

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: P635074

Luminaire Tested: GWS-SA3D-722-U-SLR-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P635074
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-43)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3D-722-U-SLR-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR RIGHT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (48) 2200K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10141.9 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

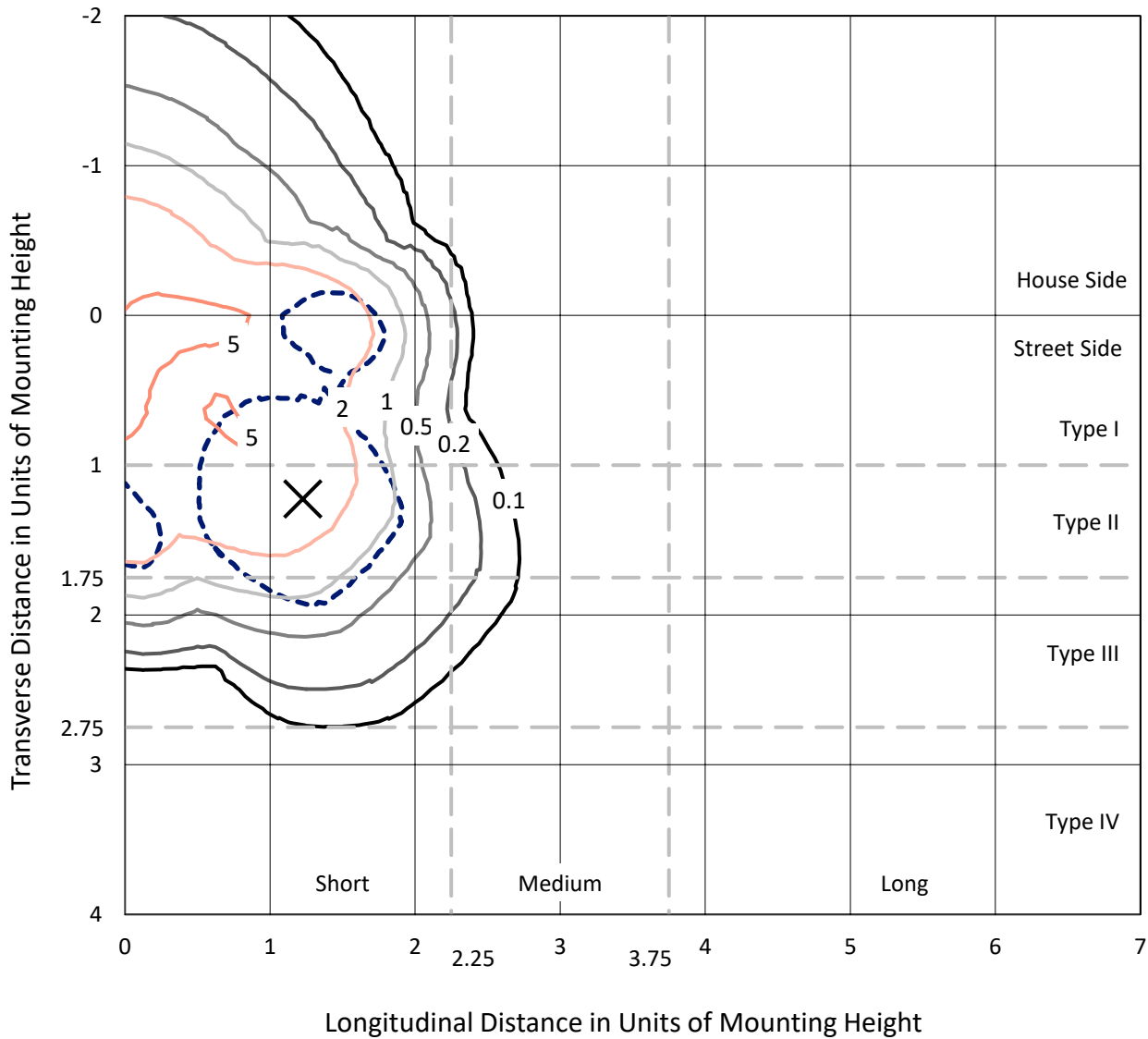
Input Watts (W): 120.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P635074
 CATALOG NUMBER: GWS-SA3D-722-U-SLR-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination

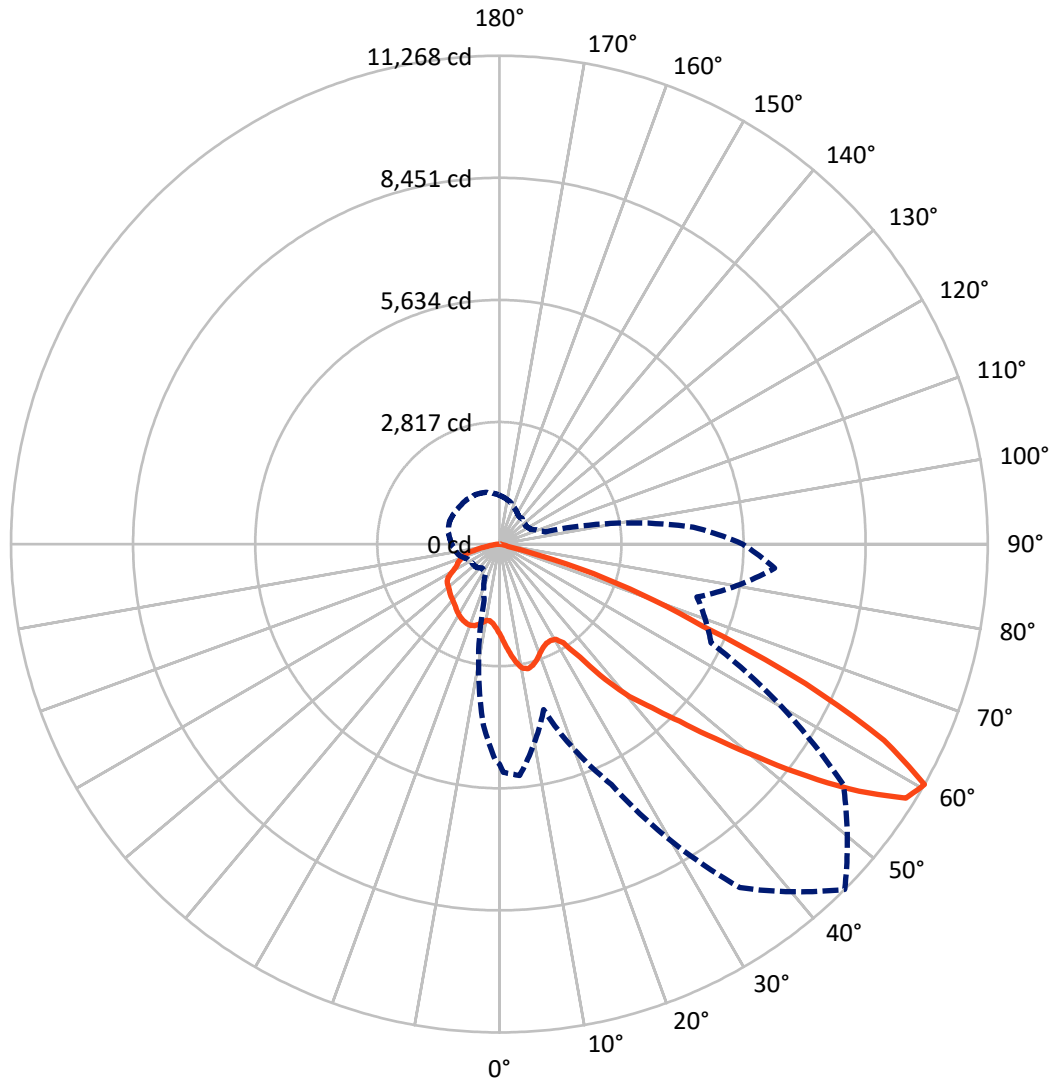
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.9 fc
 Type III - Short - N/A

REPORT NUMBER: P635074
CATALOG NUMBER: GWS-SA3D-722-U-SLR-W-GRSWH

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

REPORT NUMBER: P635074

CATALOG NUMBER: GWS-SA3D-722-U-SLR-W-GRSWH

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3555.1	0.0	3555.1
	% Fixture	35.1	0.0	35.1
Street Side	Lumens	6586.8	0.0	6586.8
	% Fixture	64.9	0.0	64.9
Total	Lumens	10141.9	0.0	10141.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.3	2.0
10°-20°	642.3	6.3
20°-30°	1043.4	10.3
30°-40°	1471.5	14.5
40°-50°	2033.6	20.1
50°-60°	2617.9	25.8
60°-70°	1658.7	16.4
70°-80°	425.6	4.2
80°-90°	45.5	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°	10141.9	100.0
0°-180°	10141.9	100.0

Coefficient of Utilization



REPORT NUMBER: P635074

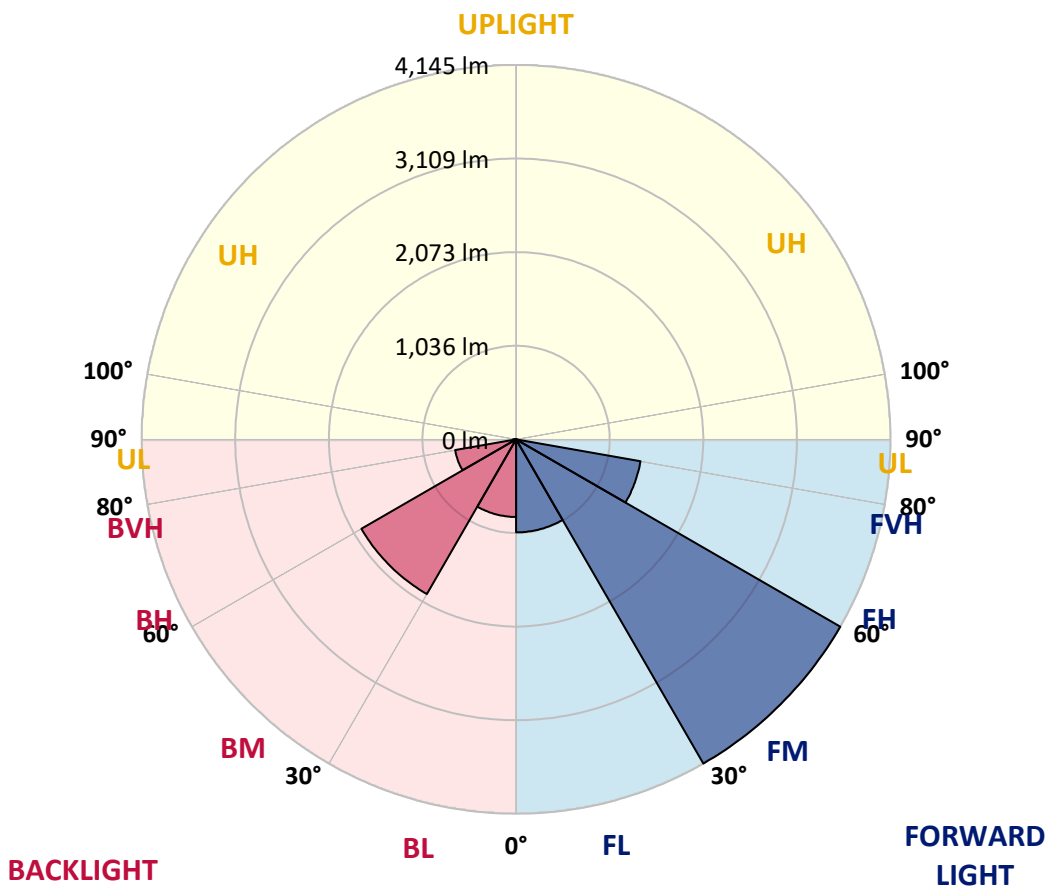
CATALOG NUMBER: GWS-SA3D-722-U-SLR-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1029.8	10.2			
FM (30°-60°)	4145.4	40.9			
FH (60°-80°)	1399.2	13.8			G1/1800
FVH (80°-90°)	12.4	0.1			G1/100
BL (0°-30°)	859.3	8.5	B2/1000		
BM (30°-60°)	1977.6	19.5	B2/2500		
BH (60°-80°)	685.1	6.8	B2/1000		G2/1000
BVH (80°-90°)	33.2	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





REPORT NUMBER: P635074

CATALOG NUMBER: GWS-SA3D-722-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4
2.5°	2179.2	2194.0	2203.3	2221.0	2252.6	2270.2	2289.7	2268.4	2273.9	2271.2	2236.8
5°	2308.3	2326.0	2350.1	2402.2	2460.7	2493.3	2523.9	2519.3	2490.5	2442.1	2407.8
7.5°	2429.1	2449.6	2491.4	2576.0	2662.4	2712.6	2749.7	2725.6	2701.4	2625.2	2538.8
10°	2523.9	2536.0	2592.7	2706.1	2806.4	2863.1	2908.6	2903.1	2869.6	2784.1	2668.0
12.5°	2613.1	2621.5	2682.8	2796.2	2886.3	2911.4	2948.6	2960.7	2949.5	2885.4	2771.1
15°	2708.8	2724.6	2781.3	2867.8	2908.6	2882.6	2895.6	2929.1	2960.7	2960.7	2855.7
17.5°	2798.1	2812.0	2869.6	2906.8	2867.8	2799.0	2802.7	2845.5	2920.7	2999.7	2932.8
20°	2877.0	2890.1	2946.7	2911.4	2787.8	2687.5	2684.7	2736.7	2858.5	3024.8	3015.5
22.5°	2963.5	2982.1	3029.4	2915.1	2713.5	2586.2	2585.3	2639.2	2803.6	3049.9	3110.3
25°	3086.1	3114.9	3139.1	2947.7	2673.5	2520.2	2532.3	2583.4	2786.0	3090.8	3250.6
27.5°	3268.3	3291.5	3289.6	3015.5	2671.7	2493.3	2518.3	2577.8	2817.6	3163.3	3398.4
30°	3465.3	3477.4	3457.8	3110.3	2714.4	2510.0	2547.2	2617.8	2897.5	3283.1	3615.8
32.5°	3683.7	3698.5	3661.4	3252.5	2813.9	2633.6	2715.4	2749.7	3009.9	3456.0	3846.3
35°	3934.6	3963.4	3886.2	3440.2	3106.6	3084.3	3203.2	3158.6	3248.8	3660.4	4092.5
37.5°	4198.5	4199.4	4088.8	3718.0	3680.9	3719.0	3956.9	3817.5	3755.2	3888.1	4343.5
40°	4422.4	4416.9	4246.8	4092.5	4180.8	4332.3	4619.4	4405.7	4242.2	4193.8	4551.6
42.5°	4646.4	4626.0	4454.0	4330.4	4525.6	4836.9	5161.2	4899.2	4554.4	4471.7	4757.0
45°	4932.6	4926.1	4718.9	4425.2	4836.9	5401.9	5832.2	5407.5	4739.3	4633.4	5099.0
47.5°	5394.5	5362.9	4977.2	4417.8	5128.7	6154.6	6698.2	6047.7	4868.5	4637.1	5650.9
50°	5846.1	5807.1	5285.7	4416.9	5429.8	6935.2	7720.4	6825.6	5000.5	4659.4	6212.2
52.5°	6302.4	6302.4	5792.2	4521.9	5745.7	7806.9	8901.6	7794.8	5225.3	4951.2	6902.7
55°	6573.7	6646.2	6361.8	4699.4	6115.6	8832.8	10069.7	8841.2	5572.9	5478.1	7540.2
57.5°	6229.0	6364.6	6323.7	4575.8	6334.0	9586.4	11060.3	9634.8	5744.8	5540.4	7444.5
60°	5075.7	5264.4	5358.2	3951.3	6118.4	9673.8	11267.5	9686.8	5389.8	4717.9	6376.7
62.5°	3374.2	3529.4	3672.5	2823.1	5296.9	8702.7	9965.6	8705.5	4501.4	3521.0	4417.8
65°	1655.0	1770.3	1924.5	1669.0	4138.1	7271.6	7769.7	7034.6	3256.2	1971.0	2253.5
67.5°	433.0	465.6	486.9	647.7	2964.4	5224.4	5067.4	5145.4	2091.8	644.0	589.2
70°	224.9	226.7	225.8	267.6	2003.5	3320.3	3492.2	3231.1	1459.9	269.5	232.3
72.5°	160.8	161.7	158.9	180.3	967.4	1902.2	1971.0	1949.6	764.8	159.8	158.9
75°	105.0	105.9	104.1	105.9	145.9	216.5	199.8	210.0	127.3	101.3	101.3
77.5°	62.3	63.2	62.3	64.1	62.3	62.3	57.6	57.6	54.8	54.8	55.8
80°	41.8	41.8	40.9	42.7	39.0	39.0	37.2	36.2	33.5	32.5	32.5
82.5°	25.1	26.0	25.1	25.1	23.2	23.2	21.4	20.4	17.7	17.7	16.7
85°	13.0	13.0	12.1	12.1	10.2	9.3	7.4	7.4	5.6	4.6	4.6
87.5°	1.9	1.9	0.9	0.9	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: P635074

CATALOG NUMBER: GWS-SA3D-722-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4
2.5°	2227.5	2208.9	2181.0	2154.1	2129.0	2103.0	2073.2	2042.6	2016.5	1989.6	1975.6
5°	2362.2	2324.1	2251.6	2187.5	2129.9	2082.5	2031.4	1987.7	1946.8	1913.4	1896.7
7.5°	2484.0	2424.5	2314.8	2213.5	2135.5	2070.4	1999.8	1934.8	1879.9	1839.0	1823.2
10°	2596.4	2525.8	2381.7	2253.5	2162.4	2089.9	2003.5	1915.2	1842.8	1788.9	1775.9
12.5°	2687.5	2606.6	2434.7	2286.0	2178.2	2100.2	2024.0	1947.8	1876.2	1806.5	1795.4
15°	2768.3	2672.6	2474.7	2306.5	2172.7	2073.2	2009.1	1999.8	1999.8	1920.8	1898.5
17.5°	2838.0	2733.0	2507.2	2315.8	2137.3	1993.3	1954.3	2035.1	2126.2	2069.5	2019.3
20°	2917.9	2790.6	2534.1	2315.8	2072.3	1892.0	1888.3	2025.8	2160.6	2161.5	2108.5
22.5°	2998.8	2857.5	2565.7	2307.4	1983.1	1774.9	1843.7	1988.7	2108.5	2159.6	2123.4
25°	3129.8	2950.5	2615.9	2300.9	1879.0	1695.0	1803.7	1939.4	2040.7	2094.6	2071.4
27.5°	3296.2	3073.1	2692.1	2311.1	1775.9	1647.6	1761.0	1875.3	1967.3	2014.7	1997.9
30°	3482.0	3214.4	2773.9	2328.8	1701.5	1623.5	1709.9	1801.9	1883.6	1931.0	1923.6
32.5°	3719.0	3367.7	2844.5	2304.6	1659.7	1611.4	1656.0	1722.0	1800.9	1830.7	1837.2
35°	4002.4	3536.8	2898.4	2209.8	1621.6	1598.4	1597.4	1638.3	1694.1	1741.5	1746.1
37.5°	4263.5	3734.8	2957.9	2047.2	1552.8	1565.8	1528.7	1552.8	1607.7	1655.0	1673.6
40°	4521.9	3935.5	3040.6	1840.0	1462.7	1493.4	1449.7	1466.4	1510.1	1572.3	1602.1
42.5°	4772.8	4116.7	3128.0	1628.1	1372.5	1392.1	1359.5	1376.3	1421.8	1499.9	1533.3
45°	5046.0	4362.0	3195.8	1428.3	1294.5	1286.1	1260.1	1284.3	1353.0	1438.5	1478.5
47.5°	5562.7	4748.6	3240.4	1295.4	1252.7	1192.3	1162.5	1214.6	1292.6	1379.1	1427.4
50°	6193.6	5308.0	3227.4	1210.9	1216.4	1095.6	1085.4	1154.2	1237.8	1327.9	1380.9
52.5°	6693.6	5857.2	3079.6	1130.0	1145.8	1034.3	1004.6	1104.9	1184.8	1276.8	1331.7
55°	7075.5	6042.2	2626.1	1034.3	1030.6	989.7	927.4	1053.8	1131.9	1217.4	1276.8
57.5°	6764.2	5630.5	1946.8	902.3	880.0	901.4	841.0	967.4	1066.8	1151.4	1204.3
60°	5613.8	4489.3	1084.5	799.2	736.0	788.0	778.7	876.3	996.2	1085.4	1130.9
62.5°	3811.0	2989.5	643.1	631.9	596.6	670.9	720.2	784.3	902.3	974.8	1017.6
65°	1899.4	1452.5	427.5	473.0	477.6	552.0	644.9	715.5	814.0	888.4	931.1
67.5°	551.1	451.6	325.2	361.5	411.7	471.1	545.5	629.1	724.8	813.1	863.3
70°	237.9	240.7	258.3	301.1	350.3	411.7	486.0	567.8	648.6	716.5	754.6
72.5°	168.2	174.7	194.2	237.9	284.4	342.9	417.2	496.2	554.8	623.5	663.5
75°	107.8	112.4	128.2	161.7	196.1	252.8	323.4	395.9	456.3	505.5	543.6
77.5°	59.5	60.4	73.4	92.9	116.2	152.4	204.4	261.1	305.7	333.6	368.0
80°	34.4	34.4	40.9	53.0	66.9	89.2	118.0	145.9	172.8	190.5	207.2
82.5°	18.6	18.6	21.4	28.8	36.2	49.3	66.0	79.9	96.6	105.9	117.1
85°	5.6	5.6	7.4	10.2	13.0	18.6	26.0	33.5	40.9	47.4	53.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
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: P635074

CATALOG NUMBER: GWS-SA3D-722-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4
2.5°	1972.9	1959.8	1952.4	1943.1	1945.9	1937.5	1932.9	1935.7	1919.0	1935.7	1952.4
5°	1890.2	1871.6	1856.7	1844.6	1839.0	1827.9	1821.4	1821.4	1811.2	1827.9	1848.3
7.5°	1817.7	1802.8	1795.4	1787.9	1779.6	1769.3	1758.2	1754.5	1748.0	1765.6	1783.3
10°	1769.3	1771.2	1775.9	1786.1	1784.2	1777.7	1761.0	1751.7	1751.7	1772.1	1799.1
12.5°	1791.6	1811.2	1822.3	1840.9	1844.6	1839.0	1822.3	1814.9	1833.5	1864.1	1908.7
15°	1878.1	1891.1	1900.4	1915.2	1914.3	1909.7	1896.7	1902.2	1963.6	2023.0	2063.0
17.5°	1971.9	1957.1	1955.2	1964.5	1967.3	1961.7	1954.3	1979.4	2080.7	2136.4	2156.9
20°	2039.8	1988.7	1977.5	1981.2	1988.7	1985.9	1985.9	2026.8	2131.8	2157.8	2131.8
22.5°	2060.2	1987.7	1971.0	1971.9	1982.2	1983.1	1987.7	2030.5	2091.8	2092.7	2052.8
25°	2027.7	1958.0	1945.9	1947.8	1959.8	1958.9	1960.8	1984.9	2011.9	2000.7	1971.0
27.5°	1966.4	1906.0	1902.2	1912.5	1928.3	1919.9	1914.3	1920.8	1933.8	1919.9	1893.9
30°	1896.7	1845.5	1847.4	1866.9	1883.6	1869.7	1855.8	1859.5	1860.4	1845.5	1815.8
32.5°	1823.2	1785.1	1791.6	1812.1	1831.6	1816.7	1801.9	1800.0	1782.4	1764.7	1735.9
35°	1749.8	1735.0	1743.3	1760.1	1776.8	1764.7	1755.4	1749.8	1711.7	1685.7	1661.6
37.5°	1682.9	1694.1	1708.9	1719.2	1724.7	1723.8	1718.2	1705.2	1655.0	1624.4	1592.8
40°	1623.5	1657.8	1673.6	1678.3	1686.6	1684.8	1683.9	1665.3	1599.3	1566.8	1530.5
42.5°	1569.6	1617.9	1644.8	1649.5	1654.1	1655.0	1652.3	1625.3	1550.0	1511.9	1477.6
45°	1517.5	1580.7	1615.1	1610.4	1616.9	1616.9	1619.7	1584.4	1501.7	1462.7	1426.4
47.5°	1472.0	1546.3	1577.9	1572.3	1576.1	1578.8	1581.6	1540.7	1448.7	1411.6	1374.4
50°	1430.2	1509.1	1536.1	1538.0	1538.0	1544.5	1543.5	1503.6	1404.1	1364.2	1327.0
52.5°	1385.6	1471.0	1499.9	1511.9	1515.7	1518.4	1505.4	1459.0	1358.6	1310.3	1275.9
55°	1333.5	1432.0	1458.0	1473.8	1481.3	1479.4	1461.8	1414.4	1312.1	1263.8	1224.8
57.5°	1254.5	1348.4	1385.6	1393.0	1405.1	1397.6	1377.2	1337.2	1237.8	1189.5	1149.5
60°	1168.1	1235.9	1265.7	1272.2	1262.9	1265.7	1262.9	1224.8	1138.4	1100.3	1059.4
62.5°	1054.7	1115.1	1146.7	1155.1	1139.3	1149.5	1145.8	1098.4	1012.0	972.0	935.8
65°	969.2	1035.2	1072.4	1077.0	1072.4	1077.0	1064.0	1006.4	924.6	883.7	846.6
67.5°	902.3	970.2	1009.2	1022.2	1017.6	1016.6	996.2	929.3	844.7	800.1	752.7
70°	787.1	846.6	896.8	928.3	928.3	910.7	871.7	809.4	741.6	703.5	666.3
72.5°	697.0	772.2	821.5	854.0	860.5	850.3	795.5	729.5	651.4	613.3	574.3
75°	574.3	647.7	700.7	743.4	751.8	740.6	677.4	612.4	539.9	502.7	463.7
77.5°	383.8	427.5	470.2	509.2	500.9	508.3	465.6	416.3	371.7	343.8	326.2
80°	216.5	245.3	258.3	279.7	279.7	279.7	251.8	228.6	203.5	187.7	170.1
82.5°	122.7	141.3	146.8	164.5	169.1	170.1	151.5	136.6	120.8	112.4	100.4
85°	56.7	66.9	67.8	78.1	81.8	89.2	80.8	70.6	61.3	57.6	50.2
87.5°	1.9	5.6	7.4	13.9	18.6	21.4	23.2	23.2	19.5	17.7	14.9
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: P635074

CATALOG NUMBER: GWS-SA3D-722-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4	2083.4
2.5°	1972.9	1995.2	2021.2	2039.8	2073.2	2101.1	2129.9	2161.5	2184.7	2179.2
5°	1873.4	1910.6	1958.0	2001.7	2063.9	2127.1	2196.8	2268.4	2310.2	2308.3
7.5°	1817.7	1870.6	1928.3	1986.8	2060.2	2151.3	2258.1	2369.7	2426.3	2429.1
10°	1847.4	1904.1	1943.1	1992.4	2069.5	2183.8	2312.0	2445.9	2510.9	2523.9
12.5°	1941.3	1936.6	1933.8	1969.1	2062.1	2207.0	2364.1	2523.9	2597.3	2613.1
15°	2030.5	1934.8	1877.1	1901.3	2028.6	2221.9	2415.2	2609.4	2692.1	2708.8
17.5°	2047.2	1902.2	1795.4	1812.1	1975.6	2226.6	2464.4	2693.1	2782.3	2798.1
20°	2000.7	1860.4	1735.9	1712.7	1908.7	2214.5	2495.1	2762.7	2860.3	2877.0
22.5°	1942.2	1823.2	1691.3	1630.9	1827.0	2202.4	2529.5	2836.2	2948.6	2963.5
25°	1880.9	1775.9	1649.5	1557.5	1734.0	2195.0	2587.1	2932.8	3068.5	3086.1
27.5°	1815.8	1718.2	1613.2	1522.2	1648.5	2204.2	2668.9	3088.9	3243.2	3268.3
30°	1746.1	1660.6	1590.0	1510.1	1590.0	2212.6	2759.0	3248.8	3430.0	3465.3
32.5°	1673.6	1607.7	1565.8	1515.7	1553.8	2193.1	2838.0	3428.1	3653.0	3683.7
35°	1601.1	1553.8	1535.2	1525.9	1505.4	2121.5	2902.1	3609.3	3907.6	3934.6
37.5°	1533.3	1498.0	1492.4	1502.6	1431.1	2004.5	2976.5	3839.8	4157.6	4198.5
40°	1470.1	1437.6	1436.7	1434.8	1349.3	1844.6	3076.8	4074.0	4403.9	4422.4
42.5°	1411.6	1370.7	1378.1	1355.8	1282.4	1671.8	3171.6	4273.8	4633.4	4646.4
45°	1359.5	1305.6	1314.0	1286.1	1250.8	1490.6	3255.3	4509.8	4924.2	4932.6
47.5°	1309.4	1251.7	1228.5	1226.6	1245.2	1323.3	3337.0	4964.2	5379.6	5394.5
50°	1262.9	1200.6	1134.6	1175.5	1210.9	1197.8	3439.3	5451.2	5849.8	5846.1
52.5°	1218.3	1136.5	1042.7	1121.6	1121.6	1104.9	3410.5	5746.7	6238.2	6302.4
55°	1167.2	1033.4	946.9	1031.5	990.6	1021.3	2900.3	5843.3	6482.7	6573.7
57.5°	1065.9	906.0	830.8	876.3	815.0	946.9	2083.4	5363.8	6067.3	6229.0
60°	968.3	812.2	762.9	754.6	674.7	772.2	1350.2	4199.4	4993.9	5075.7
62.5°	854.0	731.3	689.5	625.4	542.7	562.2	817.8	2763.7	3355.6	3374.2
65°	767.6	662.6	582.7	506.5	444.2	408.0	483.2	1332.6	1677.3	1655.0
67.5°	658.9	567.8	491.6	436.8	385.7	340.1	321.5	395.9	447.9	433.0
70°	586.4	499.0	425.6	373.6	326.2	280.6	248.1	233.2	228.6	224.9
72.5°	505.5	429.3	353.1	302.9	258.3	216.5	186.8	169.1	164.5	160.8
75°	403.3	331.8	262.1	214.7	175.6	145.9	126.4	111.5	108.7	105.0
77.5°	266.7	212.8	156.1	127.3	104.1	88.3	75.3	66.0	64.1	62.3
80°	146.8	122.7	95.7	77.1	62.3	53.9	49.3	43.7	42.7	41.8
82.5°	87.4	73.4	54.8	43.7	36.2	32.5	29.7	26.9	26.0	25.1
85°	43.7	34.4	24.2	20.4	18.6	16.7	16.7	13.9	13.0	13.0
87.5°	11.2	9.3	5.6	4.6	4.6	4.6	3.7	2.8	2.8	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)