

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: P1432974

Luminaire Tested: EHBR1-36-UNV-TASM-L850-UPL24

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1432974
REPORT IS A COMBINATION OF REPORTS P1431775 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-36-UNV-TASM-L850-UPL24
Description: Elevate Round Highbay at, 36000 lumens, 5000K 80CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

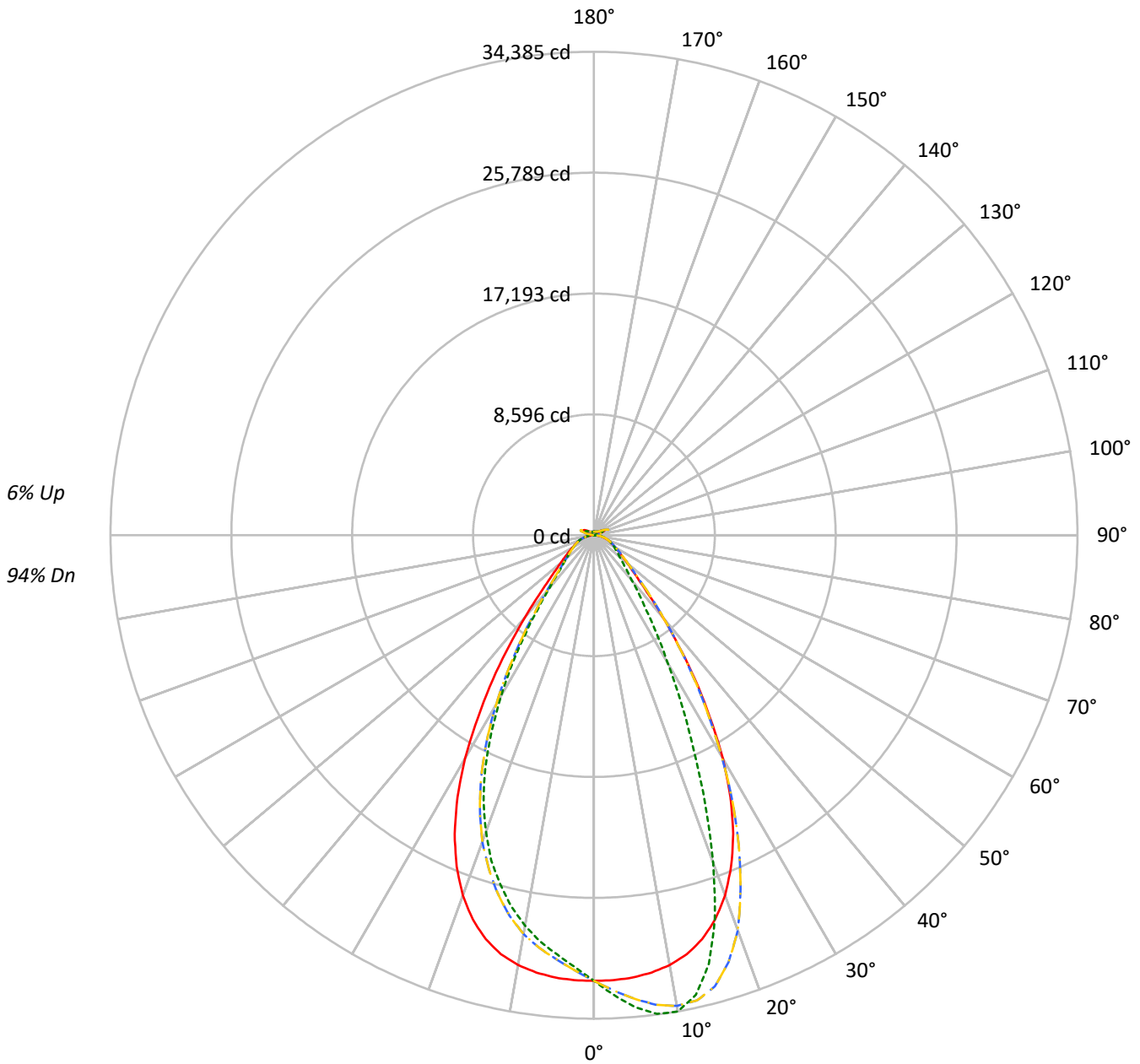
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37822.4 lumens
Efficiency: N/A
Efficacy: 181.9 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): 207.9
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: P1432974
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Luminous Intensity Polar Plot



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



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	96	96	96	94
1	110	107	104	101	107	104	101	99	99	97	95	94	92	91	89	88	87	87	87	87	85
2	103	97	92	88	100	95	91	87	91	87	84	87	84	81	83	81	78	78	78	78	76
3	97	89	83	78	94	87	82	77	84	79	75	80	76	73	77	74	71	71	71	71	69
4	91	82	75	70	89	80	74	70	77	72	68	74	70	67	72	68	65	65	65	65	63
5	86	76	69	64	83	74	68	63	72	66	62	69	65	61	67	63	60	60	60	60	58
6	81	70	63	58	79	69	63	58	67	61	57	65	60	56	63	59	55	55	55	55	54
7	76	66	59	54	74	65	58	53	63	57	53	61	56	52	59	55	51	51	51	51	50
8	72	61	55	50	70	60	54	50	59	53	49	57	52	48	56	51	48	48	48	48	46
9	68	57	51	46	67	57	50	46	55	50	46	54	49	45	52	48	45	45	45	45	43
10	65	54	48	43	63	53	47	43	52	46	43	51	46	42	50	45	42	42	42	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	148812	148812	148812	148812
5°	147907	157788	147907	140231
10°	146088	161839	146088	132717
15°	141775	150399	141775	122595
20°	132595	120600	132595	109197
25°	117357	83558	117357	91512
30°	95290	54361	95290	68469
35°	68345	35205	68345	45582
40°	44187	24265	44187	28746
45°	28037	18797	28037	20482
50°	20821	15972	20821	17060
55°	16999	14550	16999	15059
60°	14719	13860	14719	13944
65°	13419	13367	13419	13310
70°	12718	13097	12718	12928
75°	11893	12670	11893	12291
80°	10447	11962	10447	11183
85°	6759	8539	6759	8144

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 39418 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3013.1	8.0
10°-20°	8197.3	21.7
20°-30°	9613.8	25.4
30°-40°	6685.8	17.7
40°-50°	3322.5	8.8
50°-60°	1987.2	5.3
60°-70°	1398.7	3.7
70°-80°	901.0	2.4
80°-90°	290.4	0.8
90°-100°	64.6	0.2
100°-110°	418.6	1.1
110°-120°	772.7	2.0
120°-130°	459.7	1.2
130°-140°	278.7	0.7
140°-150°	193.4	0.5
150°-160°	126.9	0.3
160°-170°	73.5	0.2
170°-180°	24.6	0.1
0°-30°	20824.1	55.1
0°-40°	27509.9	72.7
0°-60°	32819.6	86.8
0°-90°	35409.7	93.6
90°-120°	1255.9	3.3
90°-150°	2187.7	5.8
90°-180°	2413.0	6.4
0°-180°	37822.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	31688	31688	31688	31688	31688	
5°	31580	33690	31580	29942	31580	2997
15°	29744	31553	29744	25720	29744	8312
25°	23436	16686	23436	18275	23436	10610
35°	12544	6461	12544	8366	12544	7831
45°	4536	3041	4536	3314	4536	3712
55°	2297	1966	2297	2035	2297	2101
65°	1401	1395	1401	1389	1401	1407
75°	838	892	838	866	838	879
85°	232	294	232	280	232	258
90°	18	22	18	18	18	19
95°	34	34	34	30	34	36
105°	192	100	192	146	192	259
115°	822	704	822	668	822	749
125°	527	553	527	482	527	485
135°	334	386	334	353	334	265
145°	303	317	303	295	303	190
155°	271	283	271	264	271	127
165°	258	267	258	253	258	73
175°	258	264	258	254	258	25
180°	258	258	258	258	258	



TEST NUMBER: P1432974
 CATALOG NUMBER: EHBR1-36-UNV-TASM-L850-UPL24

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	31688.5	31688.5	31688.5	31688.5	31688.5	31688.5	31688.5	31688.5	31688.5	31688.5	31688.5
2.5°	31670.0	32079.5	32411.0	32629.7	32737.8	32629.7	32411.0	32079.5	31670.0	31263.0	30983.1
5°	31580.4	32400.4	33095.0	33549.6	33690.3	33549.6	33095.0	32400.4	31580.4	30805.5	30291.5
7.5°	31365.8	32643.4	33675.5	34206.1	34335.7	34206.1	33675.5	32643.4	31365.8	30268.9	29619.5
10°	31038.4	32796.6	33989.2	34369.5	34385.0	34369.5	33989.2	32796.6	31038.4	29560.6	28794.7
12.5°	30516.1	32742.0	33884.0	33759.3	33475.8	33759.3	33884.0	32742.0	30516.1	28695.4	27729.2
15°	29743.7	32418.2	33217.9	32202.4	31552.9	32202.4	33217.9	32418.2	29743.7	27527.3	26406.6
17.5°	28655.1	31812.1	31827.5	29818.5	28593.3	29818.5	31827.5	31812.1	28655.1	26098.7	24864.6
20°	27252.1	30840.0	29913.0	26238.4	24786.8	26238.4	29913.0	30840.0	27252.1	24410.1	23199.1
22.5°	25493.2	29529.1	27246.7	22636.9	20656.4	22636.9	27246.7	29529.1	25493.2	22446.1	21185.9
25°	23436.1	27923.0	24378.5	18712.8	16686.5	18712.8	24378.5	27923.0	23436.1	20106.2	18966.5
27.5°	21016.5	25887.2	21324.4	15291.4	13422.0	15291.4	21324.4	25887.2	21016.5	17690.1	16526.1
30°	18328.9	23277.5	18145.9	12177.7	10456.3	12177.7	18145.9	23277.5	18328.9	14975.9	13933.5
32.5°	15319.9	20719.5	15093.4	9757.5	8299.3	9757.5	15093.4	20719.5	15319.9	12385.6	11296.4
35°	12543.7	17519.0	12341.1	7667.0	6461.4	7667.0	12341.1	17519.0	12543.7	9940.5	8871.0
37.5°	9844.2	14495.1	9837.7	6173.9	5240.9	6173.9	9837.7	14495.1	9844.2	7728.2	6860.1
40°	7658.7	11333.9	7708.0	4928.4	4205.8	4928.4	7708.0	11333.9	7658.7	5880.2	5324.7
42.5°	5803.0	8666.5	6058.5	4044.8	3572.3	4044.8	6058.5	8666.5	5803.0	4633.0	4217.1
45°	4536.2	6377.6	4731.1	3412.5	3041.2	3412.5	4731.1	6377.6	4536.2	3731.1	3451.7
47.5°	3694.2	4929.0	3834.4	2927.1	2666.8	2927.1	3834.4	4929.0	3694.2	3155.8	2946.7
50°	3103.0	3782.1	3183.7	2555.1	2380.4	2555.1	3183.7	3782.1	3103.0	2702.4	2562.8
52.5°	2665.6	3084.5	2711.3	2277.0	2159.4	2277.0	2711.3	3084.5	2665.6	2364.4	2277.6
55°	2297.2	2593.1	2357.8	2047.6	1966.3	2047.6	2357.8	2593.1	2297.2	2104.1	2039.9
57.5°	2017.3	2199.8	2047.6	1852.1	1798.1	1852.1	2047.6	2199.8	2017.3	1872.4	1837.9
60°	1769.5	1905.1	1806.9	1681.6	1666.2	1681.6	1806.9	1905.1	1769.5	1684.5	1662.0
62.5°	1578.9	1664.4	1597.8	1528.3	1514.6	1528.3	1597.8	1664.4	1578.9	1513.4	1517.7
65°	1400.6	1480.1	1427.9	1390.4	1395.2	1390.4	1427.9	1480.1	1400.6	1370.2	1376.8
67.5°	1262.6	1304.3	1281.7	1260.3	1265.7	1260.3	1281.7	1304.3	1262.6	1233.0	1243.1
70°	1115.9	1160.5	1137.3	1140.3	1149.2	1140.3	1137.3	1160.5	1115.9	1107.1	1114.7
72.5°	975.7	1010.2	1002.4	1009.5	1019.0	1009.5	1002.4	1010.2	975.7	974.5	975.1
75°	837.8	863.9	867.6	877.7	892.5	877.7	867.6	863.9	837.8	829.0	839.6
77.5°	687.5	717.2	728.5	742.1	764.1	742.1	728.5	717.2	687.5	693.4	698.8
80°	549.6	563.3	588.3	598.3	629.3	598.3	588.3	563.3	549.6	539.6	547.2
82.5°	402.3	414.7	436.1	455.2	473.0	455.2	436.1	414.7	402.3	397.5	398.1
85°	232.3	251.4	265.6	288.2	293.5	288.2	265.6	251.4	232.3	237.7	232.3
87.5°	81.4	87.3	99.8	108.7	109.3	108.7	99.8	87.3	81.4	83.2	75.4
90°	17.9	30.4	52.3	30.1	22.0	30.1	52.3	30.4	17.9	31.1	48.4
92.5°	23.2	41.0	73.5	39.4	28.6	39.4	73.5	41.0	23.2	40.4	77.6
95°	34.4	50.3	93.4	43.3	33.9	43.3	93.4	50.3	34.4	53.7	108.2
97.5°	52.9	62.3	105.3	46.1	40.6	46.1	105.3	62.3	52.9	65.6	124.1
100°	70.2	70.2	191.6	52.7	45.9	52.7	191.6	70.2	70.2	80.8	193.1
102.5°	106.1	137.2	443.1	103.7	55.2	103.7	443.1	137.2	106.1	151.2	409.5
105°	192.3	312.5	779.1	264.3	99.6	264.3	779.1	312.5	192.3	315.8	729.5
107.5°	363.6	581.9	1003.4	519.2	228.4	519.2	1003.4	581.9	363.6	558.8	962.4
110°	581.3	813.0	1095.0	710.4	459.3	710.4	1095.0	813.0	581.3	767.3	1008.8



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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°	756.6	905.9	1069.8	787.4	634.6	787.4	1069.8	905.9	756.6	846.8	966.4
115°	822.3	892.6	955.6	784.8	703.6	784.8	955.6	892.6	822.3	827.0	862.9
117.5°	794.4	817.0	825.5	737.0	707.6	737.0	825.5	817.0	794.4	743.9	732.7
120°	717.4	708.0	696.0	666.6	667.8	666.6	696.0	708.0	717.4	649.7	611.9
122.5°	621.0	601.2	588.4	595.5	613.3	595.5	588.4	601.2	621.0	553.3	524.8
125°	526.8	506.9	513.3	534.5	552.8	534.5	513.3	506.9	526.8	470.3	463.1
127.5°	447.7	438.4	458.9	482.7	498.4	482.7	458.9	438.4	447.7	411.9	419.2
130°	391.3	393.3	420.4	440.8	450.7	440.8	420.4	393.3	391.3	374.0	391.9
132.5°	356.0	366.0	391.8	409.5	415.5	409.5	391.8	366.0	356.0	351.3	373.2
135°	334.0	348.7	372.5	383.7	386.2	383.7	372.5	348.7	334.0	335.8	356.0
137.5°	321.3	336.0	353.9	363.1	361.1	363.1	353.9	336.0	321.3	325.8	341.2
140°	313.9	328.7	336.6	347.1	345.7	347.1	336.6	328.7	313.9	316.6	328.5
142.5°	306.7	319.9	324.0	331.8	329.8	331.8	324.0	319.9	306.7	309.3	317.3
145°	303.2	313.3	309.9	319.9	317.1	319.9	309.9	313.3	303.2	304.0	308.5
147.5°	296.6	304.0	300.0	308.5	305.8	308.5	300.0	304.0	296.6	296.6	298.5
150°	289.2	294.5	288.6	298.5	298.3	298.5	288.6	294.5	289.2	287.9	289.8
152.5°	279.2	284.5	279.2	290.4	289.7	290.4	279.2	284.5	279.2	277.9	279.8
155°	271.1	273.8	271.1	282.3	282.9	282.3	271.1	273.8	271.1	270.5	271.7
157.5°	265.6	267.6	266.2	276.1	276.7	276.1	266.2	267.6	265.6	265.6	266.2
160°	261.3	263.9	263.3	271.8	272.4	271.8	263.3	263.9	261.3	262.1	262.7
162.5°	259.8	259.8	259.7	268.3	269.4	268.3	259.7	259.8	259.8	259.8	261.2
165°	257.7	258.9	257.5	264.0	266.6	264.0	257.5	258.9	257.7	258.3	258.3
167.5°	257.5	256.2	257.5	263.2	265.7	263.2	257.5	256.2	257.5	258.2	258.2
170°	255.4	256.1	256.0	261.7	264.2	261.7	256.0	256.1	255.4	256.8	257.5
172.5°	257.3	257.3	256.4	260.8	264.6	260.8	256.4	257.3	257.3	258.1	259.3
175°	258.4	257.8	257.6	260.7	264.5	260.7	257.6	257.8	258.4	257.9	257.9
177.5°	257.2	258.3	259.5	262.6	267.8	262.6	259.5	258.3	257.2	257.9	257.9
180°	258.3	258.3	258.3	258.3	258.3	258.3	258.3	258.3	258.3	258.3	258.3



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	31688.5	31688.5	31688.5	31688.5	31688.5	31688.5
2.5°	30768.1	30747.9	30768.1	30983.1	31263.0	31670.0
5°	30053.2	29941.5	30053.2	30291.5	30805.5	31580.4
7.5°	29220.8	29155.9	29220.8	29619.5	30268.9	31365.8
10°	28344.3	28197.5	28344.3	28794.7	29560.6	31038.4
12.5°	27264.0	27069.7	27264.0	27729.2	28695.4	30516.1
15°	25890.2	25719.7	25890.2	26406.6	27527.3	29743.7
17.5°	24416.0	24261.4	24416.0	24864.6	26098.7	28655.1
20°	22564.4	22443.2	22564.4	23199.1	24410.1	27252.1
22.5°	20621.9	20508.5	20621.9	21185.9	22446.1	25493.2
25°	18336.6	18274.8	18336.6	18966.5	20106.2	23436.1
27.5°	15867.1	15762.0	15867.1	16526.1	17690.1	21016.5
30°	13344.2	13170.0	13344.2	13933.5	14975.9	18328.9
32.5°	10876.3	10751.0	10876.3	11296.4	12385.6	15319.9
35°	8491.2	8365.9	8491.2	8871.0	9940.5	12543.7
37.5°	6616.5	6394.9	6616.5	6860.1	7728.2	9844.2
40°	5018.1	4982.4	5018.1	5324.7	5880.2	7658.7
42.5°	4085.2	3988.3	4085.2	4217.1	4633.0	5803.0
45°	3351.9	3313.9	3351.9	3451.7	3731.1	4536.2
47.5°	2882.5	2899.2	2882.5	2946.7	3155.8	3694.2
50°	2532.5	2542.6	2532.5	2562.8	2702.4	3103.0
52.5°	2274.6	2265.7	2274.6	2277.6	2364.4	2665.6
55°	2046.4	2035.1	2046.4	2039.9	2104.1	2297.2
57.5°	1846.8	1855.1	1846.8	1837.9	1872.4	2017.3
60°	1668.5	1676.3	1668.5	1662.0	1684.5	1769.5
62.5°	1518.2	1523.0	1518.2	1517.7	1513.4	1578.9
65°	1383.9	1389.3	1383.9	1376.8	1370.2	1400.6
67.5°	1255.6	1255.6	1255.6	1243.1	1233.0	1262.6
70°	1134.9	1134.4	1134.9	1114.7	1107.1	1115.9
72.5°	990.0	1004.2	990.0	975.1	974.5	975.7
75°	849.1	865.8	849.1	839.6	829.0	837.8
77.5°	706.5	732.1	706.5	698.8	693.4	687.5
80°	560.3	588.3	560.3	547.2	539.6	549.6
82.5°	414.1	435.0	414.1	398.1	397.5	402.3
85°	246.6	279.9	246.6	232.3	237.7	232.3
87.5°	79.1	101.0	79.1	75.4	83.2	81.4
90°	28.5	17.9	28.5	48.4	31.1	17.9
92.5°	43.1	25.8	43.1	77.6	40.4	23.2
95°	49.7	29.8	49.7	108.2	53.7	34.4
97.5°	55.0	38.3	55.0	124.1	65.6	52.9
100°	64.3	50.3	64.3	193.1	80.8	70.2
102.5°	136.0	84.8	136.0	409.5	151.2	106.1
105°	286.0	145.9	286.0	729.5	315.8	192.3
107.5°	511.8	252.1	511.8	962.4	558.8	363.6
110°	679.0	469.8	679.0	1008.8	767.3	581.3



TEST NUMBER: P1432974

CATALOG NUMBER: EHBR1-36-UNV-TASM-L850-UPL24

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	729.5	634.5	729.5	966.4	846.8	756.6
115°	701.6	667.7	701.6	862.9	827.0	822.3
117.5°	640.6	645.1	640.6	732.7	743.9	794.4
120°	570.1	597.3	570.1	611.9	649.7	717.4
122.5°	505.7	537.5	505.7	524.8	553.3	621.0
125°	449.9	482.4	449.9	463.1	470.3	526.8
127.5°	411.4	433.3	411.4	419.2	411.9	447.7
130°	381.4	400.1	381.4	391.9	374.0	391.3
132.5°	360.8	372.8	360.8	373.2	351.3	356.0
135°	342.8	352.8	342.8	356.0	335.8	334.0
137.5°	327.5	336.1	327.5	341.2	325.8	321.3
140°	314.0	321.4	314.0	328.5	316.6	313.9
142.5°	300.0	305.4	300.0	317.3	309.3	306.7
145°	290.7	294.7	290.7	308.5	304.0	303.2
147.5°	282.6	285.3	282.6	298.5	296.6	296.6
150°	274.5	277.1	274.5	289.8	287.9	289.2
152.5°	265.8	269.1	265.8	279.8	277.9	279.2
155°	260.3	263.6	260.3	271.7	270.5	271.1
157.5°	257.5	260.0	257.5	266.2	265.6	265.6
160°	255.3	257.2	255.3	262.7	262.1	261.3
162.5°	252.5	254.4	252.5	261.2	259.8	259.8
165°	252.4	252.9	252.4	258.3	258.3	257.7
167.5°	251.6	252.9	251.6	258.2	258.2	257.5
170°	252.2	252.7	252.2	257.5	256.8	255.4
172.5°	253.4	254.0	253.4	259.3	258.1	257.3
175°	253.3	253.9	253.3	257.9	257.9	258.4
177.5°	255.2	255.8	255.2	257.9	257.9	257.2
180°	258.3	258.3	258.3	258.3	258.3	258.3



TEST NUMBER: P1432974
 CATALOG NUMBER: EHBR1-36-UNV-TASM-L850-UPL24

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	18.04	19.15	18.52	19.60	20.08	17.36	18.47	17.84	18.92	19.40
	3H	19.59	20.58	20.08	21.04	21.56	19.21	20.20	19.70	20.66	21.18
	4H	20.23	21.15	20.74	21.63	22.17	19.99	20.91	20.51	21.39	21.93
	6H	20.71	21.56	21.24	22.05	22.60	20.63	21.48	21.16	21.98	22.53
	8H	20.86	21.66	21.40	22.18	22.74	20.86	21.66	21.40	22.17	22.73
	12H	20.93	21.70	21.48	22.20	22.79	20.98	21.75	21.53	22.26	22.84
4H	2H	18.46	19.38	18.98	19.86	20.40	17.94	18.86	18.45	19.34	19.88
	3H	20.26	21.02	20.78	21.54	22.10	19.99	20.76	20.52	21.28	21.84
	4H	21.03	21.71	21.58	22.25	22.85	20.90	21.59	21.45	22.12	22.72
	6H	21.64	22.23	22.22	22.80	23.41	21.67	22.26	22.25	22.83	23.44
	8H	21.84	22.39	22.42	22.95	23.57	21.94	22.49	22.52	23.06	23.68
	12H	21.95	22.43	22.54	23.03	23.65	22.11	22.60	22.71	23.19	23.81
8H	4H	21.28	21.83	21.86	22.39	23.01	21.18	21.73	21.76	22.29	22.91
	6H	22.02	22.47	22.63	23.08	23.70	22.09	22.53	22.69	23.14	23.77
	8H	22.29	22.69	22.92	23.31	23.95	22.44	22.84	23.07	23.46	24.10
	12H	22.46	22.81	23.08	23.42	24.13	22.69	23.04	23.31	23.64	24.35
12H	4H	21.29	21.77	21.88	22.37	22.99	21.19	21.68	21.79	22.27	22.89
	6H	22.06	22.46	22.69	23.09	23.72	22.13	22.53	22.76	23.15	23.79
	8H	22.38	22.73	23.00	23.33	24.05	22.54	22.88	23.16	23.49	24.20

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-4

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L850-N

Data in this report applies to families of products including EHBR-60-L850-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-4
 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-L850-N**
 Description: Elevate Round Highbay at, 60000 lumens, 5000K 80CRI LEDs with N lens

Spectral Parameters

CCT (K): 4875
 CIE u': 0.2124
 CIE v': 0.4871
 Duv: 0.0005
 CIE x: 0.3488
 CIE y: 0.3555
 CIE z: 0.2957
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 573
 Purity: 11.33556
 Rf: 80
 Rg: 102.3

CRI (Ra):	82.3		
R1:	85.0	R9:	43.9
R2:	83.1	R10:	57.4
R3:	78.8	R11:	83.1
R4:	84.0	R12:	51.0
R5:	83.0	R13:	83.4
R6:	76.3	R14:	87.4
R7:	86.8	R15:	83.4
R8:	81.7		



Test Conditions

Stabilization Time: 39M
 Operation Time: 1H 39M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-4

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: SP1-2506-472-4

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: SP1-2506-472-4

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	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.82

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	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-4

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.71

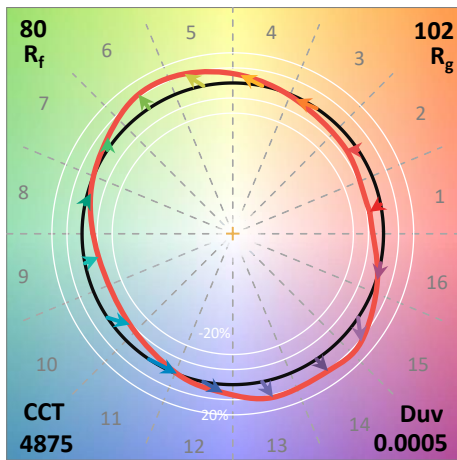
λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)
360	0	NR	490	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

Summary

$R_f = 80$
 $R_g = 102.3$
 $CIE R_a = 82.3$
 $R_9 = 43.9$



Color Vector Graphics

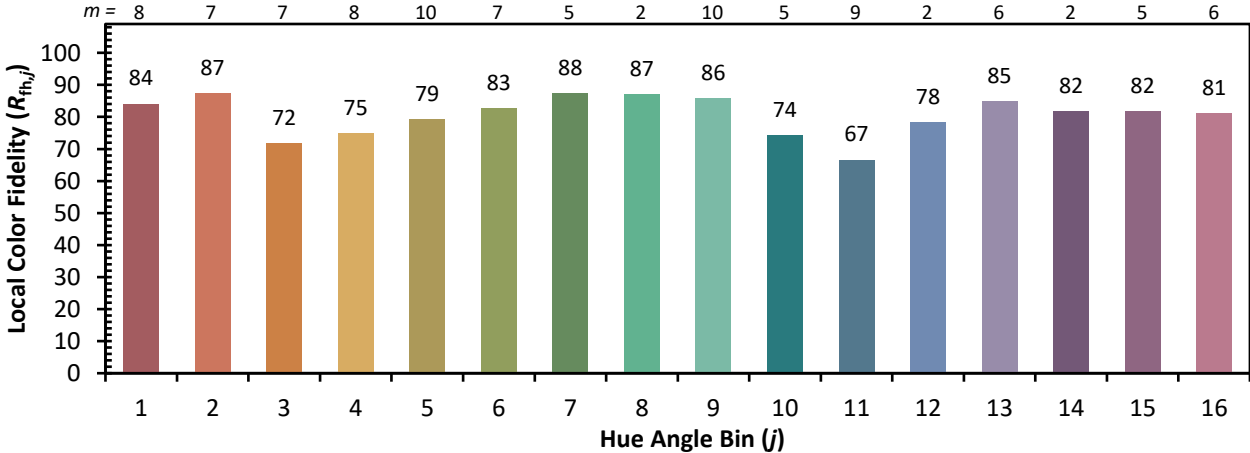


Individual Sample Fidelity Index ($R_{f,i}$)

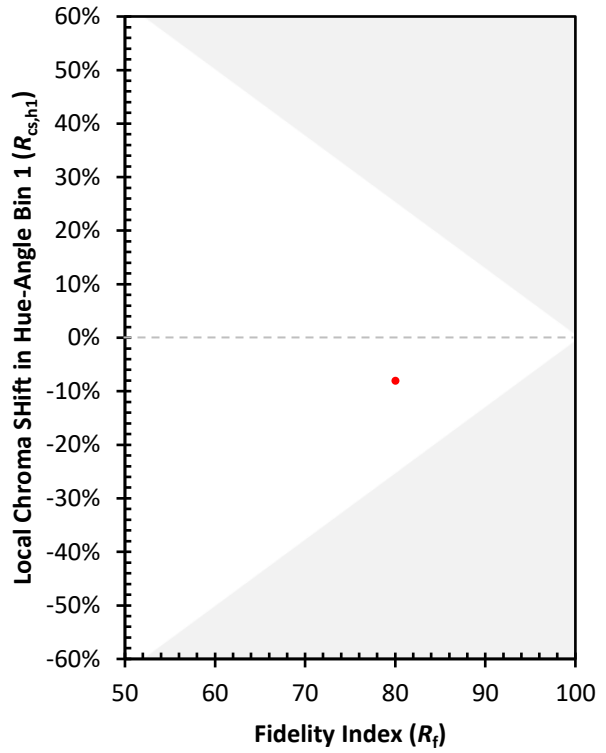
CES01 = 85	CES26 = 67	CES51 = 92	CES76 = 54
CES02 = 60	CES27 = 88	CES52 = 91	CES77 = 71
CES03 = 31	CES28 = 81	CES53 = 82	CES78 = 55
CES04 = 69	CES29 = 66	CES54 = 92	CES79 = 81
CES05 = 47	CES30 = 80	CES55 = 90	CES80 = 75
CES06 = 50	CES31 = 69	CES56 = 81	CES81 = 79
CES07 = 40	CES32 = 61	CES57 = 80	CES82 = 90
CES08 = 39	CES33 = 76	CES58 = 81	CES83 = 87
CES09 = 29	CES34 = 68	CES59 = 93	CES84 = 87
CES10 = 73	CES35 = 82	CES60 = 94	CES85 = 82
CES11 = 56	CES36 = 95	CES61 = 91	CES86 = 83
CES12 = 62	CES37 = 75	CES62 = 89	CES87 = 78
CES13 = 42	CES38 = 87	CES63 = 80	CES88 = 85
CES14 = 74	CES39 = 94	CES64 = 79	CES89 = 81
CES15 = 71	CES40 = 87	CES65 = 75	CES90 = 86
CES16 = 46	CES41 = 91	CES66 = 72	CES91 = 80
CES17 = 48	CES42 = 71	CES67 = 69	CES92 = 77
CES18 = 56	CES43 = 72	CES68 = 75	CES93 = 86
CES19 = 70	CES44 = 99	CES69 = 80	CES94 = 71
CES20 = 65	CES45 = 81	CES70 = 66	CES95 = 79
CES21 = 85	CES46 = 83	CES71 = 59	CES96 = 86
CES22 = 77	CES47 = 83	CES72 = 87	CES97 = 85
CES23 = 91	CES48 = 83	CES73 = 56	CES98 = 82
CES24 = 90	CES49 = 82	CES74 = 95	CES99 = 84
CES25 = 71	CES50 = 91	CES75 = 58	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)