

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:

Luminaire Tested: EHBR1-54-UNV-TASM-L950-UPL30

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS A COMBINATION OF REPORTS P1431872 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-54-UNV-TASM-L950-UPL30
Description: Elevate Round Highbay at, 54000 lumens, 5000K 90CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

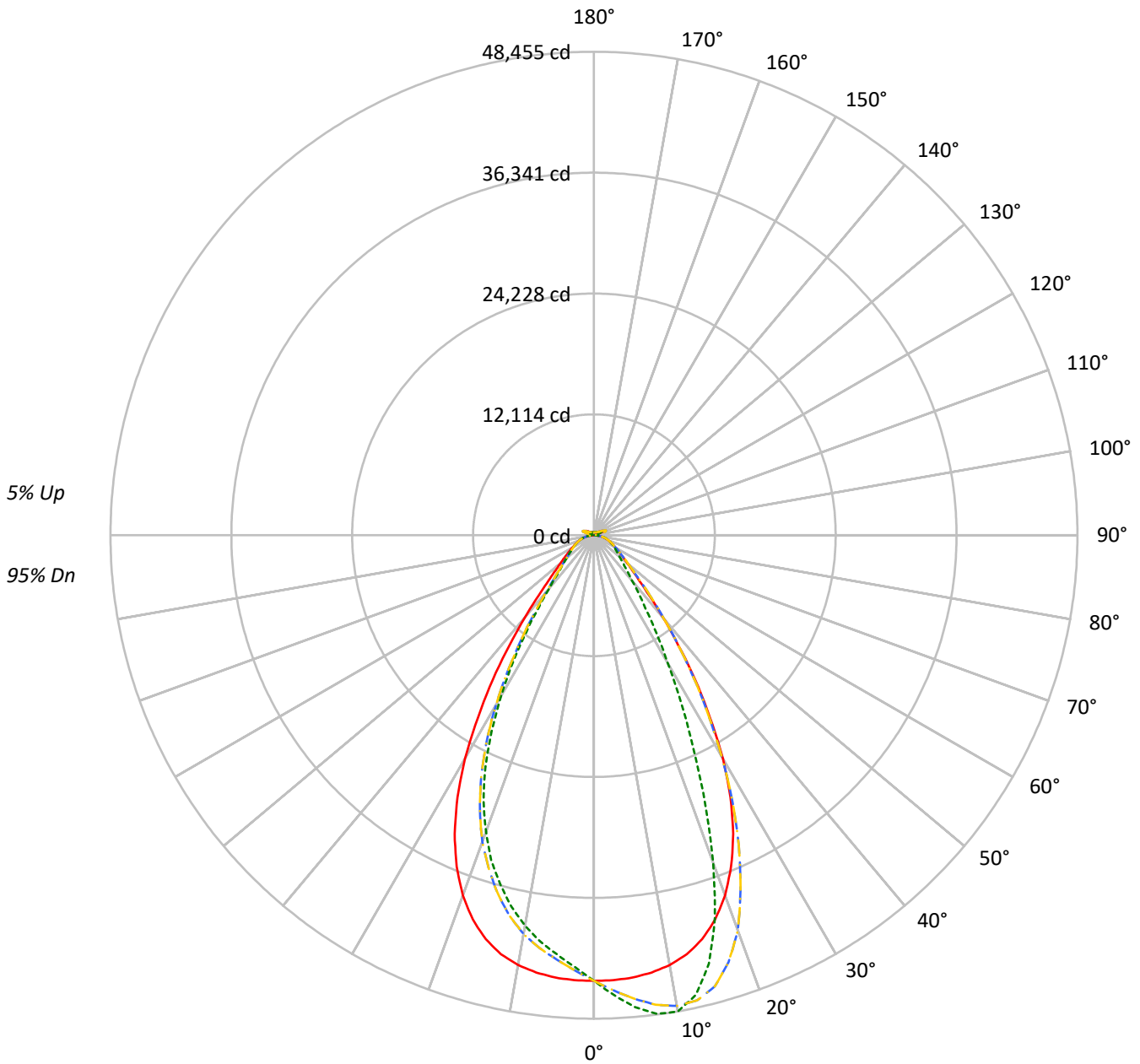
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52765.3 lumens
Efficiency: N/A
Efficacy: 165.9 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): 318
Input Voltage (V): NR
Input Current (A_{in}): 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:
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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				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	114	114	114	114	108	108	108	102	102	102	97	97	97	97	97	97	95
1	111	107	104	101	107	104	102	99	99	97	95	95	93	91	90	89	88	88	88	88	85
2	104	98	93	88	101	95	91	87	91	87	84	87	84	82	84	81	79	79	79	79	77
3	97	89	83	79	95	88	82	78	84	79	76	81	77	74	78	75	72	72	72	72	70
4	91	82	76	71	89	81	75	70	78	73	69	75	71	67	72	69	66	66	66	66	64
5	86	76	69	64	84	75	68	64	72	67	63	70	65	62	68	64	60	60	60	60	59
6	81	71	64	59	79	69	63	58	67	62	57	65	60	57	63	59	56	56	56	56	54
7	76	66	59	54	75	65	58	54	63	57	53	61	56	52	60	55	52	52	52	52	50
8	72	62	55	50	71	61	54	50	59	53	49	58	52	49	56	52	48	48	48	48	47
9	68	58	51	47	67	57	51	46	56	50	46	54	49	46	53	48	45	45	45	45	44
10	65	54	48	44	64	54	47	43	52	47	43	51	46	43	50	46	42	42	42	42	41

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	209706	209706	209706	209706
5°	208430	222355	208430	197613
10°	205867	228064	205867	187024
15°	199789	211942	199789	172760
20°	186853	169949	186853	153880
25°	165380	117751	165380	128958
30°	134282	76605	134282	96486
35°	96311	49611	96311	64234
40°	62268	34195	62268	40509
45°	39509	26488	39509	28863
50°	29340	22508	29340	24041
55°	23954	20503	23954	21222
60°	20743	19532	20743	19650
65°	18908	18836	18908	18756
70°	17921	18456	17921	18218
75°	16761	17854	16761	17319
80°	14722	16855	14722	15758
85°	9526	12034	9526	11475

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 55547 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4246.0	8.0
10°-20°	11551.6	21.9
20°-30°	13547.7	25.7
30°-40°	9421.6	17.9
40°-50°	4682.1	8.9
50°-60°	2800.4	5.3
60°-70°	1971.0	3.7
70°-80°	1269.7	2.4
80°-90°	408.3	0.8
90°-100°	76.9	0.1
100°-110°	496.8	0.9
110°-120°	916.7	1.7
120°-130°	545.7	1.0
130°-140°	331.2	0.6
140°-150°	230.3	0.4
150°-160°	151.5	0.3
160°-170°	88.2	0.2
170°-180°	29.6	0.1
0°-30°	29345.4	55.6
0°-40°	38766.9	73.5
0°-60°	46249.4	87.7
0°-90°	49898.4	94.6
90°-120°	1490.4	2.8
90°-150°	2597.5	4.9
90°-180°	2867.0	5.4
0°-180°	52765.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	44655	44655	44655	44655	44655	
5°	44503	47476	44503	42194	44503	4223
15°	41915	44464	41915	36244	41915	11714
25°	33026	23515	33026	25753	33026	14952
35°	17677	9105	17677	11789	17677	11035
45°	6392	4286	6392	4670	6392	5231
55°	3237	2771	3237	2868	3237	2960
65°	1974	1966	1974	1958	1974	1982
75°	1181	1258	1181	1220	1181	1239
85°	327	414	327	394	327	364
90°	21	27	21	21	21	25
95°	41	41	41	36	41	43
105°	228	119	228	173	228	308
115°	975	836	975	792	975	889
125°	625	657	625	572	625	576
135°	397	459	397	419	397	315
145°	361	378	361	351	361	226
155°	324	338	324	315	324	151
165°	309	320	309	304	309	88
175°	311	319	311	306	311	30
180°	311	311	311	311	311	



TEST NUMBER:
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L950-UPL30

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	44655.4	44655.4	44655.4	44655.4	44655.4	44655.4	44655.4	44655.4	44655.4	44655.4	44655.4
2.5°	44629.4	45206.3	45673.6	45981.8	46134.1	45981.8	45673.6	45206.3	44629.4	44055.8	43661.4
5°	44503.0	45658.5	46637.4	47278.0	47476.4	47278.0	46637.4	45658.5	44503.0	43411.1	42686.7
7.5°	44200.6	46001.0	47455.5	48203.3	48385.8	48203.3	47455.5	46001.0	44200.6	42655.0	41739.7
10°	43739.3	46217.0	47897.6	48433.5	48455.3	48433.5	47897.6	46217.0	43739.3	41656.8	40577.5
12.5°	43003.3	46140.0	47749.4	47573.6	47174.2	47573.6	47749.4	46140.0	43003.3	40437.6	39076.0
15°	41914.7	45683.6	46810.7	45379.7	44464.4	45379.7	46810.7	45683.6	41914.7	38791.3	37212.1
17.5°	40380.7	44829.6	44851.3	42020.2	40293.6	42020.2	44851.3	44829.6	40380.7	36778.3	35039.2
20°	38403.7	43459.6	42153.3	36975.1	34929.5	36975.1	42153.3	43459.6	38403.7	34398.6	32692.1
22.5°	35925.1	41612.4	38396.1	31899.9	29109.0	31899.9	38396.1	41612.4	35925.1	31631.1	29855.1
25°	33026.2	39349.1	34354.2	26370.0	23514.7	26370.0	34354.2	39349.1	33026.2	28333.6	26727.5
27.5°	29616.4	36480.3	30050.2	21548.6	18914.2	21548.6	30050.2	36480.3	29616.4	24929.0	23288.5
30°	25829.1	32802.6	25571.2	17160.7	14735.0	17160.7	25571.2	32802.6	25829.1	21103.9	19635.2
32.5°	21588.7	29197.8	21269.6	13750.2	11695.3	13750.2	21269.6	29197.8	21588.7	17453.9	15919.0
35°	17676.6	24687.8	17391.1	10804.4	9105.4	10804.4	17391.1	24687.8	17676.6	14008.2	12500.9
37.5°	13872.5	20426.5	13863.3	8700.1	7385.5	8700.1	13863.3	20426.5	13872.5	10890.7	9667.2
40°	10792.7	15971.7	10862.2	6945.0	5926.8	6945.0	10862.2	15971.7	10792.7	8286.5	7503.5
42.5°	8177.6	12212.8	8537.7	5699.9	5034.2	5699.9	8537.7	12212.8	8177.6	6528.9	5942.7
45°	6392.4	8987.3	6667.0	4808.9	4285.6	4808.9	6667.0	8987.3	6392.4	5257.8	4864.2
47.5°	5205.8	6945.9	5403.4	4124.8	3758.1	4124.8	5403.4	6945.9	5205.8	4447.2	4152.5
50°	4372.7	5329.8	4486.6	3600.6	3354.5	3600.6	4486.6	5329.8	4372.7	3808.3	3611.6
52.5°	3756.4	4346.7	3820.9	3208.8	3042.9	3208.8	3820.9	4346.7	3756.4	3331.8	3209.6
55°	3237.2	3654.2	3322.6	2885.5	2770.8	2885.5	3322.6	3654.2	3237.2	2965.1	2874.7
57.5°	2842.8	3099.9	2885.5	2610.1	2533.9	2610.1	2885.5	3099.9	2842.8	2638.5	2589.9
60°	2493.6	2684.6	2546.4	2369.7	2348.0	2369.7	2546.4	2684.6	2493.6	2373.9	2342.1
62.5°	2224.9	2345.5	2251.6	2153.7	2134.5	2153.7	2251.6	2345.5	2224.9	2132.8	2138.6
65°	1973.6	2085.9	2012.2	1959.4	1966.1	1959.4	2012.2	2085.9	1973.6	1931.0	1940.2
67.5°	1779.3	1838.0	1806.2	1776.0	1783.5	1776.0	1806.2	1838.0	1779.3	1737.5	1751.8
70°	1572.5	1635.3	1602.7	1606.9	1619.4	1606.9	1602.7	1635.3	1572.5	1560.0	1570.9
72.5°	1374.9	1423.5	1412.6	1422.7	1436.0	1422.7	1412.6	1423.5	1374.9	1373.2	1374.1
75°	1180.7	1217.5	1222.5	1236.7	1257.7	1236.7	1222.5	1217.5	1180.7	1168.1	1183.2
77.5°	968.8	1010.7	1026.6	1045.9	1076.8	1045.9	1026.6	1010.7	968.8	977.1	984.8
80°	774.5	793.8	829.0	843.3	886.7	843.3	829.0	793.8	774.5	760.3	771.2
82.5°	566.9	584.5	614.6	641.5	666.5	641.5	614.6	584.5	566.9	560.2	561.0
85°	327.4	354.2	374.3	406.1	413.6	406.1	374.3	354.2	327.4	334.9	327.4
87.5°	114.7	123.1	140.7	153.2	154.0	153.2	140.7	123.1	114.7	117.3	106.4
90°	21.3	36.3	62.3	36.5	27.1	36.5	62.3	36.3	21.3	37.1	57.5
92.5°	27.6	48.9	87.5	47.5	35.0	47.5	87.5	48.9	27.6	48.0	92.2
95°	41.1	59.9	111.1	52.2	41.3	52.2	111.1	59.9	41.1	63.8	128.3
97.5°	63.1	74.1	125.3	55.4	49.2	55.4	125.3	74.1	63.1	78.0	147.3
100°	83.5	83.5	227.6	63.3	55.5	63.3	227.6	83.5	83.5	96.2	229.1
102.5°	126.1	163.1	526.0	123.9	66.5	123.9	526.0	163.1	126.1	179.6	485.6
105°	228.4	370.9	924.3	314.4	119.3	314.4	924.3	370.9	228.4	374.8	865.1
107.5°	431.4	690.4	1190.3	616.7	272.0	616.7	1190.3	690.4	431.4	662.8	1141.4
110°	689.6	964.3	1298.9	843.4	545.9	843.4	1298.9	964.3	689.6	910.0	1196.5



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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°	897.4	1074.5	1269.0	934.6	753.7	934.6	1269.0	1074.5	897.4	1004.5	1146.2
115°	975.4	1058.8	1133.6	931.5	835.6	931.5	1133.6	1058.8	975.4	980.9	1023.3
117.5°	942.3	969.1	979.4	874.9	840.3	874.9	979.4	969.1	942.3	882.5	869.1
120°	851.0	840.0	825.9	791.4	793.1	791.4	825.9	840.0	851.0	770.7	725.8
122.5°	737.0	713.3	698.4	707.2	728.5	707.2	698.4	713.3	737.0	656.6	622.8
125°	625.2	601.5	609.5	634.8	657.0	634.8	609.5	601.5	625.2	558.3	549.6
127.5°	531.5	520.5	544.9	573.4	592.4	573.4	544.9	520.5	531.5	489.0	497.6
130°	464.6	467.0	499.3	523.8	535.7	523.8	499.3	467.0	464.6	444.2	465.4
132.5°	423.0	434.7	465.5	486.9	494.0	486.9	465.5	434.7	423.0	417.5	443.5
135°	397.1	414.3	442.7	456.2	459.4	456.2	442.7	414.3	397.1	399.5	423.0
137.5°	382.1	399.4	420.7	431.9	429.5	431.9	420.7	399.4	382.1	387.7	405.8
140°	373.6	390.8	400.3	412.9	411.5	412.9	400.3	390.8	373.6	376.8	390.9
142.5°	365.0	380.7	385.3	394.9	392.6	394.9	385.3	380.7	365.0	368.1	377.6
145°	361.1	372.9	368.9	380.8	377.7	380.8	368.9	372.9	361.1	361.8	367.4
147.5°	353.2	361.8	357.1	367.4	364.3	367.4	357.1	361.8	353.2	353.2	355.7
150°	344.6	350.9	343.8	355.7	355.8	355.7	343.8	350.9	344.6	343.0	345.4
152.5°	332.8	339.1	332.8	346.3	345.5	346.3	332.8	339.1	332.8	331.2	333.6
155°	323.5	326.7	323.5	336.9	337.7	336.9	323.5	326.7	323.5	322.7	324.4
157.5°	317.3	319.7	318.1	330.0	330.9	330.0	318.1	319.7	317.3	317.3	318.1
160°	312.7	315.9	315.2	325.5	326.3	325.5	315.2	315.9	312.7	313.5	314.3
162.5°	311.3	311.3	311.4	321.7	323.3	321.7	311.4	311.3	311.3	311.3	312.8
165°	309.1	310.7	309.2	317.1	320.4	317.1	309.2	310.7	309.1	309.9	309.9
167.5°	309.2	307.6	309.3	316.5	319.8	316.5	309.3	307.6	309.2	310.0	310.0
170°	306.9	307.7	307.8	315.1	318.3	315.1	307.8	307.7	306.9	308.5	309.2
172.5°	309.4	309.4	308.7	314.4	319.3	314.4	308.7	309.4	309.4	310.1	311.7
175°	311.1	310.3	310.4	314.6	319.4	314.6	310.4	310.3	311.1	310.2	310.2
177.5°	309.5	311.2	312.8	317.0	323.4	317.0	312.8	311.2	309.5	310.2	310.2
180°	311.2	311.2	311.2	311.2	311.2	311.2	311.2	311.2	311.2	311.2	311.2



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	44655.4	44655.4	44655.4	44655.4	44655.4	44655.4
2.5°	43358.3	43329.9	43358.3	43661.4	44055.8	44629.4
5°	42351.0	42193.6	42351.0	42686.7	43411.1	44503.0
7.5°	41177.9	41086.5	41177.9	41739.7	42655.0	44200.6
10°	39942.7	39735.9	39942.7	40577.5	41656.8	43739.3
12.5°	38420.4	38146.6	38420.4	39076.0	40437.6	43003.3
15°	36484.4	36244.1	36484.4	37212.1	38791.3	41914.7
17.5°	34406.9	34189.3	34406.9	35039.2	36778.3	40380.7
20°	31797.8	31626.9	31797.8	32692.1	34398.6	38403.7
22.5°	29060.5	28900.6	29060.5	29855.1	31631.1	35925.1
25°	25840.0	25752.9	25840.0	26727.5	28333.6	33026.2
27.5°	22360.0	22211.7	22360.0	23288.5	24929.0	29616.4
30°	18804.5	18559.1	18804.5	19635.2	21103.9	25829.1
32.5°	15326.9	15150.3	15326.9	15919.0	17453.9	21588.7
35°	11965.8	11789.2	11965.8	12500.9	14008.2	17676.6
37.5°	9323.9	9011.7	9323.9	9667.2	10890.7	13872.5
40°	7071.5	7021.2	7071.5	7503.5	8286.5	10792.7
42.5°	5756.8	5620.3	5756.8	5942.7	6528.9	8177.6
45°	4723.5	4669.9	4723.5	4864.2	5257.8	6392.4
47.5°	4062.0	4085.5	4062.0	4152.5	4447.2	5205.8
50°	3568.8	3583.0	3568.8	3611.6	3808.3	4372.7
52.5°	3205.4	3192.8	3205.4	3209.6	3331.8	3756.4
55°	2883.9	2868.0	2883.9	2874.7	2965.1	3237.2
57.5°	2602.5	2614.2	2602.5	2589.9	2638.5	2842.8
60°	2351.3	2362.2	2351.3	2342.1	2373.9	2493.6
62.5°	2139.5	2146.2	2139.5	2138.6	2132.8	2224.9
65°	1950.2	1957.7	1950.2	1940.2	1931.0	1973.6
67.5°	1769.3	1769.3	1769.3	1751.8	1737.5	1779.3
70°	1599.4	1598.5	1599.4	1570.9	1560.0	1572.5
72.5°	1395.1	1415.1	1395.1	1374.1	1373.2	1374.9
75°	1196.6	1220.0	1196.6	1183.2	1168.1	1180.7
77.5°	995.6	1031.6	995.6	984.8	977.1	968.8
80°	789.7	829.0	789.7	771.2	760.3	774.5
82.5°	583.7	612.9	583.7	561.0	560.2	566.9
85°	347.5	394.4	347.5	327.4	334.9	327.4
87.5°	111.4	142.3	111.4	106.4	117.3	114.7
90°	33.9	21.3	33.9	57.5	37.1	21.3
92.5°	51.2	30.8	51.2	92.2	48.0	27.6
95°	59.1	35.5	59.1	128.3	63.8	41.1
97.5°	65.4	45.7	65.4	147.3	78.0	63.1
100°	76.4	59.9	76.4	229.1	96.2	83.5
102.5°	161.4	100.8	161.4	485.6	179.6	126.1
105°	339.3	173.3	339.3	865.1	374.8	228.4
107.5°	606.9	299.2	606.9	1141.4	662.8	431.4
110°	805.3	557.4	805.3	1196.5	910.0	689.6



TEST NUMBER:

CATALOG NUMBER: EHBR1-54-UNV-TASM-L950-UPL30

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	865.1	752.6	865.1	1146.2	1004.5	897.4
115°	832.0	791.9	832.0	1023.3	980.9	975.4
117.5°	759.6	765.1	759.6	869.1	882.5	942.3
120°	676.2	708.4	676.2	725.8	770.7	851.0
122.5°	599.8	637.7	599.8	622.8	656.6	737.0
125°	533.8	572.3	533.8	549.6	558.3	625.2
127.5°	488.1	514.2	488.1	497.6	489.0	531.5
130°	452.8	474.8	452.8	465.4	444.2	464.6
132.5°	428.4	442.5	428.4	443.5	417.5	423.0
135°	407.1	418.9	407.1	423.0	399.5	397.1
137.5°	389.1	399.3	389.1	405.8	387.7	382.1
140°	373.5	382.1	373.5	390.9	376.8	373.6
142.5°	357.0	363.3	357.0	377.6	368.1	365.0
145°	346.1	350.8	346.1	367.4	361.8	361.1
147.5°	336.7	339.9	336.7	355.7	353.2	353.2
150°	327.4	330.6	327.4	345.4	343.0	344.6
152.5°	317.2	321.2	317.2	333.6	331.2	332.8
155°	311.0	315.0	311.0	324.4	322.7	323.5
157.5°	307.9	311.2	307.9	318.1	317.3	317.3
160°	305.8	308.2	305.8	314.3	313.5	312.7
162.5°	302.7	305.1	302.7	312.8	311.3	311.3
165°	302.8	303.6	302.8	309.9	309.9	309.1
167.5°	302.1	303.6	302.1	310.0	310.0	309.2
170°	302.9	303.7	302.9	309.2	308.5	306.9
172.5°	304.6	305.4	304.6	311.7	310.1	309.4
175°	304.7	305.5	304.7	310.2	310.2	311.1
177.5°	307.1	307.9	307.1	310.2	310.2	309.5
180°	311.2	311.2	311.2	311.2	311.2	311.2



TEST NUMBER: CATALOG
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L950-UPL30

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.31	20.43	19.77	20.86	21.32	18.63	19.75	19.09	20.18	20.64
	3H	20.86	21.86	21.34	22.30	22.80	20.48	21.48	20.96	21.92	22.42
	4H	21.50	22.43	22.00	22.89	23.41	21.26	22.19	21.76	22.65	23.17
	6H	21.98	22.83	22.49	23.31	23.84	21.90	22.76	22.41	23.24	23.77
	8H	22.13	22.94	22.65	23.44	23.97	22.13	22.94	22.65	23.43	23.97
	12H	22.20	22.98	22.73	23.47	24.03	22.25	23.03	22.78	23.52	24.08
4H	2H	19.73	20.66	20.23	21.12	21.64	19.21	20.14	19.71	20.60	21.12
	3H	21.52	22.29	22.03	22.81	23.34	21.26	22.03	21.77	22.54	23.08
	4H	22.30	22.99	22.83	23.51	24.09	22.17	22.86	22.70	23.38	23.96
	6H	22.91	23.51	23.47	24.06	24.65	22.94	23.54	23.50	24.09	24.68
	8H	23.11	23.67	23.67	24.21	24.81	23.21	23.77	23.78	24.32	24.91
	12H	23.22	23.71	23.80	24.29	24.89	23.38	23.87	23.96	24.45	25.05
8H	4H	22.55	23.11	23.11	23.65	24.25	22.45	23.01	23.01	23.55	24.15
	6H	23.29	23.74	23.88	24.34	24.94	23.36	23.81	23.95	24.40	25.01
	8H	23.56	23.96	24.17	24.57	25.19	23.71	24.11	24.32	24.72	25.34
	12H	23.73	24.09	24.34	24.68	25.37	23.96	24.31	24.56	24.90	25.59
12H	4H	22.56	23.05	23.14	23.63	24.23	22.46	22.95	23.04	23.53	24.13
	6H	23.33	23.74	23.95	24.35	24.96	23.40	23.80	24.01	24.41	25.03
	8H	23.65	24.00	24.26	24.59	25.29	23.81	24.16	24.41	24.75	25.44

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-8

Test Date: 08/04/2025

Luminaire Tested: EHBR-60-L950-N

Data in this report applies to families of products including EHBR-60-L950-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-8
 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-L950-N**
 Description: Elevate Round Highbay at, 60000 lumens, 5000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K): 4901
 CIE u': 0.2131
 CIE v': 0.4853
 Duv: -0.0008
 CIE x: 0.3477
 CIE y: 0.3520
 CIE z: 0.3003
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 574
 Purity: 9.953987
 Rf: 90.7
 Rg: 100.5

CRI (Ra):	94.3		
R1:	95.8	R9:	72.3
R2:	96.5	R10:	89.1
R3:	94.4	R11:	94.9
R4:	95.3	R12:	68.4
R5:	94.1	R13:	96.4
R6:	92.5	R14:	96.4
R7:	95.5	R15:	93.9
R8:	90.1		



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

REPORT NUMBER: SP1-2506-472-8

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: SP1-2506-472-8

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-8

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	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-8

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 2.04

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	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-8

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 4.41

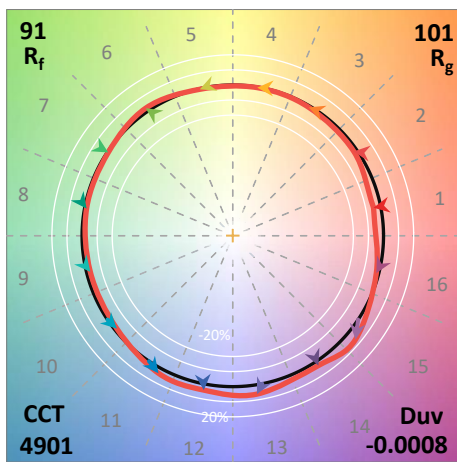
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

Summary

$R_f = 90.7$
 $R_g = 100.5$
 CIE $R_a = 94.3$
 $R_9 = 72.3$

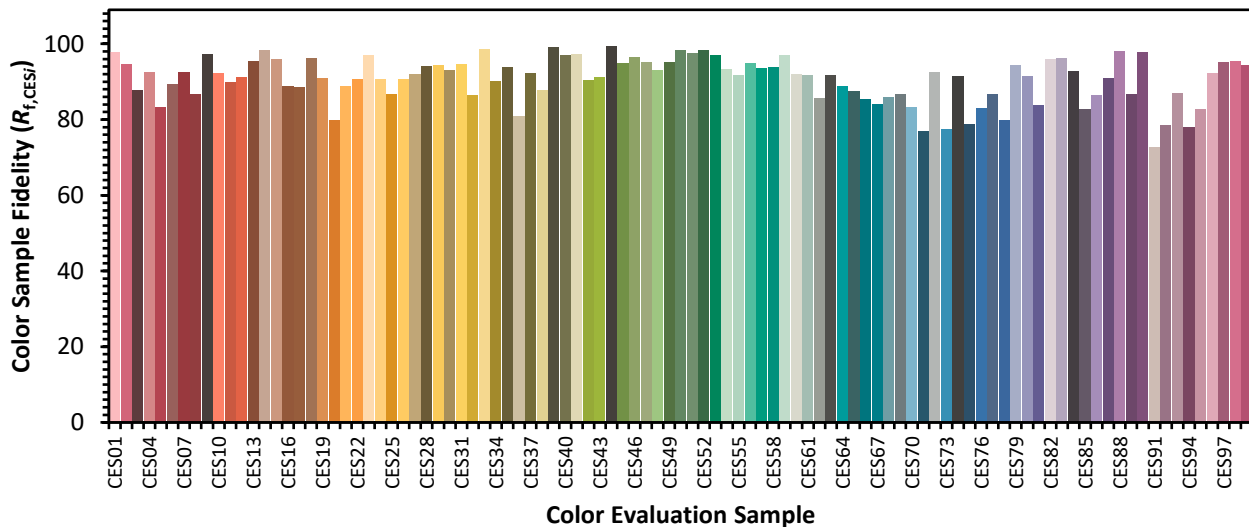


Color Vector Graphics

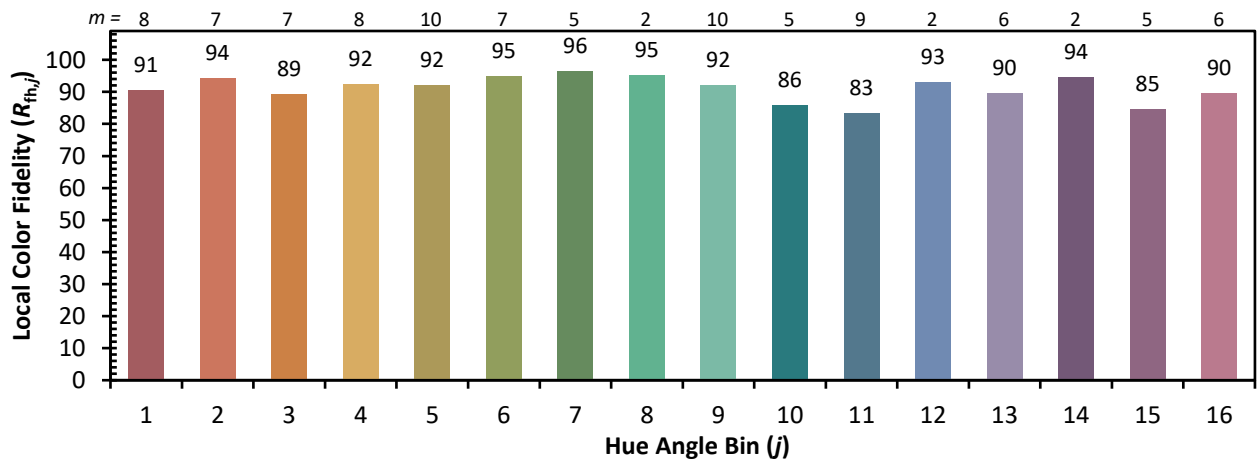
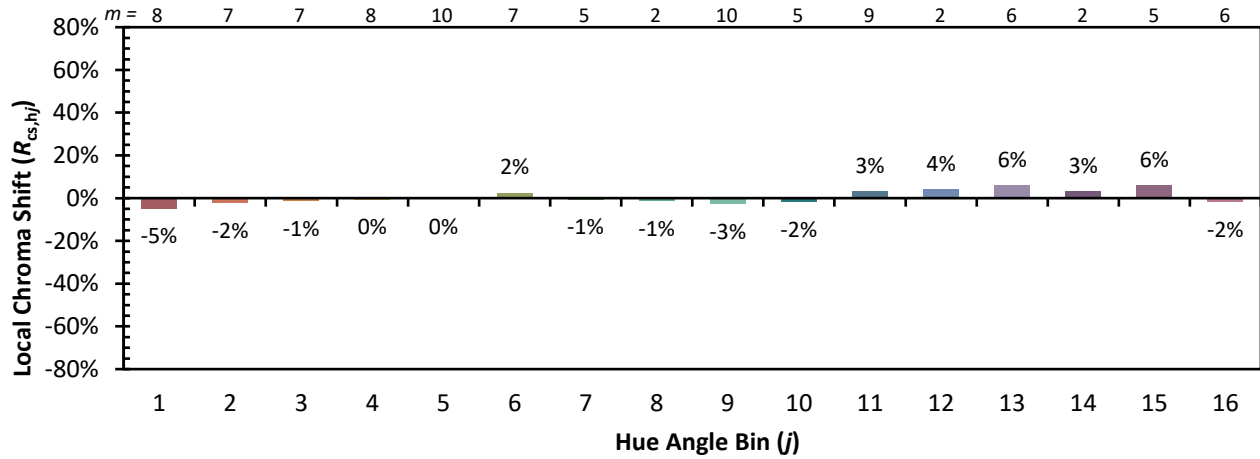


Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 91	CES51 = 98	CES76 = 83
CES02 = 61	CES27 = 92	CES52 = 98	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 97	CES78 = 80
CES04 = 69	CES29 = 94	CES54 = 93	CES79 = 94
CES05 = 48	CES30 = 93	CES55 = 92	CES80 = 91
CES06 = 50	CES31 = 95	CES56 = 95	CES81 = 84
CES07 = 41	CES32 = 86	CES57 = 94	CES82 = 96
CES08 = 40	CES33 = 99	CES58 = 94	CES83 = 96
CES09 = 29	CES34 = 90	CES59 = 97	CES84 = 93
CES10 = 73	CES35 = 94	CES60 = 92	CES85 = 83
CES11 = 56	CES36 = 81	CES61 = 92	CES86 = 86
CES12 = 62	CES37 = 92	CES62 = 86	CES87 = 91
CES13 = 43	CES38 = 88	CES63 = 92	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 89	CES89 = 87
CES15 = 71	CES40 = 97	CES65 = 88	CES90 = 98
CES16 = 47	CES41 = 97	CES66 = 85	CES91 = 73
CES17 = 48	CES42 = 90	CES67 = 84	CES92 = 79
CES18 = 56	CES43 = 91	CES68 = 86	CES93 = 87
CES19 = 70	CES44 = 99	CES69 = 87	CES94 = 78
CES20 = 65	CES45 = 95	CES70 = 83	CES95 = 83
CES21 = 85	CES46 = 97	CES71 = 77	CES96 = 92
CES22 = 77	CES47 = 95	CES72 = 92	CES97 = 95
CES23 = 91	CES48 = 93	CES73 = 77	CES98 = 95
CES24 = 90	CES49 = 95	CES74 = 92	CES99 = 94
CES25 = 70	CES50 = 98	CES75 = 79	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)