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: P323061

Luminaire Tested: **GLEON-SA7D-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:	P323061
	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-SA7D-830-U-T4W-HSS
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(7) 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:	31609 lumens
Efficiency:	N/A
Efficacy:	70.6 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):	448
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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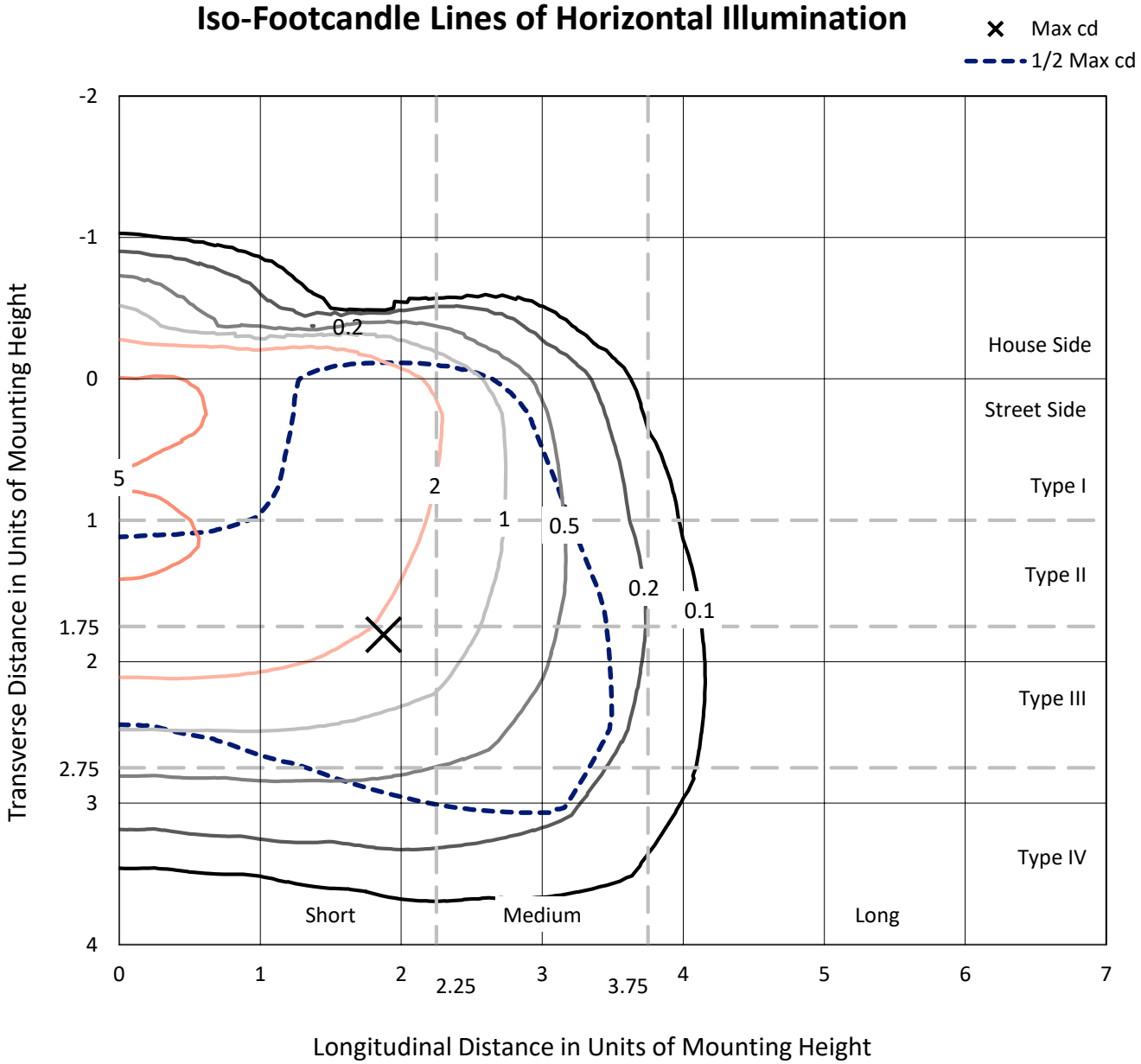
REPORT NUMBER: P323061
CATALOG NUMBER: GLEON-SA7D-830-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
Type IV - Short - N/A

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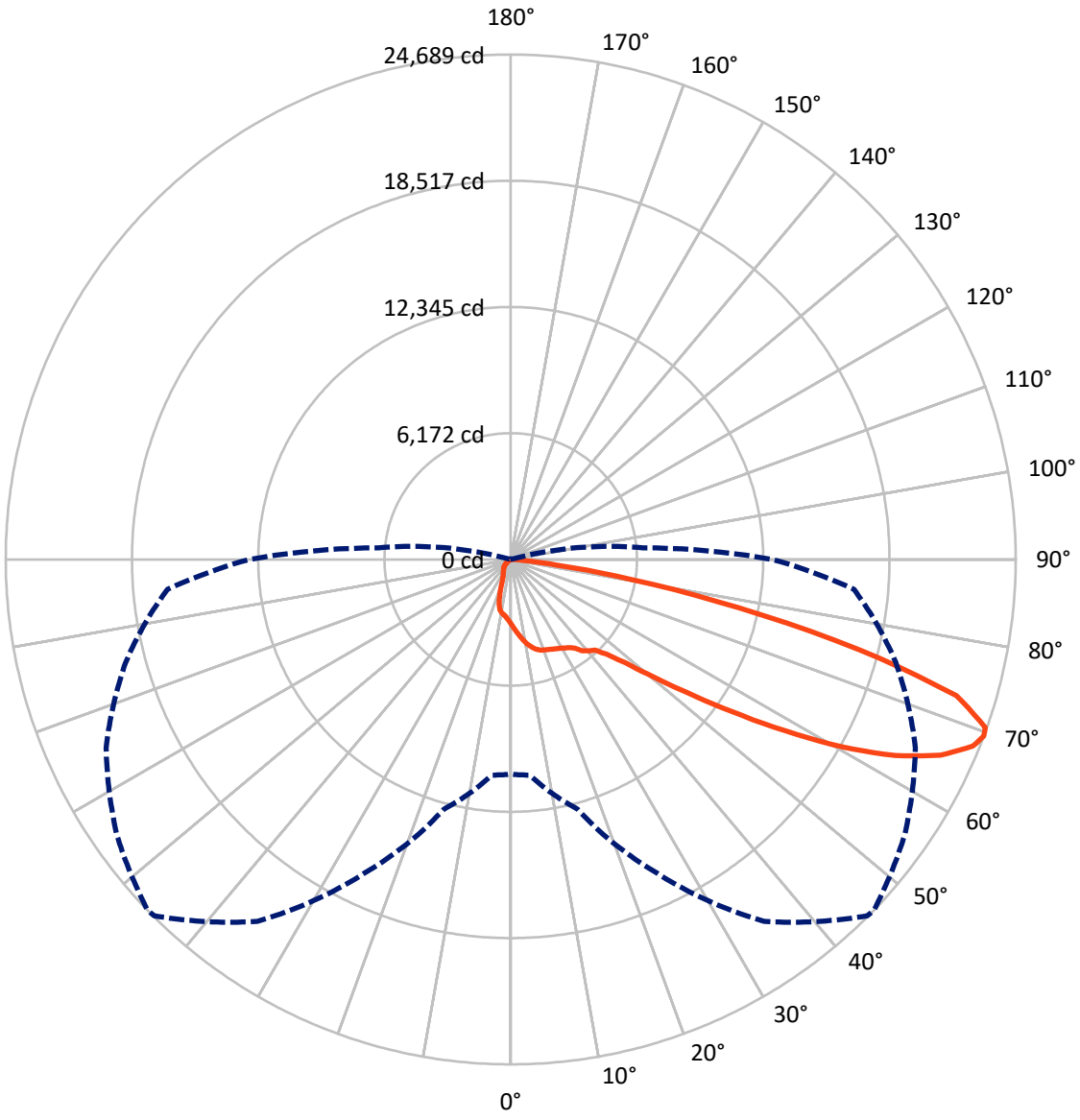
Luminous Intensity Polar Plot



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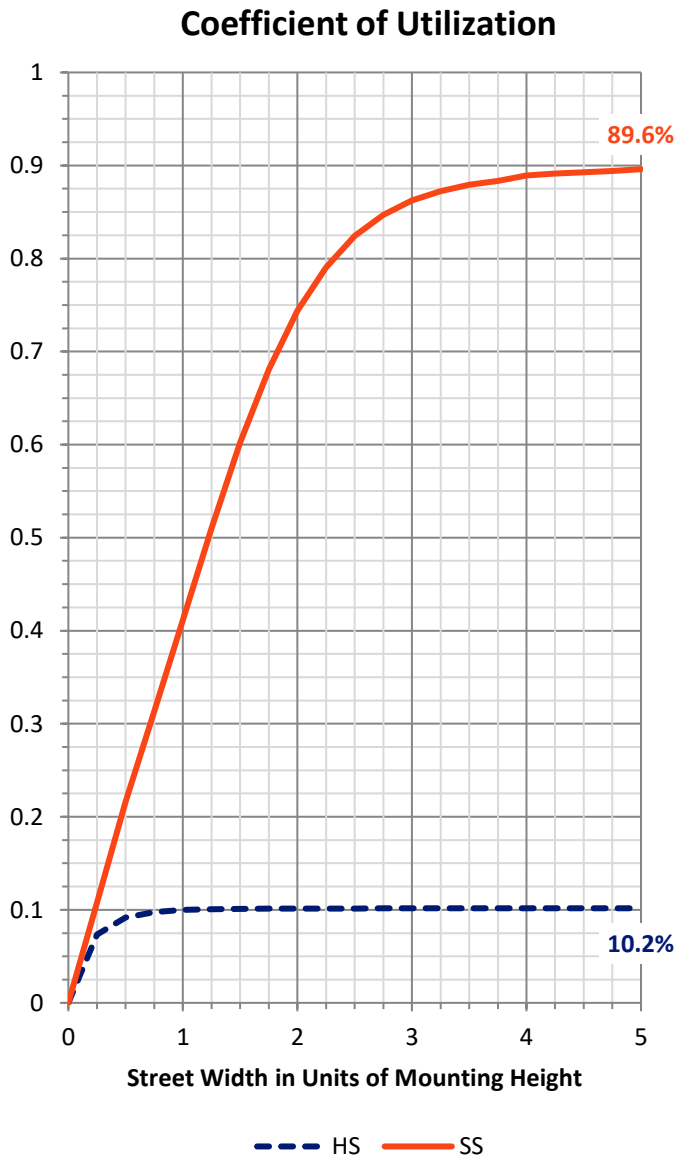
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3243.9	0.0	3243.9
	% Fixture	10.3	0.0	10.3
Street Side	Lumens	28365.1	0.0	28365.1
	% Fixture	89.7	0.0	89.7
Total	Lumens	31609.0	0.0	31609.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	315.2	1.0
10°-20°	956.3	3.0
20°-30°	1504.0	4.8
30°-40°	2156.8	6.8
40°-50°	3727.7	11.8
50°-60°	7364.4	23.3
60°-70°	10292.5	32.6
70°-80°	4972.4	15.7
80°-90°	319.6	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°	31609.0	100.0
0°-180°	31609.0	100.0



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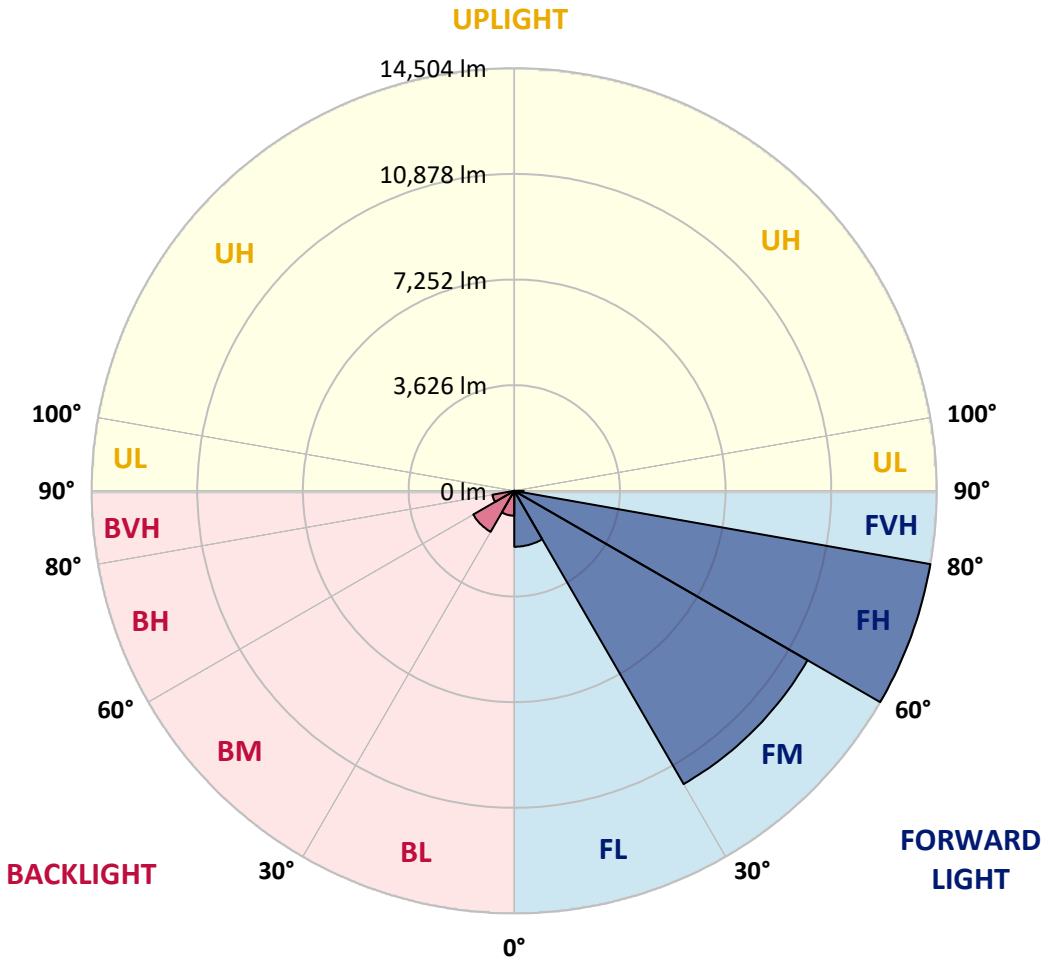
REPORT NUMBER: P323061
CATALOG NUMBER: GLEON-SA7D-830-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1920.6	6.1			
FM	(30°-60°)	11623.3	36.8			
FH	(60°-80°)	14504.2	45.9			G5
FVH	(80°-90°)	316.9	1.0			G3/500
BL	(0°-30°)	855.0	2.7	B2/1000		
BM	(30°-60°)	1625.6	5.1	B2/2500		
BH	(60°-80°)	760.6	2.4	B2/1000		G2/1000
BVH	(80°-90°)	2.7	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



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Scaled Data Report

REPORT NUMBER: P323061
CATALOG NUMBER: GLEON-SA7D-830-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	3167.1	3167.1	3167.1	3167.1	3167.1	3167.1	*3167.1*	3167.1	3167.1	3167.1	3167.1
2.5°	3518.3	3513.9	3493.2	3484.3	3433.9	3404.2	*3392.4*	3355.3	3302.0	3248.6	3189.3
5°	3918.5	3917.0	3878.5	3841.4	3746.6	3657.7	*3641.4*	3555.4	3435.4	3322.7	3210.1
7.5°	4327.5	4308.3	4269.7	4198.6	4060.8	3918.5	*3905.2*	3783.6	3613.2	3450.2	3288.6
10°	4674.3	4662.5	4612.1	4503.9	4342.4	4180.8	*4164.5*	4014.8	3822.2	3622.1	3416.1
12.5°	4944.1	4935.2	4868.5	4733.6	4561.7	4394.2	*4372.0*	4238.6	4032.6	3808.8	3565.8
15°	5108.6	5104.1	5022.6	4878.9	4709.9	4564.7	*4545.4*	4428.3	4237.1	4003.0	3728.8
17.5°	5147.1	5148.6	5064.1	4918.9	4779.6	4675.8	*4661.0*	4572.1	4412.0	4179.3	3891.8
20°	5061.1	5078.9	5003.3	4877.4	4791.4	4736.6	*4724.7*	4671.4	4536.5	4317.2	4022.2
22.5°	4939.6	4948.5	4896.6	4812.2	4776.6	4787.0	*4781.0*	4751.4	4637.3	4435.7	4151.2
25°	4865.5	4865.5	4834.4	4763.3	4787.0	4850.7	*4852.2*	4846.2	4755.8	4581.0	4308.3
27.5°	4862.5	4853.7	4818.1	4764.7	4829.9	4927.8	*4933.7*	4973.7	4917.4	4757.3	4503.9
30°	4981.1	4970.7	4895.2	4825.5	4908.5	5013.7	*5028.5*	5116.0	5087.8	4948.5	4721.8
32.5°	5258.3	5221.2	5053.7	4939.6	5001.9	5127.8	*5147.1*	5286.4	5330.9	5184.2	4932.2
35°	5637.7	5520.6	5279.0	5156.0	5161.9	5293.8	*5311.6*	5516.1	5648.0	5400.5	5095.2
37.5°	6160.8	6103.0	5710.3	5381.3	5407.9	5608.0	*5659.9*	5882.2	5845.1	5519.1	5280.5
40°	7307.9	7217.5	6799.6	6012.6	5643.6	5862.9	*5879.2*	5997.8	6000.7	5787.3	5665.8
42.5°	8870.0	8832.9	8392.8	7158.2	6107.5	6033.4	*6063.0*	6263.1	6486.9	6353.5	6347.5
45°	10599.5	10580.2	10113.4	8678.8	7045.6	6592.1	*6629.1*	6897.4	7325.7	7355.3	7543.5
47.5°	11991.1	11982.2	11714.0	10375.7	8481.7	7539.1	*7551.0*	7835.5	8588.4	8960.4	9261.2
50°	13259.7	13302.7	13090.8	12211.9	10438.0	9022.6	*8994.5*	9184.2	10393.5	11002.6	11376.1
52.5°	15023.4	15084.1	14489.8	13925.2	12490.6	10863.3	*10841.1*	11039.7	12563.2	13019.7	13086.3
55°	16581.0	16477.2	16007.4	15844.4	14993.7	13136.7	*13130.8*	13305.7	14661.7	14855.9	14978.9
57.5°	17268.6	17228.6	17455.4	17828.9	17615.4	15823.7	*15810.3*	15676.9	16539.5	16560.2	16938.2
60°	17702.9	17751.8	18446.9	19598.4	20130.4	18715.1	*18629.1*	17815.5	18332.7	18286.8	18691.4
62.5°	17376.8	17473.2	18724.0	20643.2	22012.6	21239.0	*21117.5*	19774.8	19865.2	19706.6	20083.0
65°	15645.8	15795.5	17845.2	20446.1	22946.3	23211.6	*23088.6*	21504.3	21081.9	20821.1	20612.1
67.5°	12704.0	12792.9	14933.0	18731.4	22525.4	24388.3	*24363.1*	23020.4	22000.8	20632.9	19011.5
69°	*10498.7*	*10586.2*	*12646.2*	*16926.3*	*21599.1*	*24640.3*	*24689.2*	*23506.5*	*21825.9*	*19488.7*	*16844.8*
70°	8892.2	8985.6	10904.8	15379.1	20524.7	24523.2	*24610.6*	23460.6	21325.0	18163.8	14943.3
72.5°	4664.0	4744.0	6713.6	10595.1	16732.1	22518.0	*22783.3*	21477.6	18076.4	13191.6	8835.9
75°	1465.7	1511.7	2621.7	5538.4	11456.1	17508.7	*17569.5*	16847.7	12835.9	7256.0	3679.9
77.5°	558.7	545.4	872.9	2040.8	5791.8	11024.8	*11396.8*	10528.4	6735.8	2565.4	849.2
80°	300.9	302.3	453.5	844.8	2478.0	5665.8	*5980.0*	5102.6	2393.5	800.3	195.6
82.5°	130.4	136.3	254.9	447.6	1138.2	2089.7	*2246.8*	1870.3	914.4	538.0	72.6
85°	28.2	31.1	123.0	243.1	463.9	586.9	*615.0*	606.2	582.4	417.9	28.2
87.5°	0.0	0.0	54.8	87.4	117.1	133.4	*117.1*	152.6	321.6	281.6	14.8
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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Scaled Data Report

REPORT NUMBER: P323061
CATALOG NUMBER: GLEON-SA7D-830-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3167.1	3167.1	3167.1	3167.1	3167.1	3167.1	3167.1	3167.1	3167.1	3167.1	3167.1
2.5°	3170.1	3143.4	3097.4	3047.1	3011.5	2974.4	2944.8	2931.5	2916.6	2906.3	2919.6
5°	3164.1	3112.3	3023.3	2937.4	2875.1	2824.8	2783.3	2767.0	2750.7	2738.8	2737.3
7.5°	3216.0	3143.4	3007.0	2881.1	2784.7	2716.6	2660.2	2636.5	2617.3	2608.4	2601.0
10°	3315.3	3221.9	3039.6	2875.1	2750.7	2635.1	2513.5	2420.2	2359.4	2331.2	2320.9
12.5°	3444.2	3327.2	3101.9	2906.3	2725.5	2503.2	2245.3	2023.0	1879.2	1831.8	1803.6
15°	3595.4	3450.2	3183.4	2946.3	2633.6	2227.5	1790.3	1499.8	1366.4	1339.8	1310.1
17.5°	3740.7	3580.6	3281.2	2953.7	2432.0	1779.9	1311.6	1114.5	1062.6	1080.4	1084.8
20°	3868.1	3709.5	3377.6	2888.5	2066.0	1335.3	1015.2	966.3	985.6	1019.6	1025.6
22.5°	3997.0	3834.0	3466.5	2716.6	1597.6	1013.7	914.4	926.3	945.5	979.6	985.6
25°	4154.1	3985.2	3549.5	2400.9	1199.0	862.5	868.5	886.3	905.5	936.6	939.6
27.5°	4334.9	4176.4	3604.3	1990.4	889.2	792.9	812.2	838.8	858.1	887.7	893.7
30°	4575.0	4428.3	3622.1	1565.0	745.5	730.6	739.5	772.1	800.3	827.0	831.4
32.5°	4800.3	4677.3	3562.8	1181.2	690.6	672.8	672.8	692.1	724.7	749.9	755.8
35°	5007.8	4927.8	3373.1	864.0	649.1	619.5	604.7	604.7	625.4	646.2	652.1
37.5°	5282.0	5279.0	3066.3	689.1	609.1	575.0	543.9	520.2	512.8	517.2	520.2
40°	5751.8	5756.2	2666.2	618.0	575.0	529.1	481.7	438.7	398.7	385.3	383.8
42.5°	6485.4	6418.7	2246.8	583.9	545.4	481.7	410.5	352.7	290.5	271.2	269.7
45°	7650.3	7254.5	1802.2	552.8	514.3	428.3	339.4	260.8	210.4	195.6	195.6
47.5°	9347.2	8352.7	1396.1	518.7	472.8	367.5	256.4	188.2	154.1	146.7	148.2
50°	11101.9	9428.7	1070.0	475.7	422.4	303.8	189.7	136.3	117.1	117.1	118.6
52.5°	12658.0	10217.1	834.4	429.8	360.1	238.6	143.8	106.7	97.8	96.3	97.8
55°	14114.9	10725.5	638.8	376.4	286.0	177.8	109.7	87.4	81.5	78.5	77.1
57.5°	15519.8	10977.4	478.7	303.8	207.5	128.9	87.4	74.1	68.2	63.7	62.2
60°	16455.0	10772.9	329.0	223.8	143.8	93.4	72.6	63.7	56.3	51.9	50.4
62.5°	16982.6	10214.2	211.9	161.5	102.3	69.7	57.8	53.4	43.0	38.5	38.5
65°	16769.2	9292.3	148.2	115.6	74.1	51.9	43.0	43.0	31.1	25.2	23.7
67.5°	14860.3	7850.3	112.6	86.0	53.4	38.5	32.6	37.1	19.3	11.9	11.9
69°	*12785.5*	*6506.1*	*96.3*	*71.1*	*44.5*	*31.1*	*28.2*	*34.1*	*13.3*	*8.9*	*7.4*
70°	11112.3	5612.5	87.4	62.2	37.1	26.7	25.2	32.6	13.3	7.4	5.9
72.5°	6648.4	3130.1	66.7	44.5	23.7	20.7	20.7	37.1	13.3	7.4	5.9
75°	2686.9	1102.6	48.9	31.1	17.8	17.8	25.2	47.4	11.9	5.9	4.4
77.5°	609.1	241.6	28.2	19.3	11.9	17.8	29.6	37.1	7.4	3.0	0.0
80°	148.2	59.3	17.8	11.9	7.4	13.3	22.2	20.7	1.5	0.0	0.0
82.5°	48.9	20.7	7.4	5.9	1.5	4.4	10.4	5.9	0.0	0.0	0.0
85°	20.7	11.9	3.0	1.5	0.0	0.0	1.5	0.0	0.0	0.0	0.0
87.5°	13.3	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

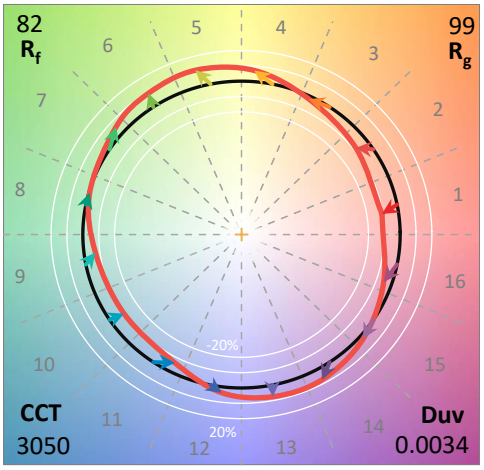
Test Information

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

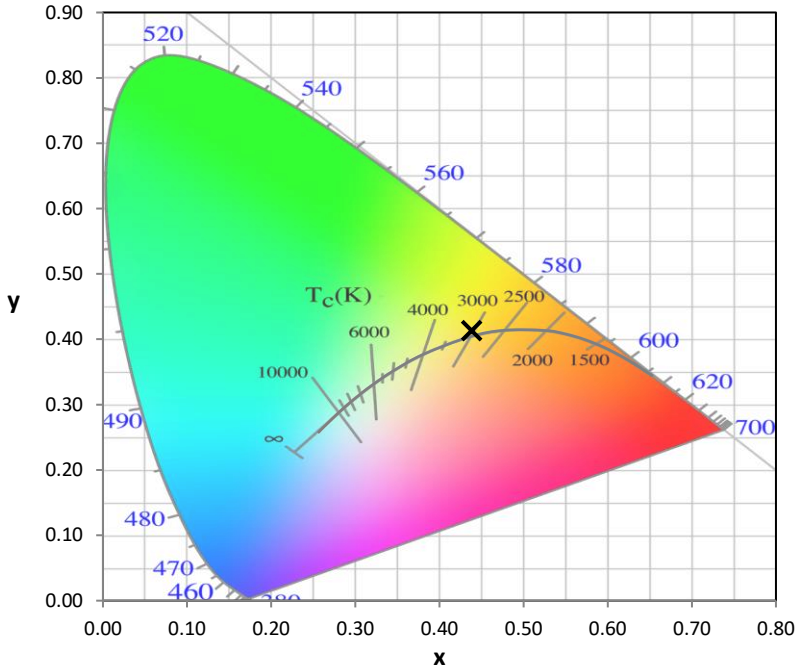
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

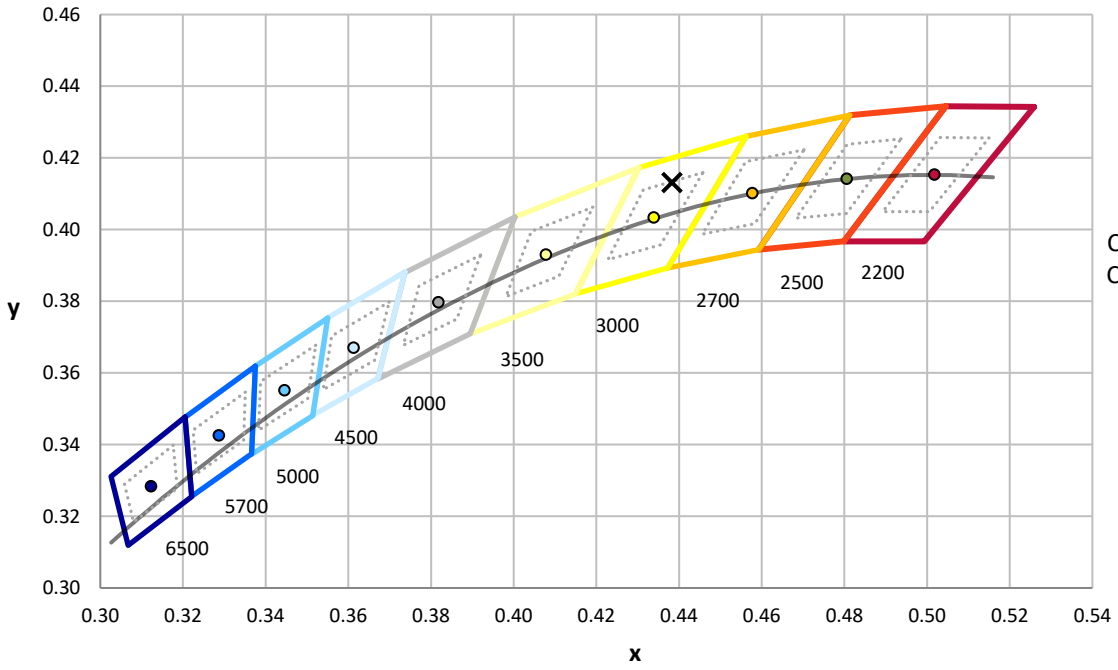
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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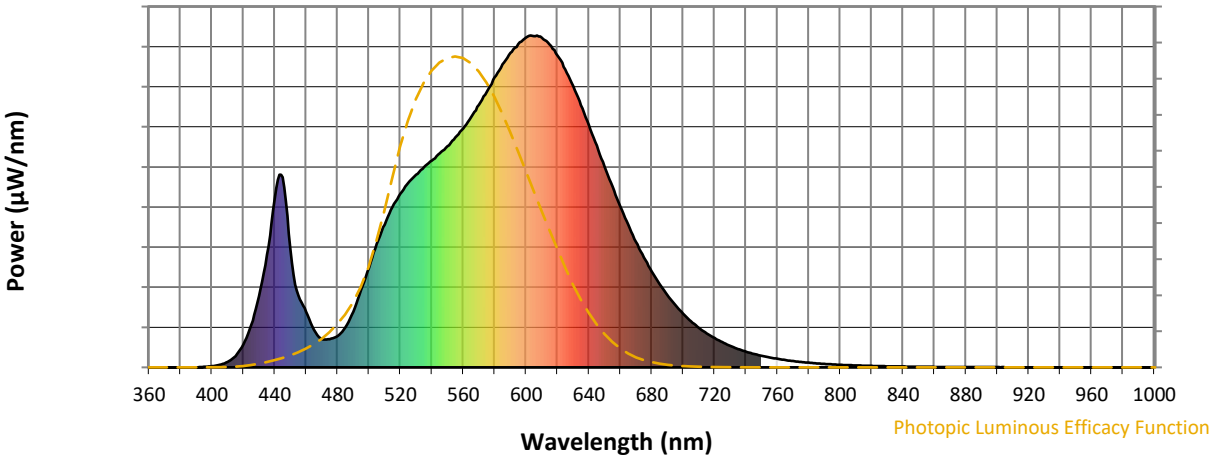
Photopic Flux vs. Wavelength



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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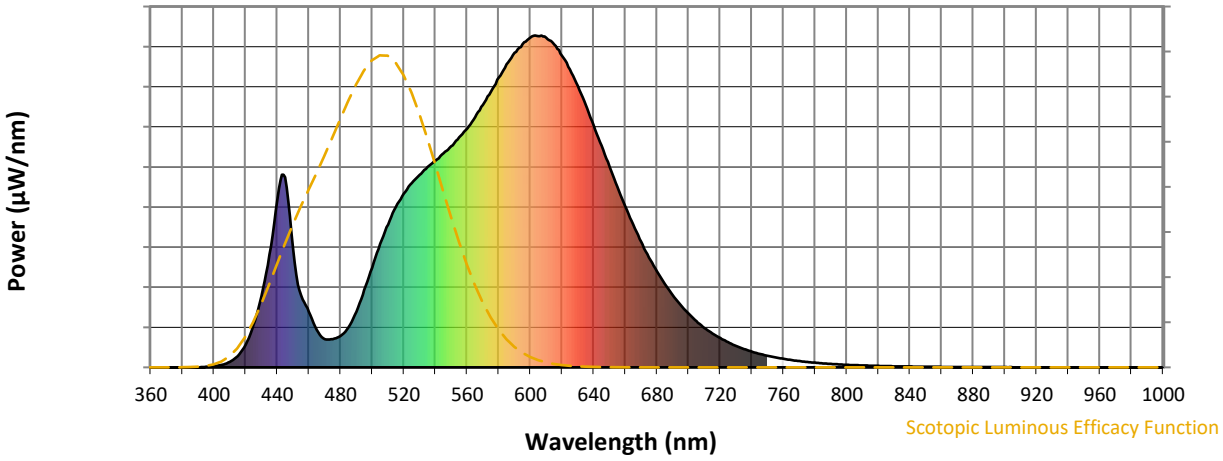
Scotopic Flux vs. Wavelength



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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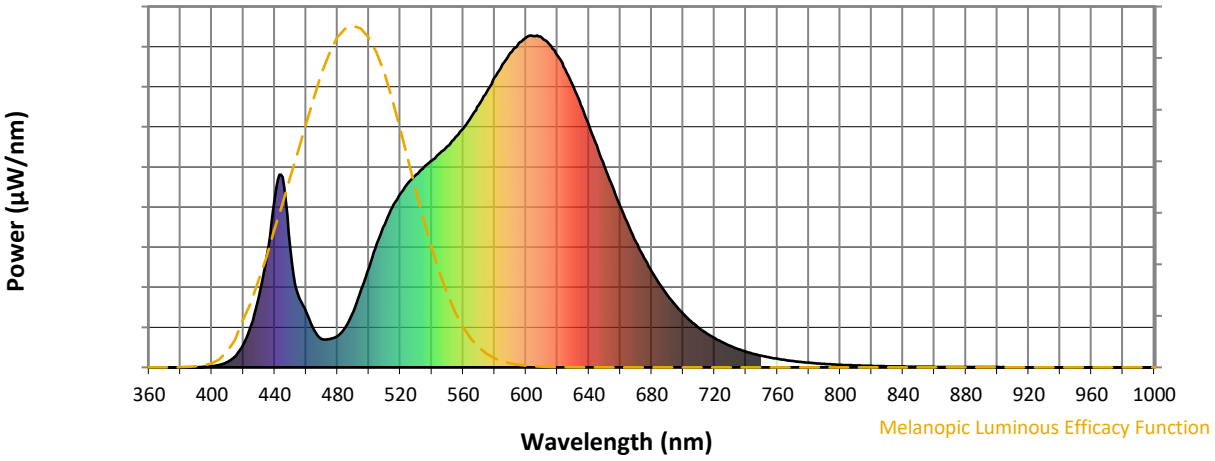
Melanopic Flux vs. Wavelength



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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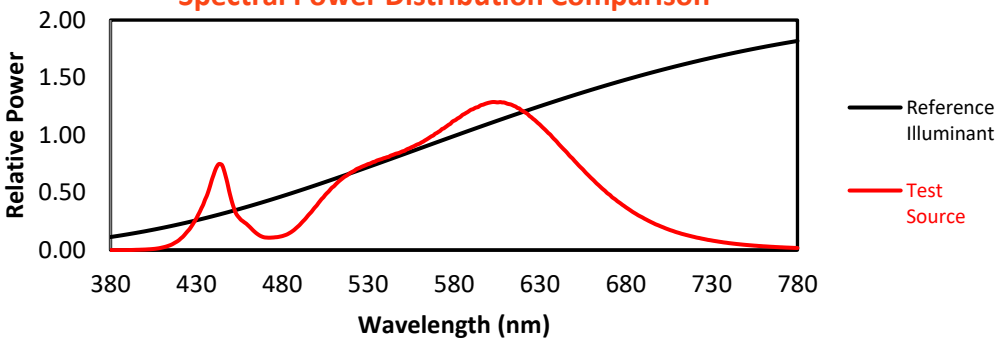
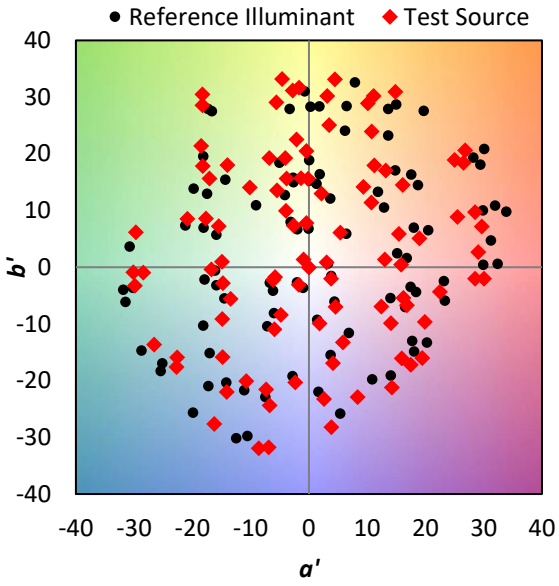
Summary

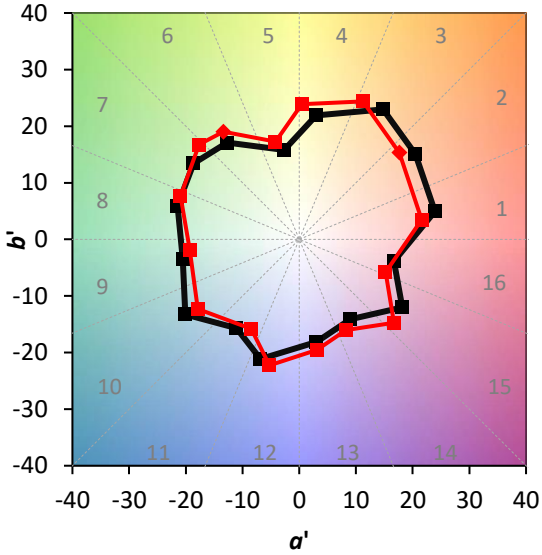
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

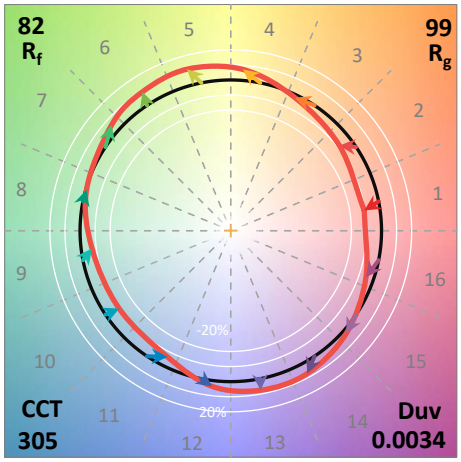
Spectral Power Distribution Comparison

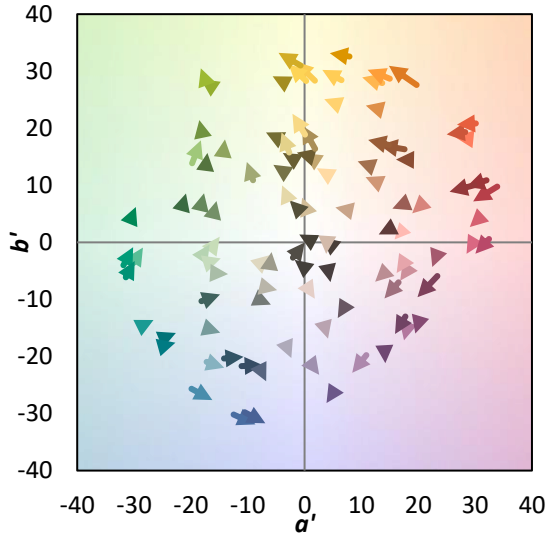


Color Vector Graphics









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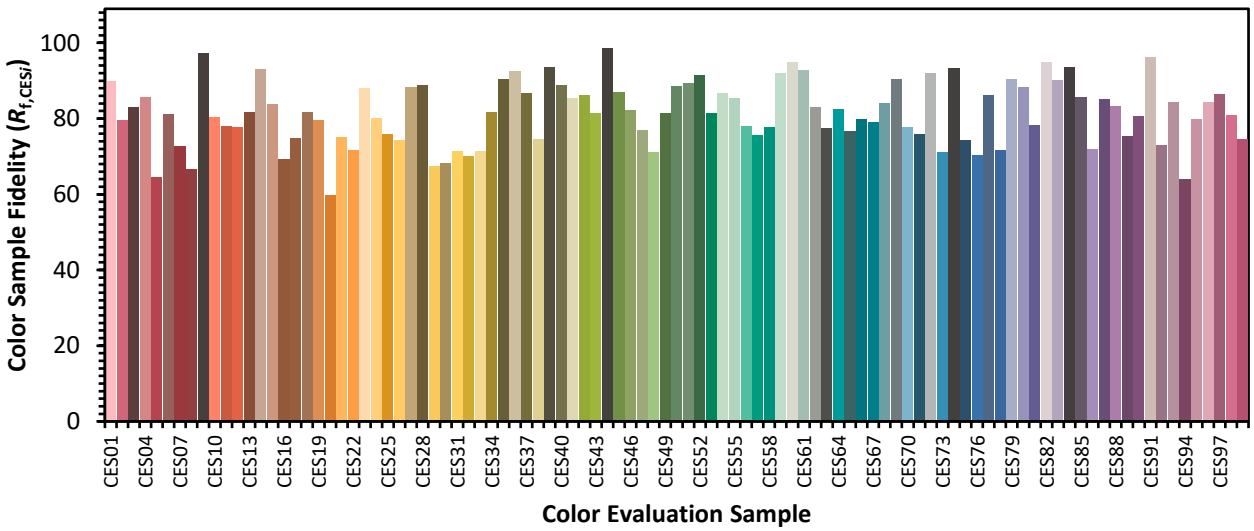
Individual Sample Fidelity Index ($R_{f,i}$)

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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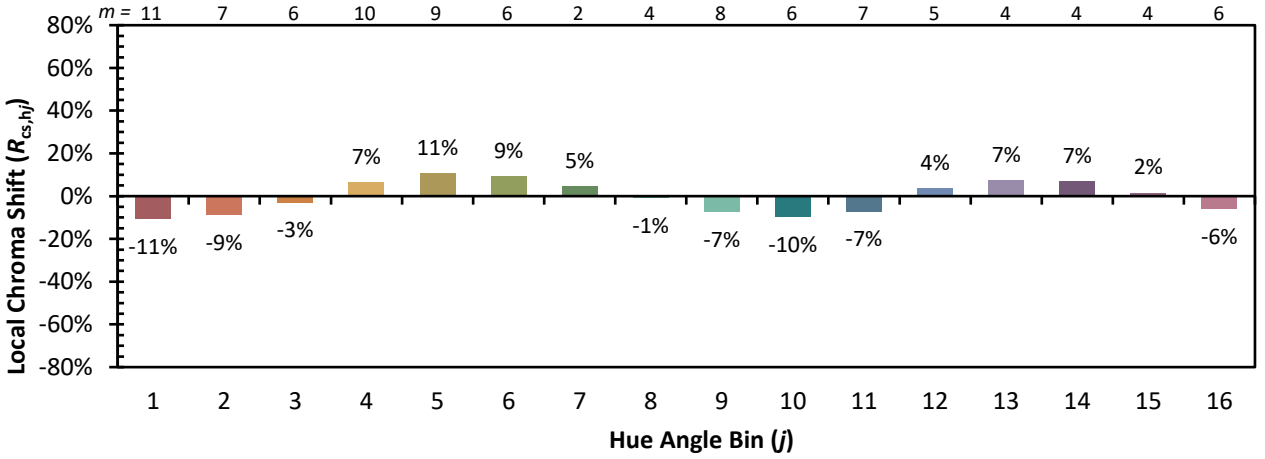
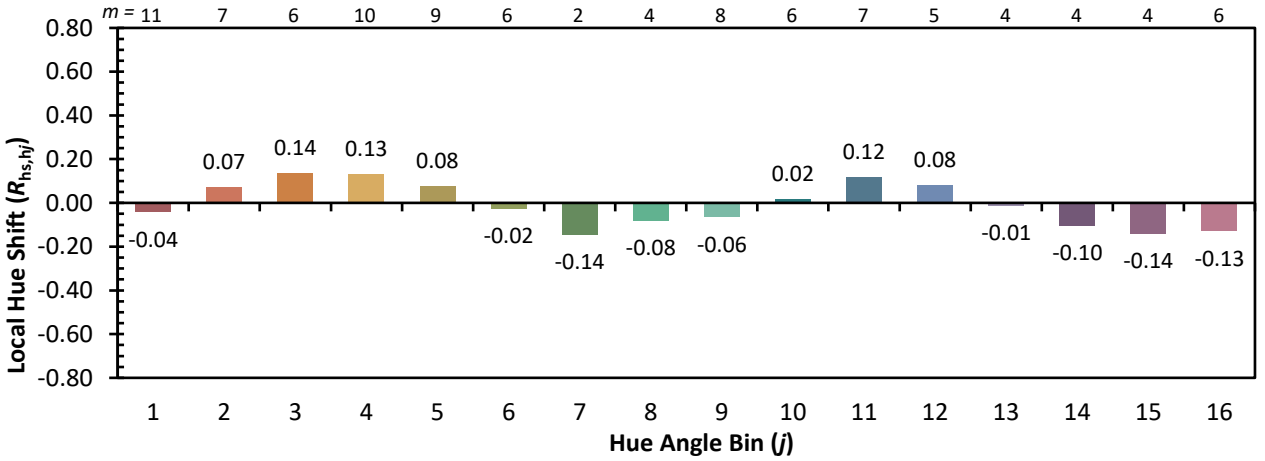
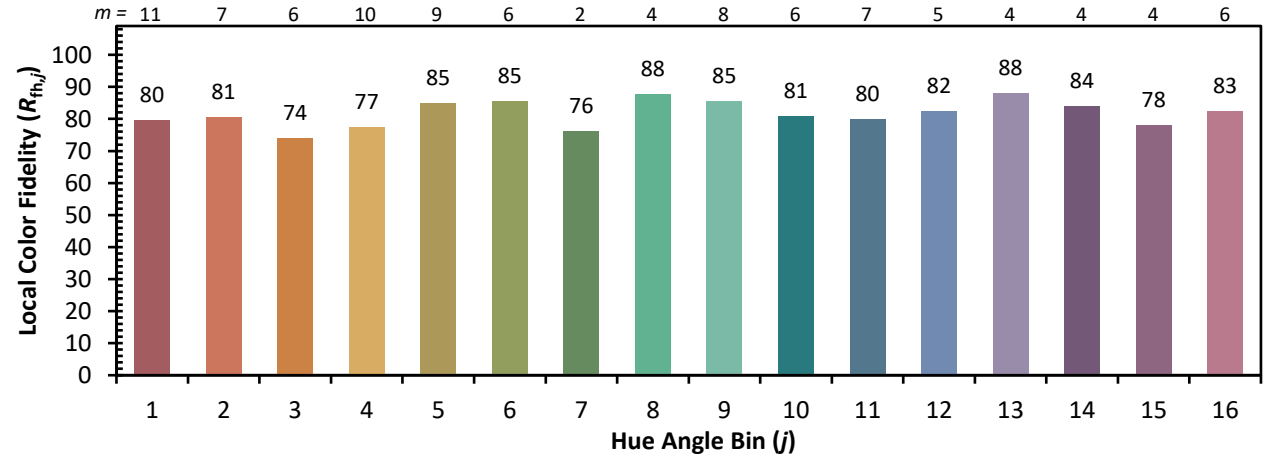
Color Rendition by Hue-Angle Bin







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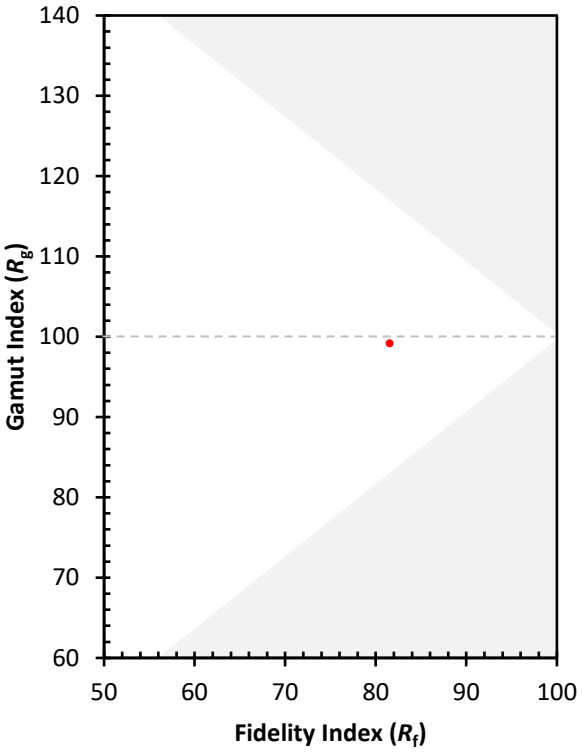
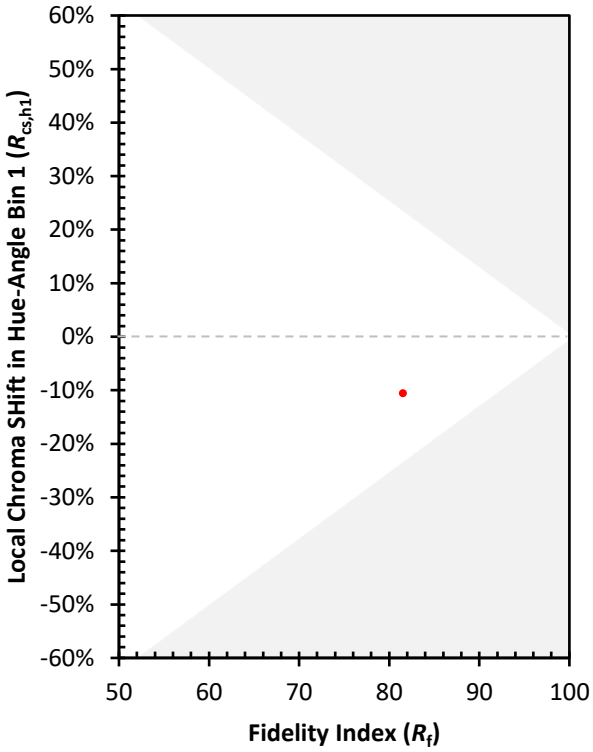
Measure Comparisons





(END OF REPORT)