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: P1433930

Luminaire Tested: EHBR1-54-UNV-A1-L940

Issue Date: 3/13/2026

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:	P1433930
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-654-5)
Test Lab:	INNOVATION CENTER
Issue Date:	3/13/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	EHBR1-54-UNV-A1-L940
Description:	Elevate Round Highbay at, 54000 lumens, 4000K 90CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	49972.6 lumens
Efficiency:	N/A
Efficacy:	168.8 lumens/watt
Spacing Criteria (0/90/45):	0.8 / 1.07 / 0.95
Luminous Opening:	Circular (Dia: 1.71' x H: 0')
CIE Type:	Direct

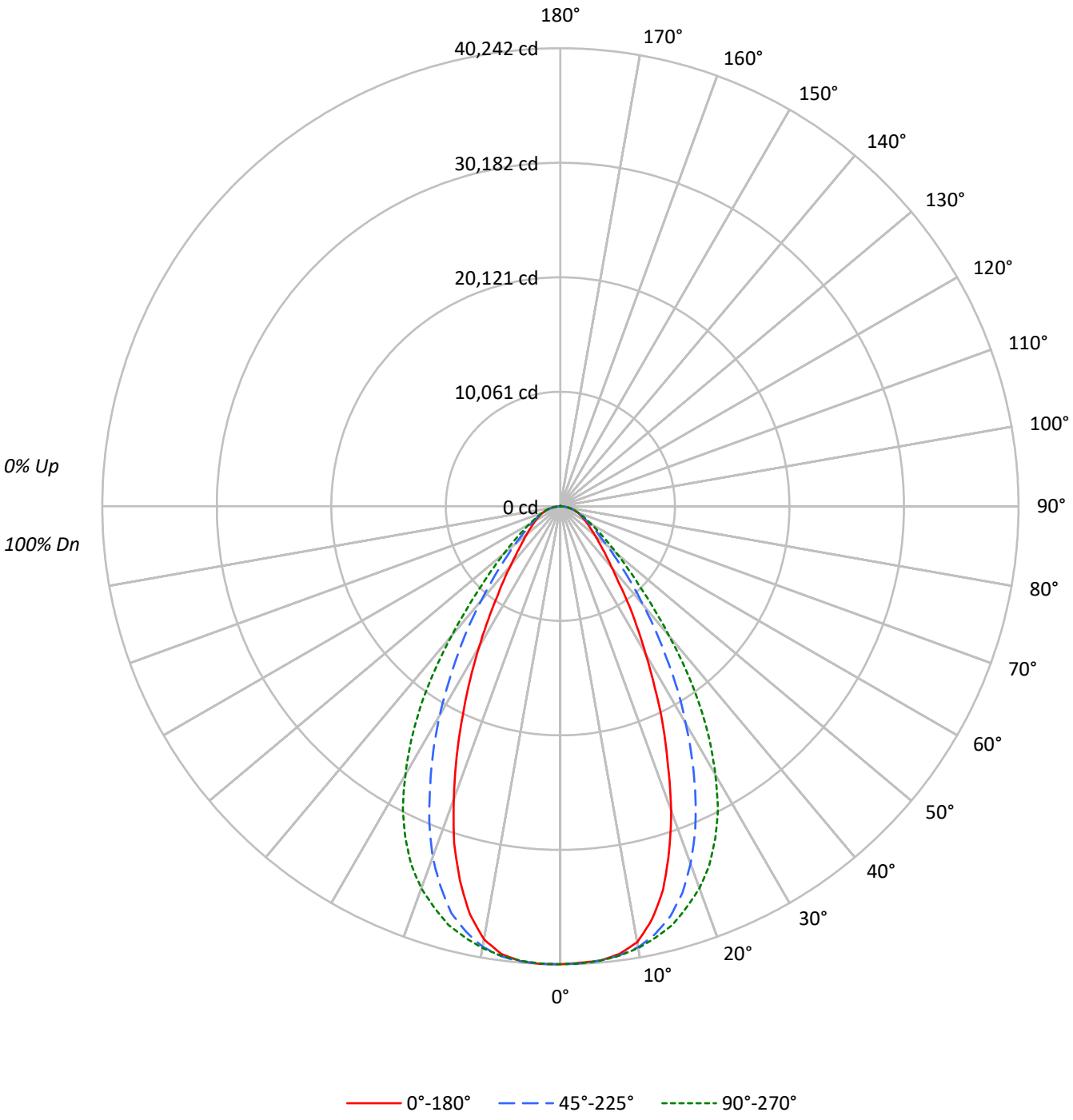
Input Watts (W):	296
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1433930
CATALOG NUMBER: EHBR1-54-UNV-A1-L940

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1433930
CATALOG NUMBER: EHBR1-54-UNV-A1-L940

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80
3	98	90	83	78	95	88	82	78	85	81	77	83	79	75	80	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	188902	188902	188902	188902	188902
5°	188876	188849	188856	189190	189075
10°	185420	187581	187879	187348	184207
15°	169466	181290	185022	179837	165574
20°	142210	167022	178432	163877	136674
25°	110796	145488	166757	140176	105056
30°	81407	119431	147655	114899	77267
35°	59196	92861	122415	88862	55332
40°	43007	69260	91102	66337	41680
45°	34271	51241	64345	49021	33085
50°	28813	39012	47192	37725	28375
55°	25571	31303	36318	30779	25225
60°	23533	26666	29531	26501	23699
65°	22608	24163	25493	24238	22824
70°	22302	22835	23541	22963	22522
75°	22073	21936	22073	21998	22288
80°	22192	20597	20142	20918	22192
85°	20017	16978	16795	17248	20610

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 67418 cd/sqm

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1433930
CATALOG NUMBER: EHBR1-54-UNV-A1-L940

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3798.7	7.6
10°-20°	10209.4	20.4
20°-30°	12414.6	24.8
30°-40°	10112.6	20.2
40°-50°	6071.6	12.1
50°-60°	3494.3	7.0
60°-70°	2186.8	4.4
70°-80°	1287.9	2.6
80°-90°	376.7	0.8
90°-100°	0.2	0.0
100°-110°	0.2	0.0
110°-120°	0.2	0.0
120°-130°	0.6	0.0
130°-140°	2.6	0.0
140°-150°	4.6	0.0
150°-160°	5.1	0.0
160°-170°	4.6	0.0
170°-180°	1.9	0.0
0°-30°	26422.7	52.9
0°-40°	36535.3	73.1
0°-60°	46101.2	92.3
0°-90°	49952.6	100.0
90°-120°	0.6	0.0
90°-150°	8.3	0.0
90°-180°	20.0	0.0
0°-180°	49972.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	40225	40225	40225	40225	40225	
5°	40067	40061	40063	40133	40109	3787
15°	34857	37289	38057	36990	34056	9590
25°	21383	28078	32183	27053	20275	9742
35°	10326	16198	21353	15500	9652	6533
45°	5160	7716	9689	7381	4982	4071
55°	3123	3823	4436	3759	3081	2823
65°	2035	2174	2294	2181	2054	2023
75°	1216	1209	1216	1212	1228	1289
85°	372	315	312	320	382	396
90°	2	0	0	0	1	19
95°	2	0	0	0	1	1
105°	2	0	0	0	2	2
115°	2	0	0	0	2	2
125°	2	0	0	1	2	2
135°	4	3	3	3	4	3
145°	8	7	7	8	8	5
155°	13	10	8	11	14	6
165°	19	16	14	17	19	5
175°	25	22	18	22	25	2
180°	23	23	23	23	23	

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1433930
CATALOG NUMBER: EHBR1-54-UNV-A1-L940

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	40225.3	40225.3	40225.3	40225.3	40225.3	40225.3	*40225.3*	40225.3	40225.3
2.5°	*40136.8*	*40173.0*	*40188.2*	*40196.6*	*40205.9*	*40231.2*	*40242.1*	*40224.5*	*40239.6*
5°	40066.8	40069.4	40061.0	40098.9	40062.6	40088.0	*40133.4*	40115.7	40109.0
7.5°	39659.1	39743.4	39793.0	39805.7	39812.4	39843.6	*39875.7*	39694.5	39667.5
10°	38884.0	39024.7	39337.3	39426.6	39399.6	39450.2	*39288.4*	38814.9	38629.6
12.5°	37184.7	37679.2	38491.4	38852.8	38787.1	38831.8	*38280.8*	37281.6	36706.9
15°	34856.9	35582.3	37289.1	38001.9	38056.7	38001.9	*36990.1*	35043.0	34056.5
17.5°	31762.3	33101.9	35615.1	36998.5	36919.3	36945.4	*35024.5*	32146.5	31017.6
20°	28456.4	29884.4	33421.2	35728.8	35704.4	35557.9	*32791.9*	28996.4	27348.5
22.5°	24717.3	26559.1	30907.2	34167.7	34158.4	33914.1	*30073.2*	25556.4	23782.1
25°	21382.7	23189.0	28078.0	32255.2	32182.8	31904.7	*27052.8*	22124.9	20274.9
27.5°	17935.2	19813.1	25057.7	30014.2	29964.4	29661.1	*24165.5*	18917.5	17156.7
30°	15012.5	16729.6	22024.7	27548.1	27229.7	27195.1	*21188.9*	15947.7	14249.2
32.5°	12508.7	13980.5	19165.3	24969.2	24405.6	24566.5	*18222.4*	13464.1	11780.7
35°	10325.7	11622.3	16198.0	21986.8	21353.2	21561.4	*15500.4*	11047.7	9651.7
37.5°	8380.3	9627.3	13683.1	19086.1	18117.2	18509.8	*13105.9*	9226.3	8107.4
40°	7015.5	8004.6	11298.0	15903.1	14860.9	15500.4	*10821.1*	7695.4	6799.0
42.5°	6045.0	6690.3	9324.8	12864.2	12064.6	12517.9	*8918.7*	6433.4	5762.7
45°	5160.3	5675.1	7715.6	10151.3	9688.7	10109.2	*7381.2*	5485.5	4981.7
47.5°	4507.4	4904.2	6351.6	8197.6	7910.2	8043.4	*6164.6*	4787.1	4377.6
50°	3943.8	4250.4	5339.8	6616.2	6459.5	6541.2	*5163.7*	4165.3	3883.9
52.5°	3505.7	3730.6	4478.7	5437.6	5360.0	5372.6	*4400.4*	3664.1	3460.1
55°	3123.2	3279.9	3823.3	4454.3	4435.8	4439.1	*3759.3*	3247.0	3081.0
57.5°	2788.7	2918.5	3285.7	3741.6	3714.6	3720.5	*3255.5*	2883.9	2776.9
60°	2505.6	2592.4	2839.2	3161.9	3144.2	3136.7	*2821.6*	2560.3	2523.3
62.5°	2254.5	2310.1	2481.2	2710.3	2676.6	2684.3	*2480.3*	2312.6	2257.9
65°	2034.6	2054.0	2174.5	2316.1	2294.2	2312.6	*2181.3*	2066.7	2054.0
67.5°	1819.8	1839.2	1910.0	2005.2	1979.8	1995.0	*1911.6*	1844.2	1833.3
70°	1624.3	1623.5	1663.1	1714.5	1714.5	1717.0	*1672.4*	1632.0	1640.3
72.5°	1422.2	1417.1	1428.9	1463.4	1454.1	1486.2	*1439.0*	1426.4	1428.0
75°	1216.5	1202.3	1209.0	1226.7	1216.5	1233.4	*1212.4*	1228.4	1228.4
77.5°	1022.8	995.8	987.5	990.0	971.4	996.7	*1001.7*	1012.7	1037.9
80°	820.6	782.7	761.6	760.8	744.8	760.8	*773.5*	796.2	820.6
82.5°	609.1	576.3	540.9	534.1	524.1	533.3	*550.1*	577.2	616.7
85°	371.5	337.0	315.1	303.3	311.7	311.7	*320.1*	358.0	382.5
87.5°	134.0	117.1	96.1	96.9	99.4	102.8	*107.0*	134.8	147.5
90°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.8
92.5°	0.8	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.8
95°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.8
97.5°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.8
100°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7
102.5°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7
105°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7
107.5°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7
110°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1433930
CATALOG NUMBER: EHBR1-54-UNV-A1-L940

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7
115°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7
117.5°	2.5	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	1.7
120°	1.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.8	1.7
122.5°	2.5	0.8	0.0	0.0	0.0	0.0	*0.0*	0.8	2.5
125°	2.5	0.8	0.0	0.0	0.0	0.0	*0.8*	0.8	2.5
127.5°	2.5	0.8	0.0	0.0	0.0	0.0	*0.8*	1.7	2.5
130°	2.5	1.7	0.8	0.0	0.8	0.8	*1.7*	1.7	2.5
132.5°	3.4	2.5	2.5	1.7	1.7	2.5	*2.5*	3.4	3.4
135°	4.2	3.4	3.4	2.5	3.4	3.4	*3.4*	3.4	4.2
137.5°	4.2	4.2	4.2	4.2	4.2	4.2	*4.2*	4.2	5.0
140°	5.9	5.0	5.0	5.0	5.0	5.0	*5.0*	5.9	5.9
142.5°	6.7	6.7	5.9	5.9	5.9	6.7	*6.7*	6.7	7.5
145°	7.5	7.5	6.7	6.7	6.7	7.5	*7.5*	8.4	8.4
147.5°	10.2	9.2	7.5	7.5	7.5	7.5	*8.4*	9.2	10.2
150°	11.0	10.2	8.4	8.4	8.4	8.4	*9.2*	11.0	11.8
152.5°	11.8	11.0	9.2	8.4	8.4	8.4	*10.2*	11.0	12.7
155°	12.7	11.8	10.2	8.4	8.4	9.2	*11.0*	12.7	13.5
157.5°	15.2	13.5	11.8	10.2	10.2	11.0	*12.7*	14.3	15.2
160°	16.9	15.2	13.5	11.8	11.8	12.7	*14.3*	16.0	16.9
162.5°	18.5	16.9	14.3	13.5	12.7	13.5	*15.2*	17.7	18.5
165°	19.4	17.7	16.0	14.3	14.3	14.3	*16.9*	18.5	19.4
167.5°	20.2	19.4	16.9	15.2	15.2	15.2	*17.7*	19.4	20.2
170°	21.1	20.2	17.7	16.0	15.2	16.0	*18.5*	20.2	21.1
172.5°	22.7	21.9	19.4	17.7	16.9	17.7	*20.2*	21.9	22.7
175°	25.2	23.6	21.9	19.4	18.5	19.4	*21.9*	23.6	25.2
177.5°	26.1	24.4	22.7	20.2	19.4	20.2	*22.7*	24.4	26.1
180°	22.7	22.7	22.7	22.7	22.7	22.7	*22.7*	22.7	22.7

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1433930
CATALOG NUMBER: EHBR1-54-UNV-A1-L940

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	20.60	21.86	20.96	22.17	22.49	21.58	22.84	21.94	23.16	23.47
	3H	22.16	23.29	22.54	23.62	23.99	22.92	24.04	23.30	24.38	24.74
	4H	22.83	23.88	23.23	24.23	24.62	23.48	24.53	23.88	24.88	25.26
	6H	23.38	24.35	23.80	24.72	25.12	23.91	24.87	24.33	25.25	25.64
	8H	23.59	24.50	24.02	24.89	25.30	24.05	24.96	24.48	25.35	25.76
	12H	23.71	24.59	24.15	24.97	25.40	24.12	25.00	24.56	25.38	25.81
4H	2H	21.17	22.22	21.57	22.57	22.95	21.94	22.99	22.34	23.34	23.72
	3H	22.96	23.82	23.37	24.23	24.63	23.53	24.39	23.94	24.80	25.20
	4H	23.75	24.53	24.19	24.95	25.39	24.22	25.00	24.66	25.42	25.86
	6H	24.44	25.11	24.90	25.55	26.02	24.79	25.46	25.26	25.91	26.38
	8H	24.69	25.31	25.16	25.76	26.23	24.98	25.60	25.45	26.05	26.52
	12H	24.86	25.41	25.34	25.89	26.37	25.10	25.65	25.59	26.13	26.61
8H	4H	24.03	24.66	24.50	25.11	25.58	24.46	25.08	24.93	25.53	26.00
	6H	24.85	25.36	25.36	25.86	26.34	25.16	25.66	25.66	26.16	26.65
	8H	25.18	25.64	25.71	26.15	26.65	25.42	25.87	25.94	26.39	26.88
	12H	25.43	25.83	25.95	26.33	26.90	25.61	26.01	26.13	26.51	27.08
12H	4H	24.05	24.60	24.54	25.08	25.56	24.47	25.02	24.96	25.50	25.98
	6H	24.90	25.35	25.42	25.87	26.36	25.20	25.66	25.72	26.17	26.67
	8H	25.29	25.69	25.80	26.18	26.75	25.52	25.92	26.04	26.42	26.99

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-7

Test Date: 08/04/2025

Luminaire Tested: EHBR-60-L940-N

Data in this report applies to families of products including EHBR-60-L940-N

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

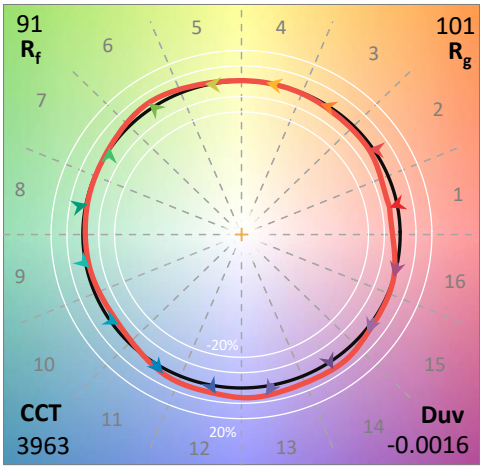
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-472-7
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-L940-N**
Description:	Elevate Round Highbay at, 60000 lumens, 4000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K):	3963
CIE u':	0.2267
CIE v':	0.5003
Duv:	-0.0016
CIE x:	0.3810
CIE y:	0.3738
CIE z:	0.2453
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	580
Purity:	26.49712
Rf:	90.7
Rg:	101

CRI (Ra):	93.4
R1:	95.2
R2:	95.1
R3:	93.3
R4:	94.5
R5:	94.2
R6:	92.9
R7:	94.0
R8:	87.7
R9:	66.4
R10:	86.6
R11:	94.4
R12:	75.4
R13:	95.0
R14:	95.4
R15:	92.8



Test Conditions

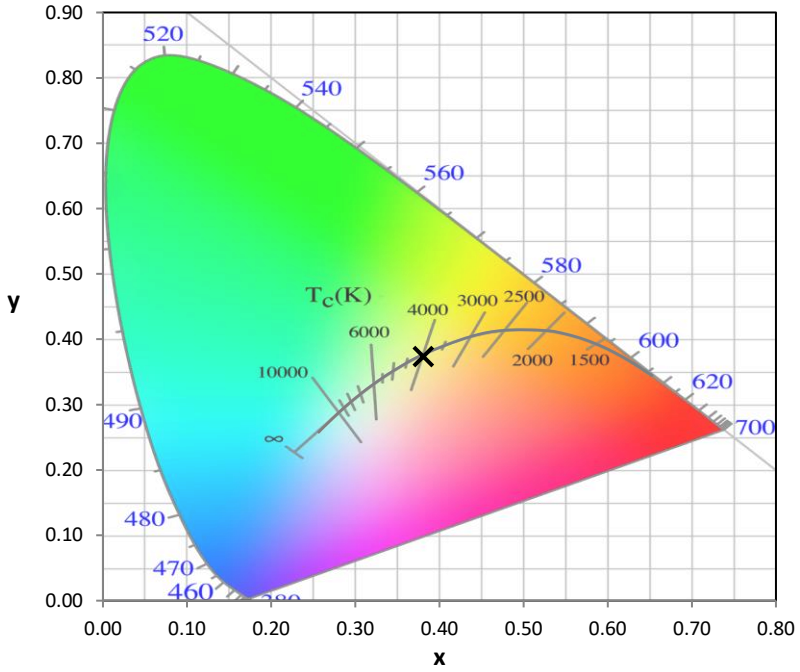
Stabilization Time:	44M
Operation Time:	1H 44M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-7

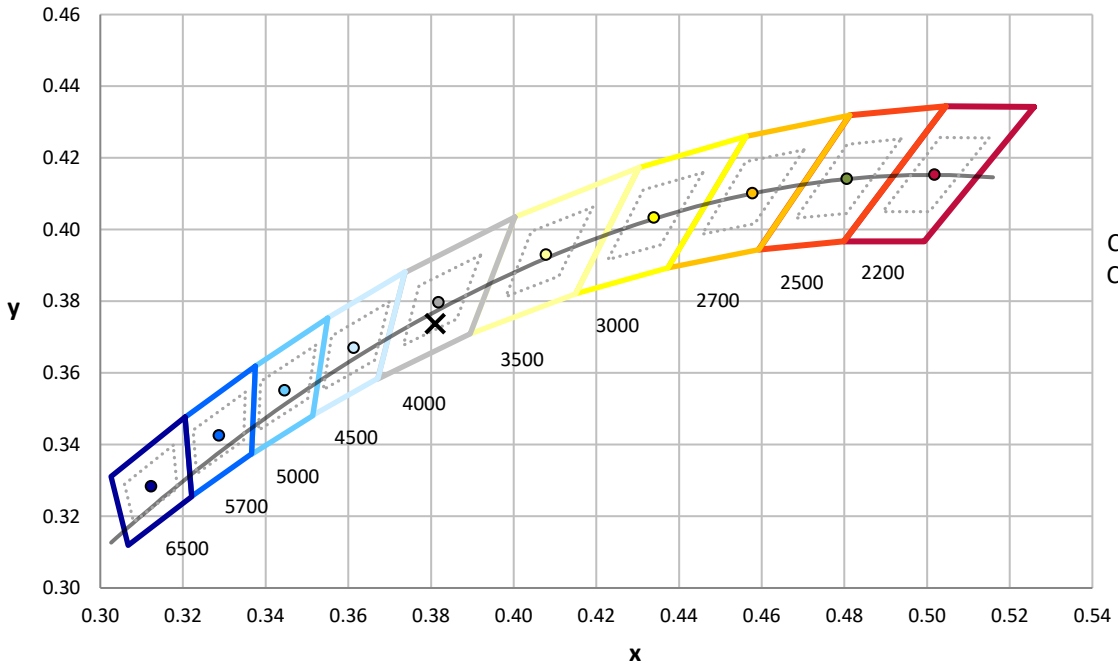
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	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

REPORT NUMBER: SP1-2506-472-7

CIE 1931 Chromaticity Diagram



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

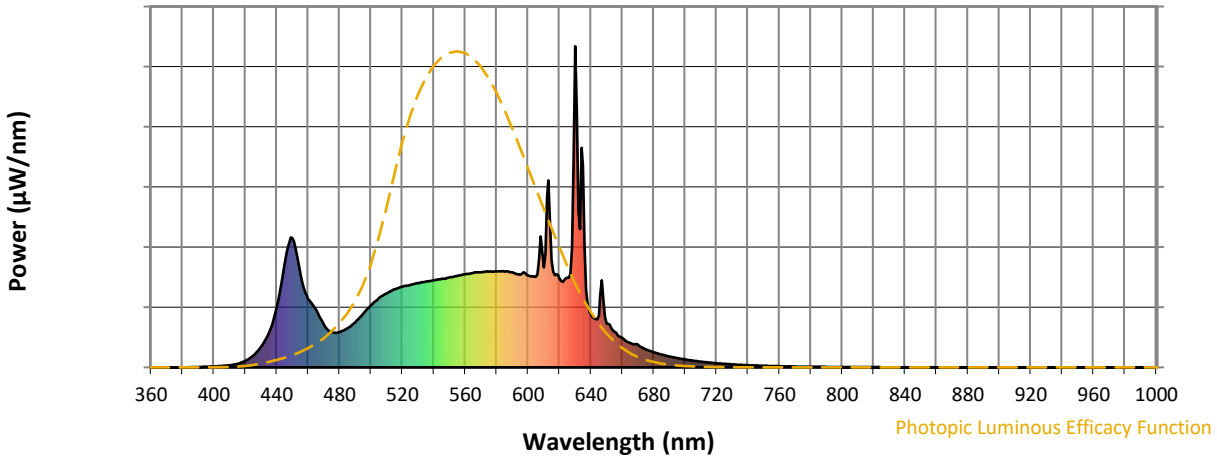


CCT = 3963K
CIE x = 0.3810
CIE y = 0.3738
Duv = -0.0016

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-7

Photopic Flux vs. Wavelength

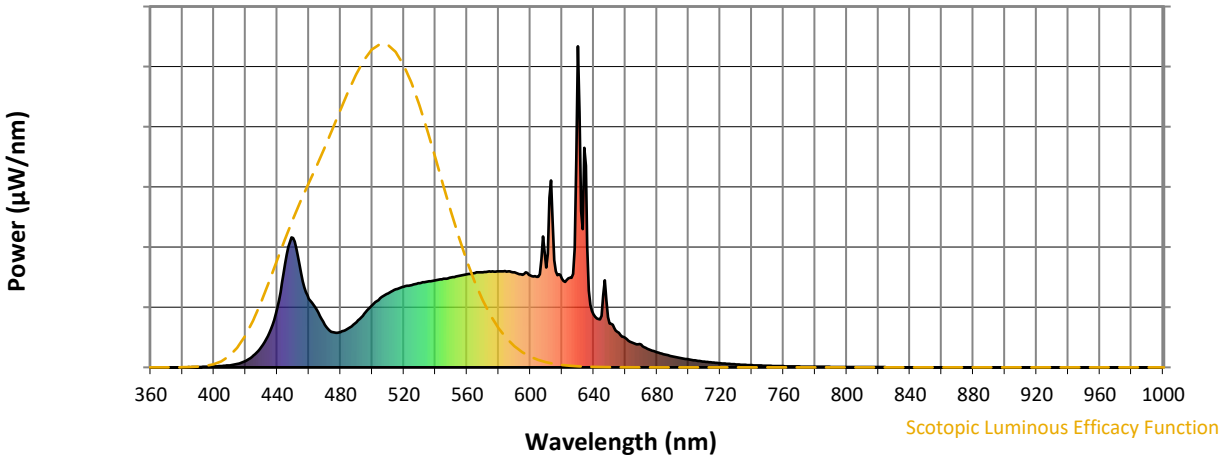


Photopic Lumens: NR

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	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-7

Scotopic Flux vs. Wavelength

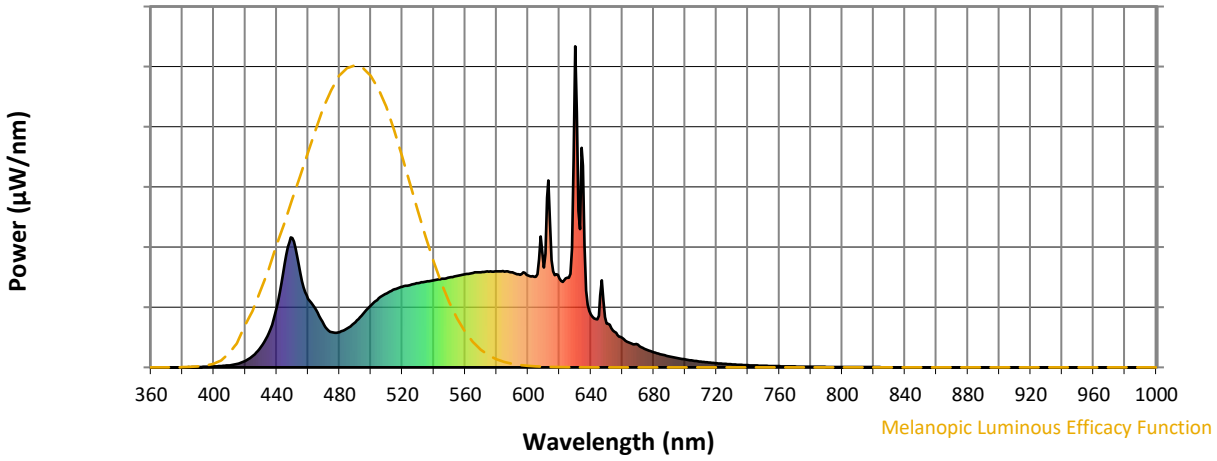


Scotopic Lumens: NR **S/P: 1.76**

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	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-7

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.64**

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	141	NR	620	276	NR	750	5	NR	880	0	NR
365	0	NR	495	167	NR	625	279	NR	755	4	NR	885	0	NR
370	0	NR	500	193	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	215	NR	635	628	NR	765	3	NR	895	0	NR
380	0	NR	510	230	NR	640	164	NR	770	3	NR	900	0	NR
385	0	NR	515	243	NR	645	161	NR	775	2	NR	905	0	NR
390	1	NR	520	251	NR	650	137	NR	780	2	NR	910	0	NR
395	2	NR	525	256	NR	655	111	NR	785	2	NR	915	0	NR
400	3	NR	530	262	NR	660	92	NR	790	1	NR	920	0	NR
405	4	NR	535	267	NR	665	76	NR	795	1	NR	925	0	NR
410	6	NR	540	271	NR	670	71	NR	800	1	NR	930	0	NR
415	11	NR	545	276	NR	675	56	NR	805	1	NR	935	0	NR
420	20	NR	550	280	NR	680	47	NR	810	1	NR	940	0	NR
425	37	NR	555	285	NR	685	40	NR	815	1	NR	945	0	NR
430	63	NR	560	290	NR	690	34	NR	820	1	NR	950	0	NR
435	108	NR	565	294	NR	695	29	NR	825	1	NR	955	0	NR
440	186	NR	570	296	NR	700	25	NR	830	0	NR	960	0	NR
445	323	NR	575	298	NR	705	21	NR	835	0	NR	965	0	NR
450	403	NR	580	299	NR	710	18	NR	840	0	NR	970	0	NR
455	293	NR	585	298	NR	715	15	NR	845	0	NR	975	0	NR
460	214	NR	590	296	NR	720	13	NR	850	0	NR	980	0	NR
465	180	NR	595	288	NR	725	11	NR	855	0	NR	985	0	NR
470	132	NR	600	286	NR	730	9	NR	860	0	NR	990	0	NR
475	109	NR	605	282	NR	735	8	NR	865	0	NR	995	0	NR
480	110	NR	610	311	NR	740	7	NR	870	0	NR	1000	0	NR
485	121	NR	615	334	NR	745	6	NR	875	0	NR			

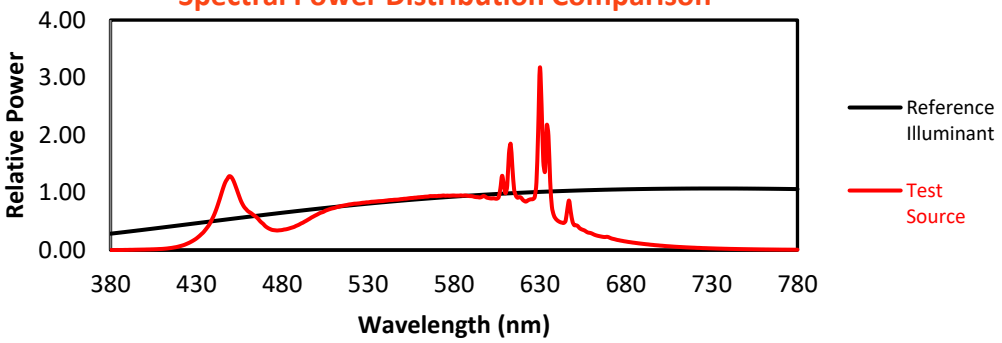
REPORT NUMBER: SP1-2506-472-7

TM-30-18

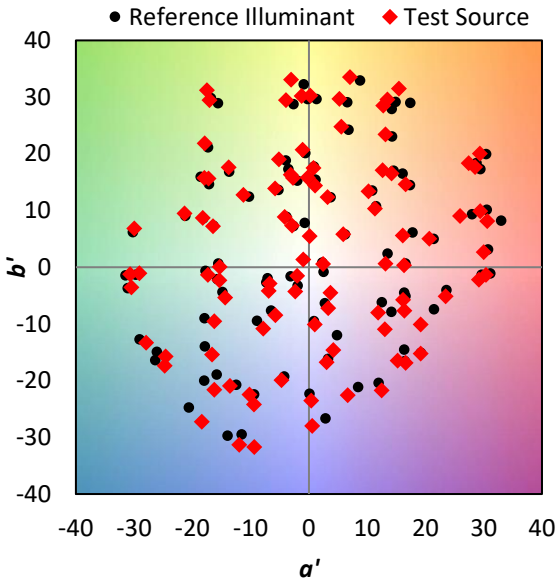
Summary

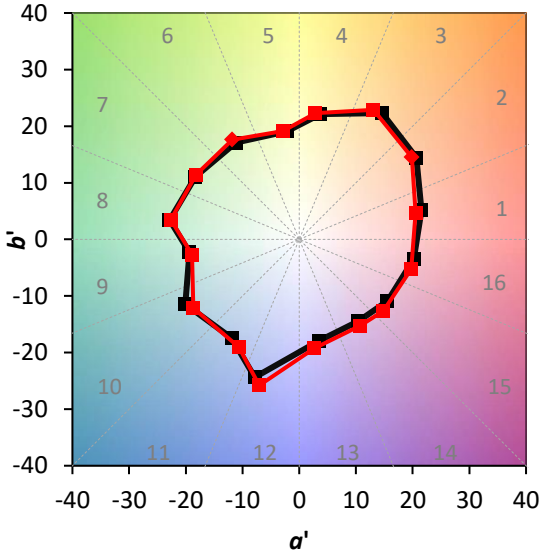
R_f = 90.7
R_g = 101
CIE R_a = 93.4
R_9 = 66.4

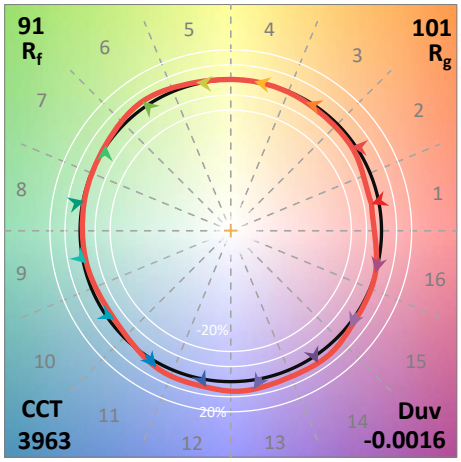
Spectral Power Distribution Comparison

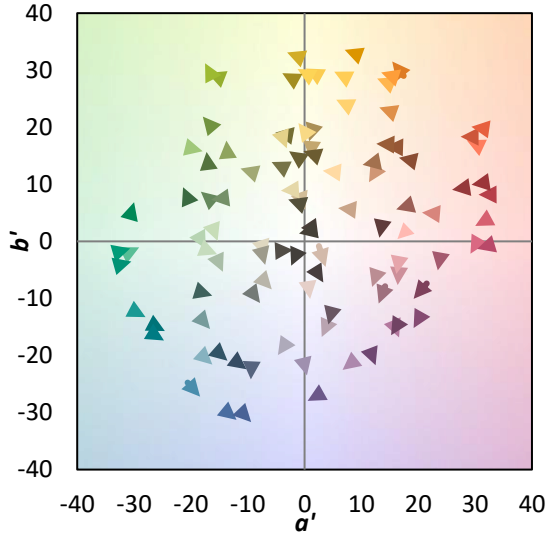


Color Vector Graphics







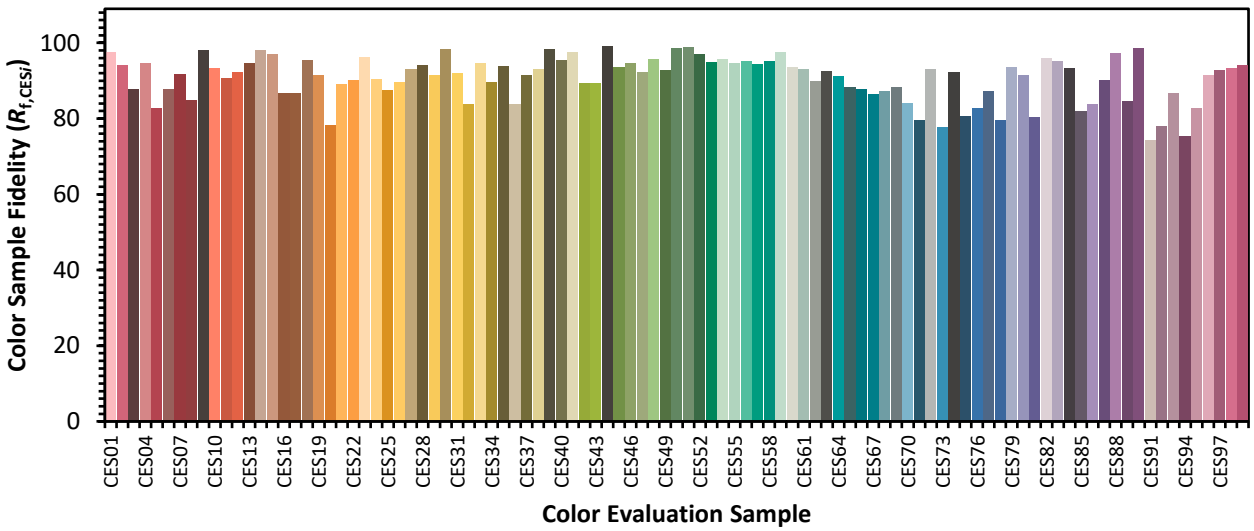


REPORT NUMBER: SP1-2506-472-7

TM-30-18

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

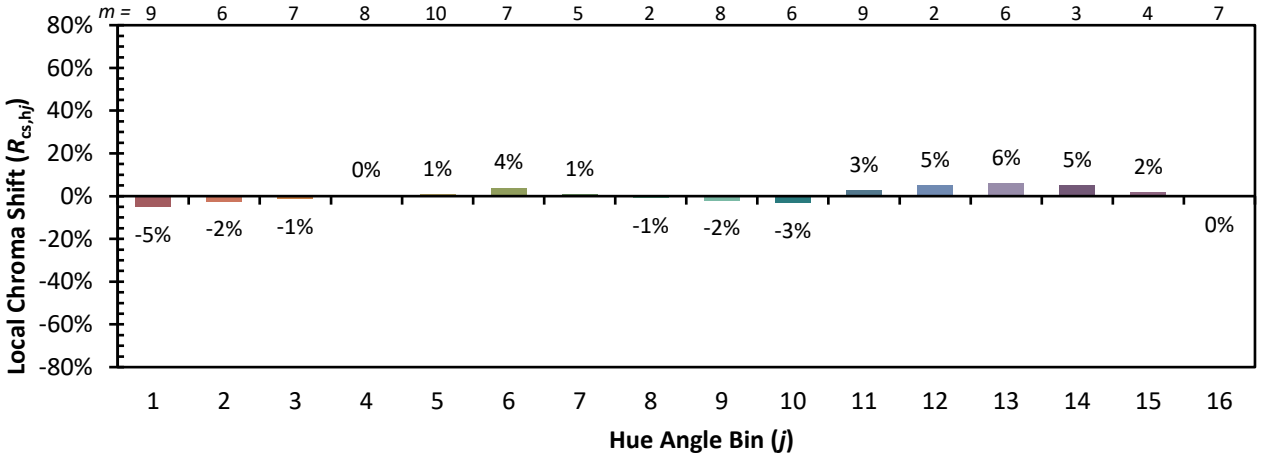
CES01 = 86	CES26 = 90	CES51 = 99	CES76 = 83
CES02 = 62	CES27 = 93	CES52 = 97	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 95	CES78 = 79
CES04 = 69	CES29 = 91	CES54 = 96	CES79 = 94
CES05 = 49	CES30 = 98	CES55 = 95	CES80 = 91
CES06 = 50	CES31 = 92	CES56 = 95	CES81 = 80
CES07 = 42	CES32 = 84	CES57 = 94	CES82 = 96
CES08 = 41	CES33 = 95	CES58 = 95	CES83 = 95
CES09 = 29	CES34 = 90	CES59 = 98	CES84 = 93
CES10 = 74	CES35 = 94	CES60 = 93	CES85 = 82
CES11 = 57	CES36 = 84	CES61 = 93	CES86 = 84
CES12 = 63	CES37 = 92	CES62 = 90	CES87 = 90
CES13 = 43	CES38 = 93	CES63 = 92	CES88 = 97
CES14 = 74	CES39 = 98	CES64 = 91	CES89 = 84
CES15 = 71	CES40 = 96	CES65 = 88	CES90 = 99
CES16 = 47	CES41 = 98	CES66 = 88	CES91 = 74
CES17 = 49	CES42 = 89	CES67 = 87	CES92 = 78
CES18 = 56	CES43 = 89	CES68 = 87	CES93 = 87
CES19 = 71	CES44 = 99	CES69 = 88	CES94 = 75
CES20 = 66	CES45 = 93	CES70 = 84	CES95 = 83
CES21 = 85	CES46 = 95	CES71 = 80	CES96 = 91
CES22 = 78	CES47 = 92	CES72 = 93	CES97 = 93
CES23 = 91	CES48 = 96	CES73 = 78	CES98 = 93
CES24 = 90	CES49 = 93	CES74 = 92	CES99 = 94
CES25 = 71	CES50 = 99	CES75 = 81	

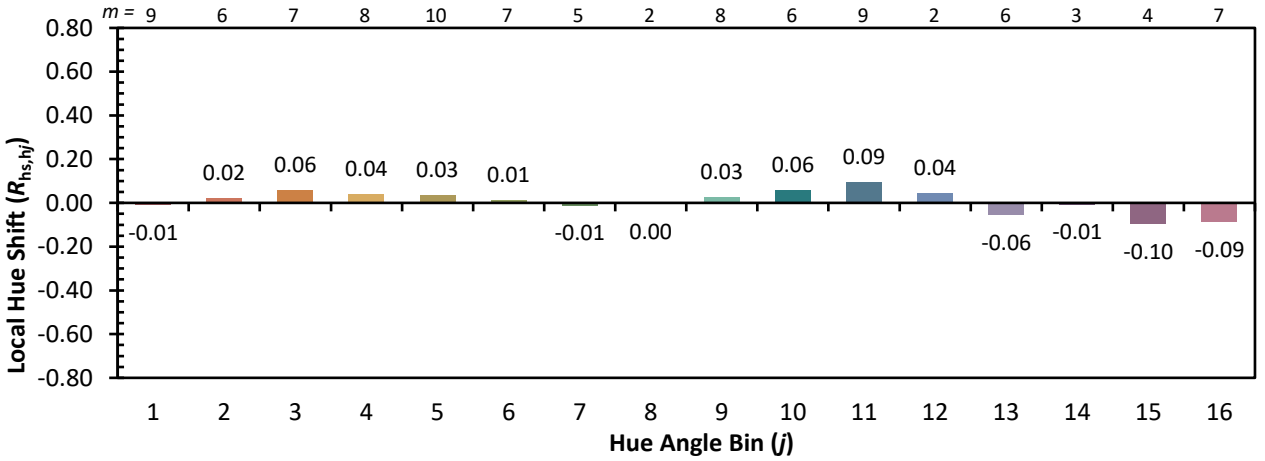


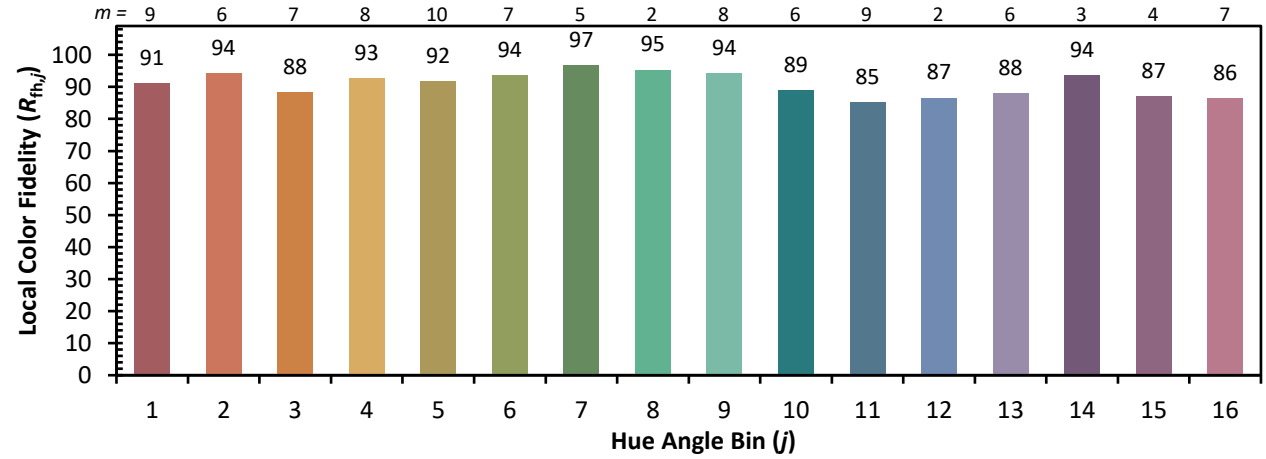
REPORT NUMBER: SP1-2506-472-7

TM-30-18

Color Rendition by Hue-Angle Bin



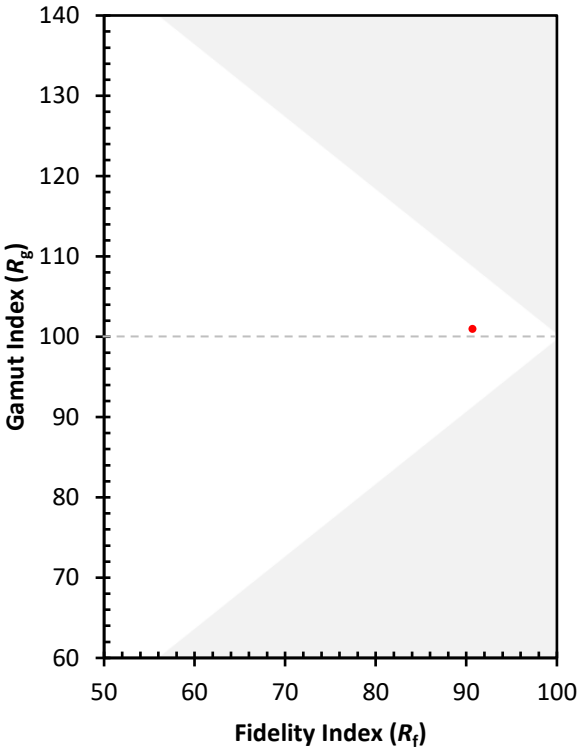


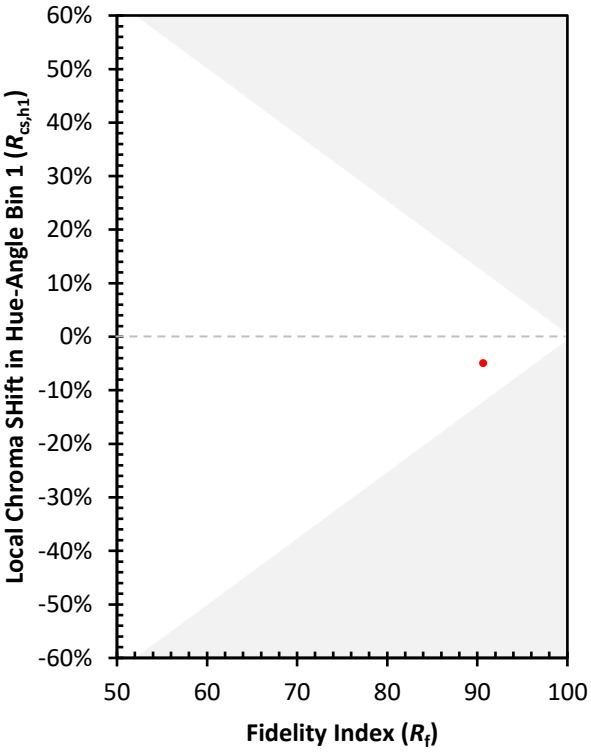


REPORT NUMBER: SP1-2506-472-7

TM-30-18

Measure Comparisons





(END OF REPORT)