

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: P321141

Luminaire Tested: **GAN-SA7D-830-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321141
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-SA7D-830-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44741 lumens
Efficiency: N/A
Efficacy: 99.9 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): 448
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

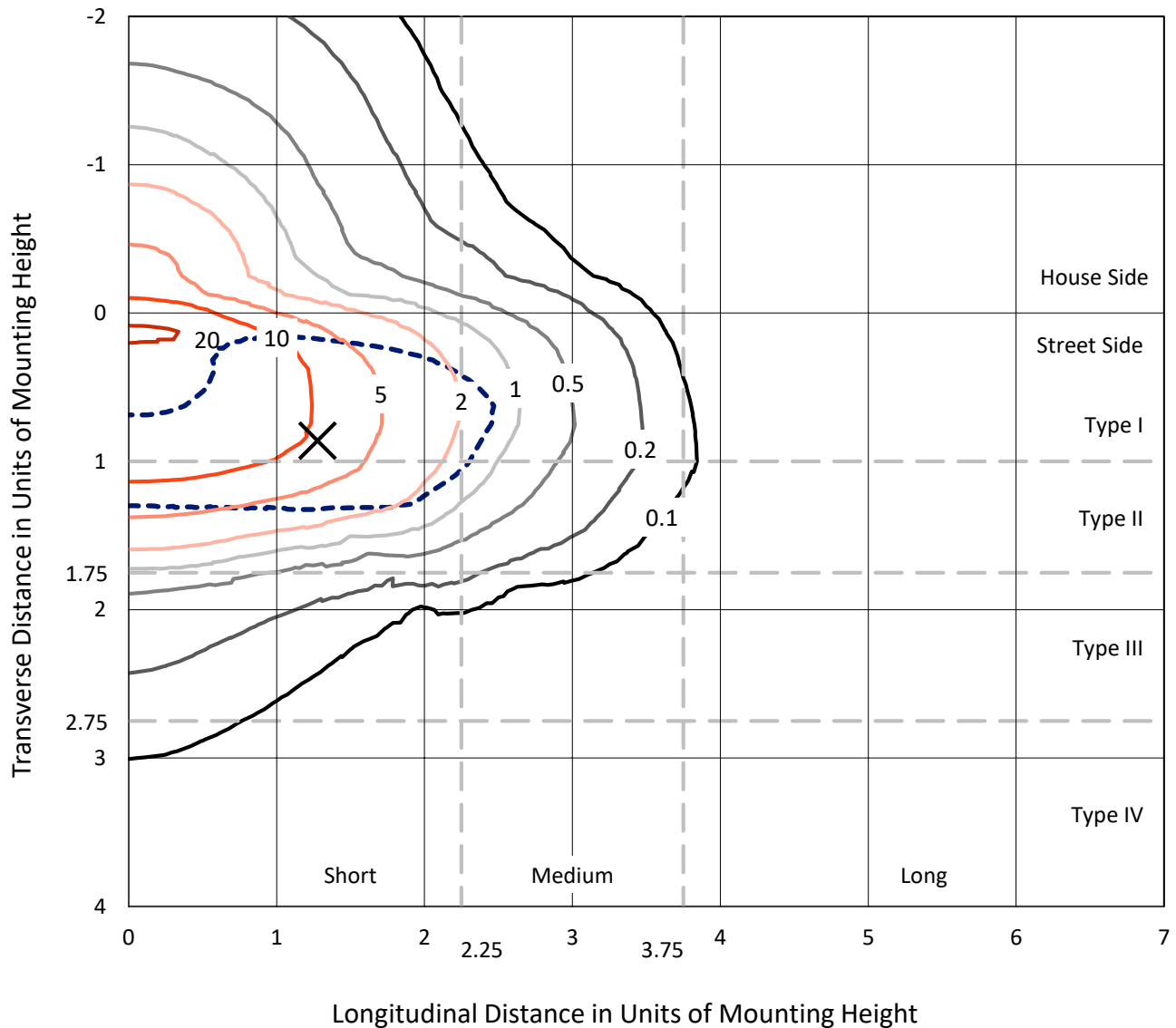


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Iso-Footcandle Lines of Horizontal Illumination

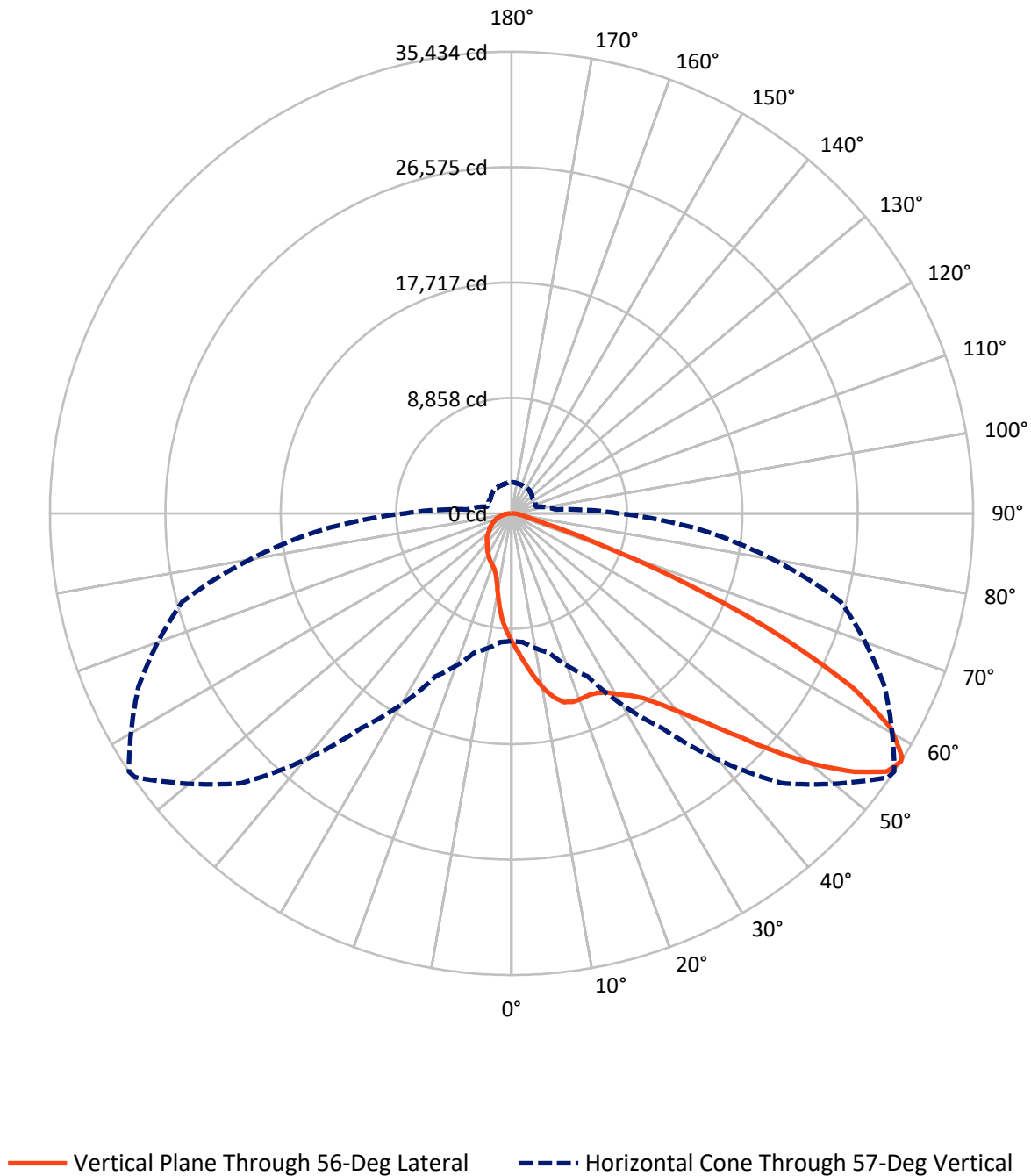
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 22 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	7712.4	0.0	7712.4
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	37028.6	0.0	37028.6
	% Fixture	82.8	0.0	82.8
Total	Lumens	44741.0	0.0	44741.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	948.0	2.1
10°-20°	2680.1	6.0
20°-30°	4365.3	9.8
30°-40°	6525.7	14.6
40°-50°	9898.1	22.1
50°-60°	11094.0	24.8
60°-70°	6552.6	14.6
70°-80°	2146.9	4.8
80°-90°	530.4	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°	44741.0	100.0
0°-180°	44741.0	100.0

Coefficient of Utilization



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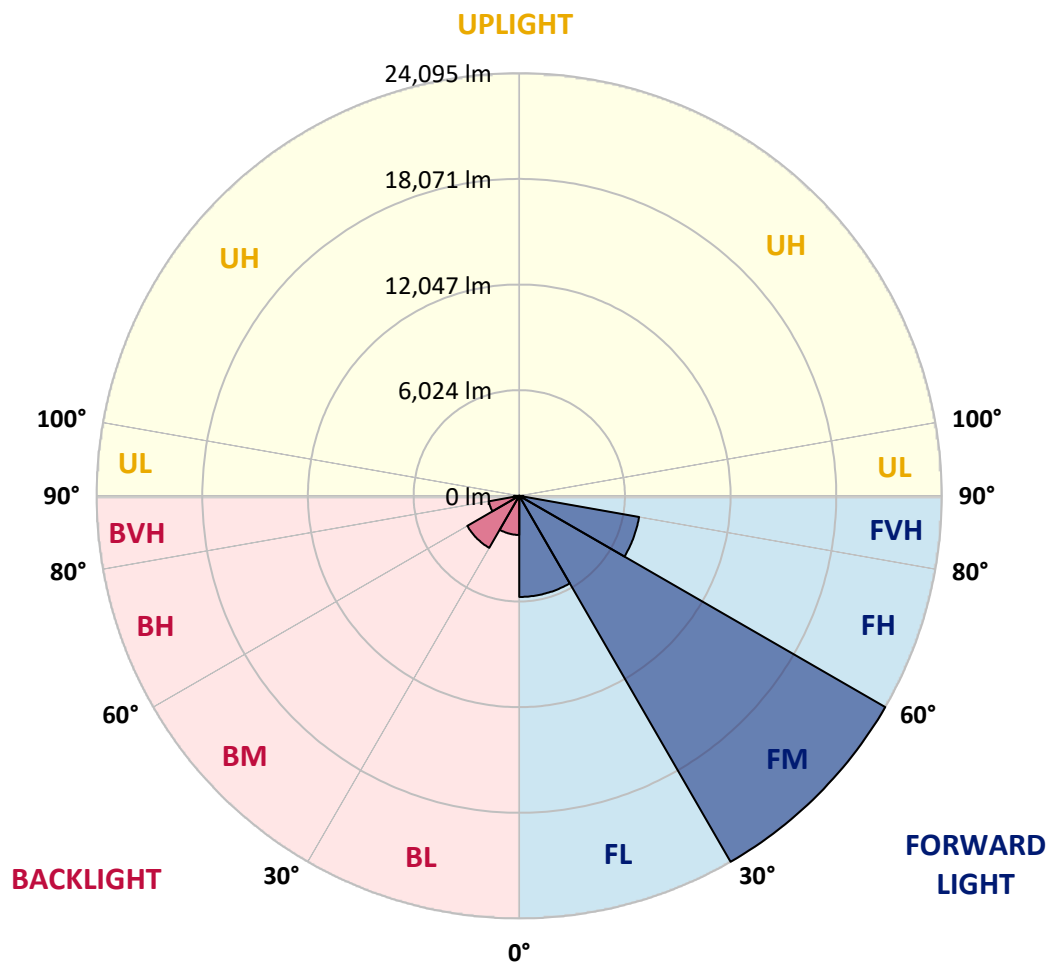
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5763.3	12.9			
FM	(30°-60°)	24094.5	53.9			
FH	(60°-80°)	6937.2	15.5			G3/7500
FVH	(80°-90°)	233.5	0.5			G3/500
BL	(0°-30°)	2230.1	5.0	B3/2500		
BM	(30°-60°)	3423.3	7.7	B3/5000		
BH	(60°-80°)	1762.2	3.9	B3/2500		G3/2500
BVH	(80°-90°)	296.9	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°	9923.6	9923.6	9923.6	9923.6	9923.6	9923.6	9923.6	9923.6	9923.6	9923.6	9923.6
2.5°	11395.1	11499.6	11453.5	11293.6	11170.6	10996.8	10803.1	10744.7	10540.2	10311.1	10035.8
5°	13198.7	13146.4	13071.0	12821.9	12559.0	12253.0	11767.2	11690.3	11235.2	10717.0	10169.6
7.5°	14225.8	14221.2	14176.6	14030.5	13790.6	13390.9	12805.0	12714.3	12027.0	11193.6	10344.9
10°	14076.6	14065.9	14139.7	14291.9	14364.1	14281.1	13787.6	13696.8	12852.7	11721.0	10547.9
12.5°	13229.4	13235.6	13354.0	13673.8	14108.9	14631.7	14551.7	14507.1	13709.1	12317.6	10793.9
15°	12569.8	12583.6	12677.4	12955.7	13469.3	14418.0	15016.1	15031.5	14537.9	12975.7	11081.4
17.5°	12280.7	12309.9	12353.0	12548.3	13018.8	13992.1	15126.8	15209.8	15263.6	13658.4	11358.2
20°	12373.0	12400.6	12412.9	12537.5	12923.4	13733.7	15049.9	15199.1	15820.2	14301.1	11634.9
22.5°	12786.6	12803.5	12811.2	12843.5	13143.3	13807.5	14999.2	15156.0	16223.1	14877.7	11844.0
25°	13472.3	13460.0	13410.8	13369.3	13570.8	14099.7	15116.0	15265.2	16550.6	15400.5	11980.9
27.5°	14293.4	14278.0	14182.7	14068.9	14184.3	14554.8	15452.8	15571.2	16844.3	15889.4	12050.1
30°	15279.0	15239.0	15059.1	14923.8	14968.4	15237.5	16007.8	16115.5	17297.9	16444.5	12117.7
32.5°	16418.4	16375.3	16115.5	15891.0	15891.0	16115.5	16579.8	16669.0	17682.3	17071.8	12226.9
35°	17845.2	17791.4	17453.2	17076.5	16970.4	17084.1	17359.4	17422.4	18374.2	17862.2	12425.3
37.5°	19527.4	19455.1	19016.9	18512.6	18280.4	18274.2	18472.6	18601.7	19479.7	18900.0	12762.0
40°	21214.1	21163.4	20780.5	20383.8	19928.7	19782.6	20088.6	20128.6	20925.0	20188.5	13192.5
42.5°	22518.0	22508.8	22438.0	22490.3	22024.4	21729.2	21969.1	22001.4	22690.2	21583.1	13650.7
45°	23206.8	23222.2	23565.1	24324.6	24496.9	24281.6	24400.0	24409.2	24707.5	22990.0	14070.5
47.5°	22654.8	22734.8	23602.0	25301.0	26711.0	27426.0	27229.2	27342.9	26663.3	24198.6	14399.5
50°	20503.7	20602.1	22078.2	24865.9	27744.2	30468.8	30365.8	30339.7	28240.9	25084.2	14577.9
52.5°	17839.1	17916.0	19133.7	22604.1	26986.2	32151.0	33096.6	32961.3	29643.2	25746.9	14611.7
55°	13781.4	13901.3	15068.4	18089.7	23920.3	31508.3	35104.7	34983.2	30920.9	26094.4	14571.7
57°	9797.5	9923.6	11082.9	13806.0	20122.4	29283.4	35304.6	35433.7	31611.3	26152.8	14616.3
57.5°	8742.7	8871.9	10020.5	12665.1	18938.5	28479.2	35132.4	35347.6	31735.8	26143.6	14640.9
60°	4402.1	4451.3	5183.2	7069.8	11971.7	23023.8	32885.9	33441.0	31848.1	25691.6	14747.0
62.5°	2736.9	2701.5	2678.5	3256.6	5824.4	15268.3	28250.1	29318.7	29700.1	24596.8	14490.2
65°	2406.3	2340.2	2086.5	2040.4	2572.4	7415.8	21274.1	22604.1	25110.4	22871.6	13878.3
67.5°	2260.3	2195.7	1909.7	1737.5	1739.0	2939.9	13207.9	14705.5	19561.2	19954.8	12434.5
70°	2109.6	2051.1	1783.6	1580.6	1480.7	1628.3	6076.5	7212.8	12751.2	15684.9	10392.6
72.5°	1915.8	1875.9	1622.2	1413.0	1307.0	1219.3	2326.4	2747.7	7382.0	10534.0	7217.4
75°	1712.9	1676.0	1459.2	1259.3	1130.1	959.5	1310.0	1411.5	3750.2	5389.2	3553.4
77.5°	1489.9	1468.4	1297.7	1113.2	1010.2	794.9	927.2	976.4	1608.3	2311.0	1782.1
80°	1185.5	1227.0	1134.7	991.7	896.4	636.6	656.6	688.8	936.4	1128.6	1011.7
82.5°	771.9	844.1	888.7	805.7	738.0	501.3	472.0	485.9	610.4	688.8	439.8
85°	321.4	361.3	584.3	527.4	490.5	365.9	316.7	322.9	378.2	392.1	179.9
87.5°	143.0	152.2	256.8	241.4	207.6	126.1	135.3	147.6	201.4	190.7	69.2
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°	9923.6	9923.6	9923.6	9923.6	9923.6	9923.6	9923.6	9923.6	9923.6	9923.6	9923.6
2.5°	9932.8	9803.7	9582.2	9337.8	9137.9	8978.0	8816.5	8705.8	8576.7	8507.5	8472.1
5°	9940.5	9686.8	9220.9	8742.7	8315.3	7924.7	7552.6	7266.6	6999.1	6854.6	6814.6
7.5°	9972.8	9591.5	8838.1	8050.8	7291.2	6597.8	6062.7	5727.5	5486.1	5378.5	5347.7
10°	9998.9	9479.2	8364.5	7199.0	6165.7	5463.1	5047.9	4860.3	4777.3	4763.4	4749.6
12.5°	10060.4	9363.9	7866.3	6310.3	5290.8	4805.0	4660.4	4648.1	4671.2	4705.0	4705.0
15°	10157.3	9250.1	7297.4	5547.6	4734.2	4563.6	4592.8	4660.4	4723.5	4775.7	4783.4
17.5°	10228.0	9110.2	6685.4	4937.2	4437.5	4483.6	4588.2	4683.5	4748.1	4798.8	4803.4
20°	10278.8	8893.4	6032.0	4471.3	4266.8	4409.8	4540.5	4625.1	4669.7	4720.4	4728.1
22.5°	10252.6	8602.8	5452.3	4137.6	4128.4	4302.2	4426.7	4528.2	4494.4	4445.2	4477.5
25°	10126.6	8203.0	4855.7	3888.6	3982.4	4157.6	4311.4	4243.7	4130.0	4108.4	4120.7
27.5°	9902.1	7692.6	4303.7	3657.9	3813.2	4023.9	4014.6	3947.0	3907.0	3879.3	3896.2
30°	9660.7	7139.0	3820.9	3456.5	3625.6	3799.4	3764.0	3762.5	3722.5	3677.9	3699.4
32.5°	9422.3	6582.4	3438.0	3290.4	3484.2	3507.2	3584.1	3607.2	3528.8	3435.0	3428.8
35°	9214.8	6056.6	3147.4	3139.8	3313.5	3316.6	3428.8	3396.5	3201.3	3104.4	3104.4
37.5°	9059.5	5532.2	2926.0	3004.4	3089.0	3169.0	3225.9	3092.1	3059.8	3006.0	3004.4
40°	8991.8	5071.0	2787.6	2901.4	2930.6	3032.1	2886.1	2938.3	2953.7	2926.0	2926.0
42.5°	8921.1	4669.7	2667.7	2823.0	2818.4	2804.6	2730.8	2798.4	2859.9	2861.5	2856.8
45°	8850.4	4323.7	2561.6	2655.4	2720.0	2570.8	2584.7	2657.0	2743.1	2773.8	2773.8
47.5°	8771.9	4050.0	2464.8	2478.6	2578.5	2478.6	2467.8	2523.2	2624.7	2673.9	2684.6
50°	8599.7	3804.0	2354.0	2323.3	2351.0	2384.8	2394.0	2420.2	2532.4	2610.8	2629.3
52.5°	8361.4	3584.1	2212.6	2180.3	2180.3	2307.9	2351.0	2358.7	2454.0	2547.8	2566.2
55°	8163.1	3444.2	2066.5	2060.4	2054.2	2226.4	2300.2	2312.5	2378.6	2452.5	2461.7
57°	8176.9	3433.4	1954.3	1960.4	1958.9	2143.4	2252.6	2278.7	2312.5	2375.6	2386.3
57.5°	8184.6	3441.1	1929.7	1932.7	1931.2	2120.3	2238.7	2267.9	2294.1	2360.2	2371.0
60°	8299.9	3461.1	1829.7	1795.9	1803.6	1997.3	2160.3	2197.2	2214.1	2301.8	2315.6
62.5°	8129.2	3371.9	1749.8	1668.3	1668.3	1868.2	2051.1	2109.6	2135.7	2254.1	2277.2
65°	7634.1	3121.3	1656.0	1523.7	1539.1	1739.0	1920.4	2015.8	2055.8	2203.4	2228.0
67.5°	6869.9	2830.7	1556.0	1394.6	1410.0	1603.7	1785.1	1888.2	1951.2	2148.0	2168.0
70°	5875.1	2475.5	1420.7	1257.7	1276.2	1456.1	1625.2	1742.1	1835.9	2095.7	2101.9
72.5°	4331.4	2029.6	1231.6	1107.1	1127.1	1283.9	1463.8	1599.1	1725.2	1965.0	1962.0
75°	2575.5	1586.8	1022.5	954.8	968.7	1114.8	1317.7	1482.2	1671.4	1914.3	1943.5
77.5°	1562.2	1194.7	833.4	799.5	816.5	965.6	1213.2	1388.4	1648.3	1805.1	1795.9
80°	944.1	853.4	665.8	644.2	661.2	825.7	1122.4	1317.7	1440.7	1542.2	1542.2
82.5°	493.6	521.2	489.0	472.0	495.1	670.4	1021.0	1150.1	1273.1	1093.2	1021.0
85°	201.4	272.2	296.8	295.2	309.1	464.4	881.0	984.1	821.1	779.6	798.0
87.5°	67.7	115.3	144.5	124.5	130.7	292.1	610.4	475.1	564.3	393.6	373.6
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)