

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: P1433420

Luminaire Tested: EHBR1-12-UNV-TASM-L935-UPL15

Issue Date: 3/20/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1433420  
REPORT IS A COMBINATION OF REPORTS P1431645 AND P1431635  
Test Lab: INNOVATION CENTER  
Issue Date: 3/20/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: EHBR1-12-UNV-TASM-L935-UPL15  
Description: Elevate Round Highbay at, 12000 lumens, 3500K 90CRI LEDs with TASM lens  
Light Source: -  
Ballast/Driver: -

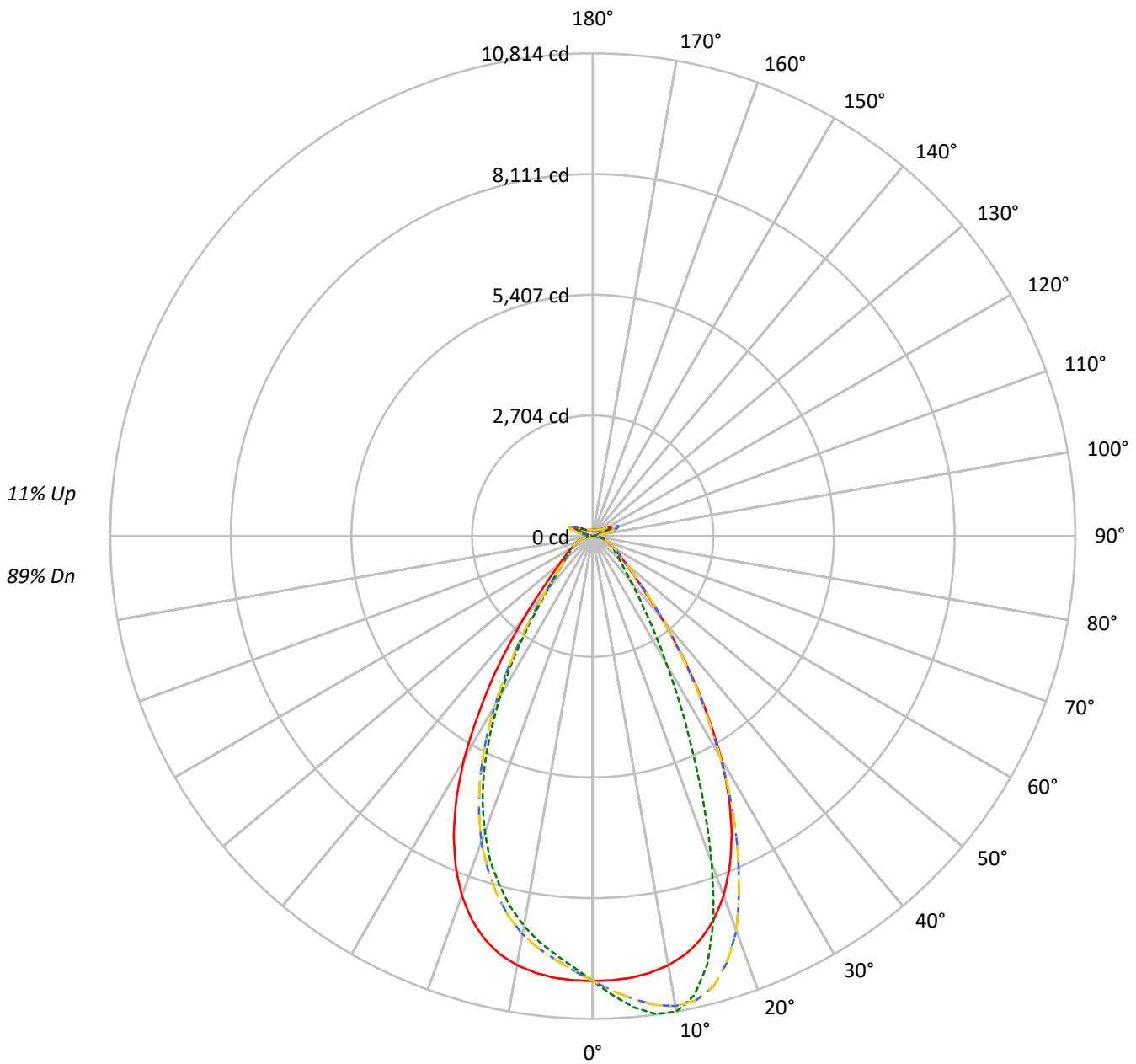
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12491.9 lumens  
Efficiency: N/A  
Efficacy: 168.8 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: Semi-Direct

Input Watts (W): 74  
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: P1433420  
CATALOG NUMBER: EHBR1-12-UNV-TASM-L935-UPL15

### Luminous Intensity Polar Plot



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



TEST NUMBER: P1433420  
 CATALOG NUMBER: EHBR1-12-UNV-TASM-L935-UPL15

**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	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89			89
1	109	106	103	100	106	102	100	97	96	94	92	91	89	87	86	84	83				80
2	102	96	91	87	99	93	89	85	88	85	82	84	81	78	79	77	75				73
3	96	88	82	77	93	86	80	76	81	77	73	77	74	71	74	71	68				66
4	90	81	74	69	87	79	73	68	75	70	66	72	68	64	69	65	62				60
5	84	75	68	63	82	73	67	62	70	64	60	67	62	59	64	60	57				55
6	79	69	62	57	77	68	61	57	65	59	55	62	58	54	60	56	53				51
7	75	64	57	53	73	63	57	52	61	55	51	59	54	50	56	52	49				47
8	71	60	53	49	69	59	53	48	57	51	47	55	50	46	53	49	46				44
9	67	56	50	45	65	55	49	45	53	48	44	52	47	43	50	46	43				41
10	64	53	46	42	62	52	46	42	50	45	41	49	44	41	47	43	40				38

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

	0°	90°	180°	270°
0°	46800	46800	46800	46800
5°	46516	49624	46516	44102
10°	45944	50898	45944	41739
15°	44587	47300	44587	38555
20°	41700	37928	41700	34342
25°	36908	26279	36908	28780
30°	29968	17096	29968	21533
35°	21494	11072	21494	14335
40°	13897	7631	13897	9041
45°	8817	5912	8817	6441
50°	6547	5023	6547	5366
55°	5346	4576	5346	4737
60°	4629	4359	4629	4385
65°	4220	4204	4220	4186
70°	3999	4119	3999	4065
75°	3741	3985	3741	3865
80°	3285	3762	3285	3517
85°	2127	2688	2127	2560

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 12396 cd/sqm



TEST NUMBER: P1433420  
 CATALOG NUMBER: EHBR1-12-UNV-TASM-L935-UPL15

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	947.6	7.6
10°-20°	2578.0	20.6
20°-30°	3023.5	24.2
30°-40°	2102.6	16.8
40°-50°	1044.9	8.4
50°-60°	625.0	5.0
60°-70°	439.9	3.5
70°-80°	283.4	2.3
80°-90°	92.4	0.7
90°-100°	36.0	0.3
100°-110°	235.7	1.9
110°-120°	435.5	3.5
120°-130°	258.8	2.1
130°-140°	156.4	1.3
140°-150°	108.1	0.9
150°-160°	70.4	0.6
160°-170°	40.4	0.3
170°-180°	13.4	0.1
0°-30°	6549.1	52.4
0°-40°	8651.7	69.3
0°-60°	10321.6	82.6
0°-90°	11137.2	89.2
90°-120°	707.2	5.7
90°-150°	1230.5	9.9
90°-180°	1355.0	10.8
0°-180°	12491.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	9966	9966	9966	9966	9966	
5°	9932	10596	9932	9416	9932	943
15°	9354	9923	9354	8089	9354	2614
25°	7370	5248	7370	5747	7370	3337
35°	3945	2032	3945	2631	3945	2463
45°	1427	956	1427	1042	1427	1167
55°	722	618	722	640	722	661
65°	440	439	440	437	440	442
75°	264	281	264	272	264	277
85°	73	92	73	88	73	81
90°	10	11	10	10	10	8
95°	19	18	19	17	19	20
105°	108	55	108	82	108	146
115°	464	396	464	376	464	422
125°	297	311	297	272	297	273
135°	187	216	187	198	187	149
145°	169	177	169	165	169	106
155°	150	157	150	146	150	70
165°	141	146	141	139	141	40
175°	141	143	141	138	141	13
180°	140	140	140	140	140	



TEST NUMBER: P1433420  
 CATALOG NUMBER: EHBR1-12-UNV-TASM-L935-UPL15

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	9965.8	9965.8	9965.8	9965.8	9965.8	9965.8	9965.8	9965.8	9965.8	9965.8	9965.8
2.5°	9960.0	10088.8	10193.0	10261.8	10295.8	10261.8	10193.0	10088.8	9960.0	9832.0	9744.0
5°	9931.8	10189.7	10408.2	10551.1	10595.5	10551.1	10408.2	10189.7	9931.8	9688.1	9526.5
7.5°	9864.4	10266.2	10590.7	10757.6	10798.4	10757.6	10590.7	10266.2	9864.4	9519.4	9315.2
10°	9761.4	10314.4	10689.4	10809.0	10813.9	10809.0	10689.4	10314.4	9761.4	9296.7	9055.8
12.5°	9597.1	10297.2	10656.4	10617.1	10527.9	10617.1	10656.4	10297.2	9597.1	9024.5	8720.7
15°	9354.2	10195.3	10446.8	10127.5	9923.2	10127.5	10446.8	10195.3	9354.2	8657.2	8304.7
17.5°	9011.8	10004.7	10009.6	9377.7	8992.4	9377.7	10009.6	10004.7	9011.8	8207.9	7819.8
20°	8570.6	9699.0	9407.4	8251.9	7795.3	8251.9	9407.4	9699.0	8570.6	7676.8	7296.0
22.5°	8017.5	9286.7	8569.0	7119.2	6496.3	7119.2	8569.0	9286.7	8017.5	7059.2	6662.8
25°	7370.5	8781.6	7666.9	5885.1	5247.8	5885.1	7666.9	8781.6	7370.5	6323.3	5964.8
27.5°	6609.6	8141.4	6706.4	4809.1	4221.1	4809.1	6706.4	8141.4	6609.6	5563.4	5197.3
30°	5764.3	7320.6	5706.8	3829.8	3288.4	3829.8	5706.8	7320.6	5764.3	4709.8	4382.0
32.5°	4818.0	6516.2	4746.8	3068.7	2610.0	3068.7	4746.8	6516.2	4818.0	3895.2	3552.6
35°	3944.9	5509.7	3881.2	2411.2	2032.1	2411.2	3881.2	5509.7	3944.9	3126.2	2789.9
37.5°	3095.9	4558.7	3093.9	1941.6	1648.3	1941.6	3093.9	4558.7	3095.9	2430.5	2157.4
40°	2408.7	3564.4	2424.2	1549.9	1322.7	1549.9	2424.2	3564.4	2408.7	1849.3	1674.6
42.5°	1825.0	2725.6	1905.4	1272.0	1123.5	1272.0	1905.4	2725.6	1825.0	1457.1	1326.2
45°	1426.6	2005.7	1487.9	1073.2	956.5	1073.2	1487.9	2005.7	1426.6	1173.4	1085.5
47.5°	1161.8	1550.1	1205.9	920.6	838.7	920.6	1205.9	1550.1	1161.8	992.5	926.7
50°	975.8	1189.5	1001.3	803.6	748.6	803.6	1001.3	1189.5	975.8	849.9	806.0
52.5°	838.4	970.0	852.7	716.1	679.1	716.1	852.7	970.0	838.4	743.6	716.3
55°	722.4	815.5	741.6	643.9	618.4	643.9	741.6	815.5	722.4	661.7	641.5
57.5°	634.4	691.8	643.9	582.5	565.5	582.5	643.9	691.8	634.4	588.8	578.0
60°	556.5	599.1	568.3	528.8	524.0	528.8	568.3	599.1	556.5	529.7	522.7
62.5°	496.5	523.4	502.5	480.6	476.4	480.6	502.5	523.4	496.5	476.0	477.3
65°	440.5	465.5	449.1	437.3	438.8	437.3	449.1	465.5	440.5	431.0	433.0
67.5°	397.2	410.2	403.0	396.3	398.1	396.3	403.0	410.2	397.2	387.7	390.9
70°	350.9	365.0	357.6	358.6	361.4	358.6	357.6	365.0	350.9	348.1	350.6
72.5°	306.9	317.7	315.2	317.5	320.5	317.5	315.2	317.7	306.9	306.4	306.7
75°	263.5	271.7	272.8	276.0	280.7	276.0	272.8	271.7	263.5	260.7	264.0
77.5°	216.3	225.6	229.1	233.4	240.4	233.4	229.1	225.6	216.3	218.1	219.8
80°	172.8	177.2	185.0	188.2	197.9	188.2	185.0	177.2	172.8	169.7	172.1
82.5°	126.5	130.4	137.1	143.1	148.7	143.1	137.1	130.4	126.5	125.0	125.2
85°	73.1	79.0	83.6	90.6	92.4	90.6	83.6	79.0	73.1	74.8	73.1
87.5°	25.6	27.5	31.4	34.2	34.3	34.2	31.4	27.5	25.6	26.2	23.7
90°	9.9	16.9	29.0	16.0	11.1	16.0	29.0	16.9	9.9	17.4	27.2
92.5°	13.0	22.8	41.0	21.3	15.0	21.3	41.0	22.8	13.0	22.7	43.6
95°	19.1	28.1	52.2	23.6	17.9	23.6	52.2	28.1	19.1	30.2	60.9
97.5°	29.5	34.8	59.0	25.1	21.7	25.1	59.0	34.8	29.5	36.9	69.9
100°	39.3	39.3	107.7	28.8	24.7	28.8	107.7	39.3	39.3	45.3	108.9
102.5°	59.5	76.9	249.4	57.5	29.9	57.5	249.4	76.9	59.5	85.0	230.9
105°	108.2	175.8	439.0	148.1	54.9	148.1	439.0	175.8	108.2	177.9	411.5
107.5°	204.9	327.9	565.6	291.9	127.6	291.9	565.6	327.9	204.9	315.0	542.8
110°	327.7	458.3	617.3	399.9	257.9	399.9	617.3	458.3	327.7	432.6	569.0



TEST NUMBER: P1433420  
 CATALOG NUMBER: EHBR1-12-UNV-TASM-L935-UPL15

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	426.6	510.7	603.1	443.3	356.8	443.3	603.1	510.7	426.6	477.5	545.0
115°	463.5	503.3	538.6	441.7	395.8	441.7	538.6	503.3	463.5	466.3	486.6
117.5°	447.8	460.5	465.2	414.8	398.1	414.8	465.2	460.5	447.8	419.4	413.2
120°	404.3	399.1	392.0	375.1	375.6	375.1	392.0	399.1	404.3	366.2	344.9
122.5°	349.8	338.6	331.3	334.8	344.9	334.8	331.3	338.6	349.8	311.6	295.7
125°	296.6	285.4	288.8	300.4	310.6	300.4	288.8	285.4	296.6	264.6	260.7
127.5°	251.9	246.6	258.0	271.2	279.9	271.2	258.0	246.6	251.9	231.7	236.0
130°	219.9	221.1	236.4	247.4	252.9	247.4	236.4	221.1	219.9	210.1	220.4
132.5°	199.8	205.6	220.1	229.7	232.8	229.7	220.1	205.6	199.8	196.9	209.5
135°	187.2	195.9	209.0	215.3	216.3	215.3	209.0	195.9	187.2	188.2	199.8
137.5°	180.0	188.6	198.5	203.5	202.1	203.5	198.5	188.6	180.0	182.4	191.2
140°	175.7	184.3	188.8	194.4	193.3	194.4	188.8	184.3	175.7	177.2	184.0
142.5°	171.4	179.3	181.5	185.6	184.3	185.6	181.5	179.3	171.4	172.9	177.4
145°	169.3	175.1	173.5	178.9	177.0	178.9	173.5	175.1	169.3	169.9	172.3
147.5°	165.6	169.9	167.7	172.3	170.5	172.3	167.7	169.9	165.6	165.6	166.5
150°	161.2	164.2	161.1	166.5	166.1	166.5	161.1	164.2	161.2	160.5	161.4
152.5°	155.4	158.4	155.4	161.6	161.1	161.6	155.4	158.4	155.4	154.7	155.6
155°	150.5	152.1	150.5	156.8	157.0	156.8	150.5	152.1	150.5	150.4	150.7
157.5°	147.2	148.1	147.4	152.8	153.0	152.8	147.4	148.1	147.2	147.2	147.4
160°	144.2	145.6	145.1	149.8	150.1	149.8	145.1	145.6	144.2	144.7	144.9
162.5°	143.0	143.0	142.7	147.5	147.8	147.5	142.7	143.0	143.0	143.0	143.7
165°	141.4	142.2	141.0	144.4	145.5	144.4	141.0	142.2	141.4	142.0	142.0
167.5°	141.0	140.3	140.7	143.5	144.6	143.5	140.7	140.3	141.0	141.6	141.6
170°	139.8	139.9	139.5	142.3	143.4	142.3	139.5	139.9	139.8	140.5	141.0
172.5°	140.3	140.3	139.3	141.4	143.3	141.4	139.3	140.3	140.3	140.8	141.6
175°	140.7	140.0	139.7	141.0	142.9	141.0	139.7	140.0	140.7	140.5	140.5
177.5°	139.8	140.2	140.6	142.0	144.6	142.0	140.6	140.2	139.8	140.5	140.5
180°	140.2	140.2	140.2	140.2	140.2	140.2	140.2	140.2	140.2	140.2	140.2



TEST NUMBER: P1433420  
 CATALOG NUMBER: EHBR1-12-UNV-TASM-L935-UPL15

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	9965.8	9965.8	9965.8	9965.8	9965.8	9965.8
2.5°	9676.3	9670.0	9676.3	9744.0	9832.0	9960.0
5°	9451.6	9416.4	9451.6	9526.5	9688.1	9931.8
7.5°	9189.7	9169.3	9189.7	9315.2	9519.4	9864.4
10°	8914.1	8868.0	8914.1	9055.8	9296.7	9761.4
12.5°	8574.3	8513.2	8574.3	8720.7	9024.5	9597.1
15°	8142.3	8088.7	8142.3	8304.7	8657.2	9354.2
17.5°	7678.7	7630.1	7678.7	7819.8	8207.9	9011.8
20°	7096.4	7058.2	7096.4	7296.0	7676.8	8570.6
22.5°	6485.5	6449.8	6485.5	6662.8	7059.2	8017.5
25°	5766.8	5747.3	5766.8	5964.8	6323.3	7370.5
27.5°	4990.1	4957.1	4990.1	5197.3	5563.4	6609.6
30°	4196.7	4141.9	4196.7	4382.0	4709.8	5764.3
32.5°	3420.6	3381.2	3420.6	3552.6	3895.2	4818.0
35°	2670.4	2631.0	2670.4	2789.9	3126.2	3944.9
37.5°	2080.8	2011.1	2080.8	2157.4	2430.5	3095.9
40°	1578.2	1567.0	1578.2	1674.6	1849.3	2408.7
42.5°	1284.7	1254.3	1284.7	1326.2	1457.1	1825.0
45°	1054.2	1042.2	1054.2	1085.5	1173.4	1426.6
47.5°	906.5	911.8	906.5	926.7	992.5	1161.8
50°	796.5	799.7	796.5	806.0	849.9	975.8
52.5°	715.4	712.6	715.4	716.3	743.6	838.4
55°	643.6	640.1	643.6	641.5	661.7	722.4
57.5°	580.8	583.4	580.8	578.0	588.8	634.4
60°	524.8	527.2	524.8	522.7	529.7	556.5
62.5°	477.5	479.0	477.5	477.3	476.0	496.5
65°	435.2	436.9	435.2	433.0	431.0	440.5
67.5°	394.9	394.9	394.9	390.9	387.7	397.2
70°	356.9	356.7	356.9	350.6	348.1	350.9
72.5°	311.3	315.9	311.3	306.7	306.4	306.9
75°	267.0	272.3	267.0	264.0	260.7	263.5
77.5°	222.2	230.2	222.2	219.8	218.1	216.3
80°	176.2	185.0	176.2	172.1	169.7	172.8
82.5°	130.2	136.8	130.2	125.2	125.0	126.5
85°	77.6	88.0	77.6	73.1	74.8	73.1
87.5°	24.8	31.8	24.8	23.7	26.2	25.6
90°	16.0	9.9	16.0	27.2	17.4	9.9
92.5°	24.2	14.4	24.2	43.6	22.7	13.0
95°	27.9	16.7	27.9	60.9	30.2	19.1
97.5°	30.9	21.3	30.9	69.9	36.9	29.5
100°	36.2	28.1	36.2	108.9	45.3	39.3
102.5°	76.6	47.6	76.6	230.9	85.0	59.5
105°	161.2	82.0	161.2	411.5	177.9	108.2
107.5°	288.6	141.9	288.6	542.8	315.0	204.9
110°	383.0	264.8	383.0	569.0	432.6	327.7



TEST NUMBER: P1433420  
 CATALOG NUMBER: EHBR1-12-UNV-TASM-L935-UPL15

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	411.5	357.7	411.5	545.0	477.5	426.6
115°	395.7	376.5	395.7	486.6	466.3	463.5
117.5°	361.3	363.7	361.3	413.2	419.4	447.8
120°	321.6	336.7	321.6	344.9	366.2	404.3
122.5°	285.0	303.0	285.0	295.7	311.6	349.8
125°	253.6	271.7	253.6	260.7	264.6	296.6
127.5°	231.8	244.0	231.8	236.0	231.7	251.9
130°	214.8	225.3	214.8	220.4	210.1	219.9
132.5°	203.0	209.7	203.0	209.5	196.9	199.8
135°	192.7	198.5	192.7	199.8	188.2	187.2
137.5°	183.9	189.0	183.9	191.2	182.4	180.0
140°	176.0	180.4	176.0	184.0	177.2	175.7
142.5°	168.0	171.0	168.0	177.4	172.9	171.4
145°	162.4	164.7	162.4	172.3	169.9	169.3
147.5°	157.5	159.1	157.5	166.5	165.6	165.6
150°	152.6	154.2	152.6	161.4	160.5	161.2
152.5°	147.6	149.3	147.6	155.6	154.7	155.4
155°	144.2	145.9	144.2	150.7	150.4	150.5
157.5°	142.3	143.4	142.3	147.4	147.2	147.2
160°	140.6	141.6	140.6	144.9	144.7	144.2
162.5°	138.8	139.8	138.8	143.7	143.0	143.0
165°	138.4	138.6	138.4	142.0	142.0	141.4
167.5°	137.9	138.6	137.9	141.6	141.6	141.0
170°	138.0	138.2	138.0	141.0	140.5	139.8
172.5°	138.4	138.6	138.4	141.6	140.8	140.3
175°	138.0	138.2	138.0	140.5	140.5	140.7
177.5°	138.9	139.1	138.9	140.5	140.5	139.8
180°	140.2	140.2	140.2	140.2	140.2	140.2



TEST NUMBER: P1433420  
 CATALOG NUMBER: EHBR1-12-UNV-TASM-L935-UPL15

**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	13.67	14.72	14.22	15.25	15.83	12.99	14.04	13.54	14.57	15.15
	3H	15.21	16.15	15.78	16.69	17.32	14.83	15.77	15.40	16.31	16.94
	4H	15.85	16.72	16.43	17.28	17.92	15.61	16.49	16.20	17.04	17.69
	6H	16.33	17.13	16.92	17.70	18.35	16.25	17.06	16.85	17.63	18.28
	8H	16.48	17.24	17.09	17.83	18.49	16.47	17.23	17.08	17.83	18.48
	12H	16.55	17.27	17.16	17.86	18.54	16.60	17.33	17.21	17.91	18.59
4H	2H	14.08	14.95	14.67	15.51	16.15	13.56	14.43	14.15	14.99	15.63
	3H	15.87	16.60	16.47	17.20	17.85	15.61	16.34	16.21	16.94	17.59
	4H	16.65	17.30	17.26	17.91	18.60	16.52	17.17	17.13	17.78	18.47
	6H	17.26	17.82	17.90	18.46	19.16	17.29	17.85	17.93	18.48	19.19
	8H	17.46	17.98	18.10	18.61	19.33	17.56	18.08	18.20	18.71	19.43
	12H	17.56	18.02	18.22	18.68	19.40	17.73	18.19	18.39	18.85	19.57
8H	4H	16.90	17.42	17.54	18.05	18.76	16.80	17.32	17.44	17.95	18.67
	6H	17.64	18.06	18.31	18.74	19.46	17.70	18.13	18.37	18.80	19.52
	8H	17.91	18.29	18.60	18.97	19.71	18.05	18.43	18.74	19.12	19.85
	12H	18.08	18.41	18.76	19.08	19.88	18.30	18.63	18.99	19.30	20.11
12H	4H	16.90	17.36	17.56	18.03	18.74	16.81	17.27	17.47	17.93	18.65
	6H	17.68	18.06	18.37	18.75	19.48	17.75	18.13	18.44	18.81	19.55
	8H	18.00	18.33	18.68	19.00	19.80	18.15	18.48	18.83	19.15	19.95

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

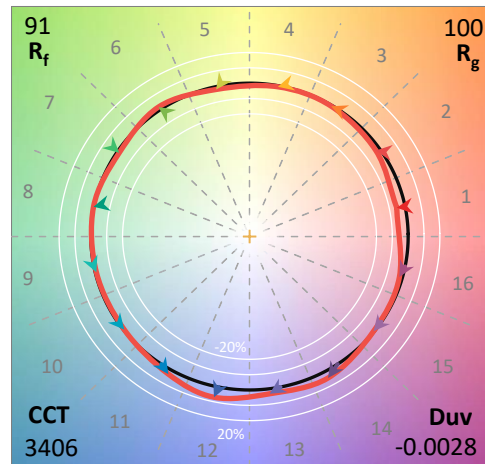
**Test Information**

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

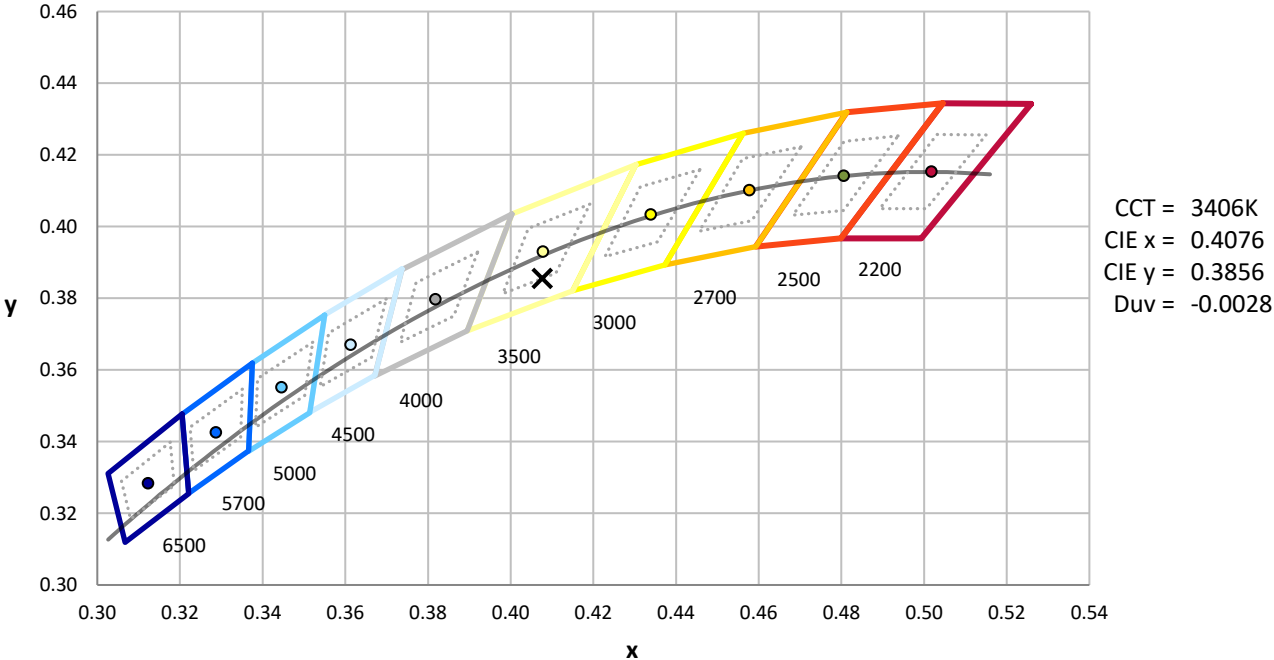
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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 <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	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



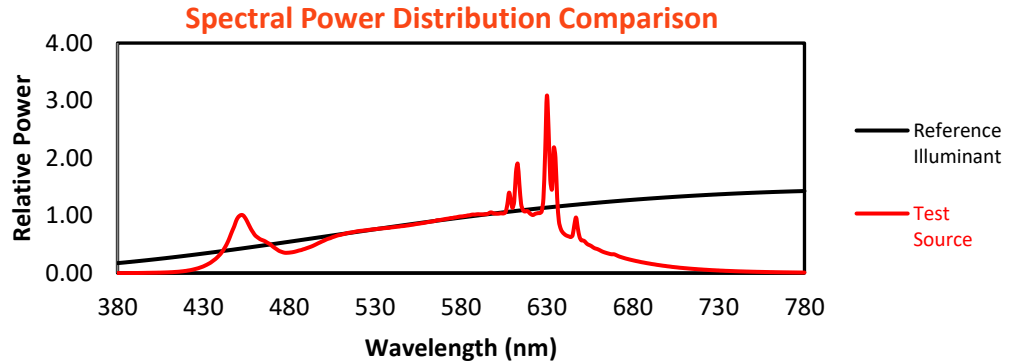
Melanopic Lumens: NR

M/P: 3.3

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	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)