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: P1433770

Luminaire Tested: EHBR1-24-UNV-A1-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:	P1433770
	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:	EHBR1-24-UNV-A1-L940
Description:	Elevate Round Highbay at, 24000 lumens, 4000K 90CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	23037.7 lumens
Efficiency:	N/A
Efficacy:	179.6 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):	128.3
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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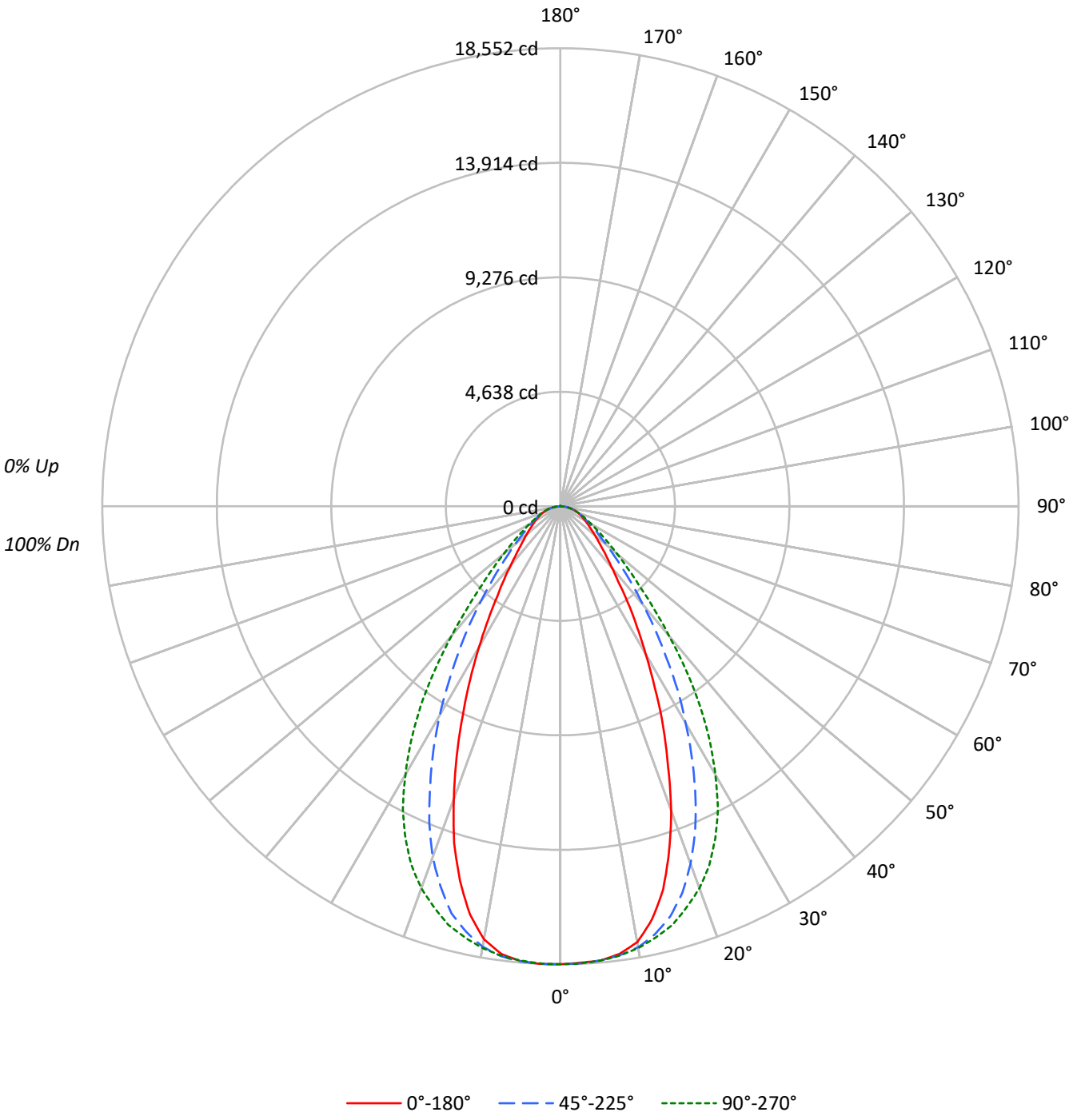
Scaled Data Report

TEST NUMBER: P1433770
CATALOG NUMBER: EHBR1-24-UNV-A1-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	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°	87085	87085	87085	87085	87085
5°	87074	87061	87064	87218	87165
10°	85480	86477	86614	86369	84921
15°	78125	83576	85297	82906	76331
20°	65560	76999	82259	75549	63008
25°	51078	67071	76876	64622	48431
30°	37529	55058	68070	52969	35621
35°	27290	42810	56434	40966	25508
40°	19827	31930	41999	30582	19215
45°	15800	23622	29664	22598	15252
50°	13283	17985	21755	17392	13081
55°	11788	14431	16743	14189	11629
60°	10849	12293	13614	12217	10926
65°	10423	11140	11752	11173	10522
70°	10283	10527	10853	10585	10383
75°	10177	10112	10177	10141	10275
80°	10231	9495	9284	9641	10231
85°	9230	7824	7748	7953	9505

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 31080 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1751.2	7.6
10°-20°	4706.6	20.4
20°-30°	5723.2	24.8
30°-40°	4662.0	20.2
40°-50°	2799.1	12.1
50°-60°	1610.9	7.0
60°-70°	1008.1	4.4
70°-80°	593.7	2.6
80°-90°	173.6	0.8
90°-100°	0.1	0.0
100°-110°	0.1	0.0
110°-120°	0.1	0.0
120°-130°	0.3	0.0
130°-140°	1.2	0.0
140°-150°	2.1	0.0
150°-160°	2.3	0.0
160°-170°	2.1	0.0
170°-180°	0.9	0.0
0°-30°	12181.1	52.9
0°-40°	16843.1	73.1
0°-60°	21253.0	92.3
0°-90°	23028.5	100.0
90°-120°	0.3	0.0
90°-150°	3.9	0.0
90°-180°	9.0	0.0
0°-180°	23037.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	18544	18544	18544	18544	18544	
5°	18471	18468	18469	18502	18491	1746
15°	16069	17190	17544	17053	15700	4421
25°	9858	12944	14836	12472	9347	4491
35°	4760	7467	9844	7146	4450	3012
45°	2379	3557	4467	3403	2297	1877
55°	1440	1763	2045	1733	1420	1302
65°	938	1002	1058	1006	947	933
75°	561	557	561	559	566	594
85°	171	145	144	148	176	183
90°	1	0	0	0	0	9
95°	1	0	0	0	0	1
105°	1	0	0	0	1	1
115°	1	0	0	0	1	1
125°	1	0	0	0	1	1
135°	2	2	2	2	2	1
145°	4	3	3	4	4	2
155°	6	5	4	5	6	3
165°	9	7	7	8	9	2
175°	12	10	9	10	12	1
180°	10	10	10	10	10	

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TEST NUMBER: P1433770
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	18544.1	18544.1	18544.1	18544.1	18544.1	18544.1	*18544.1*	18544.1	18544.1
2.5°	*18503.4*	*18520.1*	*18527.1*	*18531.0*	*18535.2*	*18546.9*	*18552.0*	*18543.8*	*18550.7*
5°	18471.2	18472.3	18468.4	18485.9	18469.2	18480.9	*18501.8*	18493.6	18490.6
7.5°	18283.2	18322.0	18344.9	18350.7	18353.9	18368.2	*18383.0*	18299.5	18287.0
10°	17925.8	17990.7	18134.8	18175.9	18163.6	18186.8	*18112.2*	17893.9	17808.5
12.5°	17142.5	17370.4	17744.9	17911.5	17881.2	17901.8	*17647.7*	17187.1	16922.2
15°	16069.3	16403.7	17190.5	17519.1	17544.4	17519.1	*17052.7*	16155.1	15700.3
17.5°	14642.7	15260.3	16418.9	17056.6	17020.1	17032.2	*16146.5*	14819.8	14299.4
20°	13118.6	13776.9	15407.5	16471.3	16460.0	16392.4	*15117.4*	13367.5	12607.9
22.5°	11394.9	12244.0	14248.5	15751.5	15747.3	15634.7	*13863.9*	11781.7	10963.8
25°	9857.6	10690.4	12944.2	14869.9	14836.5	14708.4	*12471.6*	10199.8	9346.8
27.5°	8268.3	9134.0	11551.8	13836.7	13813.8	13674.0	*11140.4*	8721.1	7909.4
30°	6920.9	7712.4	10153.5	12699.9	12553.1	12537.2	*9768.3*	7352.0	6569.0
32.5°	5766.6	6445.1	8835.4	11511.0	11251.2	11325.4	*8400.7*	6207.0	5431.0
35°	4760.2	5358.0	7467.4	10136.1	9844.0	9939.9	*7145.8*	5093.1	4449.5
37.5°	3863.4	4438.3	6308.0	8798.8	8352.1	8533.1	*6041.9*	4253.3	3737.6
40°	3234.2	3690.2	5208.5	7331.4	6851.0	7145.8	*4988.6*	3547.6	3134.4
42.5°	2786.7	3084.3	4298.8	5930.5	5561.9	5770.9	*4111.6*	2965.8	2656.7
45°	2379.0	2616.2	3556.9	4679.8	4466.6	4660.4	*3402.7*	2528.9	2296.6
47.5°	2077.9	2260.9	2928.2	3779.1	3646.6	3708.0	*2841.9*	2206.9	2018.1
50°	1818.1	1959.4	2461.7	3050.1	2977.8	3015.6	*2380.5*	1920.2	1790.5
52.5°	1616.1	1719.8	2064.7	2506.8	2471.0	2476.9	*2028.7*	1689.2	1595.2
55°	1439.8	1512.1	1762.6	2053.4	2045.0	2046.5	*1733.0*	1496.9	1420.4
57.5°	1285.6	1345.4	1514.8	1724.8	1712.5	1715.2	*1500.8*	1329.5	1280.2
60°	1155.1	1195.1	1308.9	1457.7	1449.5	1446.0	*1300.8*	1180.3	1163.3
62.5°	1039.3	1065.0	1143.9	1249.5	1234.0	1237.4	*1143.4*	1066.2	1040.9
65°	938.0	946.9	1002.5	1067.7	1057.6	1066.2	*1005.5*	952.7	946.9
67.5°	838.9	847.9	880.5	924.4	912.7	919.7	*881.2*	850.2	845.2
70°	748.9	748.5	766.7	790.4	790.4	791.5	*770.9*	752.3	756.2
72.5°	655.6	653.3	658.8	674.6	670.4	685.1	*663.4*	657.6	658.3
75°	560.9	554.2	557.3	565.5	560.9	568.6	*558.9*	566.3	566.3
77.5°	471.5	459.1	455.2	456.4	447.8	459.5	*461.8*	466.8	478.5
80°	378.3	360.8	351.1	350.8	343.3	350.8	*356.5*	367.1	378.3
82.5°	280.8	265.7	249.3	246.2	241.6	245.9	*253.6*	266.1	284.3
85°	171.3	155.4	145.2	139.8	143.8	143.8	*147.6*	165.1	176.4
87.5°	61.8	53.9	44.3	44.6	45.8	47.4	*49.3*	62.1	68.0
90°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.4
92.5°	0.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.4
95°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.4
97.5°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.4
100°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
102.5°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
105°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
107.5°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
110°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7

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Scaled Data Report

TEST NUMBER: P1433770
CATALOG NUMBER: EHBR1-24-UNV-A1-L940

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
115°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
117.5°	1.2	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
120°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.4	0.7
122.5°	1.2	0.4	0.0	0.0	0.0	0.0	*0.0*	0.4	1.2
125°	1.2	0.4	0.0	0.0	0.0	0.0	*0.4*	0.4	1.2
127.5°	1.2	0.4	0.0	0.0	0.0	0.0	*0.4*	0.7	1.2
130°	1.2	0.7	0.4	0.0	0.4	0.4	*0.7*	0.7	1.2
132.5°	1.6	1.2	1.2	0.7	0.7	1.2	*1.2*	1.6	1.6
135°	2.0	1.6	1.6	1.2	1.6	1.6	*1.6*	1.6	2.0
137.5°	2.0	2.0	2.0	2.0	2.0	2.0	*2.0*	2.0	2.3
140°	2.7	2.3	2.3	2.3	2.3	2.3	*2.3*	2.7	2.7
142.5°	3.1	3.1	2.7	2.7	2.7	3.1	*3.1*	3.1	3.5
145°	3.5	3.5	3.1	3.1	3.1	3.5	*3.5*	3.9	3.9
147.5°	4.7	4.3	3.5	3.5	3.5	3.5	*3.9*	4.3	4.7
150°	5.0	4.7	3.9	3.9	3.9	3.9	*4.3*	5.0	5.4
152.5°	5.4	5.0	4.3	3.9	3.9	3.9	*4.7*	5.0	5.9
155°	5.9	5.4	4.7	3.9	3.9	4.3	*5.0*	5.9	6.2
157.5°	7.0	6.2	5.4	4.7	4.7	5.0	*5.9*	6.6	7.0
160°	7.7	7.0	6.2	5.4	5.4	5.9	*6.6*	7.4	7.7
162.5°	8.6	7.7	6.6	6.2	5.9	6.2	*7.0*	8.2	8.6
165°	8.9	8.2	7.4	6.6	6.6	6.6	*7.7*	8.6	8.9
167.5°	9.3	8.9	7.7	7.0	7.0	7.0	*8.2*	8.9	9.3
170°	9.7	9.3	8.2	7.4	7.0	7.4	*8.6*	9.3	9.7
172.5°	10.5	10.1	8.9	8.2	7.7	8.2	*9.3*	10.1	10.5
175°	11.6	10.9	10.1	8.9	8.6	8.9	*10.1*	10.9	11.6
177.5°	12.0	11.3	10.5	9.3	8.9	9.3	*10.5*	11.3	12.0
180°	10.5	10.5	10.5	10.5	10.5	10.5	*10.5*	10.5	10.5

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Scaled Data Report

TEST NUMBER: P1433770
CATALOG NUMBER: EHBR1-24-UNV-A1-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	17.90	19.17	18.27	19.48	19.80	18.89	20.15	19.25	20.47	20.78
	3H	19.47	20.60	19.85	20.93	21.30	20.23	21.35	20.61	21.69	22.05
	4H	20.14	21.19	20.54	21.54	21.93	20.79	21.84	21.19	22.19	22.57
	6H	20.69	21.66	21.11	22.03	22.43	21.22	22.18	21.63	22.56	22.95
	8H	20.90	21.81	21.33	22.20	22.61	21.36	22.27	21.79	22.66	23.07
	12H	21.02	21.90	21.46	22.28	22.71	21.43	22.31	21.87	22.69	23.12
4H	2H	18.48	19.53	18.88	19.88	20.26	19.25	20.30	19.65	20.65	21.03
	3H	20.27	21.13	20.68	21.54	21.94	20.84	21.70	21.25	22.11	22.51
	4H	21.06	21.84	21.50	22.26	22.70	21.53	22.31	21.97	22.73	23.17
	6H	21.75	22.42	22.21	22.86	23.33	22.10	22.77	22.57	23.22	23.69
	8H	21.99	22.62	22.47	23.07	23.54	22.29	22.91	22.76	23.36	23.83
	12H	22.17	22.72	22.65	23.20	23.68	22.41	22.96	22.89	23.44	23.92
8H	4H	21.34	21.97	21.81	22.42	22.89	21.77	22.39	22.24	22.84	23.31
	6H	22.16	22.67	22.67	23.17	23.65	22.47	22.97	22.97	23.47	23.96
	8H	22.49	22.95	23.01	23.46	23.96	22.73	23.18	23.25	23.70	24.19
	12H	22.74	23.14	23.26	23.64	24.21	22.92	23.32	23.44	23.82	24.39
12H	4H	21.36	21.91	21.85	22.39	22.87	21.78	22.33	22.27	22.81	23.29
	6H	22.21	22.66	22.73	23.18	23.67	22.51	22.97	23.03	23.48	23.98
	8H	22.60	22.99	23.11	23.49	24.06	22.83	23.23	23.35	23.72	24.30

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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

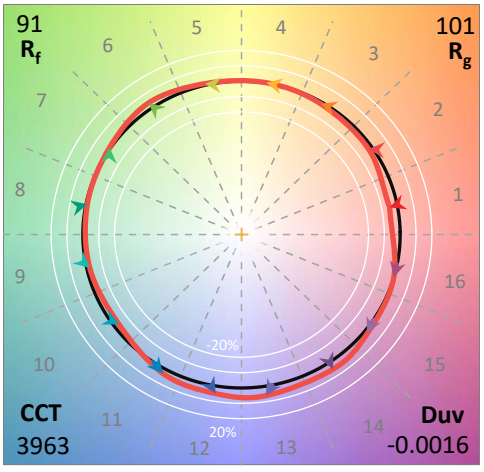
Test Information

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

REPORT NUMBER: SP1-2506-472-7

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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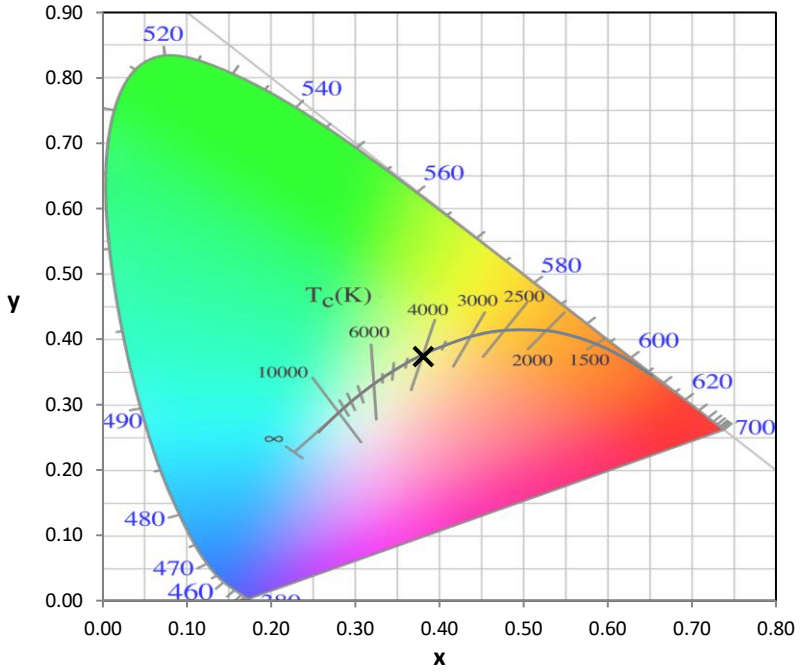
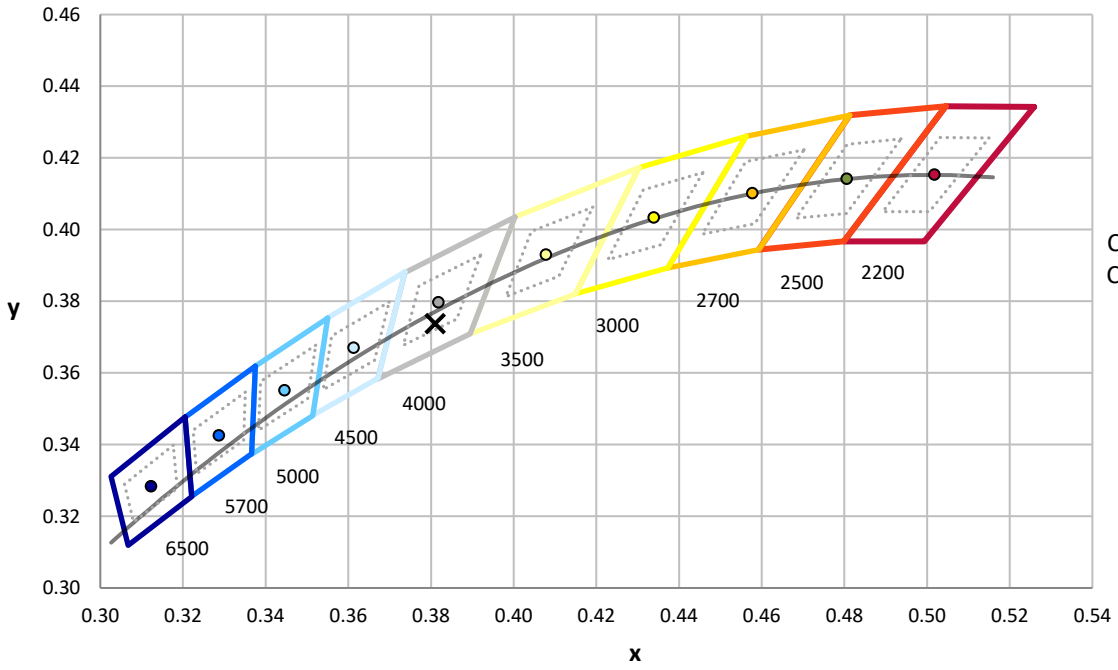
CIE 1931 Chromaticity Diagram



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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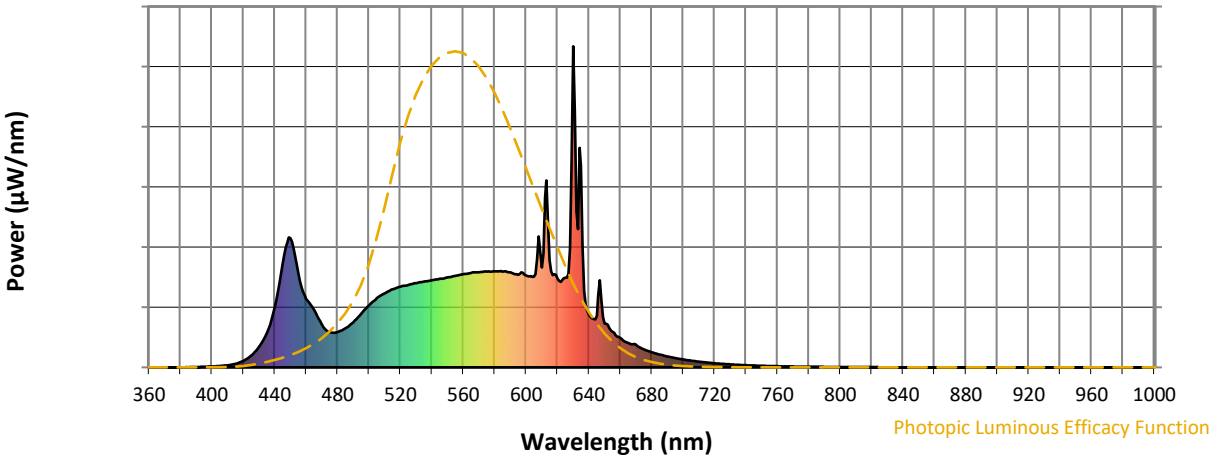
Photopic Flux vs. Wavelength



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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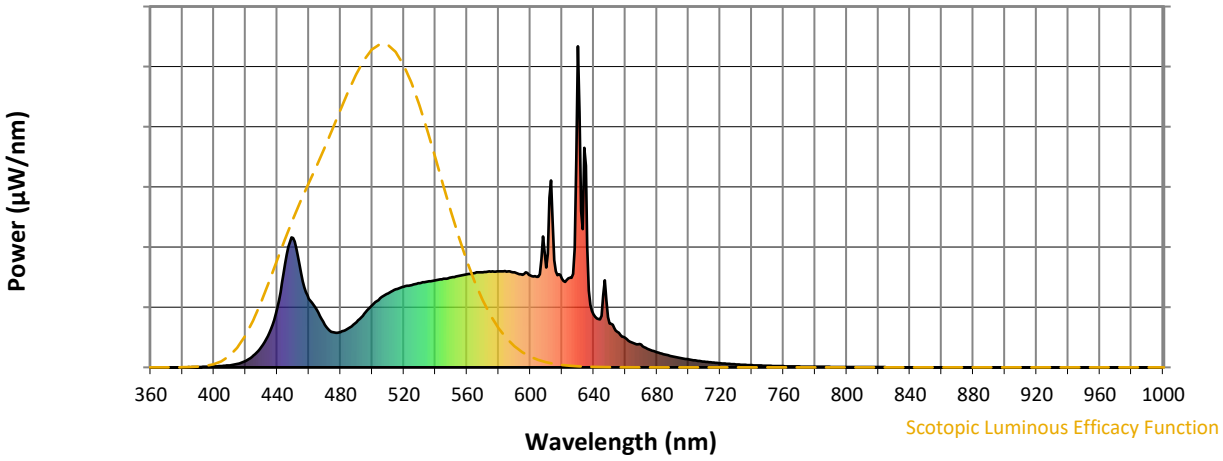
Scotopic Flux vs. Wavelength



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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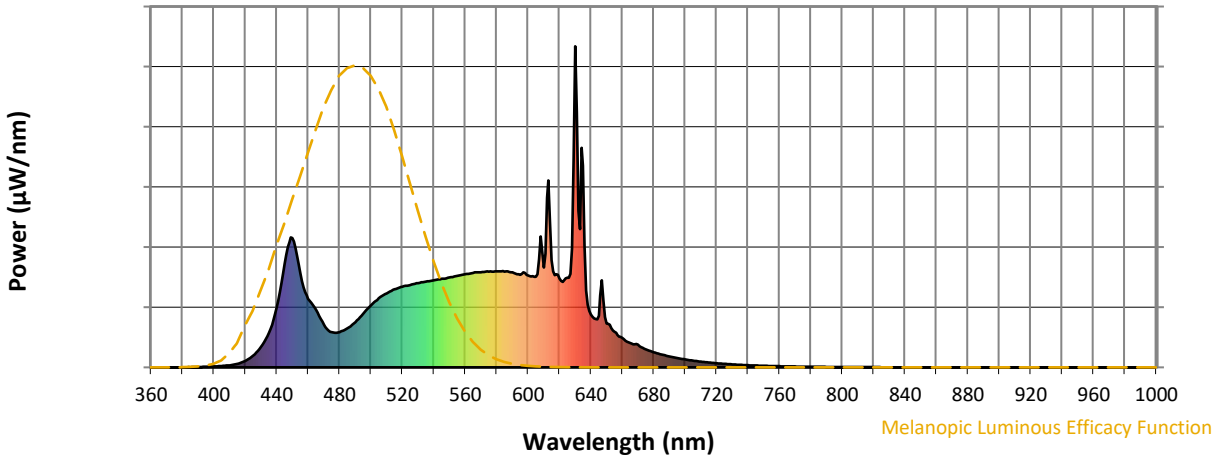
Melanopic Flux vs. Wavelength



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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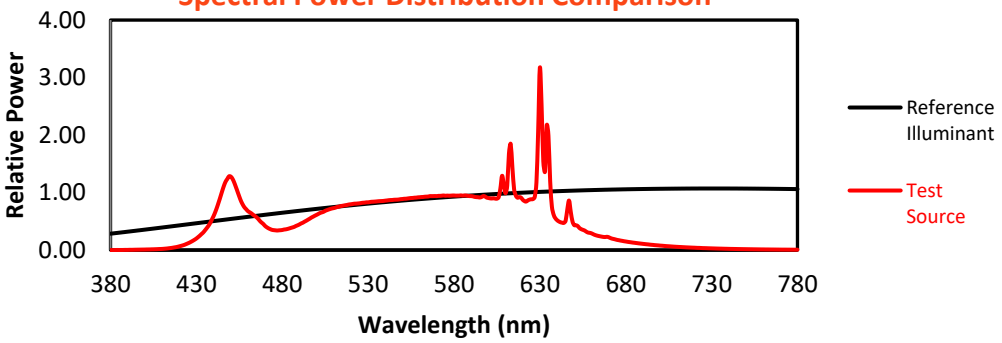
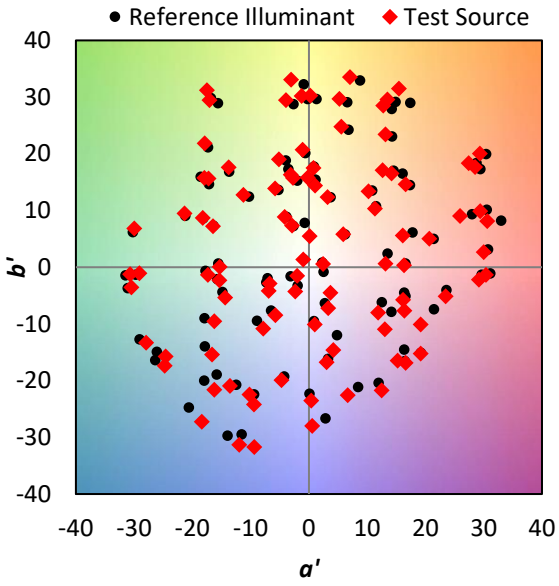
Summary

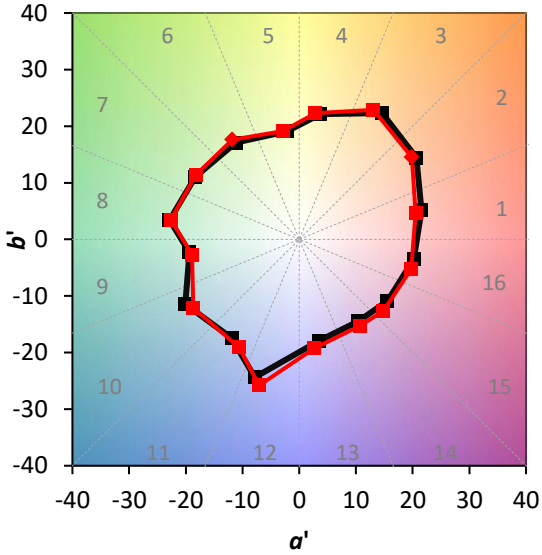
R_f = 90.7
R_g = 101
CIE R_a = 93.4
R_9 = 66.4

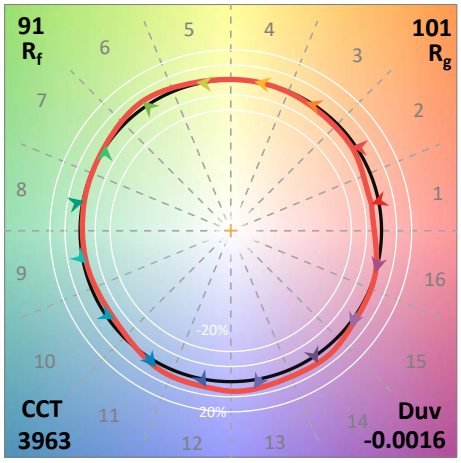
Spectral Power Distribution Comparison

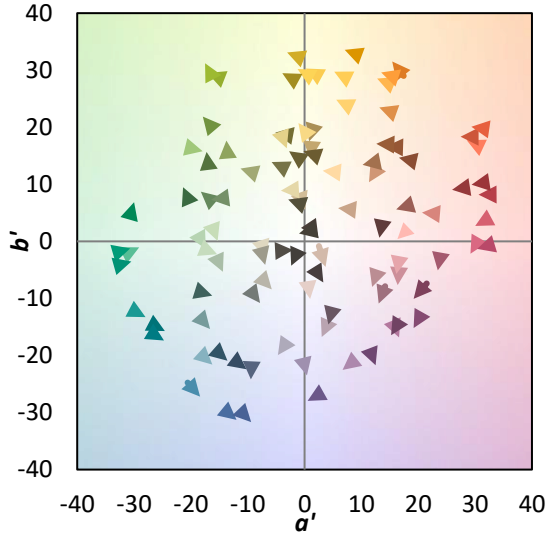


Color Vector Graphics









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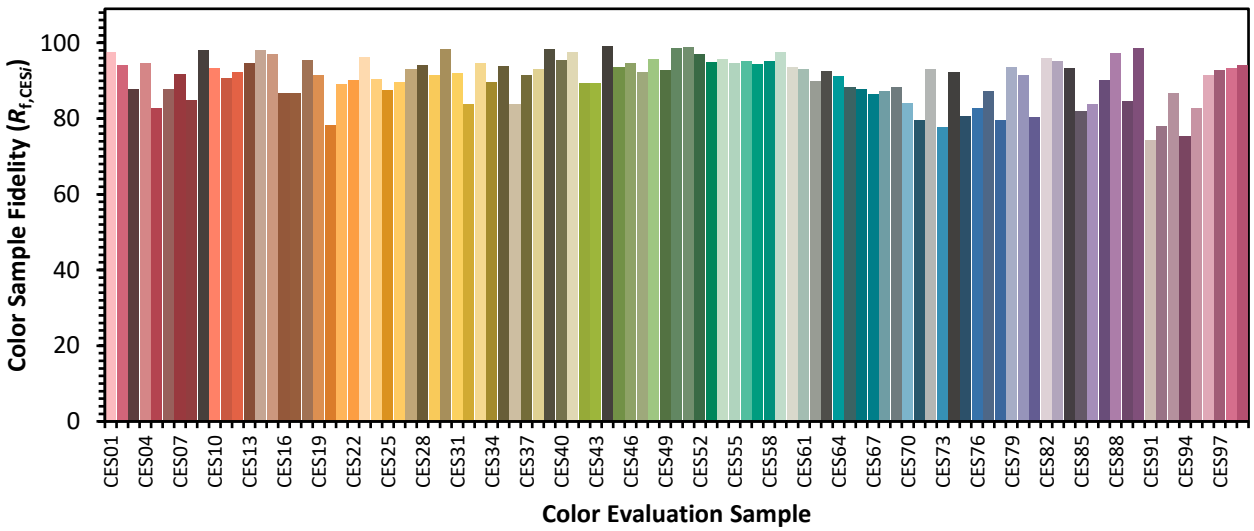
Individual Sample Fidelity Index ($R_{f,i}$)

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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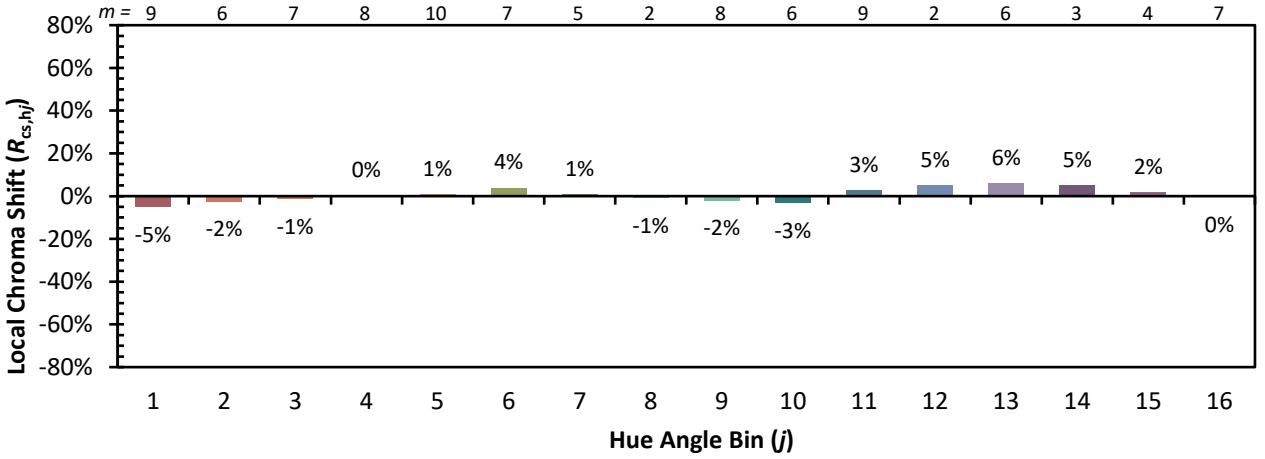
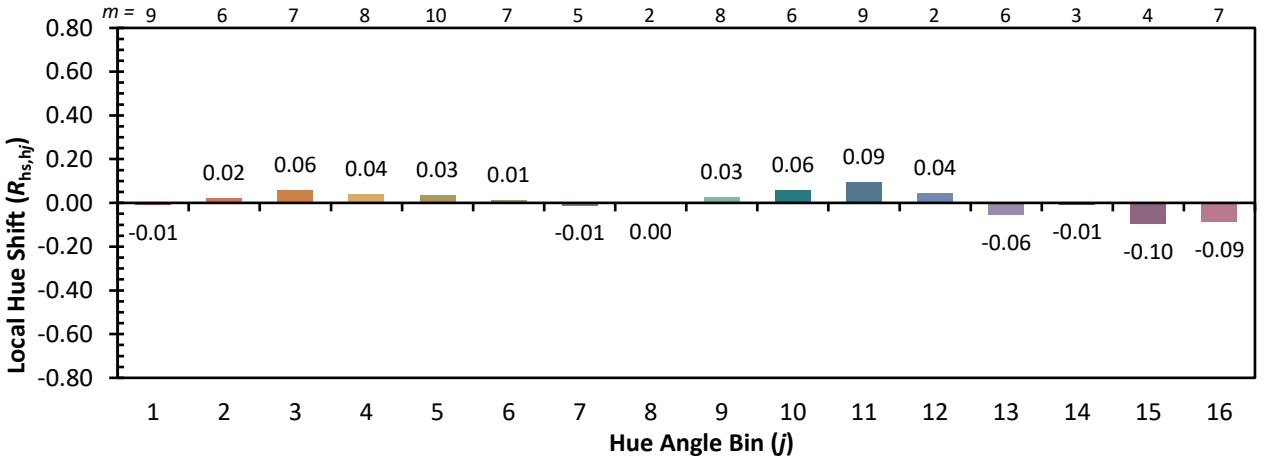
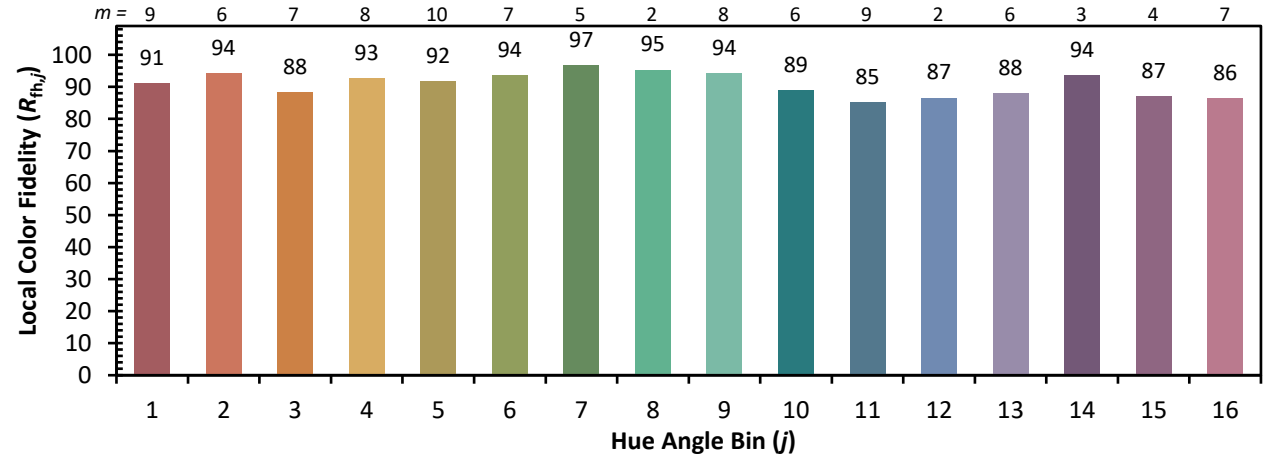
Color Rendition by Hue-Angle Bin







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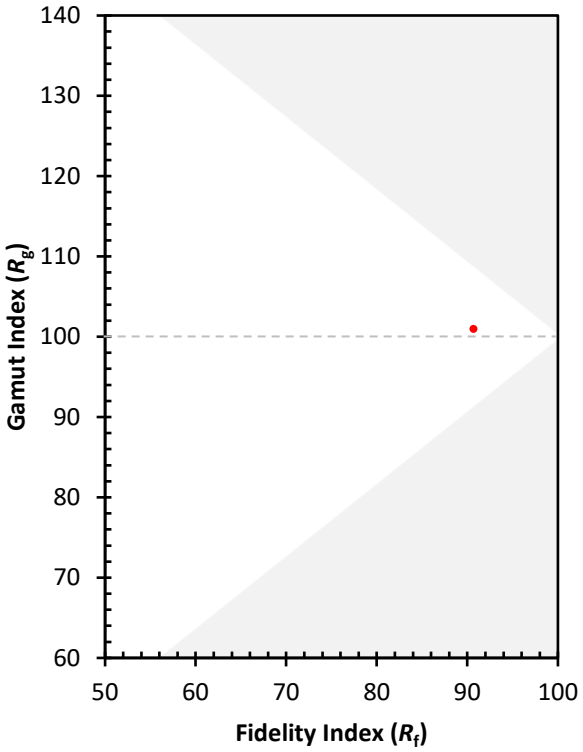
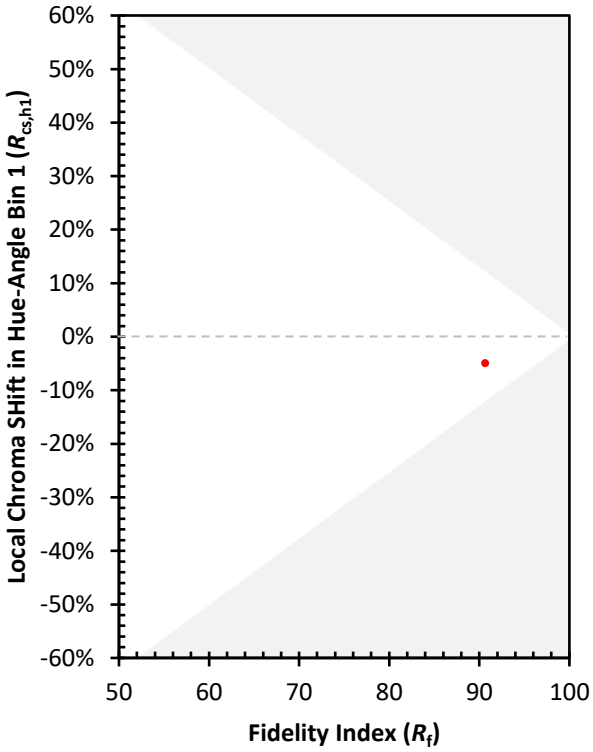
Measure Comparisons





(END OF REPORT)