

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: P1431843

Luminaire Tested: EHBR1-48-UNV-ASM-L950

Issue Date: 3/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1431843
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-654-4)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-48-UNV-ASM-L950
Description: Elevate Round Highbay at, 49000 lumens, 5000K 90CRI LEDs with ASM lens
Light Source: -
Ballast/Driver: -

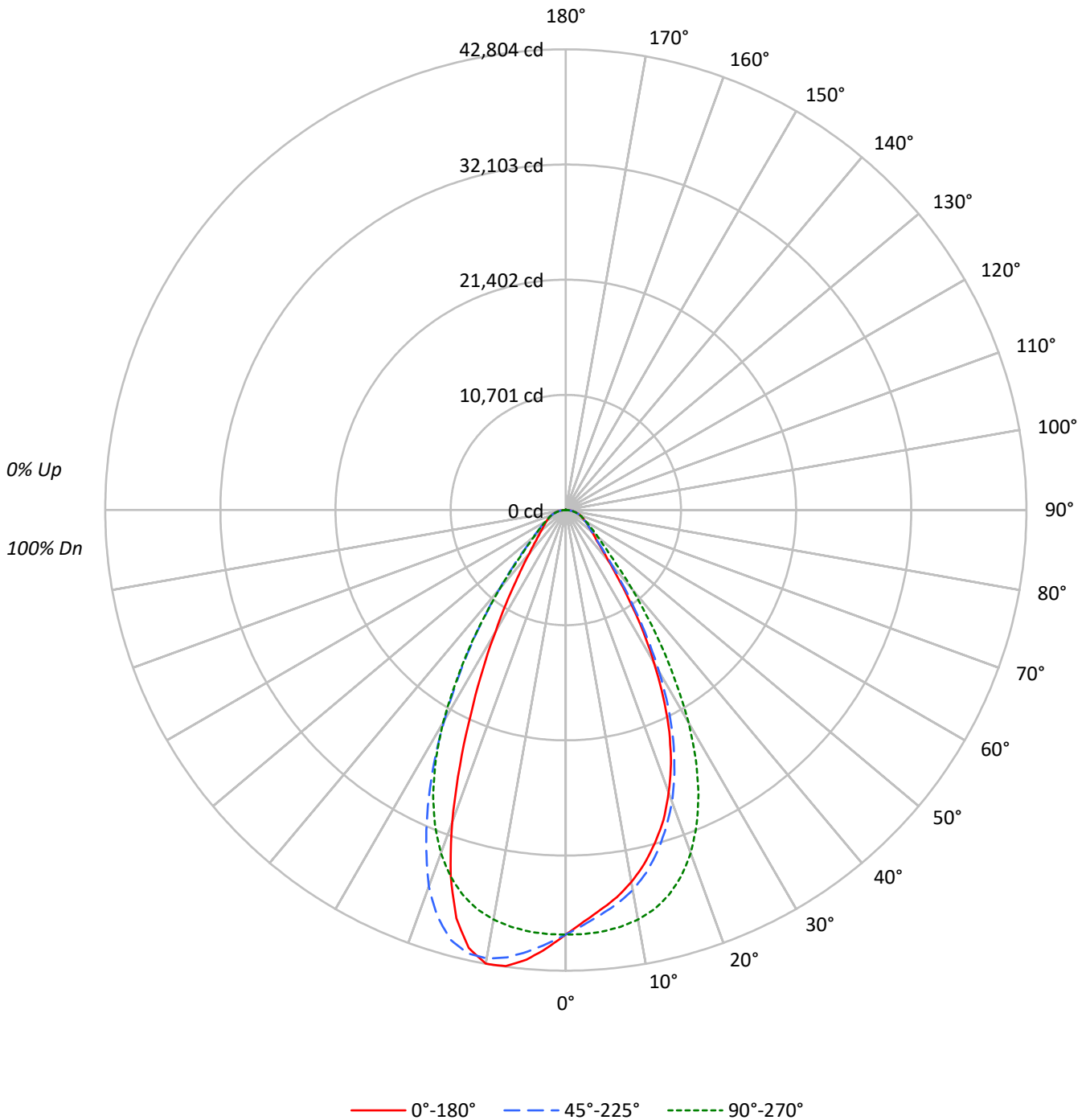
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44107.9 lumens
Efficiency: N/A
Efficacy: 170.6 lumens/watt
Spacing Criteria (0/90/45): 0.84 / 0.99 / 0.92
Luminous Opening: Circular (Dia: 1.71' x H: 0')
CIE Type: Direct

Input Watts (W): 258.6
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: P1431843
CATALOG NUMBER: EHBR1-48-UNV-ASM-L950

Luminous Intensity Polar Plot





TEST NUMBER: P1431843
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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	103	109	106	104	101	102	100	98	98	97	95	95	93	92	92	90	
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	83	81	
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	76	74	
4	93	84	77	72	91	83	77	72	80	75	71	78	74	70	76	72	69	69	67	
5	87	78	71	66	86	77	70	65	75	69	65	73	68	64	71	67	64	64	62	
6	82	72	65	60	81	71	65	60	70	64	60	68	63	59	67	62	59	59	57	
7	78	67	60	56	76	67	60	56	65	59	55	64	59	55	63	58	55	55	53	
8	74	63	56	52	72	62	56	52	61	55	51	60	55	51	59	54	51	51	49	
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	47	46	
10	66	56	49	45	65	55	49	45	54	49	45	54	48	45	53	48	45	45	43	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	185247	185247	185247	185247	185247
5°	175703	177757	185320	194208	197702
10°	167382	170927	184246	201762	204112
15°	155658	159816	180011	201039	190962
20°	139621	144323	169537	186090	154200
25°	117877	122338	151168	157247	107632
30°	88901	94055	123724	122489	70582
35°	59703	63308	89518	88072	46112
40°	38022	40634	58446	58822	32096
45°	27397	28537	37502	39114	25143
50°	23124	23308	28220	28954	21649
55°	20742	20791	23413	24031	20040
60°	19599	19432	20689	21127	19480
65°	19217	19044	19374	19751	19299
70°	19389	19052	19073	19440	19643
75°	19556	18964	18923	19594	20158
80°	19804	18422	18503	19804	21183
85°	18772	15583	15583	17819	19688

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
 Vertical Angle: 45°
 Luminance: 52726 cd/sqm



TEST NUMBER: P1431843
 CATALOG NUMBER: EHBR1-48-UNV-ASM-L950

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3750.8	8.5
10°-20°	10204.3	23.1
20°-30°	11967.6	27.1
30°-40°	8322.7	18.9
40°-50°	4136.0	9.4
50°-60°	2473.8	5.6
60°-70°	1741.1	3.9
70°-80°	1121.6	2.5
80°-90°	356.2	0.8
90°-100°	2.1	0.0
100°-110°	2.5	0.0
110°-120°	2.5	0.0
120°-130°	3.2	0.0
130°-140°	4.3	0.0
140°-150°	5.2	0.0
150°-160°	5.8	0.0
160°-170°	5.7	0.0
170°-180°	2.4	0.0
0°-30°	25922.7	58.8
0°-40°	34245.4	77.6
0°-60°	40855.2	92.6
0°-90°	44074.1	99.9
90°-120°	7.1	0.0
90°-150°	19.8	0.0
90°-180°	34.0	0.1
0°-180°	44107.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	39447	39447	39447	39447	39447	
5°	37272	37708	39312	41198	41939	3496
15°	32017	32872	37026	41351	39278	8929
25°	22749	23610	29174	30347	20772	10264
35°	10414	11043	15615	15363	8043	6634
45°	4125	4297	5647	5890	3786	3335
55°	2533	2539	2860	2935	2448	2299
65°	1729	1714	1744	1778	1737	1717
75°	1078	1045	1043	1080	1111	1138
85°	348	289	289	331	365	359
90°	1	1	1	2	6	18
95°	1	1	2	2	6	1
105°	2	1	2	3	7	2
115°	2	2	2	3	7	1
125°	2	3	3	4	7	2
135°	3	5	6	6	8	3
145°	8	9	9	7	10	5
155°	14	12	12	12	13	7
165°	21	19	20	22	24	6
175°	25	25	26	28	32	2
180°	27	27	27	27	27	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	39447.0	39447.0	39447.0	39447.0	39447.0	39447.0	39447.0	39447.0	39447.0
2.5°	38276.2	38301.2	38569.0	38917.4	39424.2	39933.8	40346.5	40618.7	40753.4
5°	37272.3	37411.4	37708.1	38347.9	39312.5	40333.2	41197.9	41763.8	41939.1
7.5°	36294.5	36375.1	36871.4	37679.9	39045.4	40635.7	41920.6	42581.1	42742.4
10°	35101.4	35284.0	35844.8	36798.2	38637.9	40826.6	42311.1	42784.6	42803.8
12.5°	33697.5	33939.3	34518.5	35721.3	37987.7	40758.6	42180.2	42024.8	41672.1
15°	32016.9	32229.1	32872.0	34267.0	37026.0	40355.4	41351.1	40086.9	39278.4
17.5°	30201.7	30394.0	30952.4	32488.8	35670.9	39600.9	39620.1	37119.2	35594.0
20°	27938.2	28089.1	28879.1	30386.6	33924.6	38390.8	37236.8	32662.6	30855.5
22.5°	25529.7	25671.0	26373.0	27941.9	31735.0	36759.0	33917.9	28179.3	25714.0
25°	22749.3	22826.2	23610.3	25028.9	29174.2	34759.6	30347.4	23294.4	20772.0
27.5°	19621.1	19752.0	20572.3	22021.4	26162.2	32225.5	26545.3	19035.2	16708.2
30°	16394.6	16611.3	17345.1	18642.5	22816.5	28976.7	22588.7	15159.2	13016.3
32.5°	13383.2	13539.3	14062.3	15418.2	19070.7	25792.3	18788.9	12146.5	10331.3
35°	10414.2	10570.3	11042.9	12374.3	15614.9	21808.3	15362.7	9544.2	8043.4
37.5°	7960.6	8236.5	8539.8	9620.4	12254.5	18044.0	12246.4	7685.4	6524.1
40°	6202.3	6246.7	6628.4	7320.0	9533.9	14108.9	9595.3	6135.0	5235.6
42.5°	4964.8	5085.4	5249.6	5767.4	7223.9	10788.4	7541.9	5035.1	4447.0
45°	4125.3	4172.7	4296.9	4644.5	5646.8	7939.1	5889.5	4248.1	3785.8
47.5°	3609.0	3588.2	3668.1	3928.5	4598.6	6135.8	4773.2	3643.7	3319.7
50°	3165.1	3152.6	3190.3	3364.1	3862.7	4708.1	3963.2	3180.6	2963.2
52.5°	2820.4	2831.6	2835.3	2943.2	3318.2	3839.7	3375.2	2834.5	2688.0
55°	2533.4	2547.5	2539.4	2619.3	2859.6	3228.0	2935.1	2549.0	2447.7
57.5°	2309.3	2299.0	2287.9	2330.8	2511.3	2738.4	2549.0	2305.6	2238.3
60°	2086.7	2077.0	2069.0	2097.0	2202.8	2371.5	2249.4	2093.3	2074.1
62.5°	1895.9	1889.9	1889.2	1884.0	1965.4	2071.9	1989.0	1902.5	1885.5
65°	1729.4	1722.8	1713.8	1705.8	1743.5	1842.6	1777.5	1730.8	1736.8
67.5°	1563.0	1563.0	1547.4	1534.9	1571.9	1623.6	1595.5	1568.9	1575.6
70°	1412.1	1412.8	1387.6	1378.1	1389.1	1444.6	1415.8	1419.5	1430.6
72.5°	1250.1	1232.3	1213.8	1213.1	1214.5	1257.5	1247.9	1256.7	1268.6
75°	1077.8	1057.1	1045.2	1031.9	1042.9	1075.5	1079.9	1092.5	1111.0
77.5°	911.3	879.5	869.8	863.2	855.8	892.8	906.9	923.9	951.2
80°	732.3	697.5	681.2	671.7	684.2	701.2	732.3	744.9	783.3
82.5°	541.5	515.6	495.6	494.8	500.8	516.3	543.0	566.6	588.8
85°	348.4	307.0	289.2	295.9	289.2	312.9	330.7	358.7	365.4
87.5°	125.7	98.4	93.9	103.6	101.4	108.7	124.2	135.4	136.1
90°	0.7	0.7	0.7	0.7	0.7	1.5	2.2	4.5	5.9
92.5°	0.7	0.7	0.7	0.7	0.7	1.5	2.2	4.5	5.9
95°	0.7	0.7	0.7	0.7	1.5	1.5	2.2	4.5	5.9
97.5°	1.5	0.7	0.7	0.7	1.5	1.5	2.2	4.5	5.9
100°	1.5	0.7	0.7	1.5	1.5	1.5	2.2	4.5	5.9
102.5°	1.5	0.7	0.7	1.5	1.5	2.2	3.0	5.2	5.9
105°	1.5	0.7	0.7	1.5	1.5	2.2	3.0	5.2	6.7
107.5°	1.5	0.7	1.5	1.5	1.5	2.2	3.0	5.2	6.7
110°	1.5	0.7	1.5	1.5	1.5	2.2	3.0	5.2	6.7



TEST NUMBER: P1431843
 CATALOG NUMBER: EHBR1-48-UNV-ASM-L950

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	1.5	0.7	1.5	1.5	1.5	2.2	3.0	5.2	6.7
115°	1.5	0.7	1.5	1.5	2.2	2.2	3.0	5.2	6.7
117.5°	1.5	0.7	1.5	2.2	2.2	2.2	3.0	5.2	6.7
120°	1.5	0.7	1.5	2.2	2.2	2.2	3.7	5.2	6.7
122.5°	1.5	1.5	2.2	3.0	3.0	3.0	3.7	5.9	6.7
125°	2.2	1.5	3.0	3.7	3.0	3.0	4.5	5.9	7.4
127.5°	2.2	1.5	3.0	3.7	3.7	3.7	4.5	5.9	7.4
130°	2.2	2.2	3.7	4.5	4.5	3.7	4.5	6.7	7.4
132.5°	3.0	3.0	5.2	5.9	5.2	4.5	5.2	7.4	8.2
135°	3.0	3.7	5.2	6.7	5.9	4.5	5.9	6.7	8.2
137.5°	3.7	4.5	6.7	7.4	6.7	5.2	5.9	7.4	8.2
140°	5.2	5.9	7.4	7.4	7.4	5.9	5.9	7.4	8.9
142.5°	6.7	6.7	8.2	8.2	8.2	6.7	6.7	8.2	8.9
145°	8.2	8.2	8.9	8.2	8.9	8.2	7.4	8.2	9.6
147.5°	9.6	9.6	9.6	8.9	8.9	8.2	8.2	8.9	10.3
150°	11.1	11.1	10.3	9.6	9.6	9.6	8.9	9.6	11.1
152.5°	12.5	11.8	11.1	10.3	10.3	10.3	10.3	11.1	11.8
155°	14.0	13.3	12.5	11.1	11.8	11.8	11.8	12.5	13.3
157.5°	16.3	14.8	14.0	13.3	13.3	14.0	14.0	14.8	15.5
160°	17.7	17.0	16.3	15.5	16.3	16.3	17.0	17.7	18.5
162.5°	19.2	18.5	17.7	17.7	17.7	17.7	19.2	20.0	21.5
165°	20.7	20.0	19.2	19.2	20.0	20.0	21.5	22.9	24.4
167.5°	20.7	20.7	20.7	20.7	21.5	21.5	22.9	25.2	26.7
170°	22.2	21.5	21.5	22.2	22.2	22.9	24.4	26.7	28.2
172.5°	23.7	22.9	23.7	23.7	24.4	24.4	26.7	28.8	30.3
175°	25.2	24.4	25.2	25.2	25.9	26.7	28.2	30.3	31.8
177.5°	25.9	25.2	25.2	25.2	25.9	27.4	28.8	31.0	32.5
180°	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4



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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	19.11	20.32	19.48	20.63	20.95	19.88	21.09	20.25	21.40	21.72
	3H	21.03	22.10	21.41	22.44	22.80	21.53	22.60	21.91	22.94	23.30
	4H	21.84	22.84	22.25	23.20	23.58	22.25	23.25	22.65	23.60	23.99
	6H	22.51	23.43	22.93	23.80	24.20	22.84	23.75	23.25	24.13	24.52
	8H	22.75	23.62	23.18	24.01	24.42	23.04	23.91	23.48	24.31	24.72
	12H	22.91	23.74	23.34	24.13	24.56	23.18	24.01	23.61	24.39	24.83
4H	2H	19.68	20.68	20.09	21.04	21.42	20.30	21.30	20.71	21.66	22.04
	3H	21.84	22.66	22.26	23.07	23.48	22.22	23.05	22.64	23.46	23.86
	4H	22.79	23.53	23.23	23.95	24.40	23.09	23.83	23.53	24.26	24.70
	6H	23.60	24.24	24.07	24.69	25.16	23.84	24.48	24.31	24.93	25.40
	8H	23.89	24.49	24.37	24.94	25.41	24.11	24.70	24.58	25.15	25.63
	12H	24.10	24.62	24.59	25.11	25.59	24.29	24.82	24.78	25.30	25.78
8H	4H	23.11	23.70	23.58	24.15	24.63	23.40	23.99	23.87	24.44	24.92
	6H	24.07	24.55	24.57	25.05	25.53	24.30	24.78	24.80	25.28	25.77
	8H	24.45	24.88	24.98	25.40	25.90	24.66	25.10	25.19	25.61	26.11
	12H	24.75	25.13	25.27	25.62	26.20	24.94	25.32	25.46	25.81	26.39
12H	4H	23.13	23.66	23.62	24.14	24.62	23.43	23.95	23.92	24.44	24.91
	6H	24.13	24.56	24.65	25.08	25.57	24.37	24.80	24.90	25.32	25.82
	8H	24.58	24.95	25.09	25.45	26.03	24.80	25.18	25.32	25.68	26.25

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

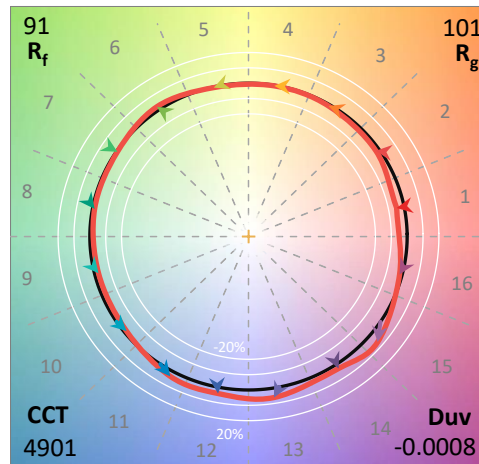
Test Information

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

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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



Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-8

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			

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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

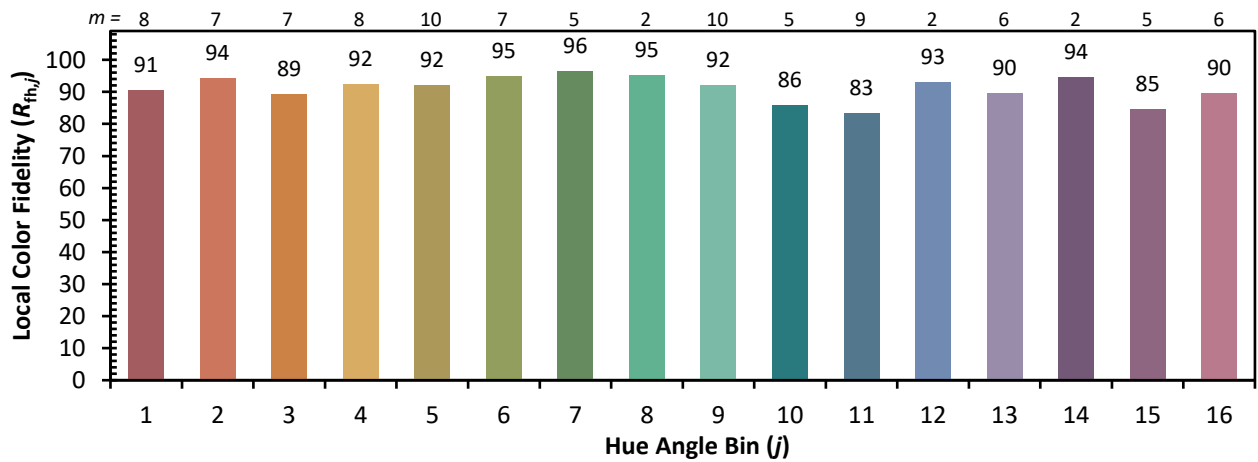
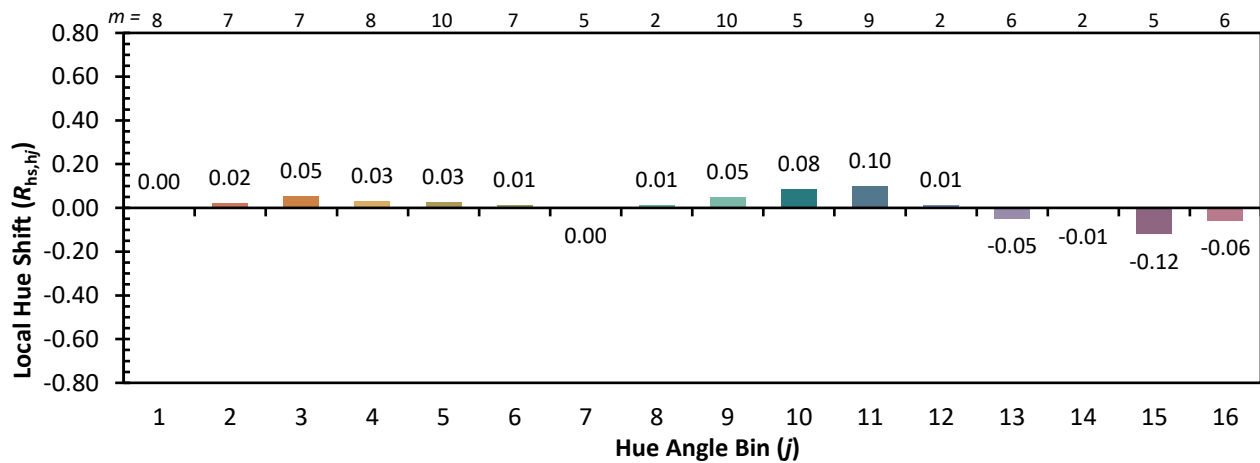
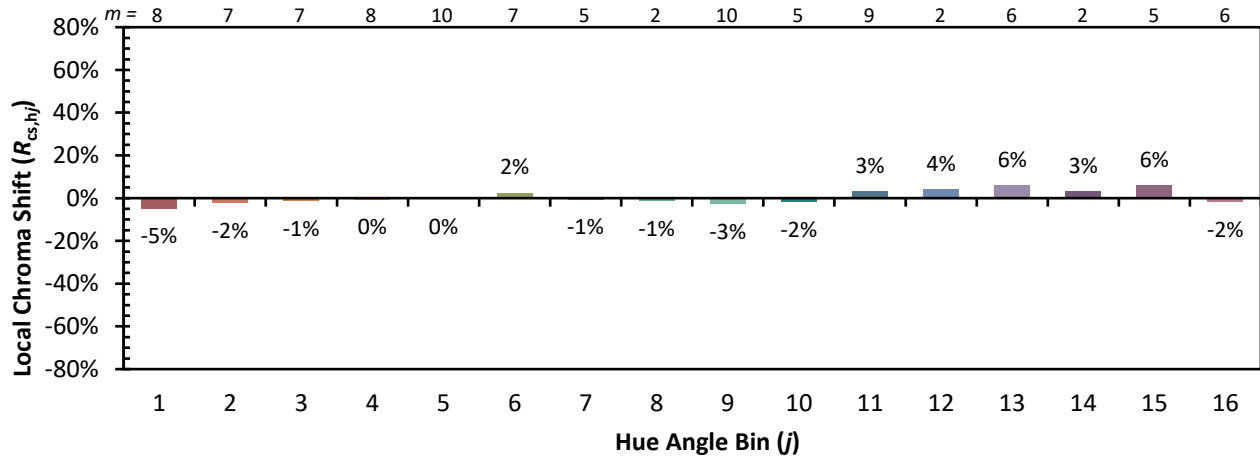


Individual Sample Fidelity Index ($R_{f,i}$)

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)