

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: P1433553

Luminaire Tested: EHBR1-36-UNV-TASM-L935-UPL40

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433553
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-L935-UPL40
Description: Elevate Round Highbay at, 36000 lumens, 3500K 90CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

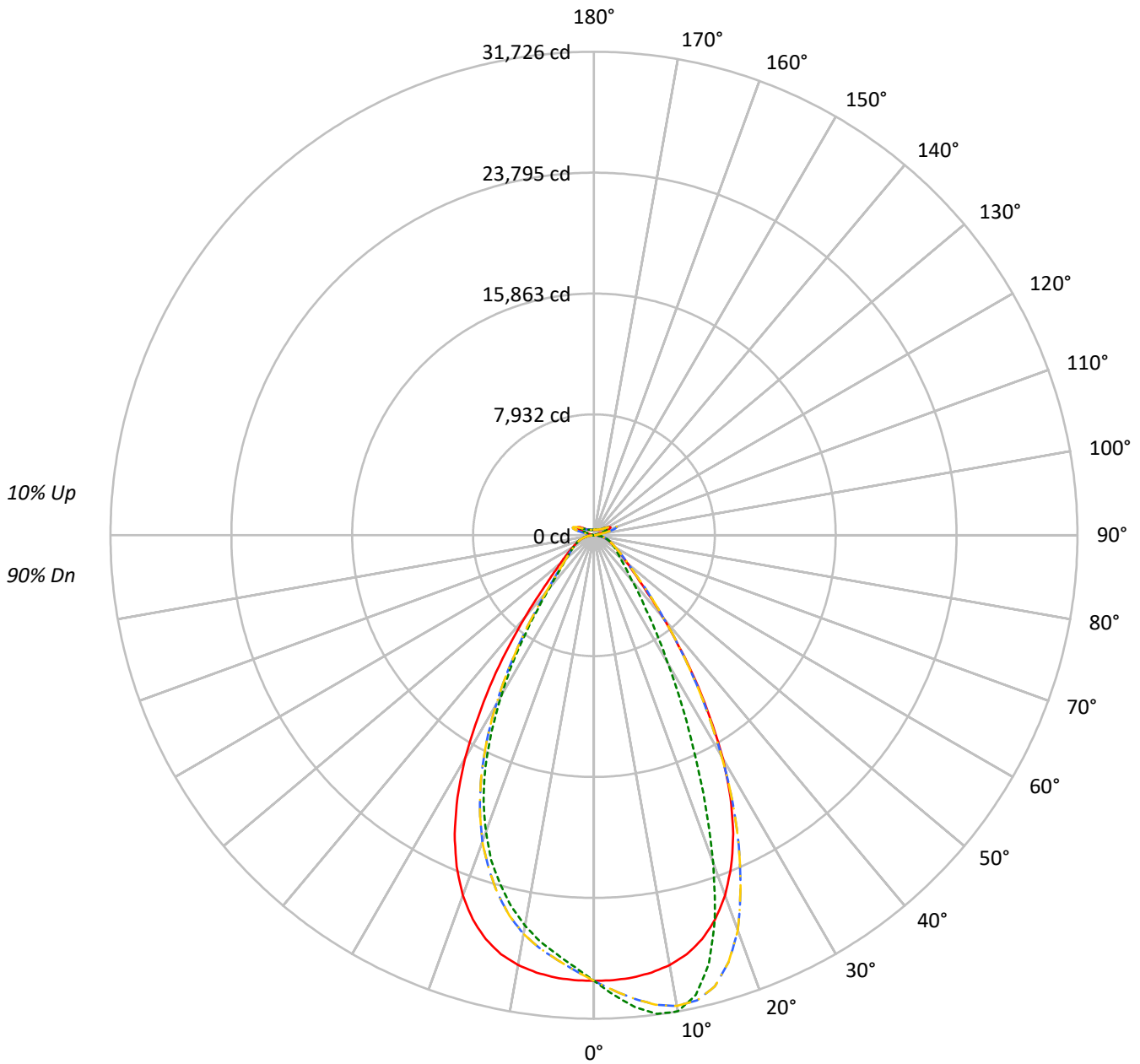
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36207.8 lumens
Efficiency: N/A
Efficacy: 163.1 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: P1433553
CATALOG NUMBER: EHBR1-36-UNV-TASM-L935-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	84	84	84	81
2	102	96	91	87	99	94	89	86	89	85	82	84	81	79	80	78	76	76	76	76	74
3	96	88	82	77	93	86	81	76	82	77	74	78	74	71	75	72	69	69	69	69	67
4	90	81	74	69	87	79	73	68	76	71	67	72	68	65	69	66	63	63	63	63	61
5	85	75	68	63	82	73	67	62	70	65	61	67	63	59	65	61	58	58	58	58	56
6	80	69	62	58	77	68	62	57	65	60	56	63	58	55	61	57	53	53	53	53	52
7	75	65	58	53	73	63	57	52	61	56	51	59	54	51	57	53	50	50	50	50	48
8	71	60	54	49	69	59	53	49	57	52	48	55	51	47	54	49	46	46	46	46	44
9	67	57	50	45	66	56	49	45	54	48	44	52	47	44	51	46	43	43	43	43	42
10	64	53	47	42	62	52	46	42	51	45	42	49	44	41	48	44	40	40	40	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	137303	137303	137303	137303
5°	136468	145585	136468	129385
10°	134790	149323	134790	122452
15°	130810	138768	130810	113113
20°	122340	111273	122340	100752
25°	108281	77096	108281	84435
30°	87920	50157	87920	63174
35°	63059	32482	63059	42057
40°	40770	22389	40770	26523
45°	25868	17343	25868	18898
50°	19210	14737	19210	15741
55°	15684	13425	15684	13895
60°	13581	12788	13581	12866
65°	12380	12333	12380	12280
70°	11734	12084	11734	11928
75°	10973	11690	10973	11340
80°	9639	11037	9639	10318
85°	6235	7879	6235	7512

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 36369 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2780.1	7.7
10°-20°	7563.3	20.9
20°-30°	8870.2	24.5
30°-40°	6168.7	17.0
40°-50°	3065.6	8.5
50°-60°	1833.5	5.1
60°-70°	1290.5	3.6
70°-80°	831.3	2.3
80°-90°	270.3	0.7
90°-100°	94.1	0.3
100°-110°	614.6	1.7
110°-120°	1135.6	3.1
120°-130°	674.9	1.9
130°-140°	408.0	1.1
140°-150°	282.2	0.8
150°-160°	184.1	0.5
160°-170°	105.7	0.3
170°-180°	35.1	0.1
0°-30°	19213.6	53.1
0°-40°	25382.3	70.1
0°-60°	30281.4	83.6
0°-90°	32673.5	90.2
90°-120°	1844.3	5.1
90°-150°	3209.4	8.9
90°-180°	3534.0	9.8
0°-180°	36207.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	29238	29238	29238	29238	29238	
5°	29138	31085	29138	27626	29138	2765
15°	27443	29113	27443	23730	27443	7669
25°	21624	15396	21624	16862	21624	9790
35°	11574	5962	11574	7719	11574	7225
45°	4185	2806	4185	3058	4185	3425
55°	2120	1814	2120	1878	2120	1938
65°	1292	1287	1292	1282	1292	1298
75°	773	824	773	799	773	811
85°	214	271	214	258	214	238
90°	26	30	26	26	26	22
95°	50	47	50	44	50	53
105°	282	144	282	214	282	381
115°	1209	1032	1209	982	1209	1102
125°	774	810	774	709	774	712
135°	489	565	489	518	489	388
145°	442	462	442	430	442	277
155°	394	410	394	382	394	184
165°	370	381	370	363	370	105
175°	369	375	369	362	369	35
180°	368	368	368	368	368	



TEST NUMBER: P1433553
 CATALOG NUMBER: EHBR1-36-UNV-TASM-L935-UPL40

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	29237.8	29237.8	29237.8	29237.8	29237.8	29237.8	29237.8	29237.8	29237.8	29237.8	29237.8
2.5°	29220.7	29598.5	29904.4	30106.2	30205.9	30106.2	29904.4	29598.5	29220.7	28845.1	28586.9
5°	29138.0	29894.6	30535.4	30954.9	31084.8	30954.9	30535.4	29894.6	29138.0	28423.1	27948.8
7.5°	28940.0	30118.8	31071.1	31560.7	31680.2	31560.7	31071.1	30118.8	28940.0	27927.9	27328.7
10°	28637.9	30260.2	31360.6	31711.4	31725.7	31711.4	31360.6	30260.2	28637.9	27274.5	26567.7
12.5°	28156.0	30209.8	31263.5	31148.4	30886.8	31148.4	31263.5	30209.8	28156.0	26476.2	25584.7
15°	27443.3	29911.0	30648.9	29711.9	29112.7	29711.9	30648.9	29911.0	27443.3	25398.4	24364.3
17.5°	26438.9	29351.8	29366.0	27512.4	26381.9	27512.4	29366.0	29351.8	26438.9	24080.3	22941.6
20°	25144.5	28454.9	27599.6	24209.2	22869.8	24209.2	27599.6	28454.9	25144.5	22522.2	21404.9
22.5°	23521.6	27245.4	25139.5	20886.2	19058.9	20886.2	25139.5	27245.4	23521.6	20710.2	19547.4
25°	21623.6	25763.4	22493.1	17265.6	15396.0	17265.6	22493.1	25763.4	21623.6	18551.2	17499.7
27.5°	19391.1	23885.1	19675.2	14108.7	12383.9	14108.7	19675.2	23885.1	19391.1	16322.0	15248.0
30°	16911.4	21477.2	16742.5	11235.9	9647.6	11235.9	16742.5	21477.2	16911.4	13817.6	12855.9
32.5°	14135.0	19117.0	13926.1	9002.8	7657.4	9002.8	13926.1	19117.0	14135.0	11427.7	10422.8
35°	11573.6	16164.1	11386.7	7074.1	5961.7	7074.1	11386.7	16164.1	11573.6	9171.7	8184.9
37.5°	9082.9	13374.1	9076.9	5696.4	4835.5	5696.4	9076.9	13374.1	9082.9	7130.6	6329.5
40°	7066.4	10457.3	7111.9	4547.2	3880.5	4547.2	7111.9	10457.3	7066.4	5425.5	4912.9
42.5°	5354.2	7996.3	5590.0	3732.0	3296.1	3732.0	5590.0	7996.3	5354.2	4274.7	3891.0
45°	4185.3	5884.3	4365.2	3148.6	2806.0	3148.6	4365.2	5884.3	4185.3	3442.5	3184.8
47.5°	3408.5	4547.8	3537.9	2700.7	2460.6	2700.7	3537.9	4547.8	3408.5	2911.8	2718.8
50°	2863.0	3489.6	2937.5	2357.5	2196.3	2357.5	2937.5	3489.6	2863.0	2493.4	2364.6
52.5°	2459.4	2846.0	2501.7	2100.9	1992.4	2100.9	2501.7	2846.0	2459.4	2181.5	2101.4
55°	2119.5	2392.5	2175.5	1889.2	1814.2	1889.2	2175.5	2392.5	2119.5	1941.4	1882.2
57.5°	1861.3	2029.6	1889.2	1708.9	1659.0	1708.9	1889.2	2029.6	1861.3	1727.6	1695.7
60°	1632.7	1757.7	1667.2	1551.5	1537.3	1551.5	1667.2	1757.7	1632.7	1554.3	1533.4
62.5°	1456.7	1535.7	1474.2	1410.1	1397.5	1410.1	1474.2	1535.7	1456.7	1396.4	1400.3
65°	1292.2	1365.7	1317.4	1282.9	1287.3	1282.9	1317.4	1365.7	1292.2	1264.2	1270.3
67.5°	1165.0	1203.4	1182.6	1162.8	1167.8	1162.8	1182.6	1203.4	1165.0	1137.6	1147.0
70°	1029.6	1070.7	1049.3	1052.1	1060.3	1052.1	1049.3	1070.7	1029.6	1021.4	1028.5
72.5°	900.3	932.1	924.9	931.4	940.2	931.4	924.9	932.1	900.3	899.2	899.7
75°	773.0	797.1	800.5	809.8	823.5	809.8	800.5	797.1	773.0	764.9	774.6
77.5°	634.3	661.7	672.1	684.7	705.0	684.7	672.1	661.7	634.3	639.8	644.8
80°	507.1	519.8	542.8	552.0	580.6	552.0	542.8	519.8	507.1	497.8	504.9
82.5°	371.1	382.7	402.4	420.0	436.4	420.0	402.4	382.7	371.1	366.8	367.3
85°	214.3	231.9	245.1	265.9	270.8	265.9	245.1	231.9	214.3	219.3	214.3
87.5°	75.1	80.6	92.1	100.3	100.9	100.3	92.1	80.6	75.1	76.8	69.6
90°	25.9	44.0	75.9	42.3	29.7	42.3	75.9	44.0	25.9	45.5	70.9
92.5°	33.7	59.6	107.1	56.0	39.5	56.0	107.1	59.6	33.7	59.1	113.8
95°	49.9	73.3	136.4	61.8	47.3	61.8	136.4	73.3	49.9	78.7	158.7
97.5°	77.2	90.9	154.0	65.8	57.1	65.8	154.0	90.9	77.2	96.3	182.2
100°	102.7	102.7	280.9	75.5	64.9	75.5	280.9	102.7	102.7	118.3	283.8
102.5°	155.3	200.8	650.6	150.3	78.6	150.3	650.6	200.8	155.3	221.8	602.1
105°	282.3	458.6	1144.7	386.5	143.6	386.5	1144.7	458.6	282.3	464.0	1072.7
107.5°	534.3	855.1	1474.7	761.6	333.0	761.6	1474.7	855.1	534.3	821.3	1415.1
110°	854.6	1194.9	1609.5	1042.8	672.9	1042.8	1609.5	1194.9	854.6	1127.9	1483.4



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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°	1112.3	1331.6	1572.4	1156.1	930.6	1156.1	1572.4	1331.6	1112.3	1245.1	1420.9
115°	1208.6	1312.1	1404.4	1152.1	1032.1	1152.1	1404.4	1312.1	1208.6	1215.8	1268.6
117.5°	1167.5	1200.8	1213.0	1081.9	1038.0	1081.9	1213.0	1200.8	1167.5	1093.4	1077.2
120°	1054.3	1040.6	1022.2	978.4	979.5	978.4	1022.2	1040.6	1054.3	954.7	899.4
122.5°	912.3	882.9	864.0	873.4	899.4	873.4	864.0	882.9	912.3	812.7	771.1
125°	773.6	744.3	753.3	783.6	810.1	783.6	753.3	744.3	773.6	690.2	679.8
127.5°	657.0	643.3	673.1	707.4	730.0	707.4	673.1	643.3	657.0	604.3	615.4
130°	573.5	576.9	616.5	645.5	659.7	645.5	616.5	576.9	573.5	548.1	575.0
132.5°	521.3	536.5	574.1	599.2	607.6	599.2	574.1	536.5	521.3	514.1	546.7
135°	488.7	511.1	545.3	561.5	564.6	561.5	545.3	511.1	488.7	491.2	521.3
137.5°	469.8	492.0	518.0	530.8	527.5	530.8	518.0	492.0	469.8	476.1	499.0
140°	458.5	480.9	492.6	507.4	504.6	507.4	492.6	480.9	458.5	462.4	480.0
142.5°	447.5	467.8	473.6	484.5	481.2	484.5	473.6	467.8	447.5	451.4	463.0
145°	442.1	457.2	452.7	466.9	462.2	466.9	452.7	457.2	442.1	443.6	449.9
147.5°	432.4	443.6	437.7	449.9	445.2	449.9	437.7	443.6	432.4	432.4	434.9
150°	421.2	429.0	420.6	434.9	434.0	434.9	420.6	429.0	421.2	419.3	421.7
152.5°	406.1	413.9	406.1	422.3	420.9	422.3	406.1	413.9	406.1	404.1	406.7
155°	393.5	397.4	393.5	409.7	410.2	409.7	393.5	397.4	393.5	393.0	394.1
157.5°	384.8	387.4	385.4	399.6	400.1	399.6	385.4	387.4	384.8	384.8	385.4
160°	377.3	381.2	379.8	392.0	392.5	392.0	379.8	381.2	377.3	378.7	379.2
162.5°	374.4	374.4	373.6	385.8	386.9	385.8	373.6	374.4	374.4	374.4	376.4
165°	370.2	372.1	369.3	378.3	381.4	378.3	369.3	372.1	370.2	371.6	371.6
167.5°	369.3	367.4	368.6	376.0	379.1	376.0	368.6	367.4	369.3	370.8	370.8
170°	366.0	366.6	365.8	373.2	376.3	373.2	365.8	366.6	366.0	368.0	369.3
172.5°	367.7	367.7	365.4	371.0	375.9	371.0	365.4	367.7	367.7	369.1	371.1
175°	368.8	367.4	366.5	370.1	375.1	370.1	366.5	367.4	368.8	368.2	368.2
177.5°	366.9	368.0	369.1	372.6	379.6	372.6	369.1	368.0	366.9	368.2	368.2
180°	368.0	368.0	368.0	368.0	368.0	368.0	368.0	368.0	368.0	368.0	368.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	29237.8	29237.8	29237.8	29237.8	29237.8	29237.8
2.5°	28388.5	28369.9	28388.5	28586.9	28845.1	29220.7
5°	27728.9	27625.8	27728.9	27948.8	28423.1	29138.0
7.5°	26960.9	26901.1	26960.9	27328.7	27927.9	28940.0
10°	26152.2	26016.7	26152.2	26567.7	27274.5	28637.9
12.5°	25155.5	24976.2	25155.5	25584.7	26476.2	28156.0
15°	23887.9	23730.5	23887.9	24364.3	25398.4	27443.3
17.5°	22527.6	22385.1	22527.6	22941.6	24080.3	26438.9
20°	20819.3	20707.5	20819.3	21404.9	22522.2	25144.5
22.5°	19027.0	18922.4	19027.0	19547.4	20710.2	23521.6
25°	16918.5	16861.5	16918.5	17499.7	18551.2	21623.6
27.5°	14639.9	14543.0	14639.9	15248.0	16322.0	19391.1
30°	12312.1	12151.4	12312.1	12855.9	13817.6	16911.4
32.5°	10035.2	9919.5	10035.2	10422.8	11427.7	14135.0
35°	7834.5	7718.9	7834.5	8184.9	9171.7	11573.6
37.5°	6104.8	5900.3	6104.8	6329.5	7130.6	9082.9
40°	4630.0	4597.1	4630.0	4912.9	5425.5	7066.4
42.5°	3769.2	3679.9	3769.2	3891.0	4274.7	5354.2
45°	3092.7	3057.6	3092.7	3184.8	3442.5	4185.3
47.5°	2659.5	2674.9	2659.5	2718.8	2911.8	3408.5
50°	2336.6	2345.9	2336.6	2364.6	2493.4	2863.0
52.5°	2098.7	2090.5	2098.7	2101.4	2181.5	2459.4
55°	1888.2	1877.7	1888.2	1882.2	1941.4	2119.5
57.5°	1704.0	1711.6	1704.0	1695.7	1727.6	1861.3
60°	1539.5	1546.7	1539.5	1533.4	1554.3	1632.7
62.5°	1400.8	1405.2	1400.8	1400.3	1396.4	1456.7
65°	1276.8	1281.8	1276.8	1270.3	1264.2	1292.2
67.5°	1158.5	1158.5	1158.5	1147.0	1137.6	1165.0
70°	1047.2	1046.6	1047.2	1028.5	1021.4	1029.6
72.5°	913.4	926.5	913.4	899.7	899.2	900.3
75°	783.4	798.8	783.4	774.6	764.9	773.0
77.5°	651.8	675.5	651.8	644.8	639.8	634.3
80°	517.0	542.8	517.0	504.9	497.8	507.1
82.5°	382.1	401.3	382.1	367.3	366.8	371.1
85°	227.5	258.2	227.5	214.3	219.3	214.3
87.5°	73.0	93.2	73.0	69.6	76.8	75.1
90°	41.6	25.9	41.6	70.9	45.5	25.9
92.5°	63.1	37.6	63.1	113.8	59.1	33.7
95°	72.8	43.5	72.8	158.7	78.7	49.9
97.5°	80.6	55.7	80.6	182.2	96.3	77.2
100°	94.3	73.3	94.3	283.8	118.3	102.7
102.5°	199.8	124.2	199.8	602.1	221.8	155.3
105°	420.4	214.0	420.4	1072.7	464.0	282.3
107.5°	752.4	370.2	752.4	1415.1	821.3	534.3
110°	998.5	690.5	998.5	1483.4	1127.9	854.6



TEST NUMBER: P1433553

CATALOG NUMBER: EHBR1-36-UNV-TASM-L935-UPL40

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1072.7	932.7	1072.7	1420.9	1245.1	1112.3
115°	1031.8	981.5	1031.8	1268.6	1215.8	1208.6
117.5°	941.9	948.3	941.9	1077.2	1093.4	1167.5
120°	838.4	878.0	838.4	899.4	954.7	1054.3
122.5°	743.2	790.1	743.2	771.1	812.7	912.3
125°	661.2	708.6	661.2	679.8	690.2	773.6
127.5°	604.5	636.3	604.5	615.4	604.3	657.0
130°	560.2	587.6	560.2	575.0	548.1	573.5
132.5°	529.5	547.1	529.5	546.7	514.1	521.3
135°	502.7	517.8	502.7	521.3	491.2	488.7
137.5°	479.8	493.0	479.8	499.0	476.1	469.8
140°	459.4	470.6	459.4	480.0	462.4	458.5
142.5°	438.5	446.3	438.5	463.0	451.4	447.5
145°	424.0	429.9	424.0	449.9	443.6	442.1
147.5°	411.5	415.4	411.5	434.9	432.4	432.4
150°	398.9	402.8	398.9	421.7	419.3	421.2
152.5°	385.7	390.2	385.7	406.7	404.1	406.1
155°	377.0	381.5	377.0	394.1	393.0	393.5
157.5°	372.2	375.3	372.2	385.4	384.8	384.8
160°	368.1	370.5	368.1	379.2	378.7	377.3
162.5°	363.3	365.8	363.3	376.4	374.4	374.4
165°	362.4	363.0	362.4	371.6	371.6	370.2
167.5°	361.0	363.0	361.0	370.8	370.8	369.3
170°	361.5	362.1	361.5	369.3	368.0	366.0
172.5°	362.7	363.3	362.7	371.1	369.1	367.7
175°	361.9	362.4	361.9	368.2	368.2	368.8
177.5°	364.3	364.9	364.3	368.2	368.2	366.9
180°	368.0	368.0	368.0	368.0	368.0	368.0



TEST NUMBER: P1433553
 CATALOG NUMBER: EHBR1-36-UNV-TASM-L935-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	17.50	18.56	18.03	19.07	19.63	16.81	17.88	17.35	18.39	18.94
	3H	19.04	19.99	19.59	20.51	21.11	18.66	19.61	19.21	20.13	20.73
	4H	19.68	20.56	20.24	21.10	21.72	19.44	20.32	20.01	20.86	21.48
	6H	20.15	20.97	20.74	21.52	22.15	20.08	20.89	20.66	21.45	22.08
	8H	20.31	21.07	20.90	21.65	22.28	20.30	21.07	20.90	21.64	22.28
	12H	20.38	21.11	20.97	21.68	22.33	20.43	21.16	21.02	21.73	22.39
4H	2H	17.91	18.79	18.48	19.33	19.95	17.39	18.27	17.96	18.81	19.43
	3H	19.70	20.43	20.28	21.02	21.65	19.44	20.17	20.02	20.76	21.39
	4H	20.48	21.13	21.07	21.73	22.40	20.35	21.01	20.95	21.60	22.27
	6H	21.09	21.66	21.71	22.27	22.96	21.12	21.68	21.74	22.30	22.99
	8H	21.28	21.81	21.91	22.43	23.12	21.39	21.92	22.01	22.53	23.22
	12H	21.39	21.86	22.03	22.50	23.20	21.55	22.02	22.20	22.67	23.36
8H	4H	20.72	21.25	21.35	21.87	22.56	20.63	21.15	21.25	21.77	22.46
	6H	21.46	21.89	22.12	22.56	23.25	21.53	21.96	22.19	22.62	23.32
	8H	21.73	22.12	22.41	22.79	23.50	21.88	22.27	22.56	22.94	23.65
	12H	21.91	22.24	22.58	22.90	23.68	22.13	22.46	22.80	23.12	23.90
12H	4H	20.73	21.20	21.38	21.84	22.54	20.63	21.10	21.28	21.75	22.44
	6H	21.51	21.89	22.18	22.56	23.27	21.57	21.96	22.25	22.63	23.34
	8H	21.82	22.16	22.49	22.81	23.60	21.98	22.31	22.65	22.97	23.75

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

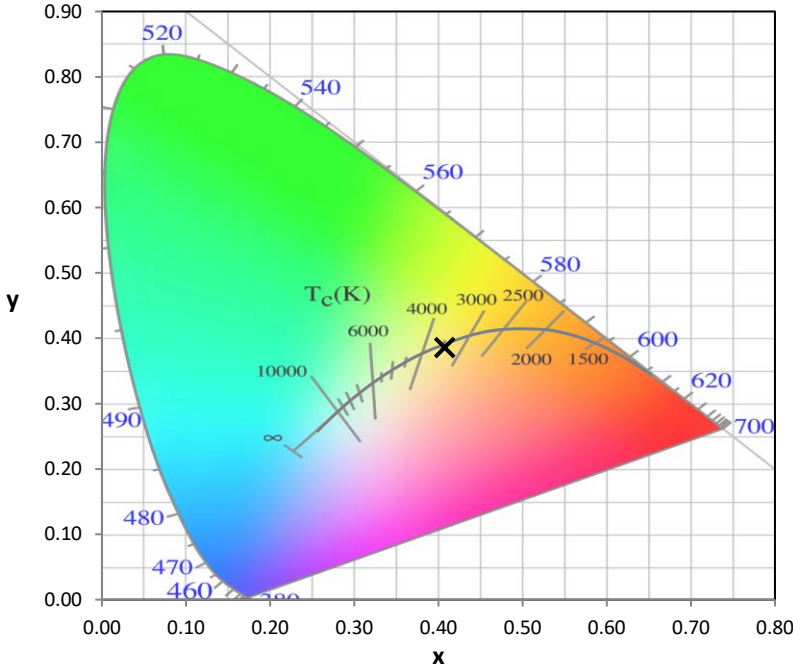
Stabilization Time: 35M
 Operation Time: 1H 35M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-6

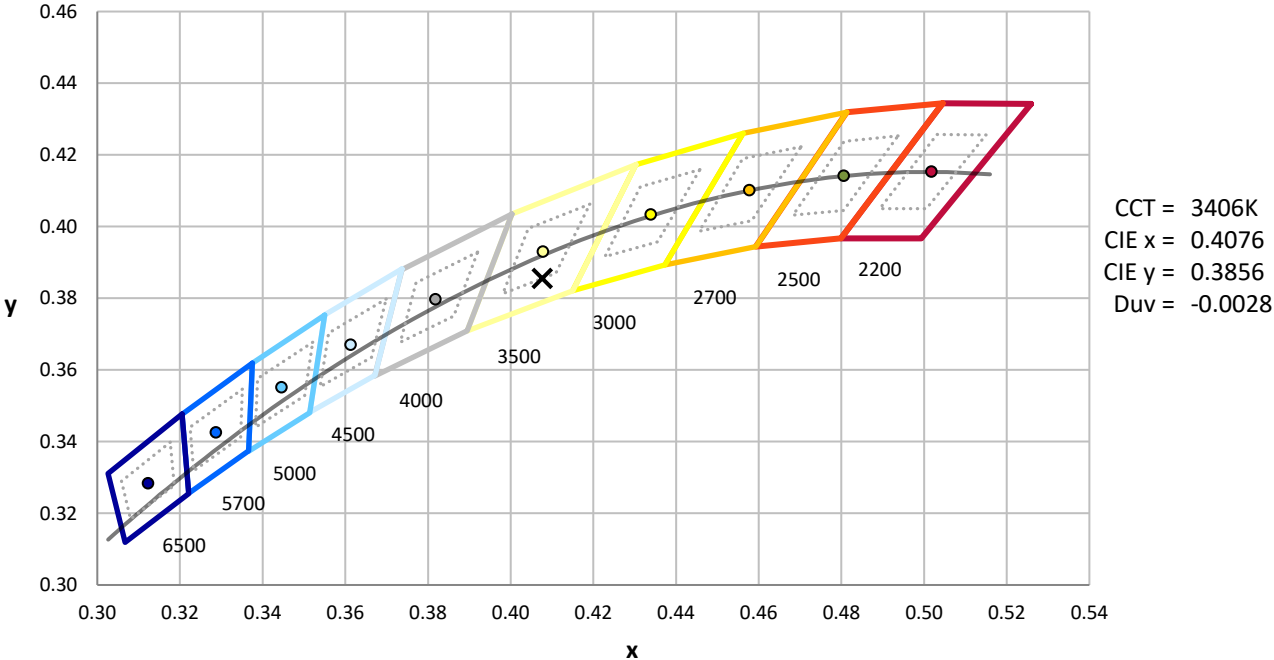
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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