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: P1432880

Luminaire Tested: EHBR1-18-UNV-TASM-L850-UPL36

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:	P1432880
	REPORT IS A COMBINATION OF REPORTS P1431681 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-18-UNV-TASM-L850-UPL36
Description:	Elevate Round Highbay at, 18000 lumens, 5000K 80CRI LEDs with TASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	21644.0 lumens
Efficiency:	N/A
Efficacy:	175.8 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

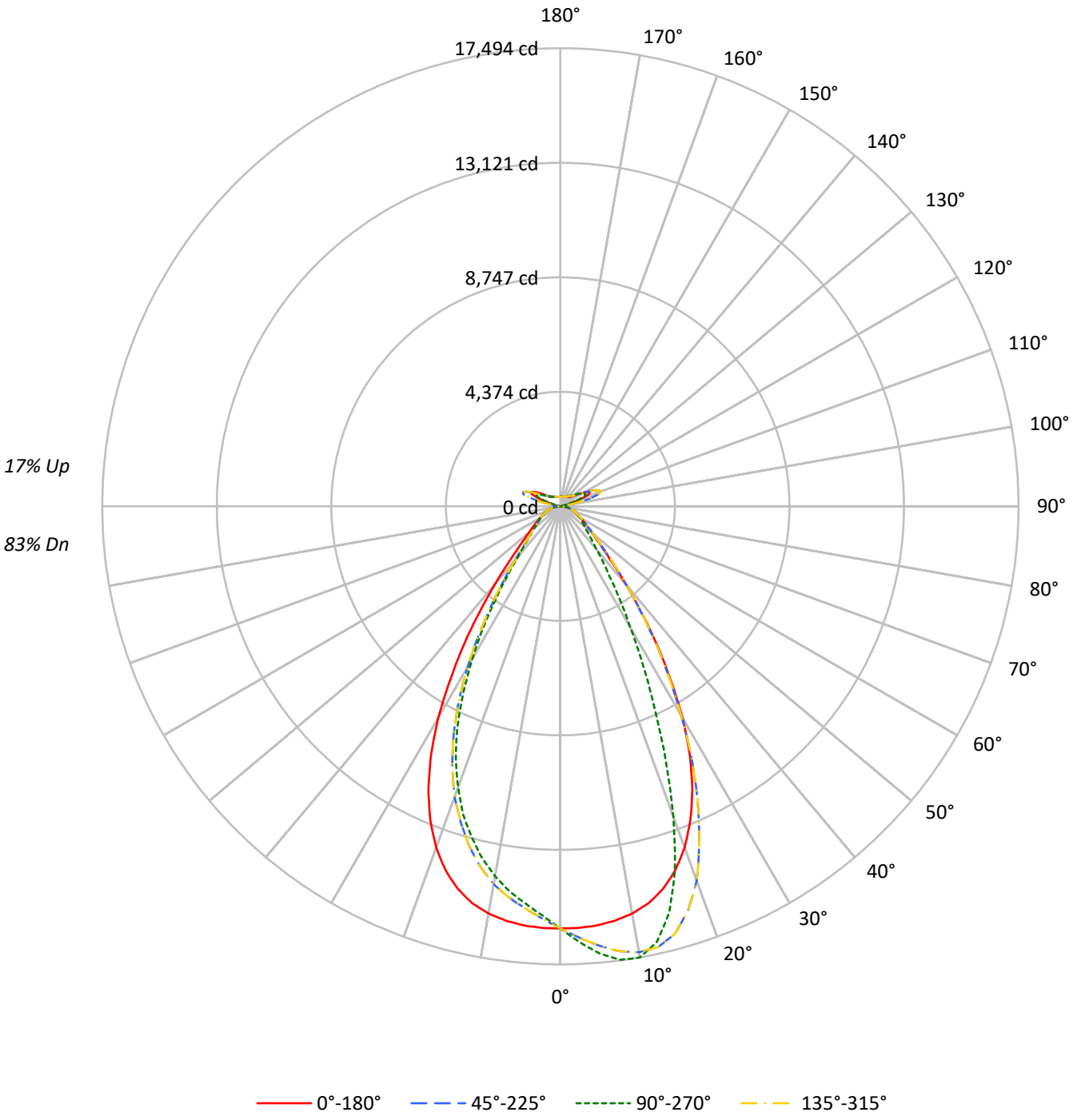
Input Watts (W):	123.1
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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

Scaled Data Report

TEST NUMBER: P1432880
CATALOG NUMBER: EHBR1-18-UNV-TASM-L850-UPL36

Luminous Intensity Polar Plot



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

Scaled Data Report

TEST NUMBER: P1432880
CATALOG NUMBER: EHBR1-18-UNV-TASM-L850-UPL36

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			20
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	115	115	115	115	110	110	110	110	102	102	102	94	94	94	87	87	87	83
1	108	104	101	98	103	100	98	95	93	91	89	87	85	83	81	79	78	75
2	101	95	89	85	97	91	87	83	85	82	79	80	77	74	75	72	71	68
3	94	86	80	75	91	84	78	74	78	74	70	74	70	67	69	66	64	62
4	88	79	72	67	85	77	71	66	72	67	63	68	64	61	65	61	59	56
5	83	73	66	61	80	71	65	60	67	62	58	64	59	56	60	57	54	52
6	78	67	60	55	75	66	59	55	62	57	53	59	55	51	56	53	50	48
7	73	63	56	51	71	61	55	50	58	53	49	56	51	47	53	49	46	44
8	69	58	52	47	67	57	51	46	55	49	45	52	47	44	50	46	43	41
9	65	55	48	43	63	53	47	43	51	46	42	49	44	41	47	43	40	38
10	62	51	45	40	60	50	44	40	48	43	39	46	42	38	44	40	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	75712	75712	75712	75712
5°	75251	80278	75251	71346
10°	74326	82340	74326	67523
15°	72131	76519	72131	62373
20°	67461	61358	67461	55557
25°	59708	42512	59708	46559
30°	48481	27657	48481	34836
35°	34772	17911	34772	23191
40°	22481	12346	22481	14625
45°	14264	9563	14264	10421
50°	10593	8126	10593	8680
55°	8648	7403	8648	7662
60°	7489	7051	7489	7094
65°	6827	6800	6827	6773
70°	6471	6664	6471	6577
75°	6050	6446	6050	6253
80°	5317	6085	5317	5689
85°	3439	4344	3439	4143

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
Vertical Angle: 45°
Luminance: 20054 cd/sqm

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

Scaled Data Report

TEST NUMBER: P1432880
CATALOG NUMBER: EHBR1-18-UNV-TASM-L850-UPL36

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1533.0	7.1
10°-20°	4170.6	19.3
20°-30°	4891.2	22.6
30°-40°	3401.6	15.7
40°-50°	1690.4	7.8
50°-60°	1011.0	4.7
60°-70°	711.6	3.3
70°-80°	458.4	2.1
80°-90°	152.0	0.7
90°-100°	96.0	0.4
100°-110°	631.5	2.9
110°-120°	1167.4	5.4
120°-130°	693.1	3.2
130°-140°	418.2	1.9
140°-150°	288.5	1.3
150°-160°	187.4	0.9
160°-170°	106.7	0.5
170°-180°	35.3	0.2
0°-30°	10594.8	49.0
0°-40°	13996.3	64.7
0°-60°	16697.8	77.1
0°-90°	18019.8	83.3
90°-120°	1894.9	8.8
90°-150°	3294.8	15.2
90°-180°	3624.0	16.7
0°-180°	21644.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	16122	16122	16122	16122	16122	
5°	16067	17141	16067	15234	16067	1525
15°	15133	16053	15133	13086	15133	4229
25°	11924	8490	11924	9298	11924	5398
35°	6382	3287	6382	4256	6382	3984
45°	2308	1547	2308	1686	2308	1889
55°	1169	1000	1169	1035	1169	1069
65°	713	710	713	707	713	716
75°	426	454	426	440	426	447
85°	118	149	118	142	118	131
90°	26	29	26	26	26	18
95°	51	47	51	44	51	54
105°	290	145	290	220	290	391
115°	1243	1060	1243	1009	1243	1133
125°	795	831	795	728	795	732
135°	501	578	501	532	501	397
145°	452	472	452	439	452	283
155°	401	417	401	387	401	187
165°	374	384	374	366	374	107
175°	370	375	370	364	370	35
180°	369	369	369	369	369	

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

Scaled Data Report

TEST NUMBER: P1432880
CATALOG NUMBER: EHBR1-18-UNV-TASM-L850-UPL36

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	16122.3	16122.3	16122.3	16122.3	*16122.3*	16122.3	16122.3	16122.3	16122.3	16122.3	16122.3
2.5°	16112.9	16321.2	16489.9	16601.2	*16656.2*	16601.2	16489.9	16321.2	16112.9	15905.8	15763.5
5°	16067.3	16484.5	16837.9	17069.1	*17140.7*	17069.1	16837.9	16484.5	16067.3	15673.1	15411.5
7.5°	15958.2	16608.1	17133.3	17403.2	*17469.1*	17403.2	17133.3	16608.1	15958.2	15400.0	15069.7
10°	*15791.6*	*16686.1*	*17292.9*	*17486.3*	*17494.2*	*17486.3*	*17292.9*	*16686.1*	*15791.6*	*15039.7*	*14650.0*
12.5°	15525.8	16658.3	17239.4	17175.9	*17031.6*	17175.9	17239.4	16658.3	15525.8	14599.5	14108.0
15°	15132.8	16493.5	16900.5	16383.8	*16053.3*	16383.8	16900.5	16493.5	15132.8	14005.1	13435.0
17.5°	14579.0	16185.2	16193.0	15170.9	*14547.5*	15170.9	16193.0	16185.2	14579.0	13278.3	12650.5
20°	13865.2	15690.6	15219.0	13349.5	*12610.9*	13349.5	15219.0	15690.6	13865.2	12419.2	11803.1
22.5°	12970.3	15023.7	13862.4	11517.1	*10509.4*	11517.1	13862.4	15023.7	12970.3	11420.0	10778.8
25°	11923.7	14206.5	12403.2	9520.5	*8489.7*	9520.5	12403.2	14206.5	11923.7	10229.5	9649.6
27.5°	10692.6	13170.8	10849.3	7779.8	*6828.8*	7779.8	10849.3	13170.8	10692.6	9000.3	8408.1
30°	9325.3	11843.0	9232.1	6195.7	*5319.8*	6195.7	9232.1	11843.0	9325.3	7619.3	7089.1
32.5°	7794.4	10541.6	7679.1	4964.3	*4222.5*	4964.3	7679.1	10541.6	7794.4	6301.5	5747.3
35°	6381.9	8913.2	6278.9	3900.8	*3287.4*	3900.8	6278.9	8913.2	6381.9	5057.5	4513.3
37.5°	5008.5	7374.7	5005.2	3141.1	*2666.5*	3141.1	5005.2	7374.7	5008.5	3932.0	3490.2
40°	3896.6	5766.4	3921.6	2507.4	*2139.8*	2507.4	3921.6	5766.4	3896.6	2991.7	2709.1
42.5°	2952.4	4409.3	3082.5	2057.9	*1817.5*	2057.9	3082.5	4409.3	2952.4	2357.1	2145.5
45°	2307.9	3244.7	2407.0	1736.2	*1547.2*	1736.2	2407.0	3244.7	2307.9	1898.3	1756.2
47.5°	1879.5	2507.7	1950.8	1489.2	*1356.8*	1489.2	1950.8	2507.7	1879.5	1605.6	1499.2
50°	1578.7	1924.2	1619.8	1300.0	*1211.1*	1300.0	1619.8	1924.2	1578.7	1374.9	1303.9
52.5°	1356.2	1569.3	1379.4	1158.5	*1098.6*	1158.5	1379.4	1569.3	1356.2	1202.9	1158.8
55°	1168.7	1319.3	1199.6	1041.8	*1000.4*	1041.8	1199.6	1319.3	1168.7	1070.5	1037.9
57.5°	1026.4	1119.1	1041.8	942.3	*914.8*	942.3	1041.8	1119.1	1026.4	952.6	935.1
60°	900.3	969.2	919.3	855.6	*847.7*	855.6	919.3	969.2	900.3	857.1	845.6
62.5°	803.2	846.7	813.0	777.6	*770.6*	777.6	813.0	846.7	803.2	770.0	772.1
65°	712.6	753.0	726.5	707.5	*709.8*	707.5	726.5	753.0	712.6	697.1	700.5
67.5°	642.4	663.5	652.1	641.2	*643.9*	641.2	652.1	663.5	642.4	627.3	632.4
70°	567.8	590.5	578.7	580.1	*584.7*	580.1	578.7	590.5	567.8	563.3	567.2
72.5°	496.4	513.9	510.0	513.6	*518.5*	513.6	510.0	513.9	496.4	495.8	496.1
75°	426.2	439.6	441.3	446.6	*454.1*	446.6	441.3	439.6	426.2	421.7	427.2
77.5°	349.8	364.9	370.6	377.6	*388.8*	377.6	370.6	364.9	349.8	352.8	355.5
80°	279.7	286.6	299.3	304.4	*320.1*	304.4	299.3	286.6	279.7	274.6	278.5
82.5°	204.7	211.0	221.9	231.5	*240.7*	231.5	221.9	211.0	204.7	202.3	202.6
85°	118.2	127.9	135.2	146.7	*149.3*	146.7	135.2	127.9	118.2	120.9	118.2
87.5°	41.5	44.4	50.8	55.3	*55.6*	55.3	50.8	44.4	41.5	42.3	38.4
90°	26.4	44.8	77.2	41.9	*28.6*	41.9	77.2	44.8	26.4	46.5	72.6
92.5°	34.5	60.9	109.4	56.0	*38.6*	56.0	109.4	60.9	34.5	60.6	116.8
95°	50.8	74.9	139.5	62.1	*46.7*	62.1	139.5	74.9	50.8	80.6	163.1
97.5°	79.0	93.0	157.6	66.1	*56.7*	66.1	157.6	93.0	79.0	98.7	187.1
100°	105.1	105.1	288.2	76.1	*64.7*	76.1	288.2	105.1	105.1	121.1	291.6
102.5°	159.3	205.8	668.3	152.8	*78.8*	152.8	668.3	205.8	159.3	227.6	619.1
105°	289.9	471.0	1176.6	396.0	*145.4*	396.0	1176.6	471.0	289.9	476.8	1103.3
107.5°	549.1	878.9	1516.1	781.7	*340.3*	781.7	1516.1	878.9	549.1	844.5	1455.3
110°	878.6	1228.5	1654.8	1071.1	*689.9*	1071.1	1654.8	1228.5	878.6	1159.9	1525.6

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

Scaled Data Report

TEST NUMBER: P1432880
CATALOG NUMBER: EHBR1-18-UNV-TASM-L850-UPL36

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	1143.8	1369.1	1616.6	1187.6	*955.1*	1187.6	1616.6	1369.1	1143.8	1280.4	1461.3
115°	1242.6	1349.1	1443.8	1183.6	*1059.6*	1183.6	1443.8	1349.1	1242.6	1250.3	1304.6
117.5°	1200.4	1234.6	1246.8	1111.3	*1065.6*	1111.3	1246.8	1234.6	1200.4	1124.0	1107.6
120°	1083.9	1069.8	1050.3	1004.8	*1005.4*	1004.8	1050.3	1069.8	1083.9	981.4	924.8
122.5°	937.5	907.4	887.5	896.5	*923.0*	896.5	887.5	907.4	937.5	835.0	792.5
125°	794.8	764.7	773.3	804.1	*830.8*	804.1	773.3	764.7	794.8	708.7	698.4
127.5°	674.5	660.5	690.9	725.7	*748.4*	725.7	690.9	660.5	674.5	620.3	632.1
130°	588.5	592.1	632.7	661.8	*676.1*	661.8	632.7	592.1	588.5	562.4	590.2
132.5°	534.6	550.3	588.9	613.8	*622.2*	613.8	588.9	550.3	534.6	526.8	560.7
135°	500.8	524.2	559.0	575.3	*578.0*	575.3	559.0	524.2	500.8	503.0	534.6
137.5°	480.9	504.4	530.8	543.5	*539.8*	543.5	530.8	504.4	480.9	487.2	511.1
140°	469.1	492.7	504.7	519.4	*516.0*	519.4	504.7	492.7	469.1	473.2	491.2
142.5°	457.5	479.0	485.0	495.6	*491.8*	495.6	485.0	479.0	457.5	461.5	473.5
145°	451.7	467.5	463.2	477.5	*472.1*	477.5	463.2	467.5	451.7	453.4	459.7
147.5°	441.6	453.4	447.3	459.7	*454.3*	459.7	447.3	453.4	441.6	441.6	443.9
150°	429.9	437.9	429.6	443.9	*442.5*	443.9	429.6	437.9	429.9	427.9	430.1
152.5°	414.1	422.1	414.1	430.4	*428.8*	430.4	414.1	422.1	414.1	412.1	414.4
155°	400.6	404.6	400.6	417.0	*417.3*	417.0	400.6	404.6	400.6	400.3	400.9
157.5°	391.2	393.5	391.4	405.9	*406.2*	405.9	391.4	393.5	391.2	391.2	391.4
160°	382.4	386.4	384.7	397.0	*397.3*	397.0	384.7	386.4	382.4	384.1	384.4
162.5°	379.0	379.0	377.6	389.9	*390.5*	389.9	377.6	379.0	379.0	379.0	380.9
165°	373.9	375.8	372.4	381.0	*383.7*	381.0	372.4	375.8	373.9	375.5	375.5
167.5°	372.4	370.4	371.0	378.0	*380.6*	378.0	371.0	370.4	372.4	374.2	374.2
170°	368.7	369.0	367.7	374.6	*377.2*	374.6	367.7	369.0	368.7	370.7	372.4
172.5°	369.6	369.6	366.5	371.4	*376.0*	371.4	366.5	369.6	369.6	371.3	373.3
175°	370.2	368.6	367.1	370.0	*374.6*	370.0	367.1	368.6	370.2	369.9	369.9
177.5°	368.3	368.9	369.4	372.3	*379.0*	372.3	369.4	368.9	368.3	369.9	369.9
180°	368.9	368.9	368.9	368.9	*368.9*	368.9	368.9	368.9	368.9	368.9	368.9

TEST NUMBER: P1432880
CATALOG NUMBER: EHBR1-18-UNV-TASM-L850-UPL36

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	16122.3	16122.3	16122.3	16122.3	16122.3	16122.3
2.5°	15654.0	15643.7	15654.0	15763.5	15905.8	16112.9
5°	15290.3	15233.5	15290.3	15411.5	15673.1	16067.3
7.5°	14866.7	14833.8	14866.7	15069.7	15400.0	15958.2
10°	*14420.9*	*14346.2*	*14420.9*	*14650.0*	*15039.7*	*15791.6*
12.5°	13871.3	13772.3	13871.3	14108.0	14599.5	15525.8
15°	13172.3	13085.5	13172.3	13435.0	14005.1	15132.8
17.5°	12422.3	12343.6	12422.3	12650.5	13278.3	14579.0
20°	11480.2	11418.5	11480.2	11803.1	12419.2	13865.2
22.5°	10491.9	10434.2	10491.9	10778.8	11420.0	12970.3
25°	9329.2	9297.8	9329.2	9649.6	10229.5	11923.7
27.5°	8072.7	8019.3	8072.7	8408.1	9000.3	10692.6
30°	6789.2	6700.6	6789.2	7089.1	7619.3	9325.3
32.5°	5533.6	5469.8	5533.6	5747.3	6301.5	7794.4
35°	4320.2	4256.3	4320.2	4513.3	5057.5	6381.9
37.5°	3366.3	3253.6	3366.3	3490.2	3932.0	5008.5
40°	2553.1	2534.9	2553.1	2709.1	2991.7	3896.6
42.5°	2078.4	2029.1	2078.4	2145.5	2357.1	2952.4
45°	1705.4	1686.0	1705.4	1756.2	1898.3	2307.9
47.5°	1466.6	1475.0	1466.6	1499.2	1605.6	1879.5
50°	1288.5	1293.6	1288.5	1303.9	1374.9	1578.7
52.5°	1157.2	1152.7	1157.2	1158.8	1202.9	1356.2
55°	1041.1	1035.4	1041.1	1037.9	1070.5	1168.7
57.5°	939.6	943.8	939.6	935.1	952.6	1026.4
60°	848.9	852.8	848.9	845.6	857.1	900.3
62.5°	772.4	774.8	772.4	772.1	770.0	803.2
65°	704.1	706.9	704.1	700.5	697.1	712.6
67.5°	638.8	638.8	638.8	632.4	627.3	642.4
70°	577.4	577.1	577.4	567.2	563.3	567.8
72.5°	503.6	510.9	503.6	496.1	495.8	496.4
75°	432.0	440.5	432.0	427.2	421.7	426.2
77.5°	359.4	372.5	359.4	355.5	352.8	349.8
80°	285.1	299.3	285.1	278.5	274.6	279.7
82.5°	210.7	221.3	210.7	202.6	202.3	204.7
85°	125.4	142.4	125.4	118.2	120.9	118.2
87.5°	40.2	51.4	40.2	38.4	42.3	41.5
90°	42.5	26.4	42.5	72.6	46.5	26.4
92.5°	64.6	38.5	64.6	116.8	60.6	34.5
95°	74.7	44.5	74.7	163.1	80.6	50.8
97.5°	82.7	56.9	82.7	187.1	98.7	79.0
100°	96.8	74.9	96.8	291.6	121.1	105.1
102.5°	205.2	127.2	205.2	619.1	227.6	159.3
105°	432.3	219.5	432.3	1103.3	476.8	289.9
107.5°	773.9	380.3	773.9	1455.3	844.5	549.1
110°	1027.0	709.8	1027.0	1525.6	1159.9	878.6

TEST NUMBER: P1432880
CATALOG NUMBER: EHBR1-18-UNV-TASM-L850-UPL36

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1103.3	959.0	1103.3	1461.3	1280.4	1143.8
115°	1061.2	1009.2	1061.2	1304.6	1250.3	1242.6
117.5°	968.7	975.0	968.7	1107.6	1124.0	1200.4
120°	862.3	902.7	862.3	924.8	981.4	1083.9
122.5°	764.1	812.3	764.1	792.5	835.0	937.5
125°	679.7	728.2	679.7	698.4	708.7	794.8
127.5°	621.4	653.9	621.4	632.1	620.3	674.5
130°	575.5	603.6	575.5	590.2	562.4	588.5
132.5°	543.7	561.8	543.7	560.7	526.8	534.6
135°	515.8	531.6	515.8	534.6	503.0	500.8
137.5°	492.0	505.8	492.0	511.1	487.2	480.9
140°	470.6	482.4	470.6	491.2	473.2	469.1
142.5°	448.8	456.9	448.8	473.5	461.5	457.5
145°	433.3	439.4	433.3	459.7	453.4	451.7
147.5°	419.8	423.9	419.8	443.9	441.6	441.6
150°	406.4	410.4	406.4	430.1	427.9	429.9
152.5°	392.6	396.9	392.6	414.4	412.1	414.1
155°	383.1	387.4	383.1	400.9	400.3	400.6
157.5°	377.8	380.3	377.8	391.4	391.2	391.2
160°	372.7	374.9	372.7	384.4	384.1	382.4
162.5°	367.2	369.5	367.2	380.9	379.0	379.0
165°	365.8	366.1	365.8	375.5	375.5	373.9
167.5°	364.0	366.1	364.0	374.2	374.2	372.4
170°	364.3	364.6	364.3	372.4	370.7	368.7
172.5°	364.9	365.2	364.9	373.3	371.3	369.6
175°	363.6	363.9	363.6	369.9	369.9	370.2
177.5°	365.9	366.2	365.9	369.9	369.9	368.3
180°	368.9	368.9	368.9	368.9	368.9	368.9

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

Scaled Data Report

TEST NUMBER: P1432880
CATALOG NUMBER: EHBR1-18-UNV-TASM-L850-UPL36

CIE UGR TABLE:

Reflectances:											
	Ceiling	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
	Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
	Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.87	15.85	15.51	16.48	17.19	14.19	15.17	14.83	15.80	16.51
	3H	16.41	17.29	17.06	17.92	18.67	16.03	16.91	16.68	17.54	18.29
	4H	17.05	17.87	17.72	18.51	19.28	16.81	17.63	17.48	18.28	19.04
	6H	17.52	18.28	18.20	18.94	19.71	17.45	18.20	18.13	18.86	19.64
	8H	17.67	18.38	18.36	19.06	19.84	17.67	18.38	18.36	19.06	19.84
	12H	17.74	18.42	18.44	19.09	19.89	17.79	18.47	18.49	19.14	19.95
4H	2H	15.28	16.10	15.95	16.74	17.51	14.76	15.58	15.43	16.22	16.99
	3H	17.07	17.75	17.75	18.44	19.21	16.81	17.48	17.49	18.17	18.95
	4H	17.84	18.45	18.54	19.15	19.96	17.71	18.33	18.41	19.02	19.83
	6H	18.45	18.98	19.17	19.70	20.52	18.48	19.01	19.20	19.72	20.55
	8H	18.65	19.14	19.37	19.85	20.68	18.75	19.24	19.47	19.96	20.79
	12H	18.75	19.18	19.49	19.92	20.76	18.91	19.35	19.65	20.09	20.92
8H	4H	18.09	18.58	18.81	19.29	20.12	17.99	18.48	18.71	19.19	20.02
	6H	18.83	19.23	19.58	19.99	20.82	18.89	19.29	19.64	20.05	20.88
	8H	19.10	19.45	19.86	20.22	21.07	19.25	19.60	20.01	20.36	21.21
	12H	19.27	19.58	20.03	20.32	21.24	19.49	19.80	20.25	20.55	21.46
12H	4H	18.09	18.53	18.83	19.27	20.10	17.99	18.43	18.73	19.17	20.01
	6H	18.87	19.23	19.64	19.99	20.84	18.94	19.29	19.70	20.06	20.91
	8H	19.18	19.49	19.95	20.24	21.16	19.34	19.65	20.10	20.39	21.31

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

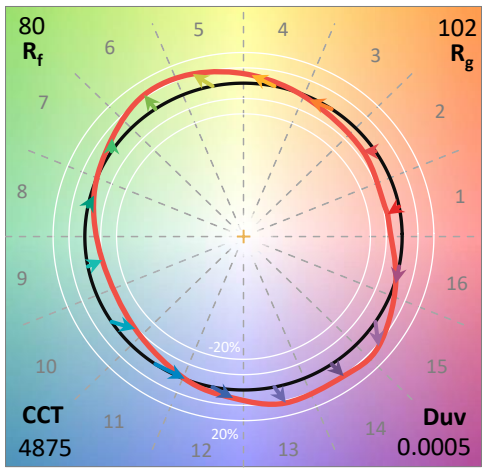
Test Information

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

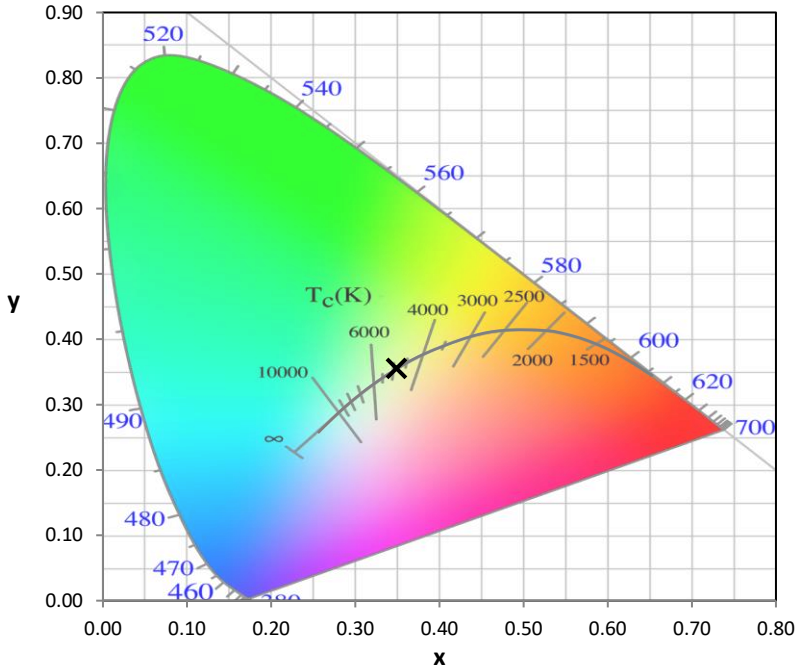
Stabilization Time:	39M
Operation Time:	1H 39M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-4

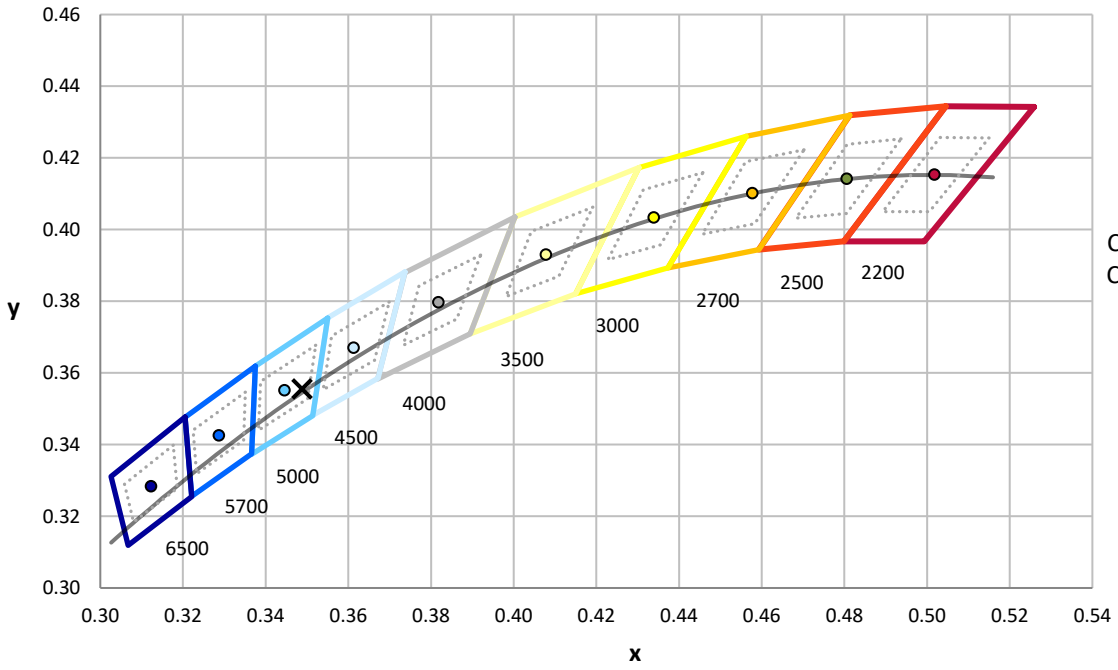
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

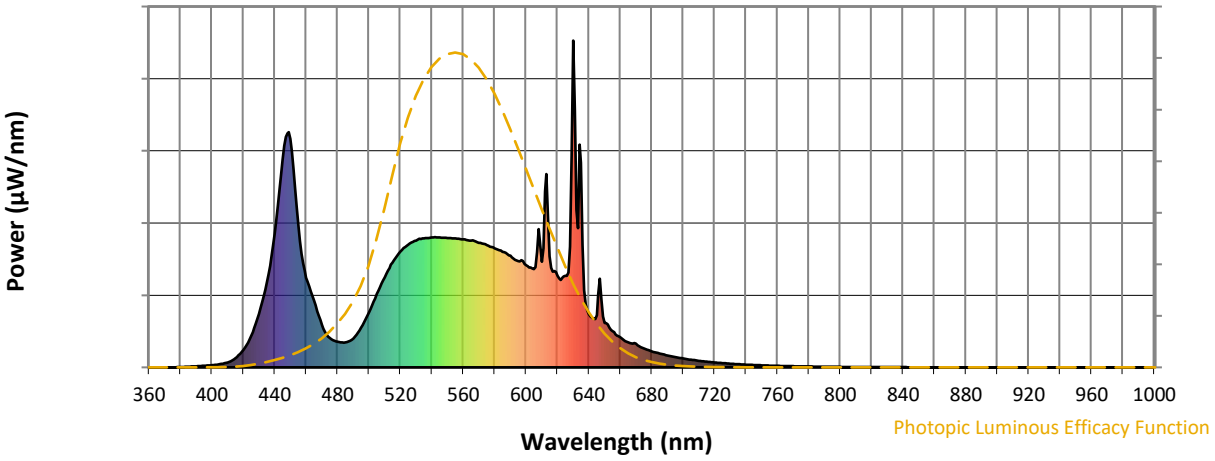


CCT = 4875K
CIE x = 0.3488
CIE y = 0.3555
Duv = 0.0005

Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-4

Photopic Flux vs. Wavelength

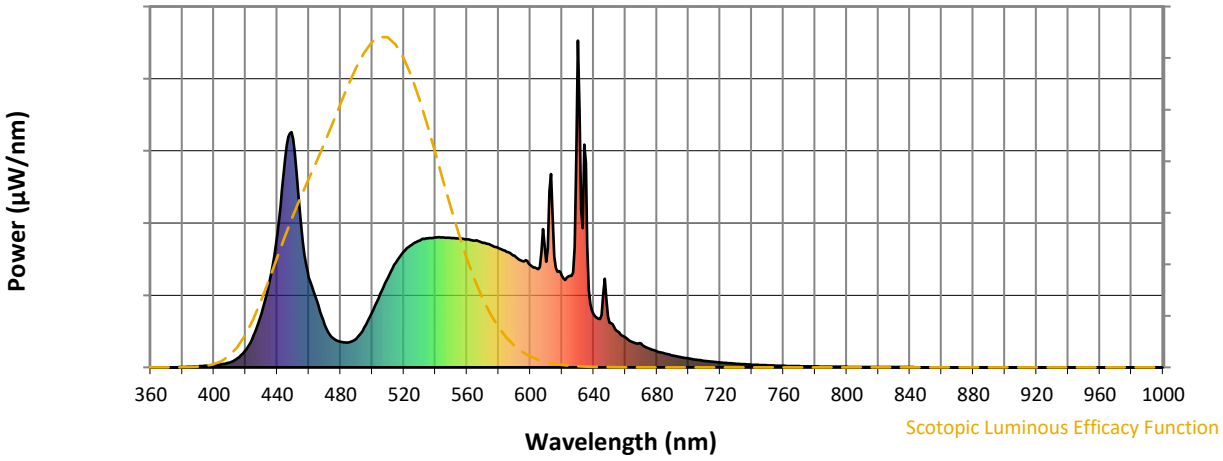


Photopic Lumens: NR

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

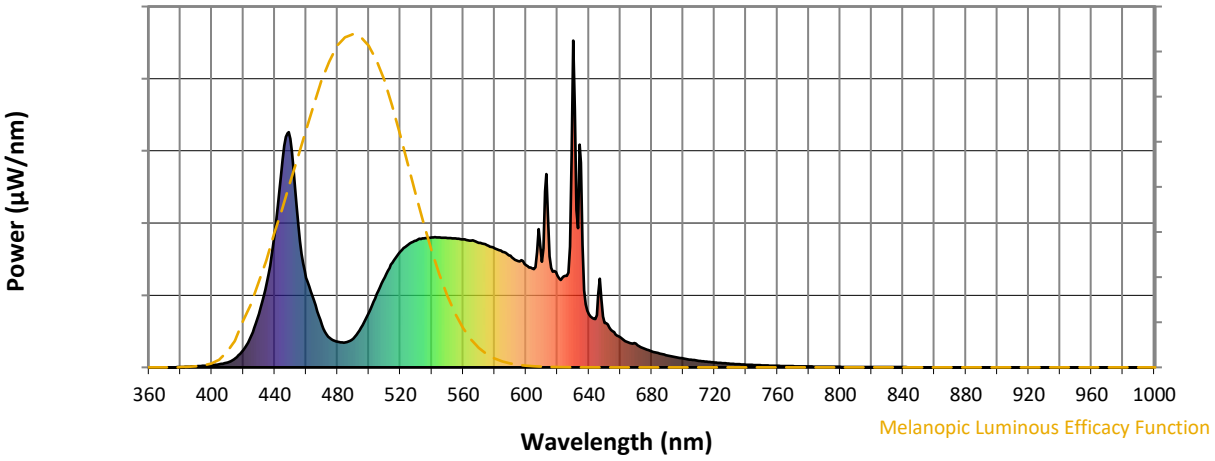


Scotopic Lumens: NR **S/P: 1.82**

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			

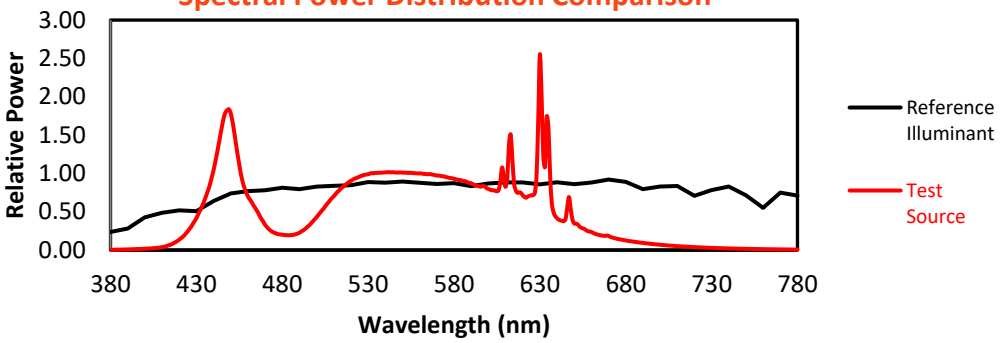
REPORT NUMBER: SP1-2506-472-4

TM-30-18

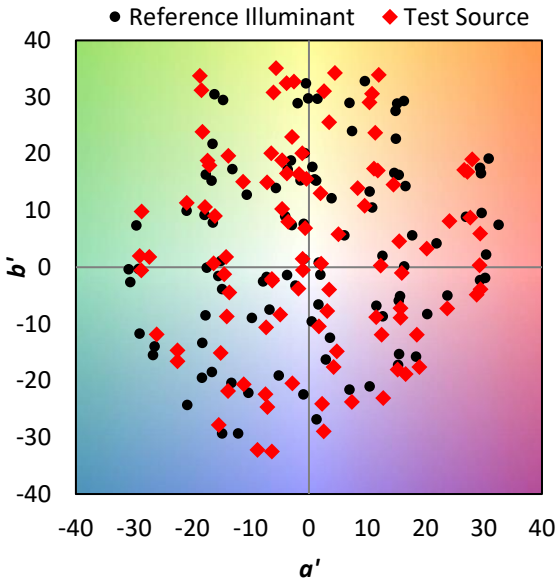
Summary

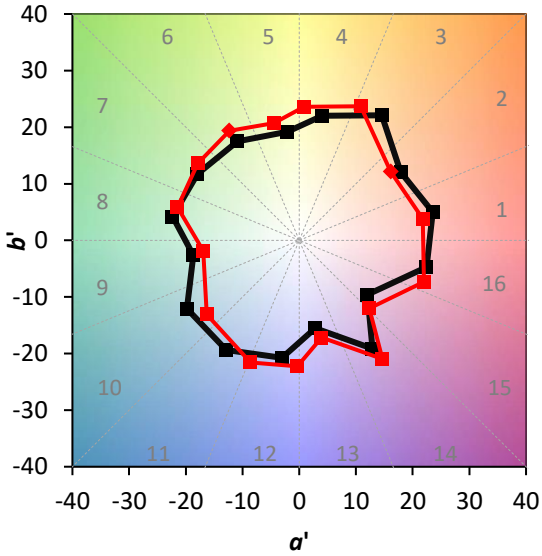
R_f = 80
R_g = 102.3
CIE R_a = 82.3
R_9 = 43.9

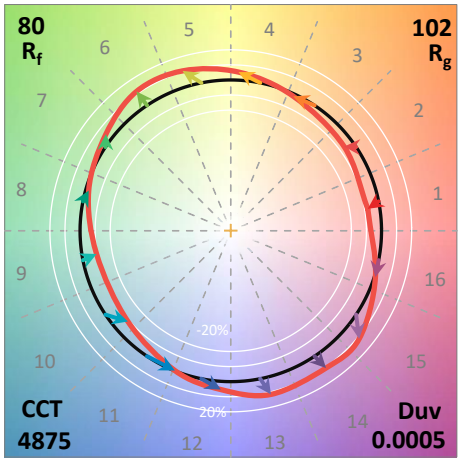
Spectral Power Distribution Comparison

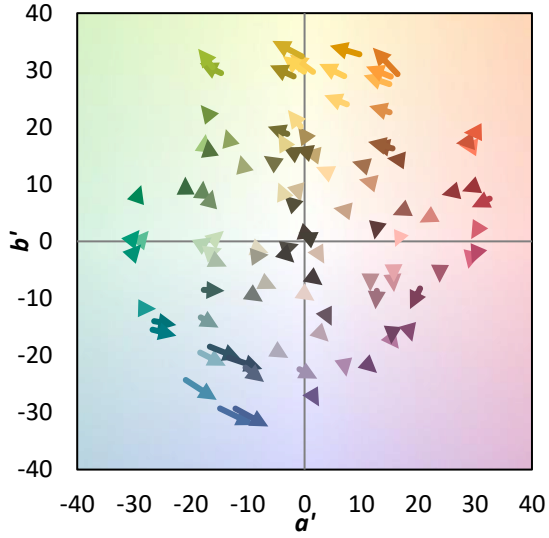


Color Vector Graphics







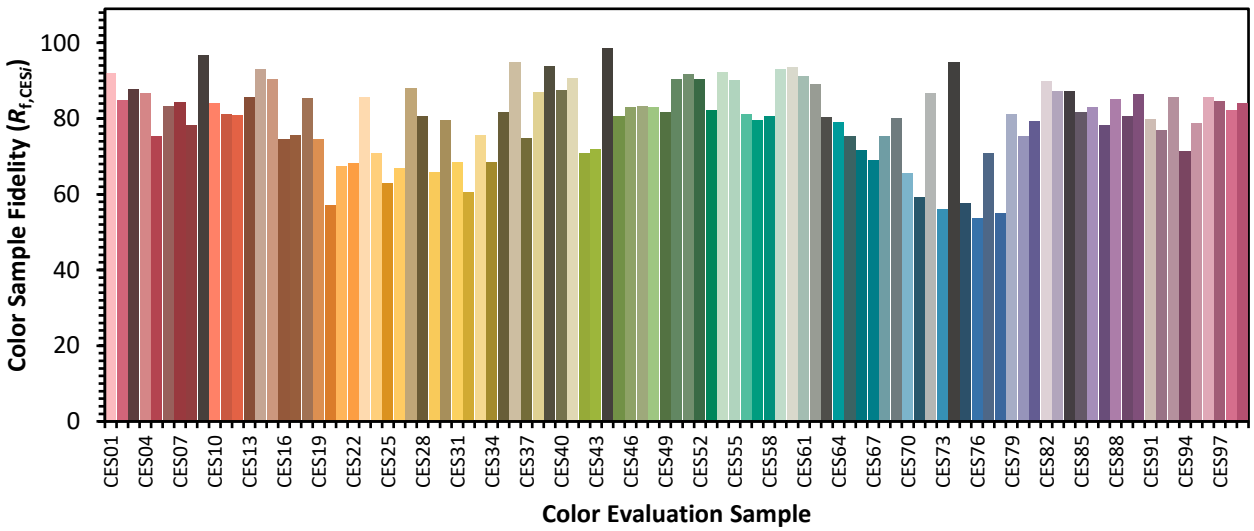


REPORT NUMBER: SP1-2506-472-4

TM-30-18

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

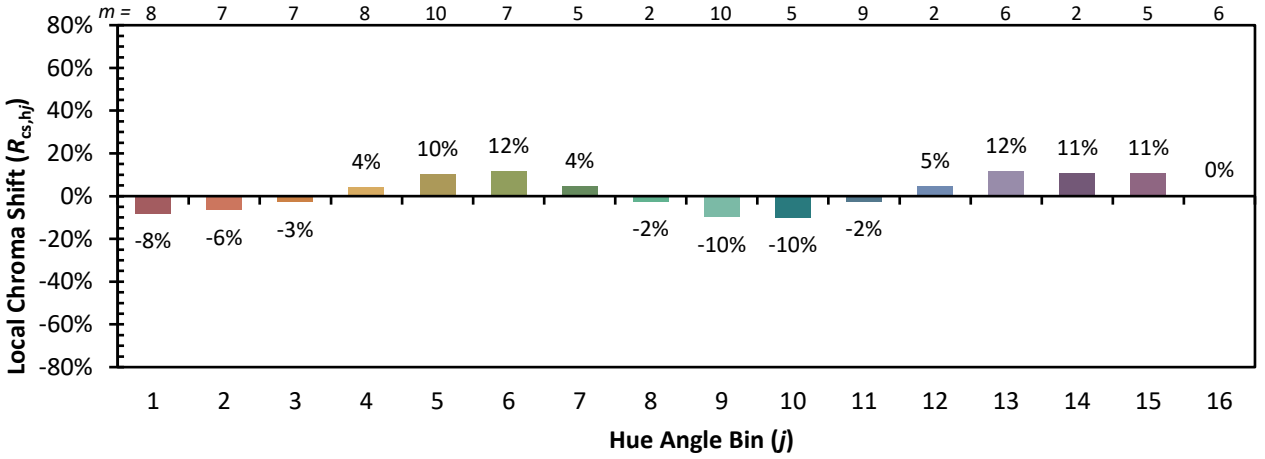
CES01 = 85	CES26 = 67	CES51 = 92	CES76 = 54
CES02 = 60	CES27 = 88	CES52 = 91	CES77 = 71
CES03 = 31	CES28 = 81	CES53 = 82	CES78 = 55
CES04 = 69	CES29 = 66	CES54 = 92	CES79 = 81
CES05 = 47	CES30 = 80	CES55 = 90	CES80 = 75
CES06 = 50	CES31 = 69	CES56 = 81	CES81 = 79
CES07 = 40	CES32 = 61	CES57 = 80	CES82 = 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	

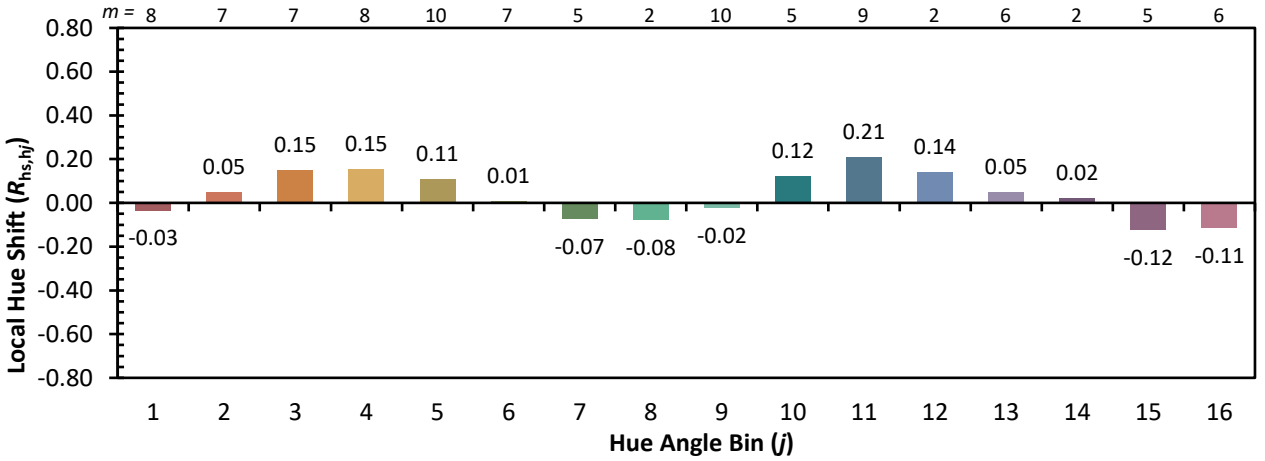


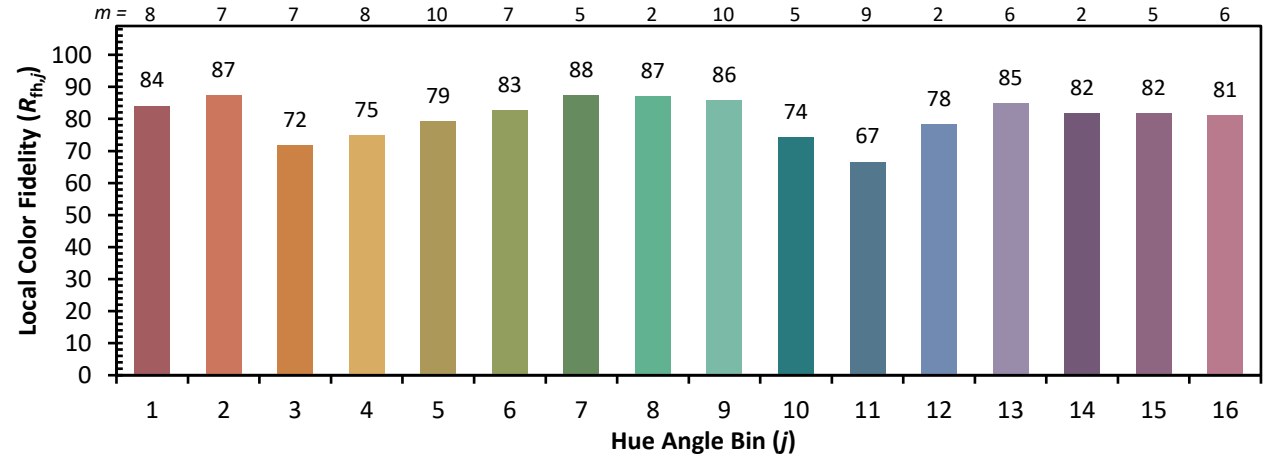
REPORT NUMBER: SP1-2506-472-4

TM-30-18

Color Rendition by Hue-Angle Bin



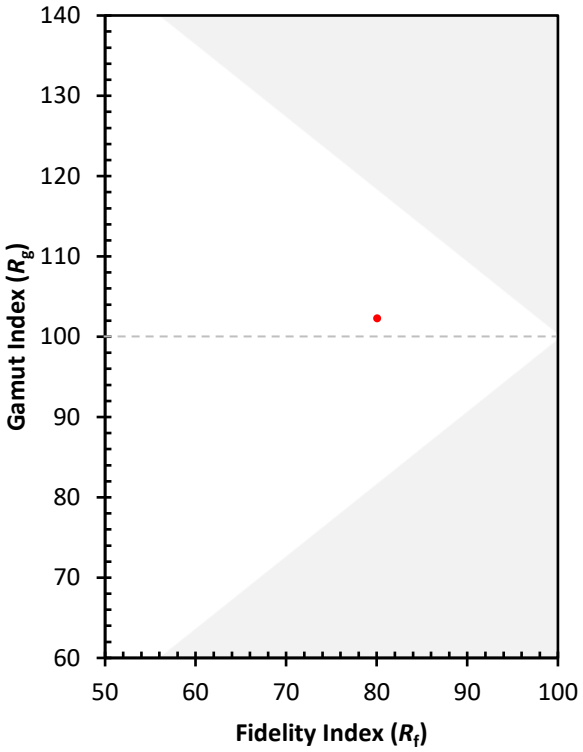


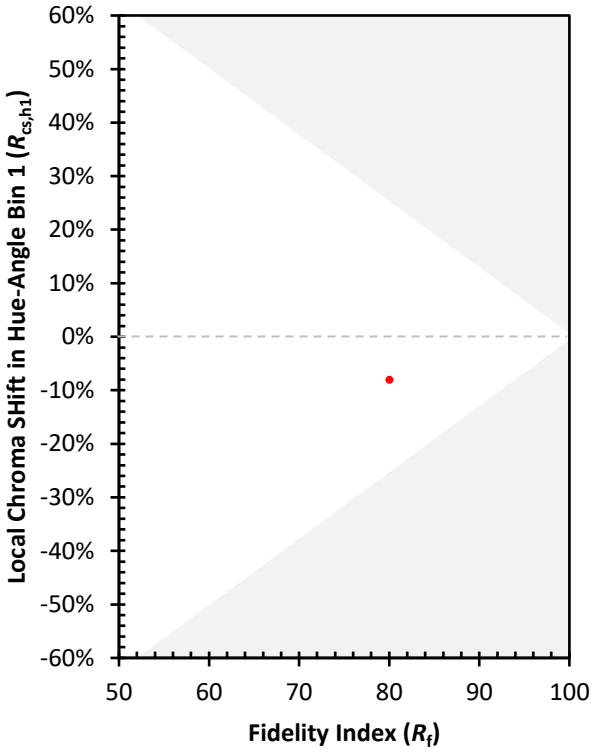


REPORT NUMBER: SP1-2506-472-4

TM-30-18

Measure Comparisons





(END OF REPORT)