

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: P979157

Luminaire Tested: **WPMLED26S-70W-6500K**

Issue Date: 03/31/2025



**Test Information**

Test Method: LM-79-08  
Report Number: P979157  
Test Lab: Cooper Lighting Solutions  
Issue Date: 03/31/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: WPMLD26S-70W-6500K  
Description: LUMARK WALL PACK LED MEDIUM 80CRI CCT AND LUMEN SELECTIVE FIXTURE  
OPERATING @70W-6500K  
Light Source: 6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

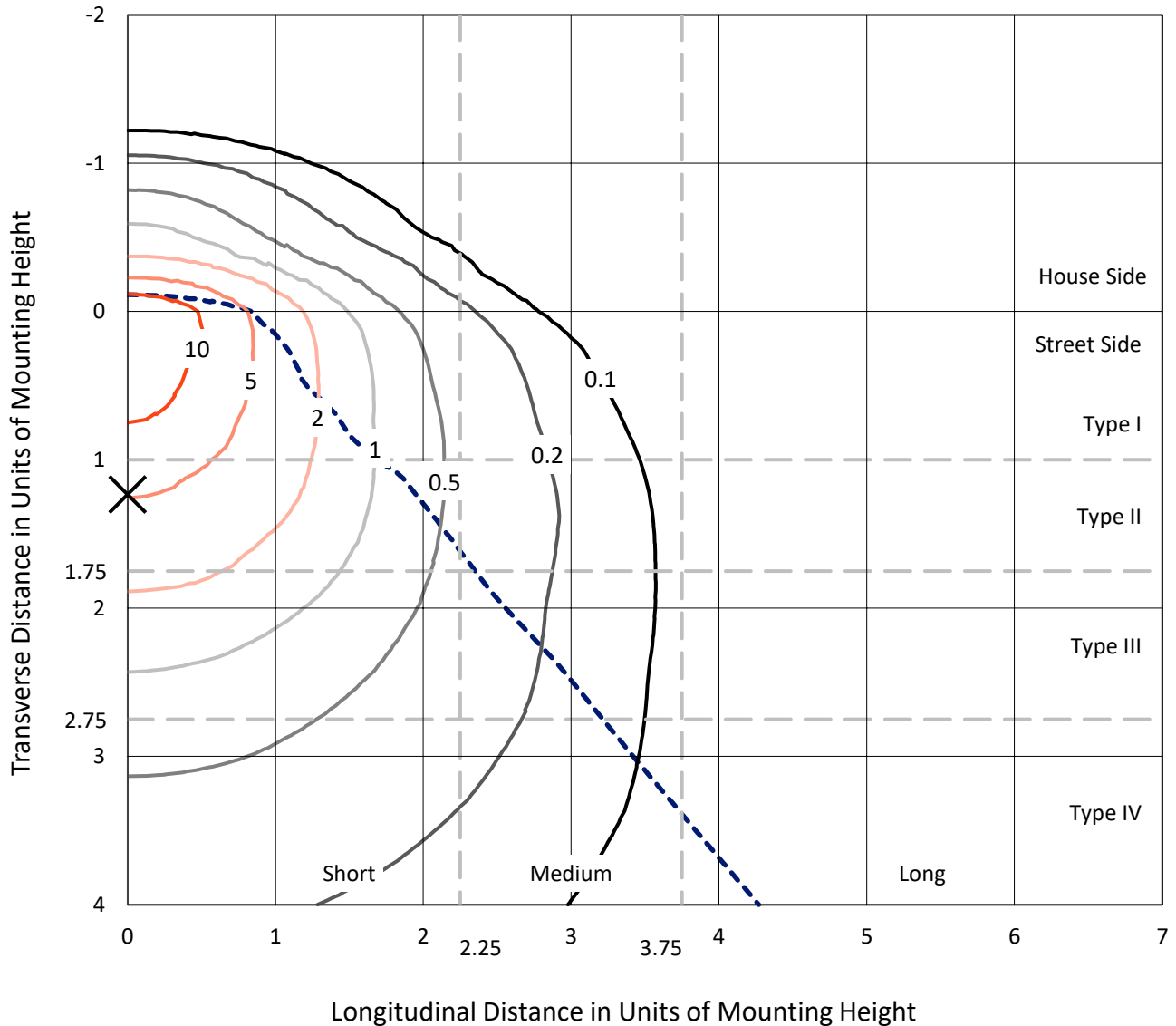
Lumens per Lamp: N/A  
Luminaire Lumens: 11766.7 lumens  
Efficiency: N/A  
Efficacy: 159.7 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.86' x L: 0.17' x H: 0.58')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U4 - G5

Input Watts (W): 73.7  
Input Voltage (V): 120  
Input Current (Ain): 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

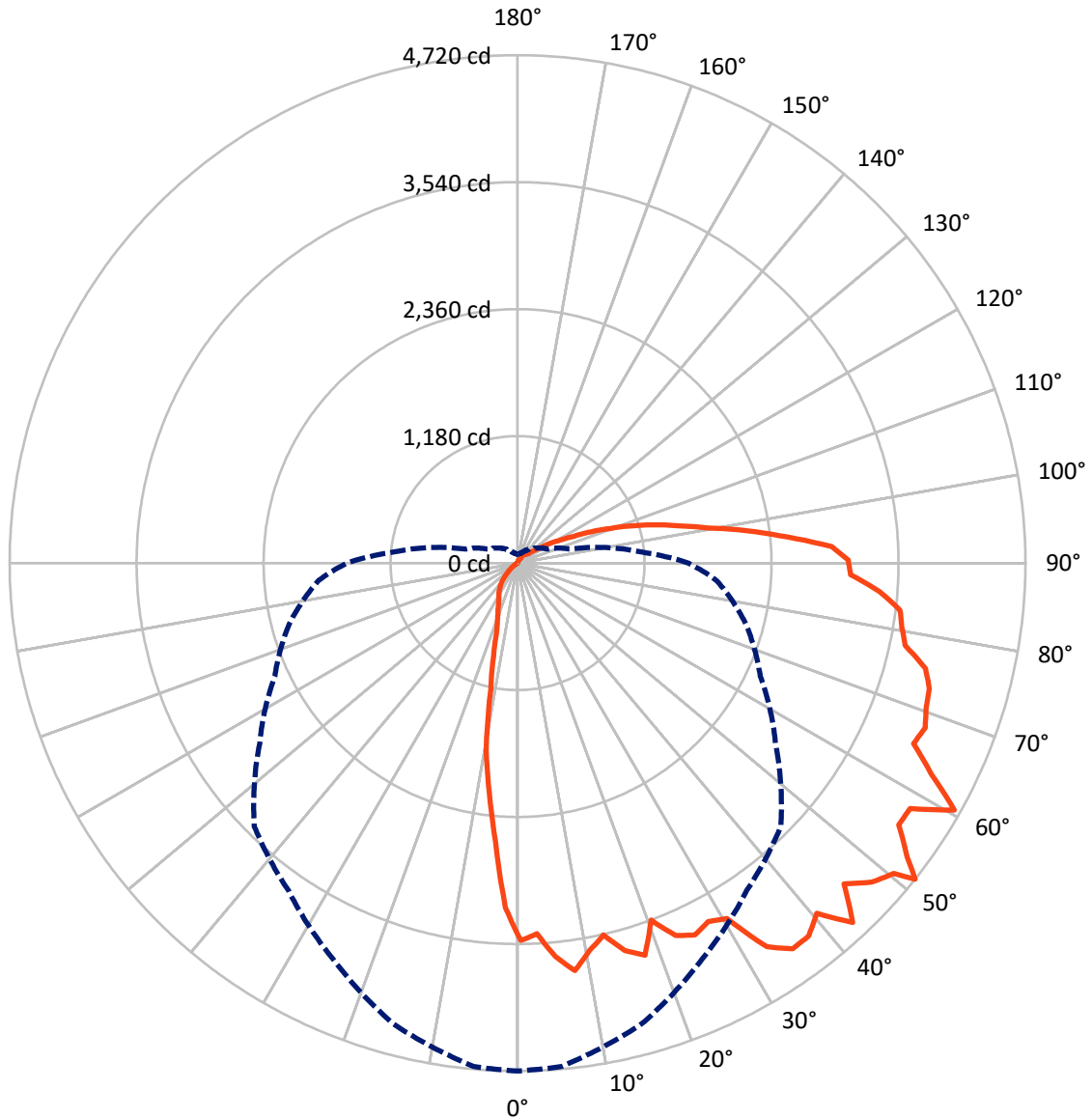
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 16.5 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 51-Deg Vertical

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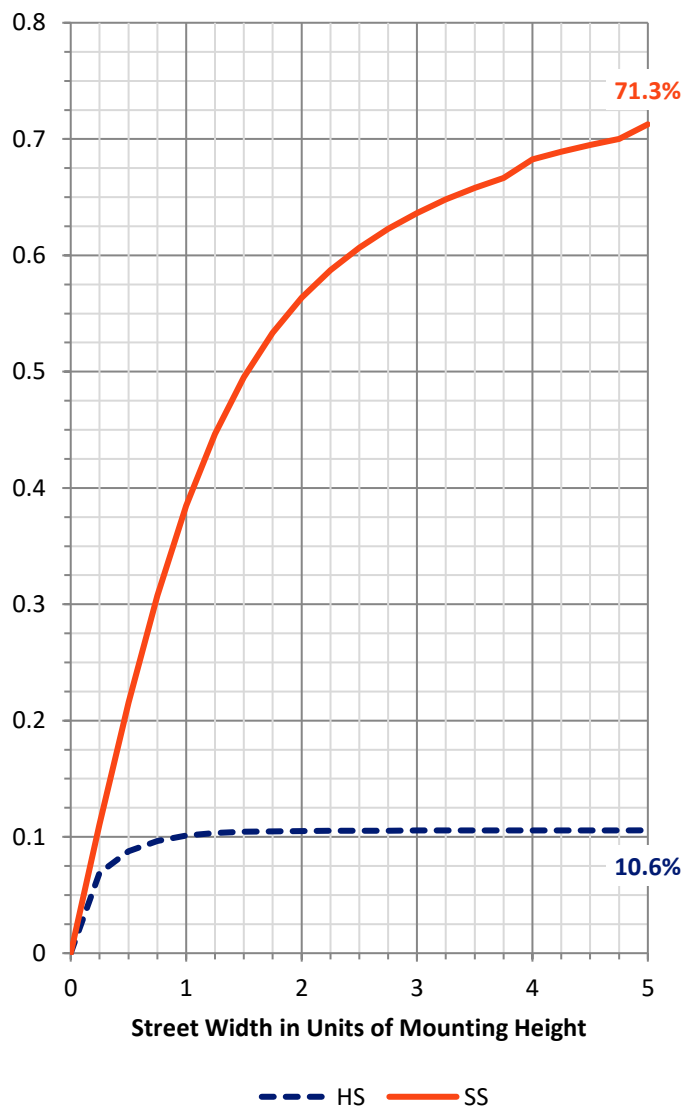
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1254.9	14.4	1269.3
	% Fixture	10.7	0.1	10.8
<b>Street Side</b>	Lumens	9172.8	1324.6	10497.4
	% Fixture	78.0	11.3	89.2
<b>Total</b>	Lumens	10427.7	1339.0	11766.7
	% Fixture	88.6	11.4	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	306.0	2.6
10°-20°	757.3	6.4
20°-30°	1054.9	9.0
30°-40°	1328.8	11.3
40°-50°	1501.3	12.8
50°-60°	1554.9	13.2
60°-70°	1503.3	12.8
70°-80°	1341.0	11.4
80°-90°	1080.2	9.2
90°-100°	715.1	6.1
100°-110°	353.5	3.0
110°-120°	154.3	1.3
120°-130°	62.7	0.5
130°-140°	31.6	0.3
140°-150°	15.6	0.1
150°-160°	4.9	0.0
160°-170°	1.0	0.0
170°-180°	0.1	0.0
0°-90°	10427.7	88.6
0°-180°	11766.7	100.0



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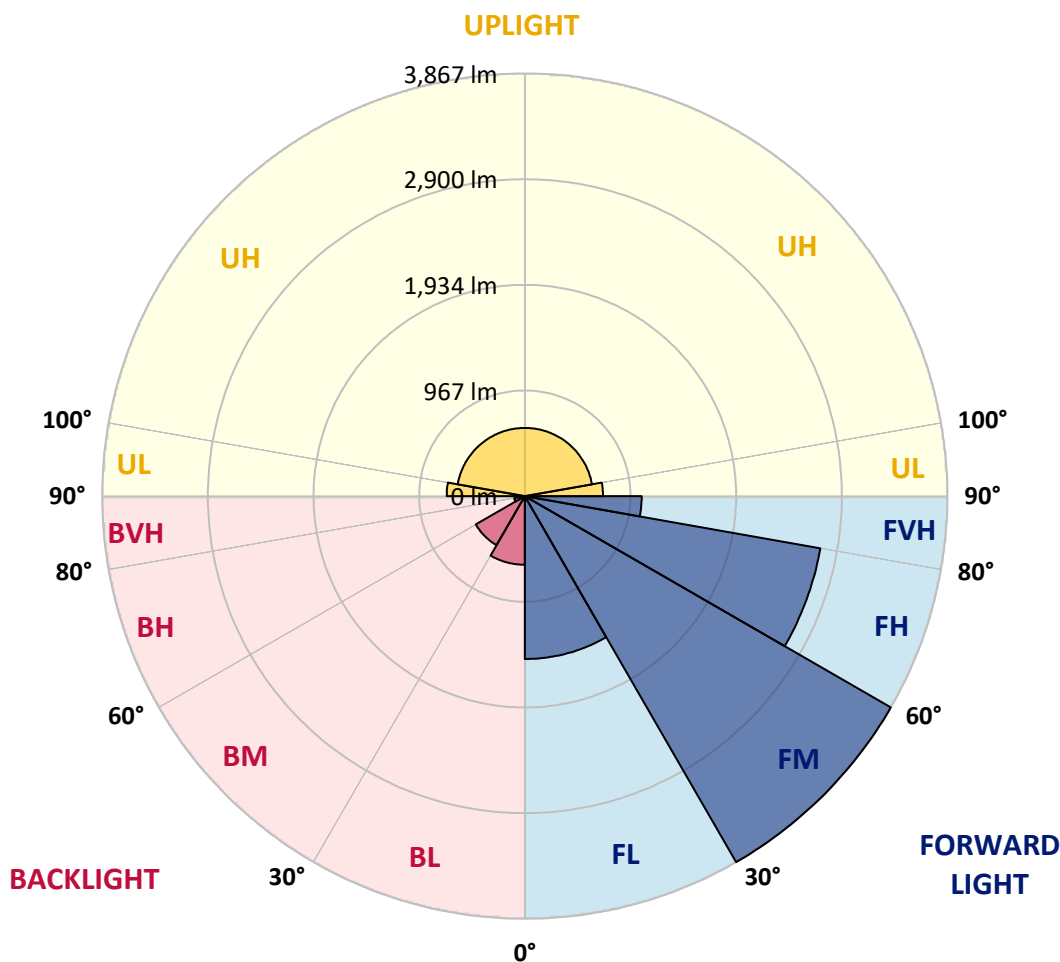
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1490.3	12.7			
FM (30°-60°)	3867.2	32.9			
FH (60°-80°)	2746.0	23.3			G2/5000
FVH (80°-90°)	1069.3	9.1			G5
BL (0°-30°)	627.9	5.3	B2/1000		
BM (30°-60°)	517.7	4.4	B1/1000		
BH (60°-80°)	98.3	0.8	B0/110		G0/110
BVH (80°-90°)	11.0	0.1			G1/100
UL (90°-100°)	715.1	6.1		U4/1000	
UH (100°-180°)	623.9	5.3		U4/1000	

**BUG Rating: B2-U4-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3507.7	3507.7	3507.7	3507.7	3507.7	3507.7	3507.7	3507.7	3507.7	3507.7	3507.7
2.5°	3449.1	3448.3	3449.1	3451.5	3456.3	3504.5	3543.8	3560.7	3539.0	3506.1	3504.5
5°	3673.1	3674.7	3655.5	3643.4	3588.0	3527.0	3467.5	3450.7	3541.4	3508.5	3496.5
7.5°	3823.3	3804.8	3793.6	3783.1	3756.6	3690.0	3606.5	3472.4	3457.9	3510.1	3486.8
10°	3662.7	3645.0	3682.0	3747.0	3831.3	3763.9	3718.1	3577.6	3412.1	3503.7	3471.6
12.5°	3547.0	3532.6	3491.6	3440.2	3573.5	3743.8	3751.0	3641.8	3439.4	3473.2	3442.6
15°	3736.6	3719.7	3665.9	3614.5	3479.6	3478.0	3726.1	3672.3	3460.3	3417.0	3396.1
17.5°	3831.3	3820.9	3848.2	3829.7	3647.4	3470.0	3506.9	3637.8	3479.6	3339.9	3331.0
20°	3542.2	3548.7	3593.6	3725.3	3818.5	3600.8	3303.7	3582.4	3437.8	3262.8	3256.3
22.5°	3759.0	3710.9	3514.1	3470.8	3649.0	3740.6	3429.0	3413.7	3396.1	3179.3	3170.4
25°	3828.9	3829.7	3901.2	3822.5	3414.5	3614.5	3509.3	3174.4	3339.9	3089.3	3070.0
27.5°	3771.9	3764.7	3735.0	3772.7	3796.0	3368.8	3539.8	3101.4	3251.5	2998.6	2968.0
30°	3832.1	3807.2	3794.4	3728.5	3673.1	3382.4	3410.5	3161.6	3183.3	2915.9	2858.0
32.5°	4250.5	4236.1	4117.2	3751.8	3605.7	3620.9	3204.9	3246.7	3107.8	2838.0	2747.2
35°	4402.3	4388.6	4270.6	4100.3	3604.9	3436.2	3135.1	3204.1	2967.2	2745.6	2627.6
37.5°	4395.1	4388.6	4326.8	4181.4	3894.8	3377.6	3364.8	3070.0	2801.8	2638.0	2489.4
40°	4280.2	4256.1	4190.3	4130.9	3894.8	3442.6	3168.0	2954.4	2662.1	2527.2	2340.9
42.5°	4565.3	4560.5	4477.8	4075.4	3824.9	3582.4	3086.1	2817.1	2582.6	2396.3	2178.7
45°	4251.3	4285.0	4363.7	4280.2	3783.9	3456.3	3042.7	2855.6	2549.7	2245.3	1999.6
47.5°	4430.4	4426.4	4391.0	4094.7	3943.7	3392.1	3167.2	2730.3	2459.7	2077.5	1821.3
50°	4531.6	4509.1	4287.5	4146.1	3769.5	3416.1	2992.9	2552.1	2276.6	1918.5	1656.7
51°	4719.5	4695.4	4436.8	4059.4	3713.3	3459.5	2925.5	2488.6	2197.9	1855.8	1588.4
52.5°	4532.4	4538.0	4600.6	4186.3	3732.5	3421.8	2858.0	2405.9	2091.9	1761.1	1499.3
55°	4296.3	4281.0	4316.4	4278.6	3788.8	3283.6	2828.3	2375.4	1941.8	1631.8	1355.5
57.5°	4301.1	4285.8	4194.3	4114.8	3926.9	3291.7	2819.5	2268.6	1863.9	1515.3	1227.1
60°	4662.5	4644.0	4481.0	3951.0	3800.0	3400.1	2670.1	2092.7	1743.4	1394.9	1096.2
62.5°	4312.3	4298.7	4329.2	4189.5	3631.4	3354.3	2597.0	1998.8	1593.2	1262.4	973.3
65°	4043.3	4028.9	3986.3	3893.2	3689.2	3160.0	2573.8	2017.2	1484.0	1137.1	843.2
67.5°	4084.3	4058.6	3986.3	3750.2	3472.4	3119.8	2442.1	1866.3	1439.9	1018.3	725.1
70°	4027.3	4013.6	3910.8	3675.5	3359.1	2931.9	2303.1	1757.1	1294.5	913.9	590.2
72.5°	4000.8	3997.6	3926.1	3652.2	3335.8	2843.6	2140.9	1745.8	1170.8	759.7	460.9
75°	3914.8	3908.4	3797.6	3578.4	3246.7	2764.9	2031.7	1563.5	1113.8	620.8	346.9
77.5°	3682.0	3687.6	3624.1	3400.9	3085.3	2613.1	1894.4	1372.4	976.5	488.3	255.4
80°	3620.1	3610.5	3535.8	3291.7	2991.3	2489.4	1761.1	1227.9	855.2	358.2	182.3
82.5°	3580.0	3574.3	3476.4	3241.9	2878.9	2373.8	1623.8	1092.9	673.8	259.4	128.5
85°	3372.8	3381.6	3310.9	3059.6	2702.2	2194.7	1483.2	956.4	538.8	180.7	86.7
87.5°	3095.7	3089.3	2969.7	2758.5	2528.8	2049.4	1340.3	815.1	425.6	124.5	57.0
90°	3072.4	3069.2	2953.6	2658.9	2300.7	1799.6	1161.2	688.2	323.6	84.3	41.0
92.5°	2921.5	2908.6	2751.2	2433.2	2043.7	1537.0	996.6	572.6	250.5	63.4	36.1
95°	2520.0	2507.1	2398.7	2189.1	1822.1	1328.2	838.4	466.6	193.5	53.0	35.3
97.5°	2152.2	2126.5	2014.8	1790.8	1542.6	1146.7	689.8	362.2	159.0	49.8	36.9
100°	1795.6	1790.0	1684.8	1492.1	1261.6	933.9	556.5	288.3	131.7	49.8	38.5
102.5°	1535.4	1515.3	1437.4	1273.6	1048.8	721.1	443.3	236.1	110.8	51.4	40.2
105°	1329.0	1321.0	1257.6	1106.6	878.5	606.3	358.2	199.2	97.2	53.0	41.0
107.5°	1124.3	1110.6	1044.8	918.7	728.4	514.8	306.8	167.0	88.3	53.0	41.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	917.9	909.0	852.0	732.4	580.6	417.6	256.2	143.7	83.5	53.0	41.0
112.5°	749.2	742.0	699.5	599.9	472.2	331.7	212.0	125.3	79.5	52.2	40.2
115°	580.6	568.6	536.4	463.4	367.8	272.2	175.9	109.2	75.5	50.6	39.3
117.5°	460.1	454.5	429.6	363.8	289.1	216.8	148.6	96.4	71.5	47.4	36.9
120°	376.6	370.2	344.5	293.9	234.5	176.7	126.1	86.7	67.5	43.4	33.7
122.5°	292.3	285.9	270.6	233.7	191.9	151.0	110.8	77.9	61.8	39.3	29.7
125°	229.7	224.9	212.0	185.5	157.4	130.9	98.0	71.5	55.4	34.5	26.5
127.5°	179.1	176.7	167.8	151.8	134.9	113.2	88.3	65.8	49.0	30.5	23.3
130°	145.4	143.7	138.9	131.7	119.7	102.0	80.3	61.0	43.4	27.3	20.9
132.5°	121.3	120.5	121.3	119.7	109.2	92.4	73.9	57.8	38.5	24.1	18.5
135°	113.2	113.2	116.4	114.0	102.0	83.5	67.5	53.0	33.7	20.9	16.1
137.5°	119.7	118.9	116.4	106.0	90.7	73.9	60.2	46.6	28.9	17.7	14.5
140°	117.2	116.4	109.2	95.6	78.7	65.0	53.0	40.2	24.1	15.3	12.0
142.5°	102.8	102.0	94.8	81.9	67.5	56.2	46.6	33.7	20.1	12.0	9.6
145°	82.7	82.7	76.3	67.5	57.0	48.2	40.2	26.5	15.3	9.6	7.2
147.5°	65.0	64.2	61.0	55.4	47.4	41.8	32.9	21.7	12.0	8.0	6.4
150°	53.0	52.2	49.0	45.0	40.2	35.3	25.7	16.1	8.8	6.4	5.6
152.5°	42.6	41.8	40.2	36.9	33.7	27.3	19.3	11.2	7.2	5.6	4.8
155°	33.7	33.7	32.1	29.7	26.5	20.9	13.7	8.0	5.6	4.8	4.0
157.5°	26.5	26.5	24.9	22.5	19.3	14.5	9.6	6.4	4.8	4.0	4.0
160°	20.1	20.1	18.5	16.9	12.8	9.6	6.4	5.6	4.8	4.0	3.2
162.5°	14.5	13.7	12.8	11.2	8.0	7.2	5.6	4.8	4.0	3.2	3.2
165°	9.6	8.8	8.0	6.4	5.6	5.6	4.8	4.0	4.0	3.2	3.2
167.5°	5.6	4.8	4.8	4.8	4.8	4.0	4.0	4.0	4.0	3.2	3.2
170°	2.4	2.4	2.4	3.2	4.0	4.0	4.0	4.0	4.0	3.2	3.2
172.5°	0.8	0.8	1.6	2.4	3.2	4.0	4.0	4.0	4.0	3.2	3.2
175°	0.0	0.8	1.6	2.4	3.2	4.0	4.0	4.0	4.0	3.2	2.4
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°	3507.7	3507.7	3507.7	3507.7	3507.7	3507.7	3507.7	3507.7	3507.7	3507.7
2.5°	3514.9	3535.8	3522.1	3467.5	3384.0	3323.8	3250.7	3208.2	3202.5	3204.1
5°	3519.7	3478.0	3281.2	3108.6	2968.9	2780.9	2689.4	2608.3	2593.8	2597.0
7.5°	3519.7	3318.2	3039.5	2703.8	2490.2	2319.2	2235.7	2184.3	2165.0	2149.7
10°	3494.0	3131.9	2729.5	2384.2	2192.3	2067.8	1936.1	1832.5	1761.1	1767.5
12.5°	3424.2	2960.8	2452.5	2162.6	1954.6	1689.6	1439.1	1275.2	1203.0	1194.9
15°	3310.1	2740.8	2237.3	1966.7	1578.8	1222.2	1040.7	934.7	898.6	892.2
17.5°	3179.3	2547.3	2074.3	1652.7	1186.1	942.0	795.8	706.7	664.1	659.3
20°	3038.7	2324.0	1878.3	1314.6	930.7	728.4	626.4	571.0	549.3	550.9
22.5°	2902.2	2146.5	1627.8	1044.0	738.0	599.1	534.0	507.5	491.5	485.8
25°	2763.3	1989.9	1380.4	832.8	611.1	521.2	473.8	449.7	432.0	428.0
27.5°	2617.9	1845.4	1141.1	687.4	534.8	464.2	428.0	400.7	384.7	380.6
30°	2467.8	1688.0	946.0	590.2	473.0	418.4	385.5	363.0	353.3	353.3
32.5°	2331.2	1514.5	784.6	517.2	424.8	381.4	353.3	338.1	330.1	328.4
35°	2181.9	1333.1	664.9	464.2	388.7	347.7	324.4	307.6	293.9	293.9
37.5°	2028.5	1160.4	573.4	417.6	355.7	318.8	293.9	276.2	266.6	265.8
40°	1868.7	995.8	506.7	377.4	323.6	290.7	265.8	245.7	233.7	232.9
42.5°	1699.2	854.4	449.7	340.5	294.7	261.8	232.9	207.2	194.3	191.9
45°	1530.6	731.6	402.3	307.6	264.2	228.1	193.5	168.6	155.8	155.0
47.5°	1366.8	625.6	360.6	277.1	233.7	193.5	157.4	132.5	120.5	118.9
50°	1215.0	534.0	322.8	251.4	203.2	159.8	124.5	102.8	94.8	94.0
51°	1162.0	504.3	308.4	241.7	191.9	146.2	111.6	92.4	84.3	83.5
52.5°	1088.1	465.0	289.1	227.3	173.5	129.3	96.4	78.7	69.9	69.1
55°	963.7	404.7	262.6	201.6	144.5	102.0	73.1	57.8	48.2	47.4
57.5°	845.6	358.2	240.1	175.9	118.0	77.9	51.4	37.7	31.3	30.5
60°	724.3	318.0	220.0	151.0	94.8	56.2	32.1	20.9	16.1	15.3
62.5°	610.3	281.1	198.4	127.7	72.3	37.7	16.1	5.6	5.6	5.6
65°	508.3	248.1	175.9	105.2	52.2	21.7	3.2	0.0	0.0	0.0
67.5°	416.8	220.8	152.6	85.1	35.3	6.4	0.0	0.0	0.0	0.0
70°	337.3	192.7	130.9	66.7	20.1	0.0	0.0	0.0	0.0	0.0
72.5°	269.8	163.8	110.0	49.8	8.8	0.0	0.0	0.0	0.0	0.0
75°	210.4	138.1	89.9	35.3	1.6	0.0	0.0	0.0	0.0	0.0
77.5°	163.0	114.0	72.3	24.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	124.5	93.2	55.4	15.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	92.4	73.9	42.6	9.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	66.7	57.8	32.9	6.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	49.0	46.6	25.7	4.8	0.0	0.0	0.0	0.0	0.0	0.0
90°	39.3	37.7	20.1	3.2	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	34.5	31.3	16.9	2.4	0.0	0.0	0.0	0.0	0.0	0.0
95°	32.9	27.3	12.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	32.1	24.1	11.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0
100°	32.1	21.7	9.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	32.1	19.3	8.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
105°	32.1	17.7	8.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	32.1	16.9	6.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P979157  
 CATALOG NUMBER: WPMLD26S-70W-6500K

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	32.1	16.1	5.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	31.3	15.3	4.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
115°	30.5	13.7	4.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	28.1	12.0	4.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
120°	24.9	10.4	3.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	22.5	9.6	3.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0
125°	20.1	8.0	3.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	17.7	7.2	2.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0
130°	15.3	6.4	2.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	13.7	6.4	2.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0
135°	12.0	5.6	2.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	10.4	4.8	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
140°	8.8	4.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	7.2	3.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	6.4	3.2	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	5.6	3.2	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
150°	4.8	2.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	4.0	2.4	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
155°	3.2	2.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	3.2	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	2.4	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	2.4	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.4	1.6	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	2.4	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	2.4	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	2.4	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	2.4	1.6	0.8	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

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

Report Prepared for

Cooper Lighting Solutions

Lumark

Report Number: SP1-2407-168-5

Test Date: 08/08/2024

Luminaire Tested: LSDL-92S-100W 6500k

Data in this report applies to families of products including LSDL-92S-100W 6500k.

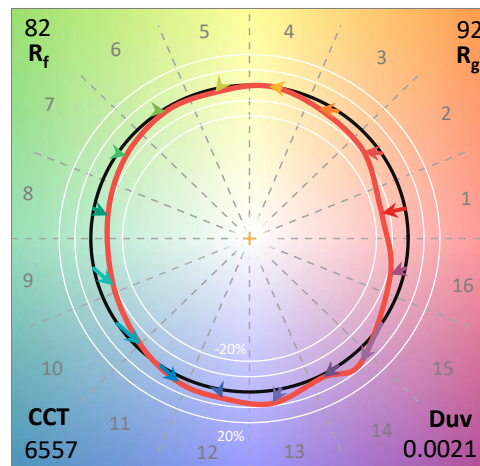
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-168-5  
 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 6500k**  
 Description: Lumark Wallpack 100W

**Spectral Parameters**

CCT (K): 6557  
 CIE u': 0.1985  
 CIE v': 0.4668  
 Duv: 0.0021  
 CIE x: 0.3121  
 CIE y: 0.3263  
 CIE z: 0.3616  
 Peak Wavelength (nm): 453  
 Dominant Wavelength (nm): 487  
 Purity: 7.689333  
 Rf: 81.6  
 Rg: 92.3

CRI (Ra):	82.1		
R1:	80.1	R9:	-3.7
R2:	89.1	R10:	72.9
R3:	92.6	R11:	78.9
R4:	79.9	R12:	57.0
R5:	80.7	R13:	83.1
R6:	82.7	R14:	96.5
R7:	86.0	R15:	74.6
R8:	65.5		



**Test Conditions**

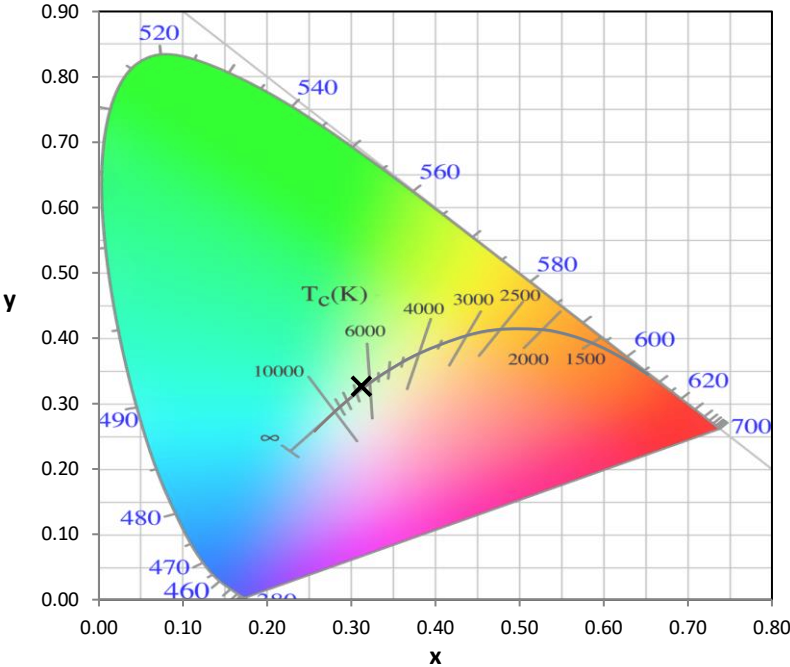
Stabilization Time: 20M  
 Operation Time: 1H 20M  
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2407-168-5

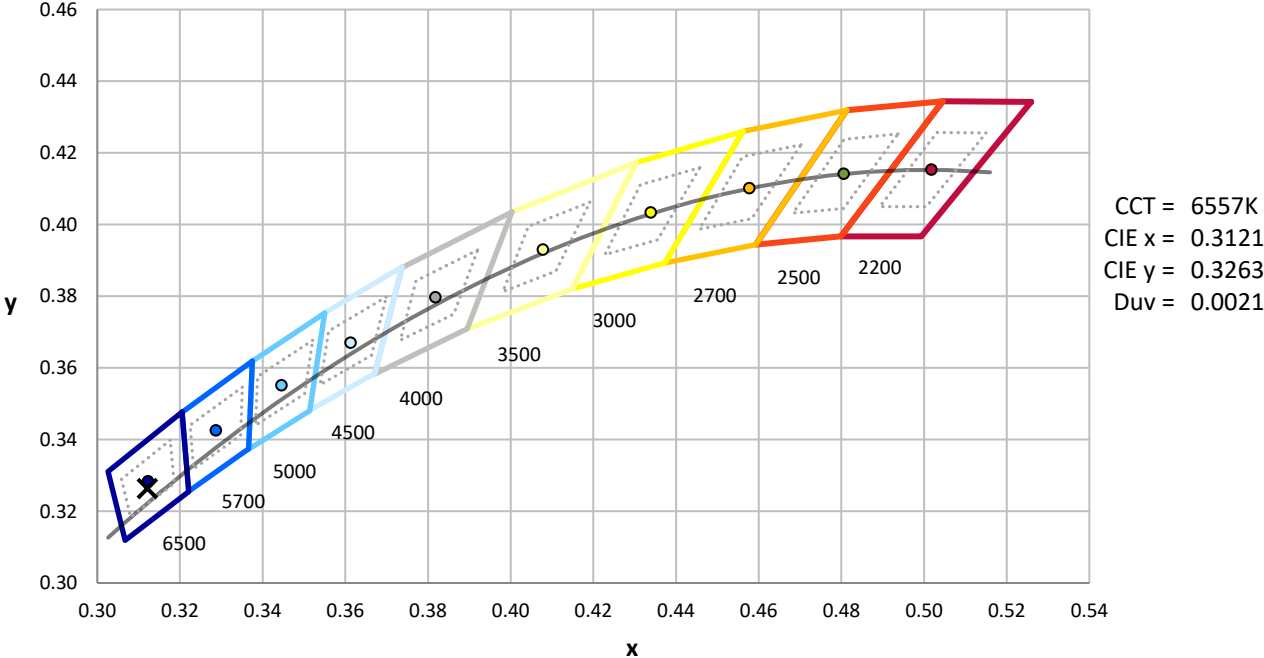
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



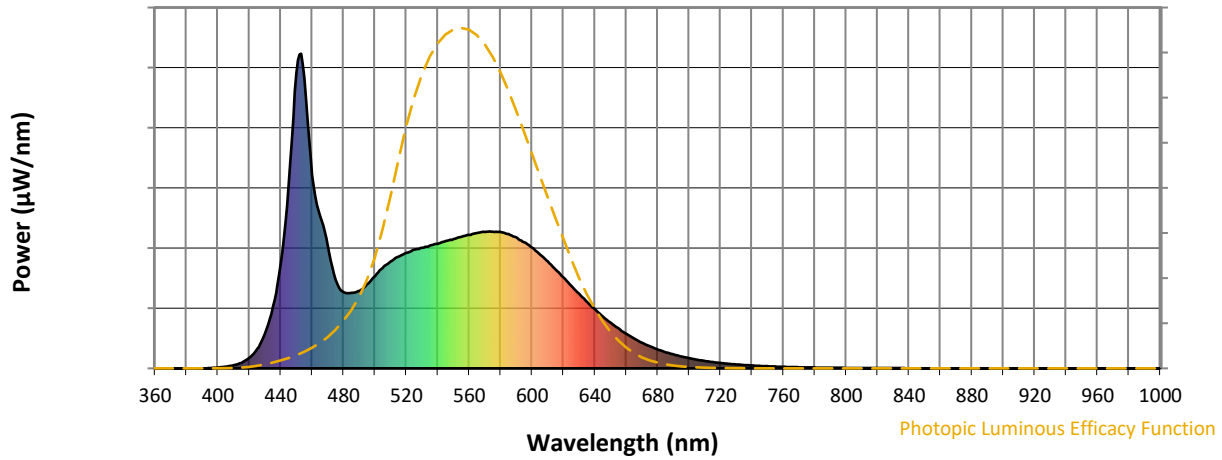
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 6500K 4-step quadrangle

REPORT NUMBER: SP1-2407-168-5

**Photopic Flux vs. Wavelength**

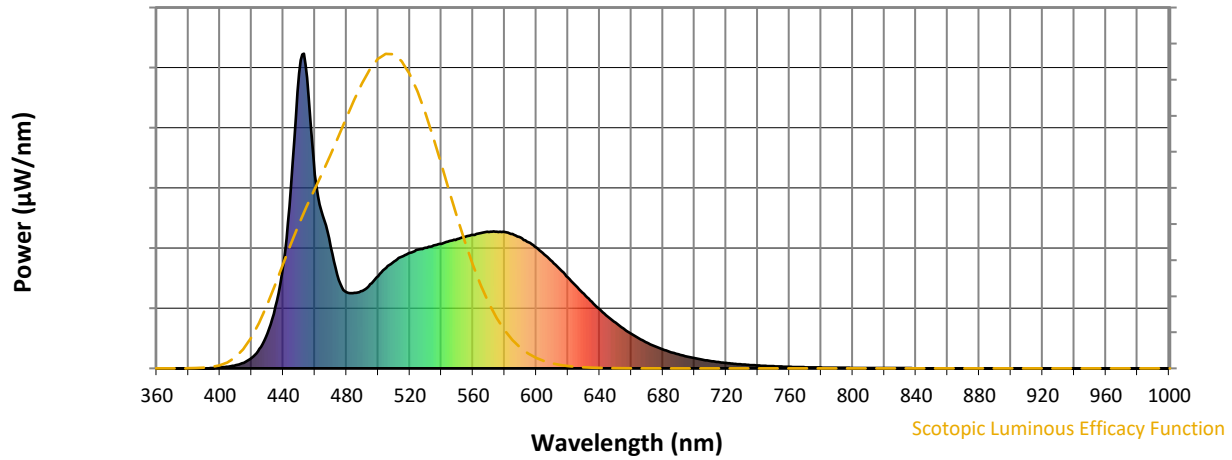


**Photopic Lumens: NR**

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	246	NR	620	288	NR	750	7	NR	880	0	NR
365	0	NR	495	267	NR	625	262	NR	755	6	NR	885	0	NR
370	0	NR	500	293	NR	630	237	NR	760	5	NR	890	0	NR
375	0	NR	505	319	NR	635	211	NR	765	4	NR	895	0	NR
380	0	NR	510	339	NR	640	188	NR	770	4	NR	900	0	NR
385	0	NR	515	355	NR	645	165	NR	775	3	NR	905	0	NR
390	0	NR	520	367	NR	650	145	NR	780	3	NR	910	0	NR
395	1	NR	525	377	NR	655	127	NR	785	2	NR	915	0	NR
400	3	NR	530	384	NR	660	110	NR	790	2	NR	920	0	NR
405	5	NR	535	391	NR	665	95	NR	795	2	NR	925	0	NR
410	10	NR	540	396	NR	670	81	NR	800	1	NR	930	0	NR
415	18	NR	545	405	NR	675	70	NR	805	1	NR	935	0	NR
420	33	NR	550	411	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	418	NR	685	51	NR	815	1	NR	945	0	NR
430	111	NR	560	425	NR	690	44	NR	820	1	NR	950	0	NR
435	196	NR	565	430	NR	695	38	NR	825	1	NR	955	0	NR
440	331	NR	570	434	NR	700	32	NR	830	1	NR	960	0	NR
445	583	NR	575	434	NR	705	28	NR	835	1	NR	965	0	NR
450	937	NR	580	433	NR	710	23	NR	840	1	NR	970	0	NR
455	923	NR	585	427	NR	715	20	NR	845	0	NR	975	0	NR
460	616	NR	590	416	NR	720	17	NR	850	0	NR	980	0	NR
465	485	NR	595	401	NR	725	15	NR	855	0	NR	985	0	NR
470	386	NR	600	384	NR	730	13	NR	860	0	NR	990	0	NR
475	280	NR	605	362	NR	735	11	NR	865	0	NR	995	0	NR
480	242	NR	610	339	NR	740	9	NR	870	0	NR	1000	0	NR
485	240	NR	615	314	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2407-168-5

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

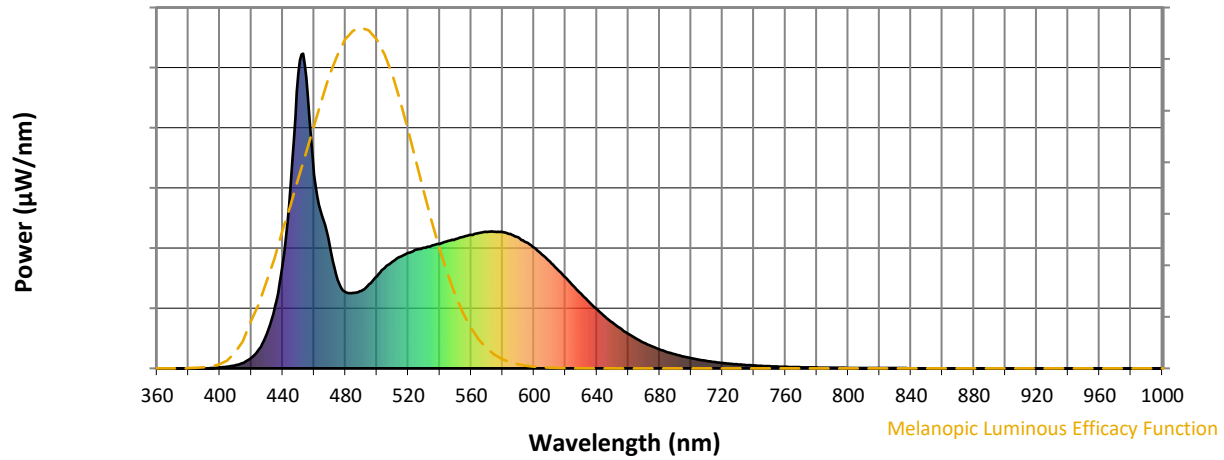
**S/P: 2.27**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)
360	0	NR	490	246	NR	620	288	NR	750	7	NR	880	0	NR
365	0	NR	495	267	NR	625	262	NR	755	6	NR	885	0	NR
370	0	NR	500	293	NR	630	237	NR	760	5	NR	890	0	NR
375	0	NR	505	319	NR	635	211	NR	765	4	NR	895	0	NR
380	0	NR	510	339	NR	640	188	NR	770	4	NR	900	0	NR
385	0	NR	515	355	NR	645	165	NR	775	3	NR	905	0	NR
390	0	NR	520	367	NR	650	145	NR	780	3	NR	910	0	NR
395	1	NR	525	377	NR	655	127	NR	785	2	NR	915	0	NR
400	3	NR	530	384	NR	660	110	NR	790	2	NR	920	0	NR
405	5	NR	535	391	NR	665	95	NR	795	2	NR	925	0	NR
410	10	NR	540	396	NR	670	81	NR	800	1	NR	930	0	NR
415	18	NR	545	405	NR	675	70	NR	805	1	NR	935	0	NR
420	33	NR	550	411	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	418	NR	685	51	NR	815	1	NR	945	0	NR
430	111	NR	560	425	NR	690	44	NR	820	1	NR	950	0	NR
435	196	NR	565	430	NR	695	38	NR	825	1	NR	955	0	NR
440	331	NR	570	434	NR	700	32	NR	830	1	NR	960	0	NR
445	583	NR	575	434	NR	705	28	NR	835	1	NR	965	0	NR
450	937	NR	580	433	NR	710	23	NR	840	1	NR	970	0	NR
455	923	NR	585	427	NR	715	20	NR	845	0	NR	975	0	NR
460	616	NR	590	416	NR	720	17	NR	850	0	NR	980	0	NR
465	485	NR	595	401	NR	725	15	NR	855	0	NR	985	0	NR
470	386	NR	600	384	NR	730	13	NR	860	0	NR	990	0	NR
475	280	NR	605	362	NR	735	11	NR	865	0	NR	995	0	NR
480	242	NR	610	339	NR	740	9	NR	870	0	NR	1000	0	NR
485	240	NR	615	314	NR	745	8	NR	875	0	NR			



REPORT NUMBER: SP1-2407-168-5

Melanopic Flux vs. Wavelength



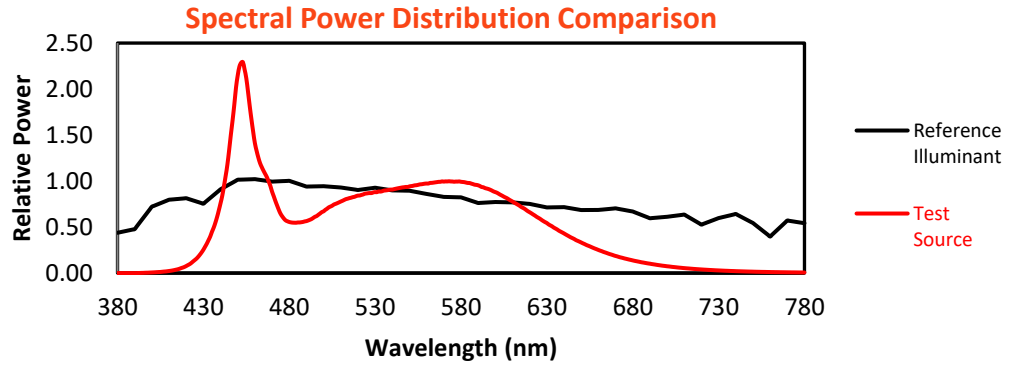
Melanopic Lumens: NR

M/P: 5.06

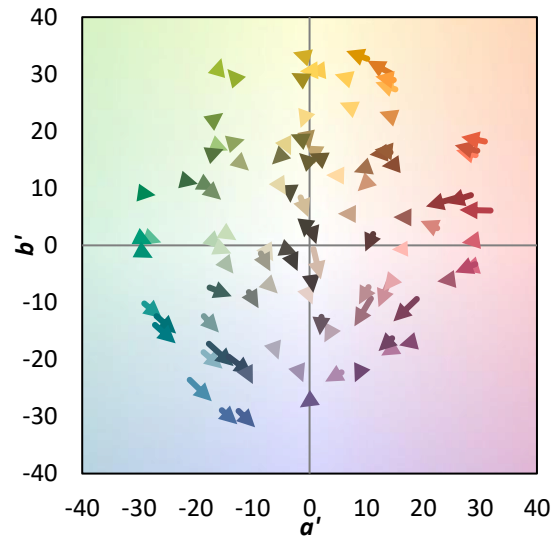
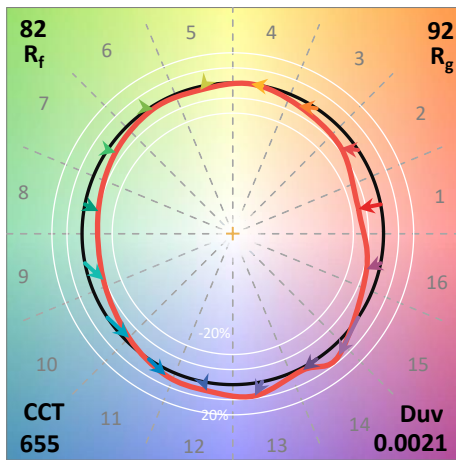
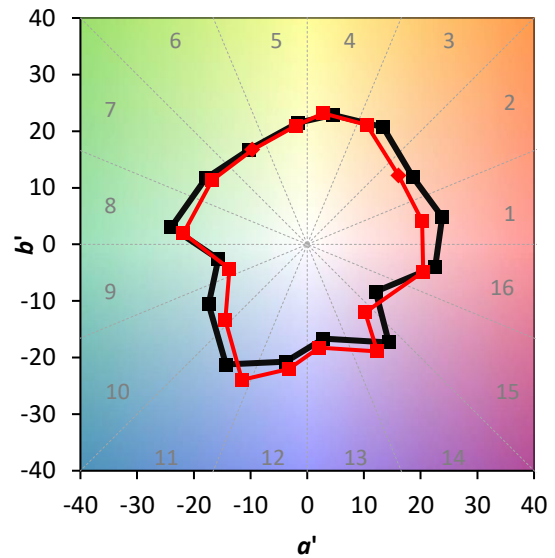
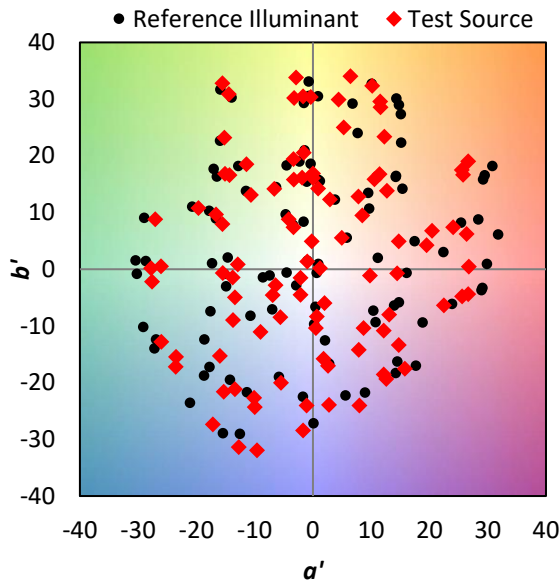
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	246	NR	620	288	NR	750	7	NR	880	0	NR
365	0	NR	495	267	NR	625	262	NR	755	6	NR	885	0	NR
370	0	NR	500	293	NR	630	237	NR	760	5	NR	890	0	NR
375	0	NR	505	319	NR	635	211	NR	765	4	NR	895	0	NR
380	0	NR	510	339	NR	640	188	NR	770	4	NR	900	0	NR
385	0	NR	515	355	NR	645	165	NR	775	3	NR	905	0	NR
390	0	NR	520	367	NR	650	145	NR	780	3	NR	910	0	NR
395	1	NR	525	377	NR	655	127	NR	785	2	NR	915	0	NR
400	3	NR	530	384	NR	660	110	NR	790	2	NR	920	0	NR
405	5	NR	535	391	NR	665	95	NR	795	2	NR	925	0	NR
410	10	NR	540	396	NR	670	81	NR	800	1	NR	930	0	NR
415	18	NR	545	405	NR	675	70	NR	805	1	NR	935	0	NR
420	33	NR	550	411	NR	680	60	NR	810	1	NR	940	0	NR
425	62	NR	555	418	NR	685	51	NR	815	1	NR	945	0	NR
430	111	NR	560	425	NR	690	44	NR	820	1	NR	950	0	NR
435	196	NR	565	430	NR	695	38	NR	825	1	NR	955	0	NR
440	331	NR	570	434	NR	700	32	NR	830	1	NR	960	0	NR
445	583	NR	575	434	NR	705	28	NR	835	1	NR	965	0	NR
450	937	NR	580	433	NR	710	23	NR	840	1	NR	970	0	NR
455	923	NR	585	427	NR	715	20	NR	845	0	NR	975	0	NR
460	616	NR	590	416	NR	720	17	NR	850	0	NR	980	0	NR
465	485	NR	595	401	NR	725	15	NR	855	0	NR	985	0	NR
470	386	NR	600	384	NR	730	13	NR	860	0	NR	990	0	NR
475	280	NR	605	362	NR	735	11	NR	865	0	NR	995	0	NR
480	242	NR	610	339	NR	740	9	NR	870	0	NR	1000	0	NR
485	240	NR	615	314	NR	745	8	NR	875	0	NR			

**Summary**

$R_f = 81.6$   
 $R_g = 92.3$   
 $CIE R_a = 82.1$   
 $R_9 = -3.7$

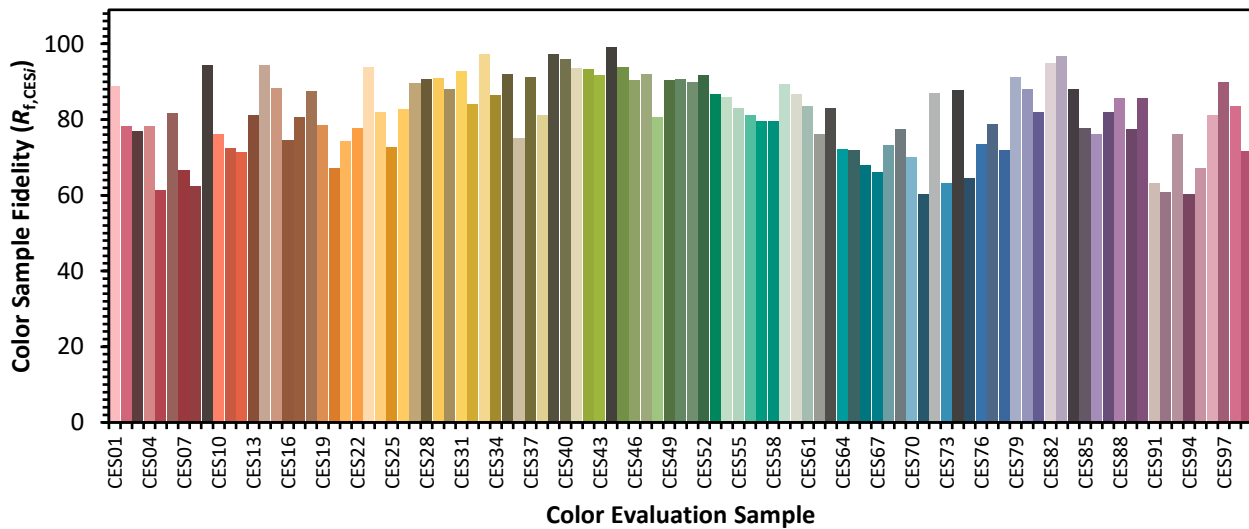


**Color Vector Graphics**

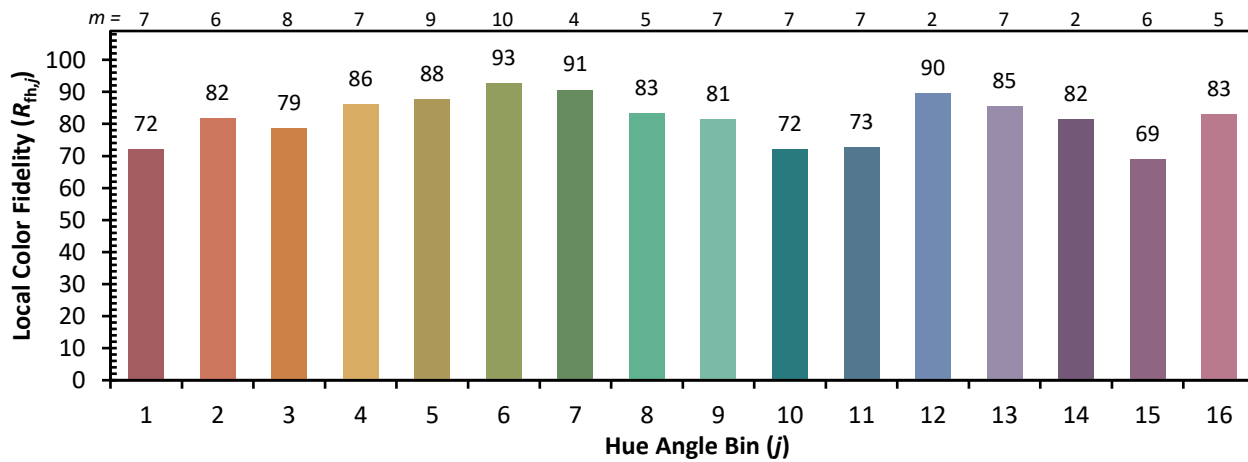
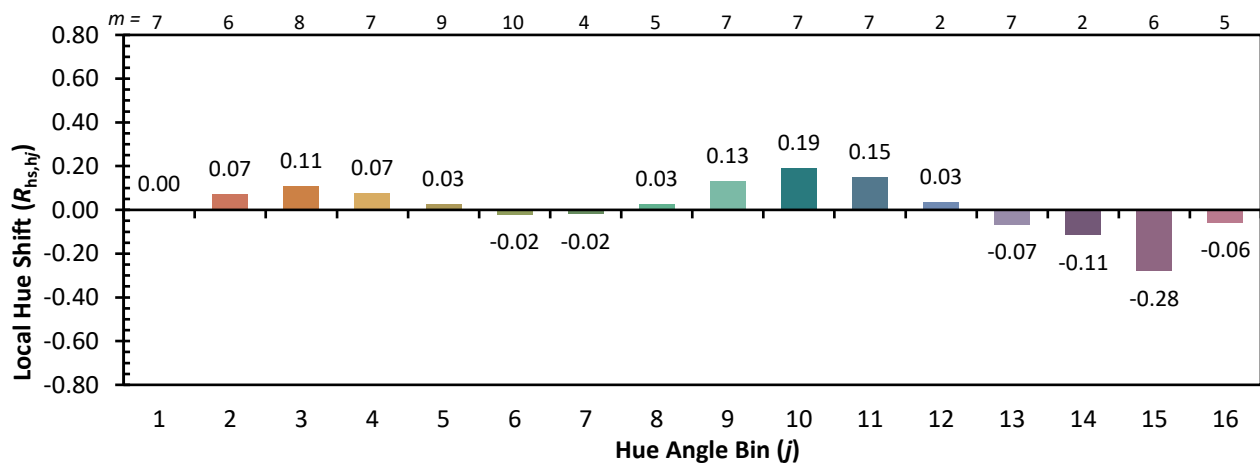
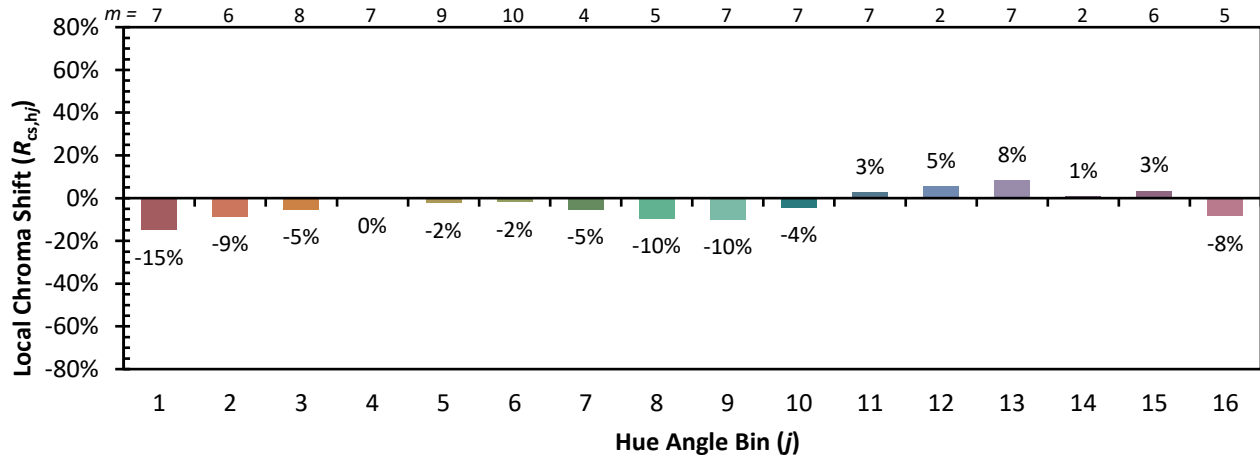


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

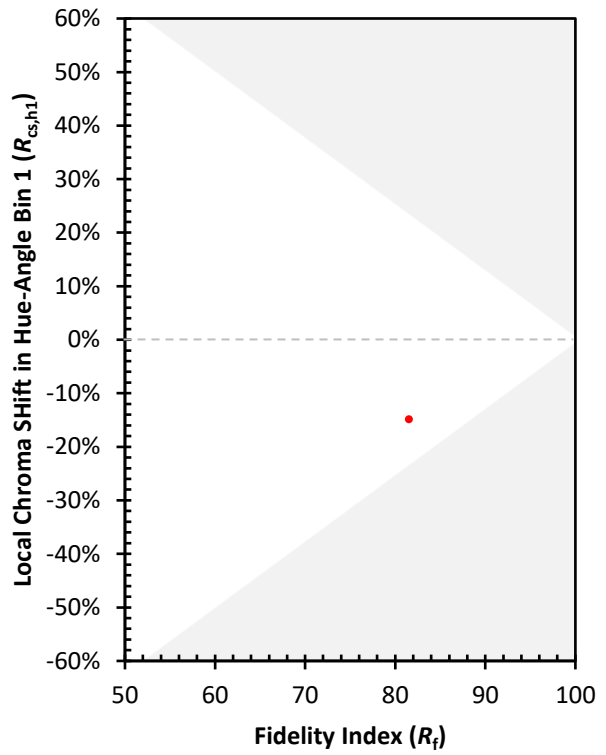
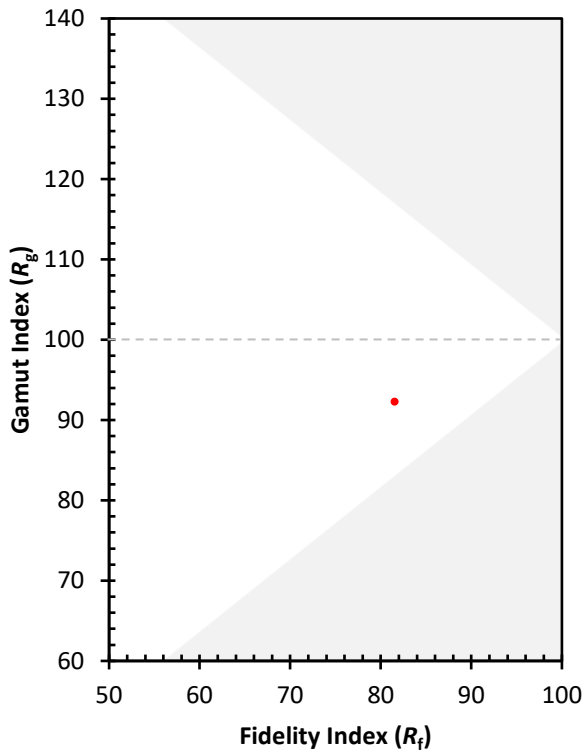
CES01 = 85	CES26 = 83	CES51 = 90	CES76 = 74
CES02 = 59	CES27 = 90	CES52 = 92	CES77 = 79
CES03 = 30	CES28 = 91	CES53 = 87	CES78 = 72
CES04 = 68	CES29 = 91	CES54 = 86	CES79 = 91
CES05 = 45	CES30 = 88	CES55 = 83	CES80 = 88
CES06 = 49	CES31 = 93	CES56 = 81	CES81 = 82
CES07 = 38	CES32 = 84	CES57 = 80	CES82 = 95
CES08 = 38	CES33 = 97	CES58 = 80	CES83 = 97
CES09 = 29	CES34 = 86	CES59 = 89	CES84 = 88
CES10 = 72	CES35 = 92	CES60 = 87	CES85 = 78
CES11 = 55	CES36 = 75	CES61 = 83	CES86 = 76
CES12 = 60	CES37 = 91	CES62 = 76	CES87 = 82
CES13 = 41	CES38 = 81	CES63 = 83	CES88 = 86
CES14 = 74	CES39 = 97	CES64 = 72	CES89 = 77
CES15 = 70	CES40 = 96	CES65 = 72	CES90 = 86
CES16 = 45	CES41 = 93	CES66 = 68	CES91 = 63
CES17 = 48	CES42 = 93	CES67 = 66	CES92 = 61
CES18 = 55	CES43 = 92	CES68 = 73	CES93 = 76
CES19 = 70	CES44 = 99	CES69 = 77	CES94 = 60
CES20 = 63	CES45 = 94	CES70 = 70	CES95 = 67
CES21 = 84	CES46 = 90	CES71 = 60	CES96 = 81
CES22 = 76	CES47 = 92	CES72 = 87	CES97 = 90
CES23 = 91	CES48 = 81	CES73 = 63	CES98 = 83
CES24 = 90	CES49 = 90	CES74 = 88	CES99 = 72
CES25 = 70	CES50 = 91	CES75 = 65	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)