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: P318901

Luminaire Tested: **GLEON-SA7D-830-U-T4FT**

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:	P318901
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-16)
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-T4FT
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(7) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	43874 lumens
Efficiency:	N/A
Efficacy:	97.9 lumens/watt
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B4 - 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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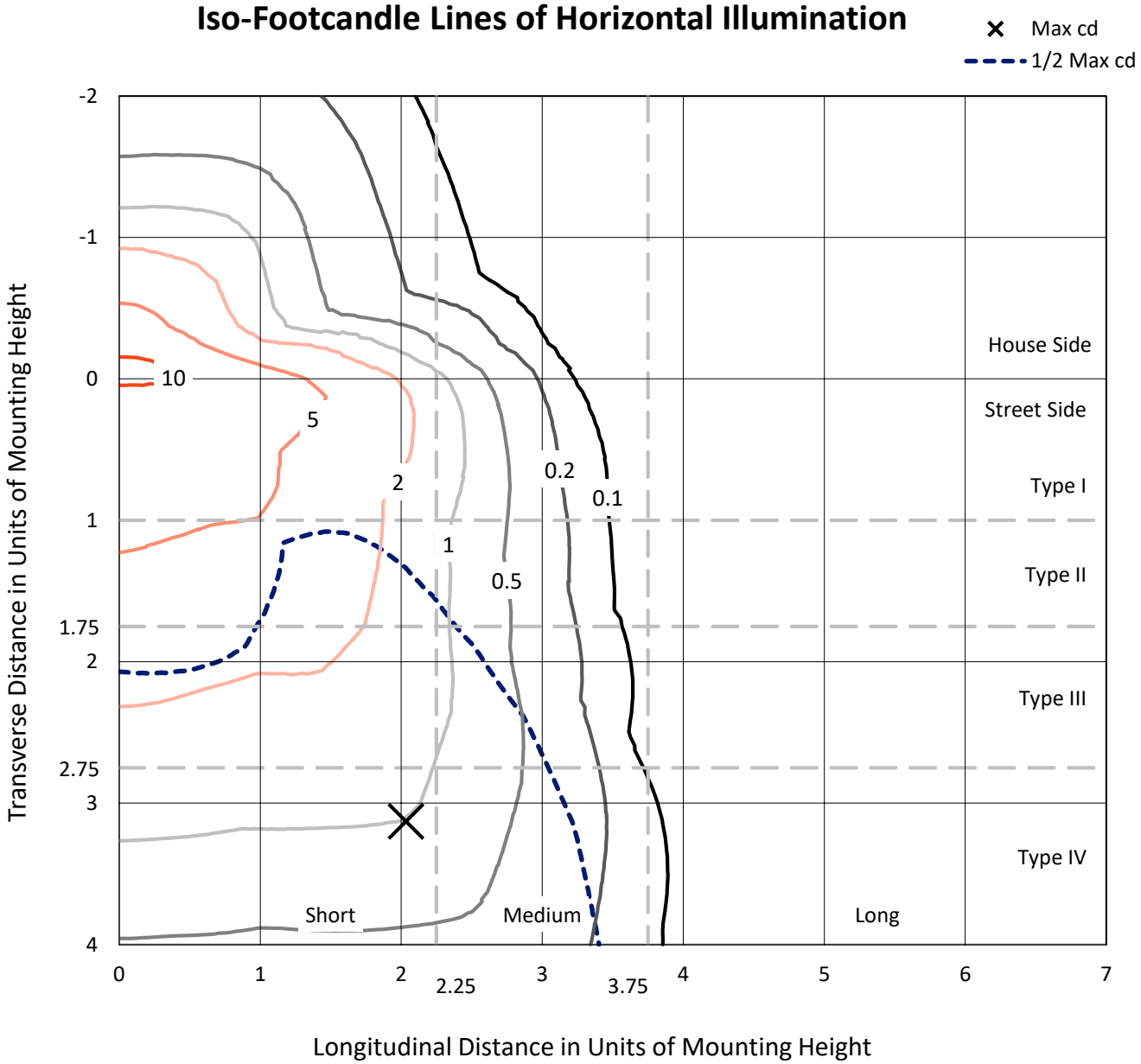
REPORT NUMBER: P318901
CATALOG NUMBER: GLEON-SA7D-830-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 11 fc
Type IV - Short - N/A

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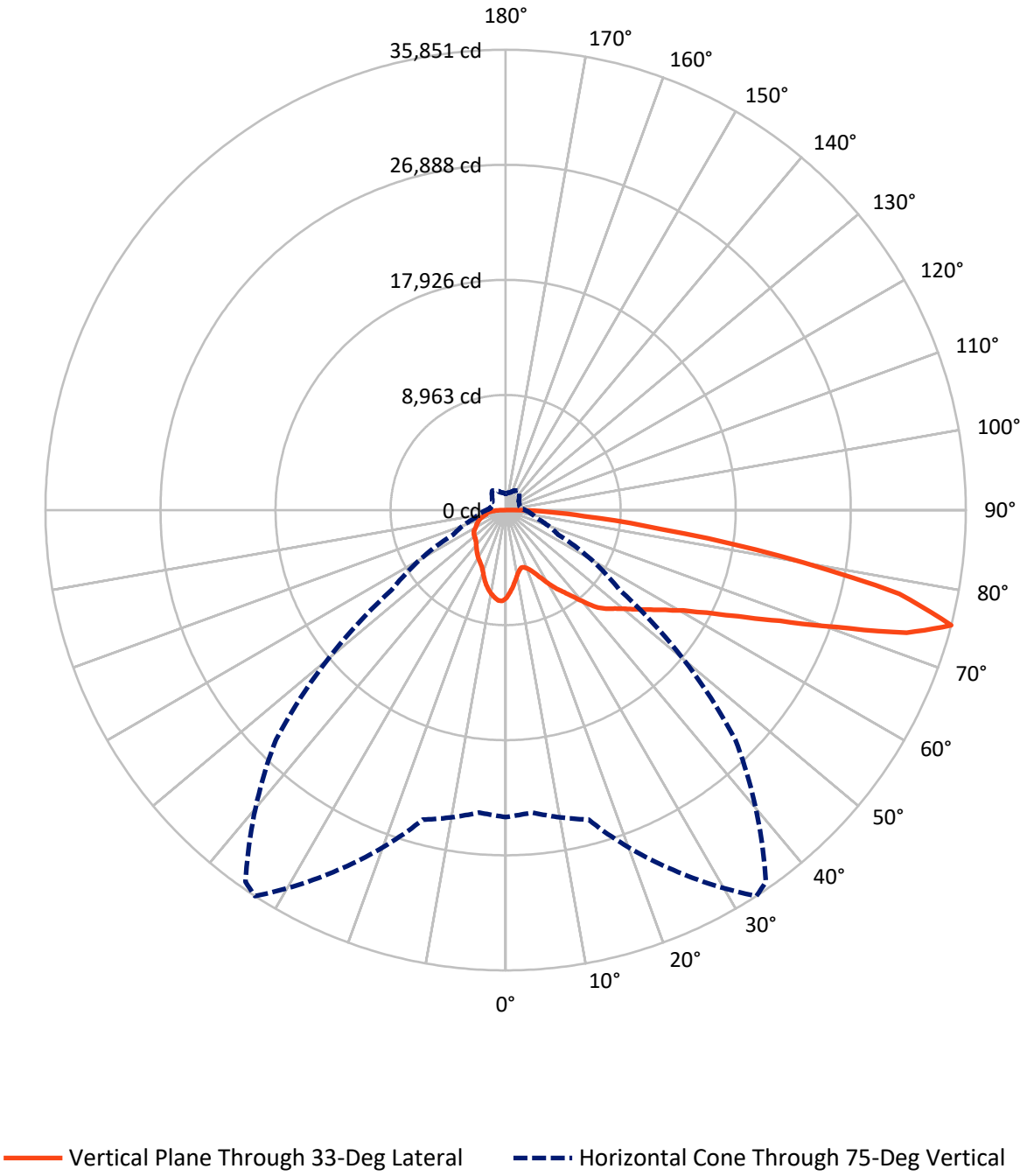
Luminous Intensity Polar Plot



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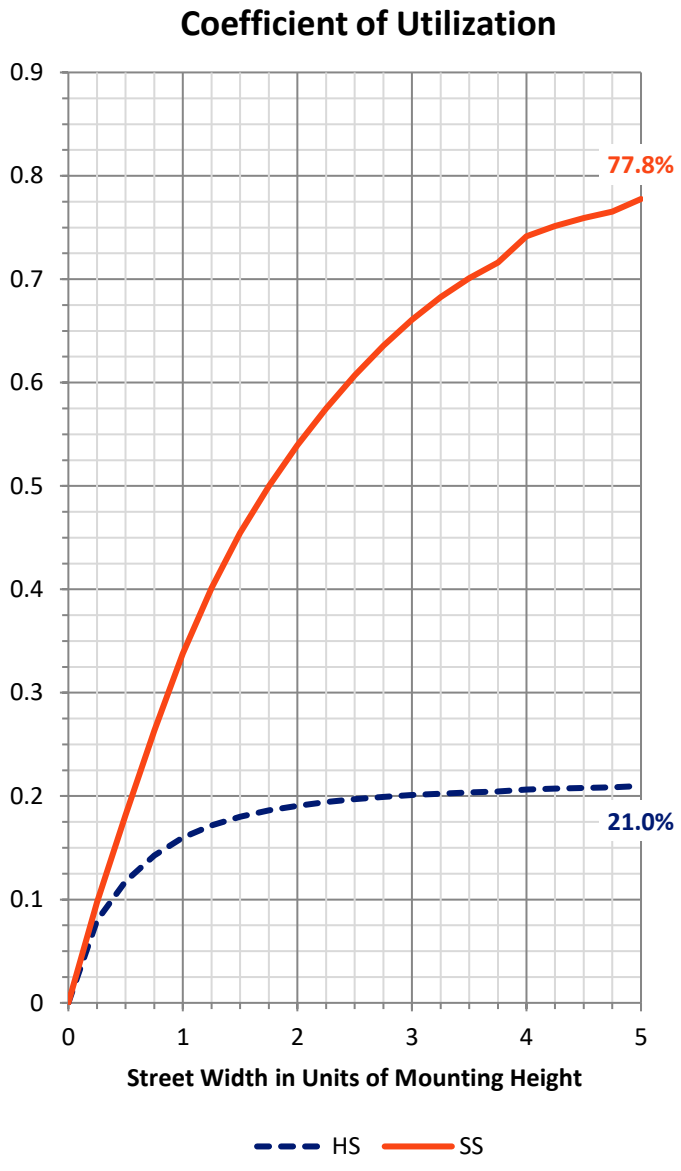
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9420.9	0.0	9420.9
	% Fixture	21.5	0.0	21.5
Street Side	Lumens	34453.1	0.0	34453.1
	% Fixture	78.5	0.0	78.5
Total	Lumens	43874.0	0.0	43874.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	620.2	1.4
10°-20°	1679.8	3.8
20°-30°	2743.3	6.3
30°-40°	4085.4	9.3
40°-50°	5859.6	13.4
50°-60°	8044.3	18.3
60°-70°	10071.1	23.0
70°-80°	9110.8	20.8
80°-90°	1659.6	3.8
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°	43874.0	100.0
0°-180°	43874.0	100.0



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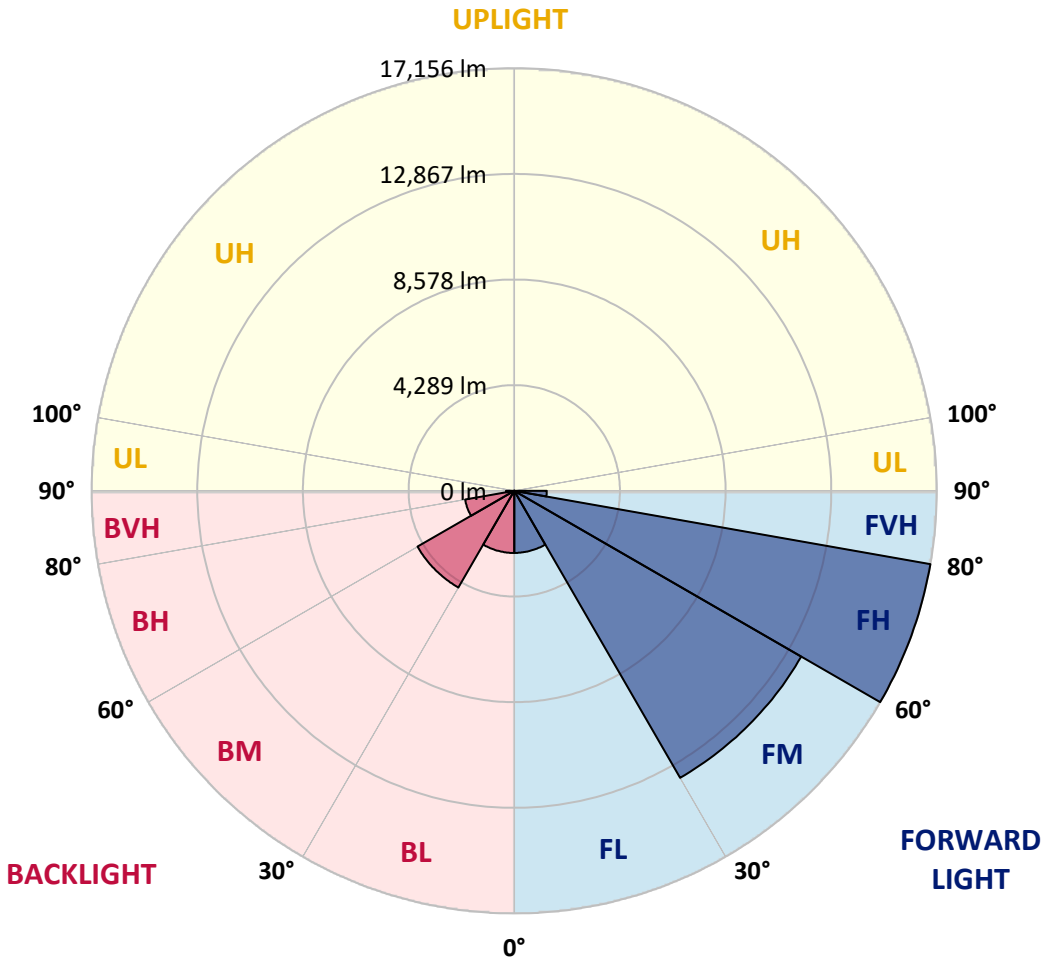
REPORT NUMBER: P318901
CATALOG NUMBER: GLEON-SA7D-830-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2519.9	5.7			
FM	(30°-60°)	13455.2	30.7			
FH	(60°-80°)	17156.3	39.1			G5
FVH	(80°-90°)	1321.7	3.0			G5
BL	(0°-30°)	2523.4	5.8	B4/5000		
BM	(30°-60°)	4534.0	10.3	B3/5000		
BH	(60°-80°)	2025.7	4.6	B3/2500		G3/2500
BVH	(80°-90°)	337.9	0.8			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	6857.8	6857.8	6857.8	6857.8	*6857.8*	6857.8	6857.8	6857.8	6857.8	6857.8	6857.8
2.5°	6368.2	6344.0	6389.5	6395.5	*6434.9*	6450.1	6504.6	6589.5	6659.2	6739.5	6812.3
5°	5790.8	5774.2	5837.8	5883.3	*5969.7*	6006.0	6134.8	6315.2	6475.8	6657.7	6822.9
7.5°	5242.2	5233.1	5304.3	5407.4	*5507.4*	5557.4	5780.2	6042.4	6310.6	6604.7	6857.8
10°	4780.0	4776.9	4845.1	4946.7	*5093.7*	5149.8	5437.7	5783.2	6159.1	6563.7	6916.9
12.5°	4520.8	4531.4	4563.2	4648.1	*4784.5*	4840.6	5160.4	5566.5	6031.8	6550.1	7003.2
15°	4584.5	4601.1	4546.6	4543.5	*4640.5*	4684.5	4984.6	5411.9	5940.9	6572.8	7129.0
17.5°	4855.7	4858.8	4714.8	4623.9	*4683.0*	4705.7	4930.0	5324.0	5887.8	6624.4	7286.6
20°	5237.7	5230.1	4975.5	4823.9	*4855.7*	4861.8	5007.3	5325.6	5883.3	6713.8	7491.2
22.5°	5743.8	5687.8	5345.3	5139.1	*5131.6*	5122.5	5205.8	5437.7	5950.0	6859.3	7735.2
25°	6404.6	6351.6	5880.2	5598.4	*5537.7*	5515.0	5527.1	5677.2	6081.8	7015.4	8008.0
27.5°	7139.6	7047.2	6592.5	6194.0	*6068.2*	6036.3	5963.6	6015.1	6225.8	7165.4	8332.4
30°	7754.9	7704.9	7307.9	6835.0	*6686.5*	6641.0	6450.1	6394.0	6433.4	7370.0	8741.6
32.5°	8099.0	8065.6	7824.7	7442.7	*7304.8*	7241.2	6971.4	6859.3	6766.8	7692.8	9296.2
35°	8515.7	8494.5	8349.0	8071.7	*7867.1*	7800.4	7591.3	7474.6	7236.6	8136.9	10013.1
37.5°	9046.2	9023.4	9026.5	8802.2	*8558.2*	8496.0	8358.1	8235.4	7845.9	8720.3	10792.1
40°	9646.3	9602.4	9585.7	9575.1	*9420.5*	9385.6	9312.9	9146.2	8609.7	9417.5	11560.4
42.5°	10549.6	10393.5	10060.1	10185.8	*10338.9*	10320.7	10379.8	10140.4	9458.4	10241.9	12310.6
45°	11421.0	11164.9	10589.0	10616.3	*10951.2*	11052.7	11495.3	11325.5	10378.3	11145.2	13086.6
47.5°	11818.1	11624.1	11134.6	11136.1	*11468.0*	11678.6	12648.6	12527.3	11345.2	12171.2	14033.8
50°	12262.1	12068.1	11628.6	11793.8	*12083.3*	12307.6	13762.5	13700.3	12265.1	13294.2	15168.9
52.5°	12747.1	12418.2	12139.4	12434.9	*12841.0*	13101.7	14877.9	14708.2	13109.3	14424.8	16473.8
55°	12753.1	12663.7	12875.9	13092.6	*13700.3*	14020.1	16046.4	15597.8	13797.3	15535.7	17536.1
57.5°	13479.1	13333.6	13783.7	13883.7	*14677.9*	15038.6	17208.8	16372.2	14497.5	16387.4	18109.0
60°	14439.9	14315.7	14683.9	14947.6	*15887.3*	16369.2	18450.0	17167.9	15047.7	17030.0	18081.7
62.5°	16099.4	15958.5	15953.9	16323.7	*17589.2*	18149.9	19842.8	17948.4	15265.9	17157.3	17310.3
65°	18528.8	18304.5	17881.7	18057.5	*19939.8*	20499.0	21399.2	18513.7	14977.9	16475.3	15323.5
67.5°	20893.0	20885.5	20365.6	20726.3	*23043.6*	23492.2	23172.4	18569.7	14079.2	14100.4	11798.4
70°	23249.7	23280.0	23192.1	24446.9	*27237.0*	27703.8	25060.7	17816.5	12059.0	10182.8	7068.4
72.5°	25116.8	25109.2	25551.8	28787.4	*32679.3*	32574.7	26652.0	15534.1	8658.2	5496.8	3378.1
75°	*23907.4*	*23643.7*	*24962.2*	*30936.4*	*35851.3*	*35340.5*	*25298.7*	*10836.0*	*4493.5*	*2502.1*	*1818.6*
77.5°	15593.2	15843.3	17778.6	25556.3	*31359.3*	30737.9	18560.6	5055.8	2117.2	1641.3	1318.5
80°	5646.8	5910.5	8324.8	14476.3	*21605.3*	21503.8	9140.1	2077.8	1432.2	1239.7	960.8
82.5°	1942.9	2039.9	3284.1	6428.9	*12198.5*	12653.1	3438.7	1180.6	1041.2	879.0	657.7
85°	762.3	872.9	1501.9	3093.2	*6153.0*	6198.5	1392.8	706.2	724.4	575.9	360.7
87.5°	289.5	351.6	718.4	1436.7	*2809.8*	2580.9	498.6	336.4	412.2	342.5	171.3
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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Scaled Data Report

REPORT NUMBER: P318901
CATALOG NUMBER: GLEON-SA7D-830-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6857.8	6857.8	6857.8	6857.8	6857.8	6857.8	6857.8	6857.8	6857.8	6857.8	6857.8
2.5°	6868.4	6900.2	6966.9	7012.3	7060.8	7074.5	7080.5	7092.7	7104.8	7100.2	7101.8
5°	6910.8	6972.9	7080.5	7126.0	7147.2	7123.0	7076.0	7038.1	7010.8	6995.7	6991.1
7.5°	6980.5	7068.4	7183.6	7176.0	7127.5	7019.9	6898.7	6807.7	6732.0	6704.7	6689.5
10°	7073.0	7176.0	7256.3	7170.0	7029.0	6842.6	6660.7	6519.8	6406.1	6362.2	6354.6
12.5°	7191.2	7295.7	7310.9	7127.5	6894.1	6639.5	6392.5	6206.1	6036.3	5981.8	5969.7
15°	7344.2	7442.7	7348.8	7053.3	6727.4	6384.9	6065.1	5812.0	5633.2	5566.5	5542.3
17.5°	7504.9	7598.8	7356.4	6930.5	6509.2	6083.3	5681.7	5422.5	5218.0	5140.7	5131.6
20°	7697.4	7739.8	7324.5	6754.7	6209.1	5692.3	5269.5	5025.5	4916.4	4861.8	4855.7
22.5°	7935.3	7889.8	7251.8	6516.8	5828.7	5240.7	4896.7	4783.0	4755.7	4743.6	4748.1
25°	8186.9	8047.4	7144.2	6206.1	5348.3	4789.1	4623.9	4655.7	4692.1	4687.5	4687.5
27.5°	8464.2	8208.1	6979.0	5793.9	4816.3	4419.3	4439.0	4555.7	4610.2	4608.7	4607.2
30°	8820.4	8389.9	6768.3	5298.3	4319.2	4158.6	4278.3	4420.8	4495.0	4492.0	4493.5
32.5°	9258.3	8590.0	6481.9	4745.1	3960.1	3966.1	4104.0	4245.0	4331.4	4323.8	4325.3
35°	9770.6	8814.3	6093.9	4199.5	3722.1	3813.1	3922.2	4020.7	4102.5	4091.9	4081.3
37.5°	10328.3	9034.0	5578.6	3711.5	3528.1	3670.6	3761.5	3778.2	3816.1	3788.8	3769.1
40°	10858.7	9202.3	4914.8	3311.4	3332.6	3549.4	3608.5	3541.8	3473.6	3464.5	3437.2
42.5°	11321.0	9258.3	4243.5	2991.6	3126.5	3422.1	3458.4	3319.0	3196.2	3138.7	3114.4
45°	11809.0	9278.0	3617.6	2723.4	2928.0	3308.4	3347.8	3161.4	2988.6	2864.3	2823.4
47.5°	12447.0	9420.5	3131.1	2524.9	2776.4	3232.6	3288.7	3035.6	2811.3	2634.0	2596.1
50°	13282.1	9702.4	2735.5	2373.3	2677.9	3182.6	3246.3	2912.8	2665.8	2452.1	2414.2
52.5°	14209.6	9961.5	2415.7	2250.6	2582.5	3094.7	3191.7	2824.9	2529.4	2283.9	2243.0
55°	14858.2	9763.0	2158.1	2123.3	2458.2	2968.9	3115.9	2750.7	2333.9	2120.2	2083.8
57.5°	14982.5	9084.1	1962.6	1991.4	2308.1	2811.3	2999.2	2585.5	2227.8	2049.0	2011.1
60°	14643.0	8138.4	1817.1	1870.2	2147.5	2612.8	2781.0	2468.8	2126.3	1973.2	1941.4
62.5°	13789.8	7170.0	1709.5	1761.0	1997.5	2411.2	2644.6	2346.0	2023.2	1886.8	1855.0
65°	12066.6	6019.7	1606.5	1664.0	1858.0	2236.9	2521.8	2232.4	1921.7	1817.1	1786.8
67.5°	9108.3	4508.7	1509.5	1561.0	1733.8	2085.4	2388.5	2120.2	1823.2	1756.5	1720.1
70°	5363.4	2823.4	1398.8	1453.4	1603.4	1927.7	2246.0	1997.5	1700.4	1670.1	1623.1
72.5°	2496.1	1698.9	1273.0	1326.1	1439.7	1717.1	2062.6	1836.8	1554.9	1488.2	1424.6
75°	*1489.8*	*1242.7*	*1124.5*	*1171.5*	*1251.8*	*1492.8*	*1832.3*	*1673.1*	*1417.0*	*1329.1*	*1262.4*
77.5°	1113.9	950.2	960.8	1010.9	1076.0	1306.4	1623.1	1544.3	1310.9	1242.7	1197.3
80°	801.7	721.4	783.5	838.1	906.3	1188.2	1554.9	1427.6	1185.1	1094.2	1051.8
82.5°	535.0	518.3	589.5	645.6	712.3	1039.7	1461.0	1250.3	1012.4	897.2	803.2
85°	295.5	312.2	397.1	421.3	478.9	732.0	1197.3	1004.8	762.3	613.8	586.5
87.5°	122.8	144.0	213.7	206.1	254.6	436.5	788.1	606.2	485.0	362.2	281.9
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

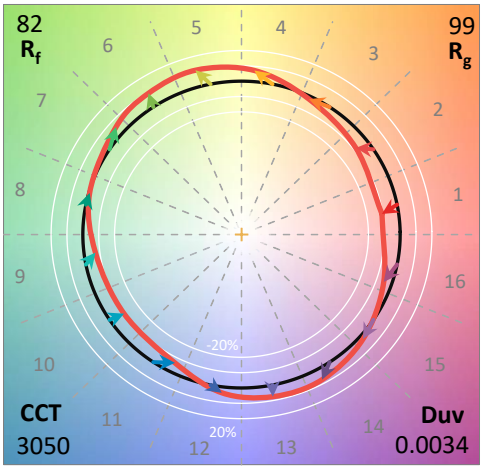
Test Information

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

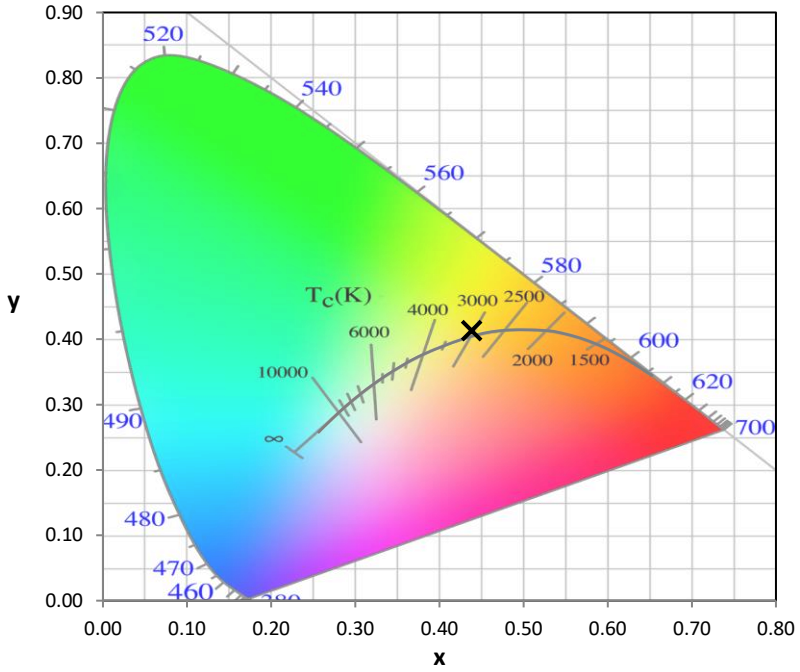
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

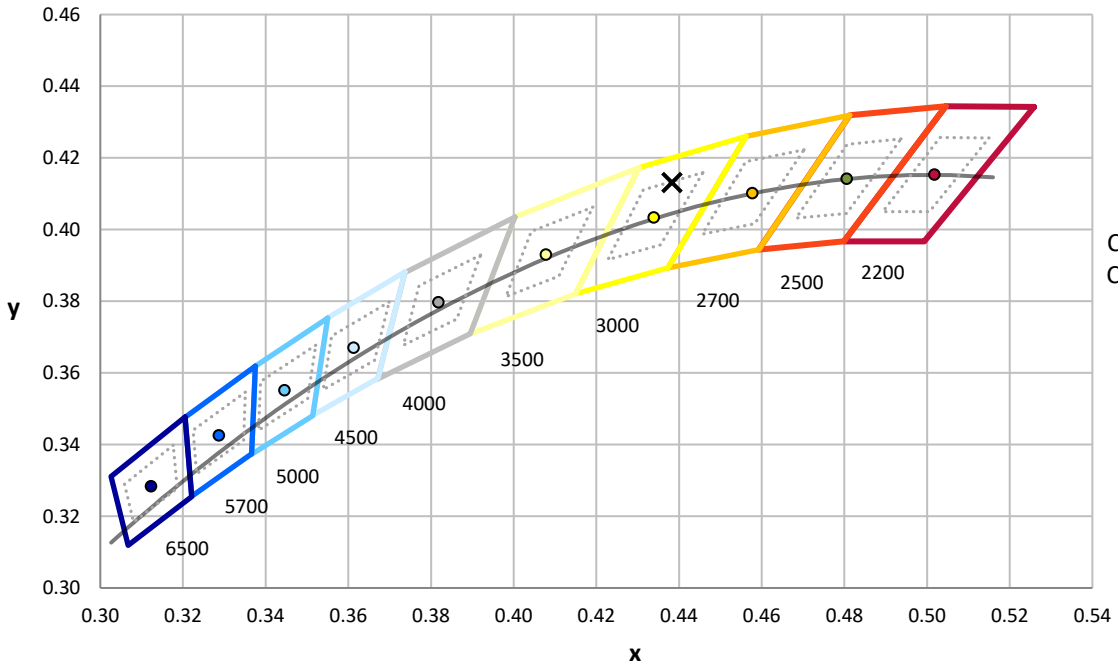
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

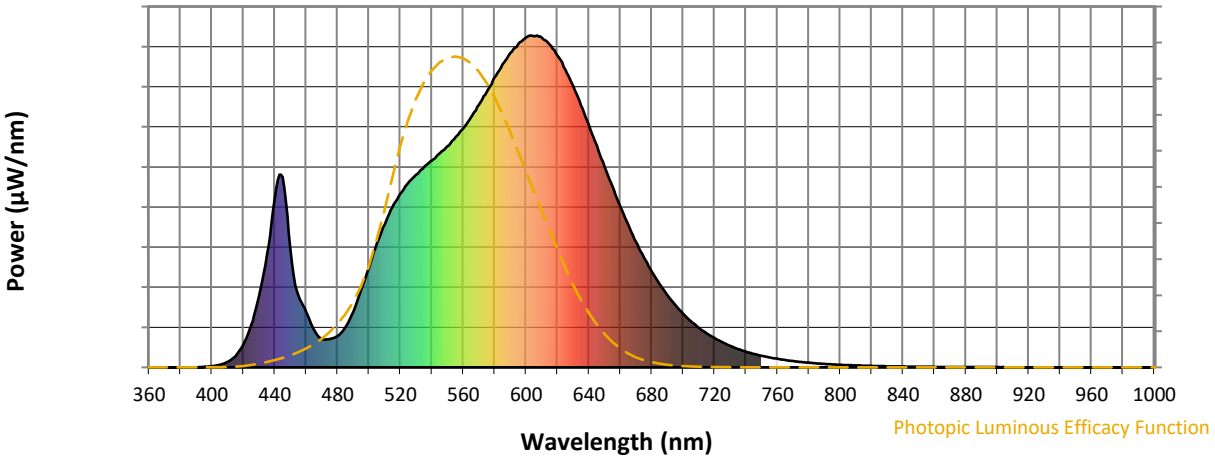


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

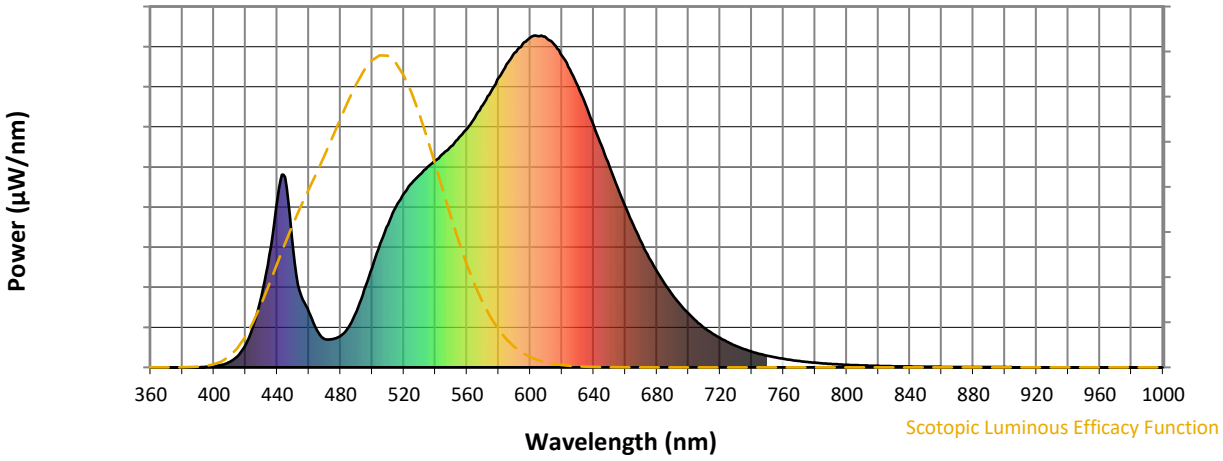


Photopic Lumens: NR

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

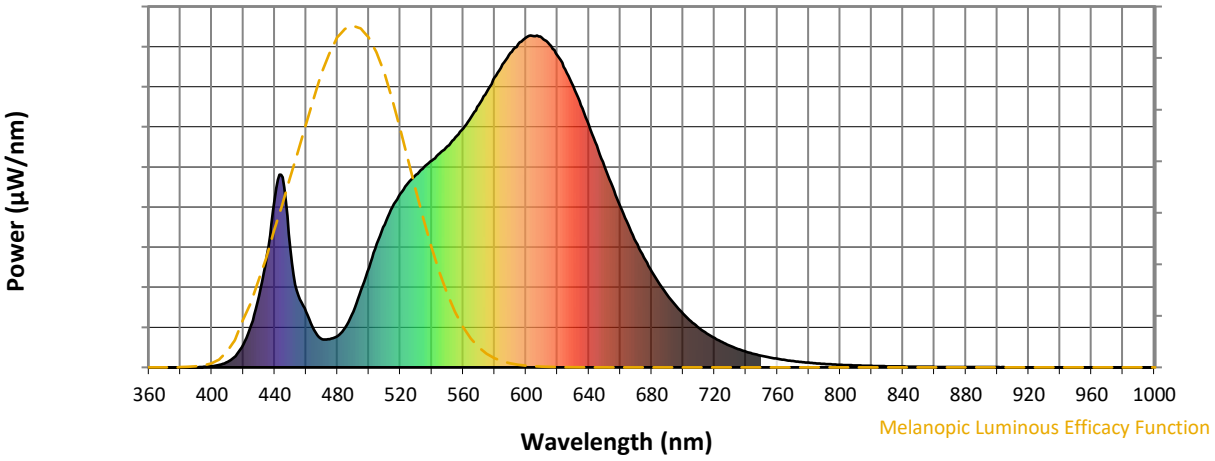


Scotopic Lumens: NR **S/P: 1.27**

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			

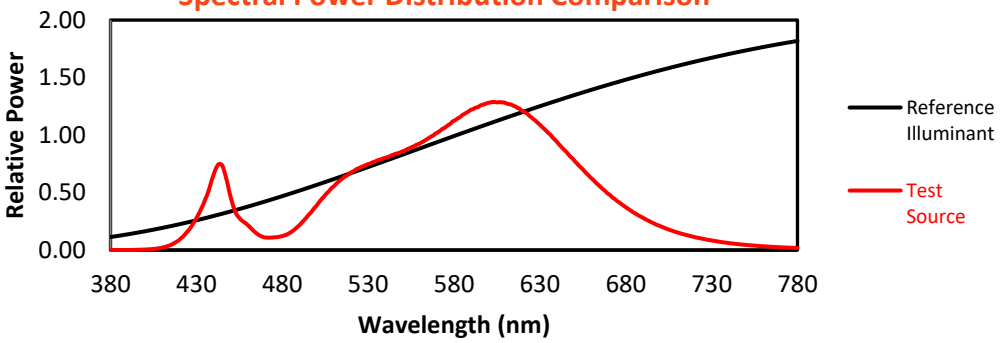
REPORT NUMBER: SP1-2408-195-9

TM-30-18

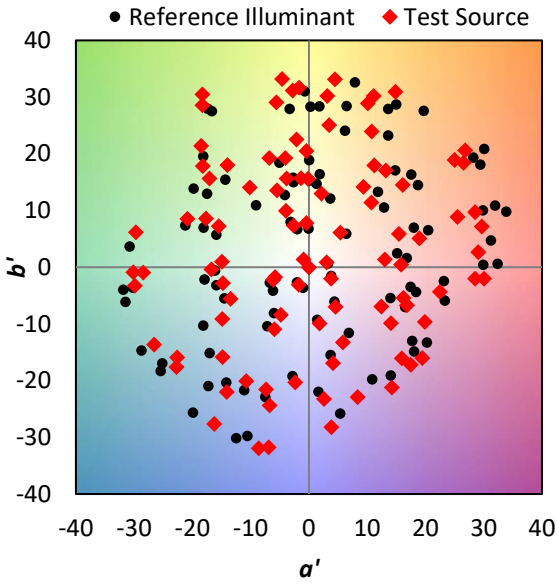
Summary

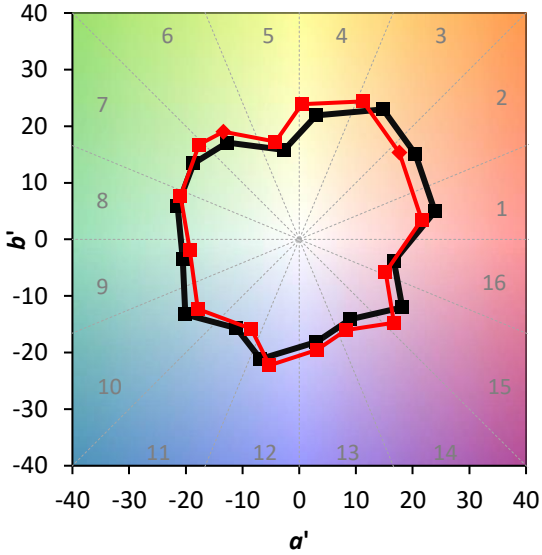
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

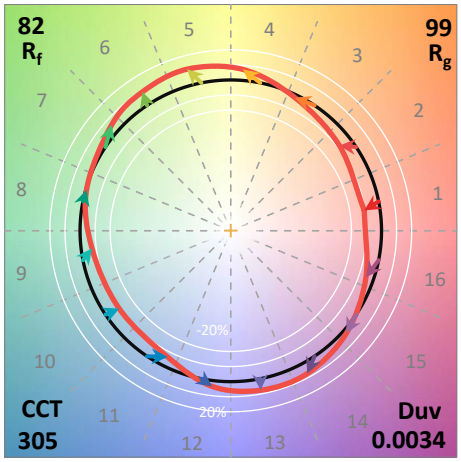
Spectral Power Distribution Comparison

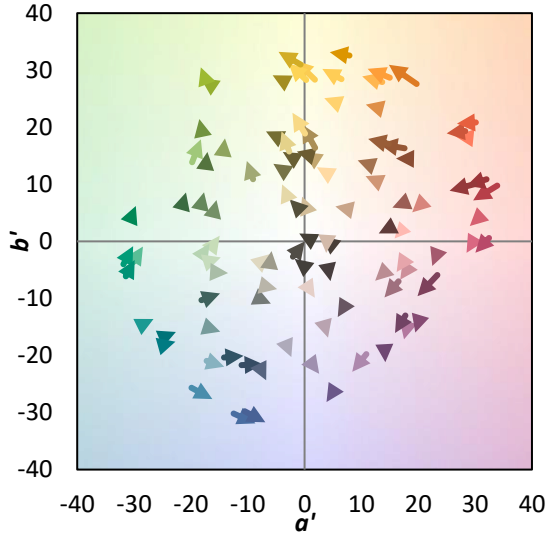


Color Vector Graphics







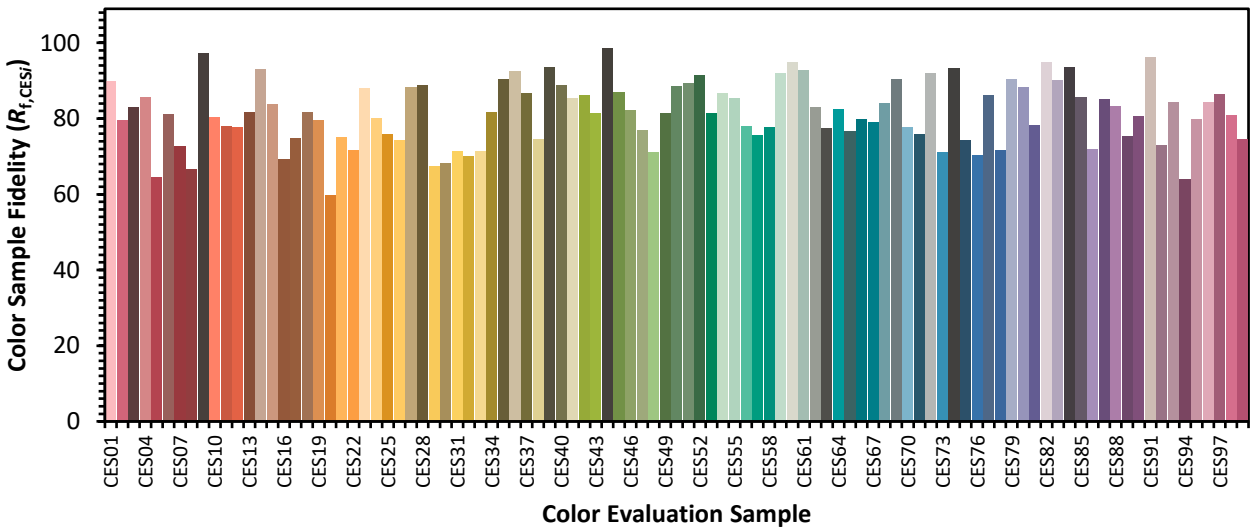


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

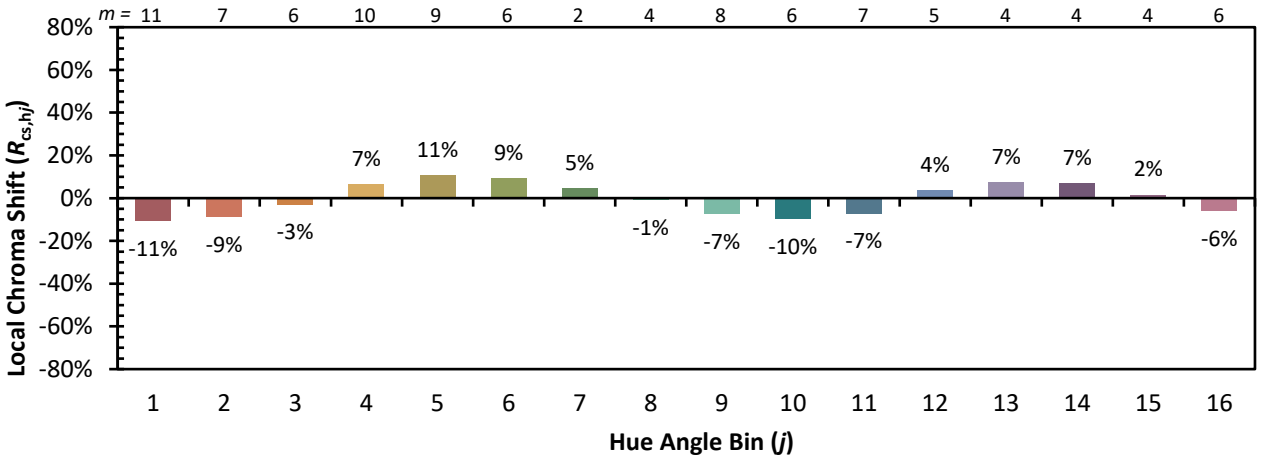
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

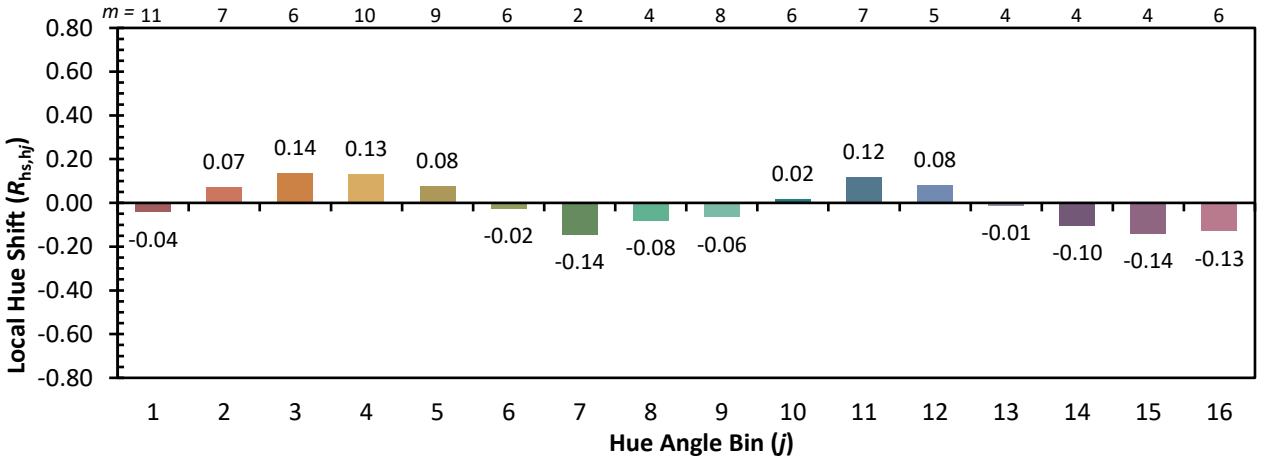


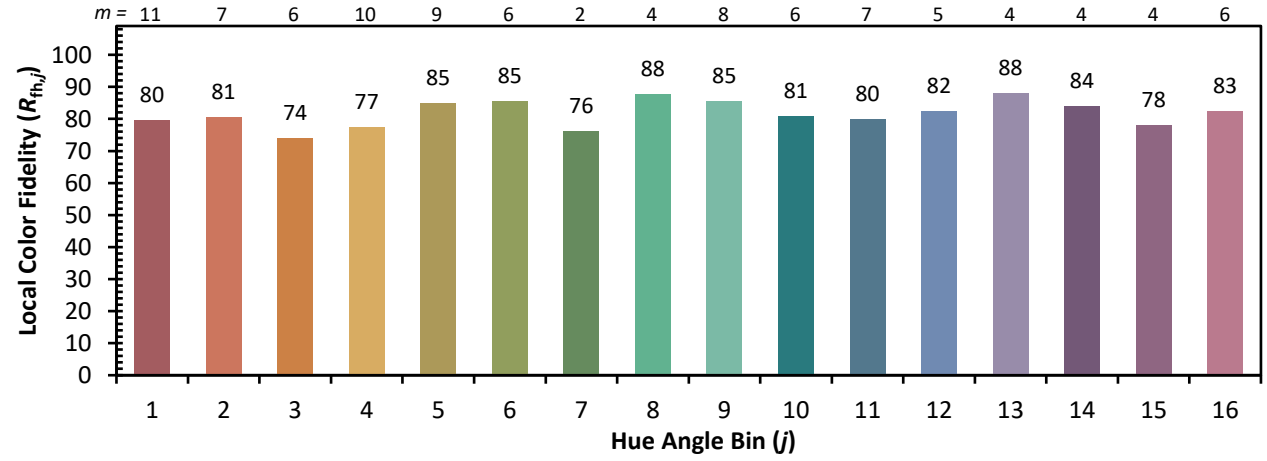
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



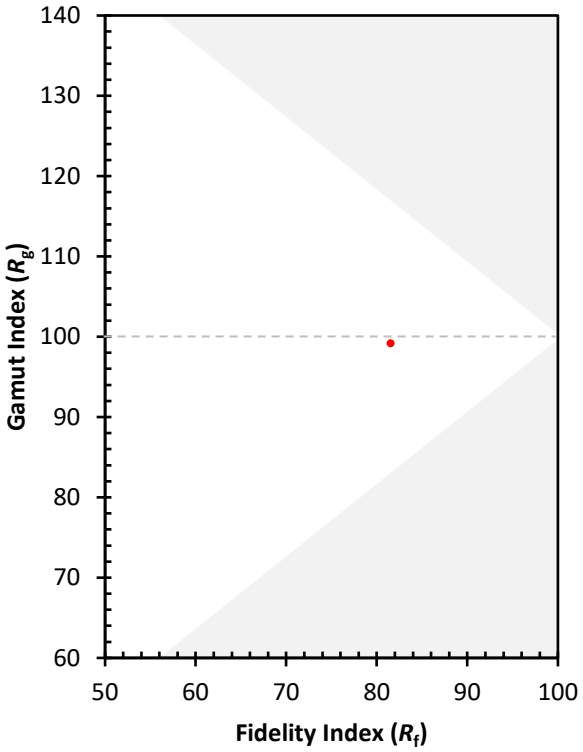


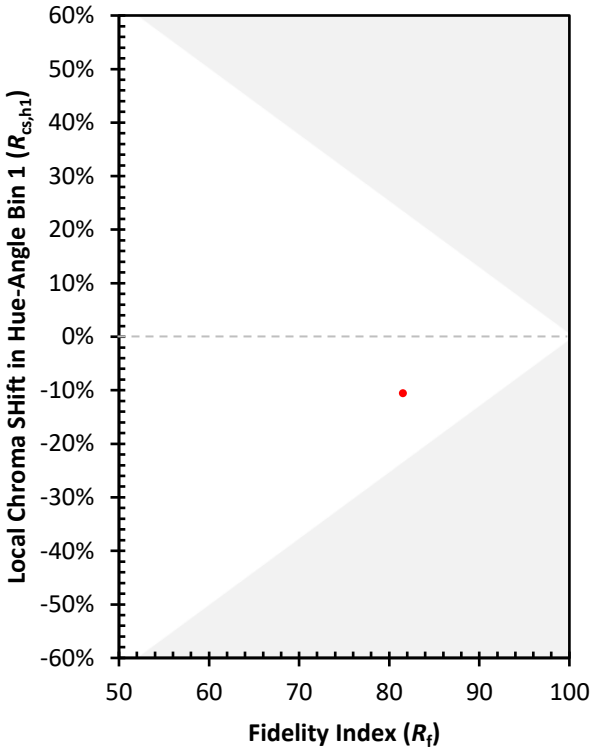


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)