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: P1433932

Luminaire Tested: EHBR1-54-UNV-ASM-L940-UPL15

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:	P1433932
	REPORT IS A COMBINATION OF REPORTS P1431869 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-54-UNV-ASM-L940-UPL15
Description:	Elevate Round Highbay at, 54000 lumens, 4000K 90CRI LEDs with ASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	51453.8 lumens
Efficiency:	N/A
Efficacy:	168.5 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:	Direct

Input Watts (W):	305.3
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: P1433932
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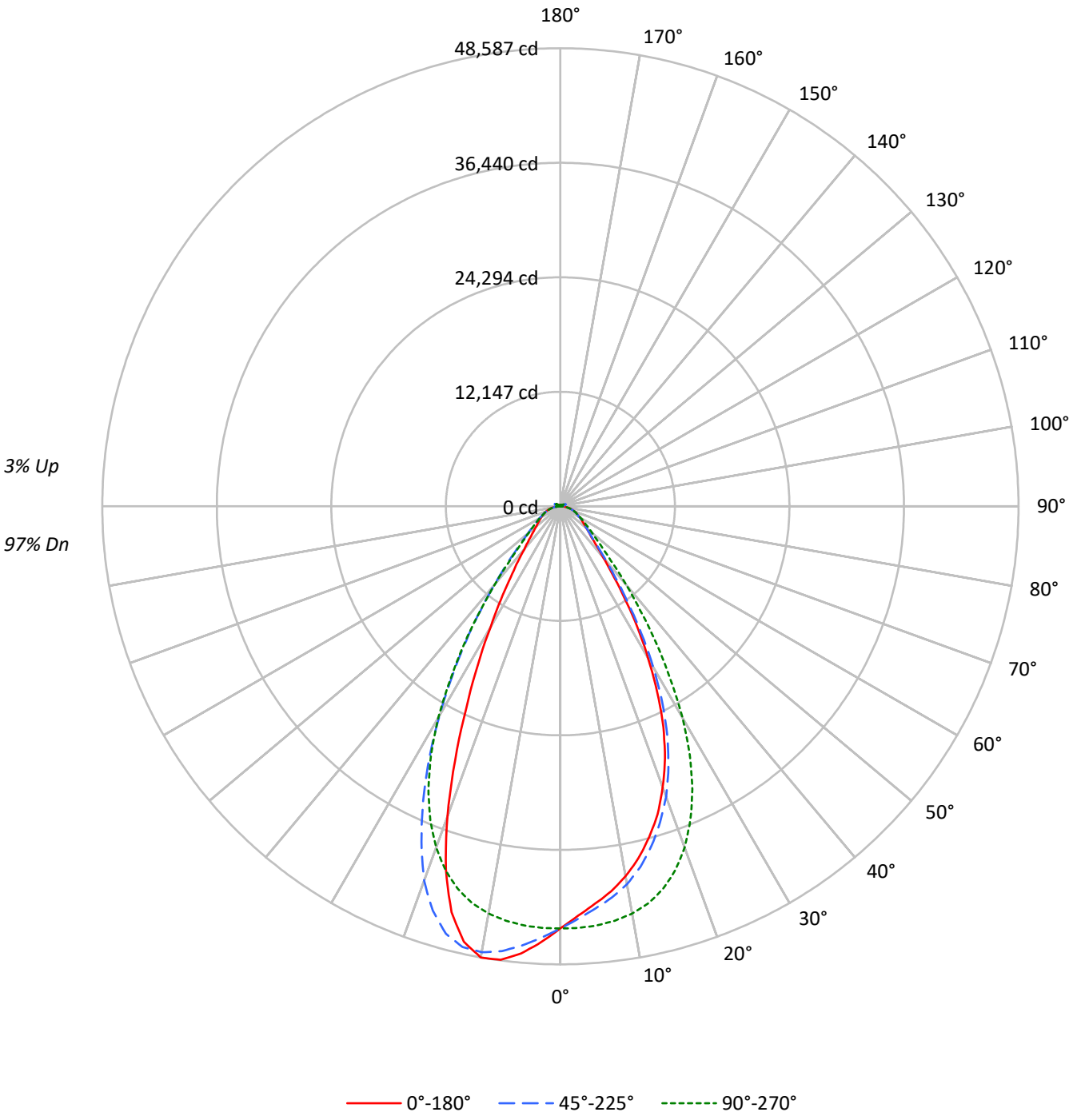
Luminous Intensity Polar Plot



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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	110	110	110	104	104	104	100	100	100	97
1	111	108	105	102	108	105	103	100	101	98	96	96	95	93	93	91	90	88
2	104	98	93	89	102	96	92	88	93	89	86	89	86	83	86	83	81	79
3	98	90	84	79	95	88	83	79	85	81	77	82	79	75	80	77	74	72
4	92	83	76	71	90	82	76	71	79	74	70	77	72	69	74	71	67	66
5	87	77	70	65	85	76	69	65	73	68	64	71	67	63	70	65	62	60
6	82	71	65	60	80	70	64	59	69	63	59	67	62	58	65	61	57	56
7	77	67	60	55	75	66	59	55	64	58	54	63	57	54	61	57	53	52
8	73	62	56	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48
9	69	58	52	47	68	58	52	47	57	51	47	55	50	47	54	50	46	45
10	66	55	49	44	64	54	48	44	53	48	44	52	47	44	51	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	210277	210277	210277	210277	210277
5°	198152	200468	208998	219021	222961
10°	187534	191506	206428	226053	228686
15°	173231	177857	200334	223734	212520
20°	154300	159497	187362	205656	170412
25°	129310	134204	165830	172498	118071
30°	96749	102359	134648	133304	76814
35°	64409	68297	96574	95014	49746
40°	40620	43410	62438	62840	34288
45°	28941	30145	39617	41319	26560
50°	24107	24299	29420	30186	22569
55°	21280	21330	24020	24654	20559
60°	19703	19536	20799	21240	19585
65°	18808	18639	18960	19331	18888
70°	18268	17951	17970	18316	18507
75°	17366	16843	16806	17403	17904
80°	15800	14700	14762	15800	16903
85°	11507	9552	9552	10922	12069

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
Vertical Angle: 45°
Luminance: 55699 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4257.6	8.3
10°-20°	11583.1	22.5
20°-30°	13584.6	26.4
30°-40°	9447.2	18.4
40°-50°	4694.8	9.1
50°-60°	2808.0	5.5
60°-70°	1976.4	3.8
70°-80°	1273.1	2.5
80°-90°	406.8	0.8
90°-100°	38.8	0.1
100°-110°	244.4	0.5
110°-120°	449.9	0.9
120°-130°	268.8	0.5
130°-140°	164.5	0.3
140°-150°	115.6	0.2
150°-160°	77.5	0.2
160°-170°	46.4	0.1
170°-180°	15.9	0.0
0°-30°	29425.3	57.2
0°-40°	38872.6	75.5
0°-60°	46375.4	90.1
0°-90°	50031.8	97.2
90°-120°	733.2	1.4
90°-150°	1282.2	2.5
90°-180°	1422.0	2.8
0°-180°	51453.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	44777	44777	44777	44777	44777	
5°	42309	42803	44624	46764	47606	3969
15°	36343	37314	42029	46938	44586	10135
25°	25823	26800	33116	34448	23579	11651
35°	11821	12535	17725	17438	9130	7530
45°	4683	4877	6410	6685	4297	3785
55°	2876	2882	3246	3332	2778	2609
65°	1963	1946	1979	2018	1972	1949
75°	1223	1186	1184	1226	1261	1291
85°	396	328	328	375	415	407
90°	11	29	11	32	17	25
95°	18	63	21	56	24	17
105°	86	424	112	454	62	114
115°	388	502	478	556	413	358
125°	281	270	308	301	326	256
135°	207	210	198	220	230	162
145°	176	185	182	185	190	112
155°	162	166	165	165	173	76
165°	160	163	163	164	171	46
175°	164	166	167	168	175	16
180°	168	168	168	168	168	

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Scaled Data Report

TEST NUMBER: P1433932
CATALOG NUMBER: EHBR1-54-UNV-ASM-L940-UPL15

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	44777.0	44777.0	44777.0	44777.0	44777.0	44777.0	44777.0	44777.0	*44777.0*
2.5°	43448.0	43476.5	43780.4	44175.9	44751.1	45329.5	45798.0	46107.1	*46259.9*
5°	42308.6	42466.4	42803.1	43529.4	44624.3	45782.9	46764.5	47406.8	*47605.8*
7.5°	41198.5	41290.1	41853.5	42771.2	44321.1	46126.4	47584.8	48334.6	*48517.7*
10°	*39844.2*	*40051.6*	*40688.1*	*41770.3*	*43858.5*	*46343.0*	*48028.1*	*48565.5*	*48587.4*
12.5°	38250.6	38525.1	39182.5	40547.8	43120.5	46265.7	47879.5	47703.3	*47302.7*
15°	36342.9	36583.9	37313.5	38897.1	42029.0	45808.1	46938.3	45503.4	*44585.6*
17.5°	34282.4	34500.7	35134.7	36878.6	40490.7	44951.7	44973.5	42134.7	*40403.4*
20°	31713.1	31884.5	32781.2	34492.3	38508.4	43578.0	42268.2	37075.9	*35024.7*
22.5°	28979.3	29139.7	29936.5	31717.3	36023.0	41725.8	38500.7	31986.9	*29188.4*
25°	25823.1	25910.4	26800.4	28410.8	33116.2	39456.3	34447.8	26441.9	*23578.7*
27.5°	22272.2	22420.9	23352.0	24996.9	29697.1	36579.7	30132.1	21607.3	*18965.7*
30°	18609.7	18855.8	19688.7	21161.4	25899.5	32891.9	25640.9	17207.5	*14775.2*
32.5°	15191.6	15368.7	15962.4	17501.4	21647.5	29277.3	21327.6	13787.7	*11727.2*
35°	11821.3	11998.4	12534.9	14046.3	17724.8	24755.0	17438.5	10833.8	*9130.2*
37.5°	9036.2	9349.3	9693.6	10920.4	13910.3	20482.1	13901.1	8723.8	*7405.7*
40°	7040.4	7090.8	7524.0	8309.1	10822.1	16015.3	10891.8	6964.0	*5943.0*
42.5°	5635.6	5772.5	5958.9	6546.7	8199.9	12246.1	8561.0	5715.5	*5047.9*
45°	4682.6	4736.4	4877.4	5272.1	6409.8	9011.8	6685.2	4822.0	*4297.3*
47.5°	4096.6	4073.1	4163.8	4459.3	5220.0	6964.8	5418.2	4136.0	*3768.3*
50°	3592.8	3578.5	3621.4	3818.6	4384.6	5344.3	4498.8	3610.4	*3363.6*
52.5°	3201.5	3214.2	3218.4	3340.9	3766.6	4358.5	3831.3	3217.5	*3051.2*
55°	2875.8	2891.7	2882.5	2973.2	3246.0	3664.2	3331.7	2893.4	*2778.4*
57.5°	2621.4	2609.6	2597.0	2645.7	2850.6	3108.3	2893.4	2617.2	*2540.8*
60°	2368.6	2357.7	2348.5	2380.4	2500.4	2691.9	2553.4	2376.2	*2354.4*
62.5°	2152.0	2145.3	2144.5	2138.6	2230.9	2351.8	2257.8	2159.6	*2140.3*
65°	1963.1	1955.5	1945.5	1936.2	1979.0	2091.5	2017.7	1964.7	*1971.5*
67.5°	1774.1	1774.1	1756.5	1742.3	1784.2	1843.0	1811.1	1780.8	*1788.4*
70°	1602.9	1603.7	1575.1	1564.2	1576.8	1639.8	1607.1	1611.3	*1623.9*
72.5°	1419.0	1398.9	1377.8	1377.0	1378.6	1427.4	1416.5	1426.5	*1440.0*
75°	1223.3	1199.9	1186.5	1171.3	1183.9	1220.8	1225.9	1240.1	*1261.2*
77.5°	1034.4	998.4	987.5	979.8	971.4	1013.4	1029.4	1048.8	*1079.8*
80°	831.2	791.8	773.3	762.4	776.6	796.0	831.2	845.6	*889.2*
82.5°	614.6	585.3	562.5	561.7	568.4	586.1	616.3	643.2	*668.4*
85°	395.5	348.4	328.3	335.9	328.3	355.1	375.4	407.2	*414.8*
87.5°	142.7	111.7	106.7	117.6	115.1	123.4	141.1	153.6	*154.5*
90°	10.8	17.0	28.6	18.5	10.8	18.6	31.8	20.4	*16.7*
92.5°	15.5	25.5	45.5	23.9	14.0	24.8	44.1	25.8	*20.6*
95°	17.8	29.3	63.3	31.7	21.0	30.2	55.6	28.1	*23.7*
97.5°	23.2	32.4	72.5	38.6	31.7	37.1	62.6	29.7	*27.5*
100°	30.2	37.8	112.5	47.9	41.7	41.7	112.6	33.5	*30.6*
102.5°	50.2	79.4	238.0	88.7	62.5	81.1	259.0	63.6	*36.0*
105°	85.6	166.4	423.6	184.2	112.5	182.7	453.9	156.8	*62.2*
107.5°	147.2	297.3	559.3	325.1	211.9	339.0	584.0	304.6	*137.0*
110°	273.5	394.4	586.2	446.0	338.2	473.1	637.2	415.6	*270.9*

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Scaled Data Report

TEST NUMBER: P1433932
CATALOG NUMBER: EHBR1-54-UNV-ASM-L940-UPL15

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	369.0	423.6	561.5	492.2	439.8	526.9	622.5	460.2	*372.6*
115°	388.3	407.4	501.5	480.6	478.4	519.3	556.3	458.6	*412.6*
117.5°	375.2	372.0	426.0	433.0	462.3	475.3	480.8	431.0	*415.0*
120°	347.4	331.2	355.9	378.3	417.6	412.3	406.2	390.2	*391.9*
122.5°	312.8	294.3	306.0	322.9	362.2	350.7	343.8	349.4	*360.3*
125°	281.3	262.0	270.5	275.3	307.5	296.0	300.7	314.0	*325.7*
127.5°	252.8	239.6	245.2	241.4	262.2	256.8	269.2	284.0	*294.1*
130°	233.6	222.8	229.8	219.9	229.9	230.6	246.9	260.1	*266.4*
132.5°	218.2	211.3	220.0	207.7	209.9	215.3	230.8	242.5	*246.4*
135°	206.6	201.3	209.9	199.3	197.7	205.2	220.1	227.0	*229.5*
137.5°	197.5	192.9	202.4	194.0	190.8	198.4	209.2	215.6	*214.8*
140°	190.0	186.1	195.6	188.6	187.1	194.6	199.3	206.3	*206.5*
142.5°	181.6	178.5	189.4	184.8	183.3	190.1	192.4	197.9	*197.2*
145°	176.4	174.0	184.8	181.8	181.8	187.1	184.7	191.0	*190.3*
147.5°	171.9	170.3	179.5	177.9	177.9	181.8	179.4	184.8	*184.3*
150°	168.2	166.6	175.0	173.4	174.1	177.2	173.3	179.5	*180.5*
152.5°	164.4	162.0	169.7	168.1	168.8	171.9	168.8	175.8	*175.9*
155°	162.3	159.9	165.9	164.2	165.1	166.7	165.1	172.2	*173.0*
157.5°	161.6	159.2	163.8	162.9	162.9	164.5	163.8	170.0	*170.9*
160°	161.1	159.4	163.2	162.4	162.5	164.0	164.1	169.6	*170.4*
162.5°	160.4	158.8	163.3	162.6	162.6	162.6	163.5	169.0	*170.7*
165°	160.5	159.7	162.8	162.8	162.8	163.6	163.7	168.4	*170.9*
167.5°	160.5	159.8	163.6	163.6	163.7	162.9	164.6	169.5	*171.9*
170°	161.5	160.6	163.7	163.8	163.0	163.9	164.7	169.6	*172.0*
172.5°	163.1	162.3	166.2	165.5	165.6	165.6	166.5	170.6	*173.8*
175°	164.1	163.2	166.4	166.4	167.2	167.2	168.2	171.5	*174.8*
177.5°	165.6	164.8	166.4	166.4	166.4	168.1	169.7	173.2	*177.1*
180°	168.1	168.1	168.1	168.1	168.1	168.1	168.1	168.1	*168.1*

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Scaled Data Report

TEST NUMBER: P1433932
CATALOG NUMBER: EHBR1-54-UNV-ASM-L940-UPL15

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	18.85	20.02	19.27	20.39	20.78	19.62	20.78	20.04	21.16	21.54
	3H	20.67	21.71	21.10	22.10	22.53	21.18	22.22	21.61	22.61	23.04
	4H	21.41	22.38	21.86	22.79	23.24	21.83	22.80	22.28	23.21	23.66
	6H	21.98	22.87	22.45	23.30	23.76	22.33	23.21	22.79	23.64	24.11
	8H	22.16	23.00	22.65	23.45	23.93	22.49	23.32	22.97	23.77	24.25
	12H	22.27	23.07	22.75	23.51	24.01	22.57	23.37	23.05	23.81	24.31
4H	2H	19.37	20.34	19.83	20.75	21.20	20.00	20.97	20.46	21.38	21.83
	3H	21.42	22.21	21.88	22.67	23.14	21.81	22.61	22.28	23.07	23.54
	4H	22.28	23.00	22.77	23.47	23.98	22.60	23.31	23.09	23.79	24.30
	6H	22.98	23.59	23.49	24.09	24.63	23.24	23.85	23.75	24.35	24.89
	8H	23.20	23.78	23.72	24.28	24.82	23.44	24.02	23.96	24.52	25.05
	12H	23.34	23.85	23.88	24.38	24.92	23.56	24.07	24.09	24.60	25.14
8H	4H	22.54	23.12	23.06	23.62	24.15	22.85	23.42	23.36	23.92	24.46
	6H	23.36	23.83	23.91	24.38	24.92	23.61	24.08	24.16	24.63	25.17
	8H	23.66	24.08	24.23	24.64	25.20	23.89	24.31	24.46	24.87	25.43
	12H	23.86	24.23	24.43	24.77	25.41	24.08	24.44	24.64	24.99	25.62
12H	4H	22.55	23.06	23.09	23.59	24.13	22.86	23.36	23.39	23.90	24.44
	6H	23.40	23.81	23.97	24.38	24.94	23.65	24.07	24.22	24.63	25.19
	8H	23.75	24.11	24.31	24.66	25.29	23.98	24.35	24.55	24.89	25.53

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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

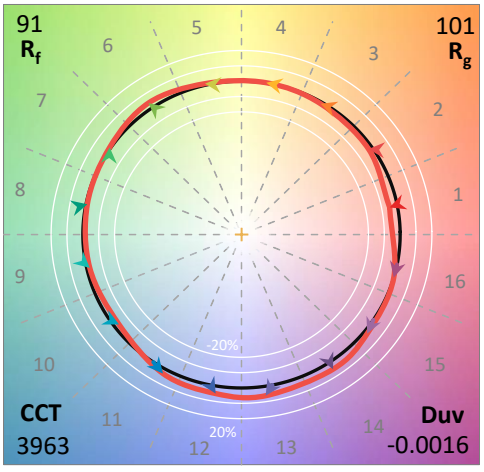
Test Information

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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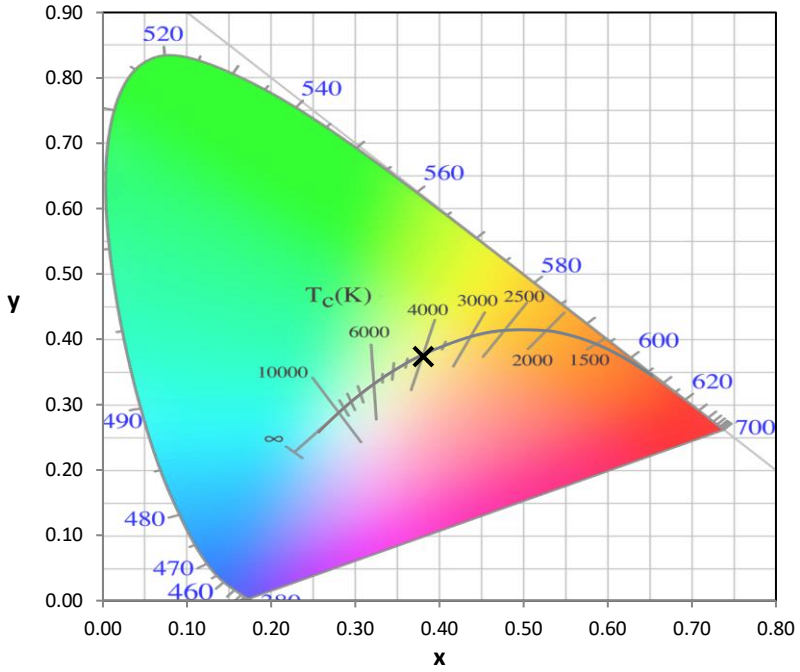
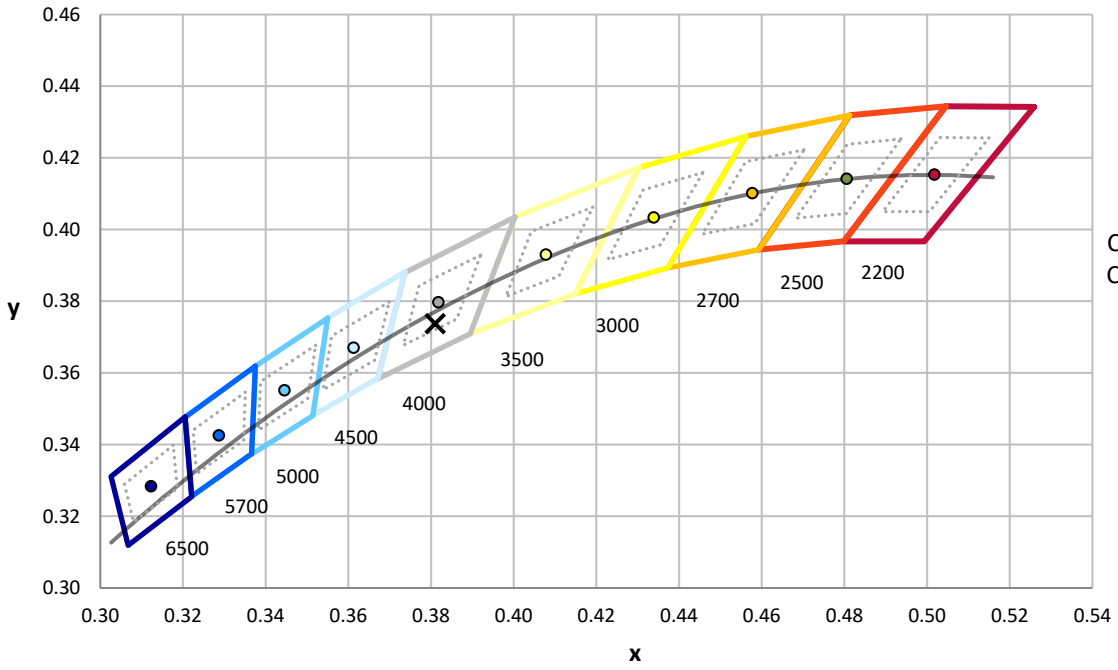
CIE 1931 Chromaticity Diagram



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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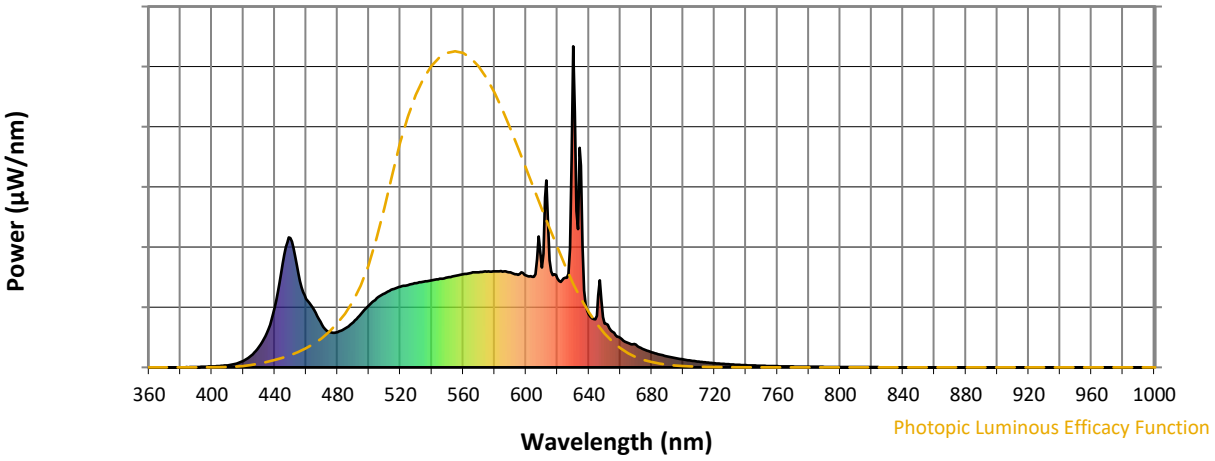
Photopic Flux vs. Wavelength



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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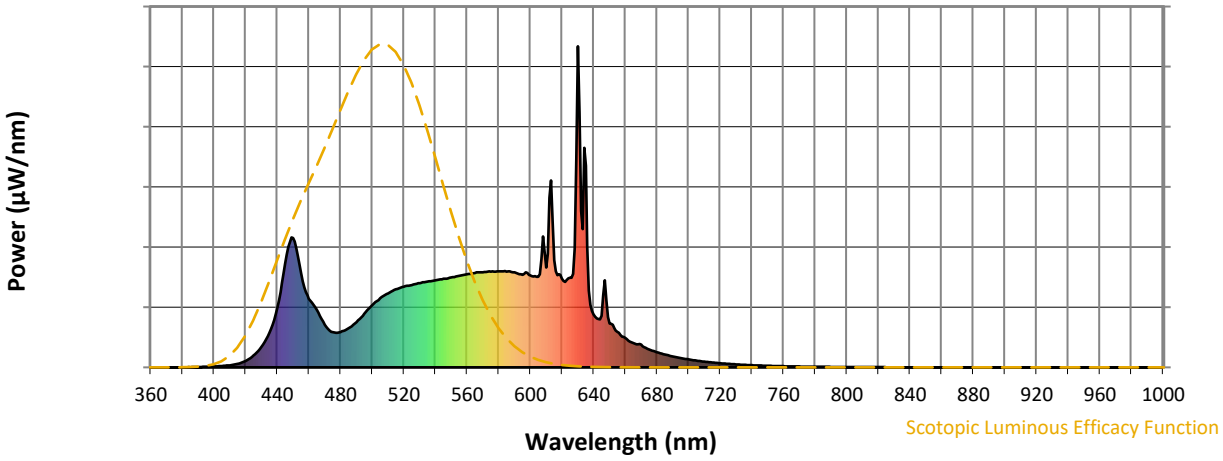
Scotopic Flux vs. Wavelength



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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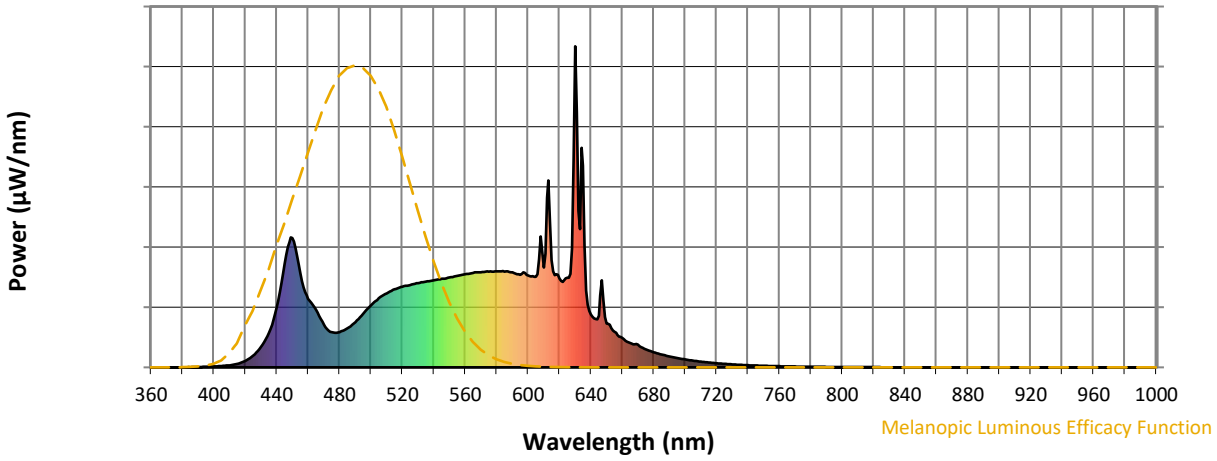
Melanopic Flux vs. Wavelength



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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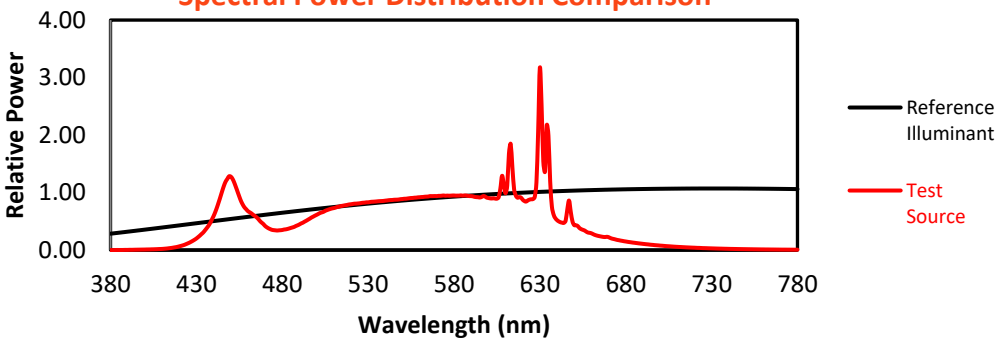
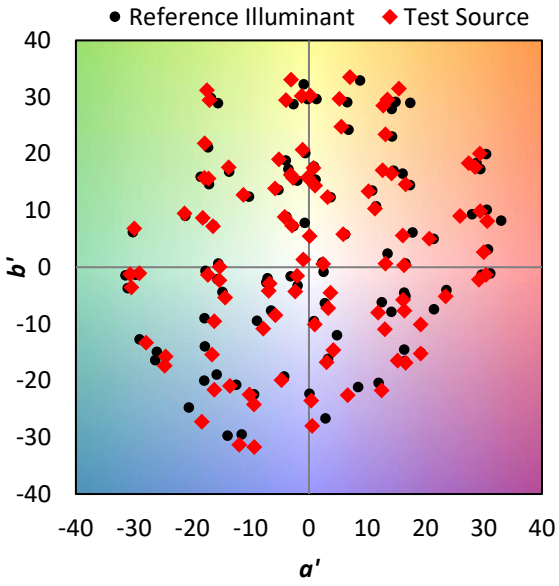
Summary

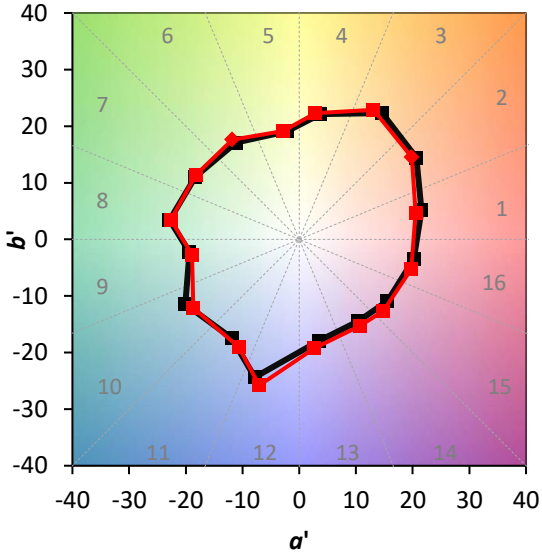
R_f = 90.7
R_g = 101
CIE R_a = 93.4
R_9 = 66.4

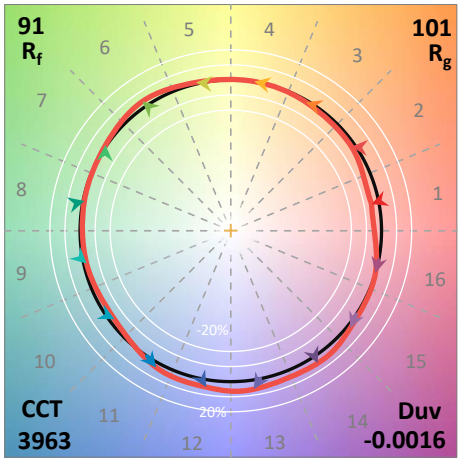
Spectral Power Distribution Comparison

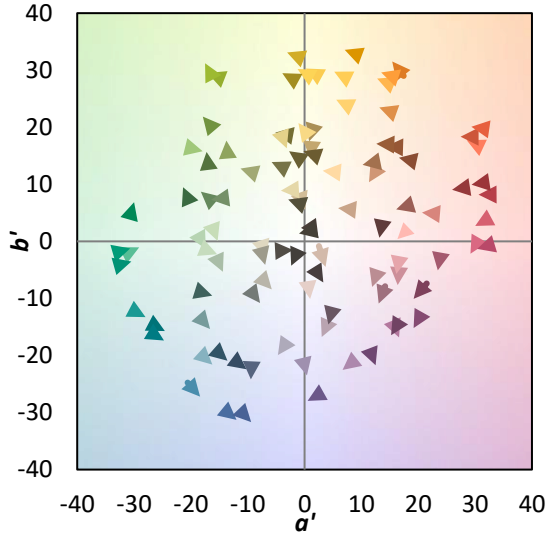


Color Vector Graphics









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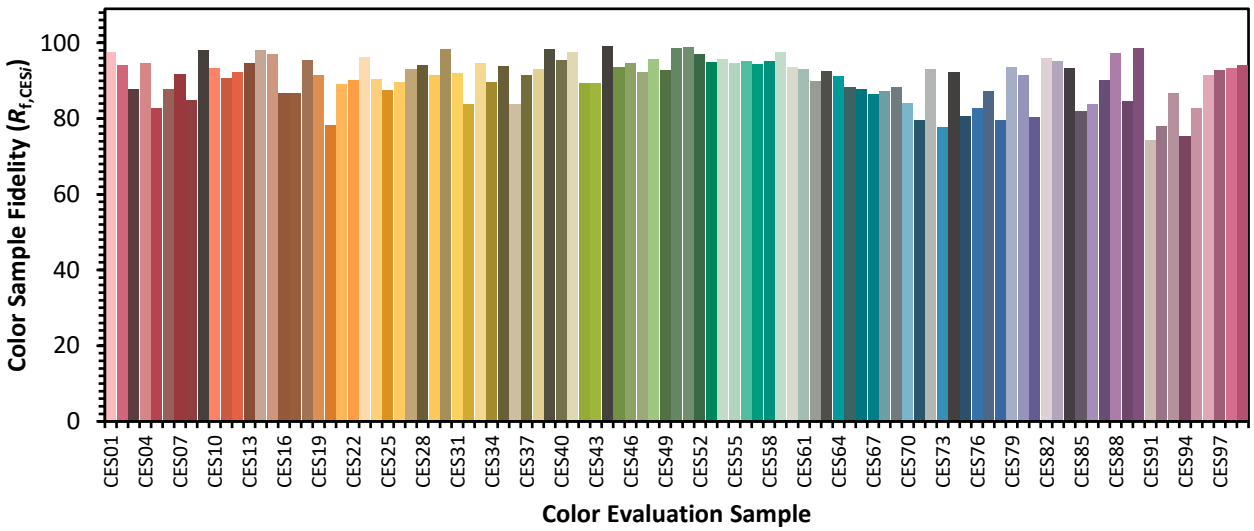
Individual Sample Fidelity Index ($R_{f,i}$)

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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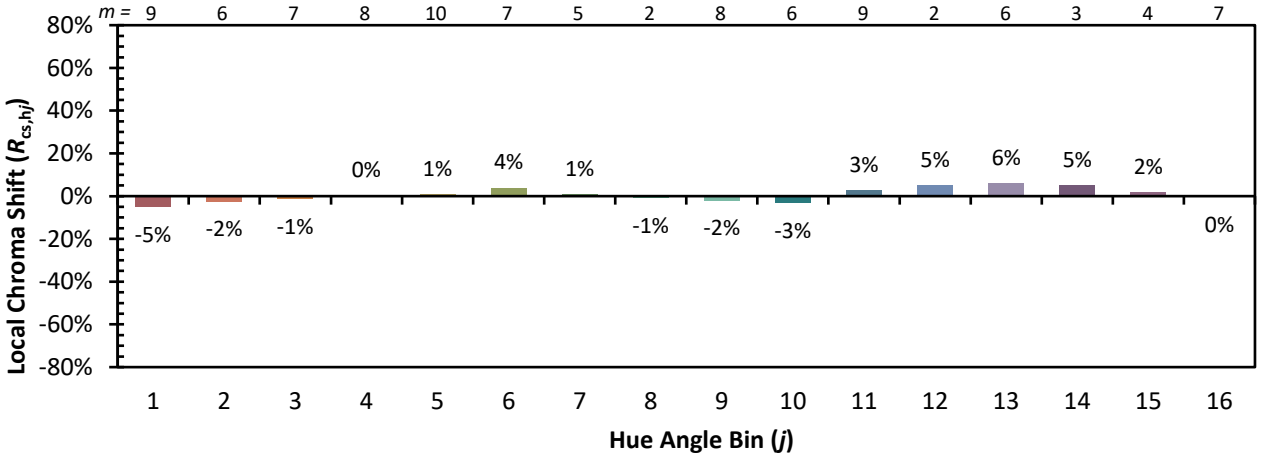
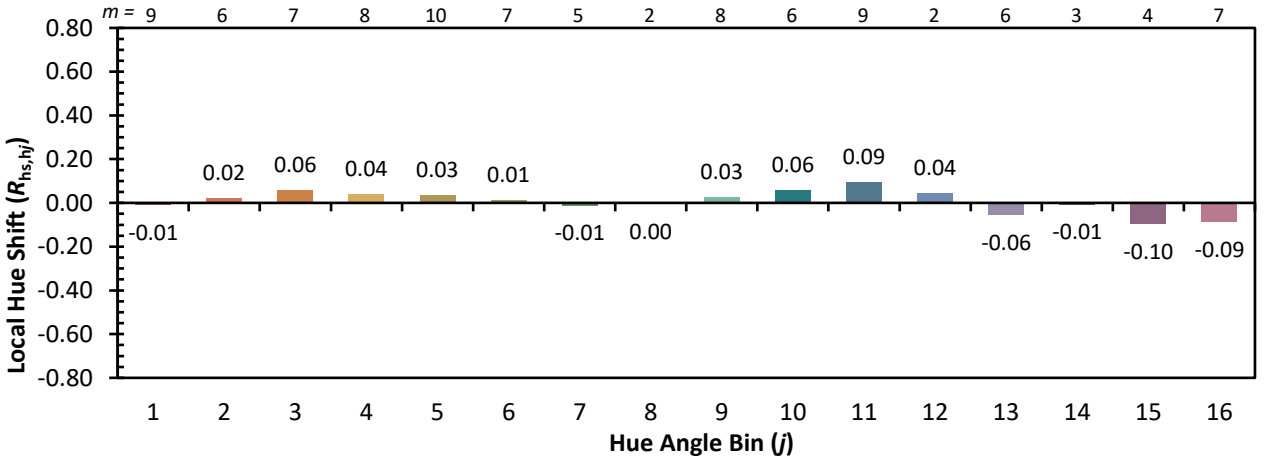
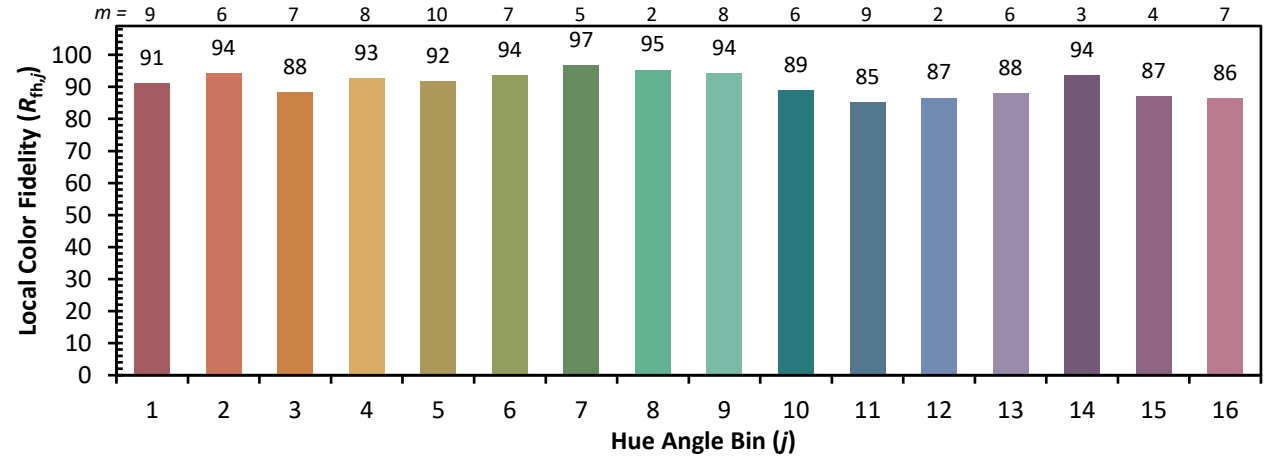
Color Rendition by Hue-Angle Bin







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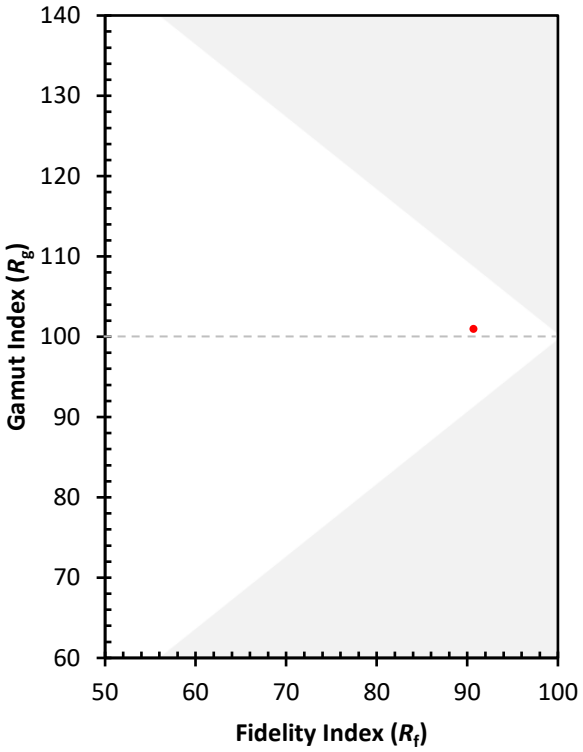
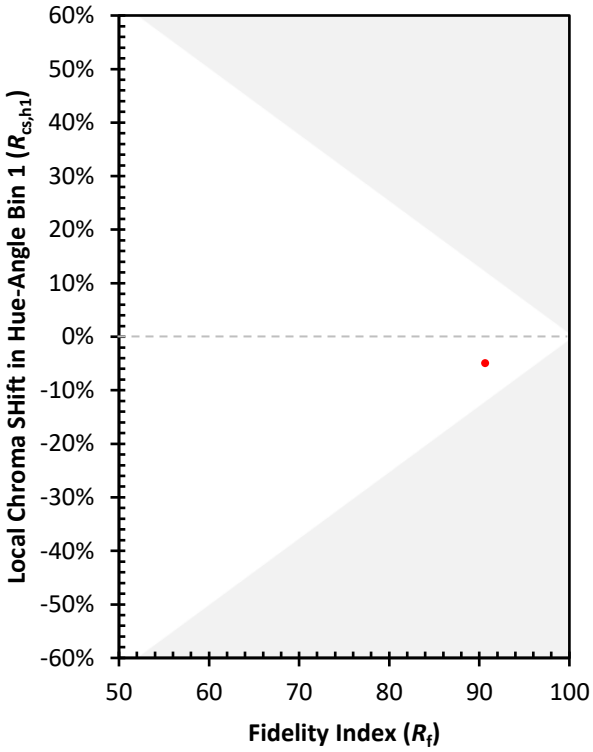
Measure Comparisons





(END OF REPORT)