

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: P1433841

Luminaire Tested: EHBR1-36-UNV-TASM-L940-UPL40

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433841
REPORT IS A COMBINATION OF REPORTS P1431778 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-36-UNV-TASM-L940-UPL40
Description: Elevate Round Highbay at, 36000 lumens, 4000K 90CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

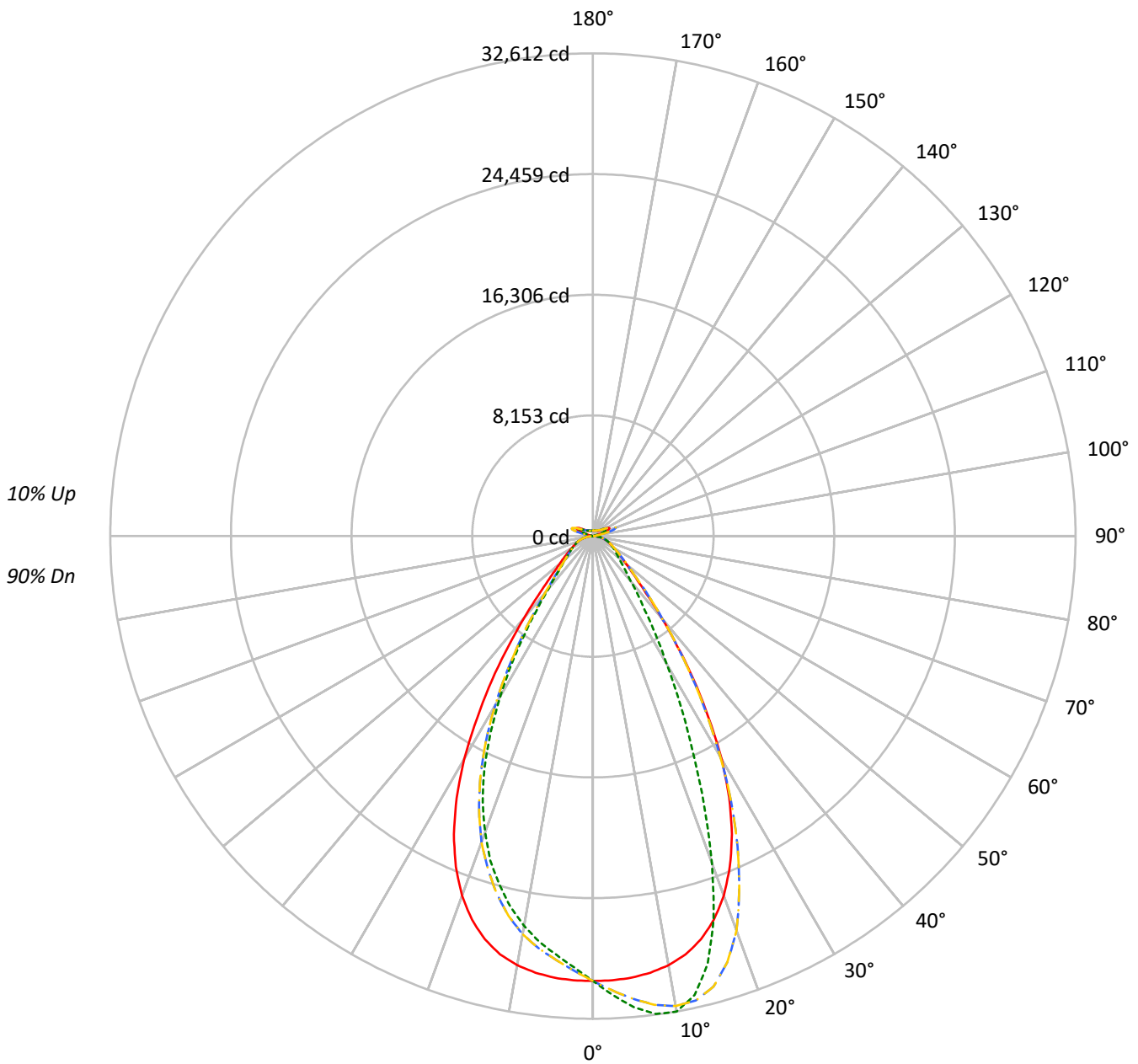
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37219.2 lumens
Efficiency: N/A
Efficacy: 167.7 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): 222
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: P1433841
CATALOG NUMBER: EHBR1-36-UNV-TASM-L940-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				
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	113	113	113	113	106	106	106	99	99	99	93	93	93	93	93	93	90
1	109	106	103	100	106	103	100	98	97	95	93	92	90	88	87	85	84	87	85	84	81
2	102	96	91	87	99	94	89	86	89	85	82	84	81	79	80	78	76	80	78	76	74
3	96	88	82	77	93	86	81	76	82	77	74	78	74	71	75	72	69	75	72	69	67
4	90	81	74	69	87	79	73	68	76	71	67	72	68	65	69	66	63	69	66	63	61
5	85	75	68	63	82	73	67	62	70	65	61	67	63	59	65	61	58	65	61	58	56
6	80	69	62	58	77	68	62	57	65	60	56	63	58	55	61	57	53	61	57	53	52
7	75	65	58	53	73	63	57	52	61	56	51	59	54	51	57	53	50	57	53	50	48
8	71	60	54	49	69	59	53	49	57	52	48	55	51	47	54	49	46	54	49	46	44
9	67	57	50	45	66	56	49	45	54	48	44	52	47	44	51	46	43	51	46	43	42
10	64	53	47	42	62	52	46	42	51	45	42	49	44	41	48	44	40	48	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	141138	141138	141138	141138
5°	140280	149652	140280	133000
10°	138555	153494	138555	125873
15°	134464	142644	134464	116273
20°	125757	114381	125757	103566
25°	111305	79250	111305	86793
30°	90376	51558	90376	64939
35°	64820	33390	64820	43231
40°	41908	23014	41908	27264
45°	26590	17827	26590	19426
50°	19747	15149	19747	16181
55°	16122	13800	16122	14283
60°	13961	13145	13961	13225
65°	12726	12677	12726	12623
70°	12061	12421	12061	12262
75°	11280	12017	11280	11658
80°	9909	11345	9909	10607
85°	6410	8100	6410	7722

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 37385 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2857.7	7.7
10°-20°	7774.6	20.9
20°-30°	9118.0	24.5
30°-40°	6341.0	17.0
40°-50°	3151.2	8.5
50°-60°	1884.7	5.1
60°-70°	1326.6	3.6
70°-80°	854.5	2.3
80°-90°	277.8	0.7
90°-100°	96.7	0.3
100°-110°	631.8	1.7
110°-120°	1167.3	3.1
120°-130°	693.7	1.9
130°-140°	419.4	1.1
140°-150°	290.1	0.8
150°-160°	189.3	0.5
160°-170°	108.6	0.3
170°-180°	36.1	0.1
0°-30°	19750.3	53.1
0°-40°	26091.3	70.1
0°-60°	31127.2	83.6
0°-90°	33586.1	90.2
90°-120°	1895.8	5.1
90°-150°	3299.0	8.9
90°-180°	3633.0	9.8
0°-180°	37219.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	30054	30054	30054	30054	30054	
5°	29952	31953	29952	28398	29952	2842
15°	28210	29926	28210	24393	28210	7884
25°	22228	15826	22228	17332	22228	10063
35°	11897	6128	11897	7934	11897	7427
45°	4302	2884	4302	3143	4302	3521
55°	2179	1865	2179	1930	2179	1992
65°	1328	1323	1328	1318	1328	1334
75°	795	846	795	821	795	834
85°	220	278	220	265	220	245
90°	27	31	27	27	27	23
95°	51	49	51	45	51	55
105°	290	148	290	220	290	391
115°	1242	1061	1242	1009	1242	1132
125°	795	833	795	728	795	732
135°	502	580	502	532	502	398
145°	454	475	454	442	454	285
155°	404	422	404	392	404	189
165°	381	392	381	373	381	108
175°	379	386	379	373	379	36
180°	378	378	378	378	378	



TEST NUMBER: P1433841
 CATALOG NUMBER: EHBR1-36-UNV-TASM-L940-UPL40

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	30054.4	30054.4	30054.4	30054.4	30054.4	30054.4	30054.4	30054.4	30054.4	30054.4	30054.4
2.5°	30036.9	30425.2	30739.7	30947.1	31049.6	30947.1	30739.7	30425.2	30036.9	29650.8	29385.4
5°	29951.9	30729.6	31388.4	31819.5	31953.0	31819.5	31388.4	30729.6	29951.9	29217.0	28729.4
7.5°	29748.4	30960.1	31939.0	32442.2	32565.1	32442.2	31939.0	30960.1	29748.4	28708.0	28092.1
10°	29437.9	31105.4	32236.5	32597.2	32611.9	32597.2	32236.5	31105.4	29437.9	28036.3	27309.8
12.5°	28942.5	31053.6	32136.8	32018.4	31749.6	32018.4	32136.8	31053.6	28942.5	27215.7	26299.3
15°	28209.9	30746.5	31505.0	30541.9	29925.9	30541.9	31505.0	30746.5	28209.9	26107.8	25044.9
17.5°	27177.4	30171.6	30186.3	28280.9	27118.8	28280.9	30186.3	30171.6	27177.4	24752.9	23582.4
20°	25846.8	29249.7	28370.5	24885.4	23508.6	24885.4	28370.5	29249.7	25846.8	23151.3	22002.8
22.5°	24178.6	28006.4	25841.7	21469.6	19591.2	21469.6	25841.7	28006.4	24178.6	21288.7	20093.4
25°	22227.6	26483.1	23121.4	17747.9	15826.1	17747.9	23121.4	26483.1	22227.6	19069.4	17988.5
27.5°	19932.8	24552.3	20224.7	14502.8	12729.8	14502.8	20224.7	24552.3	19932.8	16777.9	15673.9
30°	17383.8	22077.1	17210.2	11549.7	9917.1	11549.7	17210.2	22077.1	17383.8	14203.6	13215.0
32.5°	14529.9	19651.0	14315.1	9254.3	7871.3	9254.3	14315.1	19651.0	14529.9	11746.9	10713.9
35°	11896.8	16615.6	11704.7	7271.7	6128.2	7271.7	11704.7	16615.6	11896.8	9427.9	8413.5
37.5°	9336.6	13747.6	9330.4	5855.5	4970.6	5855.5	9330.4	13747.6	9336.6	7329.7	6506.3
40°	7263.8	10749.4	7310.5	4674.3	3988.9	4674.3	7310.5	10749.4	7263.8	5577.0	5050.1
42.5°	5503.8	8219.6	5746.1	3836.2	3388.1	3836.2	5746.1	8219.6	5503.8	4394.1	3999.6
45°	4302.2	6048.7	4487.1	3236.5	2884.4	3236.5	4487.1	6048.7	4302.2	3538.7	3273.7
47.5°	3503.7	4674.8	3636.7	2776.1	2529.3	2776.1	3636.7	4674.8	3503.7	2993.1	2794.8
50°	2943.0	3587.1	3019.6	2423.3	2257.7	2423.3	3019.6	3587.1	2943.0	2563.1	2430.7
52.5°	2528.1	2925.5	2571.5	2159.6	2048.0	2159.6	2571.5	2925.5	2528.1	2242.5	2160.1
55°	2178.7	2459.4	2236.2	1942.0	1864.9	1942.0	2236.2	2459.4	2178.7	1995.6	1934.7
57.5°	1913.3	2086.3	1942.0	1756.6	1705.4	1756.6	1942.0	2086.3	1913.3	1775.8	1743.1
60°	1678.3	1806.8	1713.8	1594.9	1580.3	1594.9	1713.8	1806.8	1678.3	1597.7	1576.3
62.5°	1497.4	1578.6	1515.4	1449.5	1436.5	1449.5	1515.4	1578.6	1497.4	1435.4	1439.4
65°	1328.3	1403.8	1354.2	1318.7	1323.2	1318.7	1354.2	1403.8	1328.3	1299.6	1305.8
67.5°	1197.5	1237.0	1215.6	1195.3	1200.4	1195.3	1215.6	1237.0	1197.5	1169.4	1179.0
70°	1058.3	1100.6	1078.7	1081.5	1089.9	1081.5	1078.7	1100.6	1058.3	1050.0	1057.2
72.5°	925.4	958.1	950.7	957.5	966.5	957.5	950.7	958.1	925.4	924.3	924.8
75°	794.6	819.4	822.8	832.4	846.5	832.4	822.8	819.4	794.6	786.2	796.3
77.5°	652.1	680.2	690.9	703.9	724.7	703.9	690.9	680.2	652.1	657.6	662.8
80°	521.3	534.3	558.0	567.5	596.8	567.5	558.0	534.3	521.3	511.8	519.0
82.5°	381.5	393.3	413.7	431.7	448.6	431.7	413.7	393.3	381.5	377.0	377.6
85°	220.3	238.4	251.9	273.3	278.4	273.3	251.9	238.4	220.3	225.5	220.3
87.5°	77.2	82.8	94.7	103.1	103.7	103.1	94.7	82.8	77.2	78.9	71.6
90°	26.6	45.3	78.0	43.5	30.6	43.5	78.0	45.3	26.6	46.8	72.9
92.5°	34.7	61.3	110.1	57.6	40.6	57.6	110.1	61.3	34.7	60.7	117.0
95°	51.3	75.4	140.2	63.5	48.6	63.5	140.2	75.4	51.3	80.9	163.1
97.5°	79.4	93.4	158.3	67.6	58.7	67.6	158.3	93.4	79.4	98.9	187.3
100°	105.6	105.6	288.7	77.6	66.7	77.6	288.7	105.6	105.6	121.6	291.7
102.5°	159.7	206.5	668.7	154.5	80.8	154.5	668.7	206.5	159.7	228.0	618.9
105°	290.2	471.4	1176.7	397.3	147.6	397.3	1176.7	471.4	290.2	476.9	1102.7
107.5°	549.2	879.0	1515.9	782.9	342.3	782.9	1515.9	879.0	549.2	844.3	1454.6
110°	878.4	1228.3	1654.4	1072.0	691.7	1072.0	1654.4	1228.3	878.4	1159.4	1524.8



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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°	1143.4	1368.8	1616.3	1188.4	956.6	1188.4	1616.3	1368.8	1143.4	1279.9	1460.6
115°	1242.3	1348.7	1443.7	1184.3	1061.0	1184.3	1443.7	1348.7	1242.3	1249.8	1304.0
117.5°	1200.1	1234.3	1246.9	1112.1	1067.0	1112.1	1246.9	1234.3	1200.1	1123.9	1107.3
120°	1083.8	1069.7	1050.7	1005.7	1006.8	1005.7	1050.7	1069.7	1083.8	981.4	924.6
122.5°	937.8	907.6	888.1	897.8	924.5	897.8	888.1	907.6	937.8	835.4	792.6
125°	795.3	765.1	774.3	805.5	832.7	805.5	774.3	765.1	795.3	709.4	698.8
127.5°	675.4	661.3	691.9	727.1	750.3	727.1	691.9	661.3	675.4	621.1	632.6
130°	589.5	593.0	633.7	663.5	678.1	663.5	633.7	593.0	589.5	563.5	591.0
132.5°	535.9	551.4	590.1	615.9	624.6	615.9	590.1	551.4	535.9	528.4	562.0
135°	502.3	525.4	560.6	577.2	580.4	577.2	560.6	525.4	502.3	505.0	535.9
137.5°	482.9	505.8	532.4	545.7	542.2	545.7	532.4	505.8	482.9	489.4	513.0
140°	471.3	494.3	506.3	521.5	518.7	521.5	506.3	494.3	471.3	475.3	493.4
142.5°	460.0	480.8	486.9	498.1	494.6	498.1	486.9	480.8	460.0	464.0	476.0
145°	454.5	470.0	465.4	480.0	475.1	480.0	465.4	470.0	454.5	455.9	462.5
147.5°	444.5	455.9	449.9	462.5	457.6	462.5	449.9	455.9	444.5	444.5	447.0
150°	432.9	440.9	432.4	447.0	446.2	447.0	432.4	440.9	432.9	431.0	433.5
152.5°	417.5	425.5	417.5	434.1	432.7	434.1	417.5	425.5	417.5	415.4	418.0
155°	404.5	408.5	404.5	421.1	421.7	421.1	404.5	408.5	404.5	404.0	405.1
157.5°	395.6	398.2	396.1	410.8	411.3	410.8	396.1	398.2	395.6	395.6	396.1
160°	387.8	391.9	390.4	402.9	403.5	402.9	390.4	391.9	387.8	389.2	389.8
162.5°	384.9	384.9	384.0	396.6	397.7	396.6	384.0	384.9	384.9	384.9	386.9
165°	380.6	382.5	379.6	388.9	392.0	388.9	379.6	382.5	380.6	382.0	382.0
167.5°	379.6	377.7	378.9	386.5	389.7	386.5	378.9	377.7	379.6	381.1	381.1
170°	376.2	376.9	376.0	383.7	386.8	383.7	376.0	376.9	376.2	378.2	379.6
172.5°	378.0	378.0	375.6	381.3	386.4	381.3	375.6	378.0	378.0	379.5	381.4
175°	379.1	377.7	376.8	380.5	385.6	380.5	376.8	377.7	379.1	378.5	378.5
177.5°	377.1	378.2	379.4	383.0	390.2	383.0	379.4	378.2	377.1	378.5	378.5
180°	378.2	378.2	378.2	378.2	378.2	378.2	378.2	378.2	378.2	378.2	378.2



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	30054.4	30054.4	30054.4	30054.4	30054.4	30054.4
2.5°	29181.5	29162.3	29181.5	29385.4	29650.8	30036.9
5°	28503.4	28397.5	28503.4	28729.4	29217.0	29951.9
7.5°	27714.0	27652.5	27714.0	28092.1	28708.0	29748.4
10°	26882.6	26743.5	26882.6	27309.8	28036.3	29437.9
12.5°	25858.1	25673.8	25858.1	26299.3	27215.7	28942.5
15°	24555.1	24393.4	24555.1	25044.9	26107.8	28209.9
17.5°	23156.9	23010.4	23156.9	23582.4	24752.9	27177.4
20°	21400.8	21285.9	21400.8	22002.8	23151.3	25846.8
22.5°	19558.5	19450.9	19558.5	20093.4	21288.7	24178.6
25°	17391.0	17332.4	17391.0	17988.5	19069.4	22227.6
27.5°	15048.9	14949.2	15048.9	15673.9	16777.9	19932.8
30°	12656.0	12490.9	12656.0	13215.0	14203.6	17383.8
32.5°	10315.5	10196.6	10315.5	10713.9	11746.9	14529.9
35°	8053.3	7934.5	8053.3	8413.5	9427.9	11896.8
37.5°	6275.3	6065.1	6275.3	6506.3	7329.7	9336.6
40°	4759.3	4725.5	4759.3	5050.1	5577.0	7263.8
42.5°	3874.5	3782.7	3874.5	3999.6	4394.1	5503.8
45°	3179.1	3143.0	3179.1	3273.7	3538.7	4302.2
47.5°	2733.8	2749.7	2733.8	2794.8	2993.1	3503.7
50°	2401.9	2411.5	2401.9	2430.7	2563.1	2943.0
52.5°	2157.3	2148.8	2157.3	2160.1	2242.5	2528.1
55°	1940.9	1930.2	1940.9	1934.7	1995.6	2178.7
57.5°	1751.6	1759.4	1751.6	1743.1	1775.8	1913.3
60°	1582.5	1589.9	1582.5	1576.3	1597.7	1678.3
62.5°	1440.0	1444.4	1440.0	1439.4	1435.4	1497.4
65°	1312.5	1317.6	1312.5	1305.8	1299.6	1328.3
67.5°	1190.8	1190.8	1190.8	1179.0	1169.4	1197.5
70°	1076.4	1075.9	1076.4	1057.2	1050.0	1058.3
72.5°	938.9	952.4	938.9	924.8	924.3	925.4
75°	805.3	821.2	805.3	796.3	786.2	794.6
77.5°	670.0	694.4	670.0	662.8	657.6	652.1
80°	531.4	558.0	531.4	519.0	511.8	521.3
82.5°	392.8	412.5	392.8	377.6	377.0	381.5
85°	233.8	265.4	233.8	220.3	225.5	220.3
87.5°	75.0	95.8	75.0	71.6	78.9	77.2
90°	42.8	26.6	42.8	72.9	46.8	26.6
92.5°	64.8	38.7	64.8	117.0	60.7	34.7
95°	74.8	44.7	74.8	163.1	80.9	51.3
97.5°	82.8	57.3	82.8	187.3	98.9	79.4
100°	96.9	75.4	96.9	291.7	121.6	105.6
102.5°	205.3	127.6	205.3	618.9	228.0	159.7
105°	432.2	220.0	432.2	1102.7	476.9	290.2
107.5°	773.5	380.6	773.5	1454.6	844.3	549.2
110°	1026.4	709.8	1026.4	1524.8	1159.4	878.4



TEST NUMBER: P1433841

CATALOG NUMBER: EHBR1-36-UNV-TASM-L940-UPL40

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1102.7	958.8	1102.7	1460.6	1279.9	1143.4
115°	1060.6	1008.9	1060.6	1304.0	1249.8	1242.3
117.5°	968.2	974.8	968.2	1107.3	1123.9	1200.1
120°	861.8	902.5	861.8	924.6	981.4	1083.8
122.5°	763.9	812.2	763.9	792.6	835.4	937.8
125°	679.6	728.4	679.6	698.8	709.4	795.3
127.5°	621.4	654.1	621.4	632.6	621.1	675.4
130°	575.9	604.0	575.9	591.0	563.5	589.5
132.5°	544.3	562.3	544.3	562.0	528.4	535.9
135°	516.7	532.2	516.7	535.9	505.0	502.3
137.5°	493.2	506.7	493.2	513.0	489.4	482.9
140°	472.3	483.7	472.3	493.4	475.3	471.3
142.5°	450.7	458.7	450.7	476.0	464.0	460.0
145°	435.8	441.9	435.8	462.5	455.9	454.5
147.5°	423.0	427.0	423.0	447.0	444.5	444.5
150°	410.0	414.0	410.0	433.5	431.0	432.9
152.5°	396.5	401.1	396.5	418.0	415.4	417.5
155°	387.6	392.1	387.6	405.1	404.0	404.5
157.5°	382.6	385.8	382.6	396.1	395.6	395.6
160°	378.3	380.9	378.3	389.8	389.2	387.8
162.5°	373.4	376.0	373.4	386.9	384.9	384.9
165°	372.6	373.1	372.6	382.0	382.0	380.6
167.5°	371.1	373.1	371.1	381.1	381.1	379.6
170°	371.6	372.2	371.6	379.6	378.2	376.2
172.5°	372.8	373.4	372.8	381.4	379.5	378.0
175°	372.0	372.6	372.0	378.5	378.5	379.1
177.5°	374.5	375.1	374.5	378.5	378.5	377.1
180°	378.2	378.2	378.2	378.2	378.2	378.2



TEST NUMBER: P1433841
 CATALOG NUMBER: EHBR1-36-UNV-TASM-L940-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	17.59	18.65	18.12	19.16	19.72	16.91	17.97	17.44	18.48	19.04
	3H	19.14	20.08	19.68	20.61	21.21	18.76	19.70	19.30	20.23	20.83
	4H	19.77	20.66	20.34	21.20	21.81	19.54	20.42	20.10	20.96	21.58
	6H	20.25	21.06	20.83	21.62	22.25	20.18	20.99	20.76	21.54	22.17
	8H	20.40	21.17	21.00	21.74	22.38	20.40	21.17	20.99	21.74	22.37
	12H	20.47	21.21	21.07	21.77	22.43	20.52	21.26	21.12	21.82	22.48
4H	2H	18.00	18.89	18.57	19.43	20.04	17.48	18.37	18.05	18.91	19.52
	3H	19.80	20.53	20.38	21.11	21.75	19.54	20.27	20.12	20.85	21.48
	4H	20.57	21.23	21.17	21.82	22.49	20.44	21.10	21.04	21.69	22.36
	6H	21.18	21.75	21.81	22.37	23.06	21.21	21.78	21.84	22.40	23.08
	8H	21.38	21.91	22.01	22.53	23.22	21.48	22.01	22.11	22.63	23.32
	12H	21.48	21.95	22.13	22.60	23.29	21.65	22.12	22.29	22.76	23.46
8H	4H	20.82	21.35	21.45	21.96	22.66	20.72	21.25	21.35	21.87	22.56
	6H	21.56	21.99	22.22	22.65	23.35	21.62	22.05	22.28	22.72	23.41
	8H	21.83	22.21	22.51	22.89	23.60	21.98	22.36	22.65	23.03	23.74
	12H	22.00	22.34	22.67	22.99	23.77	22.23	22.56	22.90	23.21	24.00
12H	4H	20.83	21.29	21.47	21.94	22.63	20.73	21.20	21.37	21.84	22.54
	6H	21.60	21.99	22.28	22.66	23.37	21.67	22.05	22.35	22.73	23.44
	8H	21.92	22.25	22.59	22.91	23.69	22.07	22.41	22.74	23.06	23.84

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

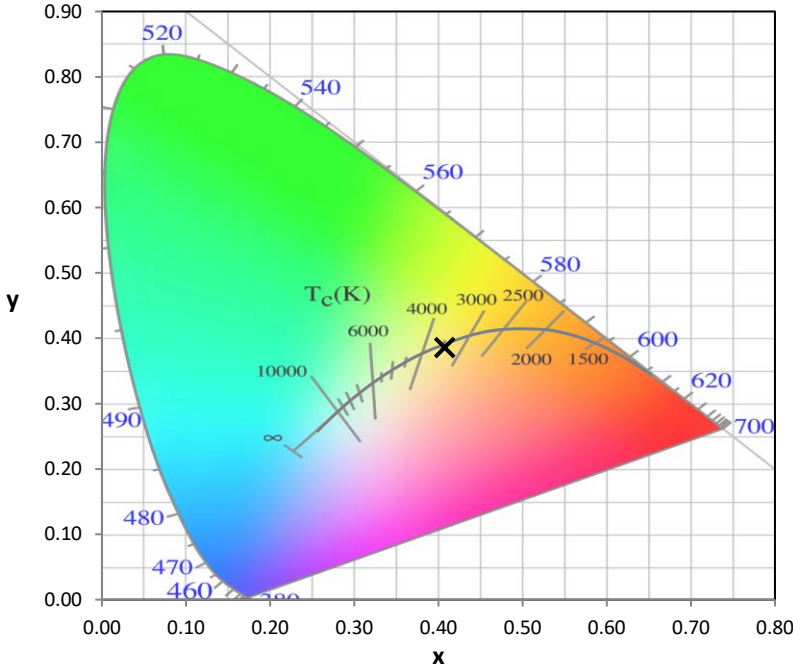
Stabilization Time: 35M
 Operation Time: 1H 35M
 Sphere Temperature (°C): 25.0

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)