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: P1432498

Luminaire Tested: EHBR1-54-UNV-ASM-L830

Issue Date: 3/13/2026

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:	P1432498
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-654-4)
Test Lab:	INNOVATION CENTER
Issue Date:	3/13/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-54-UNV-ASM-L830
Description:	Elevate Round Highbay at, 53000 lumens, 3000K 80CRI LEDs with ASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	50339.6 lumens
Efficiency:	N/A
Efficacy:	170.1 lumens/watt
Spacing Criteria (0/90/45):	0.84 / 0.99 / 0.92
Luminous Opening:	Circular (Dia: 1.71' x H: 0')
CIE Type:	Direct

Input Watts (W):	296
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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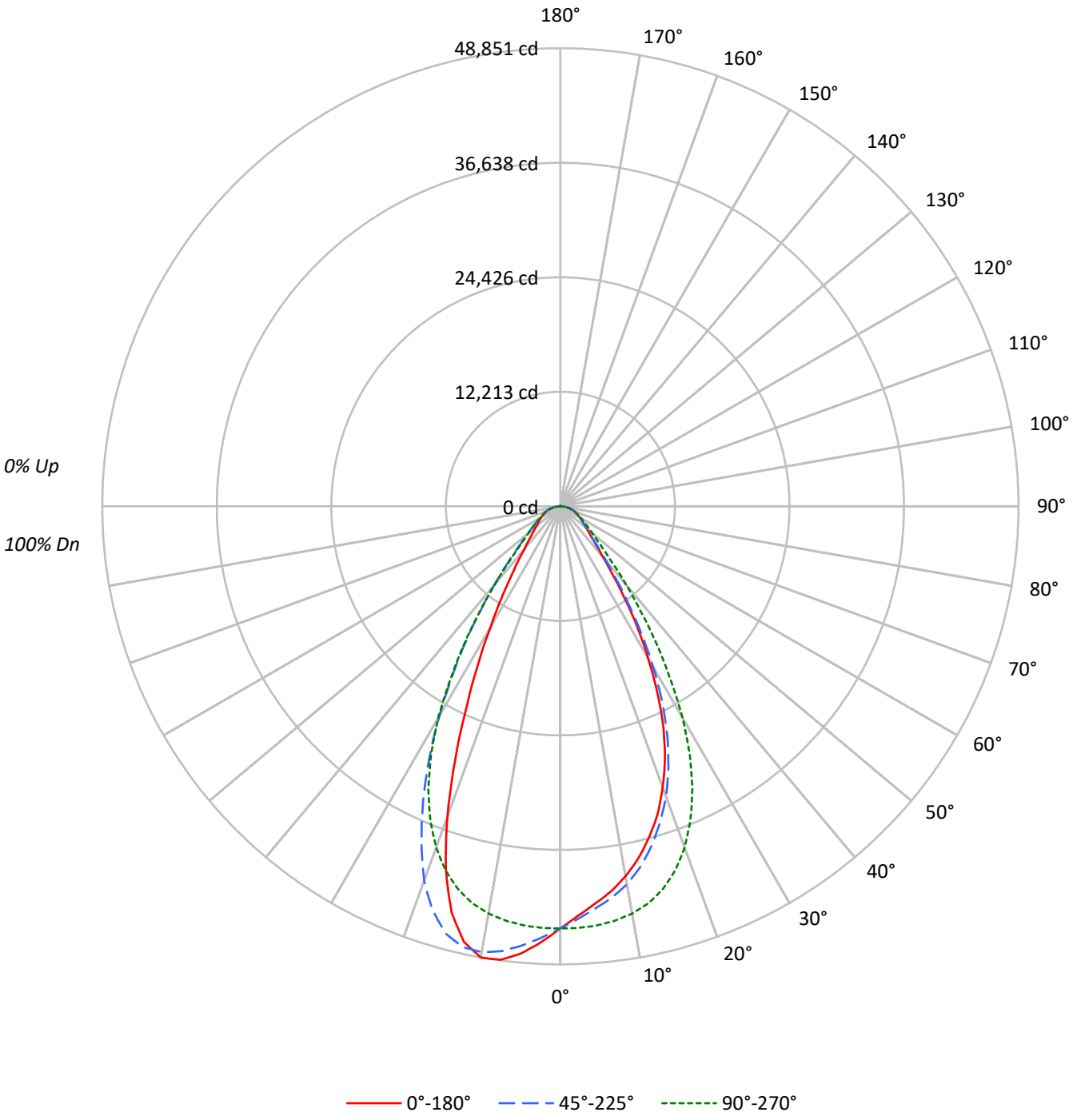
Scaled Data Report

TEST NUMBER: P1432498
CATALOG NUMBER: EHBR1-54-UNV-ASM-L830

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	93	84	77	72	91	83	77	72	80	75	71	78	74	70	76	72	69	67
5	87	78	71	66	86	77	70	65	75	69	65	73	68	64	71	67	64	62
6	82	72	65	60	81	71	65	60	70	64	60	68	63	59	67	62	59	57
7	78	67	60	56	76	67	60	56	65	59	55	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	52	61	55	51	60	55	51	59	54	51	49
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46
10	66	56	49	45	65	55	49	45	54	49	45	54	48	45	53	48	45	43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	211420	211420	211420	211420	211420
5°	200528	202872	211504	221648	225635
10°	191031	195077	210278	230268	232950
15°	177650	182395	205445	229443	217942
20°	159347	164713	193490	212382	175986
25°	134531	139623	172526	179464	122839
30°	101461	107344	141205	139795	80555
35°	68138	72251	102166	100516	52627
40°	43394	46375	66703	67133	36630
45°	31268	32569	42801	44639	28695
50°	26391	26601	32207	33046	24708
55°	23673	23729	26721	27426	22871
60°	22367	22178	23612	24112	22233
65°	21932	21735	22110	22542	22026
70°	22128	21745	21768	22186	22418
75°	22318	21644	21599	22363	23007
80°	22600	21027	21116	22600	24177
85°	21423	17786	17786	20335	22469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
Vertical Angle: 45°
Luminance: 60175 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4280.7	8.5
10°-20°	11646.1	23.1
20°-30°	13658.4	27.1
30°-40°	9498.6	18.9
40°-50°	4720.3	9.4
50°-60°	2823.3	5.6
60°-70°	1987.1	3.9
70°-80°	1280.1	2.5
80°-90°	406.6	0.8
90°-100°	2.3	0.0
100°-110°	2.8	0.0
110°-120°	2.9	0.0
120°-130°	3.6	0.0
130°-140°	4.9	0.0
140°-150°	5.9	0.0
150°-160°	6.6	0.0
160°-170°	6.5	0.0
170°-180°	2.8	0.0
0°-30°	29585.3	58.8
0°-40°	39083.8	77.6
0°-60°	46627.5	92.6
0°-90°	50301.2	99.9
90°-120°	8.0	0.0
90°-150°	22.5	0.0
90°-180°	38.0	0.1
0°-180°	50339.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	45020	45020	45020	45020	45020	
5°	42538	43036	44867	47019	47864	3990
15°	36540	37516	42257	47193	44828	10190
25°	25963	26946	33296	34635	23707	11715
35°	11886	12603	17821	17533	9180	7571
45°	4708	4904	6445	6722	4321	3806
55°	2891	2898	3264	3350	2794	2623
65°	1974	1956	1990	2029	1982	1960
75°	1230	1193	1190	1232	1268	1298
85°	398	330	330	377	417	409
90°	1	1	1	2	7	20
95°	1	1	2	2	7	1
105°	2	1	2	3	8	2
115°	2	2	2	3	8	2
125°	2	3	3	5	8	2
135°	3	6	7	7	9	3
145°	9	10	10	8	11	6
155°	16	14	14	14	15	7
165°	24	22	23	24	28	6
175°	29	29	30	32	36	3
180°	31	31	31	31	31	

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TEST NUMBER: P1432498
CATALOG NUMBER: EHBR1-54-UNV-ASM-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	45020.4	45020.4	45020.4	45020.4	45020.4	45020.4	45020.4	45020.4	45020.4
2.5°	43684.1	43712.7	44018.3	44415.9	44994.3	45575.9	46046.9	46357.6	46511.3
5°	42538.5	42697.2	43035.7	43765.9	44866.8	46031.8	47018.7	47664.4	47864.5
7.5°	41422.4	41514.5	42080.9	43003.7	44562.0	46377.0	47843.4	48597.3	48781.4
10°	40060.7	40269.2	40909.2	41997.3	44096.9	46594.8	48289.1	48829.4	48851.4
12.5°	38458.5	38734.5	39395.5	40768.2	43354.8	46517.2	48139.7	47962.5	47559.8
15°	36540.4	36782.7	37516.3	39108.4	42257.4	46057.0	47193.4	45750.6	44827.9
17.5°	34468.7	34688.2	35325.6	37079.0	40710.8	45196.0	45217.9	42363.7	40623.0
20°	31885.5	32057.7	32959.3	34679.8	38717.6	43814.8	42497.9	37277.4	35215.0
22.5°	29136.8	29298.0	30099.2	31889.7	36218.8	41952.6	38710.0	32160.7	29347.0
25°	25963.4	26051.2	26946.0	28565.2	33296.2	39670.8	34635.0	26585.6	23706.9
27.5°	22393.2	22542.7	23478.9	25132.7	29858.5	36778.5	30295.9	21724.7	19068.8
30°	18710.9	18958.2	19795.7	21276.4	26040.2	33070.7	25780.2	17301.0	14855.5
32.5°	15274.2	15452.2	16049.1	17596.5	21765.2	29436.5	21443.5	13862.6	11790.9
35°	11885.5	12063.6	12603.0	14122.7	17821.1	24889.6	17533.2	10892.7	9179.8
37.5°	9085.3	9400.2	9746.3	10979.7	13985.9	20593.5	13976.6	8771.2	7445.9
40°	7078.6	7129.3	7564.9	8354.2	10880.9	16102.3	10951.0	7001.8	5975.3
42.5°	5666.2	5803.8	5991.3	6582.3	8244.4	12312.7	8607.5	5746.5	5075.4
45°	4708.1	4762.1	4904.0	5300.7	6444.7	9060.8	6721.5	4848.2	4320.7
47.5°	4118.9	4095.2	4186.4	4483.6	5248.4	7002.6	5447.6	4158.5	3788.8
50°	3612.3	3598.0	3641.1	3839.4	4408.4	5373.3	4523.3	3630.0	3381.9
52.5°	3218.9	3231.6	3235.9	3359.0	3787.1	4382.2	3852.1	3235.0	3067.8
55°	2891.4	2907.5	2898.2	2989.3	3263.7	3684.1	3349.8	2909.1	2793.5
57.5°	2635.6	2623.8	2611.1	2660.1	2866.0	3125.2	2909.1	2631.4	2554.6
60°	2381.5	2370.5	2361.3	2393.3	2514.0	2706.5	2567.2	2389.1	2367.2
62.5°	2163.7	2157.0	2156.1	2150.2	2243.0	2364.6	2270.0	2171.3	2151.9
65°	1973.7	1966.2	1956.0	1946.8	1989.8	2102.9	2028.6	1975.4	1982.2
67.5°	1783.8	1783.8	1766.1	1751.7	1793.9	1853.0	1821.0	1790.5	1798.1
70°	1611.6	1612.5	1583.7	1572.7	1585.4	1648.7	1615.8	1620.0	1632.7
72.5°	1426.7	1406.5	1385.3	1384.5	1386.1	1435.1	1424.2	1434.3	1447.8
75°	1230.0	1206.4	1192.9	1177.6	1190.4	1227.5	1232.5	1246.9	1268.0
77.5°	1040.0	1003.8	992.8	985.1	976.7	1019.0	1035.0	1054.5	1085.6
80°	835.7	796.1	777.5	766.5	780.8	800.3	835.7	850.2	894.0
82.5°	617.9	588.4	565.6	564.7	571.5	589.3	619.6	646.7	672.0
85°	397.6	350.3	330.1	337.7	330.1	357.1	377.4	409.4	417.0
87.5°	143.5	112.3	107.3	118.2	115.7	124.1	141.8	154.5	155.3
90°	0.8	0.8	0.8	0.8	0.8	1.7	2.5	5.1	6.7
92.5°	0.8	0.8	0.8	0.8	0.8	1.7	2.5	5.1	6.7
95°	0.8	0.8	0.8	0.8	1.7	1.7	2.5	5.1	6.7
97.5°	1.7	0.8	0.8	0.8	1.7	1.7	2.5	5.1	6.7
100°	1.7	0.8	0.8	1.7	1.7	1.7	2.5	5.1	6.7
102.5°	1.7	0.8	0.8	1.7	1.7	2.5	3.4	5.9	6.7
105°	1.7	0.8	0.8	1.7	1.7	2.5	3.4	5.9	7.6
107.5°	1.7	0.8	1.7	1.7	1.7	2.5	3.4	5.9	7.6
110°	1.7	0.8	1.7	1.7	1.7	2.5	3.4	5.9	7.6

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Scaled Data Report

TEST NUMBER: P1432498
CATALOG NUMBER: EHBR1-54-UNV-ASM-L830

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	1.7	0.8	1.7	1.7	1.7	2.5	3.4	5.9	*7.6*
115°	1.7	0.8	1.7	1.7	2.5	2.5	3.4	5.9	*7.6*
117.5°	1.7	0.8	1.7	2.5	2.5	2.5	3.4	5.9	*7.6*
120°	1.7	0.8	1.7	2.5	2.5	2.5	4.2	5.9	*7.6*
122.5°	1.7	1.7	2.5	3.4	3.4	3.4	4.2	6.7	*7.6*
125°	2.5	1.7	3.4	4.2	3.4	3.4	5.1	6.7	*8.4*
127.5°	2.5	1.7	3.4	4.2	4.2	4.2	5.1	6.7	*8.4*
130°	2.5	2.5	4.2	5.1	5.1	4.2	5.1	7.6	*8.4*
132.5°	3.4	3.4	5.9	6.7	5.9	5.1	5.9	8.4	*9.3*
135°	3.4	4.2	5.9	7.6	6.7	5.1	6.7	7.6	*9.3*
137.5°	4.2	5.1	7.6	8.4	7.6	5.9	6.7	8.4	*9.3*
140°	5.9	6.7	8.4	8.4	8.4	6.7	6.7	8.4	*10.1*
142.5°	7.6	7.6	9.3	9.3	9.3	7.6	7.6	9.3	*10.1*
145°	9.3	9.3	10.1	9.3	10.1	9.3	8.4	9.3	*11.0*
147.5°	11.0	11.0	11.0	10.1	10.1	9.3	9.3	10.1	*11.8*
150°	12.6	12.6	11.8	11.0	11.0	11.0	10.1	11.0	*12.6*
152.5°	14.3	13.5	12.6	11.8	11.8	11.8	11.8	12.6	*13.5*
155°	16.0	15.2	14.3	12.6	13.5	13.5	13.5	14.3	*15.2*
157.5°	18.5	16.9	16.0	15.2	15.2	16.0	16.0	16.9	*17.7*
160°	20.2	19.4	18.5	17.7	18.5	18.5	19.4	20.2	*21.1*
162.5°	21.9	21.1	20.2	20.2	20.2	20.2	21.9	22.8	*24.4*
165°	23.6	22.8	21.9	21.9	22.8	22.8	24.4	26.1	*27.8*
167.5°	23.6	23.6	23.6	23.6	24.4	24.4	26.1	28.7	*30.3*
170°	25.3	24.4	24.4	25.3	25.3	26.1	27.8	30.3	*32.0*
172.5°	27.0	26.1	27.0	27.0	27.8	27.8	30.3	32.9	*34.7*
175°	28.7	27.8	28.7	28.7	29.5	30.3	32.0	34.7	*36.3*
177.5°	29.5	28.7	28.7	28.7	29.5	31.2	32.9	35.5	*37.2*
180°	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	*31.2*

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Scaled Data Report

TEST NUMBER: P1432498
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CIE UGR TABLE:

Reflectances:											
	Ceiling	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
	Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
	Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.57	20.78	19.94	21.09	21.41	20.34	21.54	20.70	21.86	22.18
	3H	21.49	22.56	21.87	22.89	23.26	21.99	23.06	22.37	23.40	23.76
	4H	22.30	23.30	22.71	23.65	24.04	22.71	23.71	23.11	24.06	24.45
	6H	22.97	23.89	23.39	24.26	24.66	23.29	24.21	23.71	24.59	24.98
	8H	23.21	24.08	23.64	24.47	24.88	23.50	24.37	23.94	24.77	25.18
	12H	23.37	24.20	23.80	24.59	25.02	23.64	24.47	24.07	24.85	25.29
4H	2H	20.14	21.14	20.55	21.49	21.88	20.76	21.76	21.17	22.12	22.50
	3H	22.30	23.12	22.71	23.53	23.94	22.68	23.51	23.10	23.92	24.32
	4H	23.25	23.99	23.69	24.41	24.86	23.55	24.29	23.99	24.72	25.16
	6H	24.06	24.70	24.53	25.15	25.62	24.30	24.94	24.77	25.39	25.86
	8H	24.35	24.95	24.83	25.40	25.87	24.57	25.16	25.04	25.61	26.09
	12H	24.56	25.08	25.05	25.57	26.05	24.75	25.28	25.24	25.76	26.24
8H	4H	23.57	24.16	24.04	24.61	25.09	23.86	24.45	24.33	24.90	25.38
	6H	24.52	25.01	25.03	25.51	25.99	24.76	25.24	25.26	25.74	26.23
	8H	24.91	25.34	25.44	25.86	26.36	25.12	25.55	25.65	26.07	26.57
	12H	25.21	25.58	25.73	26.08	26.66	25.40	25.78	25.92	26.27	26.85
12H	4H	23.59	24.12	24.08	24.60	25.08	23.89	24.41	24.37	24.90	25.37
	6H	24.59	25.02	25.11	25.54	26.03	24.83	25.26	25.35	25.78	26.27
	8H	25.04	25.41	25.55	25.91	26.49	25.26	25.64	25.78	26.13	26.71

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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: SP1-2506-472-2

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L830-N

Data in this report applies to families of products including EHBR-60-L830-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

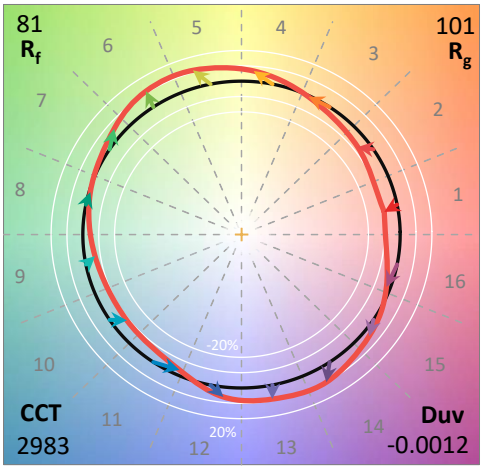
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-2
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-L830-N**
Description:	Elevate Round Highbay at, 60000 lumens, 3000K 80CRI LEDs with N lens

Spectral Parameters

CCT (K):	2983
CIE u':	0.2516
CIE v':	0.5201
Duv:	-0.0012
CIE x:	0.4364
CIE y:	0.4010
CIE z:	0.1626
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	583
Purity:	51.34918
Rf:	81.2
Rg:	101.5

CRI (Ra):	83.4				
R1:	84.0	R9:	29.4		
R2:	87.5	R10:	68.6		
R3:	88.9	R11:	82.2		
R4:	83.8	R12:	61.6		
R5:	81.9	R13:	83.9		
R6:	83.1	R14:	92.5		
R7:	87.1	R15:	79.8		
R8:	70.9				



Test Conditions

Stabilization Time:	38M
Operation Time:	1H 38M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-2

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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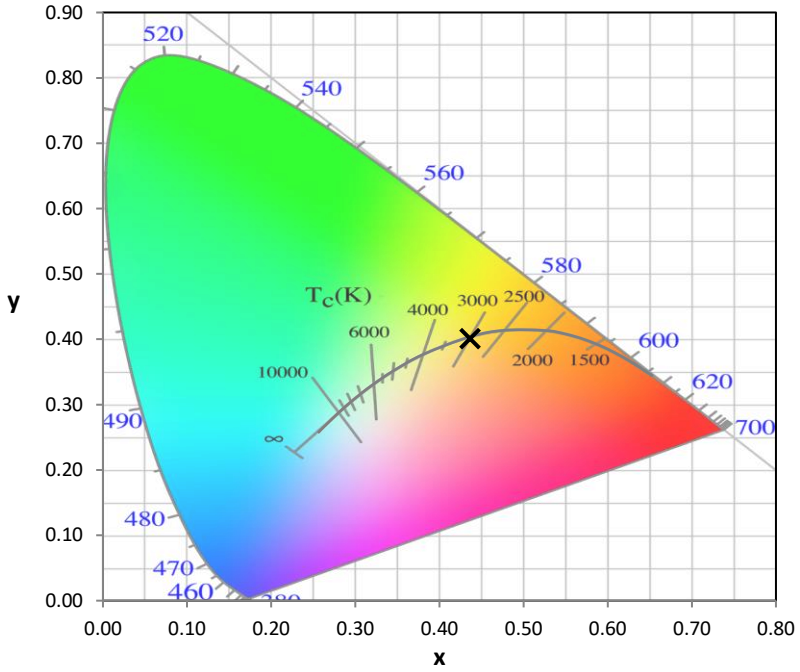
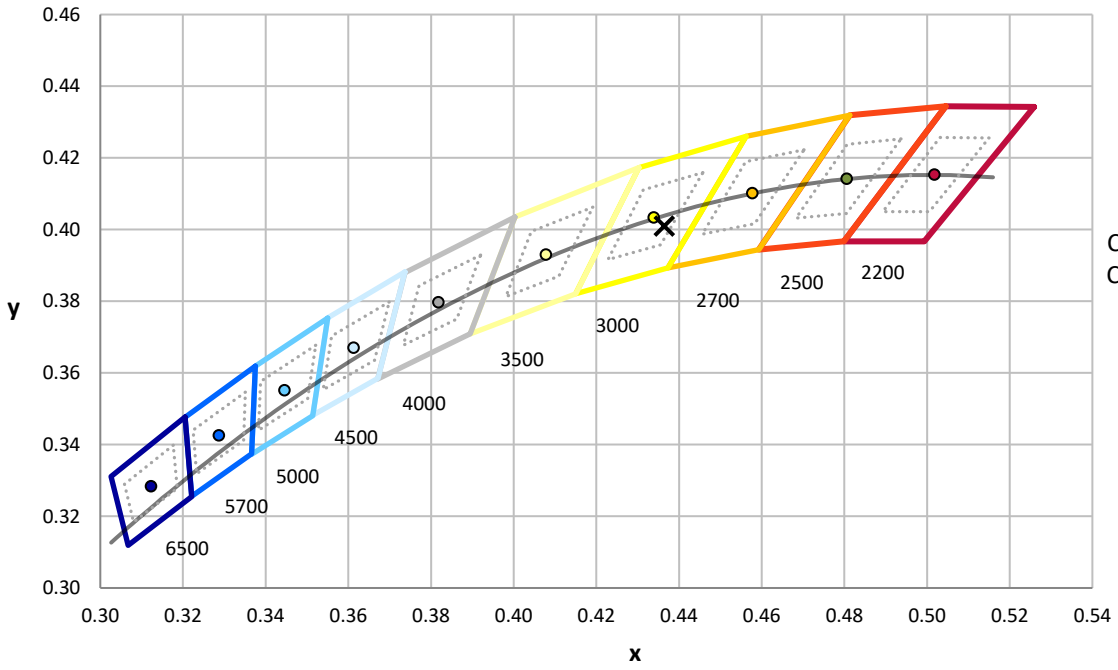
CIE 1931 Chromaticity Diagram



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



CCT = 2983K
CIE x = 0.4364
CIE y = 0.4010
Duv = -0.0012

Point lies inside the ANSI 3000K 4-step quadrangle

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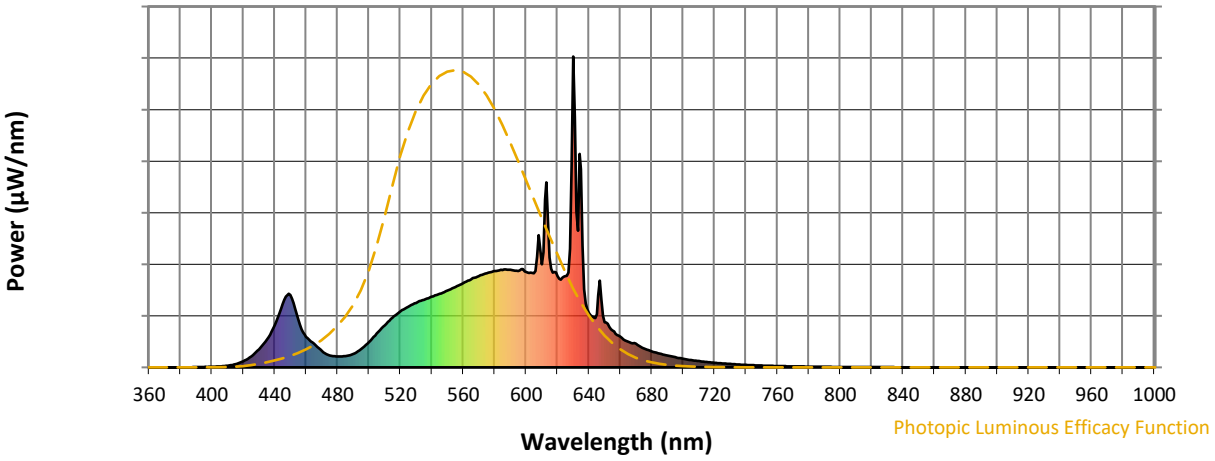
Photopic Flux vs. Wavelength



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	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

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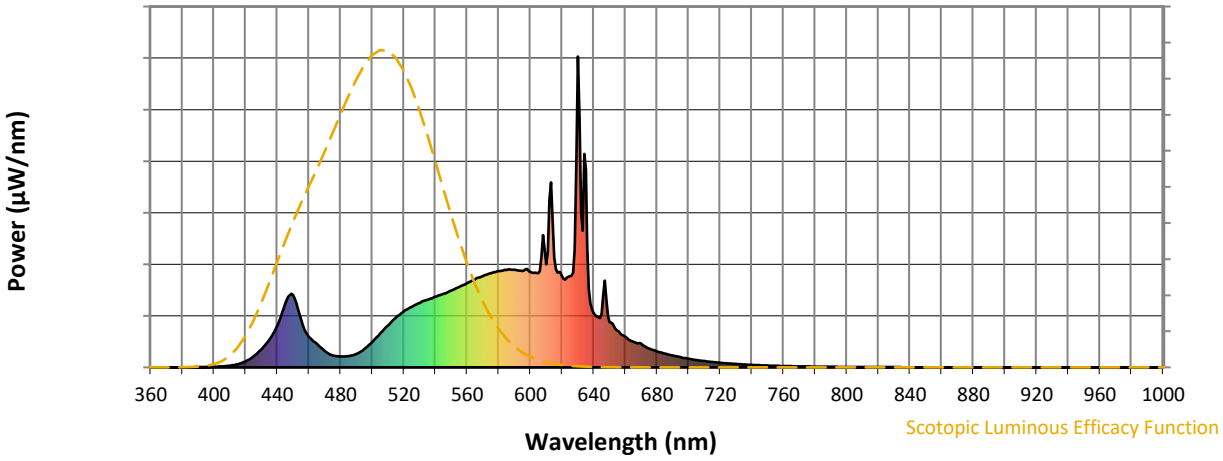
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.27**

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	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

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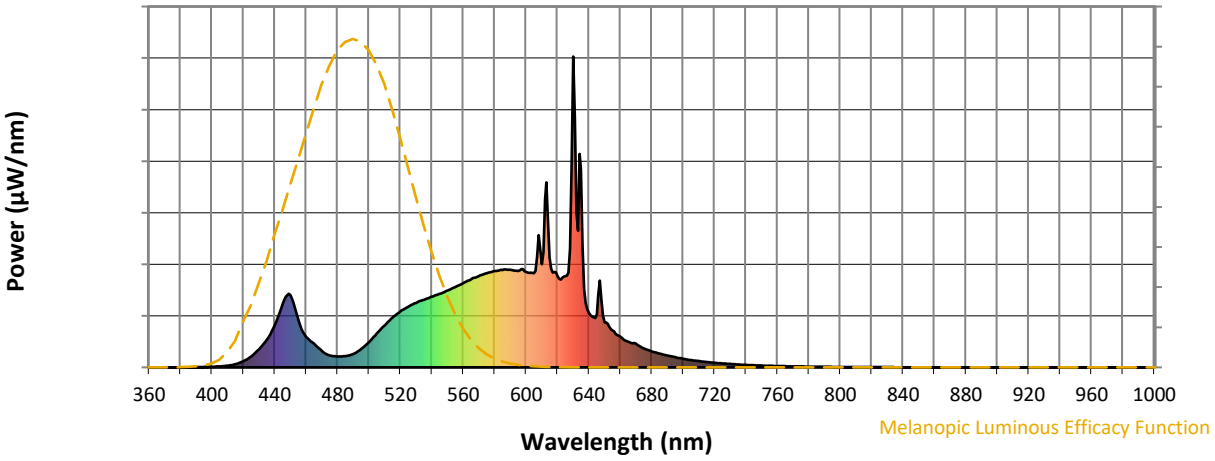
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.34**

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	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

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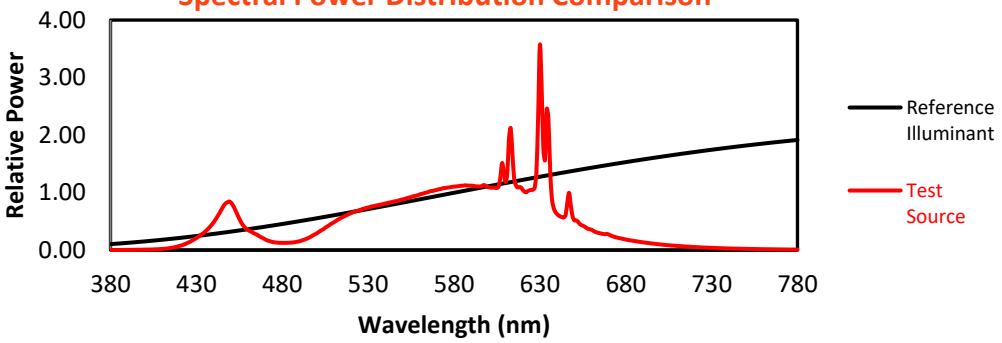
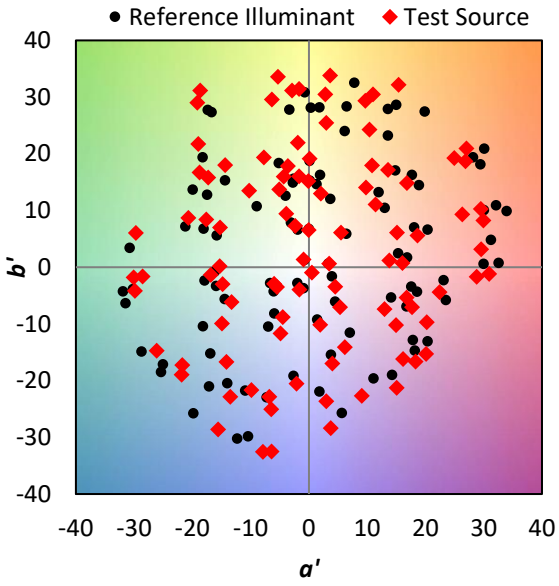
Summary

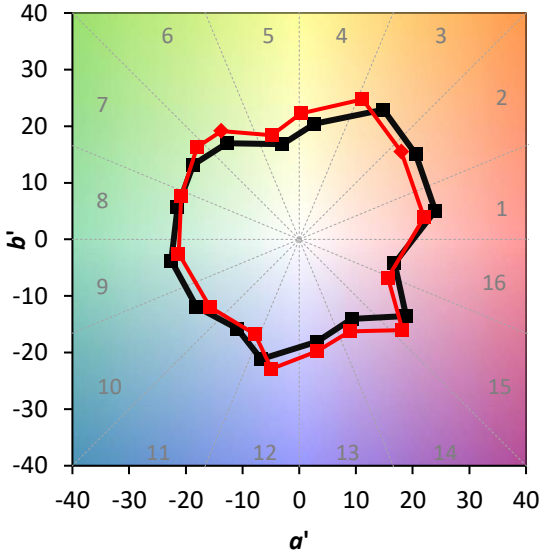
R_f = 81.2
R_g = 101.5
CIE R_a = 83.4
R_9 = 29.4

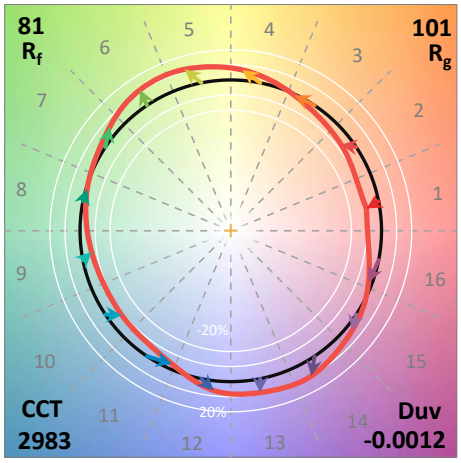
Spectral Power Distribution Comparison

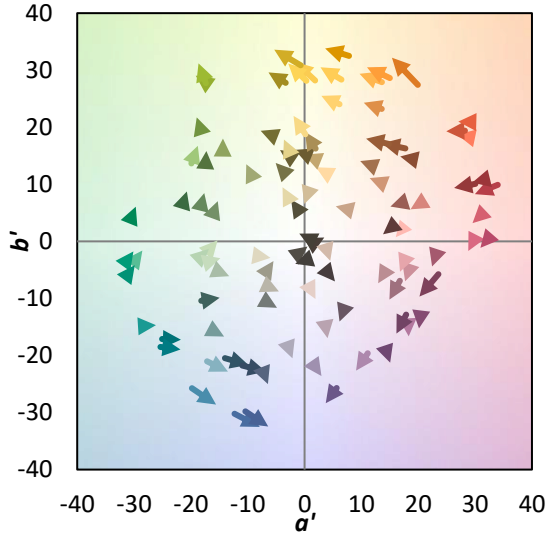


Color Vector Graphics









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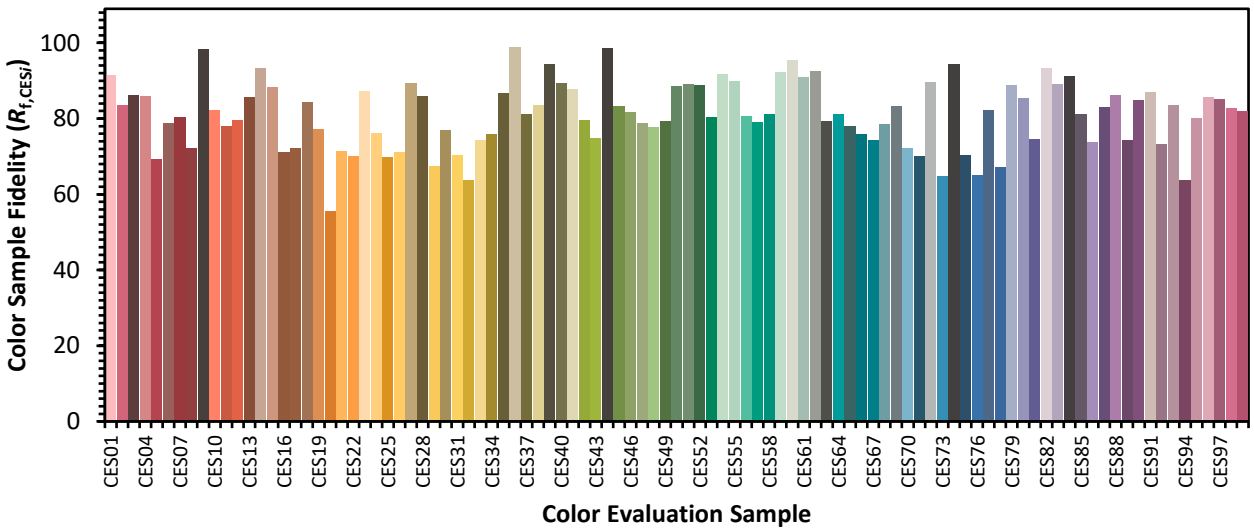
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 71	CES51 = 89	CES76 = 65
CES02 = 63	CES27 = 89	CES52 = 89	CES77 = 82
CES03 = 31	CES28 = 86	CES53 = 80	CES78 = 67
CES04 = 70	CES29 = 68	CES54 = 92	CES79 = 89
CES05 = 50	CES30 = 77	CES55 = 90	CES80 = 85
CES06 = 51	CES31 = 70	CES56 = 81	CES81 = 75
CES07 = 43	CES32 = 64	CES57 = 79	CES82 = 93
CES08 = 41	CES33 = 74	CES58 = 81	CES83 = 89
CES09 = 29	CES34 = 76	CES59 = 92	CES84 = 91
CES10 = 76	CES35 = 87	CES60 = 96	CES85 = 81
CES11 = 59	CES36 = 99	CES61 = 91	CES86 = 74
CES12 = 65	CES37 = 81	CES62 = 93	CES87 = 83
CES13 = 44	CES38 = 83	CES63 = 79	CES88 = 86
CES14 = 74	CES39 = 94	CES64 = 81	CES89 = 74
CES15 = 72	CES40 = 89	CES65 = 78	CES90 = 85
CES16 = 48	CES41 = 88	CES66 = 76	CES91 = 87
CES17 = 50	CES42 = 80	CES67 = 74	CES92 = 73
CES18 = 57	CES43 = 75	CES68 = 79	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 83	CES94 = 64
CES20 = 67	CES45 = 83	CES70 = 72	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 70	CES96 = 86
CES22 = 79	CES47 = 79	CES72 = 90	CES97 = 85
CES23 = 92	CES48 = 78	CES73 = 65	CES98 = 83
CES24 = 91	CES49 = 79	CES74 = 94	CES99 = 82
CES25 = 72	CES50 = 88	CES75 = 70	



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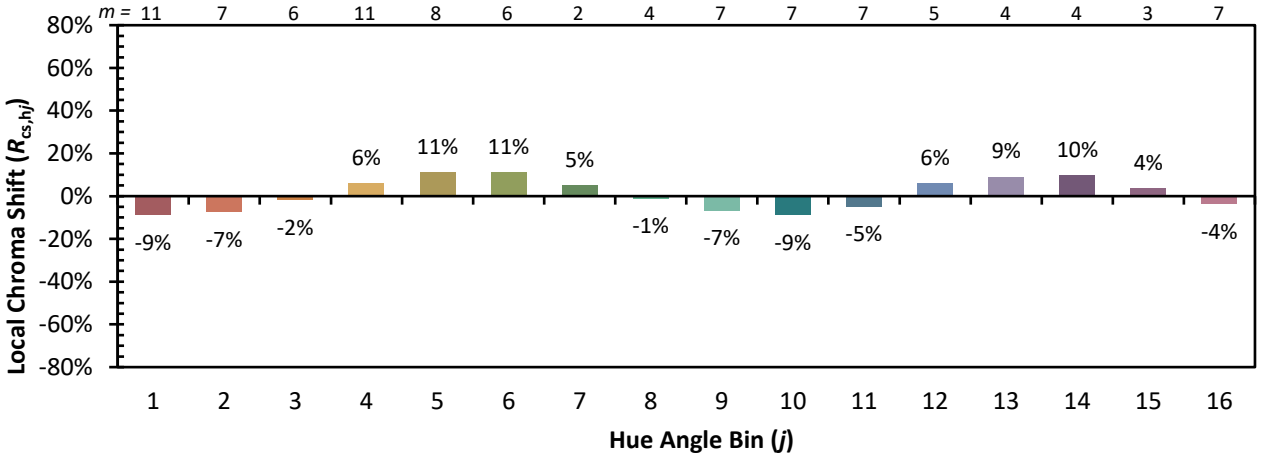
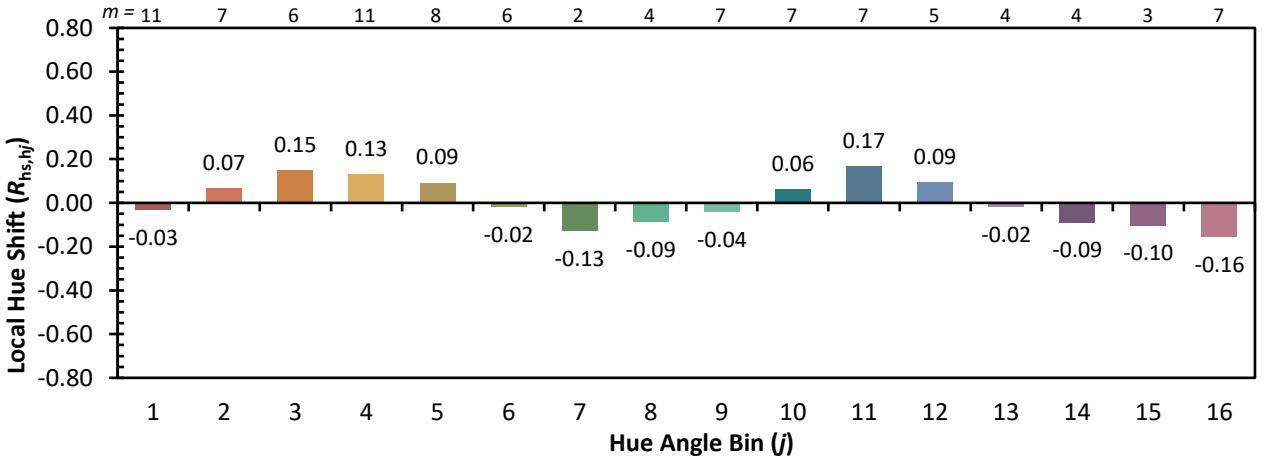
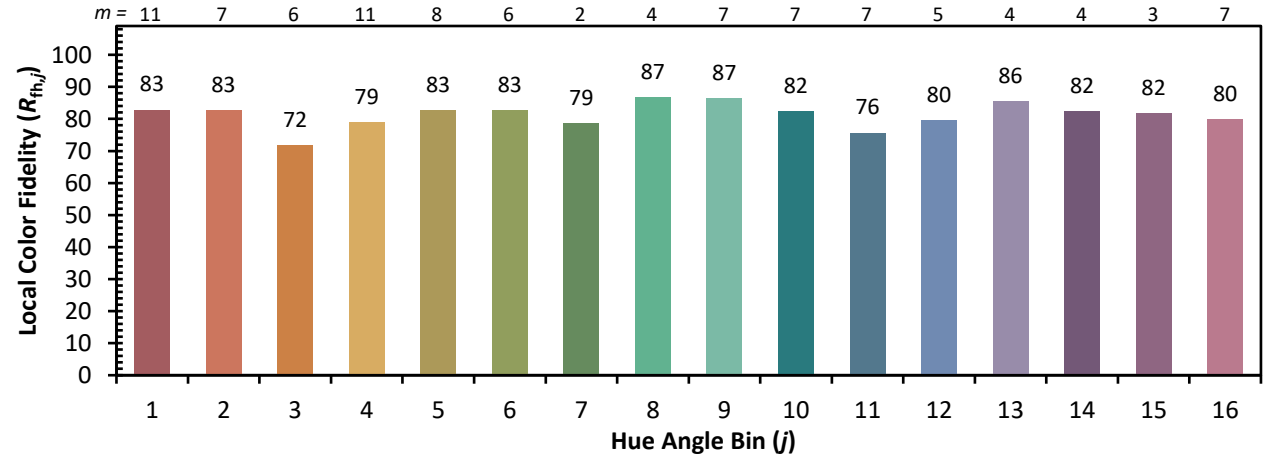
Color Rendition by Hue-Angle Bin







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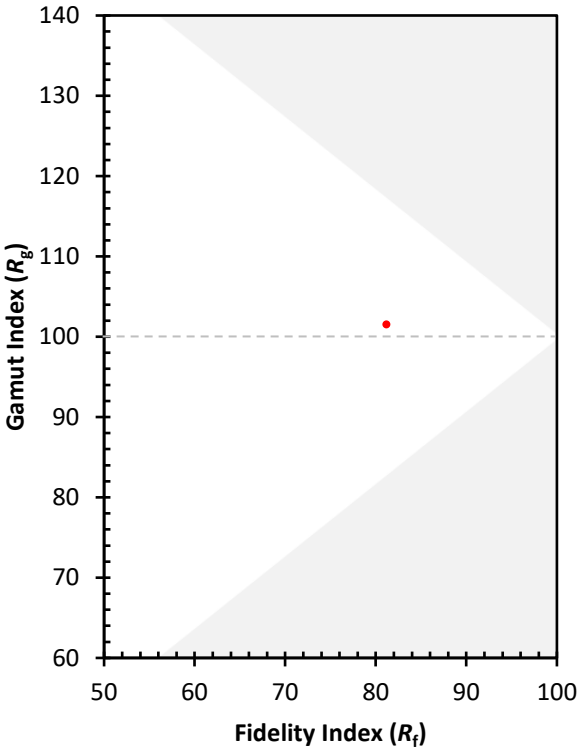
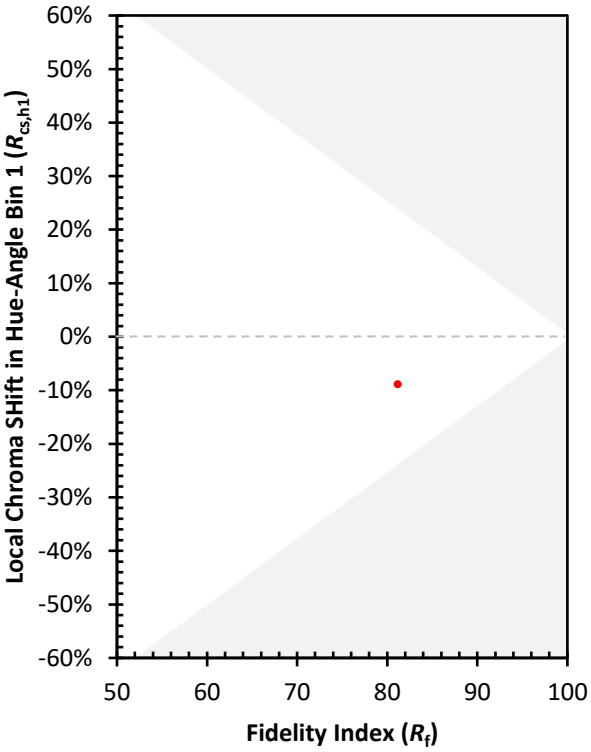
Measure Comparisons





(END OF REPORT)