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: P438112

Luminaire Tested: **IST-SA1A-830-U-SLR**

Issue Date: 12/10/2020

Report Generated By 670245982

Cooper Lighting Solutions Photometric Lab
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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P438112
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-22)
Test Lab:	INNOVATION CENTER
Issue Date:	12/10/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	IST-SA1A-830-U-SLR
Description:	IMPACT ELITE LED TRAPEZOID LUMINAIRE
	(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT ELIMINATOR RIGHT OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	1954 lumens
Efficiency:	N/A
Efficacy:	97.2 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B0 - U0 - G1

Input Watts (W):	20.1
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

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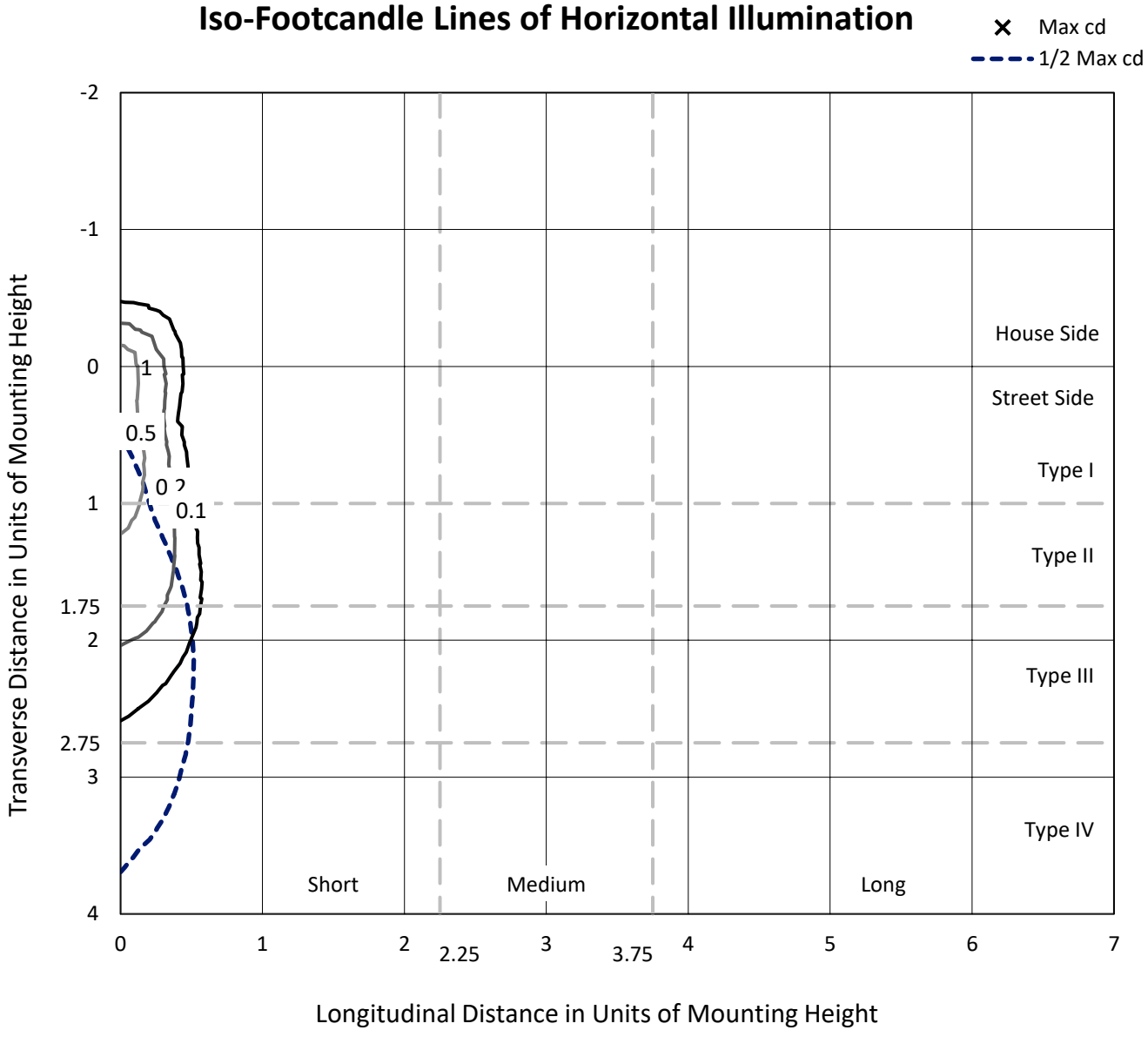
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 1 fc
Type IV - Short - N/A

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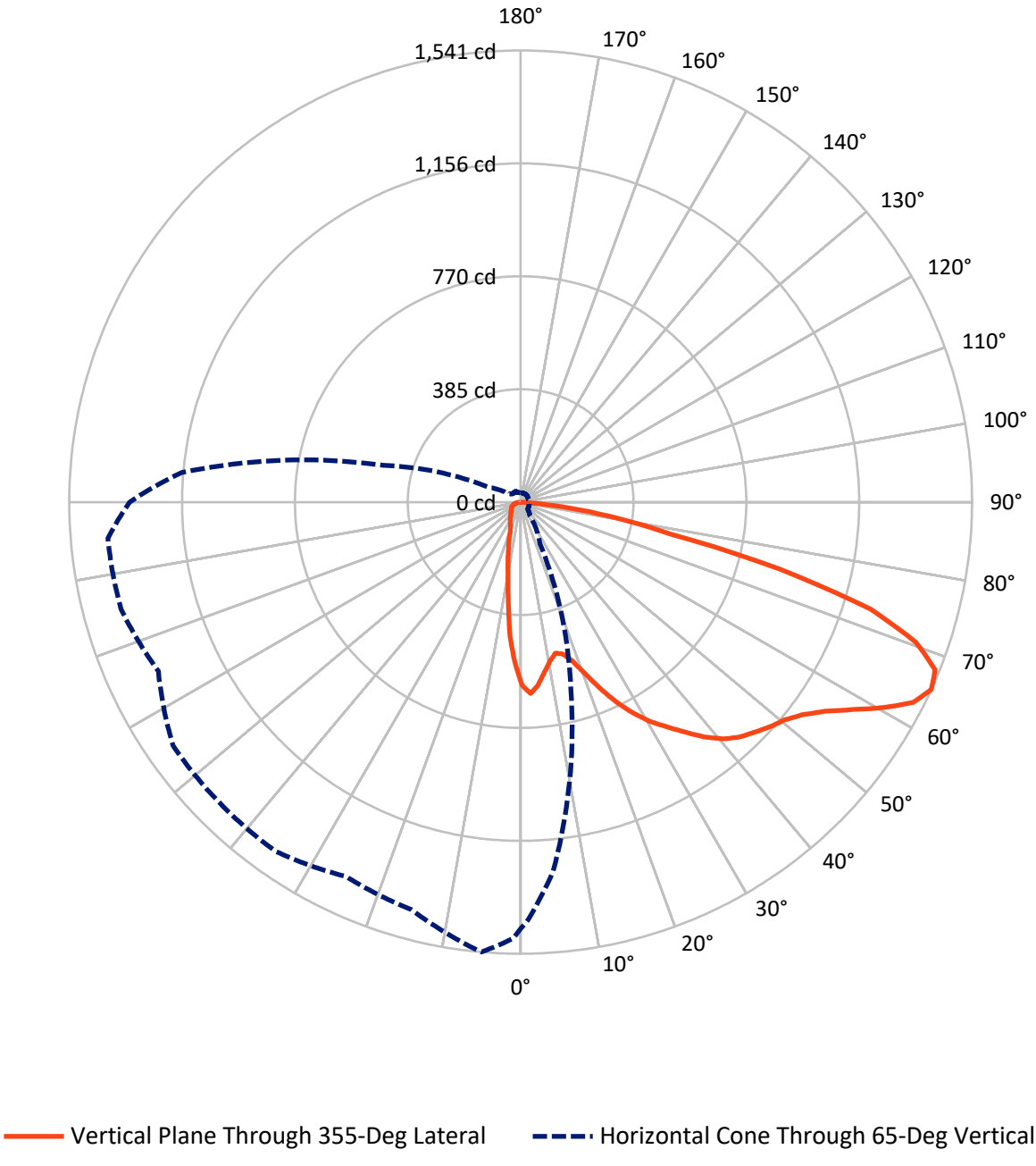
Luminous Intensity Polar Plot



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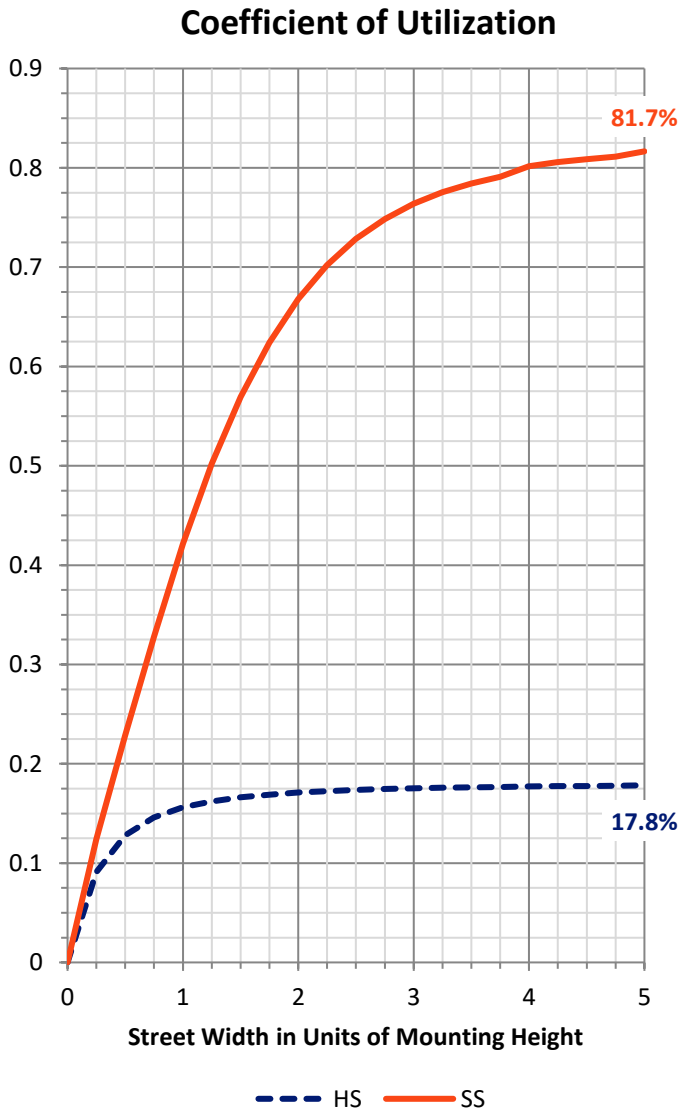
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	352.3	0.0	352.3
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	1601.7	0.0	1601.7
	% Fixture	82.0	0.0	82.0
Total	Lumens	1954.0	0.0	1954.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.2	2.4
10°-20°	97.5	5.0
20°-30°	138.9	7.1
30°-40°	198.6	10.2
40°-50°	277.3	14.2
50°-60°	385.7	19.7
60°-70°	469.8	24.0
70°-80°	289.4	14.8
80°-90°	49.7	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°	1954.0	100.0
0°-180°	1954.0	100.0



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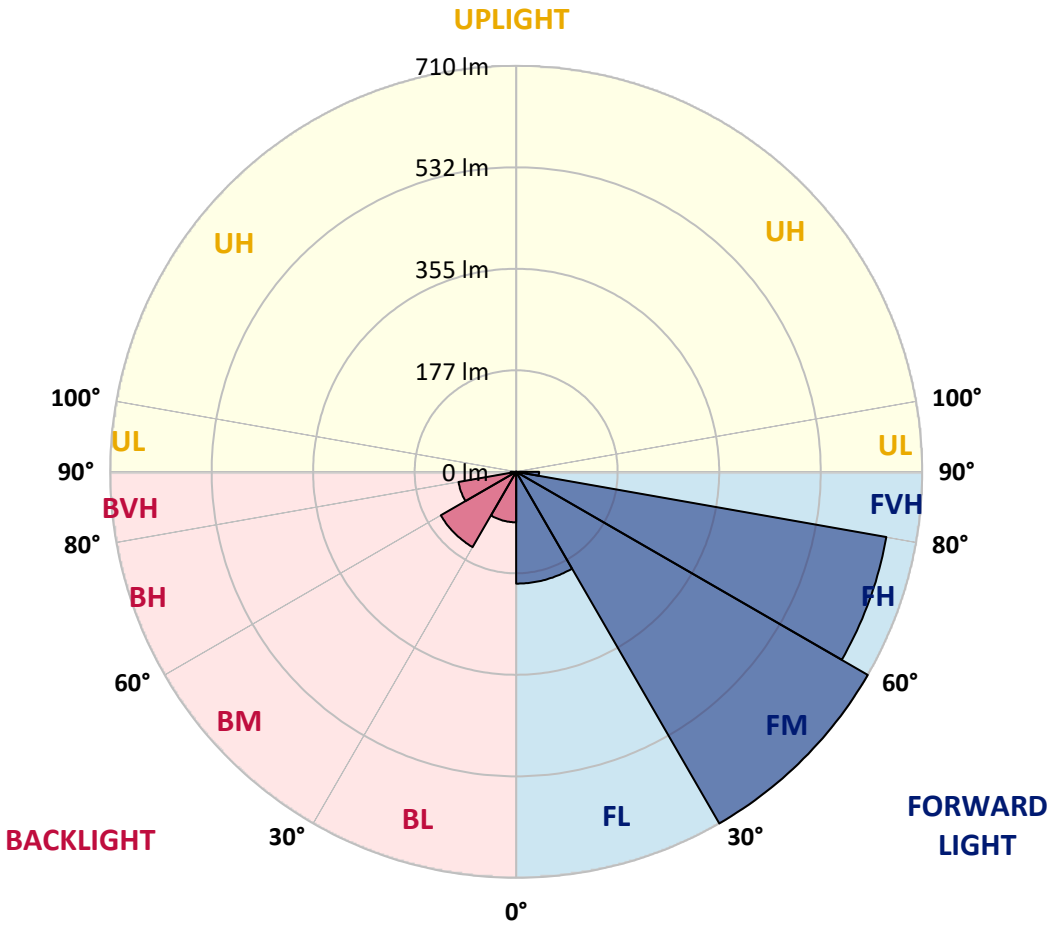
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	195.4	10.0			
FM	(30°-60°)	709.5	36.3			
FH	(60°-80°)	656.9	33.6			G0/660
FVH	(80°-90°)	39.9	2.0			G1/100
BL	(0°-30°)	88.2	4.5	B0/110		
BM	(30°-60°)	152.0	7.8	B0/220		
BH	(60°-80°)	102.3	5.2	B0/110		G0/110
BVH	(80°-90°)	9.8	0.5			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	625.2	625.2	625.2	625.2	625.2	625.2	625.2	625.2	625.2	625.2	625.2
2.5°	641.0	641.0	633.1	613.3	595.1	576.1	569.8	552.4	541.3	531.0	535.0
5°	603.8	601.5	587.2	546.1	514.4	483.5	464.6	436.1	432.9	407.6	406.0
7.5°	554.0	552.4	531.0	484.3	447.9	399.7	371.2	346.6	325.3	310.2	305.5
10°	520.0	514.4	488.3	431.3	378.3	343.5	327.6	306.3	288.1	269.1	253.2
12.5°	497.8	491.5	465.3	402.8	351.4	327.6	305.5	280.2	255.6	233.5	217.6
15°	501.7	491.5	462.2	395.7	341.9	307.9	277.0	246.9	218.4	193.9	174.1
17.5°	530.2	517.6	485.1	400.5	326.8	281.7	239.8	205.0	170.2	144.8	129.0
20°	580.1	561.9	520.7	413.9	315.8	257.2	201.8	155.9	119.5	102.1	97.3
22.5°	641.0	625.2	569.0	425.0	303.9	229.5	159.9	112.4	94.2	85.5	83.1
25°	704.3	686.9	624.4	443.2	294.4	204.2	125.8	89.4	80.7	76.8	75.2
27.5°	769.2	751.8	679.0	472.5	283.3	177.3	101.3	78.3	72.0	68.9	68.9
30°	815.1	800.9	728.1	498.6	270.7	155.9	89.4	72.8	67.3	64.1	63.3
32.5°	866.6	846.8	774.0	516.0	261.2	139.3	81.5	68.1	63.3	59.4	59.4
35°	924.4	902.2	816.7	533.4	251.7	131.4	76.0	64.9	60.1	56.2	55.4
37.5°	987.7	959.2	860.3	548.4	241.4	127.4	72.8	61.7	57.0	53.8	52.2
40°	1057.3	1027.2	918.0	561.1	234.3	122.7	70.4	59.4	54.6	50.6	49.9
42.5°	1115.9	1089.0	958.4	569.0	231.1	116.3	69.6	57.0	53.0	48.3	46.7
45°	1146.0	1123.0	1007.5	571.4	229.5	112.4	65.7	57.0	51.4	46.7	44.3
47.5°	1172.1	1155.4	1043.1	583.3	225.5	108.4	60.9	60.1	50.6	44.3	41.9
50°	1216.4	1199.0	1098.5	605.4	220.8	103.7	56.2	57.8	50.6	42.7	40.4
52.5°	1269.4	1264.7	1171.3	640.2	213.7	97.3	51.4	54.6	50.6	41.9	38.8
55°	1347.0	1339.8	1267.8	685.4	205.0	88.6	46.7	49.9	49.9	39.6	36.4
57.5°	1412.7	1413.4	1356.5	717.0	197.1	74.4	43.5	42.7	47.5	37.2	34.0
60°	1442.7	1442.7	1385.0	728.9	186.8	62.5	41.2	38.0	49.1	34.8	31.7
62.5°	1461.7	1445.9	1345.4	717.8	174.9	56.2	37.2	34.8	39.6	32.4	29.3
65°	*1456.2*	*1426.1*	*1266.2*	*661.6*	*157.5*	*54.6*	*34.8*	*31.7*	*31.7*	*30.1*	*27.7*
67.5°	1406.3	1359.6	1149.9	566.6	139.3	53.8	31.7	29.3	28.5	26.9	25.3
70°	1271.0	1237.8	1011.4	462.2	127.4	53.8	29.3	26.1	25.3	23.7	23.0
72.5°	1039.1	990.0	807.2	346.6	117.9	53.8	26.9	23.0	22.2	21.4	20.6
75°	709.9	653.7	567.4	212.9	92.6	46.7	23.7	19.0	19.0	18.2	17.4
77.5°	391.7	379.1	319.7	112.4	57.8	28.5	18.2	15.0	15.8	15.0	14.2
80°	227.1	213.7	189.9	54.6	33.2	16.6	11.1	11.1	11.9	11.9	11.1
82.5°	110.0	95.8	98.1	22.2	11.9	7.1	4.7	5.5	6.3	7.9	7.9
85°	4.0	4.0	7.9	1.6	0.0	0.0	0.0	0.0	0.0	1.6	2.4
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

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	625.2	625.2	625.2	625.2	625.2	625.2	625.2	625.2	625.2	625.2	625.2
2.5°	522.3	522.3	525.5	538.9	527.9	526.3	529.4	535.0	537.4	548.4	547.7
5°	402.8	400.5	409.9	422.6	429.7	433.7	440.0	454.3	448.7	457.4	455.8
7.5°	297.6	301.5	297.6	311.8	322.9	339.5	352.2	349.0	349.8	342.7	353.0
10°	243.0	241.4	231.9	236.6	243.0	253.2	262.0	263.5	271.5	258.8	267.5
12.5°	207.3	201.0	191.5	186.8	185.2	193.1	195.5	199.4	204.2	208.1	209.7
15°	166.2	161.4	155.1	148.0	146.4	146.4	151.9	157.5	163.8	165.4	170.9
17.5°	124.3	121.9	119.5	119.5	119.5	119.5	124.3	126.6	129.8	134.5	133.7
20°	94.2	94.2	95.0	98.9	101.3	102.9	106.0	106.8	106.0	106.8	106.8
22.5°	83.1	82.3	84.7	86.3	90.2	94.2	95.8	95.0	92.6	91.0	92.6
25°	75.2	76.0	76.8	79.1	82.3	86.3	87.1	86.3	83.9	83.9	83.9
27.5°	68.9	69.6	71.2	73.6	76.8	79.9	80.7	79.1	76.8	77.6	76.8
30°	64.1	65.7	66.5	68.9	71.2	74.4	74.4	72.8	71.2	71.2	71.2
32.5°	58.6	60.1	61.7	64.1	67.3	68.9	68.9	68.1	66.5	65.7	65.7
35°	55.4	55.4	57.0	60.1	61.7	63.3	64.1	63.3	61.7	60.1	59.4
37.5°	52.2	52.2	53.0	54.6	57.8	59.4	60.1	58.6	57.0	55.4	55.4
40°	49.1	49.1	49.9	50.6	53.8	56.2	56.2	53.8	52.2	53.0	52.2
42.5°	46.7	46.7	47.5	47.5	49.1	53.0	52.2	50.6	49.9	49.9	49.1
45°	44.3	43.5	44.3	44.3	45.1	49.1	49.1	46.7	46.7	47.5	46.7
47.5°	41.9	41.2	41.9	41.9	42.7	45.1	45.1	44.3	44.3	44.3	45.1
50°	39.6	39.6	39.6	39.6	40.4	41.2	42.7	41.9	41.9	41.9	42.7
52.5°	37.2	37.2	37.2	38.0	38.0	39.6	40.4	39.6	40.4	40.4	40.4
55°	35.6	34.8	34.8	36.4	36.4	38.0	38.8	38.0	38.8	38.8	38.8
57.5°	33.2	33.2	33.2	34.0	34.8	36.4	38.0	36.4	37.2	37.2	38.0
60°	30.9	30.9	30.9	32.4	33.2	34.8	35.6	34.8	35.6	35.6	35.6
62.5°	28.5	29.3	29.3	30.1	30.9	33.2	34.0	33.2	34.0	34.0	34.0
65°	*26.9*	*26.9*	*27.7*	*28.5*	*29.3*	*30.9*	*31.7*	*31.7*	*31.7*	*32.4*	*31.7*
67.5°	24.5	24.5	25.3	26.1	26.9	29.3	29.3	29.3	30.1	29.3	29.3
70°	22.2	22.2	23.0	23.7	24.5	26.9	26.9	26.9	27.7	26.1	26.1
72.5°	19.8	19.8	20.6	21.4	23.0	25.3	24.5	24.5	24.5	23.7	23.7
75°	17.4	17.4	18.2	19.0	19.8	23.0	22.2	21.4	21.4	20.6	20.6
77.5°	14.2	14.2	15.0	16.6	17.4	19.8	19.0	18.2	17.4	17.4	17.4
80°	11.1	11.9	12.7	13.5	14.2	15.8	15.0	14.2	13.5	13.5	13.5
82.5°	7.9	8.7	9.5	10.3	11.1	11.1	11.1	11.1	10.3	9.5	9.5
85°	3.2	4.7	6.3	6.3	7.1	6.3	7.1	6.3	5.5	5.5	4.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.8	1.6	2.4	2.4	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	625.2	625.2	625.2	625.2	625.2	625.2	625.2	625.2	625.2	625.2	625.2
2.5°	554.0	566.6	573.8	586.4	599.9	618.1	633.1	654.5	673.5	677.4	682.2
5°	459.0	475.6	483.5	504.1	535.8	555.6	587.2	620.5	661.6	674.3	690.9
7.5°	345.1	357.7	378.3	396.5	433.7	466.9	509.7	557.9	606.2	633.9	660.8
10°	262.7	278.6	300.7	322.1	358.5	391.7	442.4	496.2	557.9	583.3	611.8
12.5°	218.4	231.1	253.2	282.5	316.6	348.2	386.2	444.8	509.7	542.1	576.9
15°	176.5	189.9	217.6	250.1	283.3	318.9	355.3	411.5	490.7	523.9	557.1
17.5°	140.9	152.7	176.5	211.3	247.7	287.3	331.6	402.8	494.6	535.8	574.6
20°	109.2	119.5	137.7	169.4	206.6	253.2	310.2	399.7	518.4	576.1	614.9
22.5°	94.2	98.1	108.4	130.6	168.6	223.2	290.4	402.0	556.4	630.7	675.1
25°	83.9	87.1	91.0	104.5	134.5	192.3	273.0	406.8	596.7	692.5	743.1
27.5°	77.6	79.1	81.5	87.8	110.0	167.0	255.6	413.1	651.3	755.0	804.1
30°	71.2	71.2	73.6	79.9	96.6	148.8	243.0	425.8	705.1	808.8	857.1
32.5°	64.9	64.9	68.9	74.4	87.8	133.7	230.3	429.7	745.5	856.3	895.1
35°	59.4	60.9	64.1	70.4	82.3	122.7	218.4	422.6	774.8	896.7	936.2
37.5°	56.2	57.0	60.9	66.5	75.2	112.4	206.6	413.1	814.4	950.5	981.3
40°	52.2	53.8	57.8	63.3	70.4	104.5	193.1	402.8	849.2	1010.6	1026.5
42.5°	49.9	51.4	54.6	60.1	67.3	95.0	180.4	394.9	886.4	1062.1	1073.1
45°	47.5	49.1	53.0	57.8	67.3	87.8	167.8	389.4	922.8	1101.6	1110.3
47.5°	45.1	46.7	50.6	57.0	66.5	83.9	159.1	383.8	945.7	1135.7	1138.0
50°	43.5	45.1	49.9	58.6	64.1	82.3	155.1	389.4	984.5	1162.6	1155.4
52.5°	41.2	43.5	49.1	60.9	60.9	80.7	151.9	409.2	1032.8	1202.1	1183.9
55°	40.4	41.9	47.5	58.6	55.4	76.8	151.9	424.2	1096.9	1280.5	1250.4
57.5°	38.0	39.6	45.9	54.6	50.6	70.4	150.4	448.7	1187.9	1366.8	1339.8
60°	35.6	38.0	44.3	49.1	45.9	62.5	143.2	475.6	1250.4	1413.4	1418.2
62.5°	34.0	36.4	44.3	42.7	41.9	54.6	132.2	492.3	1244.1	1398.4	1443.5
65°	*31.7*	*34.0*	*40.4*	*38.8*	*39.6*	*49.1*	*117.9*	*484.3*	*1161.0*	*1335.1*	*1414.2*
67.5°	29.3	31.7	34.8	34.8	36.4	47.5	102.9	438.4	1070.8	1258.3	1349.3
70°	26.9	28.5	30.1	31.7	33.2	46.7	91.0	375.9	967.1	1184.7	1256.7
72.5°	23.7	24.5	26.1	27.7	30.9	44.3	86.3	305.5	823.9	1025.7	1137.2
75°	20.6	21.4	23.0	24.5	26.9	41.9	79.1	231.9	679.0	810.4	918.8
77.5°	17.4	18.2	19.8	20.6	23.0	37.2	68.1	167.8	528.7	584.1	671.9
80°	13.5	14.2	15.8	15.8	19.0	27.7	53.0	117.1	371.2	413.9	459.8
82.5°	9.5	10.3	11.1	11.9	14.2	19.0	34.8	70.4	251.7	284.1	276.2
85°	5.5	6.3	6.3	7.9	8.7	12.7	19.8	36.4	164.6	129.8	128.2
87.5°	2.4	2.4	2.4	3.2	3.2	4.7	6.3	7.1	15.8	5.5	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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REPORT NUMBER: P438112
CATALOG NUMBER: IST-SA1A-830-U-SLR

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	625.2	625.2	625.2	625.2	625.2	625.2	625.2	*625.2*	625.2	625.2
2.5°	689.3	694.9	698.8	697.2	694.9	681.4	667.9	*653.7*	641.0	641.0
5°	717.8	740.8	750.3	742.3	724.9	697.2	662.4	*626.0*	608.6	603.8
7.5°	702.8	746.3	769.2	759.0	736.0	685.4	632.3	*584.8*	558.7	554.0
10°	672.7	729.7	755.8	752.6	727.3	668.7	604.6	*550.8*	523.1	520.0
12.5°	637.9	693.3	726.5	728.1	711.5	660.0	592.8	*528.7*	504.1	497.8
15°	616.5	664.8	687.7	682.2	686.9	652.9	597.5	*537.4*	507.3	501.7
17.5°	617.3	637.9	643.4	634.7	652.9	651.3	624.4	*569.0*	535.8	530.2
20°	637.9	620.5	603.0	601.5	625.2	656.9	667.2	*622.0*	584.1	580.1
22.5°	673.5	615.7	579.3	573.8	603.8	662.4	708.3	*686.9*	651.3	641.0
25°	713.1	620.5	564.3	557.1	584.1	666.4	752.6	*753.4*	713.8	704.3
27.5°	755.8	635.5	564.3	556.4	584.8	672.7	781.9	*813.6*	777.2	769.2
30°	793.8	656.9	569.8	561.1	594.3	679.0	801.7	*867.4*	826.2	815.1
32.5°	816.7	675.1	583.3	567.4	611.0	691.7	819.9	*913.3*	881.6	866.6
35°	834.9	696.4	605.4	584.8	635.5	712.3	834.9	*963.1*	933.1	924.4
37.5°	848.4	721.8	628.4	608.6	667.9	740.0	856.3	*1016.2*	1006.7	987.7
40°	870.5	737.6	669.5	662.4	724.1	783.5	881.6	*1062.1*	1068.4	1057.3
42.5°	890.3	768.5	728.1	736.0	796.2	831.8	915.7	*1096.1*	1130.1	1115.9
45°	906.2	811.2	801.7	827.8	879.2	893.5	934.6	*1119.8*	1155.4	1146.0
47.5°	928.3	867.4	899.8	933.9	976.6	957.6	954.4	*1145.2*	1181.6	1172.1
50°	960.0	933.1	998.0	1042.3	1070.0	1009.8	979.0	*1168.1*	1221.9	1216.4
52.5°	992.4	1009.0	1097.7	1138.8	1157.0	1074.7	1013.8	*1204.5*	1269.4	1269.4
55°	1052.6	1083.4	1203.7	1229.8	1254.4	1133.3	1060.5	*1259.1*	1343.0	1347.0
57.5°	1140.4	1163.4	1284.4	1314.5	1320.9	1199.0	1134.1	*1335.1*	1405.5	1412.7
60°	1231.4	1242.5	1364.4	1391.3	1369.9	1283.7	1220.3	*1423.7*	1446.7	1442.7
62.5°	1331.9	1319.3	1419.8	1438.8	1433.2	1358.0	1328.8	*1504.5*	1476.8	1461.7
65°	*1411.9*	*1364.4*	*1448.3*	*1452.2*	*1455.4*	*1409.5*	*1439.6*	*1540.9*	*1489.4*	*1456.2*
67.5°	1460.1	1371.5	1390.5	1372.3	1385.0	1396.0	1514.7	*1525.8*	1435.6	1406.3
70°	1449.1	1271.0	1185.5	1164.9	1165.7	1243.3	1466.5	*1431.6*	1312.9	1271.0
72.5°	1347.0	1068.4	944.1	916.4	922.0	929.1	1233.0	*1249.6*	1061.3	1039.1
75°	1134.1	823.1	679.8	673.5	665.6	696.4	986.1	*913.3*	704.3	709.9
77.5°	925.2	606.2	499.4	466.9	462.2	466.9	672.7	*521.5*	409.2	391.7
80°	667.2	403.6	372.8	365.6	343.5	276.2	352.2	*335.6*	231.1	227.1
82.5°	439.2	278.6	284.9	237.4	223.2	174.9	213.7	*170.9*	115.5	110.0
85°	227.9	144.8	119.5	52.2	58.6	49.1	46.7	*38.0*	4.0	4.0
87.5°	7.9	3.2	2.4	2.4	1.6	0.8	0.8	*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

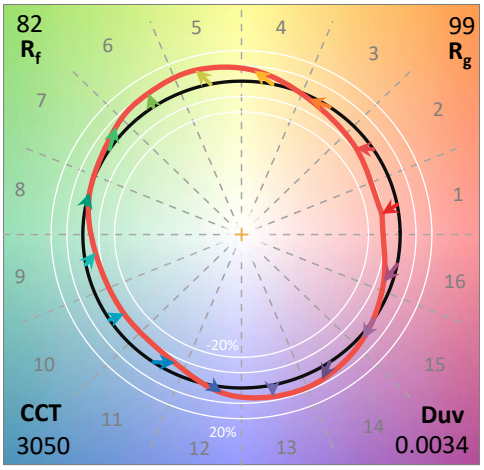
Test Information

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

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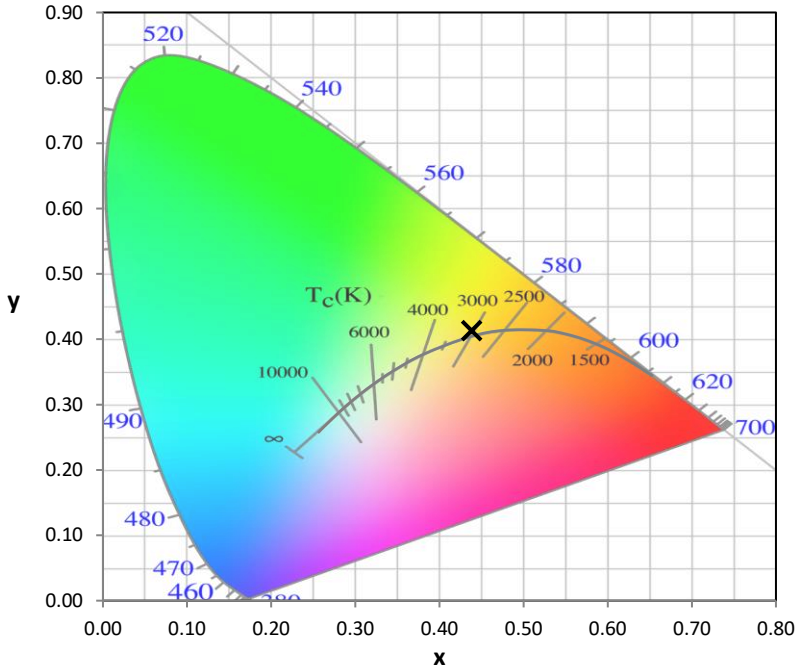
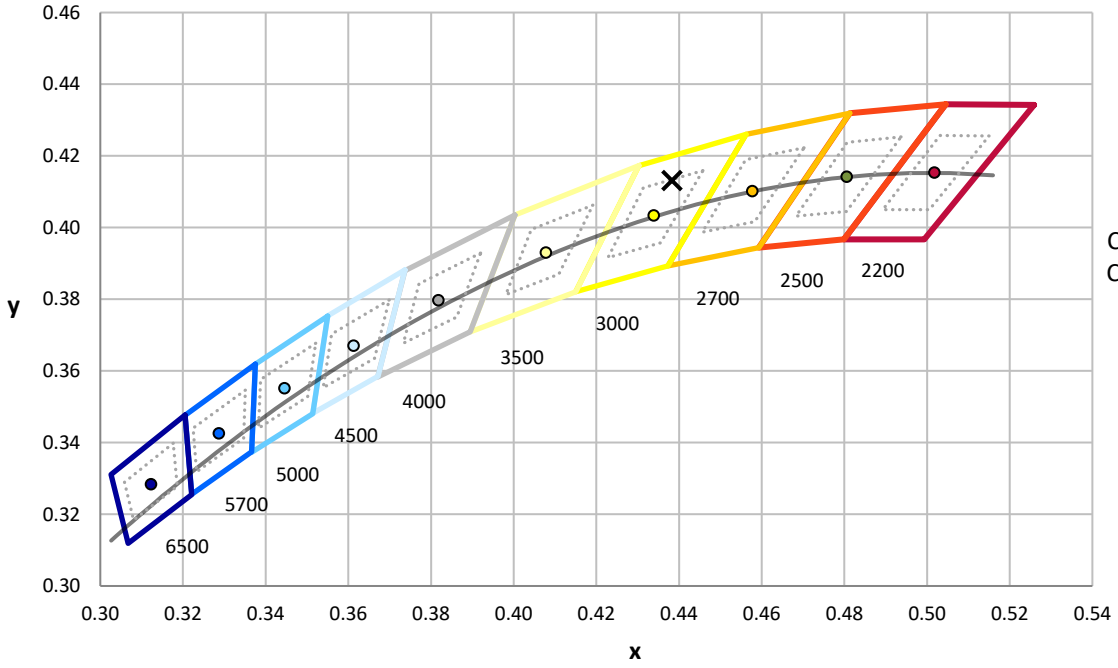
CIE 1931 Chromaticity Diagram



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

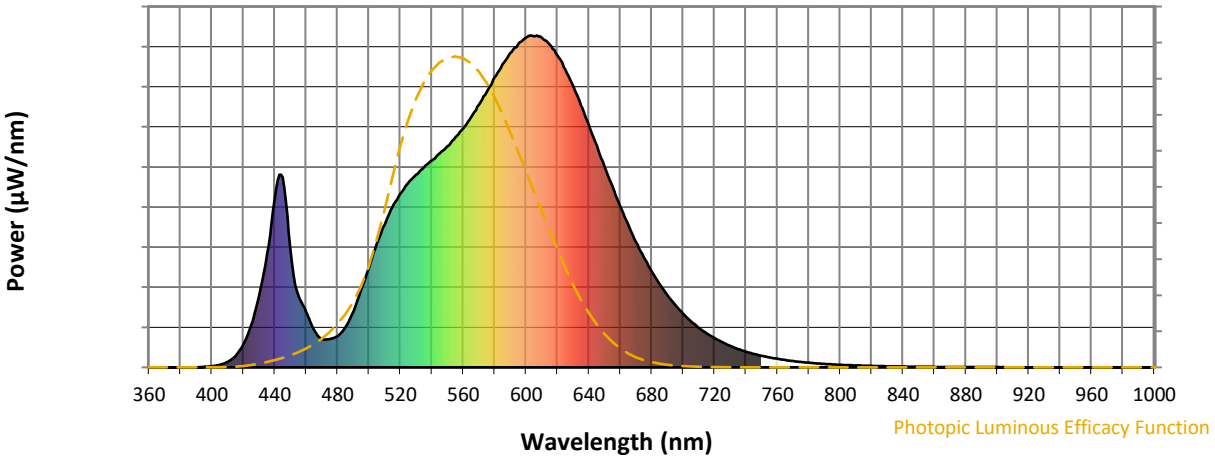


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

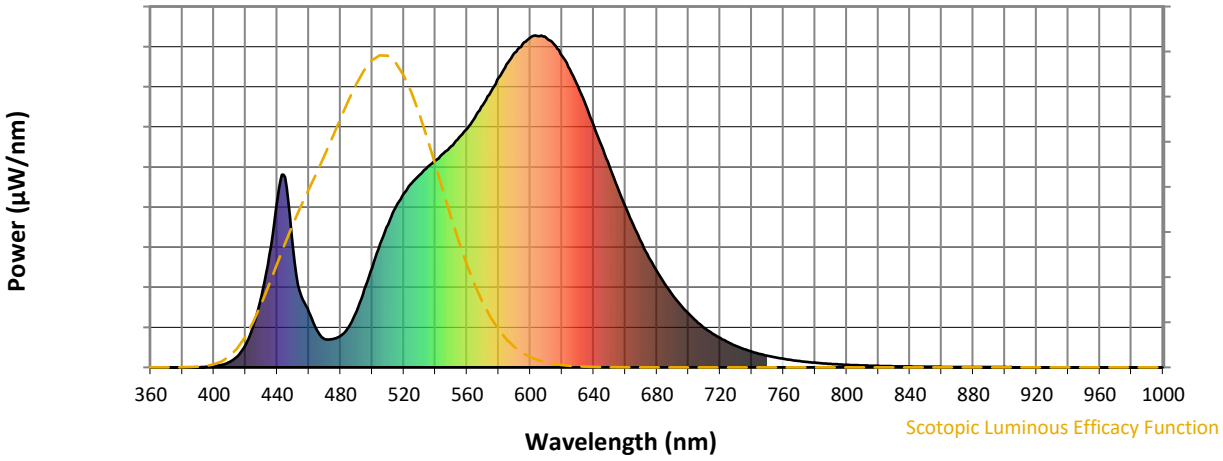


Photopic Lumens: NR

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

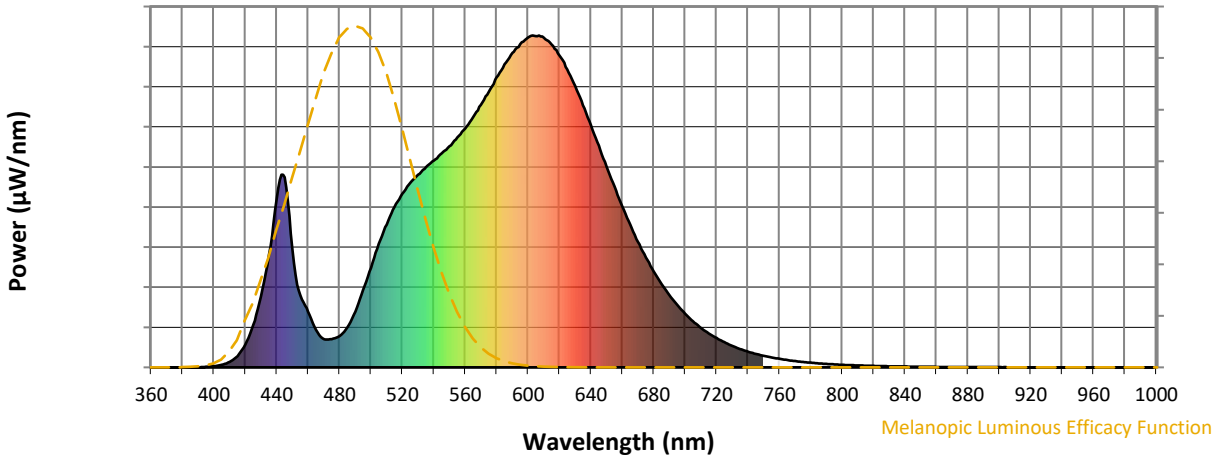


Scotopic Lumens: NR **S/P: 1.27**

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			

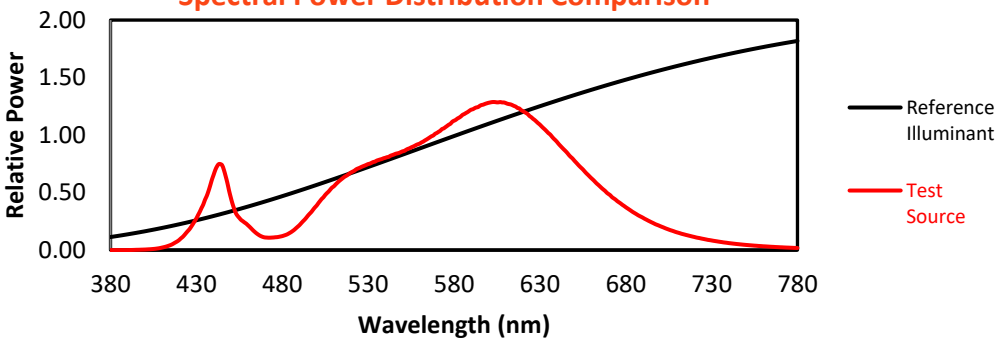
REPORT NUMBER: SP1-2408-195-9

TM-30-18

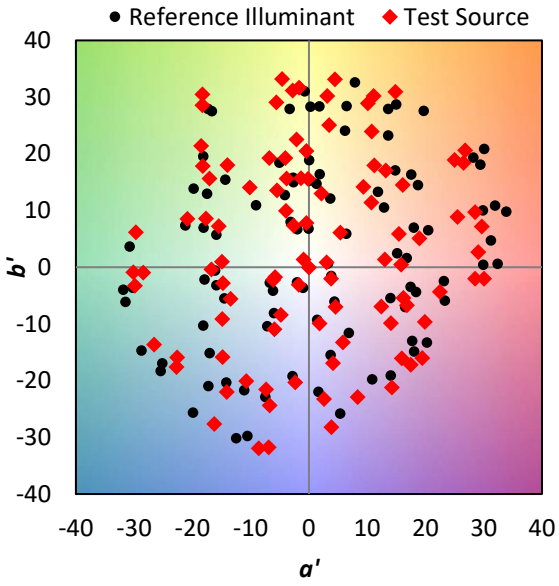
Summary

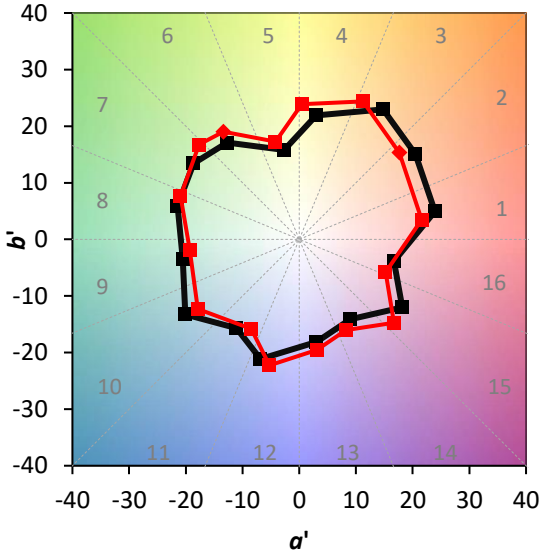
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

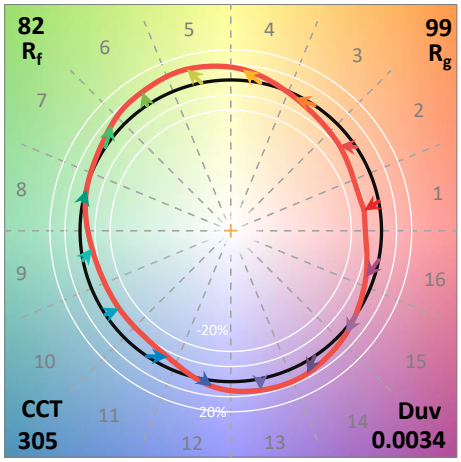
Spectral Power Distribution Comparison

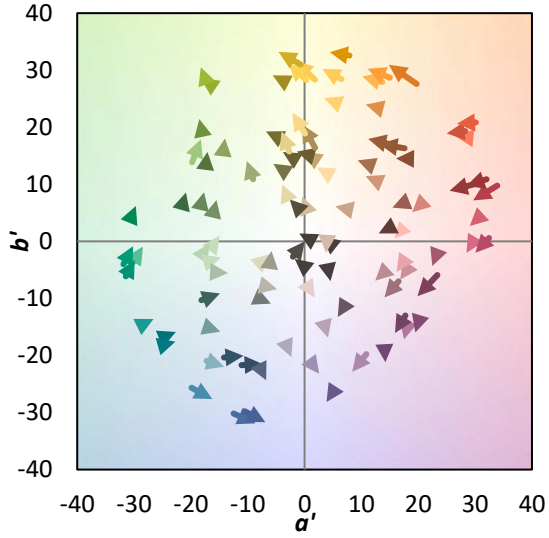


Color Vector Graphics







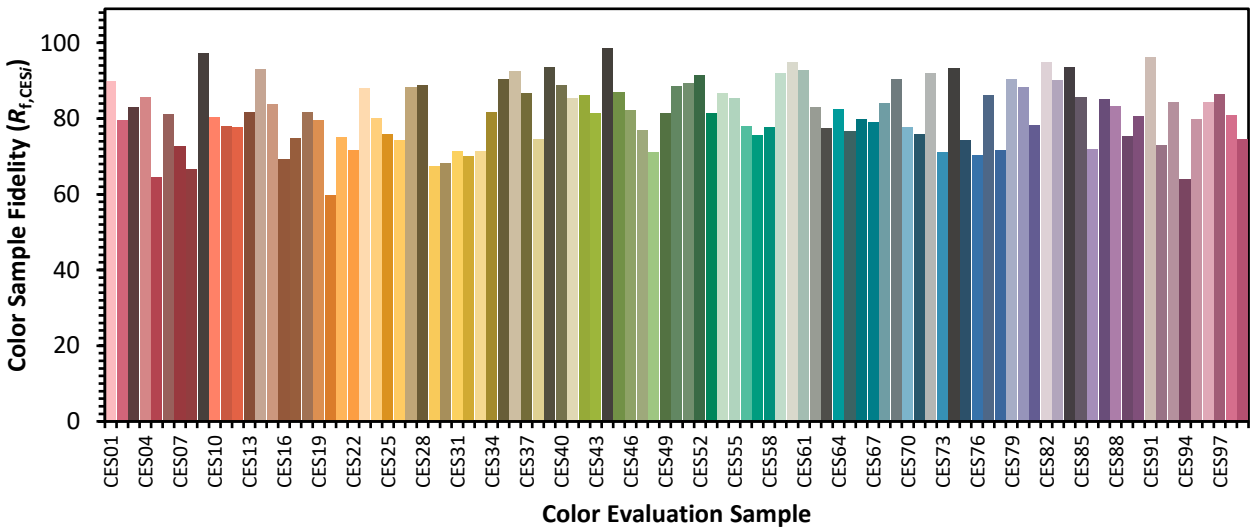


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

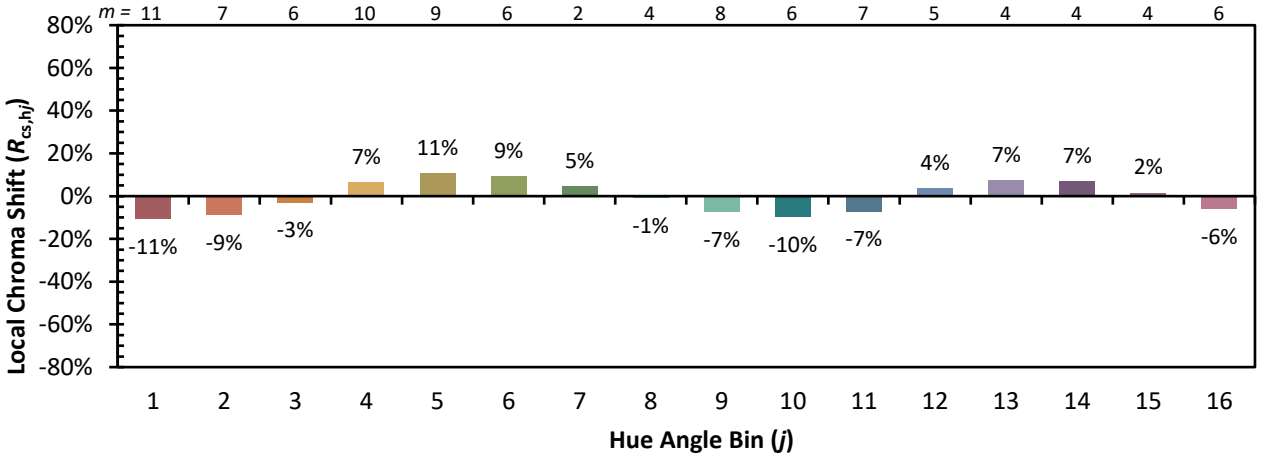
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 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	

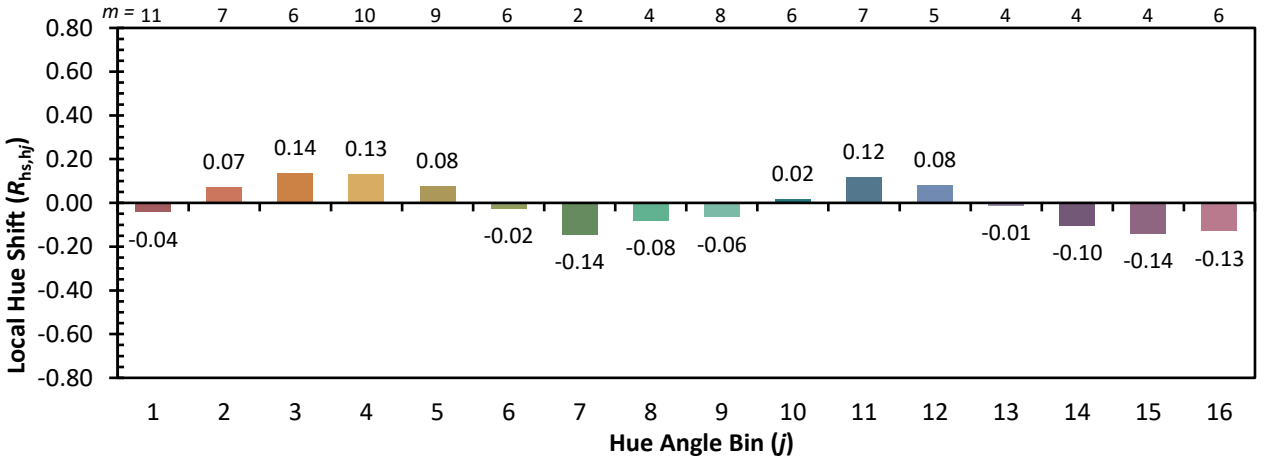


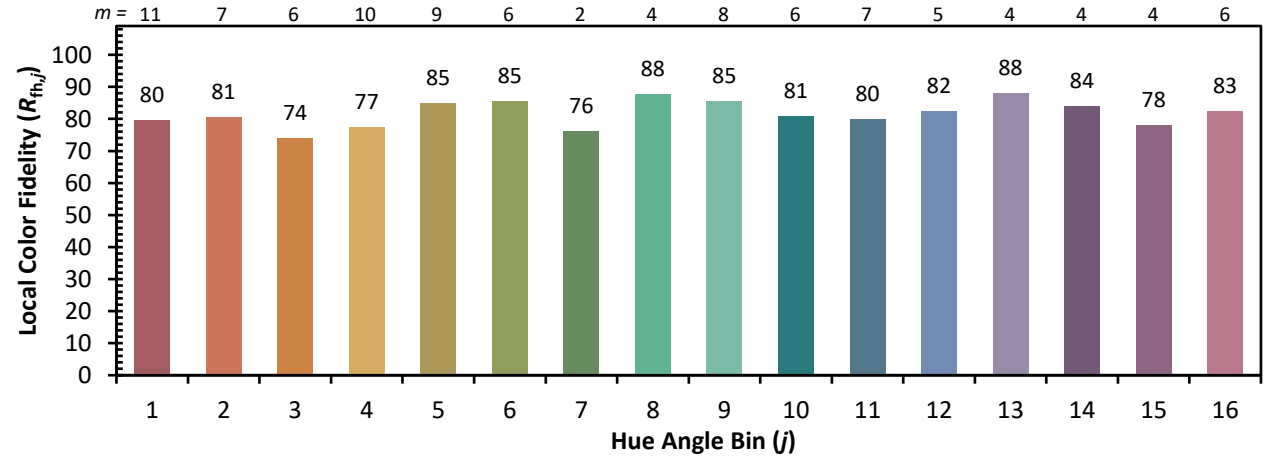
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin







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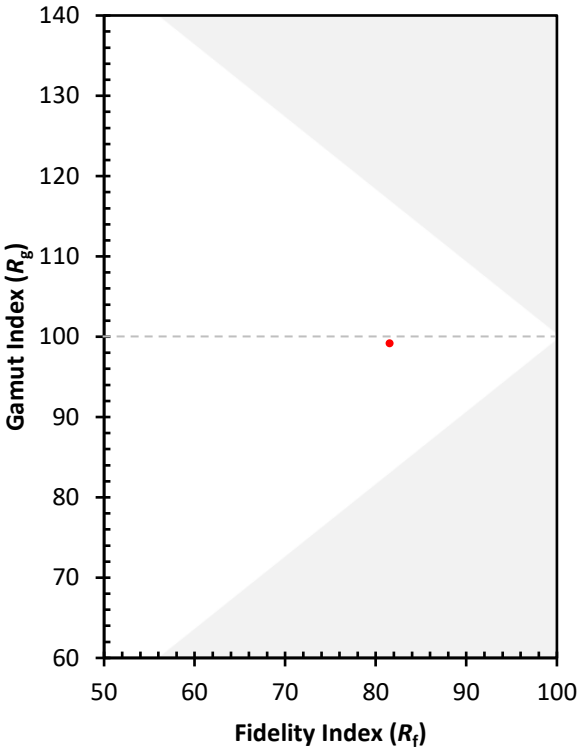
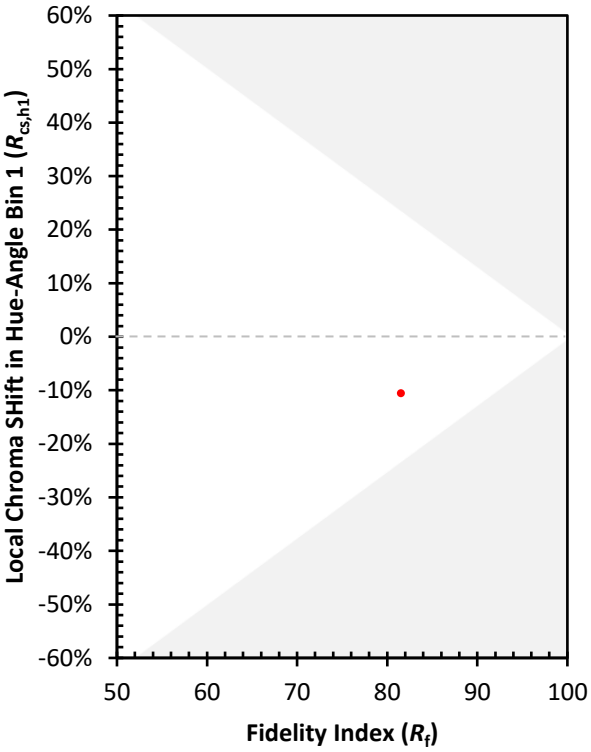
Measure Comparisons





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