

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: P299428

Luminaire Tested: **GLNA-AF-06-LED-E1-5NQ-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299428  
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-06-LED-E1-5NQ-800  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

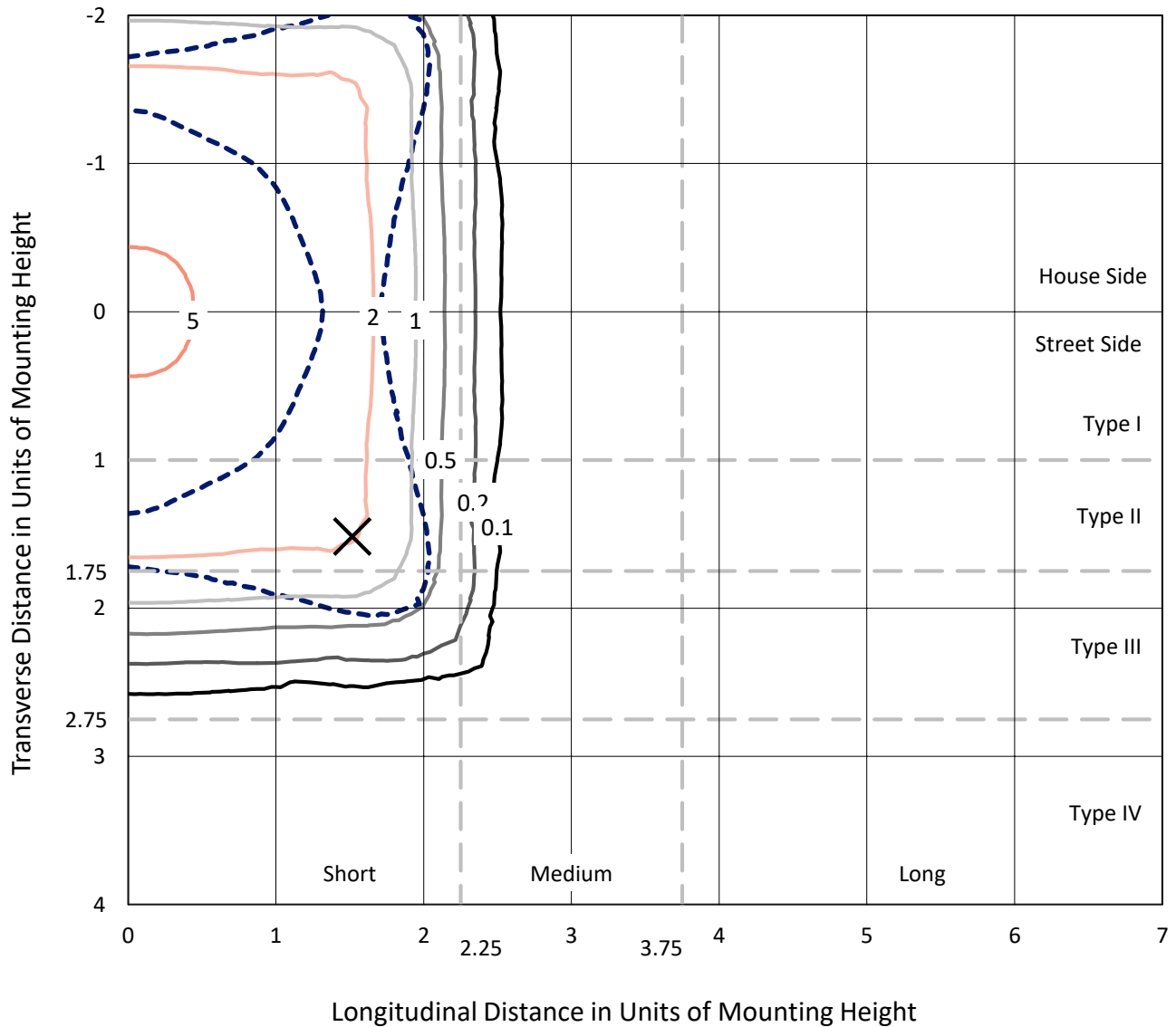
Lumens per Lamp: N/A  
Luminaire Lumens: 29566.5 lumens  
Efficiency: N/A  
Efficacy: 118.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G2  
  
Input Watts (W): 249  
Input Voltage (V): NR  
Input Current (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

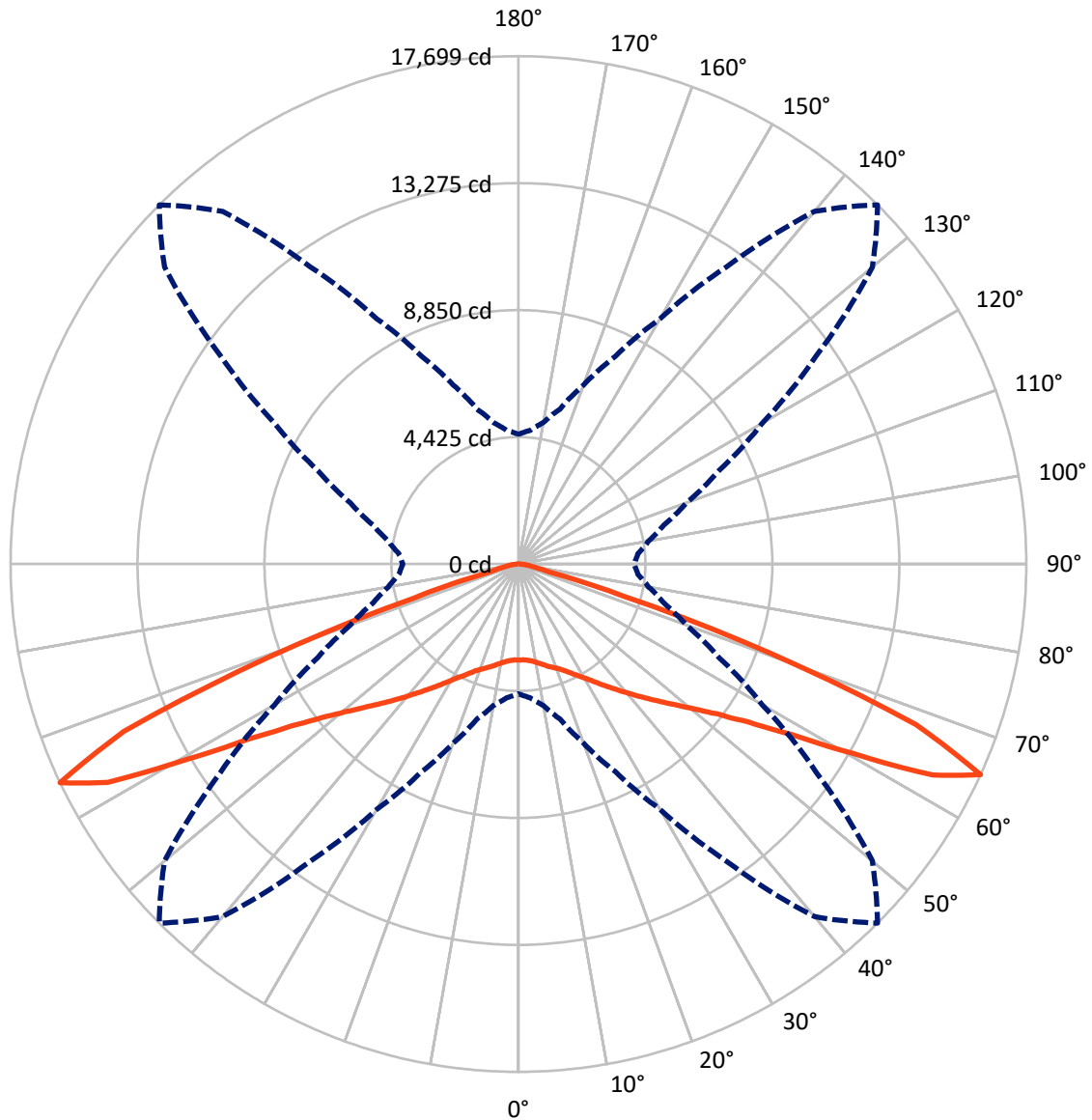
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14783.2	0.0	14783.2
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	14783.2	0.0	14783.2
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	29566.5	0.0	29566.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	326.1	1.1
10°-20°	1045.8	3.5
20°-30°	1955.4	6.6
30°-40°	3307.1	11.2
40°-50°	5407.5	18.3
50°-60°	8598.8	29.1
60°-70°	7772.8	26.3
70°-80°	983.7	3.3
80°-90°	169.2	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°	29566.5	100.0
0°-180°	29566.5	100.0

**Coefficient of Utilization**



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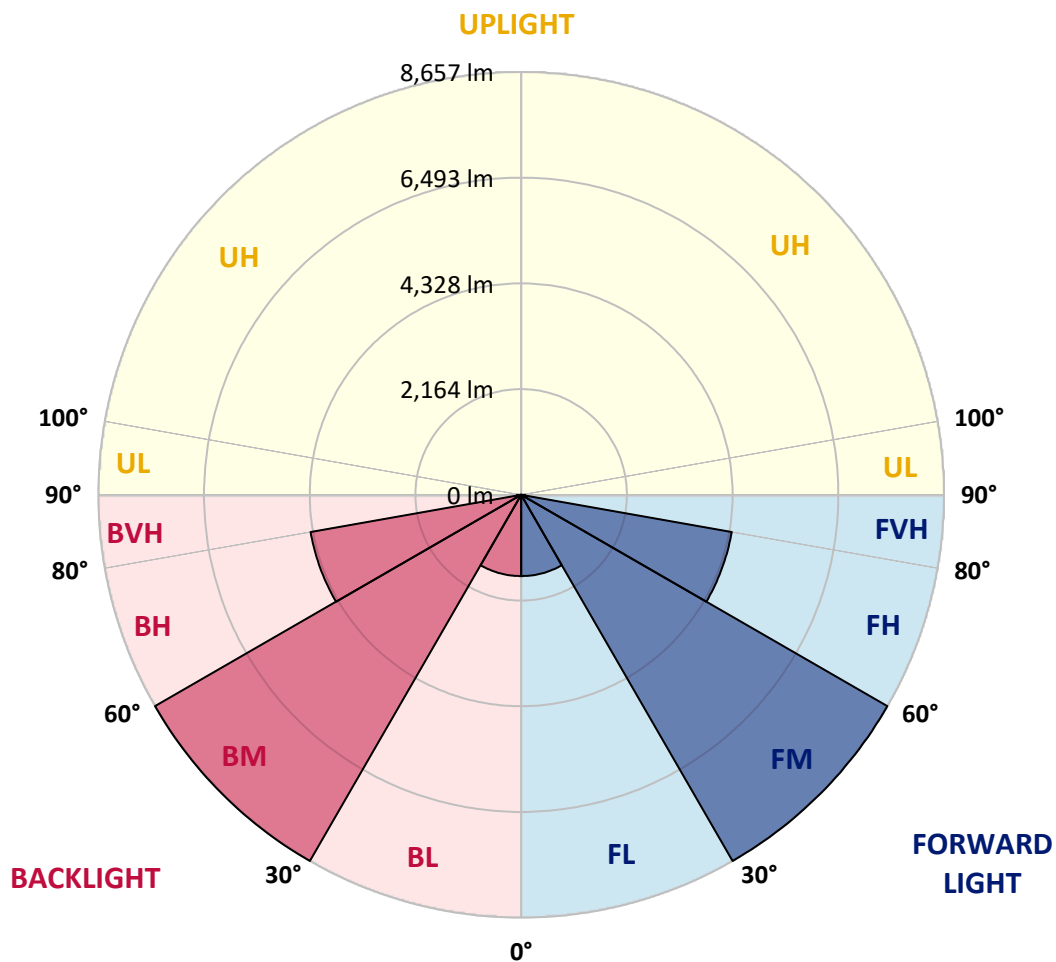
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1663.6	5.6			
FM	(30°-60°)	8656.8	29.3			
FH	(60°-80°)	4378.2	14.8			G2/5000
FVH	(80°-90°)	84.6	0.3			G1/100
BL	(0°-30°)	1663.6	5.6	B3/2500		
BM	(30°-60°)	8656.8	29.3	B5		
BH	(60°-80°)	4378.2	14.8	B4/5000		G2/5000
BVH	(80°-90°)	84.6	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3345.5	3345.5	3345.5	3345.5	3345.5	3345.5	3345.5	3345.5	3345.5	3345.5	3345.5
2.5°	3348.2	3351.0	3353.8	3351.0	3353.8	3349.6	3346.8	3351.0	3346.8	3342.7	3345.5
5°	3377.3	3378.7	3378.7	3374.5	3378.7	3375.9	3371.8	3377.3	3373.2	3369.0	3371.8
7.5°	3425.8	3431.3	3427.2	3423.0	3425.8	3423.0	3420.2	3421.6	3420.2	3416.1	3417.5
10°	3490.9	3495.0	3492.2	3490.9	3493.6	3492.2	3489.5	3488.1	3489.5	3485.3	3485.3
12.5°	3569.8	3568.4	3567.0	3568.4	3572.6	3572.6	3571.2	3572.6	3575.3	3576.7	3573.9
15°	3647.3	3650.1	3650.1	3650.1	3658.4	3665.3	3669.5	3672.3	3677.8	3679.2	3673.6
17.5°	3744.3	3744.3	3742.9	3744.3	3752.6	3763.6	3767.8	3773.3	3778.9	3783.0	3776.1
20°	3852.3	3855.0	3855.0	3857.8	3868.9	3881.3	3881.3	3884.1	3881.3	3884.1	3880.0
22.5°	3983.8	3992.1	3992.1	3993.5	4004.6	4019.8	4015.7	4019.8	4012.9	4018.4	4012.9
25°	4155.5	4168.0	4165.2	4165.2	4173.5	4183.2	4184.6	4192.9	4191.5	4198.4	4194.3
27.5°	4349.4	4368.8	4374.3	4372.9	4378.5	4388.1	4390.9	4400.6	4395.1	4400.6	4397.8
30°	4582.0	4590.3	4601.4	4605.5	4612.5	4622.2	4622.2	4623.6	4616.6	4624.9	4629.1
32.5°	4822.9	4838.2	4849.3	4874.2	4886.6	4893.6	4892.2	4895.0	4888.0	4899.1	4907.4
35°	5141.4	5152.5	5170.5	5189.9	5206.5	5205.1	5201.0	5202.4	5202.4	5212.1	5220.4
37.5°	5525.0	5527.8	5551.3	5579.0	5587.3	5579.0	5554.1	5548.5	5536.1	5548.5	5562.4
40°	5930.7	5940.4	5987.5	6005.5	6009.6	5994.4	5958.4	5937.6	5909.9	5925.2	5944.6
42.5°	6355.8	6375.2	6418.1	6450.0	6463.8	6454.1	6404.3	6372.4	6336.4	6344.7	6364.1
45°	6826.6	6850.2	6911.1	6941.6	6967.9	6952.6	6904.2	6855.7	6798.9	6803.1	6833.5
47.5°	7352.8	7376.4	7455.3	7506.5	7520.4	7517.6	7463.6	7397.1	7319.6	7316.8	7343.1
50°	7942.7	7966.2	8064.6	8143.5	8183.6	8179.5	8115.8	8021.6	7927.5	7928.9	7962.1
52.5°	8518.7	8547.8	8650.3	8786.0	8864.9	8921.7	8882.9	8794.3	8679.4	8682.1	8712.6
55°	9058.8	9107.2	9224.9	9409.1	9555.9	9715.1	9760.8	9758.1	9688.8	9708.2	9738.7
57.5°	9320.5	9392.5	9573.9	9864.7	10163.8	10487.8	10762.0	10966.9	11054.1	11185.7	11155.2
60°	8824.8	8939.7	9206.9	9634.8	10226.1	10901.8	11626.0	12333.6	12937.4	13392.9	13131.2
62.5°	7225.4	7375.0	7699.0	8247.3	9141.9	10223.3	11609.4	13282.1	15104.4	16203.9	15418.8
65°	4521.1	4676.2	5005.7	5592.8	6639.7	7984.2	9864.7	12636.9	16041.9	17699.4	16101.4
67.5°	1762.7	1847.2	2025.8	2401.1	3187.6	4384.0	6271.4	9417.4	13489.9	14942.4	13239.2
70°	883.4	891.8	925.0	994.2	1163.2	1510.7	2298.6	4366.0	7736.4	9344.0	7458.1
72.5°	638.4	639.7	656.4	686.8	740.8	818.4	967.9	1336.2	2516.0	3845.3	2358.2
75°	488.8	494.3	504.0	520.7	549.7	588.5	642.5	769.9	954.1	1106.4	930.5
77.5°	376.6	387.7	394.6	409.9	427.9	454.2	469.4	517.9	602.3	634.2	624.5
80°	286.6	296.3	311.6	324.0	336.5	348.9	343.4	365.6	409.9	436.2	422.3
82.5°	182.8	193.9	238.2	249.2	254.8	263.1	253.4	254.8	274.2	290.8	274.2
85°	117.7	124.6	150.9	164.8	166.2	171.7	167.6	157.9	157.9	144.0	162.0
87.5°	54.0	55.4	67.9	80.3	83.1	74.8	73.4	70.6	56.8	54.0	58.2
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°	3345.5	3345.5	3345.5	3345.5	3345.5	3345.5	3345.5	3345.5
2.5°	3344.1	3346.8	3348.2	3352.4	3353.8	3353.8	3355.2	3357.9
5°	3370.4	3374.5	3375.9	3381.5	3382.8	3381.5	3384.2	3385.6
7.5°	3417.5	3424.4	3427.2	3432.7	3428.5	3434.1	3435.5	3435.5
10°	3486.7	3493.6	3495.0	3500.5	3497.8	3500.5	3500.5	3497.8
12.5°	3578.1	3579.5	3575.3	3579.5	3573.9	3576.7	3572.6	3569.8
15°	3679.2	3675.0	3665.3	3665.3	3657.0	3658.4	3657.0	3655.6
17.5°	3777.5	3769.2	3762.3	3759.5	3752.6	3751.2	3747.0	3747.0
20°	3885.5	3881.3	3877.2	3871.7	3864.7	3857.8	3856.4	3859.2
22.5°	4015.7	4014.3	4014.3	4011.5	4001.8	3994.9	3990.7	3990.7
25°	4190.1	4177.7	4177.7	4176.3	4172.1	4168.0	4159.7	4163.8
27.5°	4386.8	4379.8	4385.4	4384.0	4379.8	4379.8	4374.3	4374.3
30°	4629.1	4626.3	4634.6	4627.7	4613.9	4612.5	4606.9	4600.0
32.5°	4908.8	4906.0	4918.5	4910.2	4888.0	4875.6	4864.5	4859.0
35°	5220.4	5221.7	5237.0	5231.4	5206.5	5198.2	5178.8	5176.0
37.5°	5561.0	5583.2	5609.5	5615.0	5594.2	5588.7	5567.9	5556.8
40°	5961.2	5990.3	6030.4	6040.1	6018.0	6013.8	5984.7	5969.5
42.5°	6387.7	6437.5	6487.4	6495.7	6473.5	6451.4	6423.7	6412.6
45°	6864.0	6923.6	6988.6	7005.3	6972.0	6945.7	6909.7	6909.7
47.5°	7398.5	7473.3	7546.7	7592.4	7561.9	7534.2	7491.3	7463.6
50°	8029.9	8132.4	8228.0	8275.0	8226.6	8173.9	8099.2	8074.2
52.5°	8822.0	8932.8	9015.9	8990.9	8916.2	8842.8	8761.1	8727.8
55°	9832.8	9870.2	9870.2	9776.1	9626.5	9503.3	9374.5	9331.6
57.5°	11097.1	10953.1	10731.5	10450.4	10097.3	9789.9	9582.2	9483.9
60°	12582.9	11890.5	11108.2	10339.6	9708.2	9187.6	8878.8	8737.5
62.5°	13572.9	11761.7	10194.2	8960.5	8052.1	7424.8	6998.3	6832.2
65°	12685.3	9809.3	7710.1	6234.0	5243.9	4605.5	4183.2	4028.1
67.5°	9291.4	6146.7	4105.7	2942.5	2156.0	1719.8	1546.7	1474.7
70°	4170.7	2164.3	1326.6	1035.8	893.1	819.7	787.9	776.8
72.5°	1257.3	909.8	767.1	692.4	635.6	599.6	573.3	570.5
75°	758.8	631.4	560.8	516.5	480.5	451.4	437.6	433.4
77.5°	530.3	463.9	430.6	398.8	371.1	348.9	336.5	326.8
80°	372.5	340.6	325.4	307.4	289.4	268.6	250.6	242.3
82.5°	249.2	242.3	242.3	231.2	216.0	196.6	160.6	152.3
85°	160.6	159.2	162.0	157.9	146.8	126.0	103.9	98.3
87.5°	74.8	76.2	84.5	83.1	80.3	66.5	52.6	49.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)