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

Scaled data based on original data using

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

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P630081

Luminaire Tested: GWS-SA1C-830-U-T3-W-GRSBK

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

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

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P630081
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-24)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1C-830-U-T3-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	2357.8 lumens
Efficiency:	N/A
Efficacy:	69.1 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G0

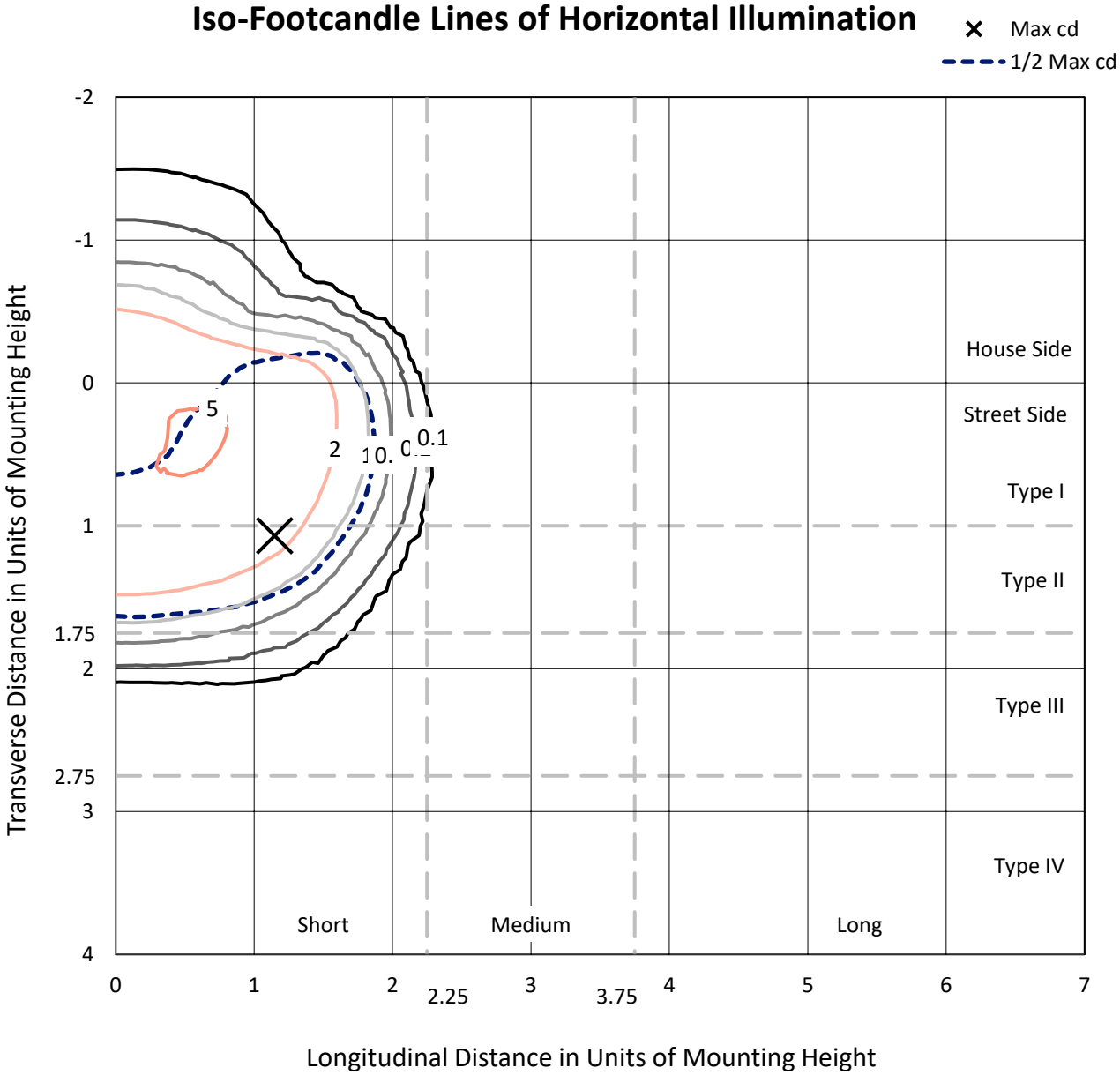
Input Watts (W):	34.1
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P630081
CATALOG NUMBER: GWS-SA1C-830-U-T3-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



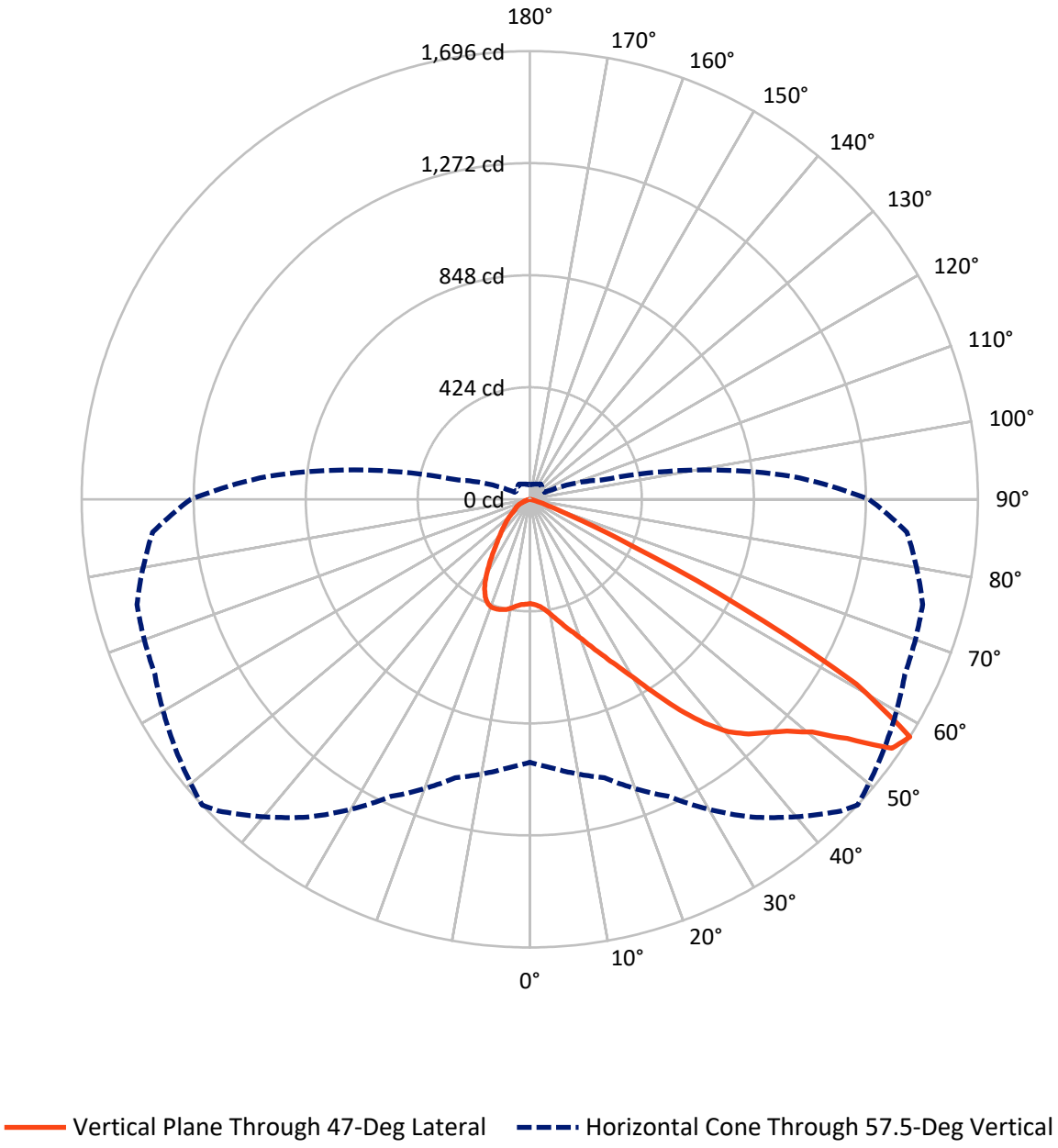
Based on 10 foot mounting height. Maximum calculated value = 5.6 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P630081
CATALOG NUMBER: GWS-SA1C-830-U-T3-W-GRSBK

Luminous Intensity Polar Plot



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

Scaled Data Report

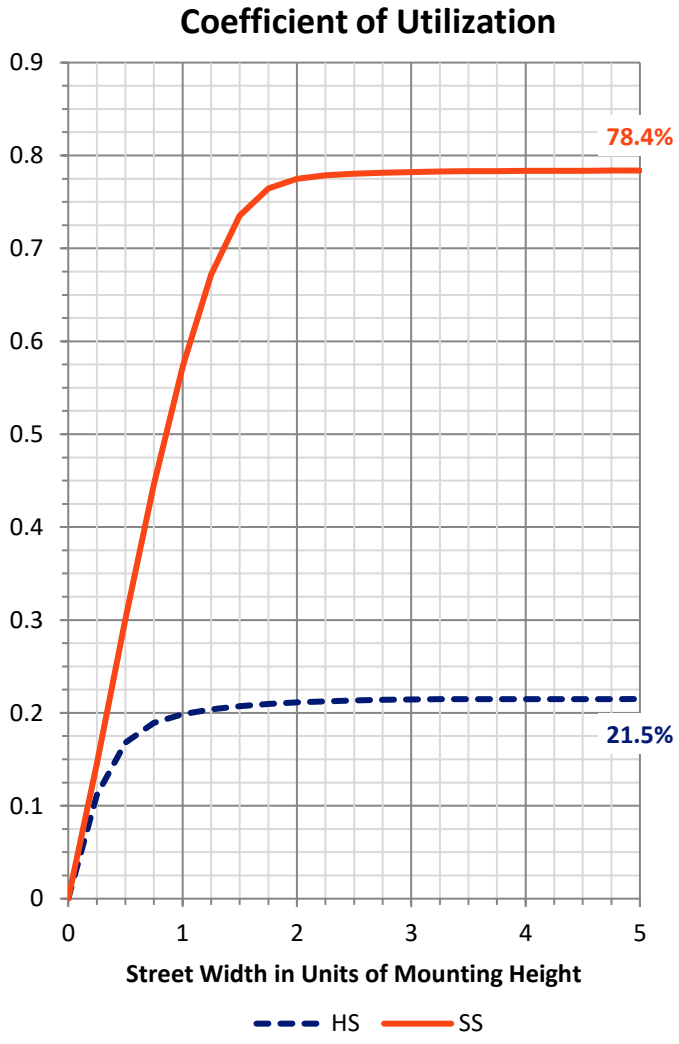
REPORT NUMBER: P630081
CATALOG NUMBER: GWS-SA1C-830-U-T3-W-GRSBK

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	511.5	0.0	511.5
	% Fixture	21.7	0.0	21.7
Street Side	Lumens	1846.3	0.0	1846.3
	% Fixture	78.3	0.0	78.3
Total	Lumens	2357.8	0.0	2357.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.3	1.7
10°-20°	132.5	5.6
20°-30°	246.0	10.4
30°-40°	393.8	16.7
40°-50°	575.7	24.4
50°-60°	710.5	30.1
60°-70°	237.4	10.1
70°-80°	22.1	0.9
80°-90°	0.5	0.0
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°	2357.8	100.0
0°-180°	2357.8	100.0



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

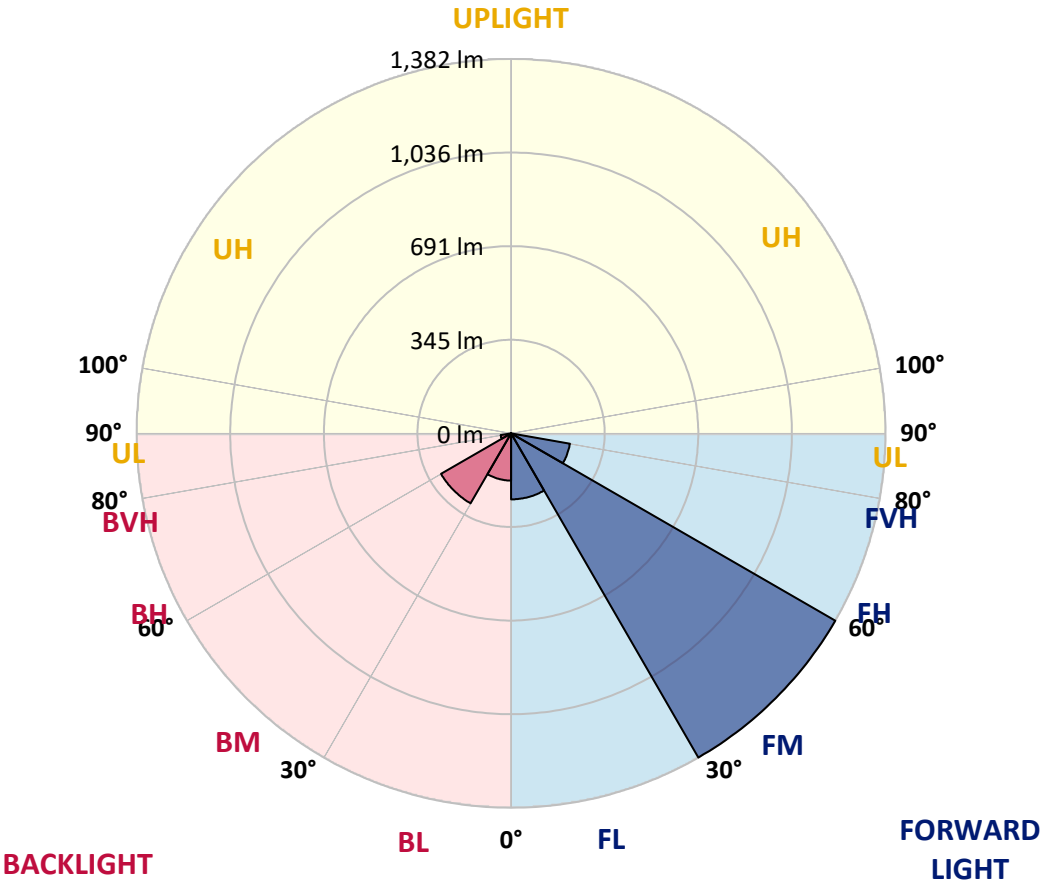
Scaled Data Report

REPORT NUMBER: P630081
CATALOG NUMBER: GWS-SA1C-830-U-T3-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	243.7	10.3			
FM	(30°-60°)	1381.7	58.6			
FH	(60°-80°)	220.6	9.4			G0/660
FVH	(80°-90°)	0.3	0.0			G0/10
BL	(0°-30°)	174.1	7.4	B1/500		
BM	(30°-60°)	298.4	12.7	B1/1000		
BH	(60°-80°)	38.9	1.6	B0/110		G0/110
BVH	(80°-90°)	0.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G0
Type II Short



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

Scaled Data Report

REPORT NUMBER: P630081
CATALOG NUMBER: GWS-SA1C-830-U-T3-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	394.7	394.7	394.7	394.7	394.7	394.7	394.7	394.7	394.7	394.7	394.7
2.5°	398.8	398.5	398.3	399.9	399.4	399.1	399.6	399.6	399.6	398.0	394.7
5°	408.4	408.4	408.1	409.8	408.4	407.6	407.8	407.8	406.7	403.7	399.6
7.5°	423.4	422.9	422.3	424.0	422.6	422.3	422.9	421.2	419.3	414.4	408.7
10°	445.1	445.1	444.2	445.9	444.8	444.2	444.2	443.1	439.6	431.9	423.4
12.5°	474.9	473.5	471.6	470.2	469.7	469.4	469.7	468.1	464.2	454.4	442.6
15°	507.5	506.4	503.4	501.2	498.2	497.6	499.3	497.9	494.1	480.6	463.9
17.5°	548.5	549.9	542.2	537.6	528.8	528.3	528.8	531.0	528.3	511.0	486.7
20°	583.6	584.7	578.9	575.6	567.7	564.1	565.2	568.8	565.8	545.5	511.6
22.5°	621.1	622.4	616.4	609.6	606.0	606.0	610.1	615.0	610.9	584.4	540.0
25°	666.0	667.0	662.1	653.1	646.8	654.7	660.8	673.9	667.0	630.9	573.7
27.5°	717.4	717.7	710.6	701.3	698.0	712.8	718.8	739.0	736.3	683.2	609.3
30°	772.4	772.7	771.1	764.8	761.8	781.2	789.4	818.7	816.8	748.1	657.7
32.5°	829.6	829.6	832.6	832.1	835.7	867.4	880.5	913.9	912.0	827.4	718.0
35°	887.1	887.4	892.6	905.7	920.5	962.7	979.9	1020.4	1016.0	922.4	794.9
37.5°	952.5	949.8	956.9	976.6	1009.5	1058.2	1074.6	1113.2	1108.3	1019.6	895.3
40°	1031.4	1026.4	1026.4	1049.4	1086.7	1142.8	1156.7	1175.9	1159.2	1098.1	993.9
42.5°	1118.4	1113.7	1107.7	1128.0	1159.2	1203.0	1214.5	1209.3	1195.6	1172.3	1106.1
45°	1206.5	1199.4	1203.5	1215.8	1233.9	1254.7	1259.1	1235.0	1228.7	1235.3	1198.9
47.5°	1273.6	1268.7	1278.8	1296.0	1310.8	1313.8	1310.8	1277.4	1276.9	1300.2	1263.2
50°	1296.0	1296.6	1324.5	1362.3	1386.1	1388.6	1384.5	1346.1	1340.9	1347.8	1298.0
52.5°	1298.2	1300.4	1341.2	1413.2	1478.1	1507.6	1504.3	1463.0	1412.1	1404.7	1350.5
55°	1245.4	1258.3	1315.2	1420.3	1558.3	1652.7	1663.6	1584.5	1509.0	1502.7	1463.6
57.5°	995.5	1021.8	1090.5	1240.2	1468.8	1667.8	1696.2	1639.3	1566.2	1539.4	1433.2
60°	595.1	627.6	693.6	877.3	1117.9	1370.8	1419.8	1427.7	1394.0	1316.6	1099.5
62.5°	255.4	252.6	333.9	474.6	664.9	871.2	893.4	927.9	957.2	876.2	667.3
65°	87.6	95.3	132.5	214.0	332.8	404.6	424.3	455.2	496.8	410.0	244.4
67.5°	54.2	57.5	76.4	126.5	179.6	176.8	168.1	163.1	158.8	108.7	67.1
70°	39.4	42.2	53.6	87.0	120.7	84.9	73.6	59.7	66.2	61.0	47.6
72.5°	26.6	28.7	37.0	52.8	61.9	41.3	38.3	43.5	52.6	50.1	38.9
75°	15.9	17.2	21.1	25.7	25.2	21.3	21.6	30.7	40.2	37.5	27.6
77.5°	10.9	11.5	14.0	16.7	12.3	6.6	6.0	8.5	13.7	13.7	9.3
80°	2.7	3.6	3.6	2.2	1.9	1.6	1.6	2.5	3.8	2.7	1.4
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5
85°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5
87.5°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5
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

Scaled Data Report

REPORT NUMBER: P630081
CATALOG NUMBER: GWS-SA1C-830-U-T3-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	394.7	394.7	394.7	394.7	394.7	394.7	394.7	394.7	394.7	394.7	394.7
2.5°	396.6	393.3	395.5	395.0	396.6	397.2	394.7	394.2	394.4	391.1	390.0
5°	400.4	396.6	397.7	396.6	398.5	400.2	399.4	400.4	401.8	399.4	398.3
7.5°	408.7	404.8	404.6	402.9	405.6	406.7	406.5	409.5	412.2	410.6	408.9
10°	422.9	417.7	417.1	415.8	416.6	417.4	414.4	415.0	417.4	415.5	414.7
12.5°	440.4	434.1	432.7	429.5	429.5	425.4	418.8	417.4	419.3	418.0	416.6
15°	459.3	450.8	448.6	442.9	437.4	429.7	422.9	421.2	422.6	421.0	419.9
17.5°	480.4	470.8	463.7	453.5	441.5	432.5	424.8	421.2	419.1	415.8	415.5
20°	501.2	488.6	476.5	460.4	444.5	430.8	418.2	408.9	401.0	396.1	394.2
22.5°	525.3	506.6	487.2	464.5	441.8	421.0	398.8	382.9	369.2	364.6	362.4
25°	551.0	526.9	497.9	468.3	432.5	399.1	369.0	345.4	327.4	321.3	318.9
27.5°	579.5	546.3	508.8	467.5	413.3	367.9	327.9	298.6	280.8	275.4	277.3
30°	615.6	571.5	522.5	459.0	384.6	324.1	277.3	252.6	239.2	234.0	234.3
32.5°	663.8	607.6	542.5	441.0	347.6	274.3	233.2	215.1	206.1	199.3	198.7
35°	732.7	662.7	561.1	411.9	302.7	229.9	200.1	185.9	173.3	165.3	166.7
37.5°	815.4	731.9	571.2	372.8	252.4	195.4	175.2	160.7	146.4	134.7	136.0
40°	913.4	822.5	570.4	321.3	206.4	171.9	154.4	137.4	119.6	108.9	110.0
42.5°	1022.6	908.2	552.6	266.9	171.1	152.7	134.4	113.0	95.8	89.2	89.5
45°	1117.3	977.7	521.4	210.5	144.0	134.1	113.6	91.7	84.0	79.4	79.1
47.5°	1187.4	1028.6	476.8	165.6	122.1	117.2	93.3	82.1	76.1	72.3	71.7
50°	1226.5	1046.4	427.5	129.7	103.2	99.4	83.5	74.5	70.3	67.9	67.3
52.5°	1279.1	1067.8	392.2	102.4	86.5	81.3	76.9	69.3	66.5	64.6	63.8
55°	1362.3	1109.1	361.6	81.3	72.0	70.9	72.5	66.2	64.6	61.6	60.5
57.5°	*1284.0*	*996.3*	*280.8*	*63.0*	*60.8*	*64.9*	*70.1*	*63.2*	*59.1*	*56.4*	*55.3*
60°	903.5	662.4	141.2	50.6	54.2	60.8	66.0	57.2	53.1	53.6	53.1
62.5°	498.2	331.5	63.5	42.4	47.1	53.6	56.4	49.5	46.8	51.5	52.3
65°	162.9	112.8	36.7	32.8	37.2	43.8	48.7	47.1	46.5	52.0	53.6
67.5°	50.1	37.2	24.9	23.5	25.7	32.3	41.1	50.9	54.7	56.4	57.2
70°	37.5	29.3	21.3	20.0	21.1	24.6	34.8	42.4	40.0	40.2	39.7
72.5°	30.1	23.3	18.3	17.5	17.5	17.0	18.3	23.0	26.0	27.4	27.4
75°	21.1	16.4	14.0	12.9	10.1	8.2	7.4	7.4	6.6	6.3	6.0
77.5°	7.1	6.0	5.5	4.4	3.0	2.5	2.2	1.9	1.4	0.8	0.5
80°	1.1	0.8	0.5	0.5	0.5	0.3	0.3	0.3	0.0	0.0	0.0
82.5°	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.0	0.0	0.0	0.0
85°	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.0	0.0	0.0	0.0
87.5°	0.5	0.5	0.5	0.5	0.3	0.3	0.3	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.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

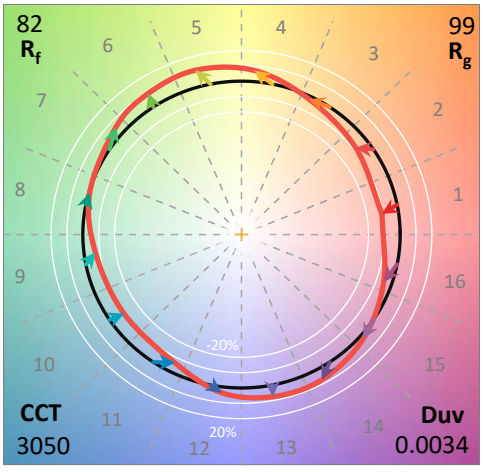
Test Information

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

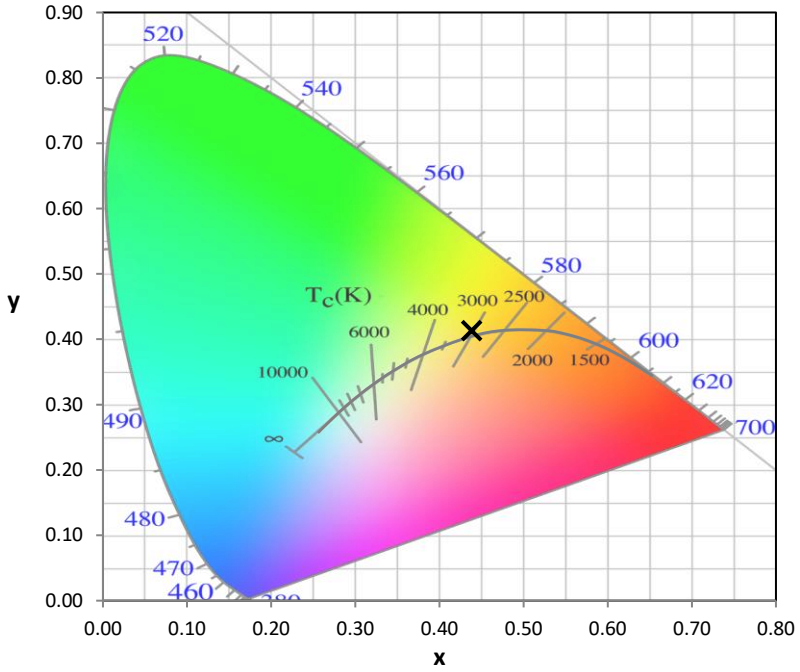
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

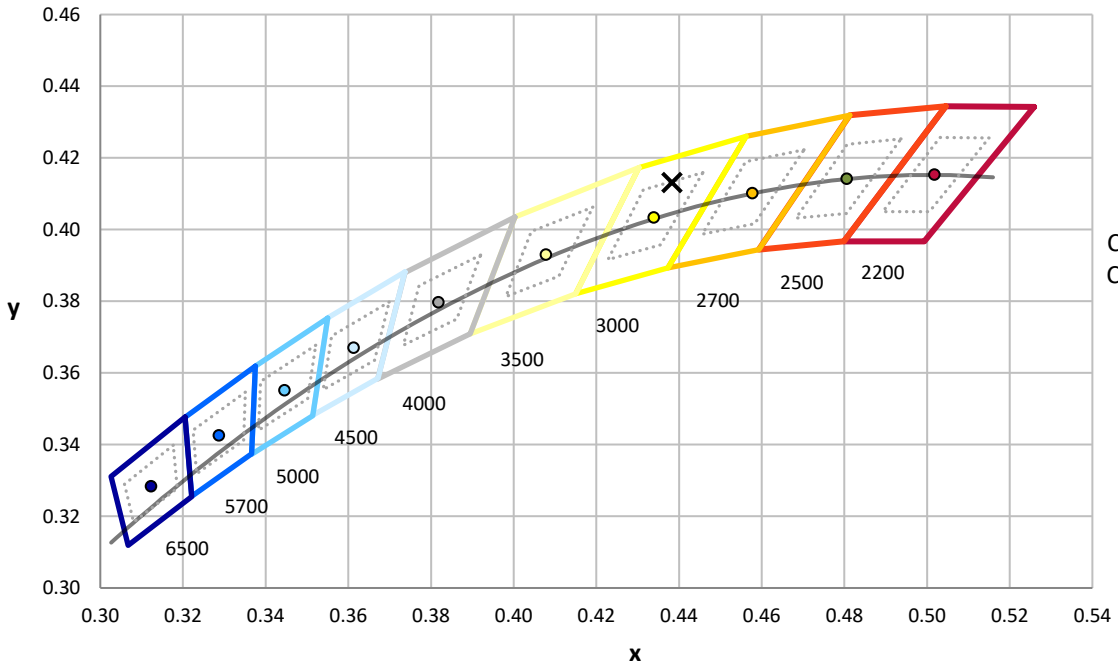
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

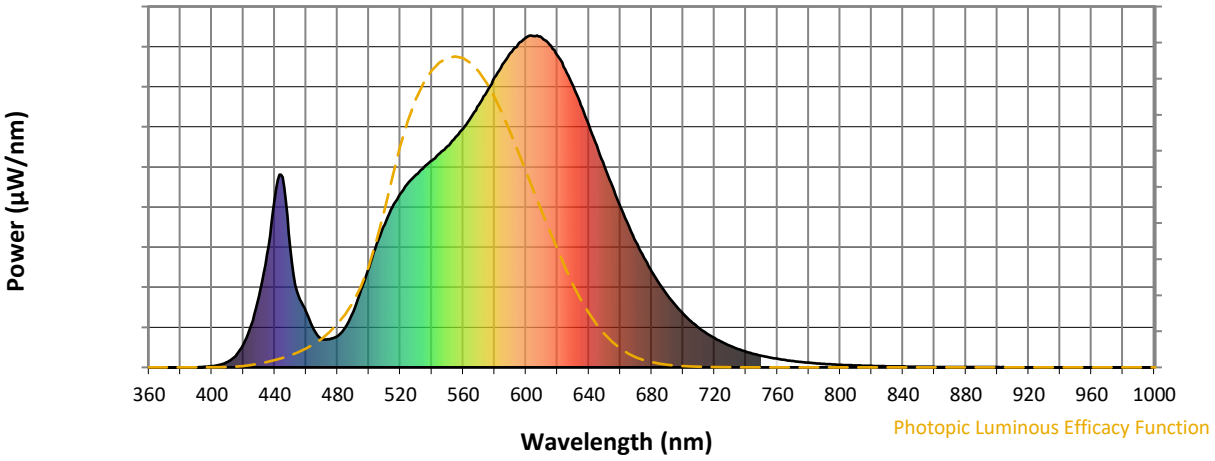


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

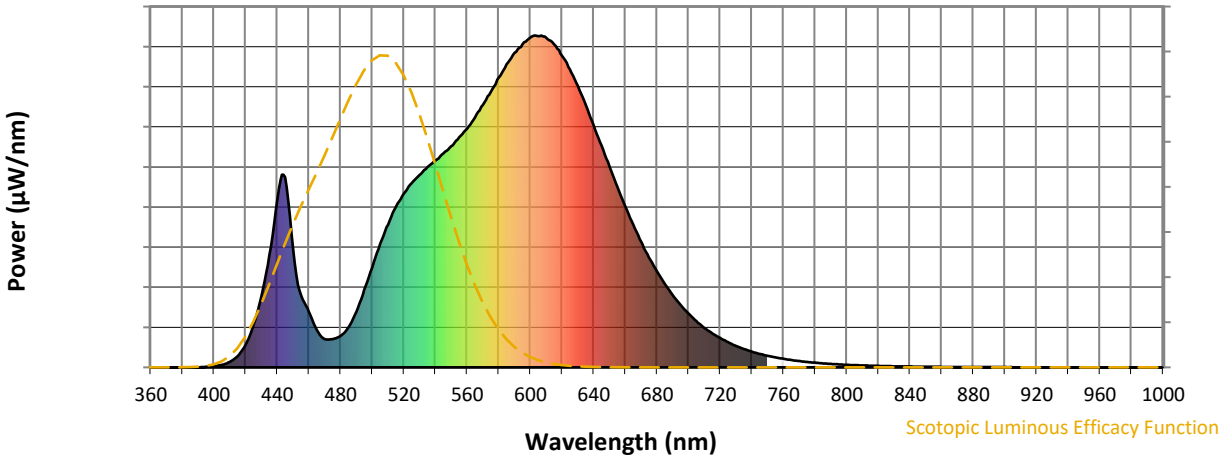


Photopic Lumens: NR

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

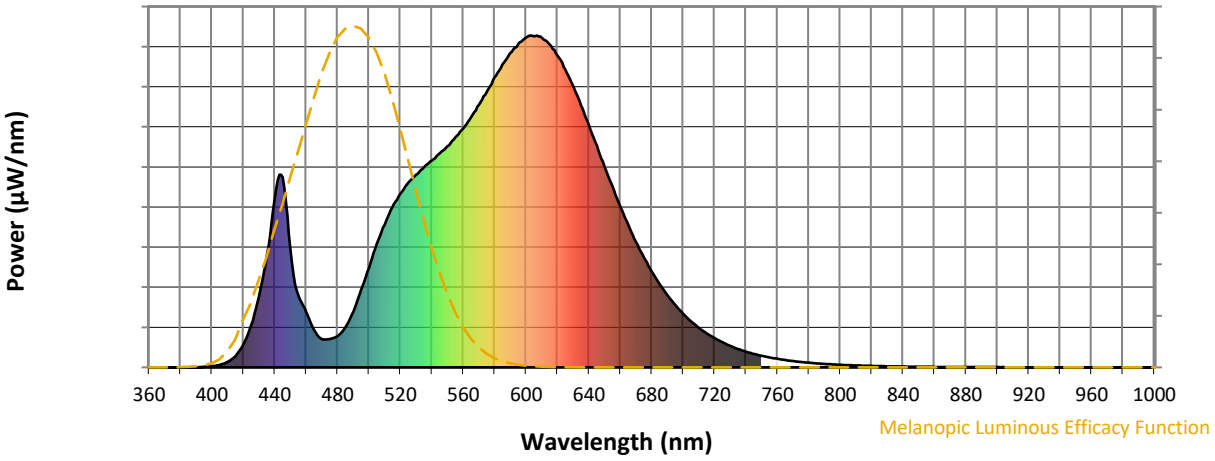


Scotopic Lumens: NR **S/P: 1.27**

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			

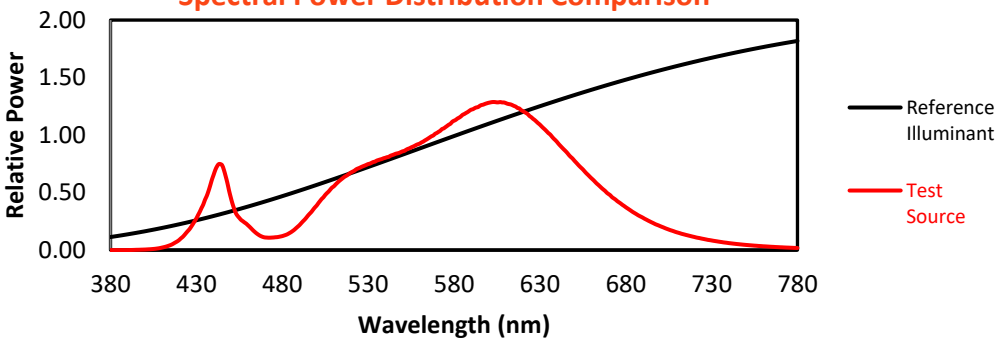
REPORT NUMBER: SP1-2408-195-9

TM-30-18

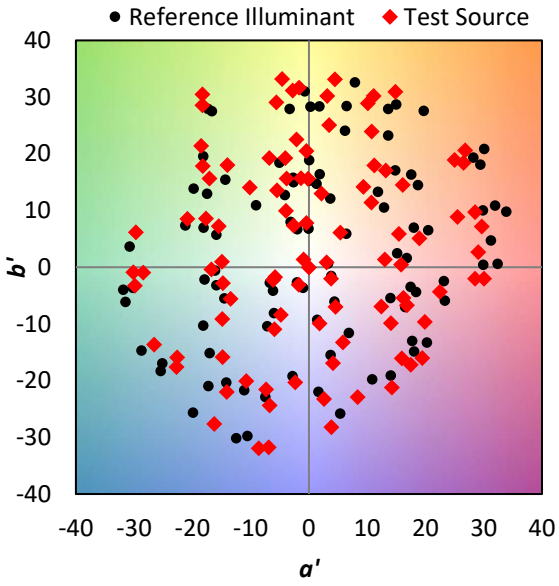
Summary

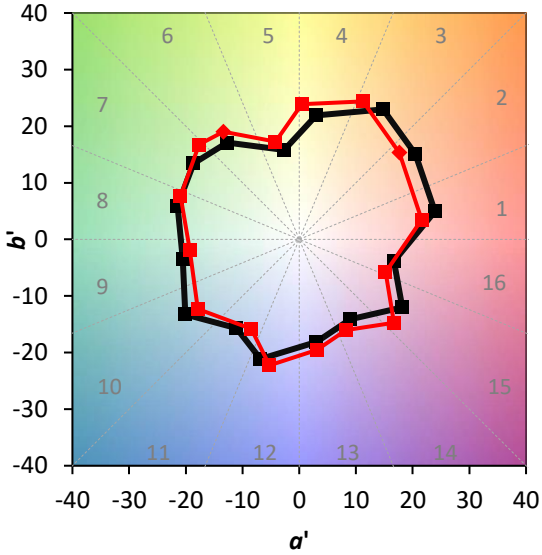
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

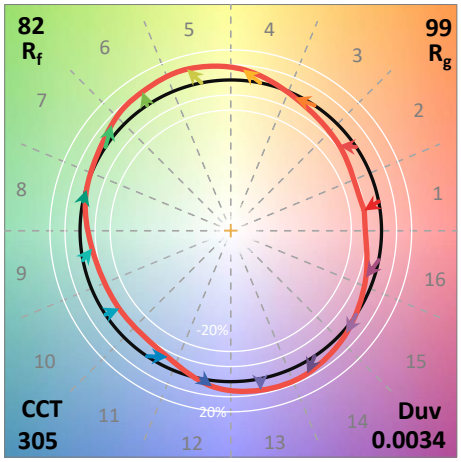
Spectral Power Distribution Comparison

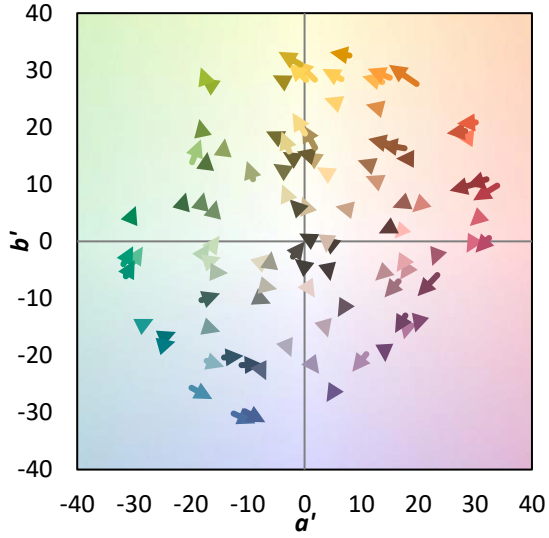


Color Vector Graphics







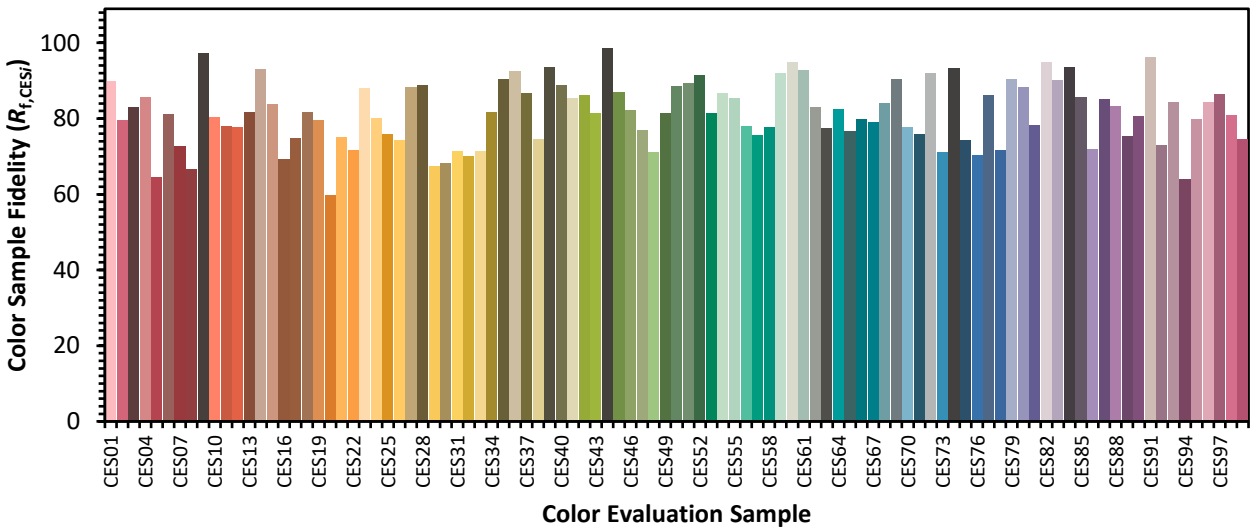


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

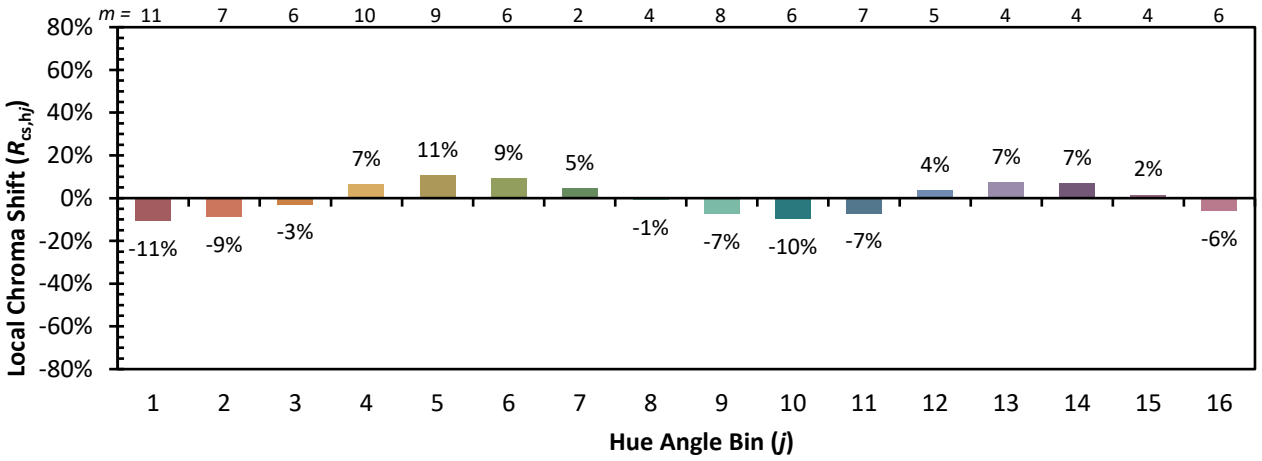
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

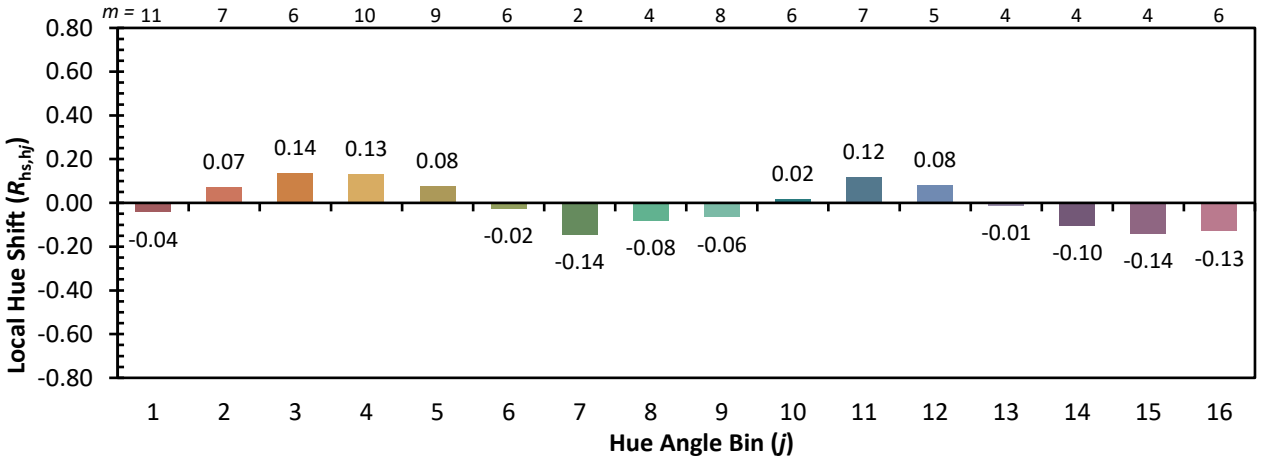


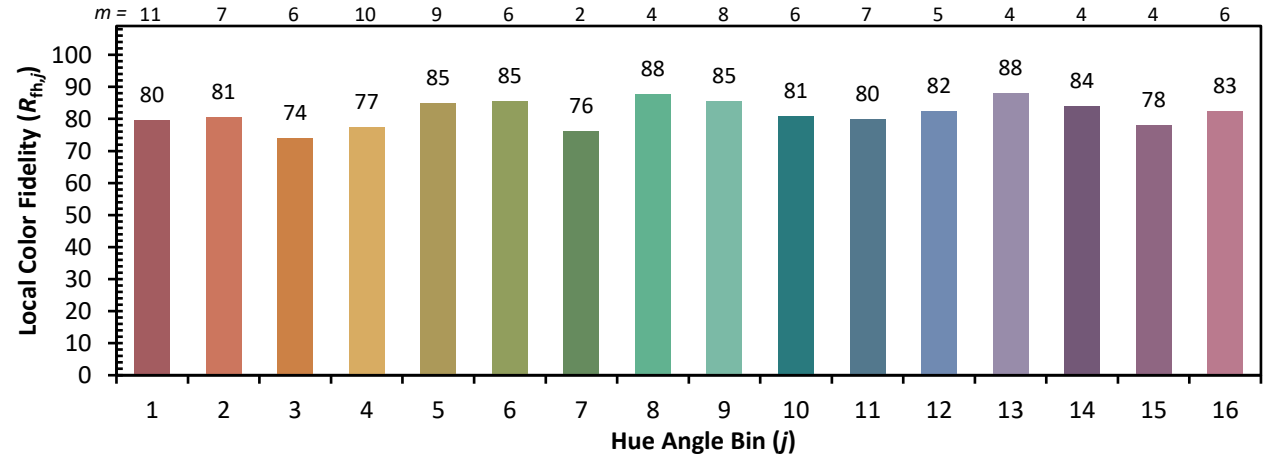
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



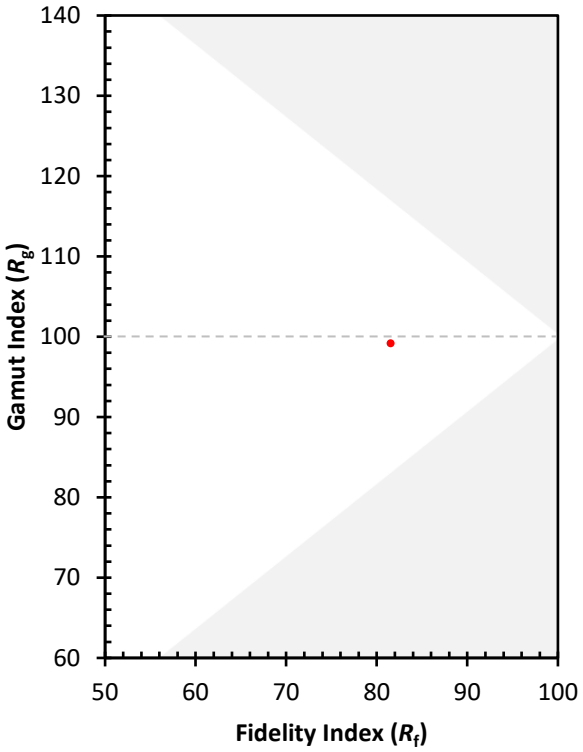


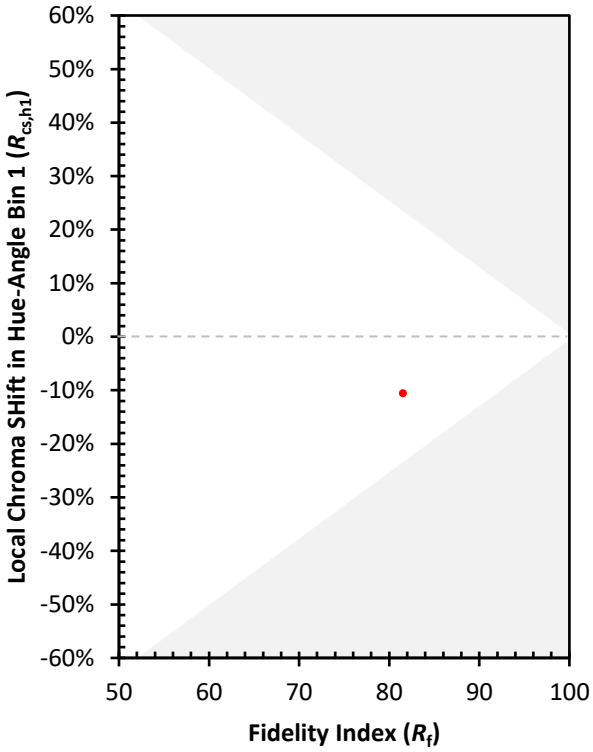


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)