

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: P856232

Luminaire Tested: **FFX-CLB-50-750-U-FR-T3-UPLR**

Issue Date: 07/16/2024



Test Information

Test Method: LM-79-08
Report Number: P856232
Test Lab: INNOVATION CENTER(G3)
Issue Date: 07/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: FFX-CLB-50-750-U-FR-T3-UPLR
Description: FAIRFAX POST TOP FIXTURE w/ FAIRFAX REFRACTOR T3 DISTRIBUTION LENS AND UPLIGHT REFLECTOR
Light Source: (4) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

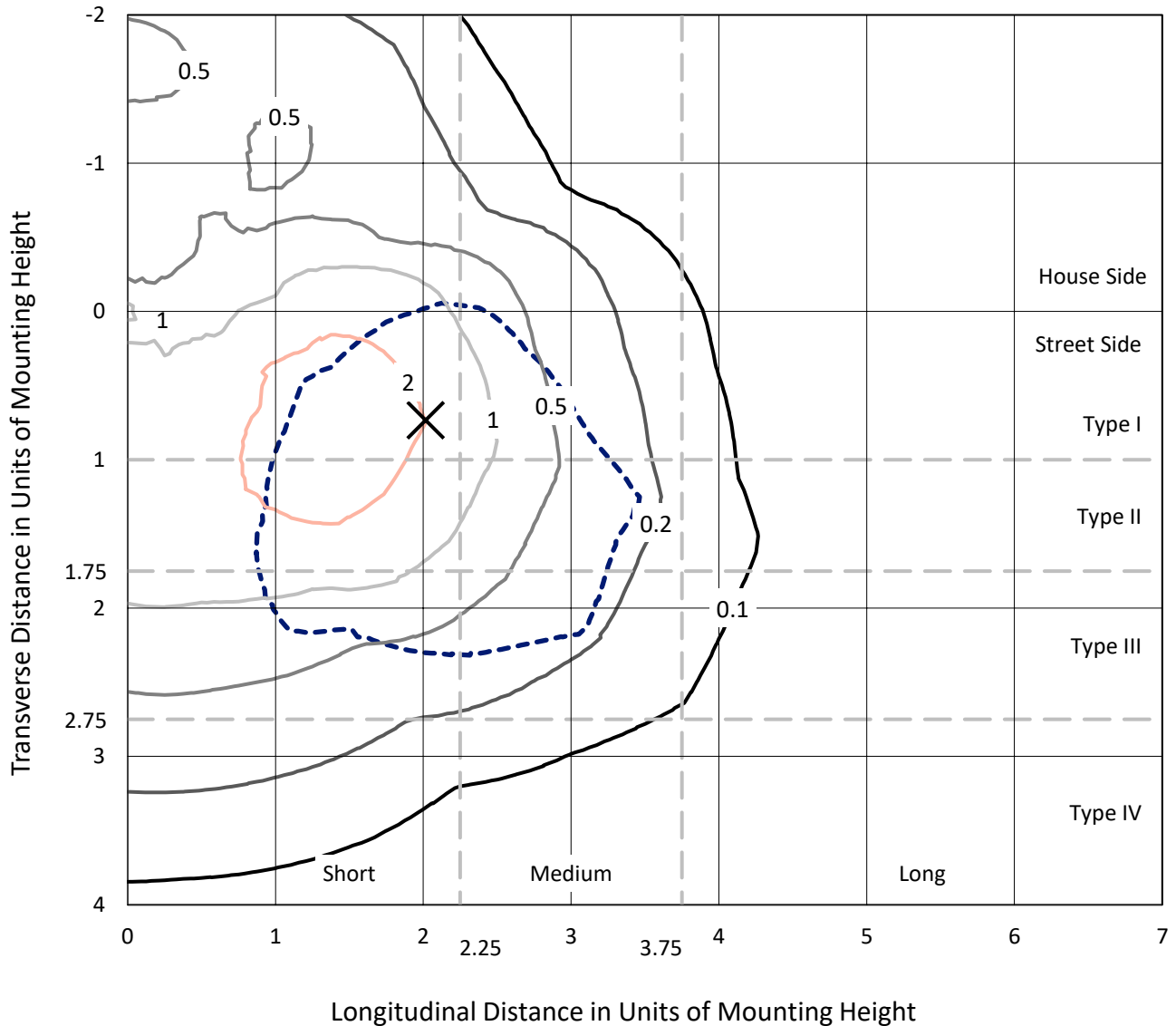
Lumens per Lamp: N/A
Luminaire Lumens: 7892 lumens
Efficiency: N/A
Efficacy: 156.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 1.67')
IES Classification: Type III - Short
BUG Rating: B2 - U4 - G3

Input Watts (W): 50.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 6.0%%
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

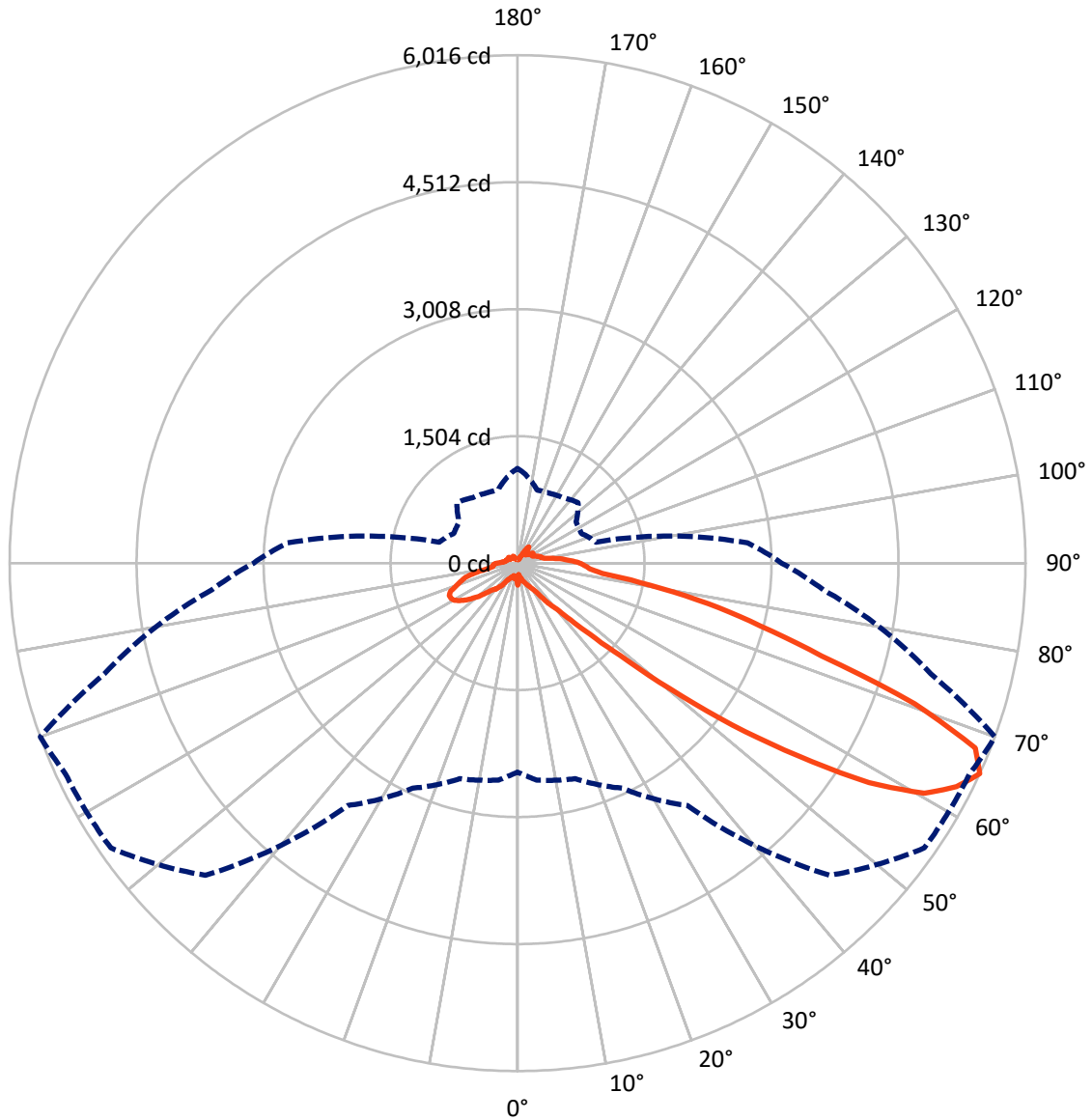
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.4 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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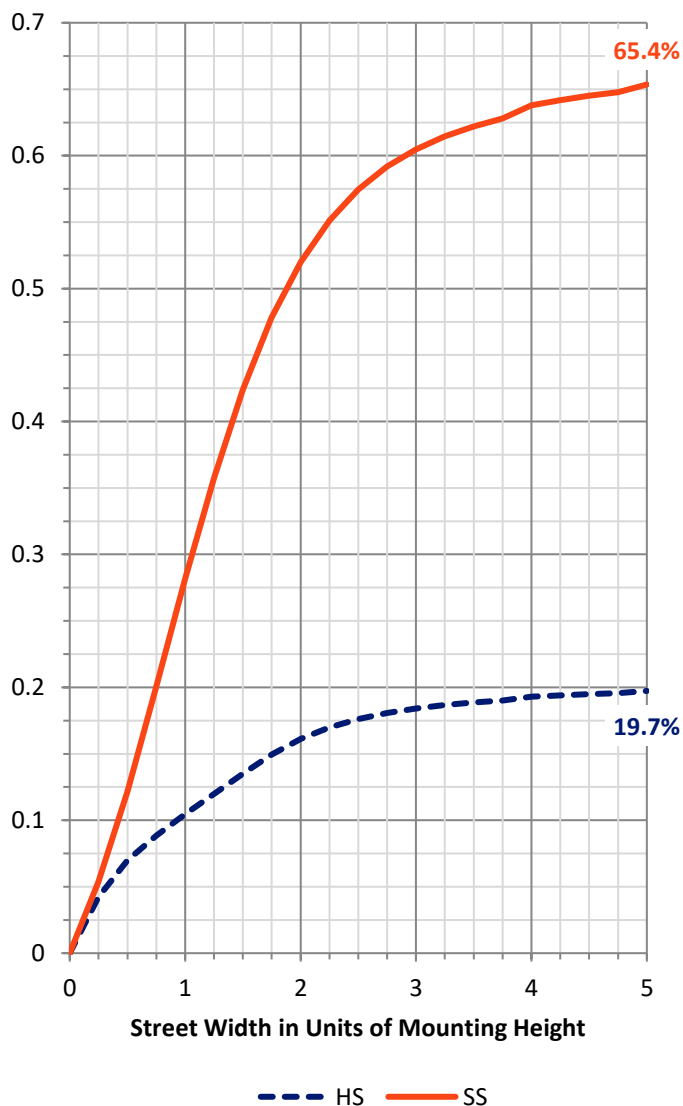
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1618.7	303.2	1921.9
	% Fixture	20.5	3.8	24.4
Street Side	Lumens	5337.5	632.6	5970.1
	% Fixture	67.6	8.0	75.6
Total	Lumens	6956.2	935.9	7892.0
	% Fixture	88.1	11.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.9	0.2
10°-20°	52.8	0.7
20°-30°	106.5	1.3
30°-40°	225.4	2.9
40°-50°	525.6	6.7
50°-60°	1566.3	19.8
60°-70°	2509.7	31.8
70°-80°	1441.8	18.3
80°-90°	511.3	6.5
90°-100°	301.6	3.8
100°-110°	182.2	2.3
110°-120°	137.0	1.7
120°-130°	116.0	1.5
130°-140°	77.0	1.0
140°-150°	72.3	0.9
150°-160°	32.1	0.4
160°-170°	13.3	0.2
170°-180°	4.4	0.1
0°-90°	6956.2	88.1
0°-180°	7892.0	100.0



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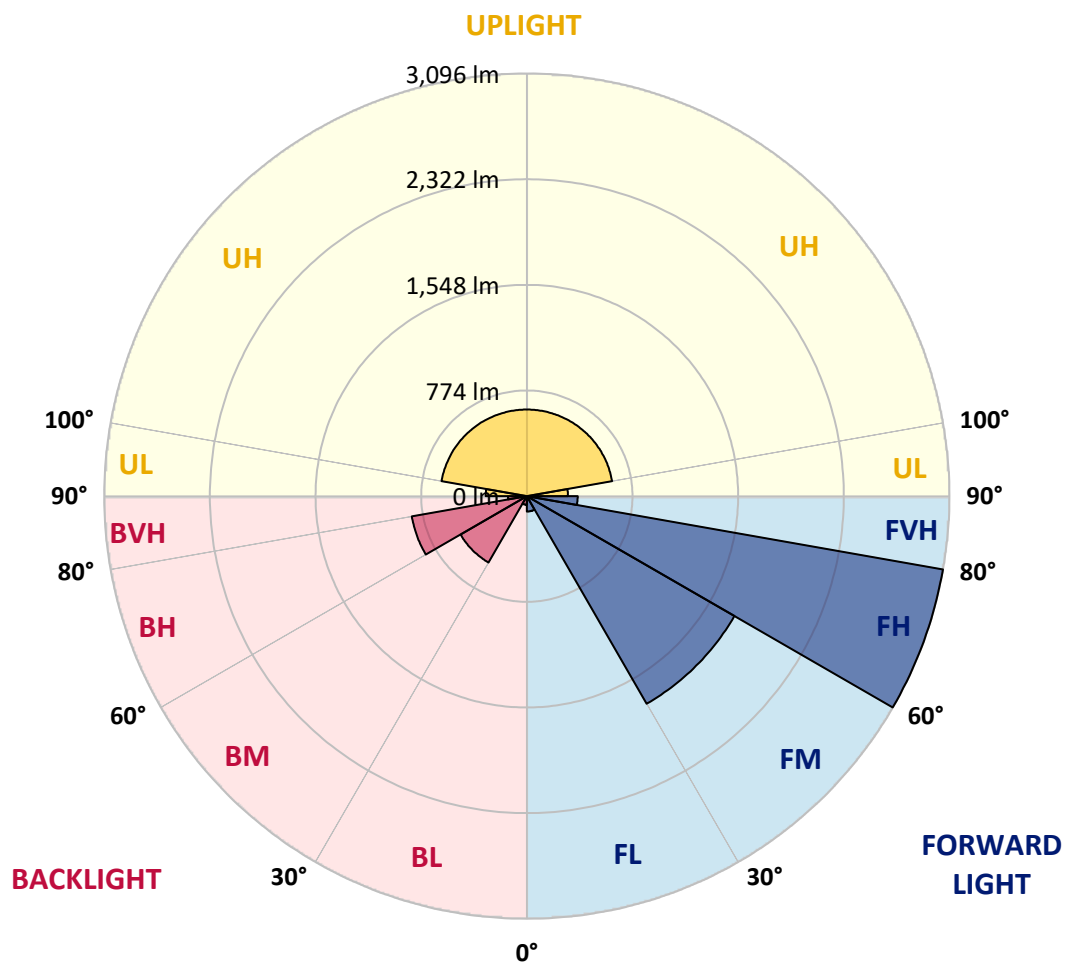
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	113.1	1.4			
FM (30°-60°)	1756.0	22.3			
FH (60°-80°)	3095.9	39.2			G2/5000
FVH (80°-90°)	372.5	4.7			G3/500
BL (0°-30°)	63.1	0.8	B0/110		
BM (30°-60°)	561.2	7.1	B1/1000		
BH (60°-80°)	855.6	10.8	B2/1000		G2/1000
BVH (80°-90°)	138.9	1.8			G2/225
UL (90°-100°)	301.6	3.8		U3/500	
UH (100°-180°)	634.3	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°	261.8	261.8	261.8	261.8	261.8	261.8	261.8	261.8	261.8	261.8	261.8
2.5°	218.3	216.6	220.8	224.2	228.3	222.5	212.4	222.5	225.8	235.9	243.4
5°	185.7	186.5	190.7	199.9	208.3	206.6	180.7	147.2	137.2	133.0	133.8
7.5°	184.0	183.2	180.7	179.8	184.8	203.2	200.7	176.5	158.1	142.2	126.3
10°	194.0	196.6	199.1	199.1	195.7	184.0	183.2	181.5	174.8	167.3	157.2
12.5°	240.0	243.4	245.9	237.5	226.7	215.0	205.8	190.7	184.0	179.8	172.3
15°	290.2	293.6	289.4	273.5	254.3	232.5	224.2	225.0	215.8	204.9	189.0
17.5°	317.0	315.3	297.8	279.4	264.3	247.6	235.9	228.3	225.0	220.8	204.9
20°	300.3	296.1	285.2	277.7	276.0	266.8	259.3	252.6	248.4	239.2	220.0
22.5°	287.7	287.7	286.0	284.4	294.4	290.2	286.9	277.7	271.8	260.1	231.7
25°	303.6	303.6	304.4	301.9	315.3	315.3	315.3	305.3	297.8	281.0	246.7
27.5°	326.2	325.4	327.9	326.2	337.9	340.4	345.4	337.9	327.0	307.0	263.5
30°	350.4	350.4	353.0	354.6	366.3	372.2	378.0	374.7	361.3	337.1	291.9
32.5°	376.4	375.5	383.1	391.4	398.1	409.0	411.5	419.9	406.5	378.0	333.7
35°	414.0	416.5	436.6	454.2	473.4	480.1	491.8	524.4	511.0	472.6	421.5
37.5°	598.9	586.3	581.3	561.2	558.7	598.0	612.2	643.2	616.4	564.6	486.8
40°	634.8	619.8	613.1	593.8	600.5	681.7	667.4	778.7	713.4	630.6	580.5
42.5°	598.0	595.5	674.1	689.2	680.8	809.6	782.0	987.8	918.4	726.0	669.9
45°	721.8	715.1	748.6	775.3	796.2	1027.9	1011.2	1227.8	1197.7	884.1	828.9
47.5°	814.6	807.9	846.4	935.9	1058.0	1308.9	1406.8	1733.8	1631.8	1216.1	1090.6
50°	1092.3	1088.1	1191.9	1288.0	1489.6	1860.1	2128.6	2481.6	2331.8	1698.7	1467.9
52.5°	1354.9	1368.3	1489.6	1674.4	1887.7	2556.8	2939.9	3187.5	3185.8	2212.2	1884.4
55°	1543.1	1588.3	1731.3	2065.0	2361.1	3174.9	3691.8	3875.0	4028.9	2951.6	2295.0
57.5°	1908.6	1987.3	2124.4	2454.8	2837.0	3922.7	4660.3	4630.2	4907.1	3718.6	2741.7
60°	2284.2	2376.2	2422.2	2725.8	3227.6	4642.8	5326.1	5255.9	5534.4	4386.0	3211.7
62.5°	2401.3	2491.6	2536.8	2867.1	3509.5	5050.9	5633.1	5660.7	5833.8	4861.9	3490.2
65°	2474.9	2578.6	2643.8	2941.6	3503.6	5229.1	5881.5	5907.4	6016.1	5066.8	3634.1
67.5°	2461.5	2577.7	2661.4	2928.2	3309.6	5081.0	5819.6	5702.5	5848.0	4920.5	3482.7
70°	2195.5	2296.7	2380.4	2586.1	2762.6	4280.6	5035.0	4841.8	4992.4	4110.8	2875.5
72.5°	1794.0	1835.9	1908.6	2005.7	2093.5	3175.8	3840.7	3675.1	3762.1	3083.8	2154.5
75°	1473.7	1465.3	1530.6	1600.8	1573.2	2320.1	3038.6	2887.2	2968.3	2341.9	1718.8
77.5°	1092.3	1088.1	1182.7	1176.8	1135.0	1606.7	2408.8	2299.2	2310.1	1729.6	1287.2
80°	656.6	669.1	761.1	779.5	730.2	1007.8	1719.6	1667.8	1590.0	1181.8	902.5
82.5°	460.8	480.1	528.6	548.7	524.4	736.0	1139.2	1103.2	1011.2	857.3	635.7
85°	470.0	473.4	479.2	480.9	470.0	660.7	884.1	864.0	858.1	718.5	524.4
87.5°	470.0	477.6	482.6	481.8	462.5	618.9	815.5	783.7	791.2	671.6	506.9
90°	421.5	434.9	434.1	436.6	420.7	559.5	739.4	713.4	723.5	605.5	460.8
92.5°	344.6	353.8	363.0	380.6	357.1	475.9	624.8	600.5	613.1	515.2	392.3
95°	320.3	328.7	334.6	343.8	320.3	423.2	552.9	523.6	528.6	437.4	332.0
97.5°	259.3	264.3	271.0	272.7	255.9	325.4	420.7	395.6	399.0	339.6	261.0
100°	217.5	221.6	227.5	227.5	216.6	269.3	332.9	319.5	317.8	277.7	220.8
102.5°	205.8	207.4	216.6	215.0	204.1	248.4	301.1	292.7	293.6	257.6	207.4
105°	202.4	202.4	211.6	207.4	198.2	236.7	281.9	279.4	278.5	245.1	199.1
107.5°	199.1	199.1	208.3	204.1	196.6	223.3	265.1	256.8	255.9	233.4	188.2
110°	185.7	188.2	198.2	193.2	187.4	210.8	243.4	237.5	237.5	220.0	179.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
112.5°	164.8	166.4	175.6	171.5	167.3	187.4	215.8	208.3	209.1	197.4	168.1
115°	153.9	156.4	165.6	159.7	156.4	174.8	199.9	194.9	196.6	185.7	158.9
117.5°	154.7	155.6	162.3	163.1	156.4	171.5	184.8	186.5	189.0	182.3	161.4
120°	188.2	184.0	187.4	183.2	179.8	197.4	213.3	215.0	214.1	201.6	160.6
122.5°	189.9	181.5	190.7	184.8	181.5	200.7	218.3	222.5	218.3	207.4	163.9
125°	151.4	153.9	154.7	156.4	159.7	180.7	189.9	190.7	191.5	188.2	158.9
127.5°	133.0	132.1	128.0	128.8	136.3	154.7	161.4	166.4	163.1	161.4	143.0
130°	127.1	128.8	128.0	128.0	132.1	146.4	151.4	158.9	156.4	153.1	130.5
132.5°	117.1	118.8	126.3	135.5	133.8	138.8	140.5	148.0	148.9	148.9	131.3
135°	111.2	112.9	118.8	130.5	127.1	129.6	128.8	135.5	136.3	137.2	123.8
137.5°	113.7	114.6	111.2	112.9	115.4	126.3	129.6	136.3	136.3	133.0	115.4
140°	119.6	119.6	112.1	109.6	114.6	131.3	138.0	148.9	147.2	141.3	119.6
142.5°	110.4	112.1	116.3	121.3	132.1	178.2	178.2	199.1	205.8	207.4	144.7
145°	143.9	144.7	146.4	148.9	169.8	233.4	212.4	227.5	233.4	239.2	174.0
147.5°	165.6	167.3	165.6	158.9	178.2	199.9	189.9	196.6	203.2	204.9	174.8
150°	129.6	128.0	127.1	126.3	147.2	153.9	145.5	144.7	149.7	153.9	135.5
152.5°	94.5	93.7	92.8	92.0	110.4	106.2	100.4	100.4	102.0	102.9	95.3
155°	83.6	82.8	81.1	82.0	93.7	89.5	84.5	82.8	84.5	83.6	79.5
157.5°	68.6	66.9	66.9	70.3	76.1	71.1	67.7	65.2	66.1	65.2	66.1
160°	56.9	56.0	56.9	61.1	64.4	60.2	56.9	55.2	55.2	56.9	60.2
162.5°	51.0	50.2	51.0	52.7	54.4	50.2	47.7	47.7	48.5	51.9	58.5
165°	44.3	44.3	45.2	46.0	46.8	44.3	43.5	43.5	45.2	50.2	57.7
167.5°	42.7	42.7	42.7	42.7	42.7	41.8	41.0	43.5	45.2	47.7	52.7
170°	41.8	41.0	41.8	41.8	41.8	41.8	41.8	44.3	44.3	45.2	47.7
172.5°	42.7	42.7	42.7	43.5	45.2	46.0	45.2	46.8	46.0	46.0	46.0
175°	43.5	43.5	44.3	45.2	46.0	46.8	47.7	47.7	47.7	48.5	48.5
177.5°	43.5	43.5	44.3	45.2	46.0	44.3	42.7	41.8	41.0	41.0	41.0
180°	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	261.8	261.8	261.8	261.8	261.8	261.8	261.8	261.8	261.8	261.8	261.8
2.5°	236.7	215.8	186.5	199.1	237.5	230.0	191.5	168.1	169.8	186.5	188.2
5°	138.0	142.2	161.4	201.6	209.1	173.1	139.7	134.7	162.3	200.7	208.3
7.5°	124.6	124.6	140.5	195.7	220.0	180.7	136.3	122.9	143.9	175.6	180.7
10°	150.5	145.5	147.2	167.3	176.5	144.7	122.1	116.3	128.0	132.1	130.5
12.5°	169.8	173.1	189.0	184.8	144.7	117.9	110.4	109.6	116.3	120.4	119.6
15°	182.3	176.5	164.8	151.4	138.0	122.9	112.1	105.4	97.9	94.5	94.5
17.5°	194.0	182.3	161.4	148.9	135.5	124.6	114.6	104.5	101.2	102.0	102.0
20°	208.3	194.0	174.8	160.6	144.7	129.6	117.1	106.2	103.7	104.5	103.7
22.5°	219.1	206.6	186.5	168.1	151.4	134.7	122.1	111.2	107.9	107.1	107.1
25°	232.5	221.6	200.7	178.2	158.1	142.2	131.3	118.8	112.9	111.2	111.2
27.5°	250.1	240.9	217.5	193.2	169.8	151.4	139.7	126.3	117.9	114.6	113.7
30°	276.8	264.3	238.4	208.3	184.0	164.8	150.5	133.8	123.8	117.9	117.1
32.5°	317.0	301.1	266.8	229.2	199.9	179.8	162.3	141.3	128.8	122.1	121.3
35°	402.3	384.7	341.2	288.6	245.9	204.9	177.3	149.7	133.8	125.5	124.6
37.5°	455.8	424.0	371.4	323.7	271.8	247.6	212.4	175.6	140.5	129.6	128.0
40°	533.6	492.6	426.6	362.2	271.0	270.2	246.7	214.1	165.6	137.2	134.7
42.5°	591.3	538.6	455.8	383.9	273.5	281.0	261.0	232.5	196.6	159.7	155.6
45°	709.3	642.3	511.0	403.1	276.8	293.6	273.5	243.4	211.6	185.7	183.2
47.5°	930.1	837.2	618.1	439.9	314.5	335.4	299.4	264.3	233.4	207.4	201.6
50°	1238.7	1127.4	747.7	472.6	378.9	426.6	368.0	314.5	277.7	257.6	251.8
52.5°	1600.8	1476.2	828.9	523.6	456.7	538.6	474.2	411.5	363.0	366.3	363.0
55°	2004.8	1857.6	900.0	600.5	556.2	663.3	593.0	538.6	512.7	585.5	589.7
57.5°	2394.6	2237.3	944.3	681.7	667.4	807.1	725.1	686.7	696.7	910.0	960.2
60°	2766.8	2518.4	978.6	757.8	761.1	920.0	857.3	849.8	880.7	1154.2	1230.3
62.5°	2981.7	2662.2	976.9	807.1	819.7	989.4	934.2	938.4	961.8	1194.4	1257.9
65°	3128.1	2735.0	960.2	832.2	844.8	1014.5	943.4	910.8	895.8	1054.7	1122.4
67.5°	3040.3	2594.5	920.0	810.5	827.2	974.4	885.7	803.8	777.8	864.0	904.1
70°	2570.2	2167.9	819.7	736.9	747.7	822.2	746.9	657.4	631.5	676.6	695.0
72.5°	1942.1	1664.4	735.2	680.8	654.9	680.0	606.4	512.7	506.9	531.1	534.5
75°	1551.5	1306.4	669.9	613.9	544.5	570.4	481.8	381.4	373.9	375.5	367.2
77.5°	1169.3	971.9	563.7	483.4	412.3	455.0	358.0	263.5	250.9	245.9	236.7
80°	800.4	675.0	383.1	323.7	292.7	333.7	255.1	193.2	192.4	190.7	180.7
82.5°	567.9	521.1	312.8	275.2	248.4	262.6	221.6	180.7	176.5	177.3	166.4
85°	496.8	471.7	301.9	278.5	252.6	251.8	211.6	169.0	167.3	168.1	158.1
87.5°	475.1	447.5	295.2	266.0	240.9	228.3	186.5	148.9	153.1	155.6	146.4
90°	425.7	397.3	267.6	237.5	213.3	191.5	158.1	134.7	141.3	143.0	134.7
92.5°	358.8	329.5	208.3	190.7	179.0	175.6	148.0	128.0	133.0	133.8	127.1
95°	303.6	276.8	181.5	168.1	159.7	158.9	133.8	116.3	118.8	117.9	112.1
97.5°	244.2	225.0	158.9	146.4	137.2	132.1	114.6	101.2	104.5	106.2	102.0
100°	208.3	197.4	148.0	137.2	126.3	119.6	104.5	93.7	97.0	100.4	97.0
102.5°	195.7	187.4	145.5	133.8	122.1	113.7	99.5	87.8	89.5	93.7	91.2
105°	185.7	178.2	141.3	128.8	117.9	108.7	97.0	82.8	82.0	86.1	85.3
107.5°	174.8	168.1	138.8	123.8	112.1	103.7	92.8	79.5	76.1	78.6	77.8
110°	169.0	162.3	133.8	117.9	105.4	97.9	87.8	76.9	72.8	73.6	73.6



REPORT NUMBER: P856232

CATALOG NUMBER: FFX-CLB-50-750-U-FR-T3-UPLR

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	157.2	149.7	122.9	107.9	97.9	91.2	81.1	73.6	68.6	70.3	71.1
115°	149.7	139.7	112.9	102.0	91.2	85.3	79.5	72.8	66.9	66.9	67.7
117.5°	154.7	135.5	105.4	97.0	91.2	89.5	87.8	77.8	66.1	65.2	65.2
120°	148.0	136.3	114.6	112.1	106.2	101.2	90.3	76.9	64.4	62.7	62.7
122.5°	144.7	142.2	129.6	121.3	110.4	100.4	84.5	70.3	61.9	60.2	60.2
125°	143.0	140.5	125.5	109.6	95.3	85.3	75.3	66.1	61.1	58.5	58.5
127.5°	131.3	119.6	101.2	92.0	82.8	78.6	70.3	64.4	58.5	55.2	55.2
130°	121.3	110.4	94.5	84.5	76.9	73.6	67.7	61.9	56.0	52.7	51.9
132.5°	119.6	108.7	92.0	79.5	72.8	69.4	66.1	59.4	52.7	49.3	48.5
135°	111.2	98.7	82.0	75.3	71.1	68.6	66.1	57.7	51.0	47.7	47.7
137.5°	102.9	90.3	77.8	74.4	71.1	68.6	61.1	52.7	47.7	45.2	45.2
140°	103.7	89.5	79.5	76.9	71.9	64.4	57.7	51.9	47.7	44.3	43.5
142.5°	110.4	92.8	80.3	72.8	69.4	65.2	62.7	56.0	47.7	41.8	40.1
145°	121.3	100.4	90.3	87.0	81.1	73.6	64.4	51.9	43.5	38.5	37.6
147.5°	133.8	112.9	101.2	92.0	80.3	67.7	55.2	45.2	38.5	36.8	36.0
150°	116.3	96.2	87.0	74.4	64.4	54.4	45.2	40.1	36.8	36.0	36.0
152.5°	87.8	71.9	64.4	58.5	52.7	47.7	42.7	39.3	36.8	35.1	35.1
155°	76.1	67.7	60.2	54.4	48.5	43.5	39.3	37.6	35.1	35.1	34.3
157.5°	66.9	62.7	52.7	47.7	43.5	41.0	39.3	36.8	36.0	35.1	35.1
160°	61.1	58.5	48.5	44.3	41.8	40.1	40.1	38.5	36.0	35.1	35.1
162.5°	59.4	56.9	46.8	42.7	40.1	41.0	42.7	41.8	38.5	36.8	36.8
165°	58.5	56.9	47.7	41.8	40.1	41.0	45.2	46.0	41.8	39.3	38.5
167.5°	53.5	52.7	50.2	46.0	43.5	43.5	46.0	46.8	45.2	45.2	44.3
170°	48.5	48.5	49.3	50.2	48.5	46.0	44.3	44.3	46.8	49.3	50.2
172.5°	46.8	47.7	49.3	51.9	51.9	48.5	46.0	45.2	47.7	51.0	51.9
175°	49.3	50.2	51.0	51.0	49.3	48.5	47.7	46.8	48.5	51.9	52.7
177.5°	41.0	41.0	41.8	41.8	41.0	41.8	41.0	39.3	39.3	39.3	39.3
180°	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5

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: SP1-2406-133-5

Test Date: 07/12/2024

Luminaire Tested: FFX-CLB-100-750-U-FR-T5

Data in this report applies to families of products including FFX-CLB-100-750-U-FR-T5.

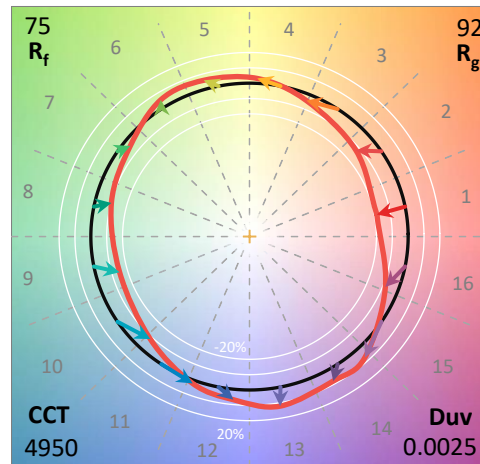
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2406-133-5
 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-100-750-U-FR-T5**
 Description: FAIRFAX ACORN W/ FAIRFAX REFRACTOR 100W T5

Spectral Parameters

CCT (K): 4950
 CIE u': 0.2102
 CIE v': 0.4882
 Duv: 0.0025
 CIE x: 0.3471
 CIE y: 0.3583
 CIE z: 0.2946
 Peak Wavelength (nm): 452
 Dominant Wavelength (nm): 571
 Purity: 11.64963
 Rf: 74.8
 Rg: 92.4

CRI (Ra):	73.0		
R1:	69.1	R9:	-35.4
R2:	80.1	R10:	51.9
R3:	87.3	R11:	66.1
R4:	70.6	R12:	40.1
R5:	69.4	R13:	71.5
R6:	71.2	R14:	93.0
R7:	82.5	R15:	62.2
R8:	53.6		



Test Conditions

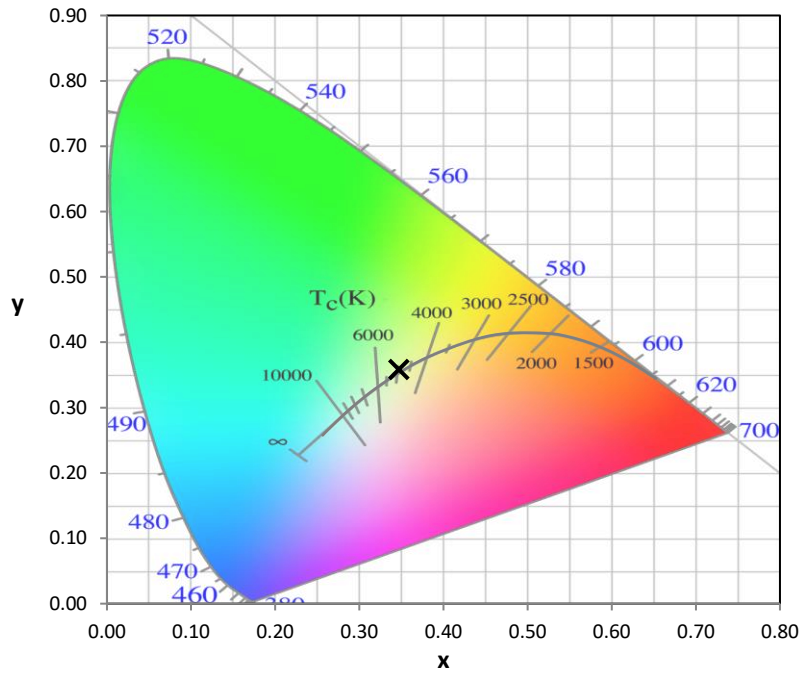
Stabilization Time: 0.803355M
 Operation Time: 1H
 Sphere Temperature (°C): 24.7

REPORT NUMBER: SP1-2406-133-5

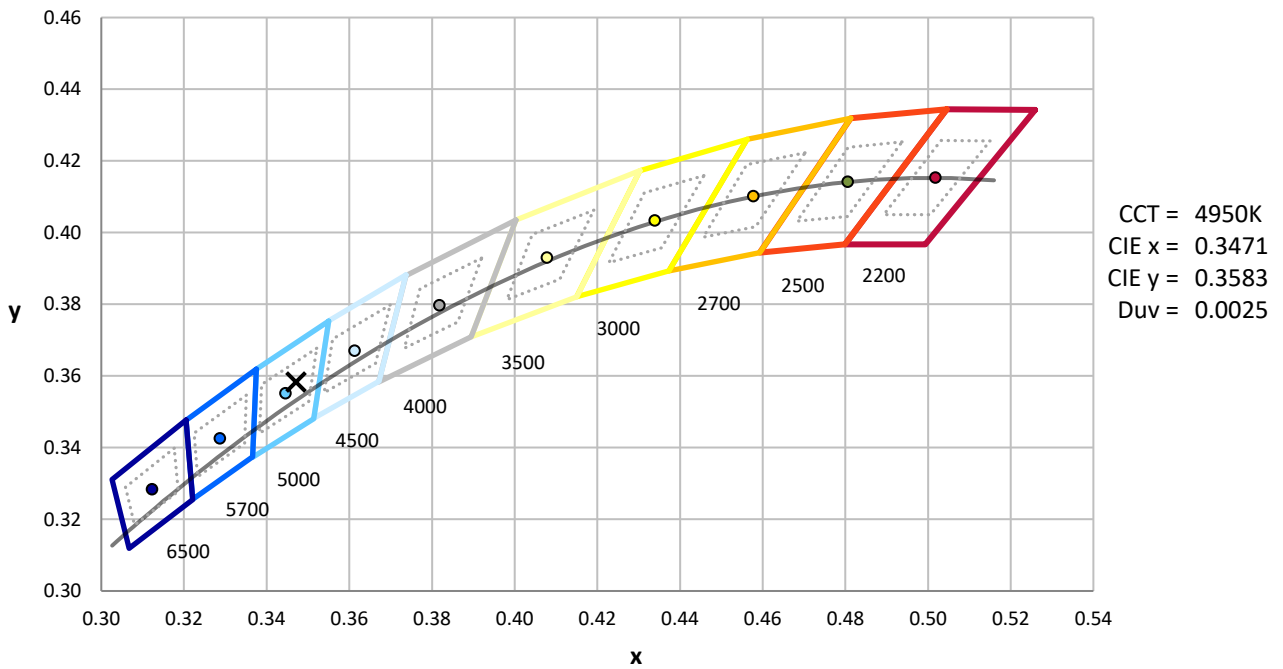
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2406-133-5

CIE 1931 Chromaticity Diagram



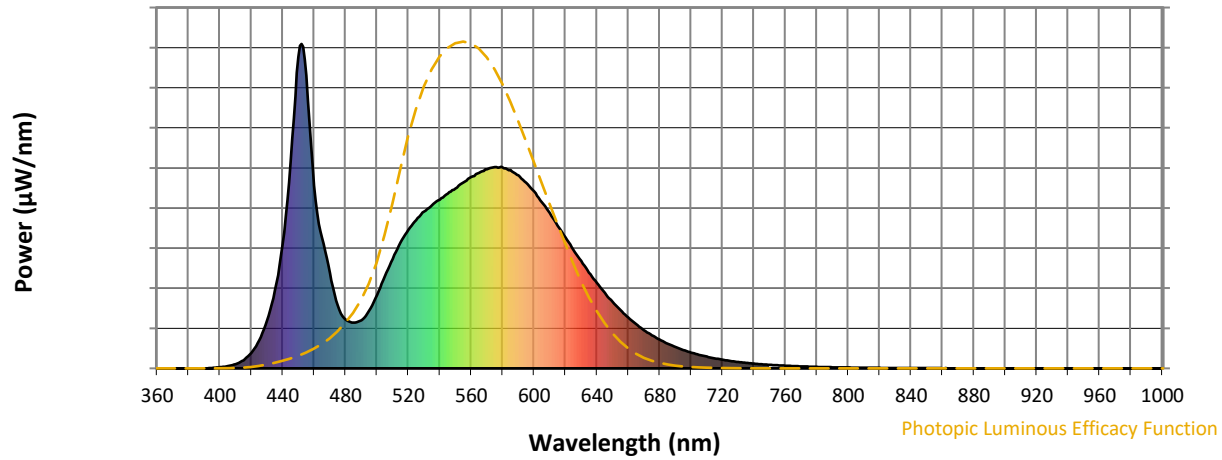
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2406-133-5

Photopic Flux vs. Wavelength

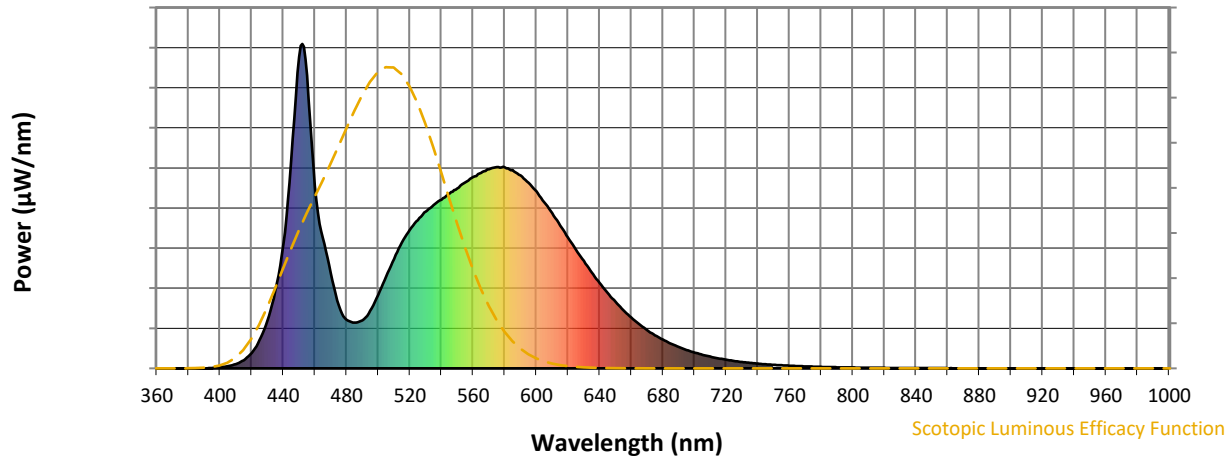


Photopic Lumens: NR

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	148	NR	620	403	NR	750	11	NR	880	0	NR
365	0	NR	495	178	NR	625	366	NR	755	9	NR	885	0	NR
370	0	NR	500	226	NR	630	331	NR	760	8	NR	890	0	NR
375	0	NR	505	283	NR	635	295	NR	765	7	NR	895	0	NR
380	0	NR	510	338	NR	640	263	NR	770	6	NR	900	0	NR
385	0	NR	515	387	NR	645	232	NR	775	5	NR	905	0	NR
390	0	NR	520	428	NR	650	205	NR	780	5	NR	910	0	NR
395	1	NR	525	457	NR	655	179	NR	785	4	NR	915	0	NR
400	4	NR	530	484	NR	660	156	NR	790	3	NR	920	0	NR
405	7	NR	535	503	NR	665	136	NR	795	3	NR	925	0	NR
410	13	NR	540	520	NR	670	118	NR	800	3	NR	930	0	NR
415	25	NR	545	538	NR	675	102	NR	805	2	NR	935	0	NR
420	48	NR	550	555	NR	680	89	NR	810	2	NR	940	0	NR
425	87	NR	555	573	NR	685	76	NR	815	2	NR	945	0	NR
430	147	NR	560	590	NR	690	66	NR	820	2	NR	950	0	NR
435	242	NR	565	603	NR	695	56	NR	825	1	NR	955	0	NR
440	384	NR	570	614	NR	700	49	NR	830	1	NR	960	0	NR
445	638	NR	575	621	NR	705	42	NR	835	1	NR	965	0	NR
450	960	NR	580	619	NR	710	36	NR	840	1	NR	970	0	NR
455	902	NR	585	611	NR	715	31	NR	845	1	NR	975	0	NR
460	564	NR	590	594	NR	720	27	NR	850	1	NR	980	0	NR
465	402	NR	595	572	NR	725	23	NR	855	1	NR	985	0	NR
470	293	NR	600	546	NR	730	20	NR	860	1	NR	990	0	NR
475	194	NR	605	511	NR	735	17	NR	865	0	NR	995	0	NR
480	150	NR	610	478	NR	740	14	NR	870	0	NR	1000	0	NR
485	141	NR	615	440	NR	745	13	NR	875	0	NR			

REPORT NUMBER: SP1-2406-133-5

Scotopic Flux vs. Wavelength



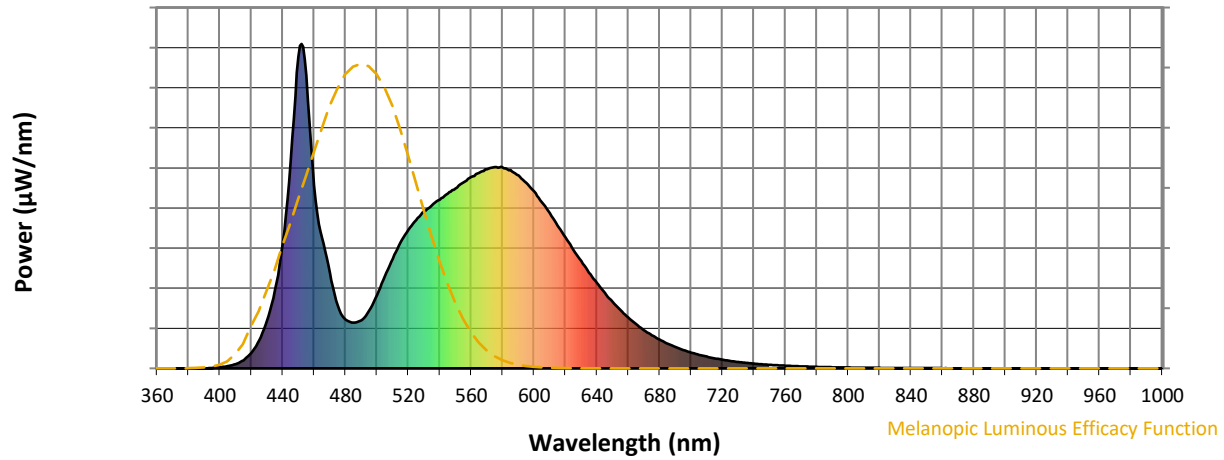
Scotopic Lumens: NR

S/P: 1.8

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	148	NR	620	403	NR	750	11	NR	880	0	NR
365	0	NR	495	178	NR	625	366	NR	755	9	NR	885	0	NR
370	0	NR	500	226	NR	630	331	NR	760	8	NR	890	0	NR
375	0	NR	505	283	NR	635	295	NR	765	7	NR	895	0	NR
380	0	NR	510	338	NR	640	263	NR	770	6	NR	900	0	NR
385	0	NR	515	387	NR	645	232	NR	775	5	NR	905	0	NR
390	0	NR	520	428	NR	650	205	NR	780	5	NR	910	0	NR
395	1	NR	525	457	NR	655	179	NR	785	4	NR	915	0	NR
400	4	NR	530	484	NR	660	156	NR	790	3	NR	920	0	NR
405	7	NR	535	503	NR	665	136	NR	795	3	NR	925	0	NR
410	13	NR	540	520	NR	670	118	NR	800	3	NR	930	0	NR
415	25	NR	545	538	NR	675	102	NR	805	2	NR	935	0	NR
420	48	NR	550	555	NR	680	89	NR	810	2	NR	940	0	NR
425	87	NR	555	573	NR	685	76	NR	815	2	NR	945	0	NR
430	147	NR	560	590	NR	690	66	NR	820	2	NR	950	0	NR
435	242	NR	565	603	NR	695	56	NR	825	1	NR	955	0	NR
440	384	NR	570	614	NR	700	49	NR	830	1	NR	960	0	NR
445	638	NR	575	621	NR	705	42	NR	835	1	NR	965	0	NR
450	960	NR	580	619	NR	710	36	NR	840	1	NR	970	0	NR
455	902	NR	585	611	NR	715	31	NR	845	1	NR	975	0	NR
460	564	NR	590	594	NR	720	27	NR	850	1	NR	980	0	NR
465	402	NR	595	572	NR	725	23	NR	855	1	NR	985	0	NR
470	293	NR	600	546	NR	730	20	NR	860	1	NR	990	0	NR
475	194	NR	605	511	NR	735	17	NR	865	0	NR	995	0	NR
480	150	NR	610	478	NR	740	14	NR	870	0	NR	1000	0	NR
485	141	NR	615	440	NR	745	13	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.74

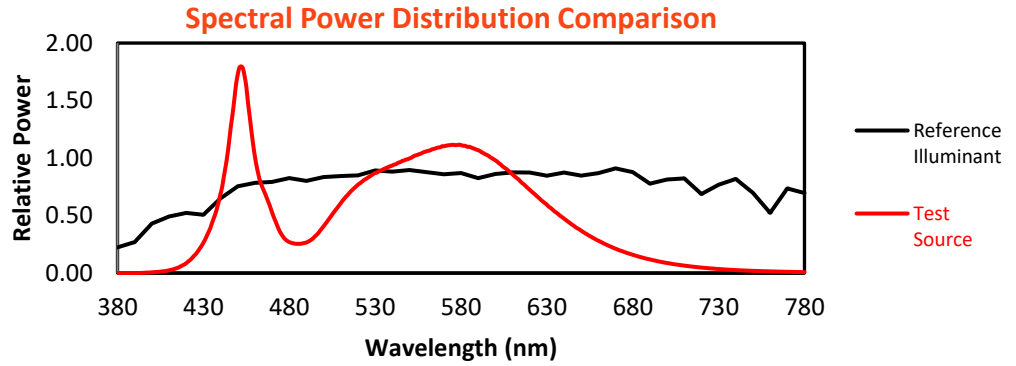
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	148	NR	620	403	NR	750	11	NR	880	0	NR
365	0	NR	495	178	NR	625	366	NR	755	9	NR	885	0	NR
370	0	NR	500	226	NR	630	331	NR	760	8	NR	890	0	NR
375	0	NR	505	283	NR	635	295	NR	765	7	NR	895	0	NR
380	0	NR	510	338	NR	640	263	NR	770	6	NR	900	0	NR
385	0	NR	515	387	NR	645	232	NR	775	5	NR	905	0	NR
390	0	NR	520	428	NR	650	205	NR	780	5	NR	910	0	NR
395	1	NR	525	457	NR	655	179	NR	785	4	NR	915	0	NR
400	4	NR	530	484	NR	660	156	NR	790	3	NR	920	0	NR
405	7	NR	535	503	NR	665	136	NR	795	3	NR	925	0	NR
410	13	NR	540	520	NR	670	118	NR	800	3	NR	930	0	NR
415	25	NR	545	538	NR	675	102	NR	805	2	NR	935	0	NR
420	48	NR	550	555	NR	680	89	NR	810	2	NR	940	0	NR
425	87	NR	555	573	NR	685	76	NR	815	2	NR	945	0	NR
430	147	NR	560	590	NR	690	66	NR	820	2	NR	950	0	NR
435	242	NR	565	603	NR	695	56	NR	825	1	NR	955	0	NR
440	384	NR	570	614	NR	700	49	NR	830	1	NR	960	0	NR
445	638	NR	575	621	NR	705	42	NR	835	1	NR	965	0	NR
450	960	NR	580	619	NR	710	36	NR	840	1	NR	970	0	NR
455	902	NR	585	611	NR	715	31	NR	845	1	NR	975	0	NR
460	564	NR	590	594	NR	720	27	NR	850	1	NR	980	0	NR
465	402	NR	595	572	NR	725	23	NR	855	1	NR	985	0	NR
470	293	NR	600	546	NR	730	20	NR	860	1	NR	990	0	NR
475	194	NR	605	511	NR	735	17	NR	865	0	NR	995	0	NR
480	150	NR	610	478	NR	740	14	NR	870	0	NR	1000	0	NR
485	141	NR	615	440	NR	745	13	NR	875	0	NR			

REPORT NUMBER: SP1-2406-133-5

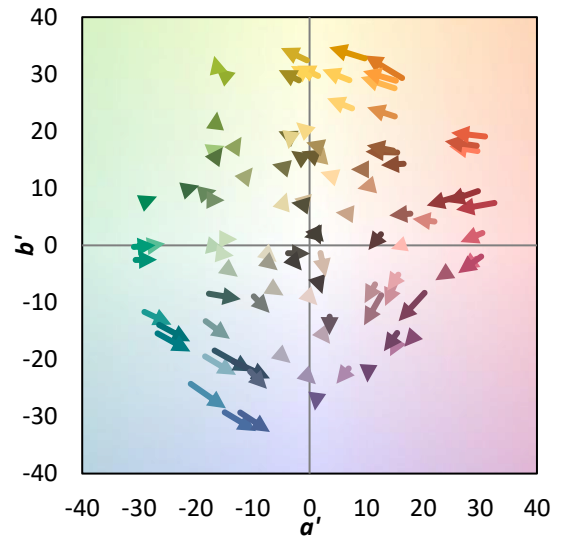
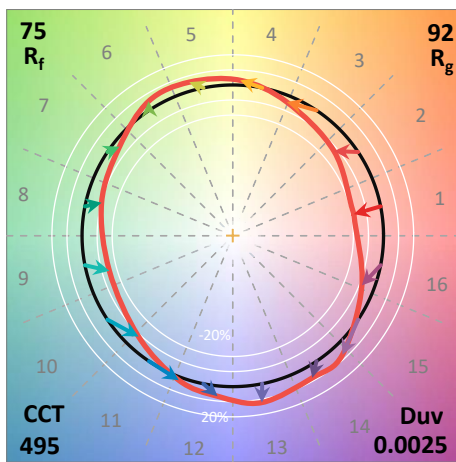
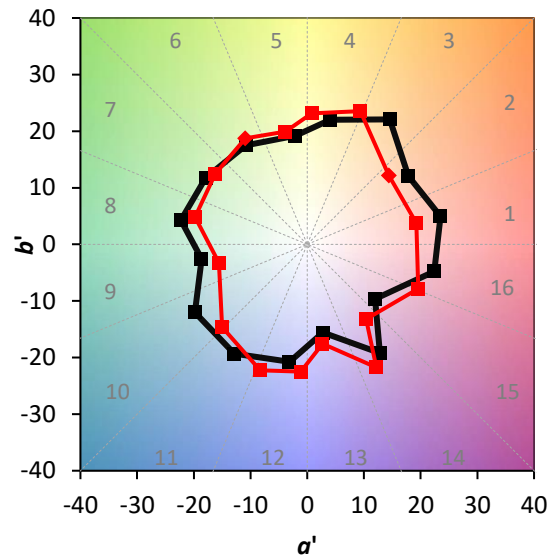
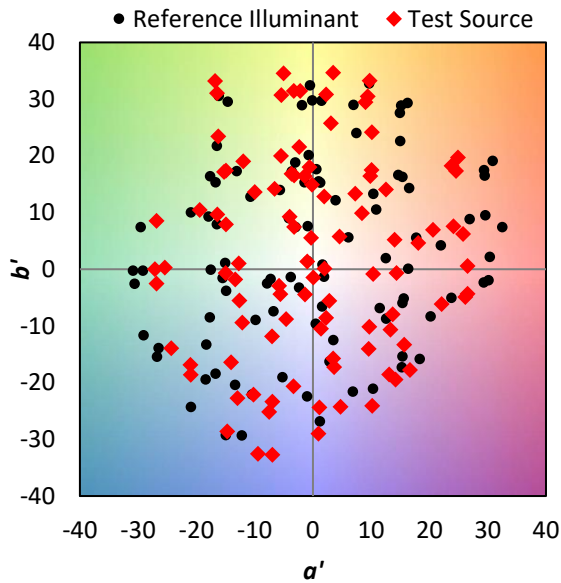
TM-30-18

Summary

$R_f = 74.8$
 $R_g = 92.4$
 CIE $R_a = 73.0$
 $R_g = -35.4$



Color Vector Graphics

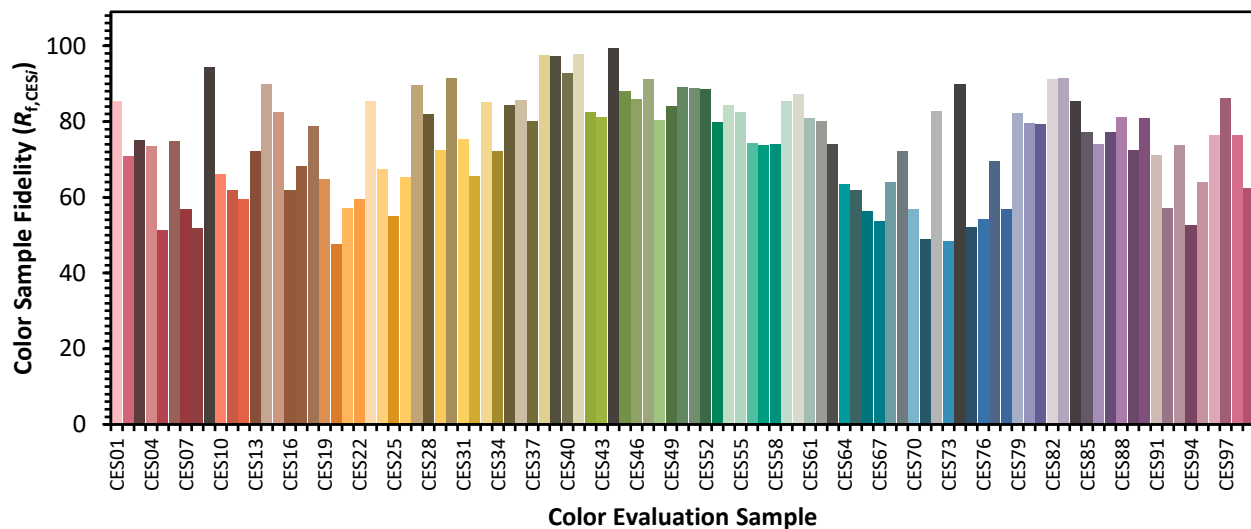


REPORT NUMBER: SP1-2406-133-5

TM-30-18

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

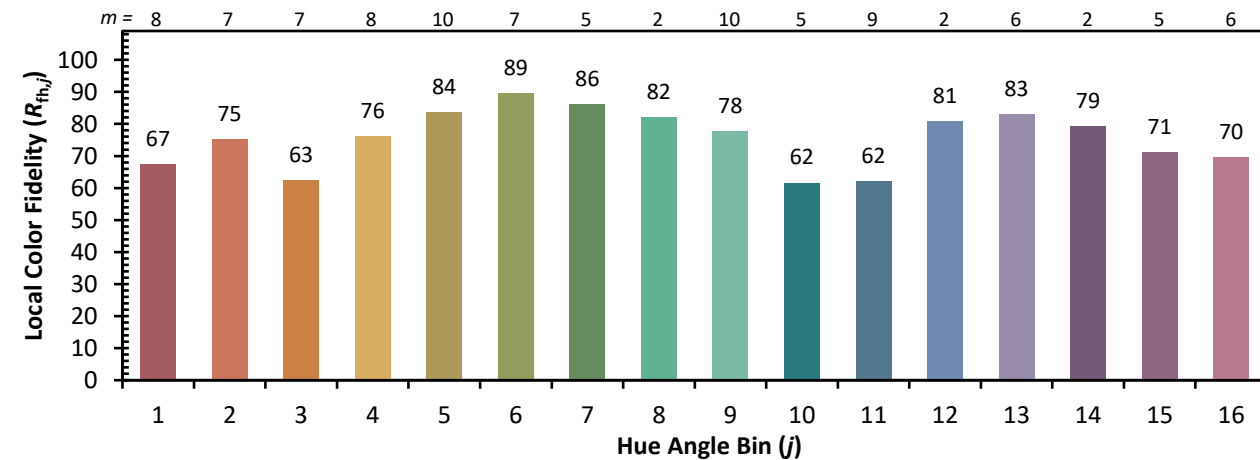
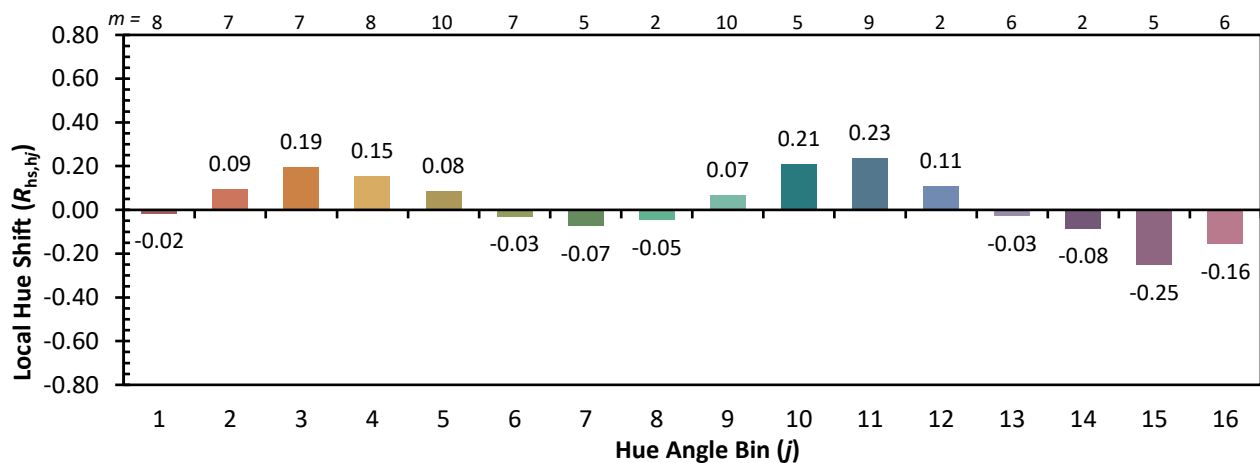
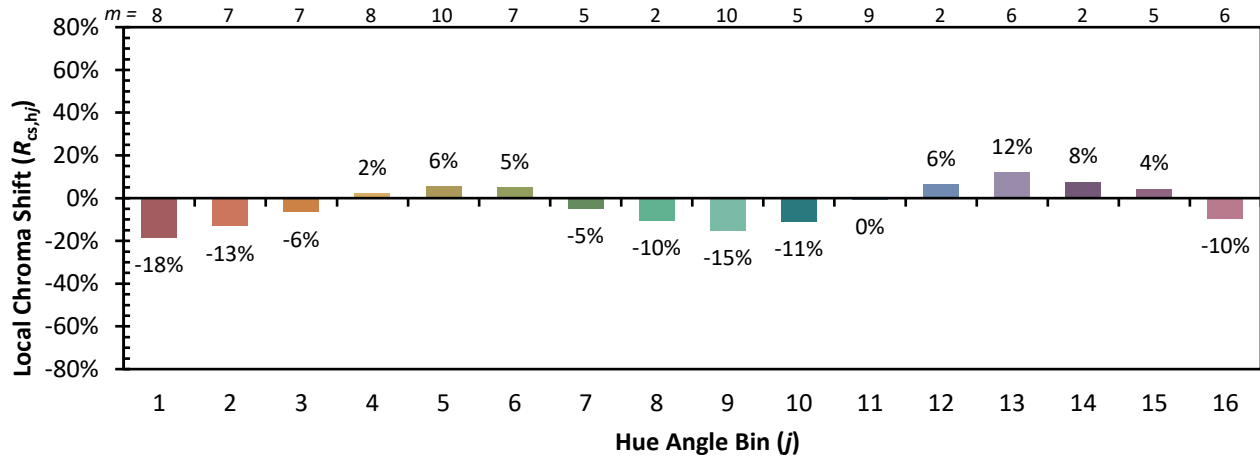
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CES02 = 60	CES27 = 90	CES52 = 88	CES77 = 69
CES03 = 30	CES28 = 82	CES53 = 80	CES78 = 57
CES04 = 69	CES29 = 72	CES54 = 84	CES79 = 82
CES05 = 46	CES30 = 91	CES55 = 82	CES80 = 79
CES06 = 50	CES31 = 75	CES56 = 74	CES81 = 79
CES07 = 39	CES32 = 66	CES57 = 74	CES82 = 91
CES08 = 38	CES33 = 85	CES58 = 74	CES83 = 91
CES09 = 29	CES34 = 72	CES59 = 85	CES84 = 85
CES10 = 73	CES35 = 84	CES60 = 87	CES85 = 77
CES11 = 56	CES36 = 86	CES61 = 81	CES86 = 74
CES12 = 62	CES37 = 80	CES62 = 80	CES87 = 77
CES13 = 41	CES38 = 98	CES63 = 74	CES88 = 81
CES14 = 74	CES39 = 97	CES64 = 63	CES89 = 72
CES15 = 70	CES40 = 93	CES65 = 62	CES90 = 81
CES16 = 46	CES41 = 98	CES66 = 56	CES91 = 71
CES17 = 49	CES42 = 83	CES67 = 54	CES92 = 57
CES18 = 55	CES43 = 81	CES68 = 64	CES93 = 74
CES19 = 71	CES44 = 99	CES69 = 72	CES94 = 53
CES20 = 64	CES45 = 88	CES70 = 57	CES95 = 64
CES21 = 85	CES46 = 86	CES71 = 49	CES96 = 76
CES22 = 77	CES47 = 91	CES72 = 83	CES97 = 86
CES23 = 91	CES48 = 80	CES73 = 48	CES98 = 77
CES24 = 90	CES49 = 84	CES74 = 90	CES99 = 62
CES25 = 71	CES50 = 89	CES75 = 52	



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TM-30-18

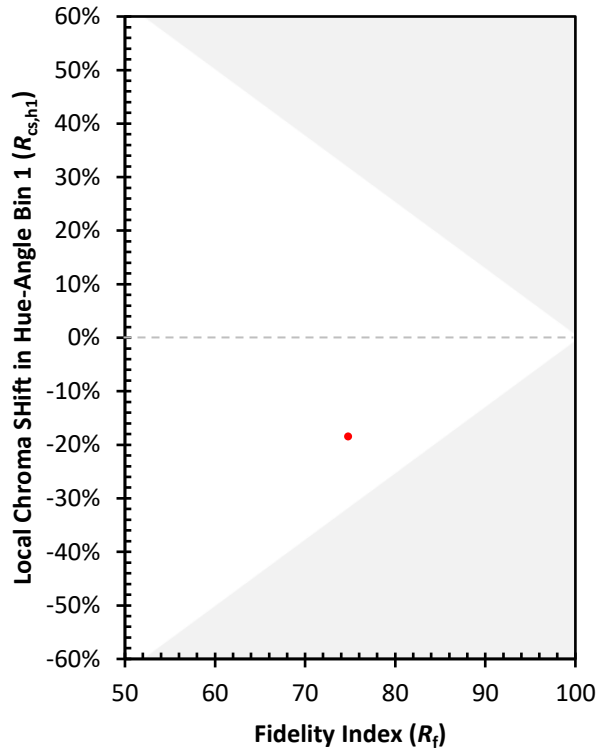
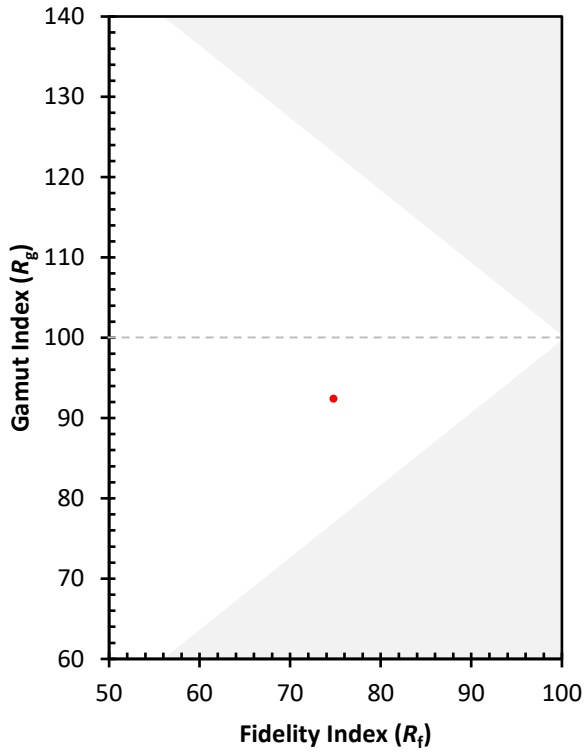
Color Rendition by Hue-Angle Bin



REPORT NUMBER: SP1-2406-133-5

TM-30-18

Measure Comparisons



(END OF REPORT)