

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: LUMARK

Report Number: P979118

Luminaire Tested: **WPSLED15S-60W-3000K**

Issue Date: 03/31/2025

Test Information

Test Method: LM-79-08
Report Number: P979118
Test Lab: Cooper Lighting Solutions
Issue Date: 03/31/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: WPSLED15S-60W-3000K
Description: LUMARK WALL PACK LED SMALL 80CRI CCT AND LUMEN SELECTIVE FIXTURE
OPERATING @60W-3000K
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

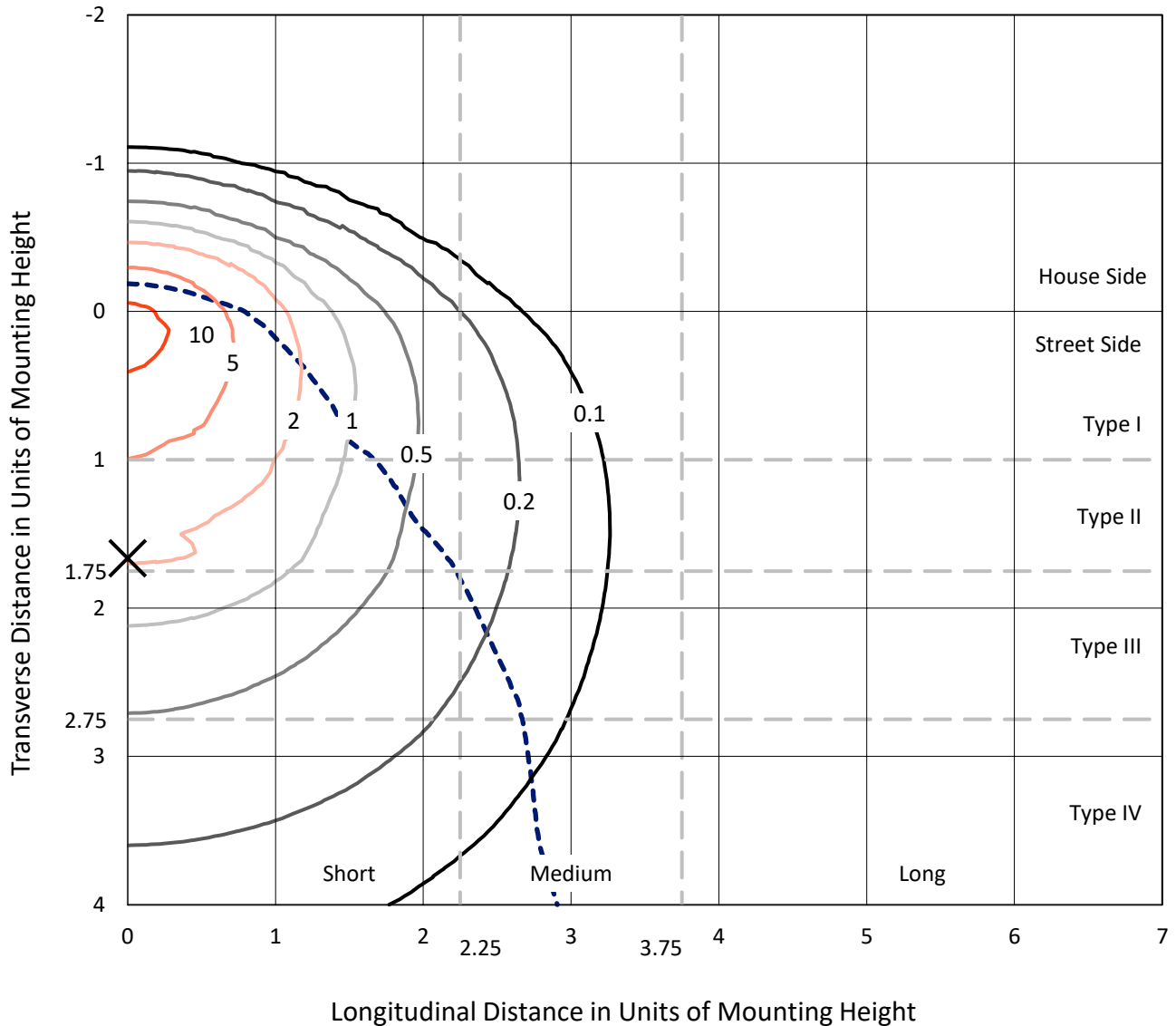
Lumens per Lamp: N/A
Luminaire Lumens: 7932.6 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.61' x L: 0.12' x H: 0.44')
IES Classification: Type IV - Short
BUG Rating: B2 - U3 - G4

Input Watts (W): 61.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

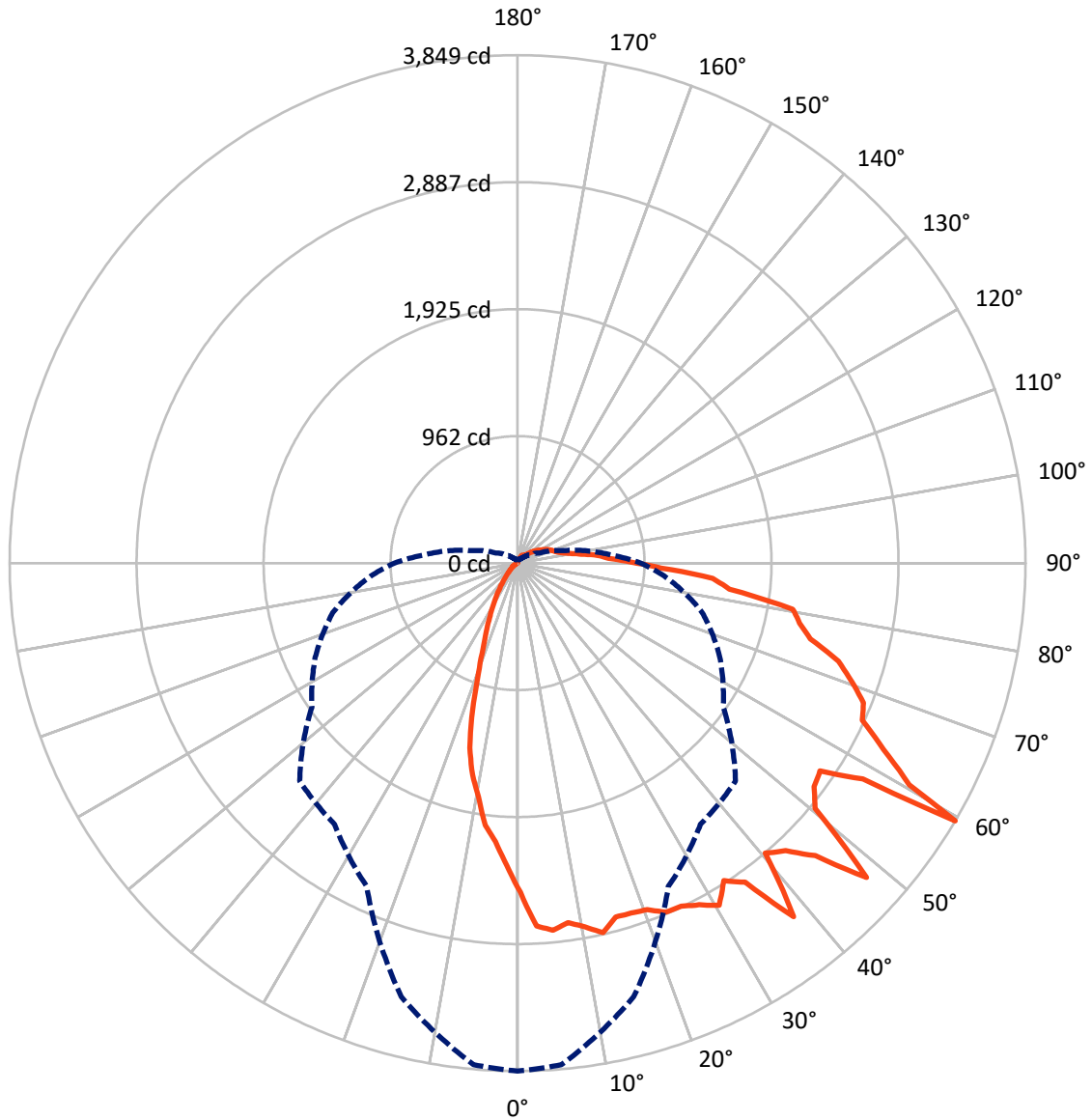
✕ Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 12 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 59-Deg Vertical

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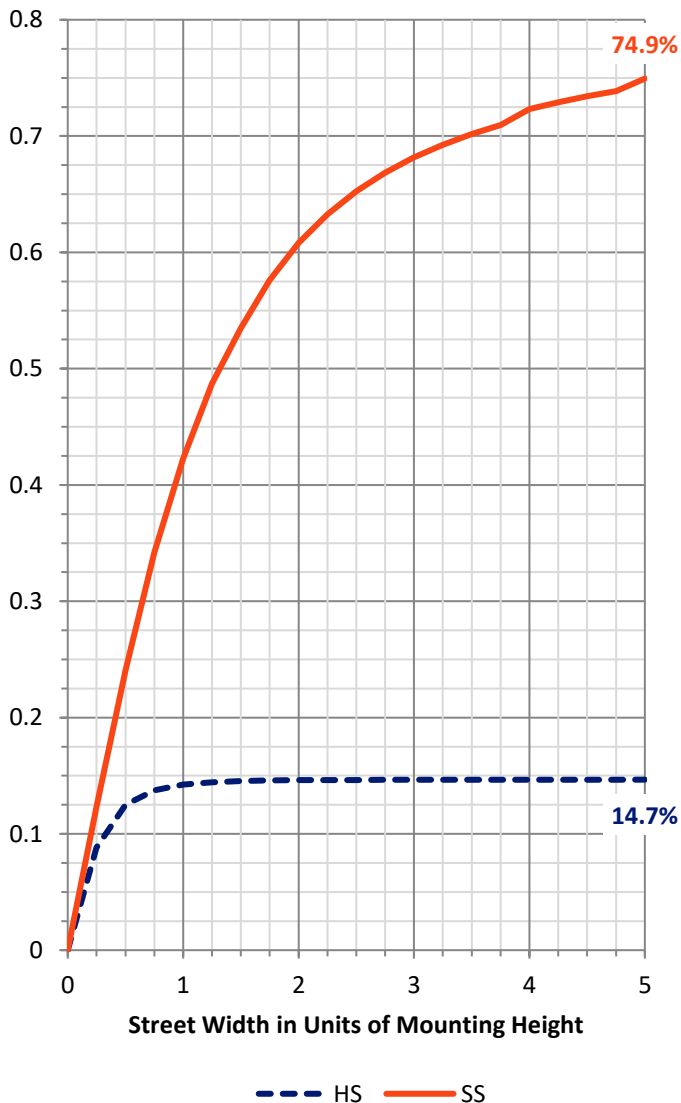
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1177.3	9.6	1186.8
	% Fixture	14.8	0.1	15.0
Street Side	Lumens	6277.6	468.2	6745.8
	% Fixture	79.1	5.9	85.0
Total	Lumens	7454.8	477.8	7932.6
	% Fixture	94.0	6.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.1	2.9
10°-20°	618.4	7.8
20°-30°	867.6	10.9
30°-40°	1028.1	13.0
40°-50°	1115.3	14.1
50°-60°	1114.2	14.0
60°-70°	1089.4	13.7
70°-80°	872.0	11.0
80°-90°	517.7	6.5
90°-100°	210.9	2.7
100°-110°	109.5	1.4
110°-120°	70.5	0.9
120°-130°	41.4	0.5
130°-140°	23.0	0.3
140°-150°	14.6	0.2
150°-160°	6.2	0.1
160°-170°	1.5	0.0
170°-180°	0.1	0.0
0°-90°	7454.8	94.0
0°-180°	7932.6	100.0

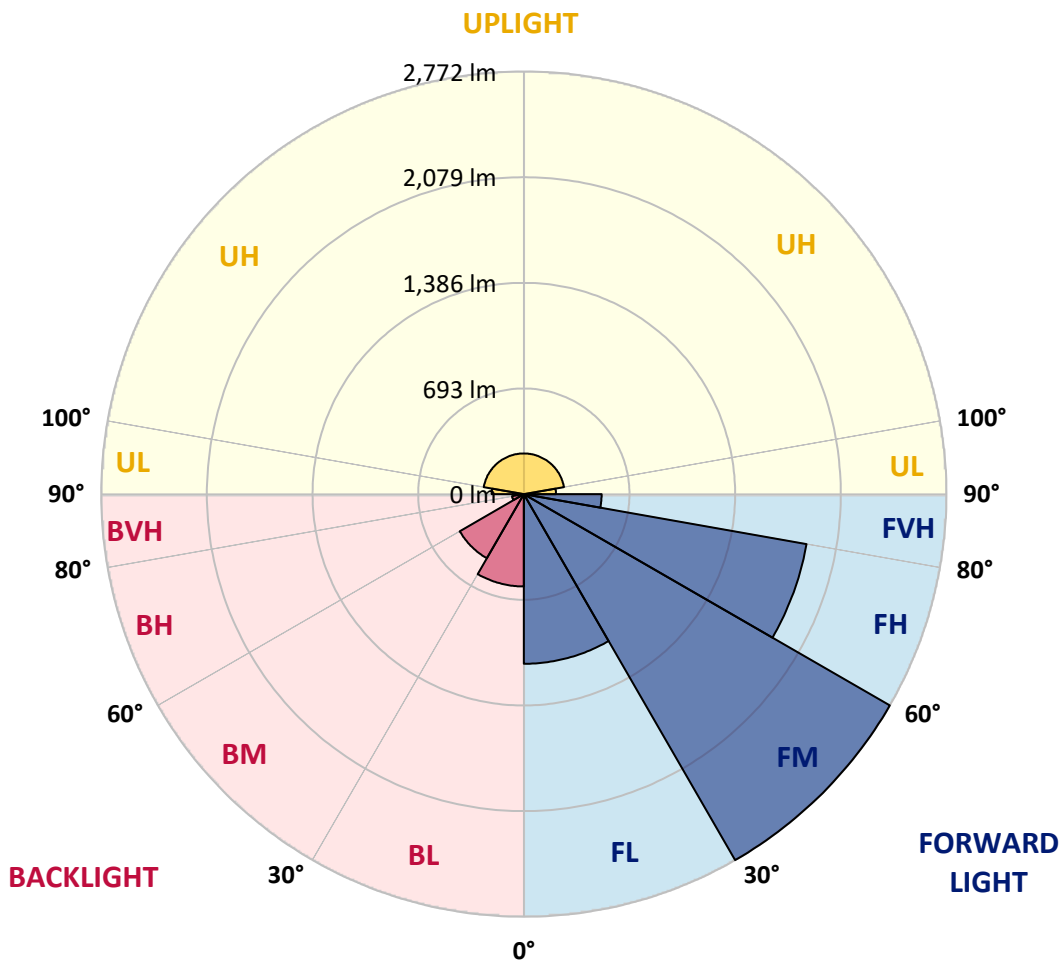


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1112.5	14.0			
FM (30°-60°)	2772.0	34.9			
FH (60°-80°)	1882.8	23.7			G2/5000
FVH (80°-90°)	510.2	6.4			G4/750
BL (0°-30°)	605.6	7.6	B2/1000		
BM (30°-60°)	485.6	6.1	B1/1000		
BH (60°-80°)	78.6	1.0	B0/110		G0/110
BVH (80°-90°)	7.4	0.1			G0/10
UL (90°-100°)	210.9	2.7		U3/500	
UH (100°-180°)	266.9	3.4		U3/500	

BUG Rating: B2-U3-G4
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2495.2	2495.2	2495.2	2495.2	2495.2	2495.2	2495.2	2495.2	2495.2	2495.2	2495.2
2.5°	2753.7	2753.7	2751.7	2749.7	2749.7	2745.7	2735.8	2711.9	2648.3	2545.9	2494.2
5°	2794.4	2804.4	2777.5	2724.9	2678.1	2669.2	2712.9	2720.9	2704.0	2577.7	2477.3
7.5°	2749.7	2747.7	2735.8	2689.1	2730.8	2798.4	2639.4	2652.3	2671.2	2561.8	2419.7
10°	2803.4	2806.4	2799.4	2739.8	2718.9	2634.4	2729.8	2591.6	2634.4	2527.0	2356.0
12.5°	2874.0	2881.9	2849.1	2801.4	2711.9	2671.2	2607.6	2677.1	2590.7	2506.2	2315.3
15°	2782.5	2800.4	2726.8	2674.2	2803.4	2674.2	2622.5	2600.6	2534.0	2488.3	2287.4
17.5°	2788.5	2811.3	2801.4	2757.7	2659.2	2736.8	2617.5	2558.8	2520.1	2475.3	2283.5
20°	2802.4	2806.4	2751.7	2696.0	2744.7	2623.5	2628.4	2556.9	2526.0	2440.5	2240.7
22.5°	2874.0	2883.9	2804.4	2731.8	2660.2	2702.0	2655.3	2539.0	2494.2	2401.8	2183.1
25°	2879.9	2883.9	2830.2	2754.7	2704.0	2638.4	2562.8	2483.3	2442.5	2343.1	2121.4
27.5°	2932.6	2920.7	2798.4	2750.7	2709.0	2605.6	2590.7	2472.4	2376.9	2264.6	2070.7
30°	3010.2	2986.3	2947.5	2800.4	2687.1	2622.5	2550.9	2459.4	2313.3	2192.0	2019.0
32.5°	2869.0	2851.1	2811.3	2880.9	2751.7	2606.6	2472.4	2351.1	2269.6	2108.5	1955.4
35°	2970.4	2919.7	2781.5	2765.6	2823.3	2566.8	2441.5	2318.3	2201.0	2039.9	1892.8
37.5°	3399.9	3355.1	3069.8	2795.4	2723.9	2623.5	2430.6	2352.1	2130.4	1963.4	1802.3
40°	2890.9	2870.0	2873.0	3085.7	2677.1	2608.5	2378.9	2317.3	2057.8	1878.9	1714.8
42.5°	2978.4	2937.6	2825.3	2788.5	2881.9	2533.0	2364.0	2239.7	1972.3	1780.5	1604.5
45°	3162.3	3125.5	2942.6	2793.4	2677.1	2542.9	2313.3	2145.3	1909.7	1665.1	1502.1
47.5°	3559.9	3506.2	3075.8	2805.4	2607.6	2570.8	2312.3	2082.7	1830.2	1554.8	1390.8
50°	2920.7	2894.8	3074.8	3093.7	2555.9	2399.8	2269.6	1999.2	1758.6	1438.5	1271.5
52.5°	2813.3	2792.5	2763.6	2802.4	2741.8	2330.2	2219.8	1911.7	1667.1	1346.0	1176.0
55°	2781.5	2742.8	2693.0	2610.5	2668.2	2312.3	2072.7	1834.1	1581.6	1251.6	1087.6
57.5°	3086.7	3002.2	2786.5	2599.6	2411.7	2429.6	1966.4	1758.6	1500.1	1167.1	987.2
59°	3849.2	3816.4	3401.8	2704.0	2416.7	2335.2	1902.7	1692.0	1449.4	1114.4	934.5
60°	3410.8	3367.1	3597.7	2911.7	2456.4	2241.7	1872.9	1658.2	1422.6	1087.6	909.6
62.5°	3113.6	3084.7	3009.2	3020.1	2682.1	2172.1	1914.7	1581.6	1320.2	1010.0	839.0
65°	2870.0	2854.1	2825.3	2720.9	2633.4	2227.8	1839.1	1527.9	1244.6	913.6	721.7
67.5°	2827.2	2808.4	2735.8	2606.6	2408.7	2197.0	1716.8	1418.6	1144.2	813.2	609.4
70°	2686.1	2676.1	2595.6	2502.2	2310.3	2033.0	1681.0	1359.9	1062.7	708.8	495.1
72.5°	2541.9	2523.1	2469.4	2380.9	2225.8	1892.8	1578.6	1287.4	945.4	599.4	395.7
75°	2291.4	2281.5	2251.7	2188.0	2037.9	1775.5	1452.4	1142.2	836.0	501.0	303.2
77.5°	2185.1	2169.1	2081.7	1993.2	1843.1	1596.5	1290.4	1024.9	725.7	394.7	222.7
80°	2114.5	2104.5	2029.0	1891.8	1732.7	1462.3	1182.0	918.6	623.3	300.2	159.1
82.5°	1616.4	1628.4	1568.7	1537.9	1435.5	1245.6	991.1	788.3	505.0	215.7	115.3
85°	1484.2	1466.3	1422.6	1364.9	1271.5	1065.7	820.1	641.2	393.7	154.1	83.5
87.5°	1090.5	1080.6	1074.6	1068.7	989.1	844.0	652.1	489.1	301.2	109.4	60.6
90°	856.9	855.9	844.0	801.3	752.5	652.1	496.1	360.9	214.7	79.5	47.7
92.5°	687.9	689.9	672.0	646.2	591.5	509.0	376.8	262.4	160.1	59.6	40.8
95°	611.4	600.4	574.6	531.8	486.1	424.5	299.2	206.8	128.2	49.7	35.8
97.5°	485.1	482.1	471.2	455.3	419.5	356.9	246.5	171.0	104.4	42.7	32.8
100°	402.6	402.6	391.7	369.8	345.0	307.2	213.7	149.1	86.5	39.8	31.8
102.5°	346.0	345.0	341.0	321.1	298.2	250.5	185.9	131.2	71.6	37.8	31.8
105°	312.2	310.2	304.2	287.3	277.4	217.7	161.0	113.3	61.6	37.8	30.8
107.5°	292.3	292.3	288.3	270.4	246.5	193.9	142.2	95.4	54.7	36.8	30.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	275.4	273.4	266.4	251.5	223.7	177.0	125.3	81.5	50.7	36.8	29.8
112.5°	259.5	259.5	250.5	232.6	199.8	157.1	110.3	70.6	48.7	35.8	28.8
115°	241.6	239.6	230.6	208.8	179.9	139.2	97.4	63.6	46.7	33.8	25.8
117.5°	215.7	215.7	208.8	190.9	160.1	123.3	88.5	59.6	45.7	31.8	23.9
120°	195.8	195.8	188.9	170.0	142.2	109.4	78.5	55.7	43.7	29.8	21.9
122.5°	177.9	177.9	169.0	150.1	123.3	95.4	68.6	52.7	41.8	27.8	18.9
125°	156.1	157.1	149.1	131.2	106.4	84.5	62.6	50.7	40.8	24.9	16.9
127.5°	139.2	137.2	129.2	112.3	92.5	73.6	58.7	48.7	38.8	22.9	14.9
130°	117.3	116.3	109.4	95.4	81.5	69.6	57.7	46.7	35.8	19.9	12.9
132.5°	100.4	98.4	92.5	83.5	73.6	66.6	55.7	44.7	32.8	16.9	10.9
135°	84.5	83.5	79.5	76.5	68.6	62.6	53.7	41.8	29.8	14.9	8.9
137.5°	74.6	74.6	72.6	70.6	65.6	59.6	50.7	39.8	26.8	11.9	7.0
140°	69.6	69.6	70.6	69.6	63.6	56.7	48.7	37.8	23.9	10.9	6.0
142.5°	70.6	70.6	70.6	67.6	61.6	54.7	45.7	34.8	20.9	8.9	5.0
145°	73.6	73.6	70.6	65.6	58.7	50.7	42.7	30.8	17.9	7.0	4.0
147.5°	71.6	70.6	66.6	59.6	52.7	46.7	37.8	25.8	14.9	6.0	4.0
150°	66.6	65.6	59.6	53.7	47.7	40.8	31.8	21.9	11.9	5.0	3.0
152.5°	58.7	57.7	52.7	45.7	39.8	33.8	26.8	16.9	8.9	4.0	3.0
155°	44.7	44.7	40.8	35.8	30.8	26.8	20.9	13.9	7.0	3.0	2.0
157.5°	32.8	32.8	30.8	27.8	24.9	21.9	16.9	10.9	5.0	2.0	2.0
160°	26.8	26.8	25.8	22.9	19.9	17.9	12.9	8.9	4.0	2.0	2.0
162.5°	22.9	21.9	20.9	18.9	15.9	12.9	8.9	6.0	4.0	2.0	2.0
165°	17.9	17.9	16.9	14.9	11.9	9.9	7.0	5.0	3.0	2.0	2.0
167.5°	12.9	12.9	11.9	9.9	8.0	6.0	4.0	3.0	3.0	2.0	2.0
170°	8.0	8.0	7.0	6.0	4.0	4.0	3.0	3.0	2.0	2.0	2.0
172.5°	3.0	3.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0
175°	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2495.2	2495.2	2495.2	2495.2	2495.2	2495.2	2495.2	2495.2	2495.2	2495.2
2.5°	2446.5	2376.9	2363.0	2351.1	2349.1	2327.2	2309.3	2291.4	2298.4	2294.4
5°	2388.8	2338.1	2310.3	2254.6	2214.9	2163.2	2150.3	2121.4	2113.5	2116.5
7.5°	2321.2	2279.5	2192.0	2128.4	2099.6	2137.3	2114.5	2038.9	2012.1	2001.1
10°	2261.6	2194.0	2093.6	2096.6	2001.1	1933.5	1887.8	1823.2	1785.4	1795.4
12.5°	2231.8	2121.4	2037.9	1952.4	1835.1	1698.9	1620.4	1608.5	1634.3	1640.3
15°	2214.9	2057.8	2001.1	1800.3	1625.4	1578.6	1561.7	1501.1	1439.5	1445.4
17.5°	2200.0	2010.1	1854.0	1631.3	1530.9	1428.5	1241.6	1175.0	1168.1	1163.1
20°	2151.3	1958.4	1736.7	1535.9	1395.7	1144.2	1064.7	954.3	893.7	883.8
22.5°	2084.6	1881.9	1605.5	1441.5	1153.2	975.2	807.2	741.6	703.8	695.9
25°	2019.0	1765.5	1499.1	1255.6	992.1	772.4	646.2	593.5	575.6	571.6
27.5°	1948.5	1656.2	1409.6	1052.8	819.1	639.2	535.8	494.1	471.2	464.2
30°	1878.9	1539.9	1271.5	917.6	681.0	528.9	446.4	405.6	391.7	387.7
32.5°	1787.4	1435.5	1106.4	788.3	562.7	447.3	368.8	333.0	317.1	316.1
35°	1697.9	1326.1	946.4	667.0	480.2	364.8	303.2	266.4	248.5	250.5
37.5°	1595.5	1223.7	828.1	555.7	391.7	302.2	240.6	214.7	198.8	197.8
40°	1500.1	1127.3	727.7	469.2	323.1	238.6	194.8	166.0	157.1	156.1
42.5°	1390.8	1008.0	630.3	396.6	265.4	196.8	155.1	133.2	125.3	125.3
45°	1260.5	866.9	519.9	317.1	211.7	157.1	123.3	105.4	97.4	96.4
47.5°	1132.3	739.6	423.5	258.5	172.0	124.3	97.4	82.5	77.5	76.5
50°	1009.0	638.2	351.9	208.8	142.2	97.4	75.6	65.6	59.6	59.6
52.5°	911.6	560.7	299.2	172.0	114.3	76.5	60.6	50.7	51.7	52.7
55°	832.1	494.1	246.5	144.1	90.5	59.6	45.7	41.8	44.7	44.7
57.5°	754.5	408.6	203.8	121.3	70.6	48.7	33.8	34.8	36.8	36.8
59°	708.8	364.8	181.9	110.3	61.6	40.8	27.8	29.8	28.8	28.8
60°	674.0	339.0	170.0	100.4	54.7	35.8	24.9	24.9	23.9	23.9
62.5°	591.5	270.4	143.2	81.5	41.8	22.9	15.9	14.9	12.9	13.9
65°	485.1	214.7	118.3	64.6	30.8	12.9	6.0	4.0	3.0	2.0
67.5°	391.7	173.0	95.4	49.7	20.9	4.0	0.0	0.0	0.0	0.0
70°	307.2	139.2	77.5	37.8	10.9	0.0	0.0	0.0	0.0	0.0
72.5°	237.6	113.3	62.6	25.8	3.0	0.0	0.0	0.0	0.0	0.0
75°	176.0	91.5	47.7	16.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	129.2	69.6	36.8	10.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	98.4	54.7	27.8	6.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	75.6	42.7	20.9	3.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	56.7	32.8	15.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	43.7	26.8	12.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	34.8	20.9	9.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	29.8	17.9	8.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	26.8	15.9	7.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	25.8	14.9	6.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	24.9	13.9	5.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	24.9	13.9	5.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	24.9	12.9	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	24.9	11.9	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P979118
 CATALOG NUMBER: WPSLED15S-60W-3000K

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	23.9	10.9	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	22.9	8.9	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	19.9	7.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	16.9	5.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	12.9	4.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	10.9	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	9.9	2.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	8.9	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	8.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	7.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	6.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	5.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	4.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	4.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	4.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
147.5°	3.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
150°	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	2.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Lumark

Report Number: SP1-2407-168-1

Test Date: 08/08/2024

Luminaire Tested: LSDL-92S-100W 3000k

Data in this report applies to families of products including LSDL-92S-100W 3000k.

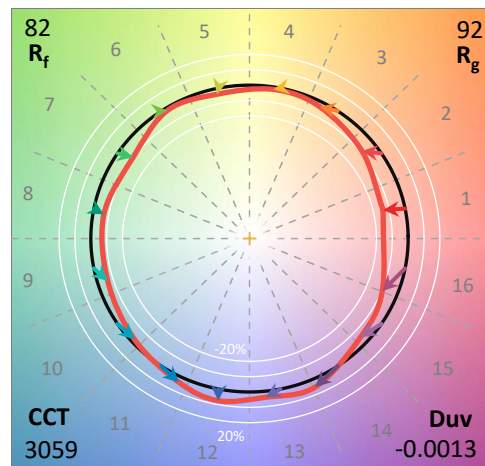
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-168-1
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/12/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Lumark
 Catalog Number: **LSDL-92S-100W 3000k**
 Description: Lumark Wallpack 100W

Spectral Parameters

CCT (K): 3059
 CIE u': 0.2490
 CIE v': 0.5184
 Duv: -0.0013
 CIE x: 0.4310
 CIE y: 0.3988
 CIE z: 0.1702
 Peak Wavelength (nm): 600
 Dominant Wavelength (nm): 583
 Purity: 49.0643
 Rf: 81.8
 Rg: 91.9

CRI (Ra):	79.3		
R1:	78.1	R9:	-8.3
R2:	92.3	R10:	82.8
R3:	91.2	R11:	73.1
R4:	74.6	R12:	70.5
R5:	78.8	R13:	81.8
R6:	90.5	R14:	95.7
R7:	77.6	R15:	69.8
R8:	50.9		



Test Conditions

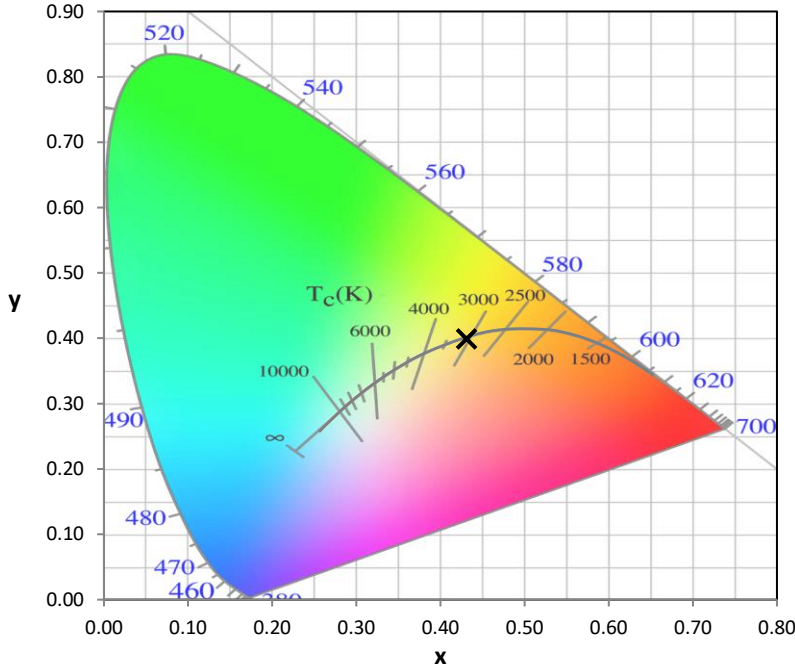
Stabilization Time: 51M
 Operation Time: 1H 51M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2407-168-1

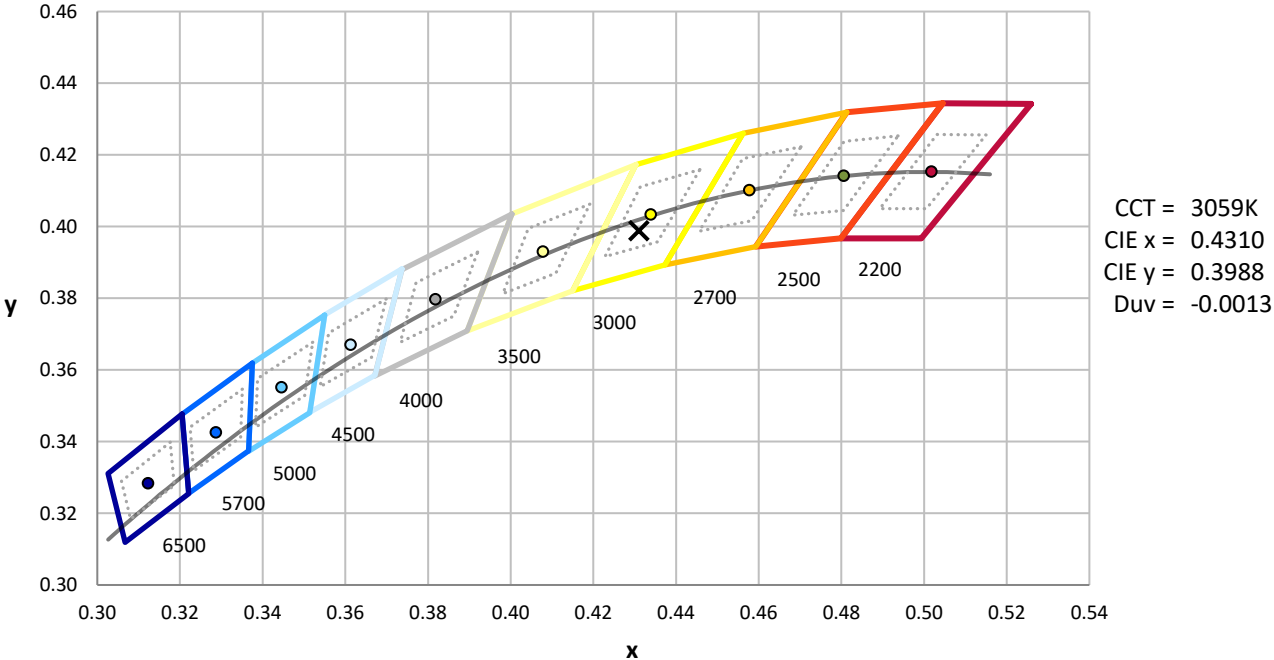
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-168-1

CIE 1931 Chromaticity Diagram



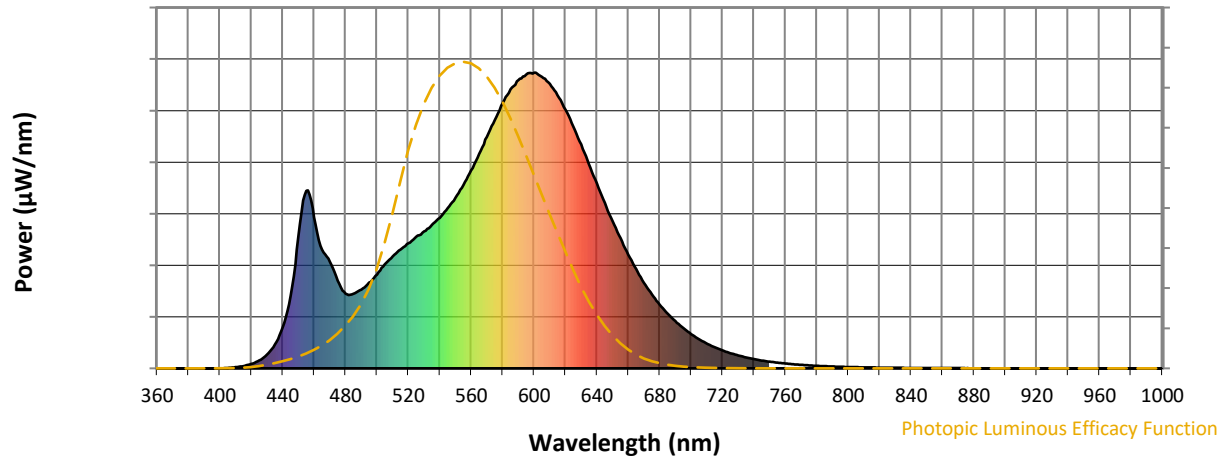
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-168-1

Photopic Flux vs. Wavelength

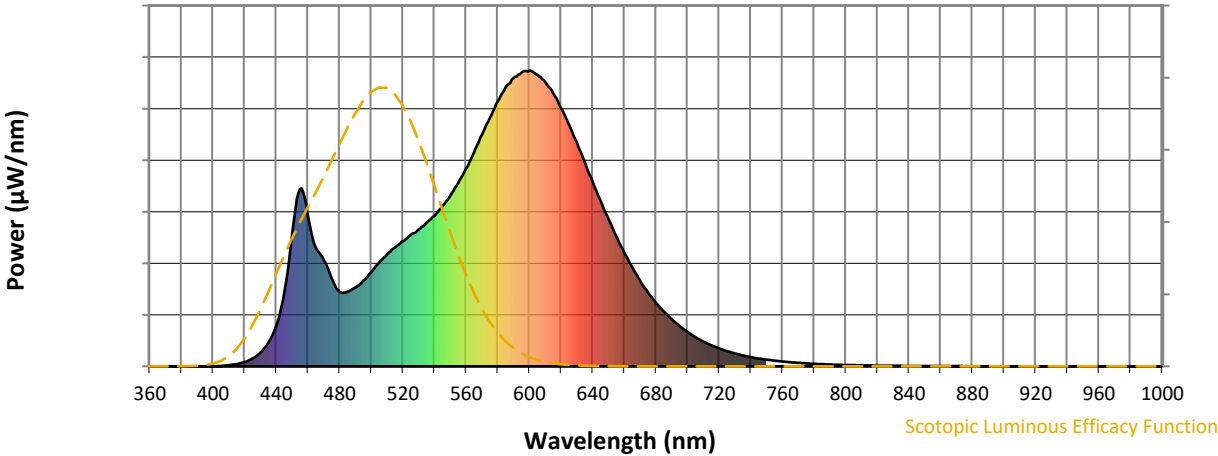


Photopic Lumens: NR

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	266	NR	620	875	NR	750	23	NR	880	0	NR
365	0	NR	495	290	NR	625	818	NR	755	19	NR	885	0	NR
370	0	NR	500	317	NR	630	758	NR	760	16	NR	890	0	NR
375	0	NR	505	352	NR	635	690	NR	765	14	NR	895	0	NR
380	0	NR	510	379	NR	640	625	NR	770	12	NR	900	0	NR
385	0	NR	515	402	NR	645	560	NR	775	10	NR	905	0	NR
390	0	NR	520	423	NR	650	498	NR	780	9	NR	910	0	NR
395	0	NR	525	445	NR	655	440	NR	785	7	NR	915	0	NR
400	0	NR	530	463	NR	660	385	NR	790	6	NR	920	0	NR
405	1	NR	535	486	NR	665	335	NR	795	5	NR	925	0	NR
410	4	NR	540	509	NR	670	289	NR	800	5	NR	930	0	NR
415	8	NR	545	542	NR	675	250	NR	805	4	NR	935	0	NR
420	15	NR	550	577	NR	680	216	NR	810	3	NR	940	0	NR
425	27	NR	555	620	NR	685	185	NR	815	3	NR	945	0	NR
430	46	NR	560	670	NR	690	160	NR	820	3	NR	950	0	NR
435	81	NR	565	725	NR	695	136	NR	825	2	NR	955	0	NR
440	139	NR	570	782	NR	700	116	NR	830	2	NR	960	0	NR
445	246	NR	575	840	NR	705	99	NR	835	2	NR	965	0	NR
450	446	NR	580	896	NR	710	84	NR	840	1	NR	970	0	NR
455	601	NR	585	944	NR	715	71	NR	845	1	NR	975	0	NR
460	511	NR	590	975	NR	720	61	NR	850	1	NR	980	0	NR
465	402	NR	595	994	NR	725	51	NR	855	1	NR	985	0	NR
470	359	NR	600	1000	NR	730	44	NR	860	1	NR	990	0	NR
475	297	NR	605	985	NR	735	37	NR	865	1	NR	995	0	NR
480	252	NR	610	962	NR	740	32	NR	870	1	NR	1000	0	NR
485	252	NR	615	923	NR	745	27	NR	875	1	NR			

REPORT NUMBER: SP1-2407-168-1

Scotopic Flux vs. Wavelength



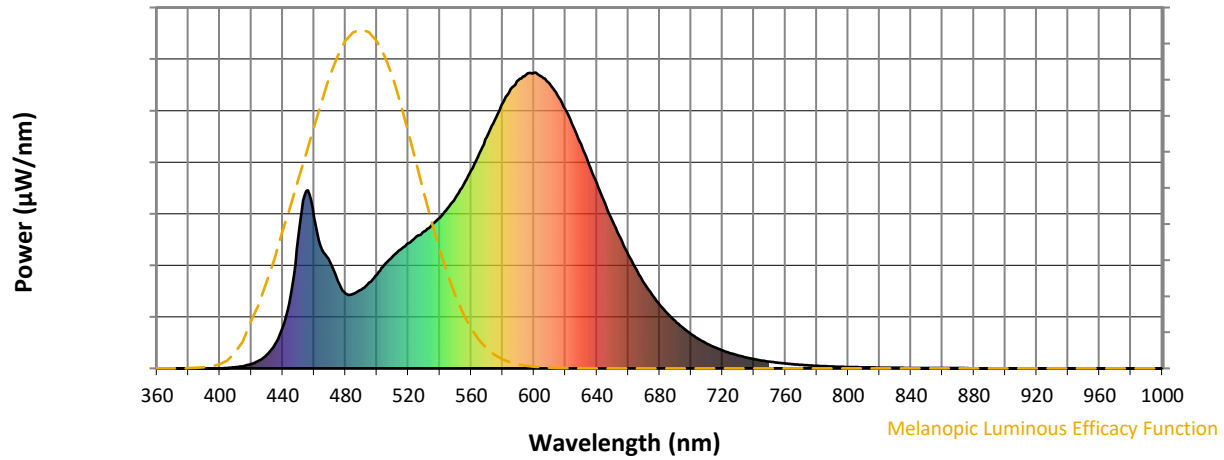
Scotopic Lumens: NR

S/P: 1.39

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	266	NR	620	875	NR	750	23	NR	880	0	NR
365	0	NR	495	290	NR	625	818	NR	755	19	NR	885	0	NR
370	0	NR	500	317	NR	630	758	NR	760	16	NR	890	0	NR
375	0	NR	505	352	NR	635	690	NR	765	14	NR	895	0	NR
380	0	NR	510	379	NR	640	625	NR	770	12	NR	900	0	NR
385	0	NR	515	402	NR	645	560	NR	775	10	NR	905	0	NR
390	0	NR	520	423	NR	650	498	NR	780	9	NR	910	0	NR
395	0	NR	525	445	NR	655	440	NR	785	7	NR	915	0	NR
400	0	NR	530	463	NR	660	385	NR	790	6	NR	920	0	NR
405	1	NR	535	486	NR	665	335	NR	795	5	NR	925	0	NR
410	4	NR	540	509	NR	670	289	NR	800	5	NR	930	0	NR
415	8	NR	545	542	NR	675	250	NR	805	4	NR	935	0	NR
420	15	NR	550	577	NR	680	216	NR	810	3	NR	940	0	NR
425	27	NR	555	620	NR	685	185	NR	815	3	NR	945	0	NR
430	46	NR	560	670	NR	690	160	NR	820	3	NR	950	0	NR
435	81	NR	565	725	NR	695	136	NR	825	2	NR	955	0	NR
440	139	NR	570	782	NR	700	116	NR	830	2	NR	960	0	NR
445	246	NR	575	840	NR	705	99	NR	835	2	NR	965	0	NR
450	446	NR	580	896	NR	710	84	NR	840	1	NR	970	0	NR
455	601	NR	585	944	NR	715	71	NR	845	1	NR	975	0	NR
460	511	NR	590	975	NR	720	61	NR	850	1	NR	980	0	NR
465	402	NR	595	994	NR	725	51	NR	855	1	NR	985	0	NR
470	359	NR	600	1000	NR	730	44	NR	860	1	NR	990	0	NR
475	297	NR	605	985	NR	735	37	NR	865	1	NR	995	0	NR
480	252	NR	610	962	NR	740	32	NR	870	1	NR	1000	0	NR
485	252	NR	615	923	NR	745	27	NR	875	1	NR			

REPORT NUMBER: SP1-2407-168-1

Melanopic Flux vs. Wavelength



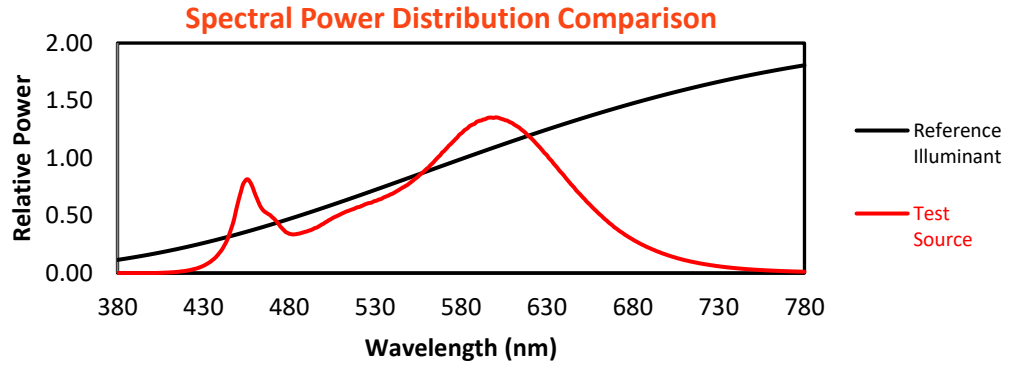
Melanopic Lumens: NR

M/P: 2.77

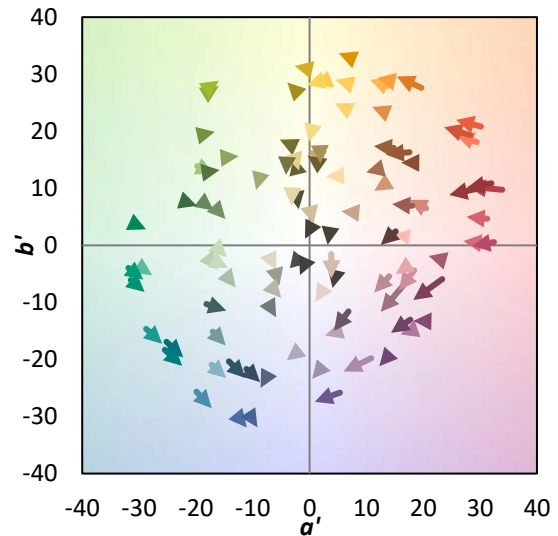
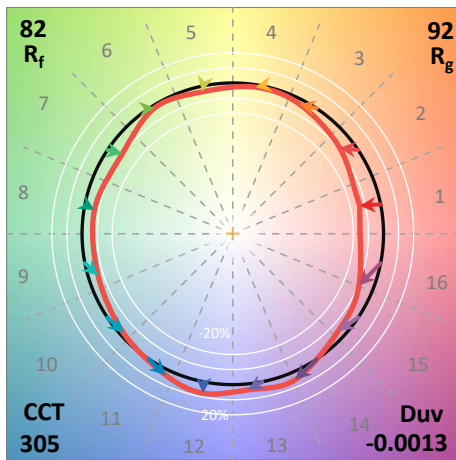
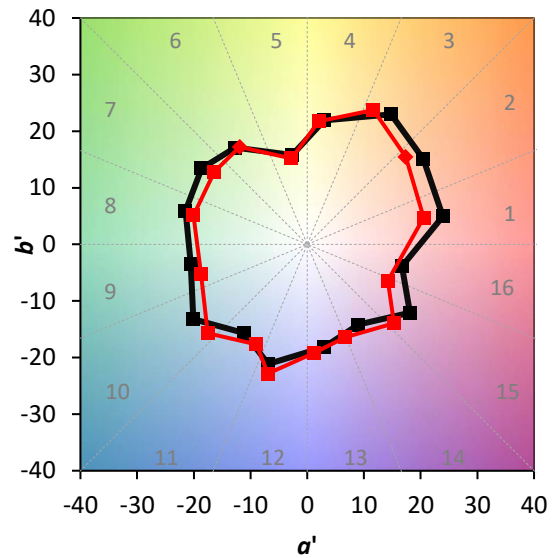
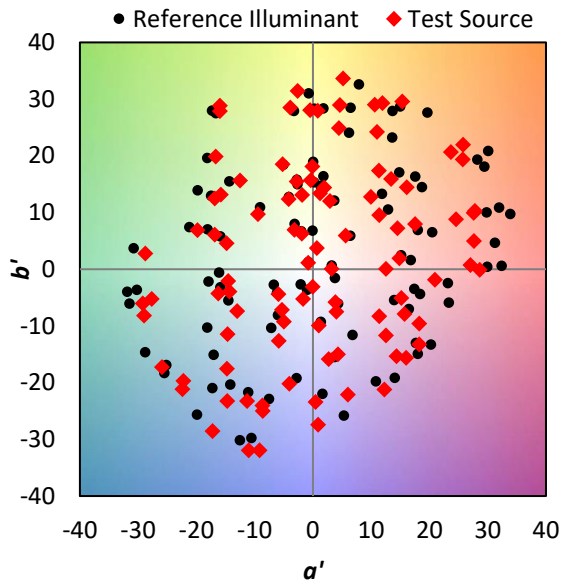
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	266	NR	620	875	NR	750	23	NR	880	0	NR
365	0	NR	495	290	NR	625	818	NR	755	19	NR	885	0	NR
370	0	NR	500	317	NR	630	758	NR	760	16	NR	890	0	NR
375	0	NR	505	352	NR	635	690	NR	765	14	NR	895	0	NR
380	0	NR	510	379	NR	640	625	NR	770	12	NR	900	0	NR
385	0	NR	515	402	NR	645	560	NR	775	10	NR	905	0	NR
390	0	NR	520	423	NR	650	498	NR	780	9	NR	910	0	NR
395	0	NR	525	445	NR	655	440	NR	785	7	NR	915	0	NR
400	0	NR	530	463	NR	660	385	NR	790	6	NR	920	0	NR
405	1	NR	535	486	NR	665	335	NR	795	5	NR	925	0	NR
410	4	NR	540	509	NR	670	289	NR	800	5	NR	930	0	NR
415	8	NR	545	542	NR	675	250	NR	805	4	NR	935	0	NR
420	15	NR	550	577	NR	680	216	NR	810	3	NR	940	0	NR
425	27	NR	555	620	NR	685	185	NR	815	3	NR	945	0	NR
430	46	NR	560	670	NR	690	160	NR	820	3	NR	950	0	NR
435	81	NR	565	725	NR	695	136	NR	825	2	NR	955	0	NR
440	139	NR	570	782	NR	700	116	NR	830	2	NR	960	0	NR
445	246	NR	575	840	NR	705	99	NR	835	2	NR	965	0	NR
450	446	NR	580	896	NR	710	84	NR	840	1	NR	970	0	NR
455	601	NR	585	944	NR	715	71	NR	845	1	NR	975	0	NR
460	511	NR	590	975	NR	720	61	NR	850	1	NR	980	0	NR
465	402	NR	595	994	NR	725	51	NR	855	1	NR	985	0	NR
470	359	NR	600	1000	NR	730	44	NR	860	1	NR	990	0	NR
475	297	NR	605	985	NR	735	37	NR	865	1	NR	995	0	NR
480	252	NR	610	962	NR	740	32	NR	870	1	NR	1000	0	NR
485	252	NR	615	923	NR	745	27	NR	875	1	NR			

Summary

$R_f = 81.8$
 $R_g = 91.9$
 $CIE R_a = 79.3$
 $R_9 = -8.3$

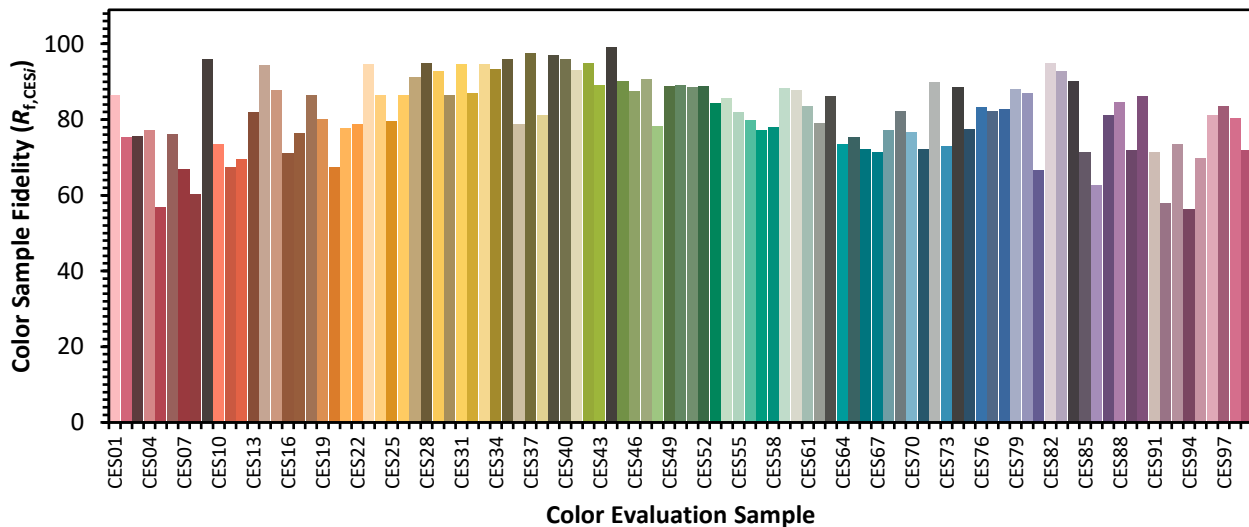


Color Vector Graphics

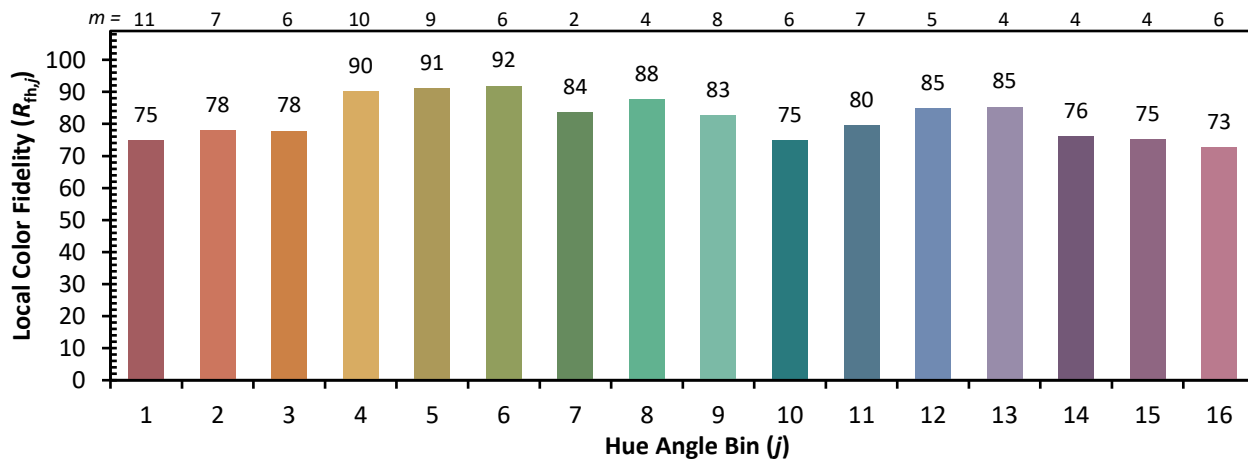
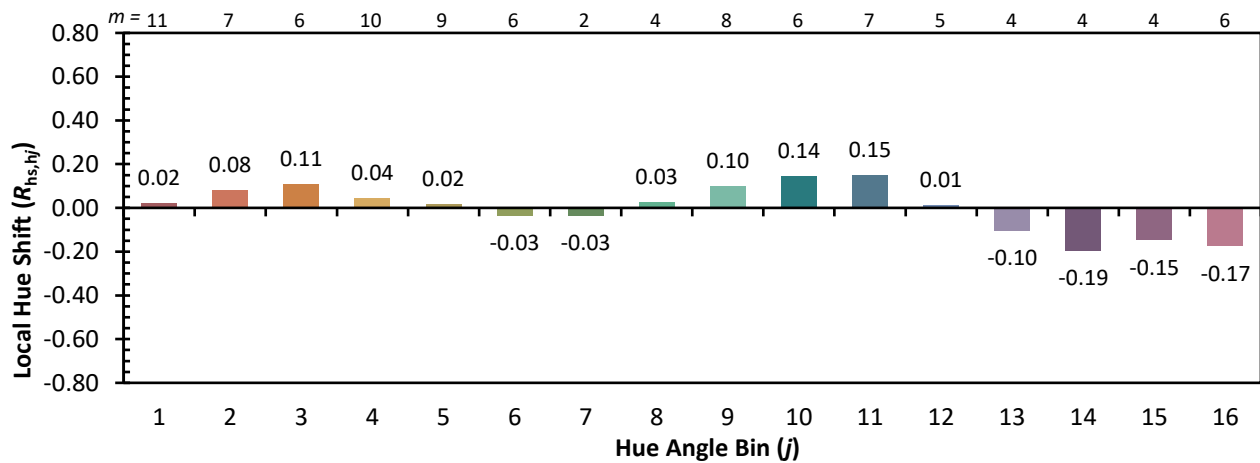
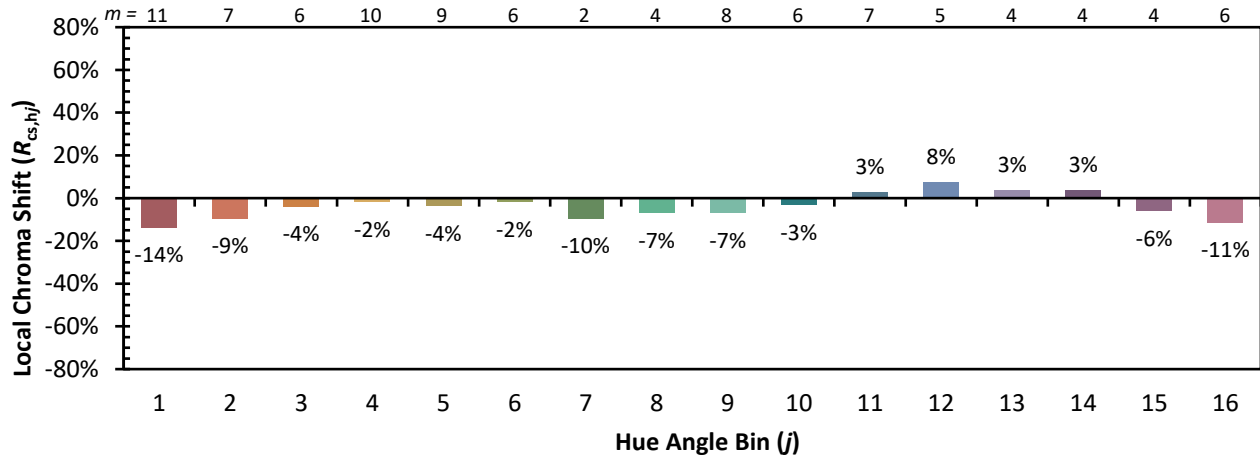


Individual Sample Fidelity Index ($R_{f,i}$)

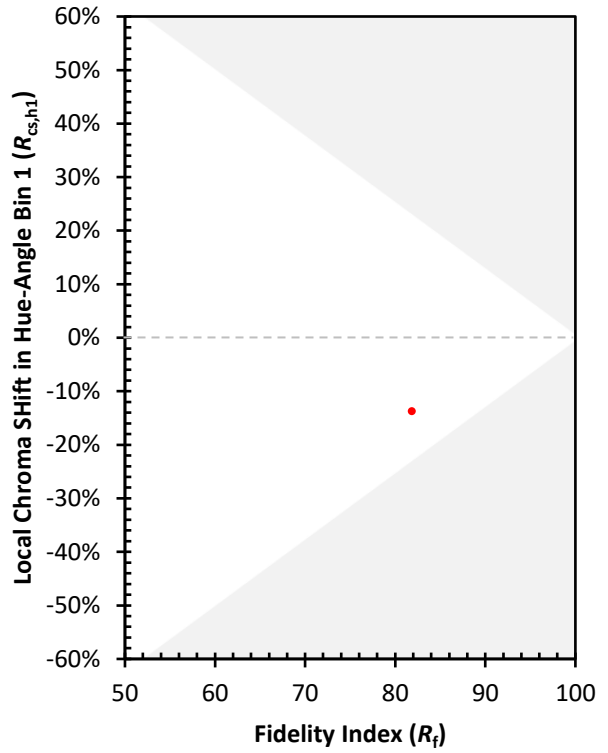
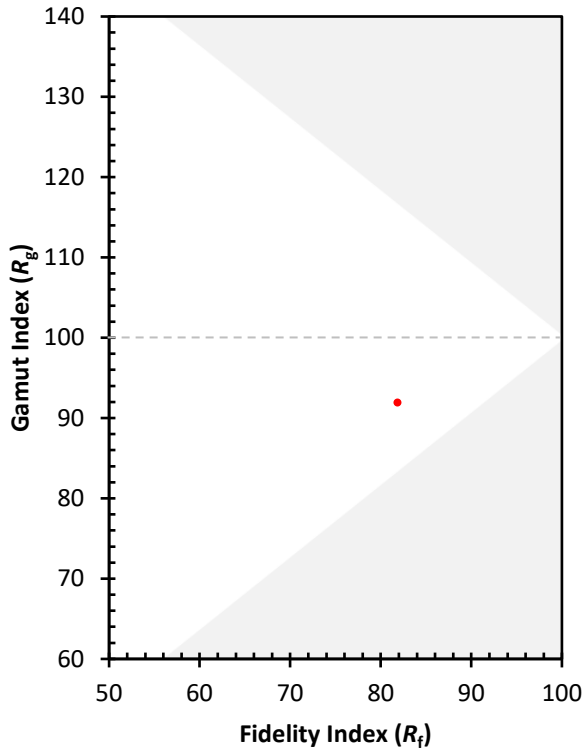
CES01 = 86	CES26 = 86	CES51 = 88	CES76 = 83
CES02 = 63	CES27 = 91	CES52 = 89	CES77 = 82
CES03 = 31	CES28 = 95	CES53 = 84	CES78 = 83
CES04 = 71	CES29 = 93	CES54 = 86	CES79 = 88
CES05 = 49	CES30 = 86	CES55 = 82	CES80 = 87
CES06 = 51	CES31 = 95	CES56 = 80	CES81 = 67
CES07 = 42	CES32 = 87	CES57 = 77	CES82 = 95
CES08 = 40	CES33 = 95	CES58 = 78	CES83 = 93
CES09 = 29	CES34 = 93	CES59 = 88	CES84 = 90
CES10 = 76	CES35 = 96	CES60 = 88	CES85 = 71
CES11 = 59	CES36 = 79	CES61 = 84	CES86 = 63
CES12 = 65	CES37 = 98	CES62 = 79	CES87 = 81
CES13 = 43	CES38 = 81	CES63 = 86	CES88 = 85
CES14 = 74	CES39 = 97	CES64 = 73	CES89 = 72
CES15 = 71	CES40 = 96	CES65 = 75	CES90 = 86
CES16 = 47	CES41 = 93	CES66 = 72	CES91 = 71
CES17 = 50	CES42 = 95	CES67 = 71	CES92 = 58
CES18 = 56	CES43 = 89	CES68 = 77	CES93 = 74
CES19 = 72	CES44 = 99	CES69 = 82	CES94 = 56
CES20 = 66	CES45 = 90	CES70 = 77	CES95 = 70
CES21 = 87	CES46 = 88	CES71 = 72	CES96 = 81
CES22 = 79	CES47 = 91	CES72 = 90	CES97 = 84
CES23 = 92	CES48 = 78	CES73 = 73	CES98 = 80
CES24 = 91	CES49 = 89	CES74 = 89	CES99 = 72
CES25 = 72	CES50 = 89	CES75 = 78	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)