

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: P1433190

Luminaire Tested: EHBR1-30-UNV-TASM-L930-UPL30

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433190
REPORT IS A COMBINATION OF REPORTS P1431744 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-30-UNV-TASM-L930-UPL30
Description: Elevate Round Highbay at, 30000 lumens, 3000K 90CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

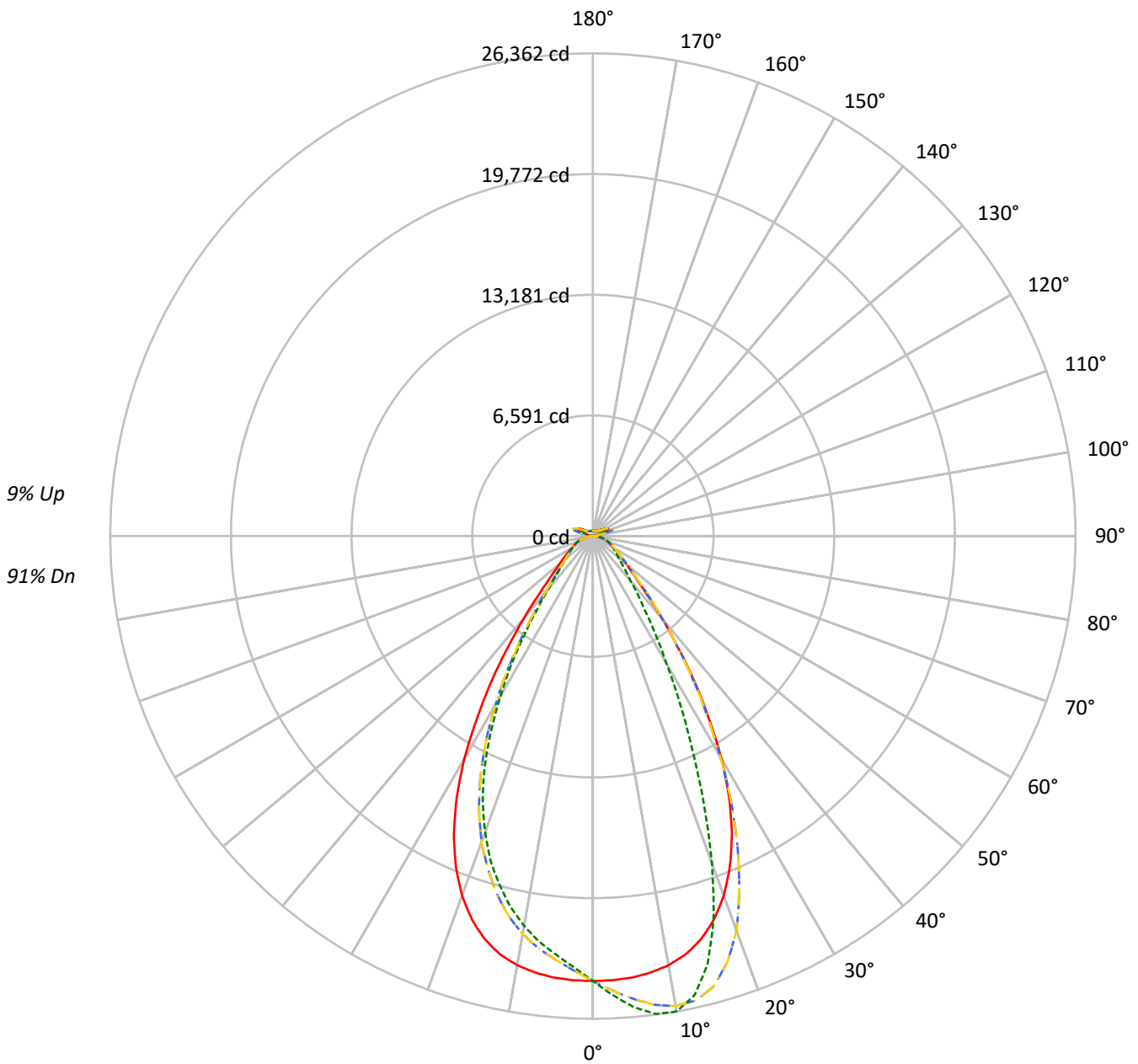
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29882.5 lumens
Efficiency: N/A
Efficacy: 164.4 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): 181.8
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

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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	0
RCR																					
0	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	94	94	94	91
1	110	106	103	100	106	103	100	98	97	95	93	92	90	89	87	86	85	85	85	85	82
2	103	97	92	87	99	94	90	86	89	86	82	85	82	79	81	78	76	76	76	76	74
3	96	88	82	78	93	86	81	76	82	78	74	78	75	72	75	72	69	69	69	69	67
4	90	81	75	70	88	79	73	69	76	71	67	73	69	65	70	66	63	63	63	63	61
5	85	75	68	63	82	73	67	62	71	65	61	68	63	60	65	61	58	58	58	58	56
6	80	70	63	58	78	68	62	57	66	60	56	63	59	55	61	57	54	54	54	54	52
7	75	65	58	53	73	64	57	53	61	56	52	59	54	51	57	53	50	50	50	50	48
8	71	60	54	49	69	59	53	49	58	52	48	56	51	47	54	50	46	46	46	46	45
9	67	57	50	46	66	56	50	45	54	49	45	53	48	44	51	47	43	43	43	43	42
10	64	53	47	43	62	52	46	42	51	46	42	50	45	41	48	44	41	41	41	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	114088	114088	114088	114088
5°	113393	120970	113393	107509
10°	111999	124075	111999	101748
15°	108693	115305	108693	93988
20°	101655	92458	101655	83717
25°	89973	64060	89973	70158
30°	73055	41676	73055	52492
35°	52397	26990	52397	34945
40°	33876	18603	33876	22038
45°	21494	14410	21494	15703
50°	15962	12245	15962	13079
55°	13032	11155	13032	11546
60°	11286	10626	11286	10690
65°	10287	10247	10287	10204
70°	9750	10042	9750	9912
75°	9118	9713	9118	9422
80°	8010	9172	8010	8573
85°	5182	6546	5182	6244

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 30220 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2310.0	7.7
10°-20°	6284.5	21.0
20°-30°	7370.5	24.7
30°-40°	5125.7	17.2
40°-50°	2547.2	8.5
50°-60°	1523.5	5.1
60°-70°	1072.3	3.6
70°-80°	690.8	2.3
80°-90°	224.2	0.8
90°-100°	72.8	0.2
100°-110°	475.3	1.6
110°-120°	878.0	2.9
120°-130°	521.9	1.7
130°-140°	315.6	1.1
140°-150°	218.4	0.7
150°-160°	142.6	0.5
160°-170°	81.9	0.3
170°-180°	27.3	0.1
0°-30°	15965.0	53.4
0°-40°	21090.7	70.6
0°-60°	25161.4	84.2
0°-90°	27148.7	90.9
90°-120°	1426.1	4.8
90°-150°	2482.0	8.3
90°-180°	2734.0	9.1
0°-180°	29882.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	24294	24294	24294	24294	24294	
5°	24211	25829	24211	22955	24211	2298
15°	22803	24190	22803	19718	22803	6373
25°	17968	12793	17968	14010	17968	8134
35°	9617	4954	9617	6414	9617	6003
45°	3478	2332	3478	2541	3478	2846
55°	1761	1508	1761	1560	1761	1611
65°	1074	1070	1074	1065	1074	1078
75°	642	684	642	664	642	674
85°	178	225	178	215	178	198
90°	20	23	20	20	20	18
95°	39	37	39	34	39	41
105°	218	111	218	166	218	294
115°	934	798	934	759	934	852
125°	598	627	598	548	598	551
135°	378	437	378	400	378	300
145°	342	358	342	333	342	214
155°	305	318	305	296	305	142
165°	287	296	287	282	287	82
175°	286	291	286	281	286	27
180°	286	286	286	286	286	



TEST NUMBER: P1433190
 CATALOG NUMBER: EHBR1-30-UNV-TASM-L930-UPL30

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	24294.2	24294.2	24294.2	24294.2	24294.2	24294.2	24294.2	24294.2	24294.2	24294.2	24294.2
2.5°	24280.1	24593.9	24848.2	25015.8	25098.7	25015.8	24848.2	24593.9	24280.1	23968.0	23753.4
5°	24211.3	24840.0	25372.5	25721.0	25829.0	25721.0	25372.5	24840.0	24211.3	23617.3	23223.2
7.5°	24046.9	25026.2	25817.6	26224.4	26323.7	26224.4	25817.6	25026.2	24046.9	23205.9	22707.9
10°	23795.8	25143.8	26058.1	26349.7	26361.5	26349.7	26058.1	25143.8	23795.8	22662.8	22075.7
12.5°	23395.4	25101.9	25977.4	25881.8	25664.5	25881.8	25977.4	25101.9	23395.4	21999.6	21258.9
15°	22803.2	24853.6	25466.8	24688.2	24190.4	24688.2	25466.8	24853.6	22803.2	21104.0	20244.8
17.5°	21968.6	24389.0	24400.8	22860.6	21921.2	22860.6	24400.8	24389.0	21968.6	20008.9	19062.6
20°	20893.0	23643.6	22933.0	20115.9	19002.9	20115.9	22933.0	23643.6	20893.0	18714.1	17785.7
22.5°	19544.6	22638.7	20888.9	17354.8	15836.4	17354.8	20888.9	22638.7	19544.6	17208.5	16242.3
25°	17967.5	21407.3	18690.0	14346.3	12792.8	14346.3	18690.0	21407.3	17967.5	15414.6	14540.8
27.5°	16112.4	19846.7	16348.4	11723.2	10290.1	11723.2	16348.4	19846.7	16112.4	13562.3	12669.9
30°	14052.0	17845.9	13911.7	9336.1	8016.3	9336.1	13911.7	17845.9	14052.0	11481.3	10682.3
32.5°	11745.0	15884.7	11571.5	7480.7	6362.7	7480.7	11571.5	15884.7	11745.0	9495.5	8660.5
35°	9616.7	13431.1	9461.4	5878.0	4953.7	5878.0	9461.4	13431.1	9616.7	7620.9	6800.9
37.5°	7547.2	11112.8	7542.2	4733.2	4018.0	4733.2	7542.2	11112.8	7547.2	5924.9	5259.3
40°	5871.6	8689.2	5909.4	3778.3	3224.4	3778.3	5909.4	8689.2	5871.6	4508.2	4082.2
42.5°	4448.9	6644.3	4644.8	3101.0	2738.8	3101.0	4644.8	6644.3	4448.9	3551.9	3233.1
45°	3477.7	4889.4	3627.1	2616.2	2331.5	2616.2	3627.1	4889.4	3477.7	2860.4	2646.3
47.5°	2832.1	3778.8	2939.7	2244.1	2044.5	2244.1	2939.7	3778.8	2832.1	2419.4	2259.1
50°	2378.9	2899.6	2440.8	1958.9	1825.0	1958.9	2440.8	2899.6	2378.9	2071.9	1964.8
52.5°	2043.7	2364.8	2078.7	1745.7	1655.5	1745.7	2078.7	2364.8	2043.7	1812.7	1746.1
55°	1761.2	1988.0	1807.7	1569.8	1507.5	1569.8	1807.7	1988.0	1761.2	1613.1	1564.0
57.5°	1546.6	1686.5	1569.8	1419.9	1378.5	1419.9	1569.8	1686.5	1546.6	1435.4	1409.1
60°	1356.7	1460.5	1385.4	1289.2	1277.4	1289.2	1385.4	1460.5	1356.7	1291.5	1274.2
62.5°	1210.4	1276.0	1225.0	1171.7	1161.2	1171.7	1225.0	1276.0	1210.4	1160.3	1163.5
65°	1073.7	1134.8	1094.7	1066.0	1069.6	1066.0	1094.7	1134.8	1073.7	1050.5	1055.6
67.5°	968.0	999.9	982.7	966.3	970.4	966.3	982.7	999.9	968.0	945.2	953.0
70°	855.5	889.7	871.9	874.2	881.1	874.2	871.9	889.7	855.5	848.7	854.6
72.5°	748.0	774.4	768.5	774.0	781.3	774.0	768.5	774.4	748.0	747.1	747.6
75°	642.3	662.4	665.1	672.8	684.2	672.8	665.1	662.4	642.3	635.5	643.7
77.5°	527.1	549.8	558.5	569.0	585.8	569.0	558.5	549.8	527.1	531.7	535.8
80°	421.4	431.8	451.0	458.8	482.5	458.8	451.0	431.8	421.4	413.7	419.5
82.5°	308.4	318.0	334.4	349.0	362.6	349.0	334.4	318.0	308.4	304.8	305.2
85°	178.1	192.7	203.6	220.9	225.0	220.9	203.6	192.7	178.1	182.2	178.1
87.5°	62.4	66.9	76.5	83.4	83.9	83.4	76.5	66.9	62.4	63.8	57.8
90°	20.1	34.1	58.7	33.0	23.3	33.0	58.7	34.1	20.1	35.2	54.8
92.5°	26.1	46.2	82.9	43.5	30.8	43.5	82.9	46.2	26.1	45.7	88.0
95°	38.7	56.8	105.5	48.0	36.9	48.0	105.5	56.8	38.7	60.9	122.7
97.5°	59.8	70.3	119.1	51.1	44.4	51.1	119.1	70.3	59.8	74.4	140.9
100°	79.4	79.4	217.3	58.6	50.4	58.6	217.3	79.4	79.4	91.5	219.4
102.5°	120.2	155.3	503.0	116.5	61.0	116.5	503.0	155.3	120.2	171.5	465.4
105°	218.3	354.7	885.1	299.2	111.3	299.2	885.1	354.7	218.3	358.8	829.4
107.5°	413.0	661.1	1140.2	589.0	257.7	589.0	1140.2	661.1	413.0	635.0	1094.1
110°	660.7	923.8	1244.4	806.5	520.5	806.5	1244.4	923.8	660.7	872.1	1146.9



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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°	860.0	1029.5	1215.7	894.0	719.8	894.0	1215.7	1029.5	860.0	962.7	1098.6
115°	934.4	1014.5	1085.9	891.1	798.3	891.1	1085.9	1014.5	934.4	940.1	980.8
117.5°	902.7	928.4	937.9	836.7	802.8	836.7	937.9	928.4	902.7	845.3	832.9
120°	815.1	804.6	790.4	756.7	757.6	756.7	790.4	804.6	815.1	738.1	695.4
122.5°	705.4	682.7	668.2	675.6	695.6	675.6	668.2	682.7	705.4	628.3	596.3
125°	598.2	575.5	582.5	606.1	626.6	606.1	582.5	575.5	598.2	533.8	525.7
127.5°	508.1	497.5	520.6	547.2	564.7	547.2	520.6	497.5	508.1	467.3	475.9
130°	443.6	446.2	476.8	499.3	510.4	499.3	476.8	446.2	443.6	424.0	444.7
132.5°	403.3	414.9	444.1	463.6	470.0	463.6	444.1	414.9	403.3	397.7	422.9
135°	378.1	395.3	421.9	434.4	436.8	434.4	421.9	395.3	378.1	380.1	403.3
137.5°	363.4	380.7	400.7	410.7	408.1	410.7	400.7	380.7	363.4	368.4	386.1
140°	354.9	372.1	381.1	392.5	390.5	392.5	381.1	372.1	354.9	357.9	371.4
142.5°	346.2	362.0	366.4	374.9	372.3	374.9	366.4	362.0	346.2	349.2	358.3
145°	342.1	353.8	350.3	361.4	357.7	361.4	350.3	353.8	342.1	343.2	348.2
147.5°	334.6	343.2	338.6	348.2	344.6	348.2	338.6	343.2	334.6	334.6	336.6
150°	326.0	332.0	325.5	336.6	336.0	336.6	325.5	332.0	326.0	324.5	326.5
152.5°	314.4	320.5	314.4	327.0	325.9	327.0	314.4	320.5	314.4	312.9	314.8
155°	304.8	307.8	304.8	317.2	317.7	317.2	304.8	307.8	304.8	304.3	305.2
157.5°	298.1	300.0	298.5	309.6	310.0	309.6	298.5	300.0	298.1	298.1	298.5
160°	292.3	295.3	294.3	303.9	304.3	303.9	294.3	295.3	292.3	293.4	293.8
162.5°	290.2	290.2	289.7	299.2	300.0	299.2	289.7	290.2	290.2	290.2	291.8
165°	287.1	288.6	286.5	293.4	295.9	293.4	286.5	288.6	287.1	288.2	288.2
167.5°	286.5	285.0	285.9	291.8	294.3	291.8	285.9	285.0	286.5	287.6	287.6
170°	283.9	284.4	283.8	289.7	292.1	289.7	283.8	284.4	283.9	285.4	286.5
172.5°	285.3	285.3	283.6	288.0	292.0	288.0	283.6	285.3	285.3	286.4	287.9
175°	286.2	285.2	284.5	287.5	291.4	287.5	284.5	285.2	286.2	285.8	285.8
177.5°	284.7	285.6	286.5	289.4	294.9	289.4	286.5	285.6	284.7	285.8	285.8
180°	285.6	285.6	285.6	285.6	285.6	285.6	285.6	285.6	285.6	285.6	285.6



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	24294.2	24294.2	24294.2	24294.2	24294.2	24294.2
2.5°	23588.6	23573.1	23588.6	23753.4	23968.0	24280.1
5°	23040.5	22954.9	23040.5	23223.2	23617.3	24211.3
7.5°	22402.3	22352.6	22402.3	22707.9	23205.9	24046.9
10°	21730.4	21617.8	21730.4	22075.7	22662.8	23795.8
12.5°	20902.1	20753.2	20902.1	21258.9	21999.6	23395.4
15°	19848.9	19718.2	19848.9	20244.8	21104.0	22803.2
17.5°	18718.7	18600.2	18718.7	19062.6	20008.9	21968.6
20°	17299.2	17206.2	17299.2	17785.7	18714.1	20893.0
22.5°	15810.0	15723.0	15810.0	16242.3	17208.5	19544.6
25°	14057.9	14010.5	14057.9	14540.8	15414.6	17967.5
27.5°	12164.7	12084.0	12164.7	12669.9	13562.3	16112.4
30°	10230.4	10096.9	10230.4	10682.3	11481.3	14052.0
32.5°	8338.5	8242.3	8338.5	8660.5	9495.5	11745.0
35°	6509.9	6413.7	6509.9	6800.9	7620.9	9616.7
37.5°	5072.5	4902.7	5072.5	5259.3	5924.9	7547.2
40°	3847.1	3819.8	3847.1	4082.2	4508.2	5871.6
42.5°	3131.9	3057.7	3131.9	3233.1	3551.9	4448.9
45°	2569.8	2540.6	2569.8	2646.3	2860.4	3477.7
47.5°	2209.8	2222.7	2209.8	2259.1	2419.4	2832.1
50°	1941.5	1949.3	1941.5	1964.8	2071.9	2378.9
52.5°	1743.9	1737.0	1743.9	1746.1	1812.7	2043.7
55°	1568.9	1560.3	1568.9	1564.0	1613.1	1761.2
57.5°	1415.8	1422.3	1415.8	1409.1	1435.4	1546.6
60°	1279.2	1285.1	1279.2	1274.2	1291.5	1356.7
62.5°	1163.9	1167.6	1163.9	1163.5	1160.3	1210.4
65°	1061.0	1065.1	1061.0	1055.6	1050.5	1073.7
67.5°	962.6	962.6	962.6	953.0	945.2	968.0
70°	870.1	869.7	870.1	854.6	848.7	855.5
72.5°	759.0	769.9	759.0	747.6	747.1	748.0
75°	651.0	663.7	651.0	643.7	635.5	642.3
77.5°	541.6	561.2	541.6	535.8	531.7	527.1
80°	429.6	451.0	429.6	419.5	413.7	421.4
82.5°	317.5	333.5	317.5	305.2	304.8	308.4
85°	189.0	214.6	189.0	178.1	182.2	178.1
87.5°	60.6	77.4	60.6	57.8	63.8	62.4
90°	32.2	20.1	32.2	54.8	35.2	20.1
92.5°	48.7	29.1	48.7	88.0	45.7	26.1
95°	56.3	33.7	56.3	122.7	60.9	38.7
97.5°	62.4	43.1	62.4	140.9	74.4	59.8
100°	72.9	56.8	72.9	219.4	91.5	79.4
102.5°	154.4	96.0	154.4	465.4	171.5	120.2
105°	325.1	165.5	325.1	829.4	358.8	218.3
107.5°	581.7	286.2	581.7	1094.1	635.0	413.0
110°	772.0	533.9	772.0	1146.9	872.1	660.7



TEST NUMBER: P1433190
 CATALOG NUMBER: EHBR1-30-UNV-TASM-L930-UPL30

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	829.4	721.1	829.4	1098.6	962.7	860.0
115°	797.7	758.8	797.7	980.8	940.1	934.4
117.5°	728.2	733.1	728.2	832.9	845.3	902.7
120°	648.2	678.8	648.2	695.4	738.1	815.1
122.5°	574.6	610.9	574.6	596.3	628.3	705.4
125°	511.2	547.9	511.2	525.7	533.8	598.2
127.5°	467.4	492.1	467.4	475.9	467.3	508.1
130°	433.2	454.3	433.2	444.7	424.0	443.6
132.5°	409.5	423.0	409.5	422.9	397.7	403.3
135°	388.8	400.4	388.8	403.3	380.1	378.1
137.5°	371.2	381.3	371.2	386.1	368.4	363.4
140°	355.5	364.0	355.5	371.4	357.9	354.9
142.5°	339.3	345.3	339.3	358.3	349.2	346.2
145°	328.1	332.7	328.1	348.2	343.2	342.1
147.5°	318.4	321.4	318.4	336.6	334.6	334.6
150°	308.9	311.9	308.9	326.5	324.5	326.0
152.5°	298.7	302.2	298.7	314.8	312.9	314.4
155°	292.0	295.5	292.0	305.2	304.3	304.8
157.5°	288.4	290.8	288.4	298.5	298.1	298.1
160°	285.3	287.3	285.3	293.8	293.4	292.3
162.5°	281.7	283.6	281.7	291.8	290.2	290.2
165°	281.1	281.5	281.1	288.2	288.2	287.1
167.5°	280.0	281.5	280.0	287.6	287.6	286.5
170°	280.4	280.9	280.4	286.5	285.4	283.9
172.5°	281.3	281.9	281.3	287.9	286.4	285.3
175°	280.8	281.2	280.8	285.8	285.8	286.2
177.5°	282.8	283.2	282.8	285.8	285.8	284.7
180°	285.6	285.6	285.6	285.6	285.6	285.6



TEST NUMBER: P1433190
 CATALOG NUMBER: EHBR1-30-UNV-TASM-L930-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	16.90	17.97	17.42	18.47	19.01	16.22	17.29	16.74	17.79	18.33
	3H	18.45	19.40	18.98	19.91	20.50	18.07	19.02	18.60	19.53	20.12
	4H	19.08	19.97	19.64	20.50	21.10	18.85	19.74	19.40	20.27	20.87
	6H	19.56	20.38	20.13	20.92	21.54	19.49	20.31	20.06	20.85	21.46
	8H	19.71	20.49	20.30	21.05	21.67	19.71	20.48	20.29	21.05	21.67
	12H	19.78	20.52	20.37	21.08	21.72	19.83	20.57	20.42	21.13	21.77
4H	2H	17.31	18.20	17.87	18.73	19.34	16.79	17.68	17.35	18.21	18.81
	3H	19.11	19.84	19.68	20.42	21.04	18.85	19.58	19.42	20.16	20.78
	4H	19.88	20.54	20.47	21.13	21.78	19.75	20.42	20.34	21.00	21.66
	6H	20.50	21.07	21.11	21.67	22.35	20.52	21.09	21.14	21.70	22.38
	8H	20.69	21.22	21.31	21.83	22.51	20.79	21.33	21.41	21.93	22.61
	12H	20.80	21.27	21.43	21.90	22.58	20.96	21.43	21.60	22.07	22.75
8H	4H	20.13	20.66	20.75	21.27	21.95	20.03	20.56	20.65	21.17	21.85
	6H	20.87	21.30	21.52	21.96	22.64	20.94	21.37	21.58	22.02	22.71
	8H	21.14	21.53	21.81	22.19	22.89	21.29	21.68	21.96	22.34	23.04
	12H	21.31	21.65	21.97	22.30	23.07	21.54	21.87	22.20	22.52	23.29
12H	4H	20.14	20.61	20.77	21.25	21.93	20.04	20.51	20.68	21.15	21.83
	6H	20.91	21.30	21.58	21.96	22.66	20.98	21.37	21.65	22.03	22.73
	8H	21.23	21.57	21.89	22.21	22.98	21.38	21.72	22.05	22.37	23.14

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-5

Test Date: 08/01/2025

Luminaire Tested: EHBR-60-L930-N

Data in this report applies to families of products including EHBR-60-L930-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-5
 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-L930-N**
 Description: Elevate Round Highbay at, 60000 lumens, 3000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K): 2996
 CIE u': 0.2519
 CIE v': 0.5169
 Duv: -0.0033
 CIE x: 0.4325
 CIE y: 0.3945
 CIE z: 0.1730
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 584
 Purity: 48.21818
 Rf: 91.3
 Rg: 102

CRI (Ra):	94.4		
R1:	96.8	R9:	61.4
R2:	98.1	R10:	94.4
R3:	97.8	R11:	95.7
R4:	95.6	R12:	88.5
R5:	96.9	R13:	97.3
R6:	95.7	R14:	97.8
R7:	90.9	R15:	92.3
R8:	83.0		



Test Conditions

Stabilization Time: 40M
 Operation Time: 1H 40M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-5

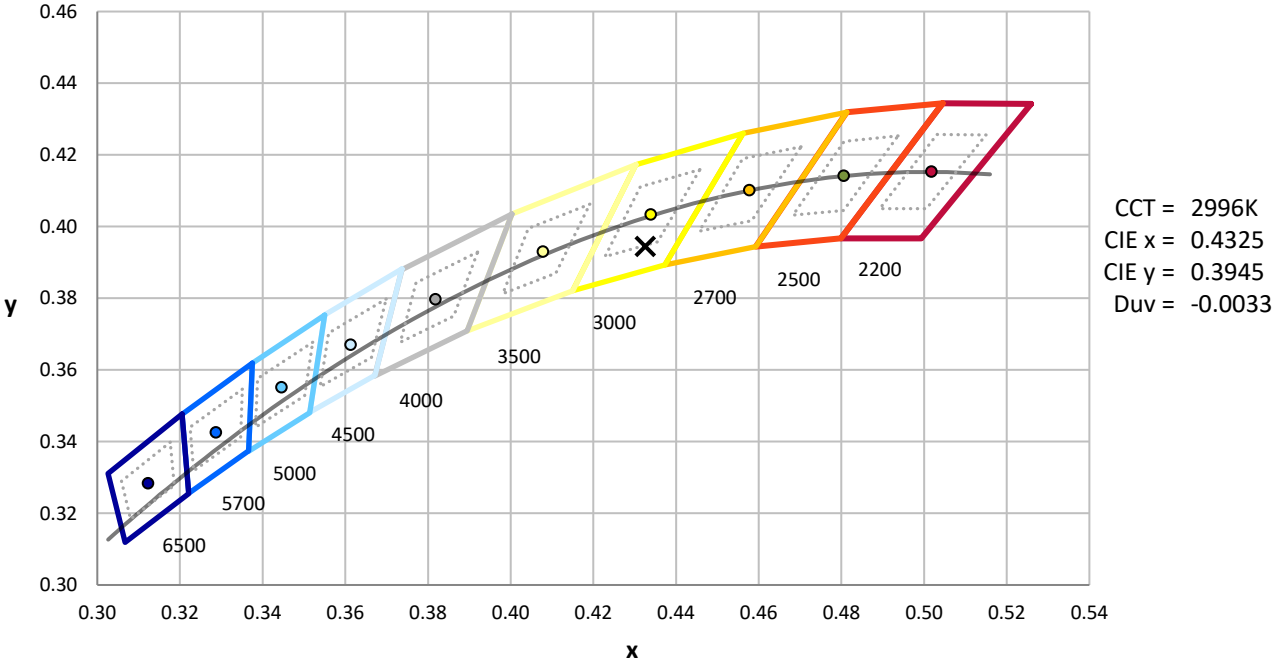
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	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: SP1-2506-472-5

CIE 1931 Chromaticity Diagram



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



CCT = 2996K
 CIE x = 0.4325
 CIE y = 0.3945
 Duv = -0.0033

Point lies inside the ANSI 3000K 7-step quadrangle

REPORT NUMBER: SP1-2506-472-5

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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-5

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.44

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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-5

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.85

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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

Summary

$R_f = 91.3$
 $R_g = 102$
 CIE $R_a = 94.4$
 $R_9 = 61.4$



Color Vector Graphics



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

CES01 = 86	CES26 = 91	CES51 = 96	CES76 = 89
CES02 = 63	CES27 = 96	CES52 = 95	CES77 = 85
CES03 = 32	CES28 = 96	CES53 = 93	CES78 = 86
CES04 = 70	CES29 = 90	CES54 = 98	CES79 = 89
CES05 = 51	CES30 = 96	CES55 = 98	CES80 = 91
CES06 = 51	CES31 = 90	CES56 = 95	CES81 = 72
CES07 = 44	CES32 = 84	CES57 = 95	CES82 = 95
CES08 = 42	CES33 = 91	CES58 = 95	CES83 = 93
CES09 = 29	CES34 = 92	CES59 = 99	CES84 = 96
CES10 = 76	CES35 = 96	CES60 = 96	CES85 = 80
CES11 = 59	CES36 = 90	CES61 = 96	CES86 = 77
CES12 = 65	CES37 = 94	CES62 = 95	CES87 = 91
CES13 = 44	CES38 = 99	CES63 = 94	CES88 = 96
CES14 = 74	CES39 = 97	CES64 = 96	CES89 = 82
CES15 = 72	CES40 = 94	CES65 = 92	CES90 = 97
CES16 = 48	CES41 = 94	CES66 = 95	CES91 = 82
CES17 = 50	CES42 = 91	CES67 = 94	CES92 = 78
CES18 = 57	CES43 = 88	CES68 = 93	CES93 = 87
CES19 = 72	CES44 = 99	CES69 = 94	CES94 = 73
CES20 = 67	CES45 = 93	CES70 = 90	CES95 = 85
CES21 = 86	CES46 = 93	CES71 = 90	CES96 = 92
CES22 = 79	CES47 = 86	CES72 = 96	CES97 = 93
CES23 = 92	CES48 = 95	CES73 = 85	CES98 = 94
CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 93
CES25 = 72	CES50 = 96	CES75 = 90	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)