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: P1432338

Luminaire Tested: EHBR1-24-UNV-TASM-L830

Issue Date: 3/13/2026

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:	P1432338
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-654-4)
Test Lab:	INNOVATION CENTER
Issue Date:	3/13/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-24-UNV-TASM-L830
Description:	Elevate Round Highbay at, 24000 lumens, 3000K 80CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	23206.9 lumens
Efficiency:	N/A
Efficacy:	180.9 lumens/watt
Spacing Criteria (0/90/45):	0.99 / 0.84 / 0.9
Luminous Opening:	Circular (Dia: 1.71' x H: 0')
CIE Type:	Direct

Input Watts (W):	128.3
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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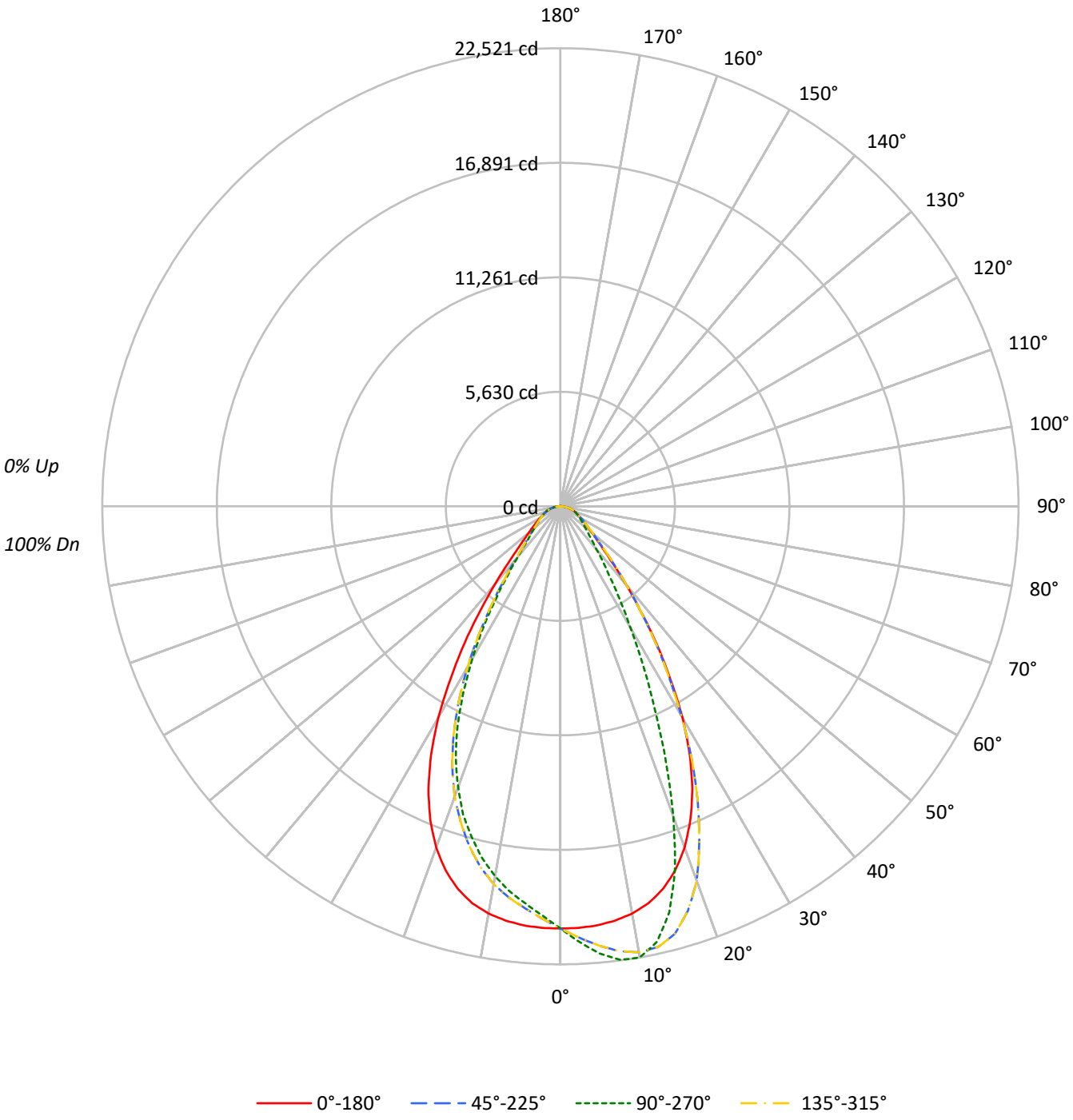
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			20
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	93	84	77	72	91	83	77	72	80	75	71	78	74	70	76	72	69	67
5	87	78	71	66	86	77	70	65	75	69	65	73	68	64	71	67	64	62
6	82	72	65	60	81	71	65	60	70	64	60	68	63	59	67	62	59	57
7	78	67	60	56	76	67	60	56	65	59	55	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	52	61	55	51	60	55	51	59	54	51	49
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46
10	66	56	49	45	65	55	49	45	54	49	45	54	48	45	53	48	45	43

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	97467	97467	97467	97467
5°	97505	104019	97505	92445
10°	96940	107391	96940	88066
15°	94711	100473	94711	81898
20°	89201	81131	89201	73460
25°	79536	56630	79536	62020
30°	65097	37137	65097	46775
35°	47100	24262	47100	31412
40°	30751	16887	30751	20005
45°	19732	13228	19732	14414
50°	14848	11391	14848	12166
55°	12318	10544	12318	10913
60°	10886	10250	10886	10312
65°	10193	10154	10193	10111
70°	10036	10334	10036	10200
75°	9956	10605	9956	10290
80°	9736	11147	9736	10420
85°	8201	10356	8201	9877

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 27741 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1973.5	8.5
10°-20°	5368.9	23.1
20°-30°	6296.6	27.1
30°-40°	4378.9	18.9
40°-50°	2176.1	9.4
50°-60°	1301.5	5.6
60°-70°	916.1	3.9
70°-80°	590.1	2.5
80°-90°	187.4	0.8
90°-100°	1.1	0.0
100°-110°	1.3	0.0
110°-120°	1.3	0.0
120°-130°	1.7	0.0
130°-140°	2.3	0.0
140°-150°	2.7	0.0
150°-160°	3.1	0.0
160°-170°	3.0	0.0
170°-180°	1.3	0.0
0°-30°	13639.0	58.8
0°-40°	18017.9	77.6
0°-60°	21495.6	92.6
0°-90°	23189.2	99.9
90°-120°	3.6	0.0
90°-150°	10.3	0.0
90°-180°	18.0	0.1
0°-180°	23206.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	20755	20755	20755	20755	20755	
5°	20684	22066	20684	19611	20684	1963
15°	19481	20666	19481	16845	19481	5444
25°	15350	10929	15350	11969	15350	6949
35°	8216	4232	8216	5479	8216	5129
45°	2971	1992	2971	2170	2971	2431
55°	1504	1288	1504	1333	1504	1376
65°	917	914	917	910	917	921
75°	549	584	549	567	549	576
85°	152	192	152	183	152	169
90°	0	3	0	0	0	7
95°	1	3	1	0	1	1
105°	1	4	1	1	1	1
115°	1	4	1	1	1	1
125°	2	4	2	1	2	2
135°	3	4	3	2	3	2
145°	5	5	5	4	5	3
155°	6	7	6	7	6	3
165°	10	13	10	11	10	3
175°	14	17	14	13	14	1
180°	14	14	14	14	14	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	20754.8	20754.8	20754.8	20754.8	*20754.8*	20754.8	20754.8	20754.8	20754.8	20754.8	20754.8
2.5°	20742.7	21010.9	21228.0	21371.2	*21442.0*	21371.2	21228.0	21010.9	20742.7	20476.1	20292.8
5°	20683.9	21221.0	21675.9	21973.7	*22065.9*	21973.7	21675.9	21221.0	20683.9	20176.4	19839.8
7.5°	20543.4	21380.2	22056.1	22403.7	*22488.5*	22403.7	22056.1	21380.2	20543.4	19825.0	19399.6
10°	*20329.0*	*21480.6*	*22261.6*	*22510.7*	*22520.8*	*22510.7*	*22261.6*	*21480.6*	*20329.0*	*19361.1*	*18859.4*
12.5°	19986.8	21444.7	22192.8	22111.0	*21925.4*	22111.0	22192.8	21444.7	19986.8	18794.4	18161.7
15°	19480.9	21232.7	21756.5	21091.4	*20666.0*	21091.4	21756.5	21232.7	19480.9	18029.3	17295.3
17.5°	18768.0	20835.7	20845.8	19530.0	*18727.5*	19530.0	20845.8	20835.7	18768.0	17093.7	16285.3
20°	17849.1	20199.0	19591.8	17185.1	*16234.4*	17185.1	19591.8	20199.0	17849.1	15987.7	15194.5
22.5°	16697.1	19340.4	17845.6	14826.3	*13529.2*	14826.3	17845.6	19340.4	16697.1	14701.4	13875.9
25°	15349.8	18288.5	15967.0	12256.2	*10929.1*	12256.2	15967.0	18288.5	15349.8	13168.8	12422.4
27.5°	13765.0	16955.2	13966.6	10015.2	*8790.8*	10015.2	13966.6	16955.2	13765.0	11586.3	10824.0
30°	12004.8	15245.9	11884.9	7975.9	*6848.5*	7975.9	11884.9	15245.9	12004.8	9808.6	9126.0
32.5°	10033.9	13570.4	9885.7	6390.8	*5435.7*	6390.8	9885.7	13570.4	10033.9	8112.1	7398.8
35°	8215.7	11474.3	8083.0	5021.6	*4232.0*	5021.6	8083.0	11474.3	8215.7	6510.7	5810.1
37.5°	6447.6	9493.7	6443.3	4043.6	*3432.6*	4043.6	6443.3	9493.7	6447.6	5061.7	4493.1
40°	5016.2	7423.2	5048.5	3227.9	*2754.7*	3227.9	5048.5	7423.2	5016.2	3851.4	3487.5
42.5°	3800.8	5676.3	3968.1	2649.2	*2339.8*	2649.2	3968.1	5676.3	3800.8	3034.5	2762.1
45°	2971.1	4177.1	3098.6	2235.1	*1991.8*	2235.1	3098.6	4177.1	2971.1	2443.7	2260.7
47.5°	2419.5	3228.3	2511.4	1917.2	*1746.7*	1917.2	2511.4	3228.3	2419.5	2066.9	1930.0
50°	2032.3	2477.1	2085.2	1673.5	*1559.1*	1673.5	2085.2	2477.1	2032.3	1770.0	1678.6
52.5°	1745.8	2020.3	1775.8	1491.3	*1414.3*	1491.3	1775.8	2020.3	1745.8	1548.6	1491.7
55°	1504.5	1698.4	1544.3	1341.1	*1287.8*	1341.1	1544.3	1698.4	1504.5	1378.1	1336.0
57.5°	1321.3	1440.8	1341.1	1213.0	*1177.6*	1213.0	1341.1	1440.8	1321.3	1226.3	1203.8
60°	1159.0	1247.7	1183.5	1101.4	*1091.3*	1101.4	1183.5	1247.7	1159.0	1103.3	1088.5
62.5°	1034.0	1090.1	1046.5	1001.0	*992.1*	1001.0	1046.5	1090.1	1034.0	991.2	993.9
65°	917.3	969.5	935.2	910.7	*913.8*	910.7	935.2	969.5	917.3	897.5	901.8
67.5°	827.0	854.3	839.5	825.4	*829.0*	825.4	839.5	854.3	827.0	807.5	814.2
70°	730.9	760.0	744.9	746.8	*752.6*	746.8	744.9	760.0	730.9	725.0	730.1
72.5°	639.0	661.6	656.5	661.2	*667.4*	661.2	656.5	661.6	639.0	638.3	638.6
75°	548.7	565.9	568.2	574.9	*584.5*	574.9	568.2	565.9	548.7	542.9	549.9
77.5°	450.3	469.8	477.2	486.1	*500.5*	486.1	477.2	469.8	450.3	454.2	457.7
80°	360.0	369.0	385.3	391.9	*412.2*	391.9	385.3	369.0	360.0	353.4	358.5
82.5°	263.5	271.6	285.7	298.2	*309.8*	298.2	285.7	271.6	263.5	260.4	260.8
85°	152.2	164.6	173.9	188.7	*192.2*	188.7	173.9	164.6	152.2	155.7	152.2
87.5°	53.3	57.2	65.4	71.2	*71.6*	71.2	65.4	57.2	53.3	54.5	49.5
90°	0.4	0.7	1.1	2.3	*3.1*	2.3	1.1	0.7	0.4	0.4	0.4
92.5°	0.4	0.7	1.1	2.3	*3.1*	2.3	1.1	0.7	0.4	0.4	0.4
95°	0.7	0.7	1.1	2.3	*3.1*	2.3	1.1	0.7	0.7	0.4	0.4
97.5°	0.7	0.7	1.1	2.3	*3.1*	2.3	1.1	0.7	0.7	0.4	0.4
100°	0.7	0.7	1.1	2.3	*3.1*	2.3	1.1	0.7	0.7	0.7	0.4
102.5°	0.7	1.1	1.6	2.7	*3.1*	2.7	1.6	1.1	0.7	0.7	0.4
105°	0.7	1.1	1.6	2.7	*3.5*	2.7	1.6	1.1	0.7	0.7	0.4
107.5°	0.7	1.1	1.6	2.7	*3.5*	2.7	1.6	1.1	0.7	0.7	0.7
110°	0.7	1.1	1.6	2.7	*3.5*	2.7	1.6	1.1	0.7	0.7	0.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	0.7	1.1	1.6	2.7	3.5	2.7	1.6	1.1	0.7	0.7	0.7
115°	1.1	1.1	1.6	2.7	3.5	2.7	1.6	1.1	1.1	0.7	0.7
117.5°	1.1	1.1	1.6	2.7	3.5	2.7	1.6	1.1	1.1	1.1	0.7
120°	1.1	1.1	2.0	2.7	3.5	2.7	2.0	1.1	1.1	1.1	0.7
122.5°	1.6	1.6	2.0	3.1	3.5	3.1	2.0	1.6	1.6	1.6	1.1
125°	1.6	1.6	2.3	3.1	3.9	3.1	2.3	1.6	1.6	2.0	1.6
127.5°	2.0	2.0	2.3	3.1	3.9	3.1	2.3	2.0	2.0	2.0	1.6
130°	2.3	2.0	2.3	3.5	3.9	3.5	2.3	2.0	2.3	2.3	2.0
132.5°	2.7	2.3	2.7	3.9	4.3	3.9	2.7	2.3	2.7	3.1	2.7
135°	3.1	2.3	3.1	3.5	4.3	3.5	3.1	2.3	3.1	3.5	2.7
137.5°	3.5	2.7	3.1	3.9	4.3	3.9	3.1	2.7	3.5	3.9	3.5
140°	3.9	3.1	3.1	3.9	4.7	3.9	3.1	3.1	3.9	3.9	3.9
142.5°	4.3	3.5	3.5	4.3	4.7	4.3	3.5	3.5	4.3	4.3	4.3
145°	4.7	4.3	3.9	4.3	5.1	4.3	3.9	4.3	4.7	4.3	4.7
147.5°	4.7	4.3	4.3	4.7	5.4	4.7	4.3	4.3	4.7	4.7	5.1
150°	5.1	5.1	4.7	5.1	5.8	5.1	4.7	5.1	5.1	5.1	5.4
152.5°	5.4	5.4	5.4	5.8	6.2	5.8	5.4	5.4	5.4	5.4	5.8
155°	6.2	6.2	6.2	6.7	7.0	6.7	6.2	6.2	6.2	5.8	6.7
157.5°	7.0	7.4	7.4	7.8	8.1	7.8	7.4	7.4	7.0	7.0	7.4
160°	8.5	8.5	9.0	9.4	9.7	9.4	9.0	8.5	8.5	8.1	8.5
162.5°	9.4	9.4	10.1	10.5	11.2	10.5	10.1	9.4	9.4	9.4	9.4
165°	10.5	10.5	11.2	12.1	12.8	12.1	11.2	10.5	10.5	10.1	10.1
167.5°	11.2	11.2	12.1	13.2	14.1	13.2	12.1	11.2	11.2	10.9	10.9
170°	11.7	12.1	12.8	14.1	14.8	14.1	12.8	12.1	11.7	11.7	11.2
172.5°	12.8	12.8	14.1	15.2	15.9	15.2	14.1	12.8	12.8	12.5	12.5
175°	13.6	14.1	14.8	15.9	16.8	15.9	14.8	14.1	13.6	13.2	13.2
177.5°	13.6	14.4	15.2	16.4	17.1	16.4	15.2	14.4	13.6	13.2	13.2
180°	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	20754.8	20754.8	20754.8	20754.8	20754.8	20754.8
2.5°	20151.9	20138.7	20151.9	20292.8	20476.1	20742.7
5°	19683.7	19610.6	19683.7	19839.8	20176.4	20683.9
7.5°	19138.5	19096.0	19138.5	19399.6	19825.0	20543.4
10°	*18564.4*	*18468.2*	*18564.4*	*18859.4*	*19361.1*	*20329.0*
12.5°	17856.9	17729.7	17856.9	18161.7	18794.4	19986.8
15°	16957.1	16845.4	16957.1	17295.3	18029.3	19480.9
17.5°	15991.5	15890.3	15991.5	16285.3	17093.7	18768.0
20°	14778.8	14699.4	14778.8	15194.5	15987.7	17849.1
22.5°	13506.6	13432.2	13506.6	13875.9	14701.4	16697.1
25°	12009.8	11969.4	12009.8	12422.4	13168.8	15349.8
27.5°	10392.3	10323.5	10392.3	10824.0	11586.3	13765.0
30°	8739.9	8625.9	8739.9	9126.0	9808.6	12004.8
32.5°	7123.6	7041.5	7123.6	7398.8	8112.1	10033.9
35°	5561.4	5479.3	5561.4	5810.1	6510.7	8215.7
37.5°	4333.6	4188.4	4333.6	4493.1	5061.7	6447.6
40°	3286.6	3263.3	3286.6	3487.5	3851.4	5016.2
42.5°	2675.6	2612.2	2675.6	2762.1	3034.5	3800.8
45°	2195.4	2170.4	2195.4	2260.7	2443.7	2971.1
47.5°	1887.9	1898.8	1887.9	1930.0	2066.9	2419.5
50°	1658.7	1665.3	1658.7	1678.6	1770.0	2032.3
52.5°	1489.8	1483.9	1489.8	1491.7	1548.6	1745.8
55°	1340.3	1332.9	1340.3	1336.0	1378.1	1504.5
57.5°	1209.6	1215.0	1209.6	1203.8	1226.3	1321.3
60°	1092.9	1097.9	1092.9	1088.5	1103.3	1159.0
62.5°	994.3	997.5	994.3	993.9	991.2	1034.0
65°	906.5	909.9	906.5	901.8	897.5	917.3
67.5°	822.3	822.3	822.3	814.2	807.5	827.0
70°	743.4	742.9	743.4	730.1	725.0	730.9
72.5°	648.4	657.8	648.4	638.6	638.3	639.0
75°	556.1	567.1	556.1	549.9	542.9	548.7
77.5°	462.7	479.5	462.7	457.7	454.2	450.3
80°	367.0	385.3	367.0	358.5	353.4	360.0
82.5°	271.3	284.9	271.3	260.8	260.4	263.5
85°	161.5	183.3	161.5	152.2	155.7	152.2
87.5°	51.8	66.1	51.8	49.5	54.5	53.3
90°	0.4	0.4	0.4	0.4	0.4	0.4
92.5°	0.4	0.4	0.4	0.4	0.4	0.4
95°	0.4	0.4	0.4	0.4	0.4	0.7
97.5°	0.4	0.7	0.4	0.4	0.4	0.7
100°	0.4	0.7	0.4	0.4	0.7	0.7
102.5°	0.4	0.7	0.4	0.4	0.7	0.7
105°	0.4	0.7	0.4	0.4	0.7	0.7
107.5°	0.4	0.7	0.4	0.7	0.7	0.7
110°	0.4	0.7	0.4	0.7	0.7	0.7

TEST NUMBER: P1432338
CATALOG NUMBER: EHBR1-24-UNV-TASM-L830

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	0.4	0.7	0.4	0.7	0.7	0.7
115°	0.4	0.7	0.4	0.7	0.7	1.1
117.5°	0.4	0.7	0.4	0.7	1.1	1.1
120°	0.4	0.7	0.4	0.7	1.1	1.1
122.5°	0.7	0.7	0.7	1.1	1.6	1.6
125°	0.7	1.1	0.7	1.6	2.0	1.6
127.5°	0.7	1.1	0.7	1.6	2.0	2.0
130°	1.1	1.1	1.1	2.0	2.3	2.3
132.5°	1.6	1.6	1.6	2.7	3.1	2.7
135°	2.0	1.6	2.0	2.7	3.5	3.1
137.5°	2.3	2.0	2.3	3.5	3.9	3.5
140°	3.1	2.7	3.1	3.9	3.9	3.9
142.5°	3.5	3.5	3.5	4.3	4.3	4.3
145°	4.3	4.3	4.3	4.7	4.3	4.7
147.5°	5.1	5.1	5.1	5.1	4.7	4.7
150°	5.8	5.8	5.8	5.4	5.1	5.1
152.5°	6.2	6.7	6.2	5.8	5.4	5.4
155°	7.0	7.4	7.0	6.7	5.8	6.2
157.5°	7.8	8.5	7.8	7.4	7.0	7.0
160°	9.0	9.4	9.0	8.5	8.1	8.5
162.5°	9.7	10.1	9.7	9.4	9.4	9.4
165°	10.5	10.9	10.5	10.1	10.1	10.5
167.5°	10.9	10.9	10.9	10.9	10.9	11.2
170°	11.2	11.7	11.2	11.2	11.7	11.7
172.5°	12.1	12.5	12.1	12.5	12.5	12.8
175°	12.8	13.2	12.8	13.2	13.2	13.6
177.5°	13.2	13.6	13.2	13.2	13.2	13.6
180°	14.4	14.4	14.4	14.4	14.4	14.4

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

Scaled Data Report

TEST NUMBER: P1432338
CATALOG NUMBER: EHBR1-24-UNV-TASM-L830

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	17.56	18.77	17.93	19.08	19.40	16.88	18.09	17.25	18.40	18.72
	3H	19.20	20.27	19.58	20.61	20.97	18.83	19.90	19.21	20.24	20.60
	4H	19.91	20.91	20.31	21.26	21.65	19.69	20.69	20.10	21.04	21.43
	6H	20.48	21.40	20.89	21.77	22.17	20.44	21.36	20.86	21.73	22.13
	8H	20.68	21.55	21.11	21.94	22.35	20.73	21.60	21.16	21.99	22.40
	12H	20.80	21.63	21.24	22.02	22.45	20.92	21.76	21.36	22.14	22.57
4H	2H	18.02	19.02	18.43	19.38	19.76	17.51	18.51	17.92	18.86	19.25
	3H	19.93	20.76	20.35	21.17	21.57	19.69	20.51	20.10	20.92	21.32
	4H	20.79	21.53	21.23	21.95	22.40	20.68	21.42	21.12	21.85	22.29
	6H	21.51	22.15	21.98	22.60	23.07	21.58	22.22	22.05	22.67	23.14
	8H	21.77	22.37	22.25	22.82	23.29	21.92	22.52	22.40	22.97	23.44
	12H	21.94	22.47	22.43	22.95	23.43	22.17	22.70	22.66	23.18	23.66
8H	4H	21.10	21.70	21.57	22.15	22.62	21.02	21.62	21.50	22.07	22.54
	6H	21.98	22.46	22.48	22.96	23.44	22.08	22.56	22.58	23.06	23.54
	8H	22.33	22.76	22.85	23.28	23.77	22.53	22.96	23.05	23.48	23.97
	12H	22.59	22.96	23.11	23.46	24.04	22.88	23.26	23.40	23.76	24.33
12H	4H	21.13	21.65	21.62	22.14	22.62	21.05	21.58	21.54	22.06	22.54
	6H	22.05	22.48	22.57	23.00	23.49	22.15	22.58	22.68	23.10	23.60
	8H	22.46	22.84	22.98	23.34	23.91	22.67	23.04	23.18	23.54	24.12

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

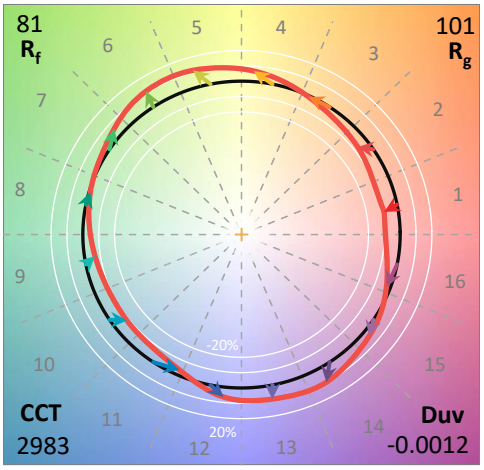
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

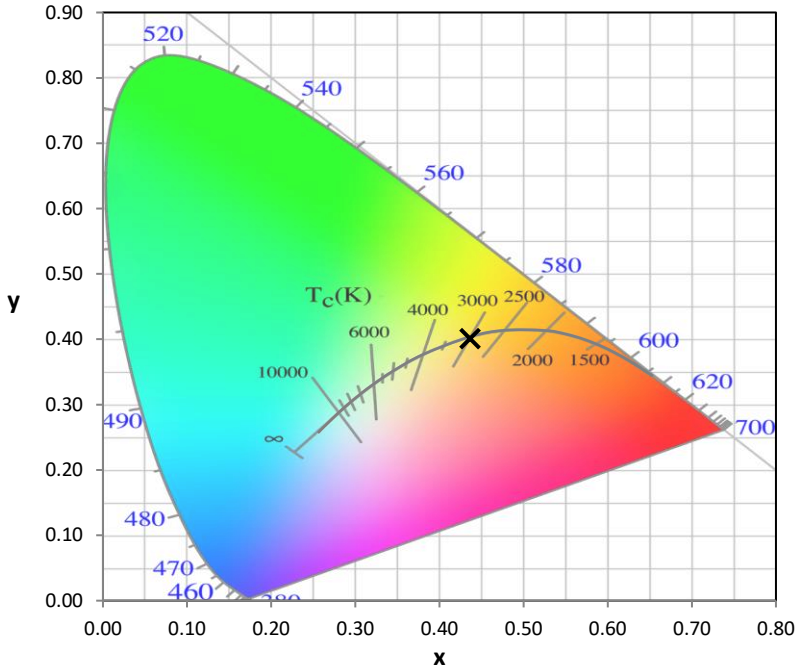
Stabilization Time:	38M
Operation Time:	1H 38M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-2

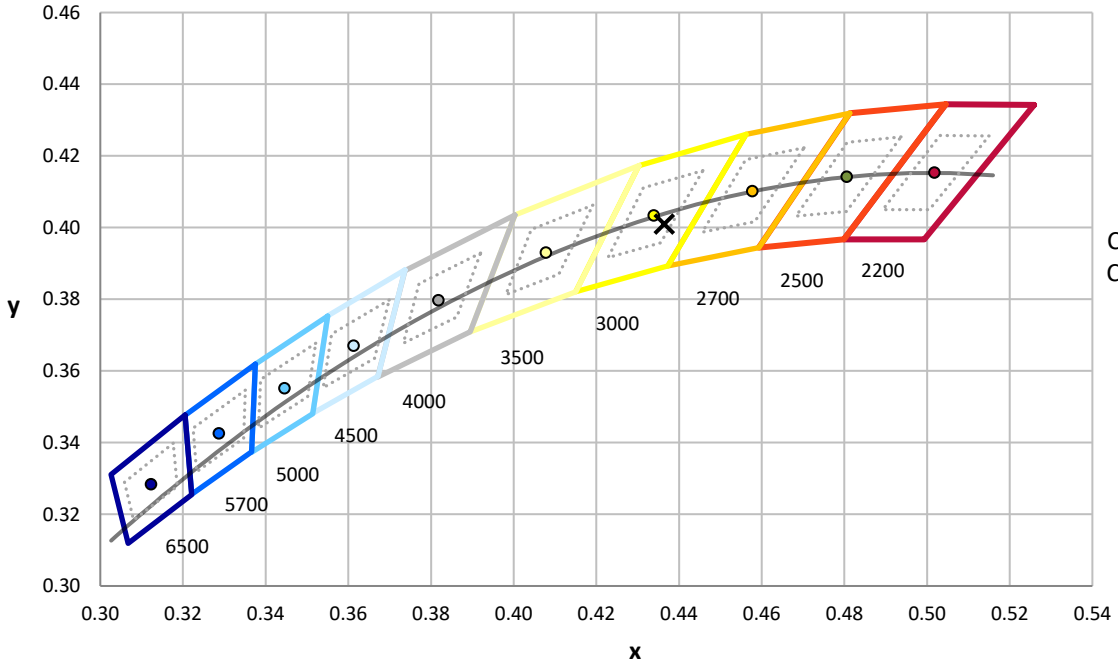
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

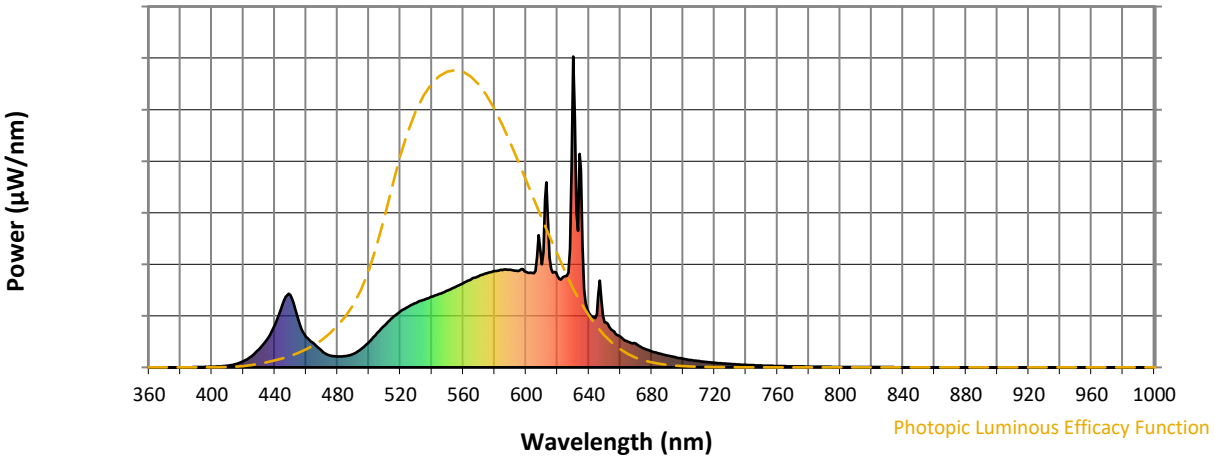


CCT = 2983K
CIE x = 0.4364
CIE y = 0.4010
Duv = -0.0012

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-2

Photopic Flux vs. Wavelength

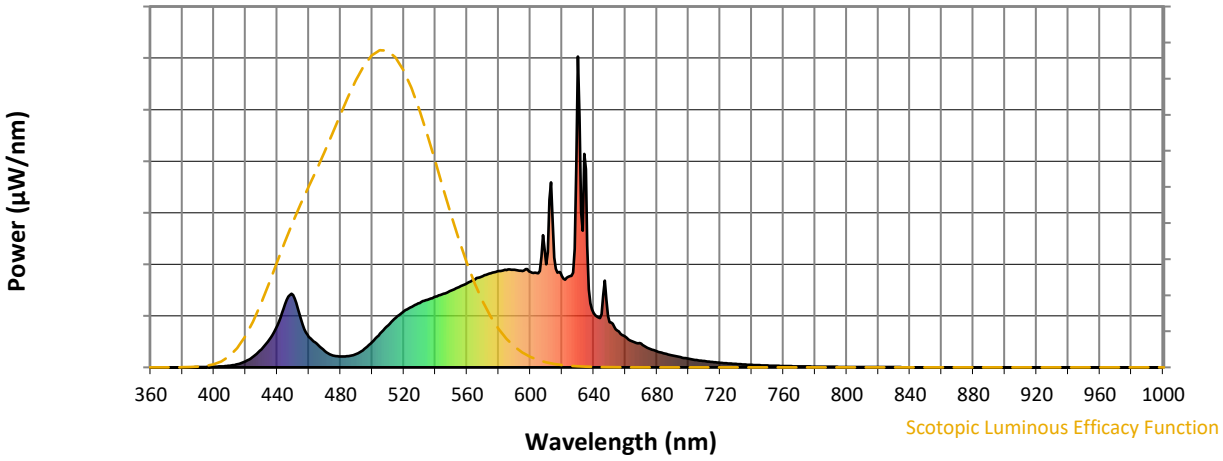


Photopic Lumens: NR

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

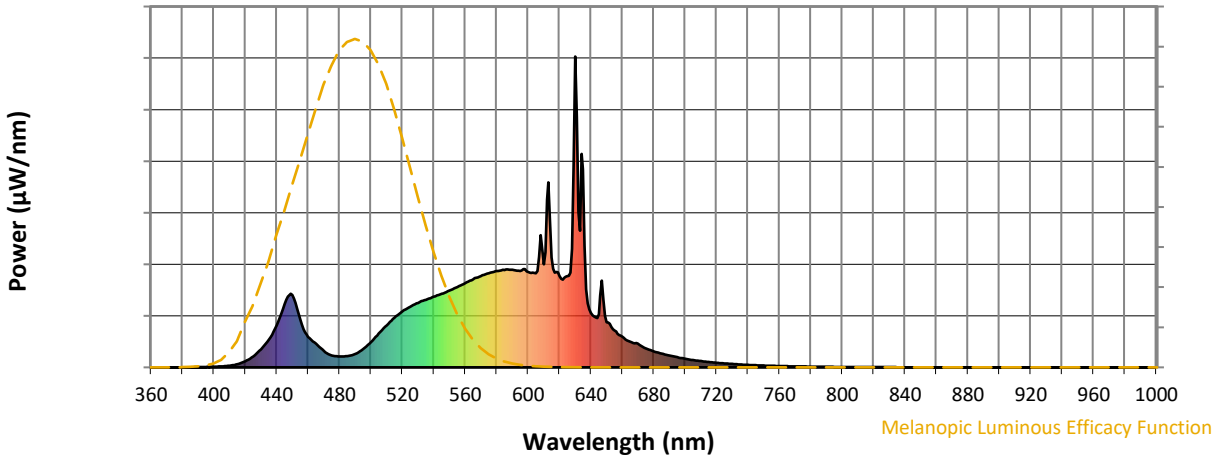


Scotopic Lumens: NR **S/P: 1.27**

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			

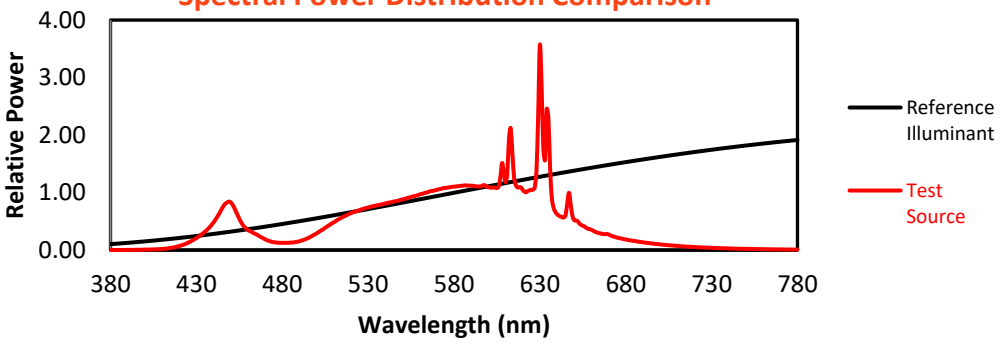
REPORT NUMBER: SP1-2506-472-2

TM-30-18

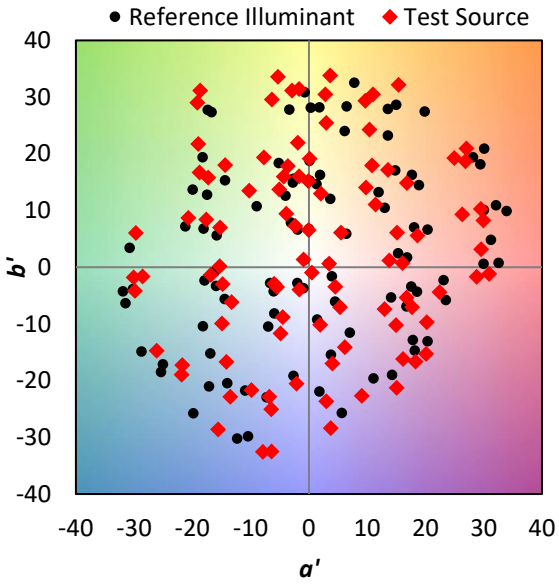
Summary

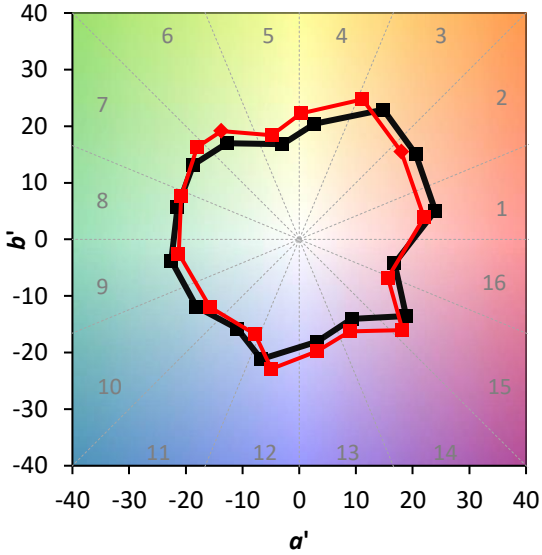
R_f = 81.2
R_g = 101.5
CIE R_a = 83.4
R_9 = 29.4

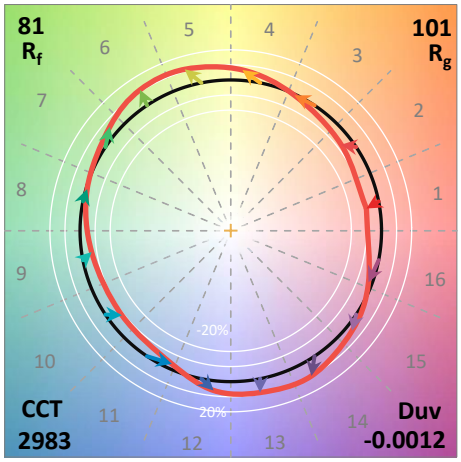
Spectral Power Distribution Comparison

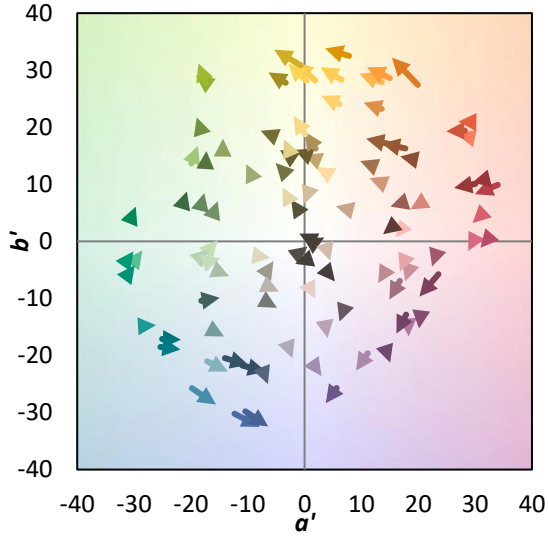


Color Vector Graphics







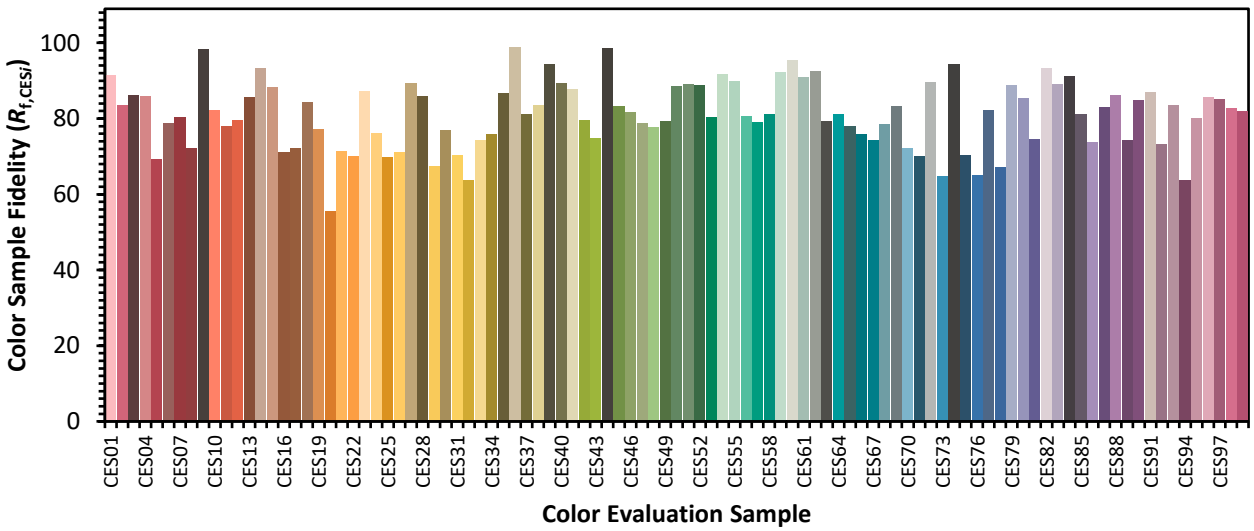


REPORT NUMBER: SP1-2506-472-2

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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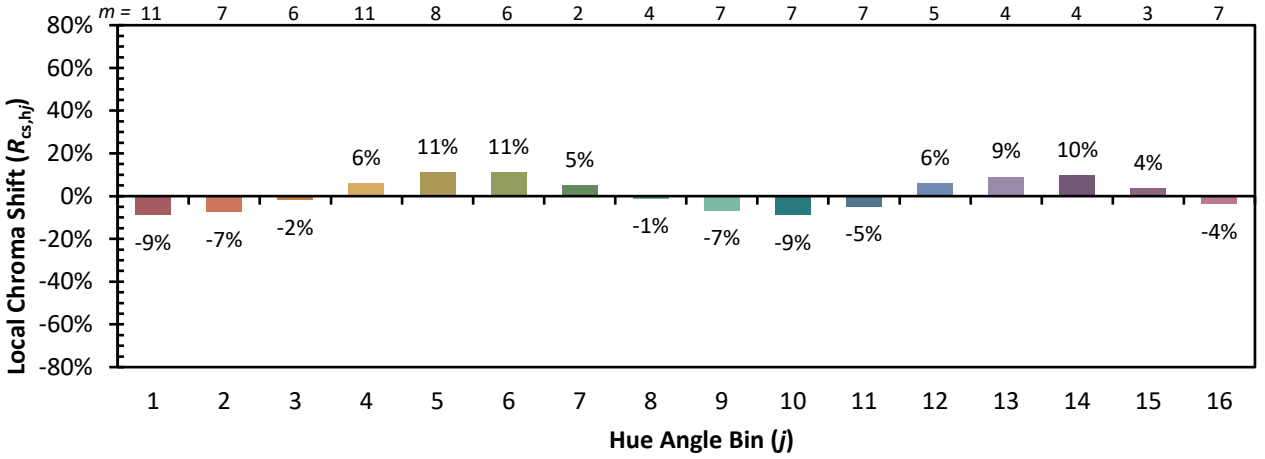
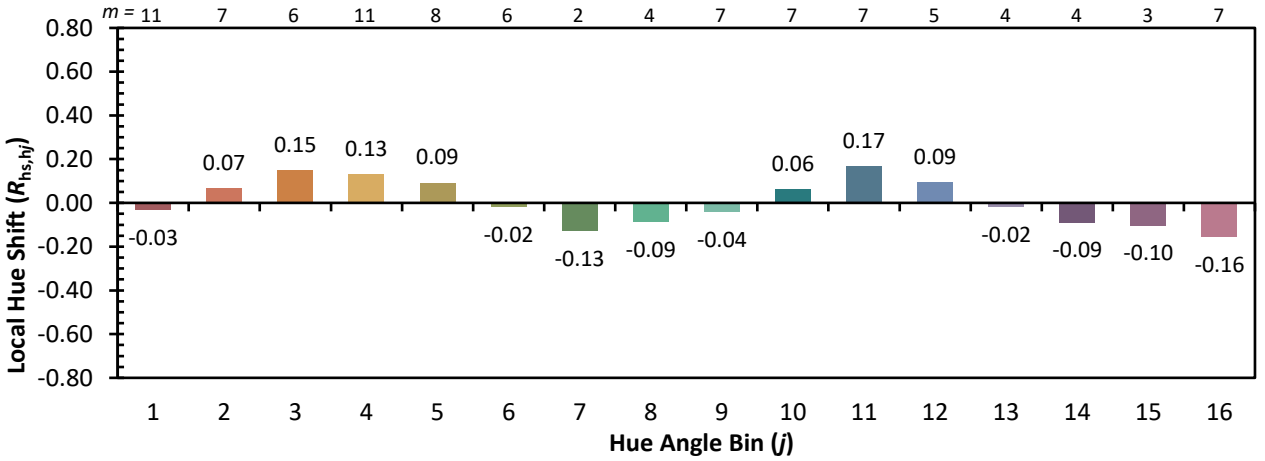
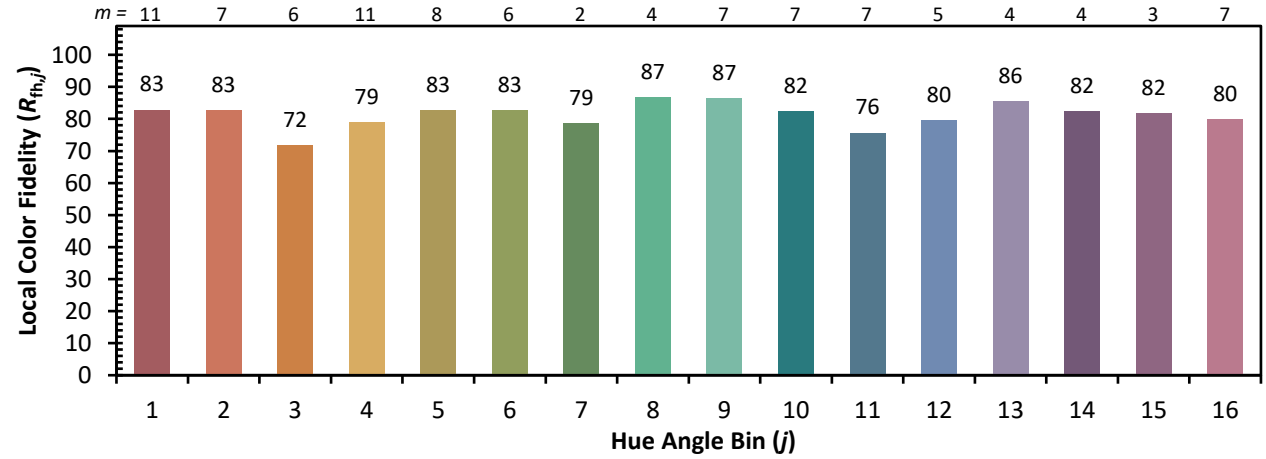
Color Rendition by Hue-Angle Bin







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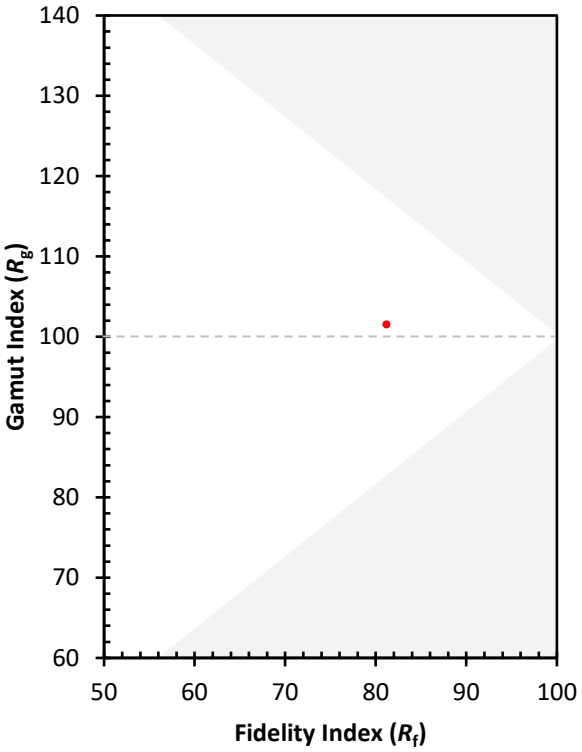
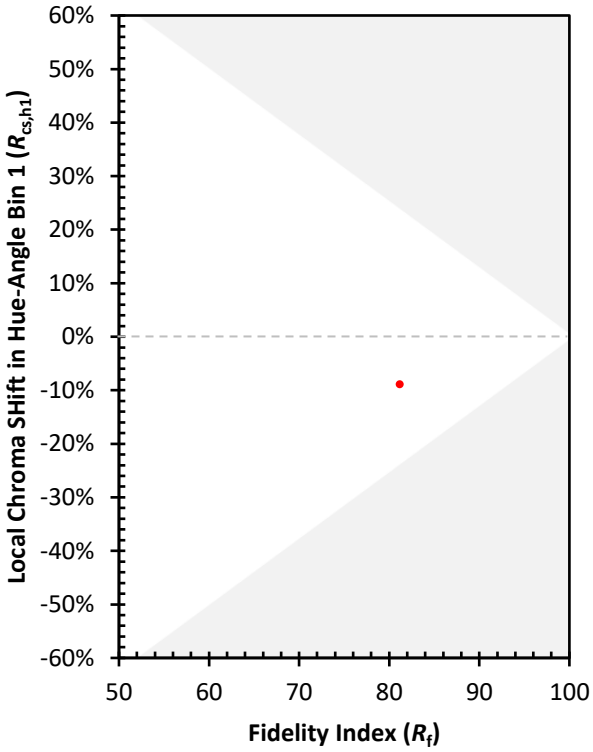
Measure Comparisons





(END OF REPORT)