

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: P190797

Luminaire Tested: **GLEON-AF-09-LED-E1-5MQ-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190797  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-09-LED-E1-5MQ-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 37677.3 lumens  
Efficiency: N/A  
Efficacy: 129.9 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G4

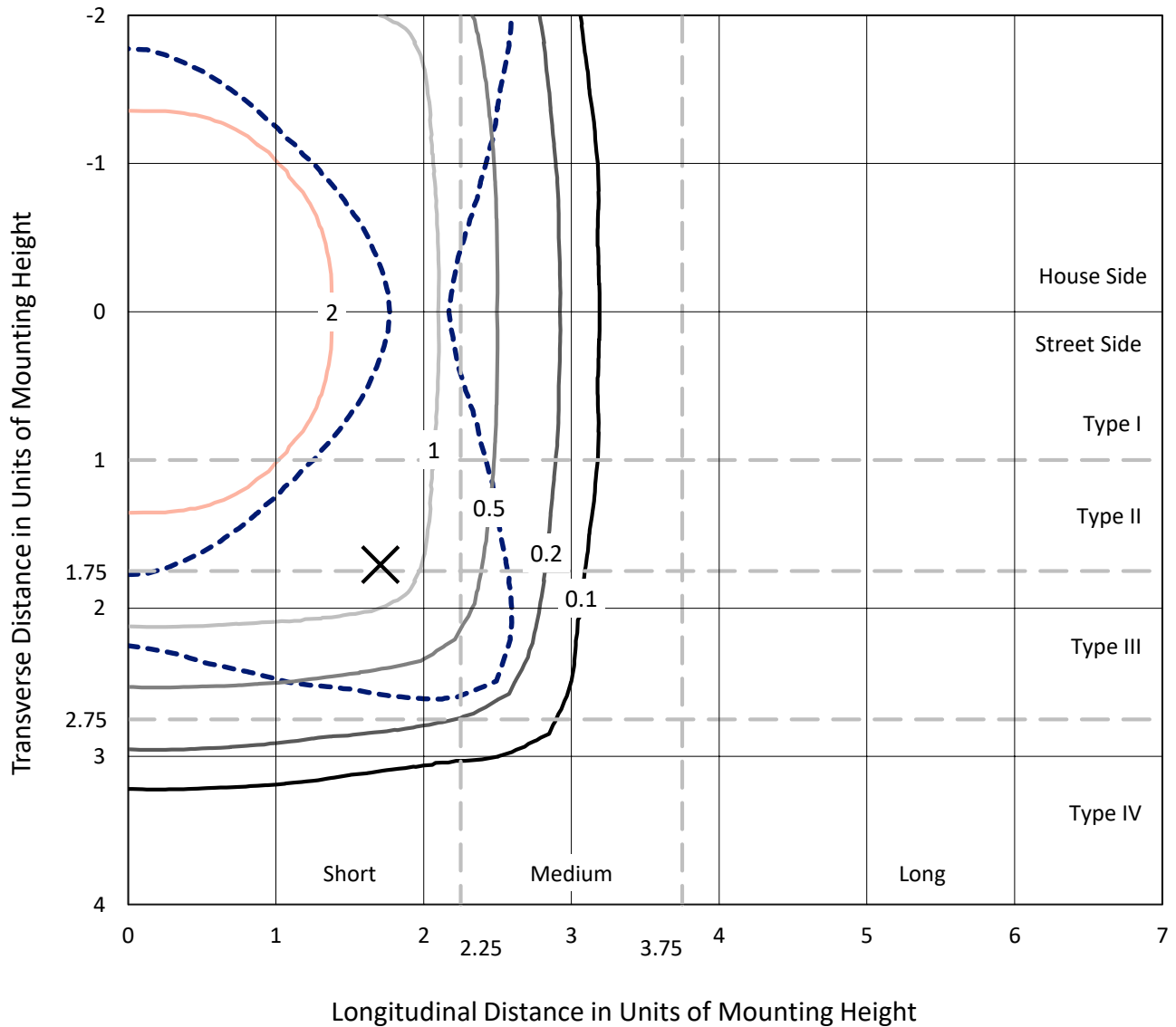
Input Watts (W): 290  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

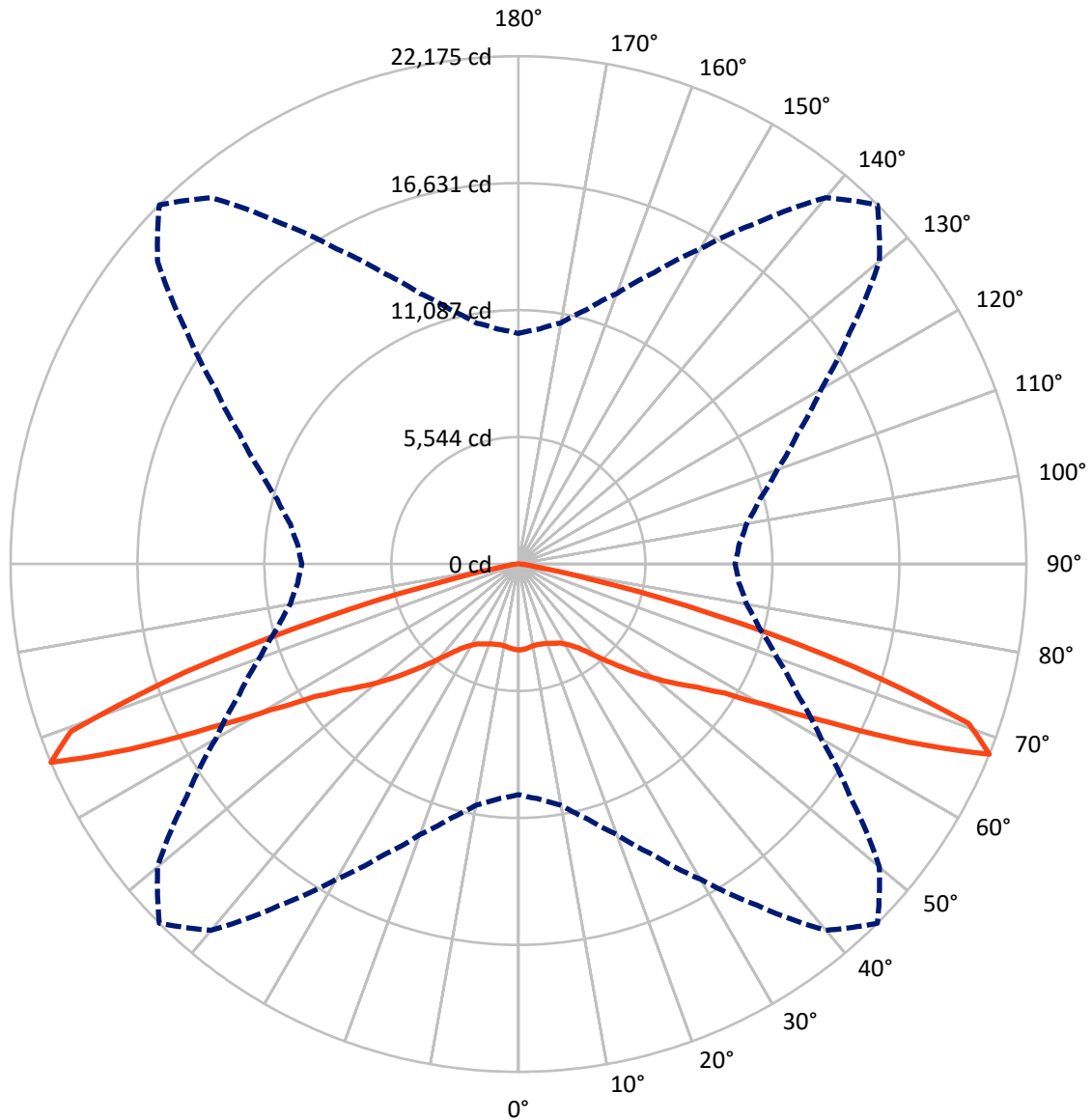
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.2 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	18838.7	0.0	18838.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	18838.7	0.0	18838.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	37677.3	0.0	37677.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	351.4	0.9
10°-20°	1019.8	2.7
20°-30°	1733.6	4.6
30°-40°	2833.9	7.5
40°-50°	5059.0	13.4
50°-60°	8529.5	22.6
60°-70°	13236.6	35.1
70°-80°	4650.8	12.3
80°-90°	262.8	0.7
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°	37677.3	100.0
0°-180°	37677.3	100.0



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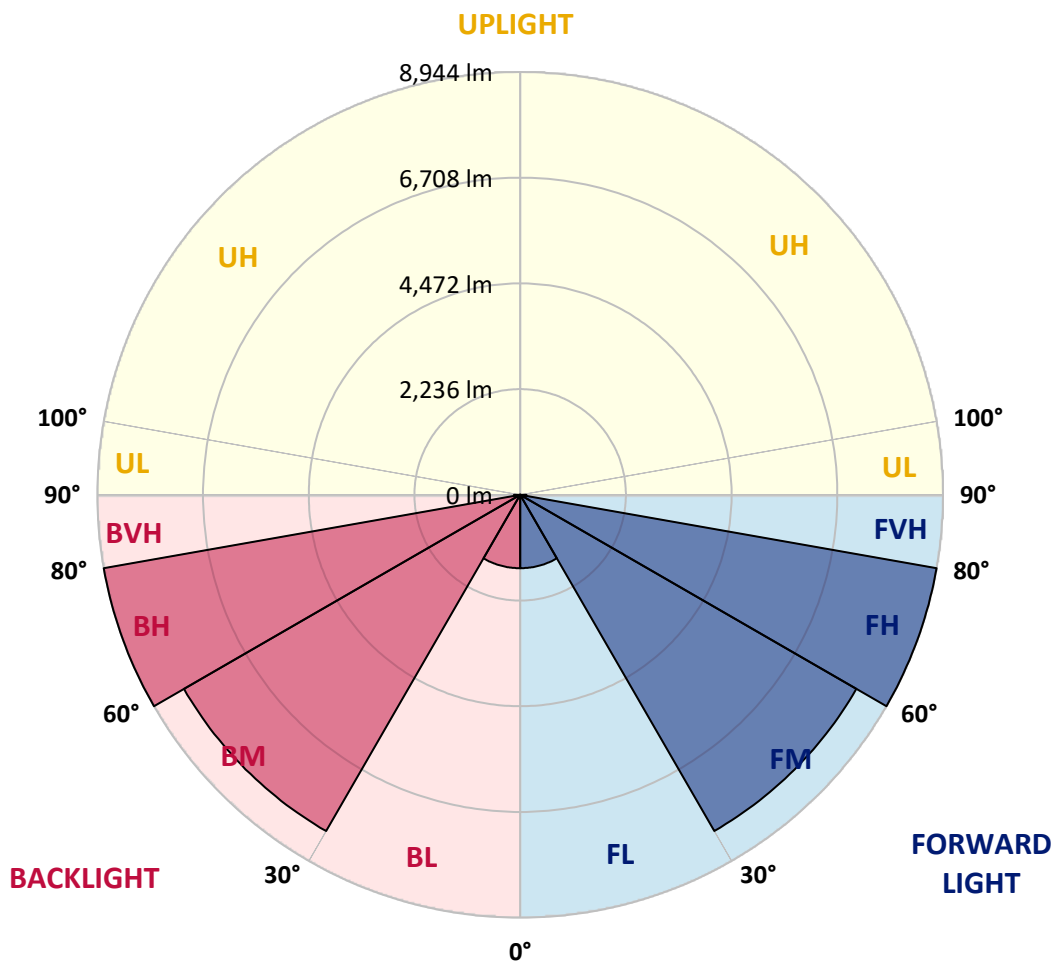
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1552.4	4.1			
FM	(30°-60°)	8211.2	21.8			
FH	(60°-80°)	8943.7	23.7			G4/12000
FVH	(80°-90°)	131.4	0.3			G2/225
BL	(0°-30°)	1552.4	4.1	B3/2500		
BM	(30°-60°)	8211.2	21.8	B4/8500		
BH	(60°-80°)	8943.7	23.7	B5		G4/12000
BVH	(80°-90°)	131.4	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G4**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3754.7	3754.7	3754.7	3754.7	3754.7	3754.7	3754.7	3754.7	3754.7	3754.7	3754.7
2.5°	3740.8	3744.3	3744.3	3744.3	3742.6	3742.6	3739.1	3742.6	3740.8	3735.6	3737.4
5°	3709.6	3713.1	3713.1	3711.4	3716.6	3714.8	3709.6	3713.1	3711.4	3707.9	3709.6
7.5°	3664.6	3669.8	3669.8	3668.1	3673.3	3671.6	3668.1	3669.8	3669.8	3664.6	3664.6
10°	3614.4	3617.9	3617.9	3616.1	3624.7	3624.7	3623.0	3628.2	3629.9	3624.7	3621.2
12.5°	3567.5	3572.8	3572.8	3579.7	3588.4	3591.8	3600.5	3607.4	3614.4	3612.7	3605.7
15°	3539.8	3543.3	3550.3	3558.9	3572.8	3584.9	3598.7	3614.4	3628.2	3631.7	3621.2
17.5°	3522.5	3527.7	3538.1	3550.3	3569.3	3590.1	3610.9	3631.7	3650.7	3657.7	3645.6
20°	3517.3	3520.8	3531.2	3552.0	3578.0	3609.2	3638.6	3662.9	3688.9	3697.6	3688.9
22.5°	3527.7	3534.7	3546.8	3571.0	3605.7	3645.6	3680.2	3713.1	3746.0	3761.6	3749.5
25°	3574.5	3581.5	3597.0	3628.2	3666.4	3707.9	3747.8	3785.9	3815.3	3831.0	3822.3
27.5°	3661.1	3669.8	3688.9	3720.1	3761.6	3806.7	3850.0	3881.2	3905.4	3910.6	3900.2
30°	3791.1	3810.2	3832.7	3867.4	3915.9	3954.0	3997.3	4025.0	4054.5	4054.5	4045.8
32.5°	3993.8	4012.8	4037.2	4070.0	4108.2	4149.8	4187.9	4212.1	4243.3	4245.0	4224.3
35°	4297.0	4305.7	4326.5	4347.2	4381.9	4418.3	4451.3	4466.8	4492.8	4494.5	4475.5
37.5°	4697.3	4699.0	4712.8	4719.8	4751.0	4790.9	4822.0	4832.4	4856.7	4853.2	4834.2
40°	5163.3	5172.0	5177.3	5187.6	5220.5	5258.7	5291.6	5296.7	5322.8	5317.6	5293.4
42.5°	5702.2	5705.7	5735.2	5750.7	5781.9	5800.9	5842.6	5847.8	5879.0	5865.1	5837.4
45°	6306.9	6338.1	6365.8	6397.0	6430.0	6452.5	6485.4	6478.4	6499.2	6478.4	6462.9
47.5°	6942.9	6965.4	7027.8	7076.3	7130.0	7149.0	7195.8	7175.0	7195.8	7166.4	7161.2
50°	7642.9	7682.7	7736.4	7791.8	7849.0	7880.2	7940.9	7914.9	7942.6	7914.9	7899.2
52.5°	8332.4	8342.8	8460.6	8542.0	8621.7	8658.2	8694.6	8682.4	8684.1	8682.4	8666.8
55°	8987.3	9011.7	9129.4	9240.3	9378.9	9481.2	9543.5	9536.7	9521.0	9505.5	9479.5
57.5°	9725.5	9749.7	9884.9	10021.7	10179.5	10325.1	10451.5	10581.4	10631.7	10645.5	10588.4
60°	10723.5	10721.8	10902.0	11068.3	11293.6	11510.1	11787.4	12069.8	12393.8	12544.5	12345.3
62.5°	11738.9	11780.4	12040.3	12334.9	12799.3	13251.5	13762.7	14265.2	14778.0	15195.5	14752.0
65°	11617.6	11777.0	12163.4	12830.5	13688.1	14707.0	15808.9	16975.1	18028.5	18752.7	17940.1
67.5°	10068.6	10295.6	10688.9	11499.7	12572.3	14041.6	15892.1	18198.3	20878.7	22174.7	20568.6
70°	7298.0	7554.5	7966.8	8758.7	9820.8	11217.4	13227.3	15996.1	19544.6	20851.0	19081.9
72.5°	3631.7	3770.3	4025.0	4529.2	5333.2	6466.4	8289.1	10950.5	14090.1	15289.1	13672.6
75°	1233.7	1297.8	1341.1	1505.7	1760.4	2205.7	3111.9	4787.4	7303.3	8755.2	7199.2
77.5°	712.2	713.8	743.3	772.7	816.1	864.6	985.9	1294.3	2238.6	3179.4	2316.6
80°	460.9	459.2	483.4	506.0	535.4	559.7	566.6	599.6	691.3	819.6	732.9
82.5°	239.1	268.5	322.2	351.7	407.1	417.6	403.8	391.6	414.1	429.7	440.1
85°	131.7	114.4	171.5	221.8	246.0	249.5	249.5	235.7	244.3	239.1	259.9
87.5°	60.7	55.4	67.6	109.1	116.1	98.7	103.9	91.9	65.9	64.1	72.7
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°	3754.7	3754.7	3754.7	3754.7	3754.7	3754.7	3754.7	3754.7
2.5°	3737.4	3739.1	3739.1	3744.3	3746.0	3749.5	3753.0	3754.7
5°	3707.9	3713.1	3709.6	3714.8	3714.8	3718.3	3718.3	3720.1
7.5°	3664.6	3669.8	3669.8	3669.8	3668.1	3673.3	3673.3	3673.3
10°	3619.5	3623.0	3621.2	3617.9	3614.4	3619.5	3617.9	3616.1
12.5°	3605.7	3597.0	3590.1	3586.7	3579.7	3581.5	3576.2	3576.2
15°	3614.4	3598.7	3586.7	3581.5	3574.5	3571.0	3567.5	3569.3
17.5°	3636.9	3617.9	3602.2	3593.5	3584.9	3579.7	3572.8	3574.5
20°	3676.7	3654.2	3631.7	3614.4	3598.7	3590.1	3584.9	3583.2
22.5°	3735.6	3702.8	3669.8	3643.9	3623.0	3610.9	3605.7	3602.2
25°	3803.2	3766.8	3728.8	3699.3	3678.4	3662.9	3652.4	3652.4
27.5°	3888.1	3858.7	3824.0	3789.3	3770.3	3754.7	3747.8	3744.3
30°	4030.2	4002.5	3974.8	3941.8	3917.6	3901.9	3889.9	3879.4
32.5°	4212.1	4189.6	4167.1	4142.8	4120.3	4099.5	4080.4	4071.8
35°	4468.6	4451.3	4435.6	4407.9	4399.3	4387.1	4376.7	4368.1
37.5°	4822.0	4815.1	4815.1	4785.7	4778.7	4773.5	4763.2	4764.8
40°	5286.4	5293.4	5284.7	5274.2	5269.0	5255.2	5255.2	5267.4
42.5°	5835.6	5840.8	5859.9	5842.6	5861.6	5844.3	5833.9	5842.6
45°	6473.2	6492.4	6530.4	6513.1	6525.3	6495.8	6459.4	6461.2
47.5°	7188.9	7206.2	7221.8	7209.7	7211.4	7162.9	7114.3	7102.2
50°	7932.2	7939.1	7947.8	7930.4	7933.9	7880.2	7824.8	7826.5
52.5°	8666.8	8699.8	8734.4	8687.6	8677.2	8616.6	8538.6	8507.5
55°	9507.2	9554.0	9514.2	9432.6	9351.2	9269.8	9167.6	9150.3
57.5°	10543.3	10463.7	10338.9	10184.7	10072.1	9957.7	9853.7	9810.4
60°	11984.9	11685.2	11459.9	11231.2	11087.4	10947.0	10810.1	10789.4
62.5°	14022.5	13504.5	13055.7	12582.7	12196.3	11894.8	11654.0	11586.4
65°	16576.5	15351.5	14289.4	13298.3	12437.1	11787.4	11378.5	11198.2
67.5°	17675.1	15256.2	13435.1	12028.3	10902.0	10115.3	9673.5	9453.5
70°	15531.7	12652.0	10671.5	9262.9	8237.1	7398.5	6998.3	6762.6
72.5°	10685.4	8048.3	6364.1	5194.5	4375.0	3673.3	3396.0	3375.2
75°	4797.7	3177.7	2190.1	1687.7	1420.8	1235.4	1178.2	1134.9
77.5°	1342.8	992.8	885.4	828.2	772.7	708.7	684.5	689.6
80°	653.3	616.8	592.6	556.2	506.0	452.2	428.0	438.3
82.5°	433.1	428.0	443.6	417.6	344.8	292.9	246.0	225.3
85°	263.4	266.8	272.0	273.7	232.2	162.9	110.9	124.8
87.5°	103.9	119.6	129.9	135.1	126.4	77.9	62.4	64.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)