

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: EHBR1-60-UNV-TASM-L950-UPL30

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: REPORT IS A COMBINATION OF REPORTS P1431904 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-60-UNV-TASM-L950-UPL30
Description: Elevate Round Highbay at, 60000 lumens, 5000K 90CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

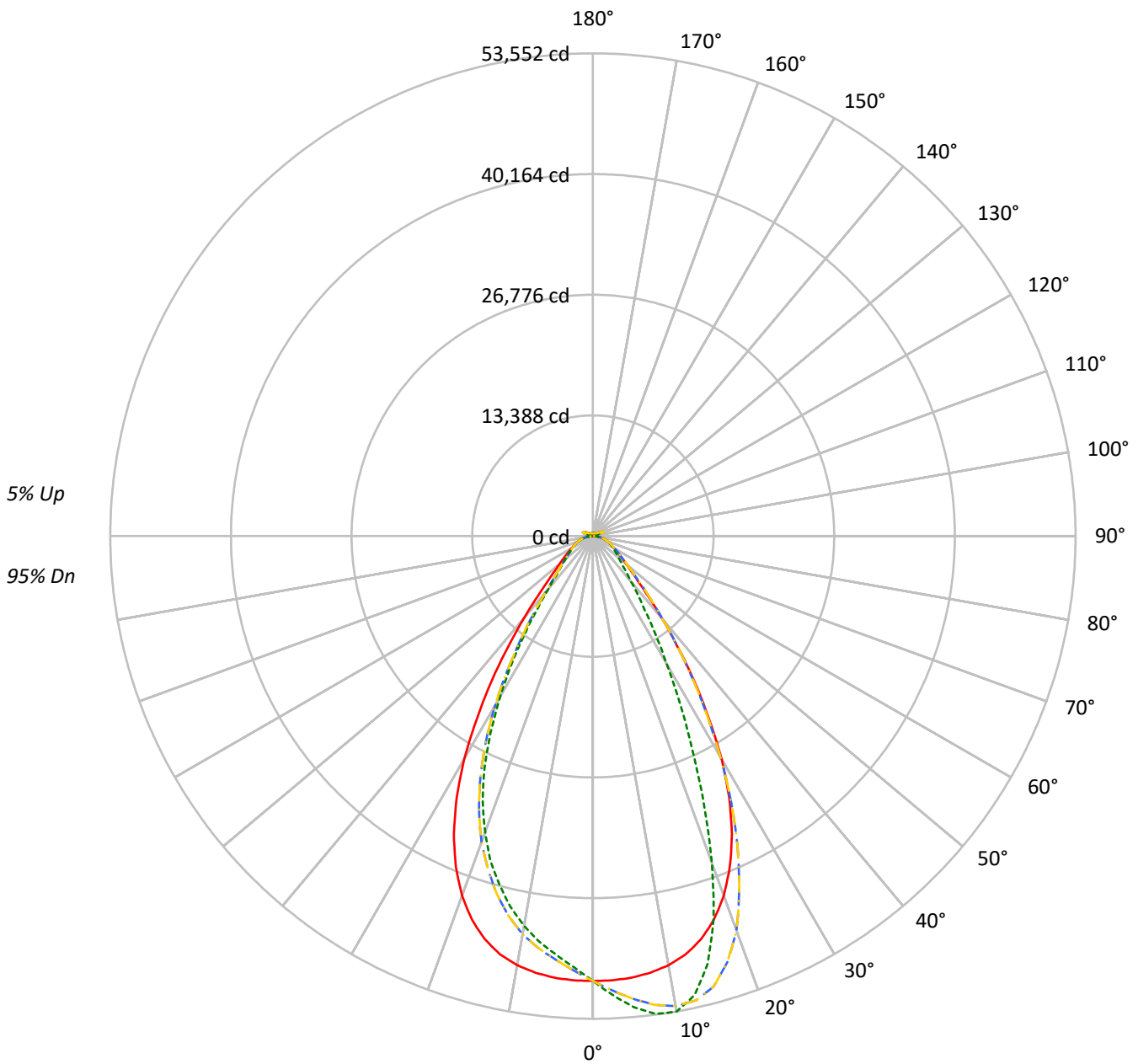
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 58017.7 lumens
Efficiency: N/A
Efficacy: 164.6 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): 352.4
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:
CATALOG NUMBER: EHBR1-60-UNV-TASM-L950-UPL30

Luminous Intensity Polar Plot



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



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L950-UPL30

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	115	115	115	115	108	108	108	103	103	103	97	97	97	97	97	97	95
1	111	107	104	101	108	105	102	99	100	97	95	95	93	92	91	89	88	88	88	88	86
2	104	98	93	89	101	96	91	87	91	88	85	88	85	82	84	82	80	84	82	80	77
3	97	90	84	79	95	88	82	78	84	80	76	81	77	74	78	75	72	78	75	72	70
4	91	82	76	71	89	81	75	70	78	73	69	75	71	67	73	69	66	73	69	66	64
5	86	76	69	64	84	75	69	64	72	67	63	70	65	62	68	64	61	68	64	61	59
6	81	71	64	59	79	70	63	59	68	62	58	66	61	57	64	59	56	64	59	56	54
7	77	66	59	54	75	65	59	54	63	57	53	61	56	53	60	55	52	60	55	52	50
8	72	62	55	50	71	61	54	50	59	54	49	58	53	49	56	52	48	56	52	48	47
9	69	58	51	47	67	57	51	47	56	50	46	54	49	46	53	49	45	53	49	45	44
10	65	54	48	44	64	54	48	44	53	47	43	51	46	43	50	46	42	50	46	42	41

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	231765	231765	231765	231765
5°	230354	245745	230354	218400
10°	227522	252054	227522	206697
15°	220805	234237	220805	190932
20°	206508	187826	206508	170067
25°	182776	130137	182776	142523
30°	148407	84664	148407	106636
35°	106442	54830	106442	70990
40°	68819	37792	68819	44770
45°	43665	29273	43665	31899
50°	32426	24875	32426	26571
55°	26474	22660	26474	23454
60°	22925	21585	22925	21716
65°	20898	20818	20898	20729
70°	19808	20398	19808	20133
75°	18523	19732	18523	19140
80°	16272	18629	16272	17416
85°	10530	13300	10530	12680

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 61390 cd/sqm



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L950-UPL30

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4692.7	8.1
10°-20°	12766.7	22.0
20°-30°	14972.8	25.8
30°-40°	10412.6	17.9
40°-50°	5174.6	8.9
50°-60°	3094.9	5.3
60°-70°	2178.3	3.8
70°-80°	1403.2	2.4
80°-90°	450.7	0.8
90°-100°	77.2	0.1
100°-110°	497.1	0.9
110°-120°	917.0	1.6
120°-130°	546.1	0.9
130°-140°	331.7	0.6
140°-150°	230.9	0.4
150°-160°	152.2	0.3
160°-170°	88.9	0.2
170°-180°	29.9	0.1
0°-30°	32432.2	55.9
0°-40°	42844.8	73.8
0°-60°	51114.3	88.1
0°-90°	55146.6	95.1
90°-120°	1491.3	2.6
90°-150°	2600.0	4.5
90°-180°	2871.0	4.9
0°-180°	58017.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	49353	49353	49353	49353	49353	
5°	49184	52470	49184	46632	49184	4668
15°	46324	49142	46324	40057	46324	12946
25°	36500	25988	36500	28462	36500	16525
35°	19536	10063	19536	13029	19536	12196
45°	7065	4736	7065	5161	7065	5781
55°	3578	3062	3578	3170	3578	3272
65°	2181	2173	2181	2164	2181	2191
75°	1305	1390	1305	1348	1305	1370
85°	362	457	362	436	362	402
90°	21	28	21	21	21	27
95°	41	42	41	36	41	44
105°	229	120	229	174	229	308
115°	976	836	976	792	976	889
125°	626	658	626	573	626	576
135°	398	460	398	419	398	315
145°	362	379	362	352	362	227
155°	325	339	325	317	325	152
165°	312	323	312	306	312	89
175°	314	323	314	309	314	30
180°	314	314	314	314	314	



TEST NUMBER:
 CATALOG NUMBER: EHBR1-60-UNV-TASM-L950-UPL30

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	49352.7	49352.7	49352.7	49352.7	49352.7	49352.7	49352.7	49352.7	49352.7	49352.7	49352.7
2.5°	49324.0	49961.6	50478.0	50818.5	50987.0	50818.5	50478.0	49961.6	49324.0	48690.0	48254.2
5°	49184.2	50461.3	51543.2	52251.1	52470.5	52251.1	51543.2	50461.3	49184.2	47977.5	47177.0
7.5°	48850.1	50839.8	52447.4	53273.7	53475.5	53273.7	52447.4	50839.8	48850.1	47141.8	46130.3
10°	48340.2	51078.6	52936.0	53528.2	53552.3	53528.2	52936.0	51078.6	48340.2	46038.7	44845.8
12.5°	47526.8	50993.5	52772.2	52577.8	52136.4	52577.8	52772.2	50993.5	47526.8	44691.2	43186.4
15°	46323.7	50489.1	51734.7	50153.2	49141.7	50153.2	51734.7	50489.1	46323.7	42871.8	41126.5
17.5°	44628.3	49545.2	49569.3	46440.3	44532.1	46440.3	49569.3	49545.2	44628.3	40647.1	38724.9
20°	42443.3	48031.1	46587.4	40864.6	38603.7	40864.6	46587.4	48031.1	42443.3	38017.0	36130.9
22.5°	39704.0	45989.7	42435.1	35255.5	32170.9	35255.5	42435.1	45989.7	39704.0	34958.4	32995.5
25°	36500.2	43488.2	37968.0	29143.9	25988.2	29143.9	37968.0	43488.2	36500.2	31314.0	29539.0
27.5°	32731.8	40317.6	33211.2	23815.2	20903.8	23815.2	33211.2	40317.6	32731.8	27551.2	25738.3
30°	28546.0	36253.1	28261.0	18965.9	16285.0	18965.9	28261.0	36253.1	28546.0	23323.8	21700.6
32.5°	23859.6	32269.1	23507.0	15196.6	12925.6	15196.6	23507.0	32269.1	23859.6	19289.8	17593.5
35°	19536.0	27284.6	19220.4	11940.9	10063.2	11940.9	19220.4	27284.6	19536.0	15481.6	13815.8
37.5°	15331.7	22575.1	15321.6	9615.3	8162.4	9615.3	15321.6	22575.1	15331.7	12036.2	10684.2
40°	11928.0	17651.8	12004.8	7675.6	6550.3	7675.6	12004.8	17651.8	11928.0	9158.1	8292.8
42.5°	9037.9	13497.5	9435.8	6299.5	5563.7	6299.5	9435.8	13497.5	9037.9	7215.6	6567.8
45°	7064.8	9932.7	7368.3	5314.8	4736.3	5314.8	7368.3	9932.7	7064.8	5810.9	5375.9
47.5°	5753.4	7676.5	5971.9	4558.7	4153.3	4558.7	5971.9	7676.5	5753.4	4915.0	4589.3
50°	4832.6	5890.4	4958.5	3979.4	3707.3	3979.4	4958.5	5890.4	4832.6	4208.9	3991.4
52.5°	4151.5	4804.0	4222.7	3546.2	3363.0	3546.2	4222.7	4804.0	4151.5	3682.4	3547.2
55°	3577.7	4038.6	3672.1	3189.1	3062.3	3189.1	3672.1	4038.6	3577.7	3277.0	3177.0
57.5°	3141.9	3426.0	3189.1	2884.6	2800.3	2884.6	3189.1	3426.0	3141.9	2916.0	2862.4
60°	2755.9	2966.9	2814.3	2619.0	2594.9	2619.0	2814.3	2966.9	2755.9	2623.6	2588.4
62.5°	2458.9	2592.1	2488.5	2380.2	2358.9	2380.2	2488.5	2592.1	2458.9	2357.1	2363.6
65°	2181.3	2305.2	2223.8	2165.5	2172.9	2165.5	2223.8	2305.2	2181.3	2134.1	2144.2
67.5°	1966.6	2031.3	1996.2	1962.8	1971.2	1962.8	1996.2	2031.3	1966.6	1920.3	1936.0
70°	1738.0	1807.4	1771.3	1775.9	1789.8	1775.9	1771.3	1807.4	1738.0	1724.1	1736.1
72.5°	1519.6	1573.3	1561.2	1572.3	1587.1	1572.3	1561.2	1573.3	1519.6	1517.7	1518.6
75°	1304.8	1345.5	1351.1	1366.9	1390.0	1366.9	1351.1	1345.5	1304.8	1291.0	1307.6
77.5°	1070.7	1117.0	1134.5	1155.9	1190.1	1155.9	1134.5	1117.0	1070.7	1080.0	1088.3
80°	856.0	877.3	916.2	931.9	980.0	931.9	916.2	877.3	856.0	840.3	852.4
82.5°	626.5	645.9	679.3	708.9	736.7	708.9	679.3	645.9	626.5	619.2	620.0
85°	361.9	391.4	413.6	448.9	457.1	448.9	413.6	391.4	361.9	370.2	361.9
87.5°	126.8	136.0	155.4	169.4	170.3	169.4	155.4	136.0	126.8	129.5	117.5
90°	21.4	36.5	62.6	37.1	27.9	37.1	62.6	36.5	21.4	37.2	57.6
92.5°	27.7	49.1	87.8	48.0	35.8	48.0	87.8	49.1	27.7	48.1	92.3
95°	41.3	60.1	111.4	52.8	42.1	52.8	111.4	60.1	41.3	63.9	128.4
97.5°	63.3	74.2	125.6	55.9	49.9	55.9	125.6	74.2	63.3	78.0	147.4
100°	83.7	83.7	227.9	63.8	56.2	63.8	227.9	83.7	83.7	96.3	229.2
102.5°	126.3	163.3	526.3	124.6	67.3	124.6	526.3	163.3	126.3	179.8	485.7
105°	228.6	371.2	924.7	315.1	120.1	315.1	924.7	371.2	228.6	375.0	865.2
107.5°	431.6	690.7	1190.7	617.3	272.8	617.3	1190.7	690.7	431.6	663.0	1141.6
110°	689.8	964.6	1299.3	844.0	546.8	844.0	1299.3	964.6	689.8	910.2	1196.7



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L950-UPL30

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	897.6	1074.8	1269.4	935.2	754.5	935.2	1269.4	1074.8	897.6	1004.7	1146.3
115°	975.7	1059.1	1134.0	932.2	836.4	932.2	1134.0	1059.1	975.7	981.1	1023.5
117.5°	942.6	969.3	979.8	875.5	841.1	875.5	979.8	969.3	942.6	882.8	869.3
120°	851.3	840.3	826.4	792.1	793.9	792.1	826.4	840.3	851.3	771.0	726.0
122.5°	737.3	713.7	698.9	708.0	729.4	708.0	698.9	713.7	737.3	657.0	623.1
125°	625.6	601.9	610.1	635.5	657.9	635.5	610.1	601.9	625.6	558.8	549.9
127.5°	532.0	521.0	545.5	574.2	593.3	574.2	545.5	521.0	532.0	489.5	498.0
130°	465.2	467.4	499.9	524.7	536.7	524.7	499.9	467.4	465.2	444.8	465.9
132.5°	423.7	435.3	466.1	487.9	495.0	487.9	466.1	435.3	423.7	418.3	444.1
135°	397.8	414.8	443.5	457.0	460.5	457.0	443.5	414.8	397.8	400.4	423.7
137.5°	383.0	400.1	421.4	432.8	430.6	432.8	421.4	400.1	383.0	388.6	406.7
140°	374.5	391.5	401.0	413.8	412.6	413.8	401.0	391.5	374.5	377.7	391.8
142.5°	366.0	381.5	386.1	395.9	393.7	395.9	386.1	381.5	366.0	369.1	378.6
145°	362.2	373.9	369.8	381.8	378.8	381.8	369.8	373.9	362.2	362.8	368.5
147.5°	354.4	362.8	358.1	368.5	365.5	368.5	358.1	362.8	354.4	354.4	356.8
150°	345.7	352.0	344.9	356.8	357.1	356.8	344.9	352.0	345.7	344.1	346.7
152.5°	334.0	340.3	334.0	347.6	346.9	347.6	334.0	340.3	334.0	332.4	334.9
155°	324.9	328.1	324.9	338.4	339.3	338.4	324.9	328.1	324.9	324.0	325.8
157.5°	318.9	321.4	319.8	331.8	332.7	331.8	319.8	321.4	318.9	318.9	319.8
160°	314.7	317.8	317.2	327.6	328.5	327.6	317.2	317.8	314.7	315.3	316.3
162.5°	313.4	313.4	313.8	324.1	325.9	324.1	313.8	313.4	313.4	313.4	315.0
165°	311.5	313.1	311.8	319.9	323.3	319.9	311.8	313.1	311.5	312.2	312.2
167.5°	311.8	310.2	312.1	319.6	323.1	319.6	312.1	310.2	311.8	312.5	312.5
170°	309.6	310.5	310.8	318.3	321.7	318.3	310.8	310.5	309.6	311.2	311.8
172.5°	312.4	312.4	312.0	317.8	322.9	317.8	312.0	312.4	312.4	313.0	314.6
175°	314.2	313.6	313.8	318.1	323.1	318.1	313.8	313.6	314.2	313.3	313.3
177.5°	312.6	314.5	316.3	320.6	327.2	320.6	316.3	314.5	312.6	313.3	313.3
180°	314.5	314.5	314.5	314.5	314.5	314.5	314.5	314.5	314.5	314.5	314.5



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L950-UPL30

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	49352.7	49352.7	49352.7	49352.7	49352.7	49352.7
2.5°	47919.1	47887.7	47919.1	48254.2	48690.0	49324.0
5°	46805.9	46631.9	46805.9	47177.0	47977.5	49184.2
7.5°	45509.3	45408.4	45509.3	46130.3	47141.8	48850.1
10°	44144.3	43915.7	44144.3	44845.8	46038.7	48340.2
12.5°	42461.8	42159.2	42461.8	43186.4	44691.2	47526.8
15°	40322.2	40056.6	40322.2	41126.5	42871.8	46323.7
17.5°	38026.2	37785.6	38026.2	38724.9	40647.1	44628.3
20°	35142.5	34953.7	35142.5	36130.9	38017.0	42443.3
22.5°	32117.3	31940.5	32117.3	32995.5	34958.4	39704.0
25°	28558.1	28461.8	28558.1	29539.0	31314.0	36500.2
27.5°	24711.9	24548.1	24711.9	25738.3	27551.2	32731.8
30°	20782.5	20511.4	20782.5	21700.6	23323.8	28546.0
32.5°	16939.2	16743.9	16939.2	17593.5	19289.8	23859.6
35°	13224.5	13029.2	13224.5	13815.8	15481.6	19536.0
37.5°	10304.7	9959.5	10304.7	10684.2	12036.2	15331.7
40°	7815.3	7759.8	7815.3	8292.8	9158.1	11928.0
42.5°	6362.4	6211.5	6362.4	6567.8	7215.6	9037.9
45°	5220.4	5161.1	5220.4	5375.9	5810.9	7064.8
47.5°	4489.3	4515.2	4489.3	4589.3	4915.0	5753.4
50°	3944.2	3960.0	3944.2	3991.4	4208.9	4832.6
52.5°	3542.6	3528.7	3542.6	3547.2	3682.4	4151.5
55°	3187.2	3169.6	3187.2	3177.0	3277.0	3577.7
57.5°	2876.3	2889.2	2876.3	2862.4	2916.0	3141.9
60°	2598.6	2610.6	2598.6	2588.4	2623.6	2755.9
62.5°	2364.5	2371.9	2364.5	2363.6	2357.1	2458.9
65°	2155.4	2163.6	2155.4	2144.2	2134.1	2181.3
67.5°	1955.4	1955.4	1955.4	1936.0	1920.3	1966.6
70°	1767.5	1766.6	1767.5	1736.1	1724.1	1738.0
72.5°	1541.8	1564.0	1541.8	1518.6	1517.7	1519.6
75°	1322.4	1348.3	1322.4	1307.6	1291.0	1304.8
77.5°	1100.3	1140.1	1100.3	1088.3	1080.0	1070.7
80°	872.7	916.2	872.7	852.4	840.3	856.0
82.5°	645.0	677.4	645.0	620.0	619.2	626.5
85°	384.1	435.8	384.1	361.9	370.2	361.9
87.5°	123.1	157.3	123.1	117.5	129.5	126.8
90°	34.0	21.4	34.0	57.6	37.2	21.4
92.5°	51.3	30.8	51.3	92.3	48.1	27.7
95°	59.2	35.6	59.2	128.4	63.9	41.3
97.5°	65.5	45.9	65.5	147.4	78.0	63.3
100°	76.5	60.1	76.5	229.2	96.3	83.7
102.5°	161.5	101.0	161.5	485.7	179.8	126.3
105°	339.4	173.5	339.4	865.2	375.0	228.6
107.5°	607.0	299.4	607.0	1141.6	663.0	431.6
110°	805.4	557.6	805.4	1196.7	910.2	689.8



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L950-UPL30

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	865.2	752.8	865.2	1146.3	1004.7	897.6
115°	832.1	792.1	832.1	1023.5	981.1	975.7
117.5°	759.7	765.3	759.7	869.3	882.8	942.6
120°	676.3	708.6	676.3	726.0	771.0	851.3
122.5°	600.0	637.8	600.0	623.1	657.0	737.3
125°	534.0	572.6	534.0	549.9	558.8	625.6
127.5°	488.2	514.5	488.2	498.0	489.5	532.0
130°	453.0	475.1	453.0	465.9	444.8	465.2
132.5°	428.8	442.9	428.8	444.1	418.3	423.7
135°	407.6	419.3	407.6	423.7	400.4	397.8
137.5°	389.7	399.8	389.7	406.7	388.6	383.0
140°	374.2	382.7	374.2	391.8	377.7	374.5
142.5°	357.8	364.1	357.8	378.6	369.1	366.0
145°	347.1	351.9	347.1	368.5	362.8	362.2
147.5°	337.8	341.0	337.8	356.8	354.4	354.4
150°	328.7	331.9	328.7	346.7	344.1	345.7
152.5°	318.6	322.7	318.6	334.9	332.4	334.0
155°	312.6	316.6	312.6	325.8	324.0	324.9
157.5°	309.7	313.1	309.7	319.8	318.9	318.9
160°	307.8	310.3	307.8	316.3	315.3	314.7
162.5°	304.9	307.4	304.9	315.0	313.4	313.4
165°	305.2	306.1	305.2	312.2	312.2	311.5
167.5°	304.6	306.1	304.6	312.5	312.5	311.8
170°	305.5	306.4	305.5	311.8	311.2	309.6
172.5°	307.4	308.3	307.4	314.6	313.0	312.4
175°	307.6	308.6	307.6	313.3	313.3	314.2
177.5°	310.1	311.1	310.1	313.3	313.3	312.6
180°	314.5	314.5	314.5	314.5	314.5	314.5



TEST NUMBER: CATALOG
 CATALOG NUMBER: EHBR1-60-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	19.70	20.83	20.15	21.25	21.69	19.02	20.15	19.47	20.56	21.01
	3H	21.25	22.25	21.71	22.69	23.17	20.86	21.87	21.33	22.30	22.79
	4H	21.88	22.82	22.37	23.27	23.78	21.65	22.58	22.14	23.04	23.54
	6H	22.36	23.23	22.87	23.70	24.21	22.29	23.15	22.79	23.62	24.14
	8H	22.52	23.33	23.03	23.82	24.35	22.51	23.33	23.03	23.82	24.34
	12H	22.59	23.37	23.11	23.85	24.40	22.64	23.42	23.16	23.90	24.45
4H	2H	20.11	21.05	20.61	21.50	22.01	19.59	20.53	20.08	20.98	21.49
	3H	21.91	22.69	22.41	23.19	23.71	21.65	22.42	22.15	22.93	23.45
	4H	22.69	23.38	23.21	23.90	24.46	22.56	23.25	23.08	23.77	24.33
	6H	23.30	23.90	23.85	24.44	25.02	23.33	23.93	23.88	24.47	25.05
	8H	23.50	24.06	24.05	24.60	25.18	23.60	24.16	24.15	24.70	25.29
	12H	23.60	24.10	24.18	24.67	25.26	23.77	24.26	24.34	24.83	25.42
8H	4H	22.94	23.50	23.49	24.03	24.62	22.84	23.40	23.39	23.94	24.52
	6H	23.68	24.13	24.26	24.72	25.31	23.74	24.20	24.33	24.78	25.38
	8H	23.95	24.35	24.55	24.95	25.56	24.10	24.50	24.70	25.10	25.71
	12H	24.12	24.48	24.72	25.06	25.74	24.35	24.70	24.94	25.28	25.96
12H	4H	22.95	23.44	23.52	24.01	24.60	22.85	23.34	23.42	23.91	24.51
	6H	23.72	24.13	24.33	24.73	25.33	23.79	24.19	24.39	24.79	25.40
	8H	24.04	24.39	24.64	24.98	25.66	24.19	24.55	24.79	25.13	25.81

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

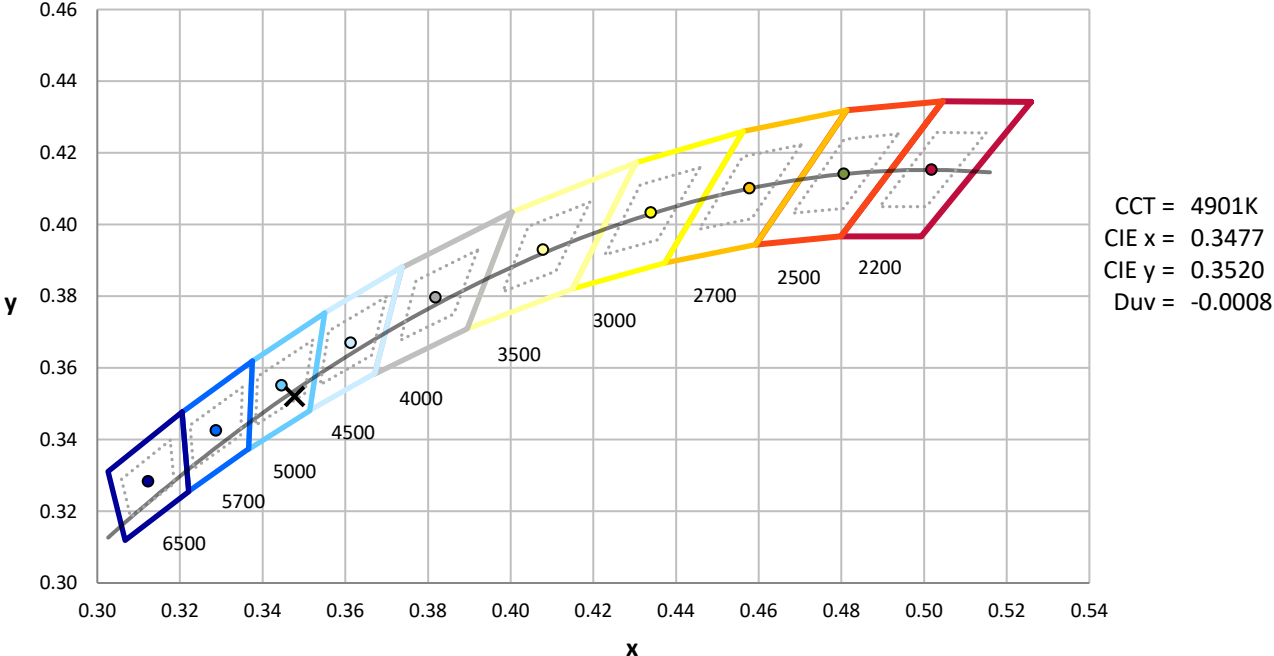
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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



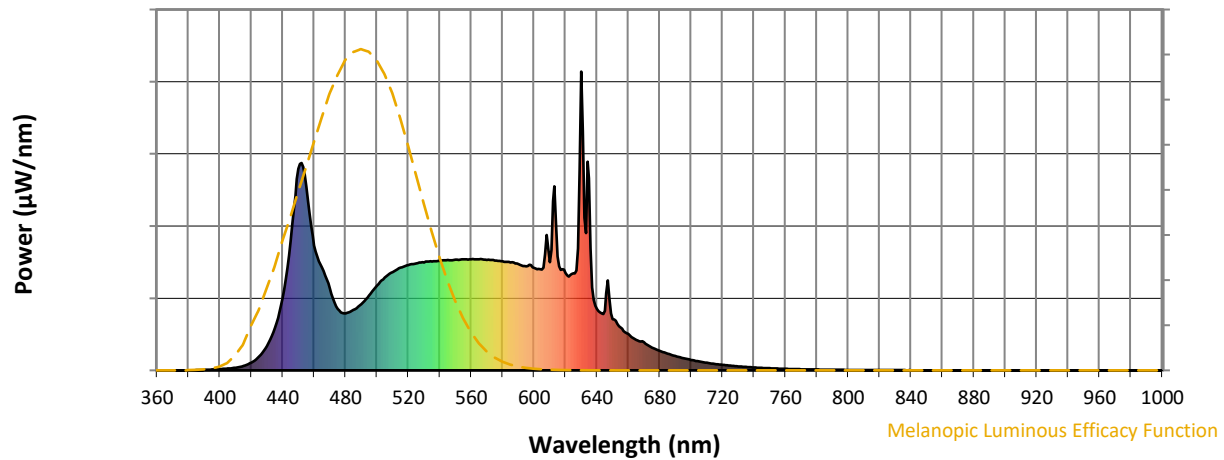
Scotopic Lumens: NR

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)