

Signify Classified - Internal
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: P436915

Luminaire Tested: **TT-D6-830-U-WQ-HSS**

Issue Date: 12/2/2020

Test Information

Test Method: LM-79-08
Report Number: P436915
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-D6-830-U-WQ-HSS
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
3000K, 80 CRI LEDS AND WIDE DISTRIBUTION WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8990.1 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U2 - G3

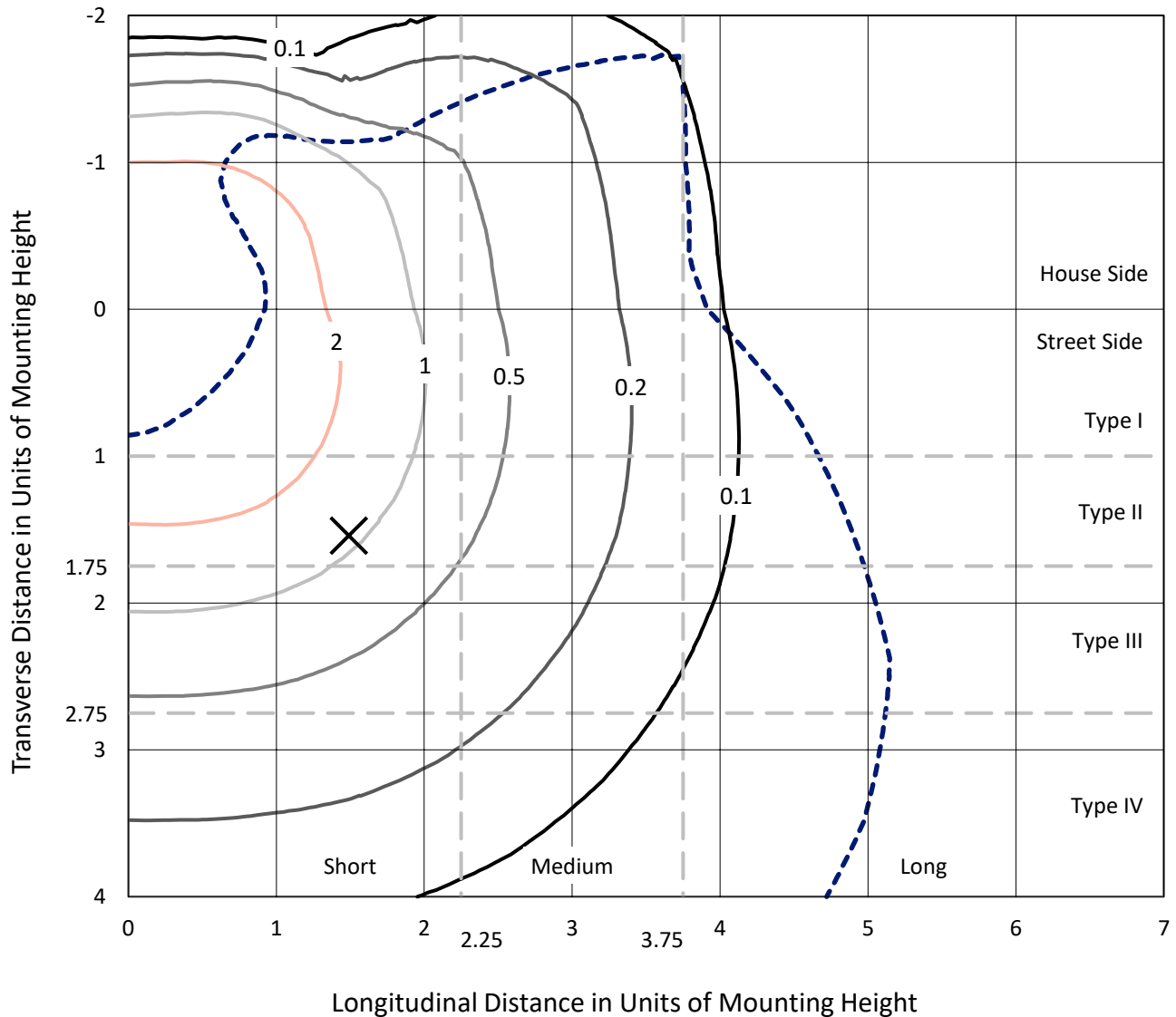
Input Watts (W): 105.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

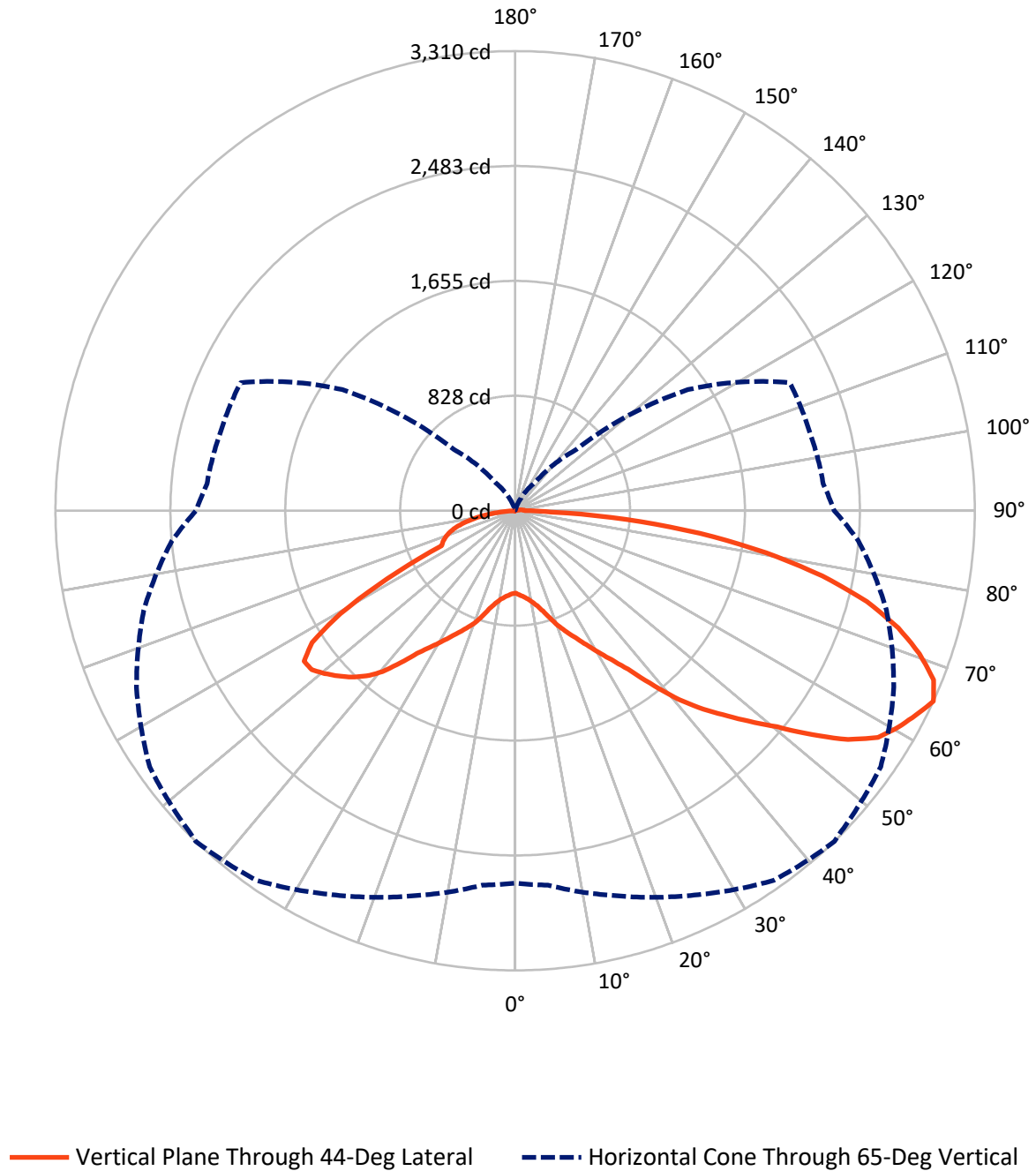


Based on 15 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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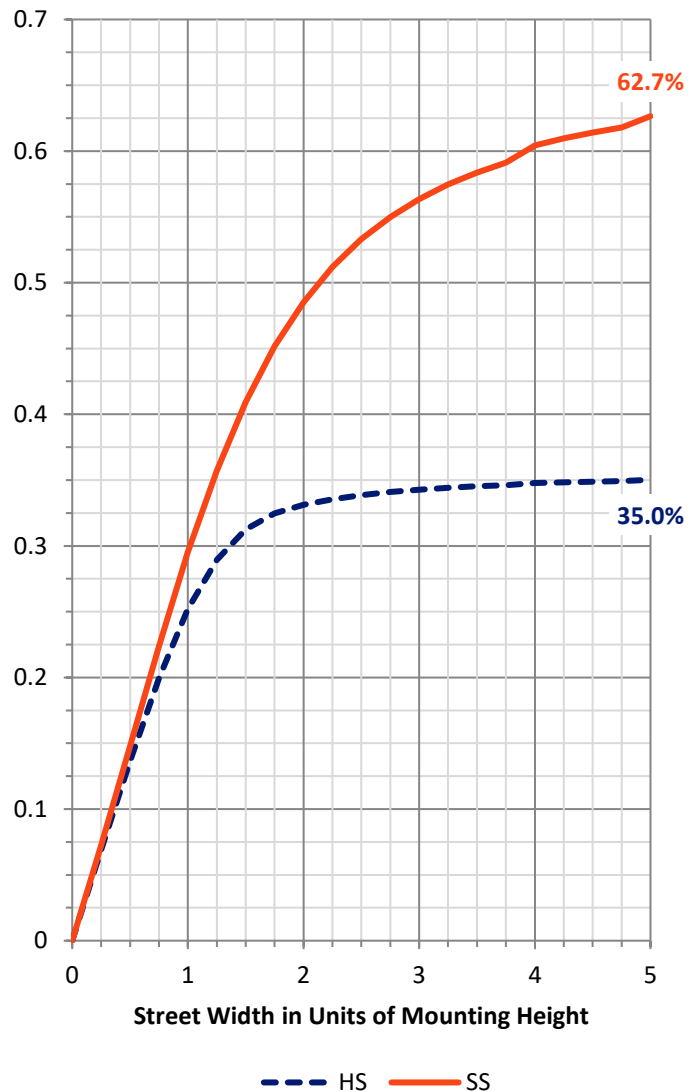
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3166.5	2.2	3168.6
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	5785.0	36.4	5821.5
	% Fixture	64.3	0.4	64.8
Total	Lumens	8951.5	38.6	8990.1
	% Fixture	99.6	0.4	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.1	0.7
10°-20°	213.6	2.4
20°-30°	457.6	5.1
30°-40°	828.7	9.2
40°-50°	1382.8	15.4
50°-60°	1915.3	21.3
60°-70°	1984.9	22.1
70°-80°	1597.5	17.8
80°-90°	511.0	5.7
90°-100°	25.9	0.3
100°-110°	8.3	0.1
110°-120°	1.6	0.0
120°-130°	1.0	0.0
130°-140°	0.7	0.0
140°-150°	0.5	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-90°	8951.5	99.6
0°-180°	8990.1	100.0



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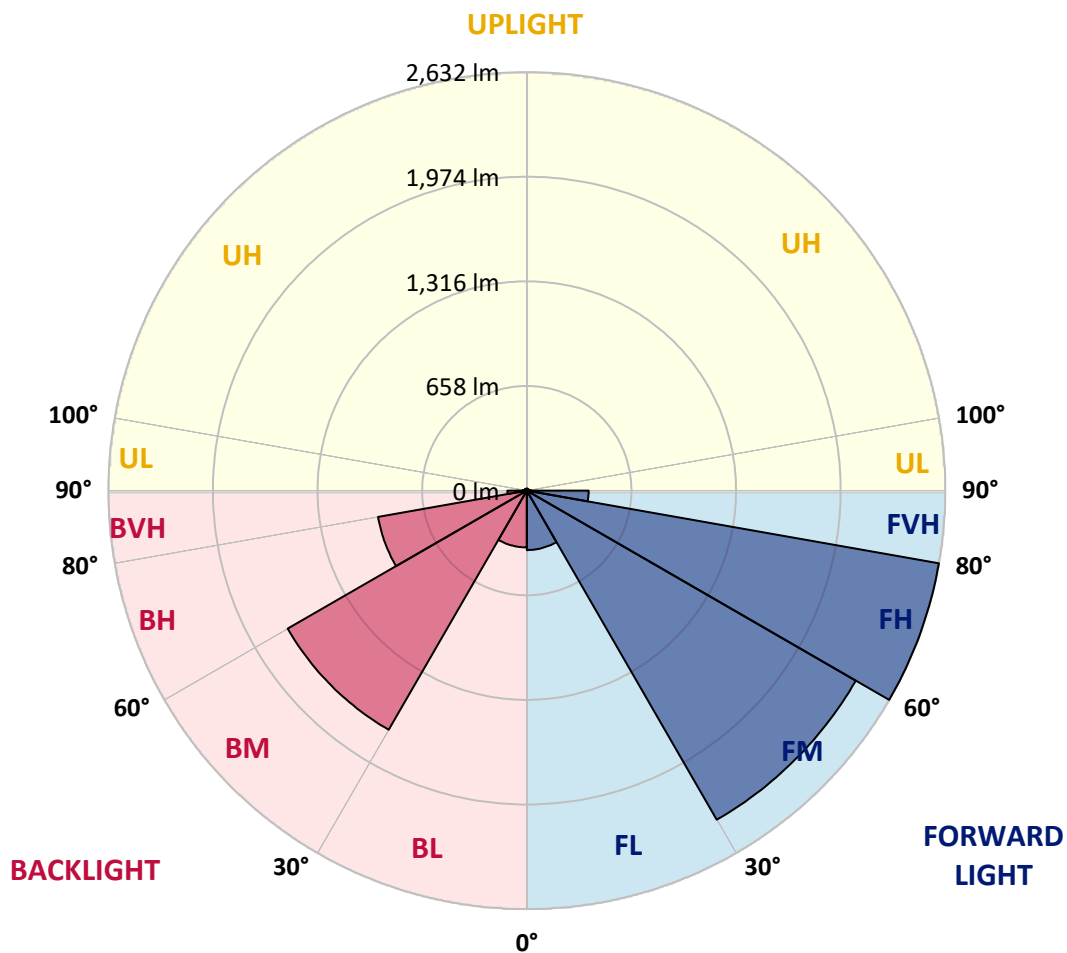
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	373.8	4.2			
FM	(30°-60°)	2390.0	26.6			
FH	(60°-80°)	2632.4	29.3			G2/5000
FVH	(80°-90°)	388.8	4.3			G3/500
BL	(0°-30°)	357.4	4.0	B1/500		
BM	(30°-60°)	1736.8	19.3	B2/2500		
BH	(60°-80°)	950.0	10.6	B2/1000		G2/1000
BVH	(80°-90°)	122.2	1.4			G2/225
UL	(90°-100°)	25.9	0.3		U2/50	
UH	(100°-180°)	12.7	0.1		U2/50	

BUG Rating: B2-U2-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2
2.5°	610.8	609.0	609.0	607.3	607.3	607.3	607.3	607.3	605.5	603.7	602.0
5°	626.6	626.6	624.8	624.8	623.1	621.3	623.1	621.3	619.5	617.8	616.0
7.5°	647.6	645.9	645.9	642.4	642.4	640.6	640.6	640.6	638.9	635.3	633.6
10°	677.5	674.0	674.0	670.4	668.7	666.9	666.9	663.4	663.4	661.7	659.9
12.5°	710.8	707.3	710.8	709.1	705.5	702.0	702.0	698.5	696.8	695.0	688.0
15°	754.7	749.4	752.9	752.9	751.2	749.4	749.4	742.4	738.9	735.4	728.4
17.5°	807.3	803.8	805.6	807.3	812.6	812.6	814.4	805.6	798.6	786.3	781.0
20°	874.0	872.3	877.5	877.5	882.8	882.8	884.6	875.8	863.5	854.7	844.2
22.5°	939.0	939.0	946.0	946.0	951.3	947.7	947.7	944.2	930.2	919.7	909.1
25°	1005.7	1003.9	1010.9	1016.2	1023.2	1014.4	1017.9	1012.7	998.6	984.6	970.6
27.5°	1079.4	1075.9	1079.4	1086.4	1098.7	1091.7	1095.2	1086.4	1072.4	1053.1	1040.8
30°	1160.1	1154.8	1160.1	1170.6	1179.4	1182.9	1181.2	1168.9	1156.6	1128.5	1119.7
32.5°	1239.1	1239.1	1251.4	1270.7	1281.2	1279.5	1281.2	1270.7	1253.1	1218.0	1197.0
35°	1335.6	1342.6	1358.4	1386.5	1409.3	1400.6	1400.6	1397.0	1367.2	1325.1	1297.0
37.5°	1463.7	1470.8	1502.4	1535.7	1577.8	1574.3	1576.1	1565.5	1507.6	1463.7	1423.4
40°	1612.9	1619.9	1667.3	1714.7	1755.1	1767.4	1769.1	1746.3	1683.1	1619.9	1556.8
42.5°	1749.8	1758.6	1807.7	1874.4	1918.3	1937.6	1941.1	1904.3	1837.6	1765.6	1686.6
45°	1886.7	1897.2	1953.4	2023.6	2086.8	2095.6	2097.3	2065.7	1992.0	1909.5	1807.7
47.5°	2027.1	2035.9	2093.8	2178.1	2246.5	2264.1	2265.8	2236.0	2146.5	2046.4	1927.1
50°	2155.2	2172.8	2251.8	2341.3	2432.5	2446.6	2448.3	2415.0	2309.7	2197.4	2039.4
52.5°	2306.2	2315.0	2399.2	2548.4	2625.6	2680.0	2681.8	2616.8	2504.5	2353.6	2150.0
55°	2481.7	2497.5	2583.5	2732.7	2871.3	2908.2	2918.7	2841.5	2692.3	2529.1	2290.4
57.5°	2583.5	2613.3	2739.7	2881.8	3055.6	3080.2	3085.4	3004.7	2839.7	2660.7	2395.7
60°	2637.9	2655.4	2788.8	3010.0	3145.1	3167.9	3166.2	3104.7	2939.8	2722.1	2444.8
62.5°	2699.3	2729.2	2841.5	3066.1	3183.7	3239.9	3231.1	3167.9	2999.4	2760.7	2492.2
65°	2681.8	2706.3	2871.3	3053.8	3248.7	3310.1	3297.8	3213.6	3008.2	2767.8	2479.9
67.5°	2611.6	2630.9	2794.1	3020.5	3206.5	3250.4	3271.5	3189.0	2959.1	2692.3	2402.7
70°	2467.6	2497.5	2655.4	2887.1	3057.4	3088.9	3092.5	3041.6	2834.5	2553.6	2274.6
72.5°	2269.3	2293.9	2465.9	2701.1	2848.5	2885.4	2888.9	2811.6	2655.4	2364.1	2090.3
75°	2032.4	2055.2	2188.6	2434.3	2580.0	2616.8	2613.3	2541.4	2376.4	2100.8	1846.3
77.5°	1739.3	1781.4	1899.0	2100.8	2243.0	2262.3	2265.8	2186.8	2053.4	1814.8	1567.3
80°	1372.5	1412.8	1546.2	1697.2	1816.5	1832.3	1837.6	1770.9	1649.8	1439.2	1228.6
82.5°	975.8	1010.9	1116.2	1239.1	1339.1	1339.1	1342.6	1288.2	1195.2	1014.4	849.5
85°	556.4	582.7	652.9	740.6	812.6	803.8	805.6	756.4	695.0	554.6	449.3
87.5°	182.5	194.8	210.6	244.0	277.3	256.2	266.8	221.1	200.1	149.2	115.8
90°	96.5	96.5	93.0	89.5	82.5	72.0	72.0	57.9	43.9	28.1	10.5
92.5°	87.8	87.8	84.2	80.7	73.7	64.9	64.9	52.7	38.6	24.6	8.8
95°	72.0	72.0	70.2	66.7	61.4	54.4	52.7	43.9	33.3	19.3	7.0
97.5°	56.2	56.2	54.4	52.7	47.4	42.1	42.1	33.3	24.6	15.8	5.3
100°	42.1	42.1	42.1	38.6	36.9	31.6	31.6	26.3	19.3	12.3	3.5
102.5°	29.8	31.6	29.8	28.1	26.3	22.8	22.8	19.3	14.0	8.8	3.5
105°	21.1	21.1	19.3	19.3	17.6	15.8	15.8	12.3	8.8	5.3	1.8
107.5°	12.3	12.3	12.3	12.3	10.5	10.5	10.5	8.8	5.3	3.5	1.8
110°	7.0	7.0	7.0	7.0	5.3	5.3	5.3	3.5	3.5	1.8	1.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
112.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	1.8	1.8	1.8	1.8
115°	1.8	1.8	1.8	3.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8
117.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
120°	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
122.5°	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
125°	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
127.5°	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
130°	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
132.5°	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
135°	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8
140°	1.8	1.8	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8
142.5°	1.8	1.8	1.8	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.8
145°	1.8	1.8	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8
147.5°	1.8	1.8	1.8	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.8
150°	1.8	1.8	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8
160°	1.8	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8
162.5°	1.8	1.8	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8
165°	1.8	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8
167.5°	1.8	1.8	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8
170°	1.8	0.0	0.0	0.0	0.0	1.8	0.0	1.8	1.8	1.8	1.8
172.5°	1.8	1.8	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8
175°	1.8	1.8	1.8	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8
177.5°	0.0	1.8	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8
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°	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2
2.5°	602.0	602.0	600.2	598.5	598.5	598.5	596.7	596.7	596.7	595.0	595.0
5°	616.0	614.3	614.3	612.5	612.5	610.8	610.8	609.0	607.3	607.3	605.5
7.5°	635.3	633.6	630.1	631.8	628.3	626.6	624.8	624.8	624.8	623.1	623.1
10°	658.2	658.2	654.6	654.6	651.1	649.4	647.6	647.6	649.4	649.4	647.6
12.5°	688.0	686.2	686.2	684.5	682.7	681.0	682.7	682.7	681.0	679.2	677.5
15°	724.8	724.8	724.8	726.6	724.8	724.8	724.8	723.1	719.6	716.1	716.1
17.5°	781.0	779.3	775.7	777.5	781.0	786.3	781.0	775.7	770.5	770.5	768.7
20°	838.9	840.7	840.7	842.4	847.7	853.0	846.0	842.4	838.9	835.4	831.9
22.5°	902.1	903.9	903.9	902.1	905.6	903.9	900.4	896.8	893.3	888.1	884.6
25°	963.5	965.3	963.5	961.8	963.5	958.3	953.0	947.7	939.0	930.2	930.2
27.5°	1032.0	1030.2	1023.2	1025.0	1021.5	1017.9	1007.4	995.1	982.8	974.1	974.1
30°	1103.9	1103.9	1089.9	1096.9	1089.9	1088.2	1065.3	1049.5	1032.0	1019.7	1017.9
32.5°	1182.9	1179.4	1168.9	1175.9	1168.9	1161.9	1133.8	1112.7	1082.9	1065.3	1063.6
35°	1277.7	1268.9	1260.2	1267.2	1267.2	1247.9	1219.8	1181.2	1139.0	1118.0	1116.2
37.5°	1393.5	1388.3	1377.7	1386.5	1393.5	1374.2	1332.1	1275.9	1216.3	1184.7	1182.9
40°	1521.7	1514.6	1509.4	1521.7	1526.9	1507.6	1451.5	1372.5	1291.7	1246.1	1239.1
42.5°	1642.8	1627.0	1618.2	1635.7	1630.5	1609.4	1532.2	1440.9	1330.4	1277.7	1268.9
45°	1751.6	1734.0	1721.7	1737.5	1730.5	1688.4	1602.4	1479.5	1346.1	1281.2	1270.7
47.5°	1858.6	1832.3	1813.0	1834.1	1820.0	1755.1	1649.8	1498.8	1328.6	1251.4	1233.8
50°	1949.9	1918.3	1906.0	1930.6	1909.5	1818.3	1683.1	1490.1	1284.7	1172.4	1144.3
52.5°	2058.7	2011.3	1999.0	2046.4	1999.0	1877.9	1690.1	1469.0	1184.7	1049.5	1023.2
55°	2169.3	2116.6	2097.3	2141.2	2069.2	1890.2	1655.0	1347.9	1033.7	889.8	851.2
57.5°	2227.2	2178.1	2160.5	2192.1	2058.7	1770.9	1498.8	1123.3	807.3	645.9	603.7
60°	2279.9	2193.9	2171.0	2213.2	1949.9	1493.6	1160.1	805.6	487.9	366.8	335.2
62.5°	2316.7	2234.2	2186.8	2206.1	1749.8	1086.4	666.9	387.9	184.3	128.1	126.4
65°	2297.4	2227.2	2195.6	2181.6	1519.9	624.8	245.7	98.3	5.3	5.3	3.5
67.5°	2237.7	2160.5	2151.7	2164.0	1504.1	600.2	228.2	89.5	0.0	0.0	0.0
70°	2106.1	2051.7	2051.7	2093.8	1435.7	568.6	212.4	82.5	0.0	0.0	0.0
72.5°	1928.8	1886.7	1911.3	1974.5	1333.9	524.8	191.3	73.7	0.0	0.0	0.0
75°	1716.5	1672.6	1704.2	1774.4	1207.5	468.6	166.7	63.2	0.0	0.0	0.0
77.5°	1446.2	1416.4	1465.5	1530.4	1039.0	394.9	136.9	50.9	0.0	0.0	0.0
80°	1126.8	1111.0	1175.9	1233.8	838.9	310.6	103.5	36.9	0.0	0.0	0.0
82.5°	777.5	770.5	833.7	893.3	600.2	217.6	70.2	24.6	0.0	0.0	0.0
85°	407.2	407.2	456.3	510.7	335.2	117.6	35.1	10.5	0.0	0.0	0.0
87.5°	89.5	86.0	93.0	119.3	66.7	22.8	5.3	1.8	0.0	0.0	0.0
90°	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
105°	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
110°	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P436915

CATALOG NUMBER: TT-D6-830-U-WQ-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
117.5°	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
122.5°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
125°	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.8	1.8	1.8	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

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

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2407-176-7

Test Date: 09/27/2024

Luminaire Tested: MEM2-HTN-VA-30-830-U-WQ

Data in this report applies to families of products including MEM2-HTN-VA-30-830-U-WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-176-7
 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-30-830-U-WQ**
 Description: EPIC MODERN VISUAL COMFORT 30W WAVESTREAM WIDE

Spectral Parameters

CCT (K): 2984
 CIE u' : 0.2500
 CIE v' : 0.5264
 Duv: 0.0033
 CIE x: 0.4431
 CIE y: 0.4147
 CIE z: 0.1422
 Peak Wavelength (nm): 601
 Dominant Wavelength (nm): 581
 Purity: 57.4798
 Rf: 85.8
 Rg: 94.1

CRI (Ra): 81.8
 R1: 79.4
 R2: 89.9
 R3: 96.6
 R4: 80.6
 R5: 80.1
 R6: 88.9
 R7: 82.6
 R8: 56.0
 R9: -1.1
 R10: 78.4
 R11: 80.8
 R12: 72.8
 R13: 81.7
 R14: 98.5
 R15: 70.2



Test Conditions

Stabilization Time: 29M
 Operation Time: 1H 29M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-176-7

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: SP1-2407-176-7

CIE 1931 Chromaticity Diagram



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



REPORT NUMBER: SP1-2407-176-7

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	260	NR	620	905	NR	750	22	NR	880	0	NR
365	0	NR	495	312	NR	625	856	NR	755	19	NR	885	0	NR
370	0	NR	500	362	NR	630	801	NR	760	17	NR	890	0	NR
375	0	NR	505	399	NR	635	742	NR	765	14	NR	895	0	NR
380	0	NR	510	425	NR	640	677	NR	770	12	NR	900	0	NR
385	0	NR	515	446	NR	645	613	NR	775	10	NR	905	0	NR
390	0	NR	520	459	NR	650	549	NR	780	9	NR	910	0	NR
395	0	NR	525	473	NR	655	485	NR	785	7	NR	915	0	NR
400	1	NR	530	490	NR	660	425	NR	790	6	NR	920	0	NR
405	2	NR	535	511	NR	665	371	NR	795	5	NR	925	0	NR
410	5	NR	540	535	NR	670	321	NR	800	4	NR	930	0	NR
415	11	NR	545	565	NR	675	276	NR	805	4	NR	935	0	NR
420	24	NR	550	595	NR	680	238	NR	810	3	NR	940	0	NR
425	47	NR	555	631	NR	685	203	NR	815	3	NR	945	0	NR
430	86	NR	560	672	NR	690	174	NR	820	2	NR	950	0	NR
435	144	NR	565	715	NR	695	148	NR	825	2	NR	955	0	NR
440	224	NR	570	763	NR	700	124	NR	830	2	NR	960	0	NR
445	342	NR	575	814	NR	705	105	NR	835	2	NR	965	0	NR
450	446	NR	580	866	NR	710	88	NR	840	1	NR	970	0	NR
455	357	NR	585	912	NR	715	73	NR	845	1	NR	975	0	NR
460	237	NR	590	954	NR	720	59	NR	850	1	NR	980	0	NR
465	202	NR	595	981	NR	725	48	NR	855	1	NR	985	0	NR
470	172	NR	600	996	NR	730	40	NR	860	1	NR	990	0	NR
475	152	NR	605	996	NR	735	34	NR	865	1	NR	995	0	NR
480	171	NR	610	980	NR	740	29	NR	870	0	NR	1000	0	NR
485	210	NR	615	947	NR	745	25	NR	875	0	NR			

REPORT NUMBER: SP1-2407-176-7

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.32

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	260	NR	620	905	NR	750	22	NR	880	0	NR
365	0	NR	495	312	NR	625	856	NR	755	19	NR	885	0	NR
370	0	NR	500	362	NR	630	801	NR	760	17	NR	890	0	NR
375	0	NR	505	399	NR	635	742	NR	765	14	NR	895	0	NR
380	0	NR	510	425	NR	640	677	NR	770	12	NR	900	0	NR
385	0	NR	515	446	NR	645	613	NR	775	10	NR	905	0	NR
390	0	NR	520	459	NR	650	549	NR	780	9	NR	910	0	NR
395	0	NR	525	473	NR	655	485	NR	785	7	NR	915	0	NR
400	1	NR	530	490	NR	660	425	NR	790	6	NR	920	0	NR
405	2	NR	535	511	NR	665	371	NR	795	5	NR	925	0	NR
410	5	NR	540	535	NR	670	321	NR	800	4	NR	930	0	NR
415	11	NR	545	565	NR	675	276	NR	805	4	NR	935	0	NR
420	24	NR	550	595	NR	680	238	NR	810	3	NR	940	0	NR
425	47	NR	555	631	NR	685	203	NR	815	3	NR	945	0	NR
430	86	NR	560	672	NR	690	174	NR	820	2	NR	950	0	NR
435	144	NR	565	715	NR	695	148	NR	825	2	NR	955	0	NR
440	224	NR	570	763	NR	700	124	NR	830	2	NR	960	0	NR
445	342	NR	575	814	NR	705	105	NR	835	2	NR	965	0	NR
450	446	NR	580	866	NR	710	88	NR	840	1	NR	970	0	NR
455	357	NR	585	912	NR	715	73	NR	845	1	NR	975	0	NR
460	237	NR	590	954	NR	720	59	NR	850	1	NR	980	0	NR
465	202	NR	595	981	NR	725	48	NR	855	1	NR	985	0	NR
470	172	NR	600	996	NR	730	40	NR	860	1	NR	990	0	NR
475	152	NR	605	996	NR	735	34	NR	865	1	NR	995	0	NR
480	171	NR	610	980	NR	740	29	NR	870	0	NR	1000	0	NR
485	210	NR	615	947	NR	745	25	NR	875	0	NR			

REPORT NUMBER: SP1-2407-176-7

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.51

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	260	NR	620	905	NR	750	22	NR	880	0	NR
365	0	NR	495	312	NR	625	856	NR	755	19	NR	885	0	NR
370	0	NR	500	362	NR	630	801	NR	760	17	NR	890	0	NR
375	0	NR	505	399	NR	635	742	NR	765	14	NR	895	0	NR
380	0	NR	510	425	NR	640	677	NR	770	12	NR	900	0	NR
385	0	NR	515	446	NR	645	613	NR	775	10	NR	905	0	NR
390	0	NR	520	459	NR	650	549	NR	780	9	NR	910	0	NR
395	0	NR	525	473	NR	655	485	NR	785	7	NR	915	0	NR
400	1	NR	530	490	NR	660	425	NR	790	6	NR	920	0	NR
405	2	NR	535	511	NR	665	371	NR	795	5	NR	925	0	NR
410	5	NR	540	535	NR	670	321	NR	800	4	NR	930	0	NR
415	11	NR	545	565	NR	675	276	NR	805	4	NR	935	0	NR
420	24	NR	550	595	NR	680	238	NR	810	3	NR	940	0	NR
425	47	NR	555	631	NR	685	203	NR	815	3	NR	945	0	NR
430	86	NR	560	672	NR	690	174	NR	820	2	NR	950	0	NR
435	144	NR	565	715	NR	695	148	NR	825	2	NR	955	0	NR
440	224	NR	570	763	NR	700	124	NR	830	2	NR	960	0	NR
445	342	NR	575	814	NR	705	105	NR	835	2	NR	965	0	NR
450	446	NR	580	866	NR	710	88	NR	840	1	NR	970	0	NR
455	357	NR	585	912	NR	715	73	NR	845	1	NR	975	0	NR
460	237	NR	590	954	NR	720	59	NR	850	1	NR	980	0	NR
465	202	NR	595	981	NR	725	48	NR	855	1	NR	985	0	NR
470	172	NR	600	996	NR	730	40	NR	860	1	NR	990	0	NR
475	152	NR	605	996	NR	735	34	NR	865	1	NR	995	0	NR
480	171	NR	610	980	NR	740	29	NR	870	0	NR	1000	0	NR
485	210	NR	615	947	NR	745	25	NR	875	0	NR			

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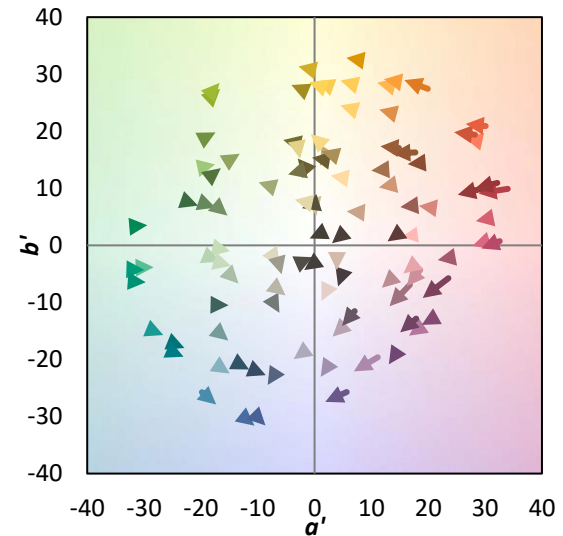
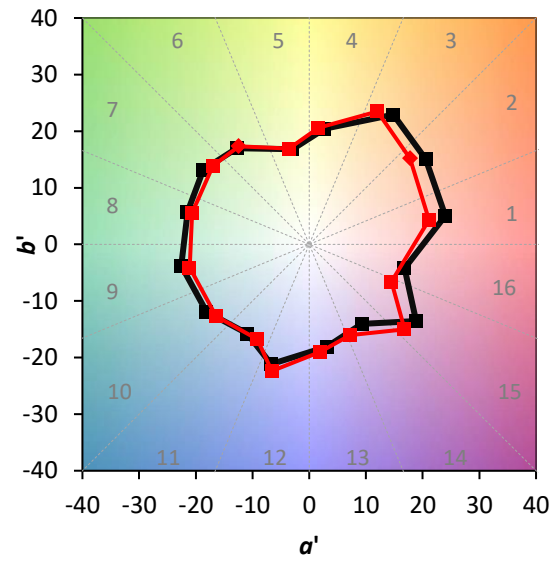
TM-30-18

Summary

$R_f = 85.8$
 $R_g = 94.1$
 $CIE R_a = 81.8$
 $R_g = -1.1$

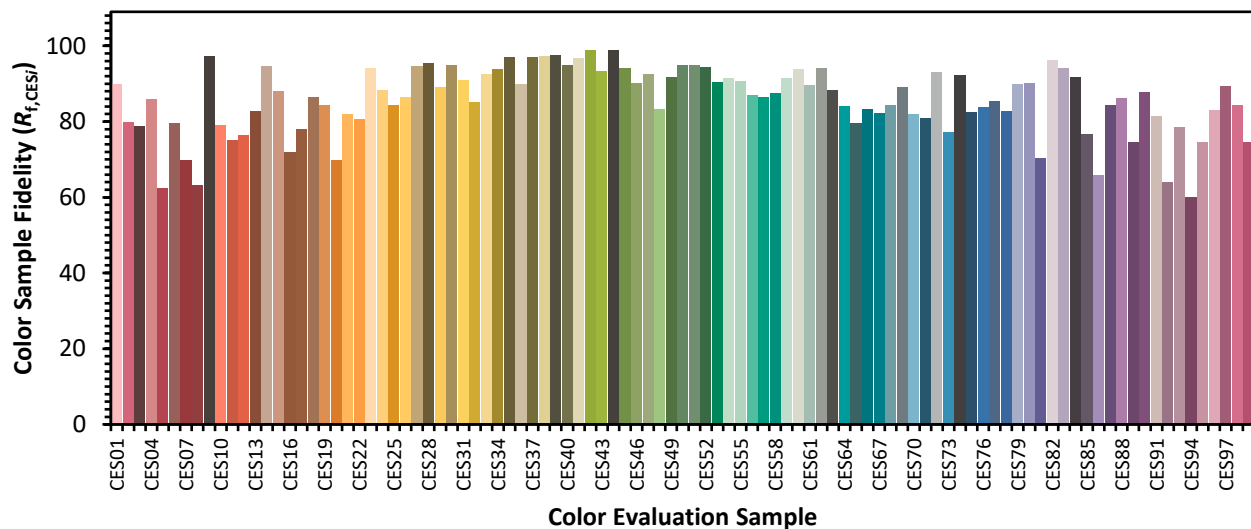


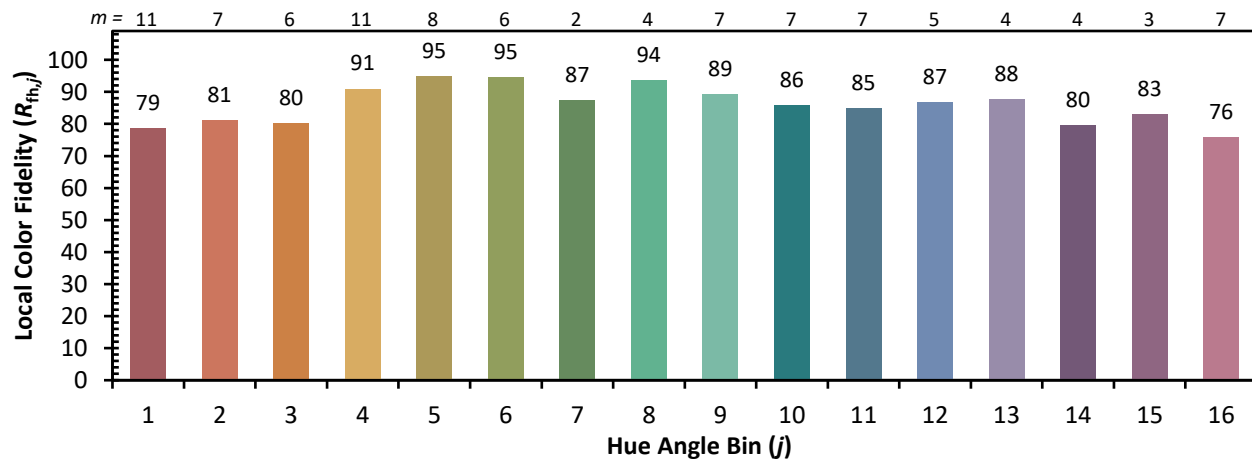
Color Vector Graphics



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

CES01 = 86	CES26 = 86	CES51 = 95	CES76 = 84
CES02 = 63	CES27 = 95	CES52 = 94	CES77 = 86
CES03 = 31	CES28 = 95	CES53 = 90	CES78 = 83
CES04 = 70	CES29 = 89	CES54 = 91	CES79 = 90
CES05 = 50	CES30 = 95	CES55 = 91	CES80 = 90
CES06 = 51	CES31 = 91	CES56 = 87	CES81 = 70
CES07 = 42	CES32 = 85	CES57 = 86	CES82 = 96
CES08 = 41	CES33 = 93	CES58 = 87	CES83 = 94
CES09 = 29	CES34 = 94	CES59 = 92	CES84 = 92
CES10 = 76	CES35 = 97	CES60 = 94	CES85 = 77
CES11 = 59	CES36 = 90	CES61 = 90	CES86 = 66
CES12 = 65	CES37 = 97	CES62 = 94	CES87 = 84
CES13 = 43	CES38 = 97	CES63 = 88	CES88 = 86
CES14 = 74	CES39 = 98	CES64 = 84	CES89 = 75
CES15 = 72	CES40 = 95	CES65 = 80	CES90 = 88
CES16 = 47	CES41 = 97	CES66 = 83	CES91 = 81
CES17 = 50	CES42 = 99	CES67 = 82	CES92 = 64
CES18 = 56	CES43 = 93	CES68 = 84	CES93 = 79
CES19 = 72	CES44 = 99	CES69 = 89	CES94 = 60
CES20 = 67	CES45 = 94	CES70 = 82	CES95 = 74
CES21 = 87	CES46 = 90	CES71 = 81	CES96 = 83
CES22 = 79	CES47 = 93	CES72 = 93	CES97 = 89
CES23 = 92	CES48 = 83	CES73 = 77	CES98 = 84
CES24 = 91	CES49 = 92	CES74 = 92	CES99 = 75
CES25 = 72	CES50 = 95	CES75 = 83	



Color Rendition by Hue-Angle Bin


Measure Comparisons



(END OF REPORT)