Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

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

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P640955

Luminaire Tested: GWS-SA5E-830-U-SLL-W-GRSWH

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

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Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P640955
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-39)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5E-830-U-SLL-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	23212.7 lumens
Efficiency:	N/A
Efficacy:	86.1 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - U0 - G3

Input Watts (W):	269.6
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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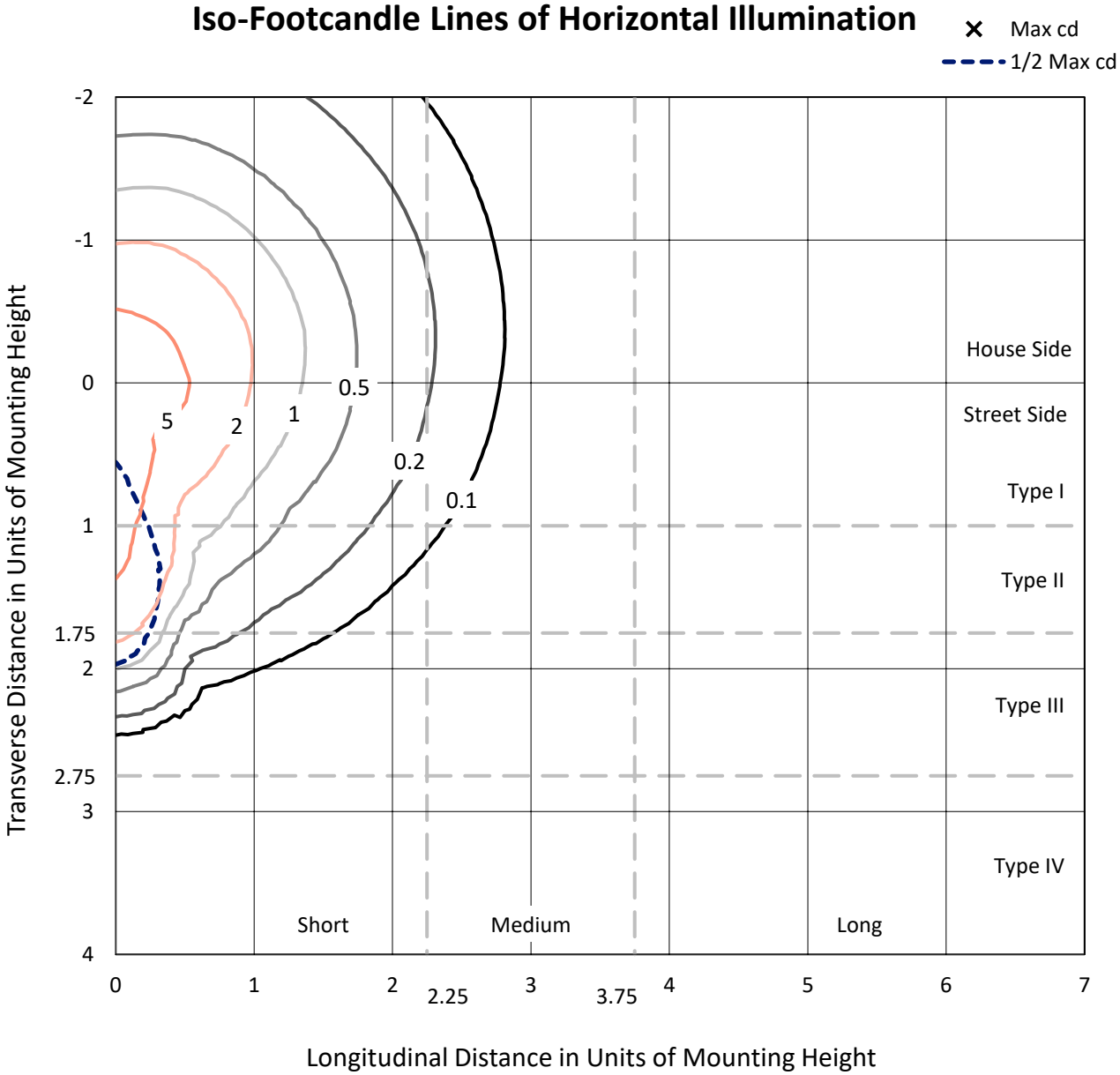
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 9 fc
Type III - Short - N/A

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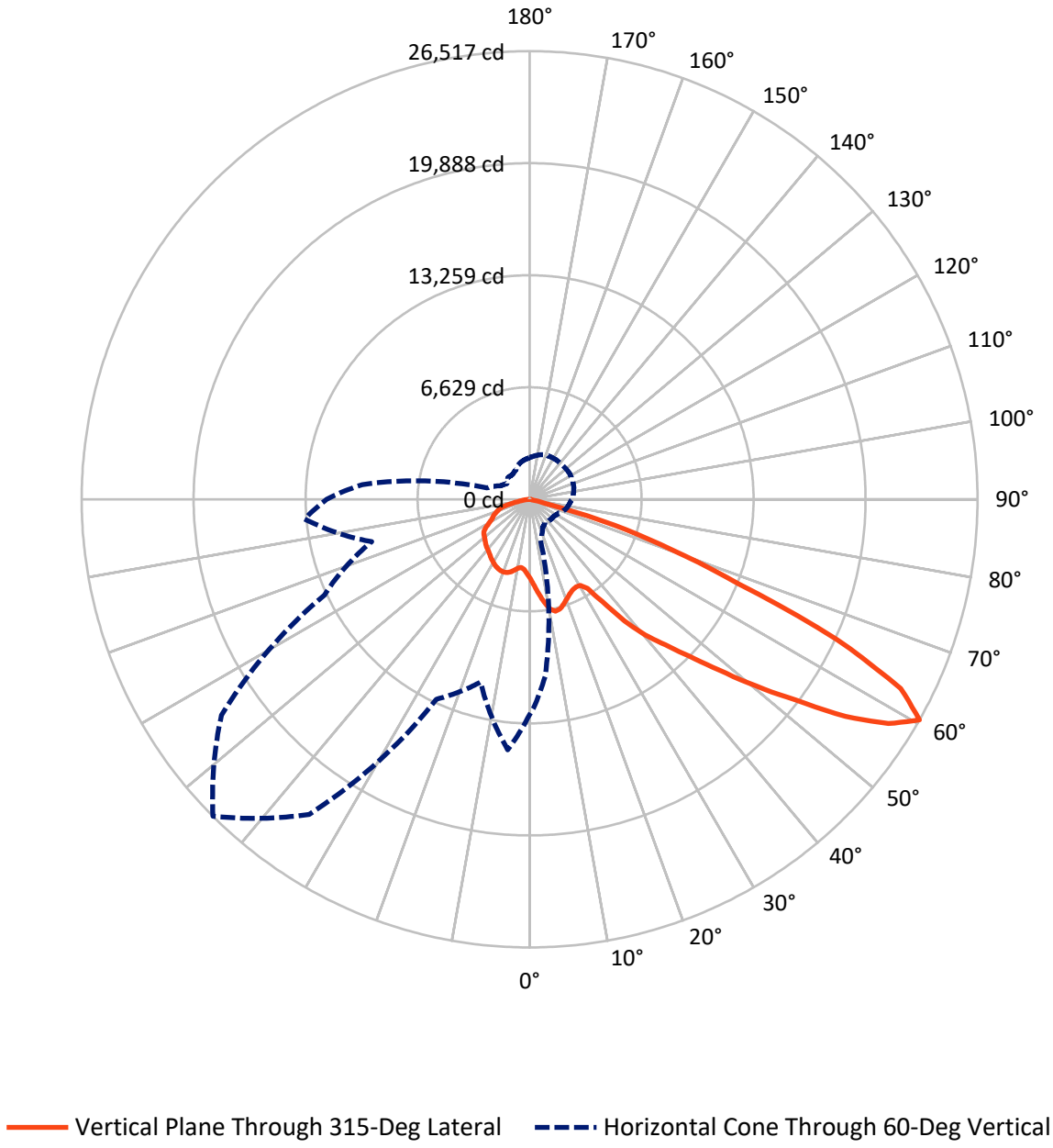
Luminous Intensity Polar Plot



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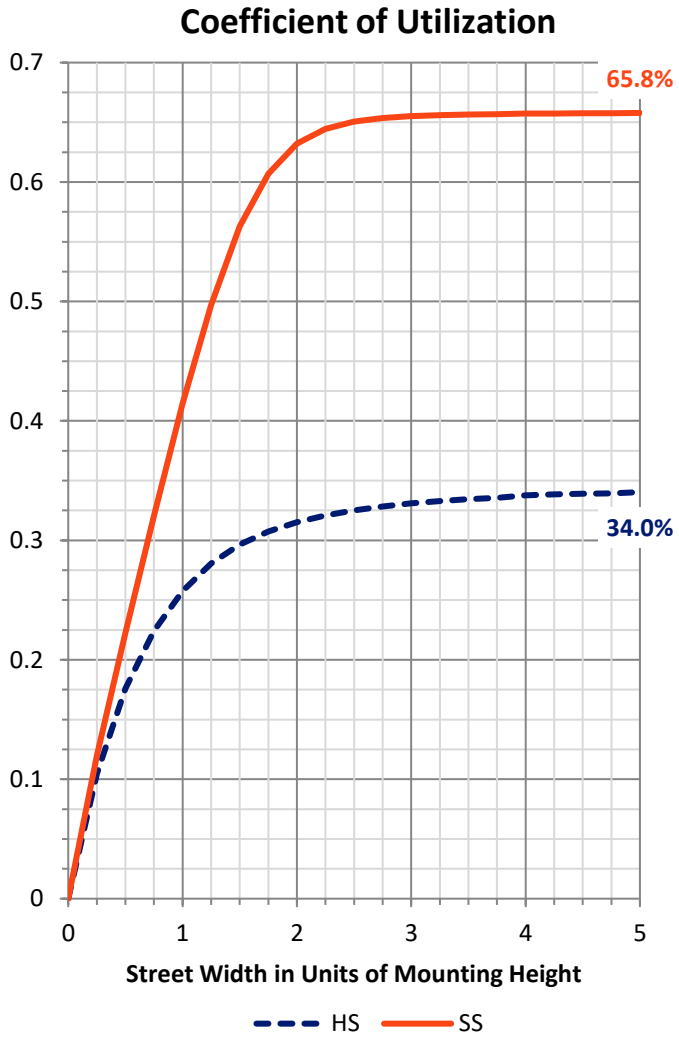
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7940.9	0.0	7940.9
	% Fixture	34.2	0.0	34.2
Street Side	Lumens	15271.8	0.0	15271.8
	% Fixture	65.8	0.0	65.8
Total	Lumens	23212.7	0.0	23212.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	457.4	2.0
10°-20°	1467.1	6.3
20°-30°	2389.4	10.3
30°-40°	3356.5	14.5
40°-50°	4593.1	19.8
50°-60°	5892.7	25.4
60°-70°	3967.9	17.1
70°-80°	992.0	4.3
80°-90°	96.7	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	23212.7	100.0
0°-180°	23212.7	100.0



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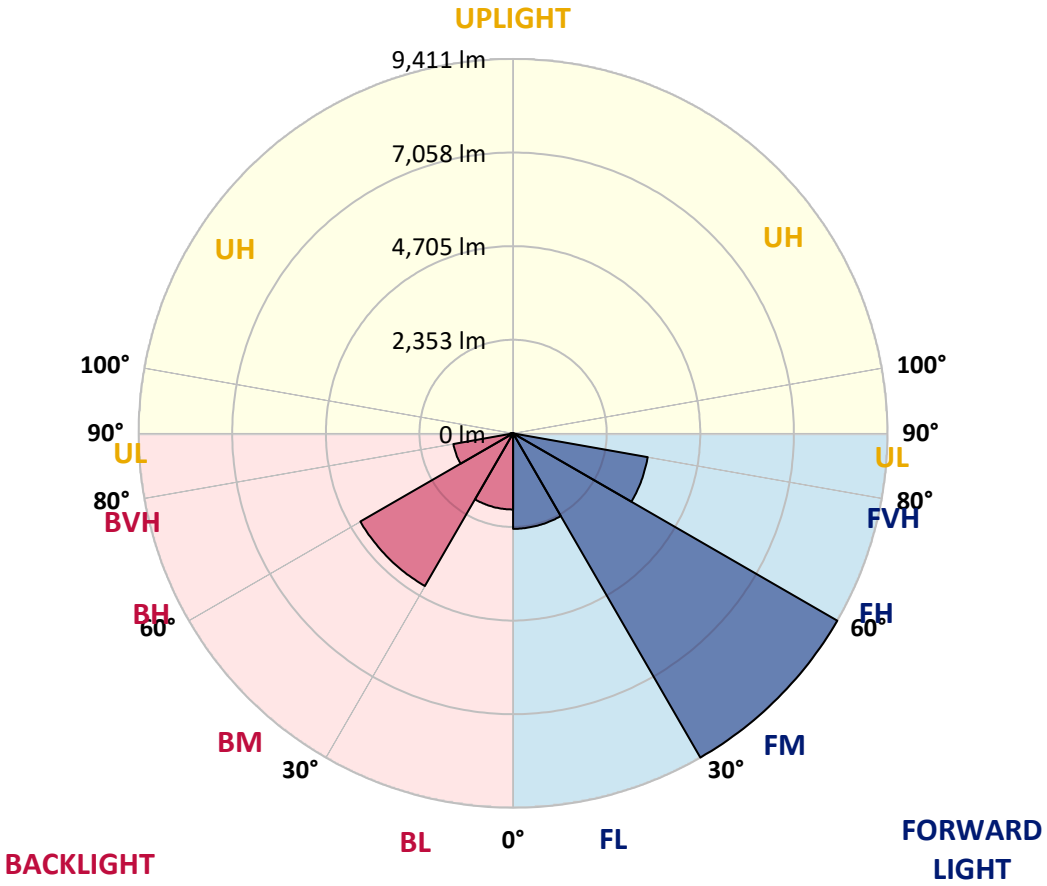
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2399.7	10.3			
FM	(30°-60°)	9410.6	40.5			
FH	(60°-80°)	3436.4	14.8			G2/5000
FVH	(80°-90°)	25.1	0.1			G1/100
BL	(0°-30°)	1914.2	8.2	B3/2500		
BM	(30°-60°)	4431.6	19.1	B3/5000		
BH	(60°-80°)	1523.4	6.6	B3/2500		G3/2500
BVH	(80°-90°)	71.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8
2.5°	4953.3	4942.6	4931.9	4848.5	4827.1	4767.3	4724.5	4671.1	4594.1	4551.3	4515.0
5°	5263.2	5246.1	5188.4	5017.4	4906.2	4784.4	4683.9	4572.7	4455.1	4378.2	4318.3
7.5°	5556.1	5551.8	5453.5	5171.3	4991.7	4816.4	4679.6	4517.1	4348.3	4232.8	4155.9
10°	5827.6	5795.5	5678.0	5310.3	5075.1	4874.2	4726.6	4547.1	4350.4	4194.3	4091.7
12.5°	6067.0	6026.4	5864.0	5438.5	5147.8	4899.8	4739.5	4592.0	4461.6	4331.2	4213.6
15°	6263.7	6214.5	6049.9	5558.2	5211.9	4884.8	4660.4	4544.9	4589.8	4647.6	4517.1
17.5°	6447.6	6396.3	6195.3	5645.9	5231.2	4792.9	4465.8	4416.7	4643.3	4906.2	4846.4
20°	6601.5	6543.8	6310.7	5688.7	5197.0	4617.6	4213.6	4299.1	4598.4	4912.6	5008.8
22.5°	6768.2	6721.2	6441.2	5750.6	5154.2	4376.1	4001.9	4211.4	4521.4	4797.2	4942.6
25°	7035.5	6977.7	6644.2	5859.7	5132.8	4149.4	3850.2	4125.9	4414.5	4664.7	4778.0
27.5°	7422.4	7315.5	6922.2	6049.9	5156.3	3935.7	3754.0	4021.2	4290.5	4504.3	4596.2
30°	7843.5	7715.3	7230.0	6246.6	5190.5	3805.3	3702.6	3901.5	4100.3	4314.1	4414.5
32.5°	8341.6	8228.3	7559.2	6394.1	5117.9	3745.4	3664.2	3771.1	3929.3	4100.3	4183.7
35°	8936.0	8732.9	7918.4	6513.8	4882.7	3657.8	3630.0	3627.8	3711.2	3877.9	3972.0
37.5°	9575.2	9357.1	8360.9	6642.1	4517.1	3518.8	3548.7	3458.9	3535.9	3668.4	3775.3
40°	10098.9	9870.2	8807.7	6817.4	4059.7	3300.7	3369.2	3273.0	3320.0	3456.8	3576.5
42.5°	10612.0	10368.3	9224.6	7016.2	3617.1	3087.0	3121.2	3084.8	3099.8	3243.0	3409.8
45°	11285.4	11011.7	9737.6	7157.3	3219.5	2918.1	2886.0	2824.0	2903.1	3089.1	3266.5
47.5°	12409.9	12082.8	10577.8	7249.2	2930.9	2821.9	2674.4	2638.0	2736.4	2943.7	3127.6
50°	13724.6	13442.4	11920.3	7245.0	2715.0	2740.6	2469.1	2437.1	2599.5	2809.1	3003.6
52.5°	14802.0	14515.6	13068.3	7031.2	2537.6	2567.5	2349.4	2259.6	2482.0	2676.5	2871.0
55°	15672.1	15349.3	13596.3	6137.6	2313.1	2291.7	2219.0	2054.4	2334.5	2544.0	2725.7
57.5°	15203.9	14819.1	12957.1	4666.8	2082.2	1947.5	1994.6	1872.7	2133.5	2396.5	2571.8
60°	*12747.6*	*12401.3*	*10526.5*	*2484.1*	*1832.1*	*1626.9*	*1725.2*	*1744.4*	*1913.3*	*2219.0*	*2398.6*
62.5°	8756.4	8504.1	7133.8	1507.1	1445.1	1306.2	1460.1	1599.1	1725.2	1983.9	2139.9
65°	4284.1	4209.3	3568.0	966.3	1011.2	1056.1	1210.0	1378.9	1564.9	1791.5	1956.1
67.5°	1180.1	1188.6	1081.7	754.6	797.4	921.4	1043.2	1177.9	1363.9	1573.4	1740.2
70°	519.5	528.0	545.1	581.5	662.7	776.0	902.1	1041.1	1212.1	1387.4	1547.8
72.5°	361.3	369.8	395.5	442.5	515.2	622.1	741.8	874.4	1051.8	1199.3	1331.8
75°	222.3	228.7	252.3	292.9	342.0	423.3	540.9	662.7	818.8	953.5	1071.0
77.5°	117.6	113.3	128.3	156.1	198.8	241.6	320.7	397.6	508.8	617.8	716.2
80°	64.1	62.0	70.5	85.5	98.3	132.5	186.0	237.3	301.4	363.4	416.9
82.5°	27.8	25.7	27.8	36.3	44.9	64.1	94.1	130.4	166.7	209.5	243.7
85°	0.0	0.0	0.0	2.1	10.7	17.1	32.1	47.0	68.4	94.1	115.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6	19.2
90°	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8
2.5°	4493.6	4440.2	4435.9	4393.2	4397.4	4399.6	4356.8	4339.7	4354.7	4371.8	4363.2
5°	4297.0	4241.4	4217.9	4177.2	4173.0	4153.7	4136.6	4115.2	4130.2	4145.2	4153.7
7.5°	4125.9	4089.6	4074.6	4063.9	4068.2	4059.7	4025.5	4006.2	4004.1	4010.5	4019.0
10°	4070.3	4040.4	4059.7	4089.6	4111.0	4125.9	4089.6	4057.5	4027.6	4014.8	4014.8
12.5°	4190.1	4151.6	4190.1	4222.1	4264.9	4275.6	4235.0	4200.8	4190.1	4202.9	4228.5
15°	4455.1	4365.4	4363.2	4382.5	4416.7	4433.8	4395.3	4378.2	4378.2	4459.4	4523.6
17.5°	4720.2	4572.7	4510.7	4500.0	4521.4	4527.8	4495.8	4480.8	4519.3	4677.5	4797.2
20°	4906.2	4726.6	4592.0	4566.3	4572.7	4574.9	4549.2	4538.5	4594.1	4786.5	4887.0
22.5°	4887.0	4754.4	4589.8	4557.8	4568.5	4564.2	4540.7	4536.4	4581.3	4748.0	4795.1
25°	4754.4	4651.8	4512.9	4491.5	4508.6	4506.5	4482.9	4472.3	4491.5	4602.7	4606.9
27.5°	4602.7	4512.9	4393.2	4386.7	4414.5	4429.5	4388.9	4356.8	4350.4	4425.2	4408.1
30°	4420.9	4354.7	4258.5	4262.7	4314.1	4322.6	4273.4	4226.4	4213.6	4254.2	4230.7
32.5°	4205.0	4183.7	4132.3	4143.0	4192.2	4209.3	4158.0	4108.8	4093.9	4106.7	4057.5
35°	4021.2	4012.6	4016.9	4036.1	4078.9	4091.7	4049.0	4010.5	3989.1	3944.2	3880.1
37.5°	3830.9	3854.4	3916.4	3952.8	3976.3	3972.0	3948.5	3920.7	3886.5	3803.1	3724.0
40°	3653.5	3713.3	3824.5	3865.1	3873.7	3875.8	3858.7	3835.2	3792.4	3681.3	3591.5
42.5°	3516.7	3582.9	3730.4	3792.4	3796.7	3801.0	3783.9	3764.6	3704.8	3557.3	3469.6
45°	3373.4	3461.1	3634.2	3709.1	3704.8	3702.6	3687.7	3679.1	3608.6	3437.6	3341.4
47.5°	3251.6	3354.2	3540.2	3604.3	3602.2	3600.0	3589.3	3589.3	3518.8	3332.8	3223.8
50°	3131.9	3249.4	3444.0	3497.4	3501.7	3497.4	3493.1	3499.6	3416.2	3217.4	3110.5
52.5°	3001.5	3134.0	3337.1	3386.3	3411.9	3422.6	3422.6	3407.6	3309.3	3101.9	2984.4
55°	2858.2	2984.4	3219.5	3285.8	3307.2	3326.4	3326.4	3296.5	3204.5	2995.0	2868.9
57.5°	2680.8	2792.0	2977.9	3044.2	3095.5	3108.3	3108.3	3059.2	2984.4	2783.4	2680.8
60°	*2488.4*	*2584.6*	*2710.7*	*2781.3*	*2819.7*	*2794.1*	*2813.3*	*2800.5*	*2740.6*	*2554.7*	*2469.1*
62.5°	2231.9	2330.2	2469.1	2541.8	2558.9	2533.3	2558.9	2556.8	2475.6	2308.8	2206.2
65°	2048.0	2144.2	2281.0	2375.1	2402.9	2396.5	2413.6	2387.9	2287.4	2129.2	2030.9
67.5°	1829.9	1932.6	2090.8	2195.5	2253.2	2259.6	2283.2	2229.7	2127.1	1953.9	1829.9
70°	1622.6	1710.2	1832.1	1930.4	2011.7	2052.3	2056.6	1979.6	1851.3	1708.1	1618.3
72.5°	1404.5	1494.3	1641.8	1748.7	1851.3	1898.4	1898.4	1804.3	1665.3	1507.1	1410.9
75°	1139.4	1222.8	1357.5	1472.9	1590.5	1650.4	1648.2	1567.0	1413.1	1263.4	1163.0
77.5°	771.7	833.7	919.2	1006.9	1024.0	1071.0	1094.5	991.9	906.4	825.2	735.4
80°	448.9	487.4	534.4	583.6	594.3	609.3	570.8	532.3	487.4	434.0	393.4
82.5°	262.9	288.6	312.1	350.6	357.0	361.3	327.1	310.0	273.6	241.6	215.9
85°	128.3	136.8	158.2	177.4	168.9	164.6	149.6	132.5	117.6	104.8	91.9
87.5°	25.7	25.7	38.5	36.3	29.9	25.7	15.0	19.2	4.3	4.3	0.0
90°	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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8
2.5°	4391.0	4427.4	4472.3	4532.1	4600.5	4673.2	4743.8	4797.2	4850.6	4929.7	4916.9
5°	4166.5	4228.5	4299.1	4391.0	4502.2	4628.3	4769.4	4910.5	5062.3	5190.5	5246.1
7.5°	4036.1	4104.6	4187.9	4307.6	4450.9	4604.8	4803.6	5032.4	5278.2	5447.1	5551.8
10°	4036.1	4123.8	4232.8	4348.3	4474.4	4632.6	4878.4	5164.9	5481.3	5703.6	5825.5
12.5°	4269.2	4356.8	4380.3	4376.1	4446.6	4621.9	4938.3	5303.9	5682.2	5917.4	6067.0
15°	4632.6	4662.5	4485.1	4322.6	4333.3	4544.9	4966.1	5415.0	5855.4	6137.6	6300.1
17.5°	4876.3	4797.2	4480.8	4196.5	4136.6	4414.5	4966.1	5521.9	6039.2	6357.8	6509.6
20°	4895.5	4698.9	4371.8	4074.6	3920.7	4241.4	4931.9	5603.1	6216.7	6569.4	6731.9
22.5°	4726.6	4532.1	4256.3	3969.9	3743.3	4031.9	4876.3	5665.1	6368.5	6768.2	6969.2
25°	4534.2	4371.8	4138.8	3863.0	3621.4	3820.2	4825.0	5769.9	6580.1	7037.6	7240.7
27.5°	4346.1	4209.3	3997.7	3773.2	3553.0	3636.4	4792.9	5923.8	6832.4	7420.3	7595.6
30°	4162.3	4038.3	3845.9	3687.7	3516.7	3516.7	4765.1	6101.2	7165.9	7850.0	8025.3
32.5°	3976.3	3858.7	3702.6	3604.3	3495.3	3469.6	4688.2	6268.0	7510.0	8320.3	8499.8
35°	3803.1	3685.5	3565.8	3525.2	3484.6	3433.3	4497.9	6398.4	7845.7	8869.7	9023.6
37.5°	3640.7	3527.3	3437.6	3426.9	3431.1	3334.9	4198.6	6507.4	8264.7	9431.9	9513.2
40°	3499.6	3373.4	3302.9	3300.7	3322.1	3176.8	3820.2	6663.5	8743.6	9908.6	9874.4
42.5°	3373.4	3240.9	3155.4	3174.6	3161.8	3018.6	3450.4	6806.7	9160.4	10355.4	10287.0
45°	3249.4	3121.2	3001.5	3029.2	3014.3	2920.2	3136.1	6911.5	9622.2	10892.0	10900.6
47.5°	3129.7	3003.6	2883.9	2849.7	2847.5	2890.3	2894.6	6945.7	10374.7	11755.7	11561.2
50°	3018.6	2892.4	2768.4	2653.0	2697.9	2830.4	2715.0	6920.0	11501.3	12709.1	12166.1
52.5°	2903.1	2783.4	2646.6	2439.2	2556.8	2687.2	2554.7	6828.1	12189.7	13551.4	13226.5
55°	2770.6	2657.3	2471.3	2219.0	2362.3	2390.0	2390.0	5938.8	12482.5	14385.2	14586.1
57.5°	2593.1	2443.5	2148.5	1945.4	2073.7	1966.8	2214.7	4155.9	11999.4	14122.2	14902.5
60°	*2392.2*	*2231.9*	*1919.7*	*1774.4*	*1812.8*	*1624.7*	*1887.7*	*2606.0*	*9945.0*	*12016.5*	*13367.6*
62.5°	2127.1	1979.6	1720.9	1607.6	1528.5	1325.4	1520.0	1648.2	6817.4	8923.1	9844.5
65°	1949.7	1787.2	1556.3	1406.7	1244.2	1066.8	1009.0	1081.7	3666.3	4993.9	5616.0
67.5°	1740.2	1579.8	1361.8	1173.6	1043.2	915.0	814.5	788.8	1257.0	1663.2	1800.0
70°	1541.3	1387.4	1205.7	1030.4	900.0	773.9	675.5	605.0	581.5	577.2	568.7
72.5°	1338.3	1195.0	1043.2	880.8	737.5	622.1	534.4	453.2	419.0	408.3	397.6
75°	1096.7	983.4	831.6	656.3	540.9	434.0	365.6	312.1	282.2	271.5	258.7
77.5°	705.5	654.2	521.6	423.3	327.1	258.7	222.3	188.1	168.9	164.6	153.9
80°	376.3	350.6	288.6	243.7	194.5	158.2	139.0	119.7	109.0	104.8	100.5
82.5°	209.5	190.3	160.3	141.1	113.3	96.2	85.5	77.0	70.5	68.4	66.3
85°	94.1	81.2	64.1	59.9	53.4	49.2	47.0	42.8	40.6	38.5	36.3
87.5°	4.3	8.6	10.7	8.6	8.6	12.8	15.0	15.0	12.8	12.8	10.7
90°	0.0	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

Scaled Data Report

REPORT NUMBER: P640955
CATALOG NUMBER: GWS-SA5E-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8	4681.8
2.5°	4996.0	5060.1	5066.6	5087.9	5060.1	5053.7	5008.8	4983.2	4959.7	4953.3
5°	5385.1	5513.4	5564.7	5601.0	5566.8	5549.7	5451.4	5348.7	5291.0	5263.2
7.5°	5784.9	5977.3	6077.7	6122.6	6126.9	6049.9	5881.1	5688.7	5592.5	5556.1
10°	6141.9	6379.2	6511.7	6597.2	6567.3	6473.2	6242.3	5981.5	5859.7	5827.6
12.5°	6406.9	6633.6	6736.2	6791.8	6789.6	6738.3	6520.3	6238.1	6099.1	6067.0
15°	6578.0	6712.7	6719.1	6731.9	6768.2	6836.6	6723.3	6462.5	6308.6	6263.7
17.5°	6712.7	6659.2	6558.7	6524.5	6605.8	6796.0	6864.4	6652.8	6486.0	6447.6
20°	6798.2	6528.8	6351.4	6285.1	6379.2	6689.1	6949.9	6823.8	6650.7	6601.5
22.5°	6864.4	6406.9	6120.5	6075.6	6173.9	6573.7	7037.6	7026.9	6836.6	6768.2
25°	6969.2	6325.7	5958.0	5925.9	6017.9	6518.1	7155.2	7302.7	7133.8	7035.5
27.5°	7133.8	6317.2	5874.6	5864.0	5990.1	6567.3	7324.1	7706.7	7495.1	7422.4
30°	7362.5	6398.4	5893.9	5915.3	6069.2	6744.7	7587.0	8168.5	7956.8	7843.5
32.5°	7691.8	6616.5	6186.8	6278.7	6392.0	7029.0	7971.8	8668.7	8508.4	8341.6
35°	8125.7	7215.0	7052.6	7443.8	7336.9	7651.1	8435.7	9275.9	9081.3	8936.0
37.5°	8705.1	8442.1	8591.8	9130.5	8871.8	8826.9	9002.2	9827.4	9720.5	9575.2
40°	9517.4	9570.9	9846.6	10554.3	10180.1	9891.5	9697.0	10242.1	10278.5	10098.9
42.5°	10056.2	10302.0	10966.9	11770.7	11255.5	10564.9	10278.5	10772.3	10774.4	10612.0
45°	10257.1	10900.6	12290.1	13215.8	12354.3	10949.7	10599.2	11492.7	11471.4	11285.4
47.5°	10184.4	11405.1	13664.7	15080.0	13765.2	11223.4	10554.3	12518.9	12692.0	12409.9
50°	10032.6	11911.8	15270.2	17363.1	15496.8	11514.1	10485.8	13656.2	13942.7	13724.6
52.5°	10186.6	12476.1	17168.6	19723.2	17668.8	11978.0	10947.6	15116.3	15065.0	14802.0
55°	10674.0	13143.1	19475.2	22688.3	20054.6	12762.6	12134.1	16508.0	15986.4	15672.1
57.5°	10650.5	13619.8	21497.6	25033.5	22130.4	13406.1	12546.7	16655.5	15601.6	15203.9
60°	9667.1	13401.8	22267.2	26517.1	22756.7	13051.2	11189.2	14876.9	13164.5	12747.6
62.5°	7215.0	11892.5	20775.0	24659.4	20984.5	11272.6	8414.3	10678.2	9459.7	8756.4
65°	4615.5	9303.7	17465.7	19977.6	17296.8	8621.7	5011.0	5725.0	4485.1	4284.1
67.5°	1964.6	6567.3	13577.1	13352.6	12940.0	5586.0	1934.7	1611.9	1201.4	1180.1
70°	649.9	4468.0	8369.4	8906.0	7728.1	3848.0	639.2	540.9	538.7	519.5
72.5°	425.4	2398.6	4711.7	5246.1	4972.5	2214.7	386.9	361.3	369.8	361.3
75°	254.4	521.6	793.1	1030.4	793.1	372.0	233.0	228.7	233.0	222.3
77.5°	149.6	145.4	141.1	141.1	139.0	128.3	117.6	113.3	115.4	117.6
80°	96.2	91.9	87.6	85.5	74.8	70.5	66.3	62.0	62.0	64.1
82.5°	62.0	57.7	53.4	47.0	38.5	32.1	29.9	25.7	25.7	27.8
85°	32.1	25.7	19.2	15.0	8.6	4.3	0.0	0.0	0.0	0.0
87.5°	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	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

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

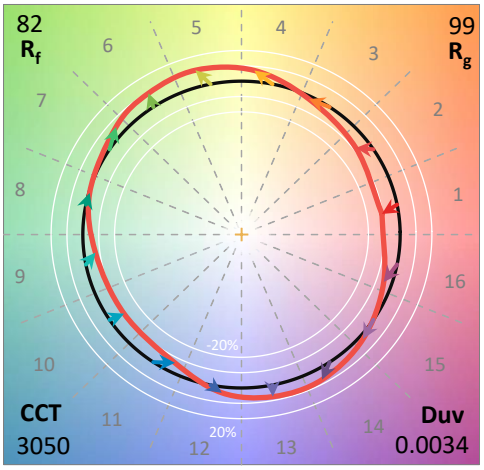
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2408-195-9
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	08/07/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	MCGRAW EDISON
Catalog Number:	**GALN-SB1A-830-U-5WQ**
Description:	GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K):	3050	CRI (Ra):	81.0		
CIE u':	0.2476	R1:	79.6	R9:	7.1
CIE v':	0.5251	R2:	85.6	R10:	67.0
Duv:	0.0034	R3:	92.0	R11:	82.7
CIE x:	0.4383	R4:	82.6	R12:	63.2
CIE y:	0.4131	R5:	78.9	R13:	80.3
CIE z:	0.1487	R6:	81.7	R14:	95.0
Peak Wavelength (nm):	603	R7:	85.2	R15:	71.7
Dominant Wavelength (nm):	581	R8:	62.0		
Purity:	55.55201				

Rf:	81.5
Rg:	99.2



Test Conditions

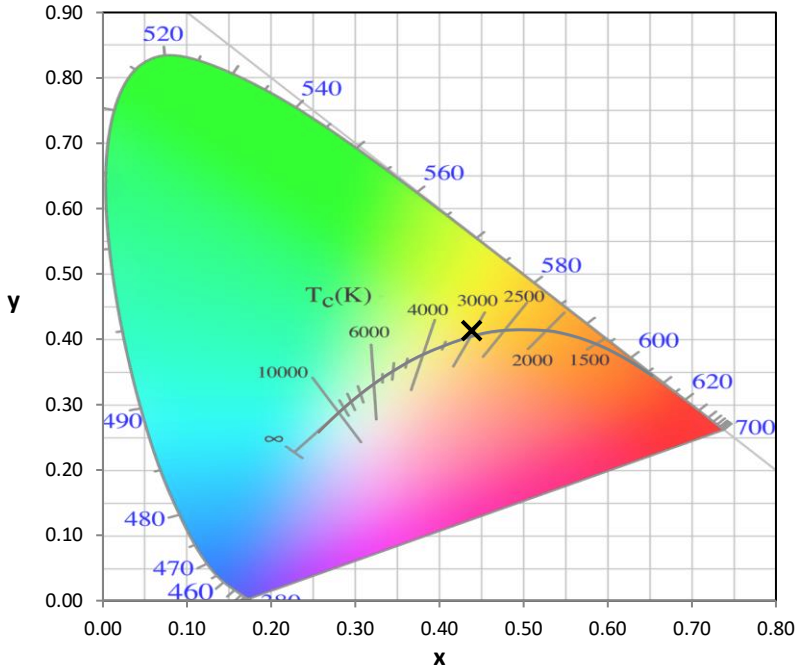
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

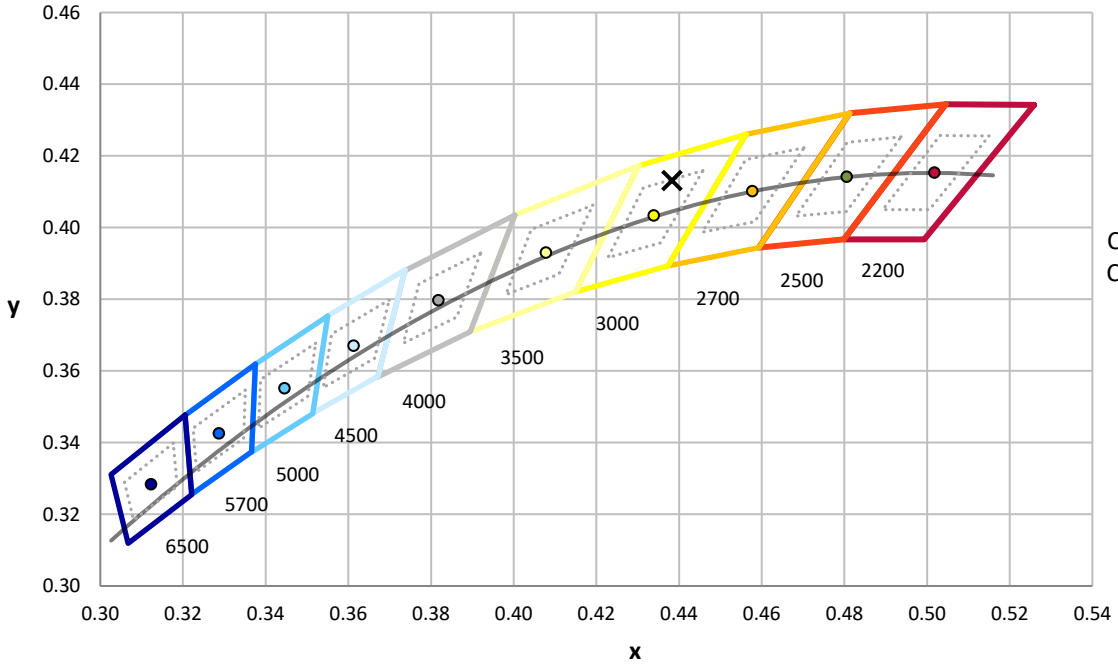
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



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

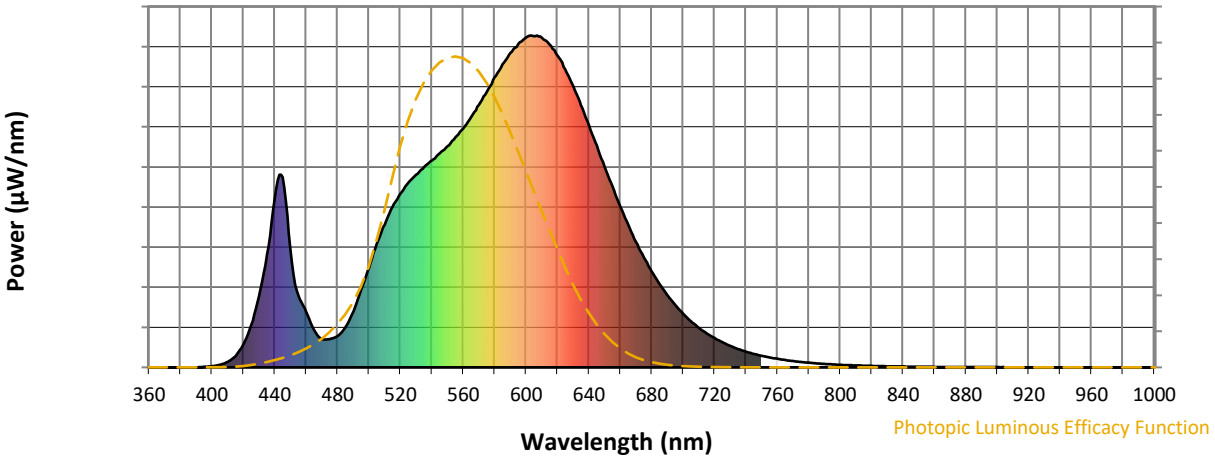


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

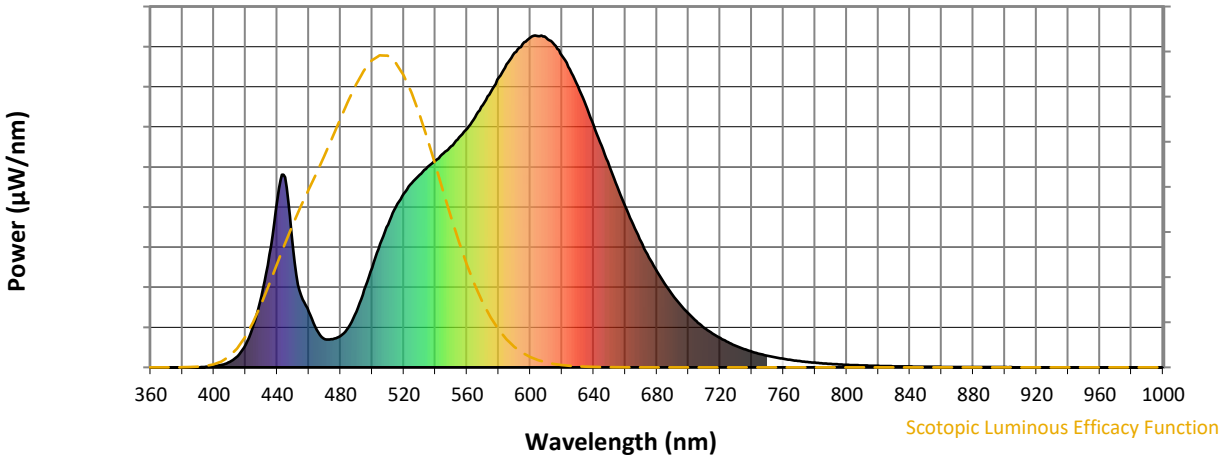


Photopic Lumens: NR

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength

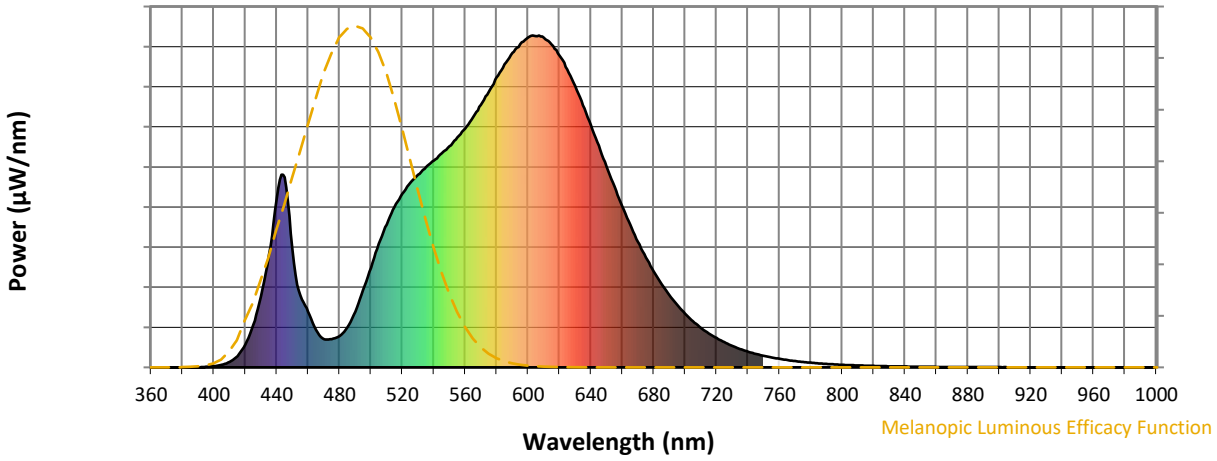


Scotopic Lumens: NR **S/P: 1.27**

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.32**

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

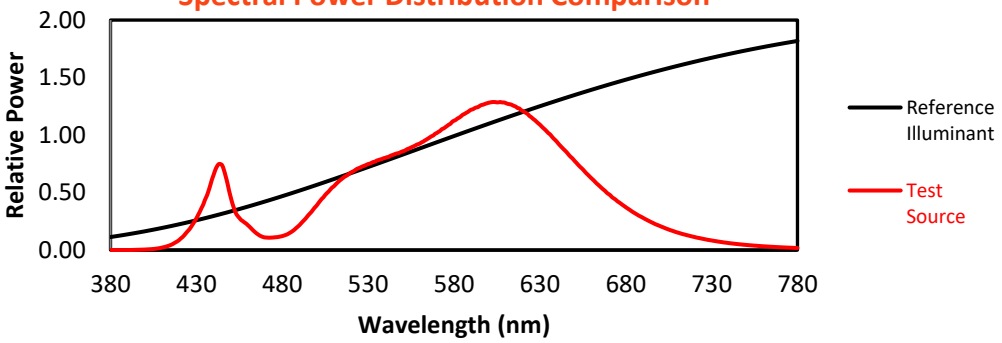
REPORT NUMBER: SP1-2408-195-9

TM-30-18

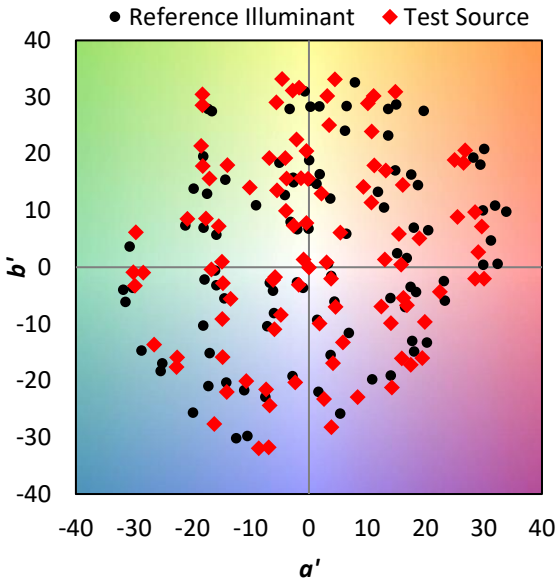
Summary

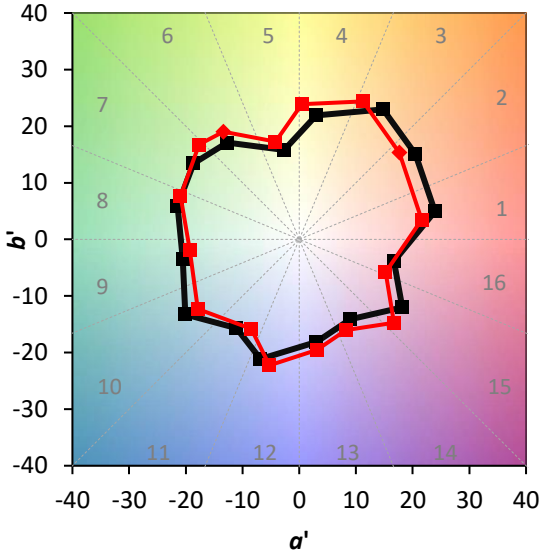
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

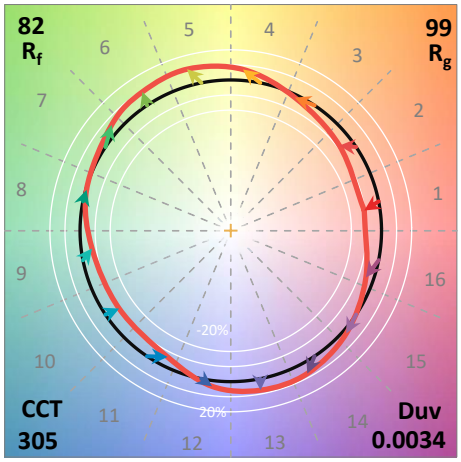
Spectral Power Distribution Comparison

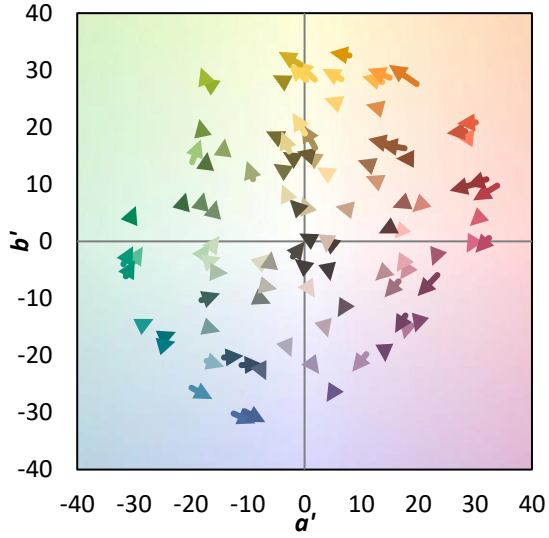


Color Vector Graphics









REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

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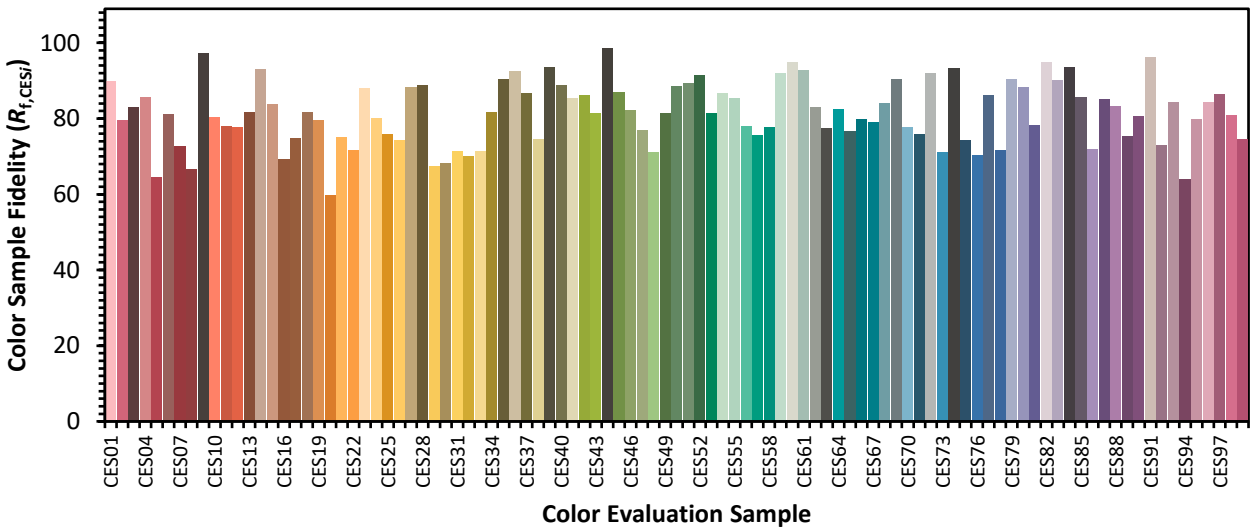
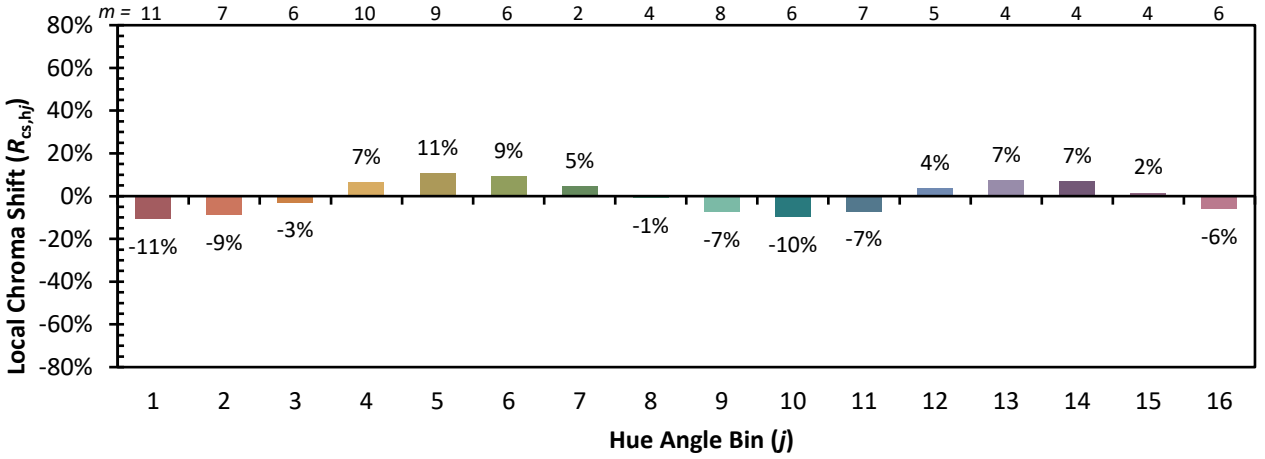
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	

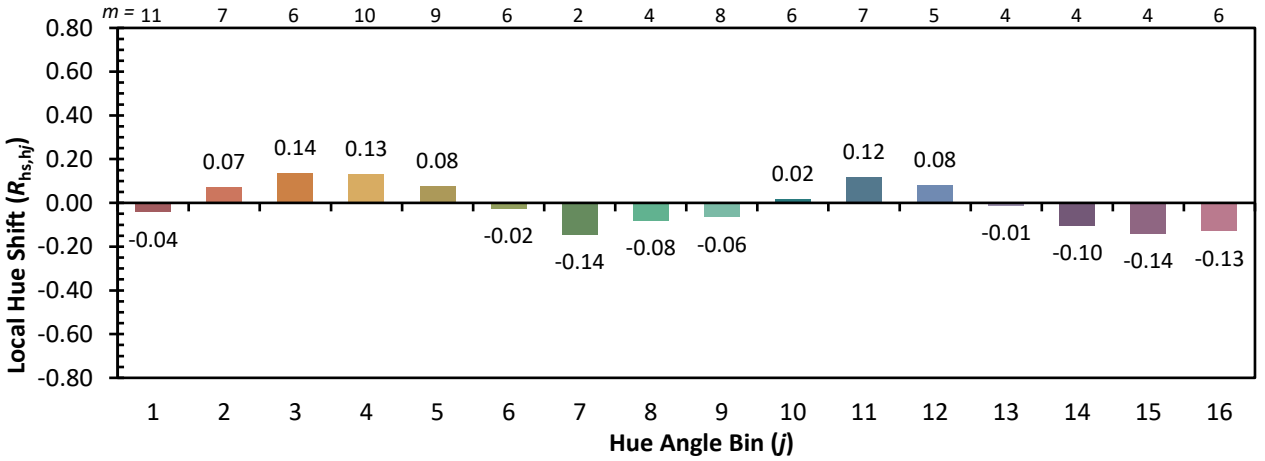


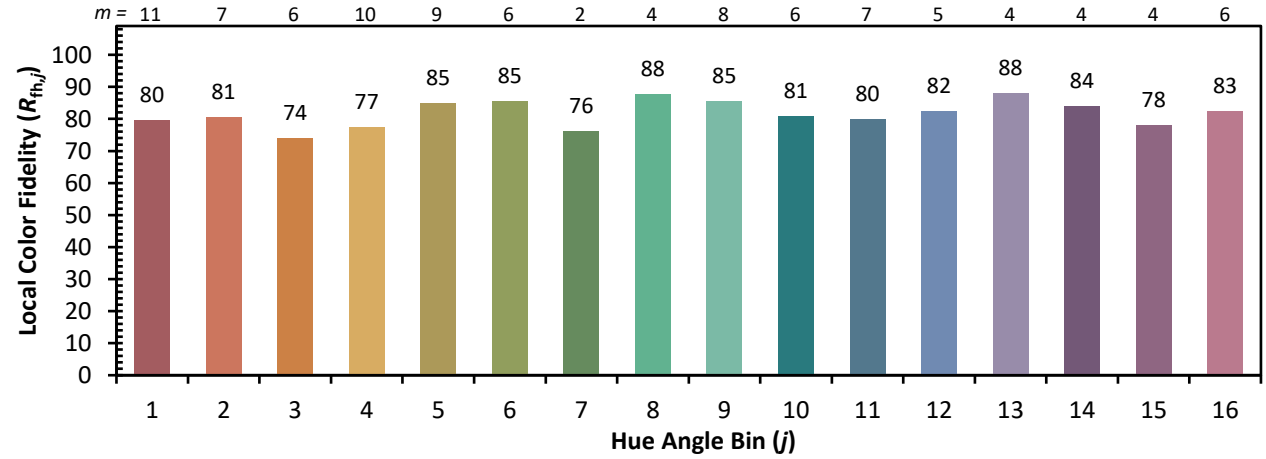
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



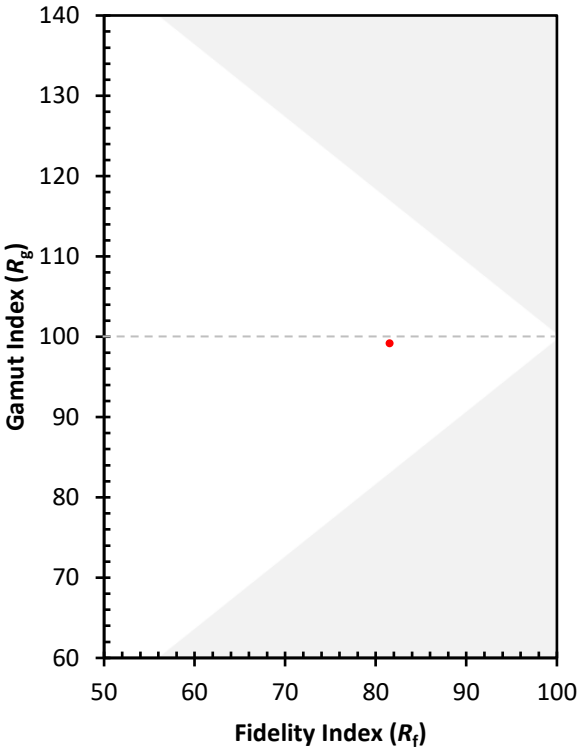


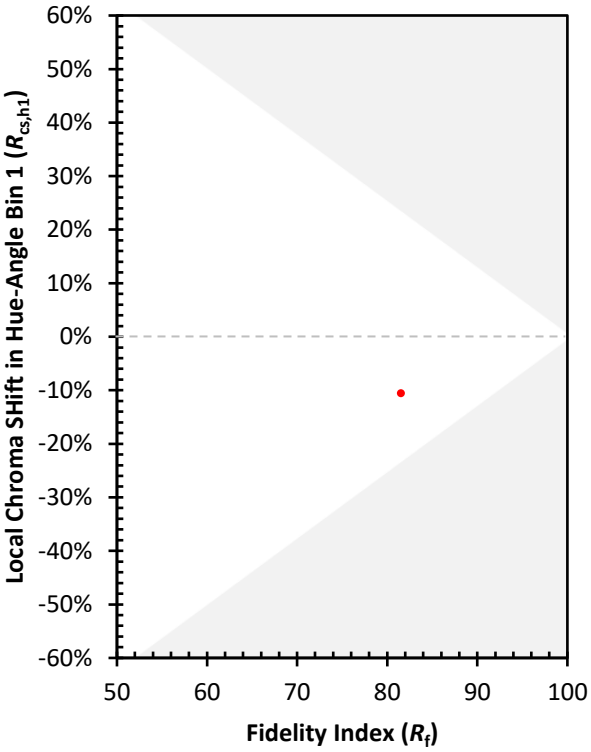


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)