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: P1432621

Luminaire Tested: EHBR1-24-UNV-ASM-L835-UPL18

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:	P1432621
	REPORT IS A COMBINATION OF REPORTS P1431710 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-24-UNV-ASM-L835-UPL18
Description:	Elevate Round Highbay at, 24000 lumens, 3500K 80CRI LEDs with ASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	25813.6 lumens
Efficiency:	N/A
Efficacy:	184.1 lumens/watt
Spacing Criteria (0/90/45):	0.84 / 0.99 / 0.92
Luminous Opening:	Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type:	Direct

Input Watts (W):	140.2
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: P1432621
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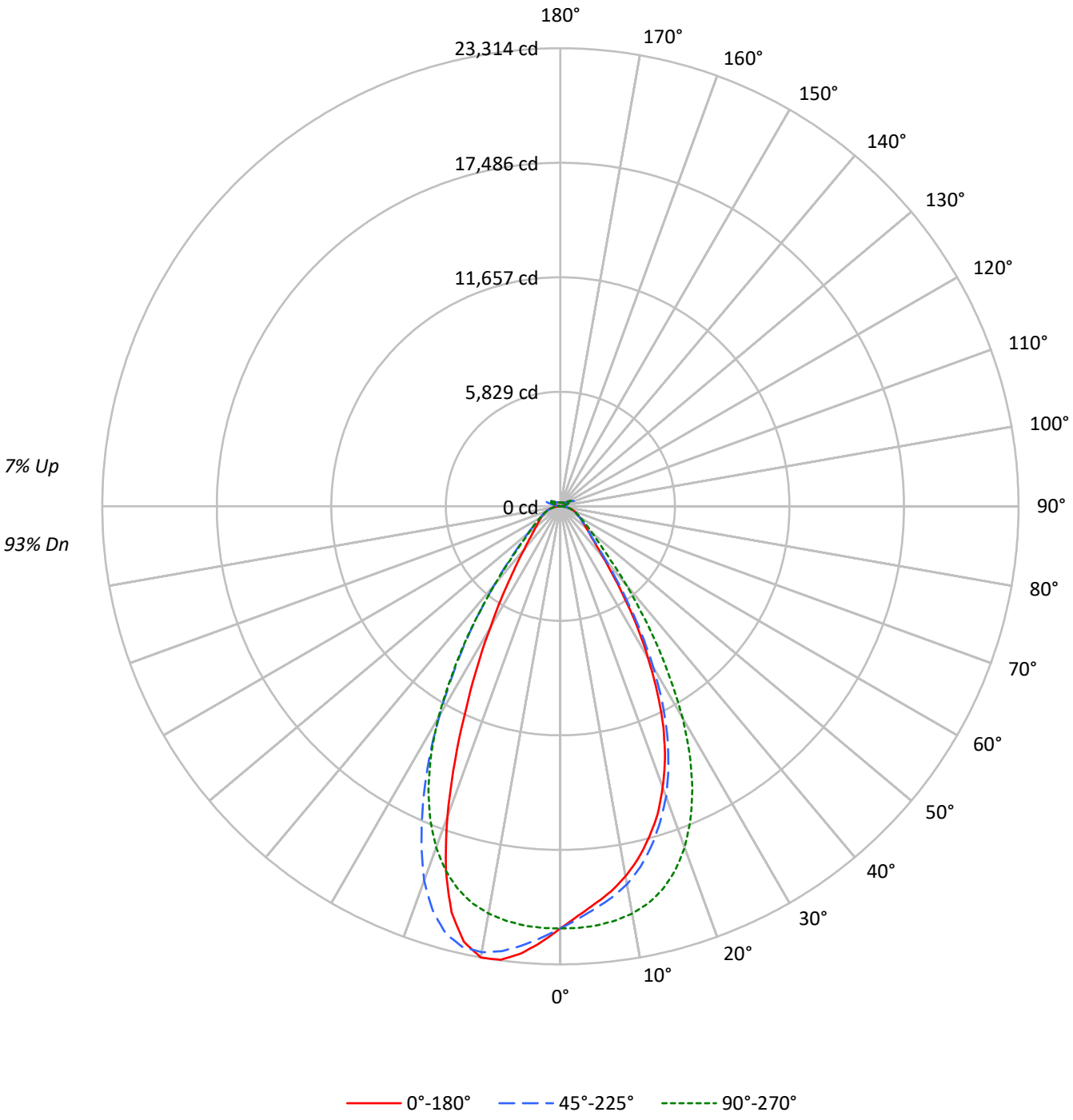
Luminous Intensity Polar Plot



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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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93
1	110	107	104	101	107	104	101	99	98	96	94	93	92	90	89	88	86	84
2	103	97	92	88	100	95	90	86	90	87	84	86	83	81	82	80	78	76
3	97	89	83	78	94	87	81	77	83	79	75	80	76	73	77	74	71	69
4	91	82	75	70	88	80	74	69	77	72	68	74	70	66	71	68	65	63
5	85	76	69	64	83	74	68	63	72	66	62	69	64	61	67	63	60	58
6	80	70	63	58	78	69	63	58	67	61	57	65	60	56	63	58	55	53
7	76	65	59	54	74	64	58	53	62	57	53	60	55	52	59	54	51	49
8	72	61	54	50	70	60	54	49	58	53	49	57	52	48	55	51	47	46
9	68	57	51	46	66	56	50	46	55	49	45	54	48	45	52	48	44	43
10	65	54	47	43	63	53	47	43	52	46	42	51	46	42	49	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	100900	100900	100900	100900	100900
5°	95082	96193	100286	105096	106986
10°	89987	91893	99053	108470	109733
15°	83124	85343	96129	107357	101976
20°	74040	76533	89904	98682	81771
25°	62049	64397	79572	82773	56656
30°	46425	49116	64610	63965	36858
35°	30906	32772	46340	45592	23871
40°	19491	20830	29960	30153	16453
45°	13887	14465	19010	19826	12744
50°	11568	11660	14117	14485	10830
55°	10211	10235	11525	11830	9865
60°	9455	9374	9980	10192	9397
65°	9025	8944	9098	9276	9063
70°	8765	8614	8624	8788	8880
75°	8334	8082	8065	8350	8590
80°	7581	7054	7085	7581	8111
85°	5522	4585	4585	5240	5790

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
Vertical Angle: 45°
Luminance: 26726 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2043.0	7.9
10°-20°	5558.1	21.5
20°-30°	6518.5	25.3
30°-40°	4533.2	17.6
40°-50°	2252.8	8.7
50°-60°	1347.4	5.2
60°-70°	948.4	3.7
70°-80°	610.9	2.4
80°-90°	197.2	0.8
90°-100°	48.2	0.2
100°-110°	313.2	1.2
110°-120°	578.3	2.2
120°-130°	344.0	1.3
130°-140°	208.4	0.8
140°-150°	144.5	0.6
150°-160°	94.7	0.4
160°-170°	54.7	0.2
170°-180°	18.3	0.1
0°-30°	14119.5	54.7
0°-40°	18652.7	72.3
0°-60°	22252.9	86.2
0°-90°	24009.4	93.0
90°-120°	939.7	3.6
90°-150°	1636.5	6.3
90°-180°	1804.0	7.0
0°-180°	25813.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	21486	21486	21486	21486	21486	
5°	20302	20539	21413	22440	22843	1904
15°	17439	17905	20167	22523	21394	4863
25°	12391	12860	15890	16530	11314	5591
35°	5672	6015	8505	8368	4381	3613
45°	2247	2340	3076	3208	2062	1816
55°	1380	1383	1558	1599	1333	1252
65°	942	934	950	968	946	935
75°	587	569	568	588	605	620
85°	190	158	158	180	199	195
90°	13	36	13	39	16	16
95°	22	81	26	70	25	22
105°	109	546	144	583	74	146
115°	500	646	615	715	526	460
125°	361	346	394	384	414	329
135°	264	266	250	278	289	207
145°	220	230	226	232	237	139
155°	196	203	202	202	211	92
165°	188	192	192	192	198	54
175°	189	192	192	191	196	18
180°	192	192	192	192	192	

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Scaled Data Report

TEST NUMBER: P1432621
CATALOG NUMBER: EHBR1-24-UNV-ASM-L835-UPL18

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	21486.0	21486.0	21486.0	21486.0	21486.0	21486.0	21486.0	21486.0	21486.0
2.5°	20848.2	20861.9	21007.7	21197.5	21473.5	21751.1	21975.9	22124.1	22197.4
5°	20301.5	20377.2	20538.7	20887.3	21412.7	21968.6	22439.6	22747.8	22843.3
7.5°	19768.8	19812.7	20083.1	20523.4	21267.2	22133.4	22833.2	23193.0	23280.8
10°	19118.9	19218.5	19523.9	20043.2	21045.2	22237.4	23045.9	23303.8	23314.3
12.5°	18354.3	18486.0	18801.5	19456.6	20691.0	22200.2	22974.7	22890.0	22697.8
15°	17438.9	17554.5	17904.6	18664.5	20167.3	21980.7	22523.0	21834.5	21394.1
17.5°	16450.2	16554.9	16859.1	17695.9	19429.2	21569.7	21580.2	20218.1	19387.3
20°	15217.3	15299.5	15729.8	16550.9	18477.9	20910.6	20282.1	17790.6	16806.3
22.5°	13905.4	13982.4	14364.8	15219.3	17285.4	20021.8	18474.3	15348.7	14005.8
25°	12391.1	12432.9	12860.0	13632.8	15890.5	18932.8	16529.6	12688.0	11314.1
27.5°	10687.2	10758.4	11205.3	11994.5	14250.0	17552.5	14458.7	10368.0	9100.5
30°	8929.8	9047.8	9447.5	10154.1	12427.7	15783.0	12303.6	8256.9	7089.7
32.5°	7289.6	7374.5	7659.4	8397.9	10387.4	14048.5	10233.9	6615.9	5627.2
35°	5672.3	5757.4	6014.8	6740.1	8505.1	11878.6	8367.7	5198.5	4381.1
37.5°	4336.0	4486.3	4651.4	5240.0	6674.7	9828.2	6670.3	4186.0	3553.5
40°	3378.3	3402.4	3610.3	3987.1	5192.9	7684.8	5226.3	3341.6	2851.7
42.5°	2704.2	2769.9	2859.4	3141.4	3934.7	5876.2	4107.9	2742.5	2422.2
45°	2246.9	2272.7	2340.4	2529.8	3075.7	4324.2	3207.8	2313.8	2062.0
47.5°	1965.7	1954.5	1998.0	2139.8	2504.8	3342.0	2599.9	1984.7	1808.2
50°	1724.0	1717.2	1737.7	1832.4	2103.9	2564.4	2158.7	1732.5	1614.0
52.5°	1536.2	1542.3	1544.3	1603.1	1807.3	2091.5	1838.4	1543.9	1464.2
55°	1379.9	1387.6	1383.1	1426.6	1557.5	1758.3	1598.7	1388.3	1333.2
57.5°	1257.8	1252.2	1246.2	1269.5	1367.9	1491.5	1388.3	1255.8	1219.1
60°	1136.6	1131.4	1126.9	1142.2	1199.8	1291.7	1225.2	1140.2	1129.7
62.5°	1032.6	1029.3	1029.0	1026.1	1070.5	1128.5	1083.4	1036.2	1027.0
65°	942.0	938.4	933.5	929.1	949.6	1003.6	968.2	942.8	946.0
67.5°	851.3	851.3	842.9	836.0	856.2	884.4	869.1	854.5	858.2
70°	769.1	769.6	755.8	750.6	756.7	786.8	771.1	773.1	779.2
72.5°	680.9	671.2	661.1	660.8	661.5	684.9	679.7	684.5	690.9
75°	587.1	575.7	569.3	562.0	568.1	585.8	588.2	595.1	605.1
77.5°	496.4	479.0	473.8	470.2	466.1	486.3	494.0	503.2	518.1
80°	398.8	379.9	371.1	365.9	372.7	382.0	398.8	405.7	426.7
82.5°	294.9	280.8	270.0	269.6	272.8	281.2	295.8	308.7	320.7
85°	189.8	167.2	157.6	161.2	157.6	170.4	180.1	195.4	199.0
87.5°	68.5	53.6	51.2	56.4	55.2	59.2	67.7	73.7	74.1
90°	13.3	21.2	36.2	23.3	13.3	22.6	38.9	22.3	16.1
92.5°	19.3	32.2	58.0	30.2	17.3	30.5	54.8	29.3	21.0
95°	22.2	37.1	80.9	40.1	25.6	37.5	69.7	32.2	25.0
97.5°	28.6	41.1	92.8	49.1	39.6	46.4	78.6	34.2	30.1
100°	37.5	48.1	144.5	60.4	52.5	52.5	143.3	39.2	34.0
102.5°	63.4	101.7	306.5	113.1	79.3	102.5	331.6	77.4	40.9
105°	109.1	214.1	546.0	236.3	143.9	233.7	583.1	197.6	74.2
107.5°	188.6	383.0	720.3	418.2	272.1	435.5	751.0	388.5	170.6
110°	351.6	508.2	755.1	574.3	435.1	608.4	819.6	531.6	343.5

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Scaled Data Report

TEST NUMBER: P1432621
CATALOG NUMBER: EHBR1-24-UNV-ASM-L835-UPL18

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	474.9	546.0	723.3	633.9	566.3	678.0	800.7	589.2	*474.7*
115°	499.7	525.2	645.8	619.0	615.4	668.0	715.3	587.3	*526.4*
117.5°	482.8	479.4	548.4	556.7	594.5	611.4	617.9	551.5	*529.4*
120°	447.0	426.8	458.0	486.2	536.8	529.9	520.8	498.7	*499.5*
122.5°	402.3	378.5	392.7	414.1	464.8	449.8	440.3	445.5	*458.8*
125°	360.9	336.7	346.5	351.9	394.2	379.4	384.1	399.7	*413.6*
127.5°	324.2	307.9	313.7	308.2	334.9	328.1	343.3	361.0	*372.8*
130°	299.3	285.4	293.2	279.8	292.7	294.2	314.5	329.6	*337.0*
132.5°	279.0	270.0	279.1	262.6	266.2	273.7	293.0	306.2	*310.6*
135°	264.1	256.5	266.2	251.1	249.7	260.9	278.5	286.8	*288.7*
137.5°	251.5	244.9	255.0	243.6	240.1	251.3	264.6	271.4	*269.9*
140°	240.4	234.8	245.6	236.6	234.7	245.7	251.6	259.5	*258.3*
142.5°	228.2	224.2	237.0	231.1	229.0	239.1	242.1	248.0	*246.4*
145°	220.1	217.1	230.5	227.1	226.5	234.1	231.7	239.0	*236.8*
147.5°	212.9	211.0	222.9	221.5	221.5	227.1	224.1	230.5	*228.3*
150°	206.7	204.8	216.3	215.0	216.0	219.9	215.6	222.9	*222.6*
152.5°	200.7	198.2	208.8	207.4	208.4	212.4	208.4	216.7	*216.1*
155°	196.5	194.1	202.7	201.8	202.2	204.2	202.2	210.6	*211.0*
157.5°	193.7	191.9	198.5	198.1	198.1	199.5	198.5	205.9	*206.3*
160°	191.6	190.2	195.7	195.3	194.7	196.7	196.2	202.5	*202.9*
162.5°	189.4	188.0	194.5	193.6	193.6	193.6	193.4	199.7	*200.4*
165°	188.1	187.7	192.4	192.4	191.7	192.8	191.5	196.4	*198.1*
167.5°	188.1	187.2	192.1	192.1	191.5	190.5	191.4	195.6	*197.4*
170°	188.0	187.5	191.5	191.0	190.1	190.5	190.2	194.4	*196.2*
172.5°	188.8	188.4	192.8	191.8	191.2	191.2	190.5	193.7	*196.4*
175°	188.6	188.2	191.6	191.6	192.0	191.4	191.2	193.4	*196.3*
177.5°	190.0	189.6	191.6	191.6	190.9	191.8	192.6	194.9	*198.6*
180°	191.8	191.8	191.8	191.8	191.8	191.8	191.8	191.8	*191.8*

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Scaled Data Report

TEST NUMBER: P1432621
CATALOG NUMBER: EHBR1-24-UNV-ASM-L835-UPL18

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	15.97	17.07	16.45	17.53	18.02	16.73	17.83	17.22	18.29	18.78
	3H	17.78	18.76	18.28	19.23	19.77	18.29	19.27	18.79	19.74	20.28
	4H	18.52	19.43	19.04	19.92	20.48	18.94	19.85	19.46	20.34	20.90
	6H	19.09	19.93	19.62	20.43	21.00	19.43	20.27	19.97	20.78	21.34
	8H	19.27	20.06	19.82	20.59	21.16	19.59	20.38	20.14	20.91	21.48
	12H	19.37	20.13	19.92	20.65	21.24	19.67	20.43	20.22	20.95	21.54
4H	2H	16.48	17.40	17.01	17.89	18.44	17.11	18.02	17.64	18.52	19.07
	3H	18.52	19.27	19.06	19.81	20.38	18.92	19.67	19.45	20.21	20.78
	4H	19.38	20.06	19.94	20.61	21.22	19.70	20.38	20.26	20.93	21.54
	6H	20.08	20.66	20.66	21.24	21.86	20.34	20.92	20.92	21.50	22.12
	8H	20.30	20.85	20.89	21.42	22.05	20.54	21.09	21.13	21.66	22.29
	12H	20.44	20.92	21.04	21.52	22.16	20.66	21.14	21.26	21.74	22.38
8H	4H	19.64	20.19	20.23	20.76	21.39	19.95	20.49	20.53	21.06	21.70
	6H	20.46	20.90	21.08	21.52	22.16	20.71	21.15	21.33	21.77	22.41
	8H	20.76	21.16	21.40	21.79	22.44	20.99	21.39	21.63	22.02	22.67
	12H	20.96	21.31	21.59	21.92	22.65	21.18	21.52	21.81	22.14	22.86
12H	4H	19.65	20.13	20.25	20.74	21.37	19.96	20.44	20.56	21.04	21.68
	6H	20.50	20.89	21.13	21.53	22.18	20.75	21.15	21.39	21.78	22.43
	8H	20.84	21.19	21.47	21.80	22.53	21.08	21.43	21.71	22.04	22.77

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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

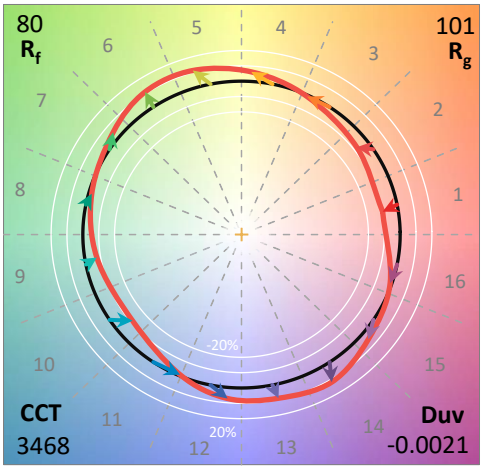
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

REPORT NUMBER: SP1-2506-472-3

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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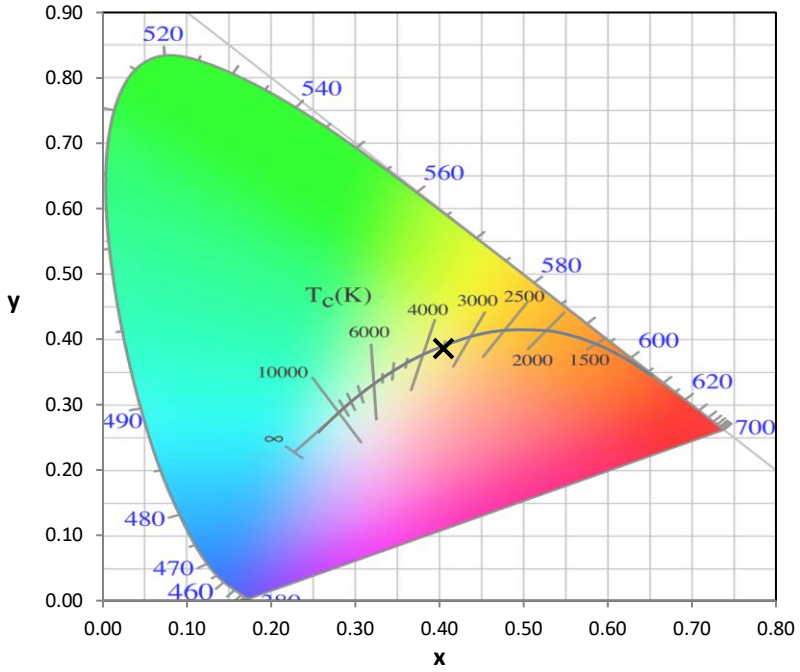
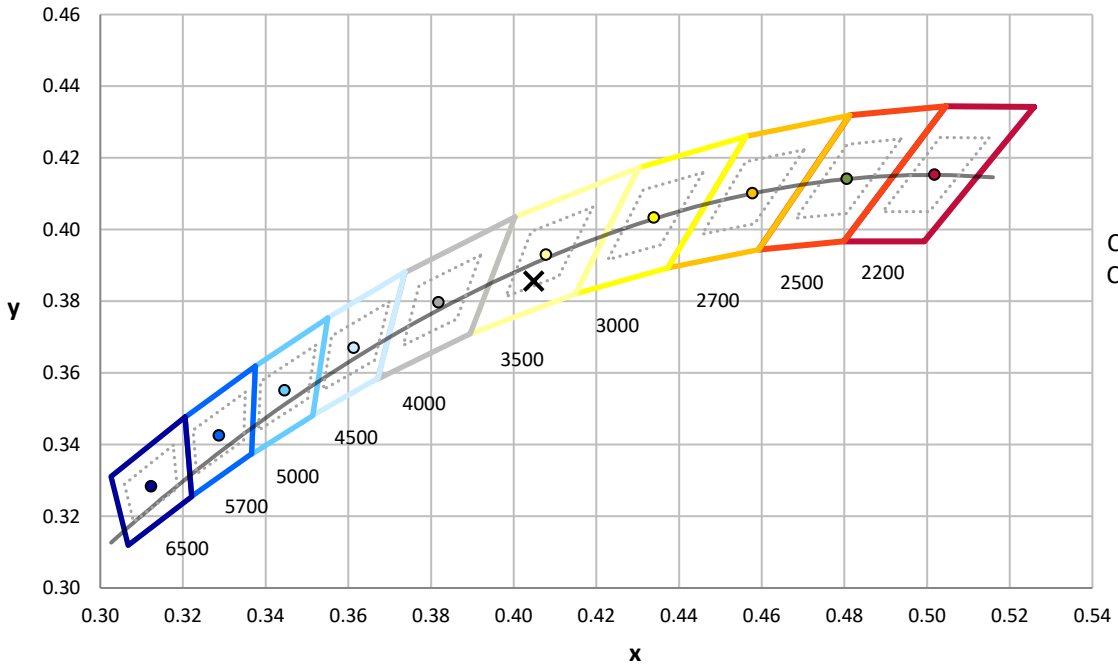
CIE 1931 Chromaticity Diagram



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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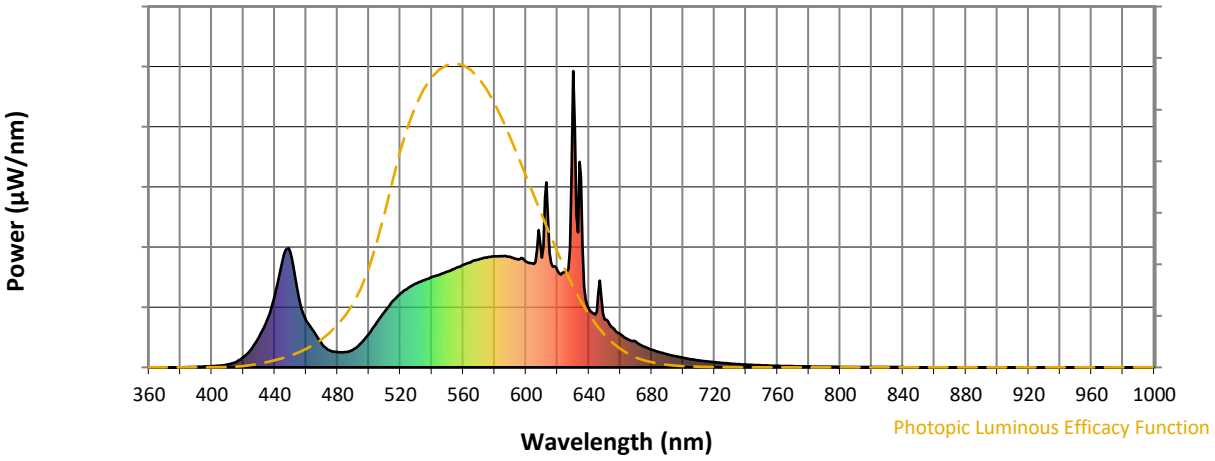
Photopic Flux vs. Wavelength



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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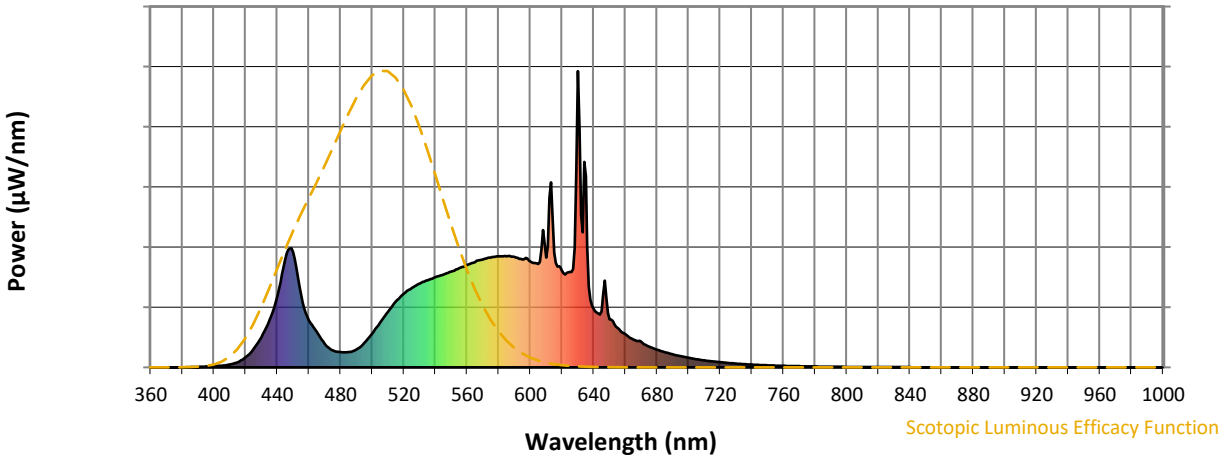
Scotopic Flux vs. Wavelength



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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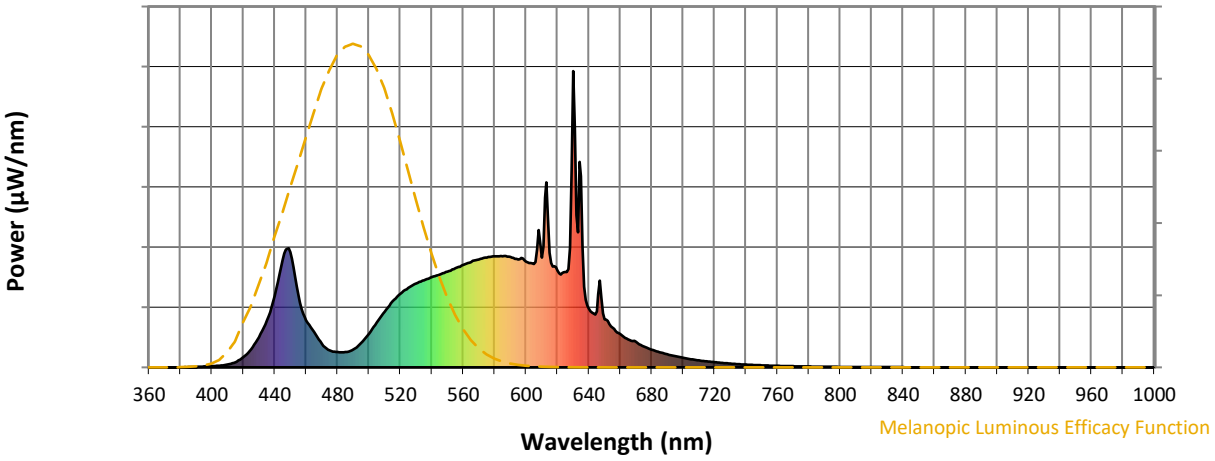
Melanopic Flux vs. Wavelength



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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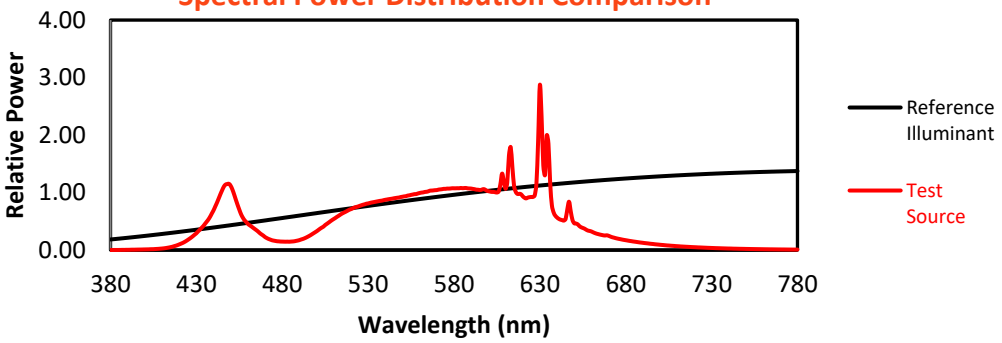
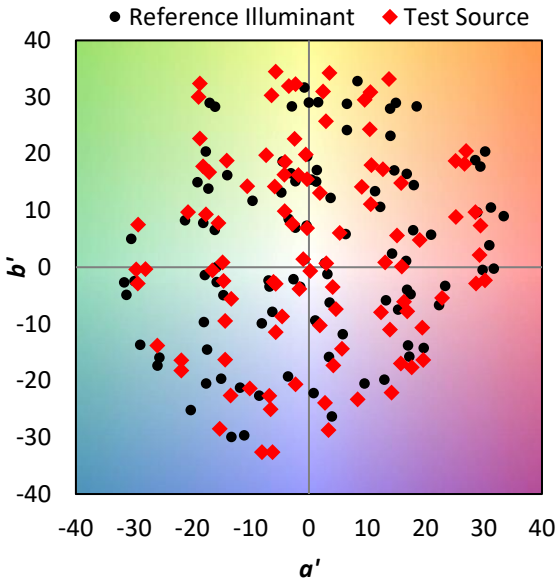
Summary

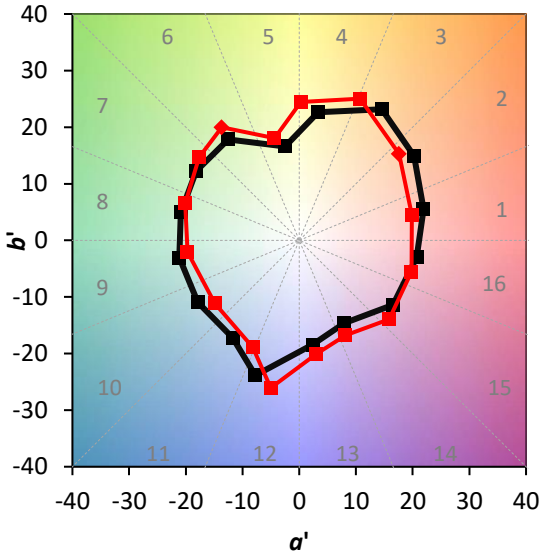
R_f = 80.1
R_g = 101
CIE R_a = 82.1
R_9 = 27.6

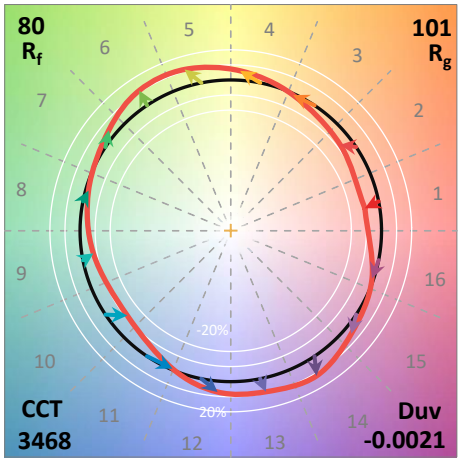
Spectral Power Distribution Comparison

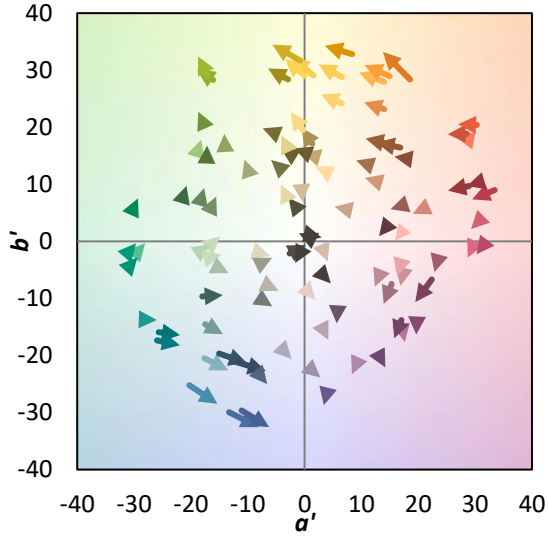


Color Vector Graphics









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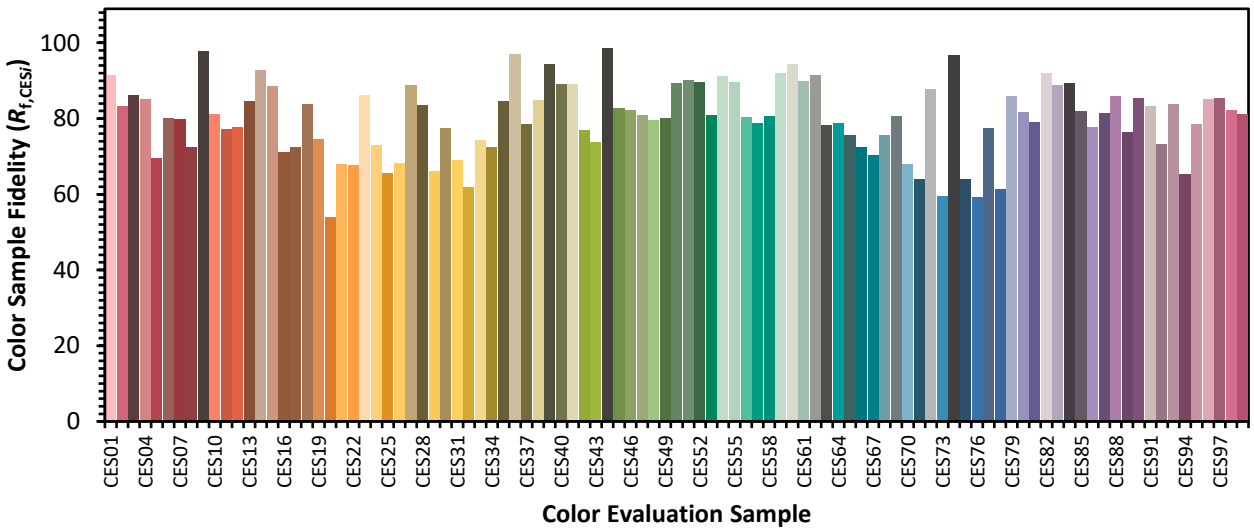
Individual Sample Fidelity Index ($R_{f,i}$)

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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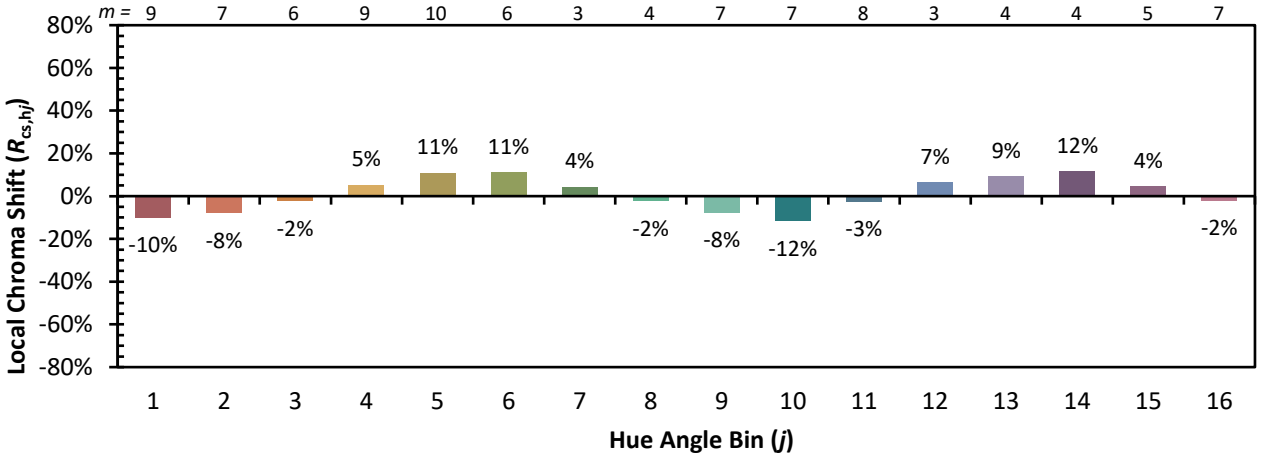
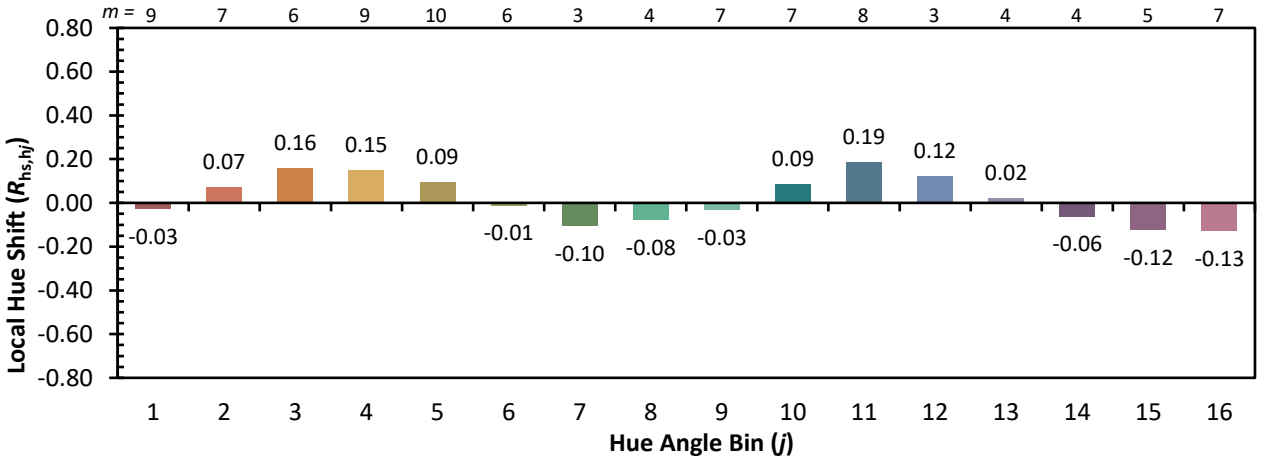
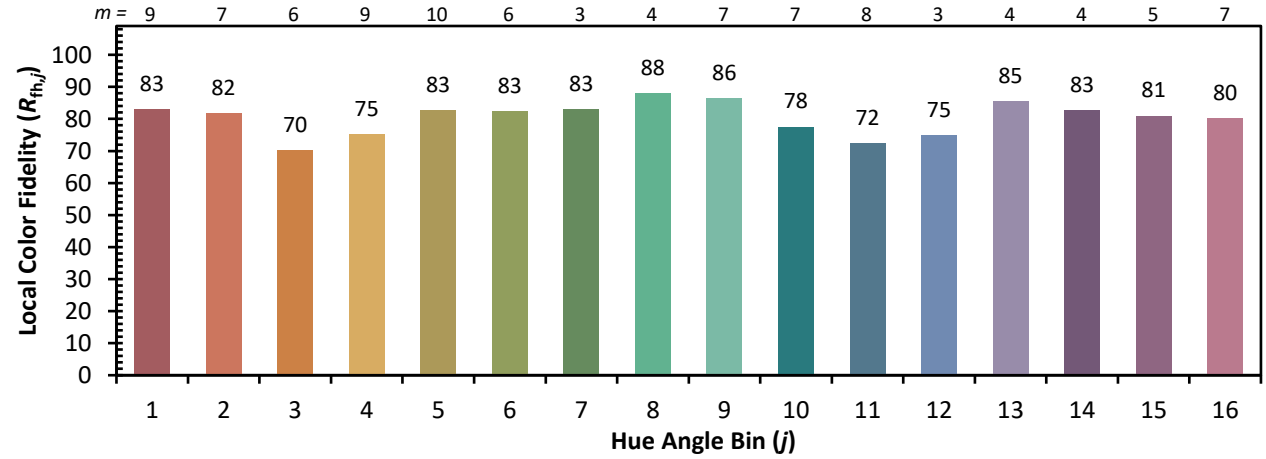
Color Rendition by Hue-Angle Bin







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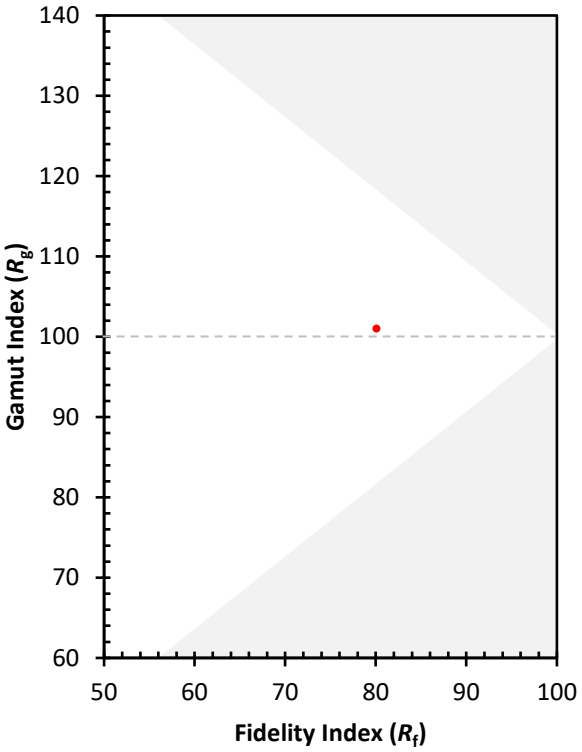
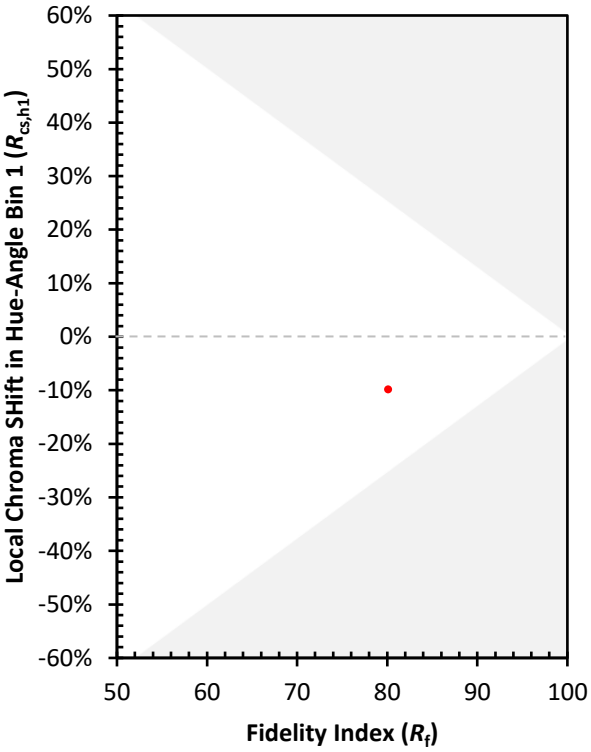
Measure Comparisons





(END OF REPORT)