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: P1433153

Luminaire Tested: EHBR1-24-UNV-A1-L930

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:	P1433153
	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:	EHBR1-24-UNV-A1-L930
Description:	Elevate Round Highbay at, 24000 lumens, 3000K 90CRI LEDs with A lens
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	22036.1 lumens
Efficiency:	N/A
Efficacy:	171.8 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):	128.3
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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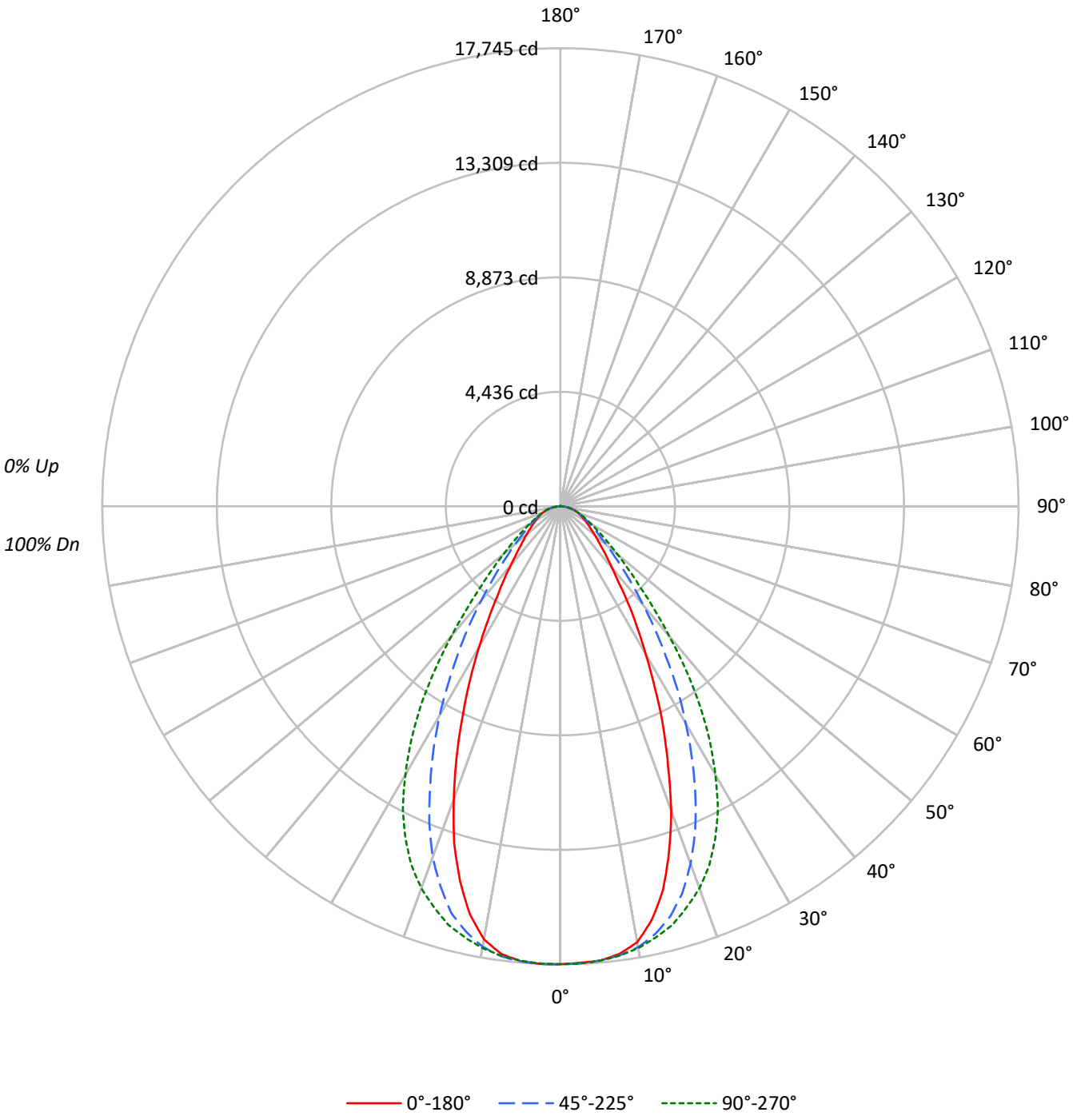
Scaled Data Report

TEST NUMBER: P1433153
CATALOG NUMBER: EHBR1-24-UNV-A1-L930

Luminous Intensity Polar Plot



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Scaled Data Report

TEST NUMBER: P1433153
CATALOG NUMBER: EHBR1-24-UNV-A1-L930

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°	83299	83299	83299	83299	83299
5°	83288	83275	83279	83426	83375
10°	81763	82717	82848	82614	81228
15°	74729	79942	81588	79301	73012
20°	62709	73651	78682	72264	60268
25°	48857	64155	73534	61812	46326
30°	35897	52665	65111	50666	34072
35°	26103	40949	53981	39185	24400
40°	18965	30541	40173	29252	18380
45°	15112	22596	28374	21616	14589
50°	12706	17203	20810	16635	12513
55°	11276	13803	16015	13572	11123
60°	10377	11759	13022	11686	10451
65°	9970	10655	11241	10687	10065
70°	9835	10070	10380	10125	9931
75°	9734	9673	9734	9700	9827
80°	9787	9084	8881	9222	9787
85°	8831	7484	7409	7608	9090

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
Vertical Angle: 45°
Luminance: 29729 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1675.1	7.6
10°-20°	4502.0	20.4
20°-30°	5474.4	24.8
30°-40°	4459.3	20.2
40°-50°	2677.4	12.1
50°-60°	1540.8	7.0
60°-70°	964.3	4.4
70°-80°	567.9	2.6
80°-90°	166.1	0.8
90°-100°	0.1	0.0
100°-110°	0.1	0.0
110°-120°	0.1	0.0
120°-130°	0.3	0.0
130°-140°	1.1	0.0
140°-150°	2.0	0.0
150°-160°	2.2	0.0
160°-170°	2.0	0.0
170°-180°	0.9	0.0
0°-30°	11651.5	52.9
0°-40°	16110.8	73.1
0°-60°	20329.0	92.3
0°-90°	22027.3	100.0
90°-120°	0.3	0.0
90°-150°	3.7	0.0
90°-180°	9.0	0.0
0°-180°	22036.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	17738	17738	17738	17738	17738	
5°	17668	17665	17666	17697	17687	1670
15°	15371	16443	16782	16311	15018	4229
25°	9429	12381	14191	11929	8940	4296
35°	4553	7143	9416	6835	4256	2881
45°	2276	3402	4272	3255	2197	1795
55°	1377	1686	1956	1658	1359	1245
65°	897	959	1012	962	906	892
75°	536	533	536	535	542	568
85°	164	139	138	141	169	175
90°	1	0	0	0	0	8
95°	1	0	0	0	0	1
105°	1	0	0	0	1	1
115°	1	0	0	0	1	1
125°	1	0	0	0	1	1
135°	2	2	2	2	2	1
145°	3	3	3	3	4	2
155°	6	4	4	5	6	3
165°	9	7	6	7	9	2
175°	11	10	8	10	11	1
180°	10	10	10	10	10	

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TEST NUMBER: P1433153
CATALOG NUMBER: EHBR1-24-UNV-A1-L930

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	17737.9	17737.9	17737.9	17737.9	17737.9	17737.9	17737.9	17737.9	17737.9
2.5°	17698.9	17714.9	17721.6	17725.3	17729.3	17740.5	17745.4	17737.5	17744.2
5°	17668.1	17669.2	17665.4	17682.2	17666.2	17677.4	17697.4	17689.6	17686.6
7.5°	17488.3	17525.4	17547.3	17552.9	17555.9	17569.6	17583.7	17503.9	17491.9
10°	17146.4	17208.5	17346.3	17385.7	17373.8	17396.1	17324.7	17115.9	17034.2
12.5°	16397.2	16615.2	16973.4	17132.7	17103.7	17123.4	16880.4	16439.8	16186.5
15°	15370.7	15690.5	16443.1	16757.4	16781.6	16757.4	16311.2	15452.7	15017.7
17.5°	14006.0	14596.8	15705.0	16315.0	16280.1	16291.6	15444.5	14175.5	13677.7
20°	12548.2	13177.9	14737.6	15755.2	15744.4	15679.7	14460.1	12786.3	12059.7
22.5°	10899.4	11711.6	13629.0	15066.7	15062.7	14954.9	13261.1	11269.4	10487.1
25°	9429.0	10225.6	12381.4	14223.4	14191.4	14068.9	11929.3	9756.3	8940.5
27.5°	7908.8	8736.9	11049.5	13235.1	13213.2	13079.5	10656.1	8342.0	7565.5
30°	6620.0	7377.1	9712.1	12147.8	12007.3	11992.1	9343.6	7032.3	6283.4
32.5°	5515.9	6164.9	8451.2	11010.6	10762.0	10833.0	8035.5	5937.1	5194.9
35°	4553.3	5125.0	7142.8	9695.4	9416.0	9507.8	6835.1	4871.7	4256.1
37.5°	3695.5	4245.3	6033.7	8416.3	7989.0	8162.1	5779.2	4068.4	3575.1
40°	3093.6	3529.7	4982.0	7012.6	6553.1	6835.1	4771.7	3393.4	2998.2
42.5°	2665.6	2950.2	4111.9	5672.6	5320.1	5520.0	3932.9	2836.9	2541.2
45°	2275.5	2502.5	3402.3	4476.4	4272.4	4457.7	3254.8	2418.9	2196.7
47.5°	1987.6	2162.6	2800.9	3614.8	3488.1	3546.8	2718.3	2110.9	1930.4
50°	1739.1	1874.2	2354.7	2917.5	2848.4	2884.4	2277.0	1836.7	1712.7
52.5°	1545.9	1645.0	1974.9	2397.8	2363.6	2369.2	1940.5	1615.7	1525.8
55°	1377.2	1446.3	1685.9	1964.2	1956.1	1957.5	1657.7	1431.8	1358.6
57.5°	1229.7	1286.9	1448.9	1649.9	1638.0	1640.6	1435.5	1271.7	1224.5
60°	1104.9	1143.2	1252.0	1394.3	1386.5	1383.1	1244.2	1129.0	1112.7
62.5°	994.2	1018.7	1094.1	1195.2	1180.3	1183.6	1093.7	1019.8	995.7
65°	897.2	905.8	958.9	1021.2	1011.6	1019.8	961.8	911.3	905.8
67.5°	802.5	811.0	842.2	884.2	873.0	879.7	842.9	813.3	808.4
70°	716.3	715.9	733.4	756.0	756.0	757.1	737.4	719.6	723.3
72.5°	627.1	624.9	630.1	645.3	641.3	655.3	634.6	629.0	629.7
75°	536.5	530.1	533.1	540.9	536.5	543.9	534.6	541.6	541.6
77.5°	451.0	439.2	435.4	436.6	428.4	439.5	441.7	446.6	457.7
80°	361.9	345.1	335.9	335.5	328.4	335.5	341.0	351.1	361.9
82.5°	268.6	254.2	238.5	235.5	231.1	235.2	242.6	254.5	272.0
85°	163.9	148.6	138.9	133.8	137.5	137.5	141.2	157.9	168.7
87.5°	59.1	51.6	42.3	42.7	43.8	45.4	47.1	59.4	65.1
90°	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
92.5°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
95°	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
97.5°	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
100°	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
102.5°	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
105°	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
107.5°	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
110°	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7

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Scaled Data Report

TEST NUMBER: P1433153
CATALOG NUMBER: EHBR1-24-UNV-A1-L930

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
115°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
117.5°	1.2	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.7
120°	0.7	0.0	0.0	0.0	0.0	0.0	*0.0*	0.4	0.7
122.5°	1.2	0.4	0.0	0.0	0.0	0.0	*0.0*	0.4	1.2
125°	1.2	0.4	0.0	0.0	0.0	0.0	*0.4*	0.4	1.2
127.5°	1.2	0.4	0.0	0.0	0.0	0.0	*0.4*	0.7	1.2
130°	1.2	0.7	0.4	0.0	0.4	0.4	*0.7*	0.7	1.2
132.5°	1.5	1.2	1.2	0.7	0.7	1.2	*1.2*	1.5	1.5
135°	1.9	1.5	1.5	1.2	1.5	1.5	*1.5*	1.5	1.9
137.5°	1.9	1.9	1.9	1.9	1.9	1.9	*1.9*	1.9	2.2
140°	2.6	2.2	2.2	2.2	2.2	2.2	*2.2*	2.6	2.6
142.5°	2.9	2.9	2.6	2.6	2.6	2.9	*2.9*	2.9	3.4
145°	3.4	3.4	2.9	2.9	2.9	3.4	*3.4*	3.7	3.7
147.5°	4.5	4.1	3.4	3.4	3.4	3.4	*3.7*	4.1	4.5
150°	4.8	4.5	3.7	3.7	3.7	3.7	*4.1*	4.8	5.2
152.5°	5.2	4.8	4.1	3.7	3.7	3.7	*4.5*	4.8	5.6
155°	5.6	5.2	4.5	3.7	3.7	4.1	*4.8*	5.6	6.0
157.5°	6.7	6.0	5.2	4.5	4.5	4.8	*5.6*	6.3	6.7
160°	7.4	6.7	6.0	5.2	5.2	5.6	*6.3*	7.0	7.4
162.5°	8.2	7.4	6.3	6.0	5.6	6.0	*6.7*	7.8	8.2
165°	8.6	7.8	7.0	6.3	6.3	6.3	*7.4*	8.2	8.6
167.5°	8.9	8.6	7.4	6.7	6.7	6.7	*7.8*	8.6	8.9
170°	9.3	8.9	7.8	7.0	6.7	7.0	*8.2*	8.9	9.3
172.5°	10.1	9.6	8.6	7.8	7.4	7.8	*8.9*	9.6	10.1
175°	11.1	10.4	9.6	8.6	8.2	8.6	*9.6*	10.4	11.1
177.5°	11.5	10.8	10.1	8.9	8.6	8.9	*10.1*	10.8	11.5
180°	10.1	10.1	10.1	10.1	10.1	10.1	*10.1*	10.1	10.1

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Scaled Data Report

TEST NUMBER: P1433153
CATALOG NUMBER: EHBR1-24-UNV-A1-L930

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	17.75	19.02	18.12	19.33	19.65	18.73	20.00	19.10	20.31	20.63
	3H	19.32	20.44	19.70	20.77	21.14	20.07	21.20	20.45	21.53	21.90
	4H	19.99	21.04	20.39	21.39	21.77	20.63	21.68	21.04	22.03	22.42
	6H	20.54	21.50	20.96	21.88	22.27	21.06	22.03	21.48	22.40	22.80
	8H	20.74	21.65	21.17	22.05	22.45	21.20	22.11	21.63	22.51	22.91
	12H	20.87	21.74	21.30	22.12	22.56	21.28	22.15	21.71	22.54	22.97
4H	2H	18.32	19.37	18.73	19.72	20.11	19.09	20.14	19.50	20.49	20.88
	3H	20.11	20.98	20.53	21.38	21.79	20.68	21.55	21.10	21.95	22.36
	4H	20.91	21.68	21.34	22.10	22.55	21.38	22.15	21.81	22.57	23.02
	6H	21.59	22.26	22.06	22.71	23.18	21.95	22.62	22.41	23.07	23.53
	8H	21.84	22.46	22.31	22.91	23.38	22.13	22.76	22.60	23.21	23.68
	12H	22.01	22.56	22.50	23.05	23.52	22.25	22.80	22.74	23.29	23.76
8H	4H	21.19	21.81	21.66	22.26	22.73	21.61	22.23	22.08	22.68	23.16
	6H	22.01	22.52	22.51	23.01	23.50	22.31	22.82	22.82	23.32	23.80
	8H	22.34	22.79	22.86	23.31	23.80	22.57	23.03	23.10	23.55	24.04
	12H	22.59	22.99	23.10	23.48	24.06	22.77	23.17	23.28	23.66	24.24
12H	4H	21.21	21.76	21.69	22.24	22.71	21.62	22.17	22.11	22.66	23.13
	6H	22.05	22.51	22.58	23.03	23.52	22.36	22.81	22.88	23.33	23.82
	8H	22.44	22.84	22.96	23.34	23.91	22.67	23.07	23.19	23.57	24.14

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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

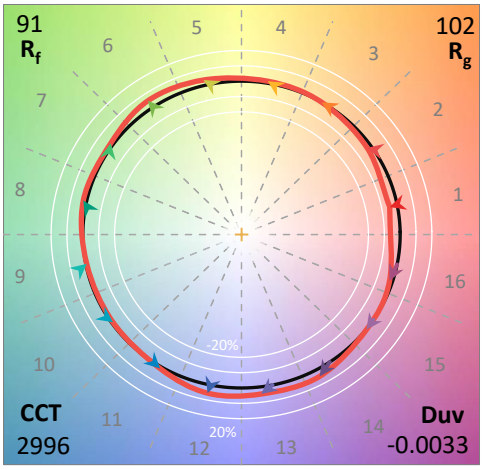
Test Information

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

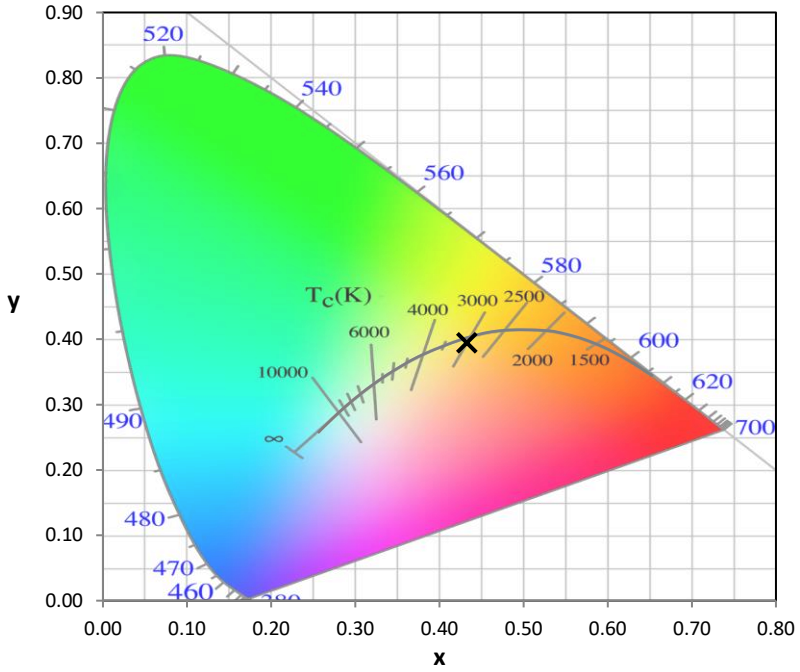
Stabilization Time:	40M
Operation Time:	1H 40M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP1-2506-472-5

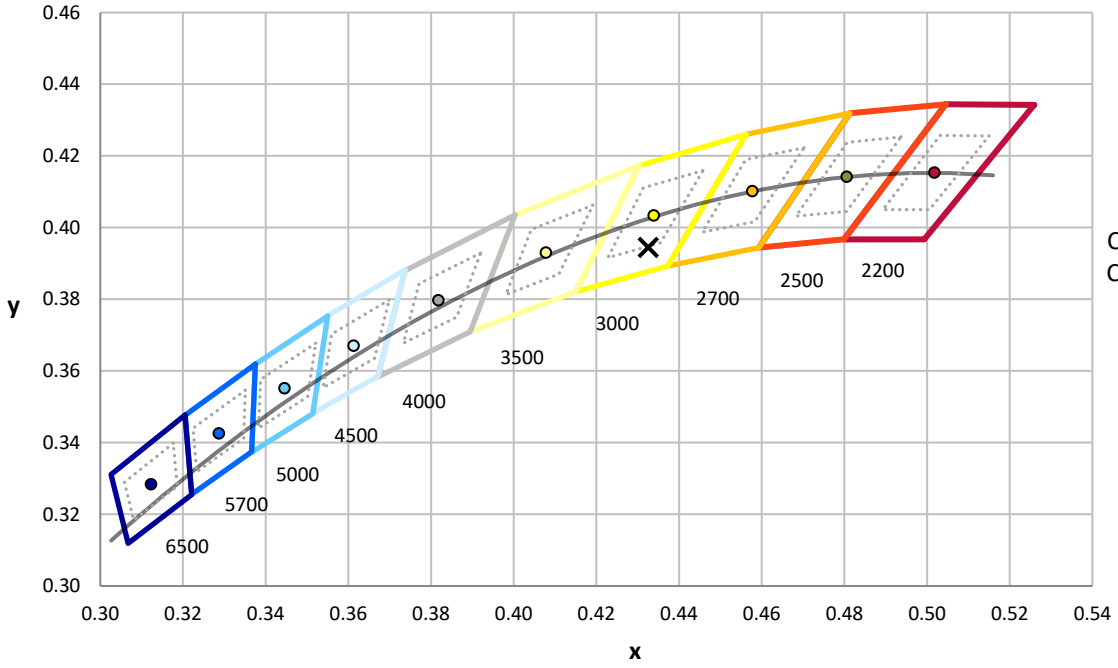
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

REPORT NUMBER: SP1-2506-472-5

CIE 1931 Chromaticity Diagram



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

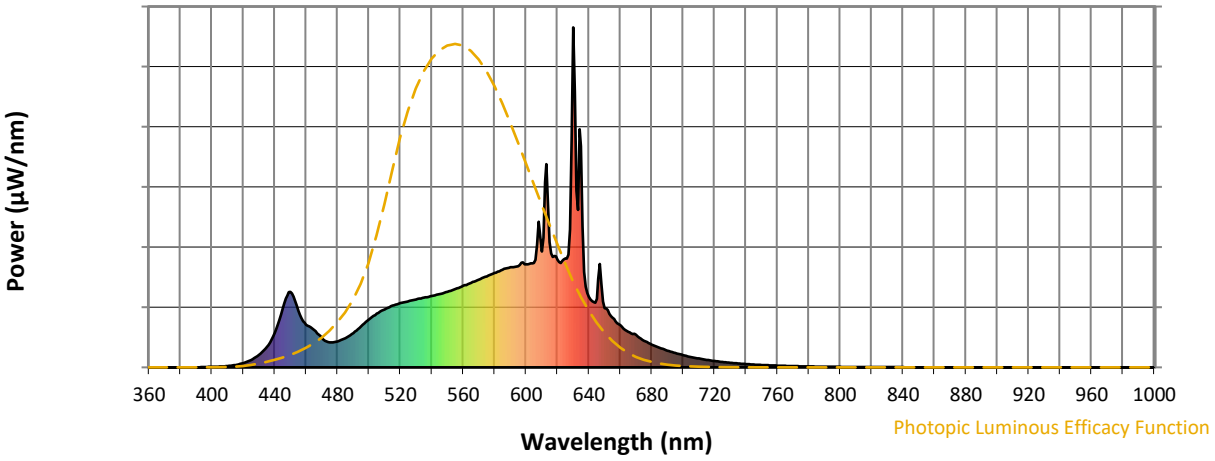


CCT = 2996K
CIE x = 0.4325
CIE y = 0.3945
Duv = -0.0033

Point lies inside the ANSI 3000K 7-step quadrangle

REPORT NUMBER: SP1-2506-472-5

Photopic Flux vs. Wavelength

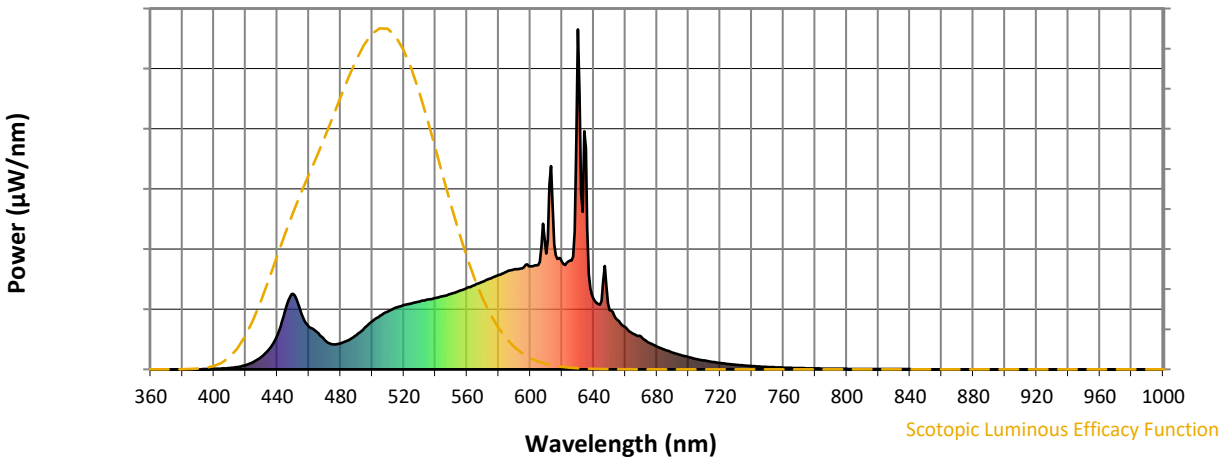


Photopic Lumens: NR

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			

REPORT NUMBER: SP1-2506-472-5

Scotopic Flux vs. Wavelength

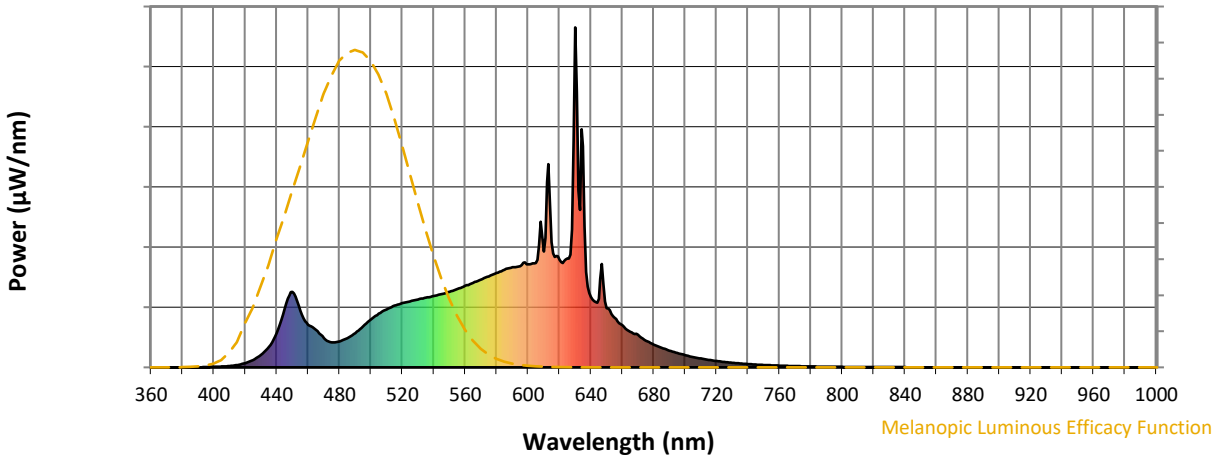


Scotopic Lumens: NR **S/P: 1.44**

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			

REPORT NUMBER: SP1-2506-472-5

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			

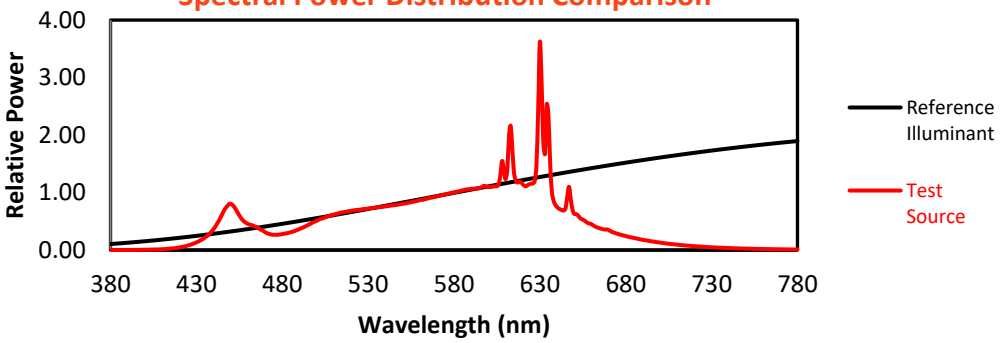
REPORT NUMBER: SP1-2506-472-5

TM-30-18

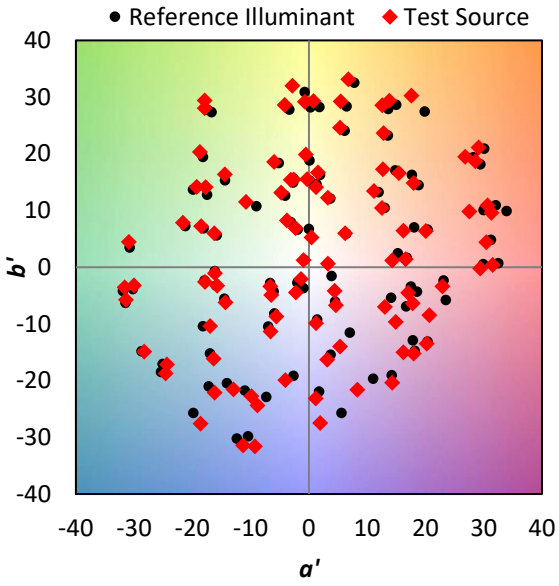
Summary

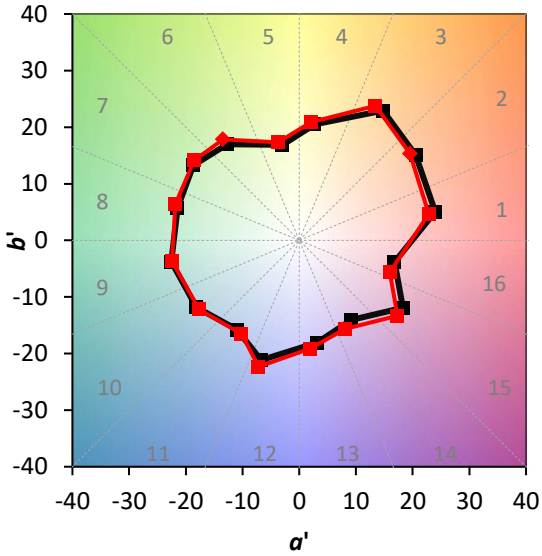
R_f = 91.3
R_g = 102
CIE R_a = 94.4
R_9 = 61.4

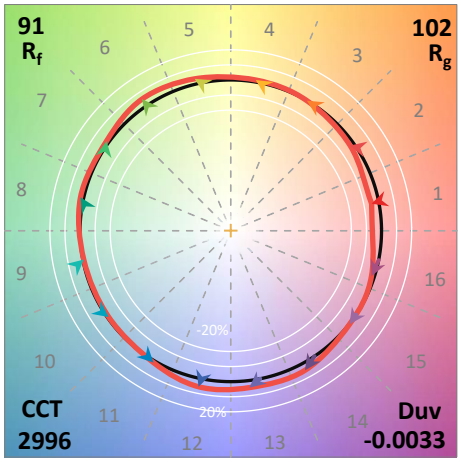
Spectral Power Distribution Comparison

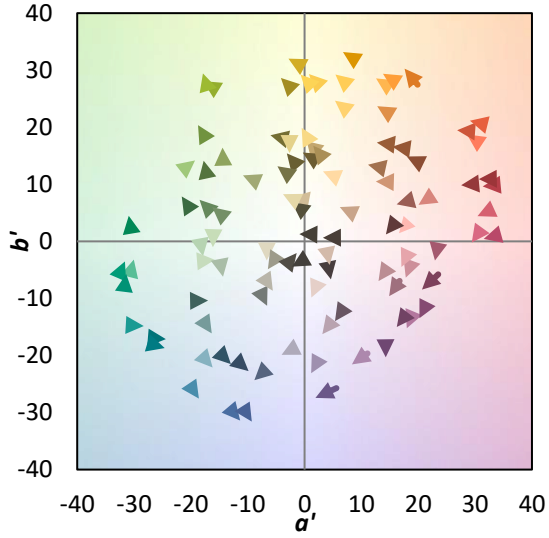


Color Vector Graphics







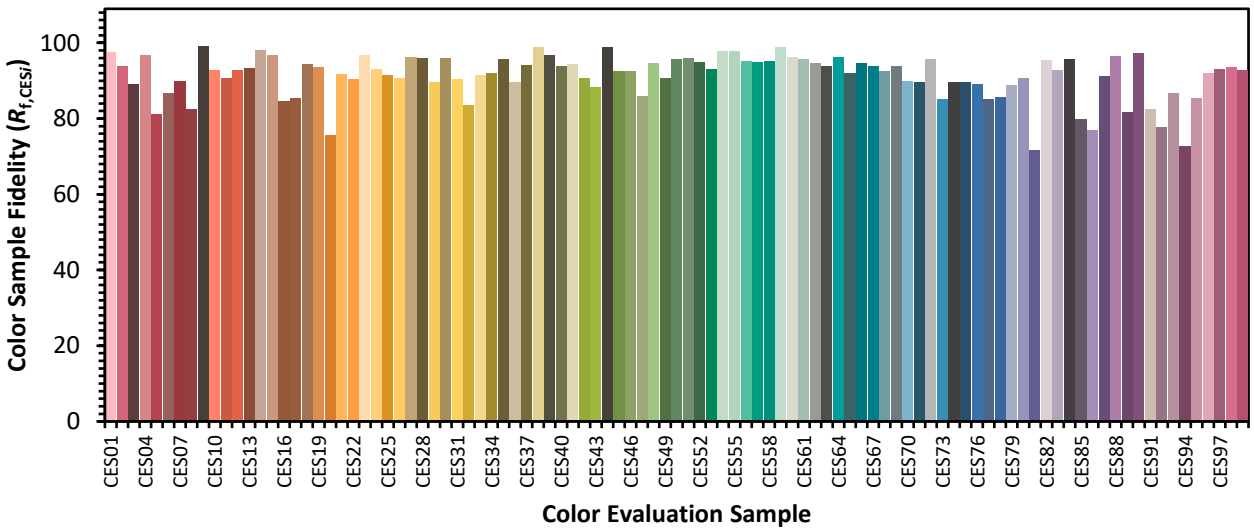


REPORT NUMBER: SP1-2506-472-5

TM-30-18

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

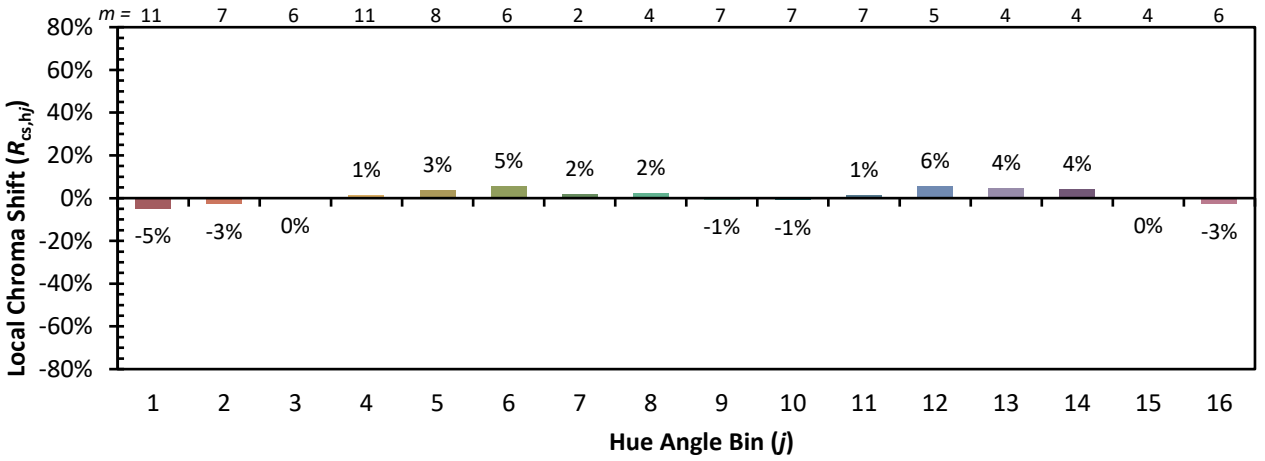
CES01 = 86	CES26 = 91	CES51 = 96	CES76 = 89
CES02 = 63	CES27 = 96	CES52 = 95	CES77 = 85
CES03 = 32	CES28 = 96	CES53 = 93	CES78 = 86
CES04 = 70	CES29 = 90	CES54 = 98	CES79 = 89
CES05 = 51	CES30 = 96	CES55 = 98	CES80 = 91
CES06 = 51	CES31 = 90	CES56 = 95	CES81 = 72
CES07 = 44	CES32 = 84	CES57 = 95	CES82 = 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	

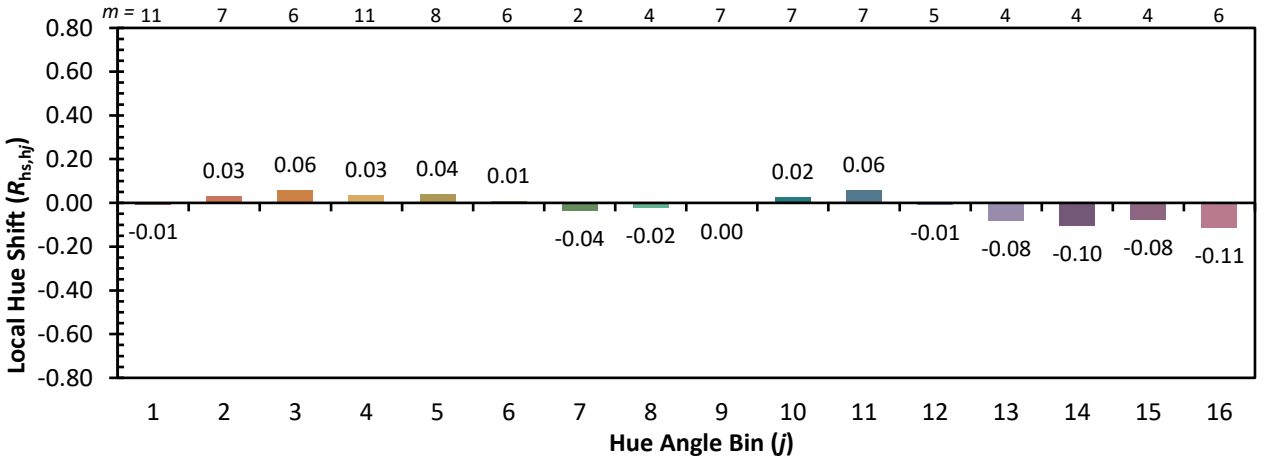


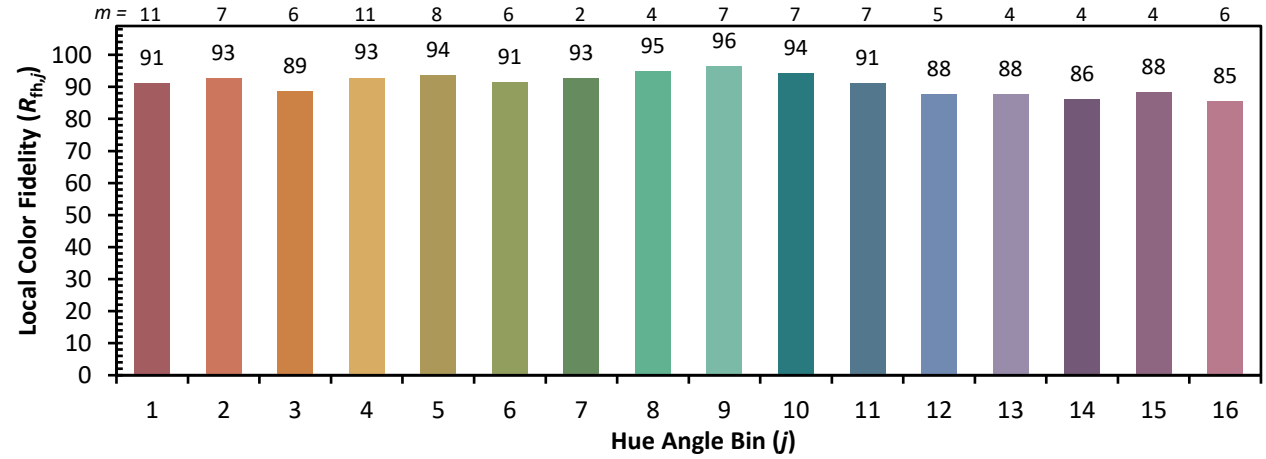
REPORT NUMBER: SP1-2506-472-5

TM-30-18

Color Rendition by Hue-Angle Bin



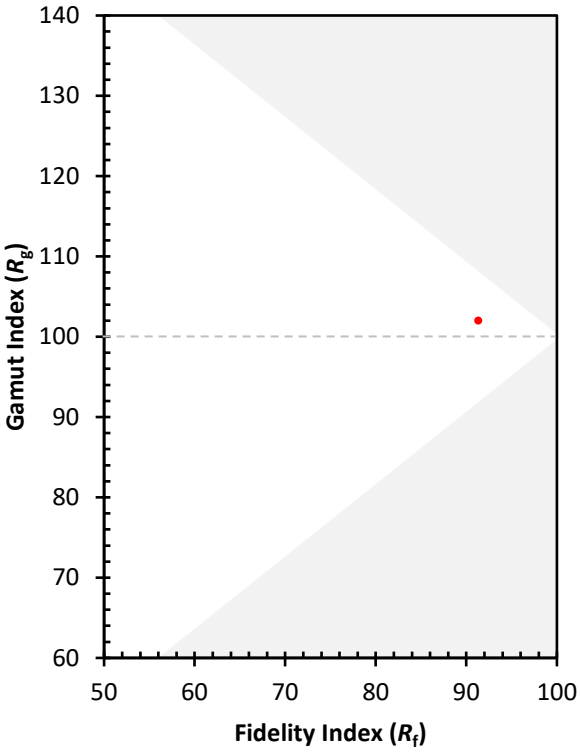


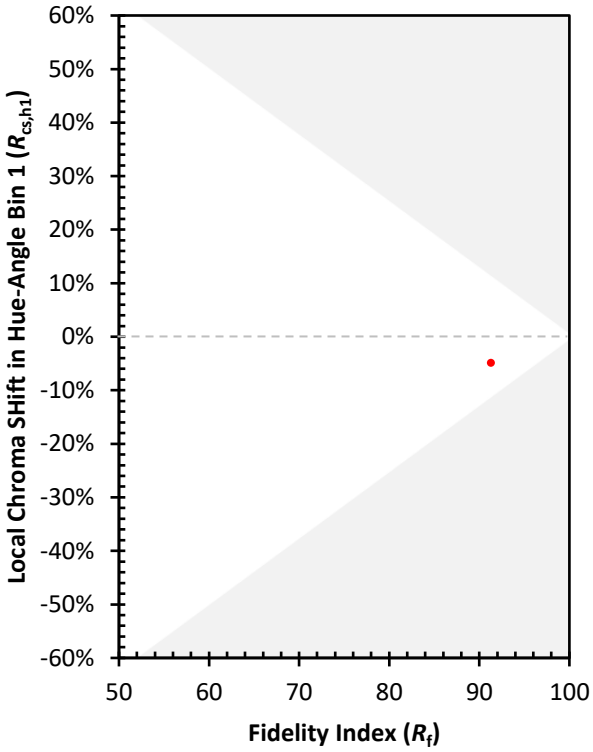


REPORT NUMBER: SP1-2506-472-5

TM-30-18

Measure Comparisons





(END OF REPORT)