

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: P1433125

Luminaire Tested: EHBR1-18-UNV-TASM-L930-UPL24

Issue Date: 3/20/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1433125  
REPORT IS A COMBINATION OF REPORTS P1431679 AND P1431635  
Test Lab: INNOVATION CENTER  
Issue Date: 3/20/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: EHBR1-18-UNV-TASM-L930-UPL24  
Description: Elevate Round Highbay at, 18000 lumens, 3000K 90CRI LEDs with TASM lens  
Light Source: -  
Ballast/Driver: -

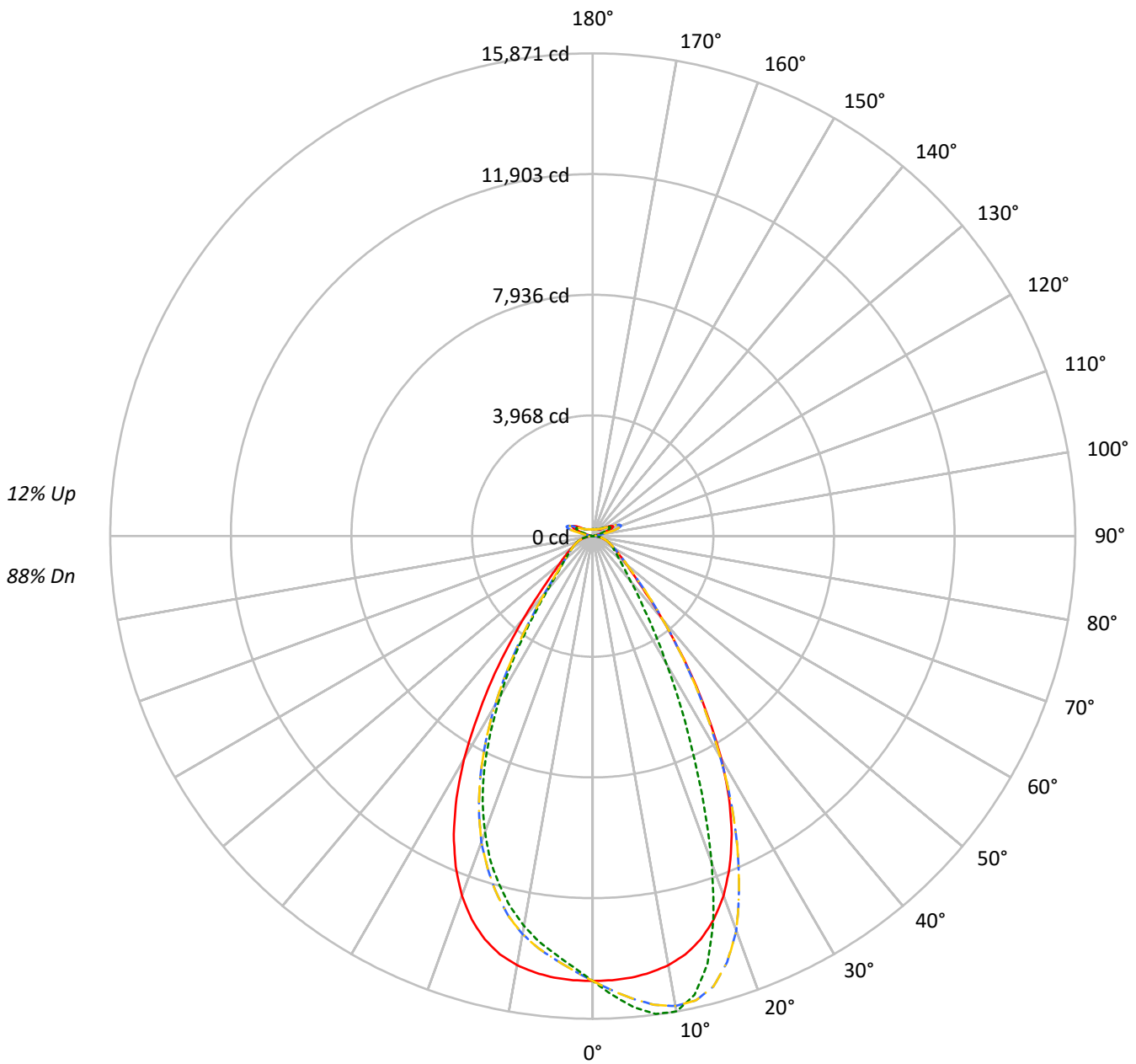
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18522.3 lumens  
Efficiency: N/A  
Efficacy: 166.6 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): 111.2  
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: P1433125  
CATALOG NUMBER: EHBR1-18-UNV-TASM-L930-UPL24

### Luminous Intensity Polar Plot



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



TEST NUMBER: P1433125

CATALOG NUMBER: EHBR1-18-UNV-TASM-L930-UPL24

**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	0
RCR																		
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	91	91	91	88
1	109	105	102	99	105	102	99	97	96	94	92	90	88	87	85	84	82	80
2	102	96	91	87	98	93	89	85	88	84	81	83	80	78	79	76	74	72
3	95	88	82	77	92	85	80	75	81	76	73	77	73	70	73	70	68	65
4	90	80	74	69	87	79	72	68	75	70	66	71	67	64	68	65	62	60
5	84	74	67	62	81	73	66	62	69	64	60	66	62	58	64	60	57	55
6	79	69	62	57	77	67	61	56	65	59	55	62	57	54	60	56	52	50
7	75	64	57	52	72	63	56	52	60	55	51	58	53	50	56	52	49	47
8	71	60	53	48	69	59	52	48	57	51	47	55	50	46	53	48	45	44
9	67	56	49	45	65	55	49	44	53	48	44	51	46	43	50	45	42	41
10	63	53	46	42	62	52	46	42	50	45	41	48	44	40	47	43	40	38

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

	0°	90°	180°	270°
0°	68686	68686	68686	68686
5°	68268	72828	68268	64725
10°	67428	74698	67428	61257
15°	65438	69418	65438	56584
20°	61200	55664	61200	50401
25°	54167	38568	54167	42238
30°	43982	25090	43982	31602
35°	31545	16249	31545	21038
40°	20395	11200	20395	13268
45°	12940	8675	12940	9454
50°	9610	7372	9610	7874
55°	7846	6715	7846	6951
60°	6794	6398	6794	6436
65°	6193	6169	6193	6144
70°	5870	6045	5870	5966
75°	5489	5849	5489	5673
80°	4823	5520	4823	5161
85°	3119	3942	3119	3759

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 18193 cd/sqm



TEST NUMBER: P1433125  
 CATALOG NUMBER: EHBR1-18-UNV-TASM-L930-UPL24

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1390.7	7.5
10°-20°	3783.5	20.4
20°-30°	4437.3	24.0
30°-40°	3085.9	16.7
40°-50°	1533.5	8.3
50°-60°	917.2	5.0
60°-70°	645.6	3.5
70°-80°	415.9	2.2
80°-90°	135.9	0.7
90°-100°	57.8	0.3
100°-110°	378.9	2.0
110°-120°	700.1	3.8
120°-130°	415.9	2.2
130°-140°	251.3	1.4
140°-150°	173.6	0.9
150°-160°	113.1	0.6
160°-170°	64.7	0.3
170°-180°	21.4	0.1
0°-30°	9611.6	51.9
0°-40°	12697.4	68.6
0°-60°	15148.2	81.8
0°-90°	16345.5	88.2
90°-120°	1136.8	6.1
90°-150°	1977.6	10.7
90°-180°	2177.0	11.8
0°-180°	18522.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	14626	14626	14626	14626	14626	
5°	14576	15550	14576	13820	14576	1383
15°	13728	14564	13728	11871	13728	3837
25°	10817	7702	10817	8435	10817	4897
35°	5790	2982	5790	3861	5790	3614
45°	2094	1404	2094	1530	2094	1713
55°	1060	908	1060	939	1060	970
65°	646	644	646	641	646	649
75°	387	412	387	400	387	406
85°	107	136	107	129	107	119
90°	16	18	16	16	16	12
95°	31	29	31	27	31	33
105°	174	88	174	132	174	235
115°	745	636	745	605	745	679
125°	477	499	477	437	477	439
135°	301	348	301	319	301	239
145°	272	284	272	264	272	170
155°	242	252	242	234	242	113
165°	227	233	227	222	227	65
175°	225	229	225	221	225	21
180°	225	225	225	225	225	



TEST NUMBER: P1433125  
 CATALOG NUMBER: EHBR1-18-UNV-TASM-L930-UPL24

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	14626.1	14626.1	14626.1	14626.1	14626.1	14626.1	14626.1	14626.1	14626.1	14626.1	14626.1
2.5°	14617.5	14806.6	14959.6	15060.5	15110.4	15060.5	14959.6	14806.6	14617.5	14429.7	14300.6
5°	14576.2	14954.7	15275.3	15485.1	15550.0	15485.1	15275.3	14954.7	14576.2	14218.6	13981.3
7.5°	14477.2	15066.9	15543.3	15788.1	15847.9	15788.1	15543.3	15066.9	14477.2	13970.8	13671.2
10°	14326.1	15137.6	15688.1	15863.5	15870.7	15863.5	15688.1	15137.6	14326.1	13644.0	13290.5
12.5°	14085.0	15112.4	15639.5	15581.9	15451.0	15581.9	15639.5	15112.4	14085.0	13244.7	12798.7
15°	13728.5	14962.9	15332.1	14863.3	14563.5	14863.3	15332.1	14962.9	13728.5	12705.4	12188.2
17.5°	13226.0	14683.1	14690.3	13763.0	13197.4	13763.0	14690.3	14683.1	13226.0	12046.1	11476.5
20°	12578.4	14234.4	13806.6	12110.6	11440.5	12110.6	13806.6	14234.4	12578.4	11266.7	10707.8
22.5°	11766.6	13629.5	12575.9	10448.3	9534.1	10448.3	12575.9	13629.5	11766.6	10360.2	9778.5
25°	10817.2	12888.1	11252.2	8637.0	7701.9	8637.0	11252.2	12888.1	10817.2	9280.2	8754.1
27.5°	9700.3	11948.5	9842.5	7057.8	6195.0	7057.8	9842.5	11948.5	9700.3	8165.1	7627.8
30°	8459.9	10743.9	8375.4	5620.7	4826.1	5620.7	8375.4	10743.9	8459.9	6912.2	6431.2
32.5°	7071.0	9563.3	6966.5	4503.6	3830.7	4503.6	6966.5	9563.3	7071.0	5716.7	5214.0
35°	5789.6	8086.0	5696.2	3538.8	2982.3	3538.8	5696.2	8086.0	5789.6	4588.1	4094.4
37.5°	4543.7	6690.3	4540.7	2849.6	2419.0	2849.6	4540.7	6690.3	4543.7	3567.1	3166.3
40°	3535.0	5231.3	3557.7	2274.7	1941.3	2274.7	3557.7	5231.3	3535.0	2714.1	2457.7
42.5°	2678.4	4000.1	2796.4	1866.9	1648.9	1866.9	2796.4	4000.1	2678.4	2138.4	1946.4
45°	2093.7	2943.6	2183.6	1575.1	1403.6	1575.1	2183.6	2943.6	2093.7	1722.1	1593.2
47.5°	1705.1	2275.0	1769.8	1351.0	1230.8	1351.0	1769.8	2275.0	1705.1	1456.6	1360.1
50°	1432.2	1745.7	1469.5	1179.3	1098.7	1179.3	1469.5	1745.7	1432.2	1247.3	1182.9
52.5°	1230.3	1423.7	1251.4	1051.0	996.7	1051.0	1251.4	1423.7	1230.3	1091.3	1051.3
55°	1060.3	1196.9	1088.3	945.1	907.5	945.1	1088.3	1196.9	1060.3	971.2	941.6
57.5°	931.2	1015.3	945.1	854.9	829.9	854.9	945.1	1015.3	931.2	864.2	848.3
60°	816.7	879.3	834.0	776.2	769.1	776.2	834.0	879.3	816.7	777.5	767.1
62.5°	728.7	768.2	737.5	705.4	699.1	705.4	737.5	768.2	728.7	698.6	700.4
65°	646.4	683.1	659.1	641.8	643.9	641.8	659.1	683.1	646.4	632.4	635.5
67.5°	582.8	602.0	591.5	581.7	584.1	581.7	591.5	602.0	582.8	569.1	573.7
70°	515.1	535.7	525.0	526.3	530.4	526.3	525.0	535.7	515.1	511.0	514.5
72.5°	450.3	466.2	462.7	466.0	470.3	466.0	462.7	466.2	450.3	449.8	450.0
75°	386.7	398.8	400.4	405.1	412.0	405.1	400.4	398.8	386.7	382.6	387.6
77.5°	317.3	331.1	336.2	342.6	352.7	342.6	336.2	331.1	317.3	320.1	322.5
80°	253.7	260.0	271.5	276.2	290.4	276.2	271.5	260.0	253.7	249.1	252.6
82.5°	185.7	191.4	201.3	210.0	218.3	210.0	201.3	191.4	185.7	183.5	183.8
85°	107.2	116.0	122.6	133.0	135.5	133.0	122.6	116.0	107.2	109.7	107.2
87.5°	37.6	40.3	46.1	50.2	50.4	50.2	46.1	40.3	37.6	38.4	34.8
90°	16.0	27.0	46.6	25.7	17.9	25.7	46.6	27.0	16.0	28.0	43.7
92.5°	20.8	36.6	65.9	34.1	23.9	34.1	65.9	36.6	20.8	36.4	70.1
95°	30.7	45.1	83.9	37.7	28.7	37.7	83.9	45.1	30.7	48.5	97.8
97.5°	47.5	56.0	94.7	40.2	34.8	40.2	94.7	56.0	47.5	59.3	112.3
100°	63.2	63.2	173.1	46.2	39.6	46.2	173.1	63.2	63.2	72.8	174.9
102.5°	95.7	123.7	400.9	92.3	48.0	92.3	400.9	123.7	95.7	136.6	371.2
105°	174.0	282.7	705.7	238.0	88.0	238.0	705.7	282.7	174.0	286.0	661.5
107.5°	329.4	527.1	909.2	469.3	204.9	469.3	909.2	527.1	329.4	506.4	872.5
110°	526.8	736.7	992.3	642.7	414.4	642.7	992.3	736.7	526.8	695.5	914.7



TEST NUMBER: P1433125  
 CATALOG NUMBER: EHBR1-18-UNV-TASM-L930-UPL24

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	685.8	821.0	969.5	712.6	573.4	712.6	969.5	821.0	685.8	767.7	876.2
115°	745.2	809.0	865.8	710.1	636.0	710.1	865.8	809.0	745.2	749.7	782.2
117.5°	719.9	740.4	747.8	666.8	639.7	666.8	747.8	740.4	719.9	674.1	664.2
120°	650.0	641.5	630.0	602.9	603.5	602.9	630.0	641.5	650.0	588.6	554.6
122.5°	562.3	544.3	532.5	538.2	554.1	538.2	532.5	544.3	562.3	500.9	475.3
125°	476.8	458.8	464.1	482.8	498.9	482.8	464.1	458.8	476.8	425.3	419.0
127.5°	404.8	396.4	414.7	435.9	449.6	435.9	414.7	396.4	404.8	372.3	379.3
130°	353.3	355.5	379.8	397.5	406.3	397.5	379.8	355.5	353.3	337.7	354.2
132.5°	321.2	330.4	353.7	368.9	374.0	368.9	353.7	330.4	321.2	316.6	336.8
135°	300.9	314.8	335.9	345.8	347.5	345.8	335.9	314.8	300.9	302.4	321.2
137.5°	289.2	303.1	319.0	326.8	324.6	326.8	319.0	303.1	289.2	293.0	307.2
140°	282.2	296.1	303.3	312.3	310.4	312.3	303.3	296.1	282.2	284.6	295.4
142.5°	275.3	287.9	291.6	298.1	295.9	298.1	291.6	287.9	275.3	277.7	284.9
145°	271.9	281.2	278.6	287.3	284.2	287.3	278.6	281.2	271.9	272.9	276.7
147.5°	265.8	272.9	269.2	276.7	273.7	276.7	269.2	272.9	265.8	265.8	267.3
150°	258.9	263.7	258.6	267.3	266.6	267.3	258.6	263.7	258.9	257.7	259.1
152.5°	249.5	254.3	249.5	259.4	258.5	259.4	249.5	254.3	249.5	248.4	249.8
155°	241.7	244.1	241.7	251.6	251.8	251.6	241.7	244.1	241.7	241.4	241.9
157.5°	236.2	237.7	236.4	245.2	245.5	245.2	236.4	237.7	236.2	236.2	236.4
160°	231.3	233.7	232.8	240.3	240.5	240.3	232.8	233.7	231.3	232.2	232.5
162.5°	229.4	229.4	228.8	236.2	236.8	236.2	228.8	229.4	229.4	229.4	230.6
165°	226.6	227.8	225.9	231.3	233.1	231.3	225.9	227.8	226.6	227.5	227.5
167.5°	225.9	224.7	225.3	229.7	231.5	229.7	225.3	224.7	225.9	226.9	226.9
170°	223.8	224.0	223.5	227.9	229.6	227.9	223.5	224.0	223.8	225.0	225.9
172.5°	224.7	224.7	223.1	226.3	229.2	226.3	223.1	224.7	224.7	225.5	226.7
175°	225.2	224.3	223.6	225.6	228.6	225.6	223.6	224.3	225.2	224.9	224.9
177.5°	224.0	224.6	225.1	227.1	231.3	227.1	225.1	224.6	224.0	224.9	224.9
180°	224.6	224.6	224.6	224.6	224.6	224.6	224.6	224.6	224.6	224.6	224.6



TEST NUMBER: P1433125

CATALOG NUMBER: EHBR1-18-UNV-TASM-L930-UPL24

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	14626.1	14626.1	14626.1	14626.1	14626.1	14626.1
2.5°	14201.3	14191.9	14201.3	14300.6	14429.7	14617.5
5°	13871.3	13819.8	13871.3	13981.3	14218.6	14576.2
7.5°	13487.0	13457.2	13487.0	13671.2	13970.8	14477.2
10°	13082.6	13014.8	13082.6	13290.5	13644.0	14326.1
12.5°	12584.0	12494.2	12584.0	12798.7	13244.7	14085.0
15°	11949.8	11871.1	11949.8	12188.2	12705.4	13728.5
17.5°	11269.4	11198.1	11269.4	11476.5	12046.1	13226.0
20°	10414.8	10358.9	10414.8	10707.8	11266.7	12578.4
22.5°	9518.3	9465.9	9518.3	9778.5	10360.2	11766.6
25°	8463.4	8434.9	8463.4	8754.1	9280.2	10817.2
27.5°	7323.6	7275.1	7323.6	7627.8	8165.1	9700.3
30°	6159.1	6078.7	6159.1	6431.2	6912.2	8459.9
32.5°	5020.1	4962.2	5020.1	5214.0	5716.7	7071.0
35°	3919.2	3861.3	3919.2	4094.4	4588.1	5789.6
37.5°	3053.9	2951.6	3053.9	3166.3	3567.1	4543.7
40°	2316.2	2299.7	2316.2	2457.7	2714.1	3535.0
42.5°	1885.6	1840.8	1885.6	1946.4	2138.4	2678.4
45°	1547.1	1529.6	1547.1	1593.2	1722.1	2093.7
47.5°	1330.5	1338.1	1330.5	1360.1	1456.6	1705.1
50°	1168.9	1173.5	1168.9	1182.9	1247.3	1432.2
52.5°	1049.9	1045.8	1049.9	1051.3	1091.3	1230.3
55°	944.5	939.4	944.5	941.6	971.2	1060.3
57.5°	852.4	856.2	852.4	848.3	864.2	931.2
60°	770.1	773.7	770.1	767.1	777.5	816.7
62.5°	700.7	702.9	700.7	700.4	698.6	728.7
65°	638.8	641.3	638.8	635.5	632.4	646.4
67.5°	579.5	579.5	579.5	573.7	569.1	582.8
70°	523.8	523.5	523.8	514.5	511.0	515.1
72.5°	456.9	463.5	456.9	450.0	449.8	450.3
75°	391.9	399.6	391.9	387.6	382.6	386.7
77.5°	326.1	337.9	326.1	322.5	320.1	317.3
80°	258.6	271.5	258.6	252.6	249.1	253.7
82.5°	191.1	200.8	191.1	183.8	183.5	185.7
85°	113.8	129.2	113.8	107.2	109.7	107.2
87.5°	36.4	46.6	36.4	34.8	38.4	37.6
90°	25.6	16.0	25.6	43.7	28.0	16.0
92.5°	38.9	23.2	38.9	70.1	36.4	20.8
95°	44.8	26.7	44.8	97.8	48.5	30.7
97.5°	49.6	34.2	49.6	112.3	59.3	47.5
100°	58.1	45.1	58.1	174.9	72.8	63.2
102.5°	123.2	76.4	123.2	371.2	136.6	95.7
105°	259.2	131.8	259.2	661.5	286.0	174.0
107.5°	464.0	228.1	464.0	872.5	506.4	329.4
110°	615.7	425.7	615.7	914.7	695.5	526.8



TEST NUMBER: P1433125

CATALOG NUMBER: EHBR1-18-UNV-TASM-L930-UPL24

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	661.5	575.1	661.5	876.2	767.7	685.8
115°	636.2	605.2	636.2	782.2	749.7	745.2
117.5°	580.8	584.7	580.8	664.2	674.1	719.9
120°	517.0	541.4	517.0	554.6	588.6	650.0
122.5°	458.2	487.1	458.2	475.3	500.9	562.3
125°	407.6	436.8	407.6	419.0	425.3	476.8
127.5°	372.7	392.3	372.7	379.3	372.3	404.8
130°	345.2	362.2	345.2	354.2	337.7	353.3
132.5°	326.2	337.1	326.2	336.8	316.6	321.2
135°	309.7	319.0	309.7	321.2	302.4	300.9
137.5°	295.5	303.6	295.5	307.2	293.0	289.2
140°	282.8	289.8	282.8	295.4	284.6	282.2
142.5°	269.8	274.7	269.8	284.9	277.7	275.3
145°	260.7	264.4	260.7	276.7	272.9	271.9
147.5°	252.9	255.3	252.9	267.3	265.8	265.8
150°	245.0	247.4	245.0	259.1	257.7	258.9
152.5°	236.9	239.5	236.9	249.8	248.4	249.5
155°	231.3	234.0	231.3	241.9	241.4	241.7
157.5°	228.3	230.1	228.3	236.4	236.2	236.2
160°	225.5	227.0	225.5	232.5	232.2	231.3
162.5°	222.4	223.9	222.4	230.6	229.4	229.4
165°	221.8	222.1	221.8	227.5	227.5	226.6
167.5°	220.8	222.1	220.8	226.9	226.9	225.9
170°	221.1	221.4	221.1	225.9	225.0	223.8
172.5°	221.6	221.9	221.6	226.7	225.5	224.7
175°	221.1	221.4	221.1	224.9	224.9	225.2
177.5°	222.5	222.8	222.5	224.9	224.9	224.0
180°	224.6	224.6	224.6	224.6	224.6	224.6



TEST NUMBER: P1433125  
 CATALOG NUMBER: EHBR1-18-UNV-TASM-L930-UPL24

**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.93	15.97	15.49	16.51	17.12	14.25	15.29	14.81	15.83	16.43
	3H	16.48	17.40	17.05	17.96	18.60	16.09	17.02	16.67	17.58	18.22
	4H	17.11	17.97	17.71	18.55	19.21	16.87	17.74	17.47	18.31	18.97
	6H	17.59	18.38	18.20	18.97	19.64	17.51	18.31	18.12	18.90	19.57
	8H	17.74	18.49	18.36	19.09	19.77	17.73	18.49	18.36	19.09	19.77
	12H	17.81	18.53	18.43	19.12	19.82	17.86	18.58	18.49	19.17	19.88
4H	2H	15.34	16.21	15.94	16.78	17.44	14.82	15.68	15.42	16.26	16.92
	3H	17.13	17.85	17.74	18.47	19.14	16.87	17.59	17.48	18.20	18.88
	4H	17.91	18.55	18.54	19.17	19.89	17.78	18.42	18.41	19.05	19.76
	6H	18.52	19.08	19.17	19.72	20.45	18.55	19.10	19.20	19.75	20.48
	8H	18.72	19.23	19.37	19.88	20.61	18.82	19.34	19.47	19.98	20.71
	12H	18.82	19.28	19.49	19.95	20.69	18.98	19.44	19.66	20.12	20.85
8H	4H	18.15	18.67	18.81	19.32	20.05	18.06	18.57	18.71	19.22	19.95
	6H	18.90	19.32	19.58	20.01	20.75	18.96	19.38	19.64	20.07	20.81
	8H	19.17	19.54	19.87	20.24	20.99	19.31	19.69	20.02	20.39	21.14
	12H	19.34	19.66	20.03	20.35	21.17	19.56	19.89	20.26	20.57	21.39
12H	4H	18.16	18.62	18.83	19.29	20.03	18.06	18.52	18.74	19.20	19.93
	6H	18.94	19.31	19.64	20.01	20.77	19.01	19.38	19.71	20.08	20.83
	8H	19.25	19.58	19.95	20.26	21.09	19.41	19.74	20.10	20.42	21.24

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-5

Test Date: 08/01/2025

Luminaire Tested: EHBR-60-L930-N

Data in this report applies to families of products including EHBR-60-L930-N

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2506-472-5  
 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-L930-N**  
 Description: Elevate Round Highbay at, 60000 lumens, 3000K 90CRI LEDs with N lens

**Spectral Parameters**

CCT (K): 2996  
 CIE u': 0.2519  
 CIE v': 0.5169  
 Duv: -0.0033  
 CIE x: 0.4325  
 CIE y: 0.3945  
 CIE z: 0.1730  
 Peak Wavelength (nm): 630  
 Dominant Wavelength (nm): 584  
 Purity: 48.21818  
 Rf: 91.3  
 Rg: 102

CRI (Ra):	94.4		
R1:	96.8	R9:	61.4
R2:	98.1	R10:	94.4
R3:	97.8	R11:	95.7
R4:	95.6	R12:	88.5
R5:	96.9	R13:	97.3
R6:	95.7	R14:	97.8
R7:	90.9	R15:	92.3
R8:	83.0		



**Test Conditions**

Stabilization Time: 40M  
 Operation Time: 1H 40M  
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-5

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: SP1-2506-472-5

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3000K 7-step quadrangle

REPORT NUMBER: SP1-2506-472-5

**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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-5

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.44**

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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-5

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 2.85**

$\lambda$ (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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

**Summary**

$R_f = 91.3$   
 $R_g = 102$   
 $CIE R_a = 94.4$   
 $R_9 = 61.4$



**Color Vector Graphics**

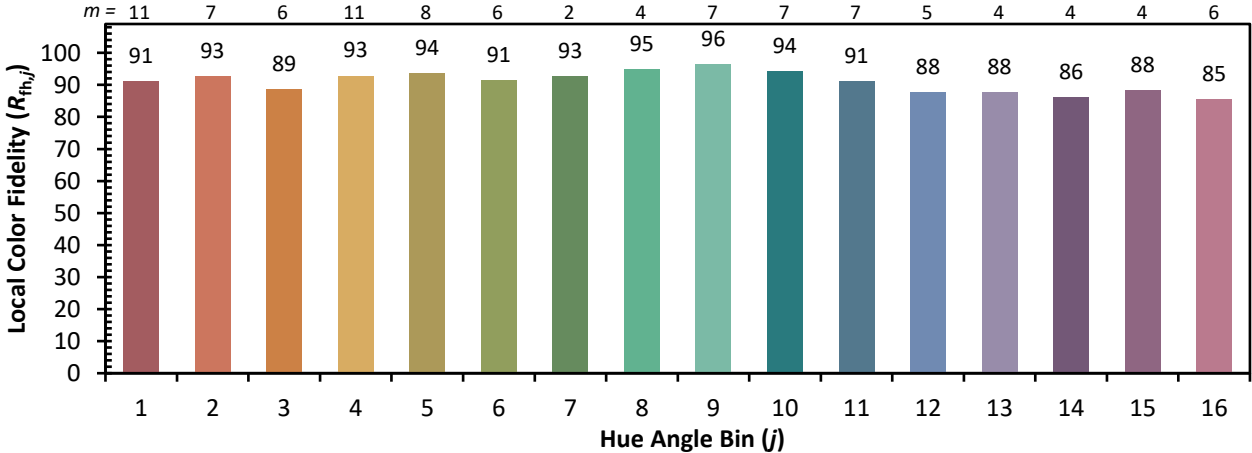
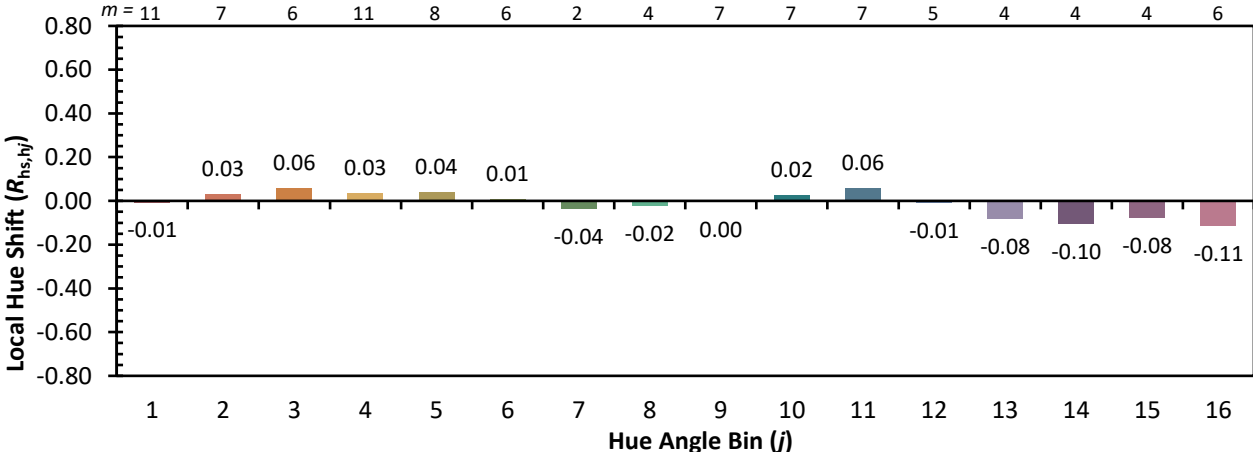
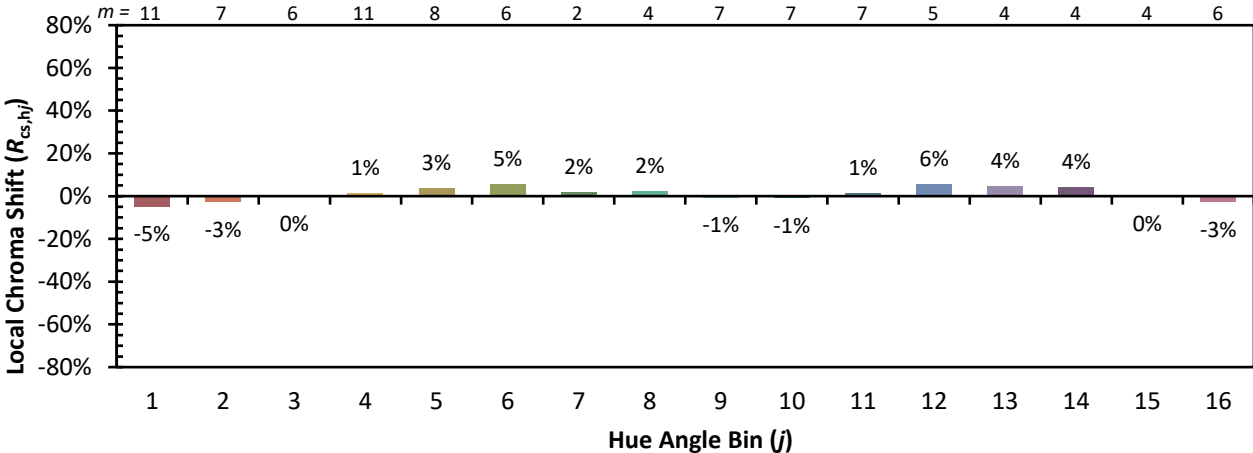


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

CES01 = 86	CES26 = 91	CES51 = 96	CES76 = 89
CES02 = 63	CES27 = 96	CES52 = 95	CES77 = 85
CES03 = 32	CES28 = 96	CES53 = 93	CES78 = 86
CES04 = 70	CES29 = 90	CES54 = 98	CES79 = 89
CES05 = 51	CES30 = 96	CES55 = 98	CES80 = 91
CES06 = 51	CES31 = 90	CES56 = 95	CES81 = 72
CES07 = 44	CES32 = 84	CES57 = 95	CES82 = 95
CES08 = 42	CES33 = 91	CES58 = 95	CES83 = 93
CES09 = 29	CES34 = 92	CES59 = 99	CES84 = 96
CES10 = 76	CES35 = 96	CES60 = 96	CES85 = 80
CES11 = 59	CES36 = 90	CES61 = 96	CES86 = 77
CES12 = 65	CES37 = 94	CES62 = 95	CES87 = 91
CES13 = 44	CES38 = 99	CES63 = 94	CES88 = 96
CES14 = 74	CES39 = 97	CES64 = 96	CES89 = 82
CES15 = 72	CES40 = 94	CES65 = 92	CES90 = 97
CES16 = 48	CES41 = 94	CES66 = 95	CES91 = 82
CES17 = 50	CES42 = 91	CES67 = 94	CES92 = 78
CES18 = 57	CES43 = 88	CES68 = 93	CES93 = 87
CES19 = 72	CES44 = 99	CES69 = 94	CES94 = 73
CES20 = 67	CES45 = 93	CES70 = 90	CES95 = 85
CES21 = 86	CES46 = 93	CES71 = 90	CES96 = 92
CES22 = 79	CES47 = 86	CES72 = 96	CES97 = 93
CES23 = 92	CES48 = 95	CES73 = 85	CES98 = 94
CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 93
CES25 = 72	CES50 = 96	CES75 = 90	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)