

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:

Luminaire Tested: EHBR1-18-UNV-TASM-L950-UPL12

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: REPORT IS A COMBINATION OF REPORTS P1431676 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-18-UNV-TASM-L950-UPL12
Description: Elevate Round Highbay at, 18000 lumens, 5000K 90CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

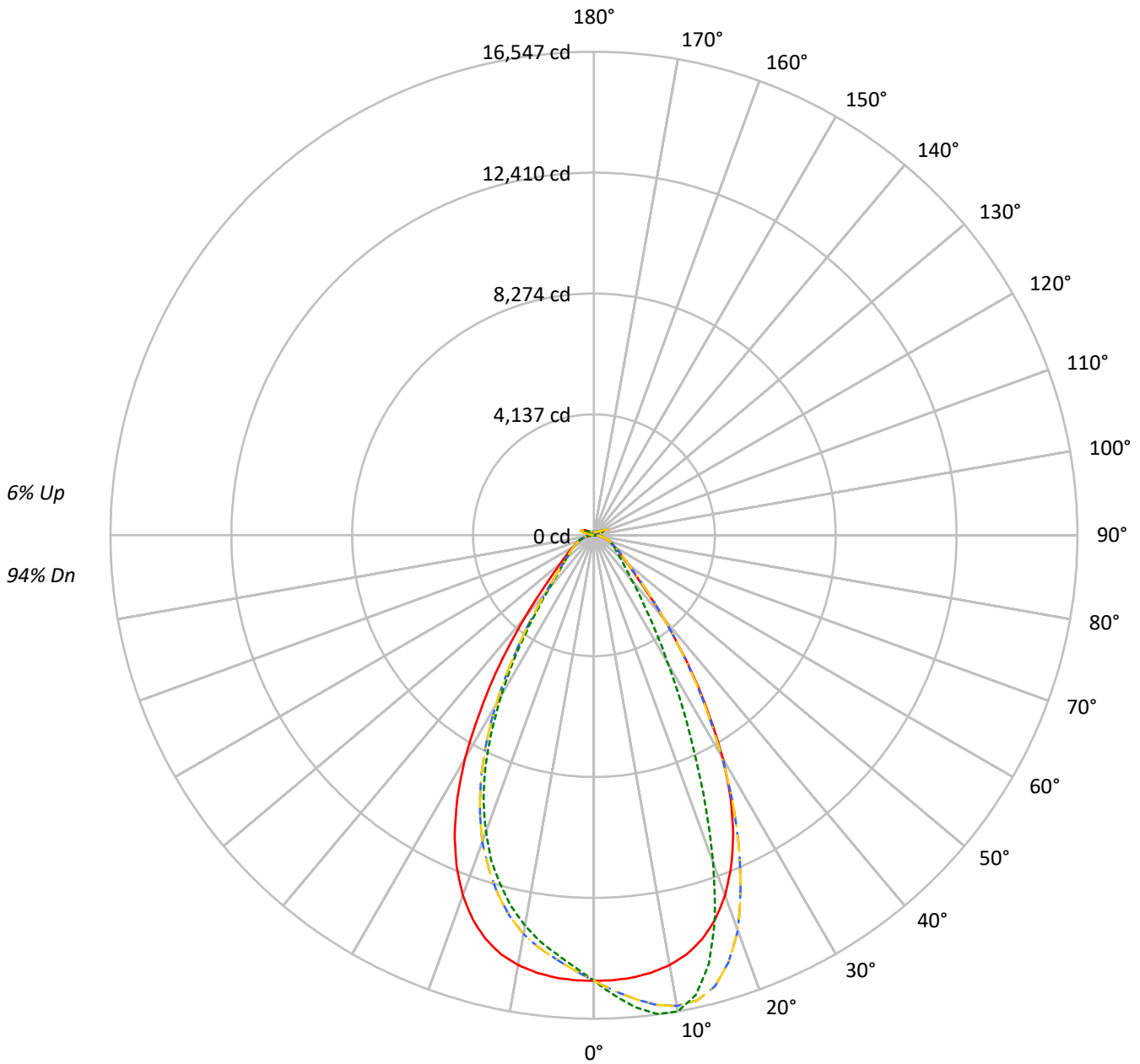
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18174.3 lumens
Efficiency: N/A
Efficacy: 178.0 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): 102.1
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:
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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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	96	96	96	94
1	110	107	104	101	107	104	101	99	99	97	95	94	92	91	90	88	87	87	87	87	85
2	103	97	92	88	100	95	91	87	91	87	84	87	84	81	83	81	79	79	79	79	76
3	97	89	83	78	94	87	82	77	84	79	75	80	76	73	77	74	71	71	71	71	69
4	91	82	75	70	89	80	74	70	77	72	68	75	70	67	72	68	65	65	65	65	63
5	86	76	69	64	83	74	68	63	72	66	62	69	65	61	67	63	60	60	60	60	58
6	81	70	63	59	79	69	63	58	67	61	57	65	60	56	63	59	55	55	55	55	54
7	76	66	59	54	74	65	58	54	63	57	53	61	56	52	59	55	51	51	51	51	50
8	72	61	55	50	70	60	54	50	59	53	49	57	52	48	56	51	48	48	48	48	46
9	68	57	51	46	67	57	50	46	55	50	46	54	49	45	53	48	45	45	45	45	43
10	65	54	48	43	63	53	47	43	52	47	43	51	46	42	50	45	42	42	42	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	71613	71613	71613	71613
5°	71176	75932	71176	67483
10°	70301	77882	70301	63867
15°	68226	72376	68226	58996
20°	63808	58036	63808	52549
25°	56475	40211	56475	44038
30°	45856	26160	45856	32949
35°	32889	16942	32889	21935
40°	21264	11677	21264	13834
45°	13492	9045	13492	9856
50°	10019	7686	10019	8210
55°	8180	7002	8180	7247
60°	7083	6670	7083	6710
65°	6457	6432	6457	6406
70°	6120	6302	6120	6221
75°	5722	6097	5722	5914
80°	5028	5756	5028	5381
85°	3253	4108	3253	3919

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 18968 cd/sqm



TEST NUMBER:
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1450.0	8.0
10°-20°	3944.8	21.7
20°-30°	4626.4	25.5
30°-40°	3217.4	17.7
40°-50°	1598.9	8.8
50°-60°	956.3	5.3
60°-70°	673.1	3.7
70°-80°	433.6	2.4
80°-90°	139.7	0.8
90°-100°	30.3	0.2
100°-110°	196.8	1.1
110°-120°	363.2	2.0
120°-130°	216.1	1.2
130°-140°	131.0	0.7
140°-150°	91.0	0.5
150°-160°	59.7	0.3
160°-170°	34.6	0.2
170°-180°	11.6	0.1
0°-30°	10021.1	55.1
0°-40°	13238.5	72.8
0°-60°	15793.7	86.9
0°-90°	17040.1	93.8
90°-120°	590.3	3.2
90°-150°	1028.4	5.7
90°-180°	1134.0	6.2
0°-180°	18174.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	15249	15249	15249	15249	15249	
5°	15197	16213	15197	14409	15197	1442
15°	14314	15184	14314	12377	14314	4000
25°	11278	8030	11278	8794	11278	5106
35°	6036	3109	6036	4026	6036	3768
45°	2183	1463	2183	1595	2183	1786
55°	1106	946	1106	979	1106	1011
65°	674	671	674	669	674	677
75°	403	430	403	417	403	423
85°	112	141	112	135	112	124
90°	8	10	8	8	8	9
95°	16	16	16	14	16	17
105°	90	47	90	69	90	122
115°	386	331	386	314	386	352
125°	248	260	248	227	248	228
135°	157	182	157	166	157	125
145°	143	149	143	138	143	89
155°	128	133	128	124	128	60
165°	121	126	121	119	121	34
175°	122	125	122	120	122	12
180°	122	122	122	122	122	



TEST NUMBER:
 CATALOG NUMBER: EHBR1-18-UNV-TASM-L950-UPL12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	15249.4	15249.4	15249.4	15249.4	15249.4	15249.4	15249.4	15249.4	15249.4	15249.4	15249.4
2.5°	15240.4	15437.5	15597.0	15702.3	15754.3	15702.3	15597.0	15437.5	15240.4	15044.6	14910.0
5°	15197.3	15591.9	15926.2	16144.9	16212.7	16144.9	15926.2	15591.9	15197.3	14824.5	14577.1
7.5°	15094.1	15708.9	16205.6	16460.9	16523.3	16460.9	16205.6	15708.9	15094.1	14566.2	14253.7
10°	14936.5	15782.7	16356.6	16539.5	16547.0	16539.5	16356.6	15782.7	14936.5	14225.4	13856.8
12.5°	14685.2	15756.4	16306.0	16245.9	16109.4	16245.9	16306.0	15756.4	14685.2	13809.0	13344.1
15°	14313.5	15600.5	15985.4	15496.7	15184.1	15496.7	15985.4	15600.5	14313.5	13246.8	12707.6
17.5°	13789.6	15308.8	15316.3	14349.5	13759.8	14349.5	15316.3	15308.8	13789.6	12559.4	11965.5
20°	13114.4	14841.0	14394.9	12626.7	11928.1	12626.7	14394.9	14841.0	13114.4	11746.8	11164.0
22.5°	12268.0	14210.2	13111.8	10893.5	9940.4	10893.5	13111.8	14210.2	12268.0	10801.7	10195.2
25°	11278.1	13437.3	11731.6	9005.1	8030.1	9005.1	11731.6	13437.3	11278.1	9675.6	9127.2
27.5°	10113.7	12457.7	10261.9	7358.6	6459.0	7358.6	10261.9	12457.7	10113.7	8513.0	7952.8
30°	8820.4	11201.8	8732.3	5860.2	5031.8	5860.2	8732.3	11201.8	8820.4	7206.8	6705.2
32.5°	7372.3	9970.8	7263.3	4695.6	3993.9	4695.6	7263.3	9970.8	7372.3	5960.3	5436.2
35°	6036.4	8430.6	5938.9	3689.6	3109.4	3689.6	5938.9	8430.6	6036.4	4783.6	4268.9
37.5°	4737.3	6975.4	4734.2	2971.0	2522.1	2971.0	4734.2	6975.4	4737.3	3719.1	3301.2
40°	3685.6	5454.2	3709.3	2371.7	2024.0	2371.7	3709.3	5454.2	3685.6	2829.7	2562.4
42.5°	2792.5	4170.5	2915.6	1946.5	1719.1	1946.5	2915.6	4170.5	2792.5	2229.5	2029.4
45°	2183.0	3069.0	2276.7	1642.2	1463.4	1642.2	2276.7	3069.0	2183.0	1795.5	1661.1
47.5°	1777.8	2371.9	1845.2	1408.5	1283.3	1408.5	1845.2	2371.9	1777.8	1518.6	1418.0
50°	1493.2	1820.0	1532.1	1229.6	1145.5	1229.6	1532.1	1820.0	1493.2	1300.5	1233.3
52.5°	1282.7	1484.4	1304.8	1095.8	1039.1	1095.8	1304.8	1484.4	1282.7	1137.8	1096.1
55°	1105.5	1247.9	1134.6	985.4	946.2	985.4	1134.6	1247.9	1105.5	1012.5	981.7
57.5°	970.8	1058.5	985.4	891.3	865.3	891.3	985.4	1058.5	970.8	901.1	884.4
60°	851.5	916.8	869.6	809.3	801.8	809.3	869.6	916.8	851.5	810.7	799.8
62.5°	759.7	800.9	768.9	735.5	728.9	735.5	768.9	800.9	759.7	728.3	730.3
65°	674.0	712.3	687.2	669.1	671.4	669.1	687.2	712.3	674.0	659.4	662.6
67.5°	607.6	627.6	616.7	606.5	609.0	606.5	616.7	627.6	607.6	593.3	598.2
70°	537.0	558.5	547.3	548.7	553.0	548.7	547.3	558.5	537.0	532.8	536.5
72.5°	469.5	486.1	482.4	485.8	490.4	485.8	482.4	486.1	469.5	468.9	469.2
75°	403.1	415.8	417.5	422.4	429.5	422.4	417.5	415.8	403.1	398.9	404.1
77.5°	330.9	345.2	350.6	357.2	367.7	357.2	350.6	345.2	330.9	333.7	336.2
80°	264.5	271.1	283.1	287.9	302.8	287.9	283.1	271.1	264.5	259.7	263.4
82.5°	193.6	199.6	209.9	219.0	227.6	219.0	209.9	199.6	193.6	191.3	191.6
85°	111.8	121.0	127.8	138.7	141.2	138.7	127.8	121.0	111.8	114.4	111.8
87.5°	39.2	42.0	48.0	52.3	52.6	52.3	48.0	42.0	39.2	40.0	36.3
90°	8.4	14.3	24.5	14.1	10.4	14.1	24.5	14.3	8.4	14.6	22.8
92.5°	10.9	19.2	34.6	18.5	13.6	18.5	34.6	19.2	10.9	19.0	36.5
95°	16.2	23.6	43.9	20.3	16.1	20.3	43.9	23.6	16.2	25.3	50.8
97.5°	24.9	29.3	49.5	21.6	19.1	21.6	49.5	29.3	24.9	30.8	58.3
100°	33.0	33.0	90.0	24.7	21.6	24.7	90.0	33.0	33.0	38.0	90.8
102.5°	49.9	64.5	208.3	48.9	26.0	48.9	208.3	64.5	49.9	71.1	192.5
105°	90.4	146.9	366.2	124.3	46.9	124.3	366.2	146.9	90.4	148.5	342.8
107.5°	171.0	273.5	471.6	244.2	107.4	244.2	471.6	273.5	171.0	262.7	452.3
110°	273.3	382.1	514.6	334.0	216.0	334.0	514.6	382.1	273.3	360.6	474.2



TEST NUMBER:

CATALOG NUMBER: EHBR1-18-UNV-TASM-L950-UPL12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	355.6	425.8	502.8	370.3	298.3	370.3	502.8	425.8	355.6	398.0	454.2
115°	386.5	419.6	449.1	369.0	330.9	369.0	449.1	419.6	386.5	388.6	405.6
117.5°	373.4	384.0	388.0	346.5	332.7	346.5	388.0	384.0	373.4	349.6	344.4
120°	337.2	332.8	327.1	313.4	313.9	313.4	327.1	332.8	337.2	305.3	287.6
122.5°	291.9	282.5	276.6	280.0	288.4	280.0	276.6	282.5	291.9	260.1	246.7
125°	247.6	238.2	241.3	251.3	260.0	251.3	241.3	238.2	247.6	221.0	217.7
127.5°	210.4	206.1	215.7	227.0	234.4	227.0	215.7	206.1	210.4	193.6	197.1
130°	183.9	184.9	197.6	207.3	211.9	207.3	197.6	184.9	183.9	175.8	184.2
132.5°	167.4	172.1	184.2	192.6	195.4	192.6	184.2	172.1	167.4	165.2	175.5
135°	157.1	163.9	175.1	180.4	181.6	180.4	175.1	163.9	157.1	157.9	167.4
137.5°	151.1	158.0	166.4	170.8	169.7	170.8	166.4	158.0	151.1	153.3	160.5
140°	147.6	154.6	158.3	163.2	162.6	163.2	158.3	154.6	147.6	148.9	154.5
142.5°	144.2	150.5	152.4	156.0	155.1	156.0	152.4	150.5	144.2	145.4	149.2
145°	142.6	147.3	145.8	150.4	149.1	150.4	145.8	147.3	142.6	142.9	145.1
147.5°	139.5	142.9	141.0	145.1	143.7	145.1	141.0	142.9	139.5	139.5	140.4
150°	136.0	138.5	135.7	140.4	140.3	140.4	135.7	138.5	136.0	135.4	136.3
152.5°	131.3	133.8	131.3	136.6	136.2	136.6	131.3	133.8	131.3	130.6	131.6
155°	127.5	128.8	127.5	132.8	133.0	132.8	127.5	128.8	127.5	127.2	127.8
157.5°	125.0	125.8	125.2	130.0	130.3	130.0	125.2	125.8	125.0	125.0	125.2
160°	123.0	124.2	123.9	127.9	128.2	127.9	123.9	124.2	123.0	123.4	123.7
162.5°	122.3	122.3	122.3	126.3	126.8	126.3	122.3	122.3	122.3	122.3	122.9
165°	121.2	121.9	121.2	124.2	125.5	124.2	121.2	121.9	121.2	121.6	121.6
167.5°	121.2	120.6	121.2	123.9	125.2	123.9	121.2	120.6	121.2	121.5	121.5
170°	120.2	120.5	120.5	123.3	124.4	123.3	120.5	120.5	120.2	120.9	121.2
172.5°	121.2	121.2	120.8	122.8	124.7	122.8	120.8	121.2	121.2	121.4	122.1
175°	121.7	121.3	121.3	122.7	124.6	122.7	121.3	121.3	121.7	121.4	121.4
177.5°	121.1	121.6	122.2	123.7	126.1	123.7	122.2	121.6	121.1	121.4	121.4
180°	121.6	121.6	121.6	121.6	121.6	121.6	121.6	121.6	121.6	121.6	121.6



TEST NUMBER:

CATALOG NUMBER: EHBR1-18-UNV-TASM-L950-UPL12

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	15249.4	15249.4	15249.4	15249.4	15249.4	15249.4
2.5°	14806.5	14796.7	14806.5	14910.0	15044.6	15240.4
5°	14462.4	14408.7	14462.4	14577.1	14824.5	15197.3
7.5°	14061.8	14030.6	14061.8	14253.7	14566.2	15094.1
10°	13640.0	13569.4	13640.0	13856.8	14225.4	14936.5
12.5°	13120.2	13026.6	13120.2	13344.1	13809.0	14685.2
15°	12459.0	12377.0	12459.0	12707.6	13246.8	14313.5
17.5°	11749.7	11675.2	11749.7	11965.5	12559.4	13789.6
20°	10858.6	10800.3	10858.6	11164.0	11746.8	13114.4
22.5°	9923.9	9869.2	9923.9	10195.2	10801.7	12268.0
25°	8824.1	8794.3	8824.1	9127.2	9675.6	11278.1
27.5°	7635.6	7585.1	7635.6	7952.8	8513.0	10113.7
30°	6421.6	6337.8	6421.6	6705.2	7206.8	8820.4
32.5°	5234.0	5173.7	5234.0	5436.2	5960.3	7372.3
35°	4086.2	4025.9	4086.2	4268.9	4783.6	6036.4
37.5°	3184.1	3077.4	3184.1	3301.2	3719.1	4737.3
40°	2414.9	2397.7	2414.9	2562.4	2829.7	3685.6
42.5°	1965.9	1919.3	1965.9	2029.4	2229.5	2792.5
45°	1613.0	1594.7	1613.0	1661.1	1795.5	2183.0
47.5°	1387.2	1395.2	1387.2	1418.0	1518.6	1777.8
50°	1218.7	1223.6	1218.7	1233.3	1300.5	1493.2
52.5°	1094.6	1090.3	1094.6	1096.1	1137.8	1282.7
55°	984.8	979.4	984.8	981.7	1012.5	1105.5
57.5°	888.7	892.7	888.7	884.4	901.1	970.8
60°	802.9	806.7	802.9	799.8	810.7	851.5
62.5°	730.6	732.9	730.6	730.3	728.3	759.7
65°	666.0	668.6	666.0	662.6	659.4	674.0
67.5°	604.2	604.2	604.2	598.2	593.3	607.6
70°	546.1	545.9	546.1	536.5	532.8	537.0
72.5°	476.4	483.2	476.4	469.2	468.9	469.5
75°	408.6	416.6	408.6	404.1	398.9	403.1
77.5°	340.0	352.3	340.0	336.2	333.7	330.9
80°	269.6	283.1	269.6	263.4	259.7	264.5
82.5°	199.3	209.3	199.3	191.6	191.3	193.6
85°	118.6	134.7	118.6	111.8	114.4	111.8
87.5°	38.0	48.6	38.0	36.3	40.0	39.2
90°	13.4	8.4	13.4	22.8	14.6	8.4
92.5°	20.3	12.2	20.3	36.5	19.0	10.9
95°	23.3	14.0	23.3	50.8	25.3	16.2
97.5°	25.8	18.0	25.8	58.3	30.8	24.9
100°	30.2	23.6	30.2	90.8	38.0	33.0
102.5°	63.9	39.9	63.9	192.5	71.1	49.9
105°	134.4	68.6	134.4	342.8	148.5	90.4
107.5°	240.5	118.5	240.5	452.3	262.7	171.0
110°	319.2	220.9	319.2	474.2	360.6	273.3



TEST NUMBER:

CATALOG NUMBER: EHBR1-18-UNV-TASM-L950-UPL12

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	342.8	298.2	342.8	454.2	398.0	355.6
115°	329.7	313.9	329.7	405.6	388.6	386.5
117.5°	301.0	303.2	301.0	344.4	349.6	373.4
120°	268.0	280.8	268.0	287.6	305.3	337.2
122.5°	237.7	252.6	237.7	246.7	260.1	291.9
125°	211.5	226.7	211.5	217.7	221.0	247.6
127.5°	193.3	203.7	193.3	197.1	193.6	210.4
130°	179.3	188.1	179.3	184.2	175.8	183.9
132.5°	169.6	175.2	169.6	175.5	165.2	167.4
135°	161.1	165.8	161.1	167.4	157.9	157.1
137.5°	154.0	158.0	154.0	160.5	153.3	151.1
140°	147.7	151.2	147.7	154.5	148.9	147.6
142.5°	141.1	143.6	141.1	149.2	145.4	144.2
145°	136.7	138.5	136.7	145.1	142.9	142.6
147.5°	132.9	134.2	132.9	140.4	139.5	139.5
150°	129.1	130.4	129.1	136.3	135.4	136.0
152.5°	125.0	126.5	125.0	131.6	130.6	131.3
155°	122.5	123.9	122.5	127.8	127.2	127.5
157.5°	121.2	122.4	121.2	125.2	125.0	125.0
160°	120.1	121.1	120.1	123.7	123.4	123.0
162.5°	118.8	119.8	118.8	122.9	122.3	122.3
165°	118.7	119.0	118.7	121.6	121.6	121.2
167.5°	118.5	119.0	118.5	121.5	121.5	121.2
170°	118.7	119.0	118.7	121.2	120.9	120.2
172.5°	119.3	119.6	119.3	122.1	121.4	121.2
175°	119.3	119.6	119.3	121.4	121.4	121.7
177.5°	120.2	120.5	120.2	121.4	121.4	121.1
180°	121.6	121.6	121.6	121.6	121.6	121.6



TEST NUMBER: CATALOG
 CATALOG NUMBER: EHBR1-18-UNV-TASM-L950-UPL12

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	15.51	16.62	15.99	17.07	17.54	14.83	15.94	15.31	16.39	16.86
	3H	17.06	18.05	17.55	18.51	19.03	16.68	17.67	17.17	18.13	18.65
	4H	17.70	18.62	18.21	19.10	19.63	17.46	18.38	17.97	18.86	19.40
	6H	18.18	19.03	18.70	19.52	20.07	18.10	18.95	18.63	19.45	19.99
	8H	18.33	19.13	18.87	19.65	20.20	18.33	19.13	18.87	19.64	20.20
	12H	18.40	19.17	18.94	19.67	20.25	18.45	19.22	18.99	19.72	20.30
4H	2H	15.93	16.85	16.44	17.33	17.87	15.41	16.33	15.92	16.81	17.34
	3H	17.73	18.49	18.25	19.01	19.57	17.46	18.23	17.99	18.75	19.31
	4H	18.50	19.19	19.04	19.72	20.31	18.37	19.06	18.92	19.59	20.18
	6H	19.12	19.71	19.68	20.27	20.88	19.14	19.73	19.71	20.30	20.91
	8H	19.31	19.86	19.89	20.42	21.04	19.41	19.97	19.99	20.53	21.14
	12H	19.42	19.90	20.01	20.50	21.11	19.58	20.07	20.17	20.66	21.28
8H	4H	18.75	19.30	19.32	19.86	20.48	18.65	19.20	19.23	19.76	20.38
	6H	19.49	19.94	20.10	20.55	21.17	19.56	20.00	20.16	20.61	21.23
	8H	19.76	20.16	20.39	20.78	21.42	19.91	20.31	20.53	20.93	21.57
	12H	19.93	20.28	20.55	20.89	21.60	20.16	20.51	20.78	21.11	21.82
12H	4H	18.76	19.25	19.35	19.84	20.46	18.66	19.15	19.25	19.74	20.36
	6H	19.53	19.93	20.16	20.55	21.19	19.60	20.00	20.23	20.62	21.26
	8H	19.85	20.20	20.47	20.80	21.51	20.01	20.35	20.62	20.96	21.67

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: SP1-2506-472-8

Test Date: 08/04/2025

Luminaire Tested: EHBR-60-L950-N

Data in this report applies to families of products including EHBR-60-L950-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-8
 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-L950-N**
 Description: Elevate Round Highbay at, 60000 lumens, 5000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K): 4901
 CIE u': 0.2131
 CIE v': 0.4853
 Duv: -0.0008
 CIE x: 0.3477
 CIE y: 0.3520
 CIE z: 0.3003
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 574
 Purity: 9.953987
 Rf: 90.7
 Rg: 100.5

CRI (Ra):	94.3		
R1:	95.8	R9:	72.3
R2:	96.5	R10:	89.1
R3:	94.4	R11:	94.9
R4:	95.3	R12:	68.4
R5:	94.1	R13:	96.4
R6:	92.5	R14:	96.4
R7:	95.5	R15:	93.9
R8:	90.1		



Test Conditions

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

REPORT NUMBER: SP1-2506-472-8

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: SP1-2506-472-8

CIE 1931 Chromaticity Diagram



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



CCT = 4901K
 CIE x = 0.3477
 CIE y = 0.3520
 Duv = -0.0008

Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-8

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	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-8

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 2.04

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	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-8

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 4.41

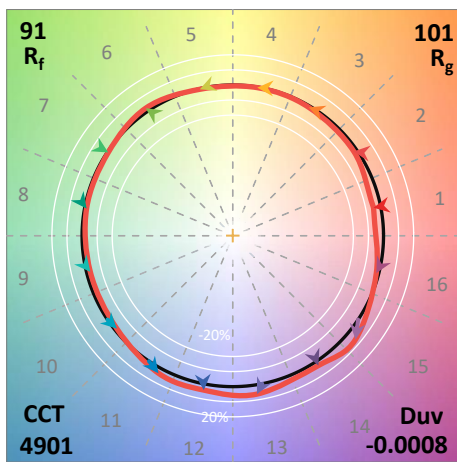
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

Summary

$R_f = 90.7$
 $R_g = 100.5$
 CIE $R_a = 94.3$
 $R_9 = 72.3$



Color Vector Graphics

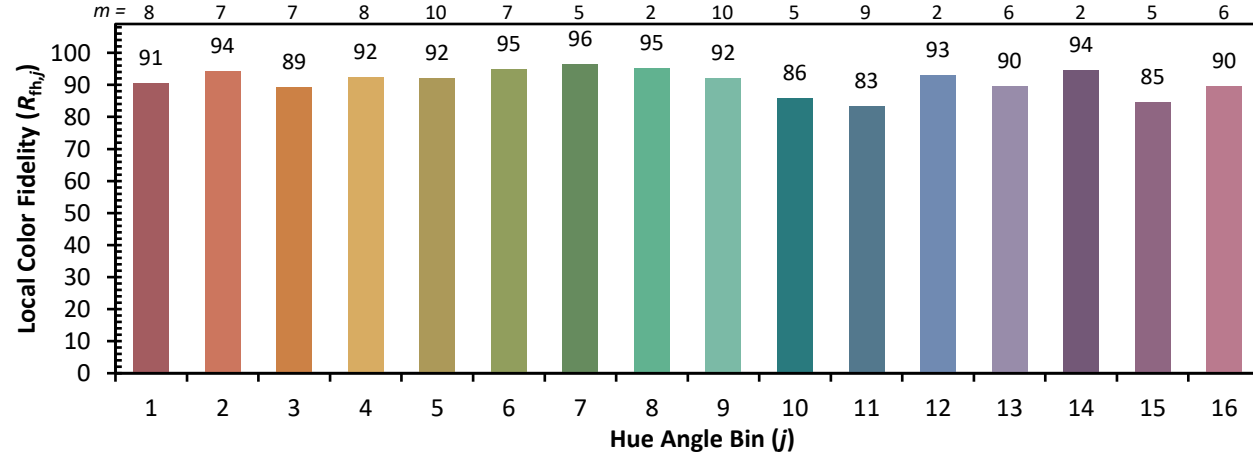


Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 91	CES51 = 98	CES76 = 83
CES02 = 61	CES27 = 92	CES52 = 98	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 97	CES78 = 80
CES04 = 69	CES29 = 94	CES54 = 93	CES79 = 94
CES05 = 48	CES30 = 93	CES55 = 92	CES80 = 91
CES06 = 50	CES31 = 95	CES56 = 95	CES81 = 84
CES07 = 41	CES32 = 86	CES57 = 94	CES82 = 96
CES08 = 40	CES33 = 99	CES58 = 94	CES83 = 96
CES09 = 29	CES34 = 90	CES59 = 97	CES84 = 93
CES10 = 73	CES35 = 94	CES60 = 92	CES85 = 83
CES11 = 56	CES36 = 81	CES61 = 92	CES86 = 86
CES12 = 62	CES37 = 92	CES62 = 86	CES87 = 91
CES13 = 43	CES38 = 88	CES63 = 92	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 89	CES89 = 87
CES15 = 71	CES40 = 97	CES65 = 88	CES90 = 98
CES16 = 47	CES41 = 97	CES66 = 85	CES91 = 73
CES17 = 48	CES42 = 90	CES67 = 84	CES92 = 79
CES18 = 56	CES43 = 91	CES68 = 86	CES93 = 87
CES19 = 70	CES44 = 99	CES69 = 87	CES94 = 78
CES20 = 65	CES45 = 95	CES70 = 83	CES95 = 83
CES21 = 85	CES46 = 97	CES71 = 77	CES96 = 92
CES22 = 77	CES47 = 95	CES72 = 92	CES97 = 95
CES23 = 91	CES48 = 93	CES73 = 77	CES98 = 95
CES24 = 90	CES49 = 95	CES74 = 92	CES99 = 94
CES25 = 70	CES50 = 98	CES75 = 79	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)