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: P1432838

Luminaire Tested: EHBR1-12-UNV-A1-L850-UPL24

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:	P1432838
	REPORT IS A COMBINATION OF REPORTS P1431639 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-12-UNV-A1-L850-UPL24
Description:	Elevate Round Highbay at, 12000 lumens, 5000K 80CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	14444.7 lumens
Efficiency:	N/A
Efficacy:	177.9 lumens/watt
Spacing Criteria (0/90/45):	0.8 / 1.07 / 0.95
Luminous Opening:	Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type:	Semi-Direct

Input Watts (W):	81.2
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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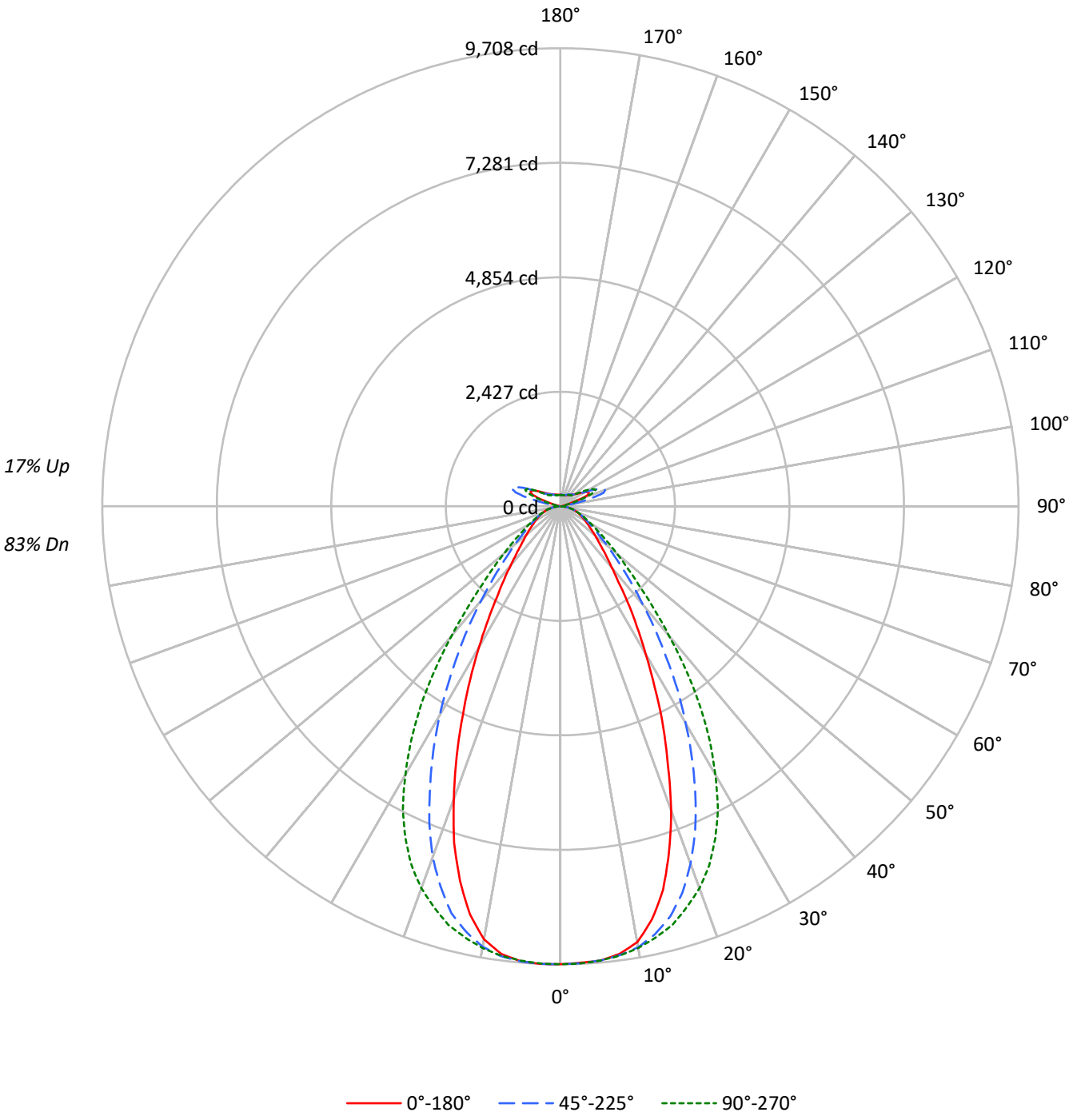
Scaled Data Report

TEST NUMBER: P1432838
CATALOG NUMBER: EHBR1-12-UNV-A1-L850-UPL24

Luminous Intensity Polar Plot



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TEST NUMBER: P1432838
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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	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	83
1	108	104	101	98	103	100	97	95	93	91	89	86	85	83	80	79	78	75
2	100	94	89	84	96	91	86	82	85	81	78	79	76	74	74	72	70	67
3	93	85	79	74	90	83	77	72	77	73	69	73	69	66	68	65	63	60
4	87	78	71	66	84	75	69	64	71	66	62	67	63	59	63	60	57	55
5	82	71	64	59	79	69	63	58	66	60	56	62	57	54	59	55	52	50
6	76	66	58	53	74	64	57	52	61	55	51	58	53	49	55	51	48	46
7	72	61	54	49	69	59	53	48	56	51	47	54	49	45	51	47	44	42
8	68	56	49	45	65	55	49	44	53	47	43	50	45	42	48	44	41	39
9	64	53	46	41	62	51	45	41	49	44	40	47	42	39	45	41	38	36
10	60	49	43	38	58	48	42	38	46	41	37	44	39	36	42	38	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	45569	45569	45569	45569	45569
5°	45267	45261	45263	45343	45315
10°	44148	44663	44734	44607	43859
15°	40080	42876	43759	42532	39159
20°	33399	39226	41906	38488	32099
25°	25830	33918	38875	32679	24491
30°	18827	27622	34149	26574	17871
35°	13571	21290	28065	20373	12685
40°	9764	15724	20683	15061	9463
45°	7694	11504	14445	11005	7427
50°	6384	8643	10455	8358	6286
55°	5575	6825	7918	6711	5499
60°	5028	5697	6309	5661	5063
65°	4703	5025	5302	5041	4747
70°	4465	4572	4713	4597	4510
75°	4166	4139	4166	4151	4208
80°	3762	3492	3416	3545	3762
85°	2607	2211	2188	2246	2683

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 15135 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	916.3	6.3
10°-20°	2462.8	17.0
20°-30°	2994.8	20.7
30°-40°	2439.4	16.9
40°-50°	1464.7	10.1
50°-60°	842.9	5.8
60°-70°	527.5	3.7
70°-80°	310.7	2.2
80°-90°	95.1	0.7
90°-100°	63.0	0.4
100°-110°	416.7	2.9
110°-120°	770.8	5.3
120°-130°	457.3	3.2
130°-140°	275.8	1.9
140°-150°	190.4	1.3
150°-160°	123.5	0.9
160°-170°	70.1	0.5
170°-180°	23.1	0.2
0°-30°	6373.9	44.1
0°-40°	8813.3	61.0
0°-60°	11120.9	77.0
0°-90°	12054.2	83.5
90°-120°	1250.4	8.7
90°-150°	2173.9	15.0
90°-180°	2391.0	16.6
0°-180°	14444.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9704	9704	9704	9704	9704	
5°	9665	9664	9664	9681	9676	913
15°	8408	8995	9180	8923	8215	2313
25°	5158	6773	7763	6526	4891	2350
35°	2491	3907	5151	3739	2328	1576
45°	1245	1861	2337	1780	1202	982
55°	753	922	1070	907	743	681
65°	491	524	553	526	496	488
75°	294	292	294	292	296	311
85°	90	76	75	77	92	96
90°	18	48	17	50	18	13
95°	30	108	33	92	29	28
105°	145	729	191	777	95	194
115°	667	862	820	953	699	614
125°	481	461	524	510	548	439
135°	352	353	330	369	381	275
145°	290	303	298	306	311	184
155°	255	264	264	264	275	119
165°	241	247	245	244	252	69
175°	240	243	242	240	245	23
180°	242	242	242	242	242	

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Scaled Data Report

TEST NUMBER: P1432838
CATALOG NUMBER: EHBR1-12-UNV-A1-L850-UPL24

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	9703.5	9703.5	9703.5	9703.5	9703.5	9703.5	*9703.5*	9703.5	9703.5
2.5°	*9682.1*	*9690.9*	*9694.5*	*9696.6*	*9698.8*	*9704.9*	*9707.5*	*9703.3*	*9706.9*
5°	9665.2	9665.8	9663.9	9673.0	9664.3	9670.4	*9681.4*	9677.0	9675.5
7.5°	9566.9	9587.2	9599.2	9602.3	9603.8	9611.4	*9619.1*	9575.5	9568.9
10°	9379.9	9413.9	9489.2	9510.8	9504.3	9516.5	*9477.4*	9363.3	9318.5
12.5°	8970.0	9089.3	9285.2	9372.4	9356.5	9367.3	*9234.4*	8993.3	8854.7
15°	8408.5	8583.4	8995.2	9167.1	9180.4	9167.1	*8923.0*	8453.4	8215.4
17.5°	7661.9	7985.1	8591.4	8925.1	8905.9	8912.3	*8448.9*	7754.7	7482.3
20°	6864.5	7209.0	8062.1	8618.8	8612.9	8577.5	*7910.4*	6994.8	6597.2
22.5°	5962.6	6406.8	7455.7	8242.2	8239.9	8181.0	*7254.5*	6164.9	5736.9
25°	5158.2	5593.8	6773.3	7780.9	7763.4	7696.3	*6525.9*	5337.1	4890.9
27.5°	4326.4	4779.5	6044.6	7240.2	7228.3	7155.1	*5829.4*	4563.5	4138.7
30°	3621.4	4035.7	5313.0	6645.4	6568.5	6560.2	*5111.4*	3847.1	3437.4
32.5°	3017.4	3372.5	4623.2	6023.3	5887.3	5926.1	*4395.8*	3247.9	2841.8
35°	2490.8	2803.6	3907.4	5303.8	5151.0	5201.2	*3739.1*	2665.0	2328.2
37.5°	2021.6	2322.4	3300.7	4604.1	4370.4	4465.0	*3161.5*	2225.6	1955.8
40°	1692.3	1930.9	2725.4	3836.3	3584.9	3739.1	*2610.4*	1856.4	1640.1
42.5°	1458.2	1613.9	2249.4	3103.2	2910.4	3019.7	*2151.4*	1551.9	1390.2
45°	1244.8	1369.0	1861.3	2448.8	2337.2	2438.7	*1780.5*	1323.3	1201.7
47.5°	1087.3	1183.0	1532.2	1977.5	1908.2	1940.2	*1487.1*	1154.8	1056.0
50°	951.4	1025.3	1288.1	1596.0	1558.2	1578.0	*1245.7*	1004.8	936.9
52.5°	845.7	899.9	1080.4	1311.7	1293.0	1296.0	*1061.5*	883.9	834.7
55°	753.4	791.2	922.3	1074.5	1070.0	1070.8	*906.9*	783.3	743.2
57.5°	672.7	704.0	792.6	902.5	896.1	897.5	*785.3*	695.7	669.8
60°	604.4	625.3	684.9	762.8	758.4	756.7	*680.6*	617.7	608.7
62.5°	543.9	557.3	598.5	653.8	645.7	647.5	*598.3*	557.8	544.7
65°	490.9	495.5	524.5	558.7	553.4	557.8	*526.2*	498.5	495.5
67.5°	439.0	443.7	460.7	483.7	477.6	481.2	*461.1*	444.9	442.2
70°	391.8	391.6	401.2	413.5	413.5	414.2	*403.4*	393.7	395.7
72.5°	343.0	341.8	344.7	353.0	350.8	358.5	*347.1*	344.1	344.5
75°	293.5	290.0	291.6	295.9	293.5	297.5	*292.4*	296.4	296.4
77.5°	246.8	240.3	238.2	238.8	234.4	240.5	*241.6*	244.3	250.4
80°	197.9	188.8	183.7	183.5	179.7	183.5	*186.5*	192.0	197.9
82.5°	147.0	139.0	130.4	128.9	126.4	128.7	*132.7*	139.2	148.7
85°	89.6	81.3	76.0	73.2	75.2	75.2	*77.2*	86.3	92.2
87.5°	32.3	28.3	23.2	23.4	24.0	24.8	*25.8*	32.5	35.6
90°	17.7	27.9	47.8	30.5	17.3	29.2	*50.5*	26.5	17.5
92.5°	25.4	42.5	77.0	39.8	22.6	39.8	*71.7*	35.9	24.1
95°	29.6	49.1	107.6	53.1	33.2	49.1	*91.6*	39.8	29.4
97.5°	37.5	54.4	123.5	65.0	51.8	61.1	*103.5*	42.5	36.1
100°	49.5	63.8	192.5	79.7	69.1	69.1	*189.9*	49.1	41.6
102.5°	84.0	135.5	408.9	150.0	104.9	135.5	*440.8*	99.6	50.9
105°	145.1	285.5	728.9	314.6	191.2	310.7	*776.7*	260.2	94.7
107.5°	251.3	511.2	961.2	557.7	362.5	580.1	*1001.1*	515.1	223.5
110°	469.0	678.4	1007.6	766.1	580.1	811.2	*1092.6*	706.3	454.4

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Scaled Data Report

TEST NUMBER: P1432838
CATALOG NUMBER: EHBR1-12-UNV-A1-L850-UPL24

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	633.7	728.9	965.2	845.7	755.4	904.1	*1067.5*	783.3	629.7
115°	666.9	701.0	861.7	825.8	820.5	890.8	*953.2*	780.6	698.7
117.5°	644.5	640.0	731.5	742.1	792.6	815.2	*823.2*	732.9	702.7
120°	596.6	569.5	610.7	647.9	715.6	706.3	*693.0*	662.7	662.9
122.5°	536.9	504.7	523.1	551.0	618.7	598.8	*585.5*	591.0	608.6
125°	481.2	448.9	460.7	467.4	524.4	504.5	*510.0*	530.0	547.5
127.5°	432.1	410.4	416.9	408.9	444.8	435.5	*455.6*	478.4	493.1
130°	398.9	380.1	389.2	370.4	387.9	390.6	*417.3*	435.8	445.4
132.5°	371.2	359.0	369.6	346.9	352.3	363.1	*388.3*	404.4	409.7
135°	351.5	340.7	352.6	331.1	330.1	346.0	*368.6*	379.2	380.6
137.5°	334.2	324.9	336.8	320.9	317.0	332.9	*350.2*	358.1	355.7
140°	318.7	310.5	323.8	311.9	309.2	325.1	*333.1*	342.6	339.9
142.5°	301.8	296.4	312.1	304.1	301.5	316.3	*320.3*	326.9	324.5
145°	290.0	285.9	303.0	299.1	297.7	308.5	*305.9*	315.4	311.4
147.5°	280.0	277.1	292.6	291.3	291.3	299.3	*295.5*	303.6	299.9
150°	270.8	268.0	283.5	282.2	283.5	288.8	*283.7*	293.4	292.2
152.5°	261.8	258.9	273.1	271.6	272.9	278.2	*273.3*	284.1	283.2
155°	255.3	252.5	264.0	263.6	263.6	266.5	*264.2*	275.2	275.4
157.5°	250.6	248.8	257.8	257.4	257.4	258.9	*258.0*	267.7	267.9
160°	247.0	245.3	252.8	252.5	251.1	253.9	*253.0*	261.4	261.6
162.5°	243.5	241.6	250.4	248.8	248.6	248.8	*247.9*	256.5	256.8
165°	241.1	240.6	246.8	246.4	245.1	246.4	*244.3*	250.1	251.7
167.5°	241.3	239.7	245.7	245.3	243.9	242.6	*243.2*	247.6	249.2
170°	240.1	239.9	244.5	242.8	241.3	241.4	*240.9*	245.2	246.8
172.5°	240.5	240.3	245.0	243.2	241.6	241.8	*239.9*	242.9	245.8
175°	239.8	239.4	242.9	242.3	242.1	241.1	*240.3*	242.0	245.1
177.5°	241.3	240.9	243.1	242.5	241.1	241.3	*241.8*	243.5	247.9
180°	241.8	241.8	241.8	241.8	241.8	241.8	*241.8*	241.8	241.8

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Scaled Data Report

TEST NUMBER: P1432838
CATALOG NUMBER: EHBR1-12-UNV-A1-L850-UPL24

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	13.88	14.90	14.51	15.52	16.23	14.86	15.89	15.49	16.50	17.21
	3H	15.35	16.26	15.99	16.89	17.64	16.12	17.03	16.76	17.66	18.40
	4H	15.95	16.80	16.61	17.44	18.20	16.61	17.46	17.27	18.11	18.86
	6H	16.41	17.19	17.08	17.85	18.62	16.96	17.74	17.63	18.40	19.17
	8H	16.55	17.29	17.24	17.97	18.74	17.05	17.80	17.74	18.47	19.24
	12H	16.62	17.33	17.31	18.00	18.80	17.09	17.80	17.78	18.46	19.26
4H	2H	14.38	15.24	15.05	15.88	16.64	15.16	16.02	15.83	16.66	17.42
	3H	16.06	16.76	16.73	17.45	18.22	16.65	17.35	17.32	18.03	18.81
	4H	16.77	17.41	17.46	18.10	18.90	17.26	17.90	17.96	18.59	19.40
	6H	17.35	17.90	18.06	18.61	19.43	17.74	18.28	18.45	19.00	19.82
	8H	17.53	18.04	18.25	18.75	19.58	17.87	18.38	18.59	19.09	19.92
	12H	17.63	18.09	18.37	18.83	19.66	17.93	18.39	18.67	19.12	19.95
8H	4H	16.99	17.50	17.71	18.21	19.04	17.44	17.95	18.15	18.66	19.49
	6H	17.68	18.10	18.42	18.85	19.68	18.02	18.44	18.76	19.19	20.02
	8H	17.93	18.30	18.69	19.06	19.91	18.21	18.59	18.97	19.34	20.19
	12H	18.09	18.42	18.85	19.16	20.07	18.33	18.66	19.09	19.40	20.31
12H	4H	16.99	17.44	17.72	18.18	19.01	17.43	17.88	18.16	18.62	19.45
	6H	17.70	18.08	18.46	18.83	19.68	18.04	18.41	18.80	19.17	20.02
	8H	17.99	18.32	18.75	19.06	19.97	18.27	18.60	19.03	19.34	20.25

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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

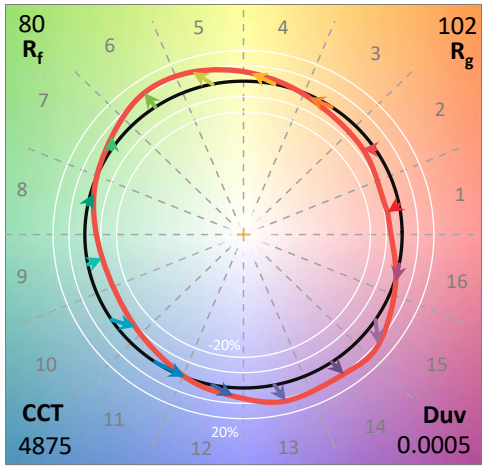
Test Information

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
CIE u':	0.2124
CIE v':	0.4871
Duv:	0.0005
CIE x:	0.3488
CIE y:	0.3555
CIE z:	0.2957
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	573
Purity:	11.33556
Rf:	80
Rg:	102.3

CRI (Ra):	82.3				
R1:	85.0	R9:	43.9		
R2:	83.1	R10:	57.4		
R3:	78.8	R11:	83.1		
R4:	84.0	R12:	51.0		
R5:	83.0	R13:	83.4		
R6:	76.3	R14:	87.4		
R7:	86.8	R15:	83.4		
R8:	81.7				



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

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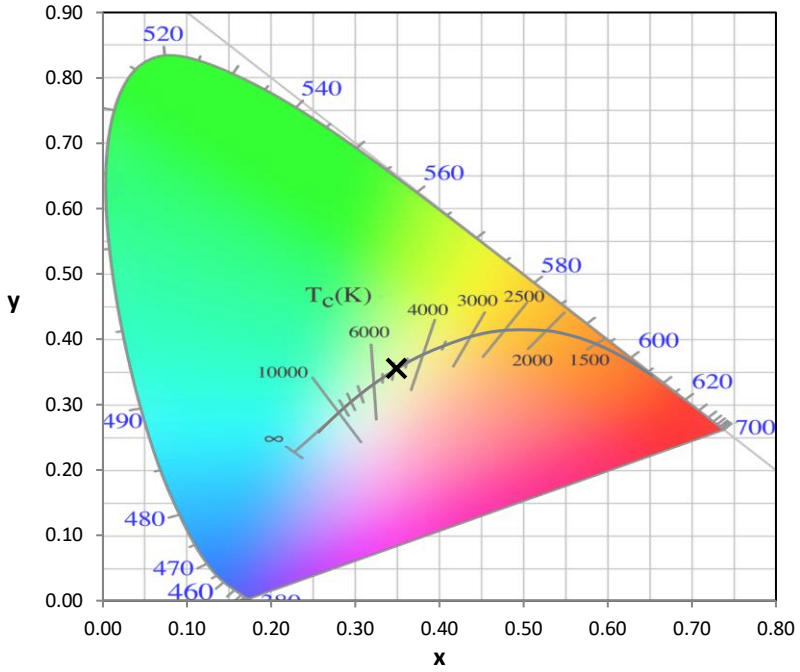
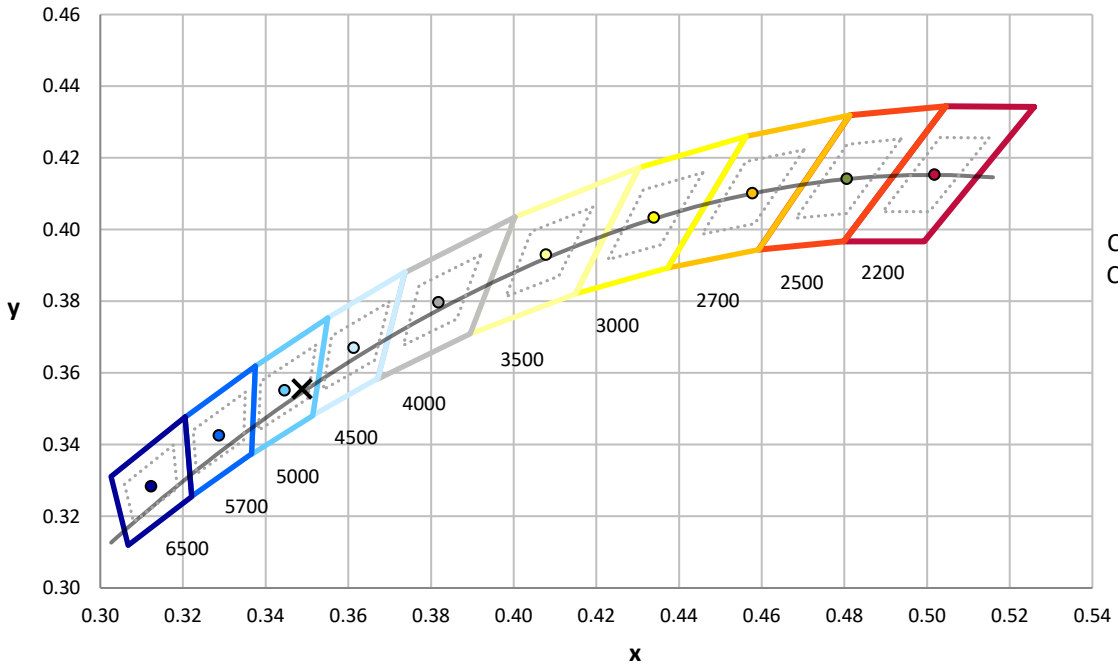
CIE 1931 Chromaticity Diagram



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

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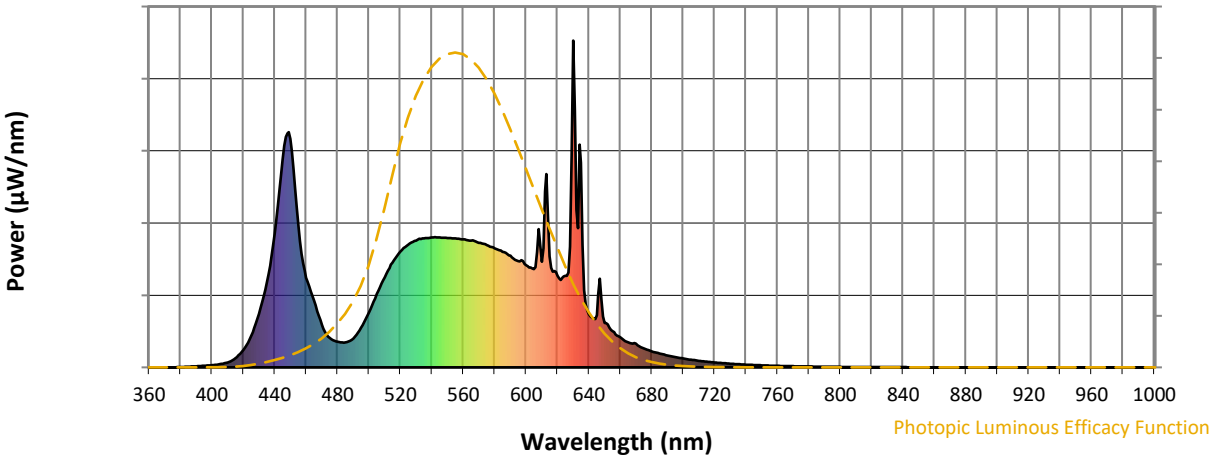
Photopic Flux vs. Wavelength



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			

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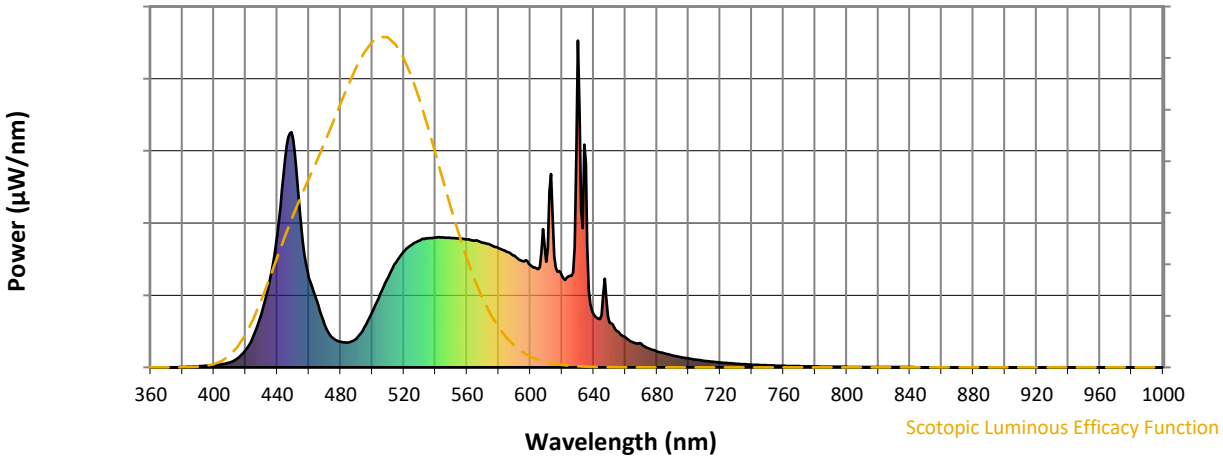
Scotopic Flux vs. Wavelength



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			

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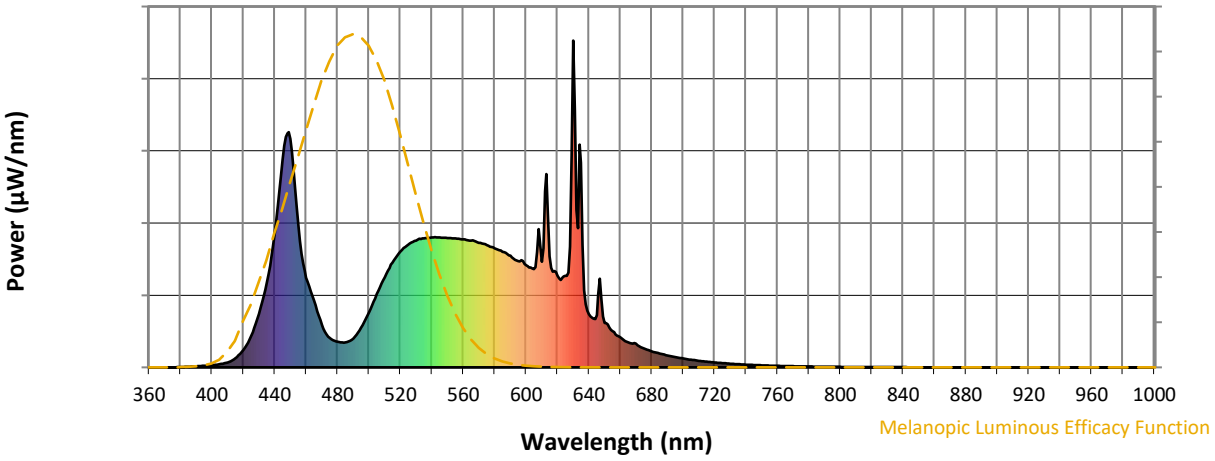
Melanopic Flux vs. Wavelength



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			

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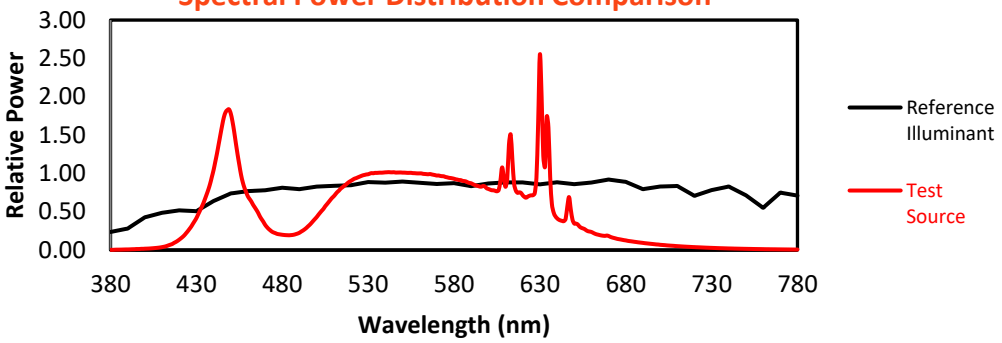
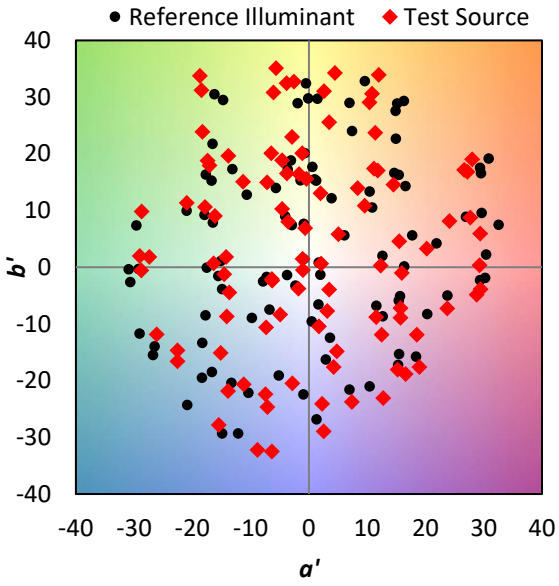
Summary

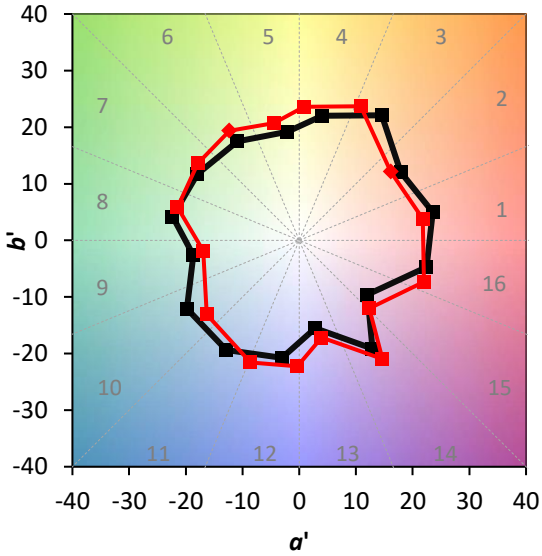
R_f = 80
R_g = 102.3
CIE R_a = 82.3
R_9 = 43.9

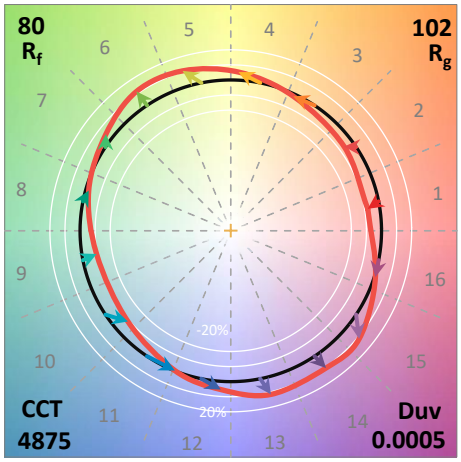
Spectral Power Distribution Comparison

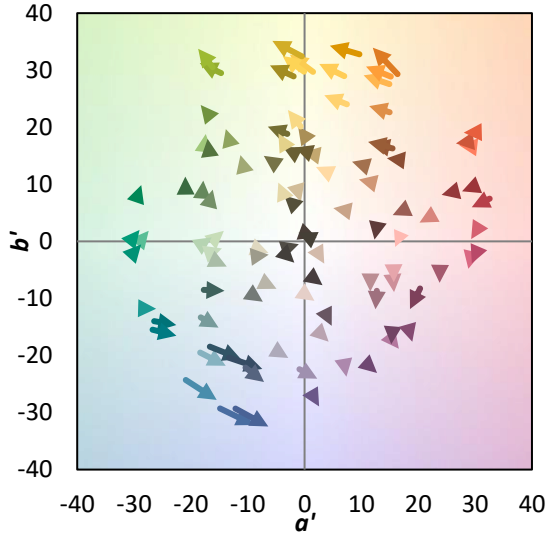


Color Vector Graphics









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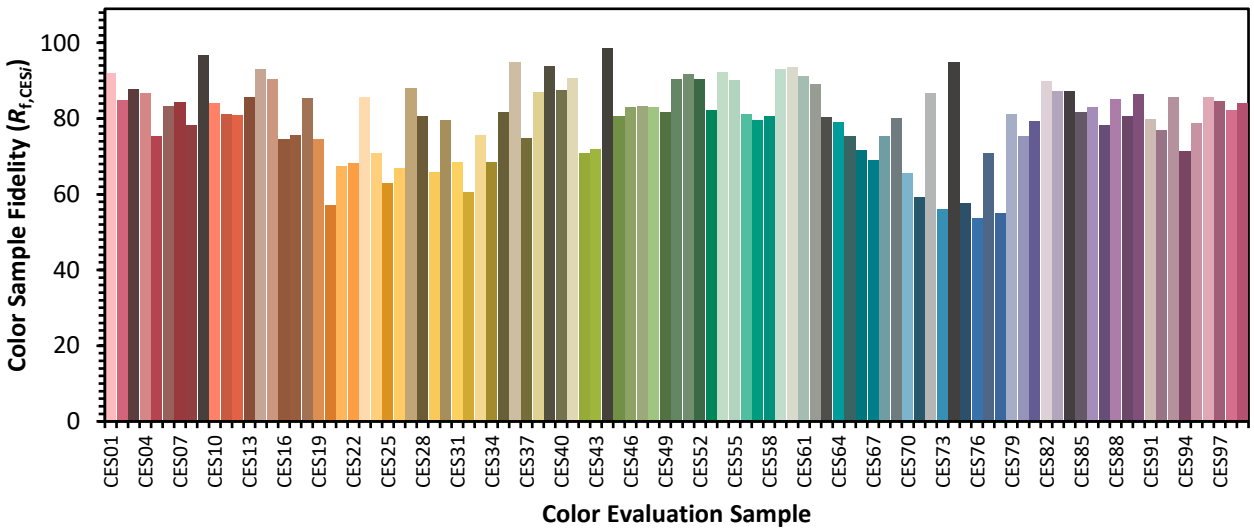
Individual Sample Fidelity Index ($R_{f,i}$)

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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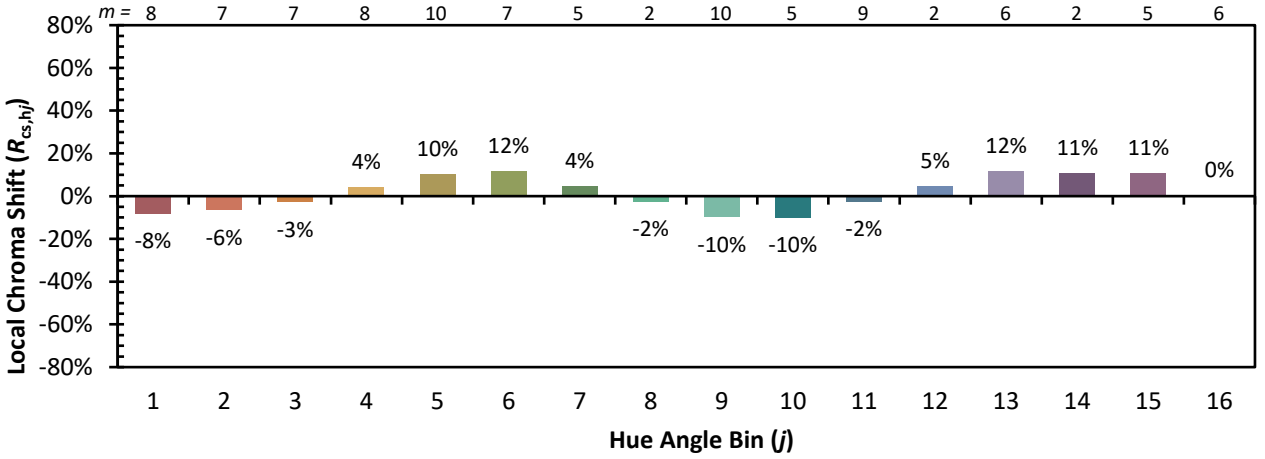
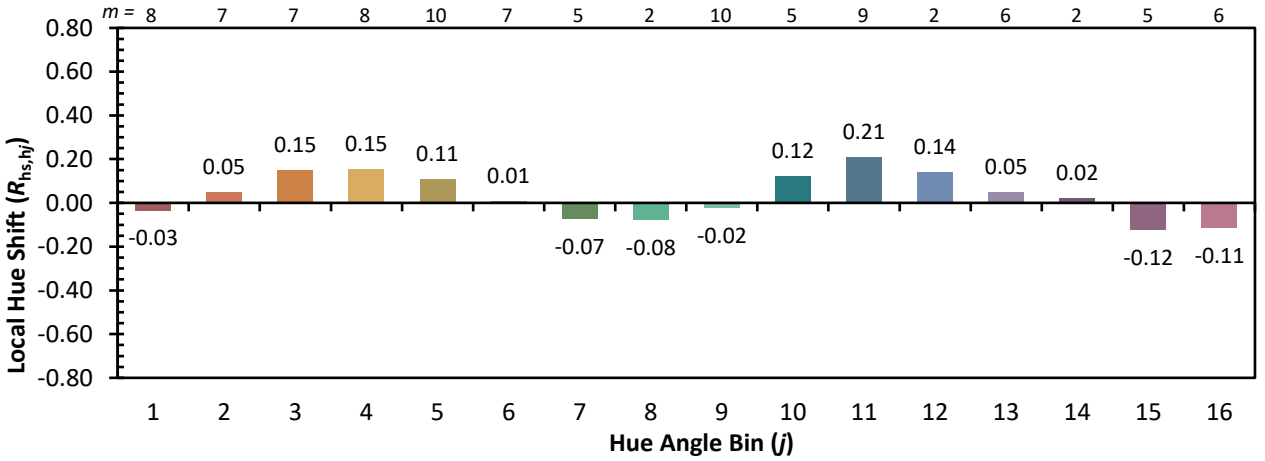
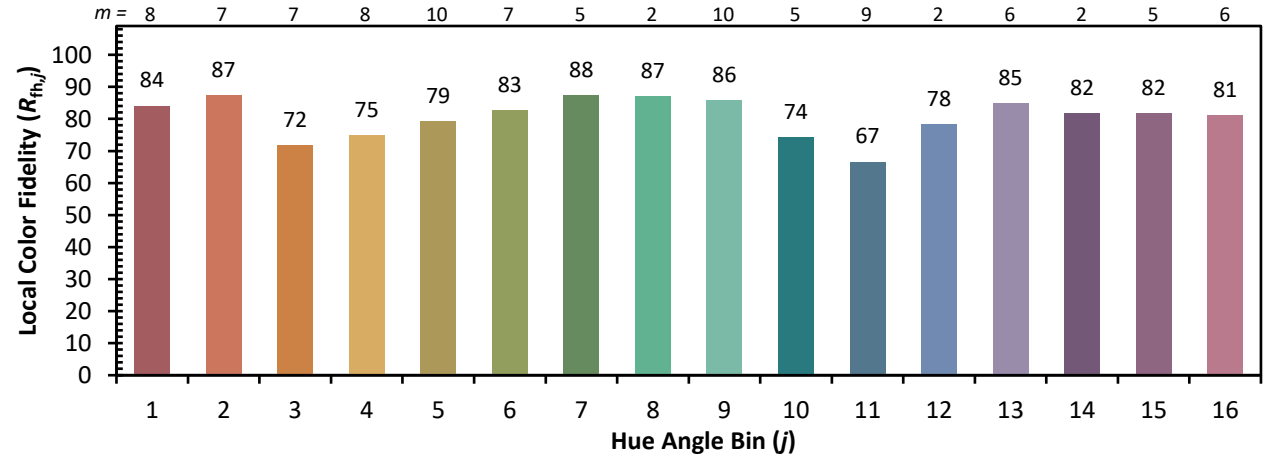
Color Rendition by Hue-Angle Bin







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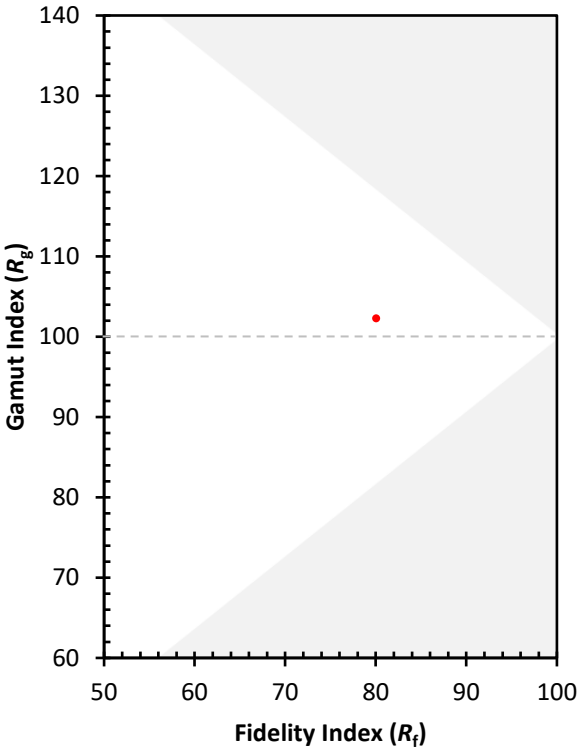
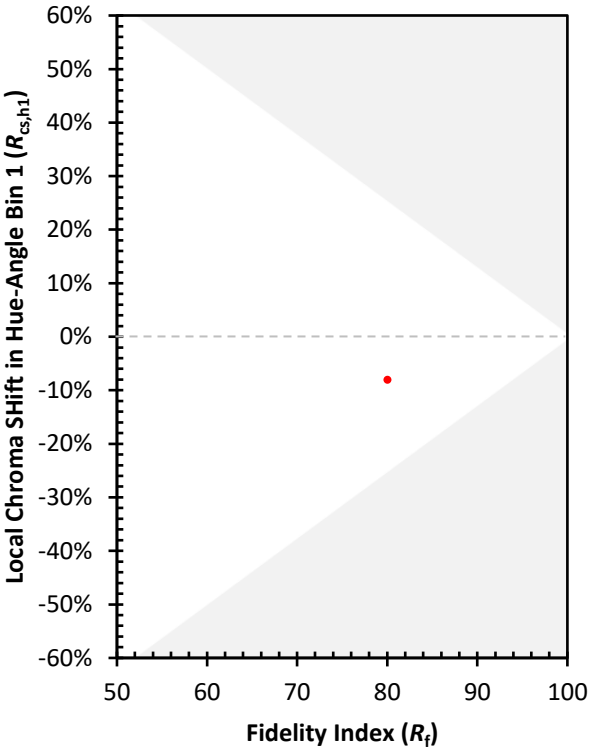
Measure Comparisons





(END OF REPORT)