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: P821549

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

Issue Date: 12/2/2020

Report Generated By 670245763

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:	P821549
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2010-017-1)
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-MQ-HSS
Description:	TOPTIER LED PARKING GARAGE LUMINAIRE
	4000K, 70 CRI LEDS AND MEDIUM DISTRIBUTION WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	8478 lumens
Efficiency:	N/A
Efficacy:	116.1 lumens/watt
Luminous Opening:	Circular (Dia: 1.12' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U2 - G3

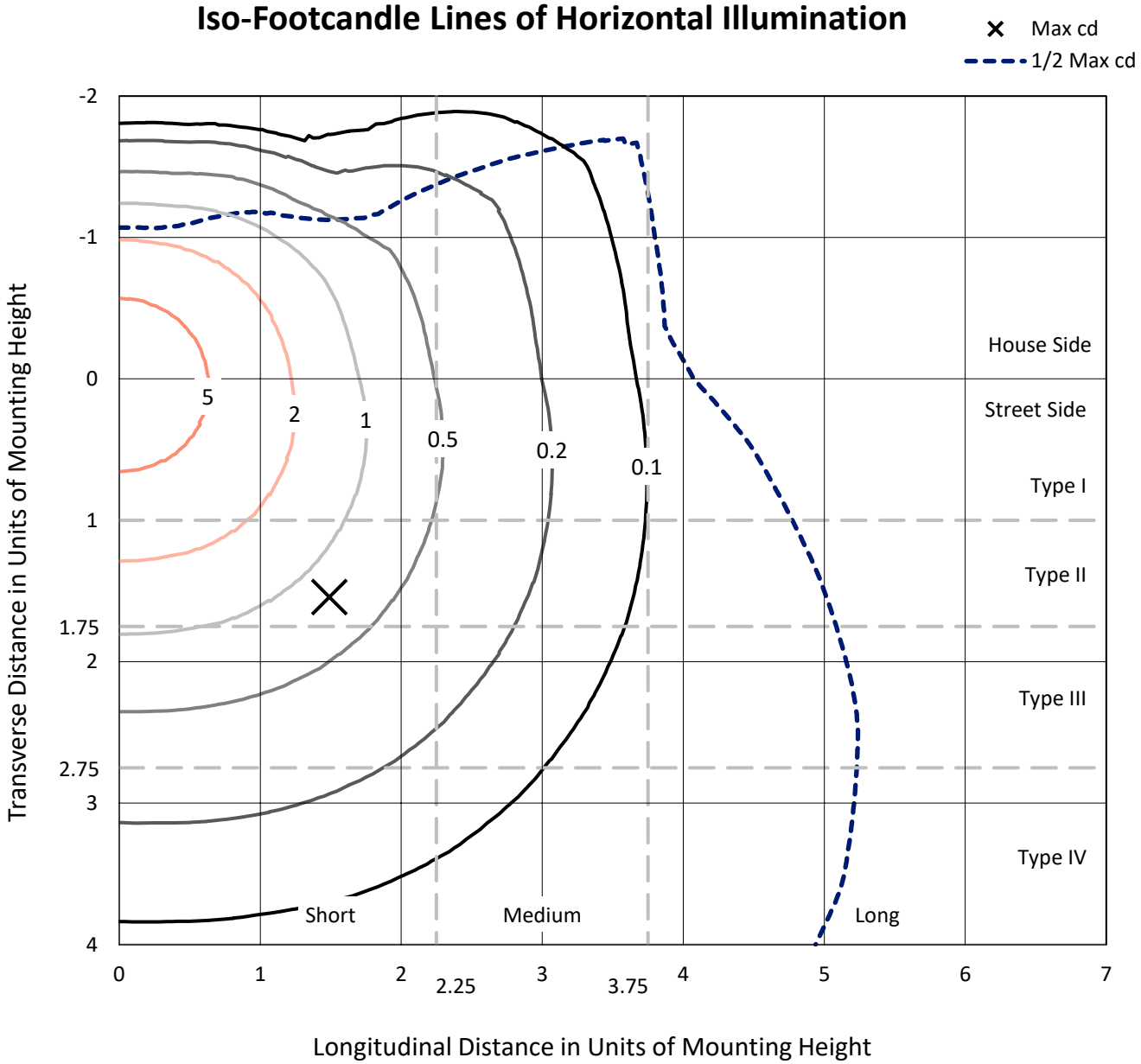
Input Watts (W):	73
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	25 FT

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Iso-Footcandle Lines of Horizontal Illumination



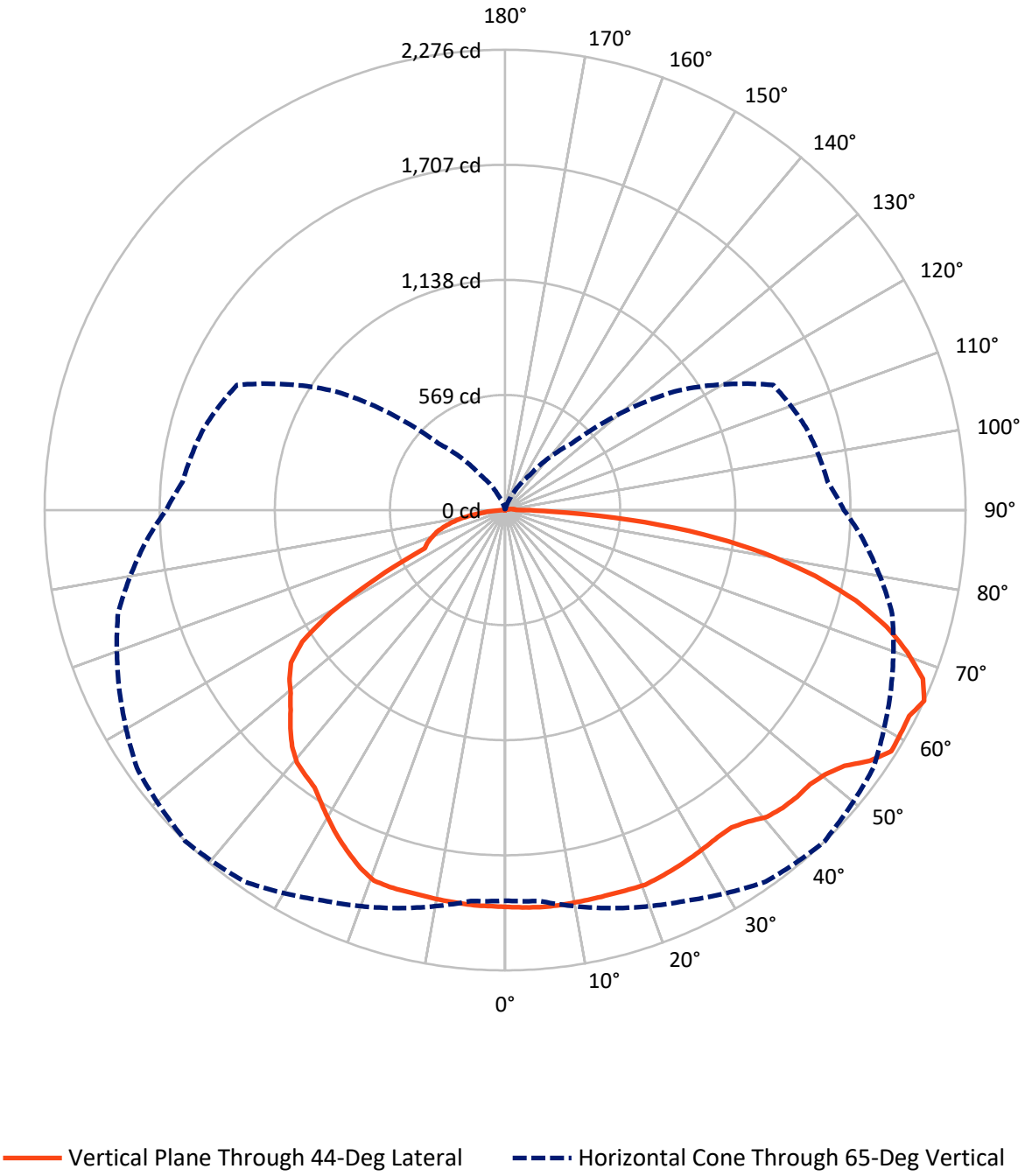
Based on 15 foot mounting height. Maximum calculated value = 8.7 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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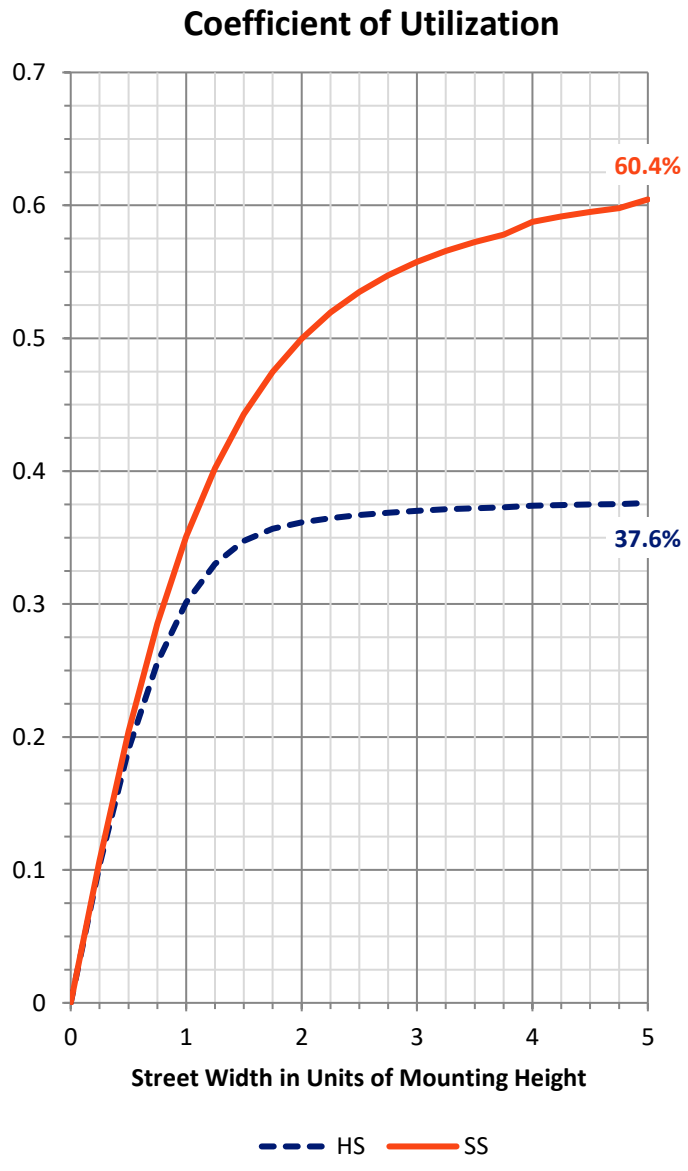
REPORT NUMBER: P821549
CATALOG NUMBER: TT-D5-740-12VDC-MQ-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3210.1	2.2	3212.4
	% Fixture	37.9	0.0	37.9
Street Side	Lumens	5236.9	28.8	5265.6
	% Fixture	61.8	0.3	62.1
Total	Lumens	8447.0	31.0	8478.0
	% Fixture	99.6	0.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.4	2.2
10°-20°	554.8	6.5
20°-30°	882.9	10.4
30°-40°	1131.2	13.3
40°-50°	1340.0	15.8
50°-60°	1467.6	17.3
60°-70°	1395.0	16.5
70°-80°	1110.7	13.1
80°-90°	377.3	4.5
90°-100°	19.9	0.2
100°-110°	6.5	0.1
110°-120°	1.4	0.0
120°-130°	0.9	0.0
130°-140°	0.7	0.0
140°-150°	0.6	0.0
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-90°	8447.0	99.6
0°-180°	8478.0	100.0



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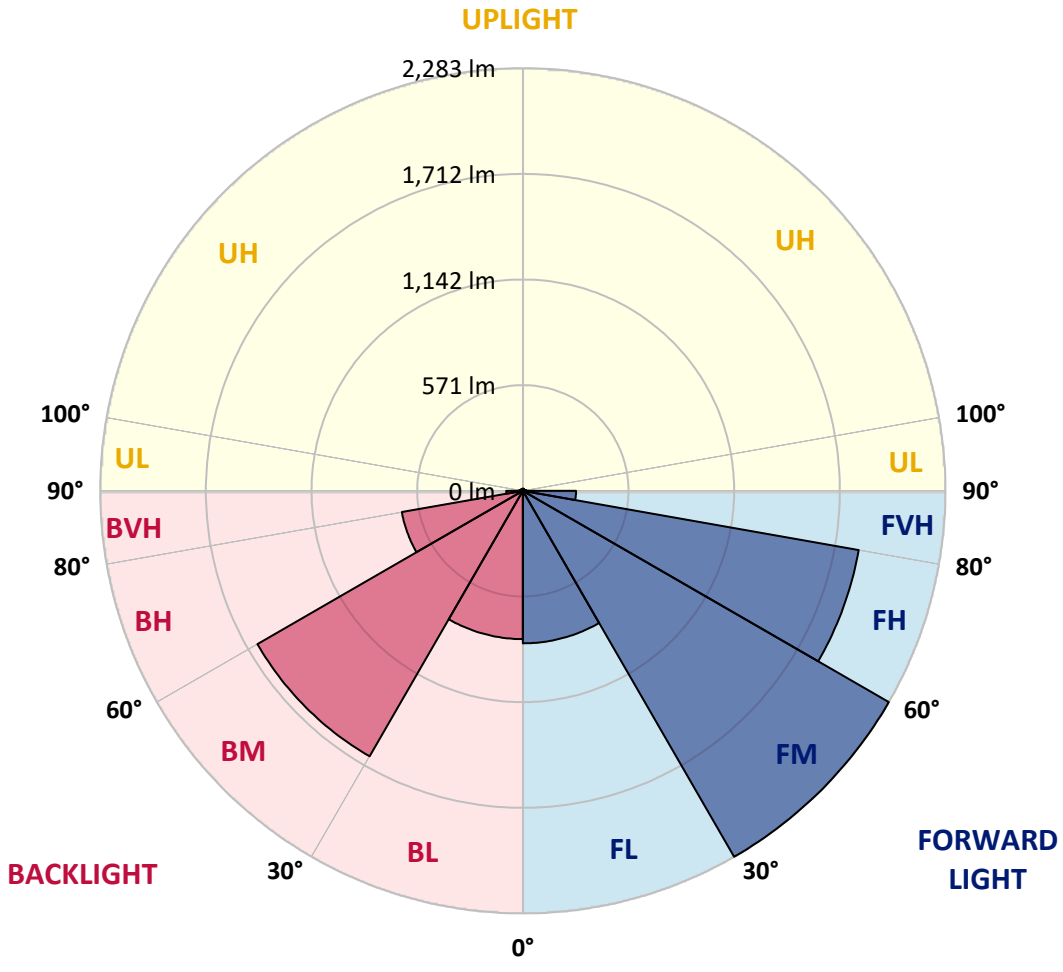
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	824.0	9.7			
FM	(30°-60°)	2283.0	26.9			
FH	(60°-80°)	1842.4	21.7			G2/5000
FVH	(80°-90°)	287.4	3.4			G3/500
BL	(0°-30°)	801.0	9.4	B2/1000		
BM	(30°-60°)	1655.8	19.5	B2/2500		
BH	(60°-80°)	663.4	7.8	B2/1000		G2/1000
BVH	(80°-90°)	89.9	1.1			G1/100
UL	(90°-100°)	19.9	0.2		U2/50	
UH	(100°-180°)	11.1	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°	1962.6	1962.6	1962.6	1962.6	1962.6	*1962.6*	1962.6	1962.6	1962.6	1962.6	1962.6
2.5°	1970.1	1968.6	1968.6	1968.6	1968.6	*1967.1*	1968.6	1965.6	1967.1	1962.6	1962.6
5°	1974.6	1971.6	1973.1	1973.1	1973.1	*1971.6*	1973.1	1968.6	1970.1	1964.1	1962.6
7.5°	1976.1	1974.6	1974.6	1974.6	1974.6	*1971.6*	1973.1	1970.1	1968.6	1964.1	1961.1
10°	1976.1	1974.6	1974.6	1974.6	1973.1	*1970.1*	1971.6	1967.1	1967.1	1961.1	1958.1
12.5°	1976.1	1974.6	1976.1	1973.1	1973.1	*1970.1*	1970.1	1965.6	1965.6	1958.1	1955.1
15°	1974.6	1973.1	1973.1	1974.6	1973.1	*1970.1*	1970.1	1965.6	1964.1	1955.1	1952.1
17.5°	1973.1	1971.6	1973.1	1974.6	1976.1	*1973.1*	1974.6	1967.1	1964.1	1955.1	1950.6
20°	1974.6	1973.1	1974.6	1977.6	1977.6	*1977.6*	1977.6	1970.1	1964.1	1955.1	1947.6
22.5°	1970.1	1970.1	1970.1	1970.1	1973.1	*1968.6*	1968.6	1964.1	1956.6	1949.1	1941.6
25°	1959.6	1959.6	1961.1	1962.6	1962.6	*1959.6*	1958.1	1953.6	1947.6	1938.6	1929.6
27.5°	1947.6	1947.6	1949.1	1949.1	1952.1	*1949.1*	1947.6	1941.6	1935.6	1925.1	1914.7
30°	1934.1	1934.1	1934.1	1937.1	1938.6	*1938.6*	1937.1	1929.6	1922.1	1910.2	1896.7
32.5°	1919.2	1919.2	1923.6	1926.6	1928.1	*1928.1*	1928.1	1919.2	1910.2	1895.2	1875.7
35°	1907.2	1907.2	1913.2	1923.6	1929.6	*1926.6*	1925.1	1919.2	1905.7	1889.2	1857.7
37.5°	1914.7	1914.7	1928.1	1943.1	1956.6	*1953.6*	1953.6	1943.1	1925.1	1898.2	1859.2
40°	1932.6	1934.1	1955.1	1974.6	1991.1	*1994.1*	1994.1	1982.1	1955.1	1920.6	1866.7
42.5°	1937.1	1940.1	1961.1	1989.6	2004.5	*2012.0*	2012.0	1995.6	1967.1	1926.6	1863.7
45°	1937.1	1938.6	1962.6	1992.6	2016.5	*2022.5*	2022.5	2004.5	1968.6	1929.6	1853.2
47.5°	1937.1	1935.6	1956.6	1998.6	2022.5	*2027.0*	2027.0	2007.5	1973.1	1923.6	1838.3
50°	1932.6	1940.1	1971.6	2004.5	2046.5	*2052.5*	2051.0	2030.0	1982.1	1931.1	1826.3
52.5°	1943.1	1941.6	1983.6	2049.5	2086.9	*2100.4*	2101.9	2075.0	2025.5	1952.1	1818.8
55°	1986.6	1988.1	2028.5	2104.9	2161.9	*2187.3*	2184.3	2149.9	2079.5	1994.1	1839.7
57.5°	2001.6	2016.5	2075.0	2140.9	2227.8	*2250.2*	2250.2	2208.3	2122.9	2027.0	1854.7
60°	1971.6	1977.6	2049.5	2161.9	2241.3	*2245.8*	2247.3	2217.3	2127.4	2009.0	1824.8
62.5°	1964.1	1976.1	2031.5	2157.4	2208.3	*2241.3*	2239.8	2199.3	2122.9	1995.6	1814.3
65°	*1931.1*	*1940.1*	*2037.5*	*2130.4*	*2242.8*	*2275.7*	*2268.2*	*2221.8*	*2103.4*	*1980.6*	*1781.3*
67.5°	1863.7	1872.7	1962.6	2092.9	2194.8	*2226.3*	2233.8	2179.8	2057.0	1910.2	1710.9
70°	1751.4	1764.8	1856.2	1983.6	2091.4	*2109.4*	2106.4	2073.5	1950.6	1793.3	1607.5
72.5°	1594.0	1615.0	1730.4	1851.7	1944.6	*1971.6*	1959.6	1922.1	1821.8	1652.5	1466.7
75°	1427.8	1447.2	1538.6	1675.0	1772.3	*1790.3*	1781.3	1736.4	1634.5	1468.2	1300.4
77.5°	1246.5	1263.0	1340.9	1480.2	1552.1	*1567.1*	1571.6	1511.7	1415.8	1266.0	1116.1
80°	1002.3	1009.8	1114.6	1206.0	1268.9	*1298.9*	1295.9	1251.0	1155.1	1030.7	880.9
82.5°	740.1	746.1	827.0	904.9	961.8	*988.8*	973.8	928.9	852.5	746.1	632.2
85°	453.9	443.5	509.4	567.8	602.3	*620.2*	605.3	579.8	512.4	428.5	349.1
87.5°	163.3	154.3	184.3	193.3	232.2	*226.2*	239.7	193.3	155.8	110.9	77.9
90°	71.9	71.9	70.4	67.4	61.4	*55.4*	53.9	44.9	33.0	21.0	7.5
92.5°	65.9	65.9	64.4	61.4	55.4	*49.4*	49.4	40.5	30.0	19.5	7.5
95°	55.4	55.4	53.9	50.9	46.4	*41.9*	41.9	33.0	25.5	16.5	6.0
97.5°	43.4	43.4	41.9	40.5	36.0	*33.0*	33.0	27.0	19.5	12.0	4.5
100°	33.0	33.0	31.5	30.0	28.5	*25.5*	24.0	19.5	15.0	9.0	3.0
102.5°	24.0	24.0	24.0	22.5	19.5	*18.0*	18.0	15.0	10.5	7.5	3.0
105°	16.5	16.5	16.5	15.0	13.5	*12.0*	12.0	10.5	7.5	4.5	1.5
107.5°	10.5	10.5	10.5	10.5	9.0	*7.5*	7.5	6.0	4.5	3.0	1.5
110°	6.0	4.5	6.0	6.0	6.0	*4.5*	4.5	3.0	3.0	1.5	1.5

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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	3.0	*1.5*	1.5	1.5	1.5	1.5	1.5
117.5°	0.0	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	0.0	1.5	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
125°	0.0	0.0	0.0	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	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
140°	0.0	1.5	1.5	0.0	0.0	*1.5*	1.5	1.5	1.5	1.5	1.5
142.5°	1.5	1.5	1.5	1.5	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
145°	1.5	1.5	1.5	1.5	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
147.5°	1.5	1.5	0.0	0.0	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
150°	1.5	1.5	1.5	0.0	0.0	*1.5*	1.5	1.5	1.5	1.5	1.5
152.5°	1.5	1.5	1.5	1.5	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
155°	1.5	1.5	1.5	1.5	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
157.5°	1.5	1.5	1.5	0.0	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
160°	1.5	1.5	1.5	1.5	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
162.5°	1.5	1.5	1.5	1.5	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
165°	1.5	1.5	1.5	1.5	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
167.5°	1.5	1.5	1.5	1.5	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
170°	1.5	1.5	1.5	1.5	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
172.5°	1.5	1.5	1.5	1.5	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
175°	1.5	1.5	1.5	1.5	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
177.5°	1.5	1.5	1.5	1.5	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5
180°	1.5	1.5	1.5	1.5	1.5	*1.5*	1.5	1.5	1.5	1.5	1.5

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1962.6	1962.6	1962.6	1962.6	1962.6	1962.6	1962.6	1962.6	1962.6	1962.6	1962.6
2.5°	1962.6	1961.1	1959.6	1961.1	1959.6	1959.6	1958.1	1958.1	1956.6	1956.6	1955.1
5°	1962.6	1961.1	1959.6	1961.1	1958.1	1959.6	1959.6	1958.1	1956.6	1955.1	1953.6
7.5°	1961.1	1961.1	1958.1	1959.6	1956.6	1956.6	1955.1	1955.1	1953.6	1953.6	1952.1
10°	1958.1	1956.6	1956.6	1956.6	1953.6	1953.6	1952.1	1950.6	1950.6	1949.1	1947.6
12.5°	1955.1	1953.6	1952.1	1952.1	1950.6	1949.1	1947.6	1947.6	1946.1	1944.6	1943.1
15°	1950.6	1949.1	1949.1	1949.1	1947.6	1947.6	1946.1	1944.6	1941.6	1940.1	1938.6
17.5°	1949.1	1947.6	1949.1	1949.1	1947.6	1949.1	1946.1	1943.1	1940.1	1938.6	1937.1
20°	1947.6	1947.6	1947.6	1946.1	1944.6	1943.1	1941.6	1940.1	1938.6	1937.1	1935.6
22.5°	1940.1	1938.6	1935.6	1926.6	1916.2	1908.7	1907.2	1910.2	1910.2	1910.2	1905.7
25°	1926.6	1922.1	1910.2	1893.7	1875.7	1863.7	1856.2	1856.2	1854.7	1851.7	1850.2
27.5°	1910.2	1901.2	1880.2	1859.2	1833.8	1818.8	1800.8	1790.3	1785.8	1784.3	1781.3
30°	1887.7	1874.2	1847.2	1820.3	1788.8	1767.8	1739.4	1721.4	1710.9	1706.4	1703.4
32.5°	1860.7	1847.2	1815.8	1782.8	1745.4	1715.4	1679.4	1651.0	1631.5	1622.5	1618.0
35°	1842.7	1823.3	1787.3	1748.4	1710.9	1667.5	1624.0	1585.1	1555.1	1544.6	1538.6
37.5°	1835.3	1817.3	1778.3	1739.4	1697.4	1645.0	1594.0	1538.6	1498.2	1480.2	1474.2
40°	1839.7	1817.3	1773.8	1731.9	1682.4	1624.0	1556.6	1487.7	1435.2	1409.8	1403.8
42.5°	1829.3	1803.8	1752.9	1707.9	1646.5	1580.6	1498.2	1418.8	1348.4	1327.4	1318.4
45°	1811.3	1779.8	1724.4	1667.5	1603.0	1522.1	1436.7	1334.9	1251.0	1225.5	1218.0
47.5°	1793.3	1749.9	1683.9	1631.5	1553.6	1459.2	1358.8	1245.0	1140.1	1114.6	1110.1
50°	1766.3	1725.9	1655.5	1594.0	1514.6	1405.3	1291.4	1149.1	1030.7	987.3	975.3
52.5°	1754.4	1701.9	1634.5	1586.6	1490.7	1366.3	1222.5	1069.7	898.9	845.0	833.0
55°	1766.3	1700.4	1628.5	1582.1	1471.2	1316.9	1140.1	945.3	747.6	690.7	674.2
57.5°	1745.4	1688.4	1616.5	1564.1	1420.3	1215.0	1020.3	770.1	564.8	491.4	485.4
60°	1718.4	1637.5	1570.1	1522.1	1313.9	1023.2	794.0	548.3	340.1	277.2	265.2
62.5°	1707.9	1624.0	1546.1	1487.7	1171.6	752.1	483.9	277.2	140.8	98.9	89.9
65°	*1675.0*	*1600.0*	*1544.6*	*1462.2*	*1023.2*	*464.4*	*208.2*	*82.4*	*6.0*	*4.5*	*4.5*
67.5°	1612.0	1535.6	1498.2	1450.2	1008.3	443.5	188.8	74.9	3.0	0.0	0.0
70°	1504.2	1444.2	1418.8	1393.3	964.8	410.5	172.3	67.4	1.5	0.0	0.0
72.5°	1361.8	1321.4	1316.9	1313.9	901.9	379.0	154.3	59.9	1.5	0.0	0.0
75°	1219.5	1170.1	1177.6	1195.5	824.0	335.6	133.3	52.4	1.5	0.0	0.0
77.5°	1039.7	1003.8	1021.7	1051.7	722.1	284.7	109.4	41.9	1.5	0.0	0.0
80°	818.0	794.0	834.5	861.4	590.3	226.2	82.4	30.0	0.0	0.0	0.0
82.5°	581.3	567.8	605.3	639.7	439.0	160.3	56.9	19.5	0.0	0.0	0.0
85°	313.1	305.6	341.6	379.0	263.7	91.4	28.5	9.0	0.0	0.0	0.0
87.5°	77.9	71.9	73.4	88.4	64.4	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	1.5	0.0	0.0	0.0	0.0	0.0
102.5°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.5	1.5	1.5	1.5	0.0	0.0	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: P821549
CATALOG NUMBER: TT-D5-740-12VDC-MQ-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	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	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	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.5	1.5	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°	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
162.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
165°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
167.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
170°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
172.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
175°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
177.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
180°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

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

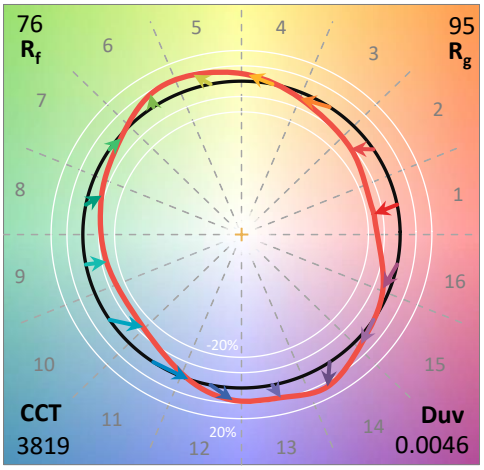
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

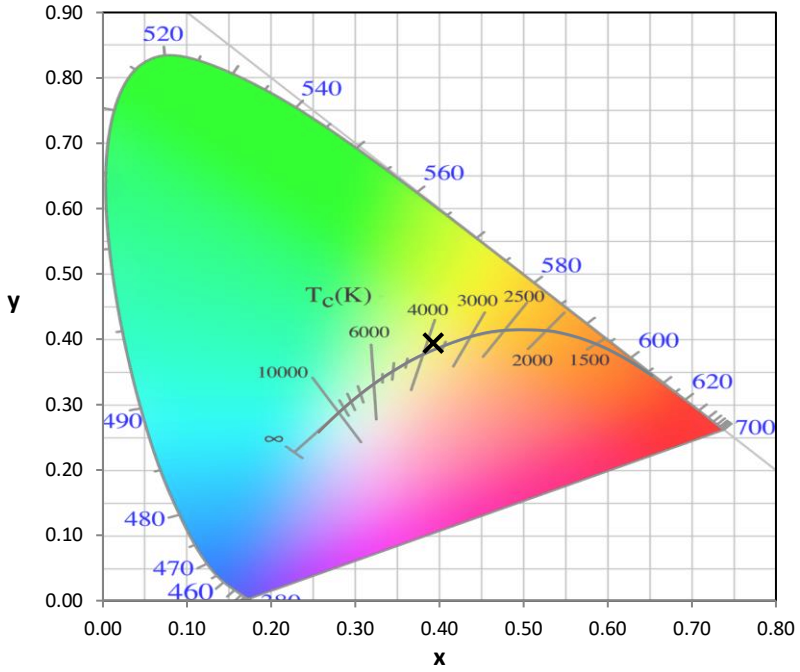
Stabilization Time:	30M
Operation Time:	1H 30M
Sphere Temperature (°C):	25.2

REPORT NUMBER: SP1-2407-176-5

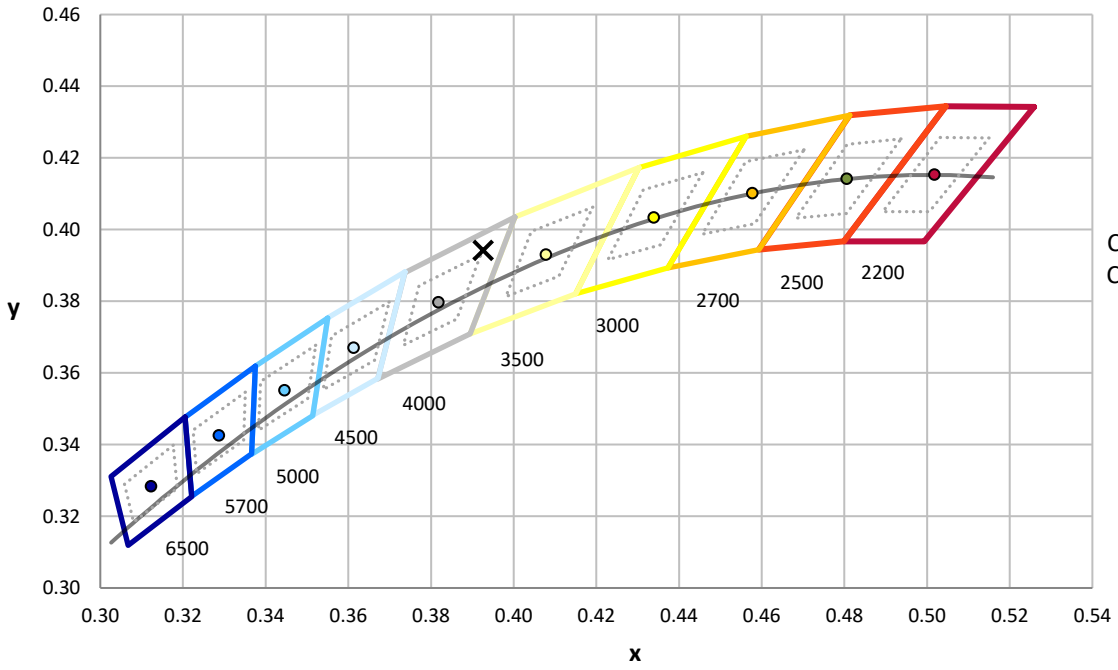
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

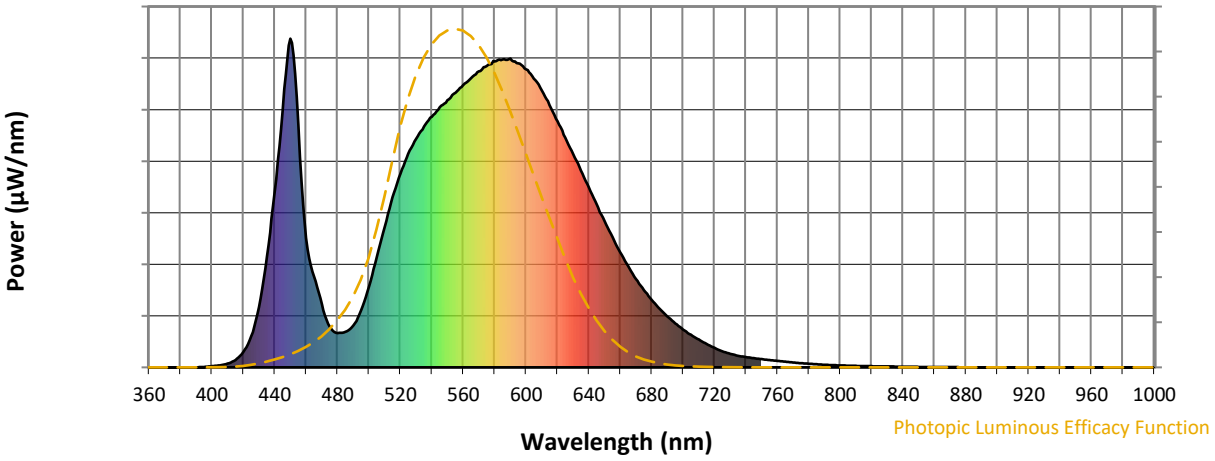


CCT = 3819K
CIE x = 0.3926
CIE y = 0.3942
Duv = 0.0046

Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP1-2407-176-5

Photopic Flux vs. Wavelength

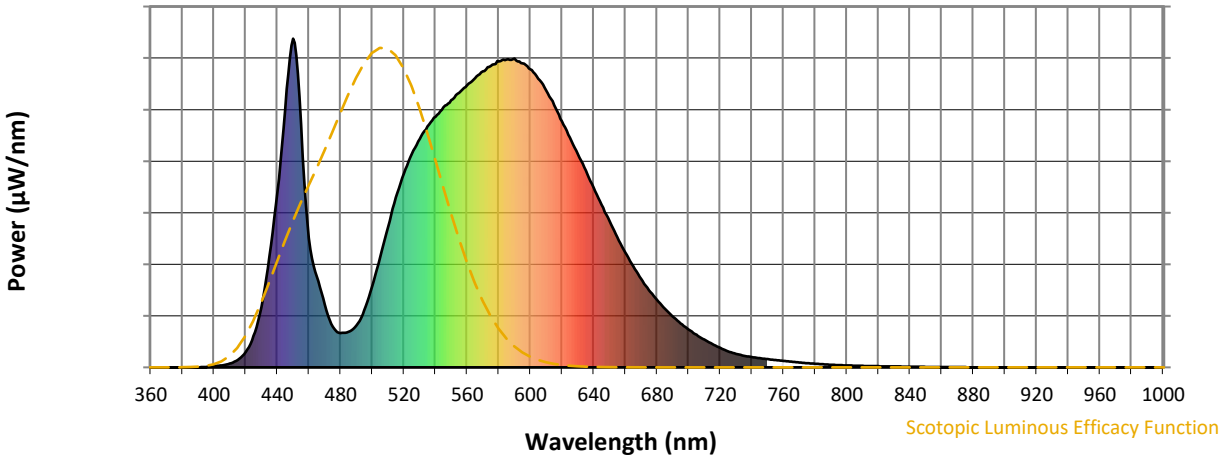


Photopic Lumens: NR

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

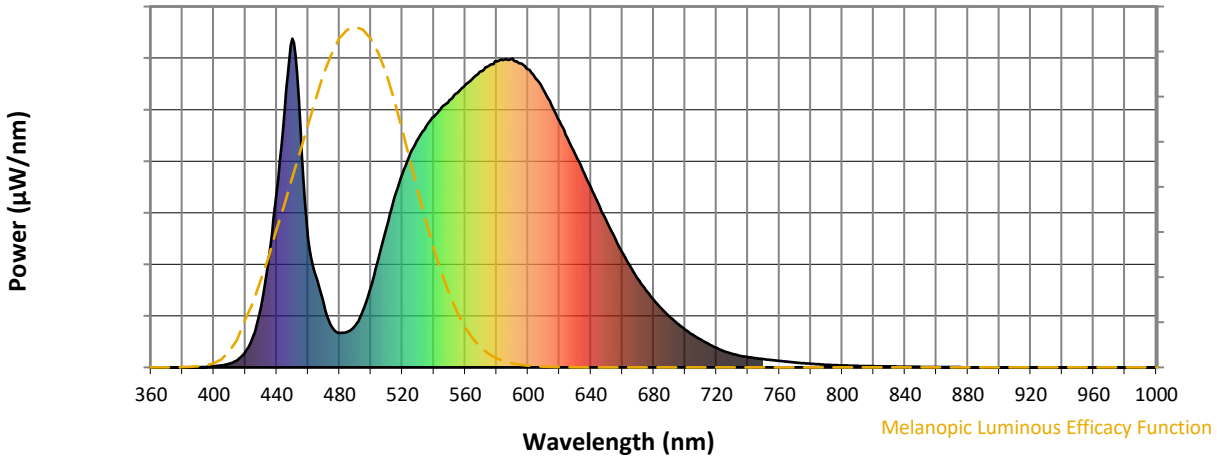


Scotopic Lumens: NR **S/P: 1.45**

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			

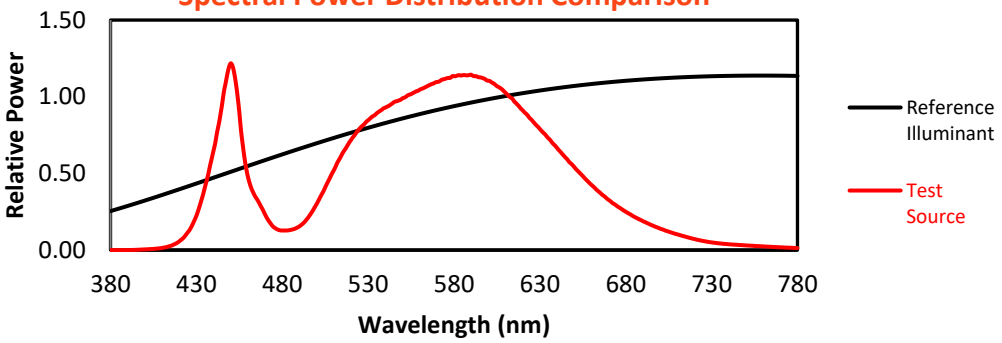
REPORT NUMBER: SP1-2407-176-5

TM-30-18

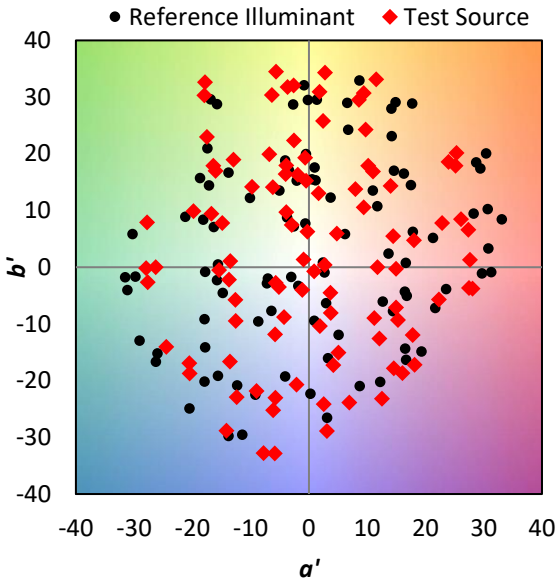
Summary

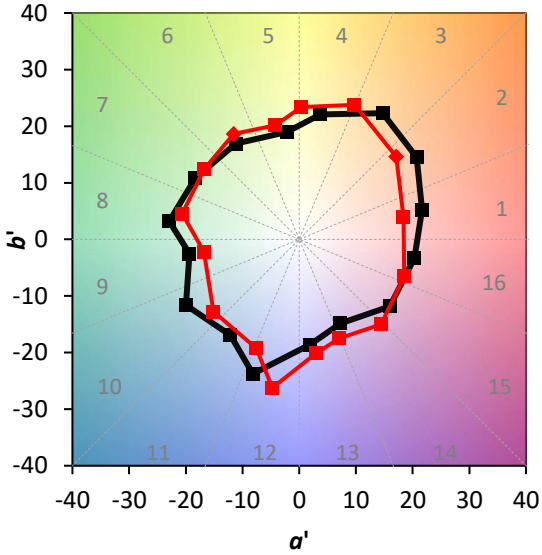
R_f = 75.6
R_g = 94.8
CIE R_a = 72.9
R_9 = -21.5

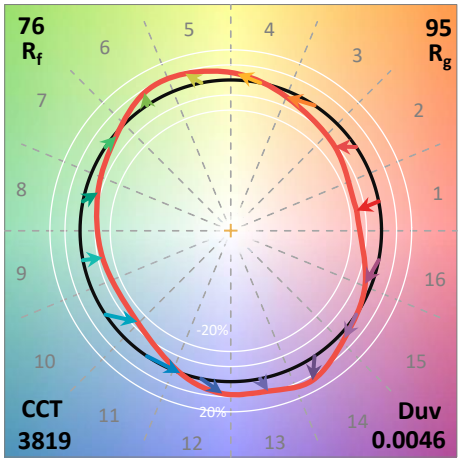
Spectral Power Distribution Comparison

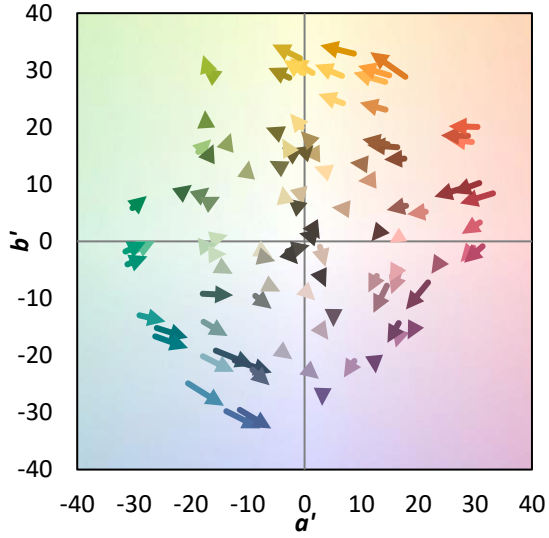


Color Vector Graphics







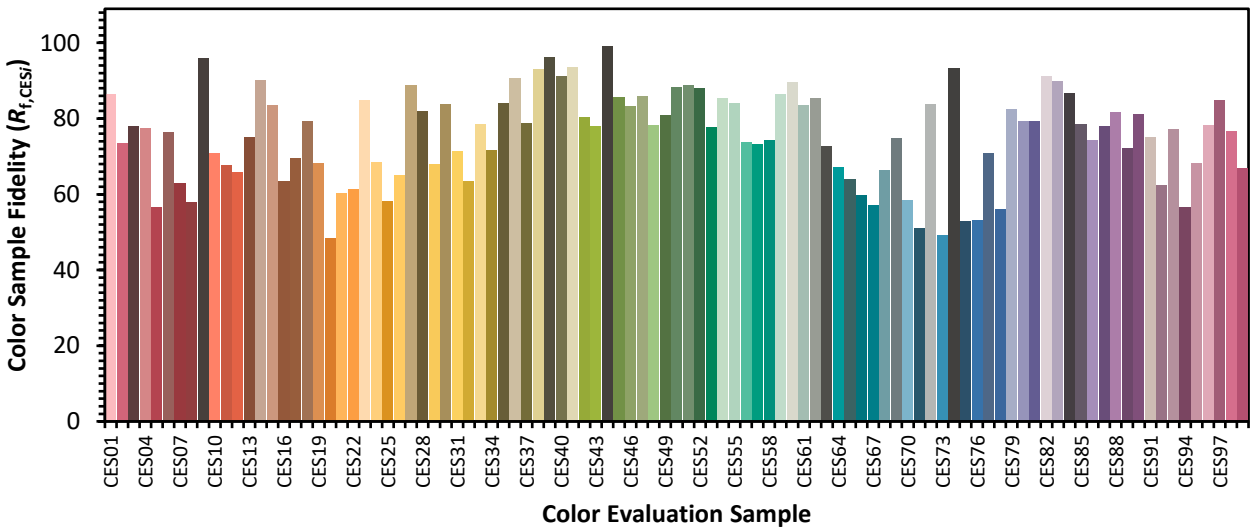


REPORT NUMBER: SP1-2407-176-5

TM-30-18

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

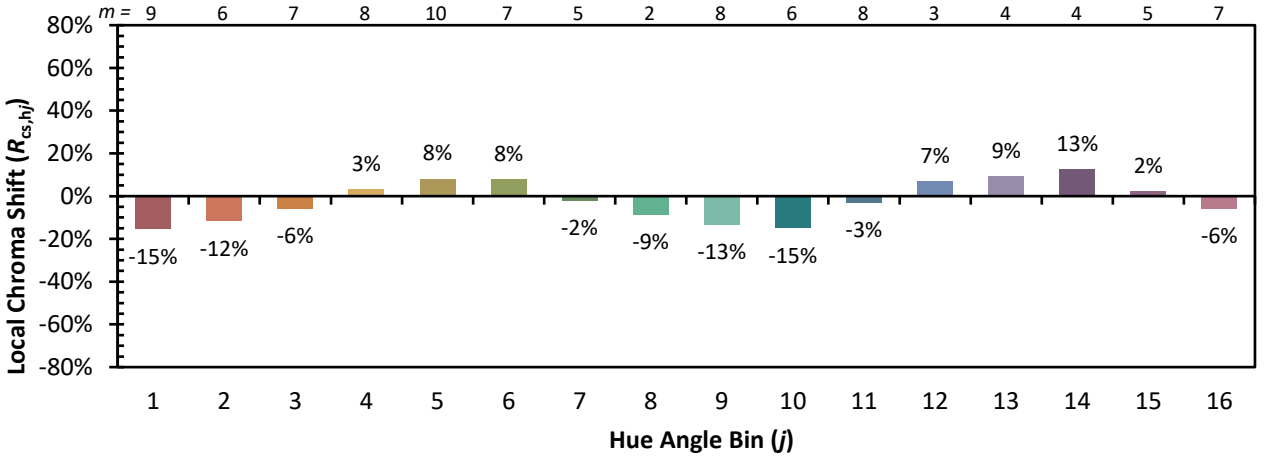
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CES02 = 61	CES27 = 89	CES52 = 88	CES77 = 71
CES03 = 30	CES28 = 82	CES53 = 78	CES78 = 56
CES04 = 70	CES29 = 68	CES54 = 85	CES79 = 83
CES05 = 48	CES30 = 84	CES55 = 84	CES80 = 79
CES06 = 50	CES31 = 71	CES56 = 74	CES81 = 79
CES07 = 40	CES32 = 63	CES57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

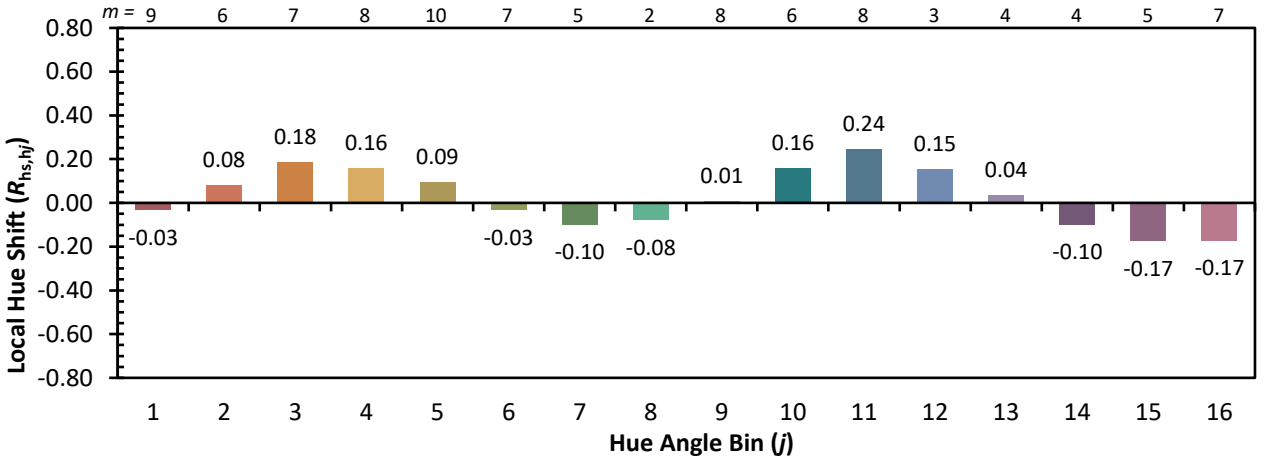


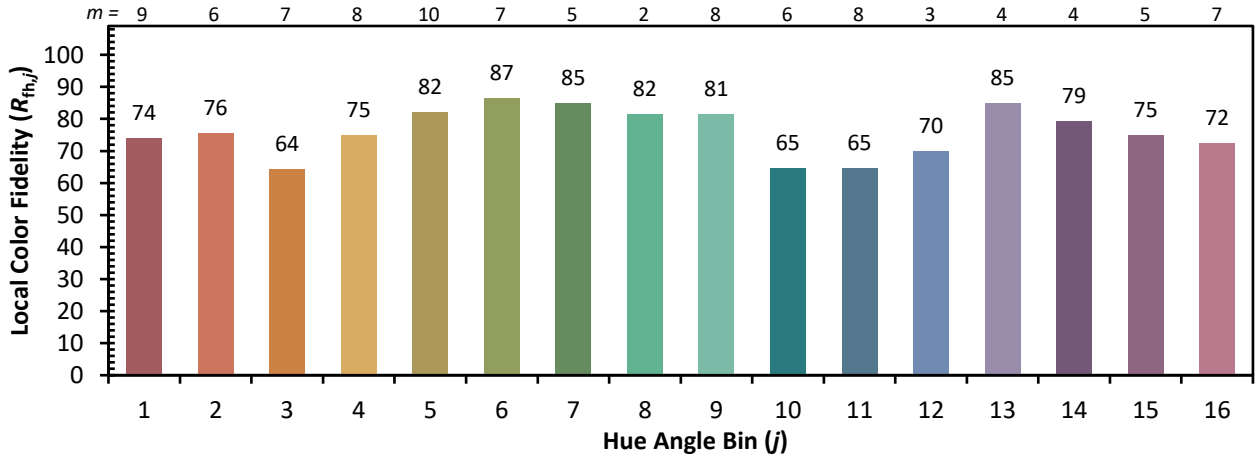
REPORT NUMBER: SP1-2407-176-5

TM-30-18

Color Rendition by Hue-Angle Bin



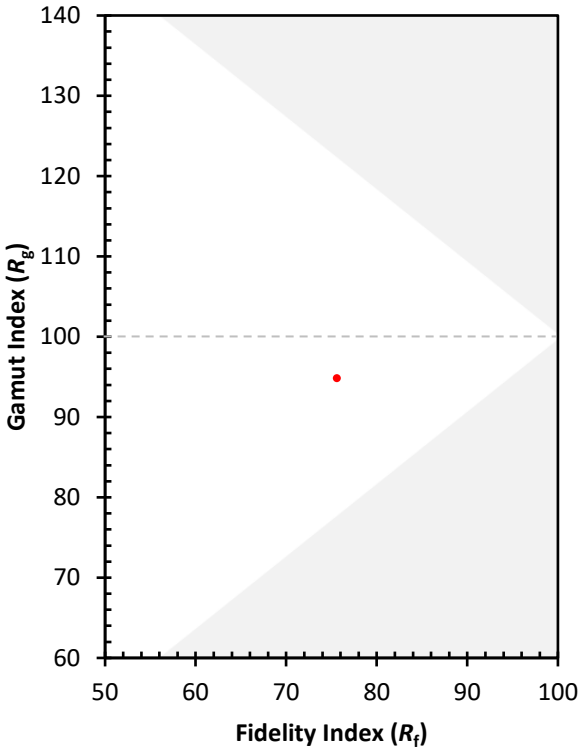


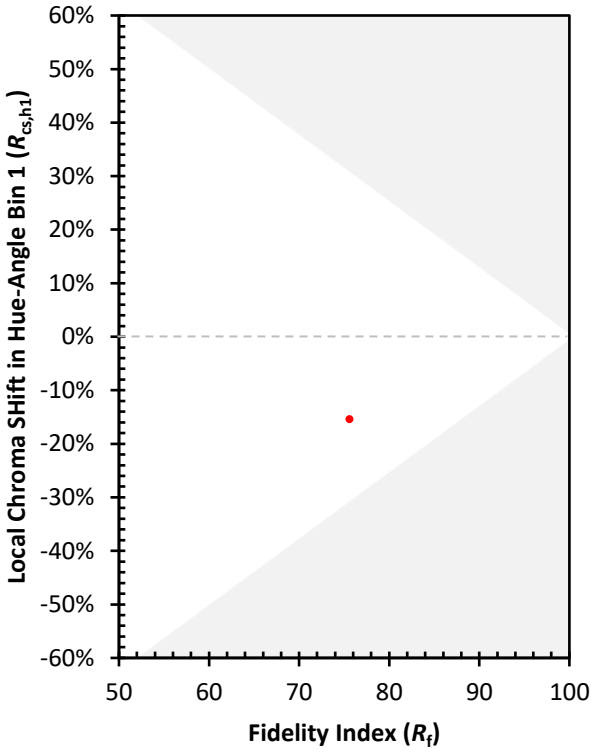


REPORT NUMBER: SP1-2407-176-5

TM-30-18

Measure Comparisons





(END OF REPORT)