

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: P299678

Luminaire Tested: **GLNA-AF-08-LED-E1-5MQ-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299678  
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: GLNA-AF-08-LED-E1-5MQ-7030-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 39027.9 lumens  
Efficiency: N/A  
Efficacy: 116.9 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G4

Input Watts (W): 334  
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

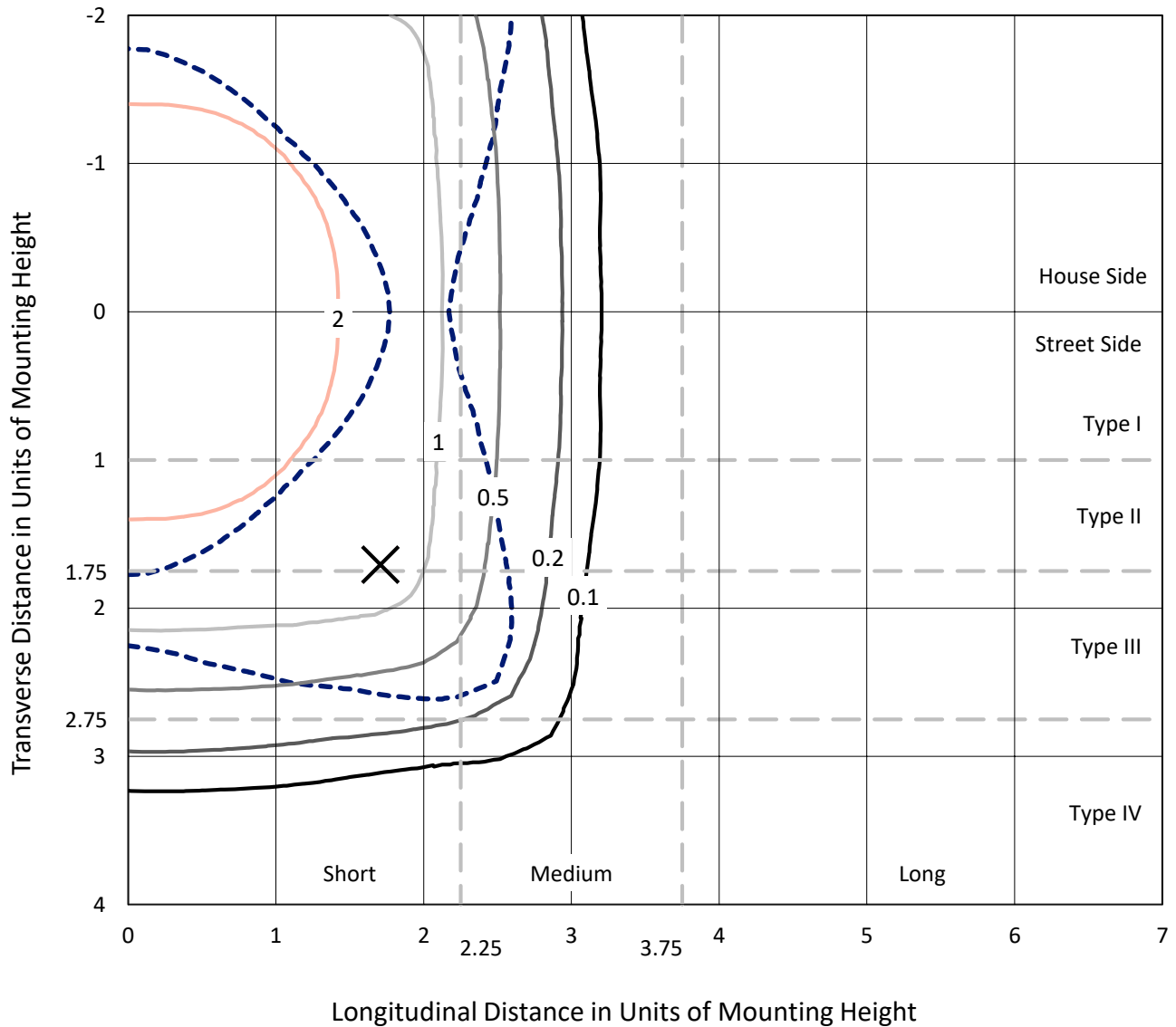


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

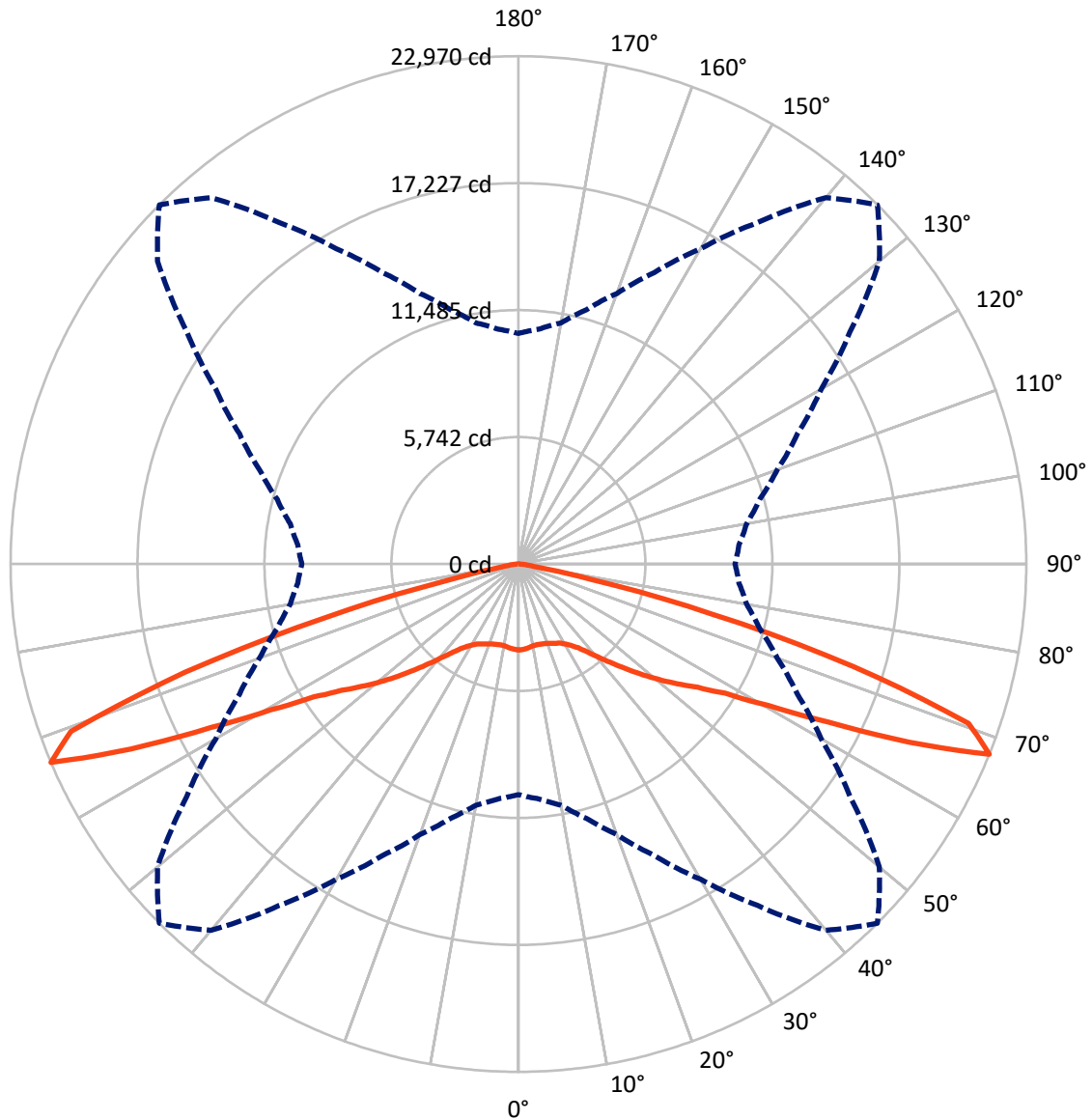


Based on 30 foot mounting height. Maximum calculated value = 4.3 fc  
 Type V - Short - Full Cutoff

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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	19514.0	0.0	19514.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	19514.0	0.0	19514.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	39027.9	0.0	39027.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	364.0	0.9
10°-20°	1056.3	2.7
20°-30°	1795.7	4.6
30°-40°	2935.4	7.5
40°-50°	5240.3	13.4
50°-60°	8835.3	22.6
60°-70°	13711.1	35.1
70°-80°	4817.5	12.3
80°-90°	272.3	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°	39027.9	100.0
0°-180°	39027.9	100.0



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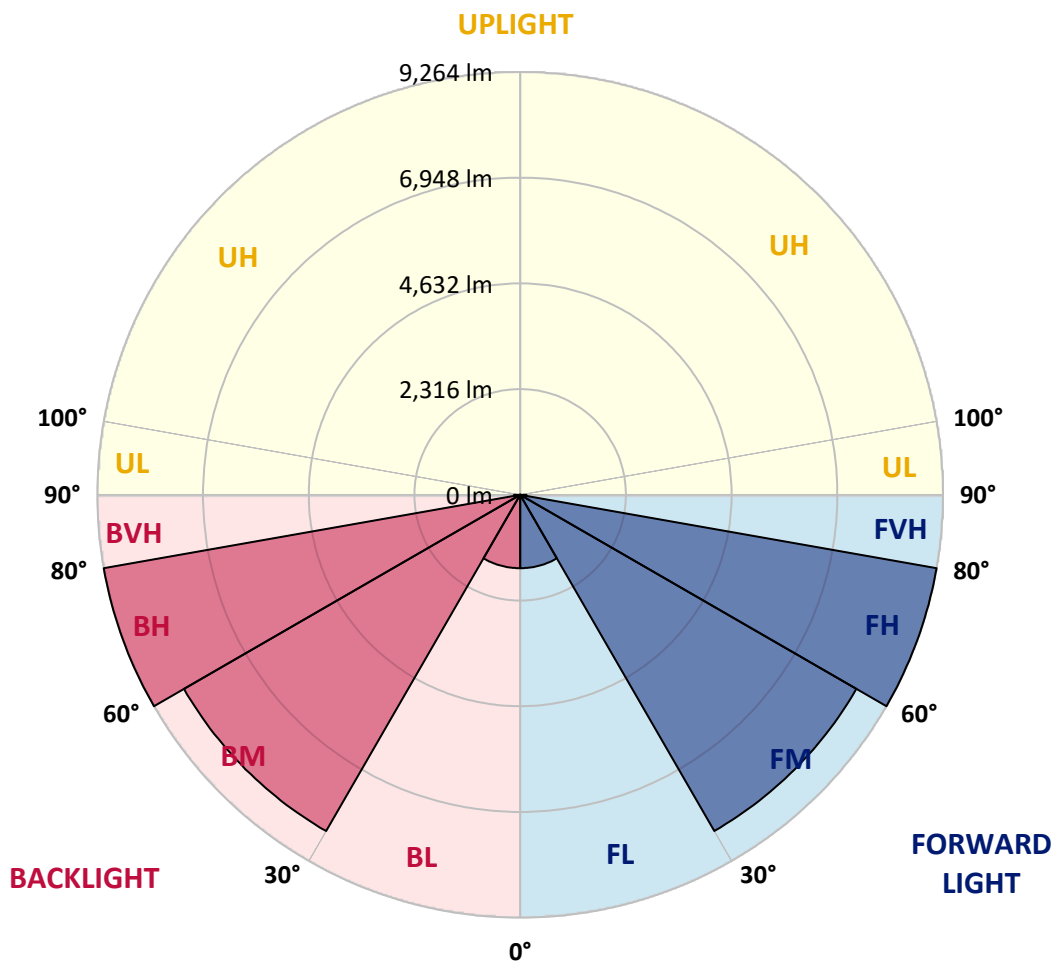
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1608.0	4.1			
FM	(30°-60°)	8505.5	21.8			
FH	(60°-80°)	9264.3	23.7			G4/12000
FVH	(80°-90°)	136.1	0.3			G2/225
BL	(0°-30°)	1608.0	4.1	B3/2500		
BM	(30°-60°)	8505.5	21.8	B5		
BH	(60°-80°)	9264.3	23.7	B5		G4/12000
BVH	(80°-90°)	136.1	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°	3889.3	3889.3	3889.3	3889.3	3889.3	3889.3	3889.3	3889.3	3889.3	3889.3	3889.3
2.5°	3874.9	3878.5	3878.5	3878.5	3876.7	3876.7	3873.1	3876.7	3874.9	3869.6	3871.3
5°	3842.6	3846.2	3846.2	3844.4	3849.8	3848.0	3842.6	3846.2	3844.4	3840.8	3842.6
7.5°	3796.0	3801.4	3801.4	3799.6	3804.9	3803.1	3799.6	3801.4	3801.4	3796.0	3796.0
10°	3743.9	3747.5	3747.5	3745.7	3754.7	3754.7	3752.9	3758.3	3760.1	3754.7	3751.1
12.5°	3695.5	3700.8	3700.8	3708.0	3717.0	3720.6	3729.6	3736.7	3743.9	3742.1	3734.9
15°	3666.7	3670.3	3677.5	3686.5	3700.8	3713.4	3727.8	3743.9	3758.3	3761.9	3751.1
17.5°	3648.8	3654.2	3664.9	3677.5	3697.3	3718.8	3740.3	3761.9	3781.6	3788.8	3776.2
20°	3643.4	3647.0	3657.8	3679.3	3706.2	3738.5	3769.0	3794.2	3821.1	3830.1	3821.1
22.5°	3654.2	3661.4	3673.9	3699.0	3734.9	3776.2	3812.1	3846.2	3880.3	3896.5	3883.9
25°	3702.6	3709.8	3726.0	3758.3	3797.8	3840.8	3882.1	3921.6	3952.1	3968.3	3959.3
27.5°	3792.4	3801.4	3821.1	3853.4	3896.5	3943.1	3988.0	4020.3	4045.4	4050.8	4040.1
30°	3927.0	3946.7	3970.1	4006.0	4056.2	4095.7	4140.6	4169.3	4199.8	4199.8	4190.8
32.5°	4137.0	4156.7	4181.8	4215.9	4255.4	4298.5	4338.0	4363.1	4395.4	4397.2	4375.7
35°	4451.1	4460.0	4481.6	4503.1	4539.0	4576.7	4610.8	4627.0	4653.9	4655.7	4635.9
37.5°	4865.7	4867.5	4881.8	4889.0	4921.3	4962.6	4994.9	5005.7	5030.8	5027.2	5007.4
40°	5348.5	5357.4	5362.8	5373.6	5407.7	5447.2	5481.3	5486.7	5513.6	5508.2	5483.1
42.5°	5906.6	5910.2	5940.7	5956.9	5989.2	6008.9	6052.0	6057.4	6089.7	6075.3	6046.6
45°	6533.0	6565.3	6594.0	6626.3	6660.4	6683.8	6717.9	6710.7	6732.2	6710.7	6694.5
47.5°	7191.7	7215.0	7279.6	7329.9	7385.5	7405.3	7453.7	7432.2	7453.7	7423.2	7417.8
50°	7916.8	7958.1	8013.7	8071.1	8130.4	8162.7	8225.5	8198.6	8227.3	8198.6	8182.4
52.5°	8631.1	8641.9	8763.9	8848.3	8930.8	8968.5	9006.2	8993.7	8995.5	8993.7	8977.5
55°	9309.5	9334.7	9456.7	9571.6	9715.2	9821.1	9885.7	9878.5	9862.3	9846.2	9819.3
57.5°	10074.1	10099.2	10239.2	10381.0	10544.4	10695.1	10826.1	10960.7	11012.8	11027.2	10967.9
60°	11107.9	11106.1	11292.8	11465.1	11698.4	11922.7	12209.9	12502.5	12838.1	12994.2	12787.8
62.5°	12159.7	12202.7	12472.0	12777.1	13258.1	13726.5	14256.0	14776.5	15307.7	15740.3	15280.8
65°	12034.0	12199.1	12599.4	13290.4	14178.8	15234.1	16375.6	17583.5	18674.7	19424.9	18583.2
67.5°	10429.5	10664.6	11072.0	11912.0	13023.0	14544.9	16461.8	18850.6	21627.1	22969.6	21305.9
70°	7559.6	7825.3	8252.4	9072.6	10172.8	11619.4	13701.4	16569.4	20245.2	21598.4	19766.0
72.5°	3761.9	3905.4	4169.3	4691.6	5524.3	6698.1	8586.2	11343.0	14595.2	15837.2	14162.6
75°	1277.9	1344.3	1389.2	1559.7	1823.5	2284.8	3223.4	4959.0	7565.0	9069.0	7457.3
77.5°	737.7	739.5	770.0	800.5	845.3	895.6	1021.2	1340.7	2318.9	3293.4	2399.6
80°	477.4	475.6	500.7	524.1	554.6	579.7	586.9	621.0	716.1	848.9	759.2
82.5°	247.7	278.2	333.8	364.3	421.8	432.5	418.2	405.6	429.0	445.1	455.9
85°	136.4	118.5	177.7	229.7	254.9	258.4	258.4	244.1	253.1	247.7	269.2
87.5°	62.8	57.4	70.0	113.1	120.3	102.3	107.7	95.1	68.2	66.4	75.4
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°	3889.3	3889.3	3889.3	3889.3	3889.3	3889.3	3889.3	3889.3
2.5°	3871.3	3873.1	3873.1	3878.5	3880.3	3883.9	3887.5	3889.3
5°	3840.8	3846.2	3842.6	3848.0	3848.0	3851.6	3851.6	3853.4
7.5°	3796.0	3801.4	3801.4	3801.4	3799.6	3804.9	3804.9	3804.9
10°	3749.3	3752.9	3751.1	3747.5	3743.9	3749.3	3747.5	3745.7
12.5°	3734.9	3726.0	3718.8	3715.2	3708.0	3709.8	3704.4	3704.4
15°	3743.9	3727.8	3715.2	3709.8	3702.6	3699.0	3695.5	3697.3
17.5°	3767.3	3747.5	3731.4	3722.4	3713.4	3708.0	3700.8	3702.6
20°	3808.5	3785.2	3761.9	3743.9	3727.8	3718.8	3713.4	3711.6
22.5°	3869.6	3835.5	3801.4	3774.4	3752.9	3740.3	3734.9	3731.4
25°	3939.6	3901.9	3862.4	3831.9	3810.3	3794.2	3783.4	3783.4
27.5°	4027.5	3997.0	3961.1	3925.2	3905.4	3889.3	3882.1	3878.5
30°	4174.7	4146.0	4117.2	4083.1	4058.0	4041.9	4029.3	4018.5
32.5°	4363.1	4339.8	4316.5	4291.3	4268.0	4246.5	4226.7	4217.7
35°	4628.7	4610.8	4594.6	4565.9	4557.0	4544.4	4533.6	4524.7
37.5°	4994.9	4987.7	4987.7	4957.2	4950.0	4944.6	4933.9	4935.7
40°	5475.9	5483.1	5474.1	5463.3	5457.9	5443.6	5443.6	5456.1
42.5°	6044.8	6050.2	6070.0	6052.0	6071.8	6053.8	6043.0	6052.0
45°	6705.3	6725.1	6764.5	6746.6	6759.2	6728.6	6691.0	6692.7
47.5°	7446.6	7464.5	7480.7	7468.1	7469.9	7419.6	7369.4	7356.8
50°	8216.5	8223.7	8232.7	8214.7	8218.3	8162.7	8105.2	8107.0
52.5°	8977.5	9011.6	9047.5	8999.0	8988.3	8925.5	8844.7	8812.4
55°	9848.0	9896.4	9855.2	9770.8	9686.4	9602.1	9496.2	9478.3
57.5°	10921.3	10838.7	10709.5	10549.7	10433.1	10314.6	10206.9	10162.1
60°	12414.5	12104.0	11870.7	11633.8	11484.8	11339.4	11197.7	11176.1
62.5°	14525.2	13988.5	13523.7	13033.7	12633.5	12321.2	12071.7	12001.7
65°	17170.7	15901.8	14801.6	13775.0	12883.0	12209.9	11786.3	11599.7
67.5°	18308.6	15803.1	13916.8	12459.4	11292.8	10477.9	10020.3	9792.3
70°	16088.4	13105.5	11054.1	9594.9	8532.4	7663.7	7249.1	7005.0
72.5°	11068.4	8336.8	6592.2	5380.8	4531.8	3804.9	3517.8	3496.2
75°	4969.8	3291.6	2268.6	1748.1	1471.7	1279.7	1220.5	1175.6
77.5°	1391.0	1028.4	917.1	857.9	800.5	734.1	708.9	714.3
80°	676.6	638.9	613.8	576.1	524.1	468.4	443.3	454.1
82.5°	448.7	443.3	459.5	432.5	357.2	303.3	254.9	233.3
85°	272.8	276.4	281.8	283.6	240.5	168.7	114.9	129.2
87.5°	107.7	123.8	134.6	140.0	131.0	80.8	64.6	66.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)