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: P1433215

Luminaire Tested: EHBR1-36-UNV-A1-L930-UPL36

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:	P1433215
	REPORT IS A COMBINATION OF REPORTS P1431769 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-36-UNV-A1-L930-UPL36
Description:	Elevate Round Highbay at, 36000 lumens, 3000K 90CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	35364.9 lumens
Efficiency:	N/A
Efficacy:	160.9 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):	219.8
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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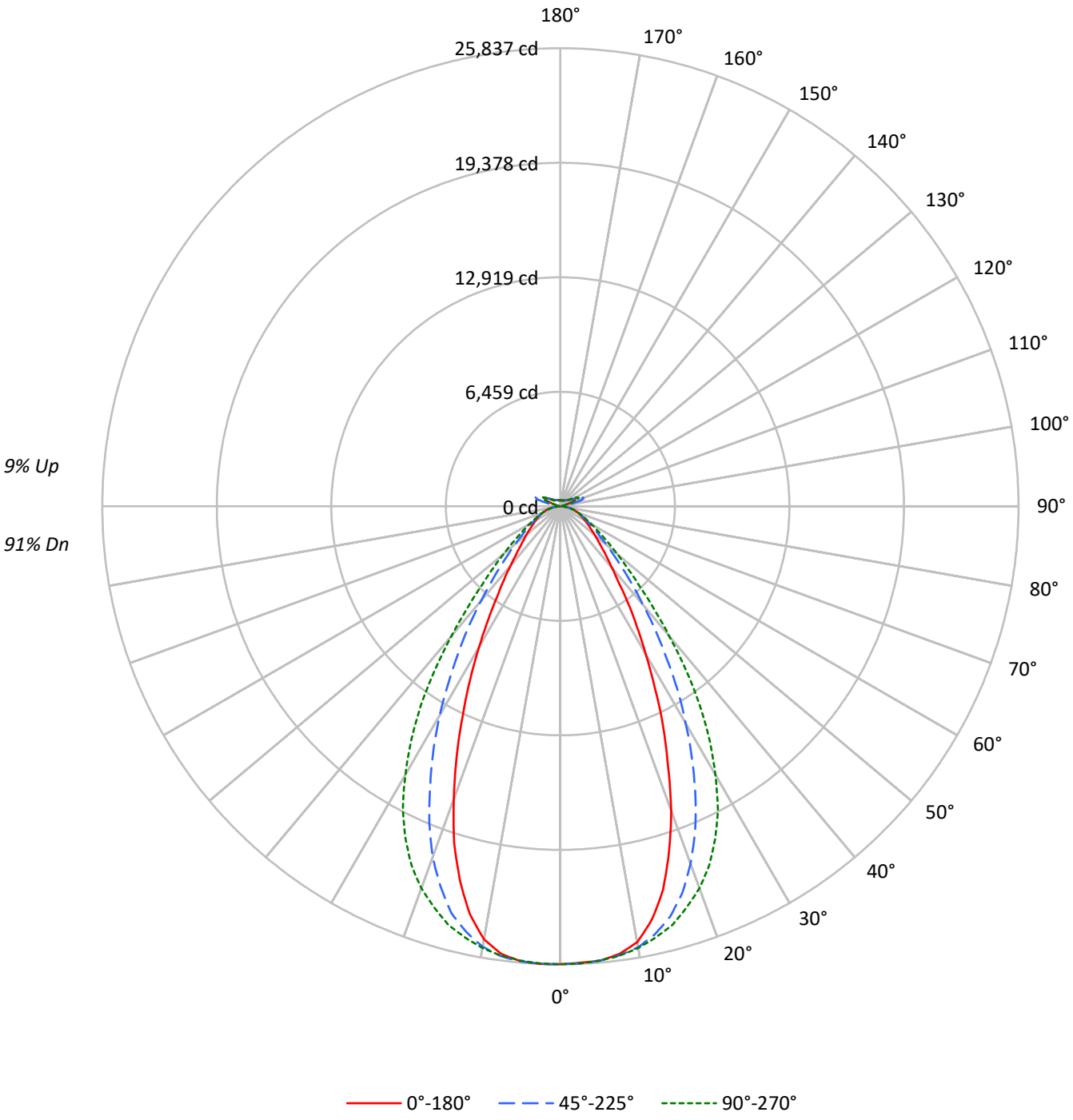
Scaled Data Report

TEST NUMBER: P1433215
CATALOG NUMBER: EHBR1-36-UNV-A1-L930-UPL36

Luminous Intensity Polar Plot



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TEST NUMBER: P1433215
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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	99	99	99	94	94	94	91
1	109	106	103	100	106	103	100	97	97	95	92	91	90	88	87	85	84	81
2	102	96	91	86	99	93	89	85	88	85	81	84	81	78	80	77	75	73
3	95	87	81	76	92	85	79	75	81	76	72	77	73	70	74	70	68	66
4	89	80	73	68	86	78	72	67	74	69	65	71	67	63	68	64	61	59
5	83	73	66	61	81	72	65	60	69	63	59	66	61	57	63	59	56	54
6	78	68	60	55	76	66	60	55	64	58	54	61	56	52	59	55	51	49
7	74	63	55	51	72	61	55	50	59	53	49	57	52	48	55	51	47	46
8	69	58	51	46	68	57	51	46	55	49	45	53	48	45	52	47	44	42
9	66	54	48	43	64	53	47	43	52	46	42	50	45	41	49	44	41	39
10	62	51	44	40	60	50	44	40	49	43	39	47	42	38	46	41	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	121280	121280	121280	121280	121280
5°	120478	120460	120466	120679	120605
10°	117501	118870	119058	118722	116731
15°	106671	114115	116463	113199	104222
20°	88891	104400	111533	102435	85430
25°	68745	90270	103467	86974	65183
30°	50109	73514	90888	70725	47561
35°	36120	56662	74696	54222	33762
40°	25987	41850	55047	40083	25185
45°	20477	30617	38446	29289	19768
50°	16989	23003	27827	22244	16732
55°	14838	18163	21074	17860	14637
60°	13382	15163	16792	15069	13476
65°	12515	13375	14111	13417	12634
70°	11886	12169	12544	12237	12002
75°	11088	11019	11088	11050	11196
80°	10014	9295	9090	9438	10014
85°	6942	5886	5825	5982	7146

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 40282 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2438.8	6.9
10°-20°	6554.7	18.5
20°-30°	7970.5	22.5
30°-40°	6492.6	18.4
40°-50°	3898.1	11.0
50°-60°	2243.4	6.3
60°-70°	1404.0	4.0
70°-80°	826.9	2.3
80°-90°	247.6	0.7
90°-100°	86.5	0.2
100°-110°	572.1	1.6
110°-120°	1058.3	3.0
120°-130°	628.0	1.8
130°-140°	379.4	1.1
140°-150°	262.8	0.7
150°-160°	171.1	0.5
160°-170°	97.6	0.3
170°-180°	32.3	0.1
0°-30°	16964.1	48.0
0°-40°	23456.6	66.3
0°-60°	29598.2	83.7
0°-90°	32076.7	90.7
90°-120°	1716.9	4.9
90°-150°	2987.1	8.4
90°-180°	3288.0	9.3
0°-180°	35364.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	25826	25826	25826	25826	25826	
5°	25724	25720	25721	25767	25751	2431
15°	22379	23941	24433	23749	21865	6157
25°	13728	18027	20662	17369	13017	6255
35°	6629	10400	13709	9952	6197	4194
45°	3313	4954	6220	4739	3198	2613
55°	2005	2455	2848	2414	1978	1813
65°	1306	1396	1473	1400	1319	1299
75°	781	776	781	778	789	827
85°	239	202	200	206	246	255
90°	25	66	24	69	24	23
95°	41	148	46	126	41	39
105°	200	1001	262	1066	130	267
115°	916	1183	1126	1309	960	844
125°	661	632	720	700	753	603
135°	484	485	454	507	524	378
145°	400	418	411	422	430	254
155°	354	366	364	366	382	165
165°	337	344	341	341	352	96
175°	337	340	338	337	344	32
180°	339	339	339	339	339	

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Scaled Data Report

TEST NUMBER: P1433215
CATALOG NUMBER: EHBR1-36-UNV-A1-L930-UPL36

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	25825.7	25825.7	25825.7	25825.7	25825.7	25825.7	25825.7	25825.7	25825.7
2.5°	25768.9	25792.2	25801.9	25807.3	25813.3	25829.5	25836.6	25825.1	25834.9
5°	25724.0	25725.6	25720.2	25744.6	25721.3	25737.5	25766.8	25755.4	25751.0
7.5°	25462.2	25516.3	25548.2	25556.3	25560.7	25580.6	25601.2	25484.9	25467.6
10°	24964.6	25054.9	25255.5	25312.9	25295.6	25328.1	25224.2	24920.2	24801.2
12.5°	23873.6	24191.1	24712.5	24944.5	24902.4	24931.1	24577.3	23935.8	23566.8
15°	22379.0	22844.7	23940.7	24398.3	24433.4	24398.3	23748.6	22498.5	21865.2
17.5°	20392.2	21252.4	22865.9	23754.0	23703.2	23719.9	22486.7	20638.9	19914.1
20°	18269.7	19186.6	21457.3	22938.8	22923.2	22829.0	21053.3	18616.4	17558.4
22.5°	15869.2	17051.6	19843.3	21936.6	21930.6	21773.8	19307.7	16407.9	15268.8
25°	13728.3	14888.0	18026.9	20708.7	20662.2	20483.7	17368.6	14204.8	13017.0
27.5°	11514.9	12720.6	16087.8	19269.9	19237.9	19043.2	15514.9	12145.5	11015.0
30°	9638.5	10740.8	14140.4	17686.6	17482.2	17460.0	13603.9	10238.8	9148.4
32.5°	8030.9	8975.8	12304.6	16030.9	15669.0	15772.4	11699.3	8644.2	7563.6
35°	6629.4	7461.9	10399.5	14116.1	13709.3	13843.0	9951.6	7092.9	6196.6
37.5°	5380.4	6180.9	8784.9	12253.7	11631.7	11883.8	8414.4	5923.5	5205.1
40°	4504.2	5139.2	7253.6	10210.2	9541.1	9951.6	6947.4	4940.7	4365.2
42.5°	3881.0	4295.4	5986.8	8259.2	7745.8	8036.8	5726.0	4130.3	3699.8
45°	3313.1	3643.6	4953.7	6517.4	6220.4	6490.4	4738.9	3521.9	3198.4
47.5°	2893.9	3148.7	4077.9	5263.1	5078.6	5164.1	3957.8	3073.5	2810.6
50°	2532.0	2728.8	3428.3	4247.8	4147.2	4199.6	3315.2	2674.2	2493.6
52.5°	2250.8	2395.1	2875.4	3491.0	3441.2	3449.3	2825.2	2352.4	2221.5
55°	2005.2	2105.8	2454.6	2859.8	2847.9	2850.0	2413.6	2084.6	1978.1
57.5°	1790.4	1873.7	2109.5	2402.2	2384.9	2388.6	2090.1	1851.5	1782.8
60°	1608.7	1664.4	1822.8	2030.0	2018.7	2013.8	1811.5	1643.8	1620.0
62.5°	1447.5	1483.2	1593.0	1740.1	1718.5	1723.4	1592.5	1484.8	1449.6
65°	1306.3	1318.7	1396.1	1487.0	1472.9	1484.8	1400.4	1326.8	1318.7
67.5°	1168.4	1180.8	1226.2	1287.3	1271.1	1280.8	1227.3	1184.1	1177.0
70°	1042.9	1042.4	1067.8	1100.7	1100.7	1102.3	1073.7	1047.7	1053.1
72.5°	913.1	909.8	917.3	939.5	933.6	954.1	923.8	915.7	916.8
75°	781.1	771.9	776.2	787.6	781.1	791.9	778.4	788.7	788.7
77.5°	656.7	639.4	634.0	635.6	623.7	639.9	643.1	650.2	666.4
80°	526.8	502.5	489.0	488.4	478.2	488.4	496.5	511.2	526.8
82.5°	391.1	370.0	347.3	342.9	336.4	342.4	353.2	370.5	395.9
85°	238.6	216.4	202.3	194.7	200.2	200.2	205.6	229.9	245.6
87.5°	86.0	75.2	61.7	62.2	63.8	66.0	68.7	86.5	94.6
90°	24.8	38.3	65.6	41.9	23.7	40.1	69.2	36.4	24.2
92.5°	35.2	58.4	105.7	54.7	31.0	54.7	98.5	49.2	33.3
95°	41.2	67.5	147.7	72.9	45.5	67.5	125.7	54.7	40.6
97.5°	52.1	74.8	169.5	89.3	71.1	83.9	142.1	58.4	49.7
100°	68.5	87.5	264.3	109.3	94.8	94.8	260.7	67.5	57.6
102.5°	115.9	185.9	561.4	205.9	144.0	185.9	605.2	136.7	70.3
105°	199.7	391.9	1000.7	432.0	262.4	426.5	1066.3	357.3	130.5
107.5°	345.6	701.8	1319.7	765.6	497.6	796.5	1374.3	707.2	307.3
110°	644.5	931.4	1383.5	1051.7	796.5	1113.7	1500.1	969.7	624.4

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Scaled Data Report

TEST NUMBER: P1433215
CATALOG NUMBER: EHBR1-36-UNV-A1-L930-UPL36

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	870.6	1000.7	1325.1	1161.1	1037.1	1241.3	*1465.5*	1075.4	865.0
115°	916.1	962.4	1183.0	1133.7	1126.5	1223.1	*1308.7*	1071.8	959.8
117.5°	885.6	878.6	1004.3	1018.9	1088.2	1119.2	*1130.1*	1006.2	965.3
120°	819.5	782.0	838.5	889.5	982.5	969.7	*951.5*	910.1	910.7
122.5°	738.0	693.2	718.2	756.4	849.4	822.1	*803.8*	811.7	836.4
125°	661.4	616.6	632.5	641.6	720.0	692.7	*700.4*	727.8	752.6
127.5°	594.0	563.7	572.4	561.4	610.6	597.9	*625.8*	657.2	677.8
130°	548.4	522.4	534.6	508.6	532.8	536.4	*573.4*	598.9	612.2
132.5°	510.7	493.8	508.3	476.8	484.1	499.2	*533.9*	556.2	563.6
135°	483.9	468.7	485.1	455.5	454.2	476.0	*507.1*	521.6	524.0
137.5°	460.2	447.4	463.8	441.9	436.5	458.3	*482.0*	493.0	489.9
140°	439.4	427.9	446.1	429.7	426.1	448.0	*458.8*	472.2	468.6
142.5°	416.3	409.0	430.2	419.4	415.7	436.4	*441.8*	450.9	447.8
145°	400.5	395.0	418.1	412.7	410.8	426.0	*422.3*	435.6	430.2
147.5°	387.5	383.3	404.0	402.3	402.3	413.2	*408.2*	419.7	414.8
150°	375.3	371.1	391.8	390.1	391.8	399.1	*392.4*	406.2	404.9
152.5°	363.1	358.9	377.8	375.4	377.3	384.5	*378.4*	393.4	392.7
155°	354.4	350.2	365.5	364.5	364.5	368.7	*366.1*	381.8	382.3
157.5°	348.7	345.9	357.5	356.5	356.5	358.9	*358.1*	371.9	372.4
160°	344.3	341.5	351.3	350.2	348.4	352.6	*351.8*	363.9	364.4
162.5°	340.1	337.0	348.2	345.9	345.3	345.9	*345.1*	357.6	358.2
165°	336.9	335.8	343.8	342.7	341.0	342.7	*340.7*	349.1	351.5
167.5°	337.5	335.1	342.6	341.5	339.6	337.8	*339.4*	346.0	348.4
170°	336.1	335.6	341.2	338.4	336.0	336.5	*336.4*	342.9	345.3
172.5°	337.2	336.7	342.4	339.4	337.0	337.6	*335.6*	340.3	344.5
175°	337.0	336.0	340.3	338.7	338.2	336.9	*336.7*	339.6	344.3
177.5°	339.3	338.3	340.9	339.3	336.9	337.5	*339.1*	341.9	348.5
180°	339.1	339.1	339.1	339.1	339.1	339.1	*339.1*	339.1	339.1

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Scaled Data Report

TEST NUMBER: P1433215
CATALOG NUMBER: EHBR1-36-UNV-A1-L930-UPL36

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	17.85	18.96	18.37	19.46	20.01	18.83	19.95	19.35	20.45	20.99
	3H	19.32	20.32	19.86	20.83	21.42	20.09	21.08	20.62	21.60	22.18
	4H	19.92	20.85	20.48	21.38	21.99	20.58	21.51	21.14	22.04	22.65
	6H	20.38	21.24	20.96	21.78	22.40	20.94	21.79	21.51	22.34	22.95
	8H	20.53	21.34	21.12	21.91	22.53	21.03	21.84	21.62	22.41	23.03
	12H	20.61	21.38	21.19	21.94	22.58	21.07	21.84	21.66	22.40	23.05
4H	2H	18.36	19.29	18.92	19.82	20.43	19.14	20.07	19.70	20.60	21.21
	3H	20.04	20.81	20.61	21.38	22.00	20.63	21.39	21.20	21.97	22.59
	4H	20.76	21.45	21.35	22.03	22.69	21.25	21.94	21.84	22.52	23.18
	6H	21.33	21.93	21.95	22.54	23.21	21.72	22.32	22.34	22.93	23.60
	8H	21.52	22.08	22.14	22.68	23.36	21.86	22.41	22.48	23.02	23.70
	12H	21.63	22.12	22.26	22.75	23.44	21.92	22.41	22.56	23.05	23.74
8H	4H	20.98	21.53	21.60	22.14	22.82	21.43	21.98	22.04	22.59	23.27
	6H	21.67	22.12	22.32	22.77	23.46	22.01	22.46	22.66	23.11	23.80
	8H	21.92	22.32	22.59	22.99	23.69	22.20	22.61	22.87	23.27	23.97
	12H	22.08	22.44	22.75	23.09	23.86	22.32	22.68	22.98	23.32	24.09
12H	4H	20.98	21.47	21.61	22.11	22.79	21.42	21.91	22.06	22.55	23.23
	6H	21.69	22.10	22.36	22.76	23.46	22.03	22.43	22.69	23.10	23.80
	8H	21.98	22.34	22.65	22.99	23.76	22.26	22.62	22.92	23.26	24.04

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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: SP1-2506-472-5

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

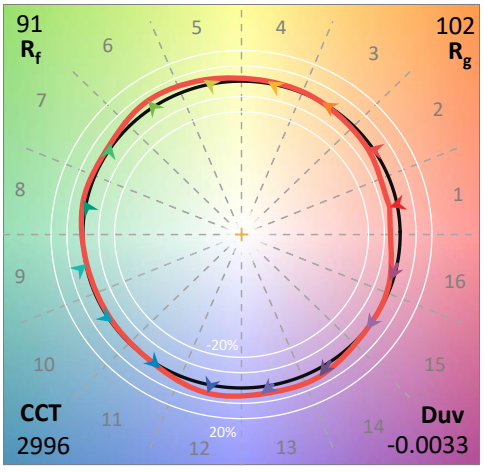
Test Information

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

REPORT NUMBER: SP1-2506-472-5

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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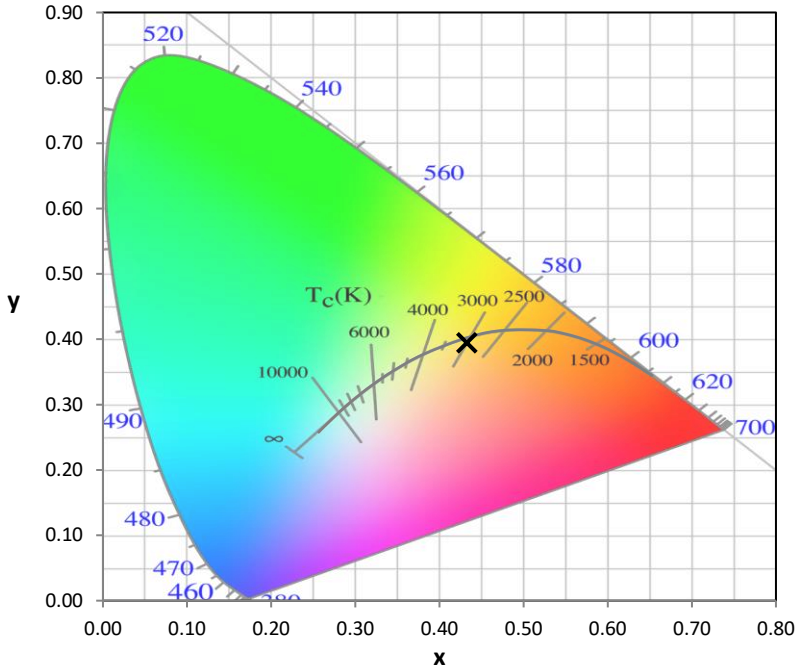
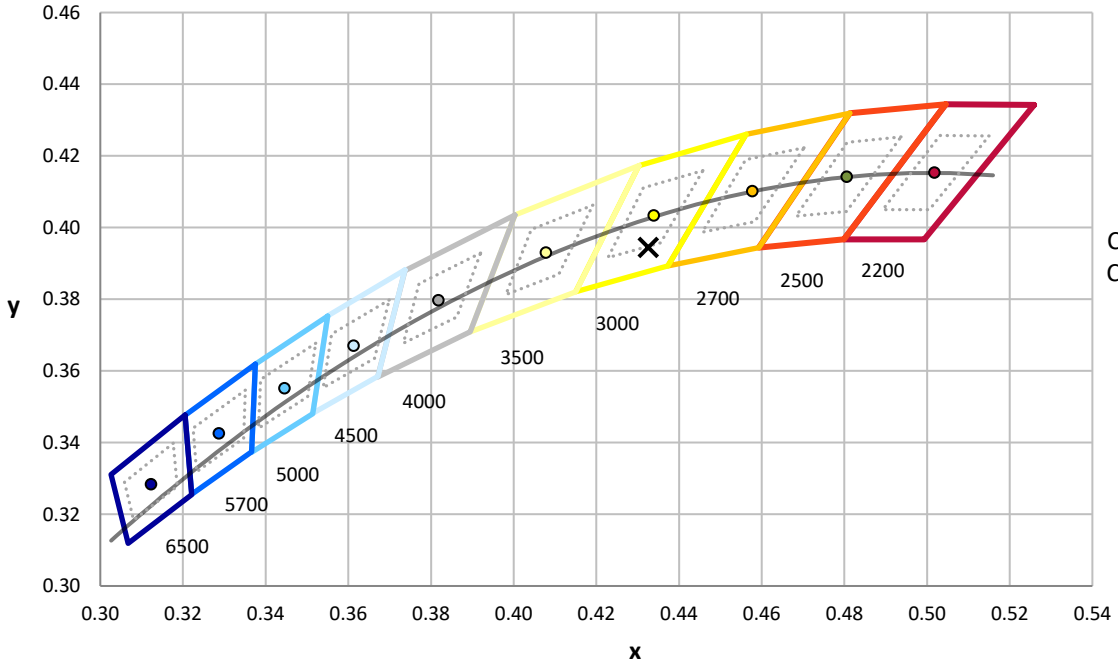
CIE 1931 Chromaticity Diagram



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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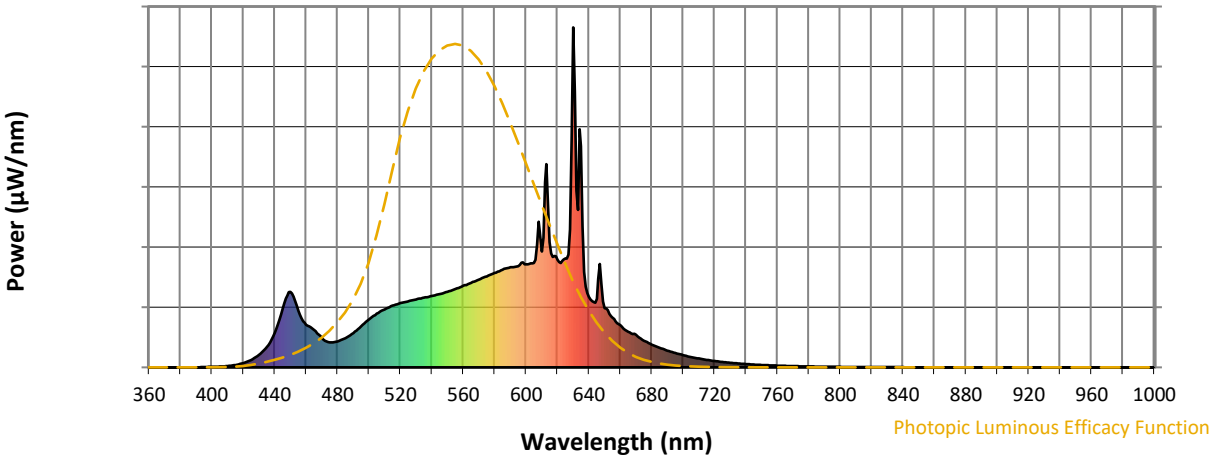
Photopic Flux vs. Wavelength



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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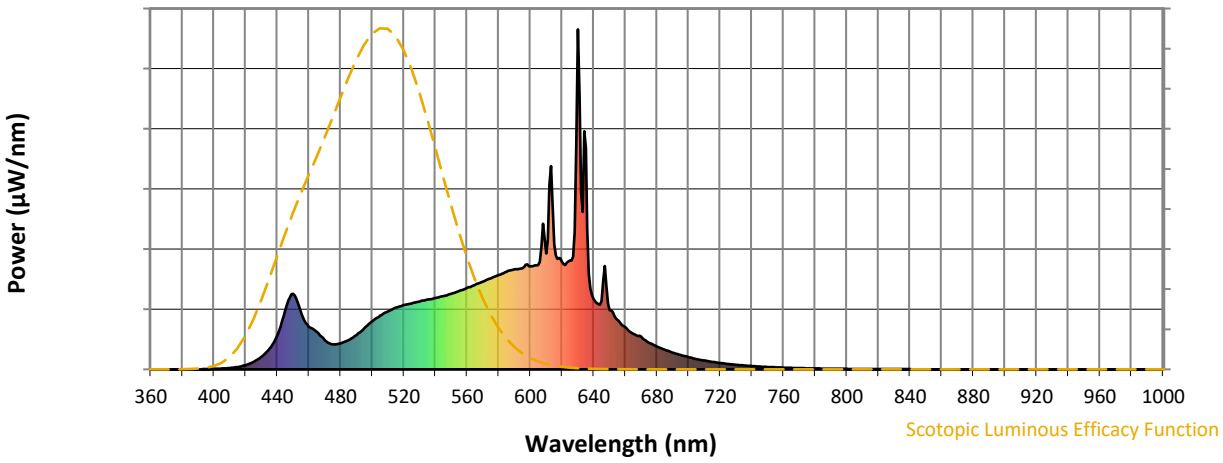
Scotopic Flux vs. Wavelength



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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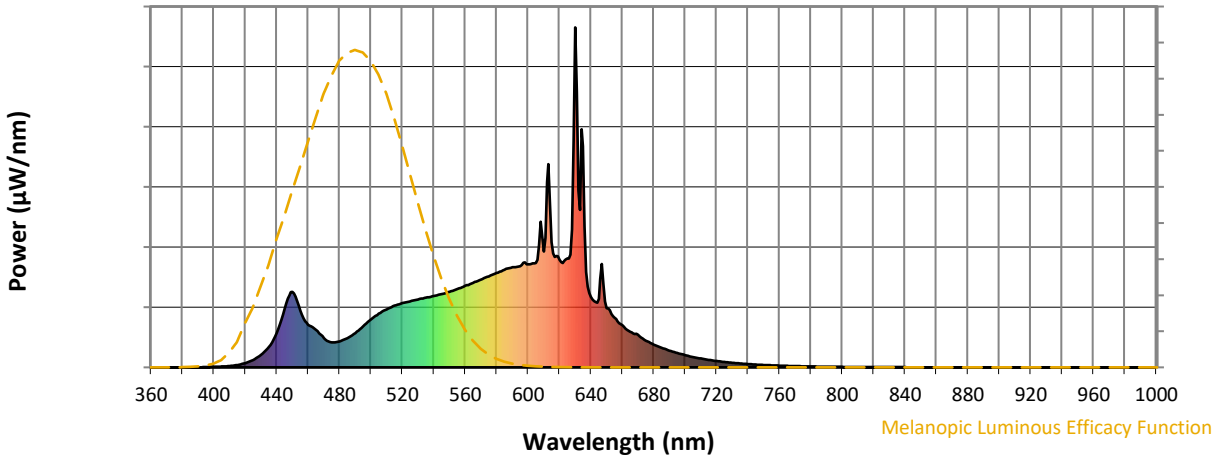
Melanopic Flux vs. Wavelength



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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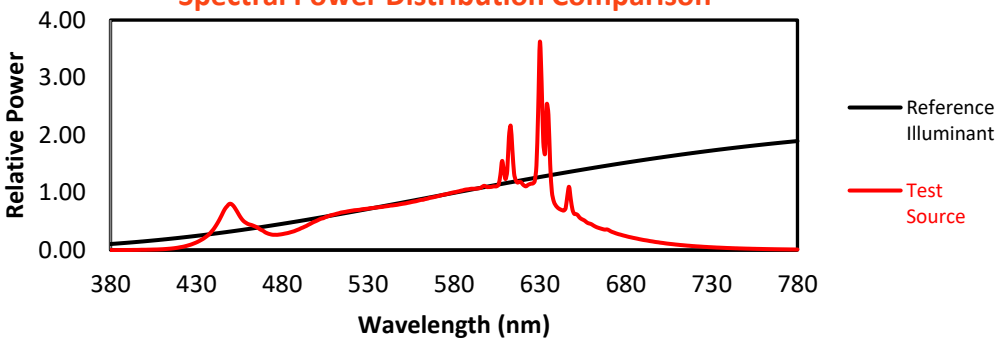
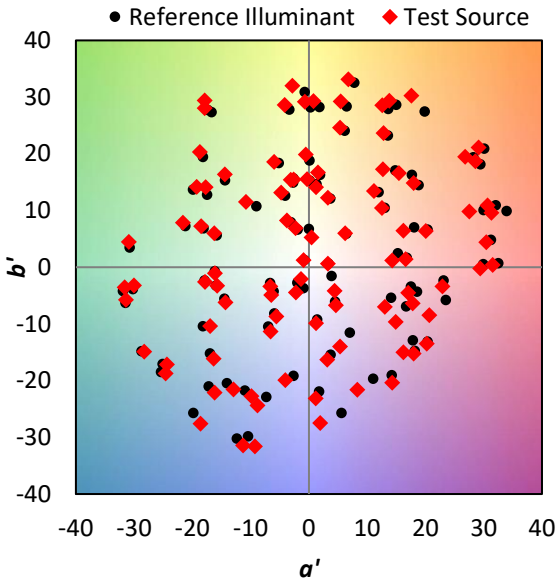
Summary

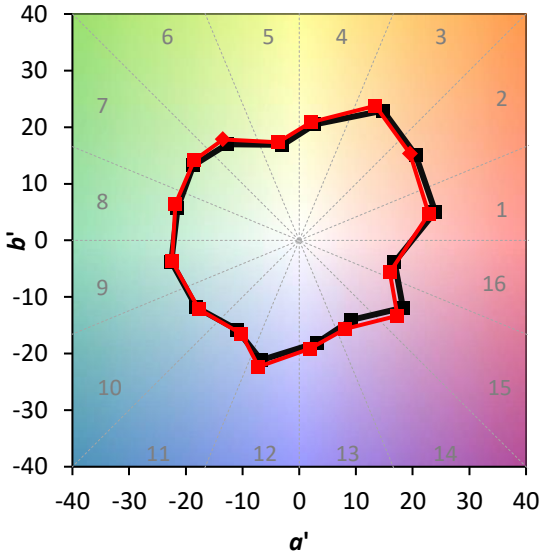
R_f = 91.3
R_g = 102
CIE R_a = 94.4
R_9 = 61.4

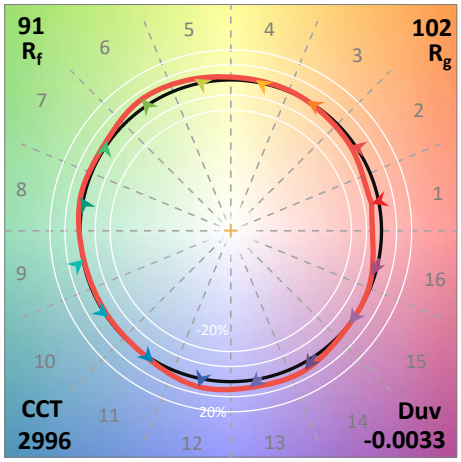
Spectral Power Distribution Comparison

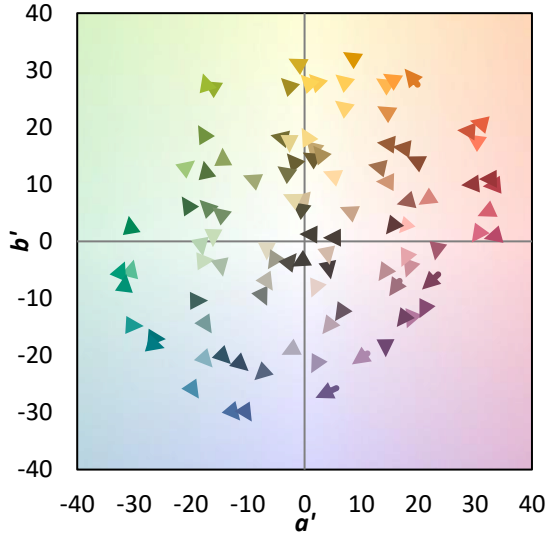


Color Vector Graphics









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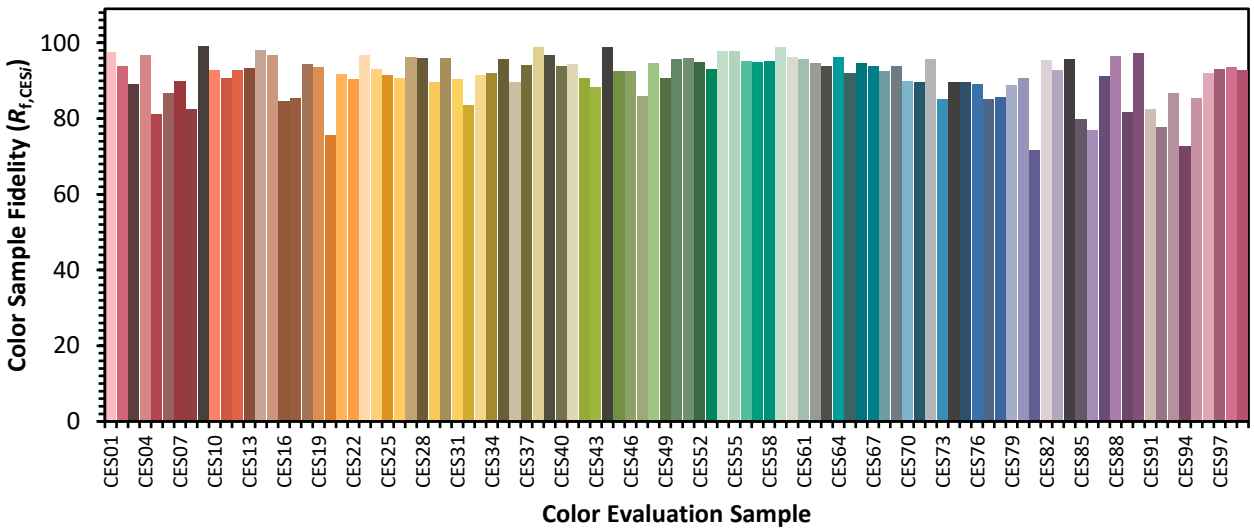
Individual Sample Fidelity Index ($R_{f,i}$)

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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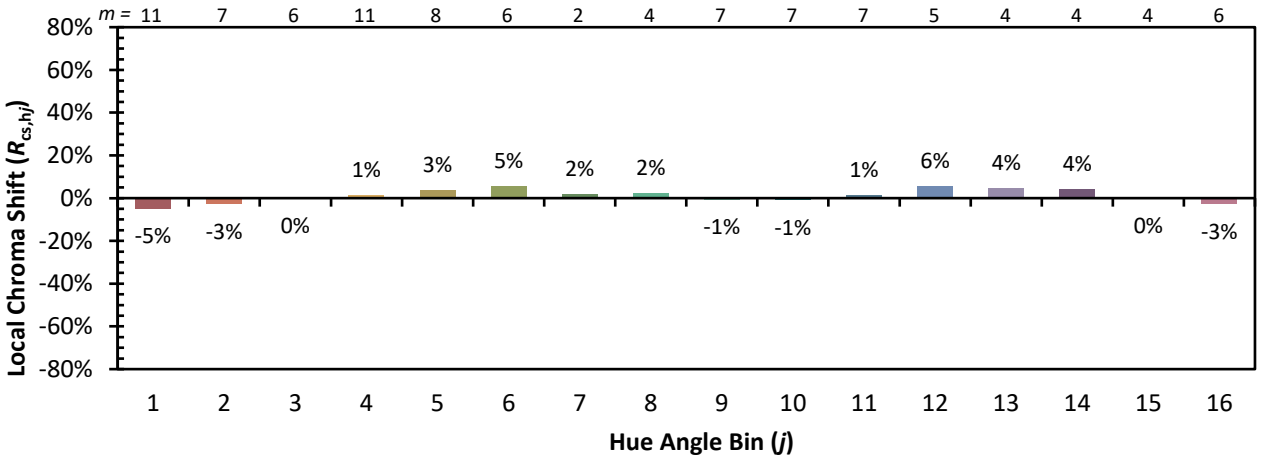
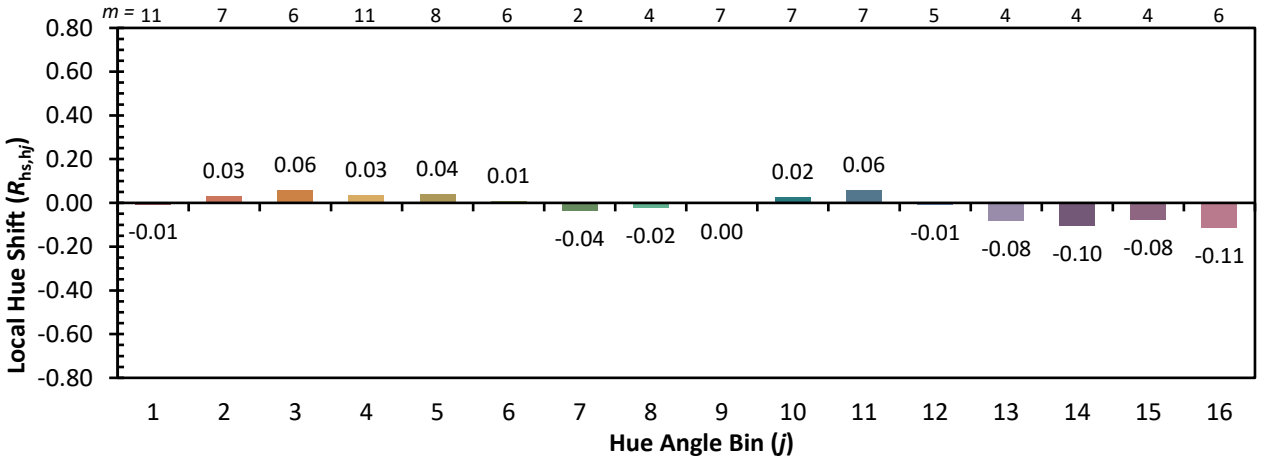
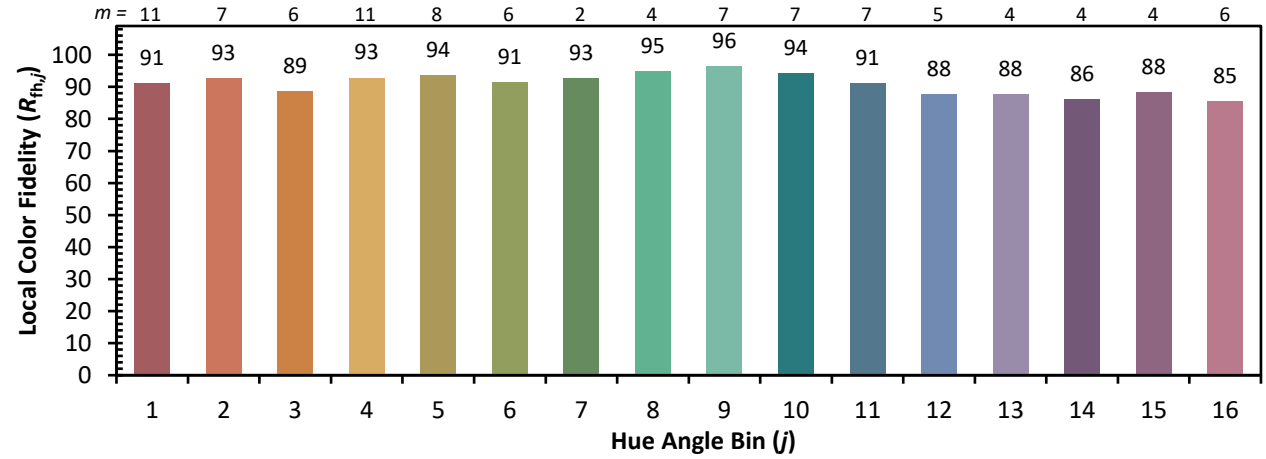
Color Rendition by Hue-Angle Bin







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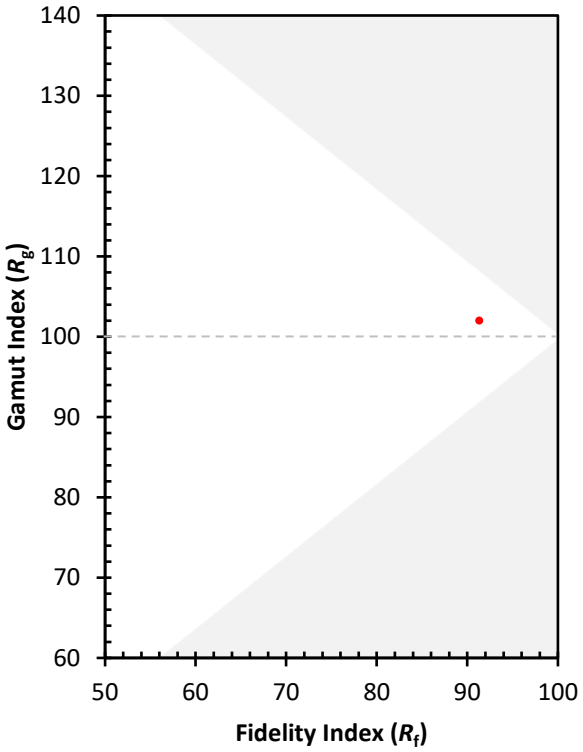
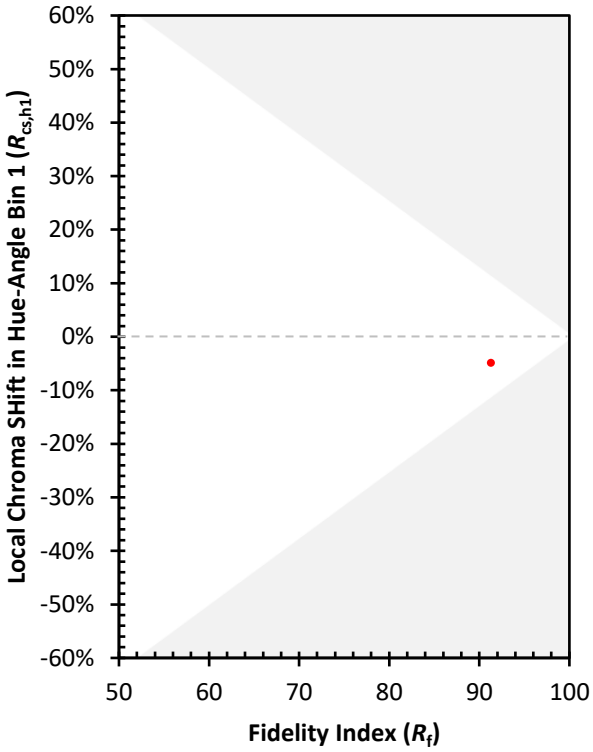
Measure Comparisons





(END OF REPORT)