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: P1432845

Luminaire Tested: EHBR1-12-UNV-TASM-L850-UPL18

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:	P1432845
	REPORT IS A COMBINATION OF REPORTS P1431646 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-12-UNV-TASM-L850-UPL18
Description:	Elevate Round Highbay at, 12000 lumens, 5000K 80CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	13889.6 lumens
Efficiency:	N/A
Efficacy:	181.3 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):	76.6
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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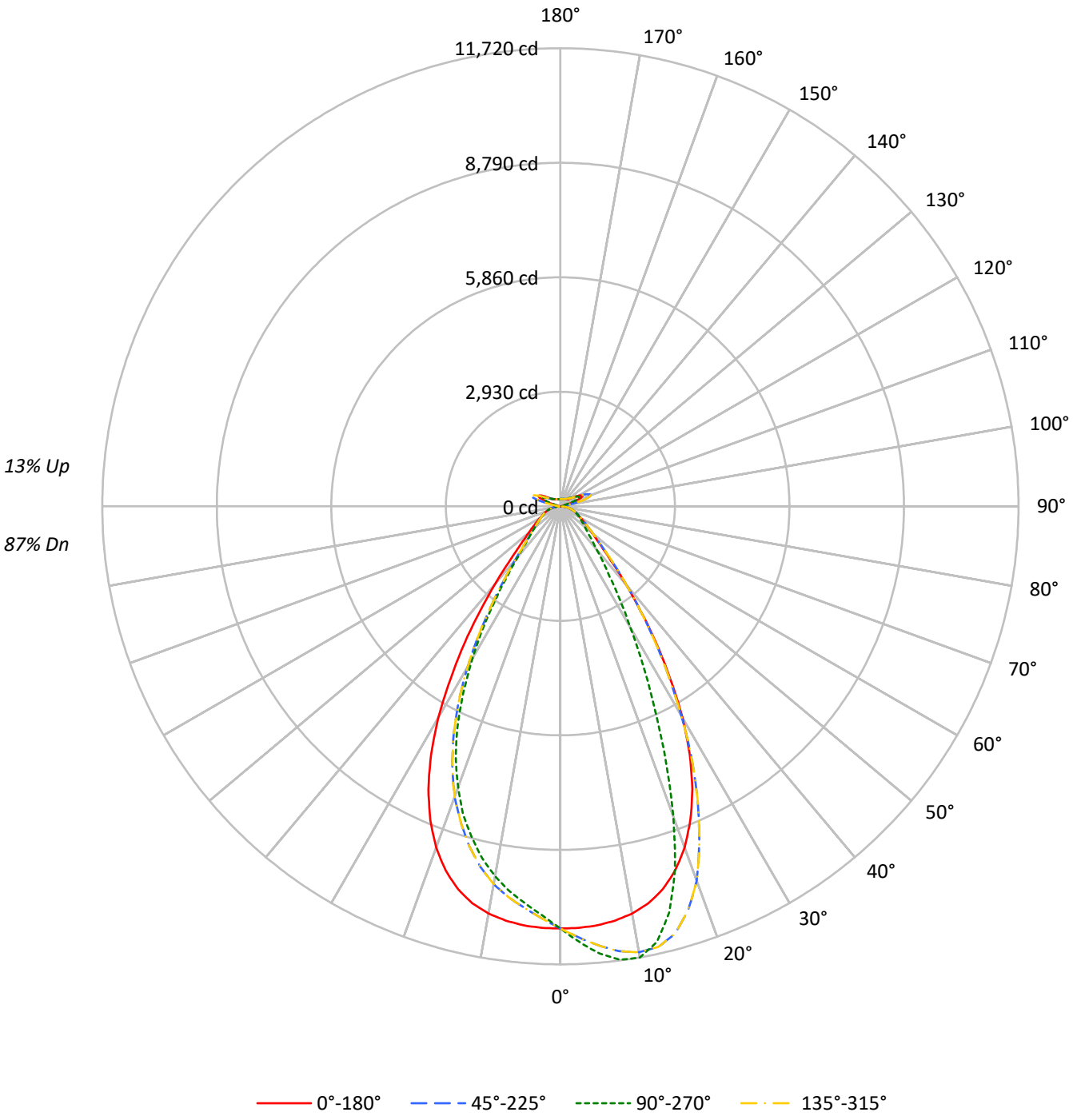
Luminous Intensity Polar Plot



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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	112	112	112	112	104	104	104	97	97	97	90	90	90	87
1	109	105	102	99	105	102	99	96	95	93	91	89	87	86	84	82	81	78
2	102	96	91	86	98	93	88	84	87	84	80	82	79	77	78	75	73	71
3	95	87	81	76	92	85	79	75	80	76	72	76	72	69	72	69	67	64
4	89	80	74	68	86	78	72	67	74	69	65	70	66	63	67	64	61	59
5	84	74	67	62	81	72	66	61	69	63	59	66	61	58	63	59	56	54
6	79	68	62	57	76	67	60	56	64	58	54	61	57	53	59	55	52	50
7	74	64	57	52	72	62	56	51	60	54	50	57	53	49	55	51	48	46
8	70	59	53	48	68	58	52	47	56	50	46	54	49	46	52	48	45	43
9	66	56	49	45	65	55	48	44	53	47	43	51	46	42	49	45	42	40
10	63	52	46	41	61	51	45	41	50	44	40	48	43	40	46	42	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	50723	50723	50723	50723
5°	50415	53783	50415	47798
10°	49795	55164	49795	45237
15°	48325	51264	48325	41787
20°	45196	41107	45196	37221
25°	40002	28481	40002	31192
30°	32480	18529	32480	23338
35°	23296	12000	23296	15536
40°	15062	8271	15062	9798
45°	9556	6407	9556	6981
50°	7096	5444	7096	5815
55°	5794	4959	5794	5133
60°	5017	4725	5017	4753
65°	4574	4556	4574	4537
70°	4334	4464	4334	4406
75°	4054	4318	4054	4189
80°	3560	4077	3560	3811
85°	2304	2912	2304	2776

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 13435 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1027.0	7.4
10°-20°	2794.1	20.1
20°-30°	3276.9	23.6
30°-40°	2278.9	16.4
40°-50°	1132.5	8.2
50°-60°	677.3	4.9
60°-70°	476.7	3.4
70°-80°	307.1	2.2
80°-90°	100.7	0.7
90°-100°	48.2	0.3
100°-110°	316.6	2.3
110°-120°	585.1	4.2
120°-130°	347.5	2.5
130°-140°	209.9	1.5
140°-150°	144.9	1.0
150°-160°	94.3	0.7
160°-170°	53.9	0.4
170°-180°	17.8	0.1
0°-30°	7098.0	51.1
0°-40°	9376.9	67.5
0°-60°	11186.7	80.5
0°-90°	12071.3	86.9
90°-120°	949.9	6.8
90°-150°	1652.3	11.9
90°-180°	1818.0	13.1
0°-180°	13889.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	10801	10801	10801	10801	10801	
5°	10764	11484	10764	10206	10764	1022
15°	10138	10755	10138	8767	10138	2833
25°	7988	5688	7988	6229	7988	3617
35°	4276	2202	4276	2852	4276	2669
45°	1546	1037	1546	1130	1546	1265
55°	783	670	783	694	783	716
65°	477	476	477	474	477	479
75°	286	304	286	295	286	300
85°	79	100	79	95	79	88
90°	13	15	13	13	13	10
95°	26	24	26	22	26	27
105°	145	73	145	110	145	196
115°	623	531	623	506	623	568
125°	398	417	398	365	398	367
135°	251	290	251	267	251	199
145°	227	237	227	221	227	142
155°	202	210	202	195	202	94
165°	189	194	189	185	189	54
175°	187	190	187	184	187	18
180°	187	187	187	187	187	

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TEST NUMBER: P1432845
CATALOG NUMBER: EHBR1-12-UNV-TASM-L850-UPL18

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	10801.2	10801.2	10801.2	10801.2	*10801.2*	10801.2	10801.2	10801.2	10801.2	10801.2	10801.2
2.5°	10794.9	10934.5	11047.4	11122.0	*11158.8*	11122.0	11047.4	10934.5	10794.9	10656.2	10560.8
5°	10764.3	11043.8	11280.6	11435.5	*11483.6*	11435.5	11280.6	11043.8	10764.3	10500.2	10325.1
7.5°	10691.3	11126.7	11478.5	11659.3	*11703.5*	11659.3	11478.5	11126.7	10691.3	10317.3	10096.0
10°	*10579.6*	*11179.0*	*11585.4*	*11715.0*	*11720.3*	*11715.0*	*11585.4*	*11179.0*	*10579.6*	*10075.9*	*9814.8*
12.5°	10401.6	11160.3	11549.6	11507.1	*11410.4*	11507.1	11549.6	11160.3	10401.6	9781.0	9451.7
15°	10138.3	11049.9	11322.5	10976.4	*10755.0*	10976.4	11322.5	11049.9	10138.3	9382.8	9000.8
17.5°	9767.2	10843.3	10848.6	10163.8	*9746.2*	10163.8	10848.6	10843.3	9767.2	8895.9	8475.3
20°	9289.0	10512.0	10196.0	8943.5	*8448.7*	8943.5	10196.0	10512.0	9289.0	8320.3	7907.5
22.5°	8689.5	10065.1	9287.3	7716.0	*7040.8*	7716.0	9287.3	10065.1	8689.5	7650.9	7221.3
25°	7988.4	9517.7	8309.6	6378.4	*5687.7*	6378.4	8309.6	9517.7	7988.4	6853.3	6464.8
27.5°	7163.6	8823.8	7268.5	5212.2	*4575.0*	5212.2	7268.5	8823.8	7163.6	6029.8	5633.0
30°	6247.5	7934.2	6185.2	4150.8	*3564.1*	4150.8	6185.2	7934.2	6247.5	5104.6	4749.3
32.5°	5221.8	7062.3	5144.7	3325.9	*2828.8*	3325.9	5144.7	7062.3	5221.8	4221.7	3850.4
35°	4275.6	5971.5	4206.5	2613.3	*2202.4*	2613.3	4206.5	5971.5	4275.6	3388.2	3023.7
37.5°	3355.4	4940.8	3353.3	2104.4	*1786.4*	2104.4	3353.3	4940.8	3355.4	2634.2	2338.3
40°	2610.6	3863.2	2627.4	1679.8	*1433.6*	1679.8	2627.4	3863.2	2610.6	2004.3	1815.0
42.5°	1978.0	2954.1	2065.1	1378.7	*1217.7*	1378.7	2065.1	2954.1	1978.0	1579.2	1437.4
45°	1546.1	2173.8	1612.6	1163.1	*1036.6*	1163.1	1612.6	2173.8	1546.1	1271.8	1176.5
47.5°	1259.2	1680.0	1307.0	997.7	*909.0*	997.7	1307.0	1680.0	1259.2	1075.7	1004.4
50°	1057.6	1289.2	1085.2	870.9	*811.4*	870.9	1085.2	1289.2	1057.6	921.1	873.6
52.5°	908.6	1051.4	924.1	776.1	*736.0*	776.1	924.1	1051.4	908.6	805.9	776.3
55°	783.0	883.9	803.7	697.9	*670.2*	697.9	803.7	883.9	783.0	717.2	695.3
57.5°	687.6	749.8	697.9	631.3	*612.9*	631.3	697.9	749.8	687.6	638.2	626.4
60°	603.1	649.3	615.9	573.2	*568.0*	573.2	615.9	649.3	603.1	574.2	566.5
62.5°	538.1	567.3	544.6	520.9	*516.3*	520.9	544.6	567.3	538.1	515.9	517.3
65°	477.4	504.5	486.7	474.0	*475.5*	474.0	486.7	504.5	477.4	467.1	469.2
67.5°	430.4	444.6	436.8	429.6	*431.4*	429.6	436.8	444.6	430.4	420.2	423.7
70°	380.3	395.6	387.6	388.7	*391.7*	388.7	387.6	395.6	380.3	377.3	380.0
72.5°	332.6	344.3	341.6	344.1	*347.3*	344.1	341.6	344.3	332.6	332.1	332.4
75°	285.6	294.5	295.7	299.1	*304.2*	299.1	295.7	294.5	285.6	282.5	286.1
77.5°	234.4	244.5	248.3	252.9	*260.5*	252.9	248.3	244.5	234.4	236.3	238.2
80°	187.3	192.0	200.5	203.9	*214.5*	203.9	200.5	192.0	187.3	183.9	186.5
82.5°	137.1	141.4	148.6	155.1	*161.2*	155.1	148.6	141.4	137.1	135.5	135.7
85°	79.2	85.7	90.6	98.2	*100.1*	98.2	90.6	85.7	79.2	81.0	79.2
87.5°	27.7	29.8	34.0	37.0	*37.2*	37.0	34.0	29.8	27.7	28.4	25.7
90°	13.3	22.5	38.8	21.3	*14.6*	21.3	38.8	22.5	13.3	23.4	36.4
92.5°	17.3	30.5	54.9	28.4	*19.6*	28.4	54.9	30.5	17.3	30.4	58.5
95°	25.5	37.6	70.0	31.3	*23.7*	31.3	70.0	37.6	25.5	40.5	81.7
97.5°	39.7	46.7	79.1	33.4	*28.8*	33.4	79.1	46.7	39.7	49.5	93.8
100°	52.7	52.7	144.6	38.4	*32.8*	38.4	144.6	52.7	52.7	60.8	146.2
102.5°	80.0	103.2	335.1	76.9	*39.8*	76.9	335.1	103.2	80.0	114.1	310.3
105°	145.4	236.1	589.8	198.7	*73.4*	198.7	589.8	236.1	145.4	239.0	552.9
107.5°	275.2	440.6	759.9	392.0	*171.0*	392.0	759.9	440.6	275.2	423.3	729.3
110°	440.4	615.7	829.4	537.0	*346.2*	537.0	829.4	615.7	440.4	581.3	764.5

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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°	573.3	686.2	810.2	595.4	*479.1*	595.4	810.2	686.2	573.3	641.7	732.3
115°	622.8	676.1	723.7	593.4	*531.4*	593.4	723.7	676.1	622.8	626.6	653.8
117.5°	601.7	618.8	625.0	557.2	*534.5*	557.2	625.0	618.8	601.7	563.3	555.1
120°	543.2	536.2	526.5	503.7	*504.2*	503.7	526.5	536.2	543.2	491.9	463.5
122.5°	469.9	454.8	445.0	449.6	*463.0*	449.6	445.0	454.8	469.9	418.6	397.2
125°	398.4	383.4	387.8	403.2	*416.9*	403.2	387.8	383.4	398.4	355.4	350.1
127.5°	338.2	331.2	346.5	364.0	*375.5*	364.0	346.5	331.2	338.2	311.1	316.9
130°	295.2	296.9	317.3	332.1	*339.3*	332.1	317.3	296.9	295.2	282.1	296.0
132.5°	268.2	276.0	295.4	308.1	*312.4*	308.1	295.4	276.0	268.2	264.3	281.2
135°	251.3	263.0	280.4	288.8	*290.2*	288.8	280.4	263.0	251.3	252.5	268.2
137.5°	241.4	253.0	266.4	272.9	*271.1*	272.9	266.4	253.0	241.4	244.7	256.6
140°	235.7	247.2	253.2	260.8	*259.2*	260.8	253.2	247.2	235.7	237.6	246.8
142.5°	229.8	240.5	243.5	248.9	*247.1*	248.9	243.5	240.5	229.8	231.8	237.8
145°	227.0	234.9	232.6	239.9	*237.2*	239.9	232.6	234.9	227.0	227.8	231.0
147.5°	221.9	227.8	224.8	231.0	*228.4*	231.0	224.8	227.8	221.9	221.9	223.2
150°	216.1	220.1	215.9	223.2	*222.5*	223.2	215.9	220.1	216.1	215.1	216.3
152.5°	208.2	212.3	208.2	216.5	*215.7*	216.5	208.2	212.3	208.2	207.3	208.4
155°	201.6	203.6	201.6	209.8	*210.0*	209.8	201.6	203.6	201.6	201.4	201.8
157.5°	197.0	198.1	197.1	204.4	*204.6*	204.4	197.1	198.1	197.0	197.0	197.1
160°	192.7	194.7	193.9	200.1	*200.4*	200.1	193.9	194.7	192.7	193.5	193.7
162.5°	191.1	191.1	190.6	196.8	*197.1*	196.8	190.6	191.1	191.1	191.1	192.0
165°	188.7	189.8	188.1	192.5	*193.9*	192.5	188.1	189.8	188.7	189.6	189.6
167.5°	188.1	187.1	187.5	191.2	*192.5*	191.2	187.5	187.1	188.1	188.9	188.9
170°	186.3	186.5	185.9	189.5	*190.9*	189.5	185.9	186.5	186.3	187.3	188.1
172.5°	186.9	186.9	185.5	188.1	*190.6*	188.1	185.5	186.9	186.9	187.7	188.7
175°	187.3	186.4	185.9	187.5	*190.0*	187.5	185.9	186.4	187.3	187.1	187.1
177.5°	186.2	186.6	187.0	188.8	*192.1*	188.8	187.0	186.6	186.2	187.1	187.1
180°	186.6	186.6	186.6	186.6	*186.6*	186.6	186.6	186.6	186.6	186.6	186.6

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	10801.2	10801.2	10801.2	10801.2	10801.2	10801.2
2.5°	10487.4	10480.6	10487.4	10560.8	10656.2	10794.9
5°	10243.8	10205.7	10243.8	10325.1	10500.2	10764.3
7.5°	9960.0	9937.9	9960.0	10096.0	10317.3	10691.3
10°	*9661.3*	*9611.3*	*9661.3*	*9814.8*	*10075.9*	*10579.6*
12.5°	9293.0	9226.8	9293.0	9451.7	9781.0	10401.6
15°	8824.8	8766.7	8824.8	9000.8	9382.8	10138.3
17.5°	8322.3	8269.7	8322.3	8475.3	8895.9	9767.2
20°	7691.2	7649.9	7691.2	7907.5	8320.3	9289.0
22.5°	7029.1	6990.4	7029.1	7221.3	7650.9	8689.5
25°	6250.2	6229.1	6250.2	6464.8	6853.3	7988.4
27.5°	5408.3	5372.6	5408.3	5633.0	6029.8	7163.6
30°	4548.4	4489.1	4548.4	4749.3	5104.6	6247.5
32.5°	3707.3	3664.6	3707.3	3850.4	4221.7	5221.8
35°	2894.2	2851.5	2894.2	3023.7	3388.2	4275.6
37.5°	2255.3	2179.7	2255.3	2338.3	2634.2	3355.4
40°	1710.5	1698.3	1710.5	1815.0	2004.3	2610.6
42.5°	1392.4	1359.4	1392.4	1437.4	1579.2	1978.0
45°	1142.5	1129.5	1142.5	1176.5	1271.8	1546.1
47.5°	982.5	988.2	982.5	1004.4	1075.7	1259.2
50°	863.2	866.7	863.2	873.6	921.1	1057.6
52.5°	775.3	772.3	775.3	776.3	805.9	908.6
55°	697.5	693.7	697.5	695.3	717.2	783.0
57.5°	629.5	632.3	629.5	626.4	638.2	687.6
60°	568.8	571.4	568.8	566.5	574.2	603.1
62.5°	517.5	519.1	517.5	517.3	515.9	538.1
65°	471.7	473.6	471.7	469.2	467.1	477.4
67.5°	428.0	428.0	428.0	423.7	420.2	430.4
70°	386.8	386.6	386.8	380.0	377.3	380.3
72.5°	337.4	342.3	337.4	332.4	332.1	332.6
75°	289.4	295.1	289.4	286.1	282.5	285.6
77.5°	240.9	249.5	240.9	238.2	236.3	234.4
80°	191.0	200.5	191.0	186.5	183.9	187.3
82.5°	141.2	148.2	141.2	135.7	135.5	137.1
85°	84.1	95.4	84.1	79.2	81.0	79.2
87.5°	26.9	34.5	26.9	25.7	28.4	27.7
90°	21.3	13.3	21.3	36.4	23.4	13.3
92.5°	32.4	19.4	32.4	58.5	30.4	17.3
95°	37.4	22.3	37.4	81.7	40.5	25.5
97.5°	41.5	28.6	41.5	93.8	49.5	39.7
100°	48.5	37.6	48.5	146.2	60.8	52.7
102.5°	102.8	63.8	102.8	310.3	114.1	80.0
105°	216.7	110.1	216.7	552.9	239.0	145.4
107.5°	387.8	190.7	387.8	729.3	423.3	275.2
110°	514.6	355.8	514.6	764.5	581.3	440.4

TEST NUMBER: P1432845
CATALOG NUMBER: EHBR1-12-UNV-TASM-L850-UPL18

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	552.9	480.6	552.9	732.3	641.7	573.3
115°	531.8	505.8	531.8	653.8	626.6	622.8
117.5°	485.5	488.7	485.5	555.1	563.3	601.7
120°	432.1	452.4	432.1	463.5	491.9	543.2
122.5°	383.0	407.2	383.0	397.2	418.6	469.9
125°	340.7	365.0	340.7	350.1	355.4	398.4
127.5°	311.5	327.8	311.5	316.9	311.1	338.2
130°	288.5	302.6	288.5	296.0	282.1	295.2
132.5°	272.6	281.7	272.6	281.2	264.3	268.2
135°	258.7	266.6	258.7	268.2	252.5	251.3
137.5°	246.9	253.7	246.9	256.6	244.7	241.4
140°	236.1	242.0	236.1	246.8	237.6	235.7
142.5°	225.3	229.4	225.3	237.8	231.8	229.8
145°	217.7	220.7	217.7	231.0	227.8	227.0
147.5°	211.1	213.1	211.1	223.2	221.9	221.9
150°	204.4	206.4	204.4	216.3	215.1	216.1
152.5°	197.5	199.8	197.5	208.4	207.3	208.2
155°	192.9	195.1	192.9	201.8	201.4	201.6
157.5°	190.3	191.6	190.3	197.1	197.0	197.0
160°	187.8	189.1	187.8	193.7	193.5	192.7
162.5°	185.4	186.5	185.4	192.0	191.1	191.1
165°	184.7	184.9	184.7	189.6	189.6	188.7
167.5°	183.9	184.9	183.9	188.9	188.9	188.1
170°	184.1	184.3	184.1	188.1	187.3	186.3
172.5°	184.5	184.7	184.5	188.7	187.7	186.9
175°	183.9	184.1	183.9	187.1	187.1	187.3
177.5°	185.1	185.3	185.1	187.1	187.1	186.2
180°	186.6	186.6	186.6	186.6	186.6	186.6

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

Scaled Data Report

TEST NUMBER: P1432845
CATALOG NUMBER: EHBR1-12-UNV-TASM-L850-UPL18

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	13.77	14.79	14.36	15.36	15.99	13.09	14.11	13.67	14.68	15.31
	3H	15.32	16.23	15.91	16.81	17.48	14.93	15.84	15.53	16.42	17.10
	4H	15.95	16.80	16.57	17.39	18.08	15.71	16.56	16.33	17.16	17.85
	6H	16.43	17.21	17.06	17.82	18.52	16.35	17.14	16.98	17.74	18.44
	8H	16.58	17.32	17.22	17.94	18.65	16.57	17.31	17.21	17.94	18.64
	12H	16.65	17.35	17.29	17.97	18.70	16.70	17.41	17.34	18.02	18.75
4H	2H	14.18	15.03	14.80	15.62	16.31	13.66	14.51	14.28	15.10	15.79
	3H	15.97	16.68	16.60	17.31	18.02	15.71	16.42	16.34	17.05	17.76
	4H	16.75	17.38	17.39	18.02	18.76	16.62	17.25	17.26	17.90	18.63
	6H	17.36	17.90	18.03	18.57	19.33	17.39	17.93	18.06	18.60	19.35
	8H	17.55	18.06	18.23	18.73	19.49	17.66	18.17	18.33	18.83	19.59
	12H	17.66	18.11	18.35	18.80	19.56	17.82	18.27	18.51	18.96	19.73
8H	4H	16.99	17.50	17.67	18.17	18.93	16.89	17.40	17.57	18.07	18.83
	6H	17.73	18.15	18.44	18.86	19.62	17.80	18.21	18.50	18.92	19.69
	8H	18.00	18.37	18.72	19.09	19.87	18.15	18.52	18.87	19.24	20.02
	12H	18.17	18.50	18.89	19.20	20.04	18.40	18.72	19.11	19.42	20.27
12H	4H	17.00	17.45	17.69	18.14	18.91	16.90	17.35	17.59	18.05	18.81
	6H	17.78	18.15	18.50	18.86	19.64	17.84	18.21	18.56	18.93	19.71
	8H	18.09	18.41	18.81	19.11	19.96	18.24	18.57	18.96	19.27	20.12

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

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-4

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L850-N

Data in this report applies to families of products including EHBR-60-L850-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

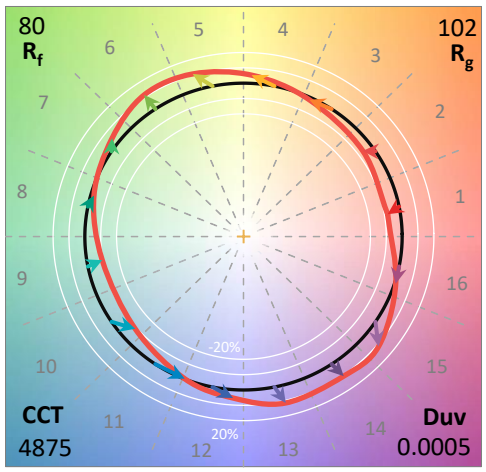
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-4
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-L850-N**
Description:	Elevate Round Highbay at, 60000 lumens, 5000K 80CRI LEDs with N lens

Spectral Parameters

CCT (K):	4875	CRI (Ra):	82.3		
CIE u':	0.2124	R1:	85.0	R9:	43.9
CIE v':	0.4871	R2:	83.1	R10:	57.4
Duv:	0.0005	R3:	78.8	R11:	83.1
CIE x:	0.3488	R4:	84.0	R12:	51.0
CIE y:	0.3555	R5:	83.0	R13:	83.4
CIE z:	0.2957	R6:	76.3	R14:	87.4
Peak Wavelength (nm):	630	R7:	86.8	R15:	83.4
Dominant Wavelength (nm):	573	R8:	81.7		
Purity:	11.33556				

Rf:	80
Rg:	102.3



Test Conditions

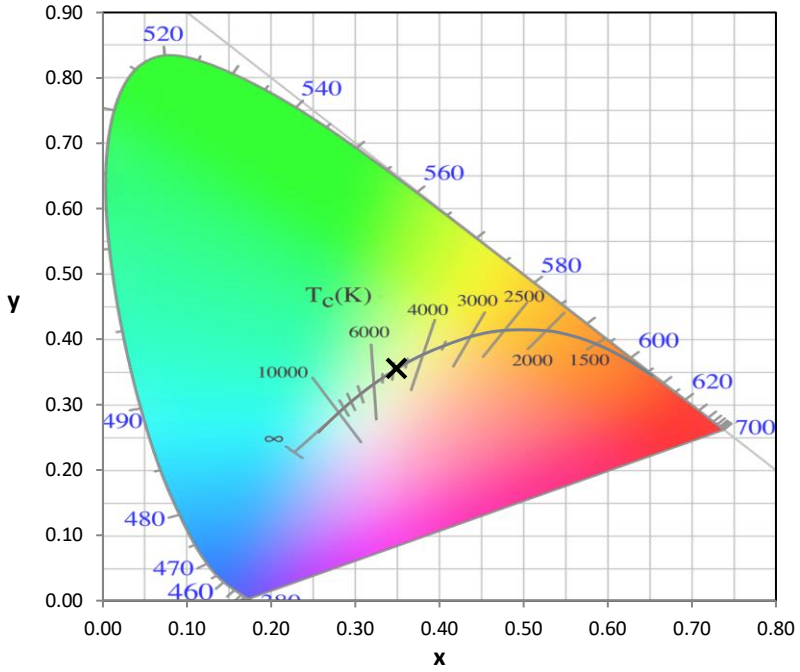
Stabilization Time:	39M
Operation Time:	1H 39M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-4

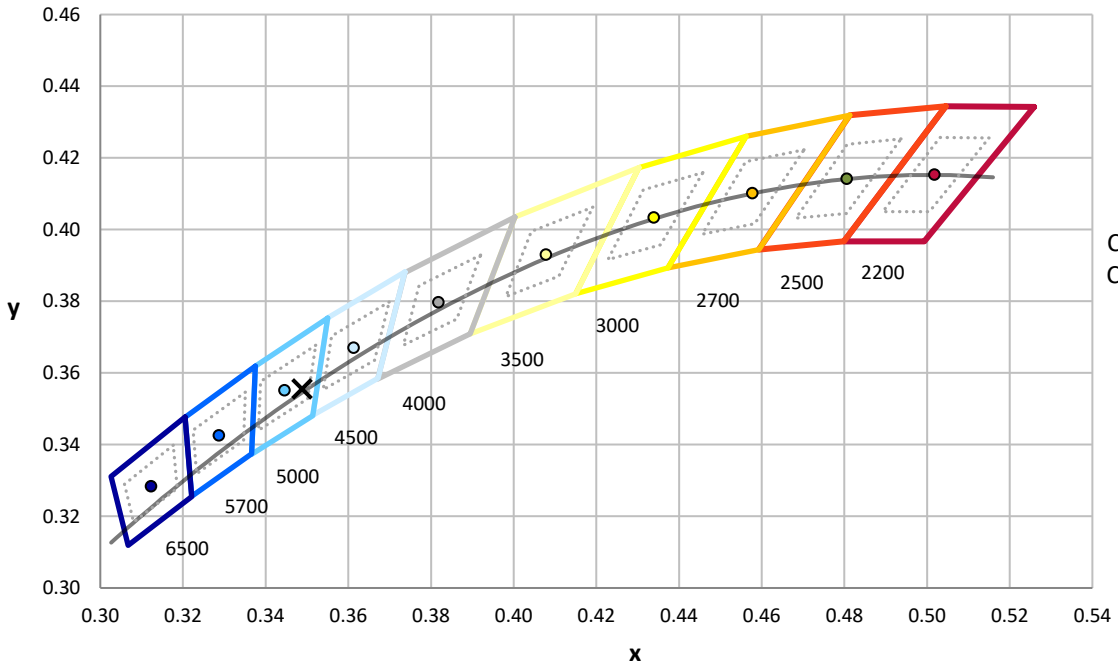
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	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: SP1-2506-472-4

CIE 1931 Chromaticity Diagram



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

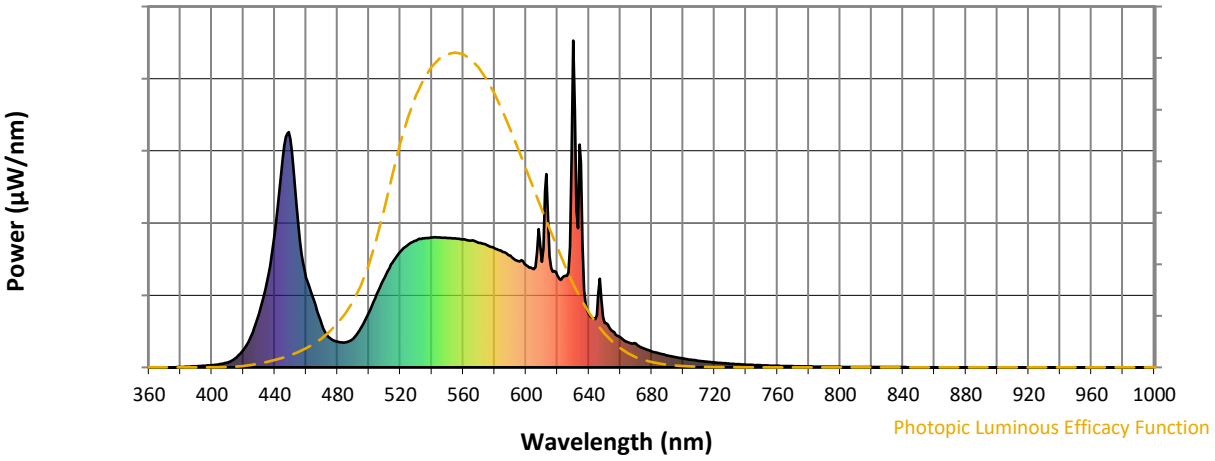


CCT = 4875K
CIE x = 0.3488
CIE y = 0.3555
Duv = 0.0005

Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-4

Photopic Flux vs. Wavelength

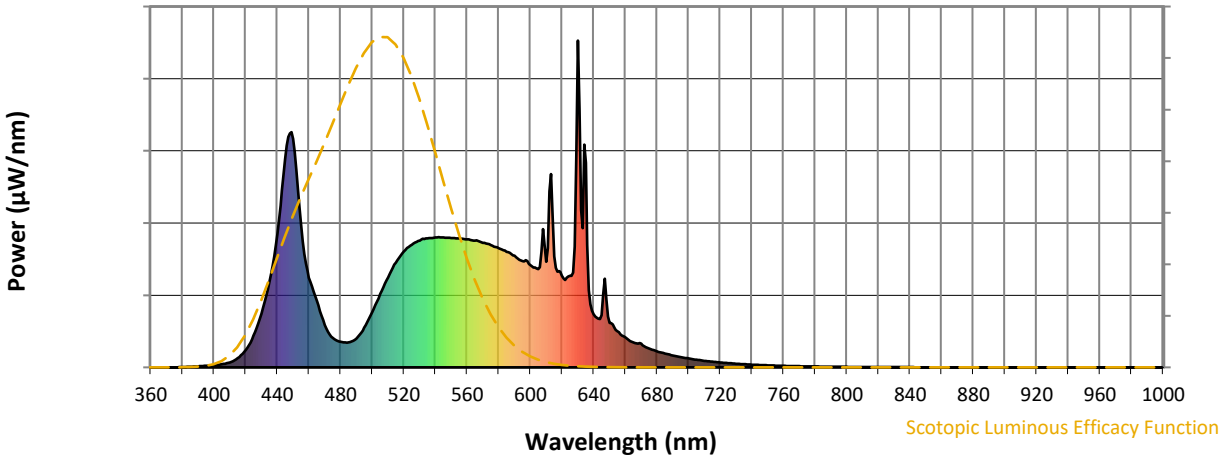


Photopic Lumens: NR

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	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-4

Scotopic Flux vs. Wavelength

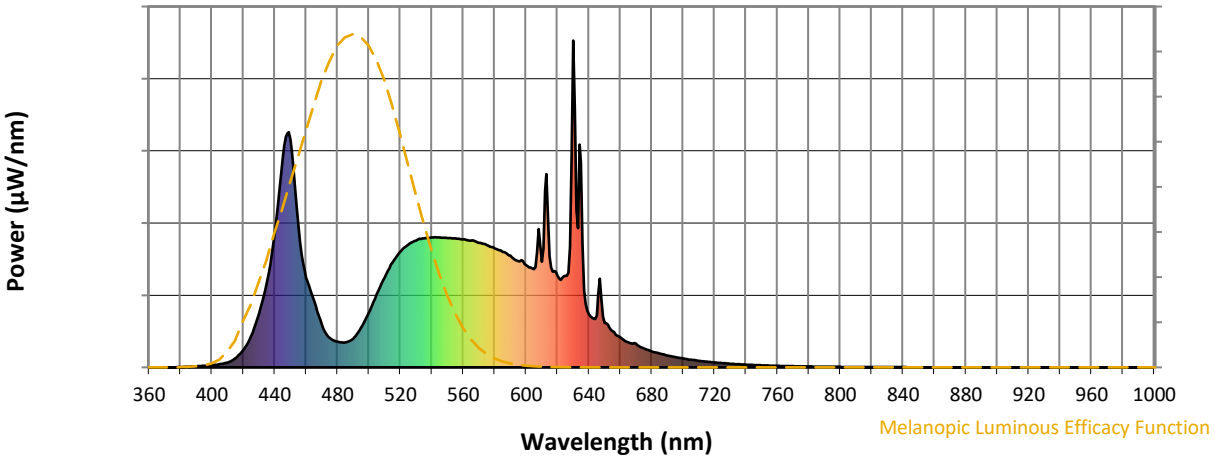


Scotopic Lumens: NR **S/P: 1.82**

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	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-4

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.71**

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	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

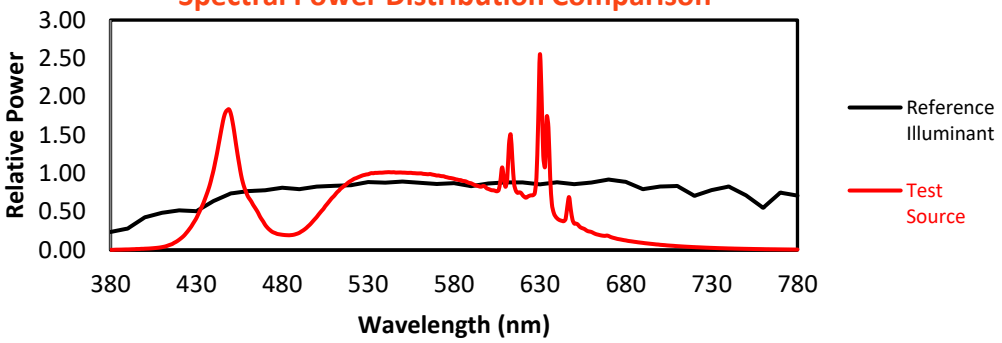
REPORT NUMBER: SP1-2506-472-4

TM-30-18

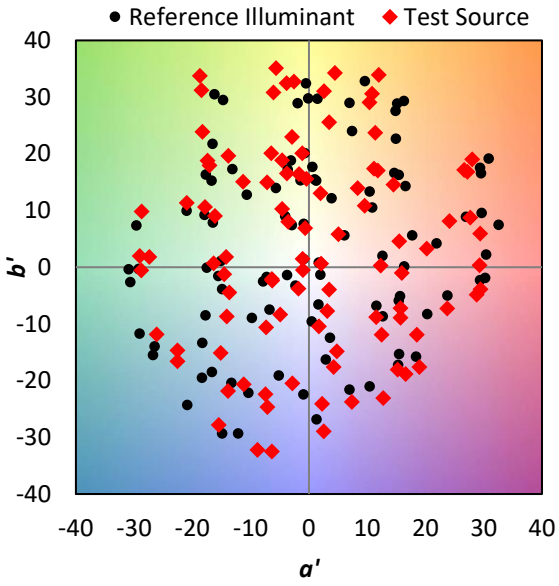
Summary

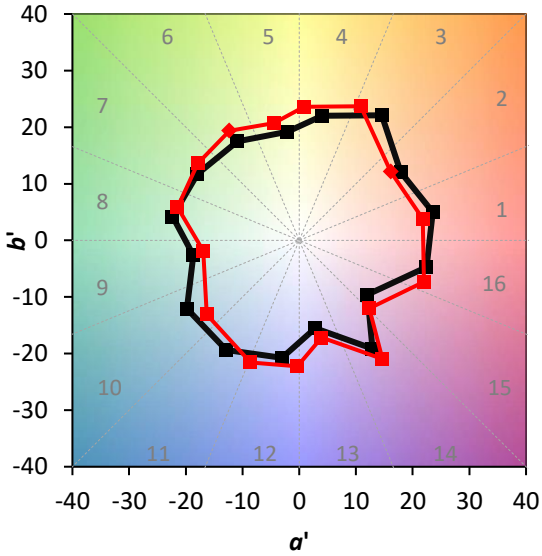
R_f = 80
R_g = 102.3
CIE R_a = 82.3
R_9 = 43.9

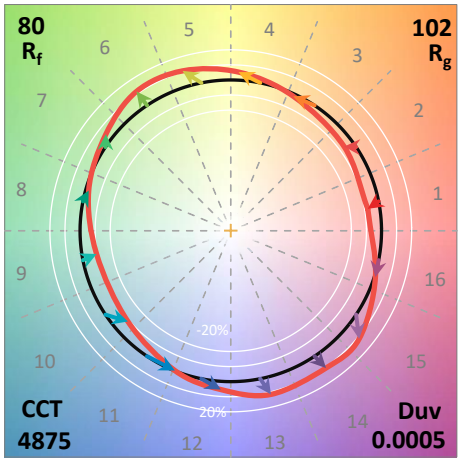
Spectral Power Distribution Comparison

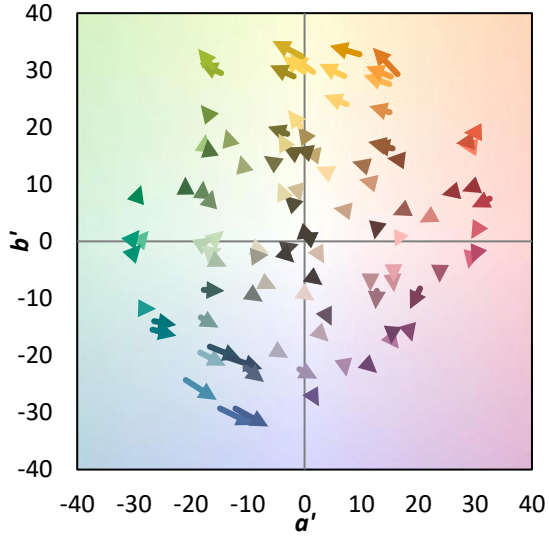


Color Vector Graphics







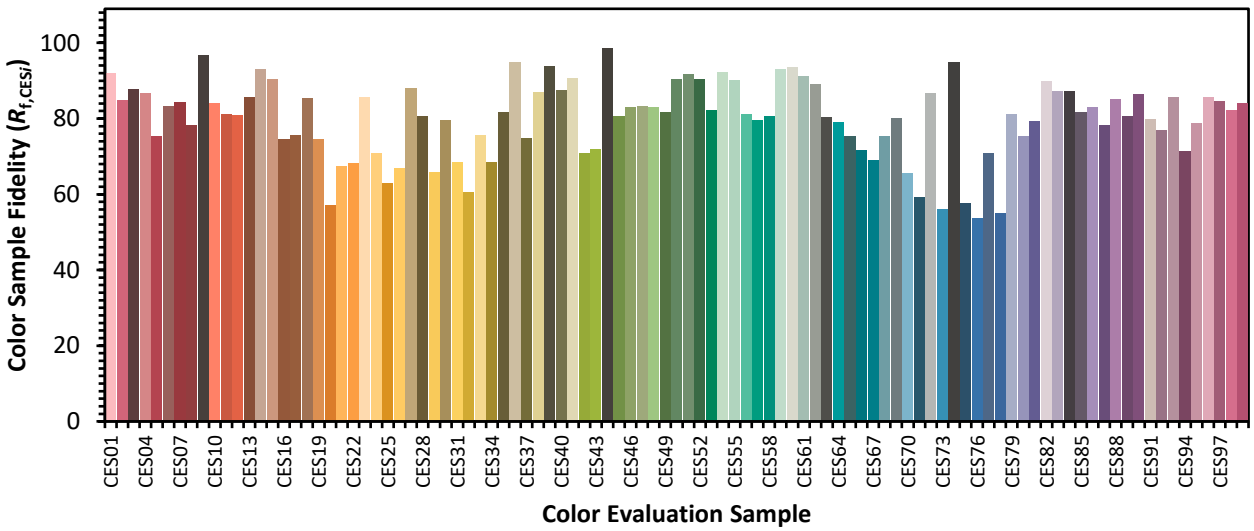


REPORT NUMBER: SP1-2506-472-4

TM-30-18

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

CES01 = 85	CES26 = 67	CES51 = 92	CES76 = 54
CES02 = 60	CES27 = 88	CES52 = 91	CES77 = 71
CES03 = 31	CES28 = 81	CES53 = 82	CES78 = 55
CES04 = 69	CES29 = 66	CES54 = 92	CES79 = 81
CES05 = 47	CES30 = 80	CES55 = 90	CES80 = 75
CES06 = 50	CES31 = 69	CES56 = 81	CES81 = 79
CES07 = 40	CES32 = 61	CES57 = 80	CES82 = 90
CES08 = 39	CES33 = 76	CES58 = 81	CES83 = 87
CES09 = 29	CES34 = 68	CES59 = 93	CES84 = 87
CES10 = 73	CES35 = 82	CES60 = 94	CES85 = 82
CES11 = 56	CES36 = 95	CES61 = 91	CES86 = 83
CES12 = 62	CES37 = 75	CES62 = 89	CES87 = 78
CES13 = 42	CES38 = 87	CES63 = 80	CES88 = 85
CES14 = 74	CES39 = 94	CES64 = 79	CES89 = 81
CES15 = 71	CES40 = 87	CES65 = 75	CES90 = 86
CES16 = 46	CES41 = 91	CES66 = 72	CES91 = 80
CES17 = 48	CES42 = 71	CES67 = 69	CES92 = 77
CES18 = 56	CES43 = 72	CES68 = 75	CES93 = 86
CES19 = 70	CES44 = 99	CES69 = 80	CES94 = 71
CES20 = 65	CES45 = 81	CES70 = 66	CES95 = 79
CES21 = 85	CES46 = 83	CES71 = 59	CES96 = 86
CES22 = 77	CES47 = 83	CES72 = 87	CES97 = 85
CES23 = 91	CES48 = 83	CES73 = 56	CES98 = 82
CES24 = 90	CES49 = 82	CES74 = 95	CES99 = 84
CES25 = 71	CES50 = 91	CES75 = 58	



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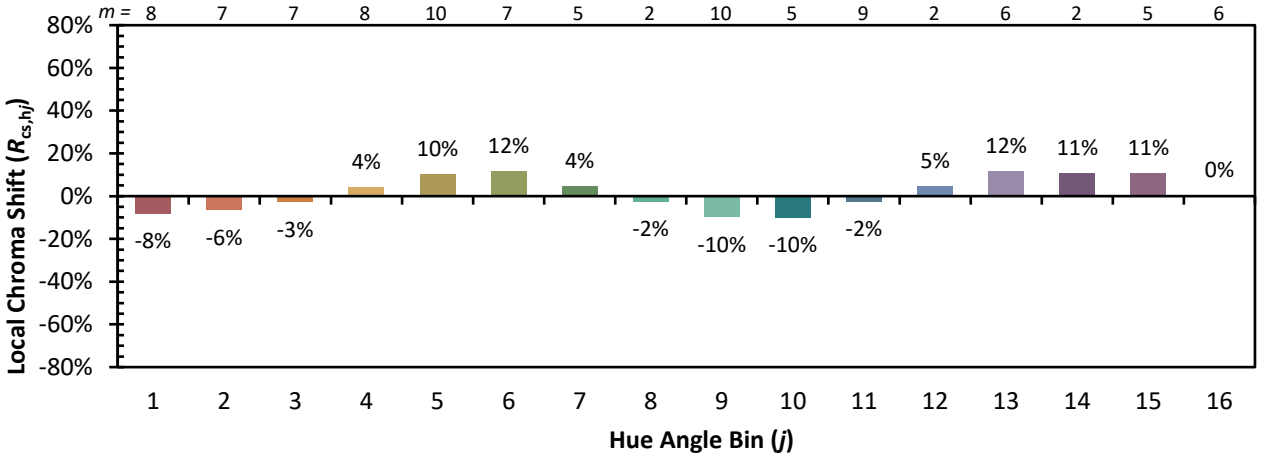
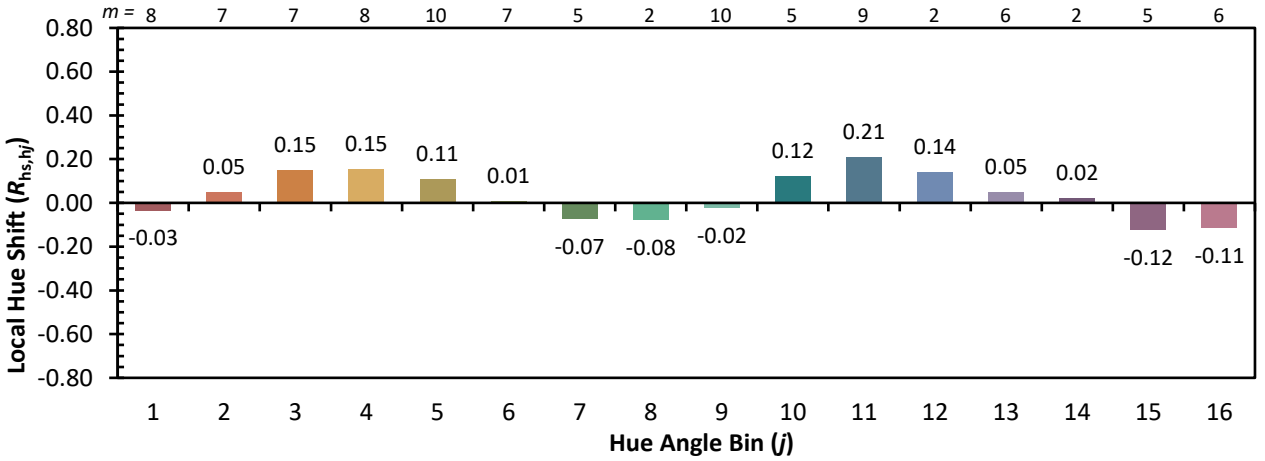
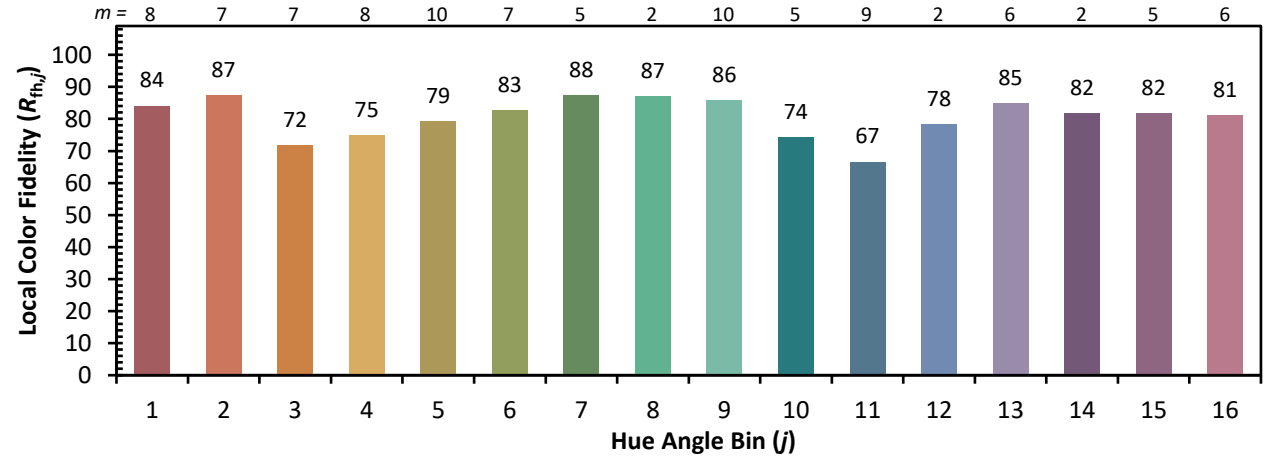
Color Rendition by Hue-Angle Bin







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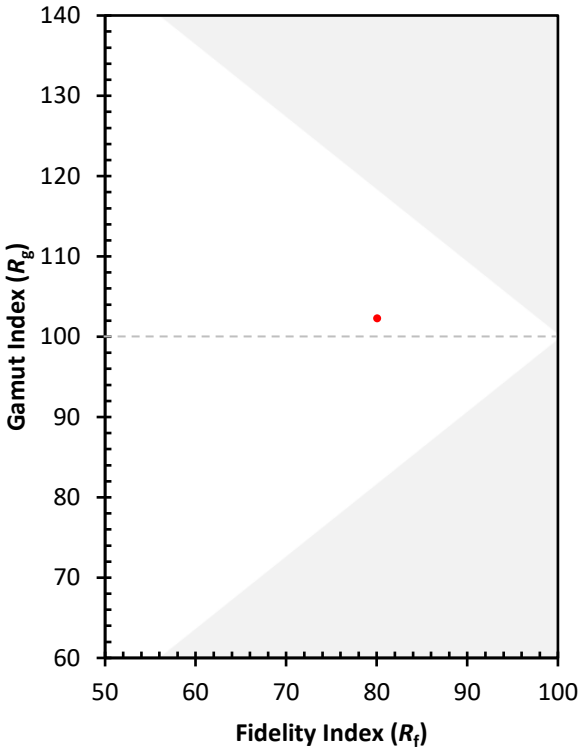
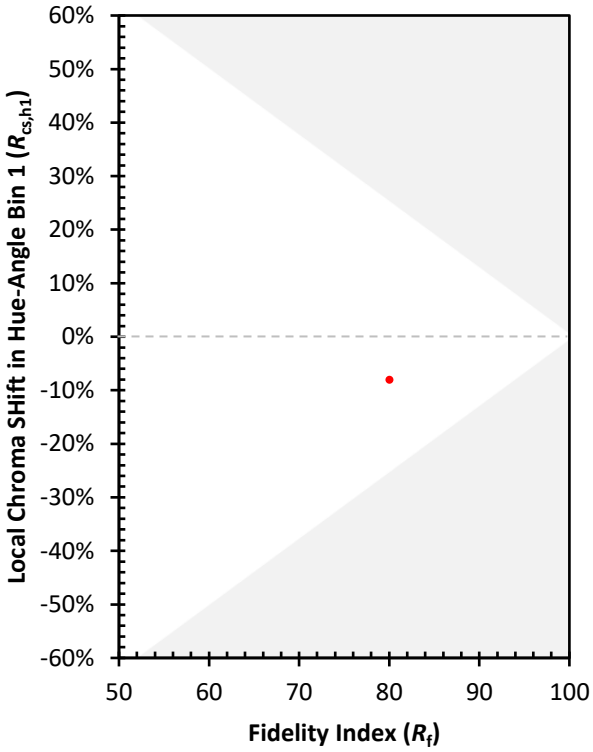
Measure Comparisons





(END OF REPORT)