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: P1431803

Luminaire Tested: EHBR1-42-UNV-A1-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:	P1431803
	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:	EHBR1-42-UNV-A1-L840
Description:	Elevate Round Highbay at, 42000 lumens, 4000K 80CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	41392.0 lumens
Efficiency:	N/A
Efficacy:	184.5 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):	224.4
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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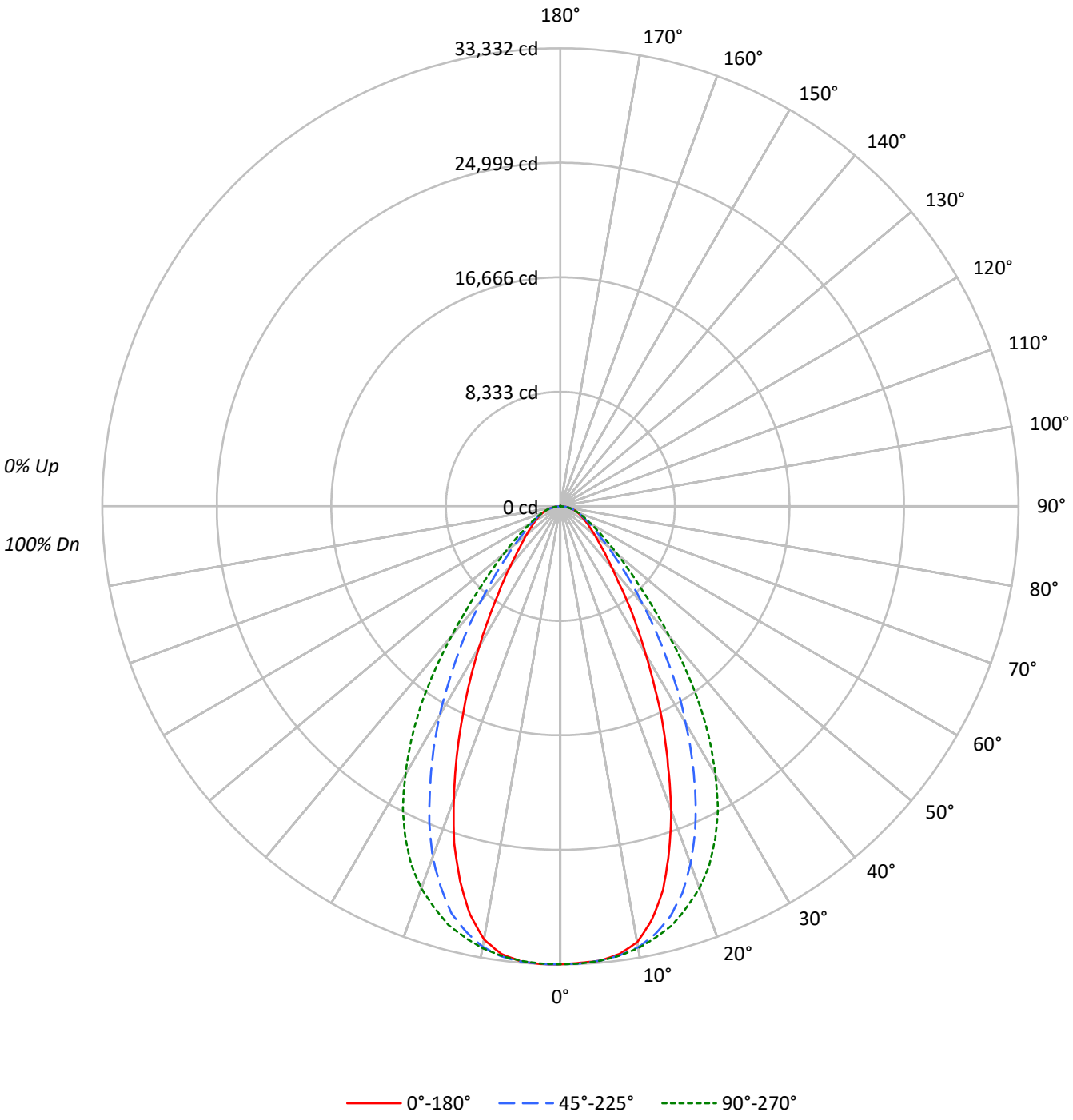
Scaled Data Report

TEST NUMBER: P1431803
CATALOG NUMBER: EHBR1-42-UNV-A1-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	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°	156466	156466	156466	156466	156466
5°	156446	156422	156429	156705	156610
10°	153582	155372	155619	155180	152578
15°	140367	150162	153253	148958	137144
20°	117792	138343	147794	135738	113206
25°	91772	120507	138124	116106	87017
30°	67429	98924	122302	95170	64001
35°	49032	76916	101396	73604	45831
40°	35623	57367	75459	54947	34523
45°	28387	42443	53298	40603	27404
50°	23865	32313	39088	31248	23503
55°	21180	25928	30081	25494	20894
60°	19493	22088	24460	21950	19630
65°	18727	20014	21115	20076	18905
70°	18473	18914	19499	19019	18656
75°	18284	18170	18284	18221	18462
80°	18382	17059	16683	17324	18382
85°	16579	14063	13912	14289	17070

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 55842 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3146.4	7.6
10°-20°	8456.4	20.4
20°-30°	10282.9	24.8
30°-40°	8376.2	20.2
40°-50°	5029.1	12.1
50°-60°	2894.3	7.0
60°-70°	1811.3	4.4
70°-80°	1066.8	2.6
80°-90°	312.0	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°	2.1	0.0
140°-150°	3.8	0.0
150°-160°	4.2	0.0
160°-170°	3.8	0.0
170°-180°	1.6	0.0
0°-30°	21885.8	52.9
0°-40°	30262.0	73.1
0°-60°	38185.4	92.3
0°-90°	41375.5	100.0
90°-120°	0.5	0.0
90°-150°	7.0	0.0
90°-180°	17.0	0.0
0°-180°	41392.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	33318	33318	33318	33318	33318	
5°	33187	33182	33184	33242	33222	3136
15°	28872	30886	31522	30639	28209	7943
25°	17711	23257	26657	22408	16794	8069
35°	8553	13417	17687	12839	7994	5411
45°	4274	6391	8025	6114	4126	3372
55°	2587	3167	3674	3114	2552	2338
65°	1685	1801	1900	1807	1701	1676
75°	1008	1001	1008	1004	1018	1067
85°	308	261	258	265	317	328
90°	1	0	0	0	1	16
95°	1	0	0	0	1	1
105°	1	0	0	0	1	1
115°	1	0	0	0	1	2
125°	2	0	0	1	2	2
135°	4	3	3	3	4	3
145°	6	6	6	6	7	4
155°	10	8	7	9	11	5
165°	16	13	12	14	16	4
175°	21	18	15	18	21	2
180°	19	19	19	19	19	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	33318.4	33318.4	33318.4	33318.4	33318.4	33318.4	*33318.4*	33318.4	33318.4
2.5°	*33245.1*	*33275.1*	*33287.7*	*33294.6*	*33302.3*	*33323.3*	*33332.3*	*33317.7*	*33330.2*
5°	33187.2	33189.3	33182.3	33213.7	33183.7	33204.6	*33242.3*	33227.7	33222.1
7.5°	32849.4	32919.2	32960.4	32970.8	32976.4	33002.3	*33028.8*	32878.7	32856.4
10°	32207.4	32324.0	32582.8	32656.8	32634.5	32676.4	*32542.4*	32150.2	31996.7
12.5°	30799.9	31209.5	31882.2	32181.6	32127.2	32164.1	*31707.8*	30880.1	30404.2
15°	28871.7	29472.6	30886.4	31476.8	31522.1	31476.8	*30638.7*	29026.0	28208.8
17.5°	26308.6	27418.1	29499.8	30645.6	30580.0	30601.7	*29010.6*	26626.8	25691.7
20°	23570.2	24753.1	27682.6	29594.0	29573.8	29452.3	*27161.3*	24017.6	22652.6
22.5°	20473.2	21998.7	25600.3	28300.9	28293.2	28090.9	*24909.4*	21168.3	19698.6
25°	17711.2	19207.3	23256.9	26716.8	26656.8	26426.5	*22407.6*	18326.0	16793.5
27.5°	14855.6	16411.1	20755.2	24860.6	24819.4	24568.2	*20016.1*	15669.3	14210.8
30°	12434.8	13857.0	18242.9	22818.0	22554.2	22525.6	*17550.7*	13209.4	11802.6
32.5°	10360.8	11580.0	15874.5	20681.9	20215.0	20348.3	*15093.6*	11152.2	9757.9
35°	8552.7	9626.7	13416.7	18211.5	17686.8	17859.1	*12838.9*	9150.8	7994.5
37.5°	6941.4	7974.2	11333.6	15808.9	15006.4	15331.5	*10855.6*	7642.0	6715.3
40°	5810.9	6630.2	9358.0	13172.4	12309.2	12838.9	*8963.1*	6374.1	5631.6
42.5°	5007.0	5541.5	7723.7	10655.3	9993.1	10368.5	*7387.3*	5328.7	4773.2
45°	4274.3	4700.7	6390.8	8408.3	8025.2	8373.4	*6113.8*	4543.6	4126.3
47.5°	3733.4	4062.1	5261.0	6790.0	6552.0	6662.3	*5106.1*	3965.1	3626.0
50°	3266.6	3520.6	4422.9	5480.1	5350.3	5418.0	*4277.1*	3450.1	3217.0
52.5°	2903.7	3090.0	3709.7	4503.9	4439.7	4450.1	*3644.8*	3034.9	2866.0
55°	2586.9	2716.7	3166.8	3689.5	3674.1	3676.9	*3113.8*	2689.5	2552.0
57.5°	2309.9	2417.3	2721.6	3099.1	3076.8	3081.7	*2696.5*	2388.7	2300.1
60°	2075.4	2147.3	2351.7	2619.0	2604.3	2598.1	*2337.1*	2120.7	2090.0
62.5°	1867.4	1913.5	2055.1	2245.0	2217.0	2223.3	*2054.4*	1915.6	1870.2
65°	1685.3	1701.3	1801.1	1918.4	1900.2	1915.6	*1806.7*	1711.8	1701.3
67.5°	1507.3	1523.4	1582.0	1660.9	1639.9	1652.5	*1583.4*	1527.6	1518.5
70°	1345.4	1344.7	1377.5	1420.1	1420.1	1422.2	*1385.2*	1351.7	1358.7
72.5°	1178.0	1173.8	1183.5	1212.1	1204.5	1231.0	*1191.9*	1181.4	1182.8
75°	1007.7	995.8	1001.4	1016.1	1007.7	1021.6	*1004.2*	1017.5	1017.5
77.5°	847.2	824.8	817.9	820.0	804.6	825.5	*829.7*	838.8	859.7
80°	679.7	648.3	630.8	630.1	616.9	630.1	*640.6*	659.5	679.7
82.5°	504.5	477.3	448.0	442.4	434.1	441.7	*455.7*	478.0	510.8
85°	307.7	279.1	261.0	251.2	258.2	258.2	*265.2*	296.6	316.8
87.5°	111.0	97.0	79.6	80.3	82.3	85.1	*88.6*	111.7	122.1
90°	1.4	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°	1.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
97.5°	1.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
100°	1.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.4
102.5°	1.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.4
105°	1.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.4
107.5°	1.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.4
110°	1.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.4

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Scaled Data Report

TEST NUMBER: P1431803
CATALOG NUMBER: EHBR1-42-UNV-A1-L840

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	1.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.4
115°	1.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.4
117.5°	2.1	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.4
120°	1.4	0.0	0.0	0.0	0.0	0.0	*0.0*	0.7	1.4
122.5°	2.1	0.7	0.0	0.0	0.0	0.0	*0.0*	0.7	2.1
125°	2.1	0.7	0.0	0.0	0.0	0.0	*0.7*	0.7	2.1
127.5°	2.1	0.7	0.0	0.0	0.0	0.0	*0.7*	1.4	2.1
130°	2.1	1.4	0.7	0.0	0.7	0.7	*1.4*	1.4	2.1
132.5°	2.8	2.1	2.1	1.4	1.4	2.1	*2.1*	2.8	2.8
135°	3.5	2.8	2.8	2.1	2.8	2.8	*2.8*	2.8	3.5
137.5°	3.5	3.5	3.5	3.5	3.5	3.5	*3.5*	3.5	4.2
140°	4.9	4.2	4.2	4.2	4.2	4.2	*4.2*	4.9	4.9
142.5°	5.6	5.6	4.9	4.9	4.9	5.6	*5.6*	5.6	6.3
145°	6.3	6.3	5.6	5.6	5.6	6.3	*6.3*	7.0	7.0
147.5°	8.4	7.7	6.3	6.3	6.3	6.3	*7.0*	7.7	8.4
150°	9.1	8.4	7.0	7.0	7.0	7.0	*7.7*	9.1	9.8
152.5°	9.8	9.1	7.7	7.0	7.0	7.0	*8.4*	9.1	10.5
155°	10.5	9.8	8.4	7.0	7.0	7.7	*9.1*	10.5	11.2
157.5°	12.6	11.2	9.8	8.4	8.4	9.1	*10.5*	11.9	12.6
160°	14.0	12.6	11.2	9.8	9.8	10.5	*11.9*	13.3	14.0
162.5°	15.4	14.0	11.9	11.2	10.5	11.2	*12.6*	14.7	15.4
165°	16.1	14.7	13.3	11.9	11.9	11.9	*14.0*	15.4	16.1
167.5°	16.7	16.1	14.0	12.6	12.6	12.6	*14.7*	16.1	16.7
170°	17.4	16.7	14.7	13.3	12.6	13.3	*15.4*	16.7	17.4
172.5°	18.8	18.1	16.1	14.7	14.0	14.7	*16.7*	18.1	18.8
175°	20.9	19.5	18.1	16.1	15.4	16.1	*18.1*	19.5	20.9
177.5°	21.6	20.2	18.8	16.7	16.1	16.7	*18.8*	20.2	21.6
180°	18.8	18.8	18.8	18.8	18.8	18.8	*18.8*	18.8	18.8

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Scaled Data Report

TEST NUMBER: P1431803
CATALOG NUMBER: EHBR1-42-UNV-A1-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	19.94	21.21	20.31	21.52	21.84	20.92	22.19	21.29	22.50	22.82
	3H	21.51	22.63	21.89	22.96	23.33	22.26	23.39	22.65	23.72	24.09
	4H	22.18	23.23	22.58	23.58	23.96	22.82	23.87	23.23	24.22	24.61
	6H	22.73	23.69	23.15	24.07	24.46	23.25	24.22	23.67	24.59	24.99
	8H	22.93	23.84	23.36	24.24	24.64	23.39	24.31	23.82	24.70	25.10
	12H	23.06	23.93	23.49	24.32	24.75	23.47	24.34	23.90	24.73	25.16
4H	2H	20.51	21.56	20.92	21.91	22.30	21.28	22.33	21.69	22.68	23.07
	3H	22.30	23.17	22.72	23.57	23.98	22.87	23.74	23.29	24.14	24.55
	4H	23.10	23.87	23.53	24.29	24.74	23.57	24.34	24.01	24.76	25.21
	6H	23.78	24.45	24.25	24.90	25.37	24.14	24.81	24.60	25.26	25.72
	8H	24.03	24.65	24.50	25.10	25.57	24.32	24.95	24.80	25.40	25.87
	12H	24.20	24.75	24.69	25.24	25.71	24.44	24.99	24.93	25.48	25.95
8H	4H	23.38	24.00	23.85	24.45	24.92	23.80	24.42	24.27	24.87	25.35
	6H	24.20	24.71	24.70	25.20	25.69	24.50	25.01	25.01	25.51	25.99
	8H	24.53	24.98	25.05	25.50	25.99	24.76	25.22	25.29	25.74	26.23
	12H	24.78	25.18	25.29	25.67	26.25	24.96	25.36	25.47	25.85	26.43
12H	4H	23.40	23.95	23.88	24.43	24.91	23.81	24.36	24.30	24.85	25.32
	6H	24.24	24.70	24.77	25.22	25.71	24.55	25.00	25.07	25.52	26.01
	8H	24.63	25.03	25.15	25.53	26.10	24.86	25.26	25.38	25.76	26.33

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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

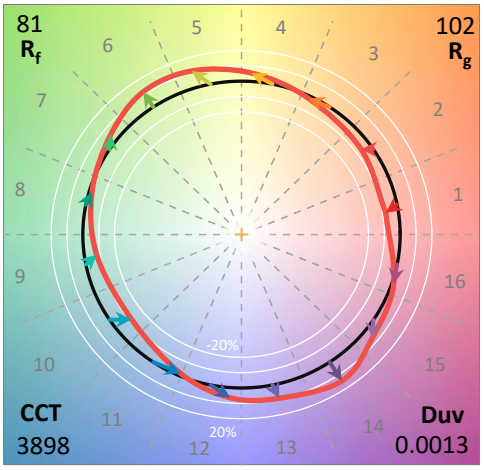
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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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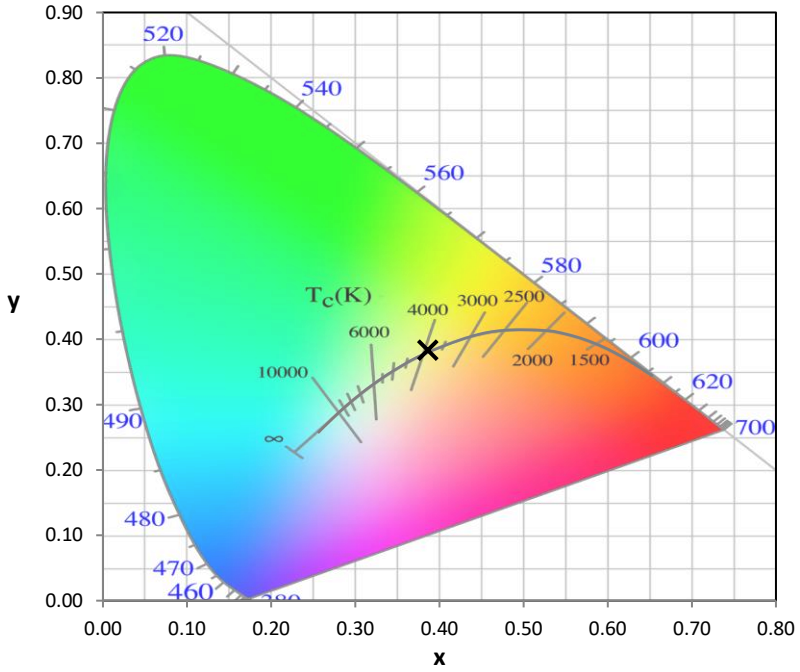
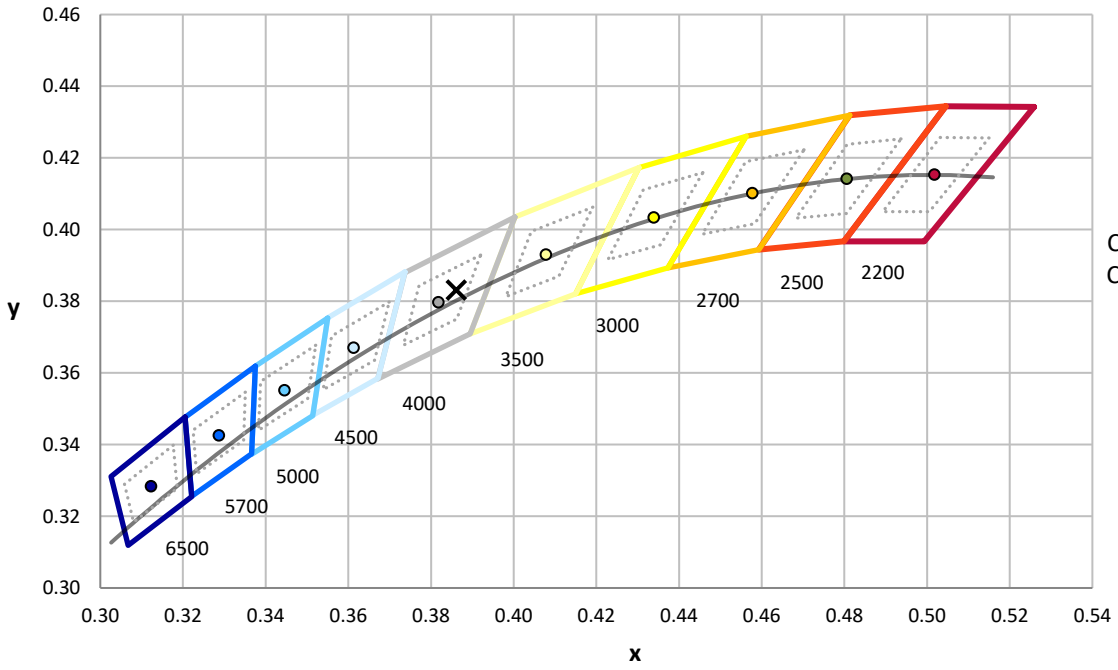
CIE 1931 Chromaticity Diagram



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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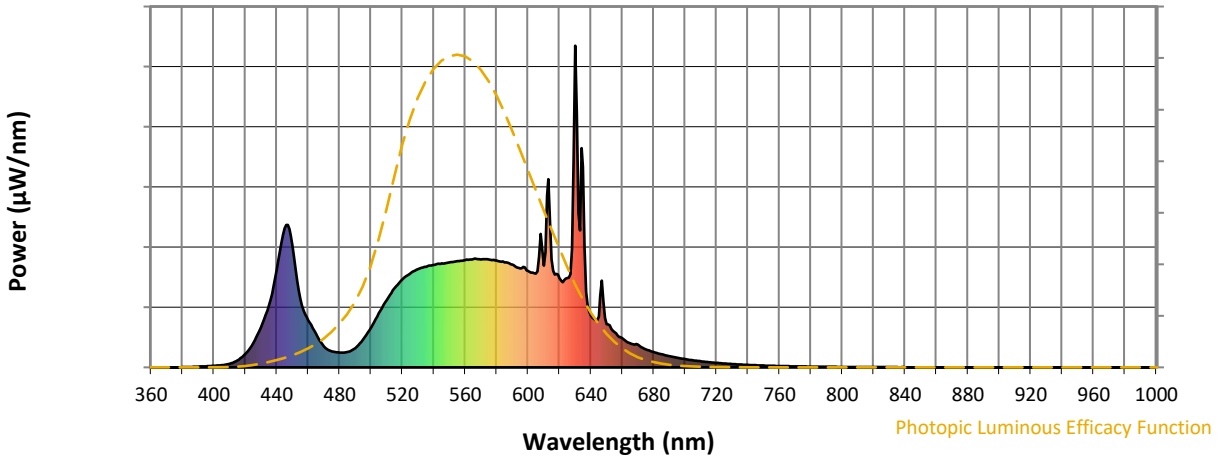
Photopic Flux vs. Wavelength



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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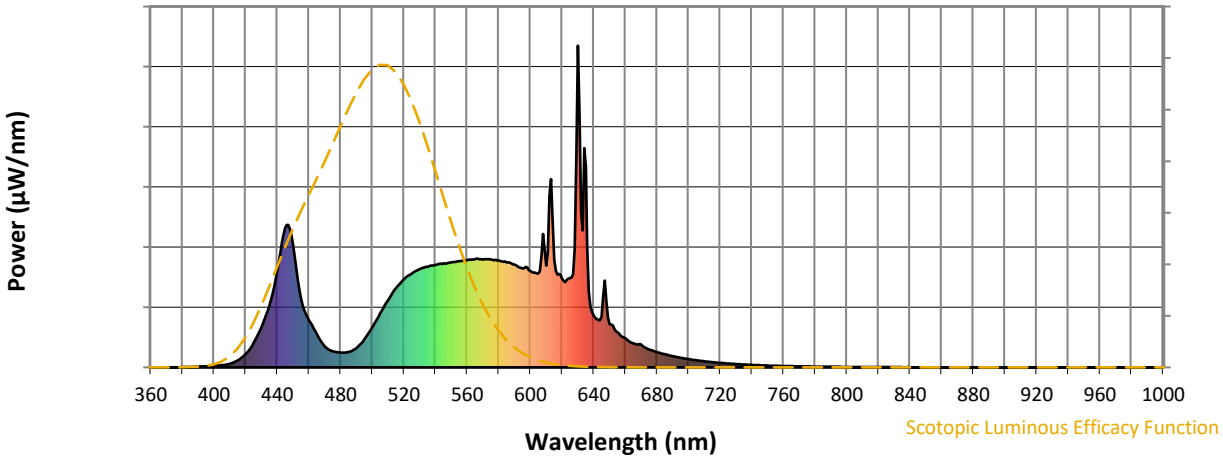
Scotopic Flux vs. Wavelength



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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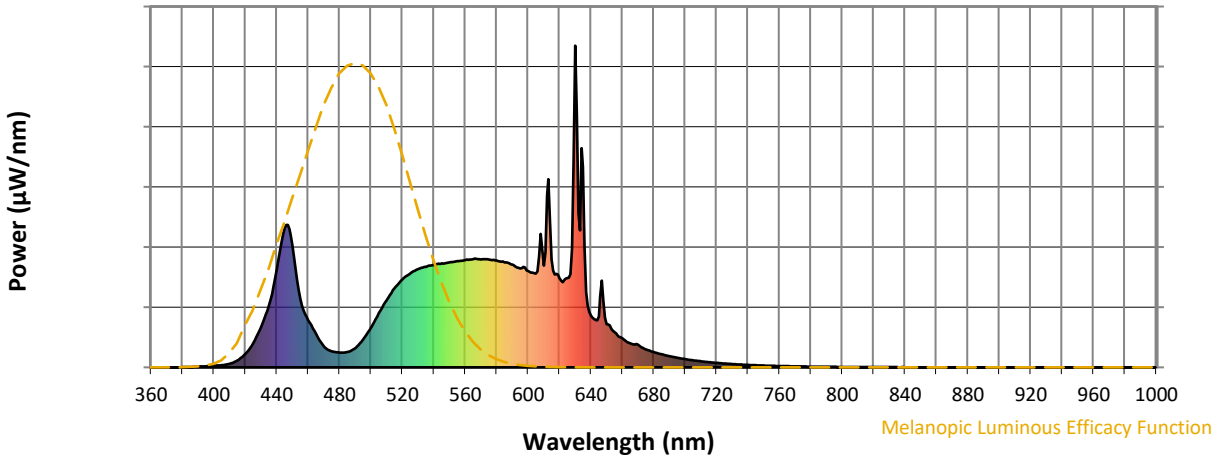
Melanopic Flux vs. Wavelength



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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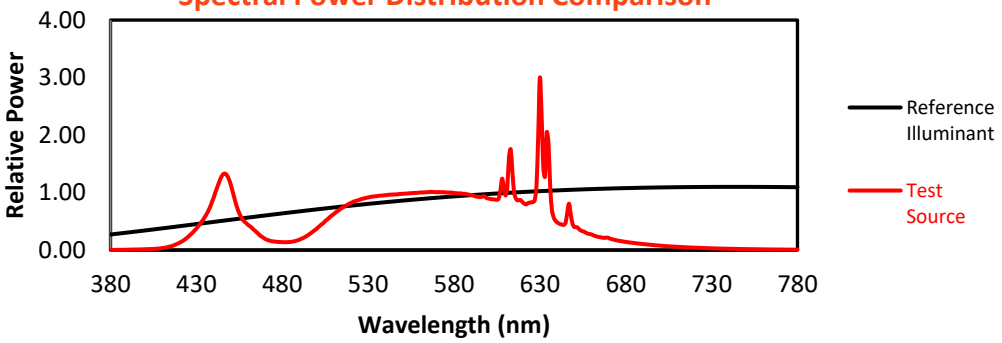
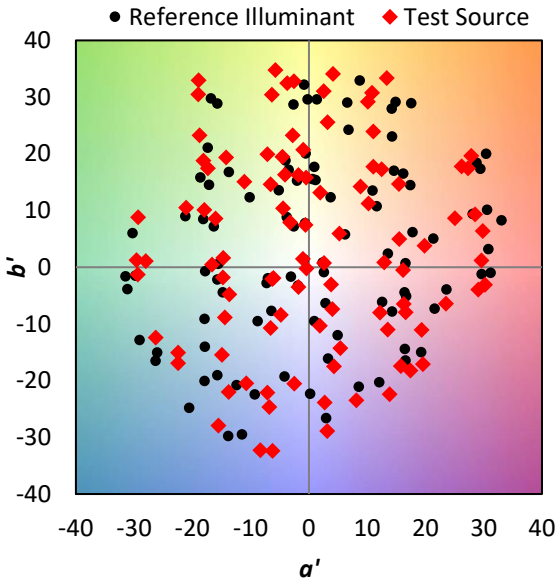
Summary

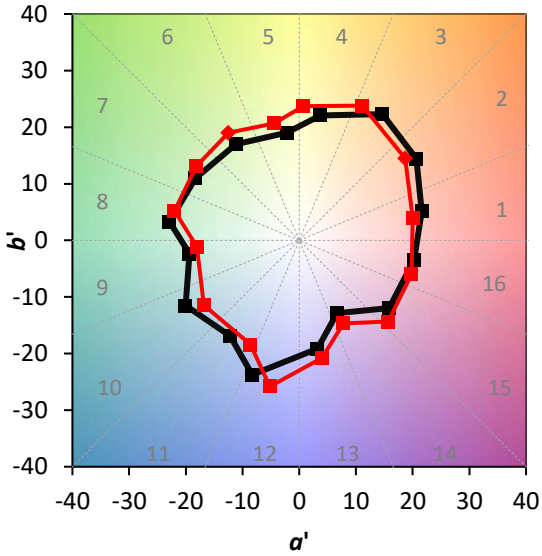
R_f = 80.7
R_g = 102.1
CIE R_a = 82.1
R_9 = 38.5

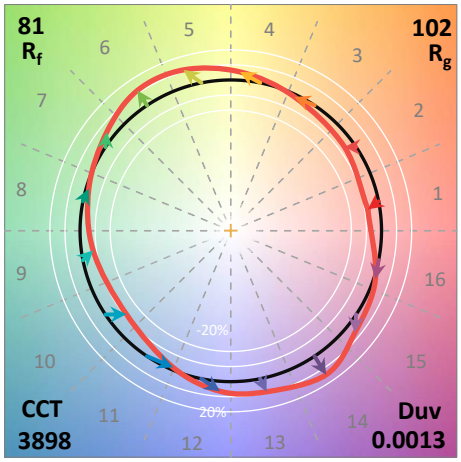
Spectral Power Distribution Comparison

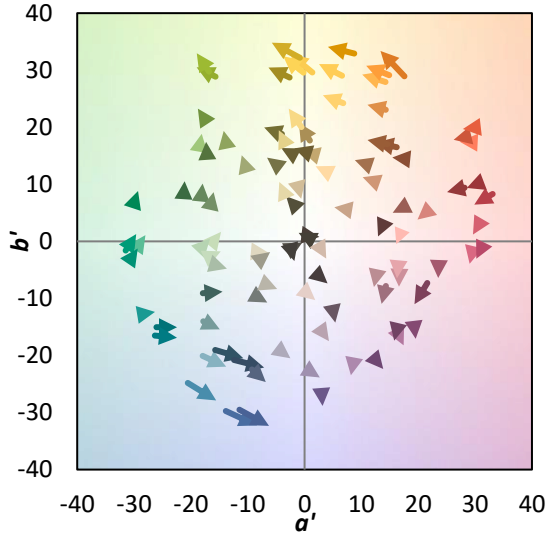


Color Vector Graphics









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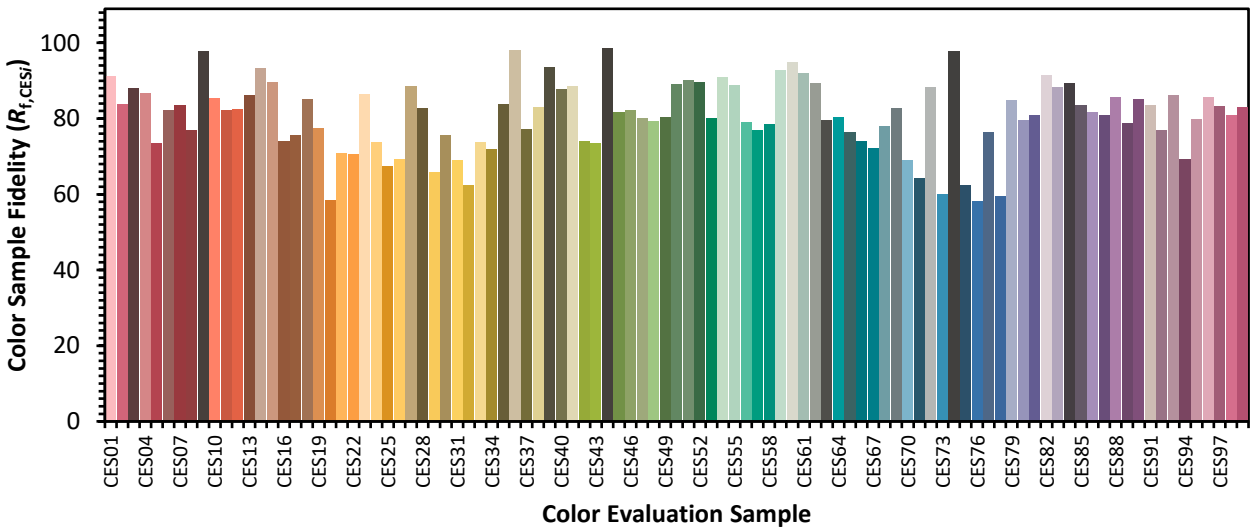
Individual Sample Fidelity Index ($R_{f,i}$)

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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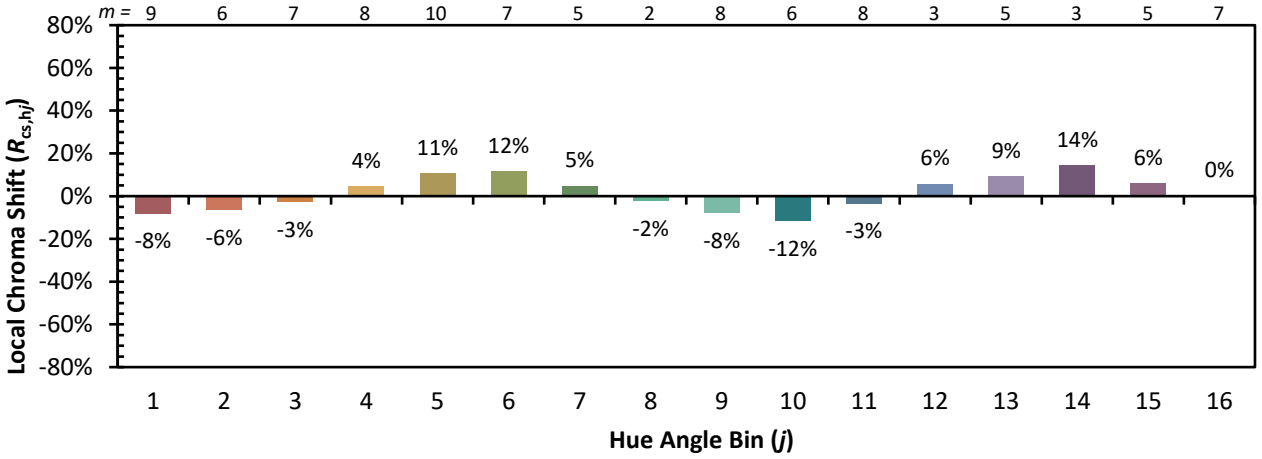
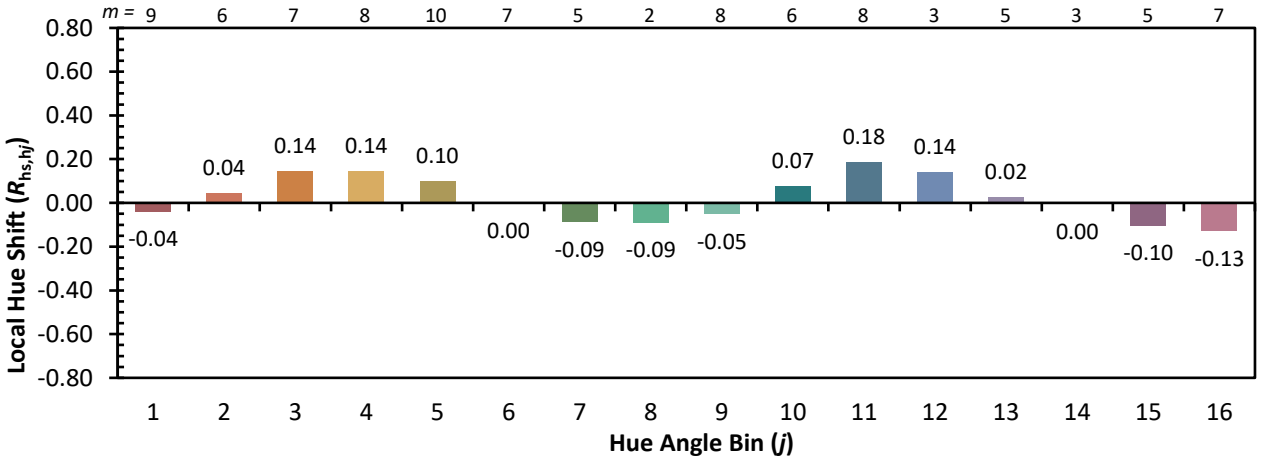
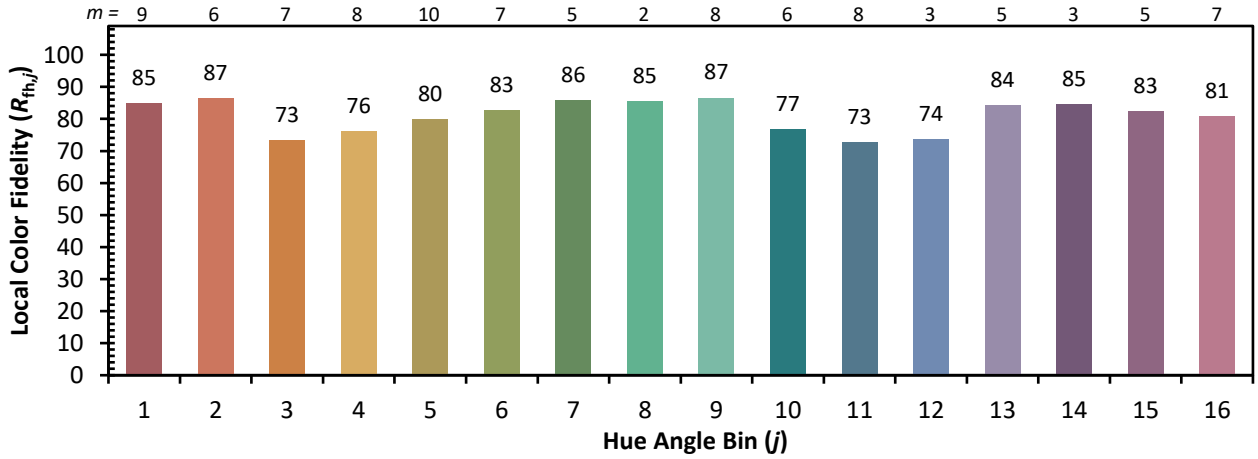
Color Rendition by Hue-Angle Bin







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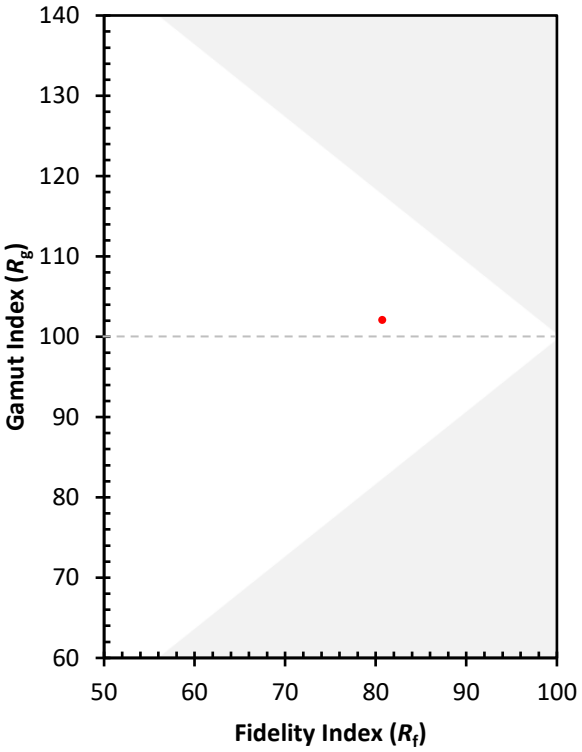
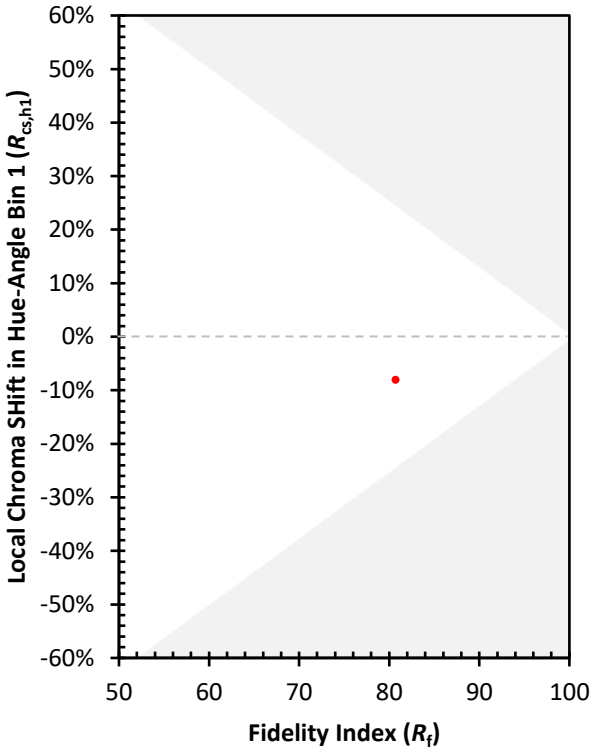
Measure Comparisons





(END OF REPORT)