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: P1433089

Luminaire Tested: EHBR1-12-UNV-A1-L930

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:	P1433089
	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:	EHBR1-12-UNV-A1-L930
Description:	Elevate Round Highbay at, 12000 lumens, 3000K 90CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	10936.1 lumens
Efficiency:	N/A
Efficacy:	169.0 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):	64.7
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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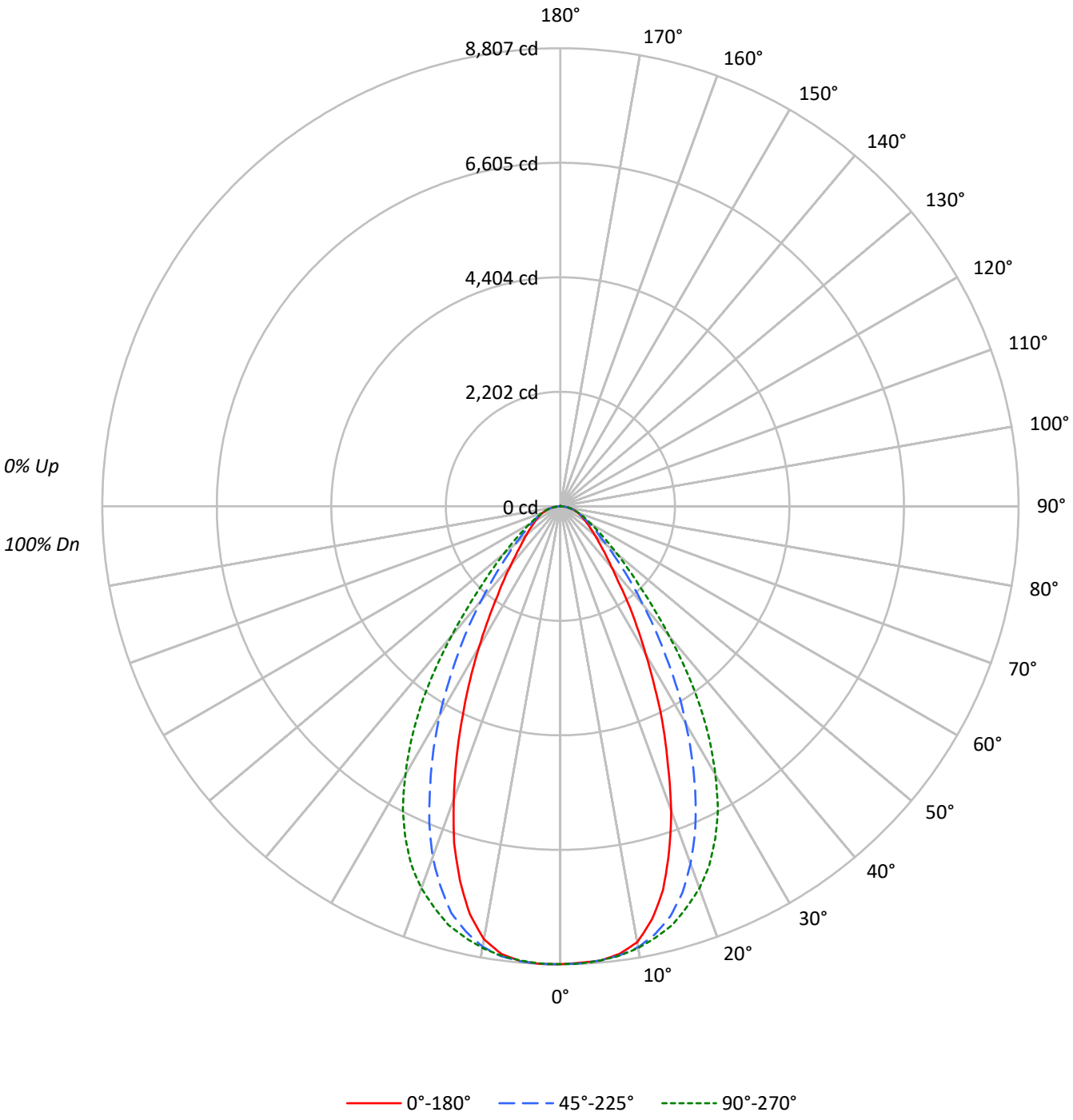
Scaled Data Report

TEST NUMBER: P1433089
CATALOG NUMBER: EHBR1-12-UNV-A1-L930

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°	41339	41339	41339	41339	41339
5°	41334	41328	41330	41403	41378
10°	40577	41050	41116	40999	40312
15°	37086	39674	40491	39355	36235
20°	31122	36551	39048	35863	29910
25°	24247	31839	36493	30676	22991
30°	17815	26136	32313	25145	16910
35°	12955	20322	26790	19446	12109
40°	9412	15157	19937	14517	9121
45°	7500	11214	14082	10728	7240
50°	6306	8538	10328	8256	6210
55°	5596	6850	7948	6736	5520
60°	5150	5835	6462	5800	5186
65°	4948	5288	5579	5305	4995
70°	4881	4997	5152	5025	4929
75°	4832	4801	4832	4814	4879
80°	4857	4505	4408	4576	4857
85°	4381	3718	3680	3772	4510

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 14754 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	831.3	7.6
10°-20°	2234.2	20.4
20°-30°	2716.8	24.8
30°-40°	2213.1	20.2
40°-50°	1328.7	12.1
50°-60°	764.7	7.0
60°-70°	478.6	4.4
70°-80°	281.9	2.6
80°-90°	82.4	0.8
90°-100°	0.0	0.0
100°-110°	0.1	0.0
110°-120°	0.1	0.0
120°-130°	0.1	0.0
130°-140°	0.5	0.0
140°-150°	1.0	0.0
150°-160°	1.1	0.0
160°-170°	1.0	0.0
170°-180°	0.4	0.0
0°-30°	5782.4	52.9
0°-40°	7995.4	73.1
0°-60°	10088.9	92.3
0°-90°	10931.7	100.0
90°-120°	0.1	0.0
90°-150°	1.8	0.0
90°-180°	4.0	0.0
0°-180°	10936.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8803	8803	8803	8803	8803	
5°	8768	8767	8767	8783	8778	829
15°	7628	8160	8328	8095	7453	2099
25°	4680	6145	7043	5920	4437	2132
35°	2260	3545	4673	3392	2112	1430
45°	1129	1688	2120	1615	1090	891
55°	684	837	971	823	674	618
65°	445	476	502	477	450	443
75°	266	265	266	265	269	282
85°	81	69	68	70	84	87
90°	0	0	0	0	0	4
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	1	1	1	1	1	1
145°	2	2	2	2	2	1
155°	3	2	2	2	3	1
165°	4	4	3	4	4	1
175°	6	5	4	5	6	0
180°	5	5	5	5	5	

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TEST NUMBER: P1433089
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	8802.9	8802.9	8802.9	8802.9	8802.9	8802.9	*8802.9*	8802.9	8802.9
2.5°	*8783.6*	*8791.5*	*8794.8*	*8796.7*	*8798.8*	*8804.3*	*8806.6*	*8802.8*	*8806.1*
5°	8768.3	8768.8	8767.0	8775.3	8767.4	8772.9	*8782.9*	8779.0	8777.6
7.5°	8679.1	8697.5	8708.4	8711.2	8712.6	8719.4	*8726.4*	8686.8	8680.9
10°	8509.4	8540.2	8608.6	8628.2	8622.3	8633.4	*8597.9*	8494.3	8453.7
12.5°	8137.5	8245.8	8423.5	8502.6	8488.2	8498.0	*8377.4*	8158.7	8033.0
15°	7628.2	7786.9	8160.4	8316.4	8328.4	8316.4	*8094.9*	7668.9	7453.0
17.5°	6950.9	7244.1	7794.1	8096.8	8079.4	8085.2	*7664.8*	7035.0	6787.9
20°	6227.5	6540.0	7313.9	7819.0	7813.6	7781.5	*7176.3*	6345.6	5985.0
22.5°	5409.2	5812.2	6763.8	7477.3	7475.2	7421.8	*6581.2*	5592.8	5204.5
25°	4679.5	5074.7	6144.7	7058.8	7042.9	6982.1	*5920.3*	4841.8	4437.0
27.5°	3924.9	4335.9	5483.6	6568.3	6557.5	6491.1	*5288.4*	4140.0	3754.6
30°	3285.4	3661.2	4819.9	6028.7	5959.0	5951.4	*4637.0*	3490.1	3118.4
32.5°	2737.4	3059.6	4194.2	5464.3	5341.0	5376.2	*3987.9*	2946.5	2578.1
35°	2259.7	2543.4	3544.8	4811.6	4673.0	4718.5	*3392.1*	2417.7	2112.2
37.5°	1834.0	2106.8	2994.4	4176.9	3964.8	4050.7	*2868.1*	2019.1	1774.3
40°	1535.3	1751.7	2472.5	3480.3	3252.2	3392.1	*2368.1*	1684.1	1487.9
42.5°	1322.9	1464.1	2040.6	2815.2	2640.3	2739.5	*1951.8*	1407.9	1261.1
45°	1129.3	1242.0	1688.5	2221.5	2120.3	2212.3	*1615.3*	1200.5	1090.2
47.5°	986.4	1073.2	1390.0	1794.0	1731.1	1760.2	*1349.1*	1047.6	958.0
50°	863.1	930.2	1168.6	1447.9	1413.6	1431.5	*1130.1*	911.5	850.0
52.5°	767.2	816.4	980.2	1189.9	1173.0	1175.8	*963.0*	801.8	757.2
55°	683.5	717.8	836.7	974.8	970.7	971.4	*822.7*	710.6	674.2
57.5°	610.3	638.7	719.1	818.8	812.9	814.2	*712.5*	631.1	607.7
60°	548.3	567.3	621.3	692.0	688.0	686.4	*617.5*	560.3	552.2
62.5°	493.4	505.5	543.0	593.1	585.7	587.4	*542.8*	506.1	494.1
65°	445.3	449.5	475.9	506.9	502.1	506.1	*477.4*	452.3	449.5
67.5°	398.3	402.5	417.9	438.8	433.3	436.6	*418.3*	403.6	401.2
70°	355.5	355.3	363.9	375.2	375.2	375.8	*366.0*	357.2	359.0
72.5°	311.2	310.1	312.7	320.3	318.2	325.3	*314.9*	312.2	312.5
75°	266.3	263.1	264.6	268.4	266.3	269.9	*265.3*	268.9	268.9
77.5°	223.9	218.0	216.1	216.6	212.6	218.2	*219.2*	221.6	227.2
80°	179.6	171.3	166.6	166.5	163.0	166.5	*169.2*	174.2	179.6
82.5°	133.3	126.1	118.3	116.9	114.7	116.7	*120.4*	126.3	134.9
85°	81.3	73.8	69.0	66.4	68.3	68.3	*70.0*	78.3	83.7
87.5°	29.3	25.7	21.0	21.2	21.7	22.5	*23.4*	29.5	32.3
90°	0.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.2
92.5°	0.2	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.2
95°	0.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.2
97.5°	0.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.2
100°	0.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.4
102.5°	0.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.4
105°	0.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.4
107.5°	0.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.4
110°	0.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.4

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Scaled Data Report

TEST NUMBER: P1433089
CATALOG NUMBER: EHBR1-12-UNV-A1-L930

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.4
115°	0.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.4
117.5°	0.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.4
120°	0.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.2	0.4
122.5°	0.5	0.2	0.0	0.0	0.0	0.0	*0.0*	0.2	0.5
125°	0.5	0.2	0.0	0.0	0.0	0.0	*0.2*	0.2	0.5
127.5°	0.5	0.2	0.0	0.0	0.0	0.0	*0.2*	0.4	0.5
130°	0.5	0.4	0.2	0.0	0.2	0.2	*0.4*	0.4	0.5
132.5°	0.7	0.5	0.5	0.4	0.4	0.5	*0.5*	0.7	0.7
135°	0.9	0.7	0.7	0.5	0.7	0.7	*0.7*	0.7	0.9
137.5°	0.9	0.9	0.9	0.9	0.9	0.9	*0.9*	0.9	1.1
140°	1.2	1.1	1.1	1.1	1.1	1.1	*1.1*	1.2	1.2
142.5°	1.5	1.5	1.2	1.2	1.2	1.5	*1.5*	1.5	1.7
145°	1.7	1.7	1.5	1.5	1.5	1.7	*1.7*	1.9	1.9
147.5°	2.2	2.0	1.7	1.7	1.7	1.7	*1.9*	2.0	2.2
150°	2.4	2.2	1.9	1.9	1.9	1.9	*2.0*	2.4	2.6
152.5°	2.6	2.4	2.0	1.9	1.9	1.9	*2.2*	2.4	2.8
155°	2.8	2.6	2.2	1.9	1.9	2.0	*2.4*	2.8	2.9
157.5°	3.3	2.9	2.6	2.2	2.2	2.4	*2.8*	3.1	3.3
160°	3.7	3.3	2.9	2.6	2.6	2.8	*3.1*	3.5	3.7
162.5°	4.1	3.7	3.1	2.9	2.8	2.9	*3.3*	3.8	4.1
165°	4.3	3.8	3.5	3.1	3.1	3.1	*3.7*	4.1	4.3
167.5°	4.5	4.3	3.7	3.3	3.3	3.3	*3.8*	4.3	4.5
170°	4.6	4.5	3.8	3.5	3.3	3.5	*4.1*	4.5	4.6
172.5°	5.0	4.8	4.3	3.8	3.7	3.8	*4.5*	4.8	5.0
175°	5.5	5.2	4.8	4.3	4.1	4.3	*4.8*	5.2	5.5
177.5°	5.7	5.3	5.0	4.5	4.3	4.5	*5.0*	5.3	5.7
180°	5.0	5.0	5.0	5.0	5.0	5.0	*5.0*	5.0	5.0

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Scaled Data Report

TEST NUMBER: P1433089
CATALOG NUMBER: EHBR1-12-UNV-A1-L930

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	15.32	16.58	15.68	16.90	17.21	16.30	17.56	16.66	17.88	18.19
	3H	16.88	18.01	17.26	18.34	18.71	17.64	18.77	18.02	19.10	19.46
	4H	17.55	18.60	17.96	18.95	19.34	18.20	19.25	18.60	19.60	19.99
	6H	18.11	19.07	18.52	19.44	19.84	18.63	19.60	19.05	19.97	20.36
	8H	18.31	19.22	18.74	19.61	20.02	18.77	19.68	19.20	20.07	20.48
	12H	18.43	19.31	18.87	19.69	20.12	18.85	19.72	19.28	20.10	20.53
4H	2H	15.89	16.94	16.29	17.29	17.68	16.66	17.71	17.06	18.06	18.44
	3H	17.68	18.54	18.09	18.95	19.35	18.25	19.11	18.66	19.52	19.92
	4H	18.47	19.25	18.91	19.67	20.11	18.94	19.72	19.38	20.14	20.58
	6H	19.16	19.83	19.62	20.27	20.74	19.52	20.18	19.98	20.63	21.10
	8H	19.41	20.03	19.88	20.48	20.95	19.70	20.32	20.17	20.77	21.24
	12H	19.58	20.13	20.06	20.61	21.09	19.82	20.37	20.31	20.85	21.33
8H	4H	18.75	19.38	19.23	19.83	20.30	19.18	19.80	19.65	20.25	20.72
	6H	19.57	20.08	20.08	20.58	21.06	19.88	20.39	20.38	20.88	21.37
	8H	19.90	20.36	20.43	20.87	21.37	20.14	20.59	20.66	21.11	21.60
	12H	20.15	20.55	20.67	21.05	21.62	20.33	20.73	20.85	21.23	21.80
12H	4H	18.77	19.32	19.26	19.81	20.28	19.19	19.74	19.68	20.22	20.70
	6H	19.62	20.07	20.14	20.59	21.09	19.92	20.38	20.45	20.89	21.39
	8H	20.01	20.41	20.52	20.90	21.48	20.24	20.64	20.76	21.14	21.71

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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: SP1-2506-472-5

Test Date: 08/01/2025

Luminaire Tested: EHBR-60-L930-N

Data in this report applies to families of products including EHBR-60-L930-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

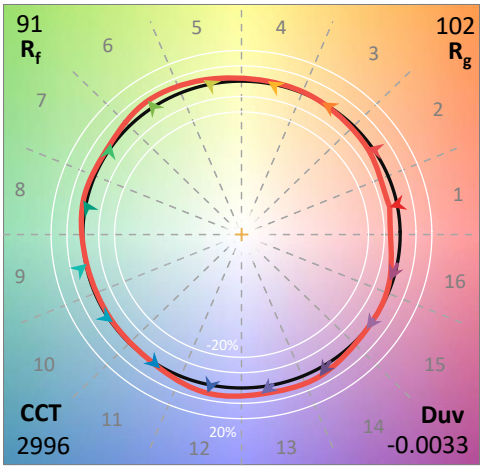
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-5
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-L930-N**
Description:	Elevate Round Highbay at, 60000 lumens, 3000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K):	2996
CIE u':	0.2519
CIE v':	0.5169
Duv:	-0.0033
CIE x:	0.4325
CIE y:	0.3945
CIE z:	0.1730
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	584
Purity:	48.21818
Rf:	91.3
Rg:	102

CRI (Ra):	94.4
R1:	96.8
R2:	98.1
R3:	97.8
R4:	95.6
R5:	96.9
R6:	95.7
R7:	90.9
R8:	83.0
R9:	61.4
R10:	94.4
R11:	95.7
R12:	88.5
R13:	97.3
R14:	97.8
R15:	92.3



Test Conditions

Stabilization Time:	40M
Operation Time:	1H 40M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-5

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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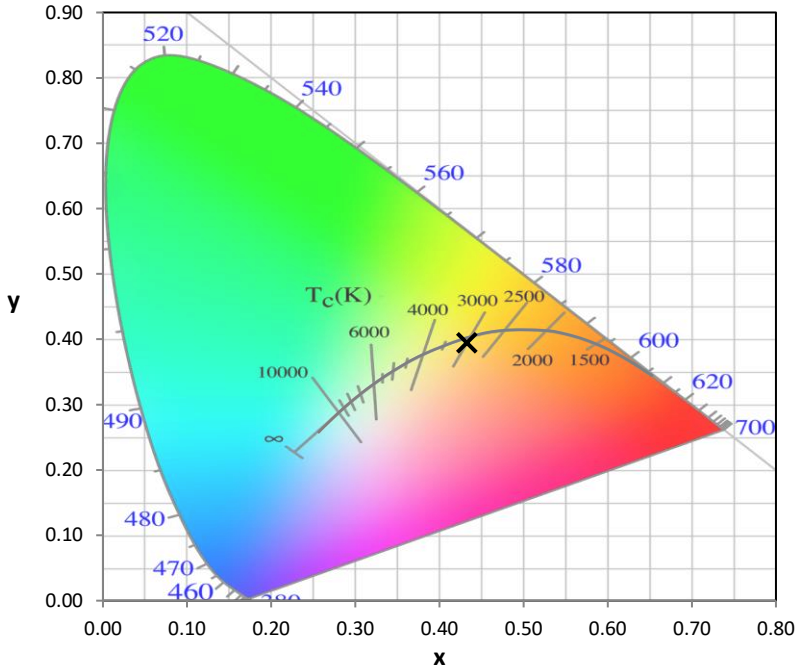
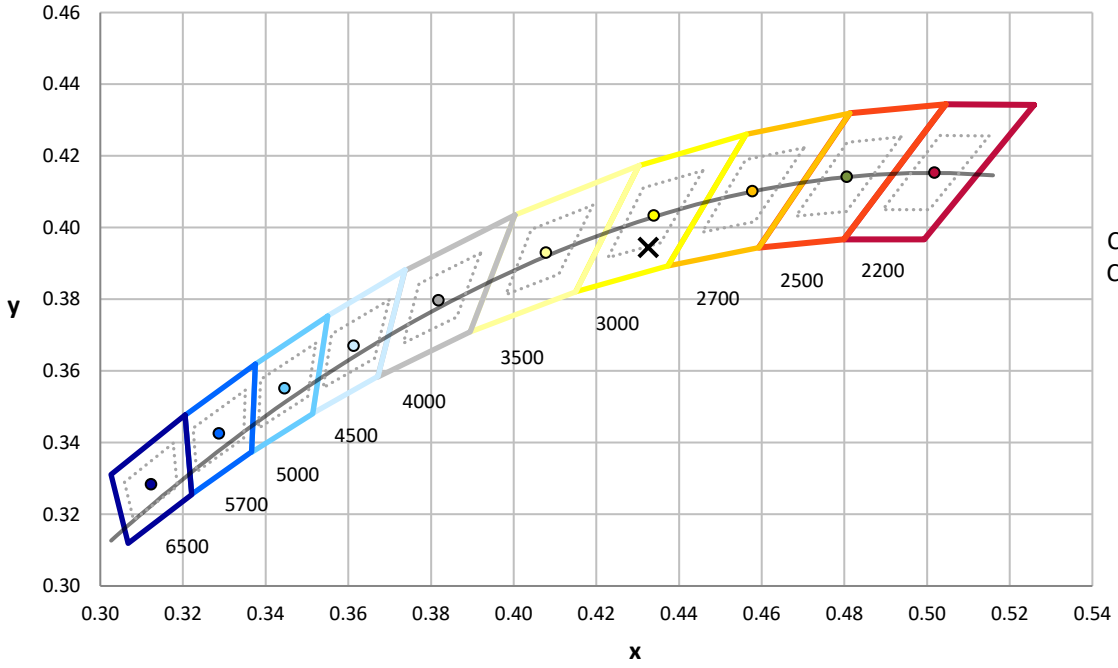
CIE 1931 Chromaticity Diagram



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



CCT = 2996K
CIE x = 0.4325
CIE y = 0.3945
Duv = -0.0033

Point lies inside the ANSI 3000K 7-step quadrangle

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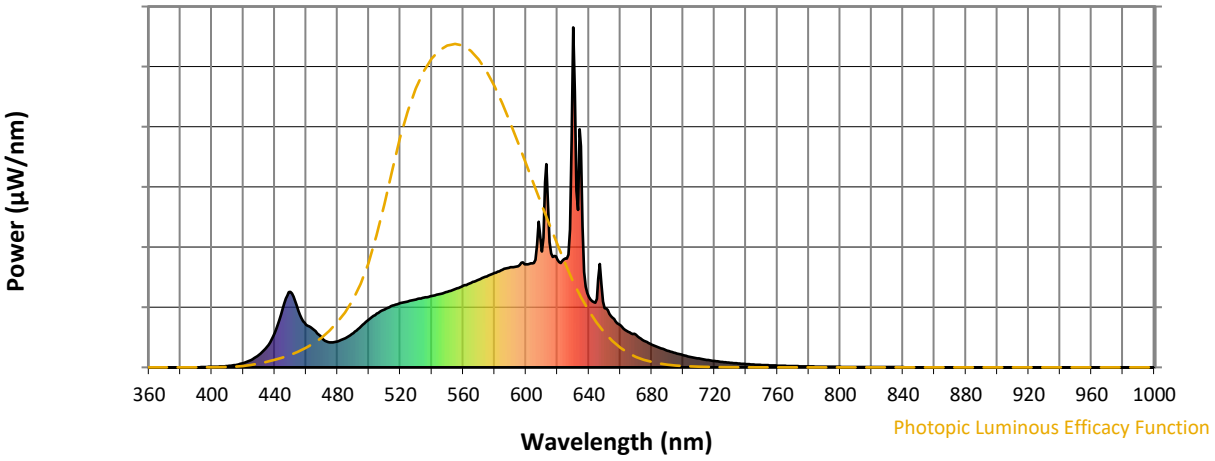
Photopic Flux vs. Wavelength



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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

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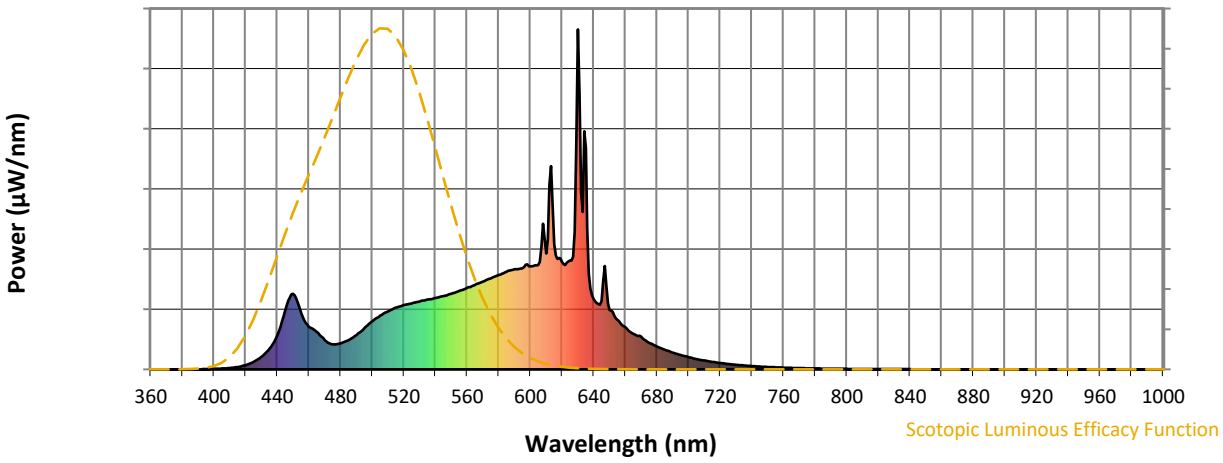
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.44**

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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

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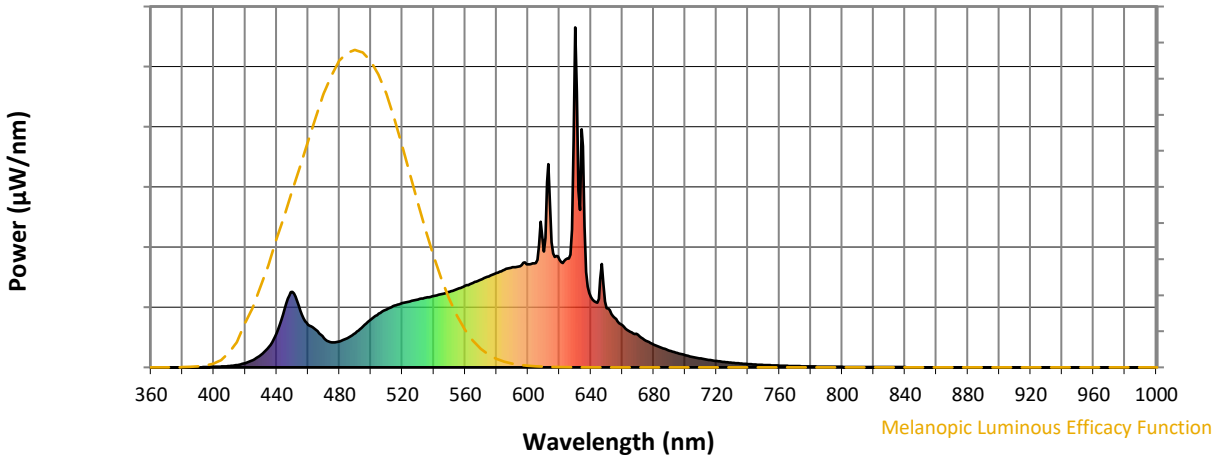
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.85**

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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

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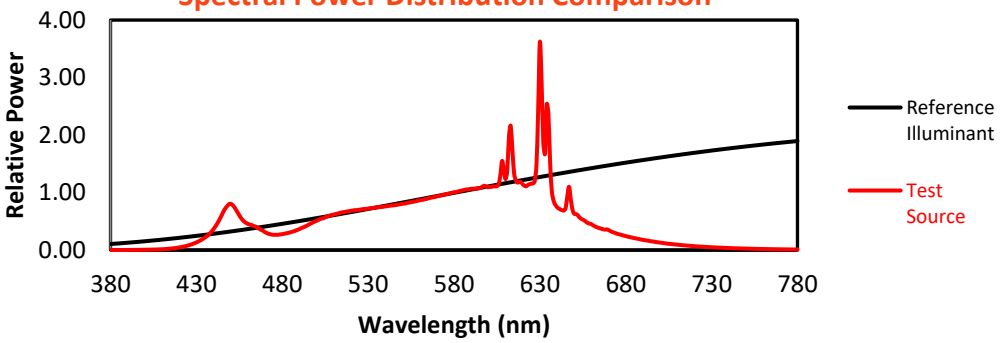
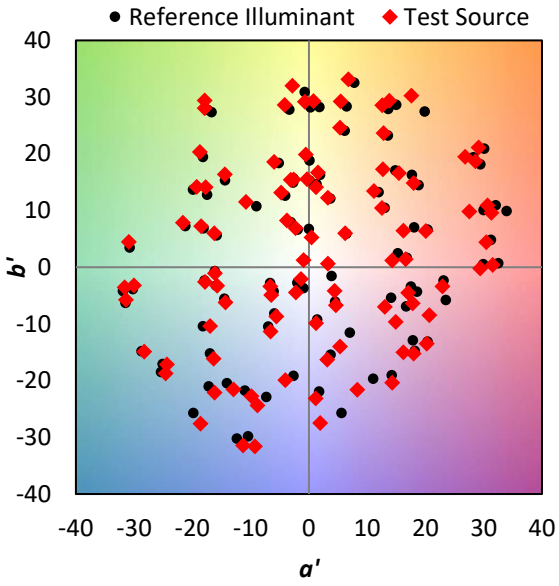
Summary

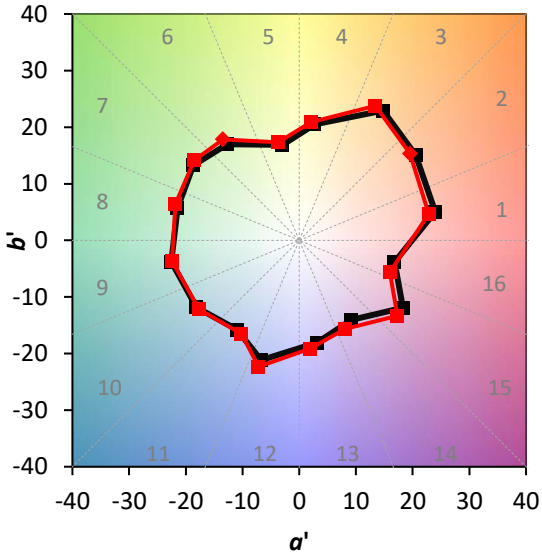
R_f = 91.3
R_g = 102
CIE R_a = 94.4
R_9 = 61.4

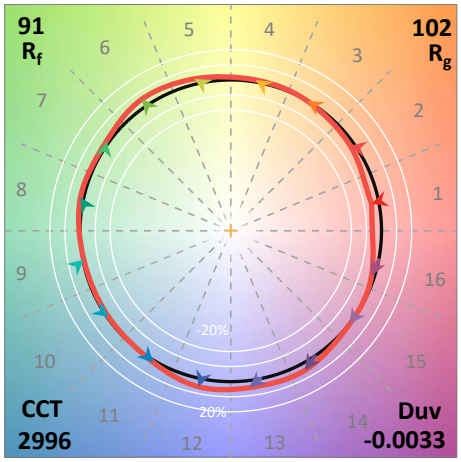
Spectral Power Distribution Comparison

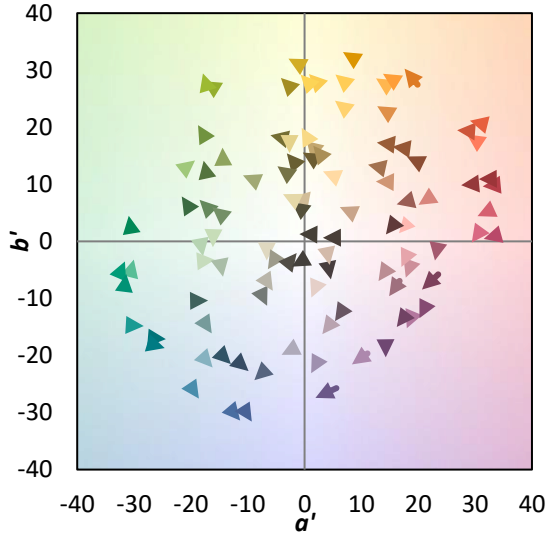


Color Vector Graphics









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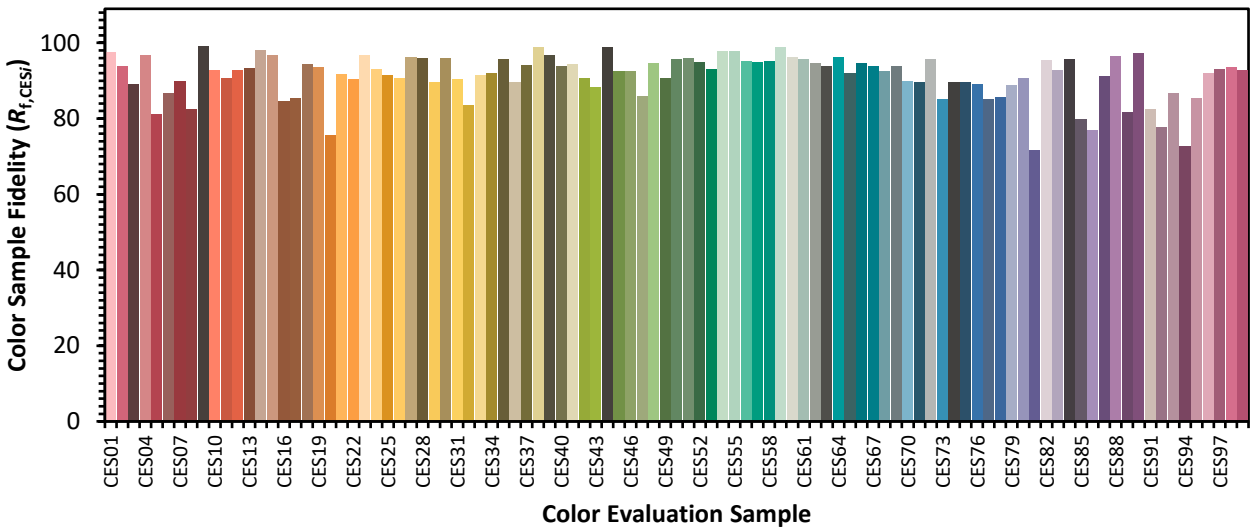
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 91	CES51 = 96	CES76 = 89
CES02 = 63	CES27 = 96	CES52 = 95	CES77 = 85
CES03 = 32	CES28 = 96	CES53 = 93	CES78 = 86
CES04 = 70	CES29 = 90	CES54 = 98	CES79 = 89
CES05 = 51	CES30 = 96	CES55 = 98	CES80 = 91
CES06 = 51	CES31 = 90	CES56 = 95	CES81 = 72
CES07 = 44	CES32 = 84	CES57 = 95	CES82 = 95
CES08 = 42	CES33 = 91	CES58 = 95	CES83 = 93
CES09 = 29	CES34 = 92	CES59 = 99	CES84 = 96
CES10 = 76	CES35 = 96	CES60 = 96	CES85 = 80
CES11 = 59	CES36 = 90	CES61 = 96	CES86 = 77
CES12 = 65	CES37 = 94	CES62 = 95	CES87 = 91
CES13 = 44	CES38 = 99	CES63 = 94	CES88 = 96
CES14 = 74	CES39 = 97	CES64 = 96	CES89 = 82
CES15 = 72	CES40 = 94	CES65 = 92	CES90 = 97
CES16 = 48	CES41 = 94	CES66 = 95	CES91 = 82
CES17 = 50	CES42 = 91	CES67 = 94	CES92 = 78
CES18 = 57	CES43 = 88	CES68 = 93	CES93 = 87
CES19 = 72	CES44 = 99	CES69 = 94	CES94 = 73
CES20 = 67	CES45 = 93	CES70 = 90	CES95 = 85
CES21 = 86	CES46 = 93	CES71 = 90	CES96 = 92
CES22 = 79	CES47 = 86	CES72 = 96	CES97 = 93
CES23 = 92	CES48 = 95	CES73 = 85	CES98 = 94
CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 93
CES25 = 72	CES50 = 96	CES75 = 90	



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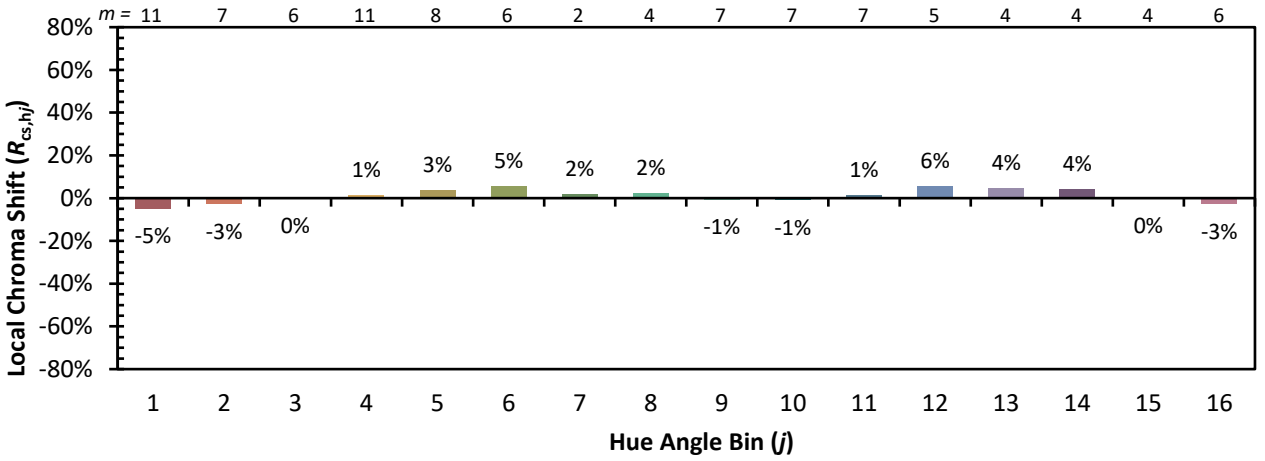
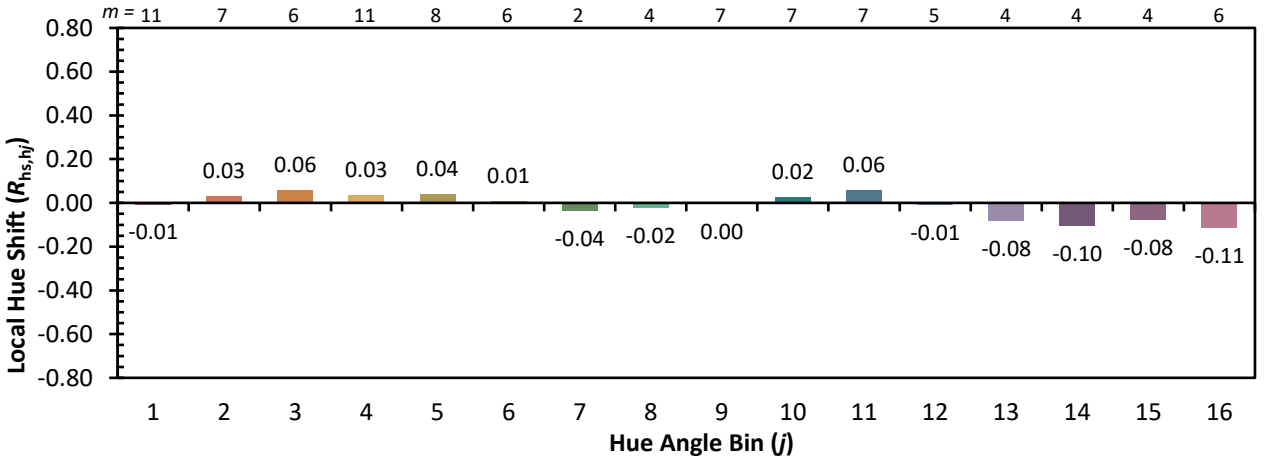
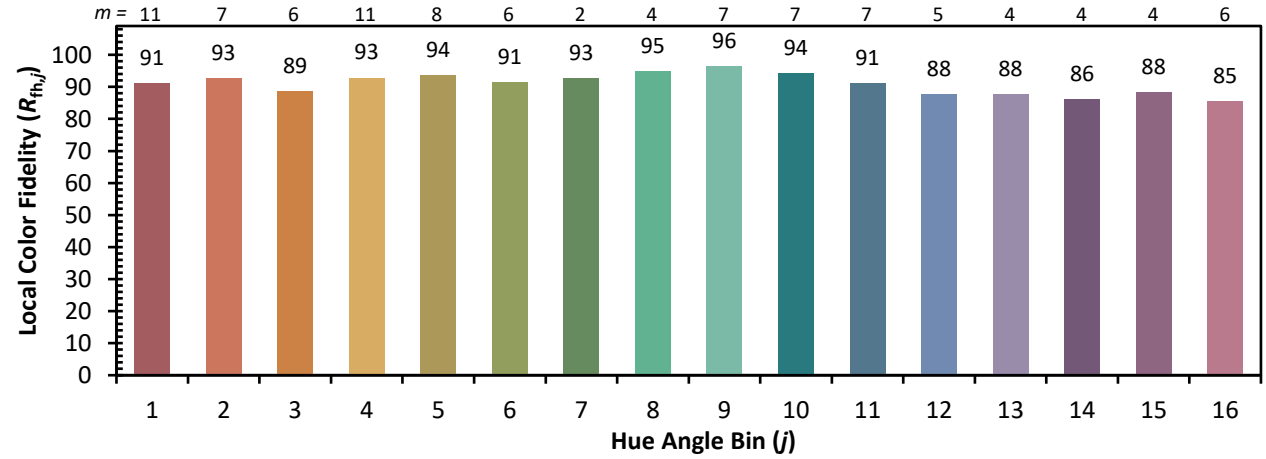
Color Rendition by Hue-Angle Bin







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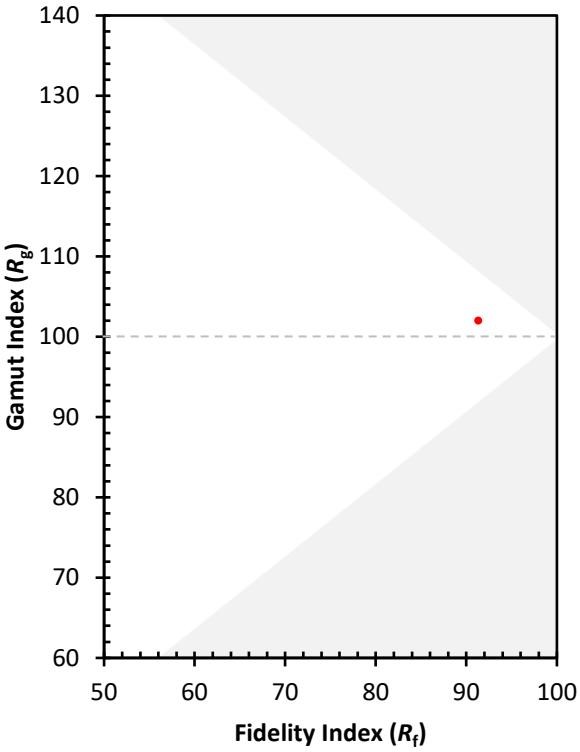
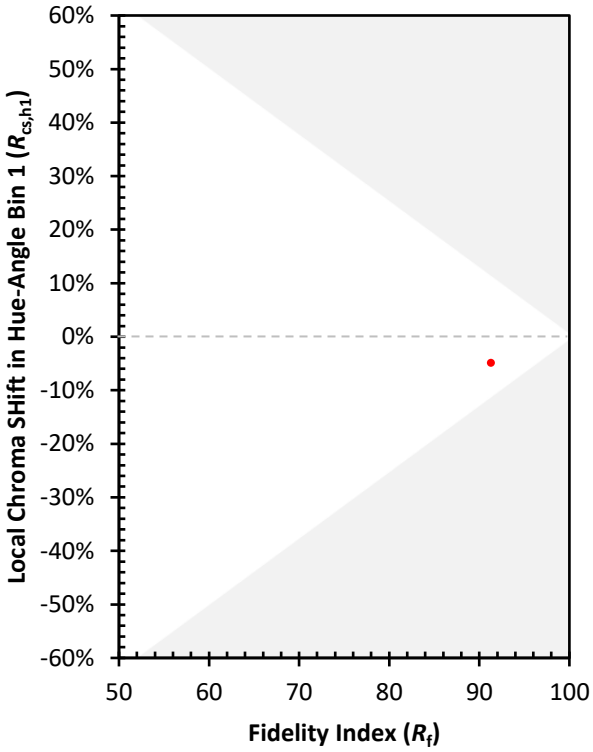
Measure Comparisons





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