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: P1432400

Luminaire Tested: EHBR1-36-UNV-TASM-L830-UPL36

Issue Date: 3/20/2026

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1432400
	REPORT IS A COMBINATION OF REPORTS P1431777 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-36-UNV-TASM-L830-UPL36
Description:	Elevate Round Highbay at, 36000 lumens, 3000K 80CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	37237.0 lumens
Efficiency:	N/A
Efficacy:	169.4 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):	219.8
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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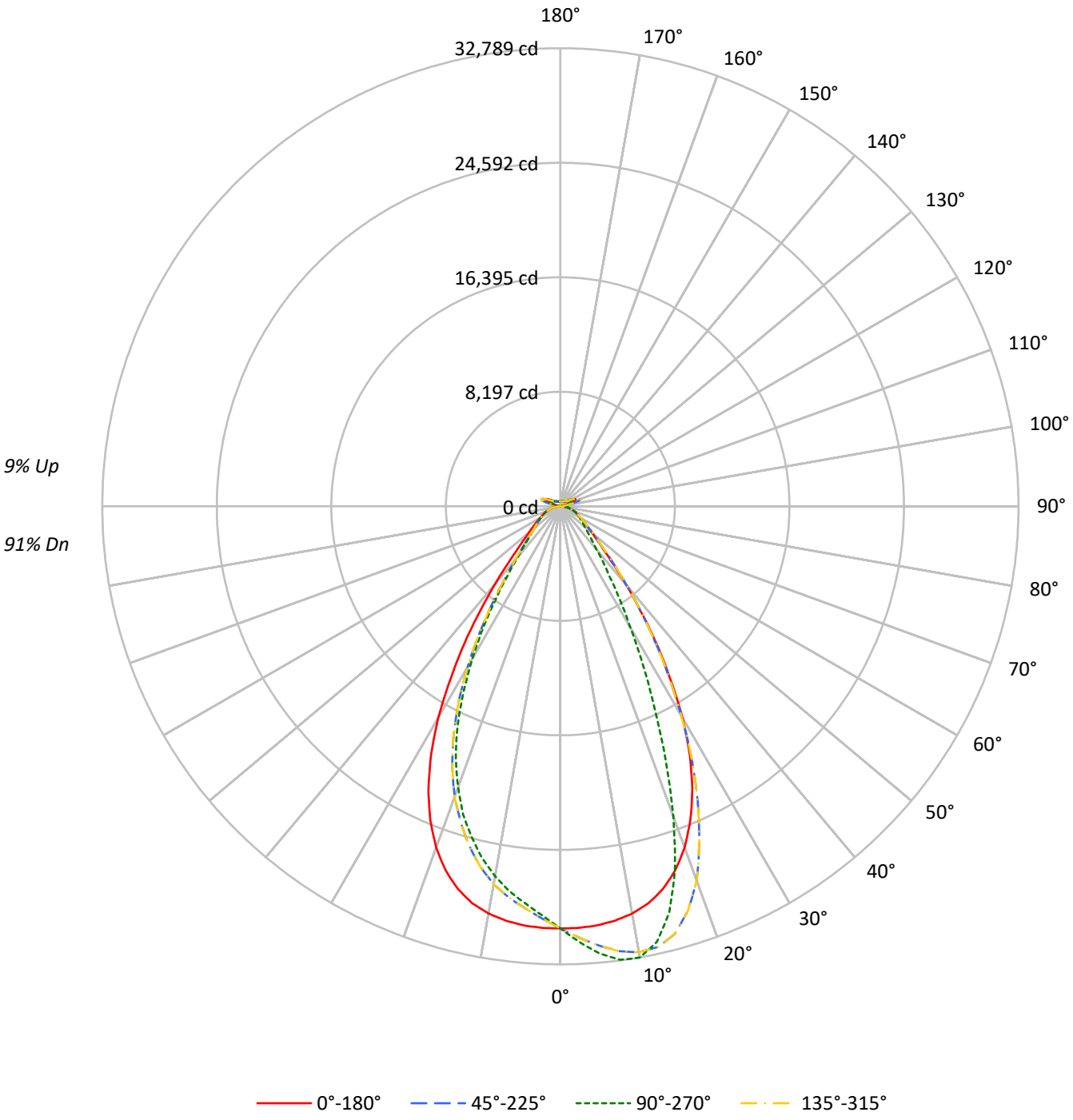
Luminous Intensity Polar Plot



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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	113	113	113	113	106	106	106	99	99	99	93	93	93	91
1	110	106	103	100	106	103	100	98	97	95	93	92	90	89	87	86	84	82
2	103	97	92	87	99	94	89	86	89	86	82	85	82	79	81	78	76	74
3	96	88	82	77	93	86	81	76	82	78	74	78	75	71	75	72	69	67
4	90	81	75	70	88	79	73	69	76	71	67	73	68	65	70	66	63	61
5	85	75	68	63	82	73	67	62	70	65	61	68	63	60	65	61	58	56
6	80	70	63	58	78	68	62	57	66	60	56	63	58	55	61	57	54	52
7	75	65	58	53	73	64	57	53	61	56	52	59	54	51	57	53	50	48
8	71	60	54	49	69	59	53	49	58	52	48	56	51	47	54	50	46	45
9	67	57	50	46	66	56	50	45	54	48	45	52	47	44	51	47	43	42
10	64	53	47	43	62	52	46	42	51	45	42	50	45	41	48	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	141906	141906	141906	141906
5°	141042	150465	141042	133722
10°	139308	154328	139308	126557
15°	135195	143419	135195	116904
20°	126441	115003	126441	104129
25°	111910	79680	111910	87264
30°	90867	51838	90867	65291
35°	65173	33571	65173	43466
40°	42136	23139	42136	27412
45°	26735	17924	26735	19531
50°	19854	15231	19854	16269
55°	16210	13875	16210	14361
60°	14036	13216	14036	13297
65°	12796	12746	12796	12692
70°	12127	12490	12127	12328
75°	11341	12082	11341	11720
80°	9963	11407	9963	10664
85°	6445	8144	6445	7766

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 37588 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2873.2	7.7
10°-20°	7816.8	21.0
20°-30°	9167.6	24.6
30°-40°	6375.5	17.1
40°-50°	3168.3	8.5
50°-60°	1895.0	5.1
60°-70°	1333.8	3.6
70°-80°	859.2	2.3
80°-90°	279.0	0.7
90°-100°	92.4	0.2
100°-110°	603.1	1.6
110°-120°	1114.2	3.0
120°-130°	662.2	1.8
130°-140°	400.4	1.1
140°-150°	277.1	0.7
150°-160°	180.9	0.5
160°-170°	103.9	0.3
170°-180°	34.5	0.1
0°-30°	19857.6	53.3
0°-40°	26233.1	70.4
0°-60°	31296.4	84.0
0°-90°	33768.3	90.7
90°-120°	1809.6	4.9
90°-150°	3149.3	8.5
90°-180°	3469.0	9.3
0°-180°	37237.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	30218	30218	30218	30218	30218	
5°	30115	32127	30115	28552	30115	2858
15°	28363	30088	28363	24526	28363	7926
25°	22348	15912	22348	17427	22348	10118
35°	11962	6162	11962	7978	11962	7467
45°	4326	2900	4326	3160	4326	3540
55°	2191	1875	2191	1941	2191	2003
65°	1336	1330	1336	1325	1336	1341
75°	799	851	799	826	799	839
85°	222	280	222	267	222	246
90°	26	29	26	26	26	22
95°	49	47	49	43	49	52
105°	277	141	277	210	277	374
115°	1186	1013	1186	963	1186	1081
125°	759	795	759	695	759	699
135°	480	554	480	508	480	380
145°	434	454	434	422	434	272
155°	386	403	386	375	386	181
165°	364	375	364	357	364	104
175°	363	369	363	356	363	35
180°	362	362	362	362	362	

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Scaled Data Report

TEST NUMBER: P1432400
CATALOG NUMBER: EHBR1-36-UNV-TASM-L830-UPL36

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	30217.8	30217.8	30217.8	30217.8	*30217.8*	30217.8	30217.8	30217.8	30217.8	30217.8	30217.8
2.5°	30200.2	30590.6	30906.7	31115.3	*31218.4*	31115.3	30906.7	30590.6	30200.2	29812.0	29545.1
5°	30114.6	30896.6	31558.9	31992.5	*32126.7*	31992.5	31558.9	30896.6	30114.6	29375.8	28885.6
7.5°	29910.1	31128.3	32112.5	32618.5	*32742.1*	32618.5	32112.5	31128.3	29910.1	28864.0	28244.8
10°	*29597.8*	*31274.5*	*32411.7*	*32774.3*	*32789.1*	*32774.3*	*32411.7*	*31274.5*	*29597.8*	*28188.7*	*27458.2*
12.5°	29099.8	31222.4	32311.4	32192.4	*31922.1*	32192.4	32311.4	31222.4	29099.8	27363.6	26442.3
15°	28363.2	30913.6	31676.2	30707.9	*30088.5*	30707.9	31676.2	30913.6	28363.2	26249.7	25181.0
17.5°	27325.1	30335.6	30350.3	28434.6	*27266.2*	28434.6	30350.3	30335.6	27325.1	24887.4	23710.5
20°	25987.3	29408.6	28524.7	25020.6	*23636.4*	25020.6	28524.7	29408.6	25987.3	23277.1	22122.4
22.5°	24310.0	28158.6	25982.2	21586.3	*19697.7*	21586.3	25982.2	28158.6	24310.0	21404.4	20202.6
25°	22348.4	26627.0	23247.1	17844.3	*15912.1*	17844.3	23247.1	26627.0	22348.4	19173.0	18086.3
27.5°	20041.1	24685.7	20334.6	14581.7	*12799.0*	14581.7	20334.6	24685.7	20041.1	16869.1	15759.1
30°	17478.2	22197.1	17303.7	11612.5	*9971.0*	11612.5	17303.7	22197.1	17478.2	14280.8	13286.8
32.5°	14608.8	19757.8	14392.9	9304.6	*7914.1*	9304.6	14392.9	19757.8	14608.8	11810.8	10772.2
35°	11961.5	16705.9	11768.3	7311.2	*6161.5*	7311.2	11768.3	16705.9	11961.5	9479.1	8459.2
37.5°	9387.3	13822.4	9381.1	5887.3	*4997.6*	5887.3	9381.1	13822.4	9387.3	7369.6	6541.7
40°	7303.2	10807.8	7350.3	4699.7	*4010.6*	4699.7	7350.3	10807.8	7303.2	5607.3	5077.5
42.5°	5533.7	8264.3	5777.3	3857.1	*3406.5*	3857.1	5777.3	8264.3	5533.7	4418.0	4021.4
45°	4325.6	6081.6	4511.5	3254.1	*2900.1*	3254.1	4511.5	6081.6	4325.6	3557.9	3291.5
47.5°	3522.8	4700.2	3656.4	2791.2	*2543.1*	2791.2	3656.4	4700.2	3522.8	3009.4	2809.9
50°	2959.0	3606.6	3036.0	2436.5	*2269.9*	2436.5	3036.0	3606.6	2959.0	2577.0	2443.9
52.5°	2541.9	2941.4	2585.5	2171.3	*2059.2*	2171.3	2585.5	2941.4	2541.9	2254.7	2171.9
55°	2190.6	2472.7	2248.4	1952.6	*1875.0*	1952.6	2248.4	2472.7	2190.6	2006.4	1945.3
57.5°	1923.7	2097.7	1952.6	1766.2	*1714.6*	1766.2	1952.6	2097.7	1923.7	1785.5	1752.6
60°	1687.4	1816.7	1723.1	1603.6	*1588.8*	1603.6	1723.1	1816.7	1687.4	1606.4	1584.8
62.5°	1505.6	1587.2	1523.7	1457.3	*1444.3*	1457.3	1523.7	1587.2	1505.6	1443.2	1447.2
65°	1335.6	1411.4	1361.6	1325.9	*1330.4*	1325.9	1361.6	1411.4	1335.6	1306.6	1312.9
67.5°	1204.0	1243.8	1222.2	1201.8	*1206.9*	1201.8	1222.2	1243.8	1204.0	1175.8	1185.4
70°	1064.1	1106.6	1084.5	1087.3	*1095.9*	1087.3	1084.5	1106.6	1064.1	1055.7	1063.0
72.5°	930.4	963.3	955.9	962.7	*971.7*	962.7	955.9	963.3	930.4	929.3	929.9
75°	798.9	823.8	827.3	836.9	*851.1*	836.9	827.3	823.8	798.9	790.5	800.6
77.5°	655.6	683.9	694.7	707.7	*728.7*	707.7	694.7	683.9	655.6	661.2	666.4
80°	524.1	537.2	561.0	570.5	*600.1*	570.5	561.0	537.2	524.1	514.5	521.8
82.5°	383.6	395.5	415.9	434.1	*451.0*	434.1	415.9	395.5	383.6	379.1	379.6
85°	221.5	239.7	253.3	274.8	*279.9*	274.8	253.3	239.7	221.5	226.7	221.5
87.5°	77.7	83.3	95.2	103.7	*104.3*	103.7	95.2	83.3	77.7	79.3	71.9
90°	25.5	43.3	74.5	41.7	*29.4*	41.7	74.5	43.3	25.5	44.6	69.5
92.5°	33.2	58.6	105.2	55.1	*39.0*	55.1	105.2	58.6	33.2	58.1	111.7
95°	49.0	72.0	133.9	60.9	*46.6*	60.9	133.9	72.0	49.0	77.2	155.8
97.5°	75.9	89.3	151.1	64.7	*56.2*	64.7	151.1	89.3	75.9	94.4	178.7
100°	100.8	100.8	275.7	74.3	*63.9*	74.3	275.7	100.8	100.8	116.1	278.4
102.5°	152.5	197.1	638.4	147.6	*77.3*	147.6	638.4	197.1	152.5	217.6	590.7
105°	277.0	450.0	1123.1	379.5	*141.1*	379.5	1123.1	450.0	277.0	455.2	1052.4
107.5°	524.2	838.9	1446.8	747.3	*326.9*	747.3	1446.8	838.9	524.2	805.9	1388.3
110°	838.4	1172.3	1579.1	1023.3	*660.3*	1023.3	1579.1	1172.3	838.4	1106.6	1455.4

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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°	1091.3	1306.4	1542.7	1134.4	*913.2*	1134.4	1542.7	1306.4	1091.3	1221.6	1394.0
115°	1185.8	1287.3	1377.9	1130.5	*1012.9*	1130.5	1377.9	1287.3	1185.8	1192.8	1244.6
117.5°	1145.5	1178.1	1190.1	1061.6	*1018.6*	1061.6	1190.1	1178.1	1145.5	1072.7	1056.8
120°	1034.4	1021.0	1002.9	960.0	*961.2*	960.0	1002.9	1021.0	1034.4	936.7	882.5
122.5°	895.1	866.4	847.7	857.1	*882.6*	857.1	847.7	866.4	895.1	797.3	756.6
125°	759.0	730.4	739.1	768.9	*795.0*	768.9	739.1	730.4	759.0	677.2	667.1
127.5°	644.6	631.2	660.6	694.2	*716.4*	694.2	660.6	631.2	644.6	592.9	603.9
130°	562.9	566.1	605.0	633.5	*647.5*	633.5	605.0	566.1	562.9	538.0	564.2
132.5°	511.6	526.4	563.4	588.1	*596.4*	588.1	563.4	526.4	511.6	504.5	536.5
135°	479.7	501.5	535.2	551.1	*554.3*	551.1	535.2	501.5	479.7	482.1	511.6
137.5°	461.0	482.9	508.4	521.0	*517.8*	521.0	508.4	482.9	461.0	467.3	489.8
140°	450.1	472.0	483.4	498.0	*495.4*	498.0	483.4	472.0	450.1	453.9	471.2
142.5°	439.3	459.2	464.9	475.7	*472.4*	475.7	464.9	459.2	439.3	443.2	454.6
145°	434.1	448.9	444.4	458.4	*453.8*	458.4	444.4	448.9	434.1	435.5	441.8
147.5°	424.5	435.5	429.7	441.8	*437.2*	441.8	429.7	435.5	424.5	424.5	427.0
150°	413.6	421.2	413.0	427.0	*426.2*	427.0	413.0	421.2	413.6	411.7	414.1
152.5°	398.9	406.4	398.9	414.7	*413.4*	414.7	398.9	406.4	398.9	396.9	399.4
155°	386.5	390.3	386.5	402.4	*403.0*	402.4	386.5	390.3	386.5	385.9	387.0
157.5°	378.1	380.6	378.6	392.6	*393.1*	392.6	378.6	380.6	378.1	378.1	378.6
160°	370.7	374.6	373.2	385.3	*385.8*	385.3	373.2	374.6	370.7	372.1	372.6
162.5°	368.0	368.0	367.3	379.3	*380.4*	379.3	367.3	368.0	368.0	368.0	369.9
165°	364.0	365.9	363.2	372.1	*375.1*	372.1	363.2	365.9	364.0	365.3	365.3
167.5°	363.2	361.3	362.5	369.9	*373.0*	369.9	362.5	361.3	363.2	364.6	364.6
170°	359.9	360.5	359.8	367.2	*370.3*	367.2	359.8	360.5	359.9	361.9	363.2
172.5°	361.7	361.7	359.5	365.0	*370.0*	365.0	359.5	361.7	361.7	363.1	364.9
175°	362.8	361.5	360.6	364.3	*369.3*	364.3	360.6	361.5	362.8	362.2	362.2
177.5°	360.9	362.0	363.2	366.7	*373.7*	366.7	363.2	362.0	360.9	362.2	362.2
180°	362.0	362.0	362.0	362.0	*362.0*	362.0	362.0	362.0	362.0	362.0	362.0

TEST NUMBER: P1432400
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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	30217.8	30217.8	30217.8	30217.8	30217.8	30217.8
2.5°	29340.1	29320.8	29340.1	29545.1	29812.0	30200.2
5°	28658.3	28551.8	28658.3	28885.6	29375.8	30114.6
7.5°	27864.6	27802.7	27864.6	28244.8	28864.0	29910.1
10°	*27028.7*	*26888.8*	*27028.7*	*27458.2*	*28188.7*	*29597.8*
12.5°	25998.6	25813.4	25998.6	26442.3	27363.6	29099.8
15°	24688.6	24525.9	24688.6	25181.0	26249.7	28363.2
17.5°	23282.7	23135.4	23282.7	23710.5	24887.4	27325.1
20°	21517.1	21401.6	21517.1	22122.4	23277.1	25987.3
22.5°	19664.8	19556.6	19664.8	20202.6	21404.4	24310.0
25°	17485.5	17426.6	17485.5	18086.3	19173.0	22348.4
27.5°	15130.7	15030.4	15130.7	15759.1	16869.1	20041.1
30°	12724.8	12558.7	12724.8	13286.8	14280.8	17478.2
32.5°	10371.5	10252.0	10371.5	10772.2	11810.8	14608.8
35°	8097.1	7977.6	8097.1	8459.2	9479.1	11961.5
37.5°	6309.4	6098.1	6309.4	6541.7	7369.6	9387.3
40°	4785.2	4751.2	4785.2	5077.5	5607.3	7303.2
42.5°	3895.6	3803.2	3895.6	4021.4	4418.0	5533.7
45°	3196.3	3160.1	3196.3	3291.5	3557.9	4325.6
47.5°	2748.7	2764.6	2748.7	2809.9	3009.4	3522.8
50°	2414.9	2424.6	2414.9	2443.9	2577.0	2959.0
52.5°	2169.0	2160.5	2169.0	2171.9	2254.7	2541.9
55°	1951.4	1940.7	1951.4	1945.3	2006.4	2190.6
57.5°	1761.1	1769.0	1761.1	1752.6	1785.5	1923.7
60°	1591.1	1598.5	1591.1	1584.8	1606.4	1687.4
62.5°	1447.8	1452.3	1447.8	1447.2	1443.2	1505.6
65°	1319.6	1324.8	1319.6	1312.9	1306.6	1335.6
67.5°	1197.3	1197.3	1197.3	1185.4	1175.8	1204.0
70°	1082.3	1081.7	1082.3	1063.0	1055.7	1064.1
72.5°	944.0	957.6	944.0	929.9	929.3	930.4
75°	809.7	825.6	809.7	800.6	790.5	798.9
77.5°	673.7	698.1	673.7	666.4	661.2	655.6
80°	534.3	561.0	534.3	521.8	514.5	524.1
82.5°	394.9	414.8	394.9	379.6	379.1	383.6
85°	235.1	266.9	235.1	221.5	226.7	221.5
87.5°	75.4	96.3	75.4	71.9	79.3	77.7
90°	40.8	25.5	40.8	69.5	44.6	25.5
92.5°	61.9	37.0	61.9	111.7	58.1	33.2
95°	71.5	42.7	71.5	155.8	77.2	49.0
97.5°	79.2	54.8	79.2	178.7	94.4	75.9
100°	92.5	72.0	92.5	278.4	116.1	100.8
102.5°	196.0	121.9	196.0	590.7	217.6	152.5
105°	412.5	209.9	412.5	1052.4	455.2	277.0
107.5°	738.2	363.3	738.2	1388.3	805.9	524.2
110°	979.6	677.4	979.6	1455.4	1106.6	838.4

TEST NUMBER: P1432400
CATALOG NUMBER: EHBR1-36-UNV-TASM-L830-UPL36

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1052.4	915.1	1052.4	1394.0	1221.6	1091.3
115°	1012.2	962.9	1012.2	1244.6	1192.8	1185.8
117.5°	924.1	930.3	924.1	1056.8	1072.7	1145.5
120°	822.5	861.4	822.5	882.5	936.7	1034.4
122.5°	729.2	775.1	729.2	756.6	797.3	895.1
125°	648.7	695.2	648.7	667.1	677.2	759.0
127.5°	593.1	624.4	593.1	603.9	592.9	644.6
130°	549.7	576.5	549.7	564.2	538.0	562.9
132.5°	519.6	536.8	519.6	536.5	504.5	511.6
135°	493.3	508.1	493.3	511.6	482.1	479.7
137.5°	470.9	483.7	470.9	489.8	467.3	461.0
140°	450.9	461.9	450.9	471.2	453.9	450.1
142.5°	430.4	438.1	430.4	454.6	443.2	439.3
145°	416.3	422.1	416.3	441.8	435.5	434.1
147.5°	404.0	407.8	404.0	427.0	424.5	424.5
150°	391.7	395.6	391.7	414.1	411.7	413.6
152.5°	378.9	383.3	378.9	399.4	396.9	398.9
155°	370.4	374.8	370.4	387.0	385.9	386.5
157.5°	365.8	368.8	365.8	378.6	378.1	378.1
160°	361.8	364.2	361.8	372.6	372.1	370.7
162.5°	357.1	359.6	357.1	369.9	368.0	368.0
165°	356.3	356.9	356.3	365.3	365.3	364.0
167.5°	354.9	356.9	354.9	364.6	364.6	363.2
170°	355.5	356.0	355.5	363.2	361.9	359.9
172.5°	356.7	357.3	356.7	364.9	363.1	361.7
175°	355.9	356.5	355.9	362.2	362.2	362.8
177.5°	358.4	358.9	358.4	362.2	362.2	360.9
180°	362.0	362.0	362.0	362.0	362.0	362.0

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

Scaled Data Report

TEST NUMBER: P1432400
CATALOG NUMBER: EHBR1-36-UNV-TASM-L830-UPL36

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	17.65	18.72	18.17	19.22	19.76	16.96	18.03	17.49	18.53	19.08
	3H	19.19	20.14	19.73	20.66	21.25	18.81	19.76	19.35	20.28	20.87
	4H	19.83	20.72	20.39	21.25	21.85	19.59	20.48	20.15	21.01	21.62
	6H	20.31	21.12	20.88	21.67	22.29	20.23	21.05	20.81	21.60	22.21
	8H	20.46	21.23	21.04	21.80	22.42	20.45	21.23	21.04	21.79	22.42
	12H	20.53	21.27	21.12	21.82	22.47	20.58	21.32	21.17	21.88	22.52
4H	2H	18.06	18.95	18.62	19.48	20.09	17.54	18.43	18.10	18.96	19.56
	3H	19.85	20.59	20.43	21.16	21.79	19.59	20.33	20.16	20.90	21.53
	4H	20.63	21.29	21.22	21.87	22.53	20.50	21.16	21.09	21.75	22.40
	6H	21.24	21.81	21.86	22.42	23.10	21.27	21.84	21.88	22.45	23.13
	8H	21.44	21.97	22.06	22.58	23.26	21.54	22.07	22.16	22.68	23.36
	12H	21.54	22.01	22.18	22.65	23.33	21.70	22.17	22.34	22.81	23.50
8H	4H	20.87	21.41	21.49	22.01	22.70	20.78	21.31	21.40	21.92	22.60
	6H	21.62	22.05	22.27	22.70	23.39	21.68	22.11	22.33	22.77	23.46
	8H	21.89	22.27	22.55	22.94	23.64	22.03	22.42	22.70	23.08	23.79
	12H	22.06	22.39	22.72	23.04	23.82	22.28	22.62	22.94	23.27	24.04
12H	4H	20.88	21.35	21.52	21.99	22.68	20.79	21.26	21.42	21.89	22.58
	6H	21.66	22.04	22.33	22.71	23.41	21.73	22.11	22.39	22.78	23.48
	8H	21.97	22.31	22.64	22.96	23.73	22.13	22.47	22.79	23.11	23.89

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

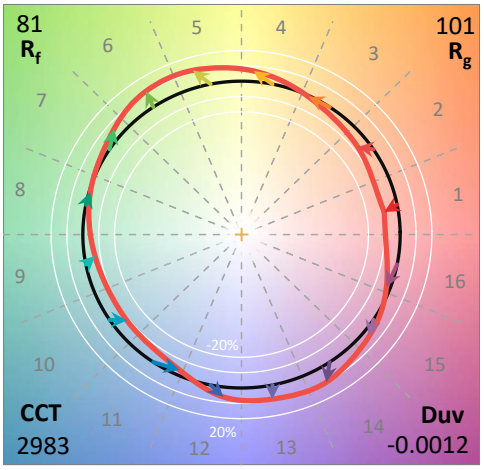
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

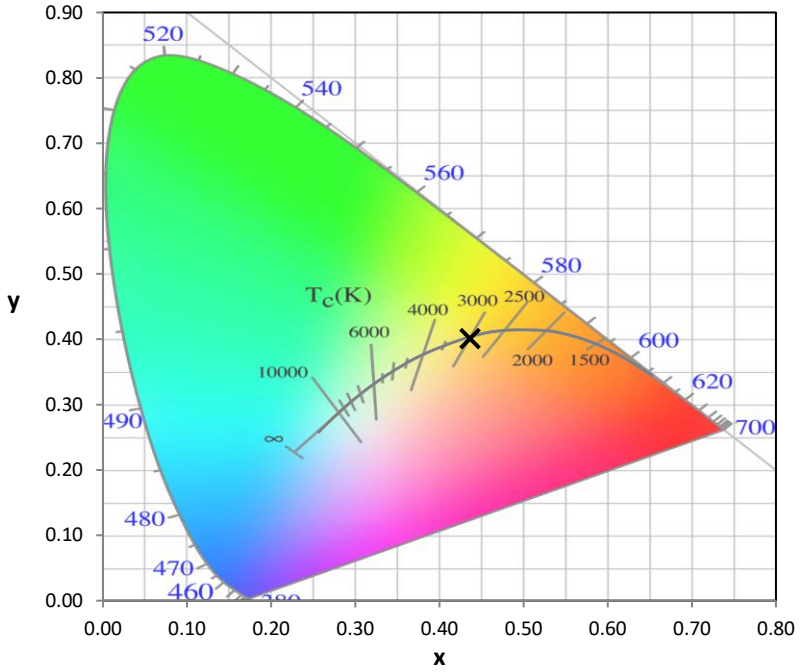
Stabilization Time:	38M
Operation Time:	1H 38M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-2

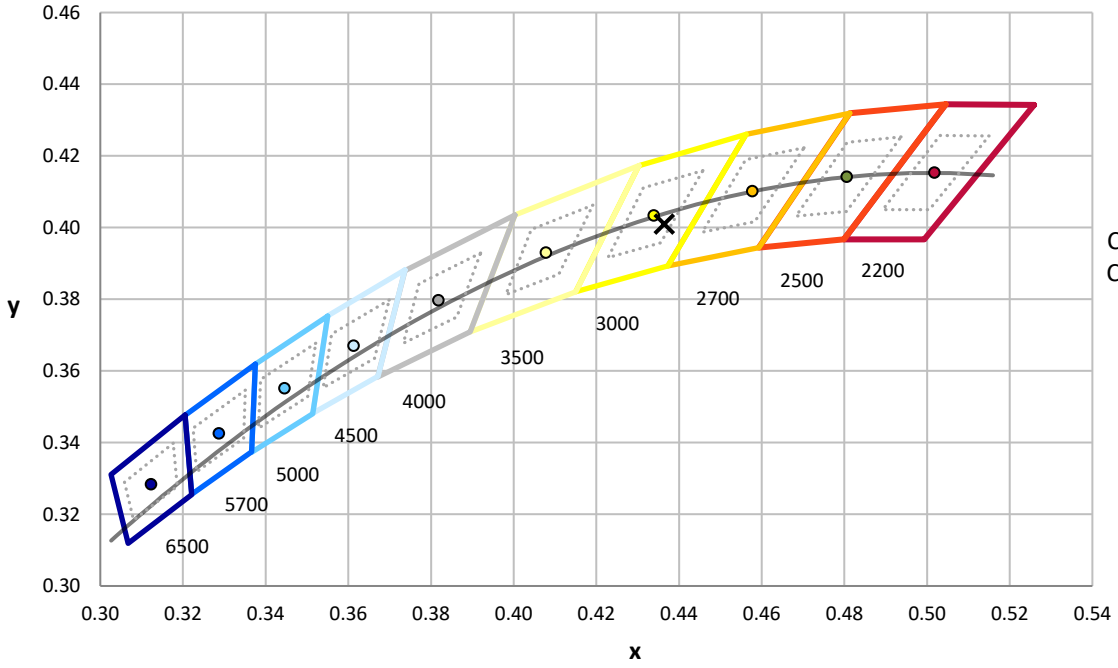
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

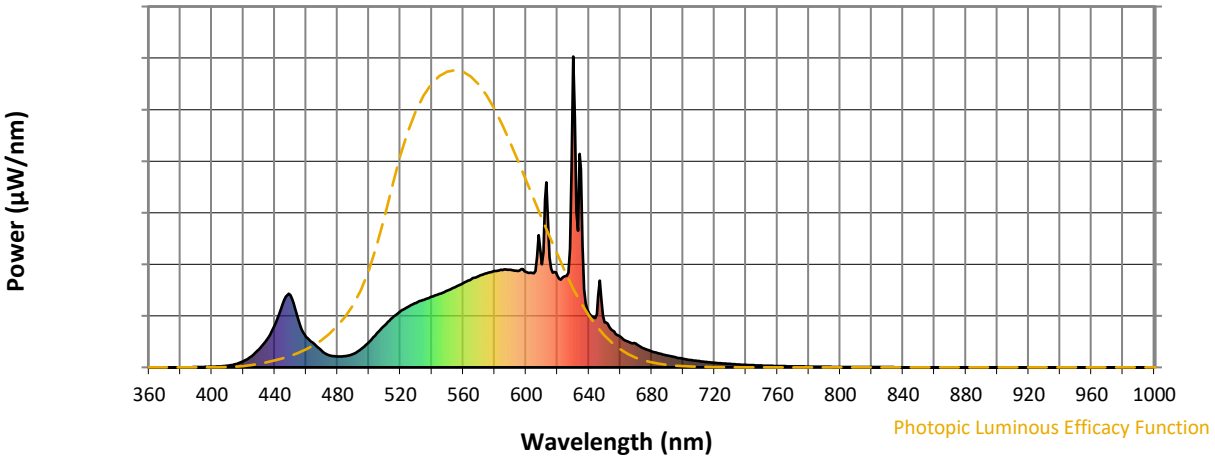


CCT = 2983K
CIE x = 0.4364
CIE y = 0.4010
Duv = -0.0012

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-2

Photopic Flux vs. Wavelength

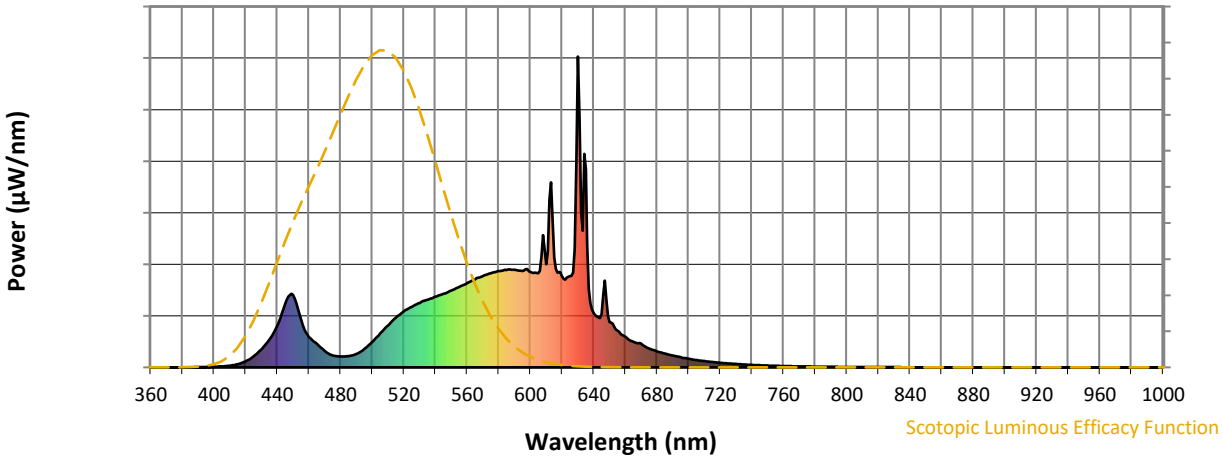


Photopic Lumens: NR

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

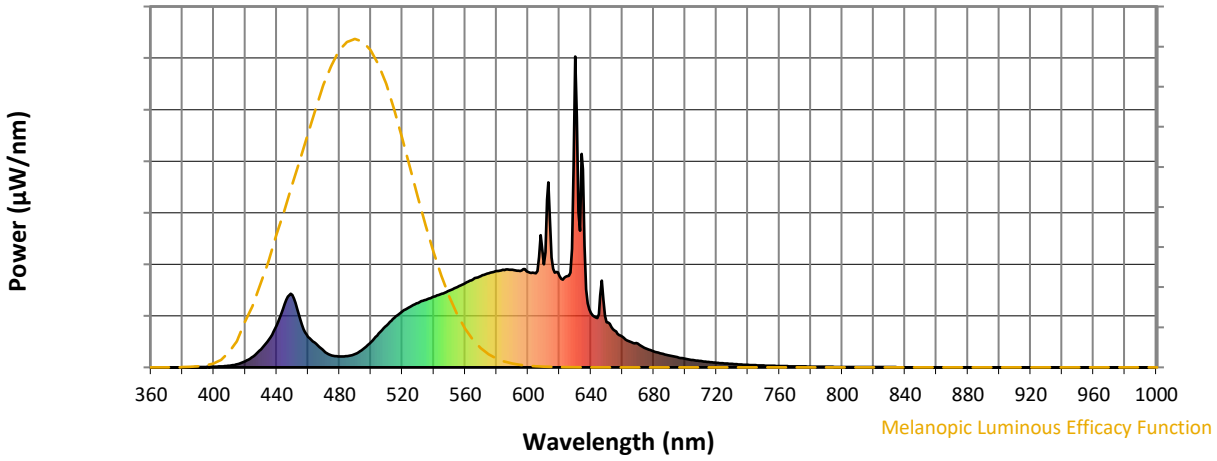


Scotopic Lumens: NR **S/P: 1.27**

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			

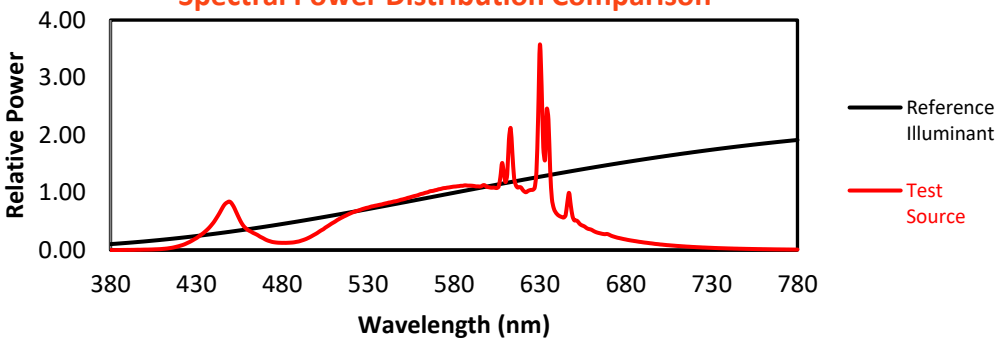
REPORT NUMBER: SP1-2506-472-2

TM-30-18

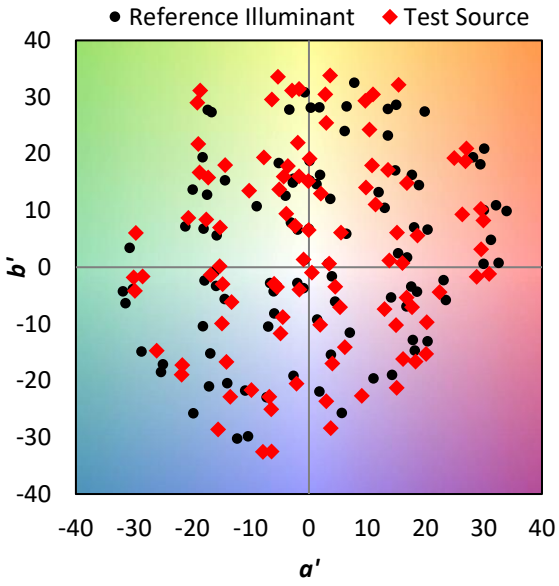
Summary

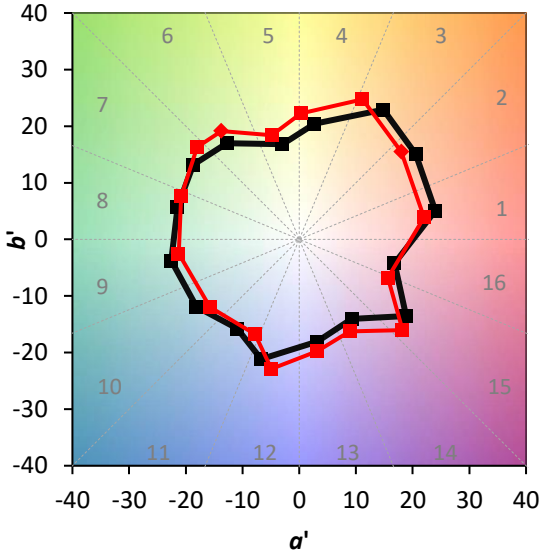
R_f = 81.2
R_g = 101.5
CIE R_a = 83.4
R_9 = 29.4

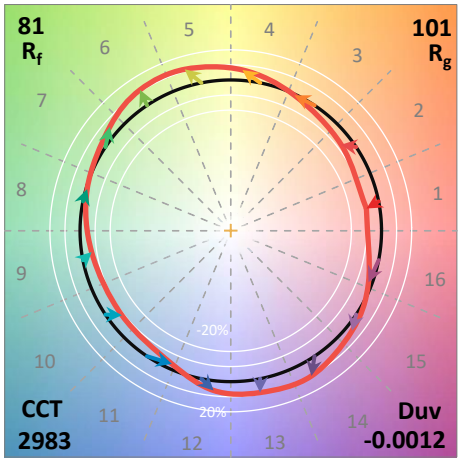
Spectral Power Distribution Comparison

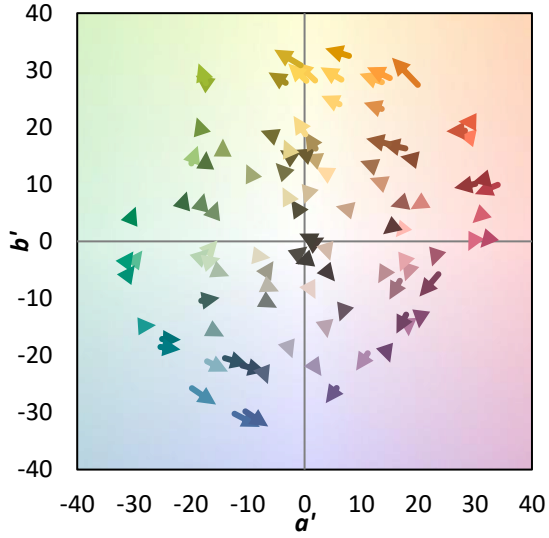


Color Vector Graphics









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
CES23 = 92	CES48 = 78	CES73 = 65	CES98 = 83
CES24 = 91	CES49 = 79	CES74 = 94	CES99 = 82
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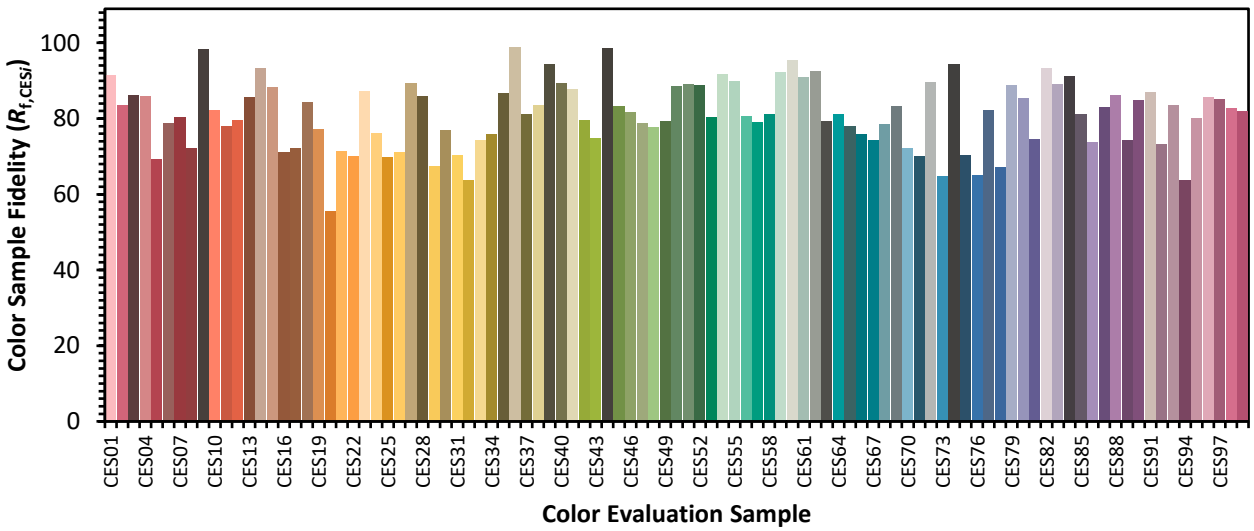

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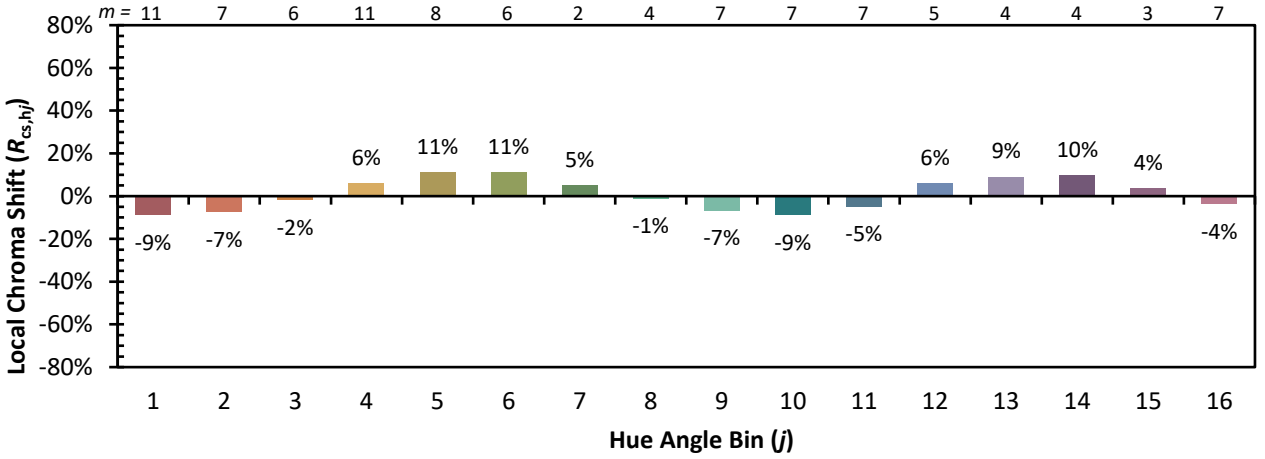
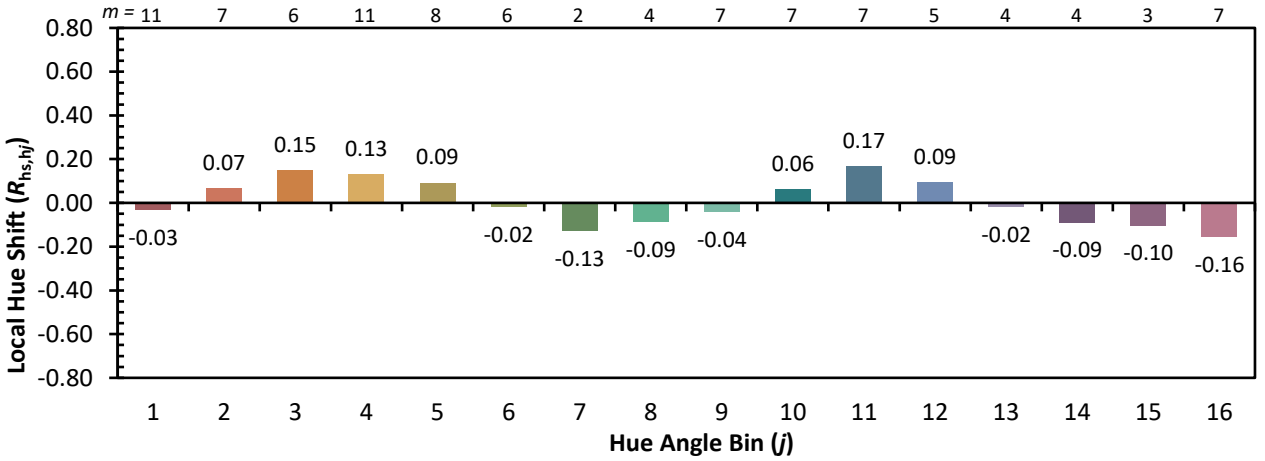
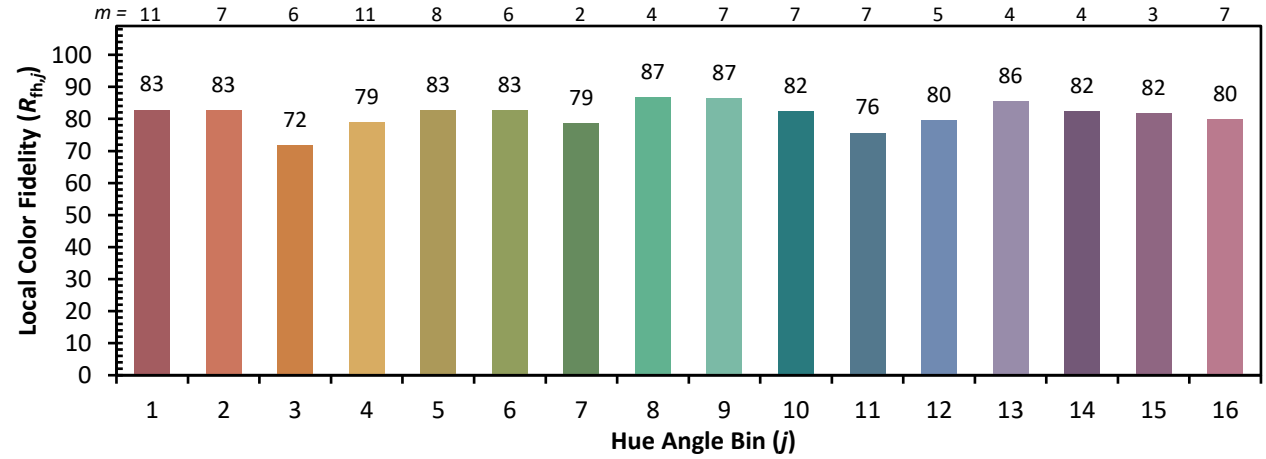
Color Rendition by Hue-Angle Bin







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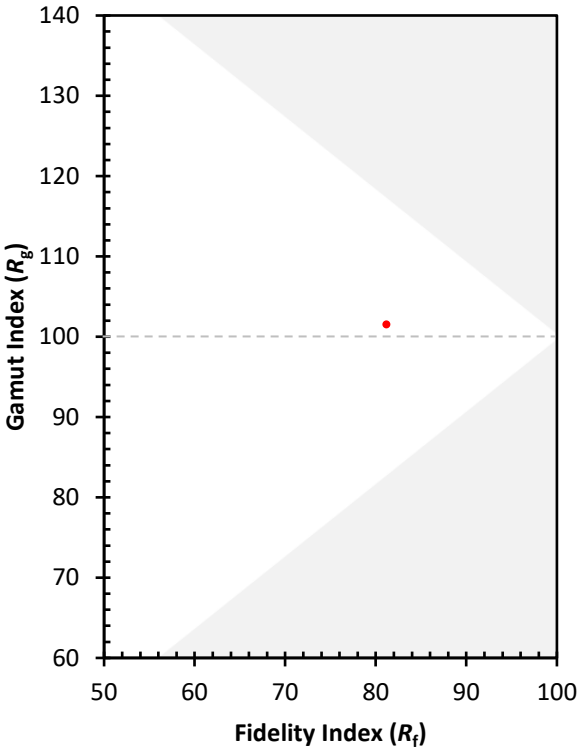
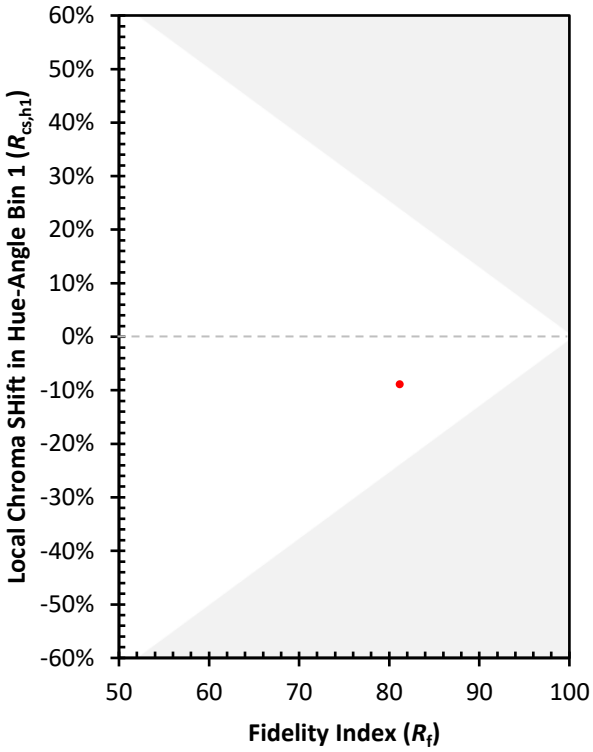
Measure Comparisons





(END OF REPORT)