

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: STREETWORKS

Report Number: P299685

Luminaire Tested: **GAA-AF-09-LED-U-5MQ-8030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299685
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: STREETWORKS
Catalog Number: GAA-AF-09-LED-U-5MQ-8030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36729.9 lumens
Efficiency: N/A
Efficacy: 98.2 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G4

Input Watts (W): 374
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: 28.75 FT

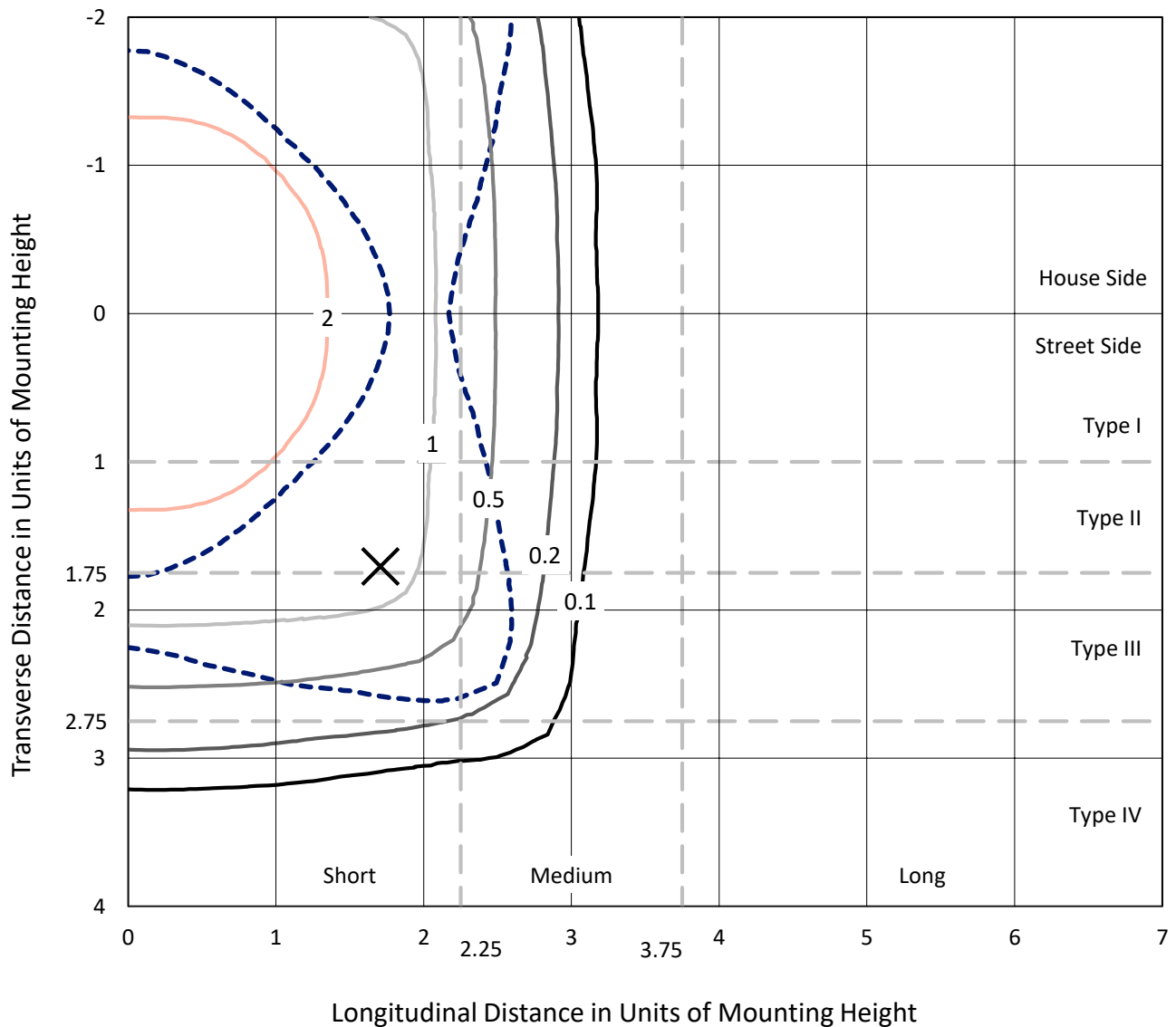


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

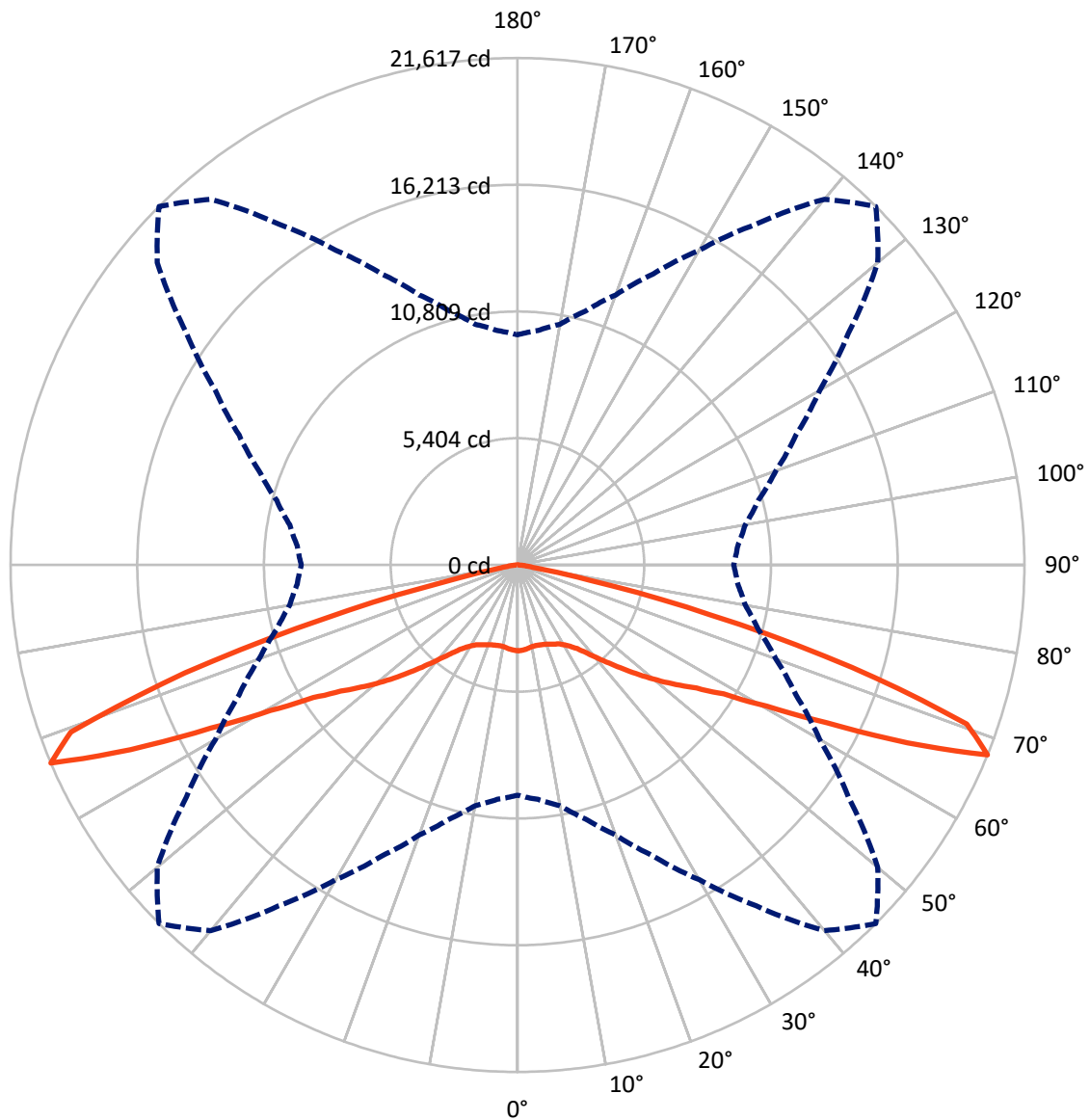


Based on 30 foot mounting height. Maximum calculated value = 4.1 fc
 Type V - Short - Full Cutoff

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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	18364.9	0.0	18364.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	18364.9	0.0	18364.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	36729.9	0.0	36729.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	342.6	0.9
10°-20°	994.1	2.7
20°-30°	1690.0	4.6
30°-40°	2762.6	7.5
40°-50°	4931.7	13.4
50°-60°	8315.1	22.6
60°-70°	12903.7	35.1
70°-80°	4533.8	12.3
80°-90°	256.2	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°	36729.9	100.0
0°-180°	36729.9	100.0



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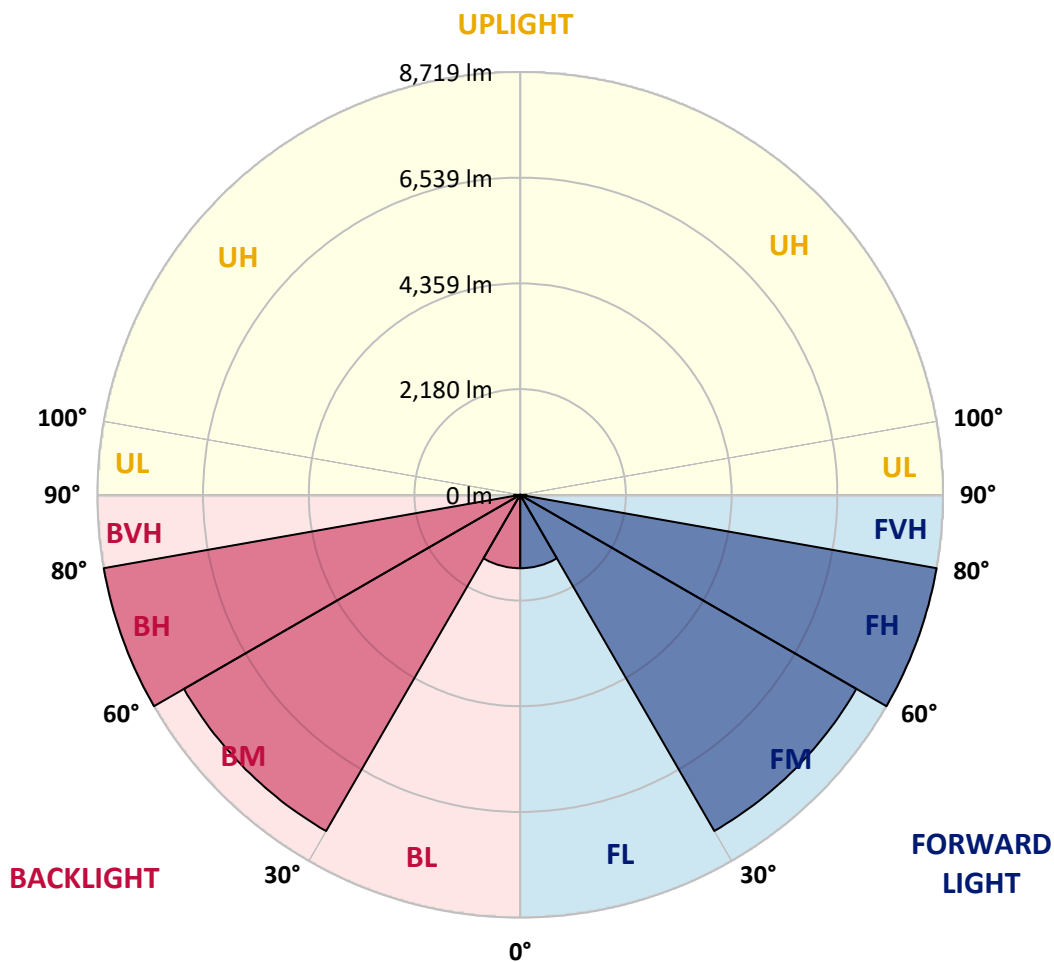
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1513.3	4.1			
FM	(30°-60°)	8004.7	21.8			
FH	(60°-80°)	8718.8	23.7			G4/12000
FVH	(80°-90°)	128.1	0.3			G2/225
BL	(0°-30°)	1513.3	4.1	B3/2500		
BM	(30°-60°)	8004.7	21.8	B4/8500		
BH	(60°-80°)	8718.8	23.7	B5		G4/12000
BVH	(80°-90°)	128.1	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°	3660.3	3660.3	3660.3	3660.3	3660.3	3660.3	3660.3	3660.3	3660.3	3660.3	3660.3
2.5°	3646.8	3650.2	3650.2	3650.2	3648.5	3648.5	3645.1	3648.5	3646.8	3641.7	3643.4
5°	3616.4	3619.7	3619.7	3618.1	3623.1	3621.4	3616.4	3619.7	3618.1	3614.7	3616.4
7.5°	3572.5	3577.5	3577.5	3575.8	3580.9	3579.2	3575.8	3577.5	3577.5	3572.5	3572.5
10°	3523.5	3526.8	3526.8	3525.2	3533.6	3533.6	3531.9	3537.0	3538.7	3533.6	3530.2
12.5°	3477.9	3482.9	3482.9	3489.7	3498.1	3501.5	3510.0	3516.7	3523.5	3521.8	3515.0
15°	3450.8	3454.2	3461.0	3469.4	3482.9	3494.8	3508.3	3523.5	3537.0	3540.4	3530.2
17.5°	3433.9	3439.0	3449.1	3461.0	3479.6	3499.8	3520.1	3540.4	3558.9	3565.7	3553.9
20°	3428.9	3432.3	3442.4	3462.7	3488.0	3518.4	3547.1	3570.8	3596.1	3604.5	3596.1
22.5°	3439.0	3445.8	3457.6	3481.2	3515.0	3553.9	3587.7	3619.7	3651.8	3667.0	3655.2
25°	3484.6	3491.4	3506.6	3537.0	3574.1	3614.7	3653.5	3690.7	3719.4	3734.6	3726.2
27.5°	3569.1	3577.5	3596.1	3626.5	3667.0	3711.0	3753.2	3783.6	3807.2	3812.3	3802.2
30°	3695.8	3714.3	3736.3	3770.1	3817.4	3854.5	3896.8	3923.8	3952.5	3952.5	3944.1
32.5°	3893.4	3912.0	3935.6	3967.7	4004.9	4045.4	4082.6	4106.2	4136.6	4138.3	4118.0
35°	4189.0	4197.4	4217.7	4238.0	4271.7	4307.2	4339.3	4354.5	4379.8	4381.5	4363.0
37.5°	4579.2	4580.8	4594.4	4601.1	4631.5	4670.4	4700.8	4710.9	4734.6	4731.2	4712.6
40°	5033.5	5042.0	5047.0	5057.2	5089.3	5126.4	5158.5	5163.6	5188.9	5183.9	5160.2
42.5°	5558.8	5562.2	5590.9	5606.1	5636.5	5655.1	5695.7	5700.7	5731.1	5717.6	5690.6
45°	6148.3	6178.7	6205.8	6236.2	6268.3	6290.2	6322.3	6315.6	6335.8	6315.6	6300.4
47.5°	6768.2	6790.2	6851.0	6898.3	6950.7	6969.2	7014.8	6994.6	7014.8	6986.1	6981.1
50°	7450.6	7489.5	7541.8	7595.9	7651.6	7682.0	7741.2	7715.8	7742.8	7715.8	7700.6
52.5°	8122.9	8133.0	8247.9	8327.3	8405.0	8440.4	8475.9	8464.1	8465.8	8464.1	8448.9
55°	8761.4	8785.0	8899.9	9008.0	9143.1	9242.8	9303.6	9296.8	9281.6	9266.4	9241.1
57.5°	9480.9	9504.6	9636.3	9769.8	9923.5	10065.4	10188.7	10315.3	10364.3	10377.8	10322.1
60°	10453.9	10452.2	10627.8	10790.0	11009.6	11220.7	11491.0	11766.3	12082.2	12229.1	12034.9
62.5°	11443.7	11484.2	11737.6	12024.7	12477.4	12918.3	13416.5	13906.4	14406.4	14813.4	14381.0
65°	11325.4	11480.8	11857.5	12507.8	13343.9	14337.1	15411.4	16548.1	17575.1	18281.2	17489.0
67.5°	9815.4	10036.6	10420.1	11210.6	12256.1	13688.5	15492.4	17740.6	20353.7	21617.1	20051.3
70°	7114.5	7364.5	7766.5	8538.4	9573.8	10935.3	12894.6	15593.8	19053.1	20326.7	18602.1
72.5°	3540.4	3675.5	3923.8	4415.3	5199.1	6303.7	8080.7	10675.1	13735.8	14904.6	13328.7
75°	1202.6	1265.1	1307.4	1467.8	1716.1	2150.2	3033.6	4667.0	7119.6	8535.0	7018.2
77.5°	694.2	695.9	724.6	753.3	795.6	842.9	961.1	1261.8	2182.3	3099.5	2258.3
80°	449.3	447.6	471.3	493.2	521.9	545.6	552.3	584.4	674.0	798.9	714.5
82.5°	233.1	261.8	314.2	342.9	396.9	407.1	393.6	381.7	403.7	418.9	429.0
85°	128.4	111.5	167.2	216.2	239.9	243.2	243.2	229.7	238.2	233.1	253.4
87.5°	59.1	54.1	65.9	106.4	113.2	96.3	101.3	89.5	64.2	62.5	70.9
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°	3660.3	3660.3	3660.3	3660.3	3660.3	3660.3	3660.3	3660.3
2.5°	3643.4	3645.1	3645.1	3650.2	3651.8	3655.2	3658.6	3660.3
5°	3614.7	3619.7	3616.4	3621.4	3621.4	3624.8	3624.8	3626.5
7.5°	3572.5	3577.5	3577.5	3577.5	3575.8	3580.9	3580.9	3580.9
10°	3528.5	3531.9	3530.2	3526.8	3523.5	3528.5	3526.8	3525.2
12.5°	3515.0	3506.6	3499.8	3496.4	3489.7	3491.4	3486.3	3486.3
15°	3523.5	3508.3	3496.4	3491.4	3484.6	3481.2	3477.9	3479.6
17.5°	3545.4	3526.8	3511.6	3503.2	3494.8	3489.7	3482.9	3484.6
20°	3584.3	3562.3	3540.4	3523.5	3508.3	3499.8	3494.8	3493.1
22.5°	3641.7	3609.6	3577.5	3552.2	3531.9	3520.1	3515.0	3511.6
25°	3707.6	3672.1	3634.9	3606.2	3586.0	3570.8	3560.6	3560.6
27.5°	3790.3	3761.6	3727.8	3694.1	3675.5	3660.3	3653.5	3650.2
30°	3928.9	3901.8	3874.8	3842.7	3819.1	3803.9	3792.0	3781.9
32.5°	4106.2	4084.3	4062.3	4038.6	4016.7	3996.4	3977.8	3969.4
35°	4356.2	4339.3	4324.1	4297.1	4288.6	4276.8	4266.7	4258.2
37.5°	4700.8	4694.0	4694.0	4665.3	4658.5	4653.5	4643.3	4645.0
40°	5153.5	5160.2	5151.8	5141.6	5136.6	5123.0	5123.0	5134.9
42.5°	5688.9	5694.0	5712.5	5695.7	5714.2	5697.3	5687.2	5695.7
45°	6310.5	6329.1	6366.2	6349.3	6361.2	6332.4	6297.0	6298.7
47.5°	7008.1	7025.0	7040.2	7028.4	7030.0	6982.8	6935.5	6923.6
50°	7732.7	7739.5	7747.9	7731.0	7734.4	7682.0	7628.0	7629.7
52.5°	8448.9	8481.0	8514.8	8469.2	8459.0	8399.9	8323.9	8293.5
55°	9268.1	9313.7	9274.9	9195.5	9116.1	9036.7	8937.0	8920.2
57.5°	10278.2	10200.5	10078.9	9928.5	9818.8	9707.3	9605.9	9563.7
60°	11683.5	11391.3	11171.7	10948.8	10808.6	10671.8	10538.3	10518.0
62.5°	13669.9	13164.9	12727.4	12266.3	11889.6	11595.7	11360.9	11295.0
65°	16159.6	14965.4	13930.0	12963.9	12124.4	11491.0	11092.3	10916.7
67.5°	17230.5	14872.5	13097.3	11725.8	10627.8	9861.0	9430.3	9215.7
70°	15141.1	12333.8	10403.2	9029.9	8030.0	7212.5	6822.3	6592.6
72.5°	10416.7	7845.9	6204.1	5063.9	4265.0	3580.9	3310.6	3290.4
75°	4677.1	3097.8	2135.0	1645.2	1385.1	1204.3	1148.6	1106.4
77.5°	1309.1	967.9	863.1	807.4	753.3	690.8	667.2	672.3
80°	636.8	601.3	577.7	542.2	493.2	440.9	417.2	427.3
82.5°	422.3	417.2	432.4	407.1	336.1	285.5	239.9	219.6
85°	256.7	260.1	265.2	266.9	226.3	158.8	108.1	121.6
87.5°	101.3	116.5	126.7	131.8	123.3	76.0	60.8	62.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)