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: P1433963

Luminaire Tested: EHBR1-60-UNV-ASM-L940-UPL12

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:	P1433963
	REPORT IS A COMBINATION OF REPORTS P1431900 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-60-UNV-ASM-L940-UPL12
Description:	Elevate Round Highbay at, 60000 lumens, 4000K 90CRI LEDs with ASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	56460.6 lumens
Efficiency:	N/A
Efficacy:	167.1 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:	Direct

Input Watts (W):	337.8
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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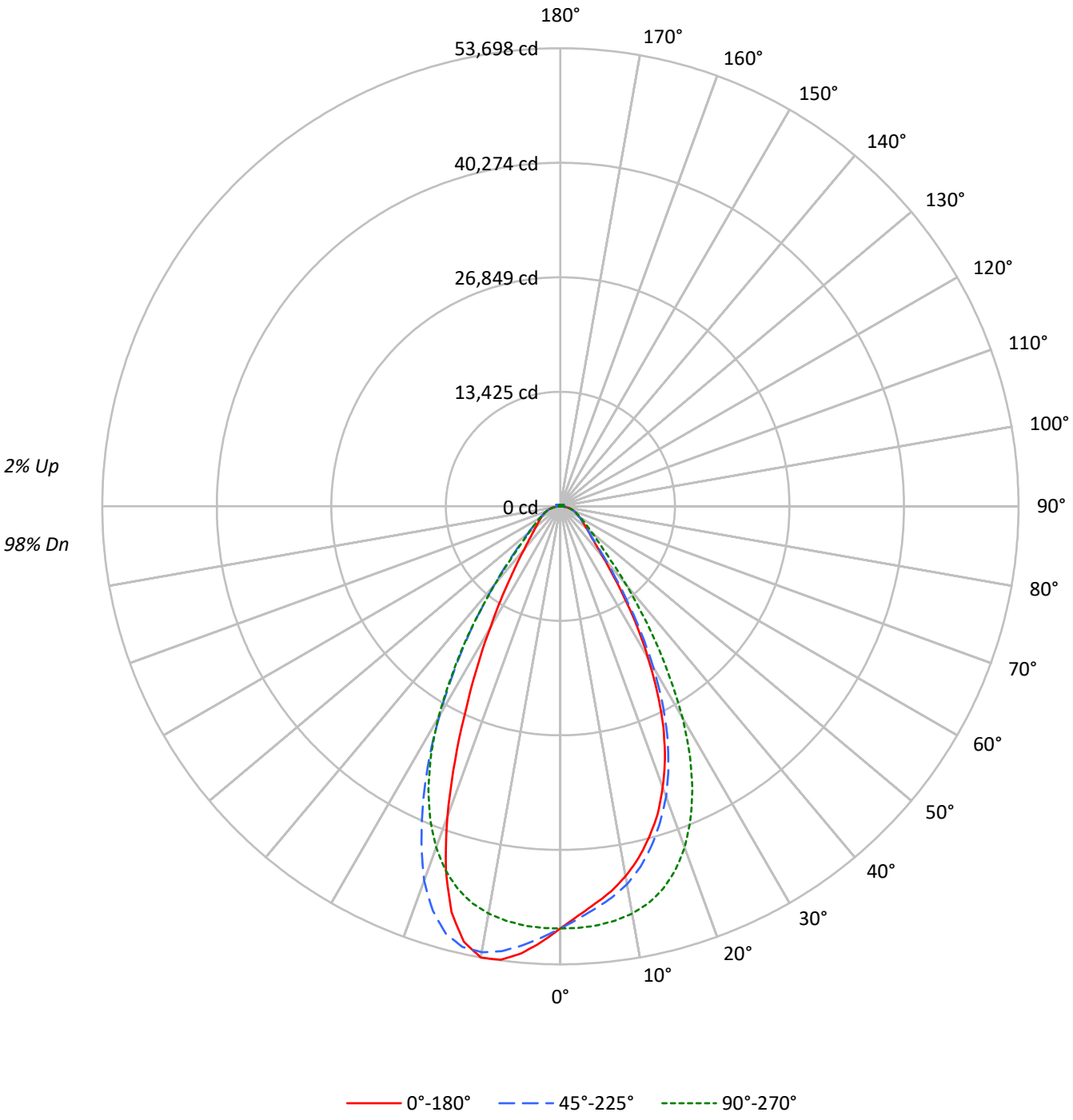
Scaled Data Report

TEST NUMBER: P1433963
CATALOG NUMBER: EHBR1-60-UNV-ASM-L940-UPL12

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			20
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	100	100	100	98
1	111	108	105	102	109	106	103	100	101	99	97	97	95	94	93	92	90	88
2	104	99	94	89	102	97	92	88	93	89	86	90	86	84	86	84	82	80
3	98	90	84	80	96	89	83	79	86	81	77	83	79	76	80	77	74	72
4	92	83	77	72	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	87	77	70	65	85	76	70	65	74	68	64	72	67	63	70	66	62	61
6	82	72	65	60	80	71	64	59	69	63	59	67	62	58	66	61	58	56
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52
8	73	62	56	51	72	62	55	51	60	55	51	59	54	50	58	53	50	48
9	69	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45
10	66	55	49	44	65	55	49	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	232397	232397	232397	232397	232397
5°	218995	221555	230982	242060	246415
10°	207261	211650	228142	249832	252741
15°	191453	196566	221406	247269	234875
20°	170531	176274	207071	227289	188338
25°	142912	148321	183274	190644	130491
30°	106927	113126	148811	147326	84894
35°	71184	75481	106733	105008	54979
40°	44892	47976	69006	69450	37895
45°	31986	33317	43784	45665	29354
50°	26643	26855	32515	33361	24943
55°	23518	23573	26547	27247	22722
60°	21775	21590	22987	23474	21644
65°	20785	20599	20955	21364	20874
70°	20188	19841	19861	20242	20453
75°	19193	18613	18574	19232	19786
80°	17463	16247	16315	17463	18680
85°	12715	10559	10559	12069	13337

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
Vertical Angle: 45°
Luminance: 61558 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4705.5	8.3
10°-20°	12801.5	22.7
20°-30°	15013.6	26.6
30°-40°	10441.0	18.5
40°-50°	5188.7	9.2
50°-60°	3103.4	5.5
60°-70°	2184.3	3.9
70°-80°	1407.0	2.5
80°-90°	448.9	0.8
90°-100°	32.2	0.1
100°-110°	199.5	0.4
110°-120°	366.4	0.6
120°-130°	219.5	0.4
130°-140°	135.2	0.2
140°-150°	95.7	0.2
150°-160°	64.9	0.1
160°-170°	39.6	0.1
170°-180°	13.7	0.0
0°-30°	32520.6	57.6
0°-40°	42961.6	76.1
0°-60°	51253.7	90.8
0°-90°	55293.9	97.9
90°-120°	598.1	1.1
90°-150°	1048.5	1.9
90°-180°	1167.0	2.1
0°-180°	56460.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	49487	49487	49487	49487	49487	
5°	46759	47306	49318	51684	52614	4386
15°	40166	41239	46450	51876	49276	11201
25°	28539	29620	36600	38071	26059	12877
35°	13065	13854	19589	19273	10091	8322
45°	5175	5390	7084	7388	4749	4183
55°	3178	3186	3588	3682	3071	2884
65°	2170	2150	2187	2230	2179	2154
75°	1352	1311	1308	1355	1394	1427
85°	437	363	363	415	458	450
90°	9	24	9	27	16	26
95°	15	52	18	46	21	14
105°	70	344	92	370	53	93
115°	316	408	390	453	338	291
125°	229	221	251	246	267	209
135°	169	172	163	181	189	132
145°	146	153	151	153	158	92
155°	136	139	138	138	145	64
165°	137	139	139	140	147	39
175°	142	144	144	146	152	13
180°	146	146	146	146	146	

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Scaled Data Report

TEST NUMBER: P1433963
CATALOG NUMBER: EHBR1-60-UNV-ASM-L940-UPL12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	49487.2	49487.2	49487.2	49487.2	49487.2	49487.2	49487.2	49487.2	*49487.2*
2.5°	48018.2	48049.7	48385.7	48822.7	49458.4	50097.8	50615.6	50957.0	*51125.9*
5°	46758.9	46933.4	47305.5	48108.2	49318.3	50598.8	51683.6	52393.5	*52613.5*
7.5°	45532.1	45633.3	46256.0	47270.2	48983.2	50978.4	52590.3	53418.9	*53621.3*
10°	*44035.4*	*44264.6*	*44968.0*	*46164.2*	*48472.0*	*51217.8*	*53080.3*	*53674.1*	*53698.2*
12.5°	42274.1	42577.5	43304.1	44813.0	47656.3	51132.5	52916.0	52721.1	*52278.5*
15°	40165.8	40432.1	41238.6	42988.7	46449.9	50626.7	51875.7	50289.9	*49275.6*
17.5°	37888.6	38129.8	38830.4	40757.8	44749.9	49680.2	49704.3	46566.8	*44653.4*
20°	35049.0	35238.3	36229.4	38120.6	42559.0	48162.0	46714.4	40975.9	*38708.9*
22.5°	32027.6	32204.9	33085.5	35053.6	39812.2	46115.0	42550.7	35351.6	*32258.6*
25°	28539.4	28635.9	29619.5	31399.4	36599.6	43606.7	38071.4	29223.3	*26059.0*
27.5°	24615.0	24779.3	25808.5	27626.3	32821.0	40427.5	33301.7	23880.1	*20960.7*
30°	20567.3	20839.2	21759.7	23387.4	28623.8	36351.9	28338.1	19017.6	*16329.3*
32.5°	16789.6	16985.4	17641.5	19342.4	23924.7	32357.0	23571.1	15238.0	*12960.8*
35°	13064.8	13260.6	13853.5	15523.8	19589.3	27359.0	19272.8	11973.4	*10090.7*
37.5°	9986.7	10332.8	10713.3	12069.0	15373.5	22636.7	15363.3	9641.5	*8184.6*
40°	7780.9	7836.6	8315.4	9183.0	11960.5	17699.9	12037.5	7696.5	*6568.1*
42.5°	6228.4	6379.7	6585.7	7235.3	9062.5	13534.3	9461.5	6316.7	*5578.9*
45°	5175.2	5234.6	5390.5	5826.7	7084.0	9959.8	7388.4	5329.3	*4749.3*
47.5°	4527.5	4501.5	4601.8	4928.4	5769.1	7697.4	5988.2	4571.1	*4164.6*
50°	3970.8	3954.9	4002.3	4220.4	4845.8	5906.4	4972.0	3990.2	*3717.4*
52.5°	3538.3	3552.3	3556.8	3692.4	4162.8	4817.1	4234.2	3555.9	*3372.2*
55°	3178.2	3195.9	3185.7	3285.9	3587.5	4049.6	3682.1	3197.8	*3070.6*
57.5°	2897.0	2884.1	2870.2	2924.0	3150.5	3435.4	3197.8	2892.5	*2808.0*
60°	2617.7	2605.7	2595.5	2630.8	2763.4	2975.0	2822.0	2626.1	*2602.0*
62.5°	2378.4	2370.9	2370.0	2363.5	2465.6	2599.2	2495.3	2386.7	*2365.4*
65°	2169.5	2161.2	2150.1	2139.9	2187.2	2311.5	2229.9	2171.4	*2178.8*
67.5°	1960.7	1960.7	1941.3	1925.5	1971.9	2036.9	2001.6	1968.2	*1976.6*
70°	1771.4	1772.4	1740.9	1728.8	1742.7	1812.3	1776.1	1780.7	*1794.6*
72.5°	1568.2	1546.0	1522.8	1521.8	1523.7	1577.6	1565.4	1576.6	*1591.4*
75°	1352.0	1326.0	1311.2	1294.5	1308.4	1349.2	1354.8	1370.6	*1393.8*
77.5°	1143.2	1103.3	1091.2	1082.9	1073.6	1120.0	1137.6	1159.1	*1193.3*
80°	918.7	875.1	854.7	842.6	858.3	879.7	918.7	934.4	*982.7*
82.5°	679.3	646.7	621.7	620.8	628.2	647.7	681.1	710.8	*738.7*
85°	437.0	385.1	362.9	371.2	362.9	392.5	414.8	450.1	*458.4*
87.5°	157.7	123.4	117.9	129.9	127.2	136.4	155.9	169.8	*170.8*
90°	9.0	14.1	23.5	15.3	9.0	15.7	26.6	18.1	*15.6*
92.5°	12.9	21.0	37.3	19.7	11.6	20.6	36.6	22.5	*18.7*
95°	14.7	24.0	51.6	26.0	17.5	25.0	45.9	24.3	*21.2*
97.5°	19.4	26.6	59.2	31.6	26.3	30.7	51.6	25.6	*24.3*
100°	25.0	30.9	91.7	39.4	34.4	34.4	92.2	28.7	*26.8*
102.5°	41.3	64.7	193.7	72.6	51.3	66.6	211.5	53.5	*31.2*
105°	70.1	135.5	344.4	150.2	92.0	149.2	369.8	129.1	*52.8*
107.5°	120.1	241.9	454.8	264.7	172.7	276.2	475.5	249.3	*113.5*
110°	222.8	320.7	476.8	362.9	275.3	385.1	518.6	339.4	*222.4*

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Scaled Data Report

TEST NUMBER: P1433963
CATALOG NUMBER: EHBR1-60-UNV-ASM-L940-UPL12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	300.4	344.4	456.8	400.4	357.8	428.9	506.8	375.7	*304.9*
115°	316.0	331.3	408.0	391.0	389.5	422.7	453.0	374.4	*337.5*
117.5°	305.3	302.5	346.7	352.5	376.4	387.0	391.7	351.9	*339.4*
120°	282.8	269.3	289.6	308.1	340.1	335.7	331.3	318.7	*320.6*
122.5°	254.6	239.6	249.3	263.4	295.3	285.9	280.6	285.9	*295.0*
125°	229.3	213.3	220.9	224.9	250.9	241.5	245.9	257.1	*267.1*
127.5°	206.2	195.2	200.2	197.4	214.3	209.9	220.2	232.7	*241.5*
130°	190.5	181.8	188.0	180.2	188.3	188.7	202.1	213.6	*218.9*
132.5°	178.3	172.6	180.5	170.8	172.4	176.5	189.2	199.6	*203.0*
135°	168.9	164.8	172.4	164.2	162.7	168.3	180.7	186.7	*189.2*
137.5°	161.7	158.3	166.7	160.1	157.3	162.9	172.0	177.7	*177.3*
140°	156.1	153.3	161.4	155.8	154.5	160.1	163.9	170.1	*170.8*
142.5°	149.8	147.3	156.7	152.9	151.7	156.7	158.6	163.5	*163.2*
145°	146.0	144.1	153.3	150.4	150.7	154.7	152.6	157.9	*157.8*
147.5°	142.8	141.5	149.1	147.6	147.6	150.4	148.5	153.3	*153.1*
150°	140.3	139.0	145.6	144.0	144.7	147.2	143.8	149.1	*150.3*
152.5°	137.8	135.6	141.5	139.9	140.6	143.1	140.6	146.5	*146.8*
155°	136.5	134.3	139.0	137.1	138.1	139.4	138.1	144.0	*145.0*
157.5°	136.8	134.3	137.8	136.9	136.9	138.3	137.8	143.1	*144.0*
160°	136.8	135.2	138.1	137.1	137.4	138.6	139.0	143.7	*144.6*
162.5°	136.8	135.2	138.6	138.0	138.0	138.0	139.3	143.9	*145.8*
165°	137.3	136.4	138.6	138.6	138.9	139.6	140.2	144.5	*147.0*
167.5°	137.3	136.8	139.8	139.8	140.2	139.6	141.4	146.1	*148.6*
170°	138.6	137.7	140.2	140.5	139.8	140.8	142.0	146.7	*149.1*
172.5°	140.5	139.6	143.0	142.4	142.6	142.6	144.2	148.1	*151.3*
175°	141.7	140.8	143.6	143.6	144.5	144.8	146.0	149.3	*152.5*
177.5°	143.3	142.4	143.6	143.6	143.8	145.7	147.5	150.9	*154.7*
180°	145.7	145.7	145.7	145.7	145.7	145.7	145.7	145.7	*145.7*

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Scaled Data Report

TEST NUMBER: P1433963
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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	19.26	20.43	19.66	20.79	21.16	20.02	21.20	20.43	21.56	21.93
	3H	21.08	22.12	21.49	22.50	22.91	21.59	22.63	22.00	23.01	23.43
	4H	21.81	22.79	22.26	23.18	23.62	22.23	23.21	22.68	23.60	24.04
	6H	22.39	23.28	22.84	23.70	24.14	22.73	23.63	23.19	24.04	24.49
	8H	22.57	23.42	23.04	23.85	24.31	22.89	23.74	23.36	24.17	24.63
	12H	22.67	23.48	23.14	23.91	24.39	22.97	23.78	23.44	24.21	24.69
4H	2H	19.78	20.75	20.22	21.15	21.59	20.41	21.38	20.85	21.78	22.21
	3H	21.82	22.62	22.27	23.07	23.53	22.22	23.02	22.67	23.47	23.92
	4H	22.69	23.41	23.16	23.87	24.36	23.01	23.73	23.48	24.19	24.68
	6H	23.38	24.00	23.88	24.49	25.01	23.64	24.26	24.14	24.75	25.27
	8H	23.61	24.19	24.12	24.68	25.20	23.85	24.43	24.35	24.91	25.44
	12H	23.75	24.26	24.27	24.78	25.30	23.97	24.48	24.49	25.00	25.52
8H	4H	22.95	23.53	23.45	24.01	24.54	23.25	23.83	23.76	24.32	24.84
	6H	23.76	24.24	24.30	24.77	25.30	24.02	24.49	24.56	25.02	25.55
	8H	24.06	24.49	24.62	25.04	25.58	24.30	24.72	24.86	25.27	25.81
	12H	24.27	24.64	24.82	25.17	25.79	24.48	24.85	25.04	25.38	26.00
12H	4H	22.96	23.47	23.48	23.99	24.51	23.26	23.77	23.79	24.30	24.82
	6H	23.80	24.22	24.36	24.78	25.32	24.06	24.48	24.62	25.03	25.57
	8H	24.15	24.52	24.70	25.05	25.67	24.39	24.76	24.94	25.29	25.91

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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: SP1-2506-472-7

Test Date: 08/04/2025

Luminaire Tested: EHBR-60-L940-N

Data in this report applies to families of products including EHBR-60-L940-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

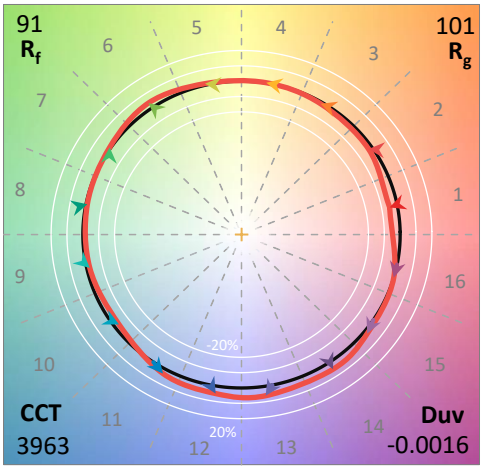
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-7
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-L940-N**
Description:	Elevate Round Highbay at, 60000 lumens, 4000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K):	3963
CIE u':	0.2267
CIE v':	0.5003
Duv:	-0.0016
CIE x:	0.3810
CIE y:	0.3738
CIE z:	0.2453
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	580
Purity:	26.49712
Rf:	90.7
Rg:	101

CRI (Ra):	93.4
R1:	95.2
R2:	95.1
R3:	93.3
R4:	94.5
R5:	94.2
R6:	92.9
R7:	94.0
R8:	87.7
R9:	66.4
R10:	86.6
R11:	94.4
R12:	75.4
R13:	95.0
R14:	95.4
R15:	92.8



Test Conditions

Stabilization Time:	44M
Operation Time:	1H 44M
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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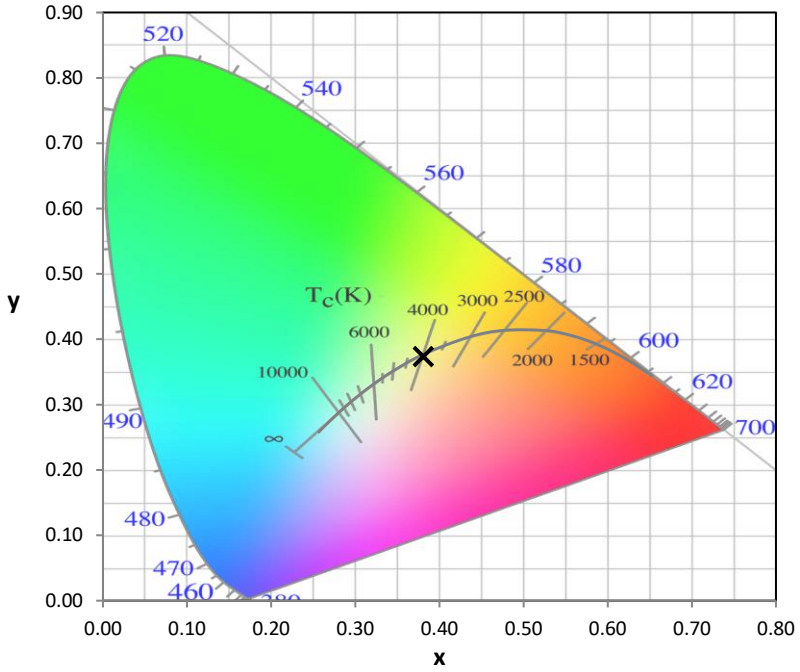
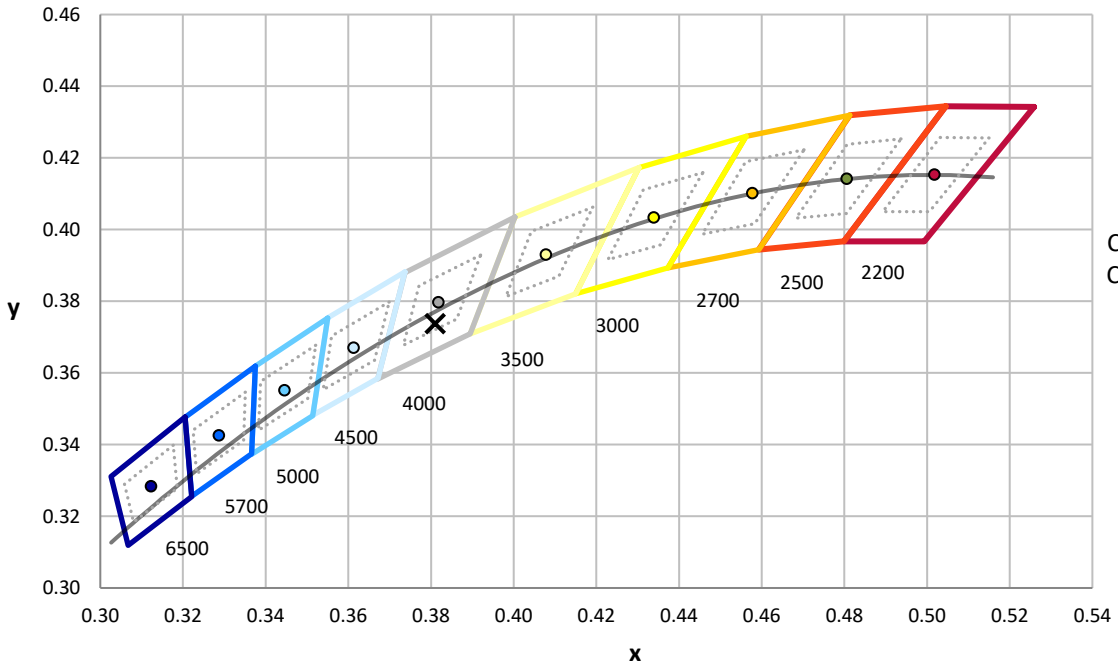
CIE 1931 Chromaticity Diagram



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



CCT = 3963K
CIE x = 0.3810
CIE y = 0.3738
Duv = -0.0016

Point lies inside the ANSI 4000K 4-step quadrangle

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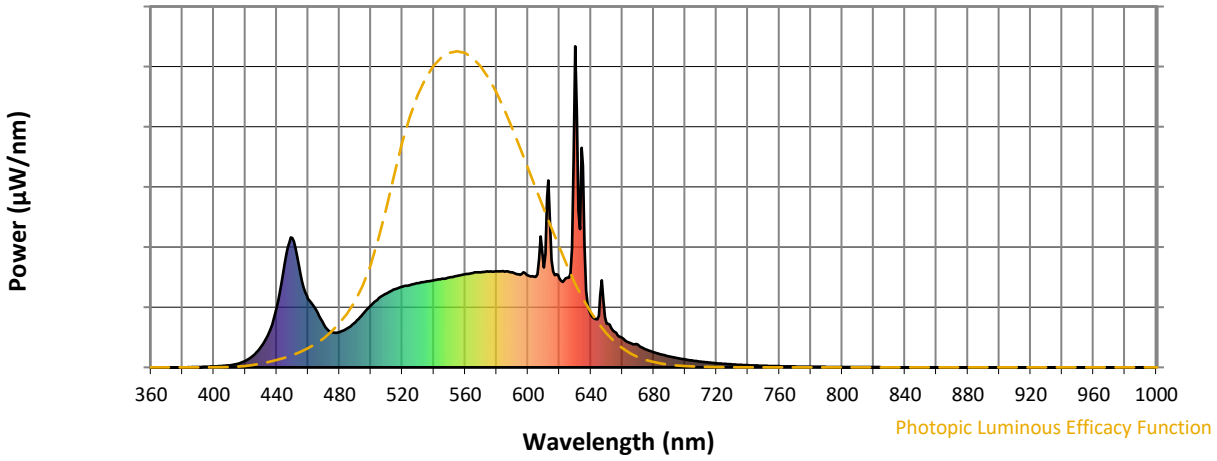
Photopic Flux vs. Wavelength



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	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

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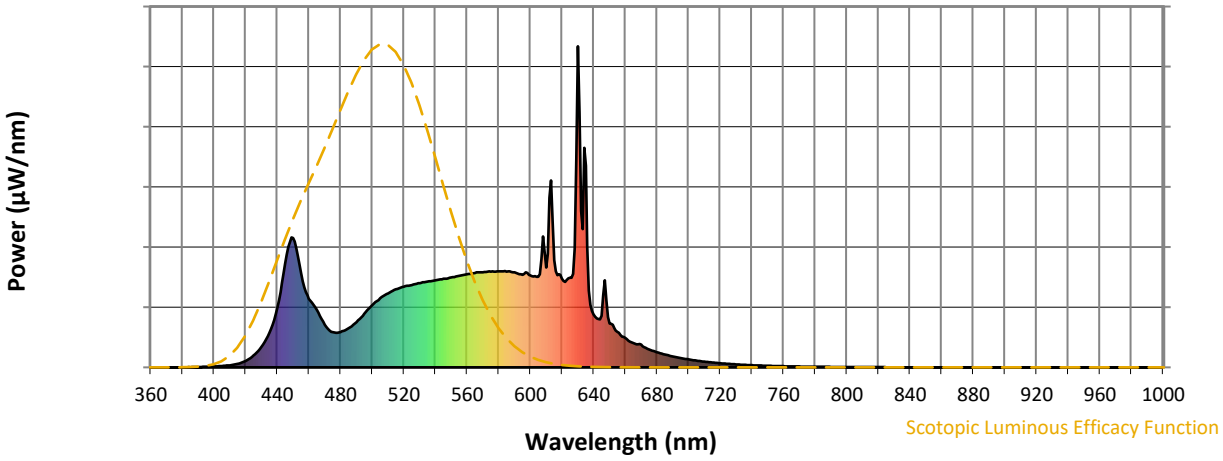
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.76**

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	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

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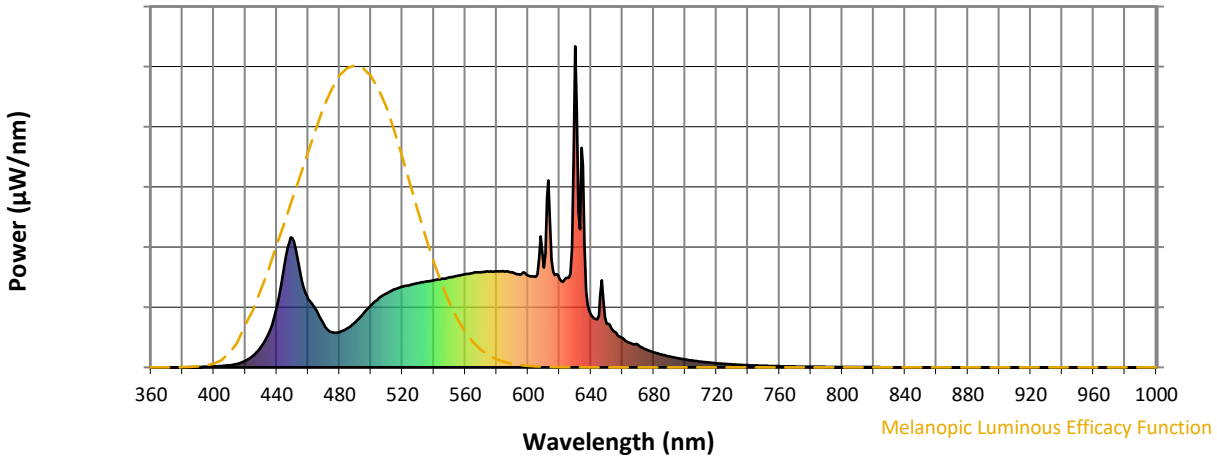
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.64**

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	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

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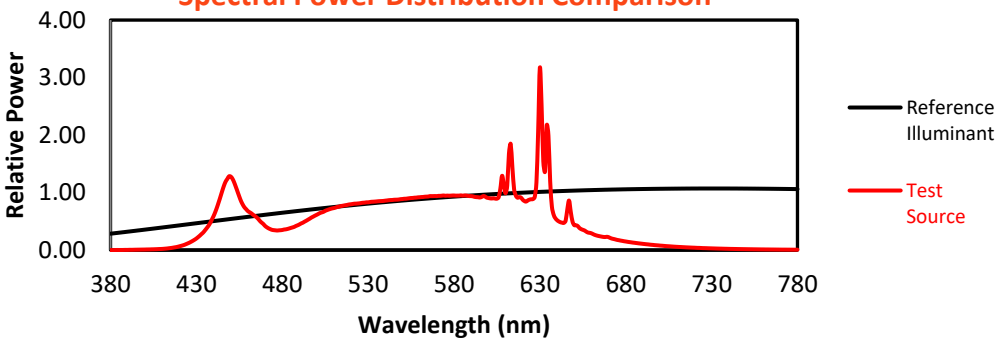
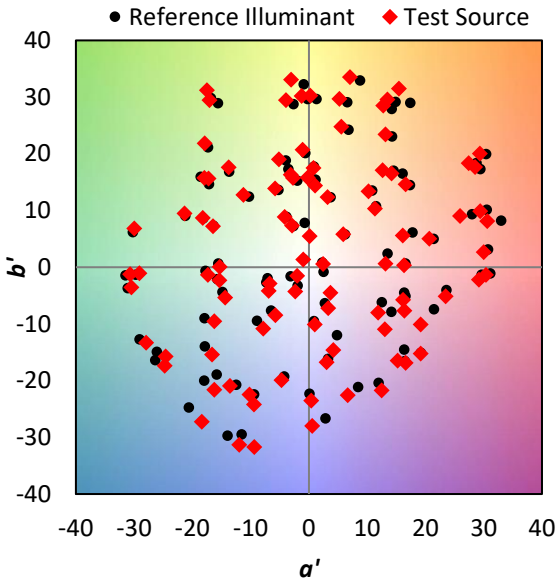
Summary

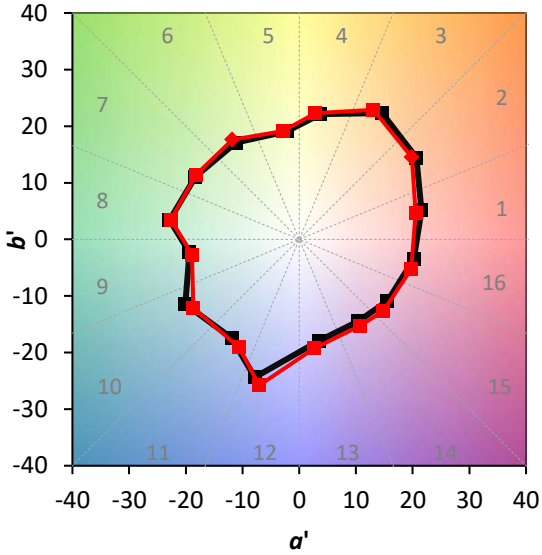
R_f = 90.7
R_g = 101
CIE R_a = 93.4
R_9 = 66.4

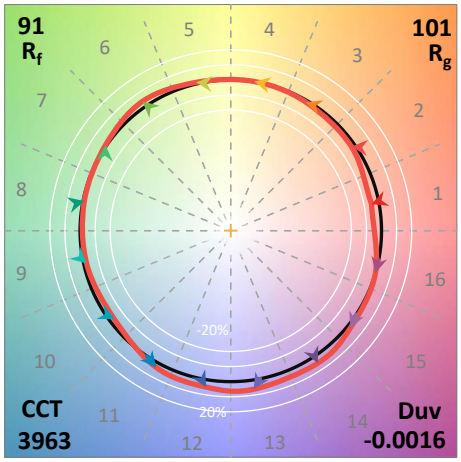
Spectral Power Distribution Comparison

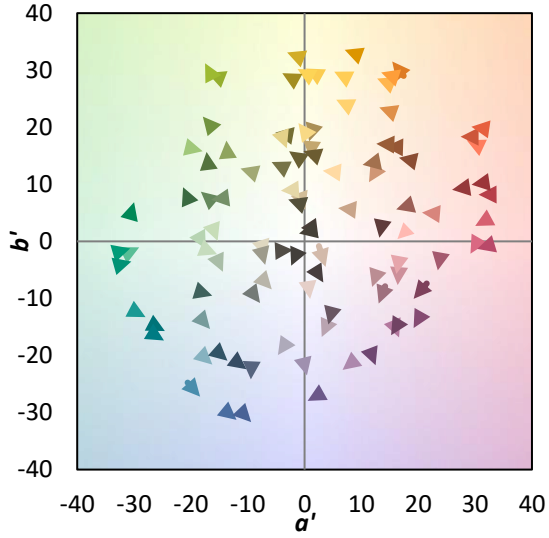


Color Vector Graphics









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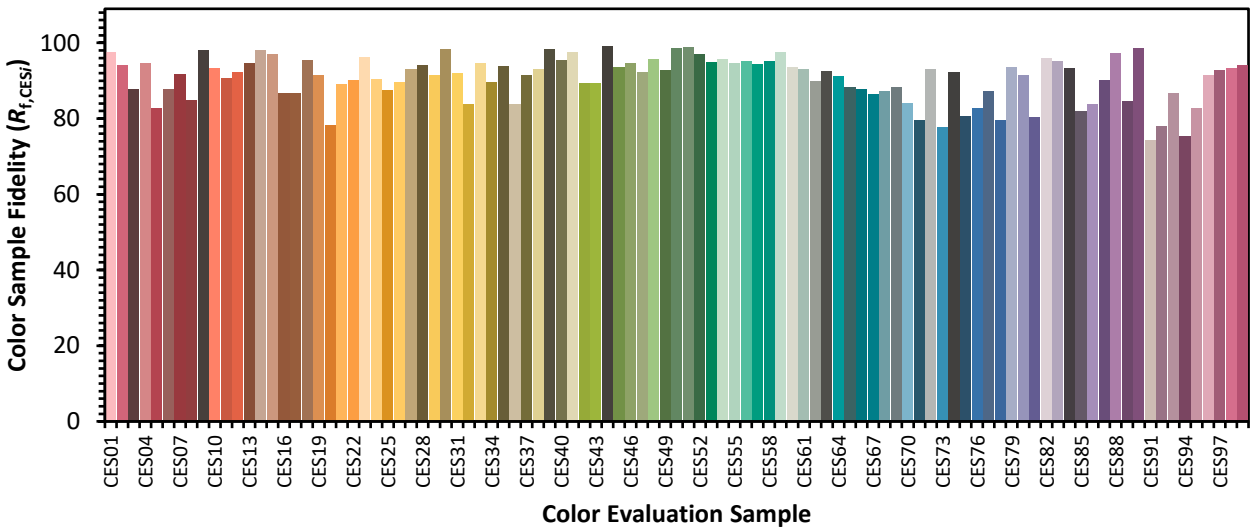
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 90	CES51 = 99	CES76 = 83
CES02 = 62	CES27 = 93	CES52 = 97	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 95	CES78 = 79
CES04 = 69	CES29 = 91	CES54 = 96	CES79 = 94
CES05 = 49	CES30 = 98	CES55 = 95	CES80 = 91
CES06 = 50	CES31 = 92	CES56 = 95	CES81 = 80
CES07 = 42	CES32 = 84	CES57 = 94	CES82 = 96
CES08 = 41	CES33 = 95	CES58 = 95	CES83 = 95
CES09 = 29	CES34 = 90	CES59 = 98	CES84 = 93
CES10 = 74	CES35 = 94	CES60 = 93	CES85 = 82
CES11 = 57	CES36 = 84	CES61 = 93	CES86 = 84
CES12 = 63	CES37 = 92	CES62 = 90	CES87 = 90
CES13 = 43	CES38 = 93	CES63 = 92	CES88 = 97
CES14 = 74	CES39 = 98	CES64 = 91	CES89 = 84
CES15 = 71	CES40 = 96	CES65 = 88	CES90 = 99
CES16 = 47	CES41 = 98	CES66 = 88	CES91 = 74
CES17 = 49	CES42 = 89	CES67 = 87	CES92 = 78
CES18 = 56	CES43 = 89	CES68 = 87	CES93 = 87
CES19 = 71	CES44 = 99	CES69 = 88	CES94 = 75
CES20 = 66	CES45 = 93	CES70 = 84	CES95 = 83
CES21 = 85	CES46 = 95	CES71 = 80	CES96 = 91
CES22 = 78	CES47 = 92	CES72 = 93	CES97 = 93
CES23 = 91	CES48 = 96	CES73 = 78	CES98 = 93
CES24 = 90	CES49 = 93	CES74 = 92	CES99 = 94
CES25 = 71	CES50 = 99	CES75 = 81	



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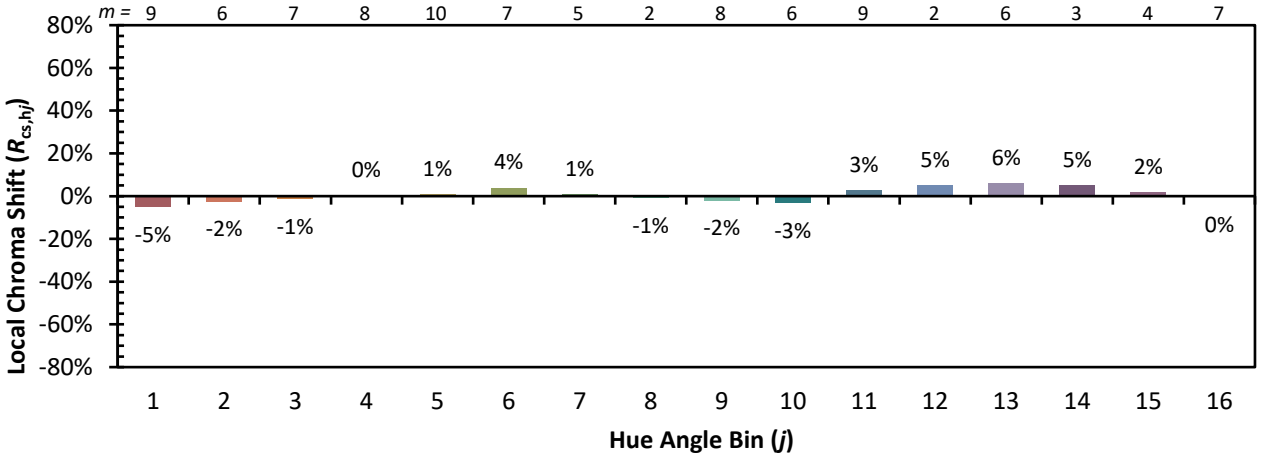
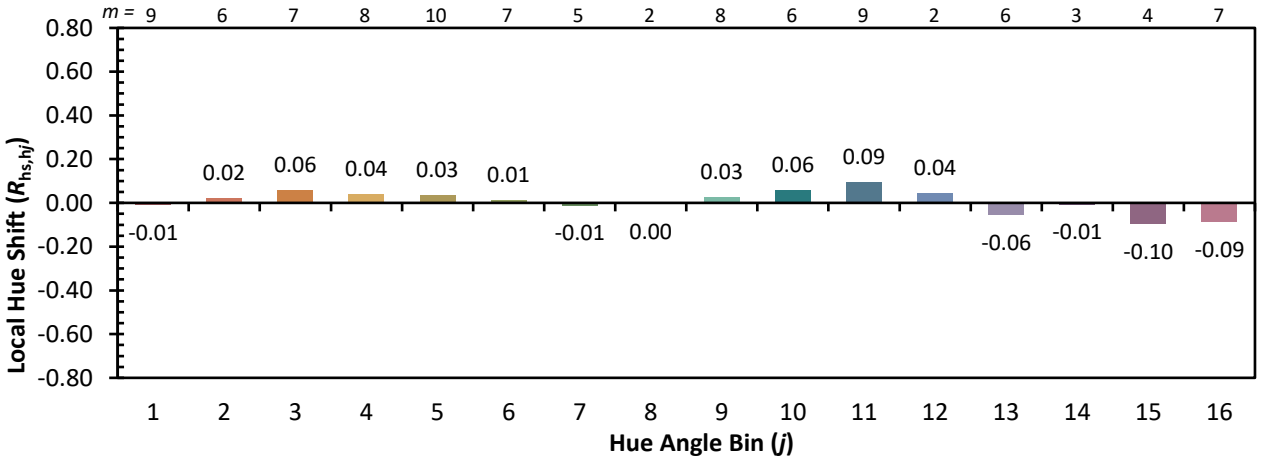
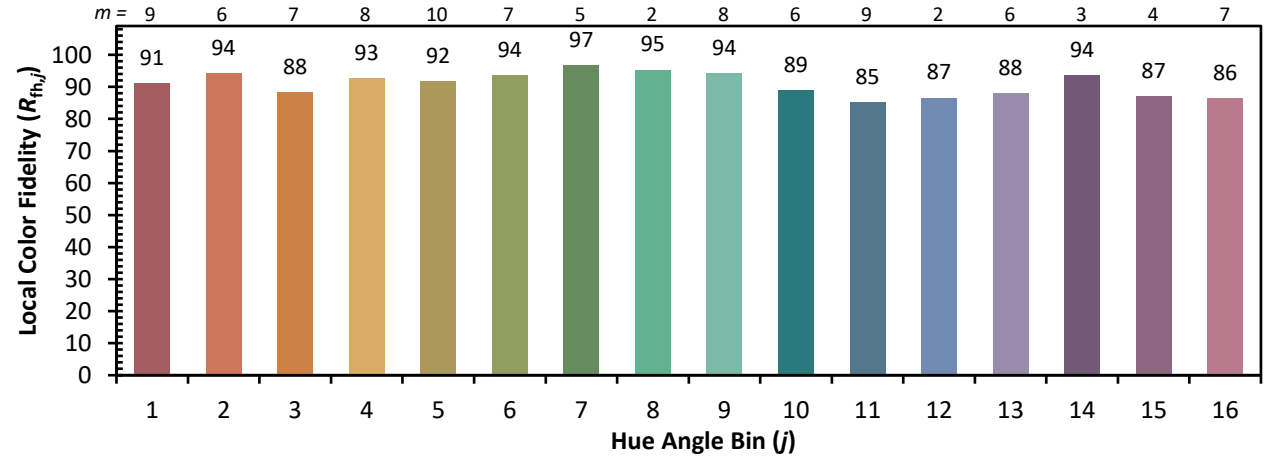
Color Rendition by Hue-Angle Bin







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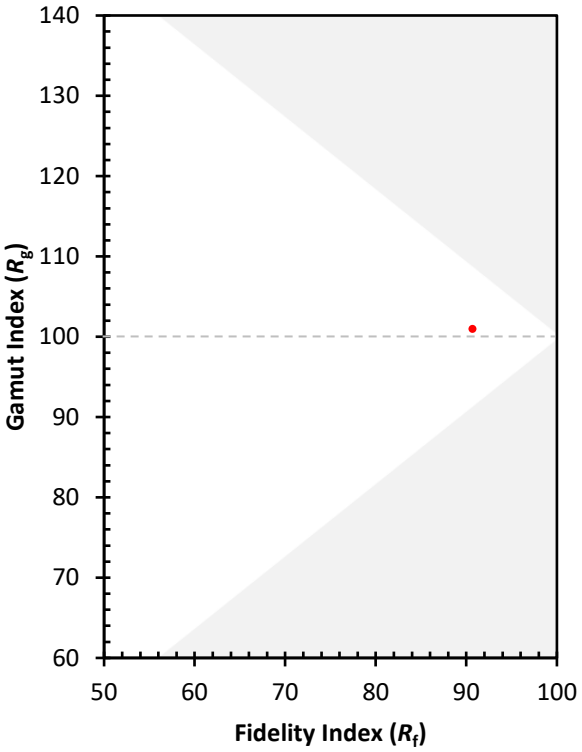
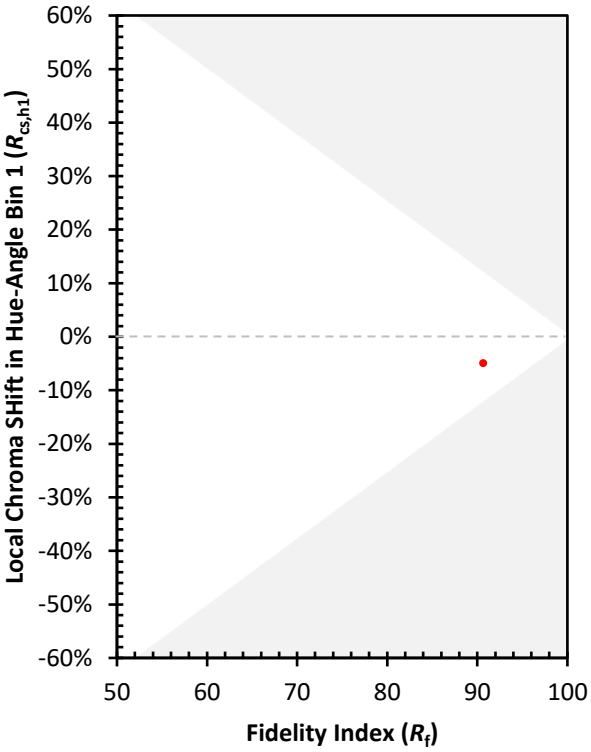
Measure Comparisons





(END OF REPORT)