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: P1431715

Luminaire Tested: EHBR1-24-UNV-TASM-L950

Issue Date: 3/13/2026

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1431715
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-654-4)
Test Lab:	INNOVATION CENTER
Issue Date:	3/13/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-24-UNV-TASM-L950
Description:	Elevate Round Highbay at, 24000 lumens, 5000K 90CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	23018.7 lumens
Efficiency:	N/A
Efficacy:	179.4 lumens/watt
Spacing Criteria (0/90/45):	0.99 / 0.84 / 0.9
Luminous Opening:	Circular (Dia: 1.71' x H: 0')
CIE Type:	Direct

Input Watts (W):	128.3
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

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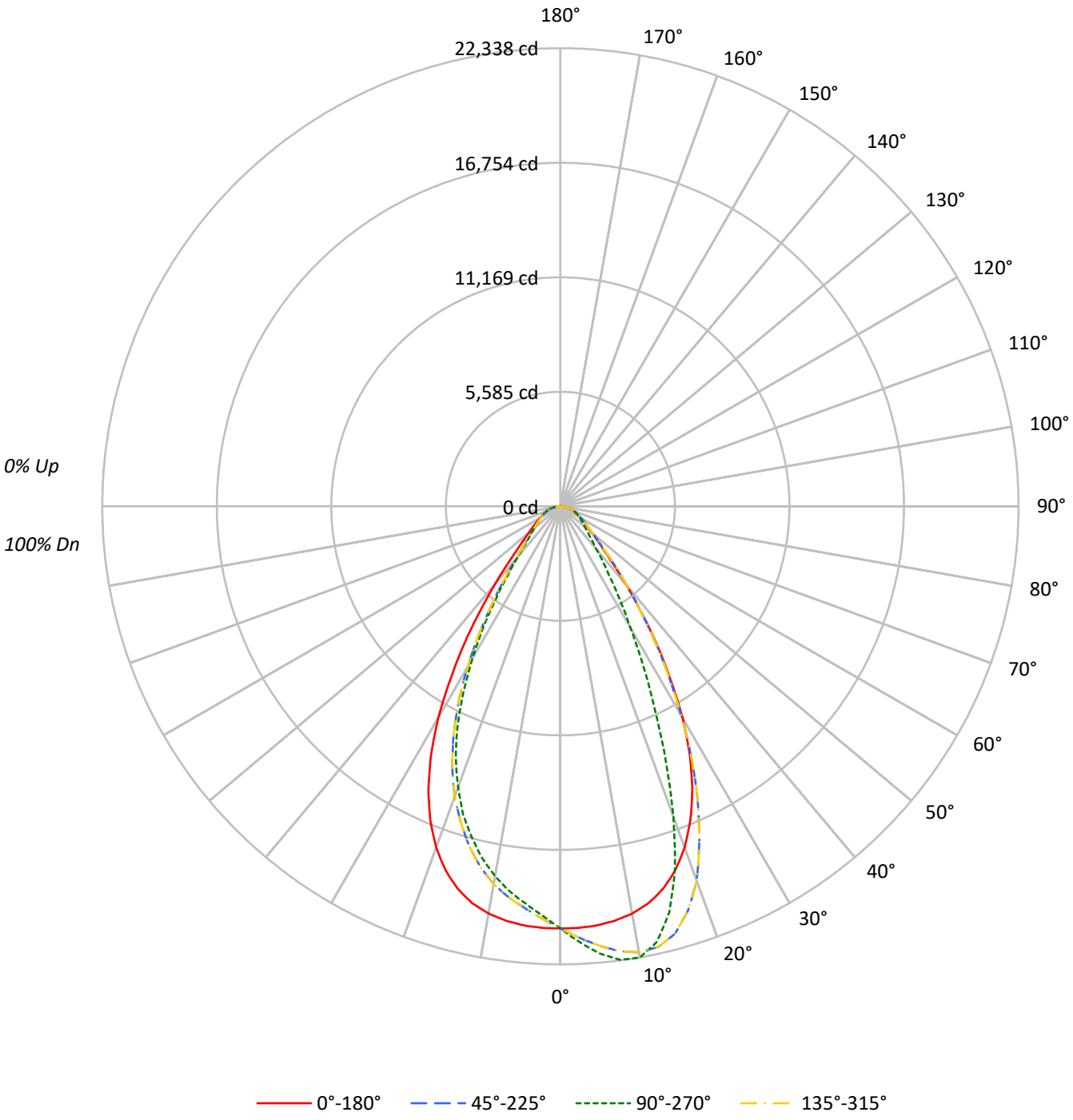
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	93	84	77	72	91	83	77	72	80	75	71	78	74	70	76	72	69	67
5	87	78	71	66	86	77	70	65	75	69	65	73	68	64	71	67	64	62
6	82	72	65	60	81	71	65	60	70	64	60	68	63	59	67	62	59	57
7	78	67	60	56	76	67	60	56	65	59	55	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	52	61	55	51	60	55	51	59	54	51	49
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46
10	66	56	49	45	65	55	49	45	54	49	45	54	48	45	53	48	45	43

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	96676	96676	96676	96676
5°	96714	103176	96714	91695
10°	96154	106521	96154	87352
15°	93944	99659	93944	81234
20°	88477	80473	88477	72864
25°	78891	56170	78891	61517
30°	64569	36835	64569	46395
35°	46718	24064	46718	31158
40°	30501	16750	30501	19843
45°	19572	13121	19572	14298
50°	14727	11298	14727	12068
55°	12218	10458	12218	10825
60°	10797	10166	10797	10228
65°	10111	10072	10111	10028
70°	9955	10250	9955	10118
75°	9876	10520	9876	10206
80°	9657	11055	9657	10333
85°	8136	10275	8136	9796

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 27516 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1957.5	8.5
10°-20°	5325.4	23.1
20°-30°	6245.6	27.1
30°-40°	4343.4	18.9
40°-50°	2158.5	9.4
50°-60°	1291.0	5.6
60°-70°	908.7	3.9
70°-80°	585.3	2.5
80°-90°	185.9	0.8
90°-100°	1.1	0.0
100°-110°	1.3	0.0
110°-120°	1.3	0.0
120°-130°	1.7	0.0
130°-140°	2.3	0.0
140°-150°	2.7	0.0
150°-160°	3.0	0.0
160°-170°	3.0	0.0
170°-180°	1.3	0.0
0°-30°	13528.4	58.8
0°-40°	17871.9	77.6
0°-60°	21321.3	92.6
0°-90°	23001.2	99.9
90°-120°	3.6	0.0
90°-150°	10.2	0.0
90°-180°	18.0	0.1
0°-180°	23018.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	20586	20586	20586	20586	20586	
5°	20516	21887	20516	19452	20516	1947
15°	19323	20498	19323	16709	19323	5400
25°	15225	10840	15225	11872	15225	6893
35°	8149	4198	8149	5435	8149	5087
45°	2947	1976	2947	2153	2947	2411
55°	1492	1277	1492	1322	1492	1365
65°	910	906	910	902	910	914
75°	544	580	544	562	544	571
85°	151	191	151	182	151	168
90°	0	3	0	0	0	7
95°	1	3	1	0	1	1
105°	1	3	1	1	1	1
115°	1	3	1	1	1	1
125°	2	4	2	1	2	2
135°	3	4	3	2	3	2
145°	5	5	5	4	5	3
155°	6	7	6	7	6	3
165°	10	13	10	11	10	3
175°	14	17	14	13	14	1
180°	14	14	14	14	14	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	20586.5	20586.5	20586.5	20586.5	20586.5	20586.5	20586.5	20586.5	20586.5	20586.5	20586.5
2.5°	20574.5	20840.5	21055.9	21197.9	21268.2	21197.9	21055.9	20840.5	20574.5	20310.1	20128.2
5°	20516.2	21048.9	21500.2	21795.5	21887.0	21795.5	21500.2	21048.9	20516.2	20012.8	19678.9
7.5°	20376.9	21206.8	21877.3	22222.1	22306.2	22222.1	21877.3	21206.8	20376.9	19664.2	19242.3
10°	20164.2	21306.4	22081.1	22328.2	22338.2	22328.2	22081.1	21306.4	20164.2	19204.1	18706.5
12.5°	19824.8	21270.9	22012.8	21931.7	21747.6	21931.7	22012.8	21270.9	19824.8	18642.0	18014.4
15°	19323.0	21060.5	21580.1	20920.4	20498.5	20920.4	21580.1	21060.5	19323.0	17883.1	17155.1
17.5°	18615.8	20666.7	20676.8	19371.7	18575.7	19371.7	20676.8	20666.7	18615.8	16955.1	16153.3
20°	17704.4	20035.2	19433.0	17045.8	16102.8	17045.8	19433.0	20035.2	17704.4	15858.0	15071.3
22.5°	16561.7	19183.6	17700.9	14706.1	13419.5	14706.1	17700.9	19183.6	16561.7	14582.2	13763.4
25°	15225.3	18140.2	15837.6	12156.8	10840.4	12156.8	15837.6	18140.2	15225.3	13062.0	12321.6
27.5°	13653.4	16817.7	13853.4	9934.0	8719.5	9934.0	13853.4	16817.7	13653.4	11492.4	10736.2
30°	11907.4	15122.3	11788.5	7911.2	6792.9	7911.2	11788.5	15122.3	11907.4	9729.0	9052.0
32.5°	9952.6	13460.4	9805.5	6339.0	5391.6	6339.0	9805.5	13460.4	9952.6	8046.3	7338.8
35°	8149.1	11381.3	8017.4	4980.9	4197.6	4980.9	8017.4	11381.3	8149.1	6457.9	5763.0
37.5°	6395.3	9416.8	6391.1	4010.8	3404.7	4010.8	6391.1	9416.8	6395.3	5020.7	4456.7
40°	4975.5	7363.0	5007.6	3201.7	2732.3	3201.7	5007.6	7363.0	4975.5	3820.1	3459.2
42.5°	3770.0	5630.2	3935.9	2627.7	2320.8	2627.7	3935.9	5630.2	3770.0	3009.9	2739.7
45°	2947.0	4143.2	3073.5	2217.0	1975.7	2217.0	3073.5	4143.2	2947.0	2423.9	2242.4
47.5°	2399.9	3202.1	2491.0	1901.6	1732.5	1901.6	2491.0	3202.1	2399.9	2050.2	1914.3
50°	2015.8	2457.0	2068.3	1660.0	1546.4	1660.0	2068.3	2457.0	2015.8	1755.7	1665.0
52.5°	1731.7	2003.9	1761.4	1479.2	1402.9	1479.2	1761.4	2003.9	1731.7	1536.0	1479.6
55°	1492.3	1684.7	1531.7	1330.2	1277.3	1330.2	1531.7	1684.7	1492.3	1366.9	1325.2
57.5°	1310.6	1429.1	1330.2	1203.2	1168.1	1203.2	1330.2	1429.1	1310.6	1216.4	1194.0
60°	1149.6	1237.6	1173.9	1092.5	1082.4	1092.5	1173.9	1237.6	1149.6	1094.4	1079.7
62.5°	1025.6	1081.3	1038.0	992.9	984.0	992.9	1038.0	1081.3	1025.6	983.2	985.9
65°	909.9	961.6	927.6	903.3	906.4	903.3	927.6	961.6	909.9	890.2	894.5
67.5°	820.3	847.4	832.7	818.7	822.3	818.7	832.7	847.4	820.3	801.0	807.6
70°	725.0	753.9	738.8	740.8	746.5	740.8	738.8	753.9	725.0	719.1	724.2
72.5°	633.8	656.2	651.2	655.9	662.0	655.9	651.2	656.2	633.8	633.1	633.5
75°	544.3	561.3	563.6	570.2	579.8	570.2	563.6	561.3	544.3	538.5	545.5
77.5°	446.6	466.0	473.3	482.1	496.4	482.1	473.3	466.0	446.6	450.5	454.0
80°	357.1	366.0	382.1	388.7	408.8	388.7	382.1	366.0	357.1	350.6	355.6
82.5°	261.4	269.4	283.4	295.7	307.3	295.7	283.4	269.4	261.4	258.3	258.7
85°	151.0	163.2	172.5	187.2	190.7	187.2	172.5	163.2	151.0	154.4	151.0
87.5°	52.9	56.8	64.9	70.6	71.0	70.6	64.9	56.8	52.9	54.1	49.1
90°	0.4	0.7	1.1	2.3	3.1	2.3	1.1	0.7	0.4	0.4	0.4
92.5°	0.4	0.7	1.1	2.3	3.1	2.3	1.1	0.7	0.4	0.4	0.4
95°	0.7	0.7	1.1	2.3	3.1	2.3	1.1	0.7	0.7	0.4	0.4
97.5°	0.7	0.7	1.1	2.3	3.1	2.3	1.1	0.7	0.7	0.4	0.4
100°	0.7	0.7	1.1	2.3	3.1	2.3	1.1	0.7	0.7	0.7	0.4
102.5°	0.7	1.1	1.6	2.7	3.1	2.7	1.6	1.1	0.7	0.7	0.4
105°	0.7	1.1	1.6	2.7	3.4	2.7	1.6	1.1	0.7	0.7	0.4
107.5°	0.7	1.1	1.6	2.7	3.4	2.7	1.6	1.1	0.7	0.7	0.7
110°	0.7	1.1	1.6	2.7	3.4	2.7	1.6	1.1	0.7	0.7	0.7

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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°	0.7	1.1	1.6	2.7	*3.4*	2.7	1.6	1.1	0.7	0.7	0.7
115°	1.1	1.1	1.6	2.7	*3.4*	2.7	1.6	1.1	1.1	0.7	0.7
117.5°	1.1	1.1	1.6	2.7	*3.4*	2.7	1.6	1.1	1.1	1.1	0.7
120°	1.1	1.1	2.0	2.7	*3.4*	2.7	2.0	1.1	1.1	1.1	0.7
122.5°	1.6	1.6	2.0	3.1	*3.4*	3.1	2.0	1.6	1.6	1.6	1.1
125°	1.6	1.6	2.3	3.1	*3.9*	3.1	2.3	1.6	1.6	2.0	1.6
127.5°	2.0	2.0	2.3	3.1	*3.9*	3.1	2.3	2.0	2.0	2.0	1.6
130°	2.3	2.0	2.3	3.4	*3.9*	3.4	2.3	2.0	2.3	2.3	2.0
132.5°	2.7	2.3	2.7	3.9	*4.3*	3.9	2.7	2.3	2.7	3.1	2.7
135°	3.1	2.3	3.1	3.4	*4.3*	3.4	3.1	2.3	3.1	3.4	2.7
137.5°	3.4	2.7	3.1	3.9	*4.3*	3.9	3.1	2.7	3.4	3.9	3.4
140°	3.9	3.1	3.1	3.9	*4.6*	3.9	3.1	3.1	3.9	3.9	3.9
142.5°	4.3	3.4	3.4	4.3	*4.6*	4.3	3.4	3.4	4.3	4.3	4.3
145°	4.6	4.3	3.9	4.3	*5.0*	4.3	3.9	4.3	4.6	4.3	4.6
147.5°	4.6	4.3	4.3	4.6	*5.4*	4.6	4.3	4.3	4.6	4.6	5.0
150°	5.0	5.0	4.6	5.0	*5.8*	5.0	4.6	5.0	5.0	5.0	5.4
152.5°	5.4	5.4	5.4	5.8	*6.1*	5.8	5.4	5.4	5.4	5.4	5.8
155°	6.1	6.1	6.1	6.6	*7.0*	6.6	6.1	6.1	6.1	5.8	6.6
157.5°	7.0	7.3	7.3	7.7	*8.1*	7.7	7.3	7.3	7.0	7.0	7.3
160°	8.5	8.5	8.9	9.3	*9.7*	9.3	8.9	8.5	8.5	8.1	8.5
162.5°	9.3	9.3	10.0	10.4	*11.1*	10.4	10.0	9.3	9.3	9.3	9.3
165°	10.4	10.4	11.1	12.0	*12.7*	12.0	11.1	10.4	10.4	10.0	10.0
167.5°	11.1	11.1	12.0	13.1	*13.9*	13.1	12.0	11.1	11.1	10.8	10.8
170°	11.6	12.0	12.7	13.9	*14.7*	13.9	12.7	12.0	11.6	11.6	11.1
172.5°	12.7	12.7	13.9	15.1	*15.8*	15.1	13.9	12.7	12.7	12.4	12.4
175°	13.5	13.9	14.7	15.8	*16.6*	15.8	14.7	13.9	13.5	13.1	13.1
177.5°	13.5	14.3	15.1	16.3	*17.0*	16.3	15.1	14.3	13.5	13.1	13.1
180°	14.3	14.3	14.3	14.3	*14.3*	14.3	14.3	14.3	14.3	14.3	14.3

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	20586.5	20586.5	20586.5	20586.5	20586.5	20586.5
2.5°	19988.5	19975.4	19988.5	20128.2	20310.1	20574.5
5°	19524.1	19451.6	19524.1	19678.9	20012.8	20516.2
7.5°	18983.3	18941.2	18983.3	19242.3	19664.2	20376.9
10°	*18413.9*	*18318.5*	*18413.9*	*18706.5*	*19204.1*	*20164.2*
12.5°	17712.1	17585.9	17712.1	18014.4	18642.0	19824.8
15°	16819.6	16708.8	16819.6	17155.1	17883.1	19323.0
17.5°	15861.8	15761.5	15861.8	16153.3	16955.1	18615.8
20°	14659.0	14580.2	14659.0	15071.3	15858.0	17704.4
22.5°	13397.1	13323.3	13397.1	13763.4	14582.2	16561.7
25°	11912.4	11872.3	11912.4	12321.6	13062.0	15225.3
27.5°	10308.1	10239.8	10308.1	10736.2	11492.4	13653.4
30°	8669.0	8555.9	8669.0	9052.0	9729.0	11907.4
32.5°	7065.8	6984.4	7065.8	7338.8	8046.3	9952.6
35°	5516.3	5434.9	5516.3	5763.0	6457.9	8149.1
37.5°	4298.5	4154.4	4298.5	4456.7	5020.7	6395.3
40°	3260.0	3236.8	3260.0	3459.2	3820.1	4975.5
42.5°	2653.9	2591.0	2653.9	2739.7	3009.9	3770.0
45°	2177.6	2152.9	2177.6	2242.4	2423.9	2947.0
47.5°	1872.6	1883.4	1872.6	1914.3	2050.2	2399.9
50°	1645.3	1651.8	1645.3	1665.0	1755.7	2015.8
52.5°	1477.8	1471.9	1477.8	1479.6	1536.0	1731.7
55°	1329.5	1322.1	1329.5	1325.2	1366.9	1492.3
57.5°	1199.8	1205.2	1199.8	1194.0	1216.4	1310.6
60°	1084.0	1089.0	1084.0	1079.7	1094.4	1149.6
62.5°	986.3	989.4	986.3	985.9	983.2	1025.6
65°	899.1	902.5	899.1	894.5	890.2	909.9
67.5°	815.7	815.7	815.7	807.6	801.0	820.3
70°	737.3	736.9	737.3	724.2	719.1	725.0
72.5°	643.1	652.4	643.1	633.5	633.1	633.8
75°	551.6	562.5	551.6	545.5	538.5	544.3
77.5°	459.0	475.6	459.0	454.0	450.5	446.6
80°	364.0	382.1	364.0	355.6	350.6	357.1
82.5°	269.1	282.5	269.1	258.7	258.3	261.4
85°	160.2	181.8	160.2	151.0	154.4	151.0
87.5°	51.4	65.6	51.4	49.1	54.1	52.9
90°	0.4	0.4	0.4	0.4	0.4	0.4
92.5°	0.4	0.4	0.4	0.4	0.4	0.4
95°	0.4	0.4	0.4	0.4	0.4	0.7
97.5°	0.4	0.7	0.4	0.4	0.4	0.7
100°	0.4	0.7	0.4	0.4	0.7	0.7
102.5°	0.4	0.7	0.4	0.4	0.7	0.7
105°	0.4	0.7	0.4	0.4	0.7	0.7
107.5°	0.4	0.7	0.4	0.7	0.7	0.7
110°	0.4	0.7	0.4	0.7	0.7	0.7

TEST NUMBER: P1431715
CATALOG NUMBER: EHBR1-24-UNV-TASM-L950

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	0.4	0.7	0.4	0.7	0.7	0.7
115°	0.4	0.7	0.4	0.7	0.7	1.1
117.5°	0.4	0.7	0.4	0.7	1.1	1.1
120°	0.4	0.7	0.4	0.7	1.1	1.1
122.5°	0.7	0.7	0.7	1.1	1.6	1.6
125°	0.7	1.1	0.7	1.6	2.0	1.6
127.5°	0.7	1.1	0.7	1.6	2.0	2.0
130°	1.1	1.1	1.1	2.0	2.3	2.3
132.5°	1.6	1.6	1.6	2.7	3.1	2.7
135°	2.0	1.6	2.0	2.7	3.4	3.1
137.5°	2.3	2.0	2.3	3.4	3.9	3.4
140°	3.1	2.7	3.1	3.9	3.9	3.9
142.5°	3.4	3.4	3.4	4.3	4.3	4.3
145°	4.3	4.3	4.3	4.6	4.3	4.6
147.5°	5.0	5.0	5.0	5.0	4.6	4.6
150°	5.8	5.8	5.8	5.4	5.0	5.0
152.5°	6.1	6.6	6.1	5.8	5.4	5.4
155°	7.0	7.3	7.0	6.6	5.8	6.1
157.5°	7.7	8.5	7.7	7.3	7.0	7.0
160°	8.9	9.3	8.9	8.5	8.1	8.5
162.5°	9.7	10.0	9.7	9.3	9.3	9.3
165°	10.4	10.8	10.4	10.0	10.0	10.4
167.5°	10.8	10.8	10.8	10.8	10.8	11.1
170°	11.1	11.6	11.1	11.1	11.6	11.6
172.5°	12.0	12.4	12.0	12.4	12.4	12.7
175°	12.7	13.1	12.7	13.1	13.1	13.5
177.5°	13.1	13.5	13.1	13.1	13.1	13.5
180°	14.3	14.3	14.3	14.3	14.3	14.3

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1431715
CATALOG NUMBER: EHBR1-24-UNV-TASM-L950

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	17.53	18.74	17.90	19.05	19.37	16.85	18.06	17.22	18.37	18.69
	3H	19.17	20.25	19.55	20.58	20.95	18.80	19.87	19.18	20.21	20.58
	4H	19.88	20.88	20.28	21.23	21.62	19.66	20.66	20.07	21.02	21.40
	6H	20.45	21.37	20.87	21.74	22.14	20.41	21.33	20.83	21.71	22.10
	8H	20.65	21.52	21.09	21.92	22.32	20.70	21.57	21.13	21.96	22.37
	12H	20.78	21.61	21.21	21.99	22.42	20.90	21.73	21.33	22.11	22.54
4H	2H	18.00	19.00	18.40	19.35	19.74	17.48	18.48	17.89	18.84	19.22
	3H	19.91	20.73	20.32	21.14	21.54	19.66	20.48	20.07	20.89	21.30
	4H	20.76	21.50	21.20	21.92	22.37	20.66	21.40	21.09	21.82	22.26
	6H	21.49	22.12	21.95	22.57	23.04	21.55	22.19	22.02	22.64	23.11
	8H	21.74	22.34	22.22	22.79	23.26	21.90	22.49	22.37	22.94	23.42
	12H	21.91	22.44	22.40	22.92	23.40	22.15	22.67	22.64	23.16	23.63
8H	4H	21.07	21.67	21.54	22.12	22.59	21.00	21.59	21.47	22.04	22.52
	6H	21.95	22.43	22.45	22.93	23.42	22.05	22.53	22.55	23.03	23.52
	8H	22.30	22.73	22.83	23.25	23.75	22.50	22.93	23.02	23.45	23.94
	12H	22.56	22.94	23.08	23.43	24.01	22.85	23.23	23.37	23.73	24.30
12H	4H	21.10	21.62	21.59	22.11	22.59	21.03	21.55	21.52	22.04	22.51
	6H	22.02	22.45	22.54	22.97	23.47	22.12	22.55	22.65	23.07	23.57
	8H	22.43	22.81	22.95	23.31	23.89	22.64	23.02	23.16	23.51	24.09

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

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

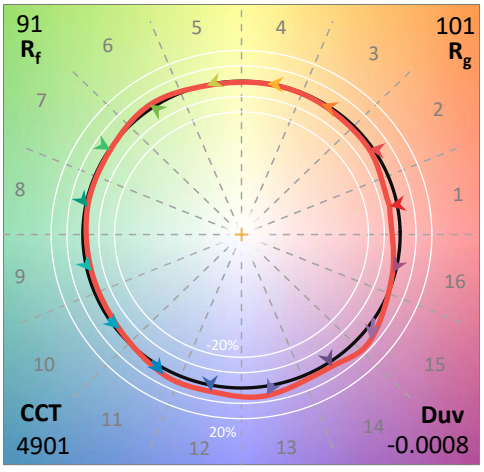
Test Information

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

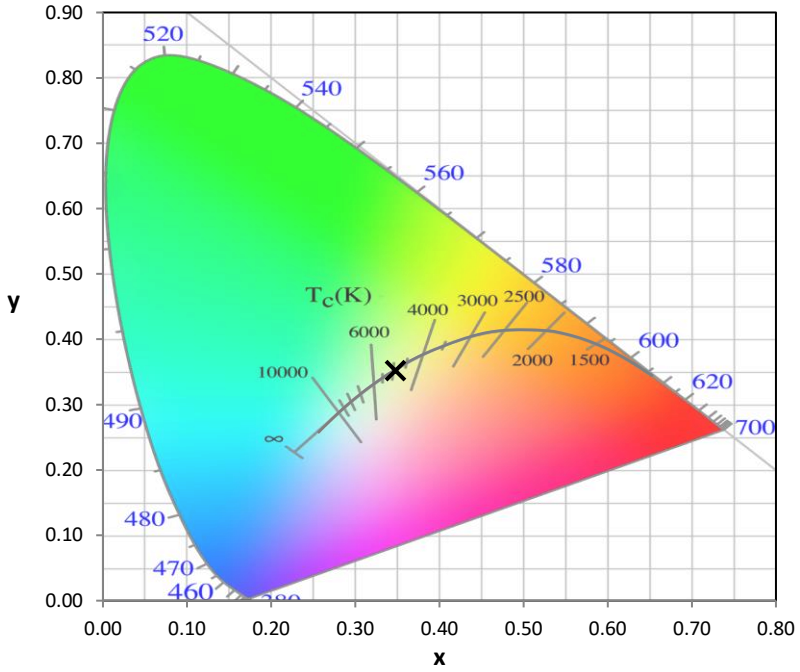
Stabilization Time:	35M
Operation Time:	1H 35M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-8

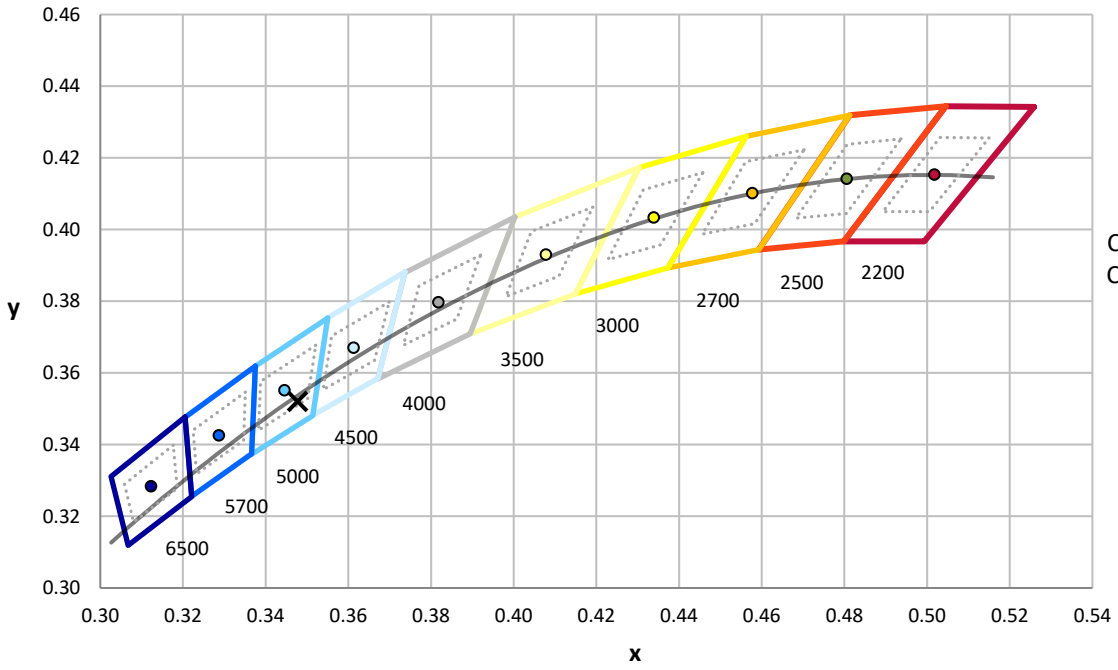
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

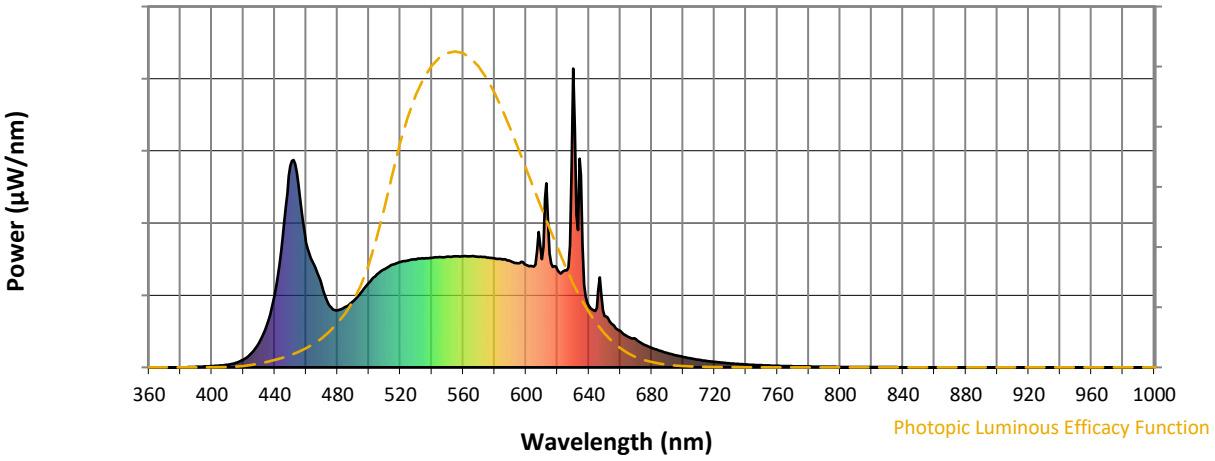


CCT = 4901K
CIE x = 0.3477
CIE y = 0.3520
Duv = -0.0008

Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-8

Photopic Flux vs. Wavelength

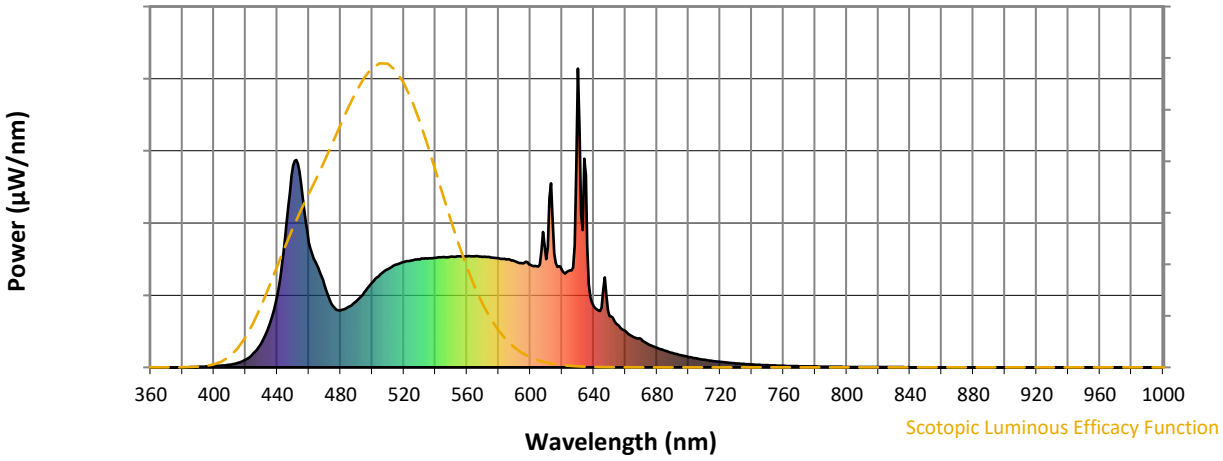


Photopic Lumens: NR

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

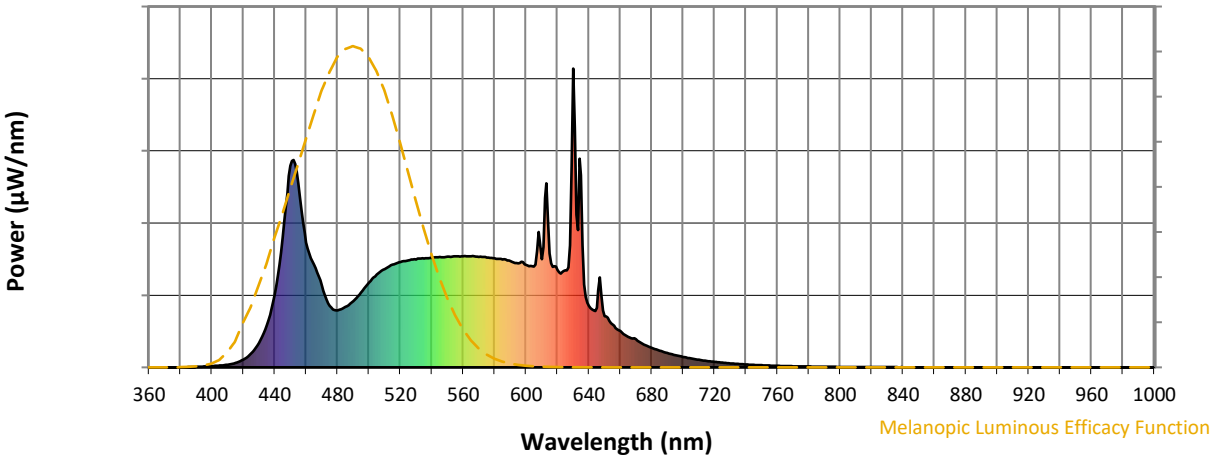


Scotopic Lumens: NR **S/P: 2.04**

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			

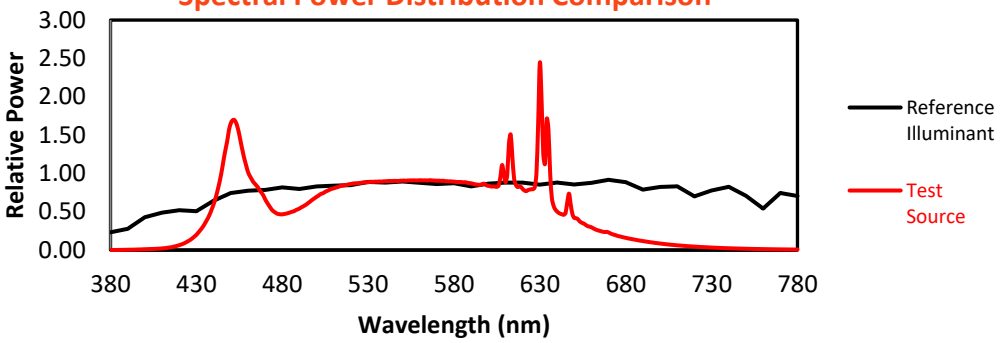
REPORT NUMBER: SP1-2506-472-8

TM-30-18

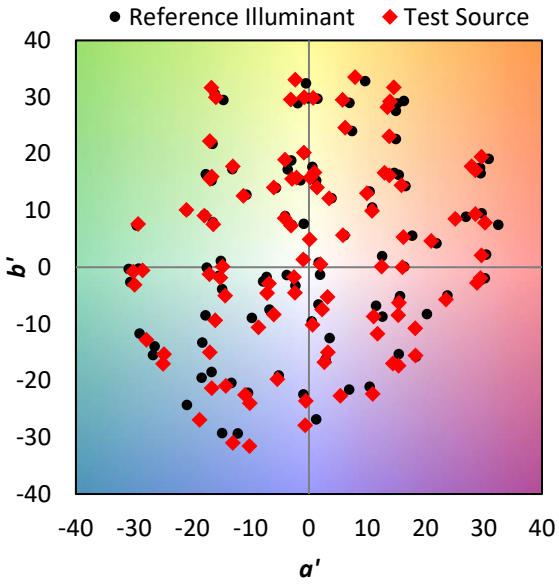
Summary

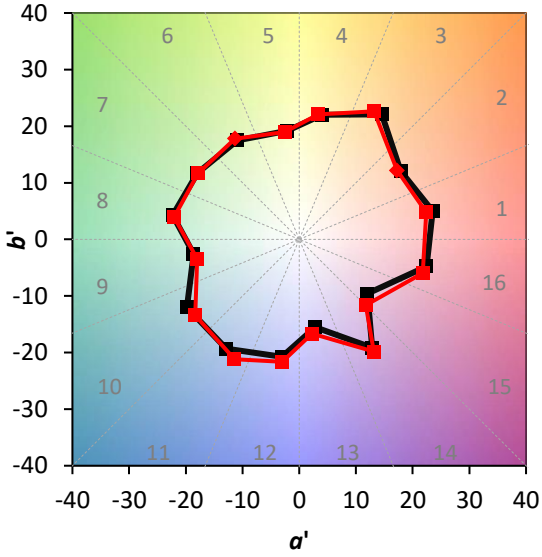
R_f = 90.7
R_g = 100.5
CIE R_a = 94.3
R_9 = 72.3

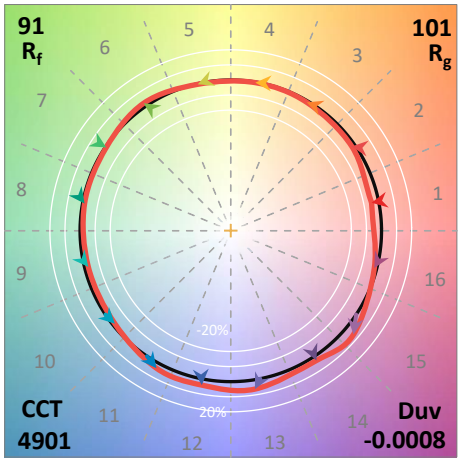
Spectral Power Distribution Comparison

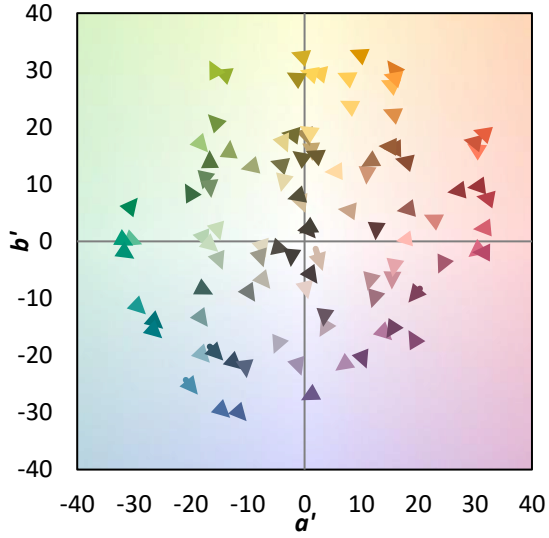


Color Vector Graphics







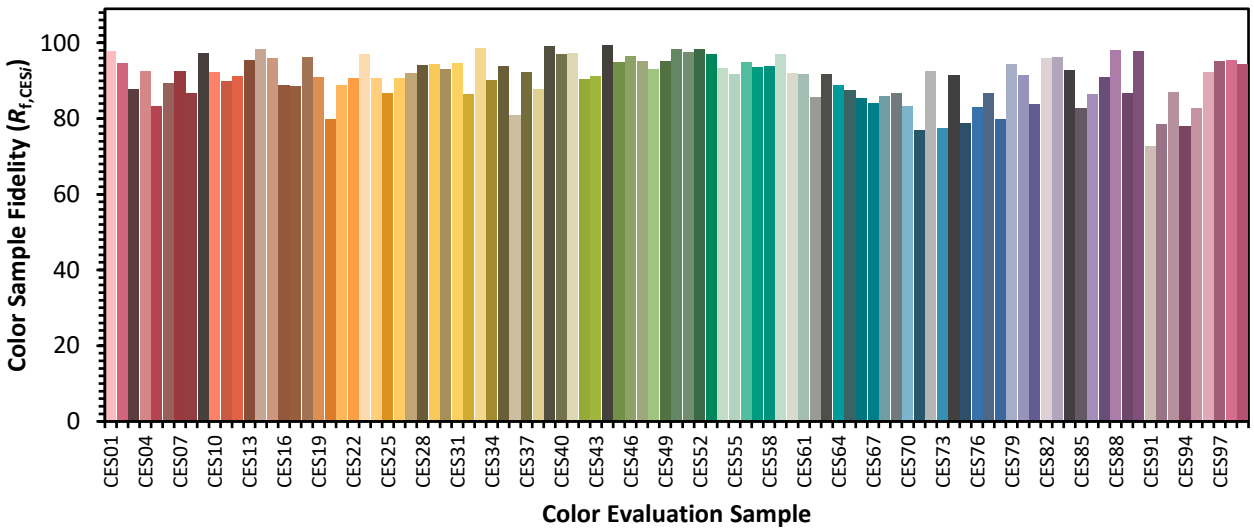


REPORT NUMBER: SP1-2506-472-8

TM-30-18

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	



REPORT NUMBER: SP1-2506-472-8

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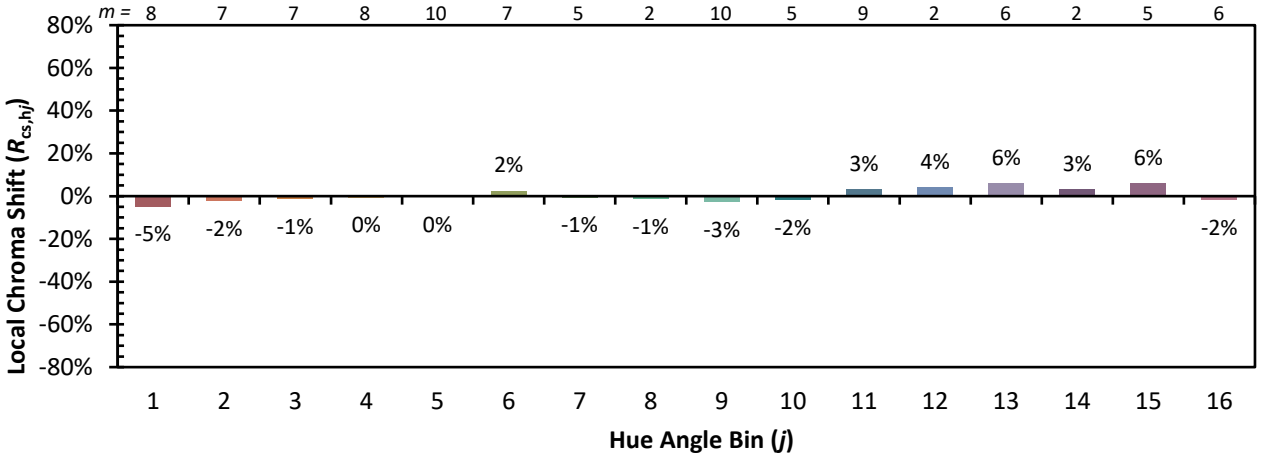
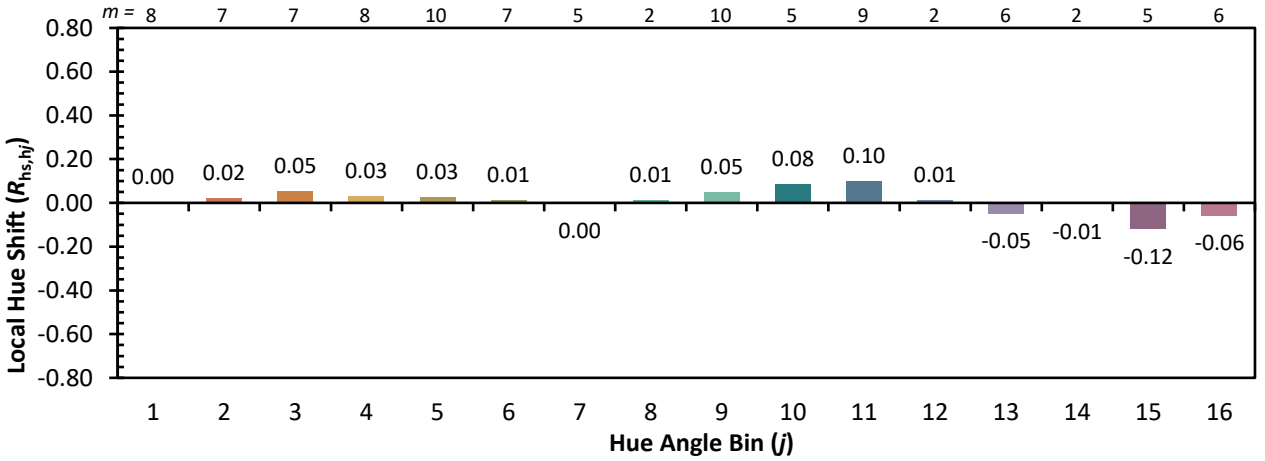
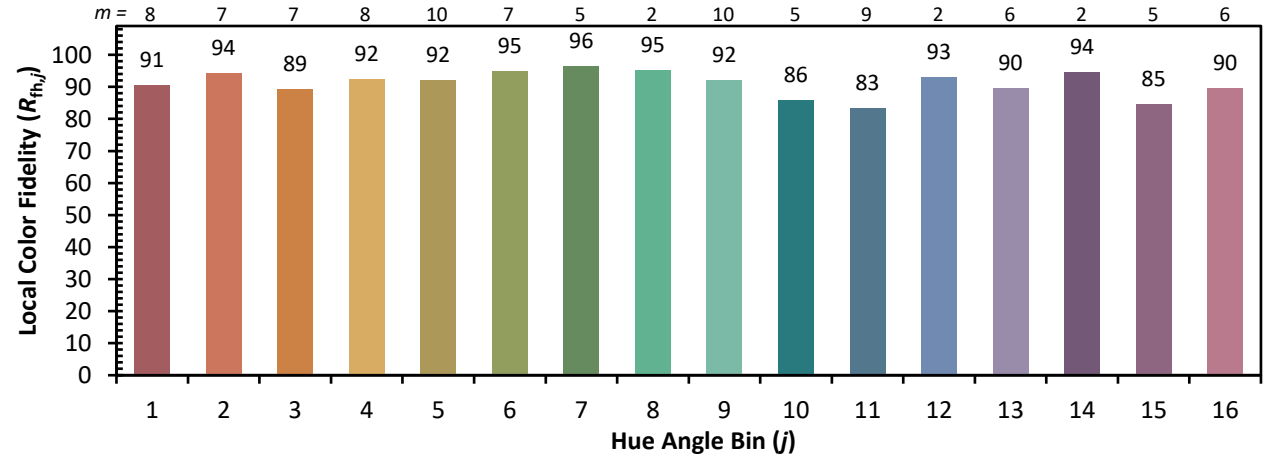
Color Rendition by Hue-Angle Bin







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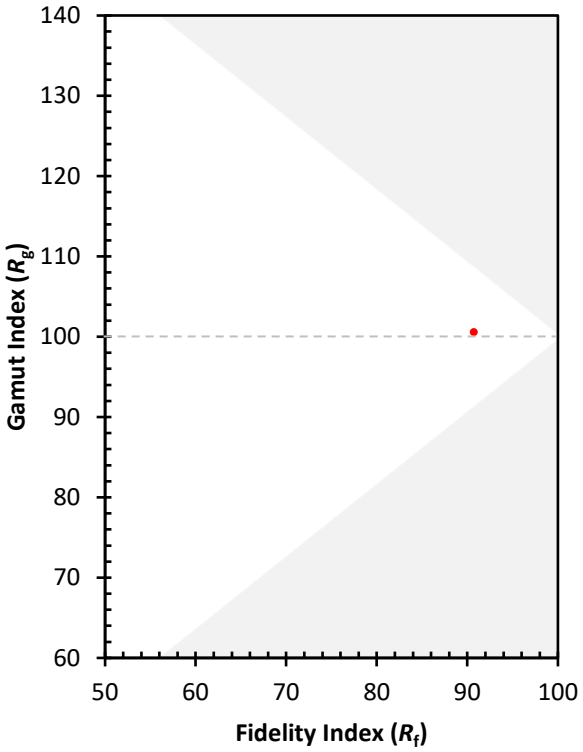
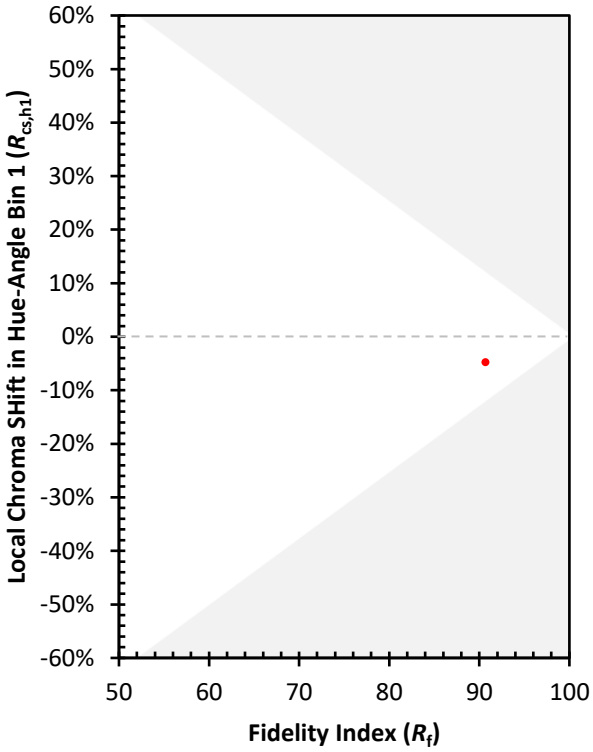
Measure Comparisons





(END OF REPORT)