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: P1431835

Luminaire Tested: EHBR1-48-UNV-A1-L950

Issue Date: 3/13/2026

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:	P1431835
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-654-5)
Test Lab:	INNOVATION CENTER
Issue Date:	3/13/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-48-UNV-A1-L950
Description:	Elevate Round Highbay at, 49000 lumens, 5000K 90CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	44025.2 lumens
Efficiency:	N/A
Efficacy:	170.2 lumens/watt
Spacing Criteria (0/90/45):	0.8 / 1.07 / 0.95
Luminous Opening:	Circular (Dia: 1.71' x H: 0')
CIE Type:	Direct

Input Watts (W):	258.6
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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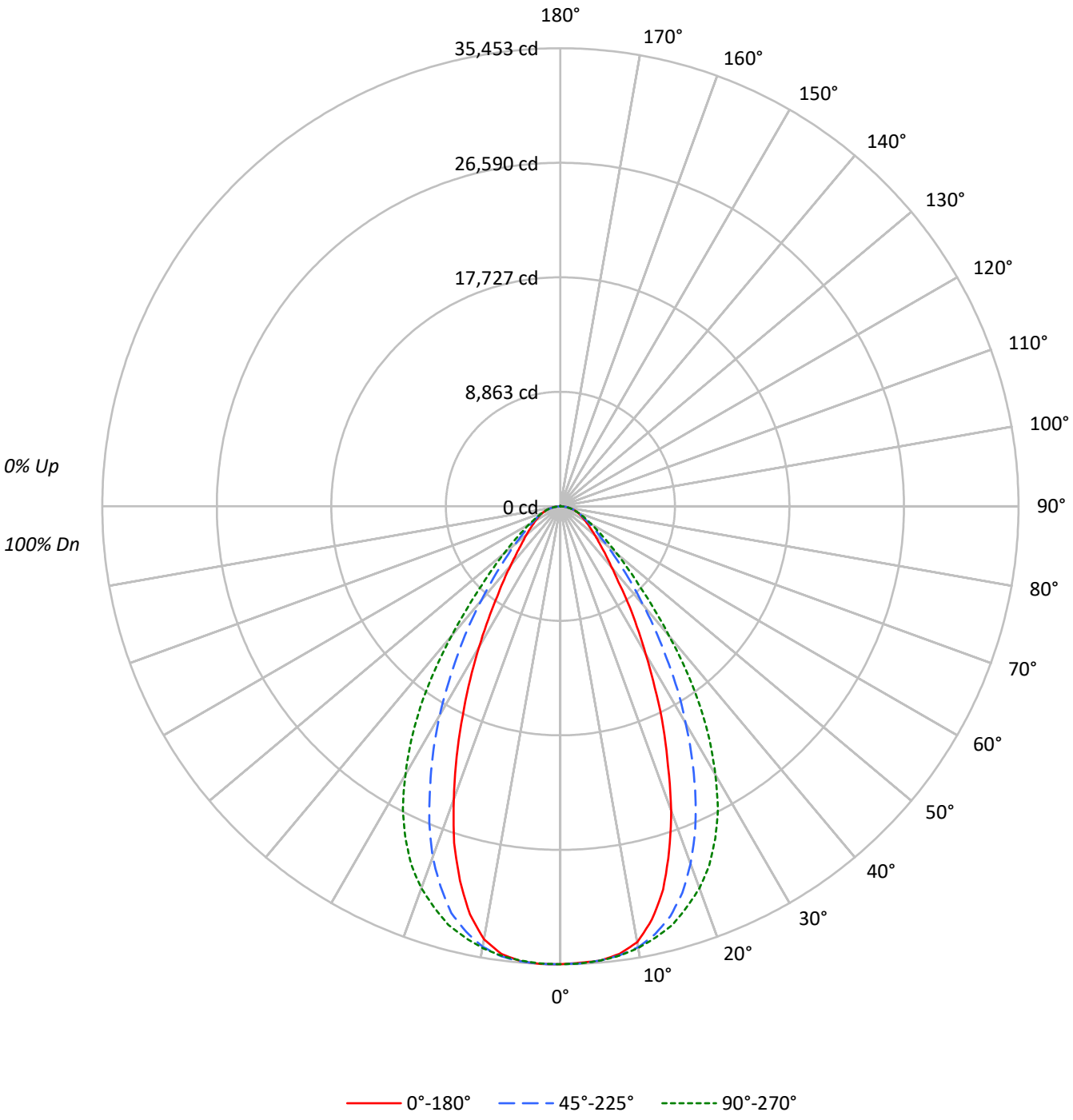
Scaled Data Report

TEST NUMBER: P1431835
CATALOG NUMBER: EHBR1-48-UNV-A1-L950

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	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80
3	98	90	83	78	95	88	82	78	85	81	77	83	79	75	80	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	166420	166420	166420	166420	166420
5°	166397	166373	166380	166674	166573
10°	163352	165257	165518	165052	162283
15°	149297	159714	163002	158433	145869
20°	125285	147144	157196	144373	120407
25°	97610	128173	146911	123493	92552
30°	71718	105217	130082	101224	68072
35°	52151	81809	107846	78286	48747
40°	37889	61017	80259	58442	36719
45°	30193	45143	56688	43186	29148
50°	25383	34369	41575	33235	24998
55°	22528	27577	31996	27115	22223
60°	20732	23494	26016	23347	20879
65°	19917	21287	22458	21354	20107
70°	19648	20118	20740	20229	19842
75°	19447	19326	19447	19380	19634
80°	19550	18146	17743	18428	19550
85°	17635	14958	14796	15200	18158

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 59394 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3346.6	7.6
10°-20°	8994.4	20.4
20°-30°	10937.1	24.8
30°-40°	8909.1	20.2
40°-50°	5349.0	12.1
50°-60°	3078.4	7.0
60°-70°	1926.6	4.4
70°-80°	1134.7	2.6
80°-90°	331.8	0.8
90°-100°	0.1	0.0
100°-110°	0.2	0.0
110°-120°	0.2	0.0
120°-130°	0.5	0.0
130°-140°	2.3	0.0
140°-150°	4.1	0.0
150°-160°	4.5	0.0
160°-170°	4.0	0.0
170°-180°	1.7	0.0
0°-30°	23278.0	52.9
0°-40°	32187.1	73.1
0°-60°	40614.5	92.3
0°-90°	44007.6	100.0
90°-120°	0.5	0.0
90°-150°	7.4	0.0
90°-180°	18.0	0.0
0°-180°	44025.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	35438	35438	35438	35438	35438	
5°	35298	35293	35295	35357	35336	3336
15°	30708	32851	33527	32588	30003	8448
25°	18838	24736	28353	23833	17862	8583
35°	9097	14270	18812	13656	8503	5755
45°	4546	6797	8536	6503	4389	3586
55°	2752	3368	3908	3312	2714	2487
65°	1792	1916	2021	1922	1810	1782
75°	1072	1065	1072	1068	1082	1135
85°	327	278	275	282	337	349
90°	2	0	0	0	1	17
95°	2	0	0	0	1	1
105°	2	0	0	0	2	2
115°	2	0	0	0	2	2
125°	2	0	0	1	2	2
135°	4	3	3	3	4	3
145°	7	6	6	7	7	4
155°	11	9	7	10	12	5
165°	17	14	13	15	17	5
175°	22	19	16	19	22	2
180°	20	20	20	20	20	

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Scaled Data Report

TEST NUMBER: P1431835
CATALOG NUMBER: EHBR1-48-UNV-A1-L950

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	35437.9	35437.9	35437.9	35437.9	35437.9	35437.9	*35437.9*	35437.9	35437.9
2.5°	*35359.9*	*35391.9*	*35405.3*	*35412.7*	*35420.8*	*35443.1*	*35452.8*	*35437.2*	*35450.5*
5°	35298.3	35300.6	35293.1	35326.6	35294.6	35316.9	*35357.0*	35341.5	35335.5
7.5°	34939.1	35013.4	35057.1	35068.3	35074.2	35101.6	*35129.9*	34970.3	34946.6
10°	34256.2	34380.2	34655.6	34734.3	34710.5	34755.1	*34612.6*	34195.4	34032.1
12.5°	32759.2	33194.9	33910.4	34228.8	34171.0	34210.3	*33724.8*	32844.6	32338.4
15°	30708.4	31347.5	32851.2	33479.1	33527.4	33479.1	*32587.7*	30872.4	30003.3
17.5°	27982.2	29162.3	31376.4	32595.2	32525.4	32548.4	*30856.1*	28320.6	27326.1
20°	25069.6	26327.7	29443.6	31476.6	31455.1	31325.9	*28889.2*	25545.4	24093.6
22.5°	21775.6	23398.2	27228.8	30101.2	30093.1	29877.8	*26494.0*	22514.8	20951.7
25°	18837.9	20429.2	24736.4	28416.4	28352.6	28107.6	*23833.1*	19491.8	17861.8
27.5°	15800.7	17455.1	22075.5	26442.0	26398.3	26131.1	*21289.4*	16666.1	15114.8
30°	13225.8	14738.5	19403.4	24269.6	23989.0	23958.5	*18667.2*	14049.7	12553.4
32.5°	11019.9	12316.6	16884.3	21997.5	21501.0	21642.8	*16053.8*	11861.6	10378.7
35°	9096.8	10239.1	14270.2	19370.1	18811.9	18995.2	*13655.6*	9732.9	8503.1
37.5°	7383.0	8481.5	12054.6	16814.5	15961.0	16306.9	*11546.2*	8128.2	7142.5
40°	6180.6	7052.0	9953.3	14010.4	13092.2	13655.6	*9533.3*	6779.6	5989.8
42.5°	5325.5	5894.1	8215.0	11333.1	10628.8	11028.1	*7857.2*	5667.7	5076.9
45°	4546.2	4999.7	6797.4	8943.2	8535.7	8906.0	*6502.7*	4832.7	4388.9
47.5°	3970.9	4320.6	5595.7	7221.9	6968.8	7086.1	*5431.0*	4217.3	3856.7
50°	3474.4	3744.6	4704.3	5828.8	5690.7	5762.7	*4549.1*	3669.6	3421.6
52.5°	3088.5	3286.6	3945.7	4790.3	4722.1	4733.2	*3876.7*	3227.9	3048.3
55°	2751.5	2889.5	3368.2	3924.2	3907.9	3910.8	*3311.8*	2860.6	2714.3
57.5°	2456.8	2571.1	2894.7	3296.2	3272.5	3277.7	*2868.0*	2540.7	2446.4
60°	2207.4	2283.9	2501.4	2785.6	2770.0	2763.4	*2485.8*	2255.6	2223.0
62.5°	1986.3	2035.2	2185.8	2387.7	2358.1	2364.8	*2185.1*	2037.5	1989.1
65°	1792.4	1809.5	1915.7	2040.4	2021.1	2037.5	*1921.7*	1820.7	1809.5
67.5°	1603.2	1620.3	1682.6	1766.5	1744.2	1757.6	*1684.1*	1624.7	1615.1
70°	1431.0	1430.3	1465.2	1510.5	1510.5	1512.7	*1473.3*	1437.7	1445.1
72.5°	1252.9	1248.5	1258.9	1289.2	1281.1	1309.3	*1267.8*	1256.6	1258.1
75°	1071.8	1059.2	1065.1	1080.7	1071.8	1086.6	*1068.1*	1082.1	1082.1
77.5°	901.1	877.4	869.9	872.2	855.8	878.1	*882.5*	892.1	914.4
80°	722.9	689.5	671.0	670.3	656.1	670.3	*681.4*	701.4	722.9
82.5°	536.7	507.7	476.5	470.6	461.7	469.9	*484.7*	508.4	543.3
85°	327.3	296.9	277.6	267.2	274.6	274.6	*282.1*	315.4	337.0
87.5°	118.0	103.1	84.6	85.4	87.6	90.6	*94.3*	118.7	129.9
90°	1.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
92.5°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
95°	1.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
97.5°	1.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
100°	1.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.5
102.5°	1.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.5
105°	1.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.5
107.5°	1.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.5
110°	1.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.5

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Scaled Data Report

TEST NUMBER: P1431835
CATALOG NUMBER: EHBR1-48-UNV-A1-L950

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	1.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.5
115°	1.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.5
117.5°	2.2	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.5
120°	1.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.7	1.5
122.5°	2.2	0.7	0.0	0.0	0.0	0.0	*0.0*	0.7	2.2
125°	2.2	0.7	0.0	0.0	0.0	0.0	*0.7*	0.7	2.2
127.5°	2.2	0.7	0.0	0.0	0.0	0.0	*0.7*	1.5	2.2
130°	2.2	1.5	0.7	0.0	0.7	0.7	*1.5*	1.5	2.2
132.5°	3.0	2.2	2.2	1.5	1.5	2.2	*2.2*	3.0	3.0
135°	3.7	3.0	3.0	2.2	3.0	3.0	*3.0*	3.0	3.7
137.5°	3.7	3.7	3.7	3.7	3.7	3.7	*3.7*	3.7	4.5
140°	5.2	4.5	4.5	4.5	4.5	4.5	*4.5*	5.2	5.2
142.5°	5.9	5.9	5.2	5.2	5.2	5.9	*5.9*	5.9	6.7
145°	6.7	6.7	5.9	5.9	5.9	6.7	*6.7*	7.4	7.4
147.5°	8.9	8.2	6.7	6.7	6.7	6.7	*7.4*	8.2	8.9
150°	9.7	8.9	7.4	7.4	7.4	7.4	*8.2*	9.7	10.4
152.5°	10.4	9.7	8.2	7.4	7.4	7.4	*8.9*	9.7	11.1
155°	11.1	10.4	8.9	7.4	7.4	8.2	*9.7*	11.1	11.9
157.5°	13.4	11.9	10.4	8.9	8.9	9.7	*11.1*	12.6	13.4
160°	14.9	13.4	11.9	10.4	10.4	11.1	*12.6*	14.1	14.9
162.5°	16.4	14.9	12.6	11.9	11.1	11.9	*13.4*	15.6	16.4
165°	17.1	15.6	14.1	12.6	12.6	12.6	*14.9*	16.4	17.1
167.5°	17.8	17.1	14.9	13.4	13.4	13.4	*15.6*	17.1	17.8
170°	18.6	17.8	15.6	14.1	13.4	14.1	*16.4*	17.8	18.6
172.5°	20.1	19.3	17.1	15.6	14.9	15.6	*17.8*	19.3	20.1
175°	22.3	20.8	19.3	17.1	16.4	17.1	*19.3*	20.8	22.3
177.5°	23.0	21.6	20.1	17.8	17.1	17.8	*20.1*	21.6	23.0
180°	20.1	20.1	20.1	20.1	20.1	20.1	*20.1*	20.1	20.1

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Scaled Data Report

TEST NUMBER: P1431835
CATALOG NUMBER: EHBR1-48-UNV-A1-L950

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	20.15	21.42	20.52	21.73	22.05	21.14	22.40	21.50	22.72	23.03
	3H	21.72	22.85	22.10	23.18	23.55	22.48	23.60	22.86	23.94	24.30
	4H	22.39	23.44	22.79	23.79	24.18	23.04	24.09	23.44	24.44	24.82
	6H	22.94	23.91	23.36	24.28	24.68	23.47	24.43	23.89	24.81	25.20
	8H	23.15	24.06	23.58	24.45	24.86	23.61	24.52	24.04	24.91	25.32
	12H	23.27	24.15	23.71	24.53	24.96	23.68	24.56	24.12	24.94	25.37
4H	2H	20.73	21.78	21.13	22.13	22.51	21.50	22.55	21.90	22.90	23.28
	3H	22.52	23.38	22.93	23.79	24.19	23.09	23.95	23.50	24.36	24.76
	4H	23.31	24.09	23.75	24.51	24.95	23.78	24.56	24.22	24.98	25.42
	6H	24.00	24.67	24.46	25.11	25.58	24.35	25.02	24.82	25.47	25.94
	8H	24.25	24.87	24.72	25.32	25.79	24.54	25.16	25.01	25.61	26.08
	12H	24.42	24.97	24.90	25.45	25.93	24.66	25.21	25.14	25.69	26.17
8H	4H	23.59	24.22	24.06	24.67	25.14	24.02	24.64	24.49	25.09	25.56
	6H	24.41	24.92	24.92	25.42	25.90	24.72	25.22	25.22	25.72	26.21
	8H	24.74	25.20	25.27	25.71	26.21	24.98	25.43	25.50	25.95	26.44
	12H	24.99	25.39	25.51	25.89	26.46	25.17	25.57	25.69	26.07	26.64
12H	4H	23.61	24.16	24.10	24.64	25.12	24.03	24.58	24.52	25.06	25.54
	6H	24.46	24.91	24.98	25.43	25.92	24.76	25.22	25.28	25.73	26.23
	8H	24.85	25.24	25.36	25.74	26.31	25.08	25.48	25.60	25.97	26.55

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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

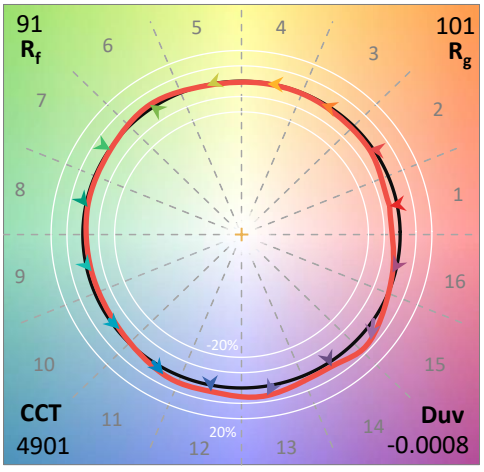
Test Information

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

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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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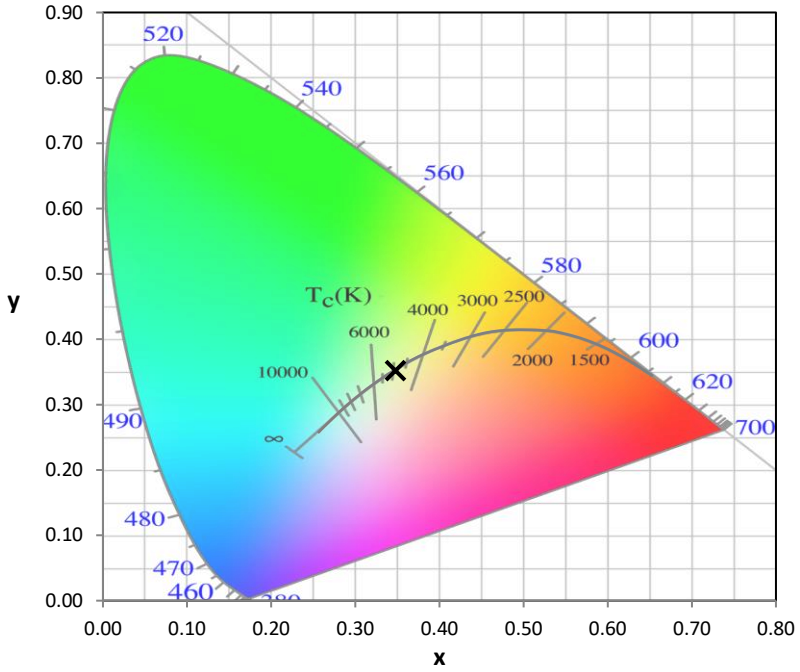
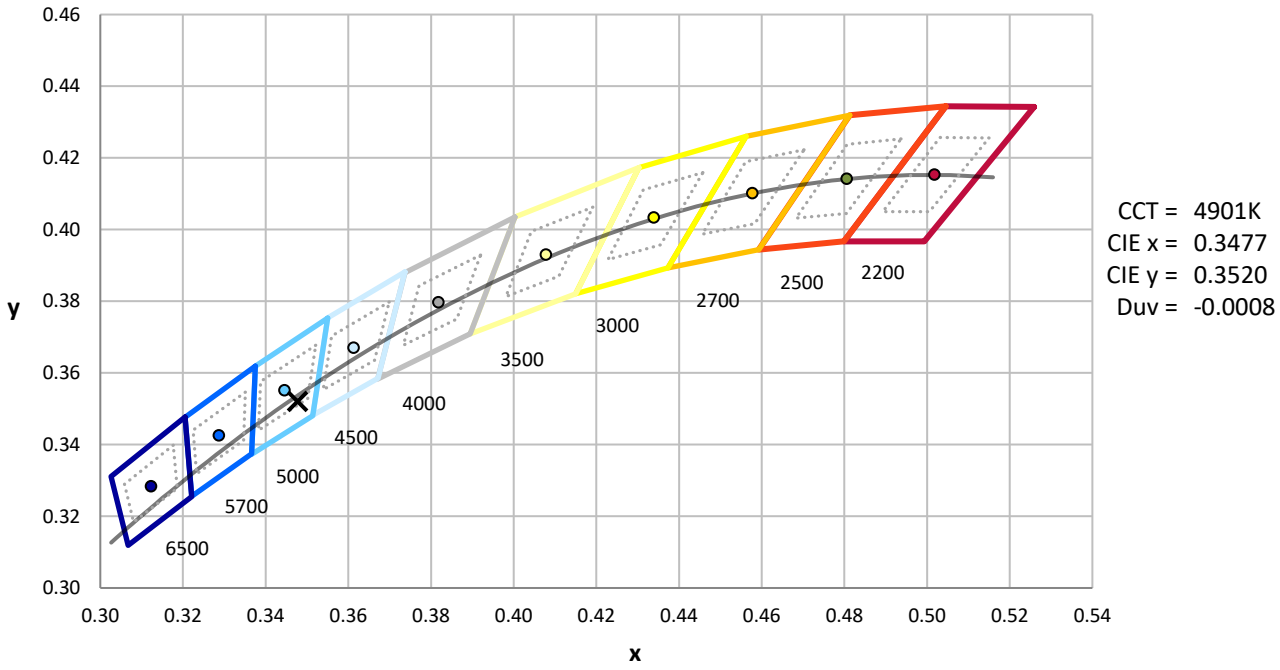
CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 5000K 4-step quadrangle

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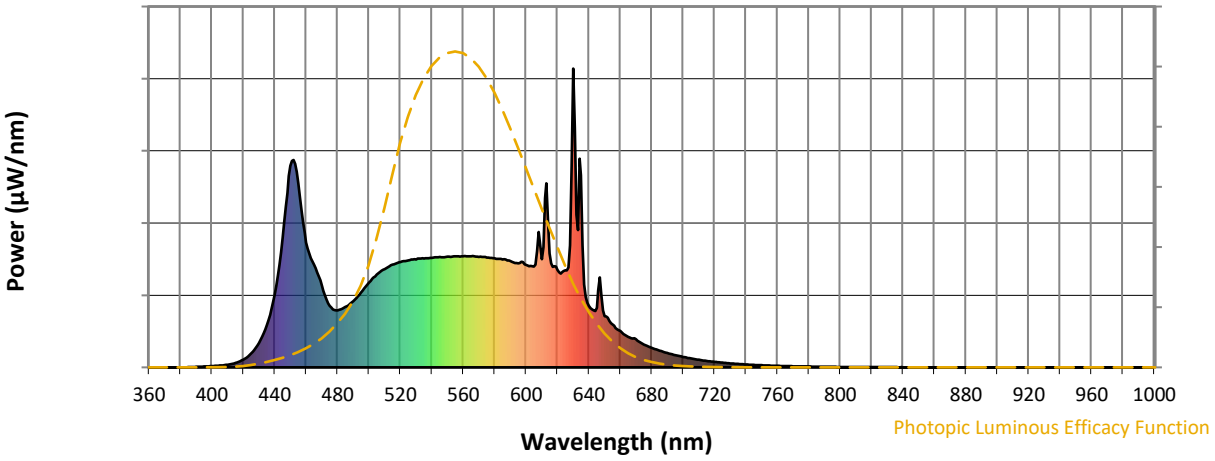
Photopic Flux vs. Wavelength



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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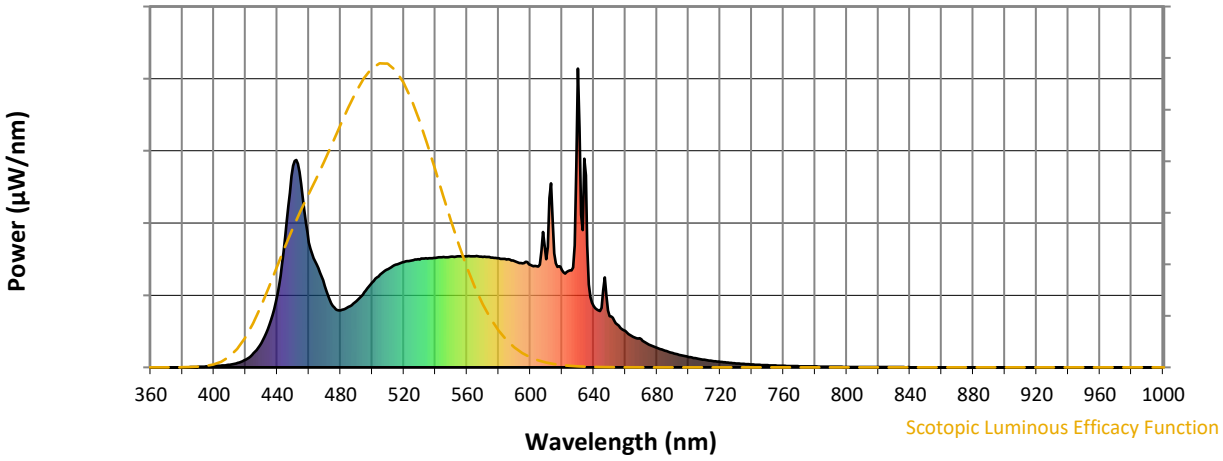
Scotopic Flux vs. Wavelength



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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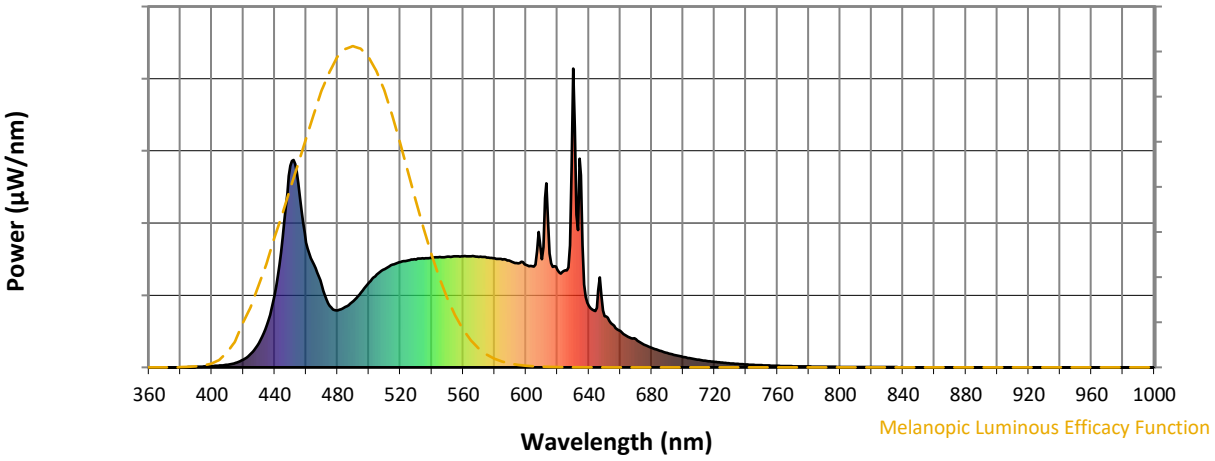
Melanopic Flux vs. Wavelength



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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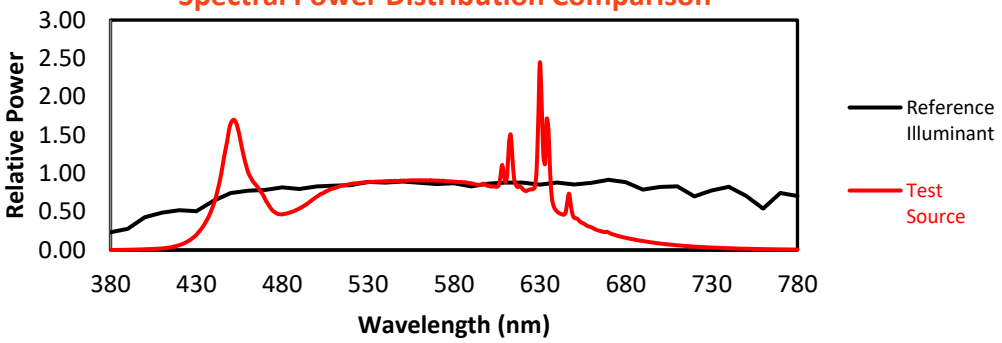
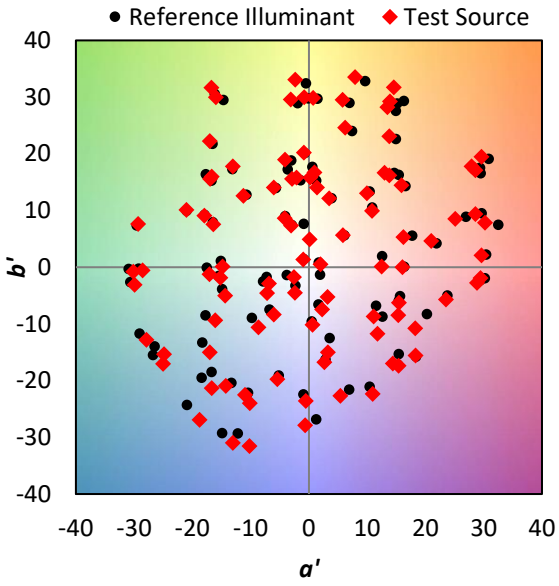
Summary

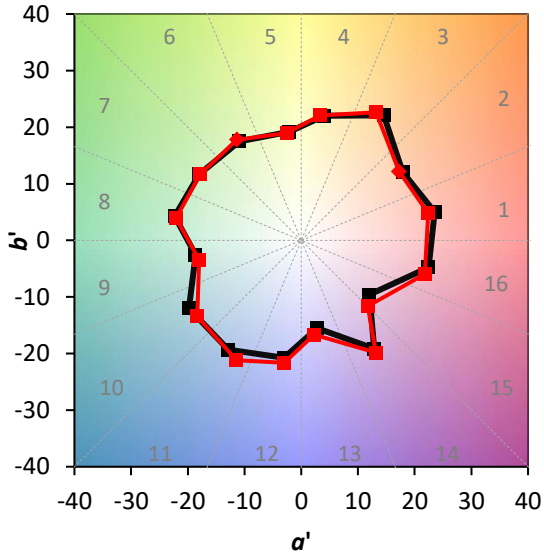
R_f = 90.7
R_g = 100.5
CIE R_a = 94.3
R_9 = 72.3

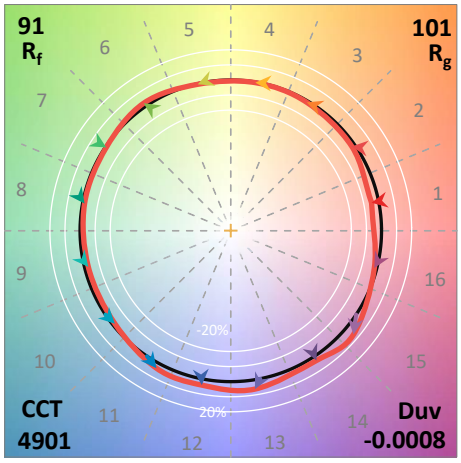
Spectral Power Distribution Comparison

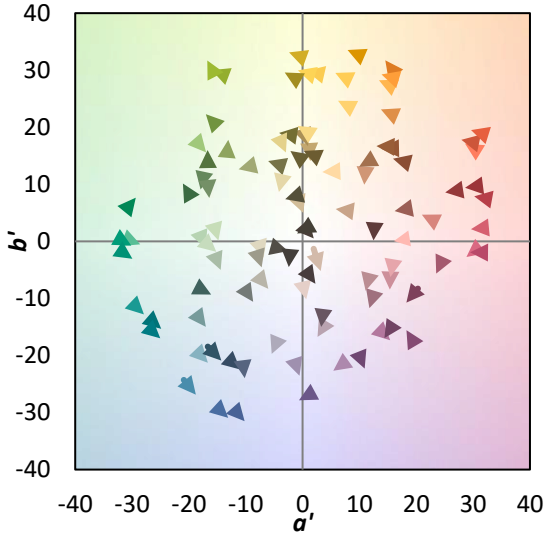


Color Vector Graphics









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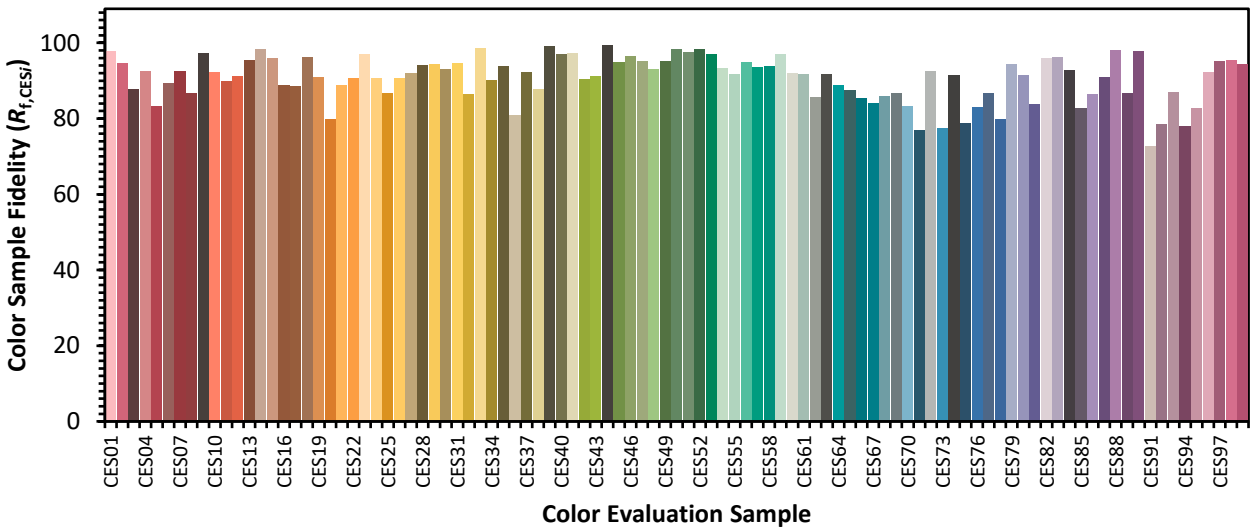
Individual Sample Fidelity Index ($R_{f,i}$)

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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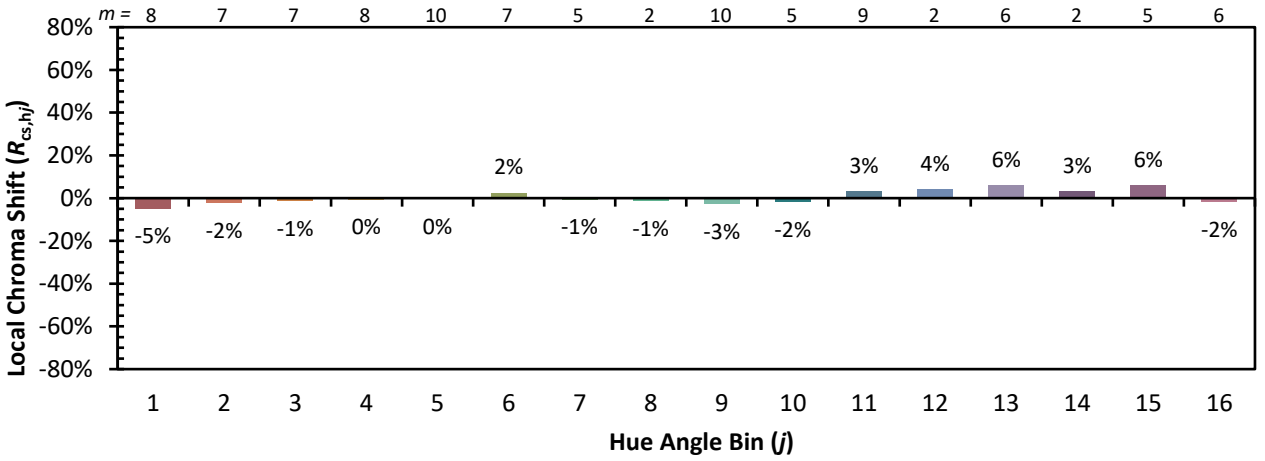
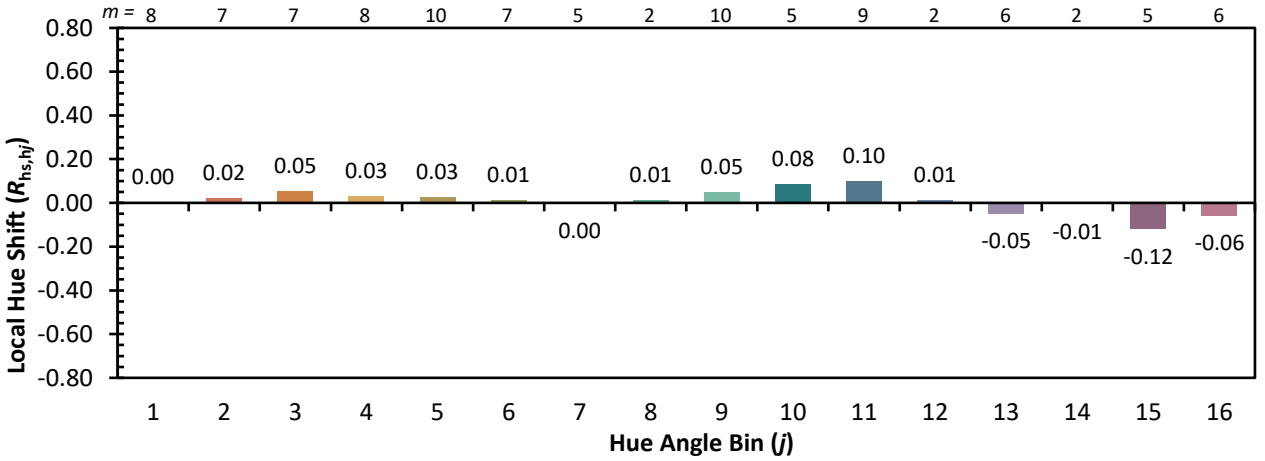
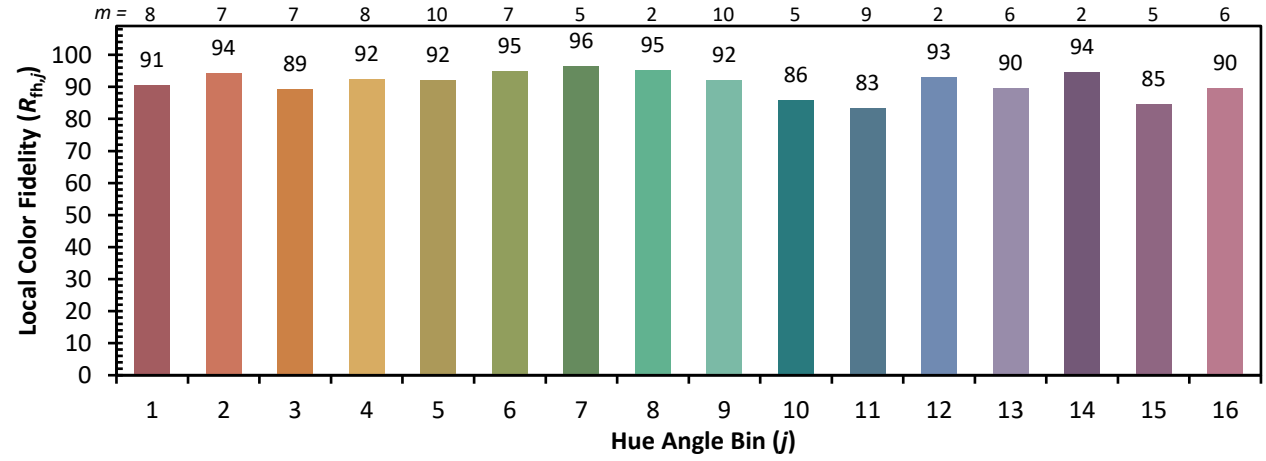
Color Rendition by Hue-Angle Bin







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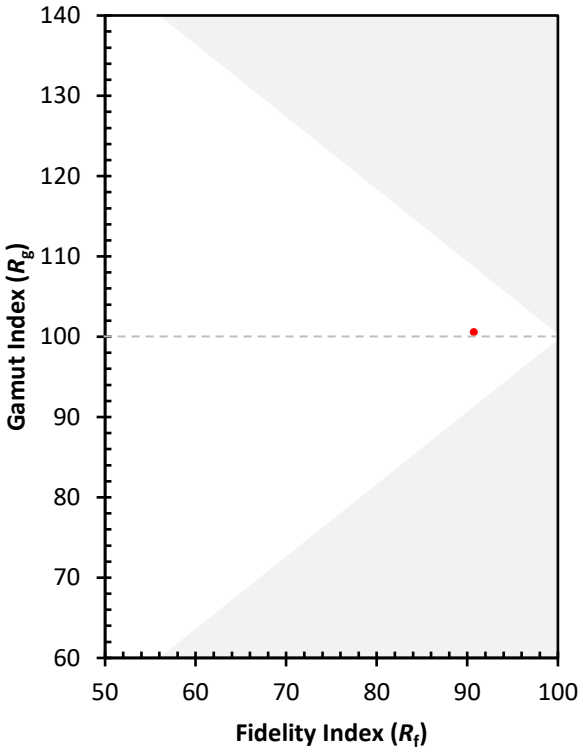
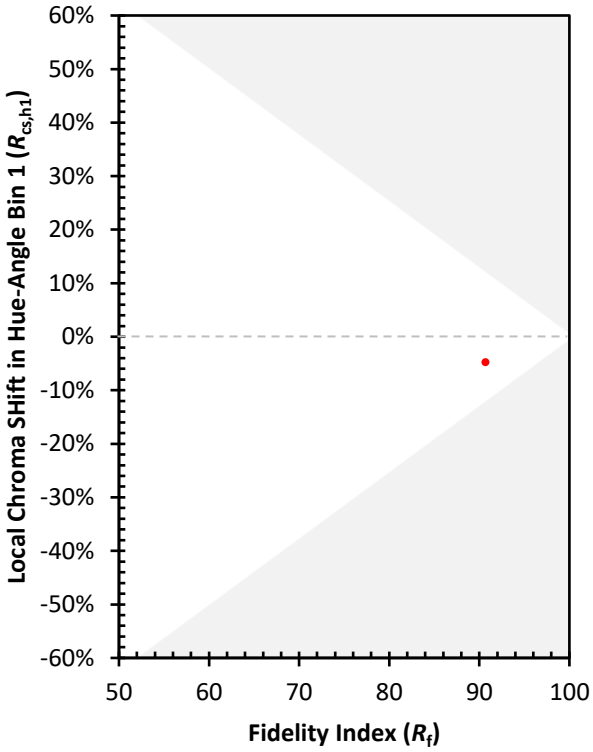
Measure Comparisons





(END OF REPORT)