

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: P299498

Luminaire Tested: **GLNA-AF-08-LED-E1-5NQ-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299498
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)
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-E1-5NQ-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31248.1 lumens
Efficiency: N/A
Efficacy: 121.6 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G2

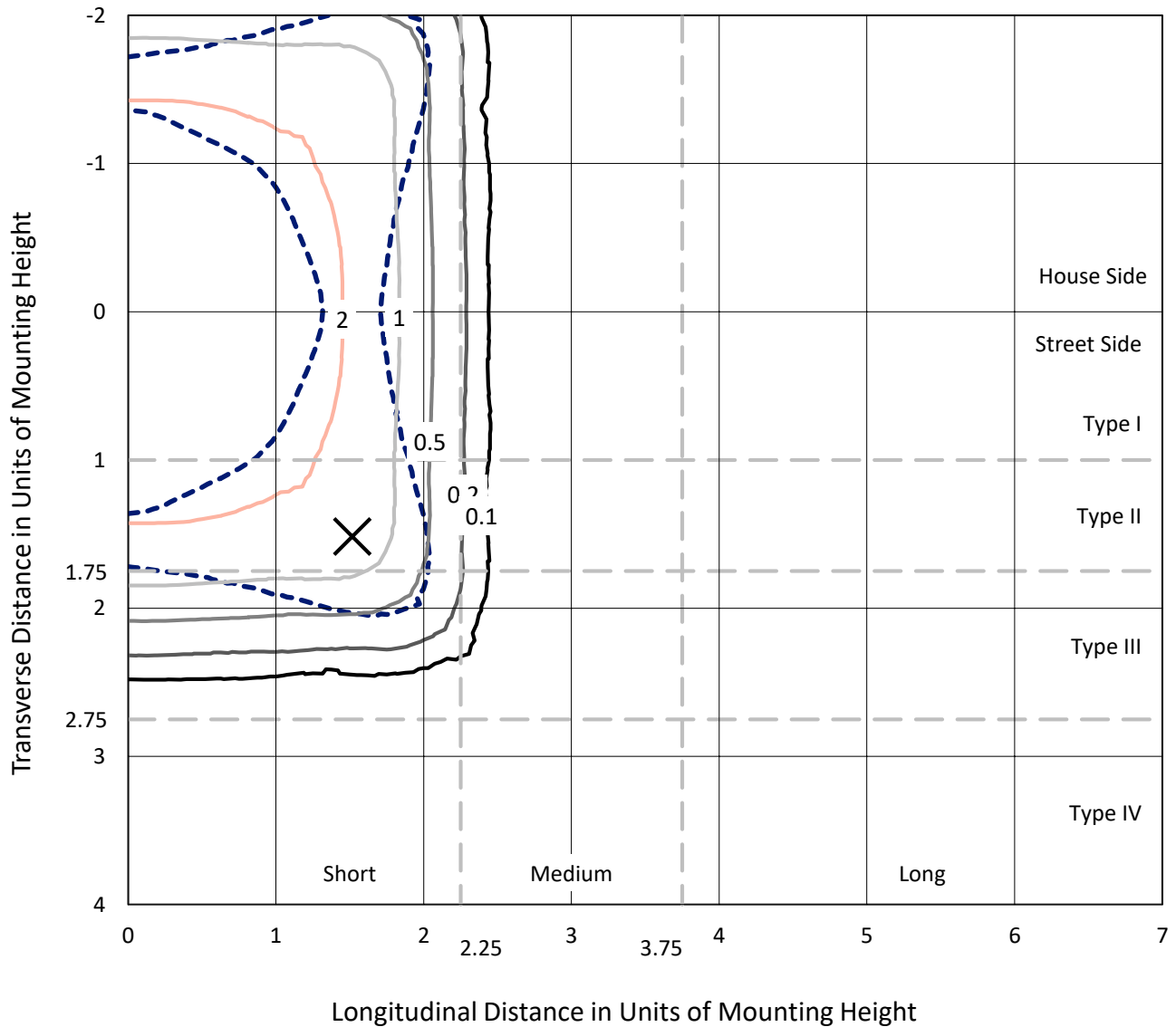
Input Watts (W): 257
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299498
 CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7030-600

Iso-Footcandle Lines of Horizontal Illumination

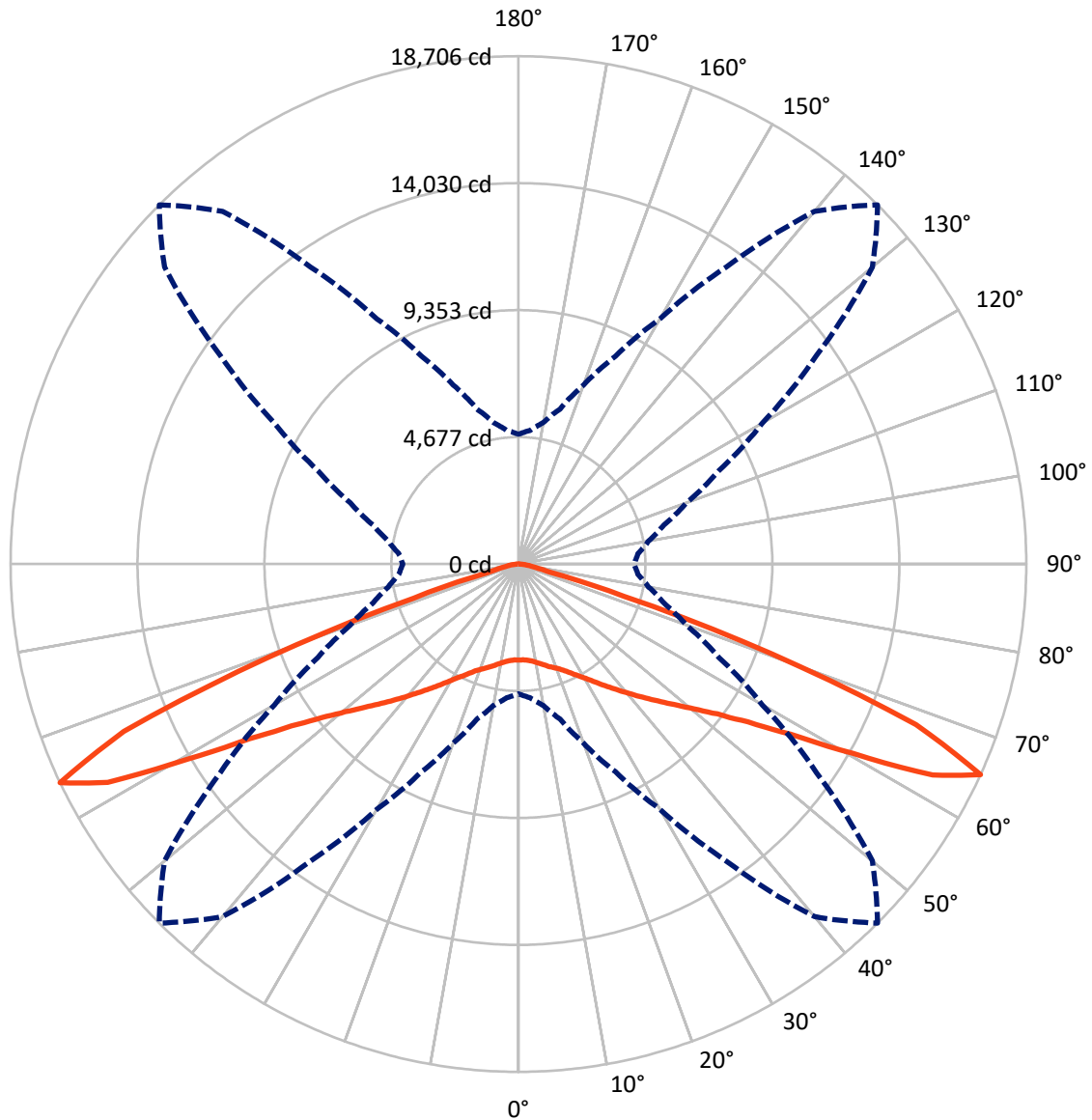
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.9 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P299498
CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7030-600

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P299498

CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7030-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15624.1	0.0	15624.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	15624.1	0.0	15624.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	31248.1	0.0	31248.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	344.6	1.1
10°-20°	1105.3	3.5
20°-30°	2066.6	6.6
30°-40°	3495.3	11.2
40°-50°	5715.1	18.3
50°-60°	9087.9	29.1
60°-70°	8214.9	26.3
70°-80°	1039.6	3.3
80°-90°	178.8	0.6
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°	31248.1	100.0
0°-180°	31248.1	100.0

Coefficient of Utilization



REPORT NUMBER: P299498

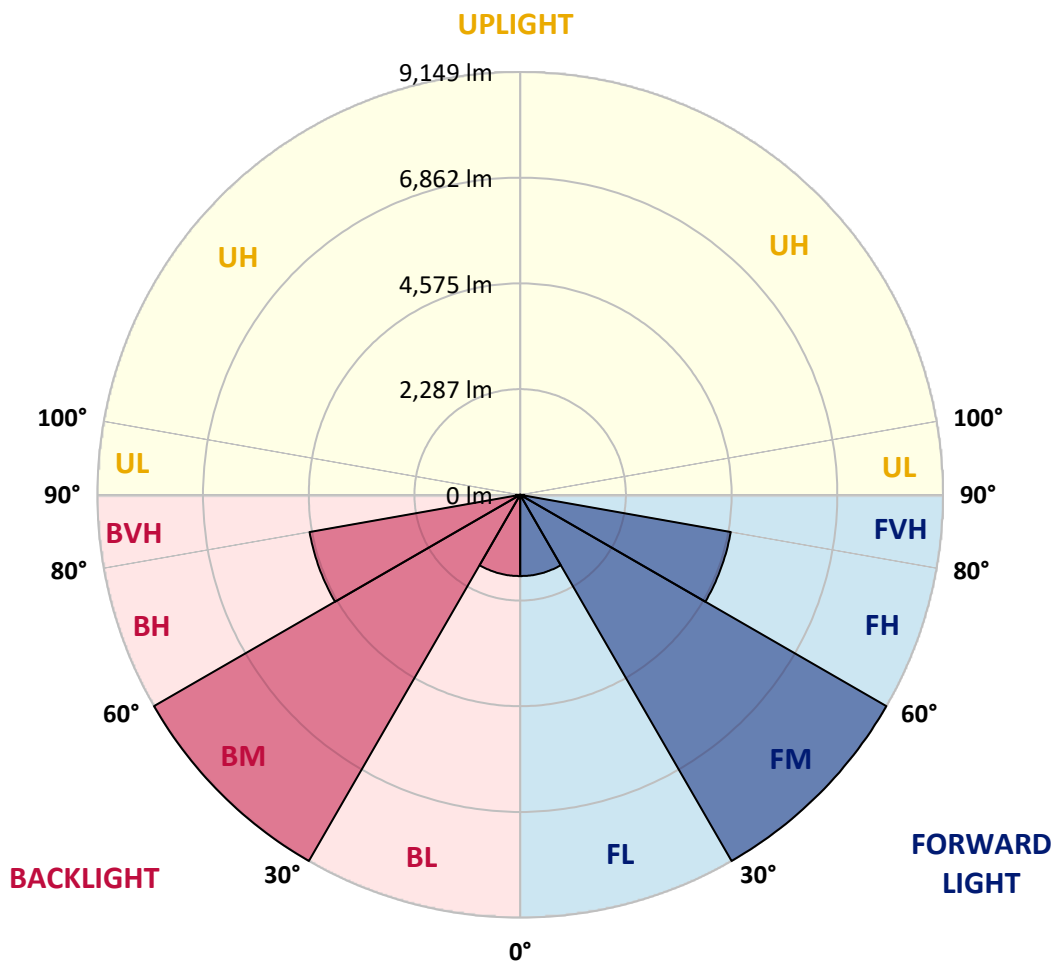
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1758.3	5.6			
FM	(30°-60°)	9149.1	29.3			
FH	(60°-80°)	4627.3	14.8			G2/5000
FVH	(80°-90°)	89.4	0.3			G1/100
BL	(0°-30°)	1758.3	5.6	B3/2500		
BM	(30°-60°)	9149.1	29.3	B5		
BH	(60°-80°)	4627.3	14.8	B4/5000		G2/5000
BVH	(80°-90°)	89.4	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G2

Type V Short





REPORT NUMBER: P299498

CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7030-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3535.7	3535.7	3535.7	3535.7	3535.7	3535.7	3535.7	3535.7	3535.7	3535.7	3535.7
2.5°	3538.7	3541.6	3544.5	3541.6	3544.5	3540.1	3537.2	3541.6	3537.2	3532.8	3535.7
5°	3569.4	3570.9	3570.9	3566.5	3570.9	3567.9	3563.5	3569.4	3565.0	3560.6	3563.5
7.5°	3620.6	3626.5	3622.1	3617.7	3620.6	3617.7	3614.8	3616.2	3614.8	3610.4	3611.8
10°	3689.4	3693.8	3690.9	3689.4	3692.3	3690.9	3687.9	3686.5	3687.9	3683.6	3683.6
12.5°	3772.8	3771.4	3769.9	3771.4	3775.8	3775.8	3774.3	3775.8	3778.7	3780.1	3777.2
15°	3854.8	3857.7	3857.7	3857.7	3866.5	3873.8	3878.2	3881.1	3887.0	3888.4	3882.6
17.5°	3957.2	3957.2	3955.8	3957.2	3966.0	3977.7	3982.1	3988.0	3993.8	3998.2	3990.9
20°	4071.4	4074.3	4074.3	4077.2	4088.9	4102.1	4102.1	4105.0	4102.1	4105.0	4100.6
22.5°	4210.4	4219.2	4219.2	4220.6	4232.4	4248.5	4244.1	4248.5	4241.1	4247.0	4241.1
25°	4391.9	4405.0	4402.1	4402.1	4410.9	4421.1	4422.6	4431.4	4429.9	4437.2	4432.8
27.5°	4596.8	4617.2	4623.1	4621.6	4627.5	4637.7	4640.7	4650.9	4645.1	4650.9	4648.0
30°	4842.6	4851.4	4863.1	4867.5	4874.8	4885.1	4885.1	4886.5	4879.2	4888.0	4892.4
32.5°	5097.3	5113.4	5125.1	5151.4	5164.6	5171.9	5170.4	5173.4	5166.0	5177.8	5186.5
35°	5433.9	5445.6	5464.6	5485.1	5502.6	5501.2	5496.8	5498.3	5498.3	5508.5	5517.3
37.5°	5839.2	5842.2	5867.0	5896.3	5905.1	5896.3	5870.0	5864.1	5851.0	5864.1	5878.8
40°	6268.0	6278.3	6328.0	6347.1	6351.5	6335.4	6297.3	6275.4	6246.1	6262.2	6282.7
42.5°	6717.3	6737.8	6783.2	6816.8	6831.5	6821.2	6768.5	6734.9	6696.8	6705.6	6726.1
45°	7214.9	7239.8	7304.2	7336.4	7364.2	7348.1	7296.9	7245.6	7185.6	7190.0	7222.2
47.5°	7771.0	7795.9	7879.3	7933.5	7948.1	7945.2	7888.1	7817.9	7735.9	7733.0	7760.8
50°	8394.5	8419.3	8523.2	8606.7	8649.1	8644.7	8577.4	8477.9	8378.4	8379.8	8414.9
52.5°	9003.3	9034.0	9142.3	9285.7	9369.1	9429.1	9388.2	9294.5	9173.0	9176.0	9208.1
55°	9574.0	9625.2	9749.6	9944.3	10099.4	10267.7	10316.0	10313.1	10239.9	10260.4	10292.6
57.5°	9850.6	9926.7	10118.4	10425.8	10741.9	11084.3	11374.1	11590.7	11682.9	11821.9	11789.7
60°	9326.7	9448.2	9730.6	10182.8	10807.7	11521.9	12287.3	13035.1	13673.2	14154.7	13878.1
62.5°	7636.4	7794.4	8136.9	8716.4	9661.8	10804.8	12269.7	14037.6	15963.5	17125.5	16295.7
65°	4778.2	4942.1	5290.4	5911.0	7017.3	8438.4	10425.8	13355.6	16954.3	18706.1	17017.2
67.5°	1863.0	1952.3	2141.1	2537.7	3368.9	4633.3	6628.1	9953.1	14257.1	15792.3	13992.2
70°	933.7	942.5	977.6	1050.8	1229.3	1596.6	2429.4	4614.3	8176.4	9875.5	7882.2
72.5°	674.7	676.1	693.7	725.9	783.0	864.9	1023.0	1412.2	2659.1	4064.1	2492.3
75°	516.6	522.5	532.7	550.3	581.0	622.0	679.0	813.7	1008.3	1169.3	983.5
77.5°	398.1	409.8	417.1	433.2	452.2	480.0	496.1	547.3	636.6	670.3	660.0
80°	302.9	313.2	329.3	342.5	355.6	368.8	362.9	386.4	433.2	461.0	446.4
82.5°	193.2	204.9	251.7	263.4	269.3	278.1	267.8	269.3	289.8	307.3	289.8
85°	124.4	131.7	159.5	174.2	175.6	181.5	177.1	166.8	166.8	152.2	171.2
87.5°	57.1	58.5	71.7	84.9	87.8	79.0	77.6	74.6	60.0	57.1	61.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299498

CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7030-600

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3535.7	3535.7	3535.7	3535.7	3535.7	3535.7	3535.7	3535.7
2.5°	3534.3	3537.2	3538.7	3543.1	3544.5	3544.5	3546.0	3548.9
5°	3562.1	3566.5	3567.9	3573.8	3575.3	3573.8	3576.7	3578.2
7.5°	3611.8	3619.2	3622.1	3627.9	3623.5	3629.4	3630.9	3630.9
10°	3685.0	3692.3	3693.8	3699.7	3696.7	3699.7	3699.7	3696.7
12.5°	3781.6	3783.1	3778.7	3783.1	3777.2	3780.1	3775.8	3772.8
15°	3888.4	3884.0	3873.8	3873.8	3865.0	3866.5	3865.0	3863.6
17.5°	3992.3	3983.6	3976.2	3973.3	3966.0	3964.5	3960.1	3960.1
20°	4106.5	4102.1	4097.7	4091.9	4084.5	4077.2	4075.8	4078.7
22.5°	4244.1	4242.6	4242.6	4239.7	4229.4	4222.1	4217.7	4217.7
25°	4428.5	4415.3	4415.3	4413.8	4409.4	4405.0	4396.3	4400.7
27.5°	4636.3	4629.0	4634.8	4633.3	4629.0	4629.0	4623.1	4623.1
30°	4892.4	4889.5	4898.2	4890.9	4876.3	4874.8	4869.0	4861.6
32.5°	5188.0	5185.1	5198.2	5189.5	5166.0	5152.9	5141.2	5135.3
35°	5517.3	5518.7	5534.8	5529.0	5502.6	5493.9	5473.4	5470.4
37.5°	5877.3	5900.7	5928.5	5934.4	5912.4	5906.6	5884.6	5872.9
40°	6300.2	6331.0	6373.4	6383.7	6360.2	6355.8	6325.1	6309.0
42.5°	6751.0	6803.7	6856.4	6865.1	6841.7	6818.3	6789.0	6777.3
45°	7254.4	7317.3	7386.1	7403.7	7368.6	7340.8	7302.7	7302.7
47.5°	7819.3	7898.3	7975.9	8024.2	7992.0	7962.7	7917.4	7888.1
50°	8486.7	8595.0	8695.9	8745.7	8694.5	8638.9	8559.8	8533.5
52.5°	9323.8	9440.8	9528.6	9502.3	9423.3	9345.7	9259.4	9224.2
55°	10392.1	10431.6	10431.6	10332.1	10174.0	10043.8	9907.7	9862.3
57.5°	11728.2	11576.0	11341.9	11044.8	10671.6	10346.7	10127.2	10023.3
60°	13298.5	12566.8	11740.0	10927.7	10260.4	9710.1	9383.8	9234.5
62.5°	14344.9	12430.7	10774.1	9470.1	8510.1	7847.1	7396.4	7220.8
65°	13406.8	10367.2	8148.6	6588.5	5542.2	4867.5	4421.1	4257.2
67.5°	9819.9	6496.3	4339.2	3109.9	2278.6	1817.6	1634.7	1558.6
70°	4408.0	2287.4	1402.0	1094.7	943.9	866.4	832.7	821.0
72.5°	1328.8	961.5	810.8	731.7	671.7	633.7	605.9	602.9
75°	802.0	667.3	592.7	545.9	507.8	477.1	462.5	458.1
77.5°	560.5	490.3	455.1	421.5	392.2	368.8	355.6	345.4
80°	393.7	360.0	343.9	324.9	305.9	283.9	264.9	256.1
82.5°	263.4	256.1	256.1	244.4	228.3	207.8	169.8	161.0
85°	169.8	168.3	171.2	166.8	155.1	133.2	109.8	103.9
87.5°	79.0	80.5	89.3	87.8	84.9	70.2	55.6	52.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)