

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: P1433675

Luminaire Tested: EHBR1-60-UNV-TASM-L935-UPL12

Issue Date: 3/20/2026

**Test Information**

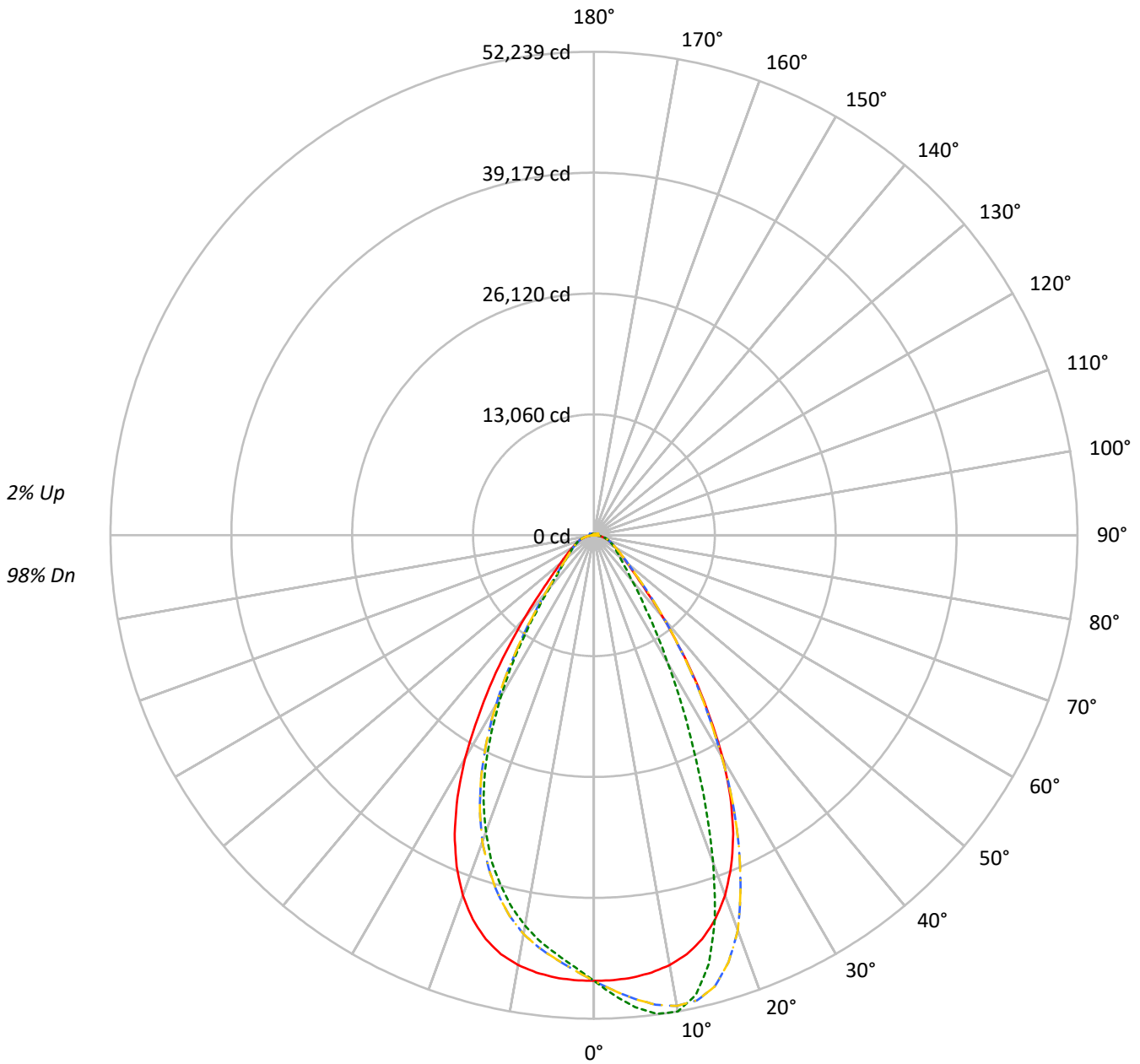
Test Method: LM-79-2019  
Report Number: P1433675  
REPORT IS A COMBINATION OF REPORTS P1431900 AND P1431635  
Test Lab: INNOVATION CENTER  
Issue Date: 3/20/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: EHBR1-60-UNV-TASM-L935-UPL12  
Description: Elevate Round Highbay at, 60000 lumens, 3500K 90CRI LEDs with TASM lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 54926.4 lumens  
Efficiency: N/A  
Efficacy: 162.6 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): 337.8  
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: P1433675  
CATALOG NUMBER: EHBR1-60-UNV-TASM-L935-UPL12

### Luminous Intensity Polar Plot



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



TEST NUMBER: P1433675  
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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	0
RCR																					
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	100	100	100	100	100	100	98
1	111	108	105	102	109	106	103	100	101	99	97	97	95	94	93	92	90	90	90	90	88
2	104	99	94	89	102	97	92	88	93	89	86	90	86	84	86	84	82	82	82	82	80
3	98	90	84	80	96	89	83	79	86	81	77	83	79	76	80	77	74	74	74	74	72
4	92	83	77	72	90	82	76	71	79	74	70	77	73	69	75	71	68	68	68	68	66
5	87	77	70	65	85	76	70	65	74	68	64	72	67	63	70	66	62	62	62	62	61
6	82	72	65	60	80	71	64	59	69	63	59	67	62	58	66	61	58	58	58	58	56
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	54	54	54	52
8	73	62	56	51	72	62	55	51	60	55	51	59	54	50	58	53	50	50	50	50	48
9	69	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	47	47	47	45
10	66	55	49	44	65	55	49	44	54	48	44	53	48	44	52	47	44	44	44	44	42

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	226081	226081	226081	226081
5°	224705	239719	224705	213044
10°	221943	245873	221943	201629
15°	215390	228493	215390	186250
20°	201444	183220	201444	165897
25°	178294	126945	178294	139029
30°	144768	82587	144768	104021
35°	103832	53485	103832	69249
40°	67131	36865	67131	43672
45°	42594	28556	42594	31117
50°	31631	24265	31631	25919
55°	25825	22105	25825	22879
60°	22363	21056	22363	21184
65°	20386	20307	20386	20221
70°	19322	19898	19322	19640
75°	18068	19249	18068	18672
80°	15872	18173	15872	16988
85°	10271	12974	10271	12371

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 59885 cd/sqm



TEST NUMBER: P1433675  
 CATALOG NUMBER: EHBR1-60-UNV-TASM-L935-UPL12

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	4577.6	8.3
10°-20°	12453.7	22.7
20°-30°	14605.6	26.6
30°-40°	10157.3	18.5
40°-50°	5047.7	9.2
50°-60°	3019.1	5.5
60°-70°	2124.9	3.9
70°-80°	1368.8	2.5
80°-90°	436.7	0.8
90°-100°	31.4	0.1
100°-110°	194.0	0.4
110°-120°	356.5	0.6
120°-130°	213.5	0.4
130°-140°	131.5	0.2
140°-150°	93.1	0.2
150°-160°	63.1	0.1
160°-170°	38.6	0.1
170°-180°	13.4	0.0
0°-30°	31636.9	57.6
0°-40°	41794.2	76.1
0°-60°	49860.9	90.8
0°-90°	53791.4	97.9
90°-120°	581.9	1.1
90°-150°	1020.0	1.9
90°-180°	1135.0	2.1
0°-180°	54926.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	48142	48142	48142	48142	48142	
5°	47978	51184	47978	45488	47978	4553
15°	45188	47937	45188	39074	45188	12628
25°	35605	25351	35605	27764	35605	16119
35°	19057	9816	19057	12710	19057	11897
45°	6892	4620	6892	5035	6892	5639
55°	3490	2987	3490	3092	3490	3191
65°	2128	2120	2128	2111	2128	2137
75°	1273	1356	1273	1315	1273	1336
85°	353	446	353	425	353	392
90°	9	15	9	9	9	21
95°	17	21	17	14	17	18
105°	90	51	90	68	90	120
115°	379	328	379	307	379	345
125°	244	260	244	223	244	225
135°	158	184	158	164	158	125
145°	147	154	147	142	147	92
155°	134	141	134	133	134	63
165°	135	143	135	134	135	38
175°	141	148	141	138	141	13
180°	142	142	142	142	142	



TEST NUMBER: P1433675  
 CATALOG NUMBER: EHBR1-60-UNV-TASM-L935-UPL12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	48142.4	48142.4	48142.4	48142.4	48142.4	48142.4	48142.4	48142.4	48142.4	48142.4	48142.4
2.5°	48114.4	48736.4	49240.2	49572.4	49736.7	49572.4	49240.2	48736.4	48114.4	47496.0	47070.9
5°	47978.1	49223.9	50279.2	50969.8	51183.8	50969.8	50279.2	49223.9	47978.1	46801.0	46020.1
7.5°	47652.2	49593.1	51161.2	51967.3	52164.2	51967.3	51161.2	49593.1	47652.2	45985.7	44999.1
10°	47154.8	49826.0	51637.9	52215.6	52239.0	52215.6	51637.9	49826.0	47154.8	44909.7	43746.1
12.5°	46361.3	49743.0	51478.1	51288.5	50857.9	51288.5	51478.1	49743.0	46361.3	43595.3	42127.4
15°	45187.7	49251.0	50466.1	48923.3	47936.6	48923.3	50466.1	49251.0	45187.7	41820.5	40118.0
17.5°	43533.9	48330.2	48353.7	45301.5	43440.0	45301.5	48353.7	48330.2	43533.9	39650.3	37775.3
20°	41402.5	46853.3	45445.0	39862.5	37657.0	39862.5	45445.0	46853.3	41402.5	37084.8	35244.9
22.5°	38730.4	44861.9	41394.4	34391.0	31382.0	34391.0	41394.4	44861.9	38730.4	34101.1	32186.4
25°	35605.1	42421.8	37036.9	28429.2	25350.9	28429.2	37036.9	42421.8	35605.1	30546.1	28814.7
27.5°	31929.1	39328.9	32396.8	23231.2	20391.2	23231.2	32396.8	39328.9	31929.1	26875.6	25107.2
30°	27846.0	35364.1	27568.0	18500.8	15885.6	18500.8	27568.0	35364.1	27846.0	22751.9	21168.4
32.5°	23274.6	31477.7	22930.6	14823.9	12608.6	14823.9	22930.6	31477.7	23274.6	18816.8	17162.1
35°	19056.9	26615.6	18749.1	11648.1	9816.5	11648.1	18749.1	26615.6	19056.9	15102.0	13477.0
37.5°	14955.7	22021.6	14945.8	9379.5	7962.2	9379.5	14945.8	22021.6	14955.7	11741.1	10422.2
40°	11635.5	17218.9	11710.4	7487.4	6389.6	7487.4	11710.4	17218.9	11635.5	8933.5	8089.4
42.5°	8816.2	13166.5	9204.4	6145.0	5427.3	6145.0	9204.4	13166.5	8816.2	7038.6	6406.8
45°	6891.6	9689.1	7187.7	5184.5	4620.2	5184.5	7187.7	9689.1	6891.6	5668.4	5244.0
47.5°	5612.4	7488.3	5825.4	4446.9	4051.5	4446.9	5825.4	7488.3	5612.4	4794.5	4476.7
50°	4714.1	5746.0	4836.9	3881.8	3616.3	3881.8	4836.9	5746.0	4714.1	4105.7	3893.5
52.5°	4049.7	4686.2	4119.2	3459.3	3280.6	3459.3	4119.2	4686.2	4049.7	3592.1	3460.2
55°	3490.0	3939.5	3582.1	3110.9	2987.2	3110.9	3582.1	3939.5	3490.0	3196.6	3099.1
57.5°	3064.8	3342.0	3110.9	2813.9	2731.7	2813.9	3110.9	3342.0	3064.8	2844.5	2792.2
60°	2688.4	2894.2	2745.3	2554.8	2531.3	2554.8	2745.3	2894.2	2688.4	2559.3	2524.9
62.5°	2398.6	2528.6	2427.5	2321.8	2301.1	2321.8	2427.5	2528.6	2398.6	2299.3	2305.6
65°	2127.8	2248.7	2169.3	2112.4	2119.6	2112.4	2169.3	2248.7	2127.8	2081.7	2091.6
67.5°	1918.3	1981.5	1947.3	1914.7	1922.9	1914.7	1947.3	1981.5	1918.3	1873.2	1888.5
70°	1695.4	1763.1	1727.8	1732.4	1745.9	1732.4	1727.8	1763.1	1695.4	1681.8	1693.6
72.5°	1482.3	1534.7	1522.9	1533.8	1548.2	1533.8	1522.9	1534.7	1482.3	1480.5	1481.4
75°	1272.8	1312.5	1318.0	1333.4	1356.0	1333.4	1318.0	1312.5	1272.8	1259.3	1275.6
77.5°	1044.5	1089.6	1106.7	1127.6	1160.9	1127.6	1106.7	1089.6	1044.5	1053.5	1061.6
80°	835.0	855.8	893.7	909.0	956.0	909.0	893.7	855.8	835.0	819.7	831.5
82.5°	611.1	630.1	662.6	691.5	718.6	691.5	662.6	630.1	611.1	604.0	604.8
85°	353.0	381.8	403.5	437.8	445.9	437.8	403.5	381.8	353.0	361.1	353.0
87.5°	123.7	132.7	151.6	165.2	166.1	165.2	151.6	132.7	123.7	126.3	114.7
90°	8.8	15.2	25.8	17.6	15.1	17.6	25.8	15.2	8.8	14.9	22.8
92.5°	11.2	20.0	35.6	21.8	18.2	21.8	35.6	20.0	11.2	19.1	36.3
95°	17.0	24.3	44.7	23.7	20.7	23.7	44.7	24.3	17.0	25.3	50.2
97.5°	25.6	29.8	50.2	24.9	23.7	24.9	50.2	29.8	25.6	30.7	57.6
100°	33.4	33.4	89.7	27.9	26.1	27.9	89.7	33.4	33.4	38.3	89.2
102.5°	49.9	64.8	205.7	52.0	30.4	52.0	205.7	64.8	49.9	70.6	188.4
105°	89.5	145.2	359.7	125.6	51.4	125.6	359.7	145.2	89.5	146.1	335.1
107.5°	168.0	268.7	462.6	242.5	110.4	242.5	462.6	268.7	168.0	257.5	442.5
110°	267.8	374.7	504.6	330.2	216.3	330.2	504.6	374.7	267.8	353.0	463.9



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 CATALOG NUMBER: EHBR1-60-UNV-TASM-L935-UPL12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	348.1	417.3	493.0	365.5	296.6	365.5	493.0	417.3	348.1	389.5	444.4
115°	378.9	411.2	440.7	364.3	328.4	364.3	440.7	411.2	378.9	380.4	396.9
117.5°	366.2	376.5	381.0	342.3	330.2	342.3	381.0	376.5	366.2	343.0	337.2
120°	330.8	326.6	322.3	310.1	311.9	310.1	322.3	326.6	330.8	299.7	281.8
122.5°	287.3	278.2	273.0	278.2	286.9	278.2	273.0	278.2	287.3	256.2	242.5
125°	244.1	234.9	239.2	250.1	259.8	250.1	239.2	234.9	244.1	218.8	214.9
127.5°	208.5	204.2	214.3	226.4	234.9	226.4	214.3	204.2	208.5	192.1	194.8
130°	183.2	183.5	196.6	207.8	213.0	207.8	196.6	183.5	183.2	175.3	182.9
132.5°	167.7	171.7	184.1	194.1	197.5	194.1	184.1	171.7	167.7	166.1	175.6
135°	158.2	163.7	175.8	181.6	184.1	181.6	175.8	163.7	158.2	159.7	167.7
137.5°	153.0	158.5	167.3	172.8	172.5	172.8	167.3	158.5	153.0	155.8	162.1
140°	150.3	155.8	159.4	165.5	166.1	165.5	159.4	155.8	150.3	151.5	157.0
142.5°	147.6	152.4	154.3	159.1	158.8	159.1	154.3	152.4	147.6	148.7	152.4
145°	146.6	150.5	148.5	153.6	153.5	153.6	148.5	150.5	146.6	146.3	149.1
147.5°	143.6	146.3	144.5	149.1	148.9	149.1	144.5	146.3	143.6	143.6	145.0
150°	140.8	143.2	139.9	145.0	146.2	145.0	139.9	143.2	140.8	140.1	141.7
152.5°	136.8	139.2	136.8	142.6	142.8	142.6	136.8	139.2	136.8	136.1	137.7
155°	134.3	135.6	134.3	140.1	141.0	140.1	134.3	135.6	134.3	133.4	135.2
157.5°	133.1	134.6	134.0	139.2	140.1	139.2	134.0	134.6	133.1	133.1	134.0
160°	133.7	134.9	135.2	139.8	140.7	139.8	135.2	134.9	133.7	133.4	134.3
162.5°	134.2	134.2	135.5	140.0	141.8	140.0	135.5	134.2	134.2	134.2	134.9
165°	135.1	135.8	136.4	140.6	143.0	140.6	136.4	135.8	135.1	134.9	134.9
167.5°	136.4	135.8	137.6	142.1	144.6	142.1	137.6	135.8	136.4	136.0	136.0
170°	136.0	136.9	138.1	142.7	145.0	142.7	138.1	136.9	136.0	136.7	136.4
172.5°	138.8	138.8	140.3	144.1	147.2	144.1	140.3	138.8	138.8	138.5	139.1
175°	140.6	140.8	142.0	145.3	148.4	145.3	142.0	140.8	140.6	139.7	139.7
177.5°	139.9	141.8	143.5	146.8	150.5	146.8	143.5	141.8	139.9	139.7	139.7
180°	141.8	141.8	141.8	141.8	141.8	141.8	141.8	141.8	141.8	141.8	141.8



TEST NUMBER: P1433675

CATALOG NUMBER: EHBR1-60-UNV-TASM-L935-UPL12

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	48142.4	48142.4	48142.4	48142.4	48142.4	48142.4
2.5°	46744.1	46713.3	46744.1	47070.9	47496.0	48114.4
5°	45658.1	45488.3	45658.1	46020.1	46801.0	47978.1
7.5°	44393.3	44294.9	44393.3	44999.1	45985.7	47652.2
10°	43061.8	42838.8	43061.8	43746.1	44909.7	47154.8
12.5°	41420.5	41125.4	41420.5	42127.4	43595.3	46361.3
15°	39333.5	39074.3	39333.5	40118.0	41820.5	45187.7
17.5°	37093.7	36859.0	37093.7	37775.3	39650.3	43533.9
20°	34280.8	34096.6	34280.8	35244.9	37084.8	41402.5
22.5°	31329.7	31157.3	31329.7	32186.4	34101.1	38730.4
25°	27857.8	27763.9	27857.8	28814.7	30546.1	35605.1
27.5°	24105.9	23946.1	24105.9	25107.2	26875.6	31929.1
30°	20272.9	20008.4	20272.9	21168.4	22751.9	27846.0
32.5°	16523.8	16333.3	16523.8	17162.1	18816.8	23274.6
35°	12900.2	12709.7	12900.2	13477.0	15102.0	19056.9
37.5°	10052.0	9715.3	10052.0	10422.2	11741.1	14955.7
40°	7623.7	7569.5	7623.7	8089.4	8933.5	11635.5
42.5°	6206.4	6059.2	6206.4	6406.8	7038.6	8816.2
45°	5092.4	5034.6	5092.4	5244.0	5668.4	6891.6
47.5°	4379.2	4404.5	4379.2	4476.7	4794.5	5612.4
50°	3847.5	3862.9	3847.5	3893.5	4105.7	4714.1
52.5°	3455.7	3442.2	3455.7	3460.2	3592.1	4049.7
55°	3109.1	3091.9	3109.1	3099.1	3196.6	3490.0
57.5°	2805.7	2818.3	2805.7	2792.2	2844.5	3064.8
60°	2534.9	2546.6	2534.9	2524.9	2559.3	2688.4
62.5°	2306.5	2313.8	2306.5	2305.6	2299.3	2398.6
65°	2102.5	2110.6	2102.5	2091.6	2081.7	2127.8
67.5°	1907.5	1907.5	1907.5	1888.5	1873.2	1918.3
70°	1724.2	1723.3	1724.2	1693.6	1681.8	1695.4
72.5°	1504.0	1525.6	1504.0	1481.4	1480.5	1482.3
75°	1290.0	1315.3	1290.0	1275.6	1259.3	1272.8
77.5°	1073.4	1112.2	1073.4	1061.6	1053.5	1044.5
80°	851.3	893.7	851.3	831.5	819.7	835.0
82.5°	629.2	660.8	629.2	604.8	604.0	611.1
85°	374.7	425.2	374.7	353.0	361.1	353.0
87.5°	120.1	153.4	120.1	114.7	126.3	123.7
90°	13.7	8.8	13.7	22.8	14.9	8.8
92.5°	20.4	12.5	20.4	36.3	19.1	11.2
95°	23.4	14.3	23.4	50.2	25.3	17.0
97.5°	25.8	18.9	25.8	57.6	30.7	25.6
100°	30.1	24.3	30.1	89.2	38.3	33.4
102.5°	63.0	40.2	63.0	188.4	70.6	49.9
105°	131.8	68.2	131.8	335.1	146.1	89.5
107.5°	235.3	116.8	235.3	442.5	257.5	168.0
110°	312.0	216.7	312.0	463.9	353.0	267.8



TEST NUMBER: P1433675

CATALOG NUMBER: EHBR1-60-UNV-TASM-L935-UPL12

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	335.1	292.2	335.1	444.4	389.5	348.1
115°	322.3	307.4	322.3	396.9	380.4	378.9
117.5°	294.3	297.0	294.3	337.2	343.0	366.2
120°	262.0	275.2	262.0	281.8	299.7	330.8
122.5°	233.1	247.7	233.1	242.5	256.2	287.3
125°	207.5	223.0	207.5	214.9	218.8	244.1
127.5°	189.9	200.6	189.9	194.8	192.1	208.5
130°	176.8	185.3	176.8	182.9	175.3	183.2
132.5°	167.9	173.5	167.9	175.6	166.1	167.7
135°	160.3	164.3	160.3	167.7	159.7	158.2
137.5°	154.0	157.3	154.0	162.1	155.8	153.0
140°	149.1	151.8	149.1	157.0	151.5	150.3
142.5°	143.3	145.7	143.3	152.4	148.7	147.6
145°	140.2	142.0	140.2	149.1	146.3	146.6
147.5°	137.7	138.9	137.7	145.0	143.6	143.6
150°	135.2	136.5	135.2	141.7	140.1	140.8
152.5°	131.9	134.0	131.9	137.7	136.1	136.8
155°	130.7	132.8	130.7	135.2	133.4	134.3
157.5°	130.6	133.0	130.6	134.0	133.1	133.1
160°	131.5	133.0	131.5	134.3	133.4	133.7
162.5°	131.5	133.0	131.5	134.9	134.2	134.2
165°	132.7	133.6	132.7	134.9	134.9	135.1
167.5°	133.0	133.6	133.0	136.0	136.0	136.4
170°	134.0	134.9	134.0	136.4	136.7	136.0
172.5°	135.8	136.7	135.8	139.1	138.5	138.8
175°	136.9	137.9	136.9	139.7	139.7	140.6
177.5°	138.5	139.4	138.5	139.7	139.7	139.9
180°	141.8	141.8	141.8	141.8	141.8	141.8



TEST NUMBER: P1433675  
 CATALOG NUMBER: EHBR1-60-UNV-TASM-L935-UPL12

**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	19.84	21.02	20.25	21.37	21.74	19.16	20.33	19.56	20.69	21.06
	3H	21.39	22.44	21.81	22.81	23.23	21.01	22.05	21.43	22.43	22.85
	4H	22.03	23.00	22.47	23.40	23.84	21.79	22.77	22.24	23.16	23.60
	6H	22.51	23.41	22.97	23.82	24.27	22.44	23.33	22.89	23.75	24.20
	8H	22.67	23.51	23.14	23.95	24.40	22.66	23.51	23.13	23.94	24.40
	12H	22.74	23.55	23.21	23.97	24.46	22.79	23.60	23.26	24.03	24.51
4H	2H	20.26	21.24	20.70	21.63	22.07	19.74	20.71	20.18	21.11	21.55
	3H	22.06	22.86	22.51	23.31	23.77	21.80	22.60	22.25	23.05	23.51
	4H	22.84	23.56	23.31	24.02	24.51	22.71	23.43	23.18	23.89	24.39
	6H	23.45	24.08	23.95	24.56	25.08	23.48	24.10	23.98	24.59	25.11
	8H	23.65	24.23	24.16	24.72	25.24	23.75	24.33	24.26	24.82	25.34
	12H	23.76	24.27	24.28	24.79	25.32	23.92	24.43	24.45	24.96	25.48
8H	4H	23.09	23.67	23.60	24.16	24.68	22.99	23.57	23.50	24.06	24.58
	6H	23.83	24.30	24.37	24.84	25.37	23.90	24.37	24.43	24.90	25.43
	8H	24.10	24.52	24.66	25.07	25.62	24.25	24.67	24.81	25.22	25.76
	12H	24.28	24.64	24.83	25.18	25.80	24.50	24.87	25.05	25.40	26.02
12H	4H	23.10	23.61	23.62	24.13	24.66	23.00	23.51	23.53	24.04	24.56
	6H	23.87	24.29	24.43	24.85	25.39	23.94	24.36	24.50	24.91	25.46
	8H	24.19	24.56	24.75	25.09	25.71	24.35	24.71	24.90	25.25	25.87

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-6

Test Date: 08/01/2025

Luminaire Tested: EHBR-60-L935-N

Data in this report applies to families of products including EHBR-60-L935-N

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2506-472-6  
 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-L935-N**  
 Description: Elevate Round Highbay at, 60000 lumens, 3500K 90CRI LEDs with N lens

**Spectral Parameters**

CCT (K): 3406  
 CIE u': 0.2394  
 CIE v': 0.5094  
 Duv: -0.0028  
 CIE x: 0.4076  
 CIE y: 0.3856  
 CIE z: 0.2068  
 Peak Wavelength (nm): 630  
 Dominant Wavelength (nm): 582  
 Purity: 38.0517  
 Rf: 91.3  
 Rg: 100

CRI (Ra):	94.6		
R1:	96.6	R9:	63.8
R2:	98.4	R10:	94.7
R3:	98.1	R11:	96.6
R4:	95.8	R12:	80.9
R5:	96.2	R13:	97.4
R6:	95.4	R14:	98.3
R7:	91.8	R15:	93.1
R8:	84.4		



**Test Conditions**

Stabilization Time: 35M  
 Operation Time: 1H 35M  
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-6

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: SP1-2506-472-6

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-6

**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-6

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.62**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-6

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 3.3**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

**Summary**

$R_f = 91.3$   
 $R_g = 100$   
 $CIE R_a = 94.6$   
 $R_9 = 63.8$



**Color Vector Graphics**

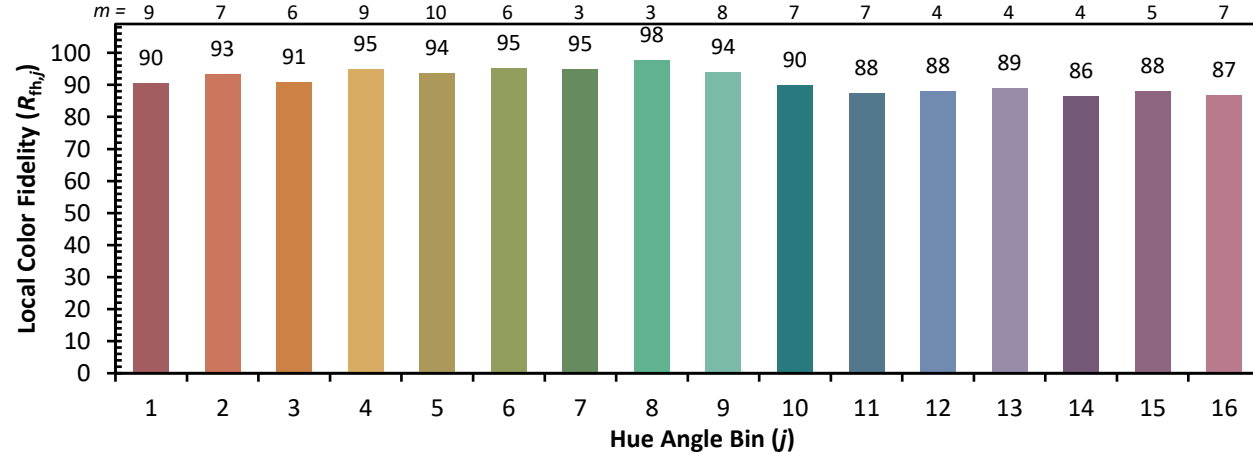


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

CES01 = 86	CES26 = 94	CES51 = 97	CES76 = 90
CES02 = 63	CES27 = 92	CES52 = 98	CES77 = 86
CES03 = 31	CES28 = 97	CES53 = 98	CES78 = 86
CES04 = 70	CES29 = 97	CES54 = 93	CES79 = 90
CES05 = 50	CES30 = 92	CES55 = 92	CES80 = 91
CES06 = 51	CES31 = 97	CES56 = 96	CES81 = 74
CES07 = 43	CES32 = 89	CES57 = 94	CES82 = 96
CES08 = 41	CES33 = 99	CES58 = 95	CES83 = 94
CES09 = 29	CES34 = 94	CES59 = 98	CES84 = 95
CES10 = 75	CES35 = 97	CES60 = 92	CES85 = 79
CES11 = 58	CES36 = 81	CES61 = 93	CES86 = 79
CES12 = 64	CES37 = 96	CES62 = 86	CES87 = 92
CES13 = 44	CES38 = 87	CES63 = 94	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 91	CES89 = 84
CES15 = 72	CES40 = 97	CES65 = 90	CES90 = 96
CES16 = 48	CES41 = 96	CES66 = 89	CES91 = 75
CES17 = 49	CES42 = 94	CES67 = 88	CES92 = 76
CES18 = 56	CES43 = 93	CES68 = 89	CES93 = 86
CES19 = 71	CES44 = 99	CES69 = 90	CES94 = 74
CES20 = 67	CES45 = 97	CES70 = 88	CES95 = 83
CES21 = 86	CES46 = 97	CES71 = 83	CES96 = 92
CES22 = 78	CES47 = 91	CES72 = 94	CES97 = 96
CES23 = 91	CES48 = 91	CES73 = 83	CES98 = 95
CES24 = 90	CES49 = 96	CES74 = 90	CES99 = 92
CES25 = 71	CES50 = 98	CES75 = 85	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)