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: McGRAW-EDISON

Report Number: P319193

Luminaire Tested: **GLEON-SA9A-830-U-T4W**

Issue Date: 3/3/2020

Report Generated By E0585644

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

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P319193
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-18)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GLEON-SA9A-830-U-T4W
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(9) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	32875 lumens
Efficiency:	N/A
Efficacy:	113.4 lumens/watt
Luminous Opening:	Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B3 - U0 - G5

Input Watts (W):	290
Input Voltage (V):	NR
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:	24 FT

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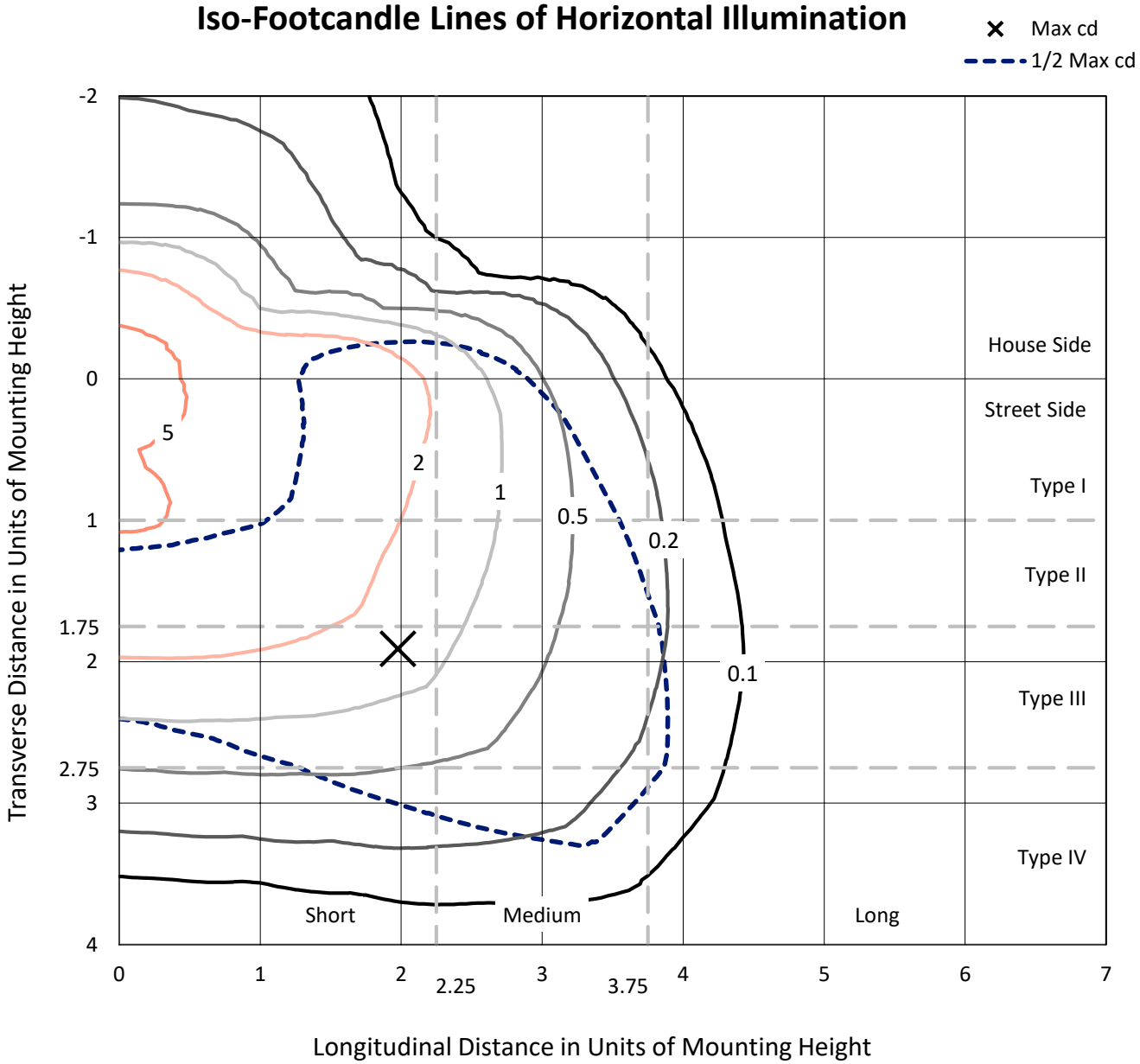
REPORT NUMBER: P319193
CATALOG NUMBER: GLEON-SA9A-830-U-T4W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type IV - Short - N/A

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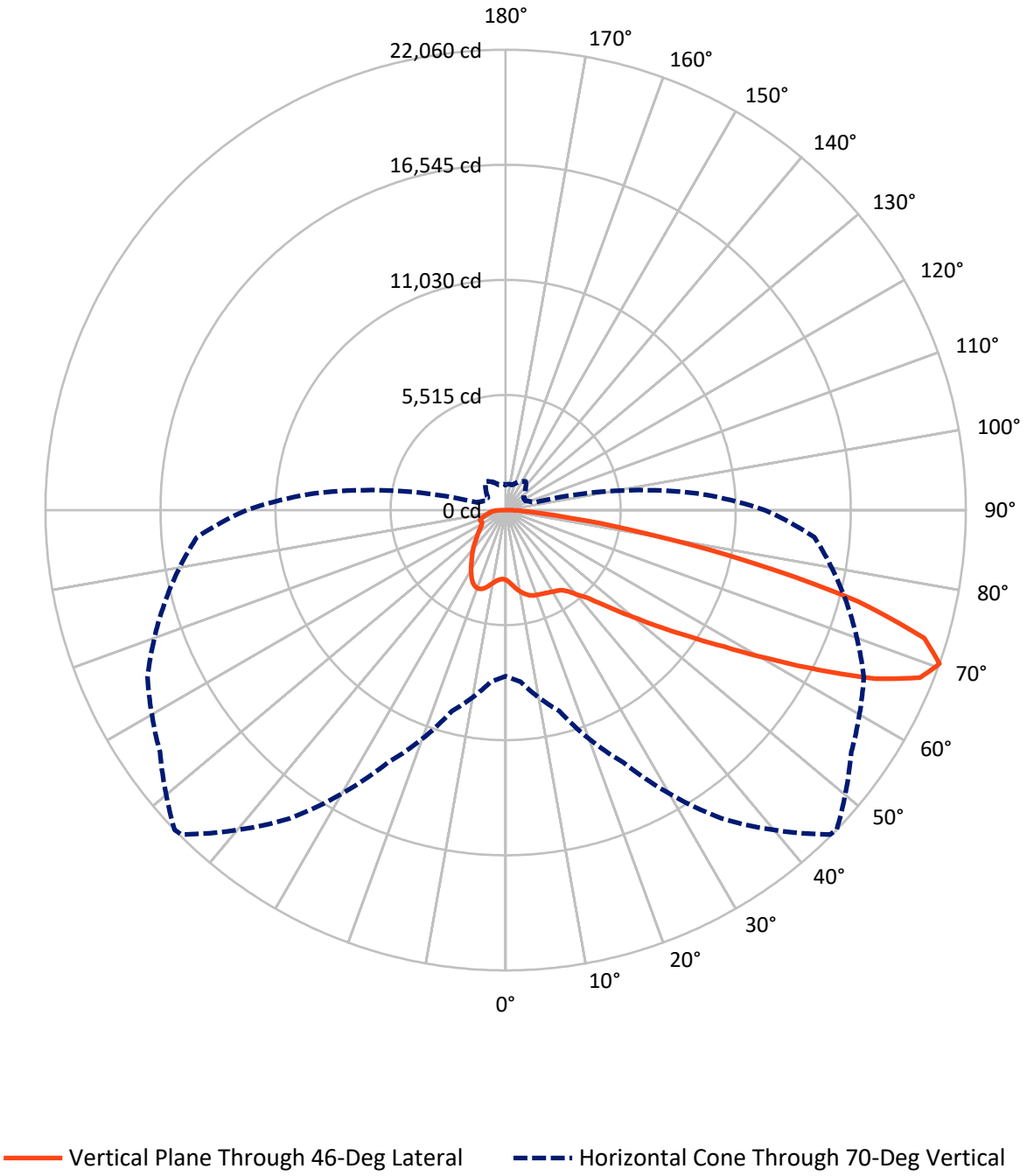
Luminous Intensity Polar Plot



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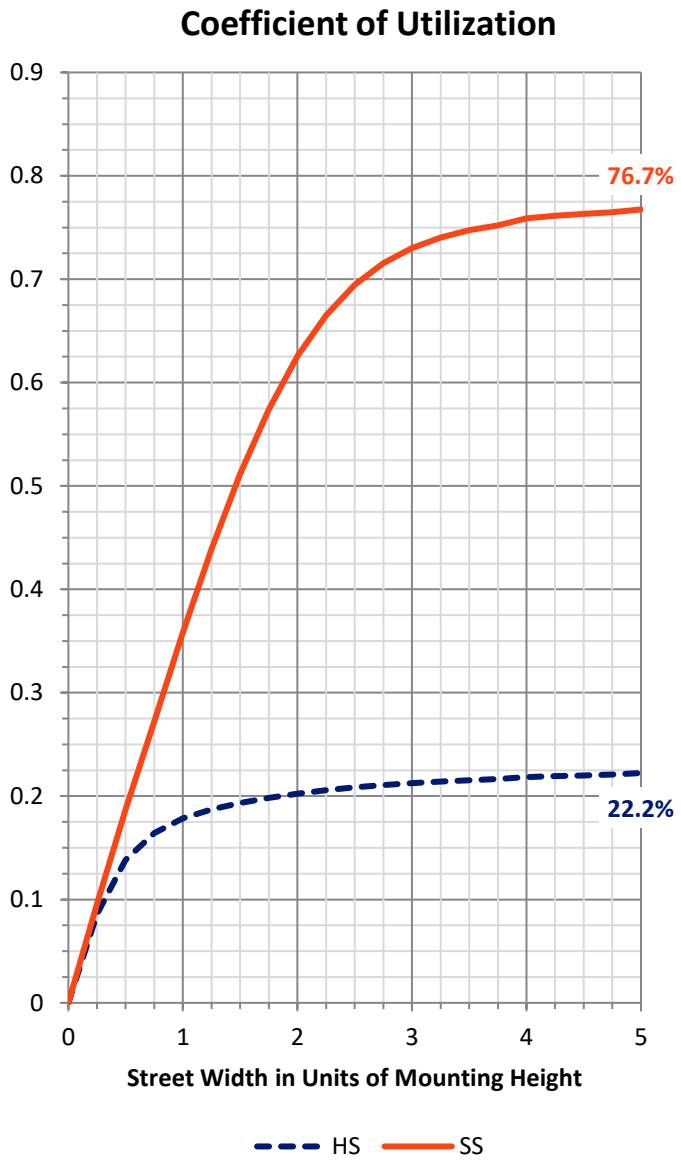
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7534.8	0.0	7534.8
	% Fixture	22.9	0.0	22.9
Street Side	Lumens	25340.1	0.0	25340.1
	% Fixture	77.1	0.0	77.1
Total	Lumens	32875.0	0.0	32875.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	341.4	1.0
10°-20°	1137.6	3.5
20°-30°	1896.8	5.8
30°-40°	2691.6	8.2
40°-50°	3959.2	12.0
50°-60°	6705.0	20.4
60°-70°	9517.6	29.0
70°-80°	5782.0	17.6
80°-90°	843.8	2.6
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°	32875.0	100.0
0°-180°	32875.0	100.0



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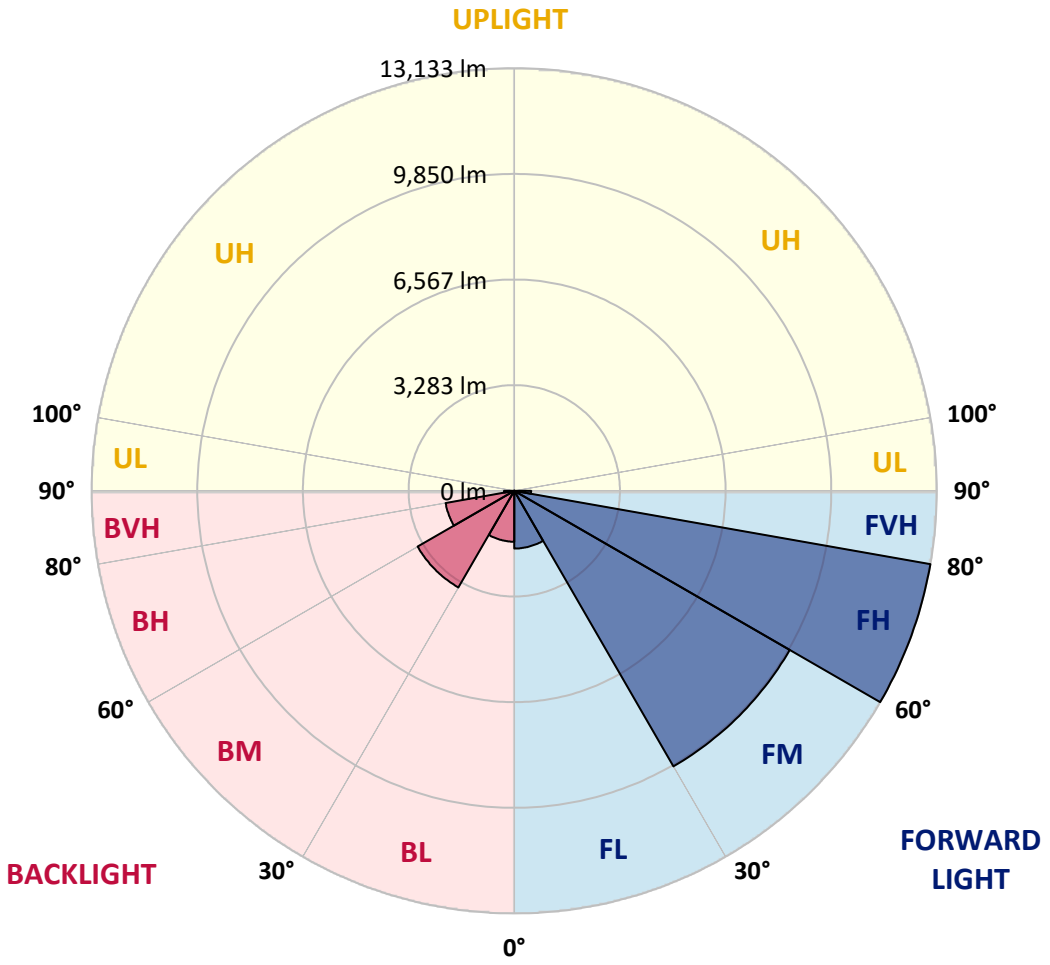
REPORT NUMBER: P319193
CATALOG NUMBER: GLEON-SA9A-830-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1793.8	5.5			
FM	(30°-60°)	9887.3	30.1			
FH	(60°-80°)	13133.4	39.9			G5
FVH	(80°-90°)	525.6	1.6			G4/750
BL	(0°-30°)	1582.0	4.8	B3/2500		
BM	(30°-60°)	3468.5	10.6	B3/5000		
BH	(60°-80°)	2166.2	6.6	B3/2500		G3/2500
BVH	(80°-90°)	318.2	1.0			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5
Type IV Short



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Scaled Data Report

REPORT NUMBER: P319193
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	3349.3	3349.3	3349.3	3349.3	3349.3	3349.3	*3349.3*	3349.3	3349.3	3349.3	3349.3
2.5°	3517.0	3519.2	3523.7	3512.5	3481.0	3472.0	*3468.6*	3435.9	3414.6	3383.1	3356.1
5°	3798.2	3800.5	3793.7	3762.2	3692.5	3640.7	*3636.2*	3562.0	3494.5	3422.4	3368.4
7.5°	4091.9	4095.2	4073.9	4014.2	3916.4	3826.3	*3820.7*	3719.5	3617.1	3508.0	3426.9
10°	4351.8	4338.3	4303.4	4220.1	4104.2	3994.0	*3989.5*	3883.7	3765.6	3634.0	3526.0
12.5°	4525.0	4513.8	4468.8	4367.5	4240.4	4139.1	*4130.1*	4032.2	3917.5	3773.5	3644.1
15°	4620.6	4628.5	4567.8	4453.0	4329.3	4243.7	*4235.9*	4166.1	4063.7	3918.6	3770.1
17.5°	4633.0	4639.8	4581.3	4467.6	4366.4	4307.9	*4304.5*	4258.4	4184.1	4044.6	3889.4
20°	4561.0	4565.5	4517.1	4423.8	4357.4	4339.4	*4338.3*	4318.0	4262.9	4139.1	3988.4
22.5°	4456.4	4459.8	4424.9	4357.4	4334.9	4363.0	*4370.9*	4363.0	4323.6	4207.7	4066.0
25°	4430.5	4428.3	4392.3	4323.6	4342.8	4402.4	*4412.5*	4415.9	4388.9	4287.6	4165.0
27.5°	4555.4	4547.5	4478.9	4368.6	4381.0	4453.0	*4466.5*	4499.1	4482.3	4393.4	4277.5
30°	4916.5	4903.0	4762.4	4539.6	4478.9	4516.0	*4532.9*	4584.6	4588.0	4513.8	4427.1
32.5°	5526.3	5509.4	5257.4	4859.2	4644.3	4580.1	*4595.9*	4673.5	4715.1	4657.8	4564.4
35°	6297.0	6277.9	5947.1	5402.6	4921.0	4702.8	*4714.0*	4775.9	4859.2	4778.2	4654.4
37.5°	7100.3	7054.2	6735.8	6041.6	5360.9	4964.9	*4964.9*	4972.8	5012.2	4843.4	4760.2
40°	7899.1	7853.0	7564.9	6793.1	5930.2	5377.8	*5351.9*	5177.5	5146.0	5000.9	4972.8
42.5°	8641.6	8628.1	8458.2	7642.6	6598.5	5784.0	*5748.0*	5452.1	5458.8	5368.8	5369.9
45°	9431.4	9431.4	9293.0	8499.9	7377.1	6436.5	*6400.5*	5965.1	6032.6	5991.0	6091.1
47.5°	10076.1	10096.3	10077.2	9393.2	8282.7	7265.7	*7200.4*	6676.1	6865.1	7008.0	7299.4
50°	10734.2	10765.7	10769.1	10373.1	9377.4	8251.2	*8177.0*	7620.1	8042.0	8451.5	9024.1
52.5°	11689.4	11760.3	11477.9	11350.8	10718.5	9421.3	*9348.2*	8834.0	9538.3	10113.2	11099.9
55°	12574.9	12513.0	12311.6	12390.3	12154.1	10753.4	*10698.2*	10247.1	11205.6	11952.7	13234.1
57.5°	13054.1	13049.6	13252.1	13589.7	13702.2	12396.0	*12349.8*	11911.1	13085.6	13647.0	15237.9
60°	13616.7	13624.5	14126.3	14892.5	15356.0	14441.3	*14421.1*	14088.1	14911.6	15228.9	16809.6
62.5°	13695.4	13837.2	14701.2	16019.8	16904.1	16831.0	*16876.0*	16049.1	16545.2	16491.2	17983.0
65°	12789.7	12976.5	14540.3	16360.7	18443.2	19444.5	*19486.1*	18021.3	17833.4	17570.1	18402.7
67.5°	10933.4	11210.1	12909.0	15619.3	18950.6	21376.2	*21434.7*	19550.3	18902.2	17935.8	17392.4
70°	*7956.5*	*8263.6*	*9973.7*	*13339.9*	*18046.0*	*21993.9*	*22060.3*	*20226.4*	*18942.7*	*16895.1*	*14847.5*
72.5°	4806.3	5047.0	6456.7	9820.7	15231.1	20868.8	*20987.0*	19369.1	17294.5	14310.8	10963.8
75°	2110.6	2268.1	3122.1	5659.1	10904.1	17266.4	*17413.8*	16579.0	14052.1	10400.1	6480.4
77.5°	898.9	943.9	1280.3	2458.3	6164.2	11798.6	*12001.1*	12113.6	9533.8	5659.1	2738.4
80°	560.3	578.3	724.5	1112.7	2884.7	6626.6	*6844.9*	7127.3	4734.3	2080.2	956.3
82.5°	340.9	361.1	481.5	672.8	1502.0	3003.9	*3108.6*	3307.7	1837.2	898.9	495.0
85°	204.8	219.4	294.8	425.3	855.0	1181.3	*1180.2*	1305.1	865.2	578.3	261.0
87.5°	97.9	109.1	157.5	220.5	430.9	443.3	*415.1*	470.3	525.4	379.1	131.6
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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CATALOG NUMBER: GLEON-SA9A-830-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3349.3	3349.3	3349.3	3349.3	3349.3	3349.3	3349.3	3349.3	3349.3	3349.3	3349.3
2.5°	3347.1	3342.6	3327.9	3316.7	3314.4	3307.7	3302.1	3305.4	3309.9	3311.1	3311.1
5°	3345.9	3333.6	3314.4	3306.6	3316.7	3330.2	3347.1	3369.6	3383.1	3393.2	3399.9
7.5°	3399.9	3376.3	3354.9	3350.4	3370.7	3406.7	3444.9	3492.2	3524.8	3547.3	3551.8
10°	3490.0	3460.7	3439.3	3443.8	3479.8	3531.6	3585.6	3646.3	3695.8	3726.2	3728.5
12.5°	3593.5	3565.3	3545.1	3564.2	3623.8	3686.8	3743.1	3796.0	3841.0	3871.3	3871.3
15°	3712.7	3692.5	3668.8	3712.7	3793.7	3850.0	3873.6	3899.5	3924.2	3946.7	3942.2
17.5°	3827.5	3808.3	3796.0	3847.7	3932.1	3958.0	3942.2	3923.1	3923.1	3935.5	3937.7
20°	3926.5	3909.6	3917.5	3968.1	4012.0	3985.0	3926.5	3865.7	3841.0	3847.7	3854.5
22.5°	4013.1	4005.2	4028.9	4052.5	4021.0	3926.5	3818.5	3736.3	3706.0	3703.7	3706.0
25°	4114.4	4113.2	4142.5	4099.7	3960.2	3785.8	3640.7	3560.8	3544.0	3557.5	3580.0
27.5°	4240.4	4252.7	4267.4	4111.0	3836.5	3573.2	3425.8	3370.7	3387.6	3420.2	3441.6
30°	4401.3	4435.0	4403.5	4082.9	3658.7	3330.2	3189.6	3173.8	3219.9	3266.1	3288.6
32.5°	4557.6	4610.5	4534.0	4009.7	3429.2	3072.6	2963.4	2958.9	3015.2	3060.2	3091.7
35°	4683.6	4788.3	4631.9	3864.6	3163.7	2835.2	2755.3	2724.9	2745.2	2798.0	2834.0
37.5°	4847.9	5022.3	4699.4	3643.0	2875.7	2639.4	2546.0	2476.3	2458.3	2479.6	2497.6
40°	5148.3	5378.9	4730.9	3333.6	2594.4	2443.6	2349.1	2246.8	2175.9	2124.1	2125.2
42.5°	5638.8	5843.6	4710.6	2957.8	2334.5	2252.4	2145.5	2027.4	1912.6	1795.6	1786.6
45°	6435.4	6534.4	4649.9	2559.5	2106.1	2052.1	1952.0	1833.9	1680.8	1548.1	1535.7
47.5°	7710.1	7490.7	4555.4	2211.9	1904.7	1882.2	1790.0	1653.8	1491.8	1385.0	1376.0
50°	9448.3	8871.1	4509.3	1935.1	1727.0	1733.7	1658.3	1514.3	1361.3	1282.6	1273.6
52.5°	11527.4	10478.9	4598.1	1721.3	1584.1	1607.7	1551.5	1416.5	1288.2	1226.3	1217.3
55°	13684.2	12144.0	4693.8	1566.1	1449.1	1495.2	1476.1	1364.7	1248.8	1191.4	1183.6
57.5°	15530.4	13387.2	4502.5	1440.1	1328.7	1400.7	1417.6	1332.1	1228.6	1176.8	1167.8
60°	16692.6	13887.8	4000.7	1322.0	1233.1	1325.3	1383.8	1323.1	1236.4	1231.9	1225.2
62.5°	17243.9	13843.9	3248.1	1228.6	1173.4	1292.7	1408.6	1373.7	1326.5	1367.0	1370.3
65°	16996.4	13182.4	2418.9	1166.7	1130.7	1305.1	1482.8	1469.3	1352.3	1392.8	1398.5
67.5°	15367.3	11603.9	1791.1	1112.7	1083.4	1340.0	1617.8	1500.8	1301.7	1331.0	1313.0
70°	*12420.7*	*9199.7*	*1381.6*	*1051.9*	*1035.1*	*1335.5*	*1678.6*	*1481.7*	*1246.6*	*1253.3*	*1204.9*
72.5°	8565.1	6273.4	1123.9	995.7	965.3	1217.3	1635.8	1434.5	1200.4	1148.7	1084.6
75°	4657.8	3367.3	955.2	937.2	842.7	1068.8	1557.1	1400.7	1158.8	1090.2	1054.2
77.5°	1832.7	1397.3	829.2	857.3	736.9	943.9	1469.3	1336.6	1101.4	1011.4	993.4
80°	748.2	713.3	687.4	741.4	633.4	825.8	1363.6	1261.2	1032.8	938.3	902.3
82.5°	424.1	443.3	534.4	585.0	514.2	760.5	1313.0	1200.4	950.7	840.4	797.7
85°	217.1	259.9	372.4	419.6	378.0	646.9	1209.4	1050.8	762.8	643.5	646.9
87.5°	104.6	145.1	235.1	263.3	245.3	468.0	903.4	761.7	594.0	470.3	455.7
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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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

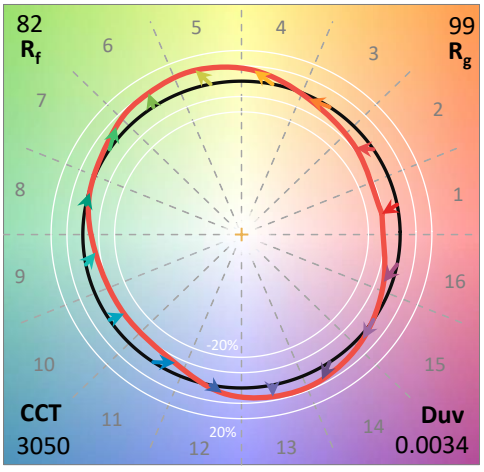
Test Information

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

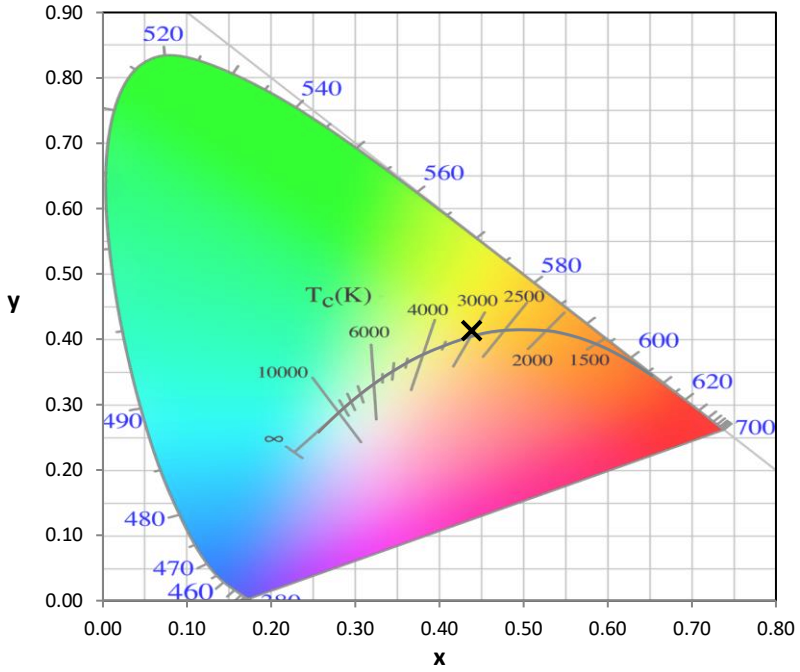
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

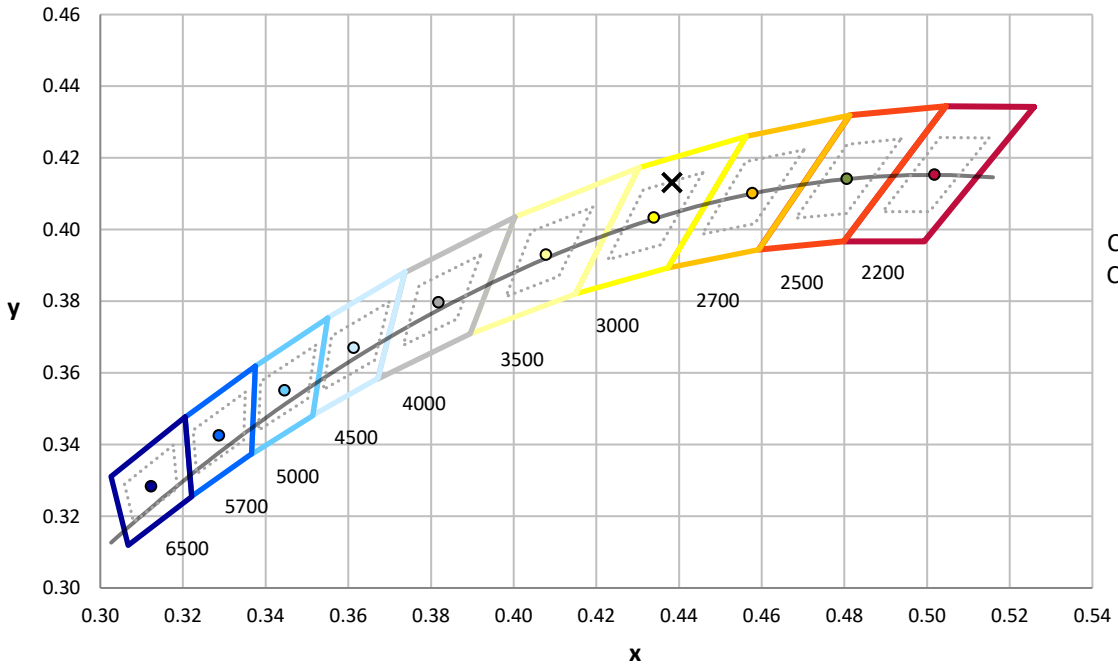
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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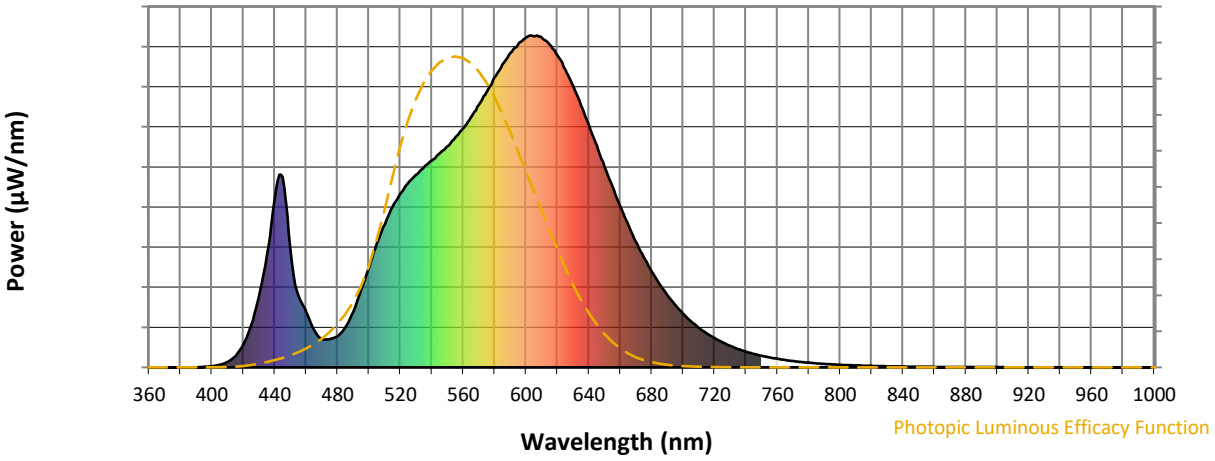
Photopic Flux vs. Wavelength



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			

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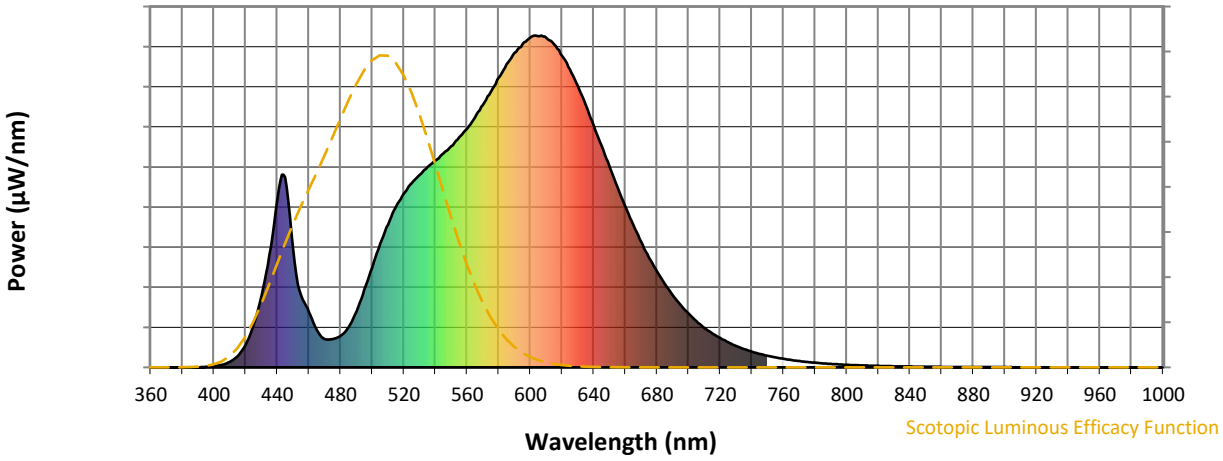
Scotopic Flux vs. Wavelength



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			

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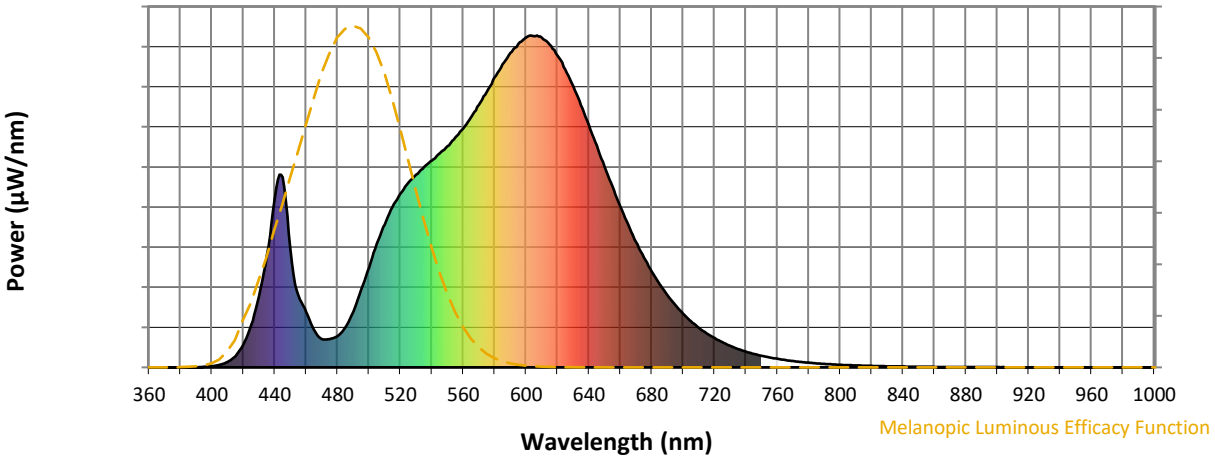
Melanopic Flux vs. Wavelength



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			

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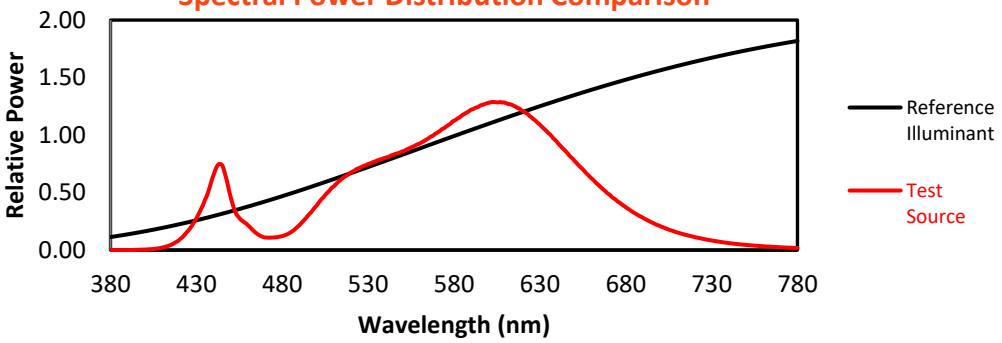
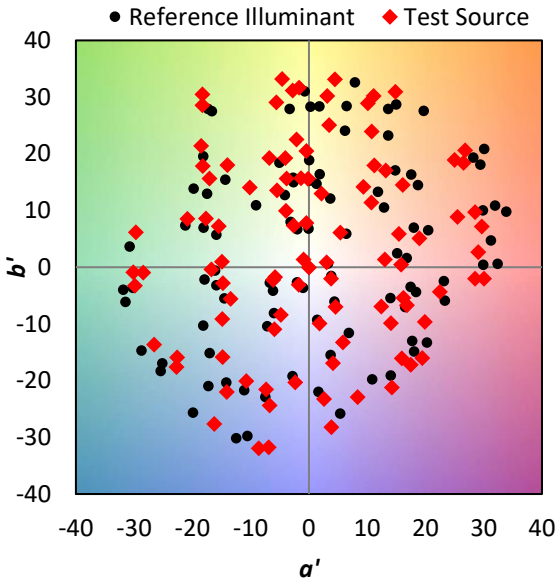
Summary

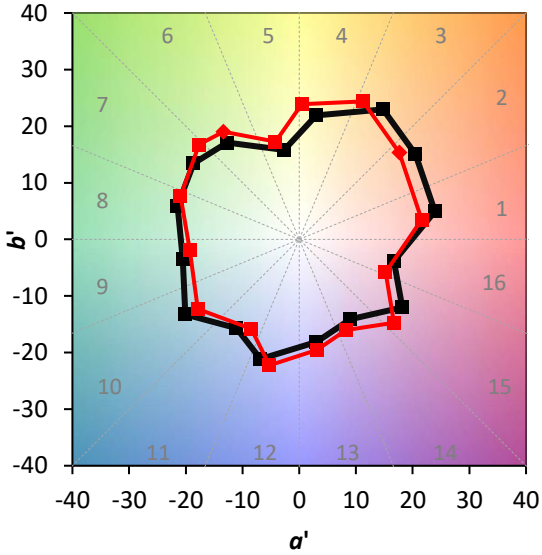
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

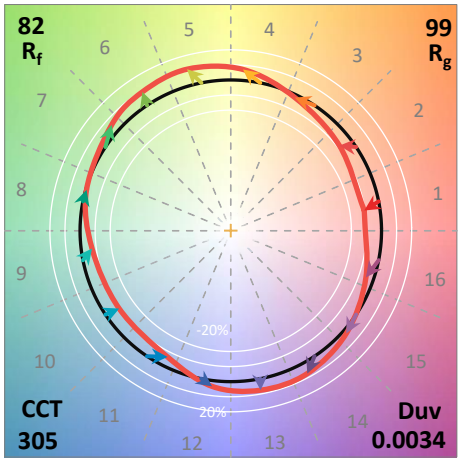
Spectral Power Distribution Comparison

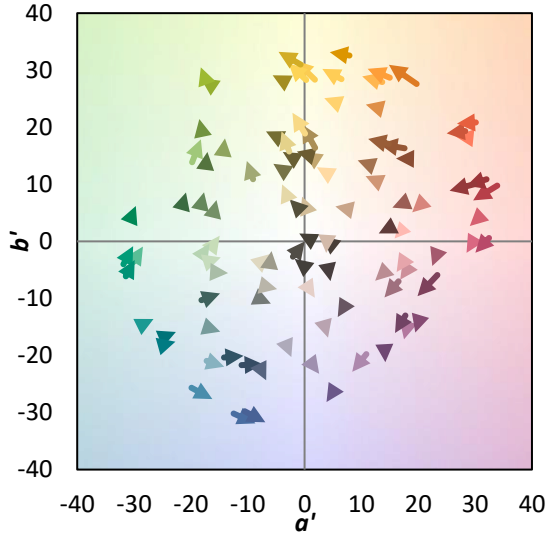


Color Vector Graphics









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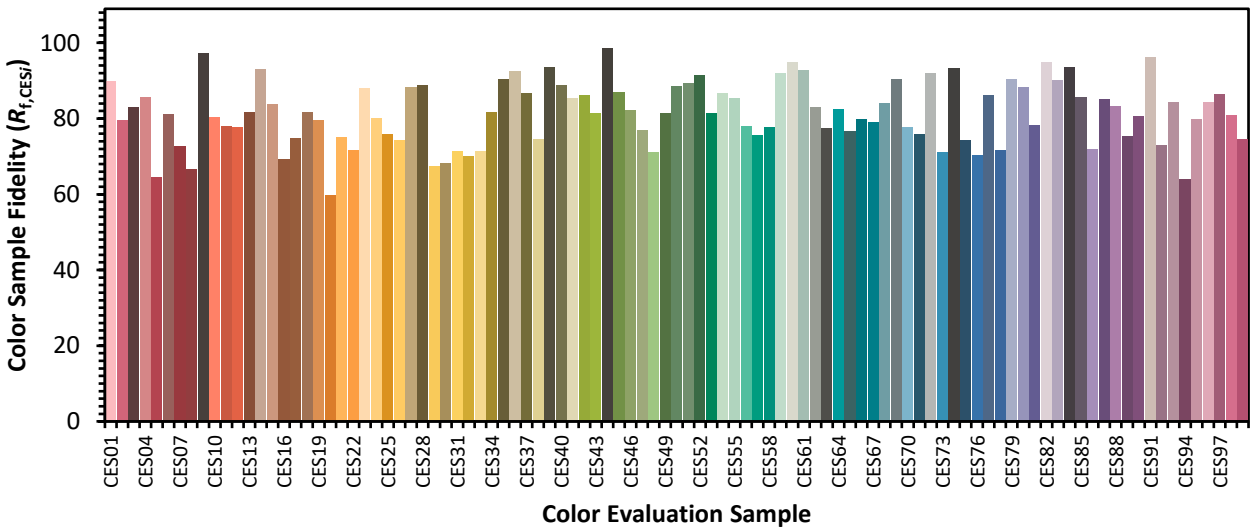
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
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	



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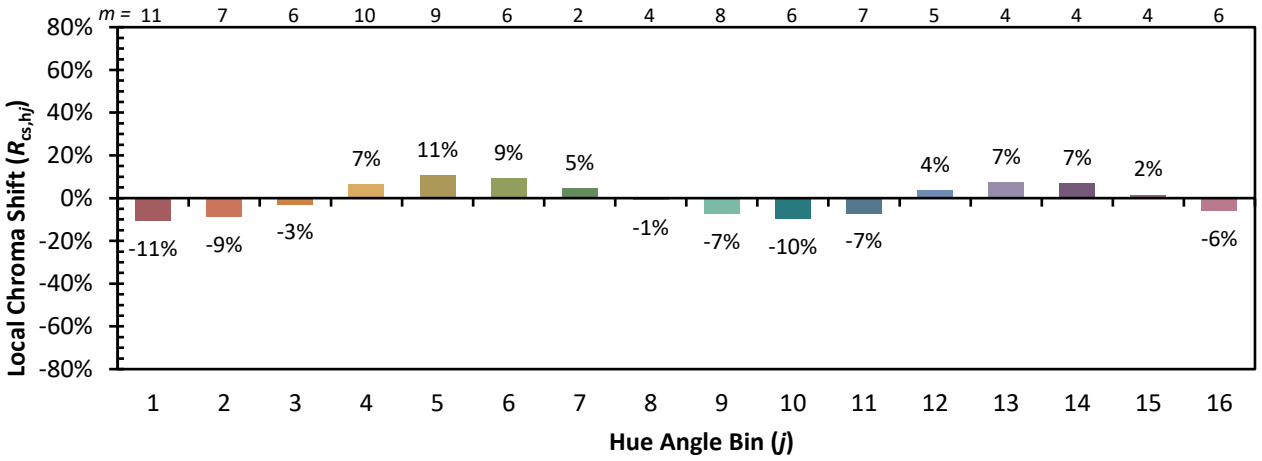
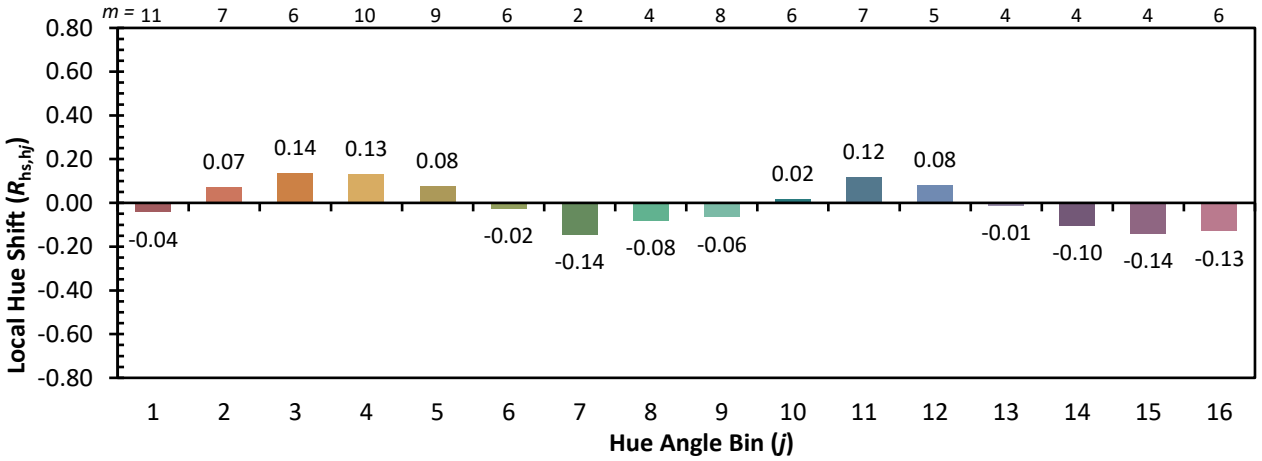
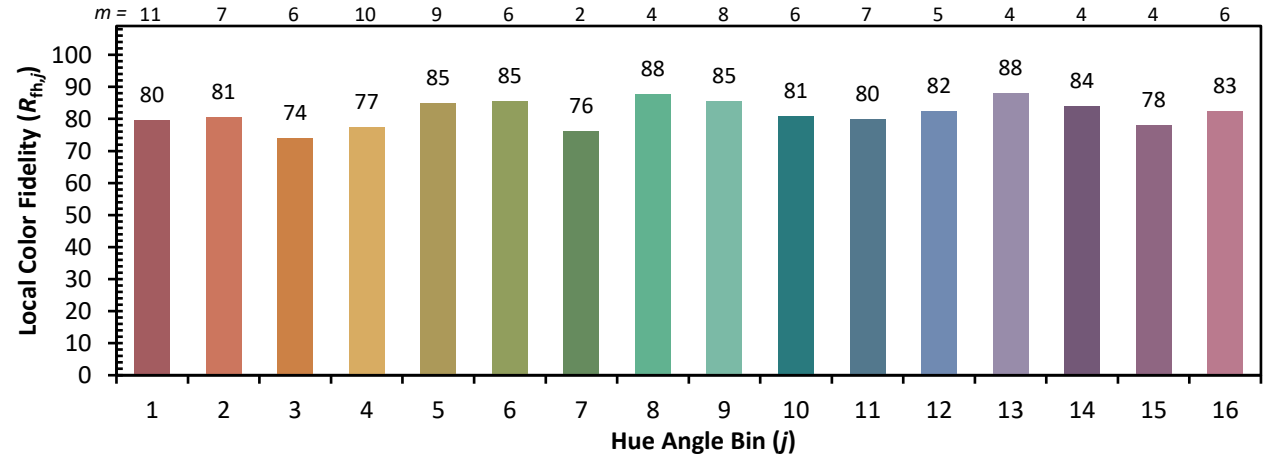
Color Rendition by Hue-Angle Bin







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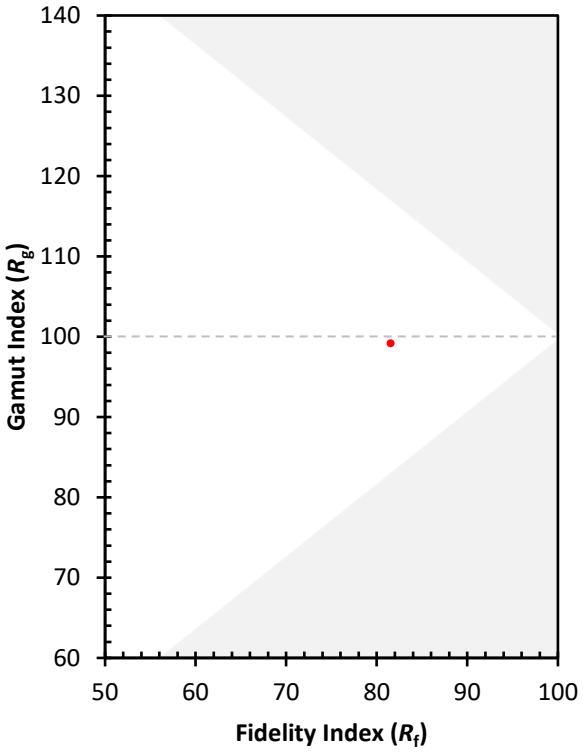
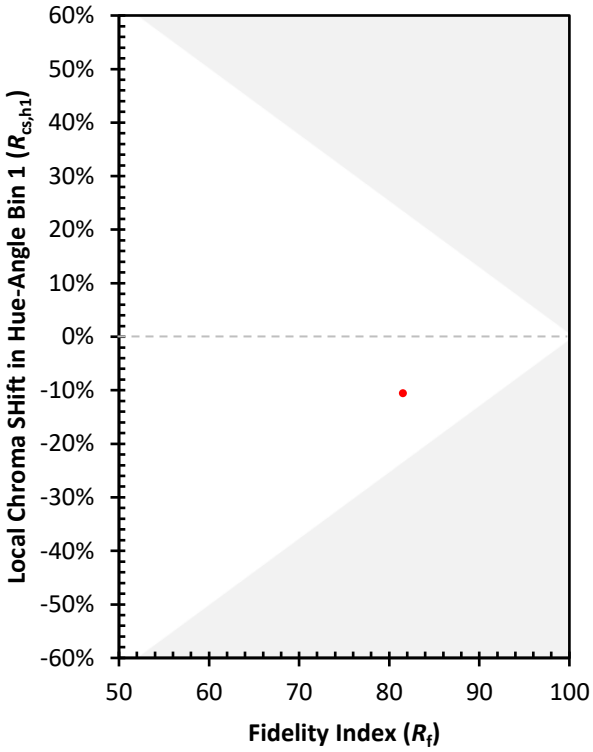
Measure Comparisons





(END OF REPORT)