

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: P1433069

Luminaire Tested: EHBR1-54-UNV-TASM-L850-UPL18

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433069
REPORT IS A COMBINATION OF REPORTS P1431870 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-54-UNV-TASM-L850-UPL18
Description: Elevate Round Highbay at, 54000 lumens, 5000K 80CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

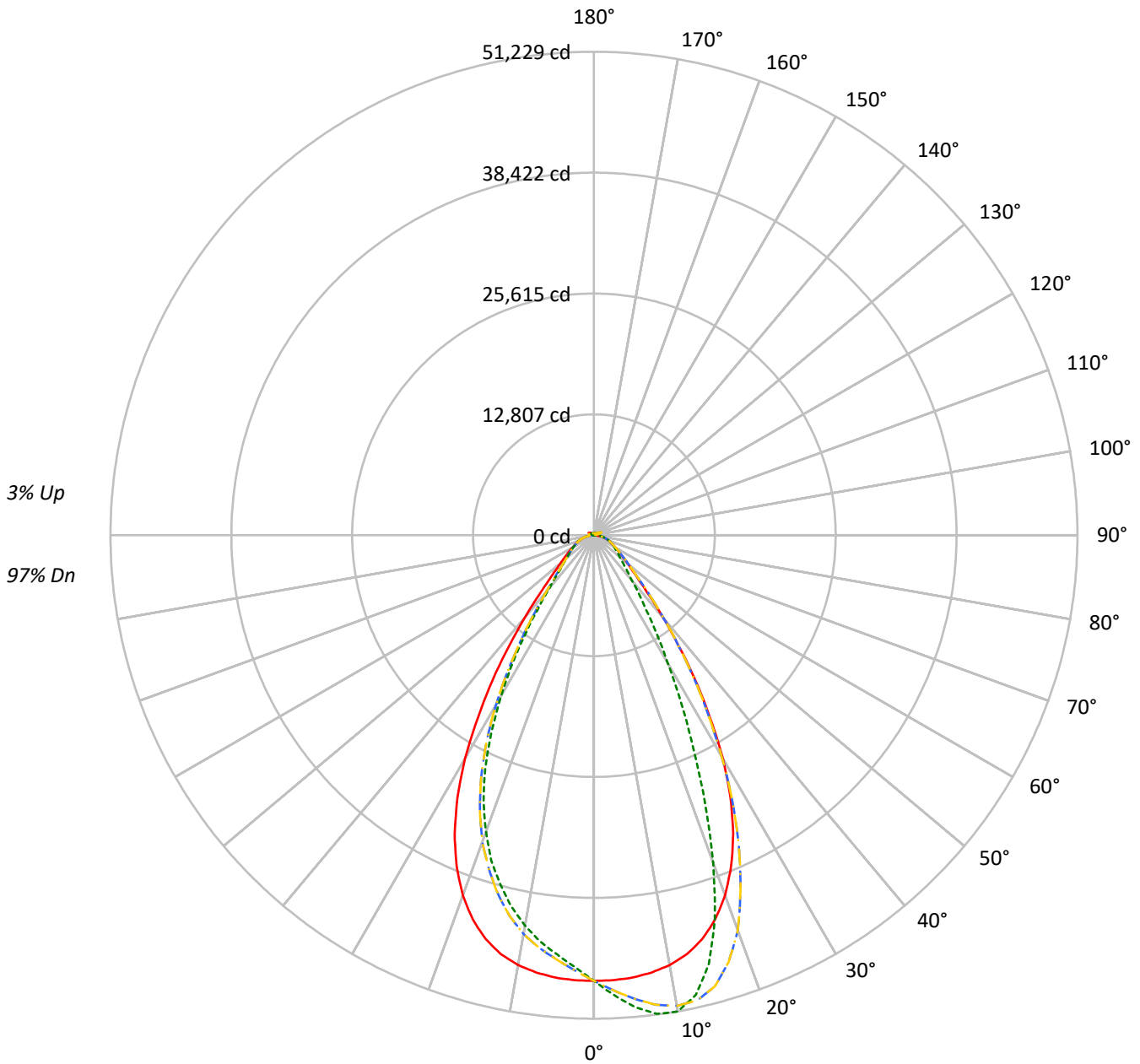
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54602.0 lumens
Efficiency: N/A
Efficacy: 177.3 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 0.84 / 0.9
Luminous Opening: Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type: Direct

Input Watts (W): 307.9
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: P1433069
CATALOG NUMBER: EHBR1-54-UNV-TASM-L850-UPL18

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - · - · 90°-270° - · - · 135°-315°



TEST NUMBER: P1433069
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L850-UPL18

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	97
1	111	108	105	102	108	105	102	100	100	98	96	96	94	93	92	91	89	89	89	89	87
2	104	98	93	89	101	96	92	88	92	89	85	89	86	83	85	83	81	81	81	81	79
3	98	90	84	79	95	88	83	78	85	80	77	82	78	75	79	76	73	73	73	73	71
4	92	83	76	71	90	81	75	71	79	74	69	76	72	68	74	70	67	67	67	67	65
5	86	77	70	65	84	75	69	64	73	68	63	71	66	63	69	65	62	62	62	62	60
6	81	71	64	59	80	70	64	59	68	63	58	66	61	58	65	60	57	57	57	57	55
7	77	66	60	55	75	66	59	54	64	58	54	62	57	53	61	56	53	53	53	53	51
8	73	62	55	51	71	61	55	51	60	54	50	59	53	50	57	53	49	49	49	49	48
9	69	58	52	47	68	58	51	47	56	51	47	55	50	46	54	49	46	46	46	46	44
10	66	55	48	44	64	54	48	44	53	48	44	52	47	43	51	46	43	43	43	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	221710	221710	221710	221710
5°	220361	235084	220361	208925
10°	217652	241119	217652	197730
15°	211226	224075	211226	182649
20°	197549	179678	197549	162689
25°	174847	124491	174847	136341
30°	141969	80991	141969	102010
35°	101825	52451	101825	67910
40°	65833	36152	65833	42828
45°	41771	28004	41771	30515
50°	31020	23796	31020	25418
55°	25326	21677	25326	22438
60°	21931	20649	21931	20774
65°	19991	19914	19991	19830
70°	18947	19512	18947	19260
75°	17721	18876	17721	18311
80°	15564	17821	15564	16659
85°	10073	12723	10073	12133

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 58727 cd/sqm



TEST NUMBER: P1433069
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L850-UPL18

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4489.1	8.2
10°-20°	12212.9	22.4
20°-30°	14323.2	26.2
30°-40°	9960.9	18.2
40°-50°	4950.1	9.1
50°-60°	2960.7	5.4
60°-70°	2083.9	3.8
70°-80°	1342.3	2.5
80°-90°	429.6	0.8
90°-100°	50.1	0.1
100°-110°	318.9	0.6
110°-120°	587.5	1.1
120°-130°	350.5	0.6
130°-140°	213.9	0.4
140°-150°	149.7	0.3
150°-160°	99.7	0.2
160°-170°	59.1	0.1
170°-180°	20.1	0.0
0°-30°	31025.2	56.8
0°-40°	40986.1	75.1
0°-60°	48896.9	89.6
0°-90°	52752.7	96.6
90°-120°	956.5	1.8
90°-150°	1670.6	3.1
90°-180°	1849.0	3.4
0°-180°	54602.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	47212	47212	47212	47212	47212	
5°	47050	50194	47050	44609	47050	4465
15°	44314	47010	44314	38319	44314	12384
25°	34917	24861	34917	27227	34917	15808
35°	18688	9627	18688	12464	18688	11667
45°	6758	4531	6758	4937	6758	5530
55°	3422	2929	3422	3032	3422	3130
65°	2087	2079	2087	2070	2087	2096
75°	1248	1330	1248	1290	1248	1310
85°	346	437	346	417	346	385
90°	14	20	14	14	14	23
95°	27	29	27	23	27	28
105°	147	80	147	112	147	198
115°	625	538	625	507	625	569
125°	401	424	401	367	401	370
135°	257	298	257	269	257	204
145°	235	246	235	228	235	147
155°	212	222	212	208	212	99
165°	207	216	207	204	207	59
175°	211	219	211	207	211	20
180°	212	212	212	212	212	



TEST NUMBER: P1433069
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L850-UPL18

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	47211.6	47211.6	47211.6	47211.6	47211.6	47211.6	47211.6	47211.6	47211.6	47211.6	47211.6
2.5°	47184.2	47794.1	48288.1	48613.9	48775.0	48613.9	48288.1	47794.1	47184.2	46577.7	46160.7
5°	47050.5	48272.2	49307.1	49984.3	50194.2	49984.3	49307.1	48272.2	47050.5	45896.1	45130.3
7.5°	46730.9	48634.3	50172.1	50962.6	51155.6	50962.6	50172.1	48634.3	46730.9	45096.7	44129.0
10°	46243.1	48862.6	50639.4	51206.0	51229.1	51206.0	50639.4	48862.6	46243.1	44041.4	42900.3
12.5°	45465.0	48781.2	50482.8	50296.9	49874.6	50296.9	50482.8	48781.2	45465.0	42752.4	41312.9
15°	44314.1	48298.7	49490.3	47977.4	47009.7	47977.4	49490.3	48298.7	44314.1	41011.9	39342.3
17.5°	42692.2	47395.8	47418.8	44425.6	42600.2	44425.6	47418.8	47395.8	42692.2	38883.7	37045.0
20°	40602.1	45947.4	44566.4	39091.7	36929.0	39091.7	44566.4	45947.4	40602.1	36367.7	34563.5
22.5°	37981.6	43994.5	40594.0	33726.0	30775.4	33726.0	40594.0	43994.5	37981.6	33441.8	31564.1
25°	34916.7	41601.6	36320.7	27879.5	24860.7	27879.5	36320.7	41601.6	34916.7	29955.5	28257.5
27.5°	31311.8	38568.5	31770.4	22782.1	19996.9	22782.1	31770.4	38568.5	31311.8	26356.0	24621.6
30°	27307.6	34680.3	27035.0	18143.1	15578.5	18143.1	27035.0	34680.3	27307.6	22312.0	20759.1
32.5°	22824.5	30869.2	22487.2	14537.4	12364.8	14537.4	22487.2	30869.2	22824.5	18453.0	16830.2
35°	18688.5	26101.0	18386.6	11422.9	9626.6	11422.9	18386.6	26101.0	18688.5	14810.0	13216.5
37.5°	14666.6	21595.8	14656.9	9198.2	7808.3	9198.2	14656.9	21595.8	14666.6	11514.1	10220.6
40°	11410.5	16886.0	11484.0	7342.6	6266.1	7342.6	11484.0	16886.0	11410.5	8760.8	7933.1
42.5°	8645.7	12911.9	9026.5	6026.2	5322.4	6026.2	9026.5	12911.9	8645.7	6902.6	6282.9
45°	6758.3	9501.8	7048.7	5084.2	4531.0	5084.2	7048.7	9501.8	6758.3	5558.7	5142.6
47.5°	5503.8	7343.5	5712.8	4360.9	3973.2	4360.9	5712.8	7343.5	5503.8	4701.8	4390.2
50°	4623.0	5634.9	4743.4	3806.7	3546.5	3806.7	4743.4	5634.9	4623.0	4026.3	3818.3
52.5°	3971.4	4595.5	4039.6	3392.5	3217.1	3392.5	4039.6	4595.5	3971.4	3522.5	3393.4
55°	3422.5	3863.4	3512.8	3050.7	2929.4	3050.7	3512.8	3863.4	3422.5	3134.8	3039.2
57.5°	3005.5	3277.3	3050.7	2759.5	2678.9	2759.5	3050.7	3277.3	3005.5	2789.5	2738.2
60°	2636.4	2838.3	2692.2	2505.4	2482.4	2505.4	2692.2	2838.3	2636.4	2509.8	2476.2
62.5°	2352.2	2479.7	2380.5	2277.0	2256.6	2277.0	2380.5	2479.7	2352.2	2254.9	2261.1
65°	2086.6	2205.3	2127.4	2071.6	2078.6	2071.6	2127.4	2205.3	2086.6	2041.5	2051.2
67.5°	1881.2	1943.2	1909.6	1877.7	1885.6	1877.7	1909.6	1943.2	1881.2	1837.0	1852.0
70°	1662.5	1728.9	1694.5	1698.9	1712.1	1698.9	1694.5	1728.9	1662.5	1649.3	1660.8
72.5°	1453.6	1505.0	1493.5	1504.1	1518.2	1504.1	1493.5	1505.0	1453.6	1451.8	1452.7
75°	1248.3	1287.2	1292.5	1307.5	1329.7	1307.5	1292.5	1287.2	1248.3	1234.9	1251.0
77.5°	1024.2	1068.5	1085.3	1105.8	1138.5	1105.8	1085.3	1068.5	1024.2	1033.1	1041.1
80°	818.8	839.3	876.4	891.5	937.5	891.5	876.4	839.3	818.8	803.8	815.3
82.5°	599.3	618.0	649.8	678.2	704.7	678.2	649.8	618.0	599.3	592.2	593.1
85°	346.2	374.5	395.8	429.4	437.3	429.4	395.8	374.5	346.2	354.1	346.2
87.5°	121.3	130.2	148.7	162.0	162.9	162.0	148.7	130.2	121.3	124.0	112.5
90°	13.9	23.9	40.9	25.4	20.1	25.4	40.9	23.9	13.9	24.1	37.1
92.5°	18.0	31.9	57.0	32.5	25.1	32.5	57.0	31.9	18.0	31.0	59.2
95°	26.9	39.0	72.1	35.5	29.2	35.5	72.1	39.0	26.9	41.2	82.4
97.5°	41.1	48.0	81.1	37.5	34.3	37.5	81.1	48.0	41.1	50.2	94.5
100°	54.1	54.1	146.7	42.5	38.3	42.5	146.7	54.1	54.1	62.2	146.9
102.5°	81.3	105.3	337.8	81.7	45.3	81.7	337.8	105.3	81.3	115.5	311.0
105°	146.8	238.2	592.5	203.5	79.5	203.5	592.5	238.2	146.8	240.4	553.6
107.5°	276.6	442.6	762.7	396.8	177.1	396.8	762.7	442.6	276.6	424.6	730.6
110°	441.7	617.8	832.1	541.8	352.3	541.8	832.1	617.8	441.7	582.7	765.9



TEST NUMBER: P1433069

CATALOG NUMBER: EHBR1-54-UNV-TASM-L850-UPL18

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	574.6	688.3	813.0	600.2	485.2	600.2	813.0	688.3	574.6	643.1	733.7
115°	624.8	678.2	726.4	598.2	537.5	598.2	726.4	678.2	624.8	628.0	655.2
117.5°	603.7	620.8	627.8	562.0	540.6	562.0	627.8	620.8	603.7	565.4	556.5
120°	545.3	538.3	530.0	508.5	510.3	508.5	530.0	538.3	545.3	494.0	464.9
122.5°	472.7	457.6	448.4	455.1	469.0	455.1	448.4	457.6	472.7	421.3	399.3
125°	401.2	386.1	391.9	408.7	423.7	408.7	391.9	386.1	401.2	358.8	352.8
127.5°	341.6	334.7	350.6	369.5	382.3	369.5	350.6	334.7	341.6	314.5	319.6
130°	299.3	300.4	321.4	338.2	346.1	338.2	321.4	300.4	299.3	286.2	299.4
132.5°	273.0	280.2	300.2	314.9	319.8	314.9	300.2	280.2	273.0	269.8	286.0
135°	256.8	267.1	285.9	294.9	297.6	294.9	285.9	267.1	256.8	258.6	273.0
137.5°	247.5	257.9	271.9	279.7	278.6	279.7	271.9	257.9	247.5	251.5	262.7
140°	242.4	252.7	258.7	267.6	267.4	267.6	258.7	252.7	242.4	244.4	253.5
142.5°	237.2	246.6	249.6	256.4	255.3	256.4	249.6	246.6	237.2	239.3	245.3
145°	235.2	242.3	239.4	247.3	246.1	247.3	239.4	242.3	235.2	235.3	239.2
147.5°	230.1	235.3	232.2	239.2	237.9	239.2	232.2	235.3	230.1	230.1	232.0
150°	224.9	229.0	224.1	232.0	232.7	232.0	224.1	229.0	224.9	224.0	225.8
152.5°	217.8	221.8	217.8	226.7	226.6	226.7	217.8	221.8	217.8	216.8	218.7
155°	212.5	214.5	212.5	221.4	222.3	221.4	212.5	214.5	212.5	211.6	213.4
157.5°	209.2	211.1	210.1	218.1	219.0	218.1	210.1	211.1	209.2	209.2	210.1
160°	207.8	209.7	209.6	216.5	217.4	216.5	209.6	209.7	207.8	207.9	208.7
162.5°	207.5	207.5	208.2	215.1	216.9	215.1	208.2	207.5	207.5	207.5	208.4
165°	207.1	208.1	207.9	213.7	216.4	213.7	207.9	208.1	207.1	207.3	207.3
167.5°	207.9	206.9	208.6	214.3	217.1	214.3	208.6	206.9	207.9	208.0	208.0
170°	206.8	207.7	208.3	214.0	216.8	214.0	208.3	207.7	206.8	207.8	207.9
172.5°	209.4	209.4	210.0	214.7	218.6	214.7	210.0	209.4	209.4	209.5	210.5
175°	211.2	211.0	211.8	215.5	219.3	215.5	211.8	211.0	211.2	210.3	210.3
177.5°	210.1	211.9	213.7	217.5	222.2	217.5	213.7	211.9	210.1	210.3	210.3
180°	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9



TEST NUMBER: P1433069

CATALOG NUMBER: EHBR1-54-UNV-TASM-L850-UPL18

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	47211.6	47211.6	47211.6	47211.6	47211.6	47211.6
2.5°	45840.3	45810.2	45840.3	46160.7	46577.7	47184.2
5°	44775.3	44608.9	44775.3	45130.3	45896.1	47050.5
7.5°	43535.0	43438.5	43535.0	44129.0	45096.7	46730.9
10°	42229.2	42010.5	42229.2	42900.3	44041.4	46243.1
12.5°	40619.8	40330.3	40619.8	41312.9	42752.4	45465.0
15°	38573.0	38318.8	38573.0	39342.3	41011.9	44314.1
17.5°	36376.5	36146.4	36376.5	37045.0	38883.7	42692.2
20°	33618.0	33437.4	33618.0	34563.5	36367.7	40602.1
22.5°	30724.0	30554.9	30724.0	31564.1	33441.8	37981.6
25°	27319.1	27227.1	27319.1	28257.5	29955.5	34916.7
27.5°	23639.9	23483.2	23639.9	24621.6	26356.0	31311.8
30°	19881.0	19621.5	19881.0	20759.1	22312.0	27307.6
32.5°	16204.3	16017.6	16204.3	16830.2	18453.0	22824.5
35°	12650.7	12464.0	12650.7	13216.5	14810.0	18688.5
37.5°	9857.7	9527.5	9857.7	10220.6	11514.1	14666.6
40°	7476.3	7423.1	7476.3	7933.1	8760.8	11410.5
42.5°	6086.3	5942.0	6086.3	6282.9	6902.6	8645.7
45°	4993.9	4937.2	4993.9	5142.6	5558.7	6758.3
47.5°	4294.5	4319.4	4294.5	4390.2	4701.8	5503.8
50°	3773.1	3788.1	3773.1	3818.3	4026.3	4623.0
52.5°	3388.9	3375.6	3388.9	3393.4	3522.5	3971.4
55°	3049.0	3032.2	3049.0	3039.2	3134.8	3422.5
57.5°	2751.5	2763.9	2751.5	2738.2	2789.5	3005.5
60°	2485.9	2497.4	2485.9	2476.2	2509.8	2636.4
62.5°	2261.9	2269.0	2261.9	2261.1	2254.9	2352.2
65°	2061.8	2069.8	2061.8	2051.2	2041.5	2086.6
67.5°	1870.6	1870.6	1870.6	1852.0	1837.0	1881.2
70°	1690.9	1690.0	1690.9	1660.8	1649.3	1662.5
72.5°	1474.9	1496.1	1474.9	1452.7	1451.8	1453.6
75°	1265.1	1289.9	1265.1	1251.0	1234.9	1248.3
77.5°	1052.6	1090.6	1052.6	1041.1	1033.1	1024.2
80°	834.9	876.4	834.9	815.3	803.8	818.8
82.5°	617.1	648.0	617.1	593.1	592.2	599.3
85°	367.4	417.0	367.4	346.2	354.1	346.2
87.5°	117.8	150.5	117.8	112.5	124.0	121.3
90°	22.0	13.9	22.0	37.1	24.1	13.9
92.5°	33.1	20.0	33.1	59.2	31.0	18.0
95°	38.1	23.0	38.1	82.4	41.2	26.9
97.5°	42.1	30.0	42.1	94.5	50.2	41.1
100°	49.2	39.0	49.2	146.9	62.2	54.1
102.5°	103.5	65.2	103.5	311.0	115.5	81.3
105°	217.4	111.5	217.4	553.6	240.4	146.8
107.5°	388.5	192.0	388.5	730.6	424.6	276.6
110°	515.3	357.2	515.3	765.9	582.7	441.7



TEST NUMBER: P1433069

CATALOG NUMBER: EHBR1-54-UNV-TASM-L850-UPL18

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	553.6	482.0	553.6	733.7	643.1	574.6
115°	532.5	507.2	532.5	655.2	628.0	624.8
117.5°	486.1	490.1	486.1	556.5	565.4	603.7
120°	432.8	453.8	432.8	464.9	494.0	545.3
122.5°	384.4	408.5	384.4	399.3	421.3	472.7
125°	342.0	367.1	342.0	352.8	358.8	401.2
127.5°	312.9	329.9	312.9	319.6	314.5	341.6
130°	290.6	304.7	290.6	299.4	286.2	299.3
132.5°	275.3	284.5	275.3	286.0	269.8	273.0
135°	262.2	269.3	262.2	273.0	258.6	256.8
137.5°	251.0	257.2	251.0	262.7	251.5	247.5
140°	241.6	246.9	241.6	253.5	244.4	242.4
142.5°	231.4	235.5	231.4	245.3	239.3	237.2
145°	225.1	228.2	225.1	239.2	235.3	235.2
147.5°	219.9	221.9	219.9	232.0	230.1	230.1
150°	214.6	216.6	214.6	225.8	224.0	224.9
152.5°	208.4	211.4	208.4	218.7	216.8	217.8
155°	205.2	208.1	205.2	213.4	211.6	212.5
157.5°	203.9	206.7	203.9	210.1	209.2	209.2
160°	203.5	205.5	203.5	208.7	207.9	207.8
162.5°	202.4	204.2	202.4	208.4	207.5	207.5
165°	203.0	203.9	203.0	207.3	207.3	207.1
167.5°	202.9	203.9	202.9	208.0	208.0	207.9
170°	203.8	204.7	203.8	207.9	207.8	206.8
172.5°	205.6	206.5	205.6	210.5	209.5	209.4
175°	206.4	207.3	206.4	210.3	210.3	211.2
177.5°	208.2	209.1	208.2	210.3	210.3	210.1
180°	211.9	211.9	211.9	211.9	211.9	211.9



TEST NUMBER: P1433069
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L850-UPL18

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	19.67	20.82	20.10	21.21	21.61	18.99	20.14	19.41	20.53	20.93
	3H	21.22	22.24	21.66	22.65	23.10	20.84	21.86	21.28	22.27	22.72
	4H	21.85	22.81	22.32	23.23	23.70	21.62	22.58	22.08	23.00	23.47
	6H	22.34	23.22	22.81	23.66	24.14	22.26	23.14	22.74	23.58	24.06
	8H	22.49	23.32	22.98	23.78	24.27	22.49	23.32	22.98	23.78	24.27
	12H	22.56	23.36	23.06	23.81	24.32	22.61	23.41	23.11	23.86	24.37
4H	2H	20.09	21.04	20.55	21.47	21.93	19.56	20.52	20.03	20.94	21.41
	3H	21.89	22.68	22.36	23.15	23.64	21.62	22.41	22.10	22.89	23.37
	4H	22.66	23.37	23.16	23.85	24.38	22.53	23.24	23.03	23.73	24.25
	6H	23.28	23.89	23.80	24.40	24.95	23.31	23.92	23.83	24.43	24.98
	8H	23.47	24.04	24.00	24.55	25.11	23.58	24.15	24.10	24.66	25.21
	12H	23.58	24.08	24.13	24.63	25.18	23.75	24.25	24.29	24.79	25.35
8H	4H	22.91	23.48	23.44	23.99	24.54	22.81	23.38	23.34	23.90	24.45
	6H	23.65	24.12	24.21	24.68	25.24	23.72	24.18	24.28	24.74	25.30
	8H	23.92	24.34	24.50	24.91	25.48	24.07	24.48	24.65	25.06	25.63
	12H	24.10	24.46	24.67	25.01	25.66	24.32	24.68	24.90	25.24	25.89
12H	4H	22.92	23.42	23.47	23.97	24.52	22.83	23.33	23.37	23.87	24.43
	6H	23.70	24.11	24.28	24.69	25.26	23.76	24.18	24.34	24.75	25.32
	8H	24.02	24.38	24.59	24.93	25.58	24.17	24.53	24.74	25.09	25.74

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



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

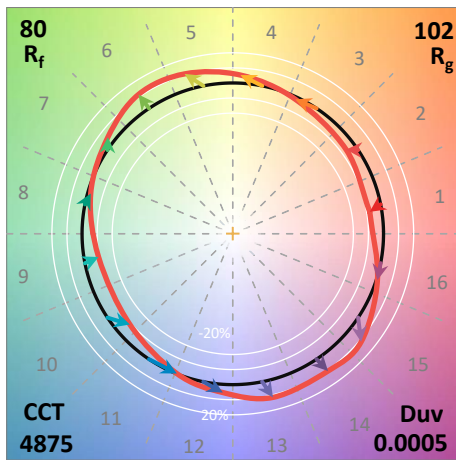
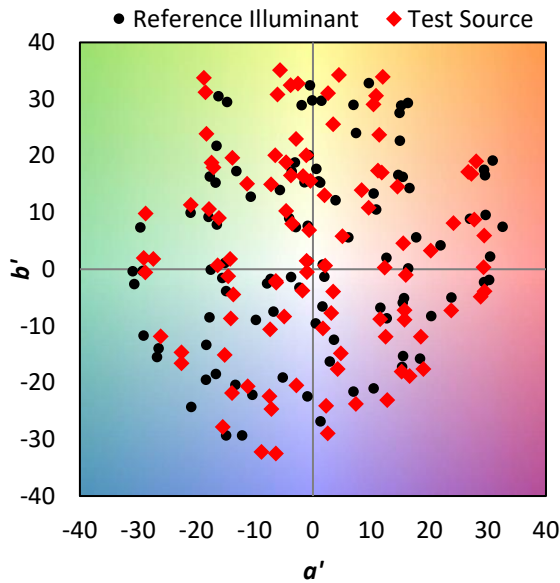
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	89	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

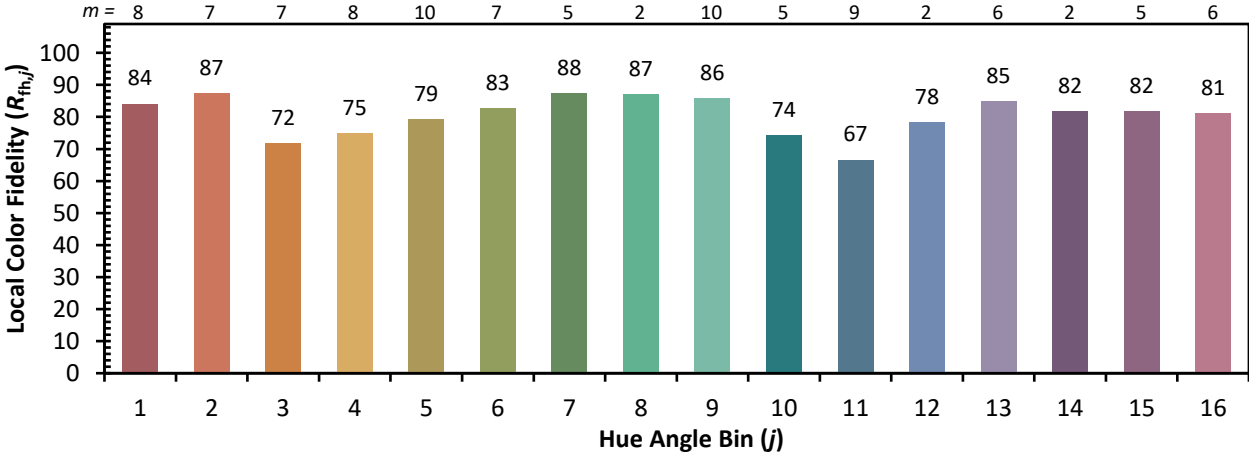


Individual Sample Fidelity Index ($R_{f,i}$)

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)