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: P1433670

Luminaire Tested: EHBR1-60-UNV-A1-L935-UPL24

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:	P1433670
	REPORT IS A COMBINATION OF REPORTS P1431895 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-60-UNV-A1-L935-UPL24
Description:	Elevate Round Highbay at, 60000 lumens, 3500K 90CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	55934.2 lumens
Efficiency:	N/A
Efficacy:	161.2 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:	Direct

Input Watts (W):	346.9
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

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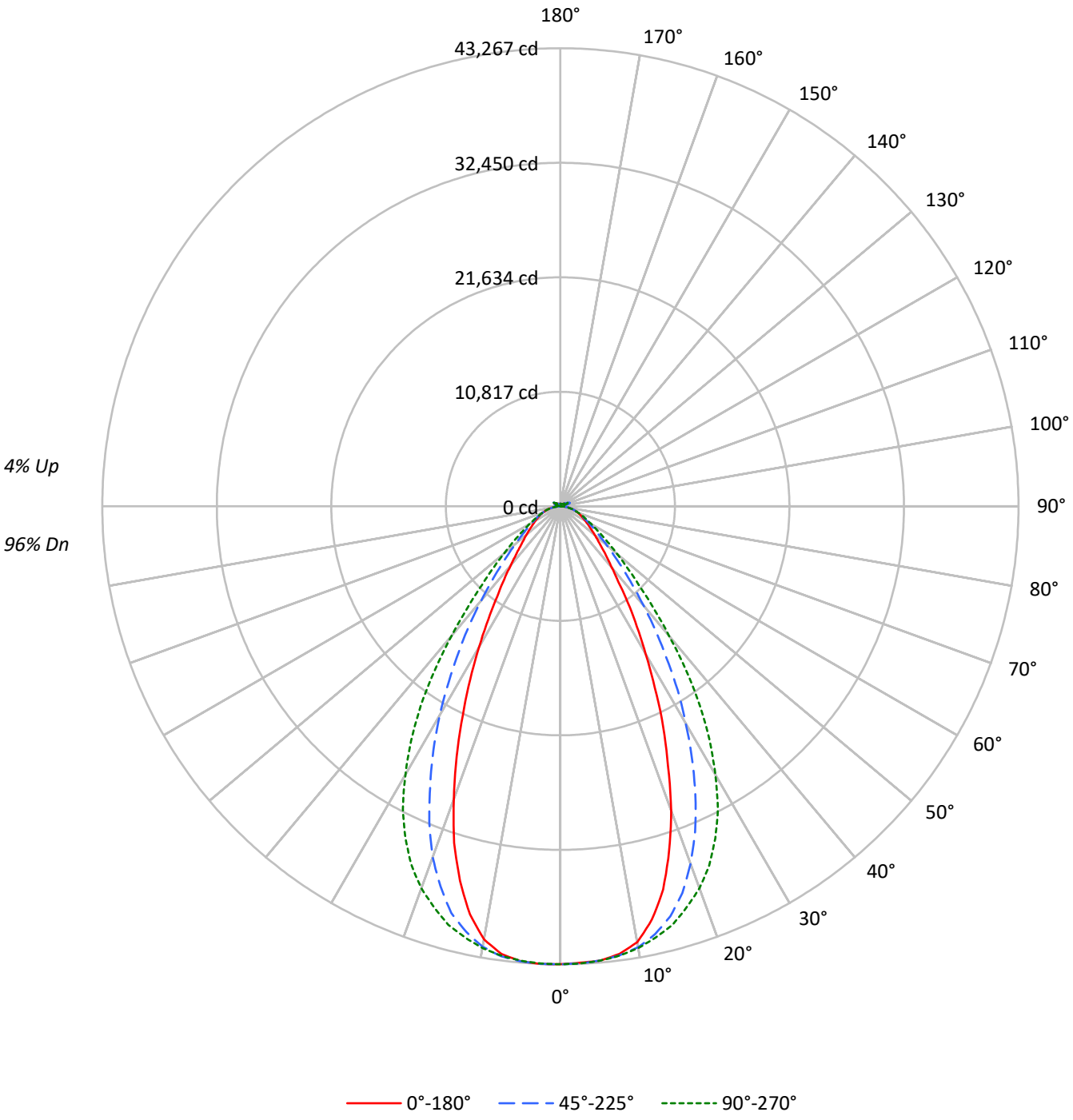
Luminous Intensity Polar Plot



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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	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96
1	111	107	104	101	108	105	102	99	100	97	95	95	93	92	91	90	88	86
2	103	97	92	88	101	95	90	86	91	87	84	87	84	81	84	81	79	77
3	97	89	82	77	94	87	81	76	83	79	75	80	76	73	78	74	71	69
4	90	81	74	69	88	80	73	68	77	71	67	74	70	66	72	68	65	63
5	85	75	68	62	83	73	67	62	71	65	61	69	64	60	67	62	59	57
6	80	69	62	57	78	68	61	56	66	60	56	64	59	55	62	58	54	52
7	75	64	57	52	73	63	56	52	61	55	51	60	54	50	58	53	50	48
8	71	60	53	48	69	59	52	48	57	51	47	56	51	47	55	50	46	45
9	67	56	49	44	65	55	48	44	54	48	44	52	47	43	51	46	43	41
10	63	52	46	41	62	52	45	41	50	45	41	49	44	40	48	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	203102	203102	203102	203102	203102
5°	201759	201729	201738	202094	201971
10°	196772	199066	199381	198819	195485
15°	178637	191102	195035	189570	174535
20°	148862	174834	186778	171542	143066
25°	115124	151171	173271	145651	109159
30°	83916	123111	152205	118439	79648
35°	60489	94889	125089	90802	56540
40°	43518	70084	92185	67126	42176
45°	34291	51272	64384	49049	33105
50°	28451	38522	46600	37252	28020
55°	24848	30418	35291	29909	24512
60°	22410	25393	28121	25235	22568
65°	20959	22399	23632	22468	21159
70°	19903	20378	21009	20492	20099
75°	18568	18453	18568	18504	18748
80°	16772	15566	15220	15808	16772
85°	11624	9858	9753	10015	11967

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 67458 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4084.2	7.3
10°-20°	10976.9	19.6
20°-30°	13347.8	23.9
30°-40°	10872.8	19.4
40°-50°	6528.0	11.7
50°-60°	3756.9	6.7
60°-70°	2351.2	4.2
70°-80°	1384.8	2.5
80°-90°	408.9	0.7
90°-100°	58.2	0.1
100°-110°	384.6	0.7
110°-120°	711.4	1.3
120°-130°	422.5	0.8
130°-140°	256.7	0.5
140°-150°	179.6	0.3
150°-160°	118.3	0.2
160°-170°	68.5	0.1
170°-180°	23.0	0.0
0°-30°	28408.9	50.8
0°-40°	39281.7	70.2
0°-60°	49566.6	88.6
0°-90°	53711.5	96.0
90°-120°	1154.2	2.1
90°-150°	2012.9	3.6
90°-180°	2223.0	4.0
0°-180°	55934.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	43249	43249	43249	43249	43249	
5°	43079	43072	43074	43150	43124	4071
15°	37477	40092	40917	39771	36616	10310
25°	22990	30189	34602	29086	21799	10475
35°	11102	17416	22958	16666	10377	7024
45°	5548	8296	10417	7936	5356	4377
55°	3358	4111	4769	4042	3313	3035
65°	2188	2338	2467	2345	2208	2175
75°	1308	1300	1308	1304	1321	1385
85°	400	339	335	344	411	426
90°	18	44	16	47	17	28
95°	29	99	31	85	28	27
105°	135	672	176	717	89	181
115°	617	795	757	880	646	568
125°	446	425	484	471	507	407
135°	328	328	307	343	355	256
145°	274	285	280	289	294	174
155°	246	252	250	253	266	115
165°	239	241	238	240	249	68
175°	243	243	239	240	248	23
180°	242	242	242	242	242	

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Scaled Data Report

TEST NUMBER: P1433670
CATALOG NUMBER: EHBR1-60-UNV-A1-L935-UPL24

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	43249.1	43249.1	43249.1	43249.1	43249.1	43249.1	*43249.1*	43249.1	43249.1
2.5°	*43153.9*	*43192.9*	*43209.2*	*43218.3*	*43228.2*	*43255.4*	*43267.2*	*43248.2*	*43264.5*
5°	43078.8	43081.5	43072.4	43113.2	43074.2	43101.4	*43150.3*	43131.2	43124.1
7.5°	42640.3	42730.9	42784.4	42797.9	42805.2	42838.7	*42873.1*	42678.4	42649.4
10°	41806.9	41958.3	42294.3	42390.3	42361.3	42415.7	*42241.8*	41732.7	41533.4
12.5°	39979.9	40511.6	41384.8	41773.5	41702.8	41750.8	*41158.3*	40084.1	39466.3
15°	37477.1	38257.0	40092.2	40858.5	40917.4	40858.5	*39770.7*	37677.2	36616.5
17.5°	34150.0	35590.2	38292.4	39779.7	39694.5	39722.6	*37657.4*	34563.0	33349.2
20°	30595.4	32130.8	35933.5	38414.6	38388.3	38230.7	*35256.9*	31176.1	29404.2
22.5°	26575.3	28555.6	33230.5	36736.1	36726.1	36463.5	*32333.8*	27477.6	25569.9
25°	22990.1	24932.1	30188.8	34679.9	34602.0	34303.0	*29086.3*	23788.1	21798.9
27.5°	19283.4	21302.5	26941.3	32270.3	32216.9	31890.8	*25982.0*	20339.6	18446.4
30°	16141.1	17987.1	23680.3	29619.0	29276.5	29239.4	*22781.7*	17146.5	15320.3
32.5°	13448.9	15031.4	20606.0	26846.2	26240.2	26413.2	*19592.3*	14476.2	12666.2
35°	11101.9	12496.0	17415.6	23639.5	22958.3	23182.1	*16665.5*	11878.2	10377.2
37.5°	9010.4	10350.9	14711.6	20520.8	19479.0	19901.2	*14091.2*	9919.8	8716.8
40°	7542.8	8606.3	12147.3	17098.5	15978.0	16665.5	*11634.6*	8273.9	7310.1
42.5°	6499.4	7193.3	10025.7	13831.1	12971.6	13458.9	*9589.2*	6916.9	6195.9
45°	5548.2	6101.7	8295.6	10914.4	10417.1	10869.1	*7936.0*	5897.9	5356.2
47.5°	4846.2	5272.8	6829.1	8813.8	8504.9	8648.0	*6628.0*	5147.0	4706.8
50°	4240.2	4569.9	5741.1	7113.5	6945.0	7032.9	*5551.8*	4478.4	4175.9
52.5°	3769.2	4011.1	4815.4	5846.3	5762.9	5776.5	*4731.1*	3939.5	3720.3
55°	3358.0	3526.4	4110.7	4789.1	4769.2	4772.8	*4041.9*	3491.1	3312.6
57.5°	2998.3	3137.8	3532.8	4022.8	3993.8	4000.2	*3500.2*	3100.6	2985.6
60°	2694.0	2787.2	3052.7	3399.6	3380.6	3372.5	*3033.7*	2752.8	2713.0
62.5°	2424.0	2483.8	2667.7	2914.0	2877.9	2886.0	*2666.8*	2486.5	2427.6
65°	2187.6	2208.5	2338.0	2490.1	2466.6	2486.5	*2345.2*	2222.0	2208.5
67.5°	1956.6	1977.4	2053.6	2155.9	2128.7	2145.0	*2055.4*	1982.9	1971.1
70°	1746.4	1745.5	1788.1	1843.4	1843.4	1846.1	*1798.1*	1754.6	1763.6
72.5°	1529.1	1523.6	1536.3	1573.4	1563.5	1597.9	*1547.2*	1533.6	1535.4
75°	1308.0	1292.6	1299.9	1318.9	1308.0	1326.1	*1303.5*	1320.7	1320.7
77.5°	1099.7	1070.7	1061.7	1064.4	1044.5	1071.6	*1077.0*	1088.8	1116.0
80°	882.3	841.5	818.9	818.0	800.7	818.0	*831.6*	856.0	882.3
82.5°	654.9	619.6	581.5	574.3	563.5	573.4	*591.5*	620.5	663.1
85°	399.5	362.4	338.8	326.1	335.2	335.2	*344.2*	385.0	411.3
87.5°	144.0	125.9	103.2	104.1	106.9	110.5	*115.0*	144.9	158.5
90°	17.8	25.7	44.1	28.2	16.0	26.9	*46.6*	24.5	16.9
92.5°	24.2	39.2	71.1	36.7	20.8	36.7	*66.2*	33.1	22.9
95°	28.7	45.3	99.2	49.0	30.6	45.3	*84.6*	36.7	27.8
97.5°	36.1	50.2	113.9	60.0	47.8	56.4	*95.5*	39.2	34.0
100°	47.1	58.8	177.6	73.5	63.7	63.7	*175.2*	45.3	39.8
102.5°	78.9	125.0	377.3	138.4	96.8	125.0	*406.7*	91.9	48.4
105°	135.3	263.4	672.5	290.3	176.4	286.7	*716.6*	240.1	88.8
107.5°	233.3	471.7	886.8	514.5	334.4	535.3	*923.6*	475.3	207.6
110°	434.2	625.9	929.7	706.8	535.3	748.4	*1008.1*	651.7	420.7

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Scaled Data Report

TEST NUMBER: P1433670
CATALOG NUMBER: EHBR1-60-UNV-A1-L935-UPL24

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	586.1	672.5	890.6	780.3	697.0	834.2	*984.9*	722.7	582.4
115°	616.8	646.8	795.0	762.0	757.1	822.0	*879.5*	720.3	646.1
117.5°	596.8	590.5	674.9	684.7	731.3	752.2	*759.5*	676.2	649.8
120°	551.9	525.5	563.5	597.8	660.3	651.7	*639.4*	612.1	613.0
122.5°	497.6	466.4	482.6	508.4	570.8	552.5	*540.2*	546.0	563.7
125°	446.2	414.9	425.1	431.2	483.9	465.5	*471.3*	489.7	507.4
127.5°	400.9	379.4	384.6	377.3	410.4	401.8	*421.1*	442.8	457.2
130°	370.2	352.1	359.8	341.8	358.6	361.1	*386.5*	403.6	413.1
132.5°	345.4	333.4	343.2	321.6	326.5	337.2	*360.4*	376.0	380.9
135°	327.9	317.2	328.3	307.7	307.4	322.1	*343.0*	352.7	354.8
137.5°	312.0	303.4	314.4	299.7	296.1	310.8	*326.7*	334.1	332.5
140°	299.1	290.8	303.1	292.1	289.7	304.3	*311.7*	321.2	318.7
142.5°	284.1	279.1	293.0	285.7	283.2	297.5	*301.3*	307.3	305.8
145°	274.0	270.3	285.3	281.7	280.4	291.1	*288.7*	298.2	294.5
147.5°	266.9	263.6	276.4	275.2	275.2	282.6	*279.8*	288.0	285.3
150°	259.2	255.9	268.7	267.5	268.7	273.6	*269.6*	280.1	279.7
152.5°	251.6	248.2	259.8	257.8	258.9	263.8	*260.8*	271.4	272.1
155°	246.3	243.0	252.2	250.4	250.4	253.8	*253.1*	264.7	265.6
157.5°	244.2	241.1	247.9	246.1	246.1	248.2	*248.8*	259.2	260.1
160°	242.3	239.3	244.8	243.0	241.7	245.1	*245.7*	254.9	255.8
162.5°	240.4	237.4	243.3	241.1	240.2	241.1	*241.7*	251.8	252.7
165°	238.9	237.1	241.4	239.5	238.4	239.5	*239.8*	246.5	248.7
167.5°	239.8	237.6	241.1	239.3	238.0	236.8	*239.5*	245.0	247.2
170°	239.5	238.5	240.7	237.7	235.6	236.5	*238.0*	243.4	245.6
172.5°	241.3	240.4	242.5	239.5	237.4	238.3	*238.5*	242.8	246.2
175°	242.8	241.0	242.8	240.1	239.2	238.9	*240.4*	243.4	247.7
177.5°	244.9	243.1	243.7	241.0	238.9	239.8	*242.5*	245.5	251.1
180°	242.5	242.5	242.5	242.5	242.5	242.5	*242.5*	242.5	242.5

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Scaled Data Report

TEST NUMBER: P1433670
CATALOG NUMBER: EHBR1-60-UNV-A1-L935-UPL24

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	20.05	21.25	20.49	21.65	22.07	21.04	22.23	21.47	22.63	23.05
	3H	21.53	22.60	21.98	23.01	23.48	22.30	23.36	22.75	23.78	24.24
	4H	22.14	23.13	22.61	23.56	24.05	22.80	23.79	23.27	24.23	24.71
	6H	22.60	23.52	23.09	23.97	24.46	23.16	24.07	23.64	24.52	25.01
	8H	22.75	23.62	23.25	24.09	24.59	23.25	24.12	23.75	24.59	25.09
	12H	22.83	23.66	23.33	24.12	24.64	23.29	24.12	23.80	24.58	25.11
4H	2H	20.58	21.57	21.05	22.00	22.49	21.36	22.35	21.83	22.78	23.27
	3H	22.26	23.08	22.75	23.56	24.06	22.85	23.67	23.33	24.15	24.65
	4H	22.98	23.71	23.48	24.21	24.75	23.47	24.20	23.97	24.70	25.24
	6H	23.56	24.19	24.09	24.71	25.27	23.95	24.58	24.48	25.10	25.66
	8H	23.75	24.34	24.28	24.86	25.42	24.08	24.67	24.62	25.19	25.76
	12H	23.85	24.38	24.41	24.93	25.50	24.15	24.67	24.70	25.23	25.80
8H	4H	23.20	23.80	23.74	24.32	24.88	23.65	24.24	24.19	24.76	25.33
	6H	23.89	24.38	24.46	24.95	25.52	24.23	24.72	24.80	25.28	25.86
	8H	24.15	24.58	24.73	25.16	25.75	24.43	24.86	25.02	25.44	26.03
	12H	24.31	24.69	24.89	25.26	25.92	24.55	24.93	25.13	25.49	26.15
12H	4H	23.20	23.73	23.76	24.28	24.85	23.65	24.17	24.20	24.73	25.29
	6H	23.92	24.35	24.51	24.93	25.52	24.25	24.69	24.84	25.27	25.85
	8H	24.21	24.59	24.79	25.16	25.82	24.49	24.87	25.07	25.43	26.09

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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

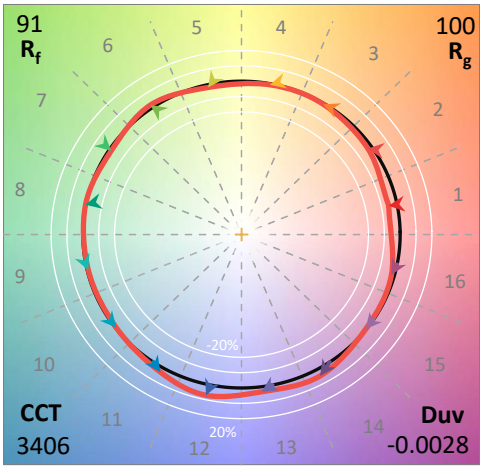
Test Information

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

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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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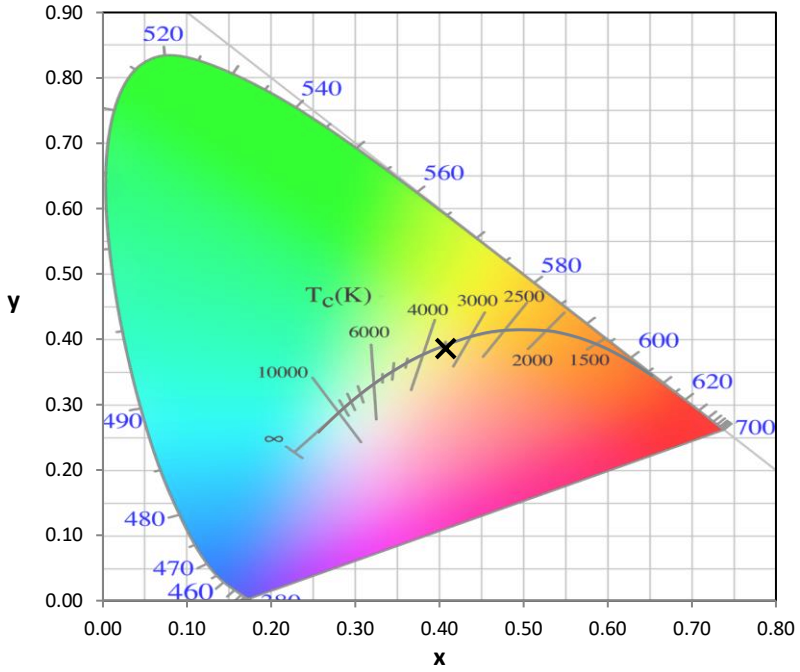
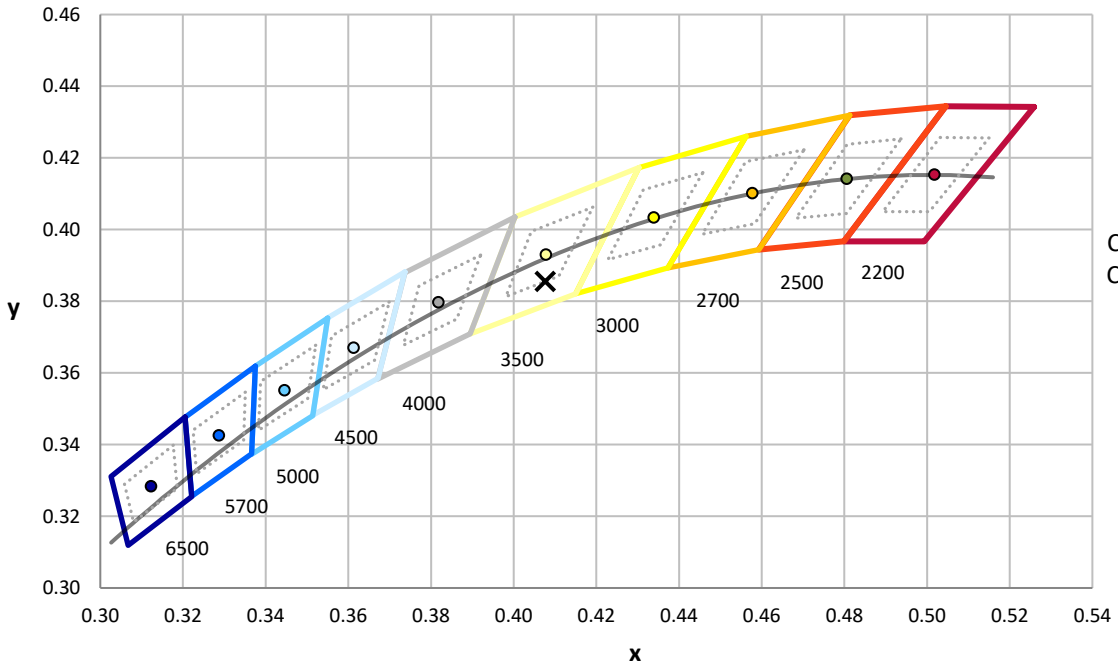
CIE 1931 Chromaticity Diagram



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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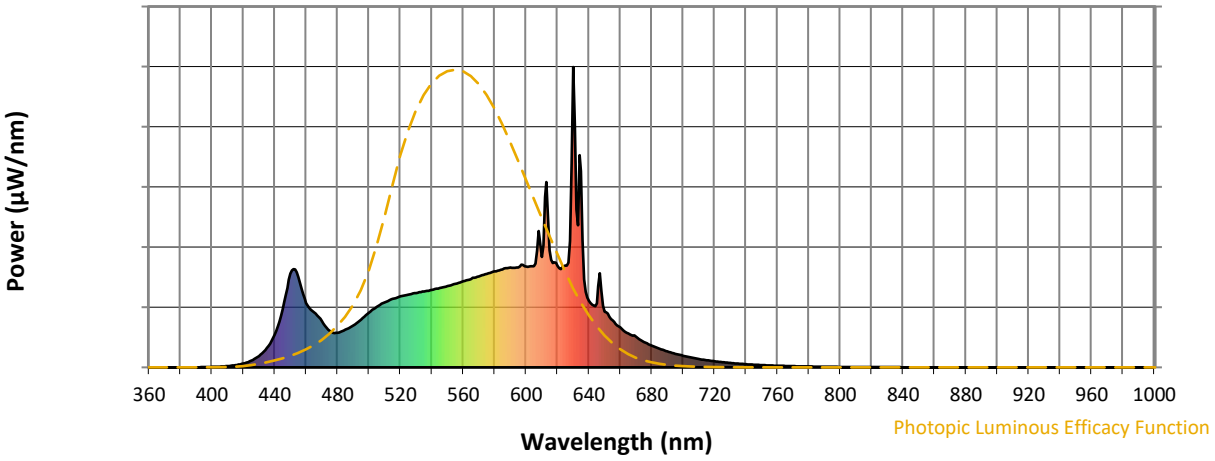
Photopic Flux vs. Wavelength



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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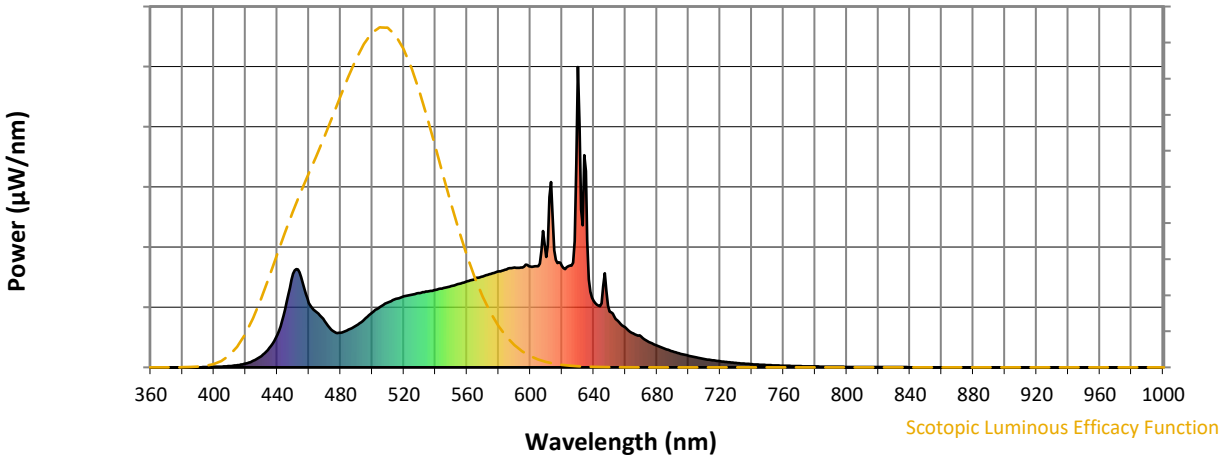
Scotopic Flux vs. Wavelength



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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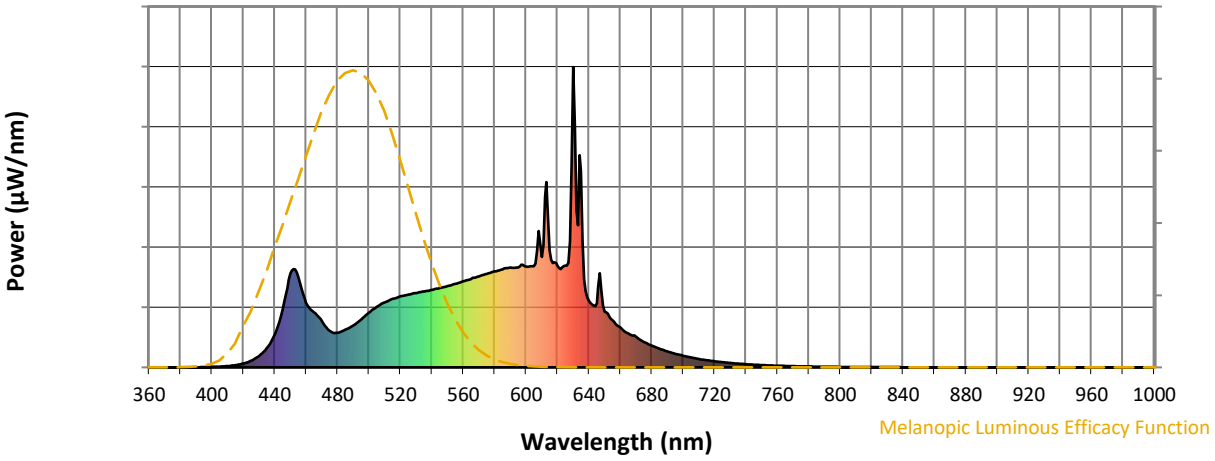
Melanopic Flux vs. Wavelength



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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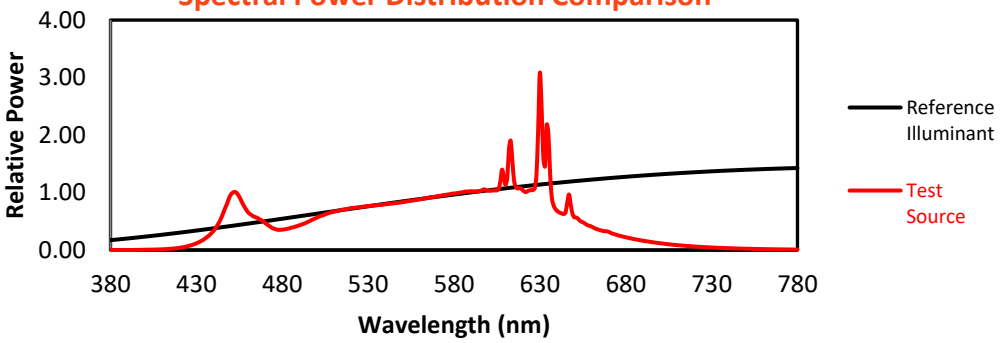
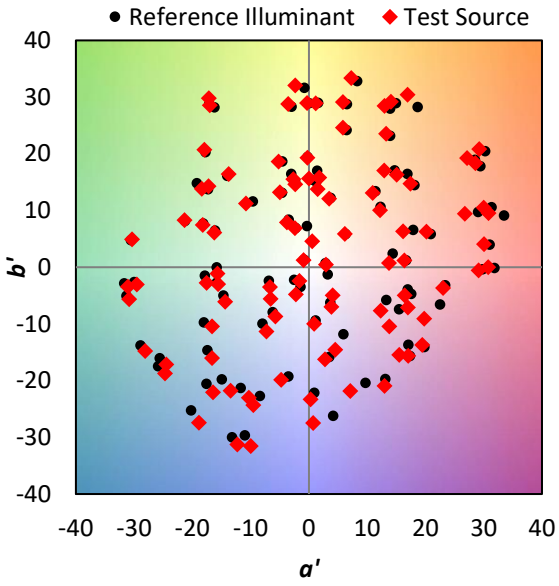
Summary

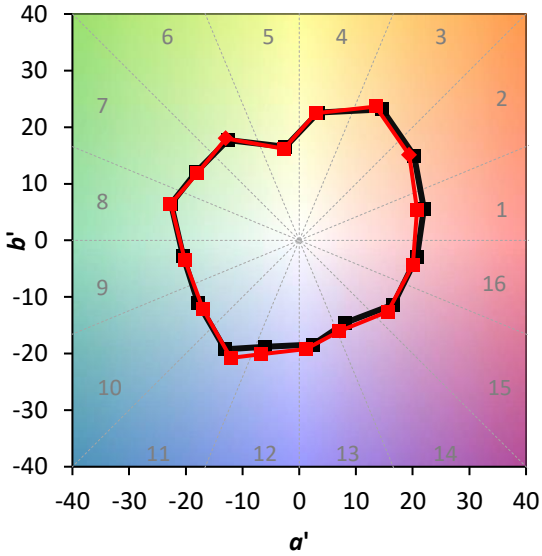
R_f = 91.3
R_g = 100
CIE R_a = 94.6
R_9 = 63.8

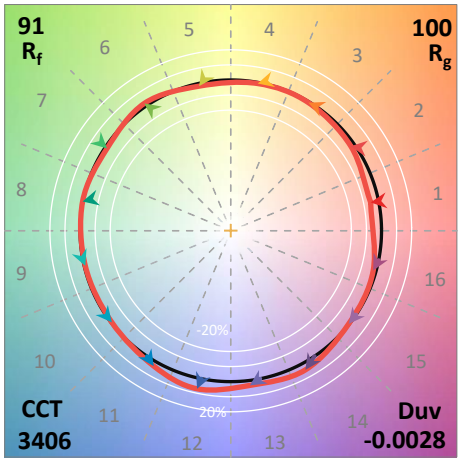
Spectral Power Distribution Comparison

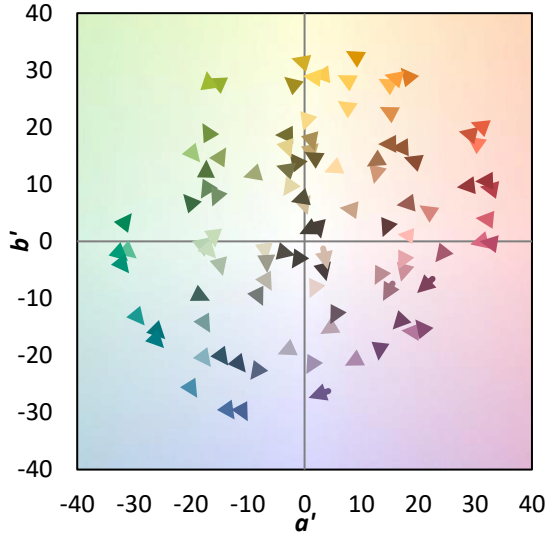


Color Vector Graphics









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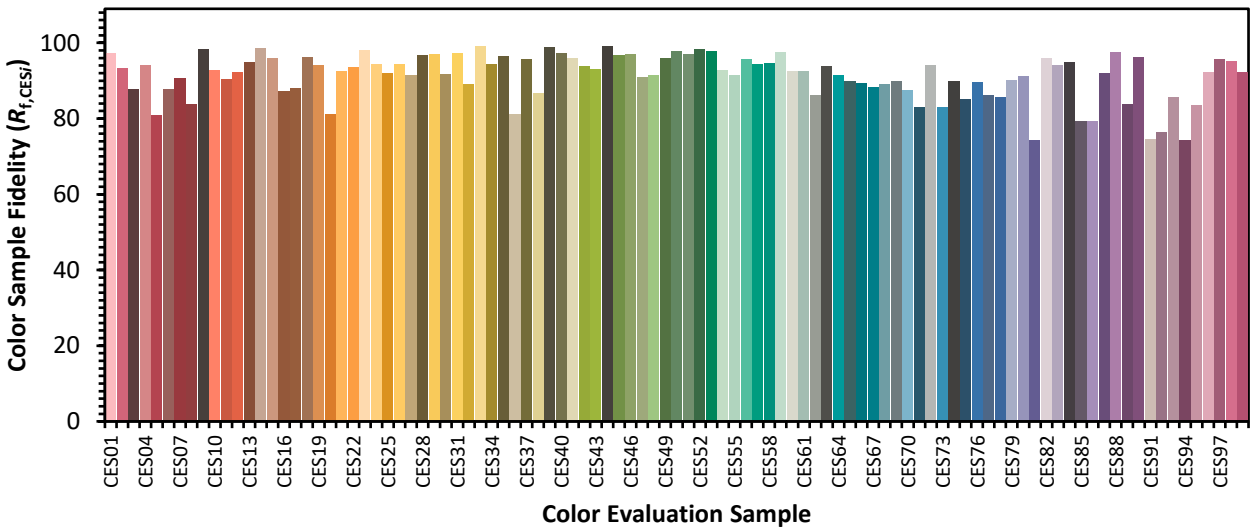
Individual Sample Fidelity Index ($R_{f,i}$)

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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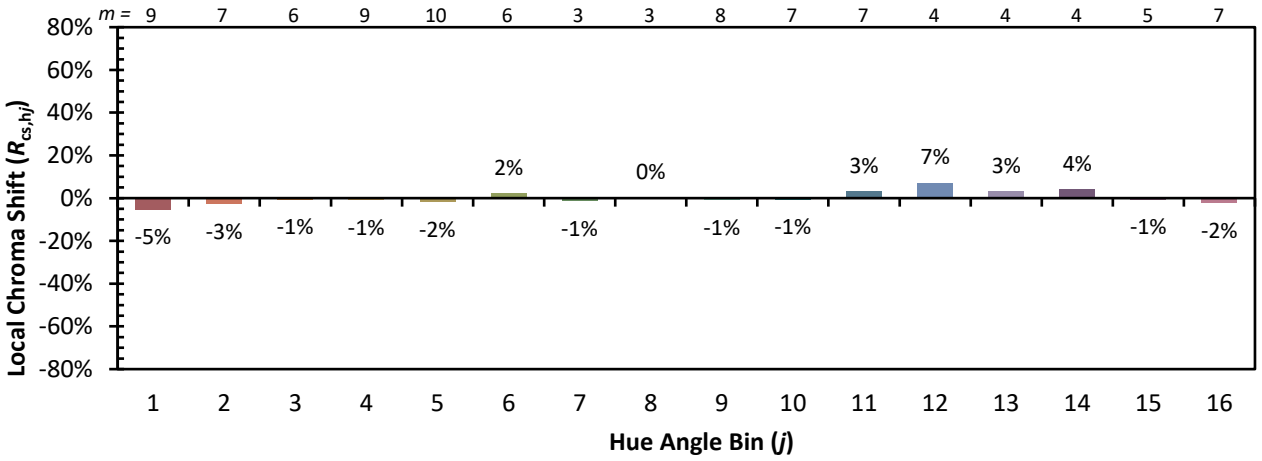
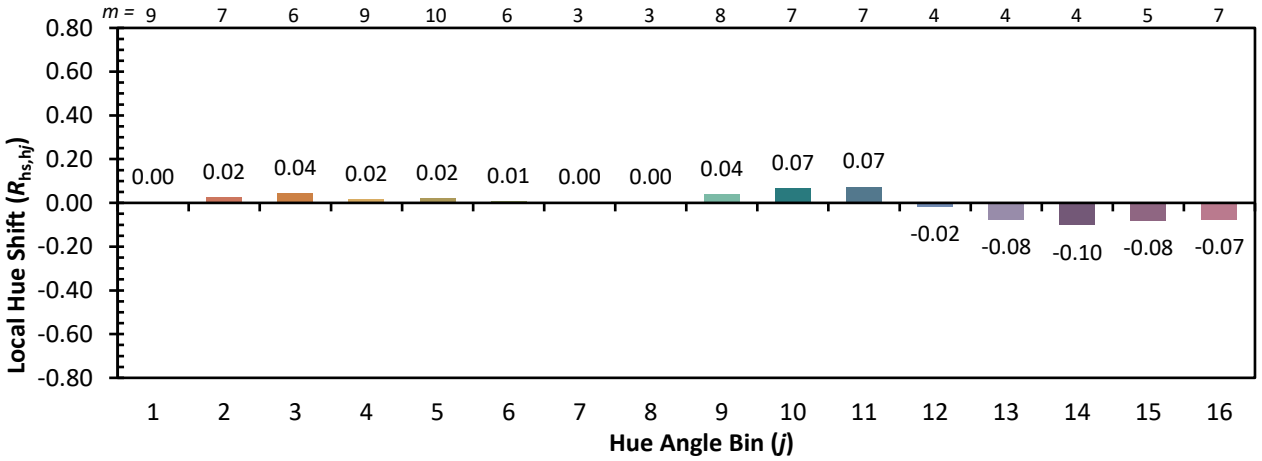
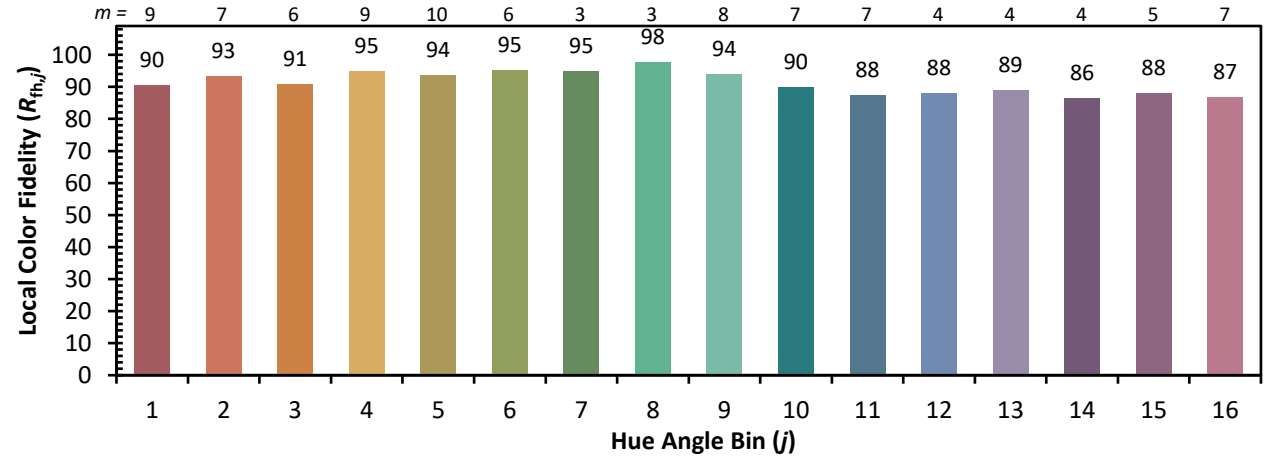
Color Rendition by Hue-Angle Bin







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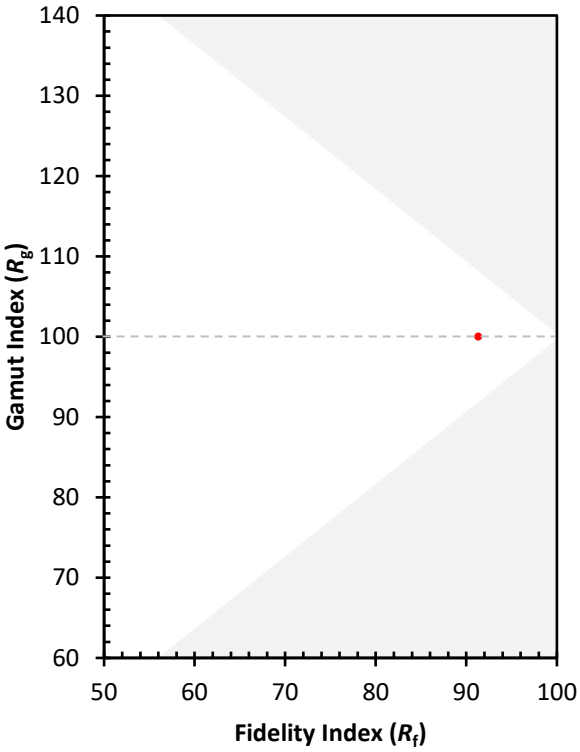
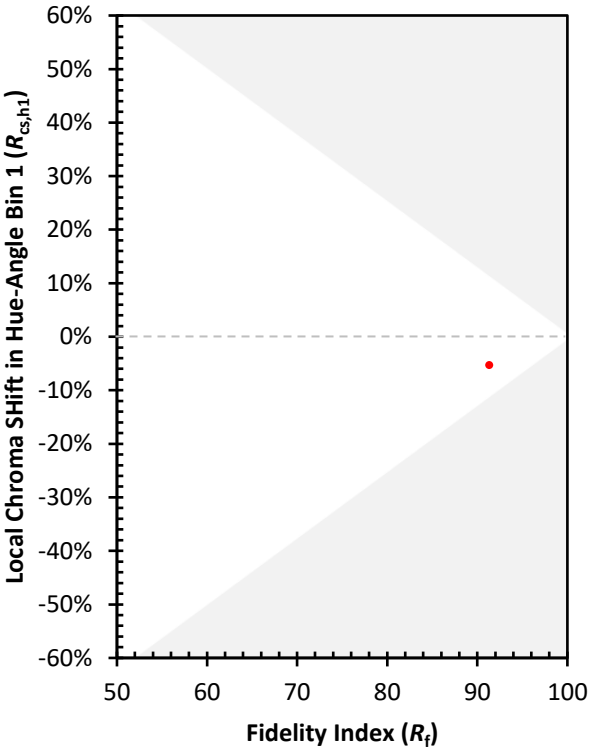
Measure Comparisons





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