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: P1431643

Luminaire Tested: EHBR1-12-UNV-A1-L950

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:	P1431643
	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-L950
Description:	Elevate Round Highbay at, 12000 lumens, 5000K 90CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	11402.1 lumens
Efficiency:	N/A
Efficacy:	176.2 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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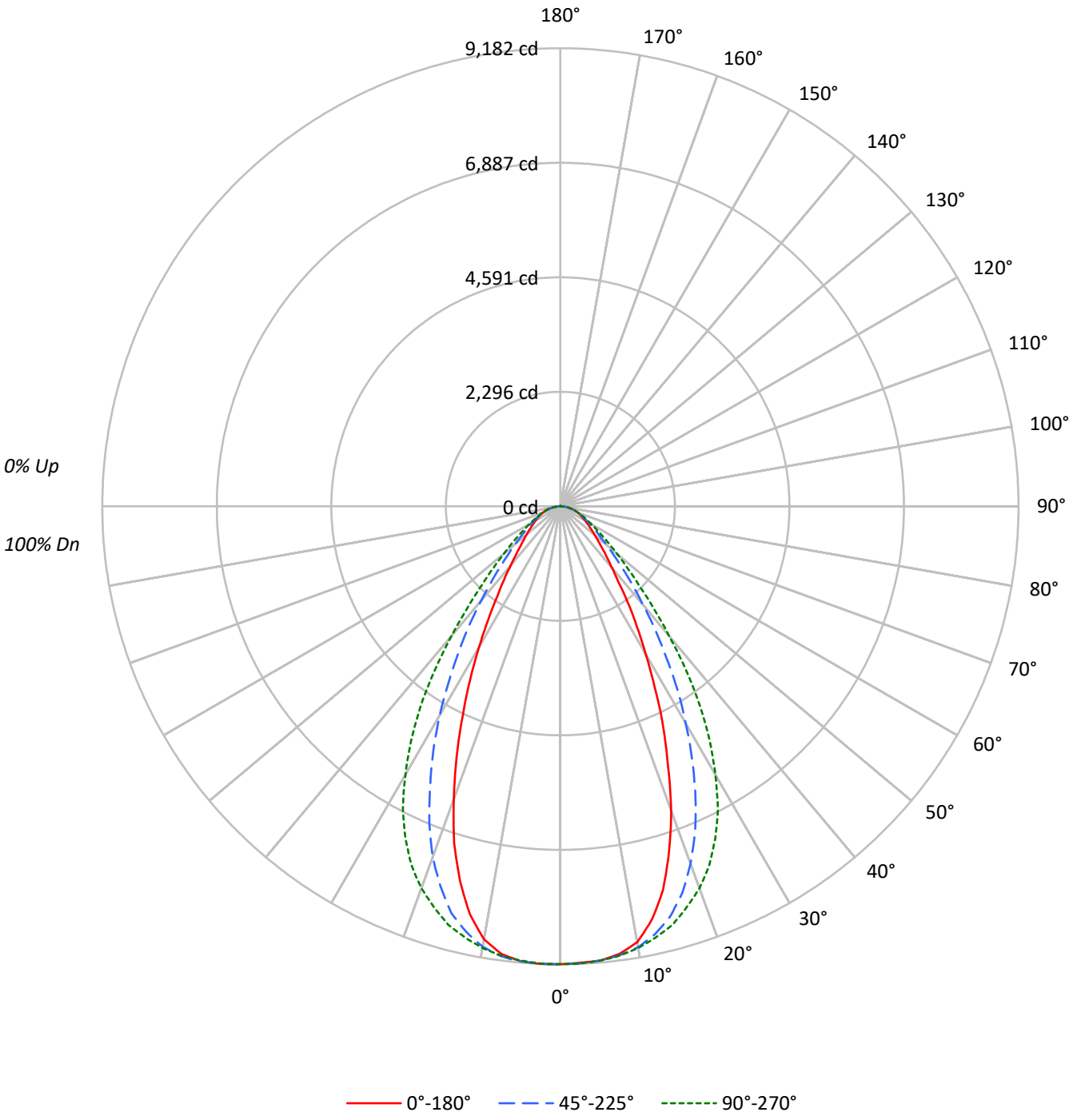
Scaled Data Report

TEST NUMBER: P1431643
CATALOG NUMBER: EHBR1-12-UNV-A1-L950

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°	43101	43101	43101	43101	43101
5°	43095	43089	43091	43167	43141
10°	42306	42800	42868	42747	42029
15°	38667	41365	42216	41033	37779
20°	32448	38109	40712	37392	31184
25°	25280	33196	38049	31984	23970
30°	18575	27250	33690	26216	17630
35°	13507	21188	27931	20275	12625
40°	9813	15803	20787	15136	9510
45°	7819	11692	14681	11185	7549
50°	6574	8901	10768	8608	6474
55°	5834	7142	8286	7023	5756
60°	5370	6084	6738	6047	5408
65°	5159	5513	5817	5530	5207
70°	5089	5211	5371	5240	5138
75°	5037	5006	5037	5019	5086
80°	5063	4697	4595	4771	5063
85°	4564	3874	3836	3933	4698

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 15383 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	866.7	7.6
10°-20°	2329.5	20.4
20°-30°	2832.6	24.8
30°-40°	2307.4	20.2
40°-50°	1385.3	12.1
50°-60°	797.3	7.0
60°-70°	499.0	4.4
70°-80°	293.9	2.6
80°-90°	85.9	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°	0.6	0.0
140°-150°	1.1	0.0
150°-160°	1.2	0.0
160°-170°	1.0	0.0
170°-180°	0.4	0.0
0°-30°	6028.8	52.9
0°-40°	8336.2	73.1
0°-60°	10518.8	92.3
0°-90°	11397.5	100.0
90°-120°	0.1	0.0
90°-150°	1.9	0.0
90°-180°	5.0	0.0
0°-180°	11402.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9178	9178	9178	9178	9178	
5°	9142	9141	9141	9157	9152	864
15°	7953	8508	8683	8440	7771	2188
25°	4879	6406	7343	6173	4626	2223
35°	2356	3696	4872	3537	2202	1491
45°	1177	1760	2211	1684	1137	929
55°	713	872	1012	858	703	644
65°	464	496	524	498	469	462
75°	278	276	278	277	280	294
85°	85	72	71	73	87	90
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°	1	0	0	0	1	1
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	1
180°	5	5	5	5	5	

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TEST NUMBER: P1431643
CATALOG NUMBER: EHBR1-12-UNV-A1-L950

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	9178.1	9178.1	9178.1	9178.1	9178.1	9178.1	*9178.1*	9178.1	9178.1
2.5°	*9157.9*	*9166.2*	*9169.6*	*9171.6*	*9173.7*	*9179.5*	*9181.9*	*9177.9*	*9181.3*
5°	9141.9	9142.5	9140.6	9149.3	9141.0	9146.8	*9157.2*	9153.1	9151.6
7.5°	9048.9	9068.2	9079.5	9082.4	9083.9	9091.0	*9098.3*	9057.0	9050.8
10°	8872.0	8904.2	8975.4	8995.9	8989.7	9001.3	*8964.3*	8856.3	8813.9
12.5°	8484.3	8597.2	8782.5	8865.0	8849.9	8860.1	*8734.4*	8506.4	8375.3
15°	7953.2	8118.7	8508.2	8670.8	8683.3	8670.8	*8439.9*	7995.7	7770.6
17.5°	7247.1	7552.8	8126.2	8441.8	8423.7	8429.8	*7991.4*	7334.8	7077.2
20°	6492.8	6818.7	7625.6	8152.1	8146.6	8113.1	*7482.1*	6616.0	6240.0
22.5°	5639.7	6059.9	7052.0	7795.9	7793.8	7738.0	*6861.7*	5831.1	5426.3
25°	4878.9	5290.9	6406.5	7359.6	7343.1	7279.6	*6172.6*	5048.2	4626.1
27.5°	4092.2	4520.7	5717.3	6848.2	6836.9	6767.7	*5513.7*	4316.4	3914.6
30°	3425.4	3817.2	5025.3	6285.5	6212.9	6205.0	*4834.6*	3638.8	3251.2
32.5°	2854.1	3189.9	4372.9	5697.1	5568.6	5605.3	*4157.8*	3072.0	2687.9
35°	2356.0	2651.8	3695.8	5016.7	4872.1	4919.6	*3536.7*	2520.7	2202.2
37.5°	1912.1	2196.6	3122.0	4354.9	4133.7	4223.3	*2990.4*	2105.1	1849.9
40°	1600.7	1826.4	2577.8	3628.6	3390.8	3536.7	*2469.0*	1755.8	1551.3
42.5°	1379.3	1526.5	2127.6	2935.2	2752.8	2856.2	*2034.9*	1467.9	1314.9
45°	1177.4	1294.9	1760.5	2316.2	2210.6	2306.6	*1684.1*	1251.6	1136.7
47.5°	1028.4	1118.9	1449.2	1870.4	1804.9	1835.2	*1406.6*	1092.3	998.8
50°	899.8	969.8	1218.3	1509.6	1473.9	1492.5	*1178.2*	950.4	886.2
52.5°	799.9	851.2	1021.9	1240.6	1223.0	1225.9	*1004.0*	836.0	789.5
55°	712.6	748.4	872.3	1016.4	1012.1	1012.8	*857.8*	740.9	703.0
57.5°	636.3	665.9	749.7	853.7	847.5	848.9	*742.8*	658.0	633.6
60°	571.7	591.5	647.8	721.5	717.4	715.7	*643.8*	584.2	575.8
62.5°	514.5	527.1	566.1	618.4	610.7	612.5	*565.9*	527.6	515.2
65°	464.3	468.6	496.1	528.5	523.5	527.6	*497.7*	471.5	468.6
67.5°	415.2	419.7	435.8	457.5	451.7	455.2	*436.1*	420.8	418.3
70°	370.6	370.4	379.5	391.2	391.2	391.8	*381.6*	372.4	374.2
72.5°	324.4	323.3	326.0	333.9	331.8	339.1	*328.3*	325.5	325.8
75°	277.6	274.3	275.9	279.8	277.6	281.4	*276.6*	280.3	280.3
77.5°	233.4	227.3	225.3	225.9	221.7	227.4	*228.6*	231.1	236.8
80°	187.2	178.6	173.7	173.6	169.9	173.6	*176.4*	181.6	187.2
82.5°	139.0	131.5	123.4	121.9	119.6	121.7	*125.5*	131.7	140.7
85°	84.7	76.9	71.9	69.2	71.2	71.2	*73.0*	81.7	87.2
87.5°	30.6	26.8	21.9	22.1	22.7	23.4	*24.4*	30.8	33.6
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: P1431643
CATALOG NUMBER: EHBR1-12-UNV-A1-L950

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°	0.6	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°	0.6	0.2	0.0	0.0	0.0	0.0	*0.0*	0.2	0.6
125°	0.6	0.2	0.0	0.0	0.0	0.0	*0.2*	0.2	0.6
127.5°	0.6	0.2	0.0	0.0	0.0	0.0	*0.2*	0.4	0.6
130°	0.6	0.4	0.2	0.0	0.2	0.2	*0.4*	0.4	0.6
132.5°	0.7	0.6	0.6	0.4	0.4	0.6	*0.6*	0.7	0.7
135°	0.9	0.7	0.7	0.6	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°	1.3	1.1	1.1	1.1	1.1	1.1	*1.1*	1.3	1.3
142.5°	1.6	1.6	1.3	1.3	1.3	1.6	*1.6*	1.6	1.8
145°	1.8	1.8	1.6	1.6	1.6	1.8	*1.8*	2.0	2.0
147.5°	2.3	2.1	1.8	1.8	1.8	1.8	*2.0*	2.1	2.3
150°	2.5	2.3	2.0	2.0	2.0	2.0	*2.1*	2.5	2.7
152.5°	2.7	2.5	2.1	2.0	2.0	2.0	*2.3*	2.5	2.9
155°	2.9	2.7	2.3	2.0	2.0	2.1	*2.5*	2.9	3.1
157.5°	3.4	3.1	2.7	2.3	2.3	2.5	*2.9*	3.3	3.4
160°	3.8	3.4	3.1	2.7	2.7	2.9	*3.3*	3.6	3.8
162.5°	4.3	3.8	3.3	3.1	2.9	3.1	*3.4*	4.0	4.3
165°	4.5	4.0	3.6	3.3	3.3	3.3	*3.8*	4.3	4.5
167.5°	4.6	4.5	3.8	3.4	3.4	3.4	*4.0*	4.5	4.6
170°	4.8	4.6	4.0	3.6	3.4	3.6	*4.3*	4.6	4.8
172.5°	5.2	5.0	4.5	4.0	3.8	4.0	*4.6*	5.0	5.2
175°	5.8	5.4	5.0	4.5	4.3	4.5	*5.0*	5.4	5.8
177.5°	5.9	5.6	5.2	4.6	4.5	4.6	*5.2*	5.6	5.9
180°	5.2	5.2	5.2	5.2	5.2	5.2	*5.2*	5.2	5.2

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Scaled Data Report

TEST NUMBER: P1431643
CATALOG NUMBER: EHBR1-12-UNV-A1-L950

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	15.46	16.73	15.83	17.04	17.36	16.44	17.71	16.81	18.02	18.34
	3H	17.03	18.15	17.41	18.49	18.85	17.78	18.91	18.17	19.24	19.61
	4H	17.70	18.75	18.10	19.10	19.48	18.34	19.39	18.75	19.75	20.13
	6H	18.25	19.22	18.67	19.59	19.98	18.78	19.74	19.19	20.11	20.51
	8H	18.45	19.36	18.88	19.76	20.16	18.91	19.83	19.34	20.22	20.62
	12H	18.58	19.45	19.01	19.84	20.27	18.99	19.86	19.42	20.25	20.68
4H	2H	16.03	17.08	16.44	17.43	17.82	16.80	17.85	17.21	18.20	18.59
	3H	17.82	18.69	18.24	19.09	19.50	18.39	19.26	18.81	19.66	20.07
	4H	18.62	19.39	19.05	19.81	20.26	19.09	19.86	19.53	20.28	20.73
	6H	19.30	19.97	19.77	20.42	20.89	19.66	20.33	20.13	20.78	21.24
	8H	19.55	20.18	20.02	20.62	21.10	19.85	20.47	20.32	20.92	21.39
	12H	19.72	20.27	20.21	20.76	21.23	19.96	20.51	20.45	21.00	21.47
8H	4H	18.90	19.52	19.37	19.97	20.44	19.32	19.95	19.79	20.39	20.87
	6H	19.72	20.23	20.22	20.72	21.21	20.02	20.53	20.53	21.03	21.51
	8H	20.05	20.50	20.57	21.02	21.51	20.28	20.74	20.81	21.26	21.75
	12H	20.30	20.70	20.82	21.19	21.77	20.48	20.88	20.99	21.37	21.95
12H	4H	18.92	19.47	19.40	19.95	20.43	19.34	19.89	19.82	20.37	20.85
	6H	19.76	20.22	20.29	20.74	21.23	20.07	20.52	20.59	21.04	21.53
	8H	20.15	20.55	20.67	21.05	21.62	20.39	20.78	20.90	21.28	21.85

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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: SP1-2506-472-8

Test Date: 08/04/2025

Luminaire Tested: EHBR-60-L950-N

Data in this report applies to families of products including EHBR-60-L950-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

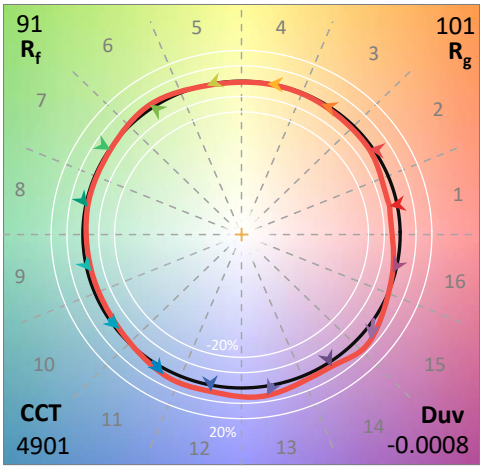
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-8
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-L950-N**
Description:	Elevate Round Highbay at, 60000 lumens, 5000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K):	4901
CIE u':	0.2131
CIE v':	0.4853
Duv:	-0.0008
CIE x:	0.3477
CIE y:	0.3520
CIE z:	0.3003
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	574
Purity:	9.953987
Rf:	90.7
Rg:	100.5

CRI (Ra):	94.3				
R1:	95.8	R9:	72.3
R2:	96.5	R10:	89.1
R3:	94.4	R11:	94.9
R4:	95.3	R12:	68.4
R5:	94.1	R13:	96.4
R6:	92.5	R14:	96.4
R7:	95.5	R15:	93.9
R8:	90.1		



Test Conditions

Stabilization Time:	35M
Operation Time:	1H 35M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-8

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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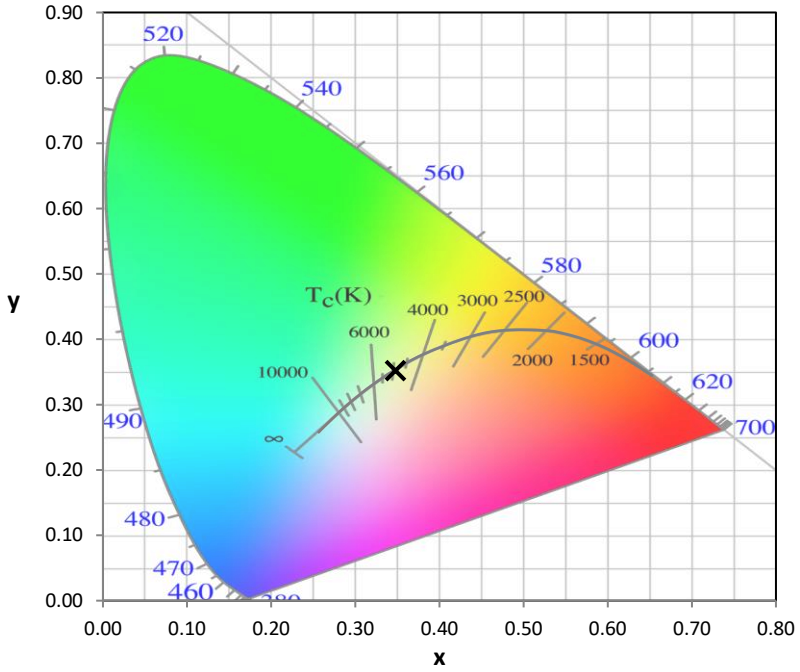
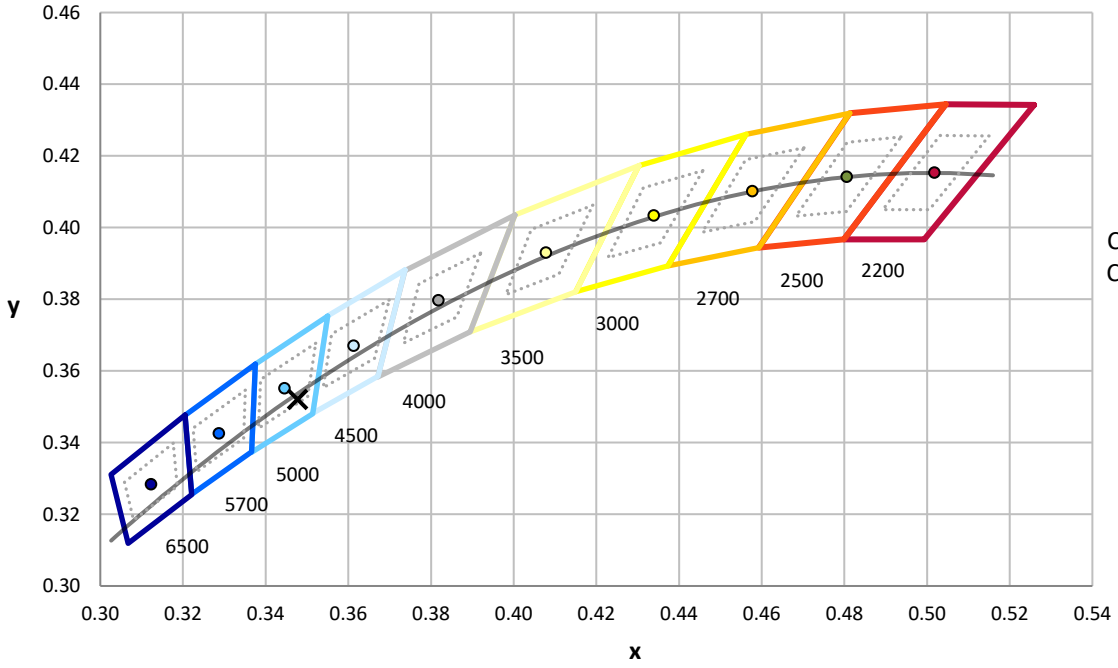
CIE 1931 Chromaticity Diagram



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



CCT = 4901K
CIE x = 0.3477
CIE y = 0.3520
Duv = -0.0008

Point lies inside the ANSI 5000K 4-step quadrangle

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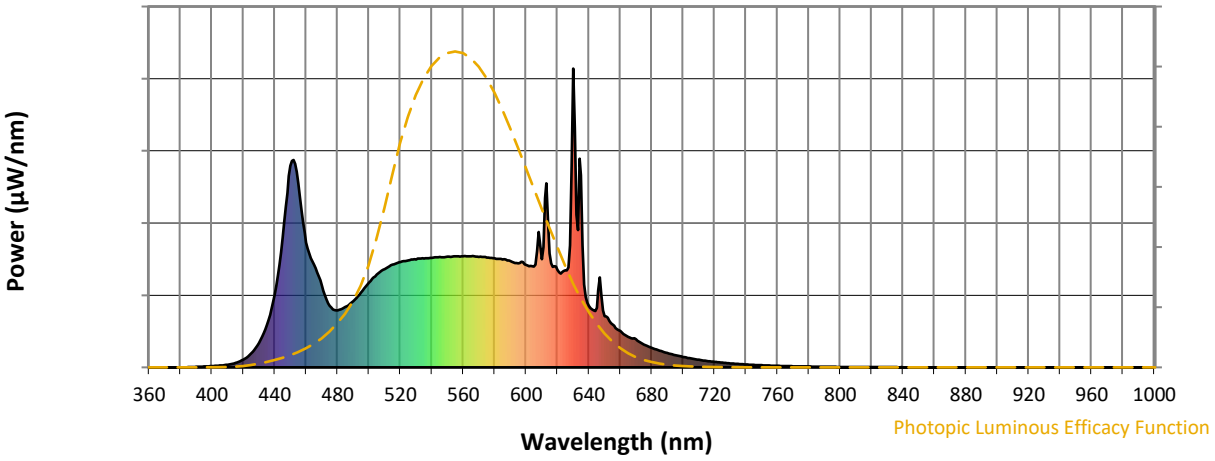
Photopic Flux vs. Wavelength



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	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

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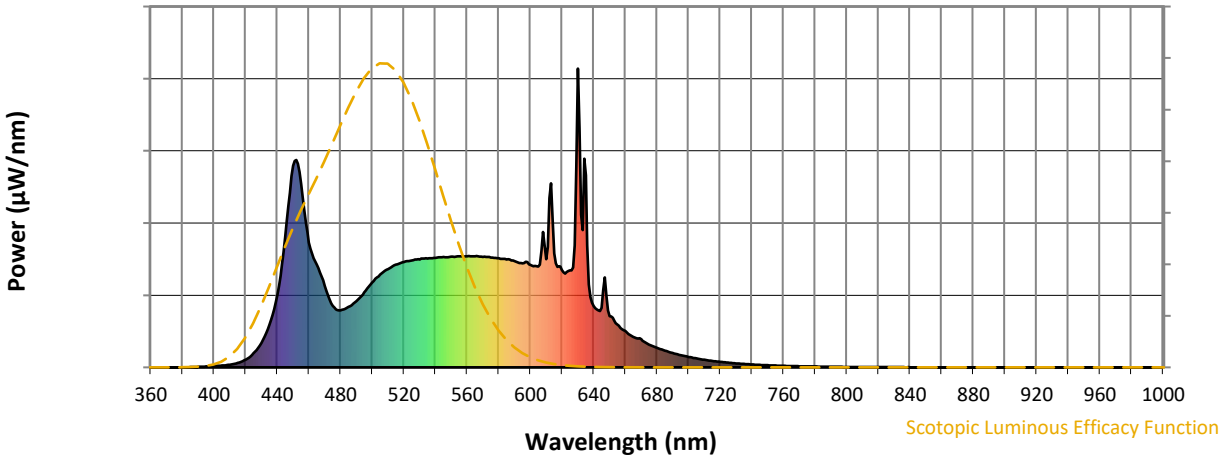
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 2.04**

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	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

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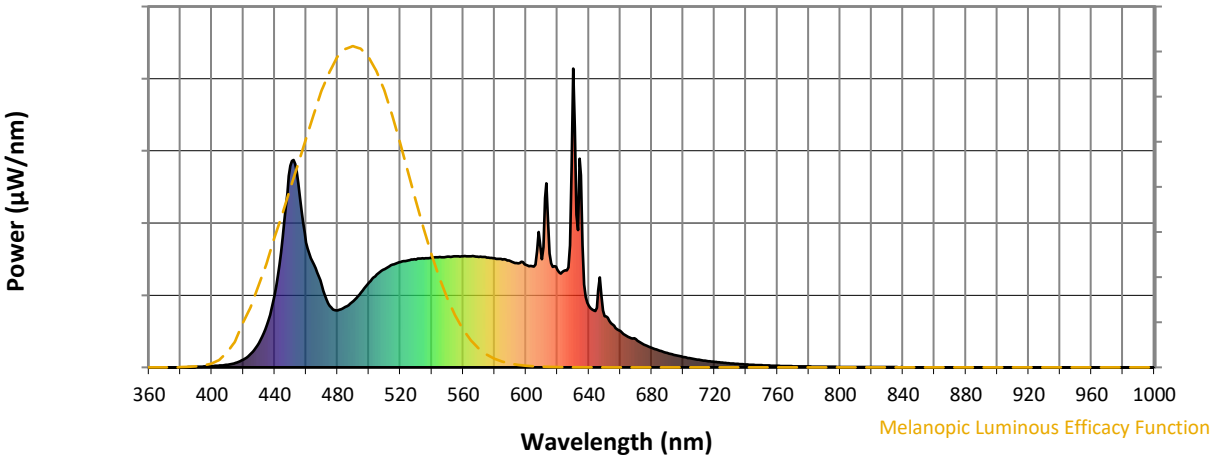
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 4.41**

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	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

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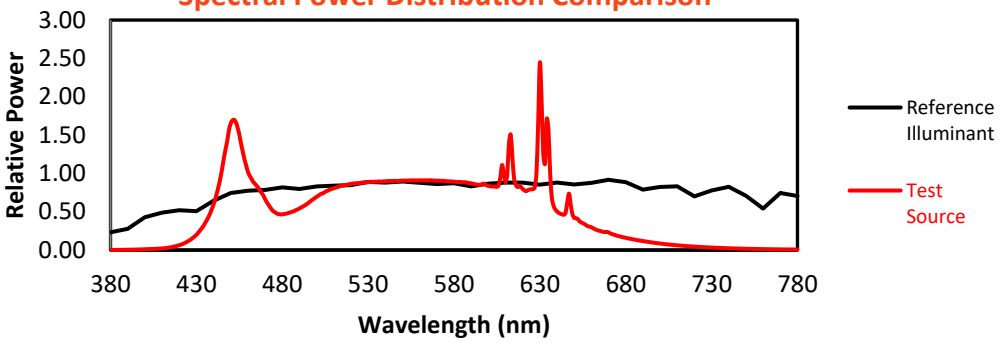
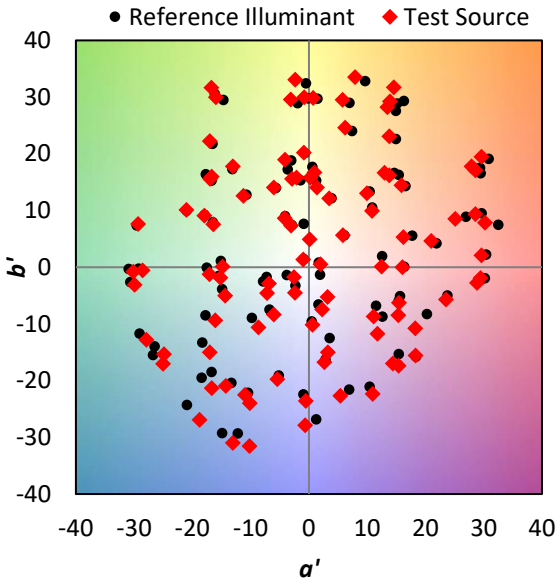
Summary

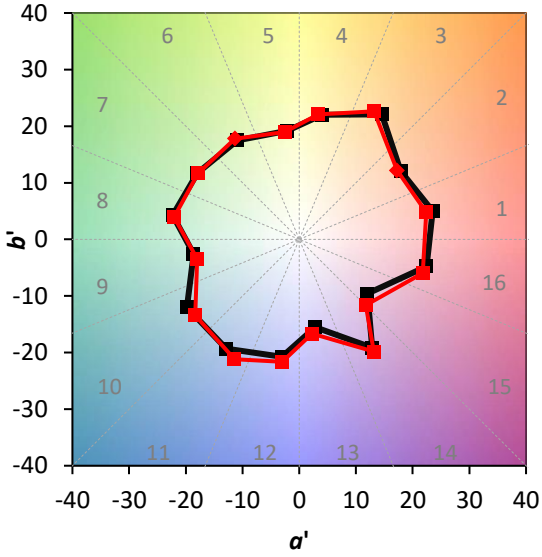
R_f = 90.7
R_g = 100.5
CIE R_a = 94.3
R_9 = 72.3

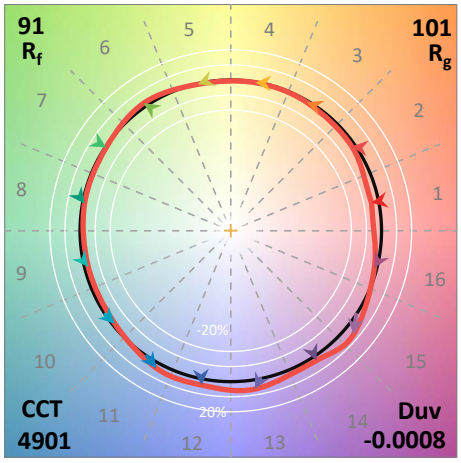
Spectral Power Distribution Comparison

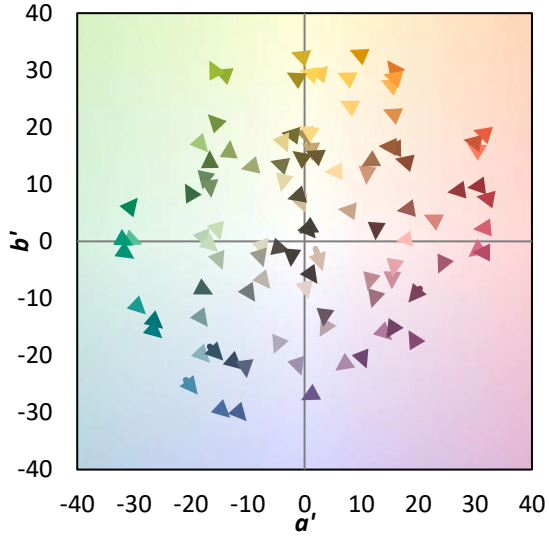


Color Vector Graphics









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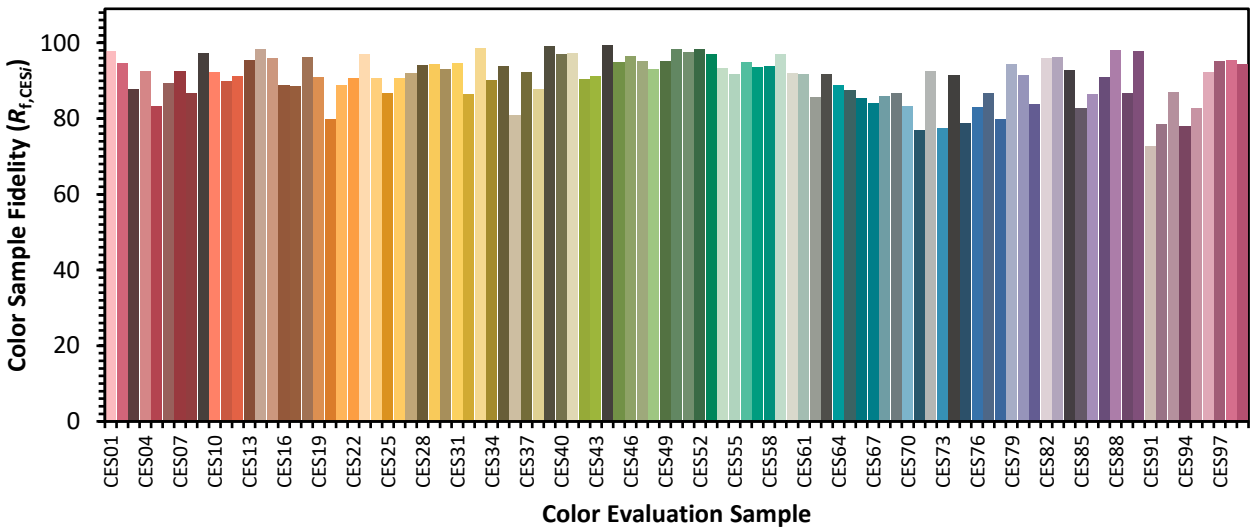
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 91	CES51 = 98	CES76 = 83
CES02 = 61	CES27 = 92	CES52 = 98	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 97	CES78 = 80
CES04 = 69	CES29 = 94	CES54 = 93	CES79 = 94
CES05 = 48	CES30 = 93	CES55 = 92	CES80 = 91
CES06 = 50	CES31 = 95	CES56 = 95	CES81 = 84
CES07 = 41	CES32 = 86	CES57 = 94	CES82 = 96
CES08 = 40	CES33 = 99	CES58 = 94	CES83 = 96
CES09 = 29	CES34 = 90	CES59 = 97	CES84 = 93
CES10 = 73	CES35 = 94	CES60 = 92	CES85 = 83
CES11 = 56	CES36 = 81	CES61 = 92	CES86 = 86
CES12 = 62	CES37 = 92	CES62 = 86	CES87 = 91
CES13 = 43	CES38 = 88	CES63 = 92	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 89	CES89 = 87
CES15 = 71	CES40 = 97	CES65 = 88	CES90 = 98
CES16 = 47	CES41 = 97	CES66 = 85	CES91 = 73
CES17 = 48	CES42 = 90	CES67 = 84	CES92 = 79
CES18 = 56	CES43 = 91	CES68 = 86	CES93 = 87
CES19 = 70	CES44 = 99	CES69 = 87	CES94 = 78
CES20 = 65	CES45 = 95	CES70 = 83	CES95 = 83
CES21 = 85	CES46 = 97	CES71 = 77	CES96 = 92
CES22 = 77	CES47 = 95	CES72 = 92	CES97 = 95
CES23 = 91	CES48 = 93	CES73 = 77	CES98 = 95
CES24 = 90	CES49 = 95	CES74 = 92	CES99 = 94
CES25 = 70	CES50 = 98	CES75 = 79	



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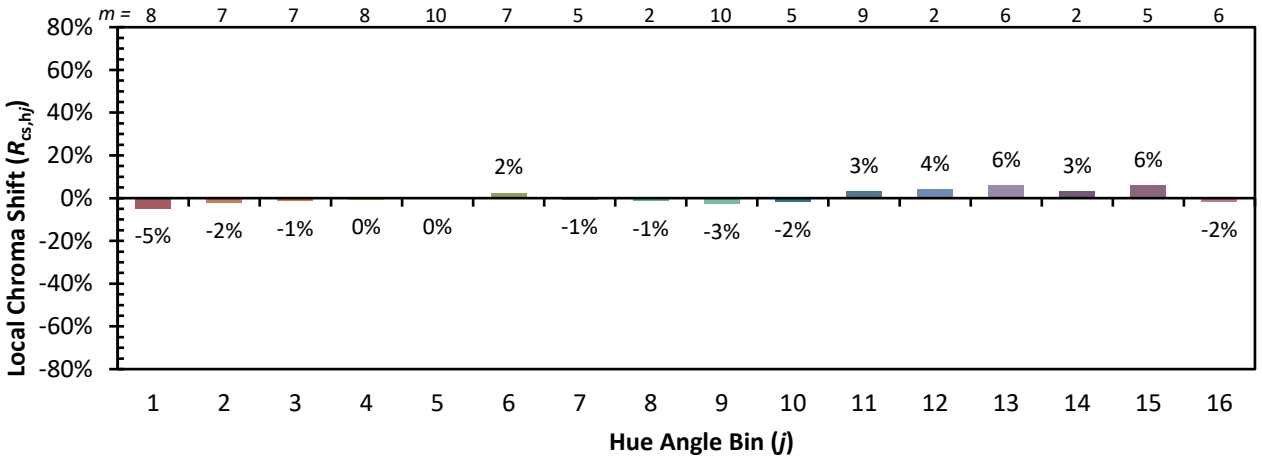
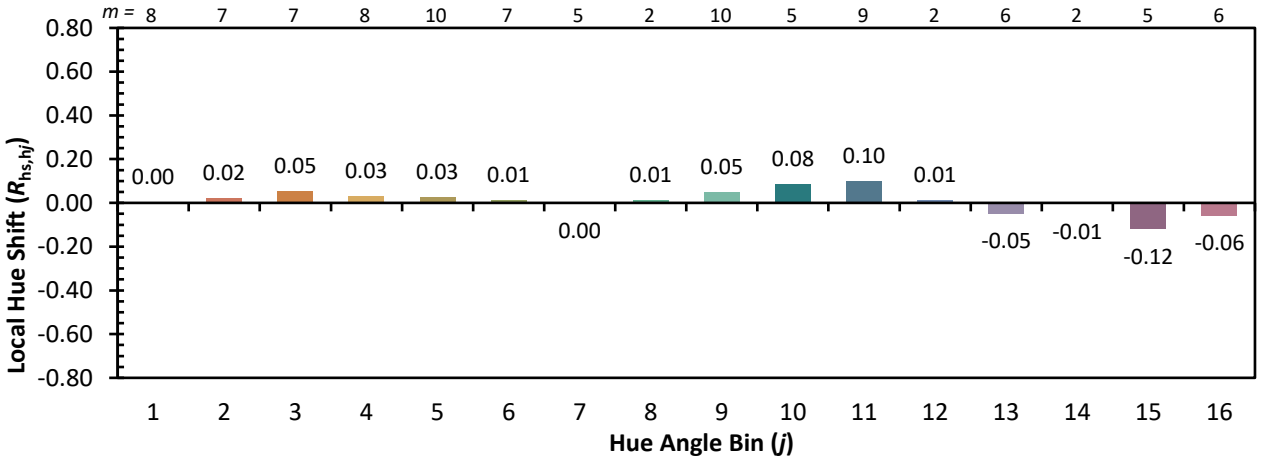
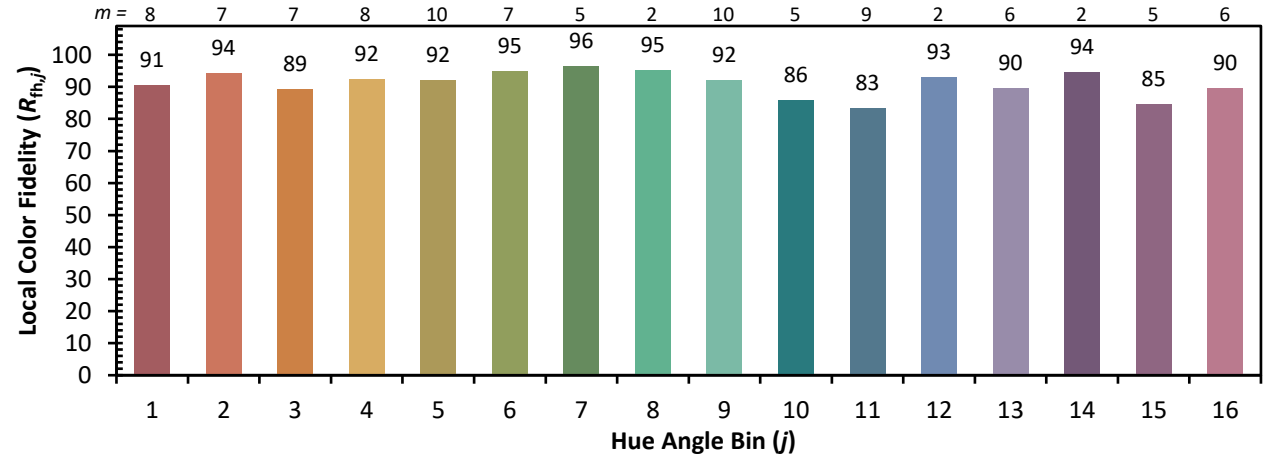
Color Rendition by Hue-Angle Bin







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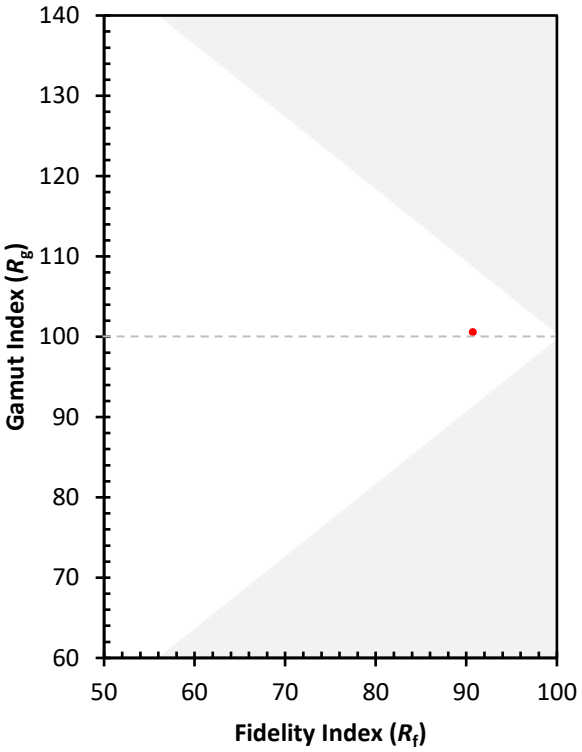
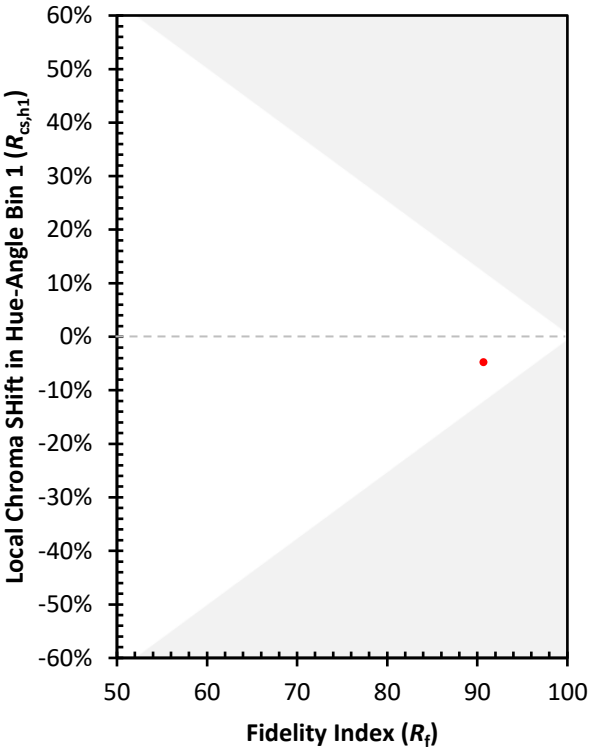
Measure Comparisons





(END OF REPORT)