

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: P299606

Luminaire Tested: **GLNA-AF-06-LED-E1-5MQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299606
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-7030
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 3000K 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: 36052.7 lumens
Efficiency: N/A
Efficacy: 108.3 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

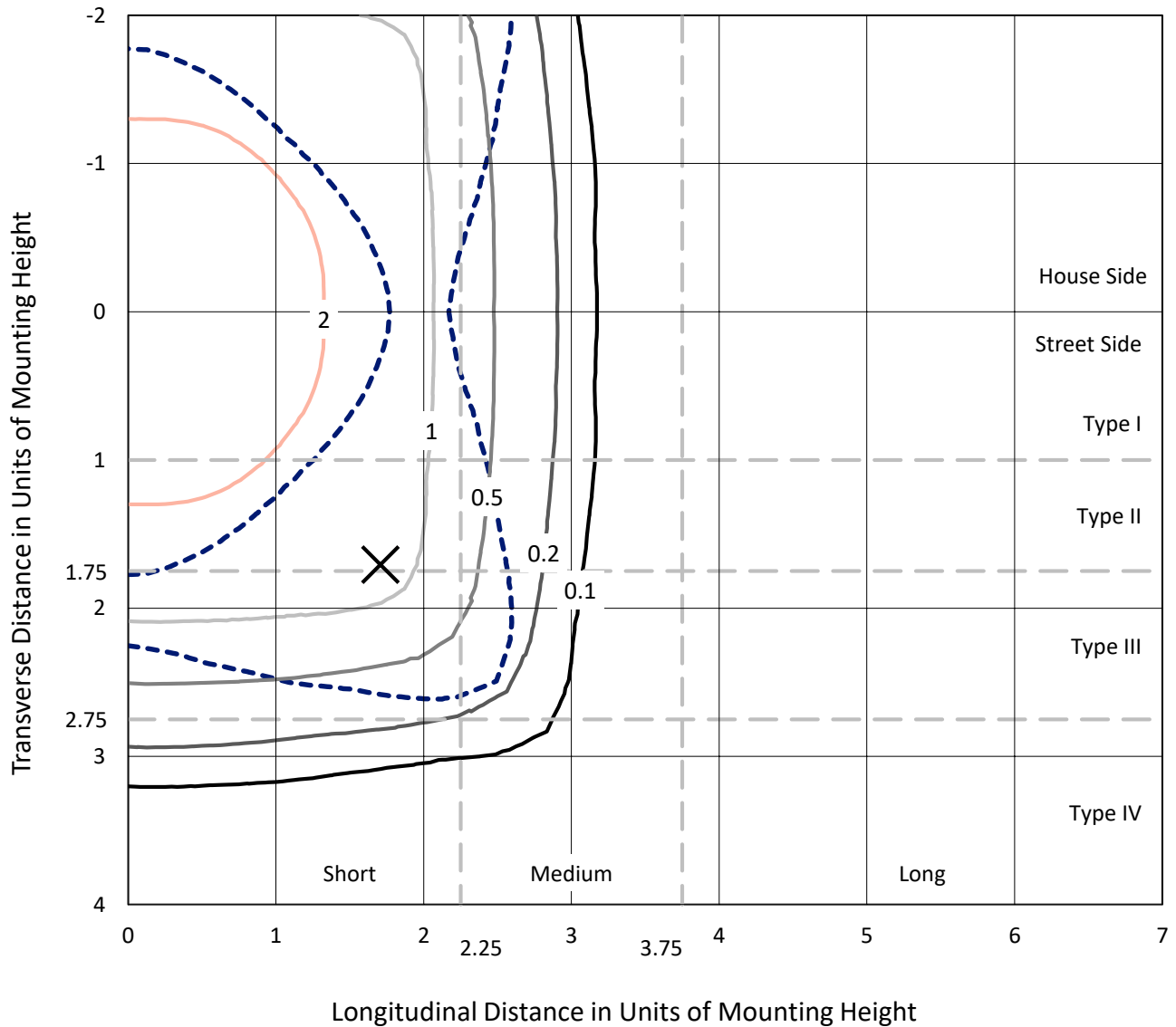
Input Watts (W): 333
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

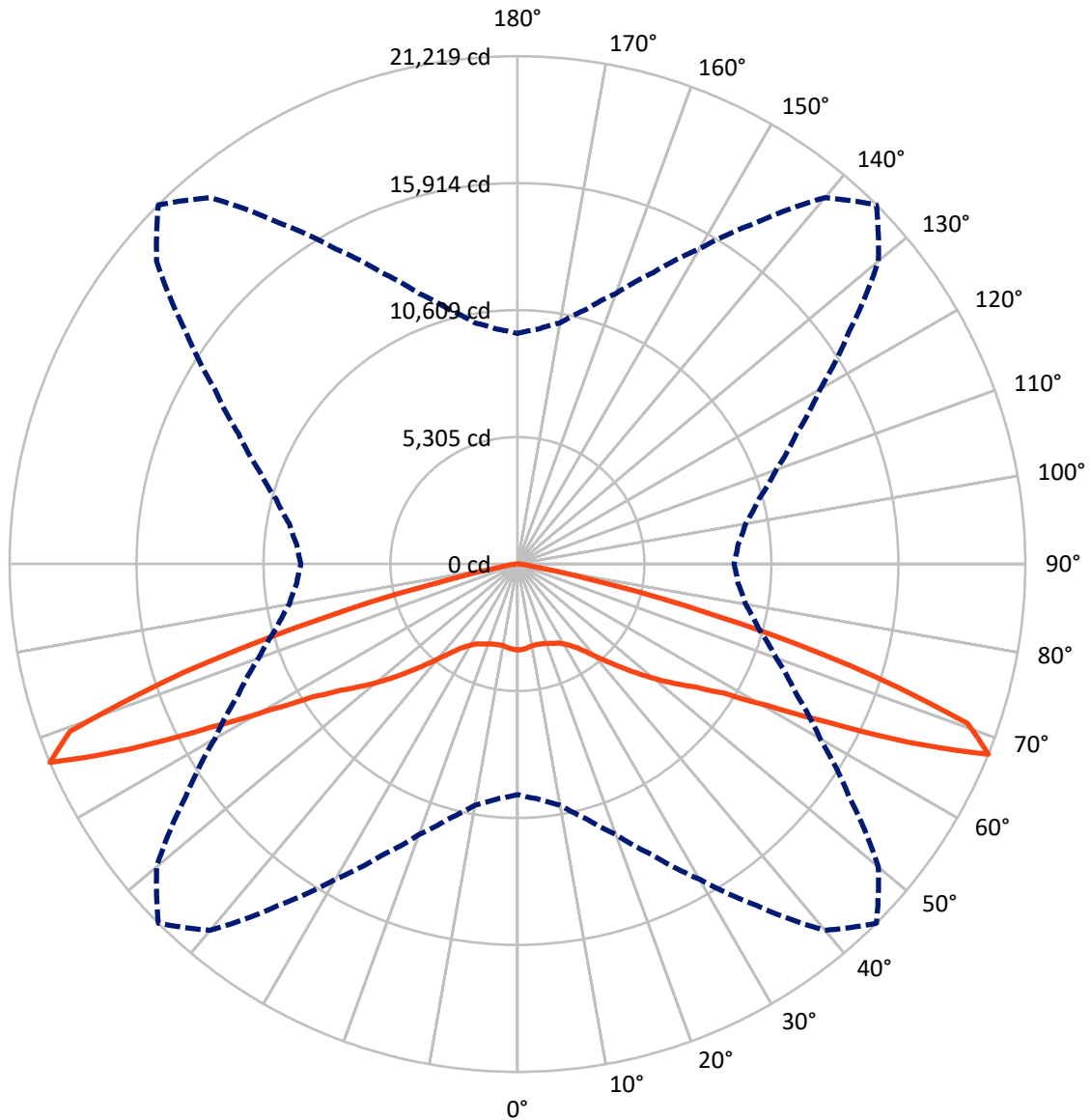
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4 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	18026.4	0.0	18026.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	18026.4	0.0	18026.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	36052.7	0.0	36052.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	336.3	0.9
10°-20°	975.8	2.7
20°-30°	1658.8	4.6
30°-40°	2711.7	7.5
40°-50°	4840.8	13.4
50°-60°	8161.8	22.6
60°-70°	12665.8	35.1
70°-80°	4450.2	12.3
80°-90°	251.5	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°	36052.7	100.0
0°-180°	36052.7	100.0



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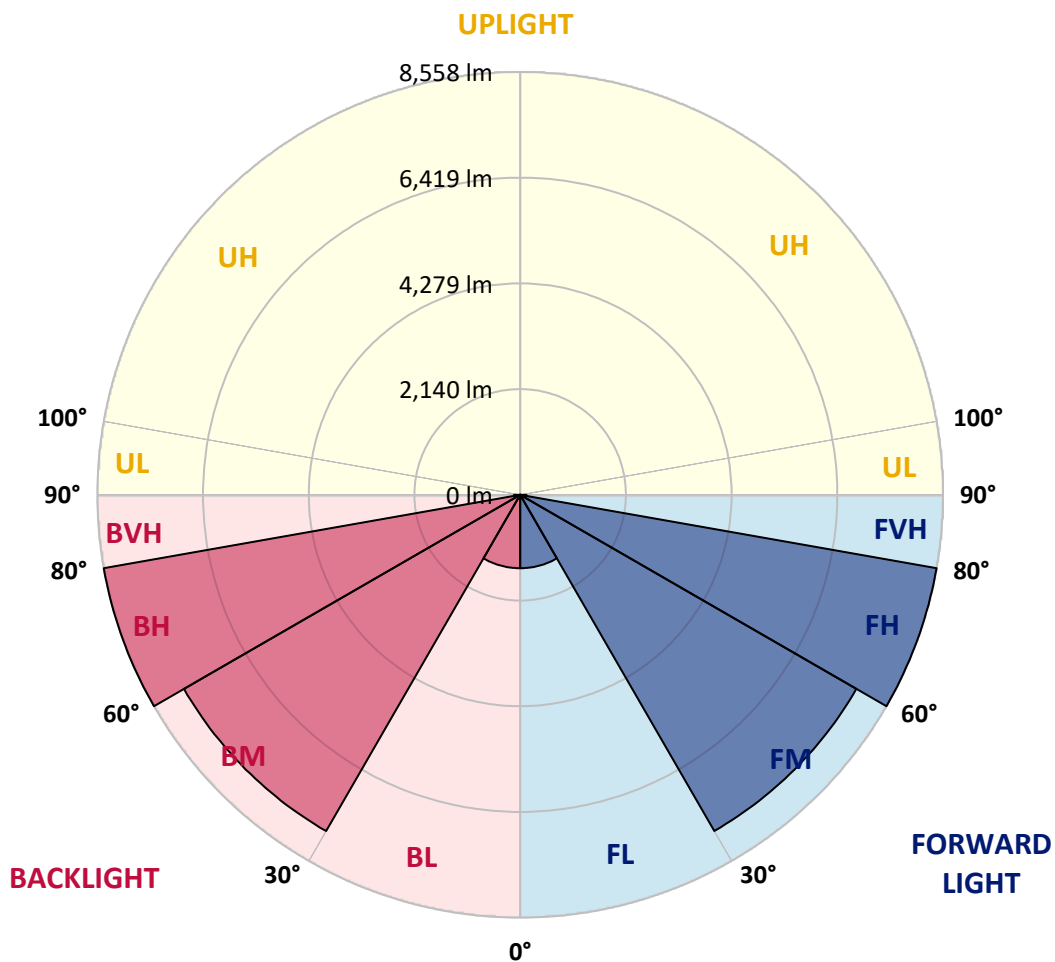
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1485.4	4.1			
FM	(30°-60°)	7857.1	21.8			
FH	(60°-80°)	8558.0	23.7			G4/12000
FVH	(80°-90°)	125.7	0.3			G2/225
BL	(0°-30°)	1485.4	4.1	B3/2500		
BM	(30°-60°)	7857.1	21.8	B4/8500		
BH	(60°-80°)	8558.0	23.7	B5		G4/12000
BVH	(80°-90°)	125.7	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°	3592.8	3592.8	3592.8	3592.8	3592.8	3592.8	3592.8	3592.8	3592.8	3592.8	3592.8
2.5°	3579.5	3582.9	3582.9	3582.9	3581.2	3581.2	3577.9	3581.2	3579.5	3574.6	3576.2
5°	3549.7	3553.0	3553.0	3551.4	3556.3	3554.7	3549.7	3553.0	3551.4	3548.0	3549.7
7.5°	3506.6	3511.6	3511.6	3509.9	3514.9	3513.2	3509.9	3511.6	3511.6	3506.6	3506.6
10°	3458.5	3461.8	3461.8	3460.2	3468.5	3468.5	3466.8	3471.8	3473.4	3468.5	3465.1
12.5°	3413.7	3418.7	3418.7	3425.4	3433.6	3437.0	3445.2	3451.9	3458.5	3456.9	3450.2
15°	3387.2	3390.5	3397.2	3405.5	3418.7	3430.3	3443.6	3458.5	3471.8	3475.1	3465.1
17.5°	3370.6	3375.6	3385.6	3397.2	3415.4	3435.3	3455.2	3475.1	3493.3	3500.0	3488.4
20°	3365.7	3369.0	3378.9	3398.8	3423.7	3453.5	3481.7	3504.9	3529.8	3538.1	3529.8
22.5°	3375.6	3382.2	3393.8	3417.1	3450.2	3488.4	3521.5	3553.0	3584.5	3599.4	3587.8
25°	3420.4	3427.0	3441.9	3471.8	3508.2	3548.0	3586.2	3622.6	3650.8	3665.8	3657.5
27.5°	3503.3	3511.6	3529.8	3559.6	3599.4	3642.5	3684.0	3713.8	3737.0	3742.0	3732.1
30°	3627.6	3645.9	3667.4	3700.6	3747.0	3783.5	3824.9	3851.4	3879.6	3879.6	3871.3
32.5°	3821.6	3839.8	3863.1	3894.6	3931.0	3970.8	4007.3	4030.5	4060.3	4062.0	4042.1
35°	4111.7	4120.0	4139.9	4159.8	4193.0	4227.8	4259.3	4274.2	4299.1	4300.8	4282.5
37.5°	4494.7	4496.4	4509.7	4516.3	4546.1	4584.3	4614.1	4624.1	4647.3	4644.0	4625.7
40°	4940.7	4949.0	4954.0	4963.9	4995.4	5031.9	5063.4	5068.4	5093.3	5088.3	5065.1
42.5°	5456.4	5459.7	5487.9	5502.8	5532.6	5550.9	5590.6	5595.6	5625.5	5612.2	5585.7
45°	6035.0	6064.8	6091.4	6121.2	6152.7	6174.3	6205.8	6199.1	6219.0	6199.1	6184.2
47.5°	6643.5	6665.0	6724.7	6771.1	6822.5	6840.8	6885.5	6865.6	6885.5	6857.3	6852.4
50°	7313.3	7351.4	7402.8	7455.9	7510.6	7540.4	7598.4	7573.6	7600.1	7573.6	7558.7
52.5°	7973.1	7983.1	8095.8	8173.8	8250.0	8284.8	8319.7	8308.0	8309.7	8308.0	8293.1
55°	8599.9	8623.1	8735.8	8841.9	8974.5	9072.4	9132.1	9125.4	9110.5	9095.6	9070.7
57.5°	9306.1	9329.4	9458.7	9589.7	9740.5	9879.8	10000.8	10125.2	10173.3	10186.5	10131.8
60°	10261.1	10259.5	10431.9	10591.1	10806.6	11013.8	11279.1	11549.4	11859.4	12003.6	11813.0
62.5°	11232.7	11272.5	11521.2	11803.0	12247.4	12680.1	13169.2	13650.0	14140.8	14540.3	14115.9
65°	11116.6	11269.2	11638.9	12277.2	13097.9	14072.8	15127.2	16243.1	17251.1	17944.1	17166.5
67.5°	9634.4	9851.6	10228.0	11003.9	12030.2	13436.1	15206.8	17413.6	19978.4	21218.6	19681.7
70°	6983.3	7228.7	7623.3	8381.0	9397.3	10733.6	12656.9	15306.3	18701.8	19951.9	18259.1
72.5°	3475.1	3607.7	3851.4	4333.9	5103.2	6187.5	7931.7	10478.3	13482.5	14629.9	13083.0
75°	1180.5	1241.8	1283.3	1440.8	1684.5	2110.6	2977.7	4580.9	6988.3	8377.7	6888.8
77.5°	681.4	683.1	711.3	739.5	780.9	827.3	943.4	1238.5	2142.1	3042.4	2216.7
80°	441.0	439.4	462.6	484.1	512.3	535.5	542.2	573.7	661.5	784.2	701.3
82.5°	228.8	257.0	308.4	336.6	389.6	399.6	386.3	374.7	396.3	411.2	421.1
85°	126.0	109.4	164.1	212.2	235.4	238.7	238.7	225.5	233.8	228.8	248.7
87.5°	58.0	53.1	64.7	104.5	111.1	94.5	99.5	87.9	63.0	61.3	69.6
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°	3592.8	3592.8	3592.8	3592.8	3592.8	3592.8	3592.8	3592.8
2.5°	3576.2	3577.9	3577.9	3582.9	3584.5	3587.8	3591.1	3592.8
5°	3548.0	3553.0	3549.7	3554.7	3554.7	3558.0	3558.0	3559.6
7.5°	3506.6	3511.6	3511.6	3511.6	3509.9	3514.9	3514.9	3514.9
10°	3463.5	3466.8	3465.1	3461.8	3458.5	3463.5	3461.8	3460.2
12.5°	3450.2	3441.9	3435.3	3432.0	3425.4	3427.0	3422.0	3422.0
15°	3458.5	3443.6	3432.0	3427.0	3420.4	3417.1	3413.7	3415.4
17.5°	3480.1	3461.8	3446.9	3438.6	3430.3	3425.4	3418.7	3420.4
20°	3518.2	3496.6	3475.1	3458.5	3443.6	3435.3	3430.3	3428.7
22.5°	3574.6	3543.1	3511.6	3486.7	3466.8	3455.2	3450.2	3446.9
25°	3639.2	3604.4	3567.9	3539.7	3519.9	3504.9	3495.0	3495.0
27.5°	3720.5	3692.3	3659.1	3626.0	3607.7	3592.8	3586.2	3582.9
30°	3856.4	3829.9	3803.4	3771.9	3748.7	3733.7	3722.1	3712.2
32.5°	4030.5	4009.0	3987.4	3964.2	3942.6	3922.7	3904.5	3896.2
35°	4275.9	4259.3	4244.4	4217.9	4209.6	4198.0	4188.0	4179.7
37.5°	4614.1	4607.5	4607.5	4579.3	4572.7	4567.7	4557.7	4559.4
40°	5058.4	5065.1	5056.8	5046.8	5041.9	5028.6	5028.6	5040.2
42.5°	5584.0	5589.0	5607.2	5590.6	5608.9	5592.3	5582.4	5590.6
45°	6194.1	6212.4	6248.9	6232.3	6243.9	6215.7	6180.9	6182.5
47.5°	6878.9	6895.5	6910.4	6898.8	6900.4	6854.0	6807.6	6796.0
50°	7590.2	7596.8	7605.1	7588.5	7591.8	7540.4	7487.4	7489.0
52.5°	8293.1	8324.6	8357.8	8313.0	8303.1	8245.0	8170.4	8140.6
55°	9097.2	9142.0	9103.9	9025.9	8948.0	8870.1	8772.3	8755.7
57.5°	10088.7	10012.4	9893.1	9745.5	9637.7	9528.3	9428.8	9387.4
60°	11468.1	11181.3	10965.8	10746.9	10609.3	10475.0	10344.0	10324.1
62.5°	13417.9	12922.2	12492.7	12040.1	11670.4	11381.9	11151.5	11086.8
65°	15861.7	14689.5	13673.2	12724.9	11900.9	11279.1	10887.8	10715.4
67.5°	16912.9	14598.4	12855.8	11509.6	10431.9	9679.2	9256.4	9045.8
70°	14862.0	12106.4	10211.4	8863.5	7882.0	7079.5	6696.5	6471.0
72.5°	10224.7	7701.2	6089.7	4970.6	4186.4	3514.9	3249.6	3229.7
75°	4590.9	3040.7	2095.7	1614.9	1359.5	1182.1	1127.4	1086.0
77.5°	1284.9	950.0	847.2	792.5	739.5	678.1	654.9	659.9
80°	625.1	590.2	567.0	532.2	484.1	432.7	409.5	419.5
82.5°	414.5	409.5	424.4	399.6	329.9	280.2	235.4	215.5
85°	252.0	255.3	260.3	262.0	222.2	155.8	106.1	119.4
87.5°	99.5	114.4	124.3	129.3	121.0	74.6	59.7	61.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)