

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: P1431867

Luminaire Tested: EHBR1-54-UNV-A1-L840

Issue Date: 3/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1431867
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-L840
Description: Elevate Round Highbay at, 54000 lumens, 4000K 80CRI LEDs with A lens
Light Source: -
Ballast/Driver: -

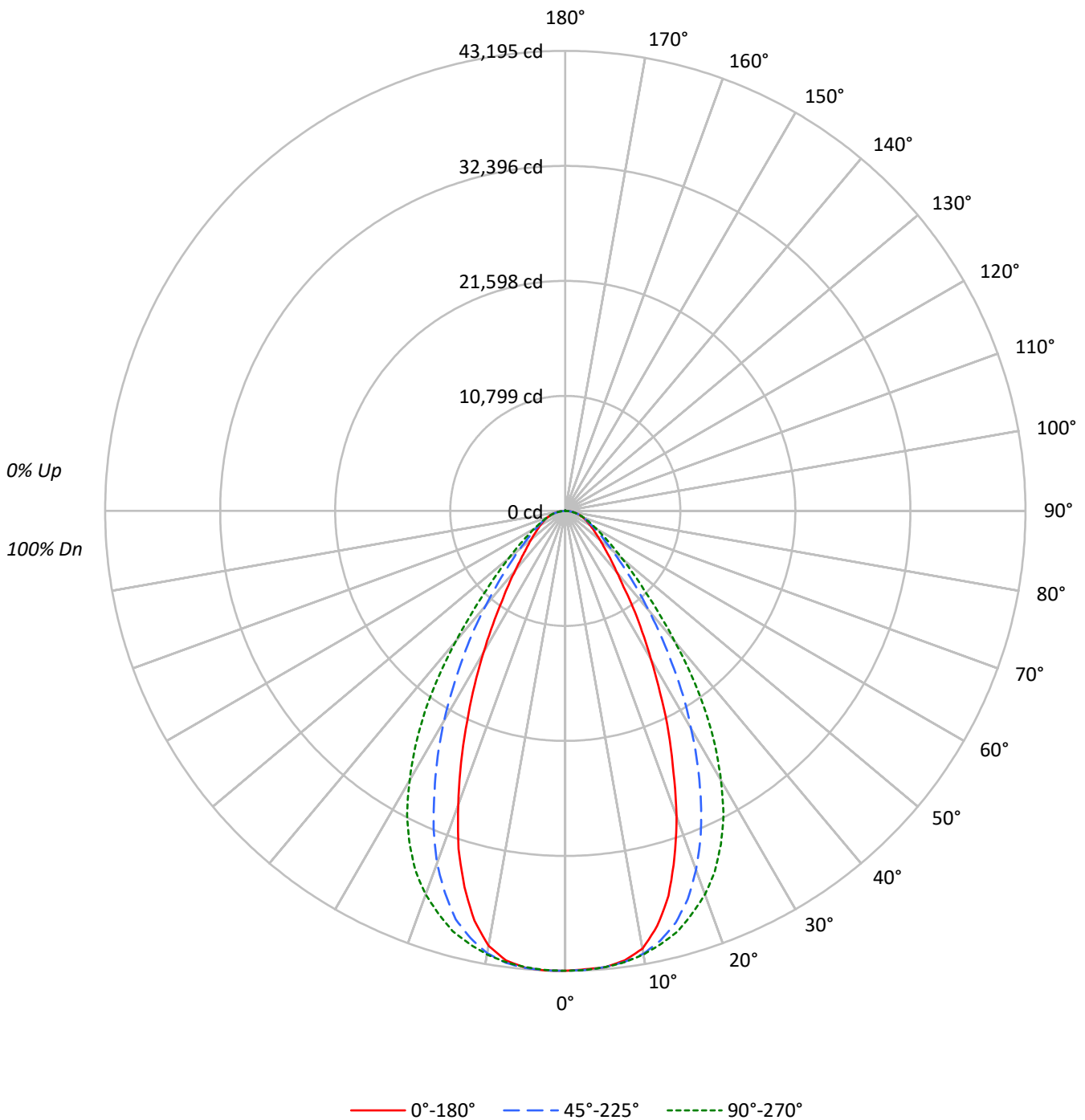
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53639.0 lumens
Efficiency: N/A
Efficacy: 181.2 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: P1431867
CATALOG NUMBER: EHBR1-54-UNV-A1-L840

Luminous Intensity Polar Plot





TEST NUMBER: P1431867
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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°	202761	202761	202761	202761	202761
5°	202734	202704	202713	203071	202948
10°	199024	201344	201663	201094	197722
15°	181899	194592	198597	193031	177722
20°	152644	179276	191523	175900	146701
25°	118925	156163	178992	150460	112763
30°	87380	128193	158489	123329	82937
35°	63539	99674	131397	95381	59391
40°	46163	74342	97786	71204	44738
45°	36785	55001	69067	52617	35512
50°	30926	41874	50654	40493	30457
55°	27447	33599	38982	33037	27077
60°	25259	28623	31698	28445	25438
65°	24267	25935	27363	26016	24498
70°	23939	24510	25268	24648	24175
75°	23693	23546	23693	23611	23923
80°	23820	22108	21619	22452	23820
85°	21488	18223	18029	18514	22124

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 72364 cd/sqm



TEST NUMBER: P1431867
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4077.4	7.6
10°-20°	10958.5	20.4
20°-30°	13325.4	24.8
30°-40°	10854.6	20.2
40°-50°	6517.1	12.1
50°-60°	3750.6	7.0
60°-70°	2347.3	4.4
70°-80°	1382.4	2.6
80°-90°	404.3	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°	4.9	0.0
150°-160°	5.5	0.0
160°-170°	4.9	0.0
170°-180°	2.1	0.0
0°-30°	28361.3	52.9
0°-40°	39215.9	73.1
0°-60°	49483.6	92.3
0°-90°	53617.6	100.0
90°-120°	0.7	0.0
90°-150°	9.0	0.0
90°-180°	21.0	0.0
0°-180°	53639.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	43177	43177	43177	43177	43177	
5°	43006	43000	43002	43078	43052	4064
15°	37414	40025	40849	39704	36555	10293
25°	22952	30138	34544	29038	21762	10457
35°	11083	17386	22920	16638	10360	7012
45°	5539	8282	10400	7923	5347	4369
55°	3352	4104	4761	4035	3307	3030
65°	2184	2334	2462	2341	2205	2171
75°	1306	1298	1306	1301	1318	1383
85°	399	338	335	344	411	426
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°	14	11	9	12	14	7
165°	21	17	15	18	21	6
175°	27	24	20	24	27	2
180°	24	24	24	24	24	



TEST NUMBER: P1431867
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	43176.6	43176.6	43176.6	43176.6	43176.6	43176.6	43176.6	43176.6	43176.6
2.5°	43081.6	43120.5	43136.8	43145.8	43155.8	43182.9	43194.6	43175.7	43191.9
5°	43006.5	43009.3	43000.2	43040.9	43002.0	43029.2	43078.0	43059.0	43051.8
7.5°	42568.9	42659.3	42712.6	42726.2	42733.4	42766.9	42801.3	42606.8	42577.9
10°	41736.9	41887.9	42223.4	42319.3	42290.3	42344.6	42171.0	41662.7	41463.8
12.5°	39912.9	40443.7	41315.5	41703.4	41632.9	41680.8	41089.4	40016.9	39400.1
15°	37414.3	38192.9	40025.0	40790.1	40848.9	40790.1	39704.0	37614.1	36555.2
17.5°	34092.7	35530.6	38228.1	39713.0	39628.0	39656.1	37594.2	34505.1	33293.3
20°	30544.2	32077.0	35873.3	38350.2	38324.0	38166.7	35197.8	31123.8	29355.0
22.5°	26530.8	28507.7	33174.8	36674.5	36664.6	36402.3	32279.6	27431.5	25527.0
25°	22951.5	24890.4	30138.1	34621.7	34544.0	34245.5	29037.6	23748.2	21762.4
27.5°	19251.1	21266.8	26896.2	32216.3	32162.9	31837.3	25938.5	20305.5	18415.5
30°	16114.0	17957.0	23640.6	29569.3	29227.5	29190.4	22743.5	17117.8	15294.7
32.5°	13426.4	15006.2	20571.4	26801.2	26196.2	26368.9	19559.4	14451.9	12645.0
35°	11083.3	12475.0	17386.4	23599.9	22919.9	23143.3	16637.6	11858.3	10359.8
37.5°	8995.2	10333.6	14687.0	20486.4	19446.4	19867.8	14067.5	9903.2	8702.2
40°	7530.2	8591.9	12126.9	17069.9	15951.2	16637.6	11615.0	8260.0	7297.8
42.5°	6488.5	7181.2	10009.0	13808.0	12949.8	13436.3	9573.1	6905.4	6185.5
45°	5538.9	6091.5	8281.7	10896.1	10399.6	10850.9	7922.7	5888.0	5347.2
47.5°	4838.1	5264.0	6817.6	8799.0	8490.6	8633.5	6616.9	5138.3	4698.8
50°	4233.1	4562.3	5731.6	7101.6	6933.4	7021.1	5542.6	4470.9	4168.9
52.5°	3762.9	4004.3	4807.3	5836.5	5753.3	5766.8	4723.2	3932.9	3714.0
55°	3352.3	3520.5	4103.8	4781.1	4761.2	4764.8	4035.1	3485.2	3307.1
57.5°	2993.3	3132.6	3526.8	4016.1	3987.1	3993.5	3494.3	3095.5	2980.6
60°	2689.4	2782.6	3047.5	3393.9	3374.9	3366.8	3028.6	2748.2	2708.4
62.5°	2419.9	2479.6	2663.2	2909.2	2873.0	2881.2	2662.3	2482.3	2423.6
65°	2183.9	2204.7	2334.0	2486.0	2462.5	2482.3	2341.3	2218.3	2204.7
67.5°	1953.3	1974.1	2050.1	2152.3	2125.1	2141.4	2051.9	1979.5	1967.8
70°	1743.5	1742.6	1785.1	1840.3	1840.3	1843.0	1795.1	1751.7	1760.7
72.5°	1526.5	1521.1	1533.7	1570.8	1560.8	1595.2	1544.6	1531.0	1532.8
75°	1305.8	1290.5	1297.7	1316.7	1305.8	1323.9	1301.3	1318.5	1318.5
77.5°	1097.8	1068.9	1059.9	1062.6	1042.7	1069.8	1075.2	1087.0	1114.1
80°	880.8	840.1	817.5	816.6	799.4	816.6	830.2	854.6	880.8
82.5°	653.8	618.6	580.6	573.3	562.5	572.4	590.5	619.5	662.0
85°	398.8	361.7	338.2	325.6	334.6	334.6	343.6	384.3	410.6
87.5°	143.8	125.7	103.1	104.0	106.7	110.3	114.8	144.7	158.3
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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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°	3.6	2.7	2.7	1.8	1.8	2.7	2.7	3.6	3.6
135°	4.5	3.6	3.6	2.7	3.6	3.6	3.6	3.6	4.5
137.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.4
140°	6.3	5.4	5.4	5.4	5.4	5.4	5.4	6.3	6.3
142.5°	7.2	7.2	6.3	6.3	6.3	7.2	7.2	7.2	8.1
145°	8.1	8.1	7.2	7.2	7.2	8.1	8.1	9.0	9.0
147.5°	10.9	9.9	8.1	8.1	8.1	8.1	9.0	9.9	10.9
150°	11.8	10.9	9.0	9.0	9.0	9.0	9.9	11.8	12.7
152.5°	12.7	11.8	9.9	9.0	9.0	9.0	10.9	11.8	13.6
155°	13.6	12.7	10.9	9.0	9.0	9.9	11.8	13.6	14.5
157.5°	16.3	14.5	12.7	10.9	10.9	11.8	13.6	15.4	16.3
160°	18.1	16.3	14.5	12.7	12.7	13.6	15.4	17.2	18.1
162.5°	19.9	18.1	15.4	14.5	13.6	14.5	16.3	19.0	19.9
165°	20.8	19.0	17.2	15.4	15.4	15.4	18.1	19.9	20.8
167.5°	21.7	20.8	18.1	16.3	16.3	16.3	19.0	20.8	21.7
170°	22.6	21.7	19.0	17.2	16.3	17.2	19.9	21.7	22.6
172.5°	24.4	23.5	20.8	19.0	18.1	19.0	21.7	23.5	24.4
175°	27.1	25.3	23.5	20.8	19.9	20.8	23.5	25.3	27.1
177.5°	28.0	26.2	24.4	21.7	20.8	21.7	24.4	26.2	28.0
180°	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4



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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	20.84	22.11	21.21	22.42	22.74	21.82	23.09	22.19	23.40	23.72
	3H	22.41	23.53	22.79	23.86	24.23	23.16	24.29	23.55	24.62	24.99
	4H	23.08	24.13	23.48	24.48	24.86	23.72	24.77	24.13	25.13	25.51
	6H	23.63	24.60	24.05	24.97	25.36	24.16	25.12	24.57	25.49	25.89
	8H	23.83	24.74	24.26	25.14	25.54	24.29	25.21	24.72	25.60	26.00
	12H	23.96	24.83	24.39	25.22	25.65	24.37	25.24	24.80	25.63	26.06
4H	2H	21.41	22.46	21.82	22.81	23.20	22.18	23.23	22.59	23.58	23.97
	3H	23.20	24.07	23.62	24.47	24.88	23.77	24.64	24.19	25.04	25.45
	4H	24.00	24.77	24.43	25.19	25.64	24.47	25.24	24.91	25.66	26.11
	6H	24.68	25.35	25.15	25.80	26.27	25.04	25.71	25.51	26.16	26.62
	8H	24.93	25.55	25.40	26.00	26.48	25.23	25.85	25.70	26.30	26.77
	12H	25.10	25.65	25.59	26.14	26.61	25.34	25.89	25.83	26.38	26.85
8H	4H	24.28	24.90	24.75	25.35	25.82	24.70	25.33	25.17	25.77	26.25
	6H	25.10	25.61	25.60	26.10	26.59	25.40	25.91	25.91	26.41	26.89
	8H	25.43	25.88	25.95	26.40	26.89	25.66	26.12	26.19	26.64	27.13
	12H	25.68	26.08	26.20	26.57	27.15	25.86	26.26	26.37	26.75	27.33
12H	4H	24.30	24.85	24.78	25.33	25.81	24.72	25.27	25.20	25.75	26.23
	6H	25.14	25.60	25.67	26.12	26.61	25.45	25.90	25.97	26.42	26.91
	8H	25.53	25.93	26.05	26.43	27.00	25.77	26.16	26.28	26.66	27.23

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-1

Test Date: 07/30/2025

Luminaire Tested: EHBR-60-L840-N

Data in this report applies to families of products including EHBR-60-L840-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-1
 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-L840-N**
 Description: Elevate Round Highbay at, 60000 lumens, 4000K 80CRI LEDs with N lens

Spectral Parameters

CCT (K): 3898
 CIE u': 0.2263
 CIE v': 0.5052
 Duv: 0.0013
 CIE x: 0.3861
 CIE y: 0.3831
 CIE z: 0.2308
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 578
 Purity: 30.85729
 Rf: 80.7
 Rg: 102.1

CRI (Ra):	82.1		
R1:	84.4	R9:	38.5
R2:	83.5	R10:	58.9
R3:	80.8	R11:	83.6
R4:	83.9	R12:	54.2
R5:	82.1	R13:	82.8
R6:	77.3	R14:	88.2
R7:	86.4	R15:	81.2
R8:	78.3		



Test Conditions

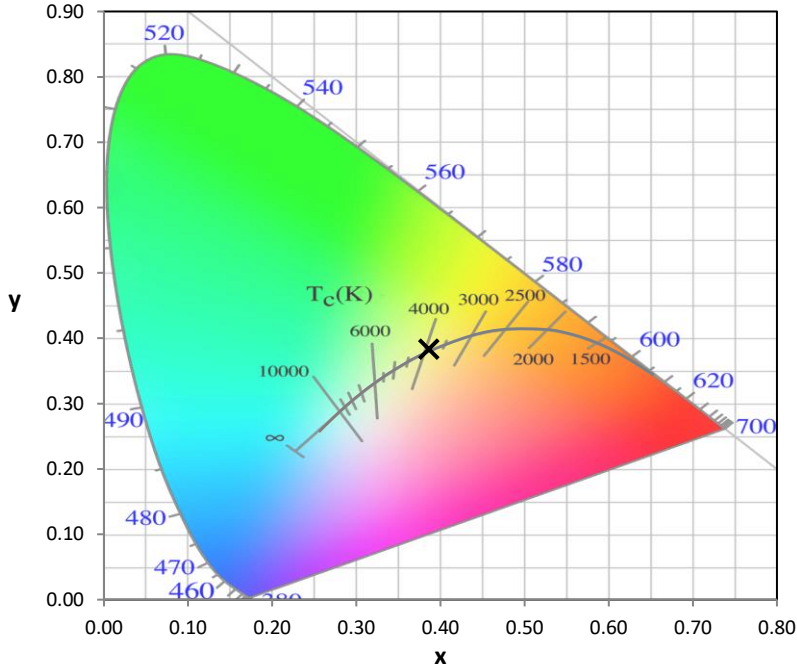
Stabilization Time: 42M
 Operation Time: 1H 42M
 Sphere Temperature (°C): 25.0

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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: SP1-2506-472-1

CIE 1931 Chromaticity Diagram



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

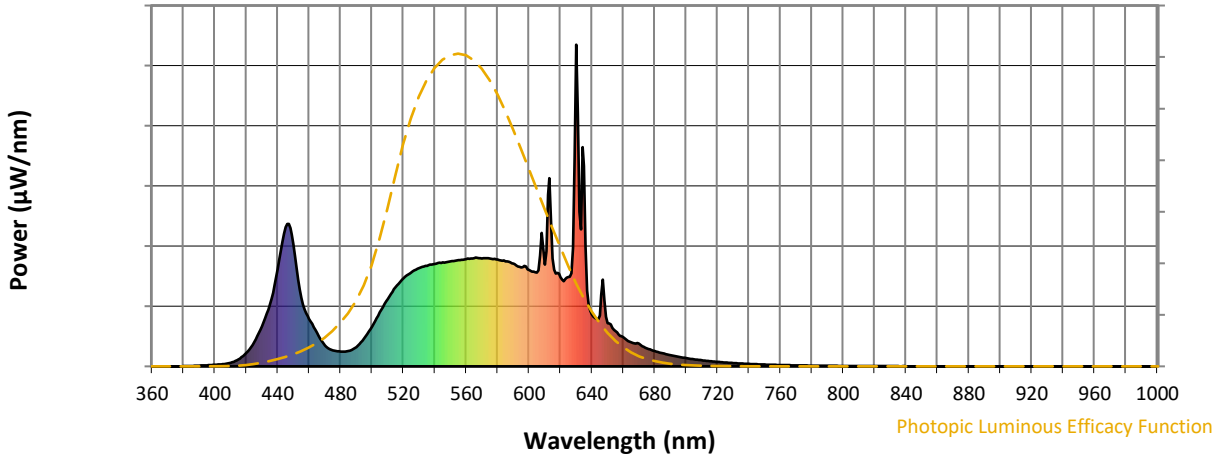


CCT = 3898K
 CIE x = 0.3861
 CIE y = 0.3831
 Duv = 0.0013

Point lies inside the ANSI 4000K 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	60	NR	620	277	NR	750	6	NR	880	0	NR
365	0	NR	495	87	NR	625	278	NR	755	5	NR	885	0	NR
370	0	NR	500	124	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	168	NR	635	623	NR	765	4	NR	895	0	NR
380	1	NR	510	209	NR	640	162	NR	770	3	NR	900	0	NR
385	1	NR	515	246	NR	645	158	NR	775	3	NR	905	0	NR
390	2	NR	520	273	NR	650	134	NR	780	2	NR	910	0	NR
395	4	NR	525	292	NR	655	109	NR	785	2	NR	915	0	NR
400	5	NR	530	305	NR	660	91	NR	790	2	NR	920	0	NR
405	7	NR	535	313	NR	665	75	NR	795	2	NR	925	0	NR
410	11	NR	540	319	NR	670	70	NR	800	1	NR	930	0	NR
415	21	NR	545	323	NR	675	56	NR	805	1	NR	935	0	NR
420	42	NR	550	326	NR	680	47	NR	810	1	NR	940	0	NR
425	76	NR	555	330	NR	685	41	NR	815	1	NR	945	0	NR
430	125	NR	560	333	NR	690	35	NR	820	1	NR	950	0	NR
435	193	NR	565	336	NR	695	30	NR	825	1	NR	955	0	NR
440	302	NR	570	336	NR	700	26	NR	830	1	NR	960	0	NR
445	432	NR	575	335	NR	705	22	NR	835	1	NR	965	0	NR
450	380	NR	580	332	NR	710	19	NR	840	0	NR	970	0	NR
455	213	NR	585	326	NR	715	16	NR	845	0	NR	975	0	NR
460	147	NR	590	319	NR	720	14	NR	850	0	NR	980	0	NR
465	104	NR	595	307	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	299	NR	730	10	NR	860	0	NR	990	0	NR
475	50	NR	605	291	NR	735	9	NR	865	0	NR	995	0	NR
480	46	NR	610	317	NR	740	8	NR	870	0	NR	1000	0	NR
485	47	NR	615	336	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-1

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.55

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	60	NR	620	277	NR	750	6	NR	880	0	NR
365	0	NR	495	87	NR	625	278	NR	755	5	NR	885	0	NR
370	0	NR	500	124	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	168	NR	635	623	NR	765	4	NR	895	0	NR
380	1	NR	510	209	NR	640	162	NR	770	3	NR	900	0	NR
385	1	NR	515	246	NR	645	158	NR	775	3	NR	905	0	NR
390	2	NR	520	273	NR	650	134	NR	780	2	NR	910	0	NR
395	4	NR	525	292	NR	655	109	NR	785	2	NR	915	0	NR
400	5	NR	530	305	NR	660	91	NR	790	2	NR	920	0	NR
405	7	NR	535	313	NR	665	75	NR	795	2	NR	925	0	NR
410	11	NR	540	319	NR	670	70	NR	800	1	NR	930	0	NR
415	21	NR	545	323	NR	675	56	NR	805	1	NR	935	0	NR
420	42	NR	550	326	NR	680	47	NR	810	1	NR	940	0	NR
425	76	NR	555	330	NR	685	41	NR	815	1	NR	945	0	NR
430	125	NR	560	333	NR	690	35	NR	820	1	NR	950	0	NR
435	193	NR	565	336	NR	695	30	NR	825	1	NR	955	0	NR
440	302	NR	570	336	NR	700	26	NR	830	1	NR	960	0	NR
445	432	NR	575	335	NR	705	22	NR	835	1	NR	965	0	NR
450	380	NR	580	332	NR	710	19	NR	840	0	NR	970	0	NR
455	213	NR	585	326	NR	715	16	NR	845	0	NR	975	0	NR
460	147	NR	590	319	NR	720	14	NR	850	0	NR	980	0	NR
465	104	NR	595	307	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	299	NR	730	10	NR	860	0	NR	990	0	NR
475	50	NR	605	291	NR	735	9	NR	865	0	NR	995	0	NR
480	46	NR	610	317	NR	740	8	NR	870	0	NR	1000	0	NR
485	47	NR	615	336	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-1

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.99

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	60	NR	620	277	NR	750	6	NR	880	0	NR
365	0	NR	495	87	NR	625	278	NR	755	5	NR	885	0	NR
370	0	NR	500	124	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	168	NR	635	623	NR	765	4	NR	895	0	NR
380	1	NR	510	209	NR	640	162	NR	770	3	NR	900	0	NR
385	1	NR	515	246	NR	645	158	NR	775	3	NR	905	0	NR
390	2	NR	520	273	NR	650	134	NR	780	2	NR	910	0	NR
395	4	NR	525	292	NR	655	109	NR	785	2	NR	915	0	NR
400	5	NR	530	305	NR	660	91	NR	790	2	NR	920	0	NR
405	7	NR	535	313	NR	665	75	NR	795	2	NR	925	0	NR
410	11	NR	540	319	NR	670	70	NR	800	1	NR	930	0	NR
415	21	NR	545	323	NR	675	56	NR	805	1	NR	935	0	NR
420	42	NR	550	326	NR	680	47	NR	810	1	NR	940	0	NR
425	76	NR	555	330	NR	685	41	NR	815	1	NR	945	0	NR
430	125	NR	560	333	NR	690	35	NR	820	1	NR	950	0	NR
435	193	NR	565	336	NR	695	30	NR	825	1	NR	955	0	NR
440	302	NR	570	336	NR	700	26	NR	830	1	NR	960	0	NR
445	432	NR	575	335	NR	705	22	NR	835	1	NR	965	0	NR
450	380	NR	580	332	NR	710	19	NR	840	0	NR	970	0	NR
455	213	NR	585	326	NR	715	16	NR	845	0	NR	975	0	NR
460	147	NR	590	319	NR	720	14	NR	850	0	NR	980	0	NR
465	104	NR	595	307	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	299	NR	730	10	NR	860	0	NR	990	0	NR
475	50	NR	605	291	NR	735	9	NR	865	0	NR	995	0	NR
480	46	NR	610	317	NR	740	8	NR	870	0	NR	1000	0	NR
485	47	NR	615	336	NR	745	7	NR	875	0	NR			

Summary

$R_f = 80.7$
 $R_g = 102.1$
 CIE $R_a = 82.1$
 $R_9 = 38.5$

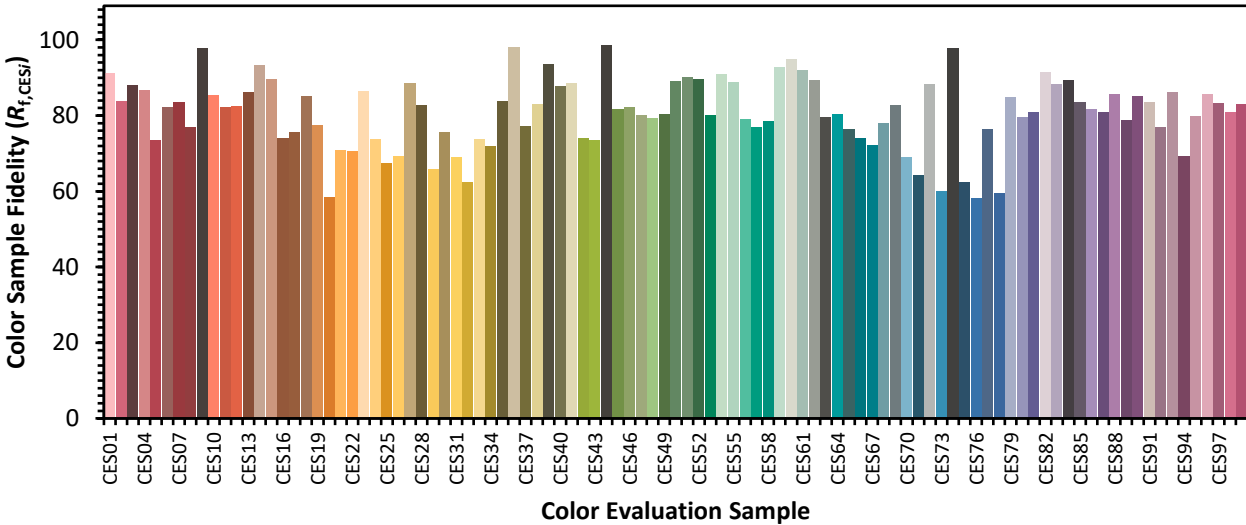


Color Vector Graphics

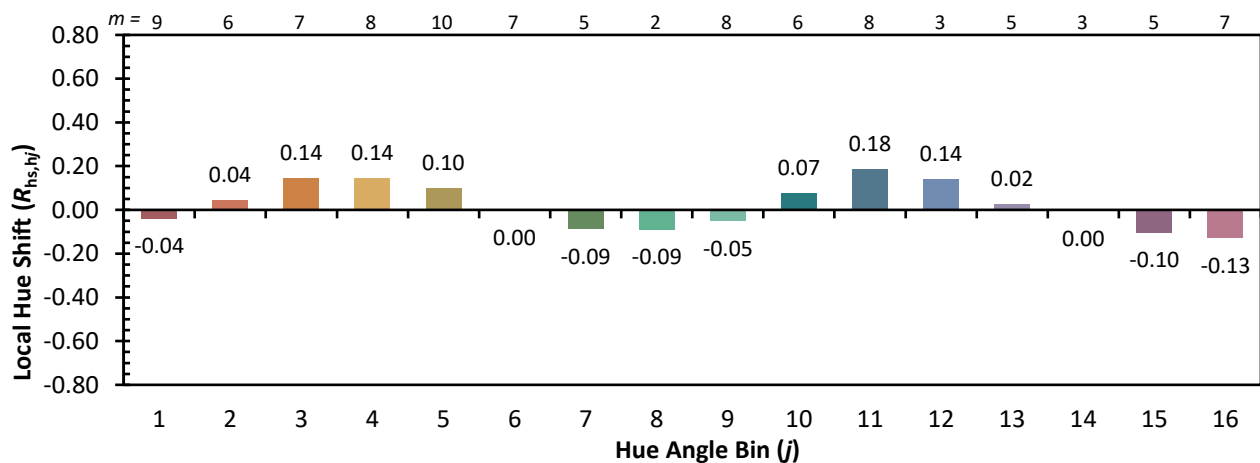


Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 69	CES51 = 90	CES76 = 58
CES02 = 61	CES27 = 89	CES52 = 90	CES77 = 76
CES03 = 31	CES28 = 83	CES53 = 80	CES78 = 60
CES04 = 69	CES29 = 66	CES54 = 91	CES79 = 85
CES05 = 48	CES30 = 76	CES55 = 89	CES80 = 79
CES06 = 50	CES31 = 69	CES56 = 79	CES81 = 81
CES07 = 41	CES32 = 62	CES57 = 77	CES82 = 91
CES08 = 40	CES33 = 74	CES58 = 79	CES83 = 88
CES09 = 29	CES34 = 72	CES59 = 93	CES84 = 89
CES10 = 74	CES35 = 84	CES60 = 95	CES85 = 84
CES11 = 57	CES36 = 98	CES61 = 92	CES86 = 82
CES12 = 63	CES37 = 77	CES62 = 89	CES87 = 81
CES13 = 43	CES38 = 83	CES63 = 80	CES88 = 86
CES14 = 74	CES39 = 94	CES64 = 80	CES89 = 79
CES15 = 71	CES40 = 88	CES65 = 77	CES90 = 85
CES16 = 47	CES41 = 89	CES66 = 74	CES91 = 83
CES17 = 49	CES42 = 74	CES67 = 72	CES92 = 77
CES18 = 56	CES43 = 73	CES68 = 78	CES93 = 86
CES19 = 71	CES44 = 98	CES69 = 83	CES94 = 69
CES20 = 65	CES45 = 82	CES70 = 69	CES95 = 80
CES21 = 86	CES46 = 82	CES71 = 64	CES96 = 86
CES22 = 78	CES47 = 80	CES72 = 88	CES97 = 83
CES23 = 91	CES48 = 79	CES73 = 60	CES98 = 81
CES24 = 90	CES49 = 80	CES74 = 98	CES99 = 83
CES25 = 71	CES50 = 89	CES75 = 62	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)