

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: STREETWORKS

Report Number: P856105

Luminaire Tested: **FFX-CLB-60-722-U-FR-T3**

Issue Date: 07/16/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P856105  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 07/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: FFX-CLB-60-722-U-FR-T3  
Description: FAIRFAX POST TOP FIXTURE w/ FAIRFAX REFRACTOR T3 DISTRIBUTION LENS  
Light Source: (4) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

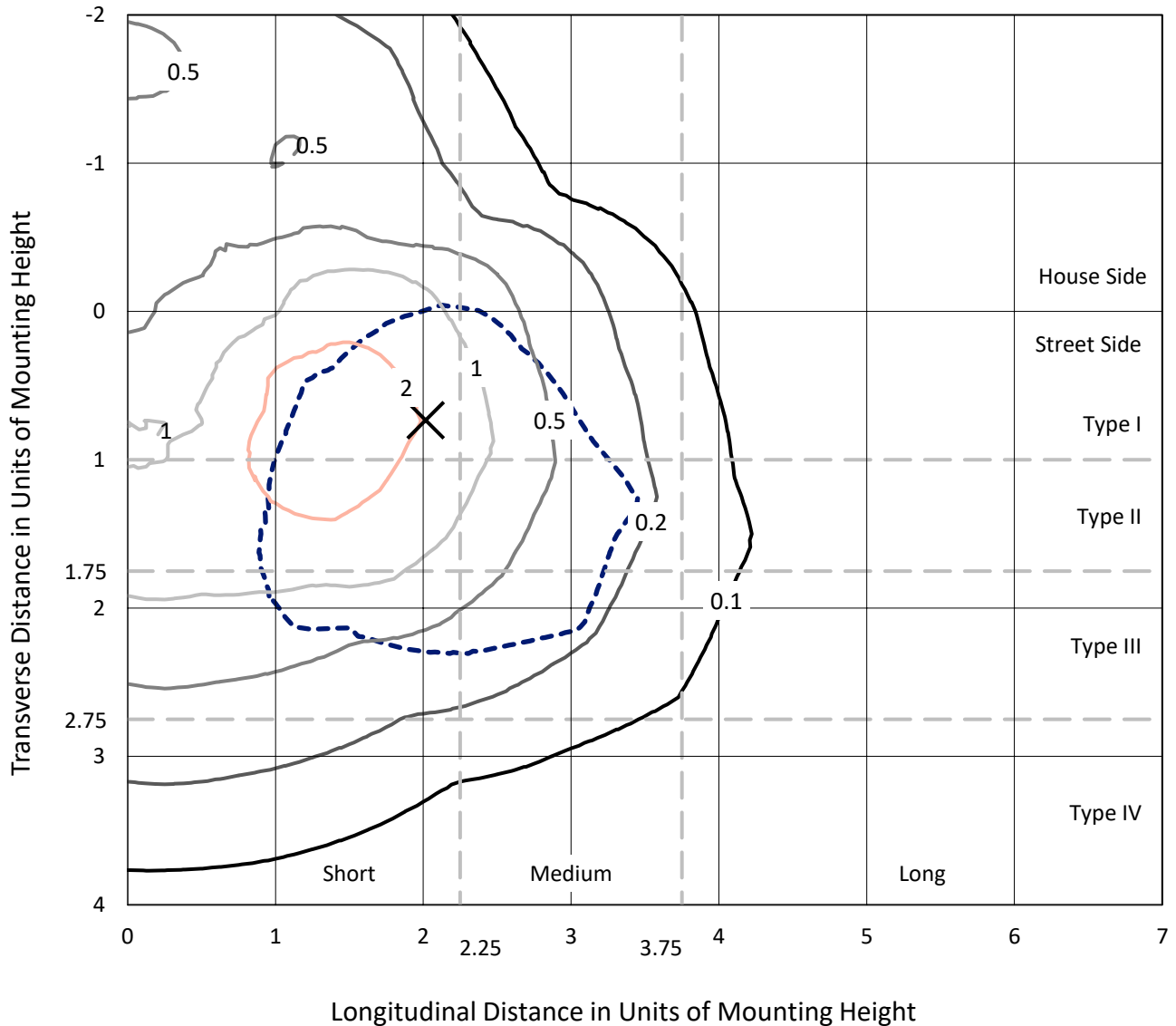
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7949.4 lumens  
Efficiency: N/A  
Efficacy: 132.9 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 1.67')  
IES Classification: Type III - Short  
BUG Rating: B2 - U5 - G3  
  
Input Watts (W): 59.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 8.9%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Iso-Footcandle Lines of Horizontal Illumination

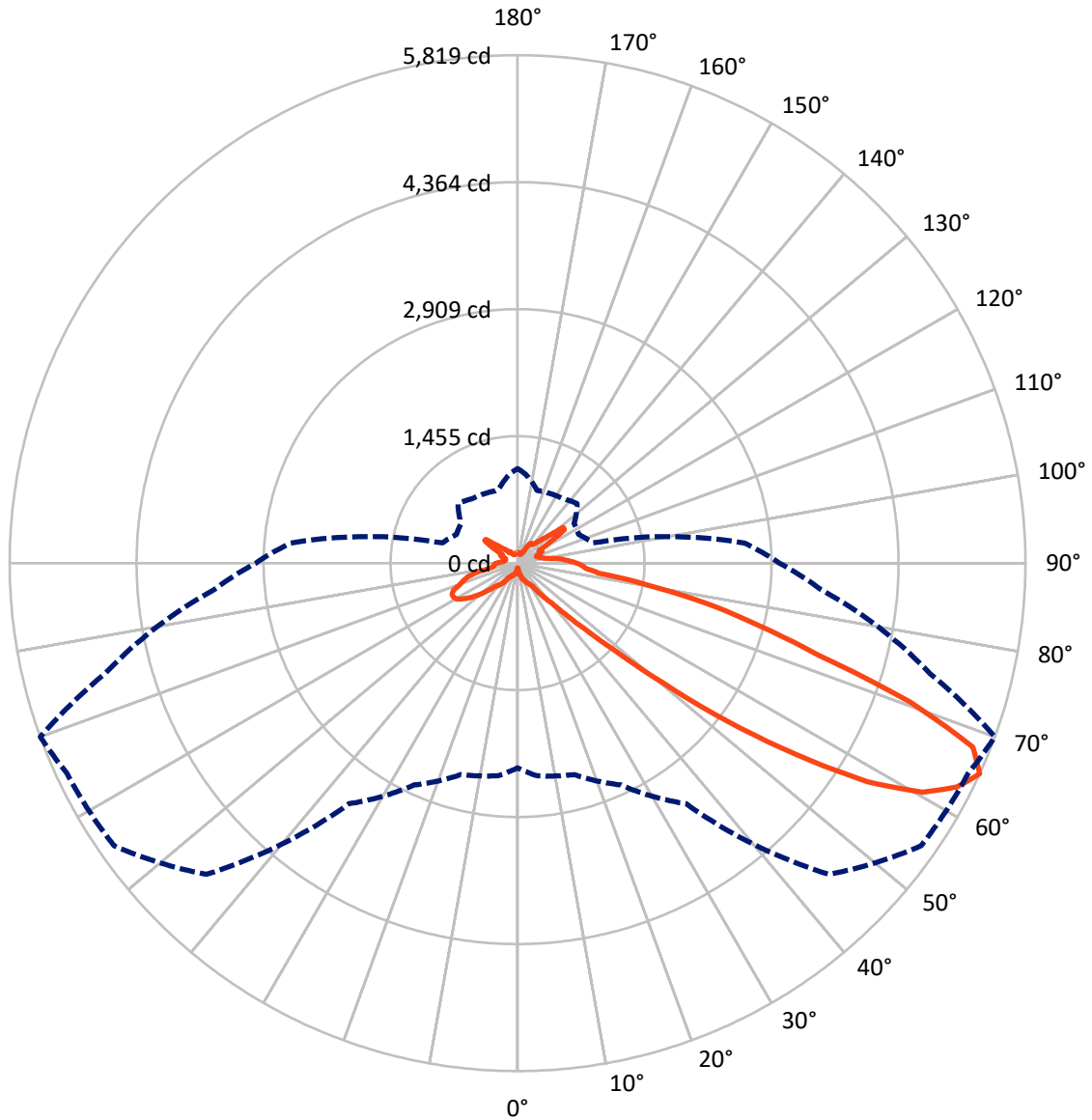
✕ Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.3 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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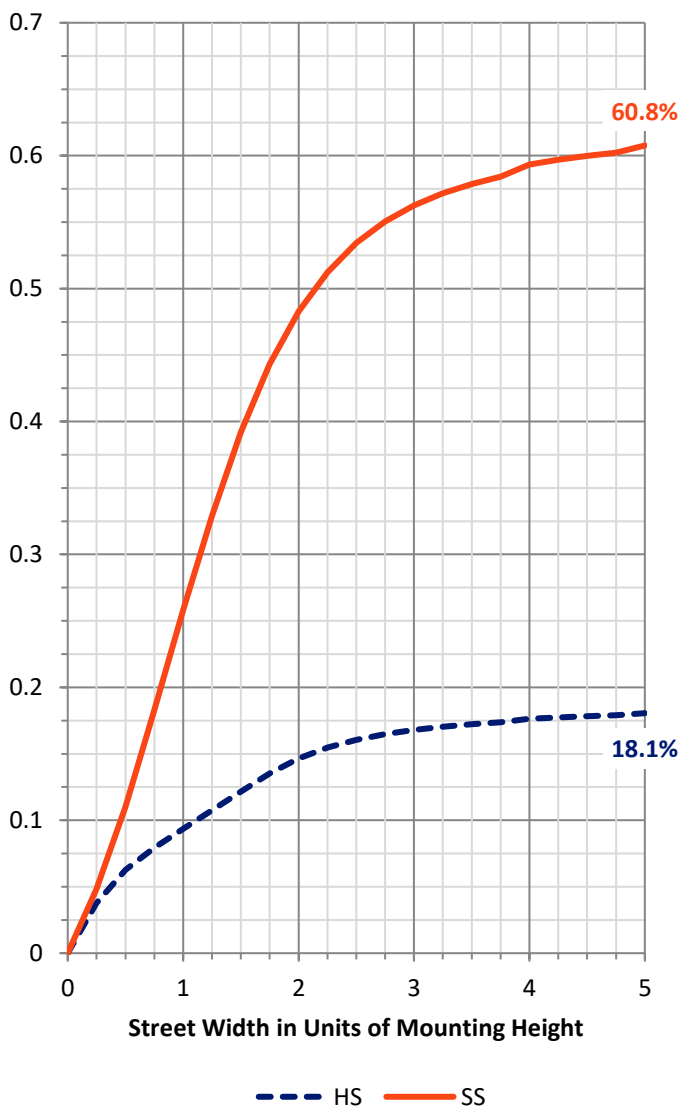
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1497.4	534.2	2031.6
	% Fixture	18.8	6.7	25.6
<b>Street Side</b>	Lumens	4993.4	924.4	5917.8
	% Fixture	62.8	11.6	74.4
<b>Total</b>	Lumens	6490.8	1458.6	7949.4
	% Fixture	81.7	18.3	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	8.5	0.1
10°-20°	41.6	0.5
20°-30°	88.4	1.1
30°-40°	180.0	2.3
40°-50°	457.8	5.8
50°-60°	1471.2	18.5
60°-70°	2400.9	30.2
70°-80°	1366.8	17.2
80°-90°	475.6	6.0
90°-100°	296.0	3.7
100°-110°	188.5	2.4
110°-120°	207.4	2.6
120°-130°	350.7	4.4
130°-140°	206.7	2.6
140°-150°	111.3	1.4
150°-160°	56.2	0.7
160°-170°	30.8	0.4
170°-180°	11.1	0.1
0°-90°	6490.8	81.7
0°-180°	7949.4	100.0

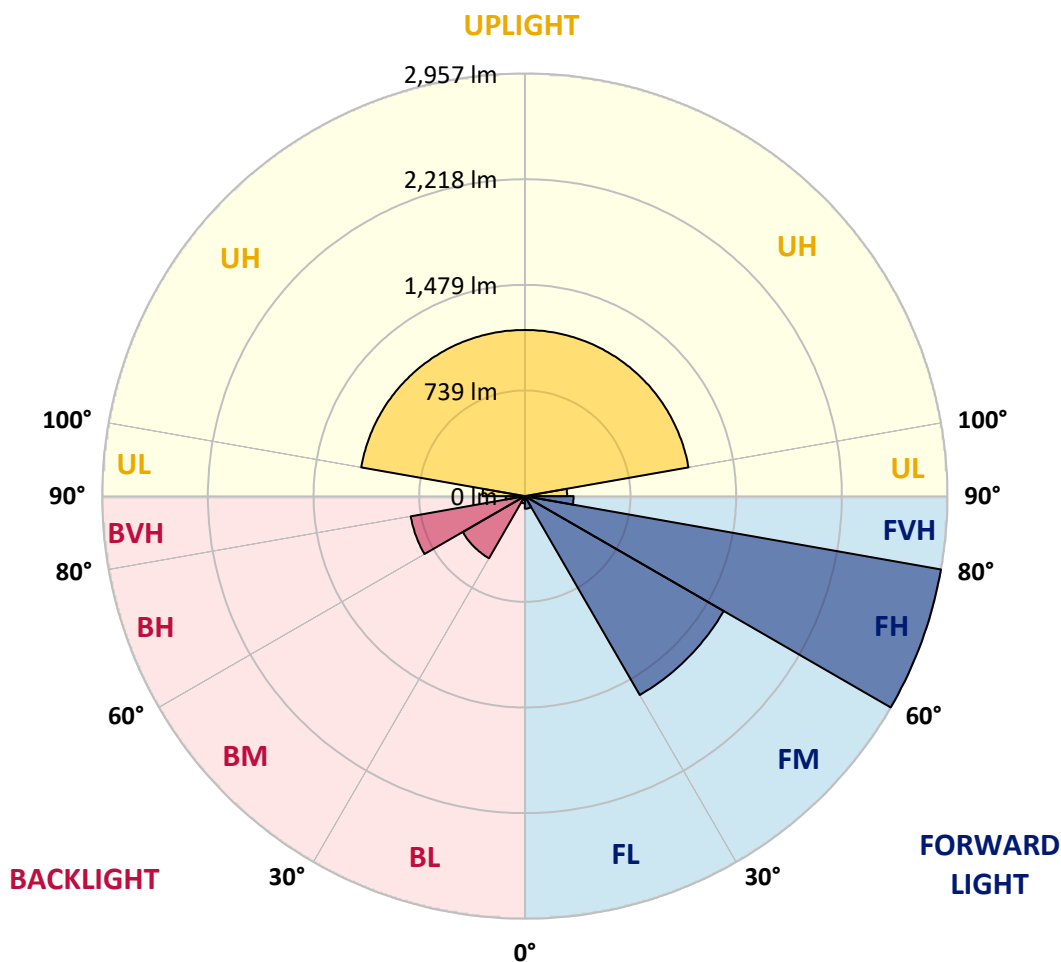


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	88.2	1.1			
FM (30°-60°)	1607.1	20.2			
FH (60°-80°)	2957.1	37.2			G2/5000
FVH (80°-90°)	341.0	4.3			G3/500
BL (0°-30°)	50.3	0.6	B0/110		
BM (30°-60°)	501.9	6.3	B1/1000		
BH (60°-80°)	810.7	10.2	B2/1000		G2/1000
BVH (80°-90°)	134.6	1.7			G2/225
UL (90°-100°)	296.0	3.7		U3/500	
UH (100°-180°)	1162.7	14.6		U5	

**BUG Rating: B2-U5-G3**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1
2.5°	63.1	63.1	64.7	64.7	64.7	63.1	62.3	60.6	60.6	60.6	59.8
5°	81.9	81.1	81.9	84.4	85.2	82.7	81.1	78.6	78.6	77.8	77.8
7.5°	110.6	109.8	108.1	105.7	106.5	109.0	112.2	105.7	104.0	99.9	98.3
10°	138.4	136.8	138.4	134.3	130.3	124.5	127.8	126.2	122.9	118.8	115.5
12.5°	168.8	169.6	172.8	169.6	163.0	154.0	152.4	148.3	145.0	144.2	139.3
15°	199.9	200.7	204.0	203.2	196.6	184.3	179.4	175.3	173.7	168.8	158.1
17.5°	216.3	217.1	217.9	218.7	214.6	204.8	197.4	190.1	187.6	186.0	172.8
20°	224.5	222.8	224.5	227.7	231.0	222.8	215.4	211.3	208.9	203.2	186.0
22.5°	237.6	235.9	235.1	237.6	247.4	241.7	234.3	230.2	227.7	220.4	194.1
25°	251.5	249.9	252.3	250.7	263.0	260.5	253.1	249.0	245.8	236.7	206.4
27.5°	267.1	265.4	267.9	266.2	276.1	277.7	272.8	269.5	264.6	251.5	215.4
30°	280.2	278.5	281.0	280.2	290.0	295.7	293.3	292.4	285.1	269.5	231.0
32.5°	290.8	290.0	295.7	298.2	300.6	313.7	312.1	319.5	311.3	292.4	253.9
35°	315.4	317.8	333.4	349.8	352.2	378.5	381.7	408.8	400.6	376.0	329.3
37.5°	487.4	478.4	462.8	447.3	441.5	492.3	499.7	526.7	506.3	460.4	385.0
40°	519.4	504.6	486.6	474.3	475.9	566.9	551.3	653.7	595.5	526.7	470.2
42.5°	493.1	488.2	551.3	580.8	559.5	692.2	666.0	861.0	794.6	625.9	567.7
45°	618.5	608.7	630.8	660.3	666.8	910.9	892.9	1096.9	1069.9	782.3	728.3
47.5°	707.8	698.8	728.3	828.2	914.2	1178.0	1276.3	1570.4	1475.4	1111.6	986.3
50°	975.6	974.0	1064.9	1183.7	1334.5	1713.7	1975.1	2305.2	2152.0	1573.7	1352.5
52.5°	1240.2	1243.5	1354.9	1565.5	1721.9	2392.0	2763.1	2994.1	3014.6	2052.1	1753.1
55°	1440.1	1460.6	1595.0	1948.0	2184.8	2995.8	3477.4	3656.8	3861.6	2772.9	2170.0
57.5°	1830.1	1861.2	1989.0	2334.7	2665.6	3747.8	4398.2	4417.9	4723.4	3572.5	2617.3
60°	2170.8	2243.7	2288.8	2602.6	3053.9	4466.2	5082.2	5042.9	5329.6	4235.2	3071.1
62.5°	2276.5	2360.1	2402.7	2736.9	3361.1	4869.2	5401.7	5450.9	5648.3	4700.5	3348.8
65°	2345.3	2443.6	2507.5	2803.3	3364.4	5041.3	5644.2	5696.6	5818.7	4895.5	3487.3
67.5°	2310.1	2435.4	2517.4	2780.3	3187.5	4908.6	5595.9	5495.1	5624.5	4732.4	3332.4
70°	2016.8	2147.9	2230.6	2426.4	2664.8	4127.1	4824.2	4655.4	4769.3	3950.1	2740.2
72.5°	1643.3	1708.0	1758.8	1866.1	2008.6	3044.1	3665.9	3525.8	3593.8	2972.0	2053.7
75°	1350.0	1369.7	1432.8	1494.2	1518.0	2226.5	2904.0	2776.2	2855.7	2262.6	1634.3
77.5°	980.6	992.0	1082.1	1092.0	1086.2	1527.8	2288.8	2176.6	2202.0	1681.8	1219.8
80°	569.3	591.5	709.4	703.7	693.8	941.2	1611.3	1566.3	1487.6	1141.9	844.6
82.5°	401.4	423.5	477.6	489.9	483.3	675.8	1046.1	1016.6	931.4	794.6	584.1
85°	422.7	425.2	427.6	433.3	422.7	602.9	801.2	786.4	787.2	657.0	481.7
87.5°	417.0	426.8	430.9	433.3	422.7	572.6	744.6	725.8	734.8	624.2	467.8
90°	366.2	384.2	385.8	389.9	384.2	511.2	668.5	650.4	661.9	562.8	426.0
92.5°	299.0	308.8	320.3	335.9	329.3	437.4	568.5	555.4	569.3	487.4	374.4
95°	283.4	294.1	301.5	312.1	302.3	398.9	513.6	487.4	498.9	426.8	322.8
97.5°	234.3	243.3	249.9	253.9	246.6	314.6	394.0	376.0	375.2	330.1	258.0
100°	199.9	205.6	211.3	215.4	208.9	260.5	312.1	305.6	307.2	272.8	222.0
102.5°	190.1	193.3	202.3	203.2	195.8	237.6	281.0	278.5	281.8	252.3	208.1
105°	186.0	188.4	195.8	193.3	186.8	222.0	258.9	260.5	260.5	235.1	195.0
107.5°	173.7	177.8	186.0	181.9	178.6	204.8	238.4	232.6	234.3	218.7	185.1
110°	172.0	175.3	183.5	180.2	177.8	199.9	229.4	227.7	230.2	216.3	190.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
112.5°	213.8	210.5	217.1	210.5	214.6	233.5	264.6	261.3	268.7	263.8	237.6
115°	263.8	265.4	272.0	258.9	263.0	281.8	299.0	304.7	311.3	303.9	276.9
117.5°	244.1	258.0	249.9	248.2	244.9	259.7	257.2	272.0	278.5	272.8	262.1
120°	261.3	278.5	254.8	242.5	237.6	274.4	292.4	291.6	286.7	275.2	253.1
122.5°	390.8	393.2	394.8	431.7	418.6	454.6	465.3	451.4	451.4	466.1	421.1
125°	609.5	611.9	610.3	626.7	617.7	652.1	666.0	665.2	657.0	649.6	605.4
127.5°	616.0	616.0	610.3	601.3	609.5	643.1	643.9	675.0	664.4	644.7	603.7
130°	430.1	433.3	453.8	460.4	471.9	479.2	471.0	498.1	503.0	499.7	471.9
132.5°	356.3	362.1	384.2	392.4	399.8	400.6	397.3	418.6	423.5	423.5	411.2
135°	308.0	314.6	317.0	312.9	323.6	331.8	338.3	355.5	353.9	350.6	340.0
137.5°	268.7	271.2	263.8	254.8	260.5	284.3	297.4	315.4	314.6	308.8	290.8
140°	226.9	227.7	223.6	219.5	225.3	245.8	258.0	277.7	275.2	271.2	249.9
142.5°	172.0	174.5	185.1	193.3	207.3	249.9	243.3	260.5	272.8	282.6	233.5
145°	181.0	177.8	176.1	185.1	203.2	264.6	245.8	267.9	273.6	280.2	223.6
147.5°	208.9	210.5	208.1	202.3	226.9	246.6	235.9	255.6	258.9	257.2	234.3
150°	163.8	166.3	167.1	164.7	195.0	194.1	183.5	198.2	199.9	199.9	184.3
152.5°	133.5	134.3	132.7	131.1	150.7	147.5	142.5	147.5	146.6	145.8	142.5
155°	127.0	127.0	125.3	126.2	139.3	136.0	132.7	136.0	134.3	131.9	128.6
157.5°	117.1	118.0	118.0	120.4	128.6	122.9	119.6	121.2	119.6	118.0	118.0
160°	110.6	110.6	111.4	114.7	119.6	113.9	111.4	112.2	111.4	109.8	110.6
162.5°	108.1	108.1	109.0	110.6	111.4	108.1	105.7	105.7	105.7	105.7	108.1
165°	106.5	106.5	106.5	107.3	107.3	104.9	104.0	104.9	105.7	106.5	109.8
167.5°	109.8	109.8	109.8	109.8	109.0	107.3	106.5	107.3	108.1	109.0	111.4
170°	114.7	113.9	113.9	113.0	112.2	110.6	109.8	109.0	109.0	109.8	110.6
172.5°	118.0	118.0	117.1	117.1	116.3	114.7	113.0	112.2	112.2	112.2	112.2
175°	122.1	122.1	122.1	122.1	121.2	119.6	118.8	117.1	117.1	117.1	117.1
177.5°	127.0	127.0	127.0	127.0	125.3	123.7	122.1	120.4	120.4	120.4	119.6
180°	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1
2.5°	59.0	58.2	55.7	54.9	54.1	52.4	50.8	50.0	49.2	49.2	50.0
5°	78.6	77.8	77.8	75.4	72.9	68.8	67.2	67.2	68.0	68.8	70.4
7.5°	99.1	100.8	102.4	98.3	90.9	81.1	75.4	77.0	81.1	84.4	84.4
10°	114.7	114.7	120.4	115.5	103.2	90.9	82.7	81.1	81.9	82.7	83.6
12.5°	136.8	136.8	133.5	120.4	108.1	95.8	89.3	87.7	87.7	84.4	83.6
15°	153.2	148.3	136.8	124.5	113.9	101.6	94.2	91.7	89.3	86.8	86.0
17.5°	163.0	154.0	138.4	127.0	116.3	106.5	99.1	94.2	91.7	92.6	92.6
20°	174.5	164.7	150.7	138.4	125.3	112.2	103.2	95.8	93.4	94.2	93.4
22.5°	183.5	173.7	159.7	145.8	131.9	118.0	107.3	98.3	95.0	95.8	95.8
25°	194.1	186.0	171.2	154.8	137.6	124.5	113.9	103.2	98.3	97.5	97.5
27.5°	204.8	199.1	183.5	163.8	145.8	130.3	119.6	107.3	101.6	99.1	99.1
30°	218.7	212.2	196.6	172.8	153.2	138.4	127.0	113.9	105.7	101.6	100.8
32.5°	240.8	233.5	214.6	189.2	161.4	146.6	134.3	119.6	109.0	104.0	103.2
35°	312.9	301.5	272.0	242.5	197.4	163.8	143.4	124.5	112.2	105.7	104.9
37.5°	358.0	330.1	290.8	271.2	222.0	200.7	172.8	142.5	117.1	109.0	107.3
40°	430.9	392.4	343.2	304.7	216.3	219.5	202.3	177.8	139.3	114.7	112.2
42.5°	492.3	444.0	369.5	319.5	217.1	229.4	216.3	195.8	167.1	136.0	131.1
45°	607.0	544.8	429.3	343.2	222.8	244.1	227.7	206.4	181.0	159.7	157.3
47.5°	820.0	735.6	536.6	382.6	260.5	283.4	253.9	226.1	203.2	178.6	174.5
50°	1122.3	1021.5	660.3	413.7	325.2	373.5	320.3	273.6	247.4	229.4	226.9
52.5°	1470.4	1364.8	751.2	471.0	403.9	485.0	423.5	369.5	335.0	335.0	340.0
55°	1875.1	1769.4	824.1	550.5	500.5	607.8	541.5	497.2	480.9	550.5	569.3
57.5°	2276.5	2142.2	873.3	631.6	613.6	752.0	672.6	634.9	665.2	871.6	935.5
60°	2642.7	2420.7	911.8	708.6	710.2	866.7	807.7	805.3	852.0	1115.7	1196.8
62.5°	2854.0	2551.8	909.3	752.8	766.8	938.0	888.8	901.9	928.1	1156.7	1218.1
65°	2999.0	2614.0	890.5	772.5	790.5	963.4	901.9	879.8	862.6	1024.0	1083.0
67.5°	2899.1	2468.2	847.9	743.8	775.8	926.5	845.4	782.3	748.7	830.7	870.8
70°	2428.1	2058.6	750.4	669.3	698.8	780.7	702.9	640.6	605.4	649.6	668.5
72.5°	1839.1	1566.3	676.6	625.9	612.8	645.5	571.8	502.2	480.9	509.5	513.6
75°	1464.7	1225.5	622.6	566.1	514.4	546.4	456.3	371.9	359.6	359.6	353.1
77.5°	1098.5	908.5	530.8	440.7	379.3	431.7	340.0	258.9	242.5	239.2	230.2
80°	736.4	618.5	357.2	292.4	272.8	320.3	241.7	190.1	190.9	190.1	179.4
82.5°	514.4	477.6	290.0	254.8	233.5	252.3	218.7	182.7	181.0	182.7	171.2
85°	456.3	437.4	281.0	263.0	240.8	243.3	209.7	172.8	173.7	176.9	167.1
87.5°	438.3	417.0	281.8	253.9	235.1	225.3	190.1	159.7	164.7	167.9	159.7
90°	394.8	373.5	258.9	229.4	209.7	195.8	167.9	151.5	158.1	161.4	154.0
92.5°	342.4	320.3	215.4	202.3	197.4	197.4	176.1	161.4	165.5	167.1	160.6
95°	294.9	273.6	191.7	177.8	173.7	174.5	157.3	145.0	147.5	146.6	141.7
97.5°	238.4	225.3	167.1	158.1	154.0	152.4	140.9	131.9	136.8	140.1	136.0
100°	210.5	204.0	161.4	154.8	149.1	148.3	138.4	132.7	136.8	141.7	138.4
102.5°	196.6	191.7	154.0	145.0	140.9	139.3	132.7	126.2	130.3	135.2	132.7
105°	185.1	177.8	147.5	139.3	133.5	132.7	126.2	118.0	120.4	127.0	125.3
107.5°	175.3	170.4	146.6	137.6	130.3	130.3	122.9	116.3	117.1	119.6	119.6
110°	183.5	177.8	152.4	145.8	136.0	132.7	131.1	126.2	122.1	120.4	120.4



REPORT NUMBER: P856105  
 CATALOG NUMBER: FFX-CLB-60-722-U-FR-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	226.9	216.3	190.9	183.5	167.1	155.6	145.0	135.2	128.6	126.2	124.5
115°	267.9	255.6	225.3	206.4	184.3	167.1	152.4	141.7	131.9	128.6	131.9
117.5°	276.1	243.3	196.6	181.0	167.9	157.3	149.1	140.9	133.5	136.0	133.5
120°	273.6	233.5	198.2	220.4	198.2	173.7	154.0	154.0	151.5	139.3	141.7
122.5°	421.1	393.2	350.6	337.5	275.2	251.5	214.6	183.5	153.2	136.0	127.8
125°	576.7	549.7	484.1	434.2	371.9	306.4	235.1	181.0	141.7	125.3	127.8
127.5°	580.0	555.4	493.1	408.8	326.9	262.1	195.8	160.6	138.4	127.8	126.2
130°	452.2	428.4	375.2	310.5	258.9	216.3	176.1	145.0	125.3	117.1	114.7
132.5°	391.6	370.3	321.1	262.1	224.5	190.9	157.3	126.2	113.0	107.3	108.1
135°	329.3	303.9	257.2	225.3	201.5	171.2	140.9	115.5	109.0	107.3	106.5
137.5°	279.3	261.3	228.6	204.0	181.0	154.0	123.7	108.1	105.7	107.3	105.7
140°	237.6	222.8	204.8	183.5	155.6	130.3	110.6	103.2	107.3	108.1	107.3
142.5°	204.8	190.1	171.2	142.5	129.4	118.0	113.0	107.3	107.3	106.5	105.7
145°	171.2	151.5	142.5	146.6	138.4	127.0	118.0	106.5	102.4	102.4	103.2
147.5°	196.6	176.1	164.7	155.6	140.1	123.7	109.8	99.1	97.5	100.8	99.9
150°	169.6	150.7	142.5	130.3	120.4	108.1	99.1	95.0	95.8	99.9	99.9
152.5°	135.2	122.1	117.1	113.9	109.0	101.6	96.7	95.0	96.7	98.3	98.3
155°	127.0	119.6	113.9	111.4	105.7	99.9	95.8	95.0	96.7	98.3	99.9
157.5°	118.8	116.3	109.0	106.5	101.6	99.1	96.7	96.7	97.5	99.1	100.8
160°	113.0	112.2	105.7	104.9	101.6	99.9	99.9	100.8	101.6	101.6	101.6
162.5°	109.8	109.8	107.3	105.7	104.9	104.0	106.5	107.3	106.5	106.5	106.5
165°	110.6	111.4	109.0	107.3	106.5	108.1	112.2	112.2	110.6	109.8	109.0
167.5°	111.4	112.2	110.6	109.8	109.8	111.4	113.0	112.2	111.4	110.6	109.8
170°	110.6	111.4	111.4	112.2	112.2	112.2	113.9	113.9	112.2	111.4	111.4
172.5°	112.2	113.0	113.9	114.7	115.5	114.7	115.5	115.5	115.5	115.5	116.3
175°	117.1	117.1	118.0	118.0	117.1	118.0	118.0	118.0	118.8	120.4	120.4
177.5°	119.6	119.6	118.8	118.8	118.0	118.8	118.8	118.8	118.8	119.6	118.8
180°	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2

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: SP1-2406-133-2

Test Date: 07/11/2024

Luminaire Tested: FFX-CLB-100-722-U-FR-T5

Data in this report applies to families of products including FFX-CLB-100-722-U-FR-T5.

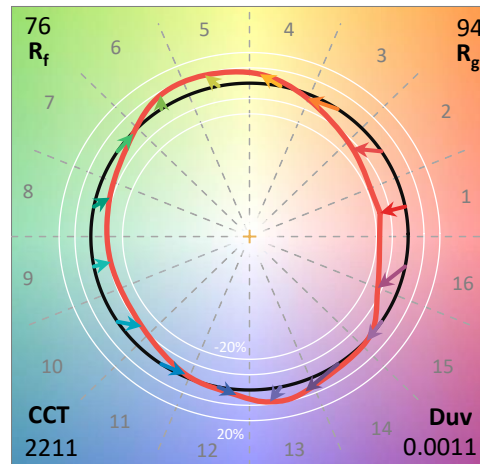
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2406-133-2  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 07/12/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Streetworks  
 Catalog Number: **FFX-CLB-100-722-U-FR-T5**  
 Description: FAIRFAX ACORN W/ FAIRFAX REFRACTOR 100W T5

**Spectral Parameters**

CCT (K): 2211  
 CIE u': 0.2892  
 CIE v': 0.5376  
 Duv: 0.0011  
 CIE x: 0.5069  
 CIE y: 0.4188  
 CIE z: 0.0743  
 Peak Wavelength (nm): 606  
 Dominant Wavelength (nm): 586  
 Purity: 77.8805  
 Rf: 76.1  
 Rg: 94.3

CRI (Ra):	71.4		
R1:	68.2	R9:	-29.2
R2:	85.0	R10:	67.8
R3:	94.0	R11:	60.7
R4:	65.1	R12:	59.0
R5:	66.6	R13:	71.3
R6:	81.8	R14:	97.6
R7:	73.4	R15:	58.9
R8:	37.3		



**Test Conditions**

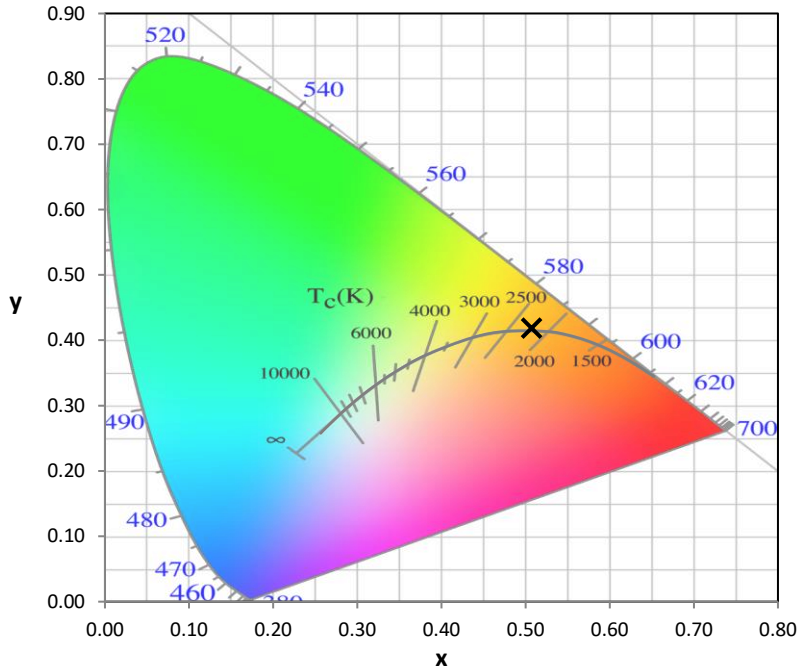
Stabilization Time: 0.813563M  
 Operation Time: 1H  
 Sphere Temperature (°C): 24.7

REPORT NUMBER: SP1-2406-133-2

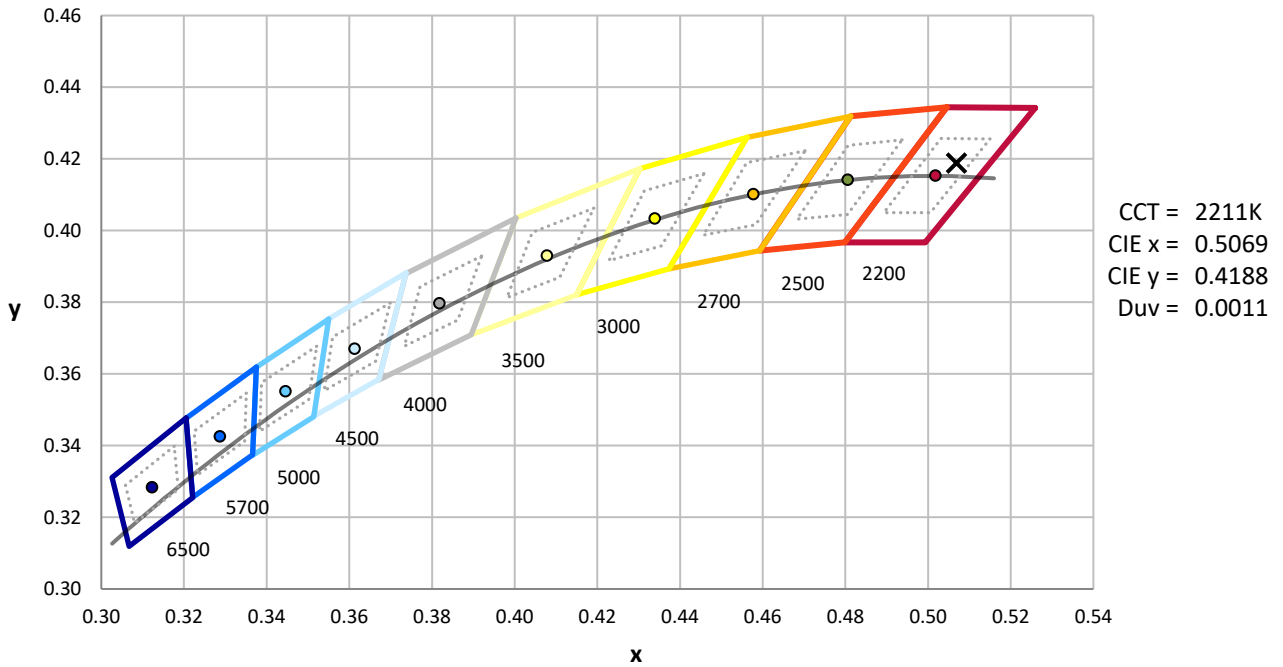
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2406-133-2

CIE 1931 Chromaticity Diagram



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

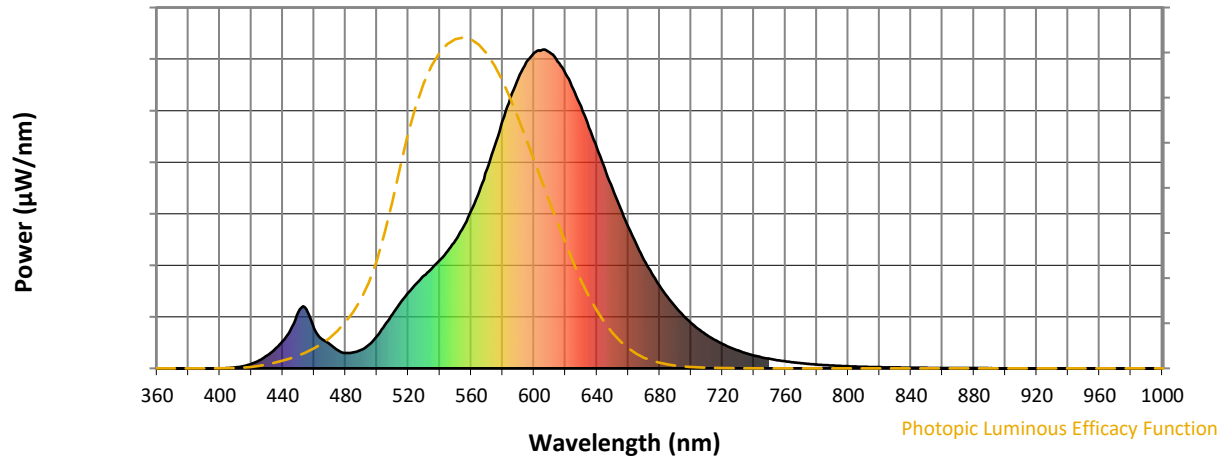


CCT = 2211K  
CIE x = 0.5069  
CIE y = 0.4188  
Duv = 0.0011

Point lies inside the ANSI 2200K 4-step quadrangle

REPORT NUMBER: SP1-2406-133-2

**Photopic Flux vs. Wavelength**

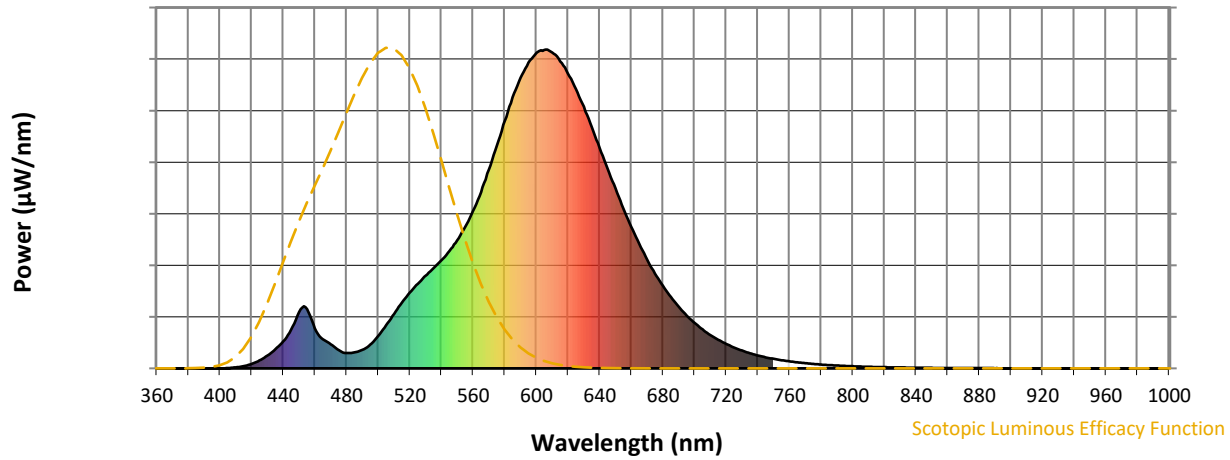


**Photopic Lumens: NR**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	58	NR	620	925	NR	750	30	NR	880	1	NR
365	0	NR	495	75	NR	625	877	NR	755	26	NR	885	1	NR
370	0	NR	500	101	NR	630	821	NR	760	22	NR	890	1	NR
375	0	NR	505	135	NR	635	756	NR	765	19	NR	895	0	NR
380	0	NR	510	171	NR	640	692	NR	770	16	NR	900	0	NR
385	0	NR	515	206	NR	645	626	NR	775	14	NR	905	0	NR
390	0	NR	520	238	NR	650	564	NR	780	12	NR	910	0	NR
395	0	NR	525	265	NR	655	502	NR	785	10	NR	915	0	NR
400	0	NR	530	291	NR	660	444	NR	790	9	NR	920	0	NR
405	1	NR	535	314	NR	665	390	NR	795	8	NR	925	0	NR
410	3	NR	540	339	NR	670	341	NR	800	7	NR	930	0	NR
415	7	NR	545	368	NR	675	298	NR	805	6	NR	935	0	NR
420	14	NR	550	401	NR	680	259	NR	810	5	NR	940	0	NR
425	25	NR	555	444	NR	685	224	NR	815	4	NR	945	0	NR
430	40	NR	560	495	NR	690	194	NR	820	4	NR	950	0	NR
435	60	NR	565	553	NR	695	166	NR	825	3	NR	955	0	NR
440	85	NR	570	623	NR	700	142	NR	830	3	NR	960	0	NR
445	121	NR	575	699	NR	705	122	NR	835	2	NR	965	0	NR
450	177	NR	580	777	NR	710	105	NR	840	2	NR	970	0	NR
455	186	NR	585	850	NR	715	90	NR	845	2	NR	975	0	NR
460	126	NR	590	912	NR	720	77	NR	850	2	NR	980	0	NR
465	92	NR	595	960	NR	725	65	NR	855	1	NR	985	0	NR
470	76	NR	600	990	NR	730	56	NR	860	1	NR	990	0	NR
475	57	NR	605	998	NR	735	48	NR	865	1	NR	995	0	NR
480	48	NR	610	991	NR	740	40	NR	870	1	NR	1000	0	NR
485	50	NR	615	963	NR	745	35	NR	875	1	NR			

REPORT NUMBER: SP1-2406-133-2

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

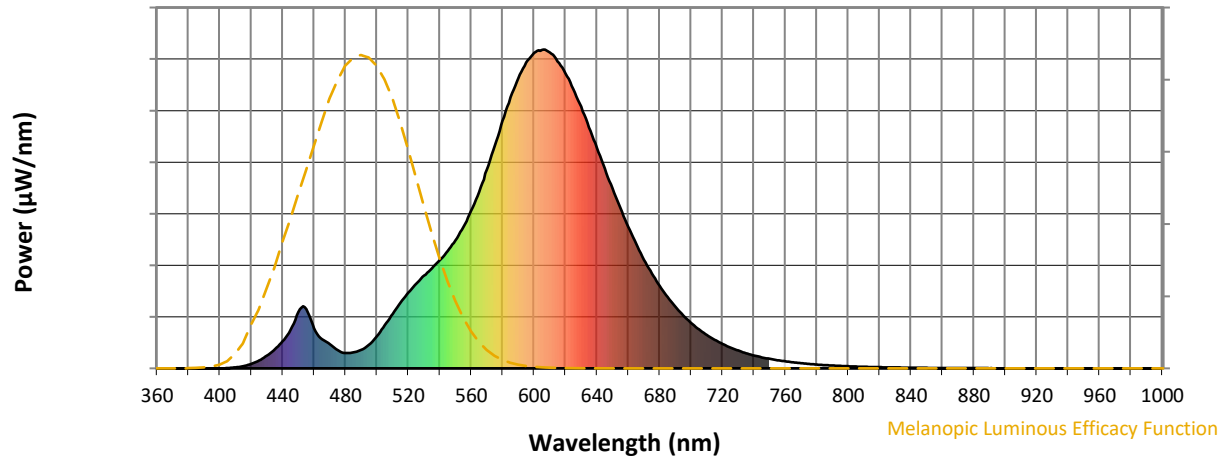
**S/P: 0.87**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	58	NR	620	925	NR	750	30	NR	880	1	NR
365	0	NR	495	75	NR	625	877	NR	755	26	NR	885	1	NR
370	0	NR	500	101	NR	630	821	NR	760	22	NR	890	1	NR
375	0	NR	505	135	NR	635	756	NR	765	19	NR	895	0	NR
380	0	NR	510	171	NR	640	692	NR	770	16	NR	900	0	NR
385	0	NR	515	206	NR	645	626	NR	775	14	NR	905	0	NR
390	0	NR	520	238	NR	650	564	NR	780	12	NR	910	0	NR
395	0	NR	525	265	NR	655	502	NR	785	10	NR	915	0	NR
400	0	NR	530	291	NR	660	444	NR	790	9	NR	920	0	NR
405	1	NR	535	314	NR	665	390	NR	795	8	NR	925	0	NR
410	3	NR	540	339	NR	670	341	NR	800	7	NR	930	0	NR
415	7	NR	545	368	NR	675	298	NR	805	6	NR	935	0	NR
420	14	NR	550	401	NR	680	259	NR	810	5	NR	940	0	NR
425	25	NR	555	444	NR	685	224	NR	815	4	NR	945	0	NR
430	40	NR	560	495	NR	690	194	NR	820	4	NR	950	0	NR
435	60	NR	565	553	NR	695	166	NR	825	3	NR	955	0	NR
440	85	NR	570	623	NR	700	142	NR	830	3	NR	960	0	NR
445	121	NR	575	699	NR	705	122	NR	835	2	NR	965	0	NR
450	177	NR	580	777	NR	710	105	NR	840	2	NR	970	0	NR
455	186	NR	585	850	NR	715	90	NR	845	2	NR	975	0	NR
460	126	NR	590	912	NR	720	77	NR	850	2	NR	980	0	NR
465	92	NR	595	960	NR	725	65	NR	855	1	NR	985	0	NR
470	76	NR	600	990	NR	730	56	NR	860	1	NR	990	0	NR
475	57	NR	605	998	NR	735	48	NR	865	1	NR	995	0	NR
480	48	NR	610	991	NR	740	40	NR	870	1	NR	1000	0	NR
485	50	NR	615	963	NR	745	35	NR	875	1	NR			



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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 1.42

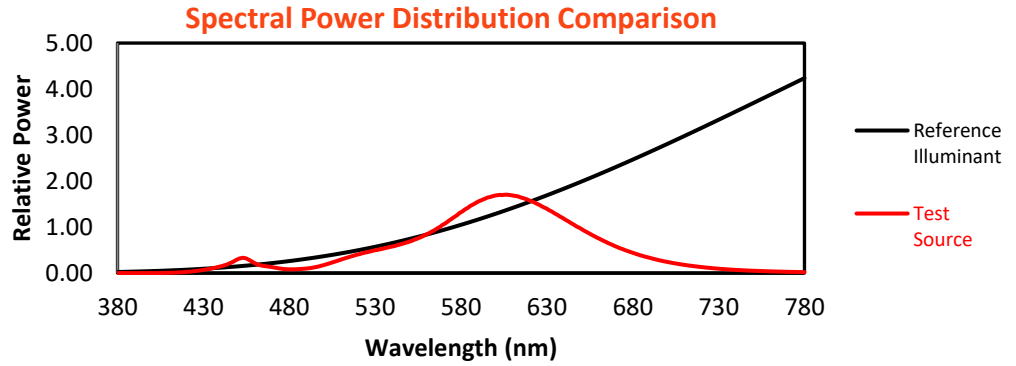
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	58	NR	620	925	NR	750	30	NR	880	1	NR
365	0	NR	495	75	NR	625	877	NR	755	26	NR	885	1	NR
370	0	NR	500	101	NR	630	821	NR	760	22	NR	890	1	NR
375	0	NR	505	135	NR	635	756	NR	765	19	NR	895	0	NR
380	0	NR	510	171	NR	640	692	NR	770	16	NR	900	0	NR
385	0	NR	515	206	NR	645	626	NR	775	14	NR	905	0	NR
390	0	NR	520	238	NR	650	564	NR	780	12	NR	910	0	NR
395	0	NR	525	265	NR	655	502	NR	785	10	NR	915	0	NR
400	0	NR	530	291	NR	660	444	NR	790	9	NR	920	0	NR
405	1	NR	535	314	NR	665	390	NR	795	8	NR	925	0	NR
410	3	NR	540	339	NR	670	341	NR	800	7	NR	930	0	NR
415	7	NR	545	368	NR	675	298	NR	805	6	NR	935	0	NR
420	14	NR	550	401	NR	680	259	NR	810	5	NR	940	0	NR
425	25	NR	555	444	NR	685	224	NR	815	4	NR	945	0	NR
430	40	NR	560	495	NR	690	194	NR	820	4	NR	950	0	NR
435	60	NR	565	553	NR	695	166	NR	825	3	NR	955	0	NR
440	85	NR	570	623	NR	700	142	NR	830	3	NR	960	0	NR
445	121	NR	575	699	NR	705	122	NR	835	2	NR	965	0	NR
450	177	NR	580	777	NR	710	105	NR	840	2	NR	970	0	NR
455	186	NR	585	850	NR	715	90	NR	845	2	NR	975	0	NR
460	126	NR	590	912	NR	720	77	NR	850	2	NR	980	0	NR
465	92	NR	595	960	NR	725	65	NR	855	1	NR	985	0	NR
470	76	NR	600	990	NR	730	56	NR	860	1	NR	990	0	NR
475	57	NR	605	998	NR	735	48	NR	865	1	NR	995	0	NR
480	48	NR	610	991	NR	740	40	NR	870	1	NR	1000	0	NR
485	50	NR	615	963	NR	745	35	NR	875	1	NR			

REPORT NUMBER: SP1-2406-133-2

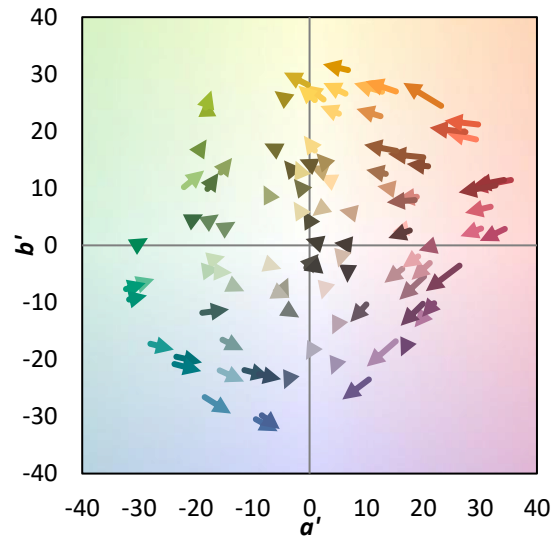
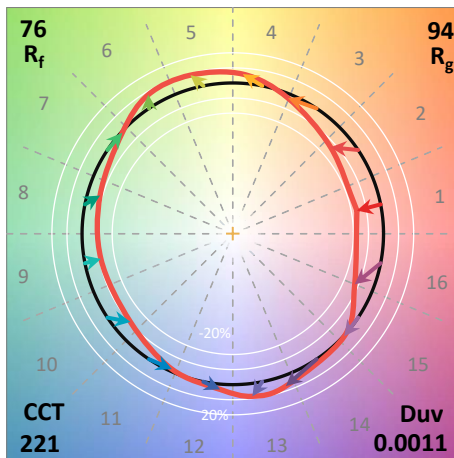
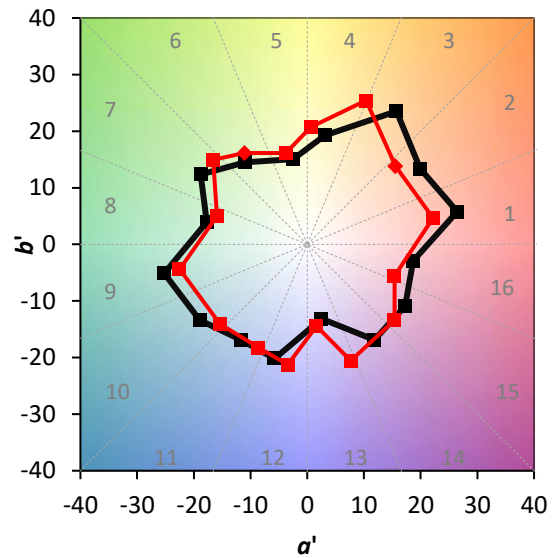
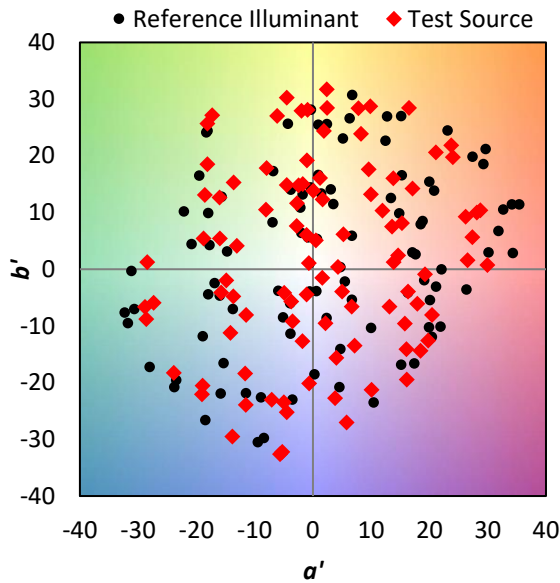
TM-30-18

**Summary**

$R_f = 76.1$   
 $R_g = 94.3$   
 CIE  $R_a = 71.4$   
 $R_9 = -29.2$



**Color Vector Graphics**

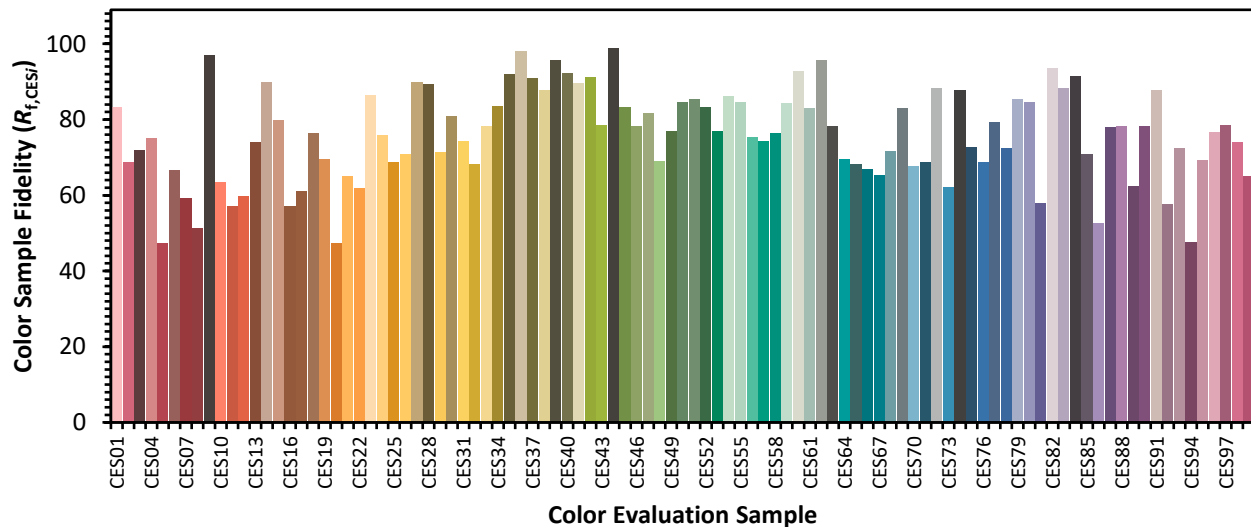


REPORT NUMBER: SP1-2406-133-2

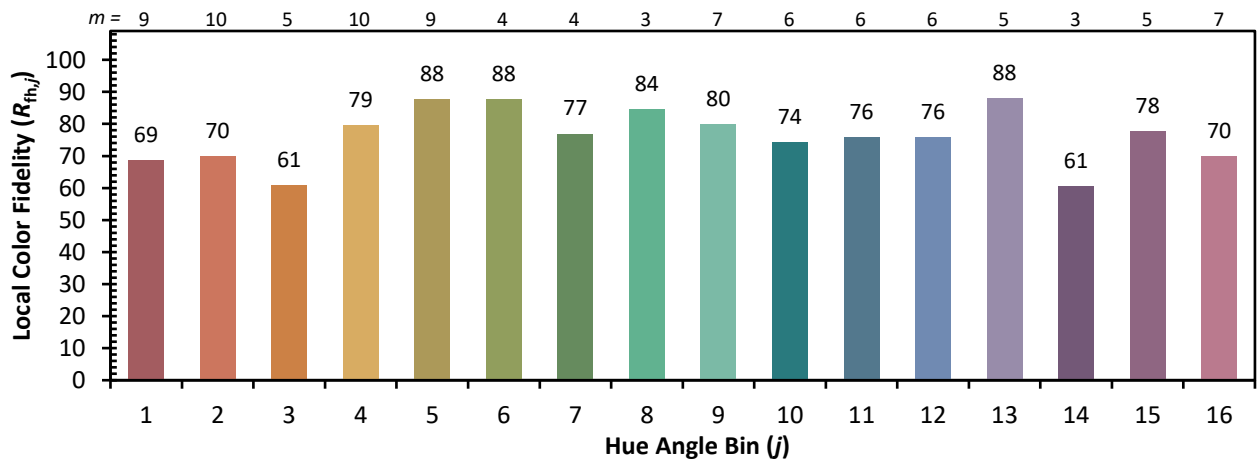
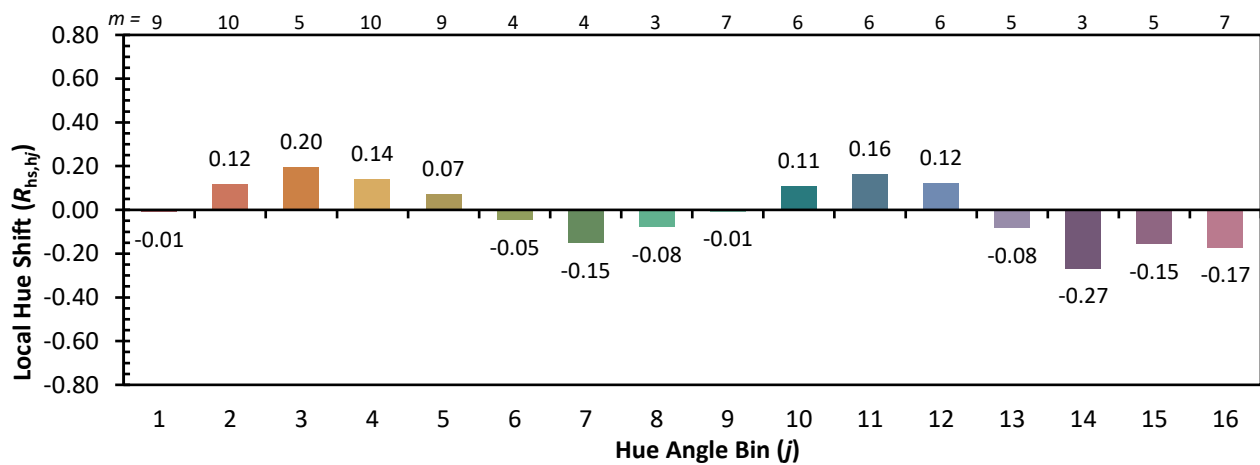
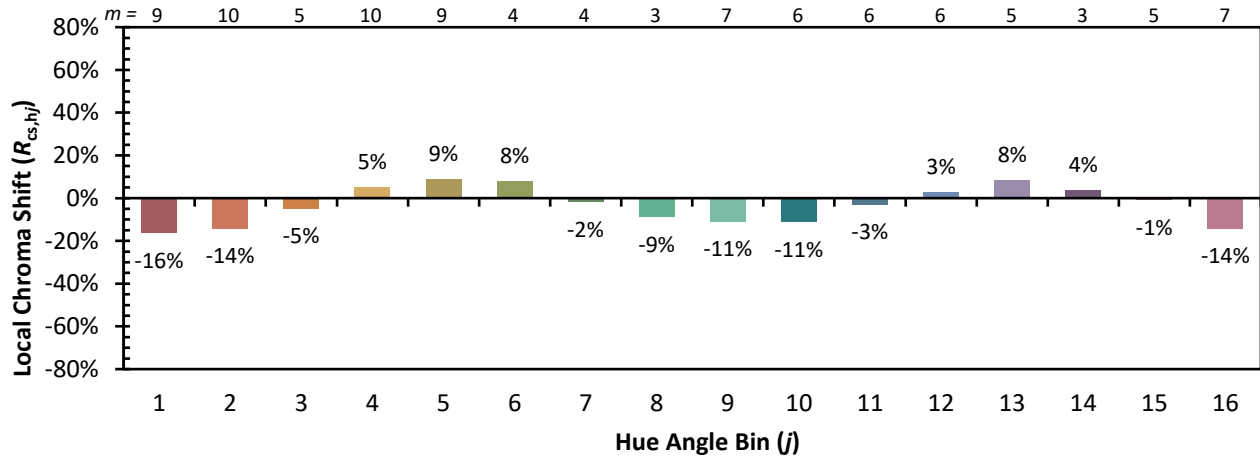
TM-30-18

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

CES01 = 87	CES26 = 71	CES51 = 85	CES76 = 69
CES02 = 65	CES27 = 90	CES52 = 83	CES77 = 79
CES03 = 32	CES28 = 89	CES53 = 77	CES78 = 72
CES04 = 72	CES29 = 71	CES54 = 86	CES79 = 86
CES05 = 52	CES30 = 81	CES55 = 85	CES80 = 85
CES06 = 52	CES31 = 74	CES56 = 75	CES81 = 58
CES07 = 44	CES32 = 68	CES57 = 74	CES82 = 93
CES08 = 42	CES33 = 78	CES58 = 76	CES83 = 88
CES09 = 29	CES34 = 84	CES59 = 84	CES84 = 92
CES10 = 79	CES35 = 92	CES60 = 93	CES85 = 71
CES11 = 62	CES36 = 98	CES61 = 83	CES86 = 53
CES12 = 68	CES37 = 91	CES62 = 96	CES87 = 78
CES13 = 45	CES38 = 88	CES63 = 78	CES88 = 78
CES14 = 75	CES39 = 96	CES64 = 69	CES89 = 63
CES15 = 72	CES40 = 92	CES65 = 68	CES90 = 78
CES16 = 49	CES41 = 90	CES66 = 67	CES91 = 88
CES17 = 51	CES42 = 91	CES67 = 65	CES92 = 58
CES18 = 57	CES43 = 79	CES68 = 72	CES93 = 72
CES19 = 74	CES44 = 99	CES69 = 83	CES94 = 48
CES20 = 68	CES45 = 83	CES70 = 68	CES95 = 69
CES21 = 88	CES46 = 78	CES71 = 69	CES96 = 77
CES22 = 81	CES47 = 82	CES72 = 88	CES97 = 79
CES23 = 92	CES48 = 69	CES73 = 62	CES98 = 74
CES24 = 92	CES49 = 77	CES74 = 88	CES99 = 65
CES25 = 74	CES50 = 85	CES75 = 73	



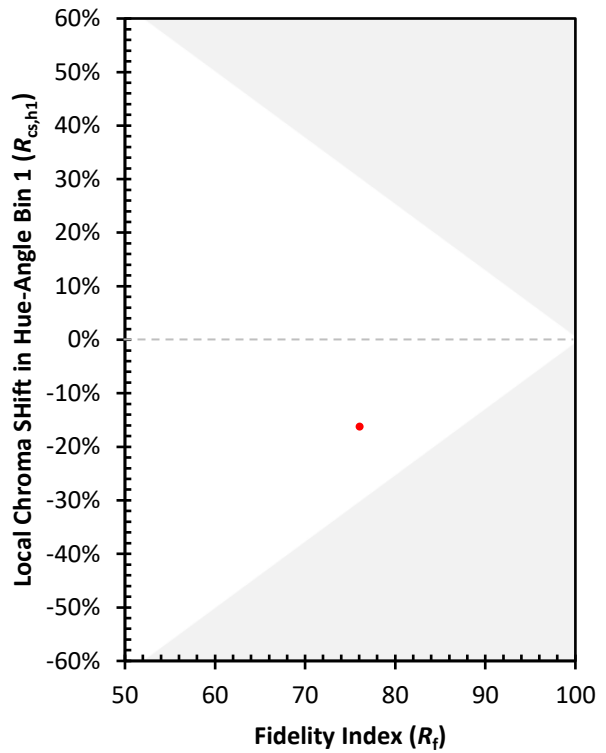
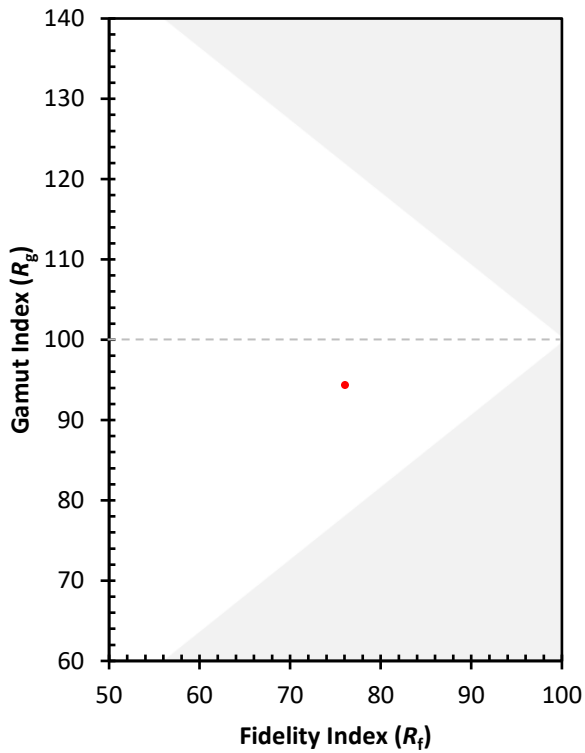
Color Rendition by Hue-Angle Bin



REPORT NUMBER: SP1-2406-133-2

TM-30-18

Measure Comparisons



(END OF REPORT)