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: P1431907

Luminaire Tested: EHBR1-60-UNV-ASM-L840

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:	P1431907
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-654-4)
Test Lab:	INNOVATION CENTER
Issue Date:	3/13/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-60-UNV-ASM-L840
Description:	Elevate Round Highbay at, 60000 lumens, 4000K 80CRI LEDs with ASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	59394.1 lumens
Efficiency:	N/A
Efficacy:	179.8 lumens/watt
Spacing Criteria (0/90/45):	0.84 / 0.99 / 0.92
Luminous Opening:	Circular (Dia: 1.71' x H: 0')
CIE Type:	Direct

Input Watts (W):	330.4
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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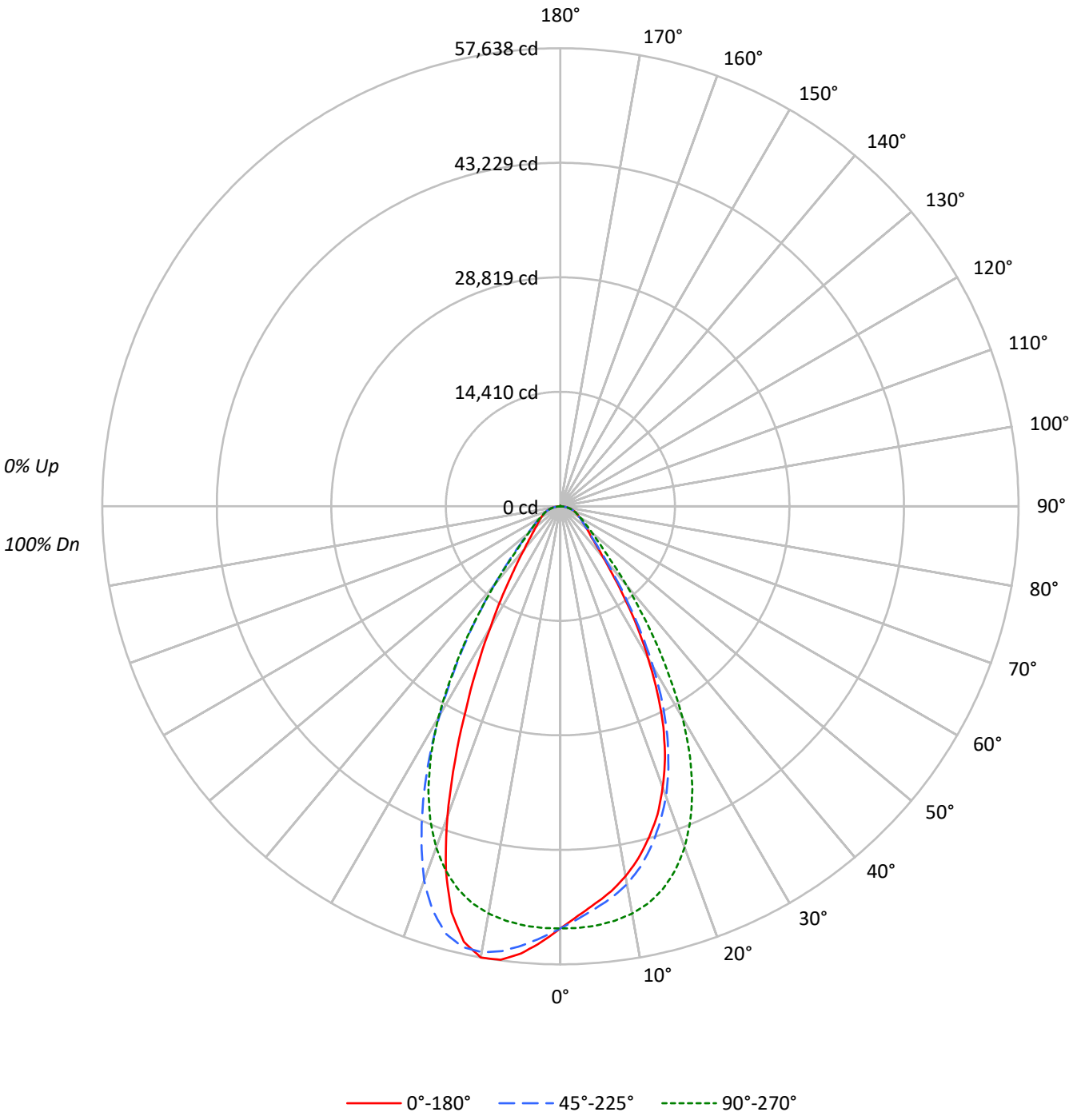
Scaled Data Report

TEST NUMBER: P1431907
CATALOG NUMBER: EHBR1-60-UNV-ASM-L840

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	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	93	84	77	72	91	83	77	72	80	75	71	78	74	70	76	72	69	67
5	87	78	71	66	86	77	70	65	75	69	65	73	68	64	71	67	64	62
6	82	72	65	60	81	71	65	60	70	64	60	68	63	59	67	62	59	57
7	78	67	60	56	76	67	60	56	65	59	55	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	52	61	55	51	60	55	51	59	54	51	49
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46
10	66	56	49	45	65	55	49	45	54	49	45	54	48	45	53	48	45	43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	249447	249447	249447	249447	249447
5°	236595	239361	249545	261514	266219
10°	225391	230165	248099	271686	274849
15°	209603	215202	242397	270711	257143
20°	188008	194339	228292	250583	207640
25°	158729	164736	203557	211743	144933
30°	119711	126651	166603	164940	95044
35°	80394	85247	120542	118595	62093
40°	51199	54716	78701	79208	43219
45°	36892	38426	50499	52669	33855
50°	31138	31385	38000	38990	29151
55°	27930	27996	31527	32359	26985
60°	26390	26166	27859	28449	26231
65°	25876	25644	26087	26596	25987
70°	26107	25657	25684	26176	26449
75°	26331	25536	25482	26385	27146
80°	26668	24810	24915	26668	28526
85°	25276	20987	20987	23988	26510

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
Vertical Angle: 45°
Luminance: 70999 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5050.7	8.5
10°-20°	13740.8	23.1
20°-30°	16115.1	27.1
30°-40°	11207.0	18.9
40°-50°	5569.4	9.4
50°-60°	3331.1	5.6
60°-70°	2344.5	3.9
70°-80°	1510.3	2.5
80°-90°	479.7	0.8
90°-100°	2.8	0.0
100°-110°	3.3	0.0
110°-120°	3.4	0.0
120°-130°	4.3	0.0
130°-140°	5.8	0.0
140°-150°	7.0	0.0
150°-160°	7.8	0.0
160°-170°	7.6	0.0
170°-180°	3.3	0.0
0°-30°	34906.6	58.8
0°-40°	46113.6	77.6
0°-60°	55014.1	92.6
0°-90°	59348.6	99.9
90°-120°	9.6	0.0
90°-150°	26.7	0.0
90°-180°	45.0	0.1
0°-180°	59394.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	53118	53118	53118	53118	53118	
5°	50190	50776	52937	55476	56474	4708
15°	43113	44264	49858	55682	52891	12023
25°	30633	31793	39285	40865	27971	13822
35°	14023	14870	21026	20687	10831	8933
45°	5555	5786	7604	7930	5098	4490
55°	3411	3419	3851	3952	3296	3095
65°	2329	2308	2348	2394	2339	2312
75°	1451	1407	1404	1454	1496	1532
85°	469	390	390	445	492	483
90°	1	1	1	3	8	24
95°	1	1	2	3	8	1
105°	2	1	2	4	9	2
115°	2	2	3	4	9	2
125°	3	4	4	6	10	2
135°	4	7	8	8	11	3
145°	11	12	12	10	13	7
155°	19	17	16	16	18	9
165°	28	26	27	29	33	8
175°	34	34	35	38	43	3
180°	37	37	37	37	37	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	53118.0	53118.0	53118.0	53118.0	53118.0	53118.0	53118.0	53118.0	53118.0
2.5°	51541.2	51575.1	51935.7	52404.8	53087.1	53773.4	54329.2	54695.7	54877.0
5°	50189.6	50376.9	50776.3	51637.9	52936.7	54311.2	55475.6	56237.6	56473.7
7.5°	48872.8	48981.4	49649.8	50738.4	52577.1	54718.6	56448.8	57338.2	57555.4
10°	47266.2	47512.3	48267.3	49551.2	52028.3	54975.6	56974.7	57612.1	57638.0
12.5°	45375.7	45701.4	46481.3	48100.9	51152.8	54884.0	56798.4	56589.2	56114.1
15°	43112.7	43398.6	44264.2	46142.7	49857.9	54341.1	55681.8	53979.6	52890.9
17.5°	40668.4	40927.4	41679.4	43748.2	48033.2	53325.2	53351.1	49983.4	47929.6
20°	37620.5	37823.7	38887.5	40917.5	45681.5	51695.6	50141.8	43982.3	41548.9
22.5°	34377.4	34567.7	35512.9	37625.5	42733.2	49498.4	45672.6	37945.3	34625.4
25°	30633.3	30736.9	31792.7	33703.1	39284.9	46806.1	40864.7	31367.4	27970.9
27.5°	26421.0	26597.3	27702.0	29653.2	35229.0	43393.6	35745.0	25632.2	22498.6
30°	22076.3	22368.1	23356.2	25103.3	30723.9	39019.0	30417.2	20412.9	17527.4
32.5°	18021.4	18231.6	18935.8	20761.5	25680.0	34731.0	25300.5	16356.0	13911.7
35°	14023.3	14233.5	14869.9	16662.8	21026.5	29366.3	20686.8	12851.9	10831.0
37.5°	10719.4	11090.9	11499.3	12954.5	16501.4	24297.5	16490.5	10348.9	8785.1
40°	8351.8	8411.6	8925.5	9856.8	12838.0	18998.5	12920.7	8261.2	7050.0
42.5°	6685.4	6847.8	7068.9	7766.1	9727.4	14527.3	10155.7	6780.1	5988.2
45°	5554.9	5618.7	5786.0	6254.2	7603.8	10690.5	7930.5	5720.3	5097.7
47.5°	4859.7	4831.8	4939.4	5290.0	6192.4	8262.2	6427.5	4906.5	4470.2
50°	4262.1	4245.1	4295.9	4530.0	5201.3	6339.8	5336.8	4283.0	3990.1
52.5°	3797.9	3812.9	3817.8	3963.3	4468.2	5170.5	4544.9	3816.8	3619.6
55°	3411.4	3430.4	3419.4	3527.0	3850.7	4346.7	3952.3	3432.4	3295.9
57.5°	3109.6	3095.7	3080.8	3138.5	3381.6	3687.4	3432.4	3104.7	3014.0
60°	2809.8	2796.9	2785.9	2823.8	2966.2	3193.3	3029.0	2818.8	2792.9
62.5°	2552.9	2544.9	2543.9	2536.9	2646.5	2789.9	2678.4	2561.8	2538.9
65°	2328.7	2319.8	2307.8	2296.9	2347.7	2481.1	2393.5	2330.7	2338.7
67.5°	2104.6	2104.6	2083.7	2066.8	2116.6	2186.3	2148.5	2112.6	2121.6
70°	1901.4	1902.4	1868.6	1855.6	1870.6	1945.3	1906.4	1911.4	1926.3
72.5°	1683.3	1659.4	1634.5	1633.5	1635.5	1693.3	1680.3	1692.3	1708.2
75°	1451.2	1423.3	1407.4	1389.5	1404.4	1448.2	1454.2	1471.2	1496.1
77.5°	1227.1	1184.3	1171.3	1162.4	1152.4	1202.2	1221.1	1244.1	1280.9
80°	986.1	939.3	917.4	904.4	921.3	944.2	986.1	1003.0	1054.8
82.5°	729.1	694.2	667.3	666.4	674.3	695.2	731.1	763.0	792.9
85°	469.1	413.4	389.5	398.4	389.5	421.3	445.2	483.1	492.0
87.5°	169.3	132.5	126.5	139.4	136.5	146.4	167.3	182.3	183.3
90°	1.0	1.0	1.0	1.0	1.0	2.0	3.0	6.0	8.0
92.5°	1.0	1.0	1.0	1.0	1.0	2.0	3.0	6.0	8.0
95°	1.0	1.0	1.0	1.0	2.0	2.0	3.0	6.0	8.0
97.5°	2.0	1.0	1.0	1.0	2.0	2.0	3.0	6.0	8.0
100°	2.0	1.0	1.0	2.0	2.0	2.0	3.0	6.0	8.0
102.5°	2.0	1.0	1.0	2.0	2.0	3.0	4.0	7.0	8.0
105°	2.0	1.0	1.0	2.0	2.0	3.0	4.0	7.0	9.0
107.5°	2.0	1.0	2.0	2.0	2.0	3.0	4.0	7.0	9.0
110°	2.0	1.0	2.0	2.0	2.0	3.0	4.0	7.0	9.0

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Scaled Data Report

TEST NUMBER: P1431907
CATALOG NUMBER: EHBR1-60-UNV-ASM-L840

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	2.0	1.0	2.0	2.0	2.0	3.0	4.0	7.0	*9.0*
115°	2.0	1.0	2.0	2.0	3.0	3.0	4.0	7.0	*9.0*
117.5°	2.0	1.0	2.0	3.0	3.0	3.0	4.0	7.0	*9.0*
120°	2.0	1.0	2.0	3.0	3.0	3.0	5.0	7.0	*9.0*
122.5°	2.0	2.0	3.0	4.0	4.0	4.0	5.0	8.0	*9.0*
125°	3.0	2.0	4.0	5.0	4.0	4.0	6.0	8.0	*10.0*
127.5°	3.0	2.0	4.0	5.0	5.0	5.0	6.0	8.0	*10.0*
130°	3.0	3.0	5.0	6.0	6.0	5.0	6.0	9.0	*10.0*
132.5°	4.0	4.0	7.0	8.0	7.0	6.0	7.0	10.0	*11.0*
135°	4.0	5.0	7.0	9.0	8.0	6.0	8.0	9.0	*11.0*
137.5°	5.0	6.0	9.0	10.0	9.0	7.0	8.0	10.0	*11.0*
140°	7.0	8.0	10.0	10.0	10.0	8.0	8.0	10.0	*12.0*
142.5°	9.0	9.0	11.0	11.0	11.0	9.0	9.0	11.0	*12.0*
145°	11.0	11.0	12.0	11.0	12.0	11.0	10.0	11.0	*12.9*
147.5°	12.9	12.9	12.9	12.0	12.0	11.0	11.0	12.0	*13.9*
150°	14.9	14.9	13.9	12.9	12.9	12.9	12.0	12.9	*14.9*
152.5°	16.9	15.9	14.9	13.9	13.9	13.9	13.9	14.9	*15.9*
155°	18.9	17.9	16.9	14.9	15.9	15.9	15.9	16.9	*17.9*
157.5°	21.9	19.9	18.9	17.9	17.9	18.9	18.9	19.9	*20.9*
160°	23.9	22.9	21.9	20.9	21.9	21.9	22.9	23.9	*24.9*
162.5°	25.9	24.9	23.9	23.9	23.9	23.9	25.9	26.9	*28.9*
165°	27.9	26.9	25.9	25.9	26.9	26.9	28.9	30.9	*32.9*
167.5°	27.9	27.9	27.9	27.9	28.9	28.9	30.9	33.9	*35.9*
170°	29.9	28.9	28.9	29.9	29.9	30.9	32.9	35.9	*37.8*
172.5°	31.9	30.9	31.9	31.9	32.9	32.9	35.9	38.8	*40.8*
175°	33.9	32.9	33.9	33.9	34.9	35.9	37.8	40.8	*42.8*
177.5°	34.9	33.9	33.9	33.9	34.9	36.9	38.8	41.8	*43.8*
180°	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	*36.9*

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Scaled Data Report

TEST NUMBER: P1431907
CATALOG NUMBER: EHBR1-60-UNV-ASM-L840

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	21.35	20.51	21.67	21.99	20.91	22.12	21.28	22.43	22.75
	3H	22.06	23.14	22.45	23.47	23.84	22.56	23.64	22.95	23.97	24.34
	4H	22.88	23.88	23.28	24.23	24.62	23.28	24.28	23.69	24.63	25.02
	6H	23.54	24.46	23.96	24.84	25.23	23.87	24.79	24.29	25.16	25.56
	8H	23.78	24.65	24.22	25.05	25.46	24.08	24.95	24.51	25.34	25.75
	12H	23.94	24.77	24.38	25.16	25.59	24.21	25.04	24.65	25.43	25.86
4H	2H	20.72	21.72	21.12	22.07	22.46	21.34	22.34	21.74	22.69	23.08
	3H	22.87	23.70	23.29	24.11	24.51	23.26	24.08	23.67	24.49	24.90
	4H	23.82	24.56	24.26	24.99	25.43	24.13	24.87	24.57	25.29	25.74
	6H	24.63	25.27	25.10	25.72	26.19	24.87	25.51	25.34	25.96	26.43
	8H	24.93	25.52	25.40	25.97	26.45	25.14	25.74	25.61	26.19	26.66
	12H	25.13	25.66	25.62	26.14	26.62	25.33	25.85	25.82	26.34	26.81
8H	4H	24.14	24.74	24.61	25.19	25.66	24.43	25.03	24.90	25.48	25.95
	6H	25.10	25.58	25.60	26.08	26.57	25.33	25.82	25.84	26.32	26.80
	8H	25.48	25.92	26.01	26.43	26.93	25.70	26.13	26.22	26.65	27.14
	12H	25.78	26.16	26.30	26.66	27.23	25.97	26.35	26.49	26.85	27.42
12H	4H	24.17	24.69	24.66	25.18	25.66	24.46	24.98	24.95	25.47	25.95
	6H	25.16	25.59	25.69	26.11	26.61	25.40	25.84	25.93	26.35	26.85
	8H	25.61	25.99	26.13	26.49	27.06	25.83	26.21	26.35	26.71	27.28

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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: SP1-2506-472-1

Test Date: 07/30/2025

Luminaire Tested: EHBR-60-L840-N

Data in this report applies to families of products including EHBR-60-L840-N

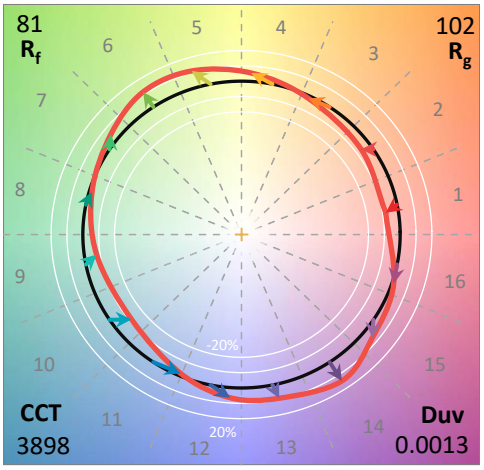
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-1
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-L840-N**
Description:	Elevate Round Highbay at, 60000 lumens, 4000K 80CRI LEDs with N lens

Spectral Parameters

CCT (K):	3898	CRI (Ra):	82.1		
CIE u':	0.2263	R1:	84.4	R9:	38.5
CIE v':	0.5052	R2:	83.5	R10:	58.9
Duv:	0.0013	R3:	80.8	R11:	83.6
CIE x:	0.3861	R4:	83.9	R12:	54.2
CIE y:	0.3831	R5:	82.1	R13:	82.8
CIE z:	0.2308	R6:	77.3	R14:	88.2
Peak Wavelength (nm):	630	R7:	86.4	R15:	81.2
Dominant Wavelength (nm):	578	R8:	78.3		
Purity:	30.85729				
Rf:	80.7				
Rg:	102.1				



Test Conditions

Stabilization Time:	42M
Operation Time:	1H 42M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-1

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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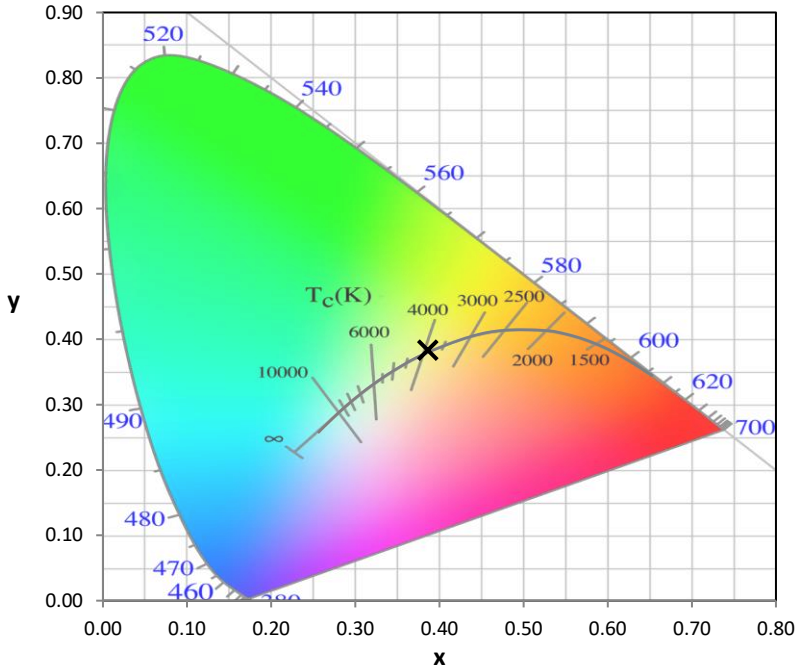
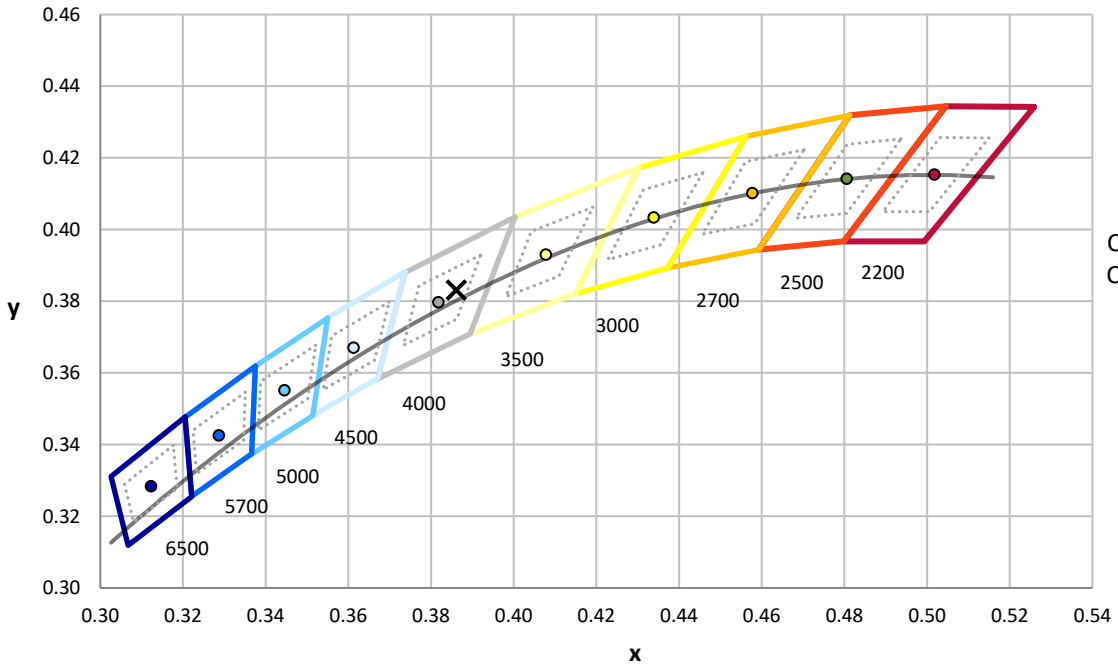
CIE 1931 Chromaticity Diagram



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



CCT = 3898K
CIE x = 0.3861
CIE y = 0.3831
Duv = 0.0013

Point lies inside the ANSI 4000K 4-step quadrangle

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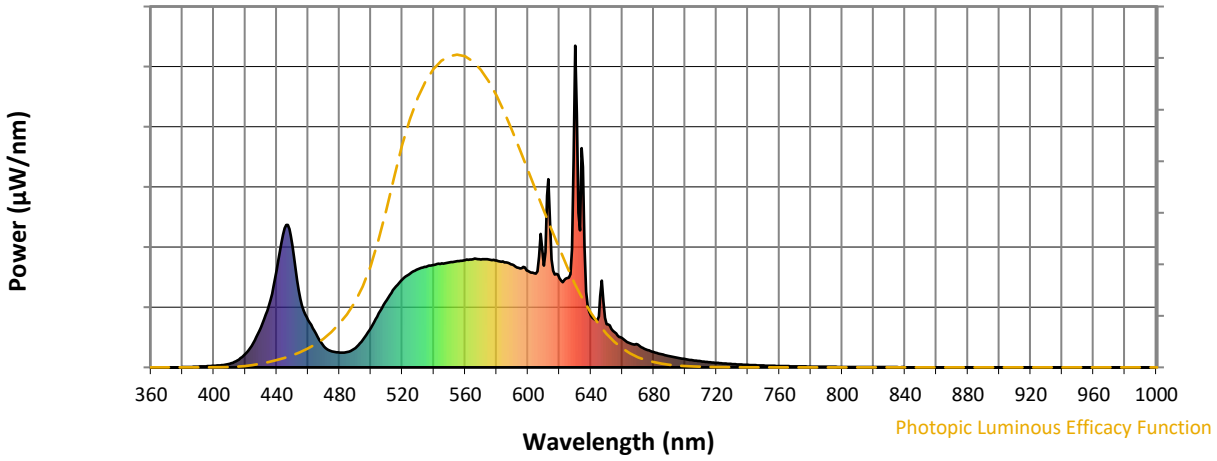
Photopic Flux vs. Wavelength



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	60	NR	620	277	NR	750	6	NR	880	0	NR
365	0	NR	495	87	NR	625	278	NR	755	5	NR	885	0	NR
370	0	NR	500	124	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	168	NR	635	623	NR	765	4	NR	895	0	NR
380	1	NR	510	209	NR	640	162	NR	770	3	NR	900	0	NR
385	1	NR	515	246	NR	645	158	NR	775	3	NR	905	0	NR
390	2	NR	520	273	NR	650	134	NR	780	2	NR	910	0	NR
395	4	NR	525	292	NR	655	109	NR	785	2	NR	915	0	NR
400	5	NR	530	305	NR	660	91	NR	790	2	NR	920	0	NR
405	7	NR	535	313	NR	665	75	NR	795	2	NR	925	0	NR
410	11	NR	540	319	NR	670	70	NR	800	1	NR	930	0	NR
415	21	NR	545	323	NR	675	56	NR	805	1	NR	935	0	NR
420	42	NR	550	326	NR	680	47	NR	810	1	NR	940	0	NR
425	76	NR	555	330	NR	685	41	NR	815	1	NR	945	0	NR
430	125	NR	560	333	NR	690	35	NR	820	1	NR	950	0	NR
435	193	NR	565	336	NR	695	30	NR	825	1	NR	955	0	NR
440	302	NR	570	336	NR	700	26	NR	830	1	NR	960	0	NR
445	432	NR	575	335	NR	705	22	NR	835	1	NR	965	0	NR
450	380	NR	580	332	NR	710	19	NR	840	0	NR	970	0	NR
455	213	NR	585	326	NR	715	16	NR	845	0	NR	975	0	NR
460	147	NR	590	319	NR	720	14	NR	850	0	NR	980	0	NR
465	104	NR	595	307	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	299	NR	730	10	NR	860	0	NR	990	0	NR
475	50	NR	605	291	NR	735	9	NR	865	0	NR	995	0	NR
480	46	NR	610	317	NR	740	8	NR	870	0	NR	1000	0	NR
485	47	NR	615	336	NR	745	7	NR	875	0	NR			

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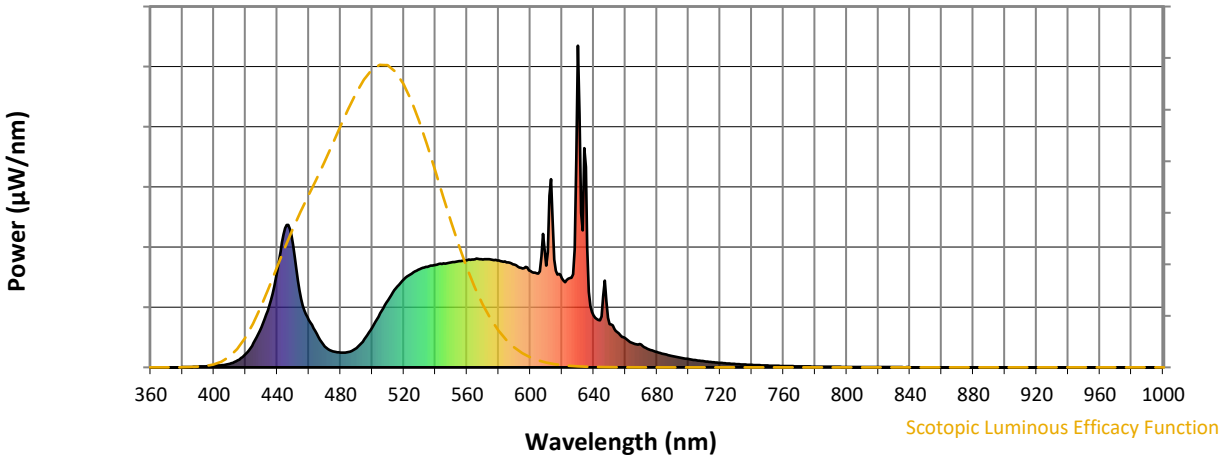
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.55**

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	277	NR	750	6	NR	880	0	NR
365	0	NR	495	87	NR	625	278	NR	755	5	NR	885	0	NR
370	0	NR	500	124	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	168	NR	635	623	NR	765	4	NR	895	0	NR
380	1	NR	510	209	NR	640	162	NR	770	3	NR	900	0	NR
385	1	NR	515	246	NR	645	158	NR	775	3	NR	905	0	NR
390	2	NR	520	273	NR	650	134	NR	780	2	NR	910	0	NR
395	4	NR	525	292	NR	655	109	NR	785	2	NR	915	0	NR
400	5	NR	530	305	NR	660	91	NR	790	2	NR	920	0	NR
405	7	NR	535	313	NR	665	75	NR	795	2	NR	925	0	NR
410	11	NR	540	319	NR	670	70	NR	800	1	NR	930	0	NR
415	21	NR	545	323	NR	675	56	NR	805	1	NR	935	0	NR
420	42	NR	550	326	NR	680	47	NR	810	1	NR	940	0	NR
425	76	NR	555	330	NR	685	41	NR	815	1	NR	945	0	NR
430	125	NR	560	333	NR	690	35	NR	820	1	NR	950	0	NR
435	193	NR	565	336	NR	695	30	NR	825	1	NR	955	0	NR
440	302	NR	570	336	NR	700	26	NR	830	1	NR	960	0	NR
445	432	NR	575	335	NR	705	22	NR	835	1	NR	965	0	NR
450	380	NR	580	332	NR	710	19	NR	840	0	NR	970	0	NR
455	213	NR	585	326	NR	715	16	NR	845	0	NR	975	0	NR
460	147	NR	590	319	NR	720	14	NR	850	0	NR	980	0	NR
465	104	NR	595	307	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	299	NR	730	10	NR	860	0	NR	990	0	NR
475	50	NR	605	291	NR	735	9	NR	865	0	NR	995	0	NR
480	46	NR	610	317	NR	740	8	NR	870	0	NR	1000	0	NR
485	47	NR	615	336	NR	745	7	NR	875	0	NR			

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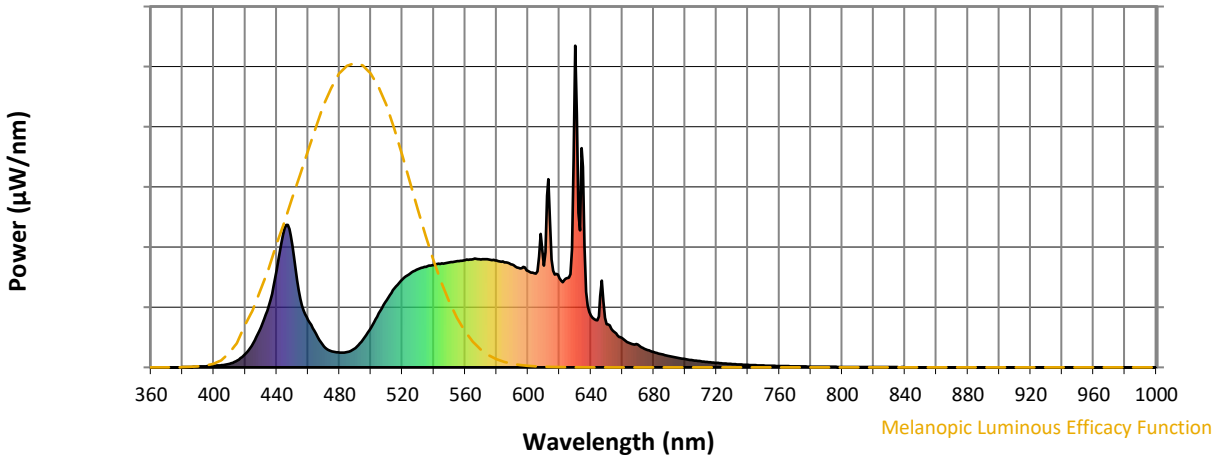
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.99**

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	277	NR	750	6	NR	880	0	NR
365	0	NR	495	87	NR	625	278	NR	755	5	NR	885	0	NR
370	0	NR	500	124	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	168	NR	635	623	NR	765	4	NR	895	0	NR
380	1	NR	510	209	NR	640	162	NR	770	3	NR	900	0	NR
385	1	NR	515	246	NR	645	158	NR	775	3	NR	905	0	NR
390	2	NR	520	273	NR	650	134	NR	780	2	NR	910	0	NR
395	4	NR	525	292	NR	655	109	NR	785	2	NR	915	0	NR
400	5	NR	530	305	NR	660	91	NR	790	2	NR	920	0	NR
405	7	NR	535	313	NR	665	75	NR	795	2	NR	925	0	NR
410	11	NR	540	319	NR	670	70	NR	800	1	NR	930	0	NR
415	21	NR	545	323	NR	675	56	NR	805	1	NR	935	0	NR
420	42	NR	550	326	NR	680	47	NR	810	1	NR	940	0	NR
425	76	NR	555	330	NR	685	41	NR	815	1	NR	945	0	NR
430	125	NR	560	333	NR	690	35	NR	820	1	NR	950	0	NR
435	193	NR	565	336	NR	695	30	NR	825	1	NR	955	0	NR
440	302	NR	570	336	NR	700	26	NR	830	1	NR	960	0	NR
445	432	NR	575	335	NR	705	22	NR	835	1	NR	965	0	NR
450	380	NR	580	332	NR	710	19	NR	840	0	NR	970	0	NR
455	213	NR	585	326	NR	715	16	NR	845	0	NR	975	0	NR
460	147	NR	590	319	NR	720	14	NR	850	0	NR	980	0	NR
465	104	NR	595	307	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	299	NR	730	10	NR	860	0	NR	990	0	NR
475	50	NR	605	291	NR	735	9	NR	865	0	NR	995	0	NR
480	46	NR	610	317	NR	740	8	NR	870	0	NR	1000	0	NR
485	47	NR	615	336	NR	745	7	NR	875	0	NR			

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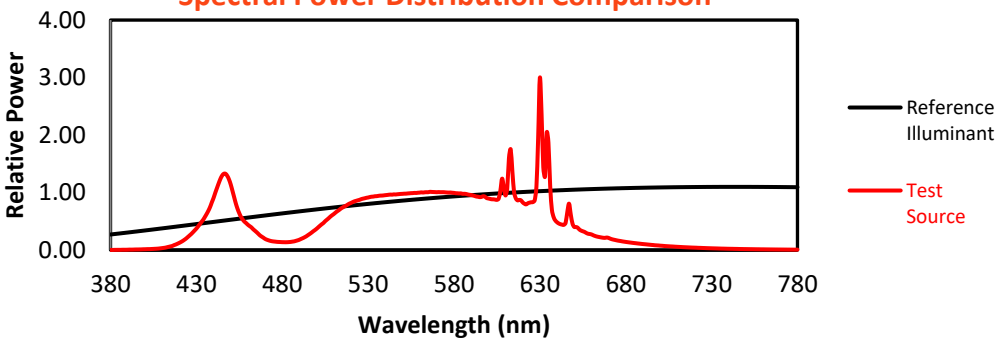
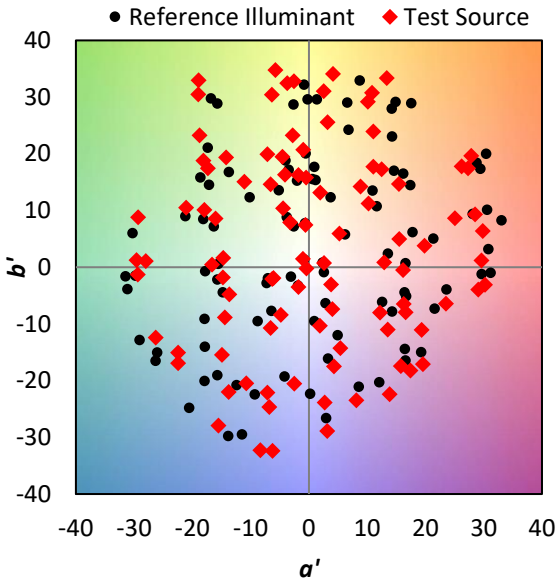
Summary

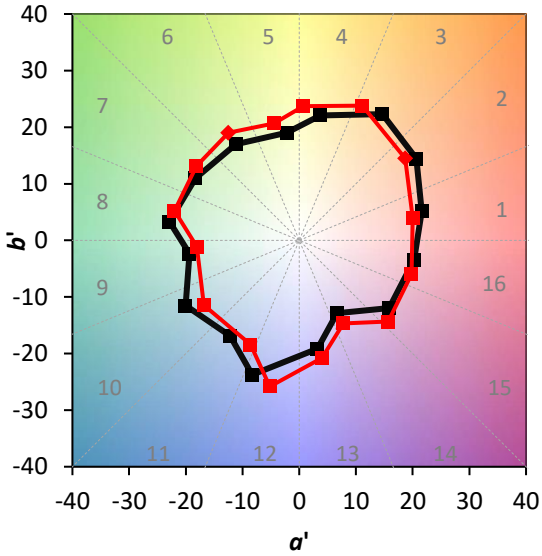
R_f = 80.7
R_g = 102.1
CIE R_a = 82.1
R_9 = 38.5

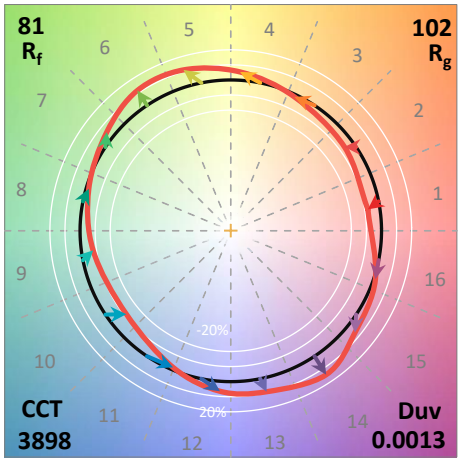
Spectral Power Distribution Comparison

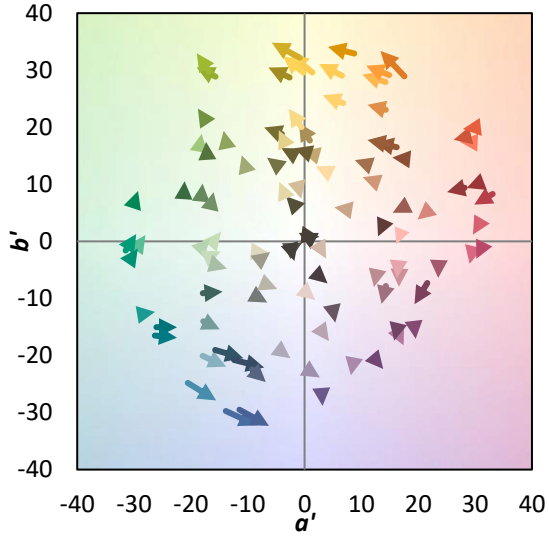


Color Vector Graphics









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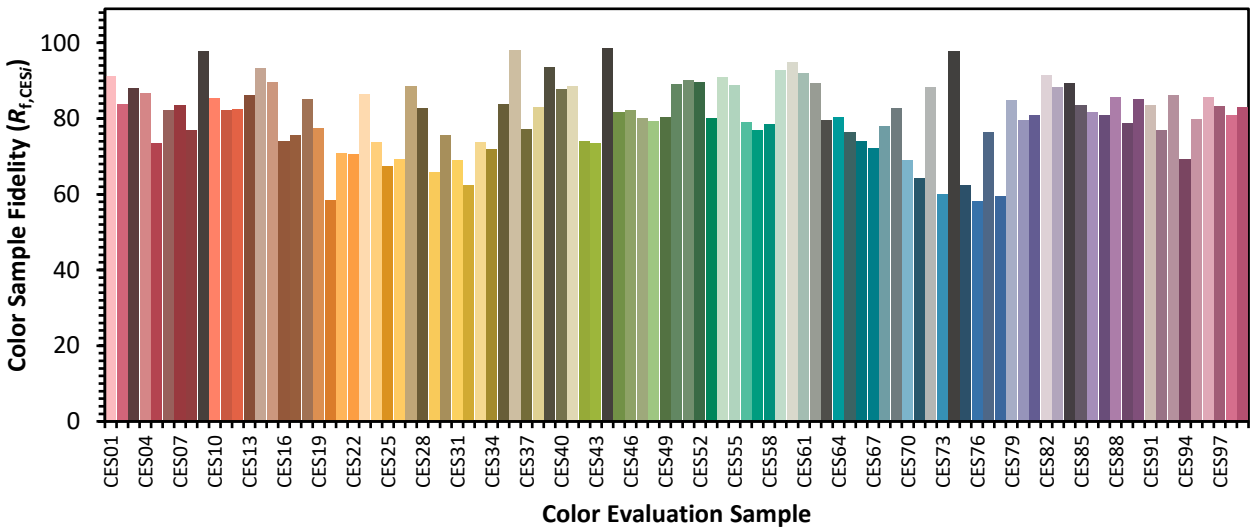
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 69	CES51 = 90	CES76 = 58
CES02 = 61	CES27 = 89	CES52 = 90	CES77 = 76
CES03 = 31	CES28 = 83	CES53 = 80	CES78 = 60
CES04 = 69	CES29 = 66	CES54 = 91	CES79 = 85
CES05 = 48	CES30 = 76	CES55 = 89	CES80 = 79
CES06 = 50	CES31 = 69	CES56 = 79	CES81 = 81
CES07 = 41	CES32 = 62	CES57 = 77	CES82 = 91
CES08 = 40	CES33 = 74	CES58 = 79	CES83 = 88
CES09 = 29	CES34 = 72	CES59 = 93	CES84 = 89
CES10 = 74	CES35 = 84	CES60 = 95	CES85 = 84
CES11 = 57	CES36 = 98	CES61 = 92	CES86 = 82
CES12 = 63	CES37 = 77	CES62 = 89	CES87 = 81
CES13 = 43	CES38 = 83	CES63 = 80	CES88 = 86
CES14 = 74	CES39 = 94	CES64 = 80	CES89 = 79
CES15 = 71	CES40 = 88	CES65 = 77	CES90 = 85
CES16 = 47	CES41 = 89	CES66 = 74	CES91 = 83
CES17 = 49	CES42 = 74	CES67 = 72	CES92 = 77
CES18 = 56	CES43 = 73	CES68 = 78	CES93 = 86
CES19 = 71	CES44 = 98	CES69 = 83	CES94 = 69
CES20 = 65	CES45 = 82	CES70 = 69	CES95 = 80
CES21 = 86	CES46 = 82	CES71 = 64	CES96 = 86
CES22 = 78	CES47 = 80	CES72 = 88	CES97 = 83
CES23 = 91	CES48 = 79	CES73 = 60	CES98 = 81
CES24 = 90	CES49 = 80	CES74 = 98	CES99 = 83
CES25 = 71	CES50 = 89	CES75 = 62	



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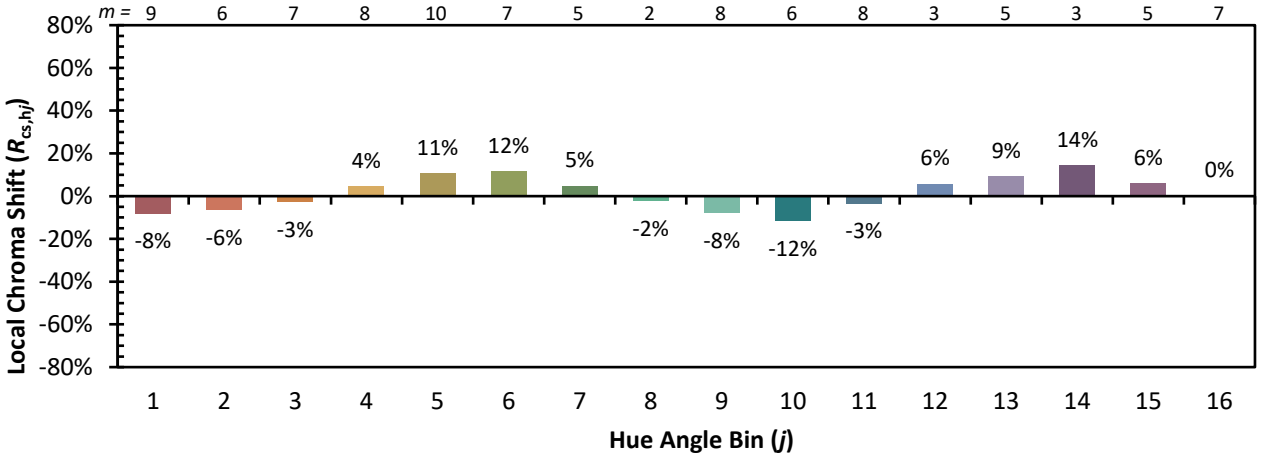
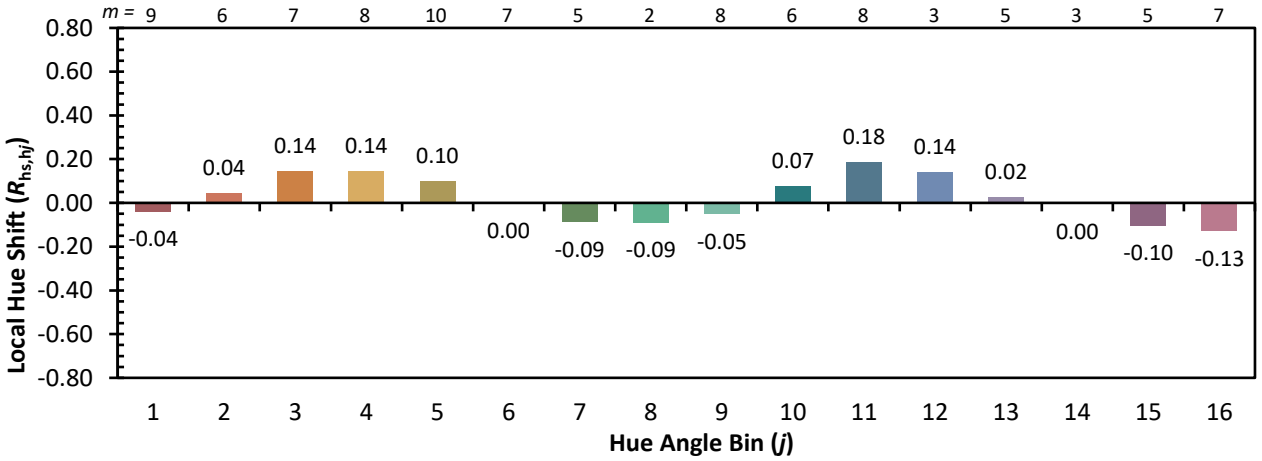
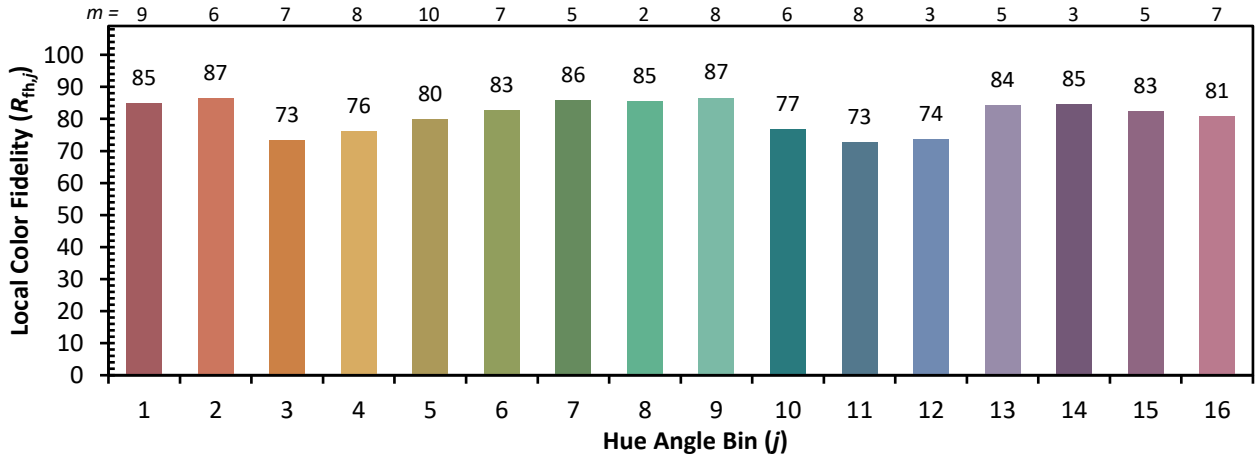
Color Rendition by Hue-Angle Bin







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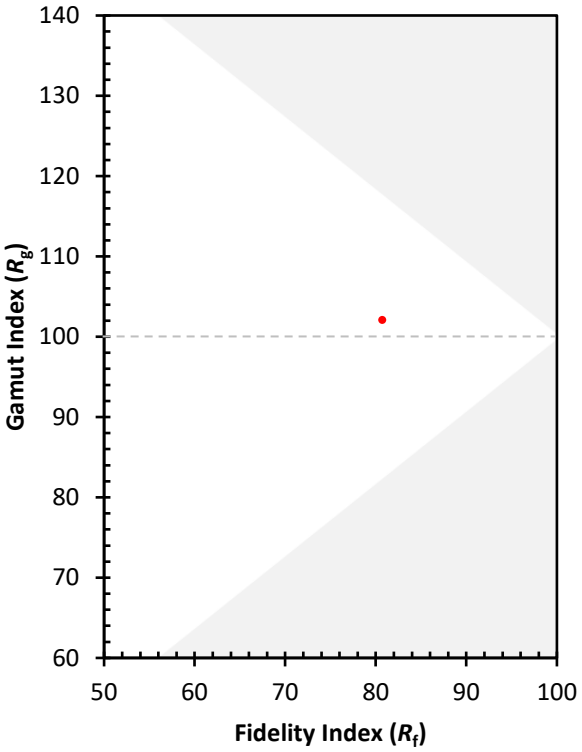
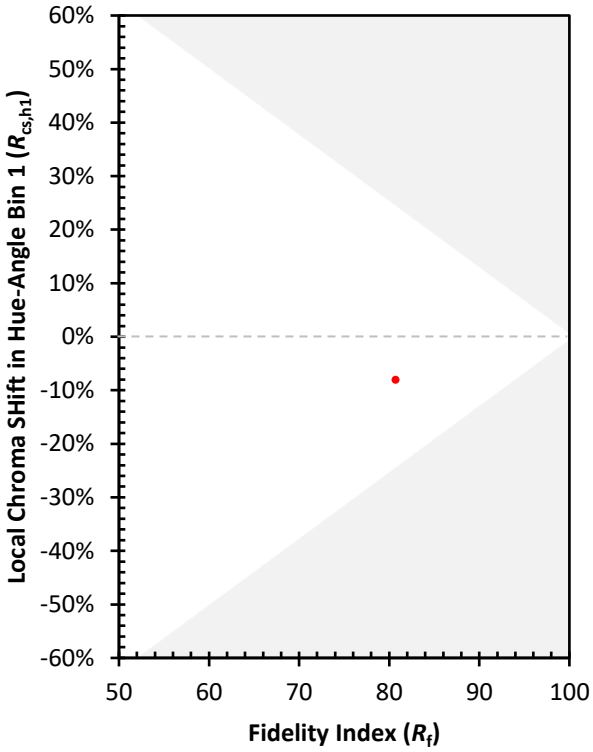
Measure Comparisons





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