LIMELIGHT PAR S

Photometric &

Chromaticity Test Reports

CONTENTS

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Testing Process

Total Lumen Measurements

Lumens are measured using a Viso Systems Lab Spion. As a goniophotometer, the Viso calculates the field lumens of the fixture by taking multiple measurements across the light beam.

Many lumens figures provided for entertainment lighting fixtures are only 2π sphere values, some even emphasize the LED engine lumens. All Elation product photometric data is the actual light output from the fixture lens, never a theoretical value based on calculation or using the source lumens as the fixtures output. We advise to always compare total fixture lumens acquired with identical measurement systems when comparing lighting fixtures.

Test Lab Equipment and Process

Elation operates an optical testing laboratory at its Los Angeles, CA headquarters to provide accurate photometric data for its lighting products. The testing lab is both light and climate- controlled and contains a variety of precise lighting measurement systems. Fixtures are analyzed with the sophisticated Viso Systems Lab Spion equipment, which measures all light and color parameters by panning the light beam at a precise speed and from different angles through a calibrated, laser aligned light and color sensor. Test data is collected and summarized by the Viso Light Inspector software. This type of measurement system is referred to as a Goniophotometer.

The Viso software calculates all relevant types of measurements, from beam angles, candela to center light intensity at a variety of distances to the latest color quality measurements like TM30 or CQS as well as accurate color temperature. This wealth of data is then processed by an Elation specific template which is included in the photometric test report for various fixture conditions such as zoom angles and color correction filters.

The Viso software also creates IES (Illuminating Engineering Society) files for each test report. IES is an industry standard file format created for the easy electronic transfer of photometric test data, which is widely used by lighting manufacturers for photometric data distribution.

Additionally, fixtures are periodically rechecked for accuracy using various hand-held light meters including one or more of the devices listed below. This is done to ensure the test data contained in this report is as accurate as possible.

Asenstek Lighting Passport | Konica Minolta T-10 | Sekonic C800U

Limelight Par S (Narrow, Full Output)

Key Measurements

Output

Total Lumen Output: 1707 lm

Peak Intensity: 203440 cd

Beam

Beam Angle (50%): 5.3°

Field Angle (10%): 8°

Cutoff Angle (2.5%): 10.1°

Color

Color Temperature: 0 K

CRI: 0.0

TLCI: n/a

TM30 R_F: 0.0

TM30 R_g: 0.0

Power Details

Efficacy: 7 Lumen/Watt

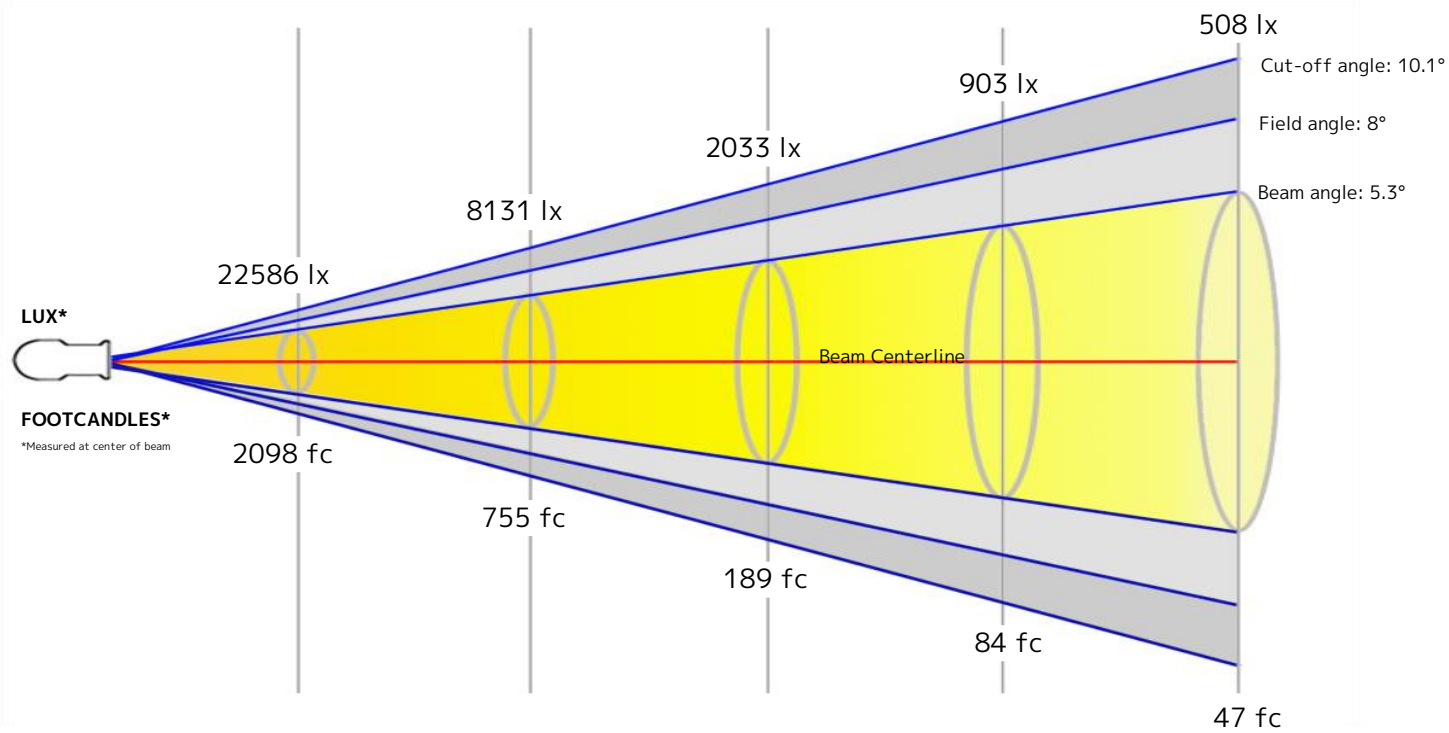
Power: 232.2 W

Supply Voltage: 119 V

Current: 1.96 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	0.3 m	0.5 m	0.9 m	1.4 m	1.8 m



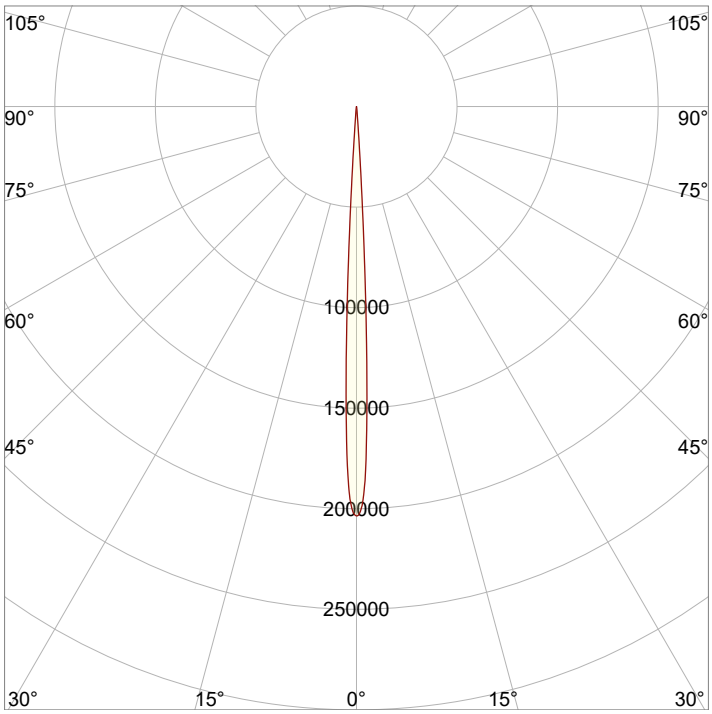
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	0.9 ft	1.5 ft	3 ft	4.5 ft	6 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	203274	50818	22586	12705	8131	5646	4148	3176	2510	2033	1680	1412	1203	1037	903	794	703	627	563	508
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	18884.7	4721.2	2098.3	1180.3	755.4	524.6	385.4	295.1	233.1	188.8	156.1	131.1	111.7	96.4	83.9	73.8	65.3	58.3	52.3	47.2

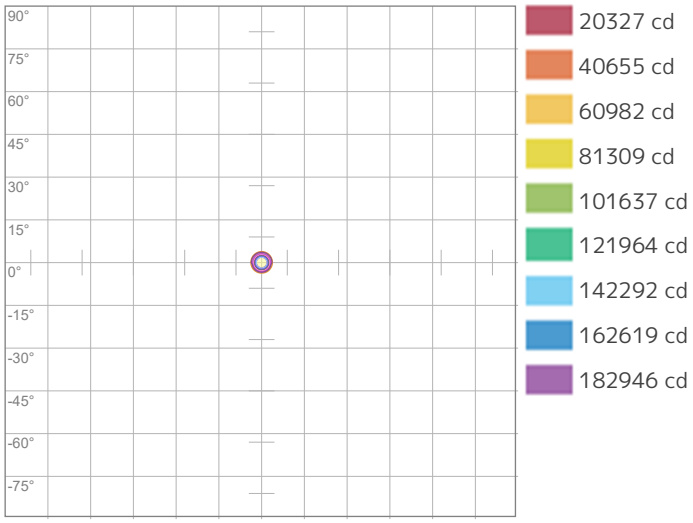
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
5.3°
Field Angle - 10%
8°
Cutoff Angle - 2.5%
10.1°

ISO Diagrams

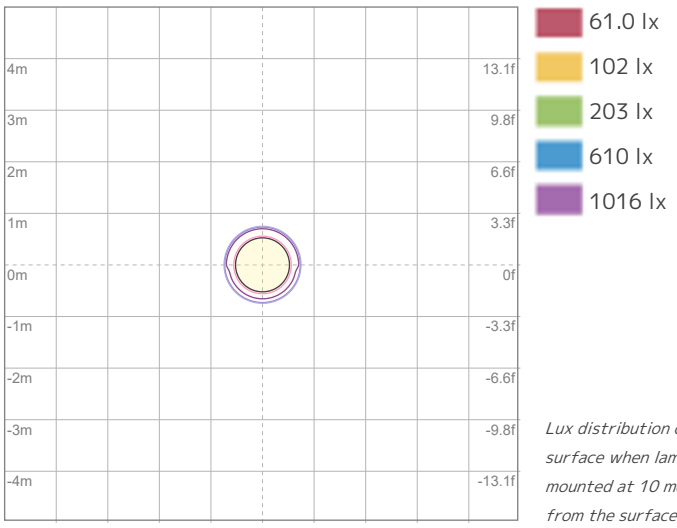


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 203274 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 2033 lx

Linear Distribution

Peak Candela

203440 cd

Calculate Center Beam Intensities

lux = 203440 / distance(m)^2

fc = 203440 / distance(ft)^2

Measurement Date: 6/5/2024

Limelight Par S (Narrow, 2400K)

Key Measurements

Output

Total Lumen Output: 1681 lm

Peak Intensity: 200500 cd

Beam

Beam Angle (50%): 5.3°

Field Angle (10%): 8.3°

Cutoff Angle (2.5%): 10.2°

Color

Color Temperature: 2323 K

CRI: 78.6

TLCI: 56

TM30 R_F: 81.0

TM30 R_g: 115.8

Power Details

Efficacy: 8 Lumen/Watt

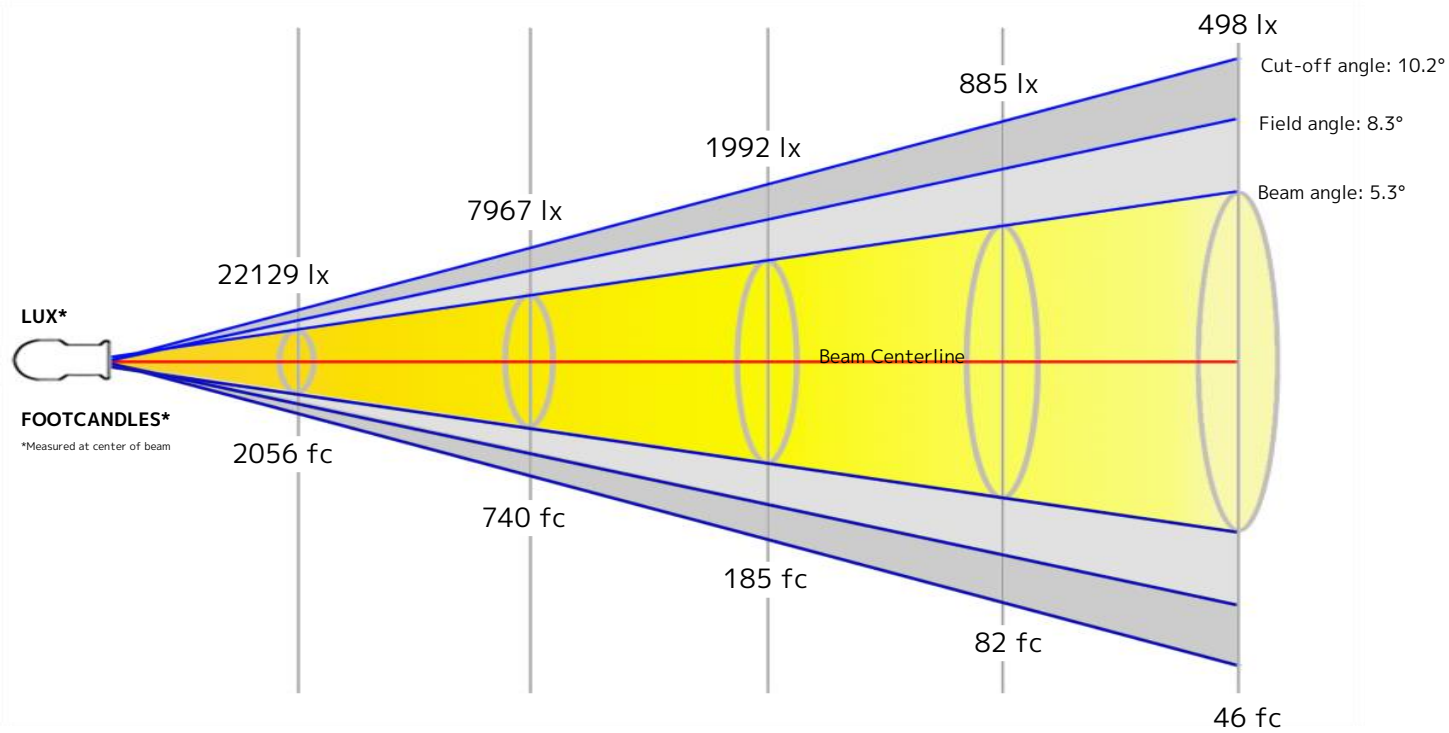
Power: 210 W

Supply Voltage: 120 V

Current: 1.77 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	0.3 m	0.5 m	0.9 m	1.4 m	1.9 m



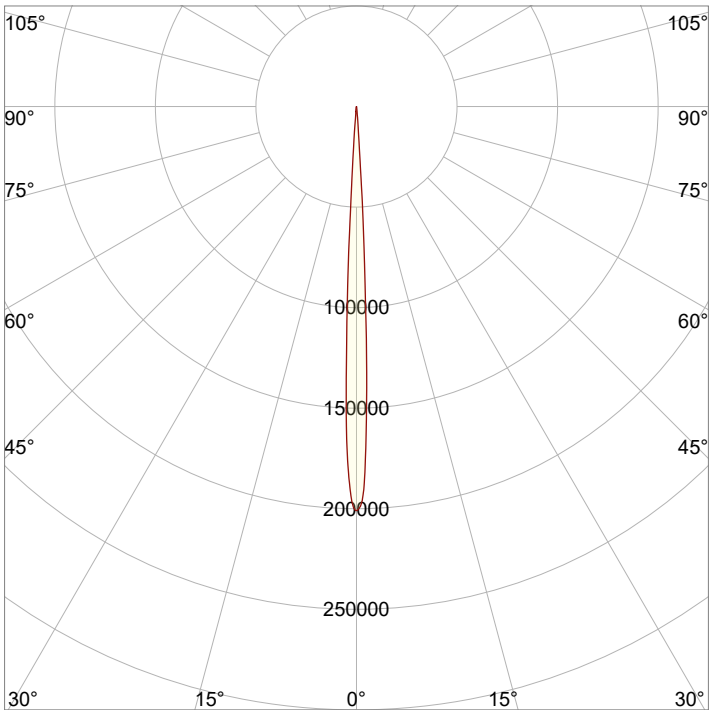
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	0.9 ft	1.5 ft	3 ft	4.6 ft	6.1 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	199163	49791	22129	12448	7967	5532	4065	3112	2459	1992	1646	1383	1178	1016	885	778	689	615	552	498
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	18502.9	4625.7	2055.9	1156.4	740.1	514	377.6	289.1	228.4	185	152.9	128.5	109.5	94.4	82.2	72.3	64	57.1	51.3	46.3

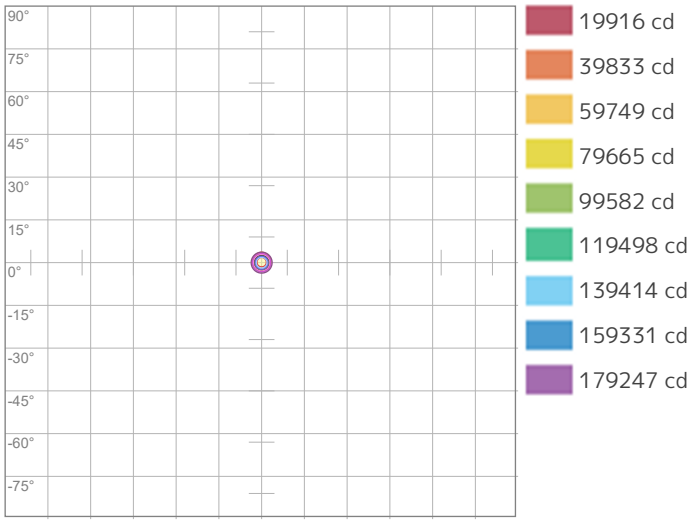
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
5.3°
Field Angle - 10%
8.3°
Cutoff Angle - 2.5%
10.2°

ISO Diagrams

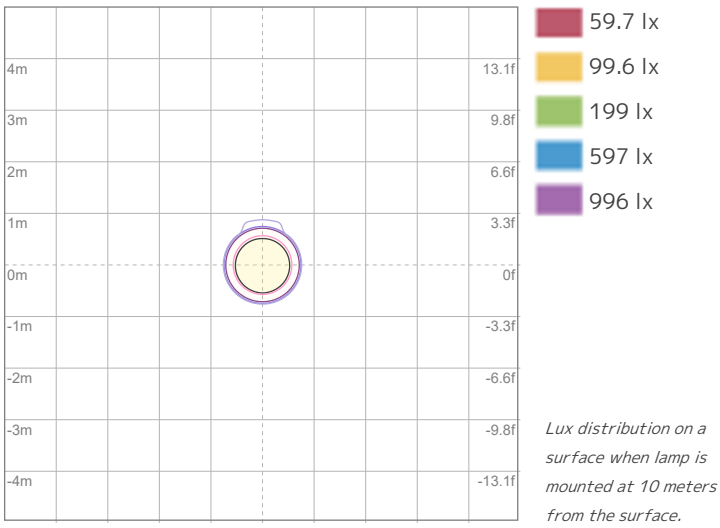


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 199163 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 1992 lx

Linear Distribution

Peak Candela

200500 cd

Calculate Center Beam Intensities

lux = 200500 / distance(m)^2

fc = 200500 / distance(ft)^2

Measurement Date: 6/5/2024

Limelight Par S (Narrow, 3200K)

Key Measurements

Output

Total Lumen Output: 1775 lm

Peak Intensity: 216535 cd

Beam

Beam Angle (50%): 5.3°

Field Angle (10%): 7.9°

Cutoff Angle (2.5%): 9.6°

Color

Color Temperature: 3173 K

CRI: 82.8

TLCI: 73

TM30 R_F: 84.4

TM30 R_g: 103.1

Power Details

Efficacy: 10 Lumen/Watt

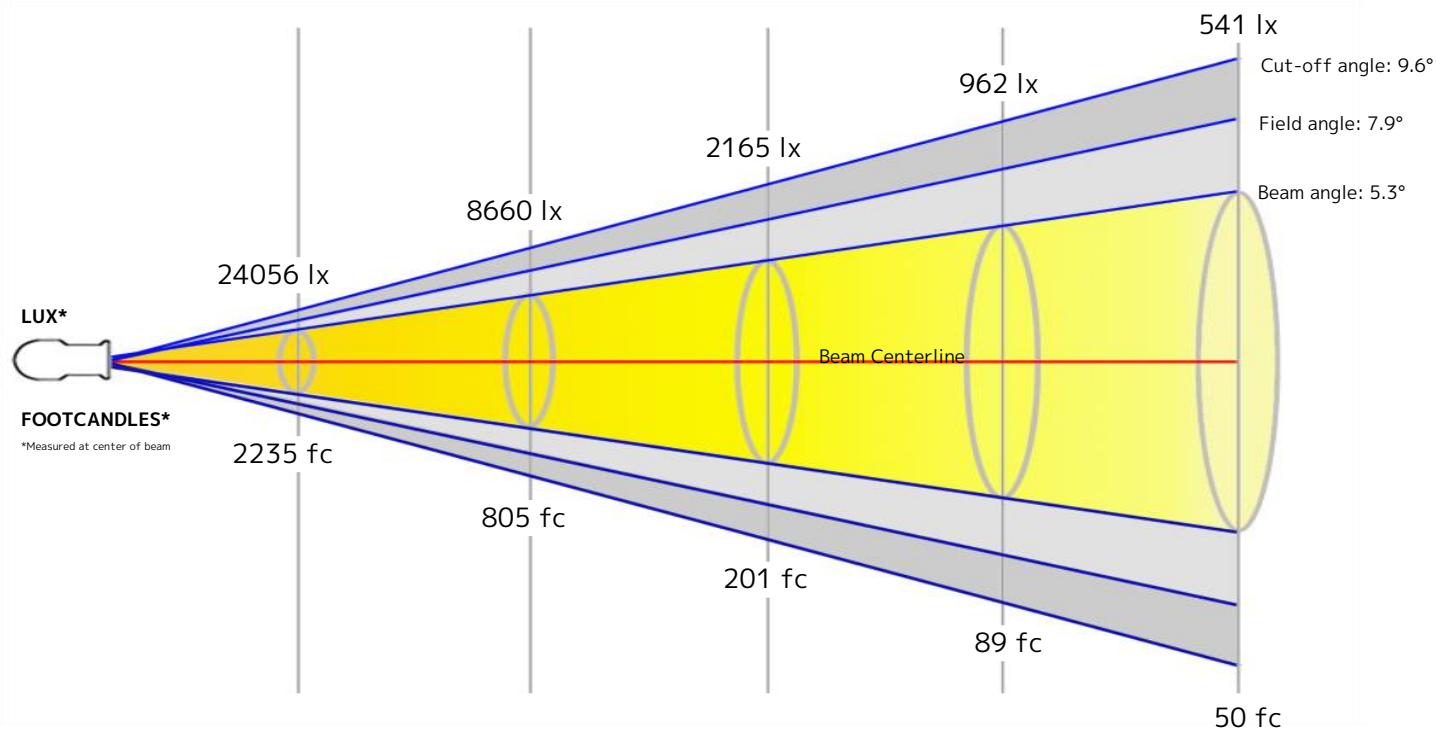
Power: 175.1 W

Supply Voltage: 119 V

Current: 1.49 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	0.3 m	0.5 m	0.9 m	1.4 m	1.8 m



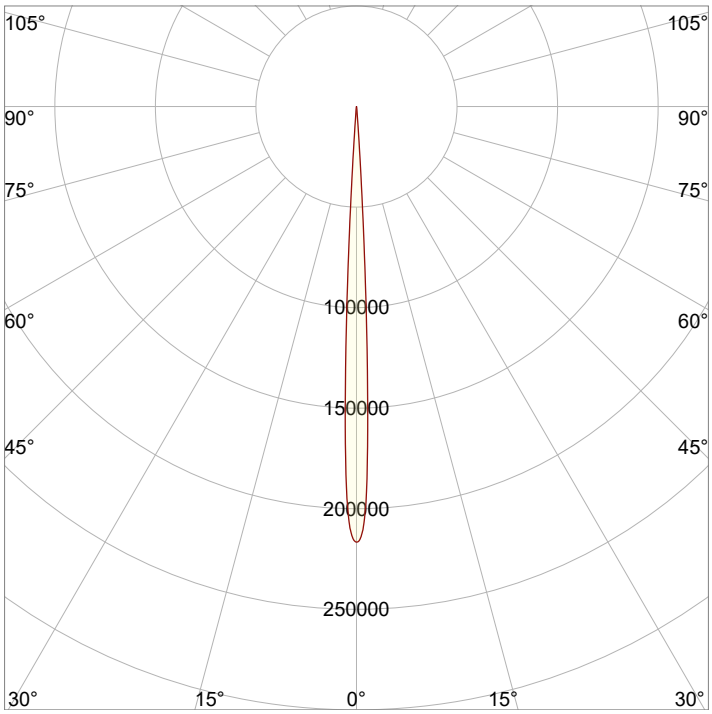
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	0.9 ft	1.5 ft	3 ft	4.5 ft	6.1 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	216502	54126	24056	13531	8660	6014	4418	3383	2673	2165	1789	1503	1281	1105	962	846	749	668	600	541
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	20113.7	5028.4	2234.9	1257.1	804.5	558.7	410.5	314.3	248.3	201.1	166.2	139.7	119	102.6	89.4	78.6	69.6	62.1	55.7	50.3

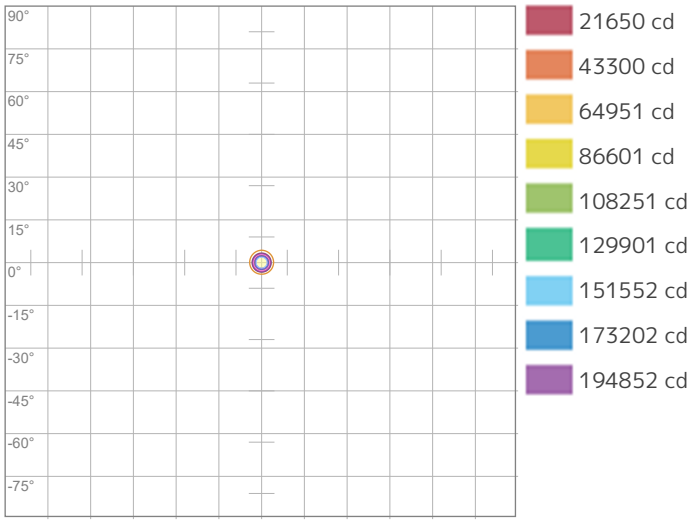
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
5.3°
Field Angle - 10%
7.9°
Cutoff Angle - 2.5%
9.6°

ISO Diagrams

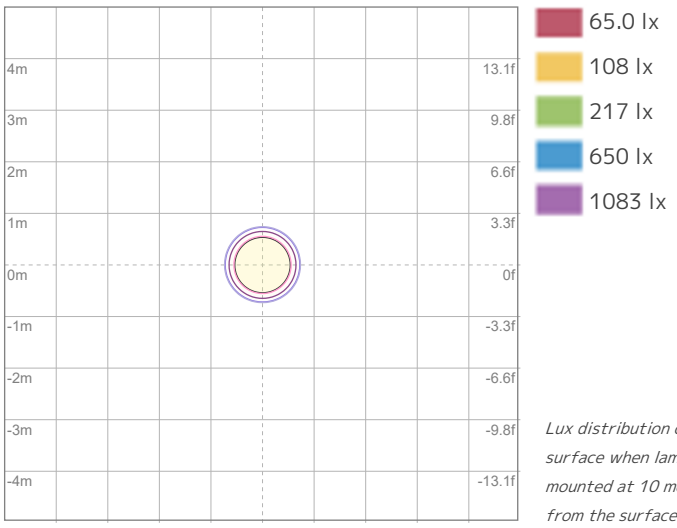


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 216502 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 2165 lx

Linear Distribution

Peak Candela

216535 cd

Calculate Center Beam Intensities

lux = 216535 / distance(m)^2

fc = 216535 / distance(ft)^2

Measurement Date: 6/5/2024

Limelight Par S (Narrow, 4500K)

Prepared For ELATION PROFESSIONAL

Key Measurements

Output

Total Lumen Output: 1892 lm

Peak Intensity: 225770 cd

Beam

Beam Angle (50%): 5.3°

Field Angle (10%): 7.9°

Cutoff Angle (2.5%): 9.7°

Color

Color Temperature: 4463 K

CRI: 73.9

TLCI: 61

TM30 R_F: 75.7

TM30 R_g: 98.8

Power Details

Efficacy: 11 Lumen/Watt

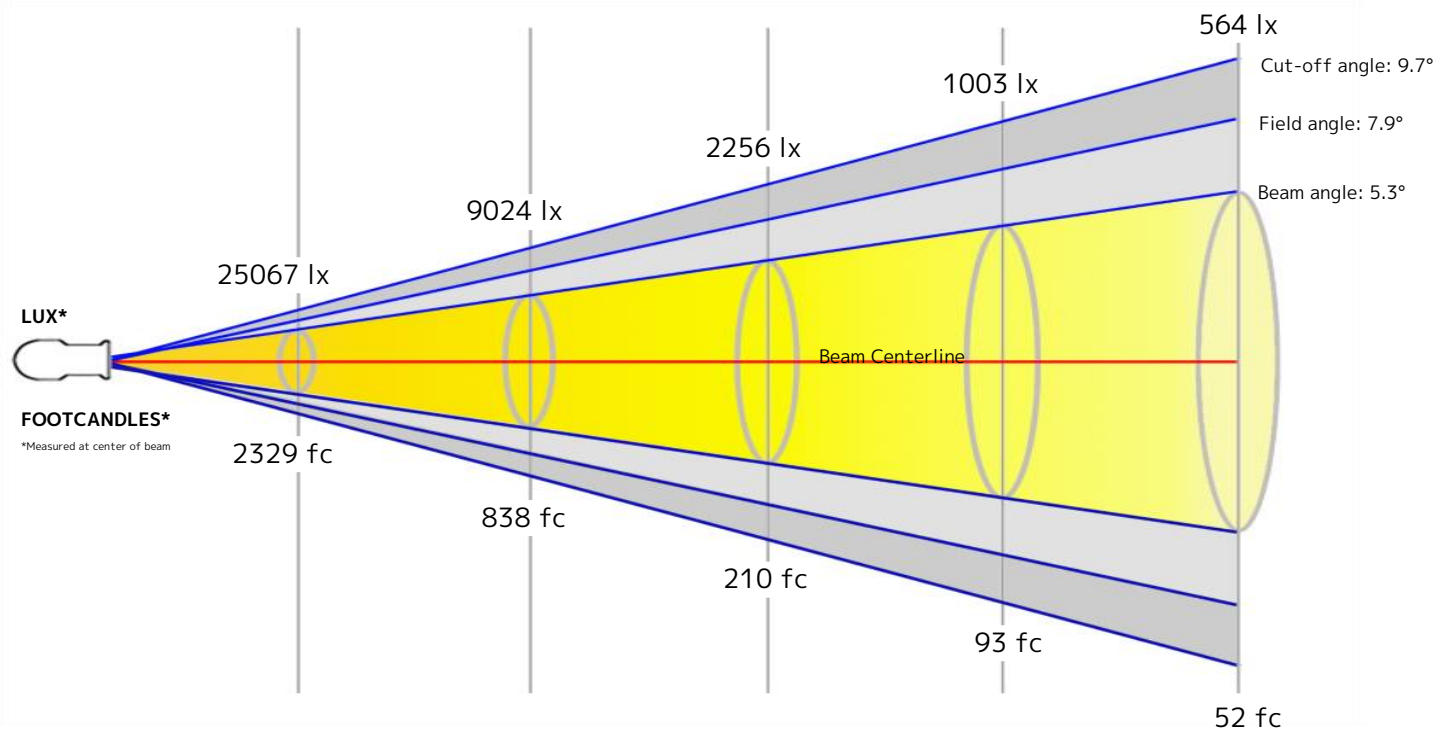
Power: 175.2 W

Supply Voltage: 119 V

Current: 1.49 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	0.3 m	0.5 m	0.9 m	1.4 m	1.9 m



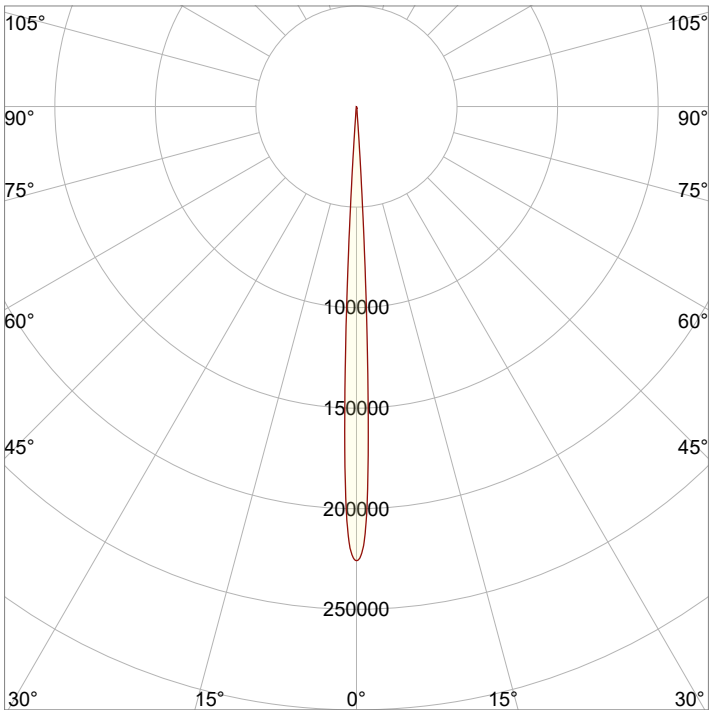
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	0.9 ft	1.5 ft	3 ft	4.6 ft	6.1 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	225607	56402	25067	14100	9024	6267	4604	3525	2785	2256	1865	1567	1335	1151	1003	881	781	696	625	564
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	20959.6	5239.9	2328.8	1310	838.4	582.2	427.7	327.5	258.8	209.6	173.2	145.6	124	106.9	93.2	81.9	72.5	64.7	58.1	52.4

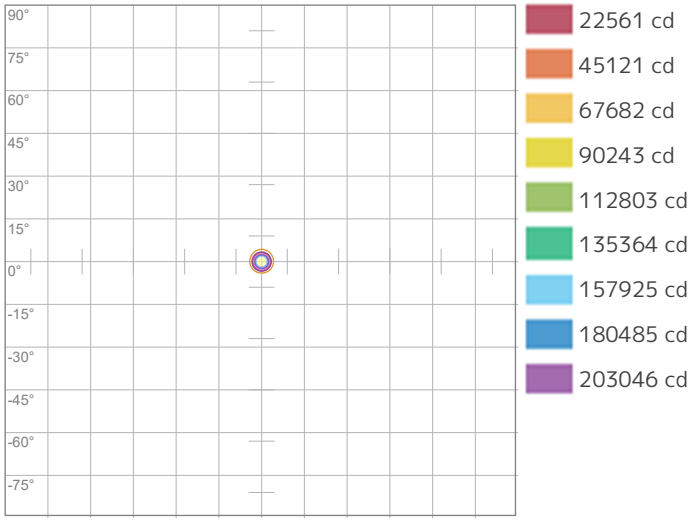
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
5.3°
Field Angle - 10%
7.9°
Cutoff Angle - 2.5%
9.7°

ISO Diagrams

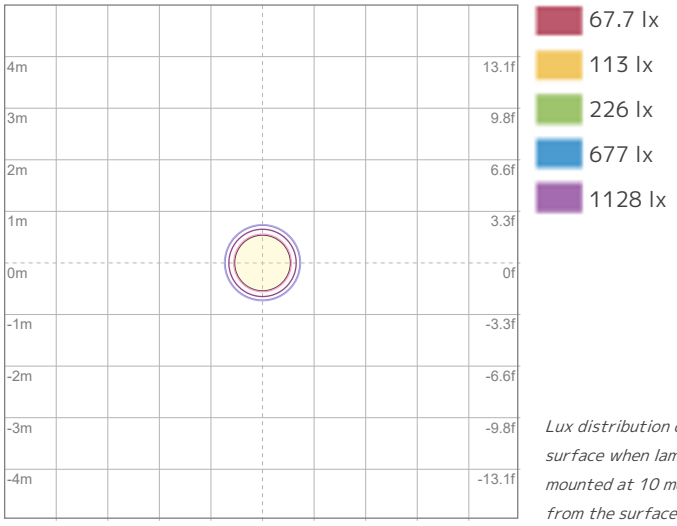


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 225607 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

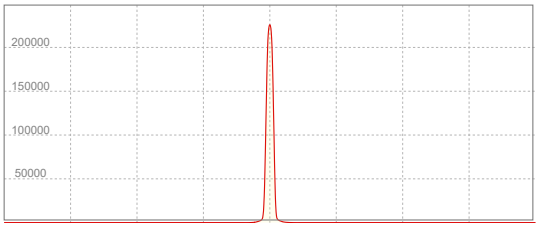
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 2256 lx

Linear Distribution



Peak Candela

225770 cd

Calculate Center Beam Intensities

lux = 225770 / distance(m)^2

fc = 225770 / distance(ft)^2

Measurement Date: 6/5/2024

Limelight Par S (Narrow, 5600K)

Key Measurements

Output

Total Lumen Output: 2051 lm

Peak Intensity: 212638 cd

Beam

Beam Angle (50%): 5.4°

Field Angle (10%): 8.2°

Cutoff Angle (2.5%): 11.9°

Color

Color Temperature: 5640 K

CRI: 75.7

TLCI: 69

TM30 R_F: 76.7

TM30 R_g: 99.8

Power Details

Efficacy: 10 Lumen/Watt

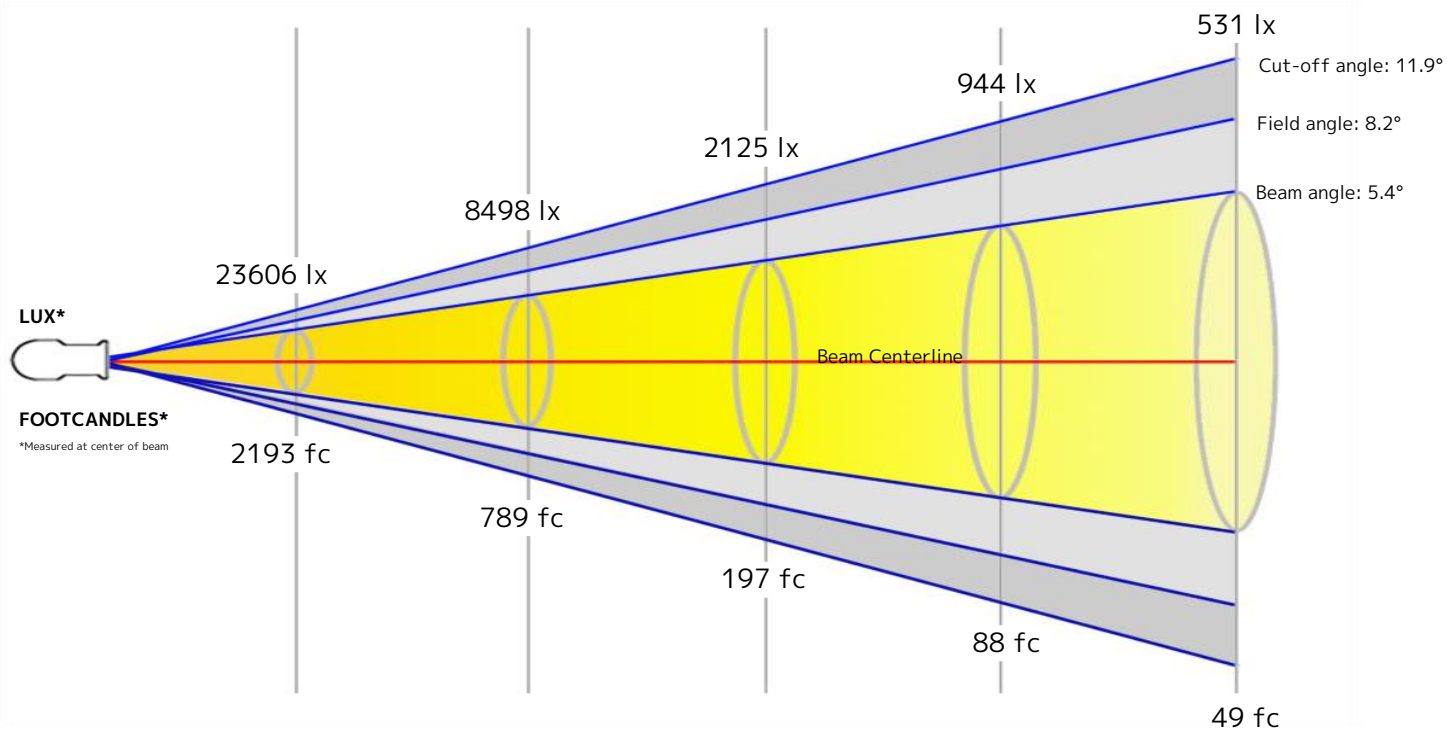
Power: 196.6 W

Supply Voltage: 120 V

Current: 1.66 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	0.3 m	0.5 m	0.9 m	1.4 m	1.9 m



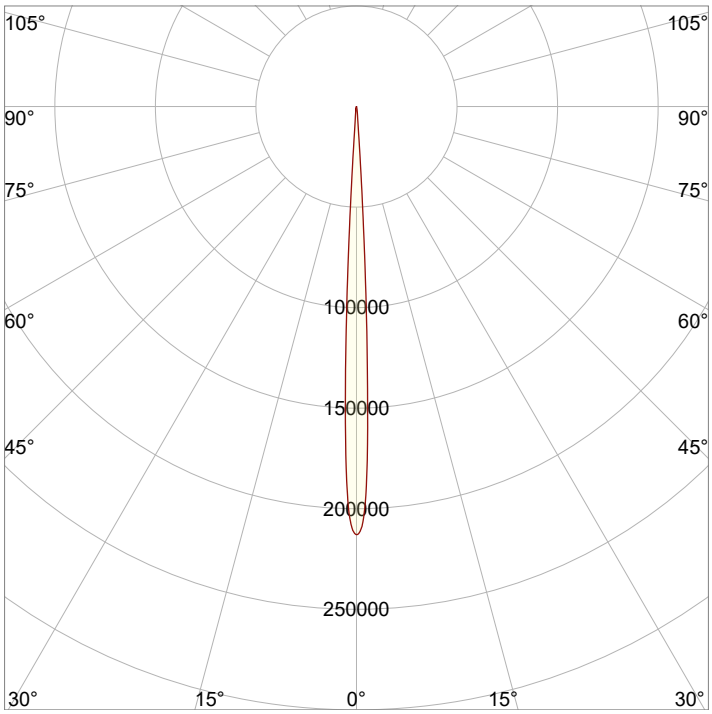
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	0.9 ft	1.5 ft	3.1 ft	4.6 ft	6.2 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	212451	53113	23606	13278	8498	5901	4336	3320	2623	2125	1756	1475	1257	1084	944	830	735	656	589	531
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	19737.4	4934.3	2193	1233.6	789.5	548.3	402.8	308.4	243.7	197.4	163.1	137.1	116.8	100.7	87.7	77.1	68.3	60.9	54.7	49.3

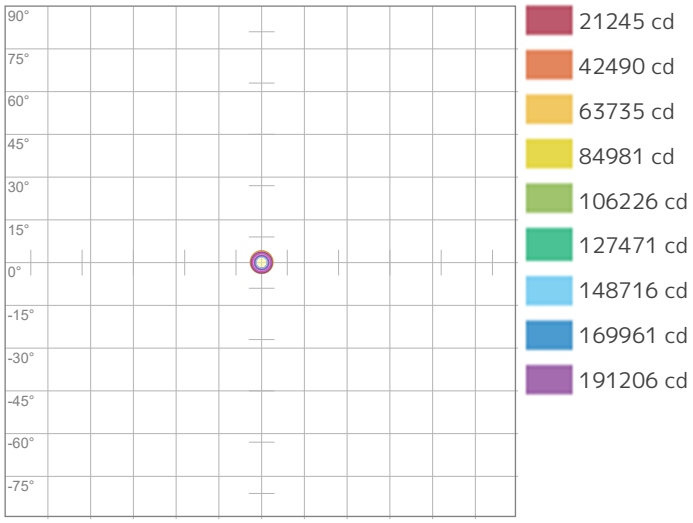
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
5.4°
Field Angle - 10%
8.2°
Cutoff Angle - 2.5%
11.9°

ISO Diagrams

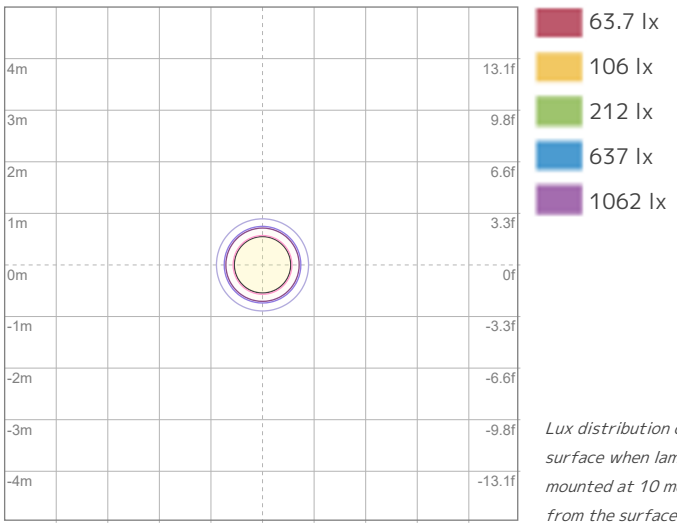


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 212451 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

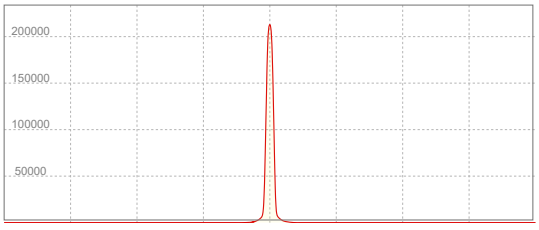
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 2125 lx

Linear Distribution



Peak Candela

212638 cd

Calculate Center Beam Intensities

lux = 212638 / distance(m)^2

fc = 212638 / distance(ft)^2

Measurement Date: 6/5/2024

Limelight Par S (Narrow, 6500K)

Prepared For ELATION PROFESSIONAL

Key Measurements

Output

Total Lumen Output: 2167 lm

Peak Intensity: 231493 cd

Beam

Beam Angle (50%): 5.4°

Field Angle (10%): 8.2°

Cutoff Angle (2.5%): 11.3°

Color

Color Temperature: 6548 K

CRI: 75.8

TLCI: 70

TM30 R_F: 76.7

TM30 R_g: 98.9

Power Details

Efficacy: 10 Lumen/Watt

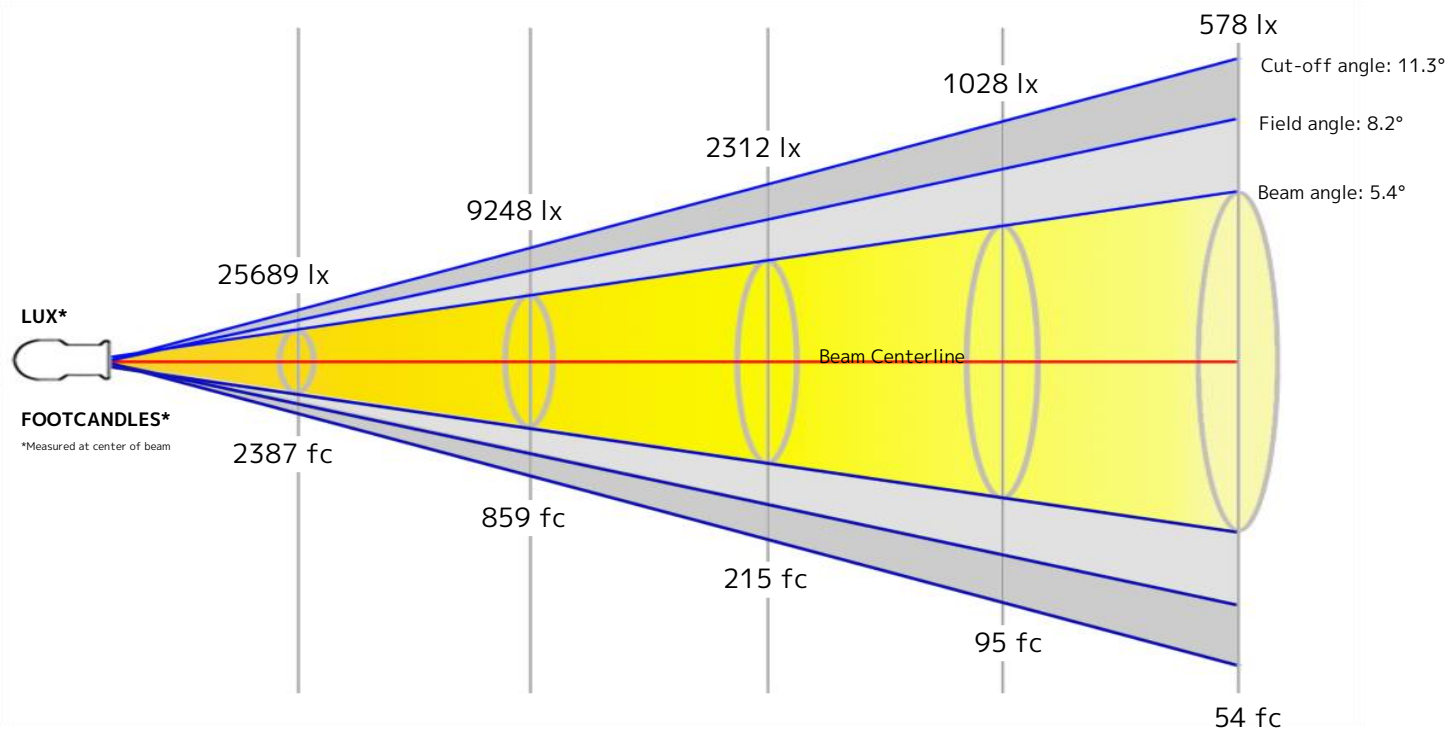
Power: 206.5 W

Supply Voltage: 119 V

Current: 1.75 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	0.3 m	0.5 m	0.9 m	1.4 m	1.9 m



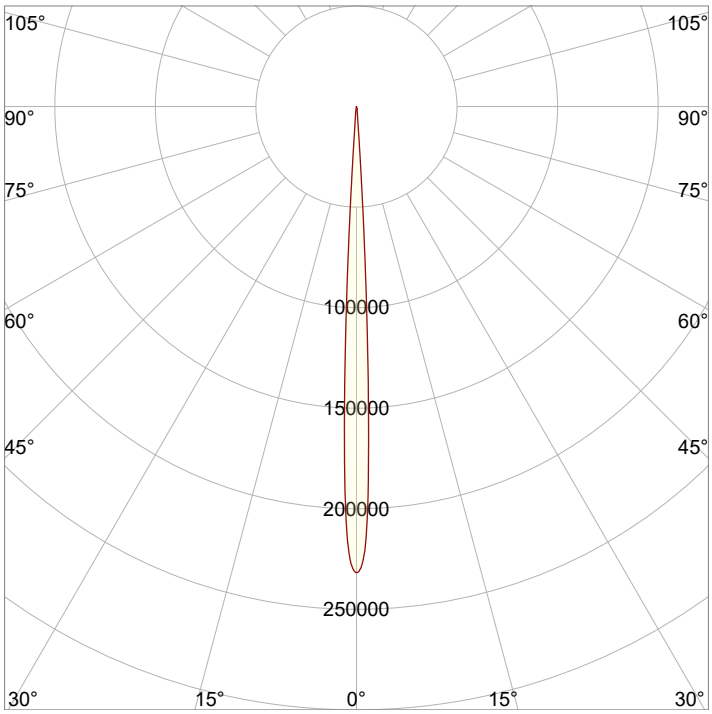
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	0.9 ft	1.5 ft	3.1 ft	4.6 ft	6.2 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	231200	57800	25689	14450	9248	6422	4718	3613	2854	2312	1911	1606	1368	1180	1028	903	800	714	640	578
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	21479.2	5369.8	2386.6	1342.5	859.2	596.6	438.4	335.6	265.2	214.8	177.5	149.2	127.1	109.6	95.5	83.9	74.3	66.3	59.5	53.7

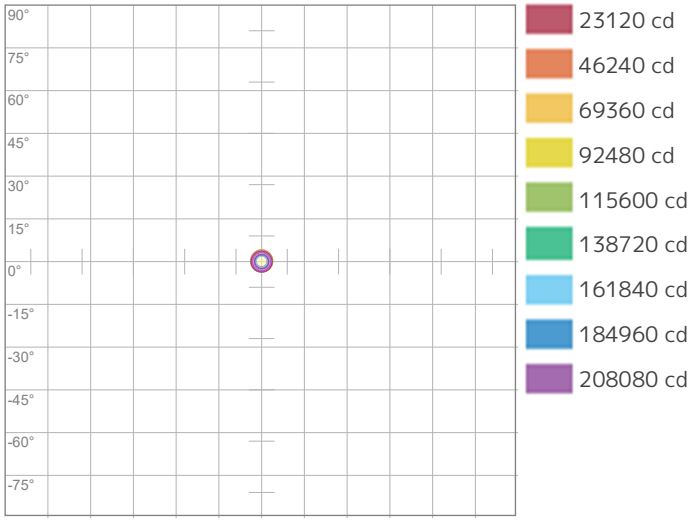
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
5.4°
Field Angle - 10%
8.2°
Cutoff Angle - 2.5%
11.3°

ISO Diagrams

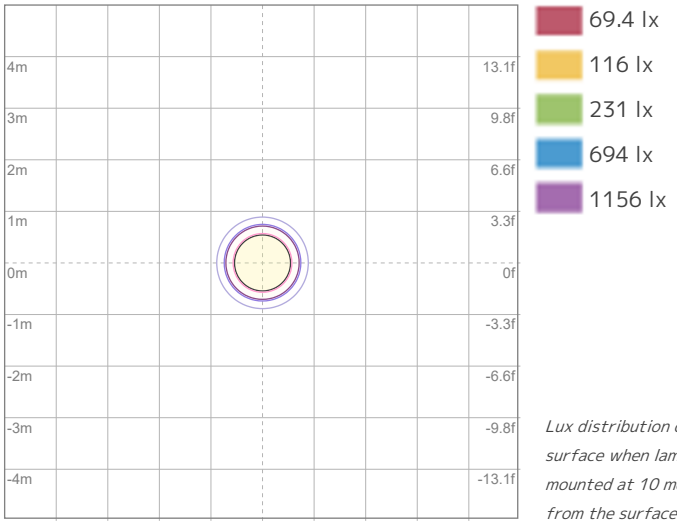


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 231200 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

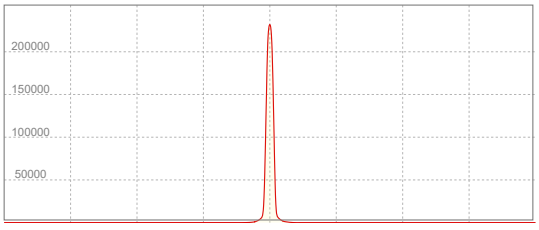
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 2312 lx

Linear Distribution



Peak Candela

231493 cd

Calculate Center Beam Intensities

lux = 231493 / distance(m)^2

fc = 231493 / distance(ft)^2

Measurement Date: 6/5/2024

Limelight Par S (Narrow, 8500K)

Prepared For ELATION PROFESSIONAL

Key Measurements

Output

Total Lumen Output: 2270 lm

Peak Intensity: 250514 cd

Beam

Beam Angle (50%): 5.4°

Field Angle (10%): 8.1°

Cutoff Angle (2.5%): 10.9°

Color

Color Temperature: 8419 K

CRI: 76.1

TLCI: 70

TM30 R_F: 76.5

TM30 R_g: 98.1

Power Details

Efficacy: 10 Lumen/Watt

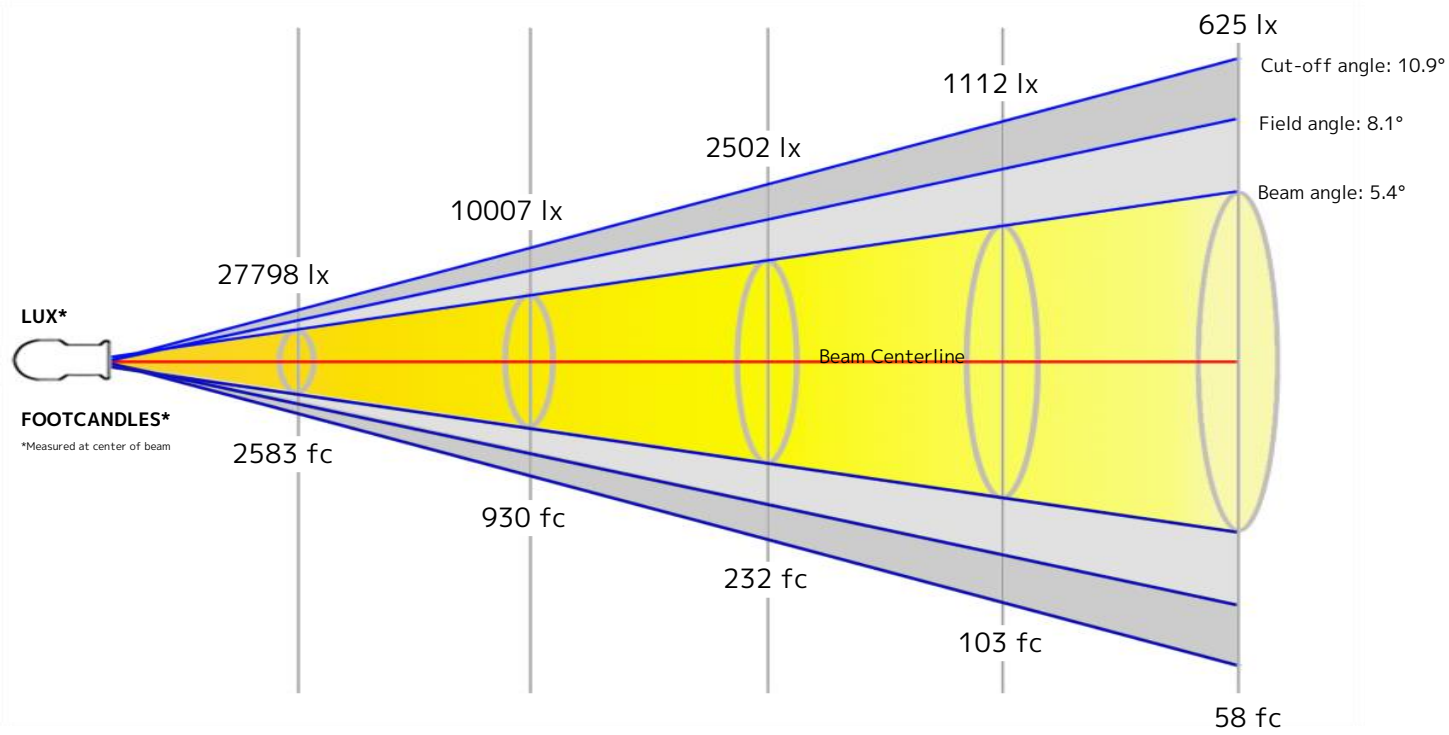
Power: 225.6 W

Supply Voltage: 119 V

Current: 1.92 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	0.3 m	0.5 m	0.9 m	1.4 m	1.9 m



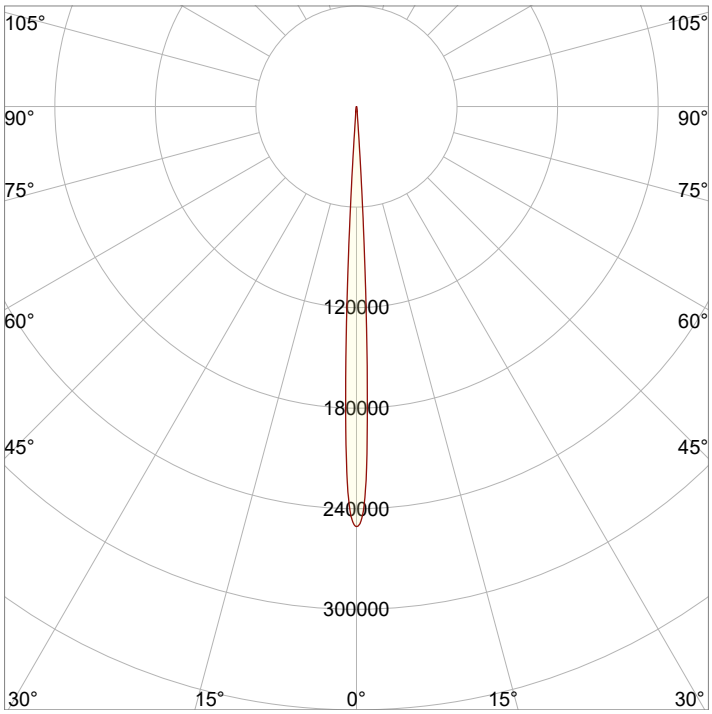
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	0.9 ft	1.5 ft	3.1 ft	4.6 ft	6.1 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	250182	62546	27798	15636	10007	6950	5106	3909	3089	2502	2068	1737	1480	1276	1112	977	866	772	693	625
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	23242.7	5810.7	2582.5	1452.7	929.7	645.6	474.3	363.2	286.9	232.4	192.1	161.4	137.5	118.6	103.3	90.8	80.4	71.7	64.4	58.1

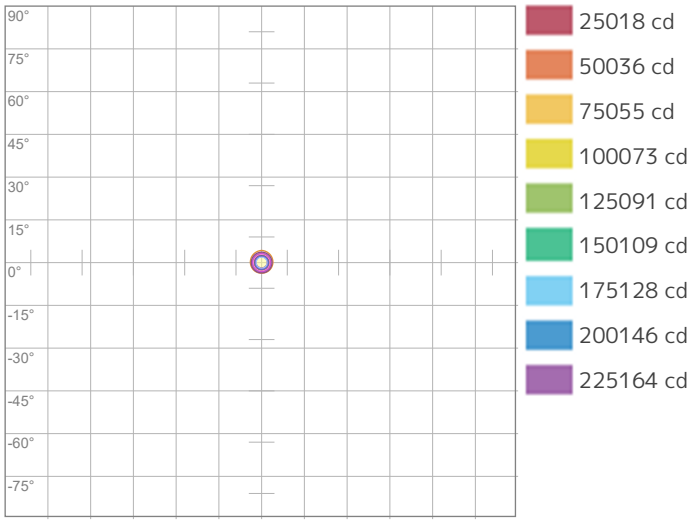
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
5.4°
Field Angle - 10%
8.1°
Cutoff Angle - 2.5%
10.9°

ISO Diagrams

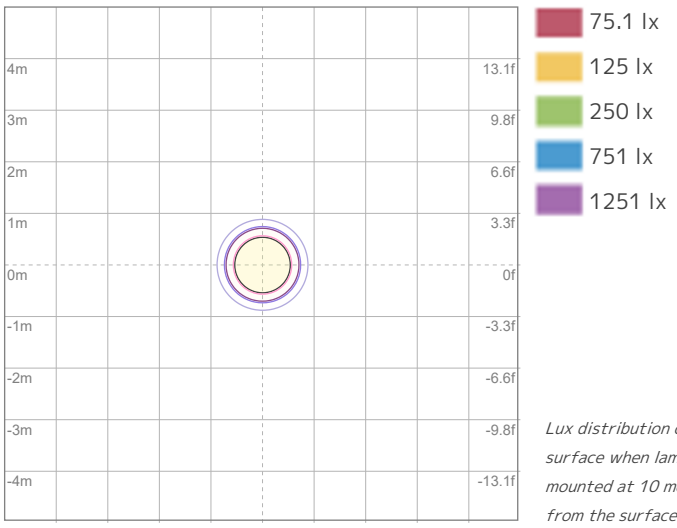


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 250182 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

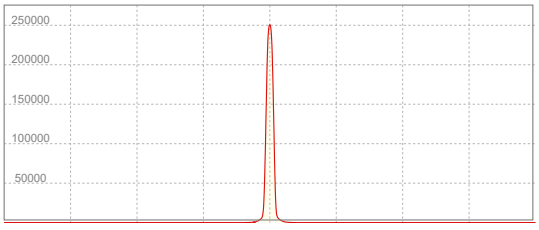
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 2502 lx

Linear Distribution



Peak Candela

250514 cd

Calculate Center Beam Intensities

lux = 250514 / distance(m)^2

fc = 250514 / distance(ft)^2

Measurement Date: 6/5/2024

Limelight Par S (Zoom 50, Full Output)

Prepared For ELATION PROFESSIONAL

Key Measurements

Output

Total Lumen Output: 3118 lm

Peak Intensity: 28125 cd

Beam

Beam Angle (50%): 21°

Field Angle (10%): 27.7°

Cutoff Angle (2.5%): 30.4°

Color

Color Temperature: 0 K

CRI: 0.0

TLCI: n/a

TM30 R_F: 0.0

TM30 R_g: 0.0

Power Details

Efficacy: 13 Lumen/Watt

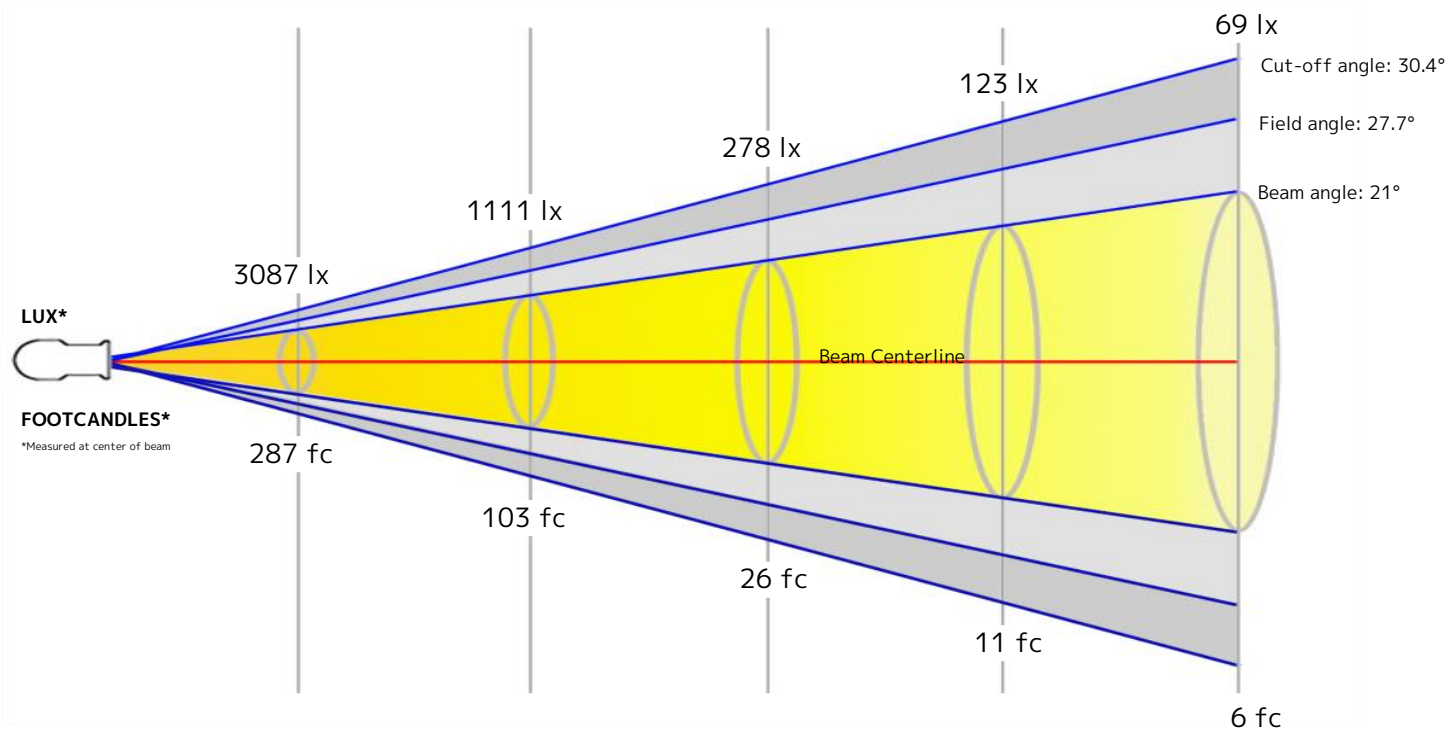
Power: 248.8 W

Supply Voltage: 119 V

Current: 2.11 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.1 m	1.9 m	3.7 m	5.6 m	7.4 m



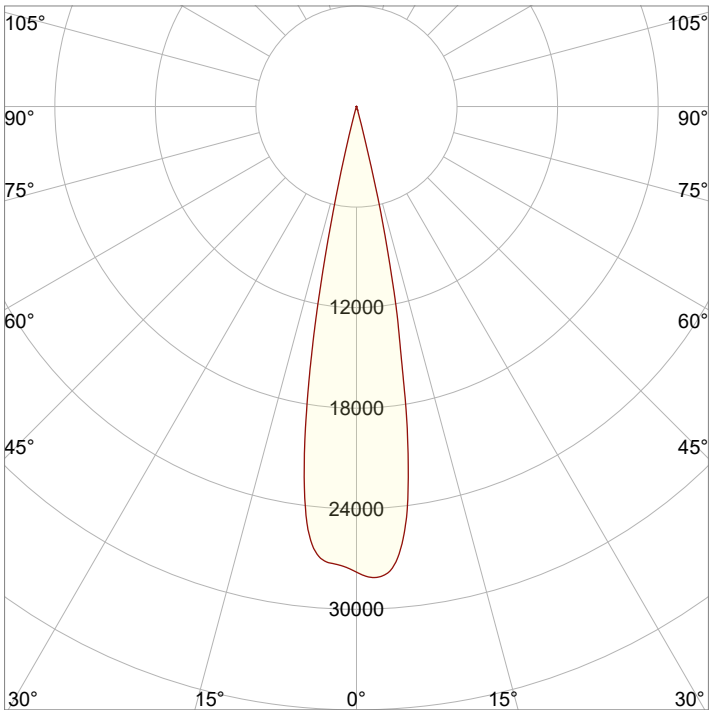
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.6 ft	6.1 ft	12.2 ft	18.3 ft	24.3 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	27782	6945	3087	1736	1111	772	567	434	343	278	230	193	164	142	123	109	96	86	77	69
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	2581	645.3	286.8	161.3	103.2	71.7	52.7	40.3	31.9	25.8	21.3	17.9	15.3	13.2	11.5	10.1	8.9	8	7.1	6.5

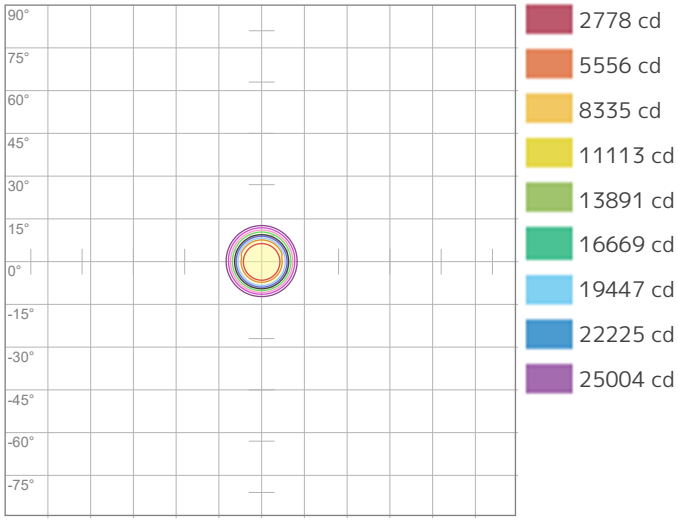
Measurement Date: 6/4/2024

Angular Distribution



Beam Angle - 50%
21°
Field Angle - 10%
27.7°
Cutoff Angle - 2.5%
30.4°

ISO Diagrams

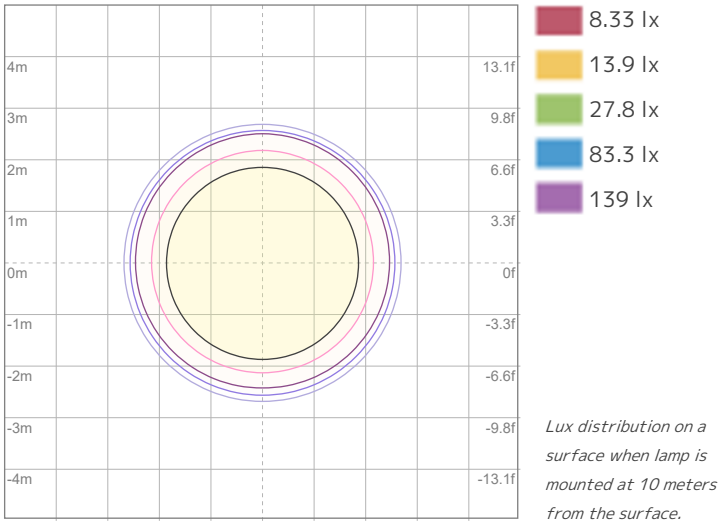


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 27782 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

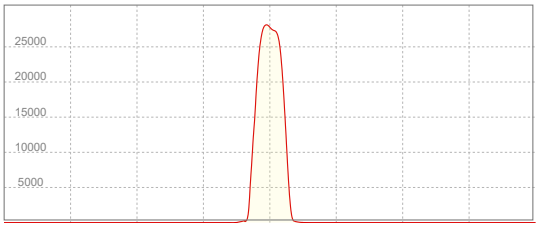
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 278 lx

Linear Distribution



Peak Candela

28125 cd

Calculate Center Beam Intensities

lux = 28125 / distance(m)^2

fc = 28125 / distance(ft)^2

Measurement Date: 6/4/2024

Limelight Par S (Zoom 50, 2400K)

Prepared For ELATION PROFESSIONAL

Key Measurements

Output

Total Lumen Output: 2879 lm

Peak Intensity: 25175 cd

Beam

Beam Angle (50%): 21.5°

Field Angle (10%): 28.6°

Cutoff Angle (2.5%): 31.8°

Color

Color Temperature: 2350 K

CRI: 78.6

TLCI: 56

TM30 R_F: 80.5

TM30 R_g: 116.1

Power Details

Efficacy: 14 Lumen/Watt

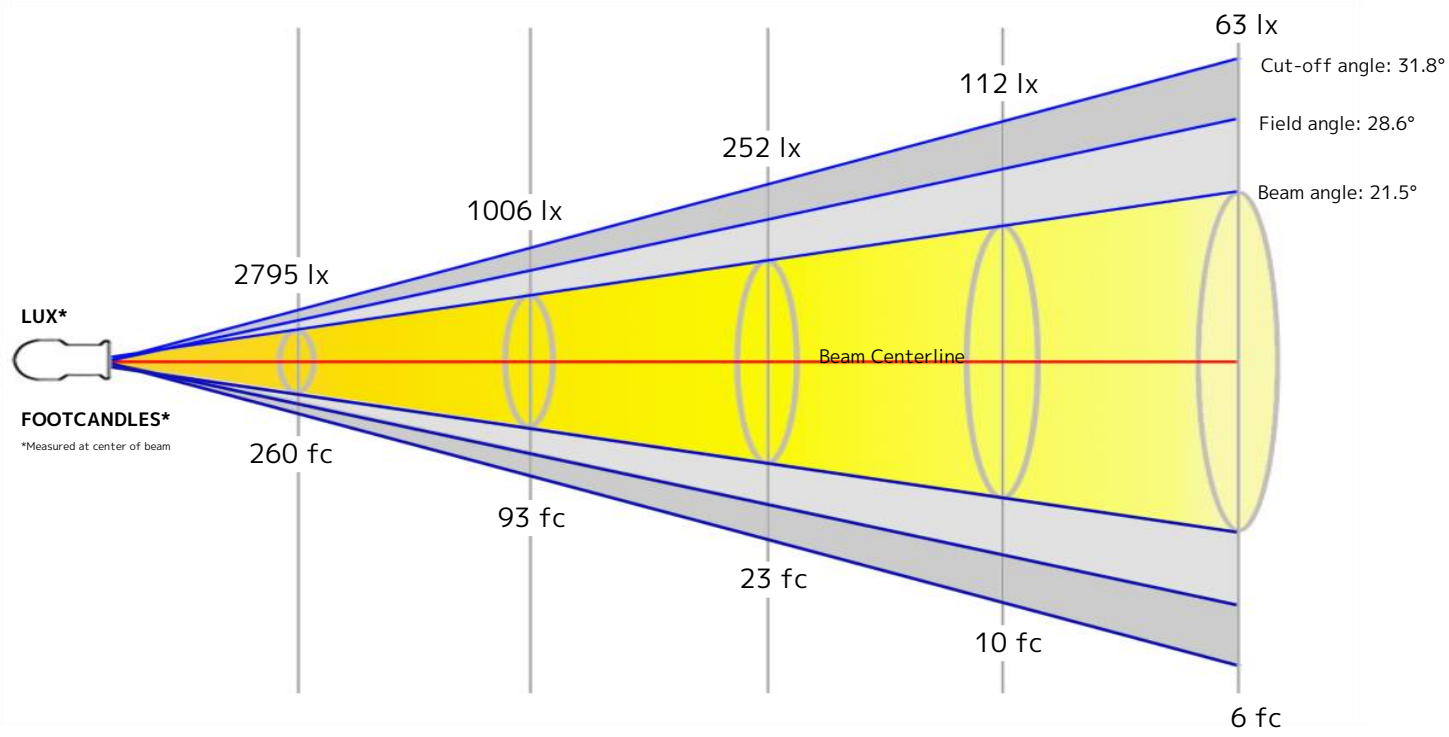
Power: 210 W

Supply Voltage: 120 V

Current: 1.77 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.1 m	1.9 m	3.8 m	5.7 m	7.6 m



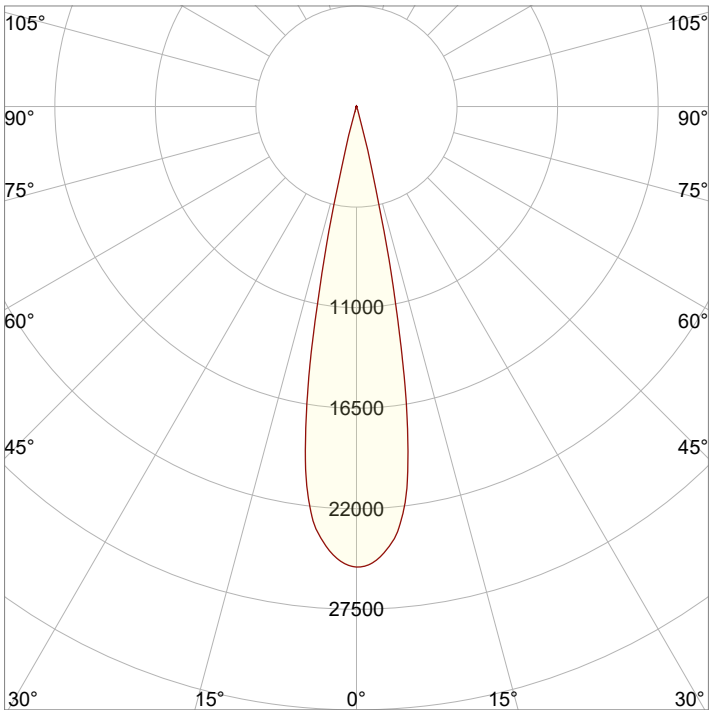
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.7 ft	6.2 ft	12.5 ft	18.7 ft	24.9 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	25157	6289	2795	1572	1006	699	513	393	311	252	208	175	149	128	112	98	87	78	70	63
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	2337.2	584.3	259.7	146.1	93.5	64.9	47.7	36.5	28.9	23.4	19.3	16.2	13.8	11.9	10.4	9.1	8.1	7.2	6.5	5.8

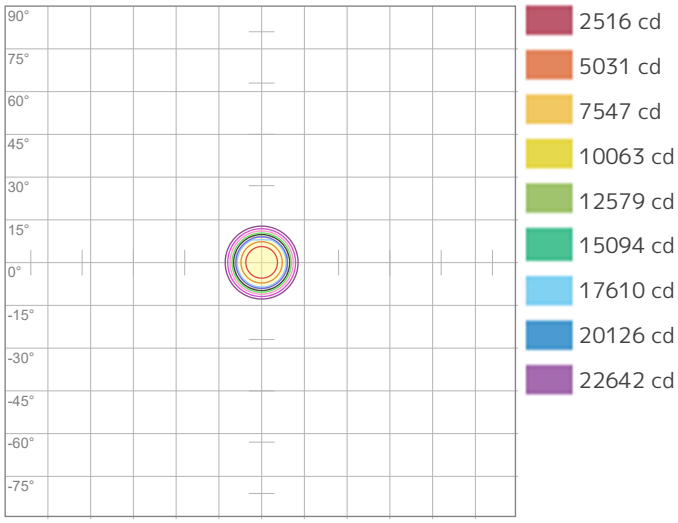
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
21.5°
Field Angle - 10%
28.6°
Cutoff Angle - 2.5%
31.8°

ISO Diagrams

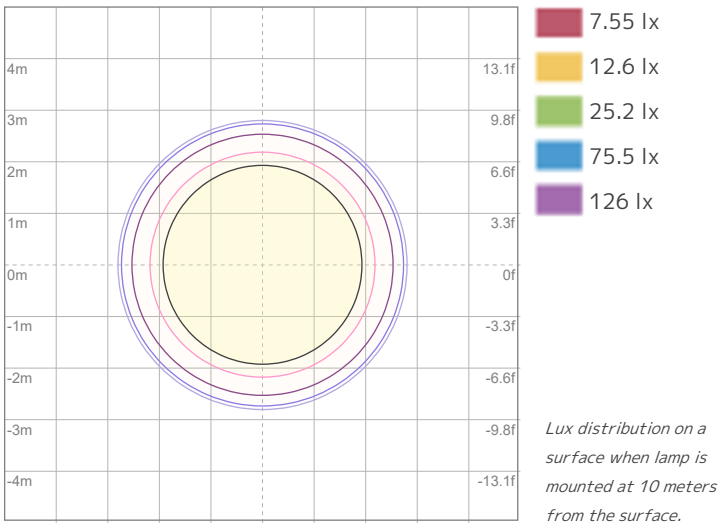


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 25157 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

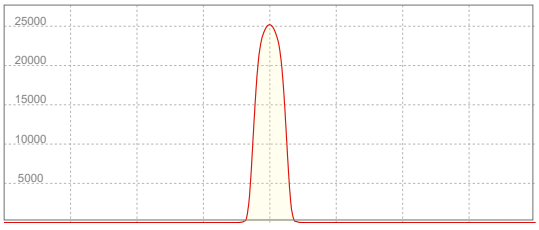
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 252 lx

Linear Distribution



Peak Candela

25175 cd

Calculate Center Beam Intensities

lux = 25175 / distance(m)^2

fc = 25175 / distance(ft)^2

Measurement Date: 6/5/2024

Limelight Par S (Zoom 50, 3200K)

Key Measurements

Output

Total Lumen Output: 3098 lm

Peak Intensity: 29341 cd

Beam

Beam Angle (50%): 20.6°

Field Angle (10%): 27.8°

Cutoff Angle (2.5%): 30.8°

Color

Color Temperature: 3176 K

CRI: 82.8

TLCI: 74

TM30 R_F: 84.6

TM30 R_g: 103.1

Power Details

Efficacy: 18 Lumen/Watt

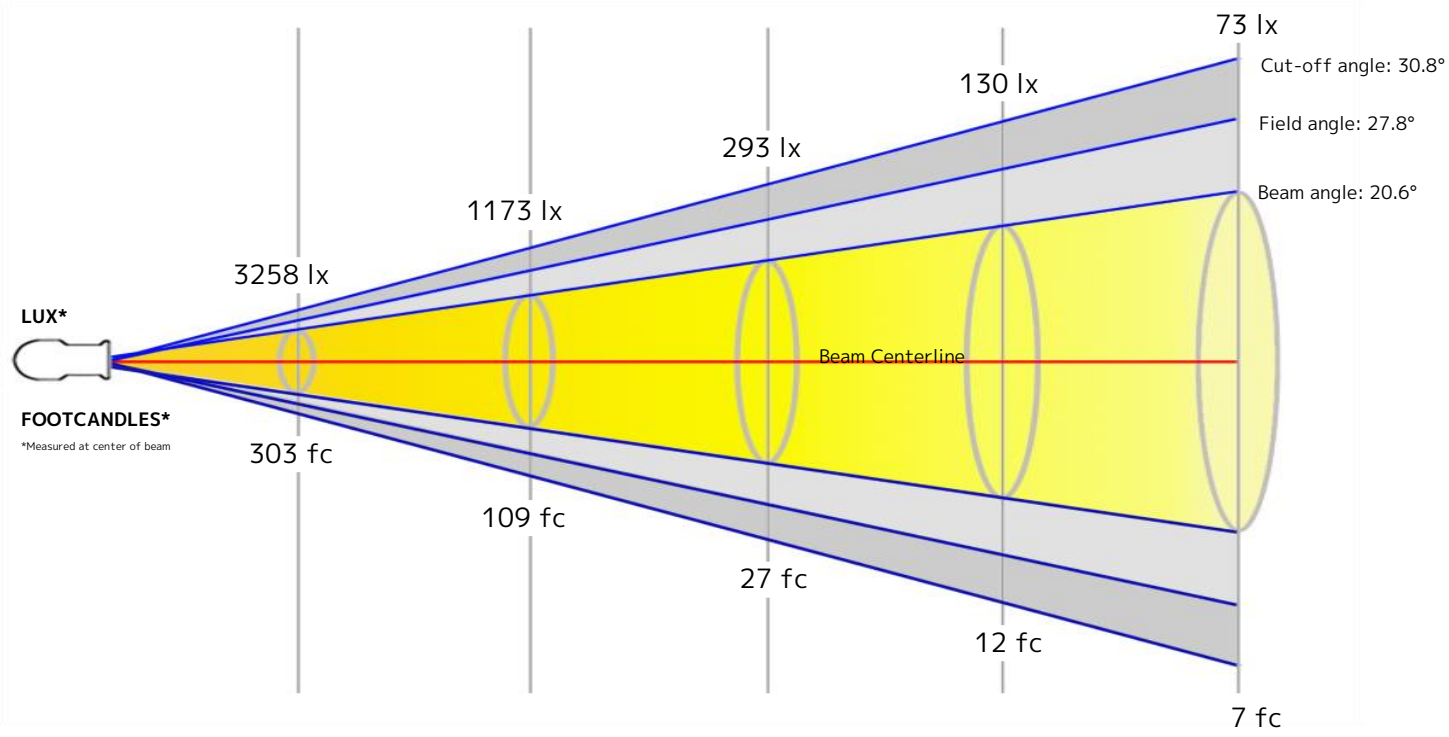
Power: 171.4 W

Supply Voltage: 120 V

Current: 1.46 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.1 m	1.8 m	3.6 m	5.5 m	7.3 m



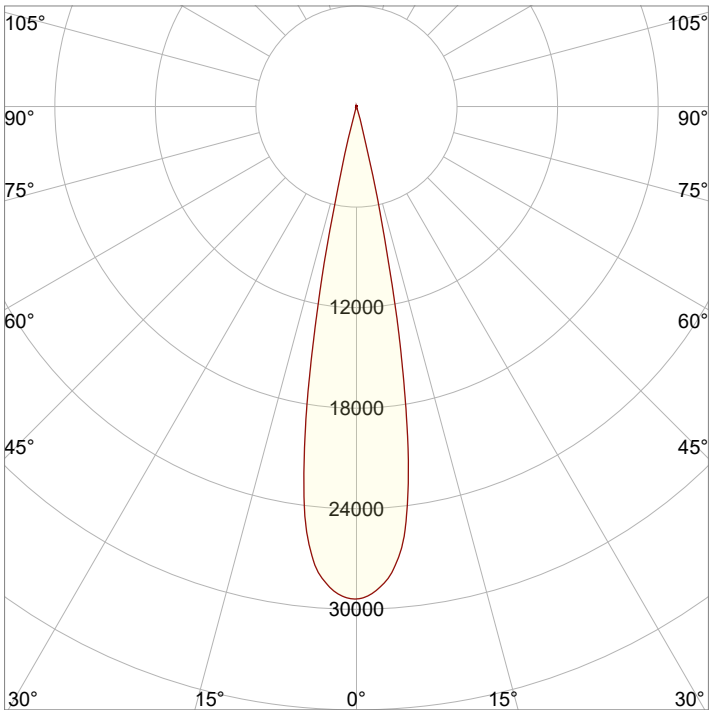
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.6 ft	6 ft	11.9 ft	17.9 ft	23.9 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	29321	7330	3258	1833	1173	814	598	458	362	293	242	204	173	150	130	115	101	90	81	73
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	2724	681	302.7	170.2	109	75.7	55.6	42.6	33.6	27.2	22.5	18.9	16.1	13.9	12.1	10.6	9.4	8.4	7.5	6.8

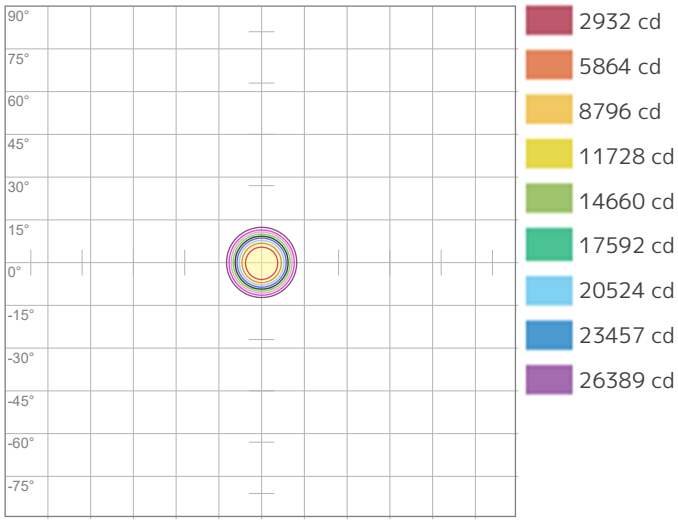
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
20.6°
Field Angle - 10%
27.8°
Cutoff Angle - 2.5%
30.8°

ISO Diagrams

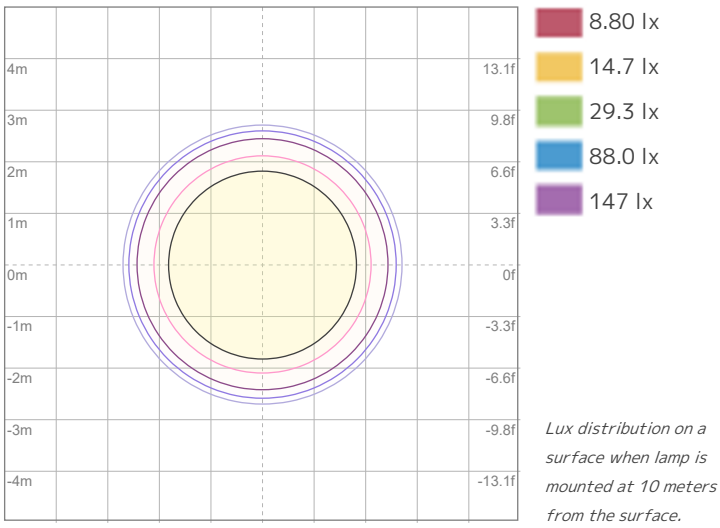


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 29321 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

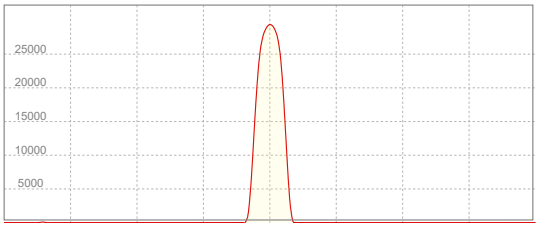
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 293 lx

Linear Distribution



Peak Candela

29341 cd

Calculate Center Beam Intensities

lux = 29341 / distance(m)^2

fc = 29341 / distance(ft)^2

Measurement Date: 6/5/2024

Key Measurements

Output

Total Lumen Output: 3260 lm

Peak Intensity: 31610 cd

Beam

Beam Angle (50%): 20.6°

Field Angle (10%): 26.7°

Cutoff Angle (2.5%): 28.8°

Color

Color Temperature: 4519 K

CRI: 73.9

TLCI: 61

TM30 R_F: 75.6

TM30 R_g: 98.9

Power Details

Efficacy: 19 Lumen/Watt

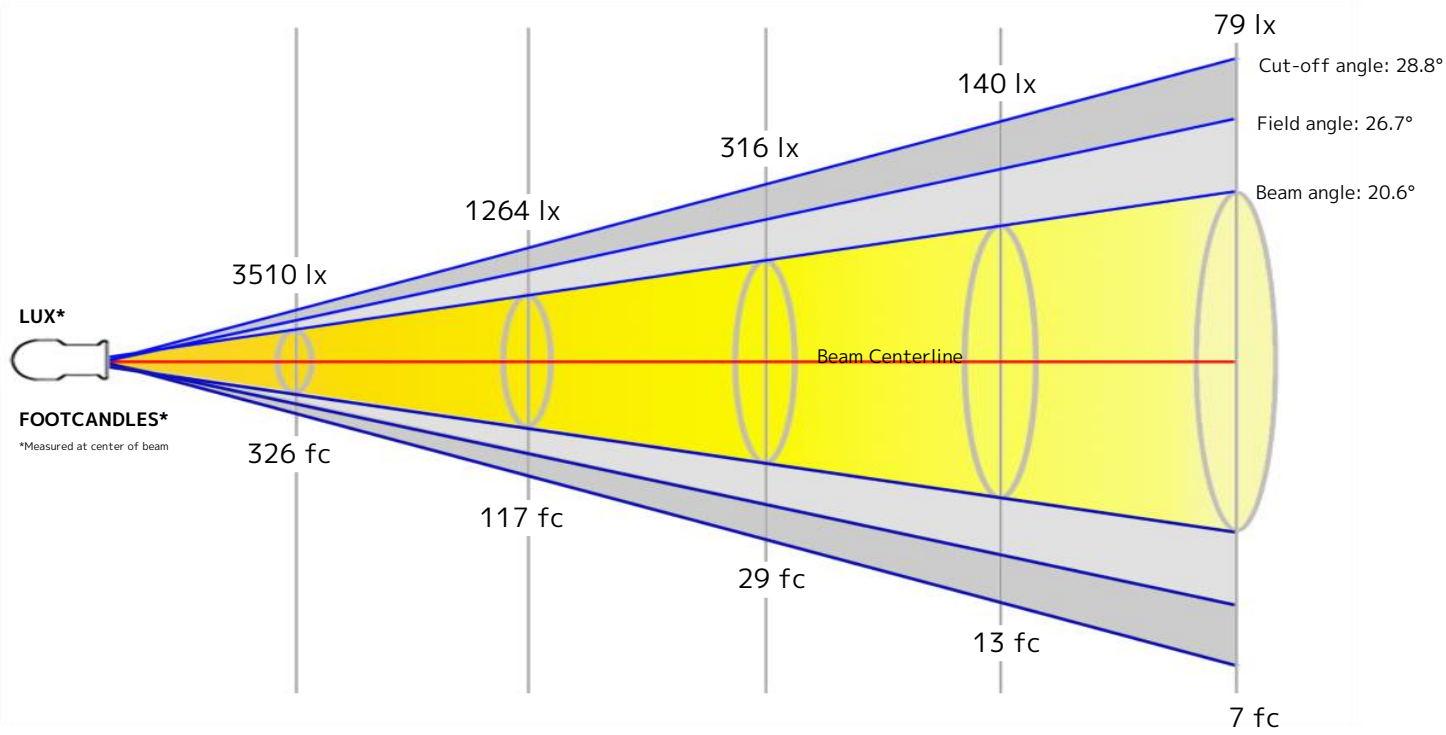
Power: 175.3 W

Supply Voltage: 120 V

Current: 1.49 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.1 m	1.8 m	3.6 m	5.5 m	7.3 m



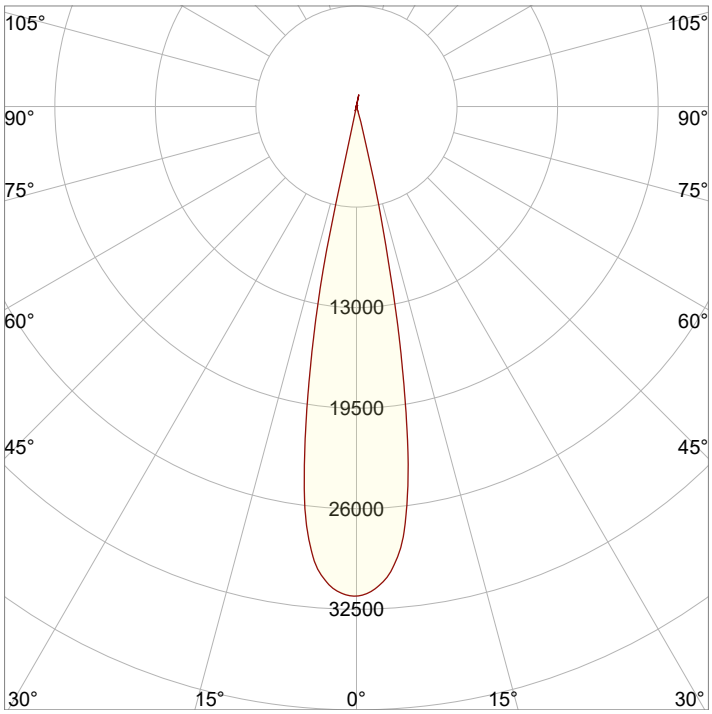
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.6 ft	6 ft	11.9 ft	17.9 ft	23.9 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	31589	7897	3510	1974	1264	877	645	494	390	316	261	219	187	161	140	123	109	97	88	79
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	2934.7	733.7	326.1	183.4	117.4	81.5	59.9	45.9	36.2	29.3	24.3	20.4	17.4	15	13	11.5	10.2	9.1	8.1	7.3

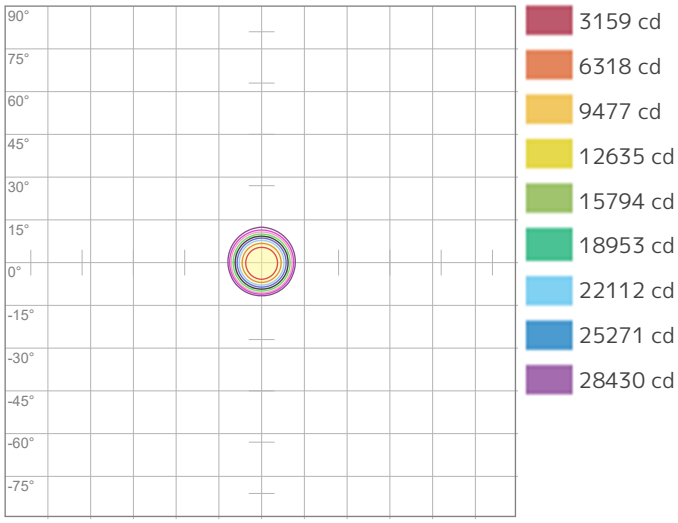
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
20.6°
Field Angle - 10%
26.7°
Cutoff Angle - 2.5%
28.8°

ISO Diagrams

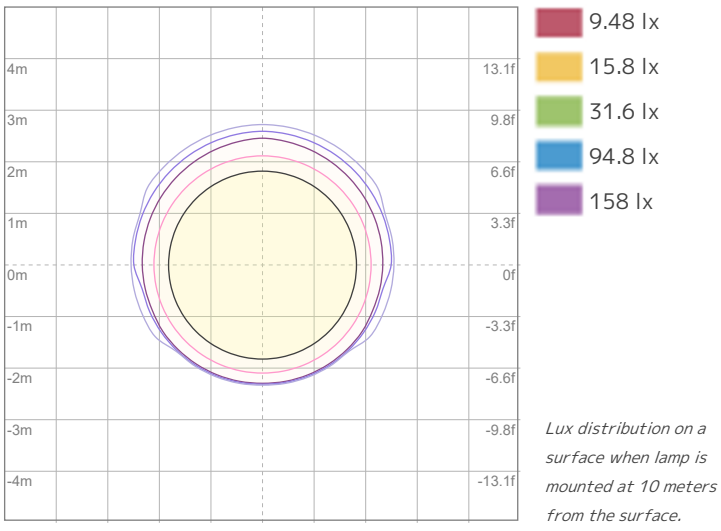


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 31589 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

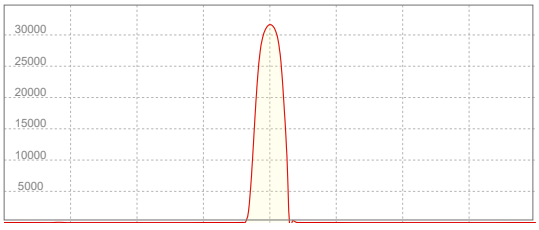
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 316 lx

Linear Distribution



Peak Candela

31610 cd

Calculate Center Beam Intensities

lux = 31610 / distance(m)^2

fc = 31610 / distance(ft)^2

Measurement Date: 6/5/2024

Key Measurements

Output

Total Lumen Output: 3667 lm

Peak Intensity: 34643 cd

Beam

Beam Angle (50%): 20.6°

Field Angle (10%): 27.9°

Cutoff Angle (2.5%): 30.2°

Color

Color Temperature: 5682 K

CRI: 74.4

TLCI: 66

TM30 R_F: 75.8

TM30 R_g: 99.2

Power Details

Efficacy: 19 Lumen/Watt

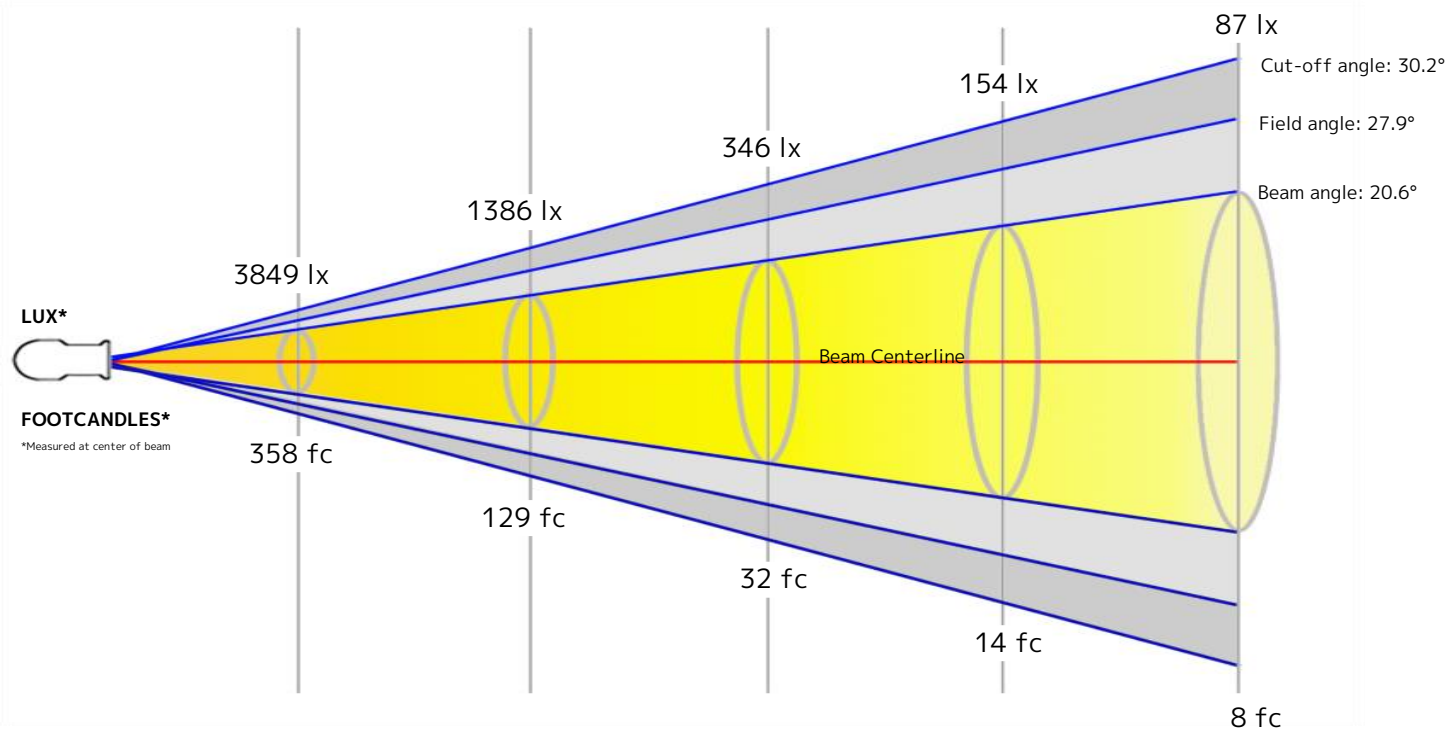
Power: 194.1 W

Supply Voltage: 119 V

Current: 1.64 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.1 m	1.8 m	3.6 m	5.4 m	7.3 m



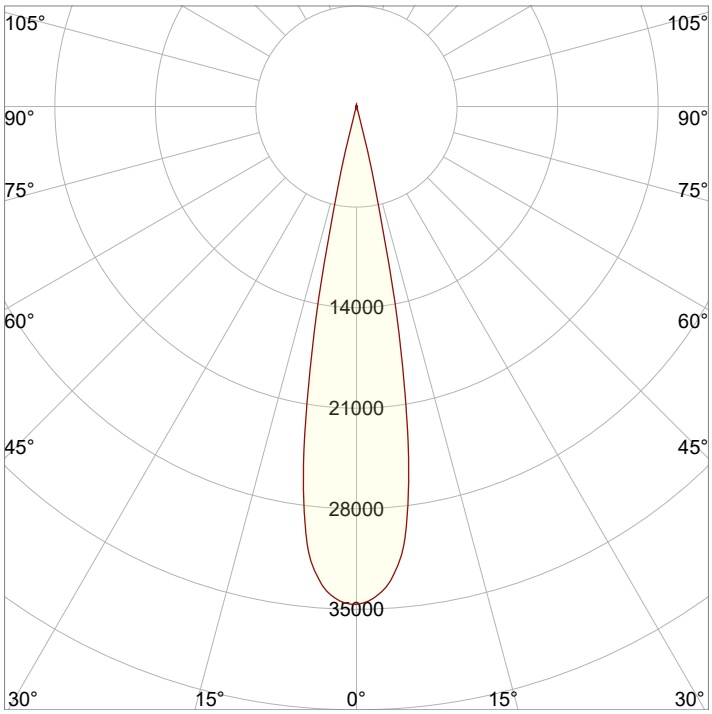
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.6 ft	6 ft	11.9 ft	17.9 ft	23.8 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	34642	8661	3849	2165	1386	962	707	541	428	346	286	241	205	177	154	135	120	107	96	87
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	3218.4	804.6	357.6	201.1	128.7	89.4	65.7	50.3	39.7	32.2	26.6	22.3	19	16.4	14.3	12.6	11.1	9.9	8.9	8

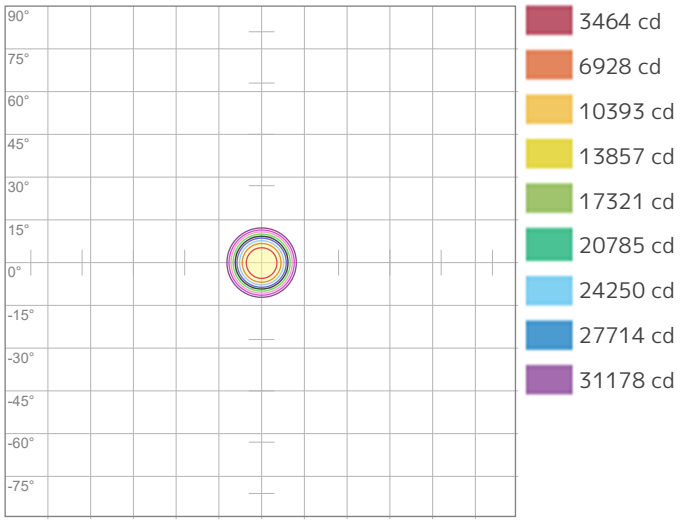
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
20.6°
Field Angle - 10%
27.9°
Cutoff Angle - 2.5%
30.2°

ISO Diagrams

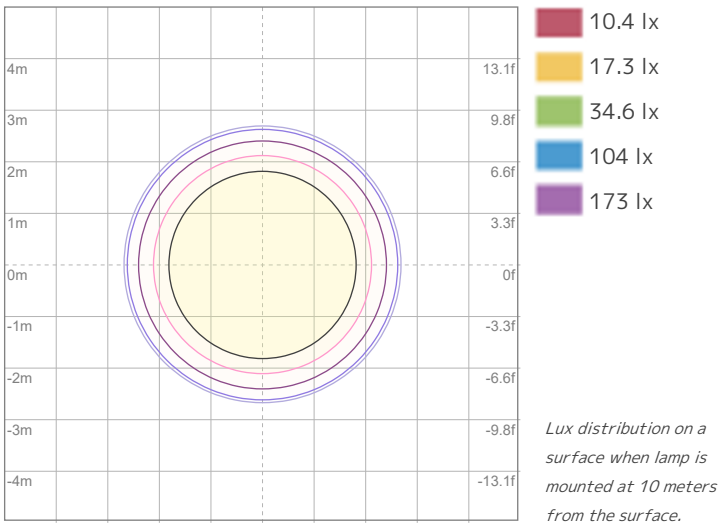


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 34642 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 346 lx

Linear Distribution

Peak Candela

34643 cd

Calculate Center Beam Intensities

lux = 34643 / distance(m)^2

fc = 34643 / distance(ft)^2

Measurement Date: 6/5/2024

Key Measurements

Output

Total Lumen Output: 3767 lm

Peak Intensity: 33422 cd

Beam

Beam Angle (50%): 21°

Field Angle (10%): 28.3°

Cutoff Angle (2.5%): 32.2°

Color

Color Temperature: 6510 K

CRI: 75.3

TLCI: 69

TM30 R_F: 76.4

TM30 R_g: 98.9

Power Details

Efficacy: 18 Lumen/Watt

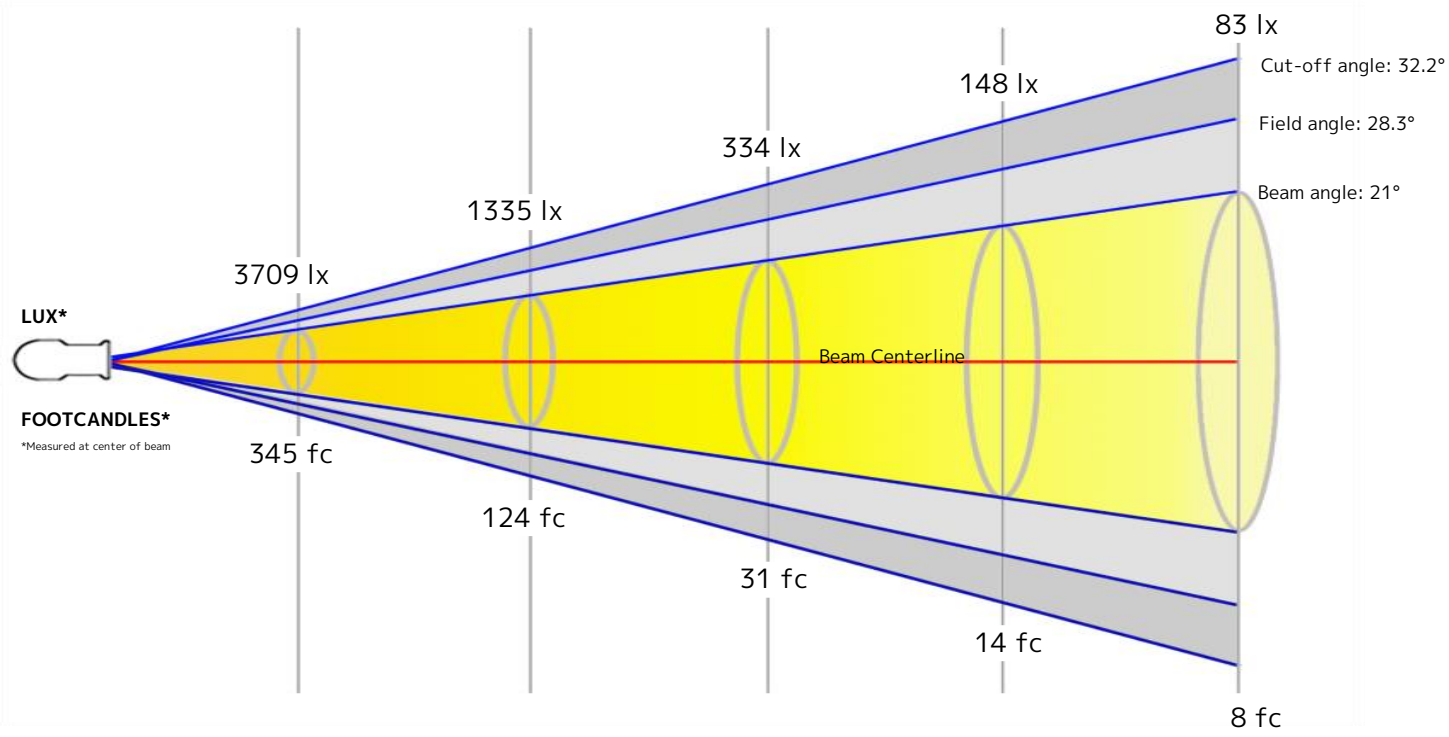
Power: 206.5 W

Supply Voltage: 119 V

Current: 1.75 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.1 m	1.9 m	3.7 m	5.6 m	7.4 m



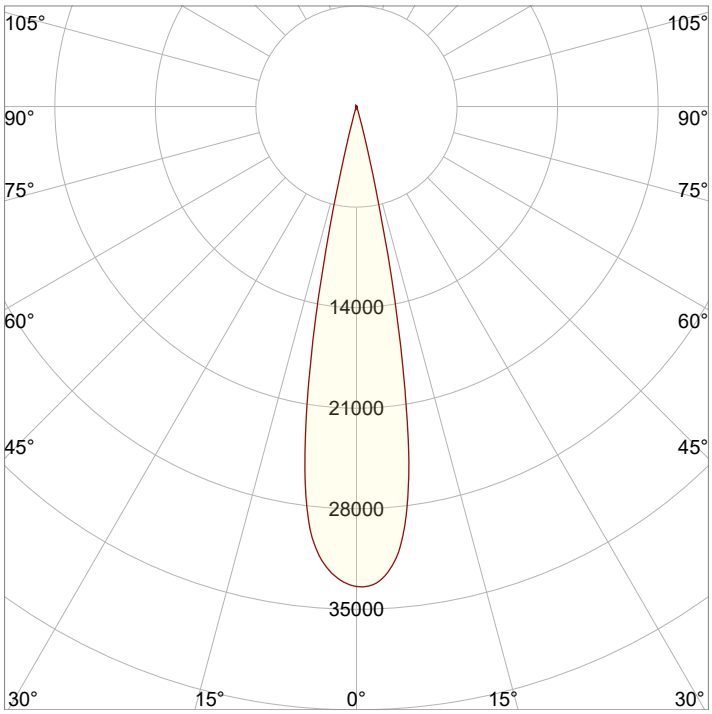
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.6 ft	6.1 ft	12.2 ft	18.2 ft	24.3 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	33378	8344	3709	2086	1335	927	681	522	412	334	276	232	198	170	148	130	115	103	92	83
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	3100.9	775.2	344.5	193.8	124	86.1	63.3	48.5	38.3	31	25.6	21.5	18.3	15.8	13.8	12.1	10.7	9.6	8.6	7.8

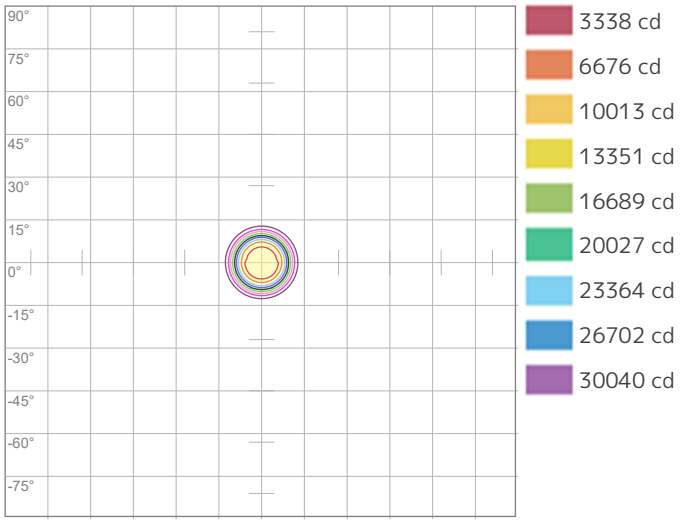
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
21°
Field Angle - 10%
28.3°
Cutoff Angle - 2.5%
32.2°

ISO Diagrams

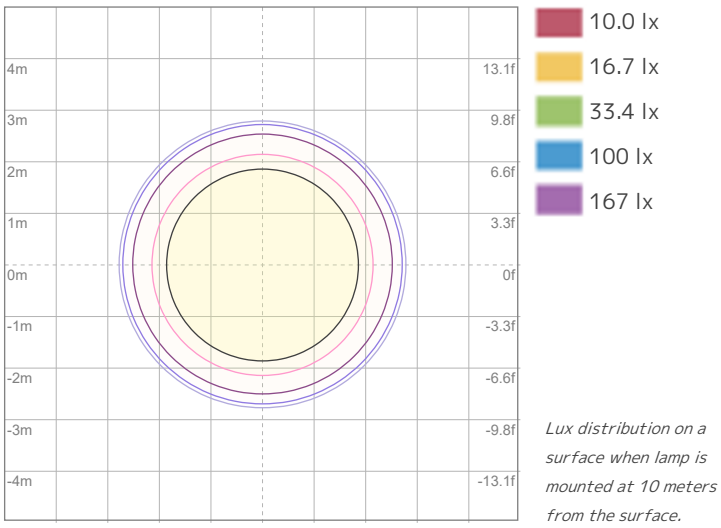


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 33378 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

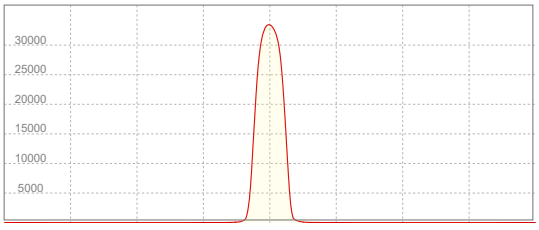
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 334 lx

Linear Distribution



Peak Candela

33422 cd

Calculate Center Beam Intensities

lux = 33422 / distance(m)^2

fc = 33422 / distance(ft)^2

Measurement Date: 6/5/2024

Limelight Par S (Zoom 50, 8500K)

Key Measurements

Output

Total Lumen Output: 3919 lm

Peak Intensity: 33577 cd

Beam

Beam Angle (50%): 21.3°

Field Angle (10%): 28.8°

Cutoff Angle (2.5%): 33.1°

Color

Color Temperature: 8568 K

CRI: 75.9

TLCI: 69

TM30 R_F: 76.3

TM30 R_g: 98.4

Power Details

Efficacy: 17 Lumen/Watt

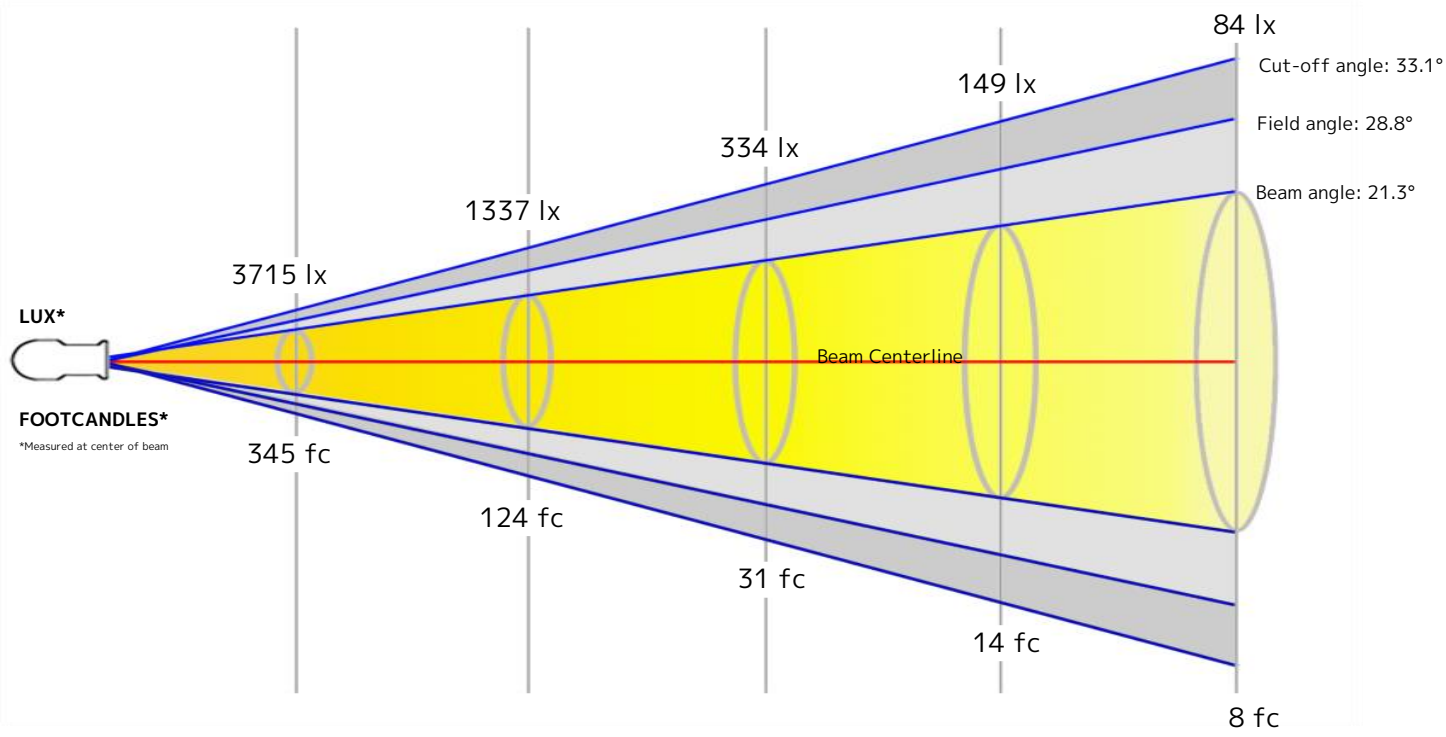
Power: 227.2 W

Supply Voltage: 119 V

Current: 1.93 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.1 m	1.9 m	3.8 m	5.6 m	7.5 m



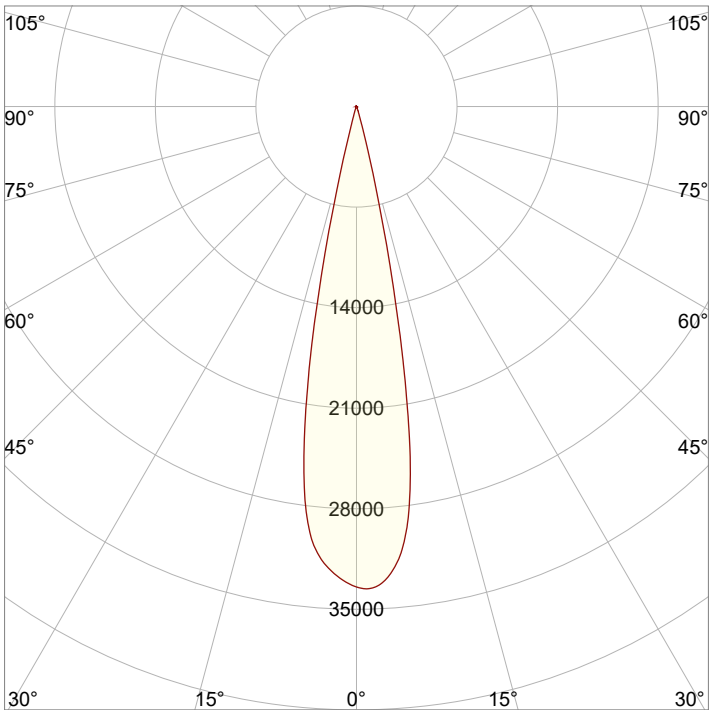
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.7 ft	6.2 ft	12.3 ft	18.5 ft	24.7 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	33433	8358	3715	2090	1337	929	682	522	413	334	276	232	198	171	149	131	116	103	93	84
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	3106	776.5	345.1	194.1	124.2	86.3	63.4	48.5	38.3	31.1	25.7	21.6	18.4	15.8	13.8	12.1	10.7	9.6	8.6	7.8

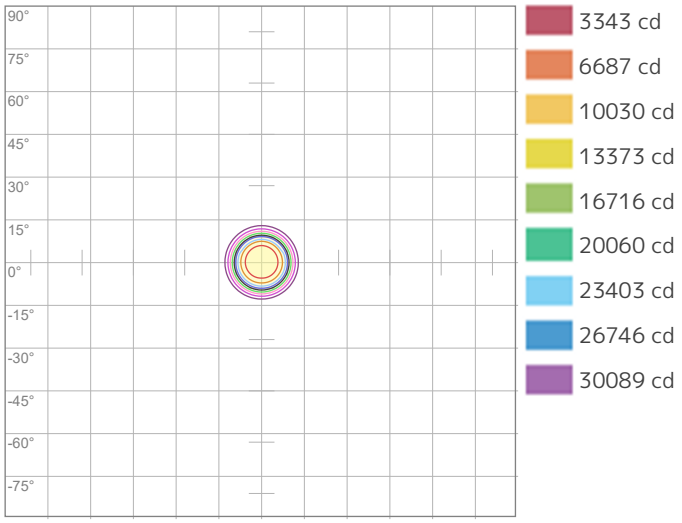
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
21.3°
Field Angle - 10%
28.8°
Cutoff Angle - 2.5%
33.1°

ISO Diagrams

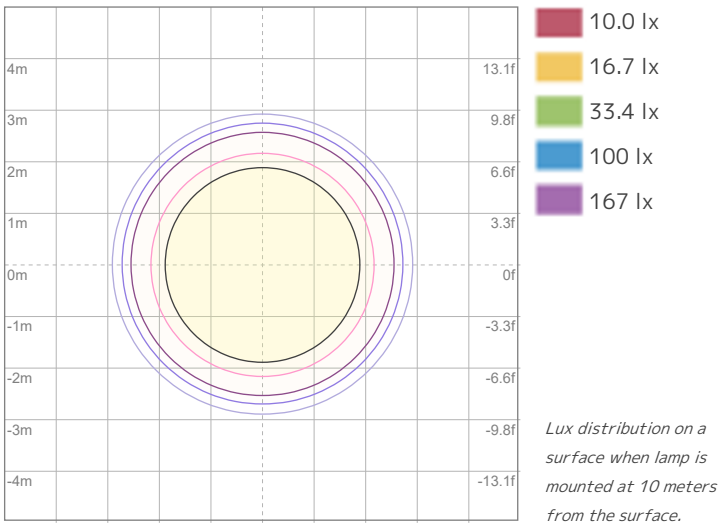


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 33433 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 334 lx

Linear Distribution

Peak Candela

33577 cd

Calculate Center Beam Intensities

lux = 33577 / distance(m)^2

fc = 33577 / distance(ft)^2

Measurement Date: 6/5/2024

Limelight Par S (Wide Zoom, Full Output)

Key Measurements

Output

Total Lumen Output: 3714 lm

Peak Intensity: 7655 cd

Beam

Beam Angle (50%): 43.1°

Field Angle (10%): 61.2°

Cutoff Angle (2.5%): 71.6°

Color

Color Temperature: 0 K

CRI: 0.0

TLCI: n/a

TM30 R_F: 0.0

TM30 R_g: 0.0

Power Details

Efficacy: 16 Lumen/Watt

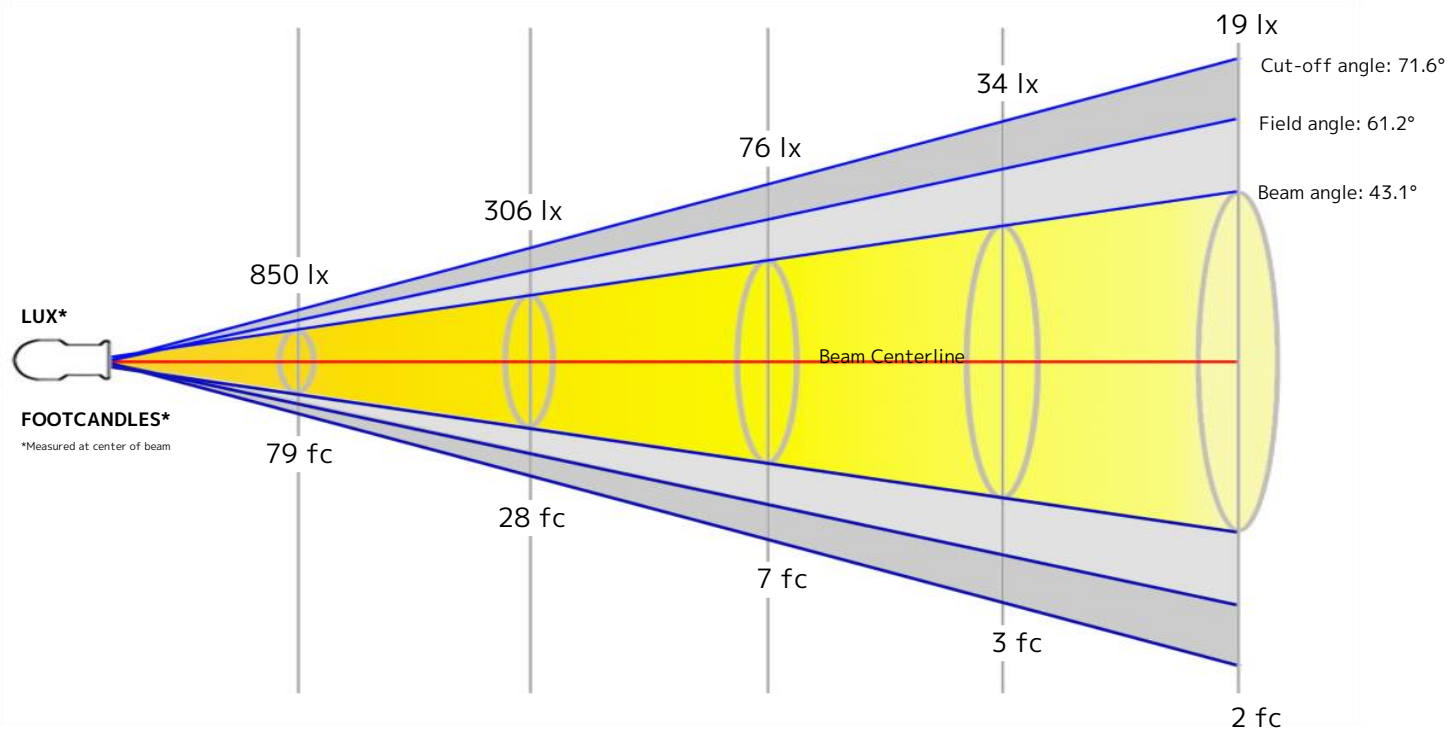
Power: 232.1 W

Supply Voltage: 119 V

Current: 1.96 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	2.4 m	3.9 m	7.9 m	11.8 m	15.8 m



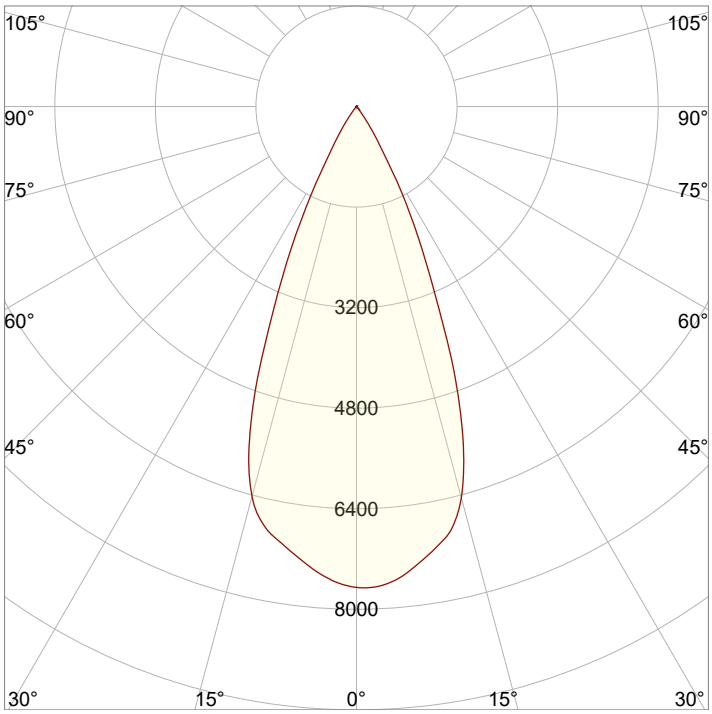
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	7.7 ft	12.9 ft	25.9 ft	38.8 ft	51.8 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	7647	1912	850	478	306	212	156	119	94	76	63	53	45	39	34	30	26	24	21	19
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	710.4	177.6	78.9	44.4	28.4	19.7	14.5	11.1	8.8	7.1	5.9	4.9	4.2	3.6	3.2	2.8	2.5	2.2	2	1.8

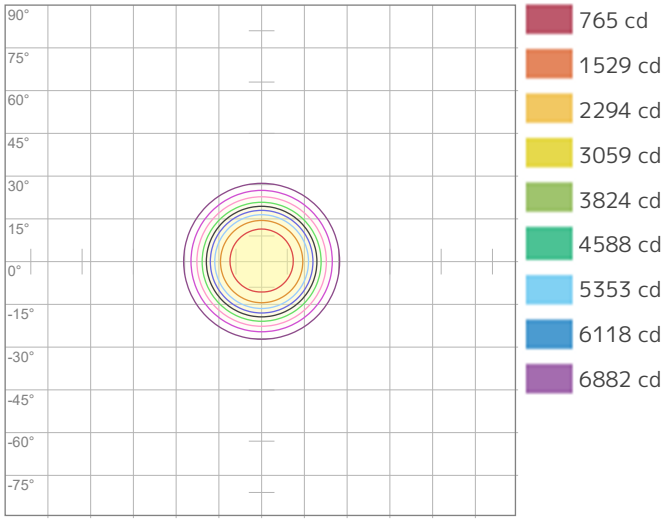
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
43.1°
Field Angle - 10%
61.2°
Cutoff Angle - 2.5%
71.6°

ISO Diagrams

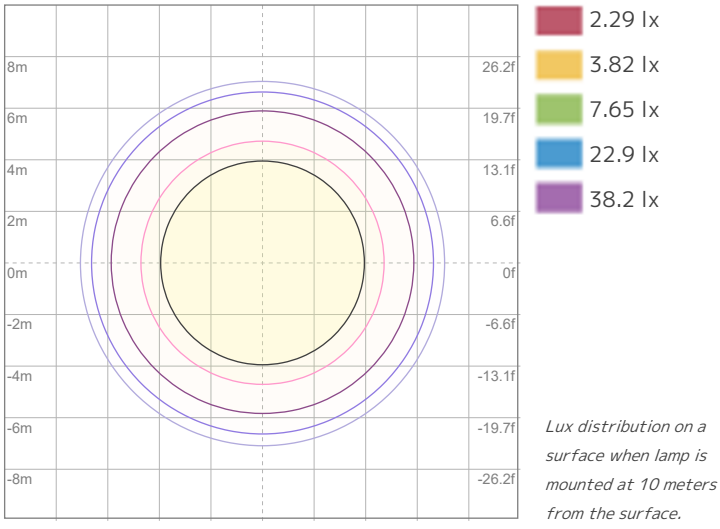


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 7647 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

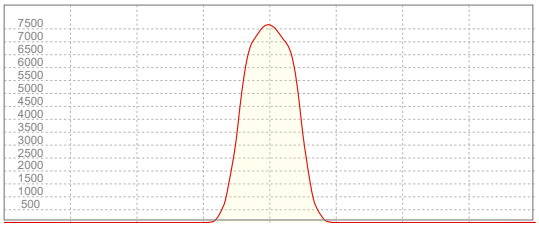
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 76.5 lx

Linear Distribution



Peak Candela
7655 cd

Calculate Center Beam Intensities

lux = 7655 / distance(m)^2

fc = 7655 / distance(ft)^2

Measurement Date: 6/5/2024

Limelight Par S (Wide Zoom, 2400K)

Key Measurements

Output

Total Lumen Output: 3659 lm

Peak Intensity: 7465 cd

Beam

Beam Angle (50%): 43.7°

Field Angle (10%): 61.5°

Cutoff Angle (2.5%): 71.6°

Color

Color Temperature: 2358 K

CRI: 78.7

TLCI: 56

TM30 R_F: 80.7

TM30 R_g: 115.8

Power Details

Efficacy: 17 Lumen/Watt

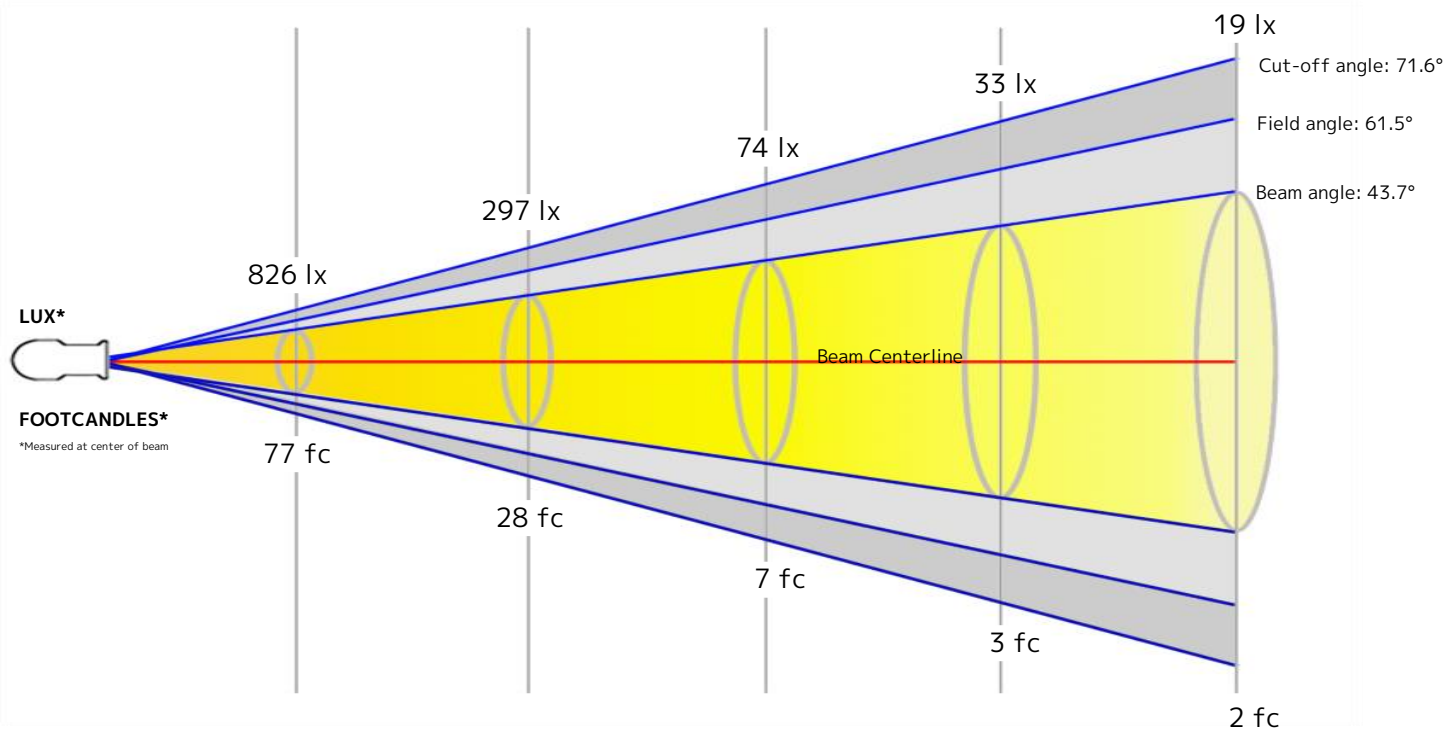
Power: 210 W

Supply Voltage: 120 V

Current: 1.76 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	2.4 m	4 m	8 m	12 m	16 m



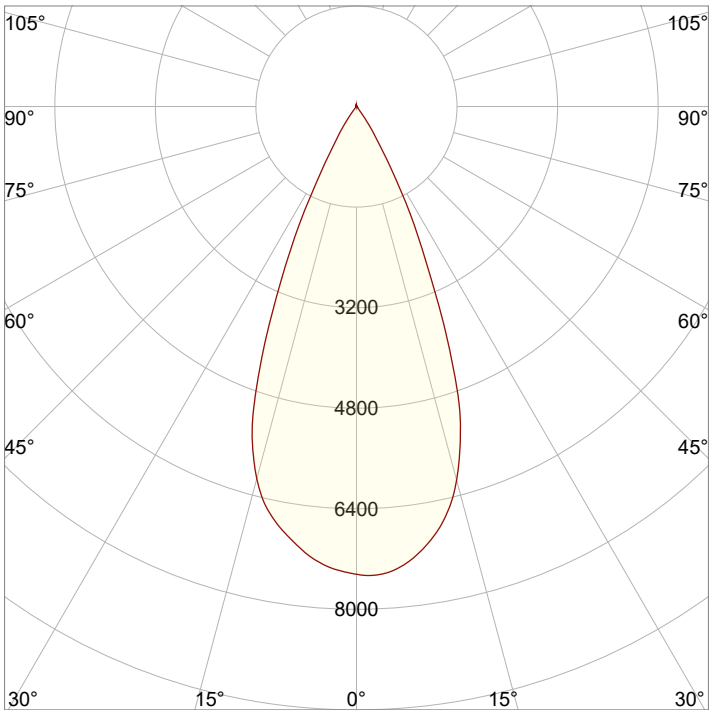
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	7.9 ft	13.1 ft	26.3 ft	39.4 ft	52.6 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	7437	1859	826	465	297	207	152	116	92	74	61	52	44	38	33	29	26	23	21	19
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	690.9	172.7	76.8	43.2	27.6	19.2	14.1	10.8	8.5	6.9	5.7	4.8	4.1	3.5	3.1	2.7	2.4	2.1	1.9	1.7

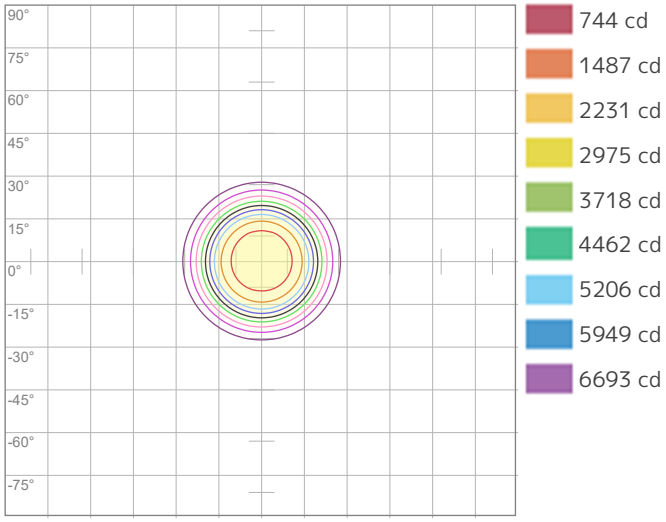
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
43.7°
Field Angle - 10%
61.5°
Cutoff Angle - 2.5%
71.6°

ISO Diagrams

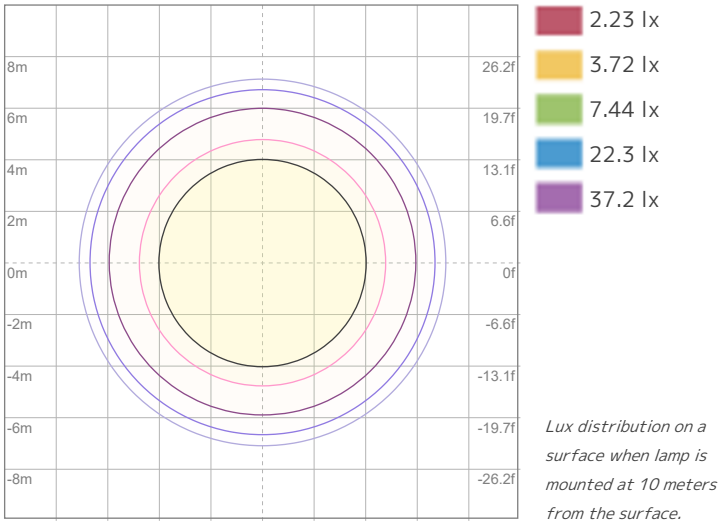


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 7437 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

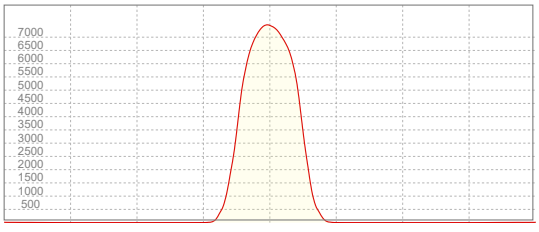
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 74.4 lx

Linear Distribution



Peak Candela
7465 cd

Calculate Center Beam Intensities

lux = 7465 / distance(m)^2

fc = 7465 / distance(ft)^2

Measurement Date: 6/5/2024

Limelight Par S (Wide Zoom, 3200K)

Key Measurements

Output

Total Lumen Output: 4040 lm

Peak Intensity: 8006 cd

Beam

Beam Angle (50%): 43.6°

Field Angle (10%): 61.7°

Cutoff Angle (2.5%): 72.5°

Color

Color Temperature: 3203 K

CRI: 82.7

TLCI: 73

TM30 R_F: 84.3

TM30 R_g: 103.1

Power Details

Efficacy: 23 Lumen/Watt

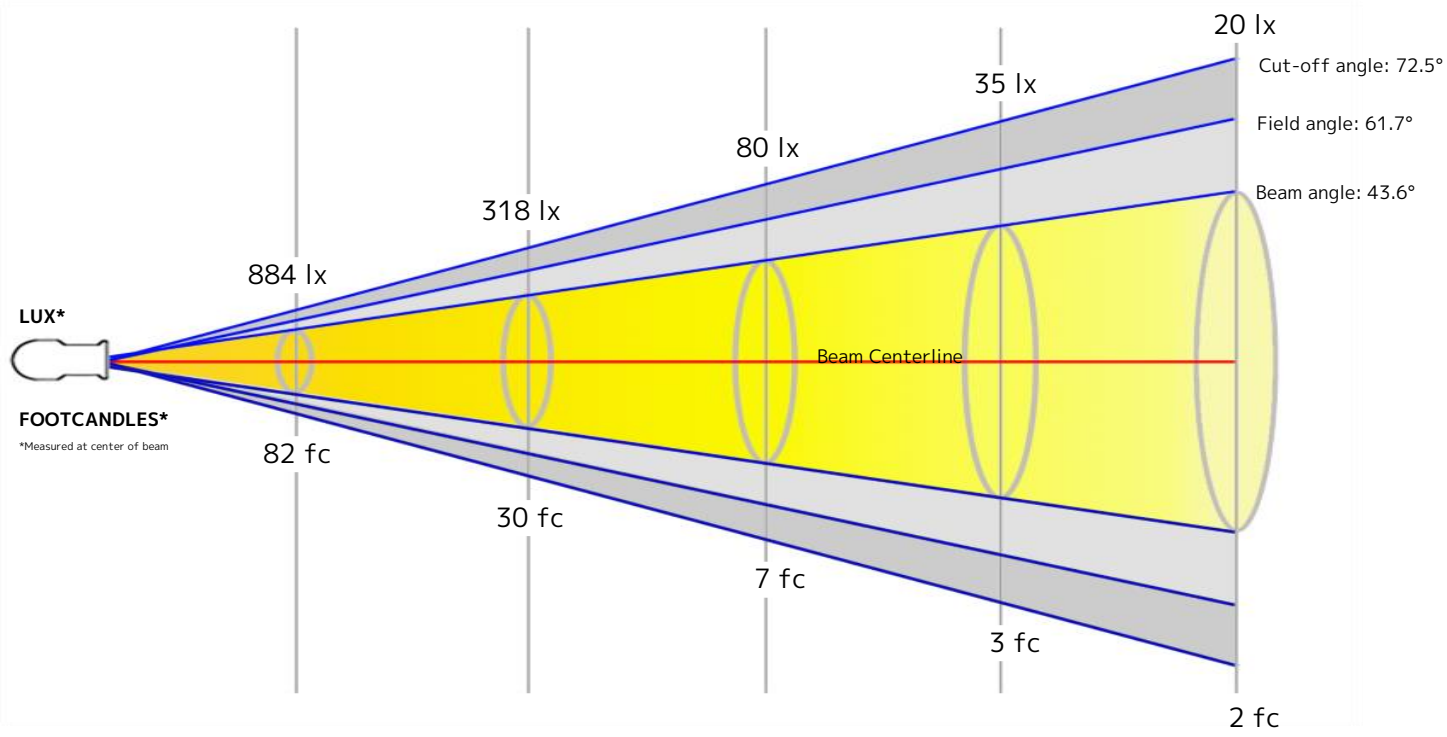
Power: 172 W

Supply Voltage: 119 V

Current: 1.46 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	2.4 m	4 m	8 m	12 m	16 m



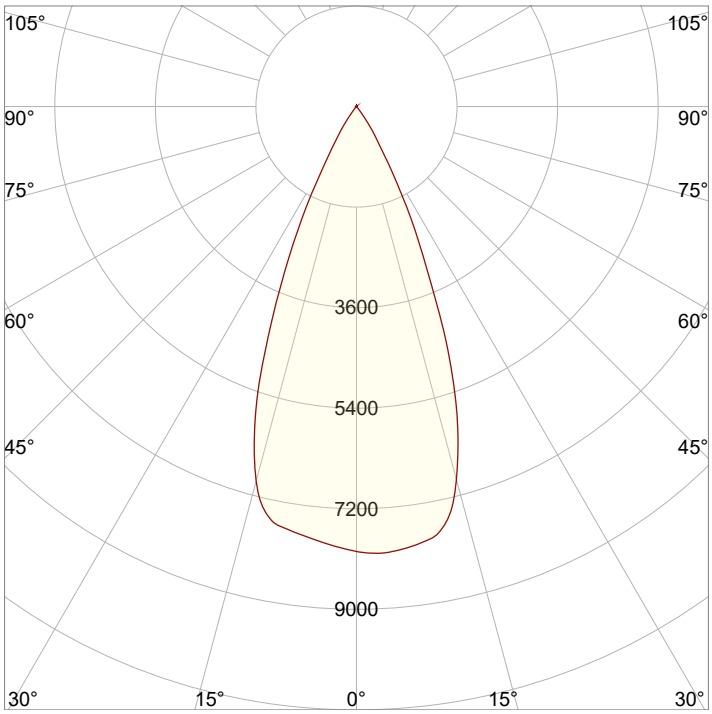
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	7.8 ft	13.1 ft	26.3 ft	39.4 ft	52.5 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	7960	1990	884	498	318	221	162	124	98	80	66	55	47	41	35	31	28	25	22	20
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	739.5	184.9	82.2	46.2	29.6	20.5	15.1	11.6	9.1	7.4	6.1	5.1	4.4	3.8	3.3	2.9	2.6	2.3	2	1.8

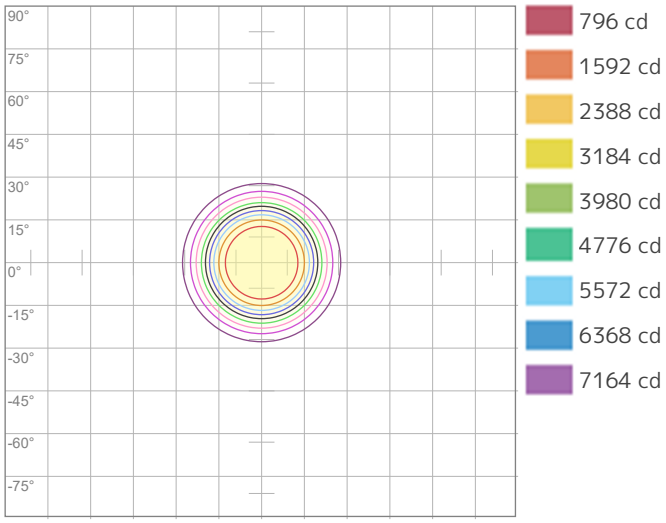
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
43.6°
Field Angle - 10%
61.7°
Cutoff Angle - 2.5%
72.5°

ISO Diagrams

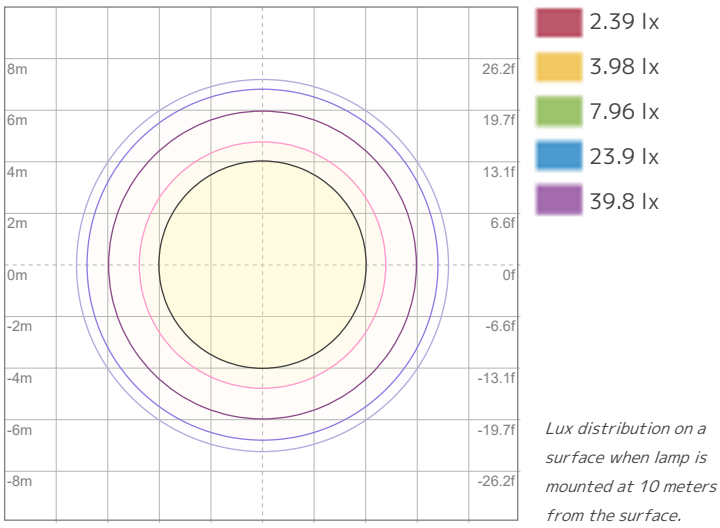


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 7960 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

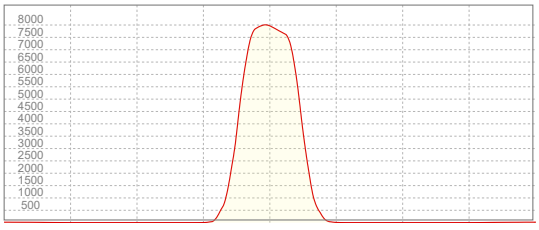
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 79.6 lx

Linear Distribution



Peak Candela

8006 cd

Calculate Center Beam Intensities

lux = 8006 / distance(m)^2

fc = 8006 / distance(ft)^2

Measurement Date: 6/5/2024

Key Measurements

Output

Total Lumen Output: 4334 lm

Peak Intensity: 8558 cd

Beam

Beam Angle (50%): 43.6°

Field Angle (10%): 61.9°

Cutoff Angle (2.5%): 73°

Color

Color Temperature: 4497 K

CRI: 73.6

TLCI: 60

TM30 R_F: 75.6

TM30 R_g: 98.6

Power Details

Efficacy: 25 Lumen/Watt

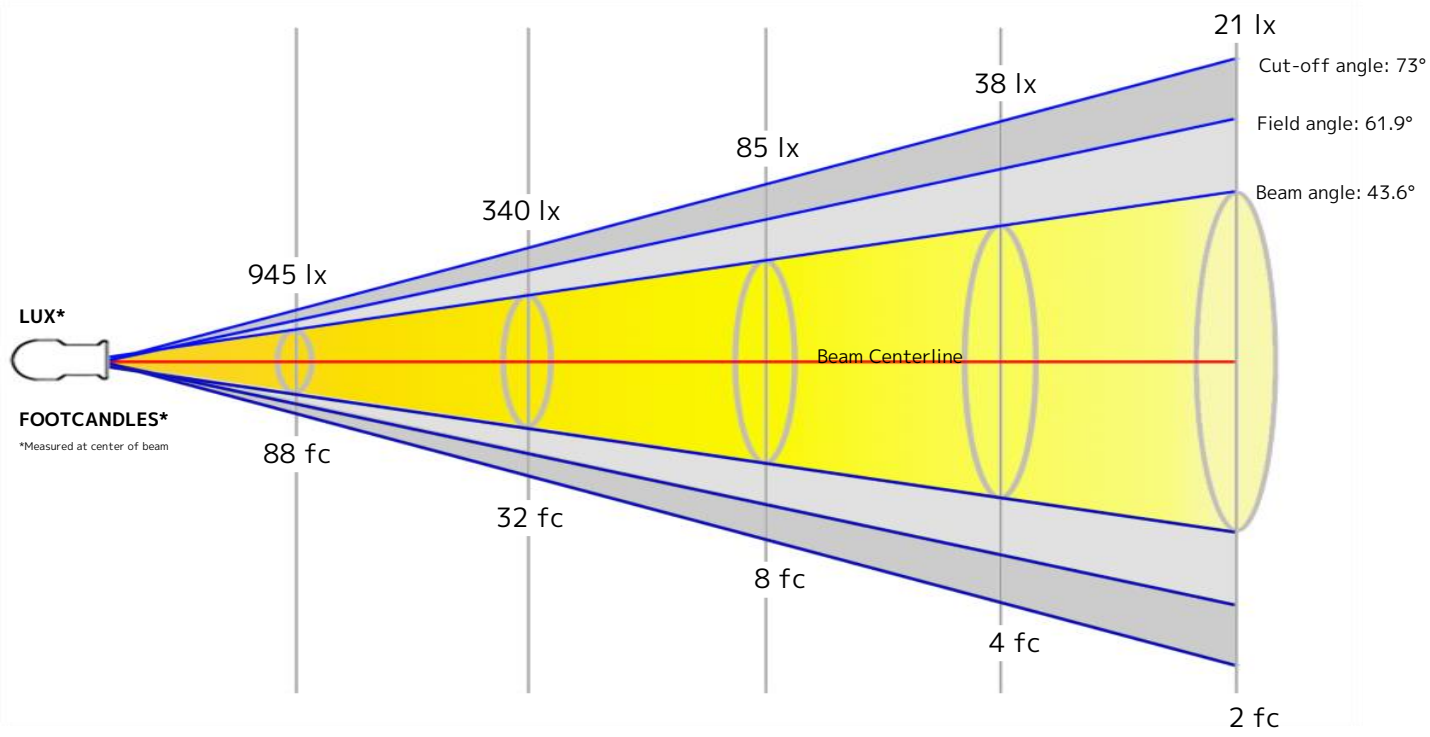
Power: 175.2 W

Supply Voltage: 120 V

Current: 1.47 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	2.4 m	4 m	8 m	12 m	16 m



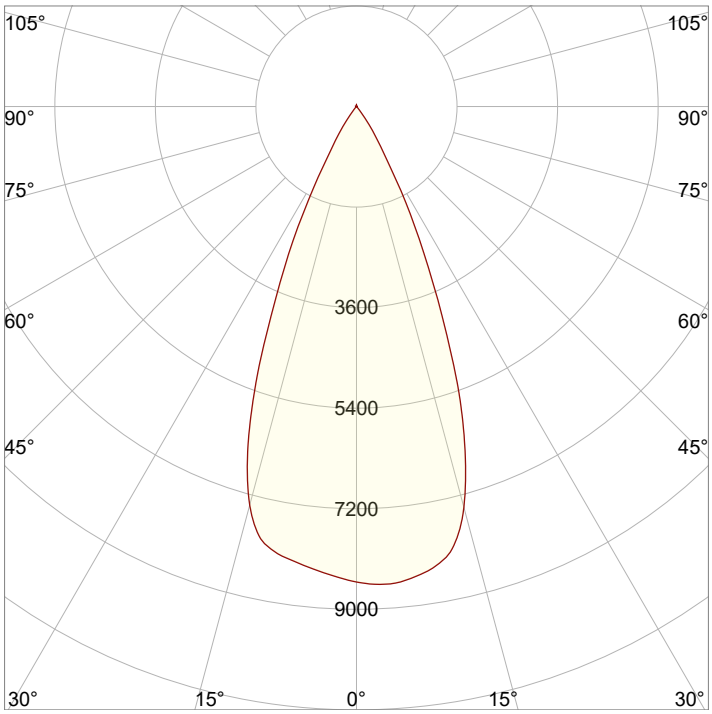
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	7.8 ft	13.1 ft	26.2 ft	39.4 ft	52.5 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	8509	2127	945	532	340	236	174	133	105	85	70	59	50	43	38	33	29	26	24	21
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	790.5	197.6	87.8	49.4	31.6	22	16.1	12.4	9.8	7.9	6.5	5.5	4.7	4	3.5	3.1	2.7	2.4	2.2	2

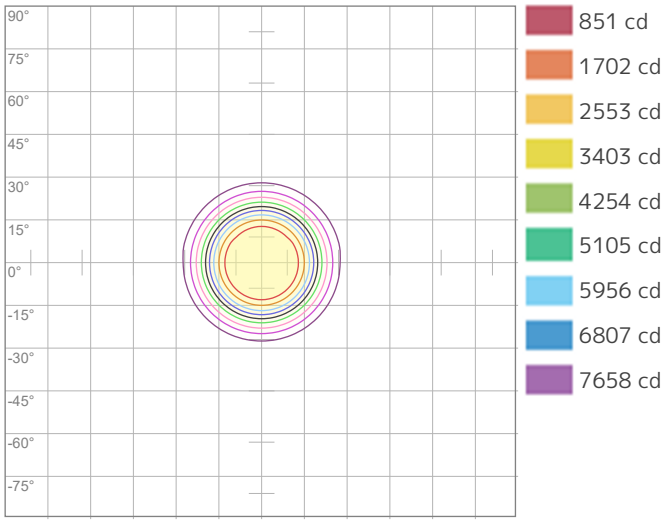
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
43.6°
Field Angle - 10%
61.9°
Cutoff Angle - 2.5%
73°

ISO Diagrams

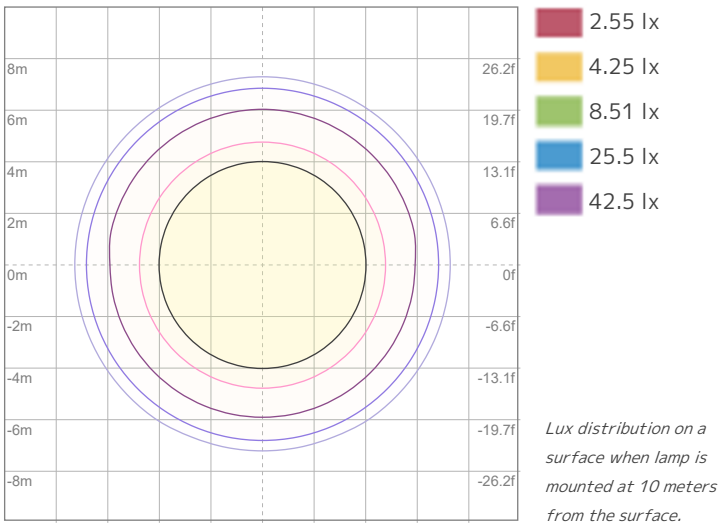


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 8509 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

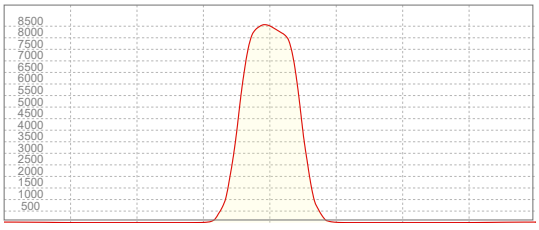
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 85.1 lx

Linear Distribution



Peak Candela
8558 cd

Calculate Center Beam Intensities

lux = 8558 / distance(m)^2

fc = 8558 / distance(ft)^2

Measurement Date: 6/5/2024

Key Measurements

Output

Total Lumen Output: 4786 lm

Peak Intensity: 10004 cd

Beam

Beam Angle (50%): 42.7°

Field Angle (10%): 61.1°

Cutoff Angle (2.5%): 71.2°

Color

Color Temperature: 5591 K

CRI: 73.8

TLCI: 65

TM30 R_F: 75.5

TM30 R_g: 99.1

Power Details

Efficacy: 25 Lumen/Watt

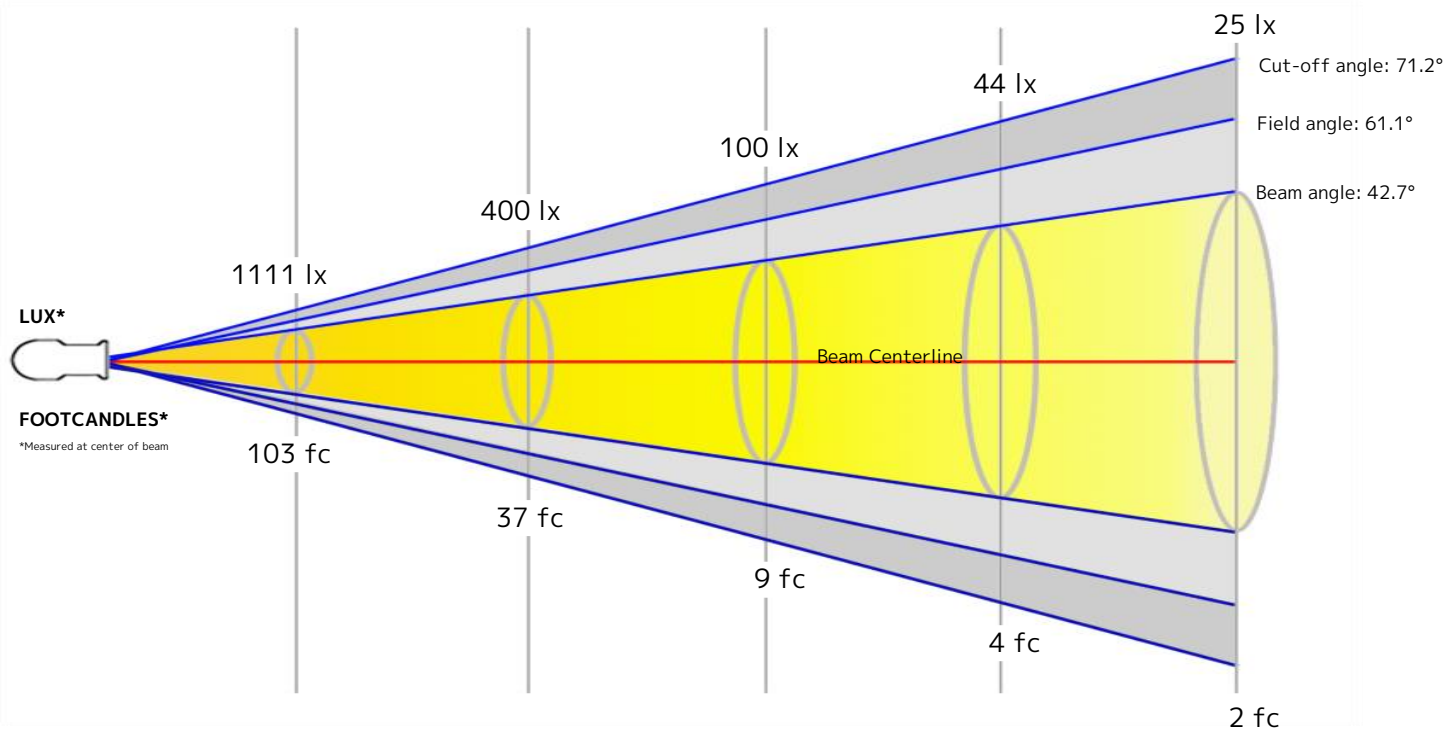
Power: 193.8 W

Supply Voltage: 119 V

Current: 1.64 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	2.3 m	3.9 m	7.8 m	11.7 m	15.6 m



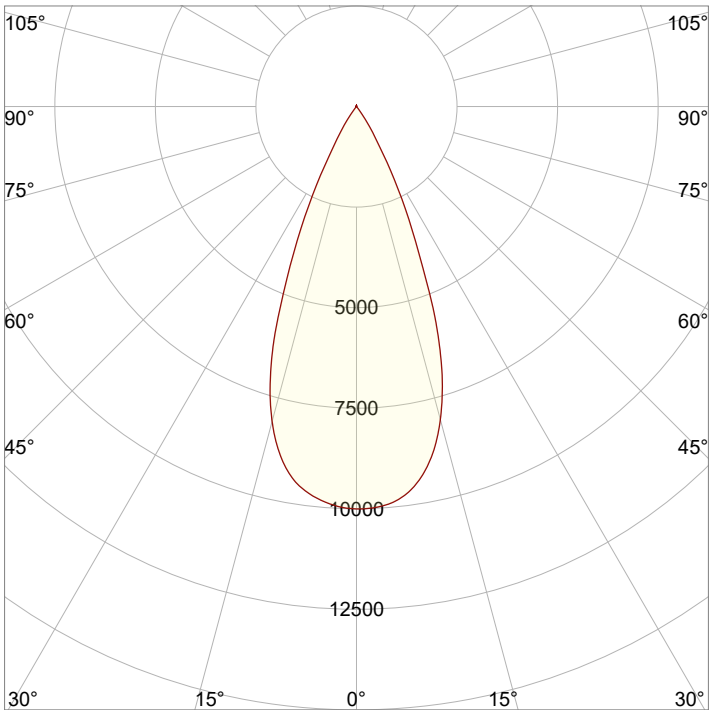
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	7.7 ft	12.8 ft	25.7 ft	38.5 ft	51.3 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	9998	2500	1111	625	400	278	204	156	123	100	83	69	59	51	44	39	35	31	28	25
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	928.9	232.2	103.2	58.1	37.2	25.8	19	14.5	11.5	9.3	7.7	6.5	5.5	4.7	4.1	3.6	3.2	2.9	2.6	2.3

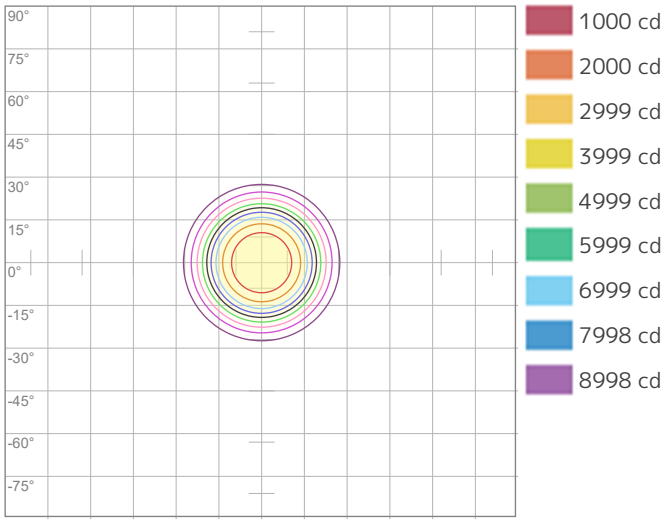
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
42.7°
Field Angle - 10%
61.1°
Cutoff Angle - 2.5%
71.2°

ISO Diagrams

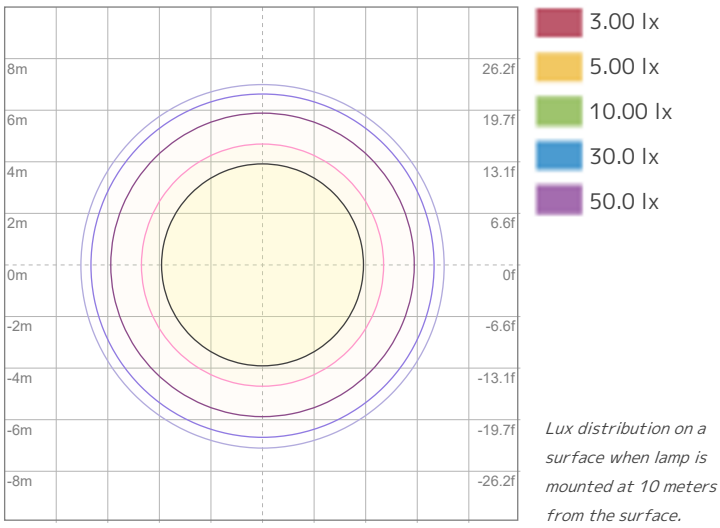


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 9998 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

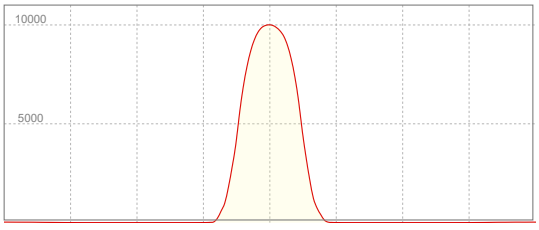
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 100.0 lx

Linear Distribution



Peak Candela

10004 cd

Calculate Center Beam Intensities

lux = 10004 / distance(m)^2

fc = 10004 / distance(ft)^2

Measurement Date: 6/5/2024

Limelight Par S (Wide Zoom, 6500K)

Key Measurements

Output

Total Lumen Output: 4844 lm

Peak Intensity: 9874 cd

Beam

Beam Angle (50%): 43°

Field Angle (10%): 62.2°

Cutoff Angle (2.5%): 72.6°

Color

Color Temperature: 6448 K

CRI: 75.1

TLCI: 68

TM30 R_F: 76.2

TM30 R_g: 99.0

Power Details

Efficacy: 24 Lumen/Watt

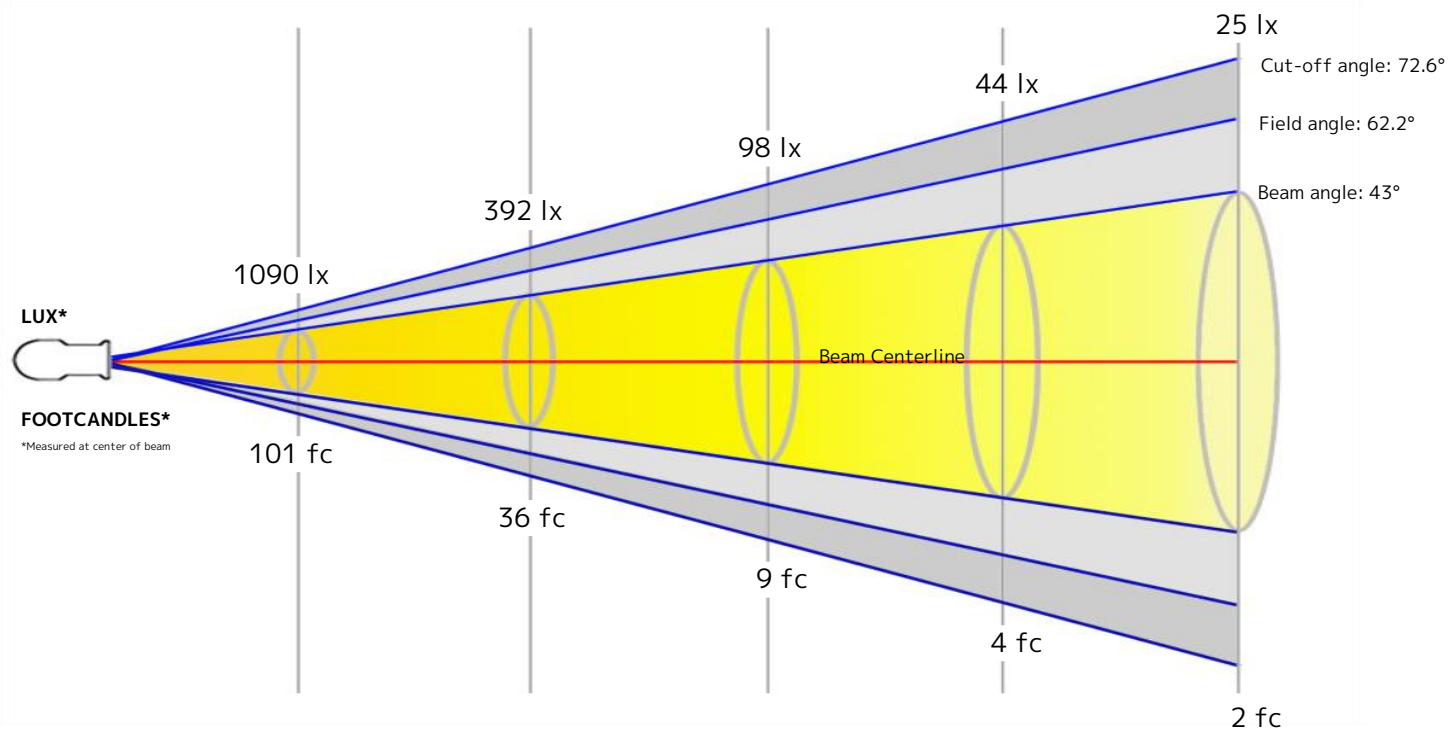
Power: 206 W

Supply Voltage: 119 V

Current: 1.74 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	2.4 m	3.9 m	7.9 m	11.8 m	15.8 m



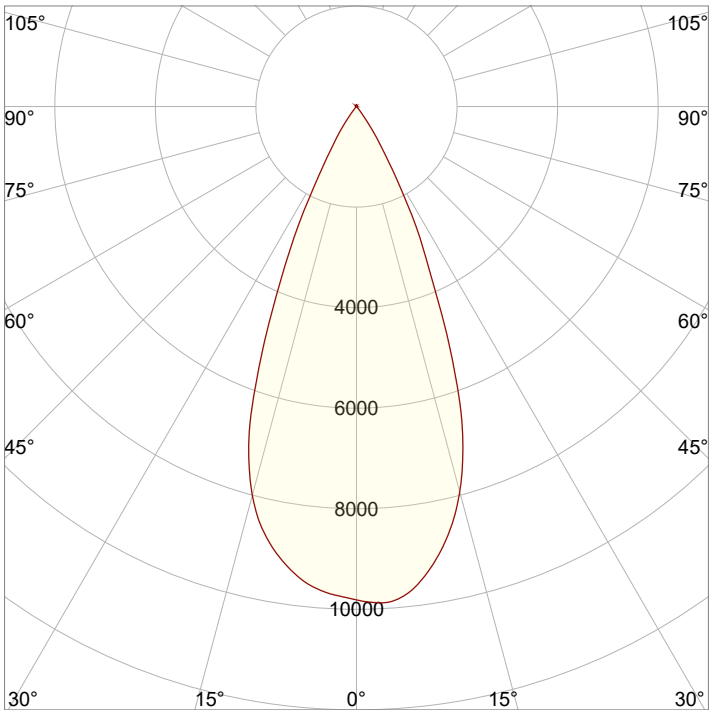
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	7.7 ft	12.9 ft	25.9 ft	38.8 ft	51.7 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	9809	2452	1090	613	392	272	200	153	121	98	81	68	58	50	44	38	34	30	27	25
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	911.3	227.8	101.3	57	36.5	25.3	18.6	14.2	11.3	9.1	7.5	6.3	5.4	4.6	4.1	3.6	3.2	2.8	2.5	2.3

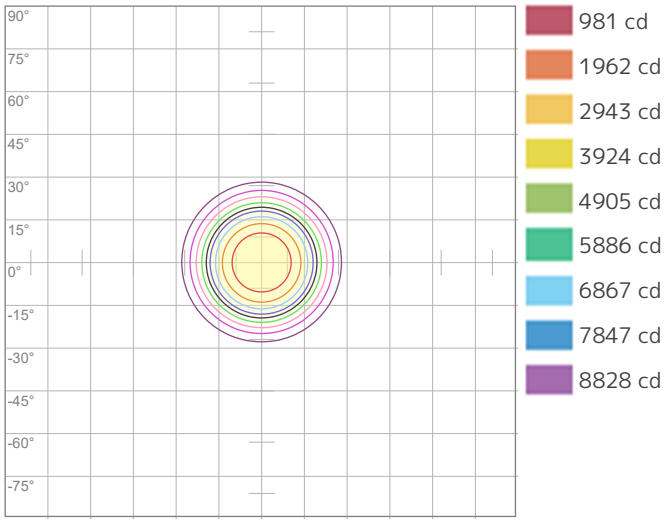
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
43°
Field Angle - 10%
62.2°
Cutoff Angle - 2.5%
72.6°

ISO Diagrams

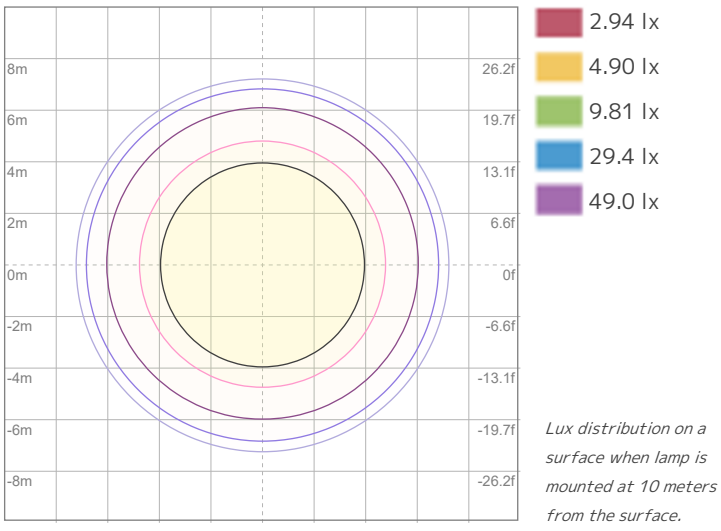


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 9809 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

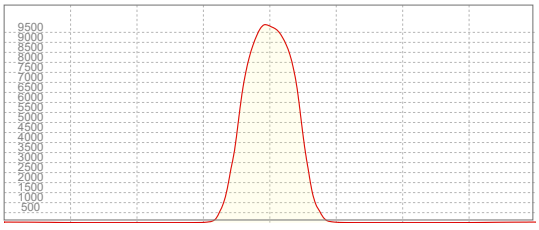
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 98.1 lx

Linear Distribution



Peak Candela

9874 cd

Calculate Center Beam Intensities

lux = 9874 / distance(m)^2

fc = 9874 / distance(ft)^2

Measurement Date: 6/5/2024

Key Measurements

Output

Total Lumen Output: 4773 lm

Peak Intensity: 9877 cd

Beam

Beam Angle (50%): 43.2°

Field Angle (10%): 61.9°

Cutoff Angle (2.5%): 72.1°

Color

Color Temperature: 8235 K

CRI: 75.7

TLCI: 69

TM30 R_F: 76.4

TM30 R_g: 97.8

Power Details

Efficacy: 21 Lumen/Watt

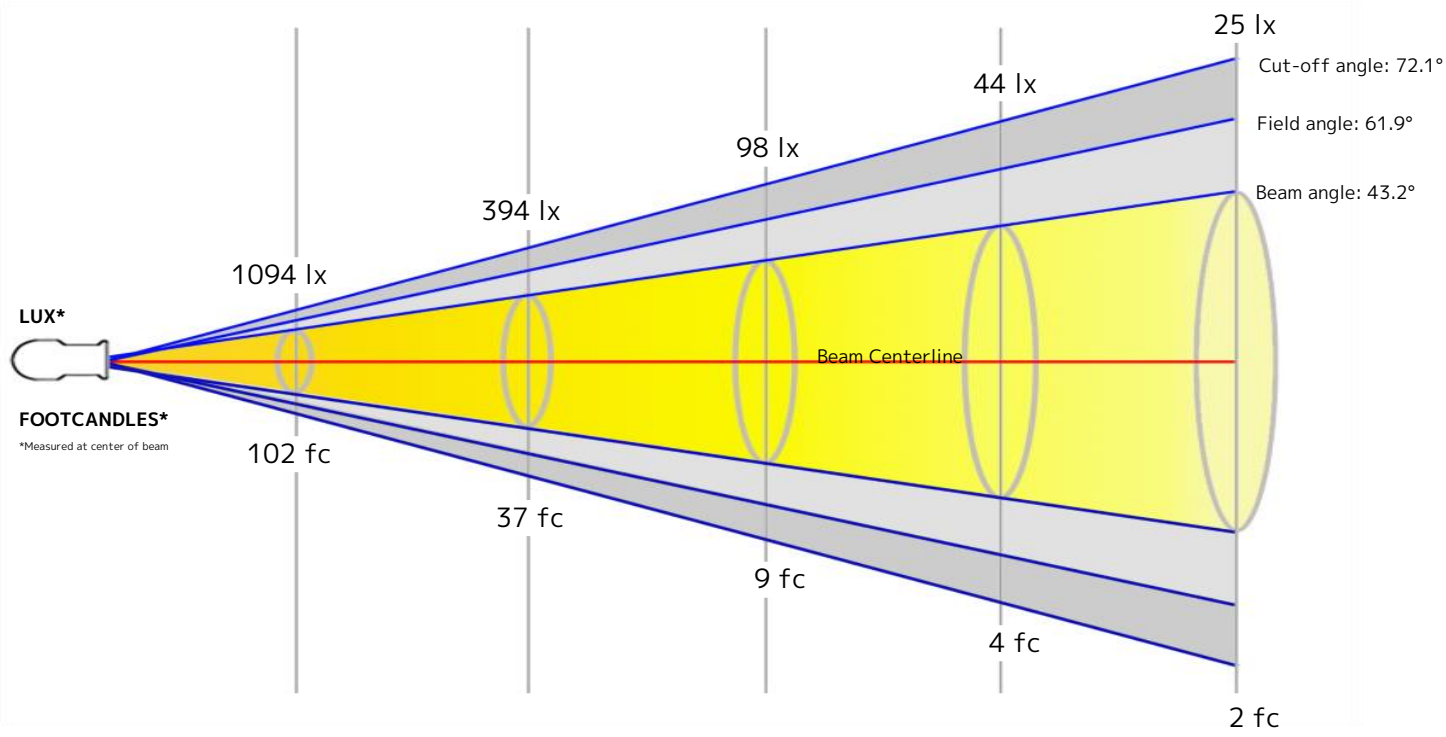
Power: 225.1 W

Supply Voltage: 119 V

Current: 1.90 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	2.4 m	4 m	7.9 m	11.9 m	15.8 m



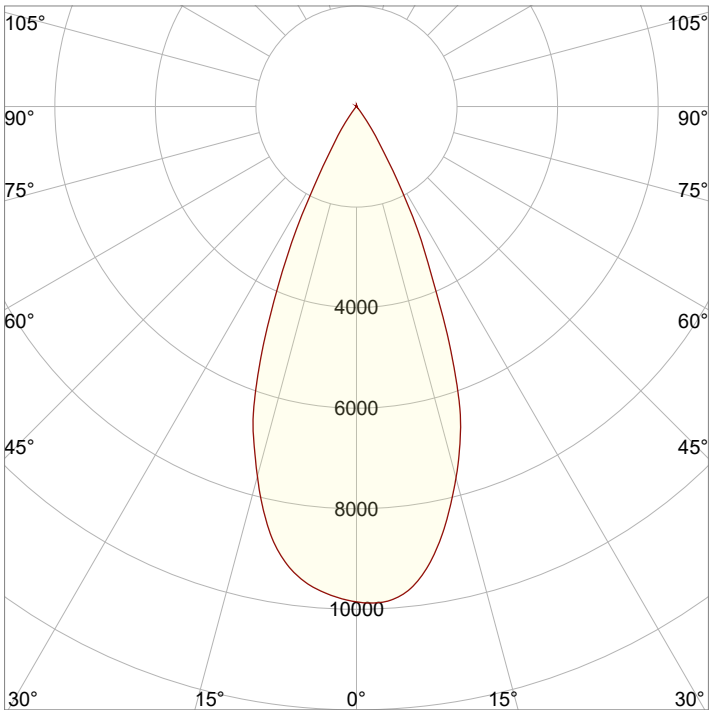
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	7.8 ft	13 ft	26 ft	39 ft	52 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	9844	2461	1094	615	394	273	201	154	122	98	81	68	58	50	44	38	34	30	27	25
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	914.5	228.6	101.6	57.2	36.6	25.4	18.7	14.3	11.3	9.1	7.6	6.4	5.4	4.7	4.1	3.6	3.2	2.8	2.5	2.3

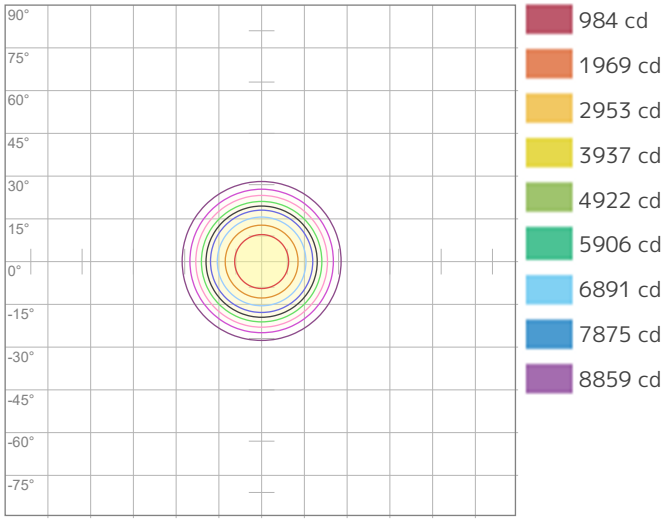
Measurement Date: 6/5/2024

Angular Distribution



Beam Angle - 50%
43.2°
Field Angle - 10%
61.9°
Cutoff Angle - 2.5%
72.1°

ISO Diagrams

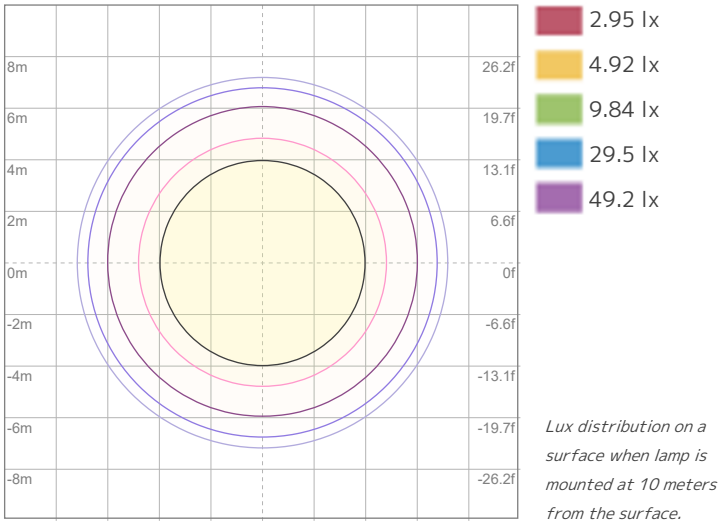


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 9844 cd



Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

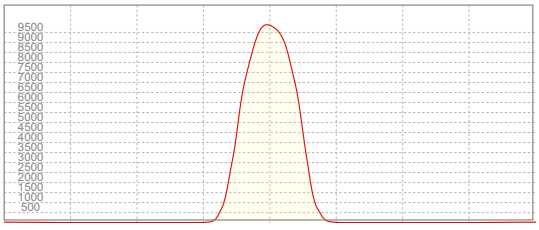
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 98.4 lx

Linear Distribution



Peak Candela
9877 cd

Calculate Center Beam Intensities

lux = 9877 / distance(m)^2

fc = 9877 / distance(ft)^2

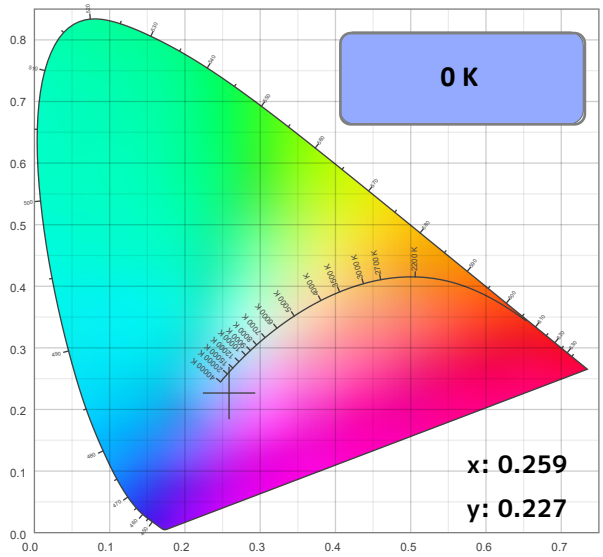
Measurement Date: 6/5/2024

Color Temperature: 0K

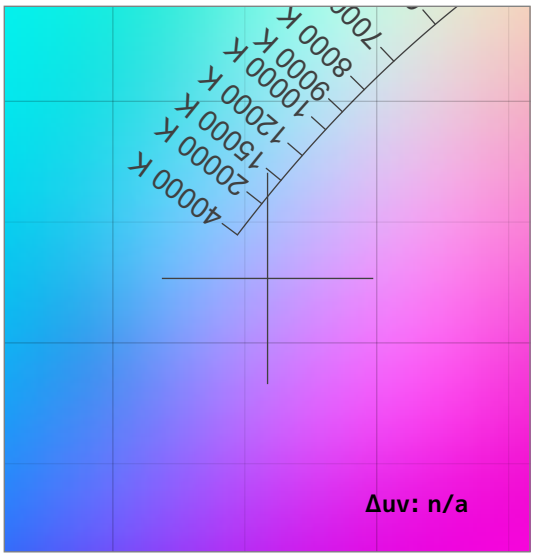
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
0.0	0.0	0.0	0.0	n/a	0.0	0.259	0.227	n/a	-28	30

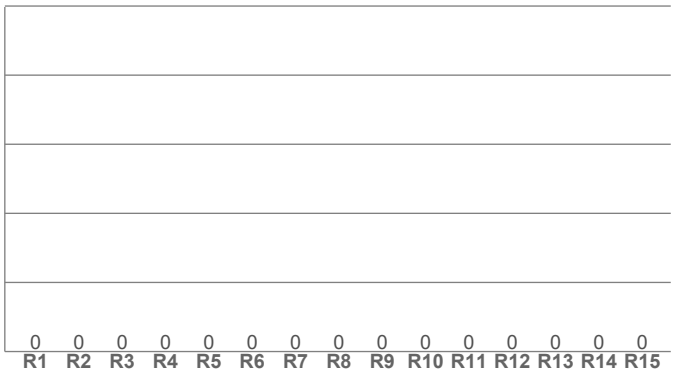
CIE 1931



CIE 1931 ZOOMED

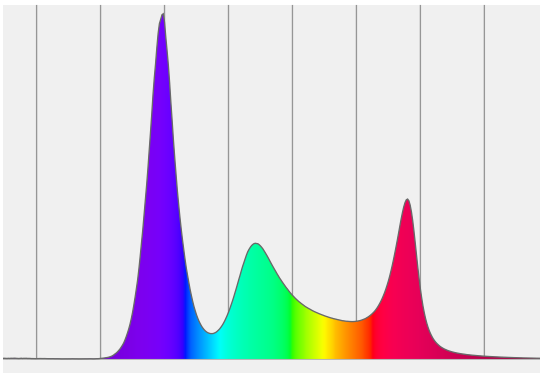


CRI: 0.0 (R1-R8)



Spectral Power Distribution (SPD)

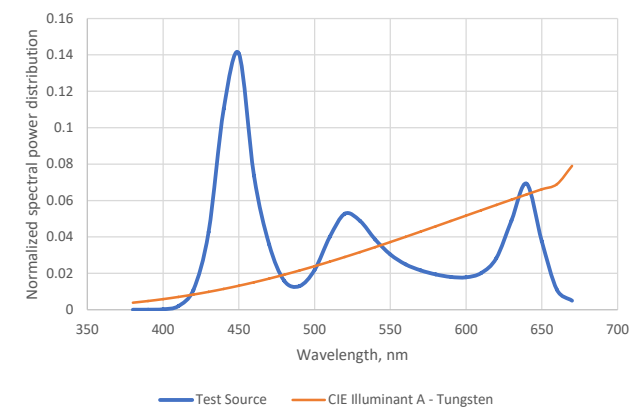
Dominant Wavelength 455 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] -28

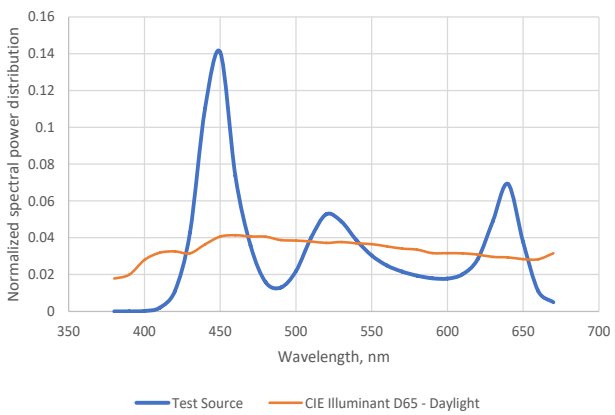
Spectral variance



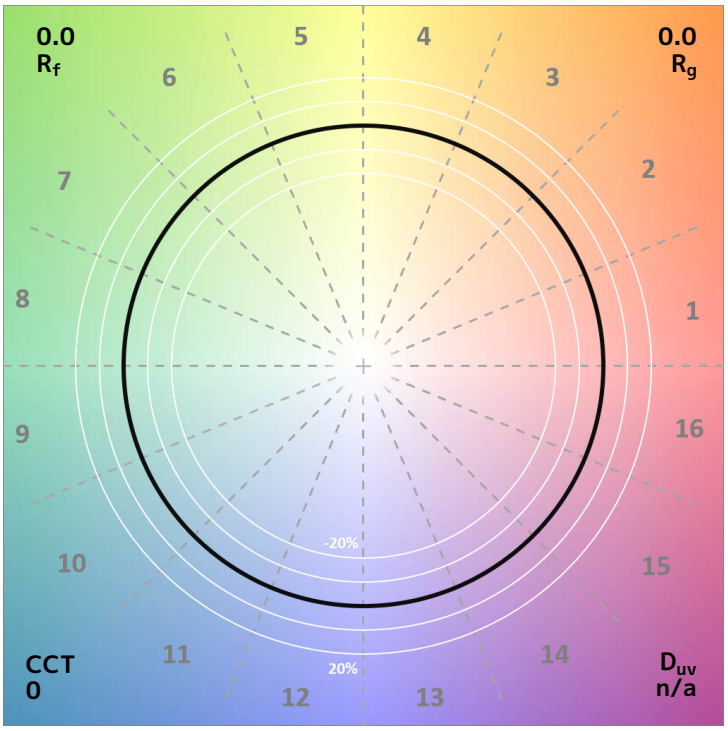
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 30

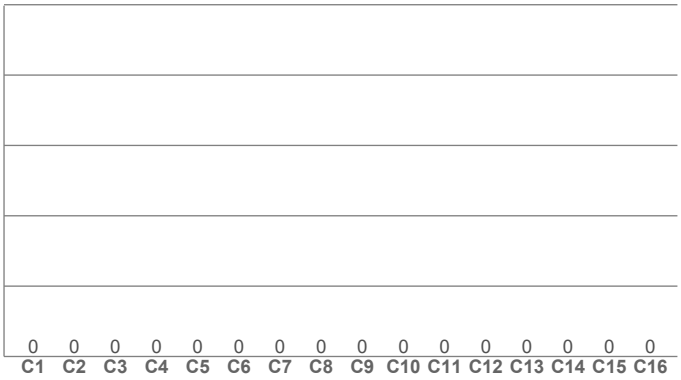
Spectral variance



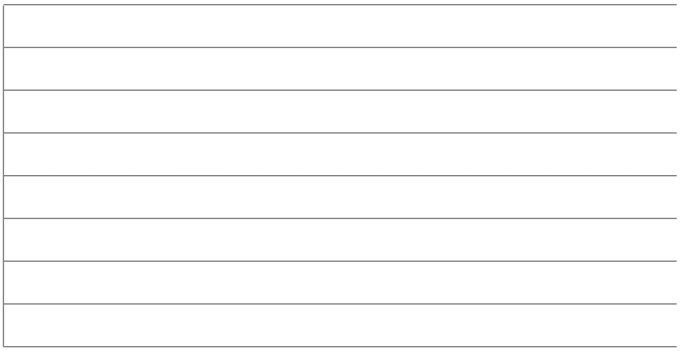
Measurement Date: 6/4/2024



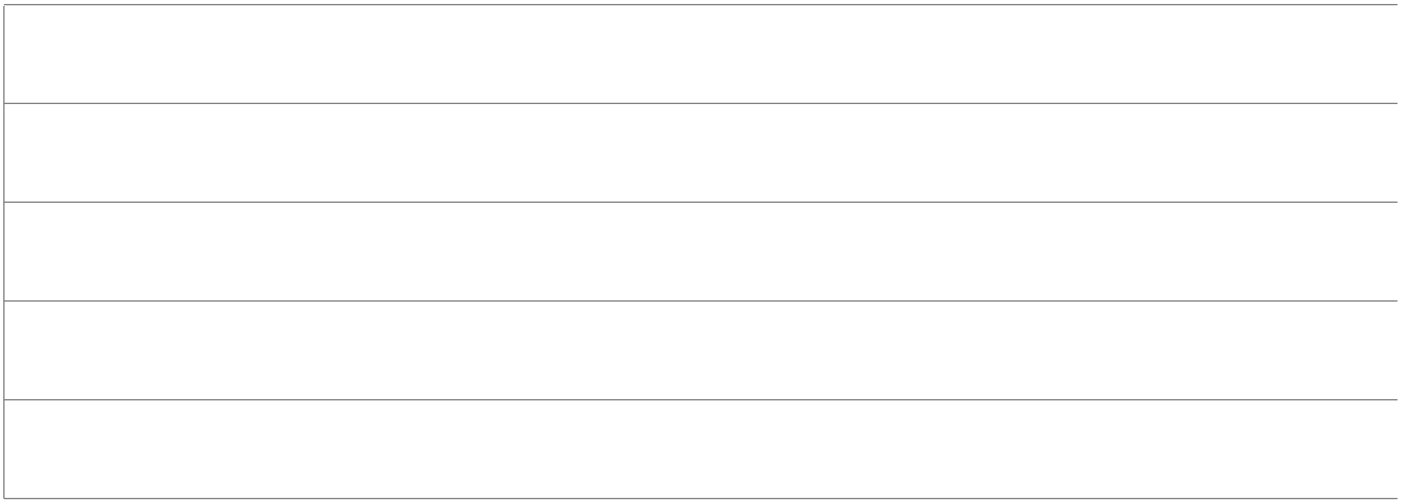
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



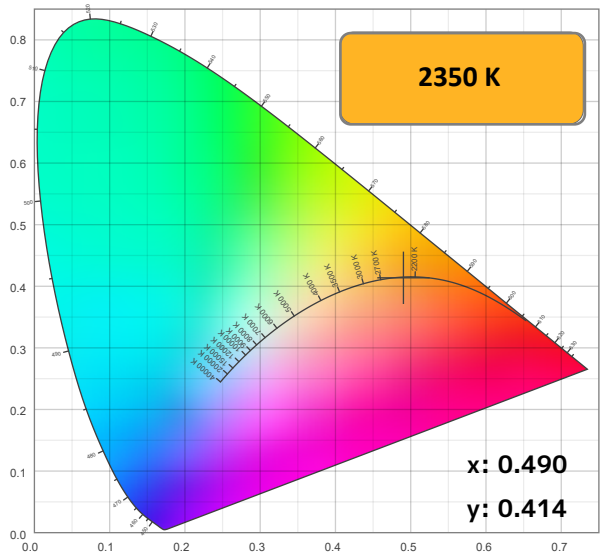
Measurement Date: 6/4/2024

Color Temperature: 2350K

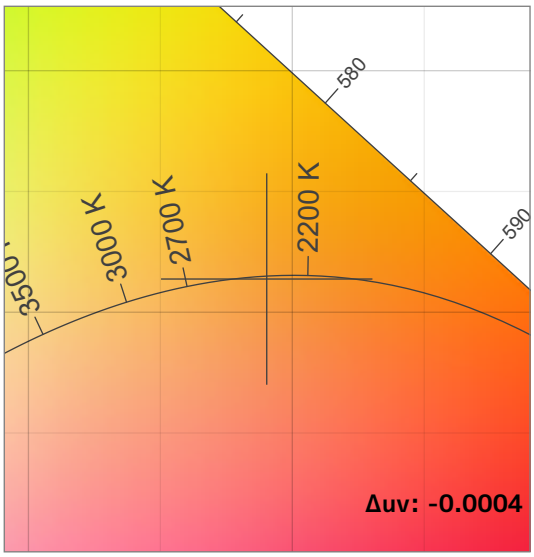
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
78.6	24.8	80.5	116.1	56	80.2	0.490	0.414	-0.0004	48	-11

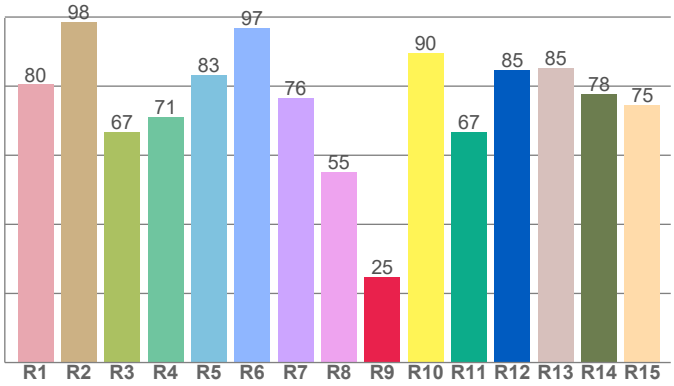
CIE 1931



CIE 1931 ZOOMED

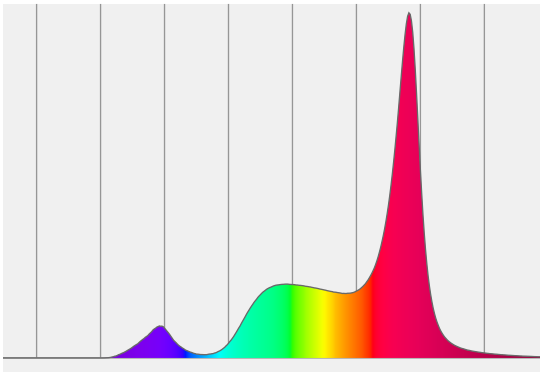


CRI: 78.6 (R1-R8)



Spectral Power Distribution (SPD)

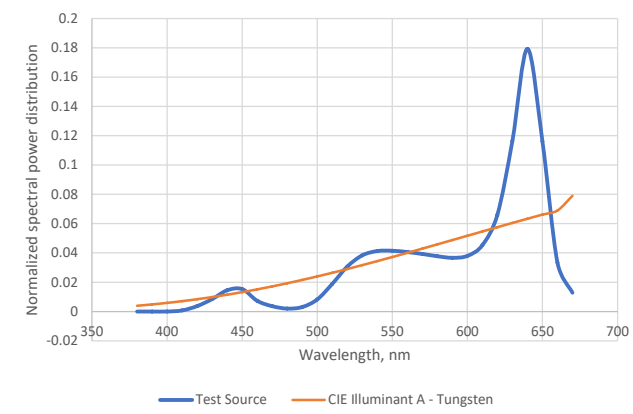
Dominant Wavelength 587 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 48

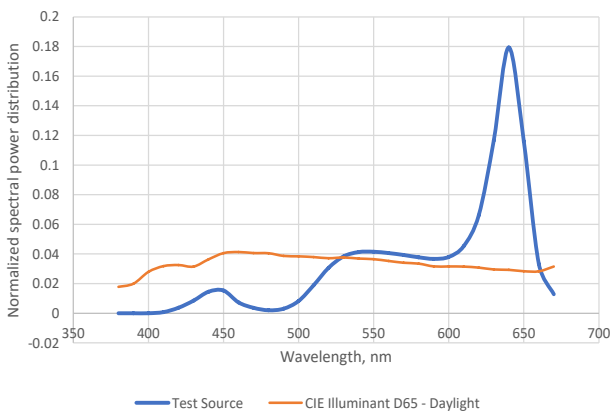
Spectral variance



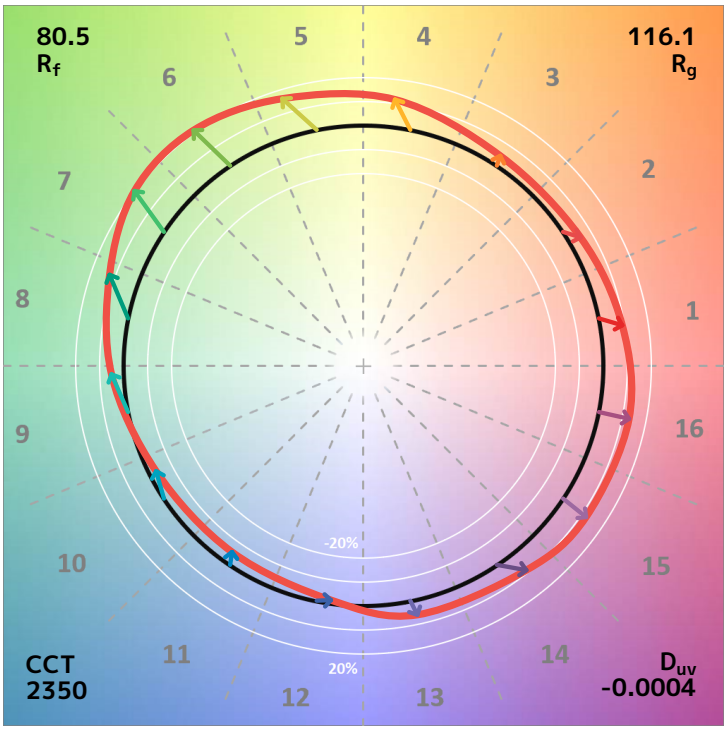
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] -11

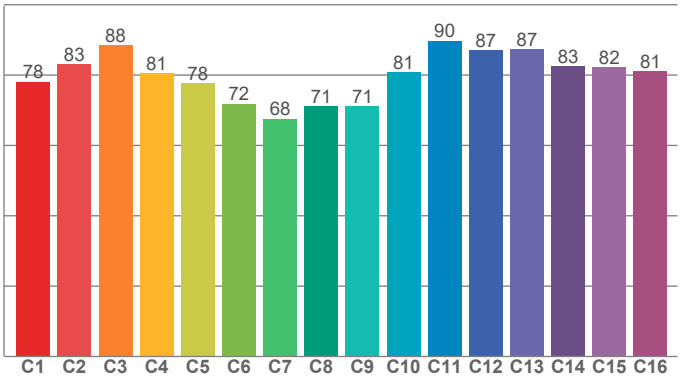
Spectral variance



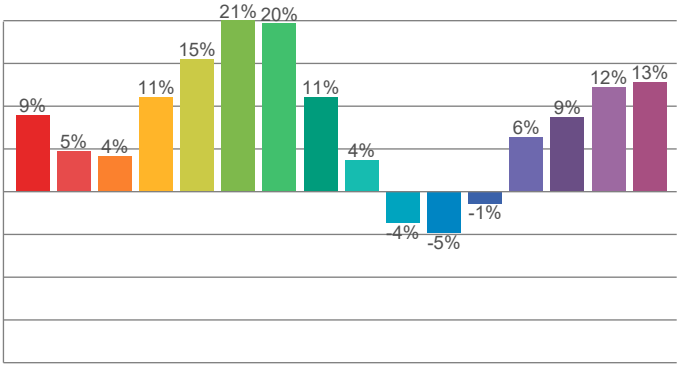
Measurement Date: 6/5/2024



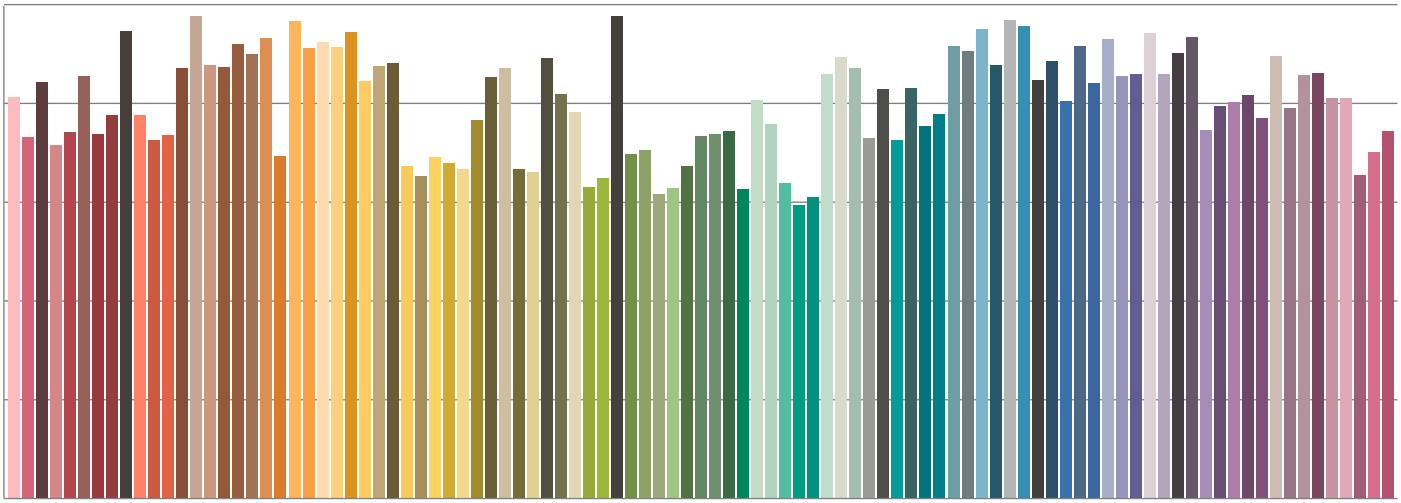
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



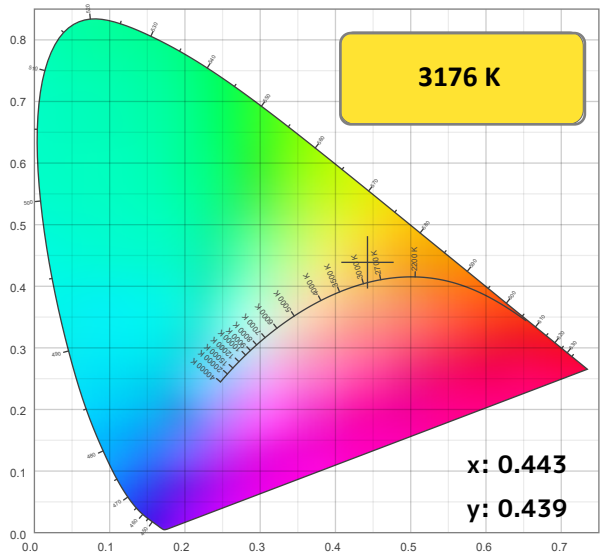
Measurement Date: 6/5/2024

Color Temperature: 3176K

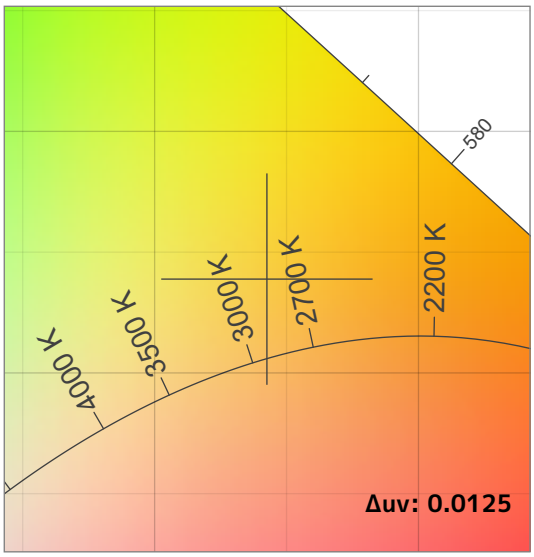
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
82.8	96.5	84.6	103.1	74	83.1	0.443	0.439	0.0125	61	22

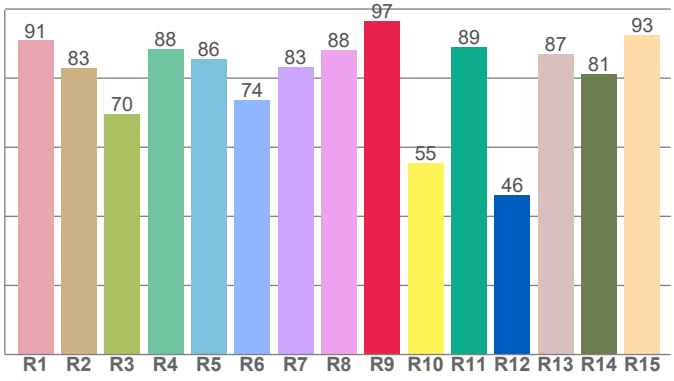
CIE 1931



CIE 1931 ZOOMED

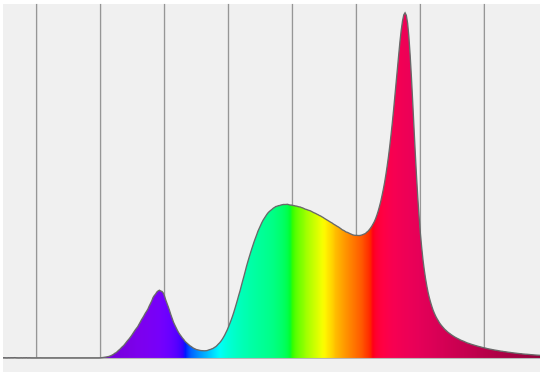


CRI: 82.8 (R1-R8)



Spectral Power Distribution (SPD)

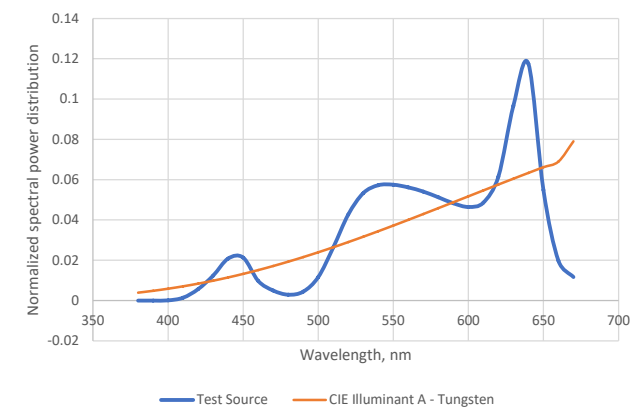
Dominant Wavelength 579 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 61

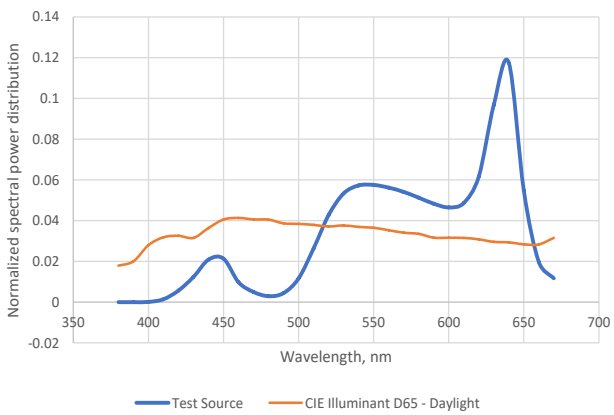
Spectral variance



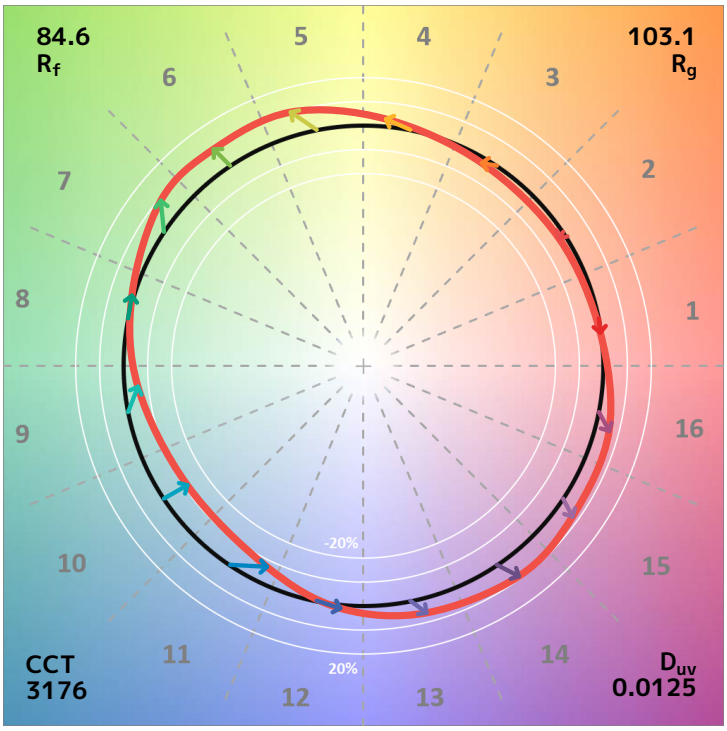
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 22

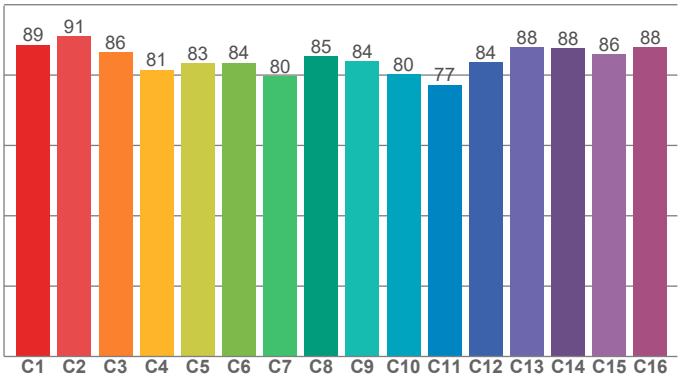
Spectral variance



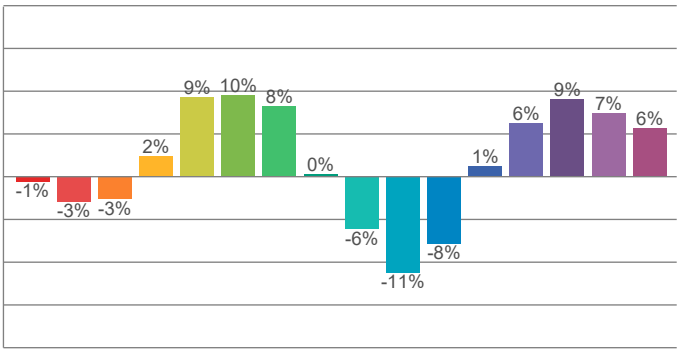
Measurement Date: 6/5/2024



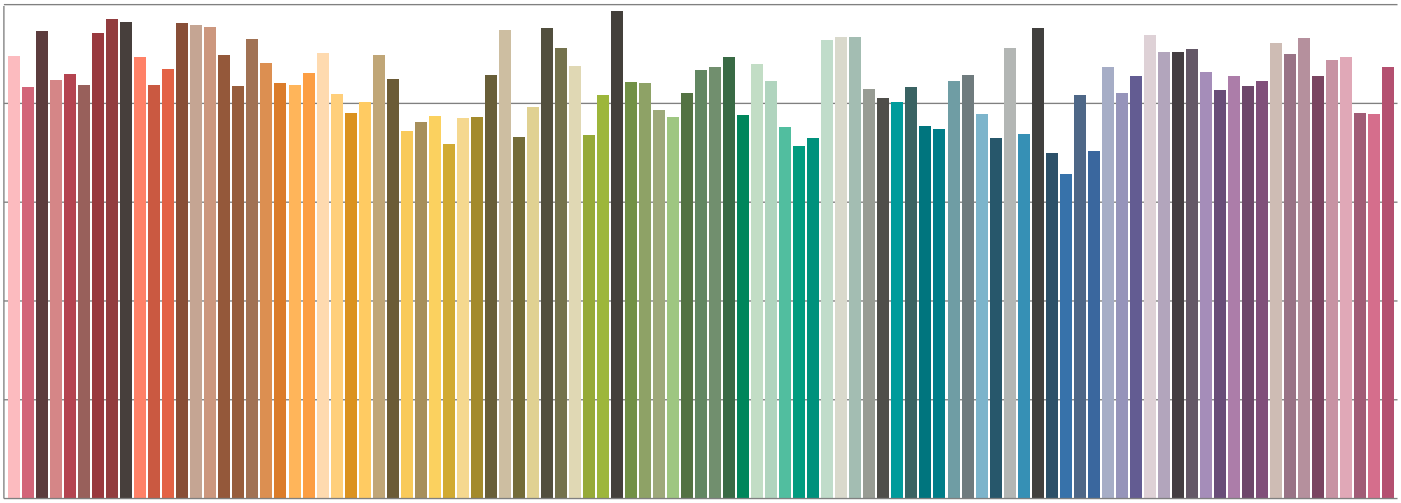
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



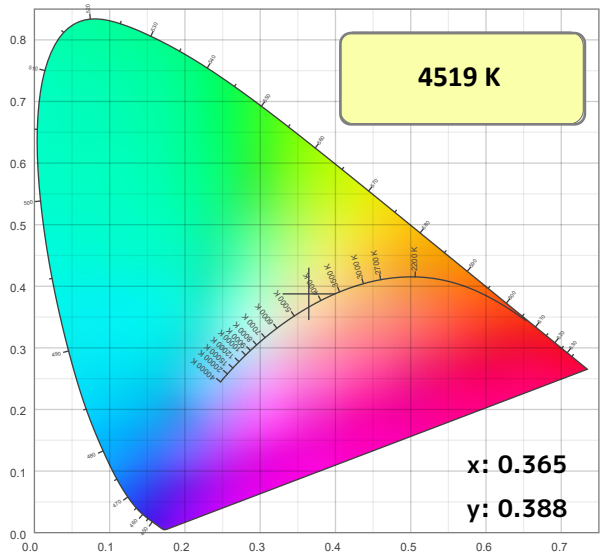
Measurement Date: 6/5/2024

Color Temperature: 4519K

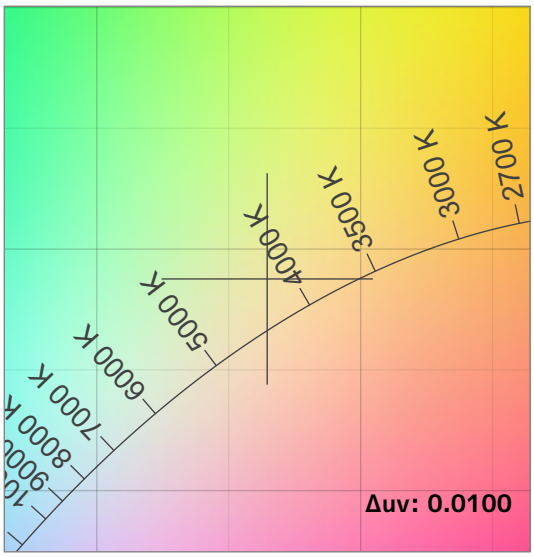
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
73.9	24.5	75.6	98.9	61	77.5	0.365	0.388	0.0100	43	49

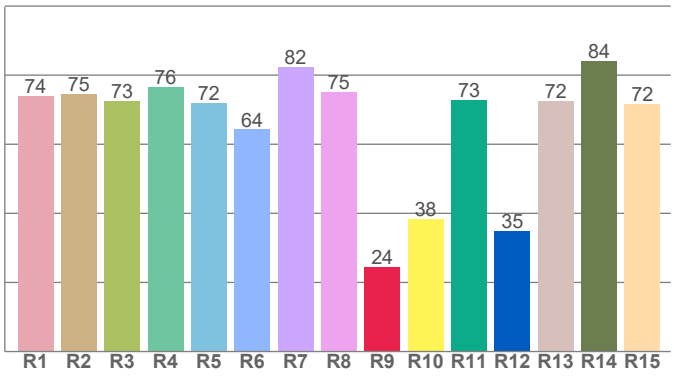
CIE 1931



CIE 1931 ZOOMED

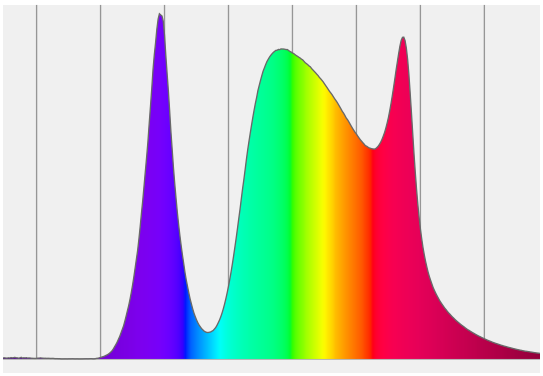


CRI: 73.9 (R1-R8)



Spectral Power Distribution (SPD)

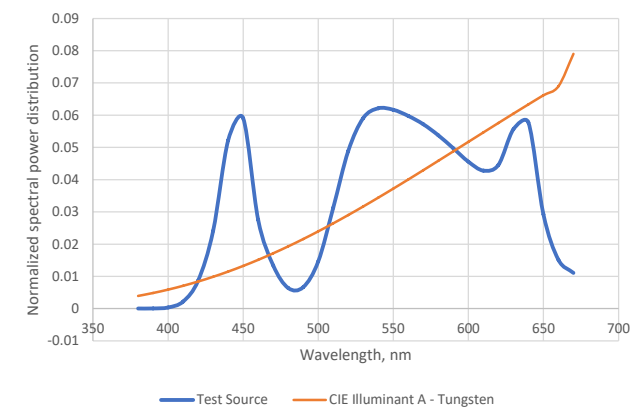
Dominant Wavelength 575 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 43

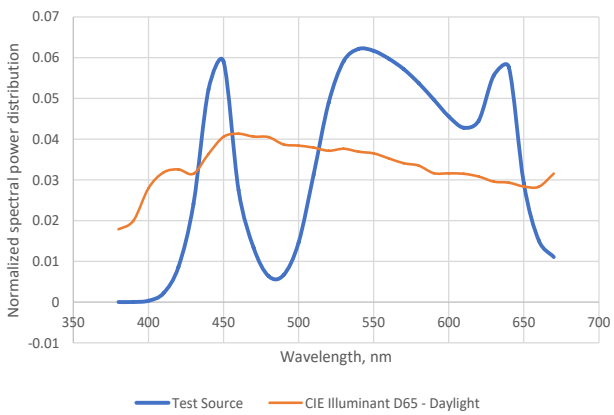
Spectral variance



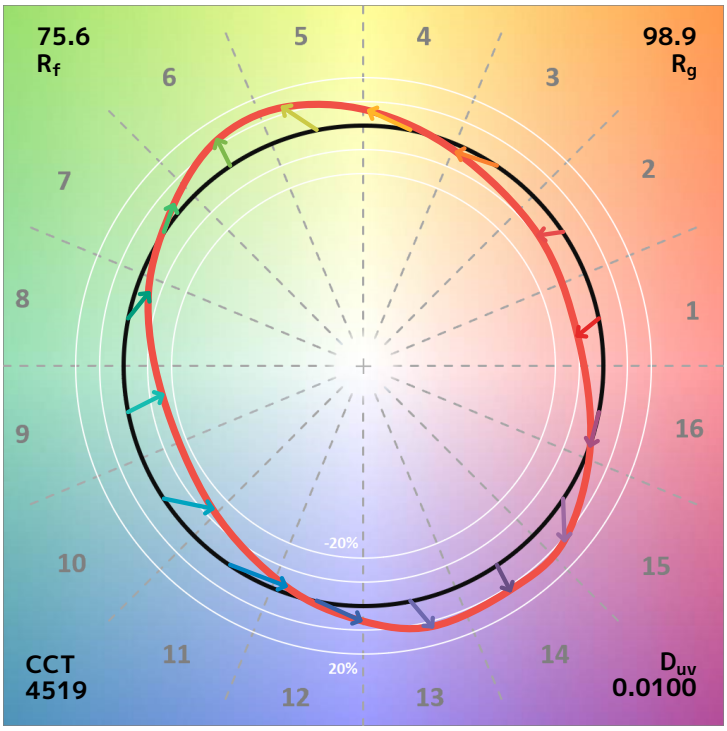
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 49

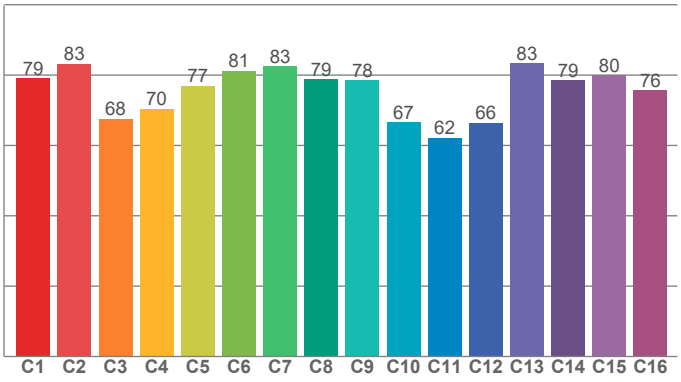
Spectral variance



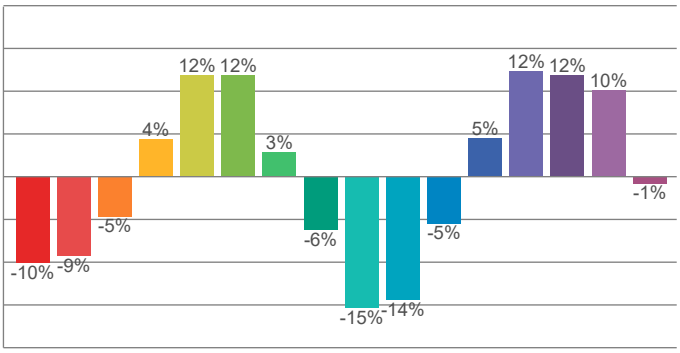
Measurement Date: 6/5/2024



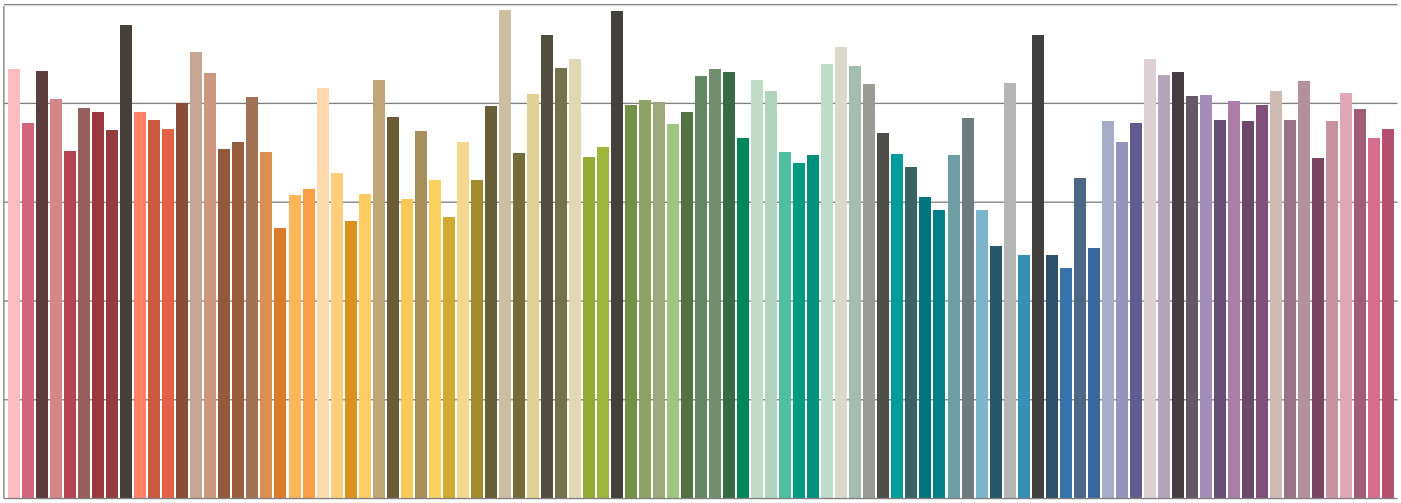
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



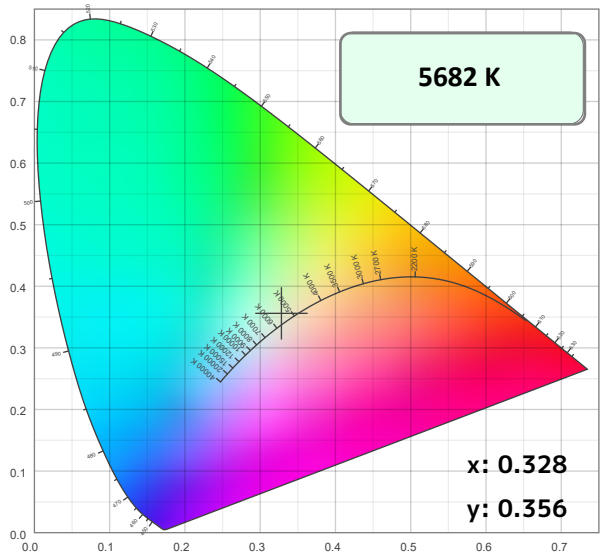
Measurement Date: 6/5/2024

Color Temperature: 5682K

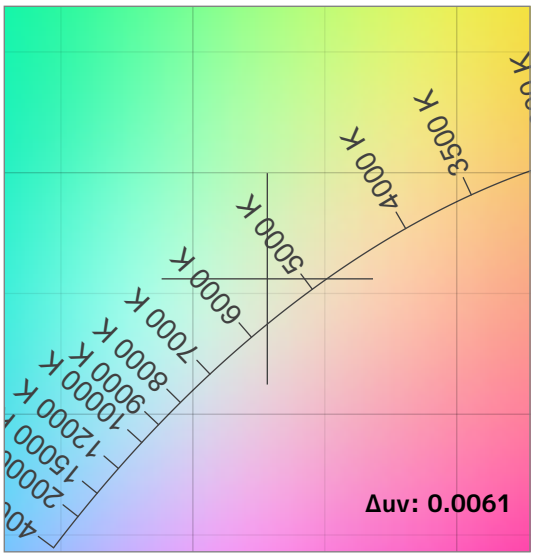
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
74.4	19.1	75.8	99.2	66	77.3	0.328	0.356	0.0061	24	52

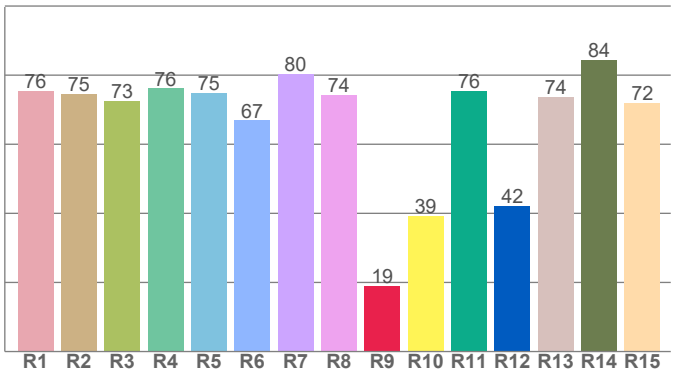
CIE 1931



CIE 1931 ZOOMED

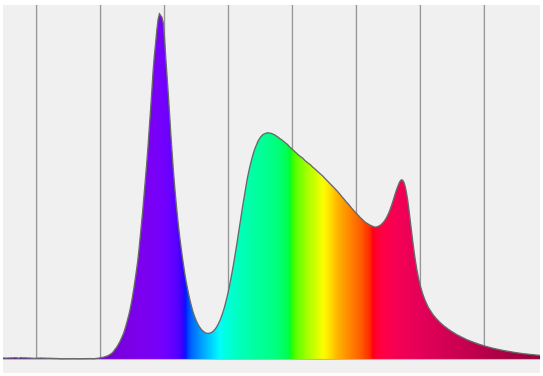


CRI: 74.4 (R1-R8)



Spectral Power Distribution (SPD)

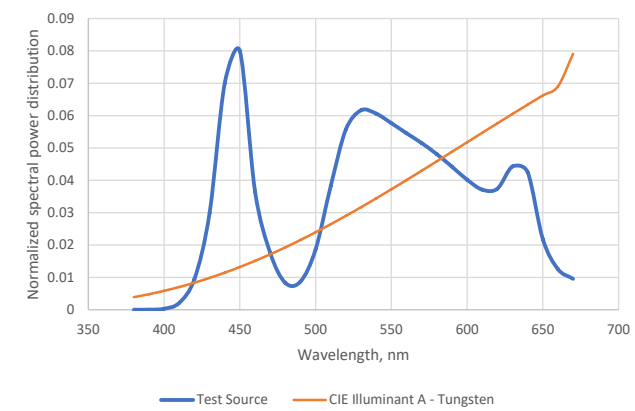
Dominant Wavelength 570 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 24

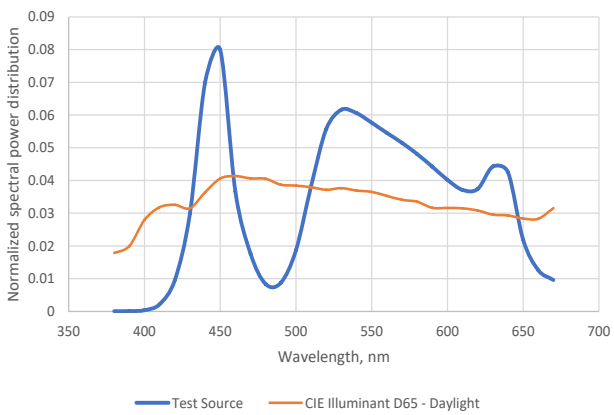
Spectral variance



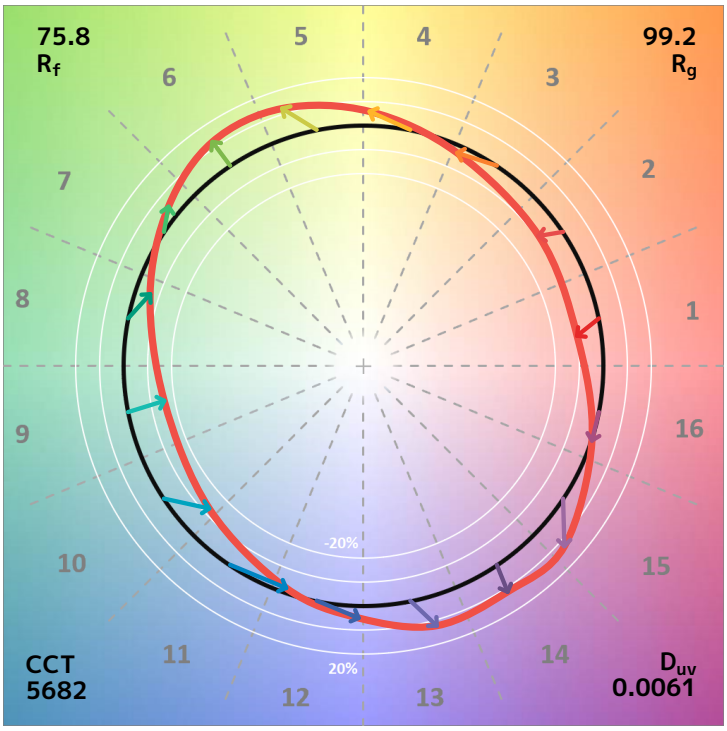
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 52

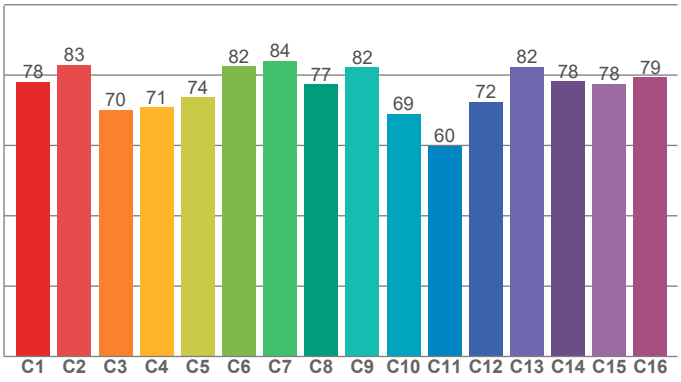
Spectral variance



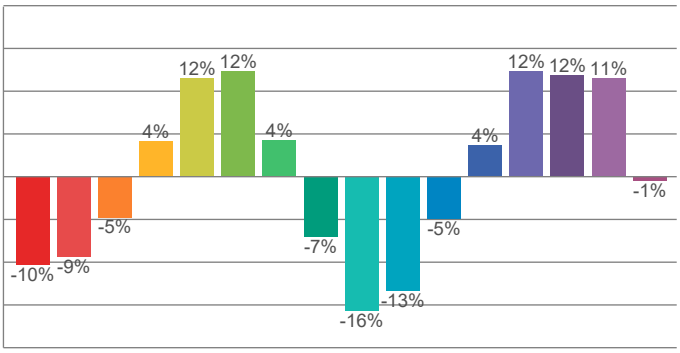
Measurement Date: 6/5/2024



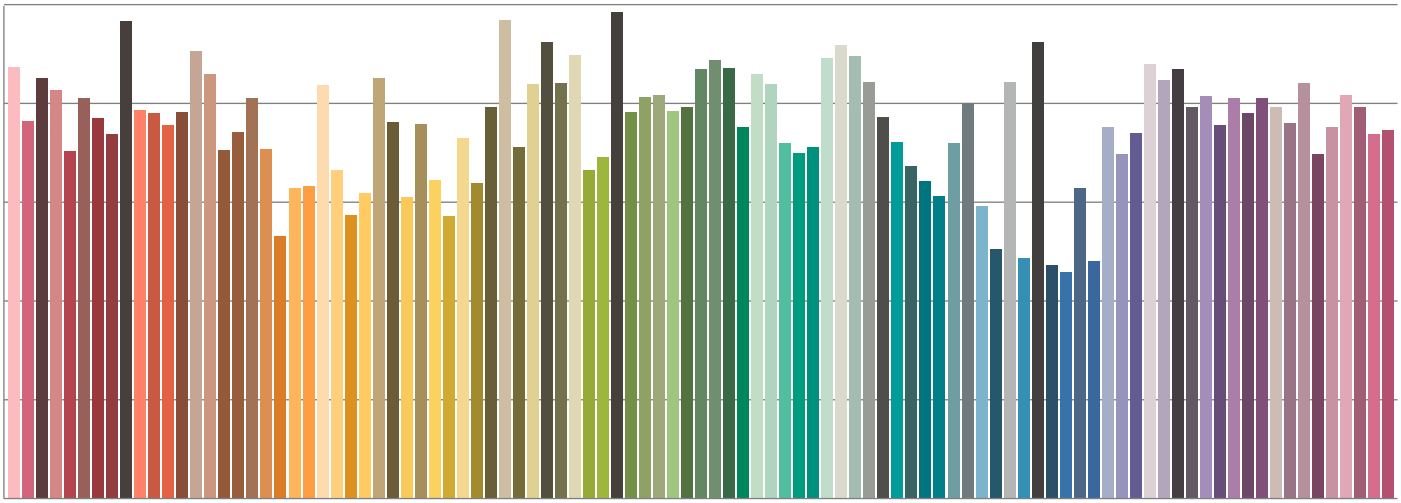
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



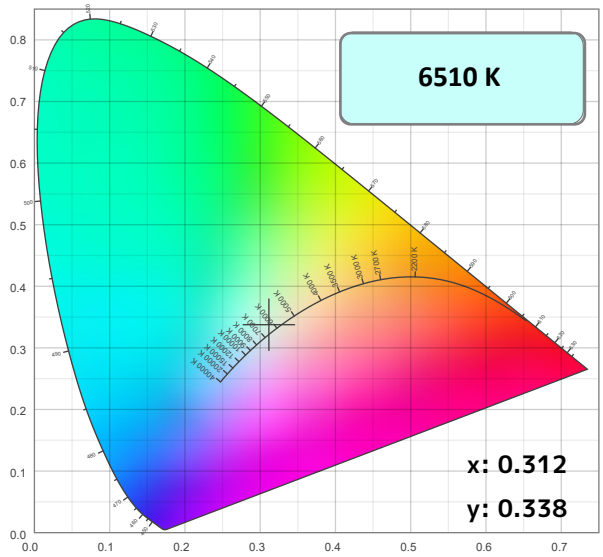
Measurement Date: 6/5/2024

Color Temperature: 6510K

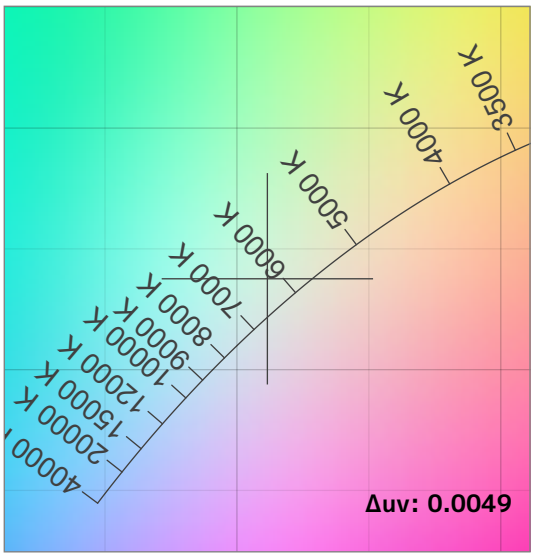
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
75.3	23.6	76.4	98.9	69	78.0	0.312	0.338	0.0049	15	51

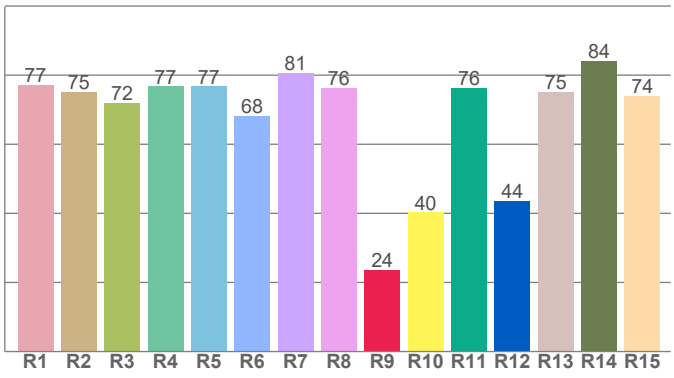
CIE 1931



CIE 1931 ZOOMED

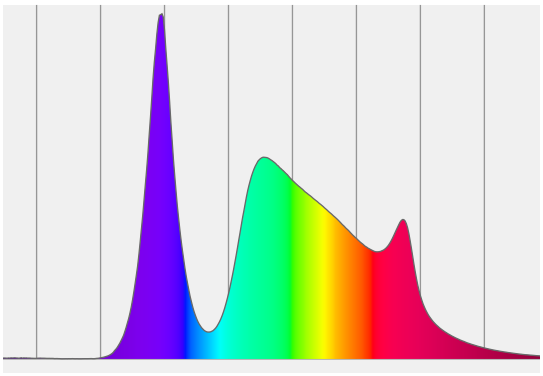


CRI: 75.3 (R1-R8)



Spectral Power Distribution (SPD)

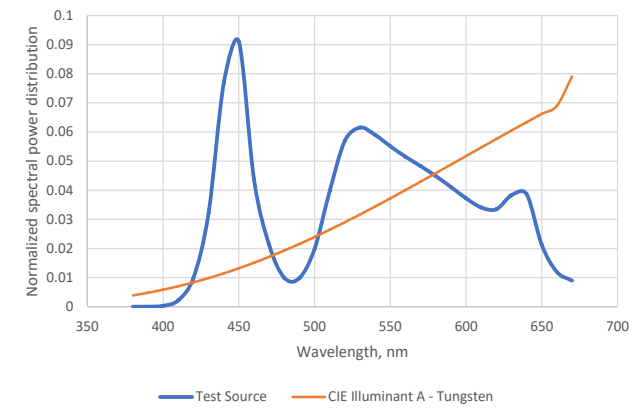
Dominant Wavelength 544 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 15

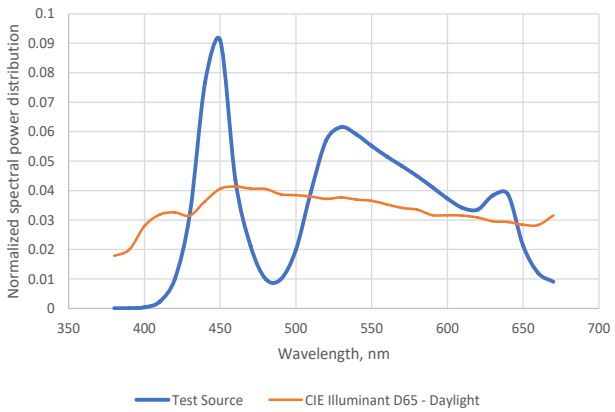
Spectral variance



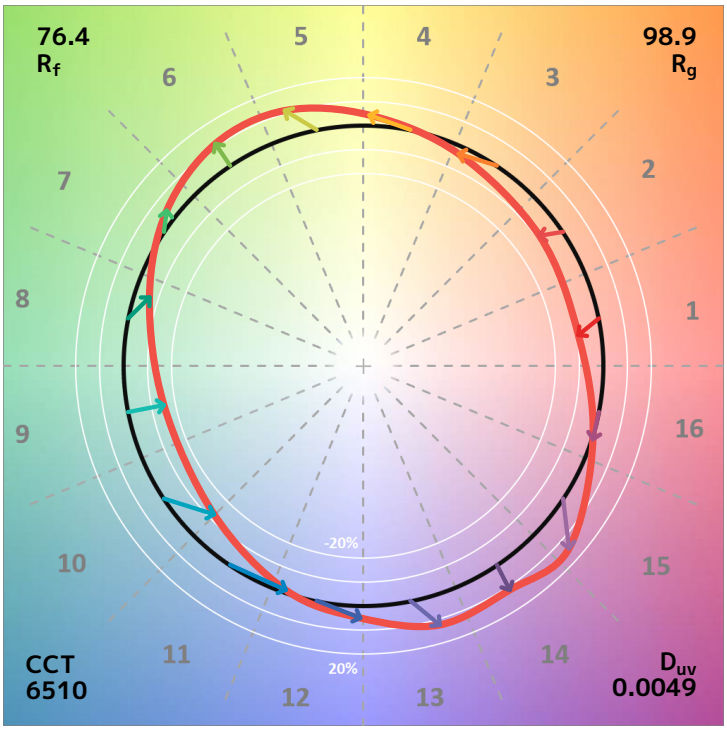
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 51

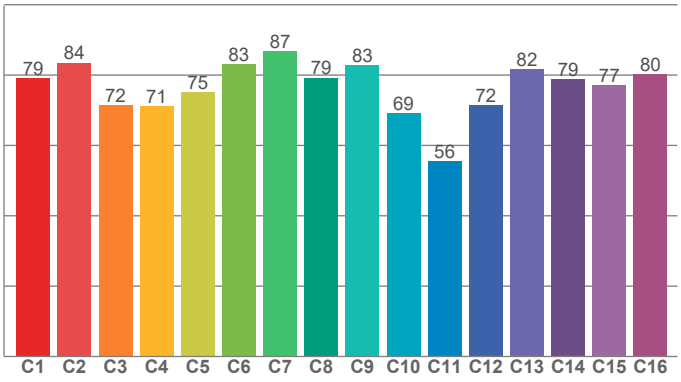
Spectral variance



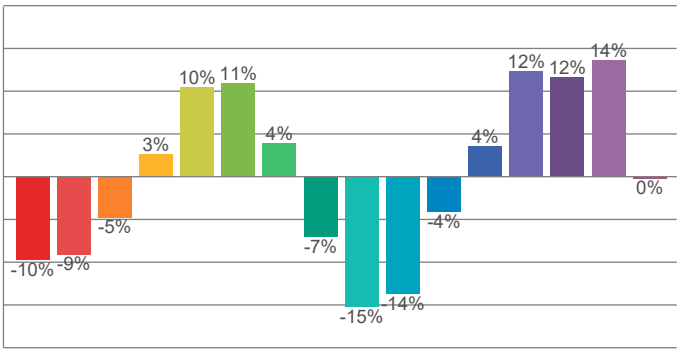
Measurement Date: 6/5/2024



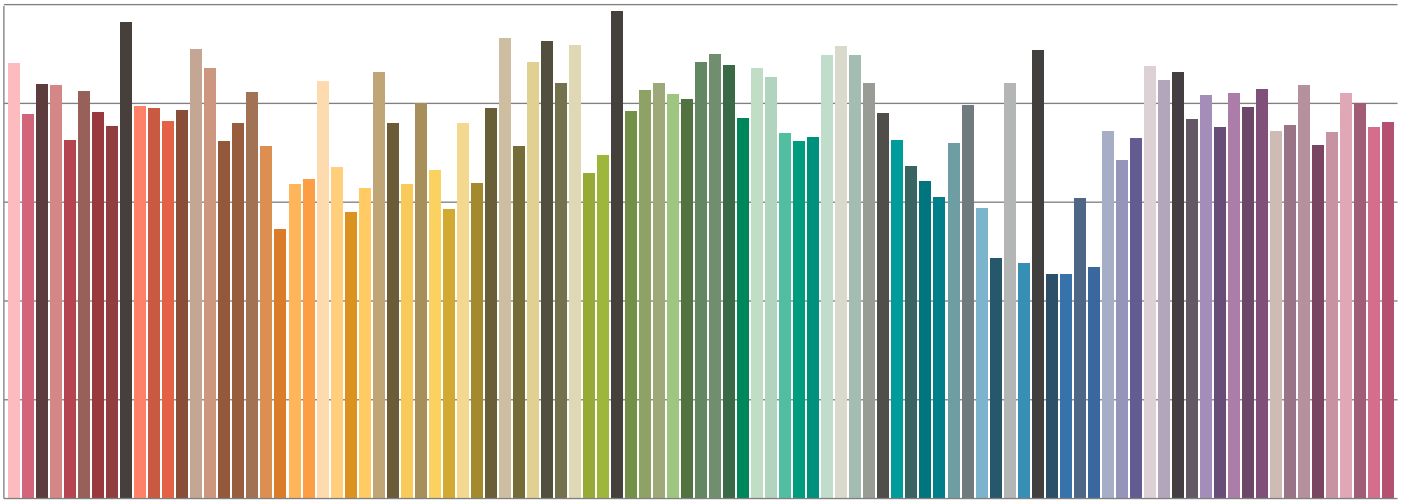
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



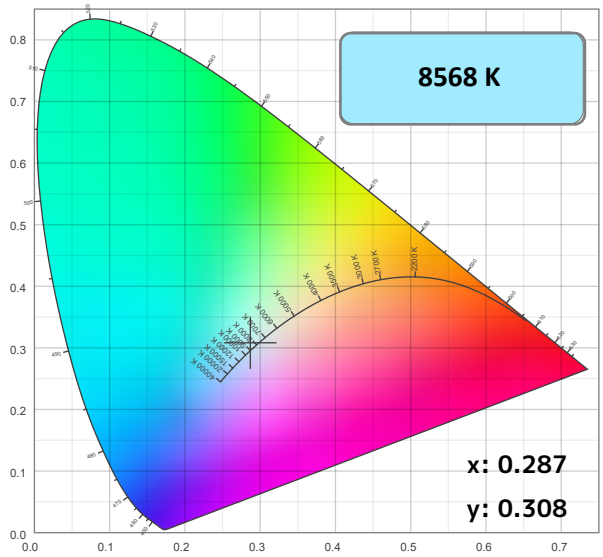
Measurement Date: 6/5/2024

Color Temperature: 8568K

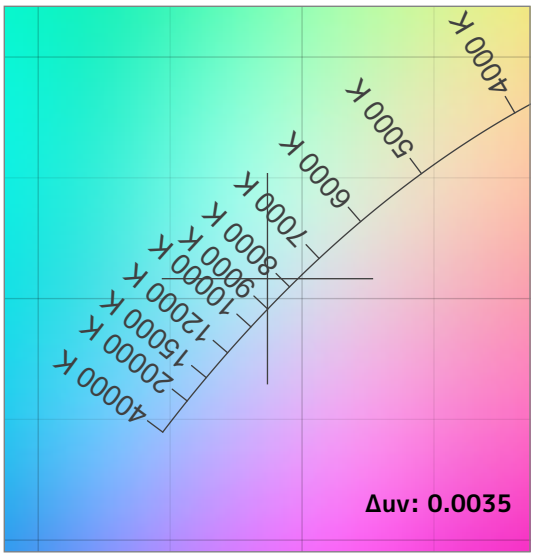
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
75.9	25.9	76.3	98.4	69	78.3	0.287	0.308	0.0035	-1	47

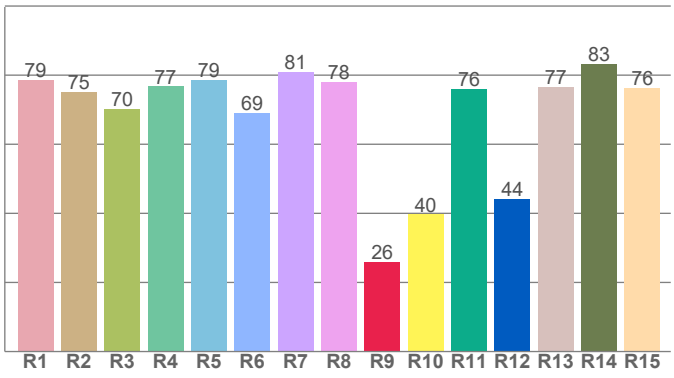
CIE 1931



CIE 1931 ZOOMED

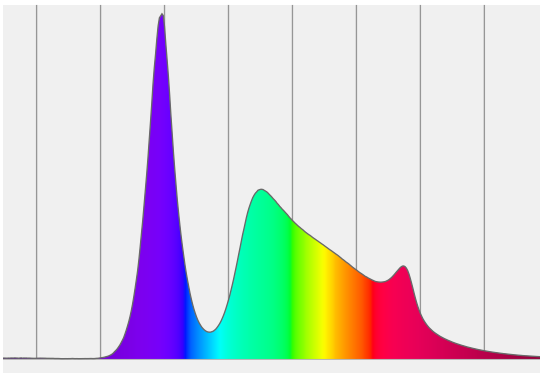


CRI: 75.9 (R1-R8)



Spectral Power Distribution (SPD)

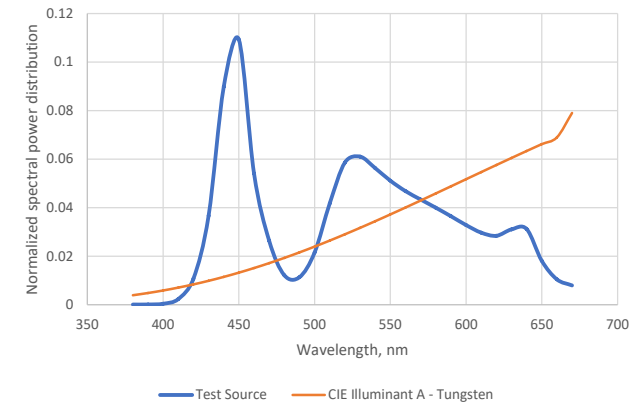
Dominant Wavelength 481 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] -1

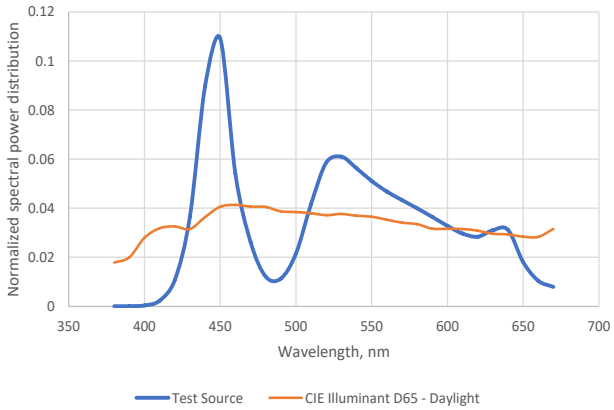
Spectral variance



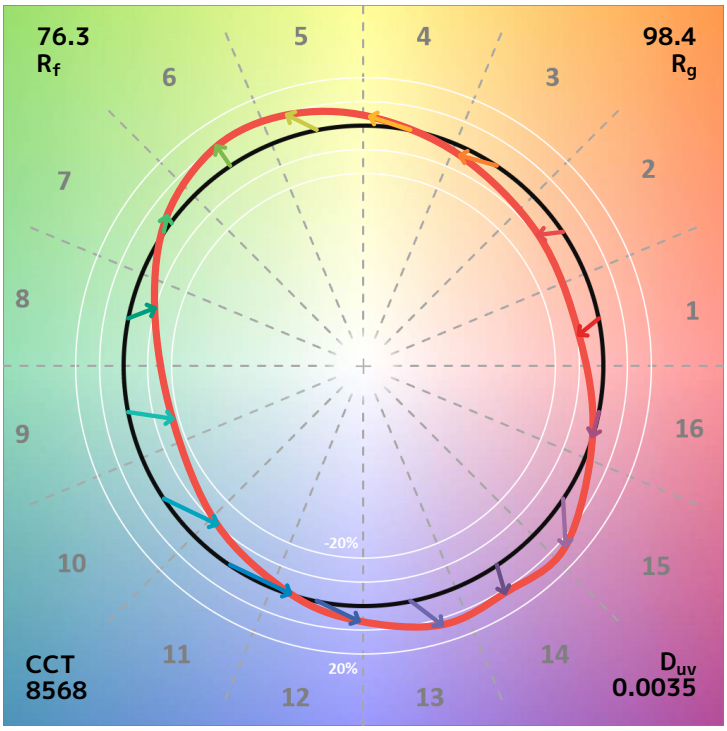
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 47

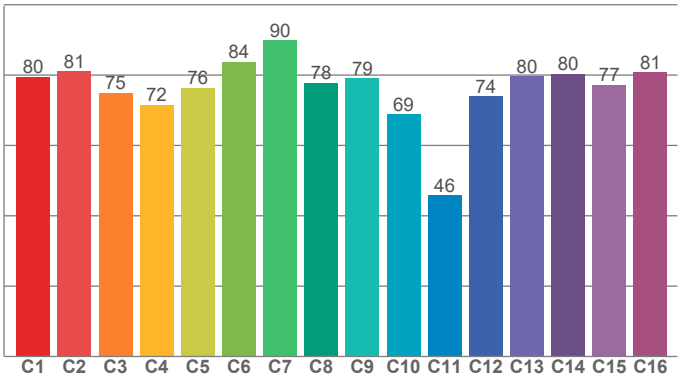
Spectral variance



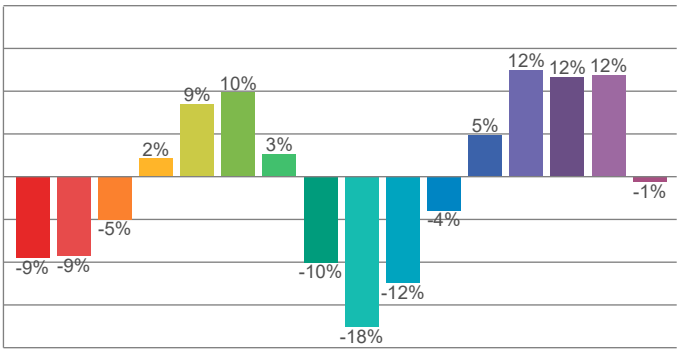
Measurement Date: 6/5/2024



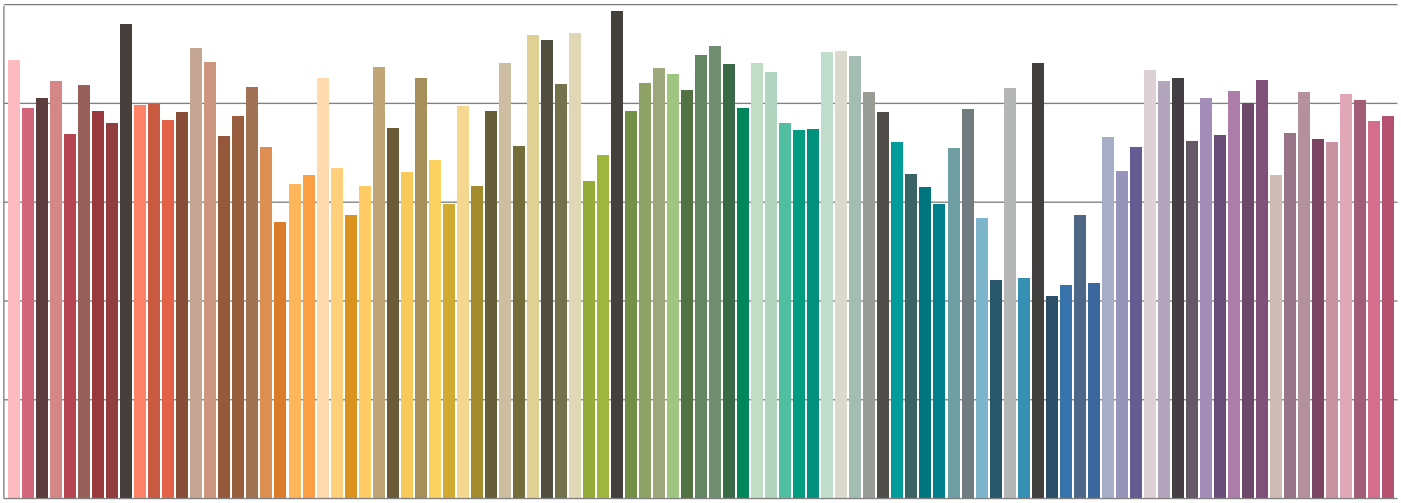
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



Measurement Date: 6/5/2024

Measurements

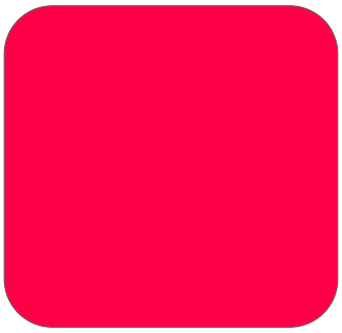
Total Lumen Output: 1034 lm

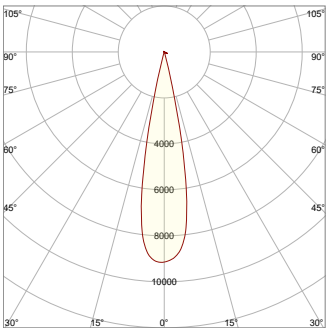
Peak Intensity: 9123 cd

Efficacy: 9 Lumen/Watt

Power: 121.5 W

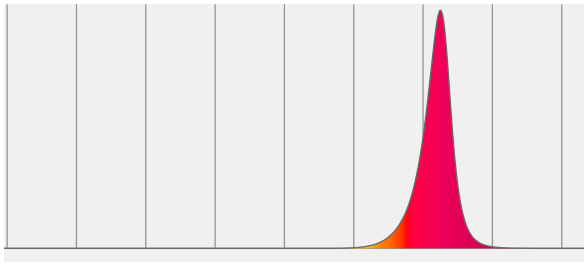
Voltage: 120 V, Current: 1.04 A

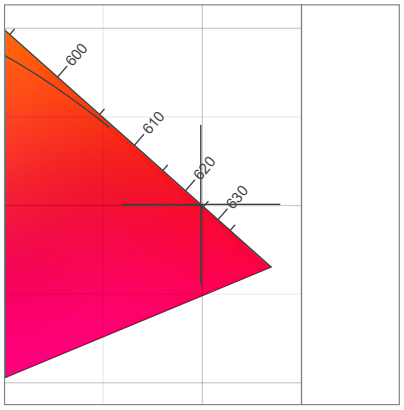




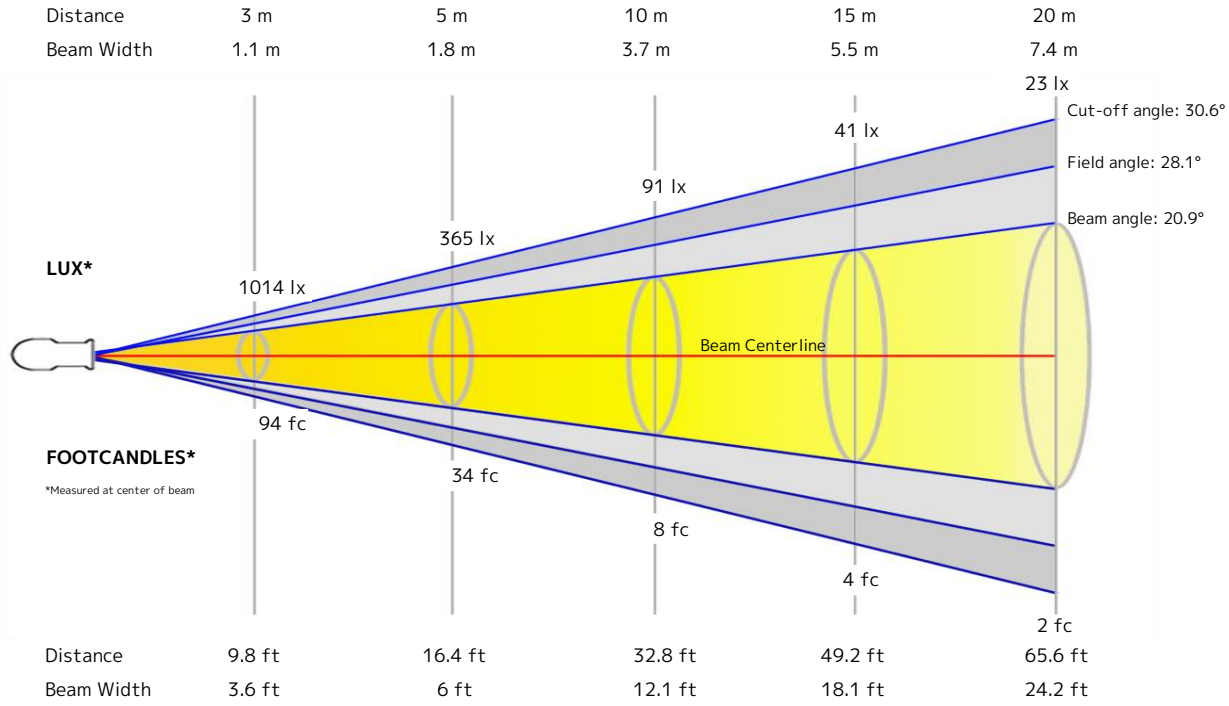
Spectral Power Distribution

Dominant Wavelength 624 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
624	0.699	0.301	0.537	0.346



Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
LX	9123	2281	1014	570	365	253	186	143	113	91	75	63	54	47	41	36	32	28	25	23
FC	847.6	211.9	94.2	53	33.9	23.5	17.3	13.2	10.5	8.5	7	5.9	5	4.3	3.8	3.3	2.9	2.6	2.3	2.1

Measurement Date: 6/4/2024

Measurements

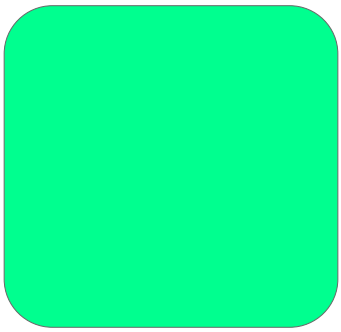
Total Lumen Output: 2107 lm

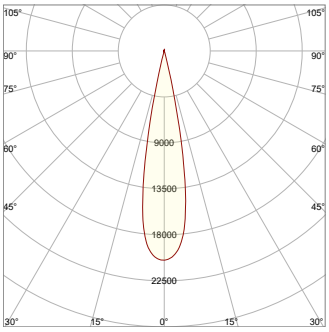
Peak Intensity: 20434 cd

Efficacy: 16 Lumen/Watt

Power: 130.7 W

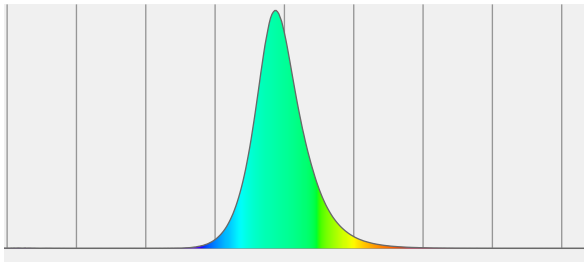
Voltage: 120 V, Current: 1.11 A

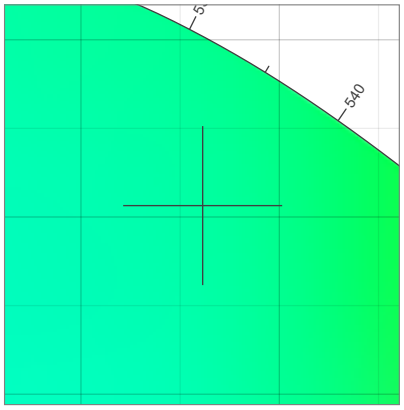




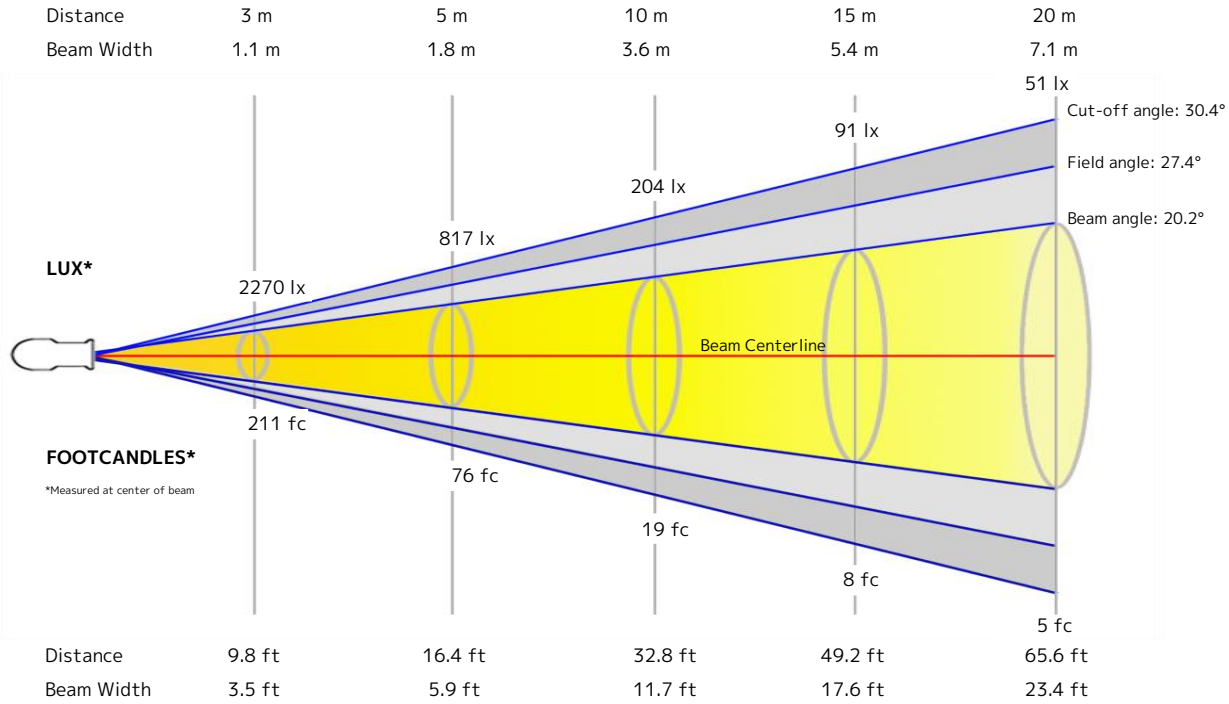
Spectral Power Distribution

Dominant Wavelength 525 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
525	0.161	0.706	0.058	0.380



Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
LX	20427	5107	2270	1277	817	567	417	319	252	204	169	142	121	104	91	80	71	63	57	51
FC	1897.7	474.4	210.9	118.6	75.9	52.7	38.7	29.7	23.4	19	15.7	13.2	11.2	9.7	8.4	7.4	6.6	5.9	5.3	4.7

Measurement Date: 6/4/2024

Measurements

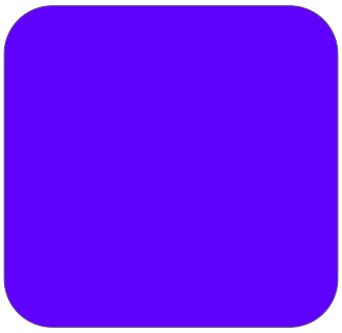
Total Lumen Output: 474 lm

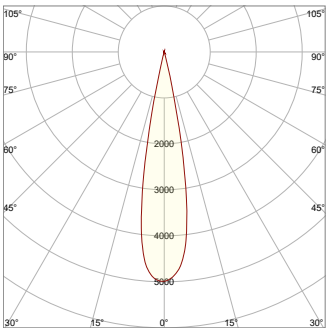
Peak Intensity: 4974 cd

Efficacy: 3 Lumen/Watt

Power: 139.6 W

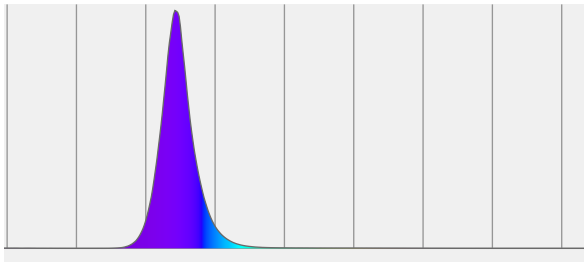
Voltage: 119 V, Current: 1.19 A

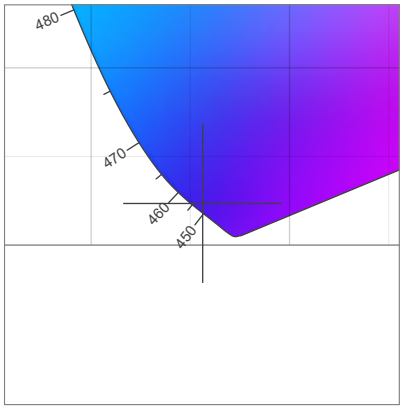




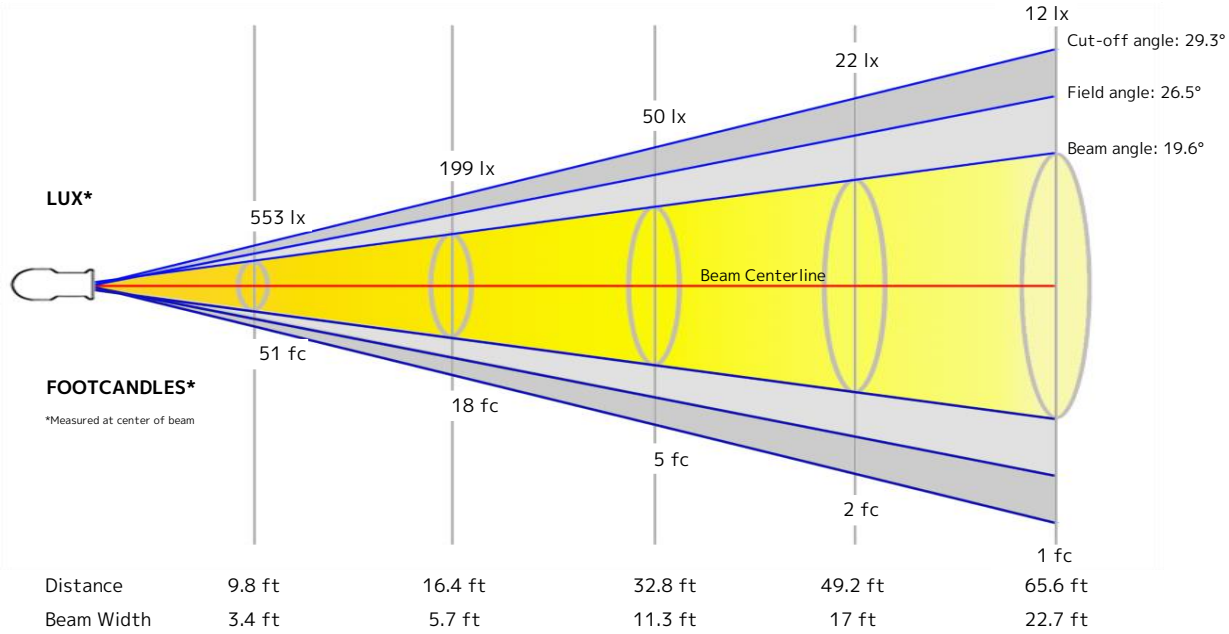
Spectral Power Distribution

Dominant Wavelength 452 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
452	0.156	0.023	0.210	0.047



Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
LX	4974	1244	553	311	199	138	102	78	61	50	41	35	29	25	22	19	17	15	14	12
FC	462.1	115.5	51.3	28.9	18.5	12.8	9.4	7.2	5.7	4.6	3.8	3.2	2.7	2.4	2.1	1.8	1.6	1.4	1.3	1.2

Measurement Date: 6/5/2024

Measurements

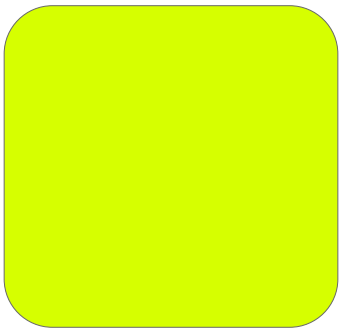
Total Lumen Output: 3217 lm

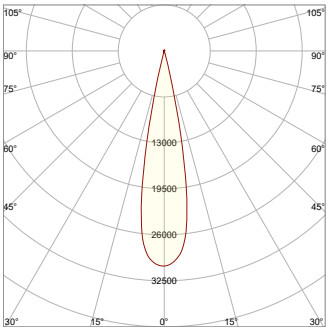
Peak Intensity: 30333 cd

Efficacy: 23 Lumen/Watt

Power: 139.3 W

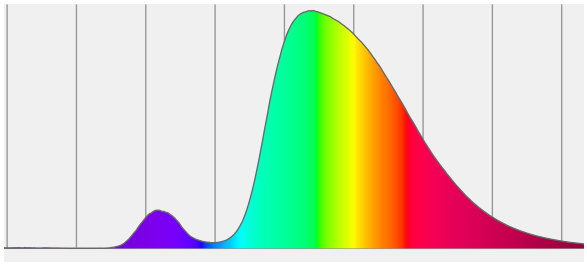
Voltage: 119 V, Current: 1.20 A

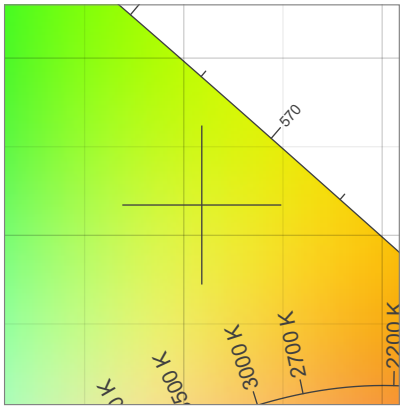




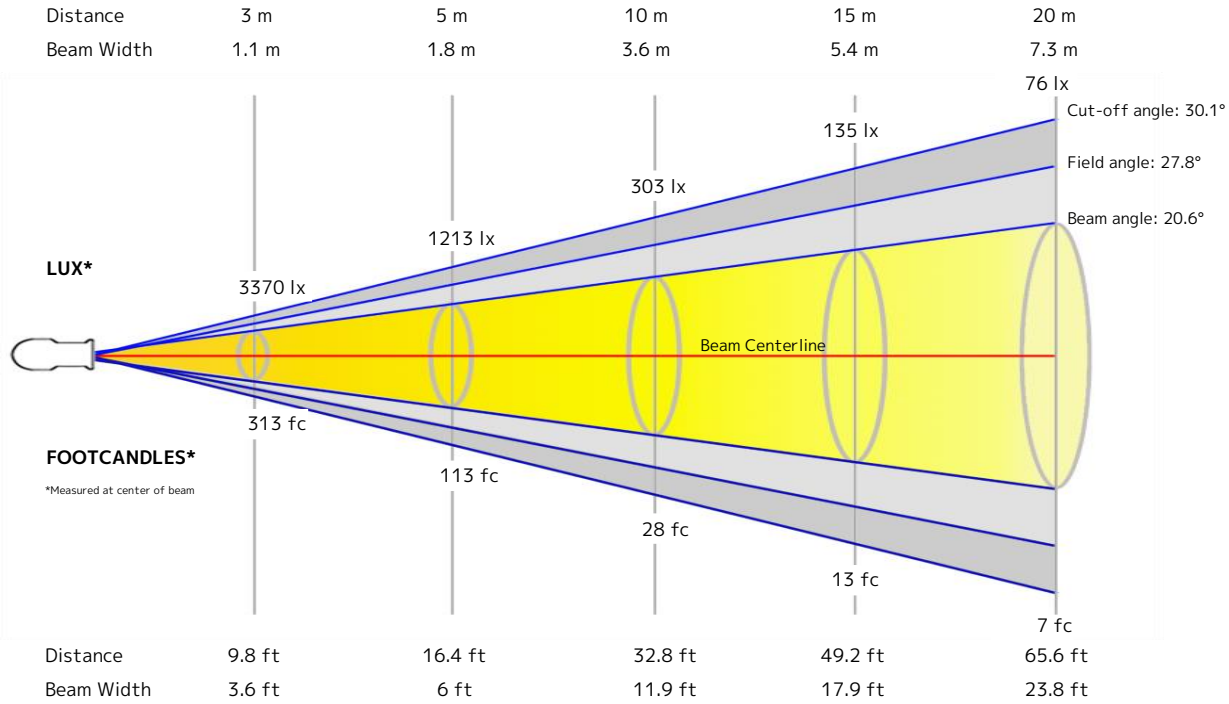
Spectral Power Distribution

Dominant Wavelength 569 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
569	0.409	0.517	0.195	0.370



Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
LX	30333	7583	3370	1896	1213	843	619	474	374	303	251	211	179	155	135	118	105	94	84	76
FC	2818.1	704.5	313.1	176.1	112.7	78.3	57.5	44	34.8	28.2	23.3	19.6	16.7	14.4	12.5	11	9.8	8.7	7.8	7

Measurement Date: 6/5/2024