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: P1432778

Luminaire Tested: EHBR1-54-UNV-A1-L835

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:	P1432778
	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:	EHBR1-54-UNV-A1-L835
Description:	Elevate Round Highbay at, 53500 lumens, 3500K 80CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	52014.2 lumens
Efficiency:	N/A
Efficacy:	175.7 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):	296
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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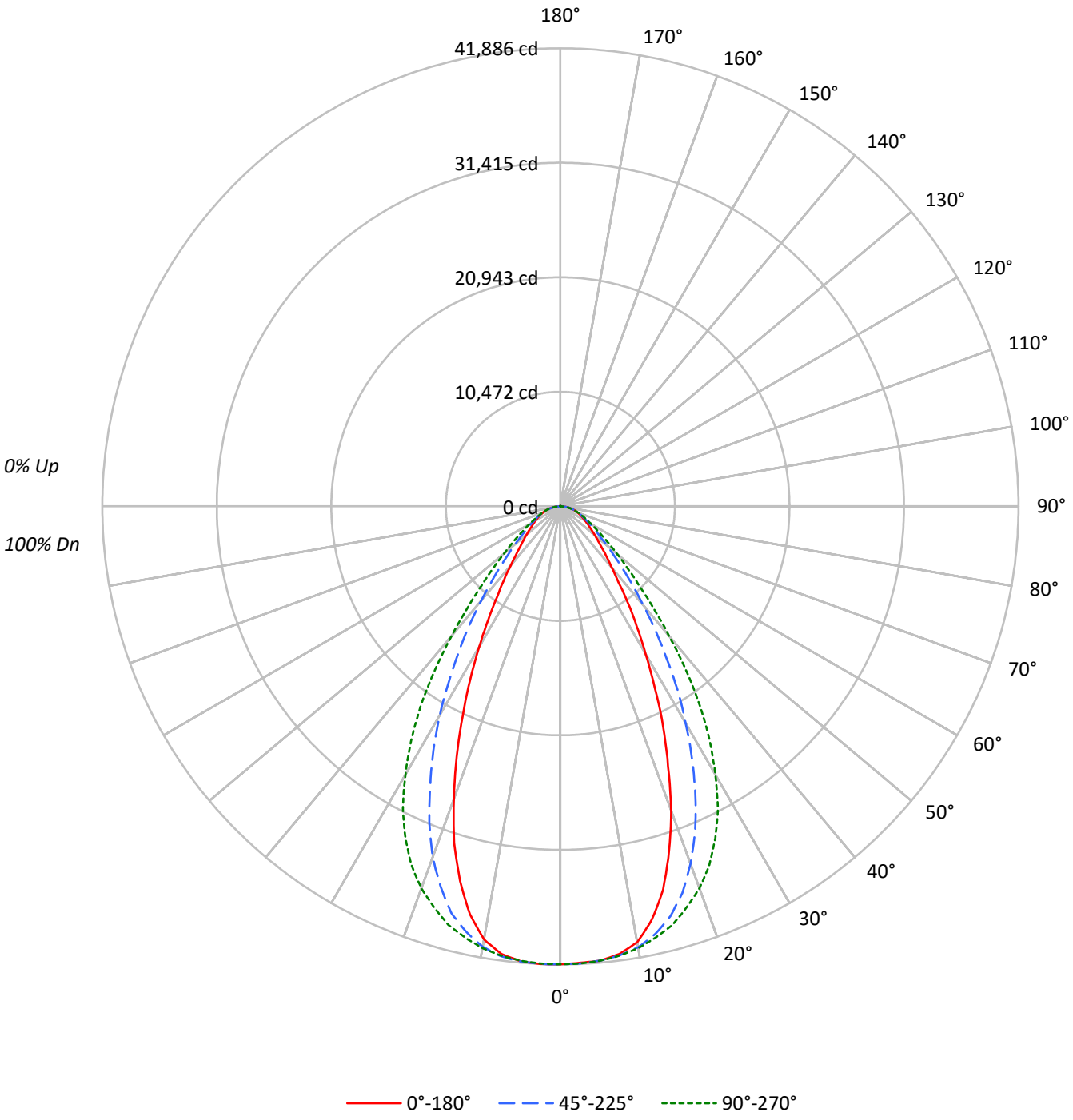
Scaled Data Report

TEST NUMBER: P1432778
CATALOG NUMBER: EHBR1-54-UNV-A1-L835

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°	196620	196620	196620	196620	196620
5°	196593	196564	196573	196920	196801
10°	192996	195245	195554	195003	191733
15°	176389	188697	192582	187184	172339
20°	148020	173846	185722	170572	142257
25°	115323	151432	173571	145903	109348
30°	84733	124310	153688	119593	80424
35°	61615	96655	127417	92492	57592
40°	44764	72090	94824	69047	43382
45°	35671	53335	66975	51023	34436
50°	29990	40606	49120	39267	29535
55°	26616	32582	37801	32036	26256
60°	24494	27756	30738	27584	24668
65°	23532	25150	26534	25228	23756
70°	23214	23767	24503	23901	23443
75°	22974	22833	22974	22896	23199
80°	23098	21438	20964	21773	23098
85°	20836	17673	17485	17953	21456

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 70172 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3953.9	7.6
10°-20°	10626.6	20.4
20°-30°	12921.8	24.8
30°-40°	10525.8	20.2
40°-50°	6319.7	12.1
50°-60°	3637.0	7.0
60°-70°	2276.2	4.4
70°-80°	1340.6	2.6
80°-90°	392.0	0.8
90°-100°	0.2	0.0
100°-110°	0.2	0.0
110°-120°	0.2	0.0
120°-130°	0.6	0.0
130°-140°	2.7	0.0
140°-150°	4.8	0.0
150°-160°	5.3	0.0
160°-170°	4.7	0.0
170°-180°	2.0	0.0
0°-30°	27502.2	52.9
0°-40°	38028.0	73.1
0°-60°	47984.7	92.3
0°-90°	51993.5	100.0
90°-120°	0.6	0.0
90°-150°	8.7	0.0
90°-180°	21.0	0.0
0°-180°	52014.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	41869	41869	41869	41869	41869	
5°	41704	41698	41700	41773	41748	3941
15°	36281	38813	39612	38501	35448	9981
25°	22256	29225	33498	28158	21103	10140
35°	10748	16860	22226	16134	10046	6800
45°	5371	8031	10085	7683	5185	4237
55°	3251	3980	4617	3913	3207	2939
65°	2118	2263	2388	2270	2138	2105
75°	1266	1258	1266	1262	1279	1341
85°	387	328	324	333	398	413
90°	2	0	0	0	1	20
95°	2	0	0	0	1	1
105°	2	0	0	0	2	2
115°	2	0	0	0	2	2
125°	3	0	0	1	3	2
135°	4	4	4	4	4	3
145°	8	7	7	8	9	5
155°	13	11	9	11	14	6
165°	20	17	15	18	20	6
175°	26	23	19	23	26	2
180°	24	24	24	24	24	

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TEST NUMBER: P1432778
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	41868.8	41868.8	41868.8	41868.8	41868.8	41868.8	*41868.8*	41868.8	41868.8
2.5°	*41776.7*	*41814.4*	*41830.2*	*41838.9*	*41848.6*	*41874.9*	*41886.2*	*41867.9*	*41883.6*
5°	41703.8	41706.5	41697.7	41737.2	41699.5	41725.8	*41773.2*	41754.7	41747.8
7.5°	41279.5	41367.1	41418.8	41432.0	41439.0	41471.5	*41504.8*	41316.2	41288.2
10°	40472.7	40619.1	40944.5	41037.4	41009.3	41062.0	*40893.6*	40400.7	40207.9
12.5°	38703.9	39218.7	40064.1	40440.2	40371.8	40418.3	*39844.8*	38804.8	38206.7
15°	36281.0	37036.0	38812.6	39554.6	39611.6	39554.6	*38501.4*	36474.8	35447.9
17.5°	33060.0	34454.4	37070.2	38510.1	38427.7	38454.9	*36455.5*	33459.9	32284.8
20°	29619.0	31105.4	34786.7	37188.6	37163.2	37010.6	*34131.7*	30181.1	28465.8
22.5°	25727.2	27644.2	32169.9	35563.6	35554.0	35299.7	*31301.9*	26600.6	24753.8
25°	22256.3	24136.5	29225.2	33573.0	33497.7	33208.2	*28158.1*	23028.9	21103.2
27.5°	18668.0	20622.6	26081.5	31240.5	31188.7	30872.9	*25152.8*	19690.4	17857.7
30°	15625.9	17413.1	22924.5	28673.6	28342.2	28306.2	*22054.6*	16599.3	14831.4
32.5°	13019.7	14551.7	19948.3	25989.4	25402.7	25570.2	*18966.9*	14014.2	12262.0
35°	10747.6	12097.1	16859.8	22885.1	22225.7	22442.3	*16133.6*	11499.1	10046.0
37.5°	8722.7	10020.6	14242.1	19865.9	18857.4	19266.0	*13641.4*	9603.2	8438.6
40°	7302.1	8331.7	11759.6	16552.9	15468.0	16133.6	*11263.2*	8009.8	7076.7
42.5°	6292.0	6963.7	9705.8	13389.8	12557.6	13029.3	*9283.1*	6696.2	5998.1
45°	5371.1	5907.0	8030.8	10566.1	10084.6	10522.2	*7682.7*	5709.7	5185.2
47.5°	4691.6	5104.6	6611.1	8532.5	8233.4	8372.0	*6416.5*	4982.7	4556.5
50°	4104.9	4424.1	5558.0	6886.5	6723.4	6808.4	*5374.7*	4335.5	4042.6
52.5°	3648.9	3883.0	4661.7	5659.7	5579.0	5592.1	*4580.1*	3813.8	3601.5
55°	3250.8	3413.9	3979.5	4636.3	4617.0	4620.5	*3912.9*	3379.6	3206.9
57.5°	2902.6	3037.7	3420.0	3894.5	3866.3	3872.5	*3388.5*	3001.7	2890.3
60°	2607.9	2698.3	2955.2	3291.1	3272.7	3264.8	*2936.9*	2665.0	2626.4
62.5°	2346.6	2404.5	2582.5	2821.1	2786.0	2793.9	*2581.7*	2407.1	2350.2
65°	2117.7	2137.9	2263.3	2410.7	2387.9	2407.1	*2270.4*	2151.1	2137.9
67.5°	1894.1	1914.3	1988.0	2087.1	2060.7	2076.5	*1989.7*	1919.5	1908.2
70°	1690.7	1689.8	1731.0	1784.6	1784.6	1787.2	*1740.7*	1698.6	1707.4
72.5°	1480.3	1475.0	1487.2	1523.2	1513.5	1546.9	*1497.8*	1484.6	1486.4
75°	1266.2	1251.4	1258.4	1276.8	1266.2	1283.8	*1261.9*	1278.6	1278.6
77.5°	1064.5	1036.5	1027.8	1030.4	1011.1	1037.4	*1042.6*	1054.1	1080.4
80°	854.1	814.7	792.7	791.9	775.2	791.9	*805.1*	828.7	854.1
82.5°	634.0	599.9	563.0	555.9	545.5	555.1	*572.6*	600.7	641.9
85°	386.7	350.7	328.0	315.7	324.5	324.5	*333.2*	372.7	398.2
87.5°	139.4	121.9	100.0	100.8	103.5	107.0	*111.3*	140.3	153.5
90°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.9
92.5°	0.9	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.9
95°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.9
97.5°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.9
100°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7
102.5°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7
105°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7
107.5°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7
110°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7

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Scaled Data Report

TEST NUMBER: P1432778
CATALOG NUMBER: EHBR1-54-UNV-A1-L835

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7
115°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7
117.5°	2.6	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7
120°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.9	1.7
122.5°	2.6	0.9	0.0	0.0	0.0	0.0	*0.0*	0.9	2.6
125°	2.6	0.9	0.0	0.0	0.0	0.0	*0.9*	0.9	2.6
127.5°	2.6	0.9	0.0	0.0	0.0	0.0	*0.9*	1.7	2.6
130°	2.6	1.7	0.9	0.0	0.9	0.9	*1.7*	1.7	2.6
132.5°	3.5	2.6	2.6	1.7	1.7	2.6	*2.6*	3.5	3.5
135°	4.4	3.5	3.5	2.6	3.5	3.5	*3.5*	3.5	4.4
137.5°	4.4	4.4	4.4	4.4	4.4	4.4	*4.4*	4.4	5.2
140°	6.1	5.2	5.2	5.2	5.2	5.2	*5.2*	6.1	6.1
142.5°	7.0	7.0	6.1	6.1	6.1	7.0	*7.0*	7.0	7.9
145°	7.9	7.9	7.0	7.0	7.0	7.9	*7.9*	8.7	8.7
147.5°	10.6	9.6	7.9	7.9	7.9	7.9	*8.7*	9.6	10.6
150°	11.4	10.6	8.7	8.7	8.7	8.7	*9.6*	11.4	12.3
152.5°	12.3	11.4	9.6	8.7	8.7	8.7	*10.6*	11.4	13.2
155°	13.2	12.3	10.6	8.7	8.7	9.6	*11.4*	13.2	14.1
157.5°	15.8	14.1	12.3	10.6	10.6	11.4	*13.2*	14.9	15.8
160°	17.6	15.8	14.1	12.3	12.3	13.2	*14.9*	16.7	17.6
162.5°	19.3	17.6	14.9	14.1	13.2	14.1	*15.8*	18.4	19.3
165°	20.2	18.4	16.7	14.9	14.9	14.9	*17.6*	19.3	20.2
167.5°	21.0	20.2	17.6	15.8	15.8	15.8	*18.4*	20.2	21.0
170°	21.9	21.0	18.4	16.7	15.8	16.7	*19.3*	21.0	21.9
172.5°	23.7	22.8	20.2	18.4	17.6	18.4	*21.0*	22.8	23.7
175°	26.3	24.5	22.8	20.2	19.3	20.2	*22.8*	24.5	26.3
177.5°	27.2	25.4	23.7	21.0	20.2	21.0	*23.7*	25.4	27.2
180°	23.7	23.7	23.7	23.7	23.7	23.7	*23.7*	23.7	23.7

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Scaled Data Report

TEST NUMBER: P1432778
CATALOG NUMBER: EHBR1-54-UNV-A1-L835

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	20.73	22.00	21.10	22.31	22.63	21.72	22.98	22.08	23.30	23.61
	3H	22.30	23.43	22.68	23.76	24.12	23.06	24.18	23.44	24.51	24.88
	4H	22.97	24.02	23.37	24.37	24.76	23.62	24.67	24.02	25.02	25.40
	6H	23.52	24.49	23.94	24.86	25.26	24.05	25.01	24.46	25.38	25.78
	8H	23.72	24.64	24.16	25.03	25.44	24.19	25.10	24.62	25.49	25.90
	12H	23.85	24.72	24.29	25.11	25.54	24.26	25.14	24.70	25.52	25.95
4H	2H	21.31	22.36	21.71	22.71	23.09	22.08	23.13	22.48	23.48	23.86
	3H	23.10	23.96	23.51	24.37	24.77	23.67	24.53	24.08	24.94	25.34
	4H	23.89	24.67	24.33	25.09	25.53	24.36	25.14	24.80	25.56	26.00
	6H	24.58	25.24	25.04	25.69	26.16	24.93	25.60	25.40	26.05	26.52
	8H	24.82	25.45	25.30	25.90	26.37	25.12	25.74	25.59	26.19	26.66
	12H	24.99	25.54	25.48	26.03	26.50	25.24	25.79	25.72	26.27	26.75
8H	4H	24.17	24.80	24.64	25.24	25.72	24.59	25.22	25.07	25.67	26.14
	6H	24.99	25.50	25.49	26.00	26.48	25.30	25.80	25.80	26.30	26.78
	8H	25.32	25.78	25.84	26.29	26.79	25.56	26.01	26.08	26.53	27.02
	12H	25.57	25.97	26.09	26.47	27.04	25.75	26.15	26.27	26.65	27.22
12H	4H	24.19	24.74	24.68	25.22	25.70	24.61	25.16	25.10	25.64	26.12
	6H	25.04	25.49	25.56	26.01	26.50	25.34	25.80	25.86	26.31	26.81
	8H	25.42	25.82	25.94	26.32	26.89	25.66	26.06	26.17	26.55	27.13

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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: SP1-2506-472-3

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L835-N

Data in this report applies to families of products including EHBR-60-L835-N

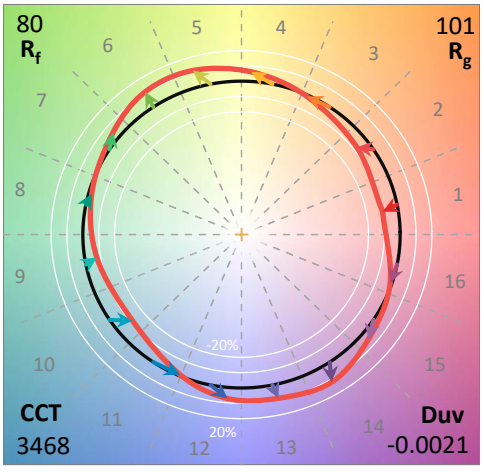
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-3
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-L835-N**
Description:	Elevate Round Highbay at, 60000 lumens, 3500K 80CRI LEDs with N lens

Spectral Parameters

CCT (K):	3468	CRI (Ra):	82.1		
CIE u':	0.2375	R1:	82.9	R9:	27.6
CIE v':	0.5091	R2:	85.6	R10:	63.8
Duv:	-0.0021	R3:	85.9	R11:	81.2
CIE x:	0.4049	R4:	82.8	R12:	57.2
CIE y:	0.3856	R5:	81.0	R13:	82.6
CIE z:	0.2095	R6:	79.7	R14:	91.0
Peak Wavelength (nm):	630	R7:	86.5	R15:	79.4
Dominant Wavelength (nm):	581	R8:	72.1		
Purity:	37.24544				
Rf:	80.1				
Rg:	101				



Test Conditions

Stabilization Time:	39M
Operation Time:	1H 39M
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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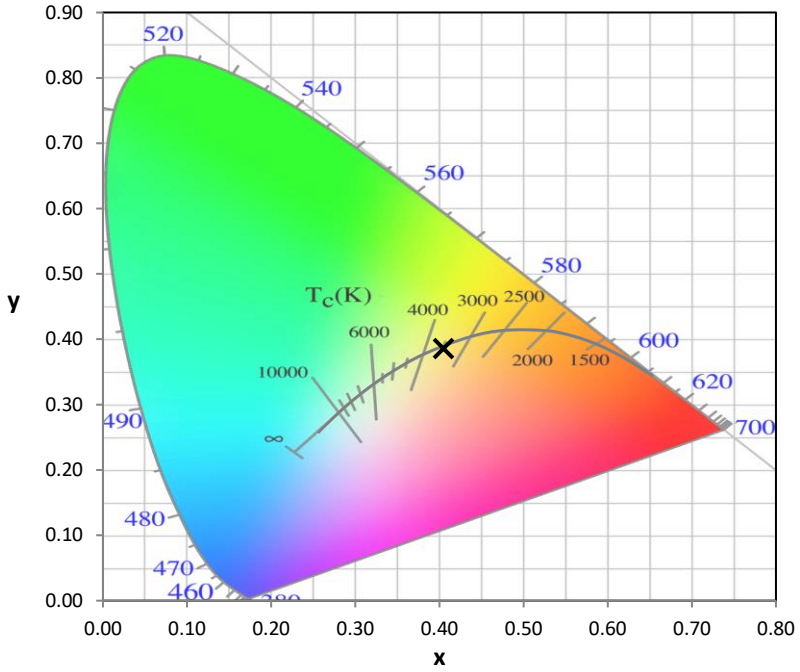
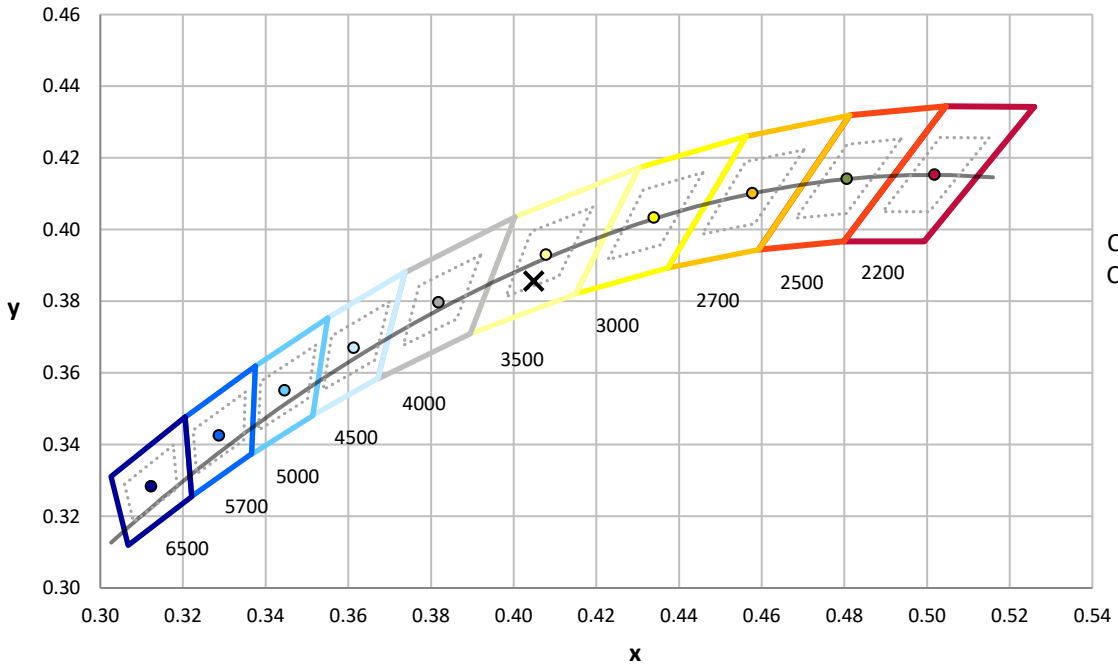
CIE 1931 Chromaticity Diagram



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



CCT = 3468K
CIE x = 0.4049
CIE y = 0.3856
Duv = -0.0021

Point lies inside the ANSI 3500K 4-step quadrangle

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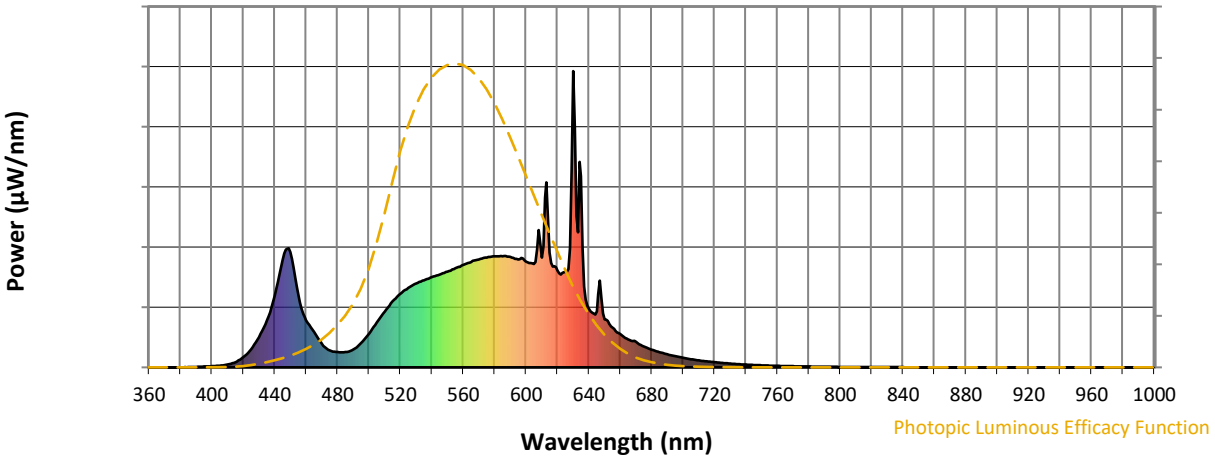
Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	60	NR	620	327	NR	750	7	NR	880	0	NR
365	0	NR	495	82	NR	625	322	NR	755	6	NR	885	0	NR
370	0	NR	500	114	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	152	NR	635	645	NR	765	4	NR	895	0	NR
380	0	NR	510	189	NR	640	197	NR	770	4	NR	900	0	NR
385	1	NR	515	222	NR	645	189	NR	775	3	NR	905	0	NR
390	2	NR	520	248	NR	650	163	NR	780	3	NR	910	0	NR
395	3	NR	525	268	NR	655	134	NR	785	2	NR	915	0	NR
400	4	NR	530	283	NR	660	113	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	94	NR	795	2	NR	925	0	NR
410	9	NR	540	305	NR	670	87	NR	800	2	NR	930	0	NR
415	18	NR	545	314	NR	675	70	NR	805	1	NR	935	0	NR
420	34	NR	550	323	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	335	NR	685	51	NR	815	1	NR	945	0	NR
430	102	NR	560	346	NR	690	44	NR	820	1	NR	950	0	NR
435	159	NR	565	356	NR	695	38	NR	825	1	NR	955	0	NR
440	241	NR	570	364	NR	700	32	NR	830	1	NR	960	0	NR
445	363	NR	575	371	NR	705	28	NR	835	1	NR	965	0	NR
450	389	NR	580	375	NR	710	24	NR	840	1	NR	970	0	NR
455	245	NR	585	375	NR	715	20	NR	845	0	NR	975	0	NR
460	158	NR	590	373	NR	720	17	NR	850	0	NR	980	0	NR
465	120	NR	595	364	NR	725	15	NR	855	0	NR	985	0	NR
470	79	NR	600	357	NR	730	13	NR	860	0	NR	990	0	NR
475	57	NR	605	349	NR	735	11	NR	865	0	NR	995	0	NR
480	51	NR	610	371	NR	740	9	NR	870	0	NR	1000	0	NR
485	51	NR	615	387	NR	745	8	NR	875	0	NR			

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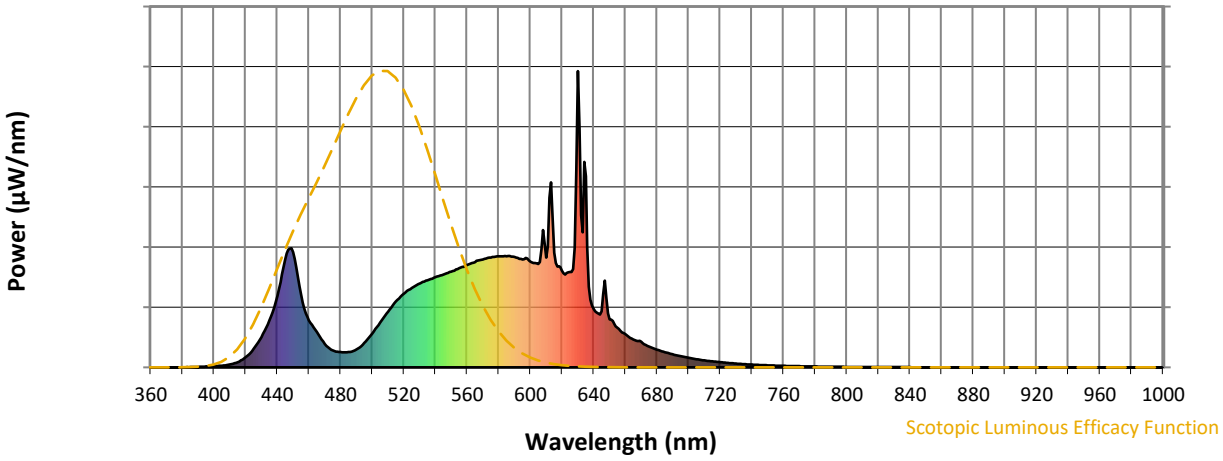
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.43**

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	60	NR	620	327	NR	750	7	NR	880	0	NR
365	0	NR	495	82	NR	625	322	NR	755	6	NR	885	0	NR
370	0	NR	500	114	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	152	NR	635	645	NR	765	4	NR	895	0	NR
380	0	NR	510	189	NR	640	197	NR	770	4	NR	900	0	NR
385	1	NR	515	222	NR	645	189	NR	775	3	NR	905	0	NR
390	2	NR	520	248	NR	650	163	NR	780	3	NR	910	0	NR
395	3	NR	525	268	NR	655	134	NR	785	2	NR	915	0	NR
400	4	NR	530	283	NR	660	113	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	94	NR	795	2	NR	925	0	NR
410	9	NR	540	305	NR	670	87	NR	800	2	NR	930	0	NR
415	18	NR	545	314	NR	675	70	NR	805	1	NR	935	0	NR
420	34	NR	550	323	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	335	NR	685	51	NR	815	1	NR	945	0	NR
430	102	NR	560	346	NR	690	44	NR	820	1	NR	950	0	NR
435	159	NR	565	356	NR	695	38	NR	825	1	NR	955	0	NR
440	241	NR	570	364	NR	700	32	NR	830	1	NR	960	0	NR
445	363	NR	575	371	NR	705	28	NR	835	1	NR	965	0	NR
450	389	NR	580	375	NR	710	24	NR	840	1	NR	970	0	NR
455	245	NR	585	375	NR	715	20	NR	845	0	NR	975	0	NR
460	158	NR	590	373	NR	720	17	NR	850	0	NR	980	0	NR
465	120	NR	595	364	NR	725	15	NR	855	0	NR	985	0	NR
470	79	NR	600	357	NR	730	13	NR	860	0	NR	990	0	NR
475	57	NR	605	349	NR	735	11	NR	865	0	NR	995	0	NR
480	51	NR	610	371	NR	740	9	NR	870	0	NR	1000	0	NR
485	51	NR	615	387	NR	745	8	NR	875	0	NR			

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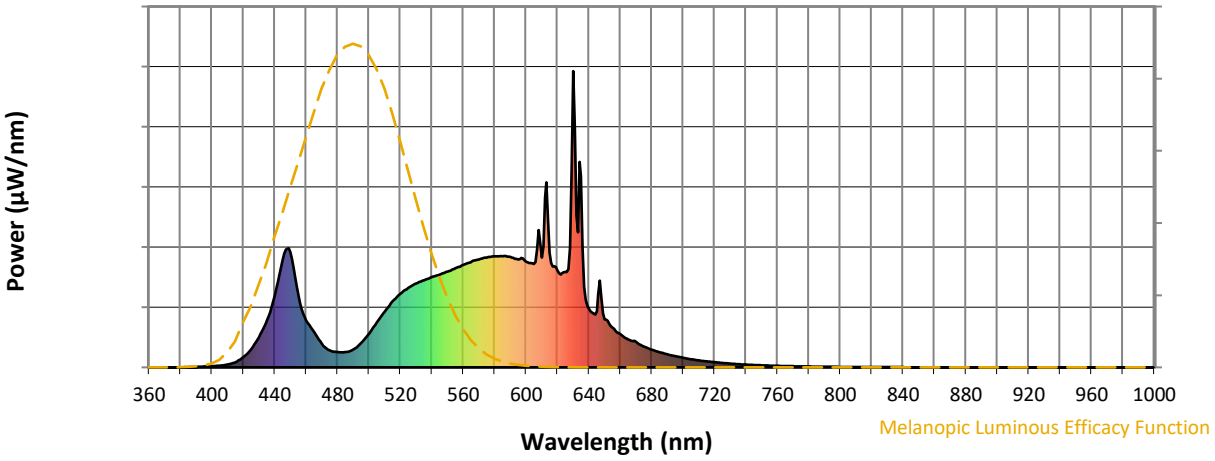
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.75**

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	60	NR	620	327	NR	750	7	NR	880	0	NR
365	0	NR	495	82	NR	625	322	NR	755	6	NR	885	0	NR
370	0	NR	500	114	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	152	NR	635	645	NR	765	4	NR	895	0	NR
380	0	NR	510	189	NR	640	197	NR	770	4	NR	900	0	NR
385	1	NR	515	222	NR	645	189	NR	775	3	NR	905	0	NR
390	2	NR	520	248	NR	650	163	NR	780	3	NR	910	0	NR
395	3	NR	525	268	NR	655	134	NR	785	2	NR	915	0	NR
400	4	NR	530	283	NR	660	113	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	94	NR	795	2	NR	925	0	NR
410	9	NR	540	305	NR	670	87	NR	800	2	NR	930	0	NR
415	18	NR	545	314	NR	675	70	NR	805	1	NR	935	0	NR
420	34	NR	550	323	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	335	NR	685	51	NR	815	1	NR	945	0	NR
430	102	NR	560	346	NR	690	44	NR	820	1	NR	950	0	NR
435	159	NR	565	356	NR	695	38	NR	825	1	NR	955	0	NR
440	241	NR	570	364	NR	700	32	NR	830	1	NR	960	0	NR
445	363	NR	575	371	NR	705	28	NR	835	1	NR	965	0	NR
450	389	NR	580	375	NR	710	24	NR	840	1	NR	970	0	NR
455	245	NR	585	375	NR	715	20	NR	845	0	NR	975	0	NR
460	158	NR	590	373	NR	720	17	NR	850	0	NR	980	0	NR
465	120	NR	595	364	NR	725	15	NR	855	0	NR	985	0	NR
470	79	NR	600	357	NR	730	13	NR	860	0	NR	990	0	NR
475	57	NR	605	349	NR	735	11	NR	865	0	NR	995	0	NR
480	51	NR	610	371	NR	740	9	NR	870	0	NR	1000	0	NR
485	51	NR	615	387	NR	745	8	NR	875	0	NR			

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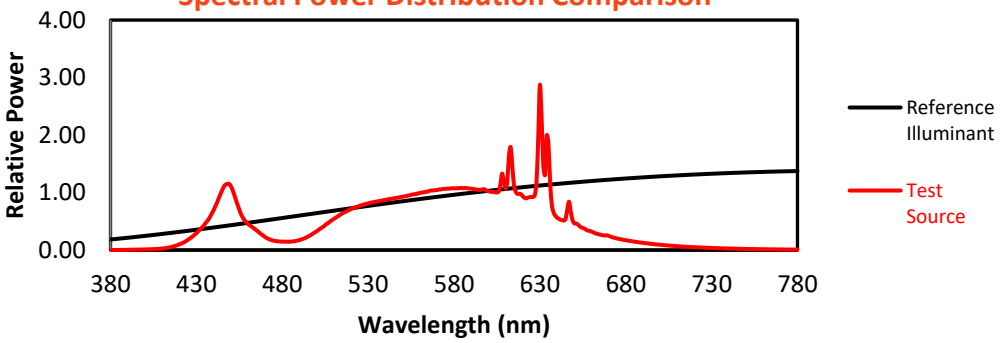
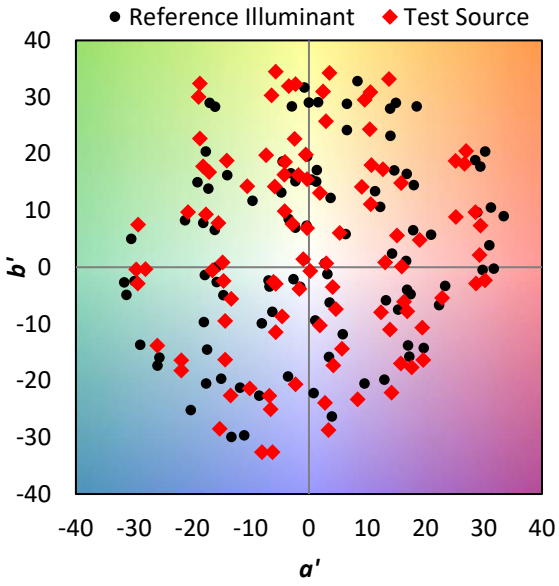
Summary

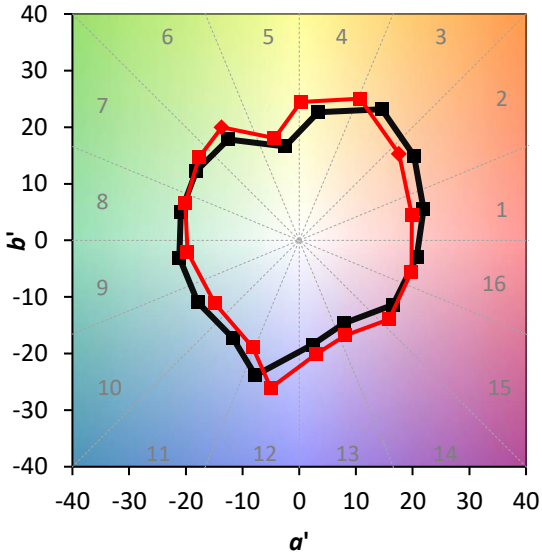
R_f = 80.1
R_g = 101
CIE R_a = 82.1
R_9 = 27.6

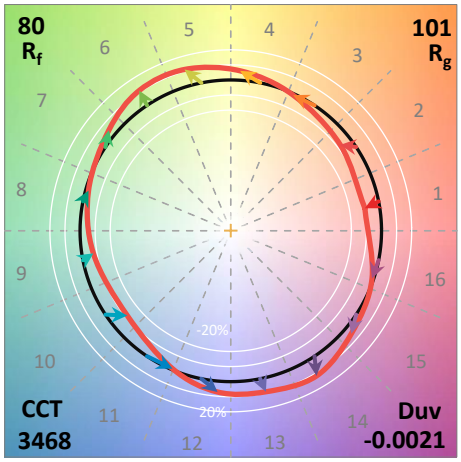
Spectral Power Distribution Comparison

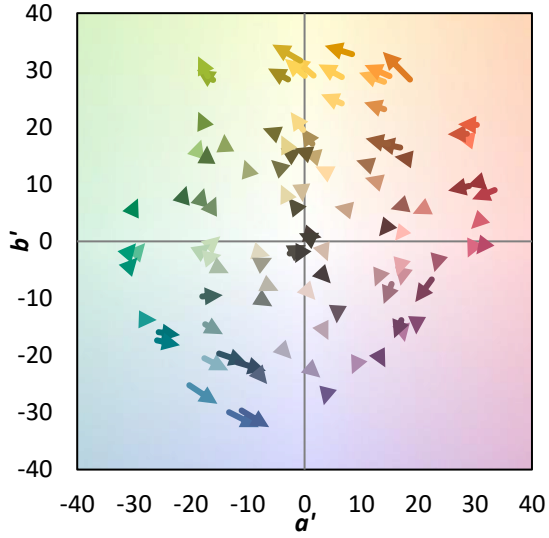


Color Vector Graphics









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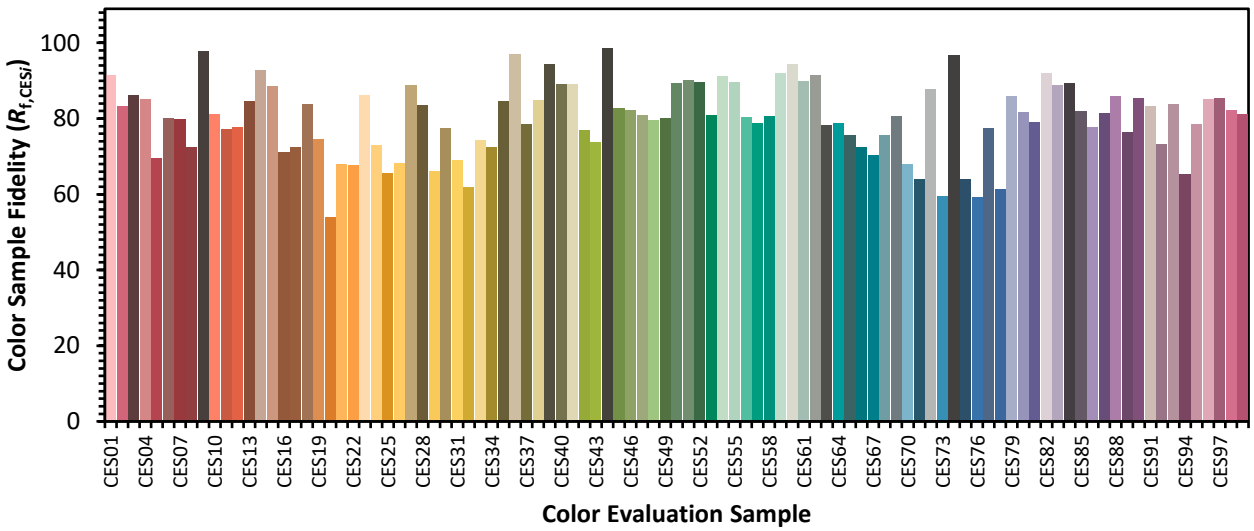
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 68	CES51 = 90	CES76 = 59
CES02 = 62	CES27 = 89	CES52 = 90	CES77 = 78
CES03 = 31	CES28 = 84	CES53 = 81	CES78 = 61
CES04 = 70	CES29 = 66	CES54 = 91	CES79 = 86
CES05 = 49	CES30 = 77	CES55 = 90	CES80 = 82
CES06 = 51	CES31 = 69	CES56 = 80	CES81 = 79
CES07 = 42	CES32 = 62	CES57 = 79	CES82 = 92
CES08 = 41	CES33 = 74	CES58 = 81	CES83 = 89
CES09 = 29	CES34 = 72	CES59 = 92	CES84 = 89
CES10 = 75	CES35 = 85	CES60 = 94	CES85 = 82
CES11 = 58	CES36 = 97	CES61 = 90	CES86 = 78
CES12 = 64	CES37 = 79	CES62 = 92	CES87 = 82
CES13 = 43	CES38 = 85	CES63 = 78	CES88 = 86
CES14 = 74	CES39 = 94	CES64 = 79	CES89 = 76
CES15 = 71	CES40 = 89	CES65 = 76	CES90 = 85
CES16 = 47	CES41 = 89	CES66 = 73	CES91 = 83
CES17 = 49	CES42 = 77	CES67 = 70	CES92 = 73
CES18 = 56	CES43 = 74	CES68 = 76	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 81	CES94 = 65
CES20 = 66	CES45 = 83	CES70 = 68	CES95 = 79
CES21 = 86	CES46 = 82	CES71 = 64	CES96 = 85
CES22 = 78	CES47 = 81	CES72 = 88	CES97 = 85
CES23 = 92	CES48 = 80	CES73 = 60	CES98 = 82
CES24 = 91	CES49 = 80	CES74 = 97	CES99 = 81
CES25 = 72	CES50 = 89	CES75 = 64	



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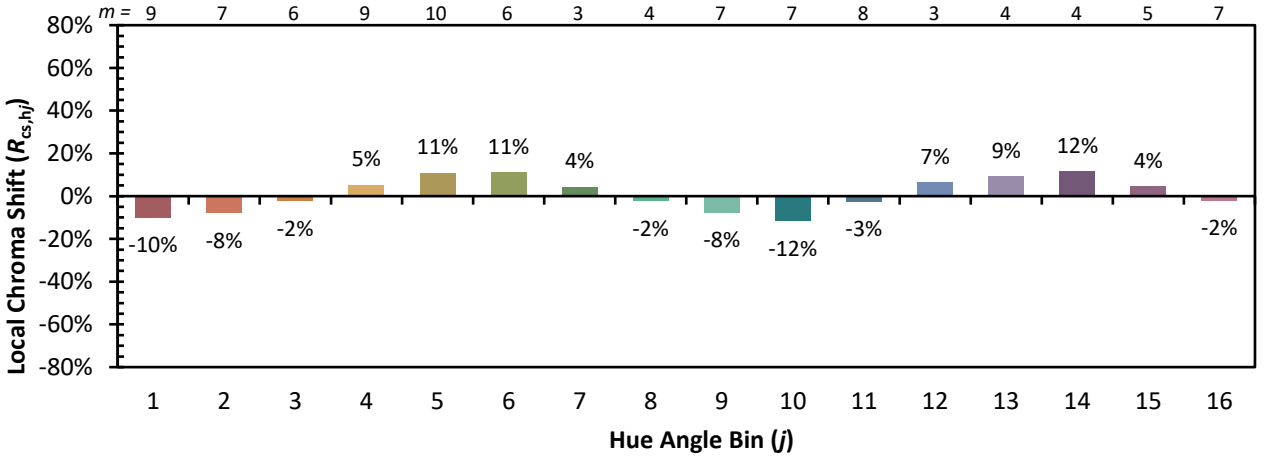
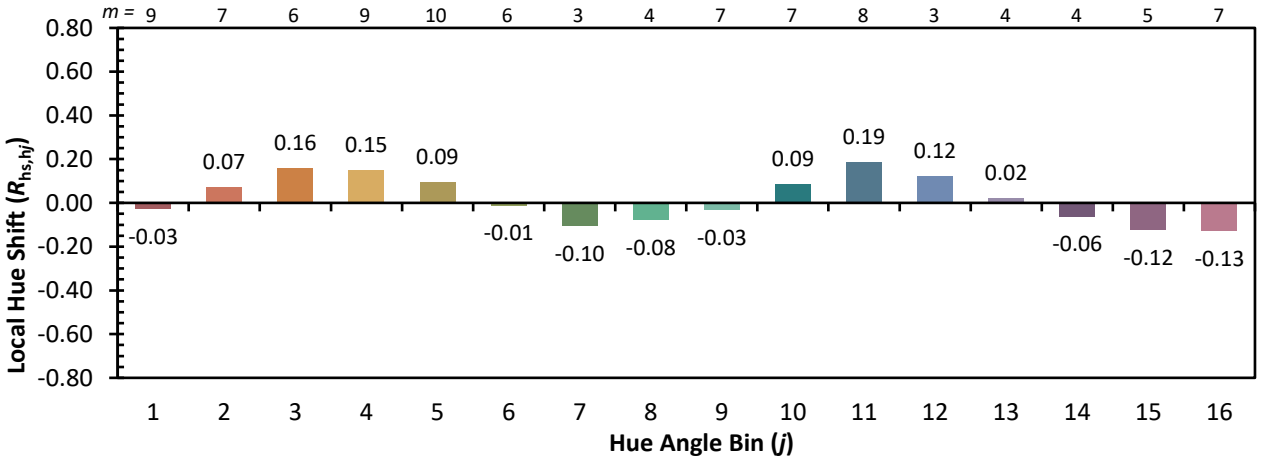
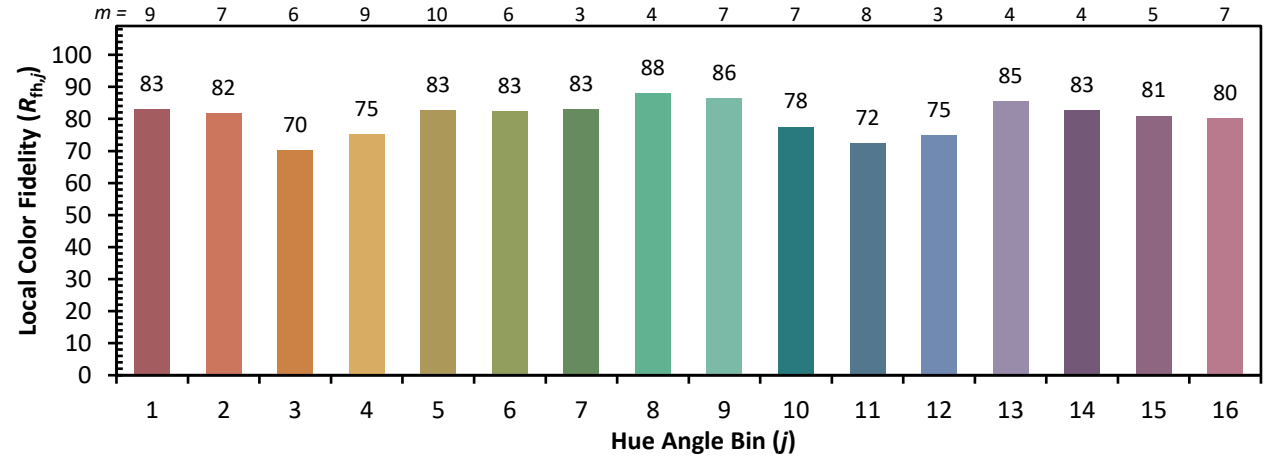
Color Rendition by Hue-Angle Bin







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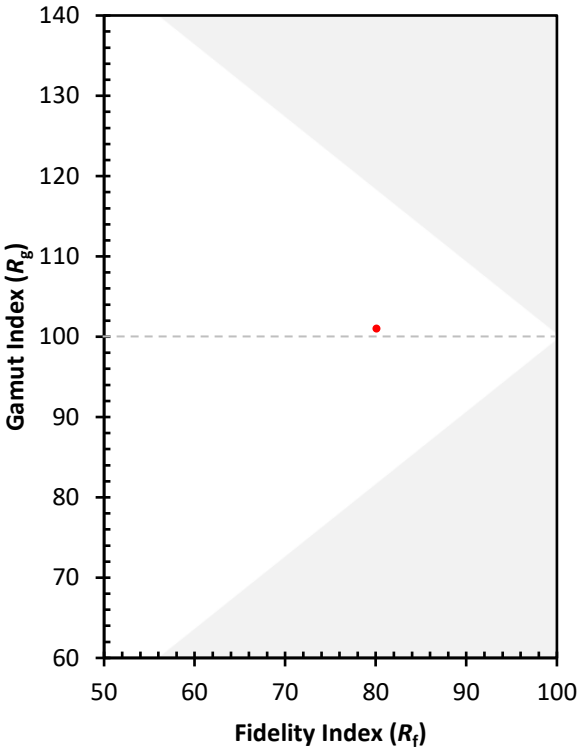
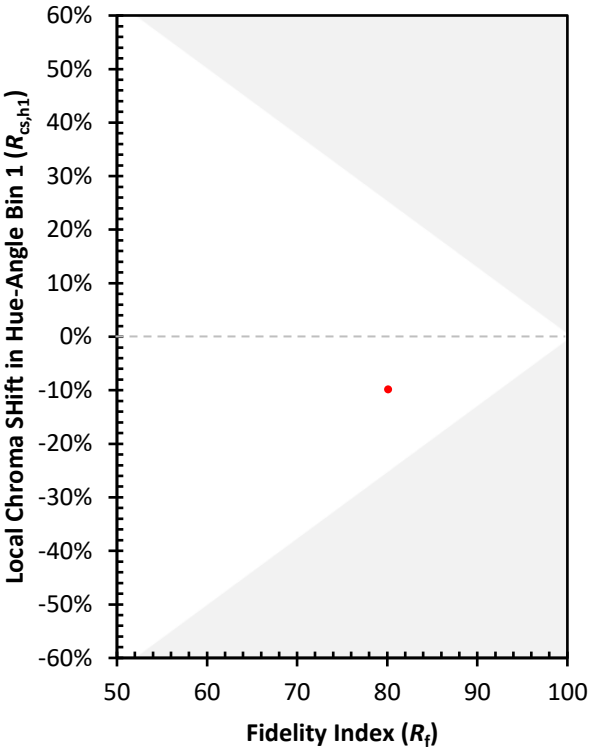
Measure Comparisons





(END OF REPORT)