

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: P638699

Luminaire Tested: GWS-SA4F-735-U-SLL-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638699
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-38)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4F-735-U-SLL-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (64) 3500K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17994.6 lumens
Efficiency: N/A
Efficacy: 79.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G2

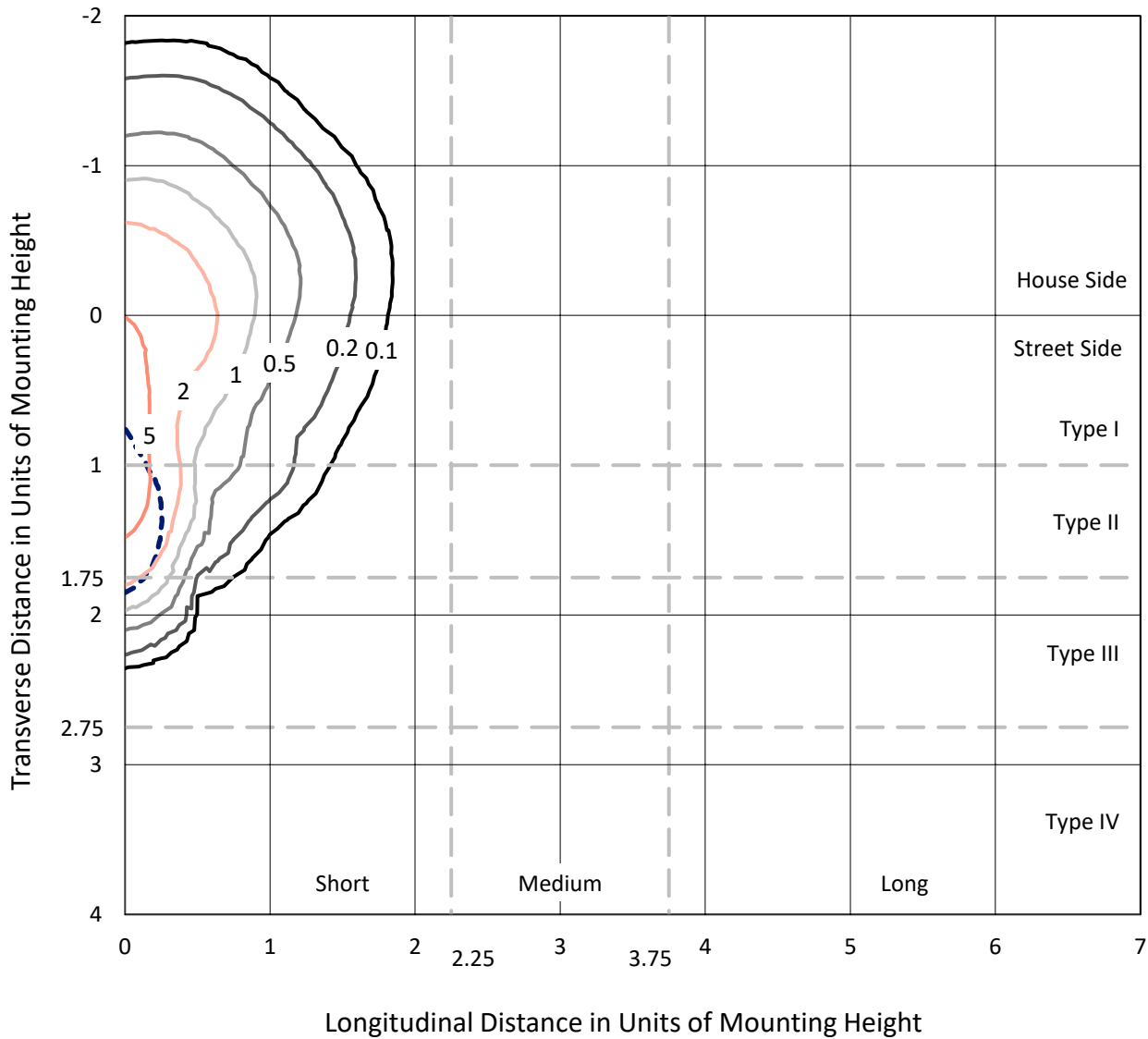
Input Watts (W): 225.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

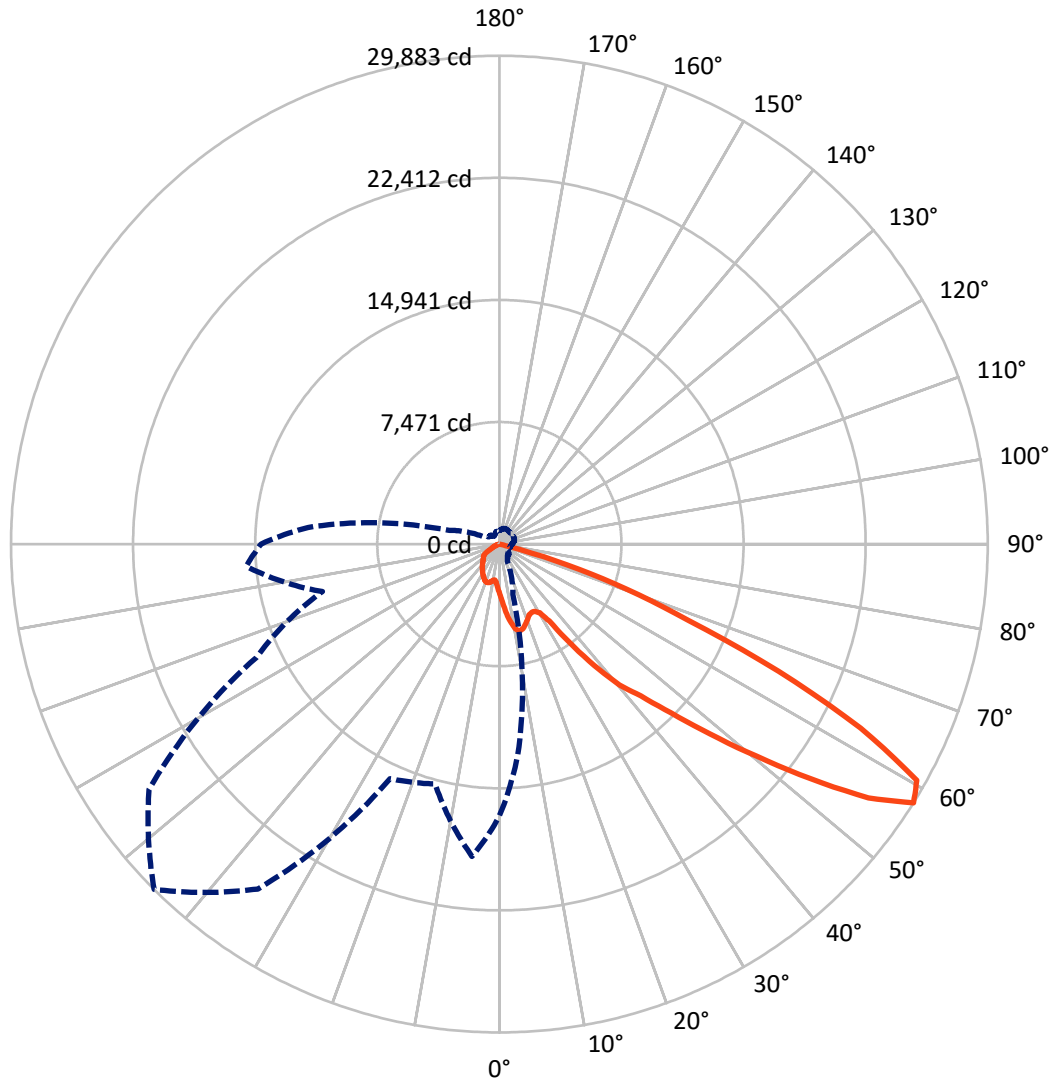
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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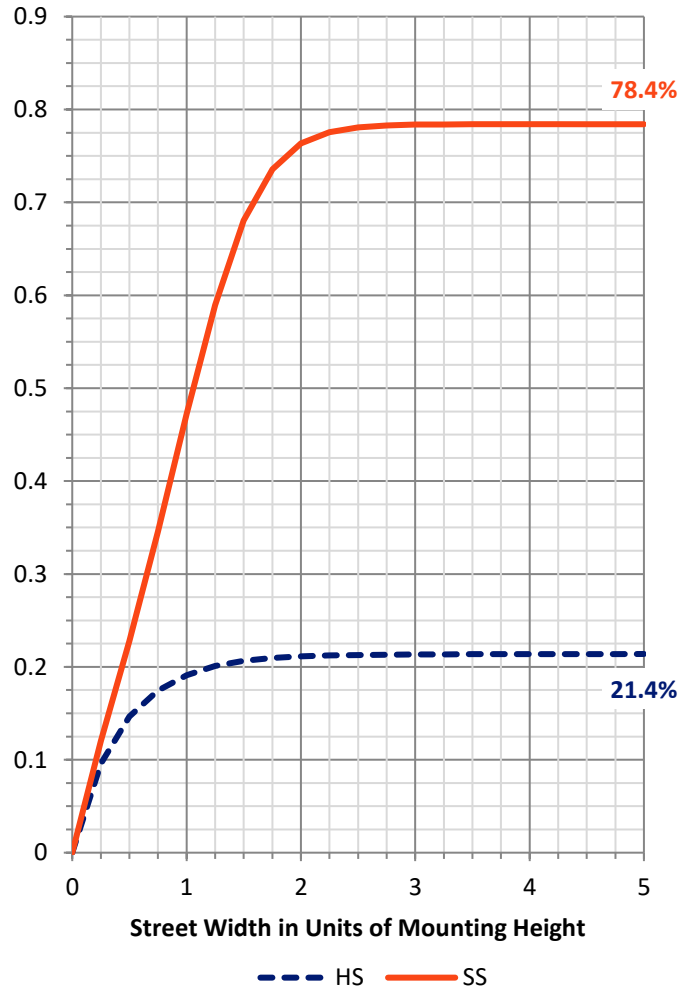
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3876.6	0.0	3876.6
	% Fixture	21.5	0.0	21.5
Street Side	Lumens	14118.0	0.0	14118.0
	% Fixture	78.5	0.0	78.5
Total	Lumens	17994.6	0.0	17994.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.2	1.7
10°-20°	994.4	5.5
20°-30°	1613.8	9.0
30°-40°	2476.8	13.8
40°-50°	3955.6	22.0
50°-60°	5538.6	30.8
60°-70°	2839.8	15.8
70°-80°	273.4	1.5
80°-90°	0.0	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°	17994.6	100.0
0°-180°	17994.6	100.0

Coefficient of Utilization



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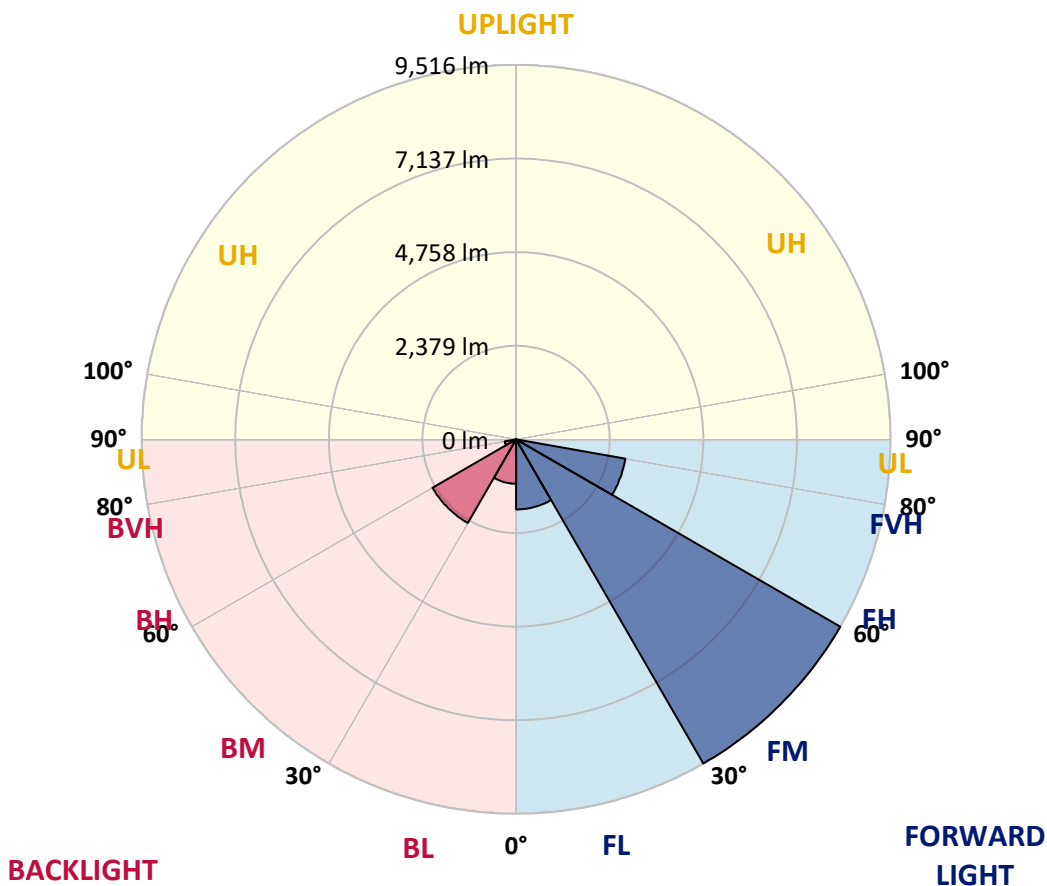
CATALOG NUMBER: GWS-SA4F-735-U-SLL-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1781.6	9.9			
FM (30°-60°)	9516.0	52.9			
FH (60°-80°)	2820.4	15.7			G2/5000
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	1128.8	6.3	B3/2500		
BM (30°-60°)	2455.0	13.6	B2/2500		
BH (60°-80°)	292.8	1.6	B1/500		G1/500
BVH (80°-90°)	0.0	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-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5
2.5°	3396.7	3389.5	3365.5	3283.7	3233.2	3153.8	3096.0	3021.5	2939.7	2889.2	2838.6
5°	3757.6	3738.3	3673.4	3485.8	3341.4	3185.0	3060.0	2922.8	2776.1	2679.9	2590.9
7.5°	4104.0	4075.1	3988.5	3671.0	3452.1	3228.3	3050.3	2850.7	2643.8	2499.4	2388.8
10°	4443.2	4378.2	4241.1	3851.4	3555.5	3286.1	3076.8	2848.3	2605.3	2422.5	2299.8
12.5°	4722.2	4674.1	4486.5	4022.2	3642.1	3298.1	3040.7	2829.0	2665.4	2542.7	2429.7
15°	4962.8	4909.9	4731.9	4176.2	3716.7	3250.0	2889.2	2703.9	2730.4	2778.5	2682.3
17.5°	5184.1	5128.8	4936.3	4303.7	3745.6	3132.1	2677.5	2588.5	2735.2	2915.6	2879.5
20°	5412.7	5350.1	5114.4	4407.1	3735.9	2946.9	2463.4	2489.8	2696.7	2903.6	2922.8
22.5°	5679.7	5614.7	5340.5	4539.4	3728.7	2725.6	2278.1	2403.2	2624.5	2800.1	2833.8
25°	6033.3	5956.3	5655.6	4734.3	3748.0	2523.5	2145.8	2319.0	2501.8	2660.6	2679.9
27.5°	6500.0	6401.4	6018.9	4974.8	3788.9	2364.7	2088.1	2203.6	2345.5	2487.4	2504.3
30°	7108.6	6983.5	6435.0	5184.1	3769.6	2254.1	2049.6	2088.1	2172.3	2287.7	2290.2
32.5°	7820.7	7649.9	6901.7	5364.5	3603.6	2172.3	1996.7	1970.2	1989.5	2078.5	2095.3
35°	8657.8	8436.5	7416.5	5535.3	3300.5	2013.5	1900.4	1811.4	1804.2	1847.5	1888.4
37.5°	9617.7	9353.1	8066.1	5754.3	2942.1	1847.5	1758.5	1669.5	1631.0	1652.7	1715.2
40°	10503.0	10209.5	8744.4	6018.9	2576.4	1698.4	1592.5	1501.1	1455.4	1462.6	1539.6
42.5°	11542.2	11239.1	9574.4	6365.3	2273.3	1597.3	1419.3	1325.5	1265.4	1299.0	1388.0
45°	13120.3	12776.3	10784.4	6666.0	2032.8	1573.3	1267.8	1135.5	1106.6	1164.3	1270.2
47.5°	15275.7	14854.7	12446.7	6848.8	1828.3	1594.9	1161.9	981.5	988.7	1053.7	1159.5
50°	17414.3	16959.7	14368.8	6608.3	1659.9	1551.6	1109.0	861.2	906.9	964.7	1060.9
52.5°	18884.2	18292.4	15304.6	5913.0	1505.9	1388.0	1104.2	748.1	834.8	854.0	935.8
55°	18941.9	18213.0	14825.9	4662.1	1296.6	1171.5	1053.7	654.3	755.4	762.6	832.3
57.5°	16603.6	15944.5	12956.7	3201.9	1152.3	858.8	839.6	572.5	620.7	680.8	724.1
60°	12631.9	12071.4	9689.9	1467.4	875.6	546.1	574.9	493.2	464.3	553.3	596.6
62.5°	7736.5	7378.1	5812.0	649.5	558.1	291.1	348.8	392.1	348.8	382.5	418.6
65°	3072.0	2913.2	2206.0	276.6	228.5	146.7	158.8	228.5	245.4	269.4	303.1
67.5°	534.0	505.2	370.5	122.7	93.8	89.0	77.0	105.8	149.1	166.0	192.4
70°	69.8	67.4	60.1	50.5	48.1	43.3	33.7	67.4	101.0	105.8	122.7
72.5°	16.8	14.4	14.4	12.0	14.4	4.8	4.8	36.1	72.2	74.6	86.6
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	45.7	50.5	60.1
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5
2.5°	2797.7	2749.6	2732.8	2708.7	2677.5	2687.1	2643.8	2629.3	2651.0	2679.9	2672.6
5°	2542.7	2489.8	2453.7	2398.4	2388.8	2367.1	2352.7	2333.5	2357.5	2391.2	2398.4
7.5°	2340.7	2295.0	2258.9	2242.0	2230.0	2220.4	2191.5	2177.1	2177.1	2191.5	2203.6
10°	2254.1	2220.4	2213.2	2218.0	2237.2	2234.8	2208.4	2189.1	2165.1	2153.0	2167.5
12.5°	2374.4	2319.0	2309.4	2311.8	2335.9	2333.5	2304.6	2280.5	2275.7	2280.5	2326.2
15°	2578.8	2494.6	2432.1	2420.1	2432.1	2427.3	2405.6	2391.2	2398.4	2468.2	2545.2
17.5°	2761.7	2631.8	2518.7	2475.4	2473.0	2465.8	2444.1	2439.3	2475.4	2605.3	2718.4
20°	2814.6	2687.1	2525.9	2470.6	2458.5	2451.3	2427.3	2434.5	2480.2	2636.6	2732.8
22.5°	2744.8	2622.1	2453.7	2398.4	2388.8	2386.4	2362.3	2371.9	2410.4	2547.6	2626.9
25°	2612.5	2509.1	2333.5	2285.3	2285.3	2280.5	2258.9	2263.7	2287.7	2408.0	2485.0
27.5°	2451.3	2352.7	2206.0	2157.8	2165.1	2172.3	2145.8	2138.6	2157.8	2270.9	2316.6
30°	2266.1	2196.3	2080.9	2037.6	2035.2	2064.0	2027.9	2018.3	2044.8	2133.8	2143.4
32.5°	2085.7	2052.0	1970.2	1936.5	1938.9	1943.7	1924.5	1924.5	1948.6	1996.7	1994.3
35°	1910.1	1888.4	1874.0	1849.9	1847.5	1837.9	1837.9	1842.7	1869.2	1886.0	1854.7
37.5°	1741.7	1763.3	1780.2	1756.1	1736.9	1736.9	1736.9	1758.5	1782.6	1775.4	1722.4
40°	1592.5	1638.2	1691.2	1664.7	1619.0	1616.6	1626.2	1662.3	1698.4	1655.1	1607.0
42.5°	1465.0	1522.8	1597.3	1582.9	1532.4	1525.2	1532.4	1578.1	1607.0	1551.6	1498.7
45°	1339.9	1412.1	1501.1	1501.1	1445.8	1438.6	1441.0	1501.1	1517.9	1453.0	1385.6
47.5°	1234.1	1313.5	1407.3	1407.3	1361.6	1347.1	1359.2	1421.7	1433.8	1342.3	1279.8
50°	1133.0	1219.7	1323.1	1315.9	1284.6	1272.6	1294.2	1361.6	1347.1	1246.1	1181.2
52.5°	1005.6	1097.0	1238.9	1246.1	1229.3	1231.7	1258.1	1301.4	1260.5	1137.9	1082.5
55°	890.1	983.9	1125.8	1164.3	1164.3	1161.9	1173.9	1207.6	1173.9	1027.2	959.8
57.5°	765.0	844.4	962.2	971.9	979.1	952.6	969.5	1015.2	998.3	873.2	834.8
60°	627.9	695.2	762.6	769.8	738.5	683.2	714.5	767.4	779.4	685.6	642.3
62.5°	445.0	510.0	589.4	589.4	558.1	502.8	543.7	589.4	572.5	476.3	449.9
65°	332.0	392.1	452.3	478.7	452.3	413.8	445.0	478.7	452.3	372.9	334.4
67.5°	214.1	255.0	291.1	312.7	317.5	312.7	327.2	317.5	286.3	233.3	211.7
70°	129.9	151.6	170.8	190.0	204.5	211.7	218.9	197.3	166.0	137.1	129.9
72.5°	93.8	113.1	129.9	144.3	161.2	166.0	166.0	151.6	122.7	96.2	89.0
75°	65.0	81.8	96.2	105.8	120.3	125.1	125.1	113.1	91.4	69.8	62.5
77.5°	2.4	16.8	16.8	14.4	19.2	24.1	24.1	28.9	26.5	19.2	16.8
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5
2.5°	2687.1	2773.7	2797.7	2886.7	2966.1	3045.5	3141.7	3199.5	3286.1	3346.2	3379.9
5°	2422.5	2494.6	2581.2	2713.5	2850.7	3002.2	3185.0	3343.8	3543.5	3690.2	3738.3
7.5°	2230.0	2323.8	2424.9	2590.9	2778.5	2980.6	3238.0	3497.8	3803.3	4003.0	4130.5
10°	2193.9	2290.2	2424.9	2588.5	2785.7	3016.7	3331.8	3668.6	4051.1	4294.0	4438.4
12.5°	2367.1	2470.6	2528.3	2602.9	2752.0	3009.4	3413.6	3841.8	4291.6	4556.3	4710.2
15°	2622.1	2713.5	2619.7	2525.9	2622.1	2932.5	3459.3	3986.1	4503.3	4808.8	4967.6
17.5°	2797.7	2805.0	2600.5	2400.8	2427.3	2792.9	3476.1	4130.5	4729.5	5049.4	5215.4
20°	2780.9	2723.2	2516.3	2295.0	2213.2	2612.5	3456.9	4258.0	4958.0	5292.4	5456.0
22.5°	2651.0	2583.6	2408.0	2191.5	2032.8	2398.4	3423.2	4373.4	5167.3	5547.4	5701.3
25°	2494.6	2422.5	2278.1	2088.1	1917.3	2191.5	3396.7	4532.2	5431.9	5879.3	5999.6
27.5°	2311.8	2249.3	2126.6	1989.5	1869.2	2035.2	3389.5	4741.5	5751.8	6283.5	6367.7
30°	2133.8	2076.1	1979.8	1900.4	1849.9	1943.7	3365.5	4965.2	6134.3	6747.8	6839.2
32.5°	1963.0	1905.3	1845.1	1833.1	1835.5	1910.1	3283.7	5186.5	6589.0	7421.4	7488.7
35°	1816.2	1748.9	1724.8	1753.7	1806.6	1852.3	3052.7	5369.4	7077.3	8155.1	8210.4
37.5°	1676.7	1609.4	1607.0	1676.7	1734.5	1763.3	2780.9	5549.8	7736.5	8900.8	8970.6
40°	1549.2	1481.9	1505.9	1590.1	1635.8	1650.3	2451.3	5824.0	8434.1	9687.5	9649.0
42.5°	1441.0	1371.2	1385.6	1493.9	1534.8	1573.3	2148.2	6052.6	9105.3	10433.2	10421.2
45°	1335.1	1282.2	1272.6	1390.5	1426.5	1580.5	1926.9	6228.2	9968.9	11383.4	11402.7
47.5°	1231.7	1190.8	1193.2	1243.7	1332.7	1616.6	1739.3	6343.6	11222.2	12889.3	12555.0
50°	1137.9	1106.6	1133.0	1075.3	1272.6	1570.9	1578.1	6319.6	12622.3	14332.7	13661.5
52.5°	1034.4	1027.2	1039.2	899.7	1176.4	1385.6	1426.5	5999.6	13279.0	15319.0	14936.5
55°	928.6	926.2	829.9	719.3	983.9	1106.6	1222.1	5006.1	13257.4	15843.4	16307.7
57.5°	803.5	784.2	630.3	587.0	765.0	769.8	1113.8	3278.9	11749.1	14587.7	15550.0
60°	608.6	594.2	461.9	476.3	534.0	493.2	887.7	1633.4	8780.5	11364.2	12449.1
62.5°	421.0	401.7	344.0	368.1	344.0	281.5	543.7	808.3	5318.8	7176.0	8159.9
65°	307.9	286.3	235.8	202.1	161.2	161.2	206.9	310.3	2059.2	3050.3	3678.2
67.5°	190.0	180.4	139.5	101.0	98.6	105.8	108.3	154.0	332.0	529.2	647.1
70°	122.7	113.1	93.8	65.0	60.1	62.5	65.0	72.2	84.2	91.4	110.7
72.5°	84.2	79.4	67.4	36.1	28.9	31.3	33.7	33.7	40.9	38.5	45.7
75°	60.1	55.3	48.1	16.8	9.6	12.0	14.4	12.0	14.4	9.6	12.0
77.5°	16.8	16.8	12.0	2.4	0.0	2.4	4.8	4.8	2.4	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.4	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	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



REPORT NUMBER: P638699

CATALOG NUMBER: GWS-SA4F-735-U-SLL-W-GRSBK

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5	3057.5
2.5°	3466.5	3521.8	3543.5	3512.2	3538.7	3495.4	3478.5	3413.6	3408.8	3396.7
5°	3933.2	4058.3	4132.9	4178.6	4125.6	4067.9	3981.3	3832.2	3786.5	3757.6
7.5°	4392.7	4587.5	4715.0	4775.2	4760.7	4642.9	4486.5	4236.3	4147.3	4104.0
10°	4792.0	5030.2	5184.1	5258.7	5227.4	5124.0	4900.3	4587.5	4469.7	4443.2
12.5°	5071.1	5290.0	5395.8	5460.8	5463.2	5422.3	5210.6	4895.4	4755.9	4722.2
15°	5246.7	5340.5	5342.9	5381.4	5448.7	5540.2	5441.5	5162.5	5013.3	4962.8
17.5°	5357.3	5253.9	5148.0	5157.7	5268.3	5511.3	5612.3	5398.2	5239.5	5184.1
20°	5436.7	5109.5	4912.3	4914.7	5027.8	5395.8	5730.2	5626.8	5463.2	5412.7
22.5°	5487.2	4982.0	4700.6	4693.4	4813.7	5258.7	5838.5	5898.6	5737.4	5679.7
25°	5590.7	4921.9	4573.1	4614.0	4719.8	5215.4	5985.2	6259.4	6110.3	6033.3
27.5°	5775.9	4982.0	4561.1	4654.9	4775.2	5342.9	6240.2	6740.6	6586.6	6500.0
30°	6095.9	5208.2	4746.3	4876.2	5020.5	5677.3	6668.4	7411.7	7190.4	7108.6
32.5°	6610.7	5677.3	5318.8	5597.9	5737.4	6225.8	7310.7	8164.7	7984.3	7820.7
35°	7320.3	6747.8	6706.9	7356.4	7322.7	7265.0	8099.7	9088.5	8816.6	8657.8
37.5°	8297.0	8470.2	8773.3	9418.0	9396.4	8956.1	9136.6	9961.7	9822.2	9617.7
40°	9516.7	9884.7	10399.5	11323.3	11034.6	10481.3	10409.1	10856.6	10743.5	10503.0
42.5°	10235.9	10871.0	11852.5	12682.5	12451.5	11484.5	11402.7	12052.2	11804.4	11542.2
45°	10570.3	11674.5	13599.0	14722.4	14022.4	12150.8	12119.5	13611.0	13471.5	13120.3
47.5°	10724.3	12485.2	15643.8	17344.6	16035.9	12735.4	12622.3	15872.3	15689.5	15275.7
50°	10895.1	13603.8	18107.1	20382.9	18468.0	13396.9	13478.7	17979.6	17902.7	17414.3
52.5°	11270.4	14787.4	21140.6	23856.6	21417.3	14433.7	14948.6	19966.7	19447.1	18884.2
55°	11833.3	16076.8	24296.8	27404.9	24426.7	15826.6	16538.7	21022.8	19564.9	18941.9
57.5°	11210.2	16399.1	26166.0	29882.7	25761.8	15831.4	15193.9	19192.1	17207.4	16603.6
60°	8896.0	15256.5	25446.7	29346.2	24624.0	14058.5	11633.6	14984.6	13036.1	12631.9
62.5°	6014.1	12795.5	22401.2	24818.8	21075.7	11058.7	7560.9	9745.2	8070.9	7736.5
65°	3295.7	9545.5	18099.9	18775.9	16495.4	7724.5	3889.9	4229.1	3221.1	3072.0
67.5°	909.3	6644.3	13317.5	12456.3	11573.5	5030.2	1005.6	755.4	538.9	534.0
70°	228.5	4395.1	7979.5	8224.8	7096.6	3221.1	192.4	91.4	72.2	69.8
72.5°	96.2	1890.8	3786.5	4351.8	3632.5	1491.5	69.8	26.5	21.7	16.8
75°	12.0	151.6	322.4	488.3	334.4	161.2	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	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

(END OF REPORT)