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: P1432995

Luminaire Tested: EHBR1-42-UNV-A1-L850-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:	P1432995
	REPORT IS A COMBINATION OF REPORTS P1431796 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-42-UNV-A1-L850-UPL12
Description:	Elevate Round Highbay at, 42000 lumens, 5000K 80CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	41847.0 lumens
Efficiency:	N/A
Efficacy:	180.5 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):	231.8
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

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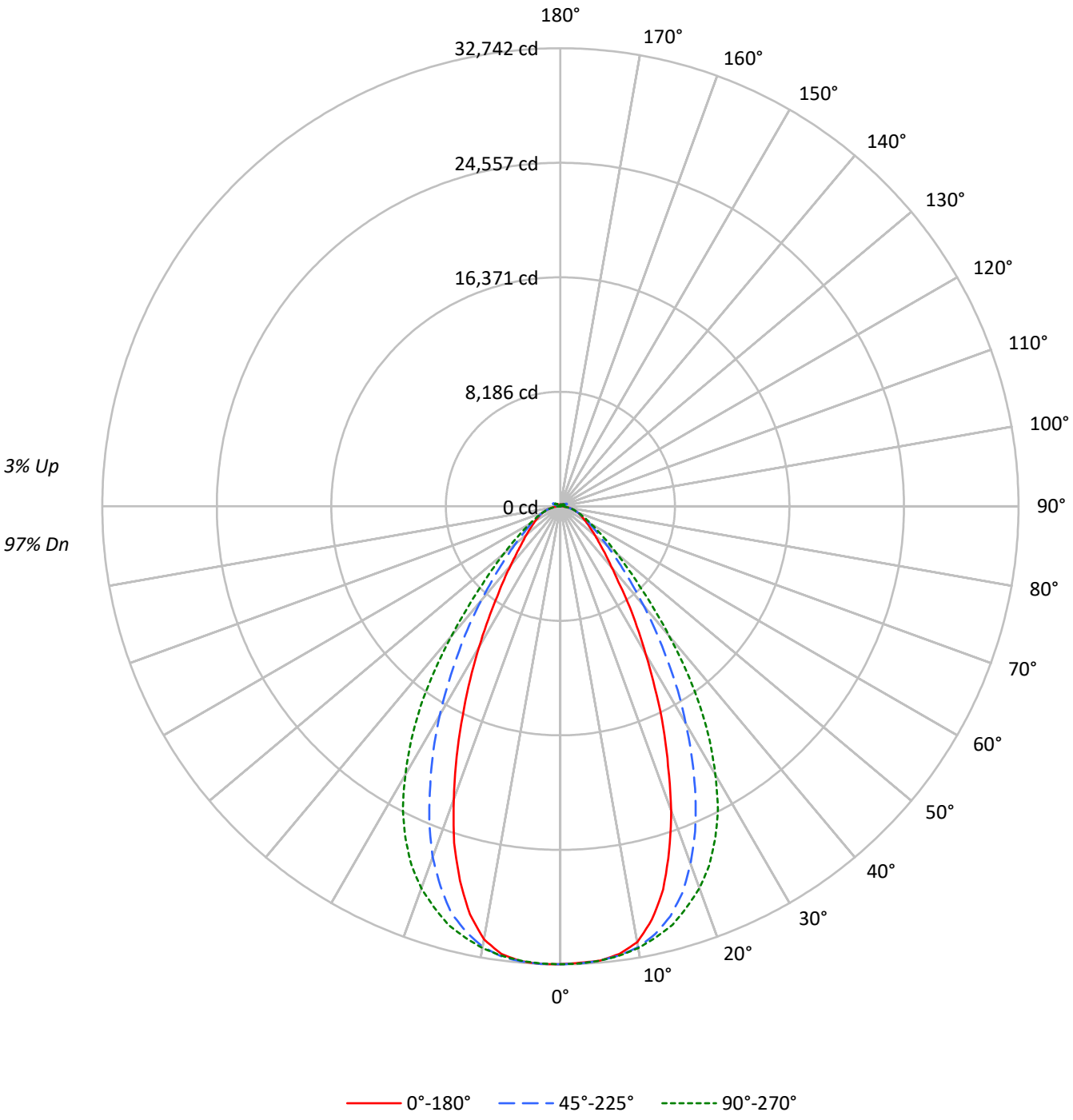
Luminous Intensity Polar Plot



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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	118	118	118	118	115	115	115	115	110	110	110	104	104	104	99	99	99	97
1	111	107	104	101	108	105	102	99	100	98	96	96	94	92	92	91	89	87
2	104	97	92	88	101	95	91	87	92	88	84	88	85	82	85	82	80	78
3	97	89	83	78	94	87	81	77	84	79	75	81	77	74	78	75	72	70
4	91	81	75	69	89	80	74	69	77	72	68	75	70	67	73	69	65	64
5	85	75	68	63	83	74	67	62	72	66	61	69	64	60	67	63	60	58
6	80	69	62	57	78	68	62	57	66	60	56	65	59	55	63	58	55	53
7	75	64	57	52	74	63	57	52	62	56	51	60	55	51	59	54	50	49
8	71	60	53	48	70	59	52	48	58	52	47	56	51	47	55	50	47	45
9	67	56	49	45	66	55	49	44	54	48	44	53	48	44	52	47	43	42
10	64	52	46	41	62	52	46	41	51	45	41	50	44	41	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	153697	153697	153697	153697	153697
5°	152681	152658	152665	152934	152842
10°	148907	150643	150882	150456	147933
15°	135183	144616	147593	143456	132079
20°	112651	132305	141344	129814	108265
25°	87120	114399	131122	110221	82606
30°	63503	93164	115181	89629	60274
35°	45775	71807	94661	68715	42787
40°	32932	53036	69761	50798	31916
45°	25950	38800	48723	37118	25052
50°	21531	29152	35264	28191	21204
55°	18804	23018	26706	22634	18550
60°	16959	19216	21280	19096	17078
65°	15861	16950	17883	17003	16011
70°	15062	15421	15898	15508	15211
75°	14052	13964	14052	14003	14189
80°	12692	11778	11519	11962	12692
85°	8796	7460	7379	7579	9054

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 51049 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3090.7	7.4
10°-20°	8306.7	19.9
20°-30°	10100.9	24.1
30°-40°	8228.0	19.7
40°-50°	4940.1	11.8
50°-60°	2843.0	6.8
60°-70°	1779.3	4.3
70°-80°	1047.9	2.5
80°-90°	308.6	0.7
90°-100°	31.4	0.1
100°-110°	207.2	0.5
110°-120°	383.2	0.9
120°-130°	227.7	0.5
130°-140°	138.8	0.3
140°-150°	97.8	0.2
150°-160°	64.9	0.2
160°-170°	38.0	0.1
170°-180°	12.8	0.0
0°-30°	21498.4	51.4
0°-40°	29726.4	71.0
0°-60°	37509.5	89.6
0°-90°	40645.2	97.1
90°-120°	621.8	1.5
90°-150°	1086.1	2.6
90°-180°	1202.0	2.9
0°-180°	41847.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	32729	32729	32729	32729	32729	
5°	32600	32595	32596	32654	32634	3081
15°	28361	30340	30964	30096	27710	7802
25°	17398	22845	26185	22011	16496	7927
35°	8401	13179	17374	12612	7853	5315
45°	4199	6278	7883	6006	4053	3312
55°	2541	3111	3609	3059	2507	2297
65°	1656	1769	1867	1775	1671	1646
75°	990	984	990	986	1000	1048
85°	302	256	254	260	311	323
90°	10	24	8	25	9	19
95°	16	53	16	46	15	15
105°	73	362	95	386	48	98
115°	333	428	408	474	348	307
125°	241	229	261	254	274	219
135°	178	178	166	186	192	139
145°	149	155	153	157	161	95
155°	136	138	137	139	146	63
165°	133	134	132	133	138	38
175°	137	136	133	135	139	13
180°	136	136	136	136	136	

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Scaled Data Report

TEST NUMBER: P1432995
CATALOG NUMBER: EHBR1-42-UNV-A1-L850-UPL12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	32728.7	32728.7	32728.7	32728.7	32728.7	32728.7	*32728.7*	32728.7	32728.7
2.5°	*32656.7*	*32686.1*	*32698.5*	*32705.3*	*32712.8*	*32733.5*	*32742.3*	*32728.0*	*32740.3*
5°	32599.8	32601.8	32595.0	32625.8	32596.3	32616.9	*32653.9*	32639.6	32634.1
7.5°	32268.0	32336.5	32377.0	32387.2	32392.7	32418.2	*32444.2*	32296.7	32274.8
10°	31637.3	31751.9	32006.1	32078.8	32056.9	32098.0	*31966.4*	31581.1	31430.4
12.5°	30254.7	30657.1	31317.9	31612.0	31558.5	31594.8	*31146.6*	30333.5	29866.0
15°	28360.7	28950.9	30339.7	30919.7	30964.2	30919.7	*30096.4*	28512.2	27709.5
17.5°	25842.9	26932.8	28977.7	30103.2	30038.7	30060.0	*28497.1*	26155.5	25237.0
20°	23153.0	24315.0	27192.6	29070.2	29050.3	28931.0	*26680.5*	23592.5	22251.6
22.5°	20110.8	21609.3	25147.2	27800.0	27792.4	27593.7	*24468.5*	20793.6	19349.9
25°	17397.7	18867.3	22845.3	26243.9	26185.0	25958.8	*22011.0*	18001.6	16496.3
27.5°	14592.7	16120.6	20387.8	24420.6	24380.1	24133.3	*19661.8*	15392.0	13959.3
30°	12214.7	13611.7	17920.0	22414.1	22155.0	22126.9	*17240.1*	12975.6	11593.7
32.5°	10177.4	11375.0	15593.5	20315.8	19857.2	19988.1	*14826.4*	10954.8	9585.2
35°	8401.3	9456.3	13179.2	17889.2	17373.7	17543.0	*12611.7*	8988.8	7853.0
37.5°	6818.5	7833.1	11133.0	15529.1	14740.8	15060.1	*10663.5*	7506.7	6596.4
40°	5708.0	6512.8	9192.4	12939.2	12091.3	12611.7	*8804.5*	6261.3	5531.9
42.5°	4918.4	5443.4	7587.0	10466.7	9816.2	10185.0	*7256.5*	5234.4	4688.7
45°	4198.6	4617.5	6277.7	8259.5	7883.2	8225.2	*6005.6*	4463.2	4053.3
47.5°	3667.3	3990.2	5167.9	6669.8	6436.0	6544.4	*5015.7*	3894.9	3561.8
50°	3208.8	3458.3	4344.6	5383.1	5255.6	5322.1	*4201.4*	3389.0	3160.1
52.5°	2852.3	3035.3	3644.0	4424.2	4361.1	4371.3	*3580.3*	2981.2	2815.3
55°	2541.1	2668.6	3110.7	3624.2	3609.1	3611.8	*3058.7*	2641.9	2506.8
57.5°	2269.0	2374.5	2673.4	3044.2	3022.3	3027.2	*2648.8*	2346.4	2259.4
60°	2038.7	2109.3	2310.1	2572.6	2558.2	2552.1	*2295.7*	2083.2	2053.0
62.5°	1834.3	1879.6	2018.7	2205.3	2177.8	2183.9	*2018.0*	1881.7	1837.1
65°	1655.5	1671.2	1769.2	1884.4	1866.6	1881.7	*1774.7*	1681.5	1671.2
67.5°	1480.6	1496.4	1554.0	1631.5	1610.9	1623.3	*1555.4*	1500.6	1491.6
70°	1321.6	1320.9	1353.1	1395.0	1395.0	1397.0	*1360.7*	1327.8	1334.7
72.5°	1157.1	1153.0	1162.6	1190.6	1183.2	1209.2	*1170.8*	1160.5	1161.9
75°	989.9	978.2	983.7	998.1	989.9	1003.5	*986.4*	999.5	999.5
77.5°	832.2	810.2	803.4	805.5	790.4	810.9	*815.0*	824.0	844.5
80°	667.7	636.8	619.6	618.9	606.0	618.9	*629.3*	647.8	667.7
82.5°	495.6	468.9	440.1	434.6	426.4	433.9	*447.6*	469.5	501.8
85°	302.3	274.2	256.4	246.8	253.6	253.6	*260.5*	291.4	311.2
87.5°	109.0	95.3	78.2	78.9	80.8	83.6	*87.0*	109.7	119.9
90°	9.9	13.9	23.8	15.1	8.5	14.5	*25.0*	13.2	9.2
92.5°	13.3	21.1	38.3	19.7	11.2	19.7	*35.7*	17.8	12.6
95°	15.9	24.4	53.4	26.4	16.5	24.4	*45.5*	19.7	15.2
97.5°	19.8	27.0	61.4	32.3	25.7	30.4	*51.5*	21.1	18.5
100°	25.7	31.6	95.7	39.6	34.3	34.3	*94.3*	24.4	21.8
102.5°	42.9	67.3	203.2	74.6	52.2	67.3	*219.1*	49.5	26.4
105°	73.3	141.8	362.2	156.4	95.0	154.4	*385.9*	129.3	48.2
107.5°	126.0	254.0	477.6	277.1	180.2	288.3	*497.4*	256.0	112.2
110°	234.3	337.1	500.8	380.6	288.3	403.1	*542.9*	351.0	227.0

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Scaled Data Report

TEST NUMBER: P1432995
CATALOG NUMBER: EHBR1-42-UNV-A1-L850-UPL12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	316.1	362.2	479.7	420.2	375.3	449.3	*530.4*	389.3	314.0
115°	332.6	348.3	428.2	410.3	407.8	442.7	*473.7*	387.9	348.4
117.5°	322.0	318.0	363.5	368.8	393.9	405.1	*409.0*	364.1	350.4
120°	297.6	283.0	303.4	321.9	355.6	351.0	*344.4*	329.9	330.5
122.5°	268.6	251.4	259.9	273.8	307.5	297.5	*291.0*	294.3	304.2
125°	240.9	223.7	229.0	232.2	260.6	250.7	*254.0*	263.9	273.9
127.5°	216.5	204.5	207.2	203.2	221.0	216.4	*227.0*	238.9	246.9
130°	200.0	190.1	194.0	184.1	193.3	194.7	*208.5*	217.8	223.1
132.5°	186.8	180.2	185.5	173.6	176.2	182.2	*194.7*	203.3	206.0
135°	177.6	171.6	177.6	166.3	166.4	174.3	*185.5*	190.8	192.1
137.5°	169.1	164.4	170.3	162.5	160.4	168.4	*176.9*	180.9	180.3
140°	162.5	157.9	164.4	158.5	157.2	165.1	*169.1*	174.4	173.1
142.5°	154.6	152.0	159.2	155.2	153.9	161.9	*163.8*	167.1	166.5
145°	149.3	147.3	155.3	153.2	152.6	158.5	*157.3*	162.6	160.6
147.5°	146.2	144.1	150.7	150.0	150.0	153.9	*152.6*	157.4	156.0
150°	142.2	140.2	146.8	146.1	146.8	149.4	*147.4*	153.4	153.4
152.5°	138.3	136.2	142.1	140.8	141.5	144.1	*142.8*	148.8	149.5
155°	135.7	133.7	138.2	136.8	136.8	138.9	*138.9*	145.6	146.3
157.5°	135.1	133.0	136.3	135.0	135.0	136.2	*137.0*	143.0	143.7
160°	134.5	132.4	135.1	133.7	133.0	135.0	*135.8*	141.1	141.7
162.5°	133.9	131.8	134.4	133.0	132.3	133.0	*133.8*	139.8	140.5
165°	133.2	131.8	133.8	132.4	131.7	132.4	*133.2*	137.1	138.5
167.5°	133.8	132.6	133.8	132.4	131.8	131.1	*133.2*	136.5	137.8
170°	133.9	133.2	133.9	131.8	130.4	131.1	*132.5*	135.9	137.1
172.5°	135.3	134.6	135.3	133.2	131.8	132.5	*133.2*	135.9	137.9
175°	136.6	135.3	135.9	133.9	133.2	133.2	*134.6*	136.5	139.3
177.5°	138.0	136.6	136.5	134.5	133.2	133.8	*135.9*	137.9	141.3
180°	135.9	135.9	135.9	135.9	135.9	135.9	*135.9*	135.9	135.9

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Scaled Data Report

TEST NUMBER: P1432995
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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	19.17	20.39	19.59	20.76	21.15	20.15	21.37	20.57	21.75	22.14
	3H	20.65	21.73	21.08	22.13	22.56	21.42	22.50	21.85	22.89	23.33
	4H	21.26	22.26	21.71	22.68	23.13	21.92	22.93	22.37	23.34	23.80
	6H	21.72	22.65	22.19	23.08	23.55	22.28	23.20	22.74	23.63	24.10
	8H	21.87	22.75	22.35	23.20	23.68	22.37	23.25	22.86	23.70	24.18
	12H	21.95	22.79	22.43	23.23	23.73	22.41	23.25	22.90	23.70	24.20
4H	2H	19.70	20.70	20.15	21.12	21.57	20.48	21.48	20.93	21.90	22.35
	3H	21.38	22.21	21.85	22.67	23.15	21.97	22.80	22.43	23.26	23.73
	4H	22.10	22.84	22.59	23.32	23.83	22.59	23.34	23.08	23.81	24.32
	6H	22.68	23.32	23.19	23.83	24.36	23.07	23.71	23.58	24.21	24.75
	8H	22.87	23.47	23.39	23.97	24.51	23.20	23.80	23.72	24.31	24.84
	12H	22.98	23.51	23.51	24.04	24.58	23.27	23.80	23.81	24.34	24.88
8H	4H	22.33	22.93	22.85	23.43	23.97	22.77	23.37	23.29	23.87	24.41
	6H	23.02	23.51	23.57	24.06	24.60	23.36	23.85	23.91	24.39	24.94
	8H	23.27	23.71	23.84	24.27	24.83	23.55	23.99	24.12	24.55	25.11
	12H	23.44	23.82	24.00	24.37	25.00	23.67	24.06	24.24	24.60	25.24
12H	4H	22.33	22.86	22.86	23.39	23.94	22.77	23.30	23.31	23.84	24.38
	6H	23.04	23.48	23.61	24.04	24.60	23.38	23.81	23.95	24.38	24.94
	8H	23.34	23.72	23.90	24.27	24.90	23.61	24.00	24.18	24.54	25.18

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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: SP1-2506-472-4

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L850-N

Data in this report applies to families of products including EHBR-60-L850-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

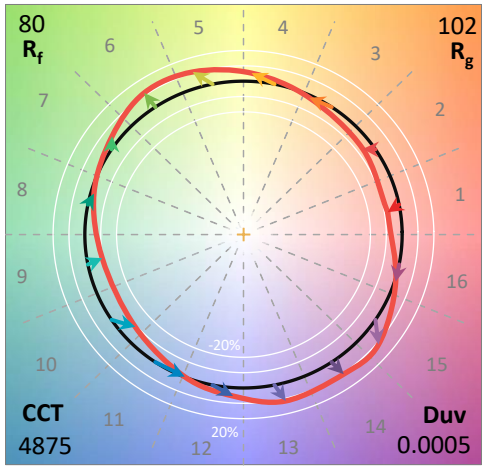
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-4
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-L850-N**
Description:	Elevate Round Highbay at, 60000 lumens, 5000K 80CRI LEDs with N lens

Spectral Parameters

CCT (K):	4875
CIE u':	0.2124
CIE v':	0.4871
Duv:	0.0005
CIE x:	0.3488
CIE y:	0.3555
CIE z:	0.2957
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	573
Purity:	11.33556
Rf:	80
Rg:	102.3

CRI (Ra):	82.3				
R1:	85.0	R9:	43.9		
R2:	83.1	R10:	57.4		
R3:	78.8	R11:	83.1		
R4:	84.0	R12:	51.0		
R5:	83.0	R13:	83.4		
R6:	76.3	R14:	87.4		
R7:	86.8	R15:	83.4		
R8:	81.7				



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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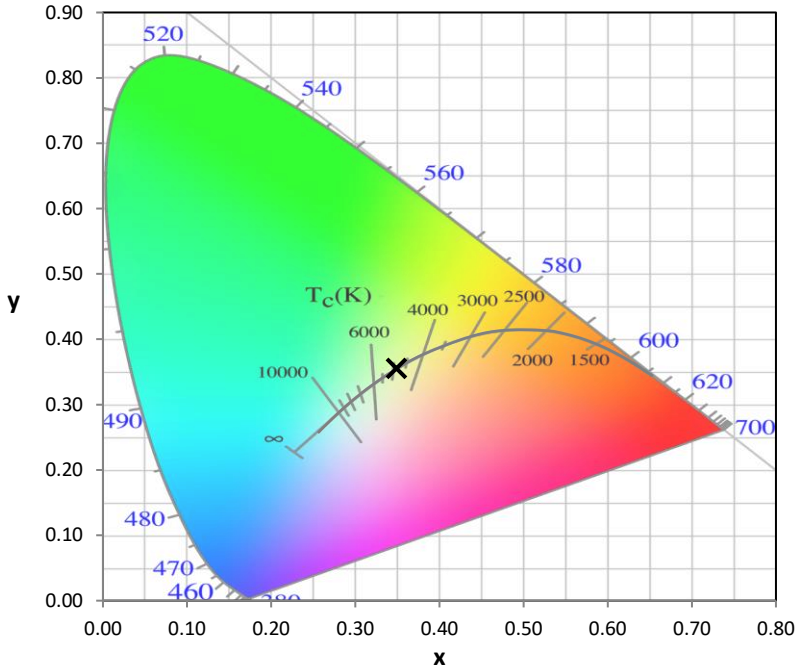
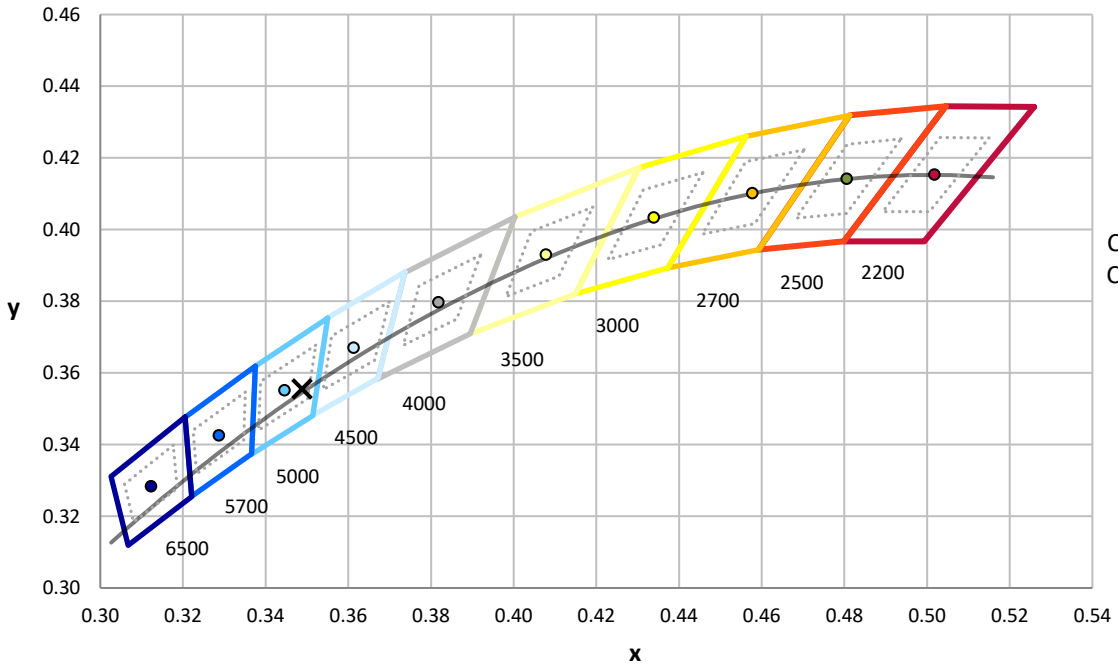
CIE 1931 Chromaticity Diagram



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



CCT = 4875K
CIE x = 0.3488
CIE y = 0.3555
Duv = 0.0005

Point lies inside the ANSI 5000K 4-step quadrangle

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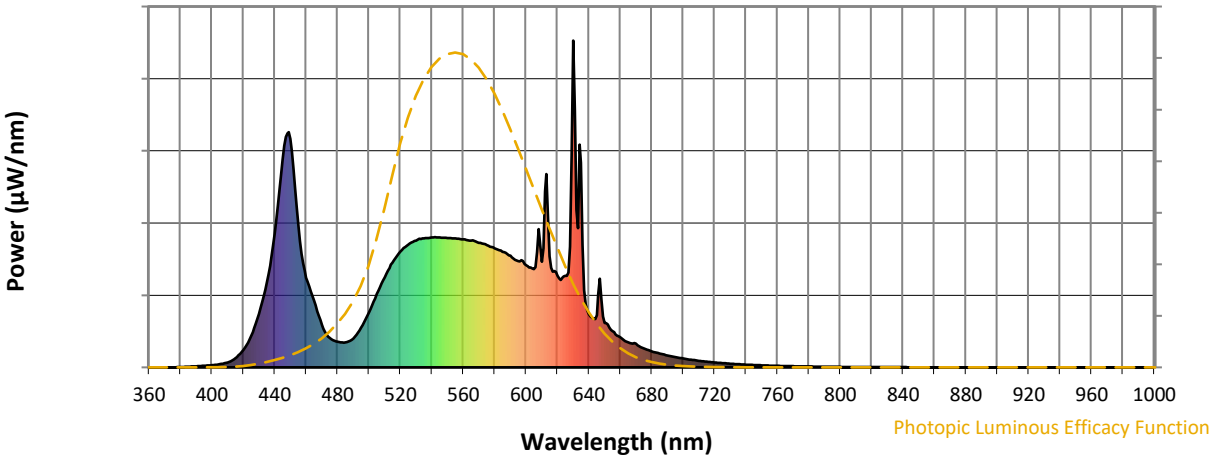
Photopic Flux vs. Wavelength



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	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

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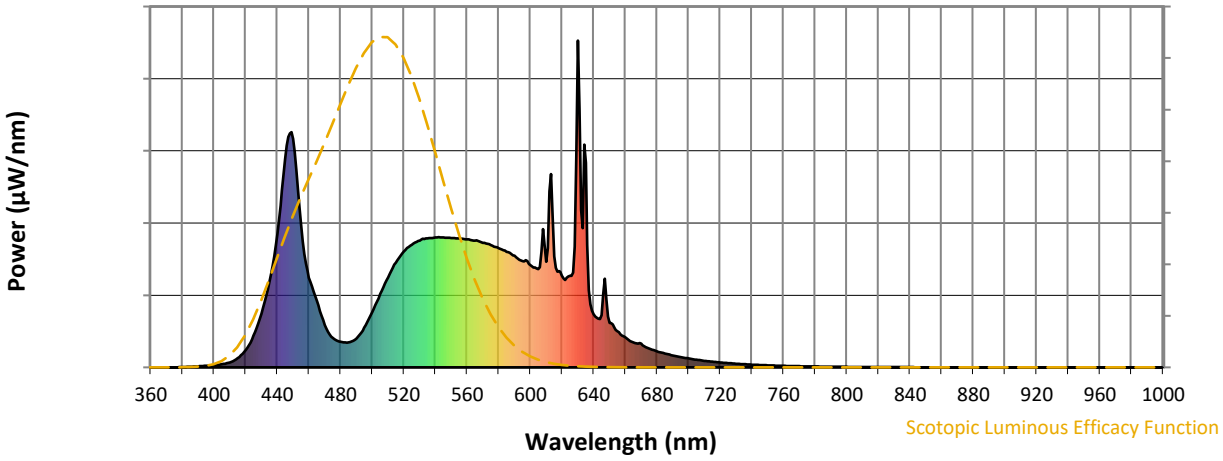
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.82**

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	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

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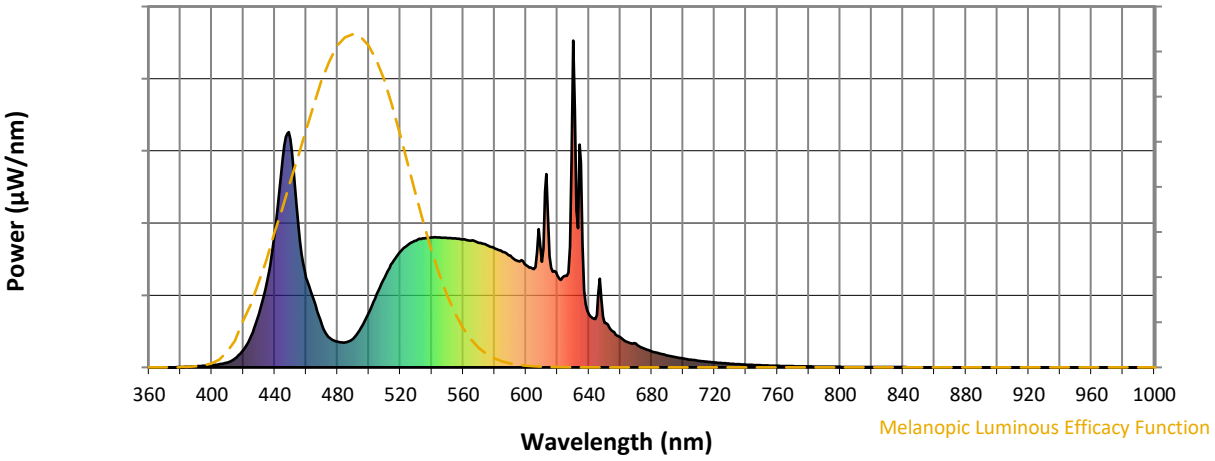
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.71**

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	89	NR	620	280	NR	750	6	NR	880	0	NR
365	0	NR	495	121	NR	625	280	NR	755	5	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	224	NR	635	626	NR	765	4	NR	895	0	NR
380	1	NR	510	275	NR	640	163	NR	770	4	NR	900	0	NR
385	2	NR	515	321	NR	645	160	NR	775	3	NR	905	0	NR
390	3	NR	520	354	NR	650	136	NR	780	3	NR	910	0	NR
395	5	NR	525	375	NR	655	111	NR	785	2	NR	915	0	NR
400	7	NR	530	388	NR	660	93	NR	790	2	NR	920	0	NR
405	10	NR	535	395	NR	665	76	NR	795	2	NR	925	0	NR
410	15	NR	540	397	NR	670	72	NR	800	2	NR	930	0	NR
415	28	NR	545	398	NR	675	57	NR	805	1	NR	935	0	NR
420	53	NR	550	396	NR	680	49	NR	810	1	NR	940	0	NR
425	97	NR	555	395	NR	685	42	NR	815	1	NR	945	0	NR
430	163	NR	560	392	NR	690	37	NR	820	1	NR	950	0	NR
435	261	NR	565	388	NR	695	32	NR	825	1	NR	955	0	NR
440	409	NR	570	381	NR	700	27	NR	830	1	NR	960	0	NR
445	637	NR	575	374	NR	705	23	NR	835	1	NR	965	0	NR
450	699	NR	580	365	NR	710	20	NR	840	1	NR	970	0	NR
455	436	NR	585	354	NR	715	17	NR	845	0	NR	975	0	NR
460	274	NR	590	342	NR	720	15	NR	850	0	NR	980	0	NR
465	205	NR	595	325	NR	725	13	NR	855	0	NR	985	0	NR
470	130	NR	600	313	NR	730	11	NR	860	0	NR	990	0	NR
475	90	NR	605	301	NR	735	10	NR	865	0	NR	995	0	NR
480	78	NR	610	323	NR	740	8	NR	870	0	NR	1000	0	NR
485	77	NR	615	340	NR	745	7	NR	875	0	NR			

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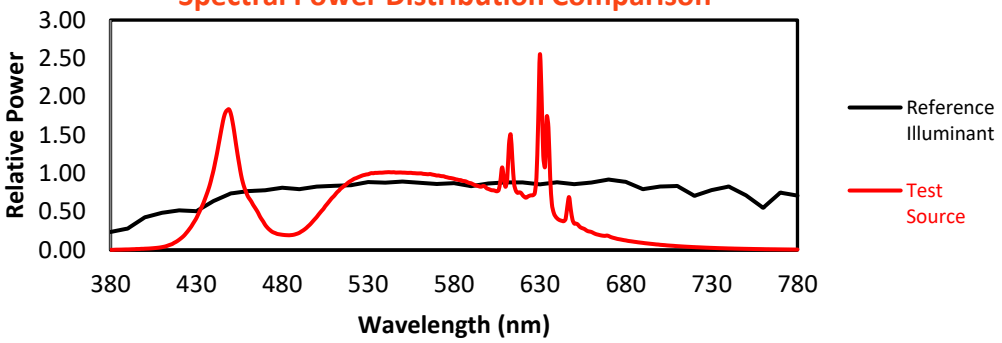
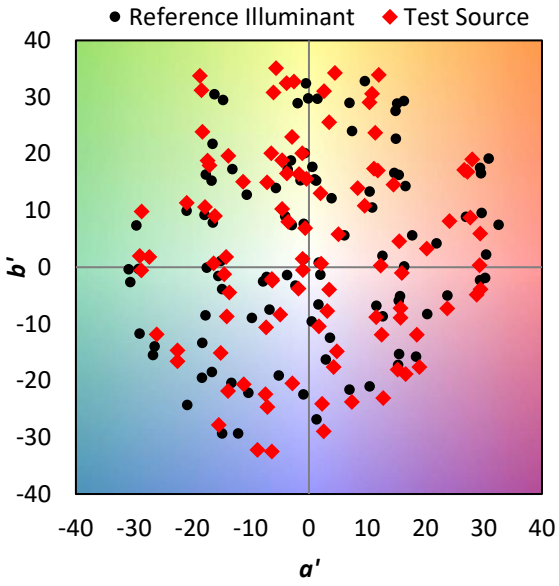
Summary

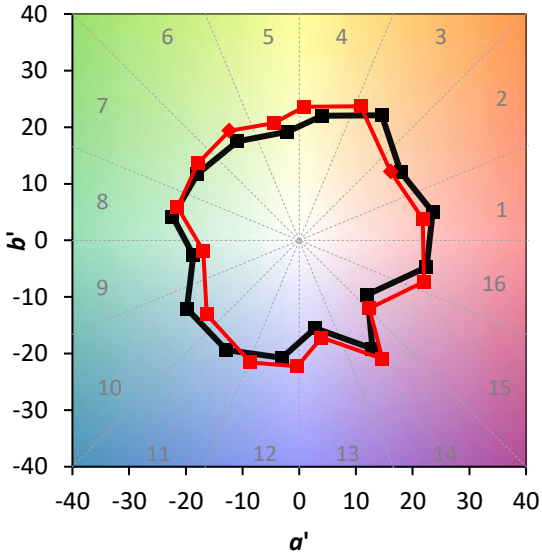
R_f = 80
R_g = 102.3
CIE R_a = 82.3
R_9 = 43.9

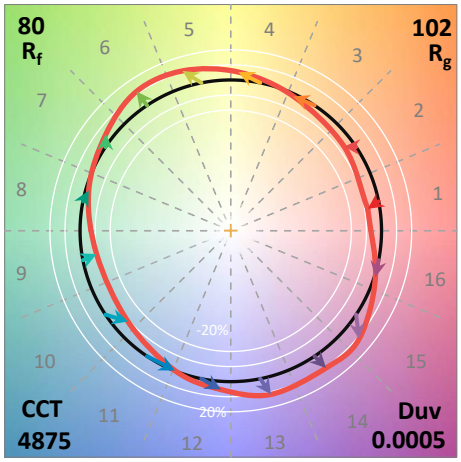
Spectral Power Distribution Comparison

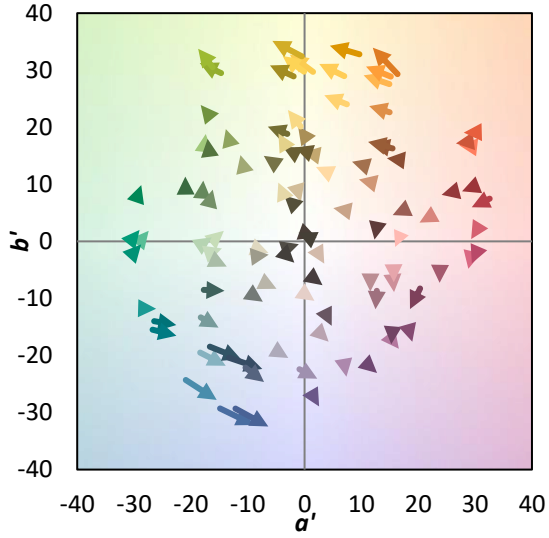


Color Vector Graphics









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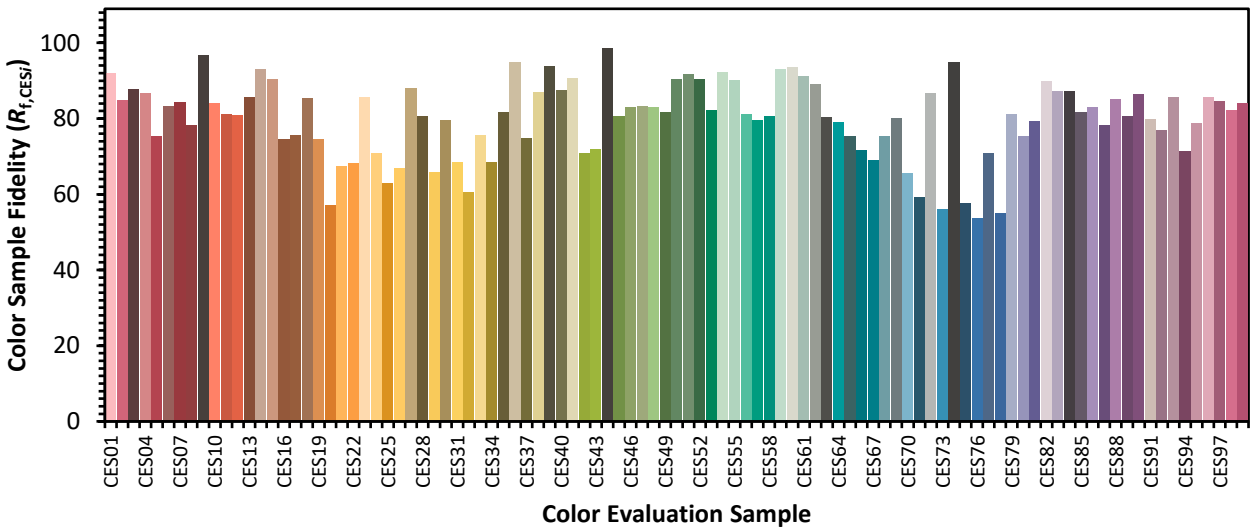
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 67	CES51 = 92	CES76 = 54
CES02 = 60	CES27 = 88	CES52 = 91	CES77 = 71
CES03 = 31	CES28 = 81	CES53 = 82	CES78 = 55
CES04 = 69	CES29 = 66	CES54 = 92	CES79 = 81
CES05 = 47	CES30 = 80	CES55 = 90	CES80 = 75
CES06 = 50	CES31 = 69	CES56 = 81	CES81 = 79
CES07 = 40	CES32 = 61	CES57 = 80	CES82 = 90
CES08 = 39	CES33 = 76	CES58 = 81	CES83 = 87
CES09 = 29	CES34 = 68	CES59 = 93	CES84 = 87
CES10 = 73	CES35 = 82	CES60 = 94	CES85 = 82
CES11 = 56	CES36 = 95	CES61 = 91	CES86 = 83
CES12 = 62	CES37 = 75	CES62 = 89	CES87 = 78
CES13 = 42	CES38 = 87	CES63 = 80	CES88 = 85
CES14 = 74	CES39 = 94	CES64 = 79	CES89 = 81
CES15 = 71	CES40 = 87	CES65 = 75	CES90 = 86
CES16 = 46	CES41 = 91	CES66 = 72	CES91 = 80
CES17 = 48	CES42 = 71	CES67 = 69	CES92 = 77
CES18 = 56	CES43 = 72	CES68 = 75	CES93 = 86
CES19 = 70	CES44 = 99	CES69 = 80	CES94 = 71
CES20 = 65	CES45 = 81	CES70 = 66	CES95 = 79
CES21 = 85	CES46 = 83	CES71 = 59	CES96 = 86
CES22 = 77	CES47 = 83	CES72 = 87	CES97 = 85
CES23 = 91	CES48 = 83	CES73 = 56	CES98 = 82
CES24 = 90	CES49 = 82	CES74 = 95	CES99 = 84
CES25 = 71	CES50 = 91	CES75 = 58	



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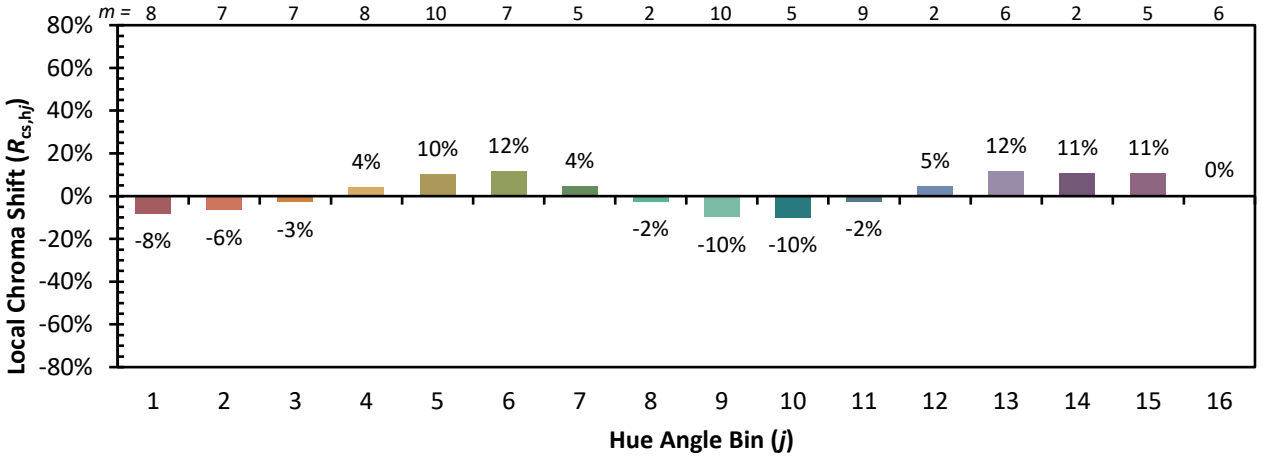
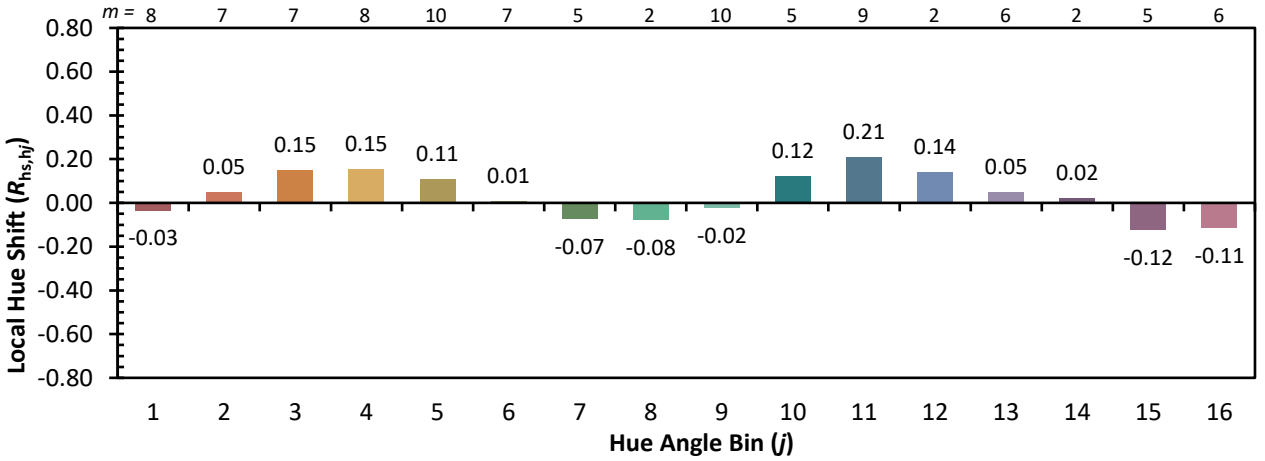
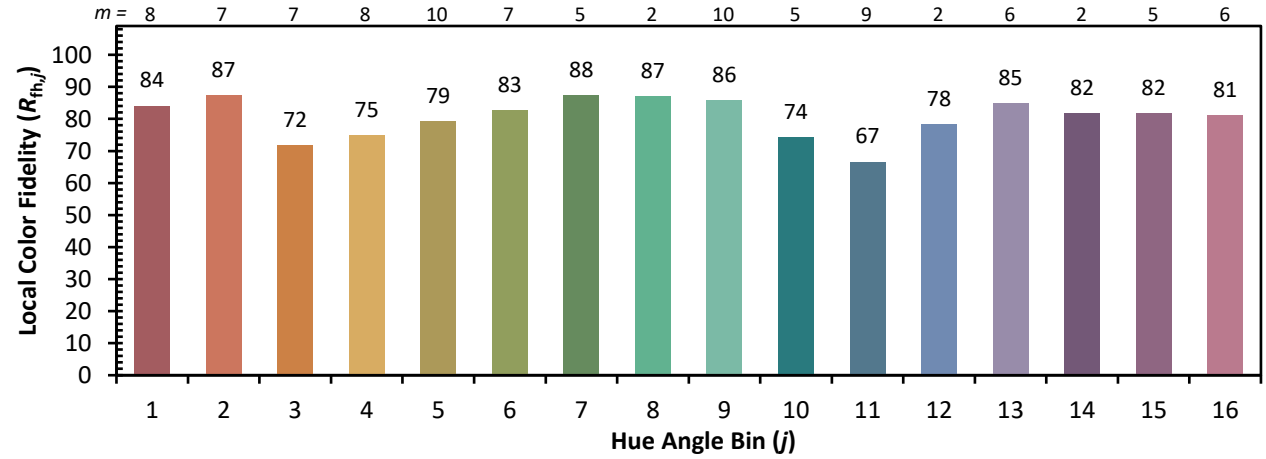
Color Rendition by Hue-Angle Bin







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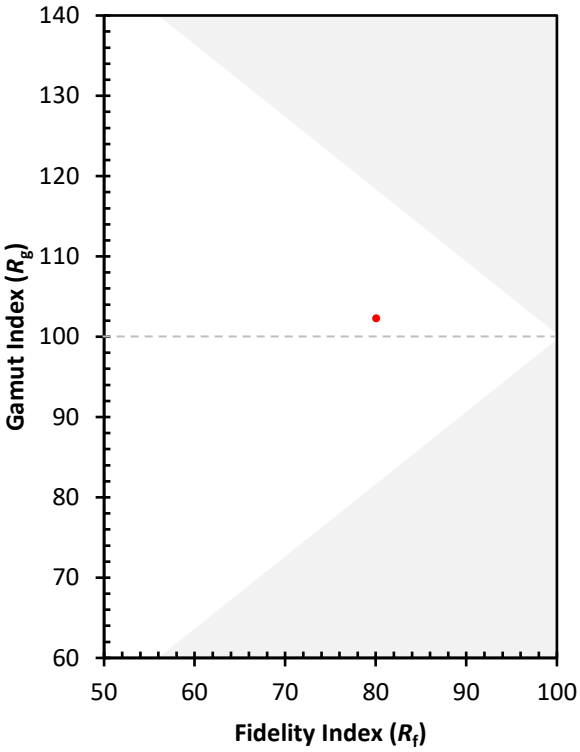
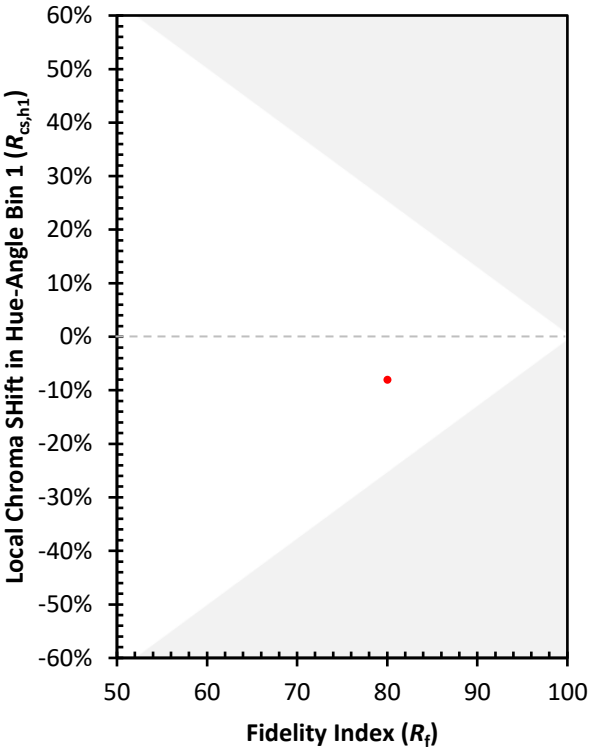
Measure Comparisons





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