

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number:

Luminaire Tested: EHBR1-30-UNV-A1-L950-UPL30

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: REPORT IS A COMBINATION OF REPORTS P1431736 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-30-UNV-A1-L950-UPL30
Description: Elevate Round Highbay at, 30000 lumens, 5000K 90CRI LEDs with A lens
Light Source: -
Ballast/Driver: -

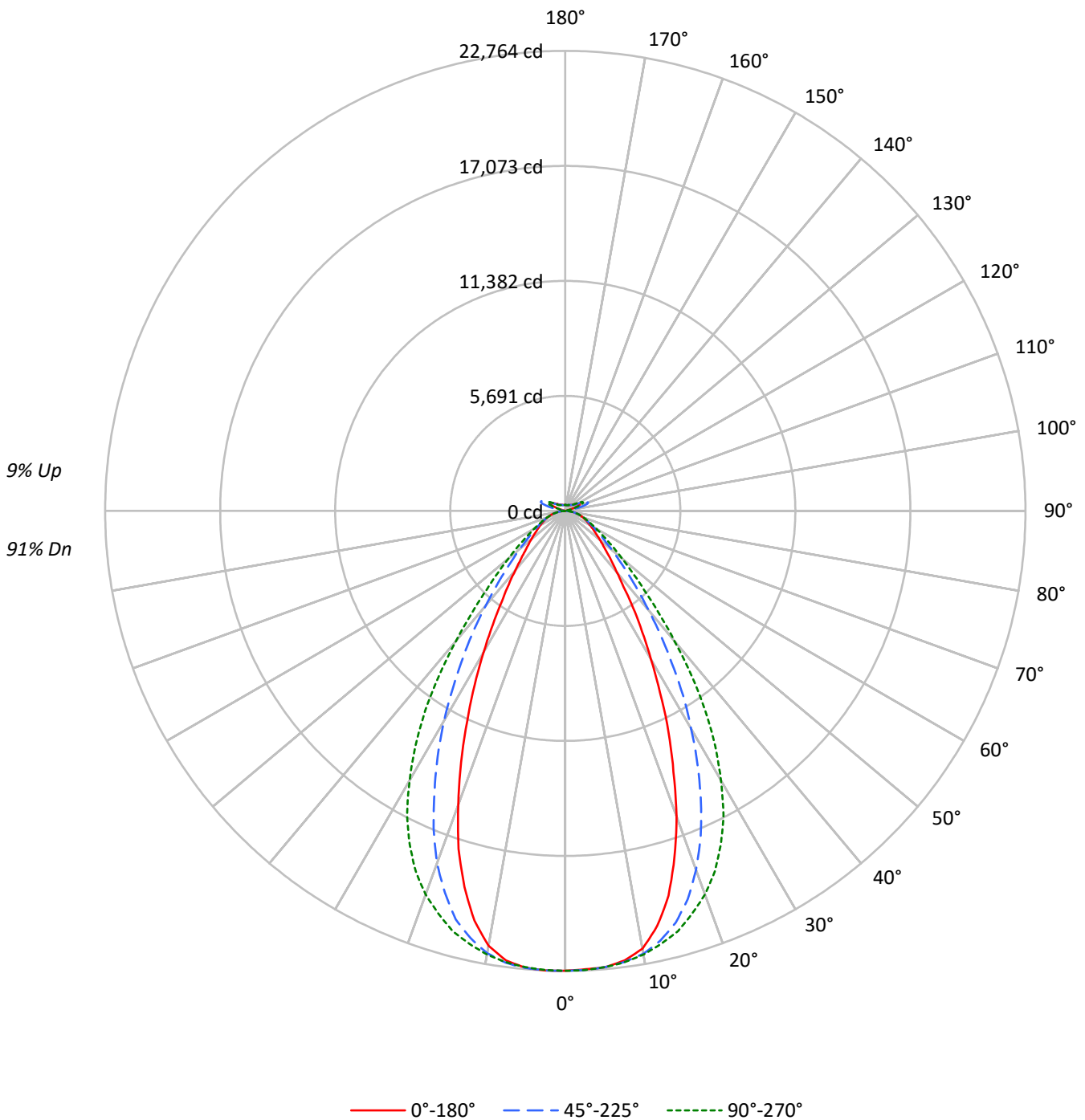
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31102.1 lumens
Efficiency: N/A
Efficacy: 171.1 lumens/watt
Spacing Criteria (0/90/45): 0.8 / 1.07 / 0.95
Luminous Opening: Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type: Direct

Input Watts (W): 181.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER:
CATALOG NUMBER: EHBR1-30-UNV-A1-L950-UPL30

Luminous Intensity Polar Plot





TEST NUMBER:

CATALOG NUMBER: EHBR1-30-UNV-A1-L950-UPL30

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10		0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	94	91	
1	109	106	103	100	106	103	100	97	97	95	93	92	90	88	87	85	84	84	82	
2	102	96	91	86	99	93	89	85	88	85	81	84	81	78	80	77	75	75	73	
3	95	87	81	76	92	85	79	75	81	76	72	77	73	70	74	71	68	68	66	
4	89	80	73	68	86	78	72	67	74	69	65	71	67	63	68	65	62	62	59	
5	83	73	66	61	81	72	65	60	69	63	59	66	61	57	63	59	56	56	54	
6	78	68	60	55	76	66	60	55	64	58	54	61	56	53	59	55	51	51	50	
7	74	63	56	51	72	62	55	50	59	53	49	57	52	48	55	51	47	47	46	
8	69	58	51	46	68	57	51	46	55	50	45	54	48	45	52	47	44	44	42	
9	66	54	48	43	64	54	47	43	52	46	42	50	45	41	49	44	41	41	39	
10	62	51	44	40	61	50	44	40	49	43	39	47	42	39	46	41	38	38	36	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	106857	106857	106857	106857	106857
5°	106151	106135	106140	106327	106262
10°	103527	104734	104900	104604	102850
15°	93986	100544	102614	99737	91827
20°	78320	91985	98269	90253	75271
25°	60570	79535	91163	76631	57431
30°	44150	64772	80079	62314	41905
35°	31825	49924	65813	47773	29748
40°	22896	36873	48501	35317	22190
45°	18042	26975	33875	25806	17417
50°	14969	20267	24517	19599	14742
55°	13073	16003	18568	15736	12896
60°	11790	13360	14795	13276	11874
65°	11027	11785	12433	11822	11132
70°	10472	10722	11053	10781	10575
75°	9769	9708	9769	9735	9865
80°	8824	8189	8008	8316	8824
85°	6116	5185	5130	5269	6296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 35492 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2148.8	6.9
10°-20°	5775.2	18.6
20°-30°	7022.6	22.6
30°-40°	5720.5	18.4
40°-50°	3434.6	11.0
50°-60°	1976.6	6.4
60°-70°	1237.0	4.0
70°-80°	728.6	2.3
80°-90°	218.1	0.7
90°-100°	74.7	0.2
100°-110°	494.1	1.6
110°-120°	914.0	2.9
120°-130°	542.4	1.7
130°-140°	327.8	1.1
140°-150°	227.0	0.7
150°-160°	147.8	0.5
160°-170°	84.4	0.3
170°-180°	27.9	0.1
0°-30°	14946.7	48.1
0°-40°	20667.2	66.4
0°-60°	26078.3	83.8
0°-90°	28262.0	90.9
90°-120°	1482.8	4.8
90°-150°	2579.9	8.3
90°-180°	2840.0	9.1
0°-180°	31102.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22754	22754	22754	22754	22754	
5°	22665	22662	22662	22702	22689	2142
15°	19718	21094	21528	20924	19265	5425
25°	12096	15883	18205	15303	11469	5511
35°	5841	9163	12079	8768	5460	3695
45°	2919	4364	5481	4175	2818	2303
55°	1767	2163	2509	2127	1743	1597
65°	1151	1230	1298	1234	1162	1144
75°	688	684	688	686	695	729
85°	210	178	176	181	216	224
90°	21	57	20	60	21	20
95°	36	128	39	109	35	34
105°	172	864	227	921	113	231
115°	791	1022	973	1130	829	729
125°	571	546	622	605	650	521
135°	418	419	392	438	453	327
145°	346	361	355	365	372	219
155°	306	316	315	316	330	143
165°	291	297	295	294	304	83
175°	291	294	292	291	298	28
180°	293	293	293	293	293	



TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	22754.5	22754.5	22754.5	22754.5	22754.5	22754.5	22754.5	22754.5	22754.5
2.5°	22704.5	22724.9	22733.5	22738.3	22743.5	22757.8	22764.0	22754.0	22762.5
5°	22664.9	22666.3	22661.6	22683.0	22662.5	22676.8	22702.5	22692.5	22688.7
7.5°	22434.2	22481.9	22510.0	22517.2	22521.0	22538.6	22556.7	22454.3	22438.9
10°	21995.8	22075.4	22252.2	22302.6	22287.4	22316.0	22224.5	21956.6	21851.8
12.5°	21034.5	21314.2	21773.7	21978.1	21940.9	21966.2	21654.5	21089.3	20764.3
15°	19717.7	20128.0	21093.6	21496.8	21527.8	21496.8	20924.4	19823.0	19264.9
17.5°	17967.2	18725.0	20146.6	20929.1	20884.3	20899.1	19812.5	18184.5	17545.9
20°	16097.1	16904.9	18905.6	20210.9	20197.2	20114.2	18549.6	16402.6	15470.4
22.5°	13982.1	15023.9	17483.5	19327.8	19322.6	19184.4	17011.6	14456.6	13453.0
25°	12095.7	13117.5	15883.1	18246.0	18205.1	18047.8	15303.1	12515.5	11469.0
27.5°	10145.6	11207.8	14174.6	16978.3	16950.2	16778.6	13669.9	10701.2	9705.2
30°	8492.3	9463.5	12458.9	15583.3	15403.2	15383.6	11986.0	9021.2	8060.4
32.5°	7075.9	7908.4	10841.4	14124.5	13805.7	13896.7	10308.1	7616.3	6664.1
35°	5841.0	6574.5	9162.8	12437.4	12079.0	12196.8	8768.1	6249.4	5459.8
37.5°	4740.6	5445.9	7740.2	10796.5	10248.5	10470.6	7413.8	5219.1	4586.2
40°	3968.5	4528.0	6391.0	8996.0	8406.4	8768.1	6121.3	4353.1	3846.1
42.5°	3419.5	3784.6	5274.9	7276.9	6824.7	7081.1	5045.1	3639.2	3259.8
45°	2919.1	3210.3	4364.5	5742.4	5480.8	5718.5	4175.3	3103.1	2818.0
47.5°	2549.8	2774.1	3593.0	4637.1	4474.6	4550.0	3487.2	2707.9	2476.4
50°	2230.9	2404.4	3020.5	3742.7	3653.9	3700.2	2920.9	2356.2	2197.1
52.5°	1983.1	2110.3	2533.5	3075.8	3032.1	3039.1	2489.2	2072.7	1957.4
55°	1766.7	1855.3	2162.7	2519.7	2509.3	2511.1	2126.6	1836.8	1742.8
57.5°	1577.4	1650.8	1858.7	2116.5	2101.3	2104.6	1841.5	1631.3	1570.9
60°	1417.4	1466.4	1606.1	1788.6	1778.6	1774.3	1596.0	1448.3	1427.4
62.5°	1275.3	1306.8	1403.5	1533.1	1514.1	1518.4	1403.1	1308.2	1277.3
65°	1151.0	1161.9	1230.1	1310.1	1297.7	1308.2	1233.9	1169.1	1161.9
67.5°	1029.5	1040.4	1080.4	1134.3	1120.0	1128.6	1081.4	1043.2	1037.1
70°	918.9	918.3	940.8	969.8	969.8	971.3	946.0	923.2	927.9
72.5°	804.4	801.6	808.3	827.8	822.5	840.7	814.0	806.8	807.8
75°	688.2	680.1	683.9	693.9	688.2	697.8	685.8	694.9	694.9
77.5°	578.6	563.3	558.6	560.0	549.5	563.8	566.7	572.9	587.1
80°	464.2	442.7	430.8	430.4	421.3	430.4	437.5	450.3	464.2
82.5°	344.6	326.0	306.0	302.1	296.5	301.7	311.3	326.5	348.9
85°	210.2	190.7	178.2	171.6	176.3	176.3	181.1	202.5	216.4
87.5°	75.8	66.2	54.4	54.8	56.2	58.2	60.5	76.3	83.4
90°	21.4	33.1	56.7	36.2	20.4	34.7	59.8	31.5	20.9
92.5°	30.4	50.4	91.3	47.2	26.8	47.2	85.0	42.5	28.8
95°	35.6	58.3	127.5	63.0	39.4	58.3	108.6	47.2	35.1
97.5°	45.0	64.6	146.4	77.1	61.4	72.4	122.8	50.4	42.9
100°	59.2	75.5	228.3	94.5	81.9	81.9	225.1	58.3	49.7
102.5°	100.1	160.6	484.8	177.9	124.4	160.6	522.6	118.1	60.8
105°	172.5	338.5	864.3	373.1	226.7	368.4	920.9	308.6	112.7
107.5°	298.4	606.1	1139.7	661.2	429.7	687.9	1186.9	610.8	265.4
110°	556.6	804.4	1194.8	908.3	687.9	961.8	1295.6	837.5	539.4



TEST NUMBER:

CATALOG NUMBER: EHBR1-30-UNV-A1-L950-UPL30

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	751.8	864.3	1144.5	1002.8	895.8	1072.0	1265.6	928.7	747.1
115°	791.1	831.2	1021.7	979.2	972.9	1056.3	1130.3	925.7	829.0
117.5°	764.8	758.8	867.4	880.0	939.8	966.6	976.0	869.0	833.7
120°	707.7	675.4	724.2	768.2	848.5	837.5	821.7	786.0	786.5
122.5°	637.4	598.6	620.3	653.3	733.6	709.9	694.2	701.0	722.4
125°	571.2	532.6	546.2	554.1	621.9	598.2	604.9	628.5	650.0
127.5°	513.1	486.9	494.3	484.8	527.4	516.3	540.4	567.7	585.4
130°	473.7	451.2	461.7	439.2	460.1	463.3	495.2	517.2	528.8
132.5°	441.1	426.5	439.0	411.8	418.1	431.1	461.0	480.5	486.8
135°	418.0	404.9	419.1	393.4	392.4	411.2	438.0	450.6	452.7
137.5°	397.6	386.5	400.7	381.8	377.0	396.0	416.4	425.9	423.2
140°	379.5	369.7	385.4	371.3	368.1	387.0	396.5	407.9	404.8
142.5°	359.6	353.2	371.7	362.3	359.1	376.9	381.6	389.5	386.8
145°	345.9	341.2	361.1	356.4	354.8	367.9	364.8	376.3	371.6
147.5°	334.8	331.0	349.1	347.5	347.5	356.9	352.6	362.5	358.4
150°	324.3	320.6	338.5	336.9	338.5	344.8	338.9	351.0	349.9
152.5°	313.7	310.0	326.3	324.3	325.8	332.2	326.9	340.0	339.3
155°	306.2	302.6	315.9	314.9	314.9	318.5	316.4	329.8	330.3
157.5°	301.3	298.8	308.9	308.0	308.0	310.0	309.4	321.4	321.8
160°	297.7	295.1	303.5	302.6	301.0	304.7	304.0	314.4	315.0
162.5°	293.9	291.4	300.8	298.8	298.3	298.8	298.2	309.1	309.6
165°	291.2	290.3	297.1	296.2	294.6	296.2	294.5	301.7	303.7
167.5°	291.6	289.6	296.1	295.1	293.5	291.9	293.4	299.1	301.1
170°	290.5	290.1	295.0	292.4	290.3	290.8	290.7	296.4	298.4
172.5°	291.5	291.0	295.9	293.4	291.4	291.8	290.1	294.2	297.8
175°	291.4	290.4	294.2	292.8	292.3	291.2	291.0	293.6	297.7
177.5°	293.4	292.5	294.6	293.2	291.2	291.6	293.0	295.6	301.3
180°	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0



TEST NUMBER: CATALOG
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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	17.42	18.54	17.94	19.04	19.58	18.40	19.52	18.92	20.02	20.56
	3H	18.90	19.89	19.43	20.40	20.99	19.66	20.66	20.20	21.17	21.75
	4H	19.49	20.43	20.05	20.95	21.55	20.16	21.09	20.71	21.62	22.22
	6H	19.96	20.81	20.53	21.36	21.97	20.51	21.37	21.08	21.91	22.52
	8H	20.11	20.92	20.69	21.48	22.10	20.61	21.42	21.19	21.98	22.60
	12H	20.18	20.95	20.76	21.51	22.15	20.65	21.42	21.23	21.97	22.62
4H	2H	17.93	18.86	18.49	19.39	19.99	18.71	19.64	19.27	20.17	20.77
	3H	19.61	20.38	20.18	20.96	21.57	20.20	20.97	20.77	21.54	22.16
	4H	20.33	21.02	20.92	21.60	22.26	20.82	21.51	21.41	22.09	22.75
	6H	20.91	21.50	21.52	22.11	22.78	21.30	21.89	21.91	22.50	23.17
	8H	21.09	21.65	21.71	22.26	22.93	21.43	21.99	22.05	22.59	23.27
	12H	21.20	21.69	21.83	22.33	23.01	21.50	21.99	22.13	22.62	23.30
8H	4H	20.55	21.11	21.17	21.71	22.39	21.00	21.55	21.62	22.16	22.84
	6H	21.24	21.69	21.89	22.35	23.03	21.58	22.03	22.23	22.69	23.37
	8H	21.49	21.90	22.16	22.56	23.26	21.78	22.18	22.44	22.84	23.54
	12H	21.66	22.01	22.32	22.66	23.43	21.89	22.25	22.55	22.89	23.66
12H	4H	20.55	21.04	21.18	21.68	22.36	20.99	21.49	21.63	22.12	22.80
	6H	21.27	21.67	21.93	22.33	23.03	21.60	22.01	22.27	22.67	23.37
	8H	21.56	21.91	22.22	22.56	23.33	21.84	22.19	22.50	22.84	23.60

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-8

Test Date: 08/04/2025

Luminaire Tested: EHBR-60-L950-N

Data in this report applies to families of products including EHBR-60-L950-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-8
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/05/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Metalux
 Catalog Number: **EHBR-60-L950-N**
 Description: Elevate Round Highbay at, 60000 lumens, 5000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K): 4901
 CIE u': 0.2131
 CIE v': 0.4853
 Duv: -0.0008
 CIE x: 0.3477
 CIE y: 0.3520
 CIE z: 0.3003
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 574
 Purity: 9.953987
 Rf: 90.7
 Rg: 100.5

CRI (Ra):	94.3		
R1:	95.8	R9:	72.3
R2:	96.5	R10:	89.1
R3:	94.4	R11:	94.9
R4:	95.3	R12:	68.4
R5:	94.1	R13:	96.4
R6:	92.5	R14:	96.4
R7:	95.5	R15:	93.9
R8:	90.1		



Test Conditions

Stabilization Time: 35M
 Operation Time: 1H 35M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-8

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	10/22/2024	10/22/2025
Sphere Thermometer	ONSET IN0085	10/22/2024	10/22/2025
Room Thermometer	ONSET IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2506-472-8

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles

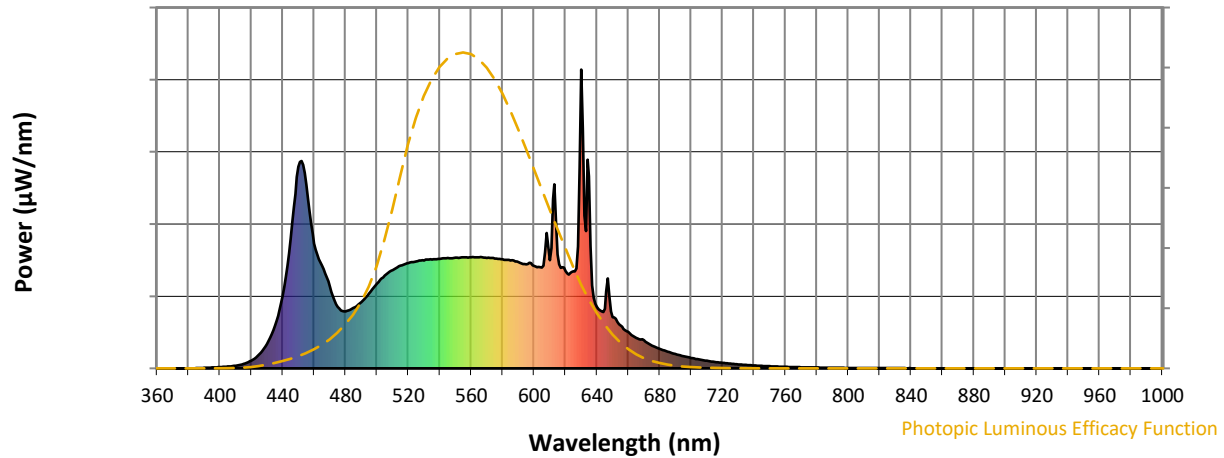


CCT = 4901K
 CIE x = 0.3477
 CIE y = 0.3520
 Duv = -0.0008

Point lies inside the ANSI 5000K 4-step quadrangle

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Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-8

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR S/P: 2.04

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-8

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 4.41

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

Summary

$R_f = 90.7$
 $R_g = 100.5$
 CIE $R_a = 94.3$
 $R_9 = 72.3$

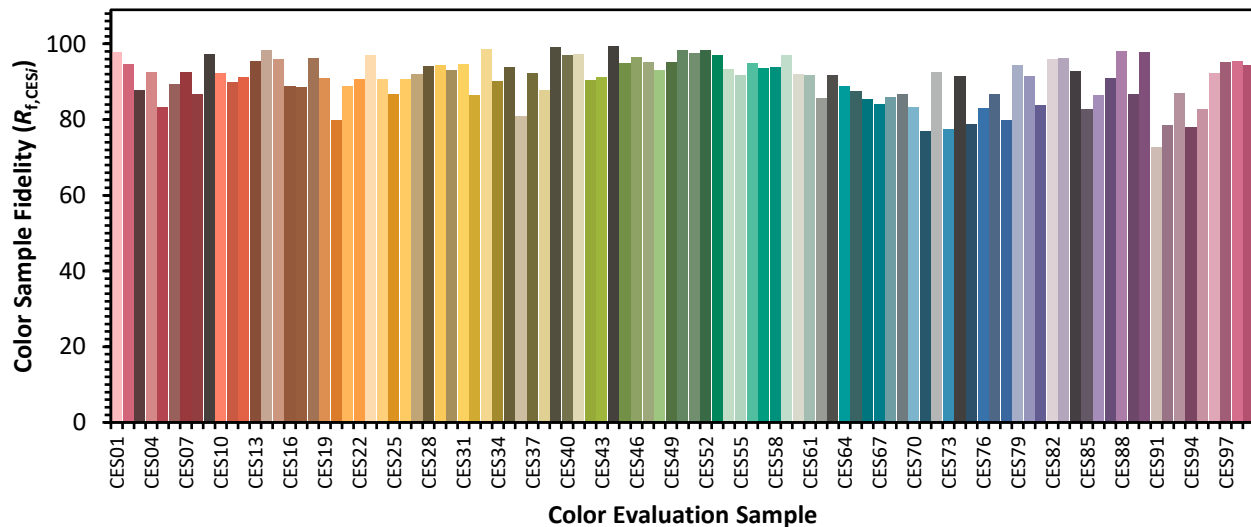


Color Vector Graphics



Individual Sample Fidelity Index ($R_{f,i}$)

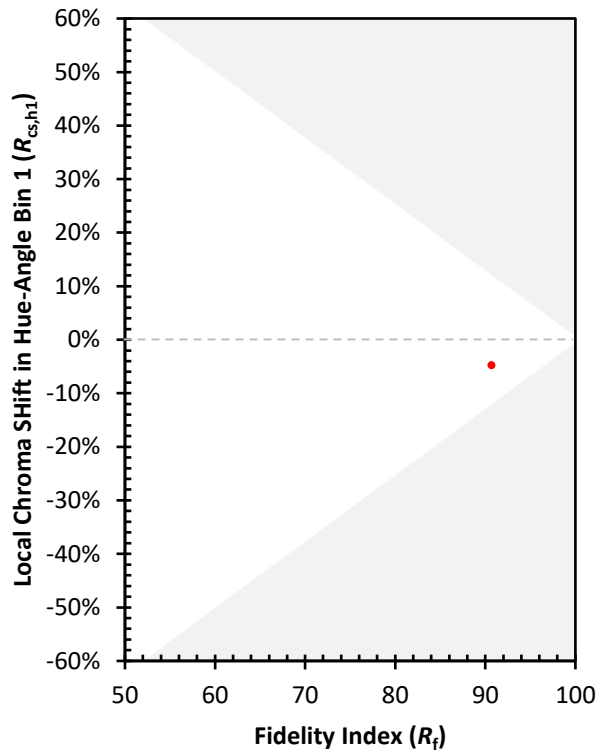
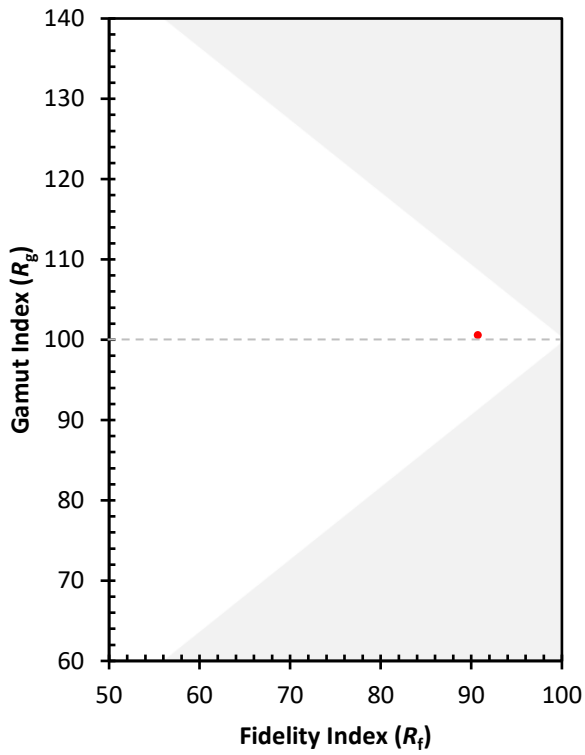
CES01 = 85	CES26 = 91	CES51 = 98	CES76 = 83
CES02 = 61	CES27 = 92	CES52 = 98	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 97	CES78 = 80
CES04 = 69	CES29 = 94	CES54 = 93	CES79 = 94
CES05 = 48	CES30 = 93	CES55 = 92	CES80 = 91
CES06 = 50	CES31 = 95	CES56 = 95	CES81 = 84
CES07 = 41	CES32 = 86	CES57 = 94	CES82 = 96
CES08 = 40	CES33 = 99	CES58 = 94	CES83 = 96
CES09 = 29	CES34 = 90	CES59 = 97	CES84 = 93
CES10 = 73	CES35 = 94	CES60 = 92	CES85 = 83
CES11 = 56	CES36 = 81	CES61 = 92	CES86 = 86
CES12 = 62	CES37 = 92	CES62 = 86	CES87 = 91
CES13 = 43	CES38 = 88	CES63 = 92	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 89	CES89 = 87
CES15 = 71	CES40 = 97	CES65 = 88	CES90 = 98
CES16 = 47	CES41 = 97	CES66 = 85	CES91 = 73
CES17 = 48	CES42 = 90	CES67 = 84	CES92 = 79
CES18 = 56	CES43 = 91	CES68 = 86	CES93 = 87
CES19 = 70	CES44 = 99	CES69 = 87	CES94 = 78
CES20 = 65	CES45 = 95	CES70 = 83	CES95 = 83
CES21 = 85	CES46 = 97	CES71 = 77	CES96 = 92
CES22 = 77	CES47 = 95	CES72 = 92	CES97 = 95
CES23 = 91	CES48 = 93	CES73 = 77	CES98 = 95
CES24 = 90	CES49 = 95	CES74 = 92	CES99 = 94
CES25 = 70	CES50 = 98	CES75 = 79	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)