

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: P856145

Luminaire Tested: **FFX-CLB-20-750-U-FR-T3**

Issue Date: 07/16/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P856145  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 07/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: FFX-CLB-20-750-U-FR-T3  
Description: FAIRFAX POST TOP FIXTURE w/ FAIRFAX REFRACTOR T3 DISTRIBUTION LENS  
Light Source: (4) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

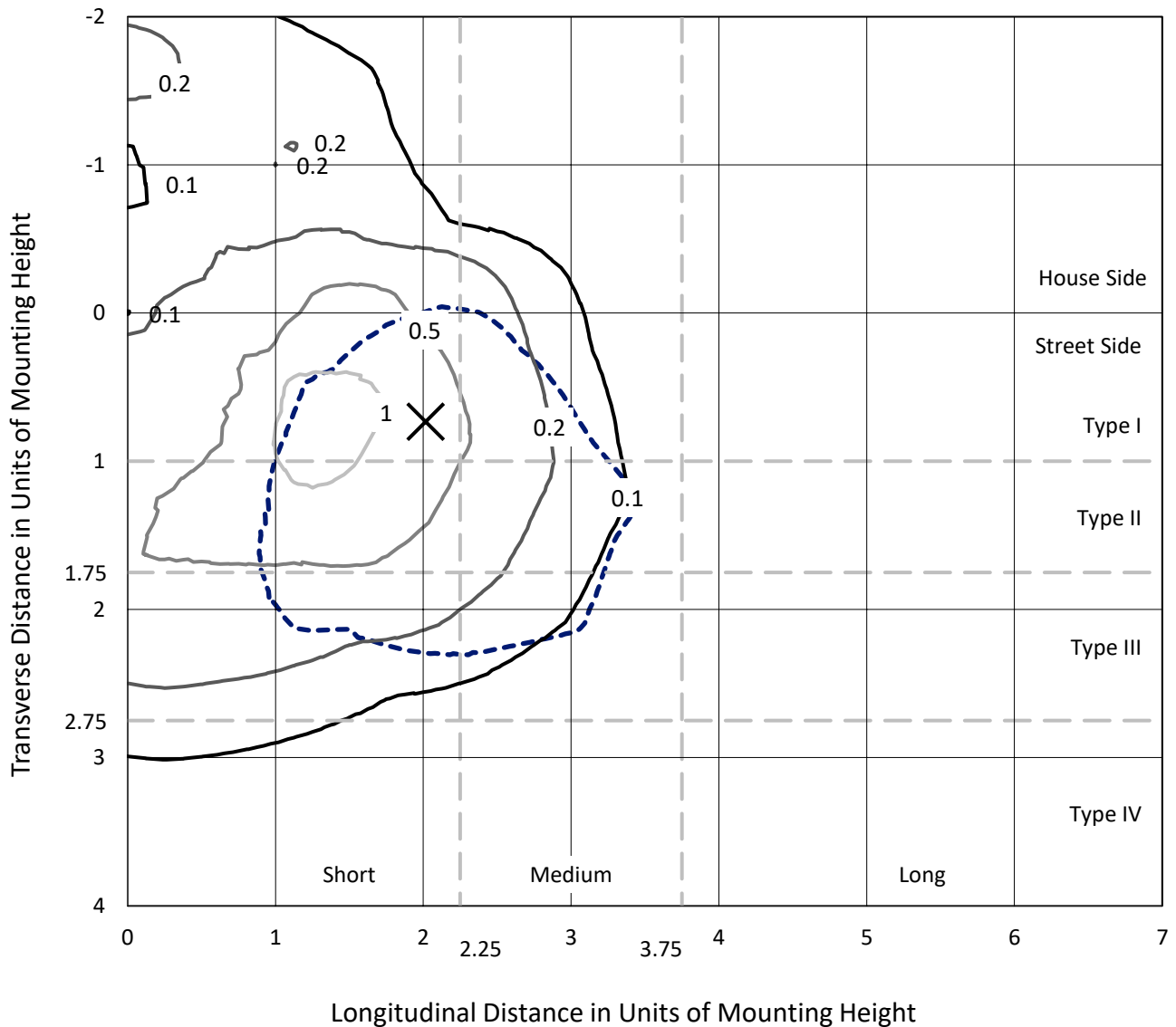
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3129.8 lumens  
Efficiency: N/A  
Efficacy: 160.5 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 1.67')  
IES Classification: Type III - Short  
BUG Rating: B1 - U3 - G2  
  
Input Watts (W): 19.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 9.8%%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P856145  
 CATALOG NUMBER: FFX-CLB-20-750-U-FR-T3

### Iso-Footcandle Lines of Horizontal Illumination

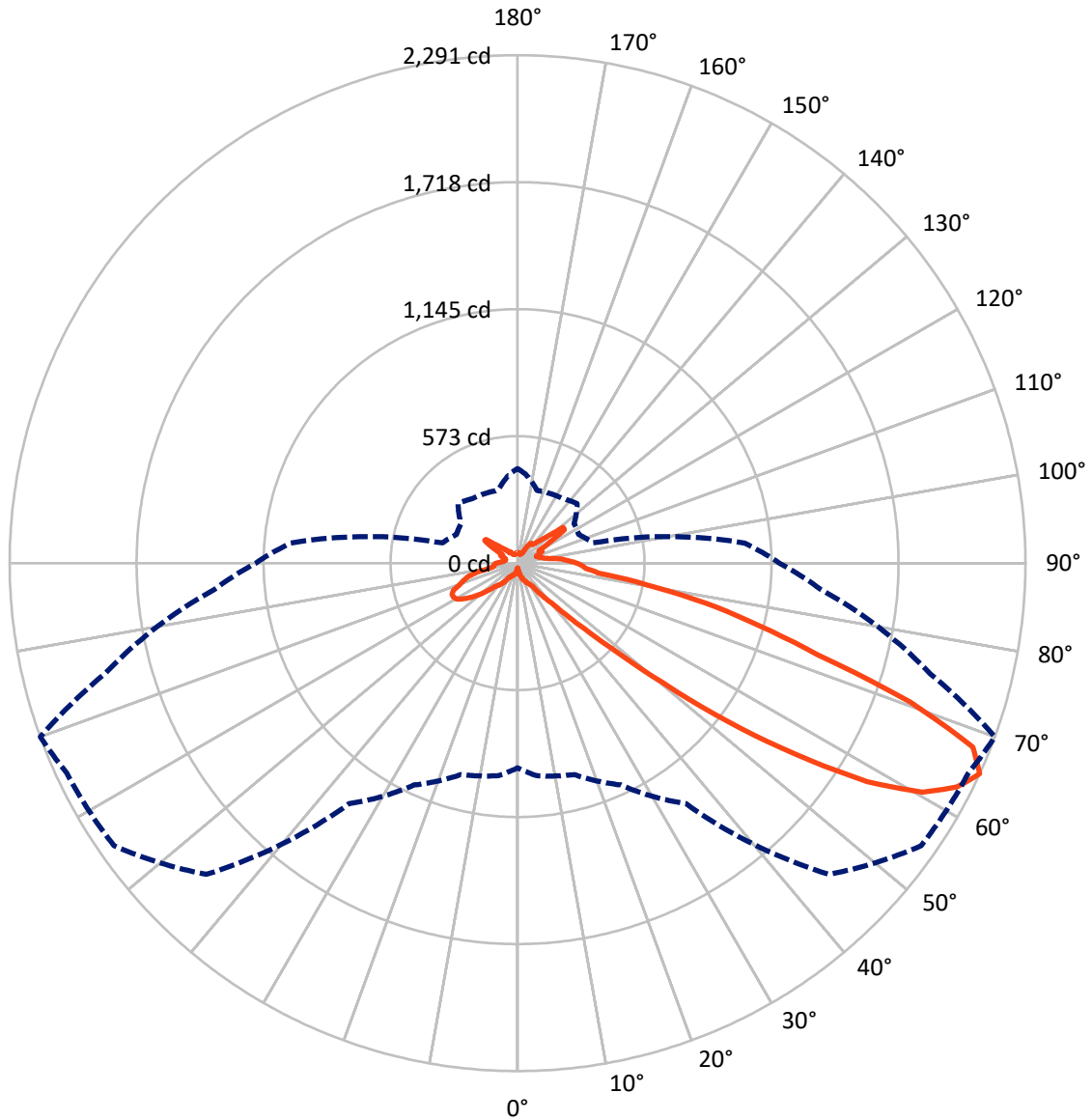
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.3 fc  
 Type III - Short - N/A

REPORT NUMBER: P856145  
CATALOG NUMBER: FFX-CLB-20-750-U-FR-T3

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P856145  
 CATALOG NUMBER: FFX-CLB-20-750-U-FR-T3

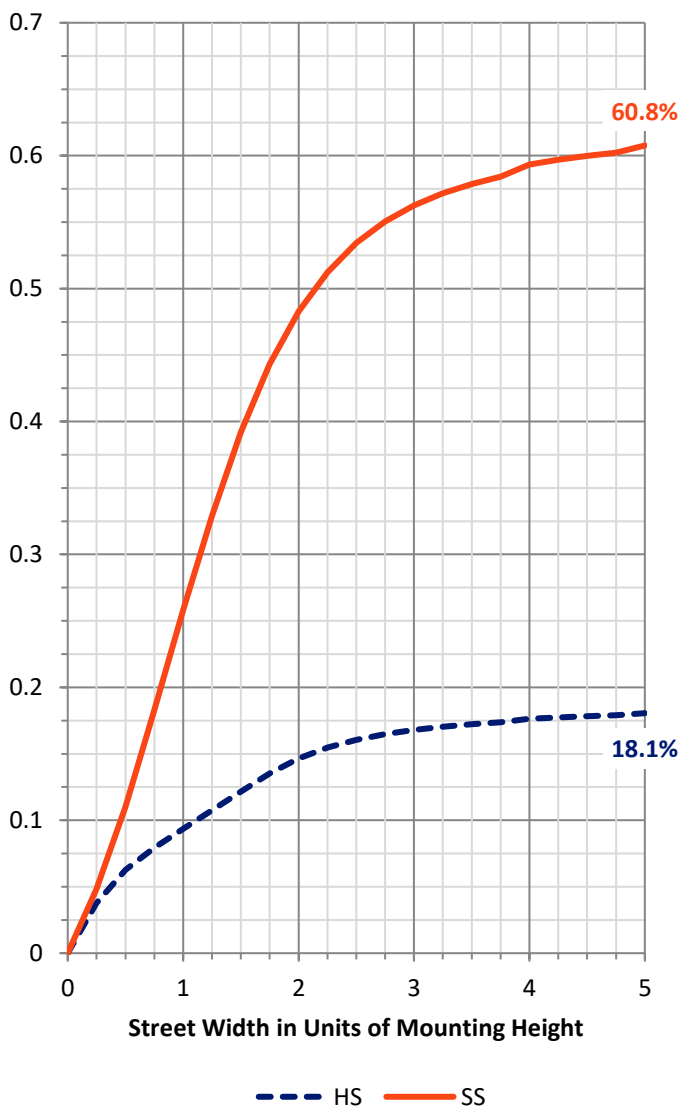
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	589.5	210.3	799.9
	% Fixture	18.8	6.7	25.6
<b>Street Side</b>	Lumens	1965.9	363.9	2329.9
	% Fixture	62.8	11.6	74.4
<b>Total</b>	Lumens	2555.5	574.3	3129.8
	% Fixture	81.7	18.3	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	3.3	0.1
10°-20°	16.4	0.5
20°-30°	34.8	1.1
30°-40°	70.9	2.3
40°-50°	180.2	5.8
50°-60°	579.2	18.5
60°-70°	945.3	30.2
70°-80°	538.1	17.2
80°-90°	187.2	6.0
90°-100°	116.5	3.7
100°-110°	74.2	2.4
110°-120°	81.6	2.6
120°-130°	138.1	4.4
130°-140°	81.4	2.6
140°-150°	43.8	1.4
150°-160°	22.1	0.7
160°-170°	12.1	0.4
170°-180°	4.4	0.1
0°-90°	2555.5	81.7
0°-180°	3129.8	100.0



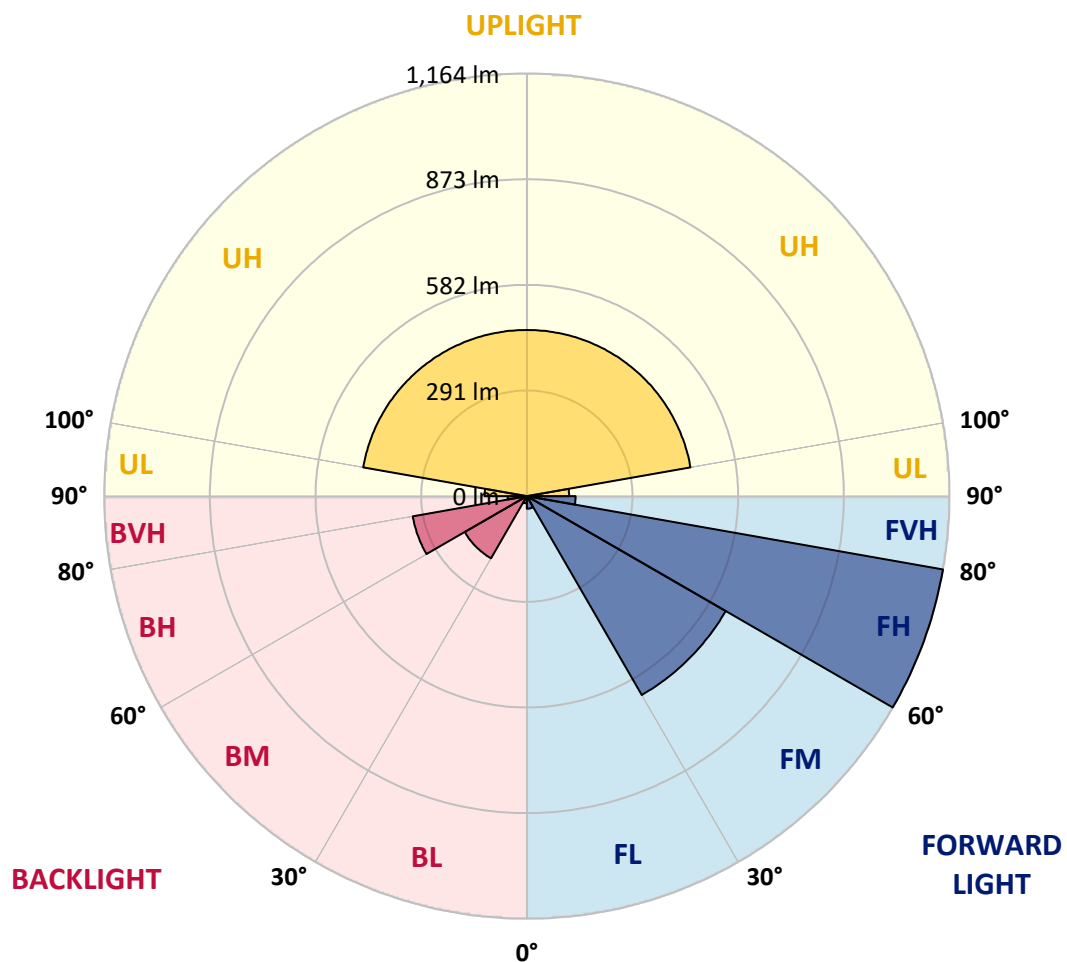
REPORT NUMBER: P856145  
 CATALOG NUMBER: FFX-CLB-20-750-U-FR-T3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	34.7	1.1			
FM (30°-60°)	632.7	20.2			
FH (60°-80°)	1164.2	37.2			G1/1800
FVH (80°-90°)	134.3	4.3			G2/225
BL (0°-30°)	19.8	0.6	B0/110		
BM (30°-60°)	197.6	6.3	B0/220		
BH (60°-80°)	319.2	10.2	B1/500		G1/500
BVH (80°-90°)	53.0	1.7			G1/100
UL (90°-100°)	116.5	3.7		U3/500	
UH (100°-180°)	457.7	14.6		U3/500	

**BUG Rating: B1-U3-G2**

Type III Short





REPORT NUMBER: P856145  
 CATALOG NUMBER: FFX-CLB-20-750-U-FR-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
2.5°	24.8	24.8	25.5	25.5	25.5	24.8	24.5	23.9	23.9	23.9	23.5
5°	32.3	31.9	32.3	33.2	33.5	32.6	31.9	31.0	31.0	30.6	30.6
7.5°	43.5	43.2	42.6	41.6	41.9	42.9	44.2	41.6	41.0	39.3	38.7
10°	54.5	53.9	54.5	52.9	51.3	49.0	50.3	49.7	48.4	46.8	45.5
12.5°	66.4	66.8	68.1	66.8	64.2	60.6	60.0	58.4	57.1	56.8	54.8
15°	78.7	79.0	80.3	80.0	77.4	72.6	70.6	69.0	68.4	66.4	62.2
17.5°	85.1	85.5	85.8	86.1	84.5	80.6	77.7	74.8	73.9	73.2	68.1
20°	88.4	87.7	88.4	89.7	91.0	87.7	84.8	83.2	82.2	80.0	73.2
22.5°	93.5	92.9	92.6	93.5	97.4	95.1	92.2	90.6	89.7	86.8	76.4
25°	99.0	98.4	99.3	98.7	103.5	102.6	99.7	98.0	96.8	93.2	81.3
27.5°	105.1	104.5	105.5	104.8	108.7	109.3	107.4	106.1	104.2	99.0	84.8
30°	110.3	109.7	110.6	110.3	114.2	116.4	115.5	115.1	112.2	106.1	91.0
32.5°	114.5	114.2	116.4	117.4	118.4	123.5	122.9	125.8	122.6	115.1	100.0
35°	124.2	125.1	131.3	137.7	138.7	149.0	150.3	160.9	157.7	148.0	129.7
37.5°	191.9	188.4	182.2	176.1	173.8	193.8	196.7	207.4	199.3	181.3	151.6
40°	204.5	198.7	191.6	186.7	187.4	223.2	217.1	257.4	234.5	207.4	185.1
42.5°	194.2	192.2	217.1	228.7	220.3	272.5	262.2	339.0	312.8	246.4	223.5
45°	243.5	239.6	248.3	260.0	262.5	358.6	351.5	431.9	421.2	308.0	286.7
47.5°	278.7	275.1	286.7	326.1	359.9	463.8	502.5	618.3	580.9	437.7	388.3
50°	384.1	383.5	419.3	466.0	525.4	674.7	777.6	907.6	847.3	619.6	532.5
52.5°	488.3	489.6	533.4	616.3	677.9	941.8	1087.9	1178.8	1186.9	807.9	690.2
55°	567.0	575.1	627.9	767.0	860.2	1179.5	1369.1	1439.7	1520.4	1091.7	854.4
57.5°	720.5	732.8	783.1	919.2	1049.5	1475.5	1731.6	1739.4	1859.7	1406.5	1030.5
60°	854.7	883.4	901.1	1024.6	1202.4	1758.4	2000.9	1985.4	2098.3	1667.4	1209.1
62.5°	896.3	929.2	946.0	1077.5	1323.3	1917.1	2126.7	2146.1	2223.8	1850.6	1318.5
65°	923.4	962.1	987.2	1103.7	1324.6	1984.8	2222.2	2242.8	2290.9	1927.4	1373.0
67.5°	909.5	958.9	991.1	1094.6	1254.9	1932.5	2203.1	2163.5	2214.4	1863.2	1312.0
70°	794.0	845.6	878.2	955.3	1049.2	1624.9	1899.3	1832.9	1877.7	1555.2	1078.8
72.5°	647.0	672.5	692.5	734.7	790.8	1198.5	1443.3	1388.1	1414.9	1170.1	808.6
75°	531.5	539.3	564.1	588.3	597.6	876.6	1143.3	1093.0	1124.3	890.8	643.4
77.5°	386.1	390.6	426.0	429.9	427.7	601.5	901.1	856.9	866.9	662.1	480.2
80°	224.2	232.9	279.3	277.0	273.2	370.6	634.4	616.7	585.7	449.6	332.5
82.5°	158.0	166.7	188.0	192.9	190.3	266.1	411.9	400.2	366.7	312.8	230.0
85°	166.4	167.4	168.4	170.6	166.4	237.4	315.4	309.6	309.9	258.7	189.6
87.5°	164.2	168.0	169.6	170.6	166.4	225.4	293.2	285.8	289.3	245.8	184.2
90°	144.2	151.3	151.9	153.5	151.3	201.3	263.2	256.1	260.6	221.6	167.7
92.5°	117.7	121.6	126.1	132.2	129.7	172.2	223.8	218.7	224.2	191.9	147.4
95°	111.6	115.8	118.7	122.9	119.0	157.1	202.2	191.9	196.4	168.0	127.1
97.5°	92.2	95.8	98.4	100.0	97.1	123.8	155.1	148.0	147.7	130.0	101.6
100°	78.7	81.0	83.2	84.8	82.2	102.6	122.9	120.3	120.9	107.4	87.4
102.5°	74.8	76.1	79.7	80.0	77.1	93.5	110.6	109.7	110.9	99.3	81.9
105°	73.2	74.2	77.1	76.1	73.5	87.4	101.9	102.6	102.6	92.6	76.8
107.5°	68.4	70.0	73.2	71.6	70.3	80.6	93.9	91.6	92.2	86.1	72.9
110°	67.7	69.0	72.2	71.0	70.0	78.7	90.3	89.7	90.6	85.1	74.8



REPORT NUMBER: P856145  
 CATALOG NUMBER: FFX-CLB-20-750-U-FR-T3

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
112.5°	84.2	82.9	85.5	82.9	84.5	91.9	104.2	102.9	105.8	103.9	93.5
115°	103.9	104.5	107.1	101.9	103.5	110.9	117.7	120.0	122.6	119.7	109.0
117.5°	96.1	101.6	98.4	97.7	96.4	102.2	101.3	107.1	109.7	107.4	103.2
120°	102.9	109.7	100.3	95.5	93.5	108.0	115.1	114.8	112.9	108.4	99.7
122.5°	153.8	154.8	155.5	170.0	164.8	179.0	183.2	177.7	177.7	183.5	165.8
125°	240.0	240.9	240.3	246.7	243.2	256.7	262.2	261.9	258.7	255.8	238.3
127.5°	242.5	242.5	240.3	236.7	240.0	253.2	253.5	265.8	261.6	253.8	237.7
130°	169.3	170.6	178.7	181.3	185.8	188.7	185.4	196.1	198.0	196.7	185.8
132.5°	140.3	142.6	151.3	154.5	157.4	157.7	156.4	164.8	166.7	166.7	161.9
135°	121.3	123.8	124.8	123.2	127.4	130.6	133.2	140.0	139.3	138.0	133.8
137.5°	105.8	106.8	103.9	100.3	102.6	111.9	117.1	124.2	123.8	121.6	114.5
140°	89.3	89.7	88.0	86.4	88.7	96.8	101.6	109.3	108.4	106.8	98.4
142.5°	67.7	68.7	72.9	76.1	81.6	98.4	95.8	102.6	107.4	111.3	91.9
145°	71.3	70.0	69.3	72.9	80.0	104.2	96.8	105.5	107.7	110.3	88.0
147.5°	82.2	82.9	81.9	79.7	89.3	97.1	92.9	100.6	101.9	101.3	92.2
150°	64.5	65.5	65.8	64.8	76.8	76.4	72.2	78.1	78.7	78.7	72.6
152.5°	52.6	52.9	52.2	51.6	59.3	58.1	56.1	58.1	57.7	57.4	56.1
155°	50.0	50.0	49.3	49.7	54.8	53.5	52.2	53.5	52.9	51.9	50.6
157.5°	46.1	46.4	46.4	47.4	50.6	48.4	47.1	47.7	47.1	46.4	46.4
160°	43.5	43.5	43.9	45.2	47.1	44.8	43.9	44.2	43.9	43.2	43.5
162.5°	42.6	42.6	42.9	43.5	43.9	42.6	41.6	41.6	41.6	41.6	42.6
165°	41.9	41.9	41.9	42.3	42.3	41.3	41.0	41.3	41.6	41.9	43.2
167.5°	43.2	43.2	43.2	43.2	42.9	42.3	41.9	42.3	42.6	42.9	43.9
170°	45.2	44.8	44.8	44.5	44.2	43.5	43.2	42.9	42.9	43.2	43.5
172.5°	46.4	46.4	46.1	46.1	45.8	45.2	44.5	44.2	44.2	44.2	44.2
175°	48.1	48.1	48.1	48.1	47.7	47.1	46.8	46.1	46.1	46.1	46.1
177.5°	50.0	50.0	50.0	50.0	49.3	48.7	48.1	47.4	47.4	47.4	47.1
180°	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7





REPORT NUMBER: P856145  
 CATALOG NUMBER: FFX-CLB-20-750-U-FR-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
2.5°	23.2	22.9	21.9	21.6	21.3	20.6	20.0	19.7	19.4	19.4	19.7
5°	31.0	30.6	30.6	29.7	28.7	27.1	26.4	26.4	26.8	27.1	27.7
7.5°	39.0	39.7	40.3	38.7	35.8	31.9	29.7	30.3	31.9	33.2	33.2
10°	45.2	45.2	47.4	45.5	40.6	35.8	32.6	31.9	32.3	32.6	32.9
12.5°	53.9	53.9	52.6	47.4	42.6	37.7	35.2	34.5	34.5	33.2	32.9
15°	60.3	58.4	53.9	49.0	44.8	40.0	37.1	36.1	35.2	34.2	33.9
17.5°	64.2	60.6	54.5	50.0	45.8	41.9	39.0	37.1	36.1	36.4	36.4
20°	68.7	64.8	59.3	54.5	49.3	44.2	40.6	37.7	36.8	37.1	36.8
22.5°	72.2	68.4	62.9	57.4	51.9	46.4	42.3	38.7	37.4	37.7	37.7
25°	76.4	73.2	67.4	61.0	54.2	49.0	44.8	40.6	38.7	38.4	38.4
27.5°	80.6	78.4	72.2	64.5	57.4	51.3	47.1	42.3	40.0	39.0	39.0
30°	86.1	83.5	77.4	68.1	60.3	54.5	50.0	44.8	41.6	40.0	39.7
32.5°	94.8	91.9	84.5	74.5	63.5	57.7	52.9	47.1	42.9	41.0	40.6
35°	123.2	118.7	107.1	95.5	77.7	64.5	56.4	49.0	44.2	41.6	41.3
37.5°	140.9	130.0	114.5	106.8	87.4	79.0	68.1	56.1	46.1	42.9	42.3
40°	169.6	154.5	135.1	120.0	85.1	86.4	79.7	70.0	54.8	45.2	44.2
42.5°	193.8	174.8	145.5	125.8	85.5	90.3	85.1	77.1	65.8	53.5	51.6
45°	239.0	214.5	169.0	135.1	87.7	96.1	89.7	81.3	71.3	62.9	61.9
47.5°	322.8	289.6	211.3	150.6	102.6	111.6	100.0	89.0	80.0	70.3	68.7
50°	441.9	402.2	260.0	162.9	128.0	147.1	126.1	107.7	97.4	90.3	89.3
52.5°	578.9	537.3	295.8	185.4	159.0	190.9	166.7	145.5	131.9	131.9	133.8
55°	738.2	696.6	324.5	216.7	197.1	239.3	213.2	195.8	189.3	216.7	224.2
57.5°	896.3	843.4	343.8	248.7	241.6	296.1	264.8	250.0	261.9	343.2	368.3
60°	1040.5	953.0	359.0	279.0	279.6	341.2	318.0	317.0	335.4	439.3	471.2
62.5°	1123.7	1004.7	358.0	296.4	301.9	369.3	349.9	355.1	365.4	455.4	479.6
65°	1180.7	1029.2	350.6	304.1	311.2	379.3	355.1	346.4	339.6	403.2	426.4
67.5°	1141.4	971.8	333.8	292.8	305.4	364.8	332.8	308.0	294.8	327.0	342.8
70°	956.0	810.5	295.4	263.5	275.1	307.4	276.7	252.2	238.3	255.8	263.2
72.5°	724.1	616.7	266.4	246.4	241.2	254.1	225.1	197.7	189.3	200.6	202.2
75°	576.7	482.5	245.1	222.9	202.5	215.1	179.6	146.4	141.6	141.6	139.0
77.5°	432.5	357.7	209.0	173.5	149.3	170.0	133.8	101.9	95.5	94.2	90.6
80°	289.9	243.5	140.6	115.1	107.4	126.1	95.1	74.8	75.1	74.8	70.6
82.5°	202.5	188.0	114.2	100.3	91.9	99.3	86.1	71.9	71.3	71.9	67.4
85°	179.6	172.2	110.6	103.5	94.8	95.8	82.6	68.1	68.4	69.7	65.8
87.5°	172.5	164.2	110.9	100.0	92.6	88.7	74.8	62.9	64.8	66.1	62.9
90°	155.5	147.1	101.9	90.3	82.6	77.1	66.1	59.7	62.2	63.5	60.6
92.5°	134.8	126.1	84.8	79.7	77.7	77.7	69.3	63.5	65.1	65.8	63.2
95°	116.1	107.7	75.5	70.0	68.4	68.7	61.9	57.1	58.1	57.7	55.8
97.5°	93.9	88.7	65.8	62.2	60.6	60.0	55.5	51.9	53.9	55.2	53.5
100°	82.9	80.3	63.5	61.0	58.7	58.4	54.5	52.2	53.9	55.8	54.5
102.5°	77.4	75.5	60.6	57.1	55.5	54.8	52.2	49.7	51.3	53.2	52.2
105°	72.9	70.0	58.1	54.8	52.6	52.2	49.7	46.4	47.4	50.0	49.3
107.5°	69.0	67.1	57.7	54.2	51.3	51.3	48.4	45.8	46.1	47.1	47.1
110°	72.2	70.0	60.0	57.4	53.5	52.2	51.6	49.7	48.1	47.4	47.4



REPORT NUMBER: P856145  
 CATALOG NUMBER: FFX-CLB-20-750-U-FR-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	89.3	85.1	75.1	72.2	65.8	61.3	57.1	53.2	50.6	49.7	49.0
115°	105.5	100.6	88.7	81.3	72.6	65.8	60.0	55.8	51.9	50.6	51.9
117.5°	108.7	95.8	77.4	71.3	66.1	61.9	58.7	55.5	52.6	53.5	52.6
120°	107.7	91.9	78.1	86.8	78.1	68.4	60.6	60.6	59.7	54.8	55.8
122.5°	165.8	154.8	138.0	132.9	108.4	99.0	84.5	72.2	60.3	53.5	50.3
125°	227.1	216.4	190.6	170.9	146.4	120.6	92.6	71.3	55.8	49.3	50.3
127.5°	228.3	218.7	194.2	160.9	128.7	103.2	77.1	63.2	54.5	50.3	49.7
130°	178.0	168.7	147.7	122.2	101.9	85.1	69.3	57.1	49.3	46.1	45.2
132.5°	154.2	145.8	126.4	103.2	88.4	75.1	61.9	49.7	44.5	42.3	42.6
135°	129.7	119.7	101.3	88.7	79.3	67.4	55.5	45.5	42.9	42.3	41.9
137.5°	110.0	102.9	90.0	80.3	71.3	60.6	48.7	42.6	41.6	42.3	41.6
140°	93.5	87.7	80.6	72.2	61.3	51.3	43.5	40.6	42.3	42.6	42.3
142.5°	80.6	74.8	67.4	56.1	51.0	46.4	44.5	42.3	42.3	41.9	41.6
145°	67.4	59.7	56.1	57.7	54.5	50.0	46.4	41.9	40.3	40.3	40.6
147.5°	77.4	69.3	64.8	61.3	55.2	48.7	43.2	39.0	38.4	39.7	39.3
150°	66.8	59.3	56.1	51.3	47.4	42.6	39.0	37.4	37.7	39.3	39.3
152.5°	53.2	48.1	46.1	44.8	42.9	40.0	38.1	37.4	38.1	38.7	38.7
155°	50.0	47.1	44.8	43.9	41.6	39.3	37.7	37.4	38.1	38.7	39.3
157.5°	46.8	45.8	42.9	41.9	40.0	39.0	38.1	38.1	38.4	39.0	39.7
160°	44.5	44.2	41.6	41.3	40.0	39.3	39.3	39.7	40.0	40.0	40.0
162.5°	43.2	43.2	42.3	41.6	41.3	41.0	41.9	42.3	41.9	41.9	41.9
165°	43.5	43.9	42.9	42.3	41.9	42.6	44.2	44.2	43.5	43.2	42.9
167.5°	43.9	44.2	43.5	43.2	43.2	43.9	44.5	44.2	43.9	43.5	43.2
170°	43.5	43.9	43.9	44.2	44.2	44.2	44.8	44.8	44.2	43.9	43.9
172.5°	44.2	44.5	44.8	45.2	45.5	45.2	45.5	45.5	45.5	45.5	45.8
175°	46.1	46.1	46.4	46.4	46.1	46.4	46.4	46.4	46.8	47.4	47.4
177.5°	47.1	47.1	46.8	46.8	46.4	46.8	46.8	46.8	46.8	47.1	46.8
180°	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7

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.

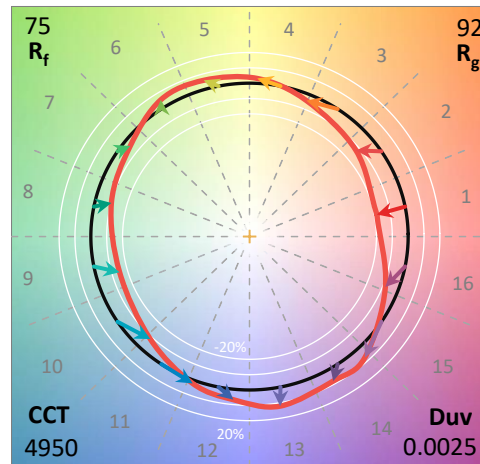
**Test Information**

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**

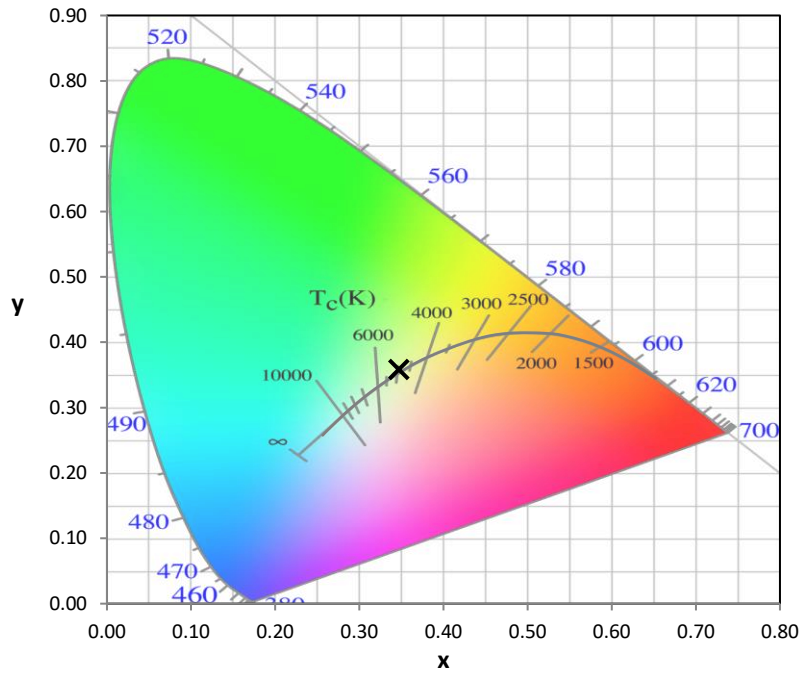
Stabilization Time: 0.803355M  
 Operation Time: 1H  
 Sphere Temperature (°C): 24.7

REPORT NUMBER: SP1-2406-133-5

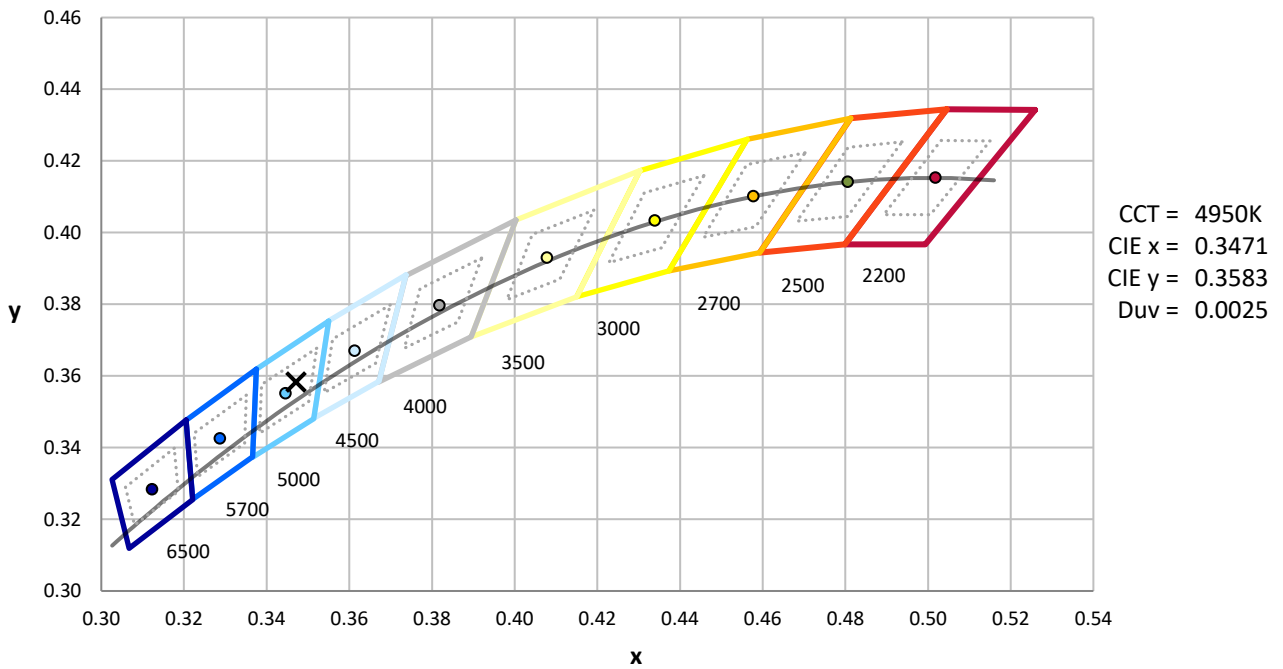
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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



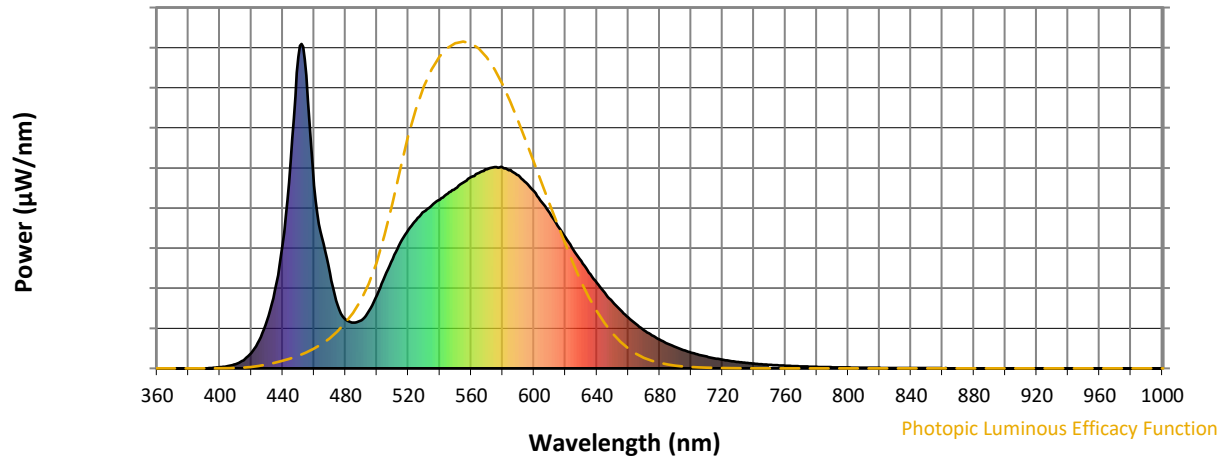
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2406-133-5

**Photopic Flux vs. Wavelength**

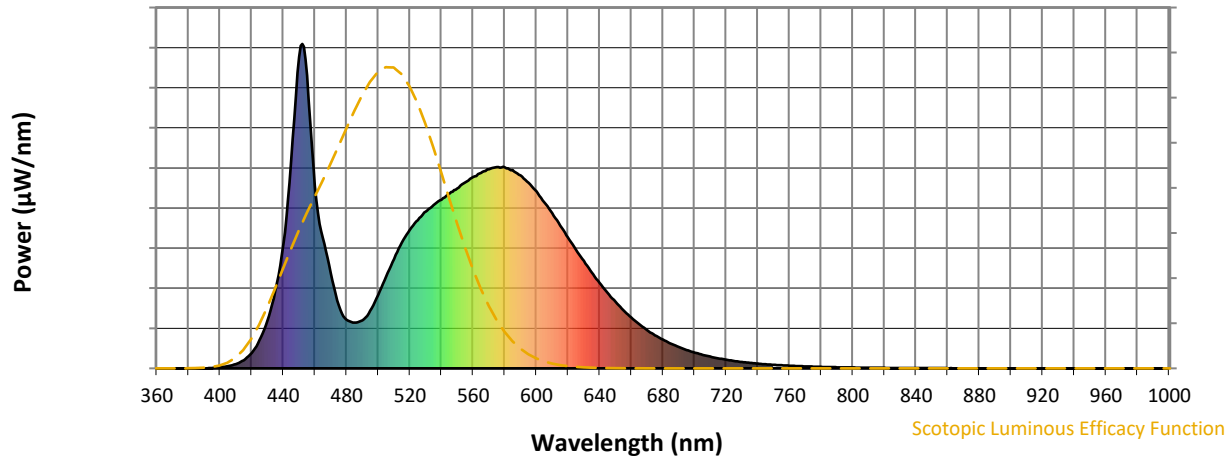


**Photopic Lumens: NR**

λ (nm)	Power W <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	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**

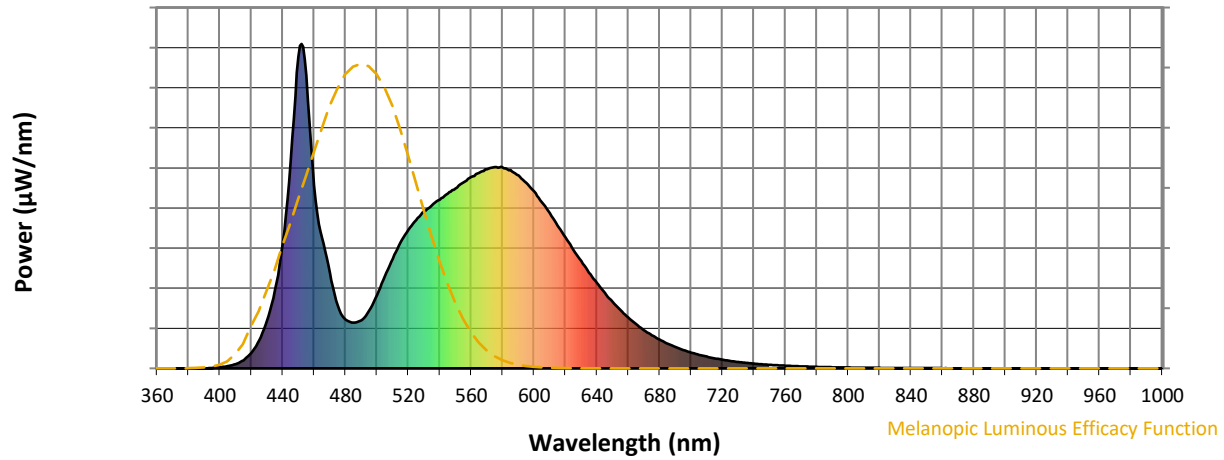
**S/P: 1.8**

λ (nm)	Power W <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	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

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.74

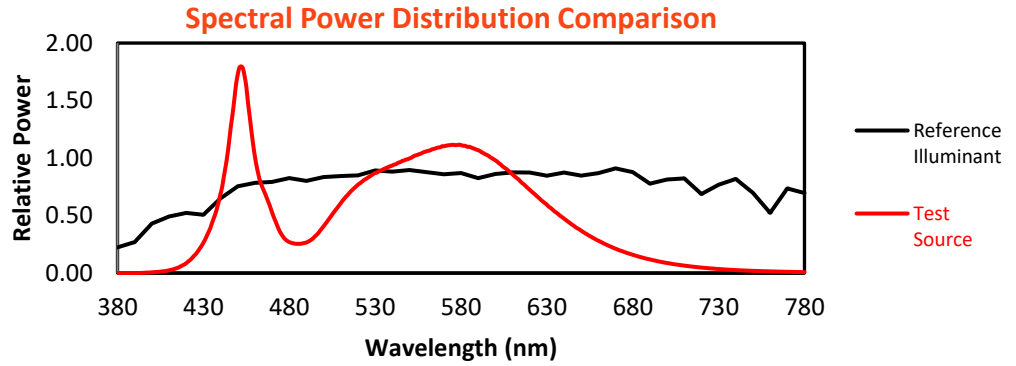
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	148	NR	620	403	NR	750	11	NR	880	0	NR
365	0	NR	495	178	NR	625	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

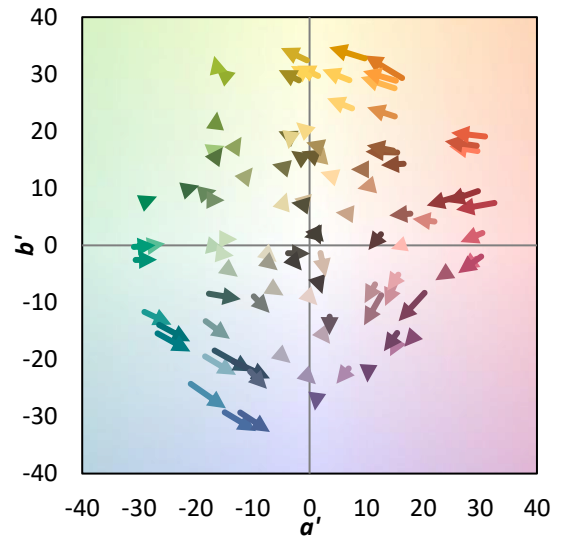
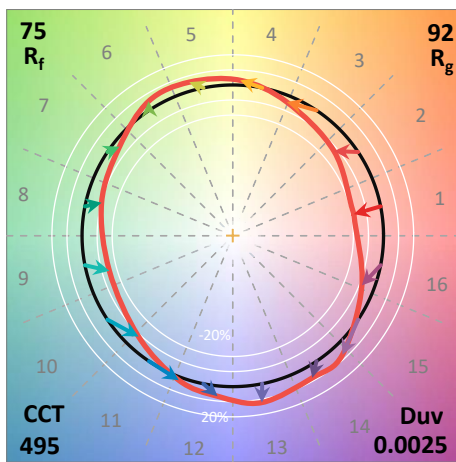
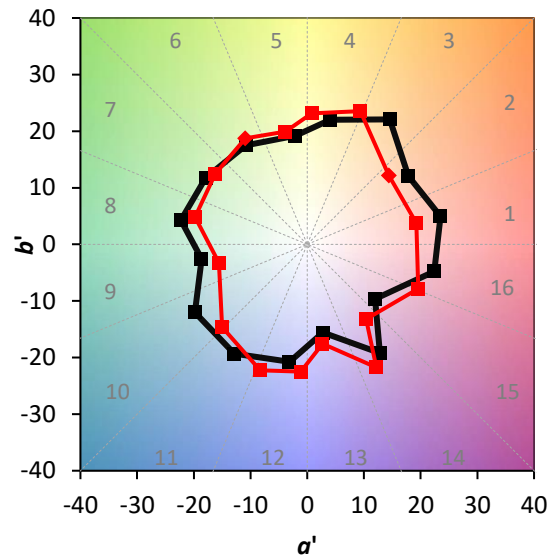
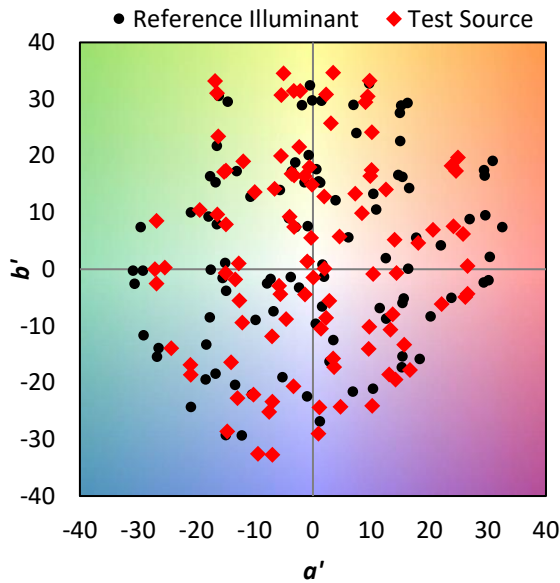
TM-30-18

**Summary**

$R_f = 74.8$   
 $R_g = 92.4$   
 CIE  $R_a = 73.0$   
 $R_9 = -35.4$



**Color Vector Graphics**

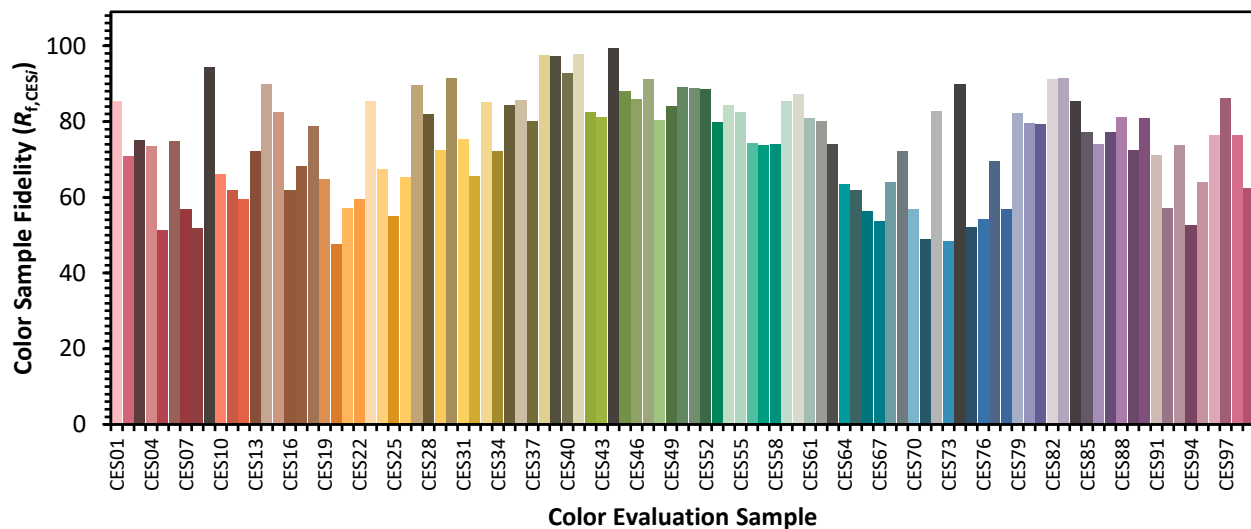


REPORT NUMBER: SP1-2406-133-5

TM-30-18

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

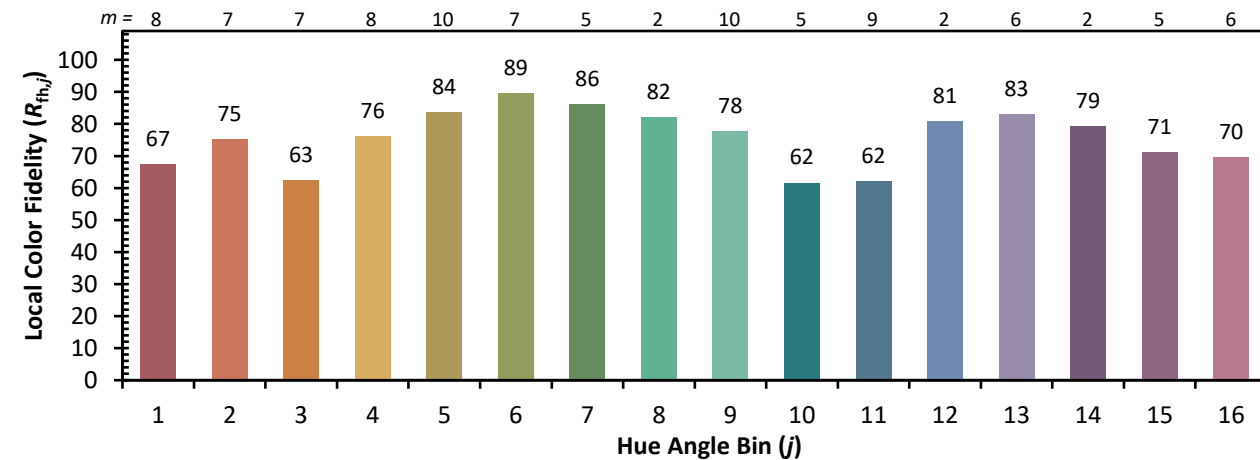
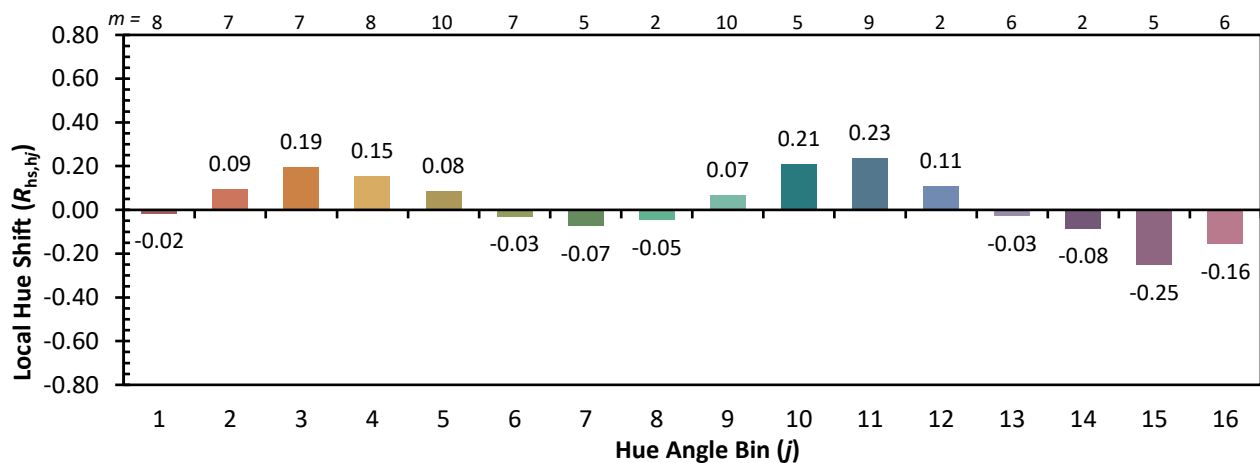
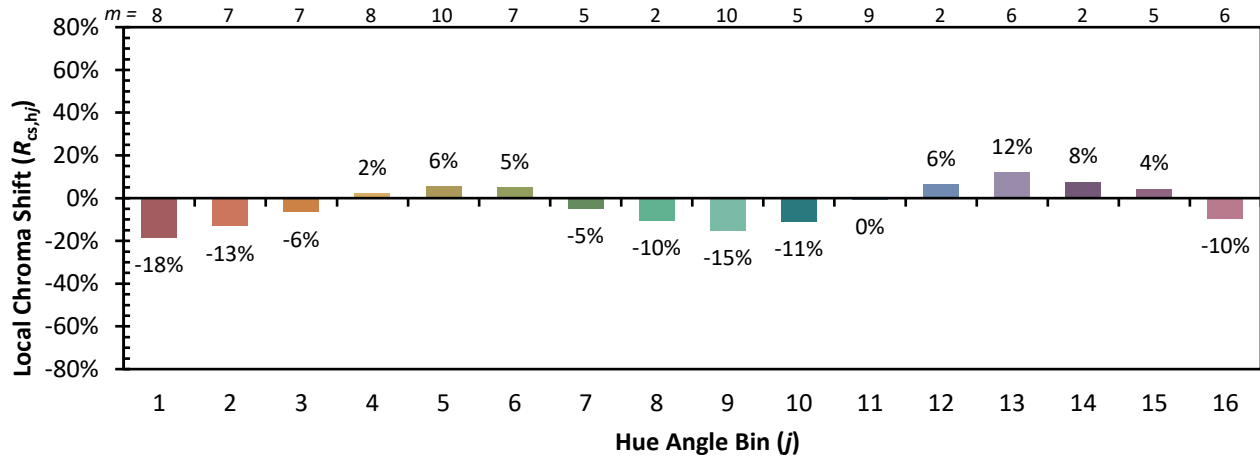
CES01 = 85	CES26 = 65	CES51 = 89	CES76 = 54
CES02 = 60	CES27 = 90	CES52 = 88	CES77 = 69
CES03 = 30	CES28 = 82	CES53 = 80	CES78 = 57
CES04 = 69	CES29 = 72	CES54 = 84	CES79 = 82
CES05 = 46	CES30 = 91	CES55 = 82	CES80 = 79
CES06 = 50	CES31 = 75	CES56 = 74	CES81 = 79
CES07 = 39	CES32 = 66	CES57 = 74	CES82 = 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	



REPORT NUMBER: SP1-2406-133-5

TM-30-18

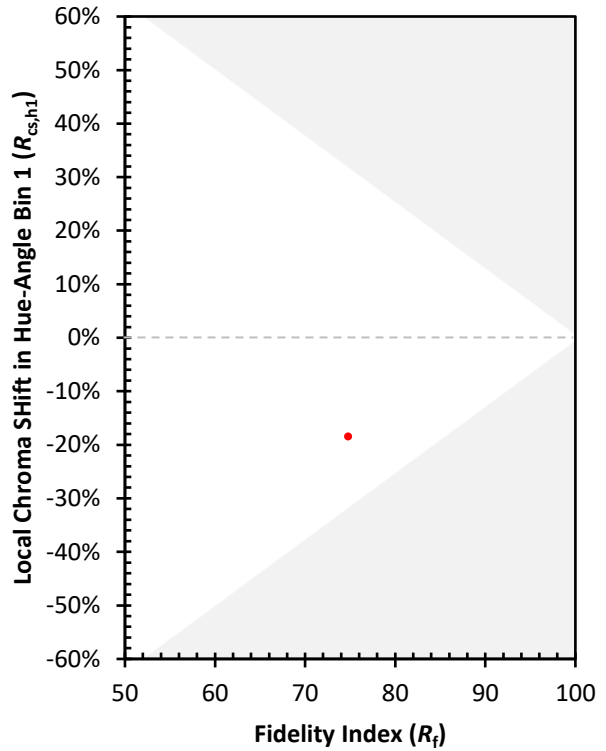
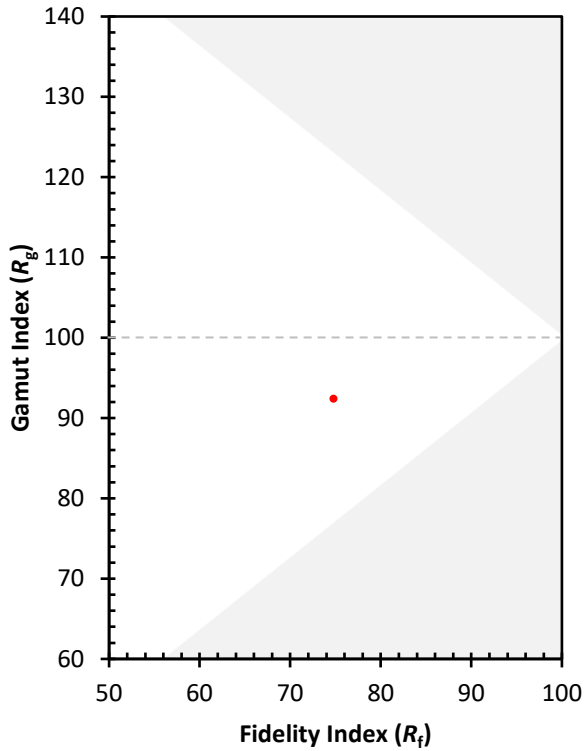
Color Rendition by Hue-Angle Bin



REPORT NUMBER: SP1-2406-133-5

TM-30-18

Measure Comparisons



(END OF REPORT)