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: P1432561

Luminaire Tested: EHBR1-12-UNV-TASM-L835-UPL40

Issue Date: 3/20/2026

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

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1432561
	REPORT IS A COMBINATION OF REPORTS P1431650 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-12-UNV-TASM-L835-UPL40
Description:	Elevate Round Highbay at, 12000 lumens, 3500K 80CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	15684.0 lumens
Efficiency:	N/A
Efficacy:	164.6 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):	95.3
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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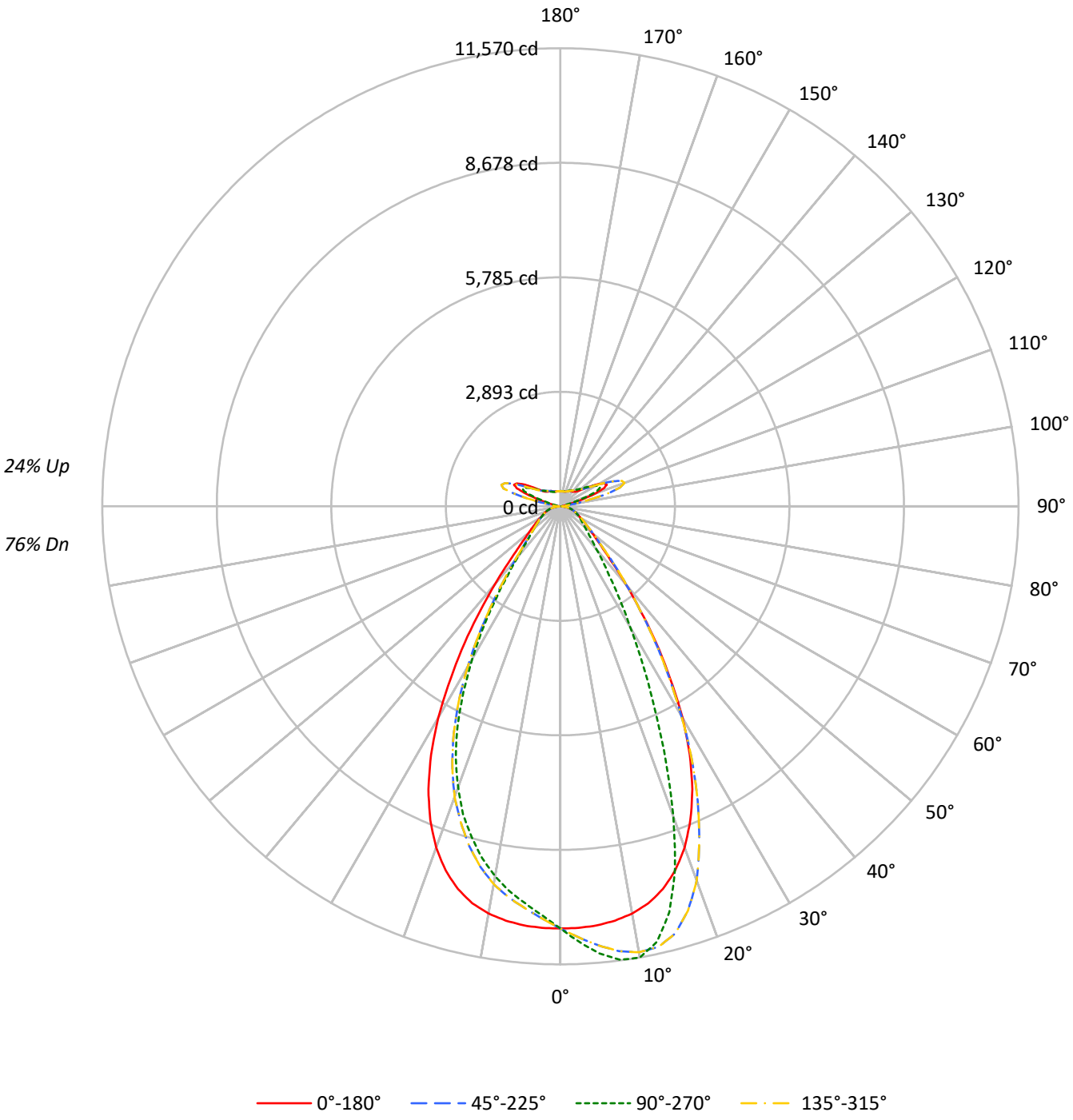
Luminous Intensity Polar Plot



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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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	80	80	80	76
1	106	102	99	96	101	98	95	92	89	87	85	81	80	78	74	73	72	69
2	99	93	87	83	94	89	84	80	82	78	75	75	72	70	69	67	65	62
3	92	84	78	73	88	81	75	71	75	70	67	69	66	63	64	61	59	56
4	86	77	70	65	82	74	68	64	69	64	60	64	60	57	59	56	54	51
5	81	71	64	59	77	68	62	57	64	59	55	59	55	52	55	52	49	47
6	76	65	58	53	73	63	57	52	59	54	50	55	51	48	52	48	46	43
7	71	61	54	49	68	59	52	48	55	50	46	52	47	44	49	45	42	40
8	67	56	50	45	65	55	48	44	52	46	42	49	44	41	46	42	39	37
9	63	53	46	41	61	51	45	41	48	43	39	46	41	38	43	39	37	35
10	60	49	43	39	58	48	42	38	45	40	37	43	39	36	41	37	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	50073	50073	50073	50073
5°	49769	53094	49769	47186
10°	49157	54457	49157	44657
15°	47706	50608	47706	41252
20°	44617	40580	44617	36743
25°	39489	28116	39489	30792
30°	32064	18292	32064	23039
35°	22997	11846	22997	15338
40°	14869	8165	14869	9673
45°	9433	6325	9433	6892
50°	7006	5375	7006	5741
55°	5720	4896	5720	5067
60°	4953	4664	4953	4692
65°	4515	4497	4515	4479
70°	4279	4407	4279	4350
75°	4002	4263	4002	4135
80°	3515	4026	3515	3762
85°	2275	2875	2275	2741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 13264 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1013.9	6.5
10°-20°	2758.3	17.6
20°-30°	3234.9	20.6
30°-40°	2249.7	14.3
40°-50°	1118.0	7.1
50°-60°	668.7	4.3
60°-70°	470.6	3.0
70°-80°	303.2	1.9
80°-90°	102.9	0.7
90°-100°	99.6	0.6
100°-110°	656.3	4.2
110°-120°	1213.7	7.7
120°-130°	720.4	4.6
130°-140°	434.3	2.8
140°-150°	299.3	1.9
150°-160°	194.0	1.2
160°-170°	110.1	0.7
170°-180°	36.3	0.2
0°-30°	7007.1	44.7
0°-40°	9256.7	59.0
0°-60°	11043.4	70.4
0°-90°	11920.1	76.0
90°-120°	1969.6	12.6
90°-150°	3423.5	21.8
90°-180°	3764.0	24.0
0°-180°	15684.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	10663	10663	10663	10663	10663	
5°	10626	11336	10626	10075	10626	1008
15°	10008	10617	10008	8654	10008	2797
25°	7886	5615	7886	6149	7886	3570
35°	4221	2174	4221	2815	4221	2635
45°	1526	1023	1526	1115	1526	1249
55°	773	662	773	685	773	707
65°	471	469	471	468	471	473
75°	282	300	282	291	282	296
85°	78	99	78	94	78	87
90°	27	29	27	27	27	16
95°	53	48	53	46	53	56
105°	301	150	301	228	301	406
115°	1292	1101	1292	1049	1292	1178
125°	826	863	826	757	826	761
135°	520	600	520	552	520	412
145°	468	490	468	456	468	294
155°	415	432	415	401	415	194
165°	386	395	386	378	386	110
175°	381	385	381	375	381	36
180°	379	379	379	379	379	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	10662.7	10662.7	10662.7	10662.7	*10662.7*	10662.7	10662.7	10662.7	10662.7	10662.7	10662.7
2.5°	10656.5	10794.3	10905.8	10979.4	*11015.8*	10979.4	10905.8	10794.3	10656.5	10519.6	10425.4
5°	10626.4	10902.3	11136.1	11289.0	*11336.4*	11289.0	11136.1	10902.3	10626.4	10365.6	10192.7
7.5°	10554.2	10984.1	11331.4	11509.9	*11553.5*	11509.9	11331.4	10984.1	10554.2	10185.1	9966.6
10°	*10444.0*	*11035.7*	*11437.0*	*11564.9*	*11570.1*	*11564.9*	*11437.0*	*11035.7*	*10444.0*	*9946.8*	*9689.1*
12.5°	10268.3	11017.3	11401.6	11359.6	*11264.2*	11359.6	11401.6	11017.3	10268.3	9655.6	9330.5
15°	10008.4	10908.3	11177.4	10835.7	*10617.2*	10835.7	11177.4	10908.3	10008.4	9262.6	8885.5
17.5°	9642.0	10704.3	10709.6	10033.5	*9621.3*	10033.5	10709.6	10704.3	9642.0	8781.9	8366.7
20°	9170.0	10377.3	10065.3	8828.9	*8340.4*	8828.9	10065.3	10377.3	9170.0	8213.6	7806.2
22.5°	8578.2	9936.1	9168.2	7617.1	*6950.6*	7617.1	9168.2	9936.1	8578.2	7552.9	7128.7
25°	7886.0	9395.7	8203.1	6296.6	*5614.8*	6296.6	8203.1	9395.7	7886.0	6765.5	6382.0
27.5°	7071.8	8710.7	7175.4	5145.4	*4516.3*	5145.4	7175.4	8710.7	7071.8	5952.5	5560.8
30°	6167.5	7832.5	6105.9	4097.6	*3518.4*	4097.6	6105.9	7832.5	6167.5	5039.2	4688.5
32.5°	5154.9	6971.8	5078.8	3283.2	*2792.6*	3283.2	5078.8	6971.8	5154.9	4167.6	3801.1
35°	4220.8	5895.0	4152.6	2579.8	*2174.2*	2579.8	4152.6	5895.0	4220.8	3344.8	2985.0
37.5°	3312.4	4877.4	3310.3	2077.4	*1763.5*	2077.4	3310.3	4877.4	3312.4	2600.5	2308.3
40°	2577.1	3813.7	2593.7	1658.3	*1415.2*	1658.3	2593.7	3813.7	2577.1	1978.6	1791.7
42.5°	1952.6	2916.2	2038.6	1361.0	*1202.1*	1361.0	2038.6	2916.2	1952.6	1559.0	1419.0
45°	1526.3	2146.0	1592.0	1148.2	*1023.3*	1148.2	1592.0	2146.0	1526.3	1255.5	1161.4
47.5°	1243.1	1658.5	1290.2	984.9	*897.4*	984.9	1290.2	1658.5	1243.1	1061.9	991.5
50°	1044.1	1272.6	1071.3	859.7	*801.0*	859.7	1071.3	1272.6	1044.1	909.3	862.4
52.5°	897.0	1037.9	912.3	766.2	*726.6*	766.2	912.3	1037.9	897.0	795.6	766.4
55°	773.0	872.5	793.4	689.0	*661.6*	689.0	793.4	872.5	773.0	708.0	686.4
57.5°	678.8	740.2	689.0	623.2	*605.0*	623.2	689.0	740.2	678.8	630.0	618.4
60°	595.4	641.0	608.0	565.8	*560.7*	565.8	608.0	641.0	595.4	566.8	559.2
62.5°	531.2	560.0	537.6	514.2	*509.7*	514.2	537.6	560.0	531.2	509.3	510.6
65°	471.3	498.0	480.5	467.9	*469.4*	467.9	480.5	498.0	471.3	461.1	463.2
67.5°	424.9	438.9	431.2	424.1	*425.9*	424.1	431.2	438.9	424.9	414.8	418.2
70°	375.5	390.5	382.6	383.7	*386.7*	383.7	382.6	390.5	375.5	372.5	375.1
72.5°	328.3	339.9	337.3	339.7	*342.9*	339.7	337.3	339.9	328.3	327.9	328.1
75°	281.9	290.7	291.9	295.3	*300.3*	295.3	291.9	290.7	281.9	278.9	282.5
77.5°	231.4	241.4	245.1	249.7	*257.2*	249.7	245.1	241.4	231.4	233.3	235.2
80°	184.9	189.6	197.9	201.3	*211.8*	201.3	197.9	189.6	184.9	181.5	184.1
82.5°	135.4	139.5	146.7	153.1	*159.1*	153.1	146.7	139.5	135.4	133.7	133.9
85°	78.2	84.6	89.4	97.0	*98.8*	97.0	89.4	84.6	78.2	80.0	78.2
87.5°	27.3	29.4	33.6	36.6	*36.8*	36.6	33.6	29.4	27.3	28.0	25.4
90°	27.3	46.4	80.0	43.0	*28.7*	43.0	80.0	46.4	27.3	48.3	75.4
92.5°	35.7	63.0	113.5	57.6	*39.2*	57.6	113.5	63.0	35.7	62.8	121.4
95°	52.7	77.7	144.8	63.8	*47.5*	63.8	144.8	77.7	52.7	83.8	169.4
97.5°	81.8	96.5	163.6	68.1	*58.0*	68.1	163.6	96.5	81.8	102.6	194.5
100°	109.1	109.1	299.3	78.4	*66.3*	78.4	299.3	109.1	109.1	125.8	303.2
102.5°	165.4	213.7	694.5	158.1	*81.0*	158.1	694.5	213.7	165.4	236.5	643.8
105°	301.3	489.5	1223.2	410.9	*150.2*	410.9	1223.2	489.5	301.3	495.6	1147.4
107.5°	570.9	913.8	1576.3	812.1	*352.9*	812.1	1576.3	913.8	570.9	878.0	1513.2
110°	913.6	1277.3	1720.5	1113.0	*716.5*	1113.0	1720.5	1277.3	913.6	1206.0	1586.3

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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°	1189.3	1423.5	1680.8	1234.2	*992.3*	1234.2	1680.8	1423.5	1189.3	1331.4	1519.5
115°	1291.9	1402.7	1501.1	1230.0	*1100.9*	1230.0	1501.1	1402.7	1291.9	1300.1	1356.5
117.5°	1248.0	1283.6	1296.3	1154.8	*1107.2*	1154.8	1296.3	1283.6	1248.0	1168.7	1151.7
120°	1126.9	1112.3	1091.7	1044.1	*1044.6*	1044.1	1091.7	1112.3	1126.9	1020.3	961.6
122.5°	974.6	943.1	922.5	931.4	*958.8*	931.4	922.5	943.1	974.6	868.0	823.9
125°	826.2	794.8	803.6	835.3	*862.9*	835.3	803.6	794.8	826.2	736.5	725.8
127.5°	701.0	686.4	717.9	753.8	*777.2*	753.8	717.9	686.4	701.0	644.6	656.9
130°	611.3	615.3	657.3	687.2	*702.1*	687.2	657.3	615.3	611.3	584.2	613.2
132.5°	555.1	571.6	611.5	637.3	*645.8*	637.3	611.5	571.6	555.1	546.9	582.2
135°	519.8	544.5	580.4	597.3	*599.9*	597.3	580.4	544.5	519.8	522.2	555.1
137.5°	499.2	523.7	551.1	564.2	*560.1*	564.2	551.1	523.7	499.2	505.6	530.5
140°	486.8	511.4	523.9	539.1	*535.3*	539.1	523.9	511.4	486.8	491.0	509.8
142.5°	474.5	497.1	503.4	514.1	*510.2*	514.1	503.4	497.1	474.5	478.6	491.2
145°	468.4	485.0	480.6	495.3	*489.5*	495.3	480.6	485.0	468.4	470.3	476.7
147.5°	458.0	470.3	464.0	476.7	*470.9*	476.7	464.0	470.3	458.0	458.0	460.2
150°	445.6	453.9	445.4	460.2	*458.6*	460.2	445.4	453.9	445.6	443.5	445.8
152.5°	429.1	437.4	429.1	446.0	*444.1*	446.0	429.1	437.4	429.1	427.0	429.3
155°	414.8	419.0	414.8	431.7	*431.9*	431.7	414.8	419.0	414.8	414.6	415.0
157.5°	404.8	407.1	405.0	419.8	*420.0*	419.8	405.0	407.1	404.8	404.8	405.0
160°	395.2	399.3	397.4	410.1	*410.4*	410.1	397.4	399.3	395.2	397.0	397.2
162.5°	391.3	391.3	389.7	402.4	*402.8*	402.4	389.7	391.3	391.3	391.3	393.4
165°	385.8	387.8	384.0	392.7	*395.3*	392.7	384.0	387.8	385.8	387.6	387.6
167.5°	384.0	382.0	382.4	389.1	*391.7*	389.1	382.4	382.0	384.0	385.9	385.9
170°	380.0	380.2	378.6	385.4	*387.9*	385.4	378.6	380.2	380.0	382.2	384.0
172.5°	380.6	380.6	377.0	381.8	*386.4*	381.8	377.0	380.6	380.6	382.6	384.6
175°	381.0	379.2	377.4	380.2	*384.8*	380.2	377.4	379.2	381.0	380.8	380.8
177.5°	379.0	379.4	379.7	382.5	*389.1*	382.5	379.7	379.4	379.0	380.8	380.8
180°	379.4	379.4	379.4	379.4	*379.4*	379.4	379.4	379.4	379.4	379.4	379.4

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	10662.7	10662.7	10662.7	10662.7	10662.7	10662.7
2.5°	10353.0	10346.2	10353.0	10425.4	10519.6	10656.5
5°	10112.5	10074.9	10112.5	10192.7	10365.6	10626.4
7.5°	9832.4	9810.6	9832.4	9966.6	10185.1	10554.2
10°	*9537.5*	*9488.1*	*9537.5*	*9689.1*	*9946.8*	*10444.0*
12.5°	9173.9	9108.6	9173.9	9330.5	9655.6	10268.3
15°	8711.7	8654.4	8711.7	8885.5	9262.6	10008.4
17.5°	8215.7	8163.7	8215.7	8366.7	8781.9	9642.0
20°	7592.6	7551.8	7592.6	7806.2	8213.6	9170.0
22.5°	6939.1	6900.8	6939.1	7128.7	7552.9	8578.2
25°	6170.1	6149.2	6170.1	6382.0	6765.5	7886.0
27.5°	5339.0	5303.7	5339.0	5560.8	5952.5	7071.8
30°	4490.1	4431.6	4490.1	4688.5	5039.2	6167.5
32.5°	3659.8	3617.6	3659.8	3801.1	4167.6	5154.9
35°	2857.2	2815.0	2857.2	2985.0	3344.8	4220.8
37.5°	2226.4	2151.8	2226.4	2308.3	2600.5	3312.4
40°	1688.6	1676.5	1688.6	1791.7	1978.6	2577.1
42.5°	1374.6	1342.0	1374.6	1419.0	1559.0	1952.6
45°	1127.9	1115.1	1127.9	1161.4	1255.5	1526.3
47.5°	969.9	975.5	969.9	991.5	1061.9	1243.1
50°	852.2	855.6	852.2	862.4	909.3	1044.1
52.5°	765.4	762.4	765.4	766.4	795.6	897.0
55°	688.6	684.8	688.6	686.4	708.0	773.0
57.5°	621.4	624.2	621.4	618.4	630.0	678.8
60°	561.5	564.1	561.5	559.2	566.8	595.4
62.5°	510.8	512.5	510.8	510.6	509.3	531.2
65°	465.7	467.5	465.7	463.2	461.1	471.3
67.5°	422.5	422.5	422.5	418.2	414.8	424.9
70°	381.9	381.7	381.9	375.1	372.5	375.5
72.5°	333.1	337.9	333.1	328.1	327.9	328.3
75°	285.7	291.3	285.7	282.5	278.9	281.9
77.5°	237.8	246.3	237.8	235.2	233.3	231.4
80°	188.5	197.9	188.5	184.1	181.5	184.9
82.5°	139.3	146.3	139.3	133.9	133.7	135.4
85°	83.0	94.2	83.0	78.2	80.0	78.2
87.5°	26.6	34.0	26.6	25.4	28.0	27.3
90°	44.1	27.3	44.1	75.4	48.3	27.3
92.5°	67.1	39.9	67.1	121.4	62.8	35.7
95°	77.5	46.2	77.5	169.4	83.8	52.7
97.5°	85.8	58.9	85.8	194.5	102.6	81.8
100°	100.5	77.7	100.5	303.2	125.8	109.1
102.5°	213.3	132.1	213.3	643.8	236.5	165.4
105°	449.5	228.2	449.5	1147.4	495.6	301.3
107.5°	804.7	395.4	804.7	1513.2	878.0	570.9
110°	1067.9	738.0	1067.9	1586.3	1206.0	913.6

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

Scaled Data Report

TEST NUMBER: P1432561
CATALOG NUMBER: EHBR1-12-UNV-TASM-L835-UPL40

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1147.4	997.2	1147.4	1519.5	1331.4	1189.3
115°	1103.5	1049.3	1103.5	1356.5	1300.1	1291.9
117.5°	1007.3	1013.8	1007.3	1151.7	1168.7	1248.0
120°	896.6	938.6	896.6	961.6	1020.3	1126.9
122.5°	794.4	844.6	794.4	823.9	868.0	974.6
125°	706.6	757.0	706.6	725.8	736.5	826.2
127.5°	646.0	679.7	646.0	656.9	644.6	701.0
130°	598.2	627.5	598.2	613.2	584.2	611.3
132.5°	565.0	583.8	565.0	582.2	546.9	555.1
135°	535.9	552.4	535.9	555.1	522.2	519.8
137.5°	511.0	525.5	511.0	530.5	505.6	499.2
140°	488.4	500.8	488.4	509.8	491.0	486.8
142.5°	465.8	474.1	465.8	491.2	478.6	474.5
145°	449.4	455.7	449.4	476.7	470.3	468.4
147.5°	435.2	439.4	435.2	460.2	458.0	458.0
150°	421.0	425.1	421.0	445.8	443.5	445.6
152.5°	406.5	410.9	406.5	429.3	427.0	429.1
155°	396.4	400.8	396.4	415.0	414.6	414.8
157.5°	390.5	393.0	390.5	405.0	404.8	404.8
160°	384.9	387.1	384.9	397.2	397.0	395.2
162.5°	379.1	381.4	379.1	393.4	391.3	391.3
165°	377.4	377.6	377.4	387.6	387.6	385.8
167.5°	375.5	377.6	375.5	385.9	385.9	384.0
170°	375.7	375.9	375.7	384.0	382.2	380.0
172.5°	376.1	376.2	376.1	384.6	382.6	380.6
175°	374.4	374.6	374.4	380.8	380.8	381.0
177.5°	376.6	376.8	376.6	380.8	380.8	379.0
180°	379.4	379.4	379.4	379.4	379.4	379.4

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

Scaled Data Report

TEST NUMBER: P1432561
CATALOG NUMBER: EHBR1-12-UNV-TASM-L835-UPL40

CIE UGR TABLE:

Reflectances:											
	Ceiling	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
	Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
	Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	12.86	13.77	13.59	14.49	15.34	12.17	13.09	12.90	13.81	14.66
	3H	14.39	15.21	15.14	15.94	16.83	14.01	14.82	14.76	15.56	16.45
	4H	15.02	15.79	15.78	16.53	17.43	14.79	15.55	15.55	16.29	17.20
	6H	15.50	16.20	16.27	16.95	17.86	15.42	16.12	16.20	16.88	17.79
	8H	15.65	16.31	16.43	17.08	18.00	15.64	16.30	16.42	17.08	17.99
	12H	15.71	16.34	16.50	17.11	18.05	15.77	16.40	16.55	17.16	18.10
4H	2H	13.26	14.02	14.02	14.76	15.66	12.73	13.49	13.50	14.24	15.14
	3H	15.04	15.67	15.81	16.45	17.37	14.78	15.41	15.55	16.19	17.11
	4H	15.81	16.39	16.60	17.17	18.11	15.69	16.26	16.47	17.04	17.99
	6H	16.42	16.91	17.23	17.72	18.68	16.45	16.94	17.25	17.75	18.70
	8H	16.62	17.08	17.42	17.88	18.84	16.72	17.18	17.53	17.98	18.94
	12H	16.72	17.12	17.54	17.95	18.92	16.88	17.29	17.70	18.11	19.08
8H	4H	16.06	16.51	16.86	17.31	18.28	15.96	16.42	16.76	17.22	18.18
	6H	16.80	17.17	17.63	18.01	18.98	16.86	17.23	17.69	18.08	19.04
	8H	17.07	17.40	17.91	18.24	19.22	17.22	17.55	18.06	18.39	19.37
	12H	17.23	17.52	18.08	18.35	19.40	17.46	17.75	18.30	18.58	19.62
12H	4H	16.06	16.47	16.88	17.29	18.26	15.96	16.37	16.79	17.19	18.16
	6H	16.84	17.17	17.69	18.02	19.00	16.91	17.24	17.75	18.08	19.06
	8H	17.15	17.44	17.99	18.27	19.31	17.30	17.59	18.15	18.42	19.47

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: SP1-2506-472-3

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L835-N

Data in this report applies to families of products including EHBR-60-L835-N

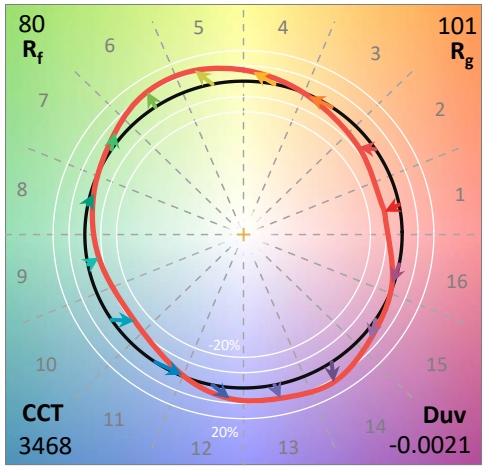
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-3
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-L835-N**
Description:	Elevate Round Highbay at, 60000 lumens, 3500K 80CRI LEDs with N lens

Spectral Parameters

CCT (K):	3468	CRI (Ra):	82.1		
CIE u':	0.2375	R1:	82.9	R9:	27.6
CIE v':	0.5091	R2:	85.6	R10:	63.8
Duv:	-0.0021	R3:	85.9	R11:	81.2
CIE x:	0.4049	R4:	82.8	R12:	57.2
CIE y:	0.3856	R5:	81.0	R13:	82.6
CIE z:	0.2095	R6:	79.7	R14:	91.0
Peak Wavelength (nm):	630	R7:	86.5	R15:	79.4
Dominant Wavelength (nm):	581	R8:	72.1		
Purity:	37.24544				
Rf:	80.1				
Rg:	101				



Test Conditions

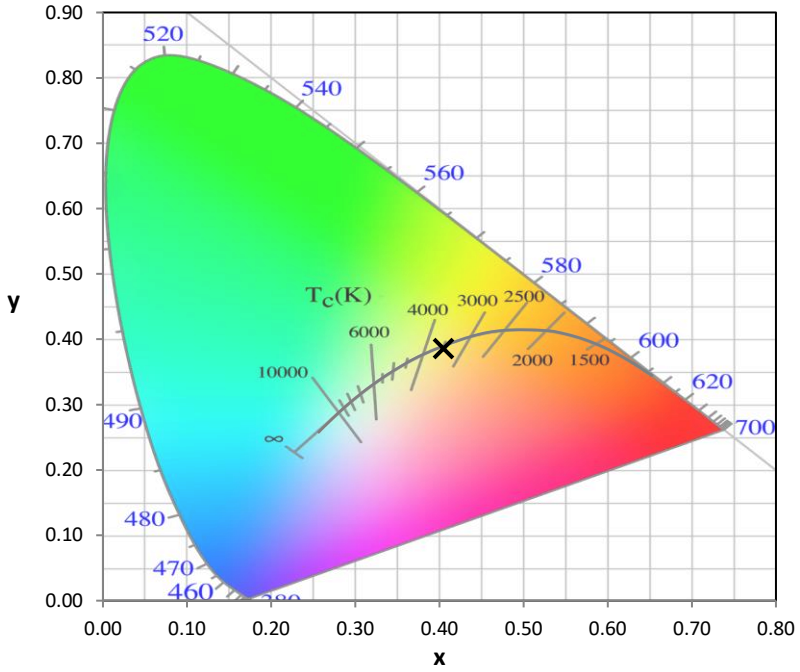
Stabilization Time:	39M
Operation Time:	1H 39M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-3

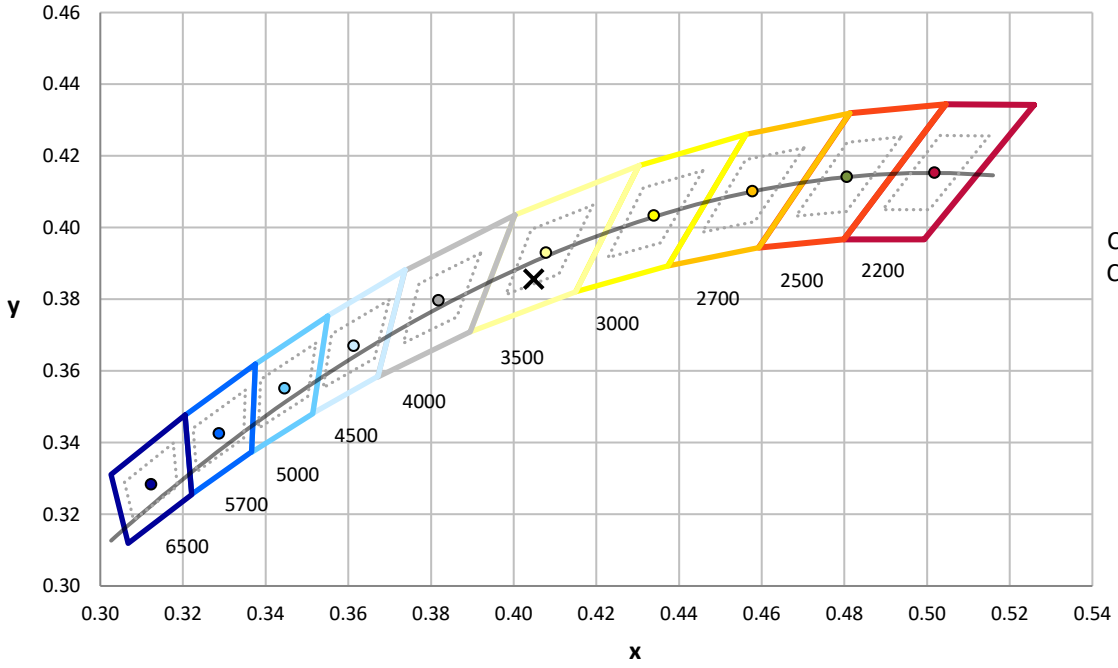
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	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: SP1-2506-472-3

CIE 1931 Chromaticity Diagram



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

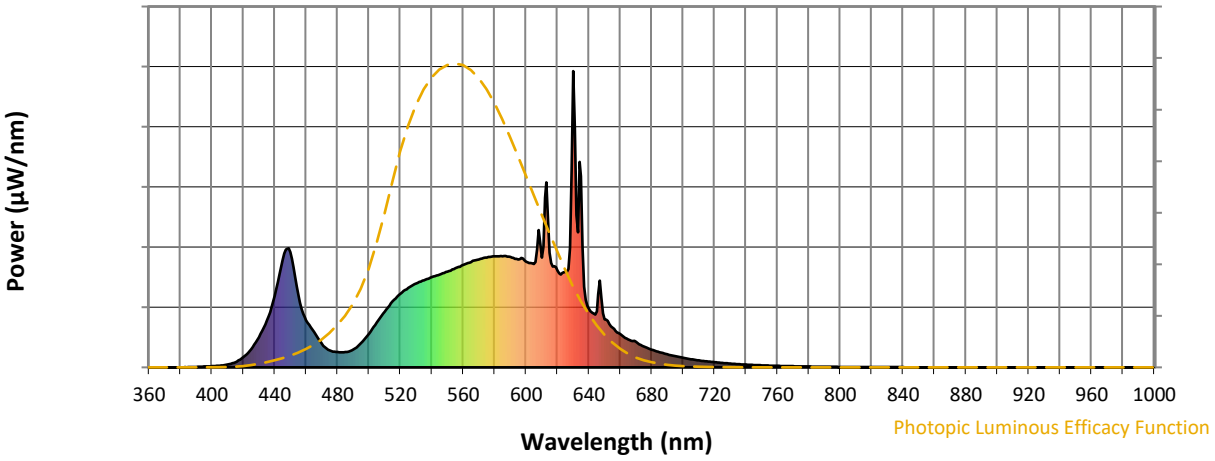


CCT = 3468K
CIE x = 0.4049
CIE y = 0.3856
Duv = -0.0021

Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-3

Photopic Flux vs. Wavelength

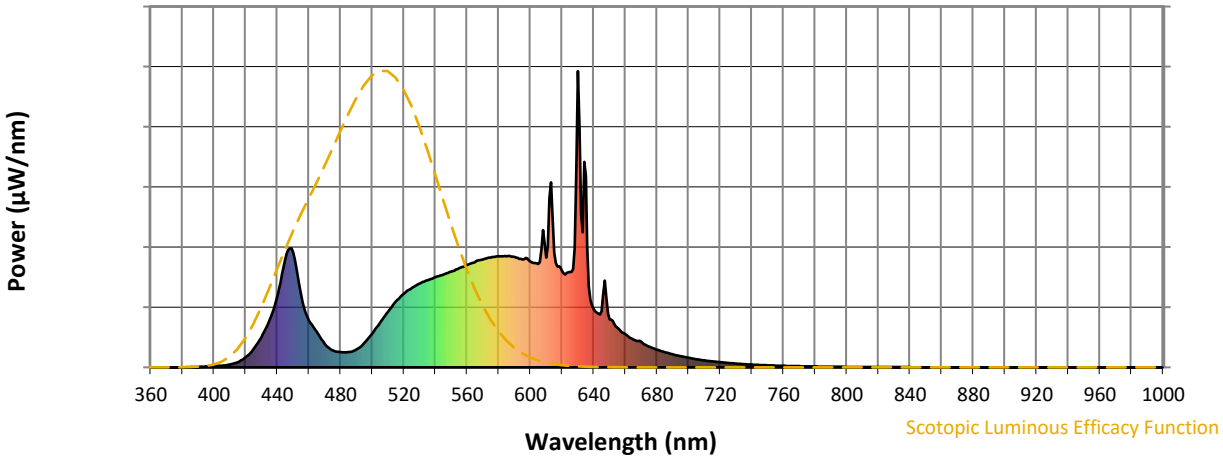


Photopic Lumens: NR

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	60	NR	620	327	NR	750	7	NR	880	0	NR
365	0	NR	495	82	NR	625	322	NR	755	6	NR	885	0	NR
370	0	NR	500	114	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	152	NR	635	645	NR	765	4	NR	895	0	NR
380	0	NR	510	189	NR	640	197	NR	770	4	NR	900	0	NR
385	1	NR	515	222	NR	645	189	NR	775	3	NR	905	0	NR
390	2	NR	520	248	NR	650	163	NR	780	3	NR	910	0	NR
395	3	NR	525	268	NR	655	134	NR	785	2	NR	915	0	NR
400	4	NR	530	283	NR	660	113	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	94	NR	795	2	NR	925	0	NR
410	9	NR	540	305	NR	670	87	NR	800	2	NR	930	0	NR
415	18	NR	545	314	NR	675	70	NR	805	1	NR	935	0	NR
420	34	NR	550	323	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	335	NR	685	51	NR	815	1	NR	945	0	NR
430	102	NR	560	346	NR	690	44	NR	820	1	NR	950	0	NR
435	159	NR	565	356	NR	695	38	NR	825	1	NR	955	0	NR
440	241	NR	570	364	NR	700	32	NR	830	1	NR	960	0	NR
445	363	NR	575	371	NR	705	28	NR	835	1	NR	965	0	NR
450	389	NR	580	375	NR	710	24	NR	840	1	NR	970	0	NR
455	245	NR	585	375	NR	715	20	NR	845	0	NR	975	0	NR
460	158	NR	590	373	NR	720	17	NR	850	0	NR	980	0	NR
465	120	NR	595	364	NR	725	15	NR	855	0	NR	985	0	NR
470	79	NR	600	357	NR	730	13	NR	860	0	NR	990	0	NR
475	57	NR	605	349	NR	735	11	NR	865	0	NR	995	0	NR
480	51	NR	610	371	NR	740	9	NR	870	0	NR	1000	0	NR
485	51	NR	615	387	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-3

Scotopic Flux vs. Wavelength

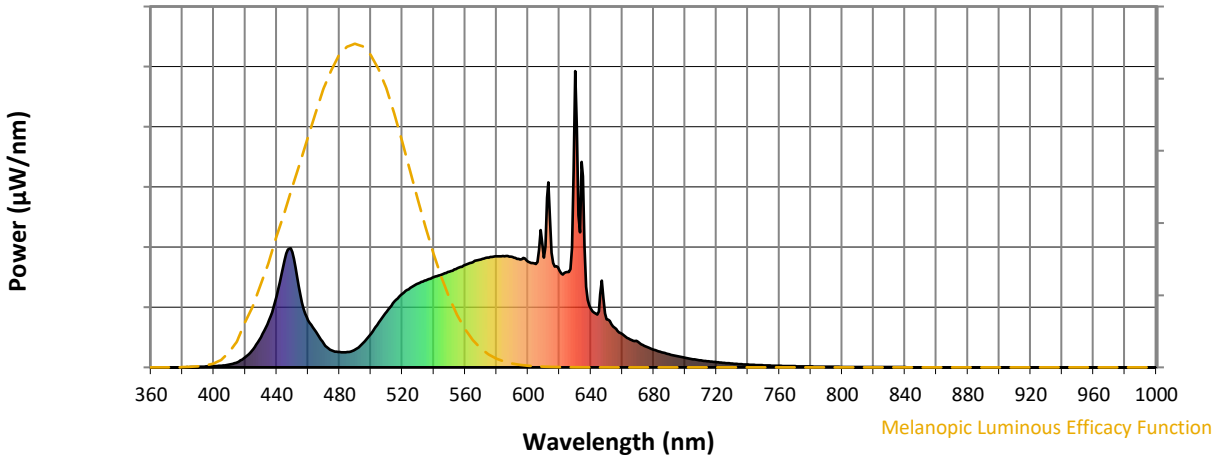


Scotopic Lumens: NR **S/P: 1.43**

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	60	NR	620	327	NR	750	7	NR	880	0	NR
365	0	NR	495	82	NR	625	322	NR	755	6	NR	885	0	NR
370	0	NR	500	114	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	152	NR	635	645	NR	765	4	NR	895	0	NR
380	0	NR	510	189	NR	640	197	NR	770	4	NR	900	0	NR
385	1	NR	515	222	NR	645	189	NR	775	3	NR	905	0	NR
390	2	NR	520	248	NR	650	163	NR	780	3	NR	910	0	NR
395	3	NR	525	268	NR	655	134	NR	785	2	NR	915	0	NR
400	4	NR	530	283	NR	660	113	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	94	NR	795	2	NR	925	0	NR
410	9	NR	540	305	NR	670	87	NR	800	2	NR	930	0	NR
415	18	NR	545	314	NR	675	70	NR	805	1	NR	935	0	NR
420	34	NR	550	323	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	335	NR	685	51	NR	815	1	NR	945	0	NR
430	102	NR	560	346	NR	690	44	NR	820	1	NR	950	0	NR
435	159	NR	565	356	NR	695	38	NR	825	1	NR	955	0	NR
440	241	NR	570	364	NR	700	32	NR	830	1	NR	960	0	NR
445	363	NR	575	371	NR	705	28	NR	835	1	NR	965	0	NR
450	389	NR	580	375	NR	710	24	NR	840	1	NR	970	0	NR
455	245	NR	585	375	NR	715	20	NR	845	0	NR	975	0	NR
460	158	NR	590	373	NR	720	17	NR	850	0	NR	980	0	NR
465	120	NR	595	364	NR	725	15	NR	855	0	NR	985	0	NR
470	79	NR	600	357	NR	730	13	NR	860	0	NR	990	0	NR
475	57	NR	605	349	NR	735	11	NR	865	0	NR	995	0	NR
480	51	NR	610	371	NR	740	9	NR	870	0	NR	1000	0	NR
485	51	NR	615	387	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-3

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.75**

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	60	NR	620	327	NR	750	7	NR	880	0	NR
365	0	NR	495	82	NR	625	322	NR	755	6	NR	885	0	NR
370	0	NR	500	114	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	152	NR	635	645	NR	765	4	NR	895	0	NR
380	0	NR	510	189	NR	640	197	NR	770	4	NR	900	0	NR
385	1	NR	515	222	NR	645	189	NR	775	3	NR	905	0	NR
390	2	NR	520	248	NR	650	163	NR	780	3	NR	910	0	NR
395	3	NR	525	268	NR	655	134	NR	785	2	NR	915	0	NR
400	4	NR	530	283	NR	660	113	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	94	NR	795	2	NR	925	0	NR
410	9	NR	540	305	NR	670	87	NR	800	2	NR	930	0	NR
415	18	NR	545	314	NR	675	70	NR	805	1	NR	935	0	NR
420	34	NR	550	323	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	335	NR	685	51	NR	815	1	NR	945	0	NR
430	102	NR	560	346	NR	690	44	NR	820	1	NR	950	0	NR
435	159	NR	565	356	NR	695	38	NR	825	1	NR	955	0	NR
440	241	NR	570	364	NR	700	32	NR	830	1	NR	960	0	NR
445	363	NR	575	371	NR	705	28	NR	835	1	NR	965	0	NR
450	389	NR	580	375	NR	710	24	NR	840	1	NR	970	0	NR
455	245	NR	585	375	NR	715	20	NR	845	0	NR	975	0	NR
460	158	NR	590	373	NR	720	17	NR	850	0	NR	980	0	NR
465	120	NR	595	364	NR	725	15	NR	855	0	NR	985	0	NR
470	79	NR	600	357	NR	730	13	NR	860	0	NR	990	0	NR
475	57	NR	605	349	NR	735	11	NR	865	0	NR	995	0	NR
480	51	NR	610	371	NR	740	9	NR	870	0	NR	1000	0	NR
485	51	NR	615	387	NR	745	8	NR	875	0	NR			

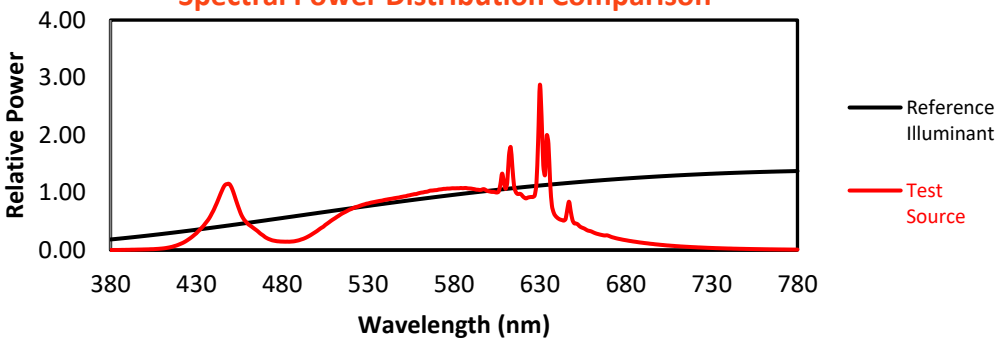
REPORT NUMBER: SP1-2506-472-3

TM-30-18

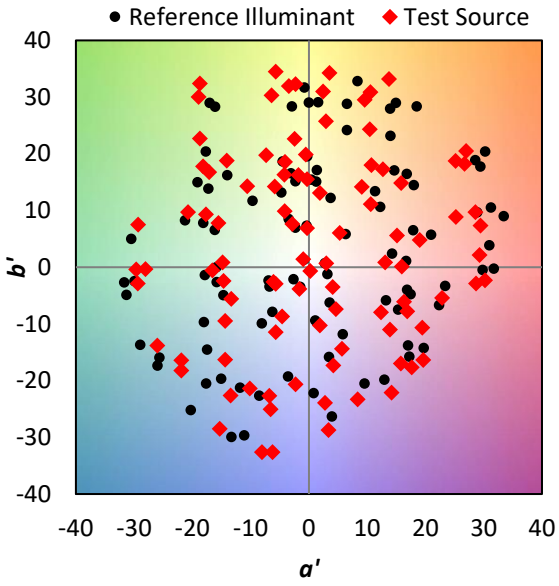
Summary

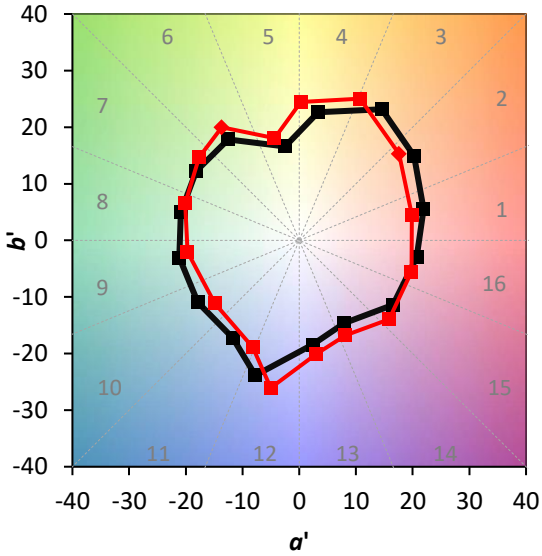
R_f = 80.1
R_g = 101
CIE R_a = 82.1
R_9 = 27.6

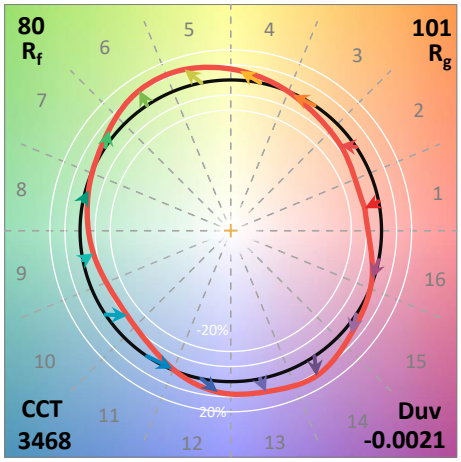
Spectral Power Distribution Comparison

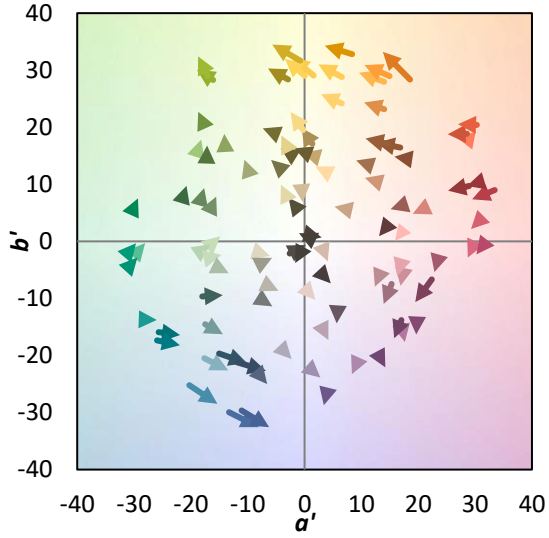


Color Vector Graphics







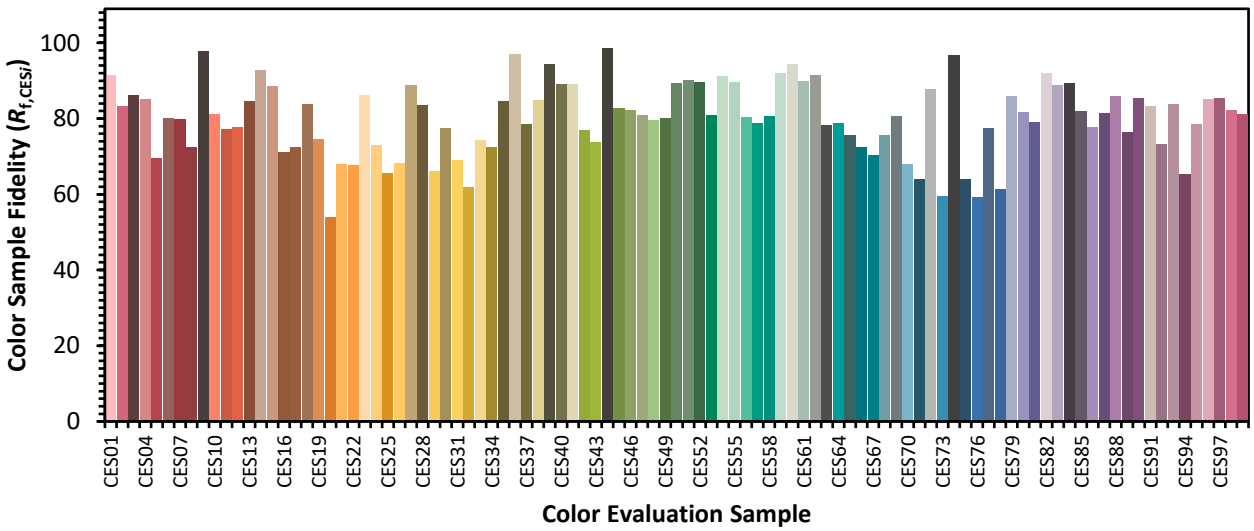


REPORT NUMBER: SP1-2506-472-3

TM-30-18

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

CES01 = 86	CES26 = 68	CES51 = 90	CES76 = 59
CES02 = 62	CES27 = 89	CES52 = 90	CES77 = 78
CES03 = 31	CES28 = 84	CES53 = 81	CES78 = 61
CES04 = 70	CES29 = 66	CES54 = 91	CES79 = 86
CES05 = 49	CES30 = 77	CES55 = 90	CES80 = 82
CES06 = 51	CES31 = 69	CES56 = 80	CES81 = 79
CES07 = 42	CES32 = 62	CES57 = 79	CES82 = 92
CES08 = 41	CES33 = 74	CES58 = 81	CES83 = 89
CES09 = 29	CES34 = 72	CES59 = 92	CES84 = 89
CES10 = 75	CES35 = 85	CES60 = 94	CES85 = 82
CES11 = 58	CES36 = 97	CES61 = 90	CES86 = 78
CES12 = 64	CES37 = 79	CES62 = 92	CES87 = 82
CES13 = 43	CES38 = 85	CES63 = 78	CES88 = 86
CES14 = 74	CES39 = 94	CES64 = 79	CES89 = 76
CES15 = 71	CES40 = 89	CES65 = 76	CES90 = 85
CES16 = 47	CES41 = 89	CES66 = 73	CES91 = 83
CES17 = 49	CES42 = 77	CES67 = 70	CES92 = 73
CES18 = 56	CES43 = 74	CES68 = 76	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 81	CES94 = 65
CES20 = 66	CES45 = 83	CES70 = 68	CES95 = 79
CES21 = 86	CES46 = 82	CES71 = 64	CES96 = 85
CES22 = 78	CES47 = 81	CES72 = 88	CES97 = 85
CES23 = 92	CES48 = 80	CES73 = 60	CES98 = 82
CES24 = 91	CES49 = 80	CES74 = 97	CES99 = 81
CES25 = 72	CES50 = 89	CES75 = 64	



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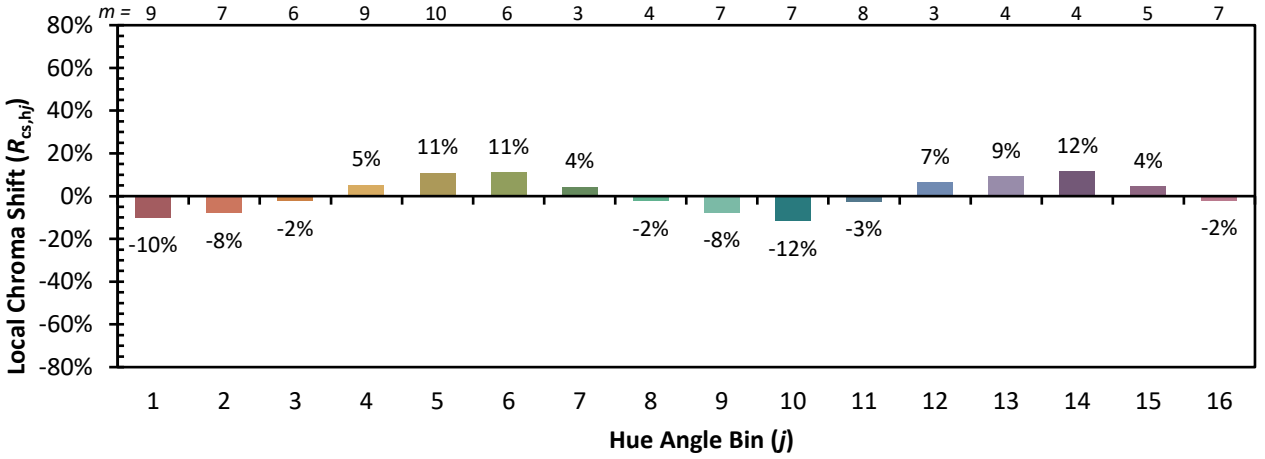
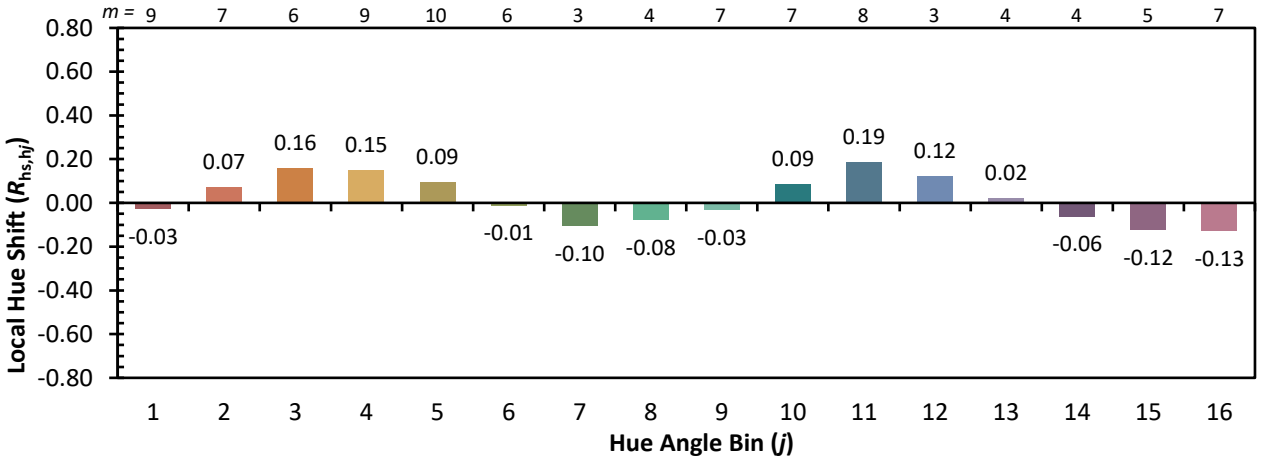
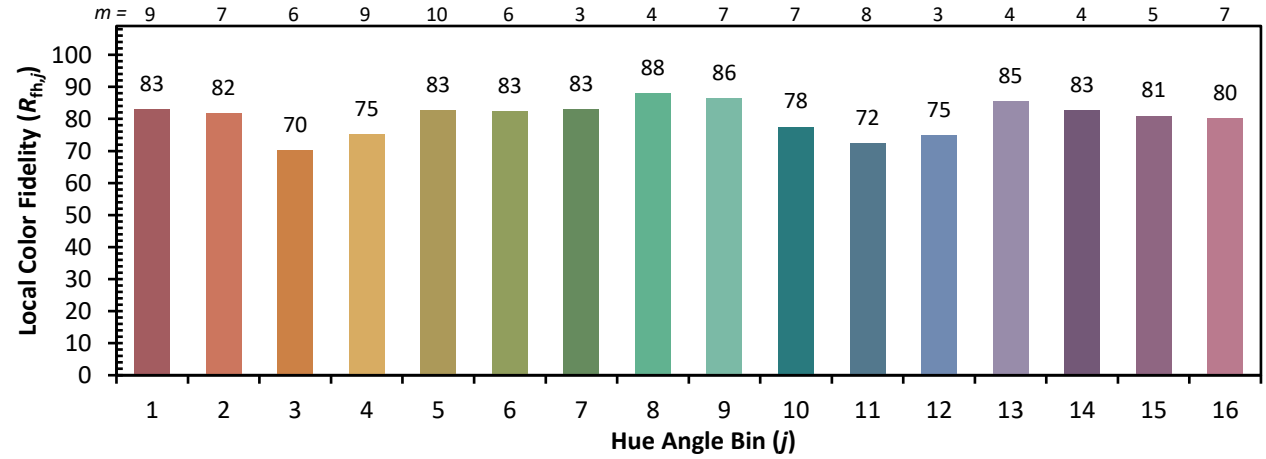
Color Rendition by Hue-Angle Bin







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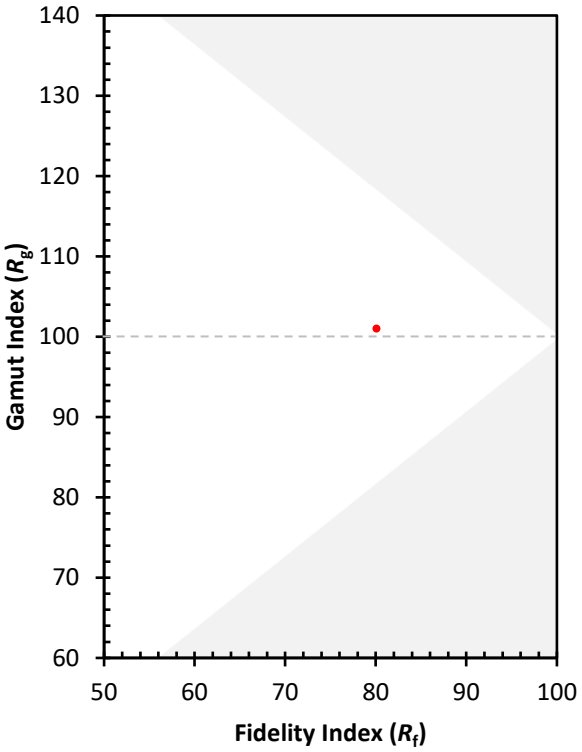
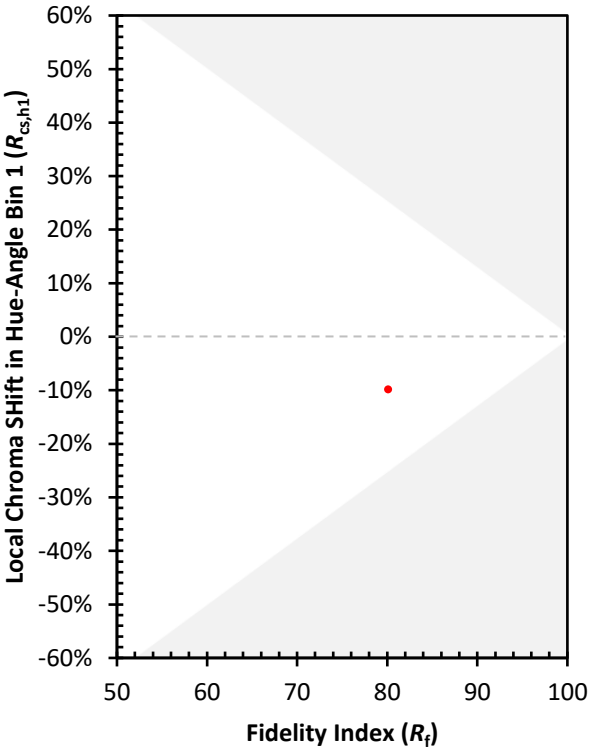
Measure Comparisons





(END OF REPORT)