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: P322744

Luminaire Tested: **GLEON-SA0D-830-U-T4FT-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:	P322744
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-17)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GLEON-SA0D-830-U-T4FT-HSS
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(10) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	43339 lumens
Efficiency:	N/A
Efficacy:	67.7 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):	640
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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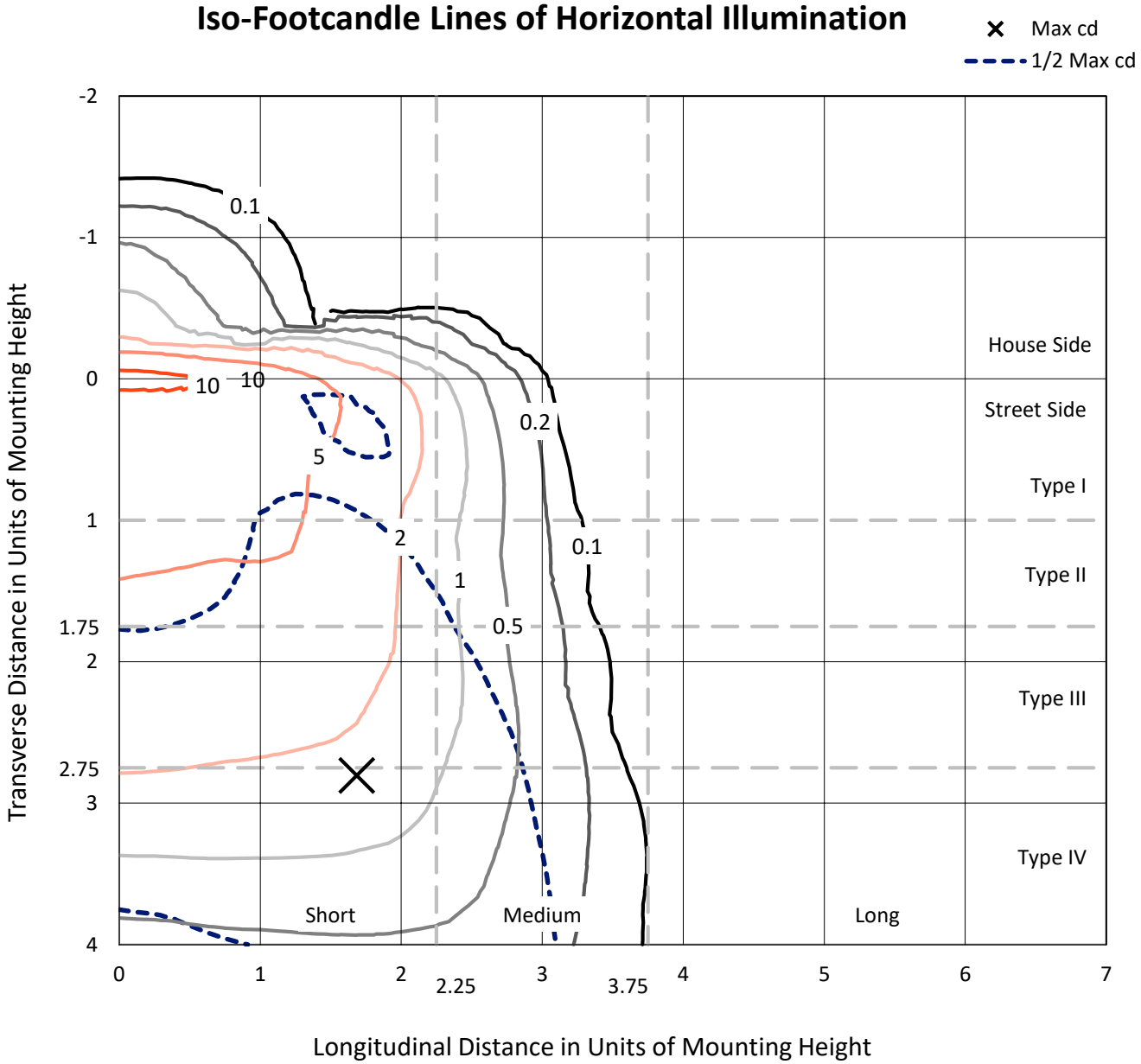
Scaled Data Report

REPORT NUMBER: P322744
CATALOG NUMBER: GLEON-SA0D-830-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 11.9 fc
Type IV - Short - N/A

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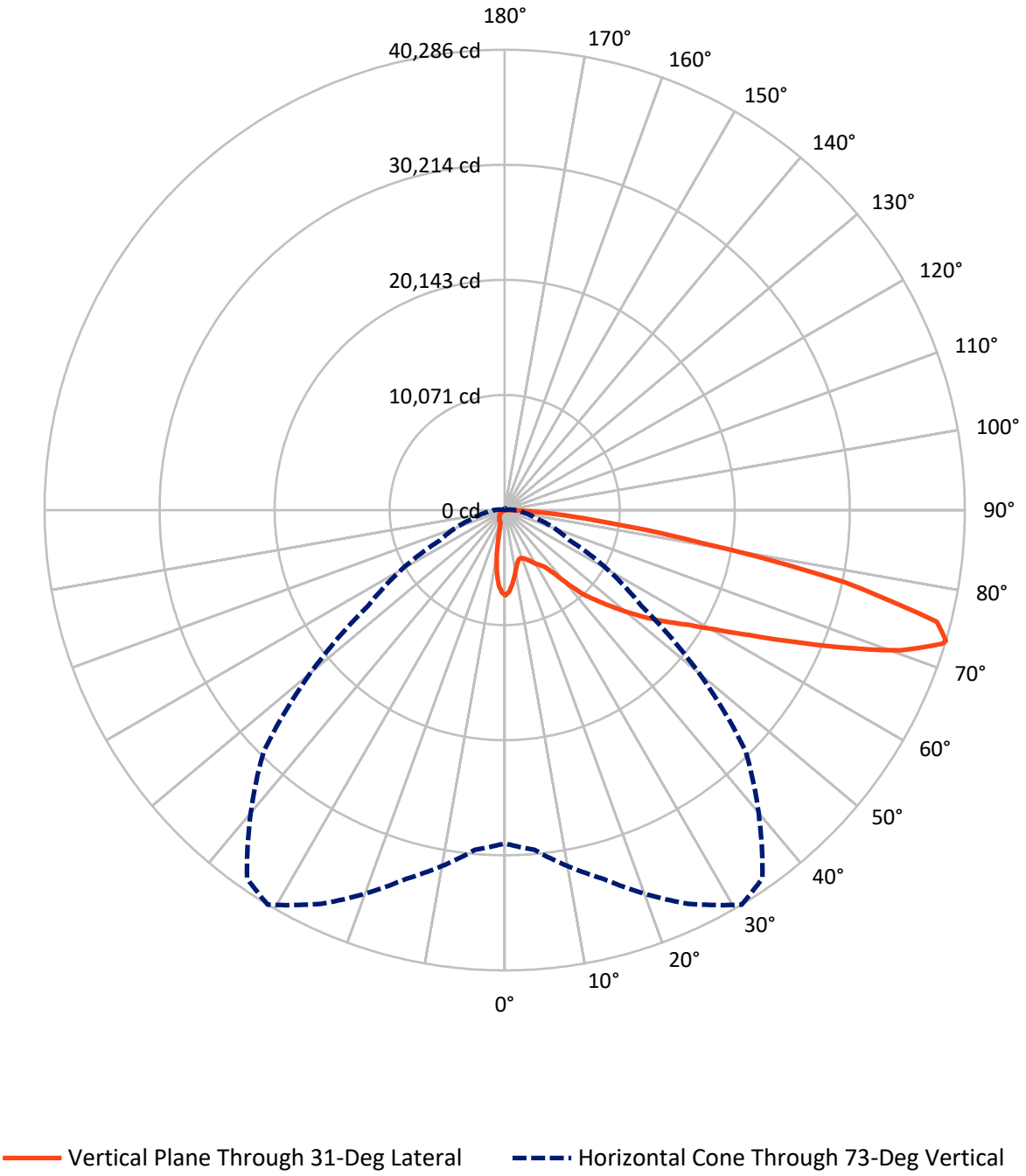
Luminous Intensity Polar Plot



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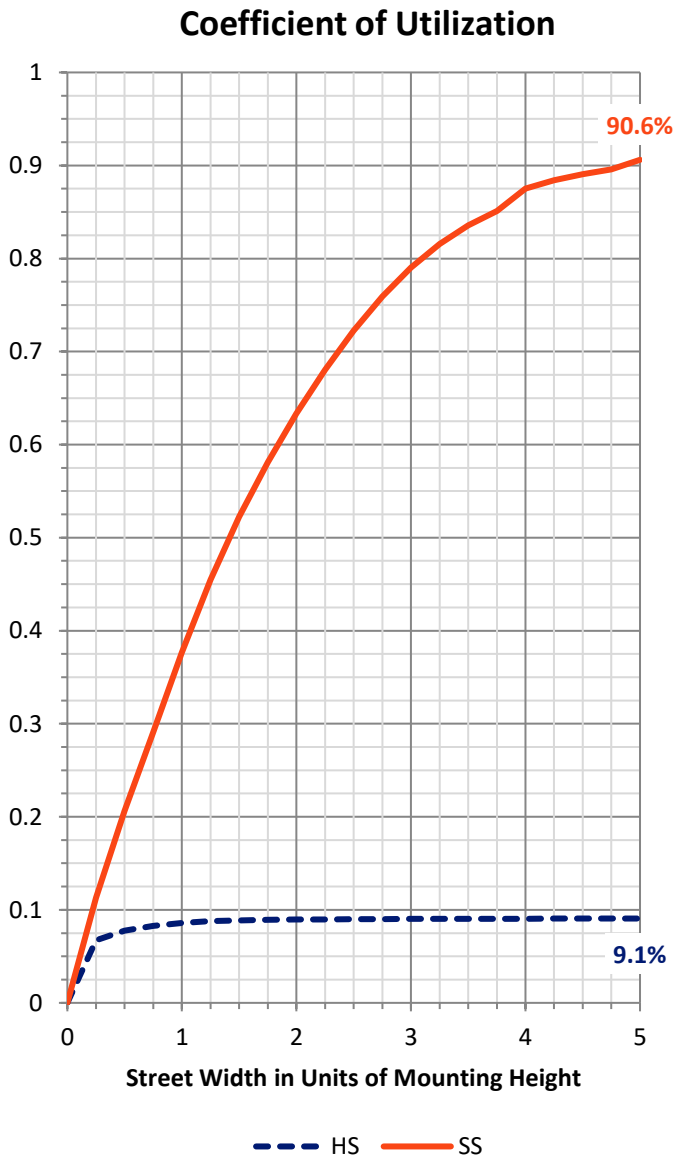
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3950.5	0.0	3950.5
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	39388.5	0.0	39388.5
	% Fixture	90.9	0.0	90.9
Total	Lumens	43339.0	0.0	43339.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	618.2	1.4
10°-20°	1342.4	3.1
20°-30°	2011.3	4.6
30°-40°	3200.0	7.4
40°-50°	5714.3	13.2
50°-60°	8867.0	20.5
60°-70°	11787.5	27.2
70°-80°	8866.6	20.5
80°-90°	931.7	2.1
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°	43339.0	100.0
0°-180°	43339.0	100.0



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REPORT NUMBER: P322744
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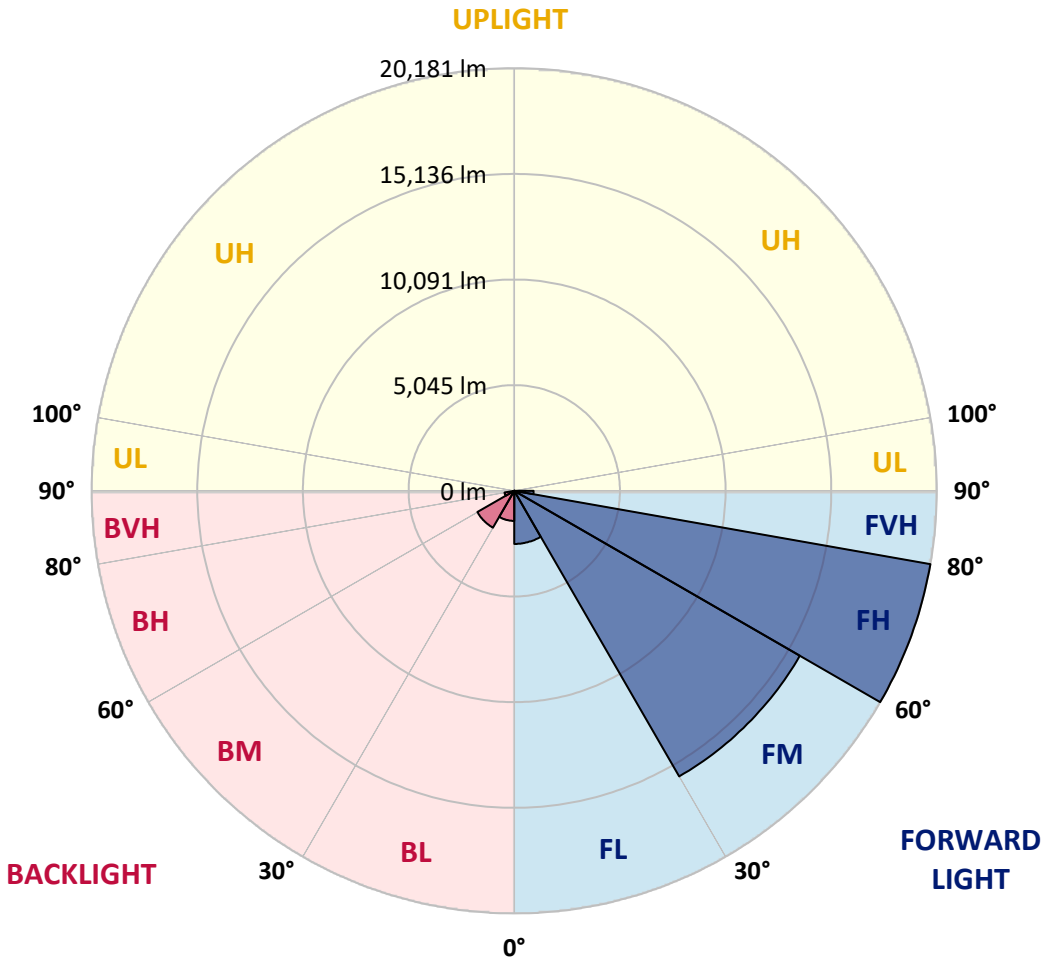
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2535.4	5.9			
FM	(30°-60°)	15747.9	36.3			
FH	(60°-80°)	20181.4	46.6			G5
FVH	(80°-90°)	923.9	2.1			G5
BL	(0°-30°)	1436.6	3.3	B3/2500		
BM	(30°-60°)	2033.4	4.7	B2/2500		
BH	(60°-80°)	472.7	1.1	B1/500		G1/500
BVH	(80°-90°)	7.8	0.0			G0/10
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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REPORT NUMBER: P322744
CATALOG NUMBER: GLEON-SA0D-830-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	31°	35°	45°	55°	65°	75°	85°
0°	7456.6	7456.6	7456.6	7456.6	*7456.6*	7456.6	7456.6	7456.6	7456.6	7456.6	7456.6
2.5°	7066.3	7096.0	7127.8	7134.2	*7187.2*	7189.3	7265.7	7323.0	7380.2	7435.4	7454.4
5°	6341.0	6389.8	6447.1	6504.3	*6616.7*	6661.3	6847.9	7038.8	7221.2	7395.1	7479.9
7.5°	5567.0	5622.1	5702.7	5844.8	*5969.9*	6056.9	6351.7	6691.0	7030.3	7350.5	7535.0
10°	4860.8	4911.7	4996.5	5147.1	*5340.1*	5458.8	5855.4	6326.2	6824.6	7310.2	7617.7
12.5°	4411.2	4438.7	4485.4	4646.6	*4820.5*	4954.1	5420.6	6003.8	6654.9	7308.1	7751.3
15°	4328.5	4336.9	4298.8	4370.9	*4506.6*	4636.0	5108.9	5743.0	6525.6	7342.0	7925.2
17.5°	4459.9	4455.7	4328.5	4320.0	*4428.1*	4534.2	4956.2	5562.7	6434.4	7420.5	8150.0
20°	4659.3	4644.4	4423.9	4383.6	*4498.1*	4597.8	4945.6	5494.9	6400.4	7552.0	8423.6
22.5°	4924.4	4898.9	4553.3	4510.8	*4633.8*	4737.8	5077.1	5560.6	6430.1	7728.0	8741.7
25°	5253.1	5214.9	4775.9	4729.3	*4854.4*	4958.3	5312.5	5749.4	6519.2	7942.2	9144.7
27.5°	5624.2	5569.1	5132.2	5011.3	*5153.4*	5261.6	5626.4	6037.8	6659.2	8169.1	9638.8
30°	5974.2	5902.1	5507.6	5308.2	*5482.1*	5603.0	5965.7	6381.3	6884.0	8519.1	10315.3
32.5°	6326.2	6245.6	5842.7	5605.1	*5762.1*	5893.6	6315.6	6854.3	7306.0	9053.5	11214.5
35°	7136.3	7051.5	6557.4	6165.0	*6162.9*	6237.1	6805.5	7501.1	7863.7	9797.9	12287.6
37.5°	8500.0	8451.2	7980.4	7236.0	*7036.7*	6953.9	7473.5	8273.1	8665.4	10822.2	13498.6
40°	9993.0	9950.6	9422.5	8748.1	*8444.8*	8241.2	8432.1	9348.3	9797.9	12073.4	14735.0
42.5°	11679.0	11477.5	10535.9	10334.4	*10063.0*	9908.2	9736.4	10673.7	11189.1	13435.0	15960.8
45°	13210.2	12870.8	11649.3	11343.9	*11282.4*	11320.6	11416.0	12455.2	12754.2	15053.1	17182.3
47.5°	14122.1	13854.9	12917.5	12624.8	*12607.9*	12860.2	13581.3	14467.8	14313.0	16463.4	18257.6
50°	14989.5	14747.7	13969.4	14041.5	*14120.0*	14463.5	16039.2	16537.6	15736.0	17742.2	19243.7
52.5°	15691.4	15322.4	14915.2	15320.3	*15706.3*	16259.8	18575.7	18395.4	16745.5	18760.2	20087.8
55°	16096.5	15929.0	16126.2	16533.4	*17258.7*	18157.9	20970.0	19941.4	17483.5	19689.1	20649.8
57.5°	17581.0	17252.3	17644.7	17996.7	*18942.6*	20200.2	23020.8	21093.0	18015.8	20263.8	20779.1
60°	19377.3	19112.2	19343.4	19928.7	*21205.4*	22683.6	24937.9	22032.5	18293.6	20632.8	20444.0
62.5°	22236.1	21886.2	21741.9	22397.3	*24089.6*	25703.5	26392.8	22683.6	18232.1	20469.5	19294.6
65°	26066.2	25703.5	25058.8	25652.6	*27805.2*	28944.0	28019.4	22821.4	17808.0	19148.3	16389.2
67.5°	29989.6	29726.6	29175.2	30176.2	*32118.8*	32485.7	29739.3	22486.3	16442.2	15526.0	11579.3
70°	32581.1	32468.7	32827.1	35041.2	*36773.8*	36667.8	31317.1	20685.8	12815.7	9547.6	5728.2
72.5°	30712.7	31251.4	33898.1	37912.7	*40029.2*	39163.9	30507.0	15884.4	7325.1	3673.1	1656.3
73°	*29164.6*	*29853.8*	*33416.7*	*38020.8*	*40285.8*	*39337.8*	*29826.3*	*14580.2*	*6243.5*	*2899.1*	*1255.5*
75°	20289.2	21135.4	27665.2	35410.2	*39085.5*	37480.0	24861.6	8924.1	2892.7	1285.2	506.9
77.5°	9850.9	10476.5	15233.4	25584.8	*30396.7*	29283.3	15477.2	3325.3	1306.4	803.8	233.3
80°	3677.4	4088.8	6612.5	13021.4	*17566.2*	18026.4	6807.6	1257.6	869.5	646.8	118.8
82.5°	962.8	1073.1	2438.9	5806.6	*9002.6*	9422.5	2146.2	634.1	636.2	532.3	72.1
85°	307.5	352.0	761.3	2606.4	*4241.5*	3724.0	559.9	307.5	462.3	396.6	40.3
87.5°	38.2	48.8	241.8	612.9	*935.3*	519.6	87.0	91.2	197.2	220.6	23.3
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-SA0D-830-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7456.6	7456.6	7456.6	7456.6	7456.6	7456.6	7456.6	7456.6	7456.6	7456.6	7456.6
2.5°	7473.5	7462.9	7465.0	7409.9	7373.9	7301.7	7227.5	7193.6	7157.5	7142.7	7157.5
5°	7511.7	7492.6	7437.5	7267.8	7087.6	6854.3	6635.8	6470.4	6262.6	6205.3	6264.7
7.5°	7571.1	7532.9	7371.7	7026.1	6625.2	6179.9	5679.4	5314.6	5015.6	4822.6	4892.6
10°	7658.0	7585.9	7261.5	6674.0	5957.2	5168.3	4457.8	3904.3	3512.0	3350.8	3344.4
12.5°	7804.4	7668.6	7125.7	6215.9	5140.7	4088.8	3157.8	2557.6	2239.5	2033.8	2029.6
15°	7965.5	7766.2	6953.9	5666.6	4190.6	2928.8	2033.8	1577.8	1372.1	1306.4	1297.9
17.5°	8162.8	7878.6	6731.3	4990.1	3196.0	1940.5	1327.6	1196.1	1187.6	1181.3	1181.3
20°	8410.9	8012.2	6445.0	4216.1	2267.1	1295.8	1128.2	1136.7	1141.0	1132.5	1134.6
22.5°	8699.3	8147.9	6103.5	3384.7	1533.3	1083.7	1079.5	1090.1	1094.3	1090.1	1092.2
25°	9034.4	8304.9	5687.9	2513.1	1107.0	1028.6	1039.2	1054.0	1064.6	1064.6	1064.6
27.5°	9450.1	8495.7	5187.4	1753.9	956.5	971.3	1001.0	1028.6	1043.4	1047.7	1047.7
30°	9990.9	8733.3	4587.2	1202.5	869.5	895.0	950.1	1003.1	1030.7	1034.9	1037.0
32.5°	10673.7	9000.5	3891.6	888.6	795.3	814.4	873.7	962.8	1015.8	1024.3	1024.3
35°	11456.3	9310.1	3143.0	774.1	742.3	748.6	795.3	897.1	990.4	1013.7	1015.8
37.5°	12313.1	9615.5	2390.1	723.2	697.7	697.7	731.7	818.6	928.9	1001.0	1009.5
40°	13112.6	9800.0	1675.4	682.9	657.4	657.4	687.1	750.7	854.7	962.8	986.1
42.5°	13850.6	9863.6	1166.4	644.7	619.3	625.6	651.1	702.0	780.4	888.6	909.8
45°	14609.9	9853.0	850.4	600.2	581.1	600.2	619.3	657.4	714.7	776.2	780.4
47.5°	15182.5	9763.9	674.4	557.8	545.0	570.5	587.4	612.9	644.7	640.5	640.5
50°	15719.0	9547.6	542.9	500.5	509.0	538.7	547.2	555.6	557.8	517.5	513.2
52.5°	16126.2	9210.4	434.8	439.0	472.9	502.6	494.1	481.4	460.2	411.4	402.9
55°	16261.9	8561.5	341.4	362.6	419.9	458.1	426.3	398.7	358.4	318.1	309.6
57.5°	16015.9	7723.8	277.8	282.1	354.2	386.0	349.9	318.1	273.6	239.6	233.3
60°	15494.2	6792.8	229.0	212.1	273.6	301.1	277.8	246.0	205.7	180.3	178.1
62.5°	14459.3	5800.3	188.7	165.4	207.8	231.2	216.3	193.0	159.1	142.1	140.0
65°	12283.4	4640.2	152.7	133.6	161.2	180.3	167.5	150.6	125.1	112.4	110.3
67.5°	8574.2	3136.6	125.1	110.3	127.2	142.1	131.5	123.0	99.7	97.6	99.7
70°	4135.5	1512.1	103.9	89.1	99.7	110.3	106.0	99.7	95.4	110.3	127.2
72.5°	1185.5	506.9	82.7	74.2	80.6	87.0	91.2	89.1	103.9	133.6	154.8
73°	*911.9*	*409.3*	*78.5*	*70.0*	*76.3*	*84.8*	*89.1*	*87.0*	*106.0*	*135.7*	*154.8*
75°	390.2	197.2	59.4	57.3	63.6	74.2	78.5	78.5	106.0	137.8	148.5
77.5°	176.0	106.0	38.2	44.5	55.1	59.4	65.7	65.7	84.8	106.0	106.0
80°	99.7	57.3	29.7	33.9	40.3	40.3	40.3	36.1	38.2	42.4	46.7
82.5°	63.6	38.2	23.3	27.6	25.4	21.2	17.0	17.0	14.8	17.0	21.2
85°	36.1	21.2	21.2	17.0	10.6	8.5	10.6	8.5	2.1	0.0	2.1
87.5°	21.2	12.7	6.4	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

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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

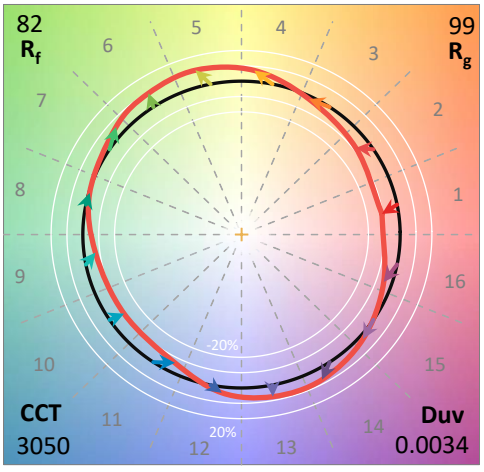
Test Information

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

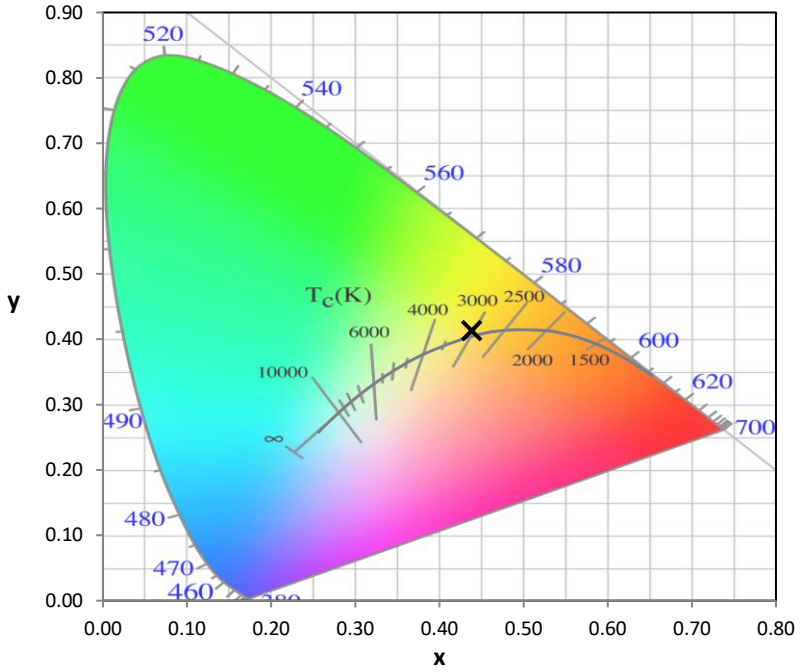
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

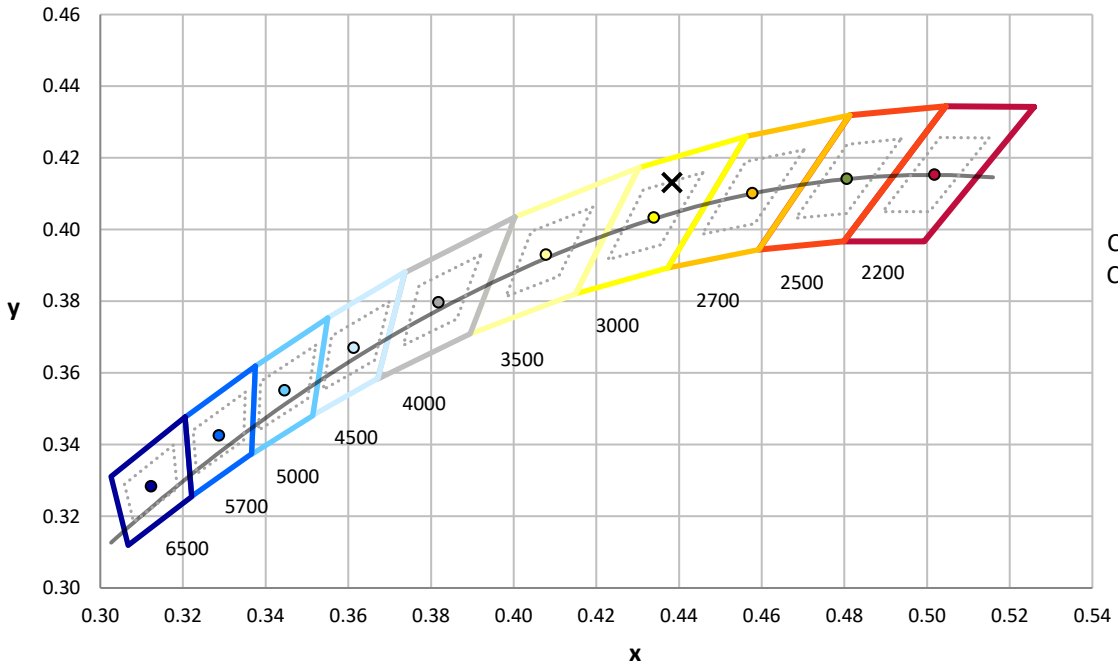
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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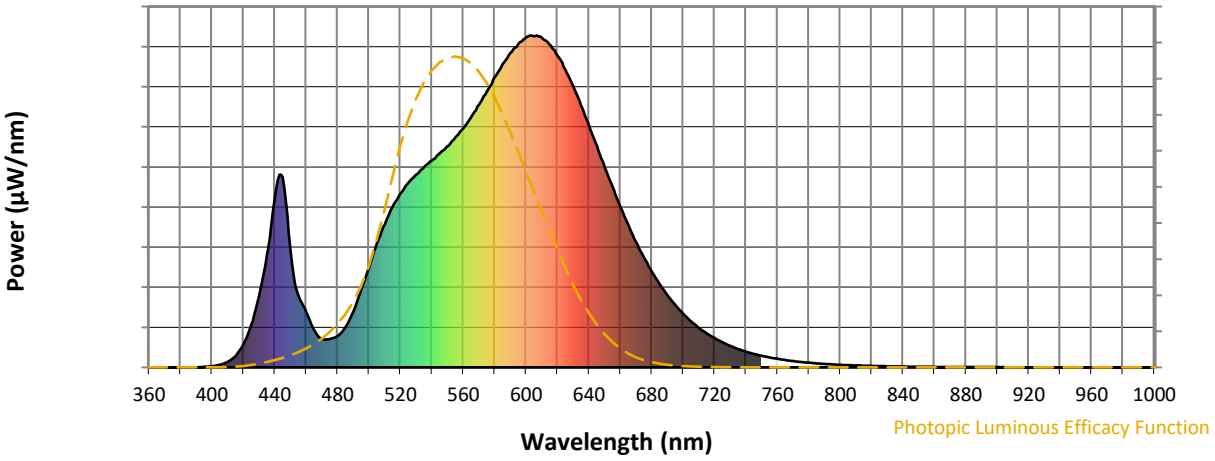
Photopic Flux vs. Wavelength



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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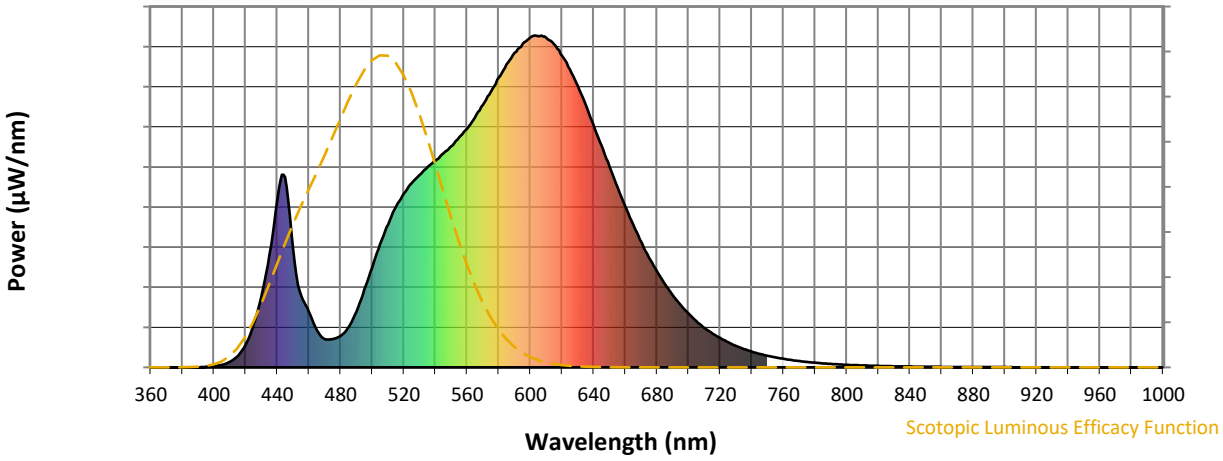
Scotopic Flux vs. Wavelength



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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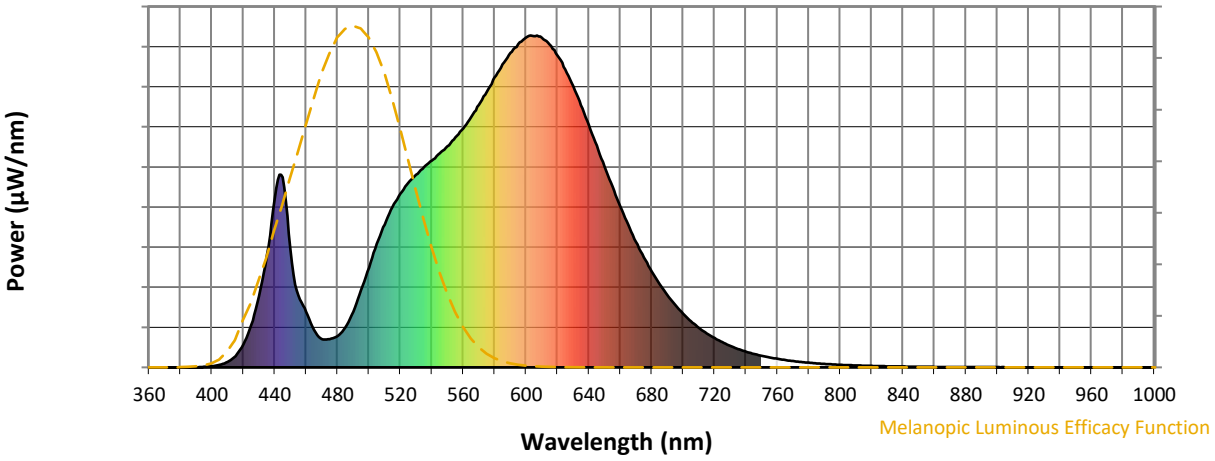
Melanopic Flux vs. Wavelength



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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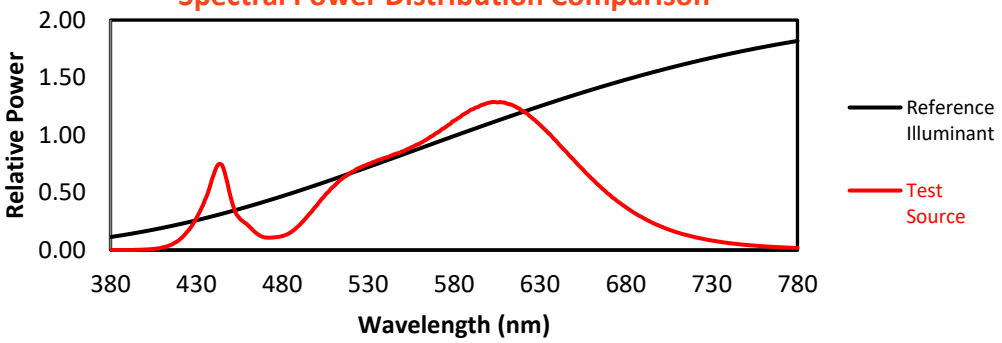
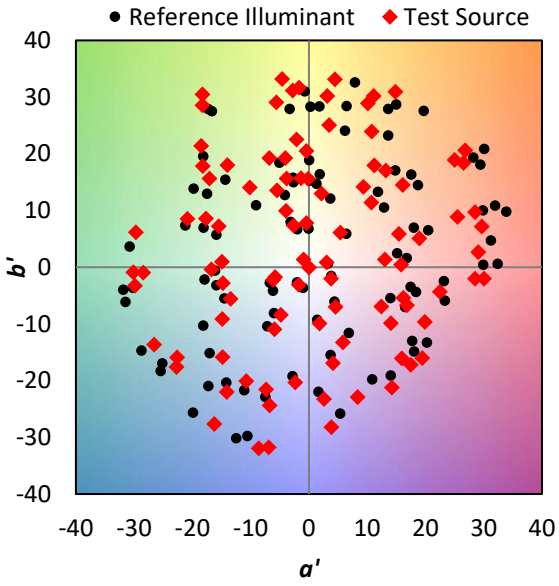
Summary

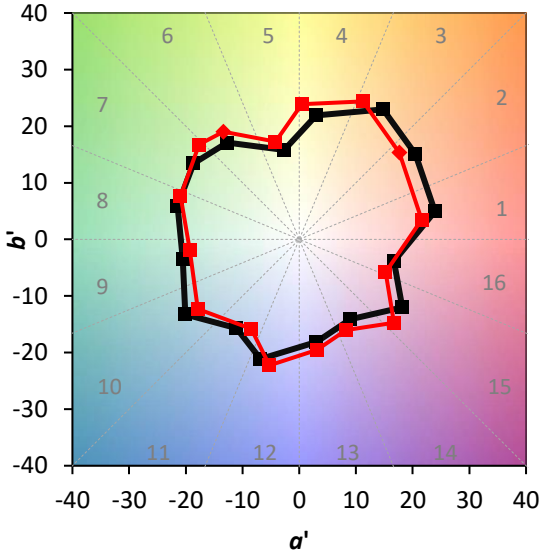
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

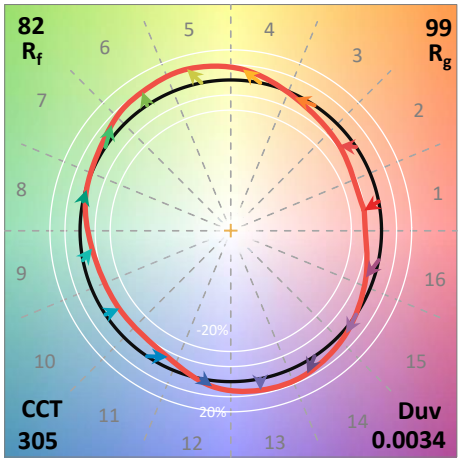
Spectral Power Distribution Comparison

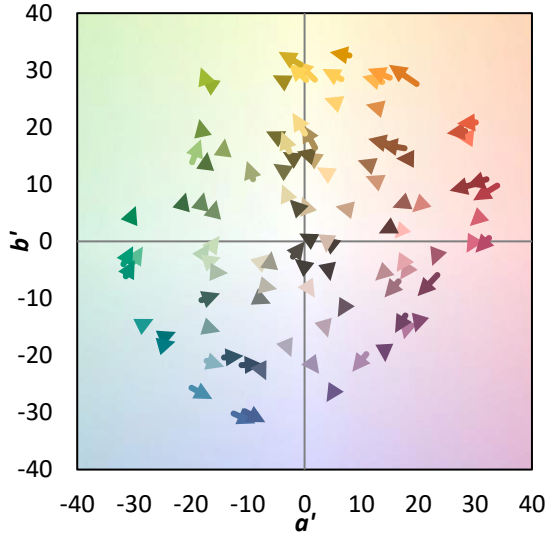


Color Vector Graphics









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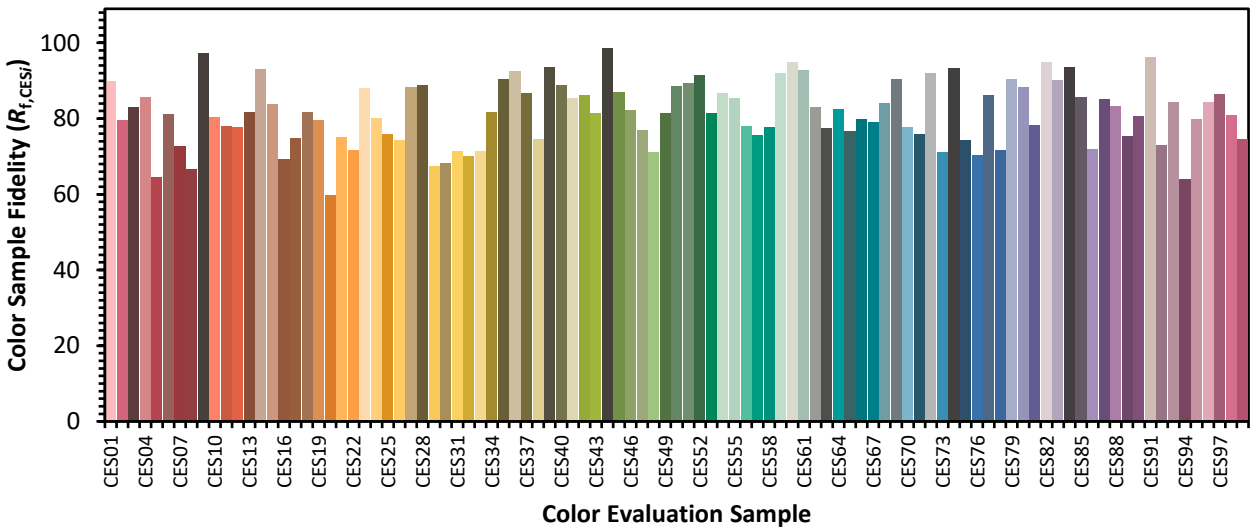
Individual Sample Fidelity Index ($R_{f,i}$)

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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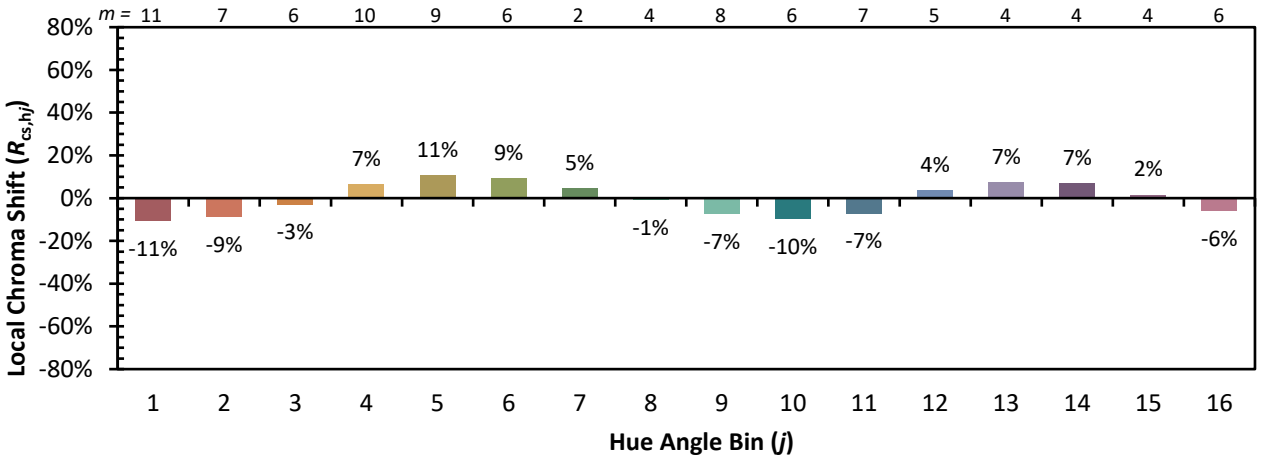
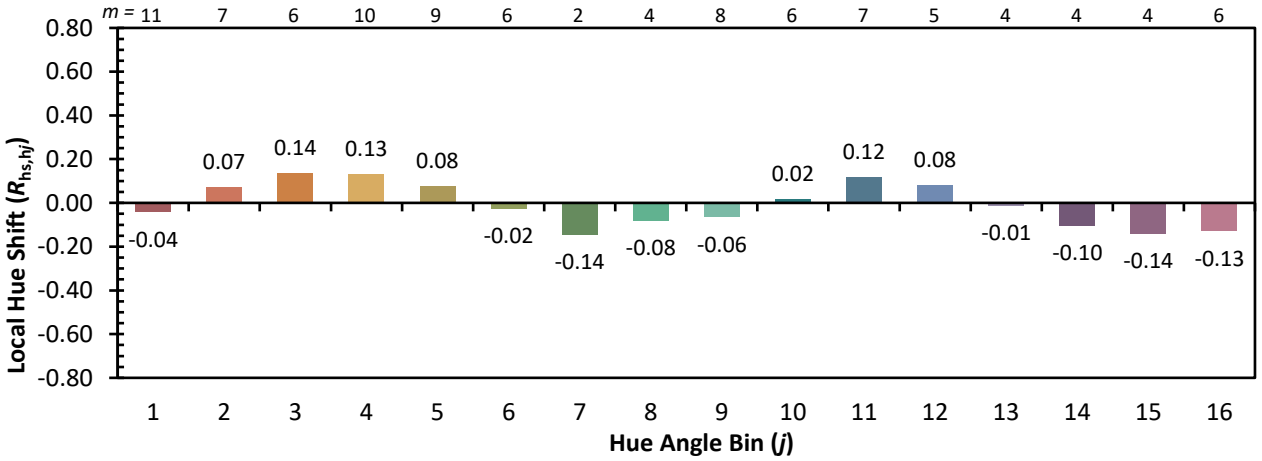
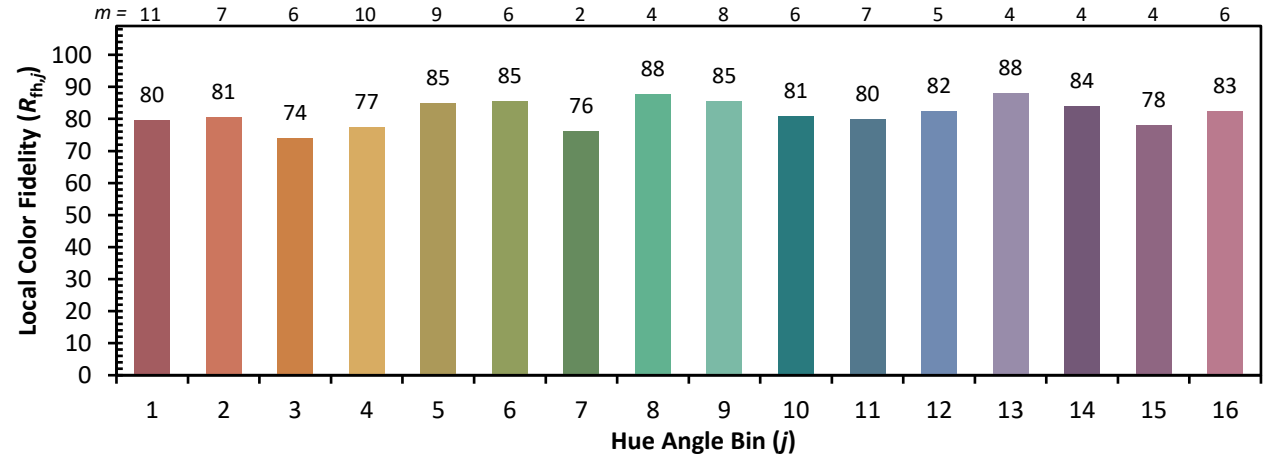
Color Rendition by Hue-Angle Bin







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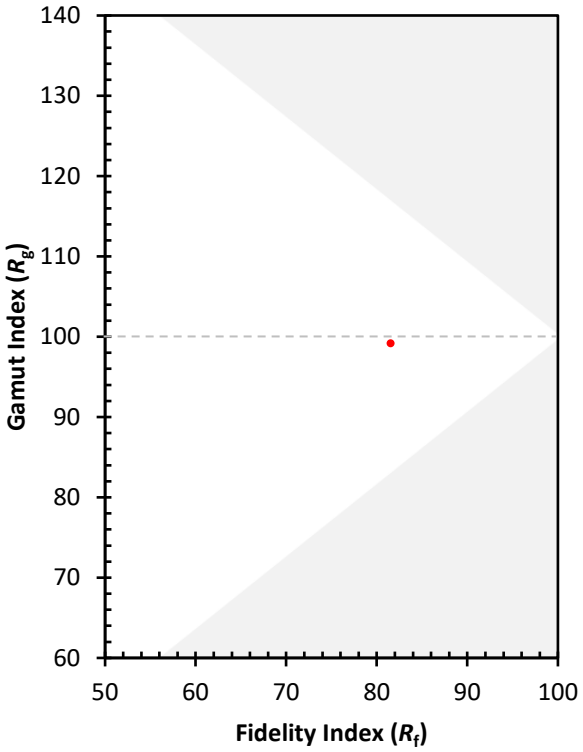
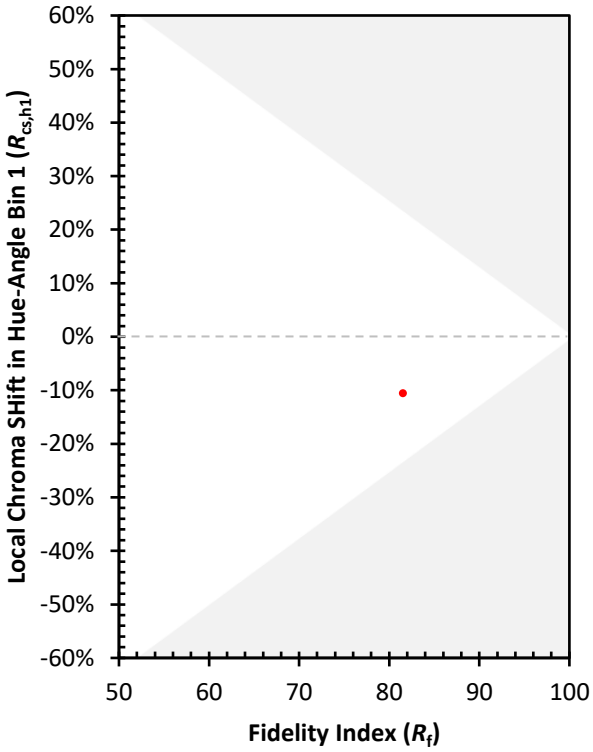
Measure Comparisons





(END OF REPORT)