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:

Luminaire Tested: EHBR1-18-UNV-A1-L950-UPL18

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:	
	REPORT IS A COMBINATION OF REPORTS P1431670 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-18-UNV-A1-L950-UPL18
Description:	Elevate Round Highbay at, 19000 lumens, 5000K 90CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	18732.8 lumens
Efficiency:	N/A
Efficacy:	175.7 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):	106.6
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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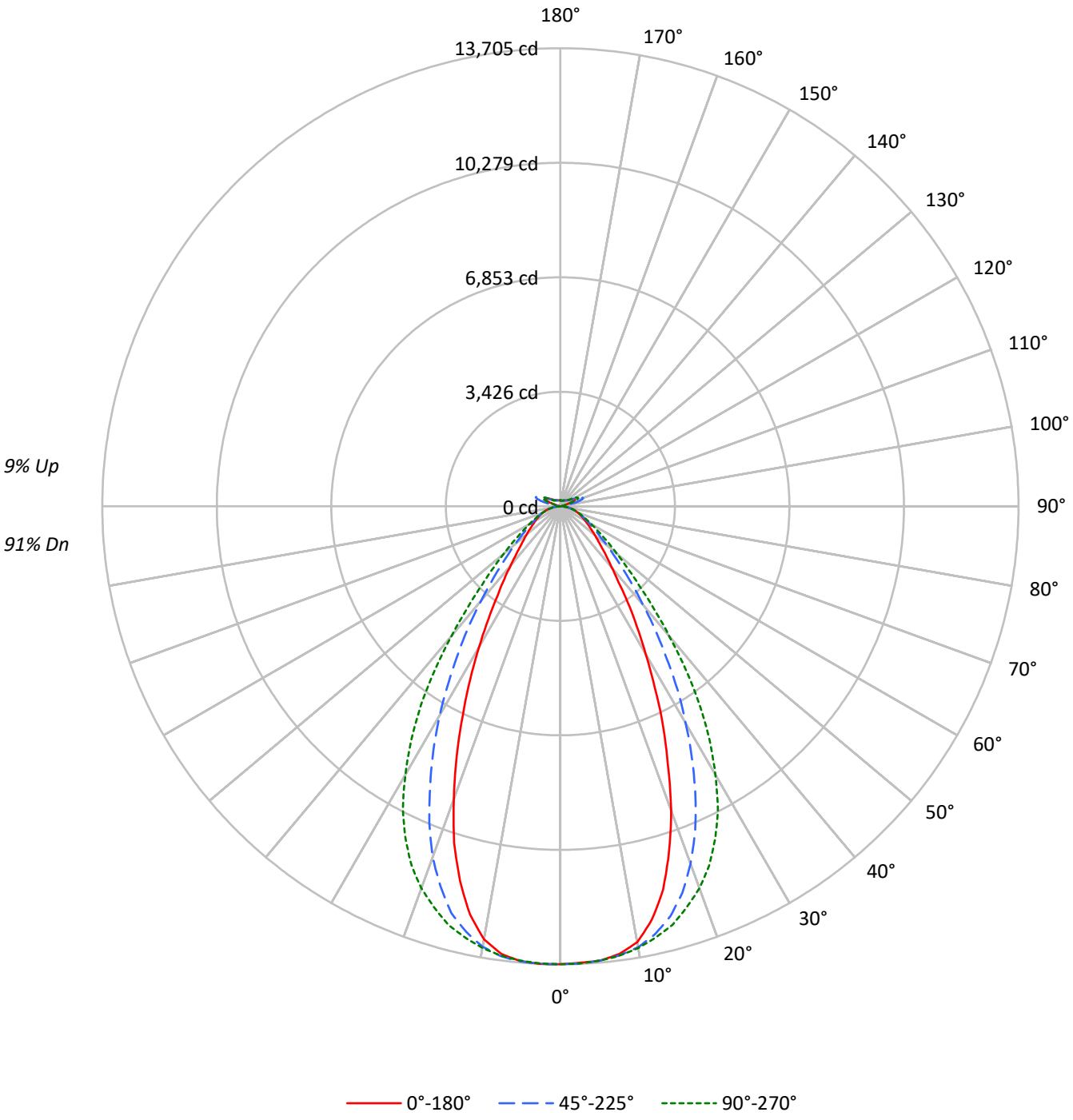
Scaled Data Report

TEST NUMBER:
CATALOG NUMBER: EHBR1-18-UNV-A1-L950-UPL18

Luminous Intensity Polar Plot



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TEST NUMBER:
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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	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	91
1	109	106	103	100	106	103	100	97	97	95	93	92	90	88	87	85	84	82
2	102	96	91	86	99	93	89	85	88	85	81	84	81	78	80	77	75	73
3	95	87	81	76	92	85	79	75	81	76	72	77	73	70	74	71	68	66
4	89	80	73	68	86	78	72	67	74	69	65	71	67	63	68	65	61	59
5	83	73	66	61	81	72	65	60	69	63	59	66	61	57	63	59	56	54
6	78	68	60	55	76	66	60	55	64	58	54	61	56	52	59	55	51	50
7	74	63	56	51	72	61	55	50	59	53	49	57	52	48	55	51	47	46
8	69	58	51	46	68	57	51	46	55	49	45	54	48	45	52	47	44	42
9	66	54	48	43	64	54	47	43	52	46	42	50	45	41	49	44	41	39
10	62	51	44	40	61	50	44	40	49	43	39	47	42	39	46	41	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	64332	64332	64332	64332	64332
5°	63907	63897	63900	64013	63974
10°	62327	63054	63154	62975	61919
15°	56583	60531	61777	60046	55284
20°	47151	55379	59161	54336	45316
25°	36465	47884	54883	46134	34576
30°	26580	38995	48211	37516	25229
35°	19160	30056	39622	28762	17909
40°	13784	22199	29199	21262	13359
45°	10862	16240	20394	15536	10486
50°	9011	12202	14761	11799	8875
55°	7870	9635	11178	9473	7764
60°	7098	8043	8907	7993	7148
65°	6638	7094	7485	7116	6702
70°	6305	6455	6655	6490	6367
75°	5881	5844	5881	5861	5938
80°	5313	4931	4821	5007	5313
85°	3681	3122	3090	3171	3791

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 21367 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1293.7	6.9
10°-20°	3476.9	18.6
20°-30°	4227.9	22.6
30°-40°	3443.9	18.4
40°-50°	2067.7	11.0
50°-60°	1190.0	6.4
60°-70°	744.7	4.0
70°-80°	438.6	2.3
80°-90°	131.3	0.7
90°-100°	45.2	0.2
100°-110°	298.9	1.6
110°-120°	552.9	3.0
120°-130°	328.1	1.8
130°-140°	198.2	1.1
140°-150°	137.3	0.7
150°-160°	89.4	0.5
160°-170°	51.0	0.3
170°-180°	16.9	0.1
0°-30°	8998.5	48.0
0°-40°	12442.4	66.4
0°-60°	15700.1	83.8
0°-90°	17014.8	90.8
90°-120°	896.9	4.8
90°-150°	1560.6	8.3
90°-180°	1718.0	9.2
0°-180°	18732.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	13699	13699	13699	13699	13699	
5°	13645	13643	13644	13668	13660	1290
15°	11871	12699	12960	12597	11598	3266
25°	7282	9562	10960	9213	6905	3318
35°	3516	5516	7272	5279	3287	2225
45°	1757	2628	3300	2514	1697	1386
55°	1064	1302	1511	1280	1049	961
65°	693	740	781	743	700	689
75°	414	412	414	413	418	439
85°	126	107	106	109	130	135
90°	13	34	12	36	13	12
95°	22	77	24	66	21	21
105°	104	523	137	557	68	140
115°	479	618	588	684	501	441
125°	346	330	376	366	393	315
135°	253	254	237	265	274	198
145°	209	218	215	221	225	133
155°	185	191	190	191	200	86
165°	176	180	178	178	184	50
175°	176	178	177	176	180	17
180°	177	177	177	177	177	

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Scaled Data Report

TEST NUMBER:
CATALOG NUMBER: EHBR1-18-UNV-A1-L950-UPL18

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	13699.0	13699.0	13699.0	13699.0	13699.0	13699.0	*13699.0*	13699.0	13699.0
2.5°	*13668.9*	*13681.3*	*13686.4*	*13689.3*	*13692.4*	*13701.1*	*13704.8*	*13698.8*	*13704.0*
5°	13645.2	13646.0	13643.1	13656.0	13643.7	13652.3	*13667.8*	13661.8	13659.5
7.5°	13506.3	13535.0	13551.9	13556.1	13558.5	13569.1	*13580.0*	13518.3	13509.1
10°	13242.3	13290.2	13396.6	13427.1	13417.9	13435.1	*13380.0*	13218.8	13155.6
12.5°	12663.5	12832.0	13108.6	13231.7	13209.3	13224.5	*13036.9*	12696.5	12500.9
15°	11870.8	12117.9	12699.1	12941.9	12960.5	12941.9	*12597.3*	11934.2	11598.2
17.5°	10816.9	11273.1	12129.0	12600.2	12573.1	12582.1	*11927.9*	10947.8	10563.3
20°	9691.0	10177.4	11381.9	12167.8	12159.4	12109.5	*11167.6*	9875.0	9313.7
22.5°	8417.7	9044.9	10525.7	11636.1	11633.0	11549.7	*10241.6*	8703.5	8099.2
25°	7282.0	7897.2	9562.3	10984.8	10960.1	10865.4	*9213.0*	7534.8	6904.8
27.5°	6108.0	6747.5	8533.6	10221.6	10204.6	10101.3	*8229.7*	6442.6	5842.8
30°	5112.6	5697.4	7500.7	9381.7	9273.3	9261.5	*7216.1*	5431.1	4852.7
32.5°	4259.9	4761.2	6526.8	8503.5	8311.6	8366.3	*6205.8*	4585.3	4012.0
35°	3516.5	3958.1	5516.3	7487.8	7272.0	7342.9	*5278.8*	3762.4	3286.9
37.5°	2854.1	3278.7	4659.9	6499.9	6170.0	6303.7	*4463.4*	3142.1	2761.0
40°	2389.2	2726.0	3847.6	5415.9	5061.0	5278.8	*3685.2*	2620.8	2315.4
42.5°	2058.6	2278.5	3175.6	4381.0	4108.7	4263.1	*3037.4*	2190.9	1962.6
45°	1757.4	1932.7	2627.6	3457.1	3299.6	3442.7	*2513.7*	1868.2	1696.6
47.5°	1535.0	1670.2	2163.1	2791.7	2693.9	2739.2	*2099.4*	1630.3	1490.9
50°	1343.0	1447.6	1818.5	2253.2	2199.9	2227.6	*1758.5*	1418.6	1322.7
52.5°	1193.9	1270.5	1525.2	1851.8	1825.4	1829.7	*1498.6*	1247.8	1178.4
55°	1063.6	1117.0	1302.1	1517.0	1510.6	1511.8	*1280.2*	1105.8	1049.2
57.5°	949.7	993.9	1119.0	1274.2	1265.1	1267.0	*1108.6*	982.2	945.7
60°	853.3	882.8	966.9	1076.8	1070.8	1068.2	*960.9*	872.0	859.3
62.5°	767.8	786.8	845.0	923.0	911.6	914.2	*844.7*	787.6	768.9
65°	692.9	699.5	740.5	788.7	781.3	787.6	*742.8*	703.8	699.5
67.5°	619.7	626.3	650.5	682.9	674.3	679.5	*651.0*	628.1	624.4
70°	553.2	552.9	566.4	583.9	583.9	584.8	*569.5*	555.8	558.7
72.5°	484.3	482.6	486.6	498.4	495.2	506.1	*490.1*	485.7	486.3
75°	414.3	409.5	411.7	417.7	414.3	420.1	*412.9*	418.3	418.3
77.5°	348.3	339.1	336.2	337.2	330.9	339.4	*341.2*	344.9	353.5
80°	279.5	266.6	259.4	259.1	253.6	259.1	*263.4*	271.1	279.5
82.5°	207.5	196.2	184.2	181.9	178.5	181.6	*187.4*	196.5	210.1
85°	126.5	114.7	107.3	103.3	106.2	106.2	*109.0*	121.9	130.3
87.5°	45.6	39.9	32.7	33.0	33.8	35.0	*36.4*	45.9	50.2
90°	12.9	20.0	34.3	21.9	12.4	20.9	*36.1*	19.0	12.6
92.5°	18.4	30.5	55.2	28.5	16.2	28.5	*51.4*	25.7	17.4
95°	21.5	35.2	77.1	38.1	23.8	35.2	*65.7*	28.5	21.2
97.5°	27.2	39.0	88.5	46.6	37.2	43.8	*74.2*	30.5	26.0
100°	35.8	45.7	138.1	57.1	49.5	49.5	*136.2*	35.2	30.1
102.5°	60.6	97.1	293.3	107.6	75.3	97.1	*316.2*	71.4	36.7
105°	104.3	204.8	522.8	225.7	137.1	222.8	*557.1*	186.7	68.2
107.5°	180.5	366.6	689.4	400.0	260.0	416.2	*718.0*	369.5	160.6
110°	336.7	486.6	722.8	549.5	416.2	581.8	*783.7*	506.6	326.2

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Scaled Data Report

TEST NUMBER:
CATALOG NUMBER: EHBR1-18-UNV-A1-L950-UPL18

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	454.8	522.8	692.3	606.6	541.9	648.5	*765.6*	561.8	451.9
115°	478.6	502.8	618.0	592.3	588.5	639.0	*683.7*	560.0	501.4
117.5°	462.7	459.0	524.7	532.3	568.5	584.7	*590.5*	525.7	504.3
120°	428.1	408.5	438.1	464.7	513.2	506.6	*497.1*	475.4	475.7
122.5°	385.6	362.2	375.2	395.2	443.7	429.4	*420.0*	424.0	437.0
125°	345.5	322.1	330.4	335.2	376.1	361.9	*366.0*	380.2	393.2
127.5°	310.3	294.5	299.0	293.3	319.0	312.4	*326.9*	343.4	354.1
130°	286.5	272.9	279.3	265.7	278.4	280.2	*299.5*	312.9	319.8
132.5°	266.8	257.9	265.5	249.1	252.9	260.8	*278.9*	290.6	294.4
135°	252.8	244.9	253.5	237.9	237.3	248.7	*264.9*	272.5	273.7
137.5°	240.5	233.8	242.3	230.9	228.0	239.4	*251.9*	257.6	256.1
140°	229.7	223.6	233.2	224.6	222.7	234.1	*239.8*	246.8	244.9
142.5°	217.5	213.7	224.8	219.2	217.2	228.0	*230.9*	235.6	234.0
145°	209.2	206.4	218.5	215.6	214.7	222.6	*220.7*	227.6	224.8
147.5°	202.5	200.3	211.2	210.2	210.2	215.9	*213.3*	219.4	216.8
150°	196.0	193.9	204.8	203.8	204.8	208.6	*205.1*	212.3	211.6
152.5°	189.7	187.5	197.4	196.2	197.2	201.0	*197.7*	205.6	205.2
155°	185.2	183.0	191.0	190.5	190.5	192.7	*191.3*	199.5	199.8
157.5°	182.3	180.7	186.8	186.3	186.3	187.5	*187.1*	194.4	194.7
160°	180.1	178.5	183.6	183.0	182.1	184.2	*183.9*	190.2	190.5
162.5°	177.7	176.3	181.9	180.7	180.4	180.7	*180.4*	186.9	187.2
165°	176.1	175.5	179.8	179.1	178.1	179.1	*178.1*	182.5	183.7
167.5°	176.3	175.1	179.0	178.5	177.6	176.6	*177.5*	180.9	182.1
170°	175.7	175.4	178.4	176.9	175.7	176.0	*175.8*	179.2	180.4
172.5°	176.3	176.0	178.9	177.5	176.3	176.5	*175.4*	177.9	180.1
175°	176.3	175.6	177.9	177.1	176.8	176.1	*176.0*	177.5	180.1
177.5°	177.5	176.9	178.2	177.4	176.1	176.3	*177.2*	178.9	182.2
180°	177.2	177.2	177.2	177.2	177.2	177.2	*177.2*	177.2	177.2

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Scaled Data Report

TEST NUMBER: CATALOG
CATALOG NUMBER: EHBR1-18-UNV-A1-L950-UPL18

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	15.65	16.77	16.17	17.27	17.81	16.64	17.75	17.16	18.25	18.80
	3H	17.13	18.12	17.66	18.64	19.22	17.89	18.89	18.43	19.40	19.99
	4H	17.73	18.66	18.29	19.19	19.79	18.39	19.32	18.95	19.85	20.45
	6H	18.19	19.05	18.76	19.59	20.20	18.75	19.60	19.31	20.15	20.76
	8H	18.34	19.15	18.92	19.71	20.33	18.84	19.65	19.42	20.21	20.83
	12H	18.41	19.19	19.00	19.74	20.39	18.88	19.65	19.46	20.21	20.85
4H	2H	16.17	17.10	16.73	17.63	18.23	16.95	17.88	17.51	18.41	19.01
	3H	17.85	18.62	18.42	19.19	19.81	18.43	19.20	19.00	19.78	20.39
	4H	18.56	19.25	19.15	19.84	20.49	19.06	19.75	19.64	20.33	20.98
	6H	19.14	19.74	19.75	20.34	21.02	19.53	20.13	20.14	20.73	21.41
	8H	19.33	19.88	19.95	20.49	21.17	19.66	20.22	20.28	20.83	21.50
	12H	19.43	19.92	20.07	20.56	21.24	19.73	20.22	20.36	20.86	21.54
8H	4H	18.79	19.34	19.40	19.95	20.63	19.23	19.79	19.85	20.39	21.07
	6H	19.48	19.93	20.12	20.58	21.27	19.81	20.27	20.46	20.92	21.60
	8H	19.73	20.13	20.39	20.79	21.49	20.01	20.41	20.67	21.08	21.77
	12H	19.89	20.25	20.55	20.89	21.66	20.13	20.48	20.79	21.13	21.90
12H	4H	18.78	19.28	19.42	19.91	20.59	19.23	19.72	19.86	20.36	21.04
	6H	19.50	19.90	20.16	20.57	21.26	19.84	20.24	20.50	20.90	21.60
	8H	19.79	20.15	20.45	20.79	21.56	20.07	20.42	20.73	21.07	21.84

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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: SP1-2506-472-8

Test Date: 08/04/2025

Luminaire Tested: EHBR-60-L950-N

Data in this report applies to families of products including EHBR-60-L950-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

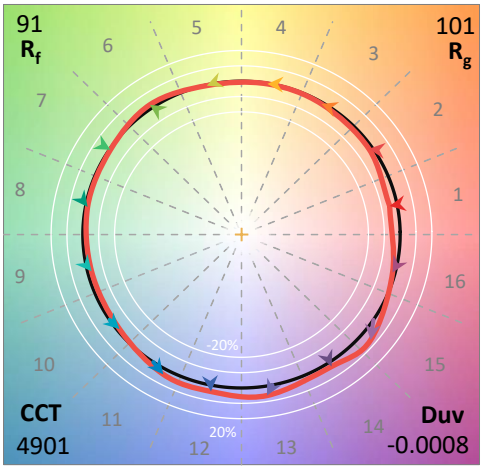
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-8
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-L950-N**
Description:	Elevate Round Highbay at, 60000 lumens, 5000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K):	4901
CIE u':	0.2131
CIE v':	0.4853
Duv:	-0.0008
CIE x:	0.3477
CIE y:	0.3520
CIE z:	0.3003
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	574
Purity:	9.953987
Rf:	90.7
Rg:	100.5

CRI (Ra):	94.3				
R1:	95.8	R9:	72.3		
R2:	96.5	R10:	89.1		
R3:	94.4	R11:	94.9		
R4:	95.3	R12:	68.4		
R5:	94.1	R13:	96.4		
R6:	92.5	R14:	96.4		
R7:	95.5	R15:	93.9		
R8:	90.1				



Test Conditions

Stabilization Time:	35M
Operation Time:	1H 35M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-8

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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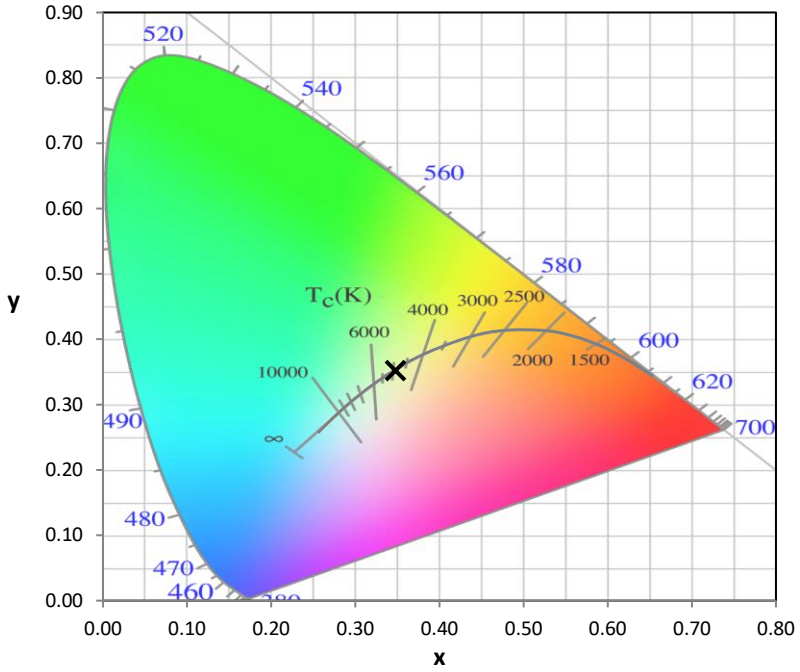
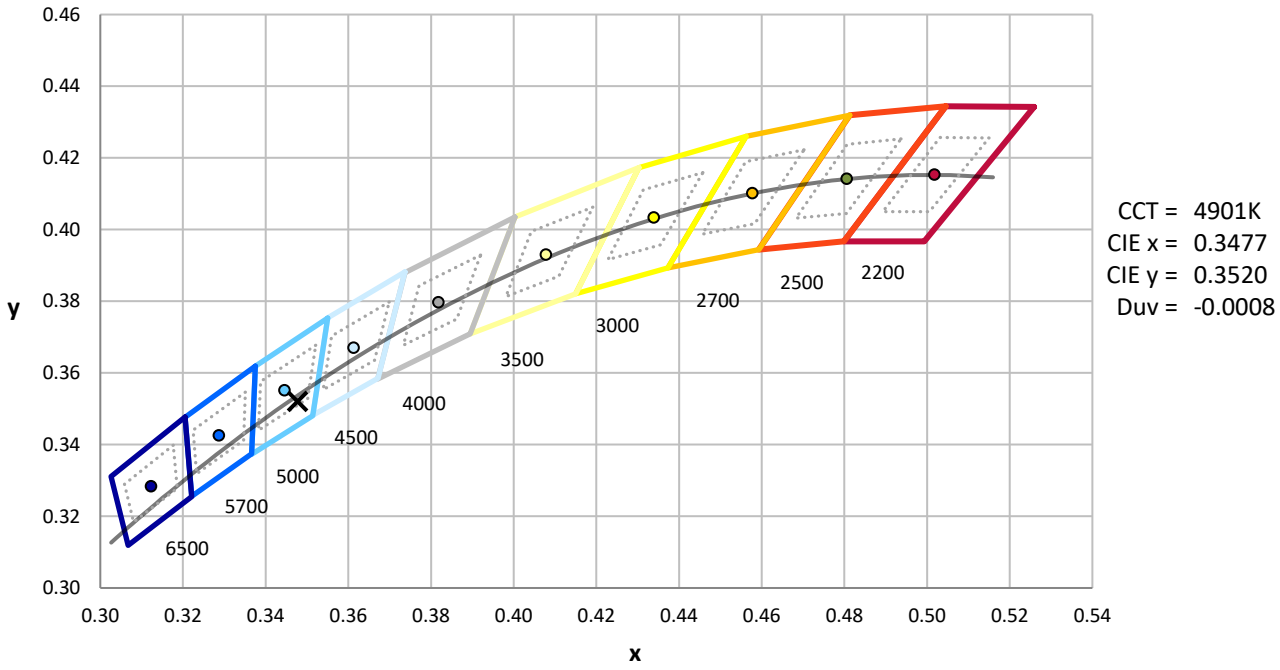
CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 5000K 4-step quadrangle

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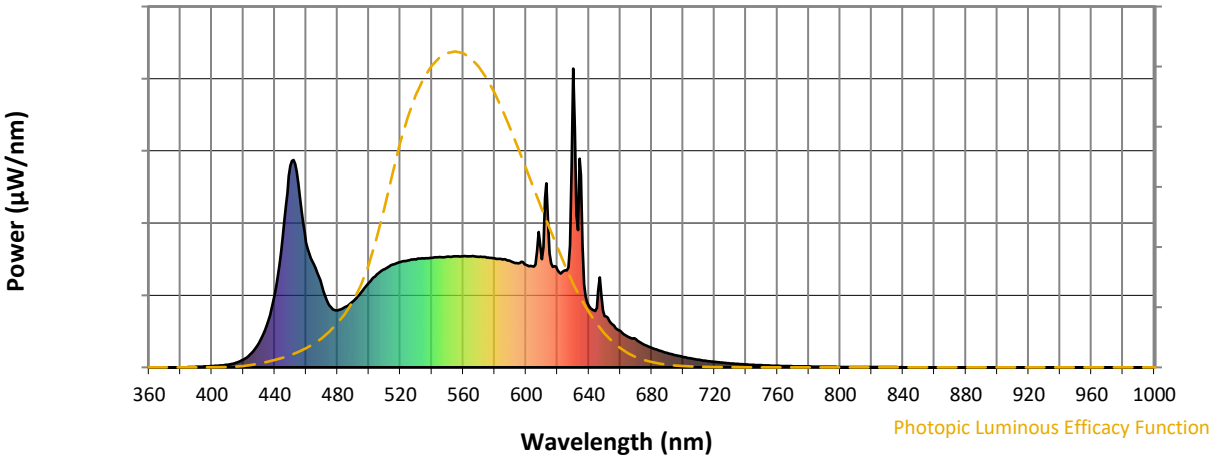
Photopic Flux vs. Wavelength



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	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

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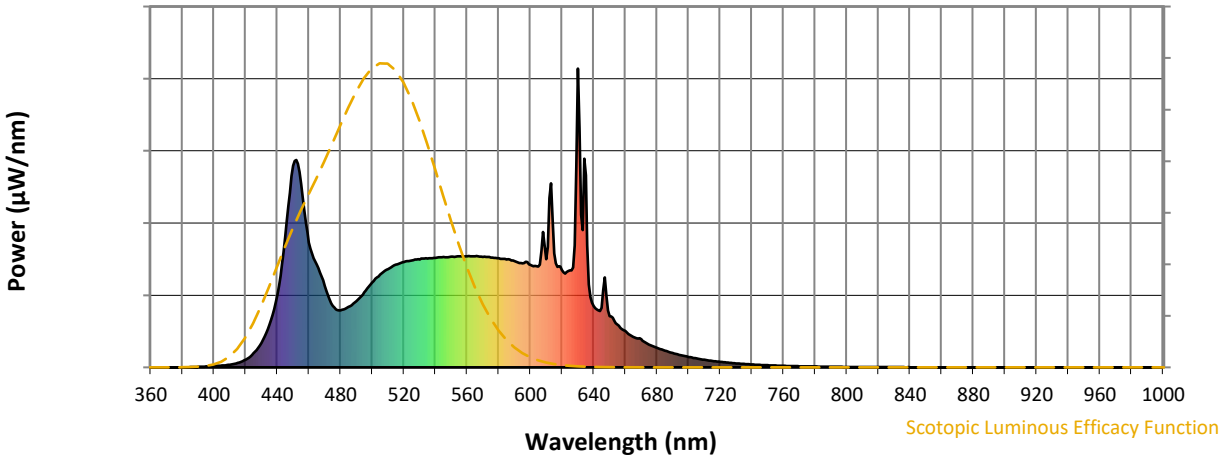
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 2.04**

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	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

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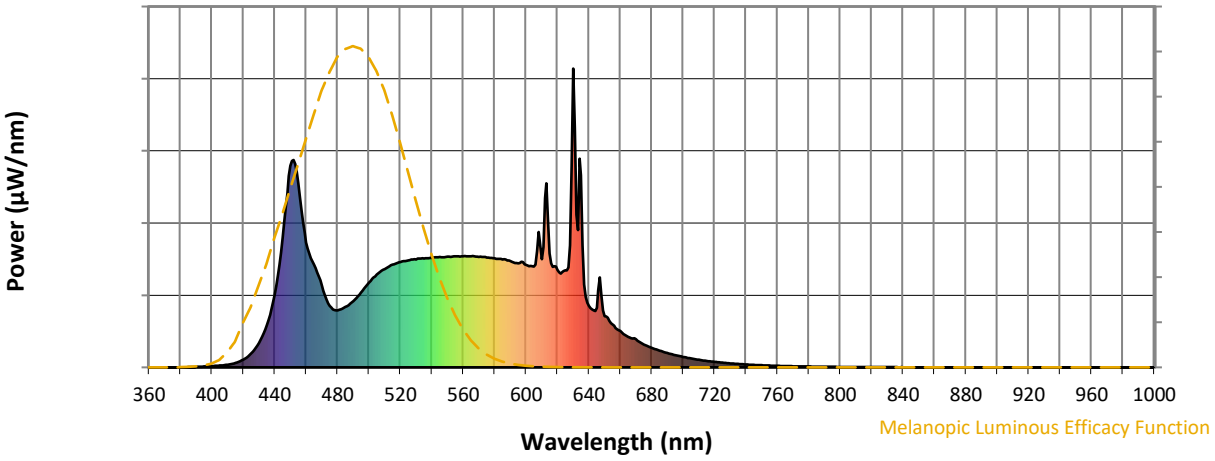
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 4.41**

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	221	NR	620	326	NR	750	7	NR	880	0	NR
365	0	NR	495	250	NR	625	325	NR	755	6	NR	885	0	NR
370	0	NR	500	284	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	311	NR	635	643	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	206	NR	770	4	NR	900	0	NR
385	1	NR	515	344	NR	645	199	NR	775	3	NR	905	0	NR
390	2	NR	520	353	NR	650	172	NR	780	3	NR	910	0	NR
395	3	NR	525	357	NR	655	143	NR	785	2	NR	915	0	NR
400	5	NR	530	362	NR	660	122	NR	790	2	NR	920	0	NR
405	6	NR	535	365	NR	665	102	NR	795	2	NR	925	0	NR
410	9	NR	540	367	NR	670	94	NR	800	2	NR	930	0	NR
415	15	NR	545	369	NR	675	76	NR	805	1	NR	935	0	NR
420	26	NR	550	370	NR	680	65	NR	810	1	NR	940	0	NR
425	47	NR	555	372	NR	685	56	NR	815	1	NR	945	0	NR
430	81	NR	560	372	NR	690	48	NR	820	1	NR	950	0	NR
435	143	NR	565	371	NR	695	41	NR	825	1	NR	955	0	NR
440	243	NR	570	370	NR	700	35	NR	830	1	NR	960	0	NR
445	434	NR	575	367	NR	705	30	NR	835	1	NR	965	0	NR
450	675	NR	580	365	NR	710	25	NR	840	1	NR	970	0	NR
455	615	NR	585	361	NR	715	22	NR	845	0	NR	975	0	NR
460	418	NR	590	356	NR	720	19	NR	850	0	NR	980	0	NR
465	344	NR	595	348	NR	725	16	NR	855	0	NR	985	0	NR
470	272	NR	600	343	NR	730	13	NR	860	0	NR	990	0	NR
475	206	NR	605	337	NR	735	11	NR	865	0	NR	995	0	NR
480	190	NR	610	362	NR	740	10	NR	870	0	NR	1000	0	NR
485	202	NR	615	381	NR	745	8	NR	875	0	NR			

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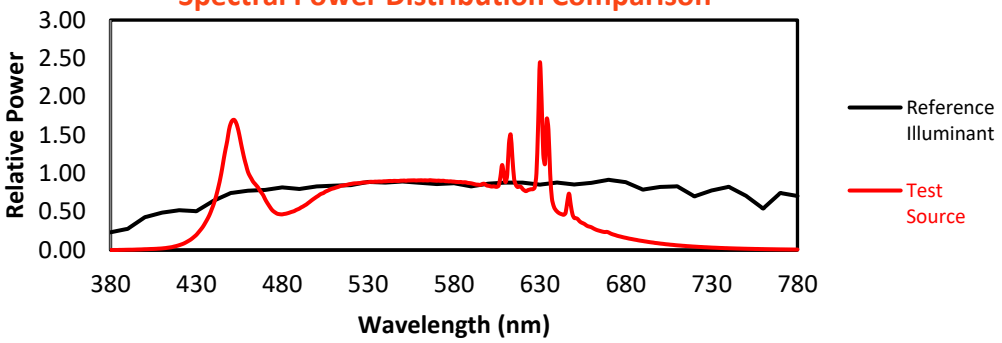
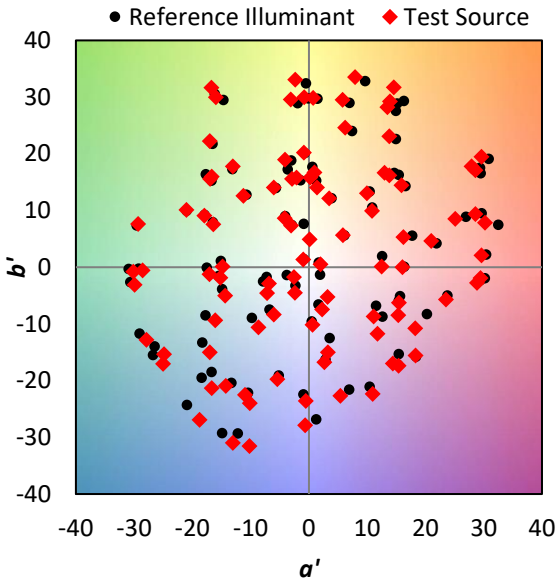
Summary

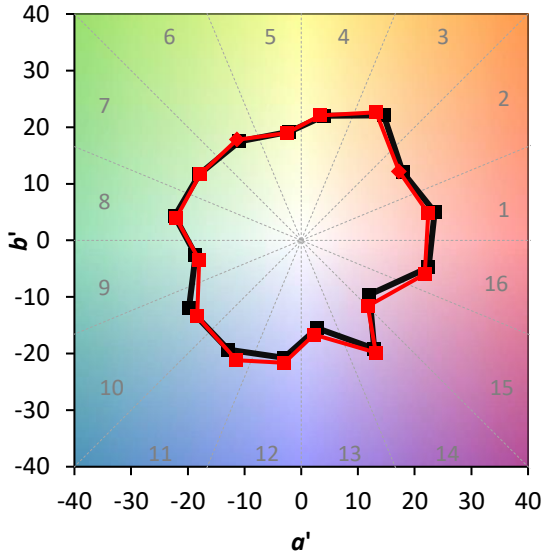
R_f = 90.7
R_g = 100.5
CIE R_a = 94.3
R_9 = 72.3

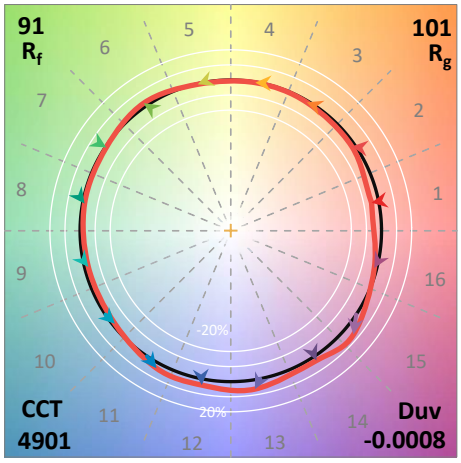
Spectral Power Distribution Comparison

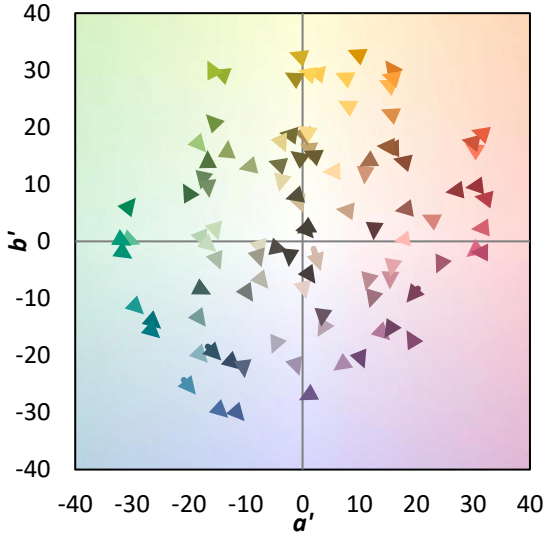


Color Vector Graphics









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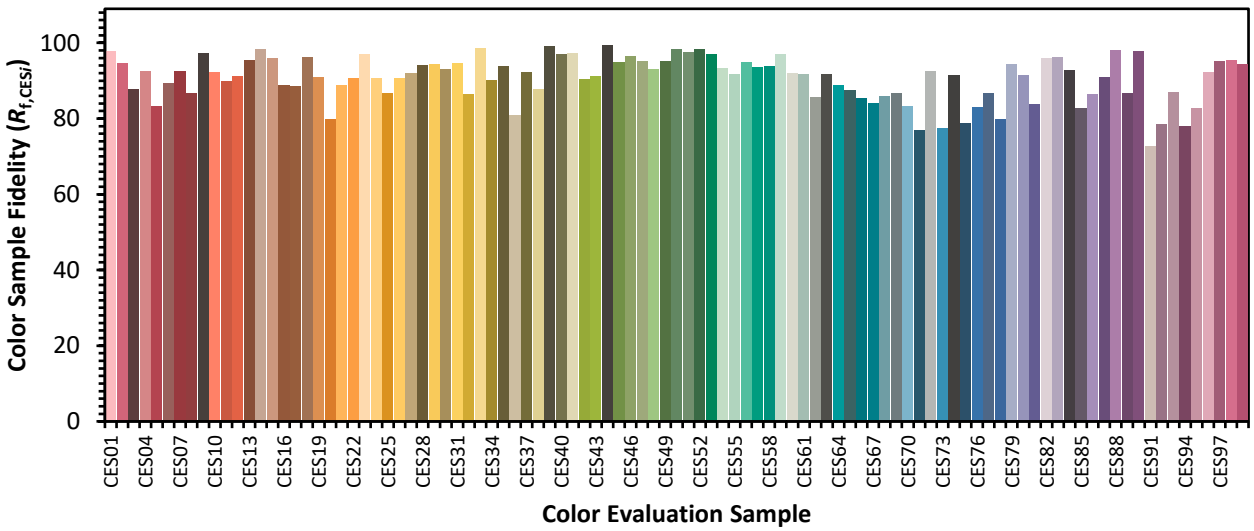
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 91	CES51 = 98	CES76 = 83
CES02 = 61	CES27 = 92	CES52 = 98	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 97	CES78 = 80
CES04 = 69	CES29 = 94	CES54 = 93	CES79 = 94
CES05 = 48	CES30 = 93	CES55 = 92	CES80 = 91
CES06 = 50	CES31 = 95	CES56 = 95	CES81 = 84
CES07 = 41	CES32 = 86	CES57 = 94	CES82 = 96
CES08 = 40	CES33 = 99	CES58 = 94	CES83 = 96
CES09 = 29	CES34 = 90	CES59 = 97	CES84 = 93
CES10 = 73	CES35 = 94	CES60 = 92	CES85 = 83
CES11 = 56	CES36 = 81	CES61 = 92	CES86 = 86
CES12 = 62	CES37 = 92	CES62 = 86	CES87 = 91
CES13 = 43	CES38 = 88	CES63 = 92	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 89	CES89 = 87
CES15 = 71	CES40 = 97	CES65 = 88	CES90 = 98
CES16 = 47	CES41 = 97	CES66 = 85	CES91 = 73
CES17 = 48	CES42 = 90	CES67 = 84	CES92 = 79
CES18 = 56	CES43 = 91	CES68 = 86	CES93 = 87
CES19 = 70	CES44 = 99	CES69 = 87	CES94 = 78
CES20 = 65	CES45 = 95	CES70 = 83	CES95 = 83
CES21 = 85	CES46 = 97	CES71 = 77	CES96 = 92
CES22 = 77	CES47 = 95	CES72 = 92	CES97 = 95
CES23 = 91	CES48 = 93	CES73 = 77	CES98 = 95
CES24 = 90	CES49 = 95	CES74 = 92	CES99 = 94
CES25 = 70	CES50 = 98	CES75 = 79	



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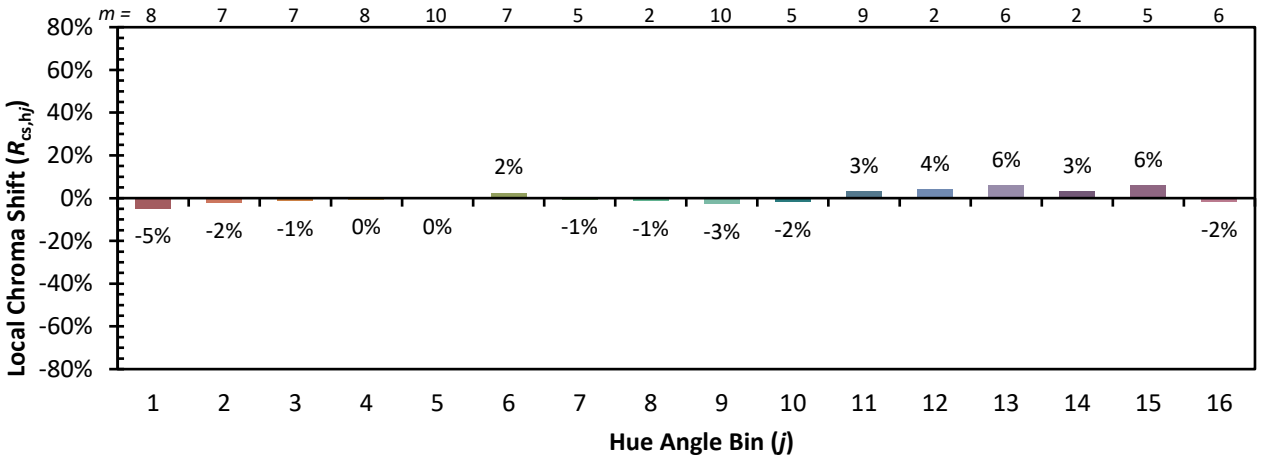
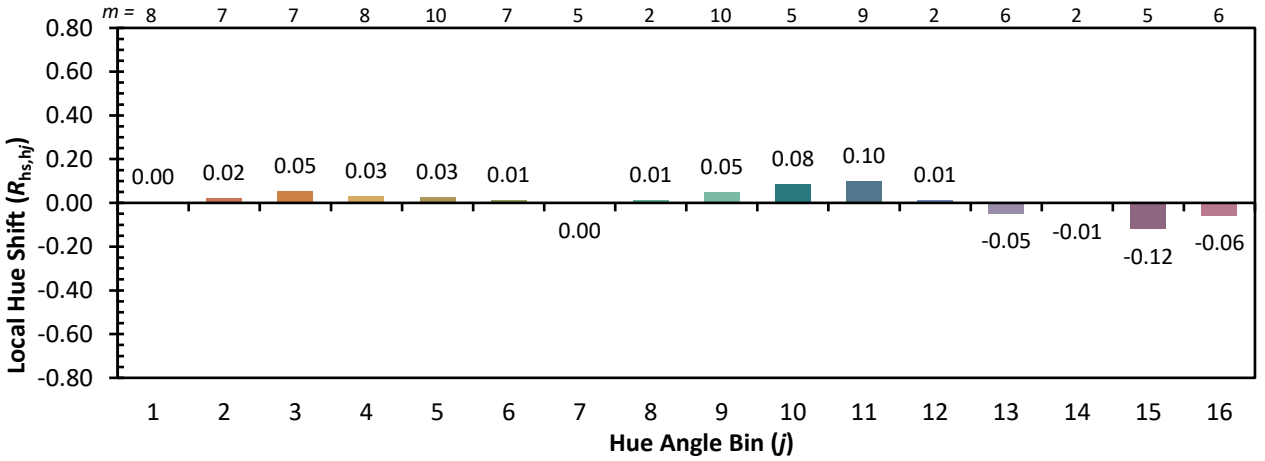
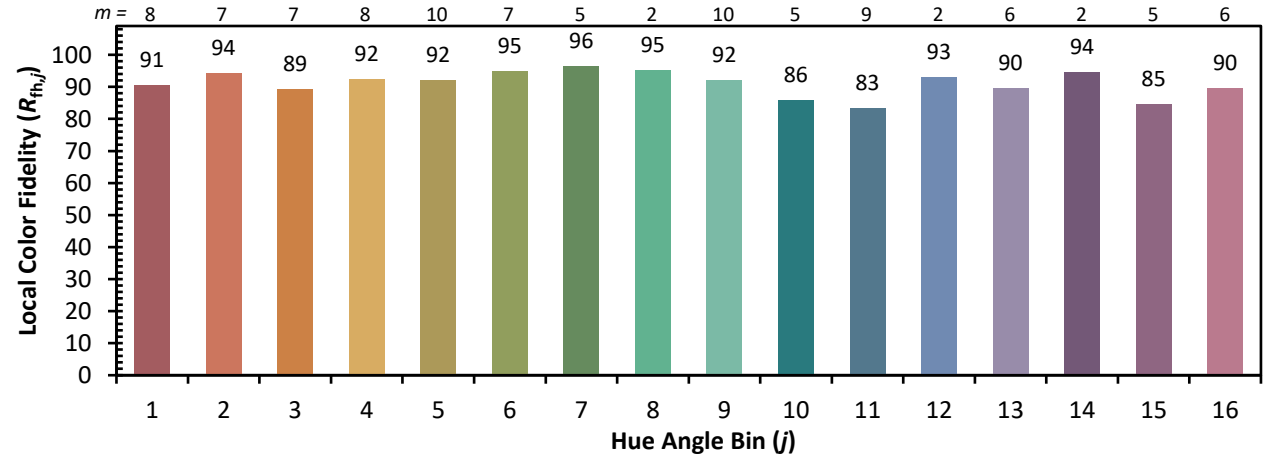
Color Rendition by Hue-Angle Bin







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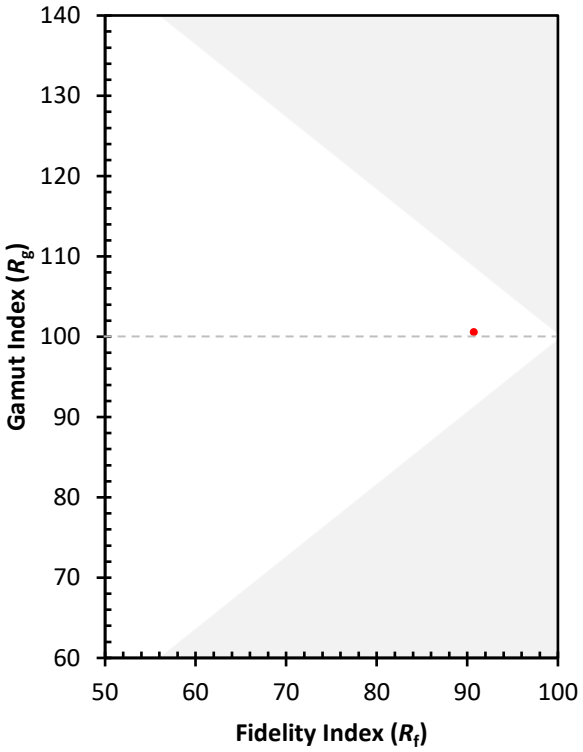
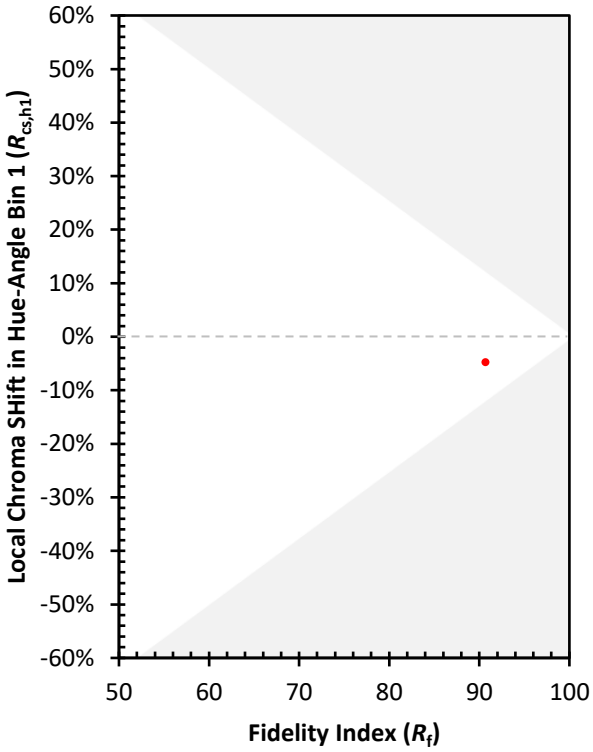
Measure Comparisons





(END OF REPORT)