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: LUMARK

Report Number: P1449788

Luminaire Tested: **AXCS4ARL-C**

Issue Date: 5/12/2026

Report Generated By 670246072

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:	P1449788
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-196-6)
Test Lab:	INNOVATION CENTER
Issue Date:	5/12/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	LUMARK
Catalog Number:	AXCS4ARL-C
Description:	4A AXCENT LED REFRACTIVE LENS WALLPACK WITH 5000K 70CRI LEDS
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5832 lumens
Efficiency:	N/A
Efficacy:	155.1 lumens/watt
Luminous Opening:	Rectangular w/ Sides (W: 0.17' x L: 0.5' x H: 0.17')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U4 - G3

Input Watts (W):	37.6
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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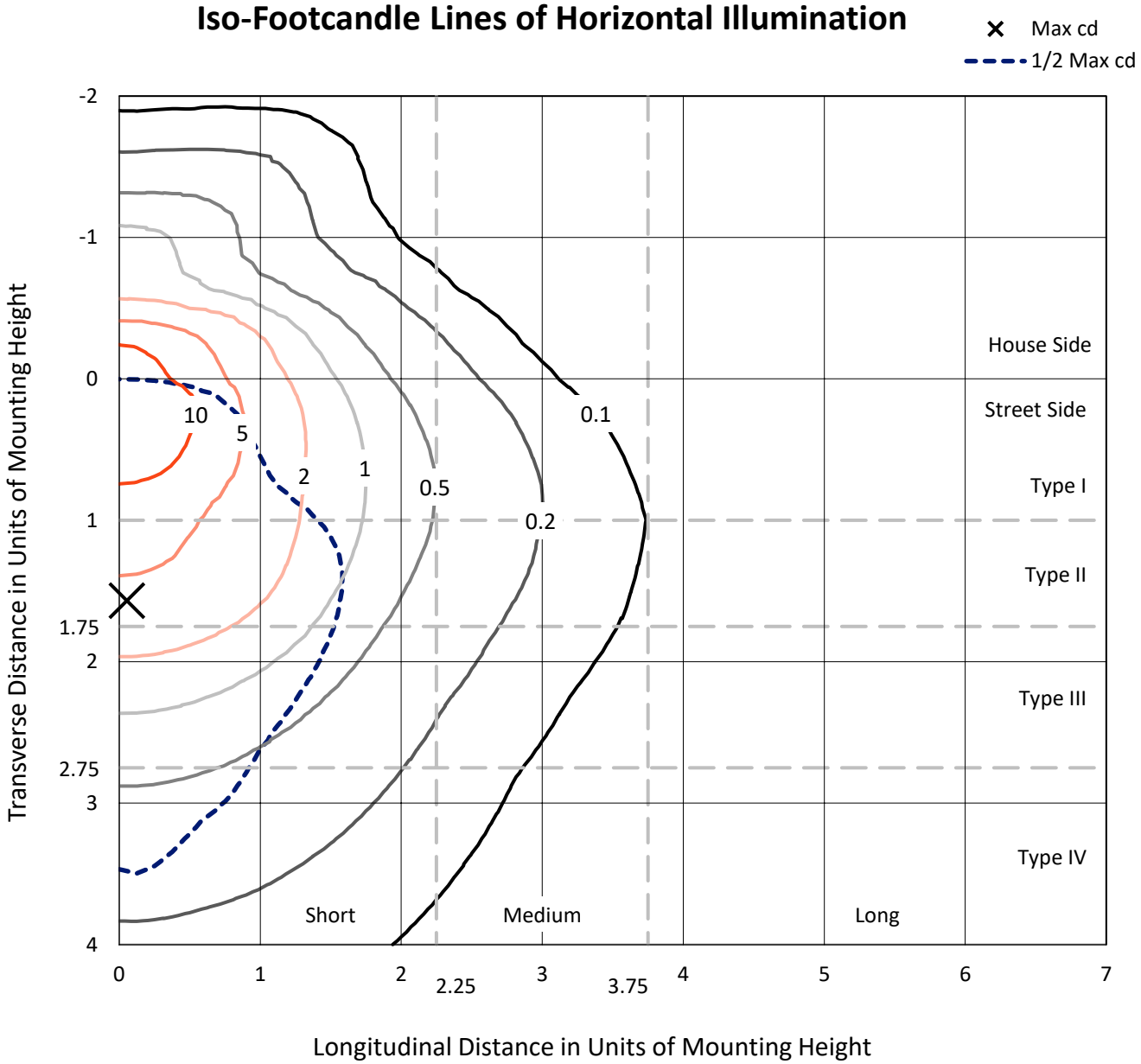
Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 17.1 fc
Type IV - Short - N/A

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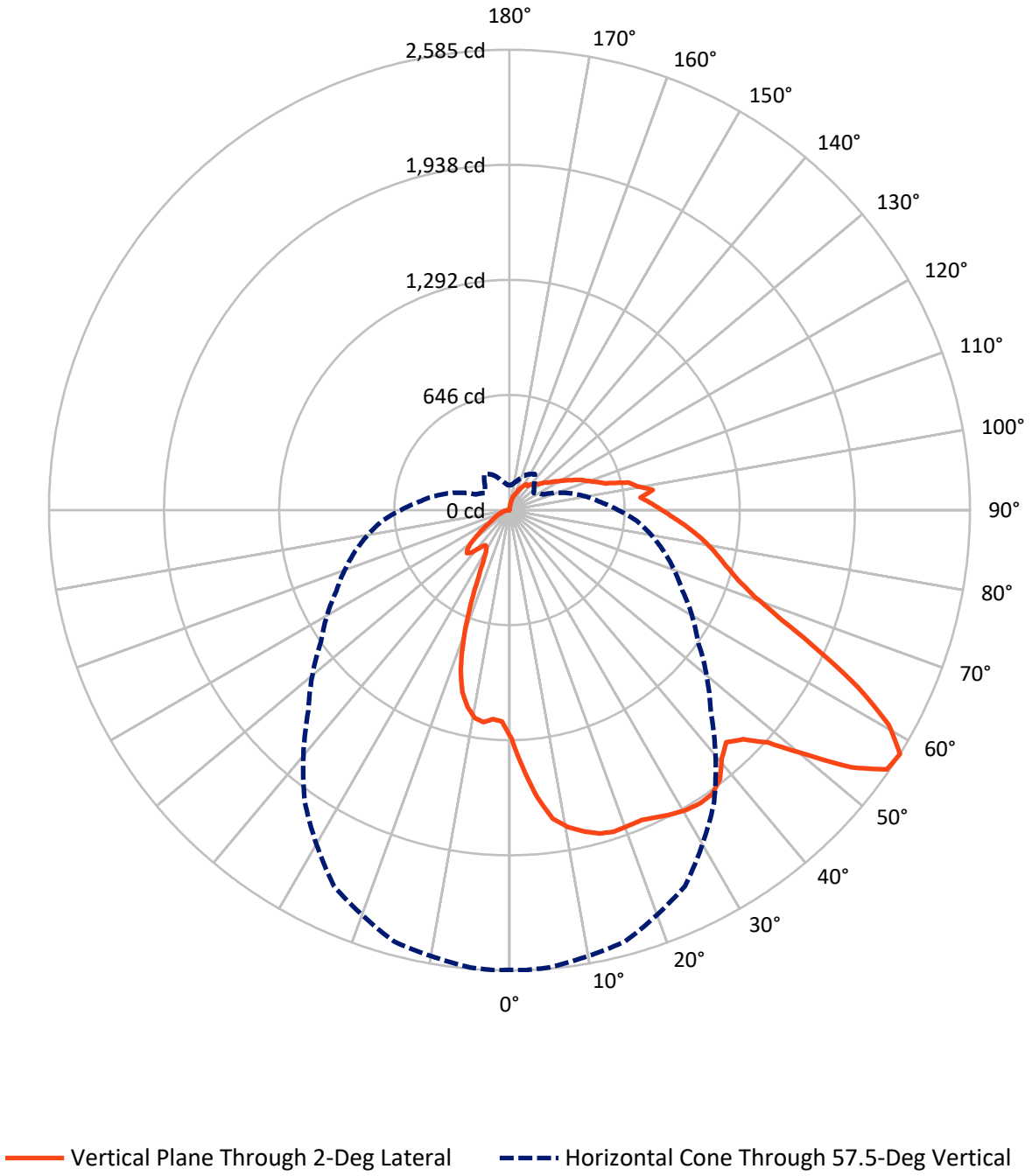
Luminous Intensity Polar Plot



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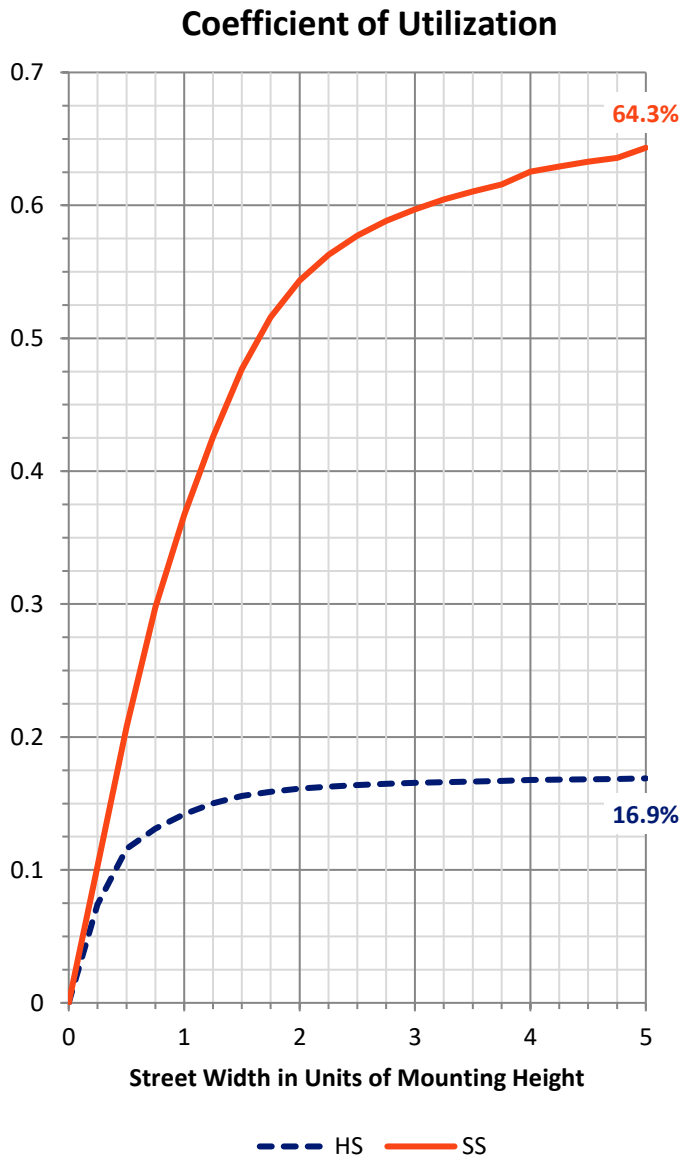
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1005.3	74.8	1080.1
	% Fixture	17.2	1.3	18.5
Street Side	Lumens	3973.8	778.2	4752.0
	% Fixture	68.1	13.3	81.5
Total	Lumens	4979.1	853.0	5832.0
	% Fixture	85.4	14.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.6	2.2
10°-20°	398.0	6.8
20°-30°	578.7	9.9
30°-40°	684.0	11.7
40°-50°	744.7	12.8
50°-60°	851.6	14.6
60°-70°	739.2	12.7
70°-80°	496.1	8.5
80°-90°	356.3	6.1
90°-100°	274.9	4.7
100°-110°	205.3	3.5
110°-120°	141.1	2.4
120°-130°	95.5	1.6
130°-140°	65.1	1.1
140°-150°	42.0	0.7
150°-160°	21.3	0.4
160°-170°	7.2	0.1
170°-180°	0.6	0.0
0°-90°	4979.1	85.4
0°-180°	5832.0	100.0



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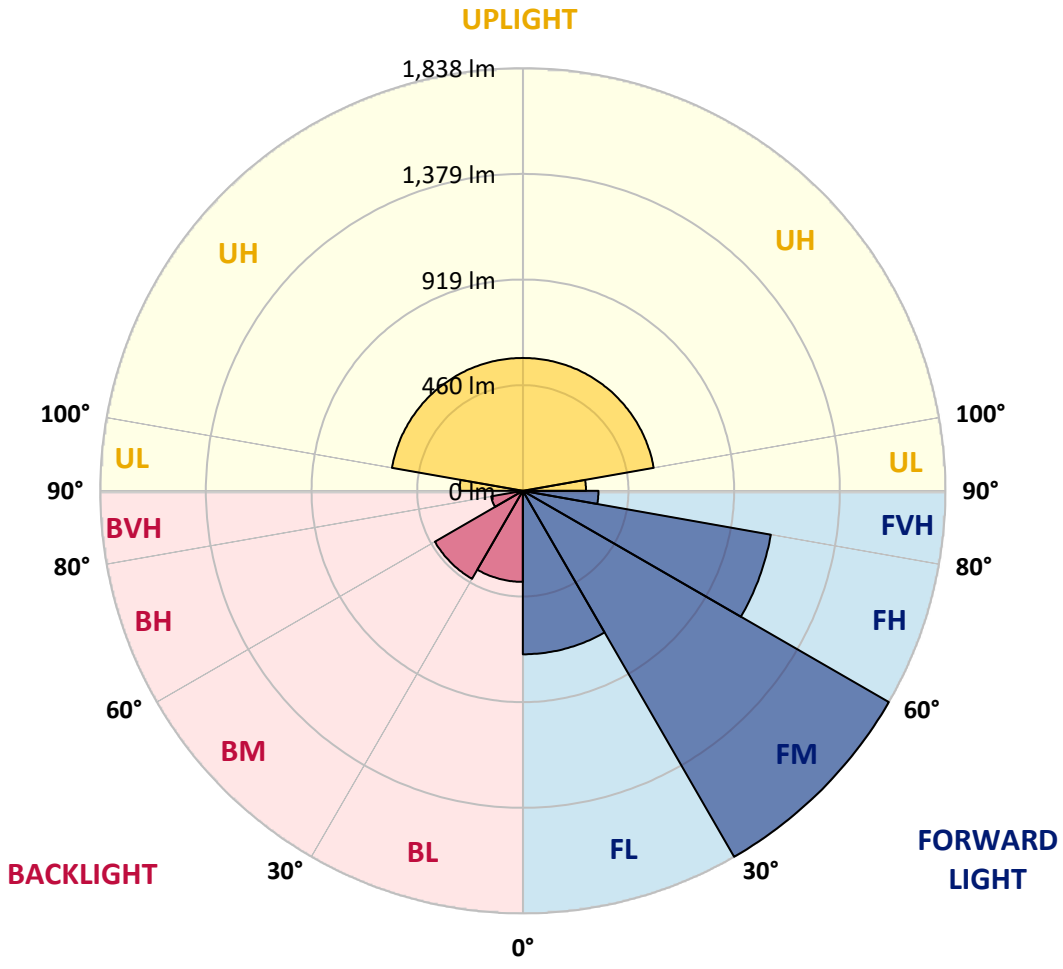
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	711.2	12.2			
FM	(30°-60°)	1838.2	31.5			
FH	(60°-80°)	1095.6	18.8			G1/1800
FVH	(80°-90°)	328.9	5.6			G3/500
BL	(0°-30°)	396.1	6.8	B1/500		
BM	(30°-60°)	442.0	7.6	B1/1000		
BH	(60°-80°)	139.7	2.4	B1/500		G1/500
BVH	(80°-90°)	27.4	0.5			G1/100
UL	(90°-100°)	274.9	4.7		U3/500	
UH	(100°-180°)	578.0	9.9		U4/1000	

BUG Rating: B1-U4-G3
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1282.7	*1282.7*	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7
2.5°	1455.4	*1450.6*	1448.2	1445.8	1433.8	1419.4	1397.8	1373.8	1347.5	1316.3	1285.1
5°	1620.8	*1618.4*	1616.0	1606.4	1587.2	1560.9	1515.3	1476.9	1421.8	1359.5	1301.9
7.5°	1752.7	*1750.3*	1747.9	1738.3	1716.7	1675.9	1623.2	1565.6	1488.9	1402.6	1313.9
10°	1810.2	*1810.2*	1810.2	1803.0	1786.2	1757.5	1707.1	1635.2	1544.1	1436.2	1316.3
12.5°	1851.0	*1851.0*	1848.6	1841.4	1824.6	1795.8	1759.9	1697.5	1594.4	1464.9	1321.1
15°	1882.1	*1884.5*	1884.5	1874.9	1858.2	1827.0	1791.0	1735.9	1640.0	1493.7	1328.3
17.5°	1896.5	*1898.9*	1896.5	1889.3	1872.5	1841.4	1803.0	1752.7	1663.9	1512.9	1325.9
20°	1894.1	*1894.1*	1891.7	1884.5	1870.1	1841.4	1803.0	1747.9	1666.3	1517.7	1316.3
22.5°	1891.7	*1891.7*	1891.7	1879.7	1858.2	1829.4	1793.4	1738.3	1659.2	1517.7	1301.9
25°	1910.9	*1910.9*	1908.5	1891.7	1863.0	1822.2	1779.0	1723.9	1644.8	1512.9	1287.5
27.5°	1932.5	*1934.9*	1930.1	1913.3	1874.9	1819.8	1764.6	1704.7	1625.6	1498.5	1273.1
30°	1954.1	*1954.1*	1951.7	1930.1	1884.5	1822.2	1747.9	1675.9	1594.4	1476.9	1249.2
32.5°	1963.7	*1963.7*	1961.3	1942.1	1894.1	1819.8	1733.5	1642.4	1558.5	1443.4	1215.6
35°	1956.5	*1958.9*	1958.9	1942.1	1903.7	1827.0	1723.9	1613.6	1517.7	1402.6	1177.2
37.5°	1918.1	*1918.1*	1918.1	1913.3	1891.7	1831.8	1716.7	1584.8	1472.1	1352.3	1131.7
40°	1829.4	*1834.2*	1834.2	1834.2	1836.6	1812.6	1716.7	1558.5	1419.4	1297.1	1081.3
42.5°	1783.8	*1783.8*	1783.8	1764.6	1750.3	1745.5	1690.3	1536.9	1364.2	1234.8	1026.2
45°	1836.6	*1836.6*	1834.2	1798.2	1719.1	1663.9	1625.6	1498.5	1311.5	1170.0	971.0
47.5°	1956.5	*1949.3*	1946.9	1884.5	1783.8	1644.8	1548.9	1436.2	1256.4	1112.5	923.1
50°	2162.7	*2155.5*	2148.3	2059.6	1891.7	1704.7	1512.9	1366.6	1194.0	1055.0	865.5
52.5°	2407.2	*2400.0*	2383.2	2284.9	2066.7	1795.8	1527.3	1313.9	1138.9	992.6	810.4
55°	2570.3	*2570.3*	2558.3	2467.2	2241.8	1913.3	1565.6	1294.7	1100.5	937.5	764.8
57.5°	*2582.2*	*2584.6*	*2577.4*	*2507.9*	*2330.5*	*2002.0*	*1596.8*	*1292.3*	*1071.7*	*896.7*	*719.3*
60°	2440.8	*2445.6*	2448.0	2380.8	2253.8	1987.6	1587.2	1273.1	1050.2	860.7	673.7
62.5°	2191.4	*2198.6*	2201.0	2133.9	2028.4	1834.2	1500.9	1227.6	1026.2	832.0	635.4
65°	1901.3	*1908.5*	1908.5	1836.6	1733.5	1584.8	1340.3	1141.3	985.4	808.0	594.6
67.5°	1642.4	*1647.2*	1647.2	1570.4	1460.2	1318.7	1146.1	1016.6	927.9	784.0	561.0
70°	1455.4	*1460.2*	1455.4	1385.8	1254.0	1105.3	959.0	887.1	853.6	743.3	520.3
72.5°	1335.5	*1340.3*	1330.7	1256.4	1117.3	959.0	812.8	767.2	764.8	695.3	481.9
75°	1251.6	*1256.4*	1246.8	1167.6	1026.2	863.1	712.1	671.3	692.9	649.8	443.6
77.5°	1182.0	*1186.8*	1177.2	1098.1	954.3	796.0	645.0	604.2	637.8	592.2	393.2
80°	1114.9	*1119.7*	1110.1	1031.0	894.3	748.1	592.2	544.3	563.4	513.1	330.9
82.5°	1045.4	*1047.8*	1038.2	966.2	844.0	707.3	556.2	505.9	522.7	460.3	263.7
85°	968.6	*973.4*	966.2	899.1	791.2	671.3	522.7	479.5	486.7	400.4	199.0
87.5°	899.1	*903.9*	896.7	836.8	743.3	633.0	496.3	450.8	450.8	354.8	151.1
90°	841.6	*844.0*	836.8	786.4	700.1	601.8	472.3	424.4	414.8	314.1	119.9
92.5°	791.2	*788.8*	781.6	740.9	661.7	573.0	453.2	405.2	378.8	275.7	105.5
95°	736.1	*738.5*	733.7	695.3	628.2	541.9	436.4	383.6	340.5	232.6	93.5
97.5°	812.8	*812.8*	810.4	767.2	683.3	573.0	448.4	371.6	306.9	201.4	88.7
100°	738.5	*728.9*	728.9	695.3	633.0	544.3	429.2	345.3	275.7	177.4	86.3
102.5°	680.9	*685.7*	683.3	647.4	585.0	498.7	383.6	302.1	237.4	158.2	88.7
105°	568.2	*558.6*	551.5	527.5	484.3	426.8	340.5	273.3	213.4	148.7	91.1
107.5°	515.5	*510.7*	508.3	489.1	453.2	398.0	321.3	261.3	203.8	141.5	93.5
110°	467.5	*465.1*	462.7	446.0	414.8	362.0	299.7	249.4	194.2	134.3	93.5

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REPORT NUMBER: P1449788
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CANDELA DISTRIBUTION (continued):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
112.5°	434.0	*434.0*	429.2	414.8	381.2	330.9	278.1	237.4	179.8	129.5	93.5
115°	393.2	*390.8*	388.4	376.4	347.7	306.9	258.9	218.2	165.4	127.1	93.5
117.5°	354.8	*354.8*	354.8	340.5	314.1	278.1	244.6	203.8	155.8	122.3	91.1
120°	318.9	*318.9*	318.9	306.9	285.3	256.5	225.4	189.4	146.3	119.9	86.3
122.5°	294.9	*292.5*	292.5	280.5	261.3	235.0	208.6	177.4	141.5	115.1	81.5
125°	266.1	*263.7*	263.7	254.1	239.8	218.2	201.4	170.2	139.1	112.7	76.7
127.5°	254.1	*251.8*	251.8	242.2	227.8	208.6	191.8	160.6	134.3	105.5	71.9
130°	227.8	*227.8*	227.8	220.6	208.6	199.0	177.4	153.4	127.1	100.7	67.1
132.5°	211.0	*211.0*	208.6	206.2	201.4	191.8	167.8	148.7	122.3	93.5	62.3
135°	199.0	*199.0*	199.0	203.8	196.6	179.8	160.6	141.5	115.1	86.3	57.5
137.5°	199.0	*196.6*	196.6	194.2	184.6	170.2	158.2	134.3	107.9	81.5	52.7
140°	184.6	*184.6*	182.2	177.4	170.2	167.8	151.1	127.1	100.7	76.7	45.6
142.5°	167.8	*167.8*	167.8	167.8	172.6	160.6	141.5	119.9	93.5	69.5	43.2
145°	175.0	*175.0*	175.0	170.2	165.4	153.4	131.9	110.3	88.7	64.7	38.4
147.5°	167.8	*167.8*	167.8	163.0	153.4	139.1	119.9	100.7	81.5	59.9	33.6
150°	155.8	*153.4*	153.4	148.7	139.1	124.7	110.3	93.5	76.7	52.7	28.8
152.5°	136.7	*136.7*	136.7	131.9	124.7	115.1	98.3	86.3	67.1	48.0	26.4
155°	124.7	*124.7*	122.3	119.9	110.3	98.3	88.7	76.7	59.9	40.8	21.6
157.5°	105.5	*105.5*	105.5	100.7	95.9	88.7	81.5	67.1	50.4	36.0	16.8
160°	93.5	*93.5*	93.5	91.1	88.7	81.5	71.9	57.5	45.6	31.2	14.4
162.5°	83.9	*83.9*	83.9	81.5	76.7	69.5	59.9	48.0	36.0	24.0	12.0
165°	71.9	*71.9*	69.5	67.1	62.3	57.5	48.0	38.4	28.8	19.2	9.6
167.5°	55.1	*55.1*	55.1	52.7	50.4	45.6	38.4	31.2	21.6	12.0	7.2
170°	40.8	*40.8*	40.8	38.4	36.0	31.2	24.0	19.2	12.0	7.2	4.8
172.5°	26.4	*21.6*	19.2	16.8	16.8	14.4	12.0	9.6	4.8	4.8	4.8
175°	0.0	*0.0*	0.0	0.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4
177.5°	0.0	*0.0*	0.0	0.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4
180°	2.4	*2.4*	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7
2.5°	1273.1	1261.1	1244.4	1225.2	1210.8	1198.8	1194.0	1191.6	1189.2	1189.2	1186.8
5°	1273.1	1254.0	1220.4	1196.4	1182.0	1174.8	1174.8	1174.8	1177.2	1177.2	1177.2
7.5°	1273.1	1239.6	1201.2	1177.2	1167.6	1172.4	1182.0	1189.2	1196.4	1198.8	1201.2
10°	1261.1	1218.0	1177.2	1160.4	1162.8	1177.2	1191.6	1191.6	1189.2	1184.4	1182.0
12.5°	1251.6	1201.2	1158.1	1150.9	1167.6	1177.2	1165.2	1153.3	1141.3	1131.7	1129.3
15°	1244.4	1184.4	1141.3	1148.5	1165.2	1148.5	1122.1	1095.7	1071.7	1057.4	1052.6
17.5°	1227.6	1162.8	1124.5	1138.9	1131.7	1098.1	1052.6	1007.0	968.6	939.9	932.7
20°	1206.0	1136.5	1100.5	1119.7	1086.1	1033.4	956.7	884.7	822.4	779.2	767.2
22.5°	1182.0	1107.7	1076.5	1083.7	1031.0	949.5	834.4	728.9	640.2	589.8	594.6
25°	1160.4	1081.3	1052.6	1038.2	963.8	848.8	688.1	556.2	469.9	424.4	426.8
27.5°	1136.5	1052.6	1026.2	995.0	891.9	726.5	532.3	414.8	350.1	318.9	321.3
30°	1107.7	1021.4	990.2	932.7	796.0	592.2	410.0	321.3	282.9	268.5	266.1
32.5°	1074.1	983.0	949.5	867.9	695.3	467.5	326.1	270.9	249.4	244.6	242.2
35°	1035.8	944.7	901.5	798.4	587.4	371.6	275.7	247.0	239.8	239.8	239.8
37.5°	990.2	899.1	848.8	721.7	481.9	304.5	247.0	237.4	244.6	254.1	256.5
40°	942.3	853.6	793.6	637.8	395.6	261.3	232.6	242.2	266.1	285.3	287.7
42.5°	896.7	810.4	736.1	553.9	328.5	235.0	227.8	256.5	294.9	318.9	323.7
45°	846.4	767.2	676.1	469.9	275.7	218.2	230.2	278.1	321.3	338.1	340.5
47.5°	798.4	716.9	611.4	398.0	239.8	208.6	239.8	299.7	326.1	321.3	323.7
50°	750.5	666.5	541.9	333.3	213.4	201.4	249.4	304.5	302.1	282.9	280.5
52.5°	700.1	621.0	477.1	282.9	191.8	196.6	258.9	287.7	258.9	227.8	225.4
55°	649.8	568.2	417.2	242.2	177.4	194.2	258.9	256.5	211.0	179.8	177.4
57.5°	*609.0*	*513.1*	*359.6*	*208.6*	*165.4*	*194.2*	*247.0*	*218.2*	*170.2*	*141.5*	*139.1*
60°	556.2	465.1	309.3	184.6	155.8	189.4	225.4	179.8	136.7	115.1	112.7
62.5°	508.3	422.0	266.1	163.0	146.3	184.6	196.6	148.7	112.7	95.9	95.9
65°	465.1	378.8	227.8	148.7	139.1	172.6	170.2	122.3	93.5	81.5	81.5
67.5°	429.2	335.7	194.2	134.3	131.9	160.6	143.9	100.7	81.5	69.5	69.5
70°	388.4	294.9	165.4	122.3	122.3	143.9	119.9	86.3	69.5	59.9	57.5
72.5°	345.3	249.4	141.5	112.7	112.7	127.1	98.3	71.9	57.5	50.4	48.0
75°	299.7	201.4	122.3	103.1	105.5	110.3	81.5	62.3	50.4	43.2	40.8
77.5°	251.8	155.8	105.5	95.9	95.9	93.5	67.1	52.7	40.8	36.0	33.6
80°	199.0	119.9	88.7	86.3	86.3	79.1	55.1	43.2	33.6	28.8	26.4
82.5°	146.3	91.1	76.7	79.1	76.7	64.7	45.6	36.0	26.4	21.6	19.2
85°	105.5	71.9	67.1	71.9	67.1	55.1	38.4	28.8	19.2	14.4	12.0
87.5°	81.5	59.9	59.9	67.1	59.9	43.2	31.2	21.6	12.0	7.2	4.8
90°	67.1	55.1	55.1	59.9	48.0	33.6	21.6	14.4	7.2	2.4	2.4
92.5°	64.7	52.7	55.1	57.5	48.0	33.6	21.6	12.0	7.2	2.4	2.4
95°	62.3	55.1	55.1	55.1	45.6	31.2	19.2	12.0	7.2	2.4	0.0
97.5°	64.7	57.5	57.5	55.1	45.6	31.2	19.2	12.0	7.2	2.4	0.0
100°	67.1	59.9	57.5	55.1	45.6	31.2	19.2	12.0	4.8	2.4	0.0
102.5°	71.9	64.7	59.9	55.1	43.2	31.2	19.2	12.0	4.8	2.4	0.0
105°	74.3	67.1	59.9	55.1	43.2	28.8	19.2	12.0	4.8	2.4	0.0
107.5°	76.7	67.1	59.9	52.7	43.2	28.8	19.2	12.0	4.8	2.4	0.0
110°	76.7	69.5	57.5	52.7	40.8	28.8	16.8	9.6	4.8	0.0	0.0

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

Scaled Data Report

REPORT NUMBER: P1449788
CATALOG NUMBER: AXCS4ARL-C

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	76.7	67.1	57.5	50.4	40.8	28.8	16.8	9.6	4.8	0.0	0.0
115°	76.7	67.1	55.1	48.0	38.4	26.4	16.8	9.6	4.8	0.0	0.0
117.5°	74.3	64.7	52.7	45.6	36.0	26.4	16.8	9.6	4.8	0.0	0.0
120°	69.5	62.3	50.4	43.2	36.0	24.0	14.4	9.6	4.8	0.0	0.0
122.5°	67.1	57.5	48.0	40.8	33.6	24.0	14.4	9.6	4.8	0.0	0.0
125°	62.3	55.1	45.6	38.4	31.2	21.6	14.4	9.6	4.8	0.0	0.0
127.5°	57.5	50.4	43.2	36.0	31.2	21.6	12.0	7.2	4.8	0.0	0.0
130°	52.7	48.0	40.8	33.6	28.8	19.2	12.0	7.2	4.8	0.0	0.0
132.5°	50.4	45.6	38.4	33.6	26.4	19.2	12.0	7.2	4.8	0.0	0.0
135°	45.6	40.8	33.6	28.8	24.0	16.8	12.0	7.2	2.4	0.0	0.0
137.5°	40.8	38.4	31.2	28.8	21.6	16.8	9.6	4.8	2.4	0.0	0.0
140°	38.4	33.6	28.8	26.4	21.6	14.4	9.6	4.8	2.4	0.0	0.0
142.5°	33.6	31.2	26.4	24.0	19.2	14.4	9.6	4.8	2.4	0.0	0.0
145°	31.2	28.8	24.0	21.6	16.8	12.0	7.2	4.8	2.4	0.0	0.0
147.5°	28.8	26.4	21.6	19.2	16.8	12.0	7.2	4.8	2.4	0.0	0.0
150°	26.4	24.0	21.6	16.8	14.4	9.6	4.8	2.4	2.4	0.0	0.0
152.5°	21.6	21.6	19.2	16.8	12.0	9.6	4.8	2.4	2.4	0.0	0.0
155°	19.2	19.2	16.8	14.4	9.6	7.2	4.8	2.4	0.0	0.0	0.0
157.5°	16.8	16.8	14.4	12.0	9.6	7.2	4.8	2.4	0.0	0.0	0.0
160°	14.4	14.4	12.0	9.6	7.2	4.8	2.4	2.4	0.0	0.0	0.0
162.5°	12.0	12.0	9.6	7.2	7.2	4.8	2.4	0.0	0.0	0.0	0.0
165°	9.6	9.6	7.2	7.2	4.8	2.4	2.4	0.0	0.0	0.0	0.0
167.5°	7.2	7.2	7.2	4.8	4.8	2.4	2.4	2.4	0.0	0.0	0.0
170°	4.8	4.8	4.8	4.8	2.4	2.4	2.4	0.0	0.0	0.0	0.0
172.5°	4.8	2.4	2.4	2.4	2.4	2.4	2.4	0.0	0.0	0.0	0.0
175°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0.0	0.0	0.0	0.0
177.5°	2.4	2.4	2.4	2.4	2.4	2.4	0.0	0.0	0.0	0.0	0.0
180°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4

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

LUMARK

Report Number: SP1-2310-196-1

Test Date: 11/15/2023

Luminaire Tested: AXCS5A-C

Data in this report applies to families of products including AXCS5A-C.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v6.12

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

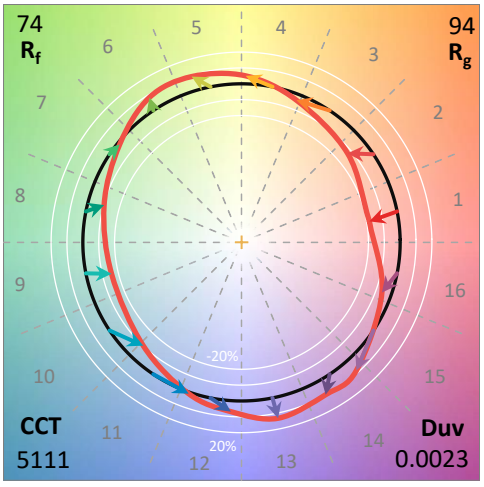
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2310-196-1
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	11/17/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	LUMARK
Catalog Number:	**AXCS5A-C**
Description:	5A AXCENT SMALL WALLPACK, FULL CUTOFF HOUSING

Spectral Parameters

CCT (K):	5111	CRI (Ra):	72.2		
CIE u':	0.2086	R1:	69.2	R9:	-34.9
CIE v':	0.4854	R2:	77.6	R10:	46.6
Duv:	0.0023	R3:	83.5	R11:	69.3
CIE x:	0.3423	R4:	72.4	R12:	43.0
CIE y:	0.3540	R5:	70.3	R13:	70.5
CIE z:	0.3037	R6:	68.9	R14:	90.7
Peak Wavelength (nm):	450	R7:	80.7		
Dominant Wavelength (nm):	568	R8:	54.9		
Purity:	9				

Rf:	73.5
Rg:	93.9



Test Conditions

Stabilization Time:	24M
Operation Time:	12H
Room Temperature (°C) / RH%:	25.4/32%
Sphere Temperature (°C):	24.8

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

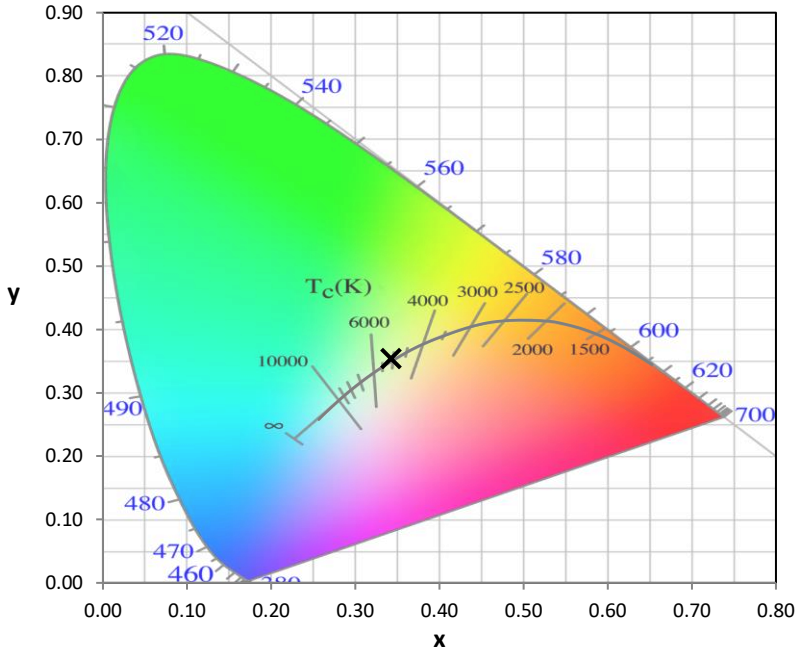
REPORT NUMBER: SP1-2310-196-1

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	8/9/2023	2/9/2024
Power Meter	XITRON 2801 IN0071	10/23/2023	10/23/2024
AC Power Source	CHROMA 61603 IN0063	10/24/2023	10/24/2024
DC Power Source	AGILENT E3634A IN0208	10/24/2023	10/24/2024
Sphere Thermometer	ONSET IN0085	10/24/2023	10/24/2024
Room Thermometer	ONSET IN0046	10/24/2023	10/24/2024

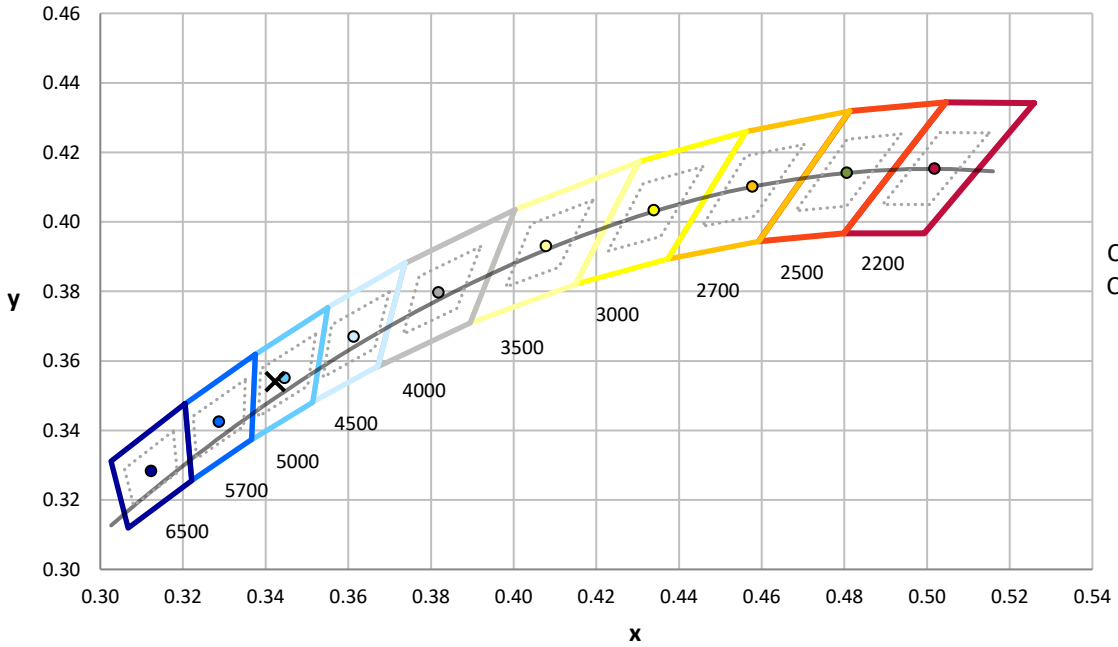
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

REPORT NUMBER: SP1-2310-196-1

CIE 1931 Chromaticity Diagram



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



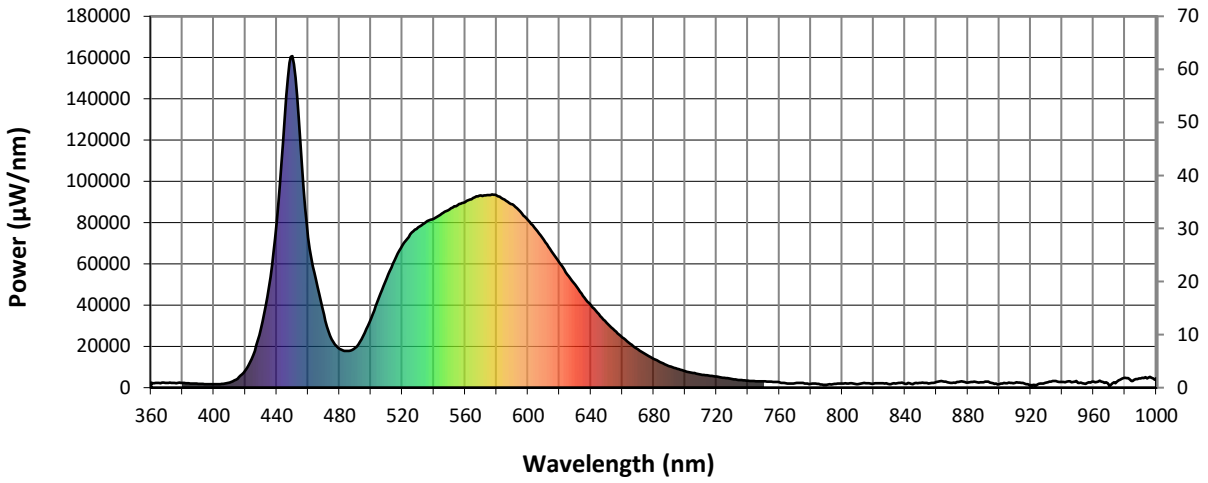
CCT = 5111K
CIE x = 0.3423
CIE y = 0.3540
Duv = 0.0023

Point lies inside the ANSI 5000K 4-step quadrangle

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

REPORT NUMBER: SP1-2310-196-1

Photopic Flux vs. Wavelength



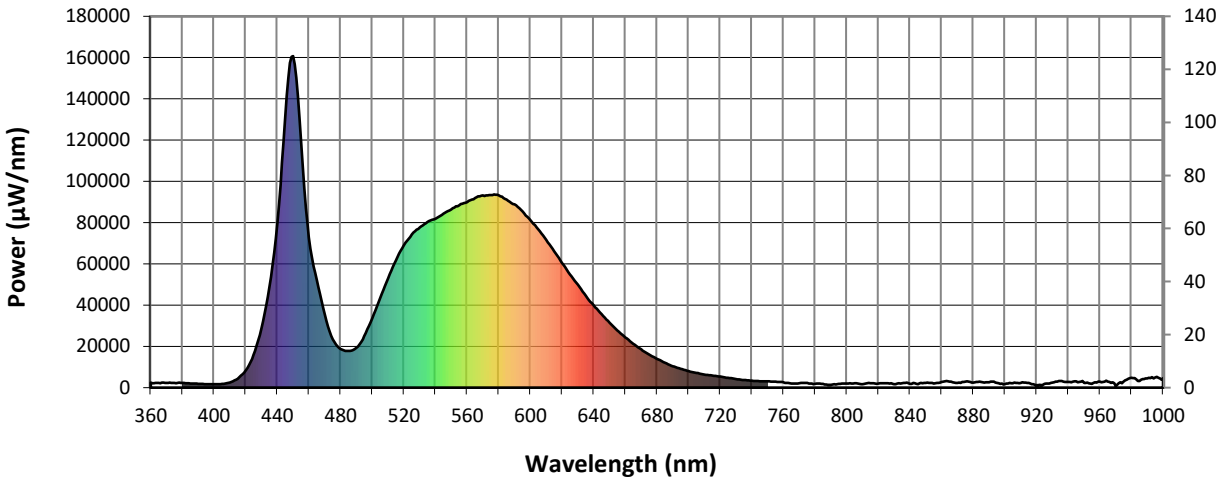
######

λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)
360	2414	NR	490	19294	NR	620	60531	NR	750	3084	NR	880	2517	NR
365	2289	NR	495	24992	NR	625	54886	NR	755	2938	NR	885	2787	NR
370	2262	NR	500	33456	NR	630	49854	NR	760	2534	NR	890	2555	NR
375	2243	NR	505	43409	NR	635	44543	NR	765	2057	NR	895	2260	NR
380	2313	NR	510	52998	NR	640	39946	NR	770	2175	NR	900	1614	NR
385	1989	NR	515	61608	NR	645	35595	NR	775	2222	NR	905	2161	NR
390	1904	NR	520	68994	NR	650	31502	NR	780	1812	NR	910	2306	NR
395	1695	NR	525	74313	NR	655	27782	NR	785	1772	NR	915	2250	NR
400	1611	NR	530	77617	NR	660	24390	NR	790	1378	NR	920	1194	NR
405	1798	NR	535	80376	NR	665	21255	NR	795	1825	NR	925	1797	NR
410	2510	NR	540	81936	NR	670	18523	NR	800	2037	NR	930	2525	NR
415	4375	NR	545	84366	NR	675	16040	NR	805	2110	NR	935	3196	NR
420	8324	NR	550	86342	NR	680	13989	NR	810	1728	NR	940	2817	NR
425	15831	NR	555	88345	NR	685	12028	NR	815	2205	NR	945	3027	NR
430	28665	NR	560	89997	NR	690	10355	NR	820	1948	NR	950	2285	NR
435	48834	NR	565	91969	NR	695	9136	NR	825	2190	NR	955	1782	NR
440	80008	NR	570	93246	NR	700	8000	NR	830	1681	NR	960	2873	NR
445	130352	NR	575	93397	NR	705	7163	NR	835	2187	NR	965	2892	NR
450	160715	NR	580	93121	NR	710	6342	NR	840	1887	NR	970	1038	NR
455	119094	NR	585	91237	NR	715	5873	NR	845	1667	NR	975	2846	NR
460	72943	NR	590	88872	NR	720	5332	NR	850	2302	NR	980	4828	NR
465	52254	NR	595	85423	NR	725	4700	NR	855	1952	NR	985	3226	NR
470	35481	NR	600	81119	NR	730	4214	NR	860	2729	NR	990	4437	NR
475	23416	NR	605	76778	NR	735	3708	NR	865	2986	NR	995	4972	NR
480	18815	NR	610	71628	NR	740	3347	NR	870	2373	NR	1000	4552	NR
485	17743	NR	615	66040	NR	745	3107	NR	875	2919	NR			

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

REPORT NUMBER: SP1-2310-196-1

Scotopic Flux vs. Wavelength



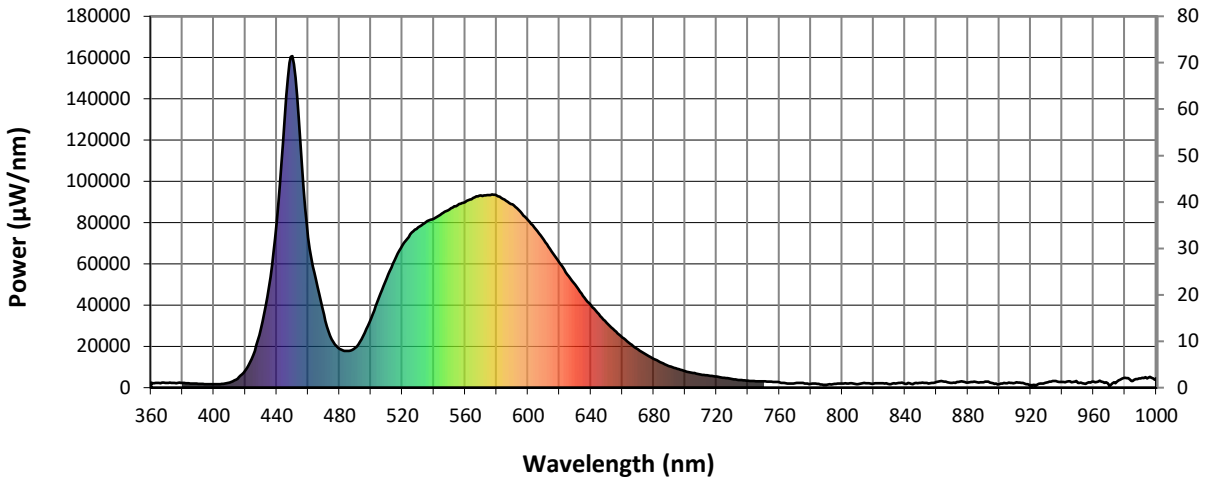
Scotopic Lumens: 9896.6 **S/P: 1.81**

λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)
360	2414	NR	490	19294	NR	620	60531	NR	750	3084	NR	880	2517	NR
365	2289	NR	495	24992	NR	625	54886	NR	755	2938	NR	885	2787	NR
370	2262	NR	500	33456	NR	630	49854	NR	760	2534	NR	890	2555	NR
375	2243	NR	505	43409	NR	635	44543	NR	765	2057	NR	895	2260	NR
380	2313	NR	510	52998	NR	640	39946	NR	770	2175	NR	900	1614	NR
385	1989	NR	515	61608	NR	645	35595	NR	775	2222	NR	905	2161	NR
390	1904	NR	520	68994	NR	650	31502	NR	780	1812	NR	910	2306	NR
395	1695	NR	525	74313	NR	655	27782	NR	785	1772	NR	915	2250	NR
400	1611	NR	530	77617	NR	660	24390	NR	790	1378	NR	920	1194	NR
405	1798	NR	535	80376	NR	665	21255	NR	795	1825	NR	925	1797	NR
410	2510	NR	540	81936	NR	670	18523	NR	800	2037	NR	930	2525	NR
415	4375	NR	545	84366	NR	675	16040	NR	805	2110	NR	935	3196	NR
420	8324	NR	550	86342	NR	680	13989	NR	810	1728	NR	940	2817	NR
425	15831	NR	555	88345	NR	685	12028	NR	815	2205	NR	945	3027	NR
430	28665	NR	560	89997	NR	690	10355	NR	820	1948	NR	950	2285	NR
435	48834	NR	565	91969	NR	695	9136	NR	825	2190	NR	955	1782	NR
440	80008	NR	570	93246	NR	700	8000	NR	830	1681	NR	960	2873	NR
445	130352	NR	575	93397	NR	705	7163	NR	835	2187	NR	965	2892	NR
450	160715	NR	580	93121	NR	710	6342	NR	840	1887	NR	970	1038	NR
455	119094	NR	585	91237	NR	715	5873	NR	845	1667	NR	975	2846	NR
460	72943	NR	590	88872	NR	720	5332	NR	850	2302	NR	980	4828	NR
465	52254	NR	595	85423	NR	725	4700	NR	855	1952	NR	985	3226	NR
470	35481	NR	600	81119	NR	730	4214	NR	860	2729	NR	990	4437	NR
475	23416	NR	605	76778	NR	735	3708	NR	865	2986	NR	995	4972	NR
480	18815	NR	610	71628	NR	740	3347	NR	870	2373	NR	1000	4552	NR
485	17743	NR	615	66040	NR	745	3107	NR	875	2919	NR			

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

REPORT NUMBER: SP1-2310-196-1

Melanopic Flux vs. Wavelength



Melanopic Lumens: 4013.6 **M/P: 0.73**

λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)
360	2414	NR	490	19294	NR	620	60531	NR	750	3084	NR	880	2517	NR
365	2289	NR	495	24992	NR	625	54886	NR	755	2938	NR	885	2787	NR
370	2262	NR	500	33456	NR	630	49854	NR	760	2534	NR	890	2555	NR
375	2243	NR	505	43409	NR	635	44543	NR	765	2057	NR	895	2260	NR
380	2313	NR	510	52998	NR	640	39946	NR	770	2175	NR	900	1614	NR
385	1989	NR	515	61608	NR	645	35595	NR	775	2222	NR	905	2161	NR
390	1904	NR	520	68994	NR	650	31502	NR	780	1812	NR	910	2306	NR
395	1695	NR	525	74313	NR	655	27782	NR	785	1772	NR	915	2250	NR
400	1611	NR	530	77617	NR	660	24390	NR	790	1378	NR	920	1194	NR
405	1798	NR	535	80376	NR	665	21255	NR	795	1825	NR	925	1797	NR
410	2510	NR	540	81936	NR	670	18523	NR	800	2037	NR	930	2525	NR
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425	15831	NR	555	88345	NR	685	12028	NR	815	2205	NR	945	3027	NR
430	28665	NR	560	89997	NR	690	10355	NR	820	1948	NR	950	2285	NR
435	48834	NR	565	91969	NR	695	9136	NR	825	2190	NR	955	1782	NR
440	80008	NR	570	93246	NR	700	8000	NR	830	1681	NR	960	2873	NR
445	130352	NR	575	93397	NR	705	7163	NR	835	2187	NR	965	2892	NR
450	160715	NR	580	93121	NR	710	6342	NR	840	1887	NR	970	1038	NR
455	119094	NR	585	91237	NR	715	5873	NR	845	1667	NR	975	2846	NR
460	72943	NR	590	88872	NR	720	5332	NR	850	2302	NR	980	4828	NR
465	52254	NR	595	85423	NR	725	4700	NR	855	1952	NR	985	3226	NR
470	35481	NR	600	81119	NR	730	4214	NR	860	2729	NR	990	4437	NR
475	23416	NR	605	76778	NR	735	3708	NR	865	2986	NR	995	4972	NR
480	18815	NR	610	71628	NR	740	3347	NR	870	2373	NR	1000	4552	NR
485	17743	NR	615	66040	NR	745	3107	NR	875	2919	NR			

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

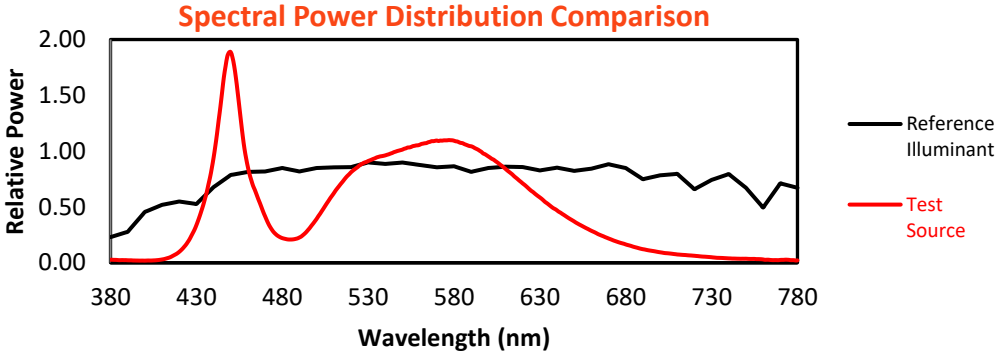
REPORT NUMBER: SP1-2310-196-1

TM-30-18

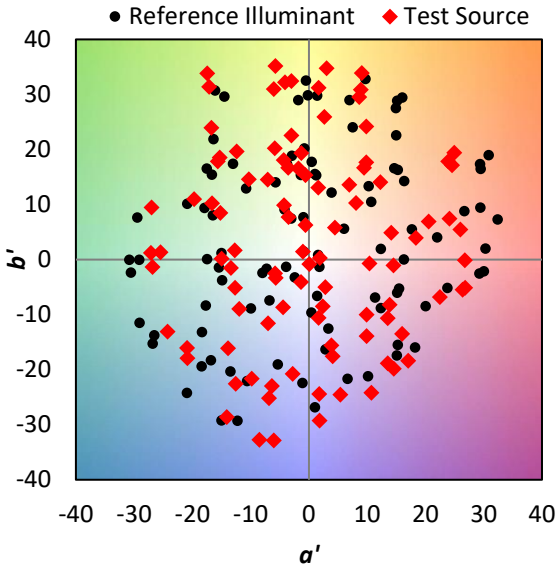
Summary

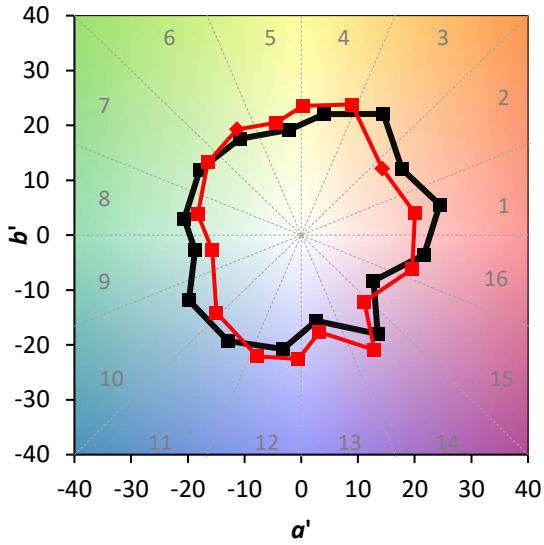
R_f = 73.5
R_g = 93.9
CIE R_a = 72.2
R_9 = -34.9

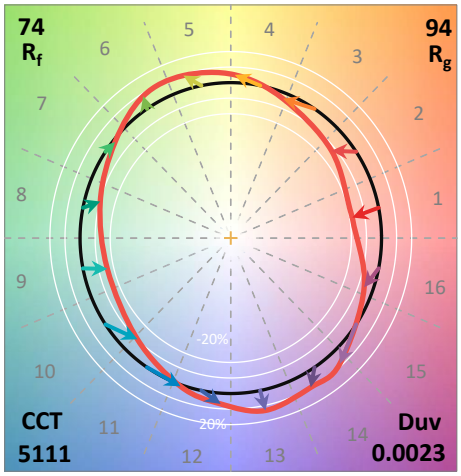
Spectral Power Distribution Comparison

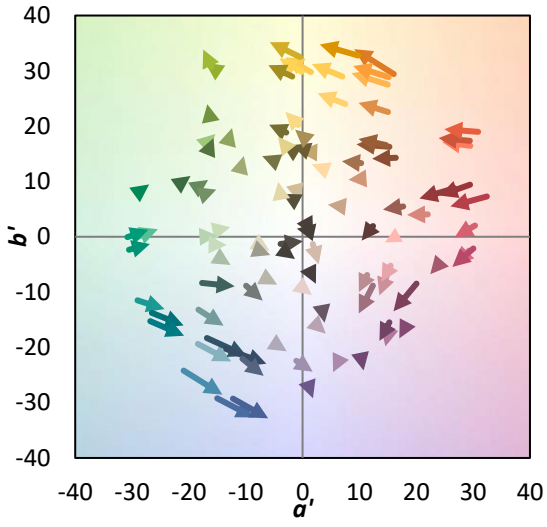


Color Vector Graphics









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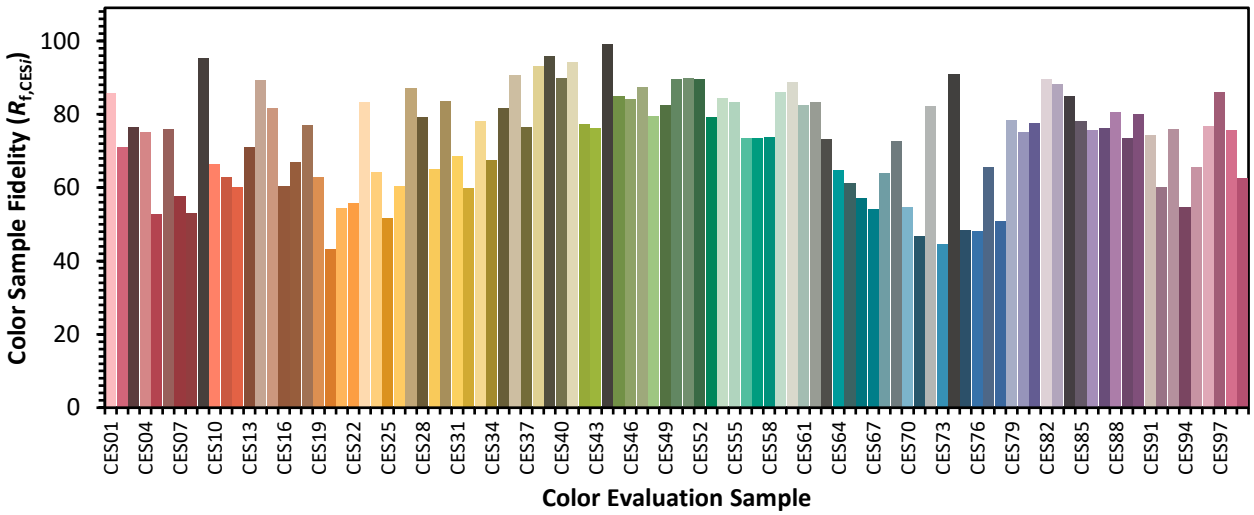
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 60	CES51 = 90	CES76 = 48
CES02 = 59	CES27 = 87	CES52 = 90	CES77 = 65
CES03 = 30	CES28 = 79	CES53 = 79	CES78 = 51
CES04 = 69	CES29 = 65	CES54 = 84	CES79 = 78
CES05 = 46	CES30 = 83	CES55 = 83	CES80 = 75
CES06 = 50	CES31 = 69	CES56 = 74	CES81 = 77
CES07 = 38	CES32 = 60	CES57 = 73	CES82 = 90
CES08 = 38	CES33 = 78	CES58 = 74	CES83 = 88
CES09 = 29	CES34 = 67	CES59 = 86	CES84 = 85
CES10 = 72	CES35 = 82	CES60 = 89	CES85 = 78
CES11 = 56	CES36 = 91	CES61 = 82	CES86 = 76
CES12 = 61	CES37 = 76	CES62 = 83	CES87 = 76
CES13 = 41	CES38 = 93	CES63 = 73	CES88 = 81
CES14 = 74	CES39 = 96	CES64 = 65	CES89 = 74
CES15 = 70	CES40 = 90	CES65 = 61	CES90 = 80
CES16 = 46	CES41 = 94	CES66 = 57	CES91 = 74
CES17 = 49	CES42 = 77	CES67 = 54	CES92 = 60
CES18 = 55	CES43 = 76	CES68 = 64	CES93 = 76
CES19 = 71	CES44 = 99	CES69 = 73	CES94 = 55
CES20 = 64	CES45 = 85	CES70 = 55	CES95 = 65
CES21 = 85	CES46 = 84	CES71 = 47	CES96 = 77
CES22 = 77	CES47 = 87	CES72 = 82	CES97 = 86
CES23 = 91	CES48 = 80	CES73 = 45	CES98 = 76
CES24 = 90	CES49 = 82	CES74 = 91	CES99 = 62
CES25 = 71	CES50 = 89	CES75 = 48	



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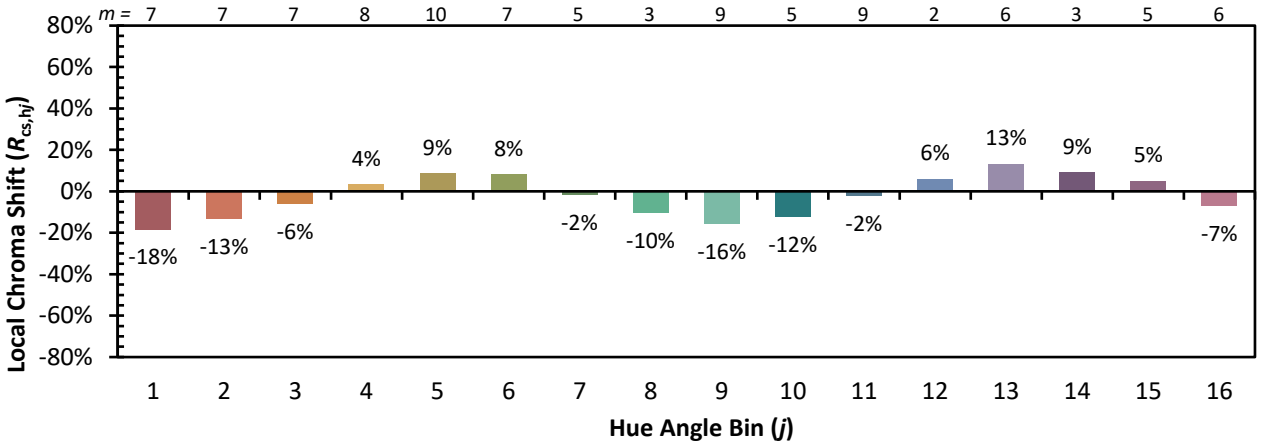
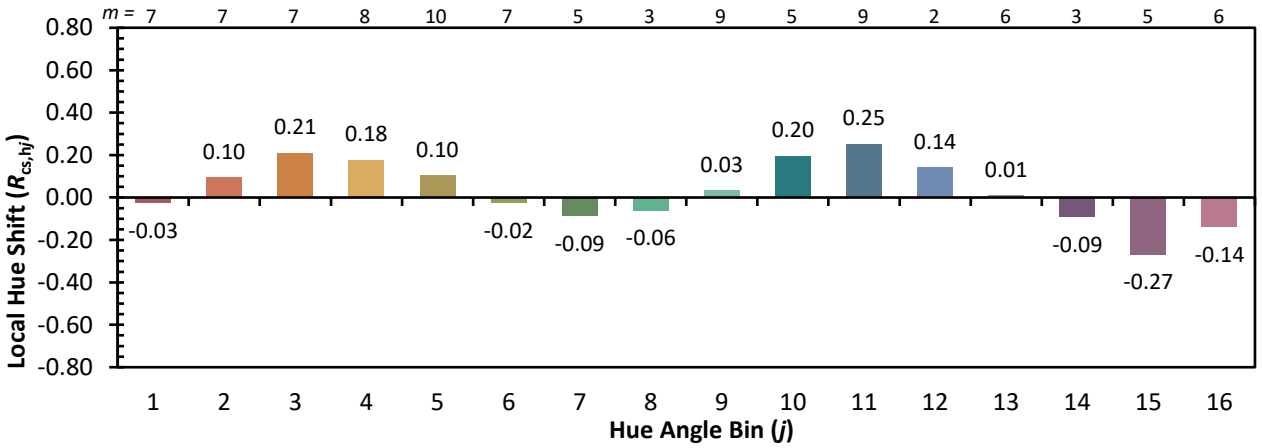
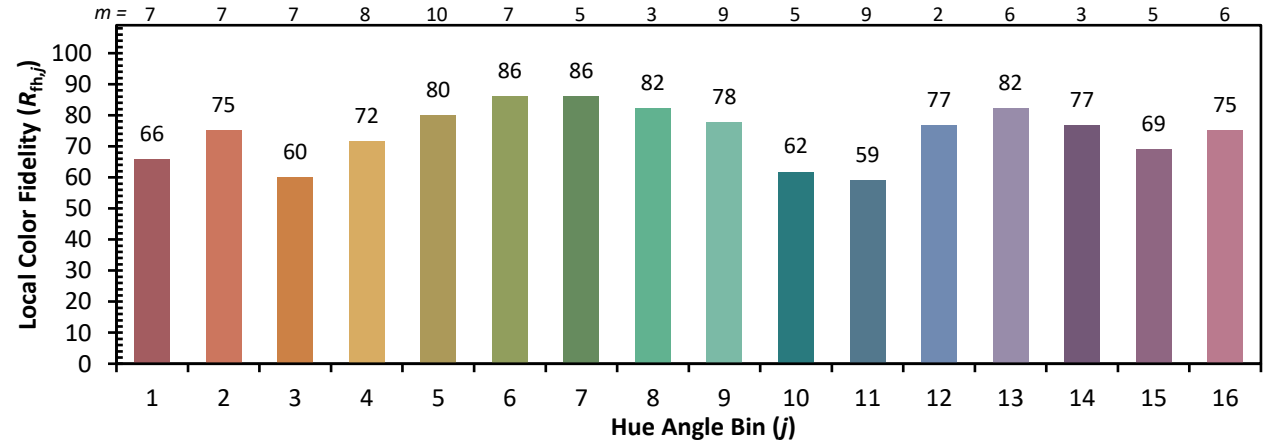
Color Rendition by Hue-Angle Bin







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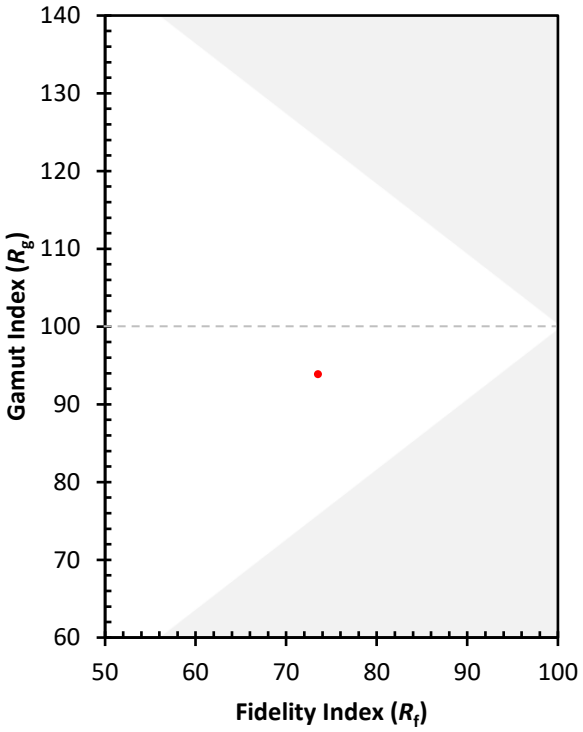
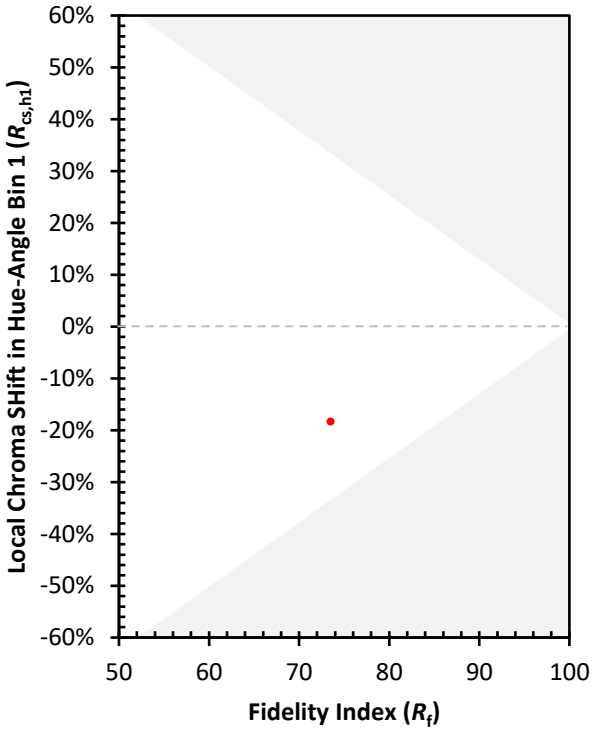
Measure Comparisons





(END OF REPORT)