

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: P1433580

Luminaire Tested: EHBR1-42-UNV-TASM-L935-UPL15

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433580
REPORT IS A COMBINATION OF REPORTS P1431905 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-42-UNV-TASM-L935-UPL15
Description: Elevate Round Highbay at, 42000 lumens, 3500K 90CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

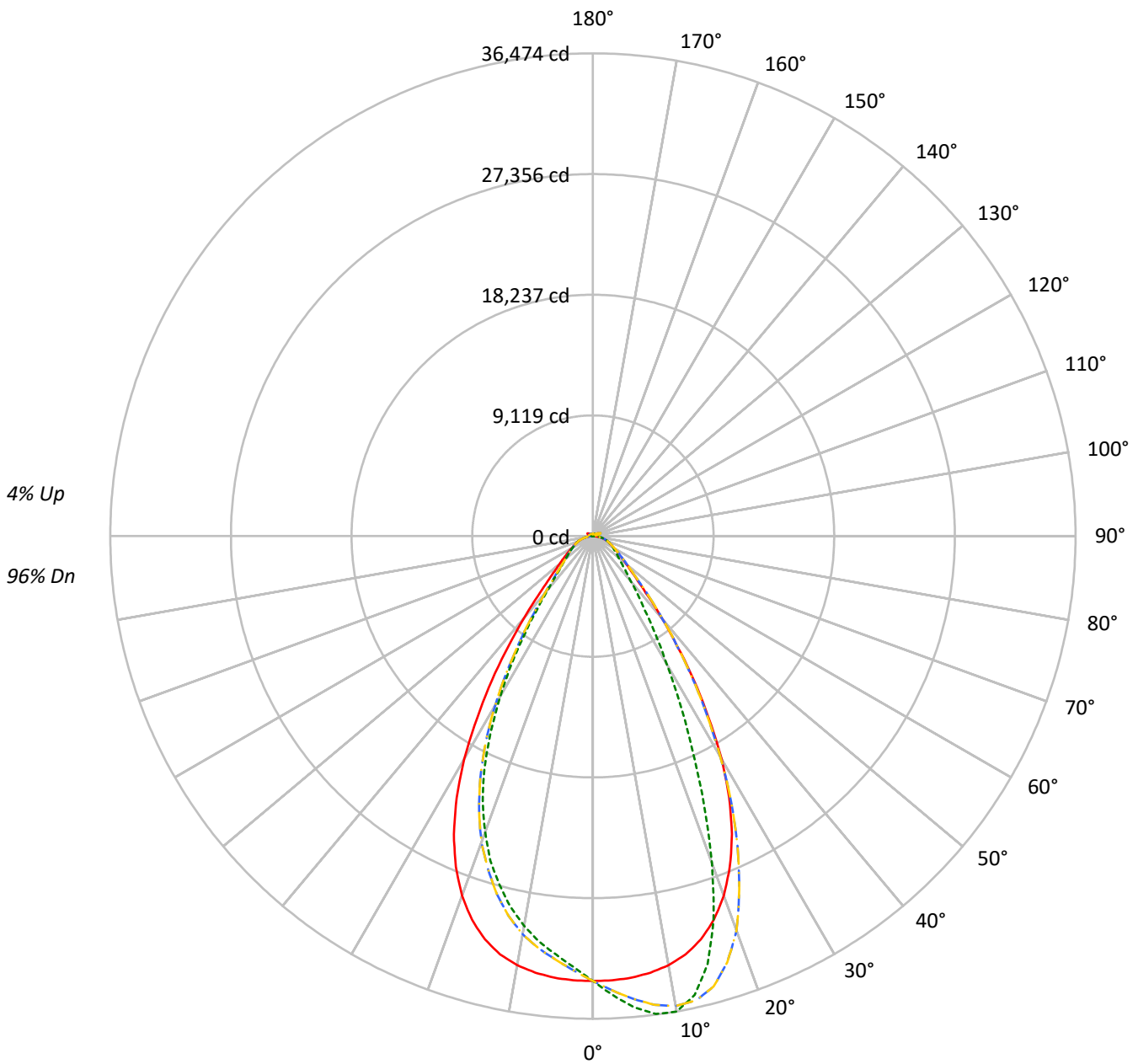
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38934.2 lumens
Efficiency: N/A
Efficacy: 166.6 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): 233.7
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: P1433580
CATALOG NUMBER: EHBR1-42-UNV-TASM-L935-UPL15

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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	96
1	111	108	105	102	108	105	102	100	100	98	96	96	94	93	92	91	89	89	89	89	87
2	104	98	93	89	101	96	92	88	92	88	85	89	86	83	85	83	81	81	81	81	79
3	98	90	84	79	95	88	83	78	85	80	77	82	78	75	79	76	73	73	73	73	71
4	92	83	76	71	90	81	75	71	79	73	69	76	72	68	74	70	67	67	67	67	65
5	86	77	70	65	84	75	69	64	73	68	63	71	66	62	69	65	62	62	62	62	60
6	81	71	64	59	80	70	64	59	68	63	58	66	61	58	65	60	57	57	57	57	55
7	77	66	59	55	75	65	59	54	64	58	54	62	57	53	61	56	53	53	53	53	51
8	73	62	55	51	71	61	55	50	60	54	50	58	53	50	57	53	49	49	49	49	48
9	69	58	52	47	68	58	51	47	56	51	47	55	50	46	54	49	46	46	46	46	44
10	66	55	48	44	64	54	48	44	53	47	44	52	47	43	51	46	43	43	43	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	157855	157855	157855	157855
5°	156893	167376	156893	148752
10°	154964	171673	154964	140781
15°	150389	159538	150389	130043
20°	140652	127927	140652	115832
25°	124488	88635	124488	97072
30°	101080	57664	101080	72630
35°	72498	37344	72498	48351
40°	46872	25739	46872	30493
45°	29740	19938	29740	21727
50°	22085	16942	22085	18097
55°	18032	15434	18032	15975
60°	15614	14702	15614	14791
65°	14234	14178	14234	14119
70°	13491	13893	13491	13713
75°	12616	13441	12616	13037
80°	11082	12688	11082	11862
85°	7169	9060	7169	8638

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 41813 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3196.2	8.2
10°-20°	8695.4	22.3
20°-30°	10197.9	26.2
30°-40°	7092.0	18.2
40°-50°	3524.4	9.1
50°-60°	2108.0	5.4
60°-70°	1483.7	3.8
70°-80°	955.7	2.5
80°-90°	305.9	0.8
90°-100°	37.3	0.1
100°-110°	237.2	0.6
110°-120°	437.1	1.1
120°-130°	260.7	0.7
130°-140°	159.0	0.4
140°-150°	111.2	0.3
150°-160°	73.9	0.2
160°-170°	43.8	0.1
170°-180°	14.9	0.0
0°-30°	22089.5	56.7
0°-40°	29181.5	75.0
0°-60°	34813.8	89.4
0°-90°	37559.2	96.5
90°-120°	711.5	1.8
90°-150°	1242.5	3.2
90°-180°	1375.0	3.5
0°-180°	38934.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	33614	33614	33614	33614	33614	
5°	33499	35738	33499	31761	33499	3179
15°	31551	33470	31551	27282	31551	8817
25°	24860	17700	24860	19385	24860	11255
35°	13306	6854	13306	8874	13306	8306
45°	4812	3226	4812	3515	4812	3937
55°	2437	2086	2437	2159	2437	2228
65°	1486	1480	1486	1474	1486	1492
75°	889	947	889	918	889	933
85°	246	311	246	297	246	274
90°	10	15	10	10	10	16
95°	20	22	20	17	20	21
105°	109	59	109	83	109	147
115°	465	400	465	377	465	424
125°	298	315	298	273	298	275
135°	191	221	191	200	191	151
145°	175	183	175	170	175	109
155°	158	165	158	154	158	74
165°	153	160	153	151	153	44
175°	156	162	156	153	156	15
180°	157	157	157	157	157	



TEST NUMBER: P1433580
 CATALOG NUMBER: EHBR1-42-UNV-TASM-L935-UPL15

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	33614.0	33614.0	33614.0	33614.0	33614.0	33614.0	33614.0	33614.0	33614.0	33614.0	33614.0
2.5°	33594.4	34028.7	34380.4	34612.4	34727.0	34612.4	34380.4	34028.7	33594.4	33162.6	32865.8
5°	33499.2	34369.0	35105.9	35588.0	35737.5	35588.0	35105.9	34369.0	33499.2	32677.3	32132.1
7.5°	33271.6	34626.9	35721.7	36284.6	36422.0	36284.6	35721.7	34626.9	33271.6	32108.1	31419.2
10°	32924.3	34789.5	36054.5	36457.9	36474.3	36457.9	36054.5	34789.5	32924.3	31356.8	30544.3
12.5°	32370.3	34731.5	35943.0	35810.5	35509.9	35810.5	35943.0	34731.5	32370.3	30439.1	29414.1
15°	31550.9	34388.0	35236.4	34159.1	33470.2	34159.1	35236.4	34388.0	31550.9	29199.9	28011.1
17.5°	30396.2	33745.0	33761.4	31630.4	30330.6	31630.4	33761.4	33745.0	30396.2	27684.6	26375.5
20°	28908.0	32713.9	31730.5	27832.7	26292.8	27832.7	31730.5	32713.9	28908.0	25893.2	24608.7
22.5°	27042.3	31323.4	28902.3	24012.4	21911.5	24012.4	28902.3	31323.4	27042.3	23810.0	22473.2
25°	24860.2	29619.7	25859.9	19849.8	17700.4	19849.8	25859.9	29619.7	24860.2	21327.8	20119.0
27.5°	22293.5	27460.2	22620.0	16220.5	14237.5	16220.5	22620.0	27460.2	22293.5	18765.0	17530.2
30°	19442.6	24691.9	19248.5	12917.6	11091.6	12917.6	19248.5	24691.9	19442.6	15885.8	14780.2
32.5°	16250.7	21978.4	16010.6	10350.4	8803.5	10350.4	16010.6	21978.4	16250.7	13138.3	11982.9
35°	13305.9	18583.5	13090.9	8133.0	6854.0	8133.0	13090.9	18583.5	13305.9	10544.5	9410.0
37.5°	10442.4	15375.9	10435.5	6549.0	5559.3	6549.0	10435.5	15375.9	10442.4	8197.8	7276.9
40°	8124.1	12022.6	8176.5	5227.8	4461.3	5227.8	8176.5	12022.6	8124.1	6237.5	5648.2
42.5°	6155.6	9193.1	6426.7	4290.6	3789.5	4290.6	6426.7	9193.1	6155.6	4914.6	4473.4
45°	4811.8	6765.1	5018.5	3619.9	3225.9	3619.9	5018.5	6765.1	4811.8	3957.8	3661.5
47.5°	3918.6	5228.4	4067.4	3104.9	2828.8	3104.9	4067.4	5228.4	3918.6	3347.6	3125.8
50°	3291.5	4012.0	3377.3	2710.4	2525.0	2710.4	3377.3	4012.0	3291.5	2866.6	2718.5
52.5°	2827.6	3271.9	2876.1	2415.4	2290.6	2415.4	2876.1	3271.9	2827.6	2508.0	2416.0
55°	2436.8	2750.7	2501.1	2172.0	2085.7	2172.0	2501.1	2750.7	2436.8	2231.9	2163.9
57.5°	2139.9	2333.4	2172.0	1964.7	1907.3	1964.7	2172.0	2333.4	2139.9	1986.1	1949.5
60°	1877.1	2020.8	1916.8	1783.7	1767.4	1783.7	1916.8	2020.8	1877.1	1786.9	1763.0
62.5°	1674.7	1765.5	1694.9	1621.2	1606.7	1621.2	1694.9	1765.5	1674.7	1605.4	1609.8
65°	1485.7	1570.1	1514.7	1475.0	1479.9	1475.0	1514.7	1570.1	1485.7	1453.5	1460.5
67.5°	1339.4	1383.5	1359.6	1336.9	1342.5	1336.9	1359.6	1383.5	1339.4	1307.9	1318.6
70°	1183.8	1231.0	1206.4	1209.6	1219.0	1209.6	1206.4	1231.0	1183.8	1174.2	1182.5
72.5°	1034.9	1071.6	1063.3	1070.9	1081.0	1070.9	1063.3	1071.6	1034.9	1033.7	1034.3
75°	888.7	916.5	920.3	931.0	946.8	931.0	920.3	916.5	888.7	879.3	890.7
77.5°	729.2	760.8	772.7	787.2	810.6	787.2	772.7	760.8	729.2	735.6	741.3
80°	583.0	597.5	624.0	634.7	667.5	634.7	624.0	597.5	583.0	572.3	580.5
82.5°	426.7	439.9	462.7	482.8	501.7	482.8	462.7	439.9	426.7	421.7	422.3
85°	246.4	266.6	281.8	305.7	311.4	305.7	281.8	266.6	246.4	252.1	246.4
87.5°	86.4	92.6	105.9	115.4	116.0	115.4	105.9	92.6	86.4	88.3	80.0
90°	10.3	17.8	30.4	18.8	14.8	18.8	30.4	17.8	10.3	17.9	27.6
92.5°	13.4	23.7	42.3	24.0	18.6	24.0	42.3	23.7	13.4	23.1	44.0
95°	20.0	29.0	53.6	26.3	21.6	26.3	53.6	29.0	20.0	30.6	61.4
97.5°	30.5	35.7	60.4	27.8	25.3	27.8	60.4	35.7	30.5	37.3	70.3
100°	40.2	40.2	109.0	31.5	28.3	31.5	109.0	40.2	40.2	46.2	109.3
102.5°	60.5	78.3	251.2	60.6	33.5	60.6	251.2	78.3	60.5	85.9	231.4
105°	109.1	177.2	440.8	151.3	58.9	151.3	440.8	177.2	109.1	178.8	411.9
107.5°	205.8	329.3	567.5	295.1	131.6	295.1	567.5	329.3	205.8	315.9	543.7
110°	328.6	459.7	619.1	403.0	261.9	403.0	619.1	459.7	328.6	433.5	569.9



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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°	427.5	512.1	604.9	446.5	360.8	446.5	604.9	512.1	427.5	478.5	545.9
115°	464.9	504.6	540.4	444.9	399.8	444.9	540.4	504.6	464.9	467.2	487.5
117.5°	449.2	461.9	467.0	418.0	402.0	418.0	467.0	461.9	449.2	420.7	414.1
120°	405.7	400.5	394.3	378.3	379.6	378.3	394.3	400.5	405.7	367.5	345.9
122.5°	351.7	340.4	333.5	338.4	348.8	338.4	333.5	340.4	351.7	313.4	297.1
125°	298.5	287.2	291.5	304.0	315.0	304.0	291.5	287.2	298.5	266.9	262.5
127.5°	254.1	248.9	260.8	274.8	284.3	274.8	260.8	248.9	254.1	233.9	237.8
130°	222.6	223.4	239.1	251.4	257.3	251.4	239.1	223.4	222.6	212.8	222.7
132.5°	202.9	208.4	223.2	234.1	237.7	234.1	223.2	208.4	202.9	200.6	212.7
135°	190.9	198.6	212.6	219.2	221.2	219.2	212.6	198.6	190.9	192.2	202.9
137.5°	184.0	191.8	202.1	207.9	207.0	207.9	202.1	191.8	184.0	186.9	195.2
140°	180.2	187.9	192.4	198.8	198.6	198.8	192.4	187.9	180.2	181.6	188.4
142.5°	176.3	183.3	185.5	190.5	189.6	190.5	185.5	183.3	176.3	177.8	182.3
145°	174.6	180.0	177.9	183.8	182.7	183.8	177.9	180.0	174.6	174.8	177.6
147.5°	170.8	174.8	172.6	177.6	176.6	177.6	172.6	174.8	170.8	170.8	172.2
150°	166.9	169.9	166.3	172.2	172.7	172.2	166.3	169.9	166.9	166.2	167.6
152.5°	161.6	164.6	161.6	168.2	168.1	168.2	161.6	164.6	161.6	160.9	162.2
155°	157.6	159.2	157.6	164.3	165.0	164.3	157.6	159.2	157.6	157.0	158.2
157.5°	155.2	156.5	155.8	161.7	162.3	161.7	155.8	156.5	155.2	155.2	155.8
160°	154.0	155.4	155.3	160.5	161.1	160.5	155.3	155.4	154.0	154.1	154.7
162.5°	153.7	153.7	154.3	159.4	160.7	159.4	154.3	153.7	153.7	153.7	154.4
165°	153.4	154.2	153.9	158.2	160.1	158.2	153.9	154.2	153.4	153.5	153.5
167.5°	153.9	153.2	154.4	158.5	160.5	158.5	154.4	153.2	153.9	154.0	154.0
170°	153.1	153.7	154.2	158.2	160.2	158.2	154.2	153.7	153.1	153.8	153.9
172.5°	155.0	155.0	155.3	158.7	161.4	158.7	155.3	155.0	155.0	155.1	155.8
175°	156.2	156.0	156.5	159.2	162.0	159.2	156.5	156.0	156.2	155.5	155.5
177.5°	155.3	156.6	157.9	160.6	164.0	160.6	157.9	156.6	155.3	155.5	155.5
180°	156.6	156.6	156.6	156.6	156.6	156.6	156.6	156.6	156.6	156.6	156.6



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	33614.0	33614.0	33614.0	33614.0	33614.0	33614.0
2.5°	32637.6	32616.2	32637.6	32865.8	33162.6	33594.4
5°	31879.3	31760.8	31879.3	32132.1	32677.3	33499.2
7.5°	30996.2	30927.5	30996.2	31419.2	32108.1	33271.6
10°	30066.5	29910.9	30066.5	30544.3	31356.8	32924.3
12.5°	28920.6	28714.5	28920.6	29414.1	30439.1	32370.3
15°	27463.3	27282.4	27463.3	28011.1	29199.9	31550.9
17.5°	25899.6	25735.7	25899.6	26375.5	27684.6	30396.2
20°	23935.5	23806.9	23935.5	24608.7	25893.2	28908.0
22.5°	21875.0	21754.6	21875.0	22473.2	23810.0	27042.3
25°	19450.8	19385.2	19450.8	20119.0	21327.8	24860.2
27.5°	16831.3	16719.7	16831.3	17530.2	18765.0	22293.5
30°	14155.0	13970.3	14155.0	14780.2	15885.8	19442.6
32.5°	11537.2	11404.3	11537.2	11982.9	13138.3	16250.7
35°	9007.2	8874.1	9007.2	9410.0	10544.5	13305.9
37.5°	7018.5	6783.4	7018.5	7276.9	8197.8	10442.4
40°	5323.0	5285.2	5323.0	5648.2	6237.5	8124.1
42.5°	4333.4	4230.7	4333.4	4473.4	4914.6	6155.6
45°	3555.6	3515.3	3555.6	3661.5	3957.8	4811.8
47.5°	3057.7	3075.3	3057.7	3125.8	3347.6	3918.6
50°	2686.4	2697.1	2686.4	2718.5	2866.6	3291.5
52.5°	2412.8	2403.4	2412.8	2416.0	2508.0	2827.6
55°	2170.8	2158.8	2170.8	2163.9	2231.9	2436.8
57.5°	1959.0	1967.8	1959.0	1949.5	1986.1	2139.9
60°	1769.9	1778.1	1769.9	1763.0	1786.9	1877.1
62.5°	1610.5	1615.5	1610.5	1609.8	1605.4	1674.7
65°	1468.0	1473.7	1468.0	1460.5	1453.5	1485.7
67.5°	1331.9	1331.9	1331.9	1318.6	1307.9	1339.4
70°	1203.9	1203.2	1203.9	1182.5	1174.2	1183.8
72.5°	1050.1	1065.2	1050.1	1034.3	1033.7	1034.9
75°	900.7	918.4	900.7	890.7	879.3	888.7
77.5°	749.4	776.5	749.4	741.3	735.6	729.2
80°	594.4	624.0	594.4	580.5	572.3	583.0
82.5°	439.3	461.4	439.3	422.3	421.7	426.7
85°	261.6	296.9	261.6	246.4	252.1	246.4
87.5°	83.8	107.1	83.8	80.0	88.3	86.4
90°	16.4	10.3	16.4	27.6	17.9	10.3
92.5°	24.7	14.9	24.7	44.0	23.1	13.4
95°	28.4	17.1	28.4	61.4	30.6	20.0
97.5°	31.4	22.2	31.4	70.3	37.3	30.5
100°	36.6	29.0	36.6	109.3	46.2	40.2
102.5°	77.0	48.5	77.0	231.4	85.9	60.5
105°	161.7	82.9	161.7	411.9	178.8	109.1
107.5°	289.0	142.8	289.0	543.7	315.9	205.8
110°	383.5	265.7	383.5	569.9	433.5	328.6



TEST NUMBER: P1433580
 CATALOG NUMBER: EHBR1-42-UNV-TASM-L935-UPL15

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	411.9	358.6	411.9	545.9	478.5	427.5
115°	396.2	377.4	396.2	487.5	467.2	464.9
117.5°	361.7	364.6	361.7	414.1	420.7	449.2
120°	322.0	337.6	322.0	345.9	367.5	405.7
122.5°	285.9	303.9	285.9	297.1	313.4	351.7
125°	254.5	273.1	254.5	262.5	266.9	298.5
127.5°	232.7	245.3	232.7	237.8	233.9	254.1
130°	216.2	226.7	216.2	222.7	212.8	222.6
132.5°	204.8	211.5	204.8	212.7	200.6	202.9
135°	195.0	200.3	195.0	202.9	192.2	190.9
137.5°	186.6	191.2	186.6	195.2	186.9	184.0
140°	179.6	183.5	179.6	188.4	181.6	180.2
142.5°	172.0	175.0	172.0	182.3	177.8	176.3
145°	167.3	169.6	167.3	177.6	174.8	174.6
147.5°	163.2	164.8	163.2	172.2	170.8	170.8
150°	159.2	160.8	159.2	167.6	166.2	166.9
152.5°	154.6	156.8	154.6	162.2	160.9	161.6
155°	152.2	154.3	152.2	158.2	157.0	157.6
157.5°	151.2	153.2	151.2	155.8	155.2	155.2
160°	150.8	152.3	150.8	154.7	154.1	154.0
162.5°	149.9	151.3	149.9	154.4	153.7	153.7
165°	150.4	151.0	150.4	153.5	153.5	153.4
167.5°	150.3	151.0	150.3	154.0	154.0	153.9
170°	150.9	151.5	150.9	153.9	153.8	153.1
172.5°	152.2	152.8	152.2	155.8	155.1	155.0
175°	152.7	153.3	152.7	155.5	155.5	156.2
177.5°	154.0	154.6	154.0	155.5	155.5	155.3
180°	156.6	156.6	156.6	156.6	156.6	156.6



TEST NUMBER: P1433580
 CATALOG NUMBER: EHBR1-42-UNV-TASM-L935-UPL15

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	18.48	19.63	18.91	20.02	20.42	17.79	18.95	18.22	19.34	19.74
	3H	20.03	21.05	20.47	21.46	21.91	19.64	20.67	20.09	21.08	21.53
	4H	20.66	21.62	21.13	22.04	22.52	20.43	21.38	20.89	21.81	22.28
	6H	21.14	22.02	21.62	22.47	22.95	21.07	21.95	21.55	22.39	22.88
	8H	21.30	22.13	21.79	22.59	23.08	21.29	22.12	21.79	22.59	23.08
	12H	21.37	22.16	21.87	22.62	23.13	21.42	22.22	21.92	22.67	23.19
4H	2H	18.89	19.85	19.36	20.27	20.75	18.37	19.33	18.84	19.75	20.23
	3H	20.69	21.48	21.17	21.96	22.45	20.43	21.22	20.91	21.70	22.19
	4H	21.47	22.18	21.97	22.66	23.19	21.34	22.05	21.84	22.54	23.07
	6H	22.08	22.69	22.61	23.21	23.76	22.11	22.72	22.64	23.24	23.79
	8H	22.28	22.85	22.81	23.36	23.92	22.38	22.95	22.91	23.47	24.02
	12H	22.39	22.89	22.94	23.44	24.00	22.55	23.05	23.10	23.60	24.16
8H	4H	21.72	22.29	22.25	22.80	23.36	21.62	22.19	22.15	22.70	23.26
	6H	22.46	22.92	23.02	23.49	24.05	22.53	22.99	23.09	23.55	24.11
	8H	22.73	23.14	23.31	23.72	24.30	22.88	23.29	23.46	23.87	24.44
	12H	22.90	23.27	23.48	23.82	24.48	23.13	23.49	23.71	24.05	24.70
12H	4H	21.73	22.23	22.28	22.78	23.34	21.63	22.14	22.18	22.68	23.24
	6H	22.50	22.92	23.09	23.49	24.07	22.57	22.98	23.15	23.56	24.14
	8H	22.82	23.18	23.40	23.74	24.39	22.98	23.34	23.55	23.90	24.55

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

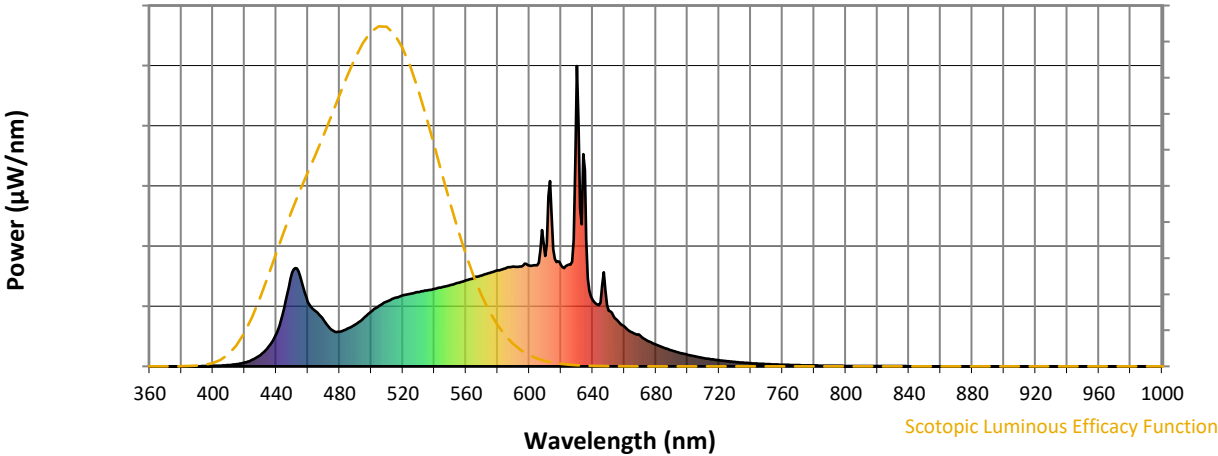


Photopic Lumens: NR

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

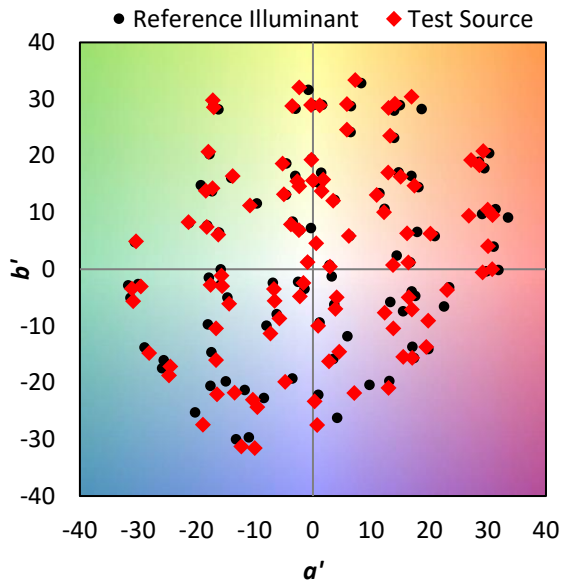
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	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 ($R_{f,i}$)

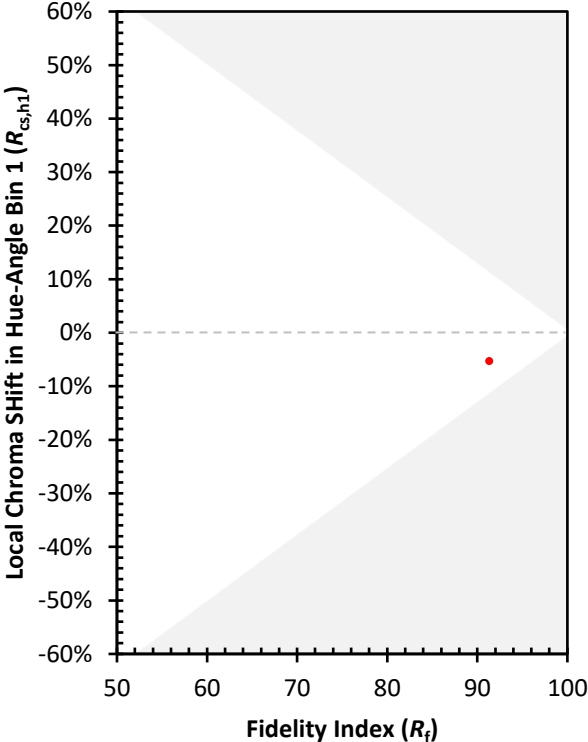
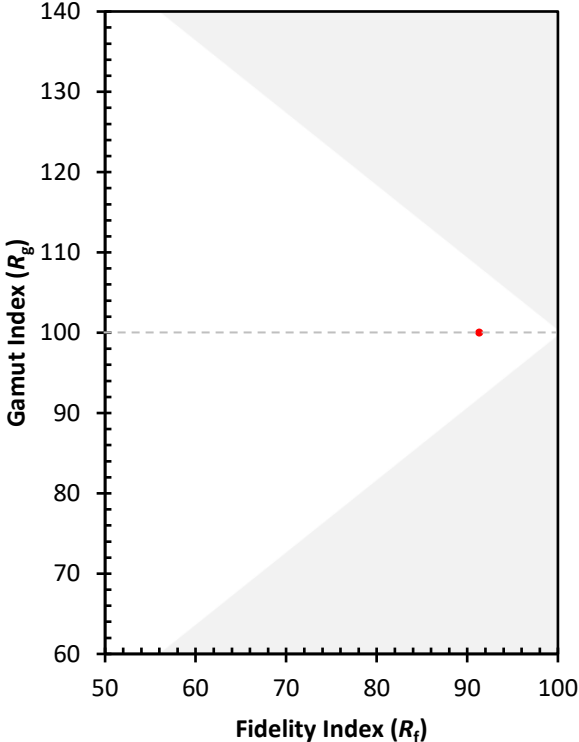
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CES06 = 51	CES31 = 97	CES56 = 96	CES81 = 74
CES07 = 43	CES32 = 89	CES57 = 94	CES82 = 96
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CES09 = 29	CES34 = 94	CES59 = 98	CES84 = 95
CES10 = 75	CES35 = 97	CES60 = 92	CES85 = 79
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CES12 = 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)