

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: P190897

Luminaire Tested: **GAN-AF-09-LED-U-5WQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190897  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-AF-09-LED-U-5WQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 57337.4 lumens  
Efficiency: N/A  
Efficacy: 114.4 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B5 - U0 - G5

Input Watts (W): 501  
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: 28.75 FT

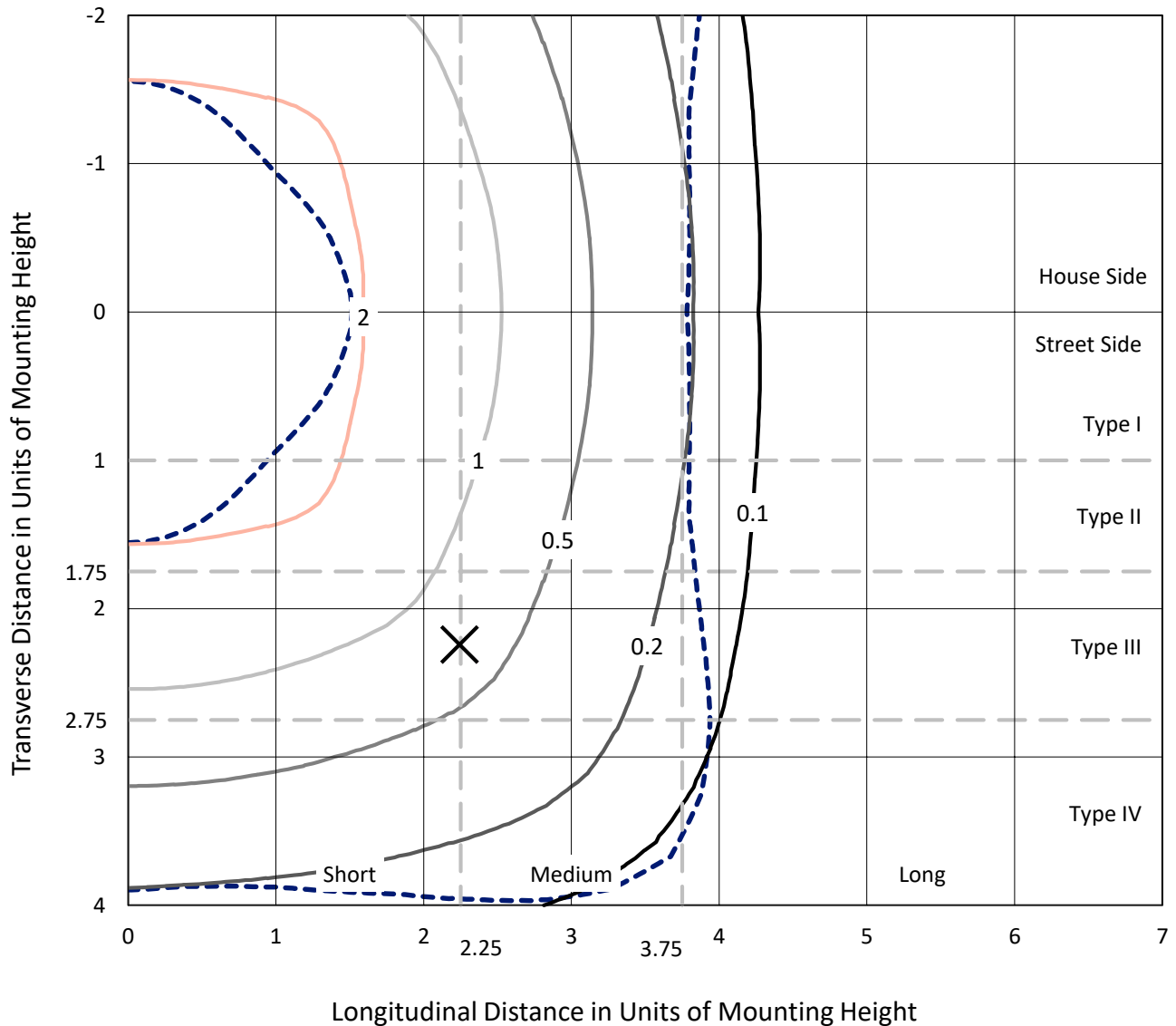


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

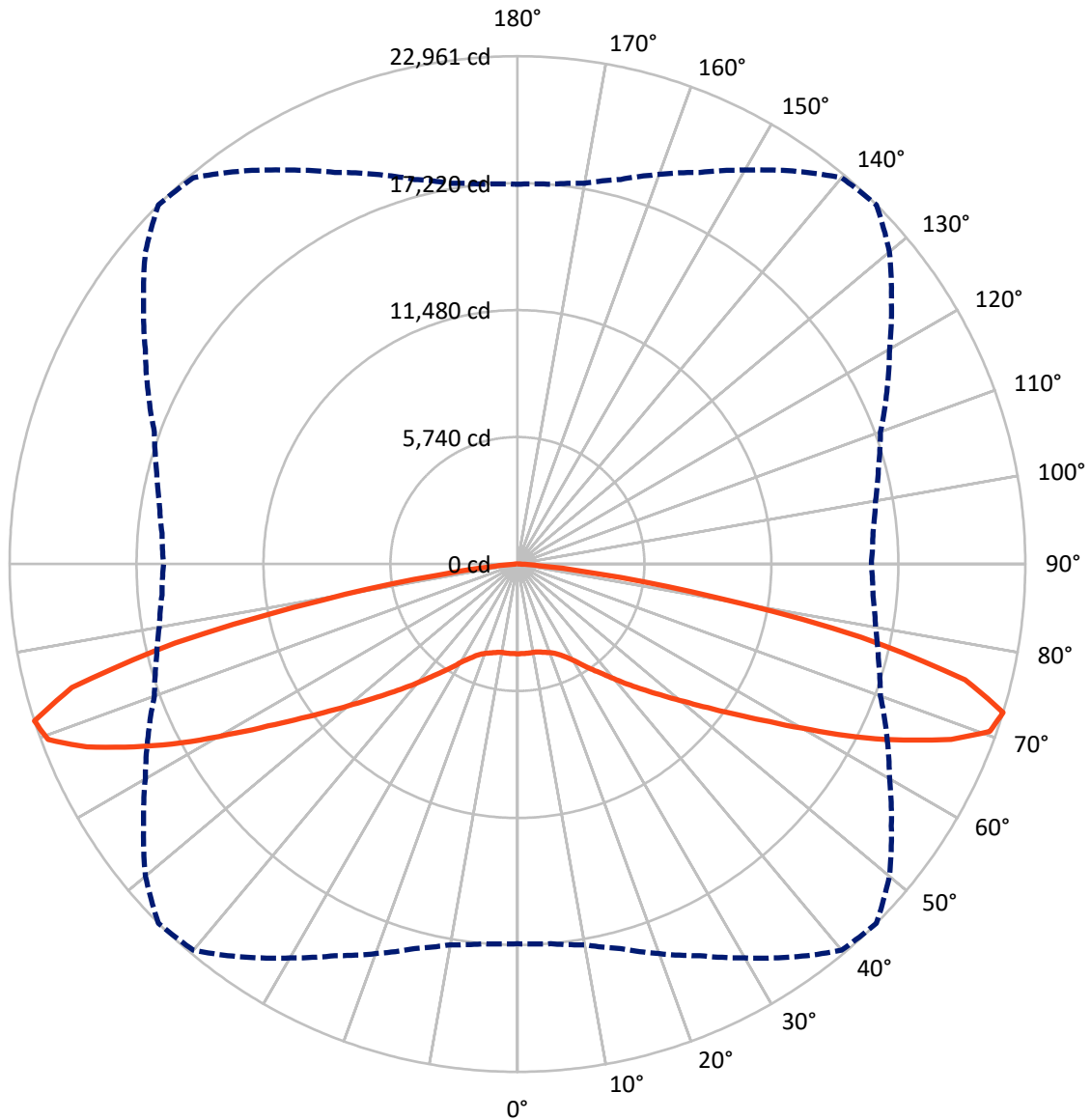


Based on 30 foot mounting height. Maximum calculated value = 4.5 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	28668.7	0.0	28668.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	28668.7	0.0	28668.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	57337.4	0.0	57337.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	387.7	0.7
10°-20°	1177.5	2.1
20°-30°	2151.9	3.8
30°-40°	3710.2	6.5
40°-50°	6342.5	11.1
50°-60°	10280.4	17.9
60°-70°	17054.8	29.7
70°-80°	15021.3	26.2
80°-90°	1211.1	2.1
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°	57337.4	100.0
0°-180°	57337.4	100.0



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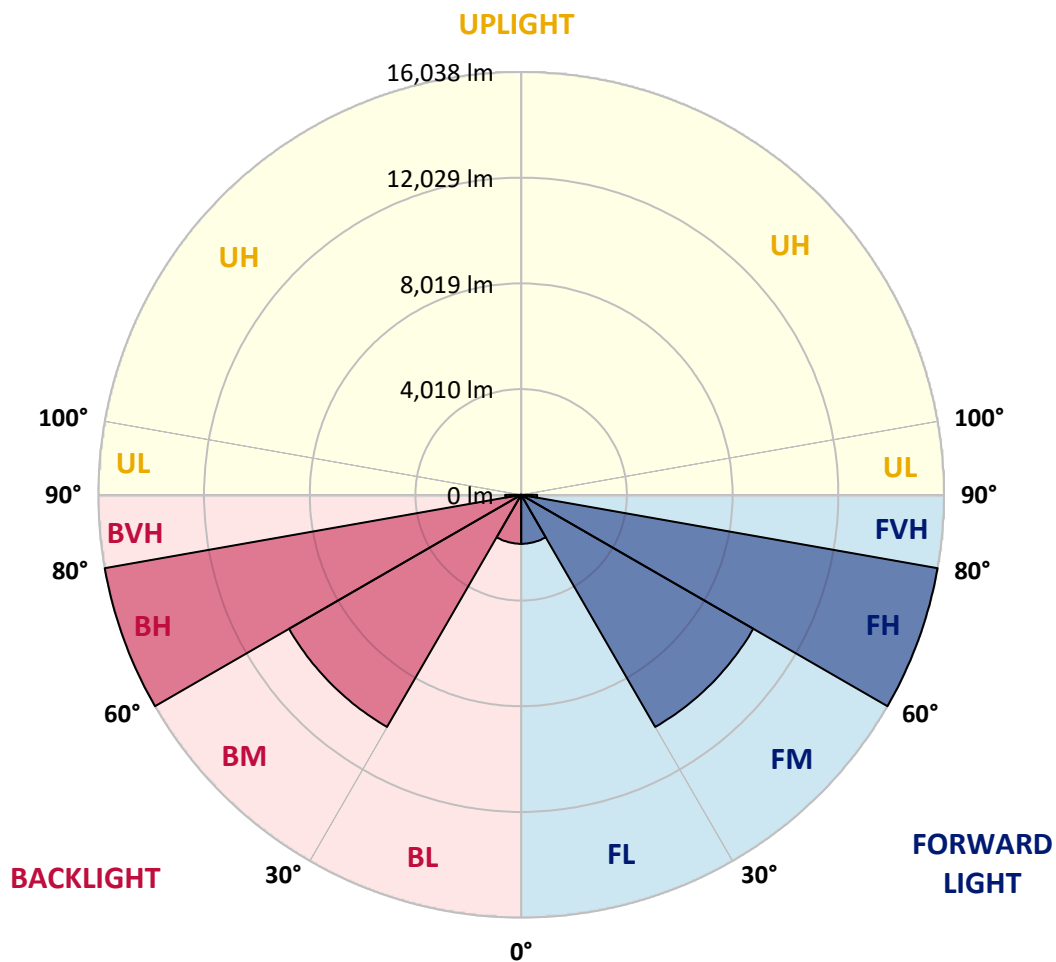
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1858.6	3.2			
FM	(30°-60°)	10166.5	17.7			
FH	(60°-80°)	16038.0	28.0			G5
FVH	(80°-90°)	605.6	1.1			G4/750
BL	(0°-30°)	1858.6	3.2	B3/2500		
BM	(30°-60°)	10166.5	17.7	B5		
BH	(60°-80°)	16038.0	28.0	B5		G5
BVH	(80°-90°)	605.6	1.1			G4/750
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G5**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4060.4	4060.4	4060.4	4060.4	4060.4	4060.4	4060.4	4060.4	4060.4	4060.4	4060.4
2.5°	4060.4	4063.1	4065.6	4063.1	4063.1	4060.4	4057.7	4060.4	4057.7	4052.5	4055.1
5°	4073.5	4078.8	4078.8	4073.5	4076.2	4073.5	4068.3	4070.9	4065.6	4057.7	4057.7
7.5°	4089.3	4091.9	4091.9	4086.7	4089.3	4084.0	4078.8	4076.2	4070.9	4060.4	4052.5
10°	4113.0	4115.6	4113.0	4107.8	4107.8	4099.8	4086.7	4081.4	4070.9	4055.1	4047.2
12.5°	4139.3	4141.9	4139.3	4134.1	4131.4	4118.2	4107.8	4099.8	4091.9	4078.8	4065.6
15°	4176.1	4181.3	4176.1	4165.6	4157.7	4147.1	4141.9	4144.5	4147.1	4136.6	4123.5
17.5°	4244.4	4247.1	4239.2	4215.6	4205.0	4194.5	4194.5	4199.7	4207.6	4202.4	4189.2
20°	4370.7	4362.8	4344.4	4315.4	4302.3	4283.9	4281.3	4283.9	4283.9	4281.3	4270.7
22.5°	4528.5	4523.2	4499.6	4462.7	4444.3	4433.8	4418.0	4404.9	4402.3	4394.4	4383.9
25°	4717.8	4715.2	4686.2	4654.7	4641.5	4628.4	4615.2	4596.8	4581.1	4562.7	4552.1
27.5°	4959.8	4949.2	4907.2	4891.3	4873.0	4865.1	4846.6	4825.7	4812.5	4788.8	4775.6
30°	5225.3	5225.3	5191.2	5186.0	5186.0	5167.5	5146.5	5109.6	5086.0	5062.3	5054.4
32.5°	5491.0	5493.7	5459.4	5469.9	5477.8	5491.0	5496.2	5483.1	5467.3	5464.7	5449.0
35°	5874.9	5864.4	5830.2	5838.1	5835.5	5832.9	5832.9	5861.8	5867.0	5872.2	5840.7
37.5°	6350.9	6350.9	6316.7	6316.7	6301.0	6285.2	6264.1	6282.6	6311.5	6319.4	6298.3
40°	6895.3	6913.7	6871.6	6869.0	6874.2	6824.3	6800.6	6829.5	6847.9	6879.5	6855.8
42.5°	7537.0	7523.8	7481.8	7476.4	7447.5	7431.7	7410.8	7434.4	7463.3	7484.3	7492.2
45°	8152.3	8141.8	8094.5	8094.5	8065.6	8052.4	8062.9	8102.4	8115.5	8144.4	8173.4
47.5°	8759.8	8746.6	8715.1	8728.2	8730.9	8754.5	8788.7	8825.5	8862.3	8901.8	8914.9
50°	9380.5	9383.0	9348.8	9380.5	9419.8	9485.6	9577.7	9638.1	9714.5	9764.4	9780.1
52.5°	9945.8	9956.4	9993.2	10066.8	10145.7	10274.5	10432.4	10579.6	10705.8	10790.0	10784.8
55°	10624.3	10640.1	10729.5	10855.8	10984.5	11179.2	11413.3	11673.6	11883.9	12004.9	11928.6
57.5°	11492.1	11526.3	11626.2	11797.2	11989.2	12241.7	12562.4	12954.3	13280.4	13443.4	13319.8
60°	12683.5	12704.4	12825.5	13014.8	13246.2	13559.1	13987.8	14513.7	14974.0	15189.6	15047.6
62.5°	14253.4	14292.9	14390.2	14582.2	14818.8	15173.8	15697.2	16354.6	16927.9	17227.7	16906.8
65°	16128.5	16254.7	16336.2	16530.8	16751.7	17127.8	17674.7	18379.6	18994.9	19192.1	18821.4
67.5°	17985.1	18095.5	18237.5	18461.1	18684.6	19108.0	19615.5	20299.2	20975.1	21153.9	20578.0
70°	18797.6	18860.8	19081.7	19386.8	19815.4	20315.1	20901.4	21669.4	22505.6	22652.9	21921.8
72.5°	17169.8	17232.9	17480.2	17998.2	18745.1	19539.3	20562.2	21690.4	22794.9	22960.6	21953.4
75°	12985.8	12883.2	13248.8	13935.2	14942.4	16049.6	17480.2	19097.5	20693.8	20901.4	19699.7
77.5°	6711.2	6698.1	6974.2	7826.2	9028.1	10287.7	11863.0	13690.7	15252.7	15883.9	14905.6
80°	1890.8	1911.9	2043.3	2466.7	3168.9	4078.8	5309.5	7021.5	8299.6	8951.7	8404.8
82.5°	741.6	799.4	849.5	928.3	1020.4	1154.5	1541.1	2293.1	3076.8	3676.4	3011.1
85°	265.6	284.0	402.3	476.0	483.9	510.1	581.1	678.5	817.8	975.7	802.1
87.5°	99.9	110.5	128.9	213.0	210.4	192.0	234.1	244.6	184.1	168.3	207.8
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	4060.4	4060.4	4060.4	4060.4	4060.4	4060.4	4060.4	4060.4
2.5°	4049.9	4052.5	4052.5	4055.1	4057.7	4057.7	4063.1	4063.1
5°	4052.5	4052.5	4047.2	4049.9	4047.2	4047.2	4049.9	4049.9
7.5°	4047.2	4044.6	4039.3	4036.7	4031.4	4031.4	4031.4	4031.4
10°	4039.3	4036.7	4031.4	4028.8	4026.2	4026.2	4026.2	4026.2
12.5°	4060.4	4052.5	4047.2	4044.6	4044.6	4044.6	4044.6	4044.6
15°	4115.6	4097.2	4084.0	4084.0	4086.7	4091.9	4091.9	4097.2
17.5°	4184.0	4162.9	4149.8	4139.3	4144.5	4152.5	4157.7	4162.9
20°	4265.5	4255.0	4236.6	4226.0	4226.0	4236.6	4241.9	4244.4
22.5°	4378.5	4370.7	4362.8	4349.7	4349.7	4354.9	4365.4	4365.4
25°	4546.9	4541.6	4536.4	4525.8	4523.2	4523.2	4528.5	4533.7
27.5°	4757.2	4759.9	4754.7	4752.0	4744.1	4741.5	4749.4	4746.8
30°	5038.6	5051.8	5064.9	5054.4	5041.3	5033.4	5025.6	5015.0
32.5°	5420.0	5404.1	5393.7	5375.3	5351.6	5330.6	5314.7	5296.3
35°	5780.3	5754.0	5743.5	5759.2	5756.6	5743.5	5725.0	5709.3
37.5°	6222.1	6216.8	6222.1	6250.9	6245.7	6258.9	6222.1	6219.4
40°	6779.6	6784.8	6821.6	6855.8	6874.2	6892.6	6871.6	6850.6
42.5°	7426.5	7423.9	7437.1	7484.3	7515.9	7537.0	7492.2	7487.0
45°	8110.3	8091.8	8102.4	8141.8	8173.4	8197.0	8147.1	8147.1
47.5°	8862.3	8830.8	8796.7	8841.4	8859.8	8875.5	8836.0	8823.0
50°	9701.3	9635.5	9561.8	9580.2	9580.2	9575.0	9525.1	9522.4
52.5°	10663.8	10542.7	10408.6	10358.7	10329.8	10298.3	10211.4	10169.4
55°	11770.9	11589.4	11379.1	11250.2	11181.8	11095.0	10950.4	10911.0
57.5°	13064.7	12780.7	12417.8	12260.1	12107.5	11965.5	11805.1	11760.4
60°	14597.9	14179.7	13698.5	13406.6	13241.0	13104.2	12938.5	12930.6
62.5°	16307.3	15647.2	15102.8	14839.8	14718.8	14597.9	14440.1	14461.1
65°	18045.6	17356.5	16846.4	16633.4	16520.2	16420.3	16262.6	16286.2
67.5°	19760.1	19126.4	18566.3	18348.0	18221.7	18095.5	17953.5	17977.1
70°	20991.0	20204.6	19573.4	19089.6	18787.1	18445.2	18224.4	18169.1
72.5°	20638.5	19426.1	18424.3	17464.3	16901.6	16444.0	16133.7	15999.6
75°	17861.4	16204.7	14916.2	13737.9	13075.3	12536.2	12144.4	11899.8
77.5°	13264.6	11402.7	9880.1	8523.1	7450.2	6729.6	6222.1	5893.3
80°	7260.8	5522.5	4036.7	2837.6	2085.4	1733.0	1530.5	1433.3
82.5°	2261.6	1459.5	1075.5	928.3	862.6	825.7	765.3	668.0
85°	720.6	631.2	586.5	560.2	533.9	465.4	320.8	292.0
87.5°	278.8	286.6	284.0	268.2	273.5	197.2	157.7	139.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)