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: P1433479

Luminaire Tested: EHBR1-24-UNV-A1-L935-UPL30

Issue Date: 3/20/2026

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:	P1433479
	REPORT IS A COMBINATION OF REPORTS P1431704 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-24-UNV-A1-L935-UPL30
Description:	Elevate Round Highbay at, 24000 lumens, 3500K 90CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	25176.0 lumens
Efficiency:	N/A
Efficacy:	167.5 lumens/watt
Spacing Criteria (0/90/45):	0.8 / 1.07 / 0.95
Luminous Opening:	Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type:	Semi-Direct

Input Watts (W):	150.3
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: P1433479
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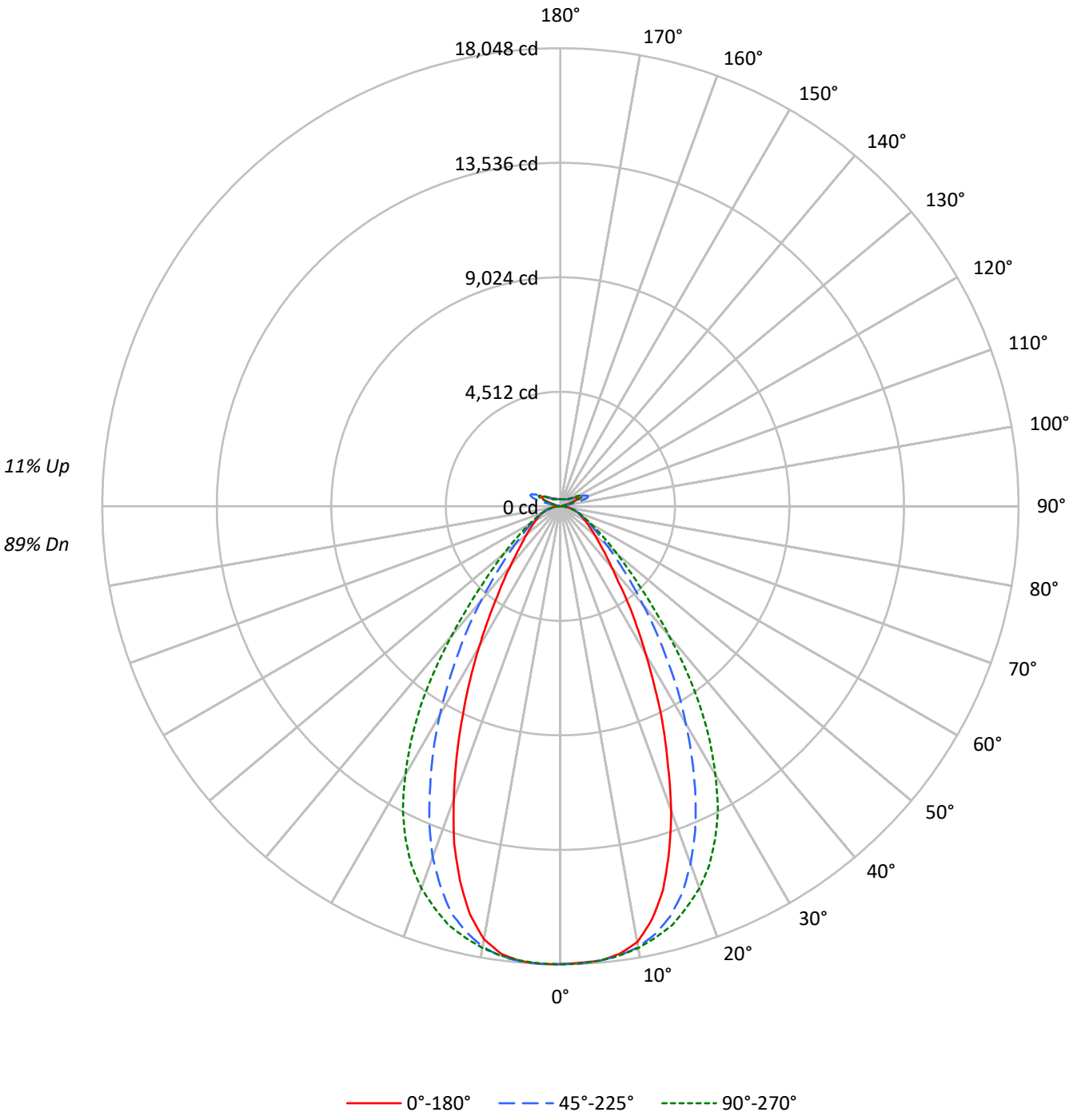
Luminous Intensity Polar Plot



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TEST NUMBER: P1433479
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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	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	109	105	102	99	105	102	99	97	96	94	92	90	89	87	85	84	82	80
2	102	95	90	86	98	93	88	84	87	84	80	83	80	77	78	76	74	71
3	95	87	80	75	92	84	79	74	80	75	72	76	72	69	72	69	67	64
4	89	79	72	67	86	77	71	66	74	68	64	70	66	62	67	63	60	58
5	83	73	66	60	80	71	65	60	68	62	58	65	60	57	62	58	55	53
6	78	67	60	55	75	66	59	54	63	57	53	60	55	52	58	54	50	49
7	73	62	55	50	71	61	54	50	59	53	49	56	51	47	54	50	46	45
8	69	58	51	46	67	57	50	46	55	49	45	53	48	44	51	46	43	41
9	65	54	47	42	63	53	47	42	51	45	41	49	44	41	48	43	40	38
10	62	51	44	39	60	50	43	39	48	42	38	46	41	38	45	41	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	84718	84718	84718	84718	84718
5°	84159	84146	84150	84299	84247
10°	82078	83035	83167	82932	81541
15°	74514	79713	81354	79074	72803
20°	62094	72928	77910	71555	59677
25°	48021	63057	72275	60755	45532
30°	35003	51352	63489	49404	33223
35°	25232	39581	52178	37876	23585
40°	18153	29233	38453	27999	17593
45°	14304	21387	26856	20460	13809
50°	11868	16069	19438	15539	11688
55°	10364	12688	14721	12476	10225
60°	9348	10592	11731	10526	9413
65°	8742	9343	9857	9372	8826
70°	8303	8501	8763	8548	8385
75°	7745	7697	7745	7718	7820
80°	6997	6493	6349	6594	6997
85°	4850	4111	4068	4178	4993

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 28139 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1703.6	6.8
10°-20°	4578.7	18.2
20°-30°	5567.7	22.1
30°-40°	4535.3	18.0
40°-50°	2723.0	10.8
50°-60°	1567.1	6.2
60°-70°	980.7	3.9
70°-80°	577.6	2.3
80°-90°	173.8	0.7
90°-100°	72.8	0.3
100°-110°	482.0	1.9
110°-120°	891.6	3.5
120°-130°	529.0	2.1
130°-140°	319.5	1.3
140°-150°	221.0	0.9
150°-160°	143.7	0.6
160°-170°	81.8	0.3
170°-180°	27.1	0.1
0°-30°	11850.1	47.1
0°-40°	16385.4	65.1
0°-60°	20675.5	82.1
0°-90°	22407.7	89.0
90°-120°	1446.3	5.7
90°-150°	2515.8	10.0
90°-180°	2768.0	11.0
0°-180°	25176.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	18040	18040	18040	18040	18040	
5°	17969	17966	17967	17999	17988	1698
15°	15633	16723	17068	16589	15274	4301
25°	9590	12592	14433	12133	9093	4369
35°	4631	7264	9576	6952	4329	2930
45°	2314	3460	4345	3310	2234	1826
55°	1401	1715	1989	1686	1382	1266
65°	912	975	1029	978	921	907
75°	546	542	546	544	551	578
85°	167	141	140	144	172	178
90°	21	55	20	58	20	18
95°	34	124	38	106	34	33
105°	168	843	221	898	110	225
115°	772	997	949	1103	808	711
125°	557	533	607	590	634	508
135°	407	408	382	427	441	319
145°	337	352	345	355	362	213
155°	298	307	306	307	321	139
165°	282	288	286	286	294	80
175°	282	285	283	282	288	27
180°	284	284	284	284	284	

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Scaled Data Report

TEST NUMBER: P1433479
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	18040.2	18040.2	18040.2	18040.2	18040.2	18040.2	*18040.2*	18040.2	18040.2
2.5°	*18000.6*	*18016.8*	*18023.6*	*18027.4*	*18031.5*	*18042.9*	*18047.8*	*18039.9*	*18046.7*
5°	17969.3	17970.3	17966.5	17983.6	17967.4	17978.7	*17999.1*	17991.1	17988.1
7.5°	17786.4	17824.2	17846.5	17852.1	17855.2	17869.1	*17883.4*	17802.2	17790.1
10°	17438.7	17501.9	17642.0	17682.0	17670.0	17692.6	*17620.1*	17407.7	17324.6
12.5°	16676.7	16898.4	17262.7	17424.7	17395.3	17415.3	*17168.2*	16720.1	16462.4
15°	15632.7	15957.9	16723.4	17043.1	17067.6	17043.1	*16589.3*	15716.1	15273.7
17.5°	14244.8	14845.6	15972.7	16593.1	16557.6	16569.3	*15707.8*	14417.1	13910.8
20°	12762.1	13402.5	14988.8	16023.7	16012.8	15947.0	*14706.6*	13004.3	12265.3
22.5°	11085.2	11911.3	13861.3	15323.5	15319.4	15209.8	*13487.2*	11461.5	10665.9
25°	9589.7	10399.9	12592.5	14465.8	14433.3	14308.7	*12132.7*	9922.6	9092.8
27.5°	8043.6	8885.8	11237.9	13460.7	13438.4	13302.5	*10837.7*	8484.2	7694.5
30°	6732.9	7502.9	9877.6	12354.8	12212.0	12196.5	*9502.9*	7152.2	6390.5
32.5°	5609.9	6270.0	8595.3	11198.3	10945.5	11017.6	*8172.5*	6038.3	5283.5
35°	4630.9	5212.4	7264.5	9860.7	9576.5	9669.8	*6951.6*	4954.7	4328.6
37.5°	3758.5	4317.7	6136.6	8559.7	8125.2	8301.3	*5877.7*	4137.8	3636.0
40°	3146.3	3589.9	5066.9	7132.2	6664.8	6951.6	*4853.0*	3451.2	3049.3
42.5°	2711.0	3000.5	4182.0	5769.3	5410.8	5614.1	*3999.9*	2885.2	2584.5
45°	2314.3	2545.2	3460.3	4552.7	4345.2	4533.7	*3310.3*	2460.1	2234.2
47.5°	2021.5	2199.5	2848.6	3676.4	3547.6	3607.3	*2764.7*	2146.9	1963.3
50°	1768.7	1906.2	2394.8	2967.2	2896.9	2933.6	*2315.9*	1868.0	1741.9
52.5°	1572.2	1673.1	2008.6	2438.7	2403.9	2409.6	*1973.5*	1643.3	1551.8
55°	1400.6	1471.0	1714.7	1997.6	1989.4	1990.8	*1686.0*	1456.2	1381.8
57.5°	1250.6	1308.8	1473.6	1678.0	1665.9	1668.6	*1460.0*	1293.3	1245.4
60°	1123.8	1162.6	1273.3	1418.0	1410.2	1406.7	*1265.4*	1148.2	1131.6
62.5°	1011.1	1036.0	1112.8	1215.6	1200.4	1203.8	*1112.3*	1037.2	1012.6
65°	912.5	921.2	975.2	1038.7	1028.9	1037.2	*978.2*	926.8	921.2
67.5°	816.2	824.9	856.6	899.3	887.9	894.7	*857.3*	827.1	822.2
70°	728.5	728.1	745.9	768.9	768.9	770.0	*750.0*	731.9	735.7
72.5°	637.8	635.5	640.9	656.3	652.2	666.5	*645.4*	639.7	640.4
75°	545.6	539.2	542.2	550.1	545.6	553.1	*543.7*	550.9	550.9
77.5°	458.7	446.6	442.8	444.0	435.7	447.0	*449.3*	454.2	465.5
80°	368.1	351.0	341.6	341.2	334.0	341.2	*346.9*	357.1	368.1
82.5°	273.2	258.5	242.5	239.5	235.0	239.2	*246.7*	258.8	276.6
85°	166.7	151.2	141.3	136.0	139.8	139.8	*143.6*	160.6	171.6
87.5°	60.1	52.5	43.1	43.4	44.6	46.1	*47.9*	60.5	66.2
90°	20.7	32.3	55.3	35.3	19.9	33.8	*58.4*	30.7	20.3
92.5°	29.5	49.1	89.1	46.0	26.1	46.0	*82.9*	41.4	28.0
95°	34.5	56.8	124.3	61.4	38.4	56.8	*105.9*	46.0	34.2
97.5°	43.7	63.0	142.8	75.2	59.9	70.6	*119.8*	49.1	41.8
100°	57.6	73.7	222.7	92.2	79.8	79.8	*219.6*	56.8	48.3
102.5°	97.4	156.6	472.9	173.6	121.4	156.6	*509.8*	115.2	59.1
105°	168.1	330.2	843.1	364.0	221.1	359.4	*898.4*	301.0	109.8
107.5°	290.9	591.2	1111.8	644.9	419.2	671.0	*1157.8*	595.8	258.7
110°	542.8	784.7	1165.5	886.0	671.0	938.2	*1263.8*	817.0	525.9

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Scaled Data Report

TEST NUMBER: P1433479
CATALOG NUMBER: EHBR1-24-UNV-A1-L935-UPL30

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	733.2	843.1	1116.4	978.2	873.8	1045.7	*1234.6*	906.0	728.6
115°	771.6	810.8	996.6	955.2	949.0	1030.4	*1102.6*	903.0	808.4
117.5°	745.9	740.2	846.1	858.4	916.8	942.9	*952.1*	847.7	813.1
120°	690.2	658.8	706.4	749.4	827.7	817.0	*801.6*	766.7	767.0
122.5°	621.6	583.9	605.1	637.2	715.6	692.5	*677.2*	683.7	704.5
125°	557.0	519.4	532.8	540.5	606.6	583.5	*590.0*	613.0	633.9
127.5°	500.3	474.8	482.2	472.9	514.4	503.6	*527.0*	553.6	570.9
130°	461.9	439.9	450.3	428.4	448.7	451.8	*482.9*	504.4	515.6
132.5°	430.0	415.8	428.1	401.5	407.7	420.4	*449.5*	468.4	474.5
135°	407.3	394.6	408.5	383.6	382.4	400.8	*426.9*	439.2	441.1
137.5°	387.4	376.6	390.4	372.0	367.3	385.8	*405.8*	415.0	412.3
140°	369.6	360.1	375.4	361.6	358.5	376.9	*386.2*	397.2	394.3
142.5°	350.0	343.9	362.0	352.7	349.7	367.0	*371.5*	379.2	376.6
145°	336.7	332.1	351.6	346.9	345.4	358.2	*355.1*	366.2	361.6
147.5°	325.5	322.0	339.8	338.2	338.2	347.4	*343.1*	352.7	348.5
150°	315.1	311.7	329.4	327.8	329.4	335.5	*329.7*	341.2	340.1
152.5°	304.7	301.3	317.4	315.5	317.0	323.2	*317.8*	330.4	329.7
155°	297.5	293.9	307.1	306.3	306.3	309.8	*307.4*	320.5	320.8
157.5°	292.4	290.1	300.1	299.4	299.4	301.3	*300.5*	312.0	312.4
160°	288.6	286.3	294.7	293.9	292.4	295.9	*295.1*	305.1	305.4
162.5°	284.8	282.4	292.0	290.1	289.8	290.1	*289.4*	299.7	300.1
165°	282.0	281.3	288.2	287.5	285.9	287.5	*285.5*	292.4	294.3
167.5°	282.4	280.5	287.0	286.3	284.8	283.2	*284.4*	289.8	291.7
170°	281.2	280.9	285.9	283.6	281.7	282.0	*281.7*	287.0	288.9
172.5°	282.0	281.6	286.7	284.4	282.4	282.9	*280.9*	284.7	288.2
175°	281.6	280.9	284.7	283.6	283.2	282.0	*281.6*	284.0	287.8
177.5°	283.5	282.8	285.1	284.0	282.0	282.4	*283.6*	285.9	291.2
180°	283.6	283.6	283.6	283.6	283.6	283.6	*283.6*	283.6	283.6

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Scaled Data Report

TEST NUMBER: P1433479
CATALOG NUMBER: EHBR1-24-UNV-A1-L935-UPL30

CIE UGR TABLE:

Reflectances:											
	Ceiling	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
	Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
	Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	16.47	17.56	17.02	18.09	18.68	17.45	18.54	18.00	19.07	19.66
	3H	17.94	18.91	18.51	19.46	20.09	18.71	19.68	19.27	20.22	20.85
	4H	18.54	19.45	19.12	20.01	20.65	19.20	20.11	19.79	20.67	21.31
	6H	19.00	19.84	19.60	20.41	21.07	19.56	20.39	20.15	20.97	21.62
	8H	19.15	19.94	19.76	20.53	21.19	19.65	20.44	20.26	21.04	21.70
	12H	19.22	19.98	19.84	20.56	21.25	19.69	20.44	20.30	21.03	21.71
4H	2H	16.98	17.89	17.57	18.45	19.09	17.76	18.67	18.35	19.23	19.87
	3H	18.66	19.41	19.26	20.01	20.67	19.24	19.99	19.84	20.60	21.26
	4H	19.37	20.05	19.99	20.66	21.35	19.86	20.54	20.48	21.15	21.85
	6H	19.95	20.53	20.59	21.17	21.88	20.34	20.92	20.98	21.56	22.27
	8H	20.14	20.68	20.78	21.31	22.03	20.47	21.02	21.12	21.65	22.37
	12H	20.24	20.72	20.90	21.39	22.11	20.54	21.02	21.20	21.68	22.40
8H	4H	19.60	20.14	20.24	20.77	21.49	20.04	20.59	20.68	21.22	21.93
	6H	20.28	20.73	20.96	21.41	22.13	20.62	21.07	21.30	21.75	22.47
	8H	20.54	20.93	21.23	21.62	22.36	20.82	21.21	21.51	21.90	22.64
	12H	20.70	21.05	21.38	21.72	22.52	20.94	21.28	21.62	21.95	22.76
12H	4H	19.59	20.07	20.25	20.74	21.46	20.04	20.52	20.70	21.18	21.90
	6H	20.31	20.70	21.00	21.39	22.13	20.64	21.04	21.33	21.73	22.46
	8H	20.60	20.95	21.28	21.62	22.42	20.88	21.22	21.56	21.90	22.70

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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

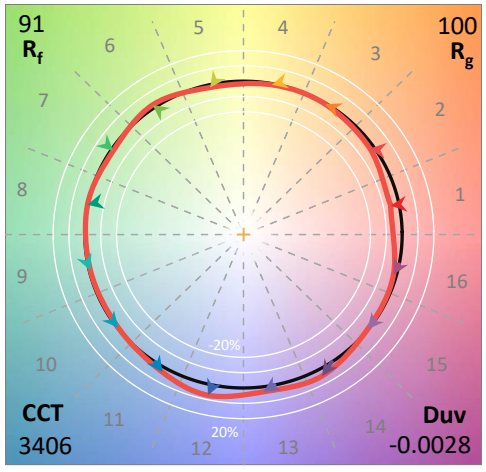
Test Information

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

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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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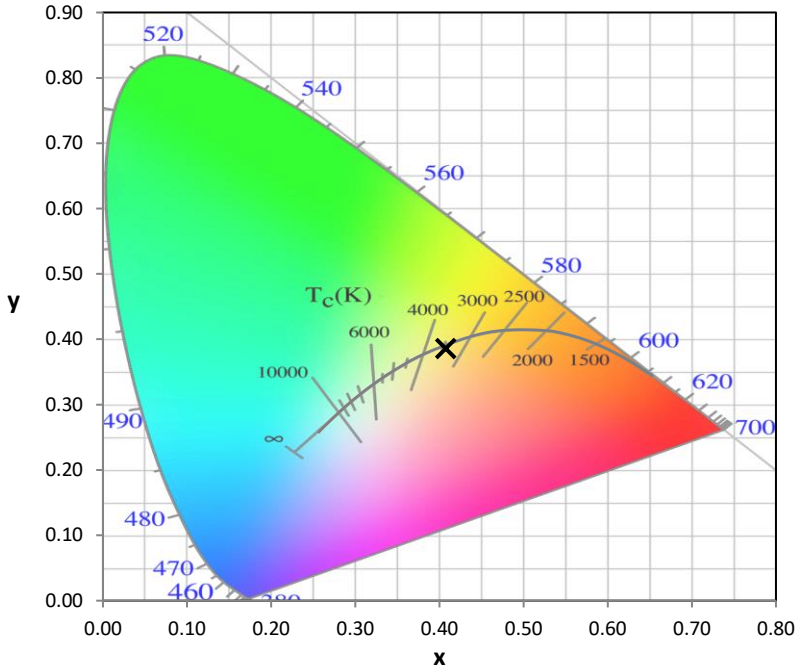
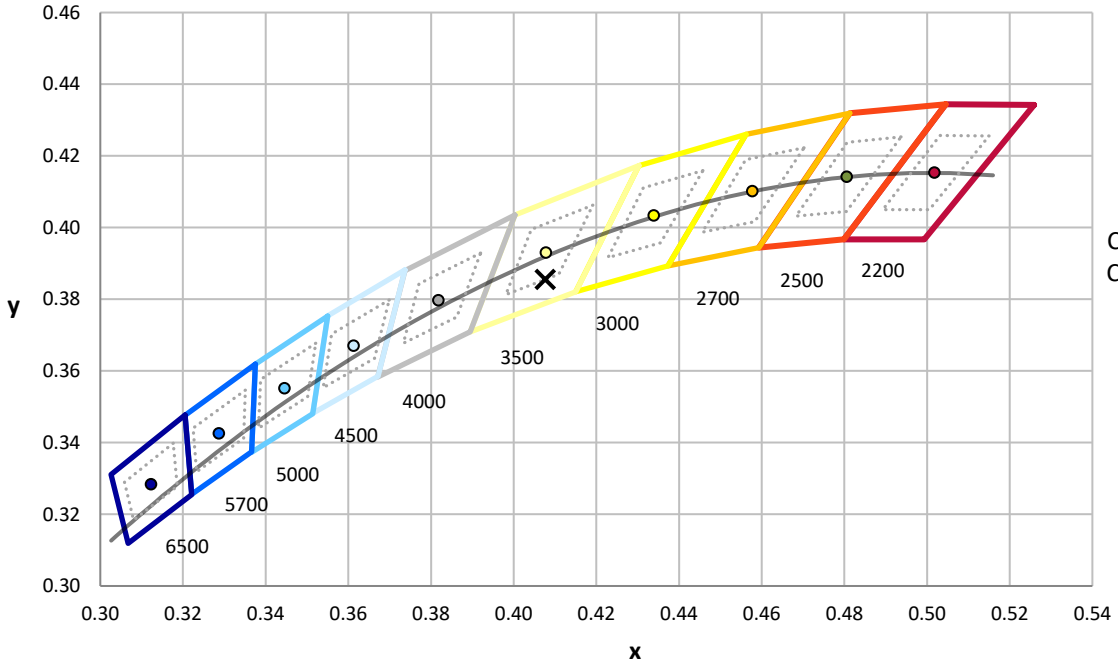
CIE 1931 Chromaticity Diagram



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



CCT = 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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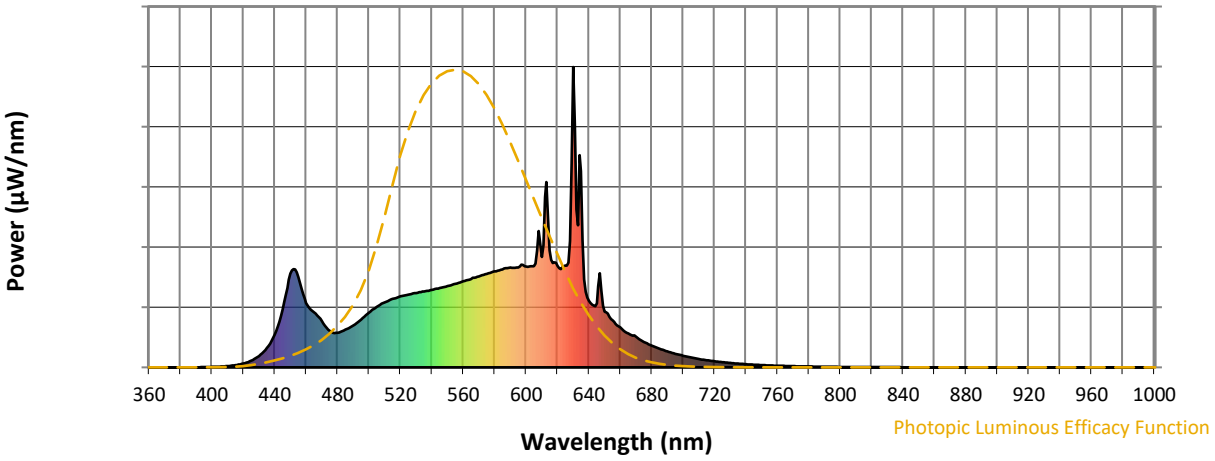
Photopic Flux vs. Wavelength



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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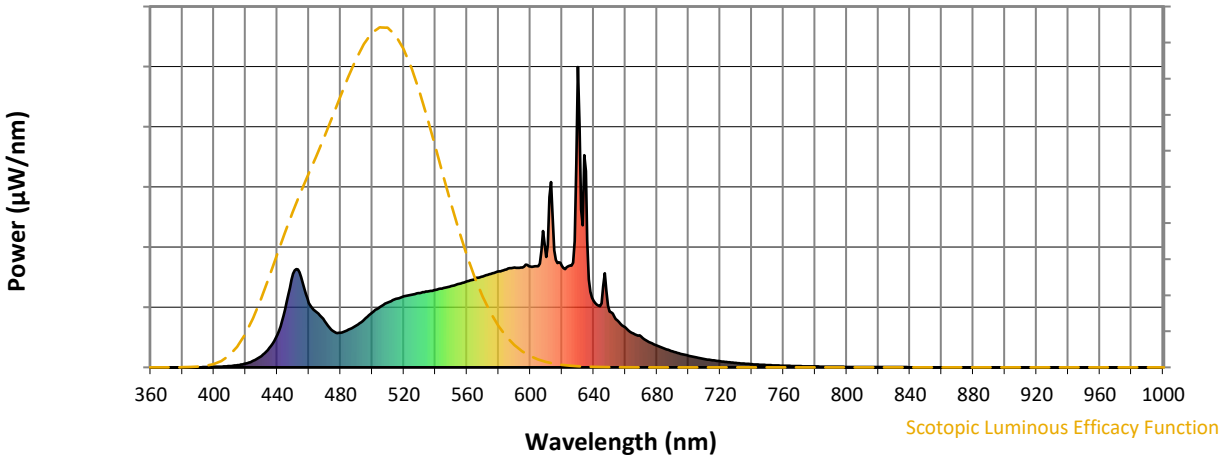
Scotopic Flux vs. Wavelength



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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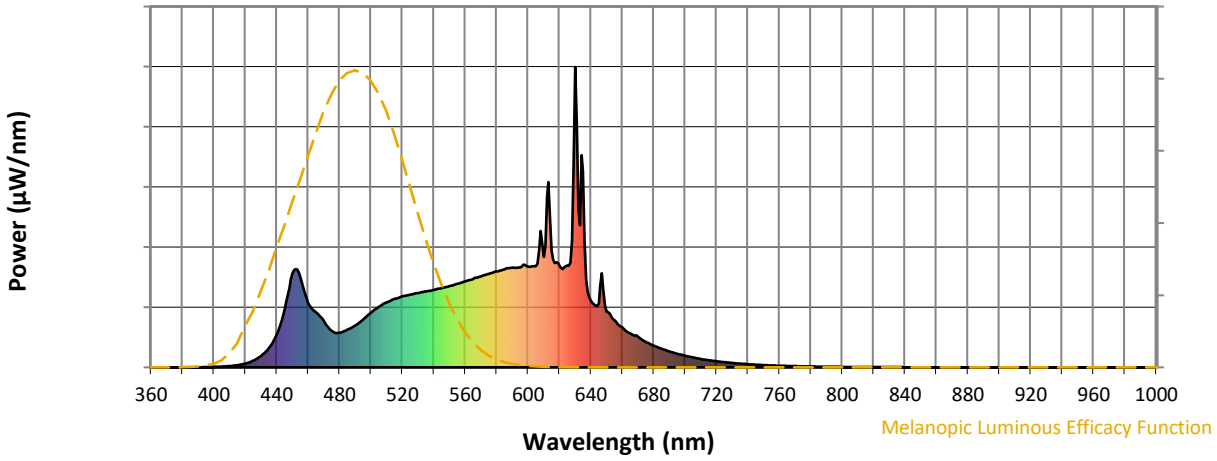
Melanopic Flux vs. Wavelength



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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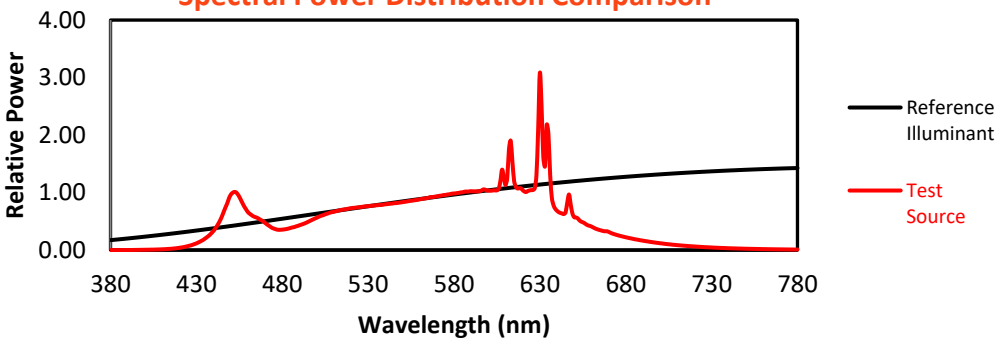
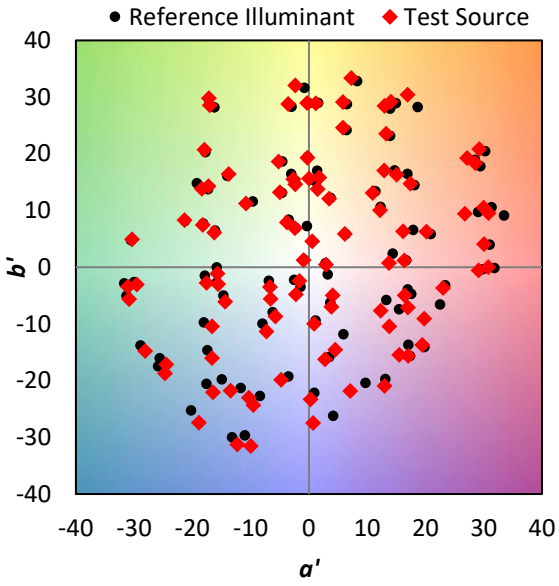
Summary

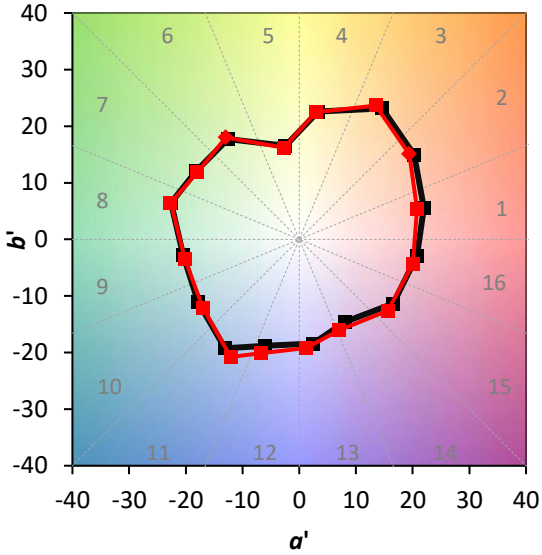
R_f = 91.3
R_g = 100
CIE R_a = 94.6
R_9 = 63.8

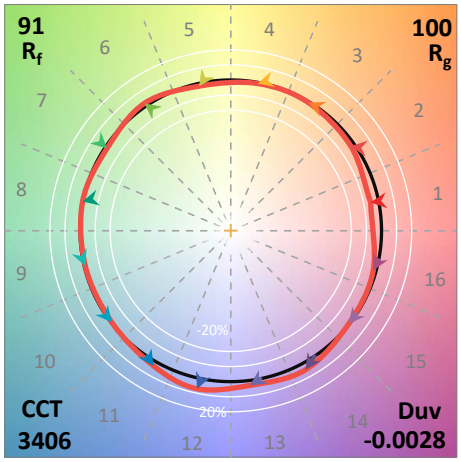
Spectral Power Distribution Comparison

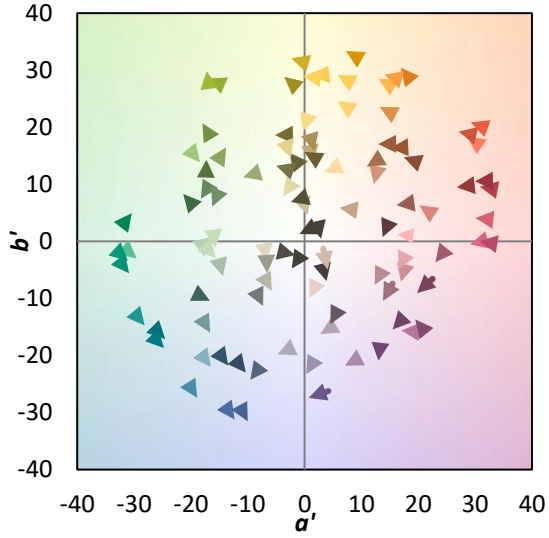


Color Vector Graphics









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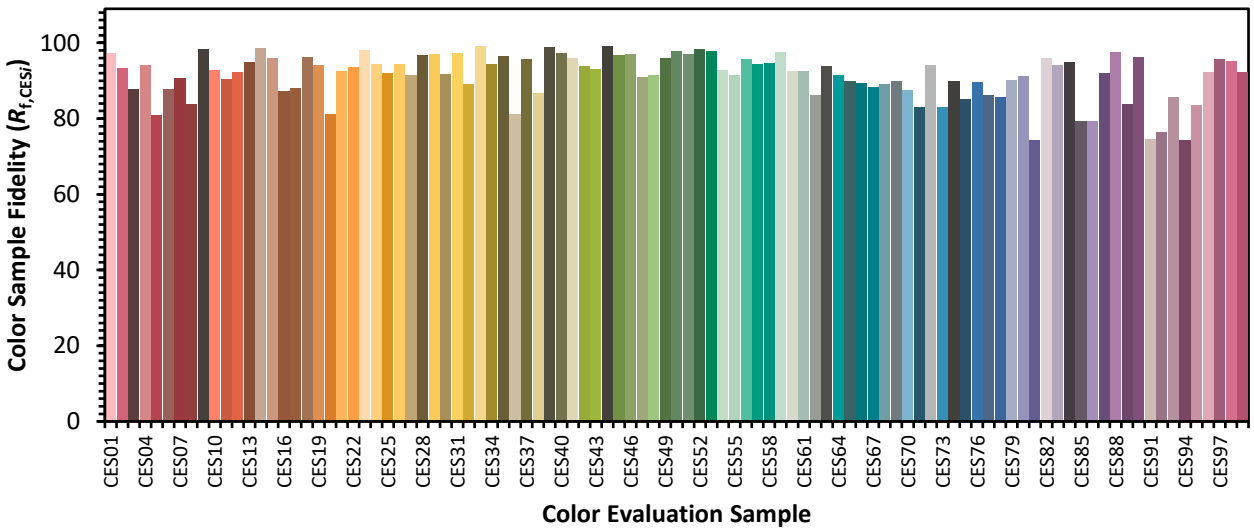
Individual Sample Fidelity Index ($R_{f,i}$)

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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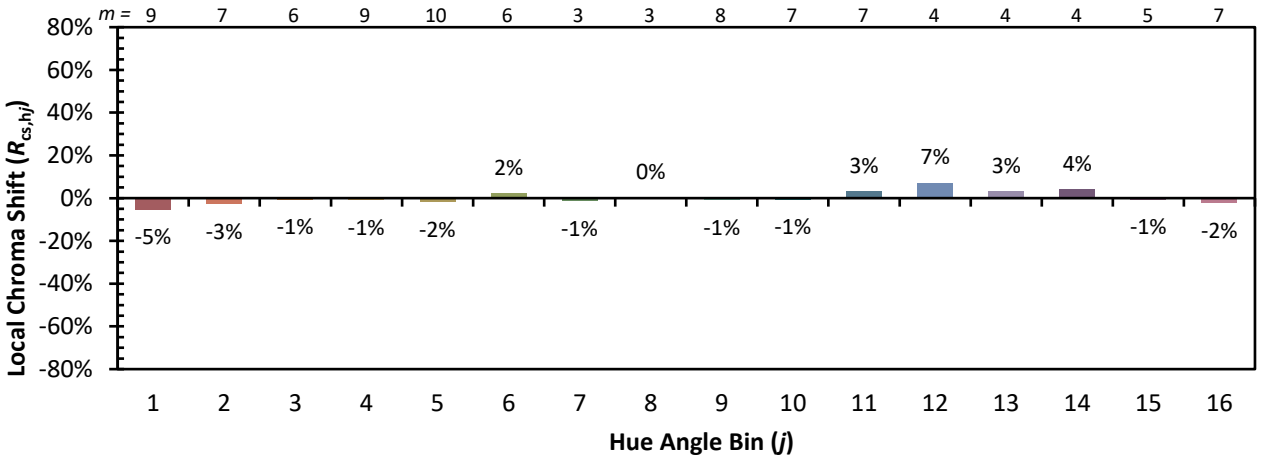
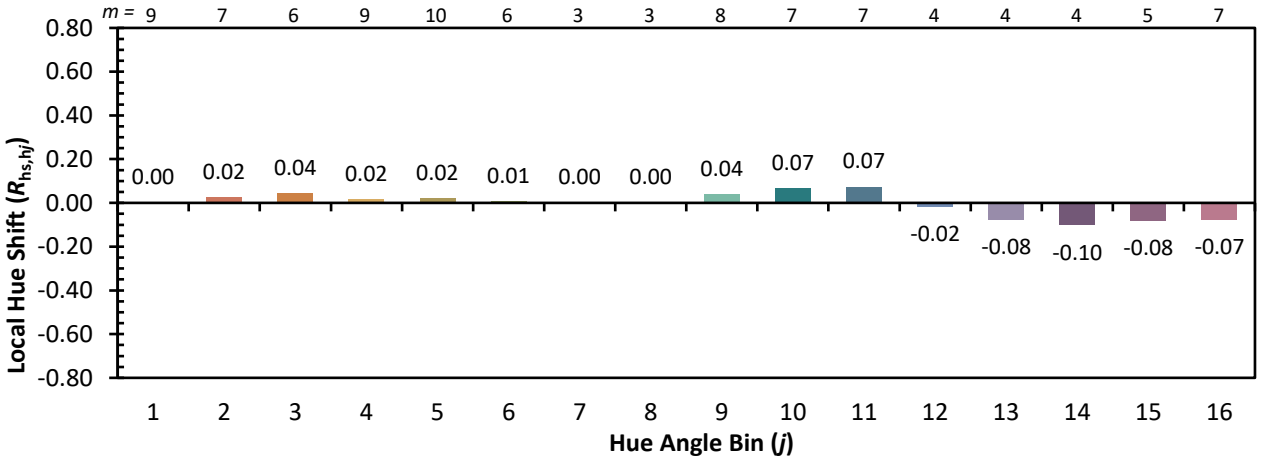
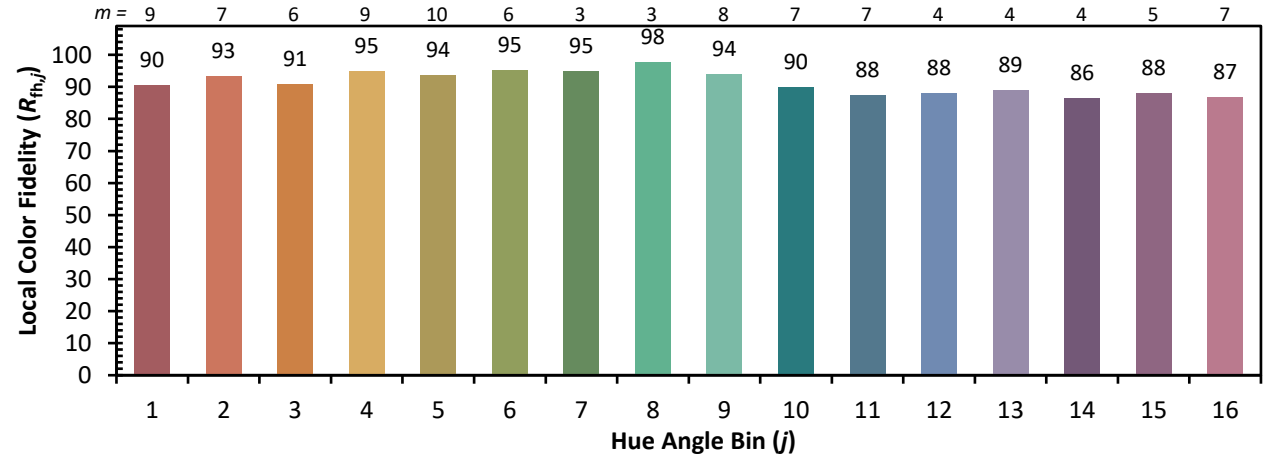
Color Rendition by Hue-Angle Bin







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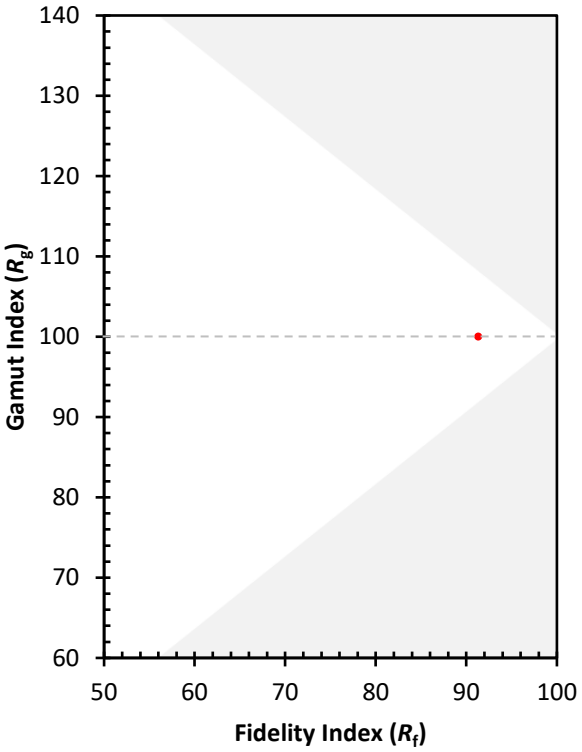
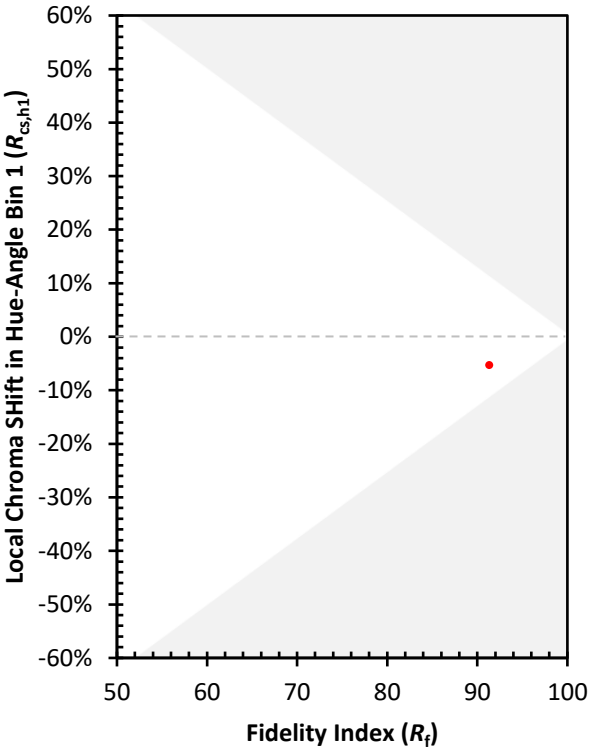
Measure Comparisons





(END OF REPORT)