

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: P1433066

Luminaire Tested: EHBR1-54-UNV-A1-L850

Issue Date: 3/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433066
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-654-5)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-54-UNV-A1-L850
Description: Elevate Round Highbay at, 55000 lumens, 5000K 80CRI LEDs with A lens
Light Source: -
Ballast/Driver: -

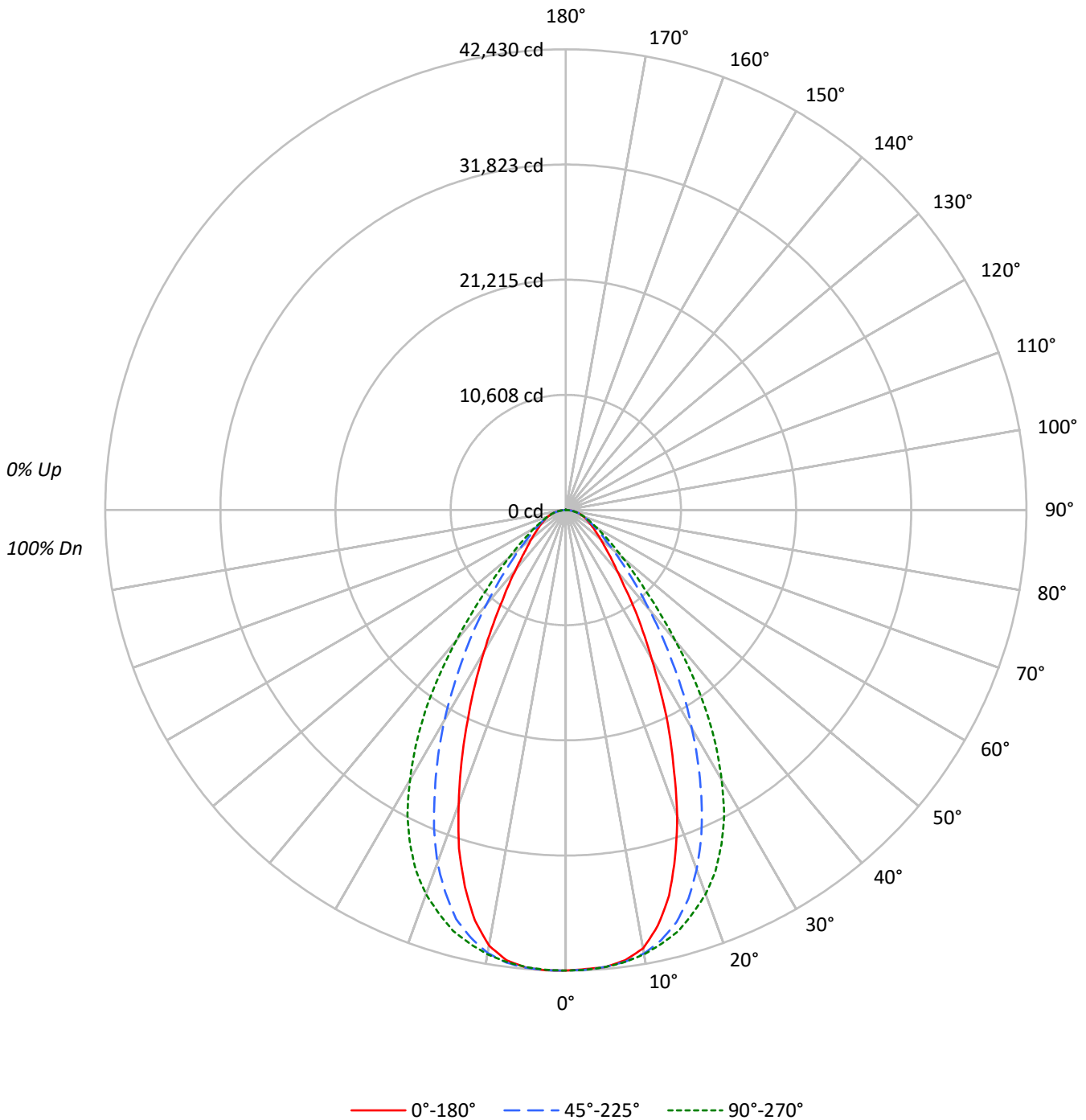
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52689.6 lumens
Efficiency: N/A
Efficacy: 178.0 lumens/watt
Spacing Criteria (0/90/45): 0.8 / 1.07 / 0.95
Luminous Opening: Circular (Dia: 1.71' x H: 0')
CIE Type: Direct

Input Watts (W): 296
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: P1433066
CATALOG NUMBER: EHBR1-54-UNV-A1-L850

Luminous Intensity Polar Plot





TEST NUMBER: P1433066
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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	92	90	
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	82	80	
3	98	90	83	78	95	88	82	78	85	81	77	83	79	75	80	77	74	74	72	
4	91	82	75	70	89	81	75	70	79	73	69	77	72	68	75	71	67	67	65	
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	61	60	
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	56	55	
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	52	50	
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	48	46	
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	45	43	
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	42	40	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	199173	199173	199173	199173	199173
5°	199146	199117	199125	199477	199356
10°	195502	197780	198094	197535	194222
15°	178680	191148	195082	189614	174577
20°	149942	176103	188134	172787	144104
25°	116820	153399	175824	147797	110767
30°	85833	125924	155683	121145	81469
35°	62414	97910	129071	93693	58340
40°	45345	73026	96055	69943	43946
45°	36135	54027	67844	51686	34884
50°	30379	41133	49758	39777	29918
55°	26961	33005	38292	32452	26598
60°	24812	28116	31137	27942	24988
65°	23837	25476	26879	25556	24065
70°	23515	24076	24821	24211	23747
75°	23274	23129	23274	23194	23501
80°	23398	21716	21237	22054	23398
85°	21105	17899	17711	18185	21730

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 71083 cd/sqm



TEST NUMBER: P1433066
 CATALOG NUMBER: EHBR1-54-UNV-A1-L850

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4005.2	7.6
10°-20°	10764.5	20.4
20°-30°	13089.6	24.8
30°-40°	10662.4	20.2
40°-50°	6401.7	12.1
50°-60°	3684.3	7.0
60°-70°	2305.7	4.4
70°-80°	1358.0	2.6
80°-90°	397.1	0.8
90°-100°	0.2	0.0
100°-110°	0.2	0.0
110°-120°	0.3	0.0
120°-130°	0.6	0.0
130°-140°	2.7	0.0
140°-150°	4.8	0.0
150°-160°	5.4	0.0
160°-170°	4.8	0.0
170°-180°	2.0	0.0
0°-30°	27859.3	52.9
0°-40°	38521.7	73.1
0°-60°	48607.7	92.3
0°-90°	52668.6	100.0
90°-120°	0.7	0.0
90°-150°	8.8	0.0
90°-180°	21.0	0.0
0°-180°	52689.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	42412	42412	42412	42412	42412	
5°	42245	42239	42241	42316	42290	3993
15°	36752	39317	40126	39001	35908	10111
25°	22545	29605	33933	28524	21377	10272
35°	10887	17079	22514	16343	10176	6888
45°	5441	8135	10216	7782	5253	4292
55°	3293	4031	4677	3964	3249	2977
65°	2145	2293	2419	2300	2166	2133
75°	1283	1275	1283	1278	1295	1359
85°	392	332	329	338	403	418
90°	2	0	0	0	1	20
95°	2	0	0	0	1	1
105°	2	0	0	0	2	2
115°	2	0	0	0	2	2
125°	3	0	0	1	3	2
135°	4	4	4	4	4	3
145°	8	7	7	8	9	5
155°	13	11	9	12	14	6
165°	20	17	15	18	20	6
175°	27	23	20	23	27	2
180°	24	24	24	24	24	



TEST NUMBER: P1433066
 CATALOG NUMBER: EHBR1-54-UNV-A1-L850

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	42412.4	42412.4	42412.4	42412.4	42412.4	42412.4	42412.4	42412.4	42412.4
2.5°	42319.1	42357.3	42373.3	42382.1	42391.9	42418.6	42430.1	42411.5	42427.4
5°	42245.3	42248.0	42239.1	42279.1	42240.9	42267.6	42315.5	42296.9	42289.8
7.5°	41815.4	41904.2	41956.6	41969.9	41977.0	42009.9	42043.7	41852.7	41824.3
10°	40998.2	41146.5	41476.0	41570.2	41541.8	41595.1	41424.6	40925.3	40729.9
12.5°	39206.4	39727.8	40584.2	40965.2	40896.0	40943.0	40362.1	39308.6	38702.7
15°	36752.1	37516.9	39316.6	40068.1	40125.9	40068.1	39001.2	36948.3	35908.2
17.5°	33489.3	34901.7	37551.5	39010.1	38926.6	38954.2	36928.8	33894.4	32704.0
20°	30003.6	31509.2	35238.3	37671.4	37645.7	37491.1	34574.8	30572.9	28835.4
22.5°	26061.2	28003.1	32587.6	36025.4	36015.6	35758.0	31708.3	26946.0	25075.2
25°	22545.3	24449.8	29604.7	34008.9	33932.6	33639.4	28523.6	23327.9	21377.2
27.5°	18910.4	20890.4	26420.1	31646.1	31593.6	31273.8	25479.4	19946.1	18089.5
30°	15828.8	17639.2	23222.2	29045.9	28710.2	28673.7	22340.9	16814.8	15024.0
32.5°	13188.8	14740.6	20207.3	26326.8	25732.5	25902.2	19213.2	14196.1	12421.2
35°	10887.1	12254.2	17078.7	23182.2	22514.2	22733.7	16343.1	11648.4	10176.4
37.5°	8836.0	10150.7	14427.0	20123.8	19102.2	19516.1	13818.5	9727.9	8548.2
40°	7396.9	8439.8	11912.3	16767.8	15668.9	16343.1	11409.4	8113.8	7168.6
42.5°	6373.7	7054.1	9831.8	13563.6	12720.6	13198.5	9403.7	6783.2	6076.0
45°	5440.9	5983.7	8135.1	10703.2	10215.5	10658.8	7782.5	5783.8	5252.6
47.5°	4752.5	5170.8	6696.9	8643.3	8340.3	8480.7	6499.8	5047.4	4615.6
50°	4158.2	4481.5	5630.2	6975.9	6810.7	6896.8	5444.5	4391.8	4095.1
52.5°	3696.3	3933.4	4722.2	5733.2	5651.5	5664.7	4639.6	3863.3	3648.3
55°	3293.0	3458.2	4031.2	4696.5	4676.9	4680.5	3963.7	3423.5	3248.6
57.5°	2940.3	3077.2	3464.4	3945.0	3916.5	3922.8	3432.5	3040.7	2927.8
60°	2641.8	2733.3	2993.6	3333.8	3315.2	3307.2	2975.0	2699.6	2660.5
62.5°	2377.1	2435.7	2616.1	2857.7	2822.1	2830.2	2615.2	2438.4	2380.7
65°	2145.2	2165.7	2292.7	2442.0	2418.9	2438.4	2299.9	2179.0	2165.7
67.5°	1918.7	1939.2	2013.8	2114.2	2087.5	2103.5	2015.6	1944.5	1933.0
70°	1712.6	1711.8	1753.5	1807.7	1807.7	1810.4	1763.3	1720.7	1729.5
72.5°	1499.5	1494.2	1506.6	1543.0	1533.2	1567.0	1517.3	1503.9	1505.7
75°	1282.7	1267.7	1274.7	1293.4	1282.7	1300.5	1278.3	1295.2	1295.2
77.5°	1078.4	1050.0	1041.1	1043.8	1024.2	1050.9	1056.2	1067.8	1094.4
80°	865.2	825.2	803.0	802.1	785.3	802.1	815.5	839.5	865.2
82.5°	642.2	607.7	570.3	563.2	552.5	562.3	580.0	608.5	650.3
85°	391.7	355.3	332.2	319.8	328.7	328.7	337.5	377.5	403.3
87.5°	141.3	123.5	101.3	102.2	104.8	108.3	112.8	142.1	155.5
90°	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
92.5°	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
95°	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
97.5°	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
100°	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
102.5°	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
105°	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
107.5°	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
110°	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8



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 CATALOG NUMBER: EHBR1-54-UNV-A1-L850

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
115°	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
117.5°	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
120°	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8
122.5°	2.7	0.9	0.0	0.0	0.0	0.0	0.0	0.9	2.7
125°	2.7	0.9	0.0	0.0	0.0	0.0	0.9	0.9	2.7
127.5°	2.7	0.9	0.0	0.0	0.0	0.0	0.9	1.8	2.7
130°	2.7	1.8	0.9	0.0	0.9	0.9	1.8	1.8	2.7
132.5°	3.5	2.7	2.7	1.8	1.8	2.7	2.7	3.5	3.5
135°	4.4	3.5	3.5	2.7	3.5	3.5	3.5	3.5	4.4
137.5°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	5.3
140°	6.2	5.3	5.3	5.3	5.3	5.3	5.3	6.2	6.2
142.5°	7.1	7.1	6.2	6.2	6.2	7.1	7.1	7.1	8.0
145°	8.0	8.0	7.1	7.1	7.1	8.0	8.0	8.8	8.8
147.5°	10.7	9.7	8.0	8.0	8.0	8.0	8.8	9.7	10.7
150°	11.6	10.7	8.8	8.8	8.8	8.8	9.7	11.6	12.5
152.5°	12.5	11.6	9.7	8.8	8.8	8.8	10.7	11.6	13.4
155°	13.4	12.5	10.7	8.8	8.8	9.7	11.6	13.4	14.2
157.5°	16.0	14.2	12.5	10.7	10.7	11.6	13.4	15.1	16.0
160°	17.8	16.0	14.2	12.5	12.5	13.4	15.1	16.9	17.8
162.5°	19.5	17.8	15.1	14.2	13.4	14.2	16.0	18.7	19.5
165°	20.4	18.7	16.9	15.1	15.1	15.1	17.8	19.5	20.4
167.5°	21.3	20.4	17.8	16.0	16.0	16.0	18.7	20.4	21.3
170°	22.2	21.3	18.7	16.9	16.0	16.9	19.5	21.3	22.2
172.5°	24.0	23.1	20.4	18.7	17.8	18.7	21.3	23.1	24.0
175°	26.6	24.9	23.1	20.4	19.5	20.4	23.1	24.9	26.6
177.5°	27.5	25.7	24.0	21.3	20.4	21.3	24.0	25.7	27.5
180°	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0



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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	20.78	22.05	21.15	22.36	22.67	21.76	23.03	22.13	23.34	23.66
	3H	22.35	23.47	22.73	23.80	24.17	23.10	24.23	23.48	24.56	24.93
	4H	23.01	24.06	23.42	24.42	24.80	23.66	24.71	24.07	25.06	25.45
	6H	23.57	24.53	23.99	24.91	25.30	24.09	25.06	24.51	25.43	25.82
	8H	23.77	24.68	24.20	25.07	25.48	24.23	25.14	24.66	25.54	25.94
	12H	23.90	24.77	24.33	25.15	25.59	24.31	25.18	24.74	25.56	26.00
4H	2H	21.35	22.40	21.76	22.75	23.14	22.12	23.17	22.52	23.52	23.91
	3H	23.14	24.00	23.56	24.41	24.81	23.71	24.57	24.13	24.98	25.38
	4H	23.94	24.71	24.37	25.13	25.58	24.41	25.18	24.84	25.60	26.05
	6H	24.62	25.29	25.09	25.74	26.21	24.98	25.65	25.44	26.09	26.56
	8H	24.87	25.49	25.34	25.94	26.41	25.16	25.79	25.63	26.23	26.71
	12H	25.04	25.59	25.53	26.07	26.55	25.28	25.83	25.77	26.32	26.79
8H	4H	24.22	24.84	24.69	25.29	25.76	24.64	25.26	25.11	25.71	26.18
	6H	25.04	25.54	25.54	26.04	26.52	25.34	25.85	25.84	26.35	26.83
	8H	25.37	25.82	25.89	26.34	26.83	25.60	26.06	26.13	26.57	27.07
	12H	25.62	26.02	26.13	26.51	27.09	25.79	26.19	26.31	26.69	27.26
12H	4H	24.23	24.78	24.72	25.27	25.74	24.65	25.20	25.14	25.69	26.16
	6H	25.08	25.54	25.61	26.05	26.55	25.38	25.84	25.91	26.36	26.85
	8H	25.47	25.87	25.99	26.37	26.94	25.70	26.10	26.22	26.60	27.17

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



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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-4

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L850-N

Data in this report applies to families of products including EHBR-60-L850-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-4
 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-L850-N**
 Description: Elevate Round Highbay at, 60000 lumens, 5000K 80CRI LEDs with N lens

Spectral Parameters

CCT (K): 4875
 CIE u': 0.2124
 CIE v': 0.4871
 Duv: 0.0005
 CIE x: 0.3488
 CIE y: 0.3555
 CIE z: 0.2957
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 573
 Purity: 11.33556
 Rf: 80
 Rg: 102.3

CRI (Ra):	82.3		
R1:	85.0	R9:	43.9
R2:	83.1	R10:	57.4
R3:	78.8	R11:	83.1
R4:	84.0	R12:	51.0
R5:	83.0	R13:	83.4
R6:	76.3	R14:	87.4
R7:	86.8	R15:	83.4
R8:	81.7		



Test Conditions

Stabilization Time: 39M
 Operation Time: 1H 39M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-4

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: SP1-2506-472-4

CIE 1931 Chromaticity Diagram



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



CCT = 4875K
 CIE x = 0.3488
 CIE y = 0.3555
 Duv = 0.0005

Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-4

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	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-4

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.82

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	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-4

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.71

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	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

Summary

$R_f = 80$
 $R_g = 102.3$
 CIE $R_a = 82.3$
 $R_9 = 43.9$



Color Vector Graphics



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

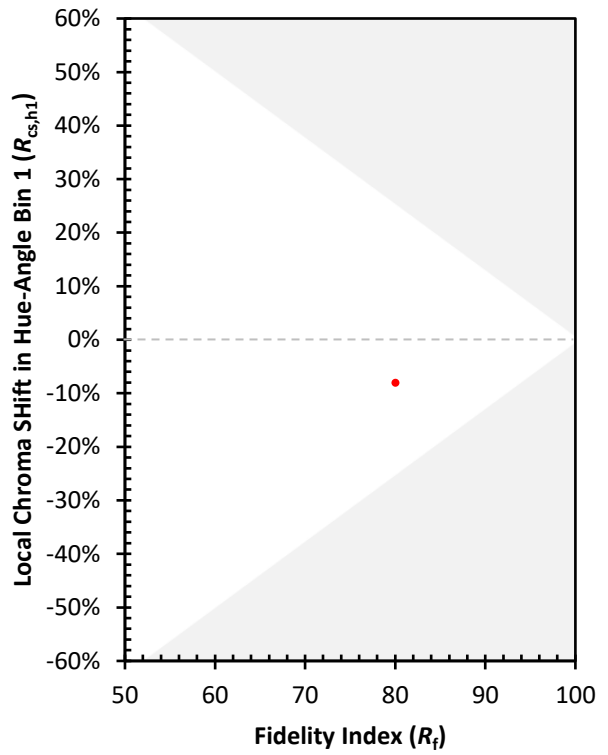
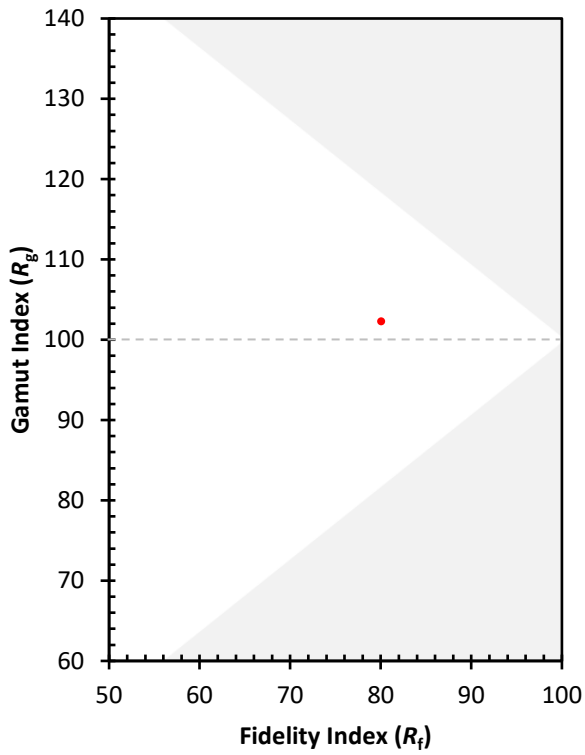
CES01 = 85	CES26 = 67	CES51 = 92	CES76 = 54
CES02 = 60	CES27 = 88	CES52 = 91	CES77 = 71
CES03 = 31	CES28 = 81	CES53 = 82	CES78 = 55
CES04 = 69	CES29 = 66	CES54 = 92	CES79 = 81
CES05 = 47	CES30 = 80	CES55 = 90	CES80 = 75
CES06 = 50	CES31 = 69	CES56 = 81	CES81 = 79
CES07 = 40	CES32 = 61	CES57 = 80	CES82 = 90
CES08 = 39	CES33 = 76	CES58 = 81	CES83 = 87
CES09 = 29	CES34 = 68	CES59 = 93	CES84 = 87
CES10 = 73	CES35 = 82	CES60 = 94	CES85 = 82
CES11 = 56	CES36 = 95	CES61 = 91	CES86 = 83
CES12 = 62	CES37 = 75	CES62 = 89	CES87 = 78
CES13 = 42	CES38 = 87	CES63 = 80	CES88 = 85
CES14 = 74	CES39 = 94	CES64 = 79	CES89 = 81
CES15 = 71	CES40 = 87	CES65 = 75	CES90 = 86
CES16 = 46	CES41 = 91	CES66 = 72	CES91 = 80
CES17 = 48	CES42 = 71	CES67 = 69	CES92 = 77
CES18 = 56	CES43 = 72	CES68 = 75	CES93 = 86
CES19 = 70	CES44 = 99	CES69 = 80	CES94 = 71
CES20 = 65	CES45 = 81	CES70 = 66	CES95 = 79
CES21 = 85	CES46 = 83	CES71 = 59	CES96 = 86
CES22 = 77	CES47 = 83	CES72 = 87	CES97 = 85
CES23 = 91	CES48 = 83	CES73 = 56	CES98 = 82
CES24 = 90	CES49 = 82	CES74 = 95	CES99 = 84
CES25 = 71	CES50 = 91	CES75 = 58	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)