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: P1432803

Luminaire Tested: EHBR1-60-UNV-A1-L835-UPL12

Issue Date: 3/20/2026

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1432803
	REPORT IS A COMBINATION OF REPORTS P1431892 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-60-UNV-A1-L835-UPL12
Description:	Elevate Round Highbay at, 60000 lumens, 3500K 80CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	58658.8 lumens
Efficiency:	N/A
Efficacy:	173.6 lumens/watt
Spacing Criteria (0/90/45):	0.8 / 1.07 / 0.95
Luminous Opening:	Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type:	Direct

Input Watts (W):	337.8
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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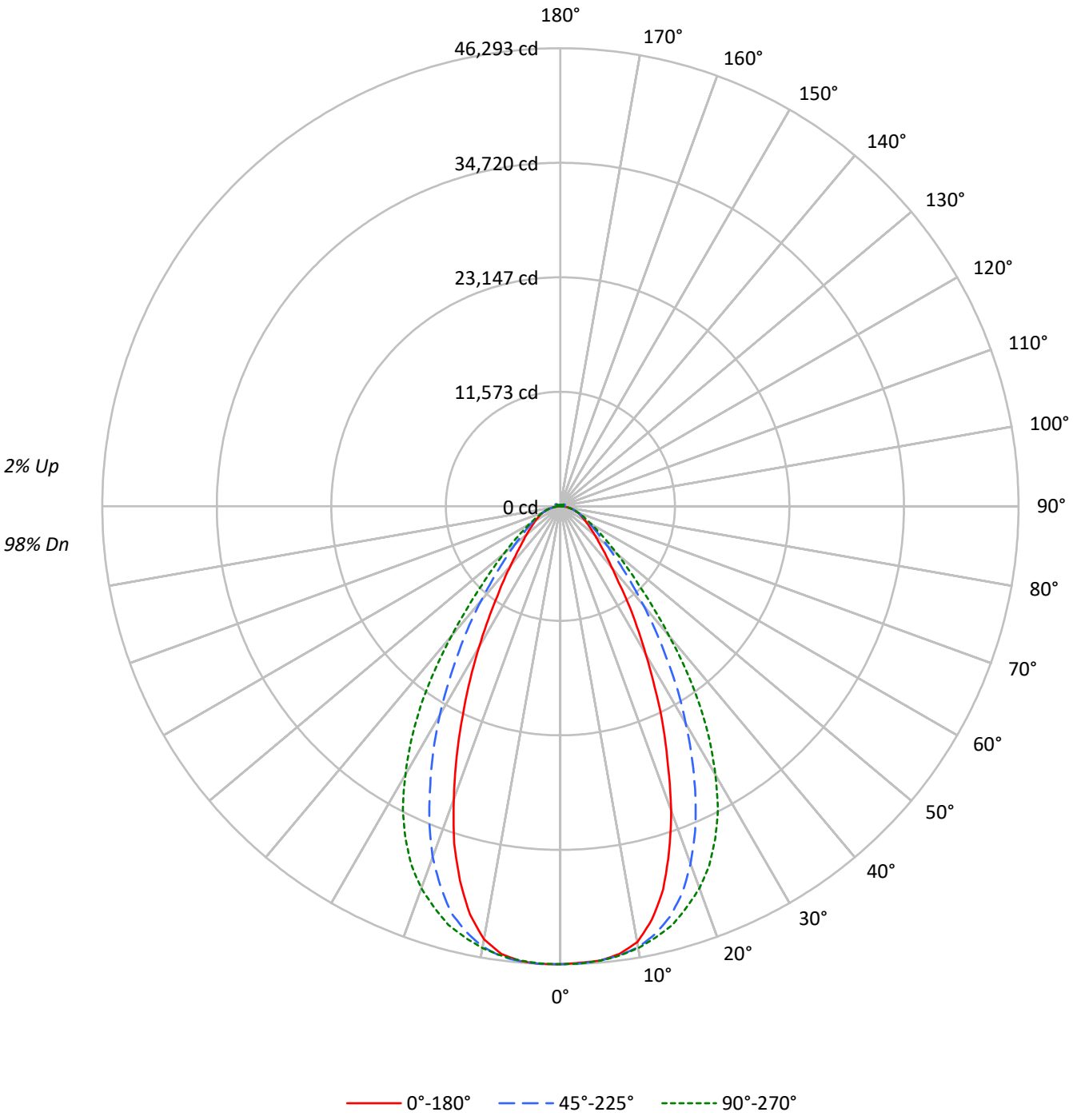
Luminous Intensity Polar Plot



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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	110	110	110	105	105	105	100	100	100	98
1	111	108	104	102	108	105	102	100	101	98	96	97	95	93	93	91	90	88
2	104	98	93	88	101	96	91	87	92	88	85	89	85	83	86	83	81	79
3	97	89	83	78	95	87	82	77	84	80	76	82	78	74	79	76	73	71
4	91	82	75	70	89	80	74	69	78	72	68	75	71	67	73	69	66	64
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	68	64	60	58
6	80	70	62	57	78	69	62	57	67	61	56	65	60	56	63	59	55	53
7	75	65	57	52	74	64	57	52	62	56	52	61	55	51	59	54	51	49
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	45	66	56	49	45	54	48	44	53	48	44	52	47	44	42
10	64	53	46	42	63	52	46	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	217305	217305	217305	217305	217305
5°	215868	215836	215845	216227	216095
10°	210532	212987	213324	212722	209155
15°	191129	204466	208674	202826	186741
20°	159272	187061	199839	183538	153071
25°	123174	161743	185387	155836	116792
30°	89784	131720	162849	126721	85218
35°	64719	101525	133837	97152	60494
40°	46562	74984	98631	71820	45125
45°	36689	54858	68887	52480	35420
50°	30441	41216	49859	39857	29979
55°	26586	32545	37759	32000	26227
60°	23977	27169	30087	27000	24146
65°	22424	23966	25284	24040	22638
70°	21295	21803	22478	21925	21506
75°	19867	19743	19867	19797	20060
80°	17944	16654	16285	16912	17944
85°	12435	10547	10434	10716	12805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 72175 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4369.8	7.4
10°-20°	11744.5	20.0
20°-30°	14281.2	24.3
30°-40°	11633.1	19.8
40°-50°	6984.5	11.9
50°-60°	4019.6	6.9
60°-70°	2515.6	4.3
70°-80°	1481.6	2.5
80°-90°	435.4	0.7
90°-100°	31.0	0.1
100°-110°	204.6	0.3
110°-120°	378.3	0.6
120°-130°	225.0	0.4
130°-140°	137.9	0.2
140°-150°	98.1	0.2
150°-160°	65.8	0.1
160°-170°	39.1	0.1
170°-180°	13.3	0.0
0°-30°	30395.6	51.8
0°-40°	42028.7	71.6
0°-60°	53032.9	90.4
0°-90°	57465.5	98.0
90°-120°	614.0	1.0
90°-150°	1075.0	1.8
90°-180°	1193.0	2.0
0°-180°	58658.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	46274	46274	46274	46274	46274	
5°	46091	46084	46086	46168	46140	4356
15°	40098	42896	43779	42552	39177	11031
25°	24598	32300	37022	31120	23323	11207
35°	11878	18634	24564	17831	11103	7515
45°	5936	8876	11146	8491	5731	4683
55°	3593	4398	5103	4324	3544	3248
65°	2341	2502	2639	2509	2363	2327
75°	1400	1391	1400	1395	1413	1482
85°	427	362	359	368	440	456
90°	10	24	8	25	9	26
95°	16	53	16	45	15	15
105°	73	358	94	381	48	97
115°	329	423	402	468	344	303
125°	239	226	257	251	271	217
135°	177	176	165	184	191	138
145°	150	156	153	158	162	95
155°	138	140	138	141	149	65
165°	138	138	135	137	143	39
175°	144	142	138	140	146	14
180°	142	142	142	142	142	

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TEST NUMBER: P1432803
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	46273.5	46273.5	46273.5	46273.5	46273.5	46273.5	*46273.5*	46273.5	46273.5
2.5°	*46171.7*	*46213.4*	*46230.8*	*46240.5*	*46251.2*	*46280.3*	*46292.9*	*46272.5*	*46290.0*
5°	46091.3	46094.2	46084.5	46128.1	46086.4	46115.5	*46167.8*	46147.4	46139.8
7.5°	45622.1	45719.1	45776.3	45790.8	45798.5	45834.4	*45871.3*	45662.9	45631.8
10°	44730.5	44892.4	45252.0	45354.7	45323.7	45381.8	*45195.8*	44651.1	44437.8
12.5°	42775.8	43344.6	44278.9	44694.7	44619.1	44670.5	*44036.6*	42887.2	42226.2
15°	40097.9	40932.3	42895.9	43715.8	43778.8	43715.8	*42551.8*	40312.0	39177.2
17.5°	36538.1	38079.1	40970.2	42561.5	42470.4	42500.4	*40290.8*	36980.0	35681.4
20°	32735.0	34377.8	38446.4	41101.0	41072.8	40904.2	*37722.4*	33356.3	31460.5
22.5°	28433.7	30552.5	35554.3	39305.1	39294.4	39013.4	*34594.9*	29399.1	27358.0
25°	24597.8	26675.7	32299.9	37105.1	37021.7	36701.9	*31120.3*	25451.6	23323.3
27.5°	20631.9	22792.2	28825.3	34527.0	34469.8	34120.9	*27799.0*	21761.9	19736.4
30°	17269.9	19245.0	25336.3	31690.2	31323.9	31284.1	*24374.8*	18345.6	16391.7
32.5°	14389.4	16082.5	22046.9	28723.6	28075.2	28260.3	*20962.4*	15488.5	13552.0
35°	11878.3	13369.9	18633.5	25292.7	24563.8	24803.2	*17830.9*	12708.8	11102.9
37.5°	9640.5	11074.8	15740.4	21955.8	20841.2	21292.9	*15076.6*	10613.5	9326.4
40°	8070.3	9208.2	12996.7	18294.3	17095.3	17830.9	*12448.2*	8852.5	7821.3
42.5°	6953.9	7696.3	10726.8	14798.4	13878.7	14400.1	*10259.7*	7400.6	6629.2
45°	5936.2	6528.4	8875.8	11677.6	11145.6	11629.2	*8491.0*	6310.3	5730.8
47.5°	5185.1	5641.6	7306.7	9430.1	9099.7	9252.8	*7091.5*	5506.9	5035.9
50°	4536.7	4889.5	6142.6	7611.0	7430.7	7524.8	*5940.1*	4791.6	4467.9
52.5°	4032.7	4291.5	5152.2	6255.1	6165.9	6180.4	*5062.0*	4214.9	3980.5
55°	3592.8	3773.0	4398.1	5124.0	5102.7	5106.6	*4324.5*	3735.2	3544.3
57.5°	3208.0	3357.2	3779.8	4304.2	4273.1	4279.9	*3744.9*	3317.5	3194.4
60°	2882.4	2982.1	3266.2	3637.3	3617.0	3608.3	*3245.8*	2945.3	2902.7
62.5°	2593.5	2657.5	2854.2	3117.8	3079.1	3087.8	*2853.3*	2660.4	2597.4
65°	2340.6	2362.9	2501.5	2664.3	2639.1	2660.4	*2509.2*	2377.4	2362.9
67.5°	2093.4	2115.7	2197.2	2306.6	2277.6	2295.0	*2199.1*	2121.5	2108.9
70°	1868.5	1867.6	1913.1	1972.3	1972.3	1975.2	*1923.8*	1877.3	1887.0
72.5°	1636.0	1630.2	1643.8	1683.4	1672.8	1709.6	*1655.4*	1640.8	1642.8
75°	1399.5	1383.0	1390.8	1411.1	1399.5	1418.9	*1394.6*	1413.1	1413.1
77.5°	1176.5	1145.6	1135.9	1138.8	1117.5	1146.6	*1152.3*	1164.9	1194.0
80°	944.0	900.4	876.1	875.2	856.7	875.2	*889.7*	915.9	944.0
82.5°	700.7	662.9	622.2	614.5	602.9	613.5	*632.8*	663.9	709.4
85°	427.4	387.7	362.5	348.9	358.6	358.6	*368.3*	411.9	440.1
87.5°	154.1	134.7	110.4	111.4	114.3	118.2	*123.1*	155.1	169.6
90°	10.4	13.7	23.5	14.9	8.4	14.4	*24.7*	13.0	9.4
92.5°	13.4	20.8	37.8	19.5	11.1	19.5	*35.2*	17.6	12.7
95°	16.3	24.0	52.8	26.1	16.3	24.0	*44.9*	19.5	15.3
97.5°	20.2	26.7	60.6	31.9	25.4	30.0	*50.8*	20.8	18.5
100°	26.0	31.2	94.4	39.1	33.8	33.8	*93.1*	24.0	22.1
102.5°	43.0	66.4	200.6	73.6	51.5	66.4	*216.2*	48.9	26.7
105°	72.9	140.0	357.5	154.4	93.8	152.4	*381.0*	127.6	48.2
107.5°	125.0	250.8	471.5	273.6	177.8	284.6	*491.1*	252.7	111.3
110°	231.9	332.8	494.4	375.8	284.6	398.0	*536.0*	346.5	224.7

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Scaled Data Report

TEST NUMBER: P1432803
CATALOG NUMBER: EHBR1-60-UNV-A1-L835-UPL12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	312.6	357.5	473.5	414.8	370.5	443.5	*523.6*	384.3	310.6
115°	328.9	343.9	422.7	405.0	402.5	437.0	*467.6*	382.9	344.5
117.5°	318.7	313.9	358.9	364.0	388.9	399.9	*403.8*	359.5	346.5
120°	294.4	279.4	299.5	317.8	351.0	346.5	*340.0*	325.9	326.9
122.5°	266.0	248.4	256.6	270.3	303.5	293.7	*287.2*	290.8	301.2
125°	238.6	221.1	226.0	229.2	257.3	247.5	*251.1*	260.9	271.2
127.5°	214.6	202.2	204.5	200.6	218.2	213.6	*224.4*	236.4	244.6
130°	198.3	188.2	191.8	181.7	191.1	192.5	*206.5*	215.6	221.1
132.5°	185.6	178.7	184.0	171.9	174.5	180.8	*193.1*	201.9	204.5
135°	176.8	170.6	176.5	165.0	165.4	173.2	*184.2*	189.5	191.1
137.5°	168.3	163.8	169.6	161.8	159.8	167.7	*176.1*	180.1	179.7
140°	162.4	157.6	164.1	158.3	156.9	164.8	*168.6*	174.2	172.9
142.5°	155.0	152.3	159.2	155.3	154.0	162.1	*164.1*	167.3	167.0
145°	150.0	148.1	155.6	153.6	153.0	159.1	*157.9*	163.4	161.5
147.5°	147.8	145.5	151.4	150.7	150.7	154.6	*153.6*	158.5	157.5
150°	144.2	141.9	147.8	147.1	147.8	150.4	*148.8*	155.3	155.5
152.5°	140.6	138.3	143.5	141.9	142.5	145.2	*144.5*	150.7	152.0
155°	138.3	136.1	139.9	138.0	138.0	140.3	*140.9*	148.1	149.0
157.5°	138.6	136.0	138.7	136.7	136.7	138.3	*139.6*	146.1	147.1
160°	138.6	136.0	138.0	136.1	135.4	137.6	*139.0*	144.8	145.7
162.5°	138.6	136.0	137.6	136.0	135.0	136.0	*137.3*	144.1	145.1
165°	138.2	136.2	137.6	135.7	135.0	135.7	*137.3*	141.8	143.4
167.5°	139.2	137.6	137.9	136.0	135.4	134.7	*137.6*	141.5	143.1
170°	139.5	138.6	138.3	135.7	134.0	135.0	*137.2*	141.2	142.7
172.5°	141.5	140.5	140.2	137.6	136.0	136.9	*138.6*	141.8	144.1
175°	143.7	141.8	141.8	138.9	137.9	138.2	*140.5*	143.0	146.3
177.5°	145.4	143.4	142.7	139.8	138.2	139.2	*142.1*	144.7	148.6
180°	142.1	142.1	142.1	142.1	142.1	142.1	*142.1*	142.1	142.1

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Scaled Data Report

TEST NUMBER: P1432803
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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	20.44	21.67	20.84	22.03	22.40	21.42	22.65	21.83	23.01	23.38
	3H	21.92	23.02	22.34	23.39	23.81	22.69	23.78	23.11	24.16	24.57
	4H	22.53	23.55	22.97	23.94	24.38	23.19	24.21	23.63	24.60	25.04
	6H	22.99	23.93	23.45	24.35	24.79	23.55	24.49	24.00	24.90	25.34
	8H	23.14	24.03	23.61	24.46	24.92	23.65	24.53	24.11	24.97	25.42
	12H	23.22	24.07	23.69	24.49	24.98	23.69	24.54	24.16	24.96	25.44
4H	2H	20.97	21.99	21.41	22.38	22.82	21.75	22.77	22.19	23.16	23.60
	3H	22.65	23.49	23.10	23.94	24.39	23.24	24.08	23.69	24.52	24.98
	4H	23.37	24.12	23.84	24.58	25.08	23.86	24.62	24.33	25.07	25.57
	6H	23.95	24.60	24.45	25.09	25.60	24.34	24.99	24.84	25.48	25.99
	8H	24.14	24.75	24.65	25.23	25.75	24.48	25.08	24.98	25.57	26.09
	12H	24.25	24.78	24.77	25.31	25.83	24.55	25.08	25.07	25.60	26.13
8H	4H	23.60	24.21	24.10	24.69	25.21	24.04	24.65	24.55	25.14	25.66
	6H	24.29	24.78	24.83	25.32	25.85	24.63	25.12	25.17	25.66	26.19
	8H	24.54	24.98	25.10	25.53	26.07	24.82	25.26	25.38	25.82	26.36
	12H	24.71	25.10	25.26	25.63	26.25	24.94	25.33	25.50	25.87	26.48
12H	4H	23.60	24.14	24.12	24.66	25.18	24.04	24.58	24.57	25.10	25.62
	6H	24.31	24.76	24.87	25.31	25.85	24.65	25.09	25.21	25.64	26.18
	8H	24.61	25.00	25.16	25.53	26.15	24.89	25.28	25.44	25.81	26.43

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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

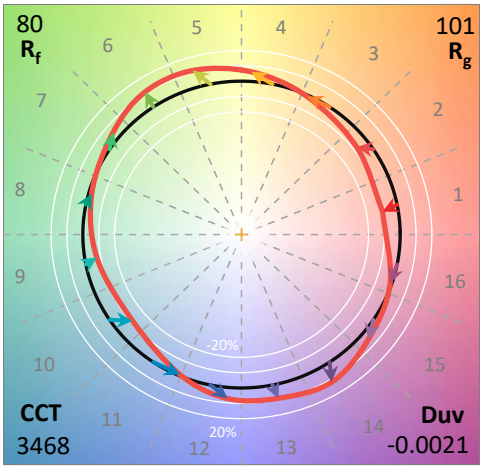
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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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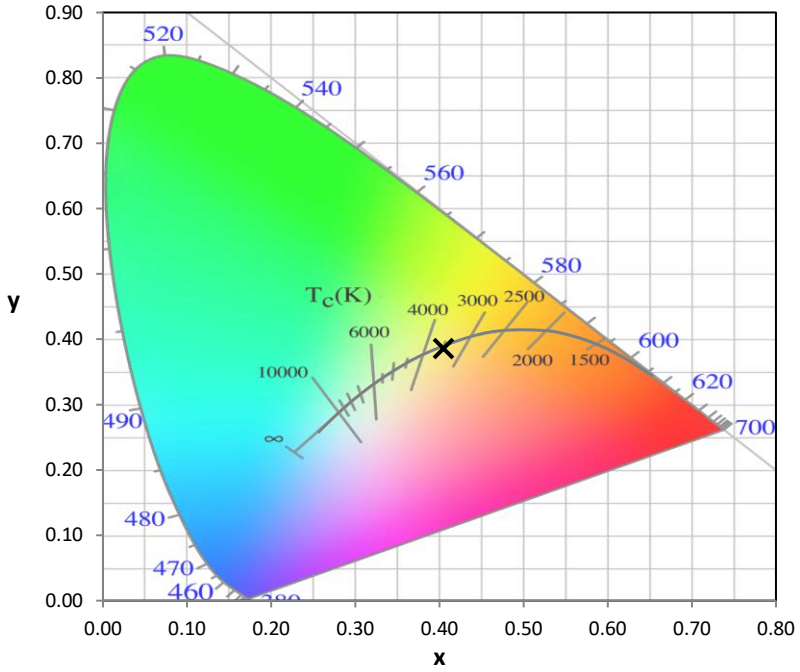
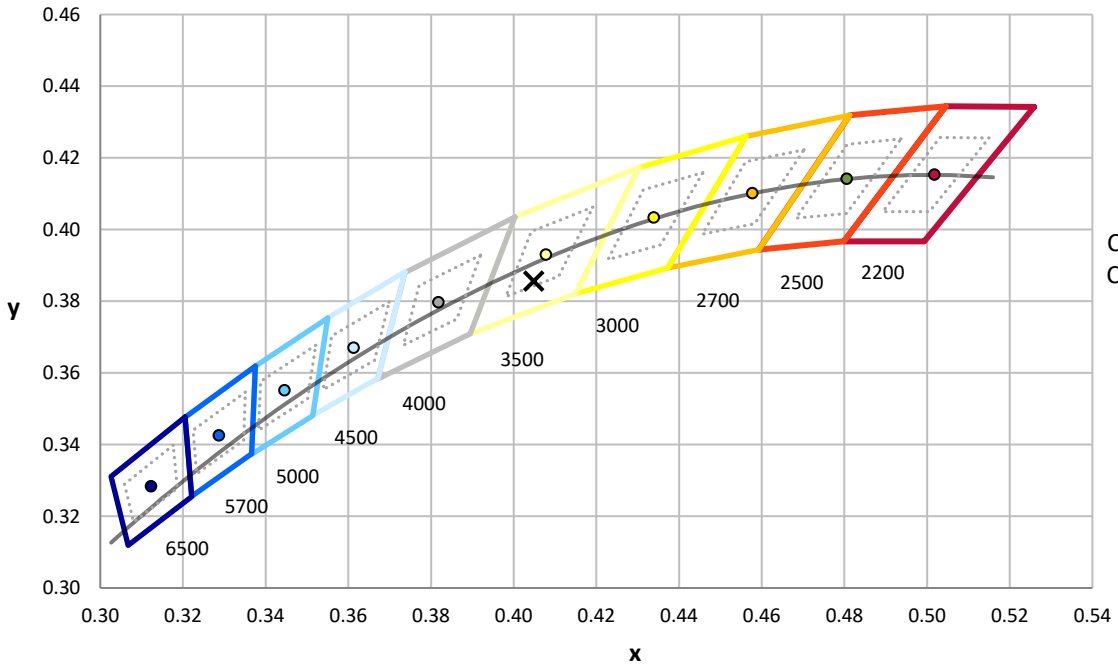
CIE 1931 Chromaticity Diagram



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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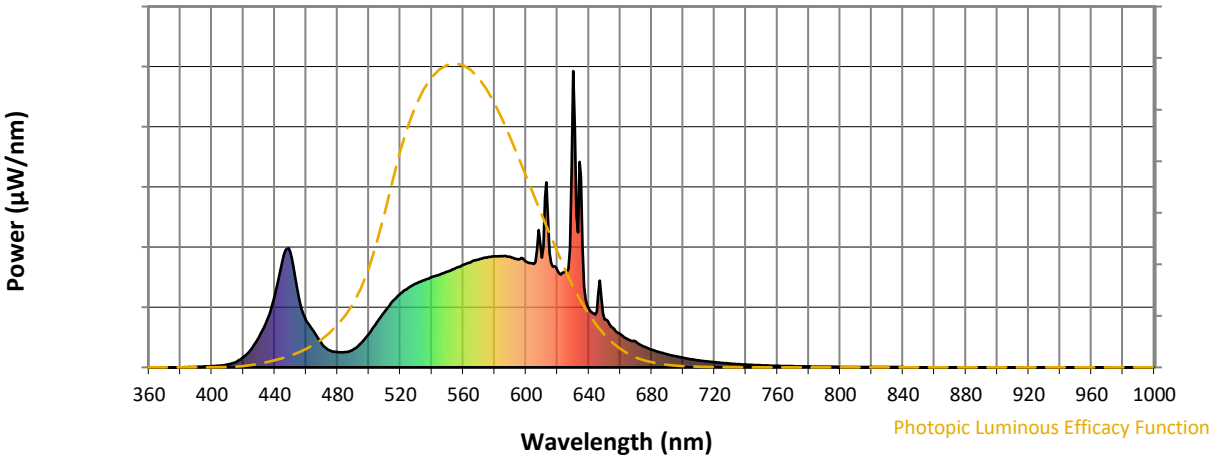
Photopic Flux vs. Wavelength



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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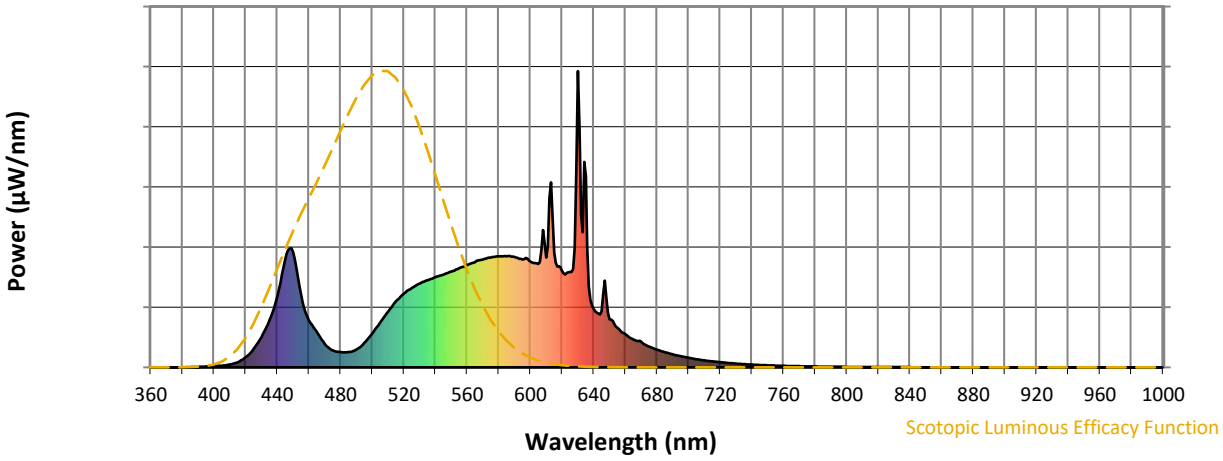
Scotopic Flux vs. Wavelength



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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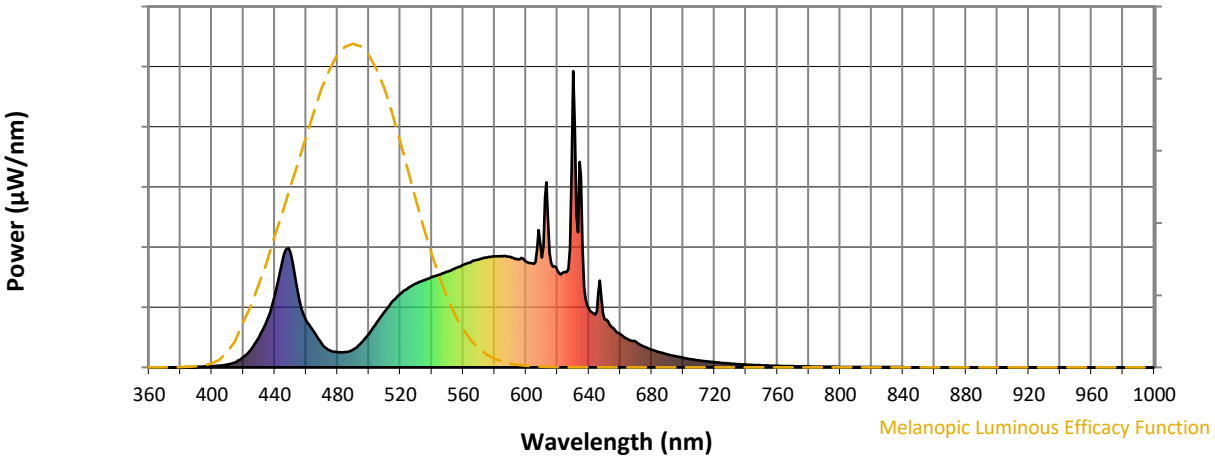
Melanopic Flux vs. Wavelength



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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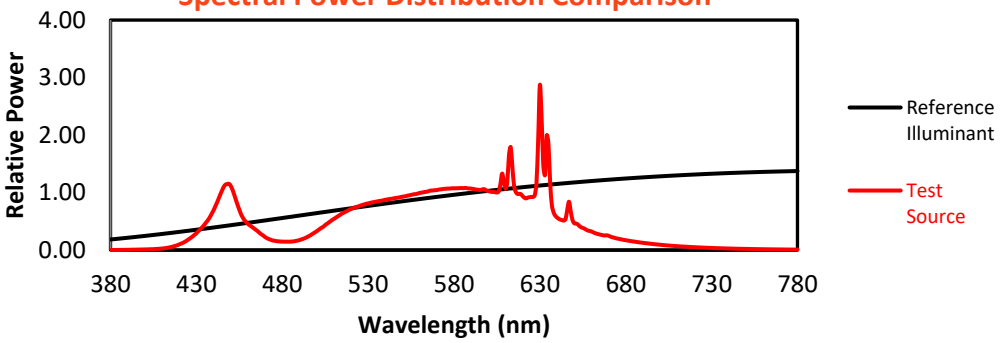
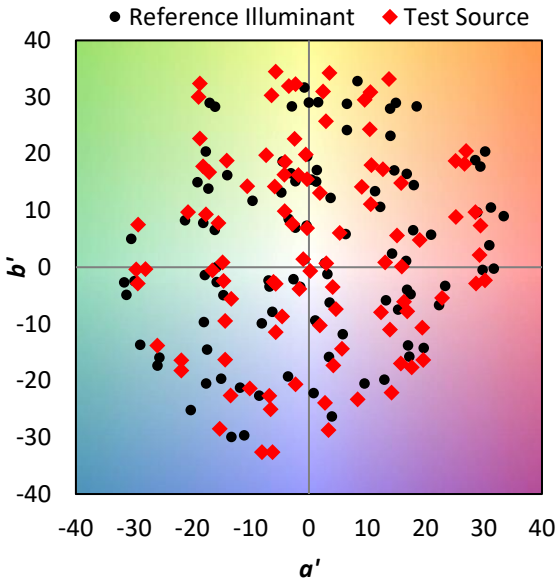
Summary

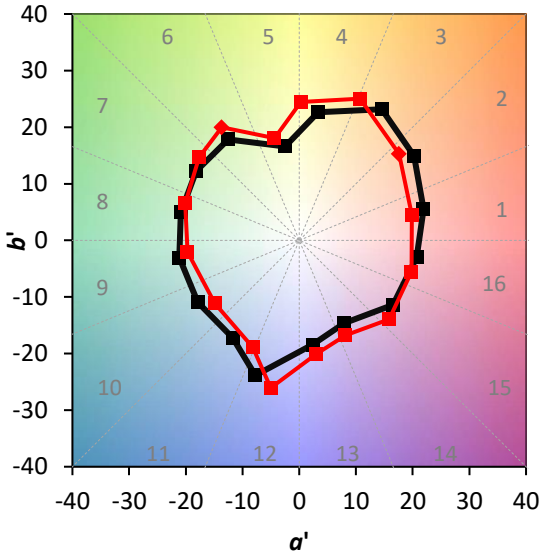
R_f = 80.1
R_g = 101
CIE R_a = 82.1
R_9 = 27.6

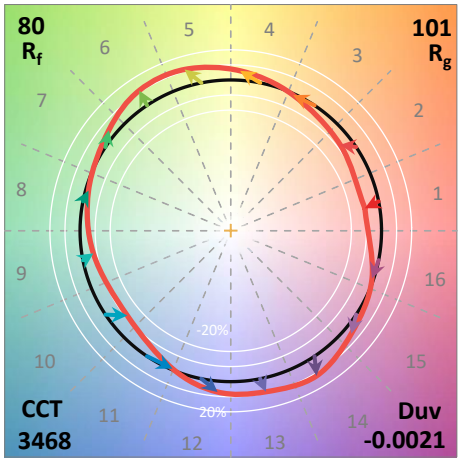
Spectral Power Distribution Comparison

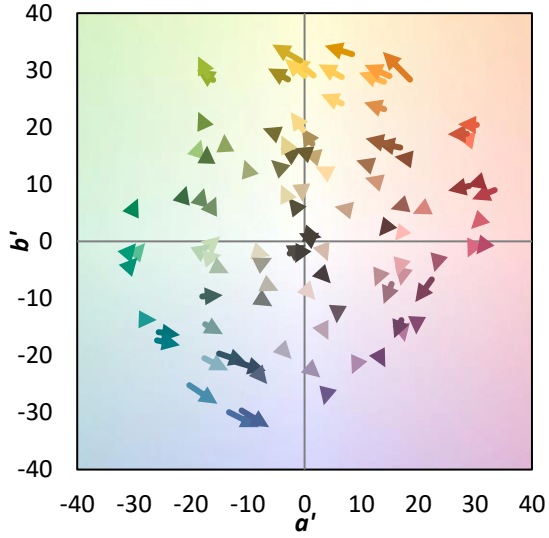


Color Vector Graphics









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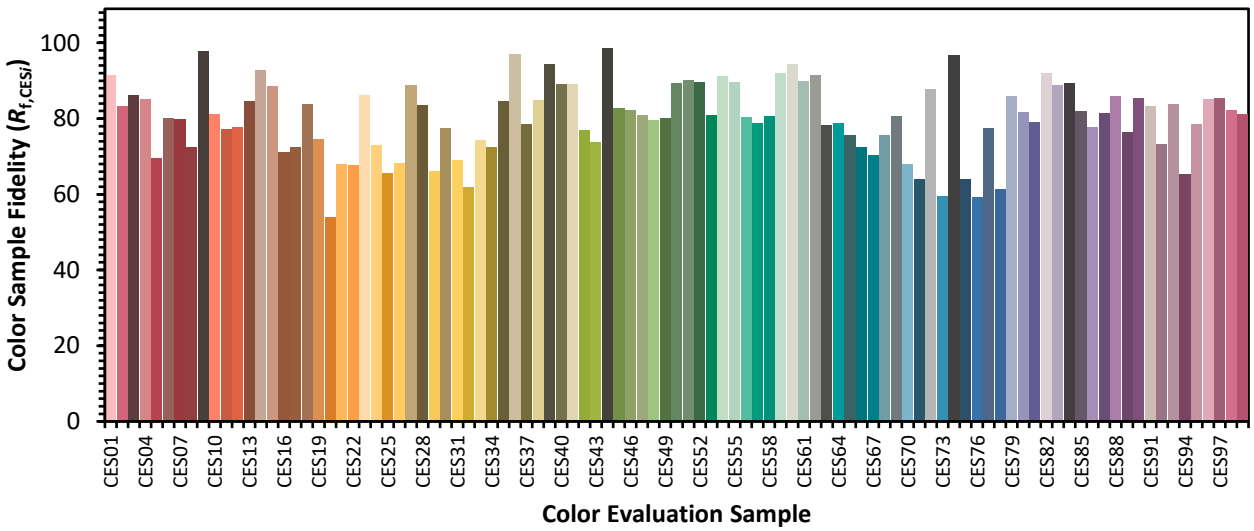
Individual Sample Fidelity Index ($R_{f,i}$)

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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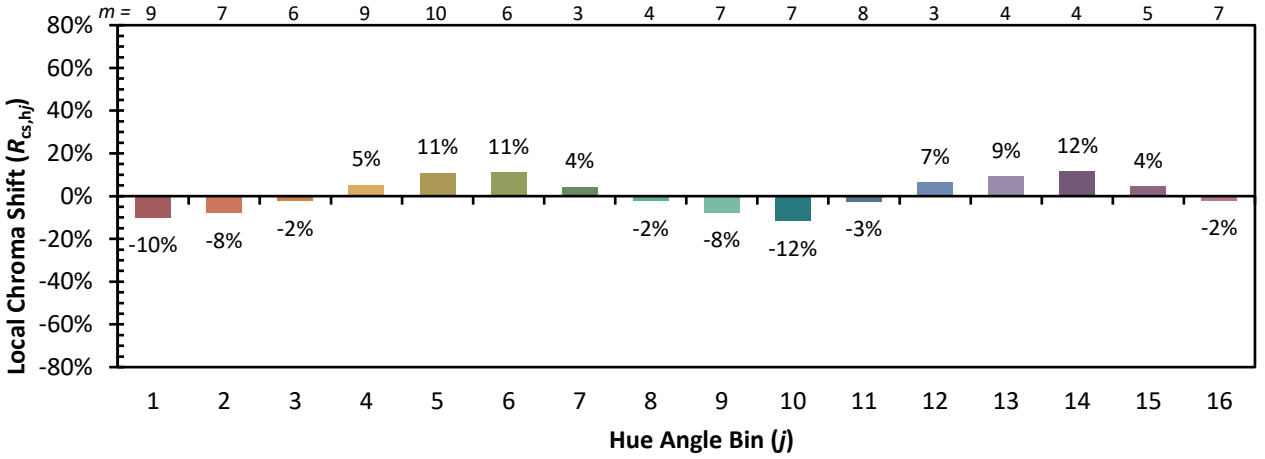
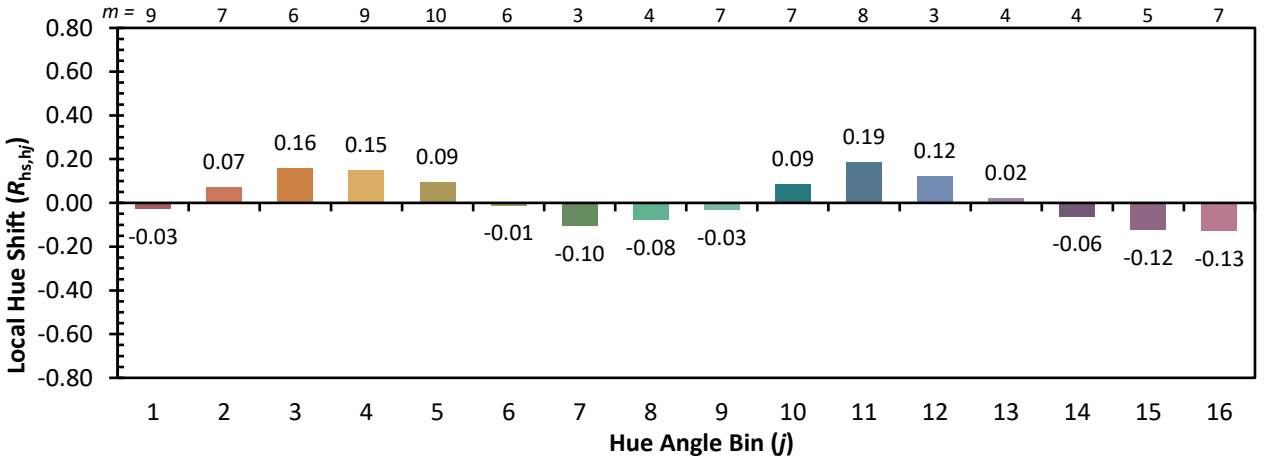
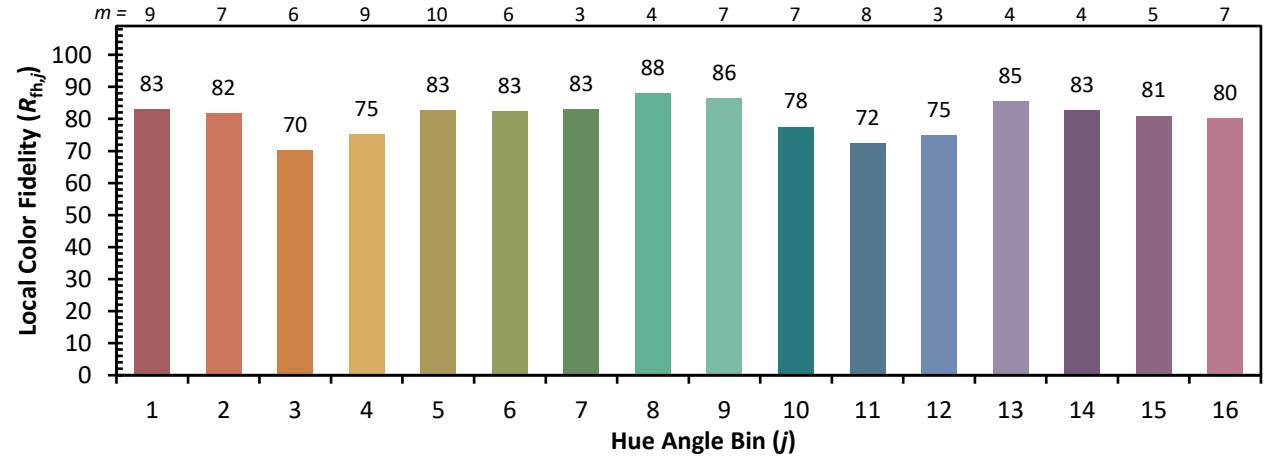
Color Rendition by Hue-Angle Bin







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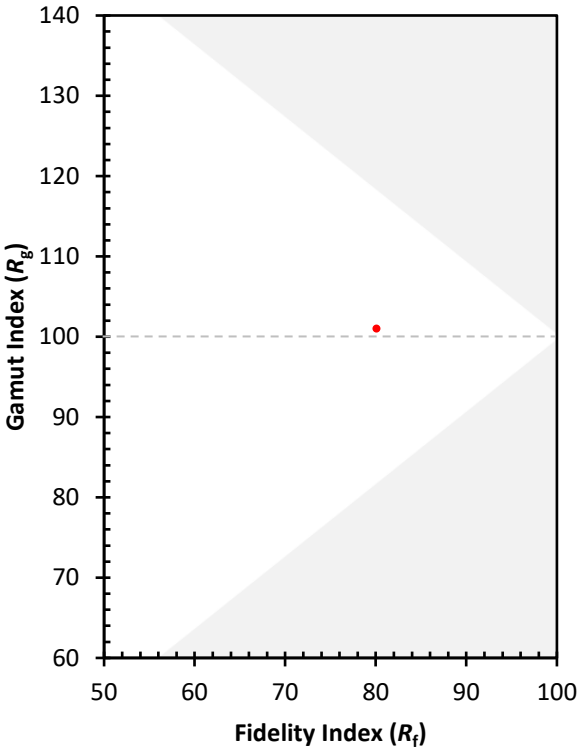
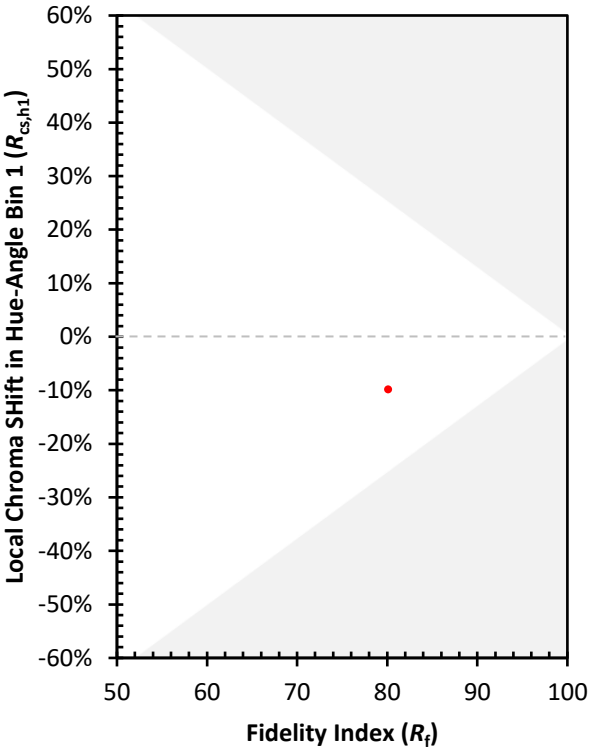
Measure Comparisons





(END OF REPORT)