

Signify Classified - Internal  
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: P322422

Luminaire Tested: **GLEON-SA8D-830-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P322422  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA8D-830-U-T3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36010 lumens  
Efficiency: N/A  
Efficacy: 70.5 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G5

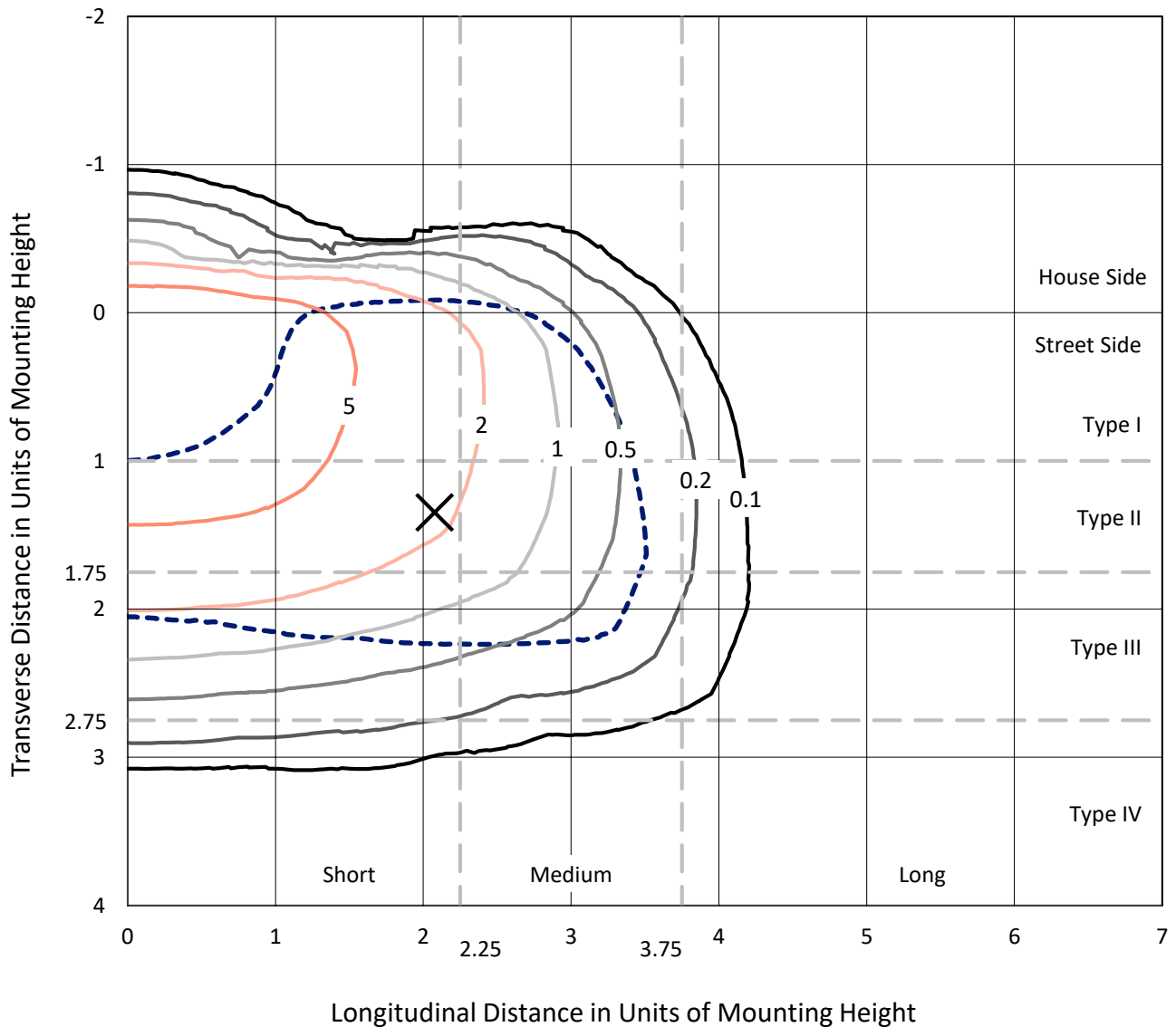
Input Watts (W): 511  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

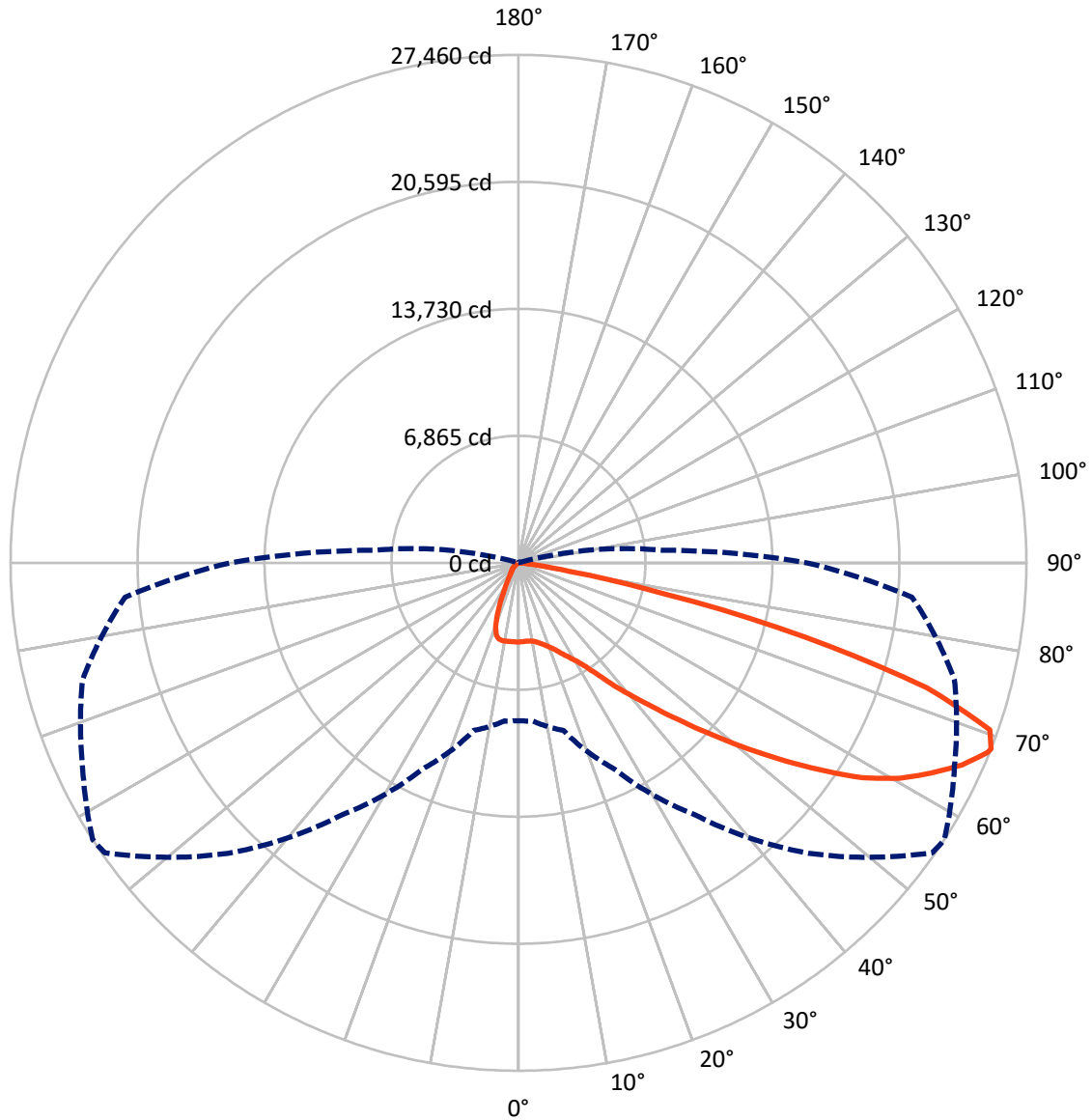
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

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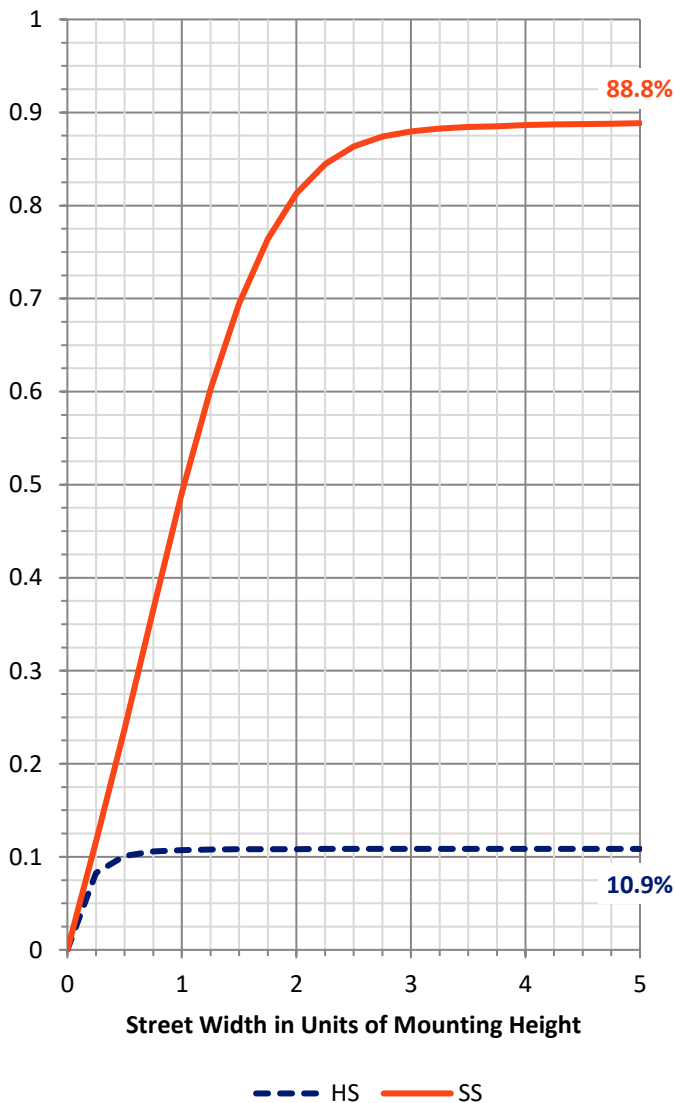
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3948.7	0.0	3948.7
	% Fixture	11.0	0.0	11.0
<b>Street Side</b>	Lumens	32061.3	0.0	32061.3
	% Fixture	89.0	0.0	89.0
<b>Total</b>	Lumens	36010.0	0.0	36010.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	400.4	1.1
10°-20°	1109.7	3.1
20°-30°	1914.3	5.3
30°-40°	3303.9	9.2
40°-50°	5651.5	15.7
50°-60°	9041.8	25.1
60°-70°	10446.8	29.0
70°-80°	3991.9	11.1
80°-90°	149.6	0.4
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°	36010.0	100.0
0°-180°	36010.0	100.0

**Coefficient of Utilization**

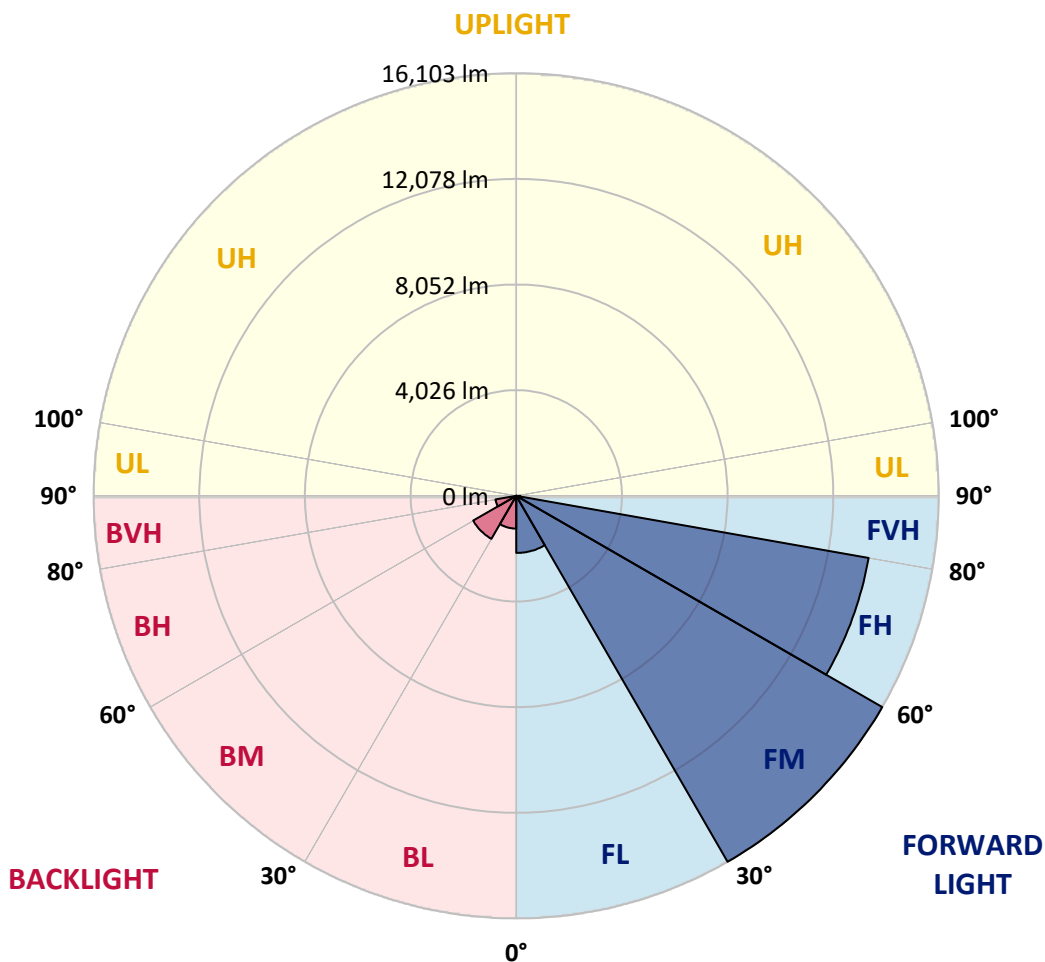


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2176.5	6.0			
FM (30°-60°)	16103.4	44.7			
FH (60°-80°)	13634.5	37.9			G5
FVH (80°-90°)	146.9	0.4			G2/225
BL (0°-30°)	1247.9	3.5	B3/2500		
BM (30°-60°)	1893.9	5.3	B2/2500		
BH (60°-80°)	804.2	2.2	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: B3-U0-G5**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	4278.9	4278.9	4278.9	4278.9	4278.9	4278.9	4278.9	4278.9	4278.9	4278.9	4278.9
2.5°	4178.5	4197.2	4210.8	4219.3	4229.6	4251.7	4258.5	4268.7	4273.8	4273.8	4285.7
5°	4013.3	4033.7	4062.7	4086.5	4134.2	4195.5	4239.8	4256.8	4287.5	4314.7	4330.0
7.5°	3860.1	3883.9	3918.0	3974.2	4055.9	4154.6	4246.6	4270.4	4330.0	4387.9	4416.9
10°	3761.3	3780.0	3824.3	3904.3	4011.6	4149.5	4278.9	4307.9	4410.0	4507.1	4561.6
12.5°	3727.3	3744.3	3790.3	3880.5	4013.3	4175.1	4353.9	4396.4	4546.3	4687.6	4764.2
15°	3776.6	3780.0	3829.4	3914.6	4045.7	4238.1	4478.2	4529.2	4718.2	4902.1	4997.5
17.5°	3967.3	3952.0	3977.6	4015.0	4118.9	4321.5	4609.3	4685.9	4937.9	5154.1	5244.4
20°	4444.1	4444.1	4386.2	4284.0	4285.7	4450.9	4786.3	4873.2	5181.4	5431.7	5513.4
22.5°	5259.7	5244.4	5128.6	4878.3	4648.4	4674.0	5002.6	5115.0	5474.2	5741.6	5768.8
25°	6240.5	6221.7	6043.0	5690.5	5292.1	5034.9	5295.5	5424.9	5823.3	6060.0	6003.8
27.5°	7279.1	7263.8	7086.7	6649.1	6082.1	5610.5	5644.5	5767.1	6179.2	6412.4	6233.7
30°	8285.4	8290.5	8115.2	7665.6	7023.7	6344.3	6087.2	6158.7	6524.8	6761.5	6506.1
32.5°	9242.4	9249.2	9097.6	8595.3	7996.0	7197.4	6700.2	6681.5	6926.7	7159.9	6867.1
35°	10095.4	10112.5	10008.6	9618.7	8983.6	8147.5	7495.4	7451.1	7497.1	7761.0	7420.5
37.5°	10917.8	10928.1	10849.7	10521.1	9989.9	9191.3	8500.0	8437.0	8338.2	8540.8	8150.9
40°	11818.6	11793.0	11702.8	11404.8	10948.5	10344.0	9579.5	9470.5	9298.6	9479.0	9111.3
42.5°	12656.3	12627.4	12642.7	12305.6	11920.7	11529.1	10837.8	10650.5	10550.1	10757.8	10289.5
45°	13703.5	13688.2	13739.3	13446.4	13134.8	12850.4	12280.0	12075.7	12031.4	12274.9	11714.7
47.5°	14737.0	14774.5	14932.9	14808.6	14682.6	14432.3	13807.4	13715.4	13742.7	14037.2	13218.2
50°	15598.6	15642.9	16077.1	16220.1	16402.3	16255.9	15629.3	15573.1	15680.4	15946.0	14835.8
52.5°	16221.8	16312.1	16851.8	17510.8	18174.8	18273.6	17648.7	17597.6	17742.4	17783.2	16085.6
55°	16654.3	16734.3	17345.6	18551.1	19903.1	20328.8	19940.6	19743.0	19715.8	19312.3	17400.1
57.5°	16730.9	16722.4	17601.0	19223.7	21258.5	22356.7	22111.5	21917.4	21358.9	20725.5	18907.0
60°	16298.4	16347.8	17367.8	19457.0	22109.8	23890.9	23909.6	23657.6	22787.5	22099.6	20367.9
62.5°	14966.9	15167.8	16198.0	18845.7	22099.6	24509.0	25227.5	25035.1	23994.7	23225.1	21849.3
65°	12807.9	12879.4	13861.9	16751.4	20606.3	24250.1	26414.3	26342.8	25082.8	24318.3	22610.4
67.5°	9353.0	9198.1	10229.9	13191.0	17446.1	22741.5	27265.7	27355.9	25922.2	24543.0	21799.9
68°	8535.7	8581.7	9385.4	12310.7	16618.6	22208.6	27321.9	27459.8	26005.7	24396.6	21357.2
70°	5087.7	5176.3	5893.1	8476.1	12642.7	19193.1	26715.7	27030.7	25508.5	22886.3	18472.8
72.5°	1299.2	1404.7	2082.4	3793.7	7221.2	13523.0	22552.5	23085.5	22147.3	18566.5	12470.7
75°	534.7	561.9	744.1	1249.8	2690.3	6092.3	14864.8	16005.6	15353.4	11115.4	5636.0
77.5°	369.5	388.2	478.5	693.0	1164.7	2065.4	7287.6	8111.8	7308.1	3793.7	1229.4
80°	265.6	280.9	342.2	461.4	669.2	737.3	2375.3	2746.5	2181.2	832.6	304.8
82.5°	158.4	170.3	255.4	328.6	407.0	352.5	590.8	670.9	631.7	413.8	136.2
85°	78.3	91.9	172.0	235.0	219.7	148.1	180.5	200.9	248.6	252.0	73.2
87.5°	5.1	10.2	100.5	141.3	61.3	34.1	52.8	64.7	88.5	124.3	30.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P322422

CATALOG NUMBER: GLEON-SA8D-830-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4278.9	4278.9	4278.9	4278.9	4278.9	4278.9	4278.9	4278.9	4278.9	4278.9	4278.9
2.5°	4290.9	4292.6	4280.6	4275.5	4278.9	4258.5	4250.0	4253.4	4253.4	4258.5	4250.0
5°	4333.4	4333.4	4313.0	4285.7	4270.4	4231.3	4205.7	4198.9	4193.8	4190.4	4183.6
7.5°	4425.4	4415.2	4379.4	4319.8	4268.7	4183.6	4118.9	4084.8	4067.8	4061.0	4055.9
10°	4573.5	4554.8	4495.2	4384.5	4267.0	4115.5	3974.2	3873.7	3790.3	3756.2	3735.8
12.5°	4772.7	4745.5	4645.0	4461.1	4255.1	3975.9	3669.4	3374.8	3100.7	2988.3	2932.1
15°	5002.6	4963.4	4805.1	4525.8	4185.3	3660.8	2995.1	2479.2	2099.5	1956.4	1895.1
17.5°	5235.9	5184.8	4944.7	4566.7	3975.9	3008.7	2101.2	1586.9	1333.2	1265.1	1241.3
20°	5470.8	5395.9	5065.6	4536.0	3502.5	2169.3	1386.0	1159.6	1086.3	1065.9	1059.1
22.5°	5693.9	5578.1	5174.6	4416.9	2773.7	1455.8	1096.6	1025.0	1001.2	989.3	985.9
25°	5888.0	5726.3	5269.9	4049.1	1963.2	1100.0	987.6	963.7	933.1	911.0	912.7
27.5°	6070.2	5874.4	5327.8	3442.9	1309.4	939.9	914.4	882.0	825.8	793.5	793.5
30°	6289.9	6071.9	5370.4	2649.4	963.7	830.9	810.5	761.1	684.5	641.9	641.9
32.5°	6620.2	6371.6	5343.1	1859.4	798.6	730.5	682.8	614.7	531.2	490.4	488.7
35°	7125.9	6834.7	5149.0	1219.1	704.9	635.1	558.5	475.1	401.8	367.8	366.1
37.5°	7807.0	7454.5	4713.1	871.8	631.7	546.6	454.6	362.7	308.2	286.1	284.4
40°	8690.7	8174.8	4089.9	706.6	563.6	461.4	350.8	280.9	243.5	226.5	228.2
42.5°	9751.5	8946.1	3342.4	609.6	497.2	379.7	274.1	221.4	197.5	185.6	182.2
45°	10929.8	9707.2	2559.2	543.2	430.8	306.5	214.5	175.4	156.7	149.8	149.8
47.5°	12225.5	10447.9	1873.0	485.3	359.3	236.7	172.0	143.0	127.7	122.6	120.9
50°	13402.1	10962.1	1350.3	424.0	294.6	187.3	139.6	119.2	109.0	102.2	102.2
52.5°	14382.9	11123.9	994.4	357.6	238.4	149.8	115.8	102.2	91.9	86.8	86.8
55°	15246.2	11057.5	739.0	294.6	192.4	122.6	98.8	86.8	78.3	73.2	73.2
57.5°	16073.7	10842.9	551.7	240.1	154.9	98.8	83.4	73.2	64.7	61.3	61.3
60°	16749.7	10485.4	410.4	194.1	124.3	80.0	69.8	59.6	52.8	47.7	47.7
62.5°	17297.9	10090.3	301.4	160.1	98.8	63.0	54.5	49.4	39.2	34.1	34.1
65°	17301.3	9434.8	226.5	132.8	76.6	49.4	40.9	39.2	25.5	20.4	18.7
67.5°	16049.8	8133.9	173.7	114.1	59.6	37.5	30.6	32.4	13.6	8.5	6.8
68°	15595.2	7803.6	163.5	112.4	56.2	35.8	28.9	32.4	11.9	6.8	5.1
70°	13148.4	6208.1	131.1	109.0	49.4	27.2	23.8	32.4	10.2	5.1	3.4
72.5°	8409.7	3603.0	97.1	86.8	37.5	20.4	15.3	28.9	10.2	3.4	1.7
75°	3579.1	1117.0	66.4	61.3	22.1	15.3	10.2	18.7	6.8	1.7	0.0
77.5°	754.3	252.0	39.2	37.5	15.3	10.2	6.8	5.1	1.7	0.0	0.0
80°	194.1	73.2	20.4	18.7	8.5	5.1	3.4	0.0	0.0	0.0	0.0
82.5°	61.3	28.9	11.9	8.5	3.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	30.6	17.0	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	17.0	5.1	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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



LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

**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  
 CIE u': 0.2476  
 CIE v': 0.5251  
 Duv: 0.0034  
 CIE x: 0.4383  
 CIE y: 0.4131  
 CIE z: 0.1487  
 Peak Wavelength (nm): 603  
 Dominant Wavelength (nm): 581  
 Purity: 55.55201  
 Rf: 81.5  
 Rg: 99.2

CRI (Ra):	81.0		
R1:	79.6	R9:	7.1
R2:	85.6	R10:	67.0
R3:	92.0	R11:	82.7
R4:	82.6	R12:	63.2
R5:	78.9	R13:	80.3
R6:	81.7	R14:	95.0
R7:	85.2	R15:	71.7
R8:	62.0		



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

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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

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CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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 <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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



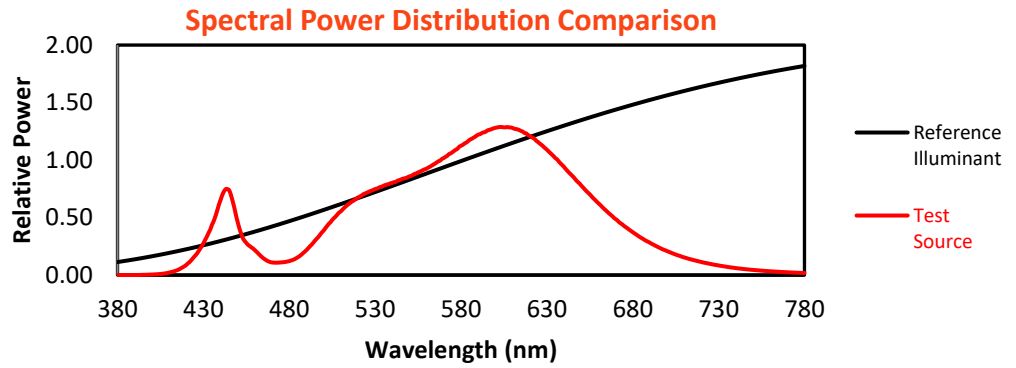
Melanopic Lumens: NR

M/P: 2.32

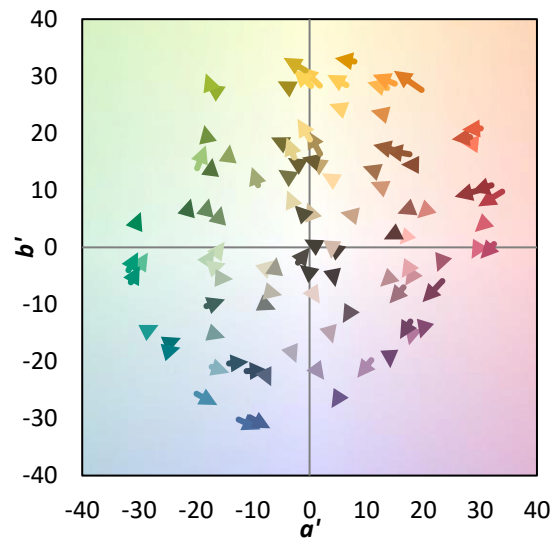
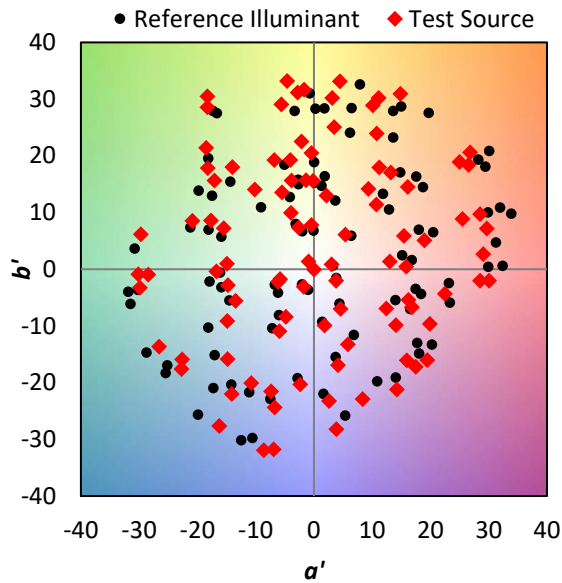
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	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			

**Summary**

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



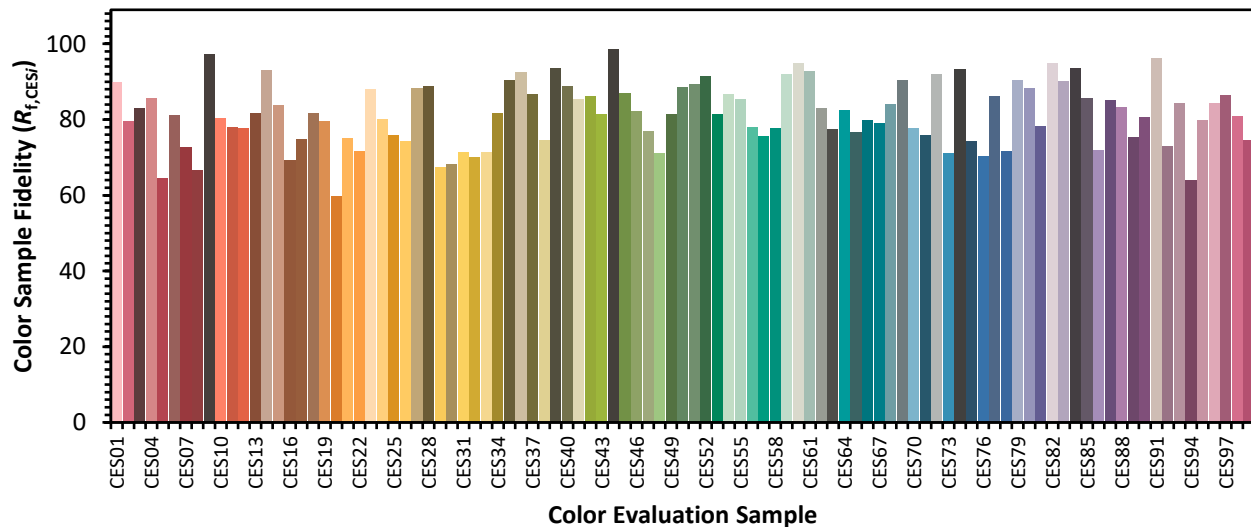
**Color Vector Graphics**



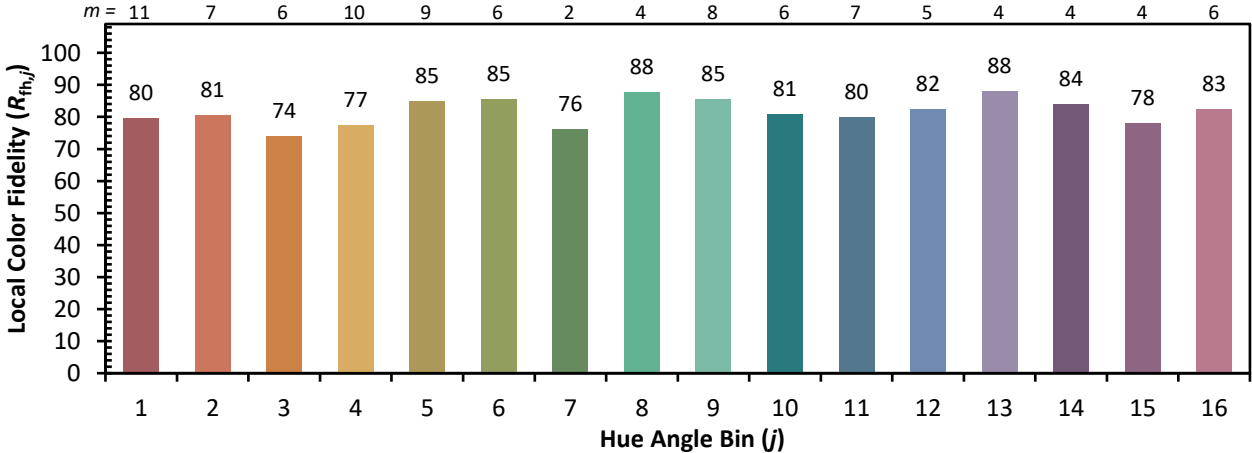


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

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	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)