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: P1432272

Luminaire Tested: EHBR1-12-UNV-TASM-L830-UPL36

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:	P1432272
	REPORT IS A COMBINATION OF REPORTS P1431649 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-12-UNV-TASM-L830-UPL36
Description:	Elevate Round Highbay at, 12000 lumens, 3000K 80CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	14965.7 lumens
Efficiency:	N/A
Efficacy:	160.7 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:	Semi-Direct

Input Watts (W):	93.1
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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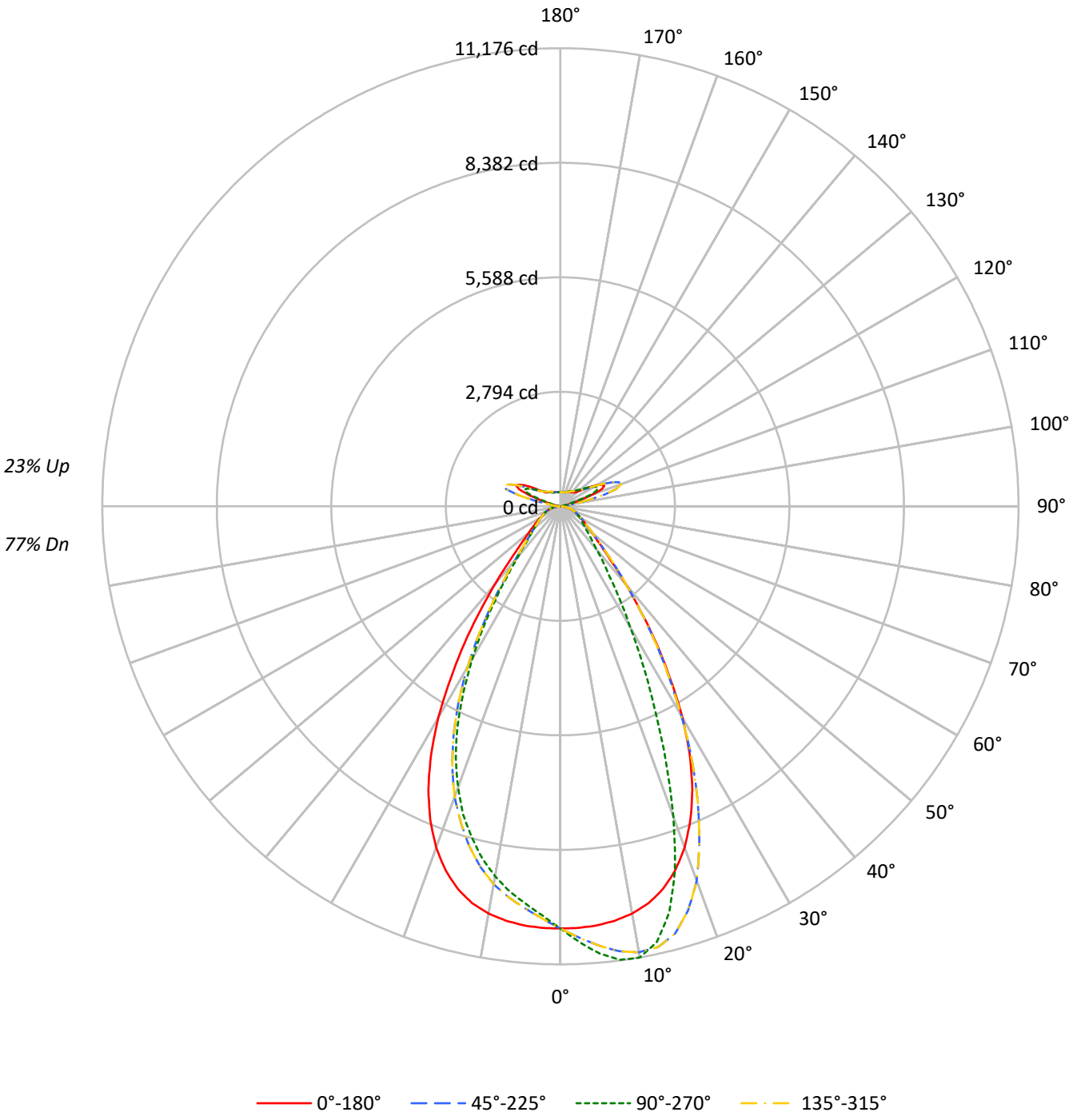
Luminous Intensity Polar Plot



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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	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77
1	106	103	99	96	101	98	95	93	90	88	86	82	81	79	75	74	73	69
2	99	93	88	83	94	89	85	81	82	79	75	76	73	70	70	68	66	63
3	92	84	78	73	88	81	76	71	75	71	67	70	66	63	65	62	60	57
4	86	77	71	66	83	75	69	64	69	64	61	65	61	57	60	57	54	52
5	81	71	64	59	78	69	62	58	64	59	55	60	56	52	56	53	50	48
6	76	66	59	54	73	64	57	53	60	54	50	56	52	48	53	49	46	44
7	72	61	54	49	69	59	53	48	56	50	46	52	48	45	49	46	43	41
8	67	57	50	45	65	55	49	44	52	47	43	49	45	41	46	43	40	38
9	64	53	46	42	61	51	45	41	49	43	40	46	42	38	44	40	37	35
10	60	50	43	39	58	48	42	38	46	41	37	44	39	36	41	38	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	48369	48369	48369	48369
5°	48075	51287	48075	45580
10°	47483	52603	47483	43138
15°	46082	48885	46082	39848
20°	43098	39199	43098	35493
25°	38145	27159	38145	29745
30°	30973	17669	30973	22255
35°	22214	11443	22214	14816
40°	14363	7887	14363	9344
45°	9113	6110	9113	6657
50°	6768	5191	6768	5546
55°	5525	4729	5525	4895
60°	4784	4505	4784	4533
65°	4361	4345	4361	4327
70°	4134	4258	4134	4202
75°	3865	4118	3865	3995
80°	3395	3889	3395	3635
85°	2197	2779	2197	2648

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 12812 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	979.4	6.5
10°-20°	2664.4	17.8
20°-30°	3124.8	20.9
30°-40°	2173.1	14.5
40°-50°	1079.9	7.2
50°-60°	645.9	4.3
60°-70°	454.6	3.0
70°-80°	292.9	2.0
80°-90°	99.1	0.7
90°-100°	91.3	0.6
100°-110°	601.8	4.0
110°-120°	1112.9	7.4
120°-130°	660.6	4.4
130°-140°	398.3	2.7
140°-150°	274.5	1.8
150°-160°	177.9	1.2
160°-170°	101.0	0.7
170°-180°	33.3	0.2
0°-30°	6768.6	45.2
0°-40°	8941.7	59.7
0°-60°	10667.6	71.3
0°-90°	11514.1	76.9
90°-120°	1806.0	12.1
90°-150°	3139.3	21.0
90°-180°	3452.0	23.1
0°-180°	14965.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	10300	10300	10300	10300	10300	
5°	10265	10951	10265	9732	10265	974
15°	9668	10256	9668	8360	9668	2702
25°	7618	5424	7618	5940	7618	3449
35°	4077	2100	4077	2719	4077	2545
45°	1474	988	1474	1077	1474	1207
55°	747	639	747	662	747	683
65°	455	454	455	452	455	457
75°	272	290	272	281	272	286
85°	76	96	76	91	76	84
90°	25	26	25	25	25	15
95°	48	44	48	42	48	52
105°	276	138	276	209	276	373
115°	1185	1010	1185	962	1185	1080
125°	758	791	758	694	758	697
135°	477	550	477	507	477	378
145°	430	449	430	418	430	269
155°	380	396	380	368	380	178
165°	354	363	354	346	354	101
175°	350	353	350	344	350	33
180°	348	348	348	348	348	

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TEST NUMBER: P1432272
CATALOG NUMBER: EHBR1-12-UNV-TASM-L830-UPL36

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	10299.9	10299.9	10299.9	10299.9	10299.9	10299.9	10299.9	10299.9	10299.9	10299.9	10299.9
2.5°	10293.9	10427.0	10534.7	10605.8	10640.9	10605.8	10534.7	10427.0	10293.9	10161.6	10070.7
5°	10264.7	10531.2	10757.1	10904.8	10950.6	10904.8	10757.1	10531.2	10264.7	10012.9	9845.8
7.5°	10195.0	10610.3	10945.7	11118.2	11160.3	11118.2	10945.7	10610.3	10195.0	9838.4	9627.4
10°	10088.5	10660.1	11047.7	11171.3	11176.3	11171.3	11047.7	10660.1	10088.5	9608.3	9359.3
12.5°	9918.8	10642.3	11013.5	10973.0	10880.8	10973.0	11013.5	10642.3	9918.8	9327.0	9013.0
15°	9667.8	10537.0	10797.0	10467.0	10255.8	10467.0	10797.0	10537.0	9667.8	8947.4	8583.1
17.5°	9313.9	10340.0	10345.1	9692.0	9293.8	9692.0	10345.1	10340.0	9313.9	8483.0	8081.9
20°	8857.9	10024.1	9722.8	8528.5	8056.5	8528.5	9722.8	10024.1	8857.9	7934.1	7540.5
22.5°	8286.2	9598.0	8856.2	7357.8	6714.0	7357.8	8856.2	9598.0	8286.2	7295.8	6886.1
25°	7617.6	9076.0	7923.9	6082.3	5423.7	6082.3	7923.9	9076.0	7617.6	6535.2	6164.8
27.5°	6831.1	8414.3	6931.2	4970.3	4362.6	4970.3	6931.2	8414.3	6831.1	5749.9	5371.6
30°	5957.6	7566.0	5898.1	3958.2	3398.7	3958.2	5898.1	7566.0	5957.6	4867.7	4528.9
32.5°	4979.5	6734.6	4905.9	3171.5	2697.5	3171.5	4905.9	6734.6	4979.5	4025.8	3671.7
35°	4077.1	5694.3	4011.3	2492.0	2100.2	2492.0	4011.3	5694.3	4077.1	3231.0	2883.4
37.5°	3199.7	4711.5	3197.6	2006.7	1703.5	2006.7	3197.6	4711.5	3199.7	2512.0	2229.7
40°	2489.4	3683.9	2505.4	1601.9	1367.0	1601.9	2505.4	3683.9	2489.4	1911.3	1730.8
42.5°	1886.2	2817.0	1969.2	1314.7	1161.1	1314.7	1969.2	2817.0	1886.2	1505.9	1370.7
45°	1474.4	2072.9	1537.8	1109.2	988.5	1109.2	1537.8	2072.9	1474.4	1212.8	1121.9
47.5°	1200.8	1602.1	1246.3	951.4	866.8	951.4	1246.3	1602.1	1200.8	1025.8	957.8
50°	1008.6	1229.3	1034.9	830.5	773.7	830.5	1034.9	1229.3	1008.6	878.4	833.0
52.5°	866.5	1002.6	881.3	740.1	701.9	740.1	881.3	1002.6	866.5	768.5	740.3
55°	746.7	842.9	766.4	665.5	639.1	665.5	766.4	842.9	746.7	683.9	663.0
57.5°	655.7	715.0	665.5	602.0	584.4	602.0	665.5	715.0	655.7	608.6	597.3
60°	575.1	619.2	587.3	546.6	541.6	546.6	587.3	619.2	575.1	547.5	540.2
62.5°	513.1	540.9	519.3	496.7	492.3	496.7	519.3	540.9	513.1	492.0	493.3
65°	455.2	481.1	464.1	452.0	453.5	452.0	464.1	481.1	455.2	445.4	447.5
67.5°	410.5	424.0	416.6	409.6	411.4	409.6	416.6	424.0	410.5	400.7	404.0
70°	362.7	377.2	369.6	370.7	373.6	370.7	369.6	377.2	362.7	359.8	362.3
72.5°	317.2	328.3	325.8	328.1	331.2	328.1	325.8	328.3	317.2	316.7	317.0
75°	272.3	280.8	281.9	285.2	290.1	285.2	281.9	280.8	272.3	269.4	272.9
77.5°	223.5	233.1	236.8	241.2	248.4	241.2	236.8	233.1	223.5	225.4	227.2
80°	178.6	183.1	191.2	194.5	204.6	194.5	191.2	183.1	178.6	175.4	177.9
82.5°	130.8	134.8	141.7	147.9	153.7	147.9	141.7	134.8	130.8	129.2	129.4
85°	75.5	81.7	86.4	93.7	95.5	93.7	86.4	81.7	75.5	77.3	75.5
87.5°	26.4	28.4	32.4	35.3	35.5	35.3	32.4	28.4	26.4	27.1	24.5
90°	25.1	42.5	73.3	39.4	26.4	39.4	73.3	42.5	25.1	44.2	69.1
92.5°	32.8	57.9	104.1	52.8	36.0	52.8	104.1	57.9	32.8	57.7	111.3
95°	48.2	71.3	132.7	58.6	43.7	58.6	132.7	71.3	48.2	76.8	155.4
97.5°	75.1	88.5	150.0	62.5	53.2	62.5	150.0	88.5	75.1	94.0	178.3
100°	100.0	100.0	274.5	72.0	60.9	72.0	274.5	100.0	100.0	115.3	278.0
102.5°	151.7	196.0	636.9	145.0	74.3	145.0	636.9	196.0	151.7	216.8	590.3
105°	276.2	448.9	1121.6	376.8	137.8	376.8	1121.6	448.9	276.2	454.5	1052.0
107.5°	523.4	837.8	1445.3	744.7	323.6	744.7	1445.3	837.8	523.4	805.1	1387.5
110°	837.6	1171.2	1577.6	1020.6	657.0	1020.6	1577.6	1171.2	837.6	1105.9	1454.6

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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°	1090.5	1305.3	1541.2	1131.7	*909.9*	1131.7	1541.2	1305.3	1090.5	1220.8	1393.3
115°	1184.7	1286.2	1376.4	1127.9	*1009.6*	1127.9	1376.4	1286.2	1184.7	1192.1	1243.9
117.5°	1144.4	1177.0	1188.6	1058.9	*1015.3*	1058.9	1188.6	1177.0	1144.4	1071.6	1056.0
120°	1033.3	1019.9	1001.1	957.4	*957.9*	957.4	1001.1	1019.9	1033.3	935.6	881.7
122.5°	893.6	864.9	845.8	854.1	*879.3*	854.1	845.8	864.9	893.6	795.8	755.5
125°	757.5	728.9	736.8	765.9	*791.3*	765.9	736.8	728.9	757.5	675.4	665.6
127.5°	642.8	629.4	658.3	691.2	*712.7*	691.2	658.3	629.4	642.8	591.1	602.4
130°	560.6	564.2	602.8	630.2	*643.8*	630.2	602.8	564.2	560.6	535.7	562.3
132.5°	509.0	524.2	560.8	584.4	*592.3*	584.4	560.8	524.2	509.0	501.5	533.9
135°	476.7	499.3	532.2	547.8	*550.1*	547.8	532.2	499.3	476.7	478.8	509.0
137.5°	457.8	480.3	505.4	517.3	*513.7*	517.3	505.4	480.3	457.8	463.7	486.5
140°	446.4	469.0	480.4	494.4	*490.9*	494.4	480.4	469.0	446.4	450.3	467.5
142.5°	435.2	455.9	461.6	471.5	*467.9*	471.5	461.6	455.9	435.2	439.0	450.5
145°	429.6	444.7	440.7	454.3	*449.0*	454.3	440.7	444.7	429.6	431.4	437.3
147.5°	420.0	431.4	425.5	437.3	*431.9*	437.3	425.5	431.4	420.0	420.0	422.1
150°	408.7	416.4	408.5	422.1	*420.6*	422.1	408.5	416.4	408.7	406.8	408.9
152.5°	393.6	401.2	393.6	409.1	*407.4*	409.1	393.6	401.2	393.6	391.6	393.8
155°	380.5	384.3	380.5	396.0	*396.2*	396.0	380.5	384.3	380.5	380.3	380.7
157.5°	371.3	373.5	371.5	385.1	*385.3*	385.1	371.5	373.5	371.3	371.3	371.5
160°	362.5	366.3	364.6	376.3	*376.6*	376.3	364.6	366.3	362.5	364.2	364.4
162.5°	359.0	359.0	357.6	369.3	*369.6*	369.3	357.6	359.0	359.0	359.0	360.9
165°	354.0	355.9	352.4	360.4	*362.7*	360.4	352.4	355.9	354.0	355.7	355.7
167.5°	352.4	350.5	350.9	357.2	*359.5*	357.2	350.9	350.5	352.4	354.2	354.2
170°	348.7	348.9	347.4	353.7	*356.0*	353.7	347.4	348.9	348.7	350.7	352.4
172.5°	349.3	349.3	346.0	350.4	*354.7*	350.4	346.0	349.3	349.3	351.1	353.0
175°	349.7	348.0	346.4	349.0	*353.2*	349.0	346.4	348.0	349.7	349.5	349.5
177.5°	347.8	348.2	348.5	351.1	*357.3*	351.1	348.5	348.2	347.8	349.5	349.5
180°	348.2	348.2	348.2	348.2	*348.2*	348.2	348.2	348.2	348.2	348.2	348.2

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	10299.9	10299.9	10299.9	10299.9	10299.9	10299.9
2.5°	10000.7	9994.1	10000.7	10070.7	10161.6	10293.9
5°	9768.4	9732.0	9768.4	9845.8	10012.9	10264.7
7.5°	9497.8	9476.7	9497.8	9627.4	9838.4	10195.0
10°	*9212.9*	*9165.2*	*9212.9*	*9359.3*	*9608.3*	*10088.5*
12.5°	8861.7	8798.6	8861.7	9013.0	9327.0	9918.8
15°	8415.2	8359.8	8415.2	8583.1	8947.4	9667.8
17.5°	7936.1	7885.9	7936.1	8081.9	8483.0	9313.9
20°	7334.2	7294.8	7334.2	7540.5	7934.1	8857.9
22.5°	6702.9	6666.0	6702.9	6886.1	7295.8	8286.2
25°	5960.1	5940.0	5960.1	6164.8	6535.2	7617.6
27.5°	5157.3	5123.2	5157.3	5371.6	5749.9	6831.1
30°	4337.3	4280.8	4337.3	4528.9	4867.7	5957.6
32.5°	3535.2	3494.5	3535.2	3671.7	4025.8	4979.5
35°	2759.9	2719.2	2759.9	2883.4	3231.0	4077.1
37.5°	2150.6	2078.6	2150.6	2229.7	2512.0	3199.7
40°	1631.1	1619.5	1631.1	1730.8	1911.3	2489.4
42.5°	1327.8	1296.3	1327.8	1370.7	1505.9	1886.2
45°	1089.5	1077.1	1089.5	1121.9	1212.8	1474.4
47.5°	936.9	942.3	936.9	957.8	1025.8	1200.8
50°	823.2	826.5	823.2	833.0	878.4	1008.6
52.5°	739.3	736.4	739.3	740.3	768.5	866.5
55°	665.2	661.5	665.2	663.0	683.9	746.7
57.5°	600.2	603.0	600.2	597.3	608.6	655.7
60°	542.4	544.9	542.4	540.2	547.5	575.1
62.5°	493.5	495.1	493.5	493.3	492.0	513.1
65°	449.8	451.6	449.8	447.5	445.4	455.2
67.5°	408.1	408.1	408.1	404.0	400.7	410.5
70°	368.9	368.7	368.9	362.3	359.8	362.7
72.5°	321.8	326.4	321.8	317.0	316.7	317.2
75°	276.0	281.4	276.0	272.9	269.4	272.3
77.5°	229.7	237.9	229.7	227.2	225.4	223.5
80°	182.1	191.2	182.1	177.9	175.4	178.6
82.5°	134.6	141.3	134.6	129.4	129.2	130.8
85°	80.2	91.0	80.2	75.5	77.3	75.5
87.5°	25.7	32.9	25.7	24.5	27.1	26.4
90°	40.5	25.1	40.5	69.1	44.2	25.1
92.5°	61.5	36.6	61.5	111.3	57.7	32.8
95°	71.1	42.3	71.1	155.4	76.8	48.2
97.5°	78.8	54.0	78.8	178.3	94.0	75.1
100°	92.2	71.3	92.2	278.0	115.3	100.0
102.5°	195.6	121.1	195.6	590.3	216.8	151.7
105°	412.2	209.2	412.2	1052.0	454.5	276.2
107.5°	737.8	362.5	737.8	1387.5	805.1	523.4
110°	979.2	676.7	979.2	1454.6	1105.9	837.6

TEST NUMBER: P1432272
CATALOG NUMBER: EHBR1-12-UNV-TASM-L830-UPL36

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1052.0	914.3	1052.0	1393.3	1220.8	1090.5
115°	1011.8	962.2	1011.8	1243.9	1192.1	1184.7
117.5°	923.7	929.6	923.7	1056.0	1071.6	1144.4
120°	822.1	860.6	822.1	881.7	935.6	1033.3
122.5°	728.5	774.4	728.5	755.5	795.8	893.6
125°	647.9	694.1	647.9	665.6	675.4	757.5
127.5°	592.4	623.3	592.4	602.4	591.1	642.8
130°	548.5	575.3	548.5	562.3	535.7	560.6
132.5°	518.1	535.3	518.1	533.9	501.5	509.0
135°	491.4	506.6	491.4	509.0	478.8	476.7
137.5°	468.6	481.8	468.6	486.5	463.7	457.8
140°	447.9	459.3	447.9	467.5	450.3	446.4
142.5°	427.1	434.8	427.1	450.5	439.0	435.2
145°	412.2	418.0	412.2	437.3	431.4	429.6
147.5°	399.1	403.0	399.1	422.1	420.0	420.0
150°	386.1	390.0	386.1	408.9	406.8	408.7
152.5°	372.9	376.9	372.9	393.8	391.6	393.6
155°	363.6	367.7	363.6	380.7	380.3	380.5
157.5°	358.3	360.5	358.3	371.5	371.3	371.3
160°	353.1	355.2	353.1	364.4	364.2	362.5
162.5°	347.8	350.0	347.8	360.9	359.0	359.0
165°	346.3	346.5	346.3	355.7	355.7	354.0
167.5°	344.5	346.5	344.5	354.2	354.2	352.4
170°	344.7	344.9	344.7	352.4	350.7	348.7
172.5°	345.1	345.3	345.1	353.0	351.1	349.3
175°	343.6	343.8	343.6	349.5	349.5	349.7
177.5°	345.6	345.8	345.6	349.5	349.5	347.8
180°	348.2	348.2	348.2	348.2	348.2	348.2

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

Scaled Data Report

TEST NUMBER: P1432272
CATALOG NUMBER: EHBR1-12-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	12.81	13.73	13.53	14.44	15.28	12.13	13.05	12.85	13.76	14.60
	3H	14.35	15.17	15.08	15.89	16.76	13.97	14.79	14.70	15.51	16.38
	4H	14.98	15.75	15.73	16.48	17.37	14.74	15.51	15.49	16.24	17.13
	6H	15.45	16.16	16.21	16.90	17.80	15.38	16.09	16.14	16.83	17.73
	8H	15.60	16.27	16.37	17.03	17.93	15.60	16.27	16.37	17.03	17.93
	12H	15.67	16.31	16.44	17.06	17.98	15.72	16.36	16.49	17.11	18.03
4H	2H	13.21	13.98	13.96	14.71	15.60	12.69	13.46	13.44	14.19	15.08
	3H	15.00	15.64	15.76	16.40	17.30	14.74	15.37	15.50	16.14	17.04
	4H	15.77	16.35	16.54	17.12	18.05	15.64	16.22	16.42	16.99	17.92
	6H	16.38	16.87	17.17	17.67	18.61	16.41	16.90	17.20	17.70	18.64
	8H	16.57	17.04	17.37	17.83	18.77	16.68	17.14	17.47	17.93	18.88
	12H	16.67	17.08	17.49	17.90	18.85	16.84	17.25	17.65	18.06	19.01
8H	4H	16.01	16.48	16.81	17.26	18.21	15.92	16.38	16.71	17.17	18.11
	6H	16.75	17.13	17.58	17.96	18.91	16.82	17.19	17.64	18.03	18.98
	8H	17.03	17.36	17.86	18.19	19.16	17.17	17.51	18.01	18.34	19.31
	12H	17.19	17.48	18.02	18.30	19.33	17.41	17.71	18.25	18.53	19.55
12H	4H	16.02	16.43	16.83	17.24	18.19	15.92	16.33	16.73	17.14	18.09
	6H	16.80	17.13	17.63	17.97	18.93	16.87	17.20	17.70	18.03	19.00
	8H	17.11	17.40	17.94	18.22	19.25	17.26	17.55	18.10	18.37	19.40

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

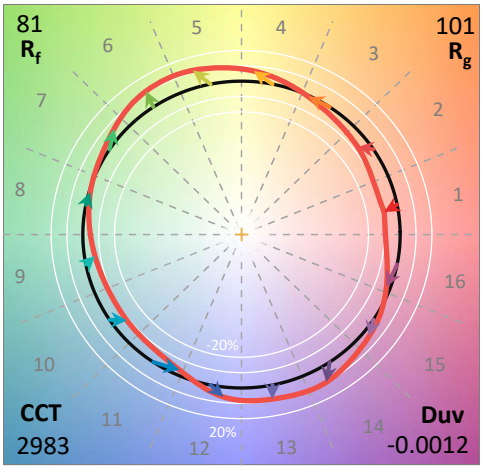
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

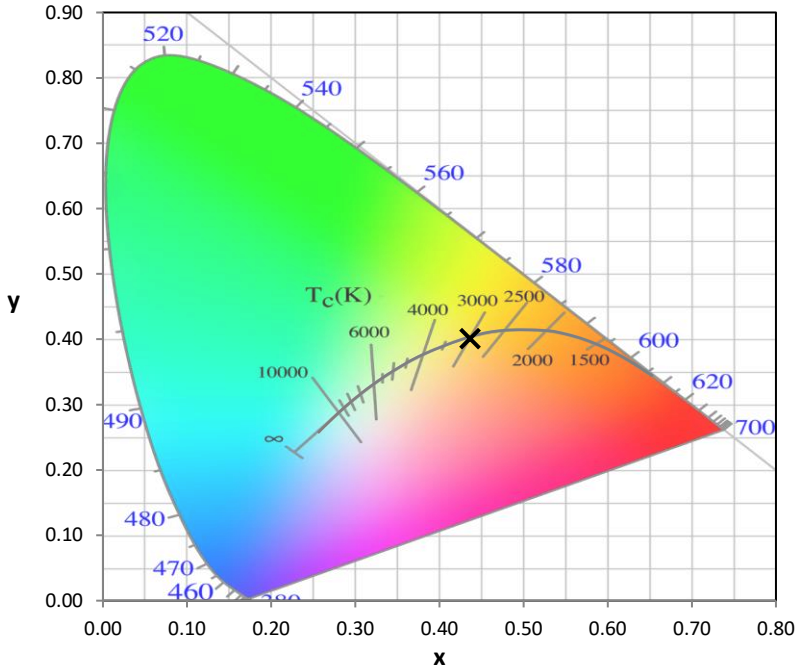
Stabilization Time:	38M
Operation Time:	1H 38M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-2

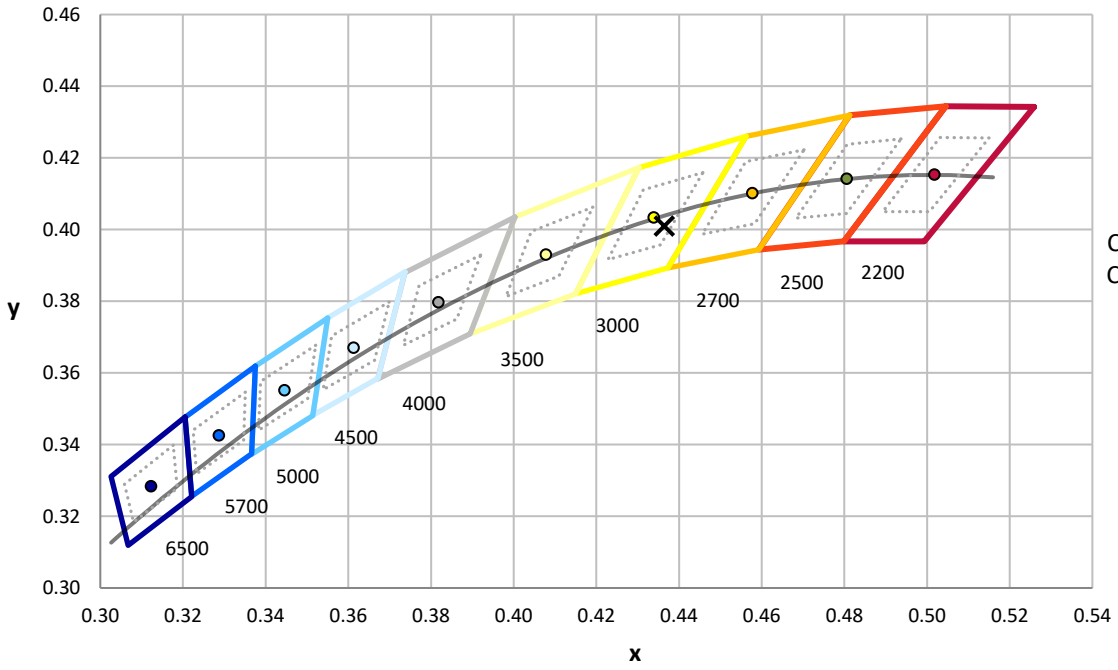
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

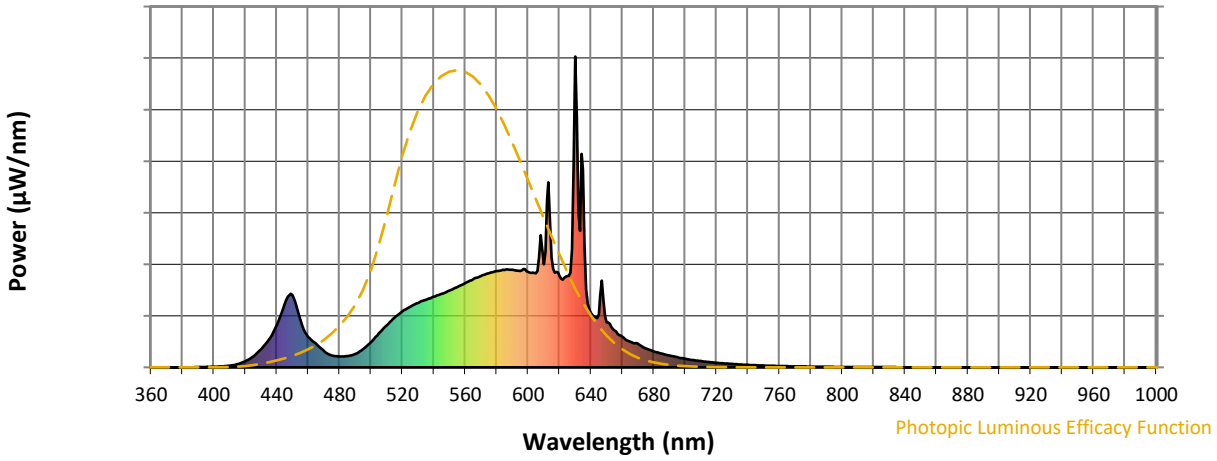


CCT = 2983K
CIE x = 0.4364
CIE y = 0.4010
Duv = -0.0012

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-2

Photopic Flux vs. Wavelength

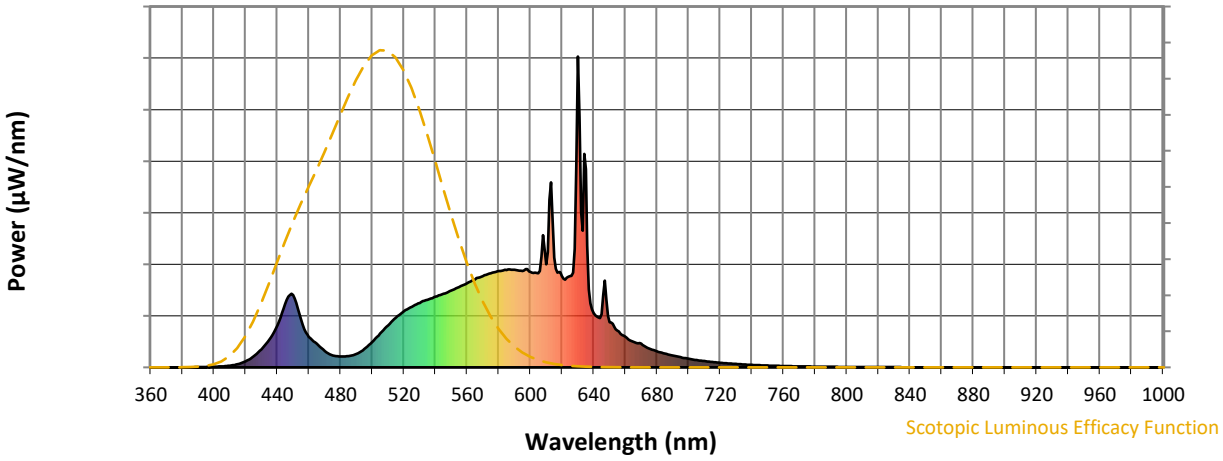


Photopic Lumens: NR

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

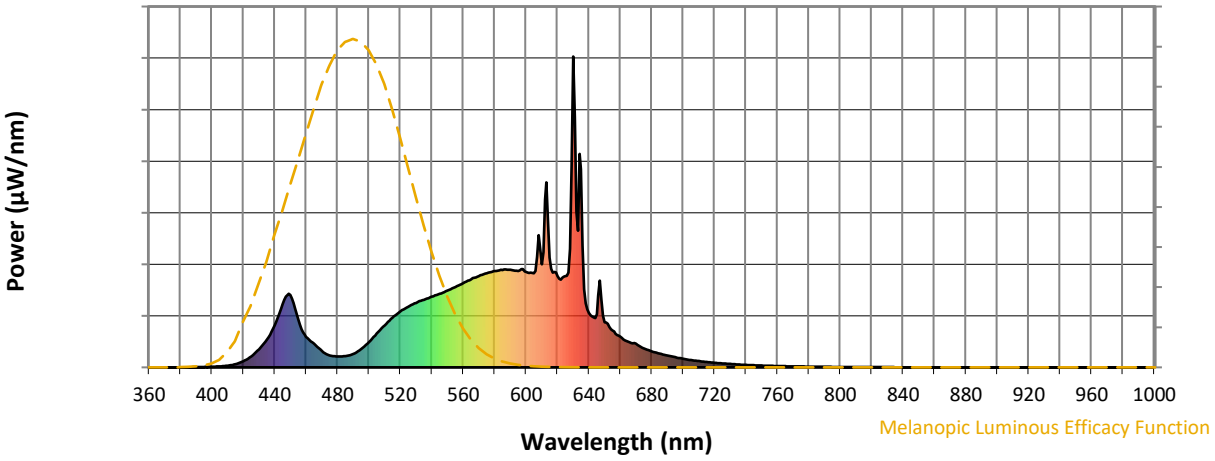


Scotopic Lumens: NR **S/P: 1.27**

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			

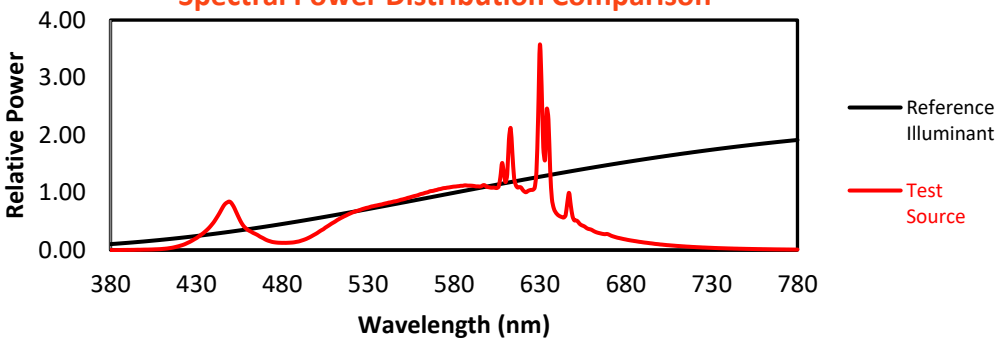
REPORT NUMBER: SP1-2506-472-2

TM-30-18

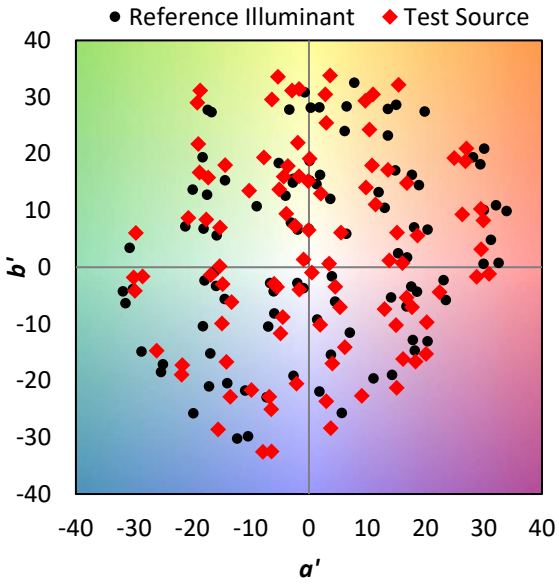
Summary

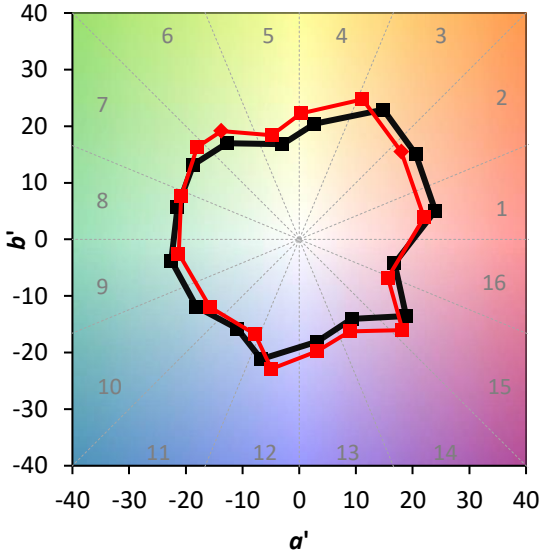
R_f = 81.2
R_g = 101.5
CIE R_a = 83.4
R_9 = 29.4

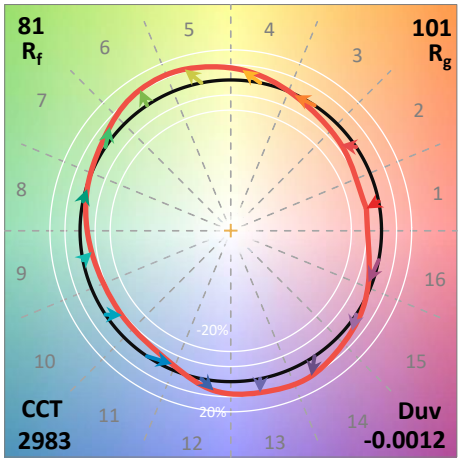
Spectral Power Distribution Comparison

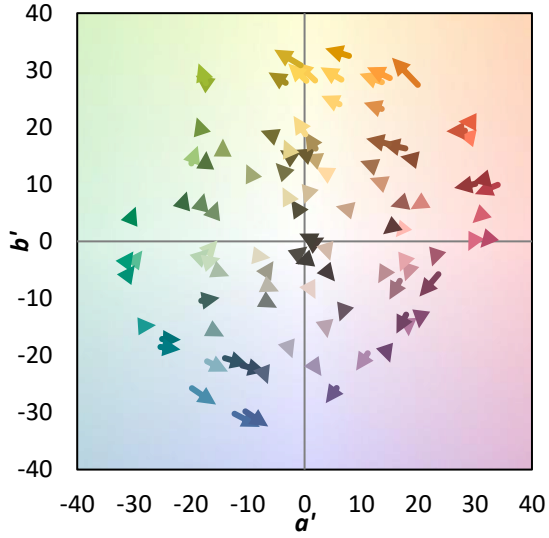


Color Vector Graphics







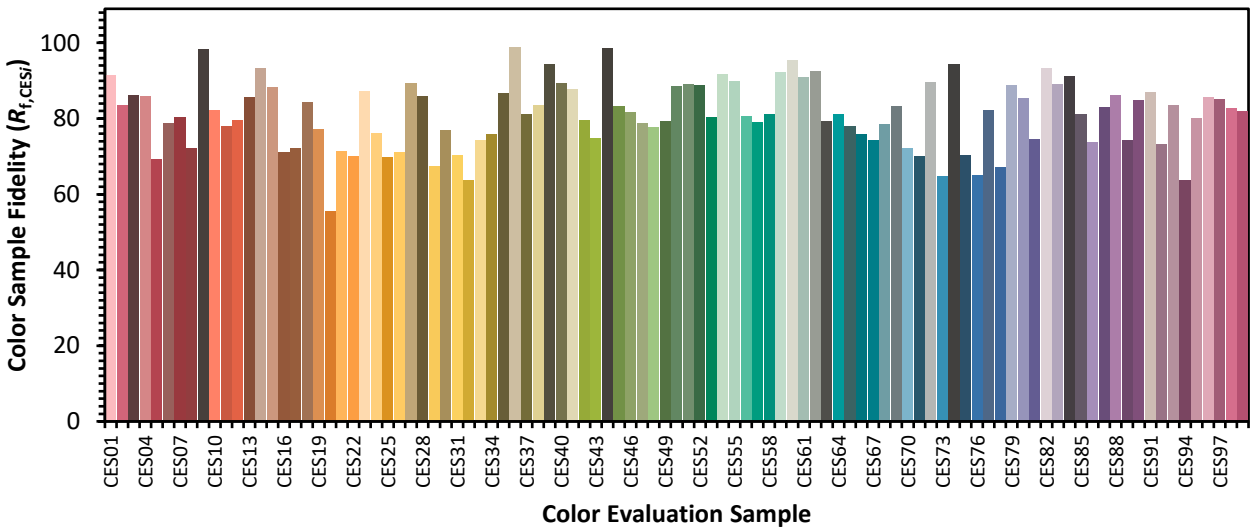


REPORT NUMBER: SP1-2506-472-2

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
CES25 = 72	CES50 = 88	CES75 = 70	



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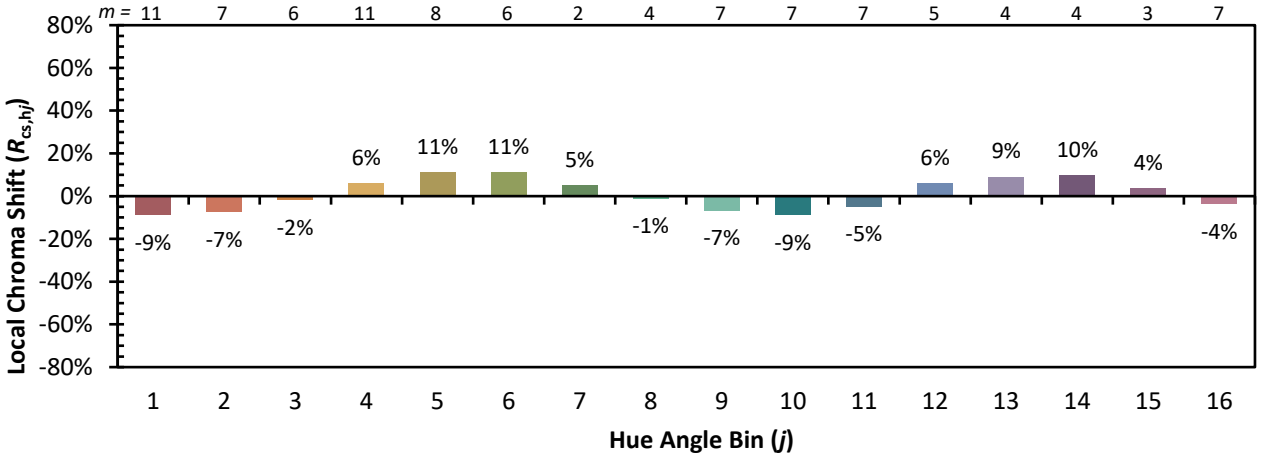
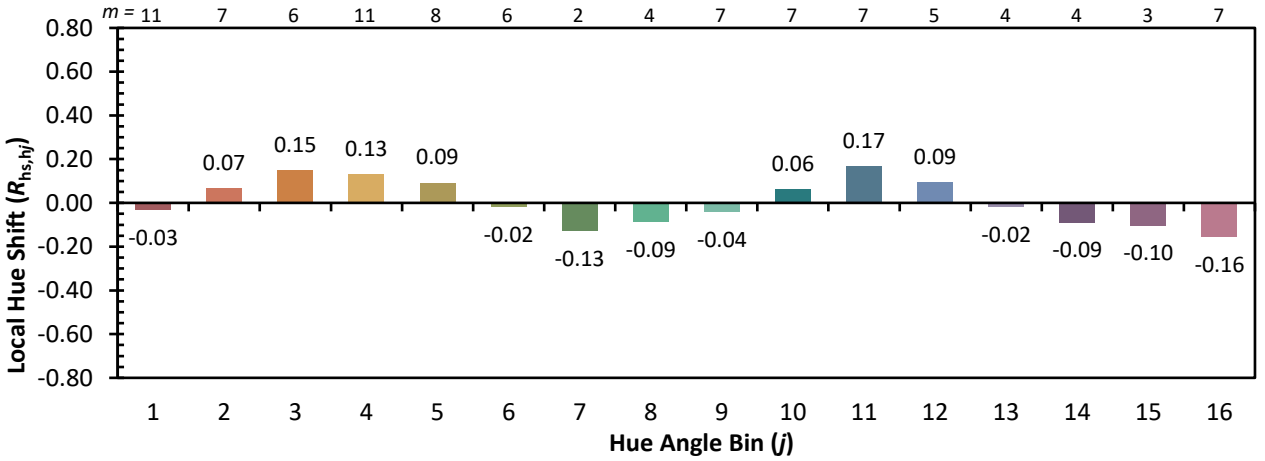
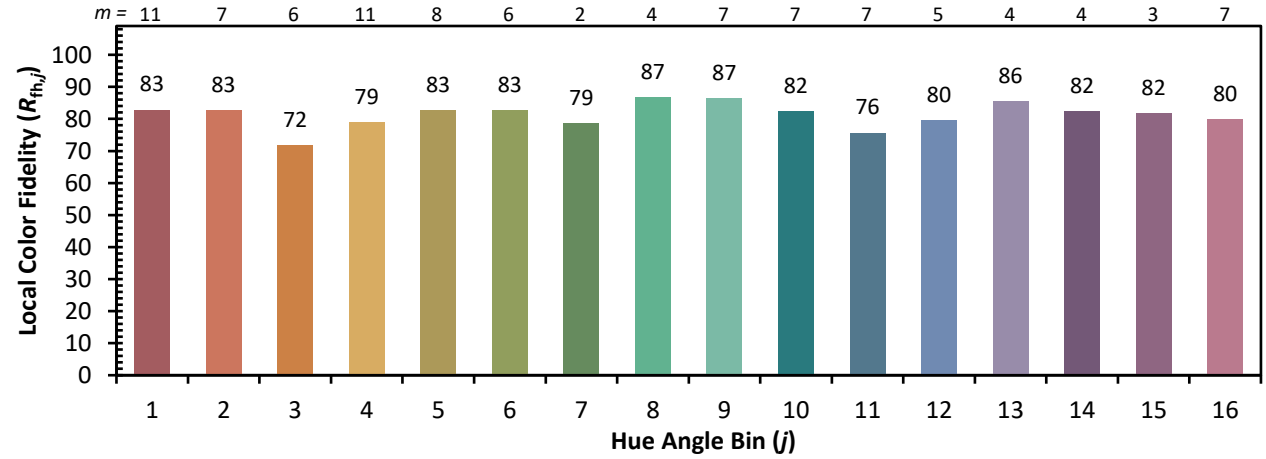
Color Rendition by Hue-Angle Bin







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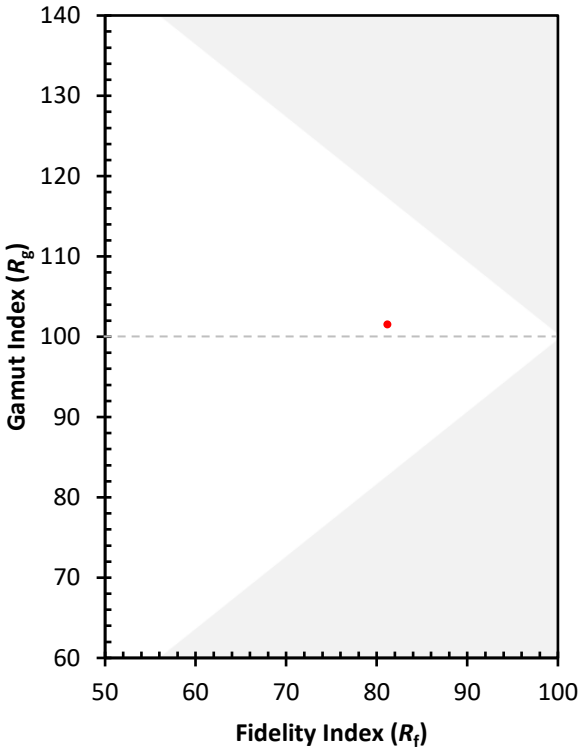
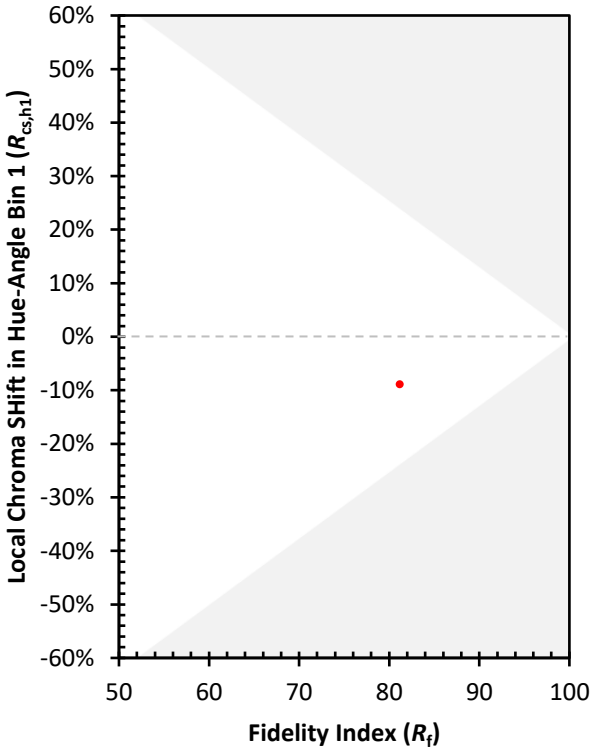
Measure Comparisons





(END OF REPORT)