

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: P638980

Luminaire Tested: GWS-SA4F-830-U-SLR-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638980
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-44)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4F-830-U-SLR-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16773.9 lumens
Efficiency: N/A
Efficacy: 74.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

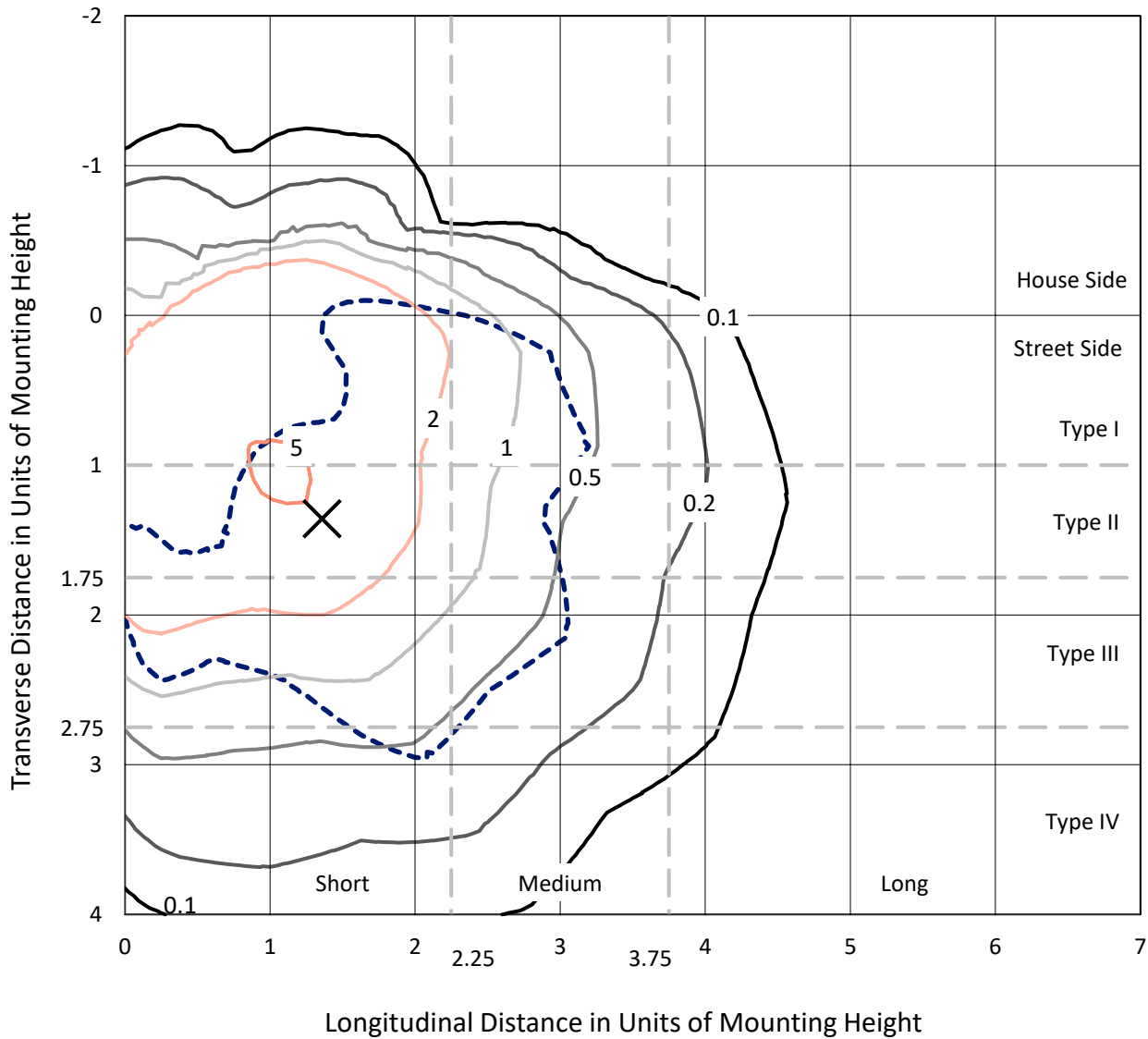
Input Watts (W): 225.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P638980
 CATALOG NUMBER: GWS-SA4F-830-U-SLR-W-HSS

Iso-Footcandle Lines of Horizontal Illumination

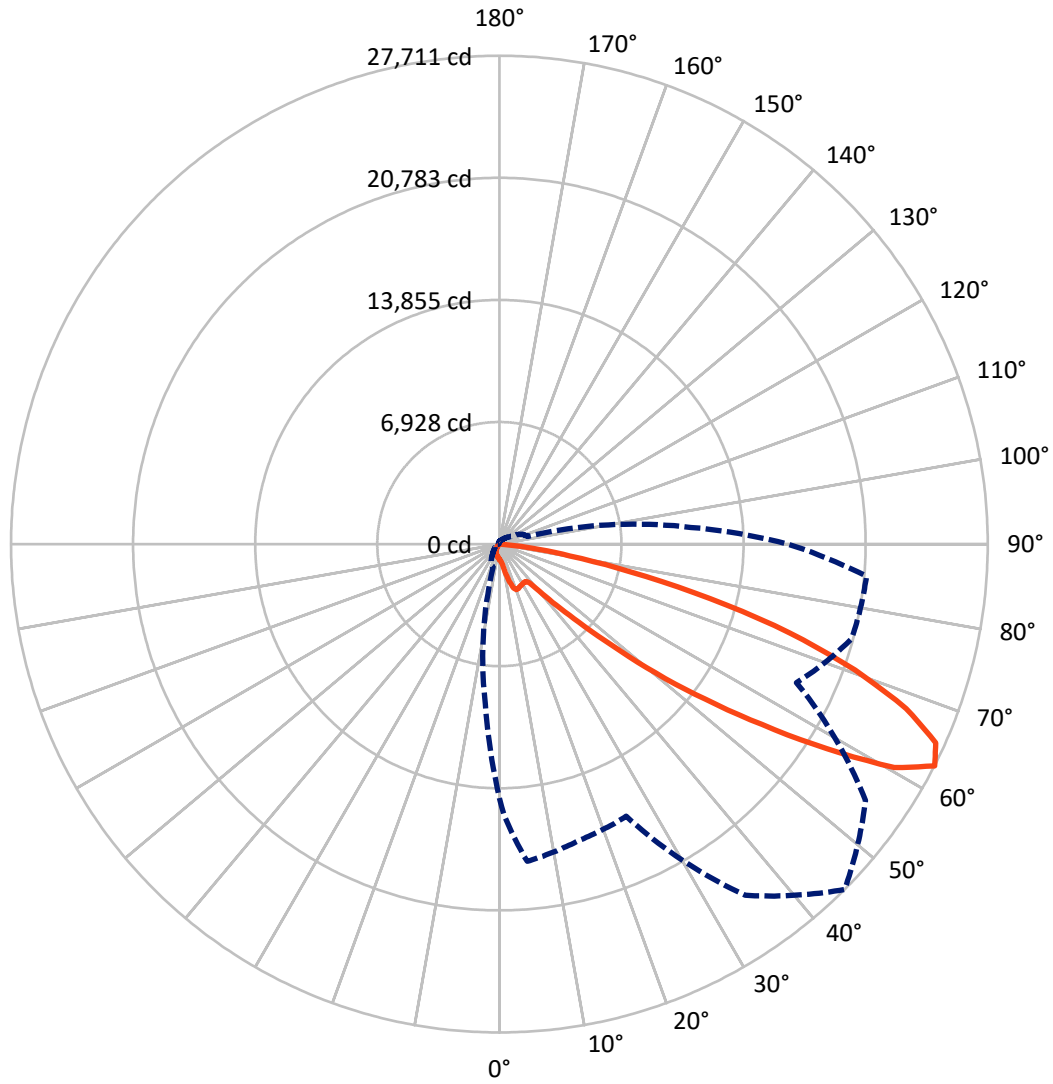
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type IV - Short - N/A

REPORT NUMBER: P638980
CATALOG NUMBER: GWS-SA4F-830-U-SLR-W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P638980
 CATALOG NUMBER: GWS-SA4F-830-U-SLR-W-HSS

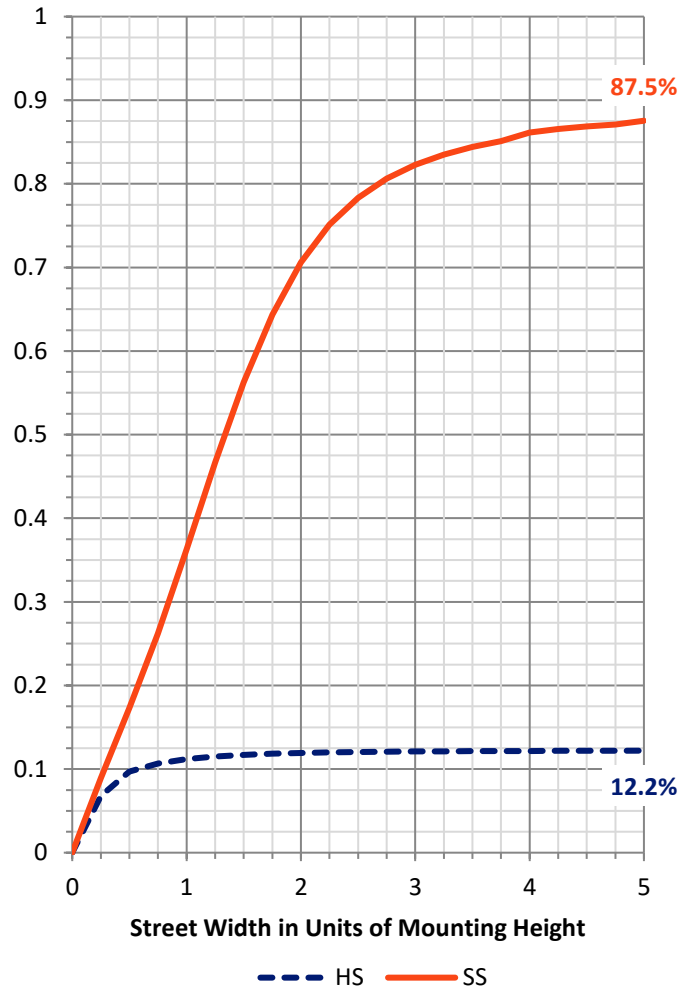
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2069.9	0.0	2069.9
	% Fixture	12.3	0.0	12.3
Street Side	Lumens	14704.0	0.0	14704.0
	% Fixture	87.7	0.0	87.7
Total	Lumens	16773.9	0.0	16773.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.4	0.5
10°-20°	292.4	1.7
20°-30°	635.7	3.8
30°-40°	1043.4	6.2
40°-50°	1918.2	11.4
50°-60°	4119.4	24.6
60°-70°	5533.0	33.0
70°-80°	2881.1	17.2
80°-90°	273.2	1.6
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°	16773.9	100.0
0°-180°	16773.9	100.0

Coefficient of Utilization



REPORT NUMBER: P638980

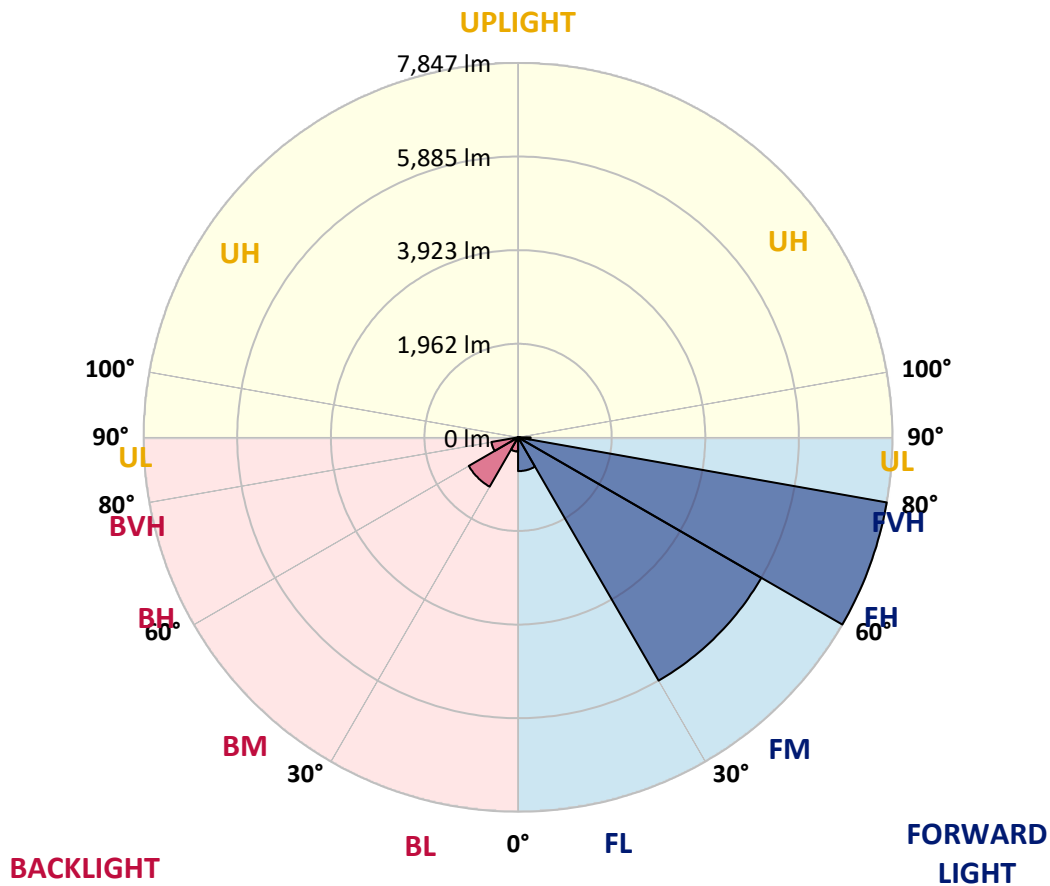
CATALOG NUMBER: GWS-SA4F-830-U-SLR-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	708.6	4.2			
FM (30°-60°)	5887.4	35.1			
FH (60°-80°)	7847.0	46.8			G4/12000
FVH (80°-90°)	261.0	1.6			G3/500
BL (0°-30°)	296.9	1.8	B1/500		
BM (30°-60°)	1193.6	7.1	B2/2500		
BH (60°-80°)	567.2	3.4	B2/1000		G2/1000
BVH (80°-90°)	12.2	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short





REPORT NUMBER: P638980

CATALOG NUMBER: GWS-SA4F-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9
2.5°	889.3	893.2	897.1	910.6	920.3	928.1	930.0	924.2	910.6	897.1	877.7
5°	862.2	866.1	879.6	916.5	953.3	982.3	992.0	986.2	953.3	910.6	866.1
7.5°	860.3	868.0	901.0	978.5	1057.9	1118.0	1133.5	1119.9	1057.9	972.6	881.6
10°	930.0	943.6	992.0	1131.5	1276.8	1383.4	1426.0	1367.9	1269.1	1114.1	964.9
12.5°	1112.1	1135.4	1228.4	1431.8	1656.6	1798.0	1856.2	1784.5	1629.5	1404.7	1168.3
15°	1398.9	1433.8	1573.3	1877.5	2142.9	2268.9	2288.2	2247.5	2067.4	1819.3	1501.6
17.5°	1803.8	1854.2	2071.2	2381.2	2573.0	2617.6	2611.8	2569.2	2437.4	2266.9	1966.6
20°	2288.2	2348.3	2561.4	2817.2	2836.6	2784.2	2755.2	2730.0	2685.4	2656.4	2421.9
22.5°	2776.5	2850.1	3072.9	3136.9	2962.5	2811.4	2739.7	2759.1	2824.9	2968.3	2873.4
25°	3262.8	3332.6	3541.8	3369.4	3020.6	2768.7	2677.7	2724.2	2881.1	3191.1	3313.2
27.5°	3830.5	3882.8	4006.8	3528.3	3030.3	2733.9	2644.7	2716.4	2908.2	3330.6	3795.6
30°	4421.5	4452.5	4392.4	3570.9	2997.4	2681.6	2611.8	2716.4	2954.7	3423.6	4158.0
32.5°	4855.5	4861.3	4665.6	3574.8	2979.9	2638.9	2580.8	2704.8	2999.3	3501.1	4508.6
35°	5303.0	5274.0	4927.2	3632.9	3026.4	2654.4	2604.0	2737.7	3069.1	3592.2	4816.7
37.5°	5756.4	5704.1	5219.7	3727.8	3146.6	2823.0	2792.0	2906.3	3181.4	3718.1	5155.8
40°	6221.4	6149.7	5523.9	3871.2	3413.9	3396.5	3503.1	3489.5	3489.5	3878.9	5504.5
42.5°	6789.1	6705.8	5973.4	4276.1	4037.8	4427.3	4717.9	4537.7	4204.5	4249.0	5957.9
45°	7539.0	7467.3	6752.3	5051.2	5016.3	5911.4	6302.8	5946.3	5117.0	5103.5	6715.5
47.5°	8738.3	8724.7	7994.3	5950.2	6213.7	7800.5	8556.2	7870.3	6157.5	6008.3	8149.3
50°	10423.9	10383.3	9542.4	7004.2	7637.8	10141.1	11489.6	10346.4	7415.0	7064.3	10069.4
52.5°	12322.7	12365.4	11710.5	8155.1	9151.0	12745.1	14622.6	13183.0	8780.9	8407.0	12485.5
55°	14111.1	14355.2	14182.8	9501.7	10629.3	15620.4	18063.7	16294.7	10472.4	10164.3	15194.2
57.5°	15510.0	16197.8	17406.8	11458.6	12367.3	18984.0	21905.8	19667.9	12446.7	13018.3	18881.3
60°	15587.5	16498.1	19305.6	15552.6	14603.2	21869.0	25742.1	22963.7	15550.7	17864.1	21770.2
62.5°	14419.2	15395.7	18069.5	17412.6	17038.7	24323.8	27710.7	25366.2	18604.2	20702.6	20913.8
65°	13082.3	14068.5	16689.9	15302.7	16755.8	24219.2	27210.8	25422.4	18881.3	18772.8	19381.2
67.5°	11061.4	11946.9	14320.3	13545.3	15444.1	23050.9	24901.2	23820.1	17395.2	17558.0	17829.2
70°	8073.7	8926.2	11129.2	11168.0	13487.2	20944.8	21396.2	21247.0	16019.6	16192.0	15417.0
72.5°	5832.0	6550.8	8451.5	9158.7	10766.9	17563.8	17251.8	17827.3	13744.9	14421.1	12382.8
75°	4192.8	4731.5	6200.1	7967.2	8534.9	13043.5	12349.9	13806.9	11028.5	12417.7	9309.9
77.5°	1701.2	1891.0	2439.4	5367.0	5609.2	8775.1	7560.3	10028.7	7862.5	8159.0	4512.5
80°	69.8	77.5	100.8	2770.7	3846.0	4936.8	4045.6	5361.2	5192.6	3286.1	1065.6
82.5°	7.8	7.8	17.4	798.3	1683.7	2724.2	1906.5	3088.4	2629.2	1393.1	484.4
85°	1.9	1.9	3.9	91.1	395.3	435.9	257.7	947.5	1222.6	569.6	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7	17.4	19.4	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



REPORT NUMBER: P638980

CATALOG NUMBER: GWS-SA4F-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9
2.5°	877.7	868.0	856.4	844.8	839.0	823.5	817.6	813.8	809.9	811.8	811.8
5°	848.6	827.3	802.1	777.0	763.4	747.9	740.1	736.3	738.2	746.0	746.0
7.5°	844.8	804.1	749.8	716.9	701.4	689.8	682.0	678.1	680.1	689.8	693.6
10°	908.7	837.0	740.1	684.0	666.5	654.9	647.1	641.3	637.4	645.2	647.1
12.5°	1046.3	947.5	786.6	680.1	649.1	633.6	627.8	616.1	610.3	614.2	616.1
15°	1331.1	1160.6	879.6	695.6	633.6	616.1	606.4	596.8	587.1	585.1	587.1
17.5°	1703.1	1459.0	1021.1	732.4	621.9	600.6	587.1	573.5	559.9	558.0	556.1
20°	2164.2	1825.2	1218.7	790.5	612.3	587.1	567.7	548.3	530.9	525.1	525.1
22.5°	2584.7	2266.9	1472.5	862.2	598.7	567.7	544.4	521.2	501.8	492.1	490.2
25°	3098.1	2735.8	1776.7	945.5	579.3	542.5	517.3	494.1	474.7	463.1	459.2
27.5°	3615.4	3229.9	2121.6	1054.0	556.1	517.3	494.1	472.8	451.4	437.9	434.0
30°	4117.3	3762.7	2509.1	1189.6	538.6	492.1	472.8	451.4	432.1	410.8	404.9
32.5°	4655.9	4307.1	2943.1	1340.8	525.1	474.7	453.4	434.0	408.8	389.4	379.8
35°	5175.2	4869.0	3421.7	1488.0	511.5	459.2	435.9	416.6	389.4	368.1	354.6
37.5°	5698.3	5440.6	3921.6	1577.2	492.1	437.9	416.6	401.1	370.1	344.9	329.4
40°	6252.4	6031.6	4462.1	1540.3	474.7	414.6	403.0	385.6	350.7	321.6	302.3
42.5°	6860.8	6595.4	5012.4	1398.9	459.2	395.3	383.6	366.2	333.3	298.4	273.2
45°	7626.1	7213.5	5463.9	1185.8	466.9	375.9	352.6	348.8	317.8	273.2	242.2
47.5°	8941.7	8162.8	5814.5	1048.2	519.3	354.6	327.4	337.1	304.2	248.0	213.1
50°	10954.8	9736.1	6142.0	1038.5	598.7	344.9	304.2	329.4	290.6	222.8	187.9
52.5°	12873.0	11334.6	6351.2	1123.8	668.5	370.1	280.9	319.7	280.9	205.4	170.5
55°	14707.8	12256.9	5977.3	1185.8	734.3	445.6	263.5	304.2	269.3	195.7	164.7
57.5°	16686.1	12667.6	4706.3	1311.7	780.8	509.6	267.4	280.9	253.8	189.9	162.8
60°	17277.0	12142.5	2840.4	1476.4	755.6	528.9	296.4	249.9	232.5	178.3	156.9
62.5°	16358.6	10896.7	1676.0	1344.7	734.3	499.9	339.1	230.6	211.2	162.8	145.3
65°	14984.9	9205.2	1092.8	1135.4	778.9	445.6	360.4	220.9	191.8	147.3	127.9
67.5°	13415.5	7415.0	765.3	670.4	718.8	401.1	304.2	218.9	172.4	124.0	104.6
70°	11299.7	5553.0	538.6	443.7	598.7	356.5	236.4	213.1	151.1	100.8	81.4
72.5°	8730.5	3475.9	401.1	286.8	426.3	290.6	187.9	180.2	122.1	83.3	62.0
75°	6438.4	1982.1	282.9	207.3	280.9	220.9	139.5	127.9	104.6	79.4	56.2
77.5°	3361.6	992.0	176.3	158.9	160.8	137.6	100.8	93.0	96.9	79.4	52.3
80°	645.2	197.6	106.6	116.3	87.2	87.2	73.6	77.5	85.3	63.9	44.6
82.5°	269.3	42.6	58.1	65.9	54.3	60.1	60.1	62.0	60.1	46.5	32.9
85°	0.0	0.0	25.2	27.1	36.8	36.8	31.0	31.0	31.0	27.1	19.4
87.5°	0.0	0.0	0.0	0.0	1.9	5.8	11.6	13.6	15.5	11.6	7.8
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: P638980

CATALOG NUMBER: GWS-SA4F-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9
2.5°	809.9	806.0	811.8	815.7	819.6	819.6	815.7	811.8	806.0	811.8	806.0
5°	747.9	753.7	763.4	767.3	771.1	763.4	759.5	747.9	738.2	740.1	736.3
7.5°	699.5	705.3	716.9	724.6	724.6	720.8	709.1	697.5	682.0	682.0	680.1
10°	654.9	662.6	676.2	685.9	689.8	685.9	674.3	658.8	645.2	645.2	639.4
12.5°	618.1	627.8	643.3	656.8	660.7	656.8	645.2	629.7	614.2	614.2	610.3
15°	587.1	598.7	616.1	631.6	637.4	631.6	618.1	598.7	583.2	585.1	579.3
17.5°	558.0	567.7	590.9	608.4	614.2	608.4	590.9	565.8	550.3	554.1	550.3
20°	525.1	536.7	559.9	579.3	585.1	579.3	559.9	532.8	517.3	517.3	519.3
22.5°	490.2	501.8	525.1	538.6	546.4	540.6	521.2	496.0	480.5	480.5	482.4
25°	459.2	465.0	482.4	496.0	497.9	492.1	476.6	457.3	445.6	451.4	453.4
27.5°	430.1	430.1	437.9	445.6	443.7	437.9	432.1	416.6	414.6	420.4	426.3
30°	399.1	389.4	385.6	379.8	377.8	375.9	381.7	381.7	385.6	393.3	399.1
32.5°	372.0	352.6	335.2	317.8	308.1	315.8	331.3	344.9	358.4	370.1	375.9
35°	341.0	310.0	280.9	257.7	242.2	253.8	279.0	304.2	327.4	342.9	352.6
37.5°	310.0	265.4	230.6	201.5	189.9	199.6	226.7	261.6	296.4	315.8	329.4
40°	277.1	220.9	180.2	156.9	145.3	155.0	182.1	217.0	263.5	288.7	306.1
42.5°	244.1	182.1	145.3	122.1	116.3	122.1	143.4	178.3	228.6	259.6	282.9
45°	211.2	151.1	116.3	98.8	93.0	98.8	116.3	145.3	195.7	230.6	257.7
47.5°	182.1	127.9	96.9	81.4	77.5	83.3	96.9	122.1	164.7	199.6	230.6
50°	158.9	112.4	83.3	69.8	65.9	71.7	83.3	102.7	139.5	170.5	203.4
52.5°	143.4	104.6	73.6	60.1	58.1	62.0	71.7	87.2	118.2	145.3	176.3
55°	139.5	104.6	67.8	54.3	52.3	56.2	63.9	75.6	102.7	125.9	153.1
57.5°	143.4	112.4	63.9	46.5	44.6	48.4	56.2	65.9	89.1	108.5	133.7
60°	143.4	114.3	56.2	36.8	34.9	38.8	46.5	58.1	79.4	94.9	116.3
62.5°	129.8	104.6	46.5	29.1	25.2	29.1	38.8	48.4	69.8	85.3	102.7
65°	112.4	89.1	38.8	21.3	17.4	21.3	31.0	40.7	60.1	73.6	93.0
67.5°	91.1	67.8	29.1	15.5	11.6	15.5	23.3	32.9	50.4	63.9	83.3
70°	67.8	48.4	23.3	13.6	11.6	13.6	21.3	31.0	44.6	58.1	77.5
72.5°	50.4	32.9	19.4	13.6	9.7	13.6	19.4	29.1	42.6	56.2	73.6
75°	42.6	27.1	17.4	11.6	9.7	11.6	17.4	27.1	38.8	52.3	69.8
77.5°	40.7	25.2	15.5	9.7	7.8	9.7	15.5	23.3	34.9	48.4	67.8
80°	34.9	21.3	13.6	7.8	5.8	7.8	13.6	19.4	27.1	36.8	52.3
82.5°	27.1	17.4	9.7	3.9	1.9	3.9	9.7	11.6	17.4	21.3	31.0
85°	17.4	9.7	3.9	0.0	0.0	0.0	3.9	7.8	7.8	9.7	15.5
87.5°	7.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	1.9	3.9	5.8
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: P638980

CATALOG NUMBER: GWS-SA4F-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9	871.9
2.5°	817.6	819.6	823.5	829.3	842.8	854.5	866.1	881.6	889.3	889.3
5°	740.1	742.1	744.0	751.8	771.1	786.6	811.8	842.8	858.3	862.2
7.5°	680.1	684.0	687.8	693.6	713.0	734.3	767.3	825.4	854.5	860.3
10°	645.2	651.0	658.8	670.4	687.8	711.1	767.3	871.9	920.3	930.0
12.5°	618.1	627.8	635.5	649.1	670.4	707.2	819.6	1003.6	1088.9	1112.1
15°	590.9	602.6	614.2	627.8	651.0	720.8	920.3	1240.0	1381.5	1398.9
17.5°	563.8	577.4	592.9	608.4	637.4	753.7	1079.2	1567.5	1765.1	1803.8
20°	532.8	550.3	571.6	590.9	623.9	806.0	1300.1	1956.9	2204.9	2288.2
22.5°	499.9	521.2	546.4	571.6	608.4	870.0	1567.5	2375.4	2722.2	2776.5
25°	472.8	494.1	517.3	542.5	583.2	947.5	1891.0	2894.7	3210.5	3262.8
27.5°	447.6	468.9	490.2	513.4	558.0	1048.2	2280.5	3446.9	3776.3	3830.5
30°	420.4	445.6	466.9	490.2	534.8	1172.2	2730.0	4059.1	4371.1	4421.5
32.5°	397.2	422.4	443.7	466.9	517.3	1307.8	3202.7	4601.7	4855.5	4855.5
35°	377.8	404.9	420.4	451.4	503.8	1395.0	3650.3	5119.0	5310.8	5303.0
37.5°	356.5	389.4	401.1	422.4	486.3	1404.7	4070.8	5665.4	5806.8	5756.4
40°	335.2	370.1	387.5	399.1	466.9	1325.3	4531.9	6167.2	6287.3	6221.4
42.5°	315.8	342.9	368.1	381.7	455.3	1185.8	4902.0	6703.9	6847.3	6789.1
45°	296.4	319.7	335.2	360.4	463.1	1088.9	5219.7	7329.7	7581.6	7539.0
47.5°	277.1	296.4	306.1	344.9	515.4	1044.3	5413.5	8298.5	8773.2	8738.3
50°	255.8	279.0	279.0	341.0	592.9	1059.8	5582.0	9701.2	10435.6	10423.9
52.5°	234.4	259.6	255.8	370.1	653.0	1131.5	5773.9	10939.3	12216.2	12322.7
55°	213.1	236.4	240.3	428.2	687.8	1193.5	5031.8	11460.5	13737.1	14111.1
57.5°	189.9	203.4	249.9	472.8	676.2	1373.7	3446.9	11555.5	14707.8	15510.0
60°	164.7	176.3	282.9	463.1	639.4	1269.1	2170.0	10703.0	14570.3	15587.5
62.5°	143.4	162.8	298.4	408.8	651.0	1100.5	1383.4	9121.9	13258.6	14419.2
65°	125.9	156.9	271.3	370.1	658.8	746.0	933.9	7420.8	11977.9	13082.3
67.5°	112.4	174.4	222.8	329.4	565.8	525.1	641.3	5766.1	10071.3	11061.4
70°	102.7	178.3	182.1	282.9	437.9	337.1	422.4	3880.9	6942.2	8073.7
72.5°	93.0	131.8	137.6	226.7	282.9	205.4	273.2	2220.4	5060.8	5832.0
75°	89.1	89.1	94.9	147.3	156.9	149.2	176.3	1325.3	3629.0	4192.8
77.5°	83.3	67.8	60.1	94.9	85.3	106.6	104.6	589.0	1573.3	1701.2
80°	65.9	48.4	40.7	60.1	58.1	71.7	62.0	48.4	71.7	69.8
82.5°	40.7	31.0	29.1	36.8	32.9	36.8	29.1	7.8	7.8	7.8
85°	19.4	17.4	15.5	15.5	17.4	15.5	11.6	3.9	1.9	1.9
87.5°	9.7	9.7	7.8	5.8	7.8	7.8	5.8	1.9	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

(END OF REPORT)