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: P821552

Luminaire Tested: **TT-D5-740-12VDC-RW-HSS**

Issue Date: 12/2/2020

Report Generated By 670245763

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:	P821552
	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-D5-740-12VDC-RW-HSS
Description:	TOPTIER LED PARKING GARAGE LUMINAIRE
	4000K, 70 CRI LEDS AND RECTANGULAR DISTRIBUTION WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	6012 lumens
Efficiency:	N/A
Efficacy:	82.4 lumens/watt
Luminous Opening:	Circular (Dia: 1.12' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U2 - G3

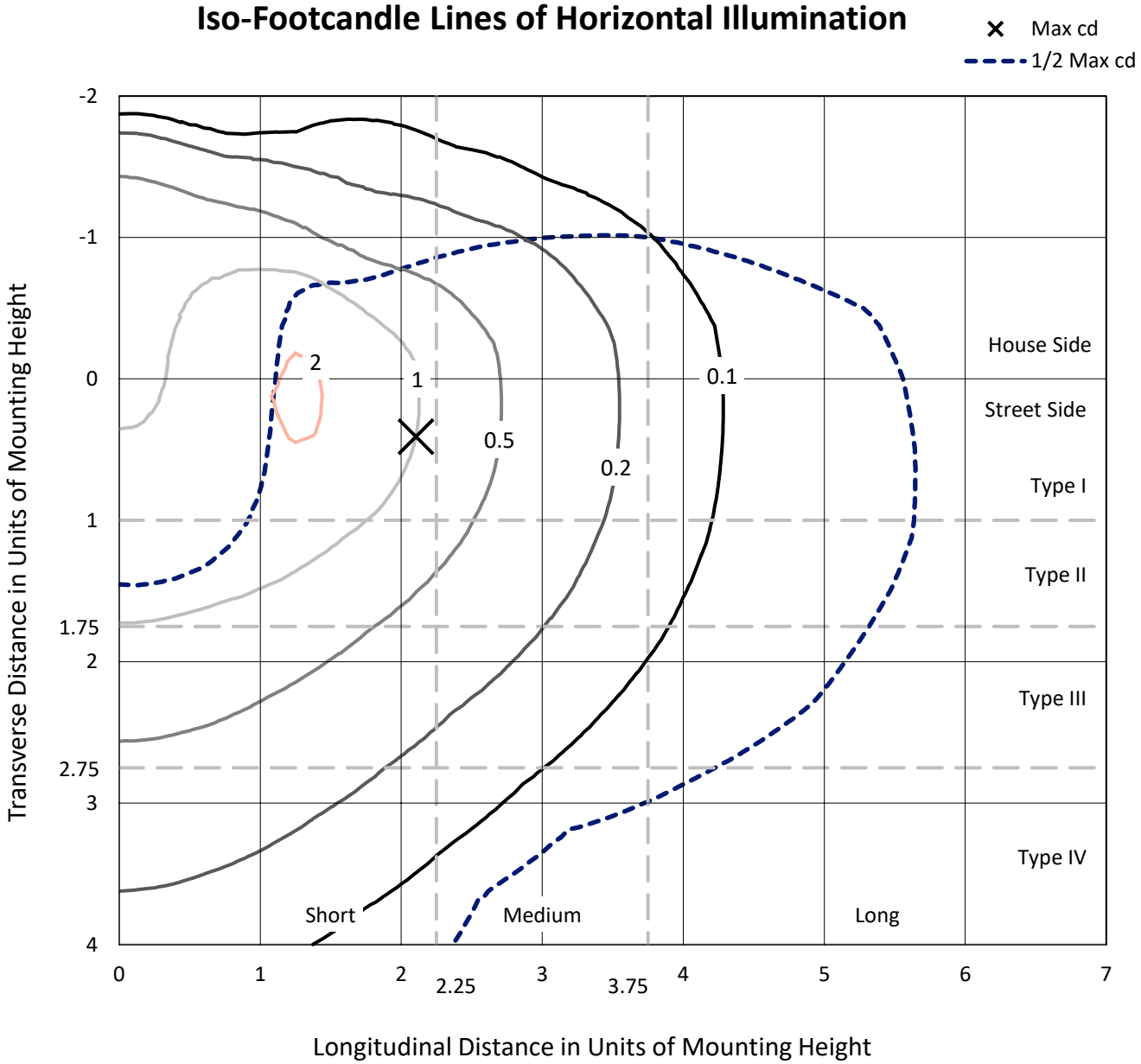
Input Watts (W):	73
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	25 FT

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REPORT NUMBER: P821552
CATALOG NUMBER: TT-D5-740-12VDC-RW-HSS

Iso-Footcandle Lines of Horizontal Illumination



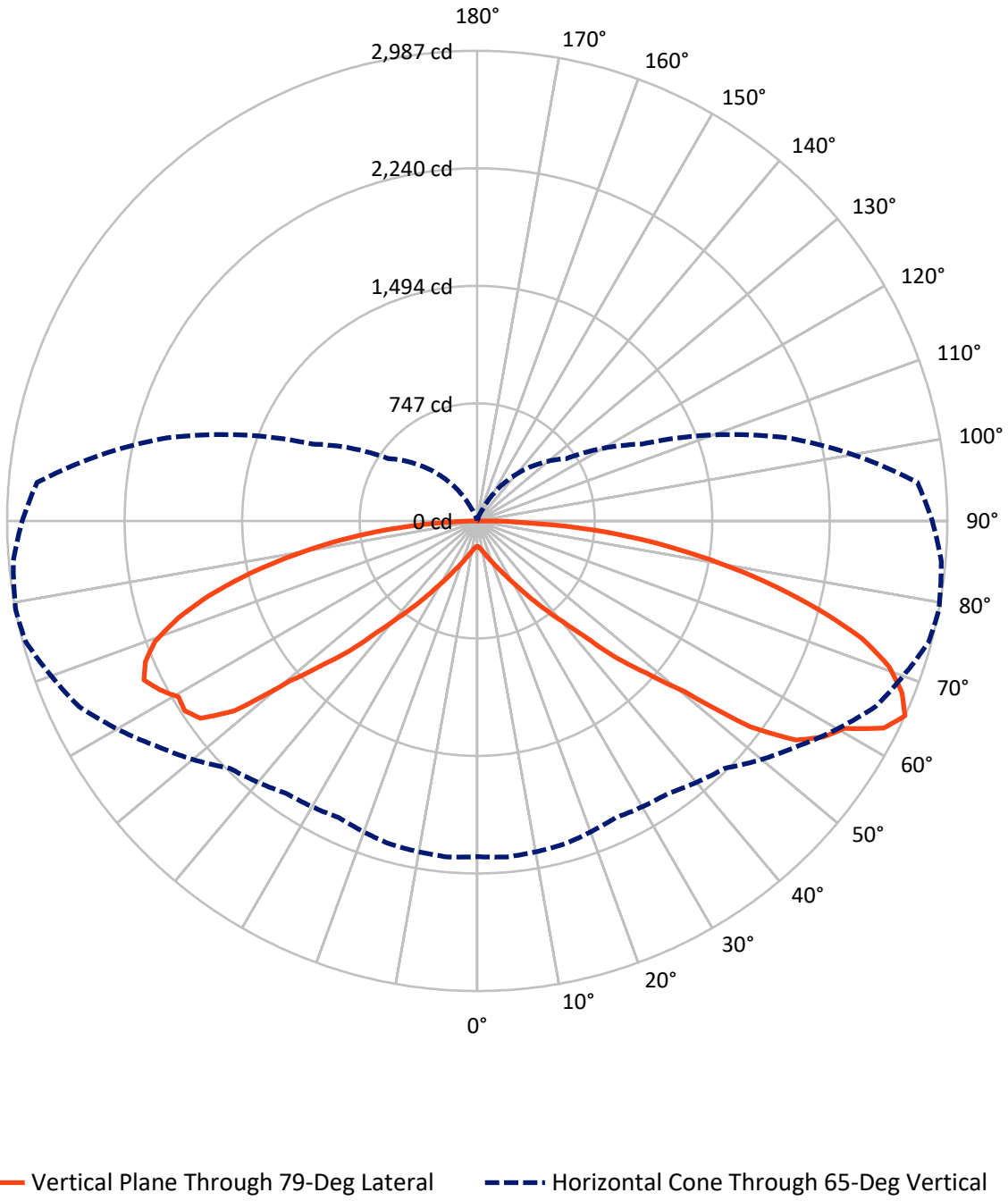
Based on 15 foot mounting height. Maximum calculated value = 2.1 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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Scaled Data Report

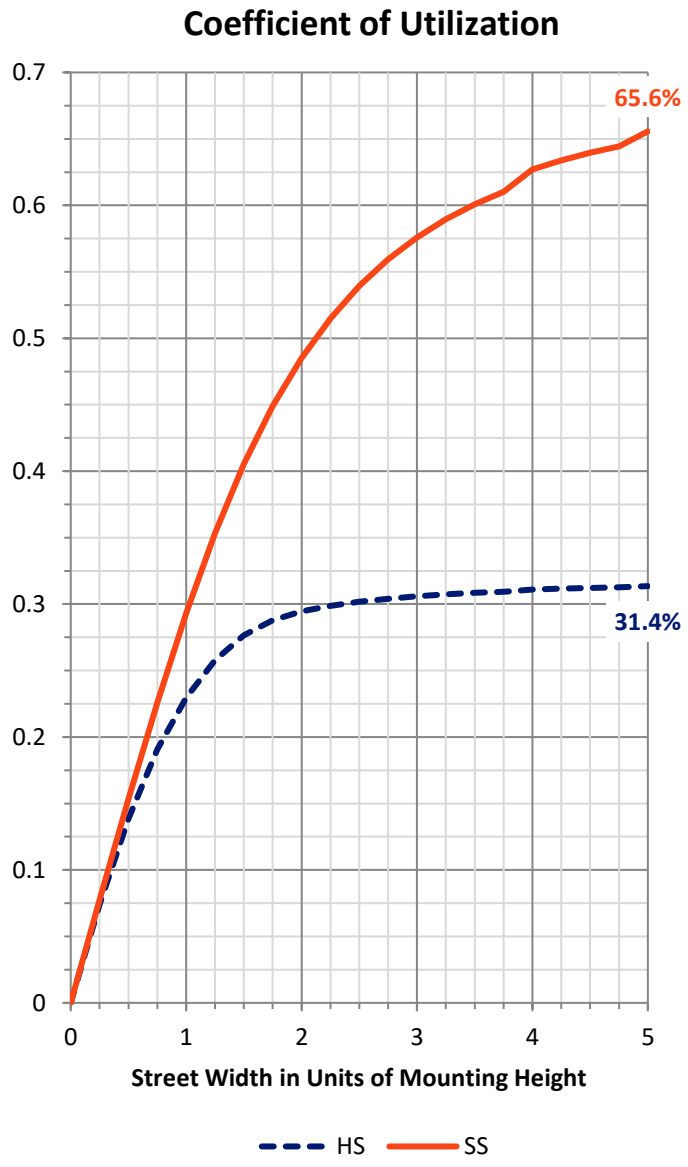
REPORT NUMBER: P821552
CATALOG NUMBER: TT-D5-740-12VDC-RW-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1898.5	2.4	1900.9
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	4084.6	26.5	4111.1
	% Fixture	67.9	0.4	68.4
Total	Lumens	5983.1	28.9	6012.0
	% Fixture	99.5	0.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.1	0.3
10°-20°	64.8	1.1
20°-30°	149.4	2.5
30°-40°	320.0	5.3
40°-50°	685.4	11.4
50°-60°	1294.5	21.5
60°-70°	1608.8	26.8
70°-80°	1377.2	22.9
80°-90°	465.9	7.7
90°-100°	20.1	0.3
100°-110°	5.8	0.1
110°-120°	1.3	0.0
120°-130°	0.7	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°	5983.1	99.5
0°-180°	6012.0	100.0



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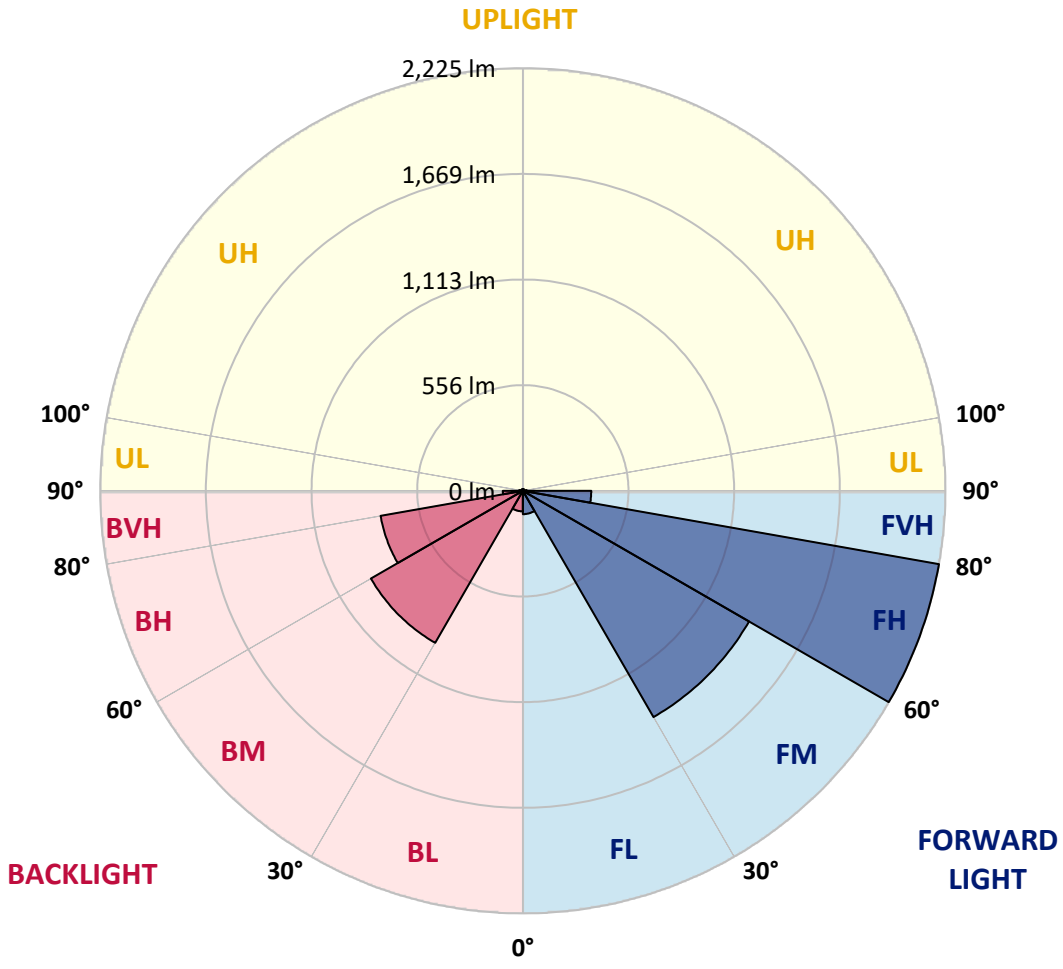
Scaled Data Report

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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°)	122.9	2.0			
FM	(30°-60°)	1375.8	22.9			
FH	(60°-80°)	2225.4	37.0			G2/5000
FVH	(80°-90°)	360.4	6.0			G3/500
BL	(0°-30°)	108.3	1.8	B0/110		
BM	(30°-60°)	924.1	15.4	B1/1000		
BH	(60°-80°)	760.6	12.7	B2/1000		G2/1000
BVH	(80°-90°)	105.5	1.8			G2/225
UL	(90°-100°)	20.1	0.3		U2/50	
UH	(100°-180°)	8.8	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°	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3	*163.3*	163.3
2.5°	172.3	172.3	172.3	170.8	170.8	170.8	169.3	167.8	166.3	*166.3*	166.3
5°	181.3	181.3	181.3	181.3	179.8	178.3	176.8	175.3	173.8	*173.8*	172.3
7.5°	193.3	191.8	193.3	191.8	191.8	190.3	188.8	187.3	184.3	*184.3*	182.8
10°	205.2	205.2	205.2	205.2	205.2	203.7	202.2	200.7	199.2	*197.7*	196.2
12.5°	220.2	220.2	220.2	218.7	220.2	218.7	217.2	217.2	215.7	*212.7*	212.7
15°	235.2	235.2	235.2	235.2	236.7	236.7	236.7	235.2	235.2	*233.7*	232.2
17.5°	253.2	251.7	253.2	253.2	254.7	256.2	257.7	259.2	259.2	*257.7*	257.7
20°	272.7	271.2	272.7	272.7	275.6	278.6	283.1	286.1	287.6	*284.6*	284.6
22.5°	293.6	292.1	295.1	295.1	299.6	304.1	311.6	314.6	319.1	*317.6*	317.6
25°	319.1	317.6	319.1	320.6	326.6	334.1	343.1	350.6	355.0	*355.0*	356.5
27.5°	347.6	347.6	349.1	350.6	356.5	368.5	382.0	395.5	406.0	*404.5*	406.0
30°	386.5	386.5	389.5	391.0	398.5	412.0	429.9	447.9	462.9	*462.9*	465.9
32.5°	429.9	428.5	432.9	434.4	441.9	459.9	485.4	513.8	533.3	*533.3*	536.3
35°	482.4	480.9	485.4	485.4	494.4	519.8	552.8	591.7	624.7	*626.2*	630.7
37.5°	548.3	545.3	545.3	549.8	560.3	593.2	638.2	692.1	726.6	*729.6*	737.1
40°	626.2	624.7	627.7	626.2	639.7	680.1	737.1	800.0	840.4	*847.9*	856.9
42.5°	722.1	725.1	720.6	720.6	737.1	783.5	850.9	924.3	997.7	*1006.7*	1011.2
45°	838.9	844.9	838.9	837.4	852.4	906.3	999.2	1128.1	1213.4	*1243.4*	1252.4
47.5°	979.7	982.7	975.2	972.3	988.7	1057.6	1177.5	1321.3	1421.7	*1444.1*	1468.1
50°	1137.0	1132.5	1126.6	1122.1	1153.5	1238.9	1378.2	1526.5	1698.8	*1701.8*	1710.8
52.5°	1298.8	1285.4	1286.8	1285.4	1328.8	1421.7	1607.4	1859.1	2121.3	*2175.2*	2181.2
55°	1460.6	1444.1	1442.6	1457.6	1519.1	1652.4	1886.1	2212.7	2425.4	*2458.3*	2453.9
57.5°	1622.4	1614.9	1611.9	1625.4	1715.3	1874.1	2137.8	2413.4	2594.7	*2591.7*	2560.2
60°	1790.2	1796.2	1785.7	1811.2	1904.1	2062.9	2254.6	2522.8	2690.5	*2677.1*	2645.6
62.5°	1962.5	1977.5	1967.0	1970.0	2029.9	2146.7	2335.5	2647.1	2879.3	*2898.8*	2862.8
65°	*2133.3*	*2143.8*	*2127.3*	*2080.8*	*2113.8*	*2223.1*	*2492.8*	*2792.4*	*2969.2*	*2987.2*	*2960.2*
67.5°	2277.1	2287.6	2230.6	2157.2	2161.7	2241.1	2477.8	2764.0	2921.3	*2909.3*	2865.8
70°	2399.9	2380.4	2287.6	2161.7	2109.3	2146.7	2370.0	2623.1	2783.4	*2777.4*	2726.5
72.5°	2440.4	2414.9	2257.6	2062.9	1959.5	1973.0	2190.2	2416.4	2546.7	*2557.2*	2495.8
75°	2376.0	2332.5	2116.8	1872.6	1739.3	1748.3	1934.0	2142.3	2247.1	*2235.1*	2187.2
77.5°	2143.8	2100.3	1866.6	1605.9	1475.6	1489.1	1635.9	1799.2	1886.1	*1881.6*	1848.6
80°	1779.7	1740.8	1535.5	1292.8	1174.5	1182.0	1294.3	1423.2	1490.6	*1505.6*	1487.6
82.5°	1315.3	1288.3	1143.0	946.8	850.9	849.4	934.8	1033.7	1099.6	*1131.0*	1119.1
85°	813.5	800.0	719.1	591.7	524.3	522.8	573.8	647.2	707.1	*749.0*	722.1
87.5°	323.6	319.1	295.1	238.2	208.2	197.7	185.8	232.2	236.7	*280.1*	278.6
90°	79.4	77.9	76.4	71.9	64.4	55.4	44.9	33.0	21.0	*16.5*	9.0
92.5°	70.4	70.4	68.9	64.4	58.4	49.4	40.4	30.0	19.5	*15.0*	7.5
95°	56.9	56.9	55.4	52.4	46.4	40.4	31.5	24.0	15.0	*12.0*	6.0
97.5°	43.4	41.9	41.9	39.0	36.0	30.0	24.0	18.0	12.0	*9.0*	4.5
100°	31.5	31.5	30.0	28.5	25.5	22.5	18.0	13.5	7.5	*6.0*	3.0
102.5°	22.5	21.0	21.0	21.0	18.0	15.0	12.0	9.0	6.0	*4.5*	1.5
105°	15.0	13.5	13.5	13.5	12.0	10.5	7.5	6.0	3.0	*3.0*	1.5
107.5°	9.0	9.0	9.0	9.0	7.5	6.0	4.5	3.0	1.5	*1.5*	1.5
110°	4.5	4.5	4.5	6.0	4.5	4.5	3.0	1.5	1.5	*1.5*	1.5

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
112.5°	3.0	3.0	3.0	3.0	3.0	3.0	1.5	1.5	1.5	*1.5*	1.5
115°	1.5	1.5	1.5	3.0	3.0	1.5	1.5	0.0	0.0	*1.5*	1.5
117.5°	0.0	0.0	1.5	1.5	1.5	1.5	0.0	0.0	0.0	*0.0*	1.5
120°	0.0	0.0	1.5	1.5	1.5	1.5	0.0	0.0	0.0	*0.0*	1.5
122.5°	0.0	0.0	1.5	1.5	1.5	1.5	0.0	0.0	0.0	*0.0*	1.5
125°	0.0	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	*0.0*	1.5
127.5°	0.0	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	*0.0*	1.5
130°	0.0	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	*0.0*	1.5
132.5°	0.0	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	*0.0*	1.5
135°	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0	0.0	*0.0*	0.0
137.5°	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	*0.0*	0.0
140°	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	*0.0*	0.0
142.5°	0.0	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0	*0.0*	0.0
145°	0.0	0.0	0.0	1.5	1.5	1.5	1.5	0.0	0.0	*0.0*	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	*0.0*	0.0
150°	0.0	0.0	0.0	0.0	1.5	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	1.5	0.0	0.0	0.0	0.0	*0.0*	0.0
160°	0.0	0.0	0.0	0.0	1.5	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	1.5	0.0	1.5	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°	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3
2.5°	164.8	164.8	164.8	163.3	163.3	163.3	161.8	161.8	160.3	160.3	160.3
5°	170.8	170.8	169.3	169.3	167.8	166.3	166.3	164.8	164.8	163.3	163.3
7.5°	181.3	181.3	179.8	178.3	175.3	173.8	172.3	170.8	170.8	169.3	169.3
10°	194.8	194.8	191.8	188.8	185.8	182.8	181.3	178.3	176.8	176.8	176.8
12.5°	211.2	209.7	206.7	202.2	199.2	194.8	191.8	188.8	185.8	185.8	185.8
15°	230.7	230.7	224.7	220.2	214.2	208.2	203.7	199.2	196.2	194.8	194.8
17.5°	254.7	254.7	247.2	239.7	232.2	224.7	218.7	212.7	209.7	208.2	208.2
20°	281.6	281.6	274.1	265.2	254.7	244.2	235.2	227.7	223.2	221.7	221.7
22.5°	314.6	314.6	304.1	292.1	278.6	263.7	251.7	242.7	238.2	235.2	235.2
25°	352.0	349.1	338.6	323.6	304.1	286.1	269.7	260.7	254.7	250.2	251.7
27.5°	403.0	398.5	385.0	359.5	335.6	311.6	292.1	280.1	272.7	269.7	271.2
30°	461.4	456.9	437.4	409.0	373.0	341.6	317.6	304.1	296.6	292.1	293.6
32.5°	531.8	525.8	501.9	462.9	421.0	376.0	346.1	329.6	322.1	317.6	316.1
35°	624.7	617.2	587.2	533.3	474.9	421.0	379.0	358.0	350.6	346.1	347.6
37.5°	729.6	719.1	678.6	612.7	539.3	470.4	422.5	395.5	386.5	379.0	379.0
40°	849.4	837.4	785.0	698.1	609.7	524.3	462.9	432.9	422.5	422.5	422.5
42.5°	999.2	987.2	927.3	800.0	683.1	582.8	509.3	474.9	464.4	467.4	467.4
45°	1231.4	1214.9	1119.1	951.3	779.0	642.7	557.3	518.3	510.8	518.3	518.3
47.5°	1444.1	1423.2	1282.4	1092.1	873.4	702.6	605.2	560.3	557.3	573.8	573.8
50°	1682.3	1655.4	1507.1	1206.0	949.8	768.5	648.7	594.7	596.2	620.2	627.7
52.5°	2143.8	2115.3	1859.1	1412.7	1032.2	792.5	666.6	602.2	602.2	629.2	639.7
55°	2417.9	2359.5	2025.4	1547.5	1066.6	820.9	659.2	572.3	569.3	599.2	608.2
57.5°	2507.8	2447.9	2059.9	1508.6	1044.2	785.0	615.7	491.4	485.4	524.3	521.3
60°	2581.2	2501.8	2004.4	1378.2	916.8	708.6	531.8	365.5	340.1	374.5	373.0
62.5°	2787.9	2702.5	2007.4	1225.4	767.0	591.7	400.0	205.2	152.8	179.8	167.8
65°	*2891.3*	*2807.4*	*2038.9*	*1153.5*	*690.6*	*489.9*	*286.1*	*83.9*	*6.0*	*6.0*	*3.0*
67.5°	2802.9	2728.0	1998.4	1135.5	680.1	486.9	290.6	82.4	0.0	0.0	0.0
70°	2674.1	2602.2	1905.6	1072.6	645.7	468.9	284.6	82.4	0.0	0.0	0.0
72.5°	2447.9	2374.5	1745.3	982.7	593.2	429.9	263.7	77.9	0.0	0.0	0.0
75°	2149.7	2094.3	1541.5	865.9	522.8	379.0	233.7	68.9	0.0	0.0	0.0
77.5°	1820.2	1754.3	1292.8	720.6	437.4	314.6	197.7	56.9	0.0	0.0	0.0
80°	1460.6	1412.7	1018.7	564.8	338.6	245.7	154.3	43.4	0.0	0.0	0.0
82.5°	1086.1	1045.7	753.5	404.5	241.2	170.8	106.4	28.5	0.0	0.0	0.0
85°	713.1	702.6	483.9	245.7	143.8	94.4	56.9	13.5	0.0	0.0	0.0
87.5°	257.7	266.7	176.8	70.4	39.0	16.5	7.5	1.5	0.0	0.0	0.0
90°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
92.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
95°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
97.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
100°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
102.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
105°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
107.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
110°	1.5	1.5	1.5	1.5	1.5	1.5	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: P821552
CATALOG NUMBER: TT-D5-740-12VDC-RW-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
115°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
117.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
120°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
122.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
125°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
127.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
130°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
132.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
135°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
150°	0.0	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	1.5	1.5	1.5	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: SP1-2407-176-5

Test Date: 09/24/2024

Luminaire Tested: MEM2-HTN-VA-30-740-U-WQ

Data in this report applies to families of products including MEM2-HTN-VA-30-740-U-WQ

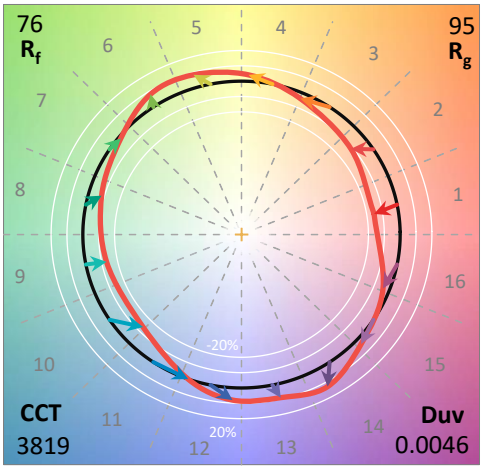
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2407-176-5
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-30-740-U-WQ**
Description:	EPIC MODERN VISUAL COMFORT 30W WAVESTREAM WIDE

Spectral Parameters

CCT (K):	3819	CRI (Ra):	72.9		
CIE u':	0.2261	R1:	70.1	R9:	-21.5
CIE v':	0.5108	R2:	78.4	R10:	48.5
Duv:	0.0046	R3:	85.0	R11:	68.4
CIE x:	0.3926	R4:	72.9	R12:	39.0
CIE y:	0.3942	R5:	69.1	R13:	71.1
CIE z:	0.2132	R6:	69.2	R14:	91.3
Peak Wavelength (nm):	450	R7:	82.8	R15:	63.2
Dominant Wavelength (nm):	577	R8:	55.4		
Purity:	36.15483				
Rf:	75.6				
Rg:	94.8				



Test Conditions

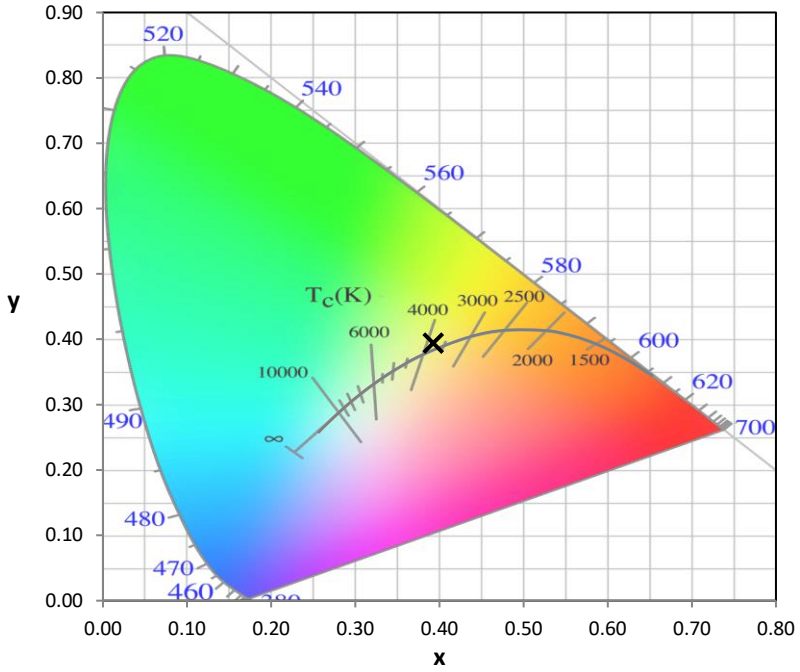
Stabilization Time:	30M
Operation Time:	1H 30M
Sphere Temperature (°C):	25.2

REPORT NUMBER: SP1-2407-176-5

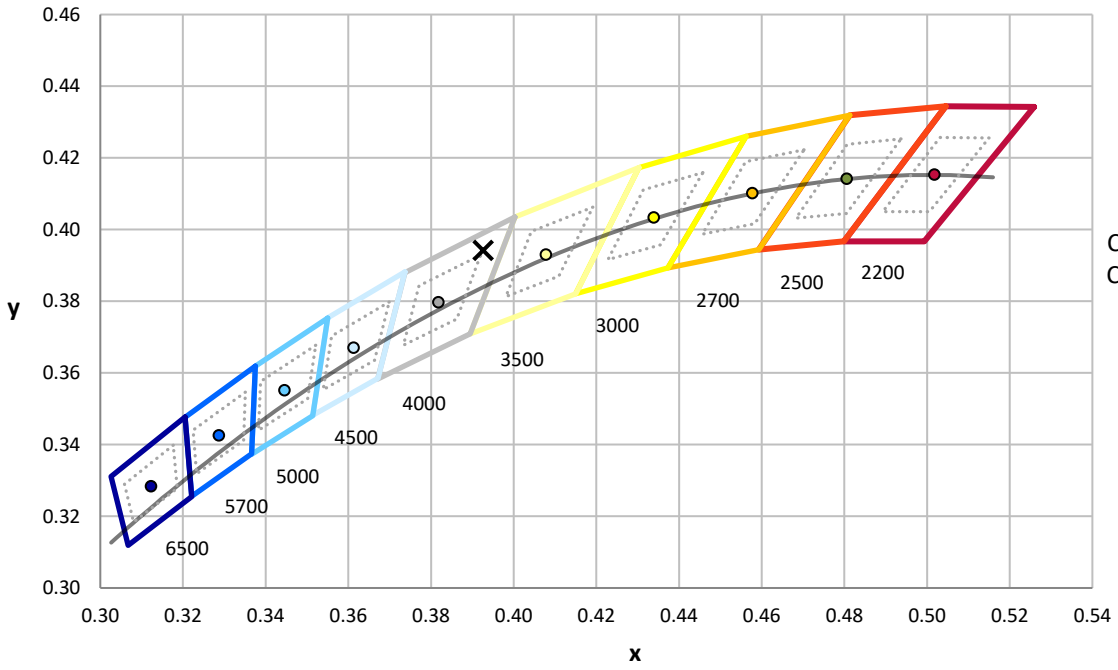
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-176-5

CIE 1931 Chromaticity Diagram



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

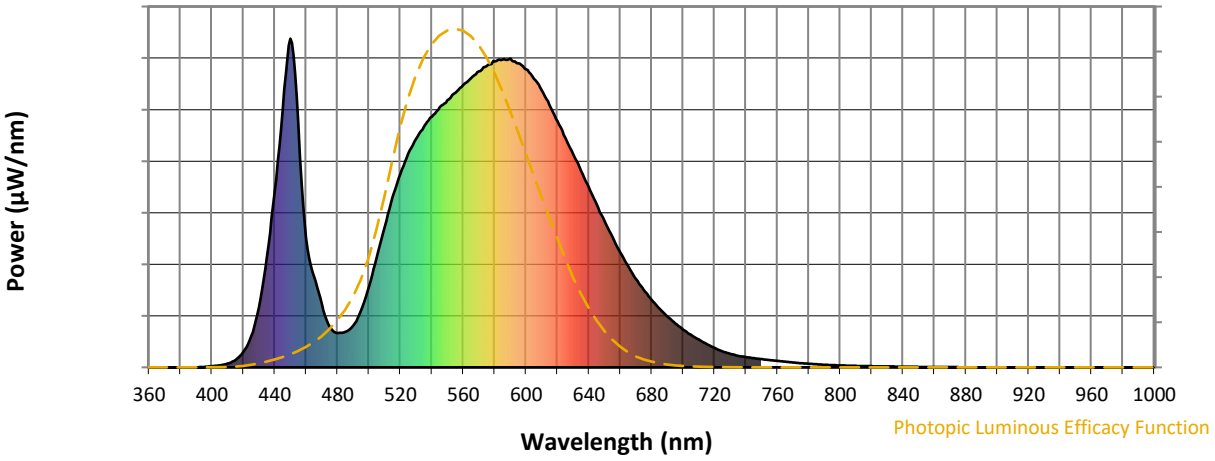


CCT = 3819K
CIE x = 0.3926
CIE y = 0.3942
Duv = 0.0046

Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP1-2407-176-5

Photopic Flux vs. Wavelength

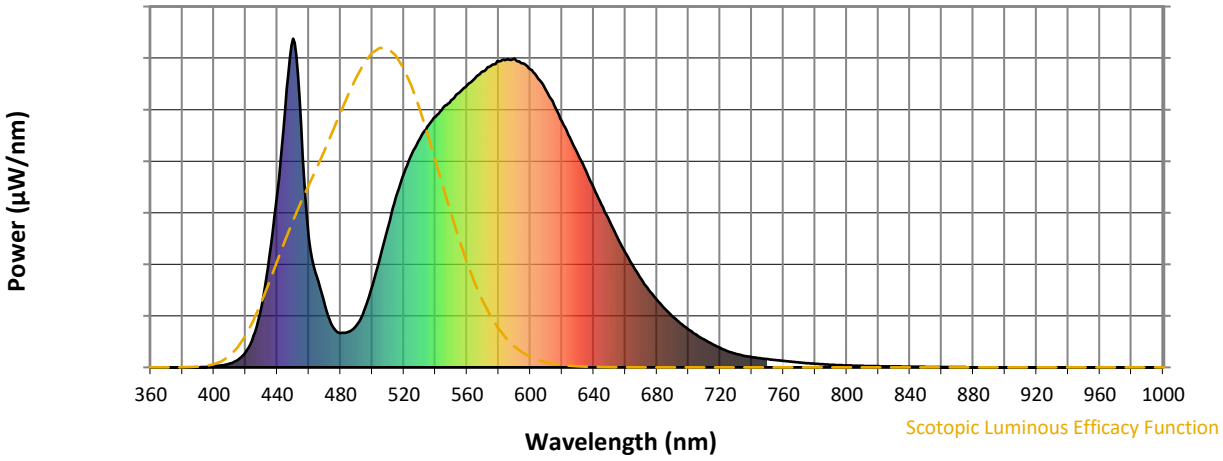


Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	127	NR	620	748	NR	750	25	NR	880	0	NR
365	0	NR	495	173	NR	625	699	NR	755	22	NR	885	0	NR
370	0	NR	500	246	NR	630	648	NR	760	20	NR	890	0	NR
375	0	NR	505	335	NR	635	599	NR	765	17	NR	895	0	NR
380	0	NR	510	427	NR	640	547	NR	770	15	NR	900	0	NR
385	0	NR	515	517	NR	645	495	NR	775	13	NR	905	0	NR
390	0	NR	520	589	NR	650	445	NR	780	11	NR	910	0	NR
395	1	NR	525	649	NR	655	396	NR	785	9	NR	915	0	NR
400	4	NR	530	695	NR	660	349	NR	790	8	NR	920	0	NR
405	6	NR	535	733	NR	665	308	NR	795	7	NR	925	0	NR
410	11	NR	540	763	NR	670	269	NR	800	6	NR	930	0	NR
415	23	NR	545	792	NR	675	235	NR	805	5	NR	935	0	NR
420	46	NR	550	813	NR	680	205	NR	810	5	NR	940	0	NR
425	95	NR	555	835	NR	685	178	NR	815	4	NR	945	0	NR
430	183	NR	560	859	NR	690	155	NR	820	3	NR	950	0	NR
435	338	NR	565	880	NR	695	134	NR	825	3	NR	955	0	NR
440	534	NR	570	900	NR	700	115	NR	830	3	NR	960	0	NR
445	782	NR	575	918	NR	705	99	NR	835	2	NR	965	0	NR
450	1000	NR	580	931	NR	710	84	NR	840	2	NR	970	0	NR
455	739	NR	585	937	NR	715	71	NR	845	2	NR	975	0	NR
460	393	NR	590	939	NR	720	59	NR	850	1	NR	980	0	NR
465	276	NR	595	925	NR	725	49	NR	855	1	NR	985	0	NR
470	190	NR	600	907	NR	730	41	NR	860	1	NR	990	0	NR
475	123	NR	605	878	NR	735	35	NR	865	1	NR	995	0	NR
480	105	NR	610	842	NR	740	31	NR	870	1	NR	1000	0	NR
485	108	NR	615	797	NR	745	28	NR	875	1	NR			

REPORT NUMBER: SP1-2407-176-5

Scotopic Flux vs. Wavelength

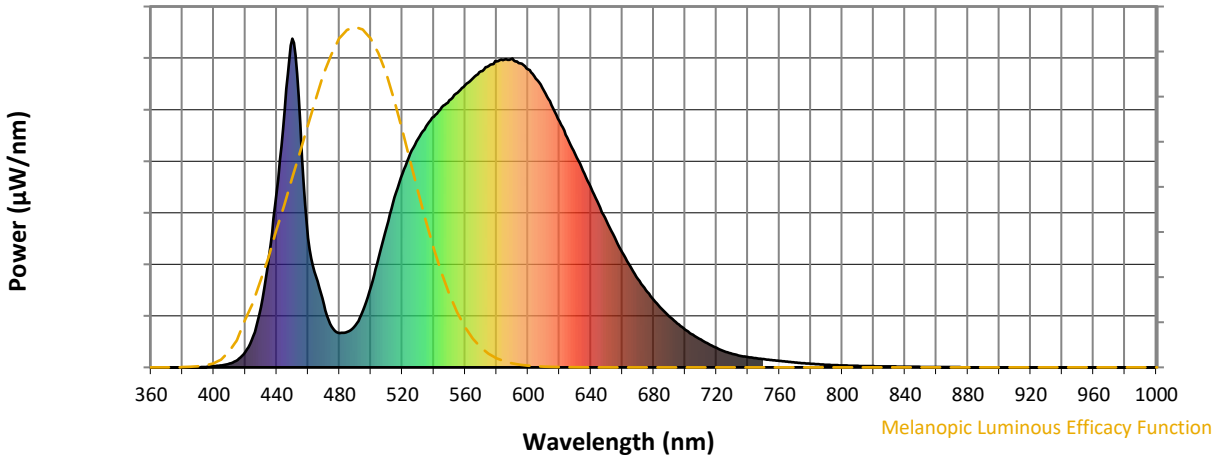


Scotopic Lumens: NR **S/P: 1.45**

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	127	NR	620	748	NR	750	25	NR	880	0	NR
365	0	NR	495	173	NR	625	699	NR	755	22	NR	885	0	NR
370	0	NR	500	246	NR	630	648	NR	760	20	NR	890	0	NR
375	0	NR	505	335	NR	635	599	NR	765	17	NR	895	0	NR
380	0	NR	510	427	NR	640	547	NR	770	15	NR	900	0	NR
385	0	NR	515	517	NR	645	495	NR	775	13	NR	905	0	NR
390	0	NR	520	589	NR	650	445	NR	780	11	NR	910	0	NR
395	1	NR	525	649	NR	655	396	NR	785	9	NR	915	0	NR
400	4	NR	530	695	NR	660	349	NR	790	8	NR	920	0	NR
405	6	NR	535	733	NR	665	308	NR	795	7	NR	925	0	NR
410	11	NR	540	763	NR	670	269	NR	800	6	NR	930	0	NR
415	23	NR	545	792	NR	675	235	NR	805	5	NR	935	0	NR
420	46	NR	550	813	NR	680	205	NR	810	5	NR	940	0	NR
425	95	NR	555	835	NR	685	178	NR	815	4	NR	945	0	NR
430	183	NR	560	859	NR	690	155	NR	820	3	NR	950	0	NR
435	338	NR	565	880	NR	695	134	NR	825	3	NR	955	0	NR
440	534	NR	570	900	NR	700	115	NR	830	3	NR	960	0	NR
445	782	NR	575	918	NR	705	99	NR	835	2	NR	965	0	NR
450	1000	NR	580	931	NR	710	84	NR	840	2	NR	970	0	NR
455	739	NR	585	937	NR	715	71	NR	845	2	NR	975	0	NR
460	393	NR	590	939	NR	720	59	NR	850	1	NR	980	0	NR
465	276	NR	595	925	NR	725	49	NR	855	1	NR	985	0	NR
470	190	NR	600	907	NR	730	41	NR	860	1	NR	990	0	NR
475	123	NR	605	878	NR	735	35	NR	865	1	NR	995	0	NR
480	105	NR	610	842	NR	740	31	NR	870	1	NR	1000	0	NR
485	108	NR	615	797	NR	745	28	NR	875	1	NR			

REPORT NUMBER: SP1-2407-176-5

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.76**

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	127	NR	620	748	NR	750	25	NR	880	0	NR
365	0	NR	495	173	NR	625	699	NR	755	22	NR	885	0	NR
370	0	NR	500	246	NR	630	648	NR	760	20	NR	890	0	NR
375	0	NR	505	335	NR	635	599	NR	765	17	NR	895	0	NR
380	0	NR	510	427	NR	640	547	NR	770	15	NR	900	0	NR
385	0	NR	515	517	NR	645	495	NR	775	13	NR	905	0	NR
390	0	NR	520	589	NR	650	445	NR	780	11	NR	910	0	NR
395	1	NR	525	649	NR	655	396	NR	785	9	NR	915	0	NR
400	4	NR	530	695	NR	660	349	NR	790	8	NR	920	0	NR
405	6	NR	535	733	NR	665	308	NR	795	7	NR	925	0	NR
410	11	NR	540	763	NR	670	269	NR	800	6	NR	930	0	NR
415	23	NR	545	792	NR	675	235	NR	805	5	NR	935	0	NR
420	46	NR	550	813	NR	680	205	NR	810	5	NR	940	0	NR
425	95	NR	555	835	NR	685	178	NR	815	4	NR	945	0	NR
430	183	NR	560	859	NR	690	155	NR	820	3	NR	950	0	NR
435	338	NR	565	880	NR	695	134	NR	825	3	NR	955	0	NR
440	534	NR	570	900	NR	700	115	NR	830	3	NR	960	0	NR
445	782	NR	575	918	NR	705	99	NR	835	2	NR	965	0	NR
450	1000	NR	580	931	NR	710	84	NR	840	2	NR	970	0	NR
455	739	NR	585	937	NR	715	71	NR	845	2	NR	975	0	NR
460	393	NR	590	939	NR	720	59	NR	850	1	NR	980	0	NR
465	276	NR	595	925	NR	725	49	NR	855	1	NR	985	0	NR
470	190	NR	600	907	NR	730	41	NR	860	1	NR	990	0	NR
475	123	NR	605	878	NR	735	35	NR	865	1	NR	995	0	NR
480	105	NR	610	842	NR	740	31	NR	870	1	NR	1000	0	NR
485	108	NR	615	797	NR	745	28	NR	875	1	NR			

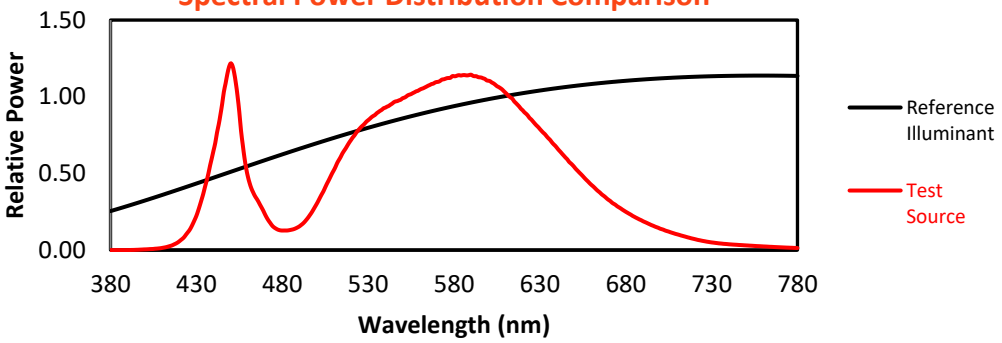
REPORT NUMBER: SP1-2407-176-5

TM-30-18

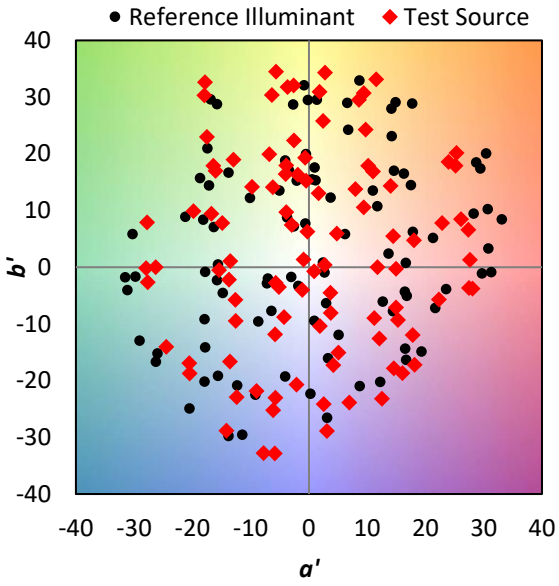
Summary

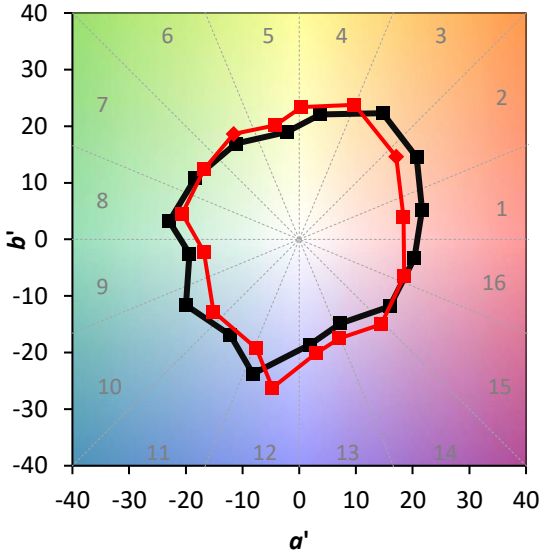
R_f = 75.6
R_g = 94.8
CIE R_a = 72.9
R_9 = -21.5

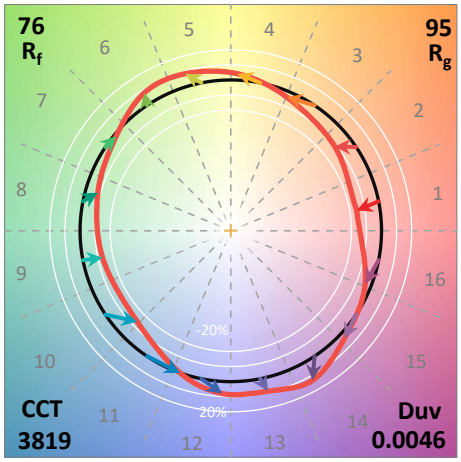
Spectral Power Distribution Comparison

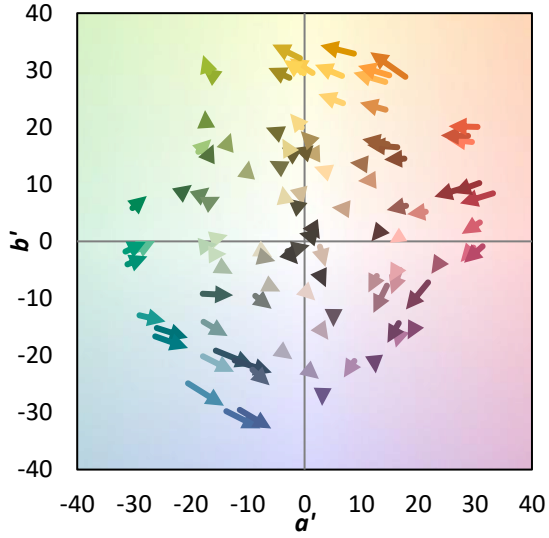


Color Vector Graphics







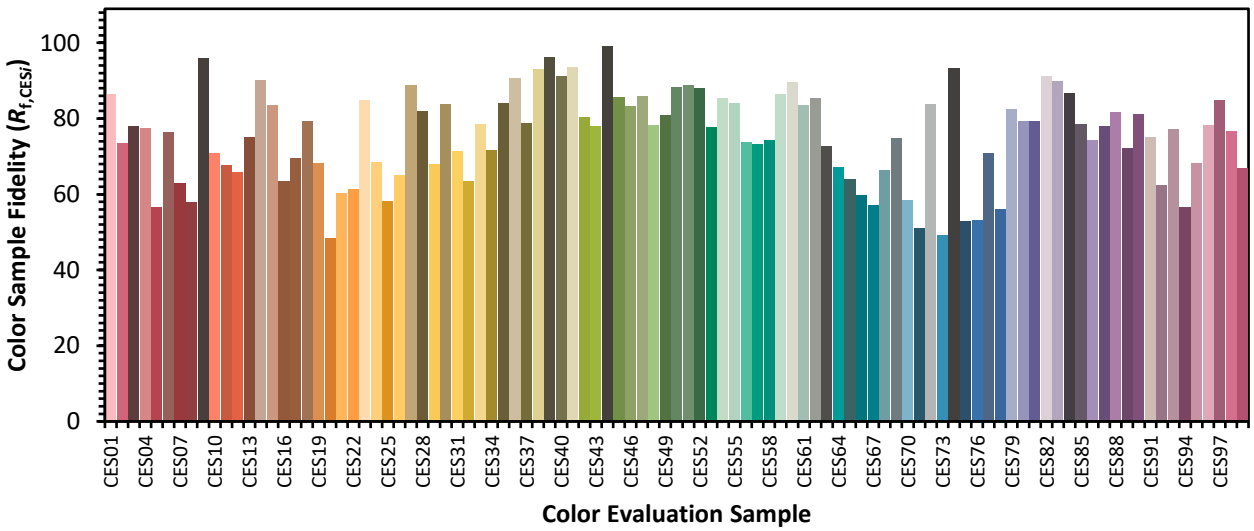


REPORT NUMBER: SP1-2407-176-5

TM-30-18

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

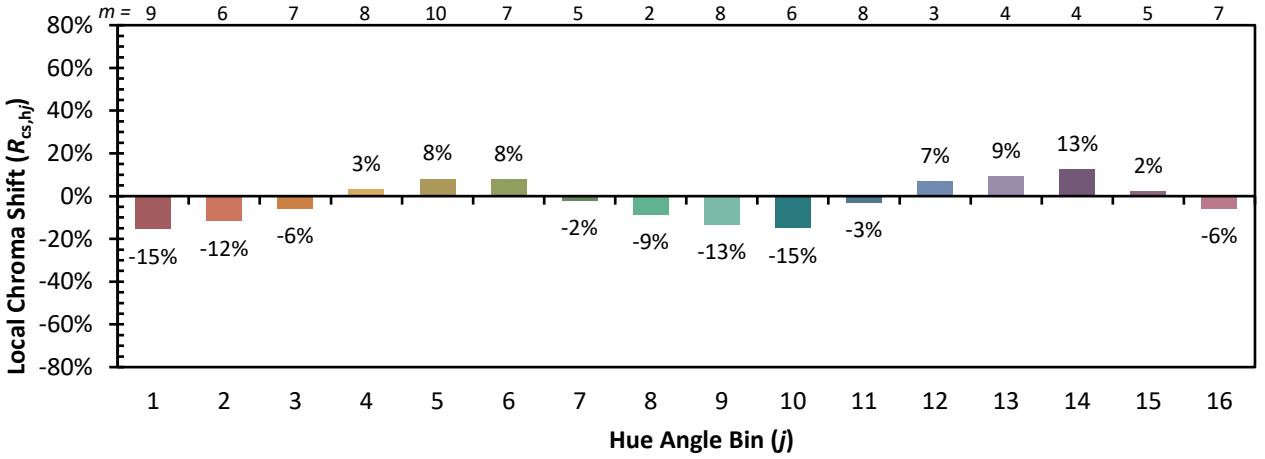
CES01 = 85	CES26 = 65	CES51 = 89	CES76 = 53
CES02 = 61	CES27 = 89	CES52 = 88	CES77 = 71
CES03 = 30	CES28 = 82	CES53 = 78	CES78 = 56
CES04 = 70	CES29 = 68	CES54 = 85	CES79 = 83
CES05 = 48	CES30 = 84	CES55 = 84	CES80 = 79
CES06 = 50	CES31 = 71	CES56 = 74	CES81 = 79
CES07 = 40	CES32 = 63	CES57 = 73	CES82 = 91
CES08 = 39	CES33 = 79	CES58 = 74	CES83 = 90
CES09 = 29	CES34 = 72	CES59 = 86	CES84 = 87
CES10 = 74	CES35 = 84	CES60 = 90	CES85 = 78
CES11 = 57	CES36 = 91	CES61 = 84	CES86 = 74
CES12 = 63	CES37 = 79	CES62 = 85	CES87 = 78
CES13 = 42	CES38 = 93	CES63 = 73	CES88 = 82
CES14 = 74	CES39 = 96	CES64 = 67	CES89 = 72
CES15 = 71	CES40 = 91	CES65 = 64	CES90 = 81
CES16 = 47	CES41 = 93	CES66 = 60	CES91 = 75
CES17 = 49	CES42 = 80	CES67 = 57	CES92 = 62
CES18 = 56	CES43 = 78	CES68 = 66	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 75	CES94 = 57
CES20 = 65	CES45 = 86	CES70 = 58	CES95 = 68
CES21 = 86	CES46 = 83	CES71 = 51	CES96 = 78
CES22 = 78	CES47 = 86	CES72 = 84	CES97 = 85
CES23 = 92	CES48 = 78	CES73 = 49	CES98 = 77
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 67
CES25 = 72	CES50 = 88	CES75 = 53	

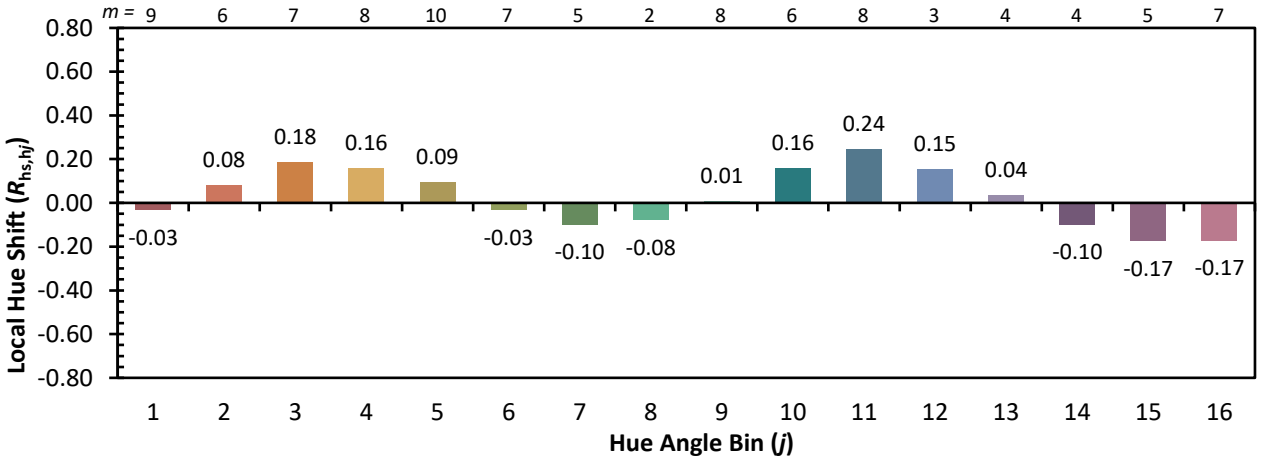


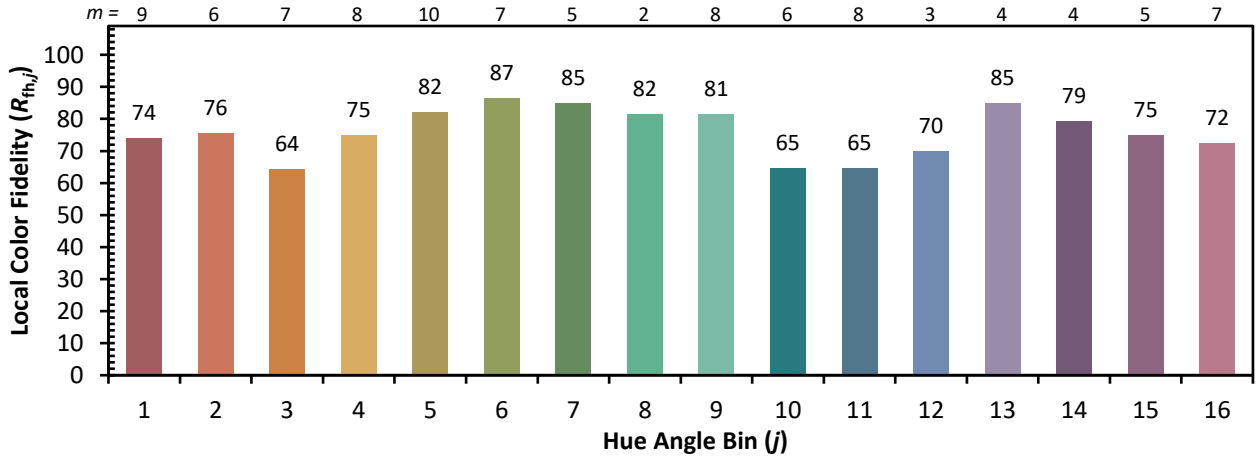
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Color Rendition by Hue-Angle Bin



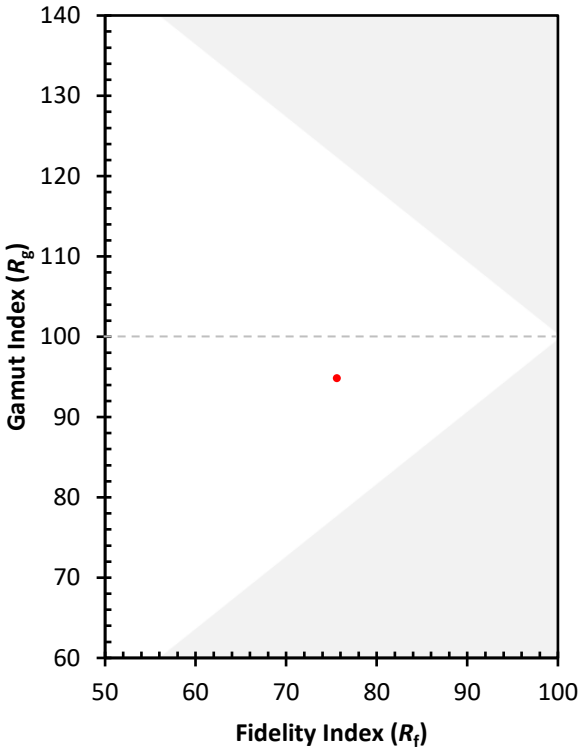


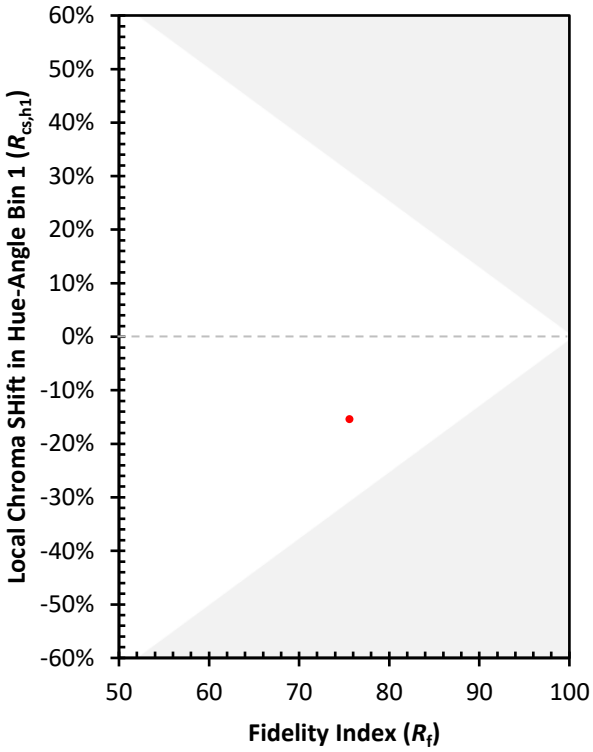


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Measure Comparisons





(END OF REPORT)