

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: P299608

Luminaire Tested: **GLNA-AF-06-LED-E1-5MQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299608
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-06-LED-E1-5MQ
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37272.3 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G4

Input Watts (W): 333
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

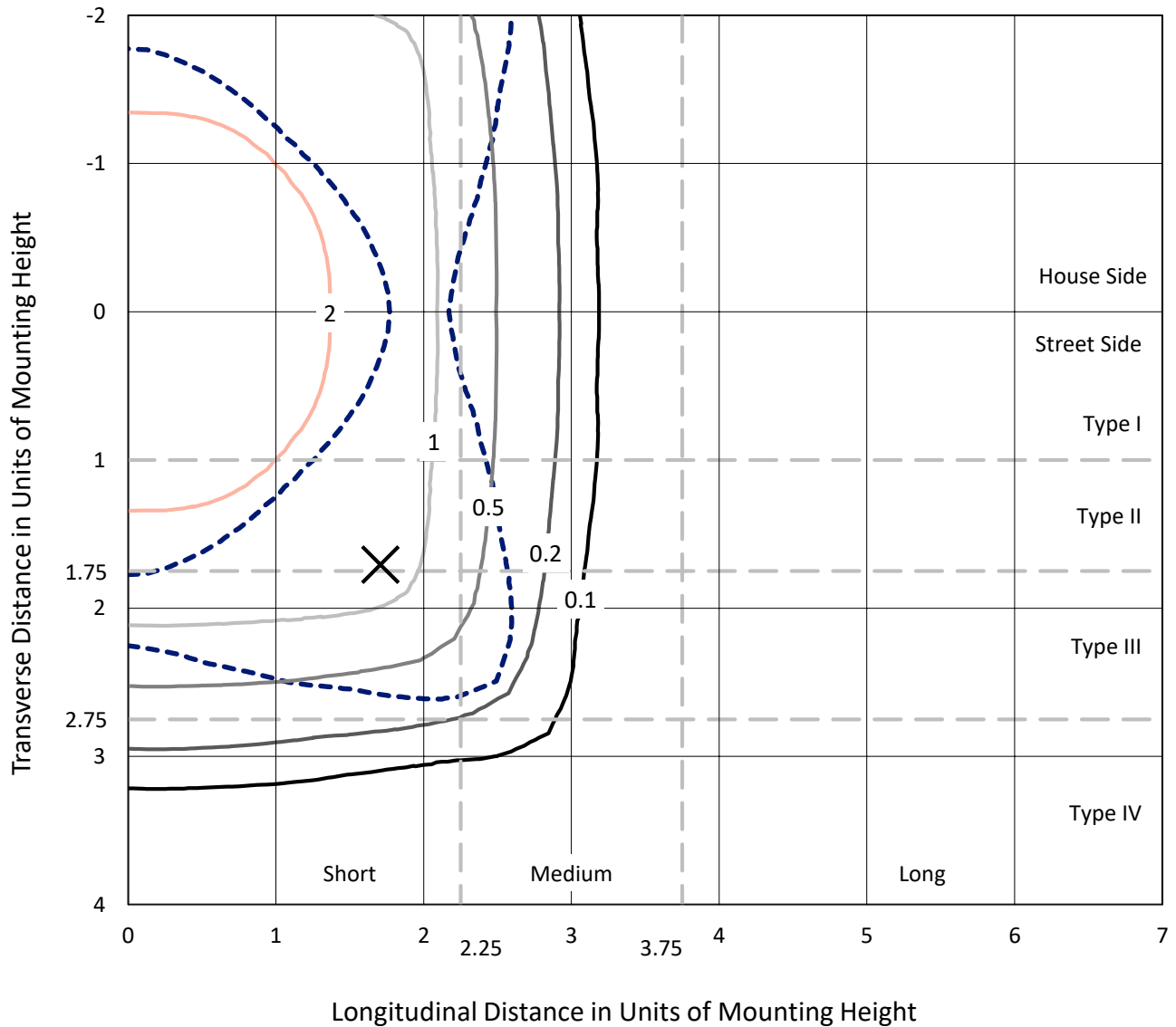


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

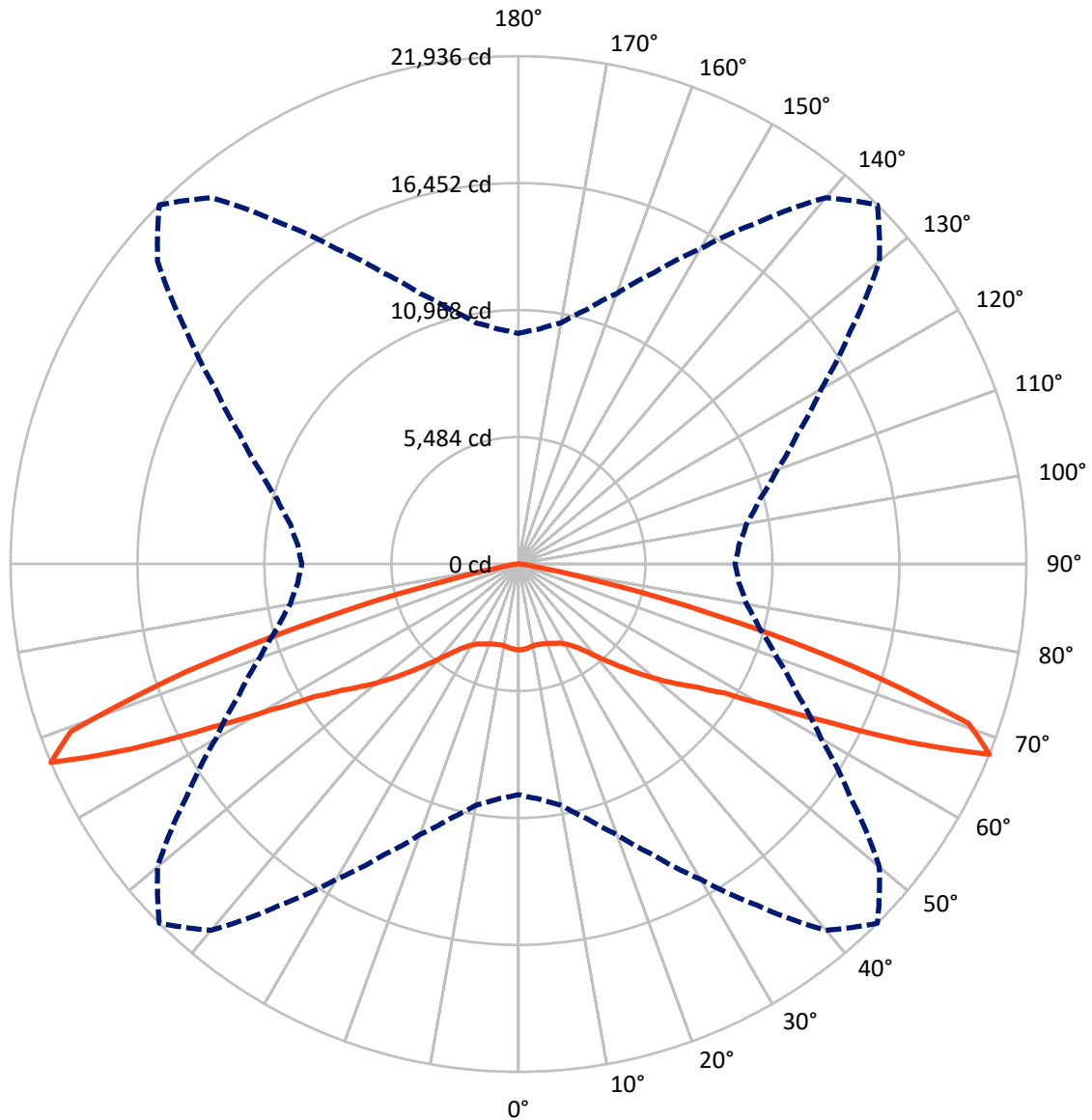


Based on 30 foot mounting height. Maximum calculated value = 4.1 fc
 Type V - Short - Full Cutoff

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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
House Side	Lumens	18636.1	0.0	18636.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	18636.1	0.0	18636.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	37272.3	0.0	37272.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	347.6	0.9
10°-20°	1008.8	2.7
20°-30°	1714.9	4.6
30°-40°	2803.4	7.5
40°-50°	5004.6	13.4
50°-60°	8437.9	22.6
60°-70°	13094.3	35.1
70°-80°	4600.8	12.3
80°-90°	260.0	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°	37272.3	100.0
0°-180°	37272.3	100.0



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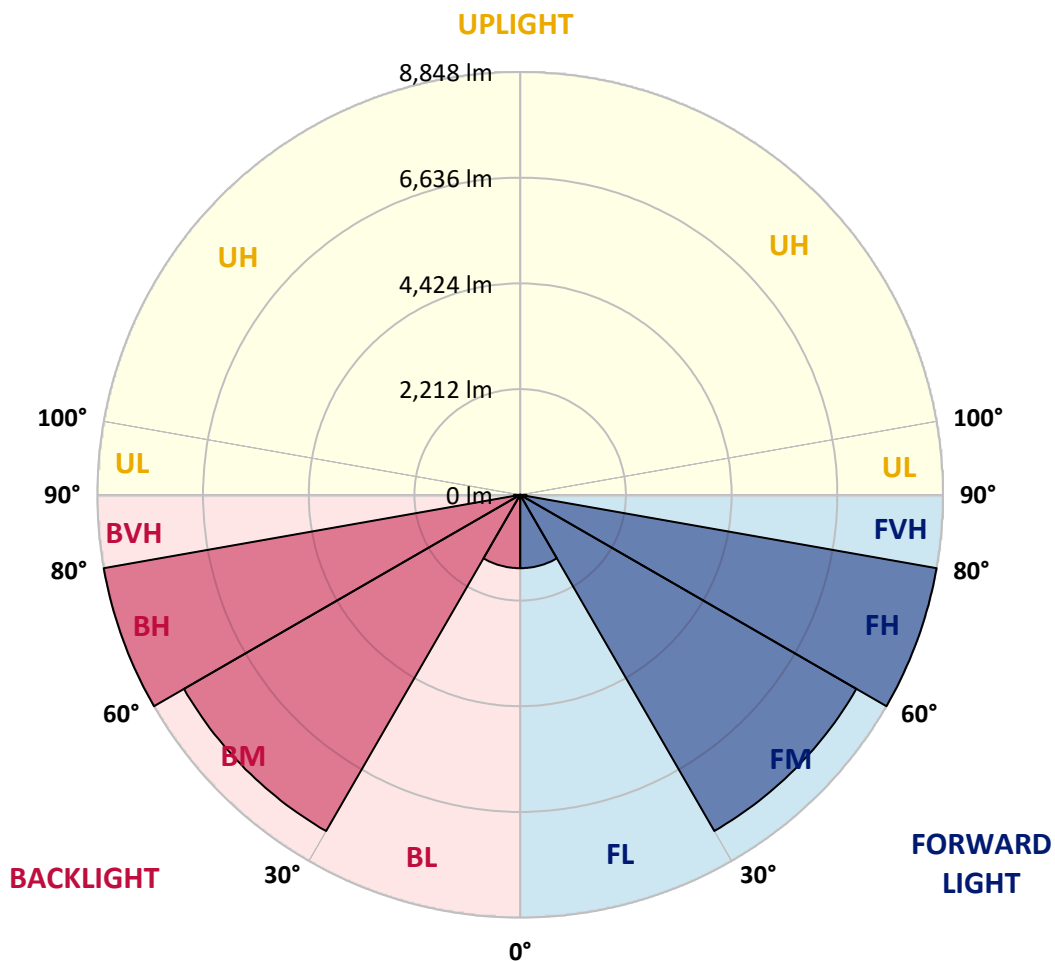
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1535.7	4.1			
FM	(30°-60°)	8122.9	21.8			
FH	(60°-80°)	8847.5	23.7			G4/12000
FVH	(80°-90°)	130.0	0.3			G2/225
BL	(0°-30°)	1535.7	4.1	B3/2500		
BM	(30°-60°)	8122.9	21.8	B4/8500		
BH	(60°-80°)	8847.5	23.7	B5		G4/12000
BVH	(80°-90°)	130.0	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°	3714.3	3714.3	3714.3	3714.3	3714.3	3714.3	3714.3	3714.3	3714.3	3714.3	3714.3
2.5°	3700.6	3704.1	3704.1	3704.1	3702.3	3702.3	3698.9	3702.3	3700.6	3695.5	3697.2
5°	3669.8	3673.2	3673.2	3671.5	3676.6	3674.9	3669.8	3673.2	3671.5	3668.1	3669.8
7.5°	3625.2	3630.4	3630.4	3628.6	3633.8	3632.1	3628.6	3630.4	3630.4	3625.2	3625.2
10°	3575.5	3578.9	3578.9	3577.2	3585.8	3585.8	3584.1	3589.2	3590.9	3585.8	3582.4
12.5°	3529.2	3534.4	3534.4	3541.2	3549.8	3553.2	3561.8	3568.6	3575.5	3573.8	3566.9
15°	3501.8	3505.2	3512.1	3520.7	3534.4	3546.4	3560.1	3575.5	3589.2	3592.6	3582.4
17.5°	3484.7	3489.8	3500.1	3512.1	3530.9	3551.5	3572.1	3592.6	3611.5	3618.4	3606.4
20°	3479.5	3482.9	3493.2	3513.8	3539.5	3570.4	3599.5	3623.5	3649.2	3657.8	3649.2
22.5°	3489.8	3496.7	3508.7	3532.7	3566.9	3606.4	3640.6	3673.2	3705.8	3721.2	3709.2
25°	3536.1	3542.9	3558.4	3589.2	3626.9	3668.1	3707.5	3745.2	3774.3	3789.8	3781.2
27.5°	3621.8	3630.4	3649.2	3680.1	3721.2	3765.8	3808.6	3839.5	3863.5	3868.6	3858.3
30°	3750.3	3769.2	3791.5	3825.8	3873.7	3911.5	3954.3	3981.7	4010.9	4010.9	4002.3
32.5°	3950.9	3969.7	3993.7	4026.3	4064.0	4105.1	4142.9	4166.8	4197.7	4199.4	4178.8
35°	4250.8	4259.4	4280.0	4300.5	4334.8	4370.8	4403.4	4418.8	4444.5	4446.2	4427.4
37.5°	4646.8	4648.5	4662.2	4669.1	4699.9	4739.3	4770.2	4780.5	4804.5	4801.0	4782.2
40°	5107.9	5116.4	5121.6	5131.9	5164.4	5202.1	5234.7	5239.8	5265.6	5260.4	5236.4
42.5°	5640.9	5644.4	5673.5	5688.9	5719.8	5738.6	5779.8	5784.9	5815.8	5802.0	5774.6
45°	6239.1	6270.0	6297.4	6328.3	6360.8	6383.1	6415.7	6408.8	6429.4	6408.8	6393.4
47.5°	6868.2	6890.5	6952.2	7000.2	7053.3	7072.2	7118.4	7097.9	7118.4	7089.3	7084.2
50°	7560.7	7600.1	7653.2	7708.1	7764.6	7795.5	7855.5	7829.8	7857.2	7829.8	7814.3
52.5°	8242.9	8253.1	8369.7	8450.3	8529.1	8565.1	8601.1	8589.1	8590.8	8589.1	8573.7
55°	8890.8	8914.8	9031.3	9141.0	9278.1	9379.3	9441.0	9434.1	9418.7	9403.3	9377.6
57.5°	9620.9	9644.9	9778.6	9914.0	10070.0	10214.0	10339.1	10467.7	10517.4	10531.1	10474.5
60°	10608.2	10606.5	10784.8	10949.3	11172.2	11386.4	11660.7	11940.1	12260.6	12409.7	12212.6
62.5°	11612.7	11653.8	11910.9	12202.3	12661.7	13109.0	13614.7	14111.7	14619.1	15032.2	14593.4
65°	11492.7	11650.4	12032.6	12692.5	13541.0	14548.8	15639.0	16792.5	17834.7	18551.1	17747.2
67.5°	9960.3	10184.9	10574.0	11376.1	12437.1	13890.6	15721.2	18002.6	20654.3	21936.4	20347.5
70°	7219.6	7473.2	7881.2	8664.5	9715.2	11096.7	13085.0	15824.1	19334.5	20626.8	18876.8
72.5°	3592.6	3729.8	3981.7	4480.5	5275.8	6396.8	8200.0	10832.8	13938.6	15124.8	13525.5
75°	1220.4	1283.8	1326.7	1489.5	1741.5	2182.0	3078.4	4735.9	7224.7	8661.1	7121.9
77.5°	704.5	706.2	735.3	764.5	807.3	855.3	975.3	1280.4	2214.5	3145.3	2291.7
80°	455.9	454.2	478.2	500.5	529.6	553.6	560.5	593.1	683.9	810.7	725.0
82.5°	236.5	265.7	318.8	348.0	402.8	413.1	399.4	387.4	409.7	425.1	435.4
85°	130.3	113.1	169.7	219.4	243.4	246.8	246.8	233.1	241.7	236.5	257.1
87.5°	60.0	54.8	66.8	108.0	114.8	97.7	102.8	90.8	65.1	63.4	72.0
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°	3714.3	3714.3	3714.3	3714.3	3714.3	3714.3	3714.3	3714.3
2.5°	3697.2	3698.9	3698.9	3704.1	3705.8	3709.2	3712.6	3714.3
5°	3668.1	3673.2	3669.8	3674.9	3674.9	3678.3	3678.3	3680.1
7.5°	3625.2	3630.4	3630.4	3630.4	3628.6	3633.8	3633.8	3633.8
10°	3580.6	3584.1	3582.4	3578.9	3575.5	3580.6	3578.9	3577.2
12.5°	3566.9	3558.4	3551.5	3548.1	3541.2	3542.9	3537.8	3537.8
15°	3575.5	3560.1	3548.1	3542.9	3536.1	3532.7	3529.2	3530.9
17.5°	3597.8	3578.9	3563.5	3554.9	3546.4	3541.2	3534.4	3536.1
20°	3637.2	3614.9	3592.6	3575.5	3560.1	3551.5	3546.4	3544.6
22.5°	3695.5	3662.9	3630.4	3604.6	3584.1	3572.1	3566.9	3563.5
25°	3762.3	3726.3	3688.6	3659.5	3638.9	3623.5	3613.2	3613.2
27.5°	3846.3	3817.2	3782.9	3748.6	3729.8	3714.3	3707.5	3704.1
30°	3986.9	3959.4	3932.0	3899.5	3875.5	3860.0	3848.0	3837.8
32.5°	4166.8	4144.6	4122.3	4098.3	4076.0	4055.4	4036.6	4028.0
35°	4420.5	4403.4	4388.0	4360.5	4352.0	4340.0	4329.7	4321.1
37.5°	4770.2	4763.3	4763.3	4734.2	4727.3	4722.2	4711.9	4713.6
40°	5229.6	5236.4	5227.8	5217.6	5212.4	5198.7	5198.7	5210.7
42.5°	5772.9	5778.1	5796.9	5779.8	5798.6	5781.5	5771.2	5779.8
45°	6403.7	6422.5	6460.2	6443.1	6455.1	6426.0	6390.0	6391.7
47.5°	7111.6	7128.7	7144.1	7132.2	7133.9	7085.9	7037.9	7025.9
50°	7846.9	7853.8	7862.3	7845.2	7848.6	7795.5	7740.6	7742.4
52.5°	8573.7	8606.2	8640.5	8594.2	8583.9	8524.0	8446.8	8416.0
55°	9405.0	9451.3	9411.8	9331.3	9250.7	9170.2	9069.0	9051.9
57.5°	10430.0	10351.1	10227.7	10075.2	9963.8	9850.6	9747.8	9704.9
60°	11856.1	11559.5	11336.7	11110.5	10968.2	10829.3	10693.9	10673.4
62.5°	13871.8	13359.3	12915.3	12447.4	12065.2	11766.9	11528.7	11461.8
65°	16398.3	15186.5	14135.7	13155.3	12303.4	11660.7	11256.1	11077.9
67.5°	17485.0	15092.2	13290.7	11898.9	10784.8	10006.6	9569.5	9351.8
70°	15364.7	12516.0	10556.8	9163.3	8148.6	7319.0	6923.0	6689.9
72.5°	10570.5	7961.7	6295.7	5138.7	4328.0	3633.8	3359.5	3339.0
75°	4746.2	3143.6	2166.6	1669.5	1405.5	1222.1	1165.6	1122.7
77.5°	1328.4	982.1	875.9	819.3	764.5	701.0	677.0	682.2
80°	646.2	610.2	586.2	550.2	500.5	447.4	423.4	433.7
82.5°	428.5	423.4	438.8	413.1	341.1	289.7	243.4	222.8
85°	260.5	264.0	269.1	270.8	229.7	161.1	109.7	123.4
87.5°	102.8	118.3	128.6	133.7	125.1	77.1	61.7	63.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)