

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: P299611

Luminaire Tested: **GLNA-AF-07-LED-E1-5MQ-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299611
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-07-LED-E1-5MQ-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K 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: 38297.3 lumens
Efficiency: N/A
Efficacy: 97.9 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

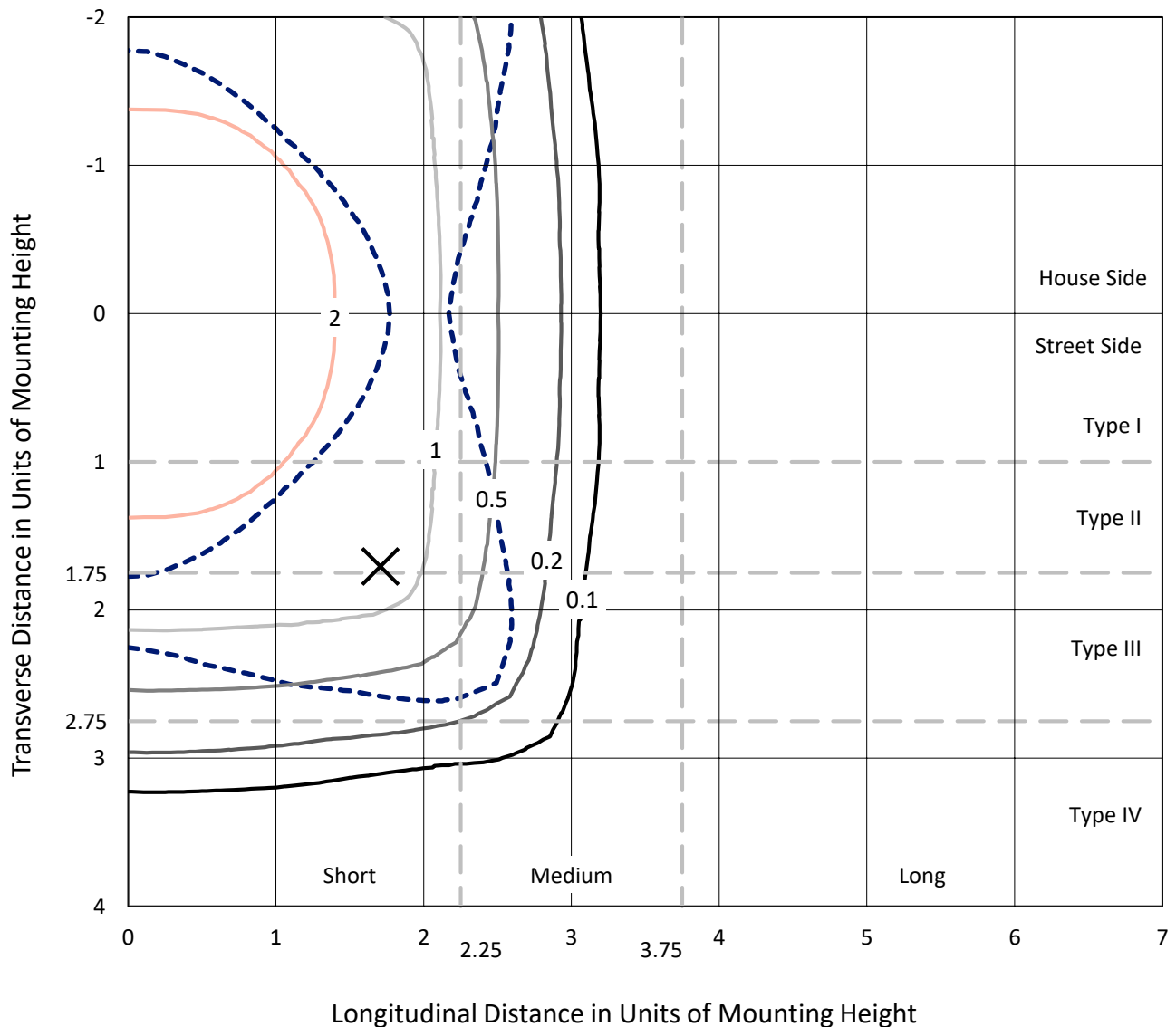
Input Watts (W): 391
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

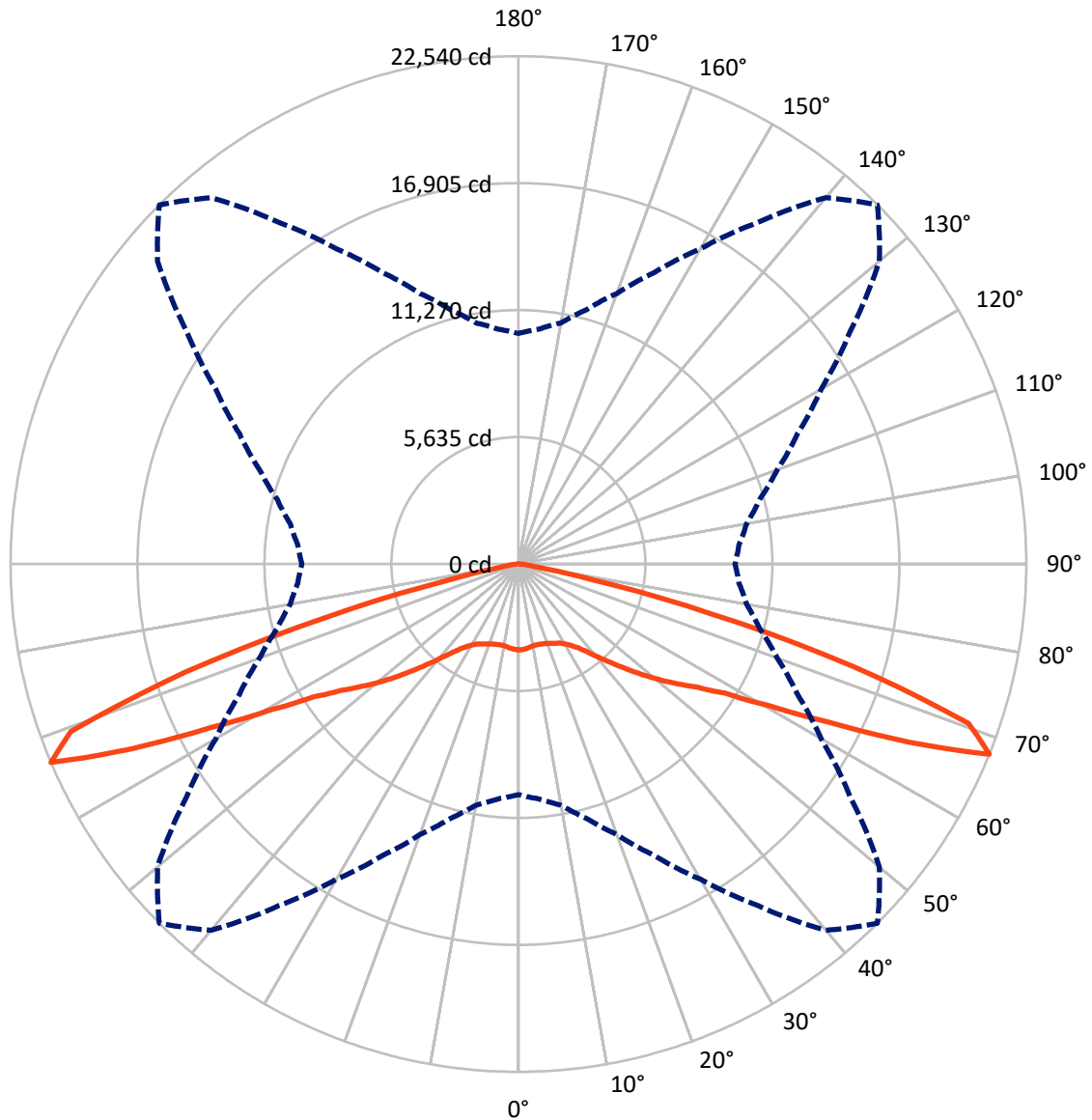
✕ Max cd
 - - - 1/2 Max cd



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
House Side	Lumens	19148.7	0.0	19148.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	19148.7	0.0	19148.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	38297.3	0.0	38297.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	357.2	0.9
10°-20°	1036.5	2.7
20°-30°	1762.1	4.6
30°-40°	2880.5	7.5
40°-50°	5142.2	13.4
50°-60°	8669.9	22.6
60°-70°	13454.4	35.1
70°-80°	4727.3	12.3
80°-90°	267.2	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°	38297.3	100.0
0°-180°	38297.3	100.0



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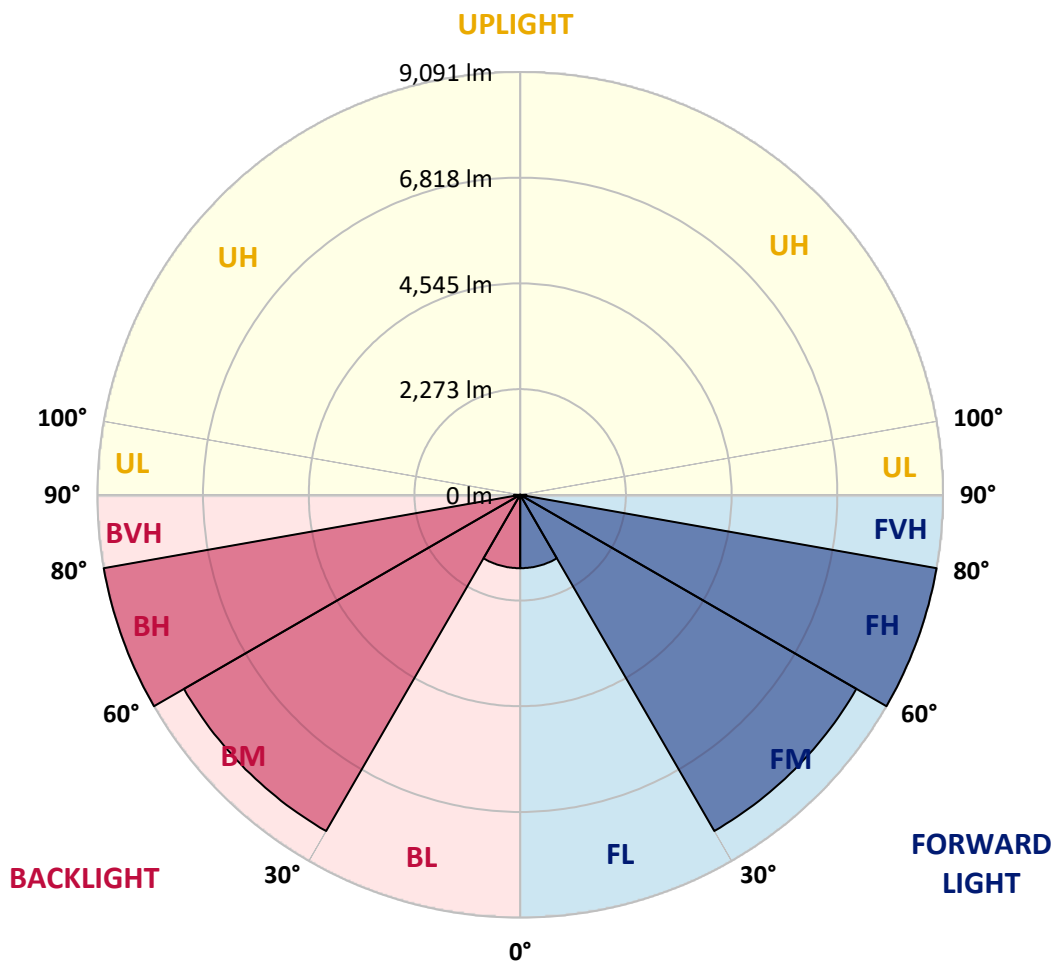
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1577.9	4.1			
FM	(30°-60°)	8346.3	21.8			
FH	(60°-80°)	9090.8	23.7			G4/12000
FVH	(80°-90°)	133.6	0.3			G2/225
BL	(0°-30°)	1577.9	4.1	B3/2500		
BM	(30°-60°)	8346.3	21.8	B4/8500		
BH	(60°-80°)	9090.8	23.7	B5		G4/12000
BVH	(80°-90°)	133.6	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°	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5
2.5°	3802.4	3805.9	3805.9	3805.9	3804.2	3804.2	3800.6	3804.2	3802.4	3797.1	3798.9
5°	3770.7	3774.2	3774.2	3772.5	3777.7	3776.0	3770.7	3774.2	3772.5	3768.9	3770.7
7.5°	3724.9	3730.2	3730.2	3728.4	3733.7	3732.0	3728.4	3730.2	3730.2	3724.9	3724.9
10°	3673.8	3677.4	3677.4	3675.6	3684.4	3684.4	3682.6	3687.9	3689.7	3684.4	3680.9
12.5°	3626.3	3631.6	3631.6	3638.6	3647.4	3650.9	3659.7	3666.8	3673.8	3672.1	3665.0
15°	3598.1	3601.6	3608.7	3617.5	3631.6	3643.9	3658.0	3673.8	3687.9	3691.4	3680.9
17.5°	3580.5	3585.8	3596.3	3608.7	3628.0	3649.2	3670.3	3691.4	3710.8	3717.9	3705.5
20°	3575.2	3578.7	3589.3	3610.4	3636.8	3668.5	3698.5	3723.1	3749.6	3758.4	3749.6
22.5°	3585.8	3592.8	3605.1	3629.8	3665.0	3705.5	3740.8	3774.2	3807.7	3823.5	3811.2
25°	3633.3	3640.4	3656.2	3687.9	3726.7	3768.9	3809.4	3848.2	3878.1	3894.0	3885.2
27.5°	3721.4	3730.2	3749.6	3781.3	3823.5	3869.3	3913.4	3945.1	3969.7	3975.0	3964.4
30°	3853.5	3872.8	3895.7	3931.0	3980.3	4019.0	4063.1	4091.2	4121.2	4121.2	4112.4
32.5°	4059.5	4078.9	4103.6	4137.0	4175.8	4218.0	4256.8	4281.4	4313.1	4314.9	4293.8
35°	4367.7	4376.5	4397.7	4418.8	4454.0	4491.0	4524.5	4540.3	4566.8	4568.5	4549.1
37.5°	4774.6	4776.3	4790.4	4797.5	4829.2	4869.7	4901.4	4911.9	4936.6	4933.1	4913.7
40°	5248.3	5257.1	5262.4	5273.0	5306.5	5345.2	5378.7	5383.9	5410.4	5405.1	5380.4
42.5°	5796.1	5799.6	5829.5	5845.4	5877.1	5896.4	5938.7	5944.0	5975.7	5961.6	5933.4
45°	6410.7	6442.4	6470.6	6502.3	6535.8	6558.7	6592.1	6585.1	6606.2	6585.1	6569.2
47.5°	7057.1	7080.0	7143.4	7192.7	7247.3	7266.7	7314.2	7293.1	7314.2	7284.3	7279.0
50°	7768.6	7809.1	7863.7	7920.1	7978.2	8009.9	8071.5	8045.1	8073.3	8045.1	8029.2
52.5°	8469.5	8480.1	8599.9	8682.6	8763.7	8800.6	8837.6	8825.3	8827.1	8825.3	8809.5
55°	9135.3	9159.9	9279.7	9392.4	9533.3	9637.2	9700.6	9693.6	9677.7	9661.9	9635.4
57.5°	9885.5	9910.2	10047.6	10186.7	10347.0	10494.9	10623.5	10755.6	10806.6	10820.7	10762.6
60°	10900.0	10898.2	11081.4	11250.5	11479.4	11699.6	11981.3	12268.4	12597.8	12751.0	12548.4
62.5°	11932.0	11974.3	12238.5	12537.9	13009.9	13469.5	13989.1	14499.8	15021.2	15445.6	14994.7
65°	11808.7	11970.8	12363.5	13041.6	13913.4	14948.9	16069.1	17254.3	18325.1	19061.3	18235.3
67.5°	10234.2	10465.0	10864.8	11689.0	12779.2	14272.6	16153.6	18497.7	21222.3	22539.7	20907.0
70°	7418.1	7678.8	8097.9	8902.8	9982.4	11401.9	13444.9	16259.3	19866.2	21194.1	19395.9
72.5°	3691.4	3832.3	4091.2	4603.7	5420.9	6572.7	8425.5	11130.7	14322.0	15540.7	13897.5
75°	1254.0	1319.1	1363.2	1530.5	1789.4	2242.0	3163.1	4866.2	7423.4	8899.3	7317.7
77.5°	723.8	725.6	755.5	785.5	829.5	878.8	1002.1	1315.6	2275.5	3231.8	2354.7
80°	468.5	466.7	491.4	514.3	544.2	568.9	575.9	609.4	702.7	833.0	745.0
82.5°	243.0	273.0	327.6	357.5	413.9	424.4	410.4	398.0	420.9	436.8	447.3
85°	133.9	116.2	174.4	225.4	250.1	253.6	253.6	239.5	248.3	243.0	264.2
87.5°	61.6	56.4	68.7	111.0	118.0	100.4	105.7	93.3	66.9	65.2	74.0
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°	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5
2.5°	3798.9	3800.6	3800.6	3805.9	3807.7	3811.2	3814.7	3816.5
5°	3768.9	3774.2	3770.7	3776.0	3776.0	3779.5	3779.5	3781.3
7.5°	3724.9	3730.2	3730.2	3730.2	3728.4	3733.7	3733.7	3733.7
10°	3679.1	3682.6	3680.9	3677.4	3673.8	3679.1	3677.4	3675.6
12.5°	3665.0	3656.2	3649.2	3645.7	3638.6	3640.4	3635.1	3635.1
15°	3673.8	3658.0	3645.7	3640.4	3633.3	3629.8	3626.3	3628.0
17.5°	3696.7	3677.4	3661.5	3652.7	3643.9	3638.6	3631.6	3633.3
20°	3737.2	3714.3	3691.4	3673.8	3658.0	3649.2	3643.9	3642.1
22.5°	3797.1	3763.7	3730.2	3703.8	3682.6	3670.3	3665.0	3661.5
25°	3865.8	3828.8	3790.1	3760.1	3739.0	3723.1	3712.6	3712.6
27.5°	3952.1	3922.2	3886.9	3851.7	3832.3	3816.5	3809.4	3805.9
30°	4096.5	4068.3	4040.2	4006.7	3982.0	3966.2	3953.9	3943.3
32.5°	4281.4	4258.5	4235.7	4211.0	4188.1	4167.0	4147.6	4138.8
35°	4542.1	4524.5	4508.6	4480.5	4471.7	4459.3	4448.8	4439.9
37.5°	4901.4	4894.3	4894.3	4864.4	4857.3	4852.1	4841.5	4843.3
40°	5373.4	5380.4	5371.6	5361.0	5355.8	5341.7	5341.7	5354.0
42.5°	5931.7	5937.0	5956.3	5938.7	5958.1	5940.5	5929.9	5938.7
45°	6579.8	6599.2	6637.9	6620.3	6632.6	6602.7	6565.7	6567.5
47.5°	7307.2	7324.8	7340.6	7328.3	7330.1	7280.7	7231.4	7219.1
50°	8062.7	8069.8	8078.6	8060.9	8064.5	8009.9	7953.5	7955.3
52.5°	8809.5	8842.9	8878.1	8830.6	8820.0	8758.4	8679.1	8647.4
55°	9663.6	9711.2	9670.7	9587.9	9505.1	9422.3	9318.4	9300.8
57.5°	10716.8	10635.8	10509.0	10352.2	10237.8	10121.5	10015.9	9971.8
60°	12182.1	11877.4	11648.5	11416.0	11269.8	11127.2	10988.0	10966.9
62.5°	14253.3	13726.7	13270.5	12789.7	12397.0	12090.5	11845.7	11777.0
65°	16849.3	15604.1	14524.5	13517.1	12641.8	11981.3	11565.7	11382.5
67.5°	17965.9	15507.2	13656.2	12226.2	11081.4	10281.8	9832.7	9609.0
70°	15787.3	12860.2	10847.1	9415.3	8372.7	7520.3	7113.4	6873.9
72.5°	10861.2	8180.7	6468.8	5280.0	4447.0	3733.7	3451.9	3430.8
75°	4876.7	3230.0	2226.1	1715.4	1444.2	1255.7	1197.6	1153.6
77.5°	1364.9	1009.2	900.0	841.8	785.5	720.3	695.7	701.0
80°	664.0	627.0	602.3	565.3	514.3	459.7	435.0	445.6
82.5°	440.3	435.0	450.9	424.4	350.5	297.6	250.1	229.0
85°	267.7	271.2	276.5	278.3	236.0	165.6	112.7	126.8
87.5°	105.7	121.5	132.1	137.4	128.6	79.3	63.4	65.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)