

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: P1433871

Luminaire Tested: EHBR1-42-UNV-TASM-L940-UPL30

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433871
REPORT IS A COMBINATION OF REPORTS P1431908 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-42-UNV-TASM-L940-UPL30
Description: Elevate Round Highbay at, 42000 lumens, 4000K 90CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

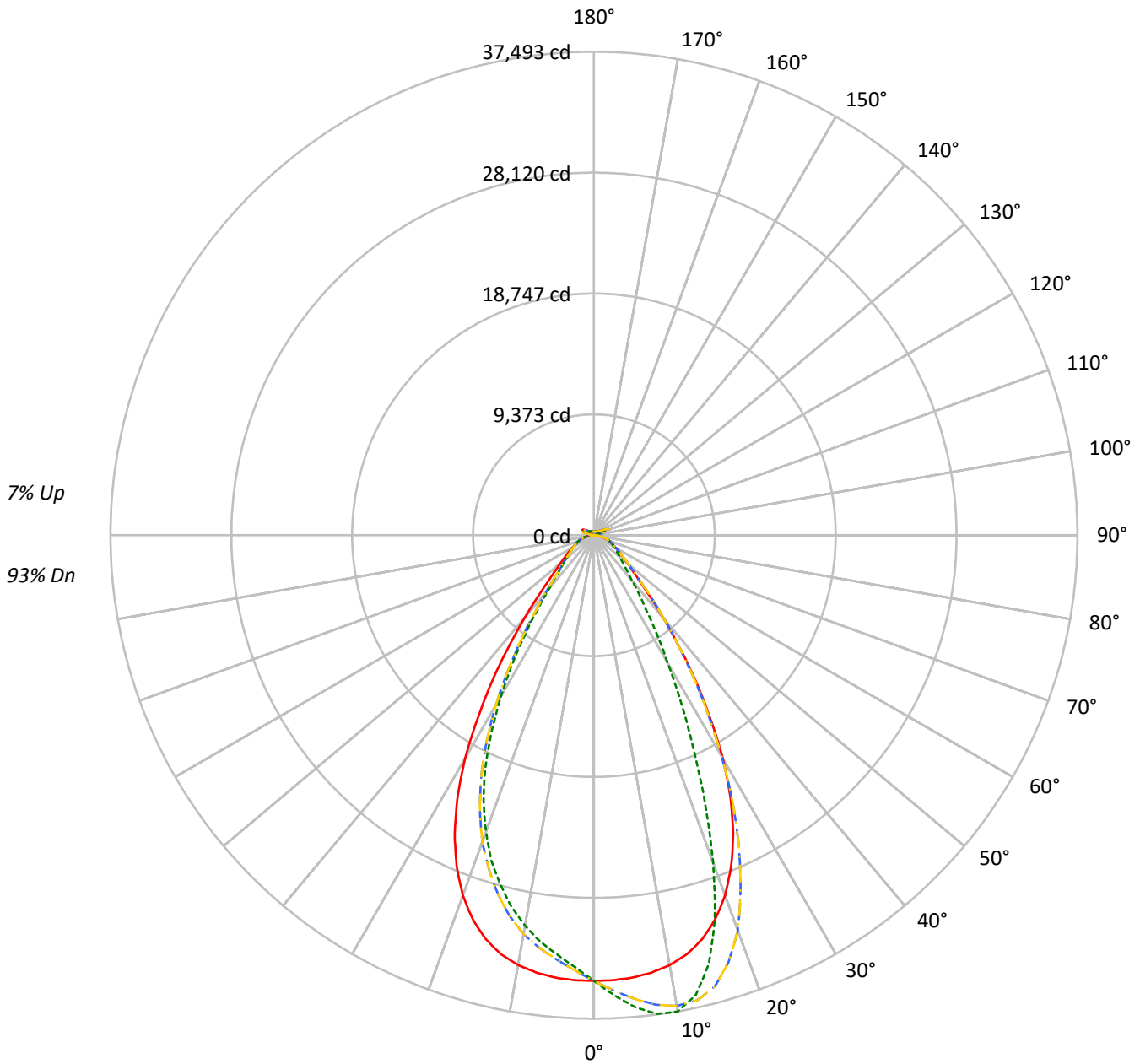
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41477.0 lumens
Efficiency: N/A
Efficacy: 168.3 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): 246.4
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: P1433871
CATALOG NUMBER: EHBR1-42-UNV-TASM-L940-UPL30

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	96	96	96	96	96	96	93
1	110	107	104	101	107	104	101	99	98	96	94	94	92	90	89	88	86	86	86	86	84
2	103	97	92	88	100	95	90	87	90	87	84	86	83	81	83	80	78	78	78	78	76
3	97	89	83	78	94	87	82	77	83	79	75	80	76	73	77	74	71	71	71	71	69
4	91	82	75	70	88	80	74	69	77	72	68	74	70	66	71	68	65	65	65	65	63
5	85	76	69	64	83	74	68	63	72	66	62	69	64	61	67	63	60	60	60	60	58
6	81	70	63	58	78	69	63	58	67	61	57	65	60	56	63	58	55	55	55	55	53
7	76	65	59	54	74	64	58	53	62	57	53	61	56	52	59	54	51	51	51	51	49
8	72	61	54	50	70	60	54	49	58	53	49	57	52	48	55	51	48	48	48	48	46
9	68	57	51	46	67	57	50	46	55	49	45	54	49	45	52	48	44	44	44	44	43
10	65	54	47	43	63	53	47	43	52	46	42	51	46	42	49	45	42	42	42	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	162264	162264	162264	162264
5°	161276	172051	161276	152907
10°	159293	176468	159293	144714
15°	154590	163994	154590	133676
20°	144581	131501	144581	119068
25°	127966	91112	127966	99784
30°	103903	59274	103903	74658
35°	74523	38388	74523	49701
40°	48181	26458	48181	31345
45°	30571	20495	30571	22334
50°	22703	17416	22703	18603
55°	18535	15865	18535	16421
60°	16050	15113	16050	15204
65°	14632	14575	14632	14514
70°	13868	14281	13868	14097
75°	12969	13815	12969	13401
80°	11392	13044	11392	12192
85°	7370	9313	7370	8880

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 42981 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3285.4	7.9
10°-20°	8938.3	21.5
20°-30°	10482.8	25.3
30°-40°	7290.1	17.6
40°-50°	3622.8	8.7
50°-60°	2166.8	5.2
60°-70°	1525.1	3.7
70°-80°	982.4	2.4
80°-90°	317.1	0.8
90°-100°	76.6	0.2
100°-110°	497.5	1.2
110°-120°	918.6	2.2
120°-130°	546.4	1.3
130°-140°	331.0	0.8
140°-150°	229.5	0.6
150°-160°	150.4	0.4
160°-170°	87.0	0.2
170°-180°	29.1	0.1
0°-30°	22706.5	54.7
0°-40°	29996.6	72.3
0°-60°	35786.3	86.3
0°-90°	38610.9	93.1
90°-120°	1492.7	3.6
90°-150°	2599.6	6.3
90°-180°	2866.0	6.9
0°-180°	41477.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	34553	34553	34553	34553	34553	
5°	34435	36736	34435	32648	34435	3268
15°	32432	34405	32432	28044	32432	9064
25°	25555	18195	25555	19927	25555	11569
35°	13678	7046	13678	9122	13678	8538
45°	4946	3316	4946	3614	4946	4047
55°	2505	2144	2505	2219	2505	2291
65°	1527	1521	1527	1515	1527	1534
75°	914	973	914	944	914	959
85°	253	320	253	305	253	282
90°	21	26	21	21	21	22
95°	41	40	41	35	41	43
105°	229	118	229	173	229	308
115°	978	836	978	794	978	891
125°	626	657	626	573	626	577
135°	397	459	397	419	397	315
145°	360	376	360	350	360	225
155°	321	335	321	312	321	150
165°	305	315	305	299	305	87
175°	305	312	305	300	305	29
180°	305	305	305	305	305	



TEST NUMBER: P1433871
 CATALOG NUMBER: EHBR1-42-UNV-TASM-L940-UPL30

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	34552.9	34552.9	34552.9	34552.9	34552.9	34552.9	34552.9	34552.9	34552.9	34552.9	34552.9
2.5°	34532.8	34979.2	35340.7	35579.2	35697.0	35579.2	35340.7	34979.2	34532.8	34088.9	33783.8
5°	34434.9	35329.0	36086.5	36582.1	36735.7	36582.1	36086.5	35329.0	34434.9	33590.0	33029.6
7.5°	34201.0	35594.1	36719.5	37298.1	37439.3	37298.1	36719.5	35594.1	34201.0	33005.0	32296.8
10°	33844.0	35761.2	37061.6	37476.3	37493.1	37476.3	37061.6	35761.2	33844.0	32232.6	31397.5
12.5°	33274.5	35701.6	36946.9	36810.8	36501.8	36810.8	36946.9	35701.6	33274.5	31289.3	30235.7
15°	32432.2	35348.5	36220.6	35113.3	34405.1	35113.3	36220.6	35348.5	32432.2	30015.5	28793.5
17.5°	31245.3	34687.6	34704.5	32513.9	31177.8	32513.9	34704.5	34687.6	31245.3	28457.9	27112.2
20°	29715.5	33627.7	32616.8	28610.1	27027.2	28610.1	32616.8	33627.7	29715.5	26616.5	25296.1
22.5°	27797.6	32198.3	29709.6	24683.1	22523.6	24683.1	29709.6	32198.3	27797.6	24475.1	23100.9
25°	25554.6	30447.0	26582.2	20404.3	18194.9	20404.3	26582.2	30447.0	25554.6	21923.6	20681.0
27.5°	22916.3	28227.2	23251.8	16673.6	14635.2	16673.6	23251.8	28227.2	22916.3	19289.2	18019.9
30°	19985.7	25381.6	19786.1	13278.5	11401.4	13278.5	19786.1	25381.6	19985.7	16329.5	15193.0
32.5°	16704.6	22592.3	16457.8	10639.5	9049.5	10639.5	16457.8	22592.3	16704.6	13505.2	12317.6
35°	13677.6	19102.6	13456.6	8360.1	7045.5	8360.1	13456.6	19102.6	13677.6	10839.0	9672.8
37.5°	10734.1	15805.4	10727.0	6731.9	5714.6	6731.9	10727.0	15805.4	10734.1	8426.8	7480.2
40°	8351.0	12358.4	8404.8	5373.8	4585.9	5373.8	8404.8	12358.4	8351.0	6411.8	5806.0
42.5°	6327.6	9449.9	6606.2	4410.4	3895.3	4410.4	6606.2	9449.9	6327.6	5051.9	4598.3
45°	4946.2	6954.1	5158.7	3721.0	3316.0	3721.0	5158.7	6954.1	4946.2	4068.3	3763.8
47.5°	4028.1	5374.5	4181.0	3191.6	2907.9	3191.6	4181.0	5374.5	4028.1	3441.1	3213.1
50°	3383.5	4124.0	3471.6	2786.1	2595.6	2786.1	3471.6	4124.0	3383.5	2946.7	2794.5
52.5°	2906.5	3363.3	2956.5	2482.8	2354.5	2482.8	2956.5	3363.3	2906.5	2578.1	2483.5
55°	2504.8	2827.5	2571.0	2232.7	2144.0	2232.7	2571.0	2827.5	2504.8	2294.3	2224.3
57.5°	2199.7	2398.6	2232.7	2019.5	1960.6	2019.5	2232.7	2398.6	2199.7	2041.6	2004.0
60°	1929.5	2077.2	1970.3	1833.6	1816.8	1833.6	1970.3	2077.2	1929.5	1836.8	1812.2
62.5°	1721.5	1814.8	1742.3	1666.4	1651.5	1666.4	1742.3	1814.8	1721.5	1650.2	1654.8
65°	1527.2	1614.0	1557.0	1516.2	1521.3	1516.2	1557.0	1614.0	1527.2	1494.1	1501.3
67.5°	1376.8	1422.2	1397.6	1374.3	1380.0	1374.3	1397.6	1422.2	1376.8	1344.5	1355.5
70°	1216.8	1265.4	1240.1	1243.4	1253.1	1243.4	1240.1	1265.4	1216.8	1207.0	1215.5
72.5°	1063.8	1101.5	1093.0	1100.8	1111.2	1100.8	1093.0	1101.5	1063.8	1062.5	1063.2
75°	913.6	942.1	946.0	957.0	973.2	957.0	946.0	942.1	913.6	903.9	915.5
77.5°	749.6	782.0	794.3	809.2	833.3	809.2	794.3	782.0	749.6	756.1	762.0
80°	599.3	614.2	641.4	652.4	686.2	652.4	641.4	614.2	599.3	588.3	596.7
82.5°	438.6	452.2	475.6	496.3	515.8	496.3	475.6	452.2	438.6	433.5	434.1
85°	253.3	274.1	289.6	314.2	320.1	314.2	289.6	274.1	253.3	259.2	253.3
87.5°	88.8	95.2	108.8	118.6	119.3	118.6	108.8	95.2	88.8	90.7	82.3
90°	21.1	36.1	62.0	35.5	25.7	35.5	62.0	36.1	21.1	37.0	57.5
92.5°	27.5	48.6	87.2	46.5	33.6	46.5	87.2	48.6	27.5	48.0	92.2
95°	40.8	59.7	110.9	51.2	40.0	51.2	110.9	59.7	40.8	63.8	128.5
97.5°	62.9	73.9	125.1	54.4	47.8	54.4	125.1	73.9	62.9	78.0	147.5
100°	83.4	83.4	227.7	62.3	54.1	62.3	227.7	83.4	83.4	96.1	229.6
102.5°	126.1	162.9	526.7	123.0	65.2	123.0	526.7	162.9	126.1	179.7	486.8
105°	228.6	371.4	926.1	314.0	117.9	314.0	926.1	371.4	228.6	375.5	867.3
107.5°	432.2	691.7	1192.8	617.0	271.0	617.0	1192.8	691.7	432.2	664.3	1144.2
110°	691.1	966.4	1301.7	844.4	545.8	844.4	1301.7	966.4	691.1	912.1	1199.4



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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°	899.5	1076.9	1271.7	935.8	754.1	935.8	1271.7	1076.9	899.5	1006.8	1148.9
115°	977.5	1061.1	1136.0	932.8	836.2	932.8	1136.0	1061.1	977.5	983.2	1025.7
117.5°	944.3	971.1	981.3	875.9	840.9	875.9	981.3	971.1	944.3	884.3	871.1
120°	852.7	841.7	827.2	792.3	793.6	792.3	827.2	841.7	852.7	772.2	727.4
122.5°	738.2	714.5	699.4	707.7	728.8	707.7	699.4	714.5	738.2	657.6	623.9
125°	626.2	602.4	610.0	635.0	656.9	635.0	610.0	602.4	626.2	558.9	550.3
127.5°	532.1	521.0	545.3	573.5	592.2	573.5	545.3	521.0	532.1	489.4	498.2
130°	464.8	467.3	499.5	523.6	535.3	523.6	499.5	467.3	464.8	444.3	465.7
132.5°	422.9	434.8	465.5	486.4	493.3	486.4	465.5	434.8	422.9	417.2	443.4
135°	396.7	414.3	442.4	455.8	458.6	455.8	442.4	414.3	396.7	398.9	422.9
137.5°	381.5	399.2	420.4	431.2	428.7	431.2	420.4	399.2	381.5	386.9	405.3
140°	372.8	390.4	399.9	412.2	410.3	412.2	399.9	390.4	372.8	375.9	390.1
142.5°	363.9	380.0	384.7	393.9	391.3	393.9	384.7	380.0	363.9	367.1	376.6
145°	359.7	371.8	368.0	379.7	376.2	379.7	368.0	371.8	359.7	360.7	366.0
147.5°	351.9	360.7	356.0	366.0	362.6	366.0	356.0	360.7	351.9	351.9	354.1
150°	343.0	349.4	342.4	354.1	353.8	354.1	342.4	349.4	343.0	341.4	343.7
152.5°	331.0	337.3	331.0	344.3	343.4	344.3	331.0	337.3	331.0	329.4	331.7
155°	321.3	324.5	321.3	334.6	335.2	334.6	321.3	324.5	321.3	320.7	322.0
157.5°	314.7	316.9	315.4	327.1	327.8	327.1	315.4	316.9	314.7	314.7	315.4
160°	309.4	312.6	311.6	321.8	322.4	321.8	311.6	312.6	309.4	310.3	311.0
162.5°	307.5	307.5	307.4	317.4	318.7	317.4	307.4	307.5	307.5	307.5	309.1
165°	304.8	306.4	304.6	312.1	315.0	312.1	304.6	306.4	304.8	305.8	305.8
167.5°	304.6	303.0	304.3	310.9	313.8	310.9	304.3	303.0	304.6	305.5	305.5
170°	302.0	302.7	302.4	309.0	311.9	309.0	302.4	302.7	302.0	303.6	304.6
172.5°	304.0	304.0	302.7	307.8	312.3	307.8	302.7	304.0	304.0	304.9	306.5
175°	305.2	304.3	304.0	307.5	312.0	307.5	304.0	304.3	305.2	304.6	304.6
177.5°	303.6	304.9	306.2	309.8	315.8	309.8	306.2	304.9	303.6	304.6	304.6
180°	304.9	304.9	304.9	304.9	304.9	304.9	304.9	304.9	304.9	304.9	304.9



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	34552.9	34552.9	34552.9	34552.9	34552.9	34552.9
2.5°	33549.2	33527.2	33549.2	33783.8	34088.9	34532.8
5°	32769.8	32648.0	32769.8	33029.6	33590.0	34434.9
7.5°	31862.0	31791.4	31862.0	32296.8	33005.0	34201.0
10°	30906.3	30746.4	30906.3	31397.5	32232.6	33844.0
12.5°	29728.5	29516.6	29728.5	30235.7	31289.3	33274.5
15°	28230.5	28044.5	28230.5	28793.5	30015.5	32432.2
17.5°	26623.0	26454.6	26623.0	27112.2	28457.9	31245.3
20°	24604.0	24471.9	24604.0	25296.1	26616.5	29715.5
22.5°	22486.0	22362.3	22486.0	23100.9	24475.1	27797.6
25°	19994.1	19926.7	19994.1	20681.0	21923.6	25554.6
27.5°	17301.4	17186.7	17301.4	18019.9	19289.2	22916.3
30°	14550.4	14360.5	14550.4	15193.0	16329.5	19985.7
32.5°	11859.5	11722.8	11859.5	12317.6	13505.2	16704.6
35°	9258.8	9122.0	9258.8	9672.8	10839.0	13677.6
37.5°	7214.6	6972.9	7214.6	7480.2	8426.8	10734.1
40°	5471.7	5432.8	5471.7	5806.0	6411.8	8351.0
42.5°	4454.5	4348.8	4454.5	4598.3	5051.9	6327.6
45°	3654.9	3613.5	3654.9	3763.8	4068.3	4946.2
47.5°	3143.1	3161.2	3143.1	3213.1	3441.1	4028.1
50°	2761.4	2772.5	2761.4	2794.5	2946.7	3383.5
52.5°	2480.2	2470.5	2480.2	2483.5	2578.1	2906.5
55°	2231.5	2219.1	2231.5	2224.3	2294.3	2504.8
57.5°	2013.8	2022.8	2013.8	2004.0	2041.6	2199.7
60°	1819.3	1827.8	1819.3	1812.2	1836.8	1929.5
62.5°	1655.4	1660.7	1655.4	1654.8	1650.2	1721.5
65°	1509.0	1514.9	1509.0	1501.3	1494.1	1527.2
67.5°	1369.1	1369.1	1369.1	1355.5	1344.5	1376.8
70°	1237.5	1236.9	1237.5	1215.5	1207.0	1216.8
72.5°	1079.4	1095.0	1079.4	1063.2	1062.5	1063.8
75°	925.9	944.0	925.9	915.5	903.9	913.6
77.5°	770.4	798.2	770.4	762.0	756.1	749.6
80°	611.0	641.4	611.0	596.7	588.3	599.3
82.5°	451.6	474.3	451.6	434.1	433.5	438.6
85°	268.9	305.2	268.9	253.3	259.2	253.3
87.5°	86.2	110.1	86.2	82.3	90.7	88.8
90°	33.8	21.1	33.8	57.5	37.0	21.1
92.5°	51.1	30.7	51.1	92.2	48.0	27.5
95°	59.1	35.4	59.1	128.5	63.8	40.8
97.5°	65.4	45.5	65.4	147.5	78.0	62.9
100°	76.4	59.7	76.4	229.6	96.1	83.4
102.5°	161.6	100.7	161.6	486.8	179.7	126.1
105°	340.1	173.4	340.1	867.3	375.5	228.6
107.5°	608.4	299.6	608.4	1144.2	664.3	432.2
110°	807.3	558.5	807.3	1199.4	912.1	691.1



TEST NUMBER: P1433871

CATALOG NUMBER: EHBR1-42-UNV-TASM-L940-UPL30

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	867.3	754.3	867.3	1148.9	1006.8	899.5
115°	834.1	793.7	834.1	1025.7	983.2	977.5
117.5°	761.5	766.8	761.5	871.1	884.3	944.3
120°	677.9	710.0	677.9	727.4	772.2	852.7
122.5°	601.1	639.0	601.1	623.9	657.6	738.2
125°	534.9	573.3	534.9	550.3	558.9	626.2
127.5°	489.0	515.0	489.0	498.2	489.4	532.1
130°	453.4	475.5	453.4	465.7	444.3	464.8
132.5°	428.8	443.0	428.8	443.4	417.2	422.9
135°	407.3	419.3	407.3	422.9	398.9	396.7
137.5°	389.1	399.5	389.1	405.3	386.9	381.5
140°	373.0	381.8	373.0	390.1	375.9	372.8
142.5°	356.3	362.6	356.3	376.6	367.1	363.9
145°	345.0	349.7	345.0	366.0	360.7	359.7
147.5°	335.1	338.3	335.1	354.1	351.9	351.9
150°	325.4	328.6	325.4	343.7	341.4	343.0
152.5°	315.0	318.8	315.0	331.7	329.4	331.0
155°	308.4	312.2	308.4	322.0	320.7	321.3
157.5°	304.9	307.8	304.9	315.4	314.7	314.7
160°	302.2	304.5	302.2	311.0	310.3	309.4
162.5°	298.8	301.0	298.8	309.1	307.5	307.5
165°	298.5	299.2	298.5	305.8	305.8	304.8
167.5°	297.6	299.2	297.6	305.5	305.5	304.6
170°	298.2	298.9	298.2	304.6	303.6	302.0
172.5°	299.5	300.2	299.5	306.5	304.9	304.0
175°	299.2	299.8	299.2	304.6	304.6	305.2
177.5°	301.4	302.0	301.4	304.6	304.6	303.6
180°	304.9	304.9	304.9	304.9	304.9	304.9



TEST NUMBER: P1433871
 CATALOG NUMBER: EHBR1-42-UNV-TASM-L940-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	18.30	19.40	18.79	19.86	20.35	17.62	18.72	18.11	19.18	19.67
	3H	19.85	20.83	20.35	21.30	21.84	19.47	20.45	19.97	20.92	21.46
	4H	20.49	21.40	21.01	21.89	22.44	20.25	21.16	20.77	21.65	22.21
	6H	20.97	21.81	21.50	22.31	22.88	20.89	21.73	21.43	22.24	22.80
	8H	21.12	21.91	21.67	22.44	23.01	21.11	21.91	21.66	22.43	23.01
	12H	21.19	21.95	21.74	22.47	23.06	21.24	22.00	21.79	22.52	23.11
4H	2H	18.72	19.63	19.24	20.12	20.67	18.19	19.11	18.72	19.60	20.15
	3H	20.51	21.27	21.05	21.81	22.38	20.25	21.01	20.79	21.55	22.11
	4H	21.29	21.97	21.84	22.51	23.12	21.16	21.84	21.71	22.39	22.99
	6H	21.90	22.49	22.48	23.06	23.69	21.93	22.52	22.51	23.09	23.71
	8H	22.10	22.65	22.68	23.22	23.85	22.20	22.75	22.79	23.32	23.95
	12H	22.20	22.69	22.81	23.29	23.92	22.37	22.85	22.97	23.45	24.09
8H	4H	21.54	22.08	22.12	22.65	23.28	21.44	21.99	22.02	22.56	23.19
	6H	22.28	22.72	22.89	23.34	23.98	22.34	22.79	22.96	23.41	24.04
	8H	22.55	22.94	23.18	23.58	24.23	22.70	23.09	23.33	23.72	24.37
	12H	22.72	23.07	23.35	23.68	24.40	22.94	23.29	23.57	23.90	24.63
12H	4H	21.55	22.03	22.15	22.63	23.26	21.45	21.93	22.05	22.53	23.17
	6H	22.32	22.72	22.96	23.35	24.00	22.39	22.78	23.02	23.42	24.07
	8H	22.64	22.99	23.27	23.60	24.32	22.79	23.14	23.42	23.75	24.48

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: SP1-2506-472-6

Test Date: 08/01/2025

Luminaire Tested: EHBR-60-L935-N

Data in this report applies to families of products including EHBR-60-L935-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-6
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/05/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Metalux
 Catalog Number: **EHBR-60-L935-N**
 Description: Elevate Round Highbay at, 60000 lumens, 3500K 90CRI LEDs with N lens

Spectral Parameters

CCT (K): 3406
 CIE u': 0.2394
 CIE v': 0.5094
 Duv: -0.0028
 CIE x: 0.4076
 CIE y: 0.3856
 CIE z: 0.2068
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 582
 Purity: 38.0517
 Rf: 91.3
 Rg: 100

CRI (Ra):	94.6		
R1:	96.6	R9:	63.8
R2:	98.4	R10:	94.7
R3:	98.1	R11:	96.6
R4:	95.8	R12:	80.9
R5:	96.2	R13:	97.4
R6:	95.4	R14:	98.3
R7:	91.8	R15:	93.1
R8:	84.4		



Test Conditions

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

REPORT NUMBER: SP1-2506-472-6

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	10/22/2024	10/22/2025
Sphere Thermometer	ONSET IN0085	10/22/2024	10/22/2025
Room Thermometer	ONSET IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2506-472-6

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-6

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)
360	0	NR	490	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-6

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.62

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-6

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.3

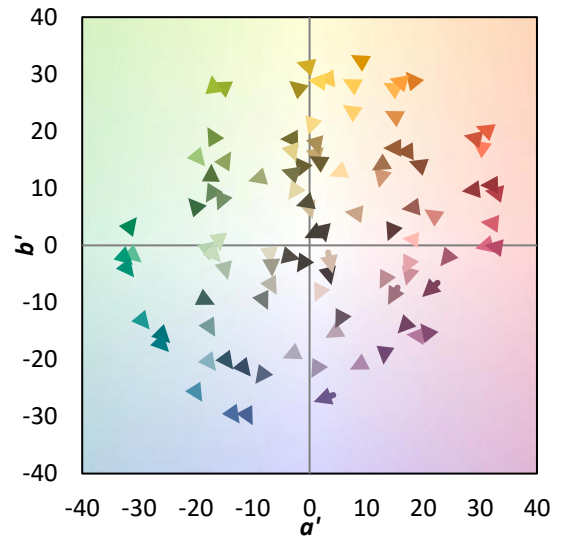
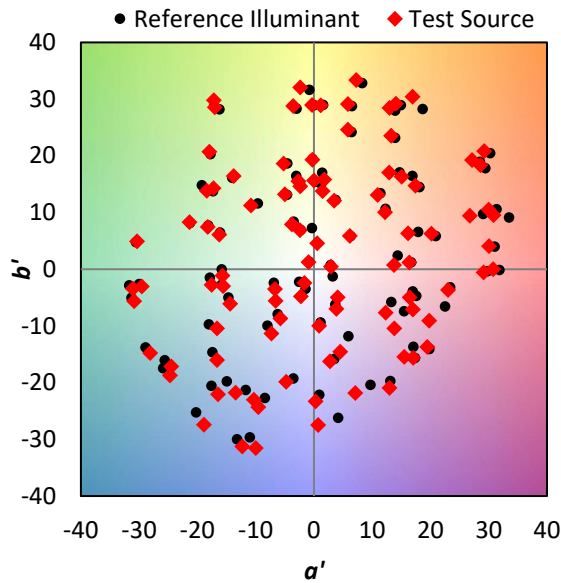
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

Summary

$R_f = 91.3$
 $R_g = 100$
 $CIE R_a = 94.6$
 $R_9 = 63.8$



Color Vector Graphics



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

CES01 = 86	CES26 = 94	CES51 = 97	CES76 = 90
CES02 = 63	CES27 = 92	CES52 = 98	CES77 = 86
CES03 = 31	CES28 = 97	CES53 = 98	CES78 = 86
CES04 = 70	CES29 = 97	CES54 = 93	CES79 = 90
CES05 = 50	CES30 = 92	CES55 = 92	CES80 = 91
CES06 = 51	CES31 = 97	CES56 = 96	CES81 = 74
CES07 = 43	CES32 = 89	CES57 = 94	CES82 = 96
CES08 = 41	CES33 = 99	CES58 = 95	CES83 = 94
CES09 = 29	CES34 = 94	CES59 = 98	CES84 = 95
CES10 = 75	CES35 = 97	CES60 = 92	CES85 = 79
CES11 = 58	CES36 = 81	CES61 = 93	CES86 = 79
CES12 = 64	CES37 = 96	CES62 = 86	CES87 = 92
CES13 = 44	CES38 = 87	CES63 = 94	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 91	CES89 = 84
CES15 = 72	CES40 = 97	CES65 = 90	CES90 = 96
CES16 = 48	CES41 = 96	CES66 = 89	CES91 = 75
CES17 = 49	CES42 = 94	CES67 = 88	CES92 = 76
CES18 = 56	CES43 = 93	CES68 = 89	CES93 = 86
CES19 = 71	CES44 = 99	CES69 = 90	CES94 = 74
CES20 = 67	CES45 = 97	CES70 = 88	CES95 = 83
CES21 = 86	CES46 = 97	CES71 = 83	CES96 = 92
CES22 = 78	CES47 = 91	CES72 = 94	CES97 = 96
CES23 = 91	CES48 = 91	CES73 = 83	CES98 = 95
CES24 = 90	CES49 = 96	CES74 = 90	CES99 = 92
CES25 = 71	CES50 = 98	CES75 = 85	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)