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: P1433906

Luminaire Tested: EHBR1-48-UNV-ASM-L940

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:	P1433906
	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:	EHBR1-48-UNV-ASM-L940
Description:	Elevate Round Highbay at, 49000 lumens, 4000K 90CRI LEDs with ASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	44228.1 lumens
Efficiency:	N/A
Efficacy:	171.0 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):	258.6
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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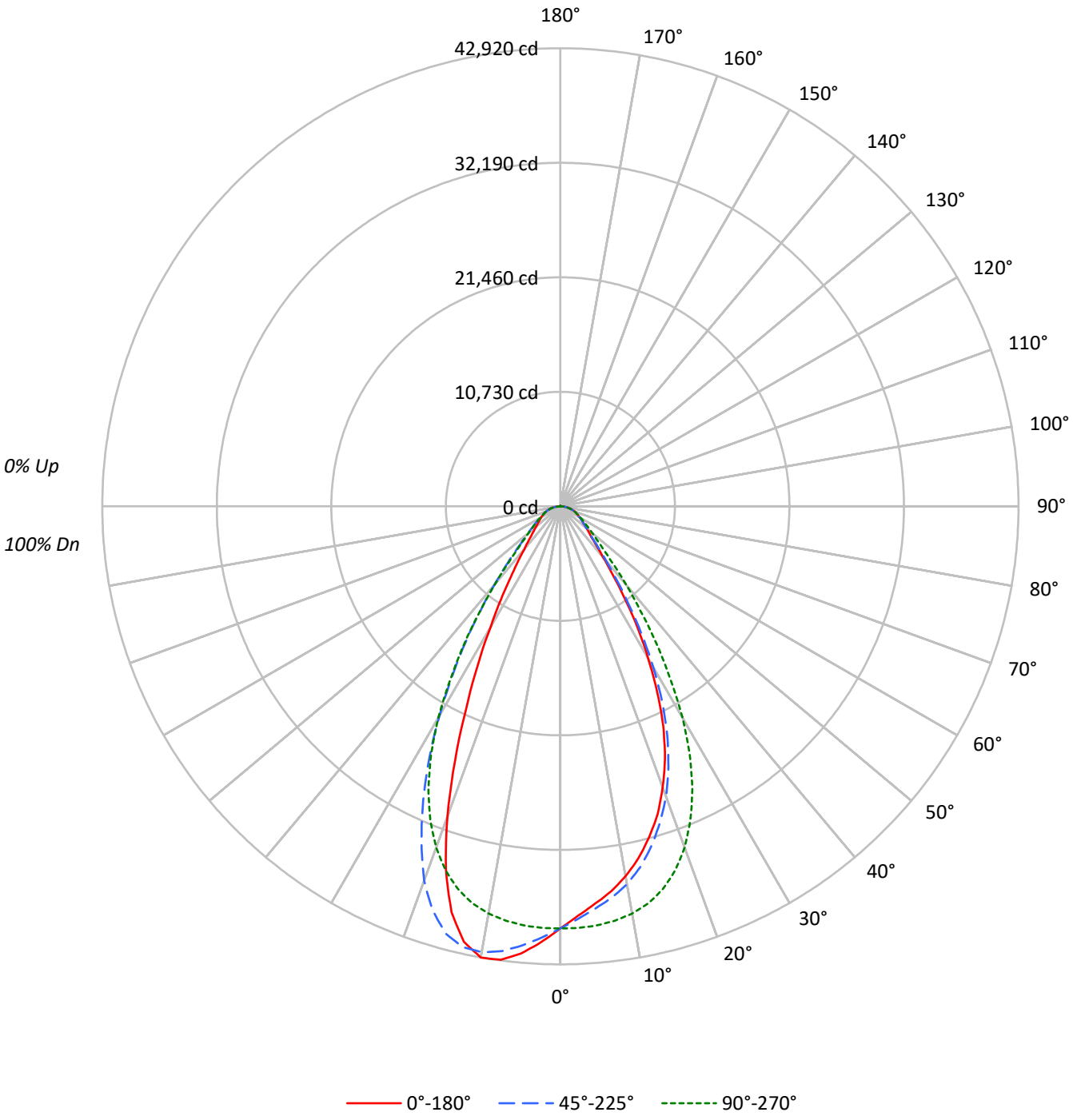
Scaled Data Report

TEST NUMBER: P1433906
CATALOG NUMBER: EHBR1-48-UNV-ASM-L940

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°	185752	185752	185752	185752	185752
5°	176182	178242	185825	194738	198241
10°	167838	171393	184748	202312	204668
15°	156082	160251	180502	201586	191482
20°	140001	144716	169999	186597	154620
25°	118198	122672	151580	157676	107925
30°	89143	94311	124062	122823	70774
35°	59866	63480	89762	88313	46238
40°	38126	40745	58605	58983	32183
45°	27472	28615	37604	39220	25211
50°	23187	23371	28297	29033	21708
55°	20798	20848	23477	24096	20094
60°	19652	19485	20745	21184	19533
65°	19269	19096	19426	19805	19351
70°	19441	19105	19125	19492	19696
75°	19609	19015	18975	19648	20215
80°	19858	18474	18555	19858	21243
85°	18826	15626	15626	17867	19742

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
Vertical Angle: 45°
Luminance: 52869 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3761.0	8.5
10°-20°	10232.1	23.1
20°-30°	12000.2	27.1
30°-40°	8345.4	18.9
40°-50°	4147.3	9.4
50°-60°	2480.5	5.6
60°-70°	1745.9	3.9
70°-80°	1124.6	2.5
80°-90°	357.2	0.8
90°-100°	2.1	0.0
100°-110°	2.5	0.0
110°-120°	2.5	0.0
120°-130°	3.2	0.0
130°-140°	4.4	0.0
140°-150°	5.2	0.0
150°-160°	5.8	0.0
160°-170°	5.7	0.0
170°-180°	2.4	0.0
0°-30°	25993.4	58.8
0°-40°	34338.7	77.6
0°-60°	40966.5	92.6
0°-90°	44194.2	99.9
90°-120°	7.1	0.0
90°-150°	19.9	0.0
90°-180°	34.0	0.1
0°-180°	44228.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	39554	39554	39554	39554	39554	
5°	37374	37811	39420	41310	42053	3506
15°	32104	32962	37127	41464	39385	8953
25°	22811	23675	29254	30430	20829	10292
35°	10442	11073	15657	15405	8065	6652
45°	4136	4309	5662	5906	3796	3344
55°	2540	2546	2867	2943	2454	2305
65°	1734	1718	1748	1782	1742	1722
75°	1081	1048	1046	1083	1114	1141
85°	349	290	290	332	366	360
90°	1	1	1	2	6	18
95°	1	1	2	2	6	1
105°	2	1	2	3	7	2
115°	2	2	2	3	7	1
125°	2	3	3	4	8	2
135°	3	5	6	6	8	3
145°	8	9	9	8	10	5
155°	14	13	12	12	13	7
165°	21	19	20	22	24	6
175°	25	25	26	28	32	2
180°	28	28	28	28	28	

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Scaled Data Report

TEST NUMBER: P1433906
CATALOG NUMBER: EHBR1-48-UNV-ASM-L940

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	39554.5	39554.5	39554.5	39554.5	39554.5	39554.5	39554.5	39554.5	*39554.5*
2.5°	38380.5	38405.6	38674.1	39023.5	39531.6	40042.6	40456.4	40729.4	*40864.4*
5°	37373.9	37513.4	37810.9	38452.4	39419.6	40443.1	41310.2	41877.6	*42053.4*
7.5°	36393.4	36474.2	36971.9	37782.6	39151.8	40746.5	42034.8	42697.1	*42858.9*
10°	*35197.0*	*35380.2*	*35942.4*	*36898.5*	*38743.2*	*40937.8*	*42426.4*	*42901.2*	*42920.5*
12.5°	33789.3	34031.8	34612.6	35818.6	38091.2	40869.6	42295.1	42139.4	*41785.6*
15°	32104.1	32316.9	32961.5	34360.4	37126.9	40465.4	41463.7	40196.1	*39385.4*
17.5°	30284.0	30476.8	31036.8	32577.3	35768.1	39708.8	39728.1	37220.4	*35691.0*
20°	28014.3	28165.6	28957.8	30469.4	34017.0	38495.4	37338.3	32751.6	*30939.6*
22.5°	25599.3	25741.0	26444.9	28018.0	31821.5	36859.2	34010.3	28256.1	*25784.0*
25°	22811.3	22888.4	23674.6	25097.1	29253.7	34854.4	30430.1	23357.9	*20828.6*
27.5°	19674.6	19805.9	20628.4	22081.4	26233.5	32313.3	26617.7	19087.1	*16753.7*
30°	16439.3	16656.5	17392.3	18693.3	22878.7	29055.7	22650.3	15200.5	*13051.8*
32.5°	13419.7	13576.2	14100.6	15460.2	19122.7	25862.6	18840.1	12179.6	*10359.4*
35°	10442.5	10599.1	11073.0	12408.0	15657.4	21867.8	15404.6	9570.2	*8065.4*
37.5°	7982.2	8258.9	8563.0	9646.6	12287.9	18093.2	12279.7	7706.4	*6541.8*
40°	6219.2	6263.7	6646.5	7340.0	9559.9	14147.3	9621.5	6151.8	*5249.8*
42.5°	4978.3	5099.3	5263.9	5783.1	7243.5	10817.8	7562.5	5048.8	*4459.1*
45°	4136.5	4184.0	4308.6	4657.2	5662.2	7960.7	5905.5	4259.7	*3796.1*
47.5°	3618.8	3598.0	3678.1	3939.2	4611.2	6152.5	4786.2	3653.6	*3328.8*
50°	3173.7	3161.2	3199.0	3373.3	3873.2	4720.9	3974.0	3189.3	*2971.3*
52.5°	2828.1	2839.3	2843.0	2951.3	3327.3	3850.2	3384.4	2842.3	*2695.3*
55°	2540.3	2554.5	2546.3	2626.4	2867.4	3236.8	2943.1	2556.0	*2454.3*
57.5°	2315.6	2305.3	2294.1	2337.1	2518.1	2745.8	2556.0	2311.9	*2244.4*
60°	2092.4	2082.7	2074.6	2102.7	2208.8	2377.9	2255.5	2099.0	*2079.7*
62.5°	1901.0	1895.1	1894.3	1889.1	1970.7	2077.6	1994.5	1907.6	*1890.6*
65°	1734.1	1727.5	1718.5	1710.4	1748.2	1847.6	1782.3	1735.6	*1741.5*
67.5°	1567.2	1567.2	1551.7	1539.1	1576.2	1628.1	1599.8	1573.2	*1579.9*
70°	1415.9	1416.7	1391.4	1381.8	1392.9	1448.5	1419.6	1423.4	*1434.5*
72.5°	1253.5	1235.6	1217.1	1216.4	1217.8	1260.9	1251.3	1260.1	*1272.1*
75°	1080.7	1059.9	1048.0	1034.7	1045.8	1078.5	1082.9	1095.5	*1114.1*
77.5°	913.8	881.9	872.2	865.6	858.1	895.2	909.4	926.4	*953.8*
80°	734.3	699.4	683.1	673.5	686.1	703.1	734.3	746.9	*785.5*
82.5°	543.0	517.0	496.9	496.2	502.2	517.7	544.5	568.1	*590.4*
85°	349.4	307.8	290.0	296.7	290.0	313.8	331.6	359.7	*366.4*
87.5°	126.1	98.7	94.2	103.9	101.6	109.0	124.6	135.7	*136.5*
90°	0.7	0.7	0.7	0.7	0.7	1.5	2.2	4.5	*6.0*
92.5°	0.7	0.7	0.7	0.7	0.7	1.5	2.2	4.5	*6.0*
95°	0.7	0.7	0.7	0.7	1.5	1.5	2.2	4.5	*6.0*
97.5°	1.5	0.7	0.7	0.7	1.5	1.5	2.2	4.5	*6.0*
100°	1.5	0.7	0.7	1.5	1.5	1.5	2.2	4.5	*6.0*
102.5°	1.5	0.7	0.7	1.5	1.5	2.2	3.0	5.2	*6.0*
105°	1.5	0.7	0.7	1.5	1.5	2.2	3.0	5.2	*6.7*
107.5°	1.5	0.7	1.5	1.5	1.5	2.2	3.0	5.2	*6.7*
110°	1.5	0.7	1.5	1.5	1.5	2.2	3.0	5.2	*6.7*

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Scaled Data Report

TEST NUMBER: P1433906
CATALOG NUMBER: EHBR1-48-UNV-ASM-L940

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	1.5	0.7	1.5	1.5	1.5	2.2	3.0	5.2	*6.7*
115°	1.5	0.7	1.5	1.5	2.2	2.2	3.0	5.2	*6.7*
117.5°	1.5	0.7	1.5	2.2	2.2	2.2	3.0	5.2	*6.7*
120°	1.5	0.7	1.5	2.2	2.2	2.2	3.7	5.2	*6.7*
122.5°	1.5	1.5	2.2	3.0	3.0	3.0	3.7	6.0	*6.7*
125°	2.2	1.5	3.0	3.7	3.0	3.0	4.5	6.0	*7.5*
127.5°	2.2	1.5	3.0	3.7	3.7	3.7	4.5	6.0	*7.5*
130°	2.2	2.2	3.7	4.5	4.5	3.7	4.5	6.7	*7.5*
132.5°	3.0	3.0	5.2	6.0	5.2	4.5	5.2	7.5	*8.2*
135°	3.0	3.7	5.2	6.7	6.0	4.5	6.0	6.7	*8.2*
137.5°	3.7	4.5	6.7	7.5	6.7	5.2	6.0	7.5	*8.2*
140°	5.2	6.0	7.5	7.5	7.5	6.0	6.0	7.5	*8.9*
142.5°	6.7	6.7	8.2	8.2	8.2	6.7	6.7	8.2	*8.9*
145°	8.2	8.2	8.9	8.2	8.9	8.2	7.5	8.2	*9.6*
147.5°	9.6	9.6	9.6	8.9	8.9	8.2	8.2	8.9	*10.3*
150°	11.1	11.1	10.3	9.6	9.6	9.6	8.9	9.6	*11.1*
152.5°	12.6	11.8	11.1	10.3	10.3	10.3	10.3	11.1	*11.8*
155°	14.1	13.3	12.6	11.1	11.8	11.8	11.8	12.6	*13.3*
157.5°	16.3	14.8	14.1	13.3	13.3	14.1	14.1	14.8	*15.6*
160°	17.8	17.0	16.3	15.6	16.3	16.3	17.0	17.8	*18.5*
162.5°	19.3	18.5	17.8	17.8	17.8	17.8	19.3	20.0	*21.5*
165°	20.8	20.0	19.3	19.3	20.0	20.0	21.5	23.0	*24.5*
167.5°	20.8	20.8	20.8	20.8	21.5	21.5	23.0	25.2	*26.7*
170°	22.3	21.5	21.5	22.3	22.3	23.0	24.5	26.7	*28.2*
172.5°	23.8	23.0	23.8	23.8	24.5	24.5	26.7	28.9	*30.4*
175°	25.2	24.5	25.2	25.2	26.0	26.7	28.2	30.4	*31.9*
177.5°	26.0	25.2	25.2	25.2	26.0	27.5	28.9	31.1	*32.6*
180°	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	*27.5*

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Scaled Data Report

TEST NUMBER: P1433906
CATALOG NUMBER: EHBR1-48-UNV-ASM-L940

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	19.12	20.33	19.49	20.64	20.96	19.89	21.10	20.25	21.41	21.73
	3H	21.04	22.11	21.42	22.45	22.81	21.54	22.61	21.92	22.95	23.31
	4H	21.85	22.85	22.26	23.20	23.59	22.26	23.26	22.66	23.61	24.00
	6H	22.52	23.44	22.94	23.81	24.21	22.84	23.76	23.26	24.14	24.53
	8H	22.76	23.63	23.19	24.02	24.43	23.05	23.92	23.49	24.32	24.73
	12H	22.92	23.75	23.35	24.14	24.57	23.19	24.02	23.62	24.40	24.84
4H	2H	19.69	20.69	20.10	21.04	21.43	20.31	21.31	20.72	21.67	22.05
	3H	21.85	22.67	22.26	23.08	23.49	22.23	23.06	22.65	23.47	23.87
	4H	22.80	23.54	23.24	23.96	24.41	23.10	23.84	23.54	24.27	24.71
	6H	23.61	24.25	24.08	24.70	25.17	23.85	24.49	24.32	24.94	25.41
	8H	23.90	24.50	24.38	24.95	25.42	24.12	24.71	24.59	25.16	25.64
	12H	24.11	24.63	24.60	25.12	25.60	24.30	24.83	24.79	25.31	25.79
8H	4H	23.12	23.71	23.59	24.16	24.64	23.41	24.00	23.88	24.45	24.93
	6H	24.07	24.56	24.58	25.06	25.54	24.31	24.79	24.81	25.29	25.78
	8H	24.46	24.89	24.99	25.41	25.91	24.67	25.10	25.20	25.62	26.12
	12H	24.76	25.13	25.28	25.63	26.21	24.95	25.33	25.47	25.82	26.40
12H	4H	23.14	23.67	23.63	24.15	24.63	23.44	23.96	23.92	24.45	24.92
	6H	24.14	24.57	24.66	25.09	25.58	24.38	24.81	24.90	25.33	25.83
	8H	24.59	24.96	25.10	25.46	26.04	24.81	25.19	25.33	25.68	26.26

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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: SP1-2506-472-7

Test Date: 08/04/2025

Luminaire Tested: EHBR-60-L940-N

Data in this report applies to families of products including EHBR-60-L940-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

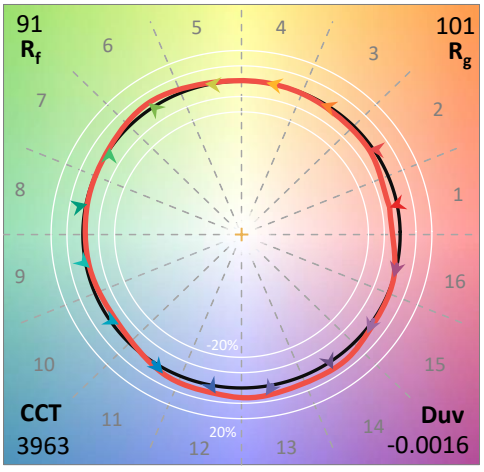
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-7
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-L940-N**
Description:	Elevate Round Highbay at, 60000 lumens, 4000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K):	3963
CIE u':	0.2267
CIE v':	0.5003
Duv:	-0.0016
CIE x:	0.3810
CIE y:	0.3738
CIE z:	0.2453
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	580
Purity:	26.49712
Rf:	90.7
Rg:	101

CRI (Ra):	93.4
R1:	95.2
R2:	95.1
R3:	93.3
R4:	94.5
R5:	94.2
R6:	92.9
R7:	94.0
R8:	87.7
R9:	66.4
R10:	86.6
R11:	94.4
R12:	75.4
R13:	95.0
R14:	95.4
R15:	92.8



Test Conditions

Stabilization Time:	44M
Operation Time:	1H 44M
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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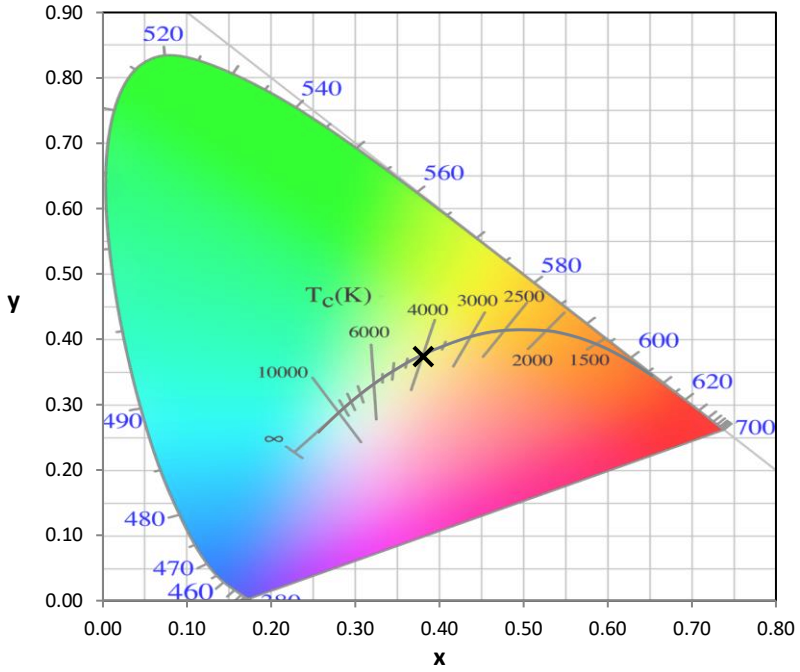
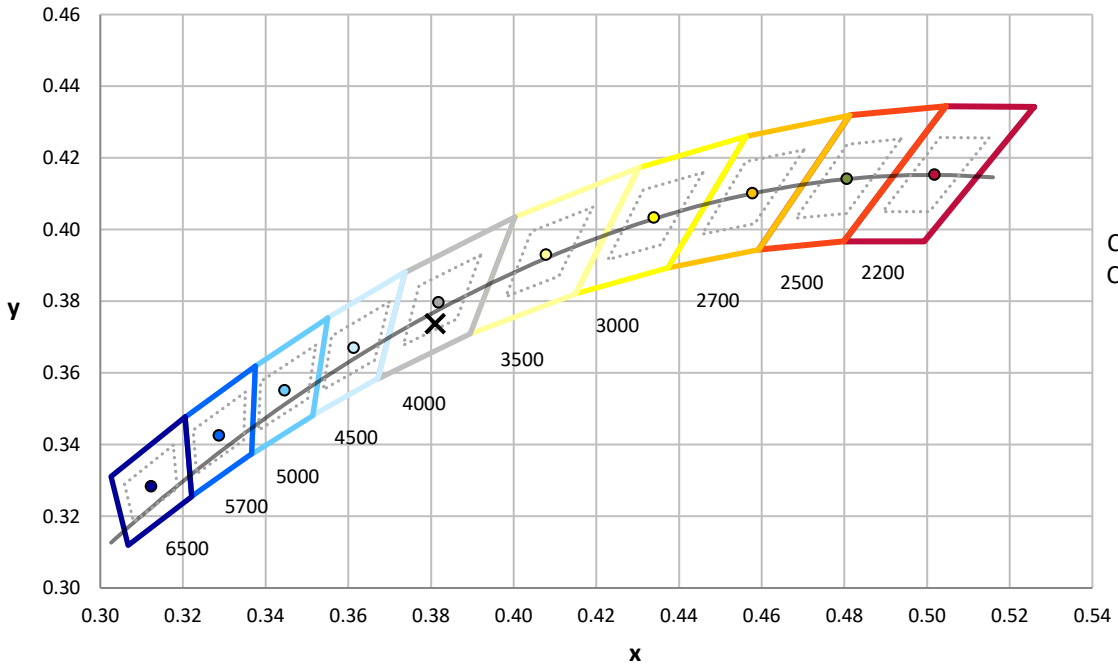
CIE 1931 Chromaticity Diagram



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



CCT = 3963K
CIE x = 0.3810
CIE y = 0.3738
Duv = -0.0016

Point lies inside the ANSI 4000K 4-step quadrangle

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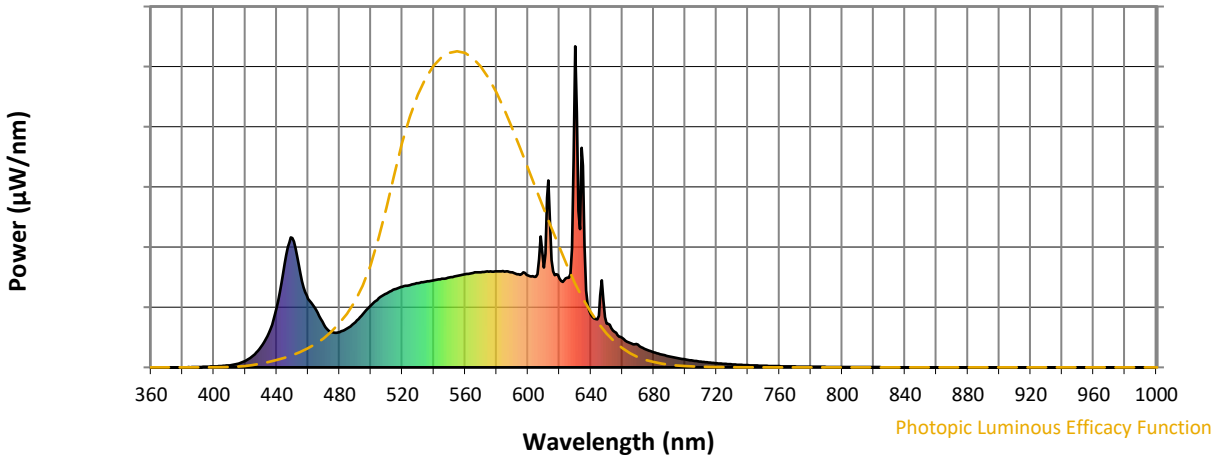
Photopic Flux vs. Wavelength



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	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

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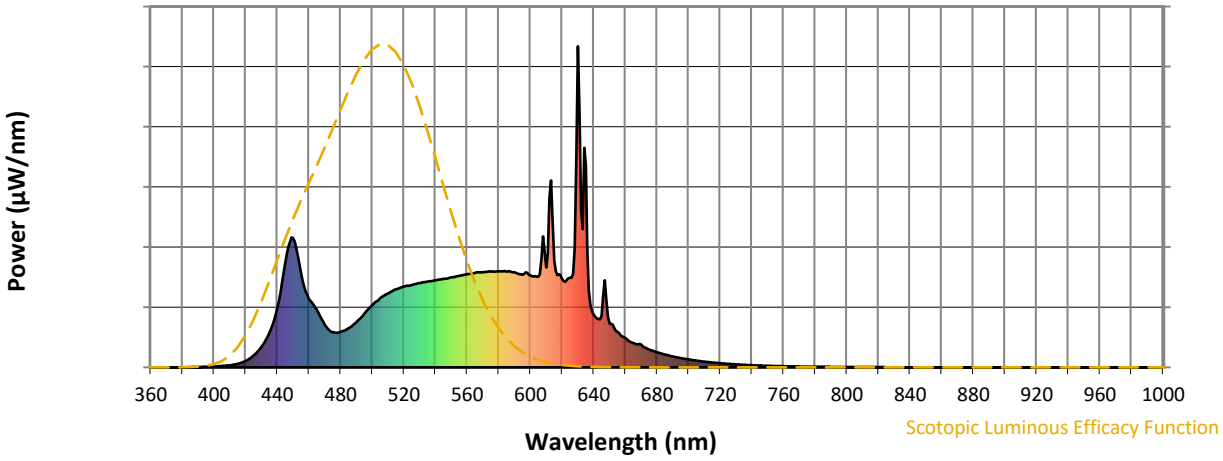
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.76**

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	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

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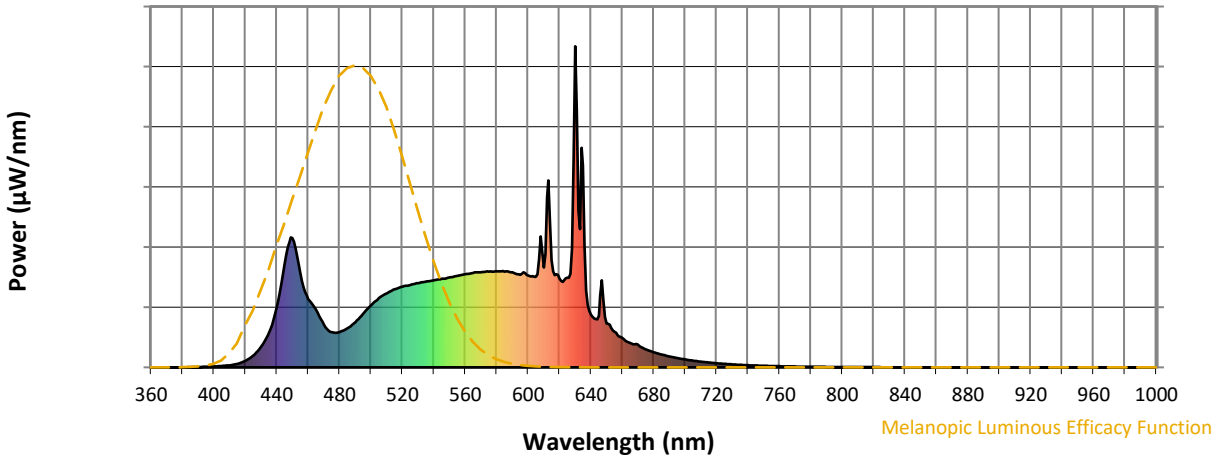
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.64**

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	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

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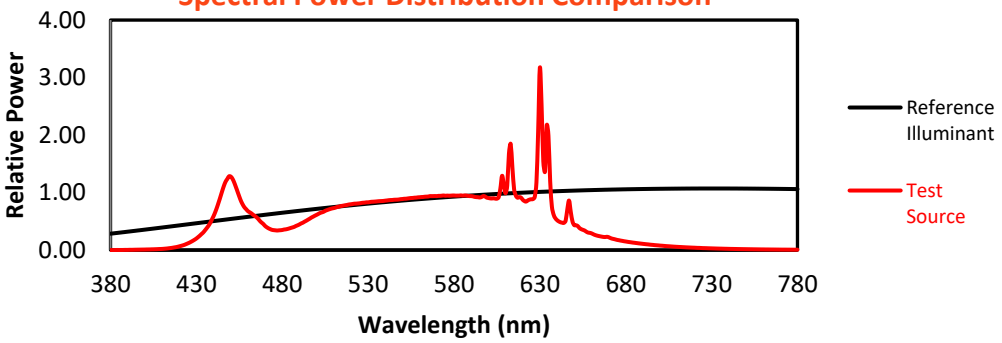
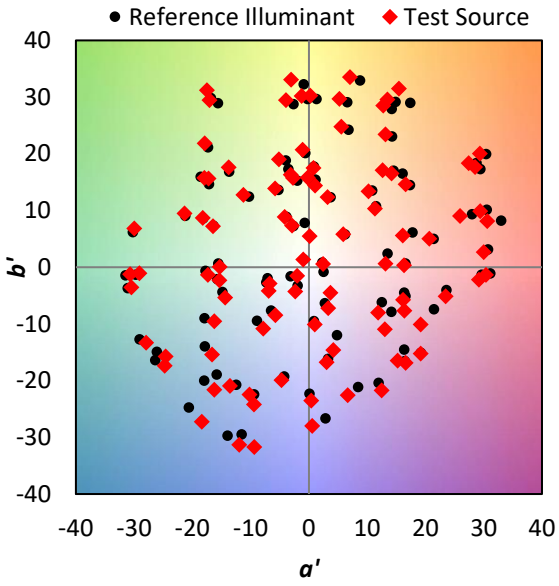
Summary

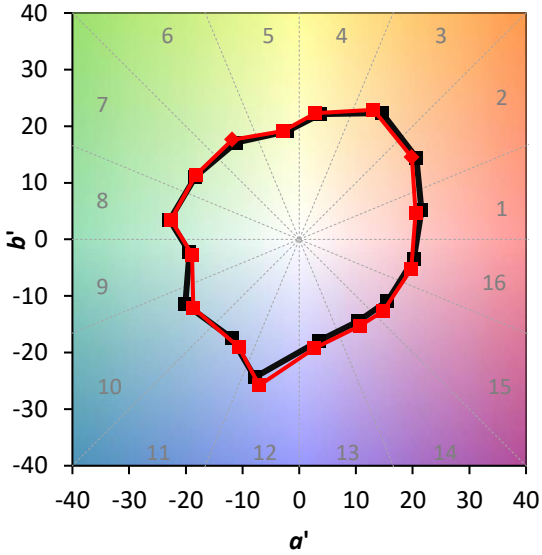
R_f = 90.7
R_g = 101
CIE R_a = 93.4
R_9 = 66.4

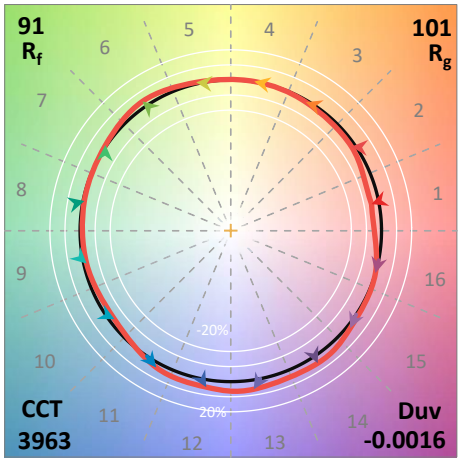
Spectral Power Distribution Comparison

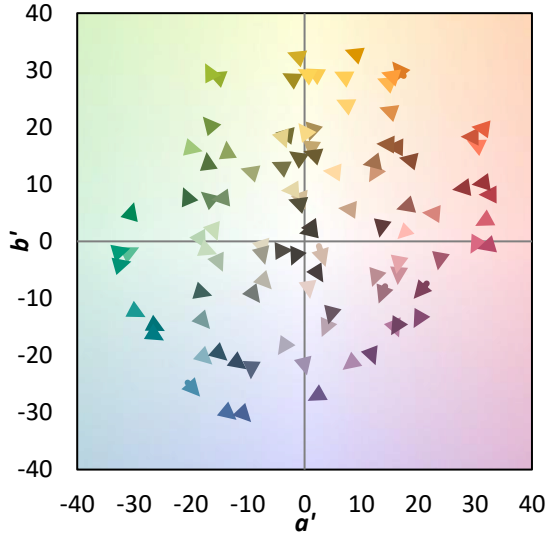


Color Vector Graphics









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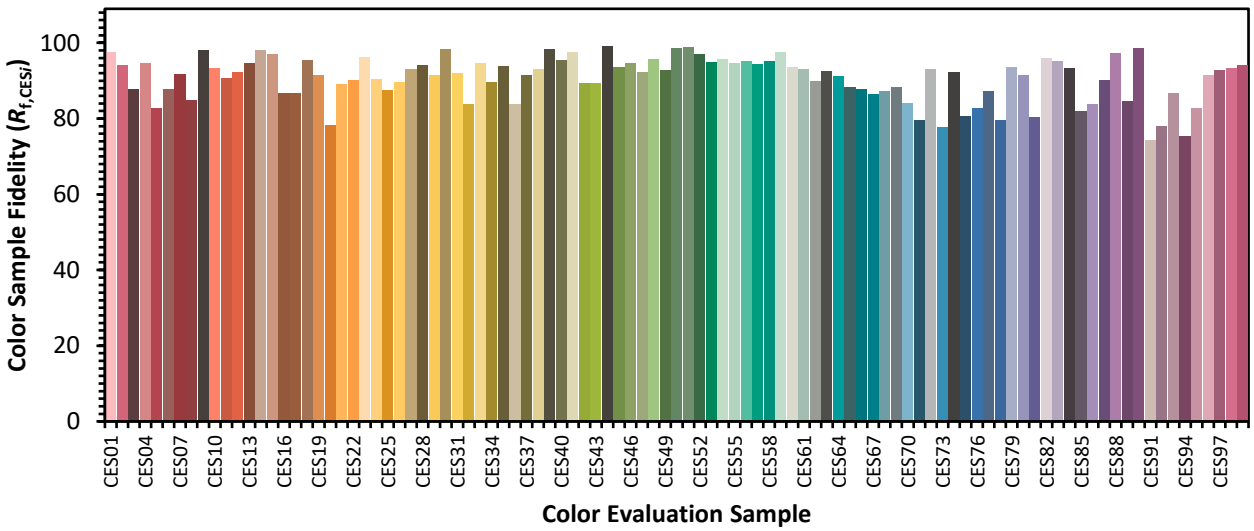
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 90	CES51 = 99	CES76 = 83
CES02 = 62	CES27 = 93	CES52 = 97	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 95	CES78 = 79
CES04 = 69	CES29 = 91	CES54 = 96	CES79 = 94
CES05 = 49	CES30 = 98	CES55 = 95	CES80 = 91
CES06 = 50	CES31 = 92	CES56 = 95	CES81 = 80
CES07 = 42	CES32 = 84	CES57 = 94	CES82 = 96
CES08 = 41	CES33 = 95	CES58 = 95	CES83 = 95
CES09 = 29	CES34 = 90	CES59 = 98	CES84 = 93
CES10 = 74	CES35 = 94	CES60 = 93	CES85 = 82
CES11 = 57	CES36 = 84	CES61 = 93	CES86 = 84
CES12 = 63	CES37 = 92	CES62 = 90	CES87 = 90
CES13 = 43	CES38 = 93	CES63 = 92	CES88 = 97
CES14 = 74	CES39 = 98	CES64 = 91	CES89 = 84
CES15 = 71	CES40 = 96	CES65 = 88	CES90 = 99
CES16 = 47	CES41 = 98	CES66 = 88	CES91 = 74
CES17 = 49	CES42 = 89	CES67 = 87	CES92 = 78
CES18 = 56	CES43 = 89	CES68 = 87	CES93 = 87
CES19 = 71	CES44 = 99	CES69 = 88	CES94 = 75
CES20 = 66	CES45 = 93	CES70 = 84	CES95 = 83
CES21 = 85	CES46 = 95	CES71 = 80	CES96 = 91
CES22 = 78	CES47 = 92	CES72 = 93	CES97 = 93
CES23 = 91	CES48 = 96	CES73 = 78	CES98 = 93
CES24 = 90	CES49 = 93	CES74 = 92	CES99 = 94
CES25 = 71	CES50 = 99	CES75 = 81	



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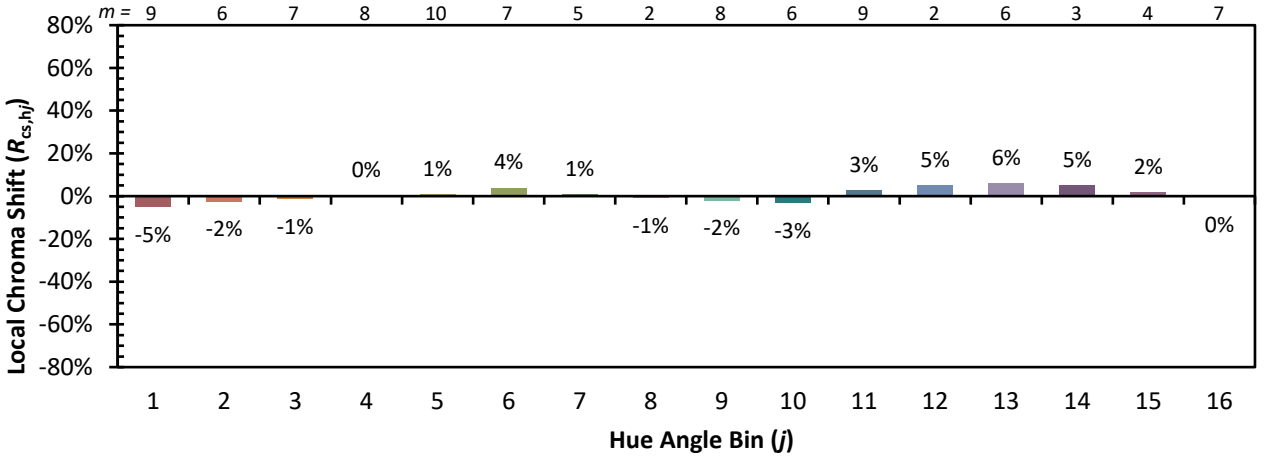
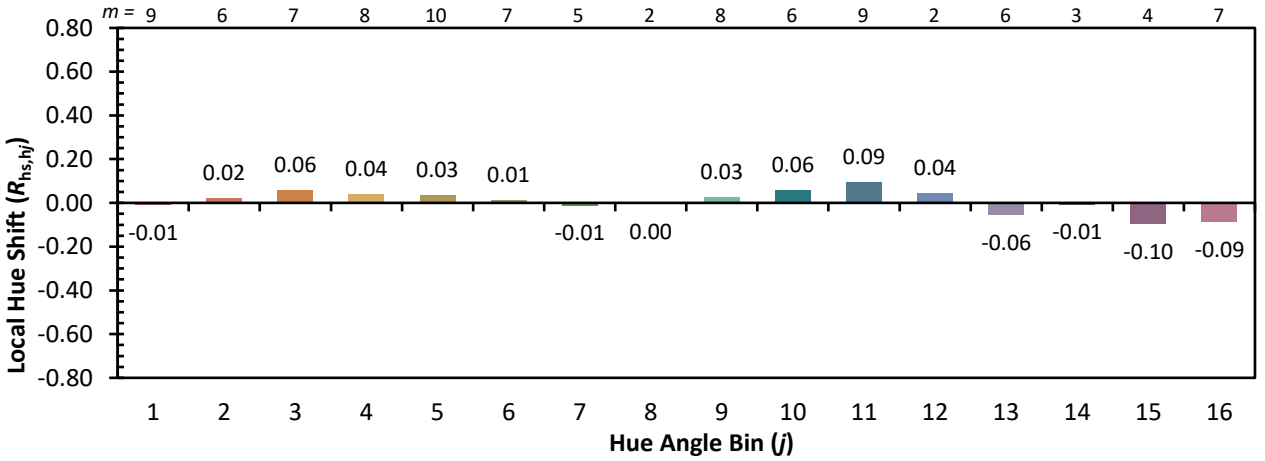
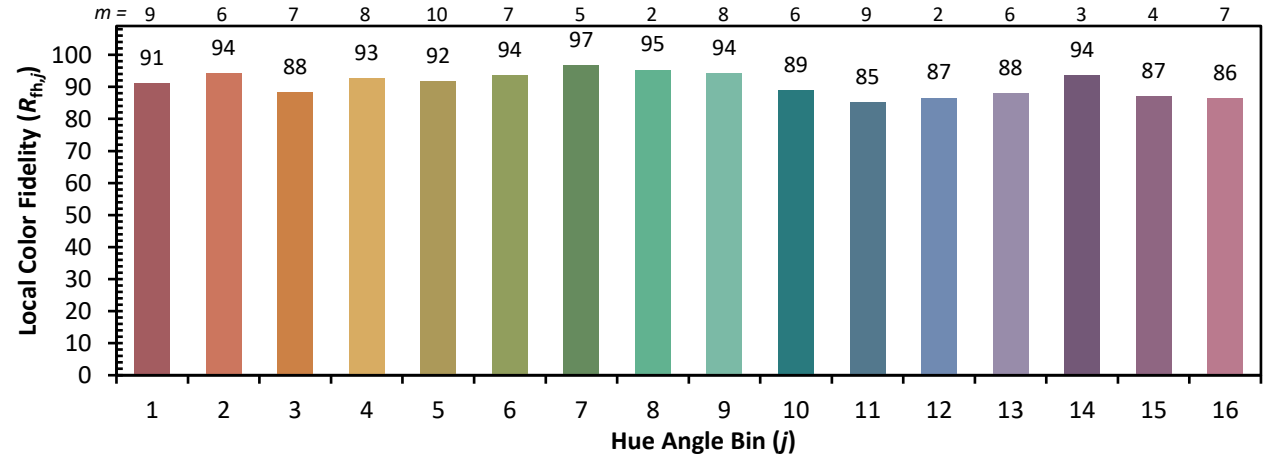
Color Rendition by Hue-Angle Bin







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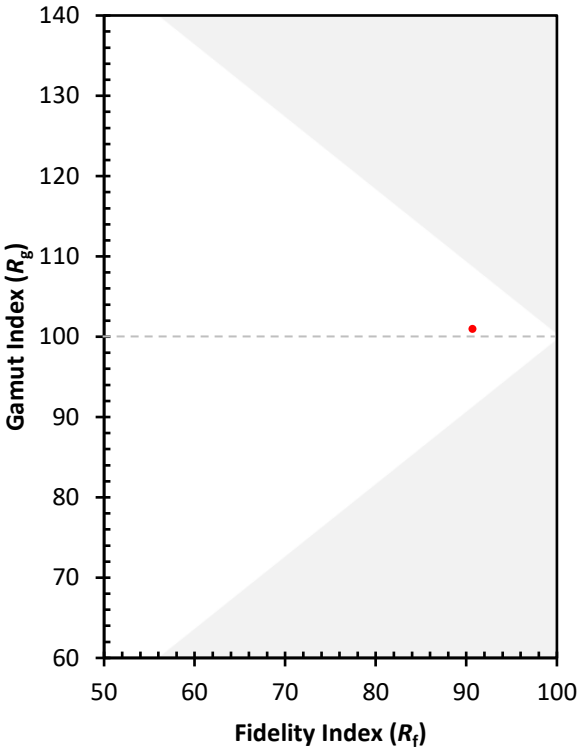
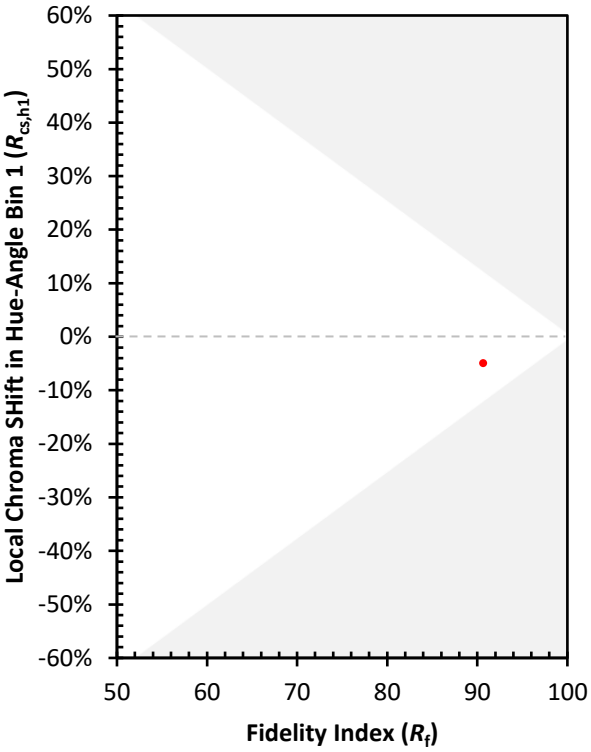
Measure Comparisons





(END OF REPORT)