

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: P1433860

Luminaire Tested: EHBR1-42-UNV-A1-L940-UPL15

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433860
REPORT IS A COMBINATION OF REPORTS P1431797 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-42-UNV-A1-L940-UPL15
Description: Elevate Round Highbay at, 42000 lumens, 4000K 90CRI LEDs with A lens
Light Source: -
Ballast/Driver: -

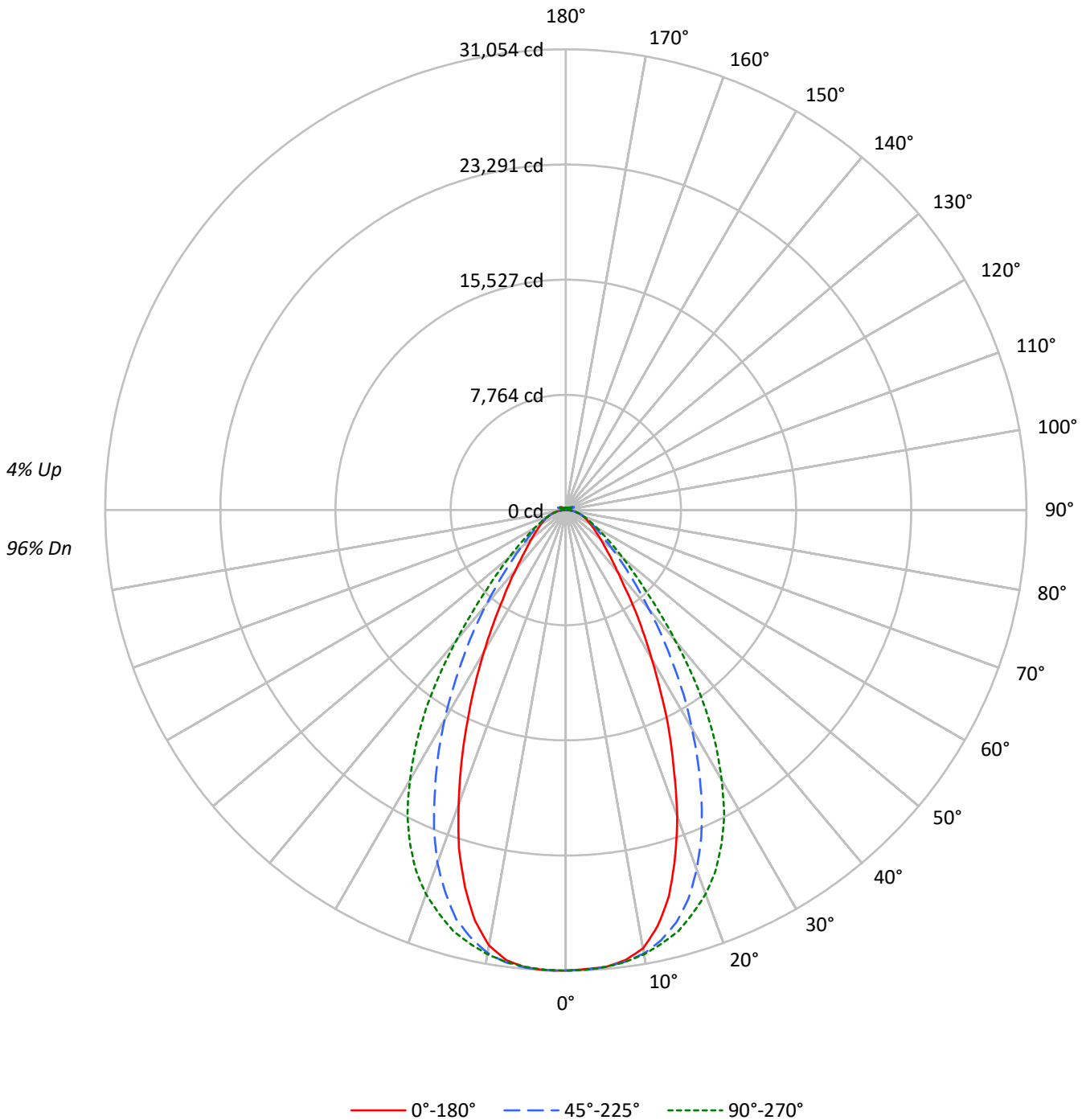
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39949.0 lumens
Efficiency: N/A
Efficacy: 170.9 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): 233.7
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: P1433860
CATALOG NUMBER: EHBR1-42-UNV-A1-L940-UPL15

Luminous Intensity Polar Plot





TEST NUMBER: P1433860
 CATALOG NUMBER: EHBR1-42-UNV-A1-L940-UPL15

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	0
RCR																					
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	96
1	111	107	104	101	108	105	102	99	100	98	96	96	94	92	92	90	89	89	89	89	87
2	104	97	92	88	101	95	91	87	91	87	84	88	85	82	84	82	80	80	80	80	77
3	97	89	82	78	94	87	81	77	84	79	75	81	77	73	78	75	72	72	72	72	70
4	91	81	74	69	88	80	73	69	77	72	67	75	70	66	72	68	65	65	65	65	63
5	85	75	68	62	83	74	67	62	71	65	61	69	64	60	67	63	59	59	59	59	57
6	80	69	62	57	78	68	61	56	66	60	56	64	59	55	63	58	54	54	54	54	53
7	75	64	57	52	73	63	57	52	62	56	51	60	55	51	58	54	50	50	50	50	48
8	71	60	53	48	69	59	52	48	57	52	47	56	51	47	55	50	46	46	46	46	45
9	67	56	49	44	66	55	49	44	54	48	44	53	47	43	51	47	43	43	43	43	42
10	63	52	46	41	62	52	45	41	51	45	41	50	44	41	49	44	40	40	40	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	145771	145771	145771	145771	145771
5°	144808	144786	144793	145048	144960
10°	141228	142874	143101	142697	140304
15°	128212	137159	139982	136059	125268
20°	106842	125483	134056	123120	102682
25°	82627	108499	124361	104537	78346
30°	60228	88360	109241	85007	57166
35°	43414	68104	89780	65171	40581
40°	31234	50300	66163	48178	30271
45°	24612	36799	46210	35204	23760
50°	20420	27649	33446	26737	20110
55°	17834	21831	25329	21467	17594
60°	16084	18226	20183	18112	16197
65°	15043	16076	16961	16126	15185
70°	14285	14625	15078	14707	14426
75°	13327	13245	13327	13282	13456
80°	12036	11172	10924	11345	12036
85°	8342	7076	7000	7189	8586

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 48417 cd/sqm



TEST NUMBER: P1433860
 CATALOG NUMBER: EHBR1-42-UNV-A1-L940-UPL15

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2931.3	7.3
10°-20°	7878.4	19.7
20°-30°	9580.1	24.0
30°-40°	7803.7	19.5
40°-50°	4685.3	11.7
50°-60°	2696.4	6.7
60°-70°	1687.5	4.2
70°-80°	993.9	2.5
80°-90°	293.1	0.7
90°-100°	36.6	0.1
100°-110°	241.8	0.6
110°-120°	447.2	1.1
120°-130°	265.6	0.7
130°-140°	161.6	0.4
140°-150°	113.3	0.3
150°-160°	74.8	0.2
160°-170°	43.5	0.1
170°-180°	14.6	0.0
0°-30°	20389.8	51.0
0°-40°	28193.5	70.6
0°-60°	35575.2	89.1
0°-90°	38549.7	96.5
90°-120°	725.7	1.8
90°-150°	1266.3	3.2
90°-180°	1399.0	3.5
0°-180°	39949.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	31041	31041	31041	31041	31041	
5°	30919	30914	30916	30970	30951	2922
15°	26898	28775	29367	28544	26281	7400
25°	16501	21667	24835	20876	15646	7518
35°	7968	12500	16478	11961	7448	5041
45°	3982	5954	7477	5696	3844	3141
55°	2410	2950	3423	2901	2378	2179
65°	1570	1678	1770	1683	1585	1561
75°	939	933	939	936	948	994
85°	287	243	241	247	295	306
90°	11	28	10	29	11	19
95°	18	62	19	53	18	17
105°	85	423	111	450	56	114
115°	388	500	476	553	406	358
125°	281	267	304	296	319	256
135°	206	207	194	216	224	161
145°	173	180	177	182	186	110
155°	156	160	158	160	168	73
165°	152	153	151	152	158	43
175°	155	155	152	153	158	15
180°	155	155	155	155	155	



TEST NUMBER: P1433860
 CATALOG NUMBER: EHBR1-42-UNV-A1-L940-UPL15

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	31041.0	31041.0	31041.0	31041.0	31041.0	31041.0	31041.0	31041.0	31041.0
2.5°	30972.7	31000.6	31012.4	31018.8	31026.0	31045.5	31053.9	31040.3	31051.9
5°	30918.7	30920.7	30914.2	30943.4	30915.5	30934.9	30970.1	30956.5	30951.2
7.5°	30604.0	30669.0	30707.4	30717.1	30722.3	30746.5	30771.1	30631.3	30610.5
10°	30005.9	30114.5	30355.6	30424.6	30403.8	30442.8	30318.0	29952.6	29809.6
12.5°	28694.6	29076.2	29702.9	29981.9	29931.2	29965.6	29540.4	28769.3	28326.0
15°	26898.2	27458.0	28775.2	29325.2	29367.4	29325.2	28544.4	27042.0	26280.6
17.5°	24510.3	25544.0	27483.4	28550.9	28489.7	28510.0	27027.6	24806.8	23935.6
20°	21959.1	23061.1	25790.4	27571.1	27552.3	27439.1	25304.7	22375.9	21104.2
22.5°	19073.8	20495.0	23850.4	26366.4	26359.2	26170.8	23206.7	19721.4	18352.1
25°	16500.6	17894.4	21667.2	24890.6	24834.7	24620.1	20876.0	17073.3	15645.6
27.5°	13840.2	15289.3	19336.5	23161.3	23122.9	22888.9	18647.9	14598.2	13239.4
30°	11584.8	12909.8	16995.9	21258.3	21012.5	20985.9	16351.0	12306.5	10995.8
32.5°	9652.6	10788.5	14789.4	19268.2	18833.2	18957.4	14061.9	10389.9	9090.9
35°	7968.1	8968.7	12499.6	16966.7	16477.8	16638.4	11961.3	8525.3	7448.0
37.5°	6466.9	7429.1	10558.9	14728.3	13980.7	14283.5	10113.6	7119.6	6256.3
40°	5413.7	6177.0	8718.3	12272.0	11467.8	11961.3	8350.4	5938.4	5246.7
42.5°	4664.8	5162.7	7195.8	9927.0	9310.0	9659.8	6882.3	4964.5	4446.9
45°	3982.1	4379.4	5954.0	7833.6	7476.6	7801.0	5695.9	4233.0	3844.3
47.5°	3478.2	3784.4	4901.4	6325.9	6104.1	6206.9	4757.1	3694.1	3378.1
50°	3043.3	3280.0	4120.6	5105.5	4984.6	5047.7	3984.7	3214.3	2997.1
52.5°	2705.2	2878.8	3456.1	4196.0	4136.2	4145.9	3395.7	2827.5	2670.1
55°	2410.1	2531.0	2950.3	3437.3	3423.0	3425.6	2901.0	2505.7	2377.6
57.5°	2152.0	2252.1	2535.6	2887.3	2866.5	2871.1	2512.2	2225.4	2142.9
60°	1933.5	2000.5	2191.0	2440.0	2426.3	2420.5	2177.3	1975.7	1947.1
62.5°	1739.8	1782.7	1914.6	2091.5	2065.5	2071.3	1914.0	1784.7	1742.4
65°	1570.1	1585.0	1678.0	1787.3	1770.3	1784.7	1683.2	1594.8	1585.0
67.5°	1404.3	1419.3	1473.9	1547.4	1527.8	1539.5	1475.2	1423.2	1414.7
70°	1253.4	1252.8	1283.3	1323.0	1323.0	1325.0	1290.5	1259.3	1265.8
72.5°	1097.5	1093.6	1102.6	1129.2	1122.2	1146.9	1110.4	1100.6	1102.0
75°	938.8	927.7	933.0	946.6	938.8	951.8	935.6	947.9	947.9
77.5°	789.3	768.4	762.0	763.9	749.6	769.1	773.0	781.5	800.9
80°	633.2	604.0	587.7	587.0	574.7	587.0	596.8	614.4	633.2
82.5°	470.0	444.7	417.4	412.2	404.4	411.5	424.6	445.3	475.9
85°	286.7	260.0	243.2	234.0	240.6	240.6	247.1	276.3	295.1
87.5°	103.4	90.4	74.2	74.8	76.7	79.3	82.5	104.1	113.8
90°	11.3	16.2	27.8	17.7	10.0	17.0	29.3	15.4	10.6
92.5°	15.3	24.7	44.6	23.1	13.1	23.1	41.6	20.8	14.5
95°	18.3	28.5	62.4	30.8	19.3	28.5	53.1	23.1	17.6
97.5°	22.8	31.6	71.6	37.7	30.0	35.4	60.1	24.7	21.4
100°	29.8	37.0	111.7	46.2	40.1	40.1	110.1	28.5	25.2
102.5°	49.8	78.5	237.2	87.0	60.8	78.5	255.6	57.8	30.6
105°	85.2	165.6	422.8	182.5	110.9	180.2	450.5	150.9	56.0
107.5°	146.8	296.4	557.6	323.5	210.3	336.5	580.7	298.8	130.7
110°	273.2	393.5	584.5	444.3	336.5	470.6	633.8	409.7	264.7



TEST NUMBER: P1433860
 CATALOG NUMBER: EHBR1-42-UNV-A1-L940-UPL15

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	368.7	422.8	559.8	490.5	438.2	524.4	619.2	454.4	366.3
115°	387.9	406.6	499.8	479.0	475.9	516.8	552.9	452.8	406.4
117.5°	375.5	371.2	424.4	430.5	459.8	472.8	477.5	425.1	408.7
120°	347.0	330.4	354.2	375.8	415.0	409.7	402.0	385.0	385.6
122.5°	313.0	293.3	303.4	319.6	358.9	347.3	339.6	343.3	354.7
125°	280.7	261.0	267.2	271.1	304.2	292.6	296.4	307.9	319.3
127.5°	252.2	238.6	241.9	237.2	258.0	252.6	264.8	278.6	287.7
130°	233.0	221.5	226.3	214.8	225.6	227.0	243.2	253.9	259.9
132.5°	217.4	209.9	216.0	202.3	205.3	212.2	226.9	236.7	239.8
135°	206.5	199.7	206.6	193.7	193.6	202.8	216.0	222.1	223.5
137.5°	196.6	191.2	198.1	188.8	186.5	195.8	205.8	210.5	209.5
140°	188.7	183.3	191.1	184.1	182.6	191.8	196.5	202.4	201.0
142.5°	179.2	176.2	184.7	180.2	178.6	187.7	190.1	193.9	193.0
145°	173.0	170.7	180.0	177.8	176.9	183.7	182.2	188.3	186.0
147.5°	168.8	166.6	174.5	173.8	173.8	178.4	176.7	182.0	180.4
150°	164.1	161.8	169.7	169.0	169.7	172.8	170.4	177.1	177.0
152.5°	159.3	157.1	164.2	162.9	163.6	166.7	164.9	171.7	172.3
155°	156.1	153.9	159.5	158.2	158.2	160.4	160.1	167.7	168.3
157.5°	154.9	152.9	157.0	155.7	155.7	157.1	157.6	164.3	165.0
160°	154.0	151.9	155.2	153.9	153.2	155.3	155.9	161.8	162.5
162.5°	153.0	150.9	154.3	152.9	152.2	152.9	153.4	160.1	160.7
165°	152.0	150.7	153.3	152.0	151.2	152.0	152.4	156.8	158.2
167.5°	152.6	151.3	153.2	151.9	151.1	150.4	152.3	156.0	157.3
170°	152.5	151.9	153.1	151.0	149.6	150.3	151.4	154.9	156.3
172.5°	153.8	153.2	154.4	152.3	150.9	151.6	151.9	154.7	156.9
175°	155.0	153.7	154.7	152.9	152.2	152.0	153.2	155.2	158.1
177.5°	156.4	155.1	155.4	153.4	152.0	152.6	154.6	156.7	160.2
180°	154.6	154.6	154.6	154.6	154.6	154.6	154.6	154.6	154.6



TEST NUMBER: P1433860
 CATALOG NUMBER: EHBR1-42-UNV-A1-L940-UPL15

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	18.94	20.14	19.37	20.53	20.94	19.92	21.13	20.35	21.52	21.92
	3H	20.42	21.49	20.86	21.90	22.35	21.18	22.26	21.63	22.66	23.11
	4H	21.02	22.02	21.49	22.45	22.92	21.68	22.69	22.15	23.11	23.58
	6H	21.49	22.41	21.97	22.85	23.33	22.04	22.96	22.52	23.40	23.88
	8H	21.64	22.51	22.13	22.97	23.46	22.14	23.01	22.63	23.47	23.96
	12H	21.71	22.55	22.21	23.00	23.52	22.18	23.01	22.67	23.46	23.98
4H	2H	19.46	20.46	19.93	20.89	21.36	20.24	21.24	20.71	21.67	22.14
	3H	21.15	21.97	21.62	22.44	22.93	21.73	22.56	22.21	23.03	23.52
	4H	21.86	22.60	22.36	23.09	23.62	22.36	23.09	22.85	23.58	24.11
	6H	22.45	23.08	22.97	23.60	24.14	22.83	23.47	23.36	23.98	24.53
	8H	22.63	23.23	23.16	23.74	24.29	22.97	23.56	23.50	24.08	24.63
	12H	22.74	23.27	23.29	23.81	24.37	23.04	23.56	23.58	24.11	24.67
8H	4H	22.09	22.69	22.62	23.20	23.75	22.54	23.13	23.07	23.64	24.20
	6H	22.78	23.27	23.34	23.83	24.39	23.12	23.61	23.68	24.17	24.73
	8H	23.03	23.47	23.61	24.04	24.62	23.31	23.75	23.89	24.32	24.90
	12H	23.20	23.58	23.77	24.14	24.79	23.44	23.82	24.01	24.37	25.02
12H	4H	22.09	22.62	22.64	23.16	23.72	22.54	23.06	23.08	23.61	24.16
	6H	22.80	23.24	23.38	23.81	24.39	23.14	23.58	23.72	24.15	24.73
	8H	23.10	23.48	23.67	24.04	24.69	23.38	23.76	23.95	24.32	24.97

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-7

Test Date: 08/04/2025

Luminaire Tested: EHBR-60-L940-N

Data in this report applies to families of products including EHBR-60-L940-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-7
 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-L940-N**
 Description: Elevate Round Highbay at, 60000 lumens, 4000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K): 3963
 CIE u': 0.2267
 CIE v': 0.5003
 Duv: -0.0016
 CIE x: 0.3810
 CIE y: 0.3738
 CIE z: 0.2453
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 580
 Purity: 26.49712
 Rf: 90.7
 Rg: 101

CRI (Ra):	93.4		
R1:	95.2	R9:	66.4
R2:	95.1	R10:	86.6
R3:	93.3	R11:	94.4
R4:	94.5	R12:	75.4
R5:	94.2	R13:	95.0
R6:	92.9	R14:	95.4
R7:	94.0	R15:	92.8
R8:	87.7		



Test Conditions

Stabilization Time: 44M
 Operation Time: 1H 44M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-7

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: SP1-2506-472-7

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-7

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	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-7

Scotopic Flux vs. Wavelength



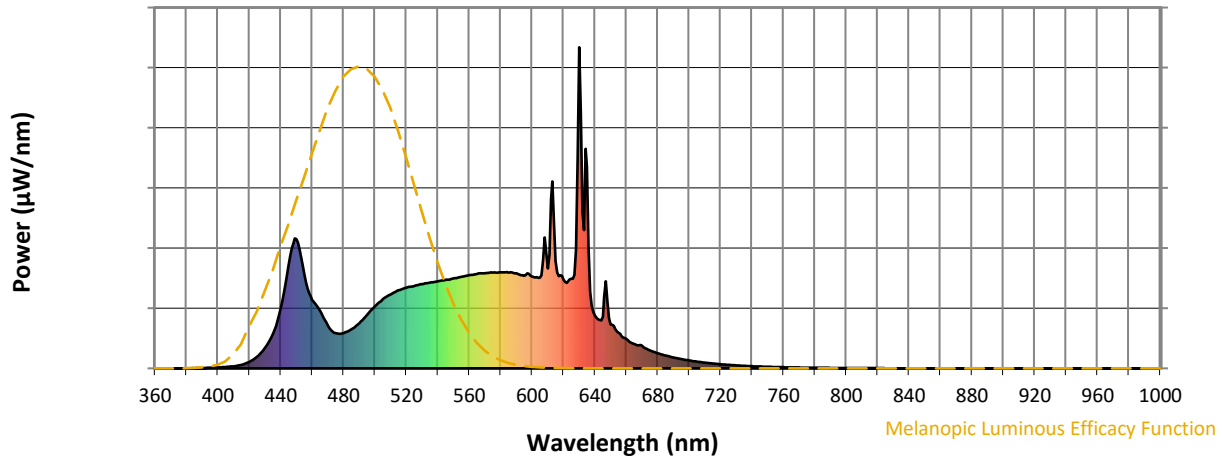
Scotopic Lumens: NR

S/P: 1.76

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	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-7

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.64

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	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

Summary

$R_f = 90.7$
 $R_g = 101$
 $CIE R_a = 93.4$
 $R_9 = 66.4$



Color Vector Graphics

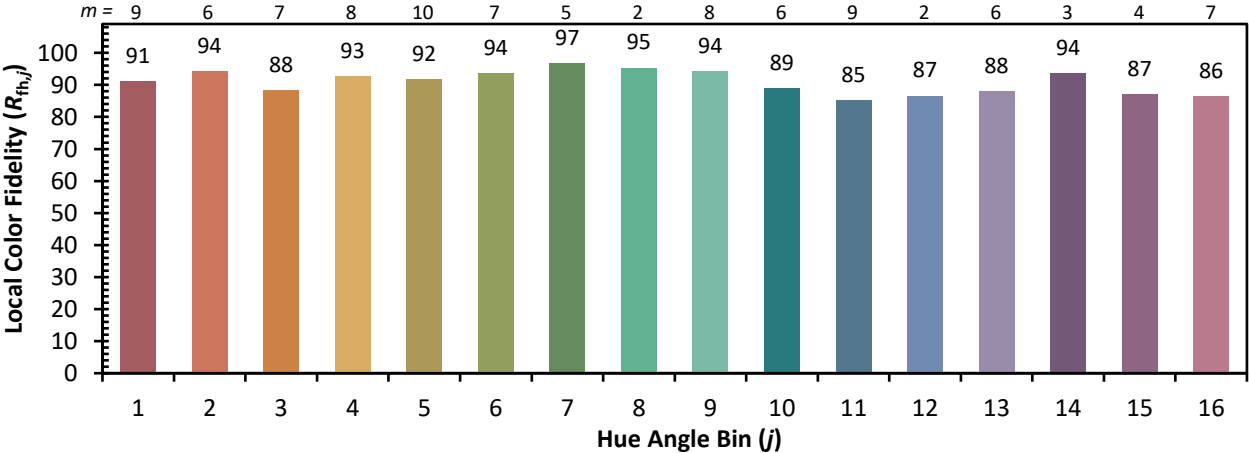


Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 90	CES51 = 99	CES76 = 83
CES02 = 62	CES27 = 93	CES52 = 97	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 95	CES78 = 79
CES04 = 69	CES29 = 91	CES54 = 96	CES79 = 94
CES05 = 49	CES30 = 98	CES55 = 95	CES80 = 91
CES06 = 50	CES31 = 92	CES56 = 95	CES81 = 80
CES07 = 42	CES32 = 84	CES57 = 94	CES82 = 96
CES08 = 41	CES33 = 95	CES58 = 95	CES83 = 95
CES09 = 29	CES34 = 90	CES59 = 98	CES84 = 93
CES10 = 74	CES35 = 94	CES60 = 93	CES85 = 82
CES11 = 57	CES36 = 84	CES61 = 93	CES86 = 84
CES12 = 63	CES37 = 92	CES62 = 90	CES87 = 90
CES13 = 43	CES38 = 93	CES63 = 92	CES88 = 97
CES14 = 74	CES39 = 98	CES64 = 91	CES89 = 84
CES15 = 71	CES40 = 96	CES65 = 88	CES90 = 99
CES16 = 47	CES41 = 98	CES66 = 88	CES91 = 74
CES17 = 49	CES42 = 89	CES67 = 87	CES92 = 78
CES18 = 56	CES43 = 89	CES68 = 87	CES93 = 87
CES19 = 71	CES44 = 99	CES69 = 88	CES94 = 75
CES20 = 66	CES45 = 93	CES70 = 84	CES95 = 83
CES21 = 85	CES46 = 95	CES71 = 80	CES96 = 91
CES22 = 78	CES47 = 92	CES72 = 93	CES97 = 93
CES23 = 91	CES48 = 96	CES73 = 78	CES98 = 93
CES24 = 90	CES49 = 93	CES74 = 92	CES99 = 94
CES25 = 71	CES50 = 99	CES75 = 81	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)