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: P1433356

Luminaire Tested: EHBR1-60-UNV-A1-L930-UPL15

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:	P1433356
	REPORT IS A COMBINATION OF REPORTS P1431893 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-60-UNV-A1-L930-UPL15
Description:	Elevate Round Highbay at, 60000 lumens, 3000K 90CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	54154.6 lumens
Efficiency:	N/A
Efficacy:	159.4 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):	339.7
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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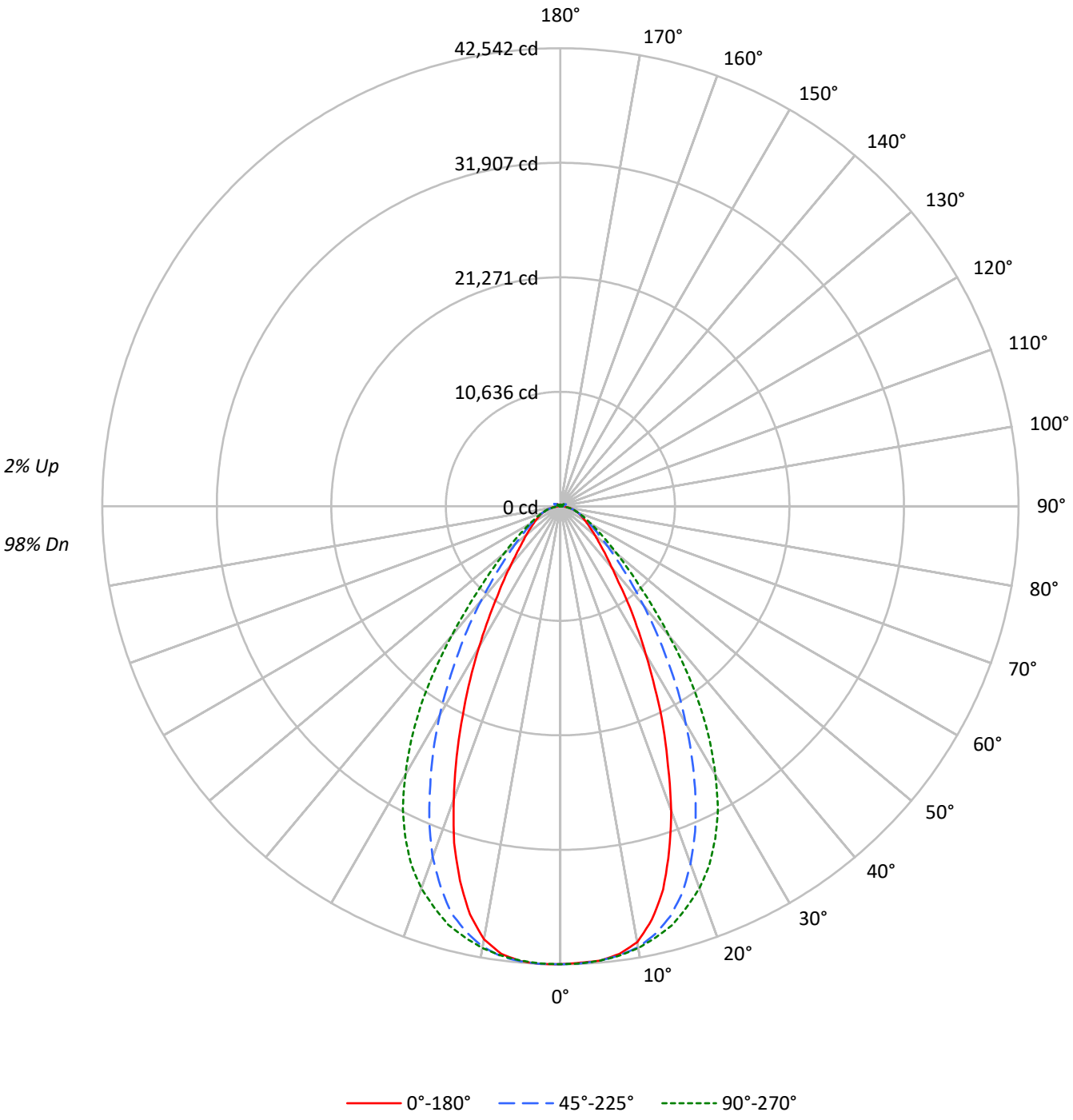
Luminous Intensity Polar Plot



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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	105	105	105	100	100	100	98
1	111	108	104	101	108	105	102	100	100	98	96	96	94	93	92	91	90	88
2	104	98	92	88	101	96	91	87	92	88	85	88	85	82	85	83	80	78
3	97	89	83	78	95	87	82	77	84	79	75	81	77	74	79	75	72	70
4	91	82	75	70	89	80	74	69	78	72	68	75	70	67	73	69	66	64
5	85	75	68	63	83	74	67	62	72	66	61	70	65	61	68	63	60	58
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	63	59	55	53
7	75	64	57	52	74	64	57	52	62	56	52	60	55	51	59	54	51	49
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	55	50	47	45
9	67	56	49	45	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	53	46	41	62	52	46	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	199698	199698	199698	199698	199698
5°	198378	198348	198357	198707	198586
10°	193474	195730	196040	195487	192208
15°	175643	187899	191767	186392	171610
20°	146367	171904	183648	168667	140668
25°	113194	148638	170366	143209	107329
30°	82509	121047	149654	116454	78314
35°	59475	93299	122993	89281	55593
40°	42789	68909	90640	66001	41469
45°	33717	50413	63305	48227	32550
50°	27974	37876	45819	36628	27550
55°	24432	29908	34700	29407	24102
60°	22034	24968	27650	24812	22189
65°	20607	22024	23235	22092	20803
70°	19569	20037	20657	20148	19763
75°	18257	18144	18257	18193	18435
80°	16490	15304	14966	15542	16490
85°	11429	9692	9587	9849	11766

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 66327 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4015.8	7.4
10°-20°	10792.9	19.9
20°-30°	13124.1	24.2
30°-40°	10690.6	19.7
40°-50°	6418.6	11.9
50°-60°	3694.0	6.8
60°-70°	2311.8	4.3
70°-80°	1361.5	2.5
80°-90°	400.5	0.7
90°-100°	35.1	0.1
100°-110°	231.4	0.4
110°-120°	427.9	0.8
120°-130°	254.3	0.5
130°-140°	155.4	0.3
140°-150°	109.9	0.2
150°-160°	73.2	0.1
160°-170°	43.1	0.1
170°-180°	14.6	0.0
0°-30°	27932.8	51.6
0°-40°	38623.3	71.3
0°-60°	48735.9	90.0
0°-90°	52809.8	97.5
90°-120°	694.3	1.3
90°-150°	1213.9	2.2
90°-180°	1345.0	2.5
0°-180°	54154.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	42524	42524	42524	42524	42524	
5°	42357	42350	42352	42427	42401	4003
15°	36849	39420	40232	39104	36003	10138
25°	22605	29683	34022	28599	21434	10299
35°	10916	17124	22574	16386	10203	6906
45°	5455	8157	10242	7803	5266	4303
55°	3302	4042	4689	3974	3257	2985
65°	2151	2299	2425	2306	2171	2138
75°	1286	1278	1286	1282	1299	1362
85°	393	333	330	338	404	419
90°	11	27	10	28	10	25
95°	18	60	18	51	17	17
105°	82	404	106	431	54	109
115°	372	478	455	529	389	343
125°	269	256	291	284	306	245
135°	199	199	186	208	215	155
145°	168	174	171	177	180	107
155°	153	156	154	157	165	72
165°	152	152	149	151	158	43
175°	156	155	152	154	159	15
180°	155	155	155	155	155	

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Scaled Data Report

TEST NUMBER: P1433356
CATALOG NUMBER: EHBR1-60-UNV-A1-L930-UPL15

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	42524.2	42524.2	42524.2	42524.2	42524.2	42524.2	*42524.2*	42524.2	42524.2
2.5°	*42430.7*	*42469.0*	*42485.0*	*42493.9*	*42503.7*	*42530.5*	*42542.0*	*42523.3*	*42539.4*
5°	42356.8	42359.4	42350.5	42390.6	42352.3	42379.1	*42427.1*	42408.4	42401.3
7.5°	41925.6	42014.8	42067.3	42080.6	42087.7	42120.7	*42154.6*	41963.1	41934.6
10°	41106.2	41255.1	41585.5	41679.9	41651.3	41704.8	*41533.8*	41033.3	40837.3
12.5°	39309.9	39832.6	40691.2	41073.4	41003.8	41051.1	*40468.5*	39412.3	38804.9
15°	36849.0	37615.8	39420.3	40173.7	40231.7	40173.7	*39104.1*	37045.8	36002.9
17.5°	33577.6	34993.7	37650.6	39113.0	39029.3	39056.9	*37026.2*	33983.7	32790.3
20°	30082.7	31592.3	35331.3	37770.8	37744.9	37590.0	*34666.0*	30653.6	28911.4
22.5°	26129.9	28077.0	32673.6	36120.4	36110.6	35852.3	*31791.9*	27017.0	25141.4
25°	22604.7	24514.3	29682.8	34098.7	34022.0	33728.1	*28598.8*	23389.4	21433.5
27.5°	18960.3	20945.4	26489.8	31729.5	31676.9	31356.3	*25546.6*	19998.7	18137.3
30°	15870.6	17685.7	23283.4	29122.5	28785.9	28749.3	*22399.9*	16859.1	15063.6
32.5°	13223.5	14779.5	20260.6	26396.3	25800.5	25970.5	*19264.0*	14233.6	12453.9
35°	10915.8	12286.6	17123.7	23243.3	22573.6	22793.6	*16386.2*	11679.1	10203.3
37.5°	8859.4	10177.4	14465.1	20176.8	19152.6	19567.7	*13855.0*	9753.5	8570.7
40°	7416.4	8462.1	11943.7	16812.0	15710.2	16386.2	*11439.6*	8135.2	7187.6
42.5°	6390.5	7072.7	9857.7	13599.3	12754.2	13233.3	*9428.4*	6801.0	6092.1
45°	5455.2	5999.4	8156.6	10731.5	10242.5	10686.9	*7803.0*	5799.0	5266.5
47.5°	4765.0	5184.5	6714.7	8666.1	8362.4	8503.1	*6516.9*	5060.7	4627.9
50°	4169.1	4493.3	5644.9	6994.3	6828.6	6915.1	*5458.8*	4403.4	4105.9
52.5°	3706.0	3943.8	4734.7	5748.3	5666.3	5679.7	*4651.8*	3873.4	3658.0
55°	3301.7	3467.3	4041.8	4708.9	4689.3	4692.8	*3974.1*	3432.6	3257.1
57.5°	2948.1	3085.2	3473.6	3955.4	3926.9	3933.1	*3441.5*	3048.7	2935.6
60°	2648.8	2740.5	3001.5	3342.6	3324.0	3315.9	*2982.8*	2706.7	2667.5
62.5°	2383.4	2442.2	2623.0	2865.2	2829.6	2837.7	*2622.1*	2444.8	2386.9
65°	2150.9	2171.4	2298.8	2448.4	2425.2	2444.8	*2305.9*	2184.8	2171.4
67.5°	1923.8	1944.3	2019.1	2119.8	2093.0	2109.1	*2020.9*	1949.6	1938.1
70°	1717.1	1716.2	1758.1	1812.5	1812.5	1815.2	*1767.9*	1725.2	1734.1
72.5°	1503.4	1498.1	1510.6	1547.0	1537.3	1571.1	*1521.3*	1507.9	1509.7
75°	1286.1	1270.9	1278.1	1296.8	1286.1	1303.9	*1281.6*	1298.6	1298.6
77.5°	1081.2	1052.8	1043.9	1046.6	1026.9	1053.7	*1058.9*	1070.5	1097.3
80°	867.5	827.4	805.1	804.3	787.3	804.3	*817.6*	841.7	867.5
82.5°	643.9	609.2	571.8	564.7	554.0	563.8	*581.6*	610.1	652.0
85°	392.8	356.3	333.1	320.6	329.5	329.5	*338.5*	378.6	404.4
87.5°	141.6	123.8	101.5	102.4	105.1	108.6	*113.1*	142.5	155.9
90°	11.3	15.5	26.6	16.9	9.5	16.2	*28.0*	14.7	10.4
92.5°	14.9	23.6	42.7	22.1	12.6	22.1	*39.7*	19.9	14.2
95°	18.0	27.3	59.7	29.5	18.4	27.3	*50.8*	22.1	17.1
97.5°	22.4	30.2	68.5	36.1	28.7	33.9	*57.5*	23.6	20.8
100°	29.1	35.4	106.8	44.2	38.3	38.3	*105.3*	27.3	24.6
102.5°	48.2	75.1	226.9	83.2	58.2	75.1	*244.5*	55.3	29.8
105°	82.1	158.4	404.4	174.6	106.0	172.3	*431.0*	144.4	54.1
107.5°	141.0	283.6	533.3	309.4	201.1	321.9	*555.4*	285.8	125.6
110°	261.8	376.4	559.1	425.0	321.9	450.1	*606.2*	391.9	253.7

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Scaled Data Report

TEST NUMBER: P1433356
CATALOG NUMBER: EHBR1-60-UNV-A1-L930-UPL15

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	353.2	404.4	535.5	469.2	419.1	501.6	*592.3*	434.6	350.9
115°	371.6	388.9	478.1	458.1	455.2	494.3	*528.9*	433.1	389.2
117.5°	359.9	355.0	405.9	411.8	439.8	452.3	*456.7*	406.6	391.5
120°	332.5	316.0	338.8	359.5	397.0	391.9	*384.5*	368.5	369.4
122.5°	300.2	280.8	290.2	305.7	343.3	332.2	*324.8*	328.7	340.1
125°	269.3	249.9	255.6	259.3	291.0	279.9	*283.7*	294.8	306.2
127.5°	242.0	228.5	231.3	226.9	246.8	241.6	*253.5*	267.0	276.0
130°	223.7	212.4	216.7	205.5	216.0	217.4	*233.1*	243.4	249.4
132.5°	209.1	201.6	207.5	194.0	196.9	203.8	*217.8*	227.5	230.4
135°	198.9	192.1	198.7	186.1	186.2	195.1	*207.6*	213.5	215.1
137.5°	189.4	184.2	190.8	182.0	179.7	188.7	*198.2*	202.6	202.0
140°	182.3	177.0	184.4	177.7	176.3	185.1	*189.5*	195.5	194.1
142.5°	173.6	170.7	178.6	174.2	172.7	181.7	*183.9*	187.6	187.1
145°	167.9	165.7	174.3	172.2	171.4	178.1	*176.7*	182.8	180.5
147.5°	164.7	162.3	169.3	168.6	168.6	173.1	*171.7*	177.0	175.7
150°	160.4	158.0	165.0	164.3	165.0	168.0	*165.9*	172.9	173.1
152.5°	156.1	153.7	160.0	158.4	159.2	162.1	*160.9*	167.7	168.8
155°	153.4	151.0	155.8	154.0	154.0	156.4	*156.7*	164.4	165.3
157.5°	153.0	150.5	153.9	152.1	152.1	153.7	*154.8*	161.7	162.6
160°	152.7	150.1	152.7	151.0	150.2	152.6	*153.6*	159.9	160.8
162.5°	152.2	149.7	152.1	150.5	149.6	150.5	*151.6*	158.7	159.6
165°	151.6	149.8	151.8	150.0	149.2	150.0	*151.1*	155.9	157.5
167.5°	152.5	150.9	151.9	150.1	149.4	148.6	*151.3*	155.3	156.9
170°	152.7	151.8	152.0	149.5	147.9	148.8	*150.7*	154.7	156.3
172.5°	154.4	153.5	153.8	151.3	149.7	150.6	*151.8*	155.1	157.4
175°	156.4	154.6	155.1	152.4	151.5	151.6	*153.5*	156.0	159.3
177.5°	158.0	156.2	155.9	153.3	151.6	152.5	*155.1*	157.7	161.7
180°	155.1	155.1	155.1	155.1	155.1	155.1	*155.1*	155.1	155.1

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Scaled Data Report

TEST NUMBER: P1433356
CATALOG NUMBER: EHBR1-60-UNV-A1-L930-UPL15

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	20.11	21.34	20.52	21.70	22.08	21.09	22.32	21.50	22.68	23.06
	3H	21.59	22.68	22.02	23.07	23.49	22.36	23.45	22.78	23.83	24.26
	4H	22.20	23.21	22.64	23.61	24.06	22.86	23.87	23.31	24.28	24.72
	6H	22.66	23.60	23.12	24.02	24.47	23.22	24.15	23.68	24.57	25.03
	8H	22.81	23.70	23.29	24.14	24.60	23.32	24.20	23.79	24.64	25.11
	12H	22.89	23.73	23.37	24.17	24.66	23.36	24.20	23.83	24.63	25.12
4H	2H	20.64	21.65	21.08	22.05	22.50	21.42	22.43	21.86	22.83	23.28
	3H	22.32	23.16	22.78	23.61	24.08	22.91	23.74	23.37	24.20	24.66
	4H	23.04	23.79	23.52	24.26	24.76	23.53	24.28	24.01	24.75	25.25
	6H	23.62	24.27	24.13	24.76	25.29	24.01	24.66	24.52	25.15	25.68
	8H	23.81	24.41	24.32	24.91	25.44	24.15	24.75	24.66	25.24	25.77
	12H	23.92	24.45	24.45	24.98	25.51	24.21	24.75	24.74	25.28	25.81
8H	4H	23.27	23.87	23.78	24.37	24.90	23.71	24.32	24.23	24.81	25.34
	6H	23.96	24.45	24.50	24.99	25.53	24.30	24.79	24.84	25.33	25.87
	8H	24.21	24.65	24.77	25.21	25.76	24.49	24.93	25.06	25.49	26.04
	12H	24.38	24.76	24.94	25.30	25.93	24.61	25.00	25.17	25.54	26.17
12H	4H	23.27	23.80	23.80	24.33	24.86	23.71	24.25	24.24	24.77	25.31
	6H	23.98	24.42	24.55	24.98	25.53	24.32	24.76	24.88	25.32	25.87
	8H	24.28	24.66	24.84	25.20	25.83	24.56	24.94	25.11	25.48	26.11

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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: SP1-2506-472-5

Test Date: 08/01/2025

Luminaire Tested: EHBR-60-L930-N

Data in this report applies to families of products including EHBR-60-L930-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

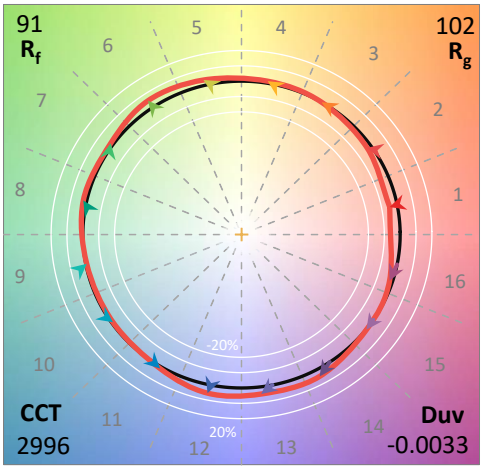
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-5
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-L930-N**
Description:	Elevate Round Highbay at, 60000 lumens, 3000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K):	2996
CIE u':	0.2519
CIE v':	0.5169
Duv:	-0.0033
CIE x:	0.4325
CIE y:	0.3945
CIE z:	0.1730
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	584
Purity:	48.21818
Rf:	91.3
Rg:	102

CRI (Ra):	94.4
R1:	96.8
R2:	98.1
R3:	97.8
R4:	95.6
R5:	96.9
R6:	95.7
R7:	90.9
R8:	83.0
R9:	61.4
R10:	94.4
R11:	95.7
R12:	88.5
R13:	97.3
R14:	97.8
R15:	92.3



Test Conditions

Stabilization Time:	40M
Operation Time:	1H 40M
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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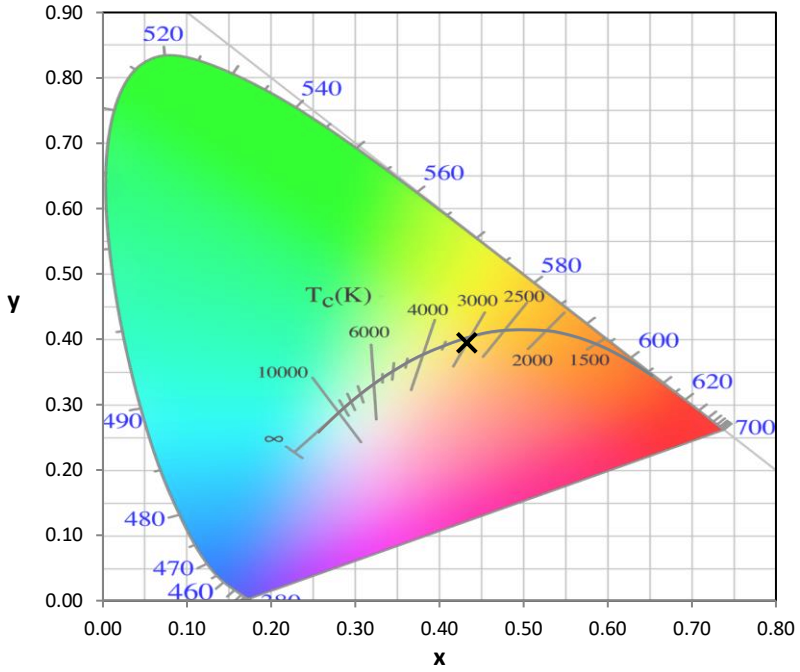
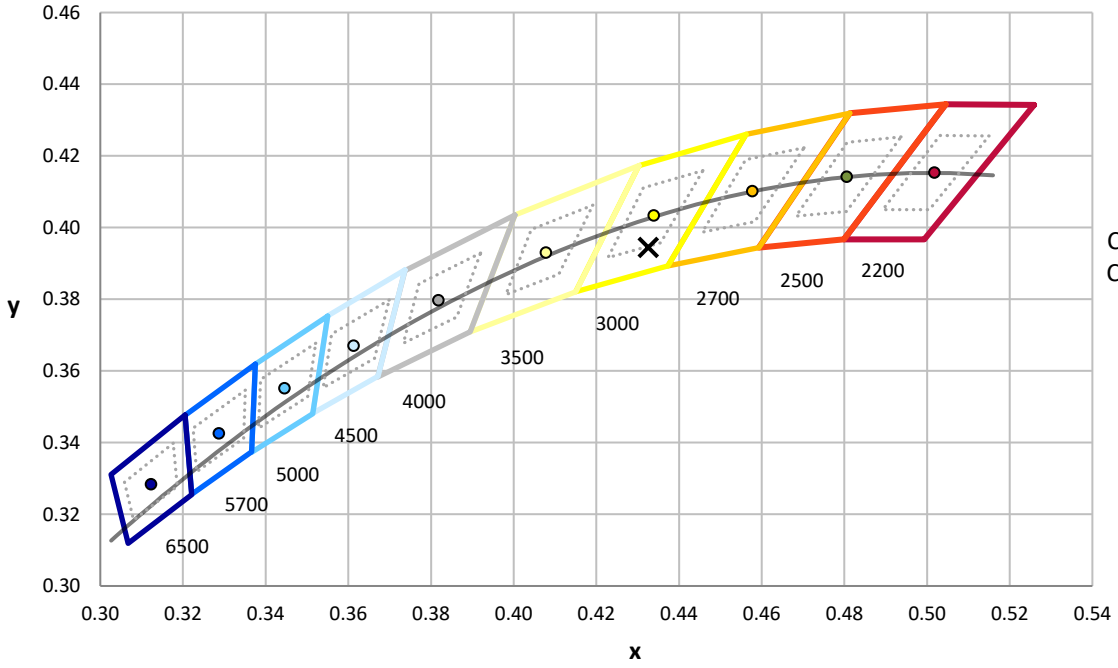
CIE 1931 Chromaticity Diagram



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



CCT = 2996K
CIE x = 0.4325
CIE y = 0.3945
Duv = -0.0033

Point lies inside the ANSI 3000K 7-step quadrangle

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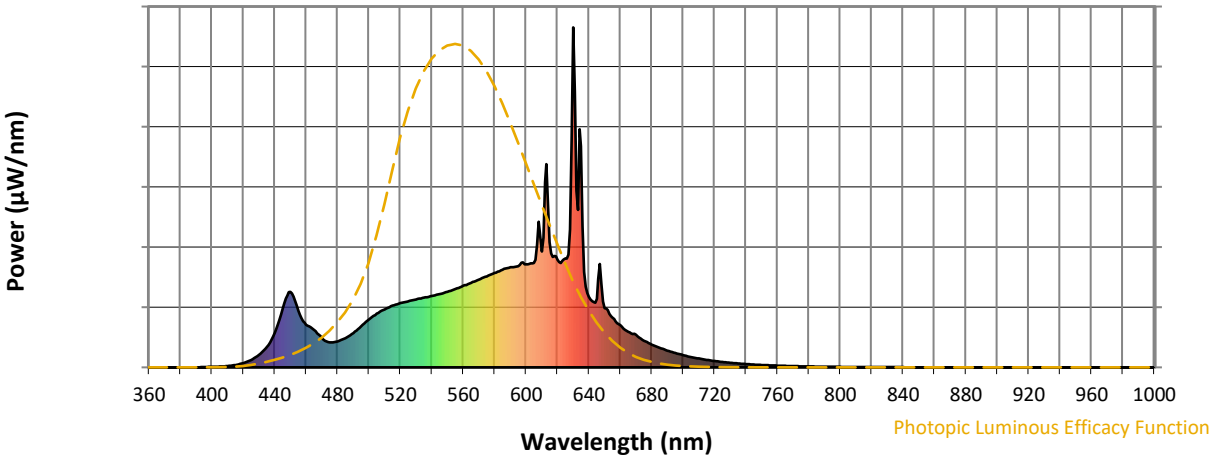
Photopic Flux vs. Wavelength



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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

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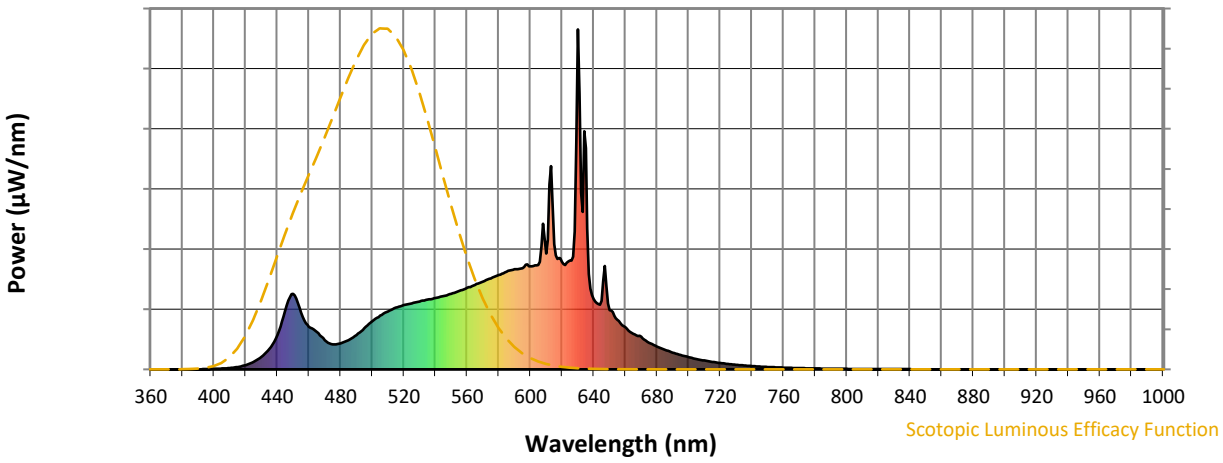
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.44**

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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

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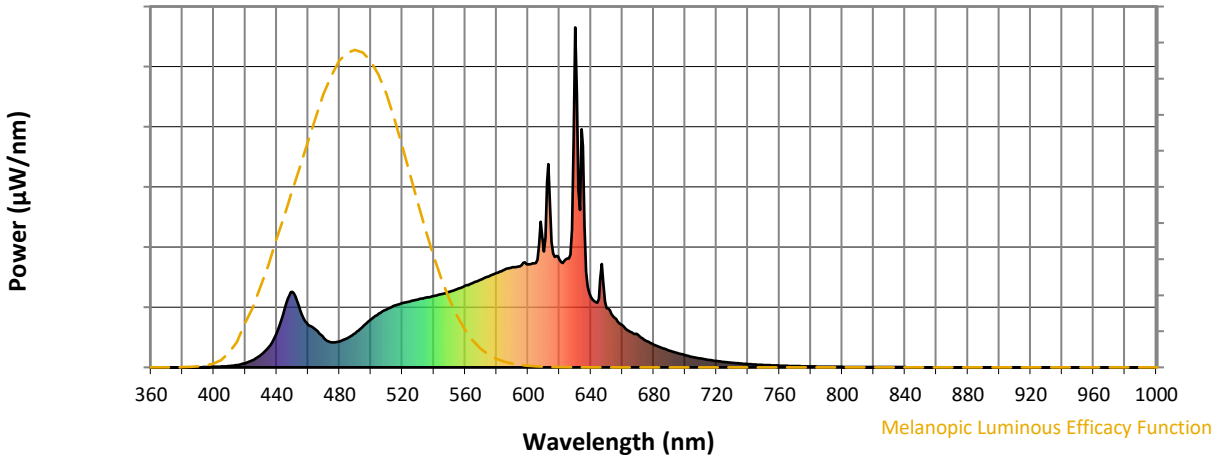
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.85**

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	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

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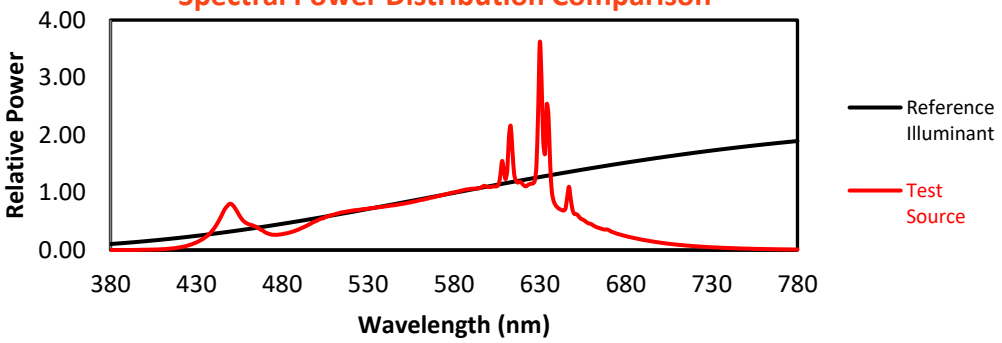
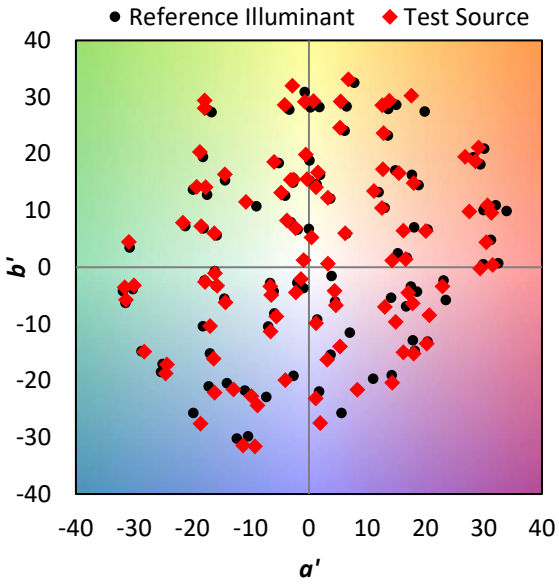
Summary

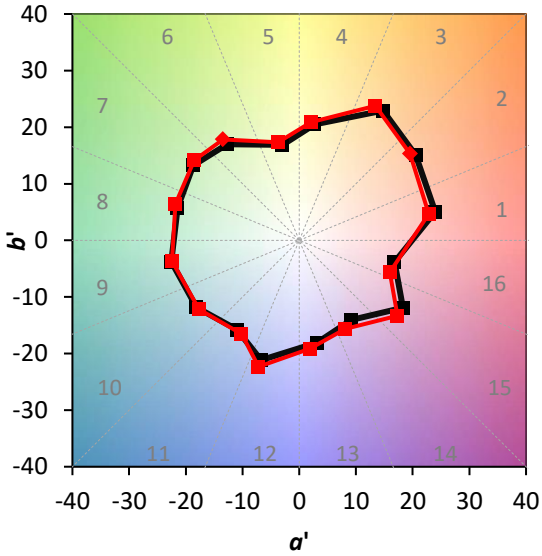
R_f = 91.3
R_g = 102
CIE R_a = 94.4
R_9 = 61.4

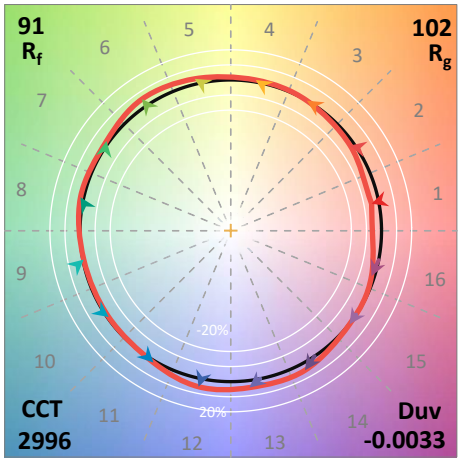
Spectral Power Distribution Comparison

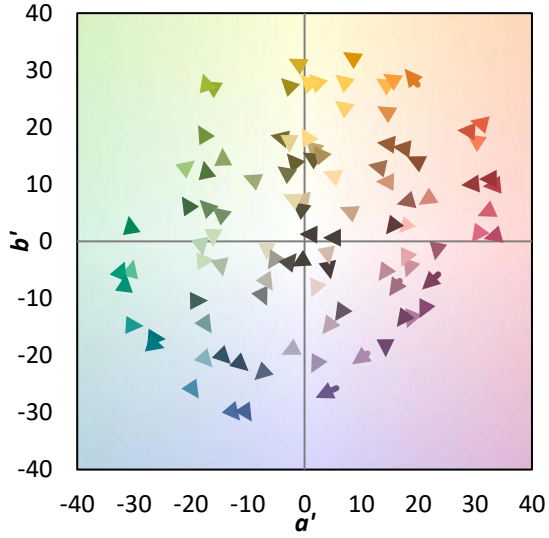


Color Vector Graphics









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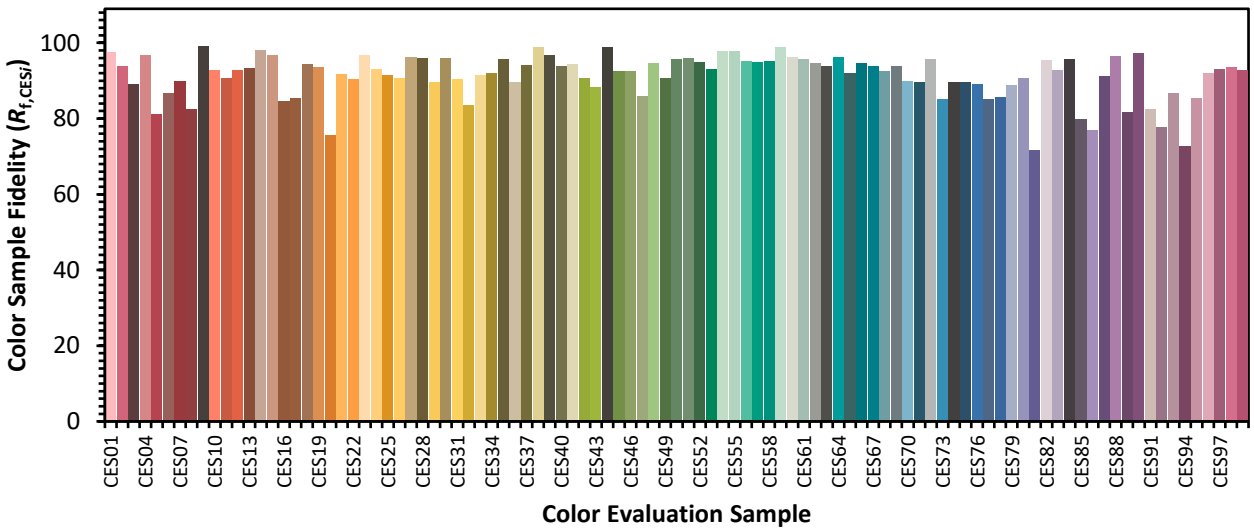
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 91	CES51 = 96	CES76 = 89
CES02 = 63	CES27 = 96	CES52 = 95	CES77 = 85
CES03 = 32	CES28 = 96	CES53 = 93	CES78 = 86
CES04 = 70	CES29 = 90	CES54 = 98	CES79 = 89
CES05 = 51	CES30 = 96	CES55 = 98	CES80 = 91
CES06 = 51	CES31 = 90	CES56 = 95	CES81 = 72
CES07 = 44	CES32 = 84	CES57 = 95	CES82 = 95
CES08 = 42	CES33 = 91	CES58 = 95	CES83 = 93
CES09 = 29	CES34 = 92	CES59 = 99	CES84 = 96
CES10 = 76	CES35 = 96	CES60 = 96	CES85 = 80
CES11 = 59	CES36 = 90	CES61 = 96	CES86 = 77
CES12 = 65	CES37 = 94	CES62 = 95	CES87 = 91
CES13 = 44	CES38 = 99	CES63 = 94	CES88 = 96
CES14 = 74	CES39 = 97	CES64 = 96	CES89 = 82
CES15 = 72	CES40 = 94	CES65 = 92	CES90 = 97
CES16 = 48	CES41 = 94	CES66 = 95	CES91 = 82
CES17 = 50	CES42 = 91	CES67 = 94	CES92 = 78
CES18 = 57	CES43 = 88	CES68 = 93	CES93 = 87
CES19 = 72	CES44 = 99	CES69 = 94	CES94 = 73
CES20 = 67	CES45 = 93	CES70 = 90	CES95 = 85
CES21 = 86	CES46 = 93	CES71 = 90	CES96 = 92
CES22 = 79	CES47 = 86	CES72 = 96	CES97 = 93
CES23 = 92	CES48 = 95	CES73 = 85	CES98 = 94
CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 93
CES25 = 72	CES50 = 96	CES75 = 90	



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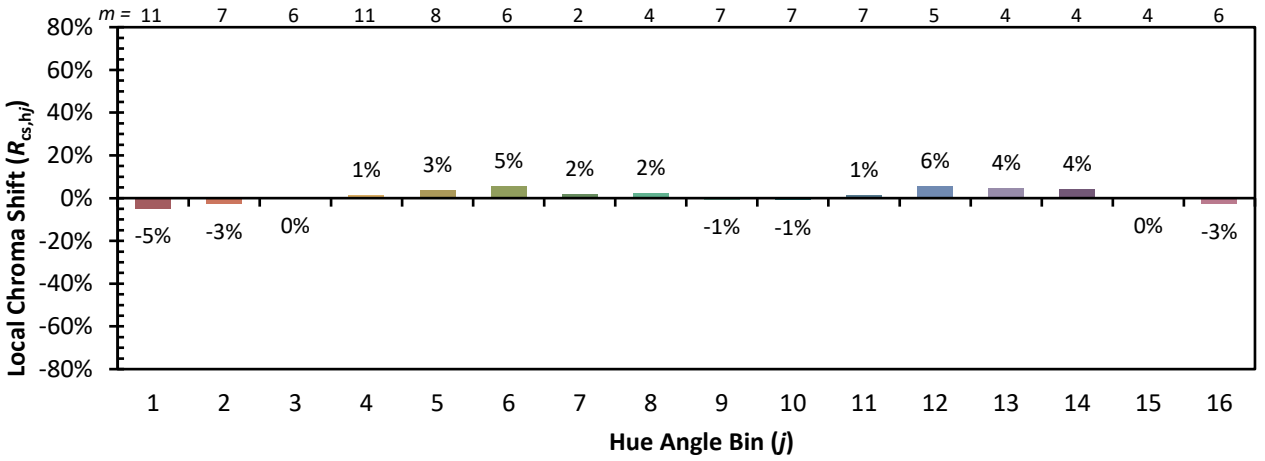
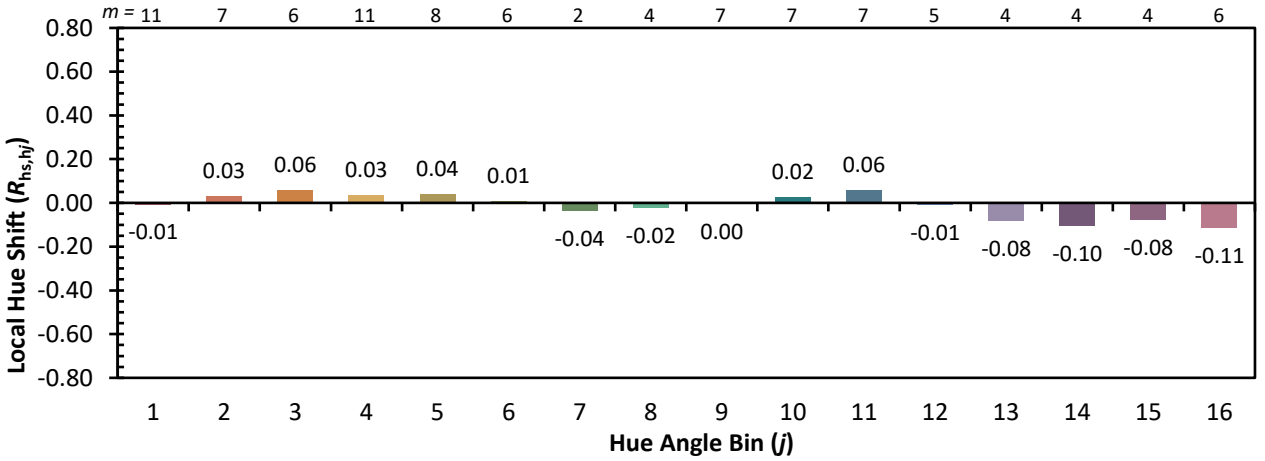
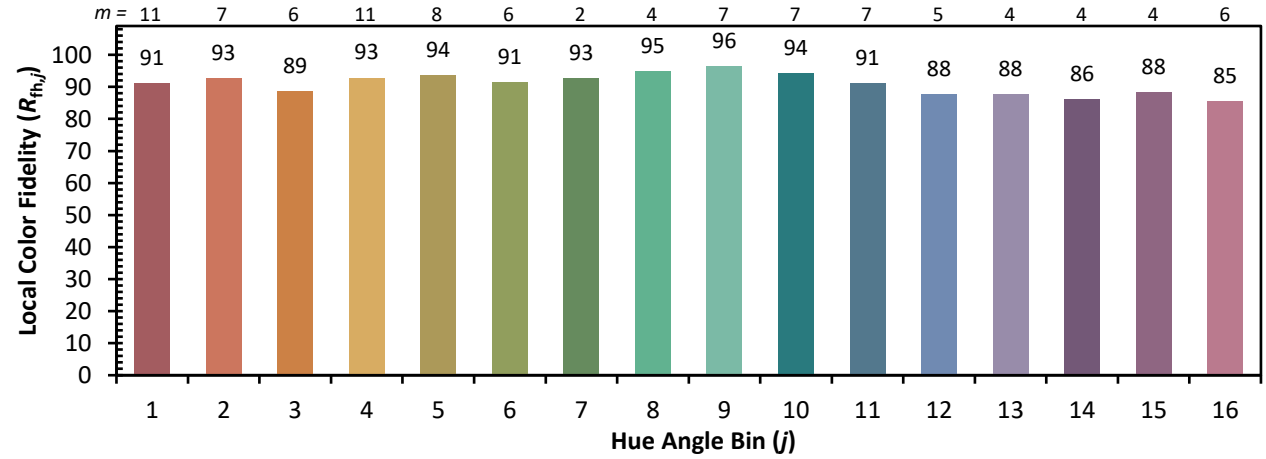
Color Rendition by Hue-Angle Bin







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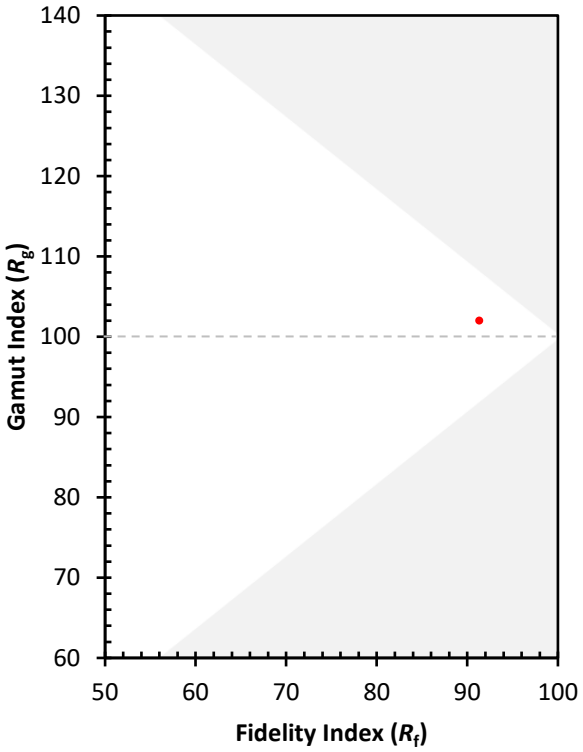
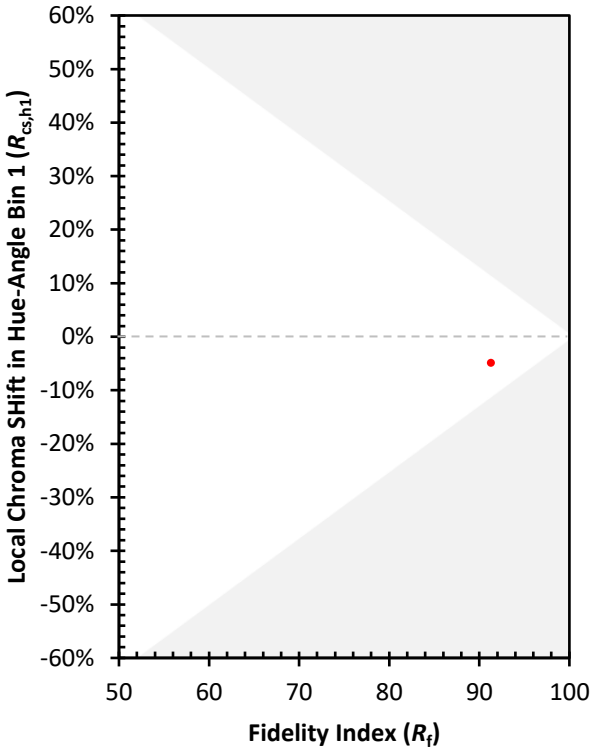
Measure Comparisons





(END OF REPORT)