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: P1432426

Luminaire Tested: EHBR1-42-UNV-A1-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:	P1432426
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-654-5)
Test Lab:	INNOVATION CENTER
Issue Date:	3/13/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-42-UNV-A1-L830
Description:	Elevate Round Highbay at, 42000 lumens, 3000K 80CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	38772.3 lumens
Efficiency:	N/A
Efficacy:	172.8 lumens/watt
Spacing Criteria (0/90/45):	0.8 / 1.07 / 0.95
Luminous Opening:	Circular (Dia: 1.71' x H: 0')
CIE Type:	Direct

Input Watts (W):	224.4
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

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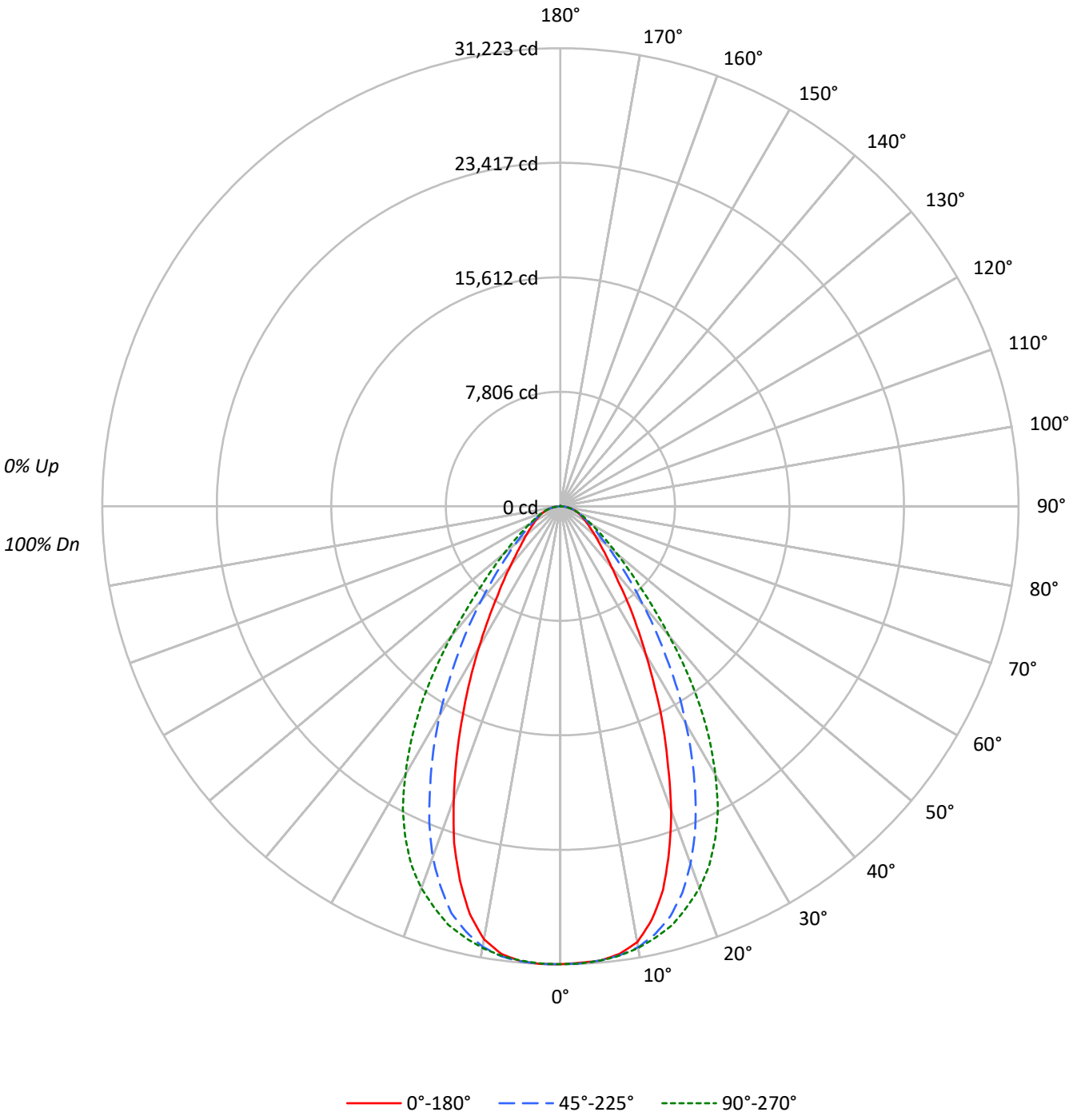
Luminous Intensity Polar Plot



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80
3	98	90	83	78	95	88	82	78	85	81	77	83	79	75	80	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	146563	146563	146563	146563	146563
5°	146544	146523	146529	146787	146698
10°	143862	145539	145769	145358	142921
15°	131483	140658	143553	139530	128464
20°	110336	129587	138440	127147	106041
25°	85963	112880	129382	108758	81509
30°	63161	92663	114561	89147	59950
35°	45928	72048	94979	68945	42931
40°	33368	53737	70683	51469	32339
45°	26590	39757	49925	38034	25669
50°	22355	30268	36615	29270	22015
55°	19840	24287	28178	23880	19572
60°	18258	20690	22912	20561	18387
65°	17541	18747	19778	18806	17708
70°	17303	17716	18264	17815	17475
75°	17126	17019	17126	17067	17293
80°	17219	15980	15629	16229	17219
85°	15529	13174	13034	13384	15987

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 52307 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2947.3	7.6
10°-20°	7921.2	20.4
20°-30°	9632.1	24.8
30°-40°	7846.1	20.2
40°-50°	4710.8	12.1
50°-60°	2711.1	7.0
60°-70°	1696.7	4.4
70°-80°	999.3	2.6
80°-90°	292.2	0.8
90°-100°	0.1	0.0
100°-110°	0.2	0.0
110°-120°	0.2	0.0
120°-130°	0.5	0.0
130°-140°	2.0	0.0
140°-150°	3.6	0.0
150°-160°	4.0	0.0
160°-170°	3.5	0.0
170°-180°	1.5	0.0
0°-30°	20500.6	52.9
0°-40°	28346.7	73.1
0°-60°	35768.6	92.3
0°-90°	38756.8	100.0
90°-120°	0.5	0.0
90°-150°	6.5	0.0
90°-180°	16.0	0.0
0°-180°	38772.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	31210	31210	31210	31210	31210	
5°	31087	31082	31084	31138	31119	2938
15°	27044	28932	29527	28700	26423	7440
25°	16590	21785	24970	20989	15731	7559
35°	8011	12568	16567	12026	7488	5069
45°	4004	5986	7517	5727	3865	3158
55°	2423	2966	3442	2917	2390	2190
65°	1579	1687	1780	1692	1594	1569
75°	944	938	944	941	953	1000
85°	288	244	242	248	297	308
90°	1	0	0	0	1	15
95°	1	0	0	0	1	1
105°	1	0	0	0	1	1
115°	1	0	0	0	1	1
125°	2	0	0	1	2	2
135°	3	3	3	3	3	2
145°	6	5	5	6	7	4
155°	10	8	7	8	10	5
165°	15	12	11	13	15	4
175°	20	17	14	17	20	2
180°	18	18	18	18	18	

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TEST NUMBER: P1432426
CATALOG NUMBER: EHBR1-42-UNV-A1-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	31209.6	31209.6	31209.6	31209.6	31209.6	31209.6	*31209.6*	31209.6	31209.6
2.5°	*31141.0*	*31169.1*	*31180.9*	*31187.4*	*31194.6*	*31214.2*	*31222.7*	*31209.0*	*31220.7*
5°	31086.7	31088.7	31082.2	31111.6	31083.5	31103.0	*31138.4*	31124.7	31119.4
7.5°	30770.3	30835.7	30874.3	30884.0	30889.3	30913.6	*30938.4*	30797.8	30776.9
10°	30169.0	30278.2	30520.6	30589.9	30569.0	30608.3	*30482.8*	30115.4	29971.6
12.5°	28850.5	29234.2	29864.3	30144.8	30093.8	30128.4	*29701.0*	28925.7	28479.9
15°	27044.4	27607.2	28931.6	29484.6	29527.0	29484.6	*28699.5*	27188.9	26423.4
17.5°	24643.5	25682.8	27632.7	28706.0	28644.6	28664.9	*27174.5*	24941.6	24065.6
20°	22078.4	23186.5	25930.5	27721.0	27702.0	27588.2	*25442.2*	22497.5	21218.9
22.5°	19177.4	20606.4	23980.0	26509.7	26502.5	26313.0	*23332.9*	19828.5	18451.9
25°	16590.2	17991.7	21784.9	25025.9	24969.7	24753.9	*20989.4*	17166.1	15730.6
27.5°	13915.4	15372.4	19441.6	23287.1	23248.6	23013.3	*18749.3*	14677.6	13311.4
30°	11647.8	12980.0	17088.3	21373.8	21126.7	21099.9	*16439.9*	12373.4	11055.6
32.5°	9705.1	10847.1	14869.8	19372.9	18935.6	19060.4	*14138.3*	10446.4	9140.3
35°	8011.4	9017.4	12567.5	17058.9	16567.4	16728.8	*12026.3*	8571.6	7488.5
37.5°	6502.1	7469.5	10616.3	14808.3	14056.6	14361.2	*10168.5*	7158.3	6290.3
40°	5443.1	6210.6	8765.7	12338.7	11530.1	12026.3	*8395.8*	5970.7	5275.2
42.5°	4690.1	5190.8	7234.9	9980.9	9360.6	9712.3	*6919.8*	4991.4	4471.1
45°	4003.8	4403.2	5986.3	7876.1	7517.3	7843.4	*5726.9*	4256.0	3865.1
47.5°	3497.1	3805.0	4928.0	6360.3	6137.3	6240.6	*4782.9*	3714.1	3396.5
50°	3059.9	3297.8	4143.0	5133.3	5011.7	5075.1	*4006.4*	3231.7	3013.4
52.5°	2719.9	2894.4	3474.9	4218.8	4158.7	4168.4	*3414.1*	2842.8	2684.6
55°	2423.2	2544.8	2966.4	3456.0	3441.6	3444.2	*2916.7*	2519.3	2390.5
57.5°	2163.7	2264.3	2549.3	2903.0	2882.1	2886.7	*2525.8*	2237.5	2154.5
60°	1944.0	2011.4	2202.9	2453.2	2439.5	2433.7	*2189.2*	1986.5	1957.7
62.5°	1749.2	1792.4	1925.0	2102.9	2076.7	2082.6	*1924.4*	1794.4	1751.8
65°	1578.6	1593.6	1687.1	1797.0	1779.9	1794.4	*1692.4*	1603.5	1593.6
67.5°	1411.9	1427.0	1481.9	1555.8	1536.1	1547.9	*1483.2*	1430.9	1422.4
70°	1260.2	1259.6	1290.3	1330.2	1330.2	1332.2	*1297.5*	1266.1	1272.7
72.5°	1103.4	1099.5	1108.6	1135.4	1128.3	1153.1	*1116.5*	1106.6	1107.9
75°	943.9	932.8	938.0	951.8	943.9	956.9	*940.6*	953.1	953.1
77.5°	793.6	772.6	766.1	768.1	753.7	773.3	*777.2*	785.7	805.3
80°	636.7	607.3	590.9	590.2	577.9	590.2	*600.1*	617.8	636.7
82.5°	472.6	447.1	419.6	414.4	406.6	413.7	*426.9*	447.7	478.5
85°	288.2	261.4	244.5	235.3	241.9	241.9	*248.4*	277.8	296.7
87.5°	104.0	90.9	74.6	75.2	77.1	79.7	*83.0*	104.6	114.4
90°	1.3	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
92.5°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
95°	1.3	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
97.5°	1.3	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
100°	1.3	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.3
102.5°	1.3	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.3
105°	1.3	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.3
107.5°	1.3	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.3
110°	1.3	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.3

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Scaled Data Report

TEST NUMBER: P1432426
CATALOG NUMBER: EHBR1-42-UNV-A1-L830

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	1.3	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.3
115°	1.3	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.3
117.5°	2.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.3
120°	1.3	0.0	0.0	0.0	0.0	0.0	*0.0*	0.7	1.3
122.5°	2.0	0.7	0.0	0.0	0.0	0.0	*0.0*	0.7	2.0
125°	2.0	0.7	0.0	0.0	0.0	0.0	*0.7*	0.7	2.0
127.5°	2.0	0.7	0.0	0.0	0.0	0.0	*0.7*	1.3	2.0
130°	2.0	1.3	0.7	0.0	0.7	0.7	*1.3*	1.3	2.0
132.5°	2.6	2.0	2.0	1.3	1.3	2.0	*2.0*	2.6	2.6
135°	3.3	2.6	2.6	2.0	2.6	2.6	*2.6*	2.6	3.3
137.5°	3.3	3.3	3.3	3.3	3.3	3.3	*3.3*	3.3	3.9
140°	4.6	3.9	3.9	3.9	3.9	3.9	*3.9*	4.6	4.6
142.5°	5.2	5.2	4.6	4.6	4.6	5.2	*5.2*	5.2	5.9
145°	5.9	5.9	5.2	5.2	5.2	5.9	*5.9*	6.6	6.6
147.5°	7.9	7.2	5.9	5.9	5.9	5.9	*6.6*	7.2	7.9
150°	8.5	7.9	6.6	6.6	6.6	6.6	*7.2*	8.5	9.2
152.5°	9.2	8.5	7.2	6.6	6.6	6.6	*7.9*	8.5	9.8
155°	9.8	9.2	7.9	6.6	6.6	7.2	*8.5*	9.8	10.5
157.5°	11.8	10.5	9.2	7.9	7.9	8.5	*9.8*	11.1	11.8
160°	13.1	11.8	10.5	9.2	9.2	9.8	*11.1*	12.5	13.1
162.5°	14.4	13.1	11.1	10.5	9.8	10.5	*11.8*	13.8	14.4
165°	15.1	13.8	12.5	11.1	11.1	11.1	*13.1*	14.4	15.1
167.5°	15.6	15.1	13.1	11.8	11.8	11.8	*13.8*	15.1	15.6
170°	16.3	15.6	13.8	12.5	11.8	12.5	*14.4*	15.6	16.3
172.5°	17.6	17.0	15.1	13.8	13.1	13.8	*15.6*	17.0	17.6
175°	19.6	18.3	17.0	15.1	14.4	15.1	*17.0*	18.3	19.6
177.5°	20.2	18.9	17.6	15.6	15.1	15.6	*17.6*	18.9	20.2
180°	17.6	17.6	17.6	17.6	17.6	17.6	*17.6*	17.6	17.6

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Scaled Data Report

TEST NUMBER: P1432426
CATALOG NUMBER: EHBR1-42-UNV-A1-L830

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	19.71	20.98	20.08	21.29	21.61	20.70	21.96	21.06	22.27	22.59
	3H	21.28	22.41	21.66	22.74	23.10	22.04	23.16	22.42	23.49	23.86
	4H	21.95	23.00	22.35	23.35	23.74	22.60	23.65	23.00	24.00	24.38
	6H	22.50	23.47	22.92	23.84	24.24	23.03	23.99	23.44	24.36	24.76
	8H	22.70	23.62	23.14	24.01	24.42	23.16	24.08	23.60	24.47	24.88
	12H	22.83	23.70	23.26	24.09	24.52	23.24	24.12	23.68	24.50	24.93
4H	2H	20.29	21.33	20.69	21.69	22.07	21.06	22.10	21.46	22.46	22.84
	3H	22.08	22.94	22.49	23.34	23.75	22.65	23.51	23.06	23.91	24.32
	4H	22.87	23.64	23.31	24.07	24.51	23.34	24.12	23.78	24.54	24.98
	6H	23.56	24.22	24.02	24.67	25.14	23.91	24.58	24.38	25.03	25.50
	8H	23.80	24.43	24.27	24.88	25.35	24.10	24.72	24.57	25.17	25.64
	12H	23.97	24.52	24.46	25.01	25.48	24.22	24.77	24.70	25.25	25.73
8H	4H	23.15	23.78	23.62	24.22	24.70	23.57	24.20	24.04	24.65	25.12
	6H	23.97	24.48	24.47	24.98	25.46	24.28	24.78	24.78	25.28	25.76
	8H	24.30	24.75	24.82	25.27	25.77	24.54	24.99	25.06	25.51	26.00
	12H	24.55	24.95	25.07	25.45	26.02	24.73	25.13	25.25	25.63	26.20
12H	4H	23.17	23.72	23.66	24.20	24.68	23.59	24.14	24.08	24.62	25.10
	6H	24.02	24.47	24.54	24.99	25.48	24.32	24.77	24.84	25.29	25.79
	8H	24.40	24.80	24.92	25.30	25.87	24.64	25.04	25.15	25.53	26.11

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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

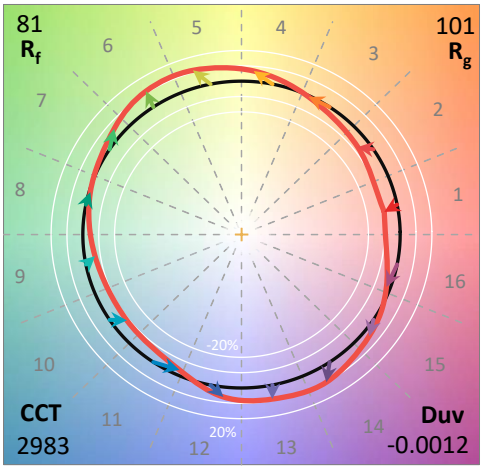
Test Information

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

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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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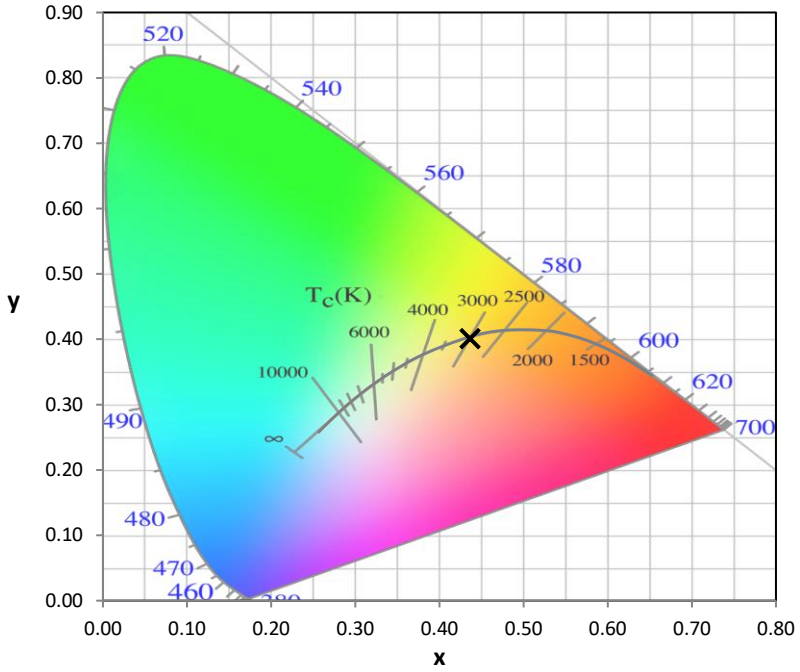
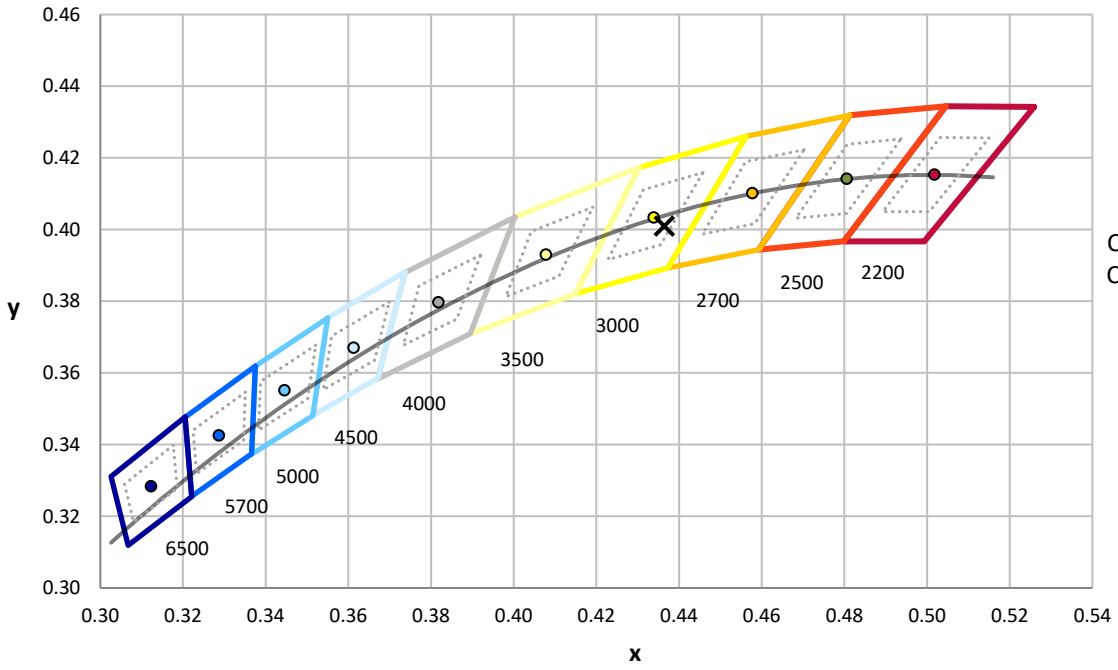
CIE 1931 Chromaticity Diagram



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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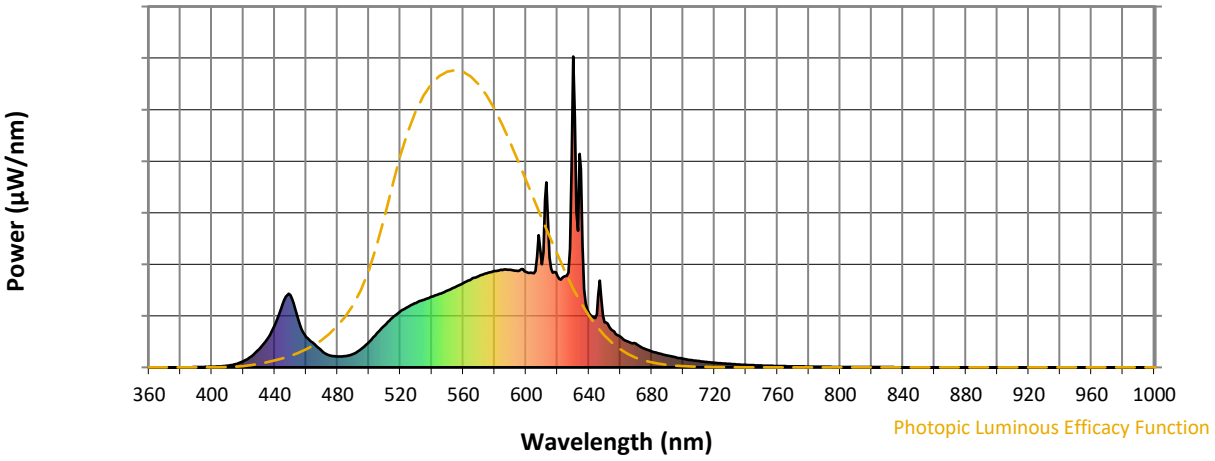
Photopic Flux vs. Wavelength



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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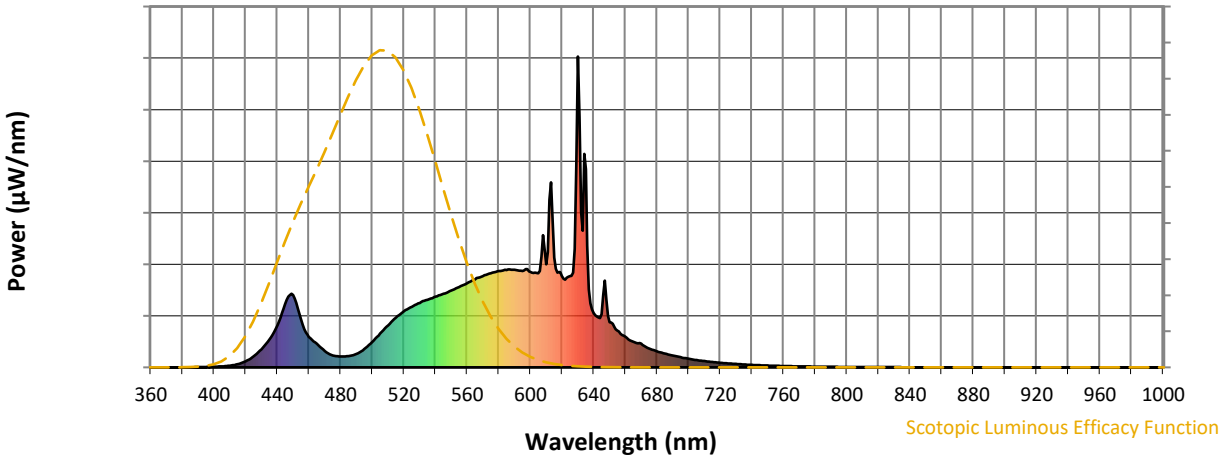
Scotopic Flux vs. Wavelength



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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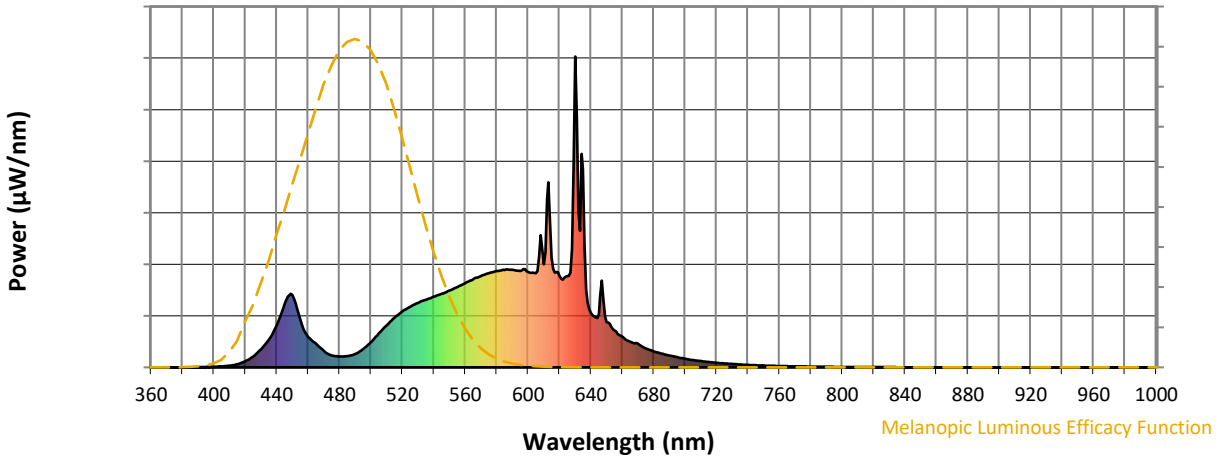
Melanopic Flux vs. Wavelength



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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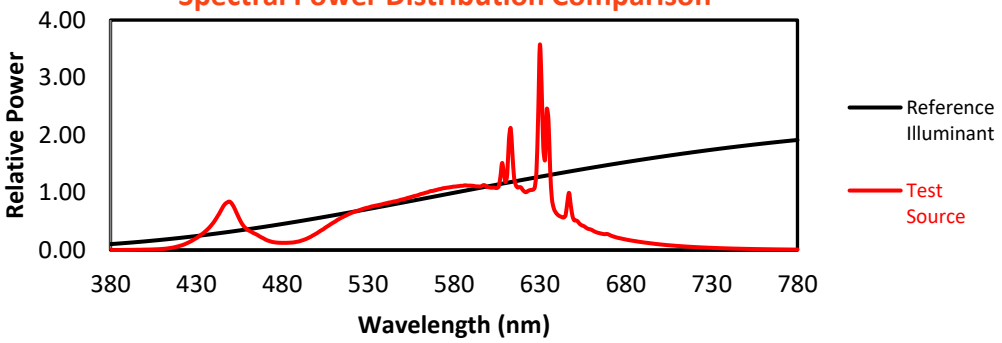
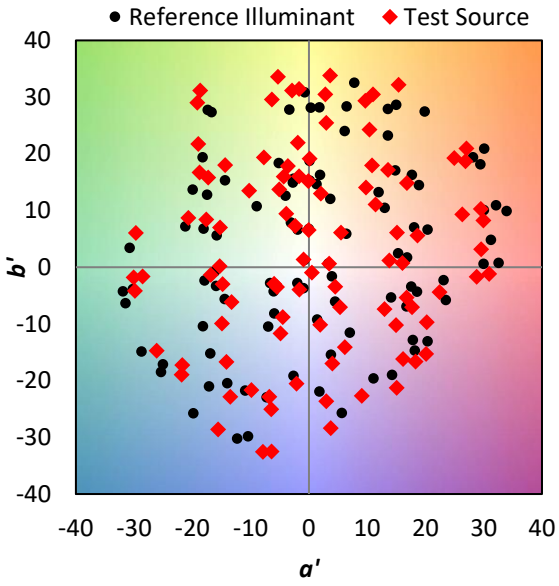
Summary

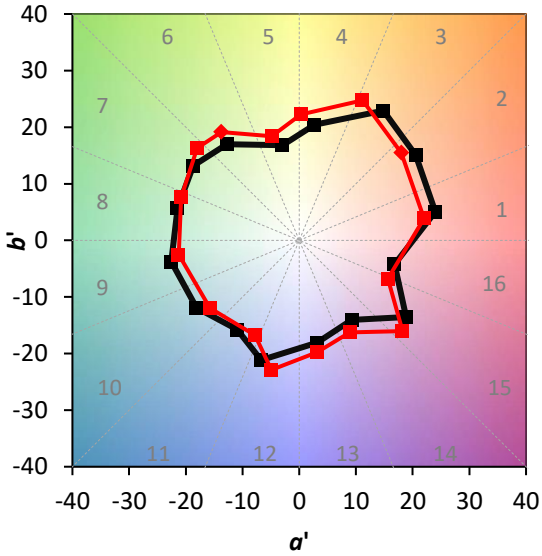
R_f = 81.2
R_g = 101.5
CIE R_a = 83.4
R_9 = 29.4

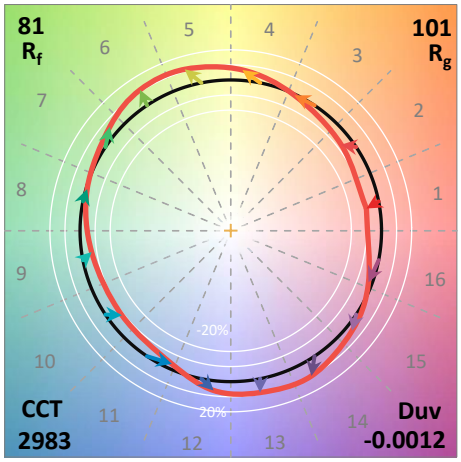
Spectral Power Distribution Comparison

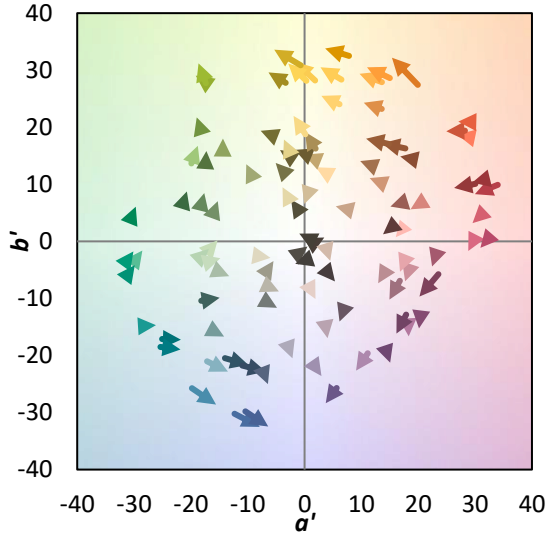


Color Vector Graphics









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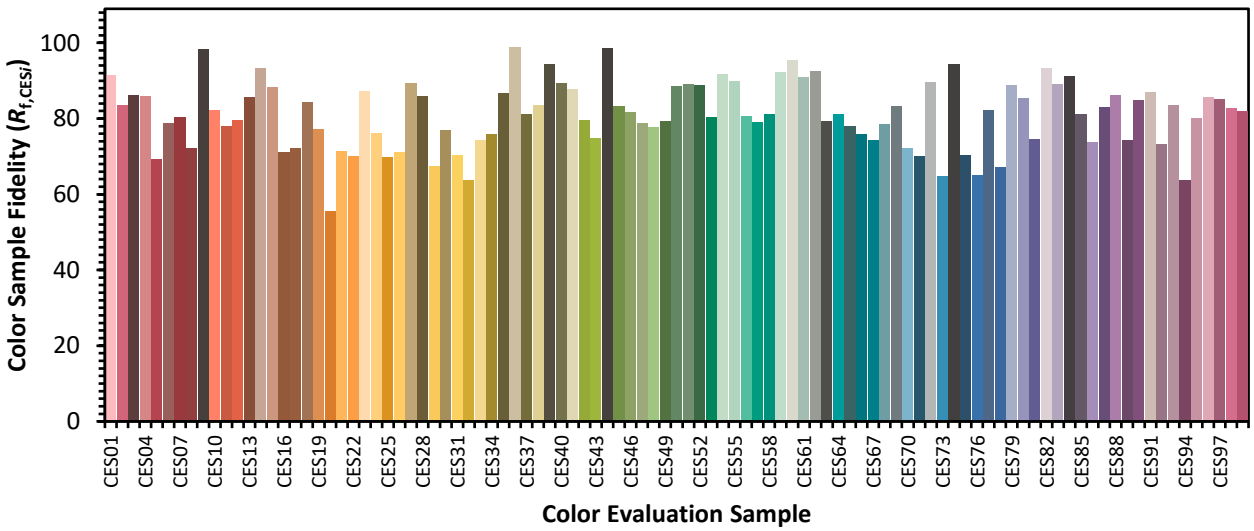
Individual Sample Fidelity Index ($R_{f,i}$)

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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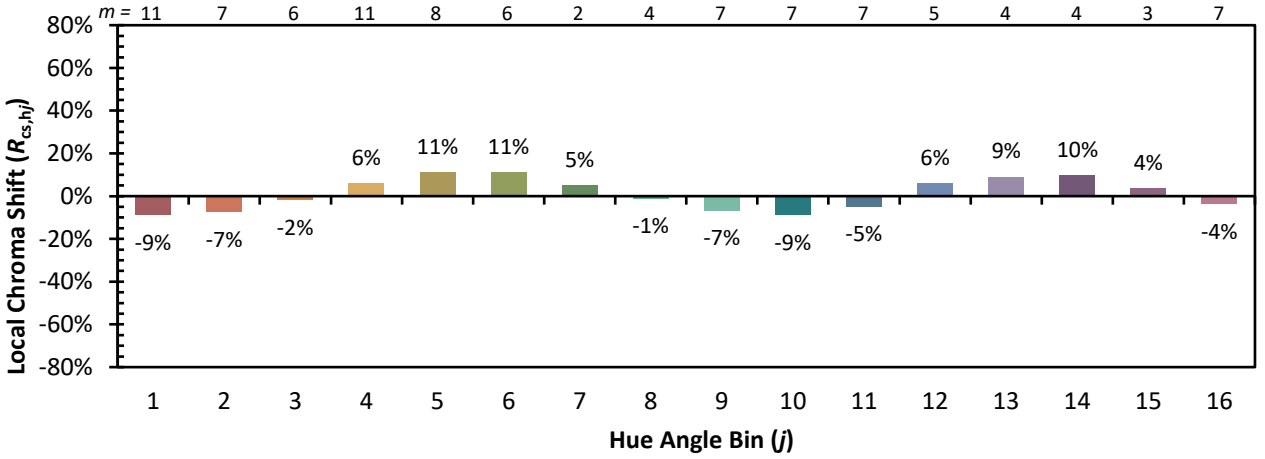
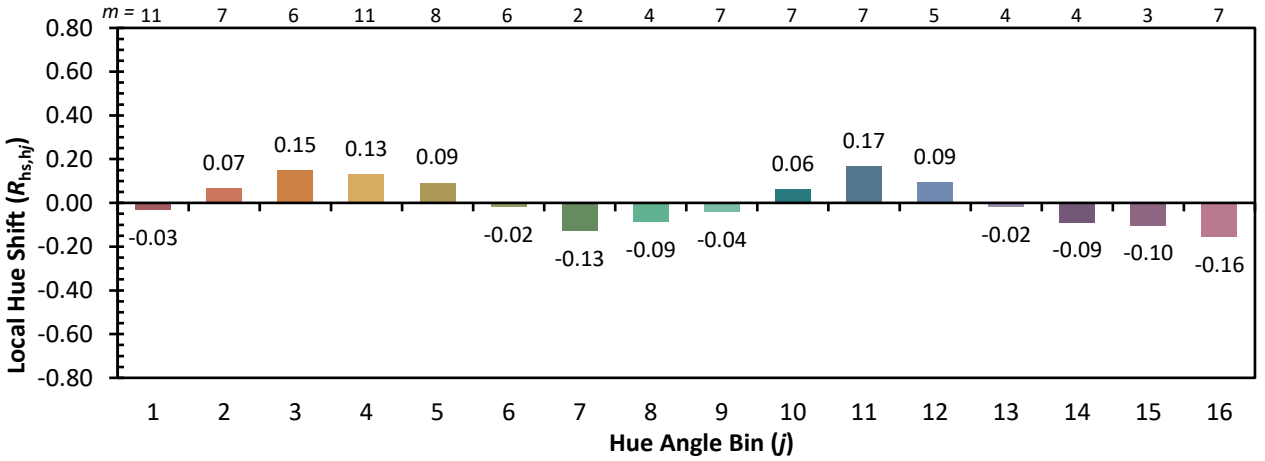
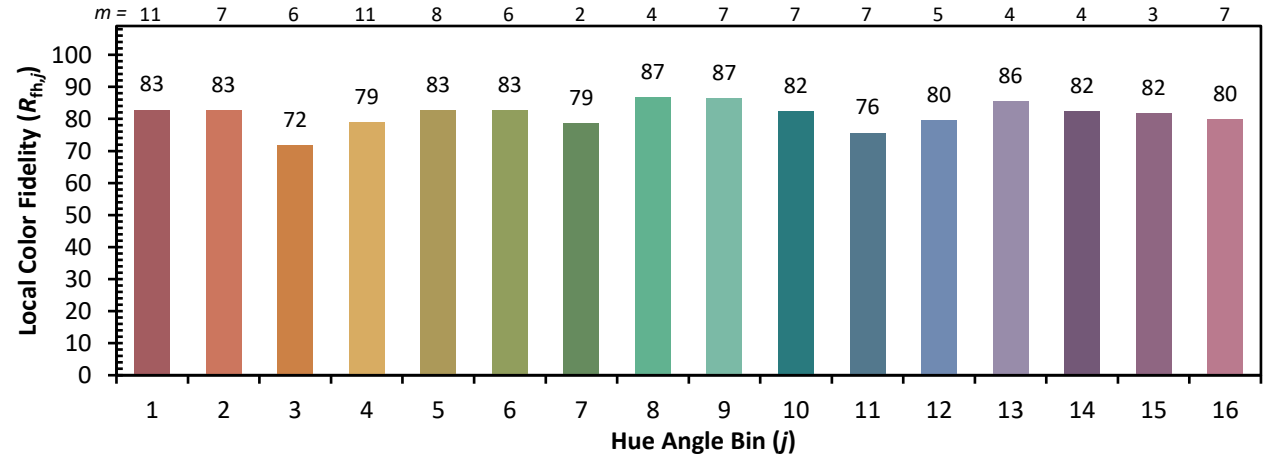
Color Rendition by Hue-Angle Bin







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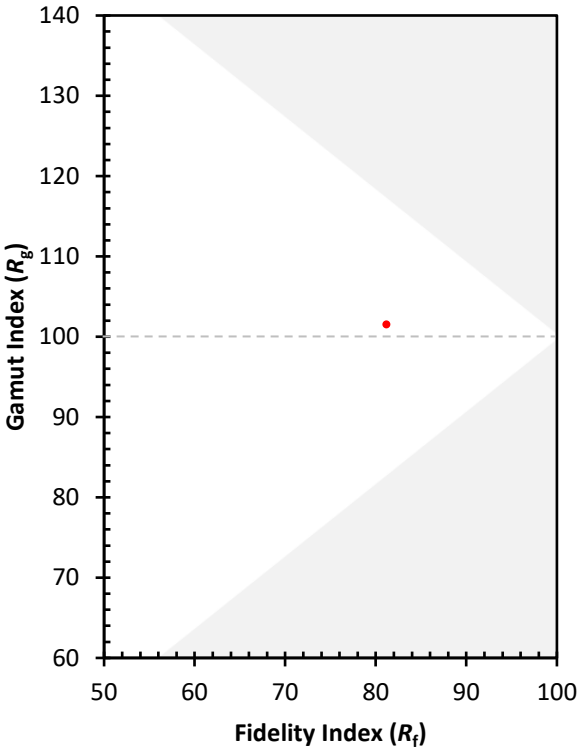
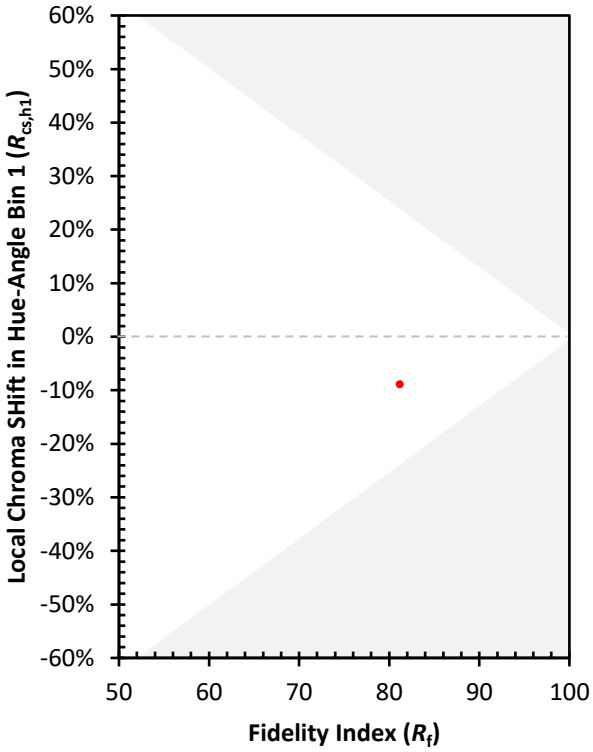
Measure Comparisons





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