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: P821256

Luminaire Tested: **TT-D5-735-24VDC-RW-HSS**

Issue Date: 12/2/2020

Report Generated By 670245763

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P821256
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2010-017-5)
Test Lab:	INNOVATION CENTER
Issue Date:	12/2/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	TT-D5-735-24VDC-RW-HSS
Description:	TOPTIER LED PARKING GARAGE LUMINAIRE
	3500K, 70 CRI LEDS AND RECTANGULAR DISTRIBUTION WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5683 lumens
Efficiency:	N/A
Efficacy:	77.8 lumens/watt
Luminous Opening:	Circular (Dia: 1.12' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U2 - G3

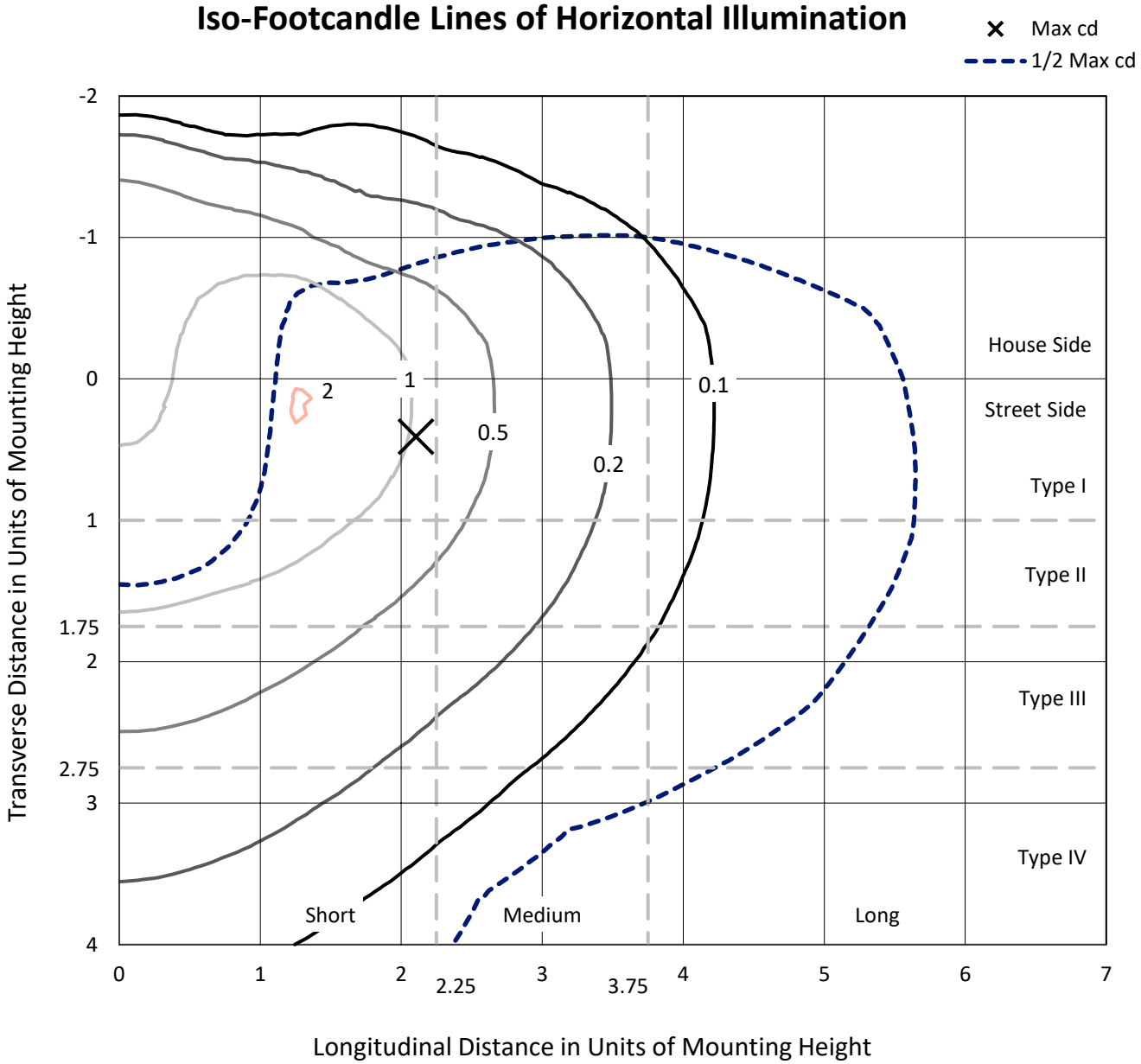
Input Watts (W):	73
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	25 FT

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Iso-Footcandle Lines of Horizontal Illumination



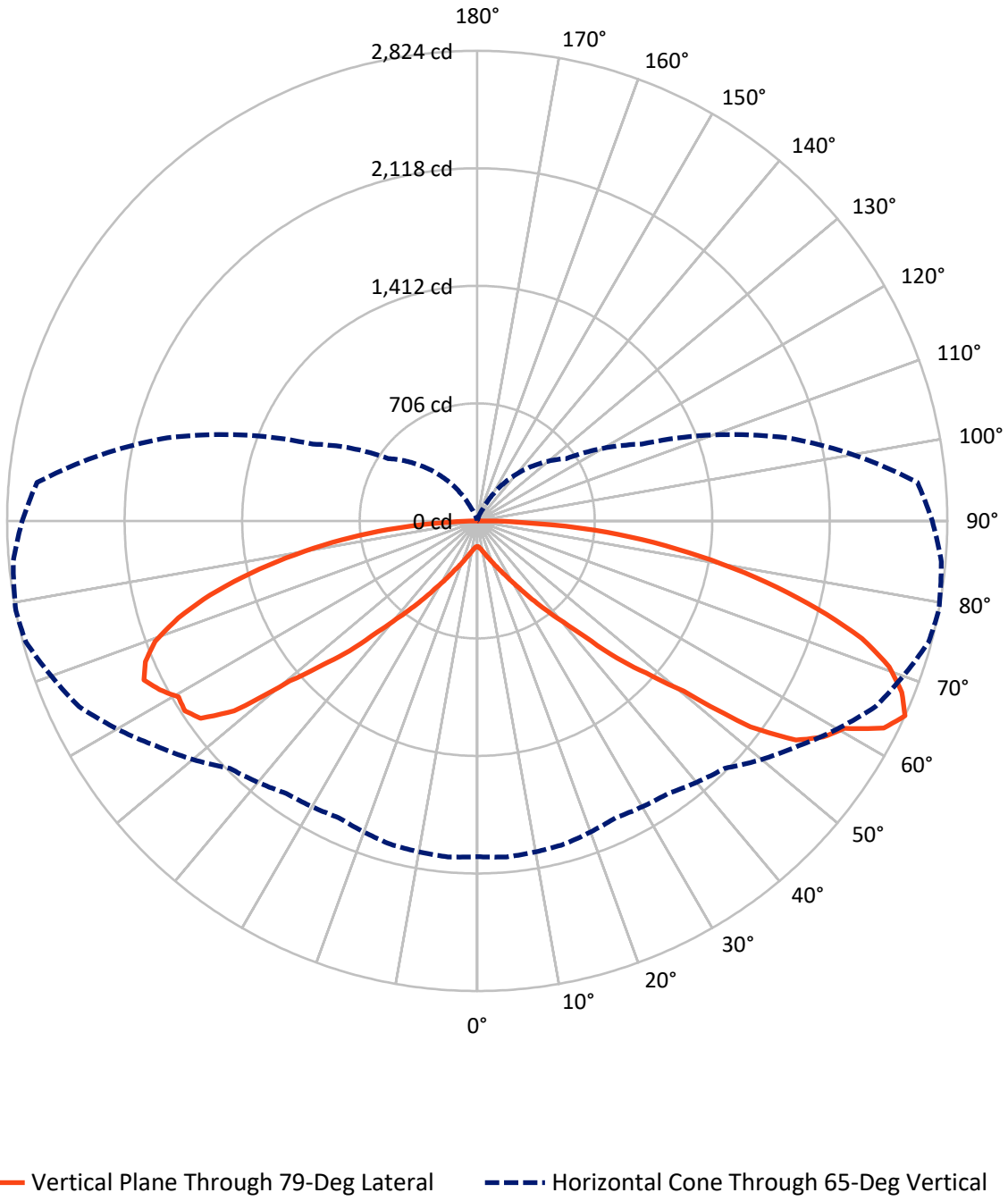
Based on 15 foot mounting height. Maximum calculated value = 2 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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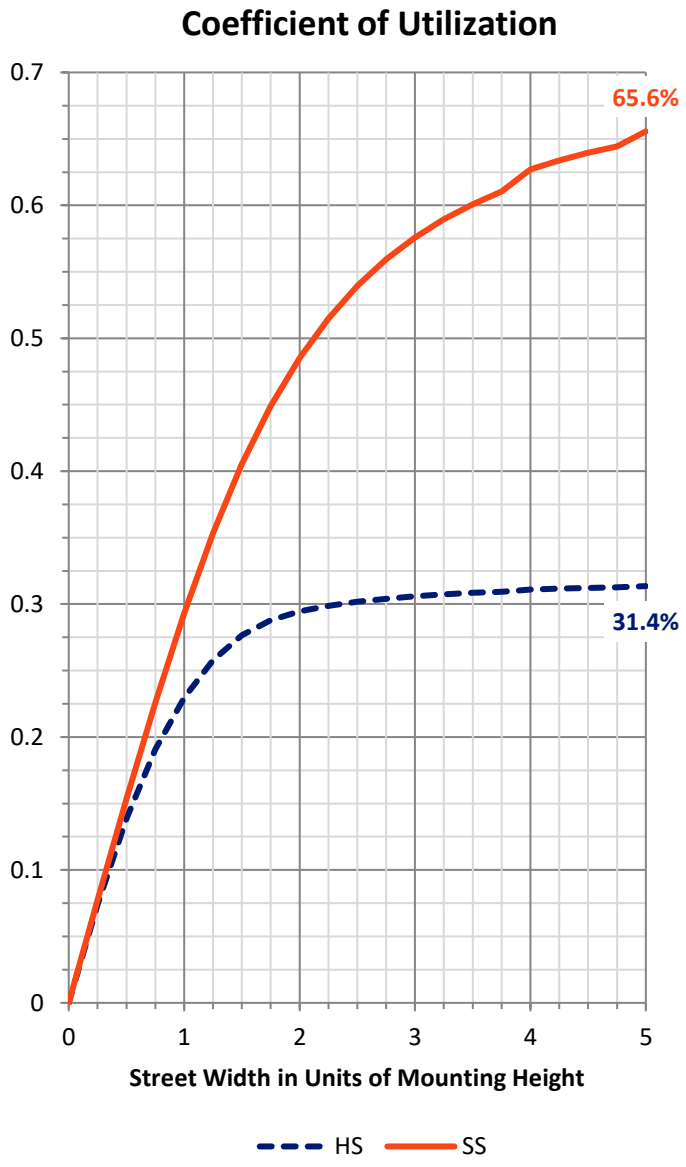
REPORT NUMBER: P821256
CATALOG NUMBER: TT-D5-735-24VDC-RW-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1794.6	2.3	1796.8
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	3861.1	25.0	3886.1
	% Fixture	67.9	0.4	68.4
Total	Lumens	5655.7	27.3	5683.0
	% Fixture	99.5	0.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.2	0.3
10°-20°	61.2	1.1
20°-30°	141.2	2.5
30°-40°	302.5	5.3
40°-50°	647.9	11.4
50°-60°	1223.7	21.5
60°-70°	1520.7	26.8
70°-80°	1301.9	22.9
80°-90°	440.4	7.7
90°-100°	19.0	0.3
100°-110°	5.5	0.1
110°-120°	1.2	0.0
120°-130°	0.6	0.0
130°-140°	0.4	0.0
140°-150°	0.3	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	5655.7	99.5
0°-180°	5683.0	100.0



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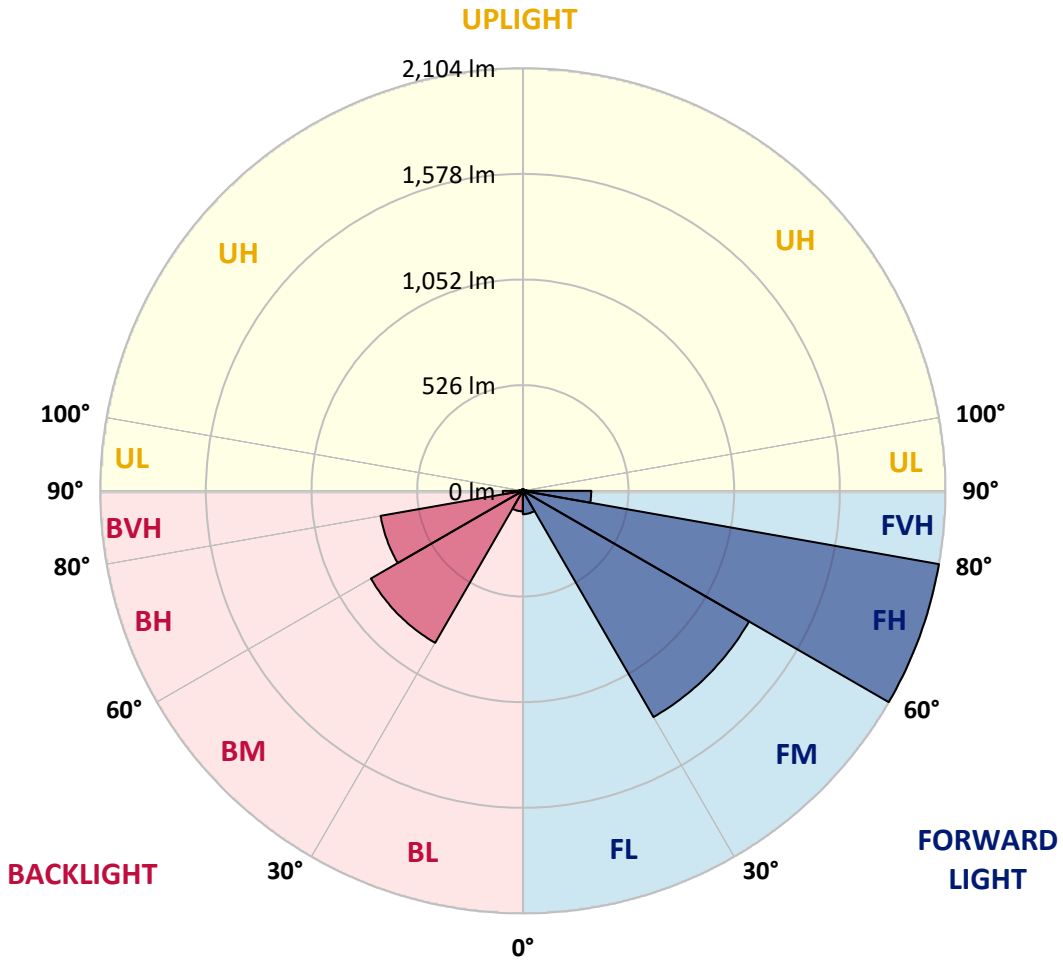
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	116.2	2.0			
FM	(30°-60°)	1300.5	22.9			
FH	(60°-80°)	2103.6	37.0			G2/5000
FVH	(80°-90°)	340.7	6.0			G3/500
BL	(0°-30°)	102.4	1.8	B0/110		
BM	(30°-60°)	873.5	15.4	B1/1000		
BH	(60°-80°)	719.0	12.7	B2/1000		G2/1000
BVH	(80°-90°)	99.7	1.8			G1/100
UL	(90°-100°)	19.0	0.3		U2/50	
UH	(100°-180°)	8.3	0.1		U1/10	

BUG Rating: B2-U2-G3
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	154.4	154.4	154.4	154.4	154.4	154.4	154.4	154.4	154.4	*154.4*	154.4
2.5°	162.9	162.9	162.9	161.4	161.4	161.4	160.0	158.6	157.2	*157.2*	157.2
5°	171.3	171.3	171.3	171.3	169.9	168.5	167.1	165.7	164.3	*164.3*	162.9
7.5°	182.7	181.3	182.7	181.3	181.3	179.8	178.4	177.0	174.2	*174.2*	172.8
10°	194.0	194.0	194.0	194.0	194.0	192.6	191.2	189.8	188.3	*186.9*	185.5
12.5°	208.2	208.2	208.2	206.8	208.2	206.8	205.3	205.3	203.9	*201.1*	201.1
15°	222.3	222.3	222.3	222.3	223.7	223.7	223.7	222.3	222.3	*220.9*	219.5
17.5°	239.3	237.9	239.3	239.3	240.7	242.2	243.6	245.0	245.0	*243.6*	243.6
20°	257.7	256.3	257.7	257.7	260.6	263.4	267.6	270.5	271.9	*269.1*	269.1
22.5°	277.6	276.1	279.0	279.0	283.2	287.5	294.5	297.4	301.6	*300.2*	300.2
25°	301.6	300.2	301.6	303.0	308.7	315.8	324.3	331.4	335.6	*335.6*	337.0
27.5°	328.5	328.5	330.0	331.4	337.0	348.4	361.1	373.8	383.8	*382.3*	383.8
30°	365.4	365.4	368.2	369.6	376.7	389.4	406.4	423.4	437.6	*437.6*	440.4
32.5°	406.4	405.0	409.3	410.7	417.7	434.7	458.8	485.7	504.1	*504.1*	507.0
35°	456.0	454.6	458.8	458.8	467.3	491.4	522.5	559.4	590.5	*591.9*	596.2
37.5°	518.3	515.5	515.5	519.7	529.6	560.8	603.3	654.2	686.8	*689.6*	696.7
40°	591.9	590.5	593.3	591.9	604.7	642.9	696.7	756.2	794.4	*801.5*	810.0
42.5°	682.6	685.4	681.1	681.1	696.7	740.6	804.3	873.7	943.1	*951.6*	955.9
45°	793.0	798.7	793.0	791.6	805.8	856.7	944.5	1066.3	1147.0	*1175.4*	1183.9
47.5°	926.1	929.0	921.9	919.0	934.6	999.8	1113.1	1249.0	1343.9	*1365.1*	1387.8
50°	1074.8	1070.6	1064.9	1060.7	1090.4	1171.1	1302.8	1443.0	1605.9	*1608.7*	1617.2
52.5°	1227.8	1215.0	1216.4	1215.0	1256.1	1343.9	1519.5	1757.4	2005.2	*2056.2*	2061.8
55°	1380.7	1365.1	1363.7	1377.9	1435.9	1562.0	1782.9	2091.6	2292.7	*2323.8*	2319.6
57.5°	1533.6	1526.6	1523.7	1536.5	1621.4	1771.5	2020.8	2281.3	2452.7	*2449.8*	2420.1
60°	1692.2	1697.9	1688.0	1712.1	1799.9	1950.0	2131.2	2384.7	2543.3	*2530.6*	2500.8
62.5°	1855.1	1869.2	1859.3	1862.2	1918.8	2029.3	2207.7	2502.2	2721.7	*2740.1*	2706.2
65°	*2016.5*	*2026.4*	*2010.9*	*1967.0*	*1998.1*	*2101.5*	*2356.4*	*2639.6*	*2806.7*	*2823.7*	*2798.2*
67.5°	2152.5	2162.4	2108.6	2039.2	2043.4	2118.5	2342.2	2612.7	2761.4	*2750.1*	2709.0
70°	2268.6	2250.2	2162.4	2043.4	1993.9	2029.3	2240.3	2479.6	2631.1	*2625.4*	2577.3
72.5°	2306.8	2282.8	2134.1	1950.0	1852.3	1865.0	2070.3	2284.2	2407.4	*2417.3*	2359.2
75°	2245.9	2204.9	2000.9	1770.1	1644.1	1652.6	1828.2	2025.0	2124.1	*2112.8*	2067.5
77.5°	2026.4	1985.4	1764.5	1518.1	1394.9	1407.6	1546.4	1700.7	1782.9	*1778.6*	1747.5
80°	1682.3	1645.5	1451.5	1222.1	1110.2	1117.3	1223.5	1345.3	1409.0	*1423.2*	1406.2
82.5°	1243.3	1217.8	1080.5	895.0	804.3	802.9	883.6	977.1	1039.4	*1069.2*	1057.8
85°	768.9	756.2	679.7	559.4	495.6	494.2	542.4	611.8	668.4	*708.0*	682.6
87.5°	305.9	301.6	279.0	225.2	196.8	186.9	175.6	219.5	223.7	*264.8*	263.4
90°	75.1	73.6	72.2	68.0	60.9	52.4	42.5	31.2	19.8	*15.6*	8.5
92.5°	66.6	66.6	65.1	60.9	55.2	46.7	38.2	28.3	18.4	*14.2*	7.1
95°	53.8	53.8	52.4	49.6	43.9	38.2	29.7	22.7	14.2	*11.3*	5.7
97.5°	41.1	39.7	39.7	36.8	34.0	28.3	22.7	17.0	11.3	*8.5*	4.2
100°	29.7	29.7	28.3	26.9	24.1	21.2	17.0	12.7	7.1	*5.7*	2.8
102.5°	21.2	19.8	19.8	19.8	17.0	14.2	11.3	8.5	5.7	*4.2*	1.4
105°	14.2	12.7	12.7	12.7	11.3	9.9	7.1	5.7	2.8	*2.8*	1.4
107.5°	8.5	8.5	8.5	8.5	7.1	5.7	4.2	2.8	1.4	*1.4*	1.4
110°	4.2	4.2	4.2	5.7	4.2	4.2	2.8	1.4	1.4	*1.4*	1.4

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
112.5°	2.8	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	*1.4*	1.4
115°	1.4	1.4	1.4	2.8	2.8	1.4	1.4	0.0	0.0	*1.4*	1.4
117.5°	0.0	0.0	1.4	1.4	1.4	1.4	0.0	0.0	0.0	*0.0*	1.4
120°	0.0	0.0	1.4	1.4	1.4	1.4	0.0	0.0	0.0	*0.0*	1.4
122.5°	0.0	0.0	1.4	1.4	1.4	1.4	0.0	0.0	0.0	*0.0*	1.4
125°	0.0	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	*0.0*	1.4
127.5°	0.0	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	*0.0*	1.4
130°	0.0	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	*0.0*	1.4
132.5°	0.0	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	*0.0*	1.4
135°	0.0	0.0	0.0	1.4	1.4	0.0	0.0	0.0	0.0	*0.0*	0.0
137.5°	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	*0.0*	0.0
140°	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	*0.0*	0.0
142.5°	0.0	0.0	0.0	0.0	1.4	1.4	0.0	0.0	0.0	*0.0*	0.0
145°	0.0	0.0	0.0	1.4	1.4	1.4	1.4	0.0	0.0	*0.0*	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	*0.0*	0.0
150°	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	*0.0*	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
157.5°	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	*0.0*	0.0
160°	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	*0.0*	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
177.5°	0.0	0.0	0.0	1.4	0.0	1.4	0.0	0.0	0.0	*0.0*	0.0
180°	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°	154.4	154.4	154.4	154.4	154.4	154.4	154.4	154.4	154.4	154.4	154.4
2.5°	155.8	155.8	155.8	154.4	154.4	154.4	152.9	152.9	151.5	151.5	151.5
5°	161.4	161.4	160.0	160.0	158.6	157.2	157.2	155.8	155.8	154.4	154.4
7.5°	171.3	171.3	169.9	168.5	165.7	164.3	162.9	161.4	161.4	160.0	160.0
10°	184.1	184.1	181.3	178.4	175.6	172.8	171.3	168.5	167.1	167.1	167.1
12.5°	199.7	198.3	195.4	191.2	188.3	184.1	181.3	178.4	175.6	175.6	175.6
15°	218.1	218.1	212.4	208.2	202.5	196.8	192.6	188.3	185.5	184.1	184.1
17.5°	240.7	240.7	233.7	226.6	219.5	212.4	206.8	201.1	198.3	196.8	196.8
20°	266.2	266.2	259.1	250.6	240.7	230.8	222.3	215.2	211.0	209.6	209.6
22.5°	297.4	297.4	287.5	276.1	263.4	249.2	237.9	229.4	225.2	222.3	222.3
25°	332.8	330.0	320.0	305.9	287.5	270.5	254.9	246.4	240.7	236.5	237.9
27.5°	380.9	376.7	363.9	339.9	317.2	294.5	276.1	264.8	257.7	254.9	256.3
30°	436.2	431.9	413.5	386.6	352.6	322.9	300.2	287.5	280.4	276.1	277.6
32.5°	502.7	497.1	474.4	437.6	397.9	355.4	327.1	311.5	304.5	300.2	298.8
35°	590.5	583.4	555.1	504.1	448.9	397.9	358.3	338.4	331.4	327.1	328.5
37.5°	689.6	679.7	641.5	579.2	509.8	444.7	399.3	373.8	365.4	358.3	358.3
40°	802.9	791.6	742.0	659.9	576.4	495.6	437.6	409.3	399.3	399.3	399.3
42.5°	944.5	933.2	876.6	756.2	645.7	550.9	481.5	448.9	439.0	441.8	441.8
45°	1164.0	1148.5	1057.8	899.2	736.4	607.5	526.8	490.0	482.9	490.0	490.0
47.5°	1365.1	1345.3	1212.2	1032.3	825.6	664.1	572.1	529.6	526.8	542.4	542.4
50°	1590.3	1564.8	1424.6	1140.0	897.8	726.5	613.2	562.2	563.6	586.3	593.3
52.5°	2026.4	1999.5	1757.4	1335.4	975.7	749.1	630.2	569.3	569.3	594.8	604.7
55°	2285.6	2230.4	1914.6	1462.8	1008.3	776.0	623.1	540.9	538.1	566.4	574.9
57.5°	2370.5	2313.9	1947.1	1426.0	987.0	742.0	582.0	464.5	458.8	495.6	492.8
60°	2439.9	2364.9	1894.7	1302.8	866.7	669.8	502.7	345.5	321.5	354.0	352.6
62.5°	2635.4	2554.6	1897.6	1158.4	725.0	559.4	378.1	194.0	144.4	169.9	158.6
65°	*2733.1*	*2653.8*	*1927.3*	*1090.4*	*652.8*	*463.1*	*270.5*	*79.3*	*5.7*	*5.7*	*2.8*
67.5°	2649.5	2578.7	1889.1	1073.4	642.9	460.2	274.7	77.9	0.0	0.0	0.0
70°	2527.7	2459.8	1801.3	1013.9	610.3	443.2	269.1	77.9	0.0	0.0	0.0
72.5°	2313.9	2244.5	1649.8	929.0	560.8	406.4	249.2	73.6	0.0	0.0	0.0
75°	2032.1	1979.7	1457.2	818.5	494.2	358.3	220.9	65.1	0.0	0.0	0.0
77.5°	1720.6	1658.3	1222.1	681.1	413.5	297.4	186.9	53.8	0.0	0.0	0.0
80°	1380.7	1335.4	962.9	533.9	320.0	232.2	145.9	41.1	0.0	0.0	0.0
82.5°	1026.7	988.4	712.3	382.3	228.0	161.4	100.5	26.9	0.0	0.0	0.0
85°	674.1	664.1	457.4	232.2	135.9	89.2	53.8	12.7	0.0	0.0	0.0
87.5°	243.6	252.1	167.1	66.6	36.8	15.6	7.1	1.4	0.0	0.0	0.0
90°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
92.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
95°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
97.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
100°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
102.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
105°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
107.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
110°	1.4	1.4	1.4	1.4	1.4	1.4	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: P821256
CATALOG NUMBER: TT-D5-735-24VDC-RW-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
115°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
117.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
120°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
122.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
125°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
127.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
130°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
132.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
135°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
150°	0.0	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
180°	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

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

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2407-176-4

Test Date: 09/24/2024

Luminaire Tested: MEM2-HTN-VA-30-735-U-WQ

Data in this report applies to families of products including MEM2-HTN-VA-30-735-U-WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

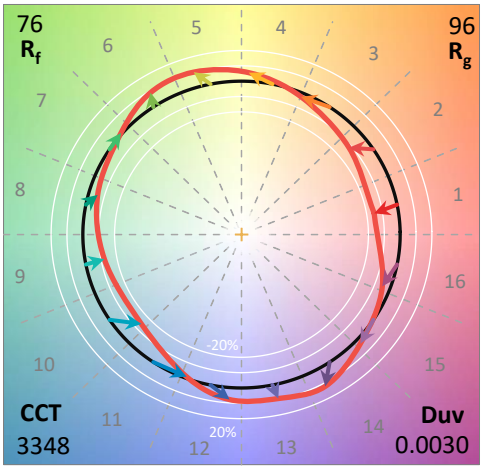
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2407-176-4
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	09/27/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	Streetworks
Catalog Number:	**MEM2-HTN-VA-30-735-U-WQ**
Description:	EPIC MODERN VISUAL COMFORT 30W WAVESTREAM WIDE

Spectral Parameters

CCT (K):	3348	CRI (Ra):	73.4		
CIE u':	0.2384	R1:	70.8	R9:	-19.2
CIE v':	0.5184	R2:	79.9	R10:	52.5
Duv:	0.0030	R3:	87.6	R11:	68.0
CIE x:	0.4177	R4:	72.6	R12:	42.6
CIE y:	0.4036	R5:	69.3	R13:	72.0
CIE z:	0.1787	R6:	71.3	R14:	92.6
Peak Wavelength (nm):	593	R7:	82.1	R15:	63.8
Dominant Wavelength (nm):	580	R8:	53.3		
Purity:	46.5223				

Rf:	75.8
Rg:	95.8



Test Conditions

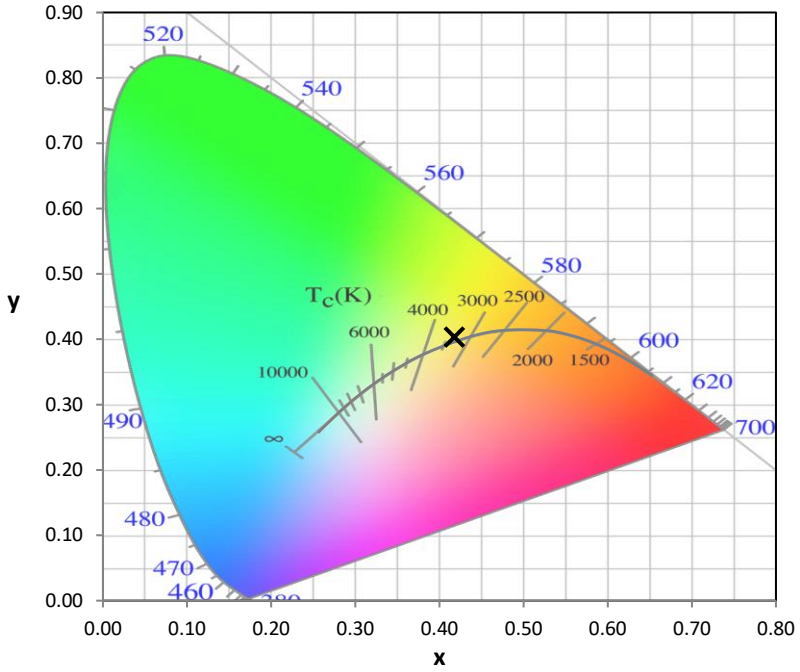
Stabilization Time:	30M
Operation Time:	1H 30M
Sphere Temperature (°C):	25.2

REPORT NUMBER: SP1-2407-176-4

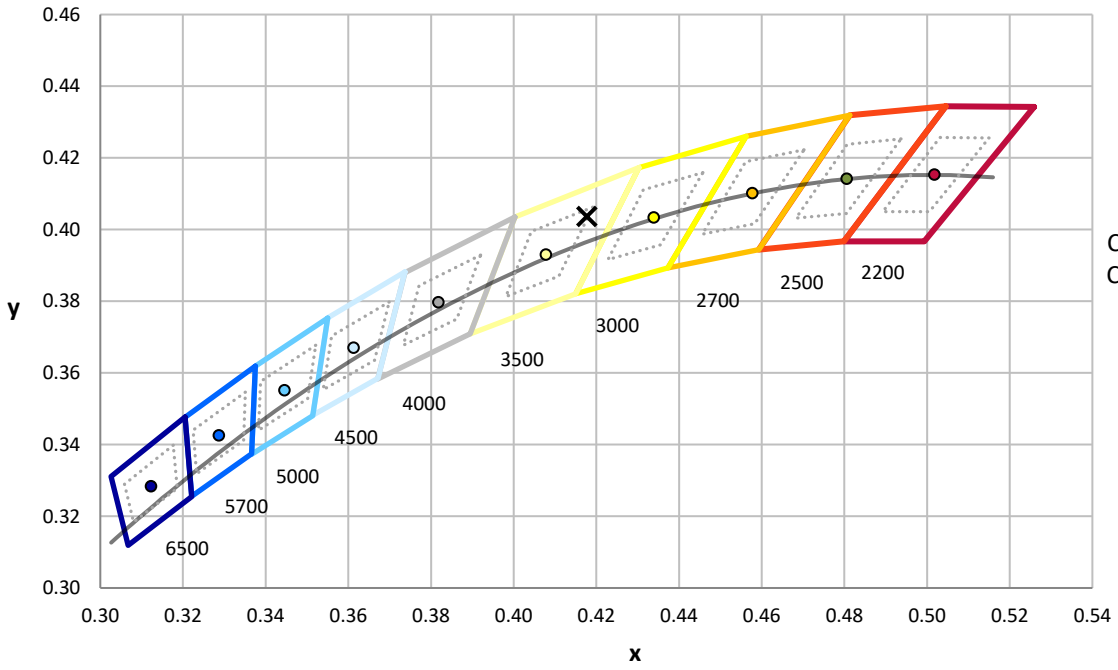
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-176-4

CIE 1931 Chromaticity Diagram



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

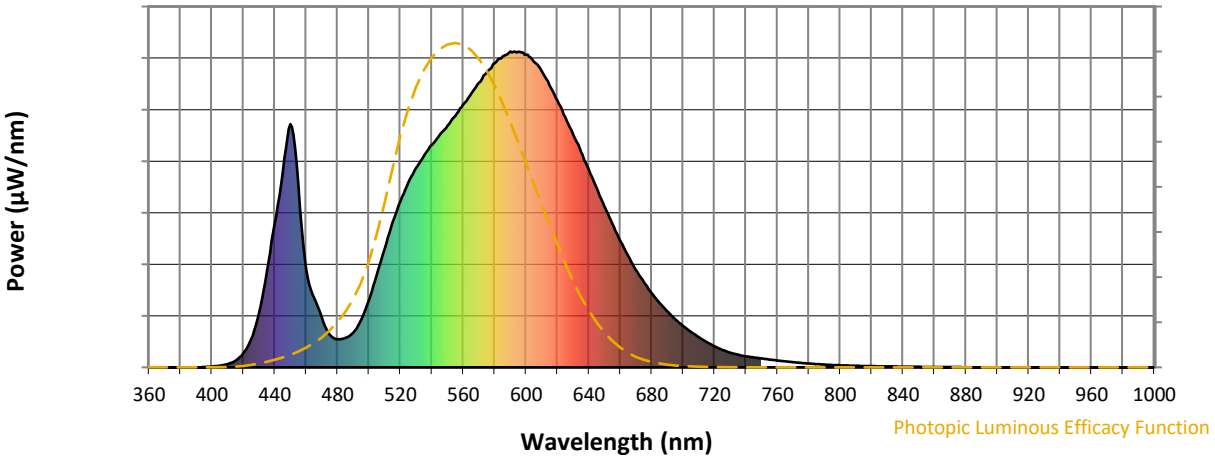


CCT = 3348K
CIE x = 0.4177
CIE y = 0.4036
Duv = 0.0030

Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2407-176-4

Photopic Flux vs. Wavelength

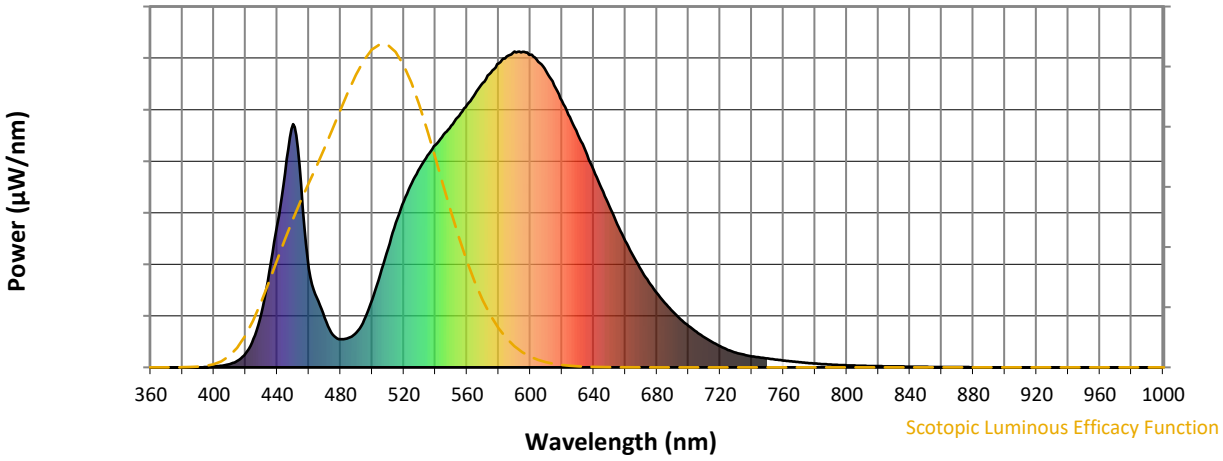


Photopic Lumens: NR

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	110	NR	620	844	NR	750	28	NR	880	0	NR
365	0	NR	495	150	NR	625	792	NR	755	25	NR	885	0	NR
370	0	NR	500	214	NR	630	737	NR	760	22	NR	890	0	NR
375	0	NR	505	293	NR	635	683	NR	765	19	NR	895	0	NR
380	0	NR	510	376	NR	640	625	NR	770	16	NR	900	0	NR
385	0	NR	515	458	NR	645	566	NR	775	14	NR	905	0	NR
390	0	NR	520	526	NR	650	509	NR	780	12	NR	910	0	NR
395	1	NR	525	584	NR	655	453	NR	785	10	NR	915	0	NR
400	3	NR	530	631	NR	660	401	NR	790	9	NR	920	0	NR
405	5	NR	535	671	NR	665	353	NR	795	8	NR	925	0	NR
410	10	NR	540	704	NR	670	308	NR	800	7	NR	930	0	NR
415	21	NR	545	737	NR	675	269	NR	805	6	NR	935	0	NR
420	44	NR	550	766	NR	680	235	NR	810	5	NR	940	0	NR
425	90	NR	555	797	NR	685	204	NR	815	4	NR	945	0	NR
430	171	NR	560	832	NR	690	177	NR	820	4	NR	950	0	NR
435	305	NR	565	866	NR	695	152	NR	825	3	NR	955	0	NR
440	455	NR	570	901	NR	700	131	NR	830	3	NR	960	0	NR
445	615	NR	575	933	NR	705	112	NR	835	3	NR	965	0	NR
450	771	NR	580	963	NR	710	96	NR	840	2	NR	970	0	NR
455	579	NR	585	984	NR	715	80	NR	845	2	NR	975	0	NR
460	313	NR	590	1000	NR	720	67	NR	850	2	NR	980	0	NR
465	221	NR	595	999	NR	725	55	NR	855	1	NR	985	0	NR
470	156	NR	600	990	NR	730	46	NR	860	1	NR	990	0	NR
475	103	NR	605	968	NR	735	40	NR	865	1	NR	995	0	NR
480	89	NR	610	937	NR	740	35	NR	870	1	NR	1000	0	NR
485	93	NR	615	893	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-176-4

Scotopic Flux vs. Wavelength

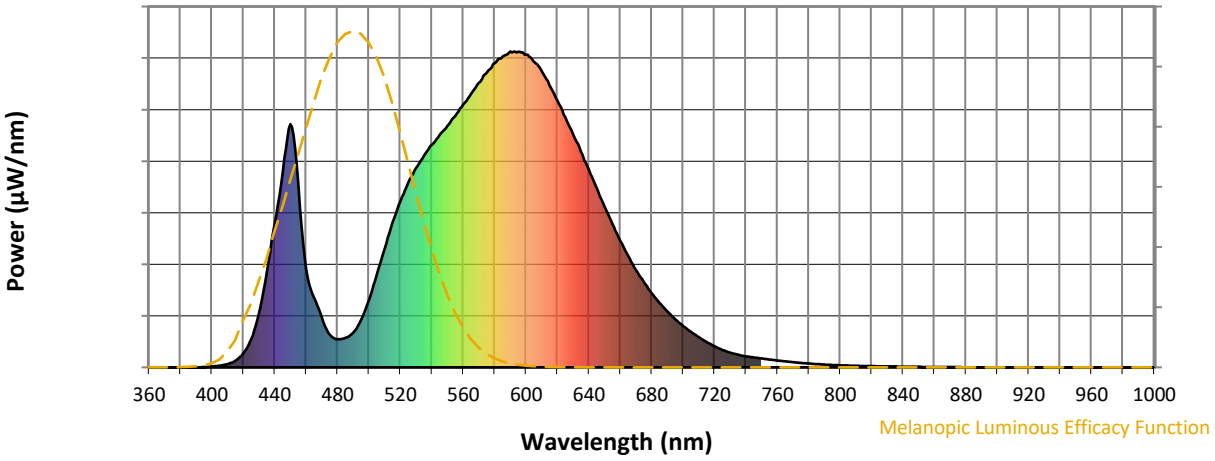


Scotopic Lumens: NR **S/P: 1.31**

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	110	NR	620	844	NR	750	28	NR	880	0	NR
365	0	NR	495	150	NR	625	792	NR	755	25	NR	885	0	NR
370	0	NR	500	214	NR	630	737	NR	760	22	NR	890	0	NR
375	0	NR	505	293	NR	635	683	NR	765	19	NR	895	0	NR
380	0	NR	510	376	NR	640	625	NR	770	16	NR	900	0	NR
385	0	NR	515	458	NR	645	566	NR	775	14	NR	905	0	NR
390	0	NR	520	526	NR	650	509	NR	780	12	NR	910	0	NR
395	1	NR	525	584	NR	655	453	NR	785	10	NR	915	0	NR
400	3	NR	530	631	NR	660	401	NR	790	9	NR	920	0	NR
405	5	NR	535	671	NR	665	353	NR	795	8	NR	925	0	NR
410	10	NR	540	704	NR	670	308	NR	800	7	NR	930	0	NR
415	21	NR	545	737	NR	675	269	NR	805	6	NR	935	0	NR
420	44	NR	550	766	NR	680	235	NR	810	5	NR	940	0	NR
425	90	NR	555	797	NR	685	204	NR	815	4	NR	945	0	NR
430	171	NR	560	832	NR	690	177	NR	820	4	NR	950	0	NR
435	305	NR	565	866	NR	695	152	NR	825	3	NR	955	0	NR
440	455	NR	570	901	NR	700	131	NR	830	3	NR	960	0	NR
445	615	NR	575	933	NR	705	112	NR	835	3	NR	965	0	NR
450	771	NR	580	963	NR	710	96	NR	840	2	NR	970	0	NR
455	579	NR	585	984	NR	715	80	NR	845	2	NR	975	0	NR
460	313	NR	590	1000	NR	720	67	NR	850	2	NR	980	0	NR
465	221	NR	595	999	NR	725	55	NR	855	1	NR	985	0	NR
470	156	NR	600	990	NR	730	46	NR	860	1	NR	990	0	NR
475	103	NR	605	968	NR	735	40	NR	865	1	NR	995	0	NR
480	89	NR	610	937	NR	740	35	NR	870	1	NR	1000	0	NR
485	93	NR	615	893	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-176-4

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.4**

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	110	NR	620	844	NR	750	28	NR	880	0	NR
365	0	NR	495	150	NR	625	792	NR	755	25	NR	885	0	NR
370	0	NR	500	214	NR	630	737	NR	760	22	NR	890	0	NR
375	0	NR	505	293	NR	635	683	NR	765	19	NR	895	0	NR
380	0	NR	510	376	NR	640	625	NR	770	16	NR	900	0	NR
385	0	NR	515	458	NR	645	566	NR	775	14	NR	905	0	NR
390	0	NR	520	526	NR	650	509	NR	780	12	NR	910	0	NR
395	1	NR	525	584	NR	655	453	NR	785	10	NR	915	0	NR
400	3	NR	530	631	NR	660	401	NR	790	9	NR	920	0	NR
405	5	NR	535	671	NR	665	353	NR	795	8	NR	925	0	NR
410	10	NR	540	704	NR	670	308	NR	800	7	NR	930	0	NR
415	21	NR	545	737	NR	675	269	NR	805	6	NR	935	0	NR
420	44	NR	550	766	NR	680	235	NR	810	5	NR	940	0	NR
425	90	NR	555	797	NR	685	204	NR	815	4	NR	945	0	NR
430	171	NR	560	832	NR	690	177	NR	820	4	NR	950	0	NR
435	305	NR	565	866	NR	695	152	NR	825	3	NR	955	0	NR
440	455	NR	570	901	NR	700	131	NR	830	3	NR	960	0	NR
445	615	NR	575	933	NR	705	112	NR	835	3	NR	965	0	NR
450	771	NR	580	963	NR	710	96	NR	840	2	NR	970	0	NR
455	579	NR	585	984	NR	715	80	NR	845	2	NR	975	0	NR
460	313	NR	590	1000	NR	720	67	NR	850	2	NR	980	0	NR
465	221	NR	595	999	NR	725	55	NR	855	1	NR	985	0	NR
470	156	NR	600	990	NR	730	46	NR	860	1	NR	990	0	NR
475	103	NR	605	968	NR	735	40	NR	865	1	NR	995	0	NR
480	89	NR	610	937	NR	740	35	NR	870	1	NR	1000	0	NR
485	93	NR	615	893	NR	745	31	NR	875	1	NR			

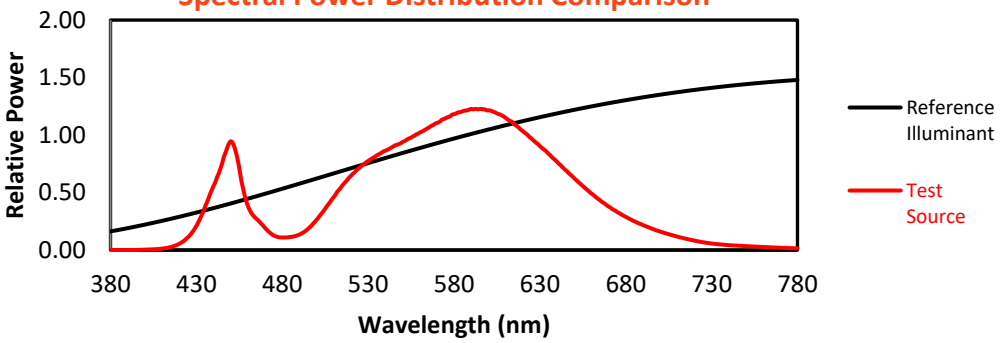
REPORT NUMBER: SP1-2407-176-4

TM-30-18

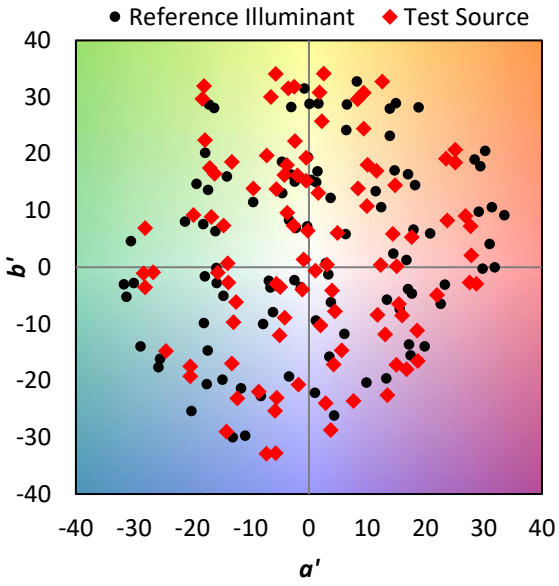
Summary

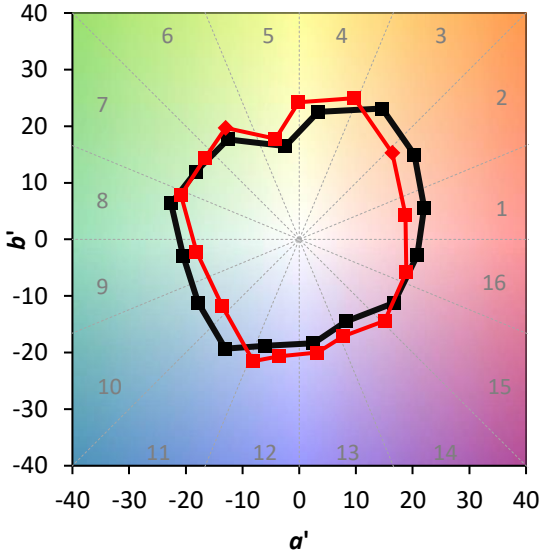
R_f = 75.8
R_g = 95.8
CIE R_a = 73.4
R_9 = -19.2

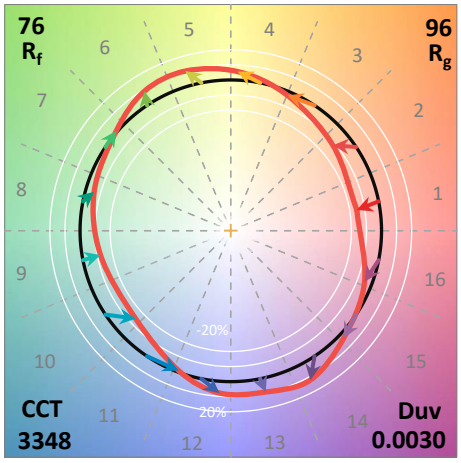
Spectral Power Distribution Comparison

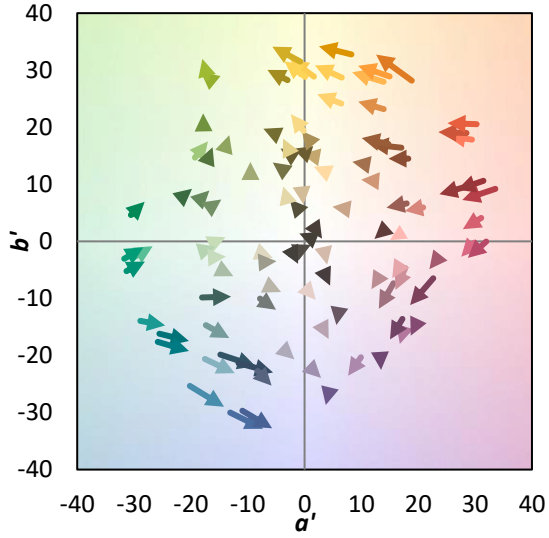


Color Vector Graphics







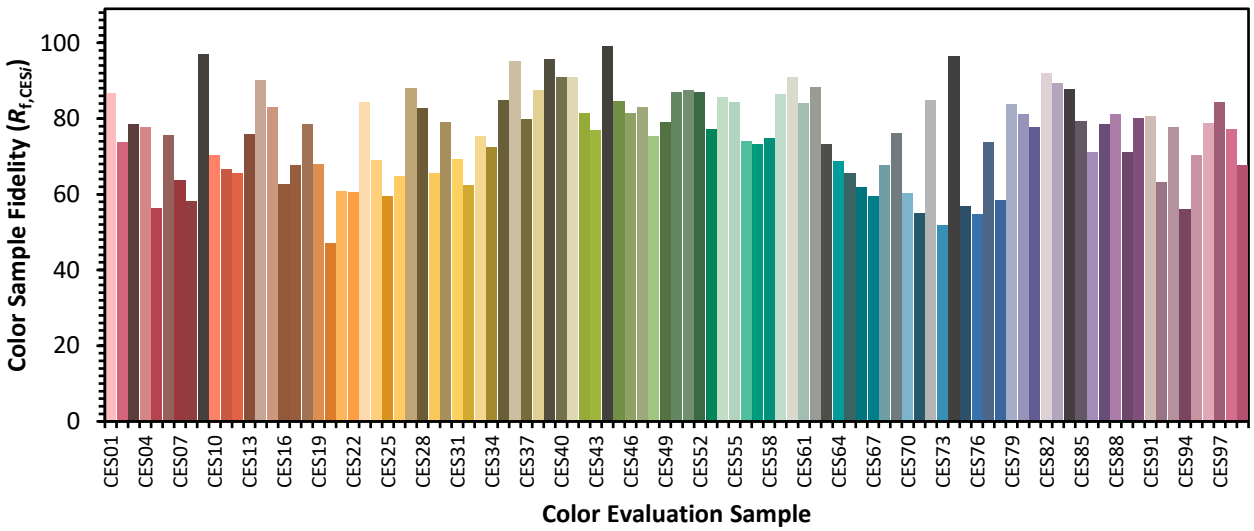


REPORT NUMBER: SP1-2407-176-4

TM-30-18

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

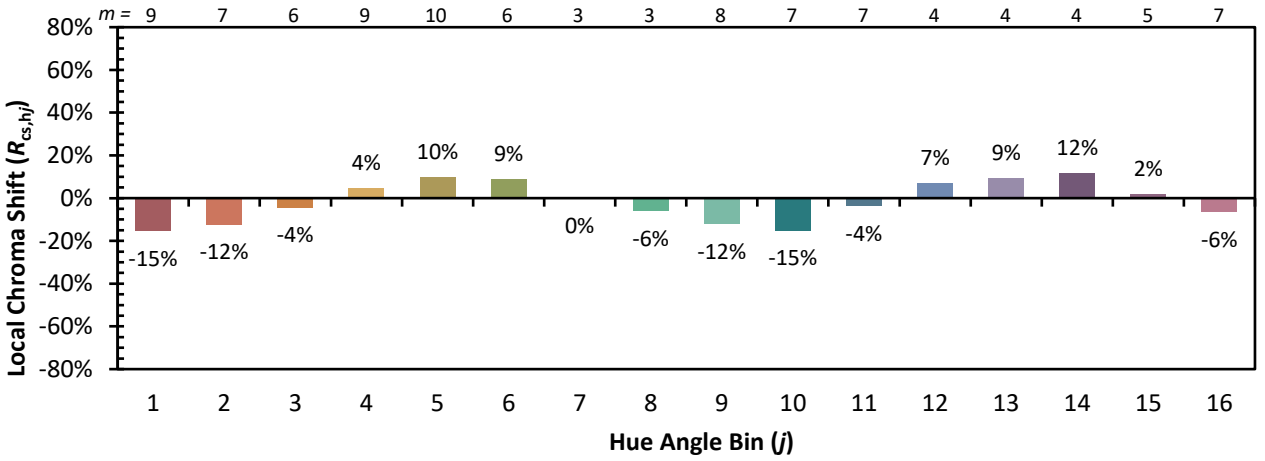
CES01 = 86	CES26 = 65	CES51 = 88	CES76 = 55
CES02 = 62	CES27 = 88	CES52 = 87	CES77 = 74
CES03 = 31	CES28 = 83	CES53 = 77	CES78 = 58
CES04 = 70	CES29 = 66	CES54 = 86	CES79 = 84
CES05 = 48	CES30 = 79	CES55 = 84	CES80 = 81
CES06 = 51	CES31 = 69	CES56 = 74	CES81 = 78
CES07 = 41	CES32 = 62	CES57 = 73	CES82 = 92
CES08 = 40	CES33 = 75	CES58 = 75	CES83 = 89
CES09 = 29	CES34 = 73	CES59 = 87	CES84 = 88
CES10 = 75	CES35 = 85	CES60 = 91	CES85 = 79
CES11 = 58	CES36 = 95	CES61 = 84	CES86 = 71
CES12 = 64	CES37 = 80	CES62 = 88	CES87 = 79
CES13 = 43	CES38 = 88	CES63 = 73	CES88 = 81
CES14 = 74	CES39 = 96	CES64 = 69	CES89 = 71
CES15 = 71	CES40 = 91	CES65 = 66	CES90 = 80
CES16 = 47	CES41 = 91	CES66 = 62	CES91 = 81
CES17 = 50	CES42 = 81	CES67 = 60	CES92 = 63
CES18 = 56	CES43 = 77	CES68 = 68	CES93 = 78
CES19 = 72	CES44 = 99	CES69 = 76	CES94 = 56
CES20 = 65	CES45 = 85	CES70 = 60	CES95 = 70
CES21 = 87	CES46 = 82	CES71 = 55	CES96 = 79
CES22 = 79	CES47 = 83	CES72 = 85	CES97 = 84
CES23 = 92	CES48 = 75	CES73 = 52	CES98 = 77
CES24 = 91	CES49 = 79	CES74 = 96	CES99 = 68
CES25 = 72	CES50 = 87	CES75 = 57	

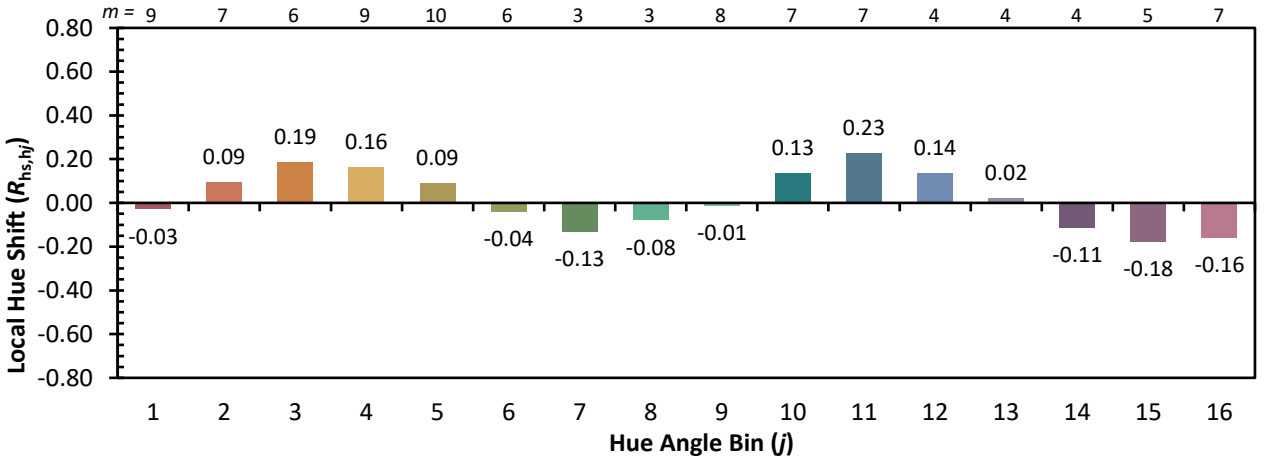


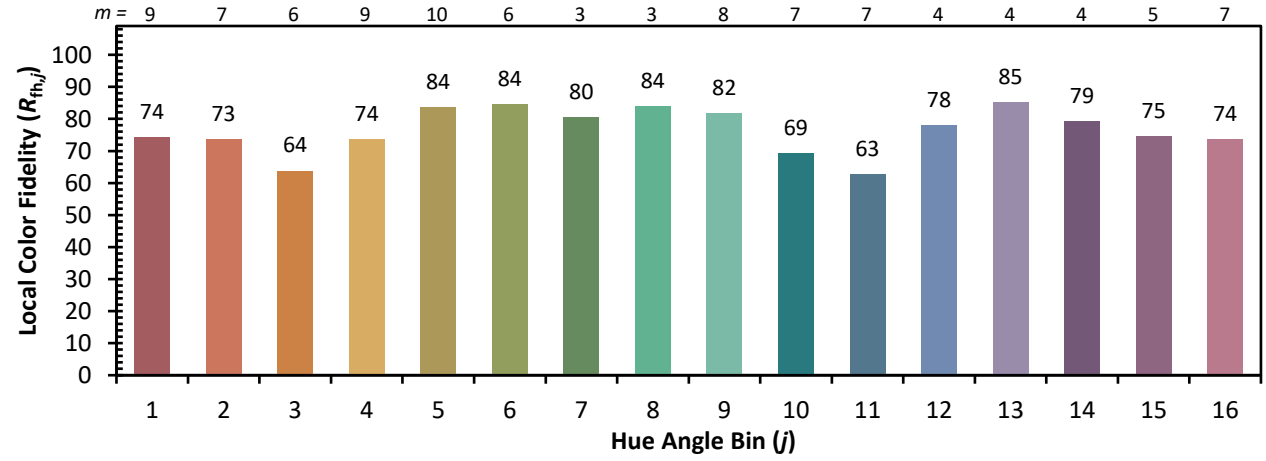
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Color Rendition by Hue-Angle Bin



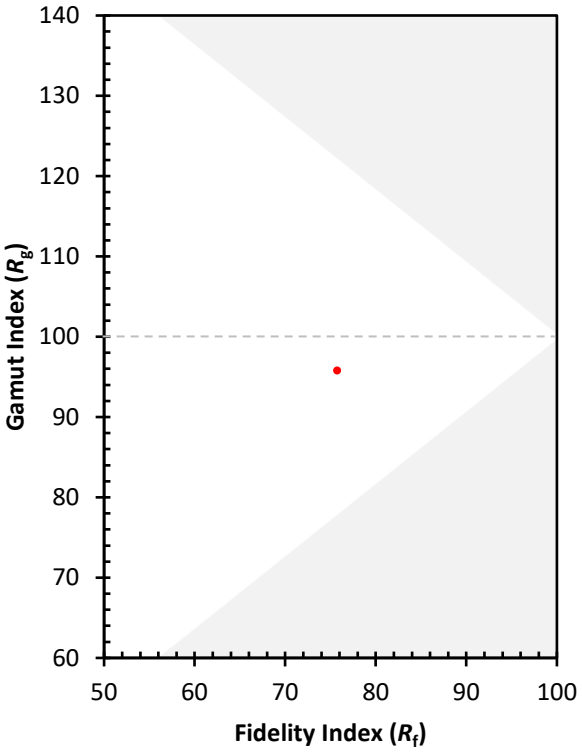


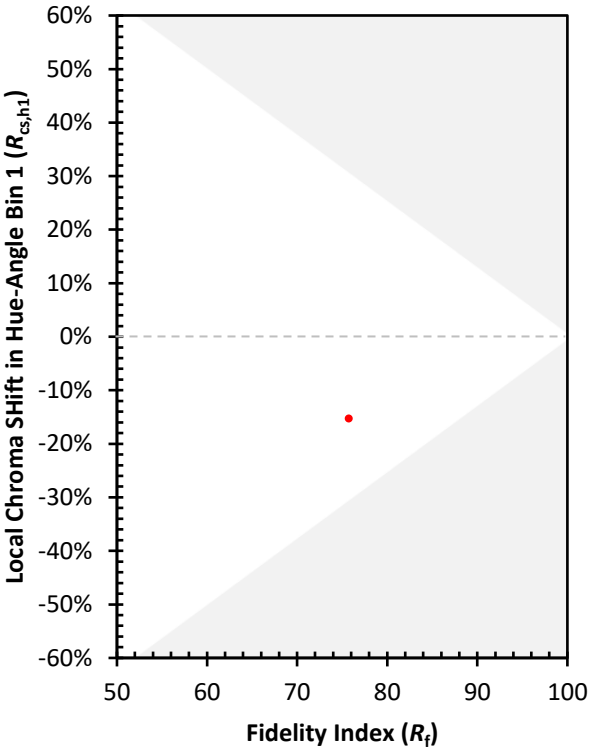


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Measure Comparisons





(END OF REPORT)