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: P436875

Luminaire Tested: **TT-D5-740-U-WQ-HSS**

Issue Date: 12/2/2020

Report Generated By 670347003

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:	P436875
	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-D5-740-U-WQ-HSS
Description:	TOPTIER LED PARKING GARAGE LUMINAIRE
	4000K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	7674 lumens
Efficiency:	N/A
Efficacy:	102.7 lumens/watt
Luminous Opening:	Circular (Dia: 1.12' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U2 - G3

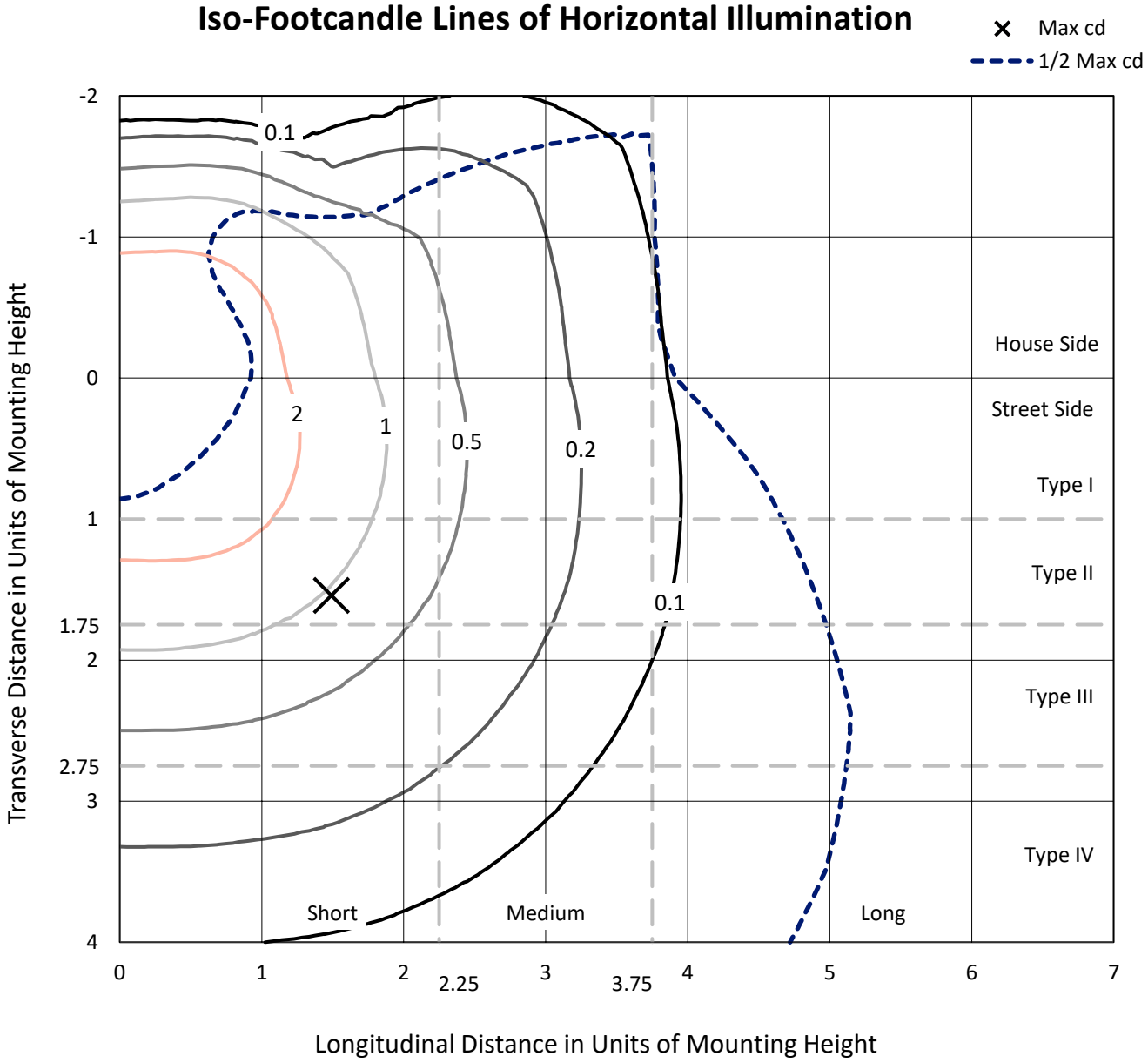
Input Watts (W):	74.7
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P436875
CATALOG NUMBER: TT-D5-740-U-WQ-HSS

Iso-Footcandle Lines of Horizontal Illumination



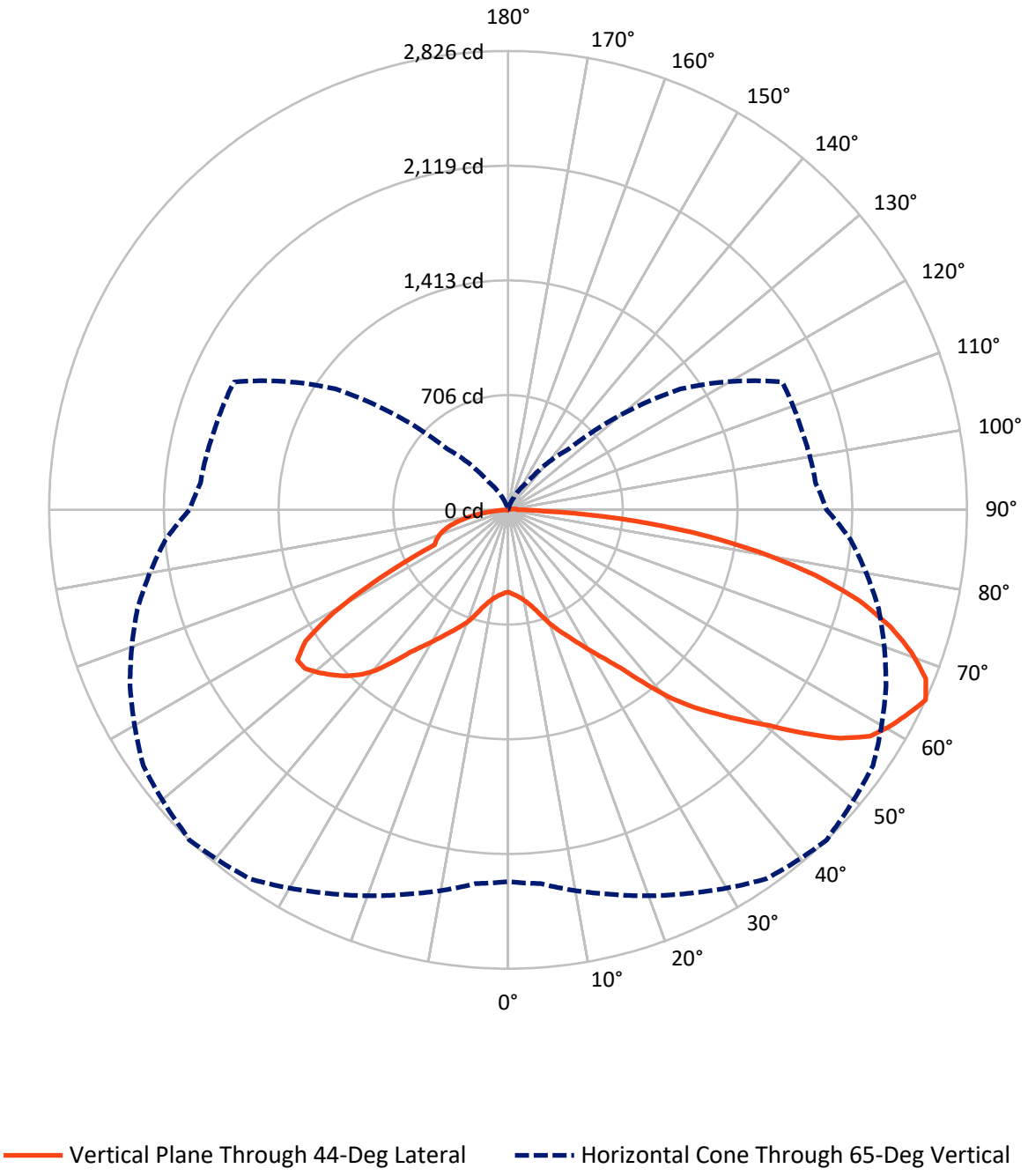
Based on 15 foot mounting height. Maximum calculated value = 3 fc
Type IV - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P436875
CATALOG NUMBER: TT-D5-740-U-WQ-HSS

Luminous Intensity Polar Plot



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

Scaled Data Report

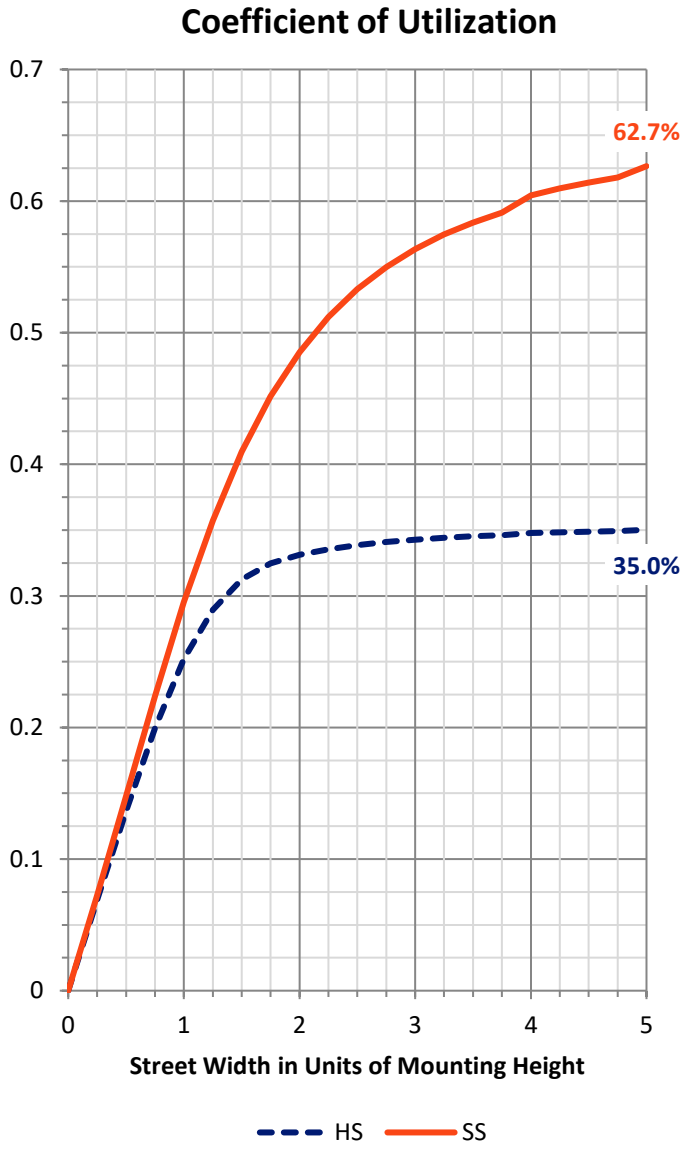
REPORT NUMBER: P436875
CATALOG NUMBER: TT-D5-740-U-WQ-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2702.9	1.8	2704.7
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	4938.2	31.1	4969.3
	% Fixture	64.3	0.4	64.8
Total	Lumens	7641.2	32.9	7674.0
	% Fixture	99.6	0.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.3	0.7
10°-20°	182.3	2.4
20°-30°	390.6	5.1
30°-40°	707.4	9.2
40°-50°	1180.4	15.4
50°-60°	1635.0	21.3
60°-70°	1694.4	22.1
70°-80°	1363.6	17.8
80°-90°	436.2	5.7
90°-100°	22.1	0.3
100°-110°	7.1	0.1
110°-120°	1.4	0.0
120°-130°	0.9	0.0
130°-140°	0.6	0.0
140°-150°	0.5	0.0
150°-160°	0.2	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-90°	7641.2	99.6
0°-180°	7674.0	100.0



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

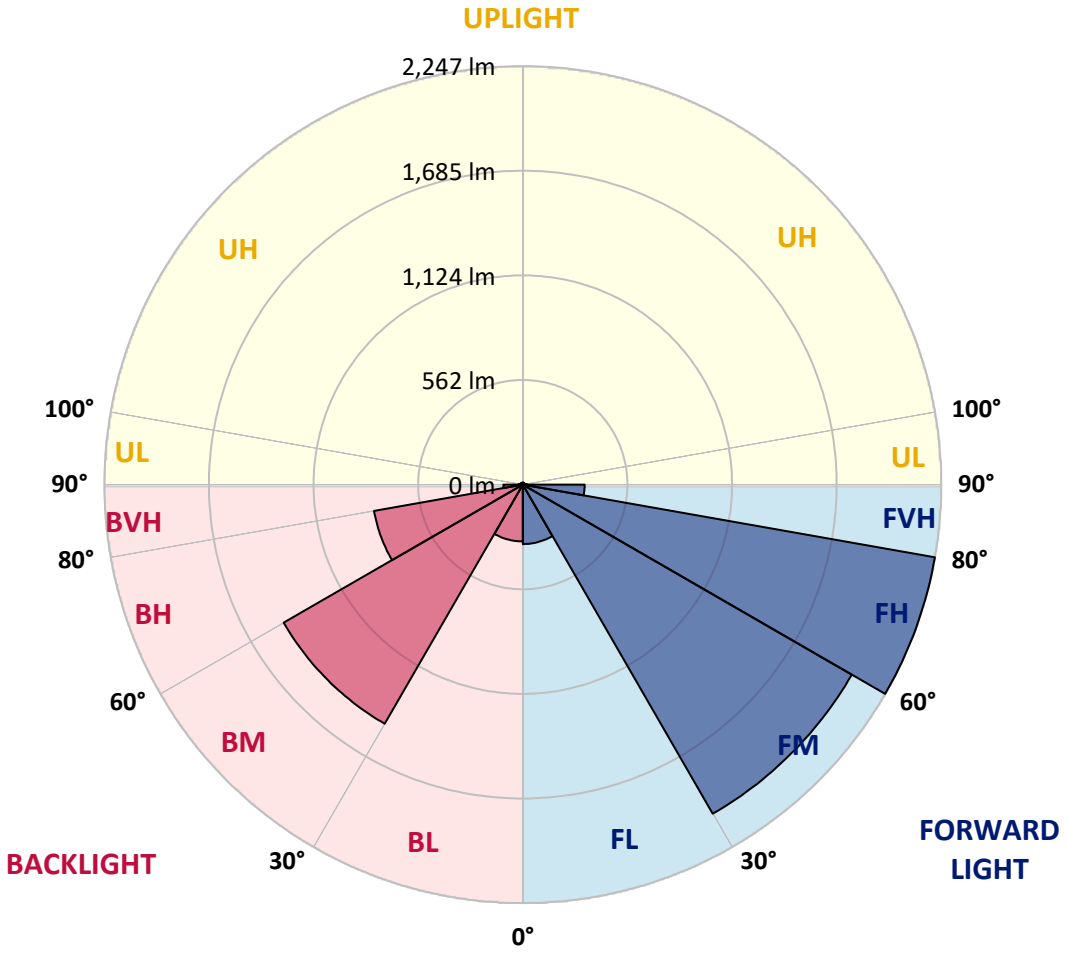
Scaled Data Report

REPORT NUMBER: P436875
CATALOG NUMBER: TT-D5-740-U-WQ-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	319.1	4.2			
FM	(30°-60°)	2040.2	26.6			
FH	(60°-80°)	2247.1	29.3			G2/5000
FVH	(80°-90°)	331.9	4.3			G3/500
BL	(0°-30°)	305.1	4.0	B1/500		
BM	(30°-60°)	1482.6	19.3	B2/2500		
BH	(60°-80°)	810.9	10.6	B2/1000		G2/1000
BVH	(80°-90°)	104.3	1.4			G2/225
UL	(90°-100°)	22.1	0.3		U2/50	
UH	(100°-180°)	10.8	0.1		U2/50	

BUG Rating: B2-U2-G3
Type IV Short



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

Scaled Data Report

REPORT NUMBER: P436875
CATALOG NUMBER: TT-D5-740-U-WQ-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	506.4	506.4	506.4	506.4	506.4	*506.4*	506.4	506.4	506.4	506.4	506.4
2.5°	521.4	519.9	519.9	518.4	518.4	*518.4*	518.4	518.4	516.9	515.4	513.9
5°	534.8	534.8	533.3	533.3	531.8	*530.4*	531.8	530.4	528.9	527.4	525.9
7.5°	552.8	551.3	551.3	548.3	548.3	*546.8*	546.8	546.8	545.3	542.3	540.8
10°	578.3	575.3	575.3	572.3	570.8	*569.3*	569.3	566.3	566.3	564.8	563.3
12.5°	606.8	603.8	606.8	605.3	602.3	*599.3*	599.3	596.3	594.8	593.3	587.3
15°	644.2	639.7	642.7	642.7	641.2	*639.7*	639.7	633.7	630.7	627.7	621.7
17.5°	689.2	686.2	687.7	689.2	693.7	*693.7*	695.1	687.7	681.7	671.2	666.7
20°	746.1	744.6	749.1	749.1	753.6	*753.6*	755.1	747.6	737.1	729.6	720.6
22.5°	801.5	801.5	807.5	807.5	812.0	*809.0*	809.0	806.0	794.0	785.0	776.1
25°	858.4	857.0	862.9	867.4	873.4	*865.9*	868.9	864.4	852.5	840.5	828.5
27.5°	921.4	918.4	921.4	927.4	937.9	*931.9*	934.9	927.4	915.4	898.9	888.4
30°	990.3	985.8	990.3	999.3	1006.8	*1009.8*	1008.3	997.8	987.3	963.3	955.8
32.5°	1057.7	1057.7	1068.2	1084.7	1093.7	*1092.2*	1093.7	1084.7	1069.7	1039.7	1021.7
35°	1140.1	1146.1	1159.6	1183.6	1203.0	*1195.5*	1195.5	1192.5	1167.1	1131.1	1107.1
37.5°	1249.5	1255.5	1282.4	1310.9	1346.9	*1343.9*	1345.4	1336.4	1286.9	1249.5	1215.0
40°	1376.8	1382.8	1423.3	1463.7	1498.2	*1508.7*	1510.2	1490.7	1436.7	1382.8	1328.9
42.5°	1493.7	1501.2	1543.1	1600.0	1637.5	*1654.0*	1657.0	1625.5	1568.6	1507.2	1439.7
45°	1610.5	1619.5	1667.5	1727.4	1781.3	*1788.8*	1790.3	1763.3	1700.4	1630.0	1543.1
47.5°	1730.4	1737.9	1787.3	1859.2	1917.7	*1932.6*	1934.1	1908.7	1832.3	1746.9	1645.0
50°	1839.7	1854.7	1922.1	1998.6	2076.5	*2088.4*	2089.9	2061.5	1971.6	1875.7	1740.9
52.5°	1968.6	1976.1	2048.0	2175.3	2241.3	*2287.7*	2289.2	2233.8	2137.9	2009.0	1835.3
55°	2118.4	2131.9	2205.3	2332.6	2451.0	*2482.5*	2491.5	2425.5	2298.2	2158.9	1955.1
57.5°	2205.3	2230.8	2338.6	2460.0	2608.3	*2629.3*	2633.8	2564.9	2424.0	2271.2	2045.0
60°	2251.7	2266.7	2380.6	2569.4	2684.7	*2704.2*	2702.7	2650.3	2509.4	2323.7	2086.9
62.5°	2304.2	2329.6	2425.5	2617.3	2717.7	*2765.6*	2758.1	2704.2	2560.4	2356.6	2127.4
65°	*2289.2*	*2310.2*	*2451.0*	*2606.8*	*2773.1*	*2825.5*	*2815.1*	*2743.1*	*2567.9*	*2362.6*	*2116.9*
67.5°	2229.3	2245.8	2385.1	2578.3	2737.1	*2774.6*	2792.6	2722.2	2525.9	2298.2	2051.0
70°	2106.4	2131.9	2266.7	2464.5	2609.8	*2636.8*	2639.8	2596.3	2419.5	2179.8	1941.6
72.5°	1937.1	1958.1	2104.9	2305.7	2431.5	*2463.0*	2466.0	2400.1	2266.7	2018.0	1784.3
75°	1734.9	1754.4	1868.2	2078.0	2202.3	*2233.8*	2230.8	2169.3	2028.5	1793.3	1576.1
77.5°	1484.7	1520.6	1621.0	1793.3	1914.7	*1931.1*	1934.1	1866.7	1752.9	1549.1	1337.9
80°	1171.6	1206.0	1319.9	1448.7	1550.6	*1564.1*	1568.6	1511.6	1408.3	1228.5	1048.7
82.5°	833.0	862.9	952.8	1057.7	1143.1	*1143.1*	1146.1	1099.7	1020.3	865.9	725.1
85°	474.9	497.4	557.3	632.2	693.7	*686.2*	687.7	645.7	593.3	473.4	383.5
87.5°	155.8	166.3	179.8	208.2	236.7	*218.7*	227.7	188.8	170.8	127.3	98.9
90°	82.4	82.4	79.4	76.4	70.4	*61.4*	61.4	49.4	37.5	24.0	9.0
92.5°	74.9	74.9	71.9	68.9	62.9	*55.4*	55.4	44.9	33.0	21.0	7.5
95°	61.4	61.4	59.9	56.9	52.4	*46.4*	44.9	37.5	28.5	16.5	6.0
97.5°	47.9	47.9	46.4	44.9	40.5	*36.0*	36.0	28.5	21.0	13.5	4.5
100°	36.0	36.0	36.0	33.0	31.5	*27.0*	27.0	22.5	16.5	10.5	3.0
102.5°	25.5	27.0	25.5	24.0	22.5	*19.5*	19.5	16.5	12.0	7.5	3.0
105°	18.0	18.0	16.5	16.5	15.0	*13.5*	13.5	10.5	7.5	4.5	1.5
107.5°	10.5	10.5	10.5	10.5	9.0	*9.0*	9.0	7.5	4.5	3.0	1.5
110°	6.0	6.0	6.0	6.0	4.5	*4.5*	4.5	3.0	3.0	1.5	1.5

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

Scaled Data Report

REPORT NUMBER: P436875
CATALOG NUMBER: TT-D5-740-U-WQ-HSS

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
112.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5
115°	1.5	1.5	1.5	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
117.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
120°	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
122.5°	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
125°	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
127.5°	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
130°	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
132.5°	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
135°	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
140°	1.5	1.5	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
142.5°	1.5	1.5	1.5	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5
145°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
147.5°	1.5	1.5	1.5	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5
150°	1.5	1.5	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
160°	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
162.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
165°	1.5	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
167.5°	1.5	1.5	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
170°	1.5	0.0	0.0	0.0	0.0	1.5	0.0	1.5	1.5	1.5	1.5
172.5°	1.5	1.5	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
175°	1.5	1.5	1.5	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
177.5°	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
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

Scaled Data Report

REPORT NUMBER: P436875
CATALOG NUMBER: TT-D5-740-U-WQ-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	506.4	506.4	506.4	506.4	506.4	506.4	506.4	506.4	506.4	506.4	506.4
2.5°	513.9	513.9	512.4	510.9	510.9	510.9	509.4	509.4	509.4	507.9	507.9
5°	525.9	524.4	524.4	522.9	522.9	521.4	521.4	519.9	518.4	518.4	516.9
7.5°	542.3	540.8	537.8	539.3	536.3	534.8	533.3	533.3	533.3	531.8	531.8
10°	561.8	561.8	558.8	558.8	555.8	554.3	552.8	552.8	554.3	554.3	552.8
12.5°	587.3	585.8	585.8	584.3	582.8	581.3	582.8	582.8	581.3	579.8	578.3
15°	618.7	618.7	618.7	620.2	618.7	618.7	618.7	617.2	614.2	611.3	611.3
17.5°	666.7	665.2	662.2	663.7	666.7	671.2	666.7	662.2	657.7	657.7	656.2
20°	716.1	717.6	717.6	719.1	723.6	728.1	722.1	719.1	716.1	713.1	710.1
22.5°	770.1	771.6	771.6	770.1	773.1	771.6	768.6	765.6	762.6	758.1	755.1
25°	822.5	824.0	822.5	821.0	822.5	818.0	813.5	809.0	801.5	794.0	794.0
27.5°	880.9	879.4	873.4	874.9	871.9	868.9	859.9	849.5	839.0	831.5	831.5
30°	942.3	942.3	930.4	936.4	930.4	928.9	909.4	895.9	880.9	870.4	868.9
32.5°	1009.8	1006.8	997.8	1003.8	997.8	991.8	967.8	949.8	924.4	909.4	907.9
35°	1090.7	1083.2	1075.7	1081.7	1081.7	1065.2	1041.2	1008.3	972.3	954.3	952.8
37.5°	1189.5	1185.0	1176.1	1183.6	1189.5	1173.1	1137.1	1089.2	1038.2	1011.3	1009.8
40°	1298.9	1292.9	1288.4	1298.9	1303.4	1286.9	1239.0	1171.6	1102.7	1063.7	1057.7
42.5°	1402.3	1388.8	1381.3	1396.3	1391.8	1373.8	1307.9	1230.0	1135.6	1090.7	1083.2
45°	1495.2	1480.2	1469.7	1483.2	1477.2	1441.2	1367.8	1263.0	1149.1	1093.7	1084.7
47.5°	1586.6	1564.1	1547.6	1565.6	1553.6	1498.2	1408.3	1279.4	1134.1	1068.2	1053.2
50°	1664.5	1637.5	1627.0	1648.0	1630.0	1552.1	1436.7	1271.9	1096.7	1000.8	976.8
52.5°	1757.3	1716.9	1706.4	1746.9	1706.4	1603.0	1442.7	1254.0	1011.3	895.9	873.4
55°	1851.7	1806.8	1790.3	1827.8	1766.3	1613.5	1412.8	1150.6	882.4	759.6	726.6
57.5°	1901.2	1859.2	1844.2	1871.2	1757.3	1511.6	1279.4	958.8	689.2	551.3	515.4
60°	1946.1	1872.7	1853.2	1889.2	1664.5	1274.9	990.3	687.7	416.5	313.1	286.1
62.5°	1977.6	1907.2	1866.7	1883.2	1493.7	927.4	569.3	331.1	157.3	109.4	107.9
65°	*1961.1*	*1901.2*	*1874.2*	*1862.2*	*1297.4*	*533.3*	*209.7*	*83.9*	*4.5*	*4.5*	*3.0*
67.5°	1910.2	1844.2	1836.8	1847.2	1283.9	512.4	194.8	76.4	0.0	0.0	0.0
70°	1797.8	1751.4	1751.4	1787.3	1225.5	485.4	181.3	70.4	0.0	0.0	0.0
72.5°	1646.5	1610.5	1631.5	1685.4	1138.6	448.0	163.3	62.9	0.0	0.0	0.0
75°	1465.2	1427.8	1454.7	1514.6	1030.7	400.0	142.3	53.9	0.0	0.0	0.0
77.5°	1234.5	1209.0	1251.0	1306.4	886.9	337.1	116.9	43.4	0.0	0.0	0.0
80°	961.8	948.3	1003.8	1053.2	716.1	265.2	88.4	31.5	0.0	0.0	0.0
82.5°	663.7	657.7	711.6	762.6	512.4	185.8	59.9	21.0	0.0	0.0	0.0
85°	347.6	347.6	389.5	436.0	286.1	100.4	30.0	9.0	0.0	0.0	0.0
87.5°	76.4	73.4	79.4	101.9	56.9	19.5	4.5	1.5	0.0	0.0	0.0
90°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.5	1.5	1.5	1.5	1.5	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
110°	1.5	1.5	1.5	1.5	1.5	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: P436875
CATALOG NUMBER: TT-D5-740-U-WQ-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	0.0	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	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.5	1.5	1.5	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

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

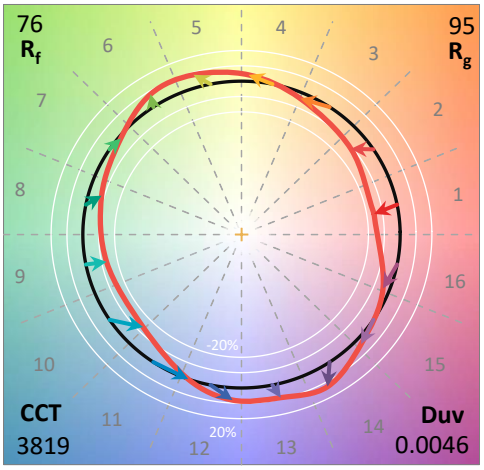
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

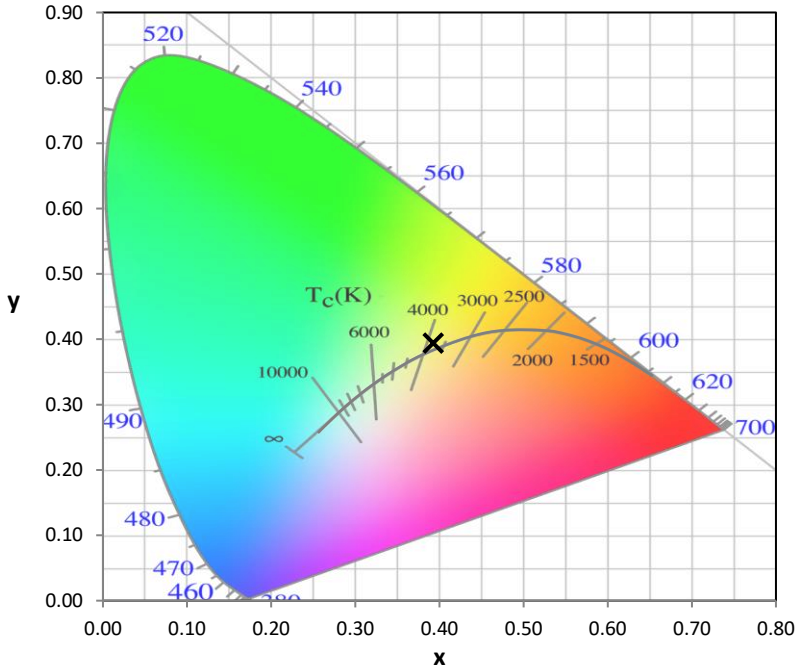
Stabilization Time:	30M
Operation Time:	1H 30M
Sphere Temperature (°C):	25.2

REPORT NUMBER: SP1-2407-176-5

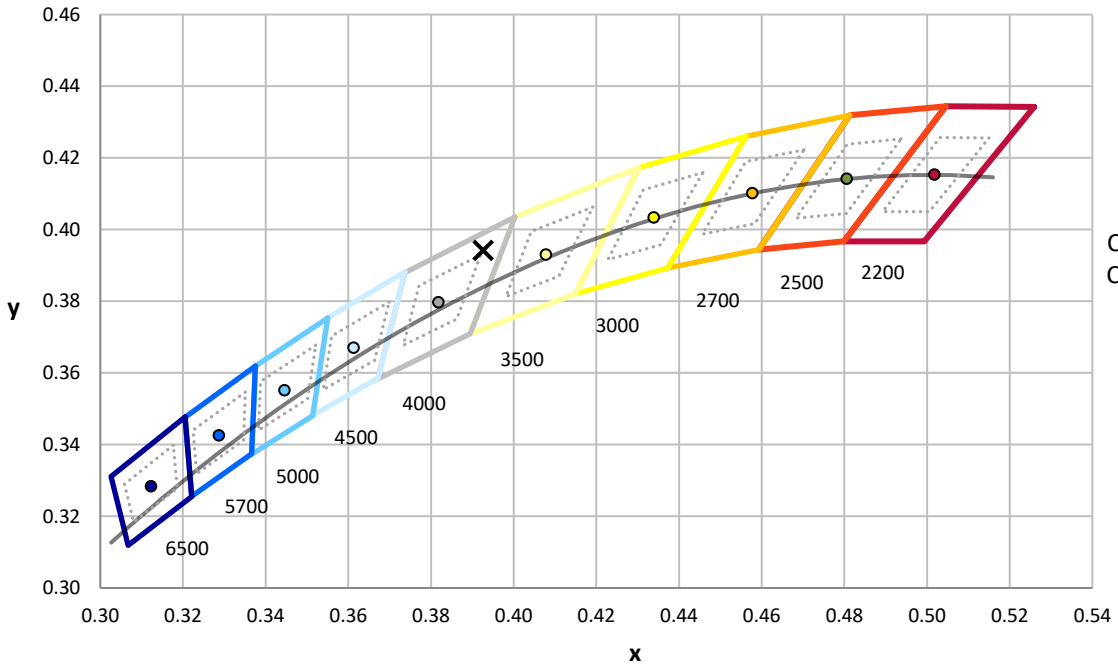
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

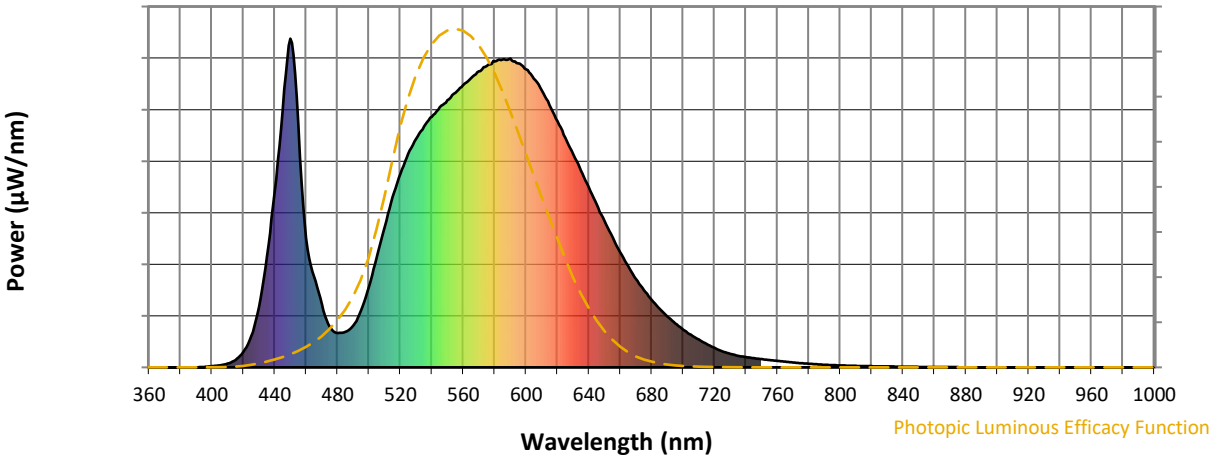


CCT = 3819K
CIE x = 0.3926
CIE y = 0.3942
Duv = 0.0046

Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP1-2407-176-5

Photopic Flux vs. Wavelength

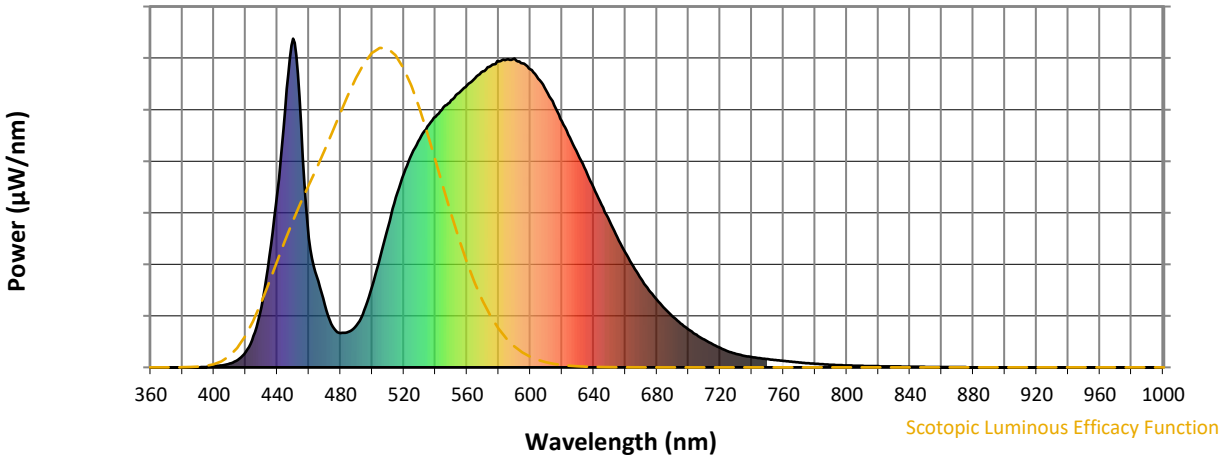


Photopic Lumens: NR

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

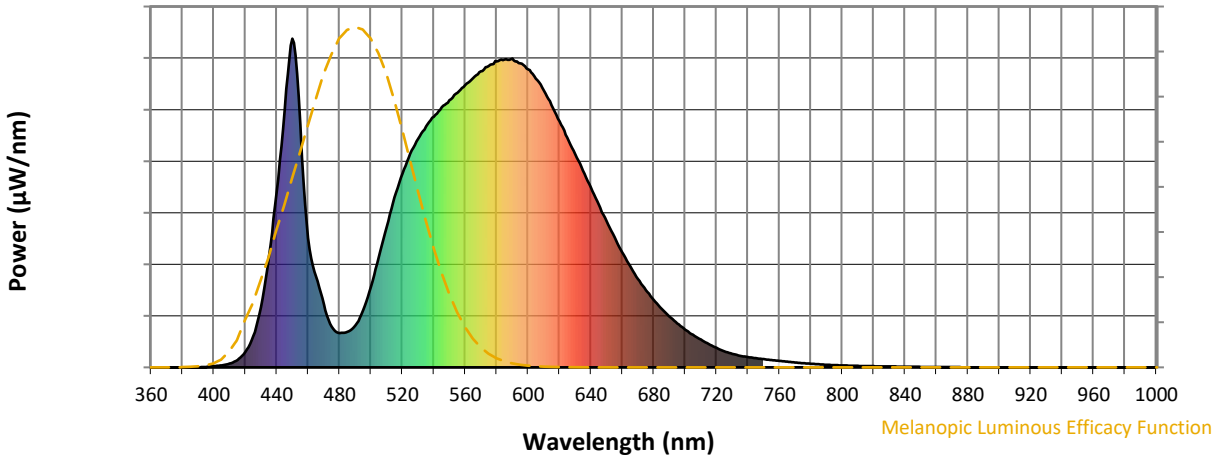


Scotopic Lumens: NR **S/P: 1.45**

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			

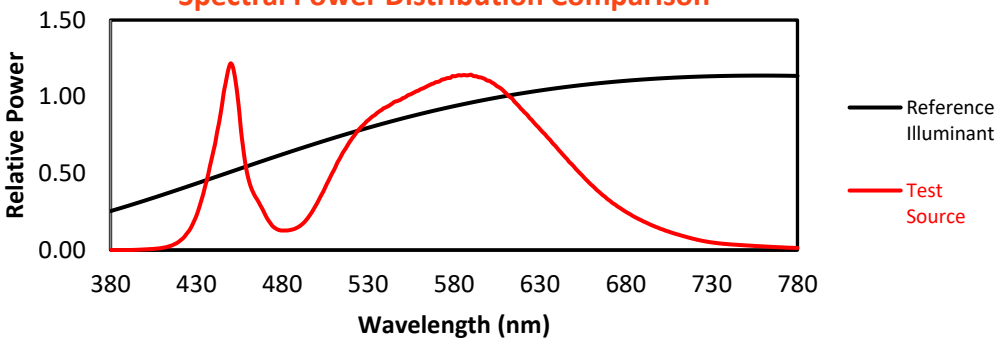
REPORT NUMBER: SP1-2407-176-5

TM-30-18

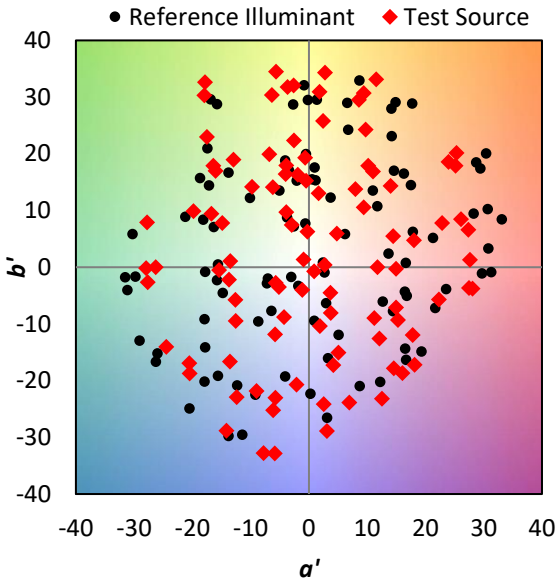
Summary

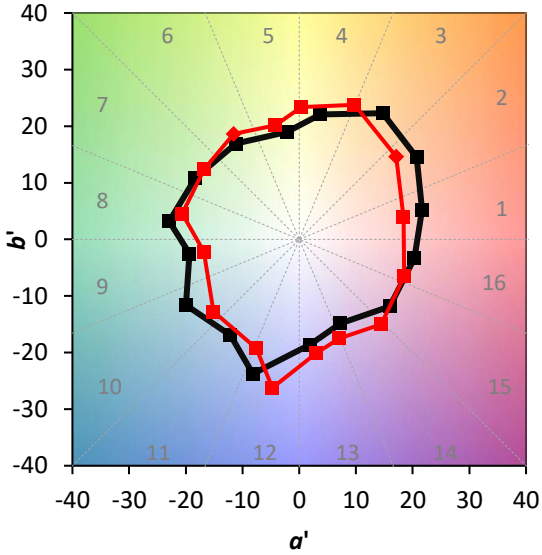
R_f = 75.6
R_g = 94.8
CIE R_a = 72.9
R_9 = -21.5

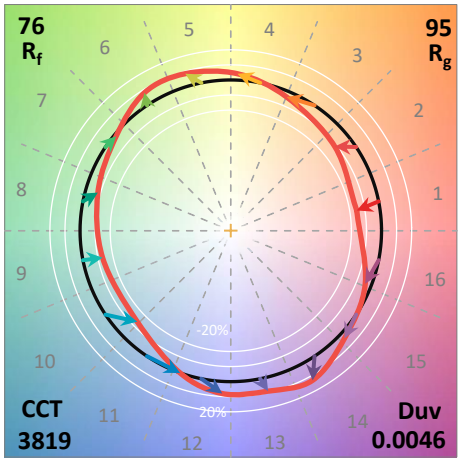
Spectral Power Distribution Comparison

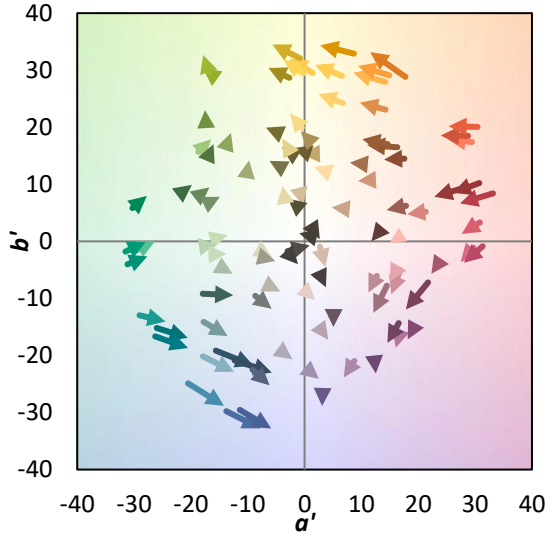


Color Vector Graphics







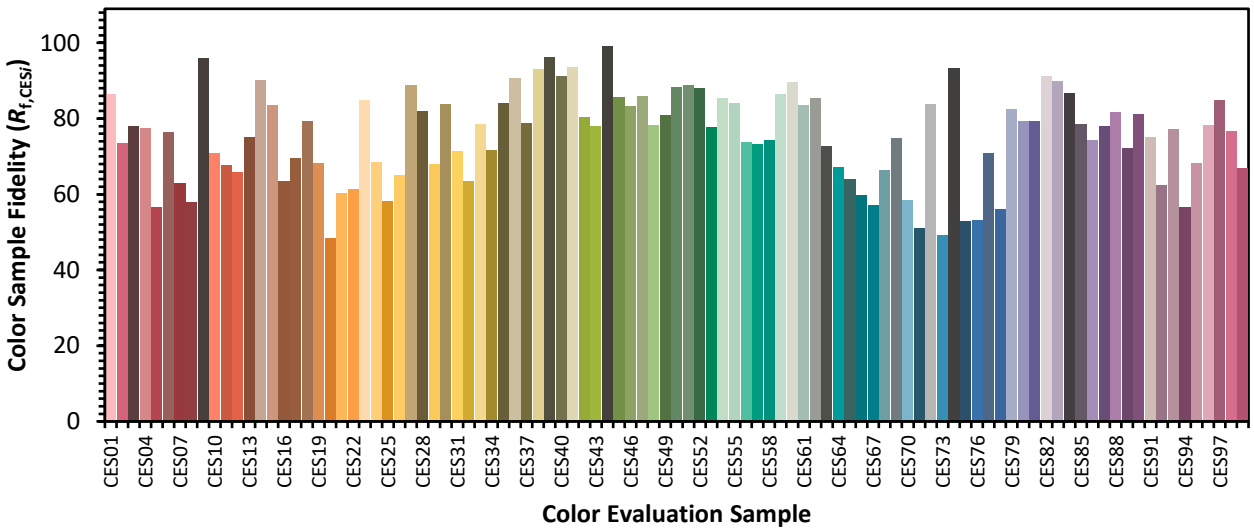


REPORT NUMBER: SP1-2407-176-5

TM-30-18

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

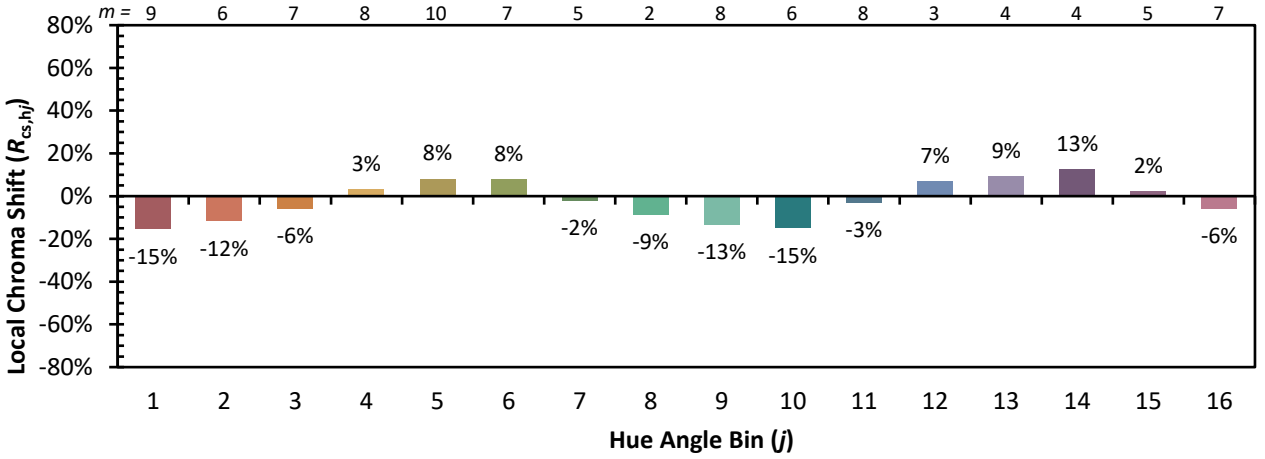
CES01 = 85	CES26 = 65	CES51 = 89	CES76 = 53
CES02 = 61	CES27 = 89	CES52 = 88	CES77 = 71
CES03 = 30	CES28 = 82	CES53 = 78	CES78 = 56
CES04 = 70	CES29 = 68	CES54 = 85	CES79 = 83
CES05 = 48	CES30 = 84	CES55 = 84	CES80 = 79
CES06 = 50	CES31 = 71	CES56 = 74	CES81 = 79
CES07 = 40	CES32 = 63	CES57 = 73	CES82 = 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	

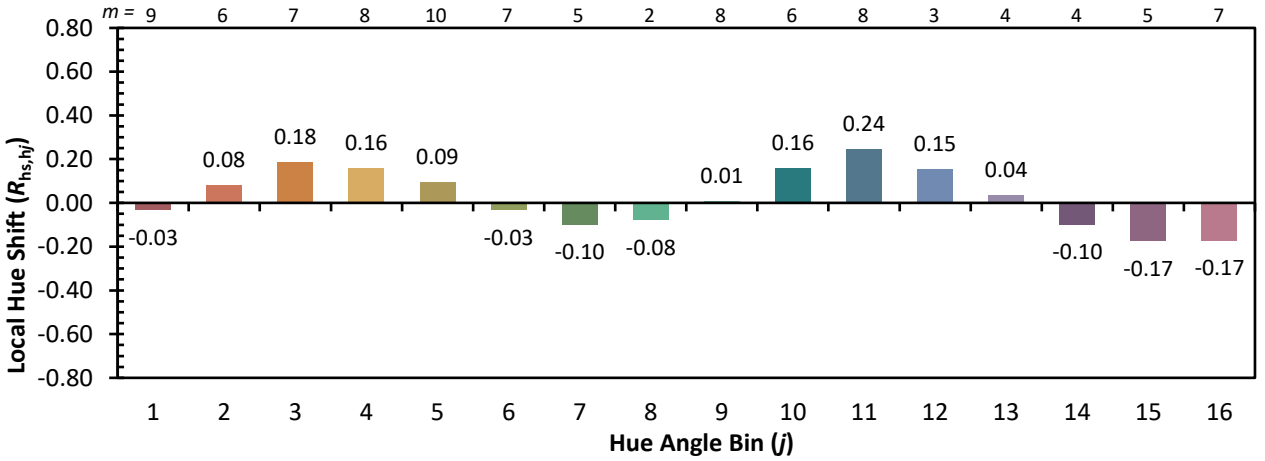


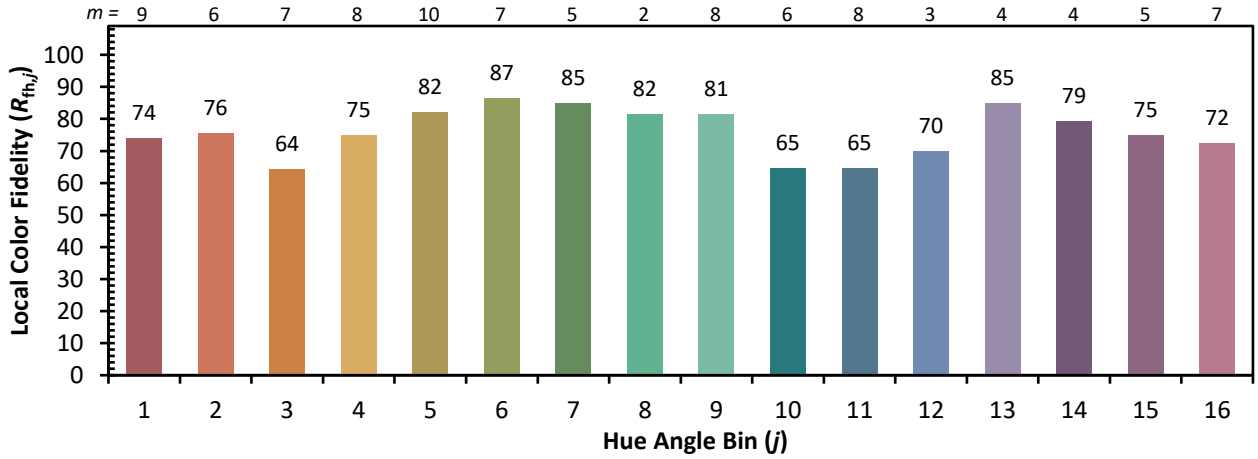
REPORT NUMBER: SP1-2407-176-5

TM-30-18

Color Rendition by Hue-Angle Bin



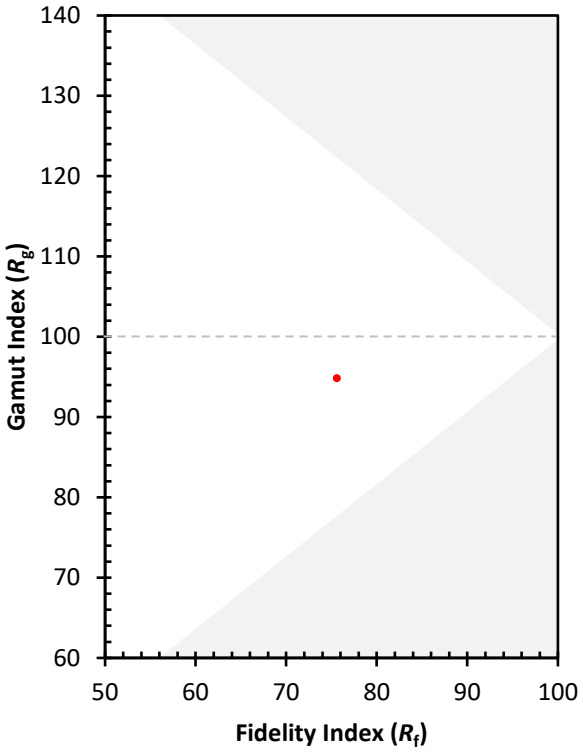


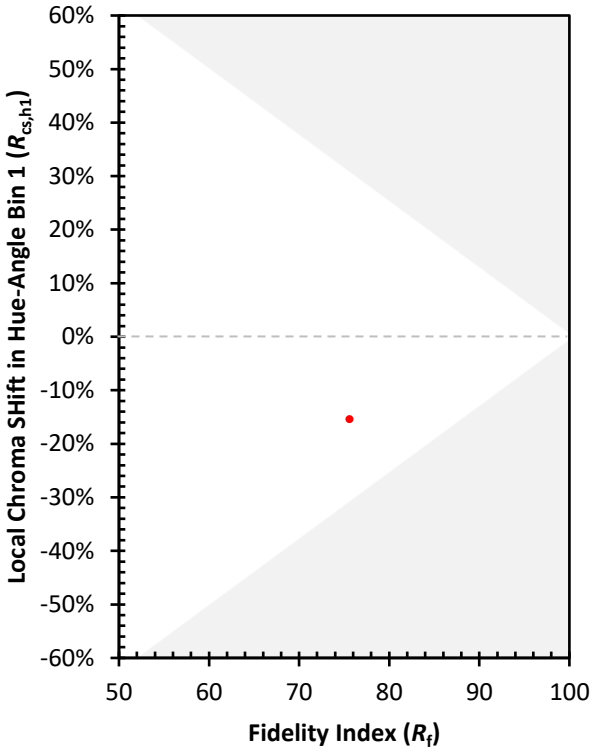


REPORT NUMBER: SP1-2407-176-5

TM-30-18

Measure Comparisons





(END OF REPORT)