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: P1432614

Luminaire Tested: EHBR1-24-UNV-A1-L835-UPL24

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:	P1432614
	REPORT IS A COMBINATION OF REPORTS P1431703 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-24-UNV-A1-L835-UPL24
Description:	Elevate Round Highbay at, 24000 lumens, 3500K 80CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	26338.3 lumens
Efficiency:	N/A
Efficacy:	181.9 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):	144.8
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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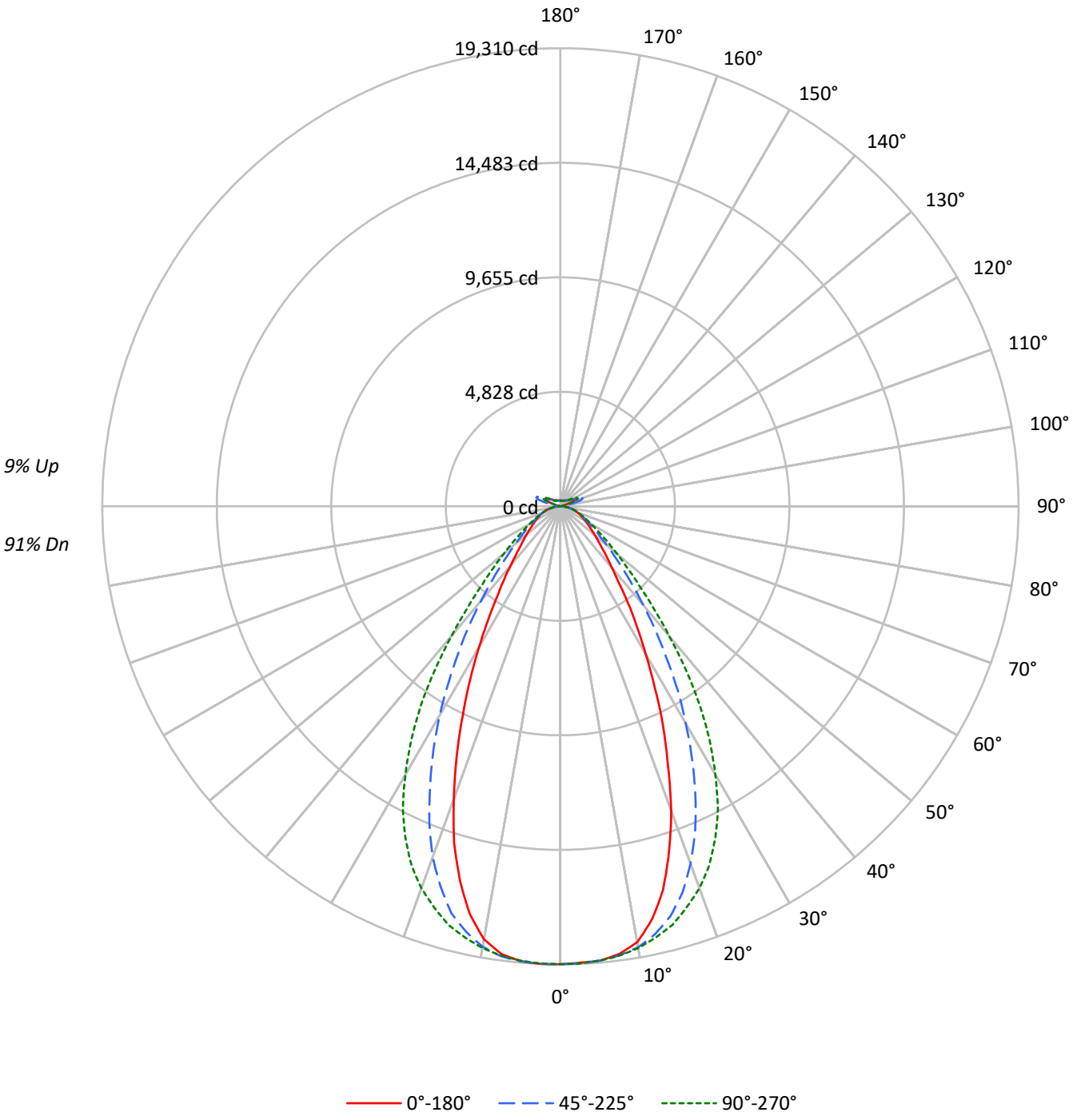
Scaled Data Report

TEST NUMBER: P1432614
CATALOG NUMBER: EHBR1-24-UNV-A1-L835-UPL24

Luminous Intensity Polar Plot



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TEST NUMBER: P1432614
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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	113	113	113	113	106	106	106	100	100	100	94	94	94	91
1	109	106	103	100	106	103	100	97	97	95	93	92	90	88	87	85	84	82
2	102	96	91	86	99	93	89	85	89	85	81	84	81	78	80	78	75	73
3	95	87	81	76	92	85	79	75	81	76	72	77	73	70	74	71	68	66
4	89	80	73	68	86	78	72	67	75	69	65	71	67	63	68	65	62	60
5	84	73	66	61	81	72	65	60	69	63	59	66	61	58	64	59	56	54
6	78	68	60	55	76	66	60	55	64	58	54	61	56	53	59	55	52	50
7	74	63	56	51	72	62	55	50	59	53	49	57	52	48	55	51	47	46
8	69	58	51	47	68	57	51	46	55	50	45	54	48	45	52	47	44	42
9	66	54	48	43	64	54	47	43	52	46	42	50	45	41	49	44	41	39
10	62	51	44	40	61	50	44	40	49	43	39	47	42	39	46	41	38	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	90643	90643	90643	90643	90643
5°	90044	90030	90035	90194	90139
10°	87818	88842	88983	88731	87244
15°	79725	85288	87043	84604	77894
20°	66436	78028	83358	76559	63850
25°	51379	67467	77329	65003	48717
30°	37451	54944	67928	52859	35547
35°	26996	42349	55826	40525	25234
40°	19422	31278	41142	29958	18823
45°	15304	22883	28734	21891	14774
50°	12698	17193	20797	16626	12505
55°	11089	13576	15750	13348	10940
60°	10001	11332	12551	11262	10072
65°	9354	9996	10546	10027	9443
70°	8884	9096	9376	9145	8970
75°	8287	8235	8287	8258	8367
80°	7486	6948	6792	7054	7486
85°	5188	4399	4353	4469	5342

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 30106 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1822.8	6.9
10°-20°	4898.9	18.6
20°-30°	5957.1	22.6
30°-40°	4852.5	18.4
40°-50°	2913.4	11.1
50°-60°	1676.7	6.4
60°-70°	1049.3	4.0
70°-80°	618.0	2.3
80°-90°	184.9	0.7
90°-100°	62.2	0.2
100°-110°	411.4	1.6
110°-120°	760.9	2.9
120°-130°	451.6	1.7
130°-140°	272.9	1.0
140°-150°	189.0	0.7
150°-160°	123.1	0.5
160°-170°	70.3	0.3
170°-180°	23.3	0.1
0°-30°	12678.7	48.1
0°-40°	17531.2	66.6
0°-60°	22121.3	84.0
0°-90°	23973.6	91.0
90°-120°	1234.5	4.7
90°-150°	2148.0	8.2
90°-180°	2365.0	9.0
0°-180°	26338.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	19302	19302	19302	19302	19302	
5°	19226	19223	19224	19258	19246	1817
15°	16726	17893	18261	17749	16342	4601
25°	10260	13473	15443	12981	9729	4675
35°	4955	7772	10246	7438	4631	3135
45°	2476	3702	4649	3542	2390	1953
55°	1499	1835	2128	1804	1478	1355
65°	976	1043	1101	1047	986	971
75°	584	580	584	582	589	618
85°	178	151	150	154	184	190
90°	18	47	17	50	18	17
95°	30	106	33	90	29	28
105°	144	720	189	767	94	192
115°	659	851	810	941	690	607
125°	476	455	518	504	541	434
135°	348	349	327	365	377	272
145°	288	301	296	304	309	183
155°	255	263	262	264	275	119
165°	243	248	245	245	253	69
175°	243	245	244	242	248	23
180°	244	244	244	244	244	

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Scaled Data Report

TEST NUMBER: P1432614
CATALOG NUMBER: EHBR1-24-UNV-A1-L835-UPL24

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	19301.8	19301.8	19301.8	19301.8	19301.8	19301.8	*19301.8*	19301.8	19301.8
2.5°	*19259.4*	*19276.8*	*19284.0*	*19288.1*	*19292.5*	*19304.7*	*19309.9*	*19301.4*	*19308.7*
5°	19225.9	19227.0	19222.9	19241.2	19223.8	19235.9	*19257.8*	19249.2	19246.0
7.5°	19030.2	19070.6	19094.5	19100.5	19103.8	19118.7	*19134.0*	19047.1	19034.1
10°	18658.2	18725.8	18875.7	18918.6	18905.7	18929.9	*18852.2*	18625.0	18536.1
12.5°	17842.9	18080.1	18469.9	18643.3	18611.7	18633.2	*18368.7*	17889.3	17613.6
15°	16725.8	17073.9	17892.9	18234.9	18261.2	18234.9	*17749.4*	16815.2	16341.7
17.5°	15240.9	15883.8	17089.7	17753.5	17715.4	17728.0	*16806.2*	15425.3	14883.6
20°	13654.6	14339.8	16037.0	17144.3	17132.5	17062.1	*15735.0*	13913.7	13123.0
22.5°	11860.4	12744.2	14830.6	16395.1	16390.7	16273.5	*14430.4*	12263.0	11411.7
25°	10260.3	11127.1	13473.1	15477.4	15442.6	15309.3	*12981.1*	10616.5	9728.7
27.5°	8606.1	9507.2	12023.7	14402.0	14378.2	14232.7	*11595.6*	9077.5	8232.5
30°	7203.7	8027.6	10568.4	13218.8	13066.0	13049.4	*10167.4*	7652.4	6837.4
32.5°	6002.2	6708.5	9196.3	11981.3	11710.9	11788.1	*8744.0*	6460.6	5652.9
35°	4954.7	5576.9	7772.5	10550.3	10246.1	10346.0	*7437.8*	5301.2	4631.3
37.5°	4021.3	4619.6	6565.7	9158.3	8693.4	8881.8	*6288.8*	4427.1	3890.3
40°	3366.3	3840.9	5421.3	7630.9	7130.9	7437.8	*5192.4*	3692.6	3262.5
42.5°	2900.6	3210.3	4474.4	6172.8	5789.2	6006.7	*4279.6*	3087.0	2765.2
45°	2476.2	2723.1	3702.3	4871.0	4649.1	4850.8	*3541.8*	2632.2	2390.4
47.5°	2162.8	2353.3	3047.8	3933.5	3795.6	3859.5	*2958.0*	2297.0	2100.6
50°	1892.4	2039.5	2562.3	3174.7	3099.5	3138.8	*2477.8*	1998.7	1863.7
52.5°	1682.2	1790.1	2149.1	2609.2	2572.0	2578.1	*2111.5*	1758.2	1660.3
55°	1498.6	1573.8	1834.6	2137.3	2128.5	2130.1	*1803.9*	1558.0	1478.4
57.5°	1338.1	1400.4	1576.7	1795.3	1782.4	1785.2	*1562.1*	1383.8	1332.5
60°	1202.3	1243.9	1362.3	1517.2	1508.8	1505.1	*1353.9*	1228.5	1210.8
62.5°	1081.8	1108.5	1190.6	1300.6	1284.4	1288.0	*1190.1*	1109.7	1083.5
65°	976.3	985.6	1043.4	1111.3	1100.8	1109.7	*1046.6*	991.6	985.6
67.5°	873.2	882.5	916.5	962.1	950.0	957.3	*917.2*	885.0	879.7
70°	779.5	779.1	798.1	822.7	822.7	823.9	*802.4*	783.0	787.1
72.5°	682.4	680.0	685.7	702.2	697.8	713.1	*690.5*	684.4	685.2
75°	583.8	576.9	580.1	588.6	583.8	591.8	*581.7*	589.4	589.4
77.5°	490.8	477.9	473.8	475.1	466.1	478.3	*480.7*	485.9	498.0
80°	393.8	375.6	365.5	365.1	357.3	365.1	*371.1*	382.1	393.8
82.5°	292.3	276.6	259.5	256.3	251.4	255.9	*264.0*	276.9	296.0
85°	178.3	161.7	151.2	145.6	149.6	149.6	*153.6*	171.8	183.6
87.5°	64.3	56.1	46.1	46.4	47.7	49.4	*51.3*	64.7	70.8
90°	17.8	27.5	47.2	30.2	17.1	28.8	*49.8*	26.2	17.5
92.5°	25.3	42.0	76.0	39.3	22.3	39.3	*70.8*	35.4	24.0
95°	29.6	48.5	106.2	52.5	32.8	48.5	*90.5*	39.3	29.2
97.5°	37.4	53.7	121.9	64.2	51.1	60.3	*102.2*	42.0	35.8
100°	49.3	62.9	190.1	78.6	68.2	68.2	*187.4*	48.5	41.4
102.5°	83.3	133.7	403.7	148.1	103.6	133.7	*435.1*	98.3	50.6
105°	143.6	281.8	719.5	310.6	188.7	306.7	*766.7*	256.9	93.9
107.5°	248.4	504.6	948.9	550.5	357.8	572.7	*988.2*	508.5	221.0
110°	463.4	669.7	994.7	756.3	572.7	800.8	*1078.6*	697.2	449.0

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Scaled Data Report

TEST NUMBER: P1432614
CATALOG NUMBER: EHBR1-24-UNV-A1-L835-UPL24

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	625.9	719.5	952.8	834.8	745.7	892.5	*1053.8*	773.2	622.0
115°	658.7	692.0	850.6	815.2	810.0	879.4	*941.0*	770.6	690.1
117.5°	636.9	631.8	722.1	732.6	782.5	804.8	*812.6*	723.5	694.1
120°	589.3	562.2	602.9	639.6	706.4	697.2	*684.1*	654.4	654.7
122.5°	530.7	498.4	516.4	543.9	610.7	591.1	*577.9*	583.6	601.5
125°	475.7	443.4	454.8	461.4	517.7	498.0	*503.7*	523.4	541.2
127.5°	427.3	405.3	411.5	403.7	439.1	429.9	*449.9*	472.6	487.5
130°	394.5	375.6	384.4	365.7	383.1	385.8	*412.3*	430.6	440.3
132.5°	367.3	355.1	365.6	342.9	348.1	359.1	*384.0*	400.1	405.3
135°	348.0	337.2	349.0	327.6	326.7	342.4	*364.7*	375.2	376.8
137.5°	331.0	321.8	333.6	317.9	314.0	329.7	*346.8*	354.6	352.4
140°	316.0	307.8	320.9	309.1	306.5	322.2	*330.1*	339.7	337.0
142.5°	299.4	294.1	309.5	301.7	299.1	313.8	*317.8*	324.3	322.1
145°	288.1	284.1	300.7	296.8	295.5	306.4	*303.8*	313.4	309.4
147.5°	278.8	275.8	290.7	289.4	289.4	297.3	*293.7*	302.0	298.5
150°	270.0	267.0	281.9	280.6	281.9	287.1	*282.3*	292.3	291.3
152.5°	261.2	258.2	271.8	270.2	271.4	276.7	*272.2*	283.1	282.7
155°	255.1	252.0	263.1	262.3	262.3	265.3	*263.5*	274.8	275.2
157.5°	251.1	248.9	257.3	256.5	256.5	258.2	*257.7*	267.7	268.1
160°	247.9	245.8	252.9	252.0	250.7	253.8	*253.3*	261.9	262.3
162.5°	244.9	242.6	250.7	248.9	248.5	248.9	*248.4*	257.6	257.9
165°	242.6	241.8	247.5	246.7	245.4	246.7	*245.2*	251.3	253.1
167.5°	243.0	241.3	246.6	245.8	244.5	243.2	*244.5*	249.1	250.9
170°	242.0	241.7	245.7	243.6	241.8	242.2	*242.2*	246.9	248.6
172.5°	242.9	242.4	246.5	244.5	242.6	243.1	*241.7*	245.0	248.1
175°	242.8	242.0	245.0	243.9	243.5	242.6	*242.4*	244.7	248.1
177.5°	244.5	243.7	245.5	244.3	242.6	243.0	*244.3*	246.3	251.1
180°	244.3	244.3	244.3	244.3	244.3	244.3	*244.3*	244.3	244.3

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Scaled Data Report

TEST NUMBER: P1432614
CATALOG NUMBER: EHBR1-24-UNV-A1-L835-UPL24

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	16.86	17.98	17.38	18.48	19.01	17.84	18.96	18.36	19.46	20.00
	3H	18.34	19.33	18.87	19.84	20.42	19.10	20.10	19.63	20.61	21.19
	4H	18.94	19.87	19.49	20.39	20.99	19.60	20.53	20.15	21.06	21.65
	6H	19.40	20.26	19.96	20.80	21.40	19.95	20.81	20.52	21.35	21.96
	8H	19.55	20.36	20.13	20.92	21.53	20.05	20.86	20.63	21.42	22.04
	12H	19.62	20.40	20.20	20.95	21.59	20.09	20.86	20.67	21.41	22.05
4H	2H	17.37	18.31	17.93	18.83	19.43	18.15	19.09	18.71	19.61	20.21
	3H	19.06	19.82	19.62	20.40	21.01	19.64	20.41	20.21	20.98	21.59
	4H	19.77	20.46	20.35	21.04	21.69	20.26	20.95	20.85	21.53	22.18
	6H	20.35	20.95	20.96	21.55	22.22	20.74	21.33	21.35	21.94	22.61
	8H	20.54	21.09	21.15	21.70	22.37	20.87	21.43	21.49	22.03	22.70
	12H	20.64	21.13	21.27	21.77	22.44	20.94	21.43	21.57	22.06	22.74
8H	4H	19.99	20.55	20.61	21.15	21.83	20.44	21.00	21.05	21.60	22.27
	6H	20.68	21.14	21.33	21.79	22.47	21.02	21.48	21.67	22.13	22.81
	8H	20.93	21.34	21.60	22.00	22.69	21.22	21.62	21.88	22.28	22.97
	12H	21.10	21.46	21.76	22.10	22.86	21.34	21.69	21.99	22.33	23.10
12H	4H	19.99	20.48	20.62	21.12	21.79	20.43	20.93	21.07	21.56	22.24
	6H	20.71	21.11	21.37	21.77	22.47	21.04	21.45	21.70	22.11	22.80
	8H	21.00	21.35	21.66	22.00	22.76	21.28	21.63	21.93	22.27	23.04

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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

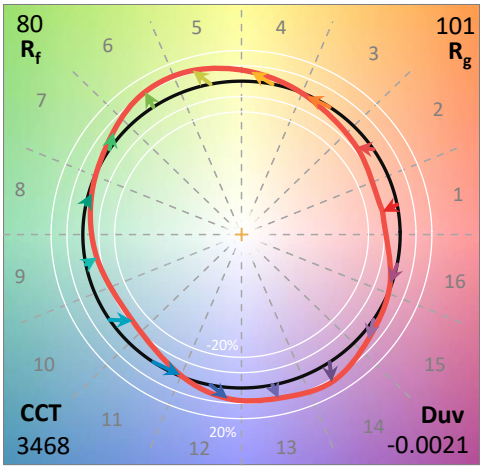
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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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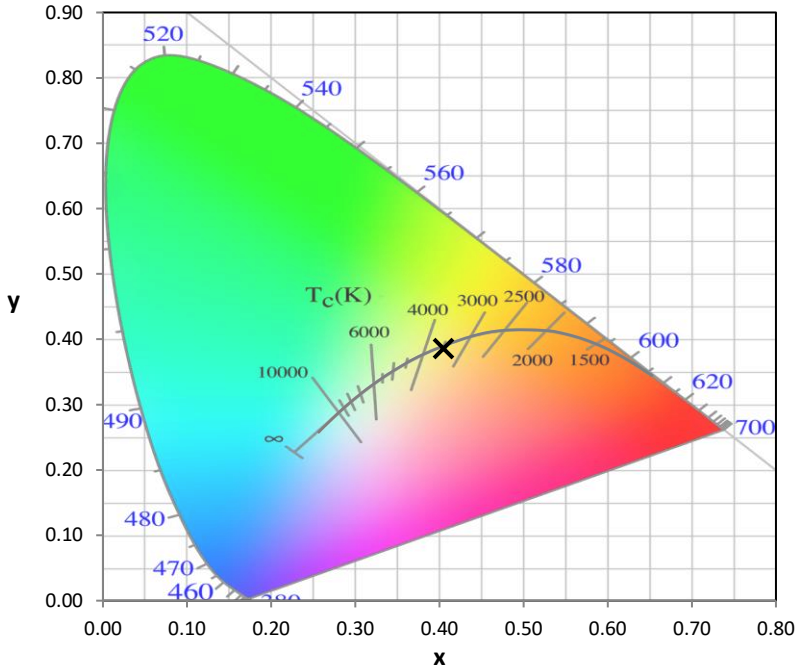
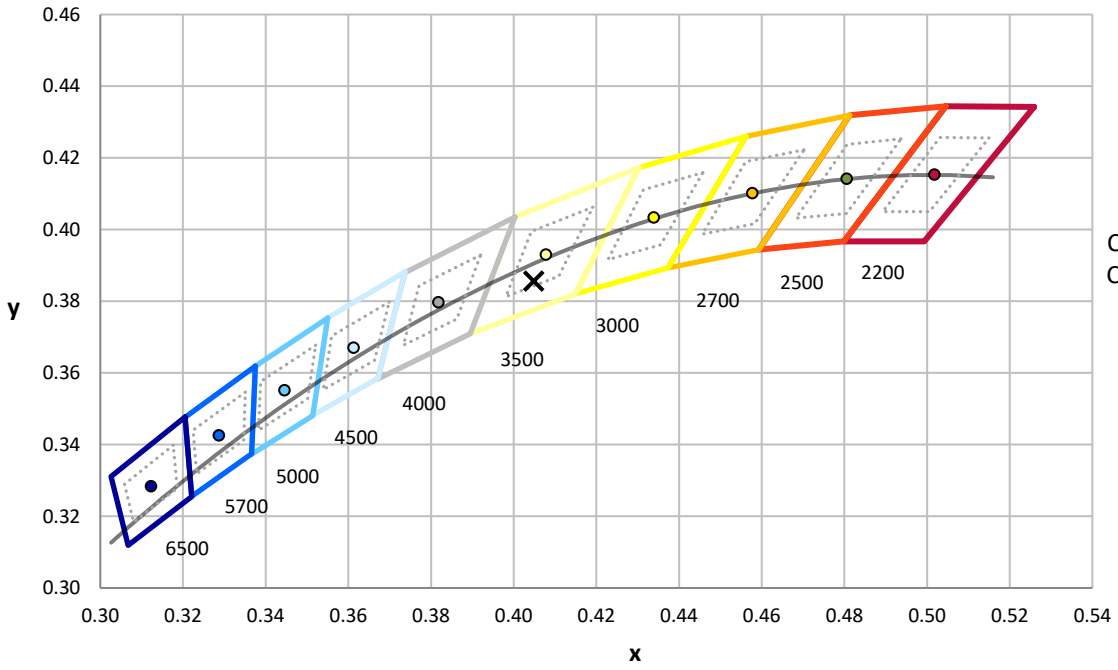
CIE 1931 Chromaticity Diagram



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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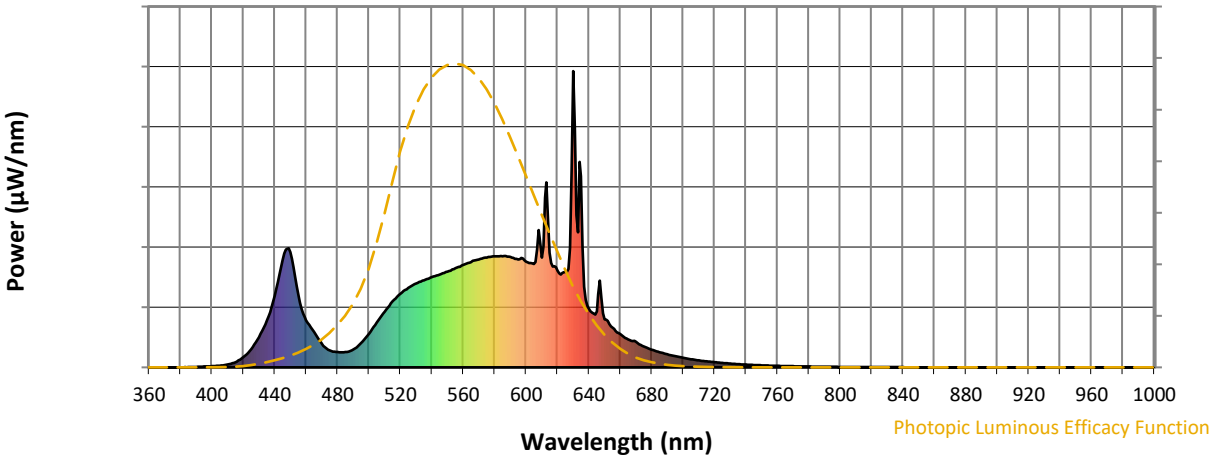
Photopic Flux vs. Wavelength



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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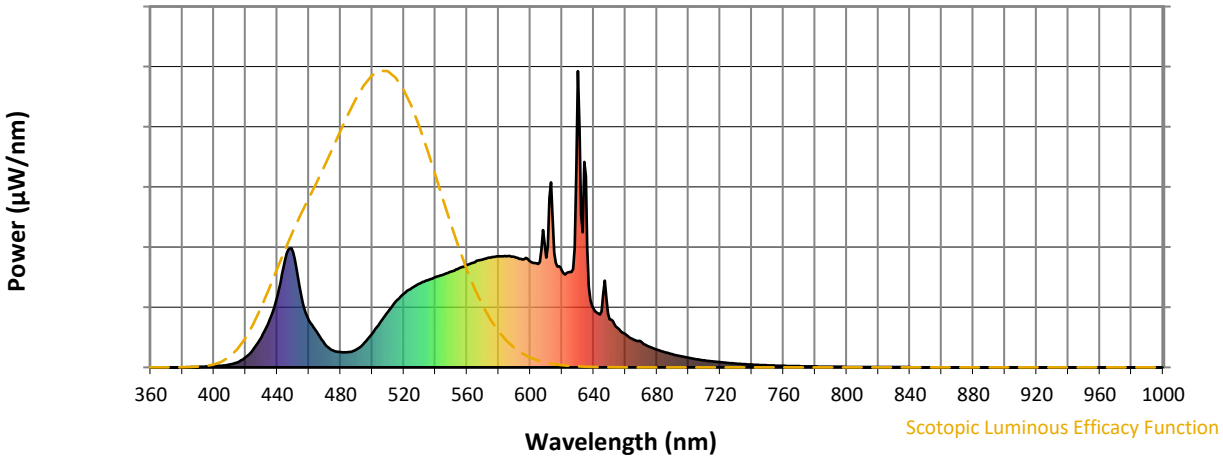
Scotopic Flux vs. Wavelength



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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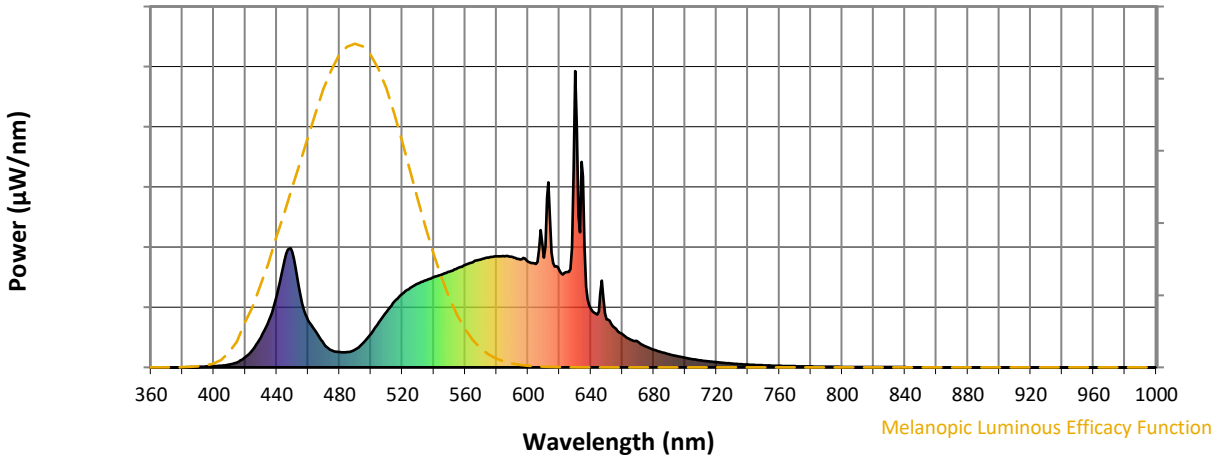
Melanopic Flux vs. Wavelength



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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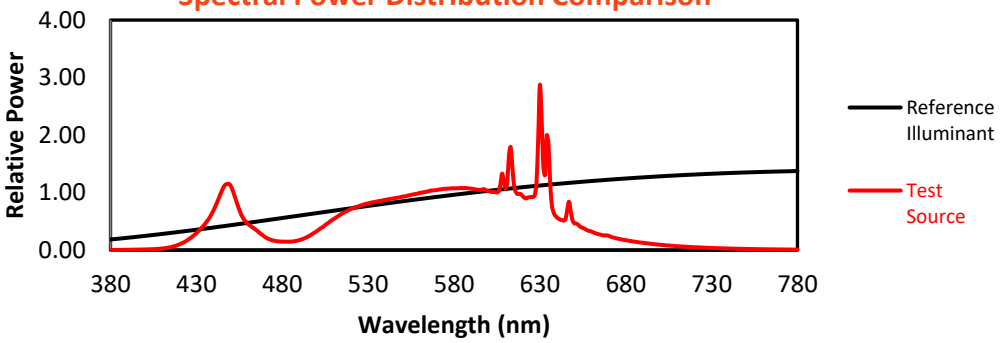
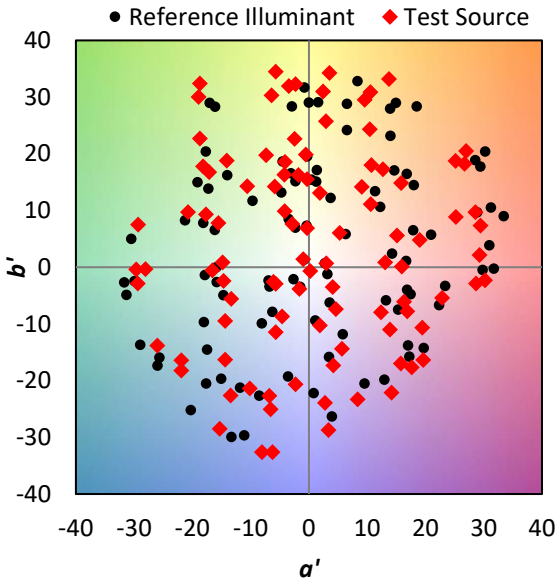
Summary

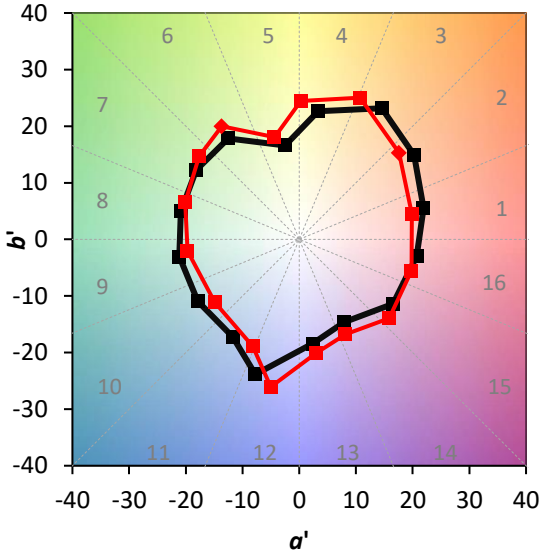
R_f = 80.1
R_g = 101
CIE R_a = 82.1
R_9 = 27.6

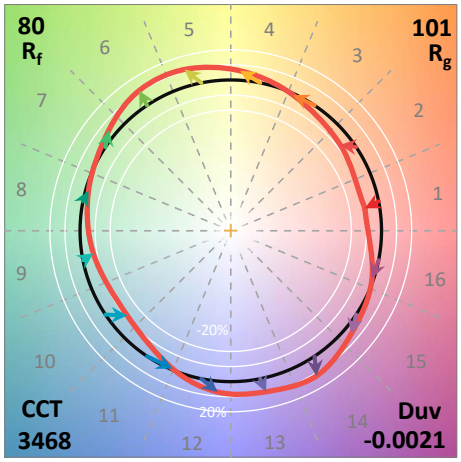
Spectral Power Distribution Comparison

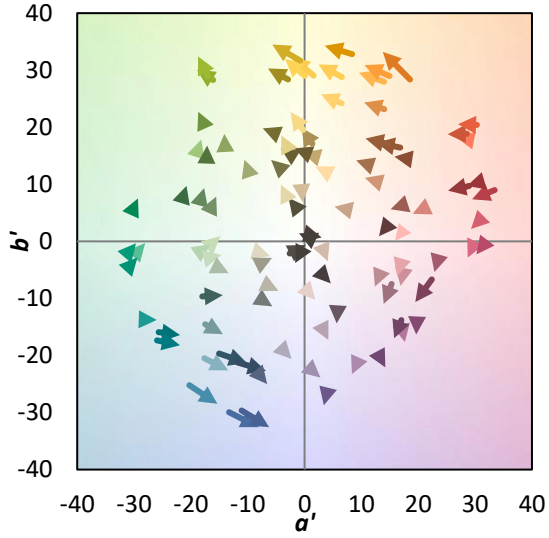


Color Vector Graphics









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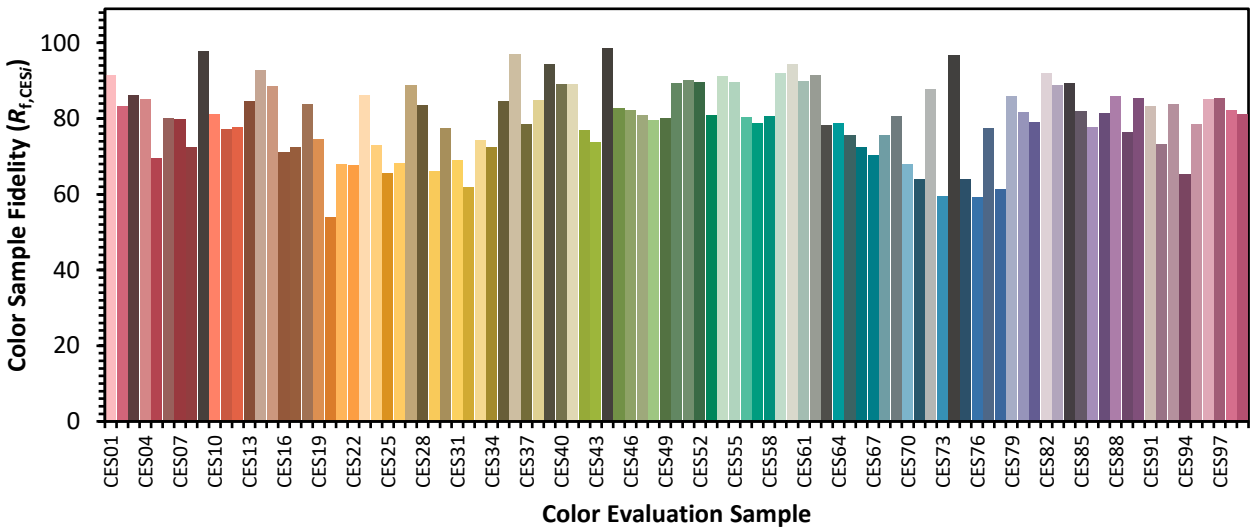
Individual Sample Fidelity Index ($R_{f,i}$)

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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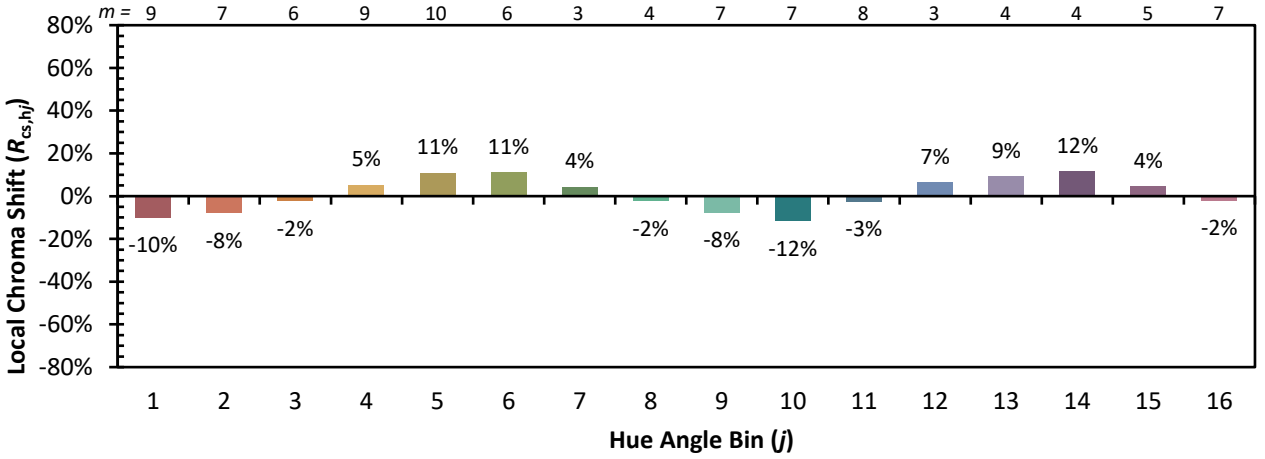
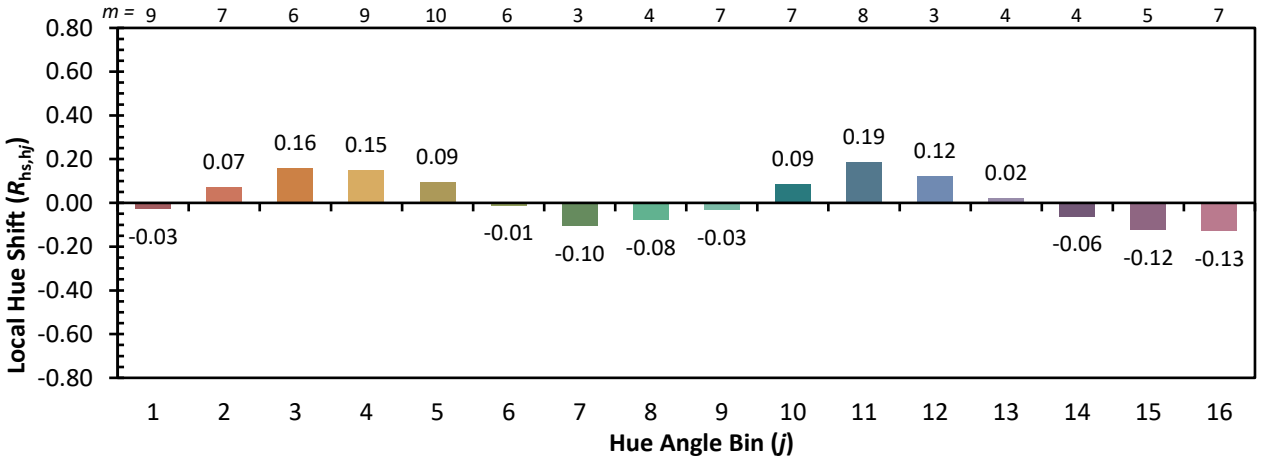
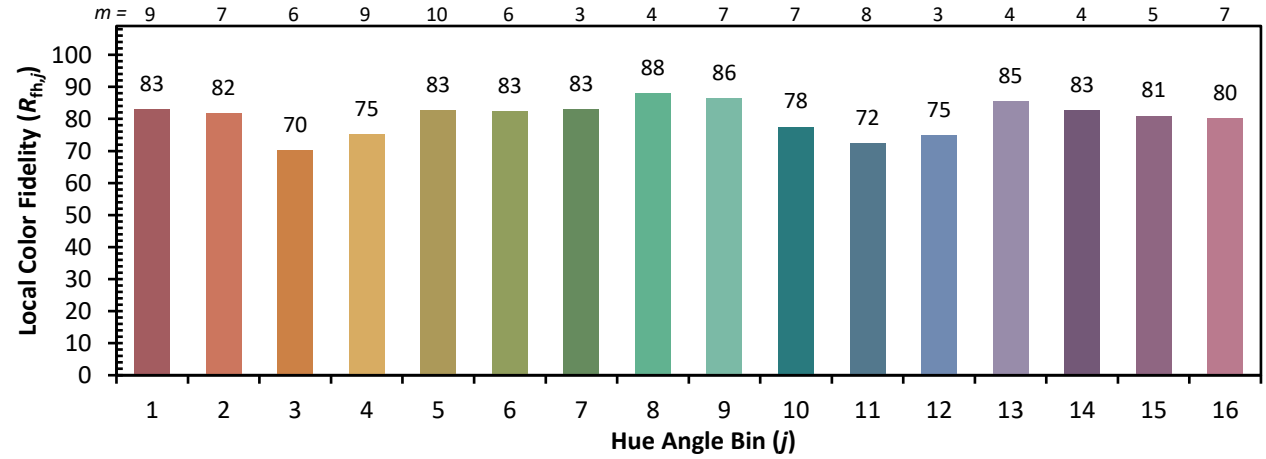
Color Rendition by Hue-Angle Bin







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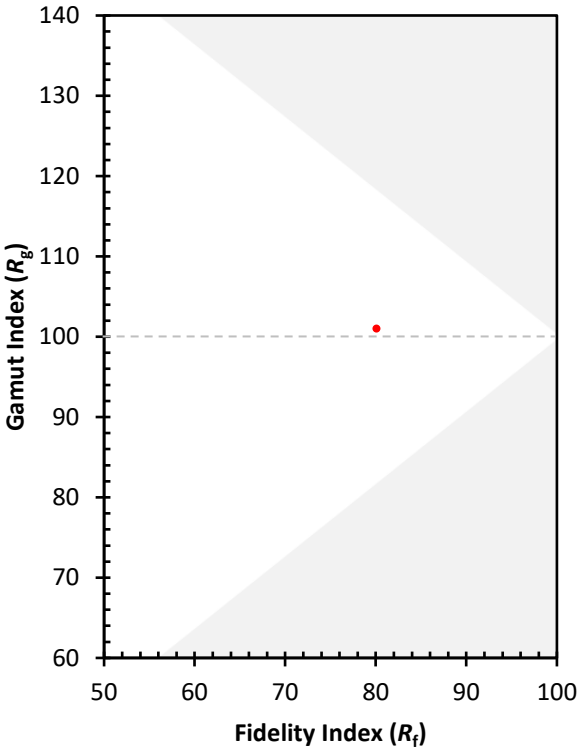
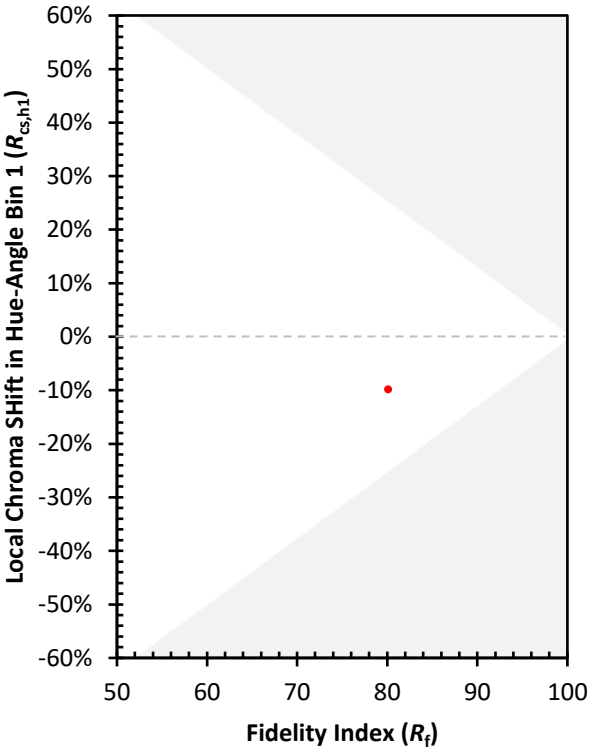
Measure Comparisons





(END OF REPORT)