

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: EHBR1-48-UNV-TASM-L950-UPL40

Issue Date: 3/20/2026

**Test Information**

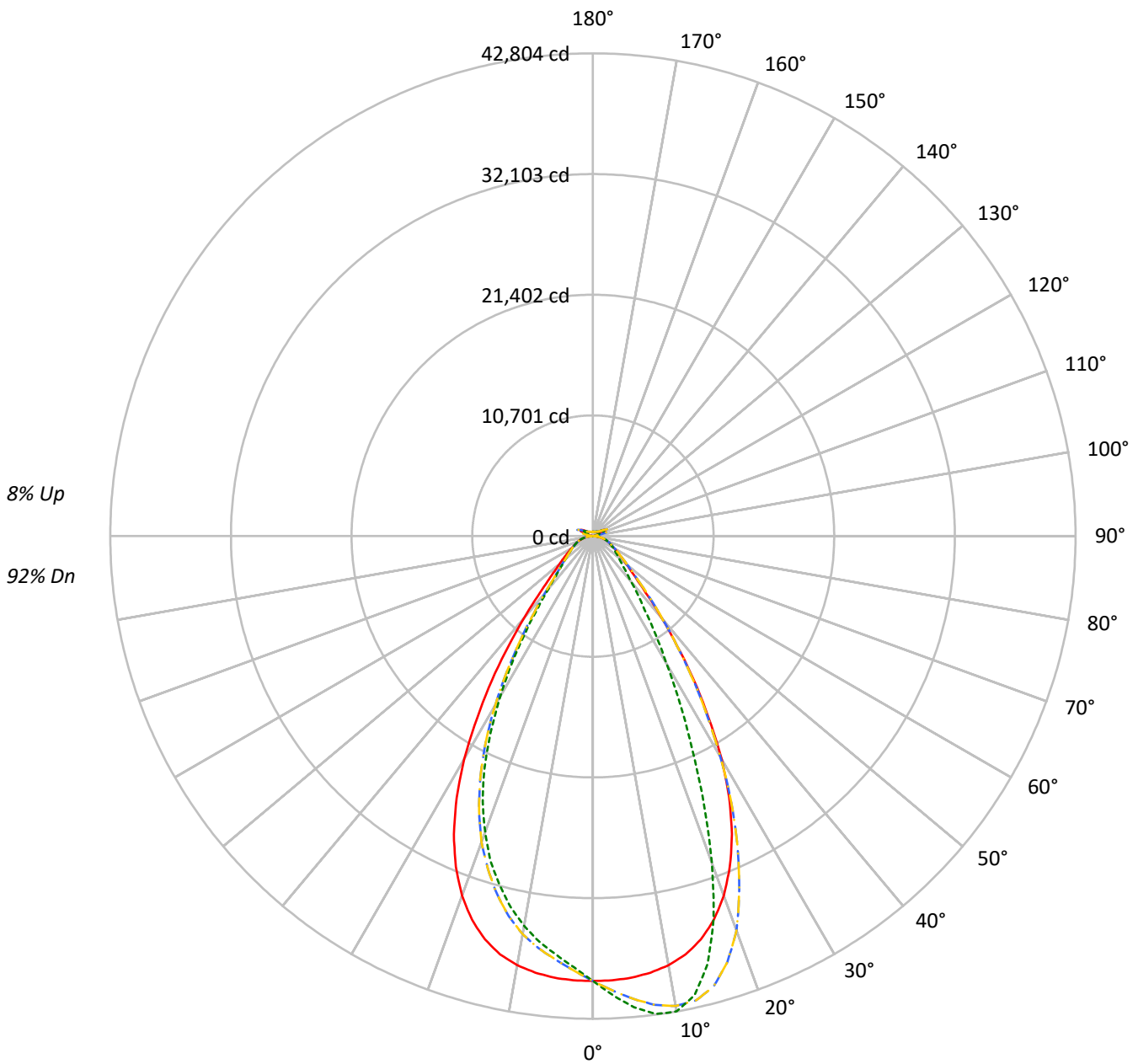
Test Method: LM-79-2019  
Report Number: REPORT IS A COMBINATION OF REPORTS P1431842 AND P1431635  
Test Lab: INNOVATION CENTER  
Issue Date: 3/20/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: EHBR1-48-UNV-TASM-L950-UPL40  
Description: Elevate Round Highbay at, 48000 lumens, 5000K 90CRI LEDs with TASM lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 47711.9 lumens  
Efficiency: N/A  
Efficacy: 165.0 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): 289.2  
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: EHBR1-48-UNV-TASM-L950-UPL40

### 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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	95	95	95	92
1	110	107	103	101	107	104	101	98	98	96	94	93	91	90	88	87	86	88	87	86	83
2	103	97	92	88	100	95	90	86	90	86	83	86	83	80	82	80	77	82	80	77	75
3	97	89	83	78	94	87	81	77	83	78	75	79	76	72	76	73	70	76	73	70	68
4	91	82	75	70	88	80	74	69	77	72	68	74	69	66	71	67	64	71	67	64	62
5	85	75	69	64	83	74	68	63	71	66	62	69	64	60	66	62	59	66	62	59	57
6	80	70	63	58	78	69	62	58	66	61	57	64	59	56	62	58	55	62	58	55	53
7	76	65	58	54	74	64	58	53	62	56	52	60	55	51	58	54	51	58	54	51	49
8	72	61	54	50	70	60	54	49	58	53	49	57	52	48	55	50	47	55	50	47	46
9	68	57	50	46	66	56	50	46	55	49	45	53	48	45	52	47	44	52	47	44	43
10	64	54	47	43	63	53	47	43	52	46	42	50	45	42	49	45	41	49	45	41	40

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	185247	185247	185247	185247
5°	184120	196422	184120	174565
10°	181856	201464	181856	165211
15°	176487	187223	176487	152611
20°	165060	150127	165060	135933
25°	146091	104016	146091	113918
30°	118620	67670	118620	85233
35°	85078	43825	85078	56742
40°	55006	30207	55006	35784
45°	34901	23399	34901	25497
50°	25918	19883	25918	21237
55°	21160	18112	21160	18747
60°	18324	17253	18324	17358
65°	16704	16640	16704	16569
70°	15831	16304	15831	16093
75°	14805	15771	14805	15300
80°	13006	14890	13006	13920
85°	8414	10631	8414	10137

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 49069 cd/sqm



TEST NUMBER:

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	3750.8	7.9
10°-20°	10204.3	21.4
20°-30°	11967.6	25.1
30°-40°	8322.7	17.4
40°-50°	4136.0	8.7
50°-60°	2473.8	5.2
60°-70°	1741.1	3.6
70°-80°	1121.6	2.4
80°-90°	362.6	0.8
90°-100°	96.9	0.2
100°-110°	630.7	1.3
110°-120°	1164.8	2.4
120°-130°	692.6	1.5
130°-140°	419.3	0.9
140°-150°	290.6	0.6
150°-160°	190.1	0.4
160°-170°	109.7	0.2
170°-180°	36.6	0.1
0°-30°	25922.7	54.3
0°-40°	34245.4	71.8
0°-60°	40855.2	85.6
0°-90°	44080.5	92.4
90°-120°	1892.4	4.0
90°-150°	3295.0	6.9
90°-180°	3631.0	7.6
0°-180°	47711.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	39447	39447	39447	39447	39447	
5°	39312	41939	39312	37272	39312	3731
15°	37026	39278	37026	32017	37026	10347
25°	29174	20772	29174	22749	29174	13208
35°	15615	8043	15615	10414	15615	9748
45°	5647	3786	5647	4125	5647	4621
55°	2860	2448	2860	2533	2860	2615
65°	1744	1737	1744	1729	1744	1751
75°	1043	1111	1043	1078	1043	1095
85°	289	365	289	348	289	322
90°	27	32	27	27	27	26
95°	52	50	52	45	52	55
105°	290	149	290	220	290	391
115°	1240	1060	1240	1006	1240	1130
125°	794	832	794	727	794	731
135°	502	581	502	532	502	398
145°	455	476	455	443	455	285
155°	406	424	406	394	406	190
165°	384	397	384	377	384	109
175°	384	392	384	378	384	37
180°	384	384	384	384	384	



TEST NUMBER:  
 CATALOG NUMBER: EHBR1-48-UNV-TASM-L950-UPL40

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	39447.0	39447.0	39447.0	39447.0	39447.0	39447.0	39447.0	39447.0	39447.0	39447.0	39447.0
2.5°	39424.2	39933.8	40346.5	40618.7	40753.4	40618.7	40346.5	39933.8	39424.2	38917.4	38569.0
5°	39312.5	40333.2	41197.9	41763.8	41939.1	41763.8	41197.9	40333.2	39312.5	38347.9	37708.1
7.5°	39045.4	40635.7	41920.6	42581.1	42742.4	42581.1	41920.6	40635.7	39045.4	37679.9	36871.4
10°	38637.9	40826.6	42311.1	42784.6	42803.8	42784.6	42311.1	40826.6	38637.9	36798.2	35844.8
12.5°	37987.7	40758.6	42180.2	42024.8	41672.1	42024.8	42180.2	40758.6	37987.7	35721.3	34518.5
15°	37026.0	40355.4	41351.1	40086.9	39278.4	40086.9	41351.1	40355.4	37026.0	34267.0	32872.0
17.5°	35670.9	39600.9	39620.1	37119.2	35594.0	37119.2	39620.1	39600.9	35670.9	32488.8	30952.4
20°	33924.6	38390.8	37236.8	32662.6	30855.5	32662.6	37236.8	38390.8	33924.6	30386.6	28879.1
22.5°	31735.0	36759.0	33917.9	28179.3	25714.0	28179.3	33917.9	36759.0	31735.0	27941.9	26373.0
25°	29174.2	34759.6	30347.4	23294.4	20772.0	23294.4	30347.4	34759.6	29174.2	25028.9	23610.3
27.5°	26162.2	32225.5	26545.3	19035.2	16708.2	19035.2	26545.3	32225.5	26162.2	22021.4	20572.3
30°	22816.5	28976.7	22588.7	15159.2	13016.3	15159.2	22588.7	28976.7	22816.5	18642.5	17345.1
32.5°	19070.7	25792.3	18788.9	12146.5	10331.3	12146.5	18788.9	25792.3	19070.7	15418.2	14062.3
35°	15614.9	21808.3	15362.7	9544.2	8043.4	9544.2	15362.7	21808.3	15614.9	12374.3	11042.9
37.5°	12254.5	18044.0	12246.4	7685.4	6524.1	7685.4	12246.4	18044.0	12254.5	9620.4	8539.8
40°	9533.9	14108.9	9595.3	6135.0	5235.6	6135.0	9595.3	14108.9	9533.9	7320.0	6628.4
42.5°	7223.9	10788.4	7541.9	5035.1	4447.0	5035.1	7541.9	10788.4	7223.9	5767.4	5249.6
45°	5646.8	7939.1	5889.5	4248.1	3785.8	4248.1	5889.5	7939.1	5646.8	4644.5	4296.9
47.5°	4598.6	6135.8	4773.2	3643.7	3319.7	3643.7	4773.2	6135.8	4598.6	3928.5	3668.1
50°	3862.7	4708.1	3963.2	3180.6	2963.2	3180.6	3963.2	4708.1	3862.7	3364.1	3190.3
52.5°	3318.2	3839.7	3375.2	2834.5	2688.0	2834.5	3375.2	3839.7	3318.2	2943.2	2835.3
55°	2859.6	3228.0	2935.1	2549.0	2447.7	2549.0	2935.1	3228.0	2859.6	2619.3	2539.4
57.5°	2511.3	2738.4	2549.0	2305.6	2238.3	2305.6	2549.0	2738.4	2511.3	2330.8	2287.9
60°	2202.8	2371.5	2249.4	2093.3	2074.1	2093.3	2249.4	2371.5	2202.8	2097.0	2069.0
62.5°	1965.4	2071.9	1989.0	1902.5	1885.5	1902.5	1989.0	2071.9	1965.4	1884.0	1889.2
65°	1743.5	1842.6	1777.5	1730.8	1736.8	1730.8	1777.5	1842.6	1743.5	1705.8	1713.8
67.5°	1571.9	1623.6	1595.5	1568.9	1575.6	1568.9	1595.5	1623.6	1571.9	1534.9	1547.4
70°	1389.1	1444.6	1415.8	1419.5	1430.6	1419.5	1415.8	1444.6	1389.1	1378.1	1387.6
72.5°	1214.5	1257.5	1247.9	1256.7	1268.6	1256.7	1247.9	1257.5	1214.5	1213.1	1213.8
75°	1042.9	1075.5	1079.9	1092.5	1111.0	1092.5	1079.9	1075.5	1042.9	1031.9	1045.2
77.5°	855.8	892.8	906.9	923.9	951.2	923.9	906.9	892.8	855.8	863.2	869.8
80°	684.2	701.2	732.3	744.9	783.3	744.9	732.3	701.2	684.2	671.7	681.2
82.5°	500.8	516.3	543.0	566.6	588.8	566.6	543.0	516.3	500.8	494.8	495.6
85°	289.2	312.9	330.7	358.7	365.4	358.7	330.7	312.9	289.2	295.9	289.2
87.5°	101.4	108.7	124.2	135.4	136.1	135.4	124.2	108.7	101.4	103.6	93.9
90°	26.8	45.5	78.3	44.5	32.0	44.5	78.3	45.5	26.8	46.8	72.8
92.5°	34.7	61.5	110.4	58.5	42.0	58.5	110.4	61.5	34.7	60.8	116.9
95°	51.6	75.5	140.4	64.5	50.0	64.5	140.4	75.5	51.6	80.8	162.9
97.5°	79.5	93.6	158.4	68.6	60.0	68.6	158.4	93.6	79.5	98.9	186.9
100°	105.6	105.6	288.5	78.5	68.0	78.5	288.5	105.6	105.6	121.6	291.1
102.5°	159.6	206.4	667.7	155.3	82.0	155.3	667.7	206.4	159.6	227.7	617.4
105°	289.8	470.7	1174.2	397.6	148.8	397.6	1174.2	470.7	289.8	476.0	1099.9
107.5°	548.1	877.2	1512.5	782.0	343.0	782.0	1512.5	877.2	548.1	842.3	1451.0
110°	876.4	1225.5	1650.7	1070.3	691.4	1070.3	1650.7	1225.5	876.4	1156.7	1521.1



TEST NUMBER:

CATALOG NUMBER: EHBR1-48-UNV-TASM-L950-UPL40

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	1140.7	1365.6	1612.7	1186.5	955.7	1186.5	1612.7	1365.6	1140.7	1276.8	1457.0
115°	1239.5	1345.6	1440.5	1182.4	1059.7	1182.4	1440.5	1345.6	1239.5	1246.8	1300.9
117.5°	1197.4	1231.5	1244.3	1110.4	1065.8	1110.4	1244.3	1231.5	1197.4	1121.4	1104.6
120°	1081.4	1067.4	1048.8	1004.3	1005.8	1004.3	1048.8	1067.4	1081.4	979.3	922.4
122.5°	936.0	905.9	886.7	896.9	923.6	896.9	886.7	905.9	936.0	833.9	791.0
125°	793.8	763.7	773.3	804.8	832.3	804.8	773.3	763.7	793.8	708.4	697.7
127.5°	674.4	660.4	691.2	726.7	750.2	726.7	691.2	660.4	674.4	620.4	631.6
130°	589.1	592.3	633.1	663.4	678.2	663.4	633.1	592.3	589.1	563.0	590.4
132.5°	535.7	551.1	589.8	616.1	624.8	616.1	589.8	551.1	535.7	528.5	561.7
135°	502.5	525.0	560.5	577.3	580.8	577.3	560.5	525.0	502.5	505.3	535.7
137.5°	483.2	505.7	532.5	546.0	542.7	546.0	532.5	505.7	483.2	489.9	513.2
140°	471.9	494.5	506.5	522.0	519.5	522.0	506.5	494.5	471.9	475.9	493.9
142.5°	460.7	481.2	487.2	498.7	495.4	498.7	487.2	481.2	460.7	464.6	476.6
145°	455.4	470.7	466.0	480.6	476.1	480.6	466.0	470.7	455.4	456.7	463.3
147.5°	445.4	456.7	450.6	463.3	458.8	463.3	450.6	456.7	445.4	445.4	448.0
150°	434.0	442.0	433.3	448.0	447.6	448.0	433.3	442.0	434.0	432.0	434.7
152.5°	418.8	426.7	418.8	435.5	434.3	435.5	418.8	426.7	418.8	416.7	419.5
155°	406.2	410.2	406.2	422.9	423.7	422.9	406.2	410.2	406.2	405.5	407.0
157.5°	397.7	400.4	398.4	413.2	413.9	413.2	398.4	400.4	397.7	397.7	398.4
160°	390.7	394.7	393.4	406.1	406.9	406.1	393.4	394.7	390.7	391.9	392.6
162.5°	388.1	388.1	387.6	400.4	401.8	400.4	387.6	388.1	388.1	388.1	390.1
165°	384.4	386.3	383.8	393.3	396.8	393.3	383.8	386.3	384.4	385.6	385.6
167.5°	383.8	381.9	383.4	391.5	395.1	391.5	383.4	381.9	383.8	385.1	385.1
170°	380.6	381.3	380.8	389.0	392.6	389.0	380.8	381.3	380.6	382.6	383.8
172.5°	382.8	382.8	381.0	387.2	392.6	387.2	381.0	382.8	382.8	384.1	386.0
175°	384.3	383.1	382.5	386.7	392.2	386.7	382.5	383.1	384.3	383.5	383.5
177.5°	382.3	383.8	385.2	389.4	396.9	389.4	385.2	383.8	382.3	383.5	383.5
180°	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8



TEST NUMBER:

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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	39447.0	39447.0	39447.0	39447.0	39447.0	39447.0
2.5°	38301.2	38276.2	38301.2	38569.0	38917.4	39424.2
5°	37411.4	37272.3	37411.4	37708.1	38347.9	39312.5
7.5°	36375.1	36294.5	36375.1	36871.4	37679.9	39045.4
10°	35284.0	35101.4	35284.0	35844.8	36798.2	38637.9
12.5°	33939.3	33697.5	33939.3	34518.5	35721.3	37987.7
15°	32229.1	32016.9	32229.1	32872.0	34267.0	37026.0
17.5°	30394.0	30201.7	30394.0	30952.4	32488.8	35670.9
20°	28089.1	27938.2	28089.1	28879.1	30386.6	33924.6
22.5°	25671.0	25529.7	25671.0	26373.0	27941.9	31735.0
25°	22826.2	22749.3	22826.2	23610.3	25028.9	29174.2
27.5°	19752.0	19621.1	19752.0	20572.3	22021.4	26162.2
30°	16611.3	16394.6	16611.3	17345.1	18642.5	22816.5
32.5°	13539.3	13383.2	13539.3	14062.3	15418.2	19070.7
35°	10570.3	10414.2	10570.3	11042.9	12374.3	15614.9
37.5°	8236.5	7960.6	8236.5	8539.8	9620.4	12254.5
40°	6246.7	6202.3	6246.7	6628.4	7320.0	9533.9
42.5°	5085.4	4964.8	5085.4	5249.6	5767.4	7223.9
45°	4172.7	4125.3	4172.7	4296.9	4644.5	5646.8
47.5°	3588.2	3609.0	3588.2	3668.1	3928.5	4598.6
50°	3152.6	3165.1	3152.6	3190.3	3364.1	3862.7
52.5°	2831.6	2820.4	2831.6	2835.3	2943.2	3318.2
55°	2547.5	2533.4	2547.5	2539.4	2619.3	2859.6
57.5°	2299.0	2309.3	2299.0	2287.9	2330.8	2511.3
60°	2077.0	2086.7	2077.0	2069.0	2097.0	2202.8
62.5°	1889.9	1895.9	1889.9	1889.2	1884.0	1965.4
65°	1722.8	1729.4	1722.8	1713.8	1705.8	1743.5
67.5°	1563.0	1563.0	1563.0	1547.4	1534.9	1571.9
70°	1412.8	1412.1	1412.8	1387.6	1378.1	1389.1
72.5°	1232.3	1250.1	1232.3	1213.8	1213.1	1214.5
75°	1057.1	1077.8	1057.1	1045.2	1031.9	1042.9
77.5°	879.5	911.3	879.5	869.8	863.2	855.8
80°	697.5	732.3	697.5	681.2	671.7	684.2
82.5°	515.6	541.5	515.6	495.6	494.8	500.8
85°	307.0	348.4	307.0	289.2	295.9	289.2
87.5°	98.4	125.7	98.4	93.9	103.6	101.4
90°	42.8	26.8	42.8	72.8	46.8	26.8
92.5°	64.9	38.7	64.9	116.9	60.8	34.7
95°	74.8	44.8	74.8	162.9	80.8	51.6
97.5°	82.8	57.5	82.8	186.9	98.9	79.5
100°	96.8	75.5	96.8	291.1	121.6	105.6
102.5°	205.0	127.7	205.0	617.4	227.7	159.6
105°	431.2	219.7	431.2	1099.9	476.0	289.8
107.5°	771.5	379.9	771.5	1451.0	842.3	548.1
110°	1023.8	708.3	1023.8	1521.1	1156.7	876.4



TEST NUMBER:

CATALOG NUMBER: EHBR1-48-UNV-TASM-L950-UPL40

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1099.9	956.5	1099.9	1457.0	1276.8	1140.7
115°	1057.9	1006.5	1057.9	1300.9	1246.8	1239.5
117.5°	965.7	972.5	965.7	1104.6	1121.4	1197.4
120°	859.6	900.4	859.6	922.4	979.3	1081.4
122.5°	762.2	810.4	762.2	791.0	833.9	936.0
125°	678.2	726.9	678.2	697.7	708.4	793.8
127.5°	620.1	652.9	620.1	631.6	620.4	674.4
130°	574.8	602.9	574.8	590.4	563.0	589.1
132.5°	543.5	561.6	543.5	561.7	528.5	535.7
135°	516.2	531.5	516.2	535.7	505.3	502.5
137.5°	493.0	506.3	493.0	513.2	489.9	483.2
140°	472.5	483.7	472.5	493.9	475.9	471.9
142.5°	451.2	459.2	451.2	476.6	464.6	460.7
145°	436.6	442.6	436.6	463.3	456.7	455.4
147.5°	424.0	428.0	424.0	448.0	445.4	445.4
150°	411.5	415.5	411.5	434.7	432.0	434.0
152.5°	398.2	403.0	398.2	419.5	416.7	418.8
155°	389.7	394.4	389.7	407.0	405.5	406.2
157.5°	385.1	388.6	385.1	398.4	397.7	397.7
160°	381.4	384.1	381.4	392.6	391.9	390.7
162.5°	376.8	379.6	376.8	390.1	388.1	388.1
165°	376.4	377.1	376.4	385.6	385.6	384.4
167.5°	375.1	377.1	375.1	385.1	385.1	383.8
170°	375.8	376.6	375.8	383.8	382.6	380.6
172.5°	377.3	378.1	377.3	386.0	384.1	382.8
175°	376.8	377.6	376.8	383.5	383.5	384.3
177.5°	379.5	380.3	379.5	383.5	383.5	382.3
180°	383.8	383.8	383.8	383.8	383.8	383.8



TEST NUMBER: CATALOG  
 CATALOG NUMBER: EHBR1-48-UNV-TASM-L950-UPL40

**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	18.71	19.80	19.21	20.27	20.78	18.03	19.12	18.52	19.59	20.09
	3H	20.25	21.23	20.77	21.71	22.26	19.87	20.84	20.39	21.33	21.88
	4H	20.89	21.80	21.42	22.30	22.87	20.65	21.56	21.19	22.06	22.63
	6H	21.37	22.20	21.92	22.72	23.30	21.30	22.13	21.84	22.65	23.23
	8H	21.52	22.31	22.08	22.85	23.43	21.52	22.31	22.08	22.84	23.43
	12H	21.59	22.35	22.16	22.87	23.49	21.64	22.40	22.21	22.93	23.54
4H	2H	19.12	20.03	19.66	20.53	21.10	18.60	19.51	19.14	20.01	20.58
	3H	20.92	21.67	21.46	22.22	22.80	20.66	21.41	21.20	21.95	22.54
	4H	21.69	22.37	22.26	22.92	23.55	21.56	22.24	22.13	22.80	23.42
	6H	22.30	22.89	22.90	23.47	24.11	22.33	22.91	22.92	23.50	24.14
	8H	22.50	23.04	23.10	23.63	24.27	22.60	23.15	23.20	23.73	24.37
	12H	22.61	23.08	23.22	23.70	24.35	22.77	23.25	23.38	23.86	24.51
8H	4H	21.94	22.48	22.54	23.06	23.71	21.84	22.38	22.44	22.97	23.61
	6H	22.68	23.12	23.31	23.75	24.40	22.75	23.19	23.37	23.82	24.47
	8H	22.95	23.34	23.60	23.99	24.65	23.10	23.49	23.74	24.13	24.80
	12H	23.12	23.47	23.76	24.09	24.83	23.35	23.69	23.99	24.31	25.05
12H	4H	21.95	22.43	22.56	23.04	23.69	21.85	22.33	22.46	22.94	23.59
	6H	22.72	23.12	23.37	23.76	24.42	22.79	23.18	23.44	23.83	24.49
	8H	23.04	23.38	23.68	24.01	24.75	23.19	23.54	23.83	24.16	24.90

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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 <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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**



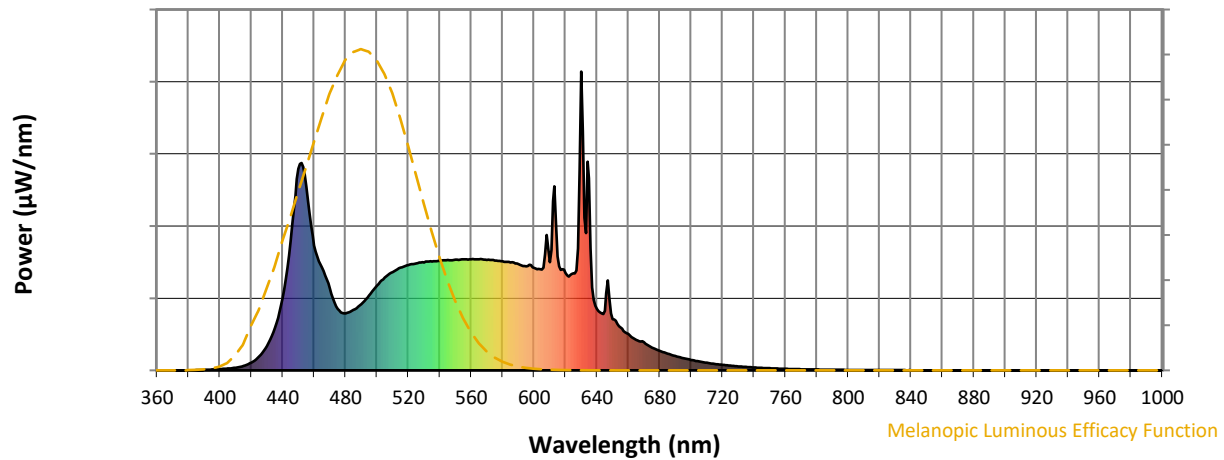
**Scotopic Lumens: NR**

**S/P: 2.04**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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

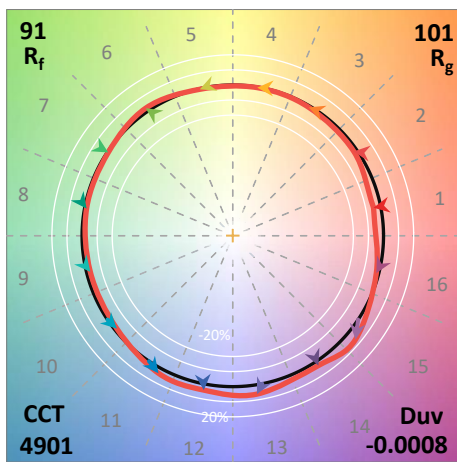
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	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)