

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: P856126

Luminaire Tested: **FFX-CLB-30-730-U-FR-T3**

Issue Date: 07/16/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P856126  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 07/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: FFX-CLB-30-730-U-FR-T3  
Description: FAIRFAX POST TOP FIXTURE w/ FAIRFAX REFRACTOR T3 DISTRIBUTION LENS  
Light Source: (4) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

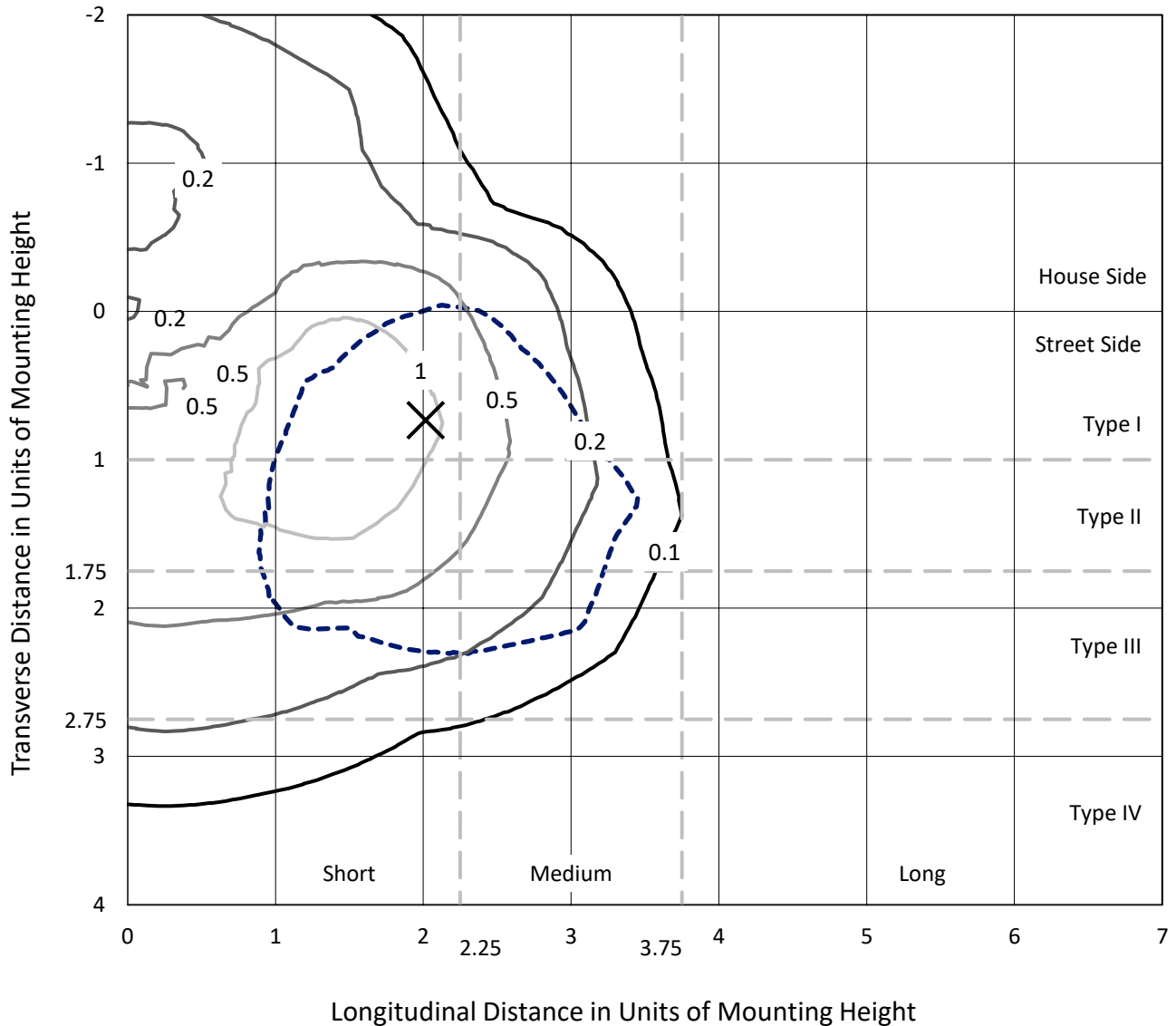
Lumens per Lamp: N/A  
Luminaire Lumens: 4785.7 lumens  
Efficiency: N/A  
Efficacy: 156.9 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 1.67')  
IES Classification: Type III - Short  
BUG Rating: B1 - U4 - G2

Input Watts (W): 30.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 10.6%%  
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

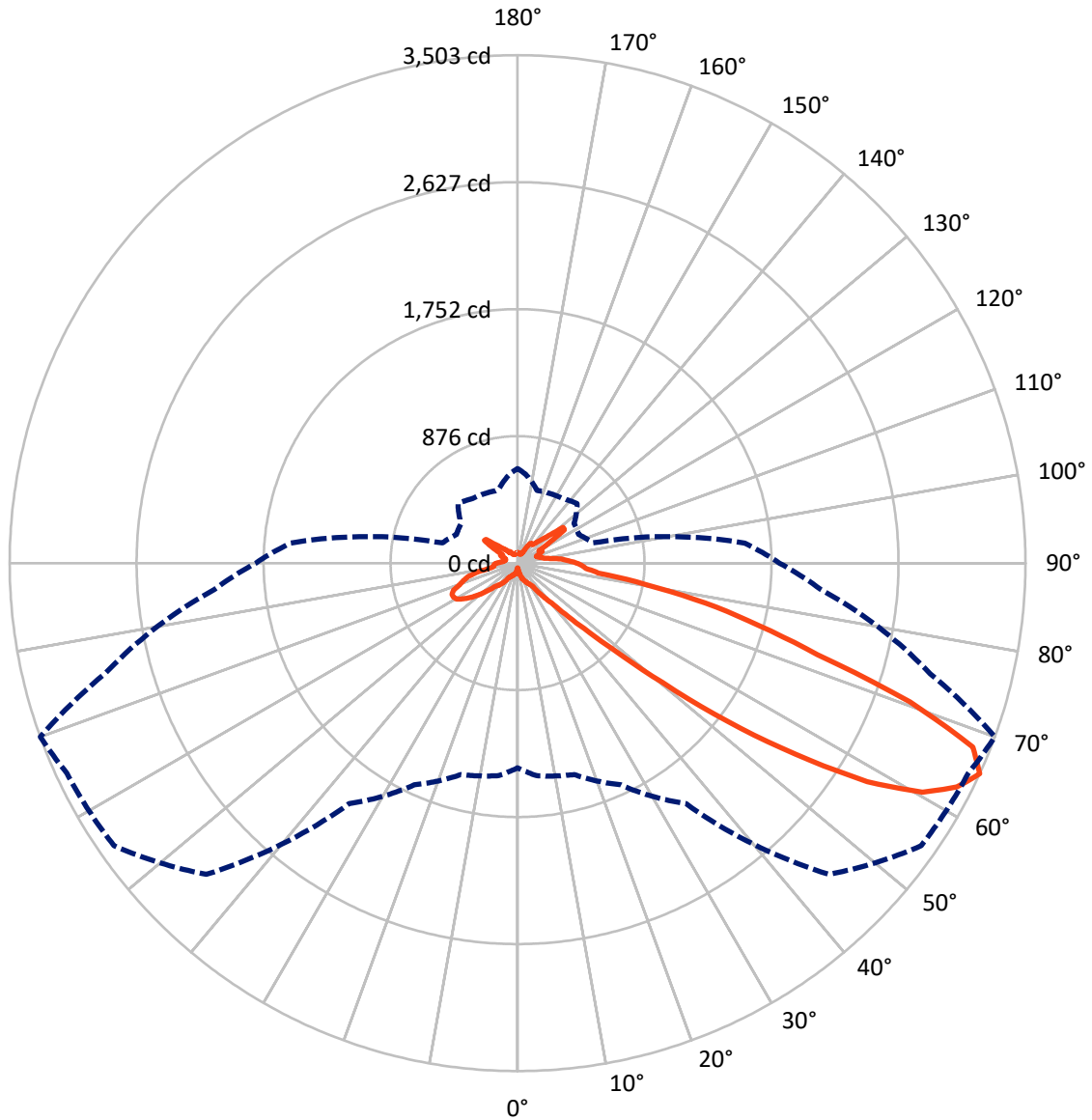
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2 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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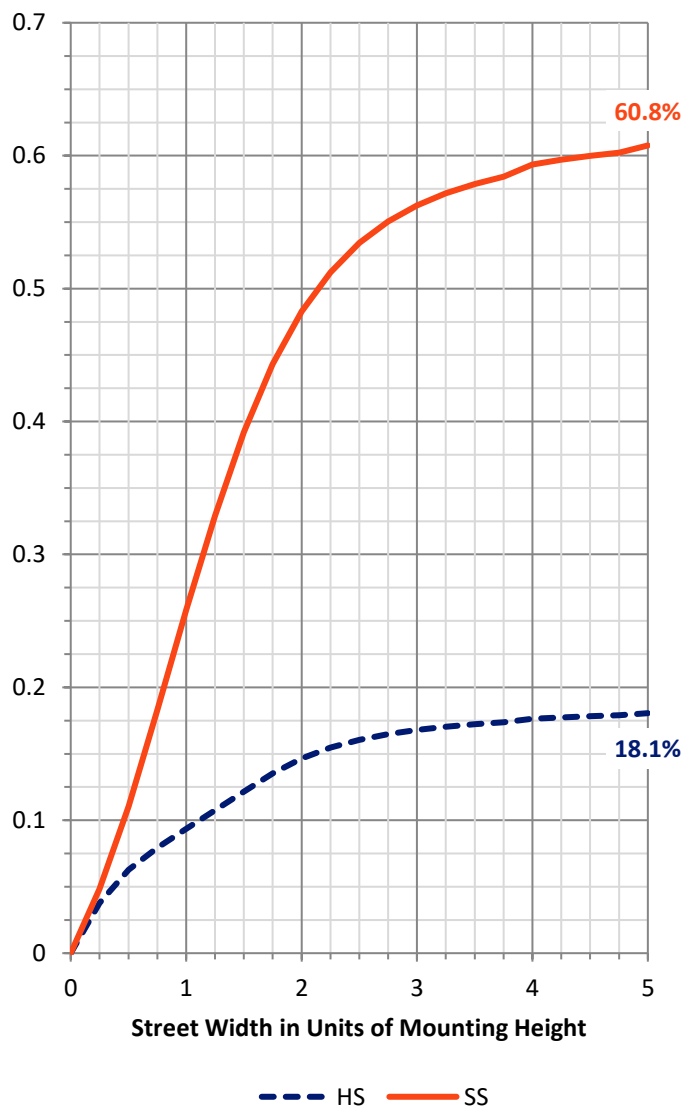
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	901.5	321.6	1223.1
	% Fixture	18.8	6.7	25.6
<b>Street Side</b>	Lumens	3006.1	556.5	3562.6
	% Fixture	62.8	11.6	74.4
<b>Total</b>	Lumens	3907.6	878.1	4785.7
	% Fixture	81.7	18.3	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	5.1	0.1
10°-20°	25.1	0.5
20°-30°	53.2	1.1
30°-40°	108.4	2.3
40°-50°	275.6	5.8
50°-60°	885.7	18.5
60°-70°	1445.4	30.2
70°-80°	822.9	17.2
80°-90°	286.3	6.0
90°-100°	178.2	3.7
100°-110°	113.5	2.4
110°-120°	124.8	2.6
120°-130°	211.1	4.4
130°-140°	124.5	2.6
140°-150°	67.0	1.4
150°-160°	33.9	0.7
160°-170°	18.5	0.4
170°-180°	6.7	0.1
0°-90°	3907.6	81.7
0°-180°	4785.7	100.0



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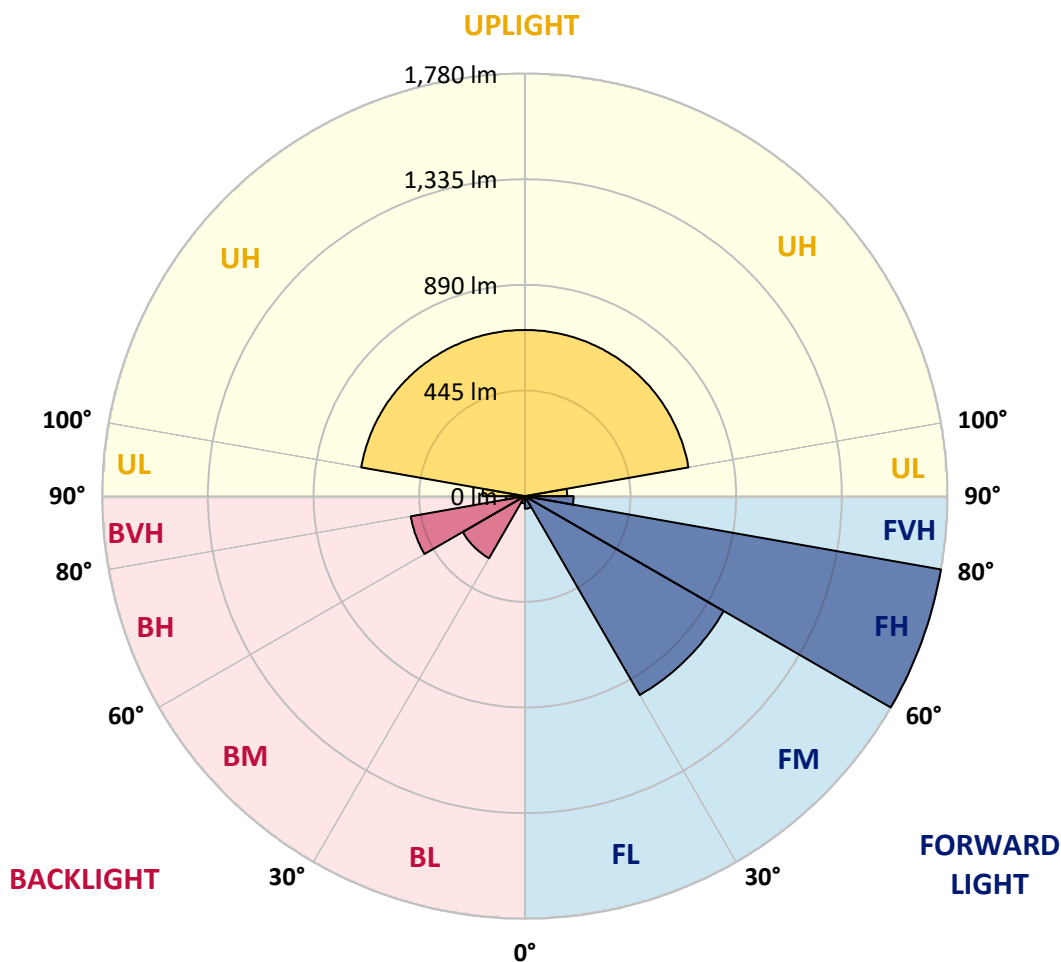
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	53.1	1.1			
FM (30°-60°)	967.5	20.2			
FH (60°-80°)	1780.2	37.2			G1/1800
FVH (80°-90°)	205.3	4.3			G2/225
BL (0°-30°)	30.3	0.6	B0/110		
BM (30°-60°)	302.1	6.3	B1/1000		
BH (60°-80°)	488.0	10.2	B1/500		G1/500
BVH (80°-90°)	81.0	1.7			G1/100
UL (90°-100°)	178.2	3.7		U3/500	
UH (100°-180°)	699.9	14.6		U4/1000	

**BUG Rating: B1-U4-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5
2.5°	38.0	38.0	39.0	39.0	39.0	38.0	37.5	36.5	36.5	36.5	36.0
5°	49.3	48.8	49.3	50.8	51.3	49.8	48.8	47.3	47.3	46.9	46.9
7.5°	66.6	66.1	65.1	63.6	64.1	65.6	67.6	63.6	62.6	60.2	59.2
10°	83.3	82.4	83.3	80.9	78.4	75.0	76.9	75.9	74.0	71.5	69.5
12.5°	101.6	102.1	104.1	102.1	98.1	92.7	91.7	89.3	87.3	86.8	83.8
15°	120.3	120.8	122.8	122.3	118.4	111.0	108.0	105.5	104.6	101.6	95.2
17.5°	130.2	130.7	131.2	131.7	129.2	123.3	118.9	114.4	112.9	111.9	104.1
20°	135.1	134.1	135.1	137.1	139.1	134.1	129.7	127.2	125.8	122.3	111.9
22.5°	143.0	142.0	141.5	143.0	148.9	145.5	141.0	138.6	137.1	132.7	116.9
25°	151.4	150.4	151.9	150.9	158.3	156.8	152.4	149.9	147.9	142.5	124.3
27.5°	160.8	159.8	161.3	160.3	166.2	167.2	164.2	162.3	159.3	151.4	129.7
30°	168.7	167.7	169.2	168.7	174.6	178.0	176.6	176.1	171.6	162.3	139.1
32.5°	175.1	174.6	178.0	179.5	181.0	188.9	187.9	192.3	187.4	176.1	152.9
35°	189.9	191.3	200.7	210.6	212.1	227.8	229.8	246.1	241.2	226.4	198.3
37.5°	293.4	288.0	278.6	269.3	265.8	296.4	300.8	317.1	304.8	277.2	231.8
40°	312.7	303.8	292.9	285.5	286.5	341.3	331.9	393.5	358.5	317.1	283.1
42.5°	296.9	293.9	331.9	349.7	336.8	416.7	400.9	518.3	478.4	376.8	341.8
45°	372.3	366.4	379.7	397.5	401.4	548.4	537.6	660.3	644.1	471.0	438.4
47.5°	426.1	420.7	438.4	498.6	550.4	709.2	768.4	945.4	888.2	669.2	593.8
50°	587.4	586.4	641.1	712.6	803.4	1031.7	1189.0	1387.8	1295.5	947.4	814.2
52.5°	746.7	748.6	815.7	942.4	1036.6	1440.0	1663.4	1802.5	1814.9	1235.4	1055.4
55°	867.0	879.3	960.2	1172.7	1315.3	1803.5	2093.5	2201.5	2324.8	1669.4	1306.4
57.5°	1101.7	1120.5	1197.4	1405.5	1604.8	2256.2	2647.8	2659.6	2843.6	2150.7	1575.7
60°	1306.9	1350.8	1377.9	1566.8	1838.5	2688.7	3059.6	3035.9	3208.5	2549.7	1848.9
62.5°	1370.5	1420.8	1446.5	1647.7	2023.5	2931.4	3251.9	3281.5	3400.4	2829.8	2016.1
65°	1411.9	1471.1	1509.6	1687.6	2025.4	3034.9	3397.9	3429.5	3503.0	2947.2	2099.4
67.5°	1390.7	1466.2	1515.5	1673.8	1918.9	2955.1	3368.8	3308.2	3386.1	2849.0	2006.2
70°	1214.2	1293.1	1342.9	1460.8	1604.3	2484.6	2904.3	2802.7	2871.2	2378.0	1649.6
72.5°	989.3	1028.3	1058.8	1123.4	1209.2	1832.6	2206.9	2122.6	2163.5	1789.2	1236.4
75°	812.7	824.6	862.5	899.5	913.8	1340.4	1748.3	1671.3	1719.2	1362.1	983.9
77.5°	590.3	597.2	651.5	657.4	653.9	919.8	1377.9	1310.3	1325.6	1012.5	734.3
80°	342.8	356.1	427.1	423.6	417.7	566.6	970.1	942.9	895.6	687.5	508.5
82.5°	241.7	255.0	287.5	294.9	291.0	406.9	629.8	612.0	560.7	478.4	351.6
85°	254.5	256.0	257.4	260.9	254.5	363.0	482.3	473.4	473.9	395.5	290.0
87.5°	251.0	256.9	259.4	260.9	254.5	344.7	448.3	436.9	442.4	375.8	281.6
90°	220.4	231.3	232.3	234.7	231.3	307.7	402.4	391.6	398.5	338.8	256.4
92.5°	180.0	185.9	192.8	202.2	198.3	263.4	342.3	334.4	342.8	293.4	225.4
95°	170.6	177.0	181.5	187.9	182.0	240.2	309.2	293.4	300.3	256.9	194.3
97.5°	141.0	146.5	150.4	152.9	148.4	189.4	237.2	226.4	225.9	198.7	155.3
100°	120.3	123.8	127.2	129.7	125.8	156.8	187.9	184.0	184.9	164.2	133.6
102.5°	114.4	116.4	121.8	122.3	117.9	143.0	169.2	167.7	169.6	151.9	125.3
105°	111.9	113.4	117.9	116.4	112.4	133.6	155.8	156.8	156.8	141.5	117.4
107.5°	104.6	107.0	111.9	109.5	107.5	123.3	143.5	140.1	141.0	131.7	111.5
110°	103.6	105.5	110.5	108.5	107.0	120.3	138.1	137.1	138.6	130.2	114.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
112.5°	128.7	126.7	130.7	126.7	129.2	140.6	159.3	157.3	161.8	158.8	143.0
115°	158.8	159.8	163.7	155.8	158.3	169.6	180.0	183.5	187.4	183.0	166.7
117.5°	147.0	155.3	150.4	149.4	147.5	156.3	154.9	163.7	167.7	164.2	157.8
120°	157.3	167.7	153.4	146.0	143.0	165.2	176.1	175.6	172.6	165.7	152.4
122.5°	235.2	236.7	237.7	259.9	252.0	273.7	280.1	271.7	271.7	280.6	253.5
125°	366.9	368.4	367.4	377.3	371.8	392.6	400.9	400.5	395.5	391.1	364.4
127.5°	370.9	370.9	367.4	362.0	366.9	387.1	387.6	406.4	400.0	388.1	363.5
130°	258.9	260.9	273.2	277.2	284.1	288.5	283.6	299.8	302.8	300.8	284.1
132.5°	214.5	218.0	231.3	236.2	240.7	241.2	239.2	252.0	255.0	255.0	247.6
135°	185.4	189.4	190.9	188.4	194.8	199.7	203.7	214.0	213.0	211.1	204.7
137.5°	161.8	163.2	158.8	153.4	156.8	171.1	179.0	189.9	189.4	185.9	175.1
140°	136.6	137.1	134.6	132.2	135.6	147.9	155.3	167.2	165.7	163.2	150.4
142.5°	103.6	105.0	111.5	116.4	124.8	150.4	146.5	156.8	164.2	170.1	140.6
145°	109.0	107.0	106.0	111.5	122.3	159.3	147.9	161.3	164.7	168.7	134.6
147.5°	125.8	126.7	125.3	121.8	136.6	148.4	142.0	153.9	155.8	154.9	141.0
150°	98.6	100.1	100.6	99.1	117.4	116.9	110.5	119.3	120.3	120.3	111.0
152.5°	80.4	80.9	79.9	78.9	90.7	88.8	85.8	88.8	88.3	87.8	85.8
155°	76.4	76.4	75.5	75.9	83.8	81.9	79.9	81.9	80.9	79.4	77.4
157.5°	70.5	71.0	71.0	72.5	77.4	74.0	72.0	73.0	72.0	71.0	71.0
160°	66.6	66.6	67.1	69.0	72.0	68.6	67.1	67.6	67.1	66.1	66.6
162.5°	65.1	65.1	65.6	66.6	67.1	65.1	63.6	63.6	63.6	63.6	65.1
165°	64.1	64.1	64.1	64.6	64.6	63.1	62.6	63.1	63.6	64.1	66.1
167.5°	66.1	66.1	66.1	66.1	65.6	64.6	64.1	64.6	65.1	65.6	67.1
170°	69.0	68.6	68.6	68.1	67.6	66.6	66.1	65.6	65.6	66.1	66.6
172.5°	71.0	71.0	70.5	70.5	70.0	69.0	68.1	67.6	67.6	67.6	67.6
175°	73.5	73.5	73.5	73.5	73.0	72.0	71.5	70.5	70.5	70.5	70.5
177.5°	76.4	76.4	76.4	76.4	75.5	74.5	73.5	72.5	72.5	72.5	72.0
180°	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5
2.5°	35.5	35.0	33.5	33.0	32.5	31.6	30.6	30.1	29.6	29.6	30.1
5°	47.3	46.9	46.9	45.4	43.9	41.4	40.4	40.4	40.9	41.4	42.4
7.5°	59.7	60.7	61.6	59.2	54.7	48.8	45.4	46.4	48.8	50.8	50.8
10°	69.0	69.0	72.5	69.5	62.1	54.7	49.8	48.8	49.3	49.8	50.3
12.5°	82.4	82.4	80.4	72.5	65.1	57.7	53.8	52.8	52.8	50.8	50.3
15°	92.2	89.3	82.4	75.0	68.6	61.2	56.7	55.2	53.8	52.3	51.8
17.5°	98.1	92.7	83.3	76.4	70.0	64.1	59.7	56.7	55.2	55.7	55.7
20°	105.0	99.1	90.7	83.3	75.5	67.6	62.1	57.7	56.2	56.7	56.2
22.5°	110.5	104.6	96.2	87.8	79.4	71.0	64.6	59.2	57.2	57.7	57.7
25°	116.9	111.9	103.1	93.2	82.9	75.0	68.6	62.1	59.2	58.7	58.7
27.5°	123.3	119.8	110.5	98.6	87.8	78.4	72.0	64.6	61.2	59.7	59.7
30°	131.7	127.7	118.4	104.1	92.2	83.3	76.4	68.6	63.6	61.2	60.7
32.5°	145.0	140.6	129.2	113.9	97.2	88.3	80.9	72.0	65.6	62.6	62.1
35°	188.4	181.5	163.7	146.0	118.9	98.6	86.3	75.0	67.6	63.6	63.1
37.5°	215.5	198.7	175.1	163.2	133.6	120.8	104.1	85.8	70.5	65.6	64.6
40°	259.4	236.2	206.6	183.5	130.2	132.2	121.8	107.0	83.8	69.0	67.6
42.5°	296.4	267.3	222.4	192.3	130.7	138.1	130.2	117.9	100.6	81.9	78.9
45°	365.4	328.0	258.4	206.6	134.1	147.0	137.1	124.3	109.0	96.2	94.7
47.5°	493.7	442.9	323.0	230.3	156.8	170.6	152.9	136.1	122.3	107.5	105.0
50°	675.6	615.0	397.5	249.0	195.8	224.9	192.8	164.7	148.9	138.1	136.6
52.5°	885.2	821.6	452.2	283.6	243.1	292.0	255.0	222.4	201.7	201.7	204.7
55°	1128.9	1065.2	496.1	331.4	301.3	365.9	326.0	299.4	289.5	331.4	342.8
57.5°	1370.5	1289.6	525.7	380.2	369.4	452.7	404.9	382.2	400.5	524.7	563.2
60°	1591.0	1457.3	548.9	426.6	427.6	521.8	486.3	484.8	512.9	671.7	720.5
62.5°	1718.2	1536.2	547.4	453.2	461.6	564.7	535.1	543.0	558.8	696.4	733.3
65°	1805.5	1573.7	536.1	465.1	475.9	580.0	543.0	529.7	519.3	616.5	652.0
67.5°	1745.3	1485.9	510.4	447.8	467.0	557.8	508.9	471.0	450.8	500.1	524.2
70°	1461.7	1239.3	451.7	402.9	420.7	470.0	423.1	385.7	364.4	391.1	402.4
72.5°	1107.2	942.9	407.4	376.8	368.9	388.6	344.2	302.3	289.5	306.7	309.2
75°	881.8	737.8	374.8	340.8	309.7	328.9	274.7	223.9	216.5	216.5	212.6
77.5°	661.3	546.9	319.6	265.3	228.3	259.9	204.7	155.8	146.0	144.0	138.6
80°	443.4	372.3	215.0	176.1	164.2	192.8	145.5	114.4	114.9	114.4	108.0
82.5°	309.7	287.5	174.6	153.4	140.6	151.9	131.7	110.0	109.0	110.0	103.1
85°	274.7	263.4	169.2	158.3	145.0	146.5	126.3	104.1	104.6	106.5	100.6
87.5°	263.8	251.0	169.6	152.9	141.5	135.6	114.4	96.2	99.1	101.1	96.2
90°	237.7	224.9	155.8	138.1	126.3	117.9	101.1	91.2	95.2	97.2	92.7
92.5°	206.1	192.8	129.7	121.8	118.9	118.9	106.0	97.2	99.6	100.6	96.7
95°	177.5	164.7	115.4	107.0	104.6	105.0	94.7	87.3	88.8	88.3	85.3
97.5°	143.5	135.6	100.6	95.2	92.7	91.7	84.8	79.4	82.4	84.3	81.9
100°	126.7	122.8	97.2	93.2	89.8	89.3	83.3	79.9	82.4	85.3	83.3
102.5°	118.4	115.4	92.7	87.3	84.8	83.8	79.9	75.9	78.4	81.4	79.9
105°	111.5	107.0	88.8	83.8	80.4	79.9	75.9	71.0	72.5	76.4	75.5
107.5°	105.5	102.6	88.3	82.9	78.4	78.4	74.0	70.0	70.5	72.0	72.0
110°	110.5	107.0	91.7	87.8	81.9	79.9	78.9	75.9	73.5	72.5	72.5



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	136.6	130.2	114.9	110.5	100.6	93.7	87.3	81.4	77.4	75.9	75.0
115°	161.3	153.9	135.6	124.3	111.0	100.6	91.7	85.3	79.4	77.4	79.4
117.5°	166.2	146.5	118.4	109.0	101.1	94.7	89.8	84.8	80.4	81.9	80.4
120°	164.7	140.6	119.3	132.7	119.3	104.6	92.7	92.7	91.2	83.8	85.3
122.5°	253.5	236.7	211.1	203.2	165.7	151.4	129.2	110.5	92.2	81.9	76.9
125°	347.2	330.9	291.5	261.4	223.9	184.4	141.5	109.0	85.3	75.5	76.9
127.5°	349.2	334.4	296.9	246.1	196.8	157.8	117.9	96.7	83.3	76.9	75.9
130°	272.2	257.9	225.9	186.9	155.8	130.2	106.0	87.3	75.5	70.5	69.0
132.5°	235.7	222.9	193.3	157.8	135.1	114.9	94.7	75.9	68.1	64.6	65.1
135°	198.3	183.0	154.9	135.6	121.3	103.1	84.8	69.5	65.6	64.6	64.1
137.5°	168.2	157.3	137.6	122.8	109.0	92.7	74.5	65.1	63.6	64.6	63.6
140°	143.0	134.1	123.3	110.5	93.7	78.4	66.6	62.1	64.6	65.1	64.6
142.5°	123.3	114.4	103.1	85.8	77.9	71.0	68.1	64.6	64.6	64.1	63.6
145°	103.1	91.2	85.8	88.3	83.3	76.4	71.0	64.1	61.6	61.6	62.1
147.5°	118.4	106.0	99.1	93.7	84.3	74.5	66.1	59.7	58.7	60.7	60.2
150°	102.1	90.7	85.8	78.4	72.5	65.1	59.7	57.2	57.7	60.2	60.2
152.5°	81.4	73.5	70.5	68.6	65.6	61.2	58.2	57.2	58.2	59.2	59.2
155°	76.4	72.0	68.6	67.1	63.6	60.2	57.7	57.2	58.2	59.2	60.2
157.5°	71.5	70.0	65.6	64.1	61.2	59.7	58.2	58.2	58.7	59.7	60.7
160°	68.1	67.6	63.6	63.1	61.2	60.2	60.2	60.7	61.2	61.2	61.2
162.5°	66.1	66.1	64.6	63.6	63.1	62.6	64.1	64.6	64.1	64.1	64.1
165°	66.6	67.1	65.6	64.6	64.1	65.1	67.6	67.6	66.6	66.1	65.6
167.5°	67.1	67.6	66.6	66.1	66.1	67.1	68.1	67.6	67.1	66.6	66.1
170°	66.6	67.1	67.1	67.6	67.6	67.6	68.6	68.6	67.6	67.1	67.1
172.5°	67.6	68.1	68.6	69.0	69.5	69.0	69.5	69.5	69.5	69.5	70.0
175°	70.5	70.5	71.0	71.0	70.5	71.0	71.0	71.0	71.5	72.5	72.5
177.5°	72.0	72.0	71.5	71.5	71.0	71.5	71.5	71.5	71.5	72.0	71.5
180°	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0

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: SP1-2406-133-4

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.

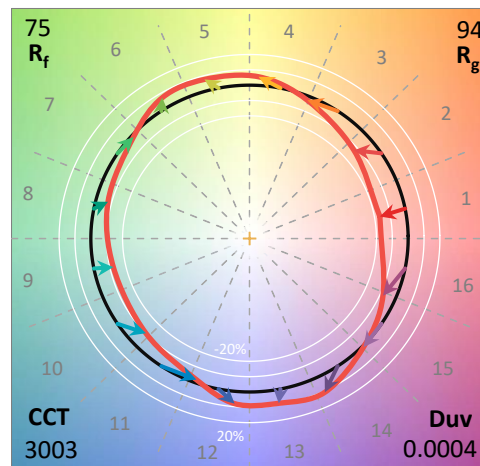
**Test Information**

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



**Test Conditions**

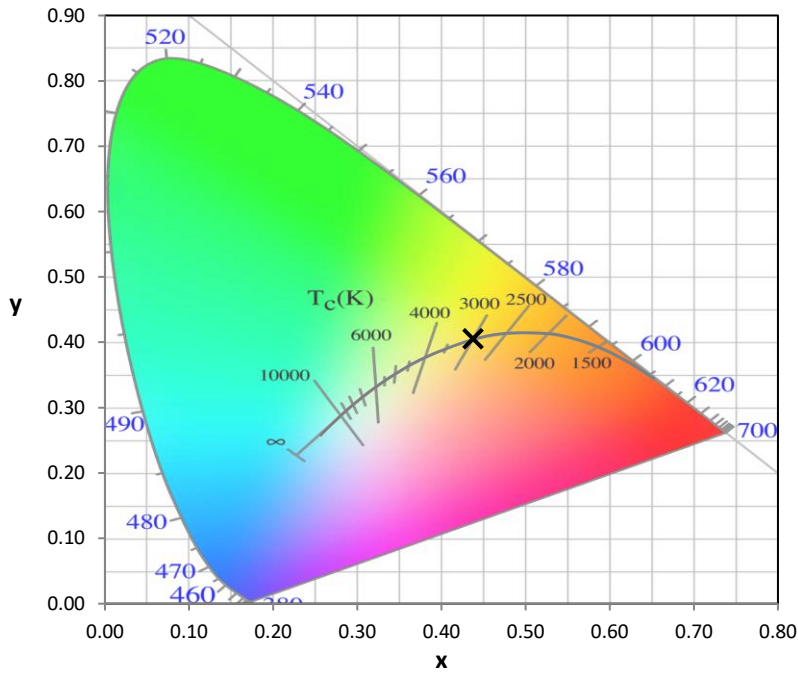
Stabilization Time: 0.794393M  
 Operation Time: 1H  
 Sphere Temperature (°C): 24.7

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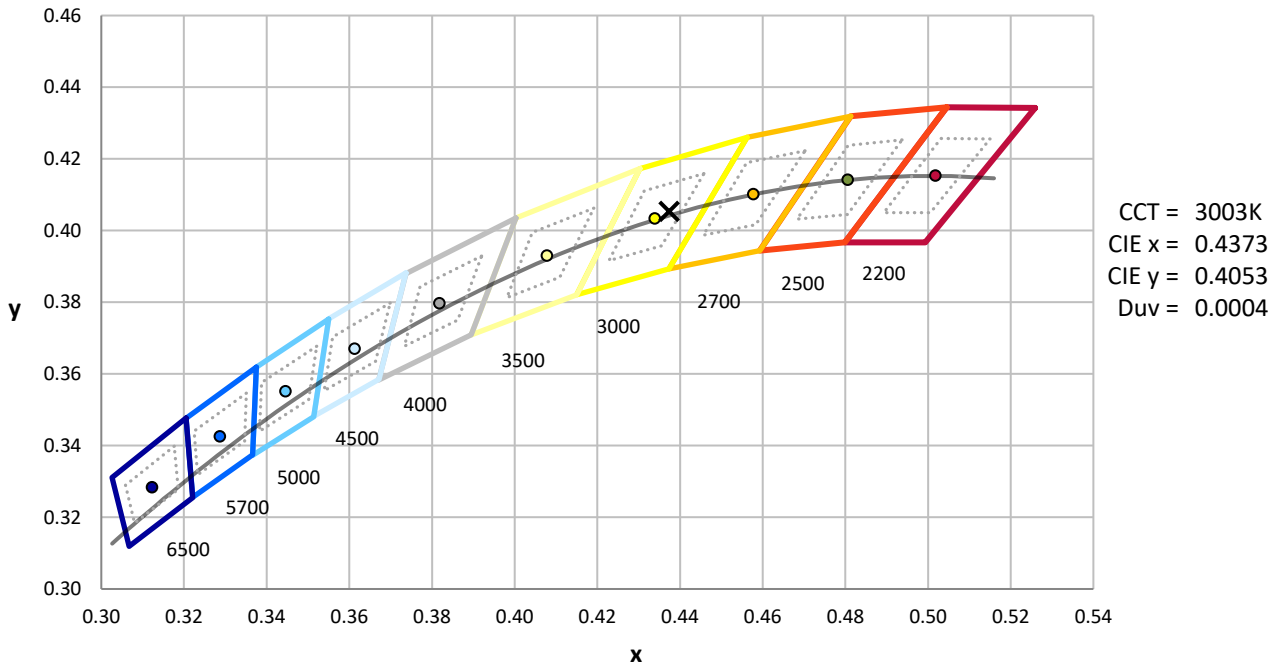
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



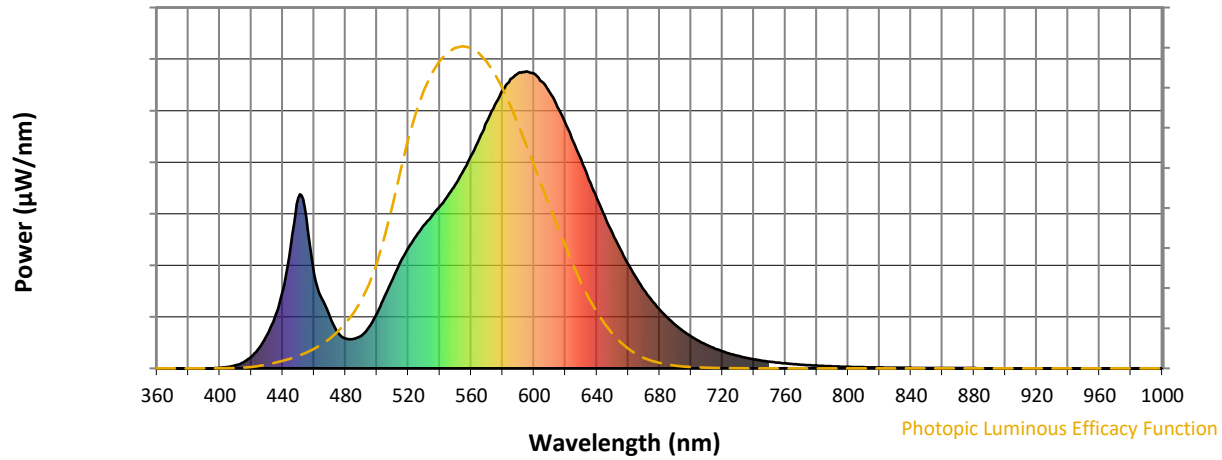
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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**Photopic Flux vs. Wavelength**

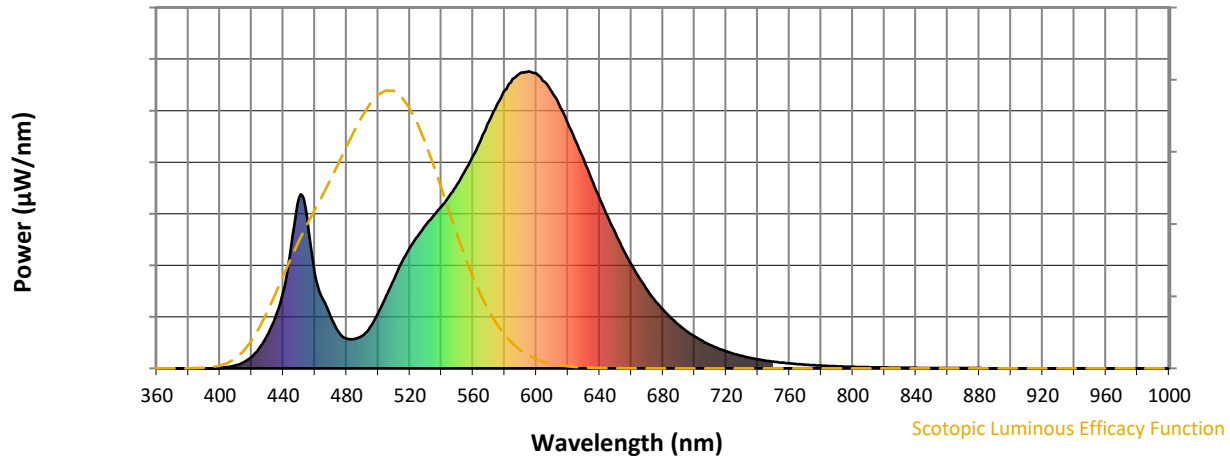


**Photopic Lumens: NR**

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	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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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

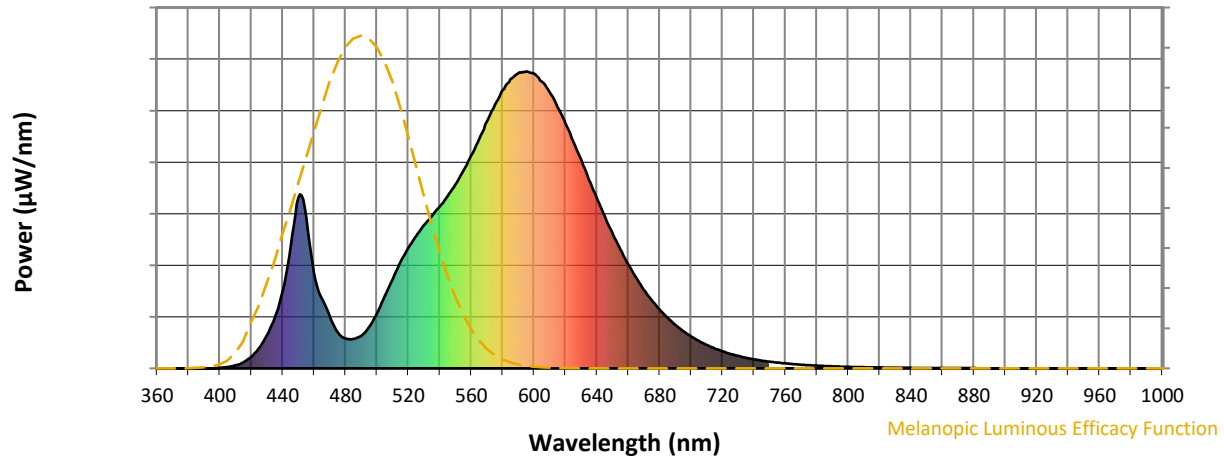
S/P: 1.21

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	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

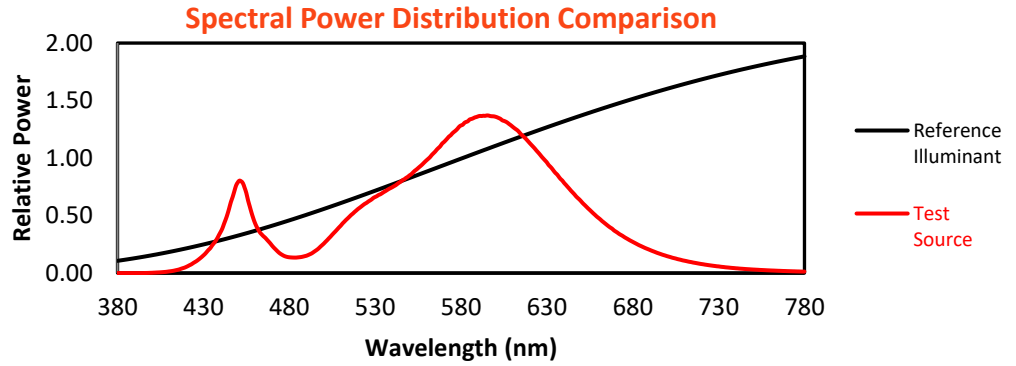
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	110	NR	620	825	NR	750	23	NR	880	1	NR
365	0	NR	495	139	NR	625	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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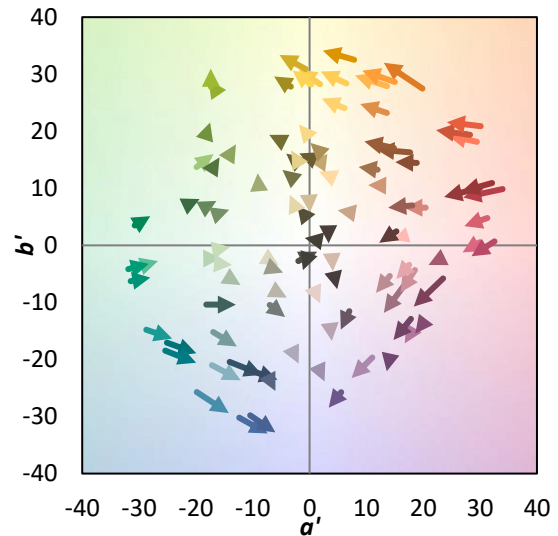
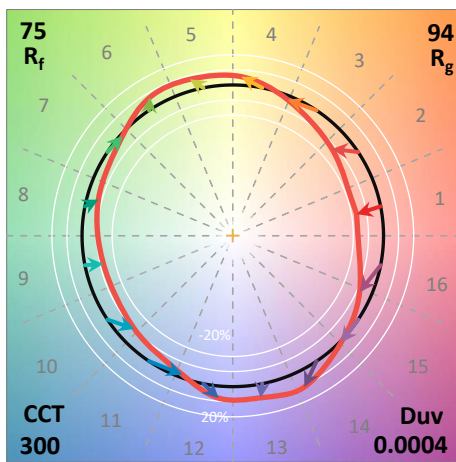
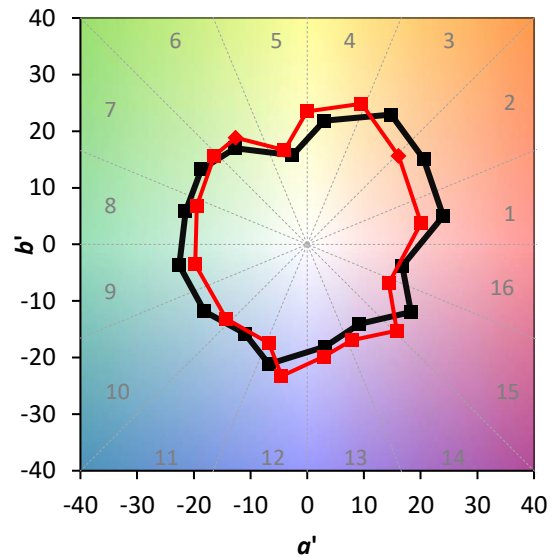
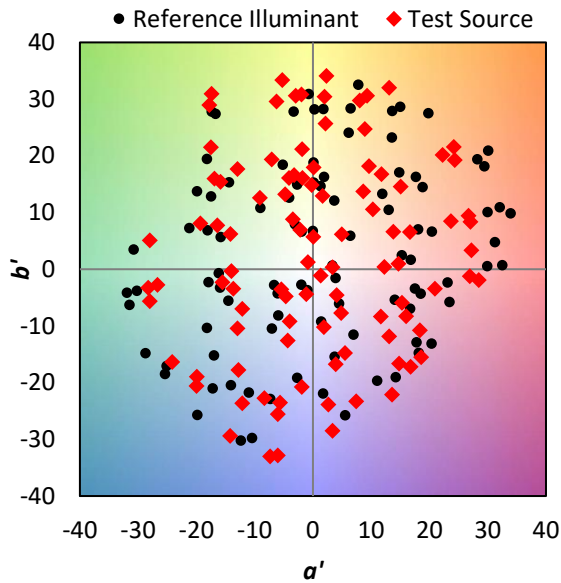
TM-30-18

**Summary**

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



**Color Vector Graphics**

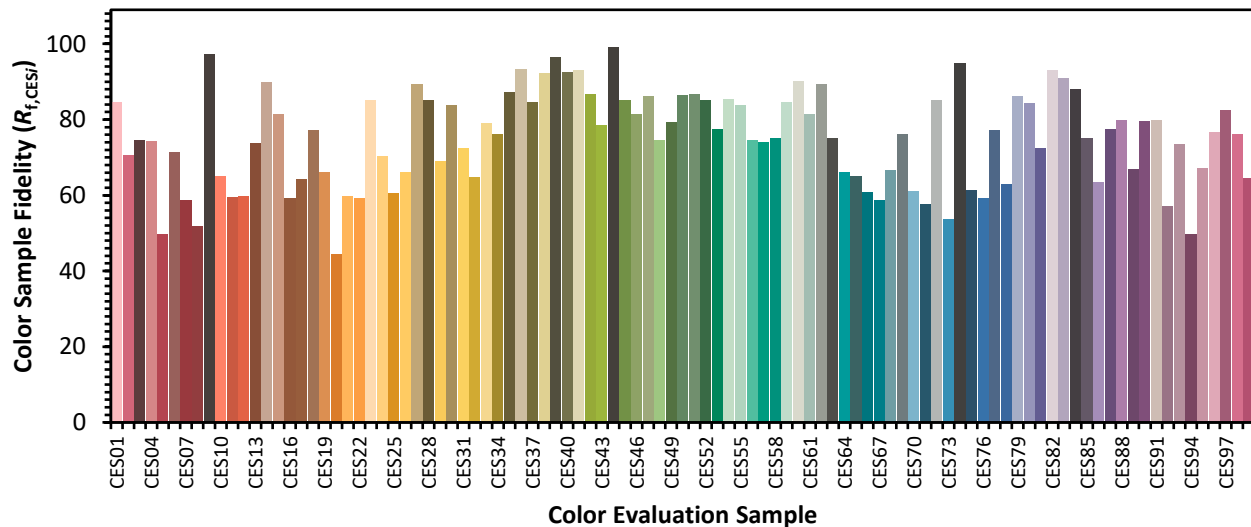


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**Individual Sample Fidelity Index ( $R_{f,i}$ )**

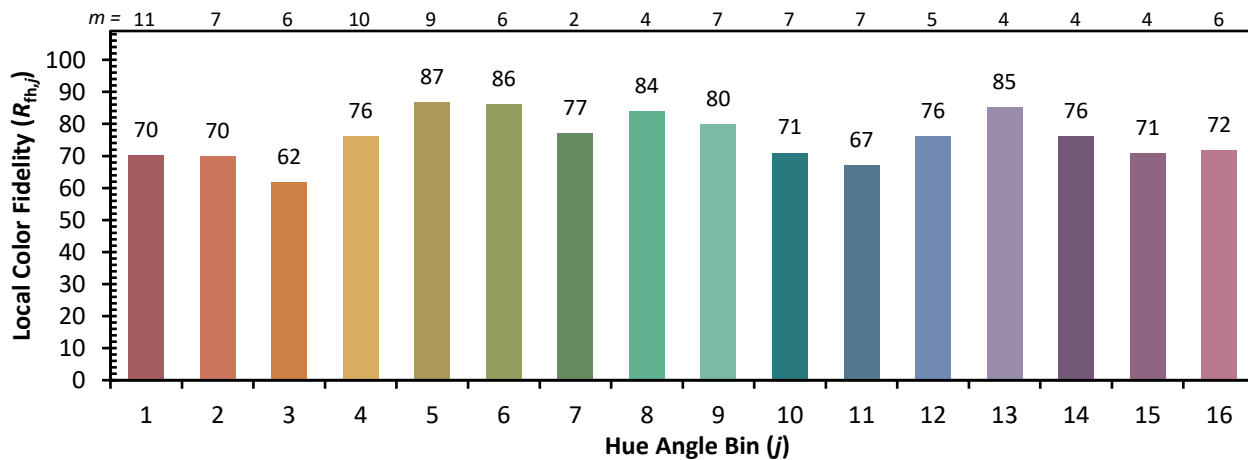
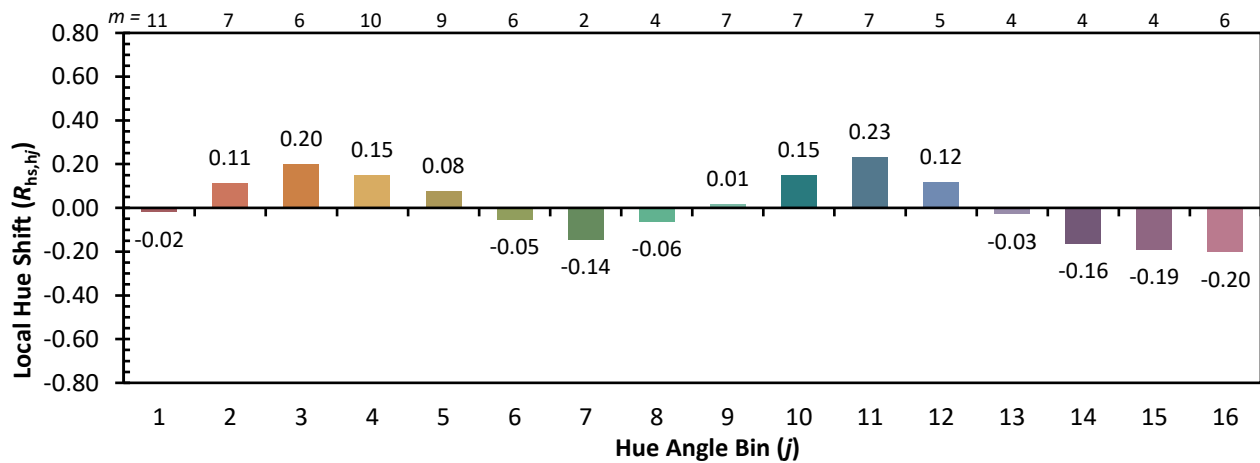
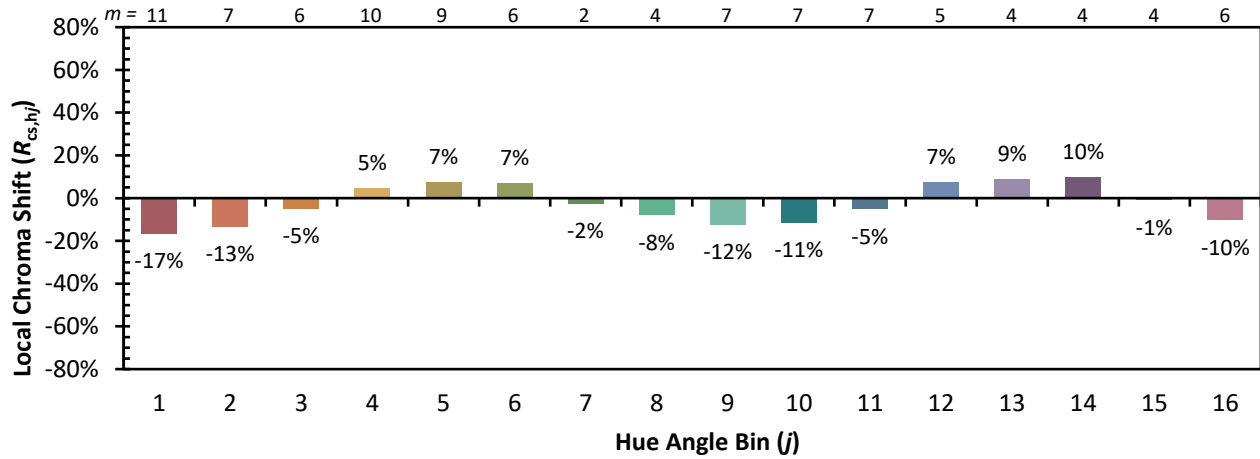
CES01 = 86	CES26 = 66	CES51 = 87	CES76 = 59
CES02 = 62	CES27 = 89	CES52 = 85	CES77 = 77
CES03 = 31	CES28 = 85	CES53 = 77	CES78 = 63
CES04 = 71	CES29 = 69	CES54 = 86	CES79 = 86
CES05 = 49	CES30 = 84	CES55 = 84	CES80 = 84
CES06 = 51	CES31 = 72	CES56 = 75	CES81 = 72
CES07 = 41	CES32 = 65	CES57 = 74	CES82 = 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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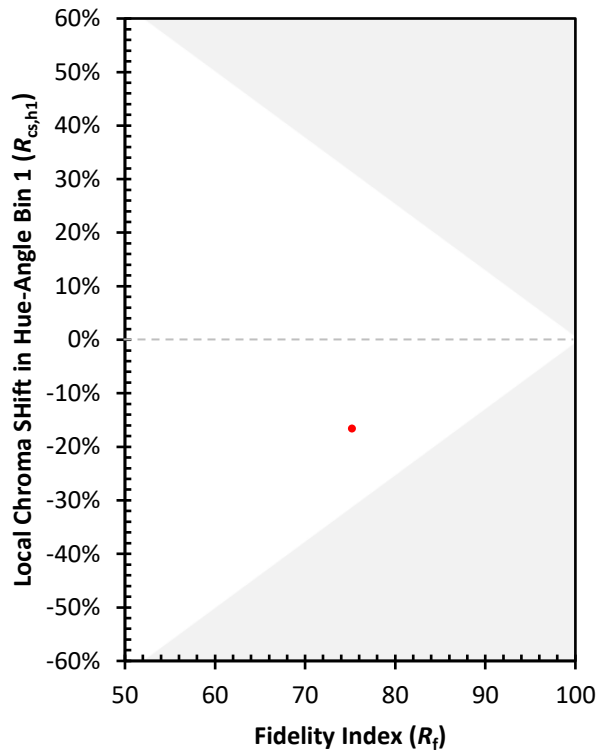
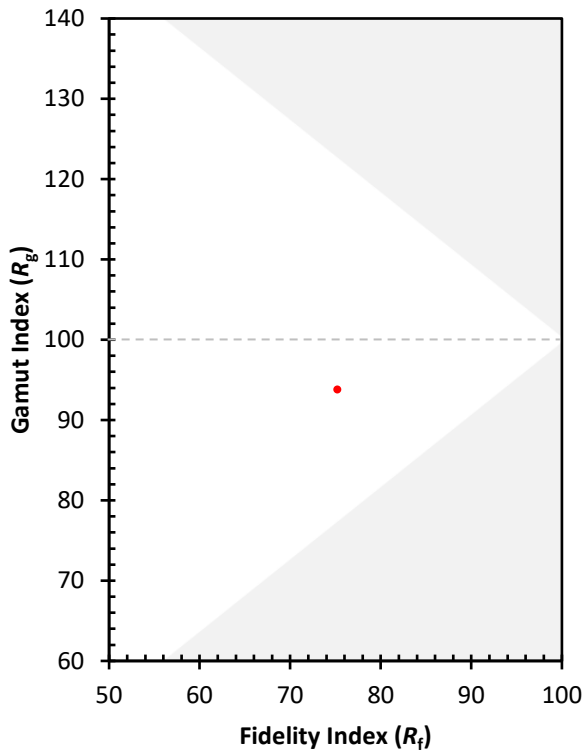
Color Rendition by Hue-Angle Bin



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TM-30-18

Measure Comparisons



(END OF REPORT)