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: P1433520

Luminaire Tested: EHBR1-30-UNV-ASM-L935-UPL36

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:	P1433520
	REPORT IS A COMBINATION OF REPORTS P1431745 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-30-UNV-ASM-L935-UPL36
Description:	Elevate Round Highbay at, 30000 lumens, 3500K 90CRI LEDs with ASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	30964.7 lumens
Efficiency:	N/A
Efficacy:	164.5 lumens/watt
Spacing Criteria (0/90/45):	0.84 / 0.99 / 0.92
Luminous Opening:	Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type:	Semi-Direct

Input Watts (W):	188.2
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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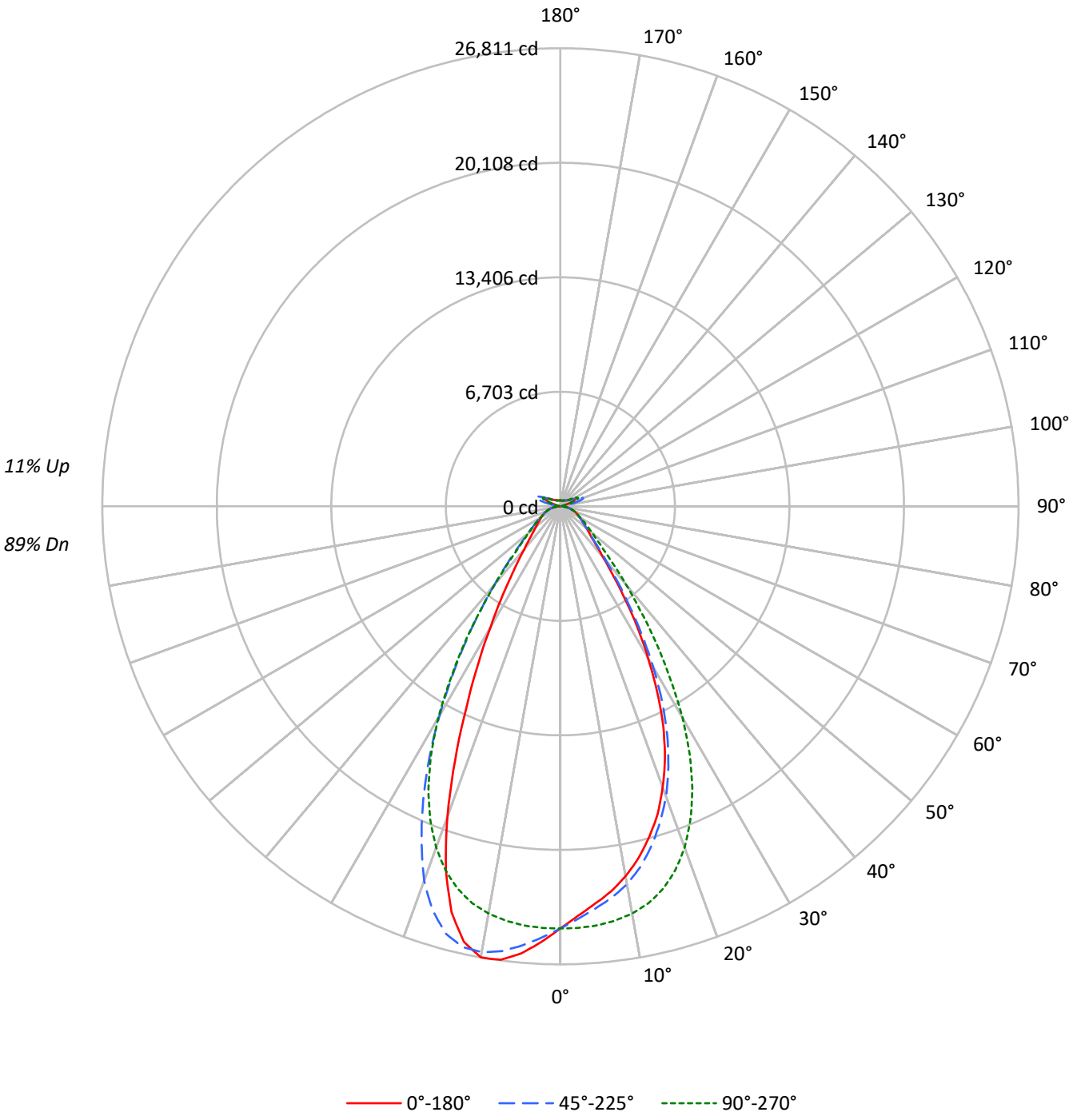
Scaled Data Report

TEST NUMBER: P1433520
CATALOG NUMBER: EHBR1-30-UNV-ASM-L935-UPL36

Luminous Intensity Polar Plot



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TEST NUMBER: P1433520
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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	113	113	113	113	105	105	105	98	98	98	92	92	92	89
1	109	106	103	100	106	102	100	97	96	94	92	91	89	87	86	84	83	81
2	102	96	91	87	99	93	89	85	88	85	82	84	81	78	79	77	75	73
3	96	88	82	77	93	86	80	76	81	77	73	77	74	71	74	71	68	66
4	90	81	74	69	87	79	73	68	75	70	66	72	68	64	69	65	62	60
5	84	75	68	63	82	73	67	62	70	64	60	67	62	59	64	60	57	55
6	79	69	62	57	77	68	61	57	65	59	55	62	58	54	60	56	53	51
7	75	64	57	53	73	63	57	52	61	55	51	59	54	50	56	52	49	47
8	71	60	53	49	69	59	53	48	57	51	47	55	50	46	53	49	46	44
9	67	56	50	45	65	55	49	45	53	48	44	52	47	43	50	46	43	41
10	64	53	46	42	62	52	46	42	50	45	41	49	44	41	47	43	40	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	116033	116033	116033	116033	116033
5°	109342	110620	115326	120858	123032
10°	103483	105674	113909	124738	126190
15°	95590	98143	110546	123458	117270
20°	85144	88011	103388	113482	94035
25°	71354	74055	91507	95186	65153
30°	53387	56483	74300	73558	42386
35°	35541	37686	53290	52430	27450
40°	22414	23954	34454	34675	18920
45°	15970	16635	21861	22800	14656
50°	13302	13408	16234	16657	12454
55°	11743	11770	13254	13604	11345
60°	10872	10780	11478	11721	10806
65°	10378	10285	10462	10666	10423
70°	10080	9906	9916	10107	10213
75°	9582	9293	9274	9603	9879
80°	8719	8111	8147	8719	9328
85°	6349	5272	5272	6026	6657

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
Vertical Angle: 45°
Luminance: 30735 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2349.4	7.6
10°-20°	6391.6	20.6
20°-30°	7496.1	24.2
30°-40°	5213.1	16.8
40°-50°	2590.6	8.4
50°-60°	1549.5	5.0
60°-70°	1090.6	3.5
70°-80°	702.5	2.3
80°-90°	229.0	0.7
90°-100°	89.1	0.3
100°-110°	583.2	1.9
110°-120°	1077.7	3.5
120°-130°	640.3	2.1
130°-140°	387.0	1.2
140°-150°	267.5	0.9
150°-160°	174.3	0.6
160°-170°	99.9	0.3
170°-180°	33.1	0.1
0°-30°	16237.1	52.4
0°-40°	21450.2	69.3
0°-60°	25590.3	82.6
0°-90°	27612.4	89.2
90°-120°	1750.1	5.7
90°-150°	3044.9	9.8
90°-180°	3352.0	10.8
0°-180°	30964.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	24708	24708	24708	24708	24708	
5°	23346	23619	24624	25805	26269	2190
15°	20054	20590	23192	25901	24603	5593
25°	14249	14789	18274	19008	13011	6429
35°	6523	6917	9781	9623	5038	4155
45°	2584	2691	3537	3689	2371	2089
55°	1587	1591	1791	1838	1533	1440
65°	1083	1074	1092	1113	1088	1076
75°	675	655	653	676	696	713
85°	218	181	181	207	229	225
90°	25	67	25	72	28	22
95°	41	151	47	129	44	40
105°	203	1018	268	1086	136	271
115°	932	1204	1147	1333	979	858
125°	672	645	734	715	768	613
135°	491	494	464	517	535	384
145°	407	426	419	429	438	258
155°	361	373	373	373	388	168
165°	343	351	350	349	360	98
175°	342	348	348	346	354	33
180°	347	347	347	347	347	

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Scaled Data Report

TEST NUMBER: P1433520
CATALOG NUMBER: EHBR1-30-UNV-ASM-L935-UPL36

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	24708.3	24708.3	24708.3	24708.3	24708.3	24708.3	24708.3	24708.3	24708.3
2.5°	23974.9	23990.6	24158.3	24376.6	24694.0	25013.2	25271.7	25442.2	25526.5
5°	23346.2	23433.3	23619.1	24019.8	24624.0	25263.4	25805.0	26159.4	26269.2
7.5°	22733.7	22784.1	23095.0	23601.5	24456.8	25452.8	26257.6	26671.4	26772.4
10°	21986.3	22100.8	22452.0	23049.2	24201.5	25572.4	26502.3	26798.8	26810.9
12.5°	21107.0	21258.4	21621.2	22374.6	23794.2	25529.8	26420.2	26323.0	26101.9
15°	20054.3	20187.2	20589.9	21463.7	23191.9	25277.3	25900.9	25109.1	24602.7
17.5°	18917.3	19037.7	19387.6	20349.9	22343.0	24804.7	24816.8	23250.3	22294.9
20°	17499.5	17594.0	18088.9	19033.1	21249.2	24046.7	23323.9	20458.8	19326.9
22.5°	15991.0	16079.5	16519.1	17501.9	19877.7	23024.6	21245.0	17650.6	16106.3
25°	14249.3	14297.5	14788.7	15677.3	18273.8	21772.2	19008.5	14590.8	13010.9
27.5°	12290.0	12372.0	12885.8	13793.4	16387.1	20185.0	16627.1	11923.0	10465.5
30°	10269.0	10404.8	10864.4	11677.0	14291.6	18150.1	14148.8	9495.3	8153.0
32.5°	8382.8	8480.6	8808.2	9657.4	11945.2	16155.4	11768.8	7608.2	6471.2
35°	6523.0	6620.8	6916.8	7750.8	9780.7	13660.0	9622.7	5978.2	5038.1
37.5°	4986.3	5159.0	5349.0	6025.9	7675.8	11302.2	7670.7	4813.9	4086.5
40°	3884.9	3912.7	4151.8	4585.0	5971.7	8837.4	6010.1	3842.7	3279.4
42.5°	3109.8	3185.3	3288.2	3612.5	4524.8	6757.5	4724.0	3153.8	2785.5
45°	2583.9	2613.6	2691.4	2909.1	3537.0	4972.8	3688.9	2660.8	2371.2
47.5°	2260.6	2247.5	2297.6	2460.7	2880.4	3843.2	2989.8	2282.3	2079.4
50°	1982.5	1974.6	1998.3	2107.2	2419.4	2949.0	2482.4	1992.3	1856.1
52.5°	1766.6	1773.6	1775.9	1843.6	2078.5	2405.1	2114.1	1775.4	1683.7
55°	1586.9	1595.7	1590.6	1640.6	1791.2	2021.9	1838.5	1596.6	1533.1
57.5°	1446.5	1440.0	1433.1	1459.9	1572.9	1715.2	1596.6	1444.1	1402.0
60°	1307.0	1301.0	1295.9	1313.5	1379.8	1485.4	1409.0	1311.2	1299.1
62.5°	1187.5	1183.8	1183.3	1180.0	1231.1	1297.8	1245.8	1191.6	1181.0
65°	1083.2	1079.1	1073.5	1068.4	1092.0	1154.1	1113.3	1084.2	1087.9
67.5°	979.0	979.0	969.2	961.3	984.5	1017.0	999.4	982.7	986.9
70°	884.5	884.9	869.2	863.2	870.1	904.9	886.8	889.1	896.1
72.5°	783.0	771.9	760.3	759.9	760.8	787.6	781.6	787.1	794.6
75°	675.0	662.1	654.6	646.3	653.3	673.7	676.5	684.3	695.9
77.5°	570.8	550.9	544.9	540.7	536.1	559.2	568.0	578.7	595.8
80°	458.7	436.9	426.7	420.7	428.6	439.2	458.7	466.6	490.7
82.5°	339.1	322.9	310.4	310.0	313.7	323.4	340.1	354.9	368.8
85°	218.2	192.2	181.2	185.3	181.2	195.9	207.1	224.7	228.8
87.5°	78.8	61.6	58.8	64.9	63.4	68.1	77.9	84.8	85.3
90°	24.6	39.4	67.2	43.1	24.6	41.7	71.8	39.9	27.8
92.5°	35.7	59.8	107.9	56.1	32.0	56.6	101.5	52.8	37.1
95°	41.2	69.1	150.6	74.6	47.2	69.5	129.2	58.5	44.5
97.5°	52.8	76.5	172.8	91.3	73.2	86.2	145.9	62.2	53.7
100°	69.5	89.5	269.3	112.1	97.3	97.3	266.5	71.4	61.2
102.5°	117.7	189.5	571.4	210.4	147.4	190.4	617.3	142.3	74.1
105°	202.9	399.1	1018.2	440.3	267.8	435.1	1086.3	366.6	135.8
107.5°	351.3	714.2	1343.1	779.5	507.0	811.4	1399.6	722.5	315.6
110°	655.3	947.7	1408.0	1070.6	811.0	1134.0	1527.5	989.5	638.1

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Scaled Data Report

TEST NUMBER: P1433520
CATALOG NUMBER: EHBR1-30-UNV-ASM-L935-UPL36

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	885.2	1018.2	1348.6	1181.8	1055.7	1263.8	1492.3	1097.0	*882.9*
115°	931.5	979.3	1204.1	1153.9	1147.1	1245.3	1332.8	1093.3	*979.3*
117.5°	900.0	894.0	1022.3	1037.7	1108.1	1139.6	1151.1	1026.6	*984.8*
120°	833.3	795.8	853.7	906.1	1000.6	987.6	970.0	928.4	*929.3*
122.5°	749.8	705.4	731.8	771.1	865.7	837.9	819.9	828.7	*853.2*
125°	672.4	627.5	645.1	654.9	734.0	706.3	714.6	743.4	*768.4*
127.5°	603.9	573.7	583.9	573.3	623.4	610.4	638.7	671.0	*692.3*
130°	557.5	531.6	545.5	520.1	544.2	547.3	584.9	612.2	*625.6*
132.5°	519.1	502.4	518.6	487.5	494.5	508.9	544.6	568.2	*576.1*
135°	491.2	476.9	494.5	465.8	463.5	484.8	517.2	532.5	*535.3*
137.5°	467.7	455.2	473.2	451.4	445.4	466.7	491.2	503.3	*500.0*
140°	446.4	435.7	455.1	438.4	434.7	456.1	467.1	481.1	*478.3*
142.5°	423.2	415.7	438.8	427.8	424.1	443.6	449.1	459.2	*456.0*
145°	407.4	401.8	426.3	420.4	418.9	433.3	429.1	442.6	*437.9*
147.5°	393.4	389.7	411.9	409.7	409.7	420.4	414.7	426.3	*421.8*
150°	381.5	377.8	399.5	397.2	399.0	406.4	398.5	411.9	*411.1*
152.5°	369.4	365.3	385.2	382.8	384.7	392.1	384.7	400.0	*398.6*
155°	361.0	356.8	373.0	372.1	372.6	376.3	372.6	387.9	*388.4*
157.5°	354.9	352.2	364.7	364.3	364.3	366.6	364.7	378.1	*378.6*
160°	350.4	348.1	358.6	358.2	356.8	360.5	359.2	370.8	*371.2*
162.5°	345.8	343.4	355.9	354.1	354.1	354.1	353.2	364.7	*365.6*
165°	343.0	342.5	351.3	351.3	349.9	351.7	348.9	357.3	*360.1*
167.5°	343.0	341.1	350.4	350.4	348.9	347.1	348.0	355.0	*357.8*
170°	342.0	341.5	348.9	347.6	345.7	346.1	345.3	352.2	*355.0*
172.5°	343.0	342.4	350.4	348.6	347.1	347.1	344.8	349.8	*354.6*
175°	342.0	341.6	347.6	347.6	348.0	346.7	345.7	349.0	*353.6*
177.5°	344.3	343.9	347.6	347.6	346.2	347.1	348.0	351.3	*357.8*
180°	347.1	347.1	347.1	347.1	347.1	347.1	347.1	347.1	*347.1*

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Scaled Data Report

TEST NUMBER: P1433520
CATALOG NUMBER: EHBR1-30-UNV-ASM-L935-UPL36

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	16.15	17.20	16.70	17.72	18.31	16.91	17.96	17.46	18.49	19.07
	3H	17.96	18.89	18.52	19.44	20.06	18.47	19.40	19.03	19.95	20.57
	4H	18.69	19.57	19.28	20.13	20.77	19.11	19.99	19.70	20.55	21.19
	6H	19.26	20.06	19.86	20.64	21.29	19.61	20.41	20.20	20.98	21.63
	8H	19.44	20.20	20.05	20.79	21.45	19.76	20.52	20.37	21.11	21.77
	12H	19.54	20.27	20.15	20.85	21.53	19.84	20.57	20.45	21.15	21.83
4H	2H	16.66	17.53	17.24	18.09	18.73	17.29	18.16	17.87	18.72	19.36
	3H	18.69	19.42	19.29	20.02	20.67	19.09	19.81	19.69	20.42	21.07
	4H	19.56	20.21	20.17	20.82	21.51	19.88	20.53	20.49	21.14	21.83
	6H	20.25	20.81	20.89	21.44	22.15	20.51	21.07	21.15	21.70	22.41
	8H	20.48	21.00	21.12	21.63	22.34	20.71	21.24	21.36	21.87	22.58
	12H	20.61	21.07	21.27	21.73	22.45	20.83	21.29	21.49	21.95	22.67
8H	4H	19.81	20.34	20.46	20.97	21.68	20.12	20.64	20.76	21.27	21.99
	6H	20.63	21.06	21.30	21.73	22.45	20.88	21.31	21.55	21.98	22.70
	8H	20.93	21.31	21.62	22.00	22.73	21.16	21.54	21.85	22.23	22.96
	12H	21.13	21.46	21.82	22.13	22.94	21.35	21.68	22.03	22.35	23.15
12H	4H	19.82	20.28	20.48	20.94	21.66	20.13	20.59	20.78	21.25	21.97
	6H	20.67	21.05	21.36	21.73	22.47	20.93	21.30	21.61	21.99	22.72
	8H	21.01	21.34	21.70	22.01	22.82	21.25	21.58	21.94	22.25	23.06

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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

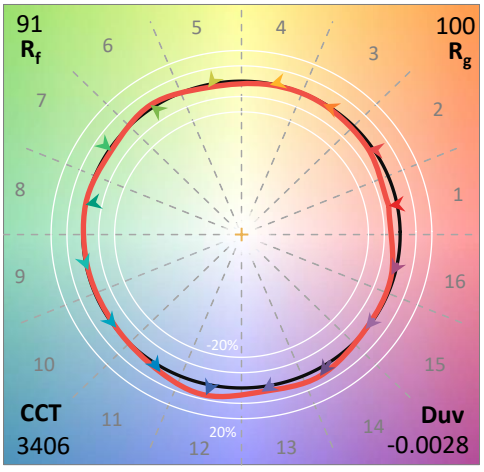
Test Information

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	CRI (Ra):	94.6		
CIE u':	0.2394	R1:	96.6	R9:	63.8
CIE v':	0.5094	R2:	98.4	R10:	94.7
Duv:	-0.0028	R3:	98.1	R11:	96.6
CIE x:	0.4076	R4:	95.8	R12:	80.9
CIE y:	0.3856	R5:	96.2	R13:	97.4
CIE z:	0.2068	R6:	95.4	R14:	98.3
Peak Wavelength (nm):	630	R7:	91.8	R15:	93.1
Dominant Wavelength (nm):	582	R8:	84.4		
Purity:	38.0517				

Rf:	91.3
Rg:	100



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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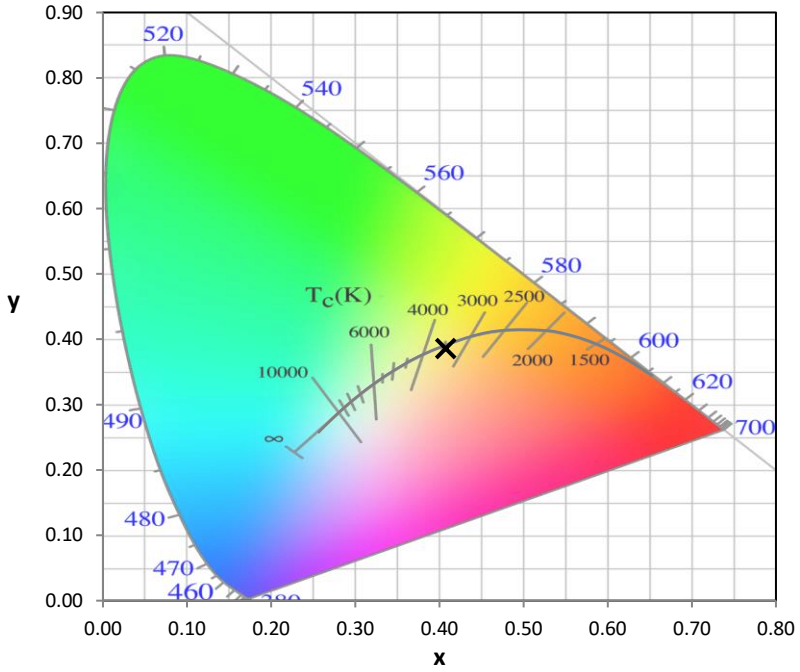
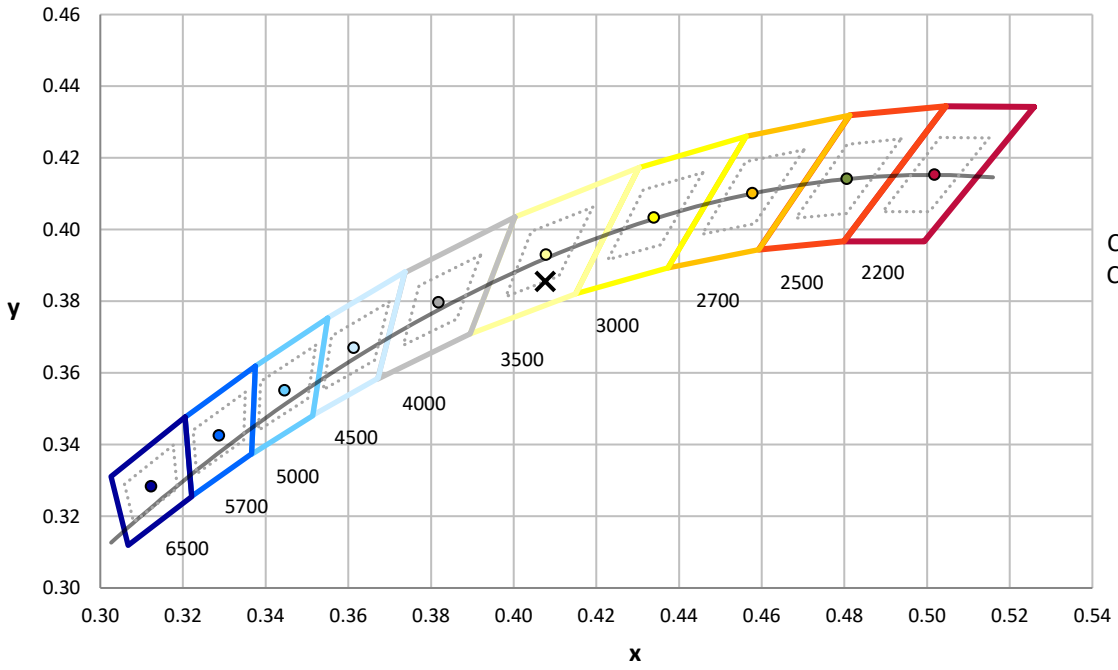
CIE 1931 Chromaticity Diagram



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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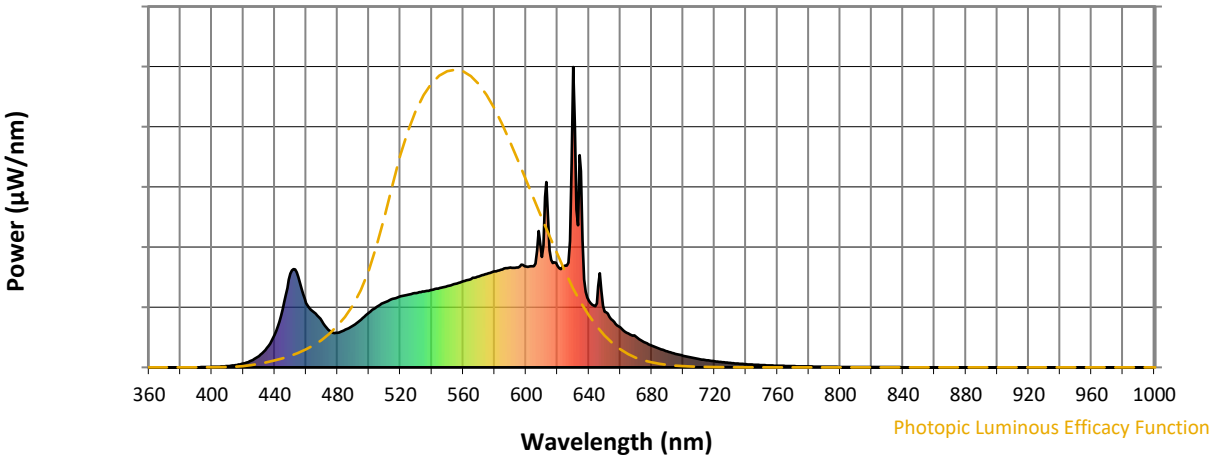
Photopic Flux vs. Wavelength



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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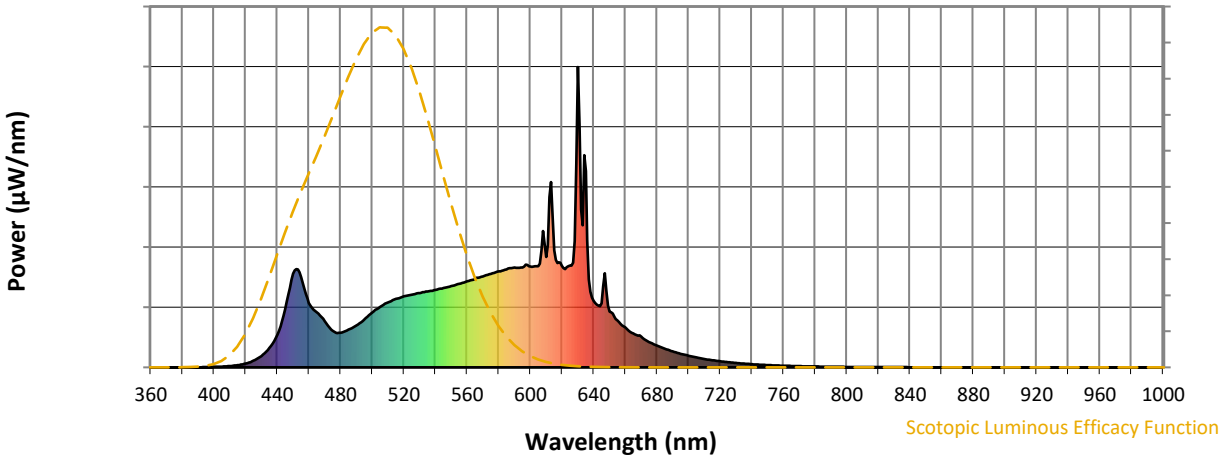
Scotopic Flux vs. Wavelength



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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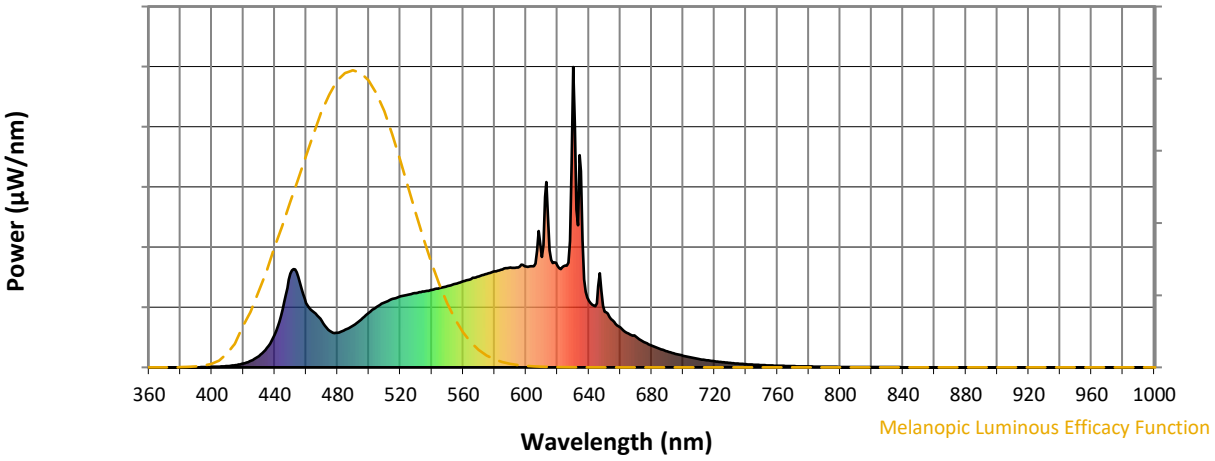
Melanopic Flux vs. Wavelength



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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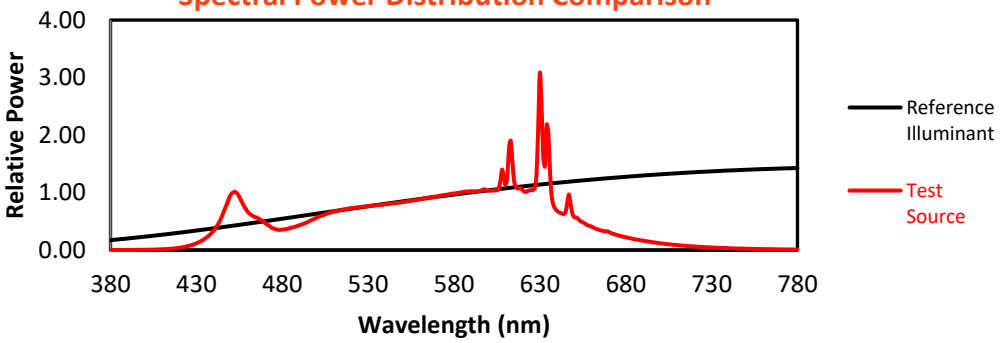
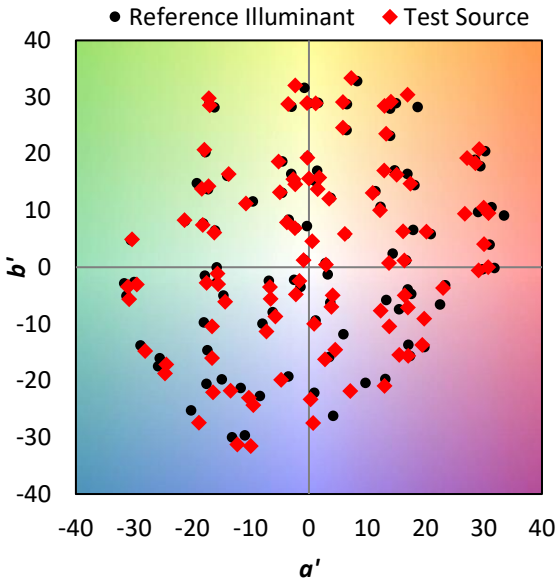
Summary

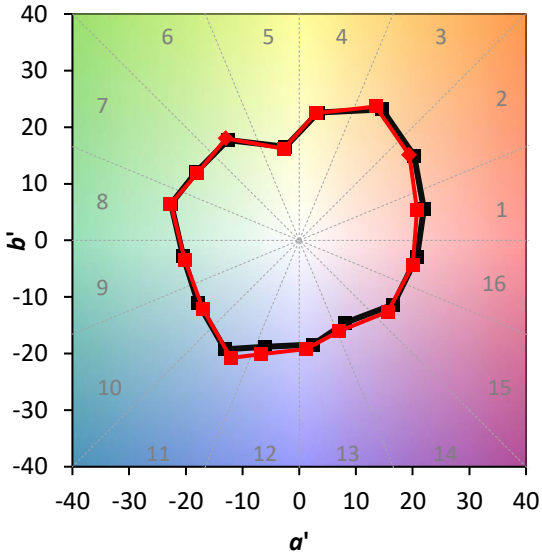
R_f = 91.3
R_g = 100
CIE R_a = 94.6
R_9 = 63.8

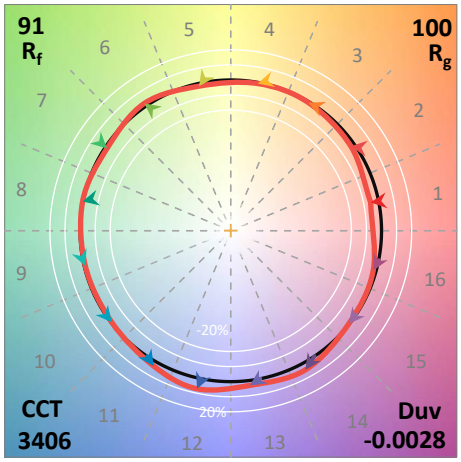
Spectral Power Distribution Comparison

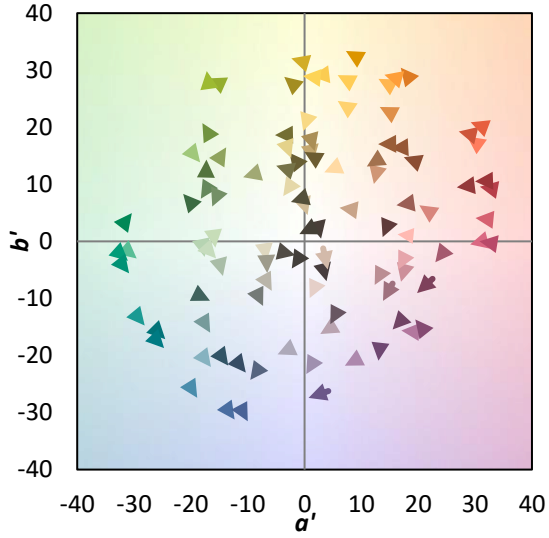


Color Vector Graphics









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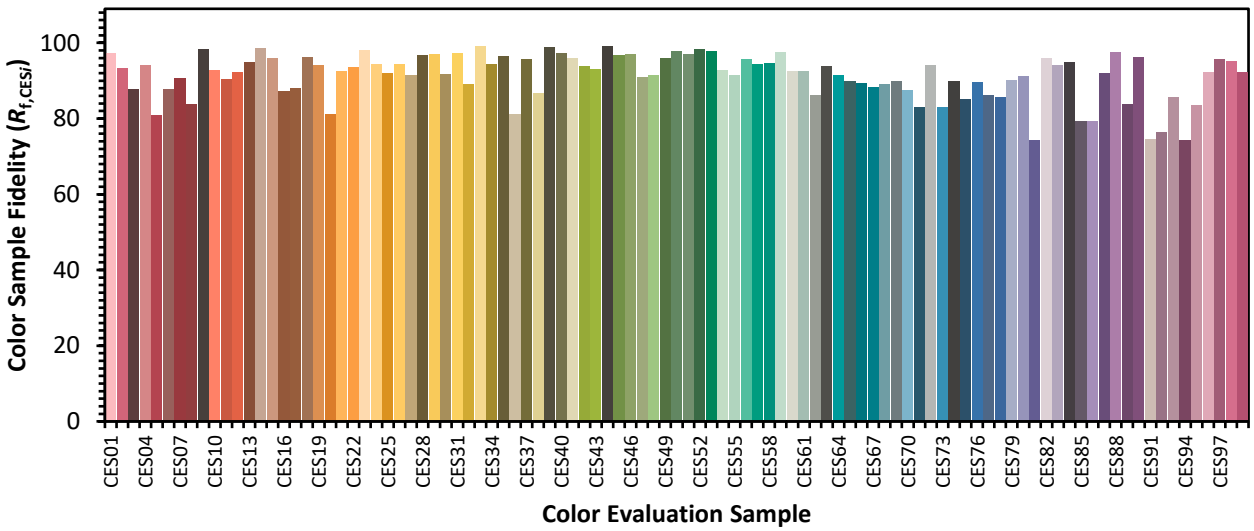
Individual Sample Fidelity Index ($R_{f,i}$)

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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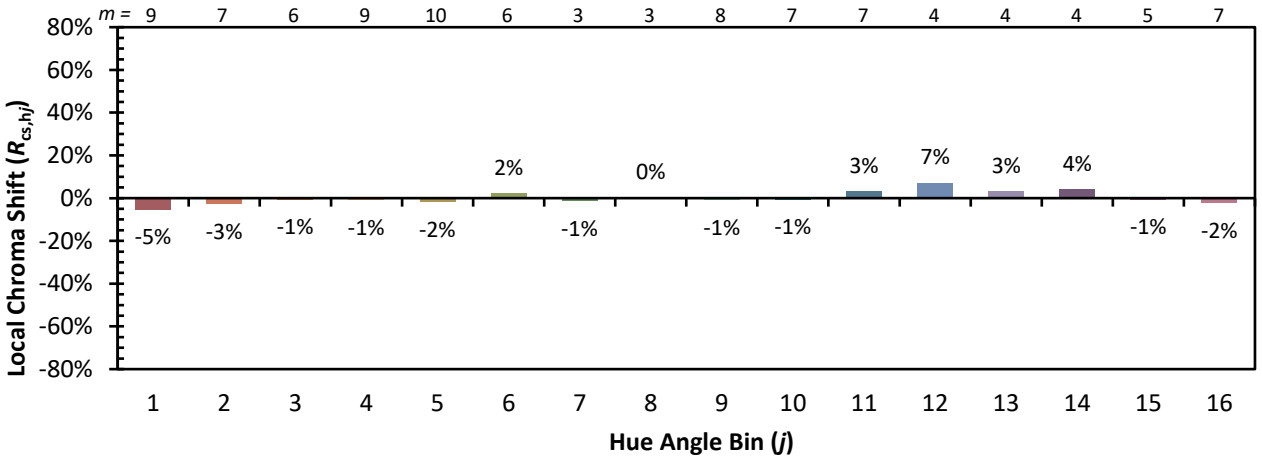
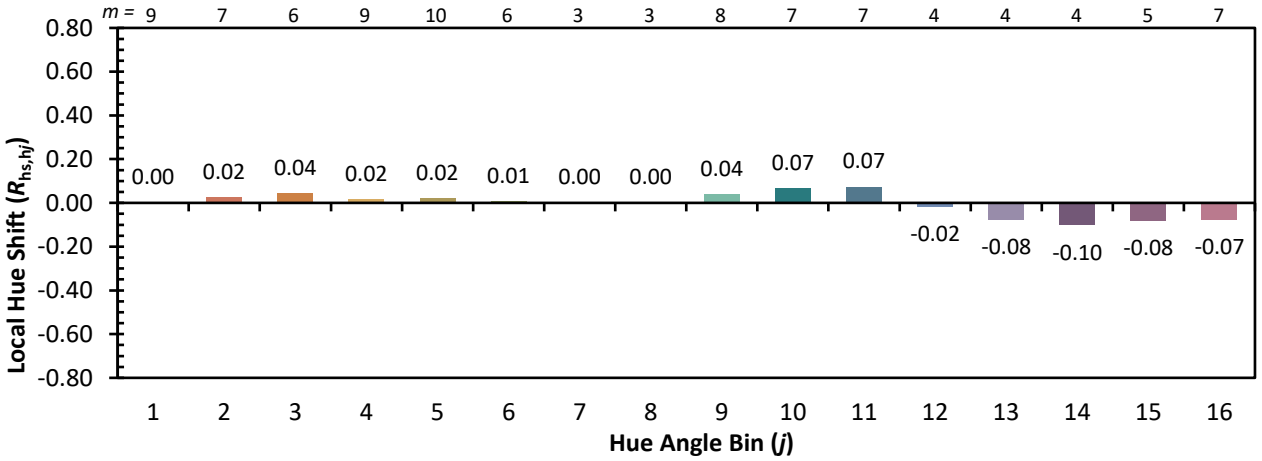
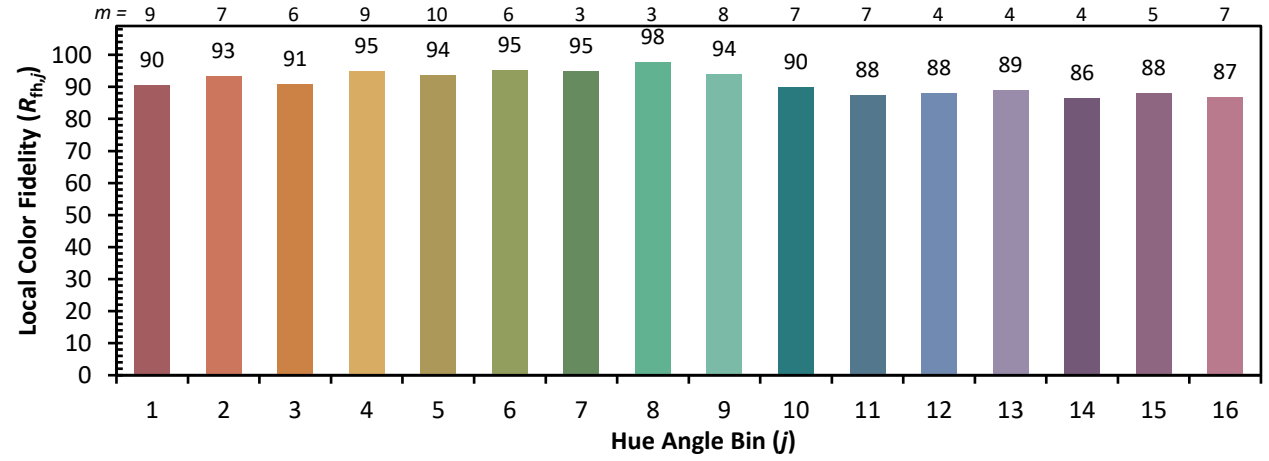
Color Rendition by Hue-Angle Bin







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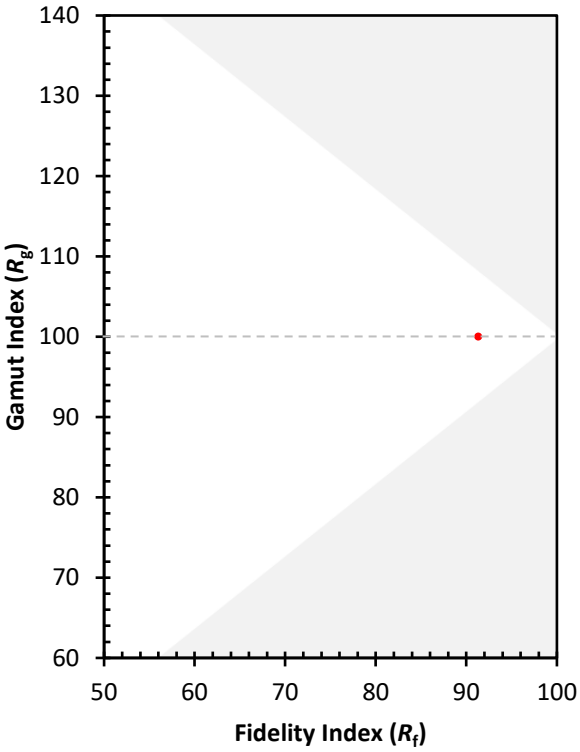
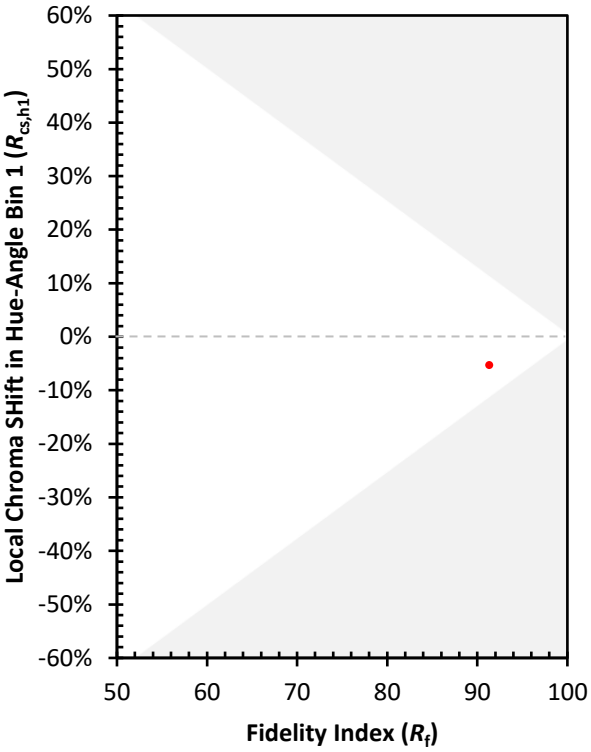
Measure Comparisons





(END OF REPORT)