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

Scaled data based on original data using

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P437257

Luminaire Tested: **ISS-SA1B-830-U-SLR**

Issue Date: 12/9/2020

Report Generated By 670245982

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

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P437257
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-22)
Test Lab:	INNOVATION CENTER
Issue Date:	12/9/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	ISS-SA1B-830-U-SLR
Description:	IMPACT ELITE LED QUARTER SPHERE LUMINAIRE
	(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT ELIMINATOR RIGHT OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	2429 lumens
Efficiency:	N/A
Efficacy:	95.6 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U0 - G1

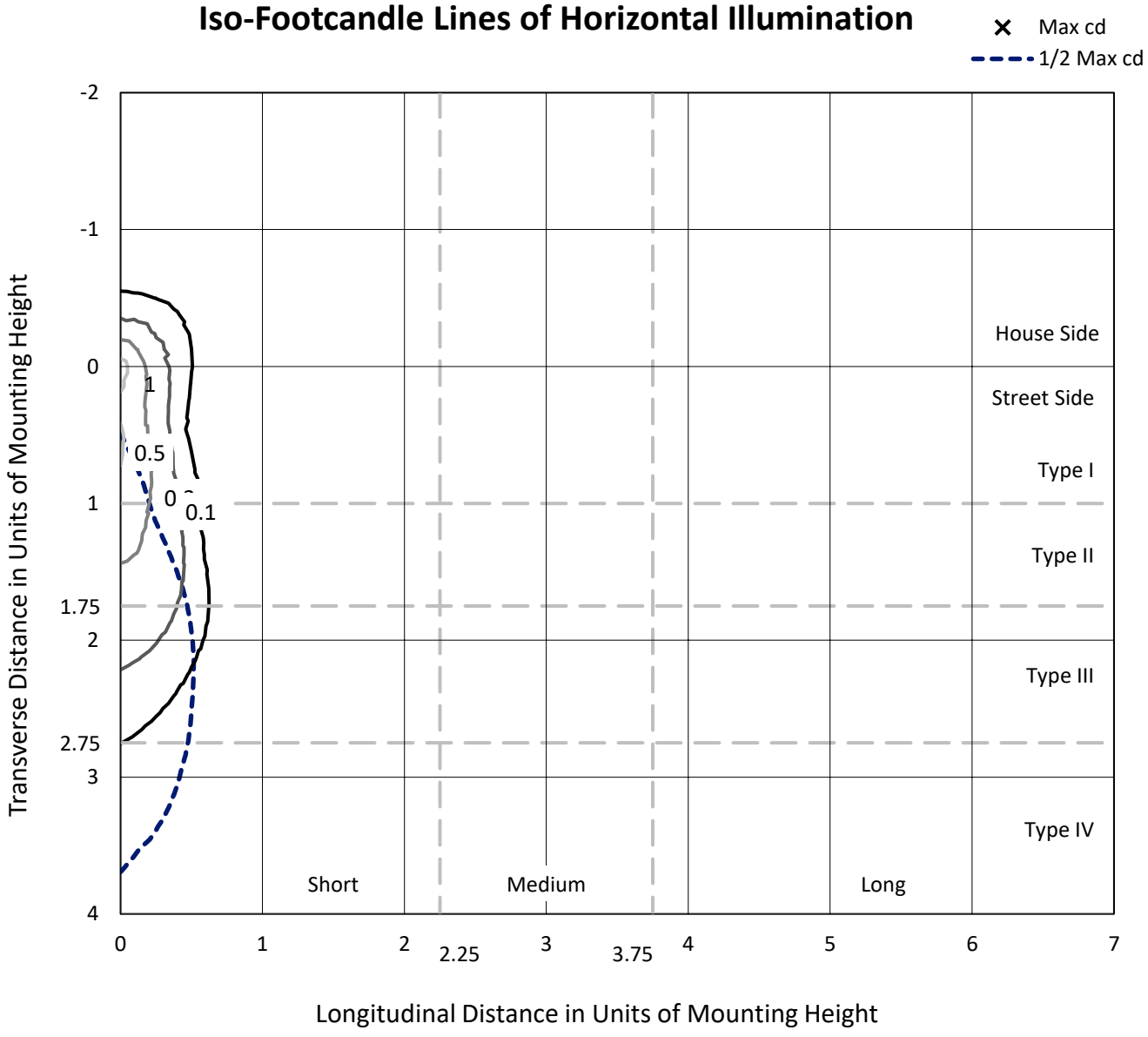
Input Watts (W):	25.4
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P437257
CATALOG NUMBER: ISS-SA1B-830-U-SLR

Iso-Footcandle Lines of Horizontal Illumination



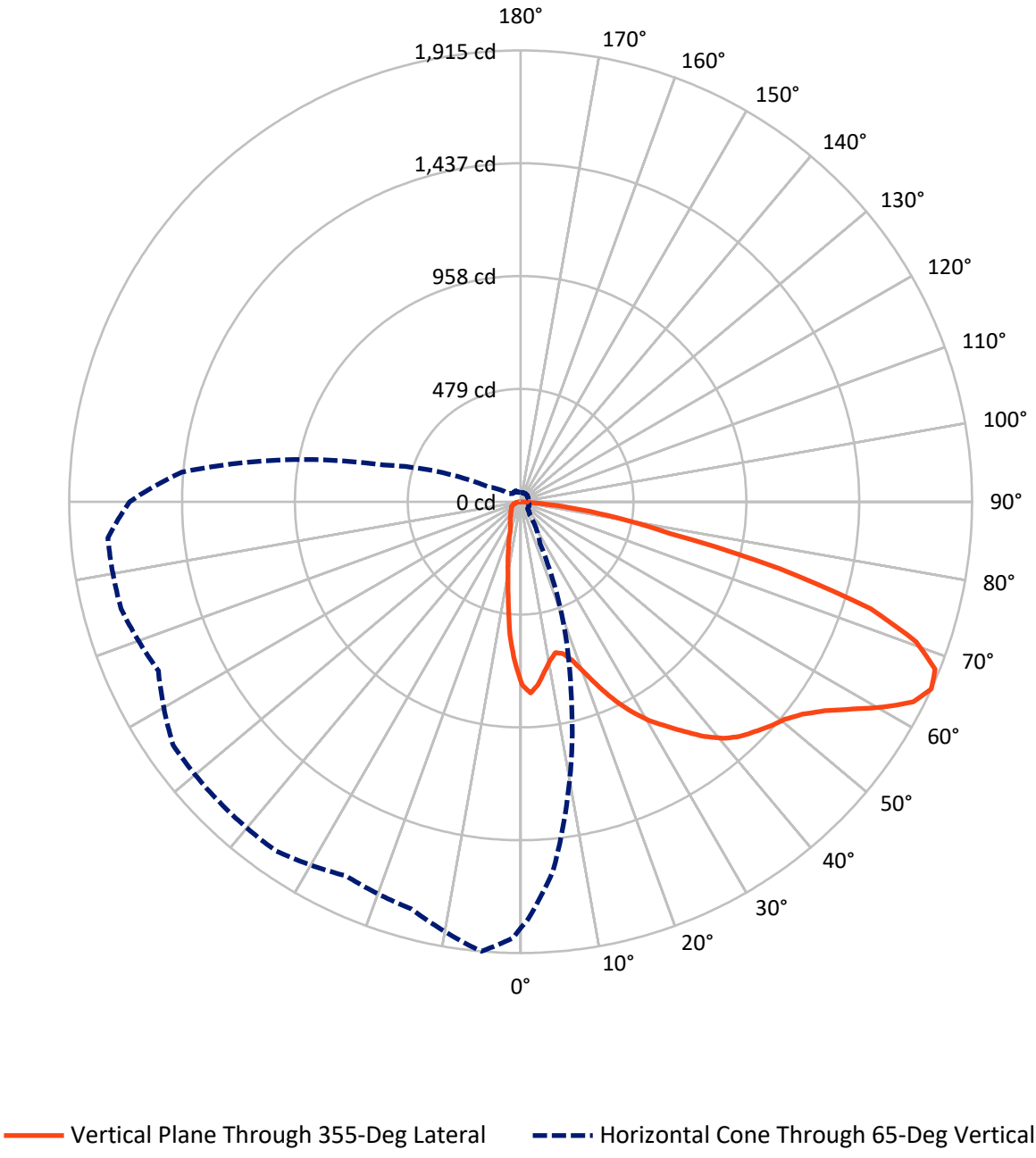
Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
Type IV - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P437257
CATALOG NUMBER: ISS-SA1B-830-U-SLR

Luminous Intensity Polar Plot



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

Scaled Data Report

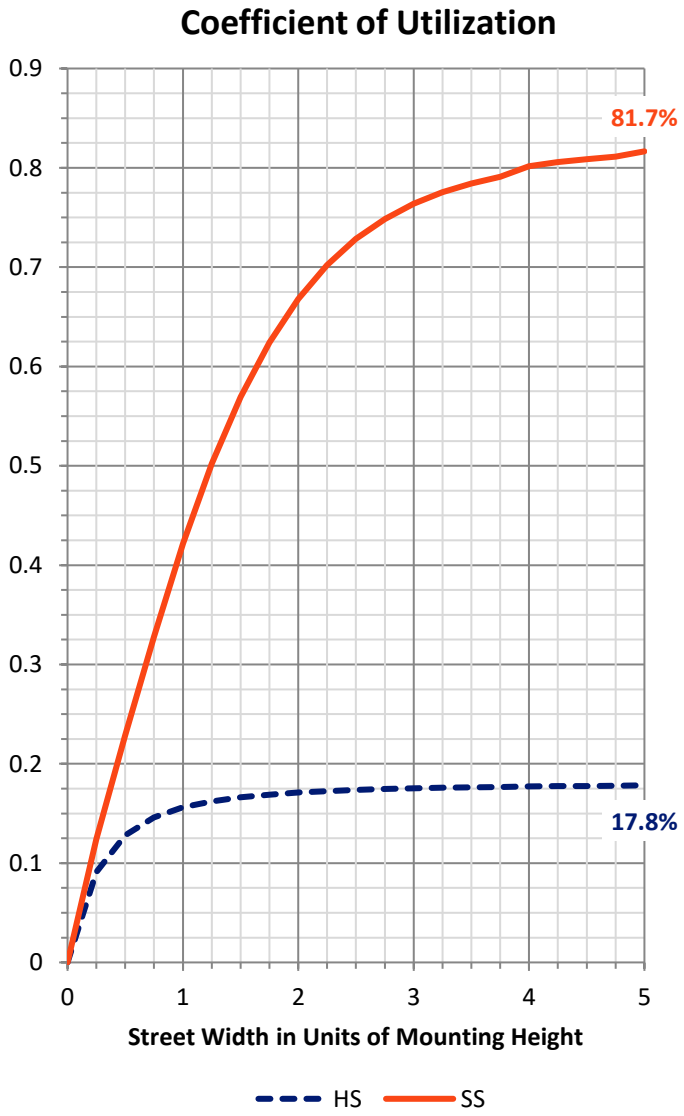
REPORT NUMBER: P437257
CATALOG NUMBER: ISS-SA1B-830-U-SLR

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	437.9	0.0	437.9
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	1991.1	0.0	1991.1
	% Fixture	82.0	0.0	82.0
Total	Lumens	2429.0	0.0	2429.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	2.4
10°-20°	121.2	5.0
20°-30°	172.7	7.1
30°-40°	246.8	10.2
40°-50°	344.7	14.2
50°-60°	479.4	19.7
60°-70°	584.0	24.0
70°-80°	359.7	14.8
80°-90°	61.8	2.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2429.0	100.0
0°-180°	2429.0	100.0



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

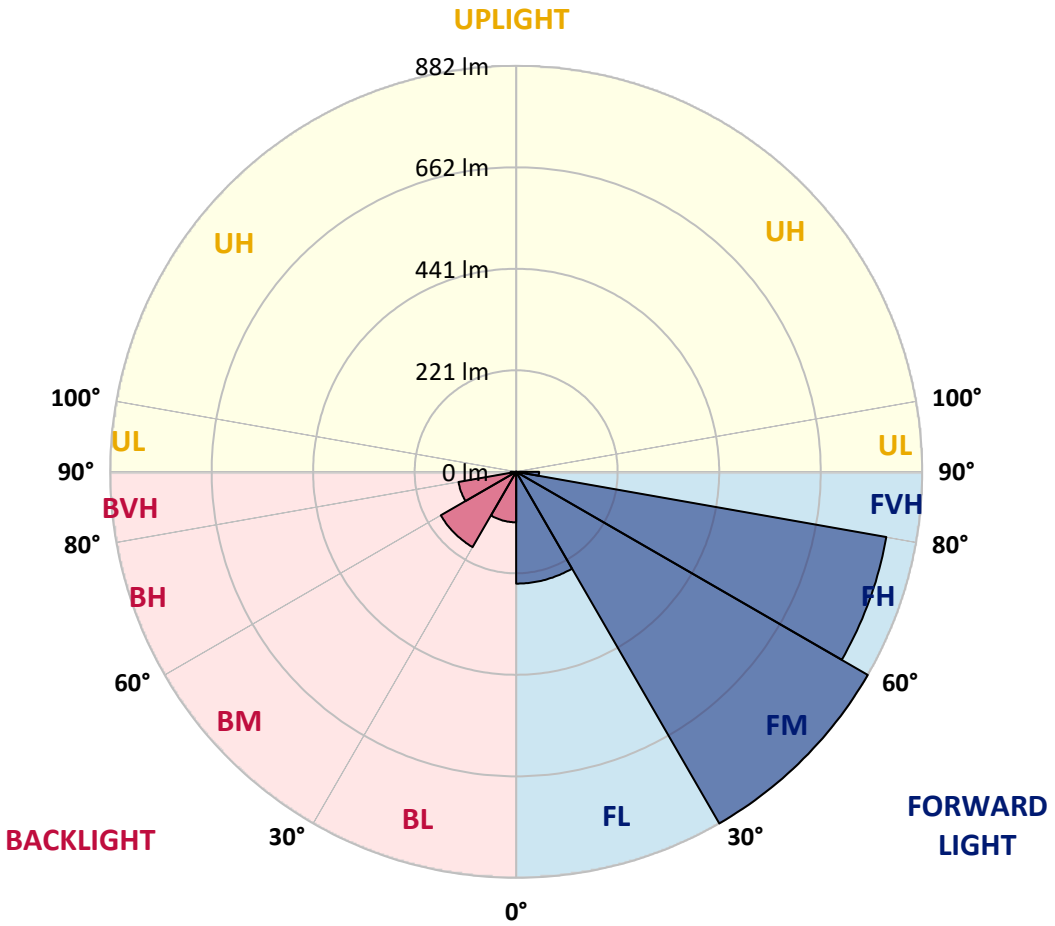
Scaled Data Report

REPORT NUMBER: P437257
CATALOG NUMBER: ISS-SA1B-830-U-SLR

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	242.9	10.0			
FM	(30°-60°)	882.0	36.3			
FH	(60°-80°)	816.6	33.6			G1/1800
FVH	(80°-90°)	49.7	2.0			G1/100
BL	(0°-30°)	109.7	4.5	B0/110		
BM	(30°-60°)	188.9	7.8	B0/220		
BH	(60°-80°)	127.2	5.2	B1/500		G1/500
BVH	(80°-90°)	12.1	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
Type IV Short



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

Scaled Data Report

REPORT NUMBER: P437257
CATALOG NUMBER: ISS-SA1B-830-U-SLR

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	777.2	777.2	777.2	777.2	777.2	777.2	777.2	777.2	777.2	777.2	777.2
2.5°	796.9	796.9	787.0	762.4	739.8	716.2	708.3	686.7	672.9	660.1	665.0
5°	750.6	747.7	730.0	678.8	639.5	601.1	577.5	542.1	538.1	506.7	504.7
7.5°	688.7	686.7	660.1	602.1	556.8	496.8	461.4	430.9	404.3	385.6	379.7
10°	646.3	639.5	607.0	536.2	470.2	427.0	407.3	380.7	358.1	334.5	314.8
12.5°	618.8	610.9	578.5	500.7	436.8	407.3	379.7	348.3	317.8	290.2	270.5
15°	623.7	610.9	574.5	491.9	425.0	382.7	344.3	306.9	271.5	241.0	216.4
17.5°	659.1	643.4	603.1	497.8	406.3	350.2	298.1	254.8	211.5	180.0	160.4
20°	721.1	698.5	647.3	514.5	392.5	319.7	250.9	193.8	148.6	126.9	121.0
22.5°	796.9	777.2	707.3	528.3	377.8	285.3	198.7	139.7	117.1	106.2	103.3
25°	875.6	853.9	776.2	550.9	366.0	253.8	156.4	111.2	100.3	95.4	93.5
27.5°	956.2	934.6	844.1	587.3	352.2	220.4	125.9	97.4	89.5	85.6	85.6
30°	1013.3	995.6	905.1	619.8	336.5	193.8	111.2	90.5	83.6	79.7	78.7
32.5°	1077.2	1052.7	962.1	641.4	324.6	173.1	101.3	84.6	78.7	73.8	73.8
35°	1149.1	1121.5	1015.3	663.1	312.8	163.3	94.4	80.7	74.8	69.8	68.9
37.5°	1227.8	1192.3	1069.4	681.8	300.1	158.4	90.5	76.7	70.8	66.9	64.9
40°	1314.3	1277.0	1141.2	697.5	291.2	152.5	87.6	73.8	67.9	63.0	62.0
42.5°	1387.1	1353.7	1191.4	707.3	287.3	144.6	86.6	70.8	65.9	60.0	58.0
45°	1424.5	1396.0	1252.4	710.3	285.3	139.7	81.7	70.8	63.9	58.0	55.1
47.5°	1457.0	1436.3	1296.6	725.1	280.4	134.8	75.8	74.8	63.0	55.1	52.1
50°	1512.1	1490.4	1365.5	752.6	274.5	128.9	69.8	71.8	63.0	53.1	50.2
52.5°	1578.0	1572.1	1456.0	795.9	265.6	121.0	63.9	67.9	63.0	52.1	48.2
55°	1674.4	1665.6	1576.0	852.0	254.8	110.2	58.0	62.0	62.0	49.2	45.3
57.5°	1756.1	1757.0	1686.2	891.3	245.0	92.5	54.1	53.1	59.0	46.2	42.3
60°	1793.4	1793.4	1721.6	906.1	232.2	77.7	51.2	47.2	61.0	43.3	39.4
62.5°	1817.1	1797.4	1672.4	892.3	217.4	69.8	46.2	43.3	49.2	40.3	36.4
65°	*1810.2*	*1772.8*	*1574.1*	*822.4*	*195.8*	*67.9*	*43.3*	*39.4*	*39.4*	*37.4*	*34.4*
67.5°	1748.2	1690.1	1429.4	704.4	173.1	66.9	39.4	36.4	35.4	33.4	31.5
70°	1580.0	1538.6	1257.3	574.5	158.4	66.9	36.4	32.5	31.5	29.5	28.5
72.5°	1291.7	1230.7	1003.5	430.9	146.6	66.9	33.4	28.5	27.5	26.6	25.6
75°	882.5	812.6	705.4	264.6	115.1	58.0	29.5	23.6	23.6	22.6	21.6
77.5°	487.0	471.2	397.4	139.7	71.8	35.4	22.6	18.7	19.7	18.7	17.7
80°	282.3	265.6	236.1	67.9	41.3	20.7	13.8	13.8	14.8	14.8	13.8
82.5°	136.7	119.0	122.0	27.5	14.8	8.9	5.9	6.9	7.9	9.8	9.8
85°	4.9	4.9	9.8	2.0	0.0	0.0	0.0	0.0	0.0	2.0	3.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report

REPORT NUMBER: P437257
CATALOG NUMBER: ISS-SA1B-830-U-SLR

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	777.2	777.2	777.2	777.2	777.2	777.2	777.2	777.2	777.2	777.2	777.2
2.5°	649.3	649.3	653.2	670.0	656.2	654.2	658.2	665.0	668.0	681.8	680.8
5°	500.7	497.8	509.6	525.3	534.2	539.1	547.0	564.7	557.8	568.6	566.7
7.5°	369.9	374.8	369.9	387.6	401.4	422.0	437.8	433.8	434.8	426.0	438.8
10°	302.0	300.1	288.2	294.2	302.0	314.8	325.6	327.6	337.4	321.7	332.5
12.5°	257.8	249.9	238.1	232.2	230.2	240.0	243.0	247.9	253.8	258.7	260.7
15°	206.6	200.7	192.8	184.0	182.0	182.0	188.9	195.8	203.6	205.6	212.5
17.5°	154.5	151.5	148.6	148.6	148.6	148.6	154.5	157.4	161.3	167.2	166.3
20°	117.1	117.1	118.1	123.0	125.9	127.9	131.8	132.8	131.8	132.8	132.8
22.5°	103.3	102.3	105.3	107.2	112.2	117.1	119.0	118.1	115.1	113.1	115.1
25°	93.5	94.4	95.4	98.4	102.3	107.2	108.2	107.2	104.3	104.3	104.3
27.5°	85.6	86.6	88.5	91.5	95.4	99.4	100.3	98.4	95.4	96.4	95.4
30°	79.7	81.7	82.6	85.6	88.5	92.5	92.5	90.5	88.5	88.5	88.5
32.5°	72.8	74.8	76.7	79.7	83.6	85.6	85.6	84.6	82.6	81.7	81.7
35°	68.9	68.9	70.8	74.8	76.7	78.7	79.7	78.7	76.7	74.8	73.8
37.5°	64.9	64.9	65.9	67.9	71.8	73.8	74.8	72.8	70.8	68.9	68.9
40°	61.0	61.0	62.0	63.0	66.9	69.8	69.8	66.9	64.9	65.9	64.9
42.5°	58.0	58.0	59.0	59.0	61.0	65.9	64.9	63.0	62.0	62.0	61.0
45°	55.1	54.1	55.1	55.1	56.1	61.0	61.0	58.0	58.0	59.0	58.0
47.5°	52.1	51.2	52.1	52.1	53.1	56.1	56.1	55.1	55.1	55.1	56.1
50°	49.2	49.2	49.2	49.2	50.2	51.2	53.1	52.1	52.1	52.1	53.1
52.5°	46.2	46.2	46.2	47.2	47.2	49.2	50.2	49.2	50.2	50.2	50.2
55°	44.3	43.3	43.3	45.3	45.3	47.2	48.2	47.2	48.2	48.2	48.2
57.5°	41.3	41.3	41.3	42.3	43.3	45.3	47.2	45.3	46.2	46.2	47.2
60°	38.4	38.4	38.4	40.3	41.3	43.3	44.3	43.3	44.3	44.3	44.3
62.5°	35.4	36.4	36.4	37.4	38.4	41.3	42.3	41.3	42.3	42.3	42.3
65°	*33.4*	*33.4*	*34.4*	*35.4*	*36.4*	*38.4*	*39.4*	*39.4*	*39.4*	*40.3*	*39.4*
67.5°	30.5	30.5	31.5	32.5	33.4	36.4	36.4	36.4	37.4	36.4	36.4
70°	27.5	27.5	28.5	29.5	30.5	33.4	33.4	33.4	34.4	32.5	32.5
72.5°	24.6	24.6	25.6	26.6	28.5	31.5	30.5	30.5	30.5	29.5	29.5
75°	21.6	21.6	22.6	23.6	24.6	28.5	27.5	26.6	26.6	25.6	25.6
77.5°	17.7	17.7	18.7	20.7	21.6	24.6	23.6	22.6	21.6	21.6	21.6
80°	13.8	14.8	15.7	16.7	17.7	19.7	18.7	17.7	16.7	16.7	16.7
82.5°	9.8	10.8	11.8	12.8	13.8	13.8	13.8	13.8	12.8	11.8	11.8
85°	3.9	5.9	7.9	7.9	8.9	7.9	8.9	7.9	6.9	6.9	5.9
87.5°	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report

REPORT NUMBER: P437257
CATALOG NUMBER: ISS-SA1B-830-U-SLR

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	777.2	777.2	777.2	777.2	777.2	777.2	777.2	777.2	777.2	777.2	777.2
2.5°	688.7	704.4	713.2	729.0	745.7	768.3	787.0	813.6	837.2	842.1	848.0
5°	570.6	591.3	601.1	626.7	666.0	690.6	730.0	771.3	822.4	838.2	858.8
7.5°	428.9	444.7	470.2	492.9	539.1	580.4	633.6	693.6	753.6	788.0	821.5
10°	326.6	346.3	373.8	400.4	445.7	487.0	549.9	616.8	693.6	725.1	760.5
12.5°	271.5	287.3	314.8	351.2	393.5	432.9	480.1	552.9	633.6	673.9	717.2
15°	219.4	236.1	270.5	310.9	352.2	396.5	441.7	511.6	609.9	651.3	692.6
17.5°	175.1	189.9	219.4	262.7	307.9	357.1	412.2	500.7	614.9	666.0	714.2
20°	135.8	148.6	171.2	210.5	256.8	314.8	385.6	496.8	644.4	716.2	764.4
22.5°	117.1	122.0	134.8	162.3	209.5	277.4	361.0	499.8	691.6	784.1	839.2
25°	104.3	108.2	113.1	129.9	167.2	239.1	339.4	505.7	741.8	860.8	923.8
27.5°	96.4	98.4	101.3	109.2	136.7	207.6	317.8	513.5	809.7	938.5	999.5
30°	88.5	88.5	91.5	99.4	120.0	185.0	302.0	529.3	876.6	1005.4	1065.4
32.5°	80.7	80.7	85.6	92.5	109.2	166.3	286.3	534.2	926.7	1064.5	1112.7
35°	73.8	75.8	79.7	87.6	102.3	152.5	271.5	525.3	963.1	1114.6	1163.8
37.5°	69.8	70.8	75.8	82.6	93.5	139.7	256.8	513.5	1012.3	1181.5	1219.9
40°	64.9	66.9	71.8	78.7	87.6	129.9	240.0	500.7	1055.6	1256.3	1276.0
42.5°	62.0	63.9	67.9	74.8	83.6	118.1	224.3	490.9	1101.8	1320.2	1334.0
45°	59.0	61.0	65.9	71.8	83.6	109.2	208.6	484.0	1147.1	1369.4	1380.3
47.5°	56.1	58.0	63.0	70.8	82.6	104.3	197.7	477.1	1175.6	1411.7	1414.7
50°	54.1	56.1	62.0	72.8	79.7	102.3	192.8	484.0	1223.8	1445.2	1436.3
52.5°	51.2	54.1	61.0	75.8	75.8	100.3	188.9	508.6	1283.8	1494.4	1471.7
55°	50.2	52.1	59.0	72.8	68.9	95.4	188.9	527.3	1363.5	1591.8	1554.4
57.5°	47.2	49.2	57.1	67.9	63.0	87.6	186.9	557.8	1476.7	1699.0	1665.6
60°	44.3	47.2	55.1	61.0	57.1	77.7	178.1	591.3	1554.4	1757.0	1762.9
62.5°	42.3	45.3	55.1	53.1	52.1	67.9	164.3	611.9	1546.5	1738.4	1794.4
65°	*39.4*	*42.3*	*50.2*	*48.2*	*49.2*	*61.0*	*146.6*	*602.1*	*1443.2*	*1659.6*	*1758.0*
67.5°	36.4	39.4	43.3	43.3	45.3	59.0	127.9	545.0	1331.1	1564.2	1677.4
70°	33.4	35.4	37.4	39.4	41.3	58.0	113.1	467.3	1202.2	1472.7	1562.3
72.5°	29.5	30.5	32.5	34.4	38.4	55.1	107.2	379.7	1024.1	1275.0	1413.7
75°	25.6	26.6	28.5	30.5	33.4	52.1	98.4	288.2	844.1	1007.4	1142.2
77.5°	21.6	22.6	24.6	25.6	28.5	46.2	84.6	208.6	657.2	726.0	835.2
80°	16.7	17.7	19.7	19.7	23.6	34.4	65.9	145.6	461.4	514.5	571.6
82.5°	11.8	12.8	13.8	14.8	17.7	23.6	43.3	87.6	312.8	353.2	343.3
85°	6.9	7.9	7.9	9.8	10.8	15.7	24.6	45.3	204.6	161.3	159.4
87.5°	3.0	3.0	3.0	3.9	3.9	5.9	7.9	8.9	19.7	6.9	4.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report

REPORT NUMBER: P437257
CATALOG NUMBER: ISS-SA1B-830-U-SLR

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	777.2	777.2	777.2	777.2	777.2	777.2	777.2	*777.2*	777.2	777.2
2.5°	856.9	863.8	868.7	866.7	863.8	847.0	830.3	*812.6*	796.9	796.9
5°	892.3	920.8	932.6	922.8	901.1	866.7	823.4	*778.2*	756.5	750.6
7.5°	873.6	927.7	956.2	943.5	914.9	852.0	786.0	*727.0*	694.6	688.7
10°	836.2	907.1	939.5	935.6	904.1	831.3	751.6	*684.7*	650.3	646.3
12.5°	792.9	861.8	903.1	905.1	884.4	820.5	736.9	*657.2*	626.7	618.8
15°	766.4	826.4	854.9	848.0	853.9	811.6	742.8	*668.0*	630.6	623.7
17.5°	767.4	792.9	799.8	789.0	811.6	809.7	776.2	*707.3*	666.0	659.1
20°	792.9	771.3	749.6	747.7	777.2	816.5	829.3	*773.3*	726.0	721.1
22.5°	837.2	765.4	720.1	713.2	750.6	823.4	880.5	*853.9*	809.7	796.9
25°	886.4	771.3	701.4	692.6	726.0	828.3	935.6	*936.6*	887.4	875.6
27.5°	939.5	790.0	701.4	691.6	727.0	836.2	972.0	*1011.3*	966.1	956.2
30°	986.7	816.5	708.3	697.5	738.8	844.1	996.6	*1078.2*	1027.1	1013.3
32.5°	1015.3	839.2	725.1	705.4	759.5	859.8	1019.2	*1135.3*	1095.9	1077.2
35°	1037.9	865.7	752.6	727.0	790.0	885.4	1037.9	*1197.3*	1159.9	1149.1
37.5°	1054.6	897.2	781.1	756.5	830.3	919.8	1064.5	*1263.2*	1251.4	1227.8
40°	1082.2	916.9	832.3	823.4	900.2	973.9	1095.9	*1320.2*	1328.1	1314.3
42.5°	1106.8	955.3	905.1	914.9	989.7	1034.0	1138.2	*1362.5*	1404.8	1387.1
45°	1126.4	1008.4	996.6	1029.0	1093.0	1110.7	1161.9	*1392.1*	1436.3	1424.5
47.5°	1154.0	1078.2	1118.6	1160.9	1214.0	1190.4	1186.4	*1423.5*	1468.8	1457.0
50°	1193.3	1159.9	1240.6	1295.6	1330.1	1255.3	1216.9	*1452.1*	1519.0	1512.1
52.5°	1233.7	1254.3	1364.5	1415.7	1438.3	1336.0	1260.2	*1497.3*	1578.0	1578.0
55°	1308.4	1346.8	1496.3	1528.8	1559.3	1408.8	1318.3	*1565.2*	1669.5	1674.4
57.5°	1417.6	1446.2	1596.7	1634.1	1641.9	1490.4	1409.8	*1659.6*	1747.2	1756.1
60°	1530.8	1544.5	1696.0	1729.5	1702.9	1595.7	1517.0	*1769.8*	1798.4	1793.4
62.5°	1655.7	1640.0	1764.9	1788.5	1781.6	1688.2	1651.8	*1870.2*	1835.7	1817.1
65°	*1755.1*	*1696.0*	*1800.3*	*1805.2*	*1809.2*	*1752.1*	*1789.5*	*1915.4*	*1851.5*	*1810.2*
67.5°	1815.1	1704.9	1728.5	1705.9	1721.6	1735.4	1883.0	*1896.7*	1784.6	1748.2
70°	1801.3	1580.0	1473.7	1448.1	1449.1	1545.5	1823.0	*1779.7*	1632.1	1580.0
72.5°	1674.4	1328.1	1173.7	1139.2	1146.1	1155.0	1532.7	*1553.4*	1319.3	1291.7
75°	1409.8	1023.1	845.1	837.2	827.4	865.7	1225.8	*1135.3*	875.6	882.5
77.5°	1150.0	753.6	620.8	580.4	574.5	580.4	836.2	*648.3*	508.6	487.0
80°	829.3	501.7	463.4	454.5	427.0	343.3	437.8	*417.1*	287.3	282.3
82.5°	546.0	346.3	354.2	295.1	277.4	217.4	265.6	*212.5*	143.6	136.7
85°	283.3	180.0	148.6	64.9	72.8	61.0	58.0	*47.2*	4.9	4.9
87.5°	9.8	3.9	3.0	3.0	2.0	1.0	1.0	*0.0*	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0

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

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

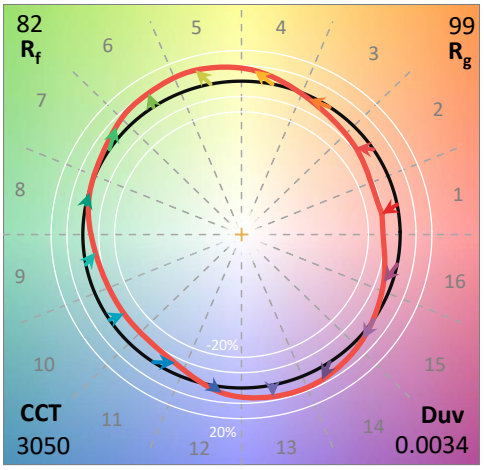
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2408-195-9
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	08/07/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	MCGRAW EDISON
Catalog Number:	**GALN-SB1A-830-U-5WQ**
Description:	GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K):	3050	CRI (Ra):	81.0		
CIE u':	0.2476	R1:	79.6	R9:	7.1
CIE v':	0.5251	R2:	85.6	R10:	67.0
Duv:	0.0034	R3:	92.0	R11:	82.7
CIE x:	0.4383	R4:	82.6	R12:	63.2
CIE y:	0.4131	R5:	78.9	R13:	80.3
CIE z:	0.1487	R6:	81.7	R14:	95.0
Peak Wavelength (nm):	603	R7:	85.2	R15:	71.7
Dominant Wavelength (nm):	581	R8:	62.0		
Purity:	55.55201				

Rf:	81.5
Rg:	99.2



Test Conditions

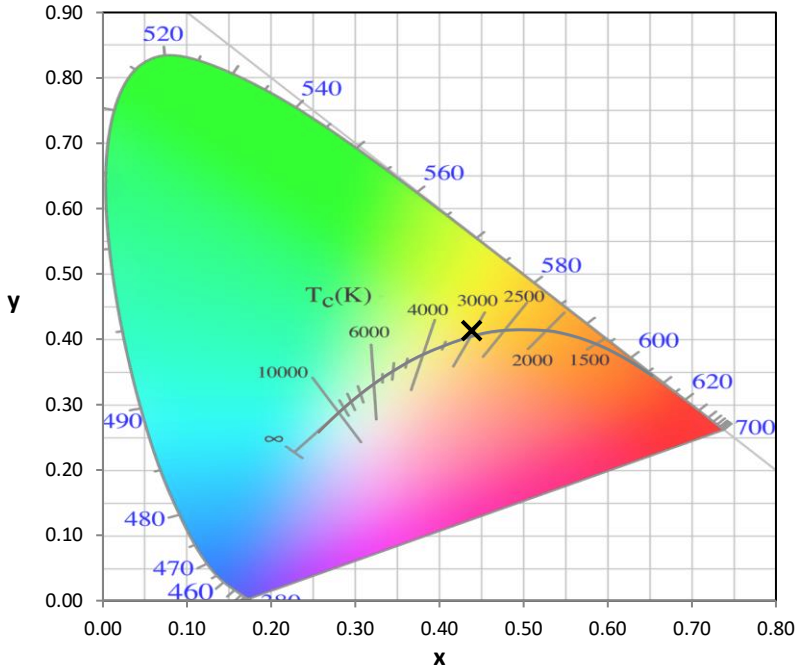
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

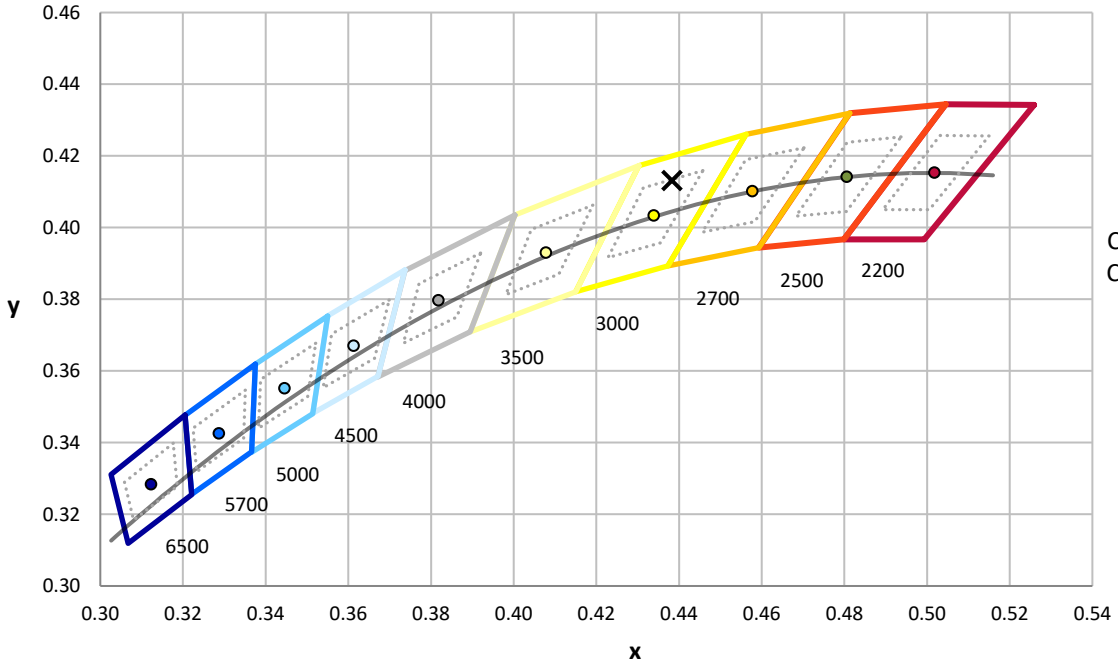
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



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

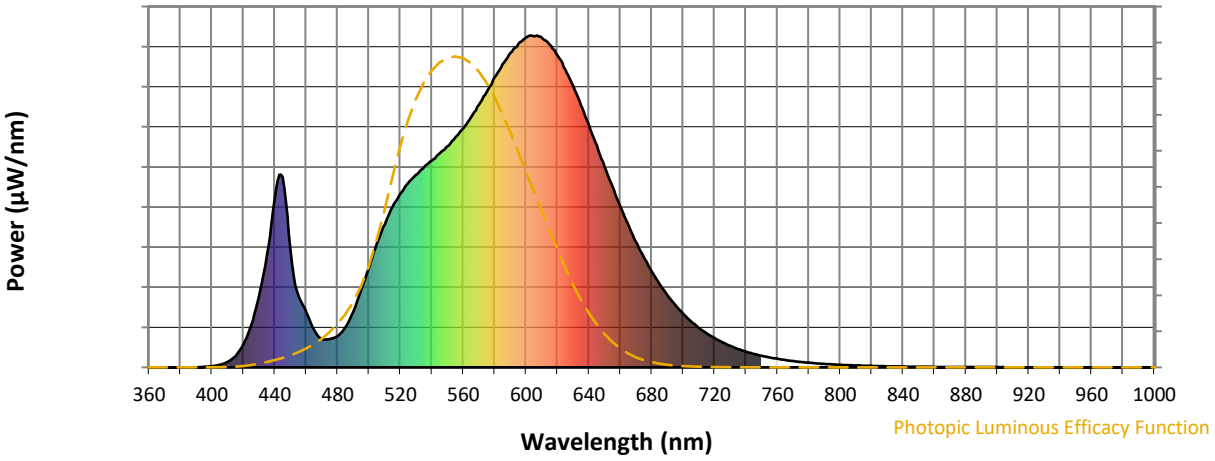


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

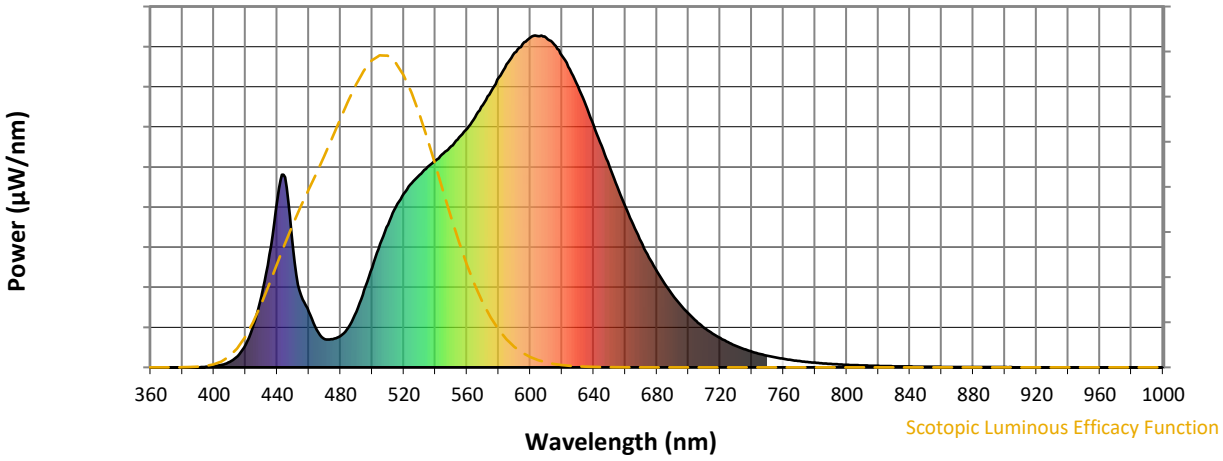


Photopic Lumens: NR

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength

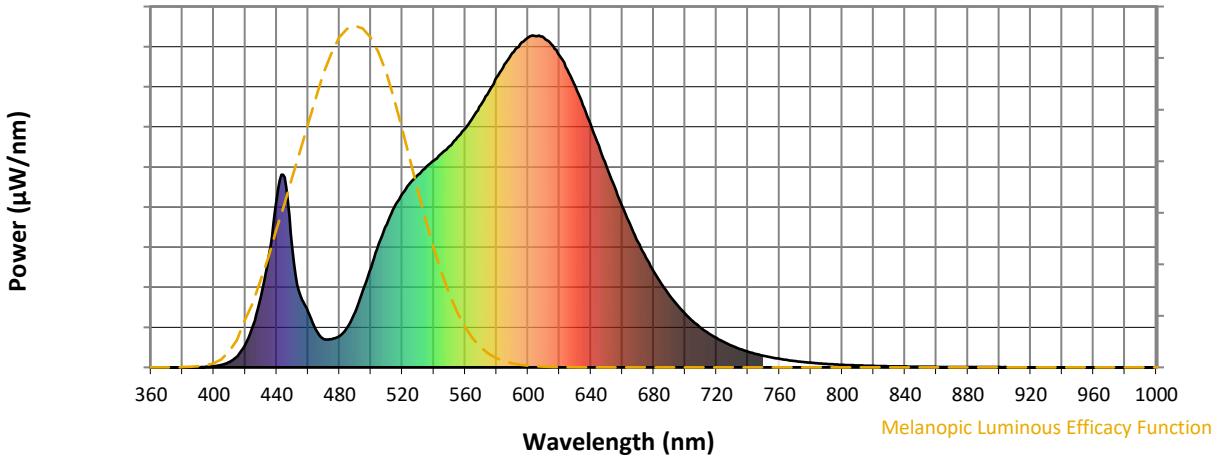


Scotopic Lumens: NR **S/P: 1.27**

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.32**

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

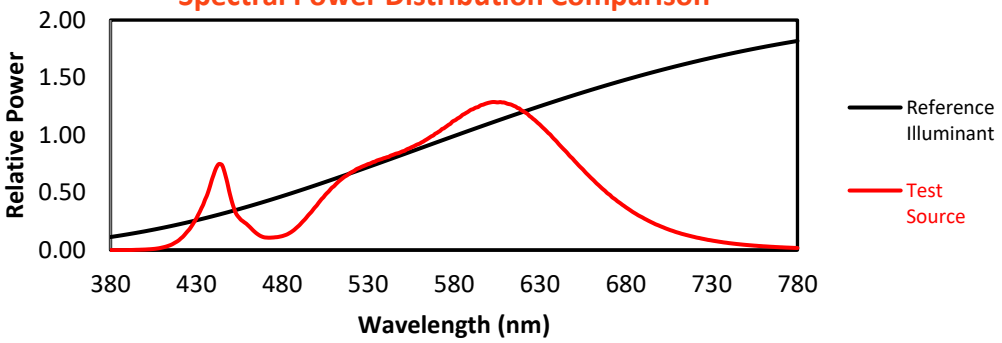
REPORT NUMBER: SP1-2408-195-9

TM-30-18

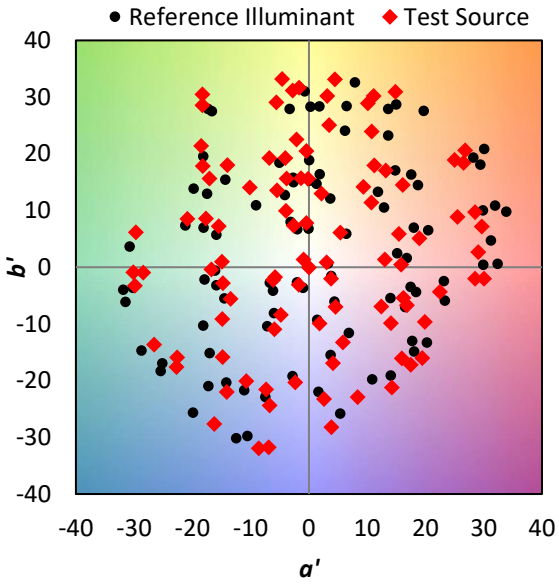
Summary

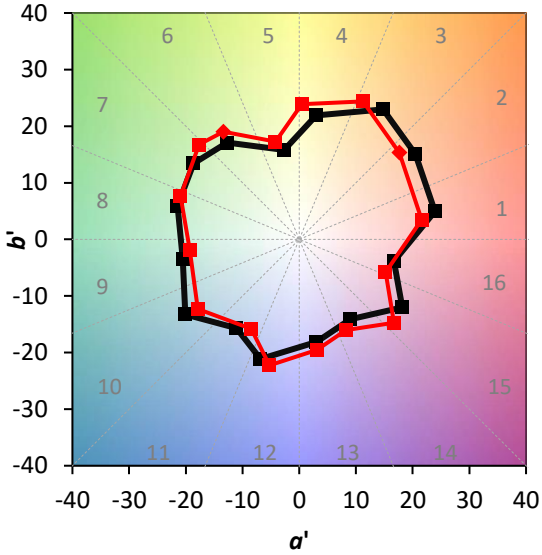
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

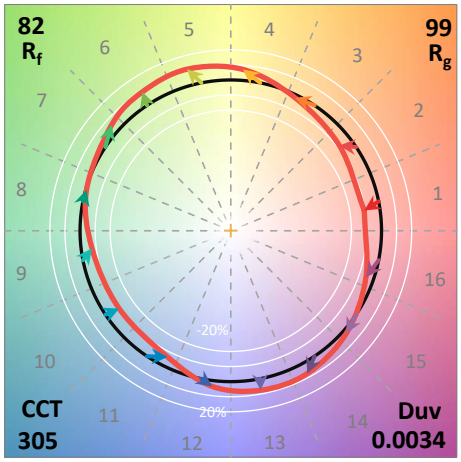
Spectral Power Distribution Comparison

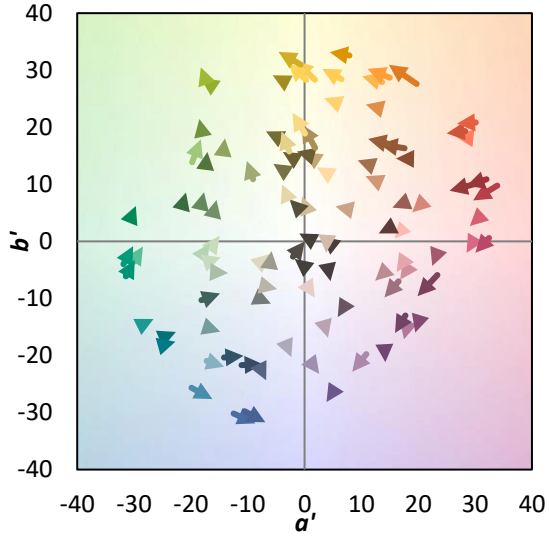


Color Vector Graphics







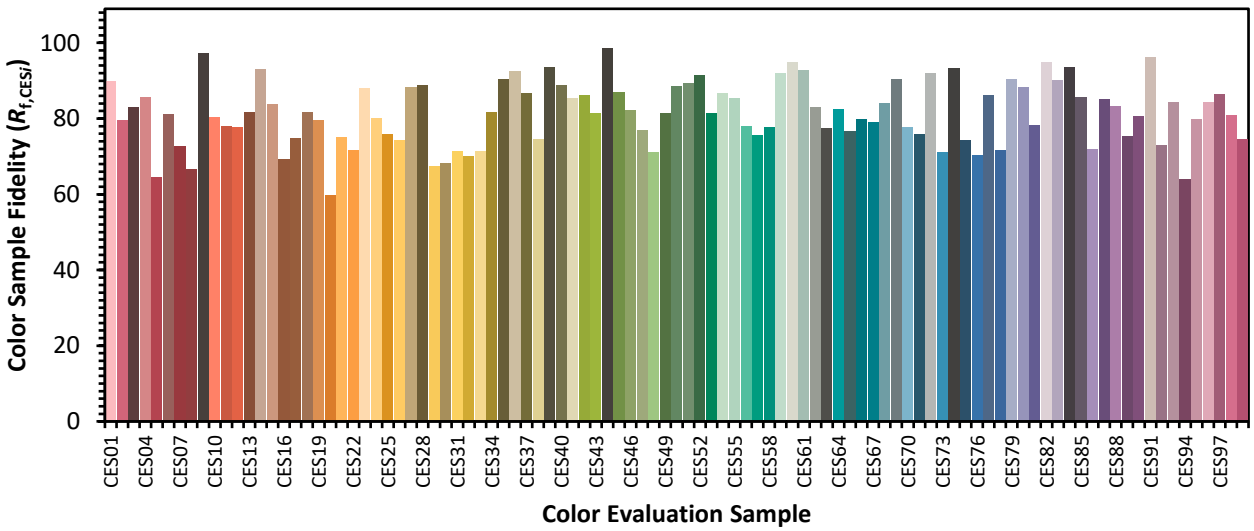


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

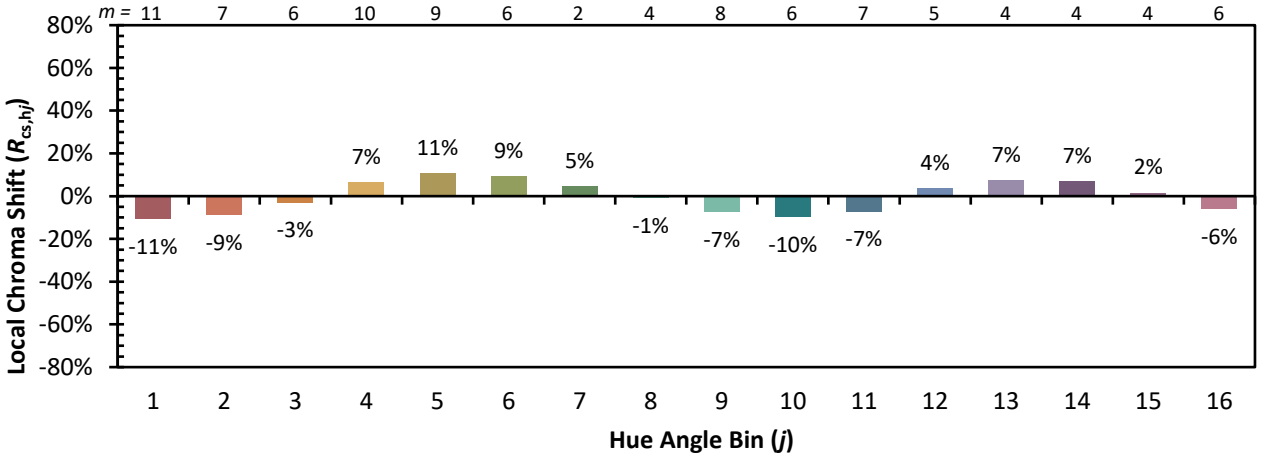
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	

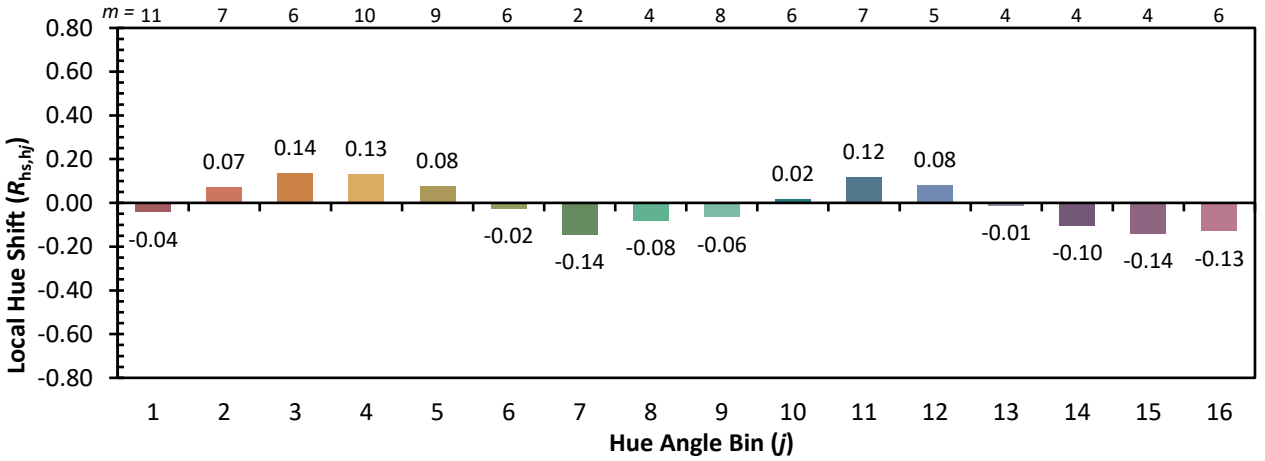


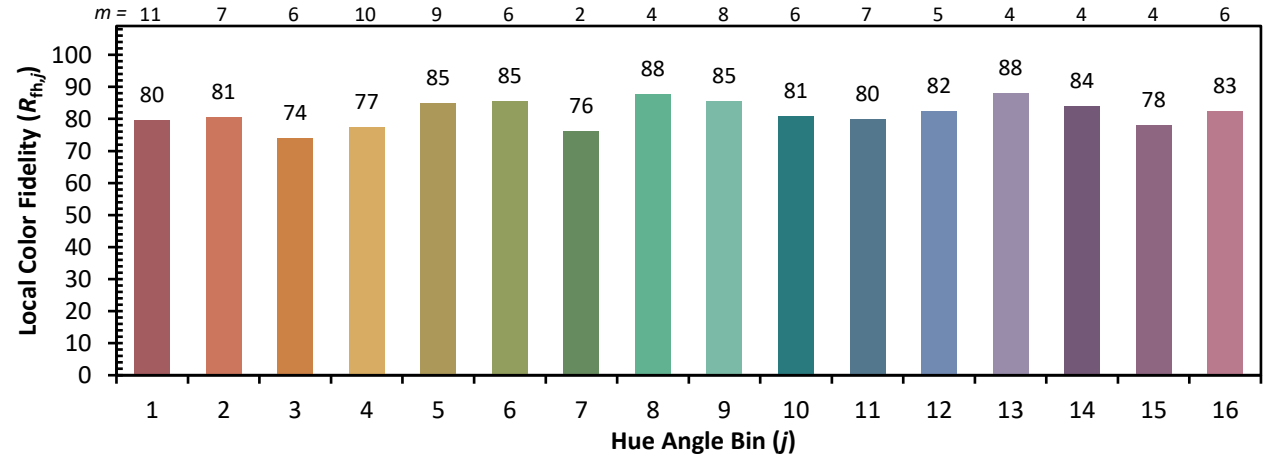
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



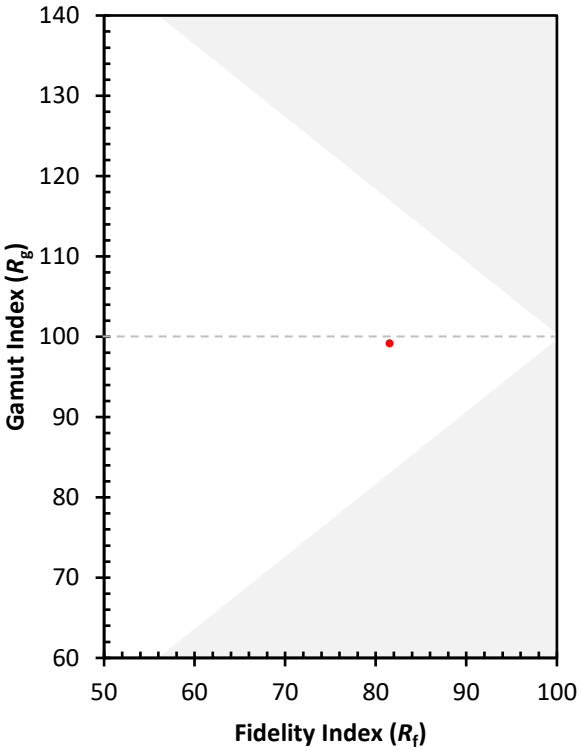


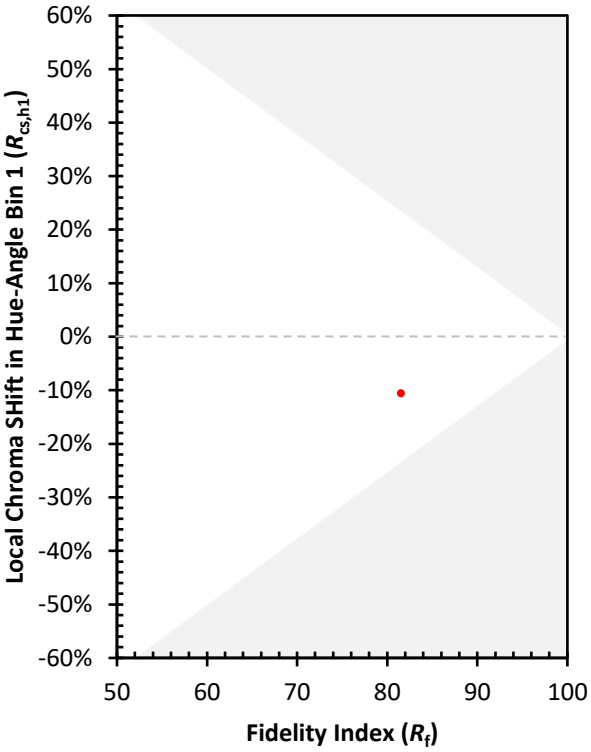


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)