

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: P979150

Luminaire Tested: **WPMLED26S-80W-4000K**

Issue Date: 03/31/2025



Test Information

Test Method: LM-79-08
Report Number: P979150
Test Lab: Cooper Lighting Solutions
Issue Date: 03/31/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: WPMLD26S-80W-4000K
Description: LUMARK WALL PACK LED MEDIUM 80CRI CCT AND LUMEN SELECTIVE FIXTURE
OPERATING @80W-4000K
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

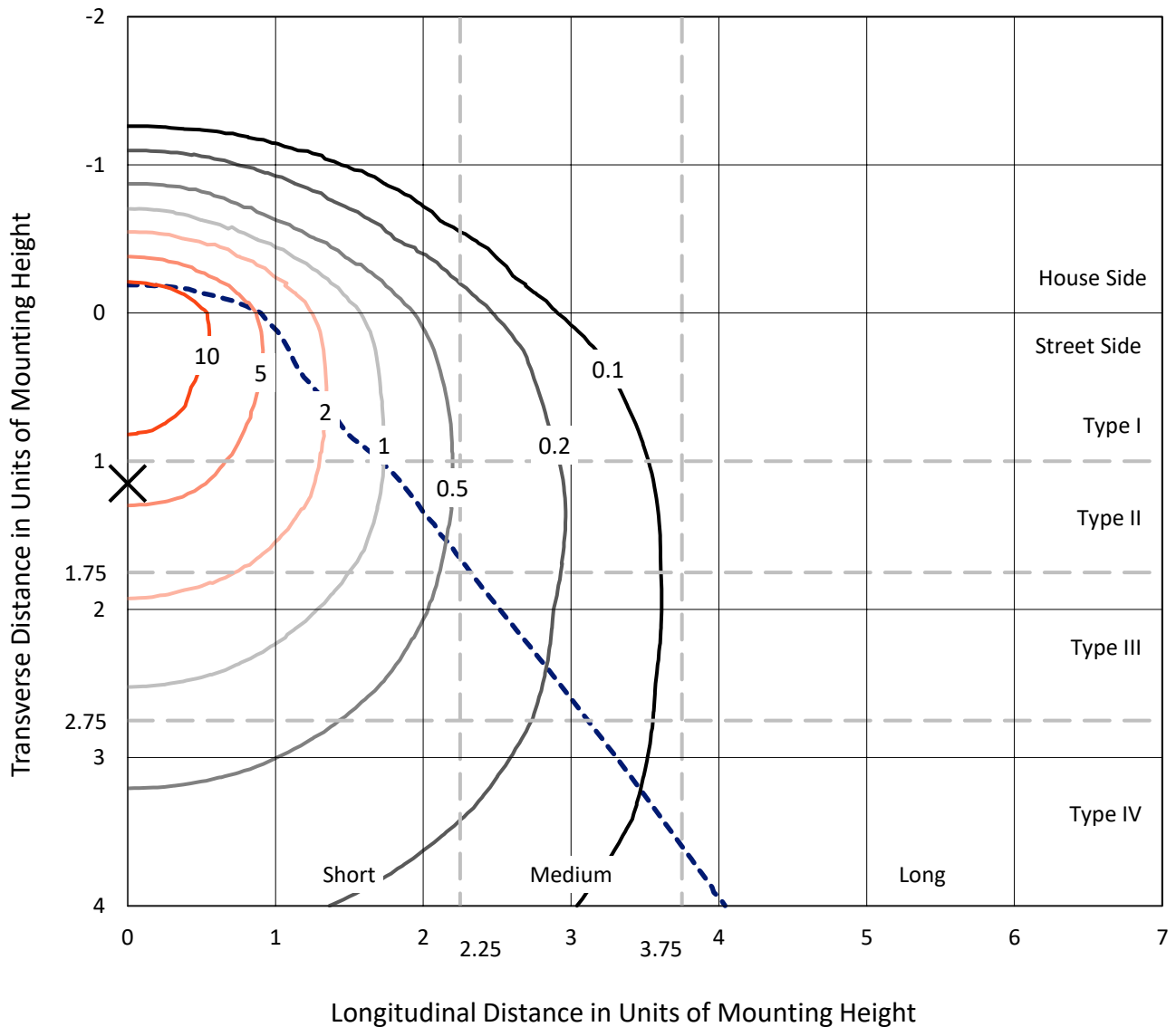
Lumens per Lamp: N/A
Luminaire Lumens: 12792.2 lumens
Efficiency: N/A
Efficacy: 157.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.86' x L: 0.17' x H: 0.58')
IES Classification: Type IV - Short
BUG Rating: B2 - U4 - G5

Input Watts (W): 81.1
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

REPORT NUMBER: P979150
 CATALOG NUMBER: WPMLED26S-80W-4000K

Iso-Footcandle Lines of Horizontal Illumination

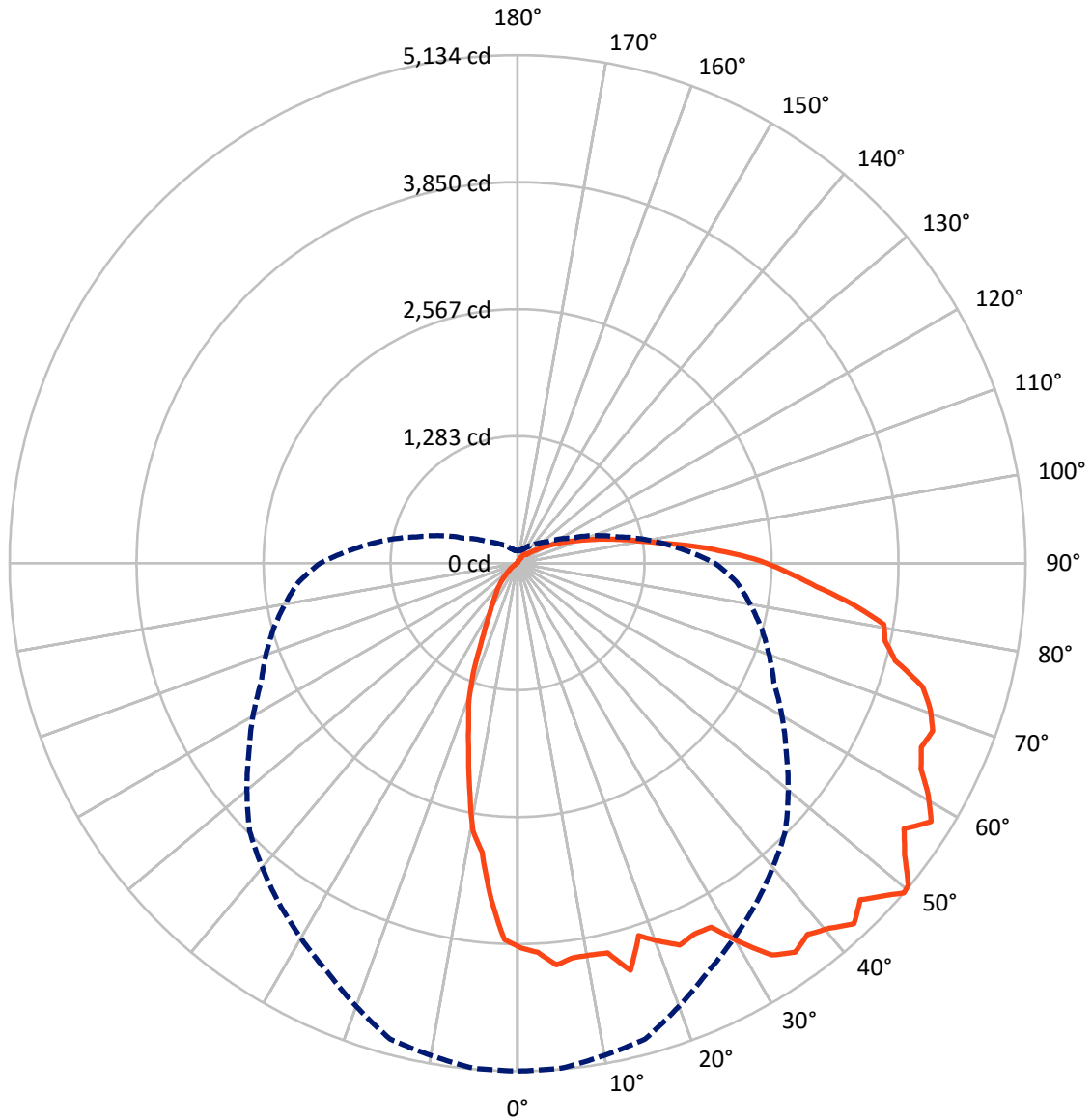
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 17.5 fc
 Type IV - Short - N/A

REPORT NUMBER: P979150
CATALOG NUMBER: WPMLED26S-80W-4000K

Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 49-Deg Vertical

REPORT NUMBER: P979150
 CATALOG NUMBER: WPMLLED26S-80W-4000K

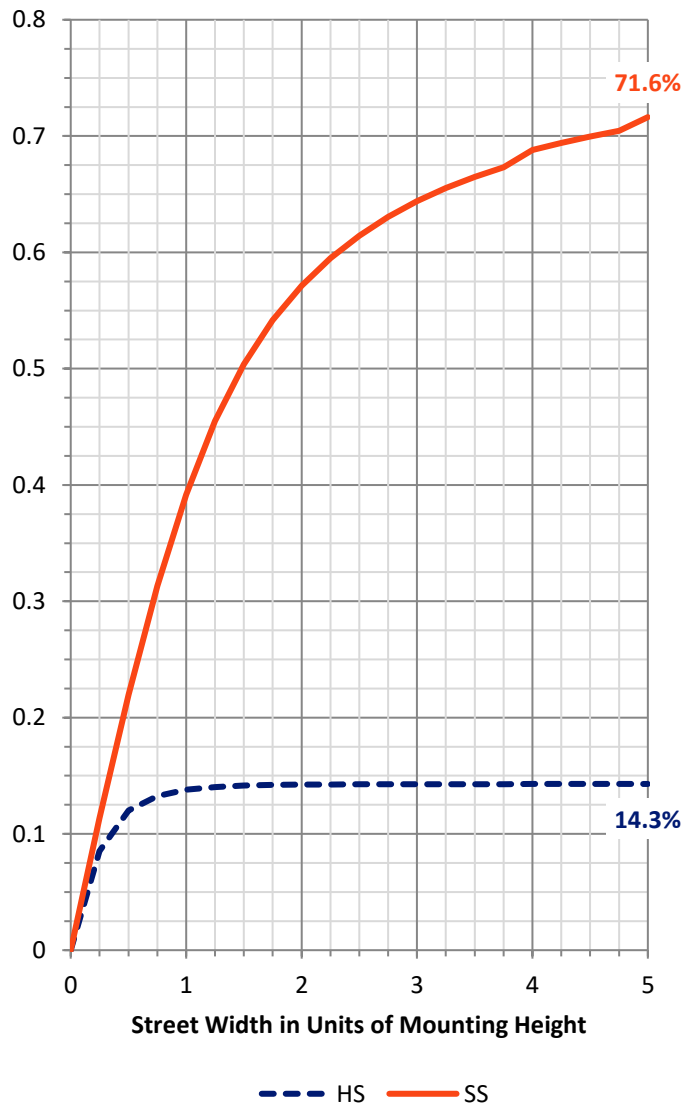
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1849.5	17.6	1867.1
	% Fixture	14.5	0.1	14.6
Street Side	Lumens	9875.7	1049.4	10925.1
	% Fixture	77.2	8.2	85.4
Total	Lumens	11725.1	1067.0	12792.2
	% Fixture	91.7	8.3	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	356.6	2.8
10°-20°	937.5	7.3
20°-30°	1303.4	10.2
30°-40°	1565.0	12.2
40°-50°	1726.7	13.5
50°-60°	1750.3	13.7
60°-70°	1648.3	12.9
70°-80°	1422.2	11.1
80°-90°	1015.1	7.9
90°-100°	551.4	4.3
100°-110°	266.3	2.1
110°-120°	130.7	1.0
120°-130°	63.0	0.5
130°-140°	33.0	0.3
140°-150°	16.3	0.1
150°-160°	5.1	0.0
160°-170°	1.0	0.0
170°-180°	0.1	0.0
0°-90°	11725.1	91.7
0°-180°	12792.2	100.0

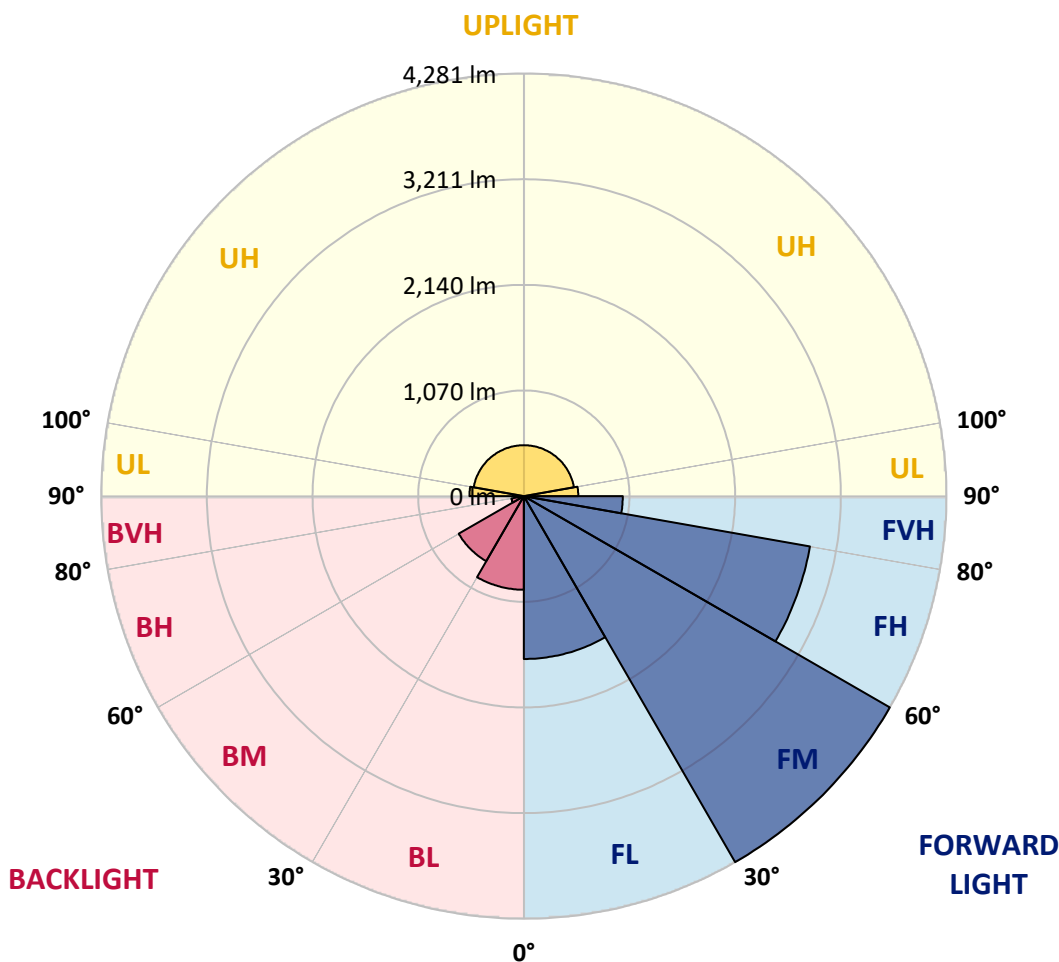


REPORT NUMBER: P979150
 CATALOG NUMBER: WPMLED26S-80W-4000K

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1649.7	12.9			
FM (30°-60°)	4280.8	33.5			
FH (60°-80°)	2942.9	23.0			G2/5000
FVH (80°-90°)	1002.2	7.8			G5
BL (0°-30°)	947.8	7.4	B2/1000		
BM (30°-60°)	761.1	5.9	B1/1000		
BH (60°-80°)	127.6	1.0	B1/500		G1/500
BVH (80°-90°)	12.9	0.1			G1/100
UL (90°-100°)	551.4	4.3		U4/1000	
UH (100°-180°)	515.6	4.0		U4/1000	

BUG Rating: B2-U4-G5
 Type IV Short





REPORT NUMBER: P979150

CATALOG NUMBER: WPMLED26S-80W-4000K

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3887.9	3887.9	3887.9	3887.9	3887.9	3887.9	3887.9	3887.9	3887.9	3887.9	3887.9
2.5°	3939.4	3938.5	3943.0	3925.2	3928.8	3946.5	3961.6	3947.4	3898.5	3877.2	3894.1
5°	4079.8	4079.8	4078.9	4095.8	4062.0	4004.3	3951.9	3917.2	3944.7	3869.2	3877.2
7.5°	4026.5	4036.3	4054.0	4088.7	4093.1	4073.6	4065.6	3936.8	3906.5	3869.2	3863.9
10°	4027.4	4022.0	4007.8	3981.2	4011.4	4032.7	4064.7	4033.6	3899.4	3869.2	3848.8
12.5°	4043.4	4042.5	4011.4	3991.8	3983.0	3953.6	4011.4	4015.8	3903.9	3839.9	3793.7
15°	4270.8	4261.0	4274.4	4137.5	4006.9	3954.5	3928.8	3989.2	3923.4	3802.6	3754.6
17.5°	3958.1	3971.4	4001.6	4137.5	4206.0	3982.1	3870.1	3889.7	3882.6	3745.7	3687.1
20°	4078.0	4062.0	3968.7	3897.7	4021.2	4137.5	3838.1	3762.6	3785.7	3658.7	3600.9
22.5°	4193.5	4181.1	4142.9	4091.3	3864.8	3982.1	3915.4	3680.0	3703.1	3569.8	3505.0
25°	4151.8	4154.4	4158.9	4160.6	4067.4	3778.6	3954.5	3618.7	3633.8	3468.5	3419.7
27.5°	4166.9	4143.8	4092.2	4095.8	4078.0	3846.1	3752.8	3589.4	3529.0	3360.1	3317.5
30°	4450.3	4437.8	4361.4	4110.0	3983.8	3873.7	3577.8	3635.6	3385.0	3265.1	3209.1
32.5°	4723.9	4723.0	4620.9	4337.4	3961.6	3836.4	3600.0	3587.6	3267.7	3168.2	3100.7
35°	4830.5	4813.7	4660.0	4536.5	4166.9	3739.5	3625.8	3444.5	3168.2	3074.1	2985.2
37.5°	4762.1	4764.8	4664.4	4541.8	4263.7	3811.5	3572.5	3262.4	3095.4	2975.4	2844.8
40°	4851.0	4839.4	4768.3	4510.7	4198.0	3893.2	3435.7	3195.8	3054.5	2843.9	2691.1
42.5°	4986.0	4986.9	4946.0	4609.3	4175.7	3868.3	3408.1	3213.5	2987.0	2692.9	2504.6
45°	4854.5	4838.5	4873.2	4640.4	4301.9	3759.1	3474.8	3136.3	2851.1	2519.7	2316.2
47.5°	5017.1	4997.6	4819.9	4619.1	4248.6	3775.1	3395.7	2952.3	2678.7	2332.2	2122.5
49°	5133.5	5123.7	4978.9	4554.2	4199.7	3828.4	3313.9	2859.1	2551.6	2222.9	1994.6
50°	5116.6	5105.1	5026.9	4662.6	4200.6	3791.9	3258.0	2801.3	2470.8	2150.1	1924.4
52.5°	4897.2	4899.8	4949.6	4743.5	4237.1	3679.1	3185.1	2743.6	2297.5	1975.0	1757.4
55°	4738.1	4739.9	4717.7	4617.3	4294.8	3672.0	3173.6	2614.7	2166.9	1824.0	1602.8
57.5°	4930.0	4920.3	4747.0	4436.1	4236.2	3725.3	3022.5	2440.6	2022.1	1699.6	1458.8
60°	4770.1	4785.2	4788.8	4496.5	4050.5	3696.0	2907.9	2288.7	1884.4	1559.2	1307.8
62.5°	4575.6	4544.5	4448.5	4381.0	4038.9	3557.4	2862.6	2249.6	1760.0	1418.0	1167.4
65°	4484.9	4484.0	4397.9	4150.9	3910.1	3442.8	2765.8	2146.5	1689.0	1278.5	1027.1
67.5°	4525.8	4519.6	4403.2	4125.1	3731.5	3313.9	2605.0	2018.6	1561.0	1155.0	876.0
70°	4424.5	4415.6	4325.0	4082.5	3688.0	3153.1	2466.4	1940.4	1402.0	1023.5	715.2
72.5°	4284.1	4285.0	4205.1	3947.4	3620.5	3055.4	2292.2	1840.9	1308.7	861.8	559.7
75°	3944.7	3971.4	3935.0	3729.7	3425.0	2912.4	2138.5	1617.0	1179.0	701.9	425.6
77.5°	3796.4	3786.6	3685.3	3478.3	3218.9	2749.8	1978.6	1426.0	1051.9	542.0	308.3
80°	3754.6	3735.1	3645.3	3351.3	3033.2	2567.6	1814.2	1262.5	892.9	406.9	217.7
82.5°	3410.8	3385.0	3316.6	3145.1	2785.3	2331.3	1622.3	1106.1	714.3	288.7	147.5
85°	3030.5	3038.5	2957.7	2755.1	2510.8	2054.1	1442.0	957.8	572.2	202.6	100.4
87.5°	2732.9	2725.8	2641.4	2447.7	2183.8	1824.9	1237.6	804.9	439.8	137.7	65.7
90°	2460.1	2461.0	2363.3	2182.9	1923.5	1530.8	1042.2	652.1	333.2	94.2	48.0
92.5°	2111.9	2091.4	2001.7	1840.0	1631.2	1280.3	851.1	514.4	251.4	70.2	40.0
95°	1783.1	1776.0	1708.5	1570.8	1366.4	1074.1	701.9	414.0	199.9	58.6	40.0
97.5°	1456.2	1439.3	1397.5	1291.8	1131.9	885.8	589.0	333.2	163.5	55.1	41.8
100°	1231.4	1222.5	1157.7	1054.6	908.0	721.4	475.3	277.2	136.8	55.1	44.4
102.5°	1062.6	1063.5	1023.5	918.7	773.0	574.8	385.6	231.0	116.4	57.7	46.2
105°	904.4	903.6	862.7	784.5	658.3	483.3	324.3	194.6	102.2	59.5	47.1
107.5°	767.6	761.4	733.0	659.2	548.2	412.2	271.0	163.5	92.4	59.5	47.1



REPORT NUMBER: P979150
 CATALOG NUMBER: WPMLD26S-80W-4000K

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	647.7	647.7	615.7	544.6	451.3	345.6	230.1	141.3	87.1	58.6	47.1
112.5°	557.1	553.5	526.0	462.9	379.4	284.3	194.6	122.6	82.6	57.7	46.2
115°	463.8	462.9	438.0	384.7	314.5	239.0	166.1	108.4	79.1	56.0	44.4
117.5°	393.6	393.6	370.5	320.7	260.3	200.8	143.0	96.0	74.6	52.4	41.8
120°	337.6	334.9	316.3	269.2	219.4	170.6	124.4	88.0	70.2	48.0	38.2
122.5°	277.2	277.2	261.2	224.8	185.7	149.3	111.1	80.0	64.9	43.5	33.8
125°	228.3	228.3	213.2	187.5	158.1	130.6	99.5	72.9	57.7	38.2	30.2
127.5°	188.4	188.4	175.9	158.1	139.5	116.4	89.7	67.5	51.5	34.6	26.7
130°	155.5	153.7	147.5	137.7	124.4	104.8	81.7	63.1	46.2	30.2	24.0
132.5°	131.5	130.6	128.8	125.3	113.7	95.1	74.6	57.7	40.9	26.7	21.3
135°	119.1	119.1	121.7	118.2	104.8	85.3	67.5	52.4	36.4	24.0	18.7
137.5°	121.7	120.8	119.9	111.9	94.2	76.4	60.4	47.1	31.1	20.4	16.0
140°	122.6	120.8	114.6	101.3	81.7	66.6	53.3	40.9	25.8	16.9	13.3
142.5°	108.4	107.5	98.6	86.2	70.2	57.7	47.1	34.6	21.3	14.2	10.7
145°	88.0	87.1	80.0	70.2	58.6	48.9	40.0	28.4	16.9	10.7	8.9
147.5°	67.5	67.5	63.1	56.9	48.9	41.8	33.8	22.2	13.3	8.9	7.1
150°	54.2	53.3	51.5	46.2	40.9	35.5	26.7	16.9	9.8	7.1	6.2
152.5°	43.5	43.5	41.8	38.2	33.8	28.4	20.4	12.4	8.0	6.2	5.3
155°	34.6	34.6	32.9	30.2	27.5	21.3	14.2	8.9	6.2	5.3	4.4
157.5°	26.7	26.7	25.8	23.1	19.5	15.1	9.8	7.1	5.3	4.4	3.6
160°	20.4	20.4	19.5	16.9	14.2	9.8	7.1	5.3	4.4	3.6	3.6
162.5°	14.2	15.1	13.3	11.5	8.9	7.1	5.3	4.4	4.4	3.6	3.6
165°	9.8	9.8	8.9	7.1	6.2	5.3	4.4	3.6	3.6	3.6	2.7
167.5°	6.2	5.3	5.3	4.4	4.4	4.4	3.6	3.6	3.6	3.6	2.7
170°	2.7	2.7	2.7	3.6	3.6	3.6	3.6	3.6	3.6	3.6	2.7
172.5°	0.0	0.9	1.8	2.7	2.7	3.6	3.6	3.6	3.6	3.6	2.7
175°	0.0	0.9	1.8	2.7	3.6	3.6	3.6	3.6	3.6	3.6	2.7
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



REPORT NUMBER: P979150

CATALOG NUMBER: WPMLED26S-80W-4000K

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3887.9	3887.9	3887.9	3887.9	3887.9	3887.9	3887.9	3887.9	3887.9	3887.9
2.5°	3896.8	3908.3	3895.0	3848.8	3828.4	3815.0	3809.7	3804.4	3797.3	3806.1
5°	3905.7	3856.8	3805.3	3760.8	3684.4	3587.6	3508.5	3464.1	3427.7	3407.2
7.5°	3886.1	3812.4	3714.6	3532.5	3350.4	3185.1	3045.6	2979.9	2942.6	2942.6
10°	3854.1	3757.3	3519.2	3244.6	2993.2	2855.5	2799.5	2764.9	2742.7	2740.9
12.5°	3801.7	3641.8	3283.7	2953.2	2793.3	2687.6	2541.9	2407.7	2329.5	2326.9
15°	3721.7	3478.3	3055.4	2773.8	2611.2	2337.5	2128.7	2030.1	1992.8	1974.2
17.5°	3623.1	3292.6	2821.7	2613.0	2270.0	2014.1	1872.0	1754.7	1692.5	1688.1
20°	3535.2	3081.2	2676.0	2332.2	1982.1	1761.8	1612.5	1527.3	1483.7	1475.7
22.5°	3430.3	2907.9	2506.3	2055.0	1739.6	1539.7	1383.3	1253.6	1182.5	1193.2
25°	3292.6	2712.5	2293.1	1822.2	1524.6	1322.9	1108.8	970.2	892.0	880.5
27.5°	3162.9	2523.2	2049.7	1603.7	1322.9	1059.0	854.7	750.7	701.9	689.4
30°	3017.2	2374.0	1832.9	1413.5	1103.5	837.8	687.7	600.6	566.8	558.8
32.5°	2867.0	2206.9	1633.9	1235.8	901.8	667.2	557.1	502.9	474.4	470.0
35°	2701.8	2032.8	1454.4	1043.9	721.4	555.3	475.3	427.3	400.7	394.5
37.5°	2543.7	1851.5	1266.9	867.1	589.9	469.1	400.7	366.0	344.7	342.1
40°	2364.2	1648.1	1082.1	709.9	497.5	399.8	345.6	306.5	289.6	285.2
42.5°	2165.2	1452.6	929.3	581.1	424.7	341.2	288.7	254.1	238.1	234.6
45°	1965.3	1276.7	787.2	484.2	359.8	287.0	238.1	205.2	188.4	186.6
47.5°	1765.4	1115.9	661.0	410.5	306.5	239.0	189.2	159.0	147.5	144.8
49°	1653.4	1028.8	594.4	376.7	276.3	212.3	163.5	135.9	126.2	124.4
50°	1592.1	981.7	548.2	353.6	255.9	193.7	149.3	123.5	111.9	110.2
52.5°	1437.5	837.8	454.0	304.7	212.3	153.7	116.4	93.3	84.4	83.5
55°	1280.3	715.2	389.1	262.1	176.8	121.7	88.8	71.1	61.3	60.4
57.5°	1134.6	597.0	338.5	221.2	143.9	93.3	64.0	47.1	40.9	39.1
60°	990.6	500.2	295.9	184.8	114.6	69.3	43.5	28.4	24.0	23.1
62.5°	852.9	415.8	255.9	155.5	87.1	47.1	23.1	12.4	11.5	12.4
65°	714.3	348.3	219.4	127.0	64.9	28.4	6.2	2.7	0.9	0.0
67.5°	587.3	296.7	187.5	102.2	43.5	10.7	0.0	0.0	0.0	0.0
70°	460.2	248.8	156.4	79.1	26.7	1.8	0.0	0.0	0.0	0.0
72.5°	355.4	207.0	129.7	59.5	13.3	0.0	0.0	0.0	0.0	0.0
75°	268.3	166.1	104.8	42.6	3.6	0.0	0.0	0.0	0.0	0.0
77.5°	200.8	134.2	83.5	30.2	0.9	0.0	0.0	0.0	0.0	0.0
80°	150.1	106.6	64.9	20.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	108.4	83.5	49.8	13.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	77.3	66.6	38.2	9.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	56.9	54.2	31.1	7.1	0.0	0.0	0.0	0.0	0.0	0.0
90°	45.3	44.4	24.9	5.3	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	39.1	37.3	20.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0
95°	37.3	32.9	17.8	3.6	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	37.3	29.3	15.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0
100°	38.2	27.5	13.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	38.2	25.8	11.5	2.7	0.0	0.0	0.0	0.0	0.0	0.0
105°	39.1	24.0	10.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	38.2	22.2	8.9	1.8	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P979150
 CATALOG NUMBER: WPMLD26S-80W-4000K

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	37.3	20.4	8.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	37.3	19.5	6.2	1.8	0.0	0.0	0.0	0.0	0.0	0.0
115°	35.5	17.8	5.3	1.8	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	32.9	16.0	4.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0
120°	29.3	13.3	4.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	25.8	11.5	3.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0
125°	23.1	10.7	3.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	20.4	9.8	3.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0
130°	17.8	8.9	3.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	16.0	7.1	2.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
135°	14.2	7.1	2.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	12.4	6.2	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
140°	10.7	4.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	8.0	3.6	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
145°	7.1	3.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	6.2	3.6	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
150°	5.3	2.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	4.4	2.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	3.6	2.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	3.6	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	2.7	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	2.7	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.7	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	2.7	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	2.7	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	2.7	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	2.7	1.8	0.9	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: SP1-2407-168-3

Test Date: 08/08/2024

Luminaire Tested: LSDL-92S-100W 4000k

Data in this report applies to families of products including LSDL-92S-100W 4000k.

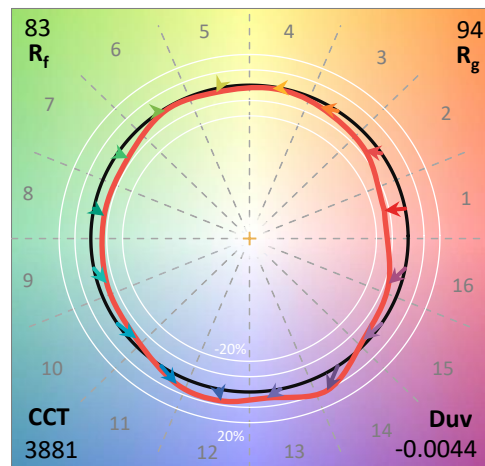
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-168-3
 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 4000k**
 Description: Lumark Wallpack 100W

Spectral Parameters

CCT (K): 3881
 CIE u': 0.2297
 CIE v': 0.4983
 Duv: -0.0044
 CIE x: 0.3825
 CIE y: 0.3688
 CIE z: 0.2487
 Peak Wavelength (nm): 453
 Dominant Wavelength (nm): 582
 Purity: 25.44833
 Rf: 82.8
 Rg: 93.7

CRI (Ra):	82.7		
R1:	82.3	R9:	4.8
R2:	93.7	R10:	84.4
R3:	93.3	R11:	77.9
R4:	79.0	R12:	66.7
R5:	82.7	R13:	85.8
R6:	89.4	R14:	97.2
R7:	81.3	R15:	76.3
R8:	59.9		



Test Conditions

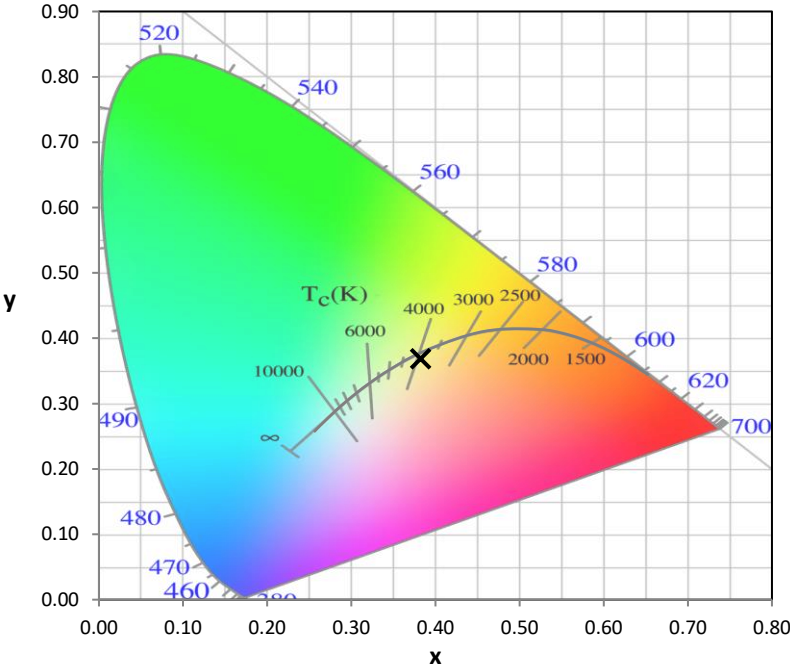
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2407-168-3

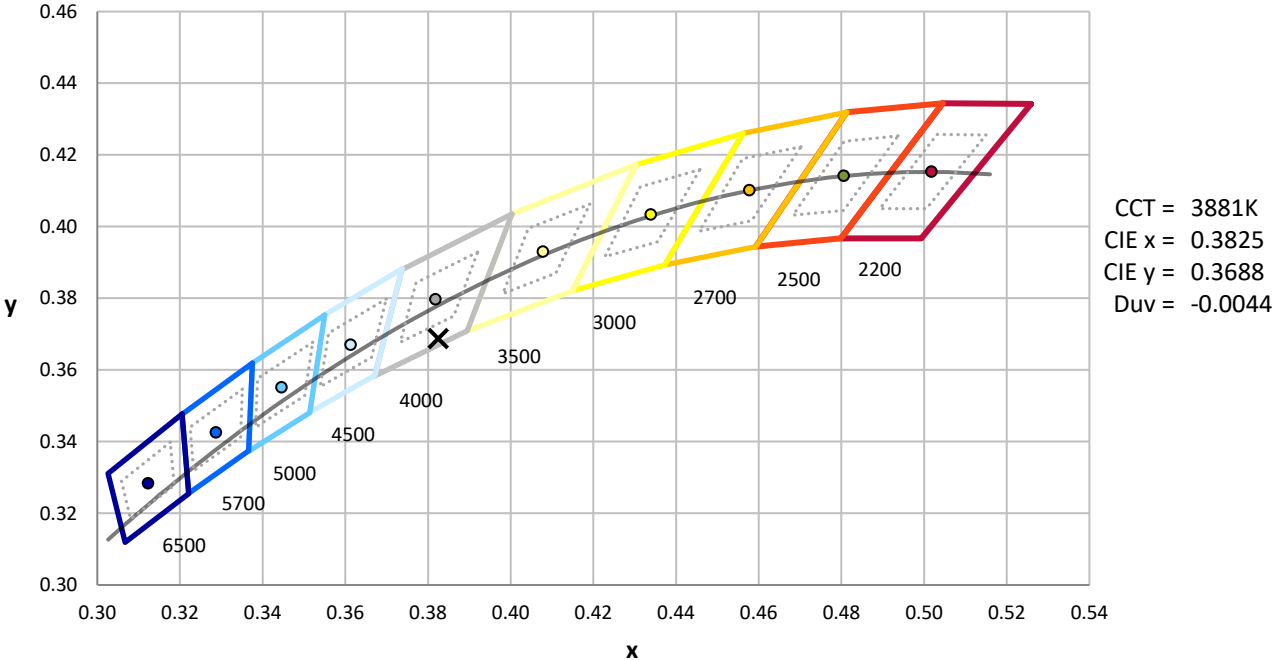
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-168-3

CIE 1931 Chromaticity Diagram



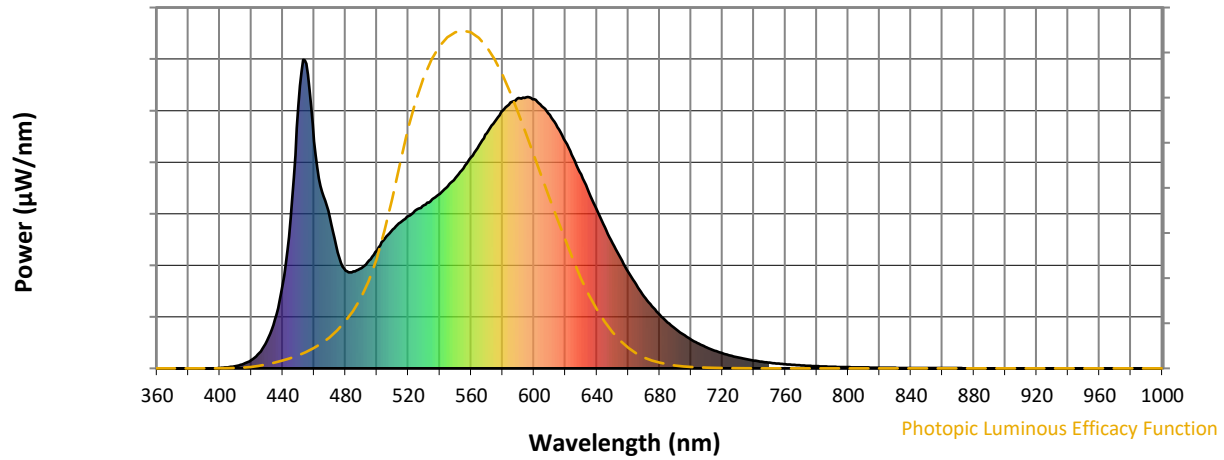
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP1-2407-168-3

Photopic Flux vs. Wavelength

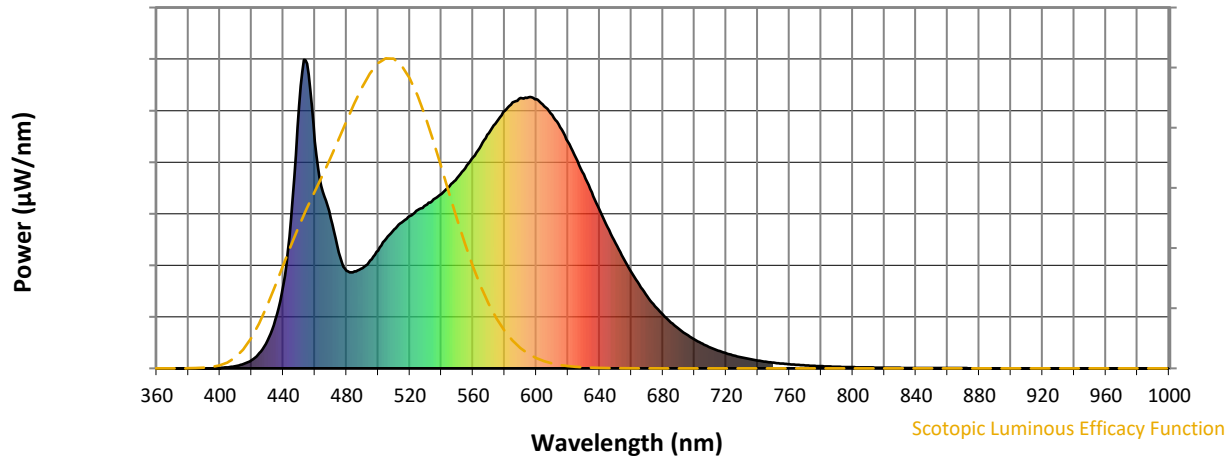


Photopic Lumens: NR

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	325	NR	620	735	NR	750	18	NR	880	0	NR
365	0	NR	495	350	NR	625	682	NR	755	16	NR	885	0	NR
370	0	NR	500	382	NR	630	629	NR	760	13	NR	890	0	NR
375	0	NR	505	421	NR	635	570	NR	765	11	NR	895	0	NR
380	0	NR	510	450	NR	640	514	NR	770	10	NR	900	0	NR
385	0	NR	515	474	NR	645	458	NR	775	8	NR	905	0	NR
390	0	NR	520	494	NR	650	406	NR	780	7	NR	910	0	NR
395	0	NR	525	513	NR	655	358	NR	785	6	NR	915	0	NR
400	2	NR	530	529	NR	660	312	NR	790	5	NR	920	0	NR
405	4	NR	535	548	NR	665	271	NR	795	4	NR	925	0	NR
410	8	NR	540	565	NR	670	234	NR	800	4	NR	930	0	NR
415	14	NR	545	591	NR	675	202	NR	805	3	NR	935	0	NR
420	27	NR	550	618	NR	680	174	NR	810	3	NR	940	0	NR
425	50	NR	555	649	NR	685	149	NR	815	2	NR	945	0	NR
430	89	NR	560	685	NR	690	129	NR	820	2	NR	950	0	NR
435	159	NR	565	723	NR	695	110	NR	825	2	NR	955	0	NR
440	272	NR	570	762	NR	700	93	NR	830	2	NR	960	0	NR
445	486	NR	575	800	NR	705	80	NR	835	1	NR	965	0	NR
450	852	NR	580	835	NR	710	67	NR	840	1	NR	970	0	NR
455	988	NR	585	862	NR	715	57	NR	845	1	NR	975	0	NR
460	735	NR	590	876	NR	720	49	NR	850	1	NR	980	0	NR
465	572	NR	595	879	NR	725	42	NR	855	1	NR	985	0	NR
470	486	NR	600	872	NR	730	35	NR	860	1	NR	990	0	NR
475	375	NR	605	850	NR	735	30	NR	865	1	NR	995	0	NR
480	317	NR	610	821	NR	740	25	NR	870	1	NR	1000	0	NR
485	314	NR	615	782	NR	745	22	NR	875	0	NR			

REPORT NUMBER: SP1-2407-168-3

Scotopic Flux vs. Wavelength



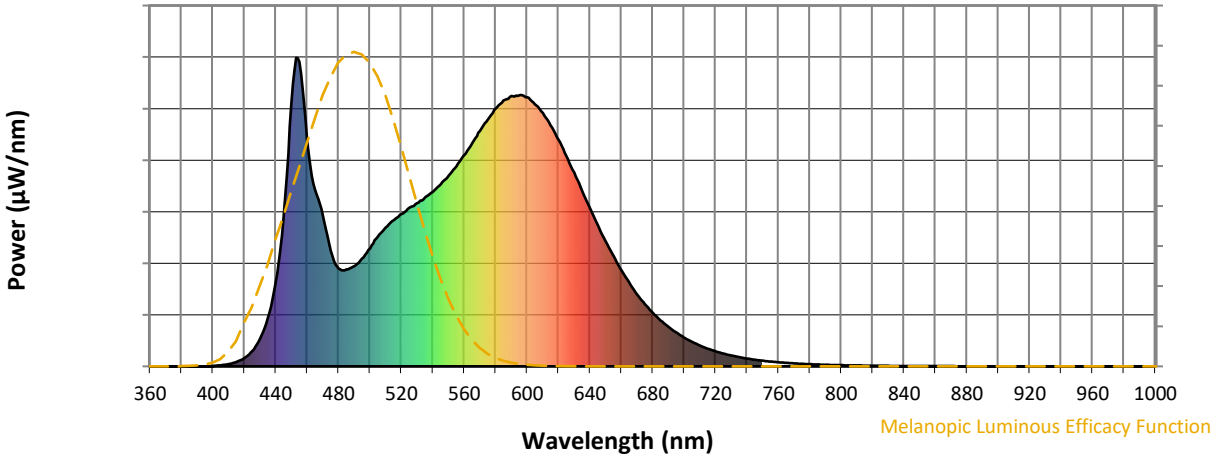
Scotopic Lumens: NR

S/P: 1.72

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	325	NR	620	735	NR	750	18	NR	880	0	NR
365	0	NR	495	350	NR	625	682	NR	755	16	NR	885	0	NR
370	0	NR	500	382	NR	630	629	NR	760	13	NR	890	0	NR
375	0	NR	505	421	NR	635	570	NR	765	11	NR	895	0	NR
380	0	NR	510	450	NR	640	514	NR	770	10	NR	900	0	NR
385	0	NR	515	474	NR	645	458	NR	775	8	NR	905	0	NR
390	0	NR	520	494	NR	650	406	NR	780	7	NR	910	0	NR
395	0	NR	525	513	NR	655	358	NR	785	6	NR	915	0	NR
400	2	NR	530	529	NR	660	312	NR	790	5	NR	920	0	NR
405	4	NR	535	548	NR	665	271	NR	795	4	NR	925	0	NR
410	8	NR	540	565	NR	670	234	NR	800	4	NR	930	0	NR
415	14	NR	545	591	NR	675	202	NR	805	3	NR	935	0	NR
420	27	NR	550	618	NR	680	174	NR	810	3	NR	940	0	NR
425	50	NR	555	649	NR	685	149	NR	815	2	NR	945	0	NR
430	89	NR	560	685	NR	690	129	NR	820	2	NR	950	0	NR
435	159	NR	565	723	NR	695	110	NR	825	2	NR	955	0	NR
440	272	NR	570	762	NR	700	93	NR	830	2	NR	960	0	NR
445	486	NR	575	800	NR	705	80	NR	835	1	NR	965	0	NR
450	852	NR	580	835	NR	710	67	NR	840	1	NR	970	0	NR
455	988	NR	585	862	NR	715	57	NR	845	1	NR	975	0	NR
460	735	NR	590	876	NR	720	49	NR	850	1	NR	980	0	NR
465	572	NR	595	879	NR	725	42	NR	855	1	NR	985	0	NR
470	486	NR	600	872	NR	730	35	NR	860	1	NR	990	0	NR
475	375	NR	605	850	NR	735	30	NR	865	1	NR	995	0	NR
480	317	NR	610	821	NR	740	25	NR	870	1	NR	1000	0	NR
485	314	NR	615	782	NR	745	22	NR	875	0	NR			

REPORT NUMBER: SP1-2407-168-3

Melanopic Flux vs. Wavelength



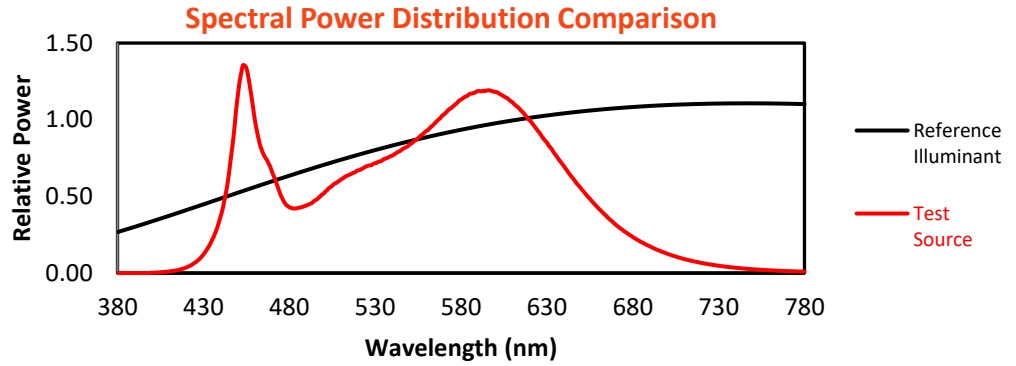
Melanopic Lumens: NR

M/P: 3.62

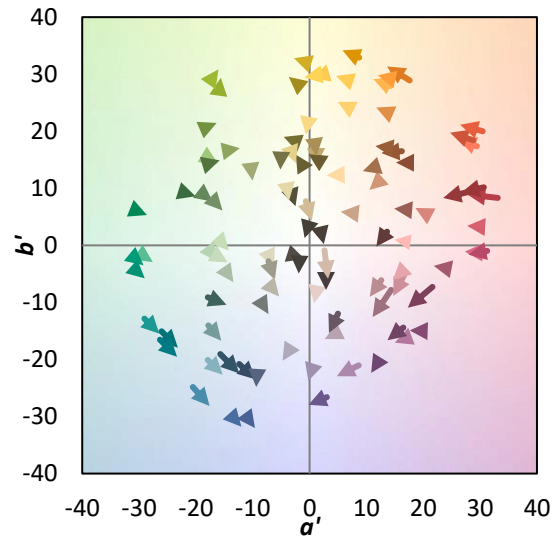
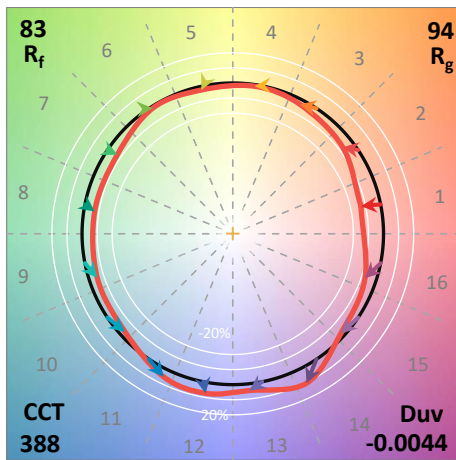
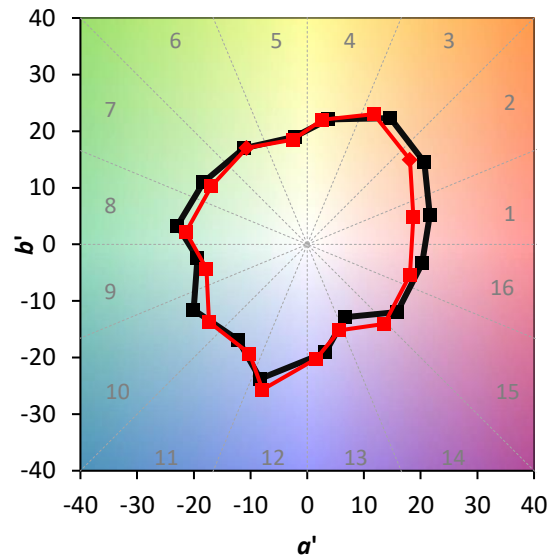
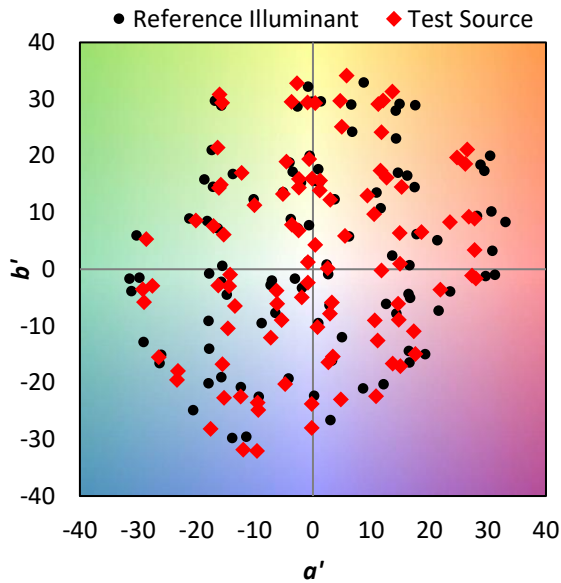
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	325	NR	620	735	NR	750	18	NR	880	0	NR
365	0	NR	495	350	NR	625	682	NR	755	16	NR	885	0	NR
370	0	NR	500	382	NR	630	629	NR	760	13	NR	890	0	NR
375	0	NR	505	421	NR	635	570	NR	765	11	NR	895	0	NR
380	0	NR	510	450	NR	640	514	NR	770	10	NR	900	0	NR
385	0	NR	515	474	NR	645	458	NR	775	8	NR	905	0	NR
390	0	NR	520	494	NR	650	406	NR	780	7	NR	910	0	NR
395	0	NR	525	513	NR	655	358	NR	785	6	NR	915	0	NR
400	2	NR	530	529	NR	660	312	NR	790	5	NR	920	0	NR
405	4	NR	535	548	NR	665	271	NR	795	4	NR	925	0	NR
410	8	NR	540	565	NR	670	234	NR	800	4	NR	930	0	NR
415	14	NR	545	591	NR	675	202	NR	805	3	NR	935	0	NR
420	27	NR	550	618	NR	680	174	NR	810	3	NR	940	0	NR
425	50	NR	555	649	NR	685	149	NR	815	2	NR	945	0	NR
430	89	NR	560	685	NR	690	129	NR	820	2	NR	950	0	NR
435	159	NR	565	723	NR	695	110	NR	825	2	NR	955	0	NR
440	272	NR	570	762	NR	700	93	NR	830	2	NR	960	0	NR
445	486	NR	575	800	NR	705	80	NR	835	1	NR	965	0	NR
450	852	NR	580	835	NR	710	67	NR	840	1	NR	970	0	NR
455	988	NR	585	862	NR	715	57	NR	845	1	NR	975	0	NR
460	735	NR	590	876	NR	720	49	NR	850	1	NR	980	0	NR
465	572	NR	595	879	NR	725	42	NR	855	1	NR	985	0	NR
470	486	NR	600	872	NR	730	35	NR	860	1	NR	990	0	NR
475	375	NR	605	850	NR	735	30	NR	865	1	NR	995	0	NR
480	317	NR	610	821	NR	740	25	NR	870	1	NR	1000	0	NR
485	314	NR	615	782	NR	745	22	NR	875	0	NR			

Summary

$R_f = 82.8$
 $R_g = 93.7$
 CIE $R_a = 82.7$
 $R_9 = 4.8$

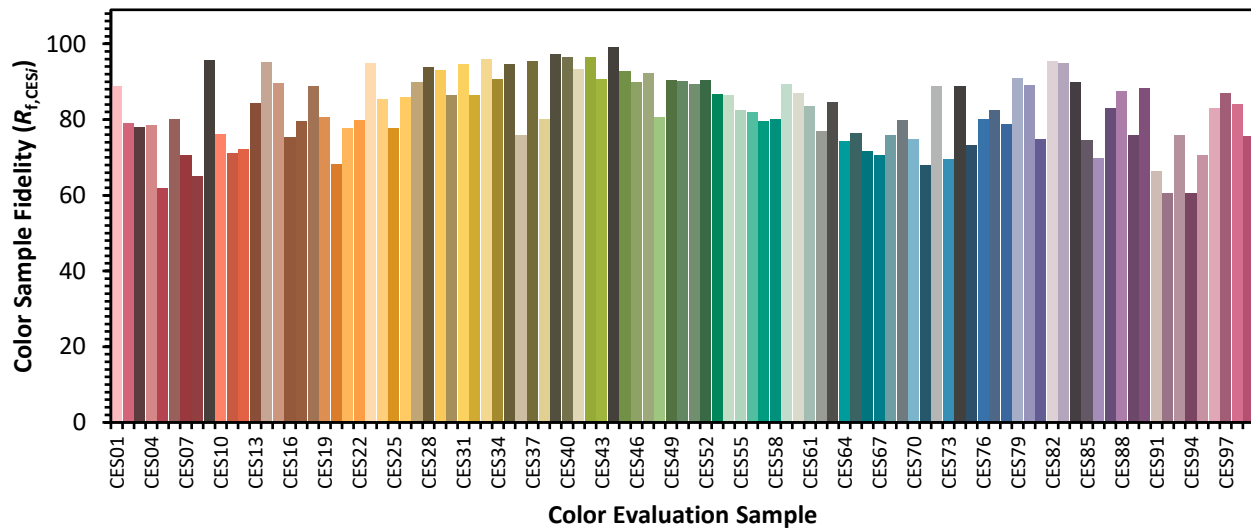


Color Vector Graphics

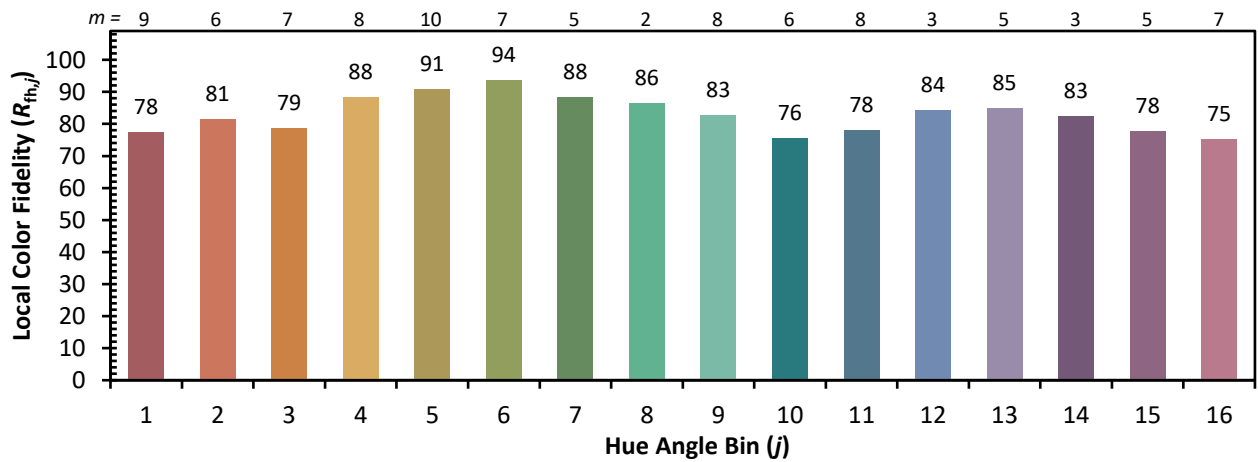
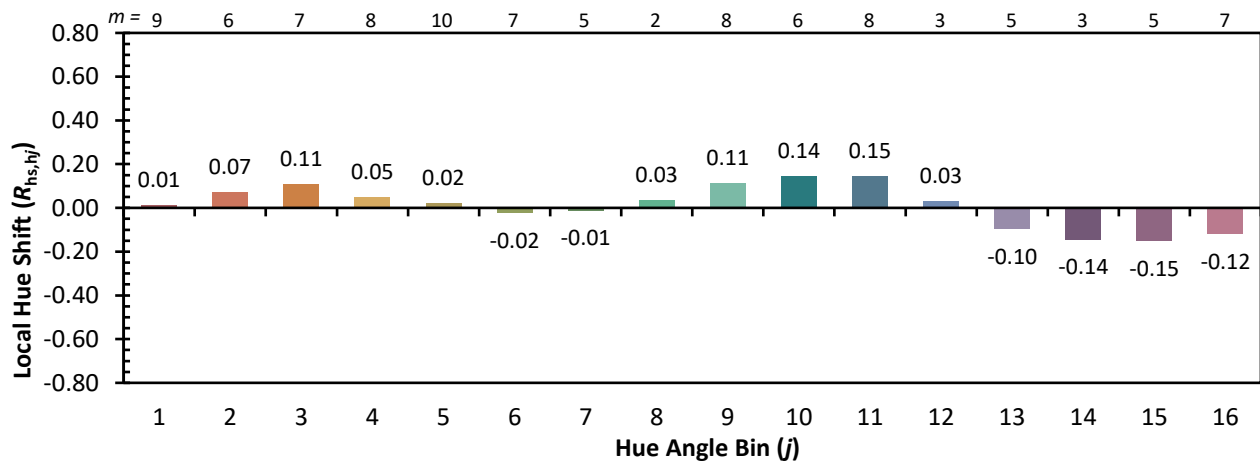
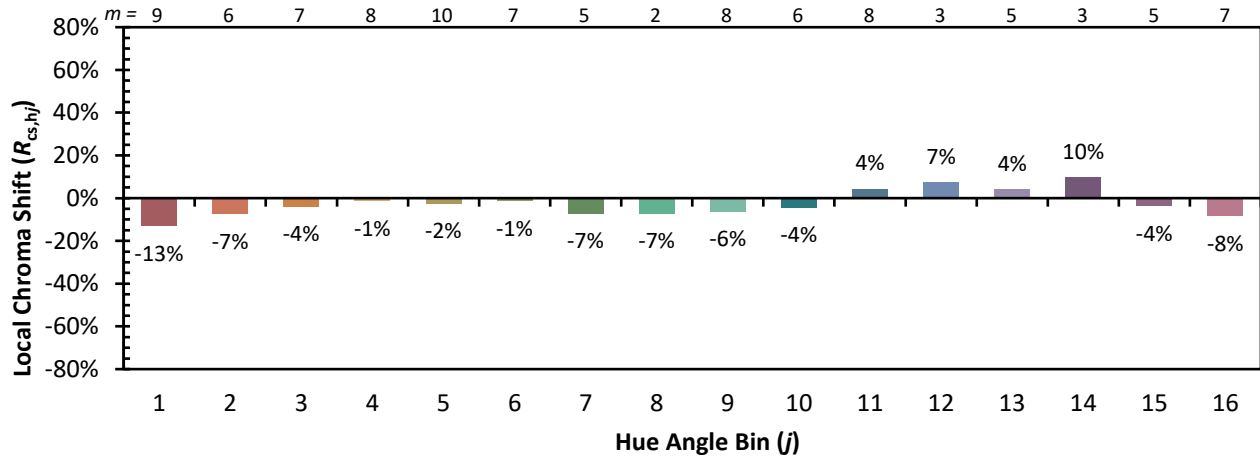


Individual Sample Fidelity Index ($R_{f,i}$)

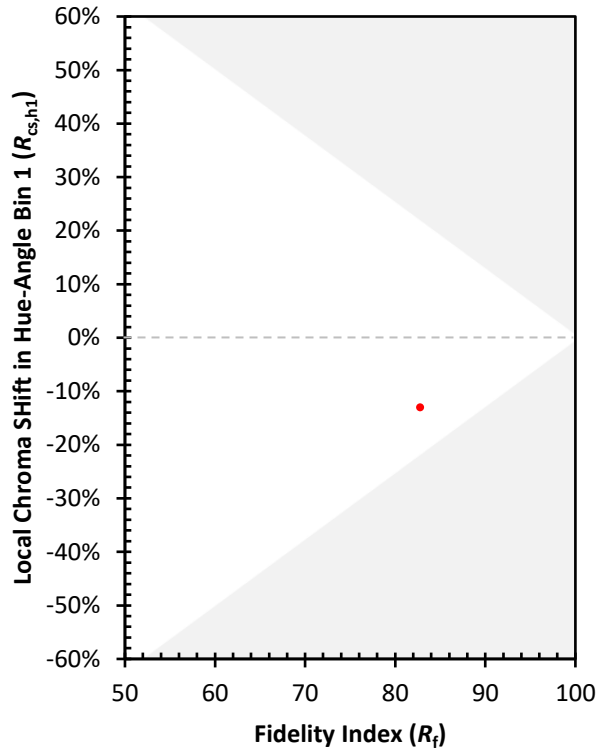
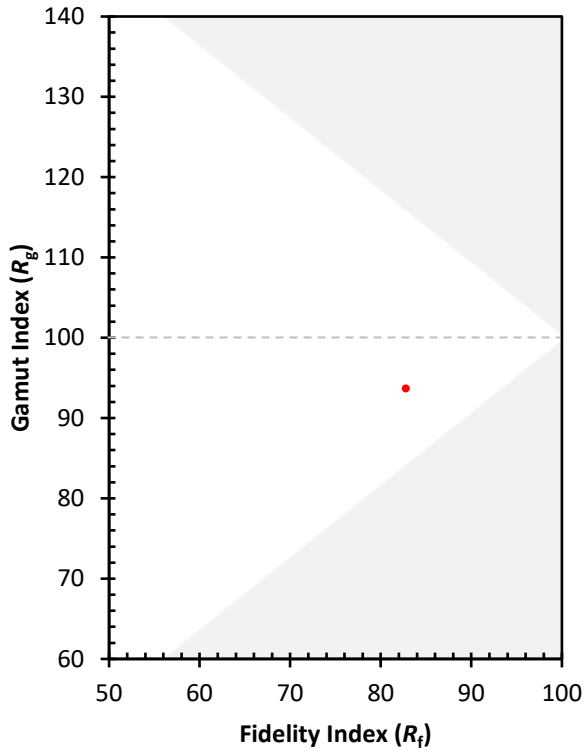
CES01 = 86	CES26 = 86	CES51 = 89	CES76 = 80
CES02 = 62	CES27 = 90	CES52 = 91	CES77 = 83
CES03 = 31	CES28 = 94	CES53 = 87	CES78 = 79
CES04 = 70	CES29 = 93	CES54 = 86	CES79 = 91
CES05 = 48	CES30 = 86	CES55 = 83	CES80 = 89
CES06 = 51	CES31 = 95	CES56 = 82	CES81 = 75
CES07 = 41	CES32 = 86	CES57 = 80	CES82 = 95
CES08 = 40	CES33 = 96	CES58 = 80	CES83 = 95
CES09 = 29	CES34 = 91	CES59 = 89	CES84 = 90
CES10 = 75	CES35 = 95	CES60 = 87	CES85 = 75
CES11 = 58	CES36 = 76	CES61 = 83	CES86 = 70
CES12 = 64	CES37 = 95	CES62 = 77	CES87 = 83
CES13 = 43	CES38 = 80	CES63 = 85	CES88 = 88
CES14 = 74	CES39 = 97	CES64 = 74	CES89 = 76
CES15 = 71	CES40 = 96	CES65 = 76	CES90 = 88
CES16 = 47	CES41 = 93	CES66 = 72	CES91 = 66
CES17 = 49	CES42 = 96	CES67 = 71	CES92 = 60
CES18 = 56	CES43 = 91	CES68 = 76	CES93 = 76
CES19 = 72	CES44 = 99	CES69 = 80	CES94 = 61
CES20 = 65	CES45 = 93	CES70 = 75	CES95 = 71
CES21 = 86	CES46 = 90	CES71 = 68	CES96 = 83
CES22 = 78	CES47 = 92	CES72 = 89	CES97 = 87
CES23 = 91	CES48 = 81	CES73 = 70	CES98 = 84
CES24 = 90	CES49 = 90	CES74 = 89	CES99 = 76
CES25 = 71	CES50 = 90	CES75 = 73	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)