

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: P1433367

Luminaire Tested: EHBR1-60-UNV-TASM-L850-UPL30

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433367
REPORT IS A COMBINATION OF REPORTS P1431904 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-60-UNV-TASM-L850-UPL30
Description: Elevate Round Highbay at, 60000 lumens, 3000K 90CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

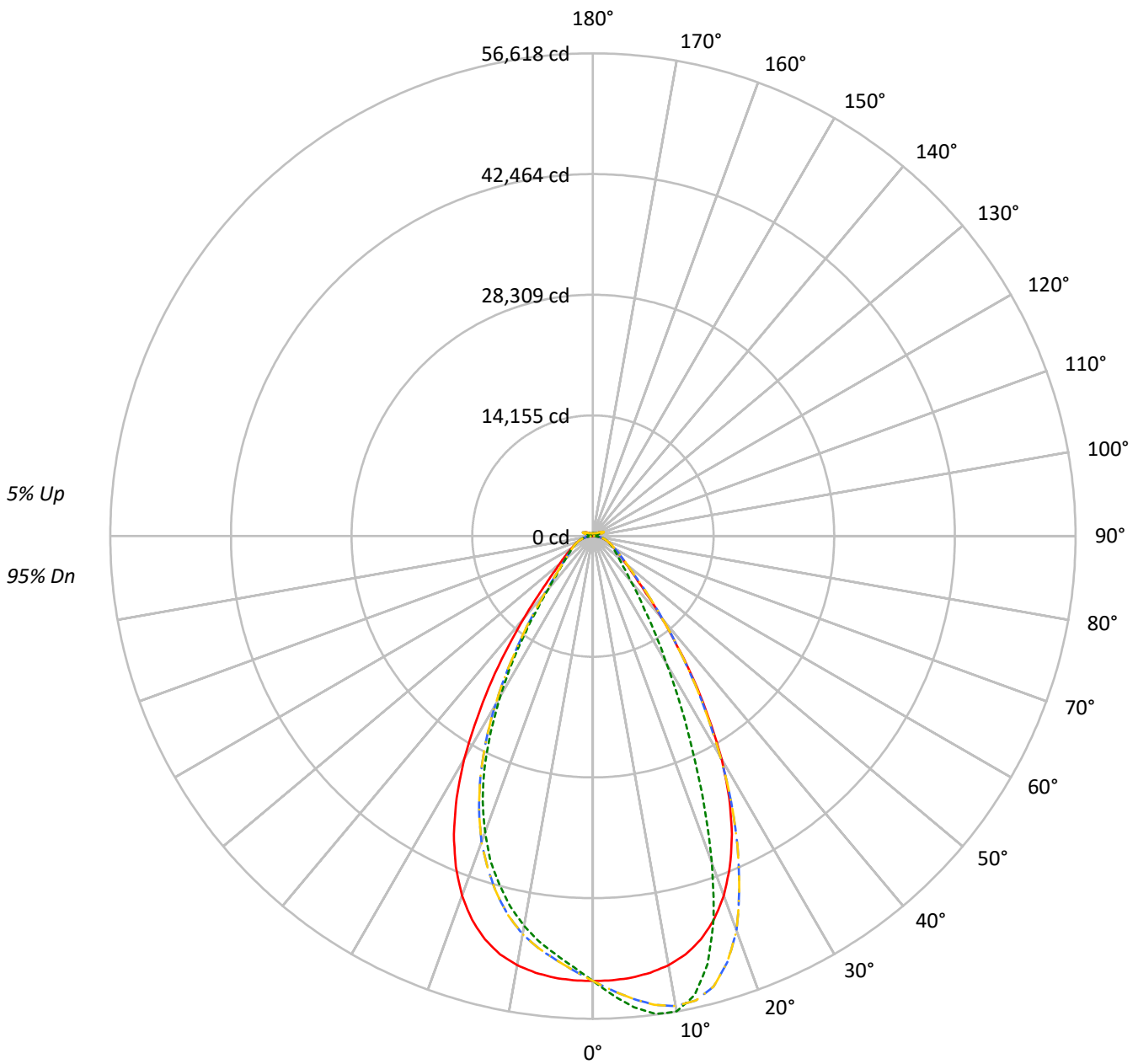
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 61338.8 lumens
Efficiency: N/A
Efficacy: 174.1 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): 352.4
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

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Luminous Intensity Polar Plot



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



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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	118	118	118	118	115	115	115	115	108	108	108	103	103	103	97	97	97	97	97	95
1	111	107	104	101	108	105	102	99	100	97	95	95	93	92	91	89	88	88	88	86
2	104	98	93	89	101	96	91	87	91	88	85	88	85	82	84	82	80	80	80	77
3	97	90	84	79	95	88	82	78	84	80	76	81	77	74	78	75	72	72	72	70
4	91	82	76	71	89	81	75	70	78	73	69	75	71	67	73	69	66	66	66	64
5	86	76	69	64	84	75	69	64	72	67	63	70	65	62	68	64	61	61	61	59
6	81	71	64	59	79	70	63	59	68	62	58	66	61	57	64	59	56	56	56	54
7	77	66	59	54	75	65	59	54	63	57	53	61	56	53	60	55	52	52	52	50
8	72	62	55	50	71	61	54	50	59	54	49	58	53	49	56	52	48	48	48	47
9	69	58	51	47	67	57	51	47	56	50	46	54	49	46	53	49	45	45	45	44
10	65	54	48	44	64	54	48	44	53	47	43	51	46	43	50	46	42	42	42	41

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	245032	245032	245032	245032
5°	243540	259813	243540	230902
10°	240546	266482	240546	218529
15°	233444	247645	233444	201862
20°	218329	198578	218329	179802
25°	193239	137586	193239	150682
30°	156902	89510	156902	112740
35°	112536	57969	112536	75054
40°	72758	39955	72758	47333
45°	46164	30950	46164	33725
50°	34282	26299	34282	28092
55°	27990	23957	27990	24797
60°	24237	22821	24237	22959
65°	22094	22010	22094	21916
70°	20941	21565	20941	21286
75°	19583	20862	19583	20236
80°	17203	19695	17203	18412
85°	11132	14062	11132	13407

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 64905 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4961.3	8.1
10°-20°	13497.6	22.0
20°-30°	15829.9	25.8
30°-40°	11008.7	17.9
40°-50°	5470.8	8.9
50°-60°	3272.1	5.3
60°-70°	2303.0	3.8
70°-80°	1483.6	2.4
80°-90°	476.5	0.8
90°-100°	81.6	0.1
100°-110°	525.5	0.9
110°-120°	969.5	1.6
120°-130°	577.3	0.9
130°-140°	350.7	0.6
140°-150°	244.1	0.4
150°-160°	160.9	0.3
160°-170°	94.0	0.2
170°-180°	31.6	0.1
0°-30°	34288.7	55.9
0°-40°	45297.4	73.8
0°-60°	54040.3	88.1
0°-90°	58303.5	95.1
90°-120°	1576.7	2.6
90°-150°	2748.8	4.5
90°-180°	3035.0	4.9
0°-180°	61338.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	52178	52178	52178	52178	52178	
5°	52000	55474	52000	49301	52000	4935
15°	48975	51955	48975	42350	48975	13687
25°	38590	27476	38590	30091	38590	17471
35°	20654	10639	20654	13775	20654	12894
45°	7469	5008	7469	5457	7469	6112
55°	3782	3238	3782	3351	3782	3459
65°	2306	2297	2306	2288	2306	2316
75°	1380	1470	1380	1426	1380	1448
85°	383	483	383	461	383	425
90°	23	30	23	23	23	29
95°	44	44	44	38	44	46
105°	242	127	242	183	242	326
115°	1032	884	1032	837	1032	940
125°	661	696	661	605	661	609
135°	421	487	421	443	421	333
145°	383	400	383	372	383	240
155°	344	359	344	335	344	160
165°	329	342	329	324	329	94
175°	332	342	332	326	332	32
180°	332	332	332	332	332	



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 CATALOG NUMBER: EHBR1-60-UNV-TASM-L850-UPL30

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	52177.8	52177.8	52177.8	52177.8	52177.8	52177.8	52177.8	52177.8	52177.8	52177.8	52177.8
2.5°	52147.5	52821.6	53367.6	53727.6	53905.7	53727.6	53367.6	52821.6	52147.5	51477.2	51016.4
5°	51999.7	53349.9	54493.7	55242.2	55474.1	55242.2	54493.7	53349.9	51999.7	50723.9	49877.6
7.5°	51646.5	53750.1	55449.7	56323.3	56536.7	56323.3	55449.7	53750.1	51646.5	49840.3	48771.0
10°	51107.4	54002.5	55966.2	56592.4	56617.8	56592.4	55966.2	54002.5	51107.4	48674.1	47413.0
12.5°	50247.4	53912.6	55793.1	55587.6	55120.9	55587.6	55793.1	53912.6	50247.4	47249.5	45658.6
15°	48975.4	53379.3	54696.2	53024.2	51954.7	53024.2	54696.2	53379.3	48975.4	45326.0	43480.7
17.5°	47183.0	52381.3	52406.8	49098.7	47081.2	49098.7	52406.8	52381.3	47183.0	42973.9	40941.7
20°	44872.9	50780.6	49254.3	43203.8	40813.5	43203.8	49254.3	50780.6	44872.9	40193.3	38199.2
22.5°	41976.8	48622.3	44864.2	37273.7	34012.5	37273.7	44864.2	48622.3	41976.8	36959.5	34884.3
25°	38589.6	45977.6	40141.4	30812.2	27475.8	30812.2	40141.4	45977.6	38589.6	33106.6	31230.0
27.5°	34605.4	42625.5	35112.3	25178.5	22100.4	25178.5	35112.3	42625.5	34605.4	29128.3	27211.7
30°	30180.1	38328.4	29878.8	20051.6	17217.2	20051.6	29878.8	38328.4	30180.1	24659.0	22942.8
32.5°	25225.5	34116.3	24852.7	16066.5	13665.5	16066.5	24852.7	34116.3	25225.5	20394.0	18600.6
35°	20654.3	28846.5	20320.6	12624.4	10639.3	12624.4	20320.6	28846.5	20654.3	16367.9	14606.7
37.5°	16209.3	23867.4	16198.6	10165.7	8629.6	10165.7	16198.6	23867.4	16209.3	12725.2	11295.8
40°	12610.8	18662.2	12692.0	8115.0	6925.2	8115.0	12692.0	18662.2	12610.8	9682.3	8767.5
42.5°	9555.2	14270.2	9975.9	6660.1	5882.2	6660.1	9975.9	14270.2	9555.2	7628.6	6943.8
45°	7469.2	10501.3	7790.1	5619.1	5007.5	5619.1	7790.1	10501.3	7469.2	6143.5	5683.6
47.5°	6082.8	8116.0	6313.7	4819.7	4391.1	4819.7	6313.7	8116.0	6082.8	5196.4	4852.0
50°	5109.2	6227.6	5242.3	4207.2	3919.5	4207.2	5242.3	6227.6	5109.2	4449.8	4219.9
52.5°	4389.1	5079.0	4464.5	3749.2	3555.5	3749.2	4464.5	5079.0	4389.1	3893.1	3750.2
55°	3782.5	4269.8	3882.3	3371.6	3237.6	3371.6	3882.3	4269.8	3782.5	3464.6	3358.9
57.5°	3321.7	3622.1	3371.6	3049.7	2960.7	3049.7	3371.6	3622.1	3321.7	3082.9	3026.3
60°	2913.7	3136.8	2975.4	2768.9	2743.5	2768.9	2975.4	3136.8	2913.7	2773.8	2736.6
62.5°	2599.7	2740.5	2631.0	2516.5	2494.0	2516.5	2631.0	2740.5	2599.7	2492.0	2498.9
65°	2306.1	2437.2	2351.1	2289.4	2297.3	2289.4	2351.1	2437.2	2306.1	2256.2	2267.0
67.5°	2079.1	2147.6	2110.5	2075.2	2084.0	2075.2	2110.5	2147.6	2079.1	2030.2	2046.8
70°	1837.5	1910.9	1872.7	1877.6	1892.2	1877.6	1872.7	1910.9	1837.5	1822.8	1835.5
72.5°	1606.6	1663.3	1650.6	1662.3	1678.0	1662.3	1650.6	1663.3	1606.6	1604.6	1605.6
75°	1379.5	1422.6	1428.5	1445.2	1469.6	1445.2	1428.5	1422.6	1379.5	1364.9	1382.5
77.5°	1132.0	1180.9	1199.5	1222.1	1258.2	1222.1	1199.5	1180.9	1132.0	1141.8	1150.6
80°	905.0	927.5	968.6	985.2	1036.1	985.2	968.6	927.5	905.0	888.4	901.2
82.5°	662.4	682.9	718.2	749.5	778.9	749.5	718.2	682.9	662.4	654.6	655.5
85°	382.6	413.8	437.3	474.5	483.3	474.5	437.3	413.8	382.6	391.3	382.6
87.5°	134.1	143.8	164.3	179.1	180.1	179.1	164.3	143.8	134.1	136.9	124.3
90°	22.6	38.6	66.2	39.2	29.5	39.2	66.2	38.6	22.6	39.3	60.9
92.5°	29.3	51.9	92.8	50.8	37.8	50.8	92.8	51.9	29.3	50.9	97.5
95°	43.6	63.6	117.8	55.8	44.5	55.8	117.8	63.6	43.6	67.6	135.8
97.5°	66.9	78.5	132.8	59.1	52.7	59.1	132.8	78.5	66.9	82.5	155.8
100°	88.5	88.5	241.0	67.5	59.4	67.5	241.0	88.5	88.5	101.9	242.3
102.5°	133.5	172.7	556.5	131.7	71.1	131.7	556.5	172.7	133.5	190.1	513.5
105°	241.6	392.4	977.6	333.1	127.0	333.1	977.6	392.4	241.6	396.5	914.7
107.5°	456.3	730.2	1258.8	652.6	288.4	652.6	1258.8	730.2	456.3	701.0	1207.0
110°	729.3	1019.8	1373.6	892.3	578.1	892.3	1373.6	1019.8	729.3	962.3	1265.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	949.0	1136.3	1342.0	988.8	797.7	988.8	1342.0	1136.3	949.0	1062.2	1212.0
115°	1031.5	1119.7	1198.9	985.5	884.3	985.5	1198.9	1119.7	1031.5	1037.2	1082.1
117.5°	996.5	1024.8	1035.8	925.6	889.3	925.6	1035.8	1024.8	996.5	933.3	919.0
120°	900.0	888.4	873.7	837.4	839.4	837.4	873.7	888.4	900.0	815.1	767.6
122.5°	779.6	754.5	738.9	748.5	771.1	748.5	738.9	754.5	779.6	694.6	658.7
125°	661.4	636.3	645.0	671.9	695.6	671.9	645.0	636.3	661.4	590.8	581.4
127.5°	562.5	550.8	576.7	607.1	627.3	607.1	576.7	550.8	562.5	517.5	526.5
130°	491.8	494.2	528.5	554.7	567.4	554.7	528.5	494.2	491.8	470.2	492.5
132.5°	447.9	460.2	492.8	515.8	523.4	515.8	492.8	460.2	447.9	442.2	469.5
135°	420.6	438.6	468.9	483.2	486.8	483.2	468.9	438.6	420.6	423.3	447.9
137.5°	404.9	423.0	445.6	457.6	455.2	457.6	445.6	423.0	404.9	410.9	430.0
140°	396.0	413.9	424.0	437.5	436.2	437.5	424.0	413.9	396.0	399.3	414.2
142.5°	386.9	403.3	408.2	418.6	416.2	418.6	408.2	403.3	386.9	390.3	400.3
145°	382.9	395.3	391.0	403.6	400.5	403.6	391.0	395.3	382.9	383.6	389.6
147.5°	374.6	383.6	378.6	389.6	386.4	389.6	378.6	383.6	374.6	374.6	377.2
150°	365.5	372.2	364.6	377.2	377.5	377.2	364.6	372.2	365.5	363.8	366.5
152.5°	353.1	359.8	353.1	367.5	366.8	367.5	353.1	359.8	353.1	351.5	354.1
155°	343.5	346.9	343.5	357.8	358.7	357.8	343.5	346.9	343.5	342.5	344.5
157.5°	337.1	339.8	338.1	350.8	351.8	350.8	338.1	339.8	337.1	337.1	338.1
160°	332.7	336.0	335.4	346.4	347.3	346.4	335.4	336.0	332.7	333.4	334.4
162.5°	331.3	331.3	331.7	342.6	344.6	342.6	331.7	331.3	331.3	331.3	333.0
165°	329.4	331.0	329.7	338.2	341.8	338.2	329.7	331.0	329.4	330.1	330.1
167.5°	329.7	328.0	330.0	337.9	341.5	337.9	330.0	328.0	329.7	330.3	330.3
170°	327.3	328.3	328.6	336.5	340.1	336.5	328.6	328.3	327.3	329.0	329.7
172.5°	330.2	330.2	329.9	336.0	341.3	336.0	329.9	330.2	330.2	330.9	332.6
175°	332.2	331.5	331.7	336.3	341.6	336.3	331.7	331.5	332.2	331.2	331.2
177.5°	330.5	332.5	334.4	339.0	346.0	339.0	334.4	332.5	330.5	331.2	331.2
180°	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	52177.8	52177.8	52177.8	52177.8	52177.8	52177.8
2.5°	50662.2	50628.9	50662.2	51016.4	51477.2	52147.5
5°	49485.2	49301.2	49485.2	49877.6	50723.9	51999.7
7.5°	48114.4	48007.8	48114.4	48771.0	49840.3	51646.5
10°	46671.3	46429.6	46671.3	47413.0	48674.1	51107.4
12.5°	44892.5	44572.6	44892.5	45658.6	47249.5	50247.4
15°	42630.4	42349.6	42630.4	43480.7	45326.0	48975.4
17.5°	40203.0	39948.6	40203.0	40941.7	42973.9	47183.0
20°	37154.2	36954.6	37154.2	38199.2	40193.3	44872.9
22.5°	33955.9	33768.9	33955.9	34884.3	36959.5	41976.8
25°	30192.9	30091.1	30192.9	31230.0	33106.6	38589.6
27.5°	26126.5	25953.3	26126.5	27211.7	29128.3	34605.4
30°	21972.2	21685.5	21972.2	22942.8	24659.0	30180.1
32.5°	17908.9	17702.4	17908.9	18600.6	20394.0	25225.5
35°	13981.6	13775.1	13981.6	14606.7	16367.9	20654.3
37.5°	10894.6	10529.7	10894.6	11295.8	12725.2	16209.3
40°	8262.7	8204.0	8262.7	8767.5	9682.3	12610.8
42.5°	6726.6	6567.1	6726.6	6943.8	7628.6	9555.2
45°	5519.2	5456.6	5519.2	5683.6	6143.5	7469.2
47.5°	4746.3	4773.7	4746.3	4852.0	5196.4	6082.8
50°	4170.0	4186.7	4170.0	4219.9	4449.8	5109.2
52.5°	3745.4	3730.7	3745.4	3750.2	3893.1	4389.1
55°	3369.7	3351.0	3369.7	3358.9	3464.6	3782.5
57.5°	3040.9	3054.6	3040.9	3026.3	3082.9	3321.7
60°	2747.4	2760.1	2747.4	2736.6	2773.8	2913.7
62.5°	2499.9	2507.7	2499.9	2498.9	2492.0	2599.7
65°	2278.7	2287.5	2278.7	2267.0	2256.2	2306.1
67.5°	2067.3	2067.3	2067.3	2046.8	2030.2	2079.1
70°	1868.7	1867.7	1868.7	1835.5	1822.8	1837.5
72.5°	1630.0	1653.5	1630.0	1605.6	1604.6	1606.6
75°	1398.1	1425.5	1398.1	1382.5	1364.9	1379.5
77.5°	1163.3	1205.4	1163.3	1150.6	1141.8	1132.0
80°	922.7	968.6	922.7	901.2	888.4	905.0
82.5°	681.9	716.2	681.9	655.5	654.6	662.4
85°	406.1	460.8	406.1	382.6	391.3	382.6
87.5°	130.2	166.3	130.2	124.3	136.9	134.1
90°	36.0	22.6	36.0	60.9	39.3	22.6
92.5°	54.2	32.6	54.2	97.5	50.9	29.3
95°	62.6	37.6	62.6	135.8	67.6	43.6
97.5°	69.3	48.5	69.3	155.8	82.5	66.9
100°	80.8	63.6	80.8	242.3	101.9	88.5
102.5°	170.7	106.8	170.7	513.5	190.1	133.5
105°	358.8	183.4	358.8	914.7	396.5	241.6
107.5°	641.7	316.5	641.7	1207.0	701.0	456.3
110°	851.5	589.5	851.5	1265.2	962.3	729.3



TEST NUMBER: P1433367
 CATALOG NUMBER: EHBR1-60-UNV-TASM-L850-UPL30

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	914.7	795.9	914.7	1212.0	1062.2	949.0
115°	879.7	837.4	879.7	1082.1	1037.2	1031.5
117.5°	803.2	809.1	803.2	919.0	933.3	996.5
120°	715.0	749.2	715.0	767.6	815.1	900.0
122.5°	634.4	674.3	634.4	658.7	694.6	779.6
125°	564.5	605.4	564.5	581.4	590.8	661.4
127.5°	516.2	543.9	516.2	526.5	517.5	562.5
130°	479.0	502.2	479.0	492.5	470.2	491.8
132.5°	453.3	468.3	453.3	469.5	442.2	447.9
135°	430.9	443.3	430.9	447.9	423.3	420.6
137.5°	412.0	422.7	412.0	430.0	410.9	404.9
140°	395.7	404.6	395.7	414.2	399.3	396.0
142.5°	378.3	385.0	378.3	400.3	390.3	386.9
145°	367.0	372.0	367.0	389.6	383.6	382.9
147.5°	357.2	360.5	357.2	377.2	374.6	374.6
150°	347.5	350.9	347.5	366.5	363.8	365.5
152.5°	336.8	341.2	336.8	354.1	351.5	353.1
155°	330.4	334.8	330.4	344.5	342.5	343.5
157.5°	327.4	331.0	327.4	338.1	337.1	337.1
160°	325.4	328.1	325.4	334.4	333.4	332.7
162.5°	322.4	325.0	322.4	333.0	331.3	331.3
165°	322.7	323.7	322.7	330.1	330.1	329.4
167.5°	322.0	323.7	322.0	330.3	330.3	329.7
170°	323.0	324.0	323.0	329.7	329.0	327.3
172.5°	324.9	325.9	324.9	332.6	330.9	330.2
175°	325.2	326.2	325.2	331.2	331.2	332.2
177.5°	327.9	328.9	327.9	331.2	331.2	330.5
180°	332.5	332.5	332.5	332.5	332.5	332.5



TEST NUMBER: P1433367
 CATALOG NUMBER: EHBR1-60-UNV-TASM-L850-UPL30

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	19.89	21.02	20.35	21.44	21.88	19.21	20.34	19.66	20.76	21.20
	3H	21.44	22.44	21.91	22.88	23.37	21.06	22.06	21.53	22.50	22.99
	4H	22.08	23.01	22.57	23.47	23.97	21.84	22.78	22.33	23.23	23.74
	6H	22.56	23.42	23.06	23.89	24.41	22.48	23.35	22.99	23.82	24.33
	8H	22.71	23.52	23.23	24.01	24.54	22.71	23.52	23.22	24.01	24.54
	12H	22.78	23.56	23.30	24.04	24.59	22.83	23.61	23.35	24.09	24.64
4H	2H	20.31	21.24	20.80	21.70	22.20	19.79	20.72	20.28	21.18	21.68
	3H	22.11	22.88	22.61	23.38	23.91	21.84	22.62	22.35	23.12	23.64
	4H	22.88	23.58	23.40	24.09	24.65	22.75	23.45	23.27	23.96	24.52
	6H	23.50	24.10	24.04	24.63	25.22	23.52	24.12	24.07	24.66	25.25
	8H	23.69	24.25	24.25	24.79	25.38	23.79	24.35	24.35	24.89	25.48
	12H	23.80	24.29	24.37	24.86	25.45	23.96	24.46	24.53	25.03	25.62
8H	4H	23.13	23.69	23.68	24.23	24.82	23.03	23.59	23.59	24.13	24.72
	6H	23.87	24.33	24.46	24.91	25.51	23.94	24.39	24.52	24.98	25.57
	8H	24.14	24.55	24.75	25.15	25.76	24.29	24.70	24.89	25.30	25.90
	12H	24.31	24.67	24.91	25.25	25.93	24.54	24.89	25.14	25.48	26.16
12H	4H	23.14	23.63	23.71	24.20	24.80	23.04	23.54	23.61	24.11	24.70
	6H	23.91	24.32	24.52	24.92	25.53	23.98	24.39	24.59	24.99	25.60
	8H	24.23	24.59	24.83	25.17	25.85	24.39	24.74	24.99	25.32	26.01

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

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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

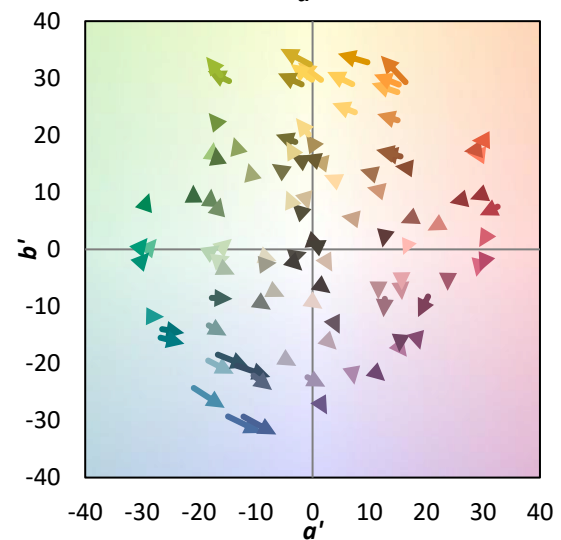
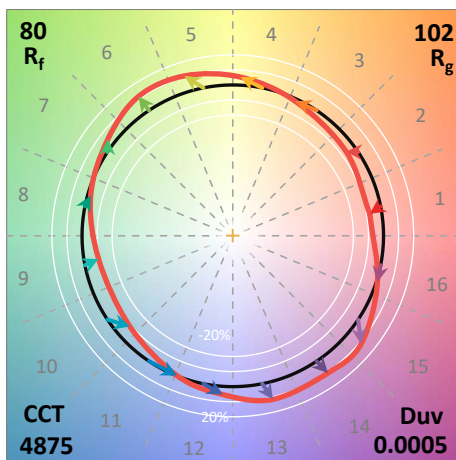
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	89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

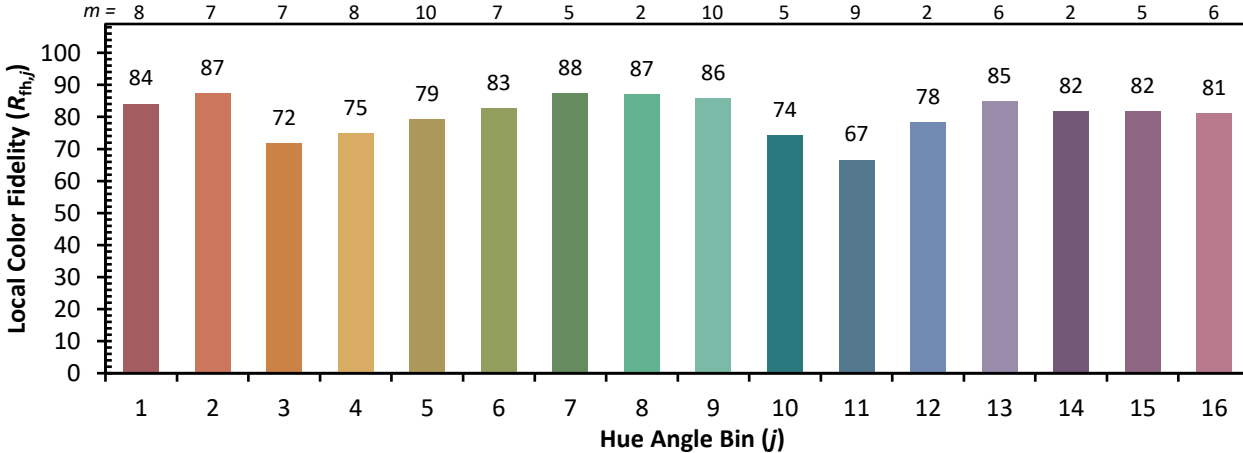


Individual Sample Fidelity Index ($R_{f,i}$)

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)