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: P323062

Luminaire Tested: **GLEON-SA8D-830-U-T4W-HSS**

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:	P323062
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GLEON-SA8D-830-U-T4W-HSS
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(8) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	35816 lumens
Efficiency:	N/A
Efficacy:	70.1 lumens/watt
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U0 - G5

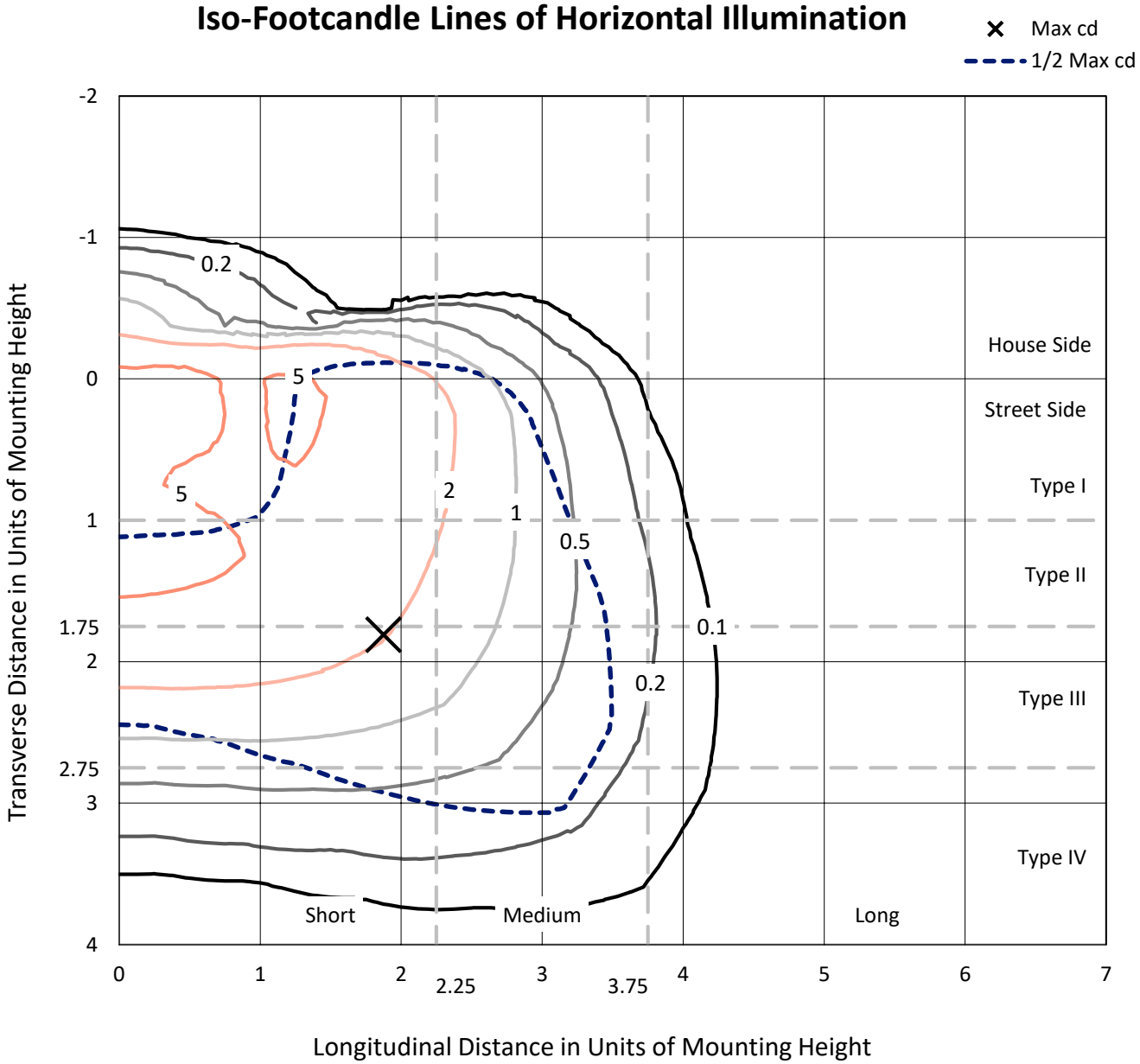
Input Watts (W):	511
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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

Scaled Data Report

REPORT NUMBER: P323062
CATALOG NUMBER: GLEON-SA8D-830-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination



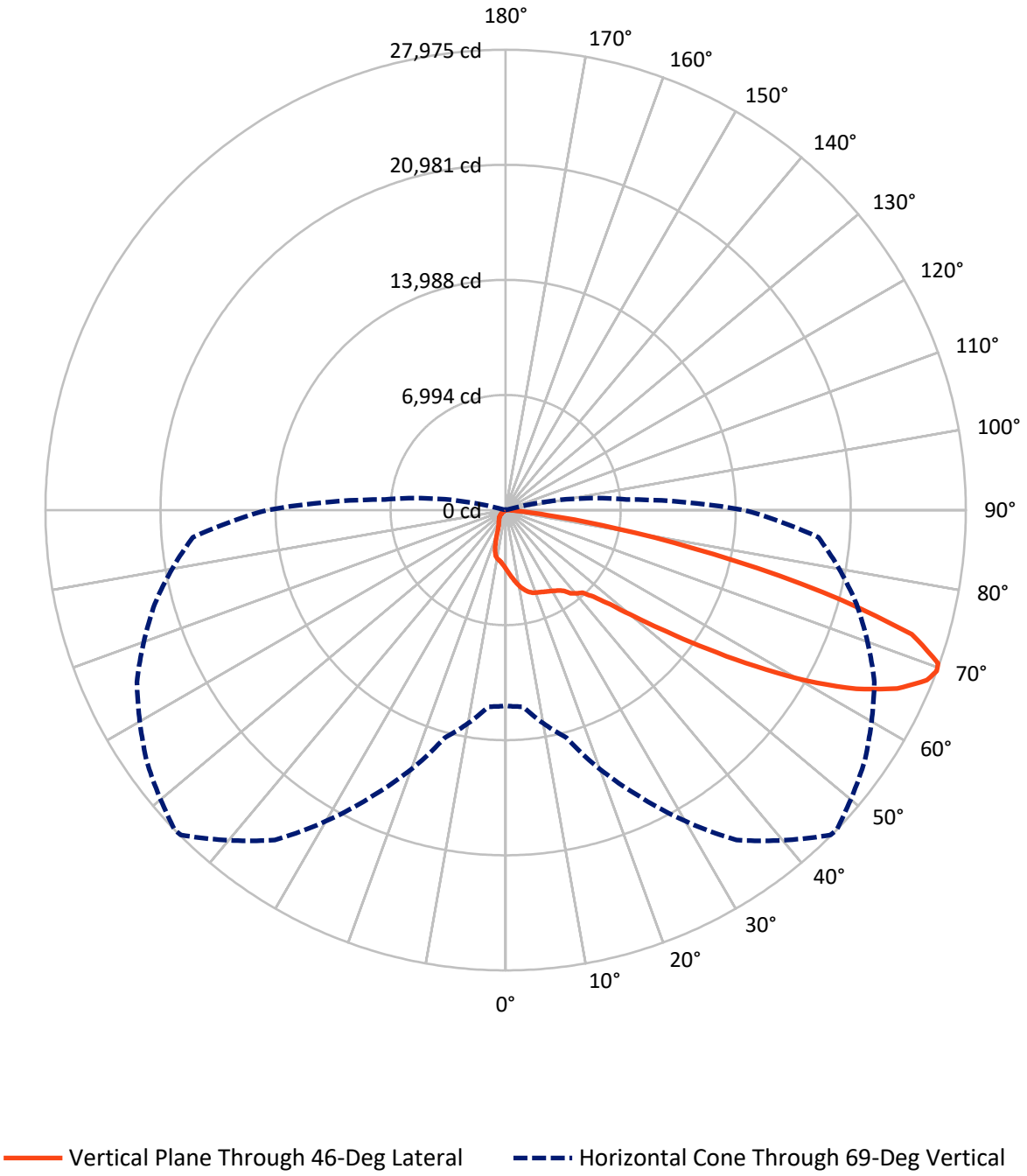
Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
Type IV - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P323062
CATALOG NUMBER: GLEON-SA8D-830-U-T4W-HSS

Luminous Intensity Polar Plot



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

Scaled Data Report

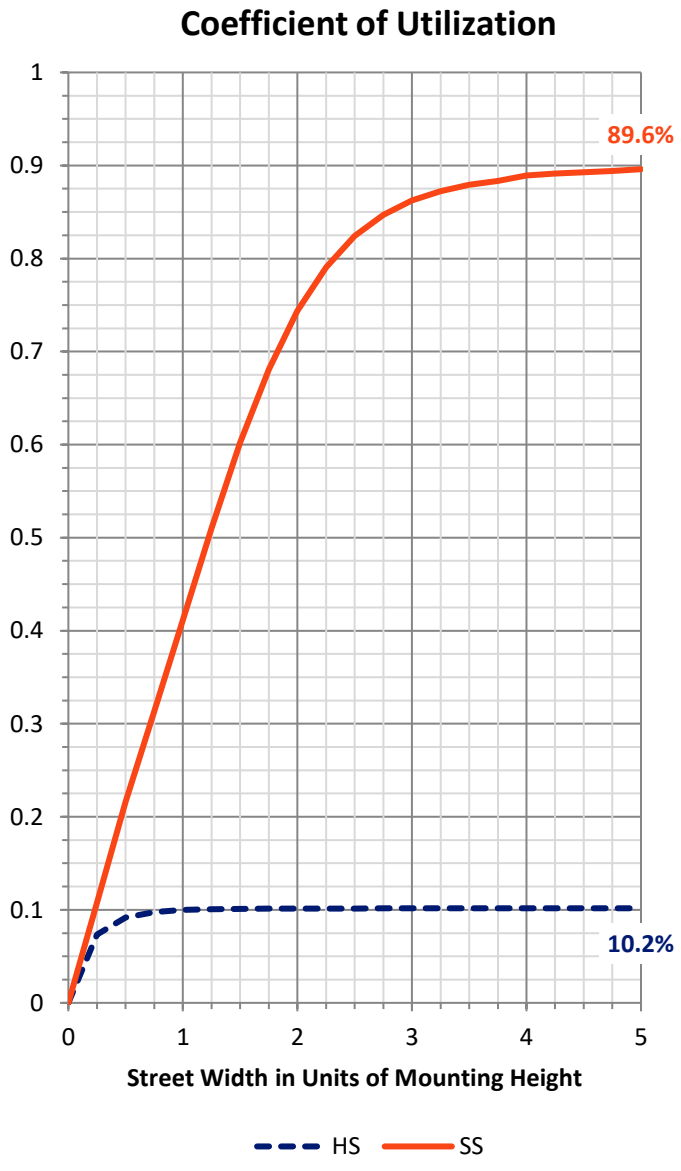
REPORT NUMBER: P323062
CATALOG NUMBER: GLEON-SA8D-830-U-T4W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3675.7	0.0	3675.7
	% Fixture	10.3	0.0	10.3
Street Side	Lumens	32140.3	0.0	32140.3
	% Fixture	89.7	0.0	89.7
Total	Lumens	35816.0	0.0	35816.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	357.2	1.0
10°-20°	1083.6	3.0
20°-30°	1704.2	4.8
30°-40°	2443.8	6.8
40°-50°	4223.9	11.8
50°-60°	8344.6	23.3
60°-70°	11662.4	32.6
70°-80°	5634.2	15.7
80°-90°	362.1	1.0
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°	35816.0	100.0
0°-180°	35816.0	100.0



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

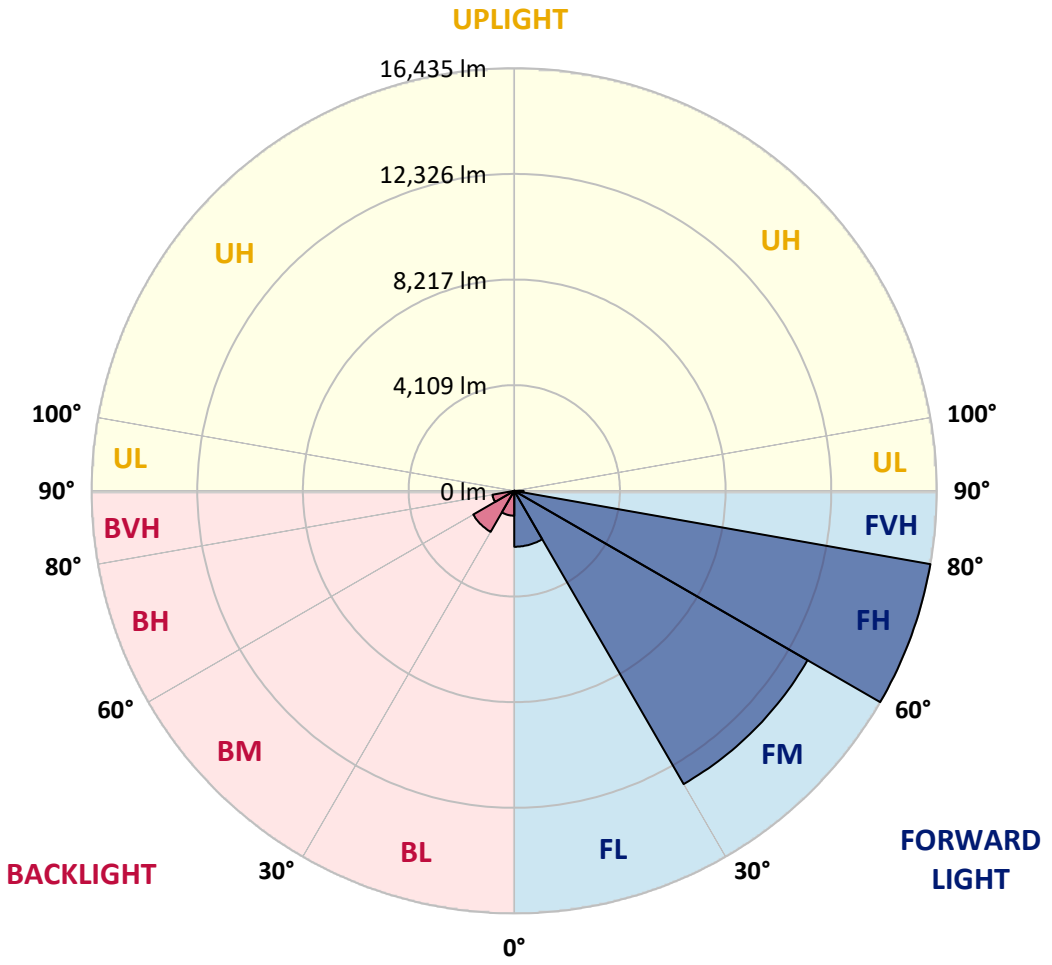
Scaled Data Report

REPORT NUMBER: P323062
CATALOG NUMBER: GLEON-SA8D-830-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2176.2	6.1			
FM	(30°-60°)	13170.3	36.8			
FH	(60°-80°)	16434.6	45.9			G5
FVH	(80°-90°)	359.1	1.0			G3/500
BL	(0°-30°)	968.8	2.7	B2/1000		
BM	(30°-60°)	1842.0	5.1	B2/2500		
BH	(60°-80°)	861.9	2.4	B2/1000		G2/1000
BVH	(80°-90°)	3.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G5
Type IV Short



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

Scaled Data Report

REPORT NUMBER: P323062
CATALOG NUMBER: GLEON-SA8D-830-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	3588.6	3588.6	3588.6	3588.6	3588.6	3588.6	*3588.6*	3588.6	3588.6	3588.6	3588.6
2.5°	3986.6	3981.6	3958.1	3948.0	3890.9	3857.3	*3843.9*	3801.9	3741.4	3681.0	3613.8
5°	4440.0	4438.3	4394.7	4352.7	4245.2	4144.5	*4126.0*	4028.6	3892.6	3765.0	3637.3
7.5°	4903.5	4881.7	4838.0	4757.4	4601.2	4440.0	*4424.9*	4287.2	4094.1	3909.4	3726.3
10°	5296.5	5283.0	5225.9	5103.3	4920.3	4737.3	*4718.8*	4549.2	4330.9	4104.2	3870.7
12.5°	5602.1	5592.0	5516.4	5363.6	5168.8	4979.1	*4953.9*	4802.8	4569.3	4315.8	4040.4
15°	5788.5	5783.5	5691.1	5528.2	5336.8	5172.2	*5150.4*	5017.7	4801.1	4535.7	4225.1
17.5°	5832.2	5833.8	5738.1	5573.5	5415.7	5298.1	*5281.3*	5180.6	4999.2	4735.6	4409.8
20°	5734.8	5754.9	5669.3	5526.5	5429.1	5367.0	*5353.6*	5293.1	5140.3	4891.8	4557.6
22.5°	5597.1	5607.1	5548.4	5452.6	5412.3	5424.1	*5417.4*	5383.8	5254.5	5026.1	4703.7
25°	5513.1	5513.1	5477.8	5397.2	5424.1	5496.3	*5498.0*	5491.3	5388.8	5190.7	4881.7
27.5°	5509.7	5499.7	5459.4	5398.9	5472.8	5583.6	*5590.3*	5635.7	5571.9	5390.5	5103.3
30°	5644.1	5632.3	5546.7	5467.7	5561.8	5681.0	*5697.8*	5796.9	5765.0	5607.1	5350.2
32.5°	5958.1	5916.1	5726.4	5597.1	5667.6	5810.3	*5832.2*	5990.0	6040.4	5874.1	5588.7
35°	6388.0	6255.3	5981.6	5842.2	5848.9	5998.4	*6018.6*	6250.3	6399.8	6119.3	5773.4
37.5°	6980.8	6915.3	6470.3	6097.5	6127.7	6354.4	*6413.2*	6665.1	6623.1	6253.7	5983.3
40°	8280.5	8178.1	7704.6	6812.9	6394.7	6643.2	*6661.7*	6796.1	6799.4	6557.6	6419.9
42.5°	10050.5	10008.5	9509.8	8110.9	6920.3	6836.4	*6869.9*	7096.7	7350.2	7199.1	7192.4
45°	12010.2	11988.4	11459.4	9833.9	7983.3	7469.5	*7511.4*	7815.4	8300.7	8334.3	8547.6
47.5°	13587.1	13577.0	13273.1	11756.7	9610.5	8542.5	*8556.0*	8878.4	9731.4	10152.9	10493.8
50°	15024.6	15073.3	14833.1	13837.3	11827.2	10223.5	*10191.6*	10406.5	11776.8	12467.0	12890.2
52.5°	17022.9	17091.7	16418.4	15778.5	14153.0	12309.1	*12284.0*	12509.0	14235.3	14752.5	14828.1
55°	18787.8	18670.3	18137.9	17953.2	16989.3	14885.2	*14878.5*	15076.6	16613.2	16833.1	16972.5
57.5°	19567.0	19521.7	19778.6	20201.8	19960.0	17929.7	*17914.6*	17763.5	18740.8	18764.3	19192.5
60°	20059.0	20114.5	20902.0	22206.8	22809.7	21206.0	*21108.6*	20186.7	20772.7	20720.7	21179.1
62.5°	19689.6	19798.8	21216.1	23390.7	24942.4	24065.8	*23928.1*	22406.7	22509.1	22329.4	22756.0
65°	17728.2	17897.8	20220.3	23167.4	26000.3	26300.9	*26161.6*	24366.4	23887.8	23592.3	23355.5
67.5°	14394.8	14495.6	16920.5	21224.5	25523.4	27634.3	*27605.7*	26084.3	24929.0	23379.0	21541.9
69°	*11896.0*	*11995.1*	*14329.3*	*19179.1*	*24473.9*	*27919.8*	*27975.2*	*26635.1*	*24730.8*	*22082.6*	*19086.7*
70°	10075.7	10181.5	12356.2	17425.9	23256.4	27787.1	*27886.2*	26583.1	24163.2	20581.3	16932.2
72.5°	5284.7	5375.4	7607.2	12005.2	18959.1	25515.0	*25815.6*	24336.2	20482.2	14947.3	10011.9
75°	1660.8	1712.9	2970.7	6275.5	12980.9	19839.1	*19907.9*	19090.1	14544.3	8221.8	4169.7
77.5°	633.1	618.0	989.1	2312.4	6562.6	12492.2	*12913.7*	11929.6	7632.3	2906.8	962.2
80°	340.9	342.6	513.9	957.2	2807.8	6419.9	*6775.9*	5781.8	2712.0	906.8	221.7
82.5°	147.8	154.5	288.8	507.1	1289.7	2367.8	*2545.8*	2119.3	1036.1	609.6	82.3
85°	31.9	35.3	139.4	275.4	525.6	665.0	*696.9*	686.8	660.0	473.6	31.9
87.5°	0.0	0.0	62.1	99.1	132.7	151.1	*132.7*	173.0	364.4	319.1	16.8
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: P323062
CATALOG NUMBER: GLEON-SA8D-830-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3588.6	3588.6	3588.6	3588.6	3588.6	3588.6	3588.6	3588.6	3588.6	3588.6	3588.6
2.5°	3592.0	3561.8	3509.7	3452.6	3412.3	3370.3	3336.7	3321.6	3304.8	3293.1	3308.2
5°	3585.3	3526.5	3425.7	3328.3	3257.8	3200.7	3153.7	3135.2	3116.8	3103.3	3101.6
7.5°	3644.0	3561.8	3407.3	3264.5	3155.4	3078.1	3014.3	2987.4	2965.6	2955.5	2947.1
10°	3756.6	3650.8	3444.2	3257.8	3116.8	2985.8	2848.1	2742.3	2673.4	2641.5	2629.8
12.5°	3902.7	3770.0	3514.7	3293.1	3088.2	2836.3	2544.1	2292.2	2129.3	2075.6	2043.7
15°	4073.9	3909.4	3607.1	3338.4	2984.1	2524.0	2028.6	1699.4	1548.3	1518.1	1484.5
17.5°	4238.5	4057.1	3717.9	3346.8	2755.7	2016.8	1486.2	1262.8	1204.0	1224.2	1229.2
20°	4382.9	4203.2	3827.1	3272.9	2340.9	1513.0	1150.3	1094.9	1116.7	1155.3	1162.1
22.5°	4529.0	4344.3	3927.8	3078.1	1810.3	1148.6	1036.1	1049.6	1071.4	1110.0	1116.7
25°	4707.0	4515.6	4021.9	2720.4	1358.5	977.3	984.1	1004.2	1026.0	1061.3	1064.7
27.5°	4911.9	4732.2	4084.0	2255.3	1007.6	898.4	920.2	950.5	972.3	1005.9	1012.6
30°	5183.9	5017.7	4104.2	1773.3	844.7	827.9	838.0	874.9	906.8	937.0	942.1
32.5°	5439.2	5299.8	4037.0	1338.4	782.5	762.4	762.4	784.2	821.2	849.7	856.4
35°	5674.3	5583.6	3822.0	979.0	735.5	701.9	685.1	685.1	708.7	732.2	738.9
37.5°	5985.0	5981.6	3474.4	780.9	690.2	651.6	616.3	589.4	581.0	586.1	589.4
40°	6517.3	6522.3	3021.0	700.3	651.6	599.5	545.8	497.1	451.7	436.6	434.9
42.5°	7348.5	7273.0	2545.8	661.6	618.0	545.8	465.2	399.7	329.1	307.3	305.6
45°	8668.5	8220.1	2042.0	626.4	582.7	485.3	384.6	295.6	238.5	221.7	221.7
47.5°	10591.2	9464.4	1581.9	587.7	535.7	416.5	290.5	213.3	174.6	166.2	167.9
50°	12579.5	10683.6	1212.4	539.1	478.6	344.3	214.9	154.5	132.7	132.7	134.3
52.5°	14342.8	11577.0	945.4	487.0	408.1	270.4	162.9	120.9	110.8	109.2	110.8
55°	15993.5	12153.0	723.8	426.5	324.1	201.5	124.3	99.1	92.4	89.0	87.3
57.5°	17585.5	12438.5	542.4	344.3	235.1	146.1	99.1	84.0	77.2	72.2	70.5
60°	18645.1	12206.7	372.8	253.6	162.9	105.8	82.3	72.2	63.8	58.8	57.1
62.5°	19242.9	11573.6	240.1	183.0	115.9	78.9	65.5	60.5	48.7	43.7	43.7
65°	19001.1	10529.1	167.9	131.0	84.0	58.8	48.7	48.7	35.3	28.5	26.9
67.5°	16838.2	8895.2	127.6	97.4	60.5	43.7	36.9	42.0	21.8	13.4	13.4
69°	*14487.2*	*7372.1*	*109.2*	*80.6*	*50.4*	*35.3*	*31.9*	*38.6*	*15.1*	*10.1*	*8.4*
70°	12591.3	6359.4	99.1	70.5	42.0	30.2	28.5	36.9	15.1	8.4	6.7
72.5°	7533.3	3546.6	75.6	50.4	26.9	23.5	23.5	42.0	15.1	8.4	6.7
75°	3044.5	1249.4	55.4	35.3	20.2	20.2	28.5	53.7	13.4	6.7	5.0
77.5°	690.2	273.7	31.9	21.8	13.4	20.2	33.6	42.0	8.4	3.4	0.0
80°	167.9	67.2	20.2	13.4	8.4	15.1	25.2	23.5	1.7	0.0	0.0
82.5°	55.4	23.5	8.4	6.7	1.7	5.0	11.8	6.7	0.0	0.0	0.0
85°	23.5	13.4	3.4	1.7	0.0	0.0	1.7	0.0	0.0	0.0	0.0
87.5°	15.1	5.0	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	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

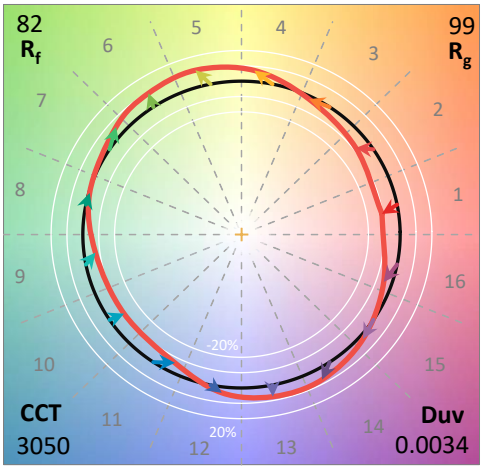
Test Information

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

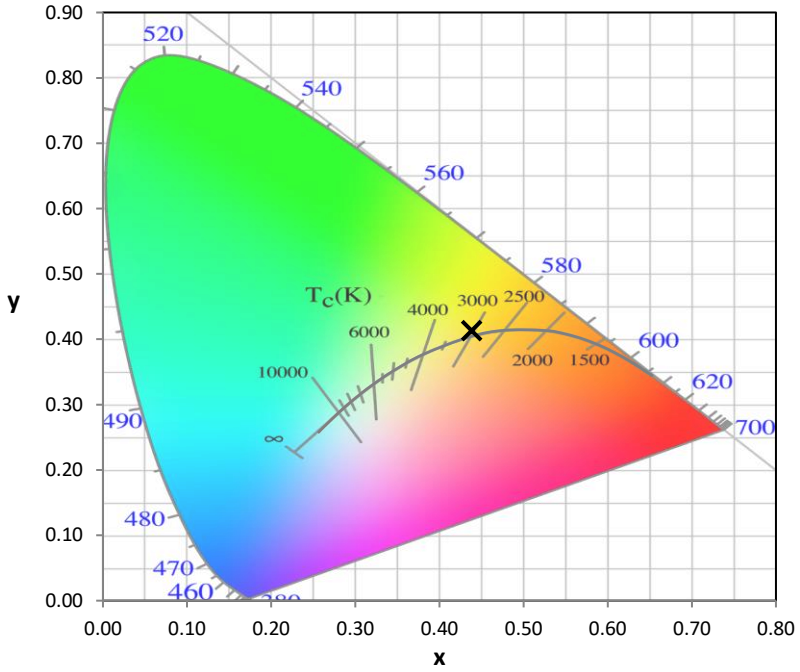
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

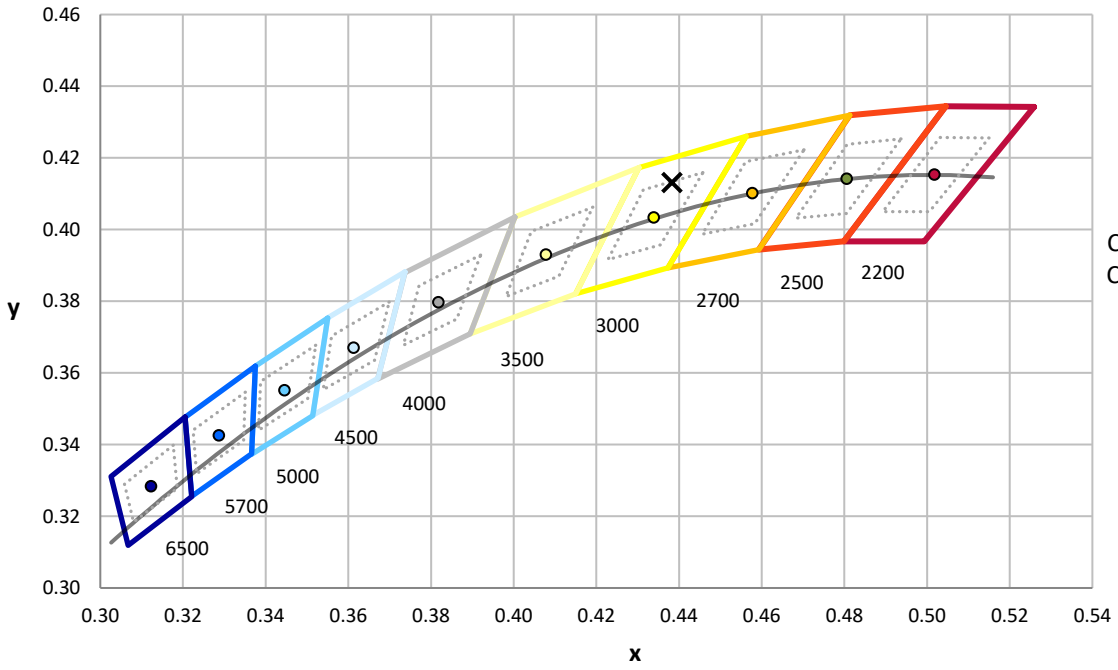
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

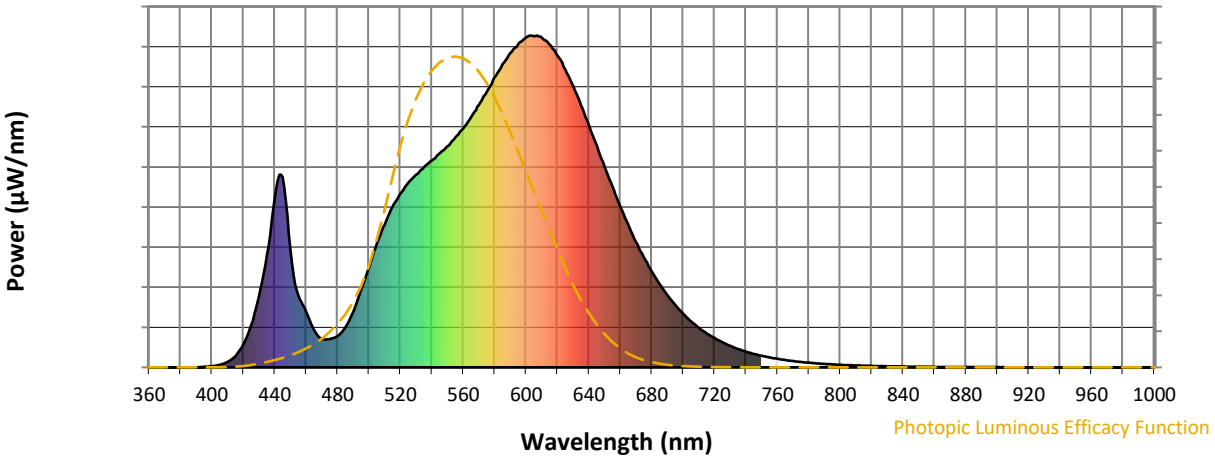


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

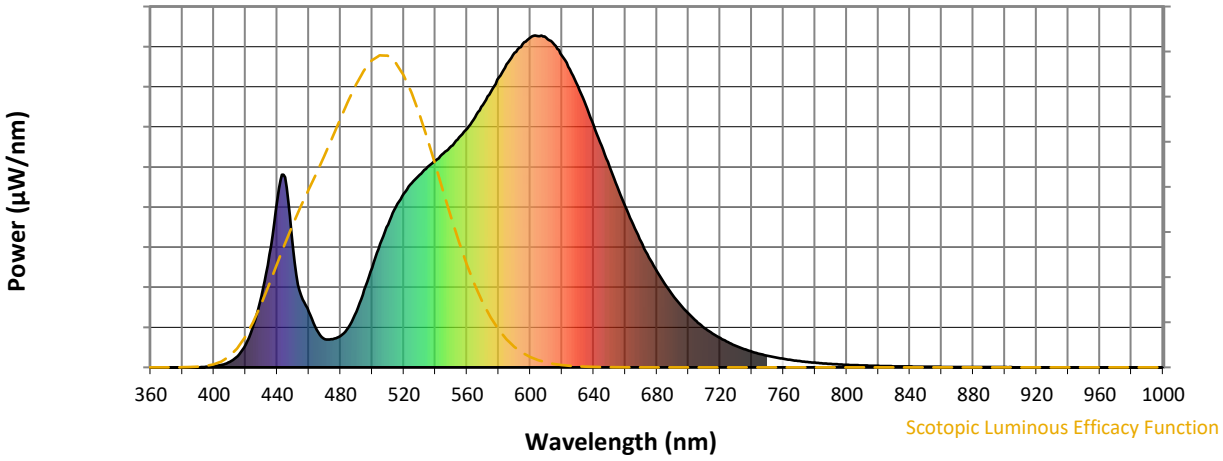


Photopic Lumens: NR

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

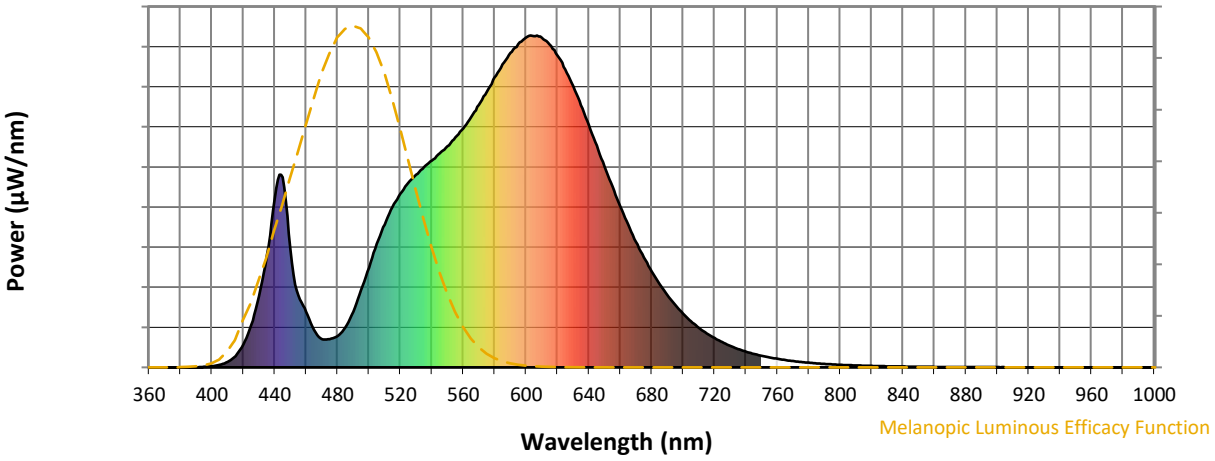


Scotopic Lumens: NR **S/P: 1.27**

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			

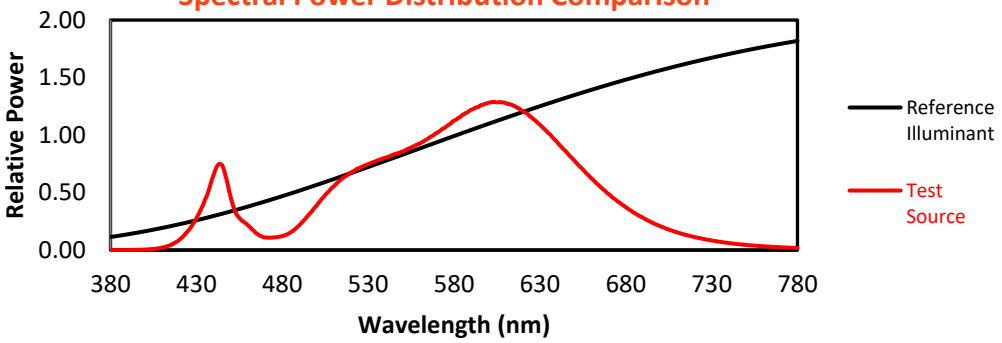
REPORT NUMBER: SP1-2408-195-9

TM-30-18

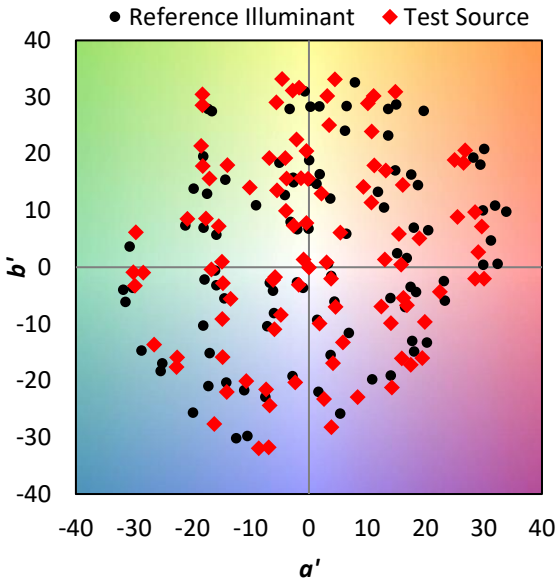
Summary

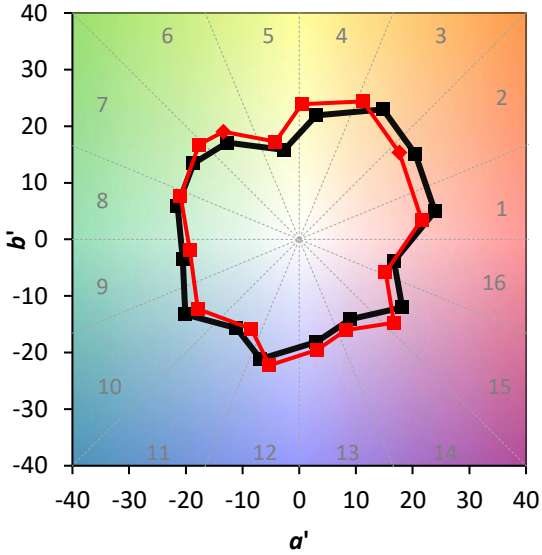
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

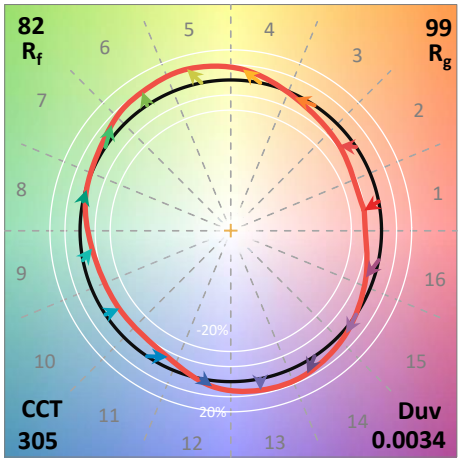
Spectral Power Distribution Comparison

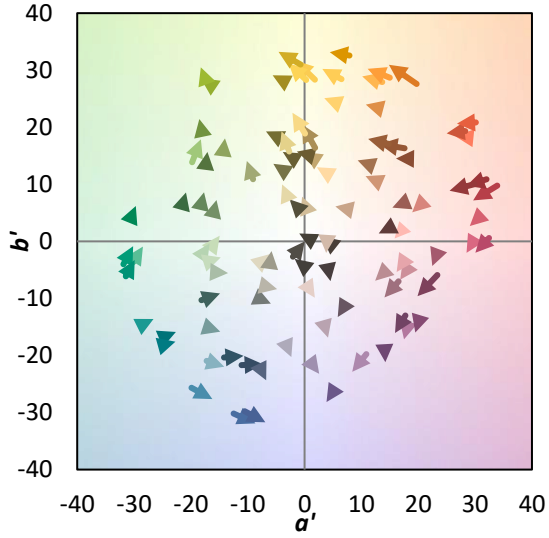


Color Vector Graphics







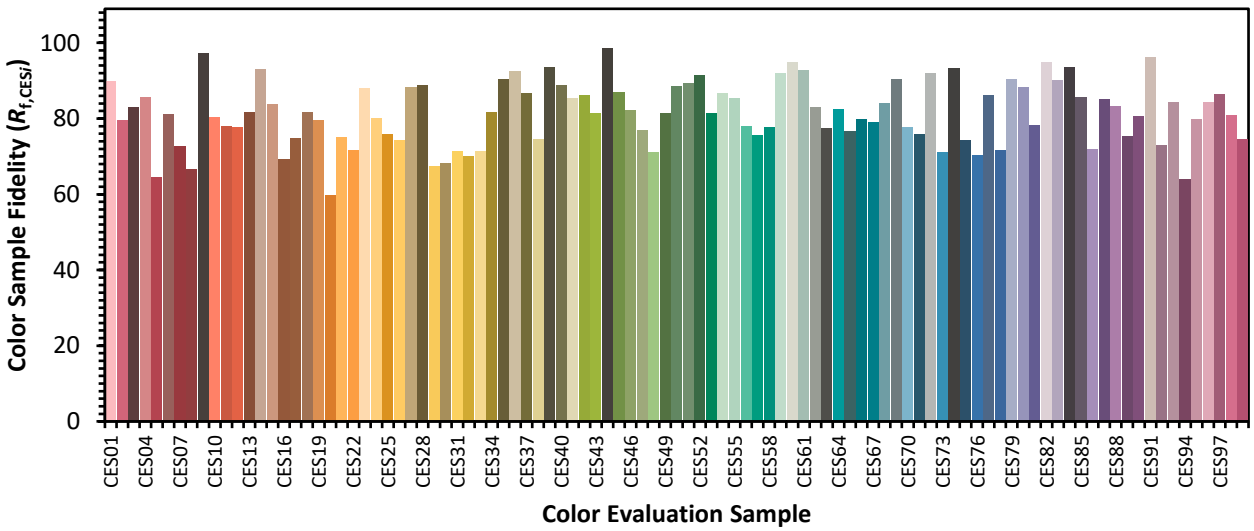


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

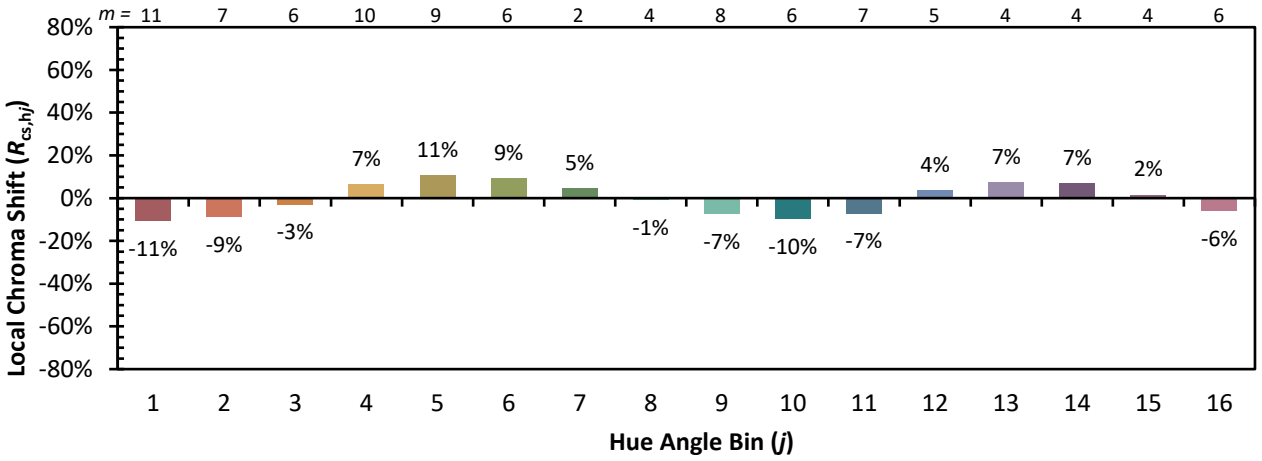
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 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	

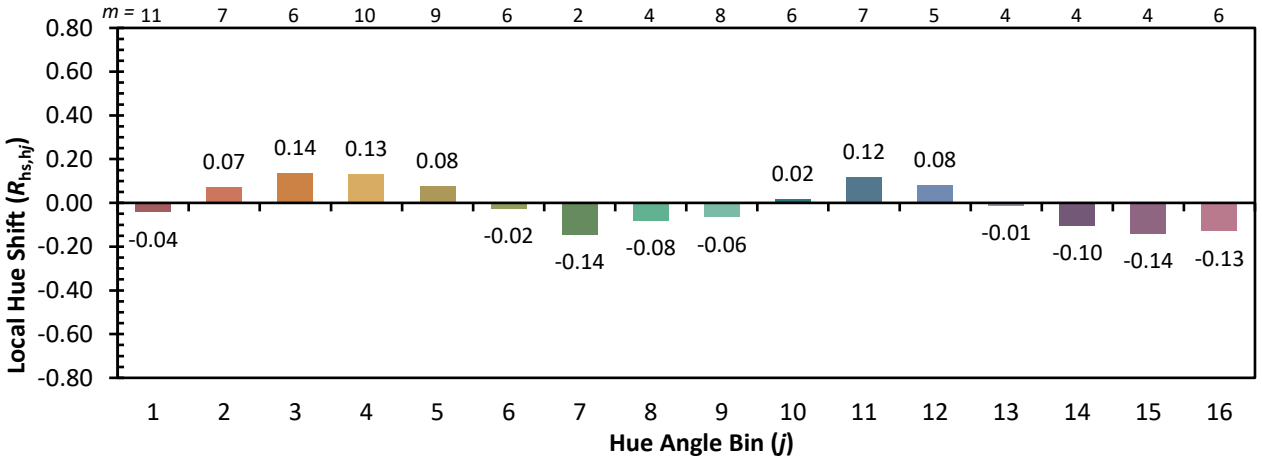


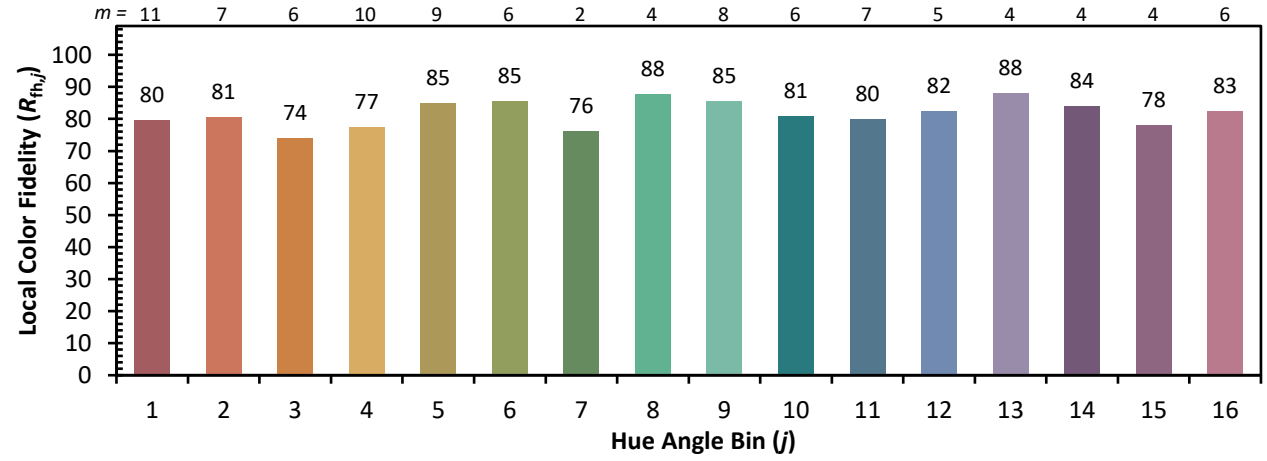
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



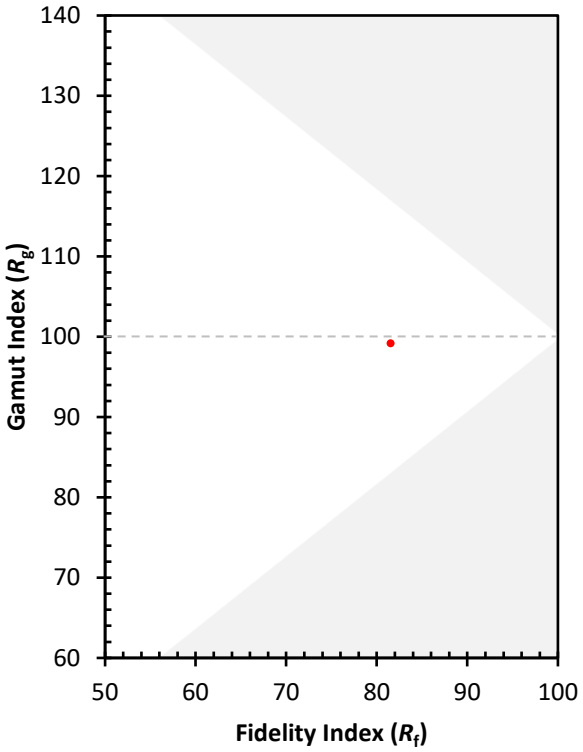


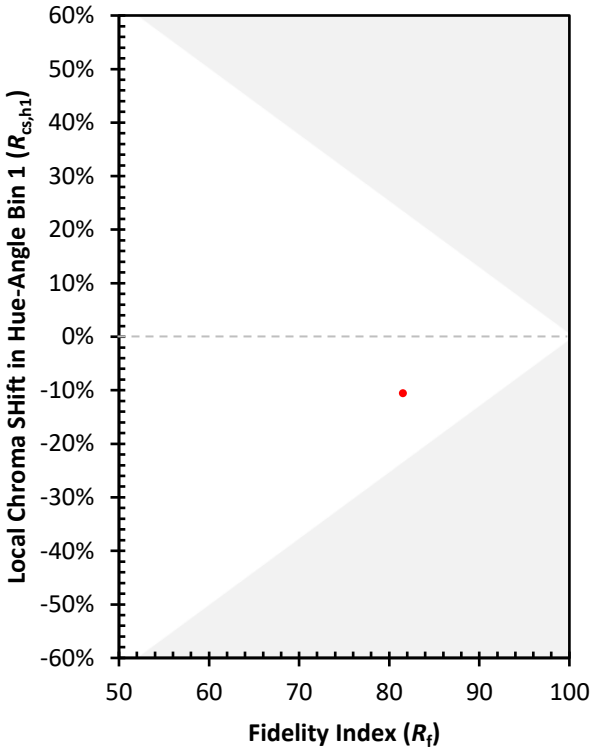


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)