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: P318579

Luminaire Tested: **GLEON-SA5D-830-U-T3**

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:	P318579
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-14)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GLEON-SA5D-830-U-T3
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(5) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	30822 lumens
Efficiency:	N/A
Efficacy:	96.3 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - U0 - G4

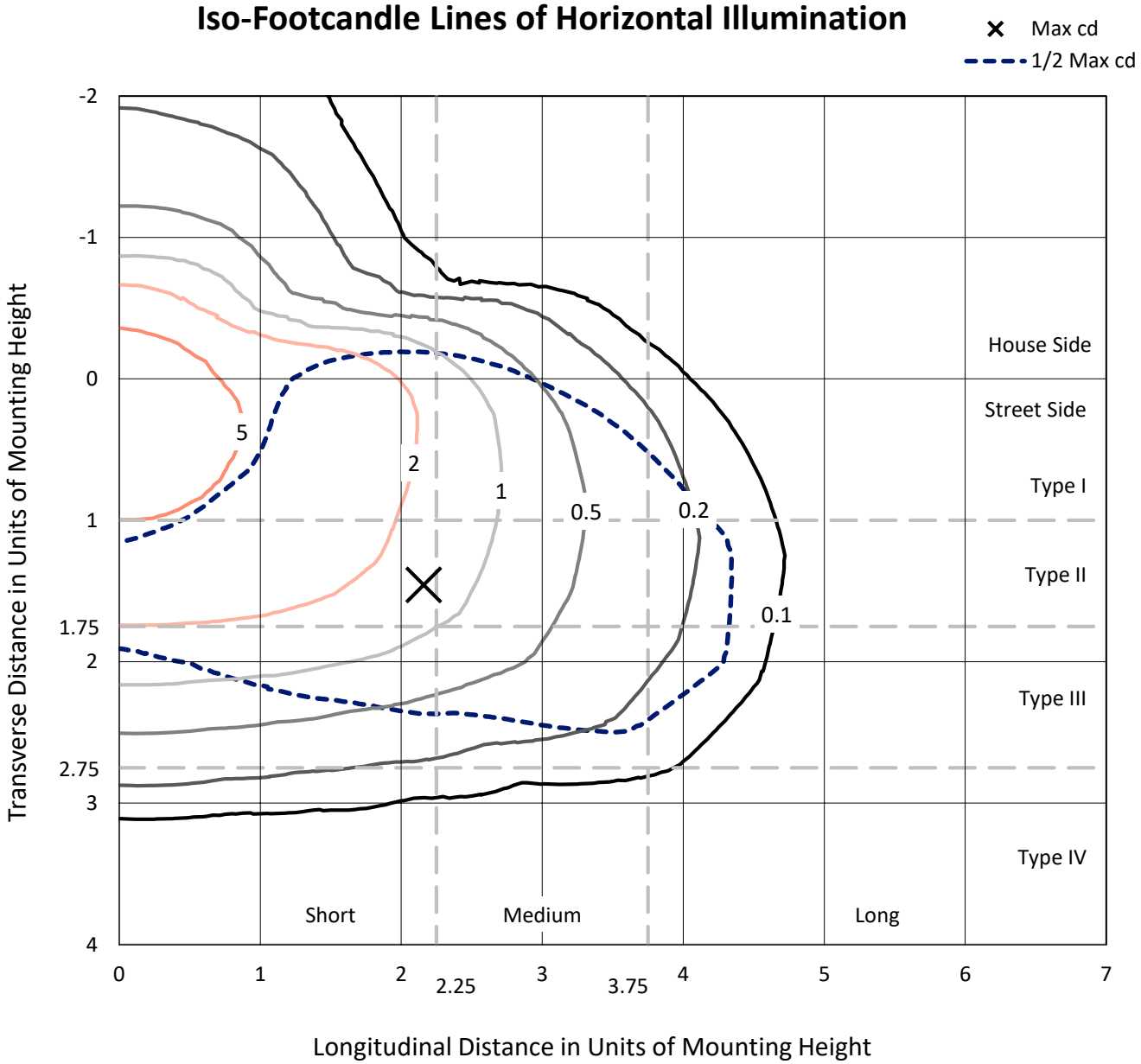
Input Watts (W):	320
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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

Scaled Data Report

REPORT NUMBER: P318579
CATALOG NUMBER: GLEON-SA5D-830-U-T3

Iso-Footcandle Lines of Horizontal Illumination



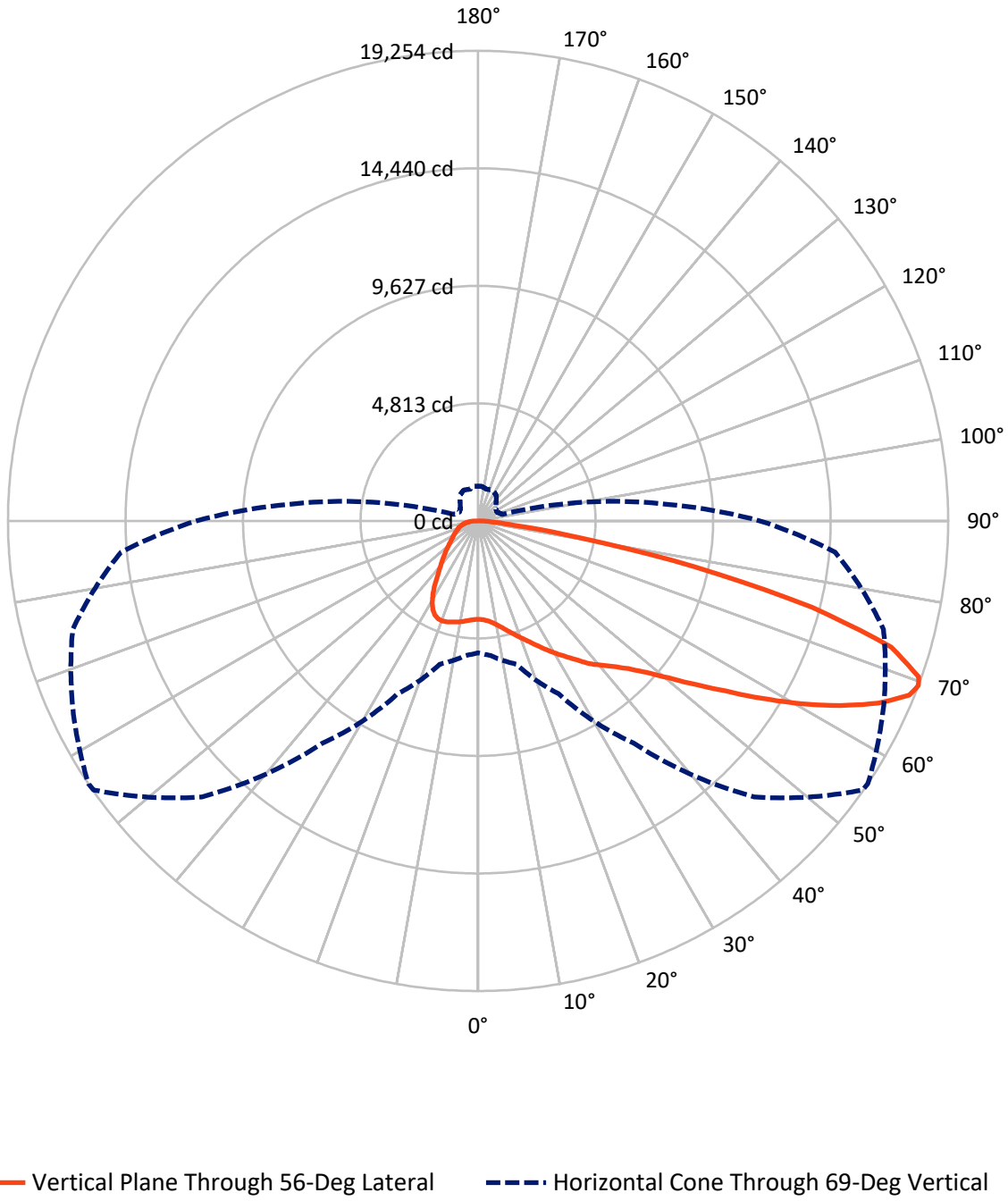
Based on 25 foot mounting height. Maximum calculated value = 7 fc
Type III - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P318579
CATALOG NUMBER: GLEON-SA5D-830-U-T3

Luminous Intensity Polar Plot



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

Scaled Data Report

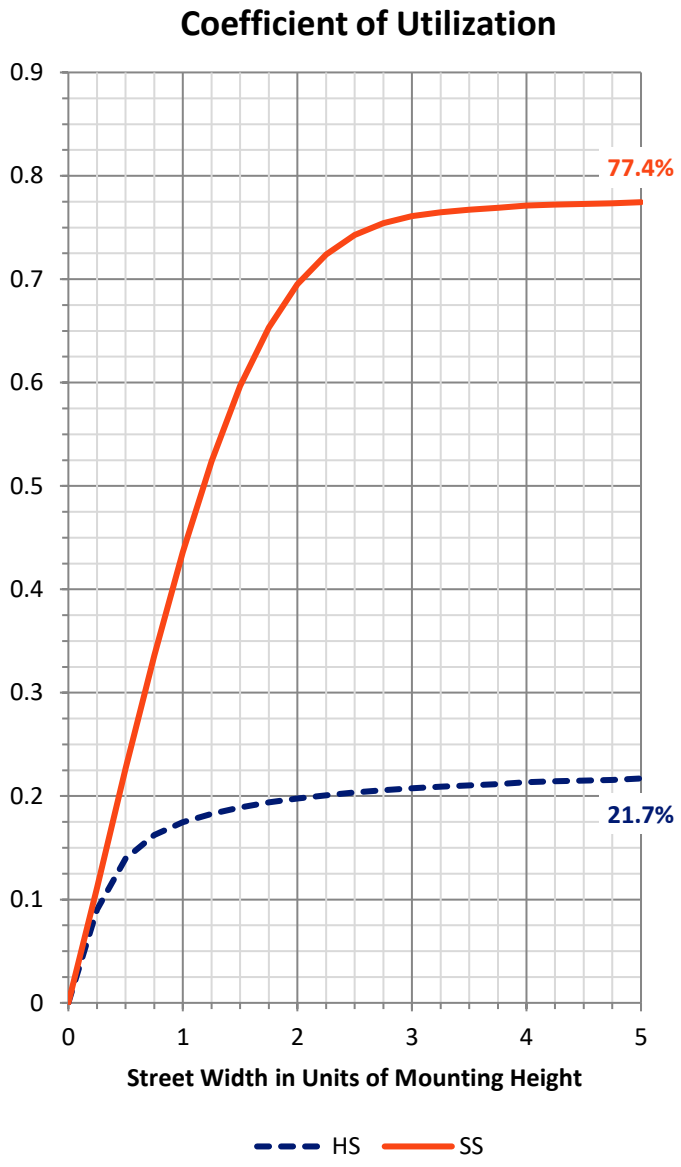
REPORT NUMBER: P318579
CATALOG NUMBER: GLEON-SA5D-830-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6864.0	0.0	6864.0
	% Fixture	22.3	0.0	22.3
Street Side	Lumens	23958.0	0.0	23958.0
	% Fixture	77.7	0.0	77.7
Total	Lumens	30822.0	0.0	30822.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	395.8	1.3
10°-20°	1272.6	4.1
20°-30°	2221.5	7.2
30°-40°	3191.1	10.4
40°-50°	4416.3	14.3
50°-60°	6470.5	21.0
60°-70°	7888.8	25.6
70°-80°	4361.4	14.2
80°-90°	604.1	2.0
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°	30822.0	100.0
0°-180°	30822.0	100.0



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

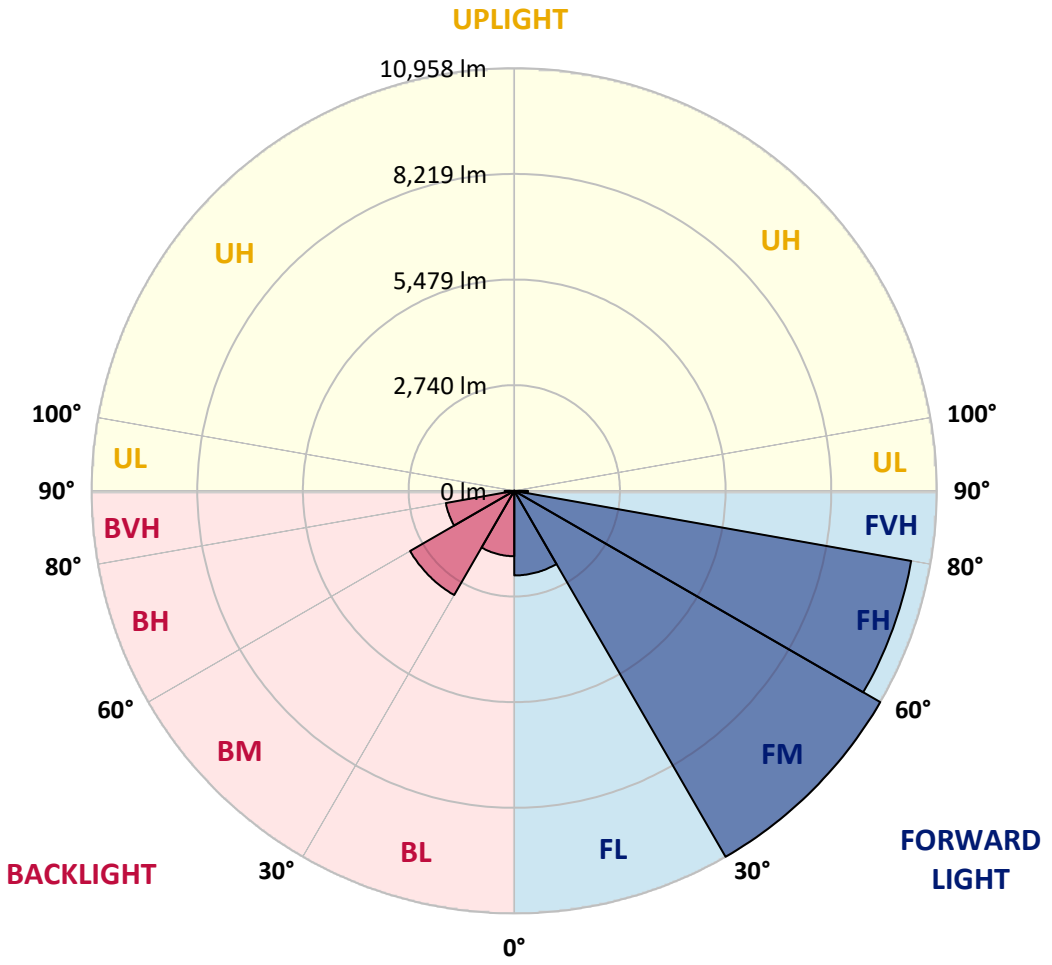
Scaled Data Report

REPORT NUMBER: P318579
CATALOG NUMBER: GLEON-SA5D-830-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2193.6	7.1			
FM	(30°-60°)	10958.4	35.6			
FH	(60°-80°)	10450.2	33.9			G4/12000
FVH	(80°-90°)	355.8	1.2			G3/500
BL	(0°-30°)	1696.3	5.5	B3/2500		
BM	(30°-60°)	3119.5	10.1	B3/5000		
BH	(60°-80°)	1800.0	5.8	B3/2500		G3/2500
BVH	(80°-90°)	248.2	0.8			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
Type III Short



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

Scaled Data Report

REPORT NUMBER: P318579
CATALOG NUMBER: GLEON-SA5D-830-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	4029.5	4029.5	4029.5	4029.5	4029.5	4029.5	4029.5	4029.5	4029.5	4029.5	4029.5
2.5°	4055.0	4059.2	4056.1	4064.6	4055.0	4061.4	4056.1	4056.1	4052.9	4043.3	4032.7
5°	4118.7	4127.2	4121.9	4130.4	4118.7	4120.8	4111.3	4111.3	4101.7	4081.5	4060.3
7.5°	4218.5	4228.1	4223.8	4232.3	4216.4	4216.4	4203.6	4202.6	4183.5	4150.6	4126.1
10°	4337.4	4350.2	4345.9	4358.7	4345.9	4350.2	4337.4	4337.4	4312.0	4265.2	4234.4
12.5°	4510.5	4526.4	4514.8	4513.7	4508.4	4516.9	4506.3	4504.1	4480.8	4417.1	4374.6
15°	4742.0	4759.0	4734.5	4732.4	4702.7	4699.5	4699.5	4696.3	4681.5	4605.0	4534.9
17.5°	5008.5	5013.8	4992.6	4958.6	4920.4	4895.9	4892.8	4901.2	4901.2	4812.1	4700.6
20°	5269.7	5279.2	5262.3	5224.0	5175.2	5139.1	5113.6	5130.6	5129.5	5023.4	4865.1
22.5°	5554.3	5576.5	5551.1	5502.2	5444.9	5404.5	5359.9	5374.8	5375.9	5245.3	5026.5
25°	5922.7	5902.5	5886.6	5817.6	5735.8	5694.4	5653.0	5667.9	5663.6	5484.2	5193.2
27.5°	6248.7	6252.9	6231.7	6158.4	6063.9	5972.6	5970.5	5980.0	5964.1	5732.6	5350.4
30°	6627.7	6629.8	6600.1	6534.3	6431.3	6313.4	6285.8	6301.8	6267.8	5968.4	5516.0
32.5°	7004.7	7015.3	6982.4	6902.7	6819.9	6676.6	6621.4	6632.0	6547.0	6209.4	5687.0
35°	7334.9	7349.7	7339.1	7286.0	7195.8	7072.6	7006.8	7000.4	6895.3	6504.6	5913.1
37.5°	7671.5	7685.3	7673.6	7629.0	7592.9	7462.3	7427.3	7427.3	7244.6	6806.1	6200.9
40°	8017.6	8038.9	8025.0	7963.5	7932.7	7873.2	7789.3	7769.2	7571.7	7168.2	6670.2
42.5°	8339.3	8366.9	8422.2	8386.1	8323.4	8331.9	8163.1	8152.5	8008.1	7703.3	7259.5
45°	8795.9	8836.3	8929.7	8902.1	8889.3	8842.6	8642.0	8632.4	8577.2	8423.2	7991.1
47.5°	9293.9	9349.1	9517.9	9523.2	9660.2	9572.1	9299.2	9266.3	9279.0	9285.4	8884.0
50°	9752.6	9813.1	10090.2	10220.8	10543.6	10562.7	10126.3	10096.6	10146.5	10293.0	9924.6
52.5°	10118.9	10195.4	10541.5	10945.0	11498.2	11655.3	11144.6	11122.3	11159.5	11412.2	11101.1
55°	10387.5	10470.4	10847.3	11582.1	12465.5	12742.6	12316.8	12295.6	12318.9	12640.7	12380.5
57.5°	10450.2	10470.4	11017.2	12011.0	13282.0	13947.7	13751.3	13708.8	13594.2	13874.5	13792.7
60°	10156.1	10236.8	10877.0	12161.8	13913.8	15135.9	15250.6	15197.5	14875.7	15105.1	15039.3
62.5°	9559.3	9703.7	10353.6	11932.5	14161.2	16106.4	16721.1	16657.4	16103.2	16251.8	15935.4
65°	8584.6	8646.2	9328.9	11141.4	13846.9	16727.5	18032.5	18000.6	17303.0	17070.5	16101.1
67.5°	6841.1	6956.9	7536.6	9488.2	12561.0	16654.3	19046.5	19043.3	18086.6	17374.2	15513.9
69°	5404.5	5524.5	6076.7	7815.9	11114.9	15984.3	19216.4	19253.5	18307.5	17189.4	14675.1
70°	4308.8	4447.9	4826.9	6583.1	9831.2	15100.9	19075.1	19142.0	18265.0	16884.7	13901.0
72.5°	1833.7	1946.3	2216.0	3393.5	5991.7	11276.3	17441.0	17693.8	17280.7	15453.4	11488.6
75°	800.6	835.6	957.7	1383.5	2659.8	6137.2	13663.2	14130.4	14775.9	13062.2	8558.1
77.5°	586.1	601.0	667.9	812.3	1193.5	2317.9	8786.4	9058.2	10656.2	9505.2	5249.5
80°	453.4	464.0	516.0	596.7	779.4	937.6	4007.2	4240.8	5991.7	4882.1	2186.2
82.5°	361.0	368.4	404.5	439.6	538.3	568.1	1330.4	1475.9	2211.7	1348.5	578.7
85°	335.5	344.0	356.8	320.7	345.1	333.4	575.5	602.0	667.9	529.8	242.1
87.5°	151.8	179.4	353.6	249.5	183.7	146.5	235.7	246.3	277.1	278.2	107.2
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: P318579
CATALOG NUMBER: GLEON-SA5D-830-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4029.5	4029.5	4029.5	4029.5	4029.5	4029.5	4029.5	4029.5	4029.5	4029.5	4029.5
2.5°	4039.1	4035.9	4041.2	4028.5	4044.4	4043.3	4038.0	4040.1	4050.7	4049.7	4050.7
5°	4063.5	4061.4	4067.7	4058.2	4077.3	4083.7	4084.7	4094.3	4106.0	4109.1	4109.1
7.5°	4125.1	4125.1	4128.3	4115.5	4128.3	4127.2	4121.9	4131.4	4143.1	4144.2	4143.1
10°	4231.3	4232.3	4227.0	4194.1	4183.5	4154.8	4128.3	4129.3	4144.2	4155.9	4159.1
12.5°	4365.0	4360.8	4337.4	4276.9	4232.3	4173.9	4146.3	4145.2	4160.1	4169.7	4172.9
15°	4517.9	4506.3	4445.7	4347.0	4268.4	4211.1	4166.5	4155.9	4147.4	4136.8	4137.8
17.5°	4662.3	4635.8	4534.9	4398.0	4315.1	4238.7	4152.7	4083.7	4035.9	4008.3	3999.8
20°	4808.9	4756.8	4611.4	4445.7	4340.6	4201.5	4035.9	3895.7	3808.7	3768.3	3760.9
22.5°	4942.7	4858.8	4682.5	4495.6	4320.4	4076.2	3816.1	3612.2	3491.2	3437.0	3441.3
25°	5073.3	4956.5	4756.8	4530.7	4218.5	3855.4	3510.3	3259.7	3119.6	3059.0	3056.9
27.5°	5187.9	5055.2	4837.5	4502.0	4028.5	3541.1	3148.2	2904.0	2787.2	2735.2	2726.7
30°	5319.6	5179.4	4944.8	4392.6	3750.3	3178.0	2794.6	2622.6	2539.8	2487.8	2478.2
32.5°	5479.9	5348.3	5032.9	4194.1	3394.6	2798.9	2518.6	2398.6	2323.2	2264.8	2254.2
35°	5713.5	5571.2	5055.2	3909.5	3003.8	2499.5	2315.8	2192.6	2090.7	2015.3	2007.9
37.5°	6006.6	5850.5	5004.2	3541.1	2624.8	2305.2	2146.9	1995.1	1862.4	1756.2	1739.2
40°	6429.2	6193.5	4863.0	3116.4	2345.5	2155.4	1982.4	1809.3	1644.7	1520.5	1496.1
42.5°	6936.7	6595.9	4646.4	2693.8	2140.6	2003.6	1818.9	1604.4	1447.2	1359.1	1346.4
45°	7582.3	7014.2	4345.9	2324.3	1938.8	1851.8	1642.6	1445.1	1347.4	1282.6	1272.0
47.5°	8319.2	7483.5	4030.6	2023.8	1767.9	1709.5	1501.4	1374.0	1296.5	1245.5	1235.9
50°	9224.9	8013.4	3696.1	1777.4	1595.9	1538.5	1434.5	1334.7	1273.1	1233.8	1224.2
52.5°	10246.3	8611.2	3455.1	1583.1	1453.6	1412.2	1399.4	1313.4	1263.5	1233.8	1224.2
55°	11346.3	9219.6	3194.9	1419.6	1330.4	1342.1	1376.1	1315.6	1281.6	1245.5	1231.7
57.5°	12447.4	9848.1	2905.1	1281.6	1232.7	1290.1	1360.2	1319.8	1291.1	1256.1	1243.4
60°	13318.1	10246.3	2455.9	1165.9	1155.2	1232.7	1321.9	1288.0	1250.8	1251.9	1249.7
62.5°	13724.8	10225.1	1960.1	1062.9	1077.7	1155.2	1260.4	1238.1	1207.3	1248.7	1251.9
65°	13496.5	9715.4	1525.8	969.4	994.9	1074.5	1196.6	1213.6	1224.2	1303.9	1314.5
67.5°	12538.7	8723.7	1181.8	887.7	919.5	1019.3	1203.0	1321.9	1335.7	1419.6	1418.6
69°	*11548.1*	*7793.6*	*1026.8*	*845.2*	*882.4*	*1033.1*	*1285.8*	*1391.0*	*1338.9*	*1428.1*	*1415.4*
70°	10717.8	7057.8	943.9	816.5	865.4	1057.5	1341.0	1389.9	1323.0	1399.4	1378.2
72.5°	8254.4	5077.5	800.6	763.4	808.0	1011.9	1357.0	1359.1	1285.8	1300.7	1264.6
75°	5661.5	3208.7	698.7	691.2	721.0	912.1	1306.0	1298.6	1189.2	1168.0	1138.2
77.5°	3121.7	1629.9	593.5	622.2	642.4	808.0	1187.1	1176.5	1086.2	1041.6	1031.0
80°	1204.1	713.5	501.2	553.2	565.9	699.7	1040.6	1031.0	955.6	898.3	882.4
82.5°	454.4	373.8	414.1	478.9	474.6	577.6	881.3	876.0	802.7	718.8	693.4
85°	210.2	224.0	328.1	395.0	364.2	427.9	705.0	714.6	625.4	525.6	525.6
87.5°	89.2	125.3	232.5	298.4	245.3	288.8	517.1	493.7	453.4	314.3	295.2
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

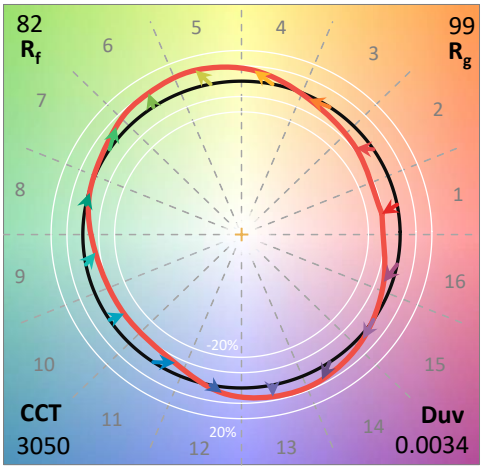
Test Information

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

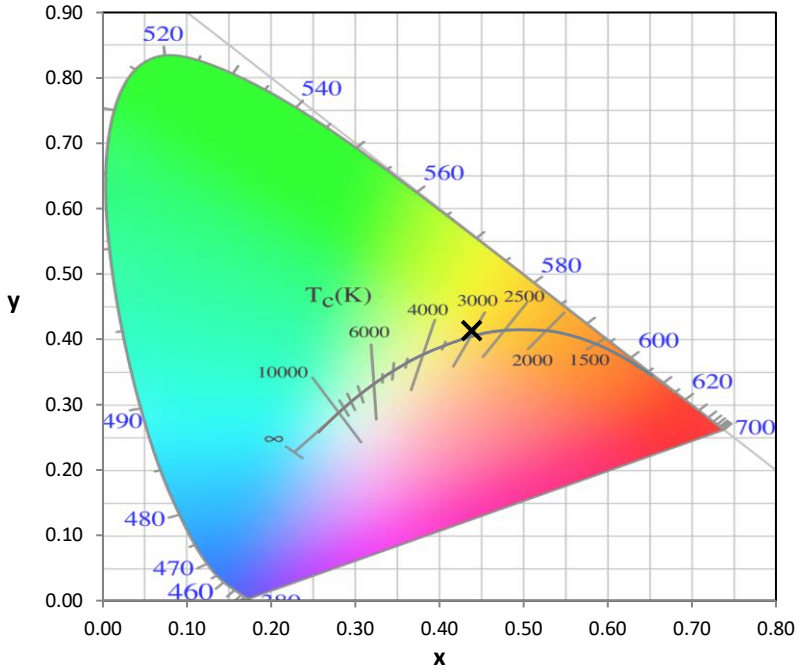
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

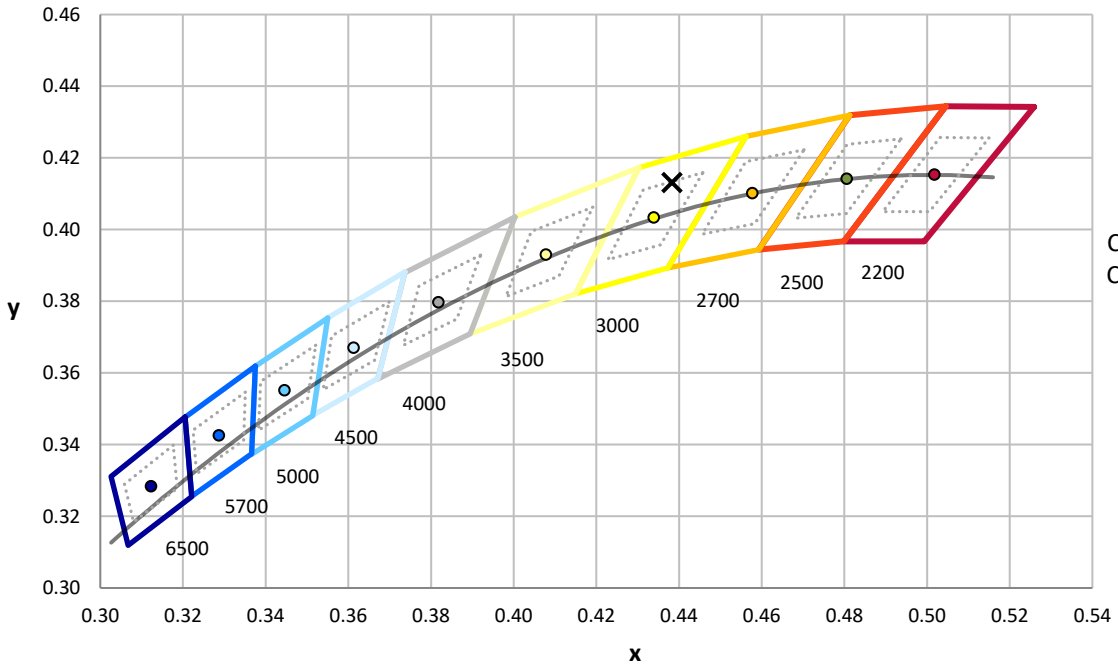
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

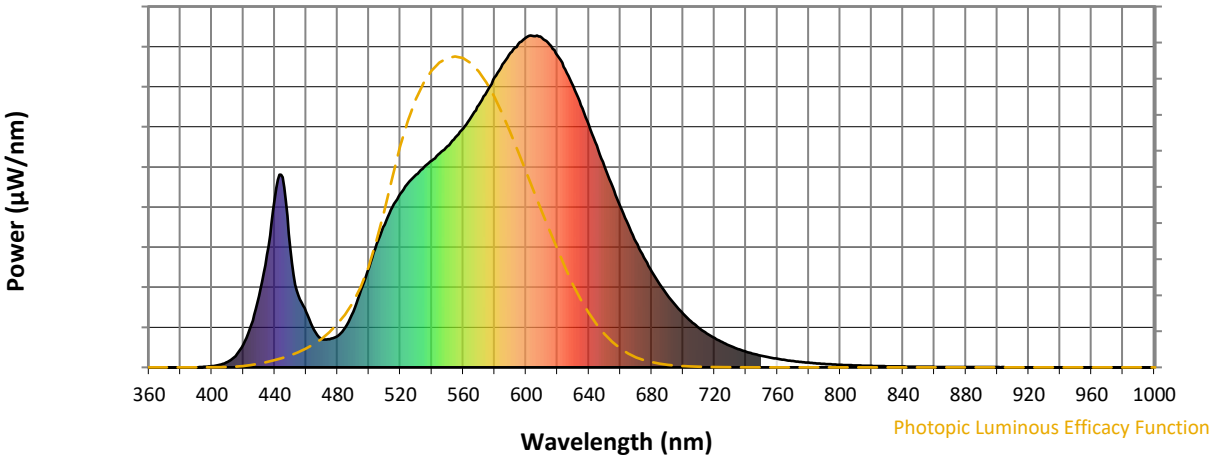


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

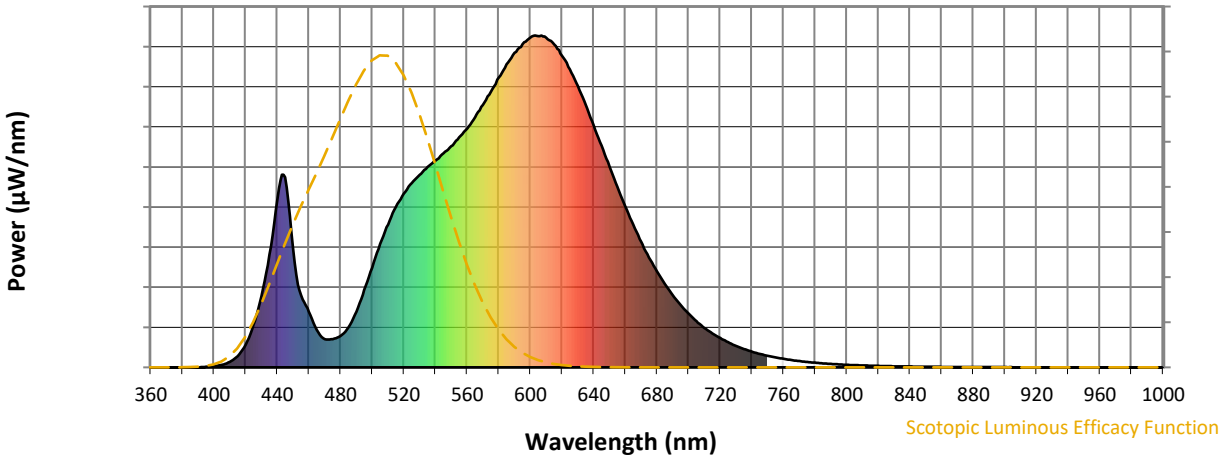


Photopic Lumens: NR

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

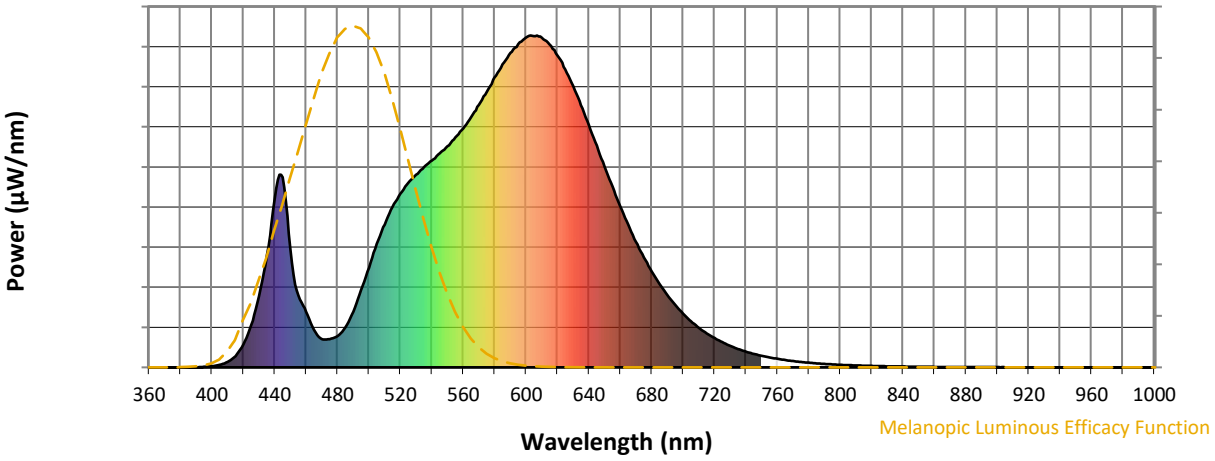


Scotopic Lumens: NR **S/P: 1.27**

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			

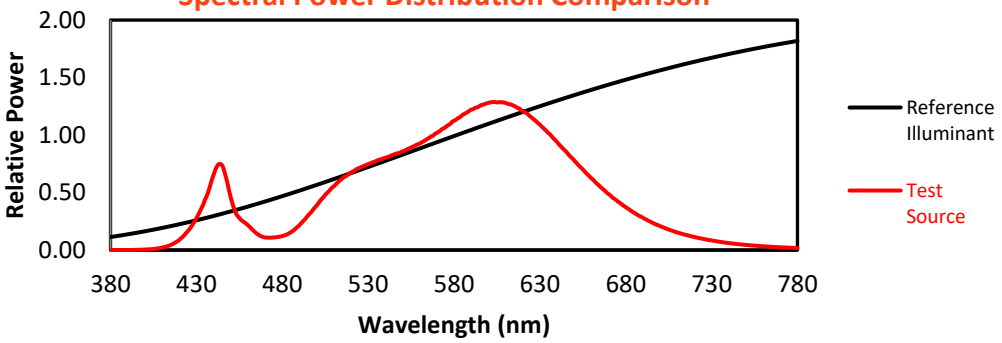
REPORT NUMBER: SP1-2408-195-9

TM-30-18

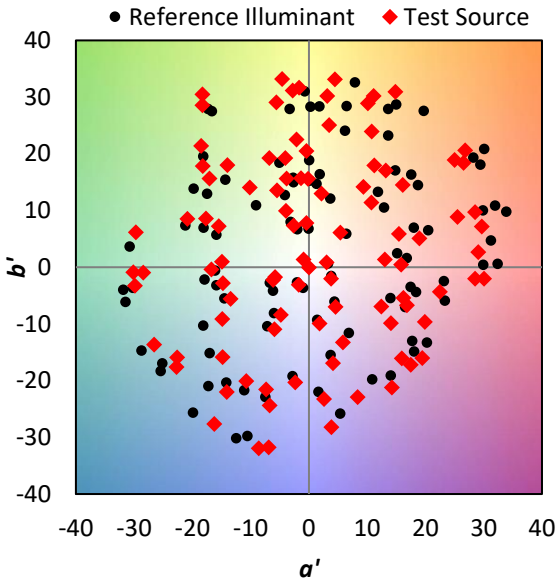
Summary

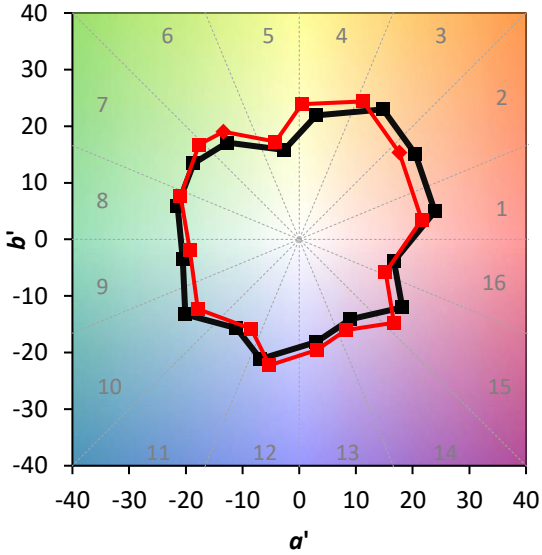
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

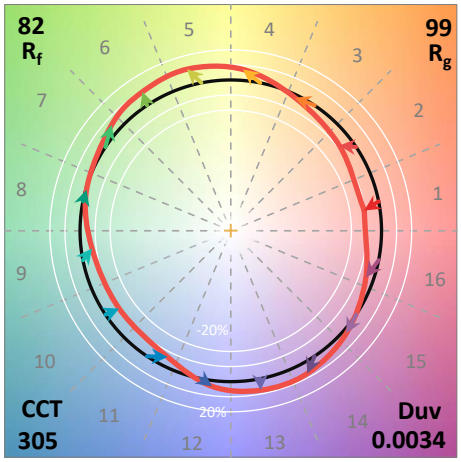
Spectral Power Distribution Comparison

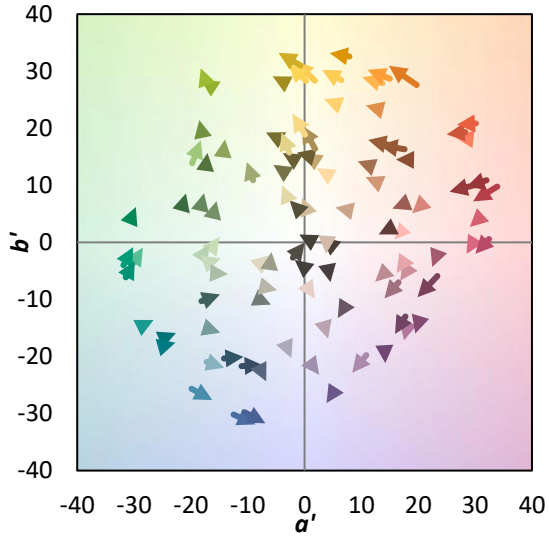


Color Vector Graphics







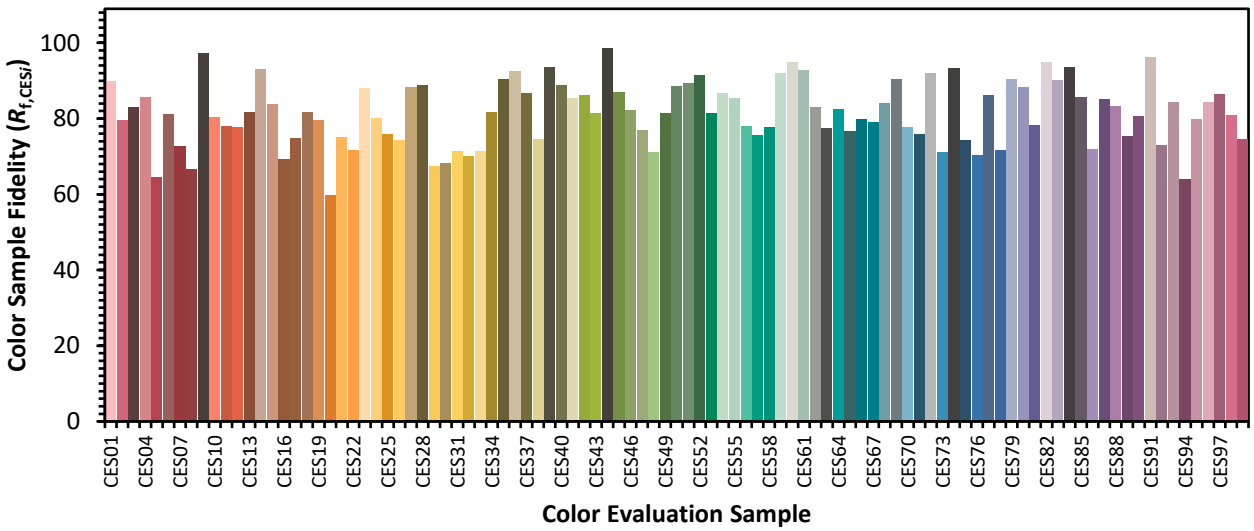


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

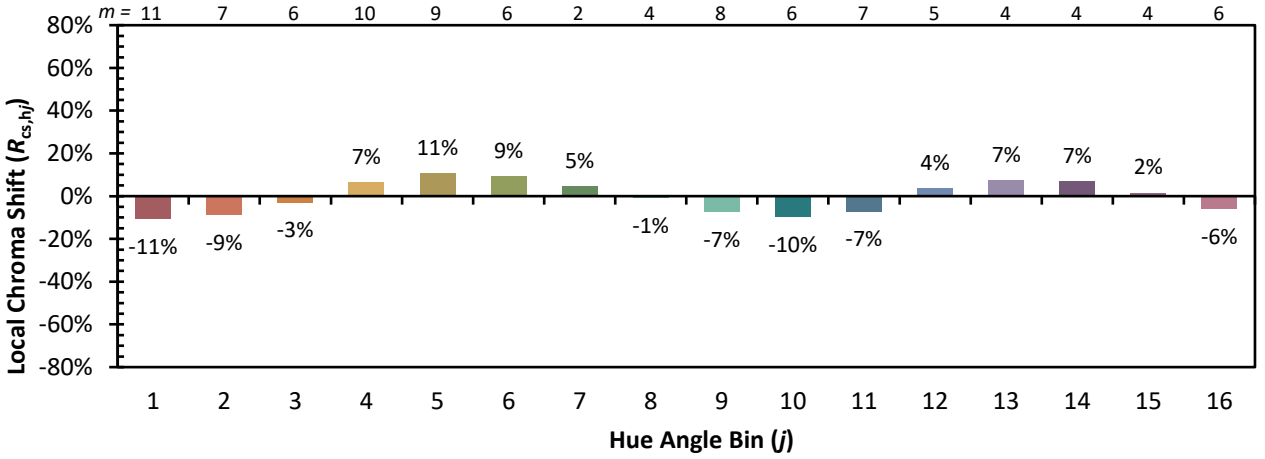
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

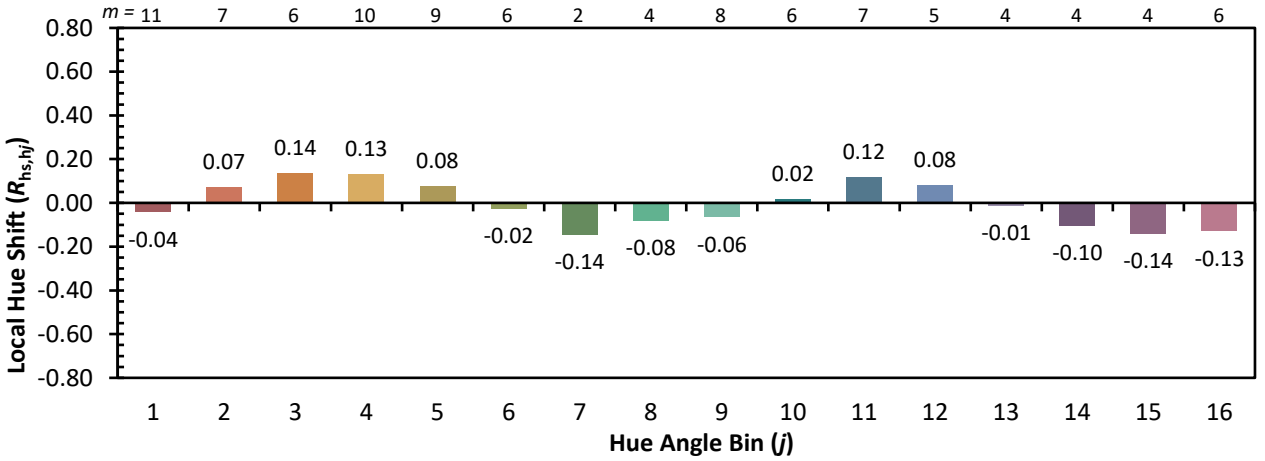


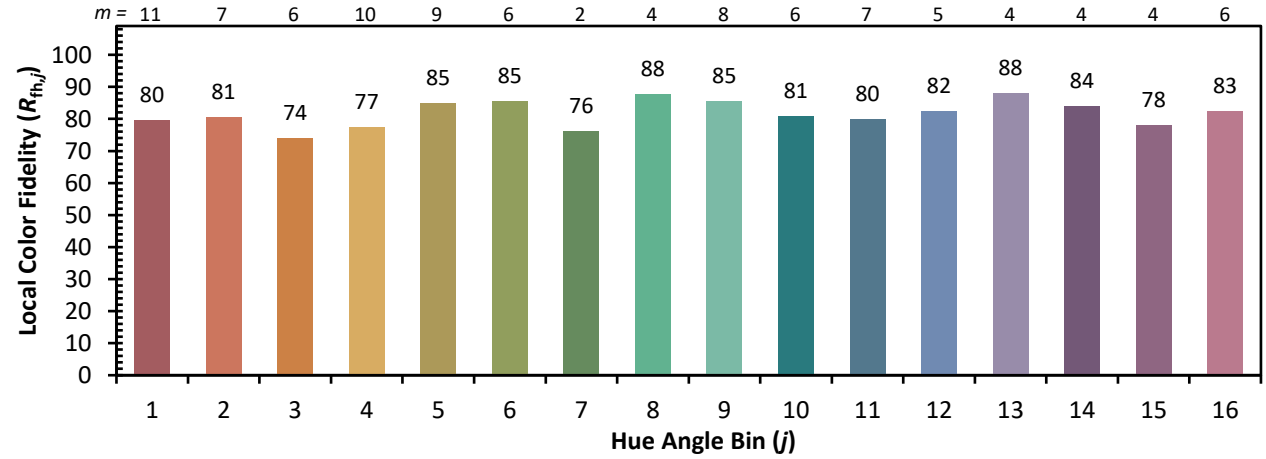
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



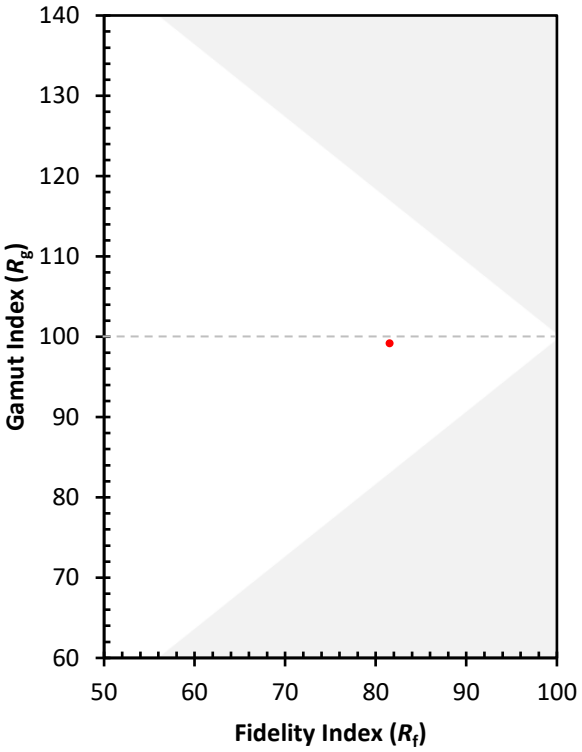


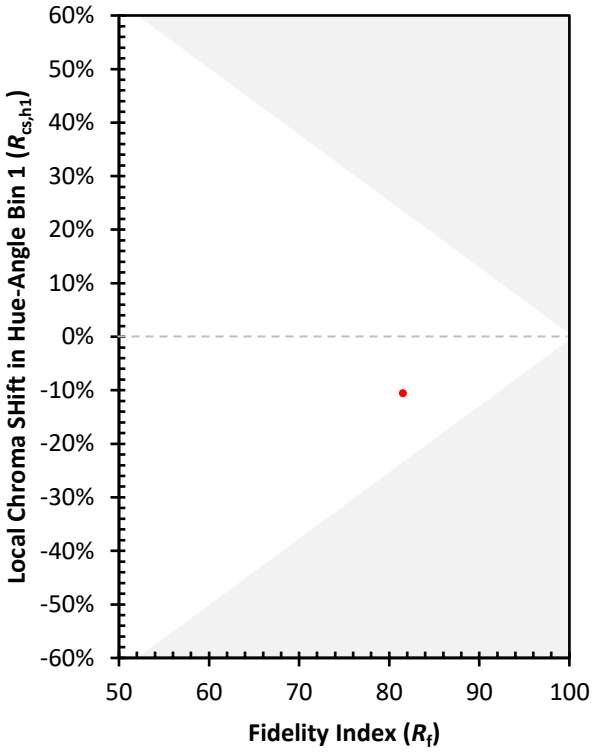


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)