

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: P856213

Luminaire Tested: **FFX-CLB-60-730-U-FR-T3-UPLR**

Issue Date: 07/16/2024



Test Information

Test Method: LM-79-08
Report Number: P856213
Test Lab: INNOVATION CENTER(G3)
Issue Date: 07/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: FFX-CLB-60-730-U-FR-T3-UPLR
Description: FAIRFAX POST TOP FIXTURE w/ FAIRFAX REFRACTOR T3 DISTRIBUTION LENS AND UPLIGHT REFLECTOR
Light Source: (4) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

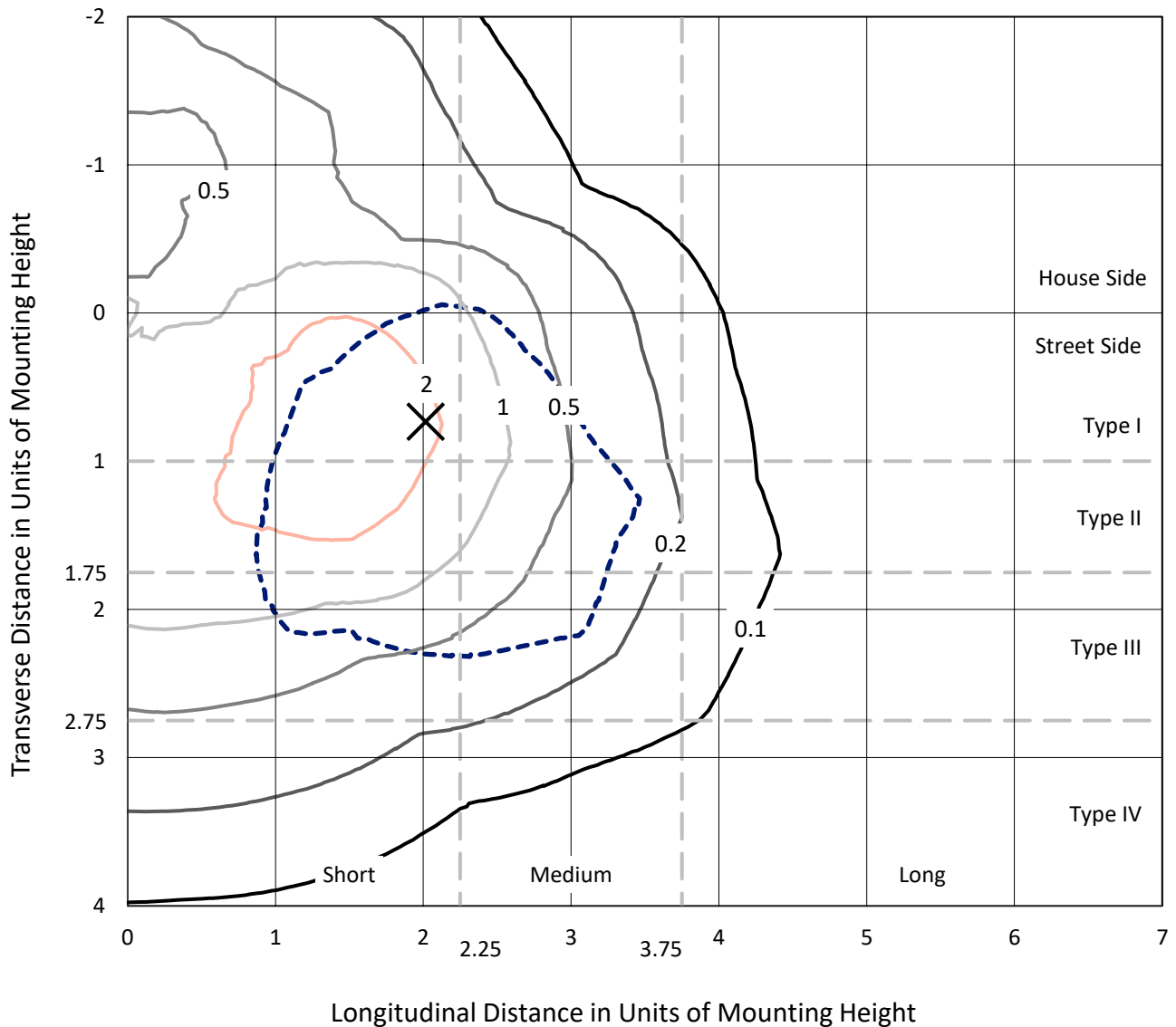
Lumens per Lamp: N/A
Luminaire Lumens: 9134.1 lumens
Efficiency: N/A
Efficacy: 152.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 1.67')
IES Classification: Type III - Short
BUG Rating: B2 - U4 - G3

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

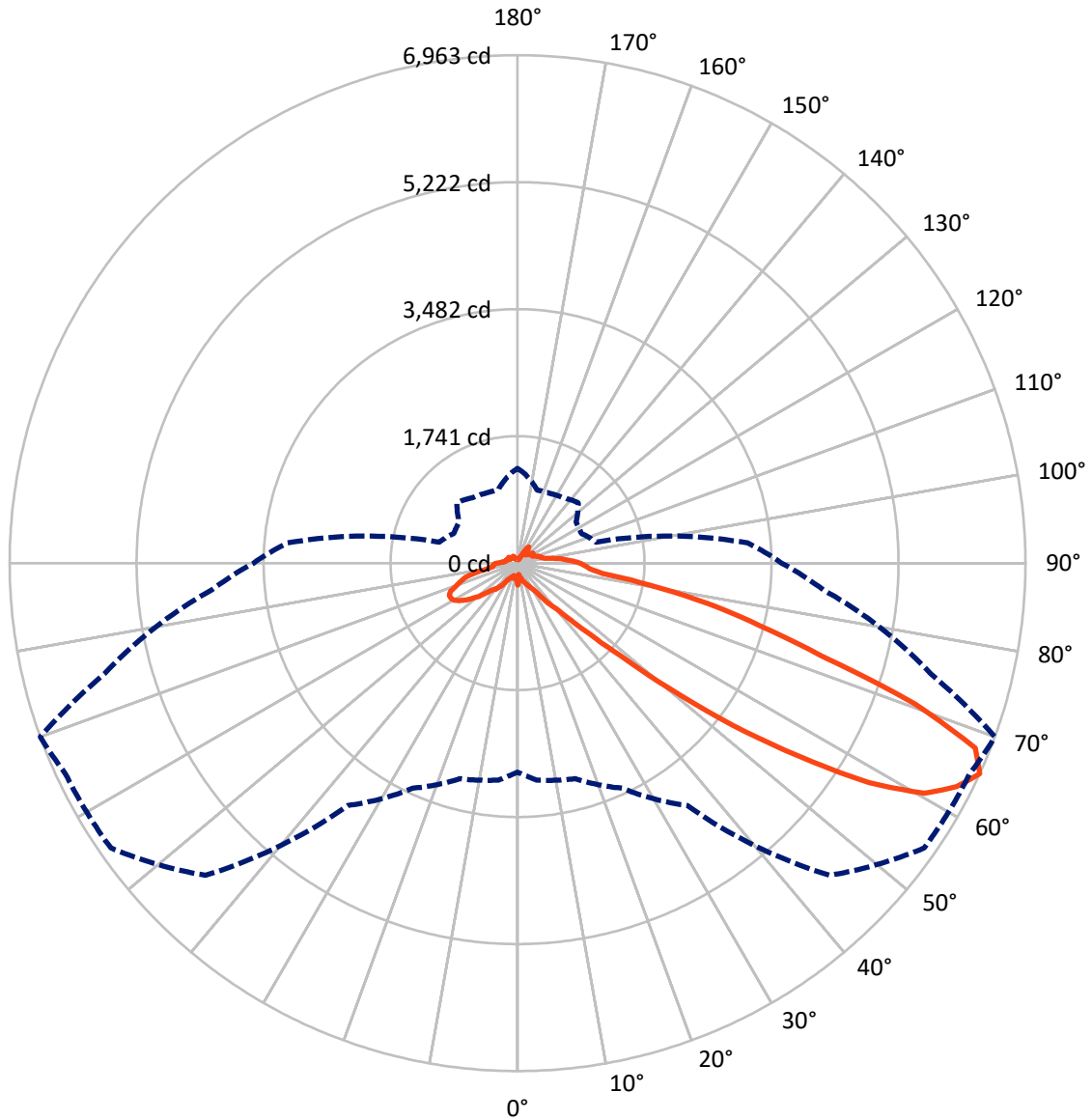
✕ Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.9 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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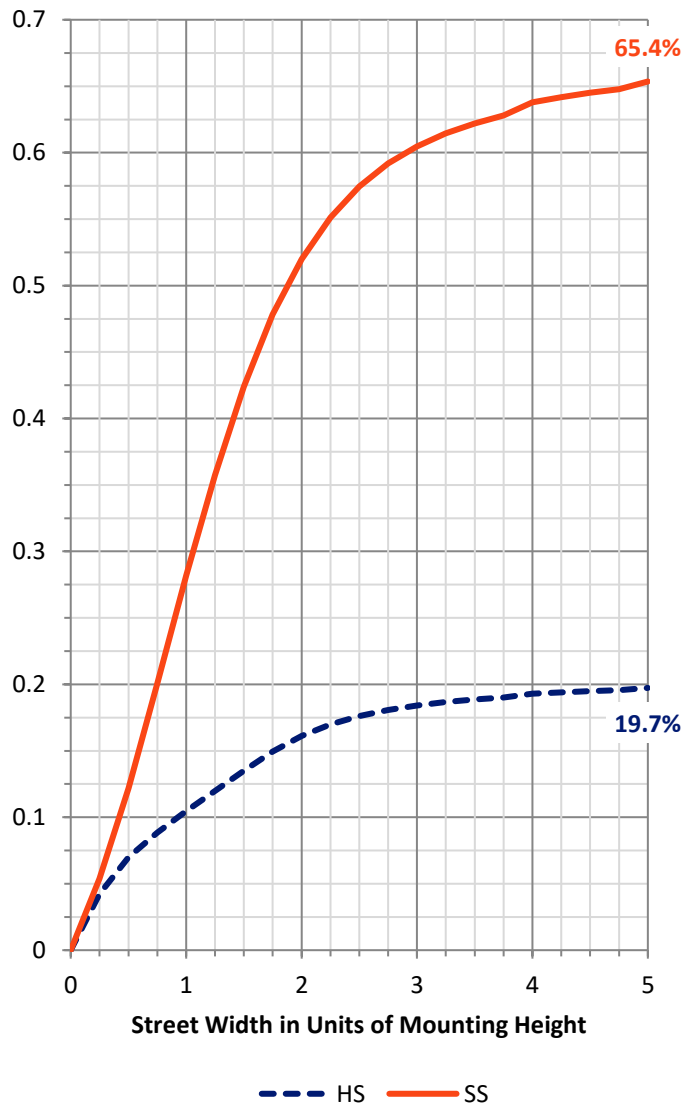
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1873.4	351.0	2224.4
	% Fixture	20.5	3.8	24.4
Street Side	Lumens	6177.6	732.2	6909.7
	% Fixture	67.6	8.0	75.6
Total	Lumens	8051.0	1083.1	9134.1
	% Fixture	88.1	11.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.5	0.2
10°-20°	61.1	0.7
20°-30°	123.3	1.3
30°-40°	260.9	2.9
40°-50°	608.3	6.7
50°-60°	1812.8	19.8
60°-70°	2904.7	31.8
70°-80°	1668.7	18.3
80°-90°	591.8	6.5
90°-100°	349.0	3.8
100°-110°	210.9	2.3
110°-120°	158.5	1.7
120°-130°	134.3	1.5
130°-140°	89.1	1.0
140°-150°	83.7	0.9
150°-160°	37.1	0.4
160°-170°	15.4	0.2
170°-180°	5.1	0.1
0°-90°	8051.0	88.1
0°-180°	9134.1	100.0

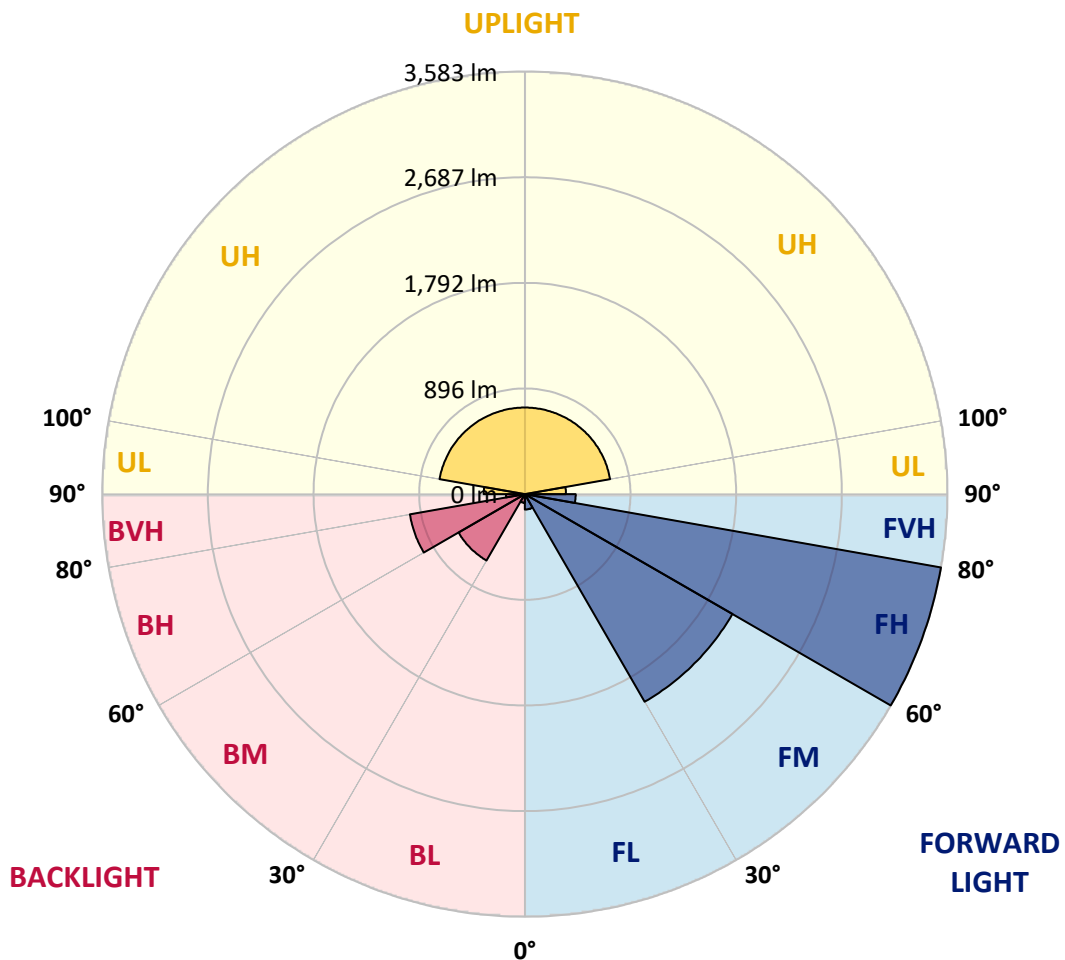


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	130.9	1.4			
FM (30°-60°)	2032.4	22.3			
FH (60°-80°)	3583.2	39.2			G2/5000
FVH (80°-90°)	431.1	4.7			G3/500
BL (0°-30°)	73.0	0.8	B0/110		
BM (30°-60°)	649.5	7.1	B1/1000		
BH (60°-80°)	990.2	10.8	B2/1000		G2/1000
BVH (80°-90°)	160.7	1.8			G2/225
UL (90°-100°)	349.0	3.8		U3/500	
UH (100°-180°)	734.1	8.0		U4/1000	

BUG Rating: B2-U4-G3
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0
2.5°	252.7	250.7	255.6	259.4	264.3	257.5	245.9	257.5	261.4	273.0	281.7
5°	214.9	215.9	220.7	231.4	241.0	239.1	209.1	170.4	158.8	153.9	154.9
7.5°	213.0	212.0	209.1	208.1	213.9	235.2	232.3	204.3	183.0	164.6	146.2
10°	224.6	227.5	230.4	230.4	226.5	213.0	212.0	210.1	202.3	193.6	182.0
12.5°	277.8	281.7	284.6	274.9	262.3	248.8	238.1	220.7	213.0	208.1	199.4
15°	335.9	339.8	334.9	316.5	294.3	269.1	259.4	260.4	249.7	237.2	218.8
17.5°	366.9	364.9	344.6	323.3	305.9	286.5	273.0	264.3	260.4	255.6	237.2
20°	347.5	342.7	330.1	321.4	319.4	308.8	300.1	292.3	287.5	276.9	254.6
22.5°	333.0	333.0	331.1	329.1	340.7	335.9	332.0	321.4	314.6	301.1	268.1
25°	351.4	351.4	352.4	349.5	364.9	364.9	364.9	353.3	344.6	325.3	285.6
27.5°	377.5	376.6	379.5	377.5	391.1	394.0	399.8	391.1	378.5	355.3	304.9
30°	405.6	405.6	408.5	410.4	424.0	430.8	437.5	433.7	418.2	390.1	337.8
32.5°	435.6	434.6	443.4	453.0	460.8	473.4	476.3	485.9	470.5	437.5	386.2
35°	479.2	482.1	505.3	525.6	547.9	555.6	569.2	607.0	591.5	546.9	487.9
37.5°	693.1	678.6	672.8	649.5	646.6	692.1	708.6	744.4	713.4	653.4	563.4
40°	734.7	717.3	709.6	687.3	695.0	788.9	772.5	901.2	825.7	729.9	671.8
42.5°	692.1	689.2	780.2	797.7	788.0	937.0	905.1	1143.2	1062.9	840.2	775.4
45°	835.4	827.7	866.4	897.4	921.6	1189.7	1170.3	1421.1	1386.2	1023.2	959.3
47.5°	942.9	935.1	979.6	1083.2	1224.5	1515.0	1628.2	2006.7	1888.6	1407.5	1262.3
50°	1264.2	1259.4	1379.4	1490.8	1724.0	2152.9	2463.6	2872.1	2698.8	1966.1	1698.9
52.5°	1568.2	1583.7	1724.0	1938.0	2184.8	2959.2	3402.6	3689.1	3687.2	2560.4	2181.0
55°	1786.0	1838.3	2003.8	2390.0	2732.7	3674.6	4272.9	4484.8	4663.0	3416.2	2656.3
57.5°	2209.0	2300.0	2458.8	2841.1	3283.5	4540.0	5393.8	5359.0	5679.4	4303.8	3173.2
60°	2643.7	2750.2	2803.4	3154.8	3735.6	5373.5	6164.4	6083.1	6405.4	5076.3	3717.2
62.5°	2779.2	2883.7	2936.0	3318.4	4061.8	5845.9	6519.6	6551.6	6752.0	5627.1	4039.6
65°	2864.4	2984.4	3059.9	3404.5	4055.0	6052.1	6807.1	6837.1	6963.0	5864.3	4206.1
67.5°	2848.9	2983.4	3080.2	3389.0	3830.5	5880.7	6735.5	6600.0	6768.4	5694.9	4030.8
70°	2541.1	2658.2	2755.0	2993.1	3197.4	4954.3	5827.5	5603.9	5778.1	4757.8	3328.1
72.5°	2076.4	2124.8	2209.0	2321.3	2423.0	3675.6	4445.2	4253.5	4354.2	3569.1	2493.6
75°	1705.7	1696.0	1771.5	1852.8	1820.9	2685.3	3516.8	3341.6	3435.5	2710.5	1989.3
77.5°	1264.2	1259.4	1368.8	1362.0	1313.6	1859.6	2787.9	2661.1	2673.7	2001.9	1489.8
80°	759.9	774.4	880.9	902.2	845.1	1166.5	1990.3	1930.2	1840.2	1367.8	1044.5
82.5°	533.4	555.6	611.8	635.0	607.0	851.9	1318.4	1276.8	1170.3	992.2	735.7
85°	544.0	547.9	554.7	556.6	544.0	764.7	1023.2	1000.0	993.2	831.5	607.0
87.5°	544.0	552.7	558.5	557.6	535.3	716.3	943.8	907.0	915.7	777.3	586.6
90°	487.9	503.4	502.4	505.3	486.9	647.6	855.7	825.7	837.3	700.8	533.4
92.5°	398.8	409.5	420.1	440.5	413.3	550.8	723.1	695.0	709.6	596.3	454.0
95°	370.8	380.4	387.2	397.9	370.8	489.8	639.9	606.0	611.8	506.3	384.3
97.5°	300.1	305.9	313.6	315.6	296.2	376.6	486.9	457.9	461.7	393.0	302.0
100°	251.7	256.5	263.3	263.3	250.7	311.7	385.3	369.8	367.8	321.4	255.6
102.5°	238.1	240.1	250.7	248.8	236.2	287.5	348.5	338.8	339.8	298.2	240.1
105°	234.3	234.3	244.9	240.1	229.4	274.0	326.2	323.3	322.4	283.6	230.4
107.5°	230.4	230.4	241.0	236.2	227.5	258.5	306.9	297.2	296.2	270.1	217.8
110°	214.9	217.8	229.4	223.6	216.8	243.9	281.7	274.9	274.9	254.6	208.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
112.5°	190.7	192.6	203.3	198.4	193.6	216.8	249.7	241.0	242.0	228.5	194.6
115°	178.1	181.0	191.7	184.9	181.0	202.3	231.4	225.5	227.5	214.9	183.9
117.5°	179.1	180.1	187.8	188.8	181.0	198.4	213.9	215.9	218.8	211.0	186.8
120°	217.8	213.0	216.8	212.0	208.1	228.5	246.8	248.8	247.8	233.3	185.9
122.5°	219.7	210.1	220.7	213.9	210.1	232.3	252.7	257.5	252.7	240.1	189.7
125°	175.2	178.1	179.1	181.0	184.9	209.1	219.7	220.7	221.7	217.8	183.9
127.5°	153.9	152.9	148.1	149.1	157.8	179.1	186.8	192.6	188.8	186.8	165.5
130°	147.1	149.1	148.1	148.1	152.9	169.4	175.2	183.9	181.0	177.1	151.0
132.5°	135.5	137.5	146.2	156.8	154.9	160.7	162.6	171.3	172.3	172.3	152.0
135°	128.7	130.7	137.5	151.0	147.1	150.0	149.1	156.8	157.8	158.8	143.3
137.5°	131.7	132.6	128.7	130.7	133.6	146.2	150.0	157.8	157.8	153.9	133.6
140°	138.4	138.4	129.7	126.8	132.6	152.0	159.7	172.3	170.4	163.6	138.4
142.5°	127.8	129.7	134.6	140.4	152.9	206.2	206.2	230.4	238.1	240.1	167.5
145°	166.5	167.5	169.4	172.3	196.5	270.1	245.9	263.3	270.1	276.9	201.3
147.5°	191.7	193.6	191.7	183.9	206.2	231.4	219.7	227.5	235.2	237.2	202.3
150°	150.0	148.1	147.1	146.2	170.4	178.1	168.4	167.5	173.3	178.1	156.8
152.5°	109.4	108.4	107.5	106.5	127.8	122.9	116.2	116.2	118.1	119.1	110.4
155°	96.8	95.8	93.9	94.9	108.4	103.6	97.8	95.8	97.8	96.8	92.0
157.5°	79.4	77.4	77.4	81.3	88.1	82.3	78.4	75.5	76.5	75.5	76.5
160°	65.8	64.9	65.8	70.7	74.5	69.7	65.8	63.9	63.9	65.8	69.7
162.5°	59.0	58.1	59.0	61.0	62.9	58.1	55.2	55.2	56.1	60.0	67.8
165°	51.3	51.3	52.3	53.2	54.2	51.3	50.3	50.3	52.3	58.1	66.8
167.5°	49.4	49.4	49.4	49.4	49.4	48.4	47.4	50.3	52.3	55.2	61.0
170°	48.4	47.4	48.4	48.4	48.4	48.4	48.4	51.3	51.3	52.3	55.2
172.5°	49.4	49.4	49.4	50.3	52.3	53.2	52.3	54.2	53.2	53.2	53.2
175°	50.3	50.3	51.3	52.3	53.2	54.2	55.2	55.2	55.2	56.1	56.1
177.5°	50.3	50.3	51.3	52.3	53.2	51.3	49.4	48.4	47.4	47.4	47.4
180°	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0
2.5°	274.0	249.7	215.9	230.4	274.9	266.2	221.7	194.6	196.5	215.9	217.8
5°	159.7	164.6	186.8	233.3	242.0	200.4	161.7	155.9	187.8	232.3	241.0
7.5°	144.2	144.2	162.6	226.5	254.6	209.1	157.8	142.3	166.5	203.3	209.1
10°	174.2	168.4	170.4	193.6	204.3	167.5	141.3	134.6	148.1	152.9	151.0
12.5°	196.5	200.4	218.8	213.9	167.5	136.5	127.8	126.8	134.6	139.4	138.4
15°	211.0	204.3	190.7	175.2	159.7	142.3	129.7	122.0	113.3	109.4	109.4
17.5°	224.6	211.0	186.8	172.3	156.8	144.2	132.6	121.0	117.1	118.1	118.1
20°	241.0	224.6	202.3	185.9	167.5	150.0	135.5	122.9	120.0	121.0	120.0
22.5°	253.6	239.1	215.9	194.6	175.2	155.9	141.3	128.7	124.9	123.9	123.9
25°	269.1	256.5	232.3	206.2	183.0	164.6	152.0	137.5	130.7	128.7	128.7
27.5°	289.4	278.8	251.7	223.6	196.5	175.2	161.7	146.2	136.5	132.6	131.7
30°	320.4	305.9	275.9	241.0	213.0	190.7	174.2	154.9	143.3	136.5	135.5
32.5°	366.9	348.5	308.8	265.2	231.4	208.1	187.8	163.6	149.1	141.3	140.4
35°	465.6	445.3	395.0	334.0	284.6	237.2	205.2	173.3	154.9	145.2	144.2
37.5°	527.6	490.8	429.8	374.6	314.6	286.5	245.9	203.3	162.6	150.0	148.1
40°	617.6	570.2	493.7	419.2	313.6	312.7	285.6	247.8	191.7	158.8	155.9
42.5°	684.4	623.4	527.6	444.3	316.5	325.3	302.0	269.1	227.5	184.9	180.1
45°	820.9	743.4	591.5	466.6	320.4	339.8	316.5	281.7	244.9	214.9	212.0
47.5°	1076.4	969.0	715.4	509.2	364.0	388.2	346.6	305.9	270.1	240.1	233.3
50°	1433.6	1304.9	865.4	546.9	438.5	493.7	425.9	364.0	321.4	298.2	291.4
52.5°	1852.8	1708.6	959.3	606.0	528.5	623.4	548.9	476.3	420.1	424.0	420.1
55°	2320.4	2150.0	1041.6	695.0	643.7	767.6	686.3	623.4	593.4	677.6	682.5
57.5°	2771.4	2589.5	1092.9	788.9	772.5	934.1	839.3	794.7	806.4	1053.2	1111.3
60°	3202.2	2914.7	1132.6	877.0	880.9	1064.8	992.2	983.5	1019.3	1335.9	1424.0
62.5°	3451.0	3081.2	1130.7	934.1	948.7	1145.2	1081.3	1086.1	1113.2	1382.3	1455.9
65°	3620.4	3165.4	1111.3	963.2	977.7	1174.2	1091.9	1054.2	1036.8	1220.7	1299.1
67.5°	3518.8	3002.8	1064.8	938.0	957.4	1127.7	1025.1	930.3	900.3	1000.0	1046.4
70°	2974.7	2509.1	948.7	852.8	865.4	951.6	864.4	760.9	730.9	783.1	804.4
72.5°	2247.7	1926.4	850.9	788.0	758.0	787.0	701.8	593.4	586.6	614.7	618.6
75°	1795.7	1512.1	775.4	710.5	630.2	660.2	557.6	441.4	432.7	434.6	425.0
77.5°	1353.3	1124.8	652.4	559.5	477.2	526.6	414.3	304.9	290.4	284.6	274.0
80°	926.4	781.2	443.4	374.6	338.8	386.2	295.2	223.6	222.6	220.7	209.1
82.5°	657.3	603.1	362.0	318.5	287.5	304.0	256.5	209.1	204.3	205.2	192.6
85°	575.0	546.0	349.5	322.4	292.3	291.4	244.9	195.5	193.6	194.6	183.0
87.5°	549.8	517.9	341.7	307.8	278.8	264.3	215.9	172.3	177.1	180.1	169.4
90°	492.7	459.8	309.8	274.9	246.8	221.7	183.0	155.9	163.6	165.5	155.9
92.5°	415.3	381.4	241.0	220.7	207.2	203.3	171.3	148.1	153.9	154.9	147.1
95°	351.4	320.4	210.1	194.6	184.9	183.9	154.9	134.6	137.5	136.5	129.7
97.5°	282.7	260.4	183.9	169.4	158.8	152.9	132.6	117.1	121.0	122.9	118.1
100°	241.0	228.5	171.3	158.8	146.2	138.4	121.0	108.4	112.3	116.2	112.3
102.5°	226.5	216.8	168.4	154.9	141.3	131.7	115.2	101.6	103.6	108.4	105.5
105°	214.9	206.2	163.6	149.1	136.5	125.8	112.3	95.8	94.9	99.7	98.7
107.5°	202.3	194.6	160.7	143.3	129.7	120.0	107.5	92.0	88.1	91.0	90.0
110°	195.5	187.8	154.9	136.5	122.0	113.3	101.6	89.1	84.2	85.2	85.2



REPORT NUMBER: P856213

CATALOG NUMBER: FFX-CLB-60-730-U-FR-T3-UPLR

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	182.0	173.3	142.3	124.9	113.3	105.5	93.9	85.2	79.4	81.3	82.3
115°	173.3	161.7	130.7	118.1	105.5	98.7	92.0	84.2	77.4	77.4	78.4
117.5°	179.1	156.8	122.0	112.3	105.5	103.6	101.6	90.0	76.5	75.5	75.5
120°	171.3	157.8	132.6	129.7	122.9	117.1	104.5	89.1	74.5	72.6	72.6
122.5°	167.5	164.6	150.0	140.4	127.8	116.2	97.8	81.3	71.6	69.7	69.7
125°	165.5	162.6	145.2	126.8	110.4	98.7	87.1	76.5	70.7	67.8	67.8
127.5°	152.0	138.4	117.1	106.5	95.8	91.0	81.3	74.5	67.8	63.9	63.9
130°	140.4	127.8	109.4	97.8	89.1	85.2	78.4	71.6	64.9	61.0	60.0
132.5°	138.4	125.8	106.5	92.0	84.2	80.3	76.5	68.7	61.0	57.1	56.1
135°	128.7	114.2	94.9	87.1	82.3	79.4	76.5	66.8	59.0	55.2	55.2
137.5°	119.1	104.5	90.0	86.2	82.3	79.4	70.7	61.0	55.2	52.3	52.3
140°	120.0	103.6	92.0	89.1	83.2	74.5	66.8	60.0	55.2	51.3	50.3
142.5°	127.8	107.5	92.9	84.2	80.3	75.5	72.6	64.9	55.2	48.4	46.5
145°	140.4	116.2	104.5	100.7	93.9	85.2	74.5	60.0	50.3	44.5	43.6
147.5°	154.9	130.7	117.1	106.5	92.9	78.4	63.9	52.3	44.5	42.6	41.6
150°	134.6	111.3	100.7	86.2	74.5	62.9	52.3	46.5	42.6	41.6	41.6
152.5°	101.6	83.2	74.5	67.8	61.0	55.2	49.4	45.5	42.6	40.7	40.7
155°	88.1	78.4	69.7	62.9	56.1	50.3	45.5	43.6	40.7	40.7	39.7
157.5°	77.4	72.6	61.0	55.2	50.3	47.4	45.5	42.6	41.6	40.7	40.7
160°	70.7	67.8	56.1	51.3	48.4	46.5	46.5	44.5	41.6	40.7	40.7
162.5°	68.7	65.8	54.2	49.4	46.5	47.4	49.4	48.4	44.5	42.6	42.6
165°	67.8	65.8	55.2	48.4	46.5	47.4	52.3	53.2	48.4	45.5	44.5
167.5°	62.0	61.0	58.1	53.2	50.3	50.3	53.2	54.2	52.3	52.3	51.3
170°	56.1	56.1	57.1	58.1	56.1	53.2	51.3	51.3	54.2	57.1	58.1
172.5°	54.2	55.2	57.1	60.0	60.0	56.1	53.2	52.3	55.2	59.0	60.0
175°	57.1	58.1	59.0	59.0	57.1	56.1	55.2	54.2	56.1	60.0	61.0
177.5°	47.4	47.4	48.4	48.4	47.4	48.4	47.4	45.5	45.5	45.5	45.5
180°	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5

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

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2406-133-4

Test Date: 07/12/2024

Luminaire Tested: FFX-CLB-100-730-U-FR-T5

Data in this report applies to families of products including FFX-CLB-100-730-U-FR-T5.

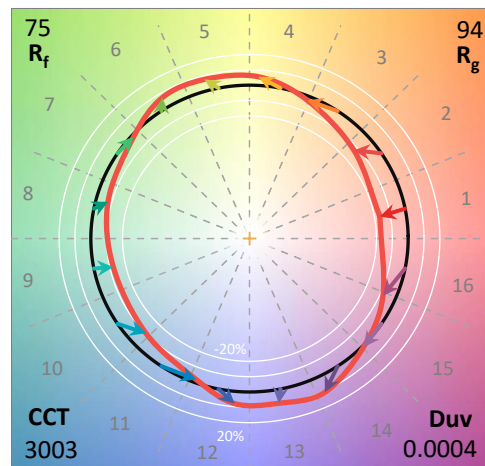
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2406-133-4
 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-100-730-U-FR-T5**
 Description: FAIRFAX ACORN W/ FAIRFAX REFRACTOR 100W T5

Spectral Parameters

CCT (K): 3003
 CIE u': 0.2503
 CIE v': 0.5219
 Duv: 0.0004
 CIE x: 0.4373
 CIE y: 0.4053
 CIE z: 0.1573
 Peak Wavelength (nm): 595
 Dominant Wavelength (nm): 582
 Purity: 52.93545
 Rf: 75.2
 Rg: 93.8

CRI (Ra): 71.9
 R1: 68.2
 R2: 82.2
 R3: 93.9
 R4: 67.6
 R5: 67.2
 R6: 75.3
 R7: 77.6
 R8: 43.1
 R9: -33.7
 R10: 59.0
 R11: 62.4
 R12: 48.5
 R13: 70.8
 R14: 96.6
 R15: 60.0



Test Conditions

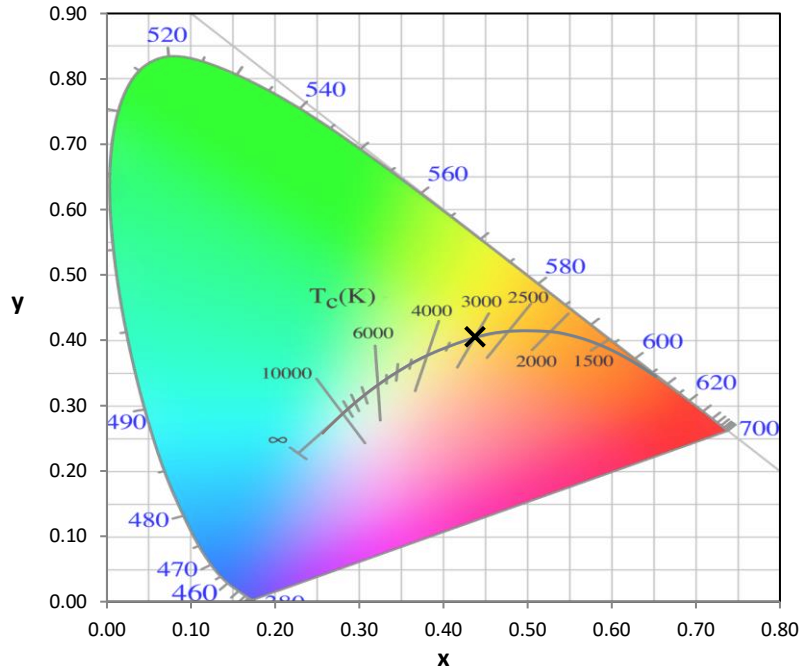
Stabilization Time: 0.794393M
 Operation Time: 1H
 Sphere Temperature (°C): 24.7

REPORT NUMBER: SP1-2406-133-4

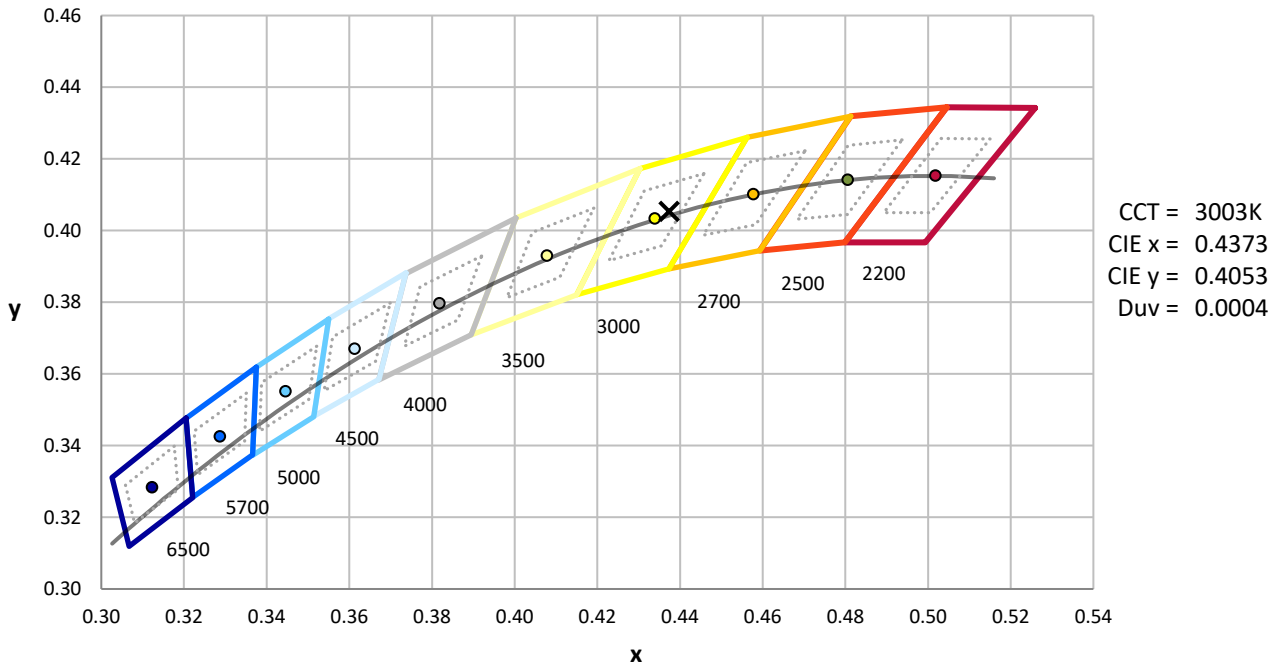
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2406-133-4

CIE 1931 Chromaticity Diagram



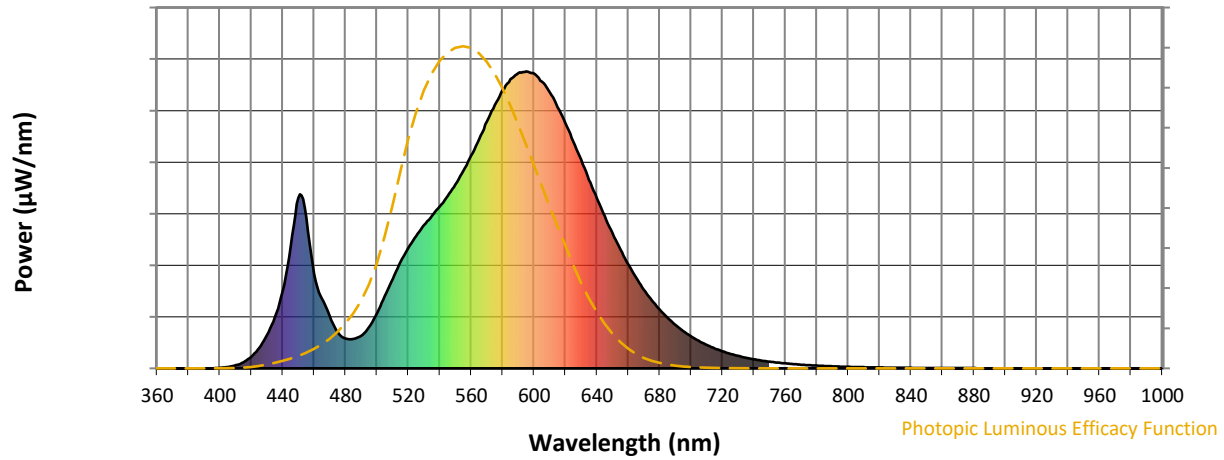
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2406-133-4

Photopic Flux vs. Wavelength

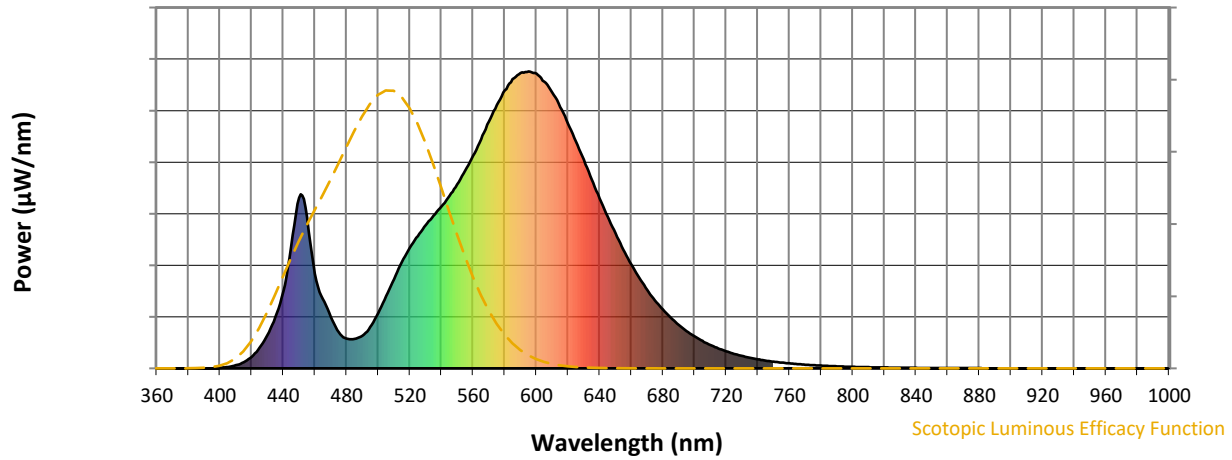


Photopic Lumens: NR

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	110	NR	620	825	NR	750	23	NR	880	1	NR
365	0	NR	495	139	NR	625	765	NR	755	19	NR	885	1	NR
370	0	NR	500	186	NR	630	702	NR	760	17	NR	890	0	NR
375	0	NR	505	243	NR	635	635	NR	765	14	NR	895	0	NR
380	0	NR	510	301	NR	640	572	NR	770	12	NR	900	0	NR
385	0	NR	515	357	NR	645	512	NR	775	11	NR	905	0	NR
390	0	NR	520	406	NR	650	455	NR	780	9	NR	910	0	NR
395	0	NR	525	445	NR	655	400	NR	785	8	NR	915	0	NR
400	2	NR	530	483	NR	660	350	NR	790	7	NR	920	0	NR
405	5	NR	535	514	NR	665	305	NR	795	6	NR	925	0	NR
410	10	NR	540	545	NR	670	264	NR	800	5	NR	930	0	NR
415	21	NR	545	581	NR	675	229	NR	805	4	NR	935	0	NR
420	39	NR	550	620	NR	680	198	NR	810	4	NR	940	0	NR
425	69	NR	555	666	NR	685	170	NR	815	3	NR	945	0	NR
430	112	NR	560	716	NR	690	147	NR	820	3	NR	950	0	NR
435	174	NR	565	771	NR	695	125	NR	825	3	NR	955	0	NR
440	260	NR	570	831	NR	700	107	NR	830	2	NR	960	0	NR
445	410	NR	575	887	NR	705	92	NR	835	2	NR	965	0	NR
450	574	NR	580	937	NR	710	79	NR	840	2	NR	970	0	NR
455	508	NR	585	974	NR	715	67	NR	845	1	NR	975	0	NR
460	319	NR	590	994	NR	720	57	NR	850	1	NR	980	0	NR
465	234	NR	595	1000	NR	725	49	NR	855	1	NR	985	0	NR
470	174	NR	600	992	NR	730	42	NR	860	1	NR	990	0	NR
475	121	NR	605	966	NR	735	36	NR	865	1	NR	995	0	NR
480	100	NR	610	929	NR	740	30	NR	870	1	NR	1000	0	NR
485	99	NR	615	880	NR	745	26	NR	875	1	NR			

REPORT NUMBER: SP1-2406-133-4

Scotopic Flux vs. Wavelength



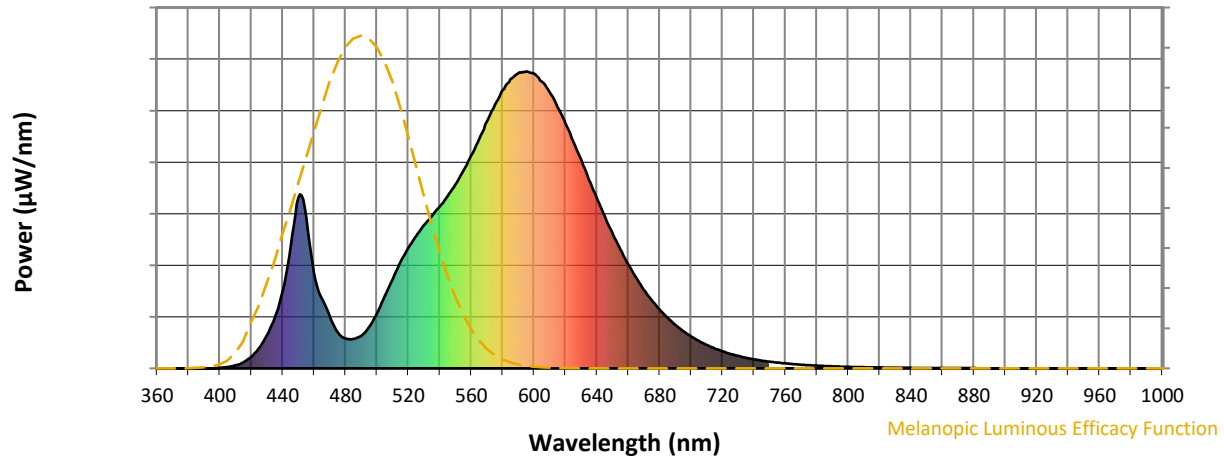
Scotopic Lumens: NR

S/P: 1.21

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	110	NR	620	825	NR	750	23	NR	880	1	NR
365	0	NR	495	139	NR	625	765	NR	755	19	NR	885	1	NR
370	0	NR	500	186	NR	630	702	NR	760	17	NR	890	0	NR
375	0	NR	505	243	NR	635	635	NR	765	14	NR	895	0	NR
380	0	NR	510	301	NR	640	572	NR	770	12	NR	900	0	NR
385	0	NR	515	357	NR	645	512	NR	775	11	NR	905	0	NR
390	0	NR	520	406	NR	650	455	NR	780	9	NR	910	0	NR
395	0	NR	525	445	NR	655	400	NR	785	8	NR	915	0	NR
400	2	NR	530	483	NR	660	350	NR	790	7	NR	920	0	NR
405	5	NR	535	514	NR	665	305	NR	795	6	NR	925	0	NR
410	10	NR	540	545	NR	670	264	NR	800	5	NR	930	0	NR
415	21	NR	545	581	NR	675	229	NR	805	4	NR	935	0	NR
420	39	NR	550	620	NR	680	198	NR	810	4	NR	940	0	NR
425	69	NR	555	666	NR	685	170	NR	815	3	NR	945	0	NR
430	112	NR	560	716	NR	690	147	NR	820	3	NR	950	0	NR
435	174	NR	565	771	NR	695	125	NR	825	3	NR	955	0	NR
440	260	NR	570	831	NR	700	107	NR	830	2	NR	960	0	NR
445	410	NR	575	887	NR	705	92	NR	835	2	NR	965	0	NR
450	574	NR	580	937	NR	710	79	NR	840	2	NR	970	0	NR
455	508	NR	585	974	NR	715	67	NR	845	1	NR	975	0	NR
460	319	NR	590	994	NR	720	57	NR	850	1	NR	980	0	NR
465	234	NR	595	1000	NR	725	49	NR	855	1	NR	985	0	NR
470	174	NR	600	992	NR	730	42	NR	860	1	NR	990	0	NR
475	121	NR	605	966	NR	735	36	NR	865	1	NR	995	0	NR
480	100	NR	610	929	NR	740	30	NR	870	1	NR	1000	0	NR
485	99	NR	615	880	NR	745	26	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.22

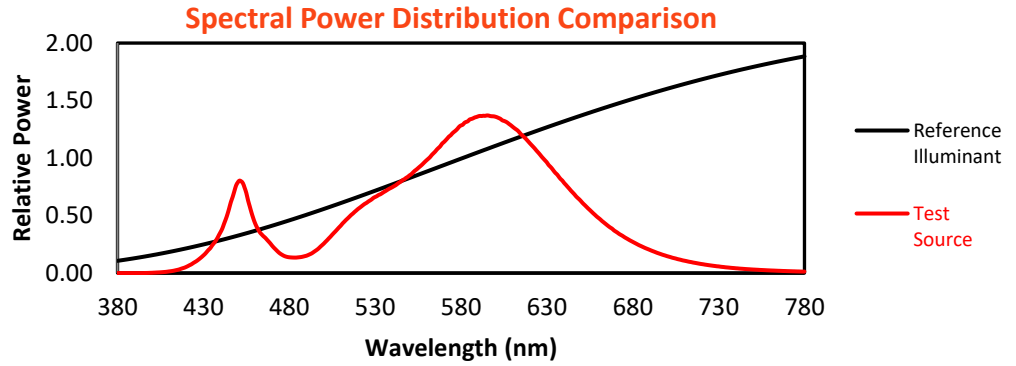
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	110	NR	620	825	NR	750	23	NR	880	1	NR
365	0	NR	495	139	NR	625	765	NR	755	19	NR	885	1	NR
370	0	NR	500	186	NR	630	702	NR	760	17	NR	890	0	NR
375	0	NR	505	243	NR	635	635	NR	765	14	NR	895	0	NR
380	0	NR	510	301	NR	640	572	NR	770	12	NR	900	0	NR
385	0	NR	515	357	NR	645	512	NR	775	11	NR	905	0	NR
390	0	NR	520	406	NR	650	455	NR	780	9	NR	910	0	NR
395	0	NR	525	445	NR	655	400	NR	785	8	NR	915	0	NR
400	2	NR	530	483	NR	660	350	NR	790	7	NR	920	0	NR
405	5	NR	535	514	NR	665	305	NR	795	6	NR	925	0	NR
410	10	NR	540	545	NR	670	264	NR	800	5	NR	930	0	NR
415	21	NR	545	581	NR	675	229	NR	805	4	NR	935	0	NR
420	39	NR	550	620	NR	680	198	NR	810	4	NR	940	0	NR
425	69	NR	555	666	NR	685	170	NR	815	3	NR	945	0	NR
430	112	NR	560	716	NR	690	147	NR	820	3	NR	950	0	NR
435	174	NR	565	771	NR	695	125	NR	825	3	NR	955	0	NR
440	260	NR	570	831	NR	700	107	NR	830	2	NR	960	0	NR
445	410	NR	575	887	NR	705	92	NR	835	2	NR	965	0	NR
450	574	NR	580	937	NR	710	79	NR	840	2	NR	970	0	NR
455	508	NR	585	974	NR	715	67	NR	845	1	NR	975	0	NR
460	319	NR	590	994	NR	720	57	NR	850	1	NR	980	0	NR
465	234	NR	595	1000	NR	725	49	NR	855	1	NR	985	0	NR
470	174	NR	600	992	NR	730	42	NR	860	1	NR	990	0	NR
475	121	NR	605	966	NR	735	36	NR	865	1	NR	995	0	NR
480	100	NR	610	929	NR	740	30	NR	870	1	NR	1000	0	NR
485	99	NR	615	880	NR	745	26	NR	875	1	NR			

REPORT NUMBER: SP1-2406-133-4

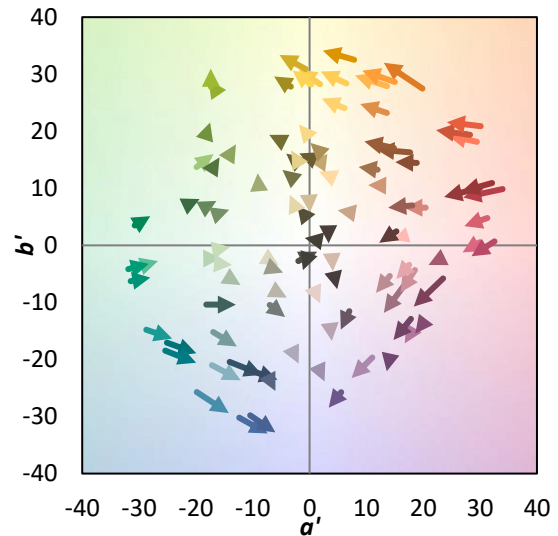
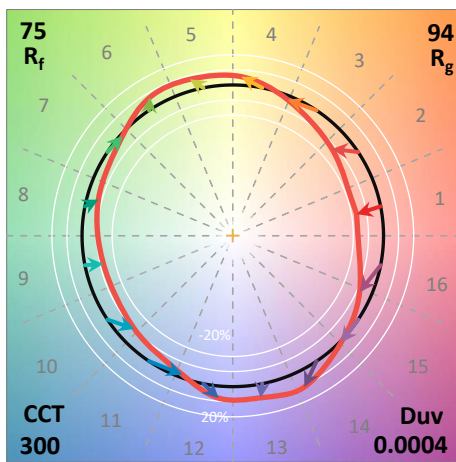
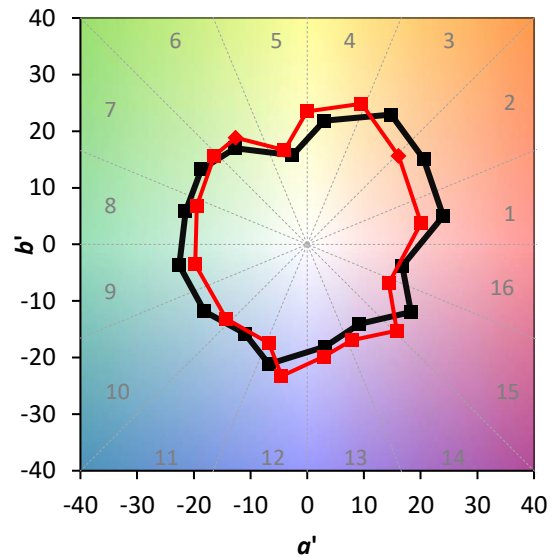
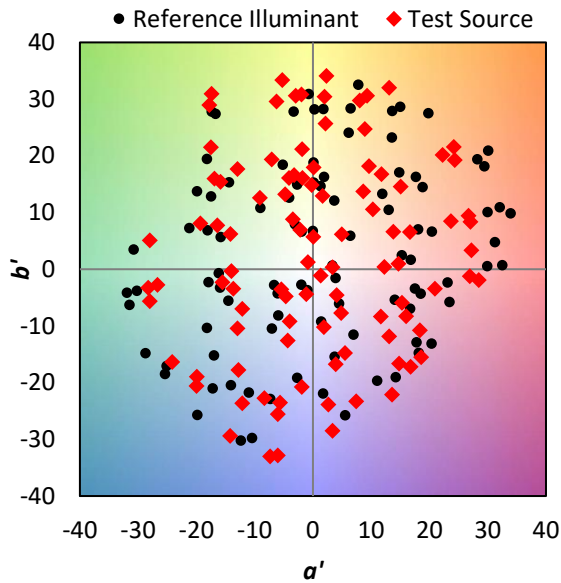
TM-30-18

Summary

$R_f = 75.2$
 $R_g = 93.8$
 CIE $R_a = 71.9$
 $R_9 = -33.7$



Color Vector Graphics

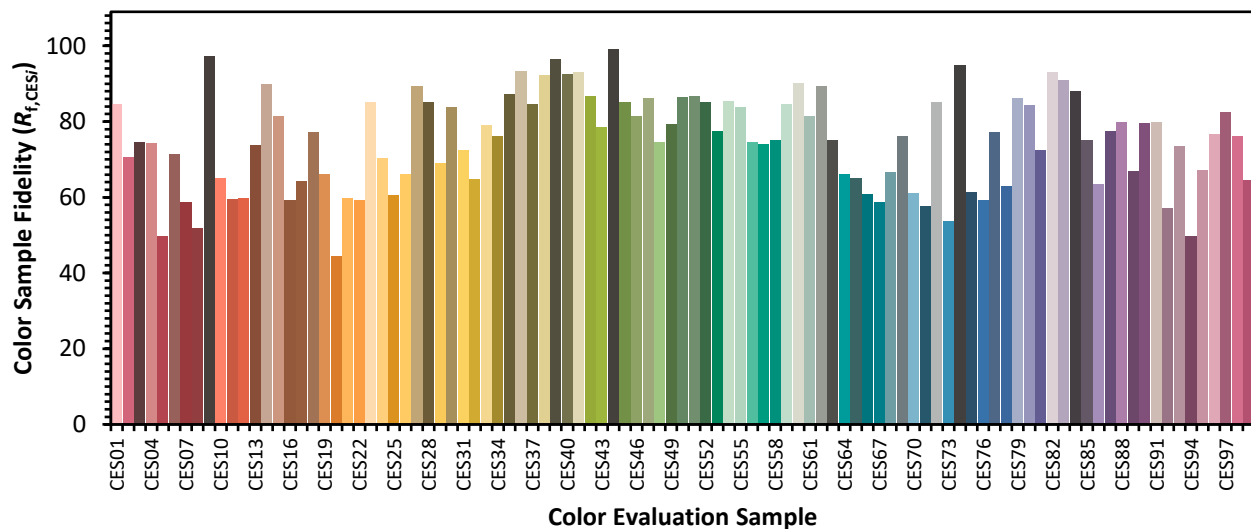


REPORT NUMBER: SP1-2406-133-4

TM-30-18

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

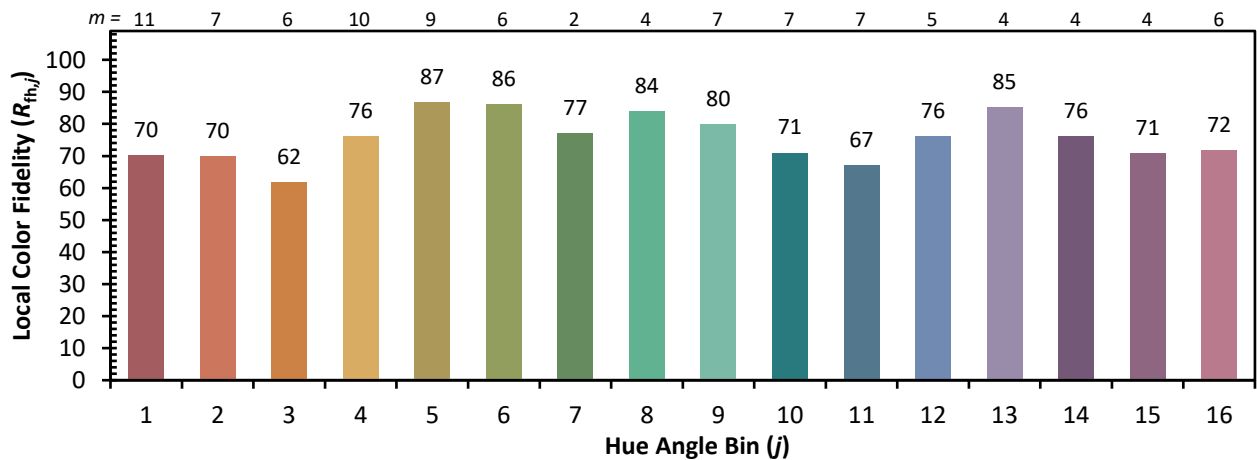
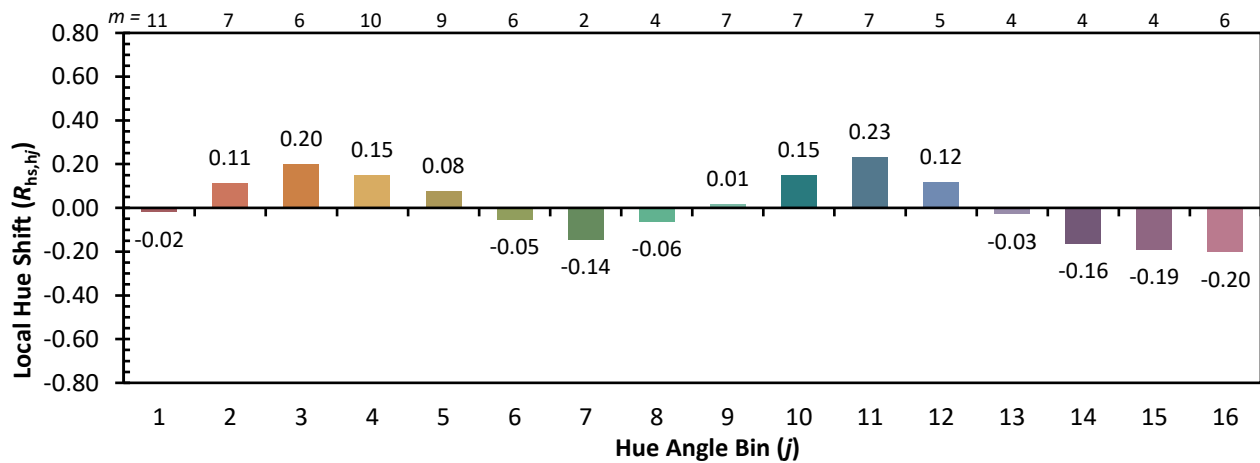
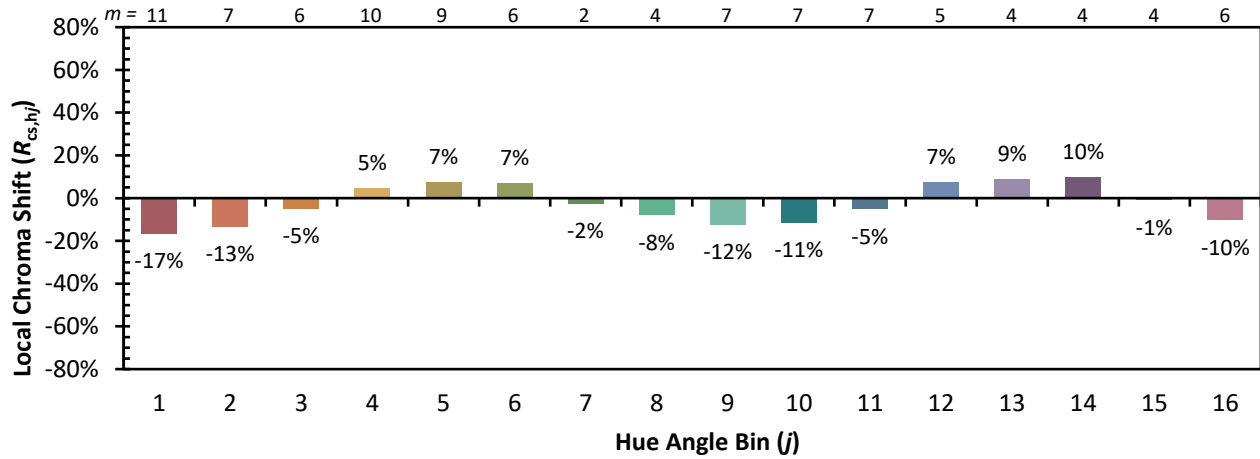
CES01 = 86	CES26 = 66	CES51 = 87	CES76 = 59
CES02 = 62	CES27 = 89	CES52 = 85	CES77 = 77
CES03 = 31	CES28 = 85	CES53 = 77	CES78 = 63
CES04 = 71	CES29 = 69	CES54 = 86	CES79 = 86
CES05 = 49	CES30 = 84	CES55 = 84	CES80 = 84
CES06 = 51	CES31 = 72	CES56 = 75	CES81 = 72
CES07 = 41	CES32 = 65	CES57 = 74	CES82 = 93
CES08 = 40	CES33 = 79	CES58 = 75	CES83 = 91
CES09 = 29	CES34 = 76	CES59 = 85	CES84 = 88
CES10 = 76	CES35 = 87	CES60 = 90	CES85 = 75
CES11 = 59	CES36 = 93	CES61 = 81	CES86 = 63
CES12 = 65	CES37 = 85	CES62 = 89	CES87 = 77
CES13 = 43	CES38 = 92	CES63 = 75	CES88 = 80
CES14 = 74	CES39 = 97	CES64 = 66	CES89 = 67
CES15 = 71	CES40 = 93	CES65 = 65	CES90 = 80
CES16 = 47	CES41 = 93	CES66 = 61	CES91 = 80
CES17 = 50	CES42 = 87	CES67 = 59	CES92 = 57
CES18 = 56	CES43 = 79	CES68 = 67	CES93 = 73
CES19 = 73	CES44 = 99	CES69 = 76	CES94 = 50
CES20 = 66	CES45 = 85	CES70 = 61	CES95 = 67
CES21 = 87	CES46 = 81	CES71 = 58	CES96 = 77
CES22 = 79	CES47 = 86	CES72 = 85	CES97 = 83
CES23 = 92	CES48 = 75	CES73 = 54	CES98 = 76
CES24 = 91	CES49 = 79	CES74 = 95	CES99 = 65
CES25 = 73	CES50 = 86	CES75 = 61	



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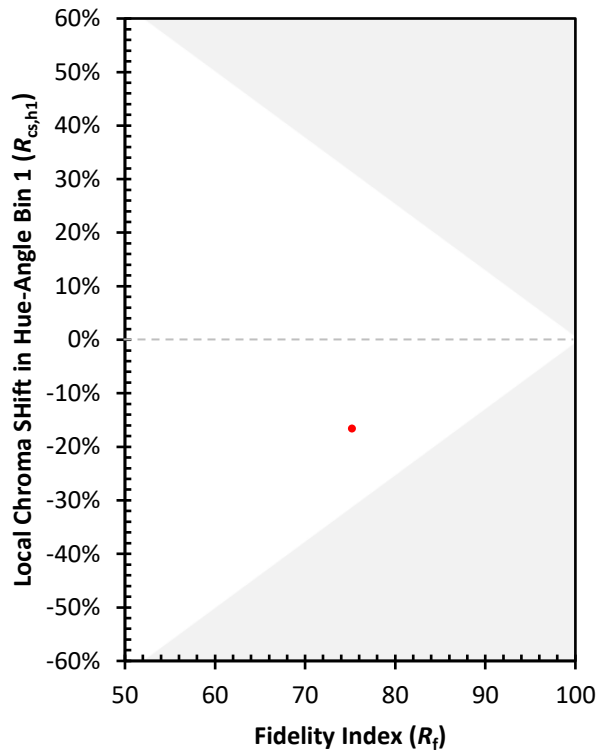
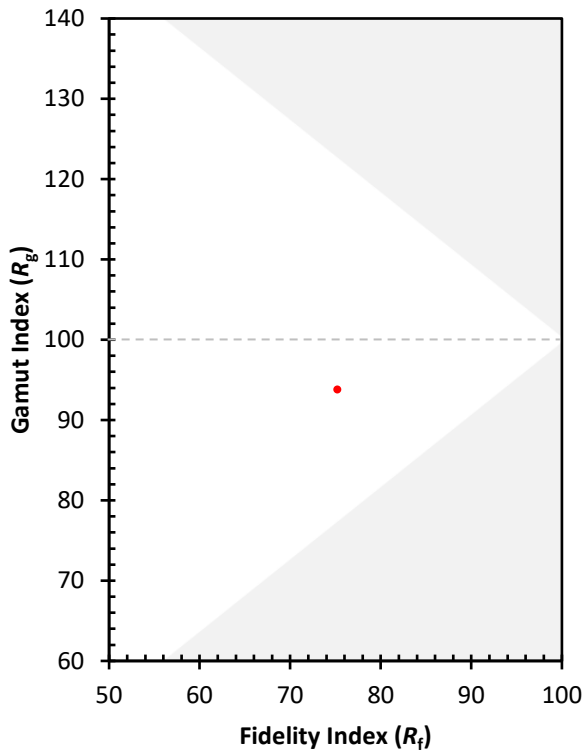
Color Rendition by Hue-Angle Bin



REPORT NUMBER: SP1-2406-133-4

TM-30-18

Measure Comparisons



(END OF REPORT)