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: P1432465

Luminaire Tested: EHBR1-48-UNV-TASM-L830-UPL40

Issue Date: 3/20/2026

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

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1432465
	REPORT IS A COMBINATION OF REPORTS P1431842 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-48-UNV-TASM-L830-UPL40
Description:	Elevate Round Highbay at, 48000 lumens, 3000K 80CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	48102.0 lumens
Efficiency:	N/A
Efficacy:	166.3 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):	289.2
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

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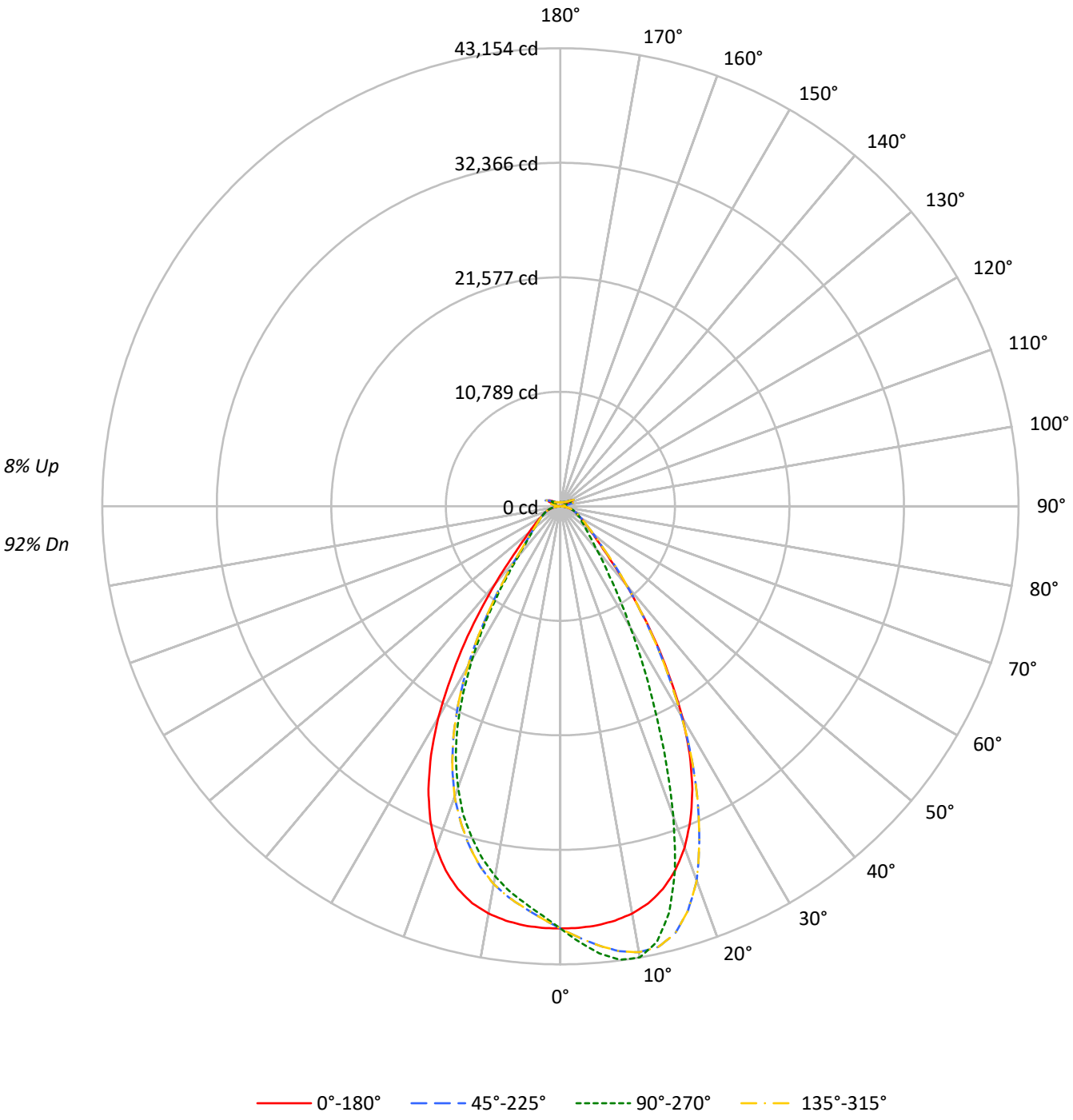
Luminous Intensity Polar Plot



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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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	92
1	110	107	103	101	107	104	101	98	98	96	94	93	91	90	88	87	86	83
2	103	97	92	88	100	95	90	86	90	86	83	86	83	80	82	80	77	75
3	97	89	83	78	94	87	81	77	83	78	75	79	76	72	76	73	70	68
4	91	82	75	70	88	80	74	69	77	72	68	74	69	66	71	67	64	62
5	85	75	69	64	83	74	68	63	71	66	62	69	64	60	66	62	59	57
6	80	70	63	58	78	69	62	58	66	61	57	64	59	56	62	58	55	53
7	76	65	58	54	74	64	58	53	62	56	52	60	55	51	58	54	51	49
8	72	61	54	50	70	60	54	49	58	53	49	57	52	48	55	50	47	46
9	68	57	50	46	66	56	50	46	55	49	45	53	48	45	52	47	44	43
10	64	54	47	43	63	53	47	43	52	46	42	50	45	42	49	45	41	40

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	186761	186761	186761	186761
5°	185625	198027	185625	175992
10°	183343	203111	183343	166562
15°	177930	188754	177930	153858
20°	166409	151354	166409	137044
25°	147285	104867	147285	114849
30°	119590	68223	119590	85930
35°	85773	44183	85773	57206
40°	55456	30454	55456	36077
45°	35186	23590	35186	25705
50°	26130	20045	26130	21411
55°	21333	18260	21333	18900
60°	18473	17394	18473	17500
65°	16840	16776	16840	16704
70°	15961	16437	15961	16224
75°	14927	15901	14927	15425
80°	13112	15011	13112	14034
85°	8484	10719	8484	10221

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 49470 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3781.5	7.9
10°-20°	10287.7	21.4
20°-30°	12065.4	25.1
30°-40°	8390.7	17.4
40°-50°	4169.8	8.7
50°-60°	2494.0	5.2
60°-70°	1755.4	3.6
70°-80°	1130.8	2.4
80°-90°	365.6	0.8
90°-100°	97.7	0.2
100°-110°	635.9	1.3
110°-120°	1174.3	2.4
120°-130°	698.3	1.5
130°-140°	422.8	0.9
140°-150°	293.0	0.6
150°-160°	191.7	0.4
160°-170°	110.6	0.2
170°-180°	36.9	0.1
0°-30°	26134.6	54.3
0°-40°	34525.4	71.8
0°-60°	41189.1	85.6
0°-90°	44440.9	92.4
90°-120°	1907.9	4.0
90°-150°	3321.9	6.9
90°-180°	3661.0	7.6
0°-180°	48102.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	39770	39770	39770	39770	39770	
5°	39634	42282	39634	37577	39634	3761
15°	37329	39600	37329	32279	37329	10432
25°	29413	20942	29413	22935	29413	13316
35°	15742	8109	15742	10499	15742	9828
45°	5693	3817	5693	4159	5693	4659
55°	2883	2468	2883	2554	2883	2636
65°	1758	1751	1758	1744	1758	1765
75°	1052	1120	1052	1087	1052	1104
85°	292	368	292	351	292	324
90°	27	32	27	27	27	26
95°	52	50	52	45	52	55
105°	292	150	292	222	292	394
115°	1250	1068	1250	1015	1250	1139
125°	800	839	800	733	800	737
135°	507	586	507	536	507	402
145°	459	480	459	446	459	288
155°	410	427	410	398	410	191
165°	388	400	388	380	388	110
175°	387	395	387	381	387	37
180°	387	387	387	387	387	

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TEST NUMBER: P1432465
CATALOG NUMBER: EHBR1-48-UNV-TASM-L830-UPL40

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	39769.5	39769.5	39769.5	39769.5	*39769.5*	39769.5	39769.5	39769.5	39769.5	39769.5	39769.5
2.5°	39746.4	40260.2	40676.3	40950.8	*41086.5*	40950.8	40676.3	40260.2	39746.4	39235.6	38884.3
5°	39633.8	40662.9	41534.7	42105.2	*42281.9*	42105.2	41534.7	40662.9	39633.8	38661.4	38016.3
7.5°	39364.5	40967.9	42263.3	42929.2	*43091.8*	42929.2	42263.3	40967.9	39364.5	37988.0	37172.8
10°	*38953.7*	*41160.3*	*42657.0*	*43134.3*	*43153.7*	*43134.3*	*42657.0*	*41160.3*	*38953.7*	*37099.0*	*36137.8*
12.5°	38298.2	41091.7	42525.0	42368.4	*42012.7*	42368.4	42525.0	41091.7	38298.2	36013.3	34800.7
15°	37328.7	40685.3	41689.1	40414.6	*39599.5*	40414.6	41689.1	40685.3	37328.7	34547.1	33140.7
17.5°	35962.5	39924.6	39944.0	37422.6	*35884.9*	37422.6	39944.0	39924.6	35962.5	32754.4	31205.4
20°	34201.9	38704.6	37541.2	32929.6	*31107.7*	32929.6	37541.2	38704.6	34201.9	30635.0	29115.2
22.5°	31994.4	37059.5	34195.1	28409.6	*25924.2*	28409.6	34195.1	37059.5	31994.4	28170.3	26588.6
25°	29412.7	35043.8	30595.4	23484.8	*20941.8*	23484.8	30595.4	35043.8	29412.7	25233.5	23803.3
27.5°	26376.0	32488.9	26762.3	19190.8	*16844.7*	19190.8	26762.3	32488.9	26376.0	22201.4	20740.5
30°	23003.0	29213.6	22773.4	15283.2	*13122.7*	15283.2	22773.4	29213.6	23003.0	18794.9	17486.9
32.5°	19226.6	26003.1	18942.5	12245.8	*10415.7*	12245.8	18942.5	26003.1	19226.6	15544.2	14177.3
35°	15742.5	21986.6	15488.3	9622.2	*8109.2*	9622.2	15488.3	21986.6	15742.5	12475.5	11133.2
37.5°	12354.6	18191.5	12346.5	7748.3	*6577.4*	7748.3	12346.5	18191.5	12354.6	9699.1	8609.6
40°	9611.9	14224.2	9673.8	6185.2	*5278.4*	6185.2	9673.8	14224.2	9611.9	7379.9	6682.6
42.5°	7282.9	10876.6	7603.5	5076.2	*4483.4*	5076.2	7603.5	10876.6	7282.9	5814.5	5292.5
45°	5692.9	8004.0	5937.6	4282.8	*3816.7*	4282.8	5937.6	8004.0	5692.9	4682.5	4332.0
47.5°	4636.2	6185.9	4812.2	3673.5	*3346.9*	3673.5	4812.2	6185.9	4636.2	3960.6	3698.1
50°	3894.3	4746.6	3995.6	3206.6	*2987.4*	3206.6	3995.6	4746.6	3894.3	3391.6	3216.4
52.5°	3345.4	3871.1	3402.8	2857.7	*2710.0*	2857.7	3402.8	3871.1	3345.4	2967.3	2858.5
55°	2883.0	3254.4	2959.1	2569.9	*2467.7*	2569.9	2959.1	3254.4	2883.0	2640.7	2560.1
57.5°	2531.8	2760.8	2569.9	2324.4	*2256.6*	2324.4	2569.9	2760.8	2531.8	2349.8	2306.6
60°	2220.8	2390.9	2267.8	2110.4	*2091.0*	2110.4	2267.8	2390.9	2220.8	2114.2	2085.9
62.5°	1981.4	2088.9	2005.3	1918.0	*1900.9*	1918.0	2005.3	2088.9	1981.4	1899.4	1904.6
65°	1757.7	1857.7	1792.0	1745.0	*1751.0*	1745.0	1792.0	1857.7	1757.7	1719.7	1727.9
67.5°	1584.7	1636.9	1608.5	1581.7	*1588.5*	1581.7	1608.5	1636.9	1584.7	1547.4	1560.1
70°	1400.5	1456.4	1427.4	1431.1	*1442.3*	1431.1	1427.4	1456.4	1400.5	1389.3	1399.0
72.5°	1224.5	1267.7	1258.1	1267.0	*1279.0*	1267.0	1258.1	1267.7	1224.5	1223.0	1223.7
75°	1051.5	1084.3	1088.7	1101.5	*1120.1*	1101.5	1088.7	1084.3	1051.5	1040.3	1053.7
77.5°	862.8	900.1	914.3	931.5	*959.0*	931.5	914.3	900.1	862.8	870.3	876.9
80°	689.8	706.9	738.3	751.0	*789.7*	751.0	738.3	706.9	689.8	677.1	686.8
82.5°	504.9	520.5	547.4	571.2	*593.6*	571.2	547.4	520.5	504.9	498.9	499.6
85°	291.6	315.5	333.4	361.7	*368.4*	361.7	333.4	315.5	291.6	298.3	291.6
87.5°	102.2	109.6	125.2	136.5	*137.2*	136.5	125.2	109.6	102.2	104.4	94.7
90°	27.0	45.9	79.0	44.9	*32.2*	44.9	79.0	45.9	27.0	47.2	73.4
92.5°	35.0	62.0	111.3	59.0	*42.3*	59.0	111.3	62.0	35.0	61.3	117.8
95°	52.0	76.2	141.5	65.0	*50.4*	65.0	141.5	76.2	52.0	81.5	164.2
97.5°	80.2	94.3	159.7	69.1	*60.5*	69.1	159.7	94.3	80.2	99.7	188.5
100°	106.5	106.5	290.8	79.2	*68.6*	79.2	290.8	106.5	106.5	122.6	293.5
102.5°	160.9	208.1	673.1	156.6	*82.7*	156.6	673.1	208.1	160.9	229.6	622.4
105°	292.2	474.5	1183.8	400.8	*150.1*	400.8	1183.8	474.5	292.2	479.9	1108.9
107.5°	552.6	884.3	1524.9	788.4	*345.8*	788.4	1524.9	884.3	552.6	849.2	1462.9
110°	883.6	1235.5	1664.2	1079.1	*697.1*	1079.1	1664.2	1235.5	883.6	1166.1	1533.5

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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°	1150.0	1376.8	1625.8	1196.2	*963.5*	1196.2	1625.8	1376.8	1150.0	1287.2	1468.9
115°	1249.7	1356.6	1452.3	1192.1	*1068.4*	1192.1	1452.3	1356.6	1249.7	1257.0	1311.5
117.5°	1207.2	1241.6	1254.4	1119.5	*1074.5*	1119.5	1254.4	1241.6	1207.2	1130.6	1113.7
120°	1090.2	1076.1	1057.4	1012.5	*1014.0*	1012.5	1057.4	1076.1	1090.2	987.3	930.0
122.5°	943.6	913.3	893.9	904.2	*931.2*	904.2	893.9	913.3	943.6	840.7	797.5
125°	800.3	770.0	779.6	811.4	*839.1*	811.4	779.6	770.0	800.3	714.2	703.4
127.5°	680.0	665.8	696.8	732.6	*756.3*	732.6	696.8	665.8	680.0	625.4	636.8
130°	593.9	597.2	638.3	668.8	*683.7*	668.8	638.3	597.2	593.9	567.6	595.2
132.5°	540.1	555.6	594.6	621.1	*629.9*	621.1	594.6	555.6	540.1	532.8	566.3
135°	506.6	529.3	565.1	582.0	*585.5*	582.0	565.1	529.3	506.6	509.4	540.1
137.5°	487.2	509.9	536.8	550.5	*547.1*	550.5	536.8	509.9	487.2	493.9	517.4
140°	475.8	498.5	510.6	526.2	*523.7*	526.2	510.6	498.5	475.8	479.8	498.0
142.5°	464.4	485.1	491.2	502.7	*499.5*	502.7	491.2	485.1	464.4	468.4	480.5
145°	459.1	474.5	469.8	484.6	*480.0*	484.6	469.8	474.5	459.1	460.4	467.1
147.5°	449.1	460.4	454.3	467.1	*462.5*	467.1	454.3	460.4	449.1	449.1	451.7
150°	437.5	445.6	436.9	451.7	*451.2*	451.7	436.9	445.6	437.5	435.6	438.3
152.5°	422.2	430.2	422.2	439.0	*437.8*	439.0	422.2	430.2	422.2	420.1	422.9
155°	409.5	413.6	409.5	426.4	*427.1*	426.4	409.5	413.6	409.5	408.8	410.3
157.5°	400.9	403.7	401.7	416.6	*417.3*	416.6	401.7	403.7	400.9	400.9	401.7
160°	393.9	397.9	396.6	409.4	*410.2*	409.4	396.6	397.9	393.9	395.1	395.9
162.5°	391.3	391.3	390.8	403.6	*405.1*	403.6	390.8	391.3	391.3	391.3	393.3
165°	387.5	389.5	387.0	396.5	*400.1*	396.5	387.0	389.5	387.5	388.7	388.7
167.5°	387.0	385.0	386.5	394.7	*398.3*	394.7	386.5	385.0	387.0	388.3	388.3
170°	383.7	384.4	384.0	392.2	*395.8*	392.2	384.0	384.4	383.7	385.7	387.0
172.5°	385.9	385.9	384.1	390.3	*395.9*	390.3	384.1	385.9	385.9	387.2	389.2
175°	387.4	386.2	385.6	389.9	*395.4*	389.9	385.6	386.2	387.4	386.7	386.7
177.5°	385.5	387.0	388.4	392.6	*400.2*	392.6	388.4	387.0	385.5	386.7	386.7
180°	387.0	387.0	387.0	387.0	*387.0*	387.0	387.0	387.0	387.0	387.0	387.0

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	39769.5	39769.5	39769.5	39769.5	39769.5	39769.5
2.5°	38614.3	38589.0	38614.3	38884.3	39235.6	39746.4
5°	37717.2	37577.0	37717.2	38016.3	38661.4	39633.8
7.5°	36672.4	36591.2	36672.4	37172.8	37988.0	39364.5
10°	*35572.5*	*35388.3*	*35572.5*	*36137.8*	*37099.0*	*38953.7*
12.5°	34216.8	33972.9	34216.8	34800.7	36013.3	38298.2
15°	32492.6	32278.6	32492.6	33140.7	34547.1	37328.7
17.5°	30642.5	30448.6	30642.5	31205.4	32754.4	35962.5
20°	28318.7	28166.6	28318.7	29115.2	30635.0	34201.9
22.5°	25880.9	25738.4	25880.9	26588.6	28170.3	31994.4
25°	23012.8	22935.2	23012.8	23803.3	25233.5	29412.7
27.5°	19913.5	19781.5	19913.5	20740.5	22201.4	26376.0
30°	16747.0	16528.6	16747.0	17486.9	18794.9	23003.0
32.5°	13650.0	13492.6	13650.0	14177.3	15544.2	19226.6
35°	10656.7	10499.3	10656.7	11133.2	12475.5	15742.5
37.5°	8303.8	8025.6	8303.8	8609.6	9699.1	12354.6
40°	6297.8	6253.0	6297.8	6682.6	7379.9	9611.9
42.5°	5127.0	5005.4	5127.0	5292.5	5814.5	7282.9
45°	4206.8	4159.0	4206.8	4332.0	4682.5	5692.9
47.5°	3617.6	3638.5	3617.6	3698.1	3960.6	4636.2
50°	3178.3	3191.0	3178.3	3216.4	3391.6	3894.3
52.5°	2854.7	2843.5	2854.7	2858.5	2967.3	3345.4
55°	2568.4	2554.1	2568.4	2560.1	2640.7	2883.0
57.5°	2317.8	2328.2	2317.8	2306.6	2349.8	2531.8
60°	2094.0	2103.8	2094.0	2085.9	2114.2	2220.8
62.5°	1905.4	1911.4	1905.4	1904.6	1899.4	1981.4
65°	1736.8	1743.5	1736.8	1727.9	1719.7	1757.7
67.5°	1575.7	1575.7	1575.7	1560.1	1547.4	1584.7
70°	1424.4	1423.6	1424.4	1399.0	1389.3	1400.5
72.5°	1242.4	1260.3	1242.4	1223.7	1223.0	1224.5
75°	1065.7	1086.6	1065.7	1053.7	1040.3	1051.5
77.5°	886.7	918.7	886.7	876.9	870.3	862.8
80°	703.2	738.3	703.2	686.8	677.1	689.8
82.5°	519.8	545.9	519.8	499.6	498.9	504.9
85°	309.5	351.3	309.5	291.6	298.3	291.6
87.5°	99.2	126.7	99.2	94.7	104.4	102.2
90°	43.2	27.0	43.2	73.4	47.2	27.0
92.5°	65.4	39.1	65.4	117.8	61.3	35.0
95°	75.4	45.1	75.4	164.2	81.5	52.0
97.5°	83.5	58.0	83.5	188.5	99.7	80.2
100°	97.6	76.2	97.6	293.5	122.6	106.5
102.5°	206.6	128.7	206.6	622.4	229.6	160.9
105°	434.7	221.5	434.7	1108.9	479.9	292.2
107.5°	777.8	383.0	777.8	1462.9	849.2	552.6
110°	1032.2	714.1	1032.2	1533.5	1166.1	883.6

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

Scaled Data Report

TEST NUMBER: P1432465
CATALOG NUMBER: EHBR1-48-UNV-TASM-L830-UPL40

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1108.9	964.3	1108.9	1468.9	1287.2	1150.0
115°	1066.5	1014.7	1066.5	1311.5	1257.0	1249.7
117.5°	973.6	980.5	973.6	1113.7	1130.6	1207.2
120°	866.6	907.8	866.6	930.0	987.3	1090.2
122.5°	768.5	817.0	768.5	797.5	840.7	943.6
125°	683.7	732.9	683.7	703.4	714.2	800.3
127.5°	625.2	658.2	625.2	636.8	625.4	680.0
130°	579.5	607.8	579.5	595.2	567.6	593.9
132.5°	548.0	566.1	548.0	566.3	532.8	540.1
135°	520.4	535.9	520.4	540.1	509.4	506.6
137.5°	497.0	510.4	497.0	517.4	493.9	487.2
140°	476.3	487.7	476.3	498.0	479.8	475.8
142.5°	454.9	462.9	454.9	480.5	468.4	464.4
145°	440.2	446.2	440.2	467.1	460.4	459.1
147.5°	427.5	431.5	427.5	451.7	449.1	449.1
150°	414.9	418.9	414.9	438.3	435.6	437.5
152.5°	401.5	406.3	401.5	422.9	420.1	422.2
155°	392.9	397.6	392.9	410.3	408.8	409.5
157.5°	388.3	391.8	388.3	401.7	400.9	400.9
160°	384.5	387.2	384.5	395.9	395.1	393.9
162.5°	379.9	382.7	379.9	393.3	391.3	391.3
165°	379.5	380.2	379.5	388.7	388.7	387.5
167.5°	378.1	380.2	378.1	388.3	388.3	387.0
170°	378.9	379.6	378.9	387.0	385.7	383.7
172.5°	380.4	381.1	380.4	389.2	387.2	385.9
175°	379.9	380.7	379.9	386.7	386.7	387.4
177.5°	382.6	383.4	382.6	386.7	386.7	385.5
180°	387.0	387.0	387.0	387.0	387.0	387.0

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

Scaled Data Report

TEST NUMBER: P1432465
CATALOG NUMBER: EHBR1-48-UNV-TASM-L830-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	18.74	19.83	19.23	20.30	20.80	18.05	19.15	18.55	19.62	20.12
	3H	20.28	21.25	20.80	21.74	22.29	19.90	20.87	20.41	21.36	21.91
	4H	20.92	21.83	21.45	22.33	22.90	20.68	21.59	21.22	22.09	22.66
	6H	21.40	22.23	21.94	22.75	23.33	21.32	22.16	21.87	22.68	23.25
	8H	21.55	22.34	22.11	22.87	23.46	21.55	22.33	22.11	22.87	23.46
	12H	21.62	22.37	22.18	22.90	23.51	21.67	22.43	22.24	22.95	23.57
4H	2H	19.15	20.06	19.69	20.56	21.13	18.63	19.53	19.16	20.04	20.61
	3H	20.94	21.69	21.49	22.24	22.83	20.68	21.43	21.23	21.98	22.57
	4H	21.72	22.39	22.28	22.95	23.57	21.59	22.27	22.16	22.82	23.45
	6H	22.33	22.91	22.92	23.50	24.14	22.36	22.94	22.95	23.53	24.17
	8H	22.53	23.07	23.12	23.65	24.30	22.63	23.17	23.23	23.76	24.40
	12H	22.63	23.11	23.25	23.73	24.38	22.80	23.28	23.41	23.89	24.54
8H	4H	21.97	22.51	22.56	23.09	23.74	21.87	22.41	22.47	22.99	23.64
	6H	22.71	23.15	23.34	23.78	24.43	22.77	23.21	23.40	23.84	24.50
	8H	22.98	23.37	23.62	24.01	24.68	23.13	23.52	23.77	24.16	24.83
	12H	23.15	23.50	23.79	24.12	24.86	23.38	23.72	24.01	24.34	25.08
12H	4H	21.98	22.46	22.59	23.07	23.72	21.88	22.36	22.49	22.97	23.62
	6H	22.75	23.15	23.40	23.79	24.45	22.82	23.21	23.46	23.85	24.52
	8H	23.07	23.41	23.71	24.04	24.77	23.22	23.57	23.86	24.19	24.93

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: SP1-2506-472-2

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L830-N

Data in this report applies to families of products including EHBR-60-L830-N

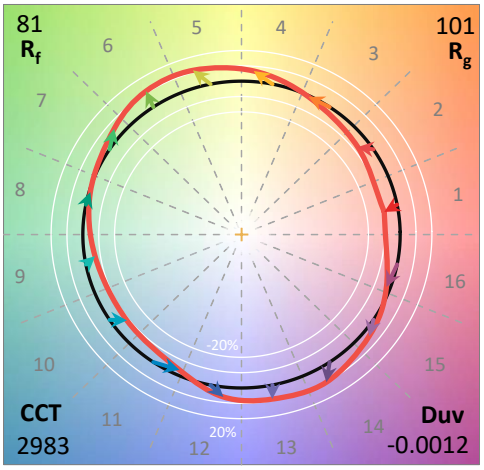
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-2
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-L830-N**
Description:	Elevate Round Highbay at, 60000 lumens, 3000K 80CRI LEDs with N lens

Spectral Parameters

CCT (K):	2983	CRI (Ra):	83.4		
CIE u':	0.2516	R1:	84.0	R9:	29.4
CIE v':	0.5201	R2:	87.5	R10:	68.6
Duv:	-0.0012	R3:	88.9	R11:	82.2
CIE x:	0.4364	R4:	83.8	R12:	61.6
CIE y:	0.4010	R5:	81.9	R13:	83.9
CIE z:	0.1626	R6:	83.1	R14:	92.5
Peak Wavelength (nm):	630	R7:	87.1	R15:	79.8
Dominant Wavelength (nm):	583	R8:	70.9		
Purity:	51.34918				
Rf:	81.2				
Rg:	101.5				



Test Conditions

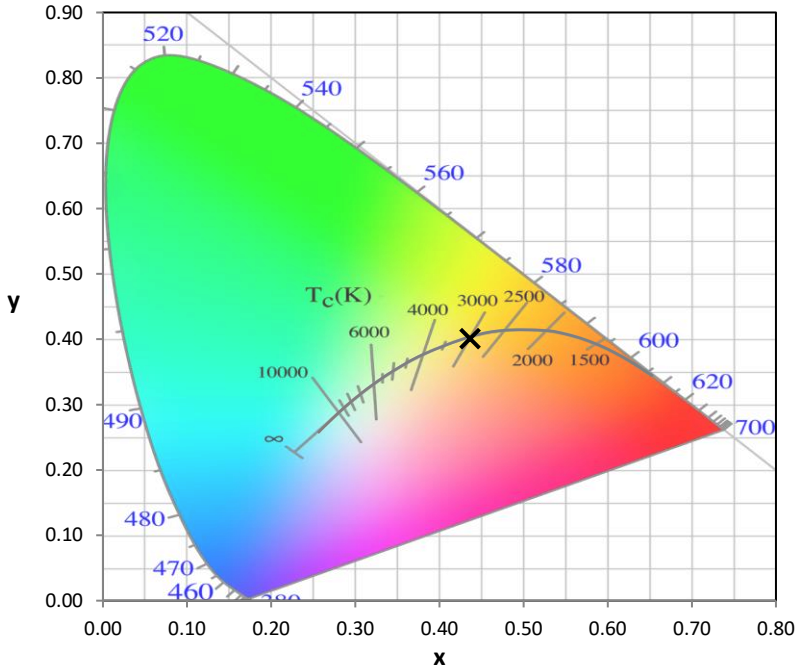
Stabilization Time:	38M
Operation Time:	1H 38M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-2

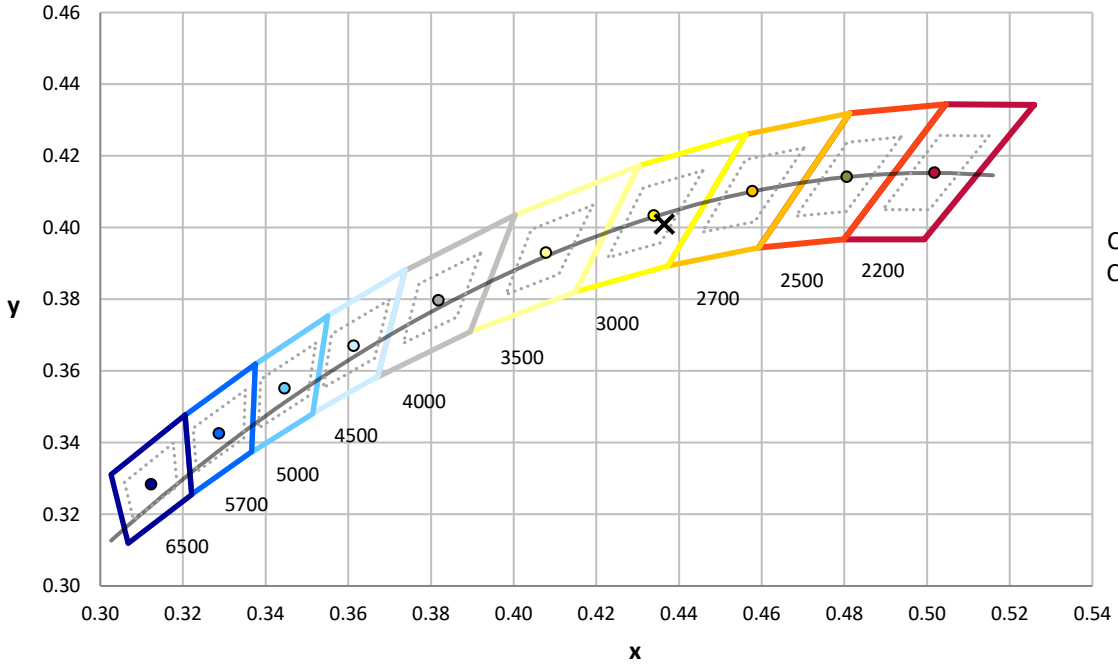
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	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: SP1-2506-472-2

CIE 1931 Chromaticity Diagram



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

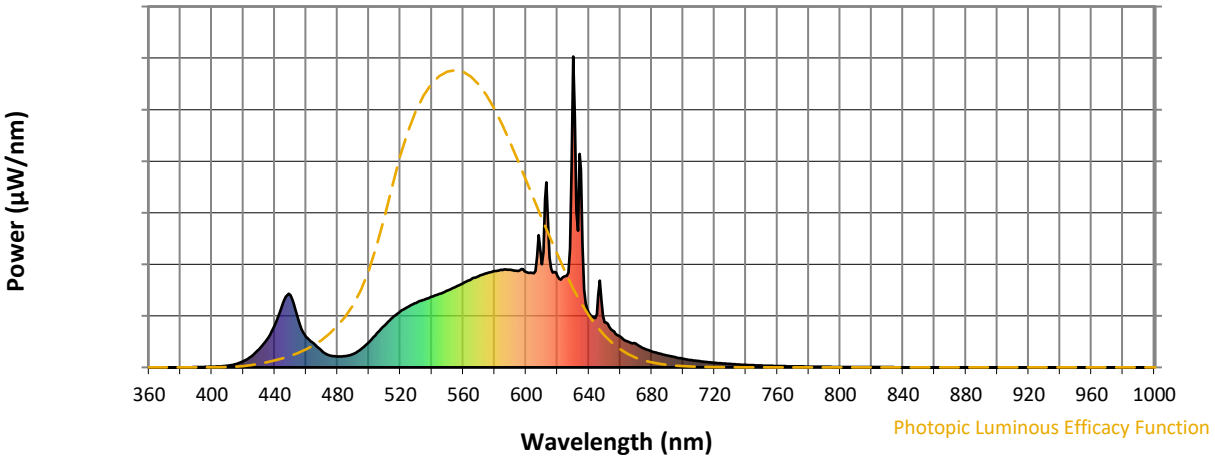


CCT = 2983K
CIE x = 0.4364
CIE y = 0.4010
Duv = -0.0012

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-2

Photopic Flux vs. Wavelength

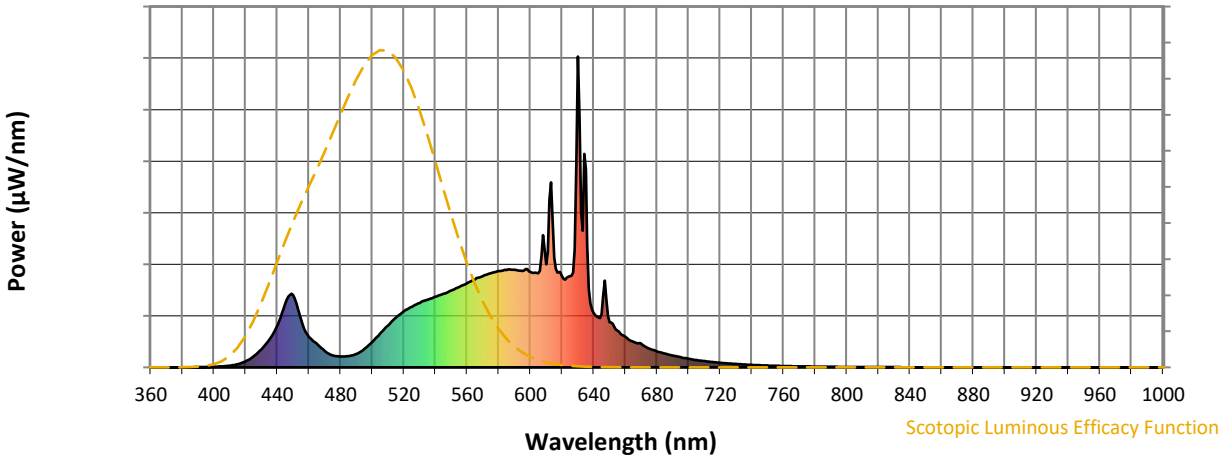


Photopic Lumens: NR

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	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-2

Scotopic Flux vs. Wavelength

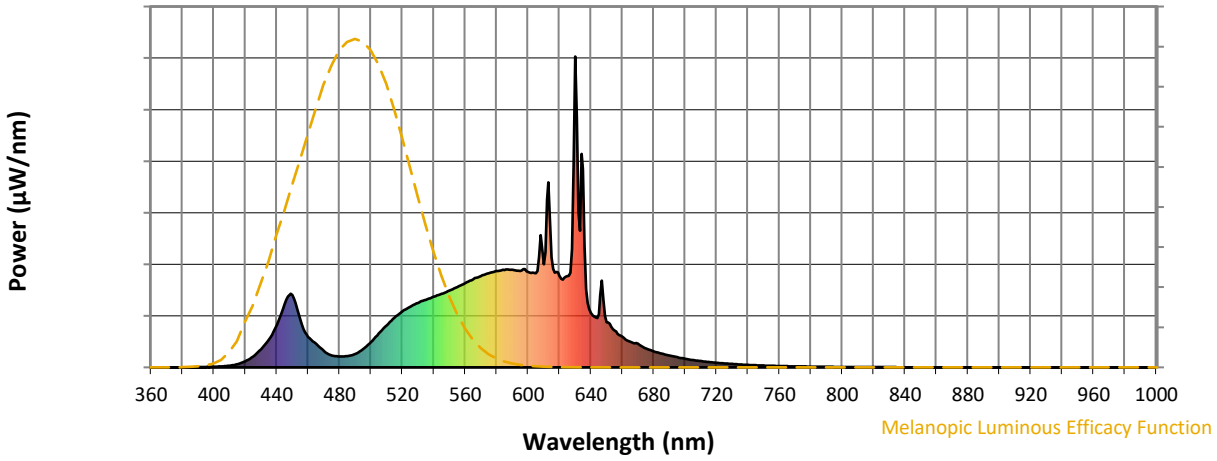


Scotopic Lumens: NR **S/P: 1.27**

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	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-2

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.34**

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	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

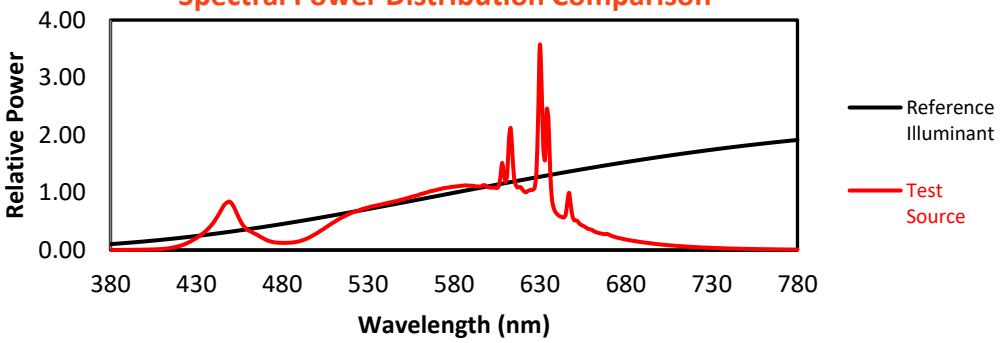
REPORT NUMBER: SP1-2506-472-2

TM-30-18

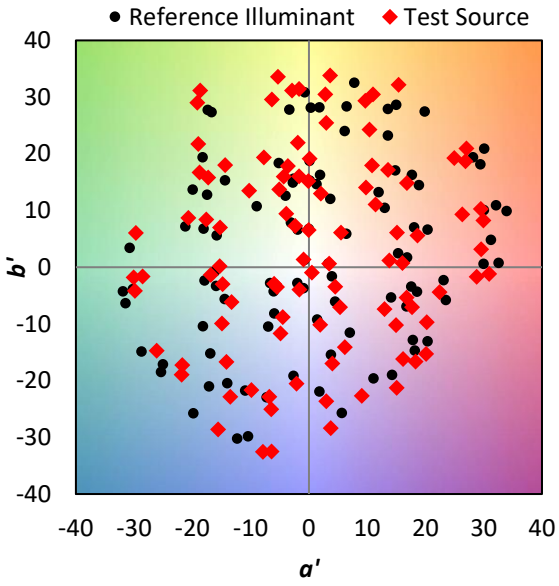
Summary

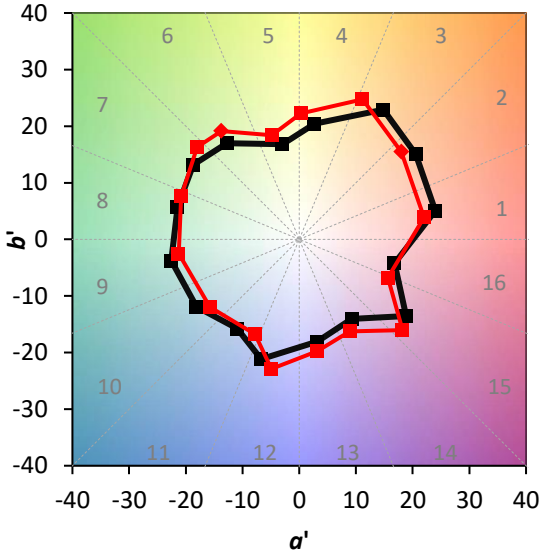
R_f = 81.2
R_g = 101.5
CIE R_a = 83.4
R_9 = 29.4

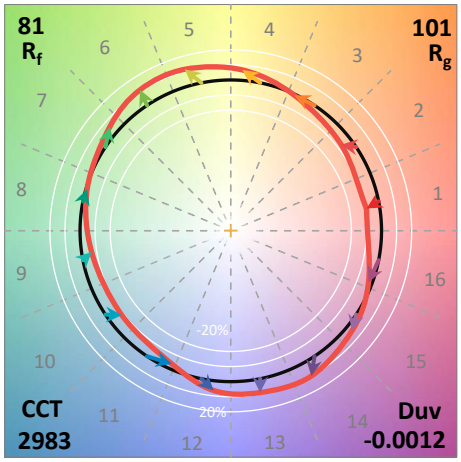
Spectral Power Distribution Comparison

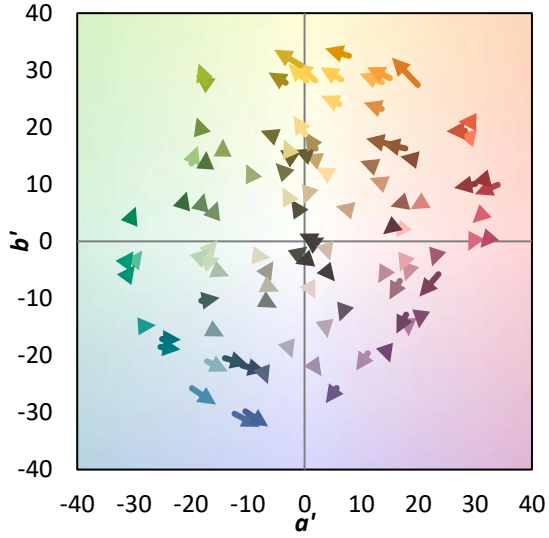


Color Vector Graphics









REPORT NUMBER: SP1-2506-472-2

TM-30-18

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

CES01 = 86	CES26 = 71	CES51 = 89	CES76 = 65
CES02 = 63	CES27 = 89	CES52 = 89	CES77 = 82
CES03 = 31	CES28 = 86	CES53 = 80	CES78 = 67
CES04 = 70	CES29 = 68	CES54 = 92	CES79 = 89
CES05 = 50	CES30 = 77	CES55 = 90	CES80 = 85
CES06 = 51	CES31 = 70	CES56 = 81	CES81 = 75
CES07 = 43	CES32 = 64	CES57 = 79	CES82 = 93
CES08 = 41	CES33 = 74	CES58 = 81	CES83 = 89
CES09 = 29	CES34 = 76	CES59 = 92	CES84 = 91
CES10 = 76	CES35 = 87	CES60 = 96	CES85 = 81
CES11 = 59	CES36 = 99	CES61 = 91	CES86 = 74
CES12 = 65	CES37 = 81	CES62 = 93	CES87 = 83
CES13 = 44	CES38 = 83	CES63 = 79	CES88 = 86
CES14 = 74	CES39 = 94	CES64 = 81	CES89 = 74
CES15 = 72	CES40 = 89	CES65 = 78	CES90 = 85
CES16 = 48	CES41 = 88	CES66 = 76	CES91 = 87
CES17 = 50	CES42 = 80	CES67 = 74	CES92 = 73
CES18 = 57	CES43 = 75	CES68 = 79	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 83	CES94 = 64
CES20 = 67	CES45 = 83	CES70 = 72	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 70	CES96 = 86
CES22 = 79	CES47 = 79	CES72 = 90	CES97 = 85
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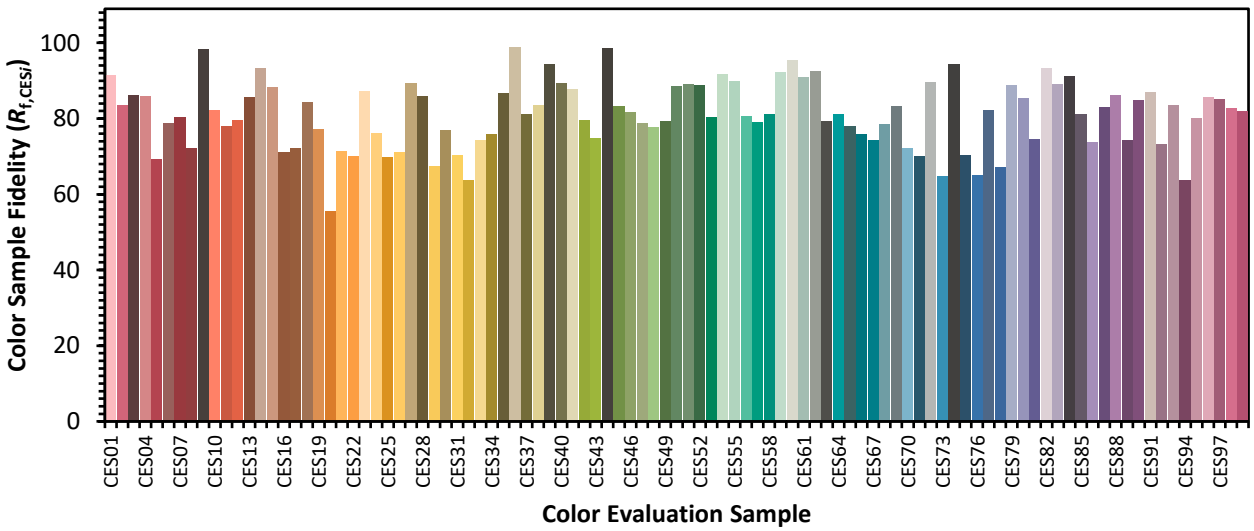

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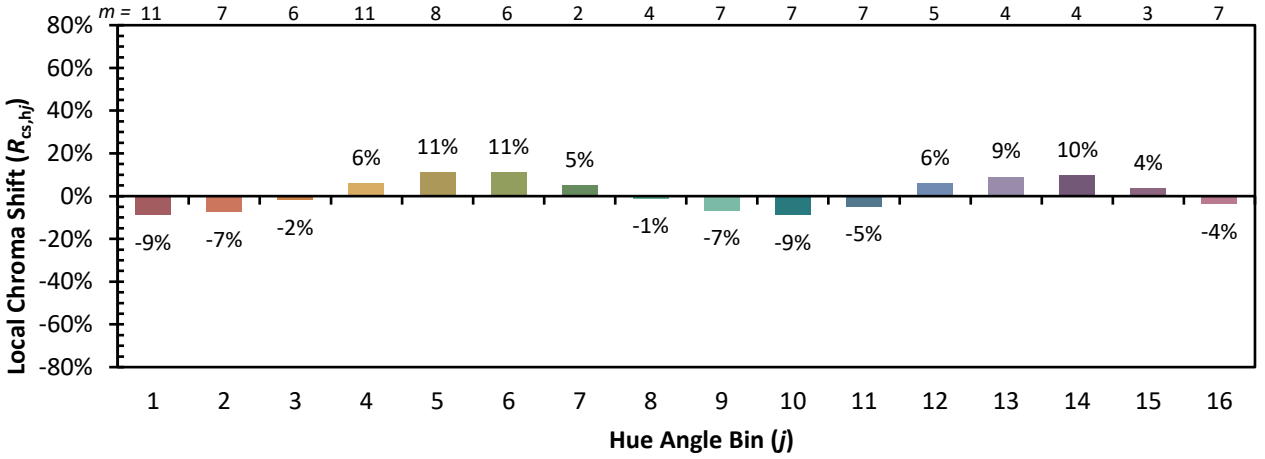
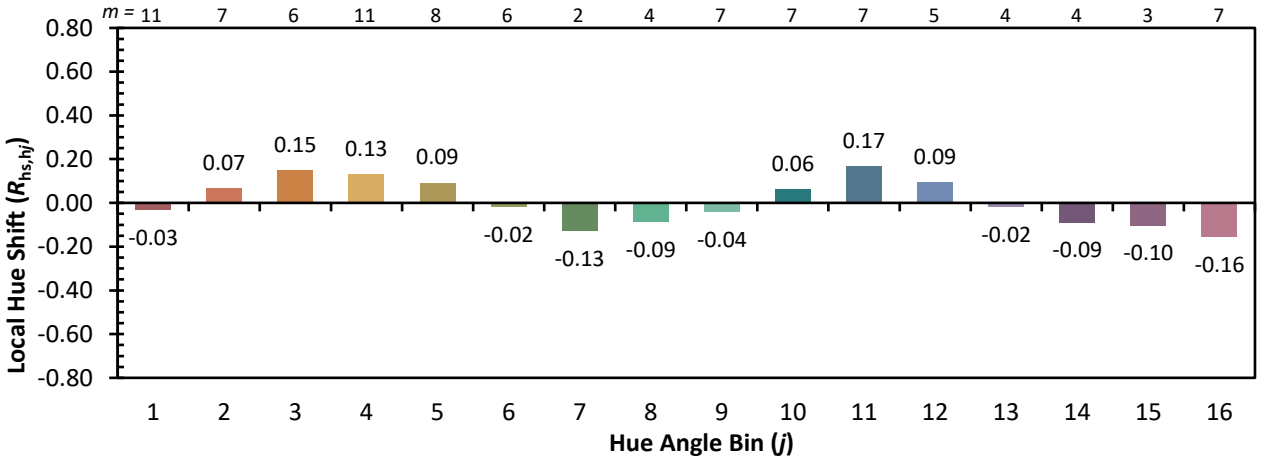
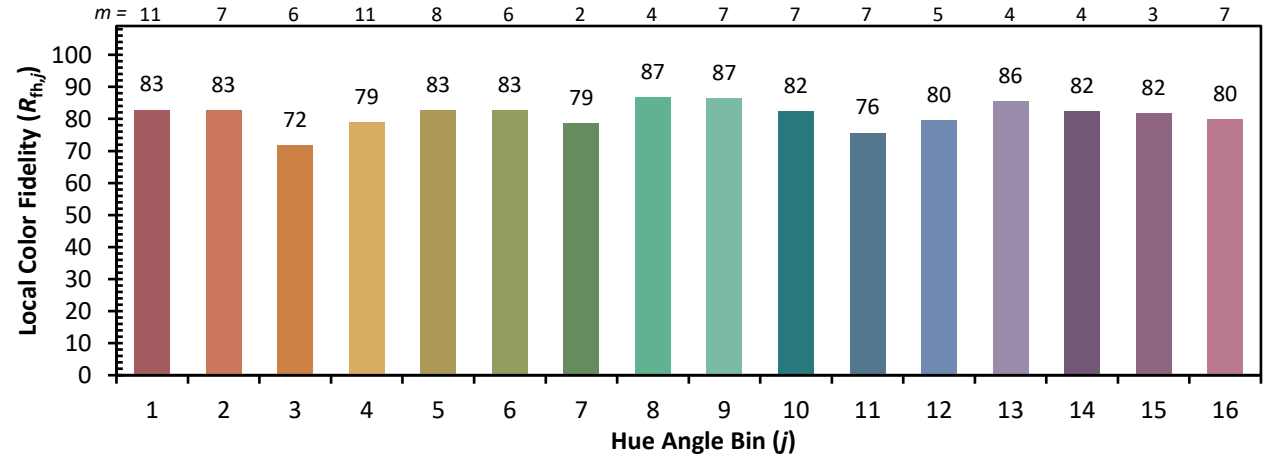
Color Rendition by Hue-Angle Bin







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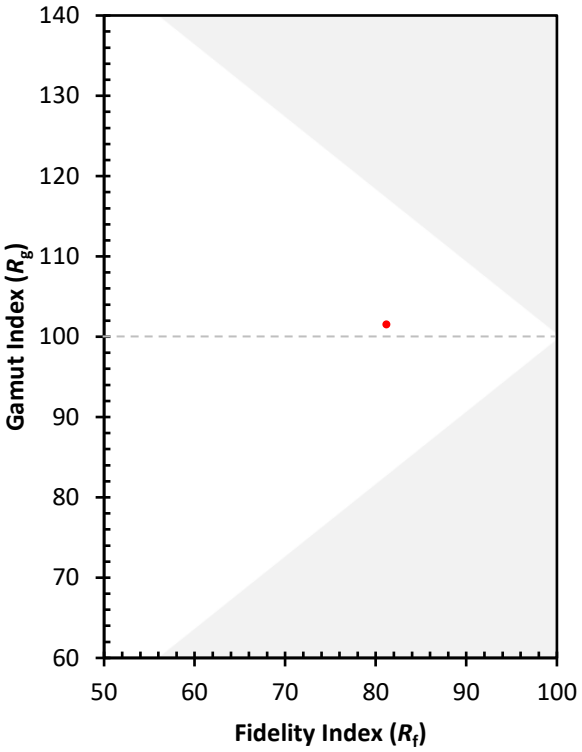
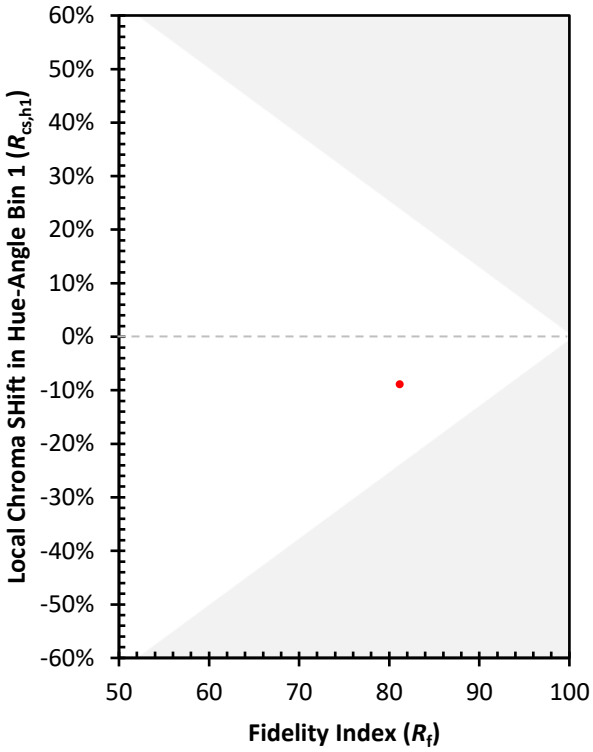
Measure Comparisons





(END OF REPORT)