

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: P1433678

Luminaire Tested: EHBR1-60-UNV-TASM-L935-UPL24

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433678
REPORT IS A COMBINATION OF REPORTS P1431903 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-UPL24
Description: Elevate Round Highbay at, 60000 lumens, 3500K 90CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

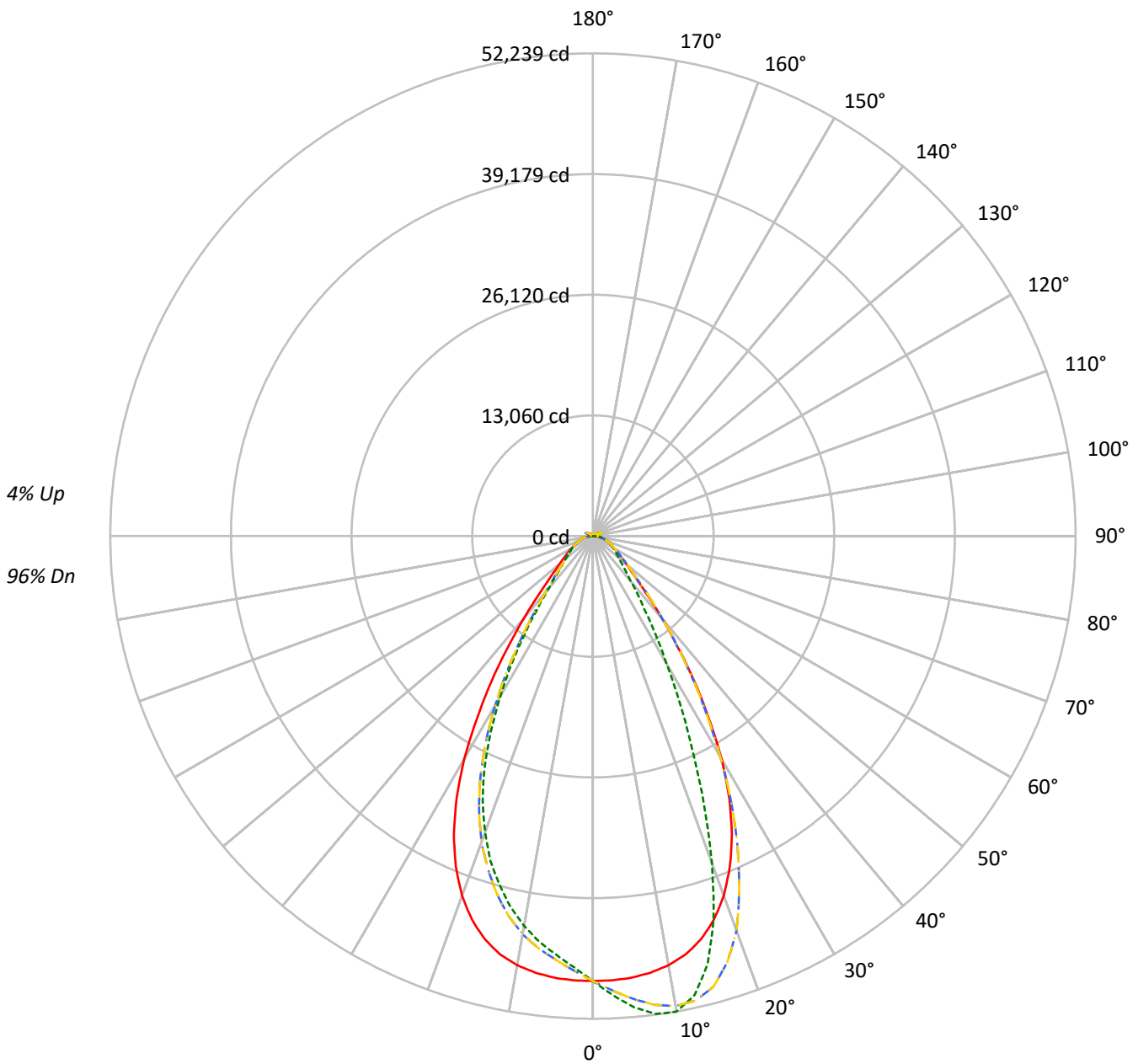
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 56035.8 lumens
Efficiency: N/A
Efficacy: 161.5 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): 346.9
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: P1433678
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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	109	109	109	103	103	103	98	98	98	98	96	
1	111	107	104	102	108	105	102	100	100	98	96	96	94	92	91	90	89	89	87	
2	104	98	93	89	101	96	91	88	92	88	85	88	85	83	85	82	80	80	78	
3	98	90	84	79	95	88	83	78	85	80	76	82	78	75	79	76	73	73	71	
4	92	83	76	71	89	81	75	70	78	73	69	76	71	68	73	70	67	67	65	
5	86	76	70	65	84	75	69	64	73	67	63	71	66	62	69	65	61	61	60	
6	81	71	64	59	79	70	64	59	68	62	58	66	61	57	64	60	57	57	55	
7	77	66	59	55	75	65	59	54	64	58	54	62	57	53	60	56	53	53	51	
8	73	62	55	51	71	61	55	50	60	54	50	58	53	49	57	52	49	49	47	
9	69	58	51	47	67	57	51	47	56	50	46	55	50	46	54	49	46	46	44	
10	65	55	48	44	64	54	48	44	53	47	43	52	47	43	51	46	43	43	41	

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4577.6	8.2
10°-20°	12453.7	22.2
20°-30°	14605.6	26.1
30°-40°	10157.3	18.1
40°-50°	5047.7	9.0
50°-60°	3019.1	5.4
60°-70°	2124.9	3.8
70°-80°	1368.8	2.4
80°-90°	438.7	0.8
90°-100°	60.6	0.1
100°-110°	387.4	0.7
110°-120°	714.2	1.3
120°-130°	425.7	0.8
130°-140°	259.2	0.5
140°-150°	181.0	0.3
150°-160°	119.9	0.2
160°-170°	70.6	0.1
170°-180°	23.9	0.0
0°-30°	31636.9	56.5
0°-40°	41794.2	74.6
0°-60°	49860.9	89.0
0°-90°	53793.3	96.0
90°-120°	1162.2	2.1
90°-150°	2028.1	3.6
90°-180°	2242.0	4.0
0°-180°	56035.8	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°	17	23	17	17	17	25
95°	32	34	32	28	32	34
105°	178	95	178	135	178	240
115°	760	652	760	617	760	692
125°	488	514	488	446	488	449
135°	311	360	311	327	311	247
145°	284	297	284	276	284	178
155°	256	267	256	250	256	119
165°	247	258	247	243	247	70
175°	251	259	251	246	251	24
180°	252	252	252	252	252	



TEST NUMBER: P1433678
 CATALOG NUMBER: EHBR1-60-UNV-TASM-L935-UPL24

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°	16.9	28.7	49.3	29.9	23.2	29.9	49.3	28.7	16.9	29.1	45.0
92.5°	21.8	38.5	68.9	38.5	29.3	38.5	68.9	38.5	21.8	37.6	72.0
95°	32.4	47.1	87.3	42.1	34.2	42.1	87.3	47.1	32.4	49.9	100.1
97.5°	49.6	58.2	98.2	44.7	40.3	44.7	98.2	58.2	49.6	60.9	114.8
100°	65.5	65.5	177.9	50.8	45.2	50.8	177.9	65.5	65.5	75.3	178.5
102.5°	98.6	127.7	410.3	98.2	53.8	98.2	410.3	127.7	98.6	140.2	378.2
105°	178.2	289.4	720.3	246.4	95.2	246.4	720.3	289.4	178.2	292.1	673.4
107.5°	336.2	538.0	927.3	481.6	214.0	481.6	927.3	538.0	336.2	516.3	888.7
110°	537.1	751.2	1011.7	658.0	427.1	658.0	1011.7	751.2	537.1	708.7	931.5



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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°	698.8	836.9	988.5	729.1	588.8	729.1	988.5	836.9	698.8	782.1	892.4
115°	759.8	824.7	883.1	726.6	652.5	726.6	883.1	824.7	759.8	763.8	796.8
117.5°	734.0	754.9	763.1	682.6	656.2	682.6	763.1	754.9	734.0	687.5	676.8
120°	663.0	654.4	643.9	617.6	619.4	617.6	643.9	654.4	663.0	600.5	565.3
122.5°	574.4	556.1	544.7	552.3	569.2	552.3	544.7	556.1	574.4	512.0	485.3
125°	487.5	469.1	475.8	496.0	513.7	496.0	475.8	469.1	487.5	435.8	428.7
127.5°	414.9	406.3	425.6	448.3	463.5	448.3	425.6	406.3	414.9	381.8	388.3
130°	363.2	364.7	390.1	409.9	419.4	409.9	390.1	364.7	363.2	347.2	363.4
132.5°	331.0	339.9	364.1	381.5	387.3	381.5	364.1	339.9	331.0	327.0	346.9
135°	311.1	323.9	346.6	357.3	360.3	357.3	346.6	323.9	311.1	313.1	331.0
137.5°	299.7	312.6	329.5	338.6	337.1	338.6	329.5	312.6	299.7	304.3	318.0
140°	293.3	306.2	313.5	323.9	323.2	323.9	313.5	306.2	293.3	295.7	306.7
142.5°	286.9	298.5	302.2	310.1	308.5	310.1	302.2	298.5	286.9	289.3	296.6
145°	284.0	292.9	289.6	299.1	297.1	299.1	289.6	292.9	284.0	284.4	288.9
147.5°	277.9	284.4	280.7	288.9	287.0	288.9	280.7	284.4	277.9	277.9	280.0
150°	271.4	276.2	270.5	280.0	280.5	280.0	270.5	276.2	271.4	270.2	272.3
152.5°	262.5	267.4	262.5	273.2	272.9	273.2	262.5	267.4	262.5	261.3	263.4
155°	255.8	258.2	255.8	266.5	267.4	266.5	255.8	258.2	255.8	254.9	256.7
157.5°	251.4	253.6	252.3	261.8	262.7	261.8	252.3	253.6	251.4	251.4	252.3
160°	248.9	251.3	251.1	259.3	260.2	259.3	251.1	251.3	248.9	249.2	250.1
162.5°	248.2	248.2	248.9	257.1	258.9	257.1	248.9	248.2	248.2	248.2	249.5
165°	247.3	248.5	247.9	254.6	257.7	254.6	247.9	248.5	247.3	247.6	247.6
167.5°	247.9	246.7	248.5	254.9	257.9	254.9	248.5	246.7	247.9	248.2	248.2
170°	246.3	247.2	247.9	254.2	257.2	254.2	247.9	247.2	246.3	247.6	247.9
172.5°	249.1	249.1	249.3	254.4	258.7	254.4	249.3	249.1	249.1	249.4	250.6
175°	250.9	250.6	251.1	255.0	259.3	255.0	251.1	250.6	250.9	250.0	250.0
177.5°	249.7	251.5	253.2	257.1	262.7	257.1	253.2	251.5	249.7	250.0	250.0
180°	251.5	251.5	251.5	251.5	251.5	251.5	251.5	251.5	251.5	251.5	251.5



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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°	26.6	16.9	26.6	45.0	29.1	16.9
92.5°	40.2	24.2	40.2	72.0	37.6	21.8
95°	46.2	27.8	46.2	100.1	49.9	32.4
97.5°	51.1	36.1	51.1	114.8	60.9	49.6
100°	59.7	47.1	59.7	178.5	75.3	65.5
102.5°	125.9	78.9	125.9	378.2	140.2	98.6
105°	264.3	135.3	264.3	673.4	292.1	178.2
107.5°	472.6	233.3	472.6	888.7	516.3	336.2
110°	626.8	434.2	626.8	931.5	708.7	537.1



TEST NUMBER: P1433678

CATALOG NUMBER: EHBR1-60-UNV-TASM-L935-UPL24

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	673.4	586.1	673.4	892.4	782.1	698.8
115°	647.7	616.8	647.7	796.8	763.8	759.8
117.5°	591.4	595.9	591.4	676.8	687.5	734.0
120°	526.4	551.9	526.4	565.3	600.5	663.0
122.5°	467.3	496.7	467.3	485.3	512.0	574.4
125°	415.8	446.2	415.8	428.7	435.8	487.5
127.5°	380.3	400.9	380.3	388.3	381.8	414.9
130°	353.0	370.2	353.0	363.4	347.2	363.2
132.5°	334.3	345.4	334.3	346.9	327.0	331.0
135°	318.1	327.0	318.1	331.0	313.1	311.1
137.5°	304.3	312.0	304.3	318.0	304.3	299.7
140°	292.7	299.1	292.7	306.7	295.7	293.3
142.5°	280.1	285.0	280.1	296.6	289.3	286.9
145°	272.1	275.8	272.1	288.9	284.4	284.0
147.5°	265.3	267.7	265.3	280.0	277.9	277.9
150°	258.5	260.9	258.5	272.3	270.2	271.4
152.5°	250.9	254.2	250.9	263.4	261.3	262.5
155°	246.5	249.9	246.5	256.7	254.9	255.8
157.5°	244.6	247.7	244.6	252.3	251.4	251.4
160°	243.7	245.8	243.7	250.1	249.2	248.9
162.5°	241.8	244.0	241.8	249.5	248.2	248.2
165°	242.4	243.3	242.4	247.6	247.6	247.3
167.5°	242.1	243.3	242.1	248.2	248.2	247.9
170°	243.0	243.9	243.0	247.9	247.6	246.3
172.5°	244.8	245.7	244.8	250.6	249.4	249.1
175°	245.4	246.3	245.4	250.0	250.0	250.9
177.5°	247.5	248.4	247.5	250.0	250.0	249.7
180°	251.5	251.5	251.5	251.5	251.5	251.5



TEST NUMBER: P1433678
 CATALOG NUMBER: EHBR1-60-UNV-TASM-L935-UPL24

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	19.69	20.83	20.12	21.23	21.65	19.01	20.15	19.44	20.55	20.97
	3H	21.24	22.25	21.69	22.67	23.14	20.85	21.87	21.31	22.29	22.75
	4H	21.87	22.82	22.35	23.26	23.74	21.64	22.59	22.11	23.02	23.51
	6H	22.35	23.23	22.84	23.68	24.17	22.28	23.15	22.77	23.61	24.10
	8H	22.51	23.33	23.01	23.80	24.31	22.50	23.33	23.01	23.80	24.30
	12H	22.58	23.37	23.08	23.83	24.36	22.63	23.42	23.14	23.88	24.41
4H	2H	20.10	21.05	20.58	21.49	21.97	19.58	20.53	20.06	20.97	21.45
	3H	21.90	22.69	22.39	23.17	23.67	21.64	22.43	22.13	22.91	23.41
	4H	22.68	23.38	23.18	23.88	24.42	22.55	23.25	23.06	23.75	24.29
	6H	23.29	23.90	23.83	24.42	24.98	23.32	23.93	23.86	24.45	25.01
	8H	23.49	24.06	24.03	24.58	25.14	23.59	24.16	24.13	24.68	25.25
	12H	23.60	24.10	24.15	24.65	25.22	23.76	24.26	24.32	24.82	25.39
8H	4H	22.93	23.49	23.47	24.02	24.58	22.83	23.40	23.37	23.92	24.48
	6H	23.67	24.13	24.24	24.70	25.27	23.73	24.19	24.31	24.77	25.34
	8H	23.94	24.35	24.53	24.94	25.52	24.09	24.50	24.68	25.08	25.67
	12H	24.11	24.47	24.70	25.04	25.70	24.34	24.70	24.92	25.26	25.93
12H	4H	22.94	23.44	23.49	23.99	24.56	22.84	23.34	23.40	23.90	24.47
	6H	23.71	24.12	24.30	24.71	25.30	23.78	24.19	24.37	24.78	25.36
	8H	24.03	24.39	24.62	24.96	25.62	24.19	24.54	24.77	25.11	25.77

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 [^] /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	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 [^] /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	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 [^] /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	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)