

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: P437762

Luminaire Tested: **ISS-SA1E-830-U-SL2**

Issue Date: 12/9/2020

Test Information

Test Method: LM-79-08
Report Number: P437762
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-14)
Test Lab: INNOVATION CENTER
Issue Date: 12/9/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-SA1E-830-U-SL2
Description: IMPACT ELITE LED QUARTER SPHERE LUMINAIRE
(1) 80 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5666 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

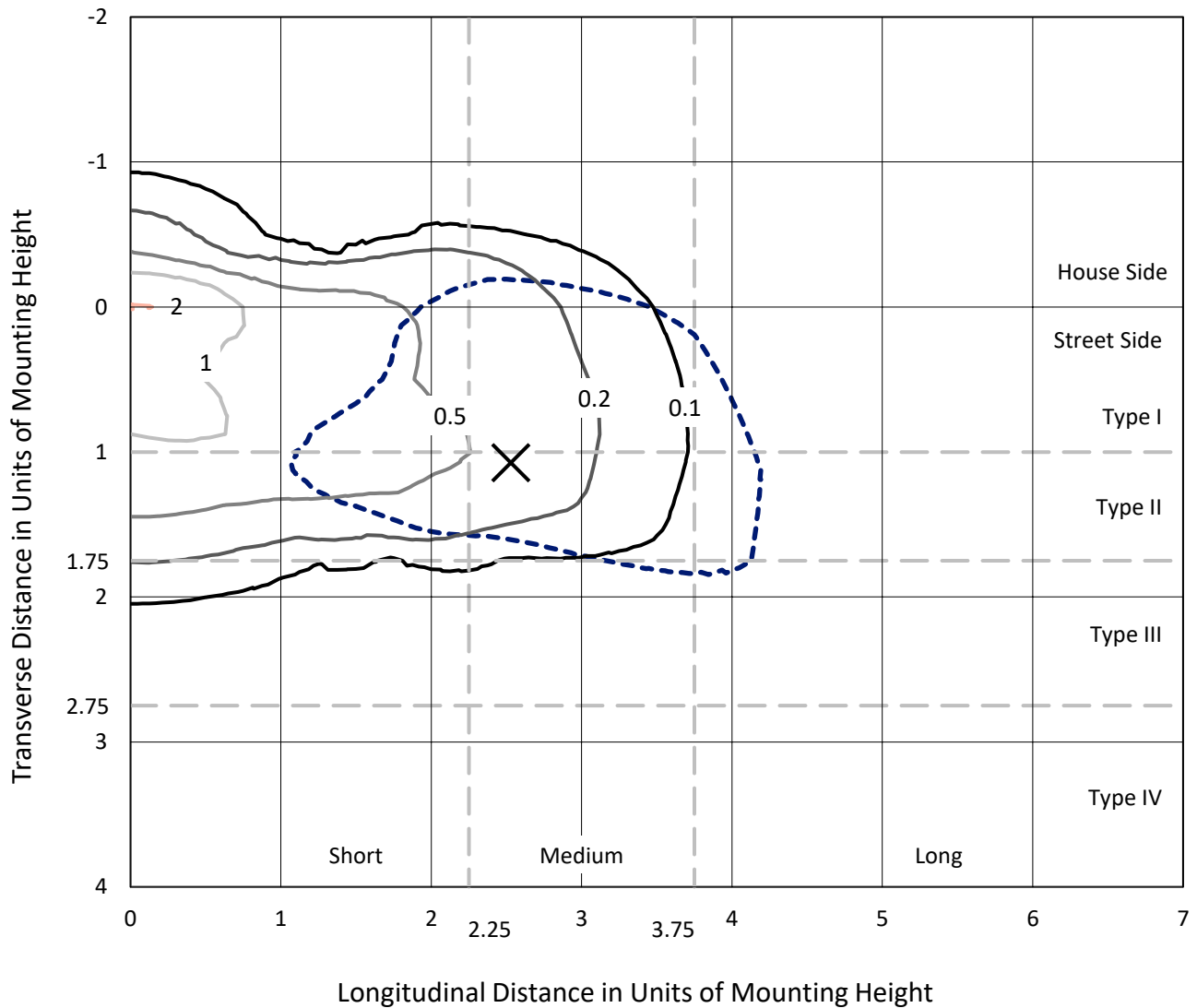
Input Watts (W): 58.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

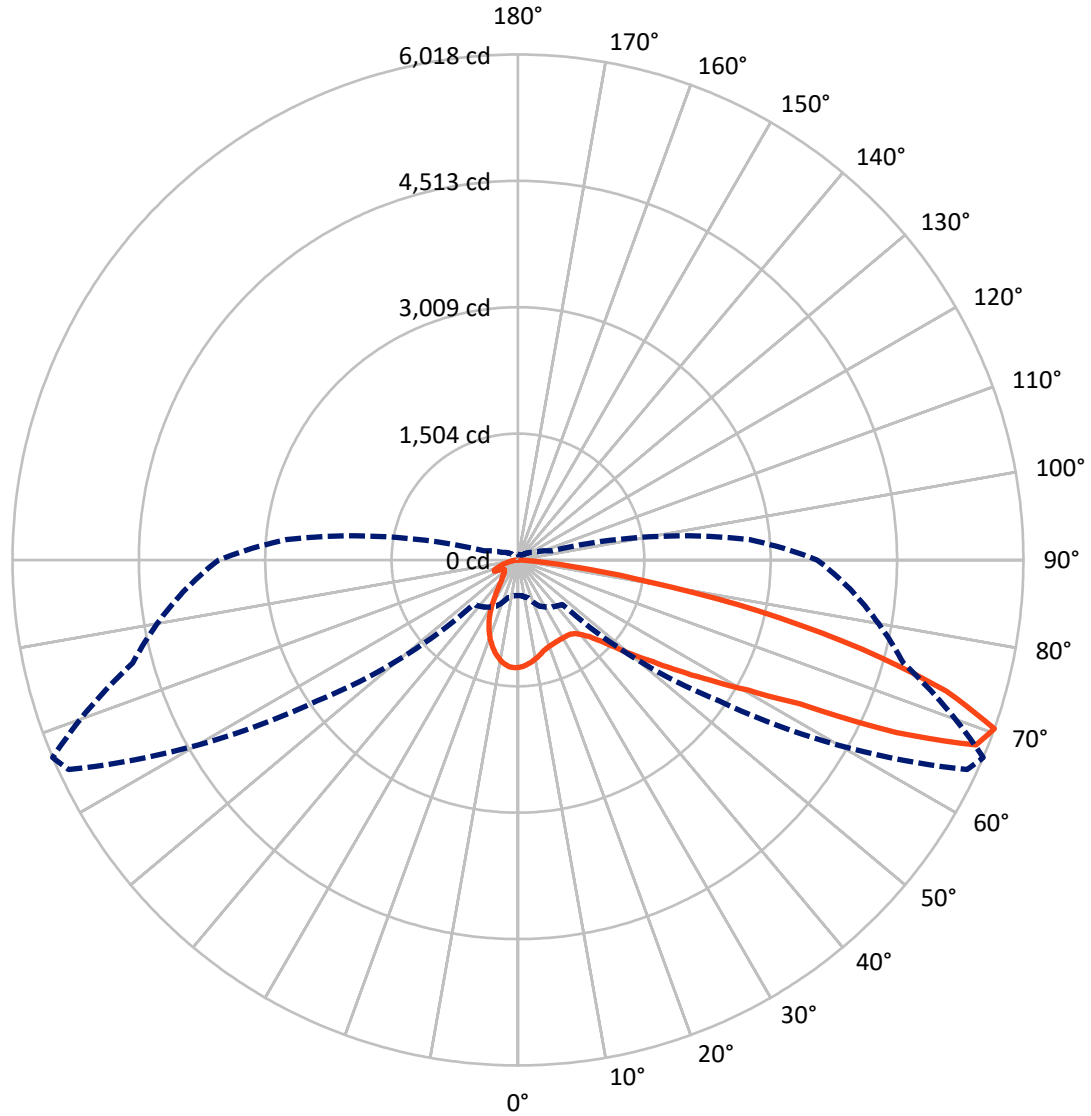
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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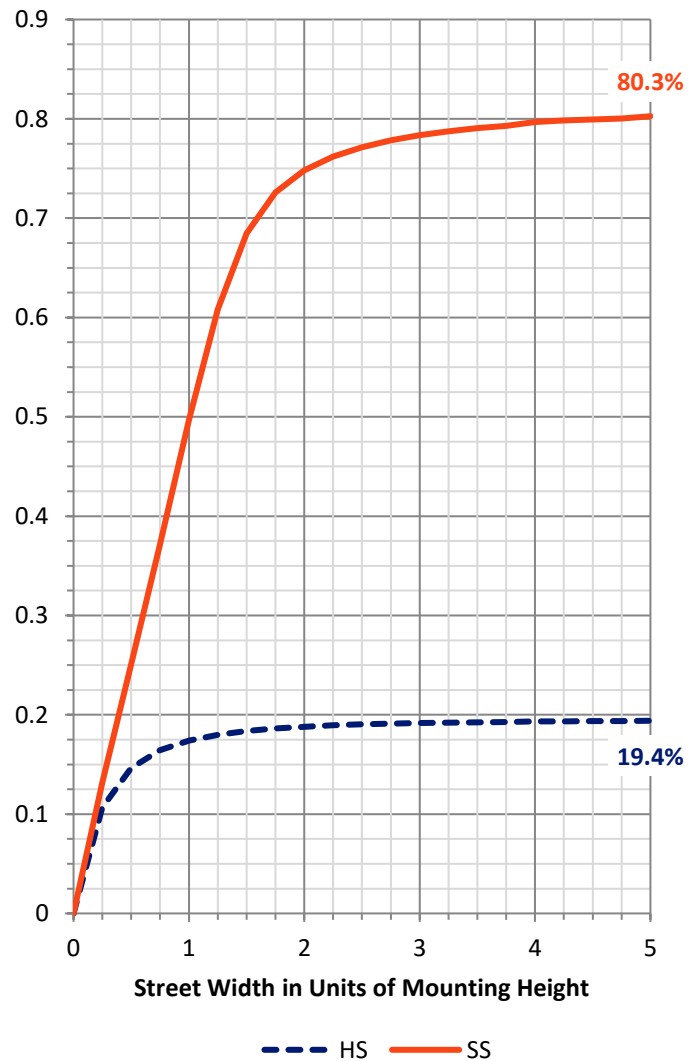
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1109.7	0.0	1109.7
	% Fixture	19.6	0.0	19.6
Street Side	Lumens	4556.3	0.0	4556.3
	% Fixture	80.4	0.0	80.4
Total	Lumens	5666.0	0.0	5666.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.3	2.0
10°-20°	271.9	4.8
20°-30°	374.8	6.6
30°-40°	506.2	8.9
40°-50°	751.1	13.3
50°-60°	1156.1	20.4
60°-70°	1429.4	25.2
70°-80°	957.5	16.9
80°-90°	106.7	1.9
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°	5666.0	100.0
0°-180°	5666.0	100.0

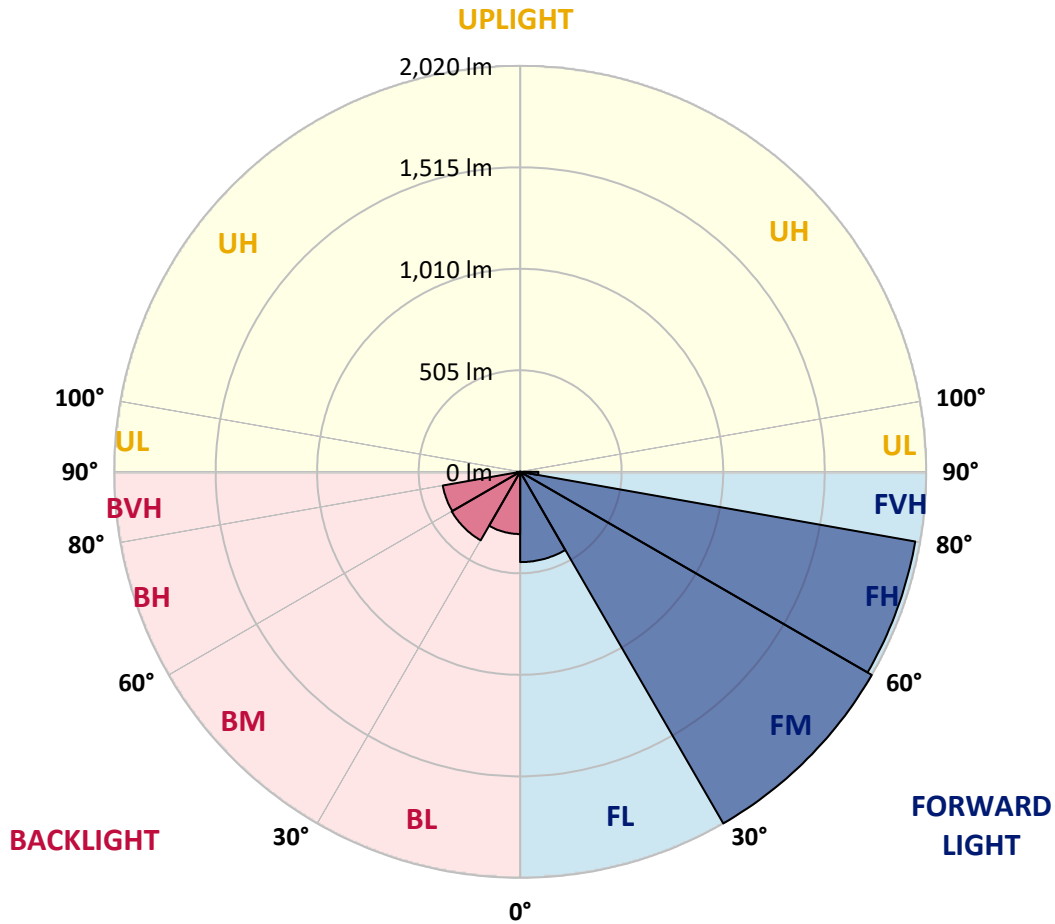


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	449.4	7.9			
FM (30°-60°)	2020.0	35.7			
FH (60°-80°)	1996.1	35.2			G2/5000
FVH (80°-90°)	90.9	1.6			G1/100
BL (0°-30°)	309.6	5.5	B1/500		
BM (30°-60°)	393.4	6.9	B1/1000		
BH (60°-80°)	390.8	6.9	B1/500		G1/500
BVH (80°-90°)	15.9	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1279.4	1279.4	1279.4	1279.4	1279.4	1279.4	1279.4	1279.4	1279.4	1279.4	1279.4
2.5°	1209.7	1217.9	1220.0	1226.1	1234.3	1242.5	1252.8	1265.1	1267.1	1273.3	1285.6
5°	1127.7	1131.8	1135.9	1148.2	1162.6	1189.2	1215.9	1240.5	1244.6	1265.1	1287.6
7.5°	1051.8	1062.1	1064.1	1074.4	1096.9	1129.8	1166.7	1209.7	1222.0	1250.7	1285.6
10°	996.5	1002.6	1006.7	1025.2	1043.6	1080.5	1125.7	1179.0	1191.3	1234.3	1283.5
12.5°	951.4	961.6	967.8	980.1	1008.8	1041.6	1086.7	1144.1	1160.5	1213.8	1275.3
15°	926.8	935.0	937.0	951.4	973.9	1006.7	1049.8	1115.4	1127.7	1193.3	1275.3
17.5°	920.6	922.7	924.7	932.9	951.4	978.0	1023.1	1090.8	1105.1	1185.1	1275.3
20°	932.9	932.9	932.9	928.8	943.2	963.7	1008.8	1070.3	1090.8	1176.9	1281.5
22.5°	961.6	963.7	957.5	947.3	941.1	955.5	994.4	1064.1	1082.6	1174.9	1293.8
25°	1002.6	1004.7	1000.6	986.2	957.5	955.5	988.3	1058.0	1074.4	1172.8	1291.7
27.5°	1058.0	1070.3	1058.0	1041.6	1004.7	971.9	994.4	1053.9	1072.3	1172.8	1295.8
30°	1135.9	1144.1	1138.0	1111.3	1064.1	1006.7	1002.6	1058.0	1072.3	1170.8	1293.8
32.5°	1213.8	1215.9	1222.0	1203.6	1146.2	1058.0	1025.2	1062.1	1074.4	1168.7	1287.6
35°	1273.3	1285.6	1312.2	1314.3	1246.6	1131.8	1072.3	1078.5	1082.6	1174.9	1281.5
37.5°	1349.1	1353.2	1396.3	1429.1	1369.6	1234.3	1138.0	1109.2	1111.3	1195.4	1291.7
40°	1418.9	1435.3	1494.7	1535.7	1515.2	1371.7	1228.2	1164.6	1168.7	1232.3	1316.3
42.5°	1523.4	1535.7	1597.2	1654.6	1660.8	1527.5	1353.2	1258.9	1248.7	1304.0	1369.6
45°	1615.7	1630.0	1708.0	1792.0	1820.7	1703.9	1509.1	1388.1	1371.7	1425.0	1468.1
47.5°	1744.9	1769.5	1831.0	1927.3	2023.7	1919.1	1708.0	1564.4	1550.1	1587.0	1599.3
50°	1867.9	1882.2	1933.5	2050.4	2220.5	2189.8	1951.9	1794.1	1771.5	1777.7	1806.4
52.5°	1886.3	1892.5	1945.8	2068.8	2388.7	2519.9	2251.3	2052.4	2011.4	2017.6	2052.4
55°	1746.9	1771.5	1810.5	1982.7	2401.0	2886.9	2671.6	2392.8	2329.2	2306.7	2335.4
57.5°	1457.8	1486.5	1541.9	1720.3	2259.5	3085.8	3360.5	2798.7	2700.3	2595.8	2630.6
60°	1074.4	1105.1	1140.0	1314.3	1900.7	3116.6	4045.4	3290.8	3145.3	2884.9	2903.3
62.5°	824.2	824.2	855.0	926.8	1271.2	2893.1	4447.2	4123.3	3766.5	3237.5	3215.0
65°	666.4	674.6	705.3	773.0	803.7	2054.5	4607.2	5333.0	4953.7	3659.9	3543.0
67.5°	551.5	553.6	588.5	695.1	703.3	1129.8	4178.6	5968.6	5878.4	4188.9	3891.6
70°	422.4	424.4	465.4	604.9	684.8	748.4	2923.8	5903.0	6017.8	4750.7	3967.5
72.5°	280.9	293.2	342.4	479.8	682.8	705.3	1587.0	5162.8	5328.9	4970.1	3713.2
75°	174.3	176.3	227.6	332.2	627.4	703.3	932.9	4022.8	4227.9	4123.3	3221.1
77.5°	106.6	110.7	135.3	217.3	485.9	705.3	664.3	2768.0	2938.2	2706.5	1898.6
80°	65.6	65.6	77.9	131.2	315.8	631.5	572.1	1609.5	1593.1	1000.6	539.2
82.5°	24.6	26.7	41.0	71.8	159.9	490.0	502.3	727.9	670.5	295.3	192.7
85°	4.1	4.1	8.2	22.6	43.1	203.0	278.8	256.3	215.3	90.2	80.0
87.5°	0.0	0.0	0.0	2.1	2.1	4.1	6.2	6.2	6.2	6.2	8.2
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1279.4	1279.4	1279.4	1279.4	1279.4	1279.4	1279.4	1279.4	1279.4	1279.4	1279.4
2.5°	1285.6	1289.7	1287.6	1281.5	1275.3	1271.2	1261.0	1254.8	1256.9	1256.9	1258.9
5°	1289.7	1295.8	1285.6	1273.3	1250.7	1226.1	1203.6	1191.3	1174.9	1181.0	1176.9
7.5°	1295.8	1299.9	1281.5	1244.6	1205.6	1164.6	1125.7	1090.8	1064.1	1051.8	1060.0
10°	1291.7	1297.9	1263.0	1207.7	1148.2	1082.6	1023.1	965.7	928.8	904.2	910.4
12.5°	1289.7	1283.5	1236.4	1154.4	1072.3	982.1	891.9	822.2	760.7	736.1	740.2
15°	1281.5	1277.4	1203.6	1099.0	986.2	859.1	740.2	650.0	576.2	551.5	559.7
17.5°	1285.6	1273.3	1164.6	1031.3	877.6	721.7	576.2	488.0	451.1	442.9	440.8
20°	1281.5	1258.9	1125.7	957.5	762.7	559.7	428.5	381.4	381.4	393.7	395.7
22.5°	1285.6	1246.6	1082.6	873.5	631.5	420.3	334.2	321.9	340.4	367.0	367.0
25°	1285.6	1232.3	1035.4	779.1	494.1	319.9	285.0	285.0	309.6	334.2	332.2
27.5°	1277.4	1203.6	982.1	678.7	367.0	264.5	250.1	256.3	272.7	293.2	291.2
30°	1256.9	1174.9	916.5	561.8	278.8	233.7	231.7	233.7	241.9	254.2	252.2
32.5°	1238.4	1142.1	853.0	436.7	235.8	217.3	215.3	217.3	219.4	223.5	223.5
35°	1226.1	1113.3	777.1	336.3	213.2	207.1	203.0	203.0	198.9	200.9	200.9
37.5°	1211.8	1086.7	699.2	262.4	200.9	196.8	192.7	186.6	186.6	182.5	182.5
40°	1211.8	1066.2	619.2	221.4	192.7	190.7	182.5	174.3	170.2	170.2	170.2
42.5°	1244.6	1066.2	545.4	203.0	184.5	182.5	172.2	164.0	159.9	159.9	159.9
45°	1299.9	1078.5	469.5	190.7	178.4	174.3	162.0	153.8	149.7	149.7	147.6
47.5°	1396.3	1129.8	401.9	184.5	172.2	166.1	151.7	143.5	139.4	139.4	139.4
50°	1558.3	1232.3	346.5	178.4	166.1	155.8	143.5	135.3	131.2	131.2	129.2
52.5°	1781.8	1386.0	319.9	174.3	157.9	145.6	135.3	127.1	123.0	121.0	121.0
55°	2050.4	1617.7	315.8	172.2	149.7	137.4	127.1	118.9	114.8	112.8	112.8
57.5°	2343.6	1872.0	344.5	168.1	141.5	127.1	118.9	110.7	106.6	104.6	104.6
60°	2626.5	2150.8	436.7	164.0	135.3	118.9	108.7	102.5	98.4	96.4	96.4
62.5°	2954.6	2444.0	639.7	166.1	131.2	110.7	100.5	94.3	92.3	90.2	90.2
65°	3315.4	2780.3	818.1	182.5	133.3	102.5	92.3	88.2	84.1	82.0	82.0
67.5°	3635.3	2997.6	682.8	211.2	145.6	96.4	82.0	80.0	75.9	73.8	75.9
70°	3563.5	2768.0	420.3	213.2	147.6	92.3	73.8	69.7	65.6	65.6	65.6
72.5°	3249.8	2442.0	293.2	184.5	131.2	82.0	63.6	59.5	57.4	57.4	57.4
75°	2735.2	2013.5	233.7	149.7	102.5	67.7	53.3	51.3	49.2	47.2	47.2
77.5°	1496.8	1094.9	174.3	114.8	75.9	51.3	45.1	41.0	39.0	39.0	39.0
80°	438.8	375.2	108.7	82.0	49.2	36.9	34.9	30.8	28.7	28.7	28.7
82.5°	184.5	155.8	65.6	45.1	32.8	24.6	22.6	20.5	18.5	16.4	18.5
85°	71.8	75.9	41.0	26.7	18.5	12.3	10.3	8.2	8.2	6.2	8.2
87.5°	8.2	10.3	8.2	6.2	4.1	2.1	2.1	2.1	2.1	2.1	2.1
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

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



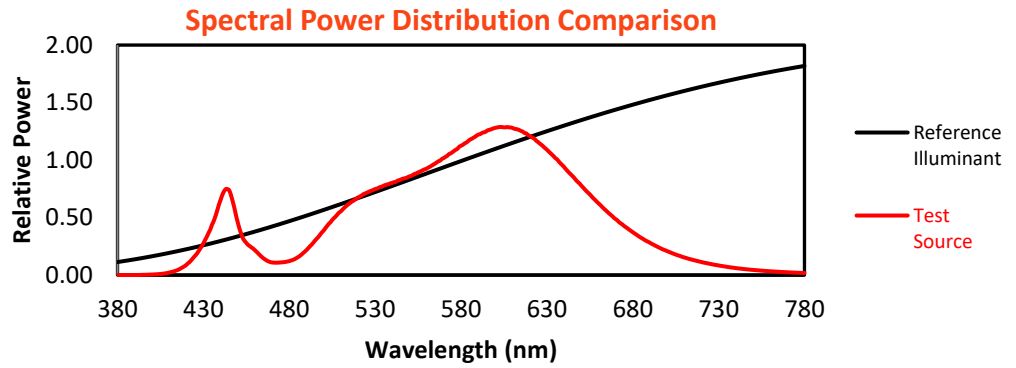
Melanopic Lumens: NR

M/P: 2.32

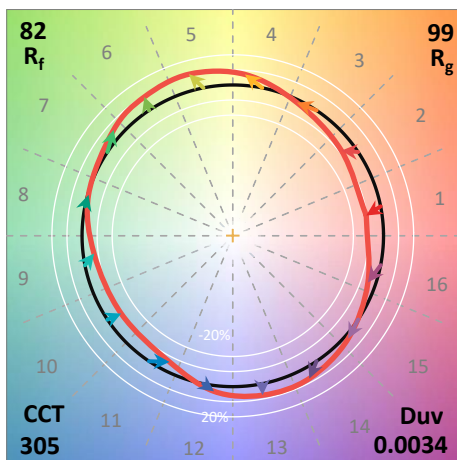
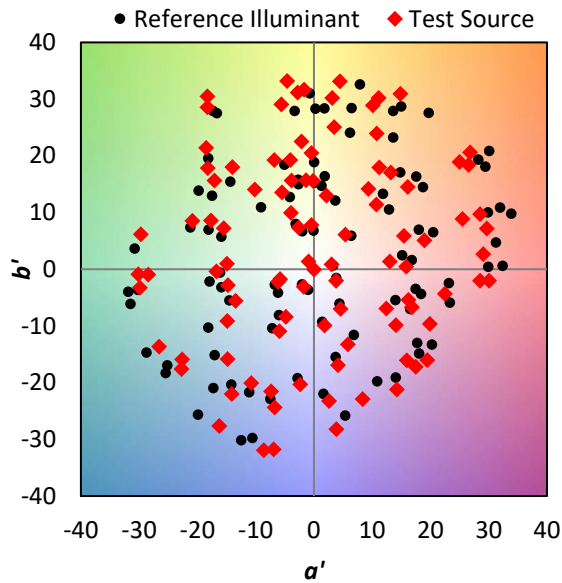
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	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			

Summary

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

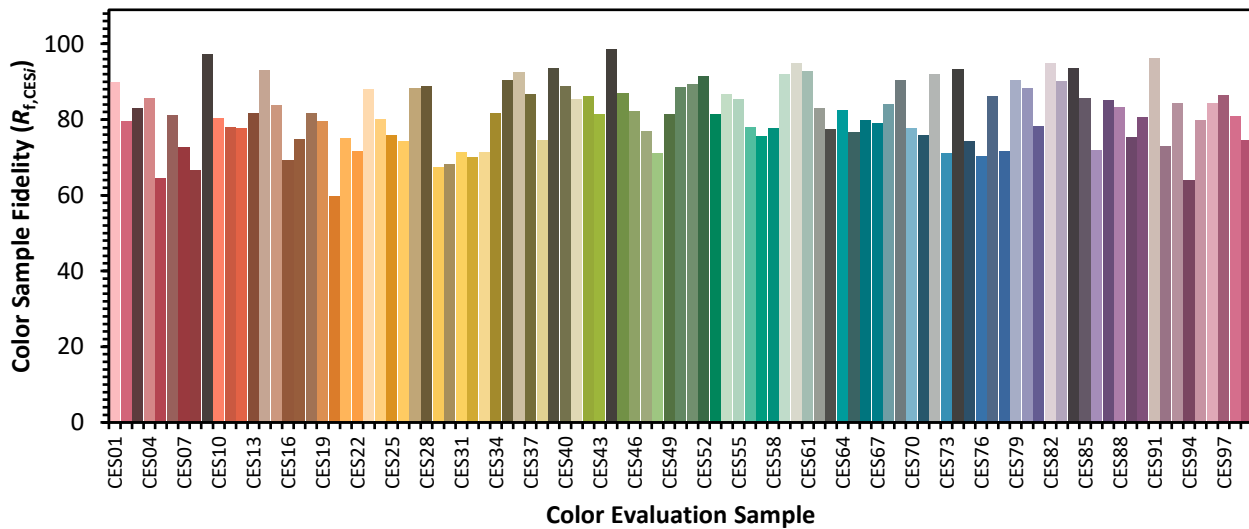


Color Vector Graphics

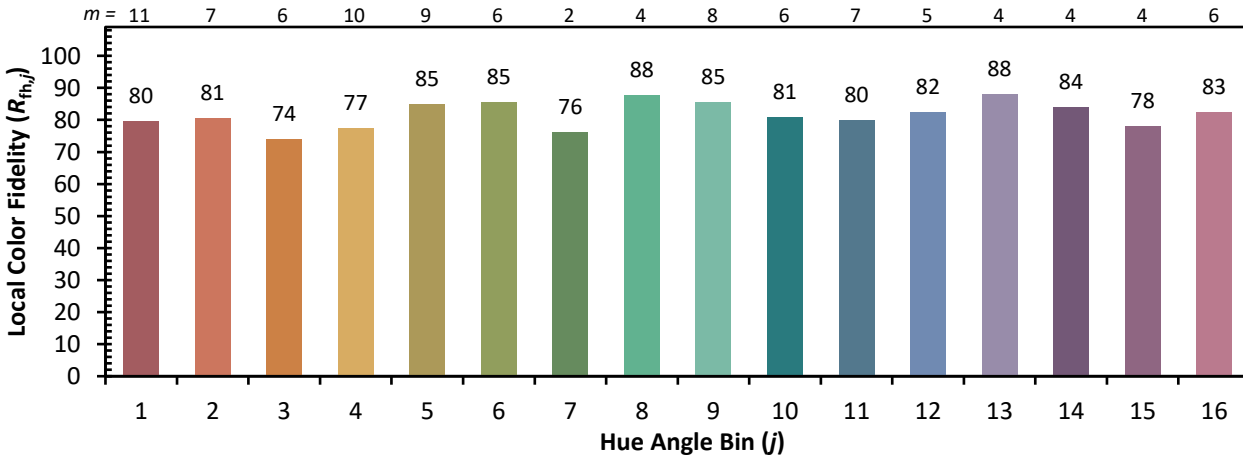
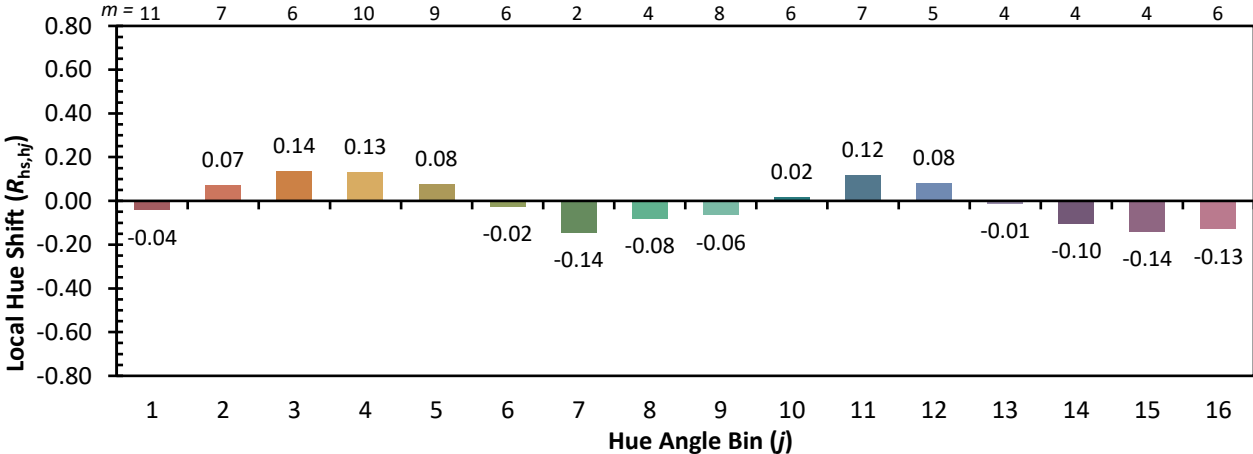
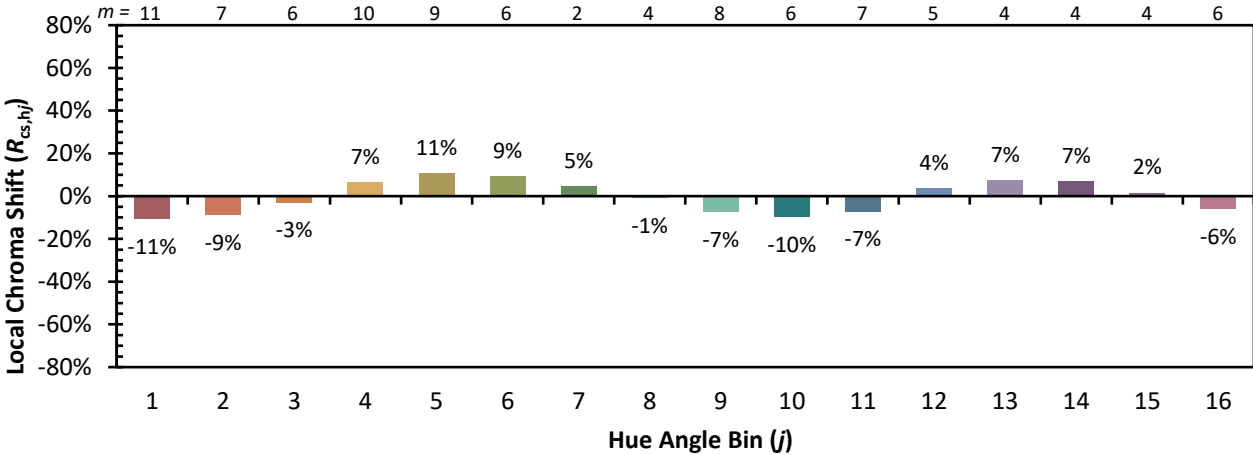


Individual Sample Fidelity Index ($R_{f,i}$)

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)