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: P1432591

Luminaire Tested: EHBR1-18-UNV-TASM-L835-UPL30

Issue Date: 3/20/2026

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1432591
	REPORT IS A COMBINATION OF REPORTS P1431680 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-18-UNV-TASM-L835-UPL30
Description:	Elevate Round Highbay at, 18000 lumens, 3500K 80CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	20753.7 lumens
Efficiency:	N/A
Efficacy:	177.8 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):	116.7
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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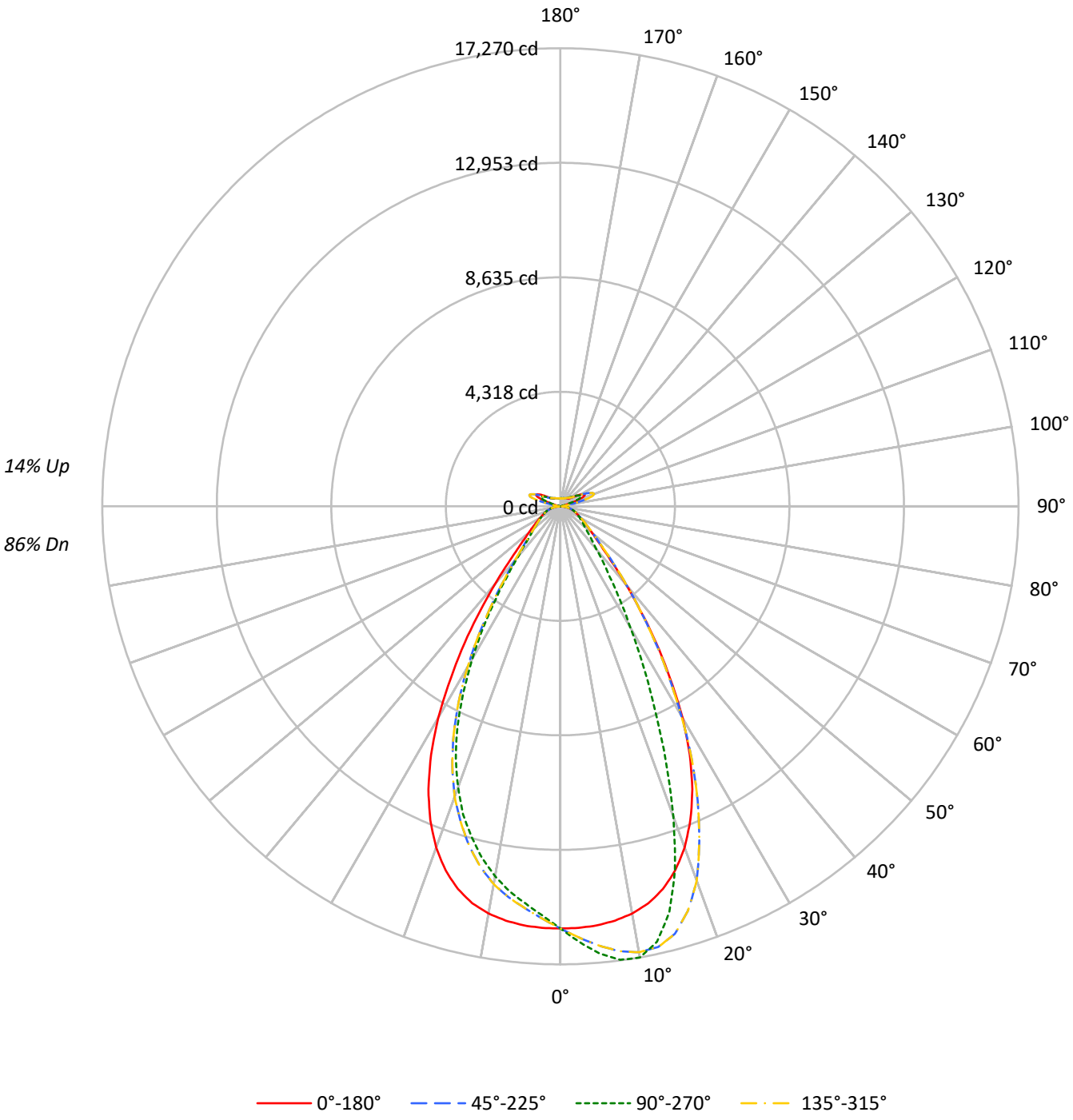
Luminous Intensity Polar Plot



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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	116	116	116	116	111	111	111	111	103	103	103	96	96	96	89	89	89	86
1	108	105	102	99	104	101	98	96	94	92	90	88	87	85	83	81	80	77
2	101	95	90	86	98	92	88	84	87	83	80	81	79	76	77	74	72	70
3	95	87	81	76	91	84	79	74	80	75	71	75	72	69	71	68	66	63
4	89	80	73	68	86	78	72	67	74	69	65	70	66	62	66	63	60	58
5	83	74	67	62	81	72	65	61	68	63	59	65	60	57	62	58	55	53
6	78	68	61	56	76	67	60	55	63	58	54	61	56	52	58	54	51	49
7	74	63	56	52	72	62	56	51	59	54	50	57	52	48	54	50	47	45
8	70	59	52	48	68	58	51	47	55	50	46	53	49	45	51	47	44	42
9	66	55	49	44	64	54	48	44	52	47	43	50	45	42	48	44	41	39
10	63	52	45	41	61	51	45	41	49	44	40	47	43	39	46	42	38	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	74742	74742	74742	74742
5°	74287	79250	74287	70432
10°	73373	81284	73373	66657
15°	71207	75539	71207	61574
20°	66596	60571	66596	54845
25°	58943	41968	58943	45962
30°	47859	27303	47859	34389
35°	34326	17682	34326	22894
40°	22193	12187	22193	14438
45°	14081	9440	14081	10287
50°	10457	8022	10457	8568
55°	8538	7308	8538	7564
60°	7393	6962	7393	7003
65°	6739	6713	6739	6685
70°	6388	6578	6388	6493
75°	5974	6364	5974	6172
80°	5248	6007	5248	5617
85°	3395	4289	3395	4091

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 19797 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1513.3	7.3
10°-20°	4117.1	19.8
20°-30°	4828.5	23.3
30°-40°	3358.0	16.2
40°-50°	1668.7	8.0
50°-60°	998.1	4.8
60°-70°	702.5	3.4
70°-80°	452.5	2.2
80°-90°	149.0	0.7
90°-100°	78.7	0.4
100°-110°	516.5	2.5
110°-120°	954.8	4.6
120°-130°	567.0	2.7
130°-140°	342.3	1.6
140°-150°	236.3	1.1
150°-160°	153.6	0.7
160°-170°	87.7	0.4
170°-180°	29.0	0.1
0°-30°	10459.0	50.4
0°-40°	13817.0	66.6
0°-60°	16483.8	79.4
0°-90°	17787.8	85.7
90°-120°	1550.0	7.5
90°-150°	2695.6	13.0
90°-180°	2966.0	14.3
0°-180°	20753.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	15916	15916	15916	15916	15916	
5°	15861	16921	15861	15038	15861	1505
15°	14939	15848	14939	12918	14939	4175
25°	11771	8381	11771	9179	11771	5329
35°	6300	3245	6300	4202	6300	3933
45°	2278	1527	2278	1664	2278	1864
55°	1154	988	1154	1022	1154	1055
65°	703	701	703	698	703	706
75°	421	448	421	435	421	442
85°	117	147	117	141	117	130
90°	22	24	22	22	22	15
95°	42	39	42	36	42	44
105°	237	119	237	180	237	320
115°	1016	867	1016	825	1016	926
125°	650	680	650	596	650	599
135°	410	473	410	435	410	325
145°	370	387	370	360	370	232
155°	328	342	328	318	328	153
165°	307	315	307	301	307	88
175°	305	309	305	299	305	29
180°	304	304	304	304	304	

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TEST NUMBER: P1432591
CATALOG NUMBER: EHBR1-18-UNV-TASM-L835-UPL30

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	15915.7	15915.7	15915.7	15915.7	15915.7	15915.7	15915.7	15915.7	15915.7	15915.7	15915.7
2.5°	15906.3	16112.0	16278.5	16388.4	16442.7	16388.4	16278.5	16112.0	15906.3	15701.9	15561.4
5°	15861.4	16273.2	16622.1	16850.4	16921.1	16850.4	16622.1	16273.2	15861.4	15472.2	15214.0
7.5°	15753.6	16395.3	16913.7	17180.2	17245.2	17180.2	16913.7	16395.3	15753.6	15202.6	14876.5
10°	15589.2	16472.3	17071.3	17262.2	17270.0	17262.2	17071.3	16472.3	15589.2	14846.9	14462.3
12.5°	15326.8	16444.8	17018.4	16955.8	16813.3	16955.8	17018.4	16444.8	15326.8	14412.4	13927.2
15°	14938.9	16282.1	16683.9	16173.8	15847.6	16173.8	16683.9	16282.1	14938.9	13825.6	13262.8
17.5°	14392.1	15977.7	15985.5	14976.5	14361.0	14976.5	15985.5	15977.7	14392.1	13108.2	12488.3
20°	13687.5	15489.5	15023.9	13178.4	12449.2	13178.4	15023.9	15489.5	13687.5	12260.0	11651.8
22.5°	12804.1	14831.1	13684.7	11369.5	10374.7	11369.5	13684.7	14831.1	12804.1	11273.7	10640.6
25°	11770.9	14024.4	12244.2	9398.5	8380.9	9398.5	12244.2	14024.4	11770.9	10098.4	9525.9
27.5°	10555.6	13002.0	10710.3	7680.1	6741.2	7680.1	10710.3	13002.0	10555.6	8885.0	8300.3
30°	9205.7	11691.2	9113.8	6116.3	5251.7	6116.3	9113.8	11691.2	9205.7	7521.7	6998.2
32.5°	7694.5	10406.4	7580.7	4900.7	4168.4	4900.7	7580.7	10406.4	7694.5	6220.7	5673.7
35°	6300.1	8799.0	6198.4	3850.8	3245.2	3850.8	6198.4	8799.0	6300.1	4992.6	4455.4
37.5°	4944.3	7280.2	4941.1	3100.8	2632.3	3100.8	4941.1	7280.2	4944.3	3881.6	3445.5
40°	3846.6	5692.5	3871.4	2475.3	2112.4	2475.3	3871.4	5692.5	3846.6	2953.3	2674.4
42.5°	2914.6	4352.7	3042.9	2031.5	1794.3	2031.5	3042.9	4352.7	2914.6	2326.9	2118.0
45°	2278.3	3203.1	2376.2	1714.0	1527.4	1714.0	2376.2	3203.1	2278.3	1874.0	1733.6
47.5°	1855.4	2475.6	1925.8	1470.1	1339.4	1470.1	1925.8	2475.6	1855.4	1585.0	1480.0
50°	1558.4	1899.6	1599.1	1283.3	1195.6	1283.3	1599.1	1899.6	1558.4	1357.3	1287.2
52.5°	1338.8	1549.2	1361.8	1143.7	1084.5	1143.7	1361.8	1549.2	1338.8	1187.5	1144.0
55°	1153.8	1302.4	1184.2	1028.5	987.6	1028.5	1184.2	1302.4	1153.8	1056.8	1024.6
57.5°	1013.2	1104.8	1028.5	930.2	903.1	930.2	1028.5	1104.8	1013.2	940.4	923.1
60°	888.7	956.8	907.6	844.6	836.9	844.6	907.6	956.8	888.7	846.1	834.7
62.5°	792.9	835.9	802.5	767.6	760.7	767.6	802.5	835.9	792.9	760.2	762.2
65°	703.4	743.4	717.2	698.4	700.7	698.4	717.2	743.4	703.4	688.2	691.5
67.5°	634.2	655.0	643.7	633.0	635.6	633.0	643.7	655.0	634.2	619.3	624.3
70°	560.5	582.9	571.3	572.7	577.2	572.7	571.3	582.9	560.5	556.0	559.9
72.5°	490.0	507.4	503.5	507.1	511.8	507.1	503.5	507.4	490.0	489.4	489.7
75°	420.8	433.9	435.7	440.8	448.3	440.8	435.7	433.9	420.8	416.3	421.7
77.5°	345.3	360.2	365.9	372.8	383.8	372.8	365.9	360.2	345.3	348.3	350.9
80°	276.1	283.0	295.5	300.5	316.0	300.5	295.5	283.0	276.1	271.0	274.9
82.5°	202.1	208.3	219.1	228.6	237.6	228.6	219.1	208.3	202.1	199.7	200.0
85°	116.7	126.3	133.4	144.8	147.4	144.8	133.4	126.3	116.7	119.4	116.7
87.5°	40.9	43.8	50.1	54.6	54.9	54.6	50.1	43.8	40.9	41.8	37.9
90°	21.6	36.8	63.3	34.6	23.8	34.6	63.3	36.8	21.6	38.1	59.4
92.5°	28.2	49.8	89.6	46.1	32.0	46.1	89.6	49.8	28.2	49.6	95.6
95°	41.7	61.4	114.2	51.0	38.6	51.0	114.2	61.4	41.7	66.0	133.3
97.5°	64.7	76.1	129.1	54.3	46.7	54.3	129.1	76.1	64.7	80.8	153.1
100°	86.0	86.0	235.8	62.5	53.3	62.5	235.8	86.0	86.0	99.2	238.5
102.5°	130.4	168.4	546.6	125.4	64.9	125.4	546.6	168.4	130.4	186.3	506.3
105°	237.2	385.4	962.3	324.2	119.4	324.2	962.3	385.4	237.2	390.0	902.3
107.5°	449.1	718.8	1240.0	639.6	278.7	639.6	1240.0	718.8	449.1	690.6	1190.1
110°	718.6	1004.7	1353.3	876.2	564.7	876.2	1353.3	1004.7	718.6	948.6	1247.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	935.5	1119.7	1322.1	971.5	*781.5*	971.5	1322.1	1119.7	935.5	1047.2	1195.1
115°	1016.3	1103.3	1180.8	968.3	*866.9*	968.3	1180.8	1103.3	1016.3	1022.6	1066.9
117.5°	981.7	1009.7	1019.8	909.1	*871.9*	909.1	1019.8	1009.7	981.7	919.3	905.9
120°	886.4	875.0	859.1	822.0	*822.6*	822.0	859.1	875.0	886.4	802.6	756.4
122.5°	766.8	742.1	726.0	733.6	*755.2*	733.6	726.0	742.1	766.8	683.0	648.3
125°	650.2	625.5	632.6	657.9	*680.0*	657.9	632.6	625.5	650.2	579.8	571.3
127.5°	551.9	540.3	565.2	593.9	*612.6*	593.9	565.2	540.3	551.9	507.4	517.0
130°	481.5	484.5	517.6	541.6	*553.4*	541.6	517.6	484.5	481.5	460.1	482.8
132.5°	437.5	450.2	481.8	502.5	*509.3*	502.5	481.8	450.2	437.5	431.2	458.9
135°	409.9	428.9	457.5	471.0	*473.2*	471.0	457.5	428.9	409.9	411.8	437.5
137.5°	393.7	412.9	434.5	445.0	*442.0*	445.0	434.5	412.9	393.7	398.9	418.4
140°	384.2	403.3	413.2	425.2	*422.6*	425.2	413.2	403.3	384.2	387.5	402.2
142.5°	374.6	392.2	397.0	405.8	*402.8*	405.8	397.0	392.2	374.6	377.9	387.8
145°	369.9	382.8	379.3	391.1	*386.7*	391.1	379.3	382.8	369.9	371.3	376.5
147.5°	361.8	371.3	366.4	376.5	*372.2*	376.5	366.4	371.3	361.8	361.8	363.7
150°	352.2	358.8	351.9	363.7	*362.7*	363.7	351.9	358.8	352.2	350.6	352.5
152.5°	339.3	345.9	339.3	352.8	*351.4*	352.8	339.3	345.9	339.3	337.7	339.6
155°	328.4	331.7	328.4	341.8	*342.1*	341.8	328.4	331.7	328.4	328.1	328.7
157.5°	320.8	322.7	321.1	333.0	*333.3*	333.0	321.1	322.7	320.8	320.8	321.1
160°	313.8	317.1	315.7	325.9	*326.2*	325.9	315.7	317.1	313.8	315.2	315.4
162.5°	311.1	311.1	310.1	320.2	*320.8*	320.2	310.1	311.1	311.1	311.1	312.7
165°	307.1	308.8	306.0	313.1	*315.4*	313.1	306.0	308.8	307.1	308.5	308.5
167.5°	306.0	304.4	305.0	310.9	*313.1*	310.9	305.0	304.4	306.0	307.4	307.4
170°	303.0	303.3	302.4	308.2	*310.4*	308.2	302.4	303.3	303.0	304.7	306.0
172.5°	304.0	304.0	301.6	305.7	*309.6*	305.7	301.6	304.0	304.0	305.3	306.9
175°	304.6	303.2	302.2	304.7	*308.6*	304.7	302.2	303.2	304.6	304.3	304.3
177.5°	302.9	303.5	304.1	306.6	*312.1*	306.6	304.1	303.5	302.9	304.3	304.3
180°	303.5	303.5	303.5	303.5	*303.5*	303.5	303.5	303.5	303.5	303.5	303.5

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	15915.7	15915.7	15915.7	15915.7	15915.7	15915.7
2.5°	15453.4	15443.2	15453.4	15561.4	15701.9	15906.3
5°	15094.3	15038.3	15094.3	15214.0	15472.2	15861.4
7.5°	14676.2	14643.7	14676.2	14876.5	15202.6	15753.6
10°	*14236.0*	*14162.3*	*14236.0*	*14462.3*	*14846.9*	*15589.2*
12.5°	13693.5	13595.8	13693.5	13927.2	14412.4	15326.8
15°	13003.4	12917.8	13003.4	13262.8	13825.6	14938.9
17.5°	12263.0	12185.4	12263.0	12488.3	13108.2	14392.1
20°	11333.1	11272.2	11333.1	11651.8	12260.0	13687.5
22.5°	10357.5	10300.5	10357.5	10640.6	11273.7	12804.1
25°	9209.6	9178.6	9209.6	9525.9	10098.4	11770.9
27.5°	7969.3	7916.5	7969.3	8300.3	8885.0	10555.6
30°	6702.2	6614.7	6702.2	6998.2	7521.7	9205.7
32.5°	5462.7	5399.7	5462.7	5673.7	6220.7	7694.5
35°	4264.8	4201.8	4264.8	4455.4	4992.6	6300.1
37.5°	3323.2	3211.9	3323.2	3445.5	3881.6	4944.3
40°	2520.4	2502.4	2520.4	2674.4	2953.3	3846.6
42.5°	2051.8	2003.1	2051.8	2118.0	2326.9	2914.6
45°	1683.5	1664.4	1683.5	1733.6	1874.0	2278.3
47.5°	1447.8	1456.1	1447.8	1480.0	1585.0	1855.4
50°	1272.0	1277.0	1272.0	1287.2	1357.3	1558.4
52.5°	1142.4	1138.0	1142.4	1144.0	1187.5	1338.8
55°	1027.8	1022.2	1027.8	1024.6	1056.8	1153.8
57.5°	927.5	931.7	927.5	923.1	940.4	1013.2
60°	838.0	841.9	838.0	834.7	846.1	888.7
62.5°	762.5	764.9	762.5	762.2	760.2	792.9
65°	695.1	697.8	695.1	691.5	688.2	703.4
67.5°	630.6	630.6	630.6	624.3	619.3	634.2
70°	570.0	569.7	570.0	559.9	556.0	560.5
72.5°	497.2	504.3	497.2	489.7	489.4	490.0
75°	426.5	434.8	426.5	421.7	416.3	420.8
77.5°	354.8	367.7	354.8	350.9	348.3	345.3
80°	281.4	295.5	281.4	274.9	271.0	276.1
82.5°	208.0	218.5	208.0	200.0	199.7	202.1
85°	123.8	140.6	123.8	116.7	119.4	116.7
87.5°	39.7	50.7	39.7	37.9	41.8	40.9
90°	34.8	21.6	34.8	59.4	38.1	21.6
92.5°	52.8	31.5	52.8	95.6	49.6	28.2
95°	61.1	36.5	61.1	133.3	66.0	41.7
97.5°	67.7	46.5	67.7	153.1	80.8	64.7
100°	79.1	61.4	79.1	238.5	99.2	86.0
102.5°	167.9	104.0	167.9	506.3	186.3	130.4
105°	353.6	179.7	353.6	902.3	390.0	237.2
107.5°	632.8	311.1	632.8	1190.1	690.6	449.1
110°	839.9	580.6	839.9	1247.6	948.6	718.6

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

Scaled Data Report

TEST NUMBER: P1432591
CATALOG NUMBER: EHBR1-18-UNV-TASM-L835-UPL30

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	902.3	784.3	902.3	1195.1	1047.2	935.5
115°	867.8	825.3	867.8	1066.9	1022.6	1016.3
117.5°	792.3	797.4	792.3	905.9	919.3	981.7
120°	705.2	738.2	705.2	756.4	802.6	886.4
122.5°	624.9	664.3	624.9	648.3	683.0	766.8
125°	555.9	595.6	555.9	571.3	579.8	650.2
127.5°	508.2	534.9	508.2	517.0	507.4	551.9
130°	470.8	493.8	470.8	482.8	460.1	481.5
132.5°	444.8	459.5	444.8	458.9	431.2	437.5
135°	422.0	434.9	422.0	437.5	411.8	409.9
137.5°	402.6	413.9	402.6	418.4	398.9	393.7
140°	385.3	394.8	385.3	402.2	387.5	384.2
142.5°	367.4	374.0	367.4	387.8	377.9	374.6
145°	354.9	359.9	354.9	376.5	371.3	369.9
147.5°	344.0	347.3	344.0	363.7	361.8	361.8
150°	333.1	336.4	333.1	352.5	350.6	352.2
152.5°	321.8	325.4	321.8	339.6	337.7	339.3
155°	314.2	317.8	314.2	328.7	328.1	328.4
157.5°	309.9	312.1	309.9	321.1	320.8	320.8
160°	305.9	307.9	305.9	315.4	315.2	313.8
162.5°	301.6	303.5	301.6	312.7	311.1	311.1
165°	300.5	300.8	300.5	308.5	308.5	307.1
167.5°	299.2	300.8	299.2	307.4	307.4	306.0
170°	299.4	299.7	299.4	306.0	304.7	303.0
172.5°	300.0	300.3	300.0	306.9	305.3	304.0
175°	299.1	299.3	299.1	304.3	304.3	304.6
177.5°	301.0	301.3	301.0	304.3	304.3	302.9
180°	303.5	303.5	303.5	303.5	303.5	303.5

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

Scaled Data Report

TEST NUMBER: P1432591
CATALOG NUMBER: EHBR1-18-UNV-TASM-L835-UPL30

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	15.02	16.03	15.62	16.62	17.28	14.34	15.35	14.94	15.94	16.59
	3H	16.57	17.46	17.18	18.06	18.76	16.18	17.08	16.80	17.68	18.38
	4H	17.20	18.04	17.83	18.65	19.37	16.96	17.80	17.60	18.42	19.13
	6H	17.68	18.45	18.32	19.07	19.80	17.60	18.38	18.25	19.00	19.72
	8H	17.83	18.56	18.49	19.20	19.93	17.82	18.55	18.48	19.20	19.93
	12H	17.90	18.59	18.56	19.23	19.98	17.95	18.65	18.61	19.28	20.03
4H	2H	15.43	16.27	16.07	16.88	17.60	14.91	15.75	15.55	16.36	17.07
	3H	17.22	17.92	17.87	18.57	19.30	16.96	17.66	17.61	18.31	19.04
	4H	18.00	18.62	18.66	19.28	20.05	17.87	18.50	18.53	19.15	19.92
	6H	18.61	19.15	19.29	19.83	20.61	18.64	19.18	19.32	19.86	20.64
	8H	18.80	19.31	19.49	19.99	20.77	18.91	19.41	19.60	20.09	20.87
	12H	18.90	19.35	19.61	20.06	20.85	19.07	19.52	19.78	20.22	21.01
8H	4H	18.24	18.75	18.93	19.43	20.21	18.14	18.65	18.83	19.33	20.11
	6H	18.98	19.39	19.70	20.12	20.91	19.05	19.46	19.76	20.18	20.97
	8H	19.25	19.62	19.99	20.35	21.15	19.40	19.77	20.14	20.50	21.30
	12H	19.42	19.74	20.15	20.46	21.33	19.65	19.96	20.38	20.68	21.55
12H	4H	18.25	18.69	18.95	19.40	20.19	18.15	18.60	18.86	19.31	20.09
	6H	19.03	19.39	19.76	20.12	20.93	19.09	19.46	19.83	20.19	20.99
	8H	19.34	19.66	20.07	20.37	21.25	19.49	19.81	20.22	20.53	21.40

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

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-3

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

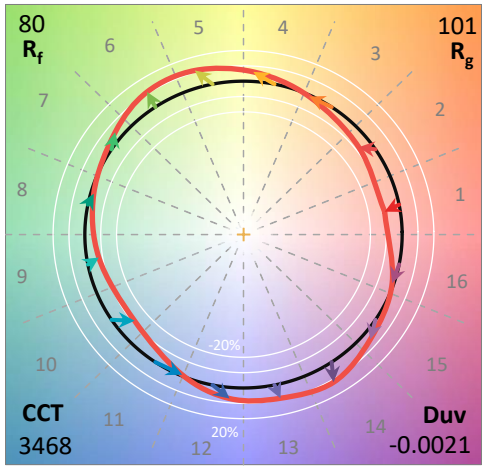
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

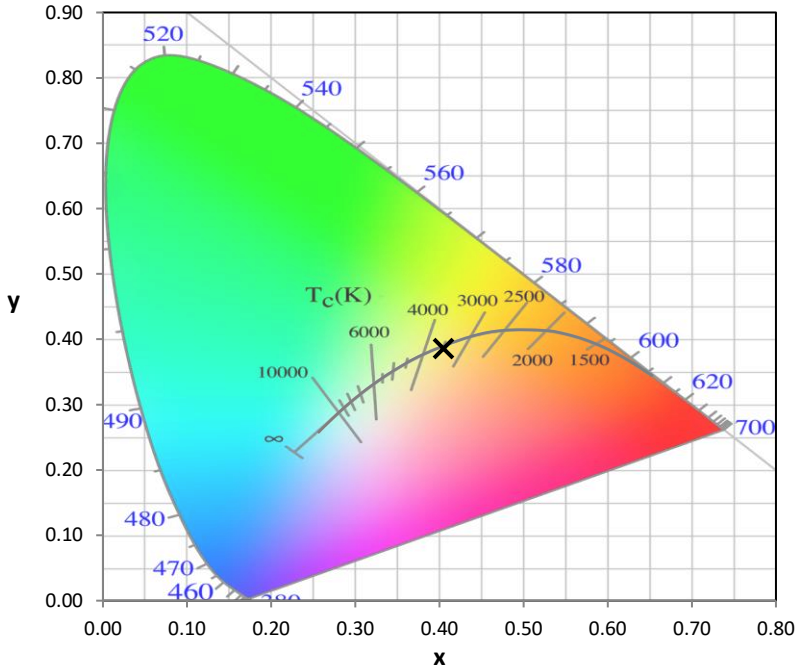
Stabilization Time:	39M
Operation Time:	1H 39M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-3

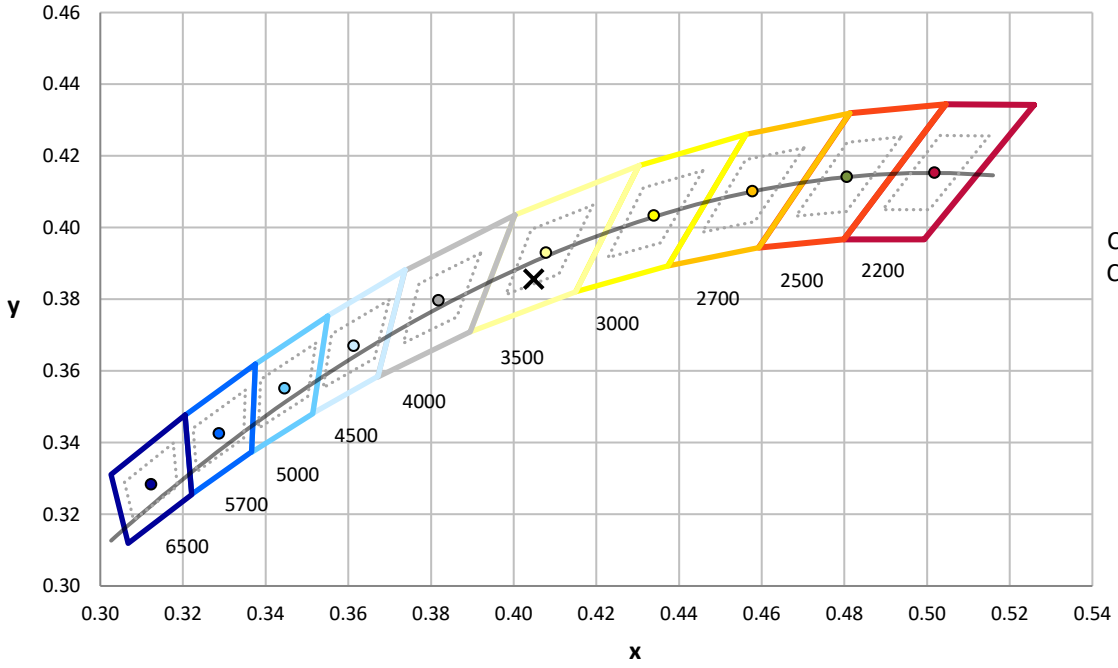
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

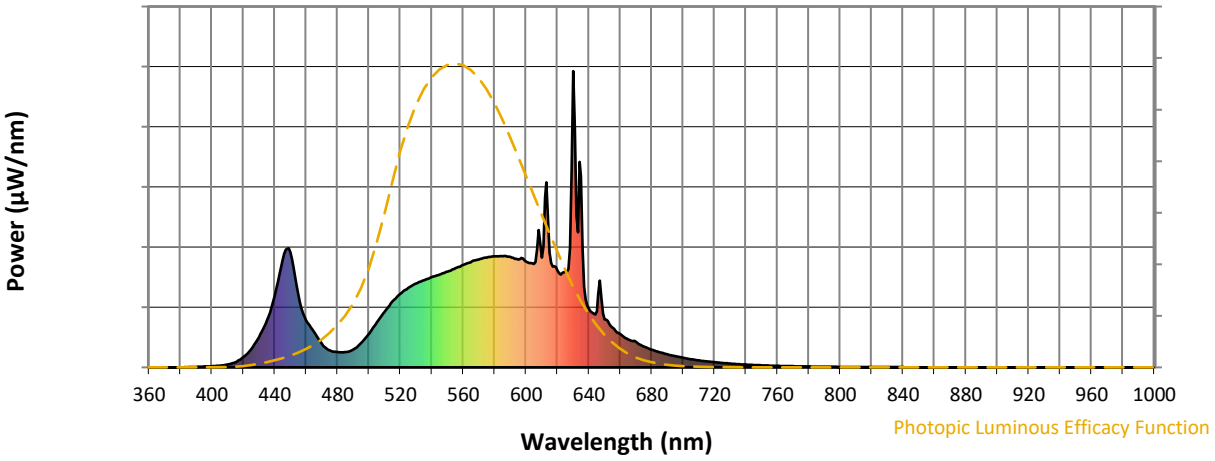


CCT = 3468K
CIE x = 0.4049
CIE y = 0.3856
Duv = -0.0021

Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-3

Photopic Flux vs. Wavelength

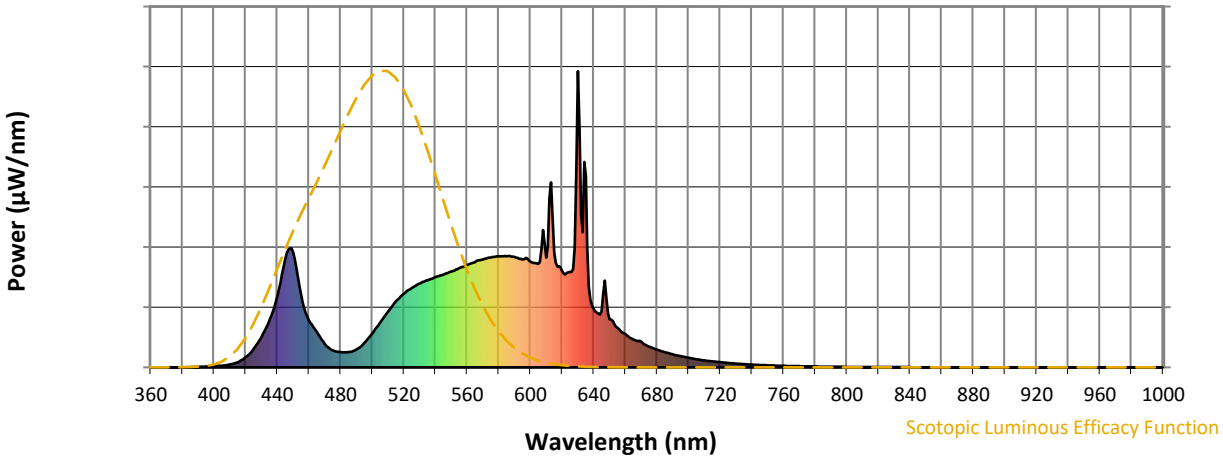


Photopic Lumens: NR

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

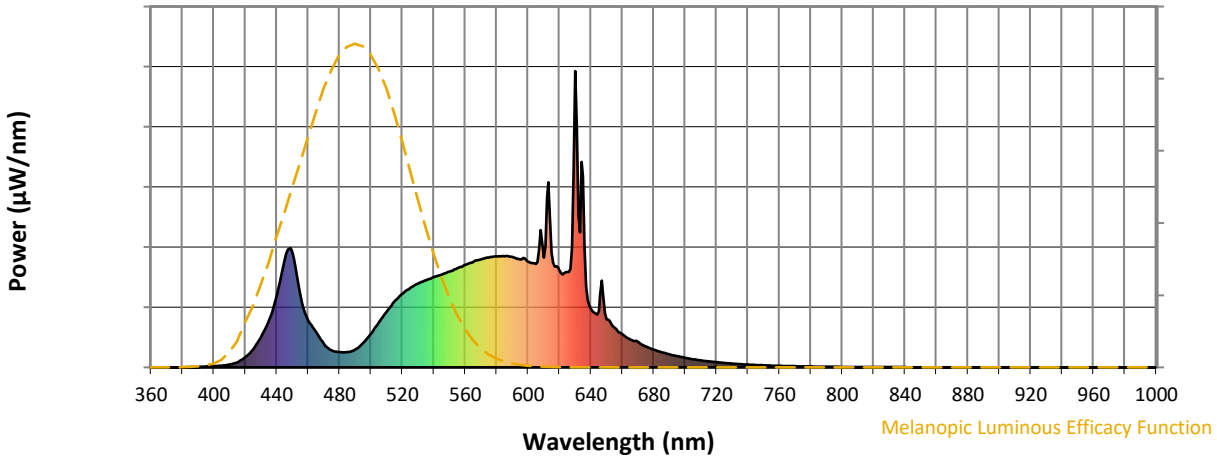


Scotopic Lumens: NR **S/P: 1.43**

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			

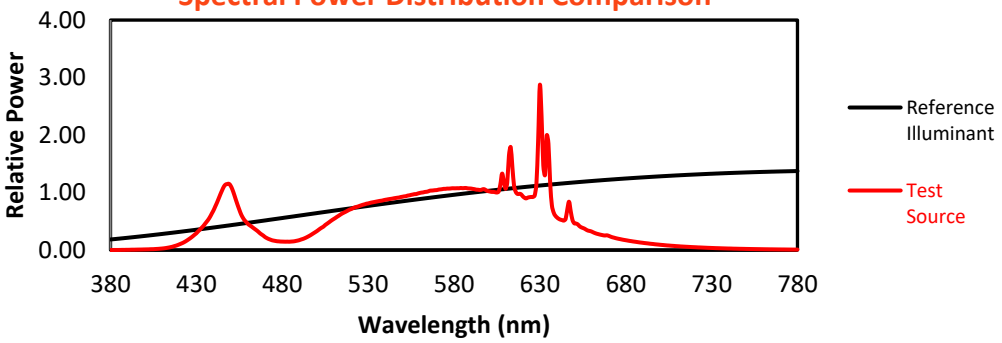
REPORT NUMBER: SP1-2506-472-3

TM-30-18

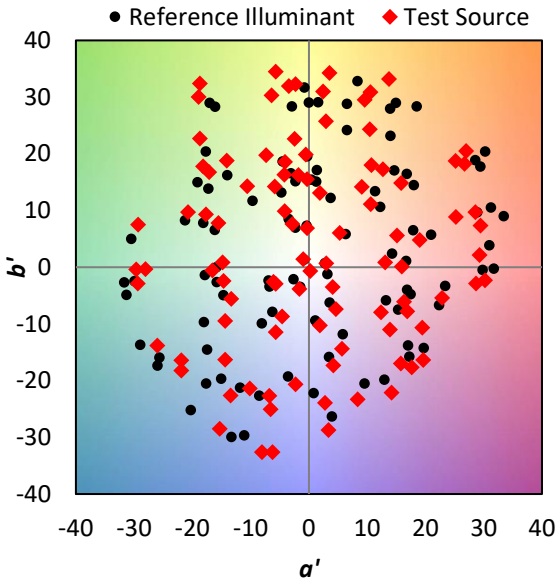
Summary

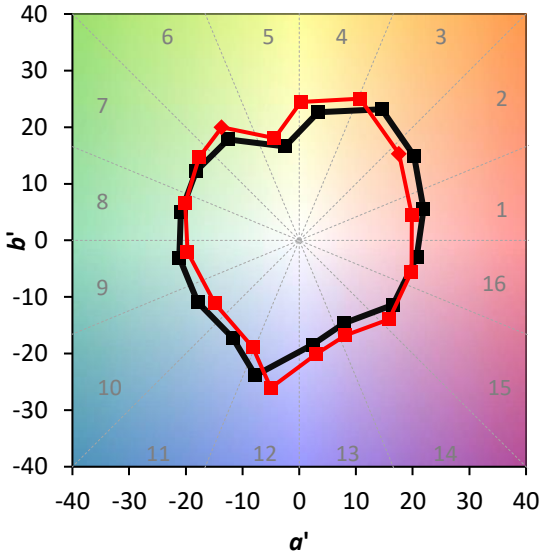
R_f = 80.1
R_g = 101
CIE R_a = 82.1
R_9 = 27.6

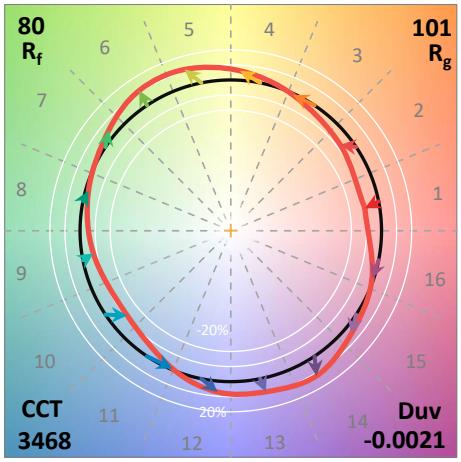
Spectral Power Distribution Comparison

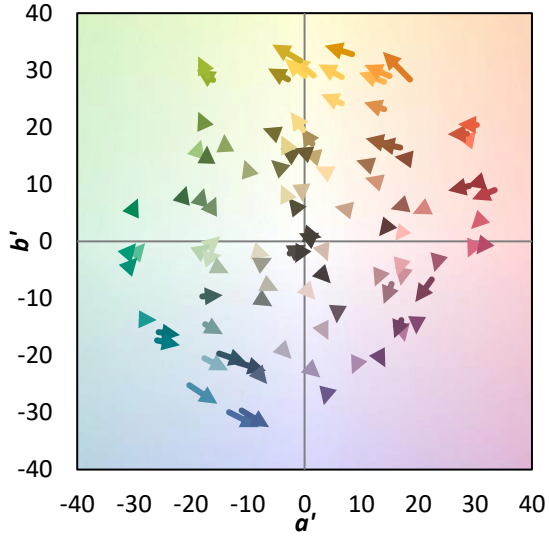


Color Vector Graphics







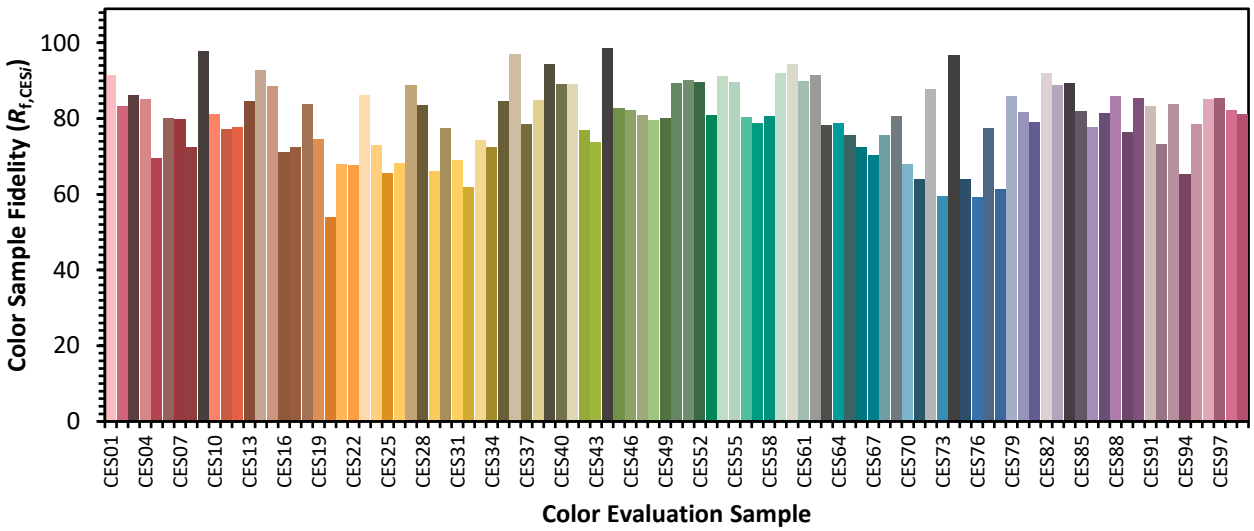


REPORT NUMBER: SP1-2506-472-3

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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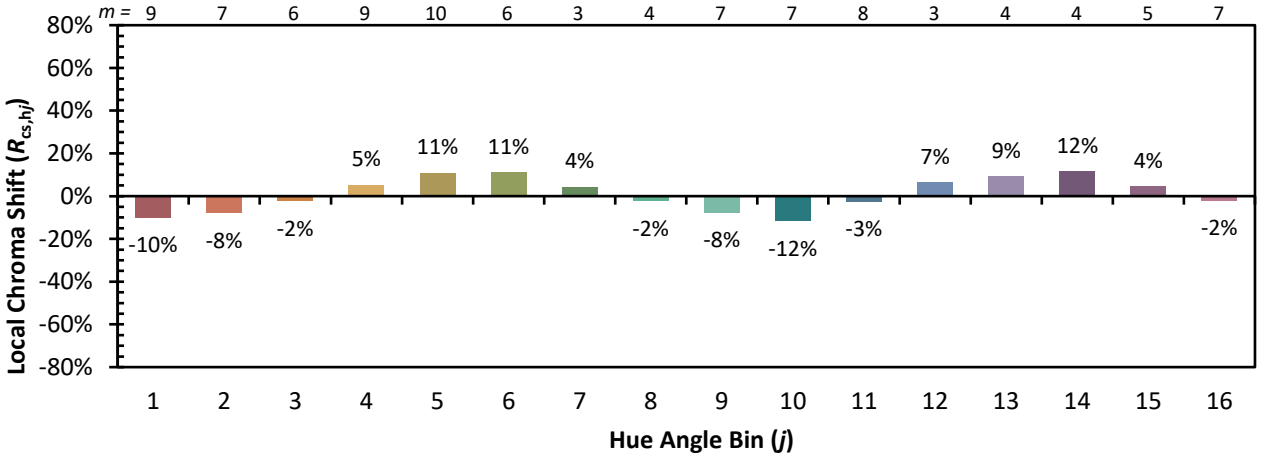
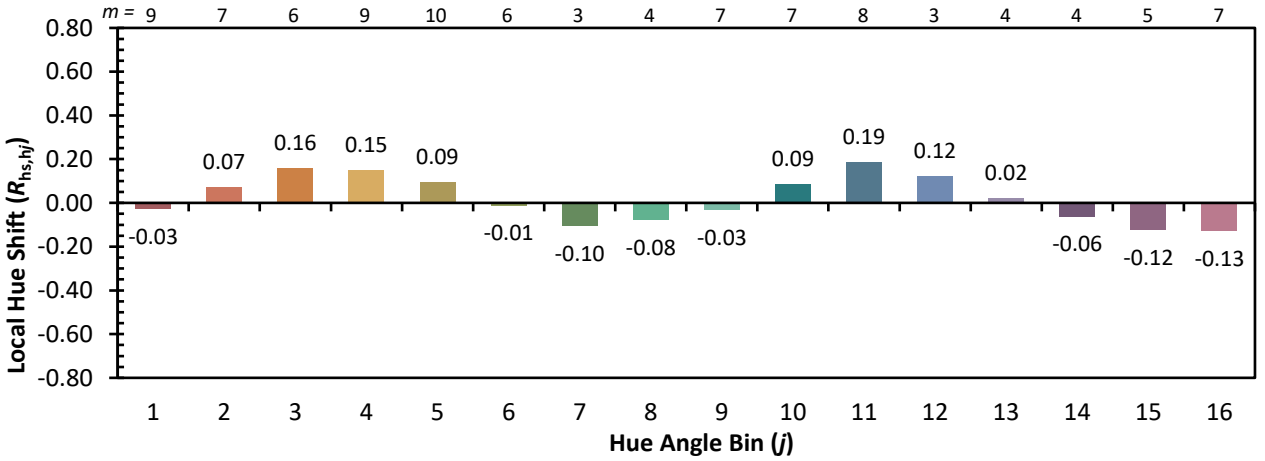
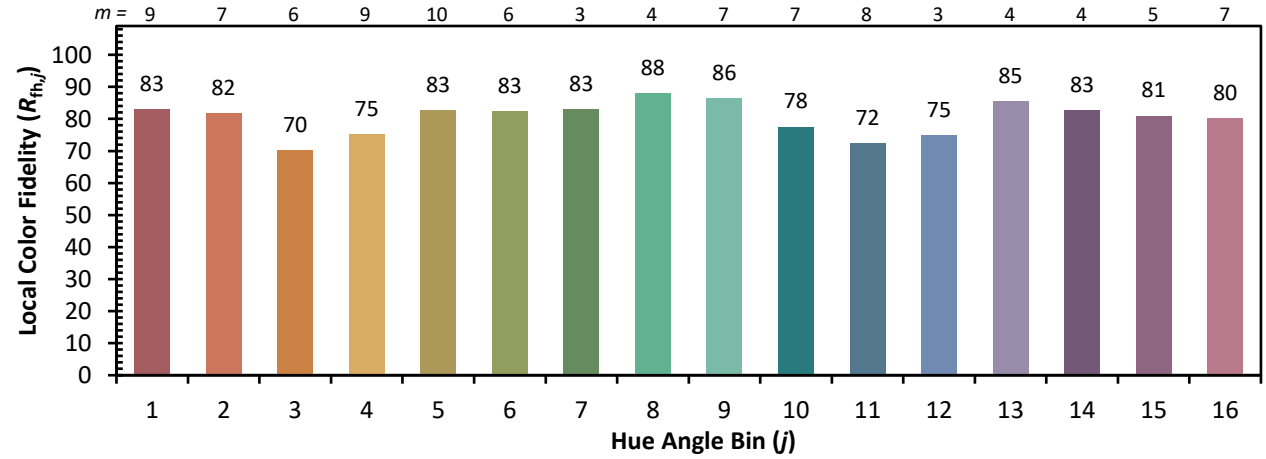
Color Rendition by Hue-Angle Bin







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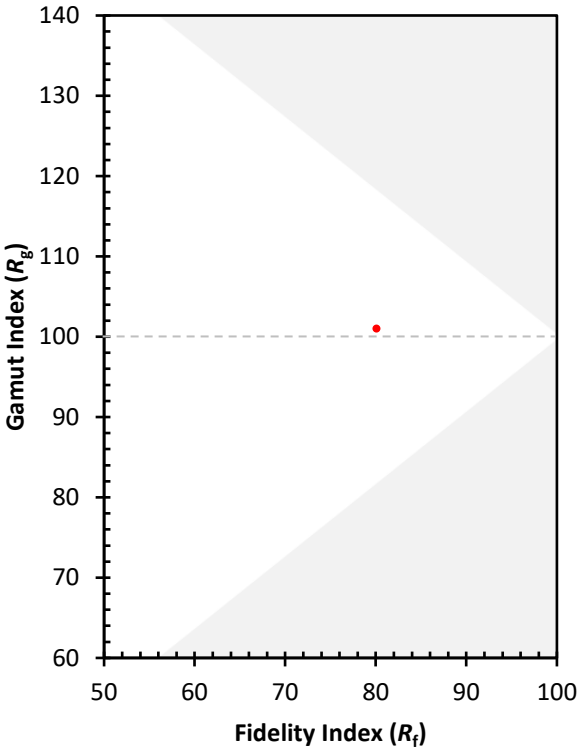
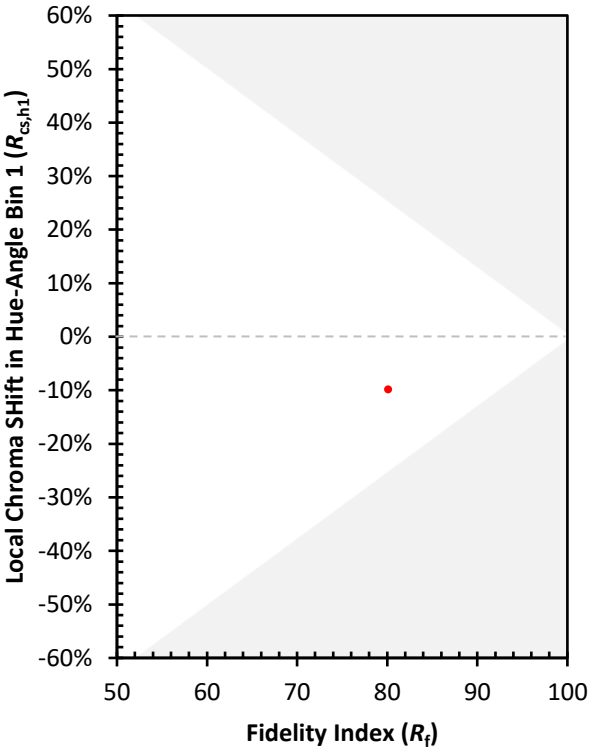
Measure Comparisons





(END OF REPORT)