

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: STREETWORKS

Report Number: P321102

Luminaire Tested: **GAN-SA8D-827-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321102
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA8D-827-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 46898 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 511
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

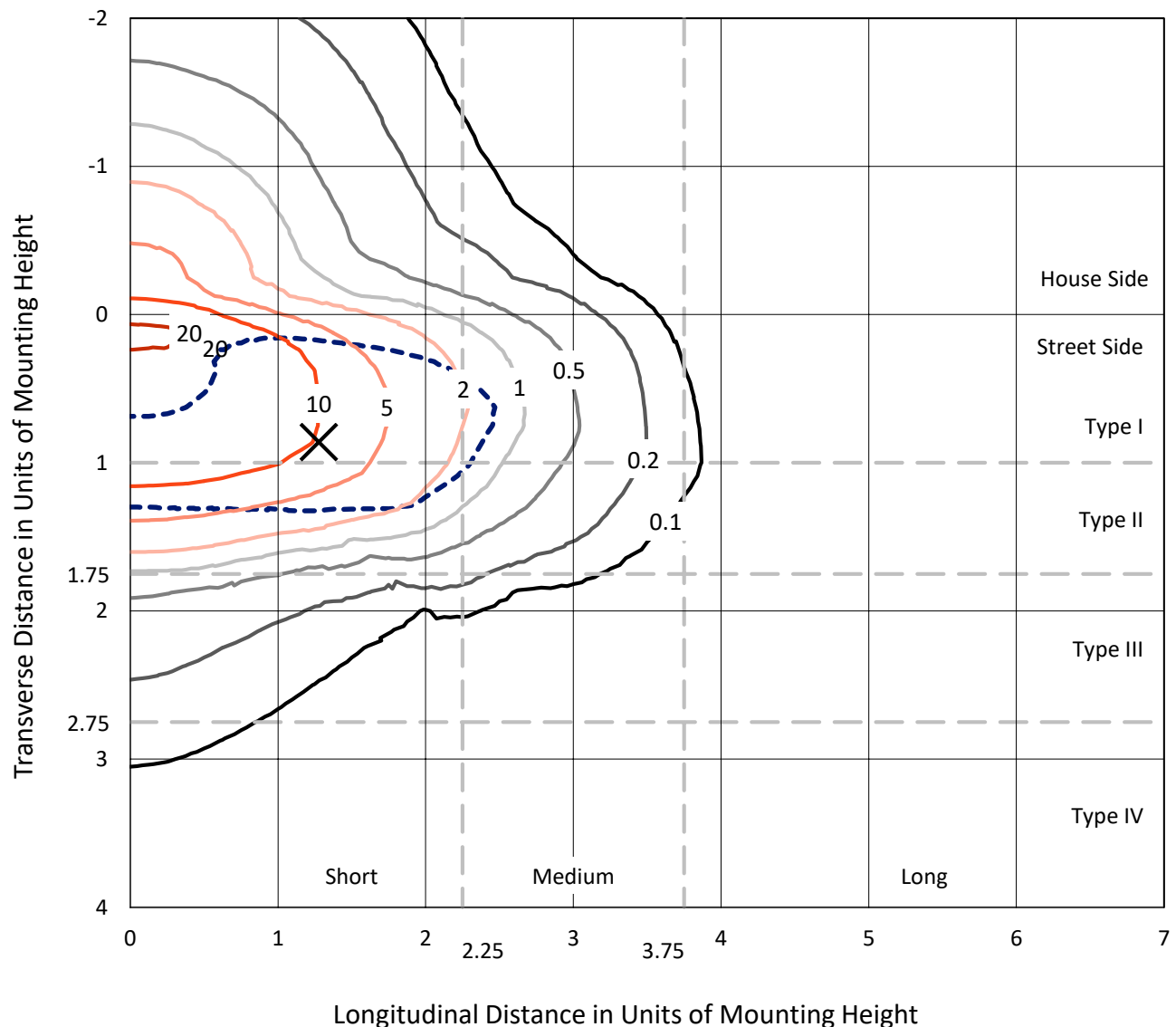


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Iso-Footcandle Lines of Horizontal Illumination

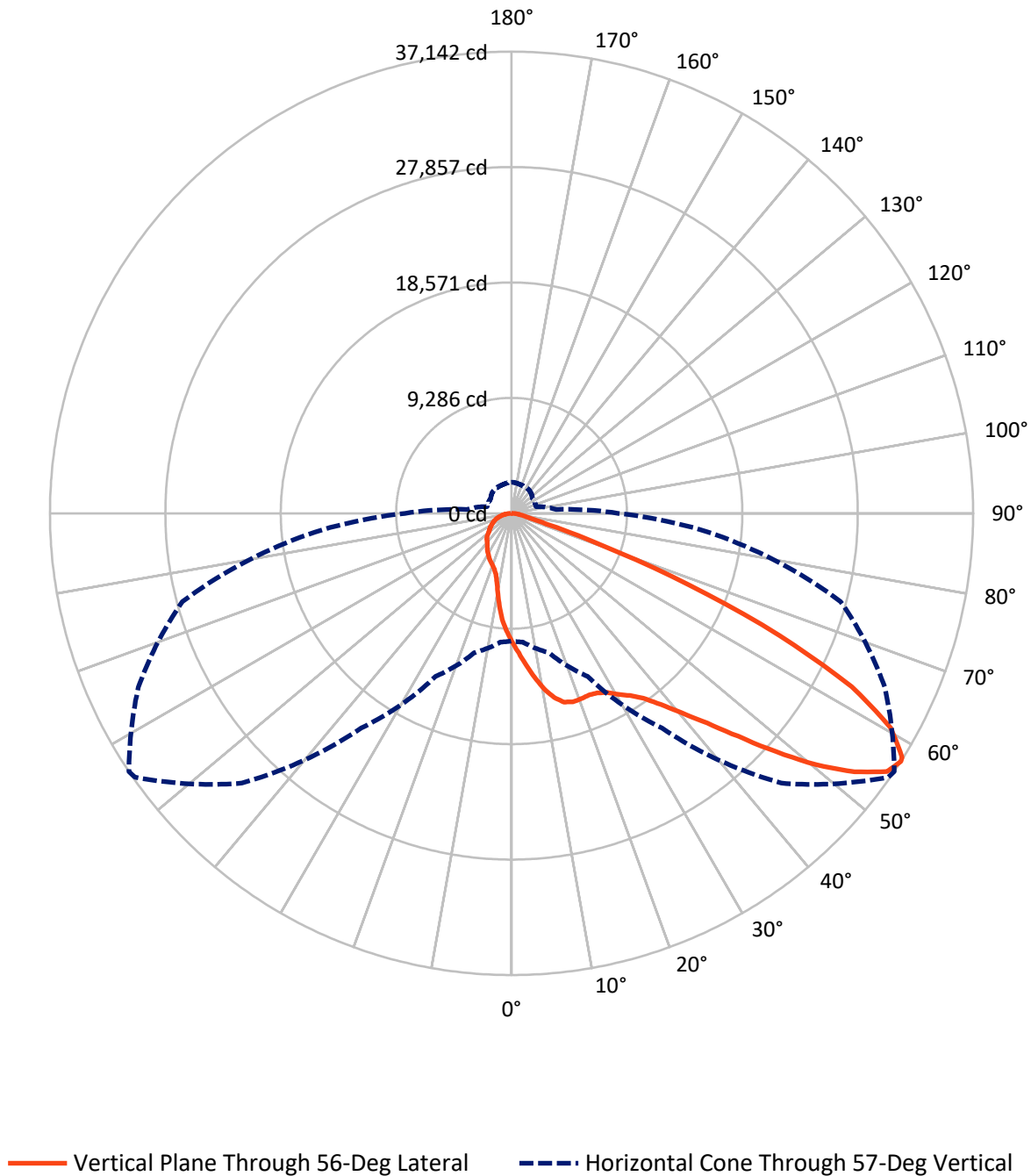
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 23.1 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8084.2	0.0	8084.2
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	38813.8	0.0	38813.8
	% Fixture	82.8	0.0	82.8
Total	Lumens	46898.0	0.0	46898.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	993.7	2.1
10°-20°	2809.3	6.0
20°-30°	4575.8	9.8
30°-40°	6840.3	14.6
40°-50°	10375.3	22.1
50°-60°	11628.9	24.8
60°-70°	6868.5	14.6
70°-80°	2250.4	4.8
80°-90°	556.0	1.2
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°	46898.0	100.0
0°-180°	46898.0	100.0

Coefficient of Utilization



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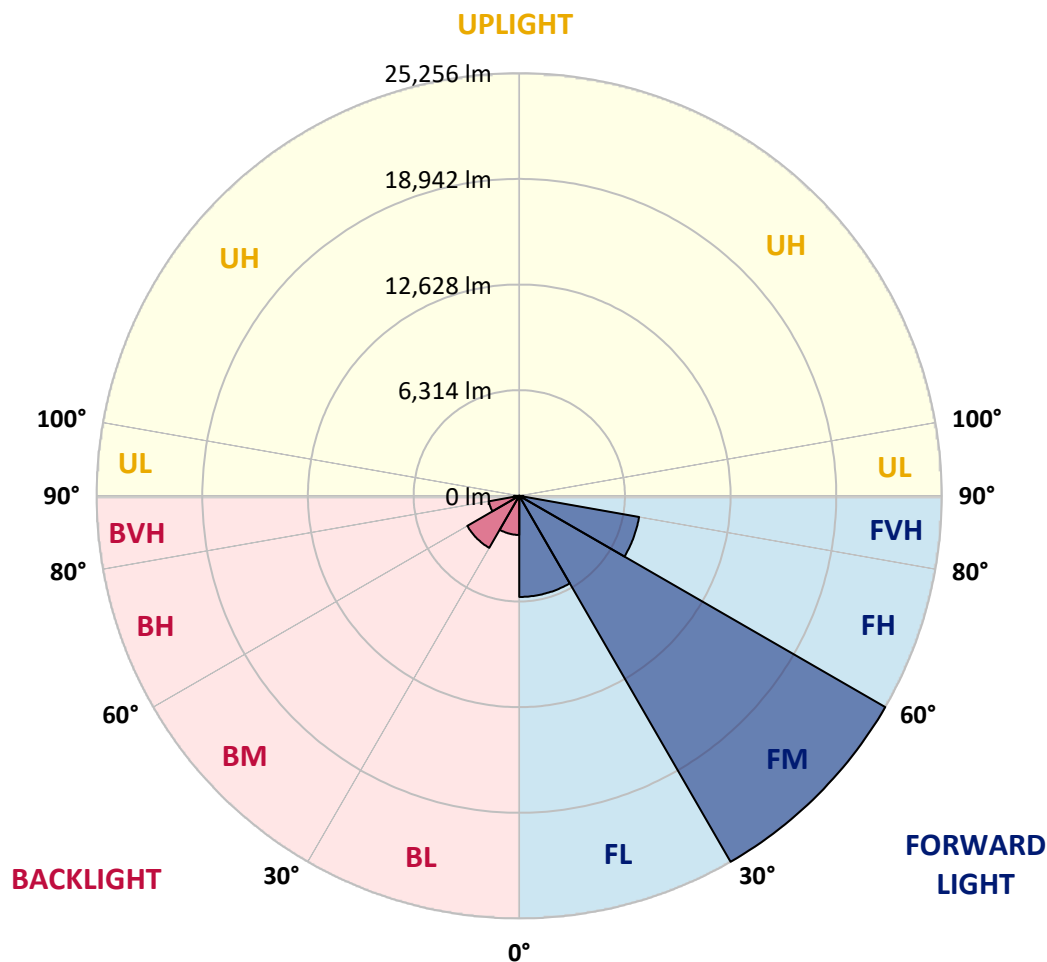
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6041.2	12.9			
FM	(30°-60°)	25256.1	53.9			
FH	(60°-80°)	7271.7	15.5			G3/7500
FVH	(80°-90°)	244.8	0.5			G3/500
BL	(0°-30°)	2337.6	5.0	B3/2500		
BM	(30°-60°)	3588.3	7.7	B3/5000		
BH	(60°-80°)	1847.2	3.9	B3/2500		G3/2500
BVH	(80°-90°)	311.2	0.7			G3/500
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°	56°	65°	75°	85°
0°	10402.0	10402.0	10402.0	10402.0	10402.0	10402.0	10402.0	10402.0	10402.0	10402.0	10402.0
2.5°	11944.4	12054.0	12005.7	11838.1	11709.1	11527.0	11323.9	11262.7	11048.3	10808.2	10519.7
5°	13835.0	13780.2	13701.2	13440.1	13164.5	12843.8	12334.5	12253.9	11776.8	11233.7	10659.9
7.5°	14911.6	14906.8	14860.0	14706.9	14455.5	14036.4	13422.4	13327.3	12606.8	11733.3	10843.6
10°	14755.3	14744.0	14821.3	14980.9	15056.7	14969.6	14452.3	14357.2	13472.3	12286.1	11056.4
12.5°	13867.2	13873.7	13997.8	14333.0	14789.1	15337.1	15253.3	15206.5	14370.1	12911.5	11314.3
15°	13175.8	13190.3	13288.6	13580.3	14118.6	15113.1	15740.0	15756.1	15238.8	13601.3	11615.6
17.5°	12872.8	12903.4	12948.5	13153.2	13646.4	14666.6	15856.1	15943.1	15999.5	14316.9	11905.8
20°	12969.5	12998.5	13011.4	13141.9	13546.5	14395.9	15775.5	15931.8	16583.0	14990.6	12195.9
22.5°	13403.0	13420.8	13428.8	13462.7	13777.0	14473.2	15722.3	15886.7	17005.2	15595.0	12415.1
25°	14121.9	14109.0	14057.4	14013.9	14225.0	14779.4	15844.8	16001.1	17348.5	16143.0	12558.5
27.5°	14982.5	14966.4	14866.5	14747.2	14868.1	15256.5	16197.8	16321.9	17656.4	16655.5	12631.0
30°	16015.6	15973.7	15785.2	15643.3	15690.1	15972.1	16779.6	16892.4	18131.8	17237.3	12701.9
32.5°	17209.9	17164.8	16892.4	16657.1	16657.1	16892.4	17379.1	17472.6	18534.7	17894.9	12816.4
35°	18705.6	18649.2	18294.6	17899.7	17788.5	17907.8	18196.3	18262.4	19260.0	18723.3	13024.3
37.5°	20468.8	20393.1	19933.7	19405.1	19161.7	19155.3	19363.2	19498.5	20418.8	19811.2	13377.2
40°	22236.9	22183.7	21782.4	21366.5	20889.5	20736.3	21057.1	21099.0	21933.9	21161.8	13828.5
42.5°	23603.6	23593.9	23519.8	23574.6	23086.2	22776.8	23028.2	23062.1	23784.1	22623.7	14308.8
45°	24325.6	24341.8	24701.2	25497.4	25677.9	25452.2	25576.3	25586.0	25898.7	24098.4	14748.8
47.5°	23747.0	23830.8	24739.9	26520.8	27998.7	28748.2	28541.9	28661.2	27948.8	25365.2	15093.7
50°	21492.2	21595.4	23142.6	26064.7	29081.8	31937.8	31829.8	31802.4	29602.4	26293.5	15280.7
52.5°	18699.1	18779.7	20056.2	23693.8	28287.2	33701.0	34692.2	34550.4	31072.3	26988.2	15316.1
55°	14445.8	14571.5	15794.8	18961.8	25073.5	33027.3	36797.1	36669.8	32411.6	27352.4	15274.2
57°	10269.9	10402.0	11617.3	14471.6	21092.5	30695.1	37006.6	37142.0	33135.3	27413.7	15321.0
57.5°	9164.2	9299.6	10503.6	13275.7	19851.5	29852.2	36826.1	37051.8	33265.8	27404.0	15346.8
60°	4614.3	4665.9	5433.1	7410.7	12548.8	24133.8	34471.4	35053.2	33383.5	26930.2	15458.0
62.5°	2868.9	2831.8	2807.6	3413.6	6105.2	16004.3	29612.1	30732.2	31131.9	25782.6	15188.8
65°	2522.3	2453.0	2187.1	2138.7	2696.4	7773.3	22299.7	23693.8	26320.9	23974.3	14547.4
67.5°	2369.2	2301.5	2001.8	1821.2	1822.9	3081.6	13844.6	15414.5	20504.3	20916.9	13034.0
70°	2211.3	2150.0	1869.6	1656.8	1552.1	1706.8	6369.5	7560.6	13366.0	16441.1	10893.6
72.5°	2008.2	1966.3	1700.4	1481.2	1370.0	1278.1	2438.5	2880.1	7737.9	11041.9	7565.4
75°	1795.5	1756.8	1529.5	1320.0	1184.6	1005.7	1373.2	1479.6	3931.0	5649.1	3724.7
77.5°	1561.8	1539.2	1360.3	1166.9	1058.9	833.3	971.9	1023.4	1685.9	2422.4	1868.0
80°	1242.6	1286.1	1189.4	1039.6	939.6	667.3	688.2	722.0	981.5	1183.0	1060.5
82.5°	809.1	884.8	931.6	844.5	773.6	525.4	494.8	509.3	639.9	722.0	461.0
85°	336.8	378.8	612.5	552.8	514.1	383.6	332.0	338.5	396.5	411.0	188.6
87.5°	149.9	159.6	269.2	253.0	217.6	132.2	141.8	154.7	211.1	199.9	72.5
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°	10402.0	10402.0	10402.0	10402.0	10402.0	10402.0	10402.0	10402.0	10402.0	10402.0	10402.0
2.5°	10411.7	10276.3	10044.2	9788.0	9578.4	9410.8	9241.6	9125.5	8990.2	8917.6	8880.6
5°	10419.7	10153.8	9665.5	9164.2	8716.2	8306.8	7916.8	7617.0	7336.5	7185.0	7143.1
7.5°	10453.6	10053.9	9264.1	8438.9	7642.8	6915.9	6355.0	6003.6	5750.6	5637.8	5605.6
10°	10481.0	9936.2	8767.7	7546.1	6463.0	5726.4	5291.3	5094.6	5007.6	4993.1	4978.6
12.5°	10545.5	9815.4	8245.5	6614.5	5545.9	5036.6	4885.1	4872.2	4896.4	4931.9	4931.9
15°	10647.0	9696.1	7649.2	5815.1	4962.5	4783.6	4814.2	4885.1	4951.2	5006.0	5014.1
17.5°	10721.1	9549.4	7007.7	5175.2	4651.4	4699.8	4809.4	4909.3	4977.0	5030.2	5035.0
20°	10774.3	9322.2	6322.8	4686.9	4472.5	4622.4	4759.4	4848.0	4894.8	4948.0	4956.0
22.5°	10746.9	9017.6	5715.1	4337.1	4327.5	4509.6	4640.1	4746.5	4711.0	4659.5	4693.3
25°	10614.8	8598.5	5089.8	4076.0	4174.3	4358.1	4519.3	4448.3	4329.1	4306.5	4319.4
27.5°	10379.5	8063.4	4511.2	3834.3	3997.1	4217.9	4208.2	4137.3	4095.4	4066.4	4084.1
30°	10126.4	7483.2	4005.1	3623.1	3800.4	3982.6	3945.5	3943.9	3902.0	3855.2	3877.8
32.5°	9876.6	6899.8	3603.8	3449.1	3652.1	3676.3	3756.9	3781.1	3698.9	3600.6	3594.1
35°	9659.0	6348.6	3299.2	3291.1	3473.2	3476.5	3594.1	3560.3	3355.6	3254.1	3254.1
37.5°	9496.2	5799.0	3067.1	3149.3	3237.9	3321.7	3381.4	3241.2	3207.3	3150.9	3149.3
40°	9425.3	5315.4	2922.0	3041.3	3071.9	3178.3	3025.2	3080.0	3096.1	3067.1	3067.1
42.5°	9351.2	4894.8	2796.3	2959.1	2954.3	2939.8	2862.4	2933.3	2997.8	2999.4	2994.6
45°	9277.0	4532.1	2685.1	2783.4	2851.1	2694.8	2709.3	2785.0	2875.3	2907.5	2907.5
47.5°	9194.8	4245.3	2583.6	2598.1	2702.8	2598.1	2586.8	2644.8	2751.2	2802.8	2814.1
50°	9014.3	3987.4	2467.5	2435.3	2464.3	2499.8	2509.4	2536.8	2654.5	2736.7	2756.0
52.5°	8764.5	3756.9	2319.3	2285.4	2285.4	2419.2	2464.3	2472.4	2572.3	2670.6	2690.0
55°	8556.6	3610.2	2166.1	2159.7	2153.3	2333.8	2411.1	2424.0	2493.3	2570.7	2580.4
57°	8571.1	3599.0	2048.5	2054.9	2053.3	2246.7	2361.2	2388.6	2424.0	2490.1	2501.4
57.5°	8579.2	3607.0	2022.7	2025.9	2024.3	2222.6	2346.7	2377.3	2404.7	2474.0	2485.3
60°	8700.0	3628.0	1917.9	1882.5	1890.5	2093.6	2264.5	2303.1	2320.9	2412.7	2427.2
62.5°	8521.1	3534.5	1834.1	1748.7	1748.7	1958.2	2150.0	2211.3	2238.7	2362.8	2387.0
65°	8002.2	3271.8	1735.8	1597.2	1613.3	1822.9	2013.0	2113.0	2154.9	2309.6	2335.4
67.5°	7201.1	2967.2	1631.1	1461.8	1477.9	1681.0	1871.2	1979.2	2045.3	2251.6	2272.5
70°	6158.4	2594.9	1489.2	1318.4	1337.7	1526.3	1703.6	1826.1	1924.4	2196.8	2203.2
72.5°	4540.2	2127.5	1291.0	1160.4	1181.4	1345.8	1534.4	1676.2	1808.3	2059.8	2056.6
75°	2699.6	1663.3	1071.8	1000.9	1015.4	1168.5	1381.2	1553.7	1751.9	2006.6	2037.2
77.5°	1637.5	1252.3	873.6	838.1	855.8	1012.2	1271.6	1455.4	1727.8	1892.2	1882.5
80°	989.6	894.5	697.9	675.3	693.0	865.5	1176.6	1381.2	1510.2	1616.6	1616.6
82.5°	517.4	546.4	512.5	494.8	519.0	702.7	1070.2	1205.6	1334.5	1145.9	1070.2
85°	211.1	285.3	311.1	309.4	324.0	486.7	923.5	1031.5	860.7	817.1	836.5
87.5°	70.9	120.9	151.5	130.5	137.0	306.2	639.9	498.0	591.5	412.6	391.6
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)