

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: P454763

Luminaire Tested: **GALN-SA5D-827-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P454763  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA5D-827-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29024 lumens  
Efficiency: N/A  
Efficacy: 93.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

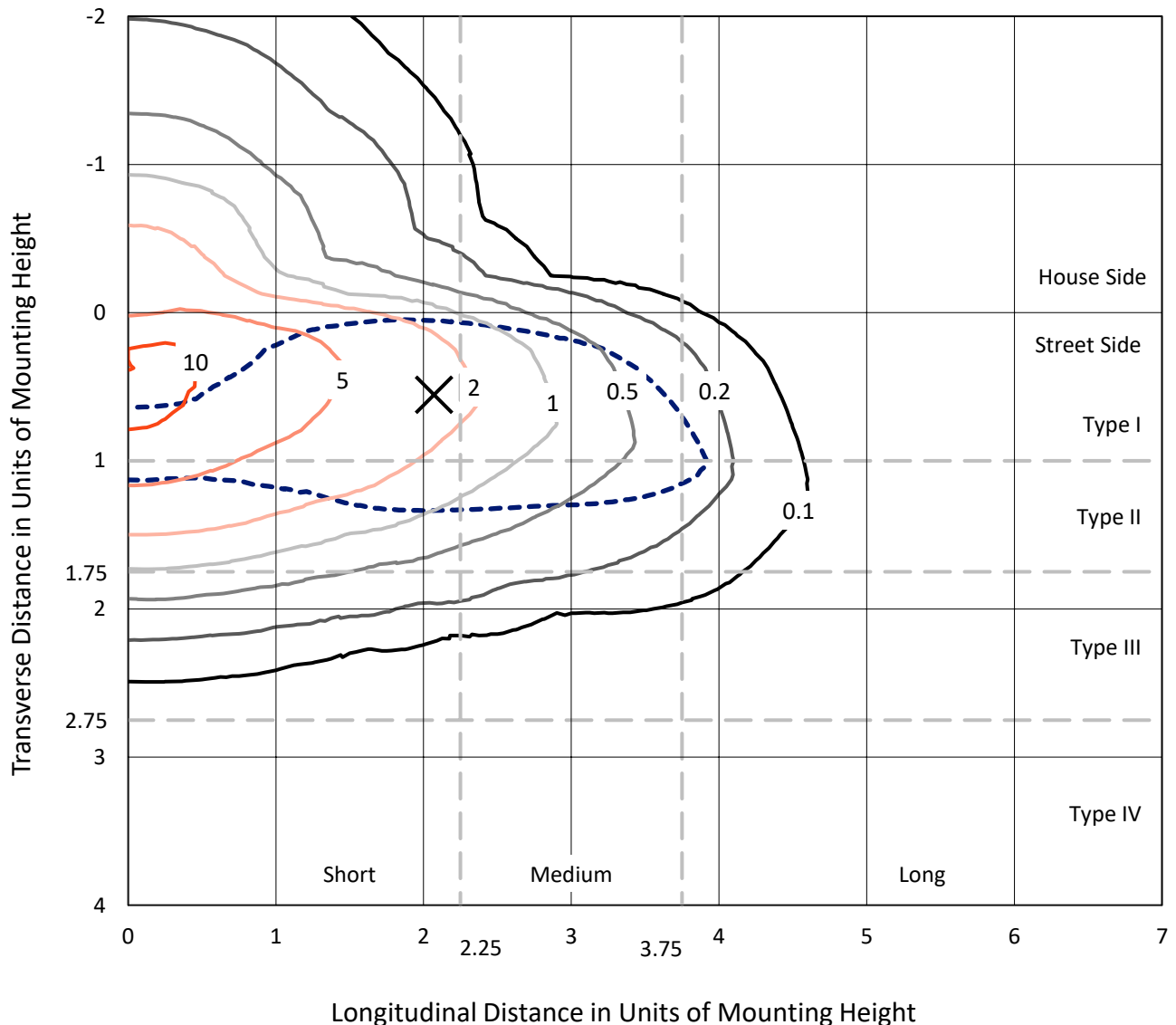
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

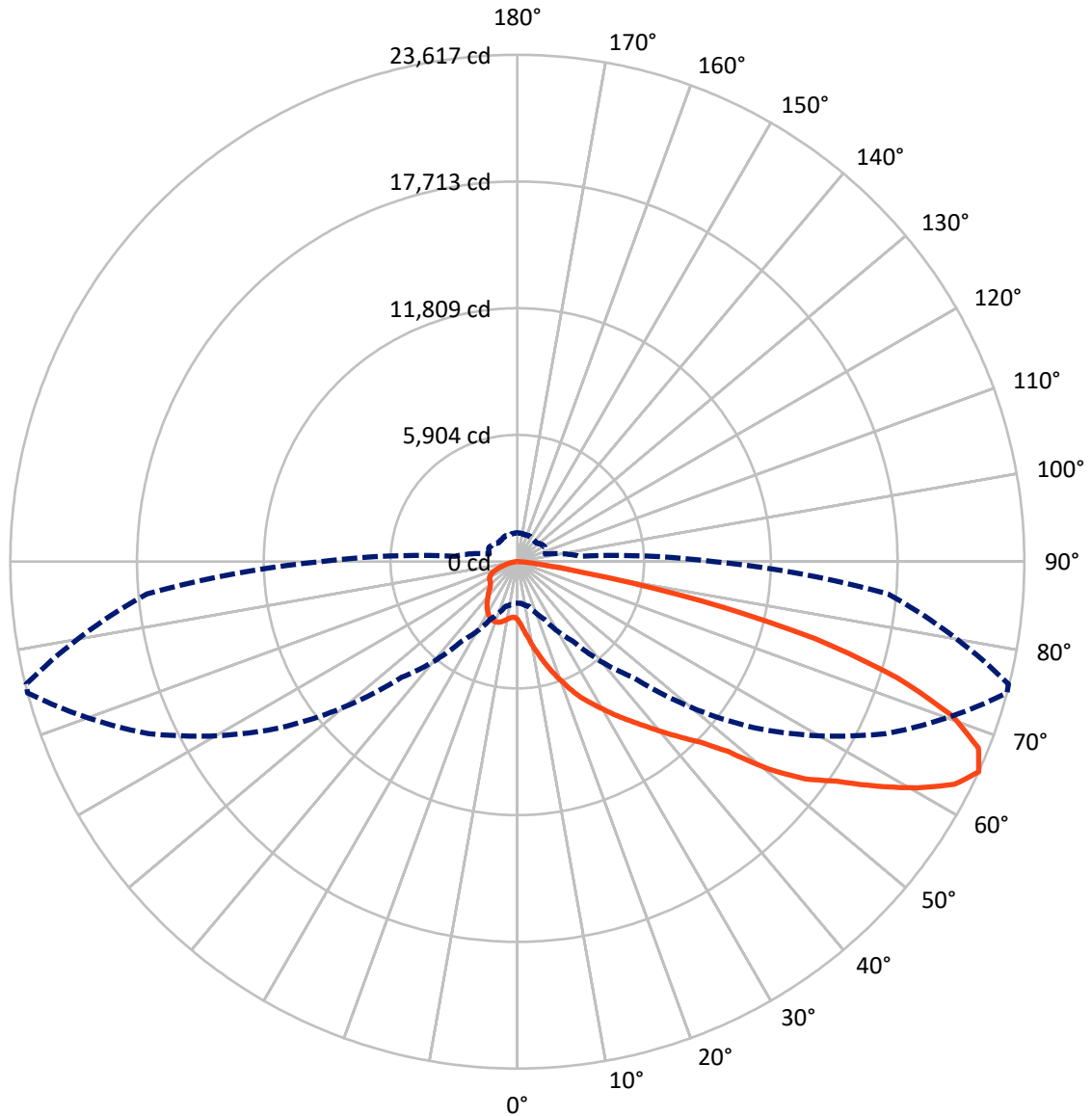
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4879.3	0.0	4879.3
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	24144.7	0.0	24144.7
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	29024.0	0.0	29024.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	327.6	1.1
10°-20°	1283.3	4.4
20°-30°	2478.9	8.5
30°-40°	4026.6	13.9
40°-50°	5538.9	19.1
50°-60°	6539.5	22.5
60°-70°	5729.7	19.7
70°-80°	2735.4	9.4
80°-90°	364.0	1.3
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°	29024.0	100.0
0°-180°	29024.0	100.0

**Coefficient of Utilization**



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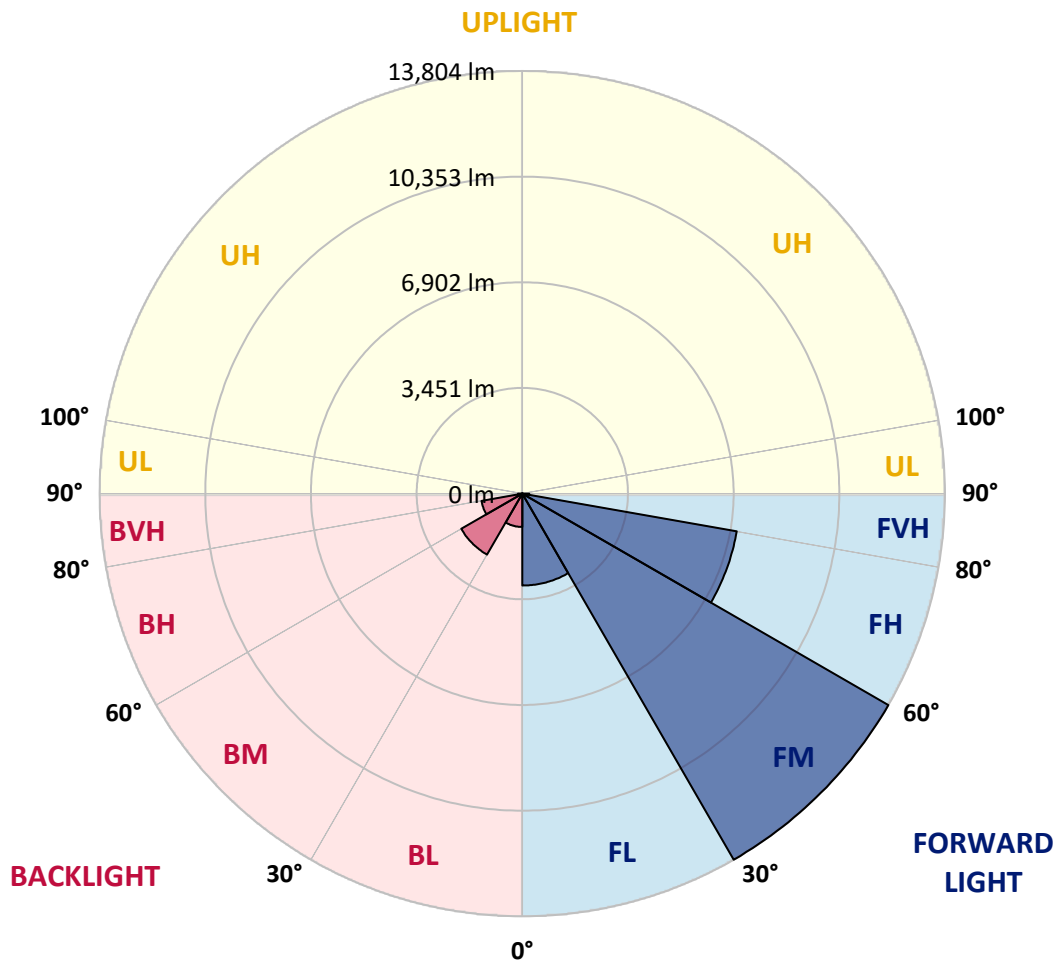
CATALOG NUMBER: GALN-SA5D-827-U-T2R

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3000.6	10.3			
FM	(30°-60°)	13804.4	47.6			
FH	(60°-80°)	7112.2	24.5			G3/7500
FVH	(80°-90°)	227.5	0.8			G3/500
BL	(0°-30°)	1089.3	3.8	B3/2500		
BM	(30°-60°)	2300.6	7.9	B2/2500		
BH	(60°-80°)	1353.0	4.7	B3/2500		G3/2500
BVH	(80°-90°)	136.5	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2696.7	2696.7	2696.7	2696.7	2696.7	2696.7	2696.7	2696.7	2696.7	2696.7	2696.7
2.5°	3583.0	3559.4	3534.2	3464.9	3390.9	3307.5	3187.9	3072.9	2920.2	2915.5	2802.2
5°	4576.4	4560.6	4448.8	4384.3	4212.7	3984.4	3790.8	3490.1	3211.5	3178.4	2958.0
7.5°	5489.4	5428.0	5385.5	5269.0	5099.0	4806.2	4431.5	4025.4	3559.4	3515.3	3150.1
10°	6177.4	6171.1	6149.0	6048.3	5920.8	5629.5	5213.9	4631.5	4000.2	3913.6	3383.1
12.5°	6692.2	6696.9	6693.7	6692.2	6600.8	6353.7	5903.5	5289.5	4445.7	4384.3	3652.3
15°	7030.6	7077.8	7096.7	7175.4	7183.3	7018.0	6630.8	5925.5	4947.9	4856.6	3941.9
17.5°	7254.2	7277.8	7365.9	7499.7	7608.4	7578.5	7233.7	6514.3	5461.1	5308.4	4242.6
20°	7468.3	7509.2	7576.9	7759.5	7951.6	8039.7	7797.3	7117.2	5969.6	5872.0	4574.8
22.5°	7913.8	7972.0	7995.6	8088.5	8252.2	8408.1	8297.9	7695.0	6526.9	6394.6	4927.4
25°	8667.8	8729.2	8663.1	8641.1	8694.6	8771.7	8748.1	8239.6	7052.7	6863.7	5261.2
27.5°	9650.2	9658.0	9529.0	9406.2	9273.9	9234.6	9162.2	8722.9	7509.2	7351.8	5596.5
30°	10704.9	10667.1	10453.0	10231.1	10007.5	9787.1	9579.3	9188.9	8017.7	7836.6	5925.5
32.5°	11684.1	11663.6	11425.9	11081.2	10703.3	10495.5	10075.2	9659.6	8562.4	8387.6	6264.0
35°	12417.7	12447.6	12186.3	11810.0	11397.6	11213.4	10682.9	10153.9	9125.9	8935.5	6632.3
37.5°	12938.8	12923.0	12691.6	12365.8	12003.7	11843.1	11392.9	10693.9	9732.0	9549.4	7035.3
40°	13124.6	13115.1	12943.5	12705.8	12476.0	12419.3	12135.9	11276.4	10426.3	10212.2	7520.2
42.5°	13006.5	13026.9	12913.6	12849.1	12806.6	12847.5	12874.2	12039.9	11183.5	10986.7	8046.0
45°	12644.4	12633.4	12617.6	12723.1	12962.4	13231.6	13604.7	12760.9	12006.8	11849.4	8751.3
47.5°	11997.4	12076.1	12115.5	12406.7	12929.3	13566.9	14445.3	13727.5	13201.7	13064.7	9826.5
50°	11092.2	11155.2	11388.1	11906.1	12685.3	13692.9	15267.1	15308.0	15194.7	14938.1	10994.6
52.5°	9678.5	9776.1	10256.3	11205.5	12184.7	13640.9	15764.6	16663.5	16813.0	16621.0	12145.4
55°	8096.4	8233.3	8740.3	9985.5	11495.2	13357.5	16107.8	17449.0	18045.7	17867.8	13253.6
57.5°	6547.3	6692.2	7213.2	8419.1	10292.5	12731.0	16332.9	18324.3	19723.8	19492.4	14632.7
60°	4906.9	5058.1	5505.2	6747.3	8579.7	11506.2	16180.2	19083.1	21400.4	21301.2	16013.3
62.5°	3165.8	3332.7	3721.5	4749.5	6594.5	9832.8	15363.1	19501.9	22851.9	22732.2	17020.8
65°	1928.5	1947.4	2161.5	2948.6	4513.4	7613.1	13494.5	18946.1	23617.0	23580.7	17327.8
67.5°	1246.8	1276.7	1374.3	1766.3	2706.1	5287.9	10789.9	17112.1	23169.9	23157.3	16693.4
70°	1053.2	1062.6	1106.7	1191.7	1572.7	3206.8	7576.9	14188.7	21471.2	21471.2	15167.9
72.5°	941.4	954.0	969.7	996.5	1122.4	1816.7	4521.3	11045.0	18538.4	18661.2	12910.5
75°	854.8	851.7	861.1	865.8	957.1	1187.0	2337.8	8168.8	14341.4	14095.9	9349.5
77.5°	732.0	736.8	732.0	752.5	845.4	903.6	1187.0	5481.6	8691.5	8373.5	4692.8
80°	601.4	609.2	617.1	629.7	722.6	686.4	713.1	2498.3	3214.6	3146.9	1449.9
82.5°	451.8	462.8	475.4	505.3	568.3	453.4	450.2	1067.3	1160.2	1062.6	533.7
85°	182.6	215.7	325.9	355.8	357.4	248.7	277.1	445.5	473.9	462.8	209.4
87.5°	42.5	50.4	105.5	159.0	146.4	92.9	102.3	144.8	165.3	152.7	70.8
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°	2696.7	2696.7	2696.7	2696.7	2696.7	2696.7	2696.7	2696.7	2696.7	2696.7	2696.7
2.5°	2750.2	2695.1	2600.7	2528.3	2476.3	2430.6	2402.3	2385.0	2378.7	2377.1	2378.7
5°	2843.1	2745.5	2595.9	2501.5	2449.5	2419.6	2402.3	2400.7	2402.3	2403.9	2399.2
7.5°	2970.6	2830.5	2635.3	2547.1	2507.8	2485.7	2477.9	2474.7	2476.3	2474.7	2474.7
10°	3140.6	2948.6	2712.4	2621.1	2588.1	2562.9	2550.3	2542.4	2536.1	2529.8	2526.7
12.5°	3328.0	3079.2	2795.9	2707.7	2660.5	2621.1	2592.8	2572.3	2558.2	2544.0	2540.8
15°	3537.3	3217.8	2888.8	2766.0	2698.3	2640.0	2591.2	2558.2	2533.0	2512.5	2510.9
17.5°	3737.3	3348.4	2951.7	2792.7	2693.5	2611.7	2547.1	2501.5	2470.0	2443.2	2440.1
20°	3951.4	3472.8	2980.1	2775.4	2646.3	2547.1	2462.1	2407.0	2370.8	2340.9	2336.2
22.5°	4167.0	3578.3	2976.9	2720.3	2564.5	2448.0	2358.2	2300.0	2257.5	2227.6	2216.5
25°	4373.3	3663.3	2937.6	2632.2	2451.1	2329.9	2238.6	2185.1	2147.3	2111.1	2111.1
27.5°	4559.0	3713.7	2863.6	2525.1	2334.6	2207.1	2134.7	2085.9	2051.3	2027.6	2013.5
30°	4741.7	3737.3	2762.8	2389.7	2211.8	2103.2	2045.0	2016.6	1985.1	1958.4	1955.2
32.5°	4905.4	3732.6	2636.9	2257.5	2095.3	2018.2	1994.6	1972.5	1939.5	1901.7	1892.3
35°	5064.4	3701.1	2487.3	2112.6	1997.7	1967.8	1974.1	1942.6	1882.8	1835.6	1827.7
37.5°	5237.5	3644.4	2323.6	1994.6	1915.9	1944.2	1959.9	1890.7	1793.1	1719.1	1701.8
40°	5437.5	3579.9	2153.6	1876.5	1851.3	1922.2	1922.2	1794.6	1660.8	1615.2	1602.6
42.5°	5672.0	3526.3	2011.9	1777.3	1797.8	1868.6	1860.8	1667.1	1612.0	1588.4	1582.1
45°	6043.6	3507.4	1865.5	1690.7	1753.7	1805.7	1741.1	1623.1	1591.6	1572.7	1566.4
47.5°	6630.8	3529.5	1736.4	1626.2	1703.3	1742.7	1607.3	1593.1	1571.1	1544.3	1541.2
50°	7175.4	3509.0	1645.1	1590.0	1659.3	1667.1	1552.2	1556.9	1544.3	1514.4	1508.1
52.5°	7621.0	3444.5	1586.8	1571.1	1621.5	1534.9	1500.3	1517.6	1512.9	1475.1	1468.8
55°	8110.6	3405.1	1558.5	1571.1	1596.3	1420.0	1451.5	1476.6	1470.4	1443.6	1442.0
57.5°	8704.0	3413.0	1538.0	1575.8	1571.1	1361.7	1402.7	1432.6	1431.0	1423.1	1423.1
60°	9311.7	3416.1	1506.6	1574.3	1541.2	1316.1	1352.3	1394.8	1397.9	1402.7	1402.7
62.5°	9513.2	3279.2	1445.2	1545.9	1475.1	1272.0	1305.1	1363.3	1360.2	1372.7	1374.3
65°	9137.0	2899.8	1353.9	1481.4	1390.1	1240.5	1268.8	1322.4	1305.1	1338.1	1344.4
67.5°	8316.8	2399.2	1212.2	1364.9	1295.6	1207.5	1245.2	1265.7	1234.2	1298.8	1300.3
70°	7188.0	1873.4	1032.7	1199.6	1188.6	1172.8	1226.3	1194.9	1150.8	1229.5	1213.7
72.5°	6010.5	1431.0	824.9	980.8	1045.3	1120.9	1193.3	1103.6	1042.2	1065.8	1037.4
75°	4515.0	1057.9	662.8	768.2	870.6	1046.9	1163.4	993.4	898.9	876.9	870.6
77.5°	2301.6	691.1	495.9	574.6	653.3	946.1	1122.4	864.3	744.6	710.0	694.2
80°	821.8	429.8	349.5	396.7	440.8	813.9	980.8	714.7	577.8	571.5	577.8
82.5°	381.0	277.1	234.6	259.8	261.3	543.1	747.8	533.7	439.2	667.5	563.6
85°	163.7	138.5	132.2	129.1	119.6	242.4	420.3	286.5	447.1	199.9	184.2
87.5°	48.8	55.1	48.8	36.2	26.8	26.8	42.5	15.7	11.0	7.9	7.9
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)