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: P1433127

Luminaire Tested: EHBR1-18-UNV-TASM-L930-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:	P1433127
	REPORT IS A COMBINATION OF REPORTS P1431681 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-18-UNV-TASM-L930-UPL36
Description:	Elevate Round Highbay at, 18000 lumens, 3000K 90CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	19635.4 lumens
Efficiency:	N/A
Efficacy:	159.5 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):	123.1
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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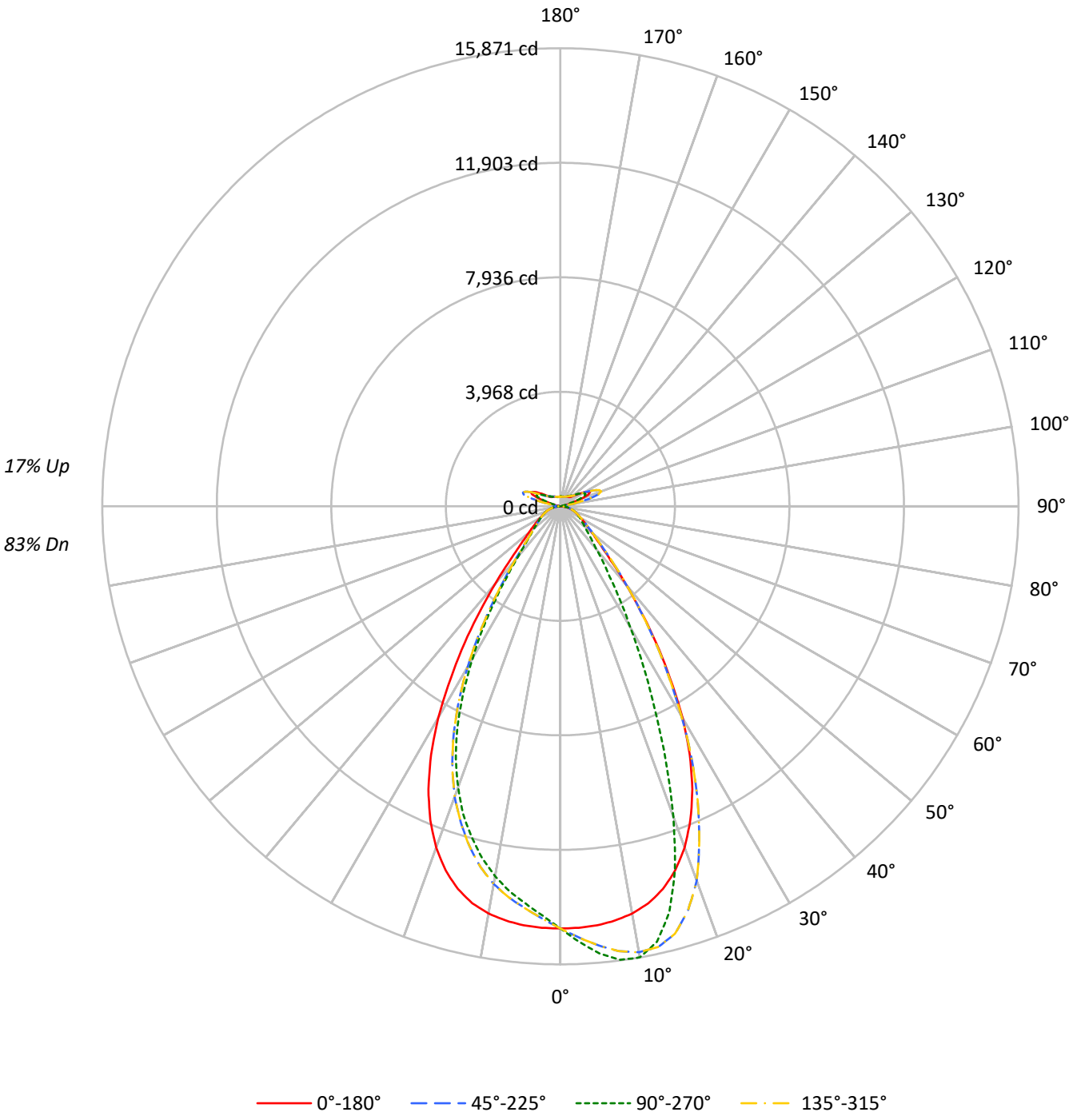
Luminous Intensity Polar Plot



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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	115	115	115	115	110	110	110	110	102	102	102	94	94	94	87	87	87	83
1	108	104	101	98	103	100	98	95	93	91	89	87	85	83	81	79	78	75
2	101	95	89	85	97	91	87	83	85	82	79	80	77	74	75	72	71	68
3	94	86	80	75	91	84	78	74	78	74	70	74	70	67	69	66	64	62
4	88	79	72	67	85	77	71	66	72	67	63	68	64	61	65	61	59	56
5	83	73	66	61	80	71	65	60	67	62	58	64	59	56	60	57	54	52
6	78	67	60	55	75	66	59	55	62	57	53	59	55	51	56	53	50	48
7	73	63	56	51	71	61	55	50	58	53	49	56	51	47	53	49	46	44
8	69	58	52	47	67	57	51	46	55	49	45	52	47	44	50	46	43	41
9	65	55	48	43	63	53	47	43	51	46	42	49	44	41	47	43	40	38
10	62	51	45	40	60	50	44	40	48	43	39	46	42	38	44	40	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	68686	68686	68686	68686
5°	68268	72828	68268	64725
10°	67428	74698	67428	61257
15°	65438	69418	65438	56584
20°	61200	55664	61200	50401
25°	54167	38568	54167	42238
30°	43982	25090	43982	31602
35°	31545	16249	31545	21038
40°	20395	11200	20395	13268
45°	12940	8675	12940	9454
50°	9610	7372	9610	7874
55°	7846	6715	7846	6951
60°	6794	6398	6794	6436
65°	6193	6169	6193	6144
70°	5870	6045	5870	5966
75°	5489	5849	5489	5673
80°	4823	5520	4823	5161
85°	3119	3942	3119	3759

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 18193 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1390.7	7.1
10°-20°	3783.5	19.3
20°-30°	4437.3	22.6
30°-40°	3085.9	15.7
40°-50°	1533.5	7.8
50°-60°	917.2	4.7
60°-70°	645.6	3.3
70°-80°	415.9	2.1
80°-90°	137.9	0.7
90°-100°	87.1	0.4
100°-110°	572.9	2.9
110°-120°	1059.0	5.4
120°-130°	628.8	3.2
130°-140°	379.4	1.9
140°-150°	261.8	1.3
150°-160°	170.0	0.9
160°-170°	96.8	0.5
170°-180°	32.0	0.2
0°-30°	9611.6	49.0
0°-40°	12697.4	64.7
0°-60°	15148.2	77.1
0°-90°	16347.5	83.3
90°-120°	1719.1	8.8
90°-150°	2989.1	15.2
90°-180°	3288.0	16.7
0°-180°	19635.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	14626	14626	14626	14626	14626	
5°	14576	15550	14576	13820	14576	1383
15°	13728	14564	13728	11871	13728	3837
25°	10817	7702	10817	8435	10817	4897
35°	5790	2982	5790	3861	5790	3614
45°	2094	1404	2094	1530	2094	1713
55°	1060	908	1060	939	1060	970
65°	646	644	646	641	646	649
75°	387	412	387	400	387	406
85°	107	136	107	129	107	119
90°	24	26	24	24	24	16
95°	46	42	46	40	46	49
105°	263	132	263	199	263	355
115°	1127	961	1127	916	1127	1027
125°	721	754	721	661	721	664
135°	454	524	454	482	454	360
145°	410	428	410	399	410	257
155°	363	379	363	352	363	170
165°	339	348	339	332	339	97
175°	336	340	336	330	336	32
180°	335	335	335	335	335	

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TEST NUMBER: P1433127
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	14626.1	14626.1	14626.1	14626.1	*14626.1*	14626.1	14626.1	14626.1	14626.1	14626.1	14626.1
2.5°	14617.5	14806.6	14959.6	15060.5	*15110.4*	15060.5	14959.6	14806.6	14617.5	14429.7	14300.6
5°	14576.2	14954.7	15275.3	15485.1	*15550.0*	15485.1	15275.3	14954.7	14576.2	14218.6	13981.3
7.5°	14477.2	15066.9	15543.3	15788.1	*15847.9*	15788.1	15543.3	15066.9	14477.2	13970.8	13671.2
10°	*14326.1*	*15137.6*	*15688.1*	*15863.5*	*15870.7*	*15863.5*	*15688.1*	*15137.6*	*14326.1*	*13644.0*	*13290.5*
12.5°	14085.0	15112.4	15639.5	15581.9	*15451.0*	15581.9	15639.5	15112.4	14085.0	13244.7	12798.7
15°	13728.5	14962.9	15332.1	14863.3	*14563.5*	14863.3	15332.1	14962.9	13728.5	12705.4	12188.2
17.5°	13226.0	14683.1	14690.3	13763.0	*13197.4*	13763.0	14690.3	14683.1	13226.0	12046.1	11476.5
20°	12578.4	14234.4	13806.6	12110.6	*11440.5*	12110.6	13806.6	14234.4	12578.4	11266.7	10707.8
22.5°	11766.6	13629.5	12575.9	10448.3	*9534.1*	10448.3	12575.9	13629.5	11766.6	10360.2	9778.5
25°	10817.2	12888.1	11252.2	8637.0	*7701.9*	8637.0	11252.2	12888.1	10817.2	9280.2	8754.1
27.5°	9700.3	11948.5	9842.5	7057.8	*6195.0*	7057.8	9842.5	11948.5	9700.3	8165.1	7627.8
30°	8459.9	10743.9	8375.4	5620.7	*4826.1*	5620.7	8375.4	10743.9	8459.9	6912.2	6431.2
32.5°	7071.0	9563.3	6966.5	4503.6	*3830.7*	4503.6	6966.5	9563.3	7071.0	5716.7	5214.0
35°	5789.6	8086.0	5696.2	3538.8	*2982.3*	3538.8	5696.2	8086.0	5789.6	4588.1	4094.4
37.5°	4543.7	6690.3	4540.7	2849.6	*2419.0*	2849.6	4540.7	6690.3	4543.7	3567.1	3166.3
40°	3535.0	5231.3	3557.7	2274.7	*1941.3*	2274.7	3557.7	5231.3	3535.0	2714.1	2457.7
42.5°	2678.4	4000.1	2796.4	1866.9	*1648.9*	1866.9	2796.4	4000.1	2678.4	2138.4	1946.4
45°	2093.7	2943.6	2183.6	1575.1	*1403.6*	1575.1	2183.6	2943.6	2093.7	1722.1	1593.2
47.5°	1705.1	2275.0	1769.8	1351.0	*1230.8*	1351.0	1769.8	2275.0	1705.1	1456.6	1360.1
50°	1432.2	1745.7	1469.5	1179.3	*1098.7*	1179.3	1469.5	1745.7	1432.2	1247.3	1182.9
52.5°	1230.3	1423.7	1251.4	1051.0	*996.7*	1051.0	1251.4	1423.7	1230.3	1091.3	1051.3
55°	1060.3	1196.9	1088.3	945.1	*907.5*	945.1	1088.3	1196.9	1060.3	971.2	941.6
57.5°	931.2	1015.3	945.1	854.9	*829.9*	854.9	945.1	1015.3	931.2	864.2	848.3
60°	816.7	879.3	834.0	776.2	*769.1*	776.2	834.0	879.3	816.7	777.5	767.1
62.5°	728.7	768.2	737.5	705.4	*699.1*	705.4	737.5	768.2	728.7	698.6	700.4
65°	646.4	683.1	659.1	641.8	*643.9*	641.8	659.1	683.1	646.4	632.4	635.5
67.5°	582.8	602.0	591.5	581.7	*584.1*	581.7	591.5	602.0	582.8	569.1	573.7
70°	515.1	535.7	525.0	526.3	*530.4*	526.3	525.0	535.7	515.1	511.0	514.5
72.5°	450.3	466.2	462.7	466.0	*470.3*	466.0	462.7	466.2	450.3	449.8	450.0
75°	386.7	398.8	400.4	405.1	*412.0*	405.1	400.4	398.8	386.7	382.6	387.6
77.5°	317.3	331.1	336.2	342.6	*352.7*	342.6	336.2	331.1	317.3	320.1	322.5
80°	253.7	260.0	271.5	276.2	*290.4*	276.2	271.5	260.0	253.7	249.1	252.6
82.5°	185.7	191.4	201.3	210.0	*218.3*	210.0	201.3	191.4	185.7	183.5	183.8
85°	107.2	116.0	122.6	133.0	*135.5*	133.0	122.6	116.0	107.2	109.7	107.2
87.5°	37.6	40.3	46.1	50.2	*50.4*	50.2	46.1	40.3	37.6	38.4	34.8
90°	24.0	40.6	70.0	38.1	*25.9*	38.1	70.0	40.6	24.0	42.2	65.9
92.5°	31.3	55.3	99.3	50.8	*35.0*	50.8	99.3	55.3	31.3	55.0	106.0
95°	46.1	68.0	126.5	56.3	*42.3*	56.3	126.5	68.0	46.1	73.2	147.9
97.5°	71.6	84.4	142.9	60.0	*51.4*	60.0	142.9	84.4	71.6	89.6	169.8
100°	95.4	95.4	261.5	69.1	*58.7*	69.1	261.5	95.4	95.4	109.9	264.6
102.5°	144.5	186.7	606.2	138.7	*71.5*	138.7	606.2	186.7	144.5	206.5	561.7
105°	263.0	427.3	1067.4	359.2	*131.9*	359.2	1067.4	427.3	263.0	432.6	1000.9
107.5°	498.1	797.3	1375.4	709.2	*308.7*	709.2	1375.4	797.3	498.1	766.1	1320.2
110°	797.0	1114.5	1501.2	971.7	*625.8*	971.7	1501.2	1114.5	797.0	1052.3	1384.0

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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°	1037.6	1242.1	1466.5	1077.4	*866.5*	1077.4	1466.5	1242.1	1037.6	1161.6	1325.7
115°	1127.3	1223.9	1309.8	1073.7	*961.3*	1073.7	1309.8	1223.9	1127.3	1134.2	1183.5
117.5°	1089.0	1120.0	1131.1	1008.1	*966.7*	1008.1	1131.1	1120.0	1089.0	1019.7	1004.8
120°	983.3	970.5	952.8	911.5	*912.1*	911.5	952.8	970.5	983.3	890.3	839.0
122.5°	850.5	823.1	805.1	813.3	*837.3*	813.3	805.1	823.1	850.5	757.5	719.0
125°	721.0	693.8	701.5	729.5	*753.7*	729.5	701.5	693.8	721.0	643.0	633.6
127.5°	611.9	599.2	626.8	658.4	*679.0*	658.4	626.8	599.2	611.9	562.8	573.4
130°	533.9	537.2	574.0	600.4	*613.4*	600.4	574.0	537.2	533.9	510.2	535.4
132.5°	485.0	499.2	534.2	556.9	*564.4*	556.9	534.2	499.2	485.0	477.9	508.7
135°	454.3	475.5	507.1	521.9	*524.3*	521.9	507.1	475.5	454.3	456.4	485.0
137.5°	436.3	457.6	481.6	493.1	*489.7*	493.1	481.6	457.6	436.3	442.0	463.7
140°	425.6	447.0	457.9	471.2	*468.1*	471.2	457.9	447.0	425.6	429.3	445.7
142.5°	415.0	434.5	440.0	449.6	*446.2*	449.6	440.0	434.5	415.0	418.7	429.5
145°	409.7	424.1	420.2	433.2	*428.3*	433.2	420.2	424.1	409.7	411.4	417.1
147.5°	400.7	411.4	405.8	417.1	*412.2*	417.1	405.8	411.4	400.7	400.7	402.7
150°	390.0	397.3	389.7	402.7	*401.5*	402.7	389.7	397.3	390.0	388.2	390.2
152.5°	375.7	382.9	375.7	390.5	*389.0*	390.5	375.7	382.9	375.7	373.8	376.0
155°	363.4	367.1	363.4	378.3	*378.6*	378.3	363.4	367.1	363.4	363.1	363.7
157.5°	354.9	357.0	355.1	368.2	*368.5*	368.2	355.1	357.0	354.9	354.9	355.1
160°	346.9	350.6	349.0	360.2	*360.5*	360.2	349.0	350.6	346.9	348.4	348.7
162.5°	343.8	343.8	342.6	353.7	*354.2*	353.7	342.6	343.8	343.8	343.8	345.6
165°	339.2	341.0	337.8	345.7	*348.1*	345.7	337.8	341.0	339.2	340.7	340.7
167.5°	337.8	336.0	336.6	342.9	*345.3*	342.9	336.6	336.0	337.8	339.4	339.4
170°	334.4	334.7	333.6	339.8	*342.2*	339.8	333.6	334.7	334.4	336.3	337.8
172.5°	335.3	335.3	332.5	336.9	*341.1*	336.9	332.5	335.3	335.3	336.9	338.6
175°	335.9	334.4	333.0	335.7	*339.9*	335.7	333.0	334.4	335.9	335.6	335.6
177.5°	334.1	334.6	335.2	337.7	*343.8*	337.7	335.2	334.6	334.1	335.6	335.6
180°	334.6	334.6	334.6	334.6	*334.6*	334.6	334.6	334.6	334.6	334.6	334.6

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	14626.1	14626.1	14626.1	14626.1	14626.1	14626.1
2.5°	14201.3	14191.9	14201.3	14300.6	14429.7	14617.5
5°	13871.3	13819.8	13871.3	13981.3	14218.6	14576.2
7.5°	13487.0	13457.2	13487.0	13671.2	13970.8	14477.2
10°	*13082.6*	*13014.8*	*13082.6*	*13290.5*	*13644.0*	*14326.1*
12.5°	12584.0	12494.2	12584.0	12798.7	13244.7	14085.0
15°	11949.8	11871.1	11949.8	12188.2	12705.4	13728.5
17.5°	11269.4	11198.1	11269.4	11476.5	12046.1	13226.0
20°	10414.8	10358.9	10414.8	10707.8	11266.7	12578.4
22.5°	9518.3	9465.9	9518.3	9778.5	10360.2	11766.6
25°	8463.4	8434.9	8463.4	8754.1	9280.2	10817.2
27.5°	7323.6	7275.1	7323.6	7627.8	8165.1	9700.3
30°	6159.1	6078.7	6159.1	6431.2	6912.2	8459.9
32.5°	5020.1	4962.2	5020.1	5214.0	5716.7	7071.0
35°	3919.2	3861.3	3919.2	4094.4	4588.1	5789.6
37.5°	3053.9	2951.6	3053.9	3166.3	3567.1	4543.7
40°	2316.2	2299.7	2316.2	2457.7	2714.1	3535.0
42.5°	1885.6	1840.8	1885.6	1946.4	2138.4	2678.4
45°	1547.1	1529.6	1547.1	1593.2	1722.1	2093.7
47.5°	1330.5	1338.1	1330.5	1360.1	1456.6	1705.1
50°	1168.9	1173.5	1168.9	1182.9	1247.3	1432.2
52.5°	1049.9	1045.8	1049.9	1051.3	1091.3	1230.3
55°	944.5	939.4	944.5	941.6	971.2	1060.3
57.5°	852.4	856.2	852.4	848.3	864.2	931.2
60°	770.1	773.7	770.1	767.1	777.5	816.7
62.5°	700.7	702.9	700.7	700.4	698.6	728.7
65°	638.8	641.3	638.8	635.5	632.4	646.4
67.5°	579.5	579.5	579.5	573.7	569.1	582.8
70°	523.8	523.5	523.8	514.5	511.0	515.1
72.5°	456.9	463.5	456.9	450.0	449.8	450.3
75°	391.9	399.6	391.9	387.6	382.6	386.7
77.5°	326.1	337.9	326.1	322.5	320.1	317.3
80°	258.6	271.5	258.6	252.6	249.1	253.7
82.5°	191.1	200.8	191.1	183.8	183.5	185.7
85°	113.8	129.2	113.8	107.2	109.7	107.2
87.5°	36.4	46.6	36.4	34.8	38.4	37.6
90°	38.6	24.0	38.6	65.9	42.2	24.0
92.5°	58.6	34.9	58.6	106.0	55.0	31.3
95°	67.7	40.4	67.7	147.9	73.2	46.1
97.5°	75.0	51.6	75.0	169.8	89.6	71.6
100°	87.8	68.0	87.8	264.6	109.9	95.4
102.5°	186.2	115.4	186.2	561.7	206.5	144.5
105°	392.2	199.2	392.2	1000.9	432.6	263.0
107.5°	702.0	345.0	702.0	1320.2	766.1	498.1
110°	931.7	643.9	931.7	1384.0	1052.3	797.0

TEST NUMBER: P1433127
CATALOG NUMBER: EHBR1-18-UNV-TASM-L930-UPL36

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1000.9	870.0	1000.9	1325.7	1161.6	1037.6
115°	962.7	915.6	962.7	1183.5	1134.2	1127.3
117.5°	878.8	884.5	878.8	1004.8	1019.7	1089.0
120°	782.2	819.0	782.2	839.0	890.3	983.3
122.5°	693.2	736.9	693.2	719.0	757.5	850.5
125°	616.6	660.6	616.6	633.6	643.0	721.0
127.5°	563.7	593.2	563.7	573.4	562.8	611.9
130°	522.1	547.6	522.1	535.4	510.2	533.9
132.5°	493.2	509.6	493.2	508.7	477.9	485.0
135°	467.9	482.3	467.9	485.0	456.4	454.3
137.5°	446.4	458.8	446.4	463.7	442.0	436.3
140°	426.9	437.6	426.9	445.7	429.3	425.6
142.5°	407.2	414.5	407.2	429.5	418.7	415.0
145°	393.1	398.6	393.1	417.1	411.4	409.7
147.5°	380.9	384.5	380.9	402.7	400.7	400.7
150°	368.7	372.3	368.7	390.2	388.2	390.0
152.5°	356.2	360.1	356.2	376.0	373.8	375.7
155°	347.5	351.5	347.5	363.7	363.1	363.4
157.5°	342.7	345.0	342.7	355.1	354.9	354.9
160°	338.1	340.1	338.1	348.7	348.4	346.9
162.5°	333.1	335.2	333.1	345.6	343.8	343.8
165°	331.9	332.1	331.9	340.7	340.7	339.2
167.5°	330.3	332.1	330.3	339.4	339.4	337.8
170°	330.5	330.8	330.5	337.8	336.3	334.4
172.5°	331.1	331.3	331.1	338.6	336.9	335.3
175°	329.9	330.2	329.9	335.6	335.6	335.9
177.5°	331.9	332.2	331.9	335.6	335.6	334.1
180°	334.6	334.6	334.6	334.6	334.6	334.6

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

Scaled Data Report

TEST NUMBER: P1433127
CATALOG NUMBER: EHBR1-18-UNV-TASM-L930-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	14.54	15.52	15.17	16.14	16.85	13.85	14.84	14.49	15.46	16.17
	3H	16.08	16.95	16.73	17.59	18.34	15.70	16.57	16.34	17.21	17.95
	4H	16.71	17.53	17.38	18.18	18.94	16.47	17.29	17.14	17.94	18.70
	6H	17.19	17.94	17.87	18.60	19.37	17.11	17.86	17.79	18.52	19.30
	8H	17.33	18.05	18.03	18.72	19.50	17.33	18.04	18.02	18.72	19.50
	12H	17.40	18.08	18.10	18.75	19.56	17.45	18.13	18.15	18.80	19.61
4H	2H	14.94	15.76	15.61	16.41	17.17	14.42	15.24	15.09	15.88	16.65
	3H	16.73	17.41	17.41	18.10	18.88	16.47	17.15	17.15	17.84	18.61
	4H	17.50	18.12	18.20	18.81	19.62	17.38	17.99	18.07	18.68	19.49
	6H	18.11	18.64	18.83	19.36	20.18	18.14	18.67	18.86	19.39	20.21
	8H	18.31	18.80	19.03	19.51	20.35	18.41	18.90	19.13	19.62	20.45
	12H	18.41	18.85	19.15	19.59	20.42	18.58	19.01	19.31	19.75	20.59
8H	4H	17.75	18.24	18.47	18.95	19.78	17.65	18.14	18.37	18.85	19.69
	6H	18.49	18.89	19.24	19.65	20.48	18.55	18.95	19.30	19.71	20.55
	8H	18.76	19.12	19.53	19.88	20.73	18.91	19.26	19.67	20.03	20.88
	12H	18.93	19.24	19.69	19.99	20.90	19.15	19.46	19.91	20.21	21.13
12H	4H	17.75	18.19	18.49	18.93	19.76	17.66	18.09	18.39	18.83	19.67
	6H	18.53	18.89	19.30	19.65	20.50	18.60	18.96	19.36	19.72	20.57
	8H	18.85	19.16	19.61	19.90	20.82	19.00	19.31	19.76	20.06	20.97

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: SP1-2506-472-5

Test Date: 08/01/2025

Luminaire Tested: EHBR-60-L930-N

Data in this report applies to families of products including EHBR-60-L930-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

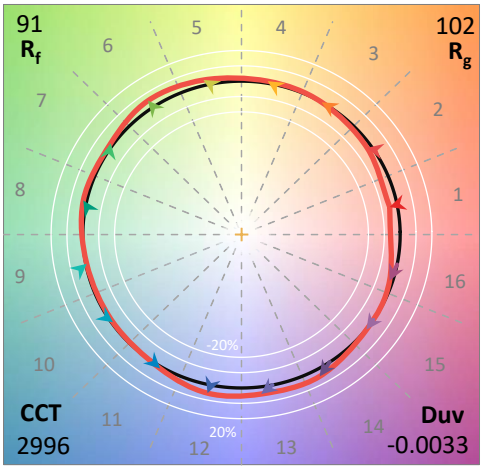
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-5
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-L930-N**
Description:	Elevate Round Highbay at, 60000 lumens, 3000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K):	2996
CIE u':	0.2519
CIE v':	0.5169
Duv:	-0.0033
CIE x:	0.4325
CIE y:	0.3945
CIE z:	0.1730
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	584
Purity:	48.21818
Rf:	91.3
Rg:	102

CRI (Ra):	94.4
R1:	96.8
R2:	98.1
R3:	97.8
R4:	95.6
R5:	96.9
R6:	95.7
R7:	90.9
R8:	83.0
R9:	61.4
R10:	94.4
R11:	95.7
R12:	88.5
R13:	97.3
R14:	97.8
R15:	92.3



Test Conditions

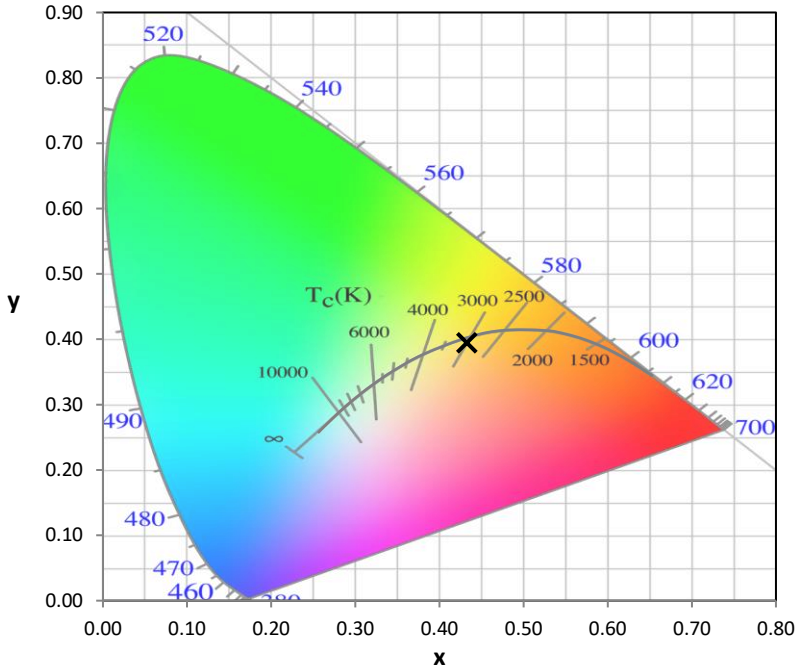
Stabilization Time:	40M
Operation Time:	1H 40M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-5

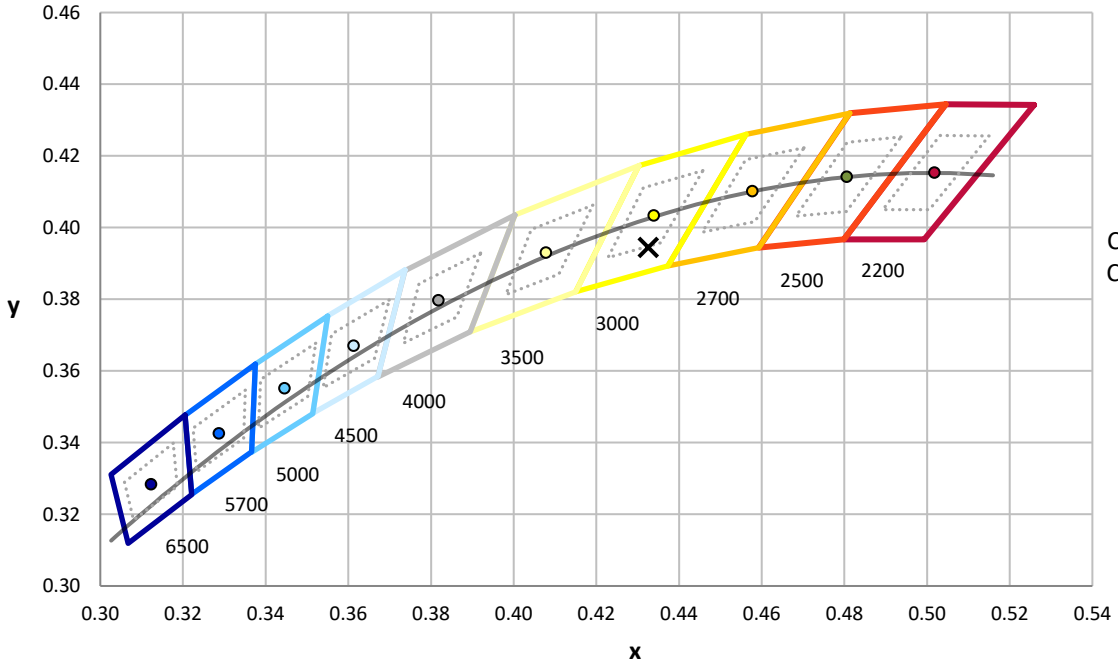
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	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: SP1-2506-472-5

CIE 1931 Chromaticity Diagram



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

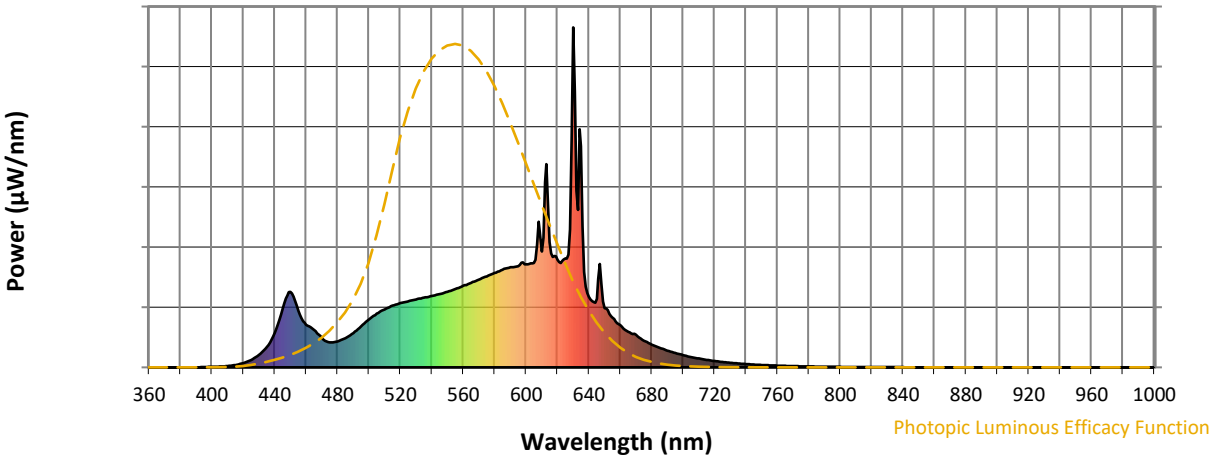


CCT = 2996K
CIE x = 0.4325
CIE y = 0.3945
Duv = -0.0033

Point lies inside the ANSI 3000K 7-step quadrangle

REPORT NUMBER: SP1-2506-472-5

Photopic Flux vs. Wavelength

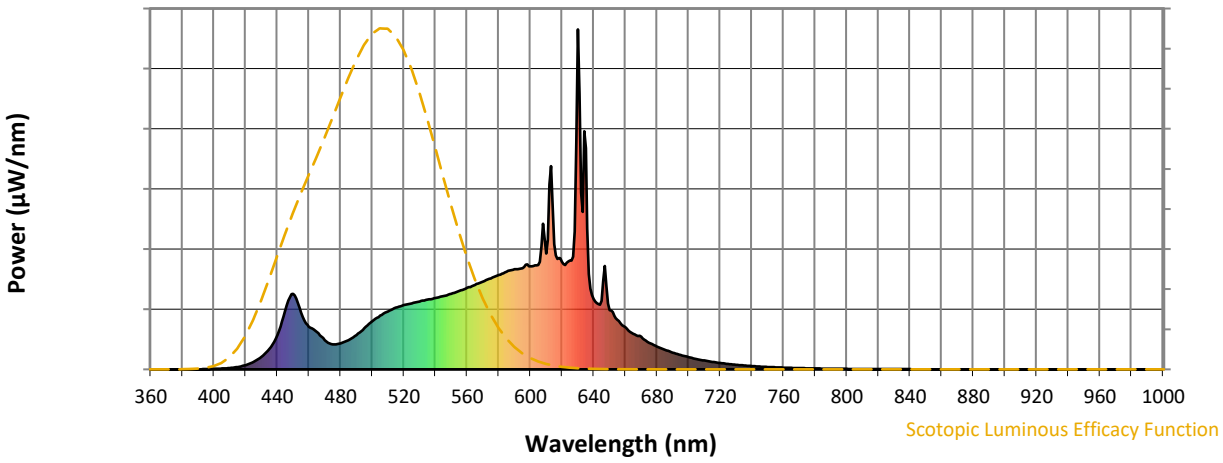


Photopic Lumens: NR

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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-5

Scotopic Flux vs. Wavelength

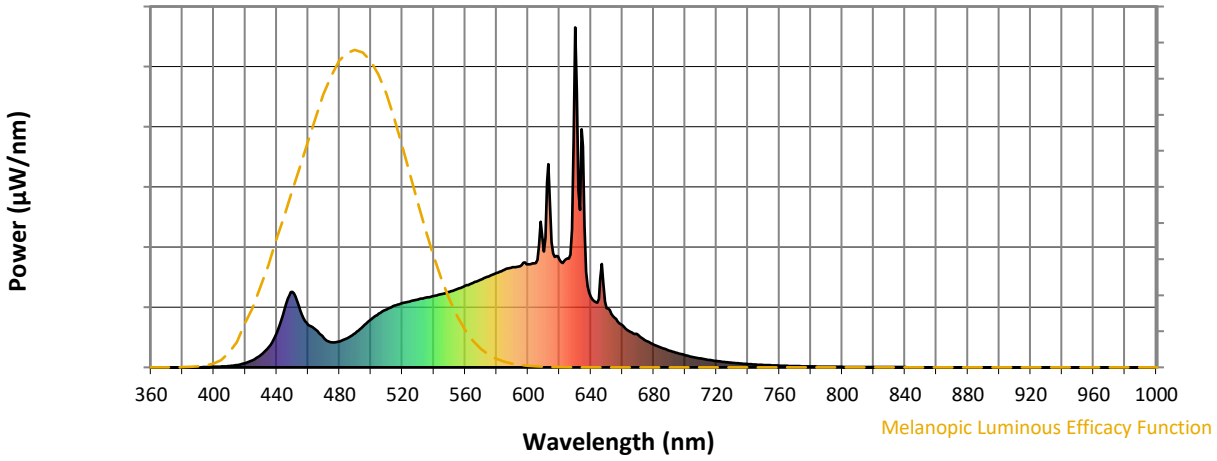


Scotopic Lumens: NR **S/P: 1.44**

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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-5

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.85**

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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

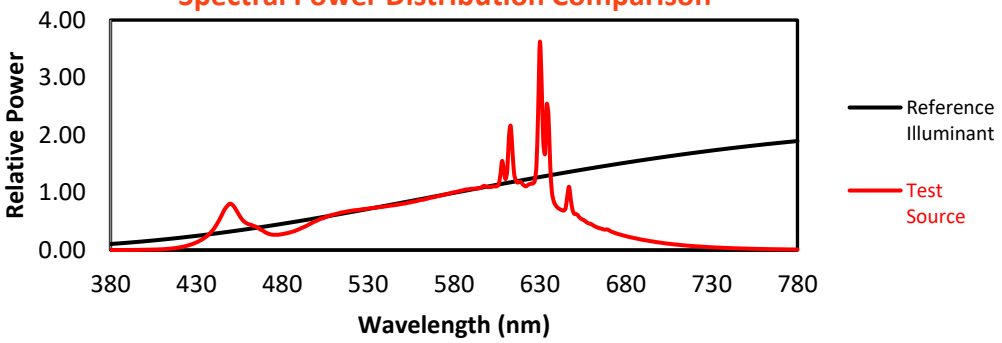
REPORT NUMBER: SP1-2506-472-5

TM-30-18

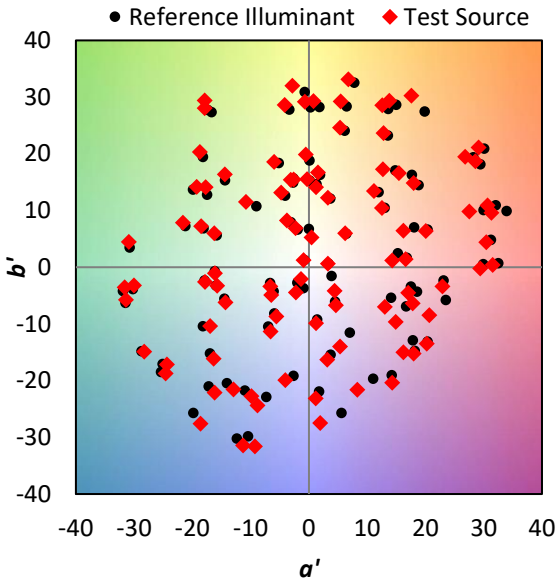
Summary

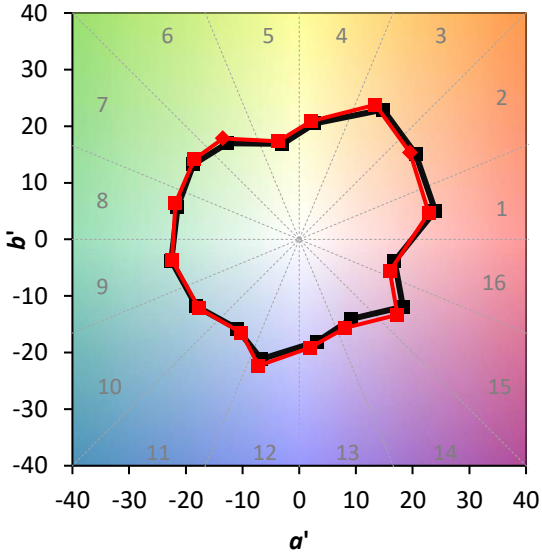
R_f = 91.3
R_g = 102
CIE R_a = 94.4
R_9 = 61.4

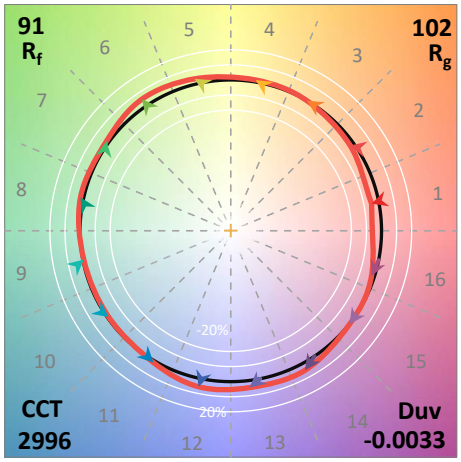
Spectral Power Distribution Comparison

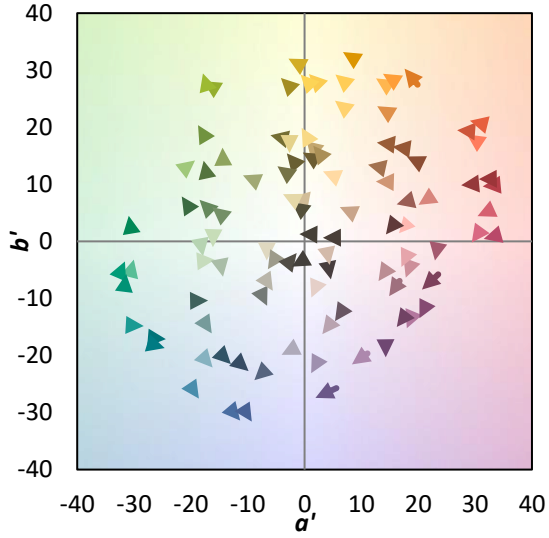


Color Vector Graphics







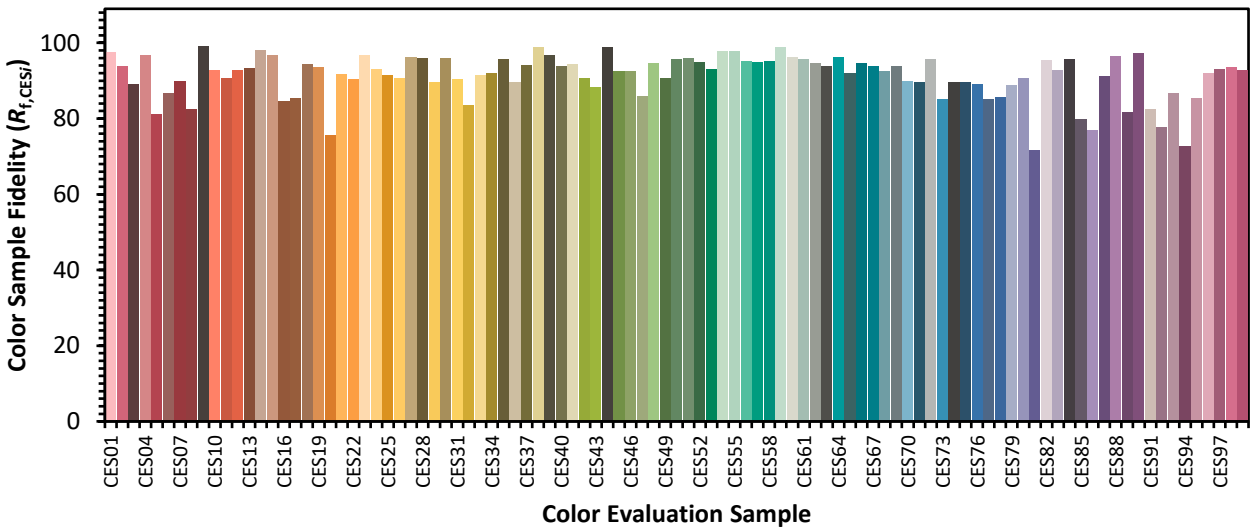


REPORT NUMBER: SP1-2506-472-5

TM-30-18

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

CES01 = 86	CES26 = 91	CES51 = 96	CES76 = 89
CES02 = 63	CES27 = 96	CES52 = 95	CES77 = 85
CES03 = 32	CES28 = 96	CES53 = 93	CES78 = 86
CES04 = 70	CES29 = 90	CES54 = 98	CES79 = 89
CES05 = 51	CES30 = 96	CES55 = 98	CES80 = 91
CES06 = 51	CES31 = 90	CES56 = 95	CES81 = 72
CES07 = 44	CES32 = 84	CES57 = 95	CES82 = 95
CES08 = 42	CES33 = 91	CES58 = 95	CES83 = 93
CES09 = 29	CES34 = 92	CES59 = 99	CES84 = 96
CES10 = 76	CES35 = 96	CES60 = 96	CES85 = 80
CES11 = 59	CES36 = 90	CES61 = 96	CES86 = 77
CES12 = 65	CES37 = 94	CES62 = 95	CES87 = 91
CES13 = 44	CES38 = 99	CES63 = 94	CES88 = 96
CES14 = 74	CES39 = 97	CES64 = 96	CES89 = 82
CES15 = 72	CES40 = 94	CES65 = 92	CES90 = 97
CES16 = 48	CES41 = 94	CES66 = 95	CES91 = 82
CES17 = 50	CES42 = 91	CES67 = 94	CES92 = 78
CES18 = 57	CES43 = 88	CES68 = 93	CES93 = 87
CES19 = 72	CES44 = 99	CES69 = 94	CES94 = 73
CES20 = 67	CES45 = 93	CES70 = 90	CES95 = 85
CES21 = 86	CES46 = 93	CES71 = 90	CES96 = 92
CES22 = 79	CES47 = 86	CES72 = 96	CES97 = 93
CES23 = 92	CES48 = 95	CES73 = 85	CES98 = 94
CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 93
CES25 = 72	CES50 = 96	CES75 = 90	



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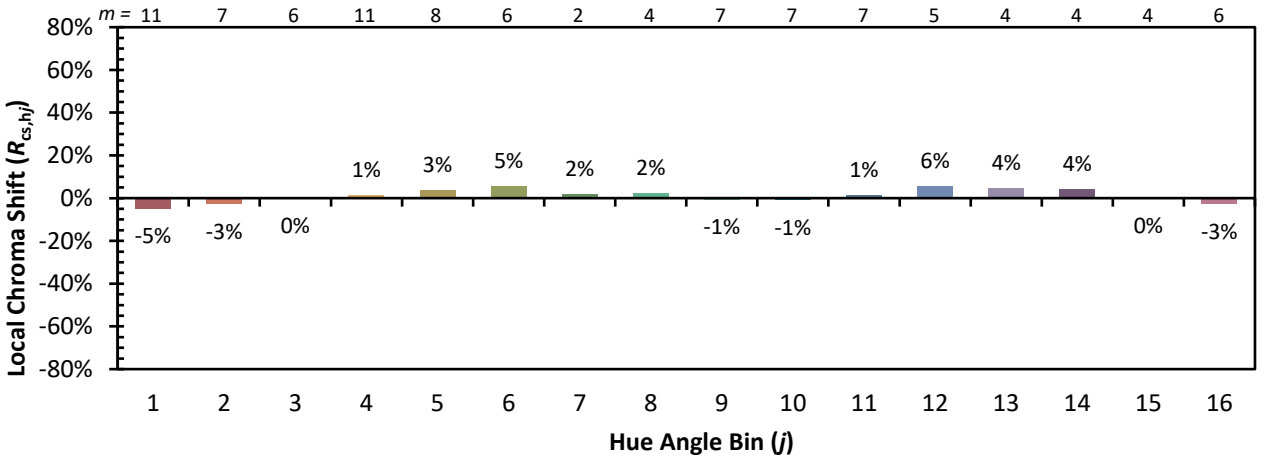
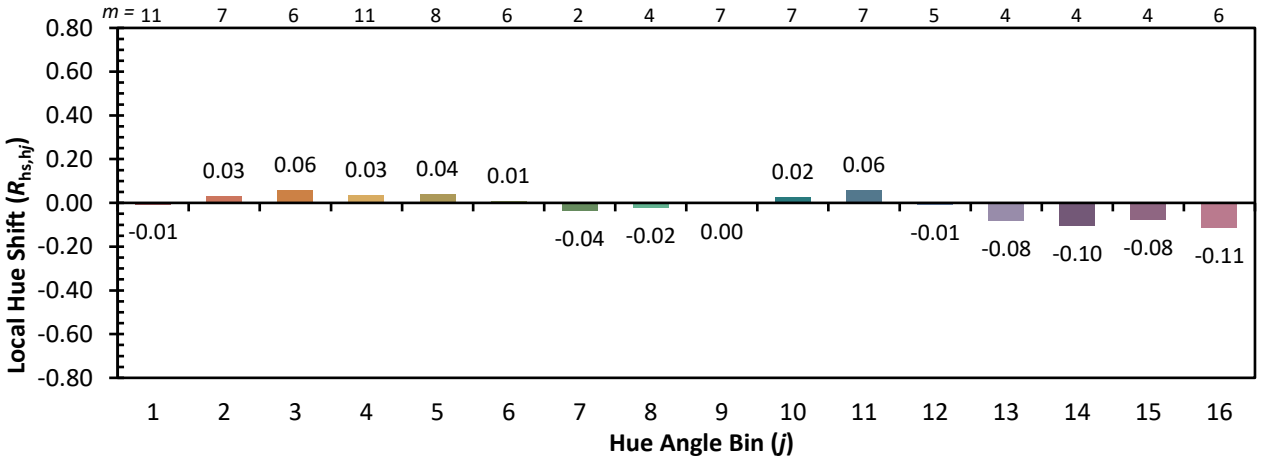
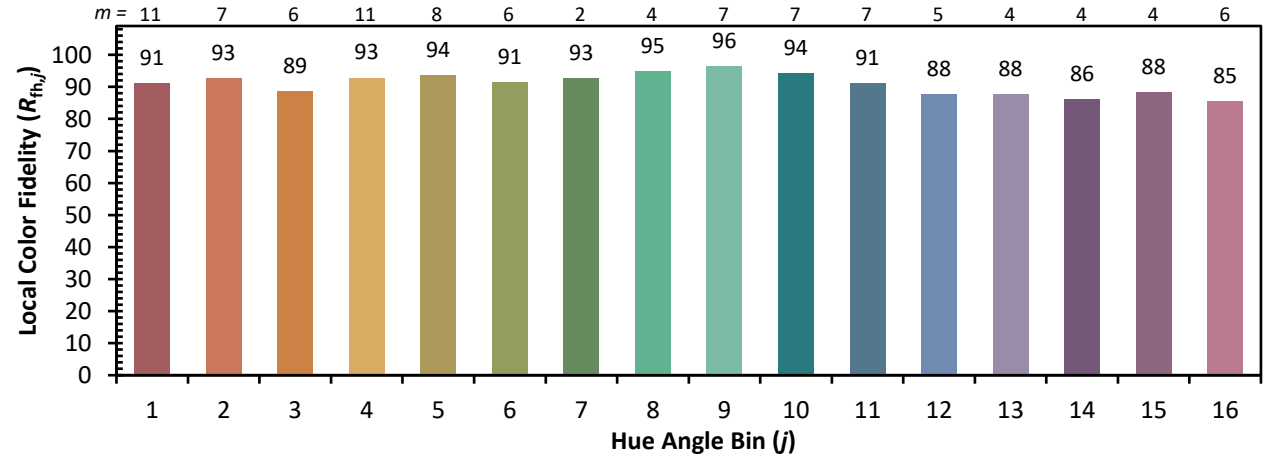
Color Rendition by Hue-Angle Bin







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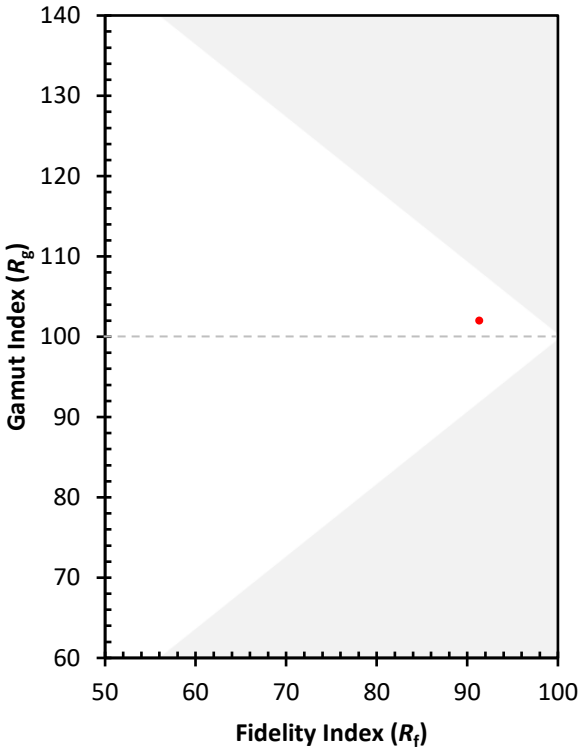
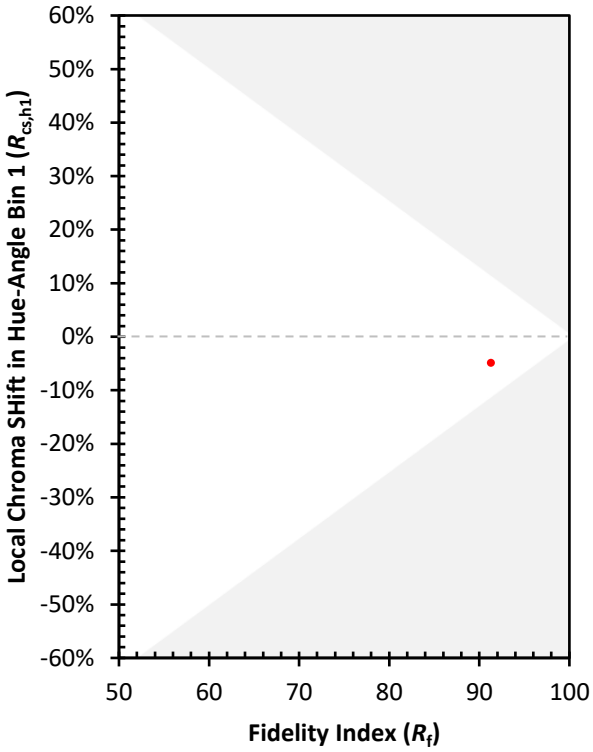
Measure Comparisons





(END OF REPORT)