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-TA-L950-UPL40

Issue Date: 3/20/2026

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	
	REPORT IS A COMBINATION OF REPORTS P1431674 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-18-UNV-TA-L950-UPL40
Description:	Elevate Round Highbay at, 18000 lumens, 5000K 90CRI LEDs with TA lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	20622.6 lumens
Efficiency:	N/A
Efficacy:	164.6 lumens/watt
Spacing Criteria (0/90/45):	1.07 / 0.8 / 0.93
Luminous Opening:	Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type:	Semi-Direct

Input Watts (W):	125.3
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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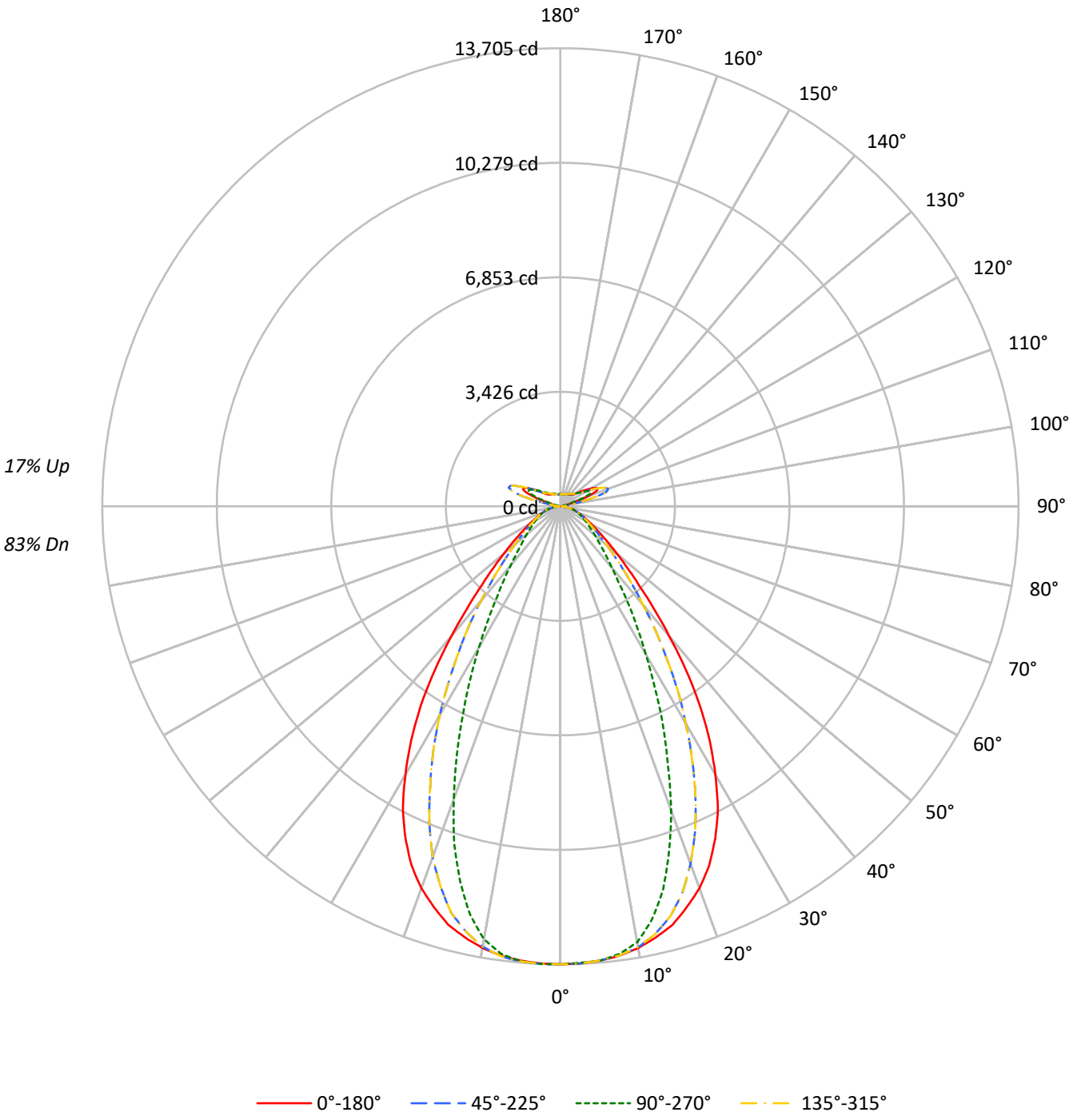
Luminous Intensity Polar Plot



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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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	83
1	107	104	100	97	103	100	97	94	92	90	88	86	84	82	80	78	77	74
2	100	94	88	84	96	90	86	82	84	81	77	79	76	73	73	71	69	66
3	93	85	79	74	89	82	77	72	77	72	69	72	68	65	68	65	62	60
4	87	78	71	65	84	75	69	64	71	65	61	66	62	59	63	59	56	54
5	81	71	64	59	78	69	62	58	65	60	55	62	57	53	58	54	51	49
6	76	65	58	53	73	64	57	52	60	55	50	57	52	49	54	50	47	45
7	72	61	53	48	69	59	52	48	56	50	46	53	48	45	51	46	43	41
8	67	56	49	44	65	55	48	44	52	47	42	50	45	41	47	43	40	38
9	64	52	46	41	61	51	45	40	49	43	39	47	42	38	45	40	37	36
10	60	49	42	38	58	48	42	37	46	40	36	44	39	36	42	38	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	64332	64332	64332	64332
5°	63900	63907	63900	63974
10°	63154	62327	63154	61919
15°	61777	56583	61777	55284
20°	59161	47151	59161	45316
25°	54883	36465	54883	34576
30°	48211	26580	48211	25229
35°	39622	19160	39622	17909
40°	29199	13784	29199	13359
45°	20394	10862	20394	10486
50°	14761	9011	14761	8875
55°	11178	7870	11178	7764
60°	8907	7098	8907	7148
65°	7485	6638	7485	6702
70°	6655	6305	6655	6367
75°	5881	5881	5881	5938
80°	4821	5313	4821	5313
85°	3090	3681	3090	3791

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 21367 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1293.7	6.3
10°-20°	3476.9	16.9
20°-30°	4227.9	20.5
30°-40°	3443.9	16.7
40°-50°	2067.7	10.0
50°-60°	1190.0	5.8
60°-70°	744.7	3.6
70°-80°	438.6	2.1
80°-90°	134.6	0.7
90°-100°	94.9	0.5
100°-110°	628.3	3.0
110°-120°	1162.3	5.6
120°-130°	689.6	3.3
130°-140°	415.9	2.0
140°-150°	287.0	1.4
150°-160°	186.1	0.9
160°-170°	105.6	0.5
170°-180°	34.8	0.2
0°-30°	8998.5	43.6
0°-40°	12442.4	60.3
0°-60°	15700.1	76.1
0°-90°	17018.2	82.5
90°-120°	1885.5	9.1
90°-150°	3278.0	15.9
90°-180°	3604.0	17.5
0°-180°	20622.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	13699	13699	13699	13699	13699	
5°	13644	13645	13644	13660	13644	1295
15°	12960	11871	12960	11598	12960	3634
25°	10960	7282	10960	6905	10960	4996
35°	7272	3516	7272	3287	7272	4490
45°	3300	1757	3300	1697	3300	2629
55°	1511	1064	1511	1049	1511	1389
65°	781	693	781	700	781	790
75°	414	414	414	418	414	438
85°	106	126	106	130	106	116
90°	26	27	26	26	26	16
95°	50	45	50	44	50	54
105°	288	219	288	143	288	389
115°	1237	1006	1237	1054	1237	1128
125°	791	726	791	826	791	728
135°	498	530	498	574	498	395
145°	449	437	449	469	449	281
155°	397	385	397	415	397	186
165°	369	363	369	379	369	105
175°	365	361	365	369	365	35
180°	364	364	364	364	364	

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TEST NUMBER:
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	13699.0	13699.0	13699.0	13699.0	13699.0	13699.0	13699.0	13699.0	13699.0	13699.0	*13699.0*
2.5°	*13692.4*	*13689.3*	*13686.4*	*13681.3*	*13668.9*	*13681.3*	*13686.4*	*13689.3*	*13692.4*	*13701.1*	*13704.8*
5°	13643.7	13656.0	13643.1	13646.0	13645.2	13646.0	13643.1	13656.0	13643.7	13652.3	*13667.8*
7.5°	13558.5	13556.1	13551.9	13535.0	13506.3	13535.0	13551.9	13556.1	13558.5	13569.1	*13580.0*
10°	13417.9	13427.1	13396.6	13290.2	13242.3	13290.2	13396.6	13427.1	13417.9	13435.1	*13380.0*
12.5°	13209.3	13231.7	13108.6	12832.0	12663.5	12832.0	13108.6	13231.7	13209.3	13224.5	*13036.9*
15°	12960.5	12941.9	12699.1	12117.9	11870.8	12117.9	12699.1	12941.9	12960.5	12941.9	*12597.3*
17.5°	12573.1	12600.2	12129.0	11273.1	10816.9	11273.1	12129.0	12600.2	12573.1	12582.1	*11927.9*
20°	12159.4	12167.8	11381.9	10177.4	9691.0	10177.4	11381.9	12167.8	12159.4	12109.5	*11167.6*
22.5°	11633.0	11636.1	10525.7	9044.9	8417.7	9044.9	10525.7	11636.1	11633.0	11549.7	*10241.6*
25°	10960.1	10984.8	9562.3	7897.2	7282.0	7897.2	9562.3	10984.8	10960.1	10865.4	*9213.0*
27.5°	10204.6	10221.6	8533.6	6747.5	6108.0	6747.5	8533.6	10221.6	10204.6	10101.3	*8229.7*
30°	9273.3	9381.7	7500.7	5697.4	5112.6	5697.4	7500.7	9381.7	9273.3	9261.5	*7216.1*
32.5°	8311.6	8503.5	6526.8	4761.2	4259.9	4761.2	6526.8	8503.5	8311.6	8366.3	*6205.8*
35°	7272.0	7487.8	5516.3	3958.1	3516.5	3958.1	5516.3	7487.8	7272.0	7342.9	*5278.8*
37.5°	6170.0	6499.9	4659.9	3278.7	2854.1	3278.7	4659.9	6499.9	6170.0	6303.7	*4463.4*
40°	5061.0	5415.9	3847.6	2726.0	2389.2	2726.0	3847.6	5415.9	5061.0	5278.8	*3685.2*
42.5°	4108.7	4381.0	3175.6	2278.5	2058.6	2278.5	3175.6	4381.0	4108.7	4263.1	*3037.4*
45°	3299.6	3457.1	2627.6	1932.7	1757.4	1932.7	2627.6	3457.1	3299.6	3442.7	*2513.7*
47.5°	2693.9	2791.7	2163.1	1670.2	1535.0	1670.2	2163.1	2791.7	2693.9	2739.2	*2099.4*
50°	2199.9	2253.2	1818.5	1447.6	1343.0	1447.6	1818.5	2253.2	2199.9	2227.6	*1758.5*
52.5°	1825.4	1851.8	1525.2	1270.5	1193.9	1270.5	1525.2	1851.8	1825.4	1829.7	*1498.6*
55°	1510.6	1517.0	1302.1	1117.0	1063.6	1117.0	1302.1	1517.0	1510.6	1511.8	*1280.2*
57.5°	1265.1	1274.2	1119.0	993.9	949.7	993.9	1119.0	1274.2	1265.1	1267.0	*1108.6*
60°	1070.8	1076.8	966.9	882.8	853.3	882.8	966.9	1076.8	1070.8	1068.2	*960.9*
62.5°	911.6	923.0	845.0	786.8	767.8	786.8	845.0	923.0	911.6	914.2	*844.7*
65°	781.3	788.7	740.5	699.5	692.9	699.5	740.5	788.7	781.3	787.6	*742.8*
67.5°	674.3	682.9	650.5	626.3	619.7	626.3	650.5	682.9	674.3	679.5	*651.0*
70°	583.9	583.9	566.4	552.9	553.2	552.9	566.4	583.9	583.9	584.8	*569.5*
72.5°	495.2	498.4	486.6	482.6	484.3	482.6	486.6	498.4	495.2	506.1	*490.1*
75°	414.3	417.7	411.7	409.5	414.3	409.5	411.7	417.7	414.3	420.1	*412.9*
77.5°	330.9	337.2	336.2	339.1	348.3	339.1	336.2	337.2	330.9	339.4	*341.2*
80°	253.6	259.1	259.4	266.6	279.5	266.6	259.4	259.1	253.6	259.1	*263.4*
82.5°	178.5	181.9	184.2	196.2	207.5	196.2	184.2	181.9	178.5	181.6	*187.4*
85°	106.2	103.3	107.3	114.7	126.5	114.7	107.3	103.3	106.2	106.2	*109.0*
87.5°	33.8	33.0	32.7	39.9	45.6	39.9	32.7	33.0	33.8	35.0	*36.4*
90°	26.0	46.1	72.1	42.1	26.6	42.1	72.1	46.1	26.0	44.0	*76.1*
92.5°	34.0	60.0	116.1	64.1	38.3	64.1	116.1	60.0	34.0	60.0	*108.1*
95°	50.1	80.1	162.1	74.1	44.6	74.1	162.1	80.1	50.1	74.1	*138.2*
97.5°	78.0	98.1	186.2	82.0	56.6	82.0	186.2	98.1	78.0	92.1	*156.2*
100°	104.2	120.1	290.3	96.1	74.6	96.1	290.3	120.1	104.2	104.2	*286.3*
102.5°	158.1	226.2	616.7	204.2	126.7	204.2	616.7	226.2	158.1	204.2	*664.7*
105°	288.3	474.5	1099.1	430.5	218.8	430.5	1099.1	474.5	288.3	468.5	*1171.2*
107.5°	546.6	840.8	1449.5	770.8	379.0	770.8	1449.5	840.8	546.6	874.9	*1509.5*
110°	874.9	1155.2	1519.6	1023.0	707.3	1023.0	1519.6	1155.2	874.9	1223.3	*1647.7*

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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°	1139.2	1275.3	1455.5	1099.1	955.6	1099.1	1455.5	1275.3	1139.2	1363.4	*1609.7*
115°	1237.3	1245.3	1299.4	1057.1	1005.6	1057.1	1299.4	1245.3	1237.3	1343.4	*1437.5*
117.5°	1195.2	1119.2	1103.1	965.0	971.9	965.0	1103.1	1119.2	1195.2	1229.3	*1241.3*
120°	1079.2	977.1	920.9	858.9	899.5	858.9	920.9	977.1	1079.2	1065.1	*1045.1*
122.5°	933.0	830.9	788.8	761.0	809.7	761.0	788.8	830.9	933.0	902.9	*882.9*
125°	790.9	704.7	694.7	677.0	725.5	677.0	694.7	704.7	790.9	760.8	*769.1*
127.5°	670.7	616.7	628.6	618.9	651.5	618.9	628.6	616.7	670.7	656.7	*687.0*
130°	584.9	558.6	586.9	573.2	601.5	573.2	586.9	558.6	584.9	588.9	*629.2*
132.5°	531.1	523.1	557.4	541.4	559.7	541.4	557.4	523.1	531.1	547.4	*585.4*
135°	497.6	499.4	531.6	513.6	530.0	513.6	531.6	499.4	497.6	521.7	*555.7*
137.5°	477.9	483.9	507.9	489.9	504.0	489.9	507.9	483.9	477.9	501.9	*527.9*
140°	466.2	470.2	488.2	468.3	480.5	468.3	488.2	470.2	466.2	490.3	*502.3*
142.5°	454.5	458.5	470.5	446.8	454.8	446.8	470.5	458.5	454.5	476.8	*482.9*
145°	448.8	450.8	456.8	431.0	437.1	431.0	456.8	450.8	448.8	465.1	*461.1*
147.5°	439.1	439.1	441.1	417.6	421.9	417.6	441.1	439.1	439.1	451.1	*445.3*
150°	427.3	425.3	427.3	403.9	408.2	403.9	427.3	425.3	427.3	435.3	*427.6*
152.5°	411.3	409.3	411.6	390.1	394.4	390.1	411.6	409.3	411.3	419.3	*411.9*
155°	397.3	397.3	397.8	380.4	384.7	380.4	397.8	397.3	397.3	401.6	*398.1*
157.5°	387.8	387.8	388.4	374.9	377.6	374.9	388.4	387.8	387.8	390.1	*388.6*
160°	378.4	380.4	380.9	369.6	372.1	369.6	380.9	380.4	378.4	382.7	*381.2*
162.5°	374.6	374.9	377.2	364.1	366.7	364.1	377.2	374.9	374.6	374.9	*373.6*
165°	369.2	371.2	371.8	362.4	363.0	362.4	371.8	371.2	369.2	371.2	*368.1*
167.5°	367.6	369.6	370.2	361.0	363.3	361.0	370.2	369.6	367.6	365.6	*366.4*
170°	363.6	365.9	368.4	361.2	361.5	361.2	368.4	365.9	363.6	363.8	*362.7*
172.5°	364.1	366.4	369.0	361.8	362.1	361.8	369.0	366.4	364.1	364.4	*361.2*
175°	364.7	365.0	365.8	360.4	361.1	360.4	365.8	365.0	364.7	363.0	*361.8*
177.5°	363.0	365.2	366.1	362.7	363.3	362.7	366.1	365.2	363.0	363.3	*364.1*
180°	364.1	364.1	364.1	364.1	364.1	364.1	364.1	364.1	364.1	364.1	*364.1*

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	13699.0	13699.0	13699.0	13699.0	13699.0	13699.0
2.5°	*13698.8*	*13704.0*	*13698.8*	*13704.8*	*13701.1*	*13692.4*
5°	13661.8	13659.5	13661.8	13667.8	13652.3	13643.7
7.5°	13518.3	13509.1	13518.3	13580.0	13569.1	13558.5
10°	13218.8	13155.6	13218.8	13380.0	13435.1	13417.9
12.5°	12696.5	12500.9	12696.5	13036.9	13224.5	13209.3
15°	11934.2	11598.2	11934.2	12597.3	12941.9	12960.5
17.5°	10947.8	10563.3	10947.8	11927.9	12582.1	12573.1
20°	9875.0	9313.7	9875.0	11167.6	12109.5	12159.4
22.5°	8703.5	8099.2	8703.5	10241.6	11549.7	11633.0
25°	7534.8	6904.8	7534.8	9213.0	10865.4	10960.1
27.5°	6442.6	5842.8	6442.6	8229.7	10101.3	10204.6
30°	5431.1	4852.7	5431.1	7216.1	9261.5	9273.3
32.5°	4585.3	4012.0	4585.3	6205.8	8366.3	8311.6
35°	3762.4	3286.9	3762.4	5278.8	7342.9	7272.0
37.5°	3142.1	2761.0	3142.1	4463.4	6303.7	6170.0
40°	2620.8	2315.4	2620.8	3685.2	5278.8	5061.0
42.5°	2190.9	1962.6	2190.9	3037.4	4263.1	4108.7
45°	1868.2	1696.6	1868.2	2513.7	3442.7	3299.6
47.5°	1630.3	1490.9	1630.3	2099.4	2739.2	2693.9
50°	1418.6	1322.7	1418.6	1758.5	2227.6	2199.9
52.5°	1247.8	1178.4	1247.8	1498.6	1829.7	1825.4
55°	1105.8	1049.2	1105.8	1280.2	1511.8	1510.6
57.5°	982.2	945.7	982.2	1108.6	1267.0	1265.1
60°	872.0	859.3	872.0	960.9	1068.2	1070.8
62.5°	787.6	768.9	787.6	844.7	914.2	911.6
65°	703.8	699.5	703.8	742.8	787.6	781.3
67.5°	628.1	624.4	628.1	651.0	679.5	674.3
70°	555.8	558.7	555.8	569.5	584.8	583.9
72.5°	485.7	486.3	485.7	490.1	506.1	495.2
75°	418.3	418.3	418.3	412.9	420.1	414.3
77.5°	344.9	353.5	344.9	341.2	339.4	330.9
80°	271.1	279.5	271.1	263.4	259.1	253.6
82.5°	196.5	210.1	196.5	187.4	181.6	178.5
85°	121.9	130.3	121.9	109.0	106.2	106.2
87.5°	45.9	50.2	45.9	36.4	35.0	33.8
90°	40.0	26.3	40.0	76.1	44.0	26.0
92.5°	54.1	36.3	54.1	108.1	60.0	34.0
95°	60.0	44.3	60.0	138.2	74.1	50.1
97.5°	64.1	54.4	64.1	156.2	92.1	78.0
100°	74.1	62.6	74.1	286.3	104.2	104.2
102.5°	150.1	76.7	150.1	664.7	204.2	158.1
105°	392.4	142.7	392.4	1171.2	468.5	288.3
107.5°	776.8	336.9	776.8	1509.5	874.9	546.6
110°	1065.1	685.3	1065.1	1647.7	1223.3	874.9

TEST NUMBER:
CATALOG NUMBER: EHBR1-18-UNV-TA-L950-UPL40

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1181.3	949.6	1181.3	1609.7	1363.4	1139.2
115°	1177.2	1053.6	1177.2	1437.5	1343.4	1237.3
117.5°	1105.2	1059.7	1105.2	1241.3	1229.3	1195.2
120°	999.4	999.6	999.4	1045.1	1065.1	1079.2
122.5°	891.2	917.8	891.2	882.9	902.9	933.0
125°	799.1	825.7	799.1	769.1	760.8	790.9
127.5°	721.3	743.6	721.3	687.0	656.7	670.7
130°	657.3	671.6	657.3	629.2	588.9	584.9
132.5°	609.8	617.8	609.8	585.4	547.4	531.1
135°	571.7	574.0	571.7	555.7	521.7	497.6
137.5°	540.0	536.3	540.0	527.9	501.9	477.9
140°	516.6	512.6	516.6	502.3	490.3	466.2
142.5°	492.8	489.1	492.8	482.9	476.8	454.5
145°	475.3	469.4	475.3	461.1	465.1	448.8
147.5°	457.6	451.9	457.6	445.3	451.1	439.1
150°	442.2	440.5	442.2	427.6	435.3	427.3
152.5°	428.1	426.7	428.1	411.9	419.3	411.3
155°	414.7	414.9	414.7	398.1	401.6	397.3
157.5°	403.2	403.6	403.2	388.6	390.1	387.8
160°	393.9	394.1	393.9	381.2	382.7	378.4
162.5°	386.4	386.7	386.4	373.6	374.9	374.6
165°	376.7	379.0	376.7	368.1	371.2	369.2
167.5°	372.9	375.3	372.9	366.4	365.6	367.6
170°	369.2	371.6	369.2	362.7	363.8	363.6
172.5°	365.8	370.1	365.8	361.2	364.4	364.1
175°	364.4	369.0	364.4	361.8	363.0	364.7
177.5°	366.7	373.3	366.7	364.1	363.3	363.0
180°	364.1	364.1	364.1	364.1	364.1	364.1

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

Scaled Data Report

TEST NUMBER: CATALOG
CATALOG NUMBER: EHBR1-18-UNV-TA-L950-UPL40

CIE UGR TABLE:

Reflectances:											
	Ceiling	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
	Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
	Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	16.36	17.37	17.00	18.00	18.73	14.62	15.64	15.26	16.27	16.99
	3H	17.51	18.41	18.16	19.05	19.82	16.21	17.12	16.87	17.76	18.52
	4H	17.95	18.80	18.63	19.46	20.23	16.86	17.71	17.53	18.36	19.14
	6H	18.27	19.04	18.95	19.71	20.50	17.37	18.14	18.05	18.81	19.60
	8H	18.35	19.08	19.05	19.77	20.56	17.53	18.27	18.23	18.95	19.75
	12H	18.38	19.08	19.08	19.76	20.58	17.62	18.32	18.32	19.00	19.82
4H	2H	16.60	17.44	17.27	18.10	18.88	15.16	16.00	15.83	16.66	17.44
	3H	17.98	18.68	18.67	19.38	20.17	16.95	17.65	17.64	18.35	19.14
	4H	18.56	19.19	19.27	19.90	20.72	17.71	18.34	18.42	19.04	19.87
	6H	19.00	19.54	19.72	20.27	21.10	18.34	18.88	19.06	19.61	20.44
	8H	19.12	19.63	19.85	20.35	21.19	18.55	19.05	19.27	19.77	20.62
	12H	19.18	19.62	19.92	20.37	21.22	18.66	19.11	19.41	19.86	20.71
8H	4H	18.72	19.22	19.45	19.95	20.79	17.95	18.46	18.68	19.18	20.02
	6H	19.26	19.67	20.02	20.44	21.29	18.69	19.10	19.44	19.87	20.72
	8H	19.44	19.81	20.21	20.58	21.44	18.97	19.34	19.74	20.11	20.97
	12H	19.55	19.87	20.32	20.63	21.55	19.15	19.47	19.92	20.23	21.16
12H	4H	18.71	19.16	19.45	19.90	20.75	17.95	18.40	18.69	19.14	19.99
	6H	19.28	19.65	20.05	20.42	21.28	18.72	19.09	19.49	19.86	20.72
	8H	19.49	19.81	20.26	20.57	21.50	19.03	19.36	19.80	20.11	21.04

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

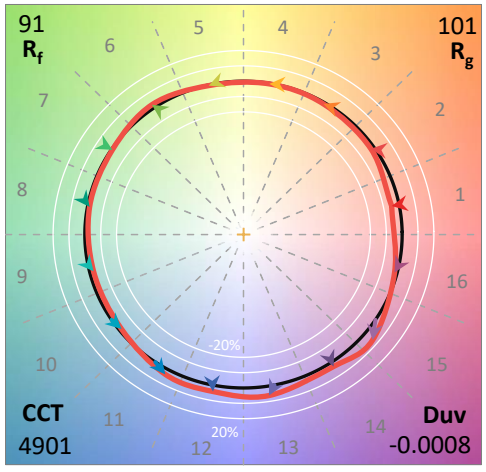
Test Information

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

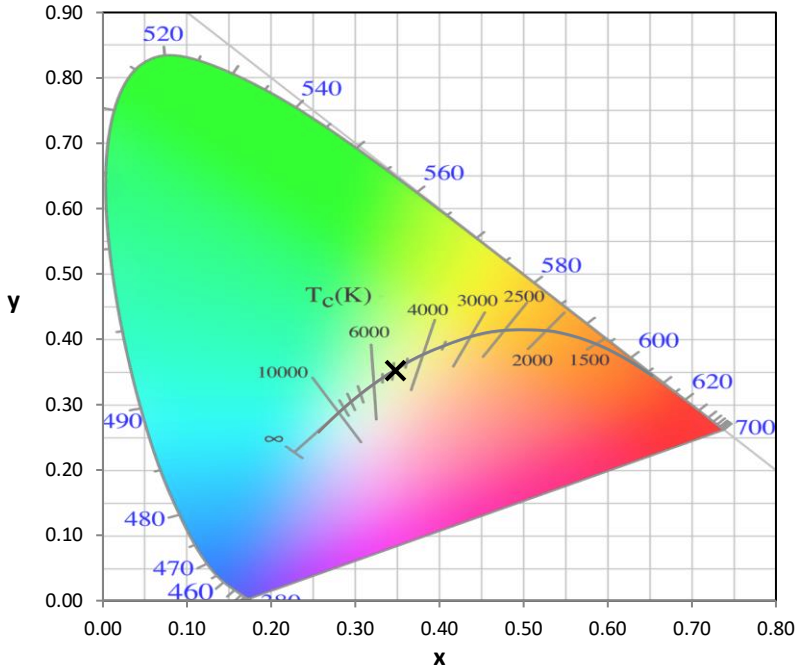
Stabilization Time:	35M
Operation Time:	1H 35M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-8

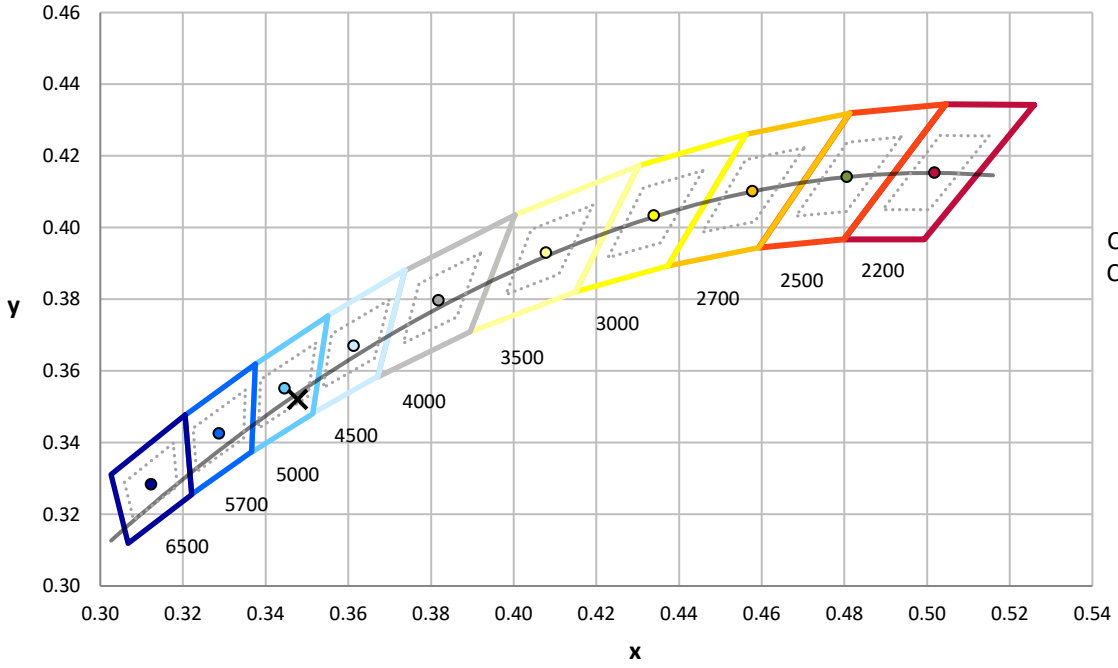
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

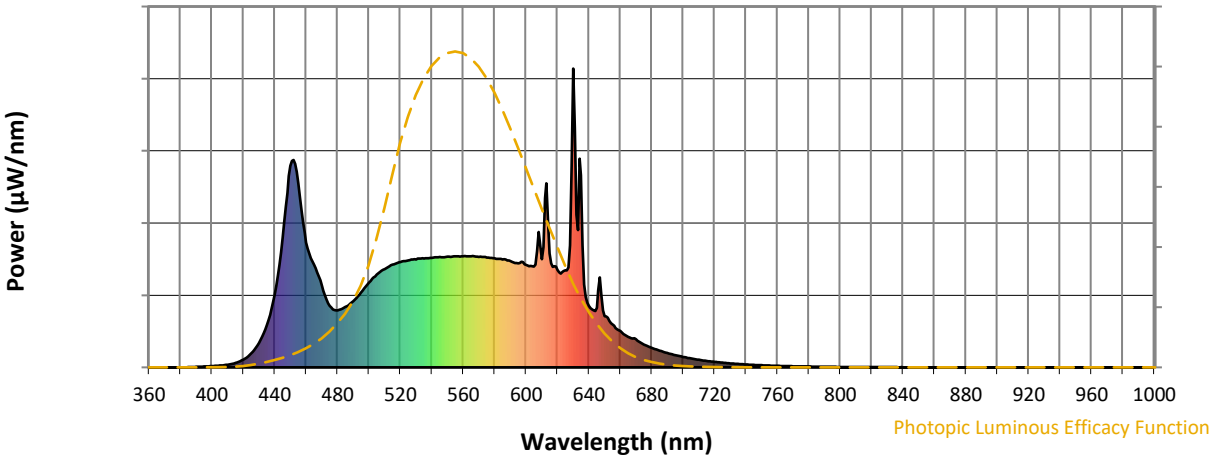


CCT = 4901K
CIE x = 0.3477
CIE y = 0.3520
Duv = -0.0008

Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-8

Photopic Flux vs. Wavelength

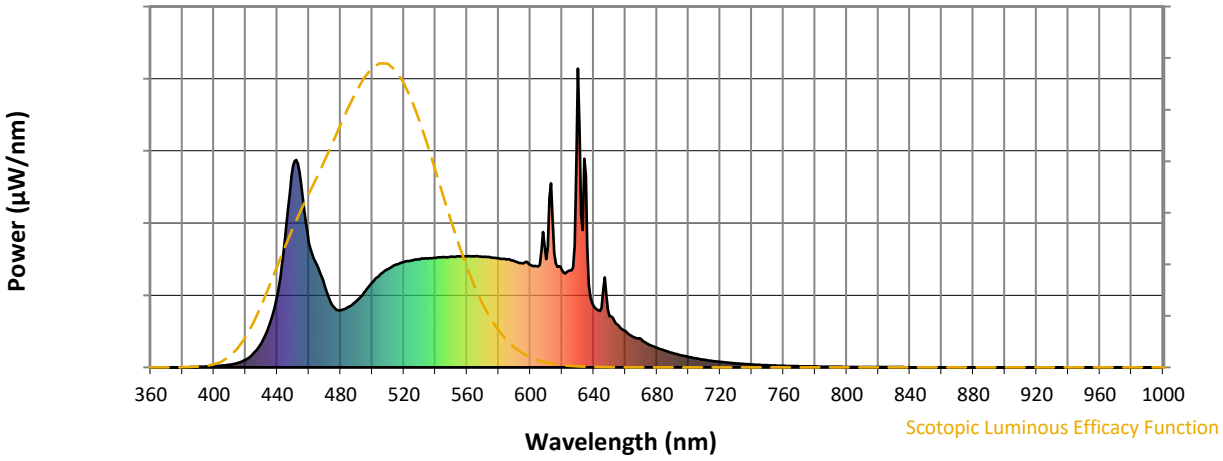


Photopic Lumens: NR

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

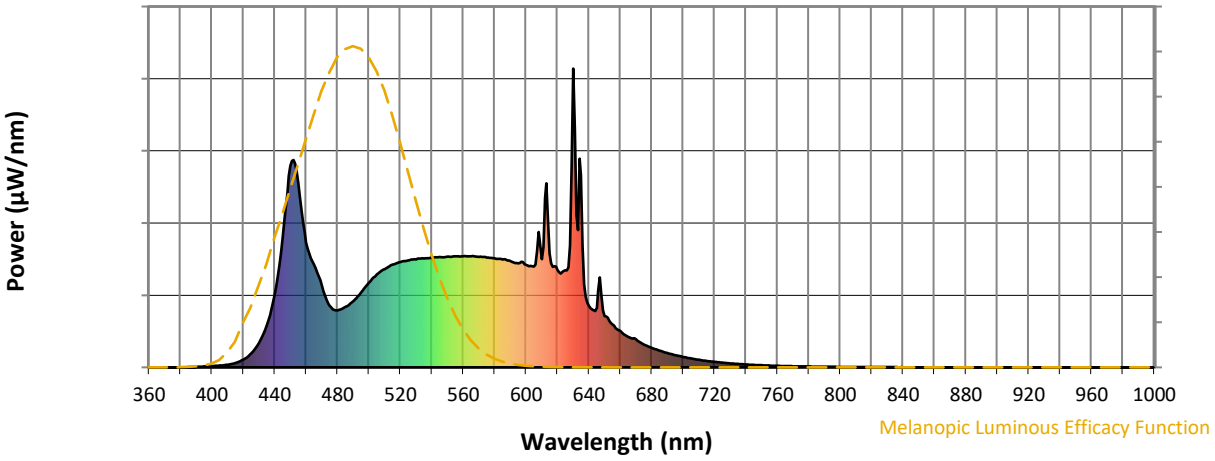


Scotopic Lumens: NR **S/P: 2.04**

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			

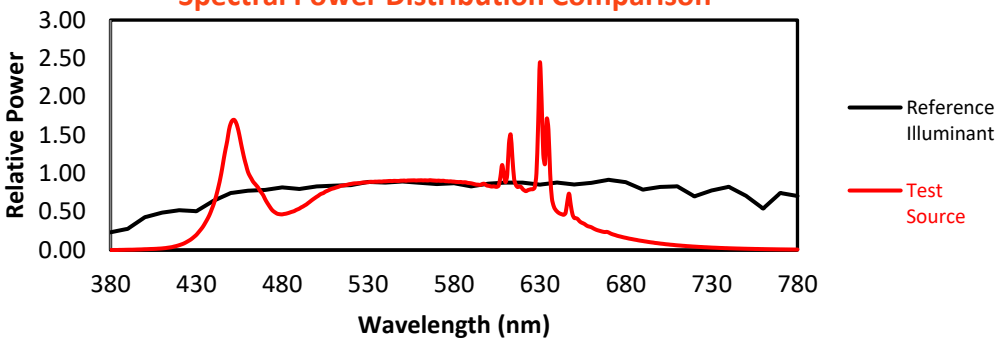
REPORT NUMBER: SP1-2506-472-8

TM-30-18

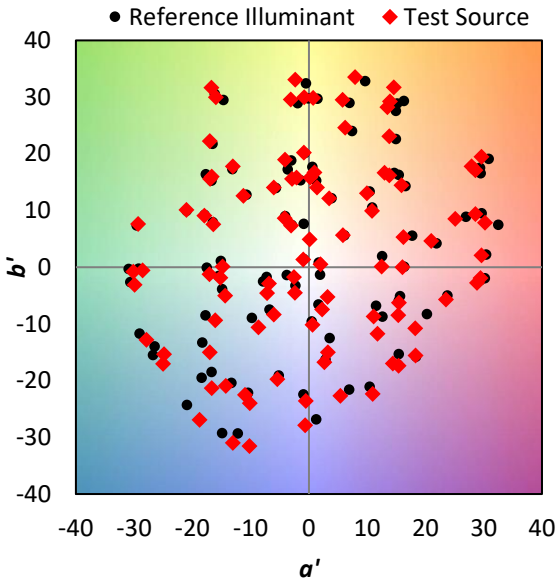
Summary

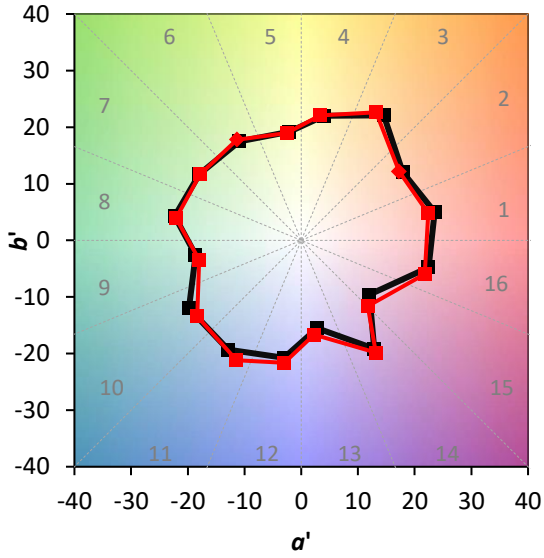
R_f = 90.7
R_g = 100.5
CIE R_a = 94.3
R_9 = 72.3

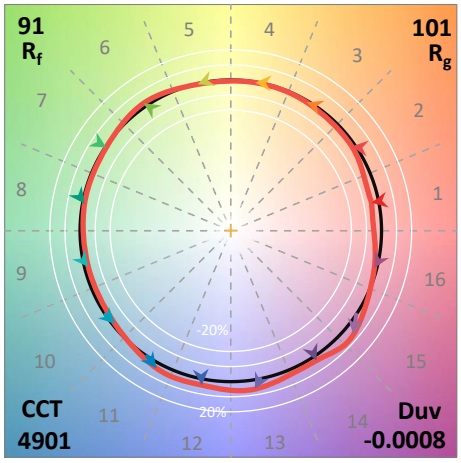
Spectral Power Distribution Comparison

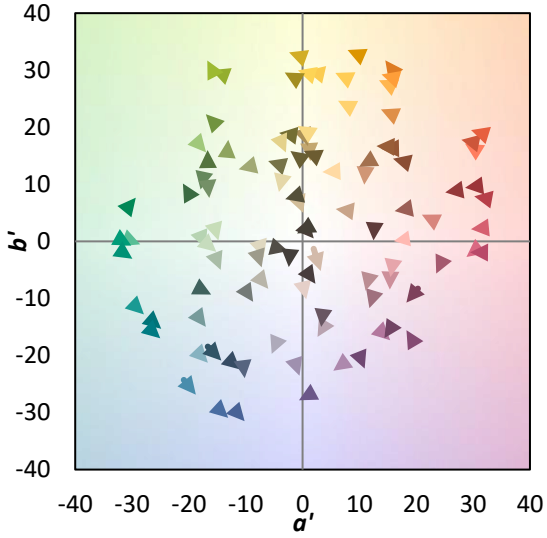


Color Vector Graphics







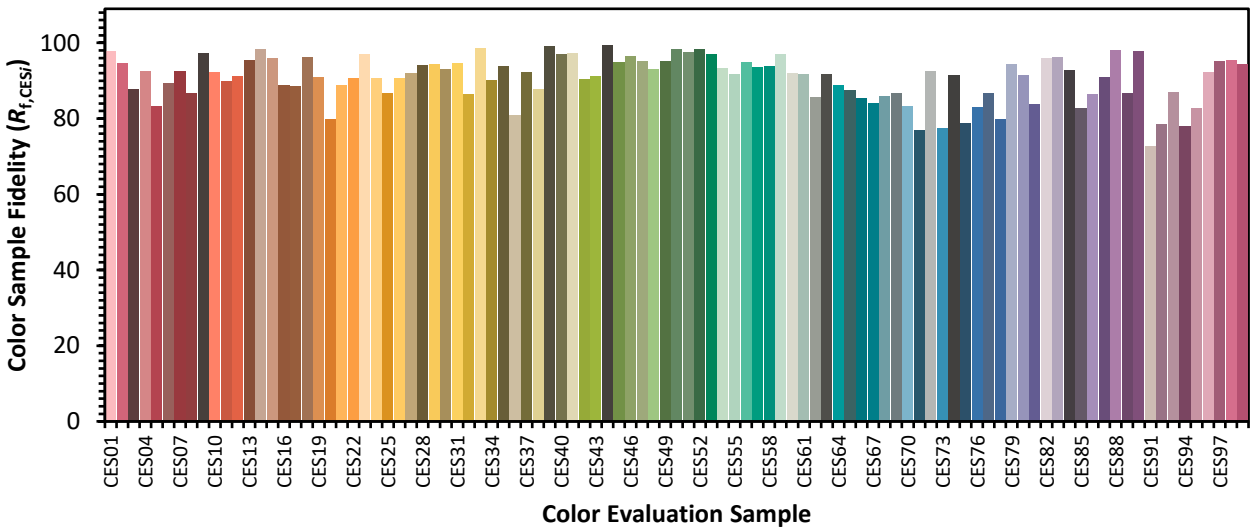


REPORT NUMBER: SP1-2506-472-8

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	



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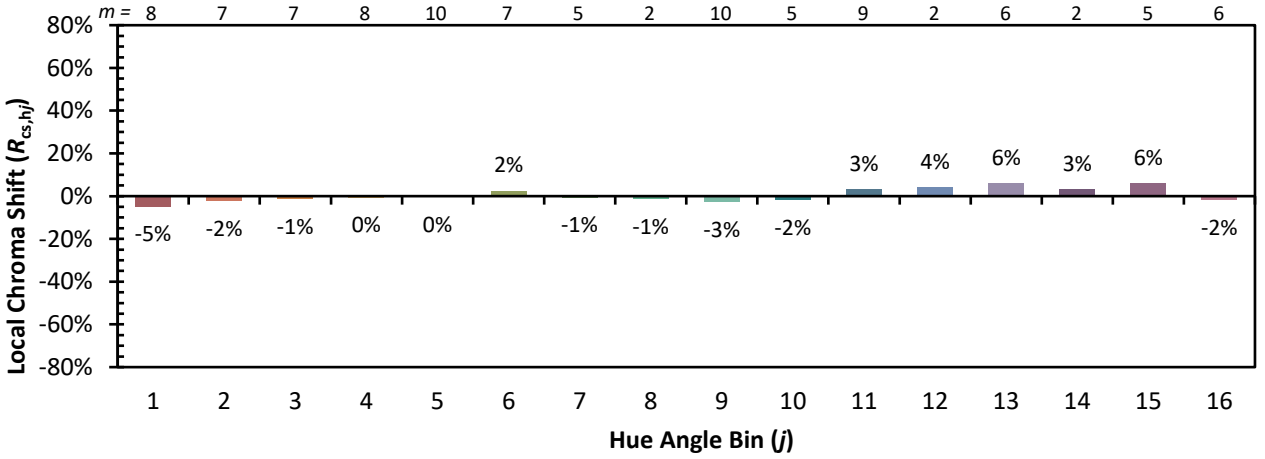
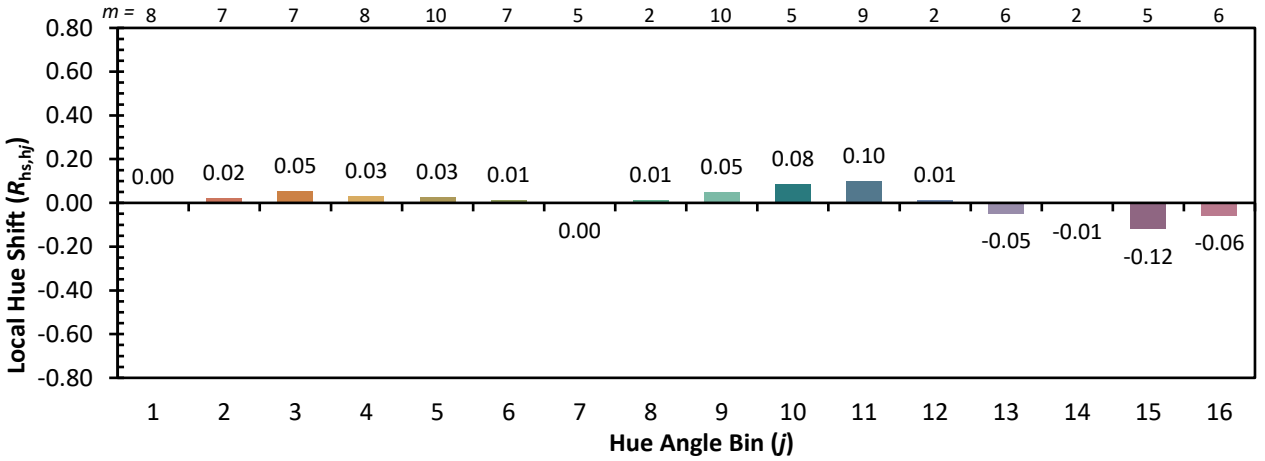
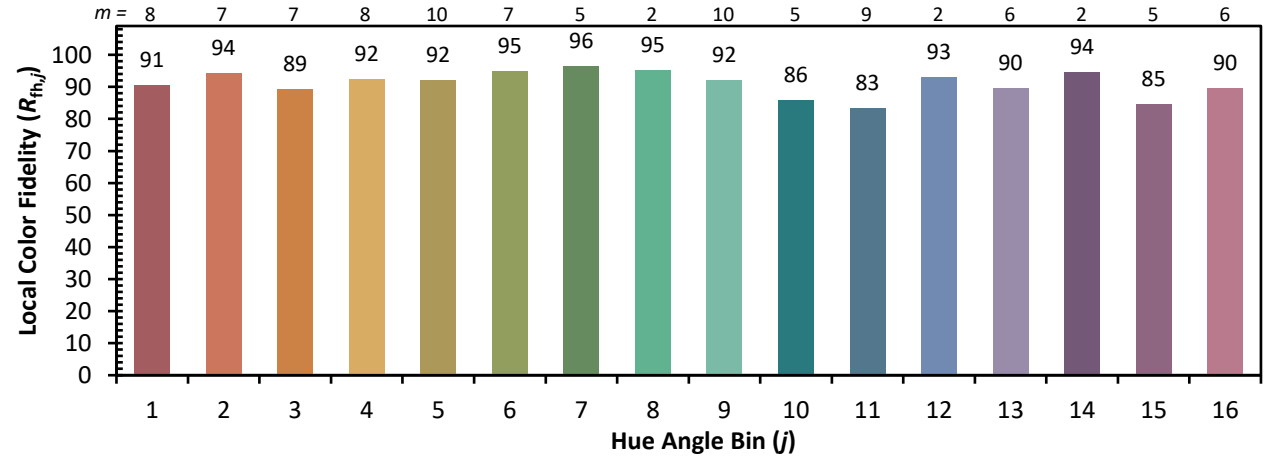
Color Rendition by Hue-Angle Bin







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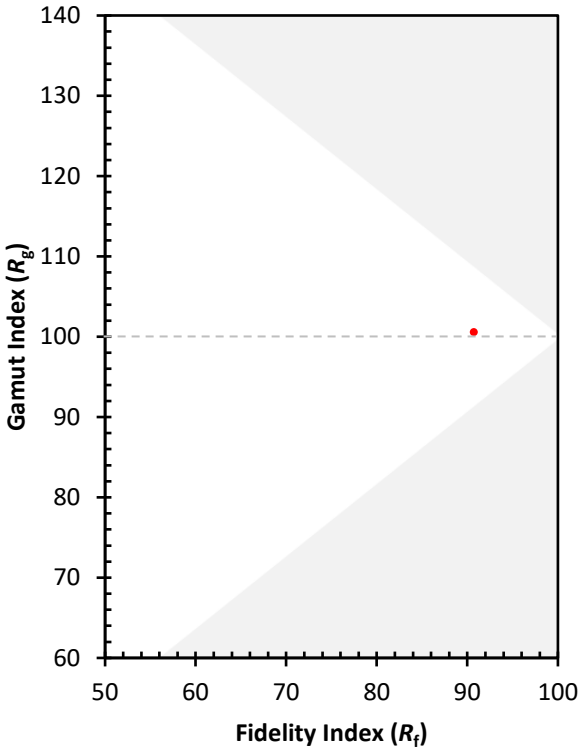
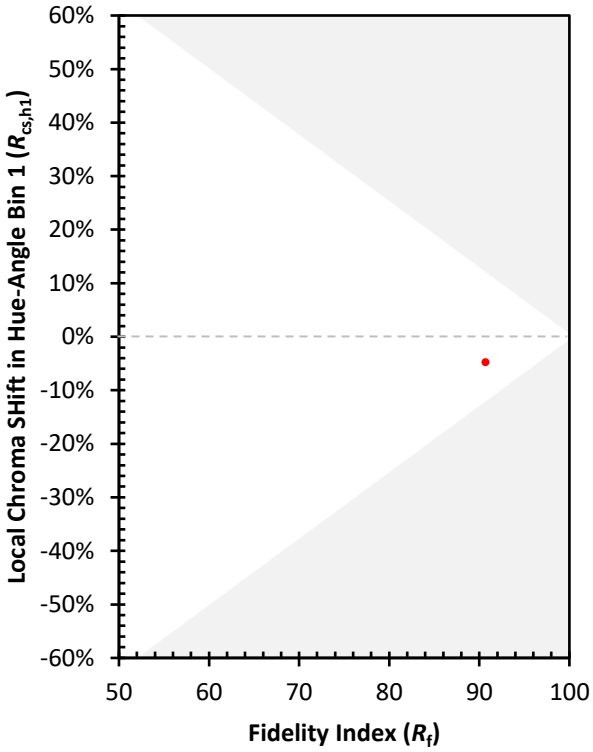
Measure Comparisons





(END OF REPORT)