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: P436899

Luminaire Tested: **TT-D6-735-U-5WQ-PM-HSS**

Issue Date: 12/2/2020

Report Generated By 670246001

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:	P436899
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2010-017-2)
Test Lab:	INNOVATION CENTER
Issue Date:	12/2/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	TT-D6-735-U-5WQ-PM-HSS
Description:	TOPTIER LED SITE LUMINAIRE
	3500K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	9543.1 lumens
Efficiency:	N/A
Efficacy:	90.7 lumens/watt
Luminous Opening:	Circular (Dia: 1.12' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B3 - U2 - G3

Input Watts (W):	105.2
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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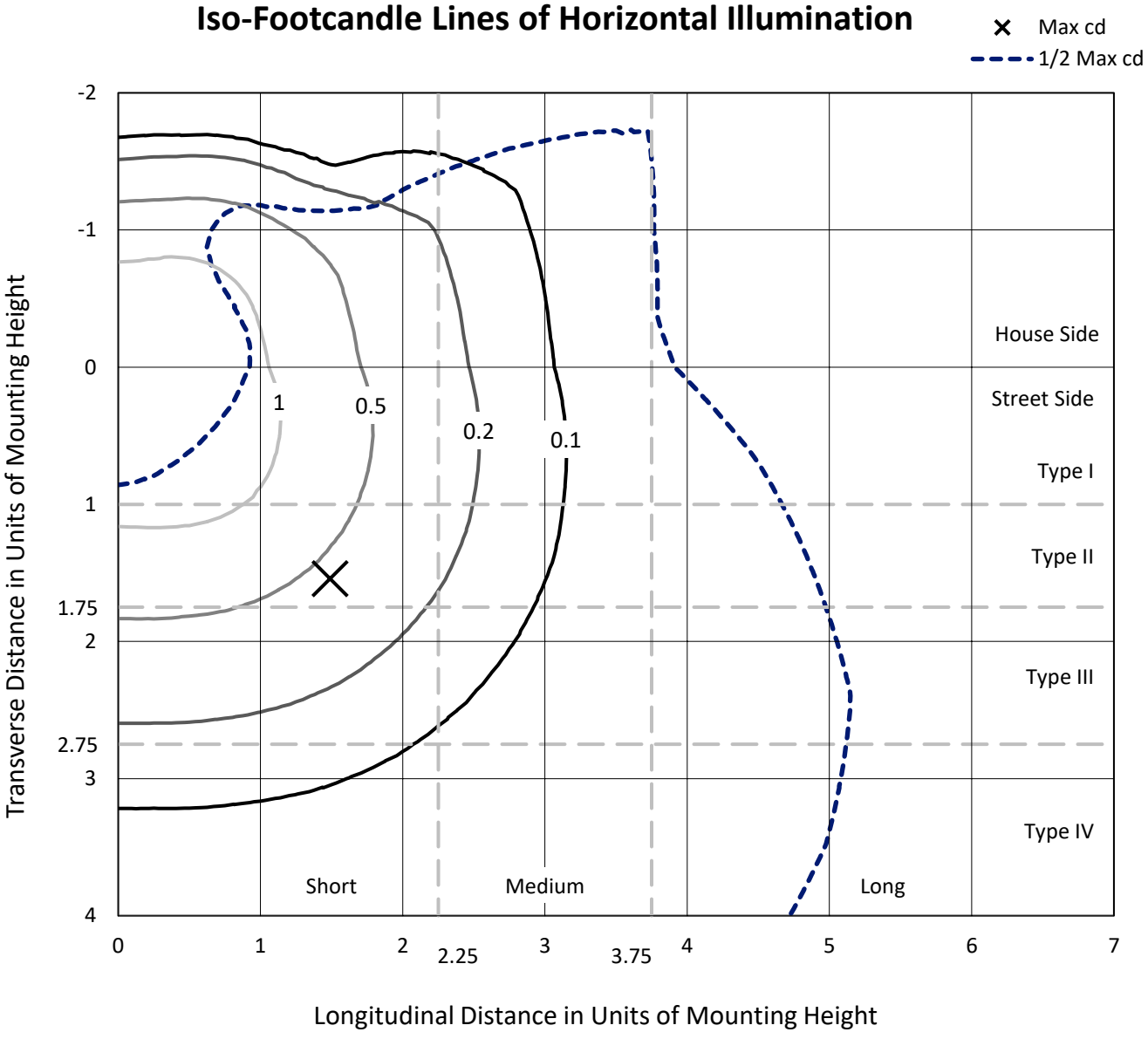
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
Type IV - Short - N/A

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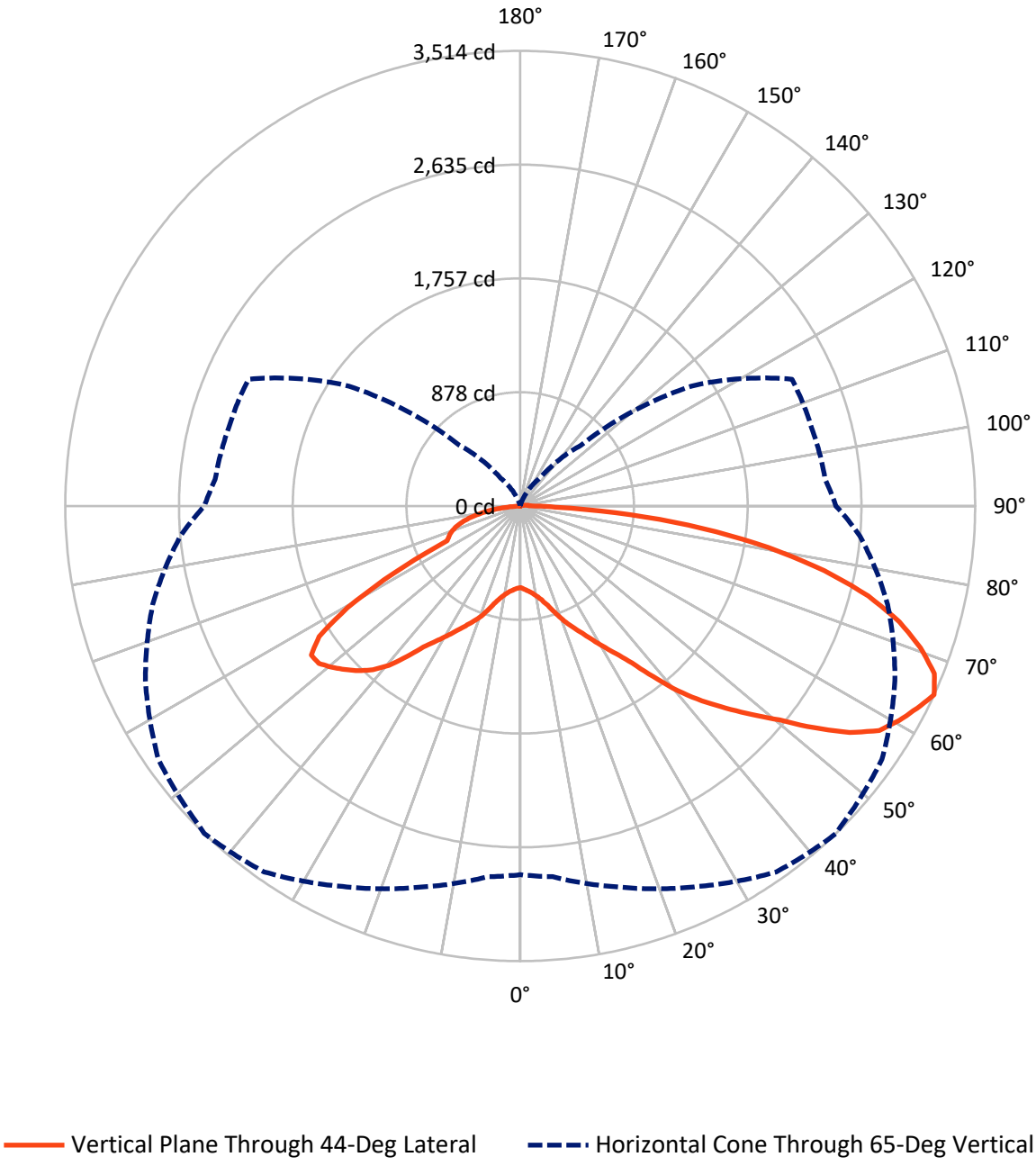
Luminous Intensity Polar Plot



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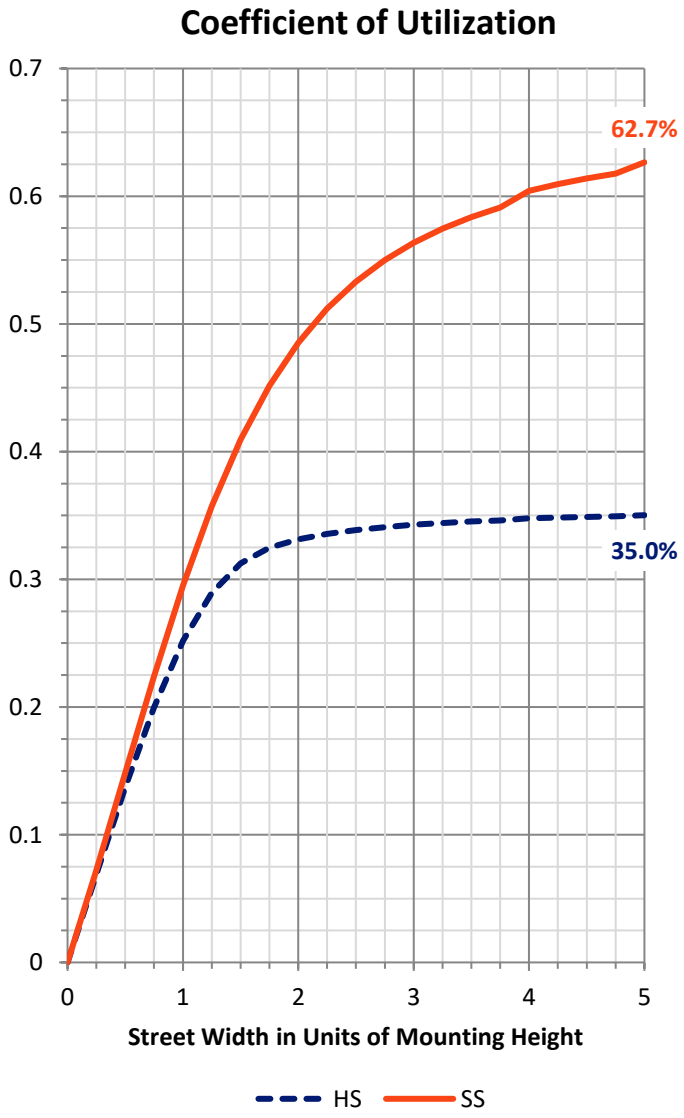
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3361.2	2.3	3363.5
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	6140.9	38.7	6179.6
	% Fixture	64.3	0.4	64.8
Total	Lumens	9502.2	40.9	9543.1
	% Fixture	99.6	0.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.8	0.7
10°-20°	226.7	2.4
20°-30°	485.7	5.1
30°-40°	879.7	9.2
40°-50°	1467.9	15.4
50°-60°	2033.2	21.3
60°-70°	2107.0	22.1
70°-80°	1695.7	17.8
80°-90°	542.4	5.7
90°-100°	27.5	0.3
100°-110°	8.8	0.1
110°-120°	1.7	0.0
120°-130°	1.1	0.0
130°-140°	0.7	0.0
140°-150°	0.6	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-90°	9502.2	99.6
0°-180°	9543.1	100.0



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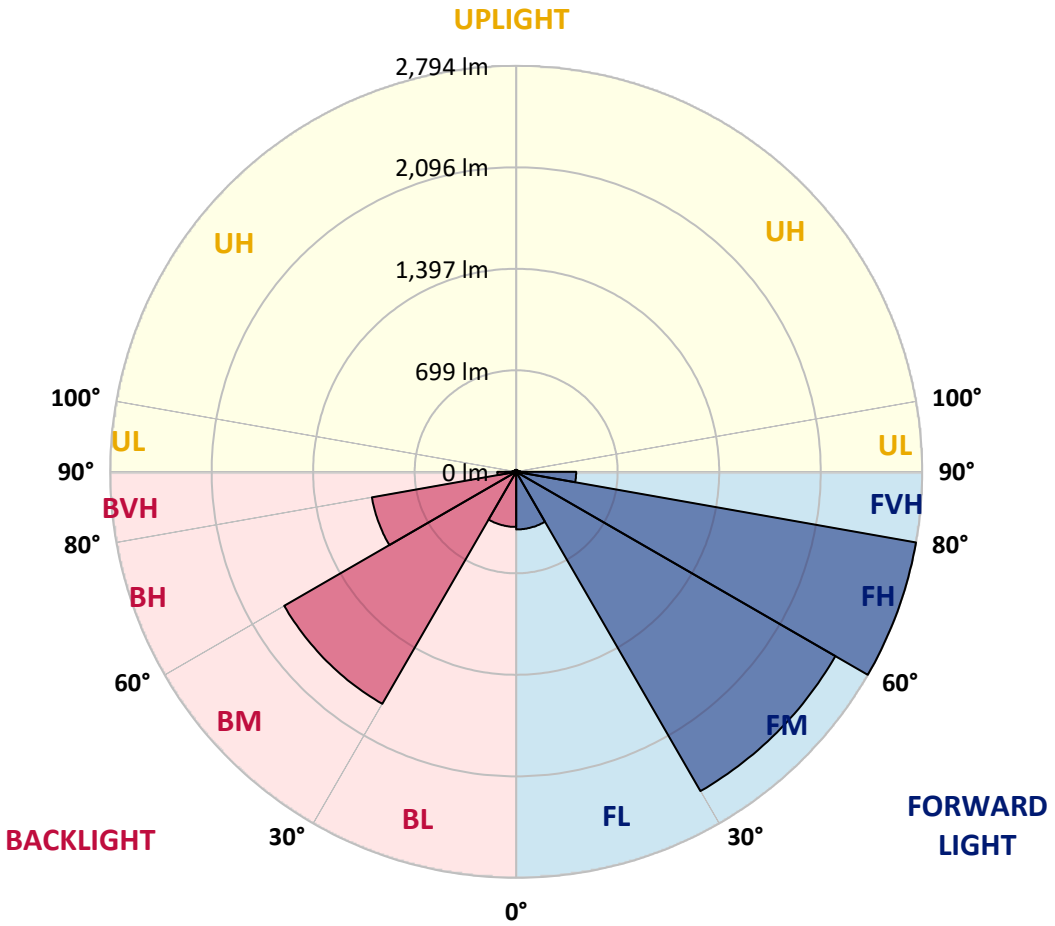
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	396.8	4.2			
FM	(30°-60°)	2537.0	26.6			
FH	(60°-80°)	2794.3	29.3			G2/5000
FVH	(80°-90°)	412.7	4.3			G3/500
BL	(0°-30°)	379.4	4.0	B1/500		
BM	(30°-60°)	1843.7	19.3	B2/2500		
BH	(60°-80°)	1008.4	10.6	B3/2500		G3/2500
BVH	(80°-90°)	129.7	1.4			G2/225
UL	(90°-100°)	27.5	0.3		U2/50	
UH	(100°-180°)	13.5	0.1		U2/50	

BUG Rating: B3-U2-G3
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	629.7	629.7	629.7	629.7	629.7	629.7	629.7	629.7	629.7	629.7	629.7
2.5°	648.3	646.5	646.5	644.6	644.6	644.6	644.6	644.6	642.8	640.9	639.0
5°	665.1	665.1	663.2	663.2	661.4	659.5	661.4	659.5	657.7	655.8	653.9
7.5°	687.5	685.6	685.6	681.9	681.9	680.0	680.0	680.0	678.1	674.4	672.6
10°	719.1	715.4	715.4	711.7	709.8	708.0	708.0	704.2	704.2	702.4	700.5
12.5°	754.5	750.8	754.5	752.7	748.9	745.2	745.2	741.5	739.6	737.8	730.3
15°	801.1	795.5	799.2	799.2	797.4	795.5	795.5	788.1	784.3	780.6	773.2
17.5°	857.0	853.3	855.1	857.0	862.6	862.6	864.5	855.1	847.7	834.6	829.1
20°	927.8	925.9	931.5	931.5	937.1	937.1	939.0	929.7	916.6	907.3	896.1
22.5°	996.7	996.7	1004.2	1004.2	1009.8	1006.0	1006.0	1002.3	987.4	976.2	965.1
25°	1067.5	1065.7	1073.1	1078.7	1086.2	1076.8	1080.6	1075.0	1060.1	1045.2	1030.3
27.5°	1145.8	1142.0	1145.8	1153.2	1166.3	1158.8	1162.5	1153.2	1138.3	1117.8	1104.8
30°	1231.5	1225.9	1231.5	1242.7	1252.0	1255.7	1253.8	1240.8	1227.7	1197.9	1188.6
32.5°	1315.3	1315.3	1328.4	1348.8	1360.0	1358.2	1360.0	1348.8	1330.2	1293.0	1270.6
35°	1417.8	1425.2	1442.0	1471.8	1496.0	1486.7	1486.7	1483.0	1451.3	1406.6	1376.8
37.5°	1553.8	1561.2	1594.8	1630.2	1674.9	1671.2	1673.0	1661.8	1600.4	1553.8	1510.9
40°	1712.1	1719.6	1769.9	1820.2	1863.0	1876.1	1877.9	1853.7	1786.7	1719.6	1652.5
42.5°	1857.5	1866.8	1918.9	1989.7	2036.3	2056.8	2060.5	2021.4	1950.6	1874.2	1790.4
45°	2002.8	2014.0	2073.6	2148.1	2215.2	2224.5	2226.3	2192.8	2114.6	2027.0	1918.9
47.5°	2151.8	2161.1	2222.6	2312.0	2384.7	2403.3	2405.2	2373.5	2278.5	2172.3	2045.6
50°	2287.8	2306.4	2390.3	2485.3	2582.2	2597.1	2598.9	2563.5	2451.8	2332.5	2164.9
52.5°	2448.0	2457.4	2546.8	2705.1	2787.1	2844.9	2846.7	2777.8	2658.6	2498.3	2282.2
55°	2634.3	2651.1	2742.4	2900.8	3047.9	3087.1	3098.2	3016.3	2857.9	2684.6	2431.3
57.5°	2742.4	2774.1	2908.2	3059.1	3243.6	3269.6	3275.2	3189.5	3014.4	2824.4	2543.1
60°	2800.2	2818.8	2960.4	3195.1	3338.6	3362.8	3360.9	3295.7	3120.6	2889.6	2595.2
62.5°	2865.4	2897.0	3016.3	3254.7	3379.6	3439.2	3429.9	3362.8	3183.9	2930.6	2645.5
65°	2846.7	2872.8	3047.9	3241.7	3448.5	3513.7	3500.7	3411.2	3193.3	2938.0	2632.5
67.5°	2772.2	2792.7	2966.0	3206.3	3403.8	3450.4	3472.7	3385.2	3141.1	2857.9	2550.5
70°	2619.4	2651.1	2818.8	3064.7	3245.4	3279.0	3282.7	3228.7	3008.8	2710.7	2414.5
72.5°	2408.9	2435.0	2617.6	2867.2	3023.7	3062.8	3066.6	2984.6	2818.8	2509.5	2218.9
75°	2157.4	2181.6	2323.2	2584.0	2738.7	2777.8	2774.1	2697.7	2522.6	2230.1	1959.9
77.5°	1846.3	1891.0	2015.8	2230.1	2381.0	2401.5	2405.2	2321.4	2179.8	1926.4	1663.7
80°	1456.9	1499.8	1641.3	1801.6	1928.3	1945.0	1950.6	1879.8	1751.3	1527.7	1304.1
82.5°	1035.9	1073.1	1184.9	1315.3	1421.5	1421.5	1425.2	1367.5	1268.7	1076.8	901.7
85°	590.6	618.5	693.1	786.2	862.6	853.3	855.1	803.0	737.8	588.7	476.9
87.5°	193.8	206.8	223.6	259.0	294.4	272.0	283.2	234.7	212.4	158.4	123.0
90°	102.5	102.5	98.7	95.0	87.6	76.4	76.4	61.5	46.6	29.8	11.2
92.5°	93.2	93.2	89.4	85.7	78.2	68.9	68.9	55.9	41.0	26.1	9.3
95°	76.4	76.4	74.5	70.8	65.2	57.8	55.9	46.6	35.4	20.5	7.5
97.5°	59.6	59.6	57.8	55.9	50.3	44.7	44.7	35.4	26.1	16.8	5.6
100°	44.7	44.7	44.7	41.0	39.1	33.5	33.5	27.9	20.5	13.0	3.7
102.5°	31.7	33.5	31.7	29.8	27.9	24.2	24.2	20.5	14.9	9.3	3.7
105°	22.4	22.4	20.5	20.5	18.6	16.8	16.8	13.0	9.3	5.6	1.9
107.5°	13.0	13.0	13.0	13.0	11.2	11.2	11.2	9.3	5.6	3.7	1.9
110°	7.5	7.5	7.5	7.5	5.6	5.6	5.6	3.7	3.7	1.9	1.9

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
112.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9
115°	1.9	1.9	1.9	3.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
117.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
120°	0.0	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
122.5°	0.0	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
125°	0.0	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
127.5°	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
130°	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
132.5°	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
135°	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9
140°	1.9	1.9	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9
142.5°	1.9	1.9	1.9	0.0	0.0	1.9	1.9	1.9	1.9	1.9	1.9
145°	1.9	1.9	0.0	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9
147.5°	1.9	1.9	1.9	0.0	0.0	1.9	1.9	1.9	1.9	1.9	1.9
150°	1.9	1.9	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9	1.9
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9
160°	1.9	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9
162.5°	1.9	1.9	0.0	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9
165°	1.9	0.0	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9
167.5°	1.9	1.9	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9
170°	1.9	0.0	0.0	0.0	0.0	1.9	0.0	1.9	1.9	1.9	1.9
172.5°	1.9	1.9	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9
175°	1.9	1.9	1.9	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9
177.5°	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9
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°	629.7	629.7	629.7	629.7	629.7	629.7	629.7	629.7	629.7	629.7	629.7
2.5°	639.0	639.0	637.2	635.3	635.3	635.3	633.4	633.4	633.4	631.6	631.6
5°	653.9	652.1	652.1	650.2	650.2	648.3	648.3	646.5	644.6	644.6	642.8
7.5°	674.4	672.6	668.8	670.7	667.0	665.1	663.2	663.2	663.2	661.4	661.4
10°	698.6	698.6	694.9	694.9	691.2	689.3	687.5	687.5	689.3	689.3	687.5
12.5°	730.3	728.5	728.5	726.6	724.7	722.9	724.7	724.7	722.9	721.0	719.1
15°	769.4	769.4	769.4	771.3	769.4	769.4	769.4	767.6	763.8	760.1	760.1
17.5°	829.1	827.2	823.5	825.3	829.1	834.6	829.1	823.5	817.9	817.9	816.0
20°	890.5	892.4	892.4	894.3	899.9	905.4	898.0	894.3	890.5	886.8	883.1
22.5°	957.6	959.5	959.5	957.6	961.3	959.5	955.7	952.0	948.3	942.7	939.0
25°	1022.8	1024.7	1022.8	1020.9	1022.8	1017.2	1011.6	1006.0	996.7	987.4	987.4
27.5°	1095.5	1093.6	1086.2	1088.0	1084.3	1080.6	1069.4	1056.3	1043.3	1034.0	1034.0
30°	1171.9	1171.9	1157.0	1164.4	1157.0	1155.1	1130.9	1114.1	1095.5	1082.4	1080.6
32.5°	1255.7	1252.0	1240.8	1248.2	1240.8	1233.3	1203.5	1181.2	1149.5	1130.9	1129.0
35°	1356.3	1347.0	1337.7	1345.1	1345.1	1324.6	1294.8	1253.8	1209.1	1186.8	1184.9
37.5°	1479.3	1473.7	1462.5	1471.8	1479.3	1458.8	1414.1	1354.4	1291.1	1257.6	1255.7
40°	1615.3	1607.8	1602.2	1615.3	1620.8	1600.4	1540.7	1456.9	1371.2	1322.8	1315.3
42.5°	1743.8	1727.0	1717.7	1736.4	1730.8	1708.4	1626.4	1529.6	1412.2	1356.3	1347.0
45°	1859.3	1840.7	1827.6	1844.4	1837.0	1792.2	1701.0	1570.5	1429.0	1360.0	1348.8
47.5°	1973.0	1945.0	1924.5	1946.9	1932.0	1863.0	1751.3	1591.0	1410.3	1328.4	1309.7
50°	2069.8	2036.3	2023.3	2049.3	2027.0	1930.1	1786.7	1581.7	1363.7	1244.5	1214.7
52.5°	2185.4	2135.0	2122.0	2172.3	2122.0	1993.5	1794.1	1559.4	1257.6	1114.1	1086.2
55°	2302.7	2246.8	2226.3	2272.9	2196.5	2006.5	1756.9	1430.8	1097.3	944.6	903.6
57.5°	2364.2	2312.0	2293.4	2326.9	2185.4	1879.8	1591.0	1192.3	857.0	685.6	640.9
60°	2420.1	2328.8	2304.6	2349.3	2069.8	1585.5	1231.5	855.1	517.9	389.4	355.8
62.5°	2459.2	2371.7	2321.4	2341.8	1857.5	1153.2	708.0	411.7	195.6	136.0	134.1
65°	*2438.7*	*2364.2*	*2330.7*	*2315.8*	*1613.4*	*663.2*	*260.8*	*104.3*	*5.6*	*5.6*	*3.7*
67.5°	2375.4	2293.4	2284.1	2297.1	1596.6	637.2	242.2	95.0	0.0	0.0	0.0
70°	2235.7	2177.9	2177.9	2222.6	1524.0	603.6	225.4	87.6	0.0	0.0	0.0
72.5°	2047.5	2002.8	2028.9	2095.9	1415.9	557.1	203.1	78.2	0.0	0.0	0.0
75°	1822.1	1775.5	1809.0	1883.5	1281.8	497.4	177.0	67.1	0.0	0.0	0.0
77.5°	1535.1	1503.5	1555.6	1624.6	1102.9	419.2	145.3	54.0	0.0	0.0	0.0
80°	1196.1	1179.3	1248.2	1309.7	890.5	329.8	109.9	39.1	0.0	0.0	0.0
82.5°	825.3	817.9	884.9	948.3	637.2	231.0	74.5	26.1	0.0	0.0	0.0
85°	432.2	432.2	484.4	542.1	355.8	124.8	37.3	11.2	0.0	0.0	0.0
87.5°	95.0	91.3	98.7	126.7	70.8	24.2	5.6	1.9	0.0	0.0	0.0
90°	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.9	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.9	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.9	1.9	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0
105°	1.9	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.9	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
110°	1.9	1.9	1.9	1.9	1.9	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: P436899
CATALOG NUMBER: TT-D6-735-U-5WQ-PM-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	1.9	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.9	1.9	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0
117.5°	1.9	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.9	1.9	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0
122.5°	1.9	1.9	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0
125°	1.9	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.9	1.9	1.9	0.0	0.0	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

MCGRAW EDISON

Report Number: SP1-2411-284-1

Test Date: 11/15/2024

Luminaire Tested: TTN-D0-735-U-WQ

Data in this report applies to families of products including TT-D* and TTN-D*

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

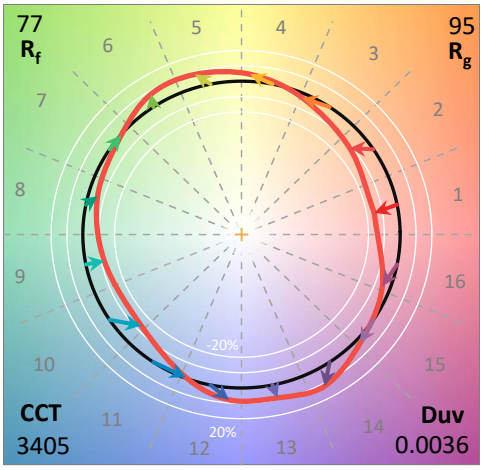
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2411-284-1
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	11/15/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	MCGRAW EDISON
Catalog Number:	**TTN-D0-735-U-WQ**
Description:	TOPTIER NANO LED PARKING GARAGE LUMINAIRE. 3500K, 70 CRI LEDS AND WIDE DISTRIBUTION

Spectral Parameters

CCT (K):	3405
CIE u':	0.2365
CIE v':	0.5180
Duv:	0.0036
CIE x:	0.4148
CIE y:	0.4038
CIE z:	0.1814
Peak Wavelength (nm):	596
Dominant Wavelength (nm):	579
Purity:	45.70672
Rf:	76.6
Rg:	95.4

CRI (Ra):	73.9
R1:	71.3
R2:	80.3
R3:	87.8
R4:	73.2
R5:	69.8
R6:	71.8
R7:	82.8
R8:	54.1
R9:	-18.0
R10:	53.1
R11:	68.6
R12:	42.6
R13:	72.5
R14:	92.7
R15:	64.3



Test Conditions

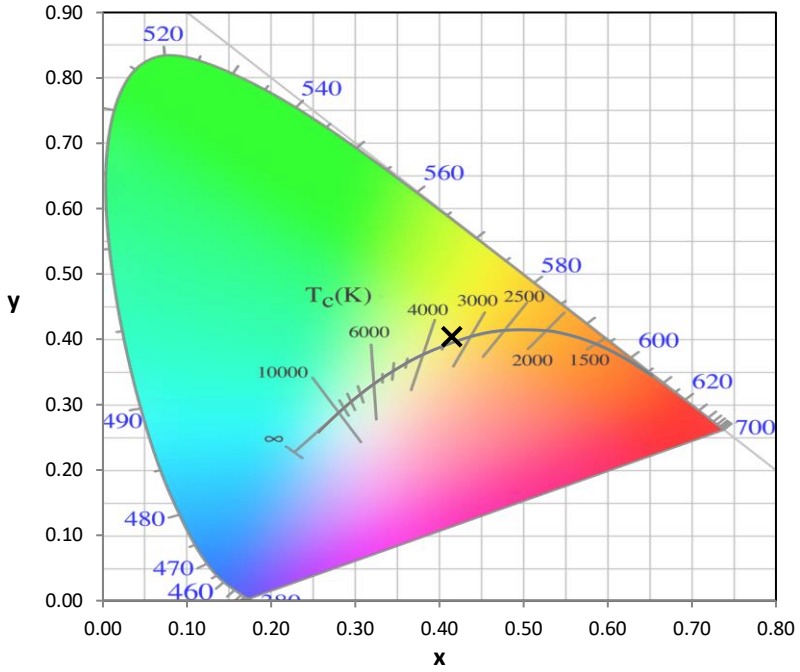
Stabilization Time:	38M
Operation Time:	1H 38M
Sphere Temperature (°C):	24.9

REPORT NUMBER: SP1-2411-284-1

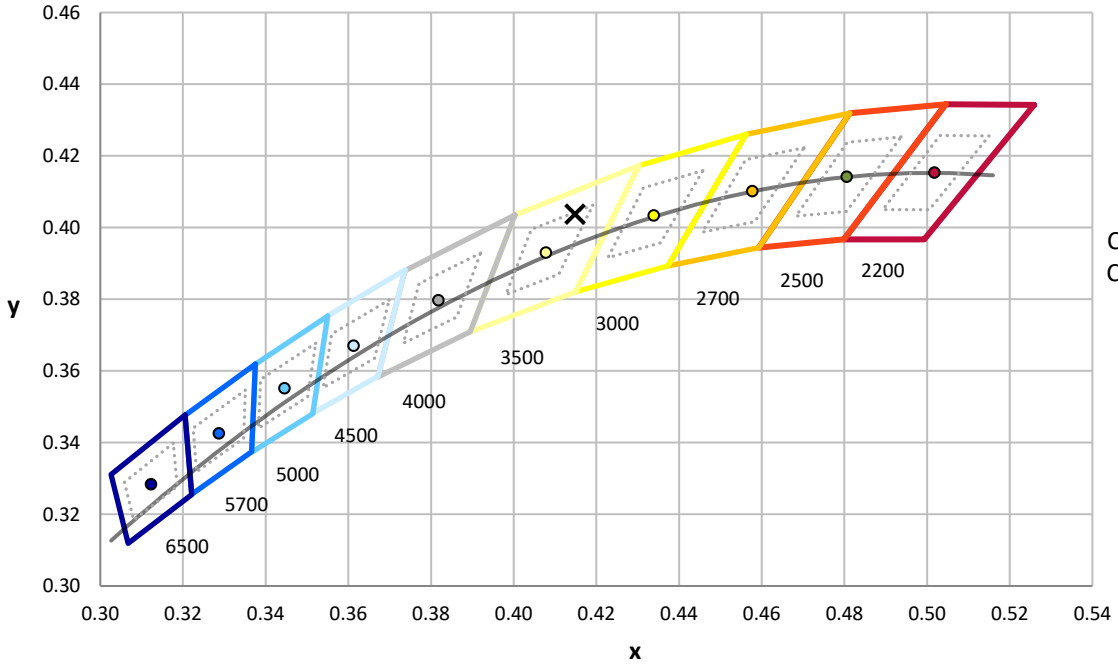
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085	10/22/2024	10/22/2025
Room Thermometer	IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2411-284-1

CIE 1931 Chromaticity Diagram



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

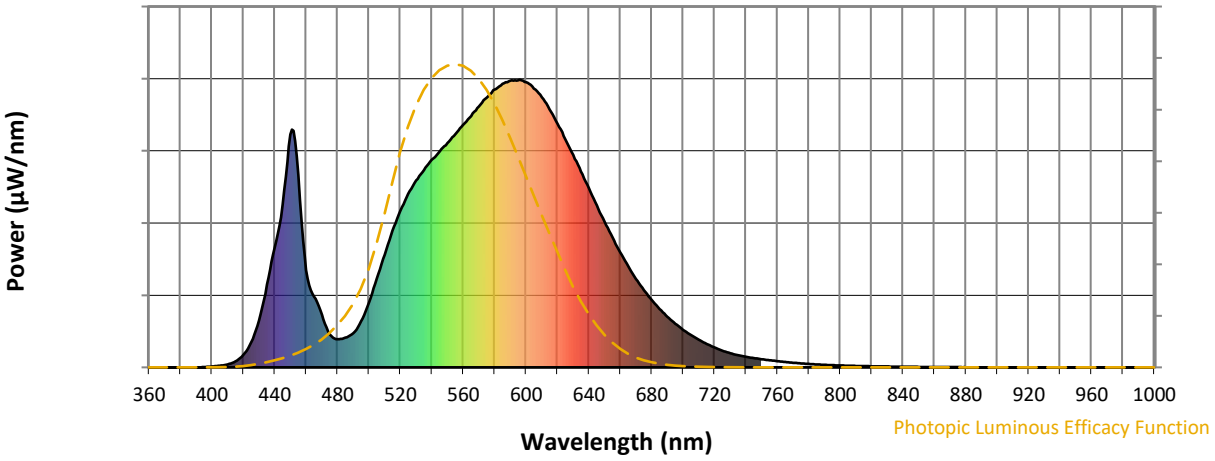


CCT = 3405K
CIE x = 0.4148
CIE y = 0.4038
Duv = 0.0036

Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2411-284-1

Photopic Flux vs. Wavelength

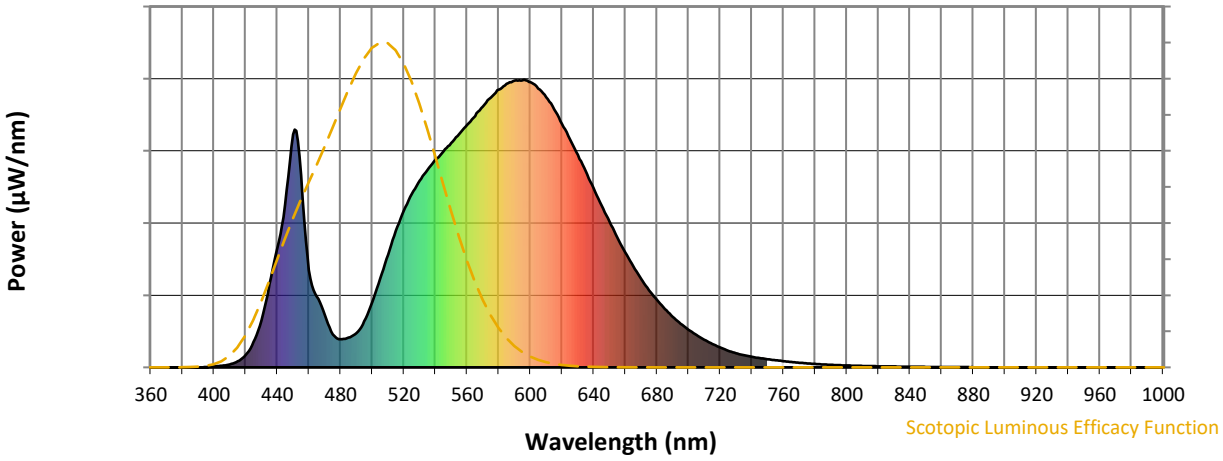


Photopic Lumens: NR

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	119	NR	620	846	NR	750	28	NR	880	1	NR
365	0	NR	495	160	NR	625	793	NR	755	25	NR	885	0	NR
370	0	NR	500	225	NR	630	739	NR	760	22	NR	890	0	NR
375	0	NR	505	308	NR	635	681	NR	765	19	NR	895	0	NR
380	0	NR	510	392	NR	640	623	NR	770	16	NR	900	0	NR
385	0	NR	515	474	NR	645	563	NR	775	14	NR	905	0	NR
390	0	NR	520	545	NR	650	506	NR	780	12	NR	910	0	NR
395	1	NR	525	603	NR	655	451	NR	785	10	NR	915	0	NR
400	3	NR	530	649	NR	660	399	NR	790	9	NR	920	0	NR
405	5	NR	535	687	NR	665	352	NR	795	8	NR	925	0	NR
410	11	NR	540	721	NR	670	307	NR	800	6	NR	930	0	NR
415	21	NR	545	751	NR	675	268	NR	805	6	NR	935	0	NR
420	43	NR	550	779	NR	680	234	NR	810	5	NR	940	0	NR
425	88	NR	555	811	NR	685	203	NR	815	4	NR	945	0	NR
430	163	NR	560	843	NR	690	176	NR	820	4	NR	950	0	NR
435	288	NR	565	873	NR	695	152	NR	825	3	NR	955	0	NR
440	416	NR	570	907	NR	700	131	NR	830	3	NR	960	0	NR
445	566	NR	575	938	NR	705	112	NR	835	3	NR	965	0	NR
450	810	NR	580	965	NR	710	96	NR	840	2	NR	970	0	NR
455	669	NR	585	986	NR	715	81	NR	845	2	NR	975	0	NR
460	338	NR	590	997	NR	720	69	NR	850	2	NR	980	0	NR
465	246	NR	595	997	NR	725	58	NR	855	1	NR	985	0	NR
470	182	NR	600	991	NR	730	49	NR	860	1	NR	990	0	NR
475	115	NR	605	968	NR	735	42	NR	865	1	NR	995	0	NR
480	97	NR	610	939	NR	740	37	NR	870	1	NR	1000	0	NR
485	103	NR	615	896	NR	745	32	NR	875	1	NR			

REPORT NUMBER: SP1-2411-284-1

Scotopic Flux vs. Wavelength

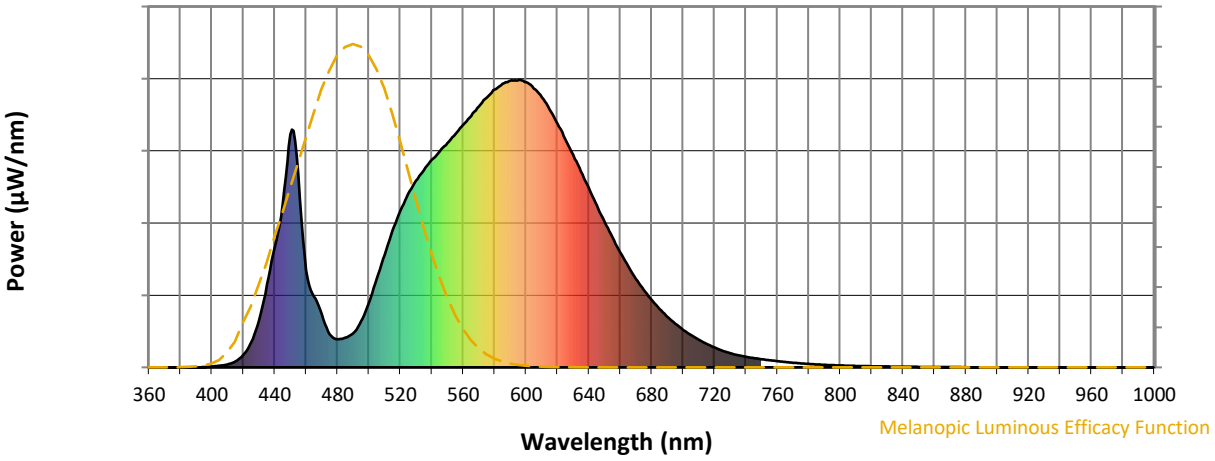


Scotopic Lumens: NR **S/P: 1.33**

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	119	NR	620	846	NR	750	28	NR	880	1	NR
365	0	NR	495	160	NR	625	793	NR	755	25	NR	885	0	NR
370	0	NR	500	225	NR	630	739	NR	760	22	NR	890	0	NR
375	0	NR	505	308	NR	635	681	NR	765	19	NR	895	0	NR
380	0	NR	510	392	NR	640	623	NR	770	16	NR	900	0	NR
385	0	NR	515	474	NR	645	563	NR	775	14	NR	905	0	NR
390	0	NR	520	545	NR	650	506	NR	780	12	NR	910	0	NR
395	1	NR	525	603	NR	655	451	NR	785	10	NR	915	0	NR
400	3	NR	530	649	NR	660	399	NR	790	9	NR	920	0	NR
405	5	NR	535	687	NR	665	352	NR	795	8	NR	925	0	NR
410	11	NR	540	721	NR	670	307	NR	800	6	NR	930	0	NR
415	21	NR	545	751	NR	675	268	NR	805	6	NR	935	0	NR
420	43	NR	550	779	NR	680	234	NR	810	5	NR	940	0	NR
425	88	NR	555	811	NR	685	203	NR	815	4	NR	945	0	NR
430	163	NR	560	843	NR	690	176	NR	820	4	NR	950	0	NR
435	288	NR	565	873	NR	695	152	NR	825	3	NR	955	0	NR
440	416	NR	570	907	NR	700	131	NR	830	3	NR	960	0	NR
445	566	NR	575	938	NR	705	112	NR	835	3	NR	965	0	NR
450	810	NR	580	965	NR	710	96	NR	840	2	NR	970	0	NR
455	669	NR	585	986	NR	715	81	NR	845	2	NR	975	0	NR
460	338	NR	590	997	NR	720	69	NR	850	2	NR	980	0	NR
465	246	NR	595	997	NR	725	58	NR	855	1	NR	985	0	NR
470	182	NR	600	991	NR	730	49	NR	860	1	NR	990	0	NR
475	115	NR	605	968	NR	735	42	NR	865	1	NR	995	0	NR
480	97	NR	610	939	NR	740	37	NR	870	1	NR	1000	0	NR
485	103	NR	615	896	NR	745	32	NR	875	1	NR			

REPORT NUMBER: SP1-2411-284-1

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.47**

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	119	NR	620	846	NR	750	28	NR	880	1	NR
365	0	NR	495	160	NR	625	793	NR	755	25	NR	885	0	NR
370	0	NR	500	225	NR	630	739	NR	760	22	NR	890	0	NR
375	0	NR	505	308	NR	635	681	NR	765	19	NR	895	0	NR
380	0	NR	510	392	NR	640	623	NR	770	16	NR	900	0	NR
385	0	NR	515	474	NR	645	563	NR	775	14	NR	905	0	NR
390	0	NR	520	545	NR	650	506	NR	780	12	NR	910	0	NR
395	1	NR	525	603	NR	655	451	NR	785	10	NR	915	0	NR
400	3	NR	530	649	NR	660	399	NR	790	9	NR	920	0	NR
405	5	NR	535	687	NR	665	352	NR	795	8	NR	925	0	NR
410	11	NR	540	721	NR	670	307	NR	800	6	NR	930	0	NR
415	21	NR	545	751	NR	675	268	NR	805	6	NR	935	0	NR
420	43	NR	550	779	NR	680	234	NR	810	5	NR	940	0	NR
425	88	NR	555	811	NR	685	203	NR	815	4	NR	945	0	NR
430	163	NR	560	843	NR	690	176	NR	820	4	NR	950	0	NR
435	288	NR	565	873	NR	695	152	NR	825	3	NR	955	0	NR
440	416	NR	570	907	NR	700	131	NR	830	3	NR	960	0	NR
445	566	NR	575	938	NR	705	112	NR	835	3	NR	965	0	NR
450	810	NR	580	965	NR	710	96	NR	840	2	NR	970	0	NR
455	669	NR	585	986	NR	715	81	NR	845	2	NR	975	0	NR
460	338	NR	590	997	NR	720	69	NR	850	2	NR	980	0	NR
465	246	NR	595	997	NR	725	58	NR	855	1	NR	985	0	NR
470	182	NR	600	991	NR	730	49	NR	860	1	NR	990	0	NR
475	115	NR	605	968	NR	735	42	NR	865	1	NR	995	0	NR
480	97	NR	610	939	NR	740	37	NR	870	1	NR	1000	0	NR
485	103	NR	615	896	NR	745	32	NR	875	1	NR			

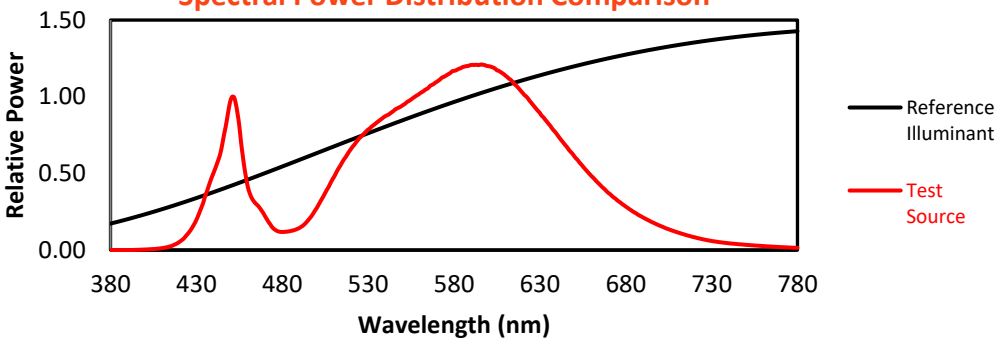
REPORT NUMBER: SP1-2411-284-1

TM-30-18

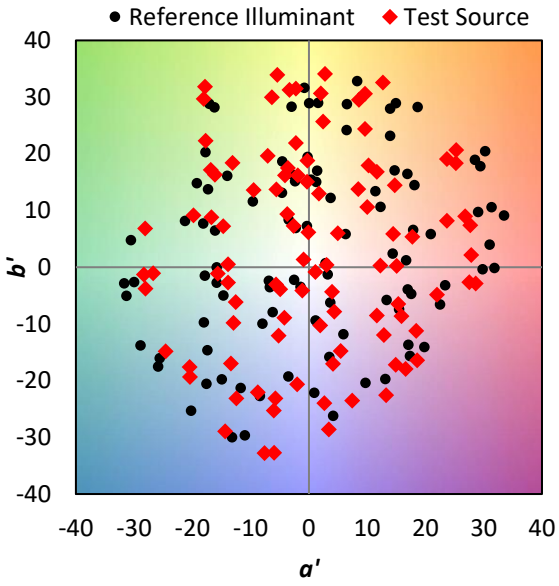
Summary

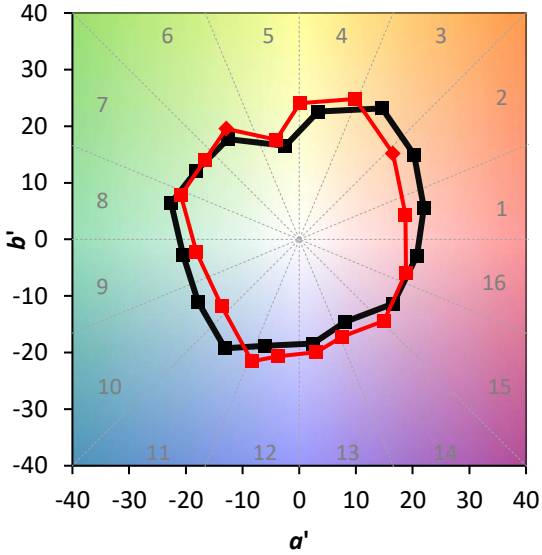
R_f = 76.6
R_g = 95.4
CIE R_a = 73.9
R_9 = -18.0

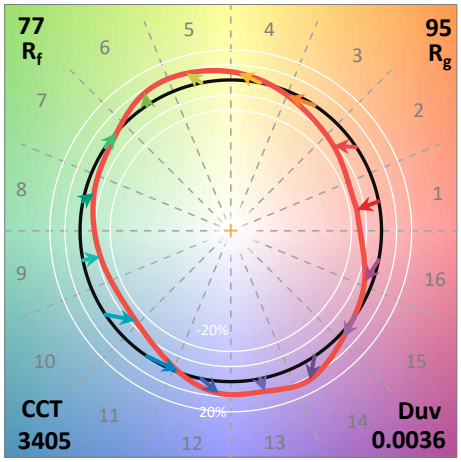
Spectral Power Distribution Comparison

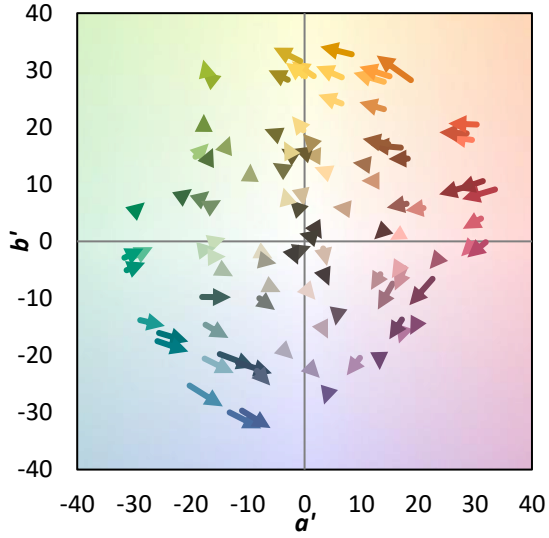


Color Vector Graphics







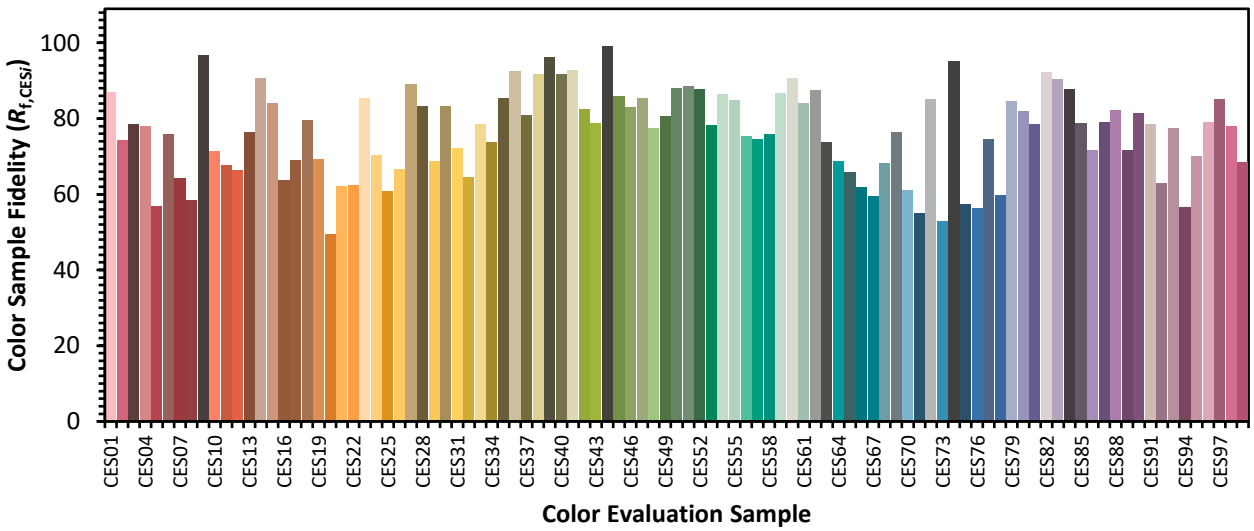


REPORT NUMBER: SP1-2411-284-1

TM-30-18

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

CES01 = 86	CES26 = 67	CES51 = 88	CES76 = 56
CES02 = 62	CES27 = 89	CES52 = 88	CES77 = 75
CES03 = 31	CES28 = 83	CES53 = 78	CES78 = 60
CES04 = 70	CES29 = 69	CES54 = 86	CES79 = 85
CES05 = 48	CES30 = 83	CES55 = 85	CES80 = 82
CES06 = 51	CES31 = 72	CES56 = 75	CES81 = 78
CES07 = 41	CES32 = 65	CES57 = 75	CES82 = 92
CES08 = 40	CES33 = 78	CES58 = 76	CES83 = 90
CES09 = 29	CES34 = 74	CES59 = 87	CES84 = 88
CES10 = 75	CES35 = 86	CES60 = 91	CES85 = 79
CES11 = 58	CES36 = 93	CES61 = 84	CES86 = 72
CES12 = 64	CES37 = 81	CES62 = 88	CES87 = 79
CES13 = 43	CES38 = 92	CES63 = 74	CES88 = 82
CES14 = 74	CES39 = 96	CES64 = 69	CES89 = 72
CES15 = 71	CES40 = 92	CES65 = 66	CES90 = 82
CES16 = 47	CES41 = 93	CES66 = 62	CES91 = 79
CES17 = 50	CES42 = 83	CES67 = 60	CES92 = 63
CES18 = 56	CES43 = 79	CES68 = 68	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 76	CES94 = 56
CES20 = 65	CES45 = 86	CES70 = 61	CES95 = 70
CES21 = 86	CES46 = 83	CES71 = 55	CES96 = 79
CES22 = 79	CES47 = 85	CES72 = 85	CES97 = 85
CES23 = 92	CES48 = 78	CES73 = 53	CES98 = 78
CES24 = 91	CES49 = 81	CES74 = 95	CES99 = 68
CES25 = 72	CES50 = 88	CES75 = 57	



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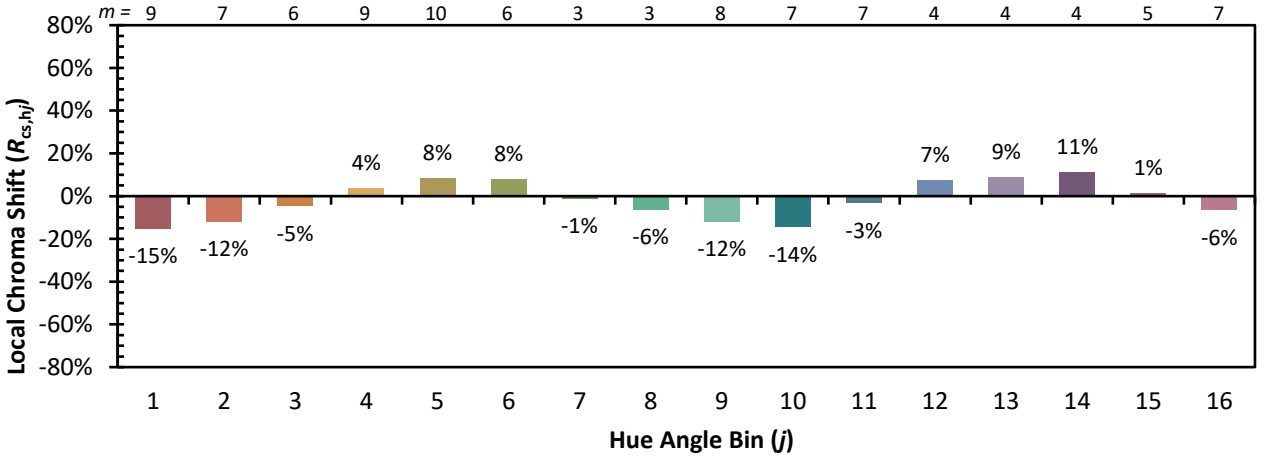
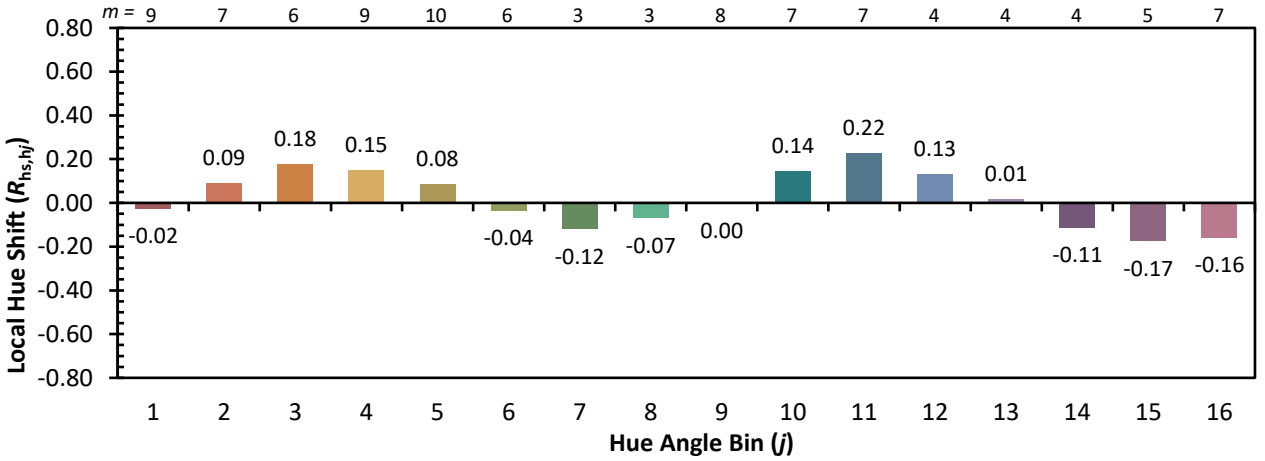
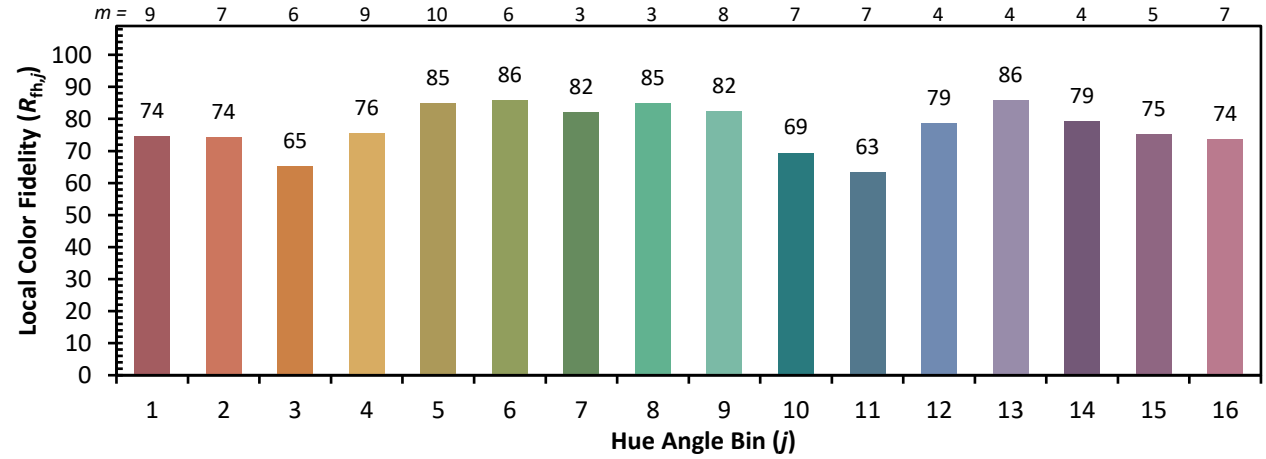
Color Rendition by Hue-Angle Bin







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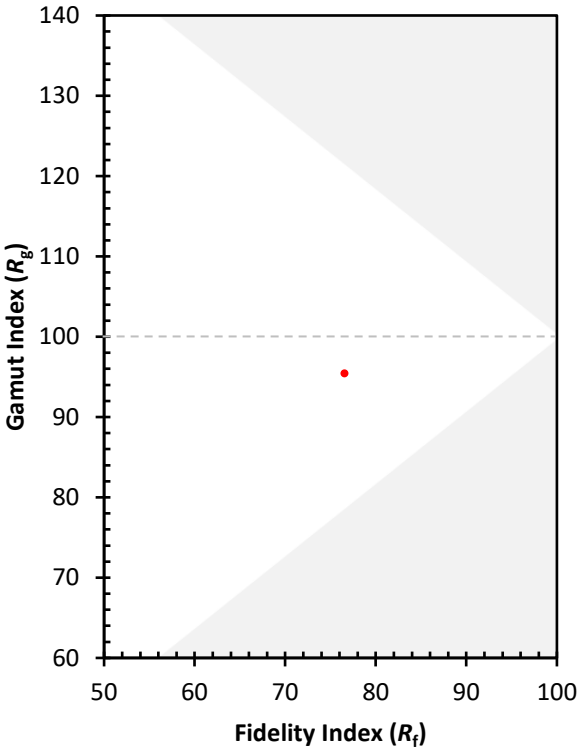
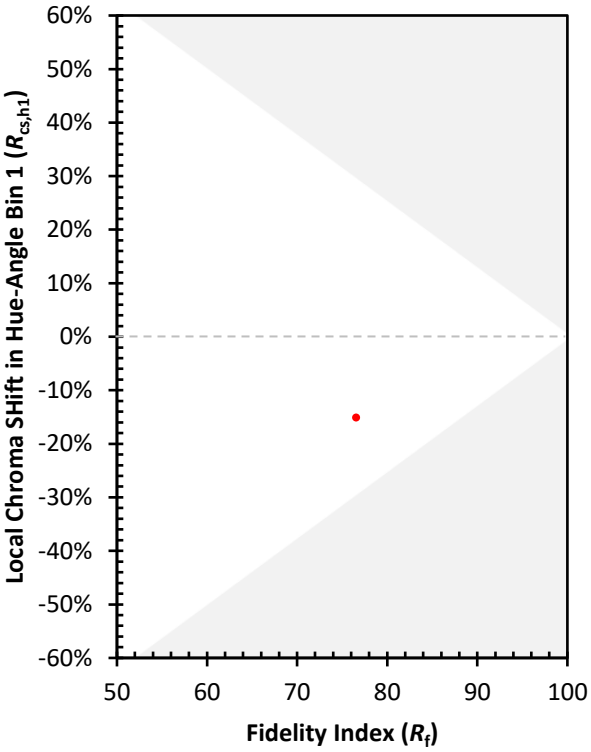
Measure Comparisons





(END OF REPORT)