

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: P457536

Luminaire Tested: **GALN-SA8D-827-U-SL3**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P457536  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA8D-827-U-SL3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 45515 lumens  
Efficiency: N/A  
Efficacy: 92.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G5

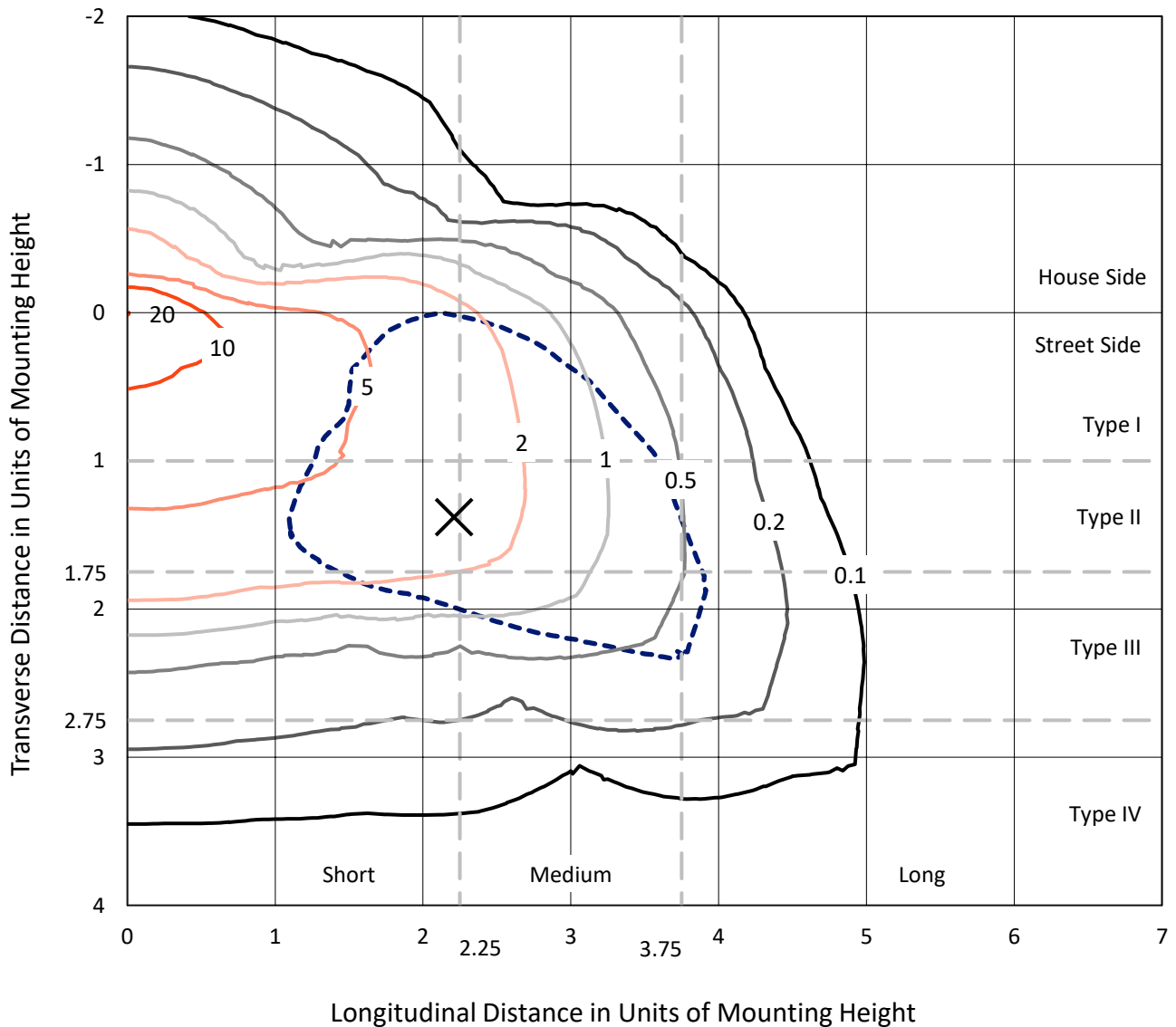
Input Watts (W): 493  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P457536  
 CATALOG NUMBER: GALN-SA8D-827-U-SL3

### Iso-Footcandle Lines of Horizontal Illumination

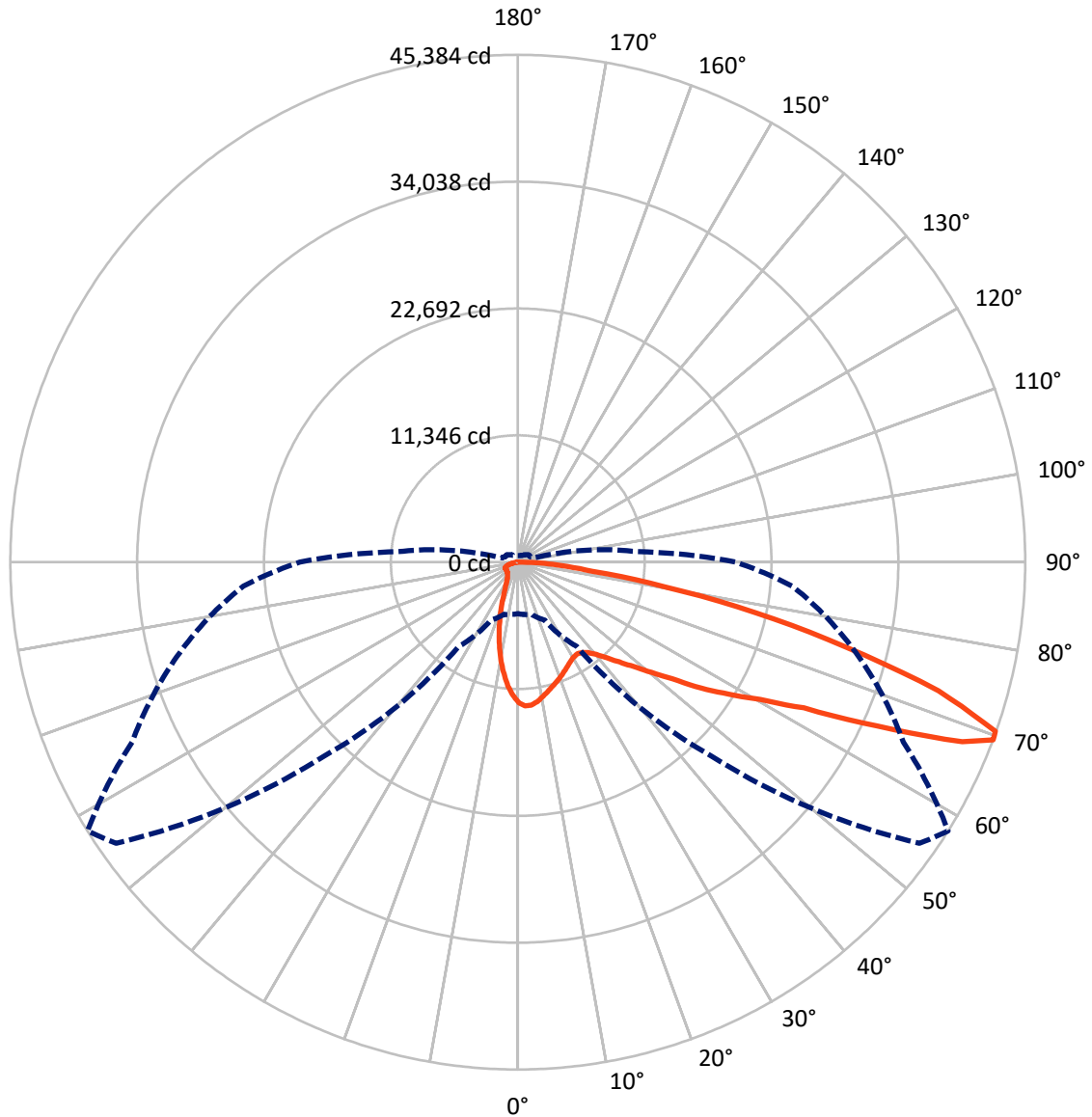
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 20.1 fc  
 Type III - Short - N/A

REPORT NUMBER: P457536  
CATALOG NUMBER: GALN-SA8D-827-U-SL3

### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P457536

CATALOG NUMBER: GALN-SA8D-827-U-SL3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6670.2	0.0	6670.2
	% Fixture	14.7	0.0	14.7
<b>Street Side</b>	Lumens	38844.8	0.0	38844.8
	% Fixture	85.3	0.0	85.3
<b>Total</b>	Lumens	45515.0	0.0	45515.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1068.1	2.3
10°-20°	2345.5	5.2
20°-30°	3030.4	6.7
30°-40°	3935.9	8.6
40°-50°	5722.2	12.6
50°-60°	9130.8	20.1
60°-70°	12197.6	26.8
70°-80°	7031.4	15.4
80°-90°	1053.2	2.3
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°	45515.0	100.0
0°-180°	45515.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P457536

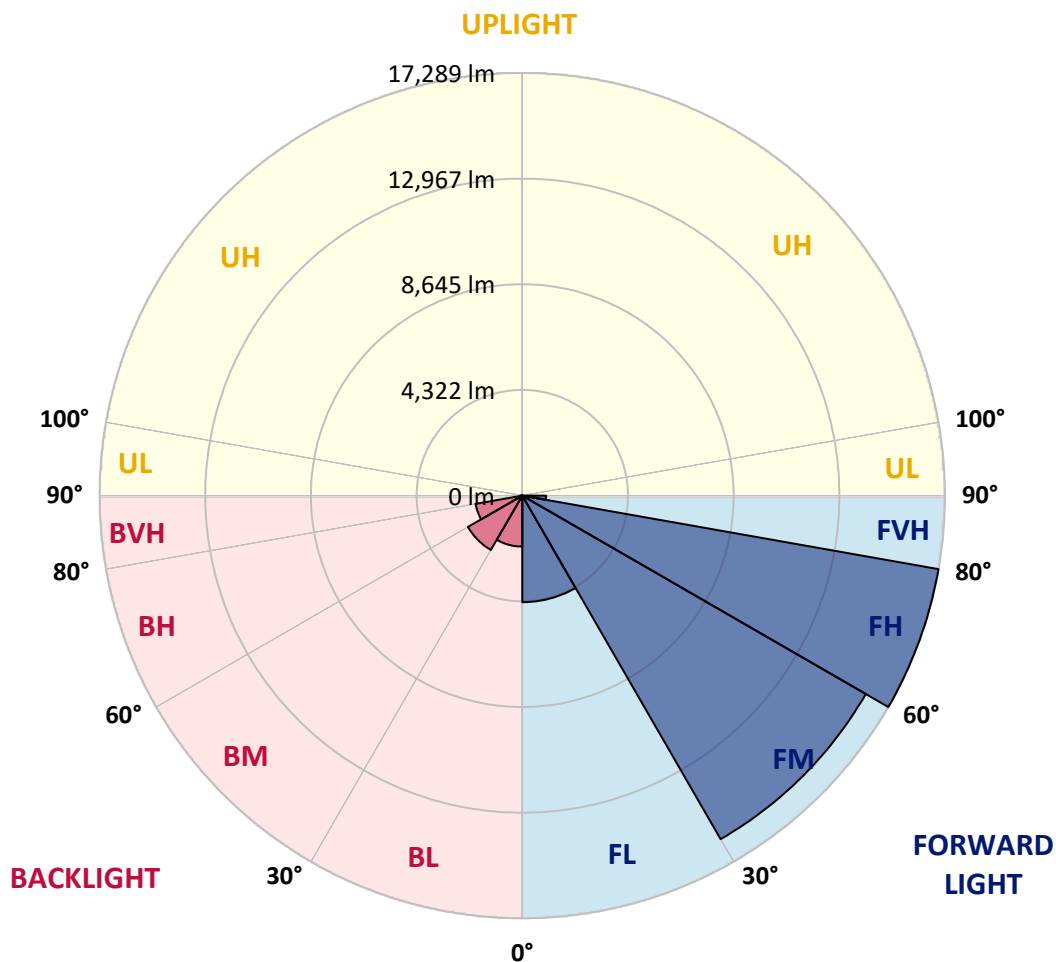
CATALOG NUMBER: GALN-SA8D-827-U-SL3

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4359.2	9.6			
FM	(30°-60°)	16223.7	35.6			
FH	(60°-80°)	17289.4	38.0			G5
FVH	(80°-90°)	972.5	2.1			G5
BL	(0°-30°)	2084.8	4.6	B3/2500		
BM	(30°-60°)	2565.1	5.6	B3/5000		
BH	(60°-80°)	1939.6	4.3	B3/2500		G3/2500
BVH	(80°-90°)	80.7	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type III Short





REPORT NUMBER: P457536

CATALOG NUMBER: GALN-SA8D-827-U-SL3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	12577.7	12577.7	12577.7	12577.7	12577.7	12577.7	12577.7	12577.7	12577.7	12577.7	12577.7
2.5°	13044.7	13080.3	13070.1	13057.4	13037.1	12981.3	12889.9	12874.7	12816.3	12691.9	12537.1
5°	12844.2	12874.7	12877.2	12895.0	12920.4	12910.2	12844.2	12836.6	12750.3	12582.8	12323.8
7.5°	12156.3	12196.9	12285.8	12384.8	12473.6	12557.4	12577.7	12590.4	12537.1	12344.2	11998.9
10°	11382.1	11422.7	11463.3	11610.6	11828.9	12037.0	12209.6	12232.5	12245.2	12067.5	11646.1
12.5°	10524.1	10607.9	10694.2	10912.5	11204.4	11531.9	11836.5	11884.7	11971.0	11836.5	11341.5
15°	9795.6	9881.9	10006.3	10201.8	10554.6	11026.7	11455.7	11534.4	11704.5	11635.9	11057.2
17.5°	9290.5	9320.9	9407.2	9630.6	10011.4	10508.9	11082.6	11240.0	11511.6	11493.8	10813.5
20°	8892.0	8930.0	8983.3	9120.4	9516.4	10041.8	10734.8	10937.9	11306.0	11366.9	10572.4
22.5°	8724.4	8752.3	8744.7	8818.3	9087.4	9615.4	10382.0	10623.1	11123.2	11280.6	10349.0
25°	8734.6	8760.0	8721.9	8704.1	8864.0	9239.7	10013.9	10321.1	10976.0	11222.2	10145.9
27.5°	8904.6	8922.4	8851.3	8780.3	8793.0	9006.2	9709.3	10049.5	10851.6	11247.6	9975.8
30°	9133.1	9166.1	9120.4	9034.1	8940.2	8950.3	9513.9	9848.9	10793.2	11336.4	9894.6
32.5°	9427.5	9458.0	9437.7	9369.2	9247.3	9112.8	9465.6	9775.3	10798.3	11516.6	9876.8
35°	9737.2	9798.2	9831.2	9826.1	9727.1	9493.5	9656.0	9912.4	10920.1	11818.7	9980.9
37.5°	10087.5	10138.3	10280.4	10371.8	10280.4	10008.8	10085.0	10262.7	11189.2	12255.3	10209.4
40°	10427.7	10503.8	10712.0	10996.3	10960.7	10722.1	10739.9	10856.7	11663.9	12905.1	10656.1
42.5°	10783.0	10874.4	11237.4	11658.8	11742.6	11557.3	11605.5	11709.6	12339.1	13806.3	11422.7
45°	11240.0	11349.1	11795.9	12321.3	12651.3	12537.1	12674.1	12724.9	13242.7	14979.0	12433.0
47.5°	11828.9	11955.8	12506.6	13161.5	13628.6	13732.6	13971.3	13940.8	14362.2	16367.5	13742.8
50°	12821.4	12892.4	13412.8	14080.4	14722.6	15192.2	15451.1	15499.4	15750.7	17717.9	15207.4
52.5°	14001.7	14065.2	14440.9	15024.7	15829.3	16824.4	17464.1	17306.7	17367.6	19362.8	16920.9
55°	15329.3	15435.9	15674.5	16062.9	17106.2	18570.8	19855.2	19893.3	19218.1	20936.6	18563.2
57.5°	16357.3	16537.6	16946.2	17499.6	18822.1	20512.7	22238.8	22264.1	21401.1	22617.0	20375.6
60°	15839.5	16052.7	16986.9	18334.7	21073.6	23901.4	25086.8	24942.1	23525.7	24530.9	22586.5
62.5°	13605.7	13643.8	15001.8	17108.7	21766.6	28435.0	29325.9	28714.2	26361.1	26957.6	24833.0
65°	8805.6	9054.4	10130.7	13082.8	19489.7	30950.5	36753.2	35339.4	30336.2	29711.8	26713.9
67.5°	5559.1	5495.6	5942.4	7470.5	13405.2	28734.5	43091.6	42868.2	35534.8	31450.5	26264.6
69°	4609.7	4680.8	4833.1	5726.6	9224.5	24533.5	43840.4	45383.7	38055.4	31313.5	24632.5
70°	4180.7	4213.7	4373.6	5076.8	7117.6	20548.2	42611.8	45315.2	39045.4	30739.8	23449.6
72.5°	3317.7	3315.1	3589.3	4223.9	5320.4	11729.9	34989.1	39342.4	37938.7	28069.4	19375.5
75°	2520.6	2561.2	2863.3	3574.0	4901.6	6409.4	24416.7	30298.1	30300.7	22170.2	12090.3
77.5°	1817.5	1842.9	2195.7	3000.4	4617.3	5196.1	16263.4	21731.1	20428.9	10158.6	3800.0
80°	1190.5	1205.7	1474.8	2375.9	4162.9	4901.6	9643.3	13301.1	9635.7	2695.8	1256.5
82.5°	652.4	728.5	901.1	1538.3	3340.5	4528.5	5861.1	6731.8	3614.7	1200.7	654.9
85°	327.5	347.8	507.7	898.6	2183.0	3746.7	4081.7	3860.9	1865.7	596.5	340.1
87.5°	96.5	121.8	210.7	347.8	885.9	1952.0	2271.9	2038.3	718.4	215.8	71.1
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: P457536

CATALOG NUMBER: GALN-SA8D-827-U-SL3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	12577.7	12577.7	12577.7	12577.7	12577.7	12577.7	12577.7	12577.7	12577.7	12577.7	12577.7
2.5°	12473.6	12427.9	12224.8	12042.1	11874.5	11696.9	11547.1	11415.1	11427.8	11430.3	11295.8
5°	12189.3	12085.2	11699.4	11339.0	11034.3	10648.5	10318.5	10105.3	9998.7	9856.5	9907.3
7.5°	11803.5	11602.9	11067.3	10468.3	9907.3	9407.2	8864.0	8490.9	8252.3	8021.3	8051.7
10°	11404.9	11082.6	10303.3	9511.3	8785.3	7985.7	7292.8	6698.8	6257.1	6092.1	5983.0
12.5°	10996.3	10572.4	9582.4	8529.0	7526.3	6569.3	5587.0	4949.8	4462.5	4203.6	4236.6
15°	10623.1	10107.8	8831.0	7546.6	6244.4	5104.7	4124.9	3518.2	3178.1	3107.0	3147.6
17.5°	10277.9	9602.7	8127.9	6592.2	5071.7	3827.9	3099.4	2756.7	2619.6	2581.5	2579.0
20°	9922.5	9173.7	7338.5	5571.7	3952.3	2967.4	2543.5	2383.5	2358.2	2373.4	2375.9
22.5°	9562.1	8643.2	6526.2	4558.9	3147.6	2426.7	2223.6	2180.5	2200.8	2236.3	2241.4
25°	9229.6	8176.1	5744.4	3670.5	2513.0	2132.2	2033.2	2033.2	2078.9	2132.2	2134.8
27.5°	8955.4	7724.3	4965.1	2914.1	2104.3	1919.0	1886.0	1903.8	1967.2	2007.9	2010.4
30°	8729.5	7302.9	4228.9	2335.3	1850.5	1748.9	1741.3	1771.8	1817.5	1855.6	1858.1
32.5°	8559.4	6932.3	3541.0	1962.2	1675.3	1619.5	1616.9	1639.8	1665.2	1675.3	1685.5
35°	8493.4	6625.2	2911.5	1726.1	1558.6	1523.0	1523.0	1520.5	1530.6	1535.7	1540.8
37.5°	8546.7	6389.1	2424.2	1573.8	1472.3	1446.9	1431.6	1416.4	1411.3	1411.3	1413.9
40°	8772.6	6264.7	2061.2	1474.8	1411.3	1373.3	1345.3	1327.6	1309.8	1314.9	1320.0
42.5°	9252.4	6287.6	1814.9	1408.8	1358.0	1304.7	1264.1	1243.8	1231.1	1246.3	1243.8
45°	10016.5	6516.0	1657.6	1363.1	1304.7	1236.2	1198.1	1177.8	1177.8	1200.7	1208.3
47.5°	11085.1	6952.6	1573.8	1327.6	1264.1	1182.9	1144.8	1129.6	1134.7	1172.7	1175.3
50°	12389.8	7711.6	1558.6	1309.8	1243.8	1144.8	1101.7	1086.4	1099.1	1139.7	1144.8
52.5°	13829.1	8688.9	1632.2	1312.3	1226.0	1122.0	1066.1	1043.3	1056.0	1089.0	1099.1
55°	15534.9	9912.4	1822.6	1322.5	1200.7	1109.3	1040.7	990.0	1005.2	1028.0	1030.6
57.5°	17276.2	11455.7	2157.6	1325.0	1180.3	1086.4	997.6	931.6	931.6	946.8	954.4
60°	19403.4	13136.1	2599.3	1327.6	1182.9	1053.4	939.2	865.6	855.4	863.0	865.6
62.5°	21515.3	14542.4	2672.9	1320.0	1208.3	1020.4	875.7	799.6	781.8	779.3	774.2
65°	22446.9	14280.9	2190.6	1284.4	1236.2	1000.1	825.0	736.1	705.7	695.5	695.5
67.5°	20929.0	12080.2	1647.4	1236.2	1218.4	979.8	776.7	682.8	647.3	627.0	627.0
69°	19502.4	10745.0	1479.9	1203.2	1172.7	946.8	746.3	654.9	611.7	588.9	581.3
70°	18400.7	9826.1	1408.8	1175.3	1129.6	908.7	723.4	634.6	586.4	561.0	555.9
72.5°	14684.5	7709.1	1233.7	1068.7	962.0	764.1	642.2	571.1	525.4	497.5	489.9
75°	8463.0	4178.2	1023.0	929.0	774.2	594.0	543.2	497.5	462.0	436.6	429.0
77.5°	2604.4	1614.4	741.2	733.6	568.6	459.4	434.1	416.3	390.9	363.0	357.9
80°	1096.6	822.4	502.6	495.0	378.2	319.8	312.2	309.7	299.5	276.7	269.1
82.5°	601.6	464.5	350.3	304.6	228.5	185.3	192.9	195.5	187.8	165.0	149.8
85°	294.5	253.8	170.1	137.1	104.1	66.0	63.5	76.2	71.1	50.8	55.8
87.5°	58.4	71.1	45.7	20.3	10.2	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

(END OF REPORT)