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: P1432747

Luminaire Tested: EHBR1-48-UNV-TASM-L835-UPL12

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:	P1432747
	REPORT IS A COMBINATION OF REPORTS P1431836 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-48-UNV-TASM-L835-UPL12
Description:	Elevate Round Highbay at, 48000 lumens, 3500K 80CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	47207.5 lumens
Efficiency:	N/A
Efficacy:	177.5 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:	Direct

Input Watts (W):	266
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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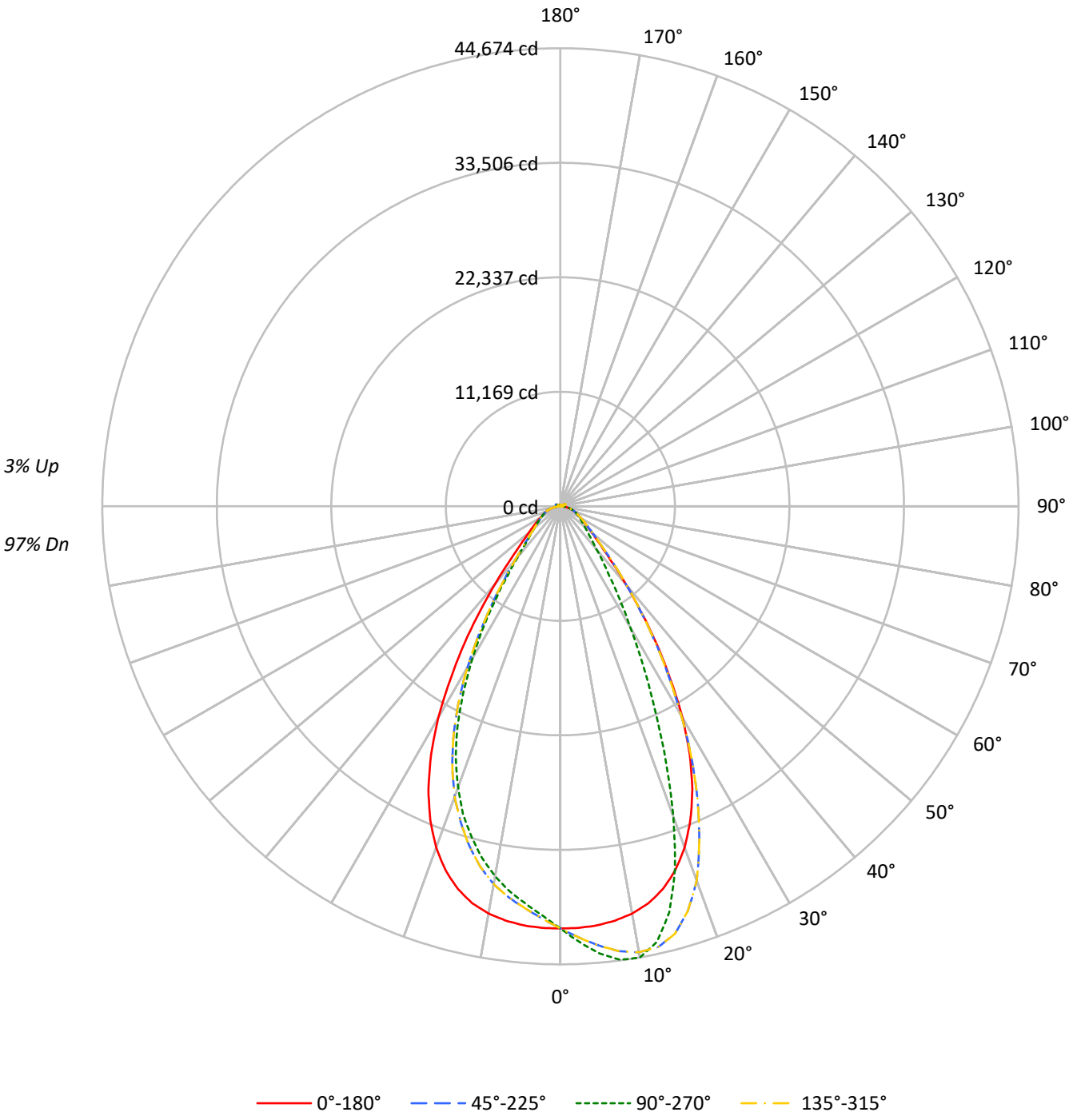
Luminous Intensity Polar Plot



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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	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97
1	111	108	105	102	108	105	103	100	101	99	97	97	95	93	93	91	90	88
2	104	98	93	89	102	96	92	88	93	89	86	89	86	83	86	84	81	79
3	98	90	84	79	96	89	83	79	85	81	77	83	79	75	80	77	74	72
4	92	83	77	72	90	82	76	71	79	74	70	77	72	69	75	71	68	66
5	87	77	70	65	85	76	69	65	74	68	64	72	67	63	70	66	62	60
6	82	71	65	60	80	70	64	59	69	63	59	67	62	58	65	61	57	56
7	77	67	60	55	76	66	59	55	64	58	54	63	58	54	61	57	53	52
8	73	62	56	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48
9	69	58	52	47	68	58	52	47	57	51	47	56	50	47	54	50	46	45
10	66	55	49	44	65	54	48	44	53	48	44	52	47	44	52	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	193341	193341	193341	193341
5°	192165	205004	192165	182192
10°	189802	210267	189802	172430
15°	184198	195403	184198	159279
20°	172272	156687	172272	141872
25°	152474	108561	152474	118895
30°	123803	70627	123803	88957
35°	88795	45740	88795	59221
40°	57409	31526	57409	37348
45°	36426	24421	36426	26611
50°	27051	20752	27051	22165
55°	22085	18903	22085	19566
60°	19125	18007	19125	18117
65°	17434	17367	17434	17292
70°	16523	17016	16523	16796
75°	15452	16461	15452	15969
80°	13574	15542	13574	14529
85°	8784	11097	8784	10579

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 51213 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3914.7	8.3
10°-20°	10650.2	22.6
20°-30°	12490.5	26.5
30°-40°	8686.4	18.4
40°-50°	4316.7	9.1
50°-60°	2581.8	5.5
60°-70°	1817.2	3.8
70°-80°	1170.6	2.5
80°-90°	373.9	0.8
90°-100°	33.0	0.1
100°-110°	207.0	0.4
110°-120°	380.7	0.8
120°-130°	227.6	0.5
130°-140°	139.5	0.3
140°-150°	98.3	0.2
150°-160°	66.0	0.1
160°-170°	39.8	0.1
170°-180°	13.6	0.0
0°-30°	27055.4	57.3
0°-40°	35741.7	75.7
0°-60°	42640.3	90.3
0°-90°	46002.0	97.4
90°-120°	620.7	1.3
90°-150°	1086.1	2.3
90°-180°	1206.0	2.6
0°-180°	47207.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	41171	41171	41171	41171	41171	
5°	41030	43772	41030	38901	41030	3894
15°	38644	40995	38644	33416	38644	10800
25°	30449	21680	30449	23743	30449	13785
35°	16297	8395	16297	10869	16297	10174
45°	5894	3951	5894	4306	5894	4823
55°	2985	2555	2985	2644	2985	2729
65°	1820	1813	1820	1805	1820	1828
75°	1088	1160	1088	1125	1088	1143
85°	302	381	302	364	302	336
90°	9	15	9	9	9	19
95°	18	21	18	15	18	19
105°	95	53	95	72	95	128
115°	405	350	405	328	405	369
125°	260	276	260	238	260	240
135°	168	195	168	175	168	133
145°	155	162	155	150	155	97
155°	141	147	141	138	141	66
165°	139	147	139	138	139	40
175°	144	150	144	141	144	14
180°	144	144	144	144	144	

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TEST NUMBER: P1432747
CATALOG NUMBER: EHBR1-48-UNV-TASM-L835-UPL12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	41170.6	41170.6	41170.6	41170.6	*41170.6*	41170.6	41170.6	41170.6	41170.6	41170.6	41170.6
2.5°	41146.7	41678.6	42109.4	42393.5	*42534.0*	42393.5	42109.4	41678.6	41146.7	40617.9	40254.2
5°	41030.2	42095.5	42998.0	43588.6	*43771.5*	43588.6	42998.0	42095.5	41030.2	40023.4	39355.7
7.5°	40751.4	42411.2	43752.2	44441.6	*44610.0*	44441.6	43752.2	42411.2	40751.4	39326.3	38482.5
10°	*40326.1*	*42610.4*	*44159.8*	*44654.0*	*44674.1*	*44654.0*	*44159.8*	*42610.4*	*40326.1*	*38406.0*	*37410.9*
12.5°	39647.5	42539.4	44023.2	43861.0	*43492.9*	43861.0	44023.2	42539.4	39647.5	37282.1	36026.8
15°	38643.8	42118.7	43157.8	41838.4	*40994.6*	41838.4	43157.8	42118.7	38643.8	35764.3	34308.2
17.5°	37229.5	41331.2	41351.2	38741.1	*37149.2*	38741.1	41351.2	41331.2	37229.5	33908.3	32304.8
20°	35406.8	40068.2	38863.8	34089.8	*32203.7*	34089.8	38863.8	40068.2	35406.8	31714.3	30140.9
22.5°	33121.6	38365.1	35399.8	29410.5	*26837.5*	29410.5	35399.8	38365.1	33121.6	29162.8	27525.3
25°	30448.9	36278.4	31673.3	24312.2	*21679.6*	24312.2	31673.3	36278.4	30448.9	26122.5	24641.9
27.5°	27305.3	33633.5	27705.2	19866.9	*17438.2*	19866.9	27705.2	33633.5	27305.3	22983.6	21471.2
30°	23813.5	30242.8	23575.7	15821.6	*13585.1*	15821.6	23575.7	30242.8	23813.5	19457.0	18102.9
32.5°	19904.0	26919.2	19609.9	12677.2	*10782.7*	12677.2	19609.9	26919.2	19904.0	16091.9	14676.8
35°	16297.1	22761.2	16034.0	9961.2	*8394.9*	9961.2	16034.0	22761.2	16297.1	12915.0	11525.4
37.5°	12789.9	18832.4	12781.5	8021.2	*6809.1*	8021.2	12781.5	18832.4	12789.9	10040.8	8912.9
40°	9950.5	14725.3	10014.6	6403.1	*5464.3*	6403.1	10014.6	14725.3	9950.5	7639.9	6918.0
42.5°	7539.5	11259.8	7871.4	5255.1	*4641.3*	5255.1	7871.4	11259.8	7539.5	6019.4	5479.0
45°	5893.5	8286.0	6146.8	4433.7	*3951.2*	4433.7	6146.8	8286.0	5893.5	4847.5	4484.6
47.5°	4799.6	6403.9	4981.8	3802.9	*3464.8*	3802.9	4981.8	6403.9	4799.6	4100.1	3828.4
50°	4031.5	4913.8	4136.4	3319.6	*3092.7*	3319.6	4136.4	4913.8	4031.5	3511.1	3329.7
52.5°	3463.2	4007.5	3522.7	2958.4	*2805.5*	2958.4	3522.7	4007.5	3463.2	3071.8	2959.2
55°	2984.6	3369.1	3063.3	2660.4	*2554.6*	2660.4	3063.3	3369.1	2984.6	2733.7	2650.3
57.5°	2621.0	2858.0	2660.4	2406.3	*2336.1*	2406.3	2660.4	2858.0	2621.0	2432.6	2387.8
60°	2299.1	2475.1	2347.7	2184.8	*2164.7*	2184.8	2347.7	2475.1	2299.1	2188.6	2159.4
62.5°	2051.2	2162.5	2076.0	1985.6	*1967.8*	1985.6	2076.0	2162.5	2051.2	1966.3	1971.7
65°	1819.7	1923.1	1855.2	1806.5	*1812.7*	1806.5	1855.2	1923.1	1819.7	1780.3	1788.7
67.5°	1640.6	1694.6	1665.2	1637.5	*1644.4*	1637.5	1665.2	1694.6	1640.6	1602.0	1615.1
70°	1449.8	1507.7	1477.6	1481.5	*1493.1*	1481.5	1477.6	1507.7	1449.8	1438.3	1448.3
72.5°	1267.6	1312.4	1302.4	1311.6	*1324.0*	1311.6	1302.4	1312.4	1267.6	1266.1	1266.8
75°	1088.5	1122.5	1127.1	1140.3	*1159.6*	1140.3	1127.1	1122.5	1088.5	1077.0	1090.8
77.5°	893.2	931.8	946.5	964.3	*992.8*	964.3	946.5	931.8	893.2	901.0	907.8
80°	714.1	731.8	764.3	777.4	*817.6*	777.4	764.3	731.8	714.1	701.0	711.0
82.5°	522.7	538.9	566.7	591.3	*614.5*	591.3	566.7	538.9	522.7	516.5	517.2
85°	301.9	326.6	345.1	374.4	*381.4*	374.4	345.1	326.6	301.9	308.9	301.9
87.5°	105.8	113.5	129.7	141.3	*142.1*	141.3	129.7	113.5	105.8	108.1	98.0
90°	9.2	15.9	27.1	17.6	*14.6*	17.6	27.1	15.9	9.2	15.7	24.2
92.5°	11.8	21.0	37.5	22.2	*17.9*	22.2	37.5	21.0	11.8	20.3	38.6
95°	17.8	25.6	47.2	24.1	*20.6*	24.1	47.2	25.6	17.8	26.9	53.5
97.5°	27.0	31.5	53.1	25.5	*23.8*	25.5	53.1	31.5	27.0	32.7	61.4
100°	35.4	35.4	95.4	28.7	*26.4*	28.7	95.4	35.4	35.4	40.6	95.2
102.5°	53.0	68.8	219.3	54.3	*30.9*	54.3	219.3	68.8	53.0	75.2	201.4
105°	95.3	154.8	384.1	133.0	*53.2*	133.0	384.1	154.8	95.3	155.9	358.3
107.5°	179.4	286.9	494.2	258.1	*116.4*	258.1	494.2	286.9	179.4	275.1	473.0
110°	286.2	400.3	539.1	351.9	*229.7*	351.9	539.1	400.3	286.2	377.3	495.9

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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°	372.1	445.9	526.7	389.7	*315.6*	389.7	526.7	445.9	372.1	416.4	475.1
115°	404.9	439.4	470.7	388.4	*349.6*	388.4	470.7	439.4	404.9	406.6	424.2
117.5°	391.2	402.2	406.9	364.9	*351.5*	364.9	406.9	402.2	391.2	366.4	360.4
120°	353.4	348.8	343.9	330.4	*331.9*	330.4	343.9	348.8	353.4	320.1	301.1
122.5°	306.6	296.8	291.1	296.1	*305.3*	296.1	291.1	296.8	306.6	273.4	258.9
125°	260.4	250.6	254.7	266.1	*276.1*	266.1	254.7	250.6	260.4	233.1	229.1
127.5°	222.1	217.5	228.1	240.7	*249.4*	240.7	228.1	217.5	222.1	204.5	207.6
130°	194.8	195.4	209.2	220.6	*225.9*	220.6	209.2	195.4	194.8	186.4	194.7
132.5°	178.0	182.5	195.6	205.8	*209.2*	205.8	195.6	182.5	178.0	176.2	186.5
135°	167.8	174.0	186.6	192.6	*194.8*	192.6	186.6	174.0	167.8	169.1	178.0
137.5°	161.9	168.2	177.5	183.0	*182.4*	183.0	177.5	168.2	161.9	164.8	171.7
140°	158.8	165.1	169.0	175.1	*175.4*	175.1	169.0	165.1	158.8	160.2	166.0
142.5°	155.7	161.4	163.3	168.1	*167.6*	168.1	163.3	161.4	155.7	157.0	161.0
145°	154.6	158.9	156.9	162.2	*161.7*	162.2	156.9	158.9	154.6	154.4	157.2
147.5°	151.3	154.4	152.4	157.2	*156.6*	157.2	152.4	154.4	151.3	151.3	152.6
150°	148.1	150.7	147.4	152.6	*153.5*	152.6	147.4	150.7	148.1	147.4	148.9
152.5°	143.6	146.2	143.6	149.6	*149.7*	149.6	143.6	146.2	143.6	142.9	144.4
155°	140.6	142.0	140.6	146.6	*147.4*	146.6	140.6	142.0	140.6	139.8	141.4
157.5°	139.0	140.3	139.7	145.1	*145.8*	145.1	139.7	140.3	139.0	139.0	139.7
160°	138.8	140.0	140.2	144.9	*145.7*	144.9	140.2	140.0	138.8	138.7	139.4
162.5°	139.0	139.0	139.9	144.6	*146.1*	144.6	139.9	139.0	139.0	139.0	139.6
165°	139.3	140.0	140.3	144.4	*146.6*	144.4	140.3	140.0	139.3	139.3	139.3
167.5°	140.3	139.6	141.2	145.5	*147.7*	145.5	141.2	139.6	140.3	140.1	140.1
170°	139.7	140.5	141.4	145.7	*147.9*	145.7	141.4	140.5	139.7	140.4	140.3
172.5°	142.1	142.1	143.1	146.6	*149.5*	146.6	143.1	142.1	142.1	142.0	142.6
175°	143.6	143.7	144.7	147.5	*150.4*	147.5	144.7	143.7	143.6	142.8	142.8
177.5°	142.9	144.5	145.9	148.9	*152.4*	148.9	145.9	144.5	142.9	142.8	142.8
180°	144.5	144.5	144.5	144.5	*144.5*	144.5	144.5	144.5	144.5	144.5	144.5

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	41170.6	41170.6	41170.6	41170.6	41170.6	41170.6
2.5°	39974.7	39948.6	39974.7	40254.2	40617.9	41146.7
5°	39046.1	38900.9	39046.1	39355.7	40023.4	41030.2
7.5°	37964.4	37880.4	37964.4	38482.5	39326.3	40751.4
10°	*36825.7*	*36635.1*	*36825.7*	*37410.9*	*38406.0*	*40326.1*
12.5°	35422.2	35169.8	35422.2	36026.8	37282.1	39647.5
15°	33637.3	33415.8	33637.3	34308.2	35764.3	38643.8
17.5°	31722.0	31521.3	31722.0	32304.8	33908.3	37229.5
20°	29316.4	29158.9	29316.4	30140.9	31714.3	35406.8
22.5°	26792.7	26645.2	26792.7	27525.3	29162.8	33121.6
25°	23823.5	23743.3	23823.5	24641.9	26122.5	30448.9
27.5°	20615.1	20478.4	20615.1	21471.2	22983.6	27305.3
30°	17337.1	17110.9	17337.1	18102.9	19457.0	23813.5
32.5°	14130.9	13968.0	14130.9	14676.8	16091.9	19904.0
35°	11032.1	10869.2	11032.1	11525.4	12915.0	16297.1
37.5°	8596.4	8308.4	8596.4	8912.9	10040.8	12789.9
40°	6519.7	6473.3	6519.7	6918.0	7639.9	9950.5
42.5°	5307.6	5181.7	5307.6	5479.0	6019.4	7539.5
45°	4355.0	4305.5	4355.0	4484.6	4847.5	5893.5
47.5°	3745.0	3766.6	3745.0	3828.4	4100.1	4799.6
50°	3290.3	3303.4	3290.3	3329.7	3511.1	4031.5
52.5°	2955.3	2943.7	2955.3	2959.2	3071.8	3463.2
55°	2658.8	2644.1	2658.8	2650.3	2733.7	2984.6
57.5°	2399.5	2410.2	2399.5	2387.8	2432.6	2621.0
60°	2167.8	2177.9	2167.8	2159.4	2188.6	2299.1
62.5°	1972.5	1978.7	1972.5	1971.7	1966.3	2051.2
65°	1798.0	1804.9	1798.0	1788.7	1780.3	1819.7
67.5°	1631.2	1631.2	1631.2	1615.1	1602.0	1640.6
70°	1474.5	1473.8	1474.5	1448.3	1438.3	1449.8
72.5°	1286.1	1304.7	1286.1	1266.8	1266.1	1267.6
75°	1103.2	1124.9	1103.2	1090.8	1077.0	1088.5
77.5°	917.9	951.1	917.9	907.8	901.0	893.2
80°	728.0	764.3	728.0	711.0	701.0	714.1
82.5°	538.1	565.1	538.1	517.2	516.5	522.7
85°	320.4	363.6	320.4	301.9	308.9	301.9
87.5°	102.7	131.2	102.7	98.0	108.1	105.8
90°	14.4	9.2	14.4	24.2	15.7	9.2
92.5°	21.6	13.2	21.6	38.6	20.3	11.8
95°	24.8	15.1	24.8	53.5	26.9	17.8
97.5°	27.4	19.8	27.4	61.4	32.7	27.0
100°	32.0	25.6	32.0	95.2	40.6	35.4
102.5°	67.2	42.6	67.2	201.4	75.2	53.0
105°	140.8	72.5	140.8	358.3	155.9	95.3
107.5°	251.5	124.6	251.5	473.0	275.1	179.4
110°	333.6	231.5	333.6	495.9	377.3	286.2

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

Scaled Data Report

TEST NUMBER: P1432747
CATALOG NUMBER: EHBR1-48-UNV-TASM-L835-UPL12

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	358.3	312.2	358.3	475.1	416.4	372.1
115°	344.6	328.5	344.6	424.2	406.6	404.9
117.5°	314.7	317.4	314.7	360.4	366.4	391.2
120°	280.1	294.0	280.1	301.1	320.1	353.4
122.5°	249.0	264.6	249.0	258.9	273.4	306.6
125°	221.7	238.1	221.7	229.1	233.1	260.4
127.5°	202.8	214.0	202.8	207.6	204.5	222.1
130°	188.6	197.7	188.6	194.7	186.4	194.8
132.5°	178.9	184.8	178.9	186.5	176.2	178.0
135°	170.6	175.0	170.6	178.0	169.1	167.8
137.5°	163.6	167.4	163.6	171.7	164.8	161.9
140°	158.0	161.1	158.0	166.0	160.2	158.8
142.5°	151.6	154.2	151.6	161.0	157.0	155.7
145°	147.9	149.8	147.9	157.2	154.4	154.6
147.5°	144.8	146.1	144.8	152.6	151.3	151.3
150°	141.8	143.1	141.8	148.9	147.4	148.1
152.5°	138.0	140.1	138.0	144.4	142.9	143.6
155°	136.3	138.4	136.3	141.4	139.8	140.6
157.5°	135.9	138.1	135.9	139.7	139.0	139.0
160°	136.2	137.7	136.2	139.4	138.7	138.8
162.5°	135.9	137.3	135.9	139.6	139.0	139.0
165°	136.7	137.5	136.7	139.3	139.3	139.3
167.5°	136.9	137.5	136.9	140.1	140.1	140.3
170°	137.7	138.5	137.7	140.3	140.4	139.7
172.5°	139.3	140.0	139.3	142.6	142.0	142.1
175°	140.1	140.9	140.1	142.8	142.8	143.6
177.5°	141.6	142.4	141.6	142.8	142.8	142.9
180°	144.5	144.5	144.5	144.5	144.5	144.5

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

Scaled Data Report

TEST NUMBER: P1432747
CATALOG NUMBER: EHBR1-48-UNV-TASM-L835-UPL12

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	19.26	20.43	19.67	20.79	21.18	18.58	19.74	18.99	20.11	20.49
	3H	20.81	21.85	21.24	22.23	22.66	20.43	21.46	20.86	21.85	22.28
	4H	21.45	22.41	21.90	22.82	23.27	21.21	22.18	21.66	22.58	23.03
	6H	21.93	22.82	22.39	23.24	23.70	21.86	22.75	22.32	23.17	23.63
	8H	22.08	22.92	22.56	23.37	23.84	22.08	22.92	22.56	23.36	23.83
	12H	22.16	22.96	22.63	23.39	23.89	22.21	23.01	22.69	23.45	23.94
4H	2H	19.68	20.65	20.13	21.05	21.50	19.16	20.12	19.61	20.53	20.98
	3H	21.48	22.28	21.94	22.73	23.20	21.22	22.02	21.68	22.47	22.94
	4H	22.25	22.97	22.73	23.44	23.95	22.13	22.84	22.61	23.31	23.82
	6H	22.87	23.49	23.38	23.98	24.51	22.90	23.52	23.41	24.01	24.54
	8H	23.07	23.64	23.58	24.14	24.67	23.17	23.75	23.68	24.24	24.77
	12H	23.17	23.68	23.71	24.21	24.75	23.34	23.85	23.87	24.38	24.91
8H	4H	22.50	23.08	23.02	23.58	24.11	22.41	22.98	22.92	23.48	24.01
	6H	23.25	23.72	23.79	24.26	24.80	23.31	23.78	23.86	24.33	24.87
	8H	23.52	23.93	24.08	24.50	25.05	23.66	24.08	24.23	24.64	25.20
	12H	23.69	24.06	24.25	24.60	25.23	23.92	24.28	24.48	24.82	25.45
12H	4H	22.52	23.02	23.05	23.55	24.09	22.42	22.93	22.95	23.46	23.99
	6H	23.29	23.71	23.86	24.27	24.82	23.36	23.77	23.92	24.34	24.89
	8H	23.61	23.97	24.17	24.52	25.15	23.76	24.13	24.32	24.67	25.30

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

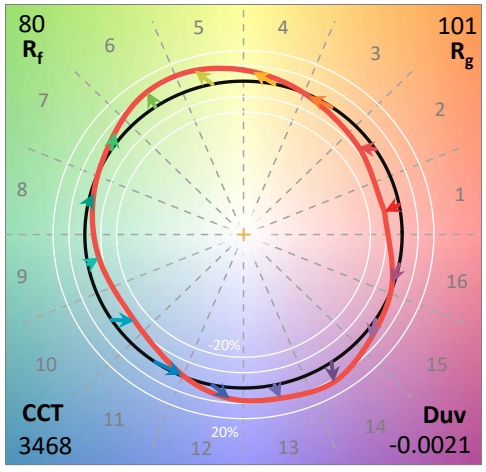
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

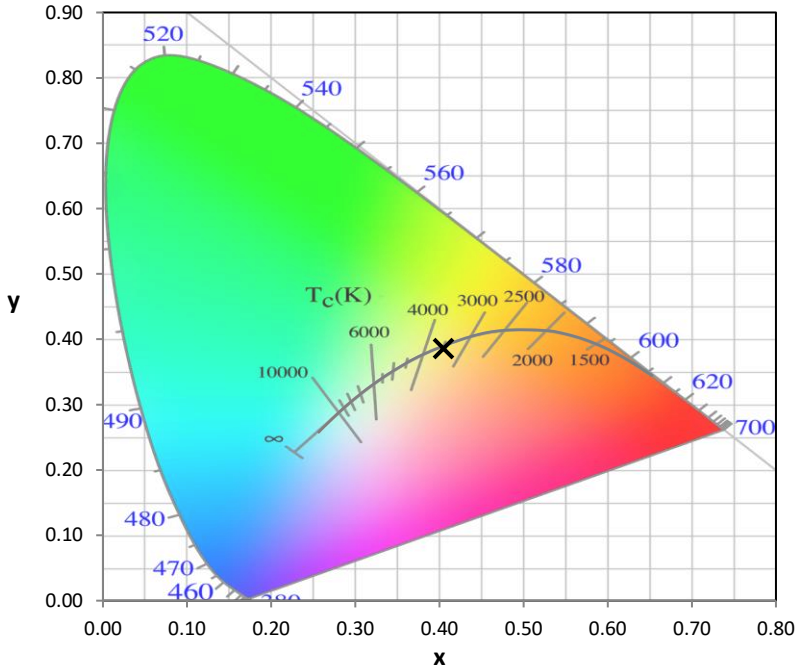
Stabilization Time:	39M
Operation Time:	1H 39M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-3

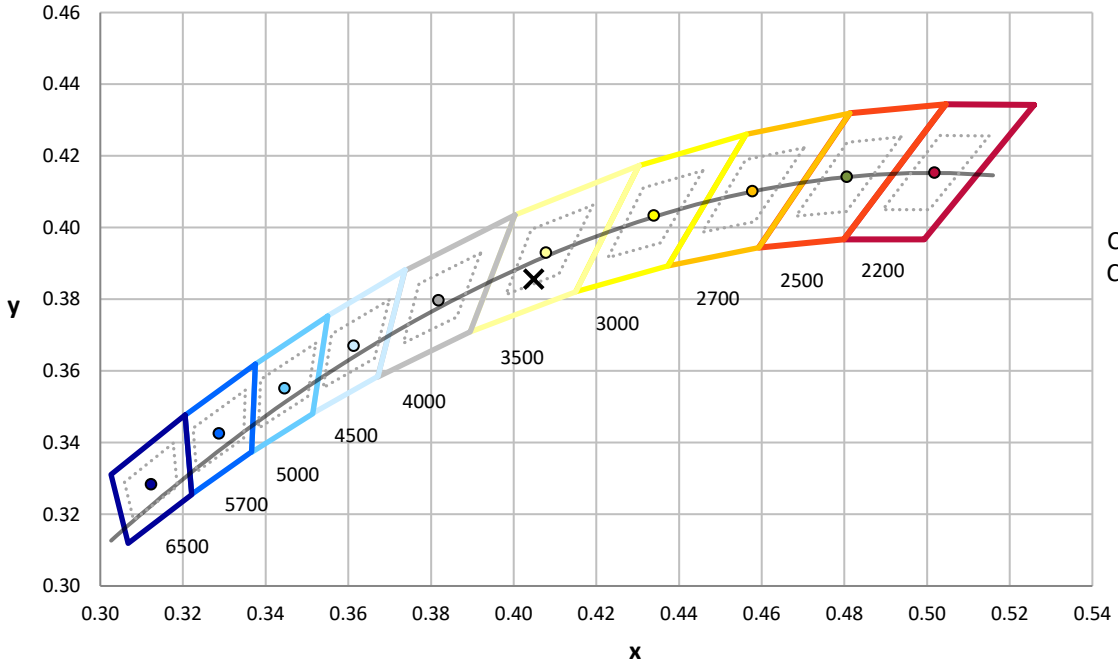
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

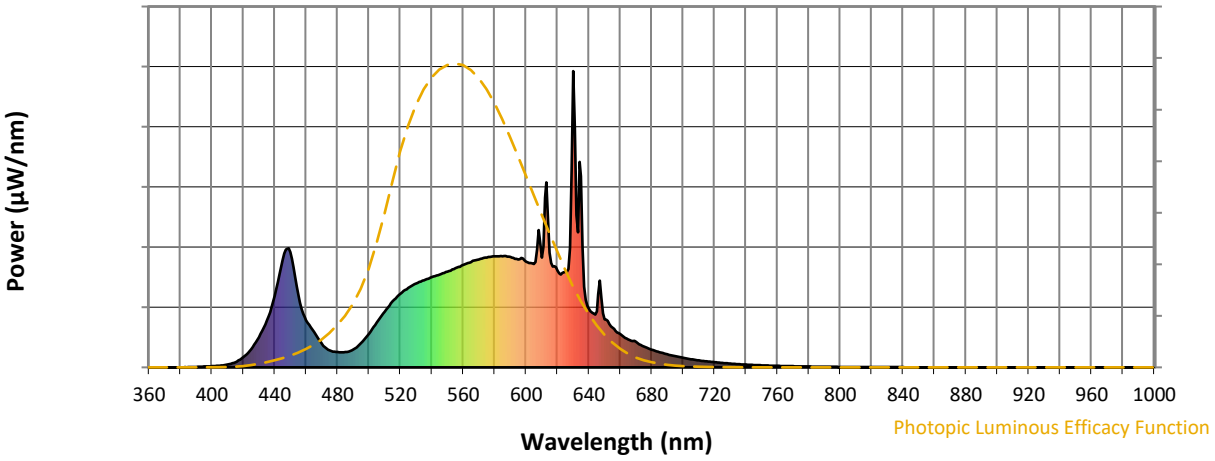


CCT = 3468K
CIE x = 0.4049
CIE y = 0.3856
Duv = -0.0021

Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-3

Photopic Flux vs. Wavelength

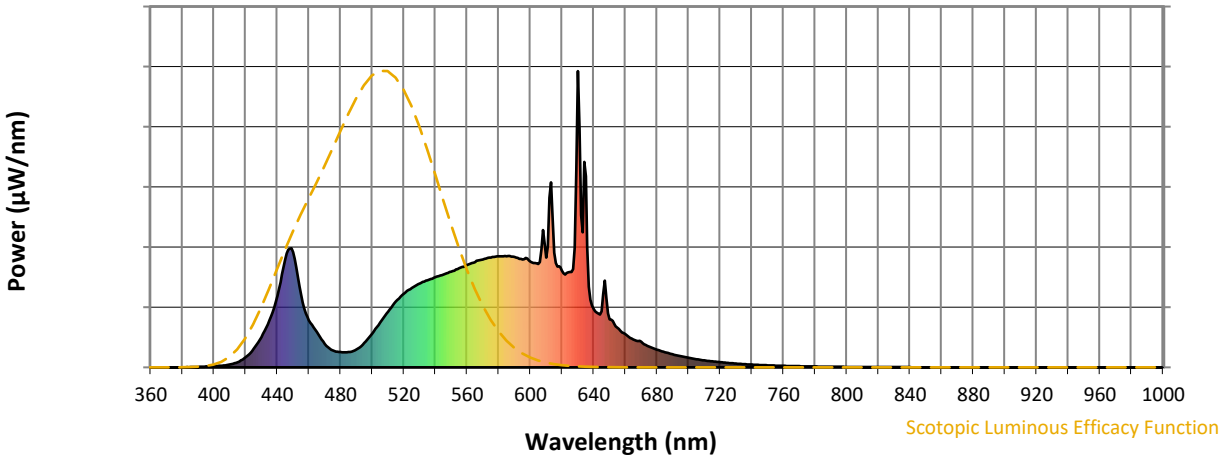


Photopic Lumens: NR

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

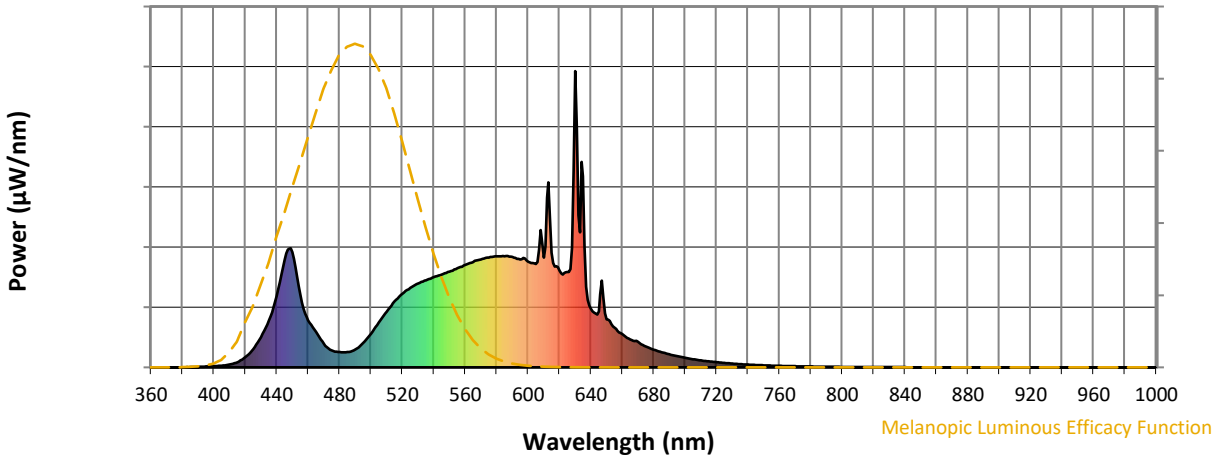


Scotopic Lumens: NR **S/P: 1.43**

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			

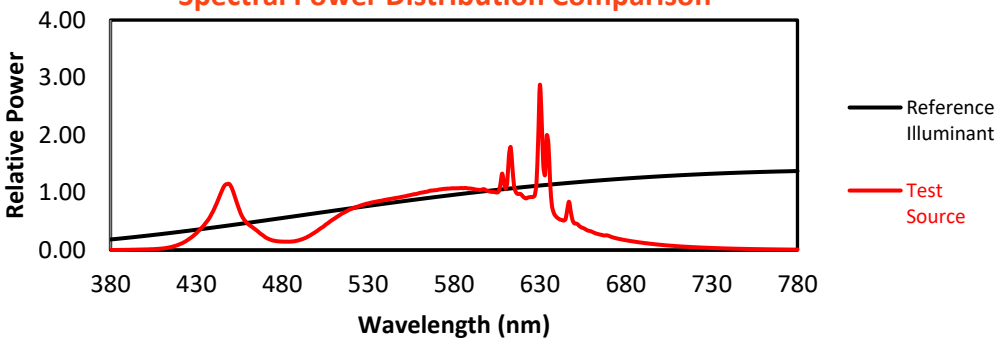
REPORT NUMBER: SP1-2506-472-3

TM-30-18

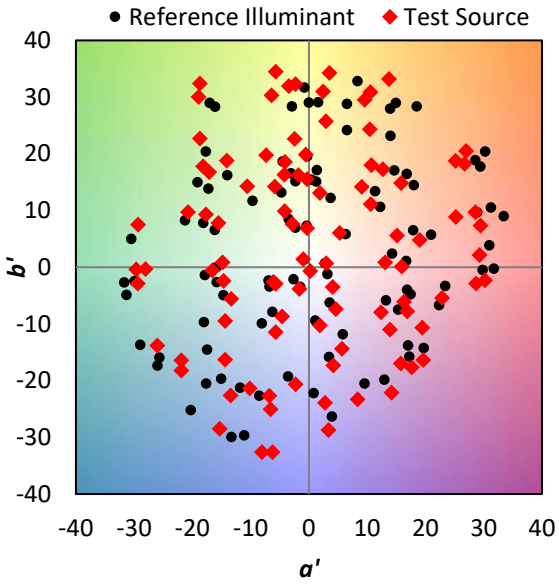
Summary

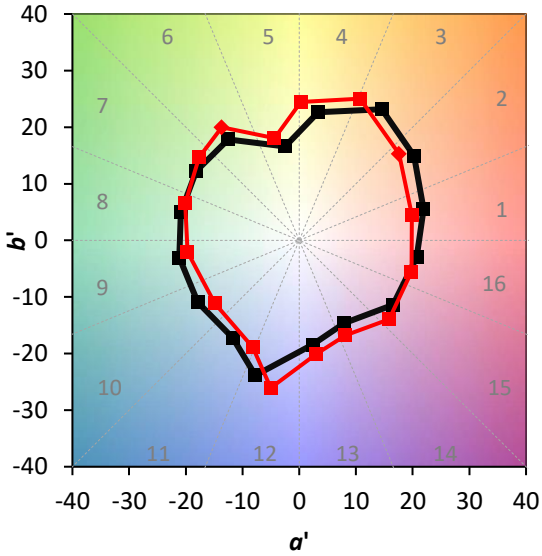
R_f = 80.1
R_g = 101
CIE R_a = 82.1
R_9 = 27.6

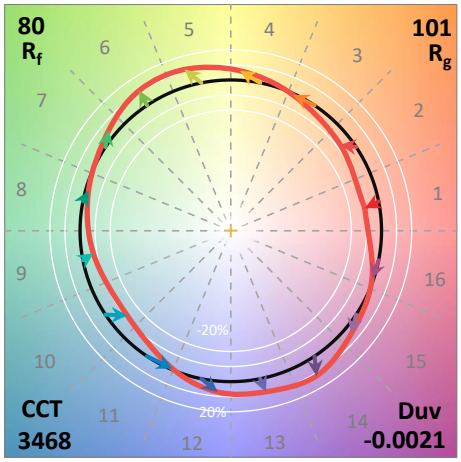
Spectral Power Distribution Comparison

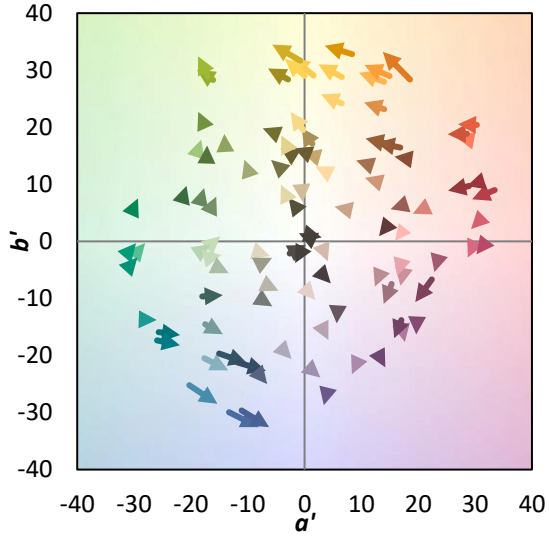


Color Vector Graphics







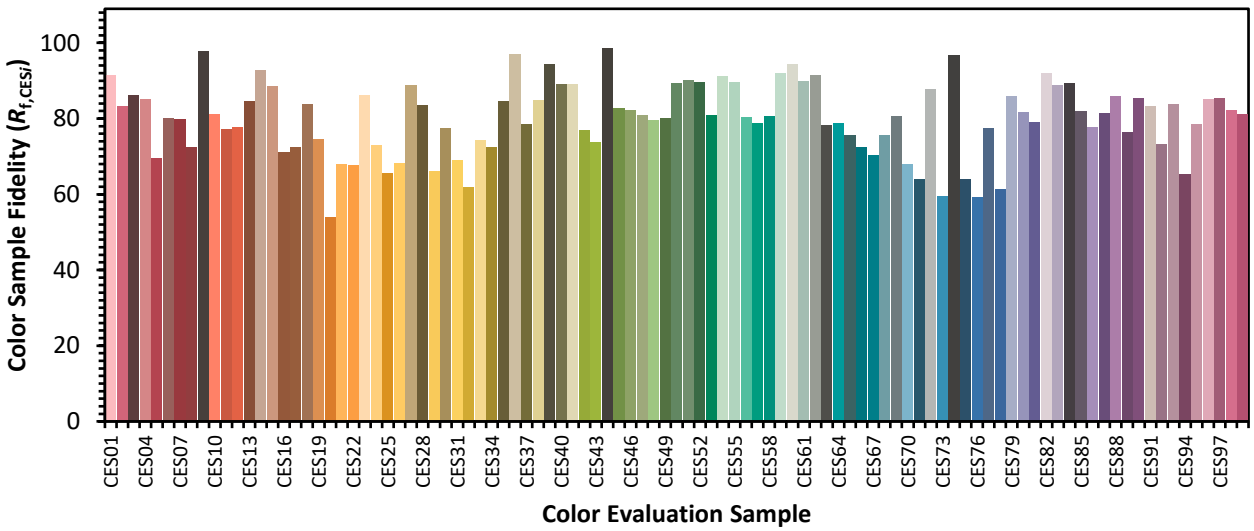


REPORT NUMBER: SP1-2506-472-3

TM-30-18

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

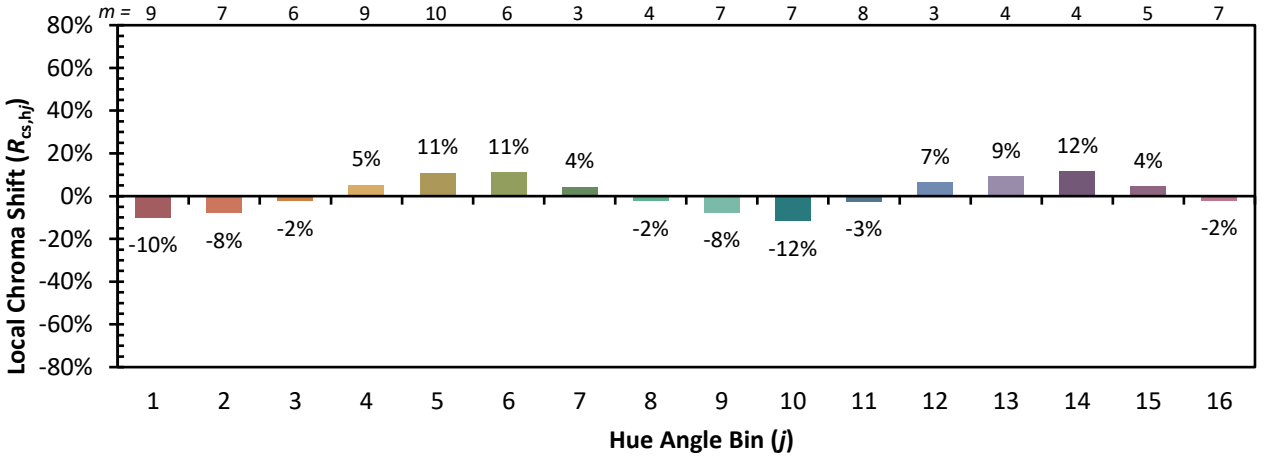
CES01 = 86	CES26 = 68	CES51 = 90	CES76 = 59
CES02 = 62	CES27 = 89	CES52 = 90	CES77 = 78
CES03 = 31	CES28 = 84	CES53 = 81	CES78 = 61
CES04 = 70	CES29 = 66	CES54 = 91	CES79 = 86
CES05 = 49	CES30 = 77	CES55 = 90	CES80 = 82
CES06 = 51	CES31 = 69	CES56 = 80	CES81 = 79
CES07 = 42	CES32 = 62	CES57 = 79	CES82 = 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	

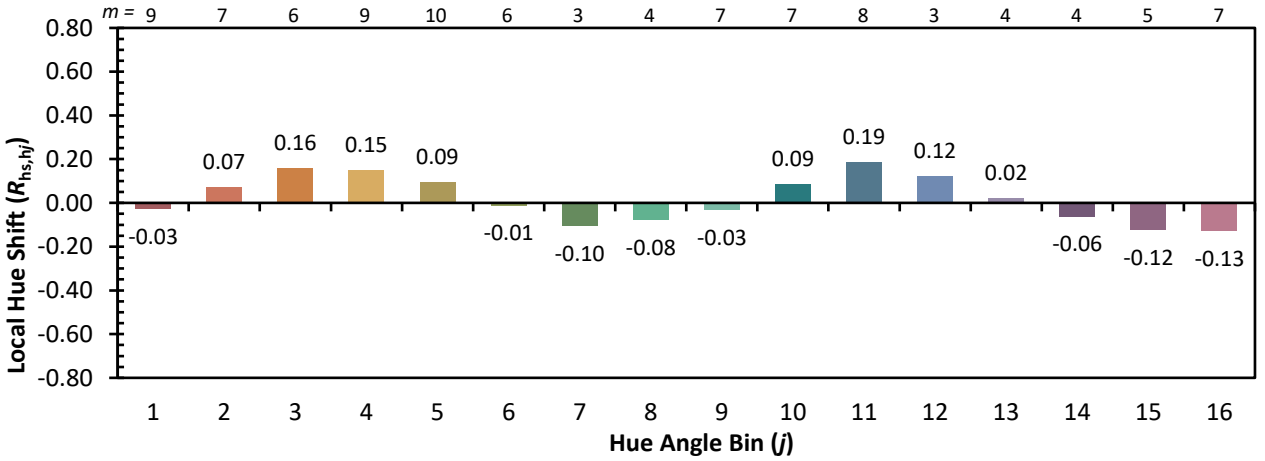


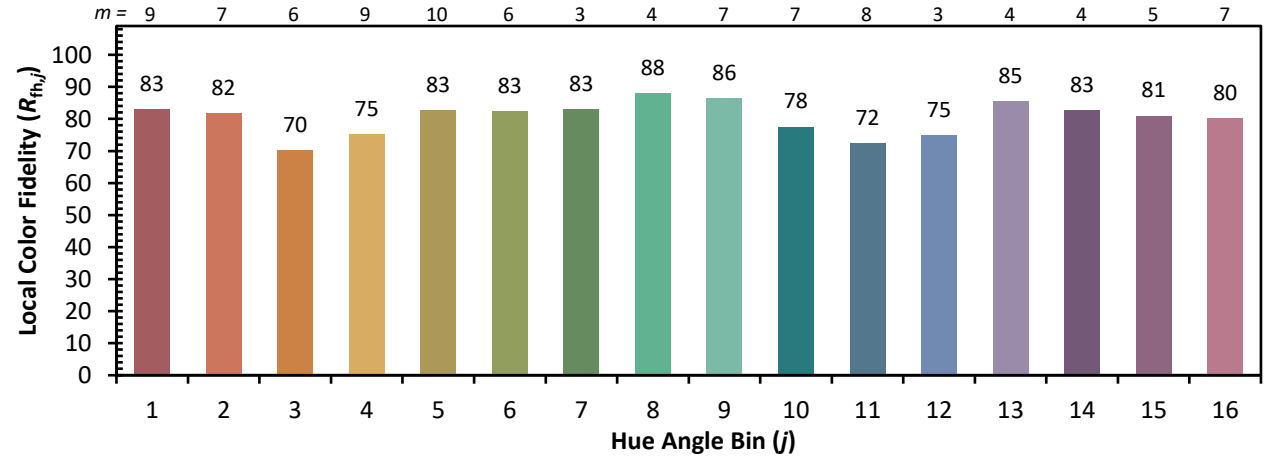
REPORT NUMBER: SP1-2506-472-3

TM-30-18

Color Rendition by Hue-Angle Bin



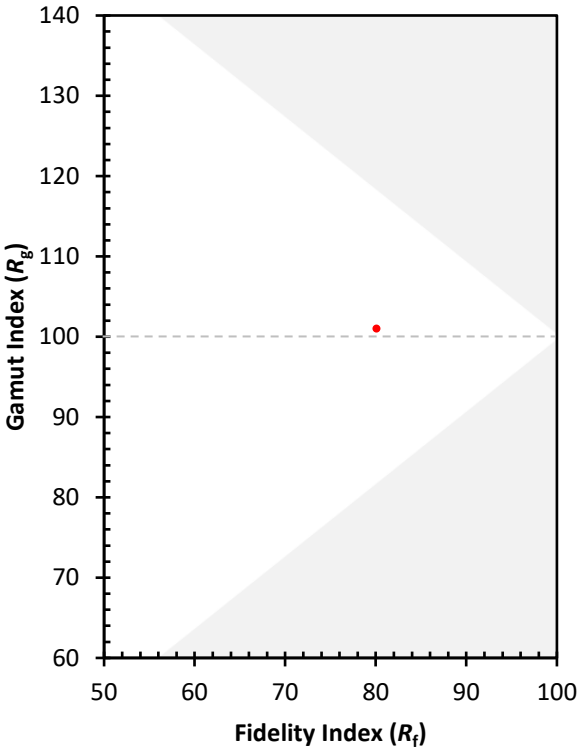


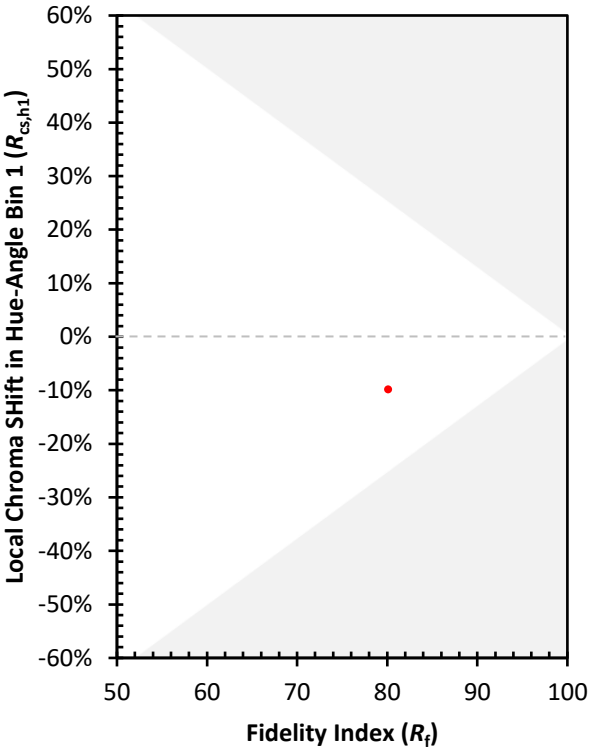


REPORT NUMBER: SP1-2506-472-3

TM-30-18

Measure Comparisons





(END OF REPORT)