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:

Luminaire Tested: EHBR1-42-UNV-A1-L840-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:	
	REPORT IS A COMBINATION OF REPORTS P1431801 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-42-UNV-A1-L840-UPL36
Description:	Elevate Round Highbay at, 42000 lumens, 4000K 80CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	45074.1 lumens
Efficiency:	N/A
Efficacy:	178.3 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):	252.8
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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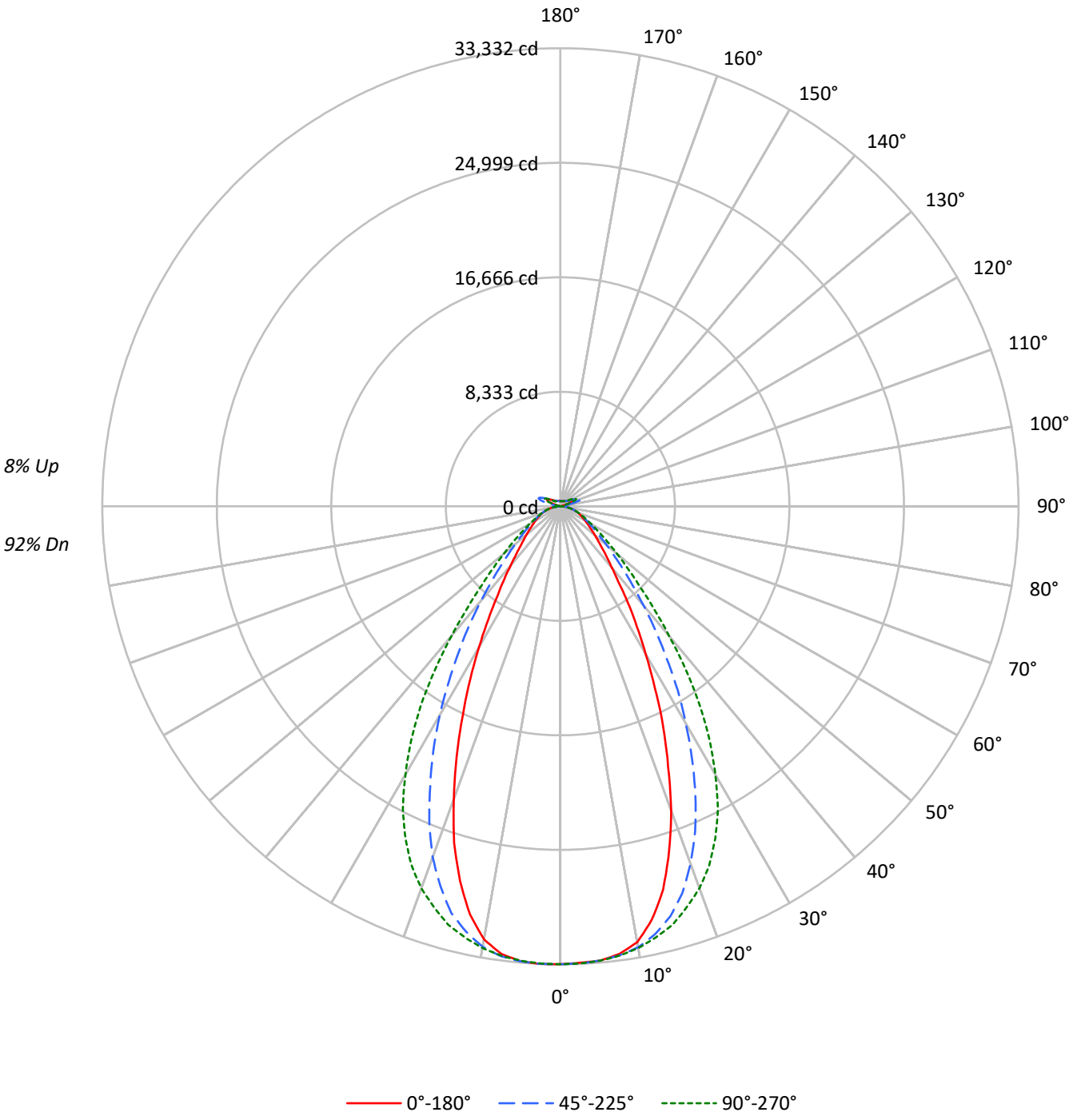
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			20
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	117	117	117	117	113	113	113	113	107	107	107	100	100	100	95	95	95	92
1	110	106	103	100	106	103	100	98	97	95	93	92	90	89	88	86	85	82
2	102	96	91	87	99	94	89	85	89	85	82	85	82	79	81	78	76	74
3	96	87	81	76	93	85	80	75	81	77	73	78	74	71	74	71	68	66
4	89	80	73	68	87	78	72	67	75	70	65	72	67	64	69	65	62	60
5	84	74	66	61	81	72	65	61	69	64	59	67	62	58	64	60	57	55
6	79	68	61	56	76	67	60	55	64	58	54	62	57	53	60	55	52	50
7	74	63	56	51	72	62	55	50	60	54	50	58	53	49	56	51	48	46
8	70	59	52	47	68	58	51	46	56	50	46	54	49	45	52	48	44	43
9	66	55	48	43	64	54	47	43	52	46	42	51	45	42	49	45	41	40
10	62	51	45	40	61	50	44	40	49	43	39	48	42	39	46	42	38	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	156466	156466	156466	156466	156466
5°	155432	155409	155416	155690	155595
10°	151590	153357	153600	153167	150598
15°	137619	147222	150252	146041	134459
20°	114681	134689	143891	132153	110216
25°	88689	116460	133485	112207	84094
30°	64647	94843	117256	91244	61360
35°	46600	73101	96367	69953	43558
40°	33526	53991	71018	51713	32491
45°	26418	39499	49601	37787	25503
50°	21918	29677	35900	28699	21586
55°	19142	23434	27187	23041	18884
60°	17264	19562	21663	19441	17385
65°	16146	17256	18205	17309	16299
70°	15333	15699	16184	15787	15485
75°	14305	14216	14305	14255	14444
80°	12920	11991	11727	12177	12920
85°	8953	7594	7512	7716	9217

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 51969 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3146.4	7.0
10°-20°	8456.4	18.8
20°-30°	10282.9	22.8
30°-40°	8376.2	18.6
40°-50°	5029.1	11.2
50°-60°	2894.3	6.4
60°-70°	1811.3	4.0
70°-80°	1066.8	2.4
80°-90°	318.5	0.7
90°-100°	97.1	0.2
100°-110°	642.0	1.4
110°-120°	1187.6	2.6
120°-130°	704.8	1.6
130°-140°	426.1	0.9
140°-150°	295.4	0.7
150°-160°	192.6	0.4
160°-170°	110.1	0.2
170°-180°	36.5	0.1
0°-30°	21885.8	48.6
0°-40°	30262.0	67.1
0°-60°	38185.4	84.7
0°-90°	41382.0	91.8
90°-120°	1926.7	4.3
90°-150°	3353.0	7.4
90°-180°	3692.0	8.2
0°-180°	45074.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	33318	33318	33318	33318	33318	
5°	33187	33182	33184	33242	33222	3136
15°	28872	30886	31522	30639	28209	7943
25°	17711	23257	26657	22408	16794	8069
35°	8553	13417	17687	12839	7994	5411
45°	4274	6391	8025	6114	4126	3372
55°	2587	3167	3674	3114	2552	2338
65°	1685	1801	1900	1807	1701	1676
75°	1008	1001	1008	1004	1018	1067
85°	308	261	258	265	317	328
90°	28	74	27	78	27	28
95°	46	166	51	141	46	44
105°	224	1123	294	1197	147	300
115°	1028	1328	1264	1469	1077	947
125°	742	710	808	786	845	677
135°	544	545	510	569	588	425
145°	450	470	462	475	484	285
155°	399	411	410	412	430	186
165°	380	388	384	384	396	108
175°	381	384	382	380	389	36
180°	383	383	383	383	383	

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Scaled Data Report

TEST NUMBER:
CATALOG NUMBER: EHBR1-42-UNV-A1-L840-UPL36

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	33318.4	33318.4	33318.4	33318.4	33318.4	33318.4	*33318.4*	33318.4	33318.4
2.5°	*33245.1*	*33275.1*	*33287.7*	*33294.6*	*33302.3*	*33323.3*	*33332.3*	*33317.7*	*33330.2*
5°	33187.2	33189.3	33182.3	33213.7	33183.7	33204.6	*33242.3*	33227.7	33222.1
7.5°	32849.4	32919.2	32960.4	32970.8	32976.4	33002.3	*33028.8*	32878.7	32856.4
10°	32207.4	32324.0	32582.8	32656.8	32634.5	32676.4	*32542.4*	32150.2	31996.7
12.5°	30799.9	31209.5	31882.2	32181.6	32127.2	32164.1	*31707.8*	30880.1	30404.2
15°	28871.7	29472.6	30886.4	31476.8	31522.1	31476.8	*30638.7*	29026.0	28208.8
17.5°	26308.6	27418.1	29499.8	30645.6	30580.0	30601.7	*29010.6*	26626.8	25691.7
20°	23570.2	24753.1	27682.6	29594.0	29573.8	29452.3	*27161.3*	24017.6	22652.6
22.5°	20473.2	21998.7	25600.3	28300.9	28293.2	28090.9	*24909.4*	21168.3	19698.6
25°	17711.2	19207.3	23256.9	26716.8	26656.8	26426.5	*22407.6*	18326.0	16793.5
27.5°	14855.6	16411.1	20755.2	24860.6	24819.4	24568.2	*20016.1*	15669.3	14210.8
30°	12434.8	13857.0	18242.9	22818.0	22554.2	22525.6	*17550.7*	13209.4	11802.6
32.5°	10360.8	11580.0	15874.5	20681.9	20215.0	20348.3	*15093.6*	11152.2	9757.9
35°	8552.7	9626.7	13416.7	18211.5	17686.8	17859.1	*12838.9*	9150.8	7994.5
37.5°	6941.4	7974.2	11333.6	15808.9	15006.4	15331.5	*10855.6*	7642.0	6715.3
40°	5810.9	6630.2	9358.0	13172.4	12309.2	12838.9	*8963.1*	6374.1	5631.6
42.5°	5007.0	5541.5	7723.7	10655.3	9993.1	10368.5	*7387.3*	5328.7	4773.2
45°	4274.3	4700.7	6390.8	8408.3	8025.2	8373.4	*6113.8*	4543.6	4126.3
47.5°	3733.4	4062.1	5261.0	6790.0	6552.0	6662.3	*5106.1*	3965.1	3626.0
50°	3266.6	3520.6	4422.9	5480.1	5350.3	5418.0	*4277.1*	3450.1	3217.0
52.5°	2903.7	3090.0	3709.7	4503.9	4439.7	4450.1	*3644.8*	3034.9	2866.0
55°	2586.9	2716.7	3166.8	3689.5	3674.1	3676.9	*3113.8*	2689.5	2552.0
57.5°	2309.9	2417.3	2721.6	3099.1	3076.8	3081.7	*2696.5*	2388.7	2300.1
60°	2075.4	2147.3	2351.7	2619.0	2604.3	2598.1	*2337.1*	2120.7	2090.0
62.5°	1867.4	1913.5	2055.1	2245.0	2217.0	2223.3	*2054.4*	1915.6	1870.2
65°	1685.3	1701.3	1801.1	1918.4	1900.2	1915.6	*1806.7*	1711.8	1701.3
67.5°	1507.3	1523.4	1582.0	1660.9	1639.9	1652.5	*1583.4*	1527.6	1518.5
70°	1345.4	1344.7	1377.5	1420.1	1420.1	1422.2	*1385.2*	1351.7	1358.7
72.5°	1178.0	1173.8	1183.5	1212.1	1204.5	1231.0	*1191.9*	1181.4	1182.8
75°	1007.7	995.8	1001.4	1016.1	1007.7	1021.6	*1004.2*	1017.5	1017.5
77.5°	847.2	824.8	817.9	820.0	804.6	825.5	*829.7*	838.8	859.7
80°	679.7	648.3	630.8	630.1	616.9	630.1	*640.6*	659.5	679.7
82.5°	504.5	477.3	448.0	442.4	434.1	441.7	*455.7*	478.0	510.8
85°	307.7	279.1	261.0	251.2	258.2	258.2	*265.2*	296.6	316.8
87.5°	111.0	97.0	79.6	80.3	82.3	85.1	*88.6*	111.7	122.1
90°	28.0	43.0	73.6	47.0	26.6	45.0	*77.7*	40.9	27.3
92.5°	39.6	65.5	118.6	61.4	34.8	61.4	*110.5*	55.2	37.5
95°	46.4	75.7	165.7	81.8	51.1	75.7	*141.1*	61.4	45.7
97.5°	58.7	83.9	190.2	100.2	79.8	94.1	*159.5*	65.5	55.9
100°	77.1	98.2	296.6	122.7	106.4	106.4	*292.5*	75.7	64.8
102.5°	130.3	208.6	630.0	231.1	161.6	208.6	*679.1*	153.4	79.1
105°	224.3	439.8	1122.9	484.8	294.5	478.6	*1196.6*	400.9	146.6
107.5°	388.0	787.5	1480.9	859.1	558.4	893.8	*1542.2*	793.6	345.0
110°	723.4	1045.2	1552.5	1180.2	893.8	1249.7	*1683.4*	1088.2	700.9

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Scaled Data Report

TEST NUMBER:
CATALOG NUMBER: EHBR1-42-UNV-A1-L840-UPL36

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	977.1	1122.9	1487.0	1302.9	1163.8	1392.9	*1644.5*	1206.8	970.9
115°	1028.2	1080.0	1327.5	1272.2	1264.1	1372.5	*1468.6*	1202.7	1077.3
117.5°	994.1	985.9	1127.0	1143.4	1221.1	1255.9	*1268.1*	1129.1	1083.4
120°	919.8	877.5	940.9	998.2	1102.5	1088.2	*1067.7*	1021.4	1022.1
122.5°	828.4	778.0	805.9	848.8	953.2	922.5	*902.0*	910.9	938.9
125°	742.5	692.0	709.8	720.0	807.9	777.3	*786.1*	816.8	844.8
127.5°	666.9	632.7	642.3	630.0	685.2	670.9	*702.3*	737.7	760.9
130°	615.7	586.4	600.0	570.7	598.0	602.0	*643.7*	672.3	687.3
132.5°	573.5	554.4	570.7	535.2	543.4	560.5	*599.4*	624.6	632.8
135°	543.5	526.4	544.8	511.4	510.1	534.6	*569.4*	585.7	588.5
137.5°	516.9	502.6	521.0	496.4	490.3	514.8	*541.4*	553.7	550.3
140°	493.8	480.8	501.2	482.8	478.7	503.3	*515.5*	530.6	526.5
142.5°	467.9	459.7	483.5	471.3	467.2	490.4	*496.5*	506.7	503.3
145°	450.2	444.0	469.9	463.8	461.7	478.8	*474.7*	489.7	483.6
147.5°	435.9	431.1	454.2	452.2	452.2	464.5	*459.0*	472.0	466.6
150°	422.3	417.5	440.6	438.6	440.6	448.8	*441.3*	457.0	455.7
152.5°	408.7	403.9	425.0	422.2	424.3	432.4	*425.7*	442.7	442.1
155°	399.1	394.3	411.3	409.9	409.9	414.7	*412.0*	429.8	430.5
157.5°	393.0	389.6	402.5	401.1	401.1	403.9	*403.2*	418.9	419.6
160°	388.3	384.9	395.7	394.3	392.3	397.1	*396.4*	410.1	410.8
162.5°	383.6	380.1	392.3	389.6	388.9	389.6	*389.0*	403.3	404.0
165°	380.2	378.8	387.6	386.2	384.2	386.2	*384.2*	393.8	396.5
167.5°	380.8	378.1	386.3	384.9	382.8	380.8	*382.9*	390.4	393.1
170°	379.4	378.7	384.9	381.5	378.7	379.4	*379.5*	386.9	389.7
172.5°	380.8	380.1	386.3	382.9	380.1	380.8	*378.7*	384.2	389.0
175°	380.9	379.5	384.2	382.2	381.5	380.2	*380.1*	383.6	389.1
177.5°	383.6	382.2	384.9	382.8	380.2	380.8	*382.9*	386.3	393.9
180°	382.9	382.9	382.9	382.9	382.9	382.9	*382.9*	382.9	382.9

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Scaled Data Report

TEST NUMBER: CATALOG
CATALOG NUMBER: EHBR1-42-UNV-A1-L840-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	18.82	19.95	19.32	20.43	20.95	19.80	20.93	20.31	21.41	21.93
	3H	20.29	21.30	20.81	21.80	22.36	21.06	22.07	21.58	22.56	23.13
	4H	20.89	21.84	21.44	22.35	22.93	21.56	22.50	22.10	23.01	23.59
	6H	21.36	22.22	21.91	22.75	23.34	21.91	22.78	22.47	23.31	23.90
	8H	21.51	22.33	22.07	22.87	23.47	22.01	22.83	22.58	23.37	23.97
	12H	21.58	22.36	22.15	22.90	23.53	22.05	22.83	22.62	23.37	23.99
4H	2H	19.33	20.28	19.88	20.79	21.37	20.11	21.06	20.66	21.57	22.15
	3H	21.02	21.79	21.57	22.35	22.95	21.60	22.38	22.15	22.93	23.53
	4H	21.73	22.43	22.30	23.00	23.63	22.22	22.92	22.79	23.49	24.12
	6H	22.31	22.91	22.91	23.50	24.15	22.70	23.30	23.30	23.89	24.54
	8H	22.50	23.06	23.10	23.65	24.31	22.83	23.39	23.43	23.98	24.64
	12H	22.60	23.10	23.22	23.72	24.38	22.90	23.39	23.52	24.02	24.68
8H	4H	21.95	22.52	22.56	23.11	23.76	22.40	22.96	23.00	23.55	24.21
	6H	22.64	23.10	23.28	23.74	24.40	22.98	23.44	23.62	24.08	24.74
	8H	22.90	23.30	23.55	23.95	24.63	23.18	23.59	23.83	24.23	24.91
	12H	23.06	23.42	23.71	24.05	24.80	23.30	23.66	23.94	24.29	25.04
12H	4H	21.95	22.45	22.57	23.07	23.73	22.40	22.89	23.02	23.51	24.18
	6H	22.67	23.08	23.32	23.72	24.40	23.00	23.41	23.65	24.06	24.74
	8H	22.96	23.32	23.61	23.95	24.70	23.24	23.60	23.88	24.23	24.98

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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: SP1-2506-472-1

Test Date: 07/30/2025

Luminaire Tested: EHBR-60-L840-N

Data in this report applies to families of products including EHBR-60-L840-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

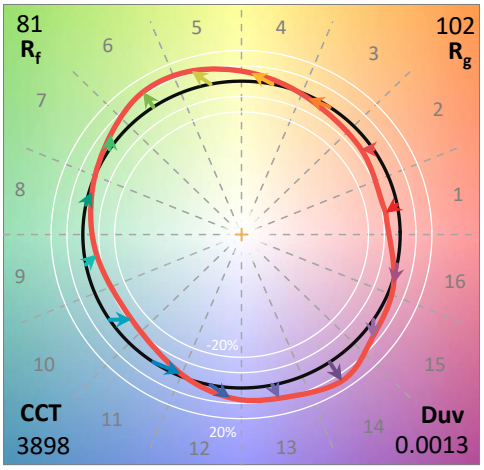
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-1
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-L840-N**
Description:	Elevate Round Highbay at, 60000 lumens, 4000K 80CRI LEDs with N lens

Spectral Parameters

CCT (K):	3898
CIE u':	0.2263
CIE v':	0.5052
Duv:	0.0013
CIE x:	0.3861
CIE y:	0.3831
CIE z:	0.2308
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	578
Purity:	30.85729
Rf:	80.7
Rg:	102.1

CRI (Ra):	82.1				
R1:	84.4	R9:	38.5		
R2:	83.5	R10:	58.9		
R3:	80.8	R11:	83.6		
R4:	83.9	R12:	54.2		
R5:	82.1	R13:	82.8		
R6:	77.3	R14:	88.2		
R7:	86.4	R15:	81.2		
R8:	78.3				



Test Conditions

Stabilization Time:	42M
Operation Time:	1H 42M
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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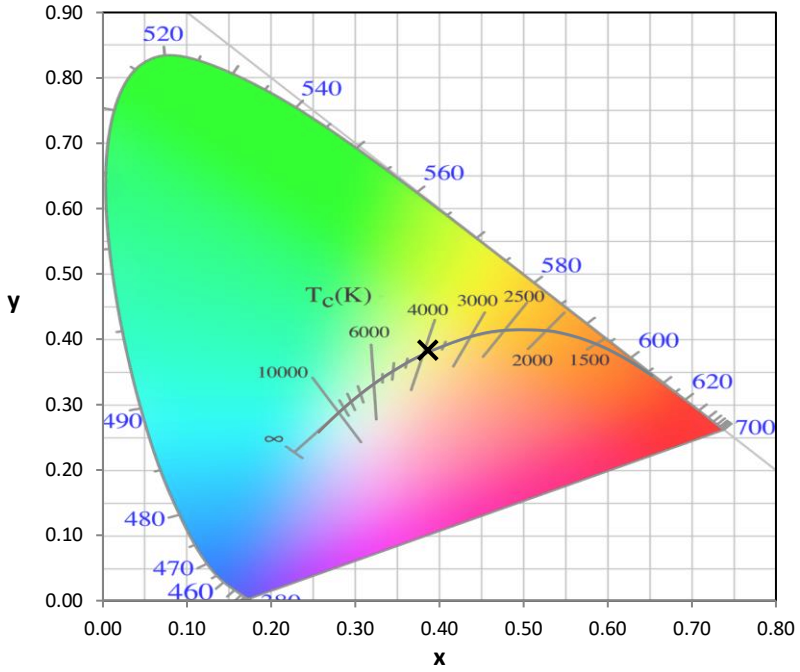
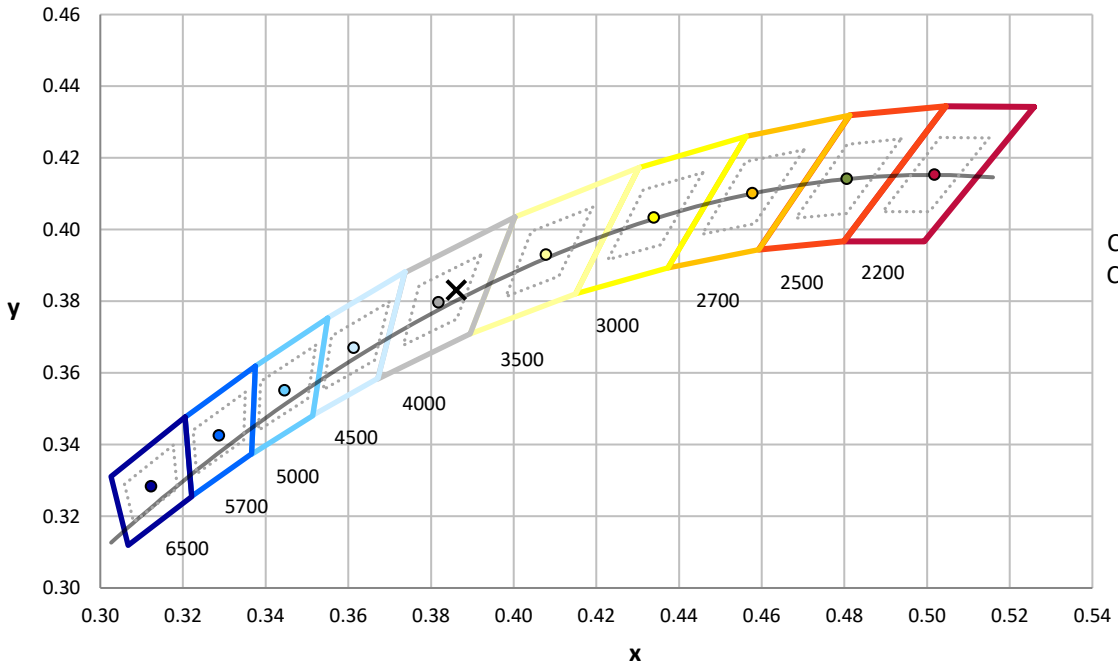
CIE 1931 Chromaticity Diagram



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



CCT = 3898K
CIE x = 0.3861
CIE y = 0.3831
Duv = 0.0013

Point lies inside the ANSI 4000K 4-step quadrangle

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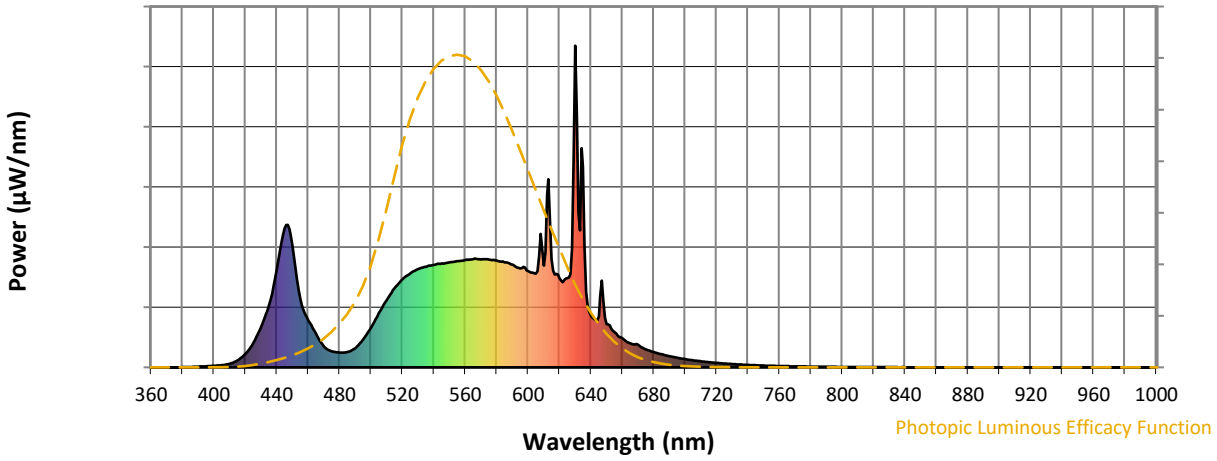
Photopic Flux vs. Wavelength



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	277	NR	750	6	NR	880	0	NR
365	0	NR	495	87	NR	625	278	NR	755	5	NR	885	0	NR
370	0	NR	500	124	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	168	NR	635	623	NR	765	4	NR	895	0	NR
380	1	NR	510	209	NR	640	162	NR	770	3	NR	900	0	NR
385	1	NR	515	246	NR	645	158	NR	775	3	NR	905	0	NR
390	2	NR	520	273	NR	650	134	NR	780	2	NR	910	0	NR
395	4	NR	525	292	NR	655	109	NR	785	2	NR	915	0	NR
400	5	NR	530	305	NR	660	91	NR	790	2	NR	920	0	NR
405	7	NR	535	313	NR	665	75	NR	795	2	NR	925	0	NR
410	11	NR	540	319	NR	670	70	NR	800	1	NR	930	0	NR
415	21	NR	545	323	NR	675	56	NR	805	1	NR	935	0	NR
420	42	NR	550	326	NR	680	47	NR	810	1	NR	940	0	NR
425	76	NR	555	330	NR	685	41	NR	815	1	NR	945	0	NR
430	125	NR	560	333	NR	690	35	NR	820	1	NR	950	0	NR
435	193	NR	565	336	NR	695	30	NR	825	1	NR	955	0	NR
440	302	NR	570	336	NR	700	26	NR	830	1	NR	960	0	NR
445	432	NR	575	335	NR	705	22	NR	835	1	NR	965	0	NR
450	380	NR	580	332	NR	710	19	NR	840	0	NR	970	0	NR
455	213	NR	585	326	NR	715	16	NR	845	0	NR	975	0	NR
460	147	NR	590	319	NR	720	14	NR	850	0	NR	980	0	NR
465	104	NR	595	307	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	299	NR	730	10	NR	860	0	NR	990	0	NR
475	50	NR	605	291	NR	735	9	NR	865	0	NR	995	0	NR
480	46	NR	610	317	NR	740	8	NR	870	0	NR	1000	0	NR
485	47	NR	615	336	NR	745	7	NR	875	0	NR			

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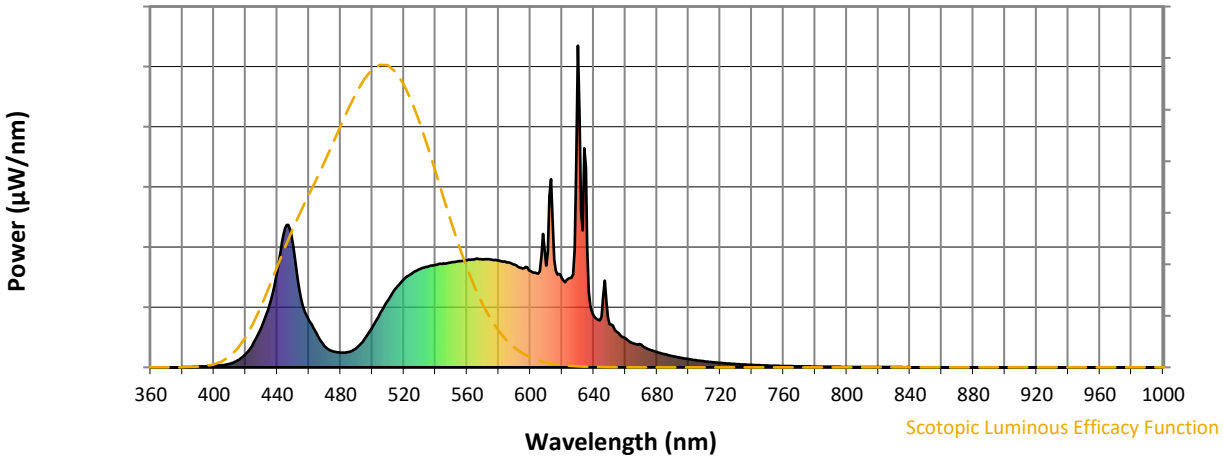
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.55**

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	277	NR	750	6	NR	880	0	NR
365	0	NR	495	87	NR	625	278	NR	755	5	NR	885	0	NR
370	0	NR	500	124	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	168	NR	635	623	NR	765	4	NR	895	0	NR
380	1	NR	510	209	NR	640	162	NR	770	3	NR	900	0	NR
385	1	NR	515	246	NR	645	158	NR	775	3	NR	905	0	NR
390	2	NR	520	273	NR	650	134	NR	780	2	NR	910	0	NR
395	4	NR	525	292	NR	655	109	NR	785	2	NR	915	0	NR
400	5	NR	530	305	NR	660	91	NR	790	2	NR	920	0	NR
405	7	NR	535	313	NR	665	75	NR	795	2	NR	925	0	NR
410	11	NR	540	319	NR	670	70	NR	800	1	NR	930	0	NR
415	21	NR	545	323	NR	675	56	NR	805	1	NR	935	0	NR
420	42	NR	550	326	NR	680	47	NR	810	1	NR	940	0	NR
425	76	NR	555	330	NR	685	41	NR	815	1	NR	945	0	NR
430	125	NR	560	333	NR	690	35	NR	820	1	NR	950	0	NR
435	193	NR	565	336	NR	695	30	NR	825	1	NR	955	0	NR
440	302	NR	570	336	NR	700	26	NR	830	1	NR	960	0	NR
445	432	NR	575	335	NR	705	22	NR	835	1	NR	965	0	NR
450	380	NR	580	332	NR	710	19	NR	840	0	NR	970	0	NR
455	213	NR	585	326	NR	715	16	NR	845	0	NR	975	0	NR
460	147	NR	590	319	NR	720	14	NR	850	0	NR	980	0	NR
465	104	NR	595	307	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	299	NR	730	10	NR	860	0	NR	990	0	NR
475	50	NR	605	291	NR	735	9	NR	865	0	NR	995	0	NR
480	46	NR	610	317	NR	740	8	NR	870	0	NR	1000	0	NR
485	47	NR	615	336	NR	745	7	NR	875	0	NR			

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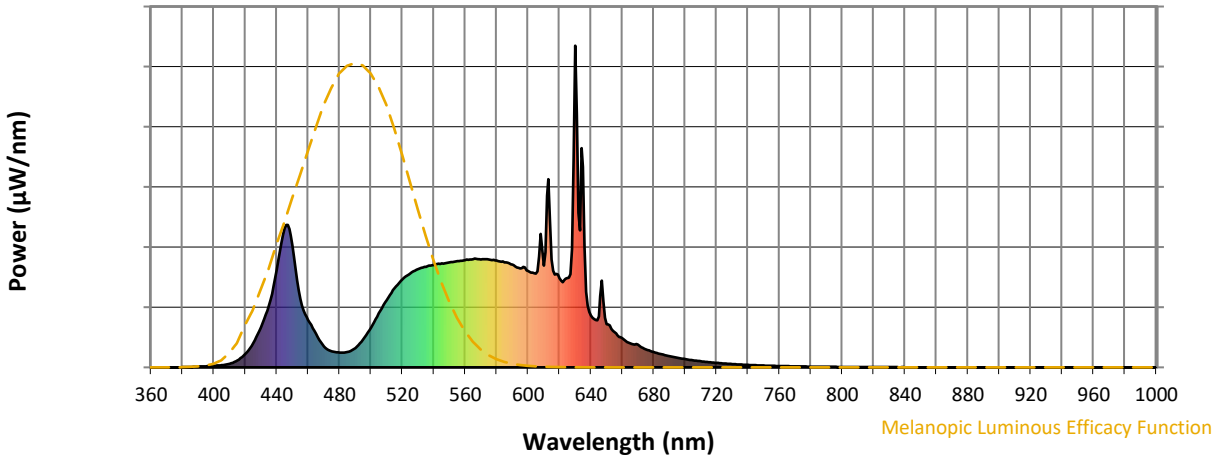
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.99**

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	277	NR	750	6	NR	880	0	NR
365	0	NR	495	87	NR	625	278	NR	755	5	NR	885	0	NR
370	0	NR	500	124	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	168	NR	635	623	NR	765	4	NR	895	0	NR
380	1	NR	510	209	NR	640	162	NR	770	3	NR	900	0	NR
385	1	NR	515	246	NR	645	158	NR	775	3	NR	905	0	NR
390	2	NR	520	273	NR	650	134	NR	780	2	NR	910	0	NR
395	4	NR	525	292	NR	655	109	NR	785	2	NR	915	0	NR
400	5	NR	530	305	NR	660	91	NR	790	2	NR	920	0	NR
405	7	NR	535	313	NR	665	75	NR	795	2	NR	925	0	NR
410	11	NR	540	319	NR	670	70	NR	800	1	NR	930	0	NR
415	21	NR	545	323	NR	675	56	NR	805	1	NR	935	0	NR
420	42	NR	550	326	NR	680	47	NR	810	1	NR	940	0	NR
425	76	NR	555	330	NR	685	41	NR	815	1	NR	945	0	NR
430	125	NR	560	333	NR	690	35	NR	820	1	NR	950	0	NR
435	193	NR	565	336	NR	695	30	NR	825	1	NR	955	0	NR
440	302	NR	570	336	NR	700	26	NR	830	1	NR	960	0	NR
445	432	NR	575	335	NR	705	22	NR	835	1	NR	965	0	NR
450	380	NR	580	332	NR	710	19	NR	840	0	NR	970	0	NR
455	213	NR	585	326	NR	715	16	NR	845	0	NR	975	0	NR
460	147	NR	590	319	NR	720	14	NR	850	0	NR	980	0	NR
465	104	NR	595	307	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	299	NR	730	10	NR	860	0	NR	990	0	NR
475	50	NR	605	291	NR	735	9	NR	865	0	NR	995	0	NR
480	46	NR	610	317	NR	740	8	NR	870	0	NR	1000	0	NR
485	47	NR	615	336	NR	745	7	NR	875	0	NR			

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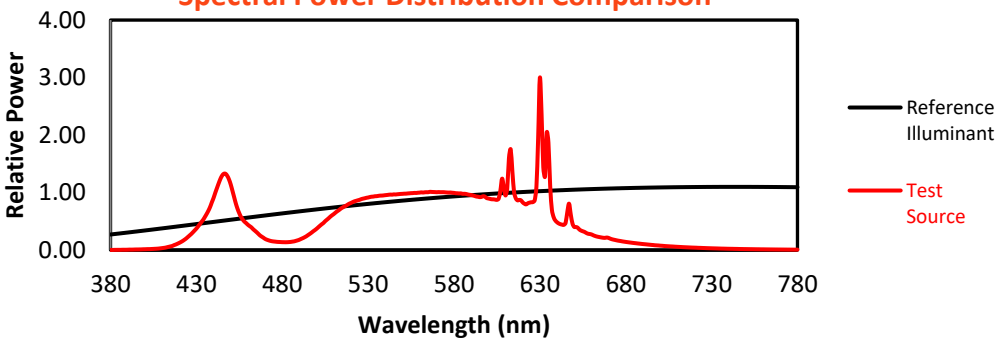
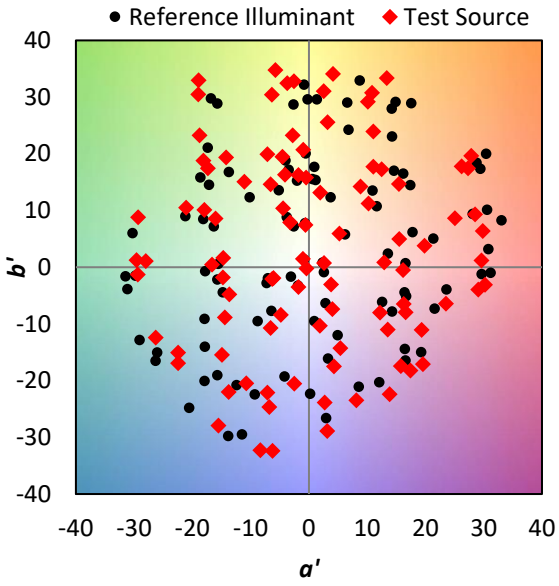
Summary

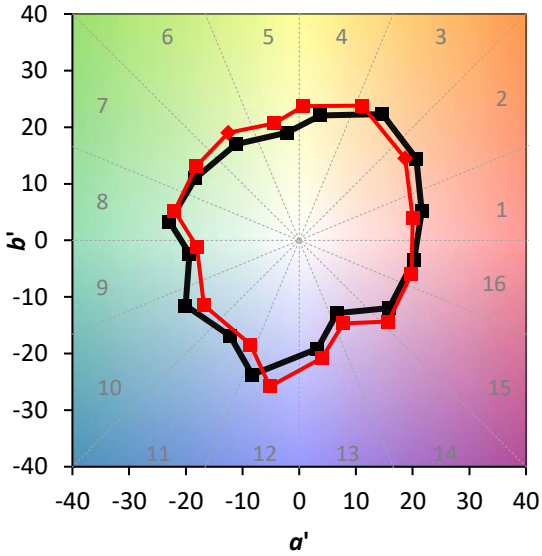
R_f = 80.7
R_g = 102.1
CIE R_a = 82.1
R_9 = 38.5

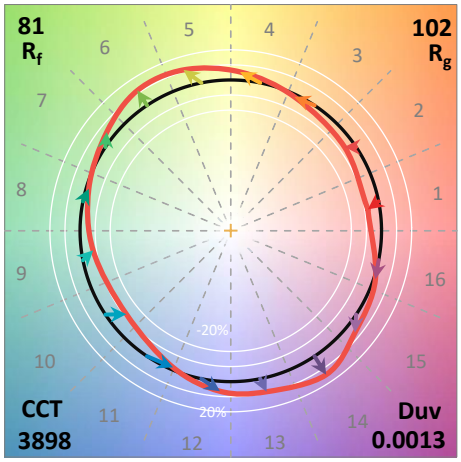
Spectral Power Distribution Comparison

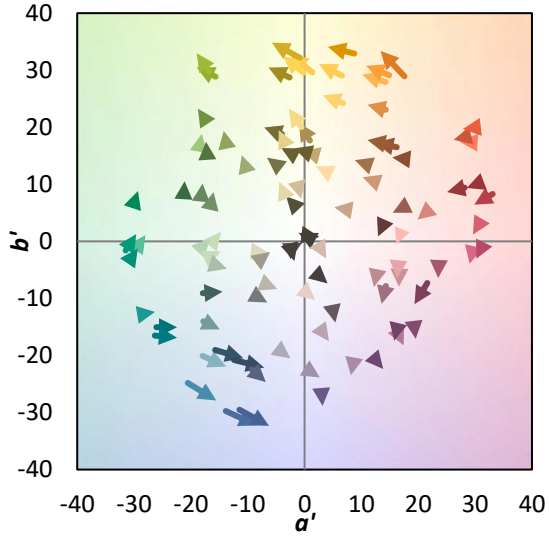


Color Vector Graphics









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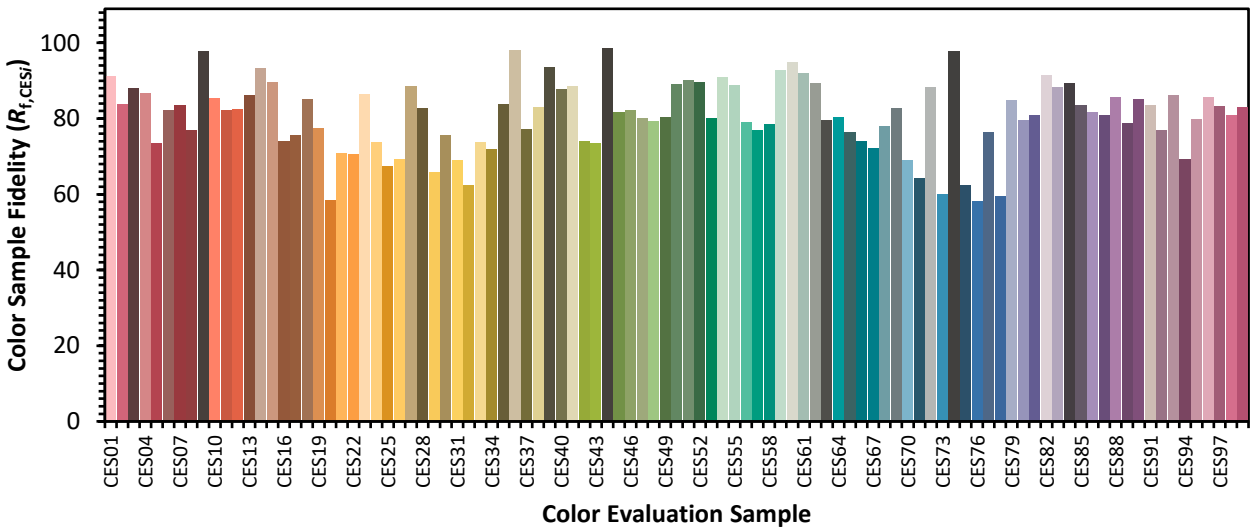
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 69	CES51 = 90	CES76 = 58
CES02 = 61	CES27 = 89	CES52 = 90	CES77 = 76
CES03 = 31	CES28 = 83	CES53 = 80	CES78 = 60
CES04 = 69	CES29 = 66	CES54 = 91	CES79 = 85
CES05 = 48	CES30 = 76	CES55 = 89	CES80 = 79
CES06 = 50	CES31 = 69	CES56 = 79	CES81 = 81
CES07 = 41	CES32 = 62	CES57 = 77	CES82 = 91
CES08 = 40	CES33 = 74	CES58 = 79	CES83 = 88
CES09 = 29	CES34 = 72	CES59 = 93	CES84 = 89
CES10 = 74	CES35 = 84	CES60 = 95	CES85 = 84
CES11 = 57	CES36 = 98	CES61 = 92	CES86 = 82
CES12 = 63	CES37 = 77	CES62 = 89	CES87 = 81
CES13 = 43	CES38 = 83	CES63 = 80	CES88 = 86
CES14 = 74	CES39 = 94	CES64 = 80	CES89 = 79
CES15 = 71	CES40 = 88	CES65 = 77	CES90 = 85
CES16 = 47	CES41 = 89	CES66 = 74	CES91 = 83
CES17 = 49	CES42 = 74	CES67 = 72	CES92 = 77
CES18 = 56	CES43 = 73	CES68 = 78	CES93 = 86
CES19 = 71	CES44 = 98	CES69 = 83	CES94 = 69
CES20 = 65	CES45 = 82	CES70 = 69	CES95 = 80
CES21 = 86	CES46 = 82	CES71 = 64	CES96 = 86
CES22 = 78	CES47 = 80	CES72 = 88	CES97 = 83
CES23 = 91	CES48 = 79	CES73 = 60	CES98 = 81
CES24 = 90	CES49 = 80	CES74 = 98	CES99 = 83
CES25 = 71	CES50 = 89	CES75 = 62	



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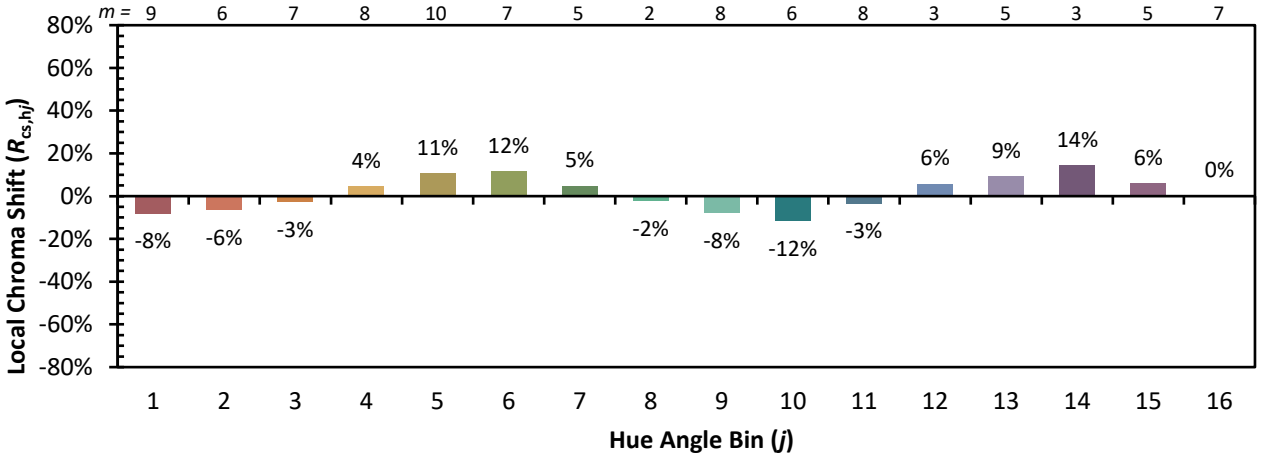
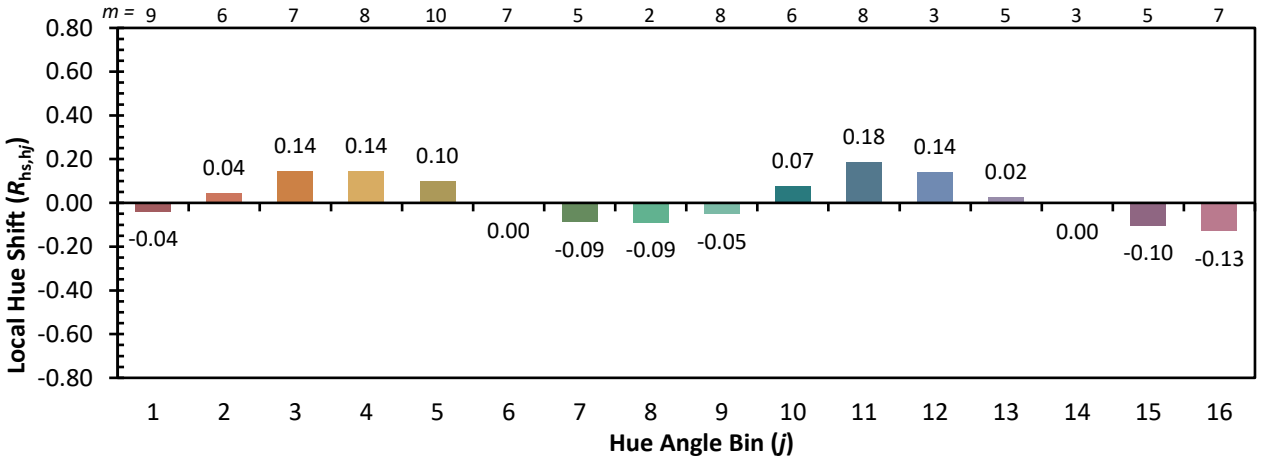
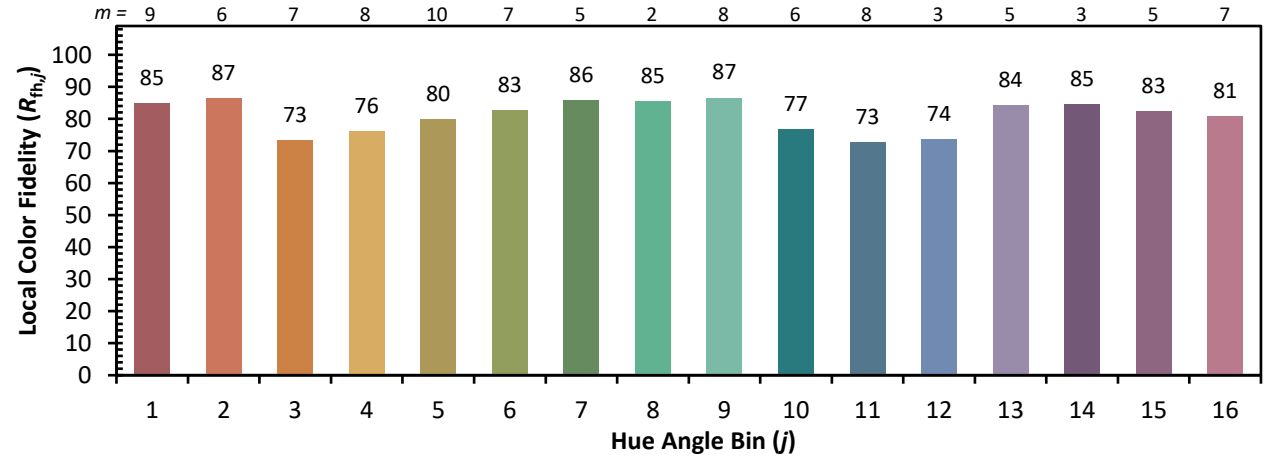
Color Rendition by Hue-Angle Bin







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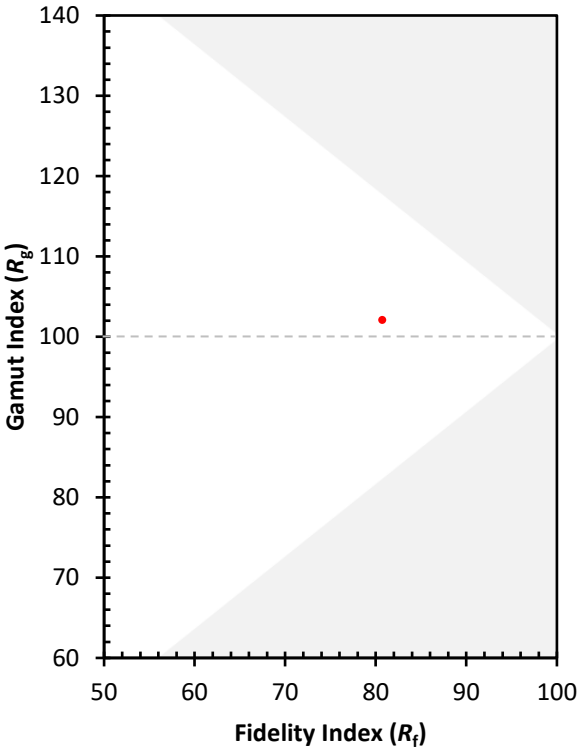
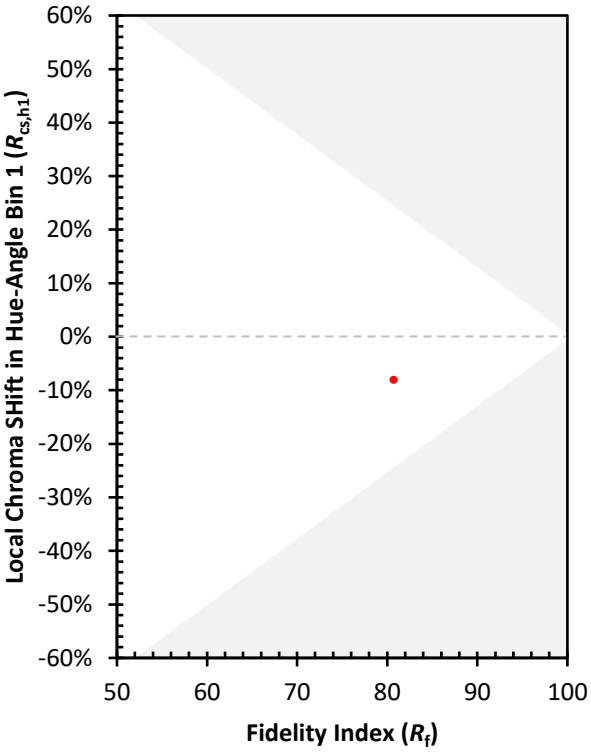
Measure Comparisons





(END OF REPORT)