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: P1433484

Luminaire Tested: EHBR1-24-UNV-ASM-L935-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:	P1433484
	REPORT IS A COMBINATION OF REPORTS P1431709 AND P1431635
Test Lab:	INNOVATION CENTER
Issue Date:	3/20/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-24-UNV-ASM-L935-UPL15
Description:	Elevate Round Highbay at, 24000 lumens, 3500K 90CRI LEDs with ASM lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	23802.9 lumens
Efficiency:	N/A
Efficacy:	173.0 lumens/watt
Spacing Criteria (0/90/45):	0.84 / 0.99 / 0.92
Luminous Opening:	Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type:	Direct

Input Watts (W):	137.6
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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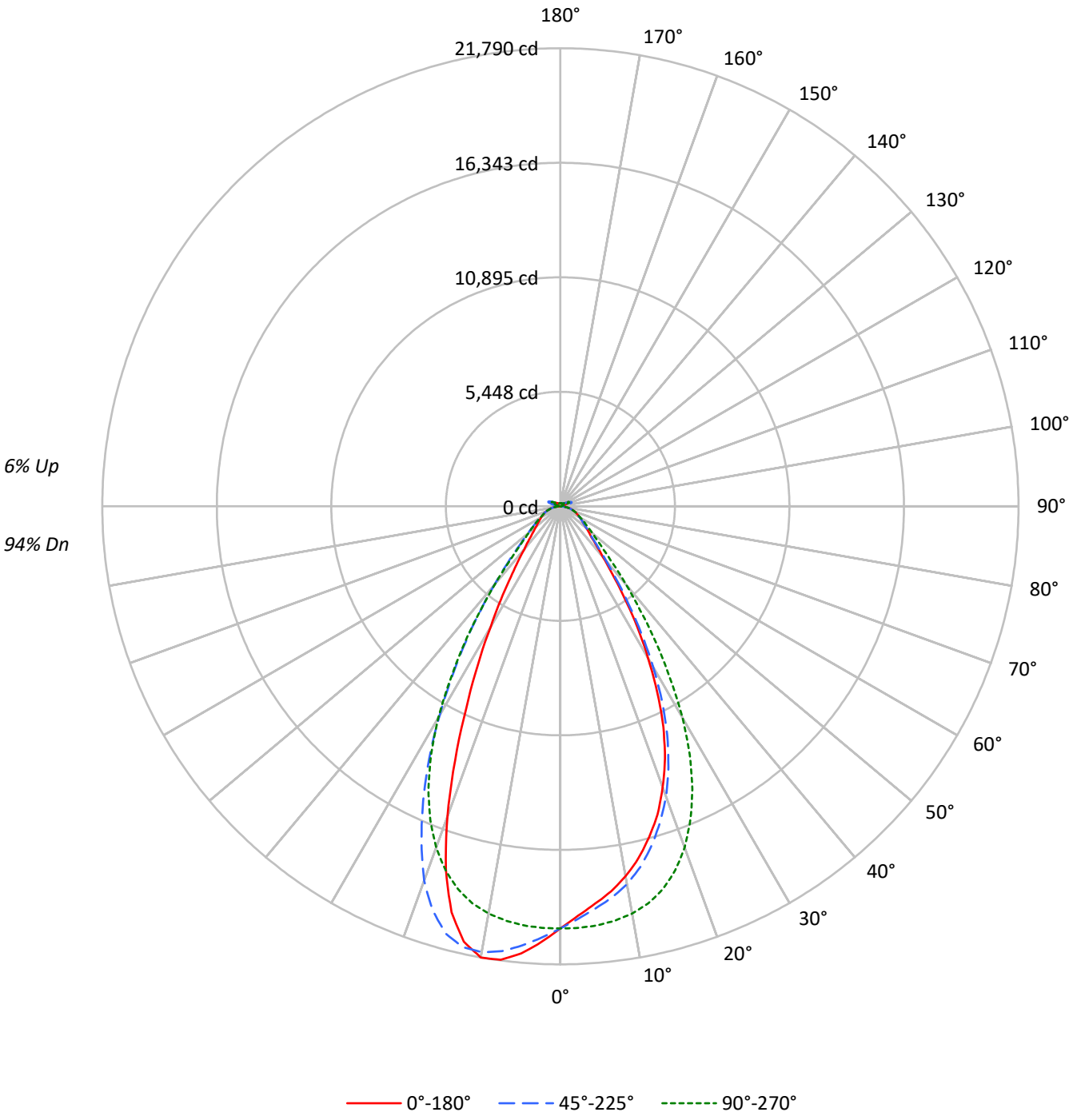
Scaled Data Report

TEST NUMBER: P1433484
CATALOG NUMBER: EHBR1-24-UNV-ASM-L935-UPL15

Luminous Intensity Polar Plot



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TEST NUMBER: P1433484
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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	114	114	114	114	108	108	108	102	102	102	97	97	97	94
1	110	107	104	101	107	104	101	99	99	97	95	94	93	91	90	89	87	85
2	104	98	93	88	101	95	91	87	91	87	84	87	84	81	83	81	79	77
3	97	89	83	79	94	87	82	78	84	79	76	81	77	74	78	74	72	70
4	91	82	76	71	89	81	75	70	78	72	68	75	71	67	72	69	66	64
5	86	76	69	64	84	75	68	64	72	67	62	70	65	61	68	64	60	58
6	81	71	64	59	79	69	63	58	67	62	57	65	60	57	63	59	56	54
7	76	66	59	54	75	65	58	54	63	57	53	61	56	52	59	55	52	50
8	72	61	55	50	71	61	54	50	59	53	49	57	52	49	56	51	48	46
9	68	58	51	47	67	57	51	46	55	50	46	54	49	45	53	48	45	43
10	65	54	48	43	64	54	47	43	52	47	43	51	46	42	50	45	42	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	94305	94305	94305	94305	94305
5°	88867	89906	93731	98226	99994
10°	84105	85887	92579	101381	102561
15°	77691	79766	89845	100340	95311
20°	69200	71531	84028	92232	76427
25°	57993	60188	74371	77362	52953
30°	43390	45906	60387	59784	34450
35°	28886	30630	43311	42612	22310
40°	18217	19469	28002	28183	15377
45°	12980	13520	17767	18530	11911
50°	10812	10897	13194	13538	10122
55°	9543	9566	10772	11057	9220
60°	8837	8761	9328	9525	8783
65°	8435	8359	8504	8669	8470
70°	8192	8051	8060	8214	8299
75°	7789	7554	7537	7805	8028
80°	7087	6594	6621	7087	7581
85°	5162	4286	4286	4897	5412

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
Vertical Angle: 45°
Luminance: 24980 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1909.5	8.0
10°-20°	5194.8	21.8
20°-30°	6092.4	25.6
30°-40°	4236.9	17.8
40°-50°	2105.5	8.8
50°-60°	1259.3	5.3
60°-70°	886.4	3.7
70°-80°	571.0	2.4
80°-90°	183.8	0.8
90°-100°	36.5	0.2
100°-110°	236.3	1.0
110°-120°	436.2	1.8
120°-130°	259.6	1.1
130°-140°	157.5	0.7
140°-150°	109.4	0.5
150°-160°	71.9	0.3
160°-170°	41.8	0.2
170°-180°	14.0	0.1
0°-30°	13196.7	55.4
0°-40°	17433.6	73.2
0°-60°	20798.5	87.4
0°-90°	22439.6	94.3
90°-120°	709.0	3.0
90°-150°	1235.6	5.2
90°-180°	1363.0	5.7
0°-180°	23802.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	20082	20082	20082	20082	20082	
5°	18975	19196	20013	20973	21350	1780
15°	16299	16734	18849	21051	19996	4545
25°	11581	12020	14852	15449	10575	5225
35°	5302	5622	7949	7821	4095	3377
45°	2100	2187	2875	2998	1927	1698
55°	1290	1293	1456	1494	1246	1170
65°	880	872	888	905	884	874
75°	549	532	531	550	566	579
85°	177	147	147	168	186	183
90°	10	27	10	30	13	14
95°	17	61	20	53	20	16
105°	82	412	109	440	57	110
115°	377	487	464	539	397	347
125°	272	262	298	290	312	248
135°	199	201	189	210	218	156
145°	167	175	172	175	180	106
155°	150	154	154	154	160	70
165°	144	147	146	146	152	41
175°	145	147	147	147	151	14
180°	147	147	147	147	147	

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Scaled Data Report

TEST NUMBER: P1433484
CATALOG NUMBER: EHBR1-24-UNV-ASM-L935-UPL15

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	20081.6	20081.6	20081.6	20081.6	20081.6	20081.6	20081.6	20081.6	20081.6
2.5°	19485.6	19498.3	19634.6	19812.0	20070.0	20329.4	20539.5	20678.1	20746.6
5°	18974.6	19045.3	19196.3	19522.1	20013.1	20532.7	20972.9	21261.1	21350.2
7.5°	18476.7	18517.8	18770.5	19182.0	19877.2	20686.8	21340.8	21677.1	21759.2
10°	17869.3	17962.4	18247.8	18733.2	19669.7	20784.0	21539.7	21780.7	21790.4
12.5°	17154.7	17277.7	17572.7	18184.9	19338.6	20749.2	21473.0	21393.9	21214.3
15°	16299.1	16407.1	16734.4	17444.6	18849.1	20544.1	21050.9	20407.4	19995.8
17.5°	15375.0	15472.9	15757.2	16539.3	18159.3	20160.0	20169.7	18896.6	18120.2
20°	14222.7	14299.5	14701.7	15469.1	17270.2	19543.9	18956.4	16627.8	15707.9
22.5°	12996.6	13068.6	13425.9	14224.6	16155.6	18713.2	17266.9	14345.5	13090.4
25°	11581.2	11620.3	12019.5	12741.7	14851.9	17695.4	15449.2	11858.7	10574.6
27.5°	9988.7	10055.3	10472.9	11210.6	13318.6	16405.3	13513.7	9690.4	8505.7
30°	8346.1	8456.4	8830.0	9490.5	11615.4	14751.4	11499.4	7717.2	6626.4
32.5°	6813.2	6892.5	7158.8	7849.0	9708.5	13130.3	9565.0	6183.5	5259.4
35°	5301.6	5381.1	5621.7	6299.5	7949.2	11102.2	7820.8	4858.7	4094.7
37.5°	4052.6	4193.0	4347.4	4897.5	6238.5	9185.8	6234.4	3912.4	3321.2
40°	3157.5	3180.0	3374.4	3726.5	4853.5	7182.5	4884.8	3123.2	2665.3
42.5°	2527.5	2588.8	2672.5	2936.1	3677.5	5492.2	3839.4	2563.3	2263.9
45°	2100.1	2124.2	2187.4	2364.4	2874.7	4041.6	2998.1	2162.6	1927.2
47.5°	1837.2	1826.7	1867.4	1999.9	2341.1	3123.6	2430.0	1855.0	1690.0
50°	1611.3	1604.9	1624.1	1712.6	1966.4	2396.8	2017.6	1619.2	1508.5
52.5°	1435.8	1441.5	1443.3	1498.3	1689.2	1954.8	1718.2	1443.0	1368.5
55°	1289.7	1296.9	1292.7	1333.4	1455.7	1643.4	1494.2	1297.6	1246.0
57.5°	1175.6	1170.3	1164.7	1186.6	1278.5	1394.0	1297.6	1173.7	1139.4
60°	1062.3	1057.4	1053.2	1067.6	1121.4	1207.2	1145.1	1065.7	1055.9
62.5°	965.2	962.1	961.7	959.1	1000.5	1054.8	1012.6	968.5	959.9
65°	880.4	877.1	872.5	868.4	887.6	938.1	904.9	881.1	884.1
67.5°	795.7	795.7	787.8	781.3	800.2	826.6	812.3	798.7	802.1
70°	718.8	719.3	706.4	701.5	707.2	735.4	720.7	722.6	728.2
72.5°	636.4	627.4	617.9	617.6	618.3	640.1	635.2	639.8	645.8
75°	548.7	538.1	532.1	525.3	530.9	547.5	549.8	556.2	565.5
77.5°	464.0	447.7	442.8	439.5	435.7	454.5	461.7	470.3	484.3
80°	372.8	355.1	346.9	342.0	348.3	357.0	372.8	379.2	398.8
82.5°	275.6	262.5	252.3	252.0	255.0	262.8	276.4	288.5	299.7
85°	177.4	156.3	147.3	150.6	147.3	159.2	168.3	182.6	186.0
87.5°	64.0	50.1	47.9	52.7	51.6	55.4	63.3	68.9	69.2
90°	10.1	16.1	27.4	17.6	10.1	17.2	29.5	17.2	12.7
92.5°	14.6	24.4	43.8	22.8	13.1	23.2	41.5	22.5	16.5
95°	16.9	28.1	61.1	30.4	19.5	28.5	52.7	24.7	19.5
97.5°	21.7	31.1	70.1	37.1	29.9	35.2	59.5	26.3	23.2
100°	28.5	36.3	109.0	45.7	39.7	39.7	108.2	30.0	26.2
102.5°	47.9	76.8	231.1	85.4	59.9	77.5	250.2	58.8	31.4
105°	82.4	161.4	411.7	178.3	108.6	176.4	439.8	149.5	56.6
107.5°	142.3	288.8	543.2	315.4	205.3	328.5	566.5	293.3	129.2
110°	265.2	383.2	569.4	433.0	328.1	458.9	618.1	401.2	259.6

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Scaled Data Report

TEST NUMBER: P1433484
CATALOG NUMBER: EHBR1-24-UNV-ASM-L935-UPL15

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	358.1	411.7	545.3	477.9	427.0	511.3	603.9	444.6	*358.5*
115°	376.9	395.9	487.0	466.7	464.0	503.8	539.4	443.1	*397.4*
117.5°	364.1	361.4	413.6	419.9	448.4	461.1	466.0	416.2	*399.7*
120°	337.1	321.7	345.3	366.7	404.9	399.7	393.0	376.5	*377.2*
122.5°	303.3	285.4	296.3	312.4	350.7	339.4	332.3	336.3	*346.5*
125°	272.3	254.0	261.5	265.6	297.5	286.2	289.9	301.9	*312.5*
127.5°	244.5	232.2	236.8	232.7	252.9	247.6	259.2	272.7	*281.8*
130°	225.9	215.3	221.4	211.3	221.1	222.1	237.5	249.1	*254.8*
132.5°	210.5	203.8	210.9	198.5	201.1	206.8	221.4	231.6	*234.9*
135°	199.3	193.7	201.1	189.9	188.8	197.0	210.5	216.9	*218.4*
137.5°	190.0	185.1	192.9	184.3	181.6	190.0	200.0	205.4	*204.2*
140°	181.7	177.6	185.9	179.1	177.6	185.8	190.3	196.3	*195.6*
142.5°	172.7	169.7	179.5	175.0	173.5	180.9	183.2	187.7	*186.6*
145°	166.8	164.5	174.6	172.0	171.6	177.2	175.4	181.0	*179.5*
147.5°	161.5	160.0	168.9	167.9	167.9	172.0	169.8	174.6	*173.1*
150°	157.0	155.4	164.0	163.0	163.7	166.7	163.3	168.9	*168.9*
152.5°	152.5	150.5	158.4	157.3	158.1	161.1	158.1	164.4	*164.0*
155°	149.5	147.6	154.0	153.2	153.5	155.1	153.5	160.1	*160.4*
157.5°	147.6	146.1	151.0	150.6	150.6	151.7	151.0	156.6	*157.0*
160°	146.2	145.0	149.1	148.7	148.4	149.8	149.5	154.4	*154.8*
162.5°	144.7	143.6	148.4	147.6	147.6	147.6	147.6	152.5	*153.3*
165°	143.8	143.5	146.9	146.9	146.5	147.3	146.5	150.3	*151.7*
167.5°	143.8	143.1	146.8	146.8	146.5	145.7	146.6	149.9	*151.4*
170°	143.9	143.5	146.5	146.2	145.5	145.8	145.7	149.2	*150.6*
172.5°	144.7	144.3	147.6	146.9	146.6	146.6	146.2	148.8	*151.0*
175°	144.7	144.3	146.9	146.9	147.3	146.9	146.9	148.7	*151.1*
177.5°	145.7	145.4	146.9	146.9	146.5	147.3	148.0	150.0	*152.9*
180°	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3	*147.3*

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Scaled Data Report

TEST NUMBER: P1433484
CATALOG NUMBER: EHBR1-24-UNV-ASM-L935-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	15.83	16.95	16.30	17.38	17.85	16.60	17.72	17.06	18.15	18.61
	3H	17.65	18.64	18.13	19.09	19.60	18.16	19.15	18.64	19.60	20.11
	4H	18.38	19.31	18.89	19.78	20.31	18.80	19.73	19.31	20.20	20.73
	6H	18.95	19.81	19.47	20.29	20.83	19.30	20.15	19.82	20.64	21.17
	8H	19.14	19.94	19.67	20.45	20.99	19.46	20.26	19.99	20.77	21.31
	12H	19.24	20.01	19.77	20.50	21.07	19.54	20.31	20.07	20.80	21.37
4H	2H	16.35	17.28	16.85	17.74	18.27	16.98	17.91	17.48	18.37	18.90
	3H	18.39	19.15	18.90	19.67	20.21	18.79	19.55	19.30	20.07	20.61
	4H	19.25	19.94	19.79	20.47	21.05	19.57	20.26	20.11	20.79	21.37
	6H	19.95	20.54	20.51	21.09	21.69	20.21	20.80	20.77	21.35	21.95
	8H	20.17	20.73	20.74	21.28	21.88	20.41	20.97	20.98	21.52	22.12
	12H	20.31	20.80	20.89	21.38	21.99	20.53	21.02	21.11	21.60	22.21
8H	4H	19.51	20.07	20.08	20.62	21.22	19.81	20.37	20.38	20.92	21.53
	6H	20.33	20.78	20.93	21.38	21.99	20.58	21.03	21.18	21.63	22.24
	8H	20.63	21.03	21.25	21.64	22.27	20.86	21.26	21.48	21.87	22.50
	12H	20.83	21.18	21.44	21.78	22.48	21.05	21.40	21.66	21.99	22.69
12H	4H	19.52	20.01	20.10	20.59	21.20	19.82	20.31	20.41	20.90	21.51
	6H	20.37	20.77	20.98	21.38	22.01	20.62	21.02	21.24	21.64	22.26
	8H	20.71	21.06	21.32	21.66	22.36	20.95	21.30	21.56	21.90	22.60

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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: SP1-2506-472-6

Test Date: 08/01/2025

Luminaire Tested: EHBR-60-L935-N

Data in this report applies to families of products including EHBR-60-L935-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

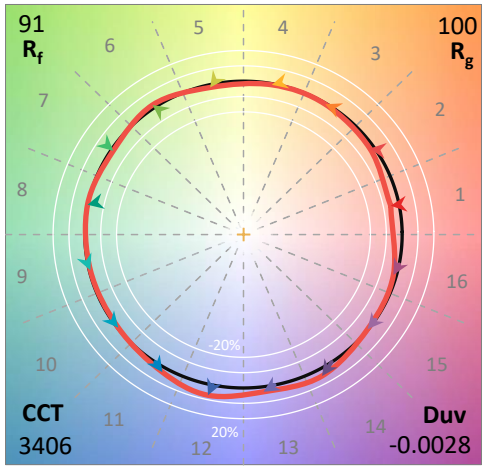
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-6
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-L935-N**
Description:	Elevate Round Highbay at, 60000 lumens, 3500K 90CRI LEDs with N lens

Spectral Parameters

CCT (K):	3406
CIE u':	0.2394
CIE v':	0.5094
Duv:	-0.0028
CIE x:	0.4076
CIE y:	0.3856
CIE z:	0.2068
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	582
Purity:	38.0517
Rf:	91.3
Rg:	100

CRI (Ra):	94.6				
R1:	96.6	R9:	63.8		
R2:	98.4	R10:	94.7		
R3:	98.1	R11:	96.6		
R4:	95.8	R12:	80.9		
R5:	96.2	R13:	97.4		
R6:	95.4	R14:	98.3		
R7:	91.8	R15:	93.1		
R8:	84.4				



Test Conditions

Stabilization Time:	35M
Operation Time:	1H 35M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-6

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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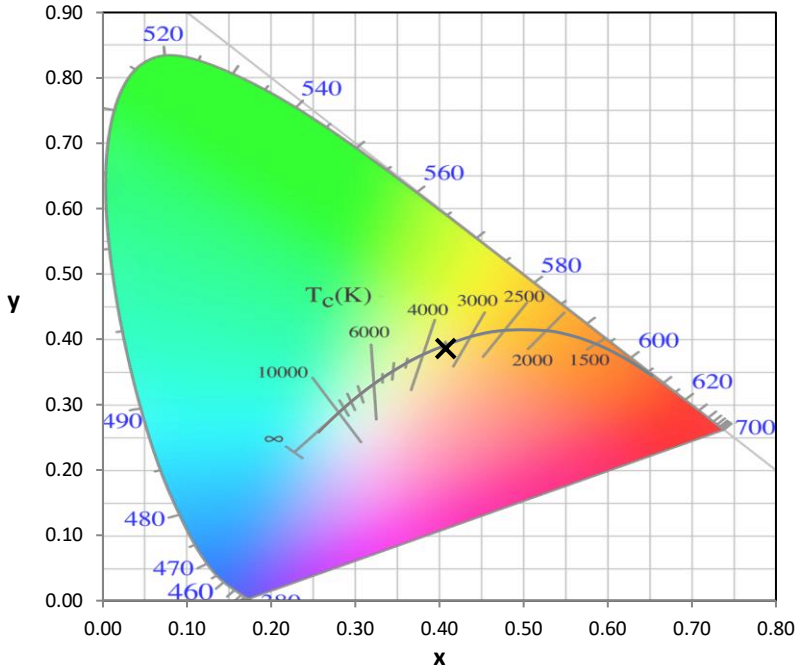
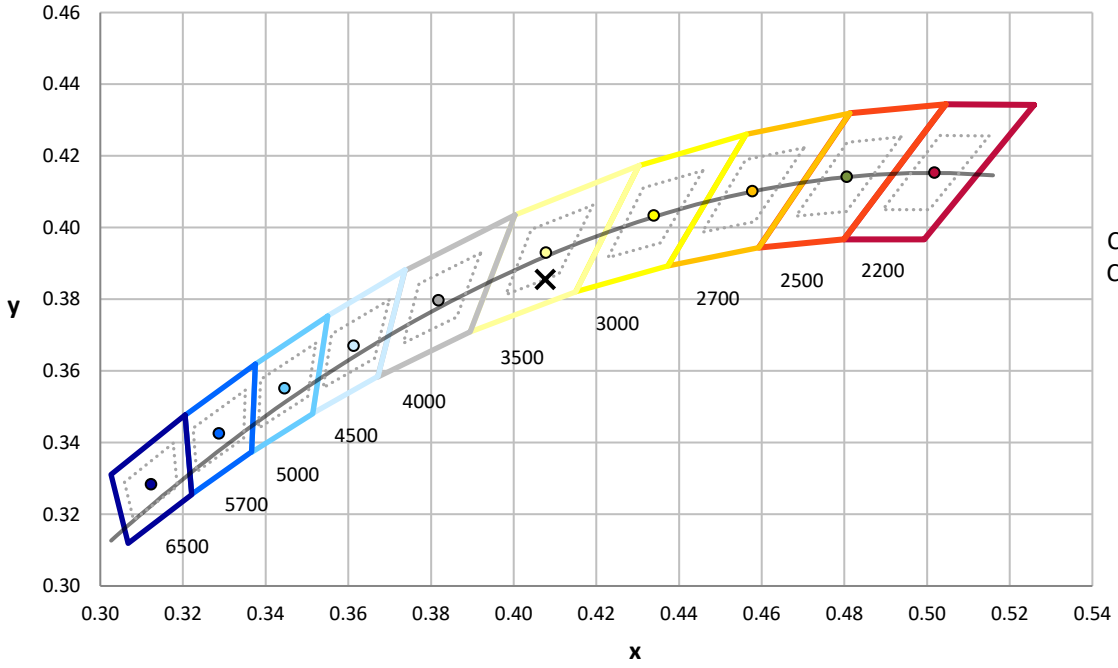
CIE 1931 Chromaticity Diagram



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



CCT = 3406K
CIE x = 0.4076
CIE y = 0.3856
Duv = -0.0028

Point lies inside the ANSI 3500K 4-step quadrangle

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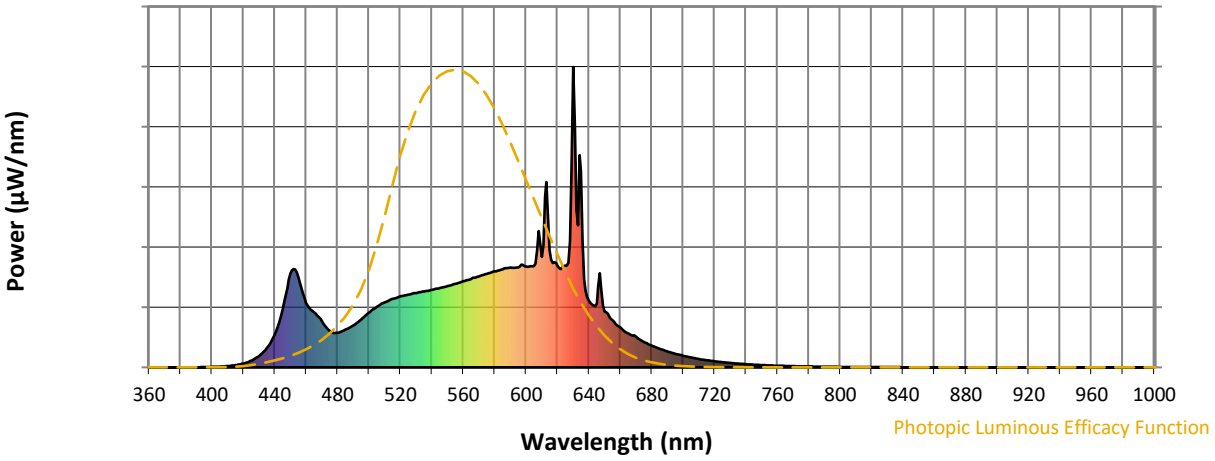
Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

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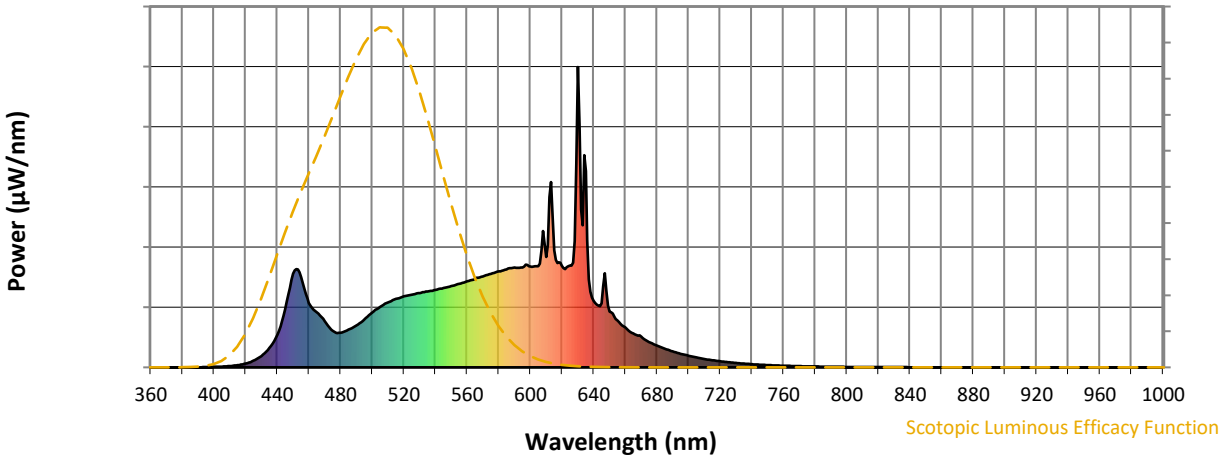
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.62**

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	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

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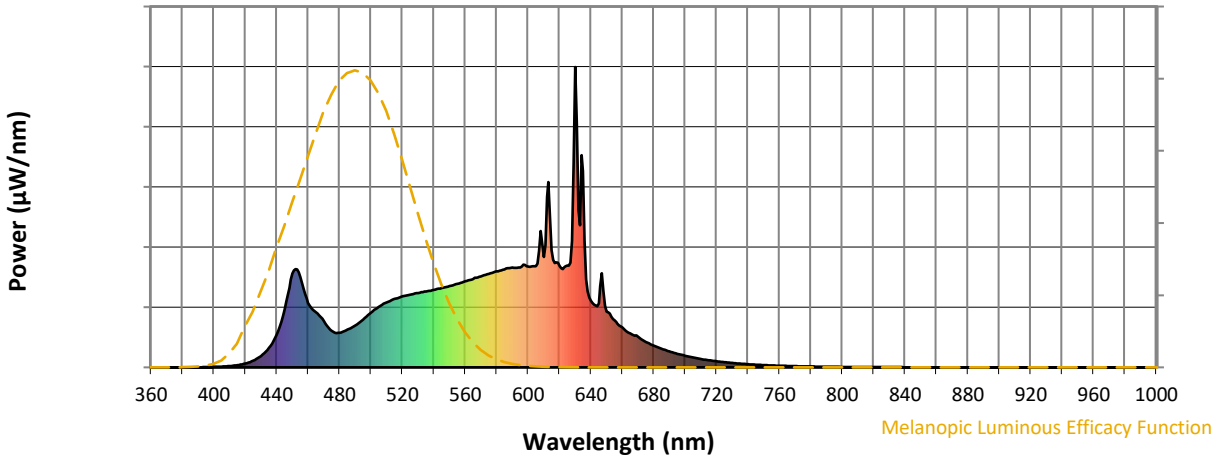
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.3**

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	140	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	159	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	182	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	202	NR	635	653	NR	765	5	NR	895	0	NR
380	0	NR	510	216	NR	640	222	NR	770	4	NR	900	0	NR
385	0	NR	515	228	NR	645	214	NR	775	3	NR	905	0	NR
390	0	NR	520	236	NR	650	185	NR	780	3	NR	910	0	NR
395	1	NR	525	242	NR	655	157	NR	785	3	NR	915	0	NR
400	2	NR	530	248	NR	660	133	NR	790	2	NR	920	0	NR
405	3	NR	535	253	NR	665	113	NR	795	2	NR	925	0	NR
410	4	NR	540	258	NR	670	103	NR	800	2	NR	930	0	NR
415	7	NR	545	264	NR	675	85	NR	805	1	NR	935	0	NR
420	13	NR	550	270	NR	680	72	NR	810	1	NR	940	0	NR
425	22	NR	555	278	NR	685	62	NR	815	1	NR	945	0	NR
430	38	NR	560	286	NR	690	53	NR	820	1	NR	950	0	NR
435	65	NR	565	295	NR	695	45	NR	825	1	NR	955	0	NR
440	108	NR	570	303	NR	700	39	NR	830	1	NR	960	0	NR
445	193	NR	575	311	NR	705	33	NR	835	1	NR	965	0	NR
450	312	NR	580	319	NR	710	28	NR	840	1	NR	970	0	NR
455	300	NR	585	326	NR	715	24	NR	845	0	NR	975	0	NR
460	214	NR	590	332	NR	720	20	NR	850	0	NR	980	0	NR
465	184	NR	595	333	NR	725	17	NR	855	0	NR	985	0	NR
470	153	NR	600	336	NR	730	15	NR	860	0	NR	990	0	NR
475	122	NR	605	337	NR	735	12	NR	865	0	NR	995	0	NR
480	115	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	125	NR	615	390	NR	745	9	NR	875	0	NR			

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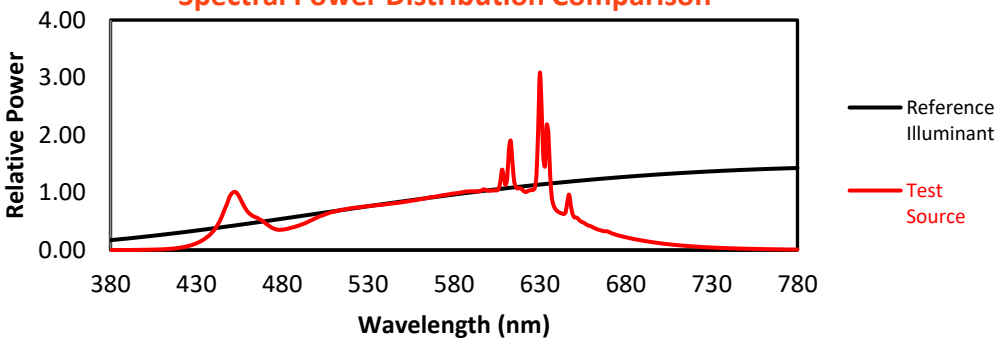
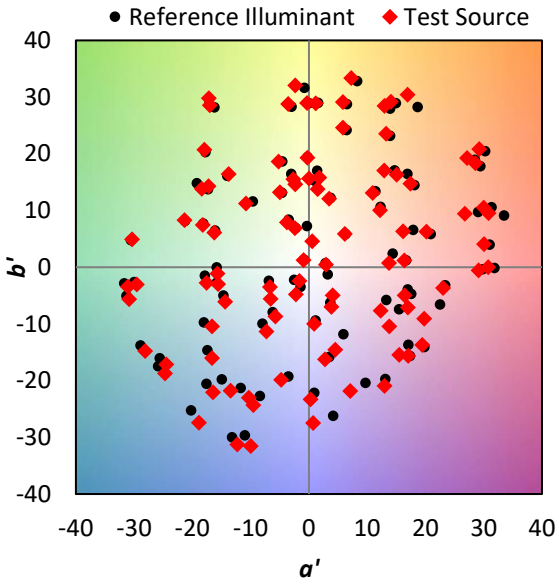
Summary

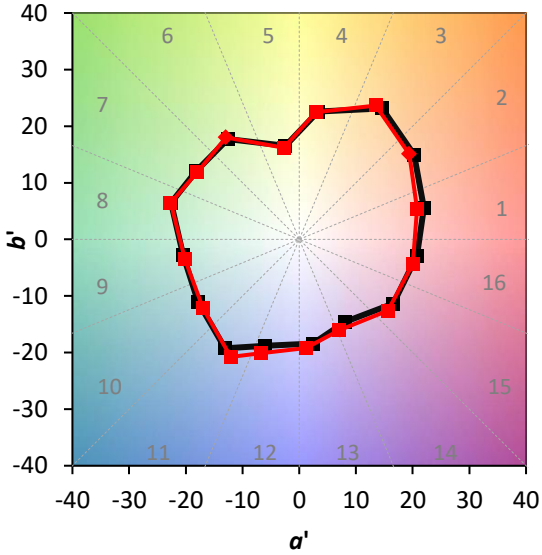
R_f = 91.3
R_g = 100
CIE R_a = 94.6
R_9 = 63.8

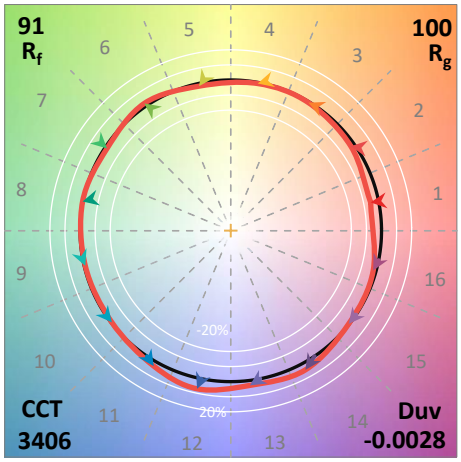
Spectral Power Distribution Comparison

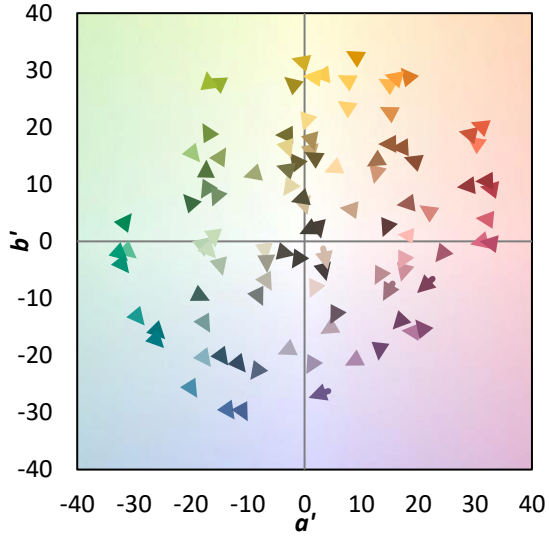


Color Vector Graphics









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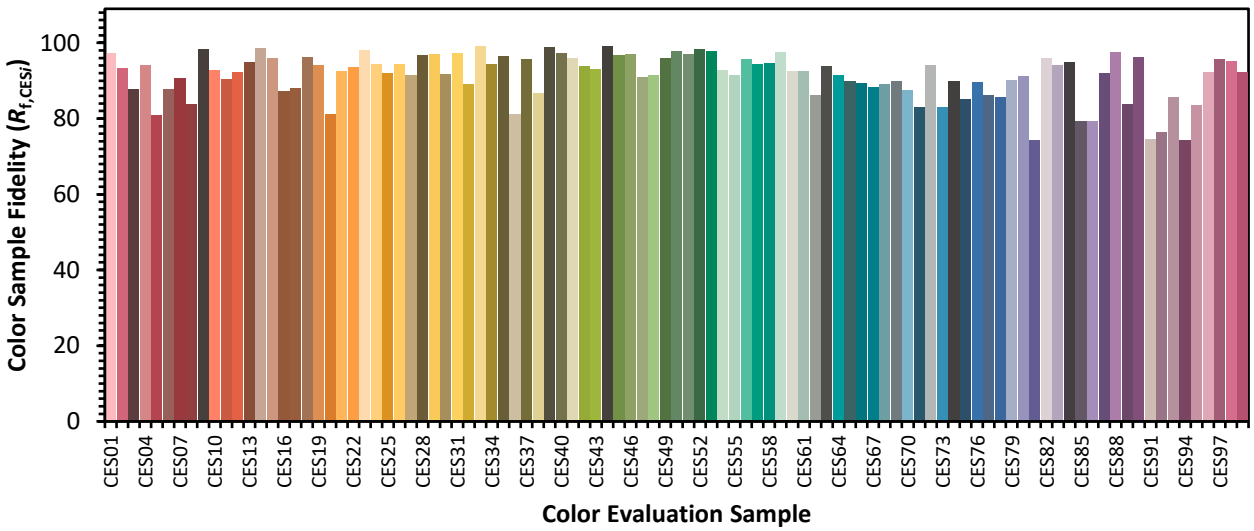
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 94	CES51 = 97	CES76 = 90
CES02 = 63	CES27 = 92	CES52 = 98	CES77 = 86
CES03 = 31	CES28 = 97	CES53 = 98	CES78 = 86
CES04 = 70	CES29 = 97	CES54 = 93	CES79 = 90
CES05 = 50	CES30 = 92	CES55 = 92	CES80 = 91
CES06 = 51	CES31 = 97	CES56 = 96	CES81 = 74
CES07 = 43	CES32 = 89	CES57 = 94	CES82 = 96
CES08 = 41	CES33 = 99	CES58 = 95	CES83 = 94
CES09 = 29	CES34 = 94	CES59 = 98	CES84 = 95
CES10 = 75	CES35 = 97	CES60 = 92	CES85 = 79
CES11 = 58	CES36 = 81	CES61 = 93	CES86 = 79
CES12 = 64	CES37 = 96	CES62 = 86	CES87 = 92
CES13 = 44	CES38 = 87	CES63 = 94	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 91	CES89 = 84
CES15 = 72	CES40 = 97	CES65 = 90	CES90 = 96
CES16 = 48	CES41 = 96	CES66 = 89	CES91 = 75
CES17 = 49	CES42 = 94	CES67 = 88	CES92 = 76
CES18 = 56	CES43 = 93	CES68 = 89	CES93 = 86
CES19 = 71	CES44 = 99	CES69 = 90	CES94 = 74
CES20 = 67	CES45 = 97	CES70 = 88	CES95 = 83
CES21 = 86	CES46 = 97	CES71 = 83	CES96 = 92
CES22 = 78	CES47 = 91	CES72 = 94	CES97 = 96
CES23 = 91	CES48 = 91	CES73 = 83	CES98 = 95
CES24 = 90	CES49 = 96	CES74 = 90	CES99 = 92
CES25 = 71	CES50 = 98	CES75 = 85	



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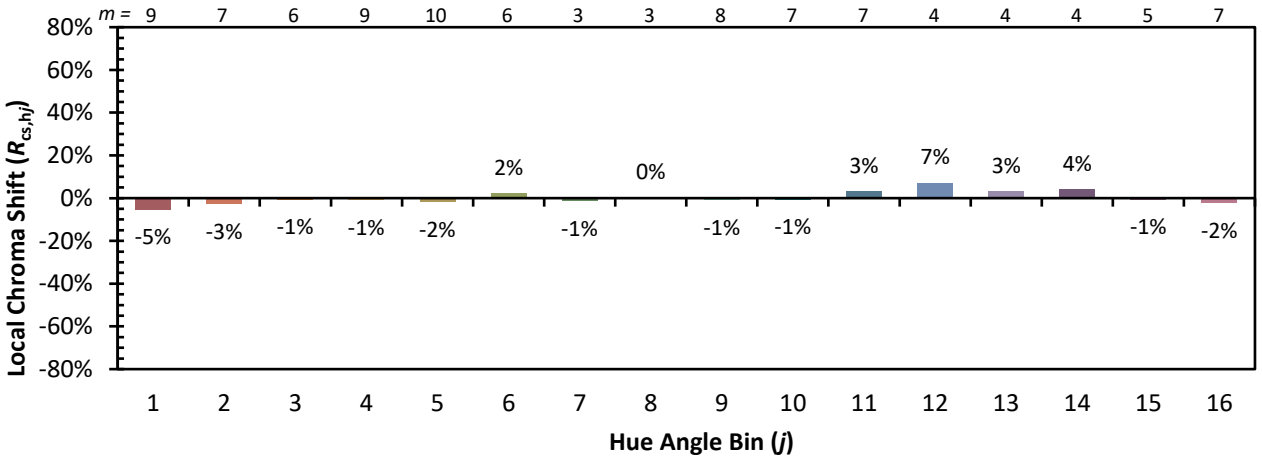
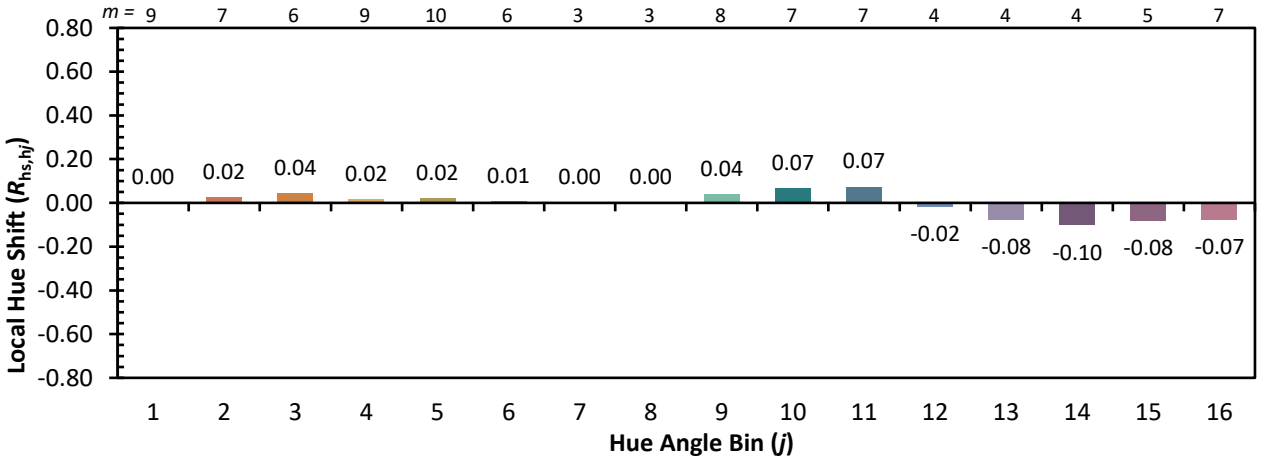
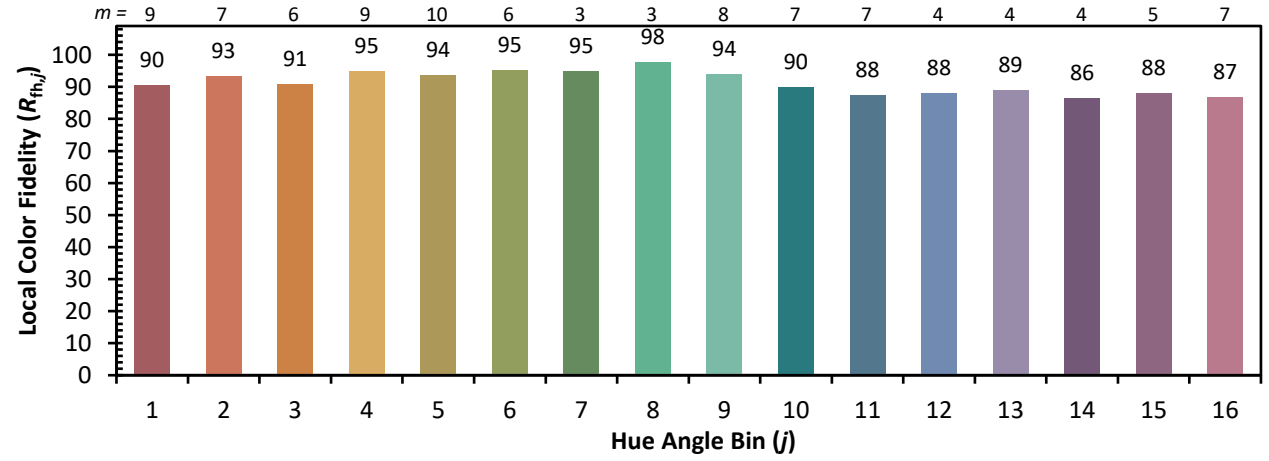
Color Rendition by Hue-Angle Bin







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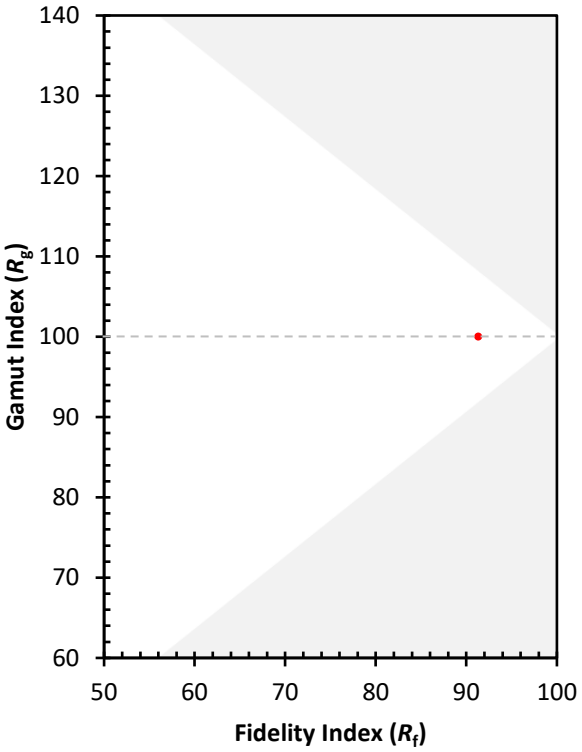
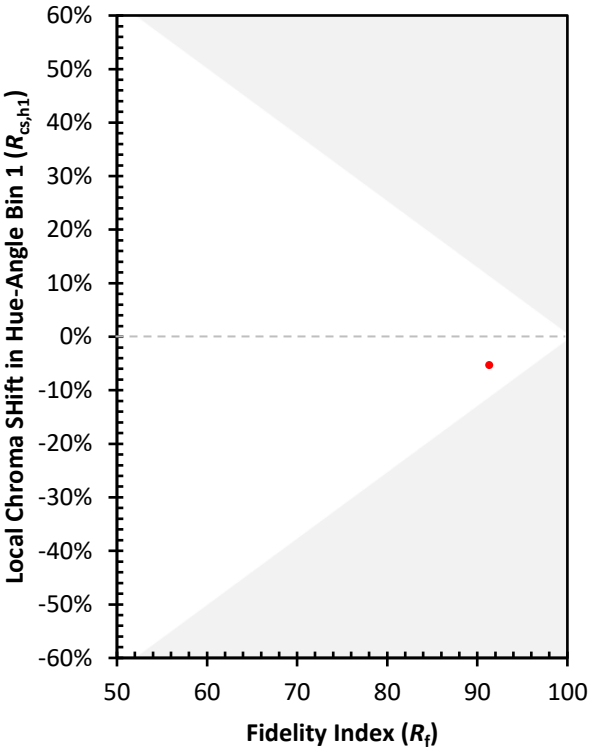
Measure Comparisons





(END OF REPORT)