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: P1433682

Luminaire Tested: EHBR1-60-UNV-ASM-L935

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:	P1433682
	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:	EHBR1-60-UNV-ASM-L935
Description:	Elevate Round Highbay at, 60000 lumens, 3500K 90CRI LEDs with ASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	53830.6 lumens
Efficiency:	N/A
Efficacy:	162.9 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):	330.4
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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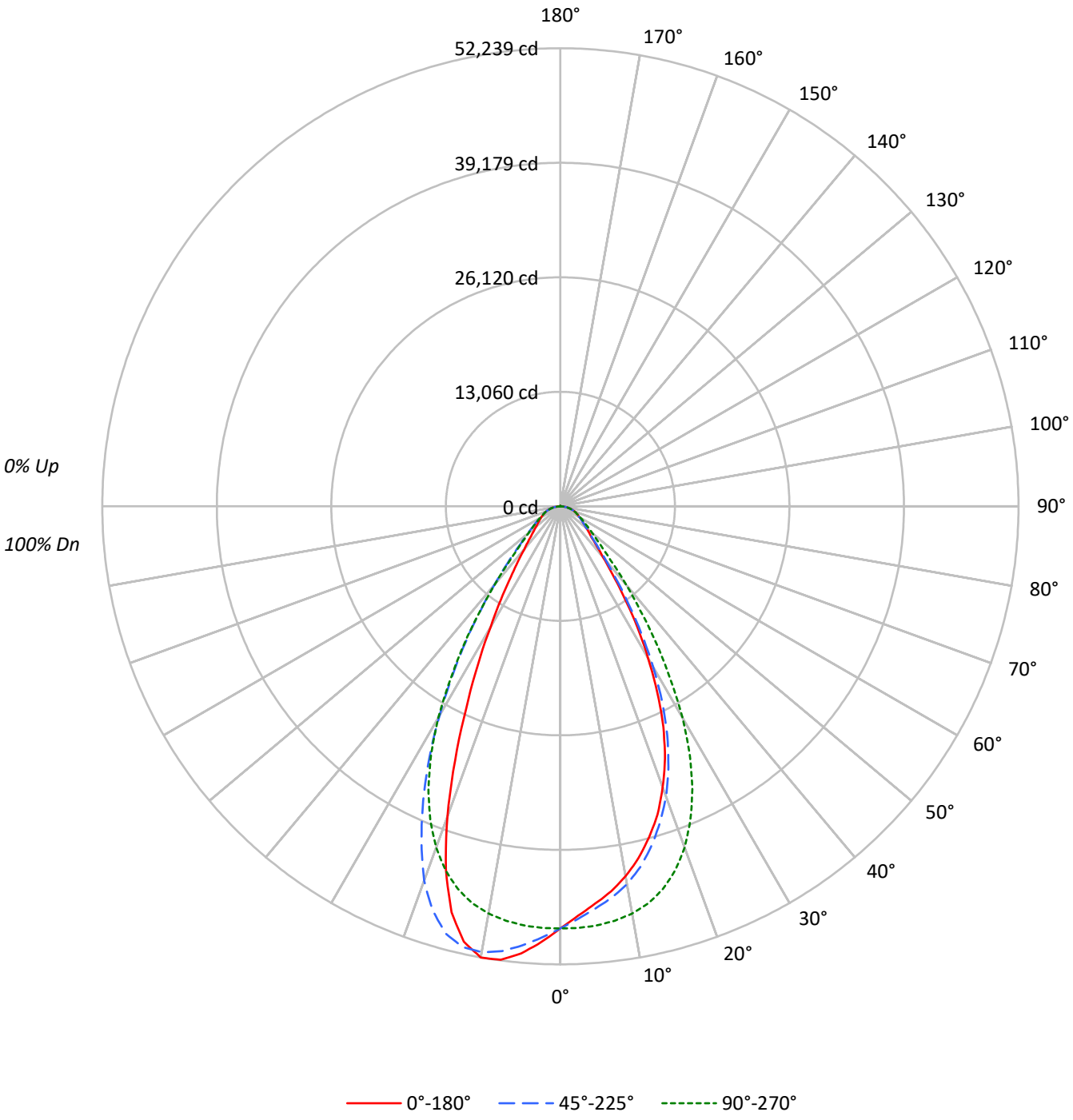
Scaled Data Report

TEST NUMBER: P1433682
CATALOG NUMBER: EHBR1-60-UNV-ASM-L935

Luminous Intensity Polar Plot



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TEST NUMBER: P1433682
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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°	226081	226081	226081	226081	226081
5°	214433	216940	226170	237018	241282
10°	204279	208605	224860	246237	249104
15°	189970	195044	219692	245354	233056
20°	170397	176136	206908	227110	188190
25°	143861	149305	184490	191909	131357
30°	108497	114787	150997	149490	86141
35°	72863	77262	109251	107486	56277
40°	46403	49591	71329	71788	39170
45°	33436	34827	45769	47736	30684
50°	28222	28445	34440	35338	26420
55°	25315	25374	28574	29328	24457
60°	23918	23714	25250	25784	23774
65°	23453	23242	23644	24105	23553
70°	23662	23254	23279	23723	23972
75°	23865	23145	23094	23914	24604
80°	24169	22487	22582	24169	25854
85°	22910	19020	19020	21741	24026

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
Vertical Angle: 45°
Luminance: 64348 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4577.6	8.5
10°-20°	12453.7	23.1
20°-30°	14605.6	27.1
30°-40°	10157.3	18.9
40°-50°	5047.7	9.4
50°-60°	3019.1	5.6
60°-70°	2124.9	3.9
70°-80°	1368.8	2.5
80°-90°	434.8	0.8
90°-100°	2.5	0.0
100°-110°	3.0	0.0
110°-120°	3.1	0.0
120°-130°	3.9	0.0
130°-140°	5.3	0.0
140°-150°	6.4	0.0
150°-160°	7.1	0.0
160°-170°	6.9	0.0
170°-180°	3.0	0.0
0°-30°	31636.9	58.8
0°-40°	41794.2	77.6
0°-60°	49860.9	92.6
0°-90°	53789.4	99.9
90°-120°	8.6	0.0
90°-150°	24.2	0.0
90°-180°	41.0	0.1
0°-180°	53830.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	48142	48142	48142	48142	48142	
5°	45488	46020	47978	50279	51184	4267
15°	39074	40118	45188	50466	47937	10897
25°	27764	28815	35605	37037	25351	12527
35°	12710	13477	19057	18749	9816	8096
45°	5035	5244	6892	7188	4620	4070
55°	3092	3099	3490	3582	2987	2805
65°	2111	2092	2128	2169	2120	2096
75°	1315	1276	1273	1318	1356	1388
85°	425	353	353	404	446	438
90°	1	1	1	3	7	21
95°	1	1	2	3	7	1
105°	2	1	2	4	8	2
115°	2	2	3	4	8	2
125°	3	4	4	5	9	2
135°	4	6	7	7	10	3
145°	10	11	11	9	12	6
155°	17	15	14	14	16	8
165°	25	24	24	26	30	7
175°	31	31	32	34	39	3
180°	33	33	33	33	33	

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Scaled Data Report

TEST NUMBER: P1433682
CATALOG NUMBER: EHBR1-60-UNV-ASM-L935

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	48142.4	48142.4	48142.4	48142.4	48142.4	48142.4	48142.4	48142.4	48142.4
2.5°	46713.3	46744.1	47070.9	47496.0	48114.4	48736.4	49240.2	49572.4	49736.7
5°	45488.3	45658.1	46020.1	46801.0	47978.1	49223.9	50279.2	50969.8	51183.8
7.5°	44294.9	44393.3	44999.1	45985.7	47652.2	49593.1	51161.2	51967.3	52164.2
10°	42838.8	43061.8	43746.1	44909.7	47154.8	49826.0	51637.9	52215.6	52239.0
12.5°	41125.4	41420.5	42127.4	43595.3	46361.3	49743.0	51478.1	51288.5	50857.9
15°	39074.3	39333.5	40118.0	41820.5	45187.7	49251.0	50466.1	48923.3	47936.6
17.5°	36859.0	37093.7	37775.3	39650.3	43533.9	48330.2	48353.7	45301.5	43440.0
20°	34096.6	34280.8	35244.9	37084.8	41402.5	46853.3	45445.0	39862.5	37657.0
22.5°	31157.3	31329.7	32186.4	34101.1	38730.4	44861.9	41394.4	34391.0	31382.0
25°	27763.9	27857.8	28814.7	30546.1	35605.1	42421.8	37036.9	28429.2	25350.9
27.5°	23946.1	24105.9	25107.2	26875.6	31929.1	39328.9	32396.8	23231.2	20391.2
30°	20008.4	20272.9	21168.4	22751.9	27846.0	35364.1	27568.0	18500.8	15885.6
32.5°	16333.3	16523.8	17162.1	18816.8	23274.6	31477.7	22930.6	14823.9	12608.6
35°	12709.7	12900.2	13477.0	15102.0	19056.9	26615.6	18749.1	11648.1	9816.5
37.5°	9715.3	10052.0	10422.2	11741.1	14955.7	22021.6	14945.8	9379.5	7962.2
40°	7569.5	7623.7	8089.4	8933.5	11635.5	17218.9	11710.4	7487.4	6389.6
42.5°	6059.2	6206.4	6406.8	7038.6	8816.2	13166.5	9204.4	6145.0	5427.3
45°	5034.6	5092.4	5244.0	5668.4	6891.6	9689.1	7187.7	5184.5	4620.2
47.5°	4404.5	4379.2	4476.7	4794.5	5612.4	7488.3	5825.4	4446.9	4051.5
50°	3862.9	3847.5	3893.5	4105.7	4714.1	5746.0	4836.9	3881.8	3616.3
52.5°	3442.2	3455.7	3460.2	3592.1	4049.7	4686.2	4119.2	3459.3	3280.6
55°	3091.9	3109.1	3099.1	3196.6	3490.0	3939.5	3582.1	3110.9	2987.2
57.5°	2818.3	2805.7	2792.2	2844.5	3064.8	3342.0	3110.9	2813.9	2731.7
60°	2546.6	2534.9	2524.9	2559.3	2688.4	2894.2	2745.3	2554.8	2531.3
62.5°	2313.8	2306.5	2305.6	2299.3	2398.6	2528.6	2427.5	2321.8	2301.1
65°	2110.6	2102.5	2091.6	2081.7	2127.8	2248.7	2169.3	2112.4	2119.6
67.5°	1907.5	1907.5	1888.5	1873.2	1918.3	1981.5	1947.3	1914.7	1922.9
70°	1723.3	1724.2	1693.6	1681.8	1695.4	1763.1	1727.8	1732.4	1745.9
72.5°	1525.6	1504.0	1481.4	1480.5	1482.3	1534.7	1522.9	1533.8	1548.2
75°	1315.3	1290.0	1275.6	1259.3	1272.8	1312.5	1318.0	1333.4	1356.0
77.5°	1112.2	1073.4	1061.6	1053.5	1044.5	1089.6	1106.7	1127.6	1160.9
80°	893.7	851.3	831.5	819.7	835.0	855.8	893.7	909.0	956.0
82.5°	660.8	629.2	604.8	604.0	611.1	630.1	662.6	691.5	718.6
85°	425.2	374.7	353.0	361.1	353.0	381.8	403.5	437.8	445.9
87.5°	153.4	120.1	114.7	126.3	123.7	132.7	151.6	165.2	166.1
90°	0.9	0.9	0.9	0.9	0.9	1.8	2.7	5.4	7.3
92.5°	0.9	0.9	0.9	0.9	0.9	1.8	2.7	5.4	7.3
95°	0.9	0.9	0.9	0.9	1.8	1.8	2.7	5.4	7.3
97.5°	1.8	0.9	0.9	0.9	1.8	1.8	2.7	5.4	7.3
100°	1.8	0.9	0.9	1.8	1.8	1.8	2.7	5.4	7.3
102.5°	1.8	0.9	0.9	1.8	1.8	2.7	3.6	6.3	7.3
105°	1.8	0.9	0.9	1.8	1.8	2.7	3.6	6.3	8.2
107.5°	1.8	0.9	1.8	1.8	1.8	2.7	3.6	6.3	8.2
110°	1.8	0.9	1.8	1.8	1.8	2.7	3.6	6.3	8.2

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Scaled Data Report

TEST NUMBER: P1433682
CATALOG NUMBER: EHBR1-60-UNV-ASM-L935

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	1.8	0.9	1.8	1.8	1.8	2.7	3.6	6.3	*8.2*
115°	1.8	0.9	1.8	1.8	2.7	2.7	3.6	6.3	*8.2*
117.5°	1.8	0.9	1.8	2.7	2.7	2.7	3.6	6.3	*8.2*
120°	1.8	0.9	1.8	2.7	2.7	2.7	4.5	6.3	*8.2*
122.5°	1.8	1.8	2.7	3.6	3.6	3.6	4.5	7.3	*8.2*
125°	2.7	1.8	3.6	4.5	3.6	3.6	5.4	7.3	*9.1*
127.5°	2.7	1.8	3.6	4.5	4.5	4.5	5.4	7.3	*9.1*
130°	2.7	2.7	4.5	5.4	5.4	4.5	5.4	8.2	*9.1*
132.5°	3.6	3.6	6.3	7.3	6.3	5.4	6.3	9.1	*10.0*
135°	3.6	4.5	6.3	8.2	7.3	5.4	7.3	8.2	*10.0*
137.5°	4.5	5.4	8.2	9.1	8.2	6.3	7.3	9.1	*10.0*
140°	6.3	7.3	9.1	9.1	9.1	7.3	7.3	9.1	*10.9*
142.5°	8.2	8.2	10.0	10.0	10.0	8.2	8.2	10.0	*10.9*
145°	10.0	10.0	10.9	10.0	10.9	10.0	9.1	10.0	*11.7*
147.5°	11.7	11.7	11.7	10.9	10.9	10.0	10.0	10.9	*12.6*
150°	13.5	13.5	12.6	11.7	11.7	11.7	10.9	11.7	*13.5*
152.5°	15.3	14.4	13.5	12.6	12.6	12.6	12.6	13.5	*14.4*
155°	17.1	16.2	15.3	13.5	14.4	14.4	14.4	15.3	*16.2*
157.5°	19.8	18.0	17.1	16.2	16.2	17.1	17.1	18.0	*18.9*
160°	21.7	20.8	19.8	18.9	19.8	19.8	20.8	21.7	*22.6*
162.5°	23.5	22.6	21.7	21.7	21.7	21.7	23.5	24.4	*26.2*
165°	25.3	24.4	23.5	23.5	24.4	24.4	26.2	28.0	*29.8*
167.5°	25.3	25.3	25.3	25.3	26.2	26.2	28.0	30.7	*32.5*
170°	27.1	26.2	26.2	27.1	27.1	28.0	29.8	32.5	*34.3*
172.5°	28.9	28.0	28.9	28.9	29.8	29.8	32.5	35.2	*37.0*
175°	30.7	29.8	30.7	30.7	31.6	32.5	34.3	37.0	*38.8*
177.5°	31.6	30.7	30.7	30.7	31.6	33.4	35.2	37.9	*39.7*
180°	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	*33.4*

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Scaled Data Report

TEST NUMBER: P1433682
CATALOG NUMBER: EHBR1-60-UNV-ASM-L935

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	19.81	21.01	20.17	21.33	21.64	20.57	21.78	20.94	22.09	22.41
	3H	21.72	22.79	22.10	23.13	23.50	22.22	23.30	22.60	23.63	24.00
	4H	22.53	23.53	22.94	23.89	24.27	22.94	23.94	23.34	24.29	24.68
	6H	23.20	24.12	23.62	24.49	24.89	23.53	24.45	23.94	24.82	25.22
	8H	23.44	24.31	23.88	24.71	25.11	23.74	24.61	24.17	25.00	25.41
	12H	23.60	24.43	24.04	24.82	25.25	23.87	24.70	24.30	25.09	25.52
4H	2H	20.37	21.37	20.78	21.73	22.11	21.00	22.00	21.40	22.35	22.74
	3H	22.53	23.36	22.95	23.76	24.17	22.92	23.74	23.33	24.15	24.55
	4H	23.48	24.22	23.92	24.64	25.09	23.79	24.53	24.22	24.95	25.39
	6H	24.29	24.93	24.76	25.38	25.85	24.53	25.17	25.00	25.62	26.09
	8H	24.59	25.18	25.06	25.63	26.10	24.80	25.40	25.27	25.85	26.32
	12H	24.79	25.32	25.28	25.80	26.28	24.98	25.51	25.47	25.99	26.47
8H	4H	23.80	24.40	24.27	24.85	25.32	24.09	24.68	24.56	25.13	25.61
	6H	24.76	25.24	25.26	25.74	26.22	24.99	25.47	25.50	25.97	26.46
	8H	25.14	25.57	25.67	26.09	26.59	25.36	25.79	25.88	26.31	26.80
	12H	25.44	25.82	25.96	26.31	26.89	25.63	26.01	26.15	26.51	27.08
12H	4H	23.83	24.35	24.32	24.84	25.31	24.12	24.64	24.61	25.13	25.60
	6H	24.82	25.25	25.35	25.77	26.27	25.06	25.49	25.59	26.01	26.51
	8H	25.27	25.65	25.79	26.14	26.72	25.49	25.87	26.01	26.37	26.94

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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: SP1-2506-472-6

Test Date: 08/01/2025

Luminaire Tested: EHBR-60-L935-N

Data in this report applies to families of products including EHBR-60-L935-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

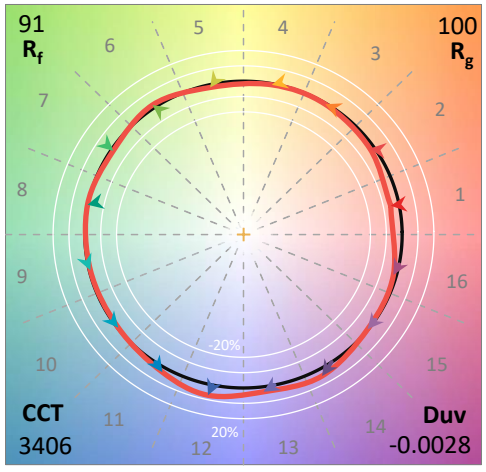
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-6
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-L935-N**
Description:	Elevate Round Highbay at, 60000 lumens, 3500K 90CRI LEDs with N lens

Spectral Parameters

CCT (K):	3406
CIE u':	0.2394
CIE v':	0.5094
Duv:	-0.0028
CIE x:	0.4076
CIE y:	0.3856
CIE z:	0.2068
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	582
Purity:	38.0517
Rf:	91.3
Rg:	100

CRI (Ra):	94.6				
R1:	96.6	R9:	63.8		
R2:	98.4	R10:	94.7		
R3:	98.1	R11:	96.6		
R4:	95.8	R12:	80.9		
R5:	96.2	R13:	97.4		
R6:	95.4	R14:	98.3		
R7:	91.8	R15:	93.1		
R8:	84.4				



Test Conditions

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

REPORT NUMBER: SP1-2506-472-6

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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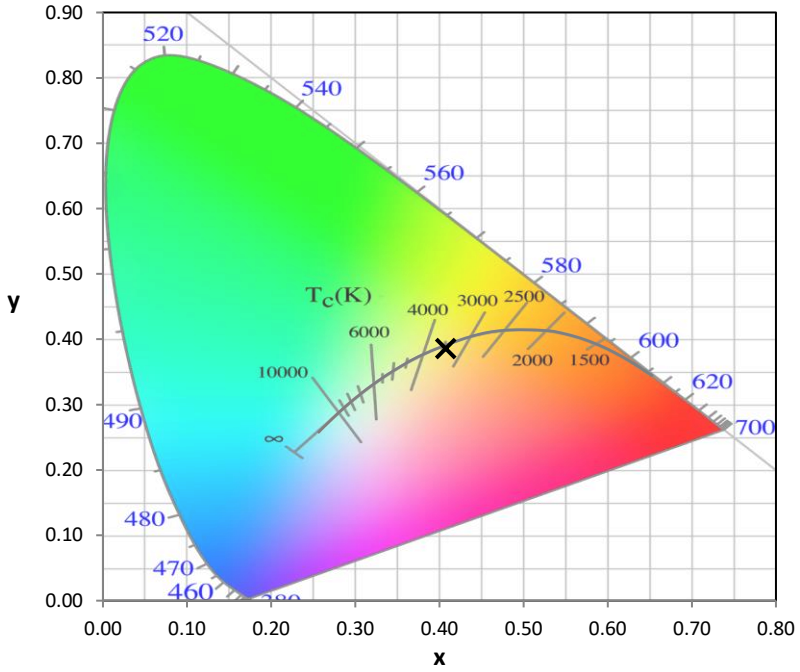
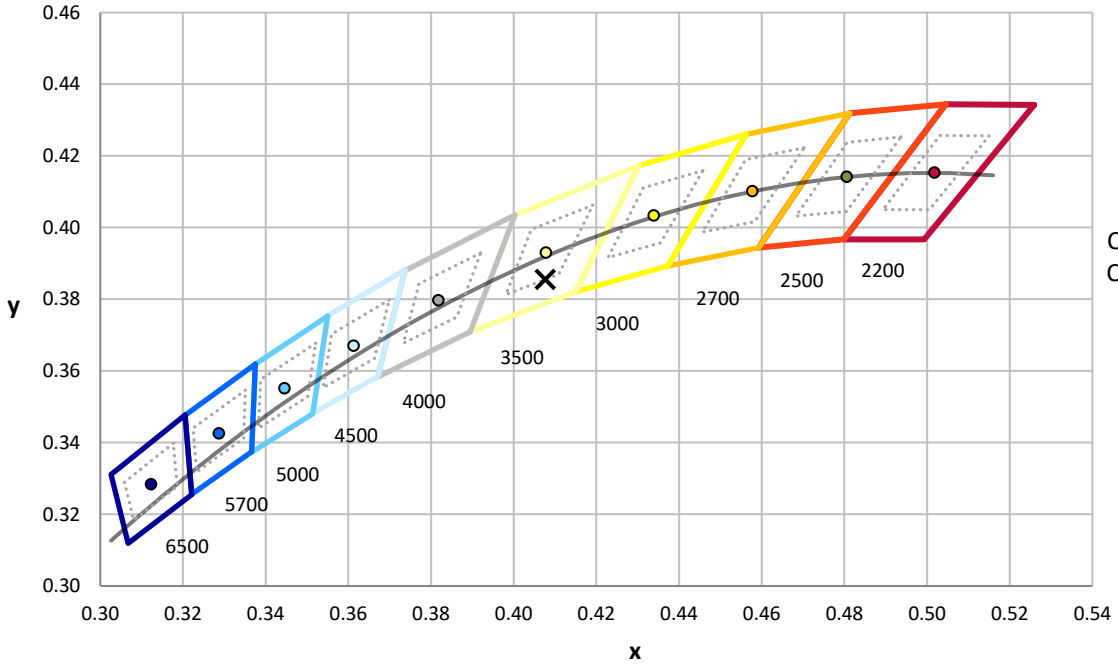
CIE 1931 Chromaticity Diagram



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



CCT = 3406K
CIE x = 0.4076
CIE y = 0.3856
Duv = -0.0028

Point lies inside the ANSI 3500K 4-step quadrangle

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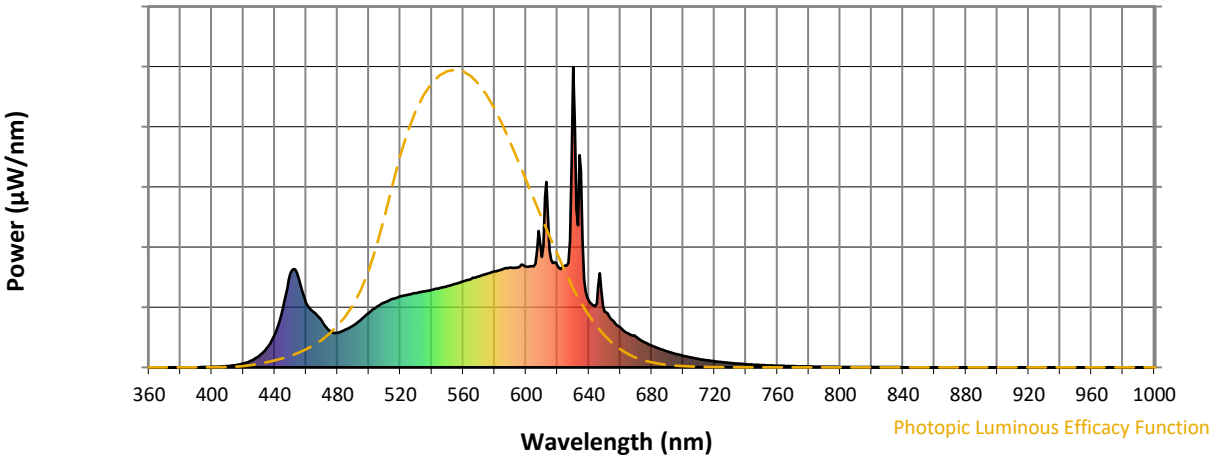
Photopic Flux vs. Wavelength



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	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

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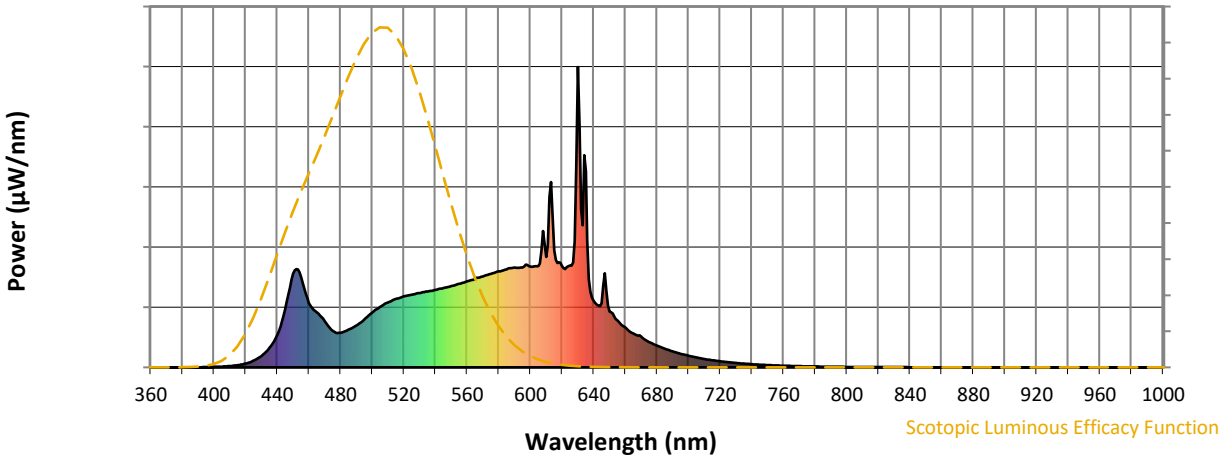
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.62**

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	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

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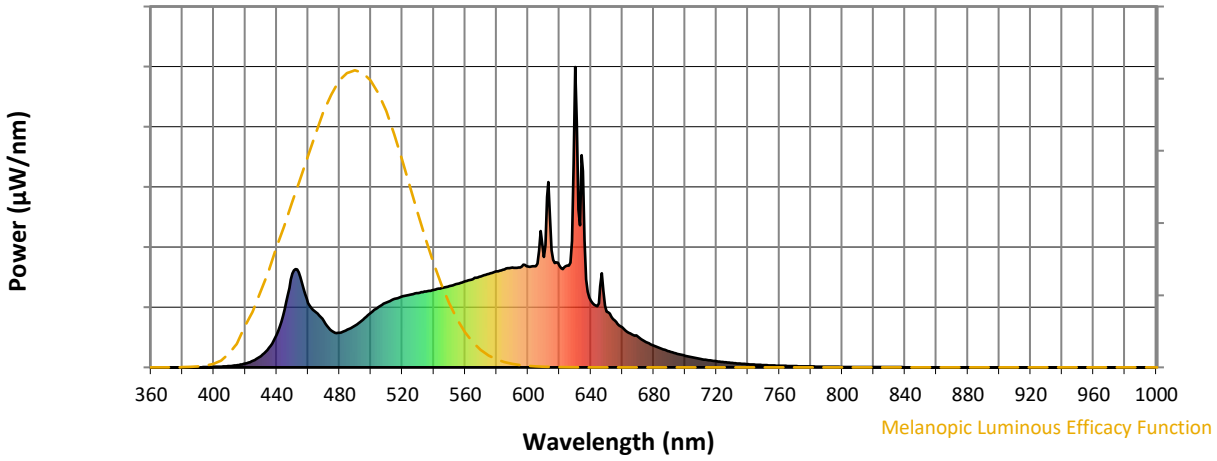
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.3**

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	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

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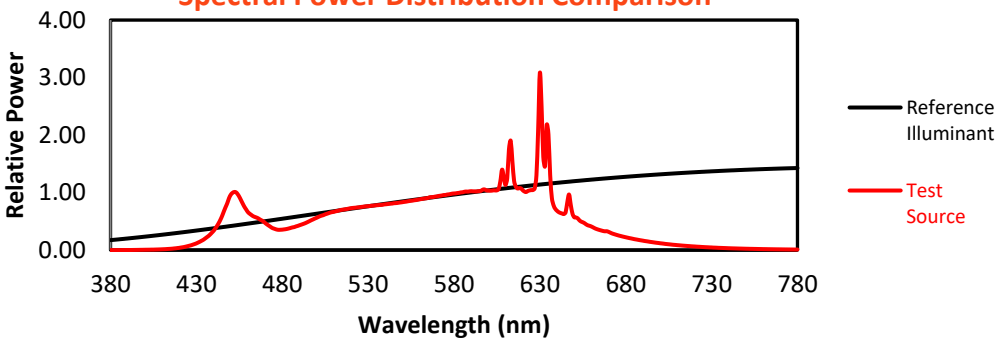
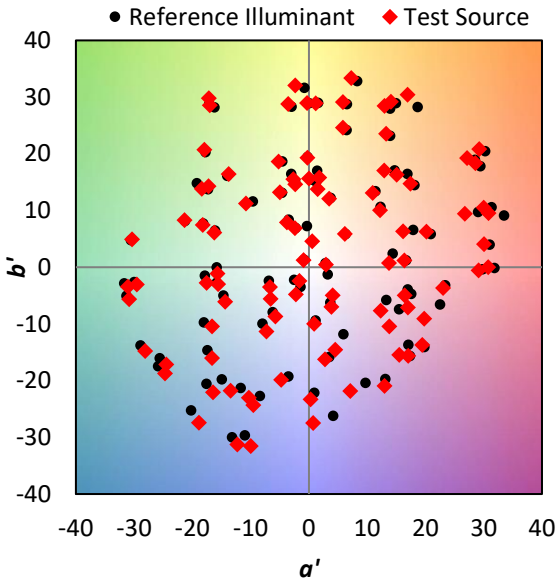
Summary

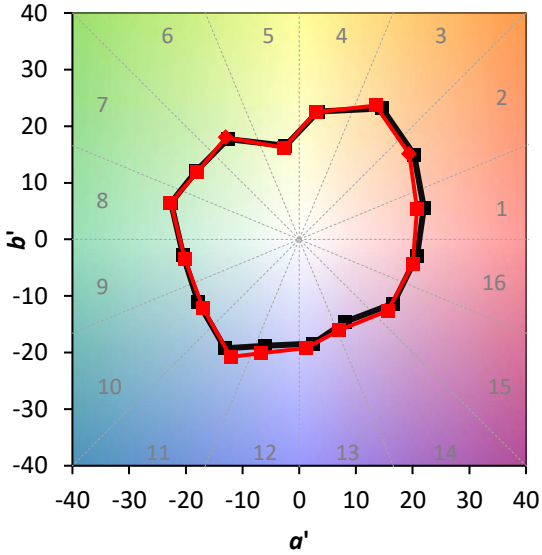
R_f = 91.3
R_g = 100
CIE R_a = 94.6
R_9 = 63.8

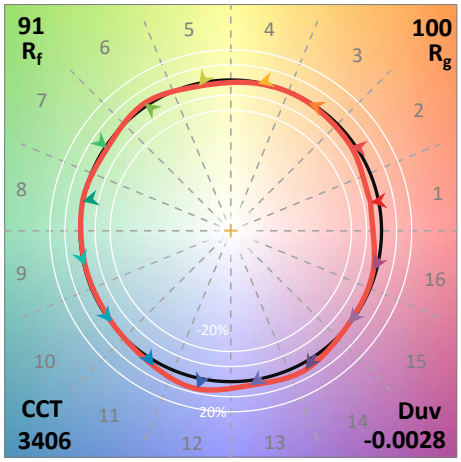
Spectral Power Distribution Comparison

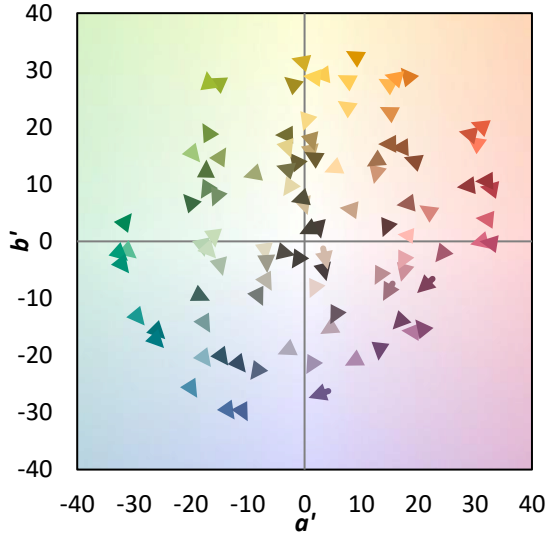


Color Vector Graphics









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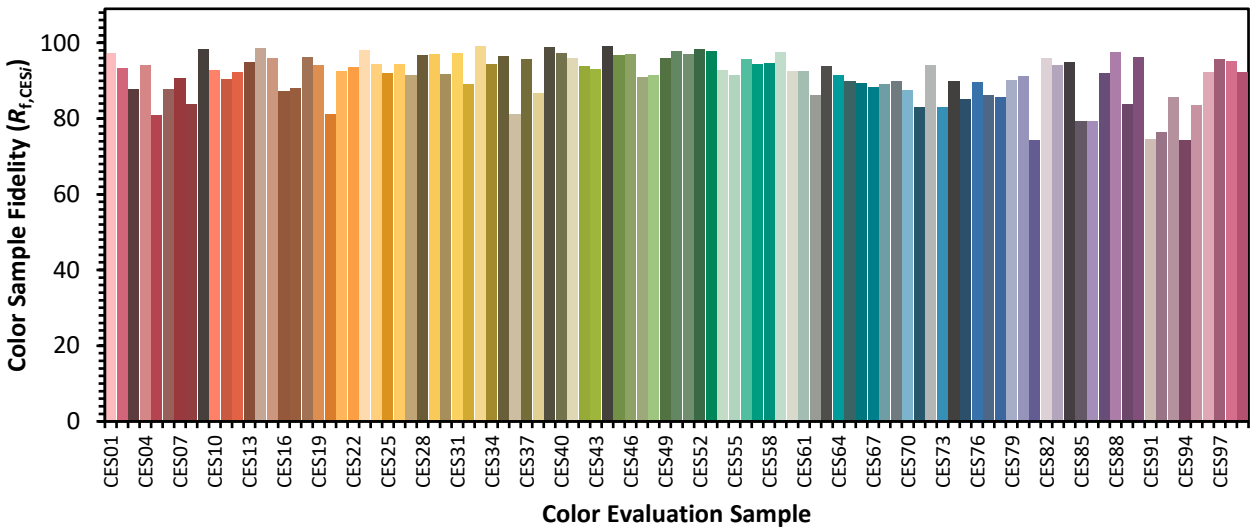
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 94	CES51 = 97	CES76 = 90
CES02 = 63	CES27 = 92	CES52 = 98	CES77 = 86
CES03 = 31	CES28 = 97	CES53 = 98	CES78 = 86
CES04 = 70	CES29 = 97	CES54 = 93	CES79 = 90
CES05 = 50	CES30 = 92	CES55 = 92	CES80 = 91
CES06 = 51	CES31 = 97	CES56 = 96	CES81 = 74
CES07 = 43	CES32 = 89	CES57 = 94	CES82 = 96
CES08 = 41	CES33 = 99	CES58 = 95	CES83 = 94
CES09 = 29	CES34 = 94	CES59 = 98	CES84 = 95
CES10 = 75	CES35 = 97	CES60 = 92	CES85 = 79
CES11 = 58	CES36 = 81	CES61 = 93	CES86 = 79
CES12 = 64	CES37 = 96	CES62 = 86	CES87 = 92
CES13 = 44	CES38 = 87	CES63 = 94	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 91	CES89 = 84
CES15 = 72	CES40 = 97	CES65 = 90	CES90 = 96
CES16 = 48	CES41 = 96	CES66 = 89	CES91 = 75
CES17 = 49	CES42 = 94	CES67 = 88	CES92 = 76
CES18 = 56	CES43 = 93	CES68 = 89	CES93 = 86
CES19 = 71	CES44 = 99	CES69 = 90	CES94 = 74
CES20 = 67	CES45 = 97	CES70 = 88	CES95 = 83
CES21 = 86	CES46 = 97	CES71 = 83	CES96 = 92
CES22 = 78	CES47 = 91	CES72 = 94	CES97 = 96
CES23 = 91	CES48 = 91	CES73 = 83	CES98 = 95
CES24 = 90	CES49 = 96	CES74 = 90	CES99 = 92
CES25 = 71	CES50 = 98	CES75 = 85	



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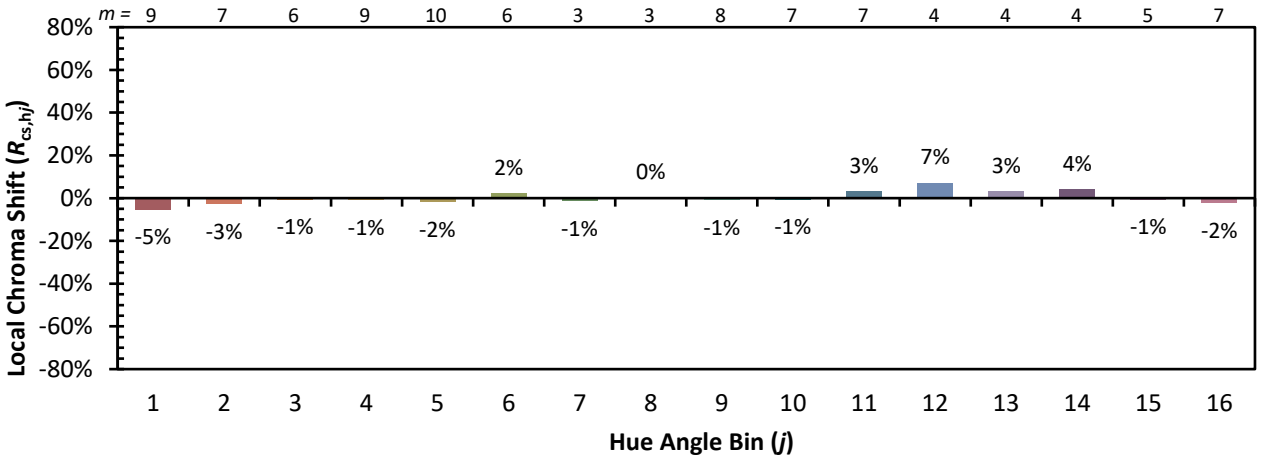
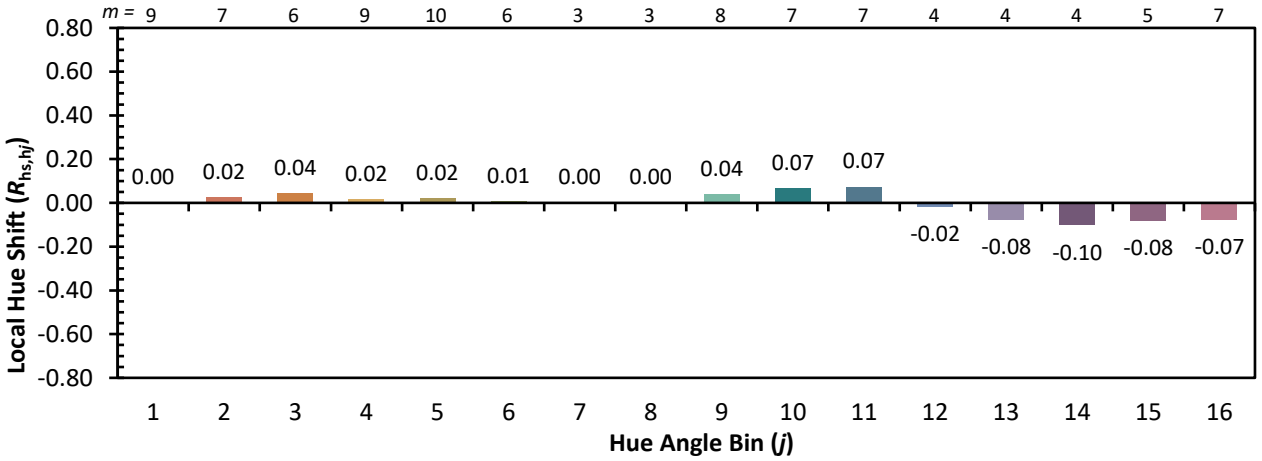
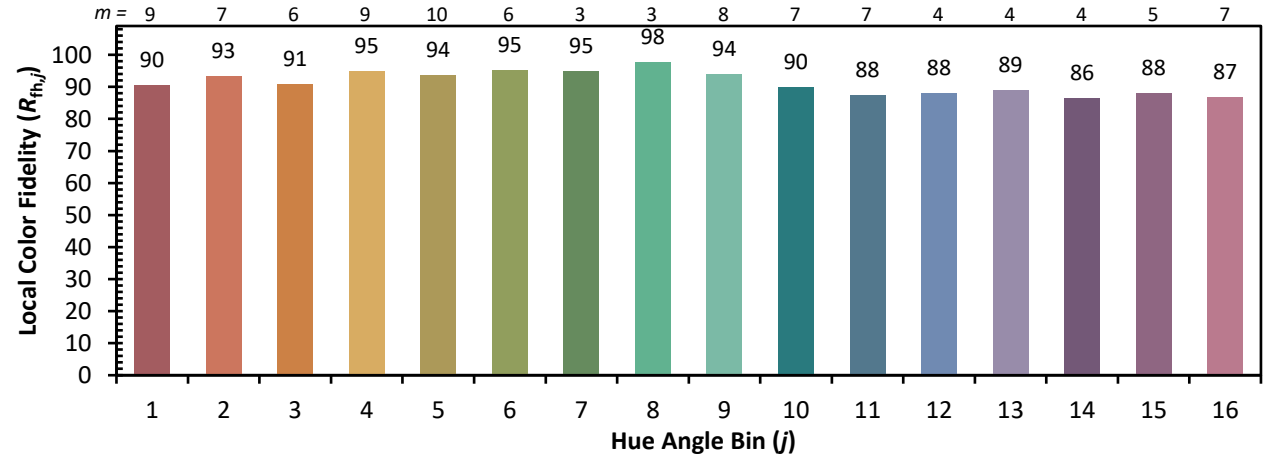
Color Rendition by Hue-Angle Bin







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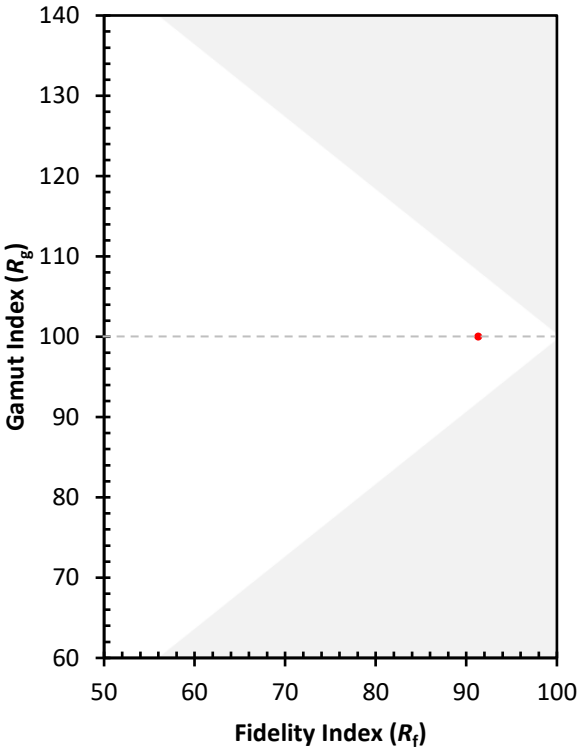
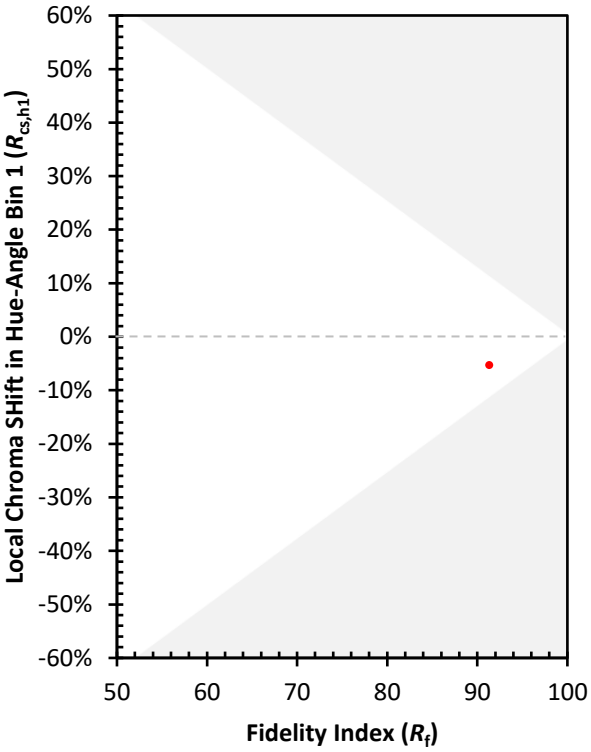
Measure Comparisons





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