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: P1433121

Luminaire Tested: EHBR1-18-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:	P1433121
	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:	EHBR1-18-UNV-A1-L930
Description:	Elevate Round Highbay at, 19000 lumens, 3000K 90CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	16323.0 lumens
Efficiency:	N/A
Efficacy:	172.4 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):	94.7
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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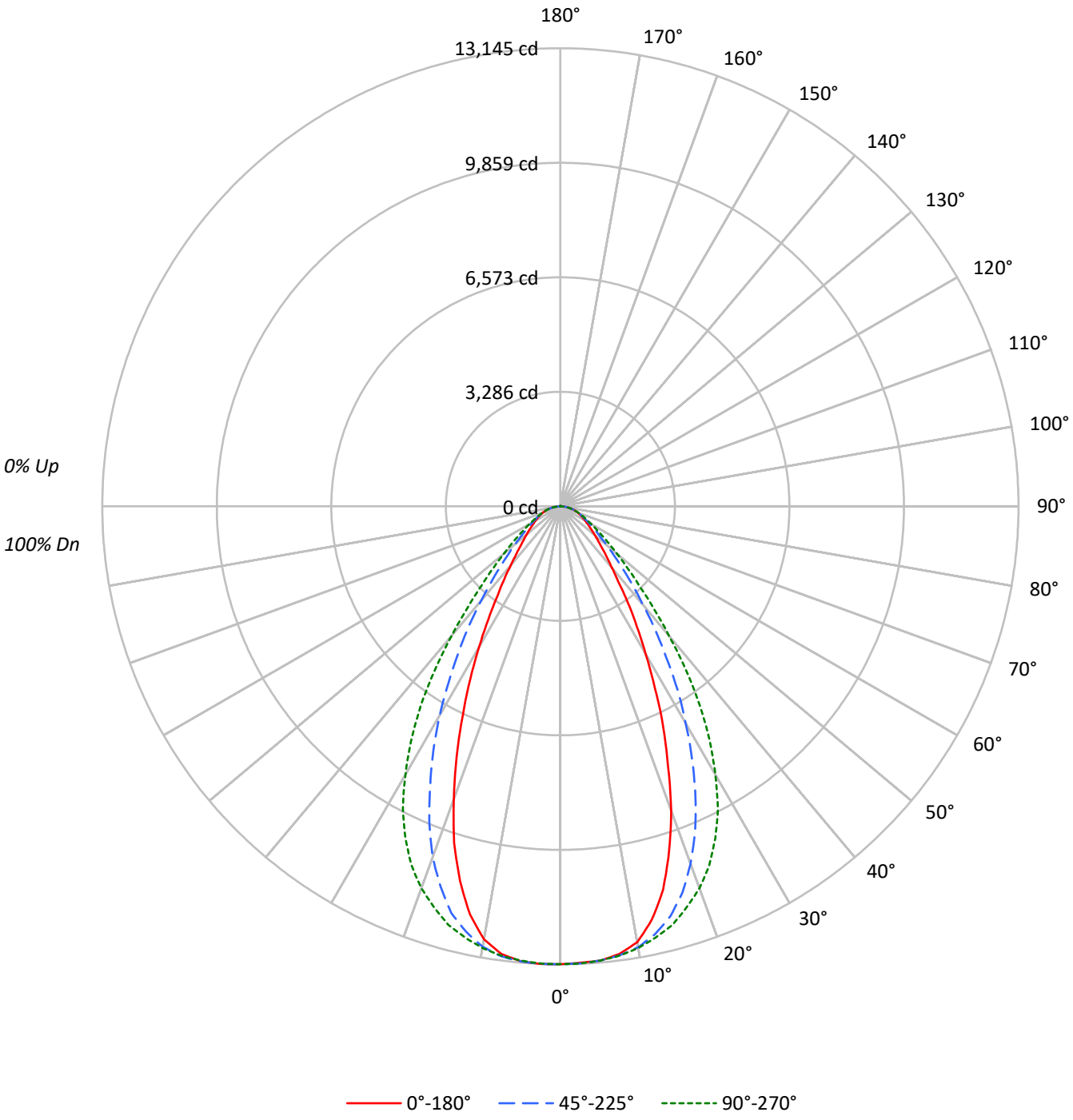
Scaled Data Report

TEST NUMBER: P1433121
CATALOG NUMBER: EHBR1-18-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°	61702	61702	61702	61702	61702
5°	61695	61685	61688	61797	61759
10°	60566	61271	61369	61195	60169
15°	55354	59217	60436	58742	54083
20°	46451	54556	58283	53529	44643
25°	36190	47522	54470	45787	34315
30°	26591	39011	48230	37530	25238
35°	19336	30332	39986	29026	18073
40°	14048	22623	29757	21668	13614
45°	11195	16737	21018	16012	10807
50°	9411	12742	15415	12323	9268
55°	8353	10224	11863	10053	8240
60°	7687	8710	9646	8656	7741
65°	7385	7892	8327	7917	7455
70°	7285	7458	7689	7501	7357
75°	7211	7165	7211	7185	7279
80°	7250	6728	6580	6831	7250
85°	6541	5544	5491	5631	6730

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 22021 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1240.8	7.6
10°-20°	3334.8	20.4
20°-30°	4055.1	24.8
30°-40°	3303.2	20.2
40°-50°	1983.2	12.1
50°-60°	1141.4	7.0
60°-70°	714.3	4.4
70°-80°	420.7	2.6
80°-90°	123.0	0.8
90°-100°	0.1	0.0
100°-110°	0.1	0.0
110°-120°	0.1	0.0
120°-130°	0.2	0.0
130°-140°	0.8	0.0
140°-150°	1.5	0.0
150°-160°	1.7	0.0
160°-170°	1.5	0.0
170°-180°	0.6	0.0
0°-30°	8630.7	52.9
0°-40°	11933.9	73.1
0°-60°	15058.5	92.3
0°-90°	16316.5	100.0
90°-120°	0.2	0.0
90°-150°	2.7	0.0
90°-180°	7.0	0.0
0°-180°	16323.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	13139	13139	13139	13139	13139	
5°	13088	13086	13086	13109	13101	1237
15°	11386	12180	12431	12082	11124	3132
25°	6984	9171	10512	8836	6623	3182
35°	3373	5291	6975	5063	3153	2134
45°	1686	2520	3165	2411	1627	1330
55°	1020	1249	1449	1228	1006	922
65°	665	710	749	712	671	661
75°	397	395	397	396	401	421
85°	121	103	102	104	125	130
90°	0	0	0	0	0	6
95°	0	0	0	0	0	0
105°	0	0	0	0	0	1
115°	0	0	0	0	0	1
125°	1	0	0	0	1	1
135°	1	1	1	1	1	1
145°	2	2	2	2	3	2
155°	4	3	3	4	4	2
165°	6	5	5	6	6	2
175°	8	7	6	7	8	1
180°	7	7	7	7	7	

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TEST NUMBER: P1433121
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	13139.1	13139.1	13139.1	13139.1	13139.1	13139.1	*13139.1*	13139.1	13139.1
2.5°	*13110.3*	*13122.1*	*13127.0*	*13129.8*	*13132.8*	*13141.1*	*13144.7*	*13138.9*	*13143.9*
5°	13087.5	13088.3	13085.5	13097.9	13086.0	13094.3	*13109.2*	13103.4	13101.2
7.5°	12954.2	12981.8	12998.0	13002.1	13004.3	13014.5	*13025.0*	12965.8	12957.0
10°	12701.1	12747.0	12849.1	12878.3	12869.5	12886.0	*12833.1*	12678.5	12617.9
12.5°	12146.0	12307.5	12572.8	12690.9	12669.4	12684.0	*12504.0*	12177.6	11989.9
15°	11385.7	11622.6	12180.1	12413.0	12430.8	12413.0	*12082.4*	11446.4	11124.2
17.5°	10374.8	10812.4	11633.3	12085.2	12059.3	12067.8	*11440.4*	10500.3	10131.5
20°	9294.9	9761.5	10916.7	11670.5	11662.4	11614.6	*10711.1*	9471.4	8933.1
22.5°	8073.6	8675.2	10095.5	11160.5	11157.5	11077.7	*9823.0*	8347.8	7768.2
25°	6984.4	7574.4	9171.4	10535.9	10512.2	10421.3	*8836.5*	7226.9	6622.6
27.5°	5858.4	6471.7	8184.9	9803.8	9787.6	9688.5	*7893.4*	6179.3	5604.0
30°	4903.7	5464.6	7194.2	8998.3	8894.3	8883.0	*6921.1*	5209.2	4654.3
32.5°	4085.8	4566.6	6260.1	8156.0	7971.9	8024.4	*5952.2*	4397.9	3848.0
35°	3372.8	3796.3	5290.9	7181.8	6974.8	7042.8	*5063.0*	3608.6	3152.6
37.5°	2737.4	3144.7	4469.4	6234.2	5917.8	6046.0	*4280.9*	3013.7	2648.2
40°	2291.6	2614.6	3690.4	5194.5	4854.1	5063.0	*3534.6*	2513.6	2220.8
42.5°	1974.5	2185.3	3045.8	4201.9	3940.8	4088.8	*2913.2*	2101.4	1882.4
45°	1685.6	1853.7	2520.2	3315.8	3164.7	3302.0	*2411.0*	1791.8	1627.2
47.5°	1472.3	1601.9	2074.7	2677.6	2583.8	2627.3	*2013.6*	1563.7	1429.9
50°	1288.1	1388.4	1744.1	2161.1	2110.0	2136.6	*1686.7*	1360.6	1268.6
52.5°	1145.1	1218.5	1462.9	1776.1	1750.8	1754.9	*1437.3*	1196.8	1130.2
55°	1020.2	1071.3	1248.8	1455.0	1448.9	1450.0	*1227.9*	1060.6	1006.4
57.5°	910.9	953.3	1073.3	1222.1	1213.4	1215.2	*1063.3*	942.0	907.0
60°	818.4	846.8	927.4	1032.8	1027.0	1024.5	*921.6*	836.3	824.2
62.5°	736.4	754.6	810.5	885.3	874.3	876.8	*810.1*	755.4	737.5
65°	664.6	670.9	710.2	756.5	749.4	755.4	*712.5*	675.0	670.9
67.5°	594.4	600.7	623.9	655.0	646.7	651.7	*624.4*	602.4	598.8
70°	530.6	530.3	543.2	560.0	560.0	560.9	*546.3*	533.1	535.8
72.5°	464.6	462.9	466.7	478.0	475.0	485.4	*470.1*	465.9	466.4
75°	397.4	392.7	394.9	400.7	397.4	402.9	*396.0*	401.2	401.2
77.5°	334.1	325.3	322.5	323.4	317.3	325.5	*327.2*	330.8	339.1
80°	268.1	255.7	248.8	248.5	243.3	248.5	*252.6*	260.0	268.1
82.5°	199.0	188.2	176.7	174.5	171.2	174.2	*179.7*	188.5	201.5
85°	121.4	110.1	102.9	99.1	101.9	101.9	*104.5*	116.9	124.9
87.5°	43.8	38.2	31.4	31.6	32.4	33.6	*34.9*	44.0	48.1
90°	0.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.3
92.5°	0.3	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.3
95°	0.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.3
97.5°	0.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.3
100°	0.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.5
102.5°	0.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.5
105°	0.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.5
107.5°	0.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.5
110°	0.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.5

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Scaled Data Report

TEST NUMBER: P1433121
CATALOG NUMBER: EHBR1-18-UNV-A1-L930

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.5
115°	0.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.5
117.5°	0.8	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.5
120°	0.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.3	0.5
122.5°	0.8	0.3	0.0	0.0	0.0	0.0	*0.0*	0.3	0.8
125°	0.8	0.3	0.0	0.0	0.0	0.0	*0.3*	0.3	0.8
127.5°	0.8	0.3	0.0	0.0	0.0	0.0	*0.3*	0.5	0.8
130°	0.8	0.5	0.3	0.0	0.3	0.3	*0.5*	0.5	0.8
132.5°	1.1	0.8	0.8	0.5	0.5	0.8	*0.8*	1.1	1.1
135°	1.3	1.1	1.1	0.8	1.1	1.1	*1.1*	1.1	1.3
137.5°	1.3	1.3	1.3	1.3	1.3	1.3	*1.3*	1.3	1.7
140°	2.0	1.7	1.7	1.7	1.7	1.7	*1.7*	2.0	2.0
142.5°	2.2	2.2	2.0	2.0	2.0	2.2	*2.2*	2.2	2.5
145°	2.5	2.5	2.2	2.2	2.2	2.5	*2.5*	2.8	2.8
147.5°	3.3	3.0	2.5	2.5	2.5	2.5	*2.8*	3.0	3.3
150°	3.6	3.3	2.8	2.8	2.8	2.8	*3.0*	3.6	3.8
152.5°	3.8	3.6	3.0	2.8	2.8	2.8	*3.3*	3.6	4.1
155°	4.1	3.8	3.3	2.8	2.8	3.0	*3.6*	4.1	4.4
157.5°	5.0	4.4	3.8	3.3	3.3	3.6	*4.1*	4.6	5.0
160°	5.5	5.0	4.4	3.8	3.8	4.1	*4.6*	5.3	5.5
162.5°	6.1	5.5	4.6	4.4	4.1	4.4	*5.0*	5.8	6.1
165°	6.3	5.8	5.3	4.6	4.6	4.6	*5.5*	6.1	6.3
167.5°	6.6	6.3	5.5	5.0	5.0	5.0	*5.8*	6.3	6.6
170°	6.9	6.6	5.8	5.3	5.0	5.3	*6.1*	6.6	6.9
172.5°	7.4	7.1	6.3	5.8	5.5	5.8	*6.6*	7.1	7.4
175°	8.3	7.7	7.1	6.3	6.1	6.3	*7.1*	7.7	8.3
177.5°	8.6	8.0	7.4	6.6	6.3	6.6	*7.4*	8.0	8.6
180°	7.4	7.4	7.4	7.4	7.4	7.4	*7.4*	7.4	7.4

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Scaled Data Report

TEST NUMBER: P1433121
CATALOG NUMBER: EHBR1-18-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	16.71	17.97	17.07	18.29	18.60	17.69	18.96	18.06	19.27	19.58
	3H	18.27	19.40	18.66	19.73	20.10	19.03	20.16	19.41	20.49	20.85
	4H	18.94	19.99	19.35	20.34	20.73	19.59	20.64	19.99	20.99	21.38
	6H	19.50	20.46	19.91	20.83	21.23	20.02	20.99	20.44	21.36	21.75
	8H	19.70	20.61	20.13	21.00	21.41	20.16	21.07	20.59	21.46	21.87
	12H	19.83	20.70	20.26	21.08	21.51	20.24	21.11	20.67	21.49	21.92
4H	2H	17.28	18.33	17.68	18.68	19.07	18.05	19.10	18.45	19.45	19.84
	3H	19.07	19.93	19.48	20.34	20.74	19.64	20.50	20.05	20.91	21.31
	4H	19.87	20.64	20.30	21.06	21.50	20.34	21.11	20.77	21.53	21.98
	6H	20.55	21.22	21.01	21.67	22.13	20.91	21.58	21.37	22.02	22.49
	8H	20.80	21.42	21.27	21.87	22.34	21.09	21.72	21.56	22.16	22.64
	12H	20.97	21.52	21.46	22.00	22.48	21.21	21.76	21.70	22.24	22.72
8H	4H	20.15	20.77	20.62	21.22	21.69	20.57	21.19	21.04	21.64	22.11
	6H	20.96	21.47	21.47	21.97	22.45	21.27	21.78	21.77	22.28	22.76
	8H	21.29	21.75	21.82	22.27	22.76	21.53	21.99	22.05	22.50	23.00
	12H	21.55	21.95	22.06	22.44	23.01	21.72	22.12	22.24	22.62	23.19
12H	4H	20.16	20.71	20.65	21.20	21.67	20.58	21.13	21.07	21.62	22.09
	6H	21.01	21.47	21.53	21.98	22.48	21.31	21.77	21.84	22.29	22.78
	8H	21.40	21.80	21.91	22.29	22.87	21.63	22.03	22.15	22.53	23.10

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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

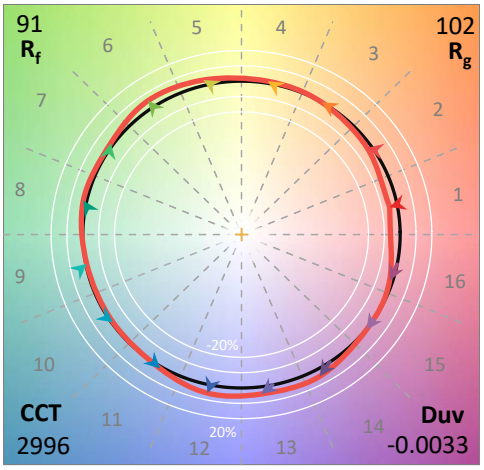
Test Information

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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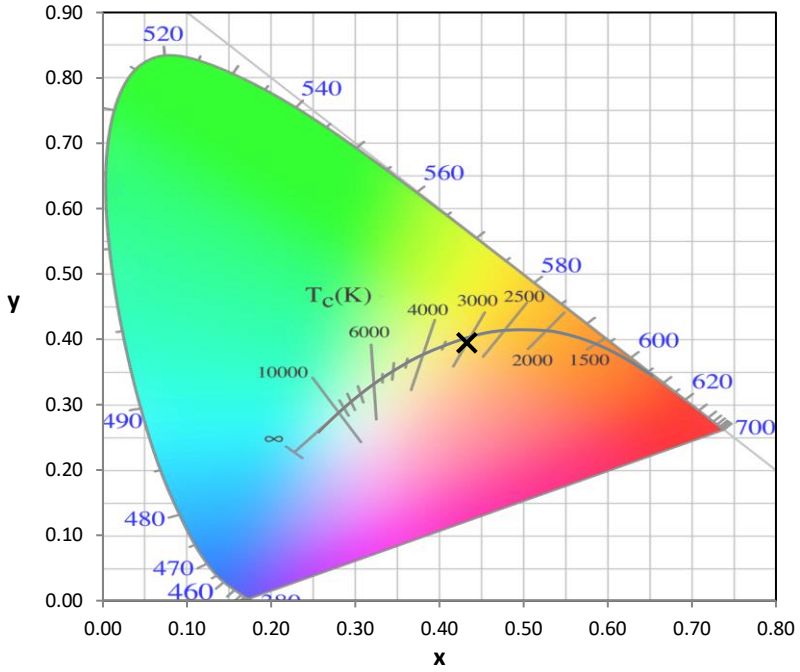
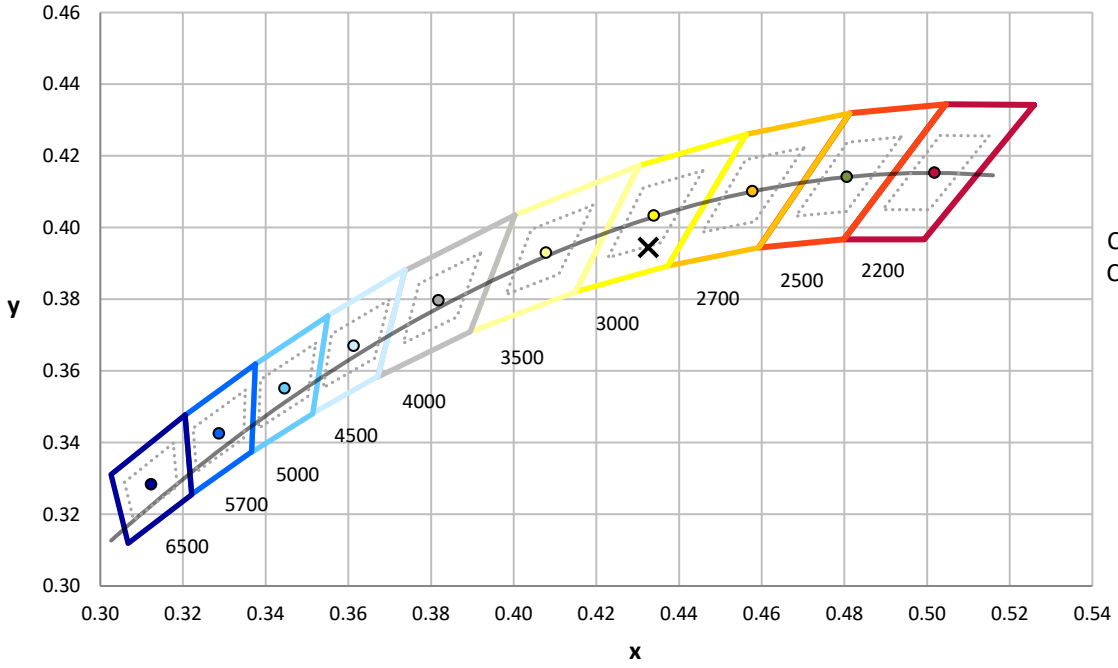
CIE 1931 Chromaticity Diagram



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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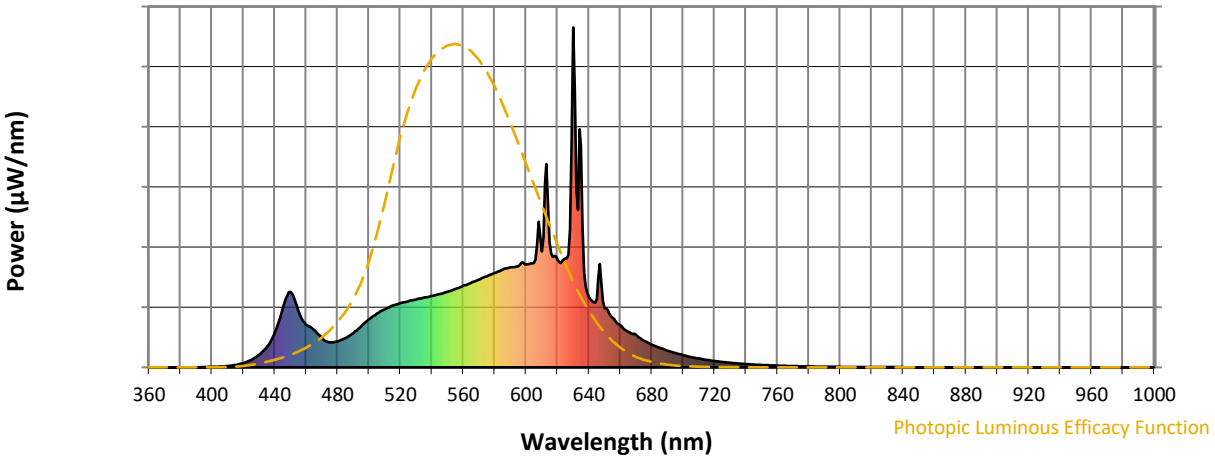
Photopic Flux vs. Wavelength



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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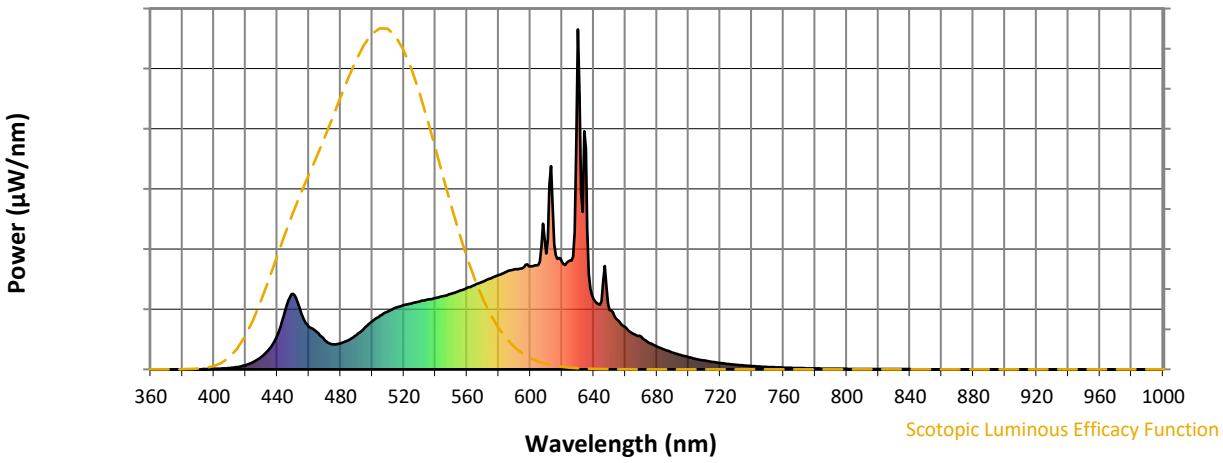
Scotopic Flux vs. Wavelength



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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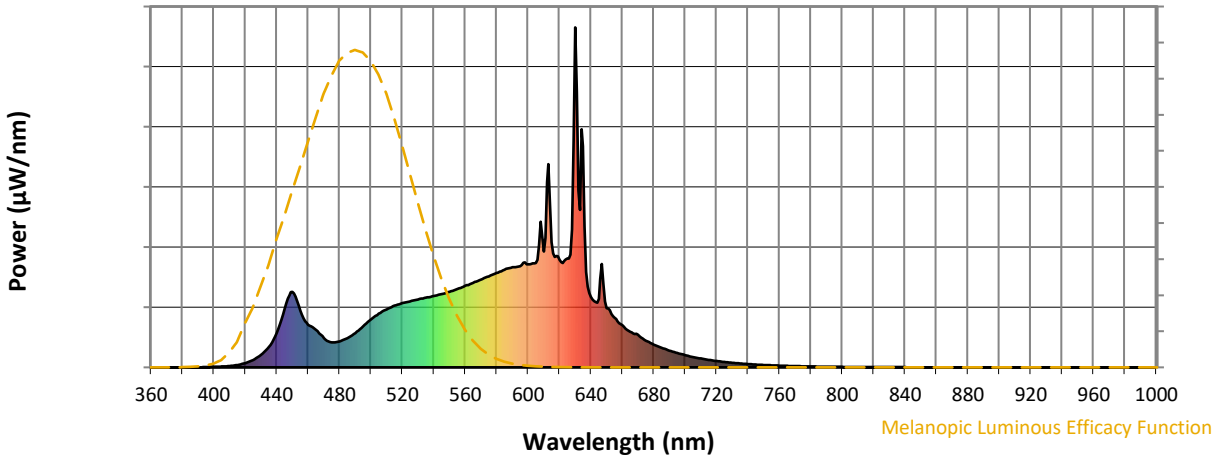
Melanopic Flux vs. Wavelength



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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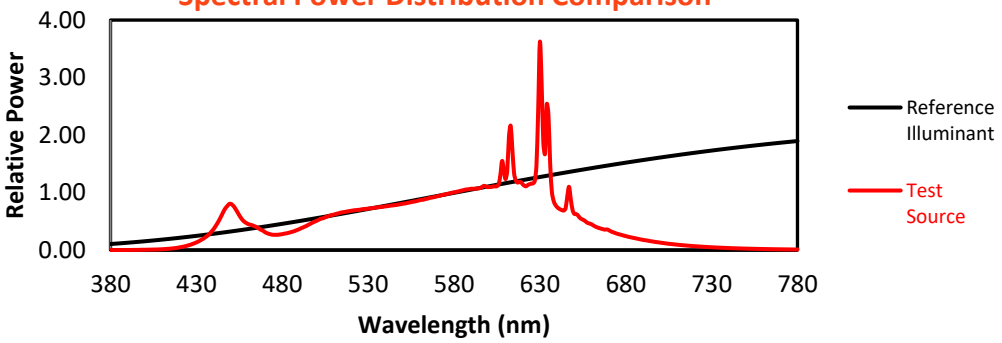
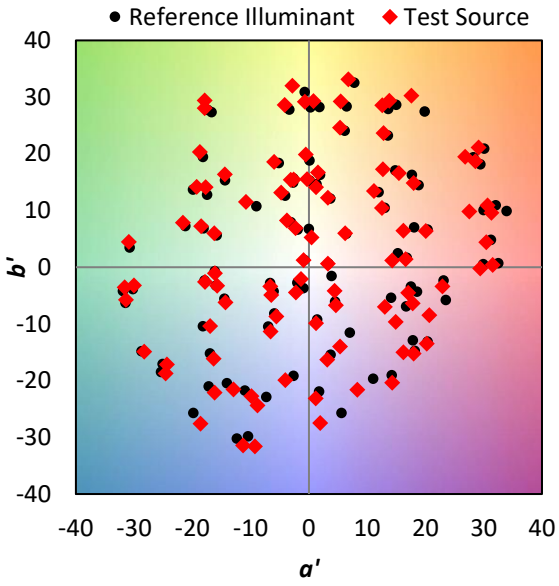
Summary

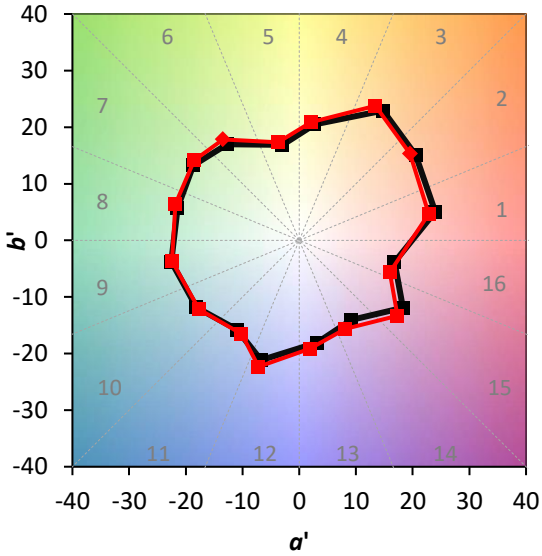
R_f = 91.3
R_g = 102
CIE R_a = 94.4
R_9 = 61.4

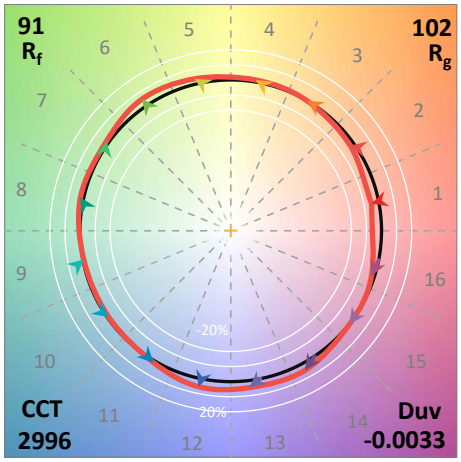
Spectral Power Distribution Comparison

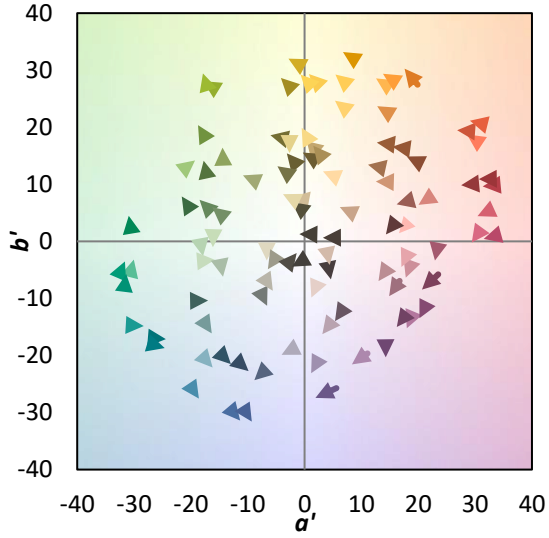


Color Vector Graphics









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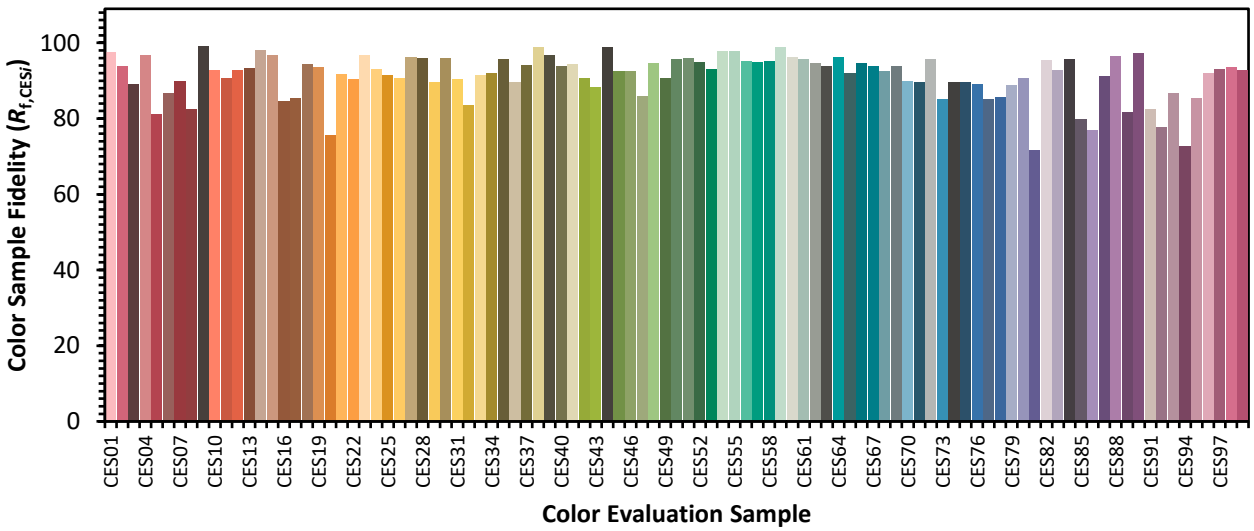
Individual Sample Fidelity Index ($R_{f,i}$)

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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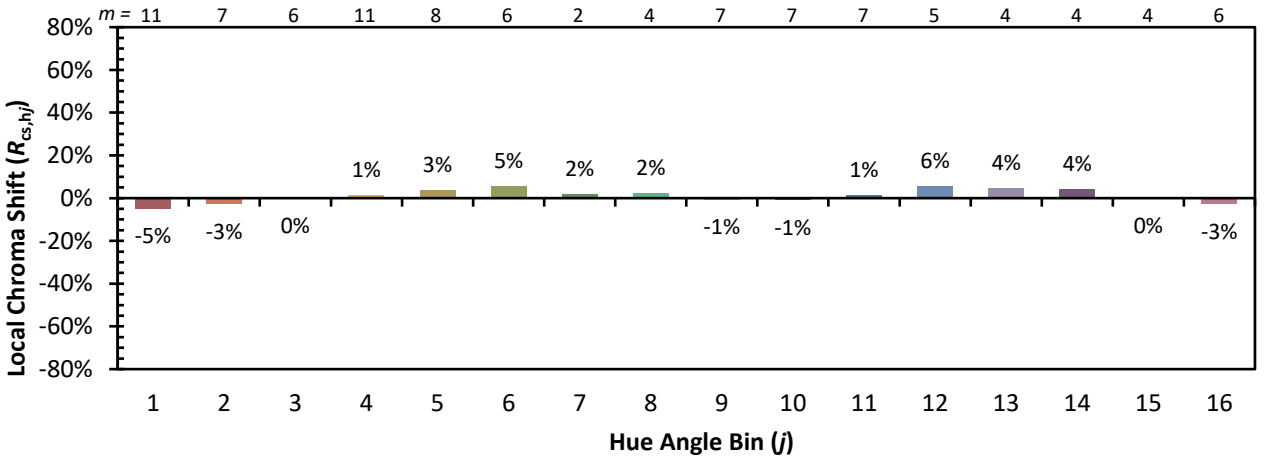
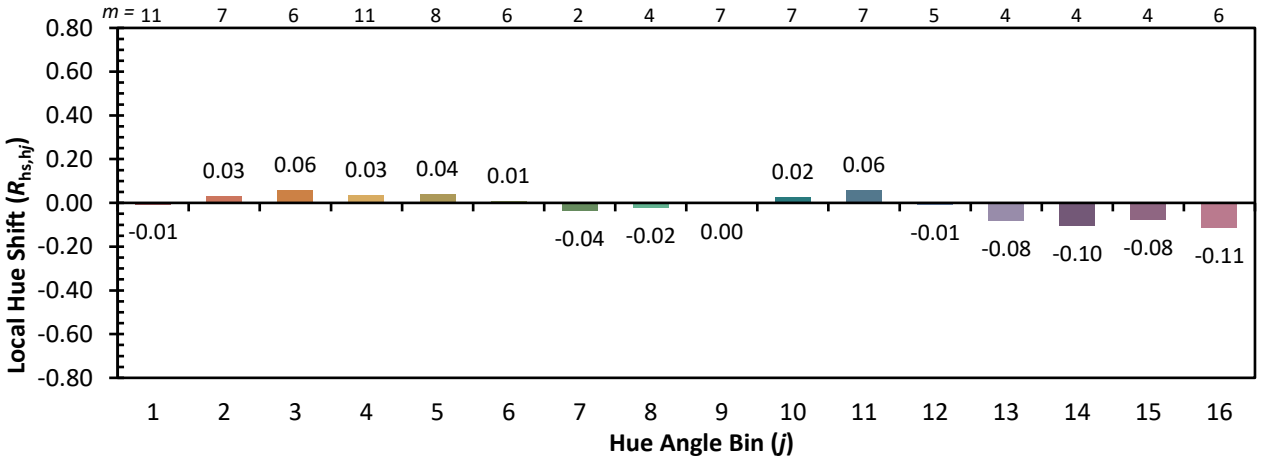
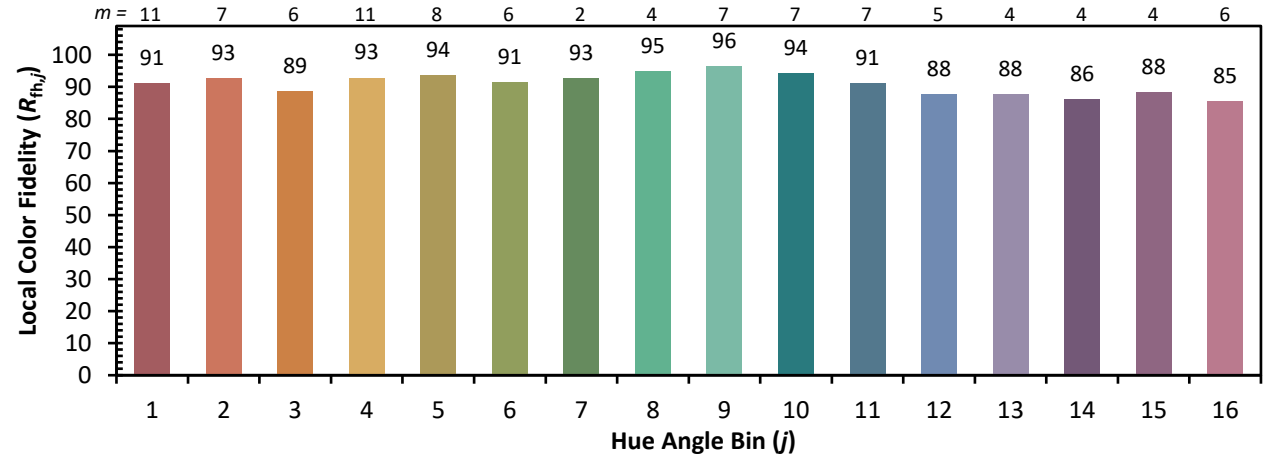
Color Rendition by Hue-Angle Bin







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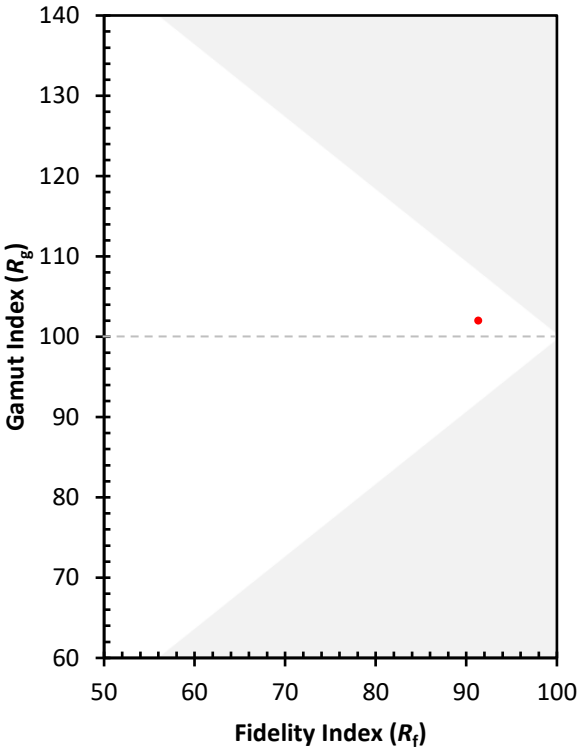
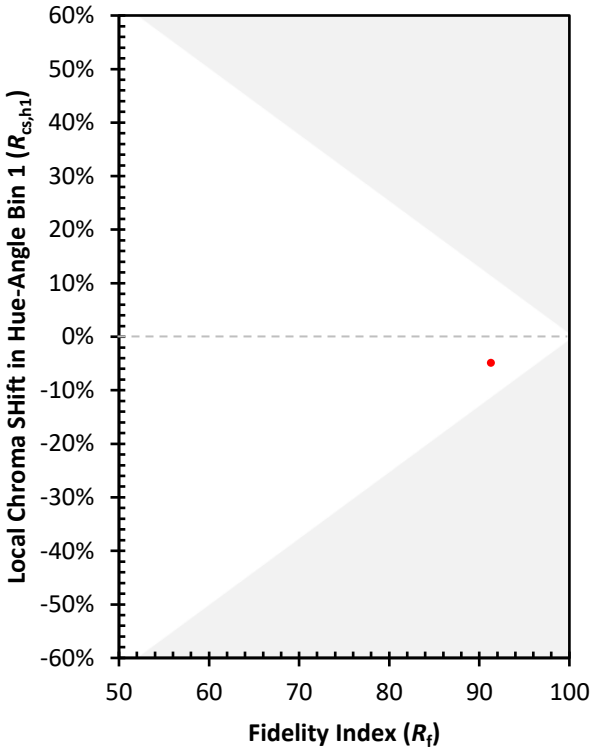
Measure Comparisons





(END OF REPORT)