

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: P191597

Luminaire Tested: **GLEON-AF-09-LED-E1-5MQ-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191597
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: GLEON-AF-09-LED-E1-5MQ-7050-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36832 lumens
Efficiency: N/A
Efficacy: 127.0 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): 290
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

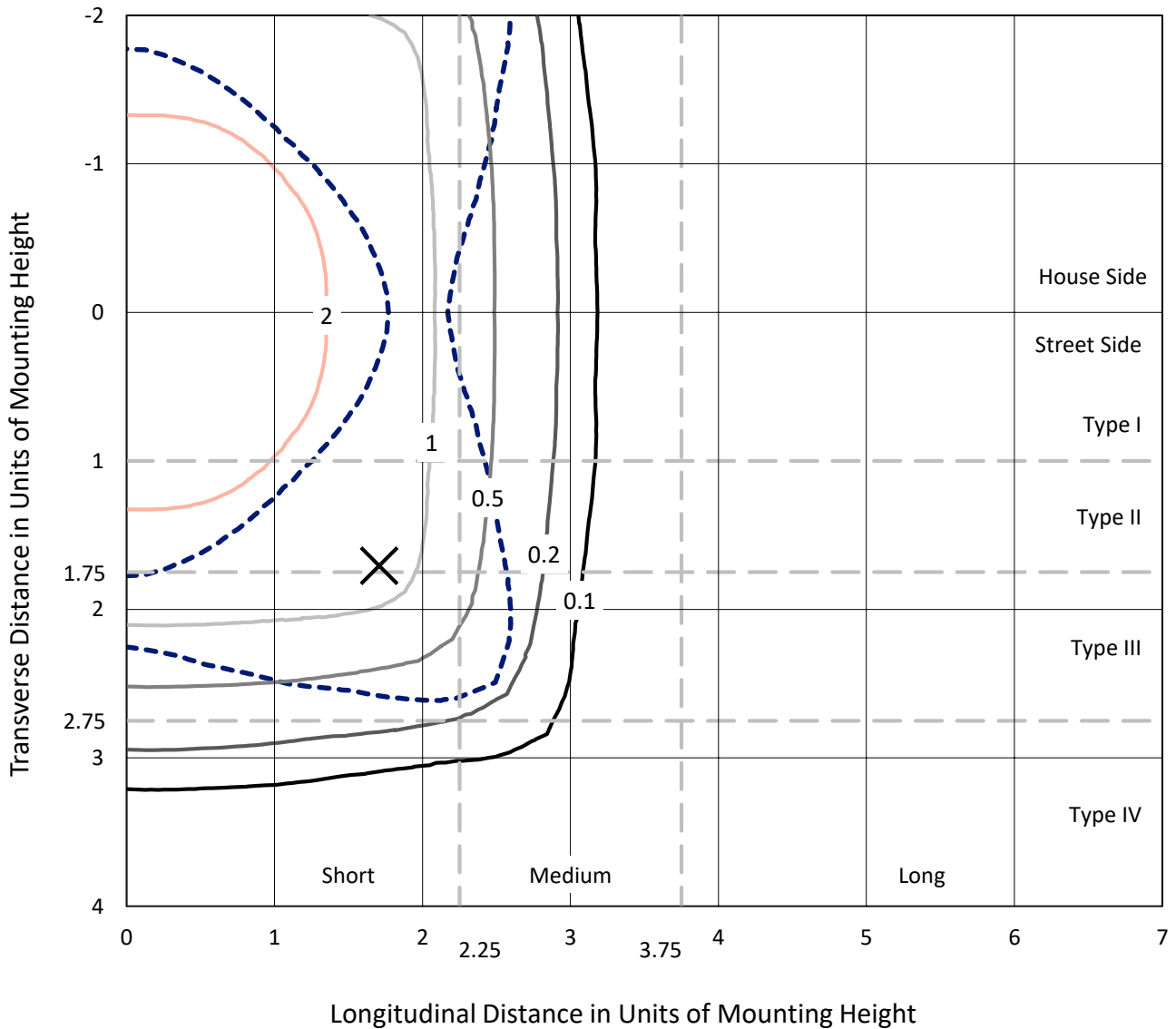


REPORT NUMBER: P191597

CATALOG NUMBER: GLEON-AF-09-LED-E1-5MQ-7050-600

Iso-Footcandle Lines of Horizontal Illumination

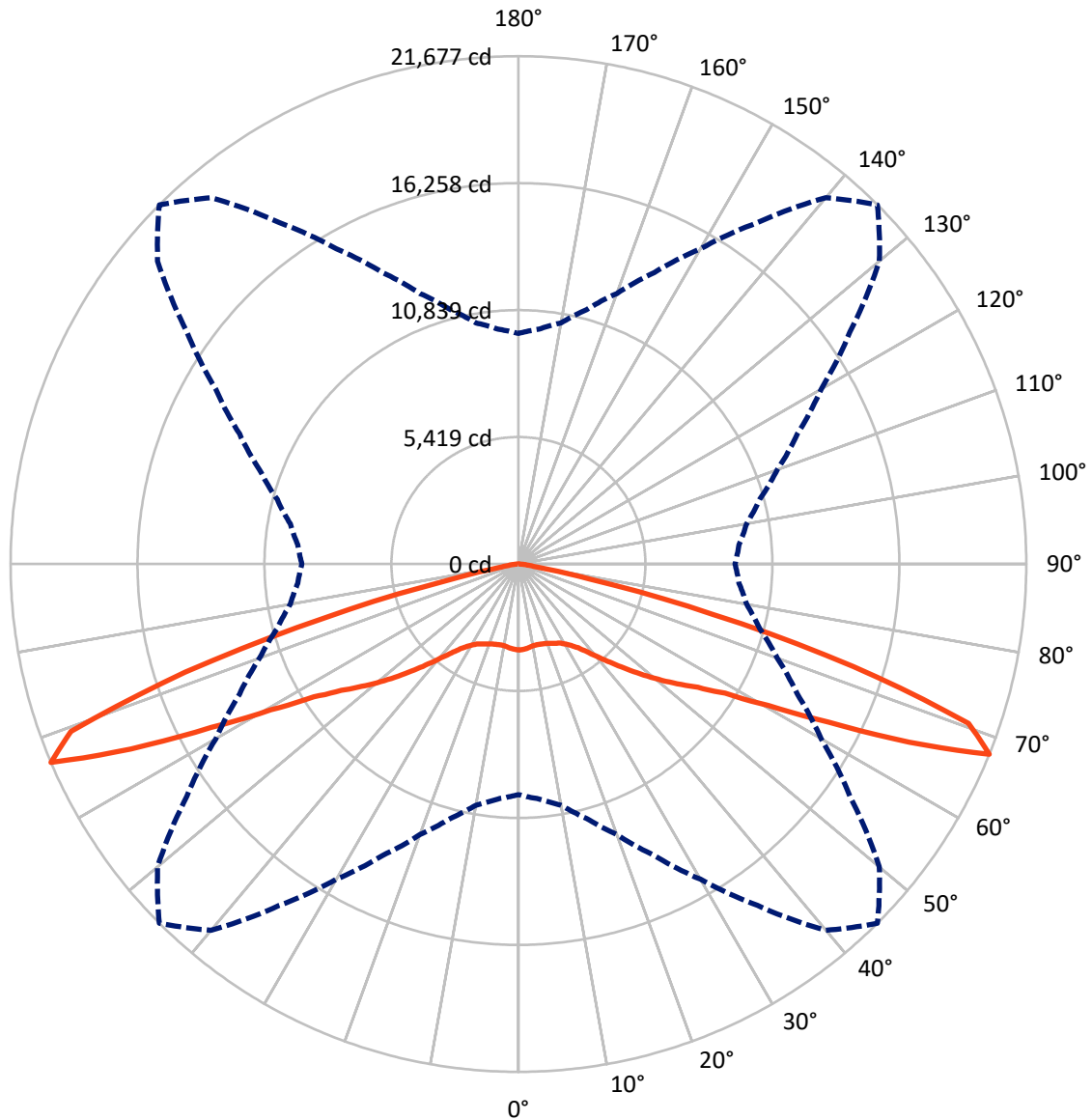
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P191597
CATALOG NUMBER: GLEON-AF-09-LED-E1-5MQ-7050-600

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P191597

CATALOG NUMBER: GLEON-AF-09-LED-E1-5MQ-7050-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18416.0	0.0	18416.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	18416.0	0.0	18416.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	36832.0	0.0	36832.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.5	0.9
10°-20°	996.9	2.7
20°-30°	1694.7	4.6
30°-40°	2770.3	7.5
40°-50°	4945.5	13.4
50°-60°	8338.2	22.6
60°-70°	12939.6	35.1
70°-80°	4546.4	12.3
80°-90°	256.9	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°	36832.0	100.0
0°-180°	36832.0	100.0



REPORT NUMBER: P191597

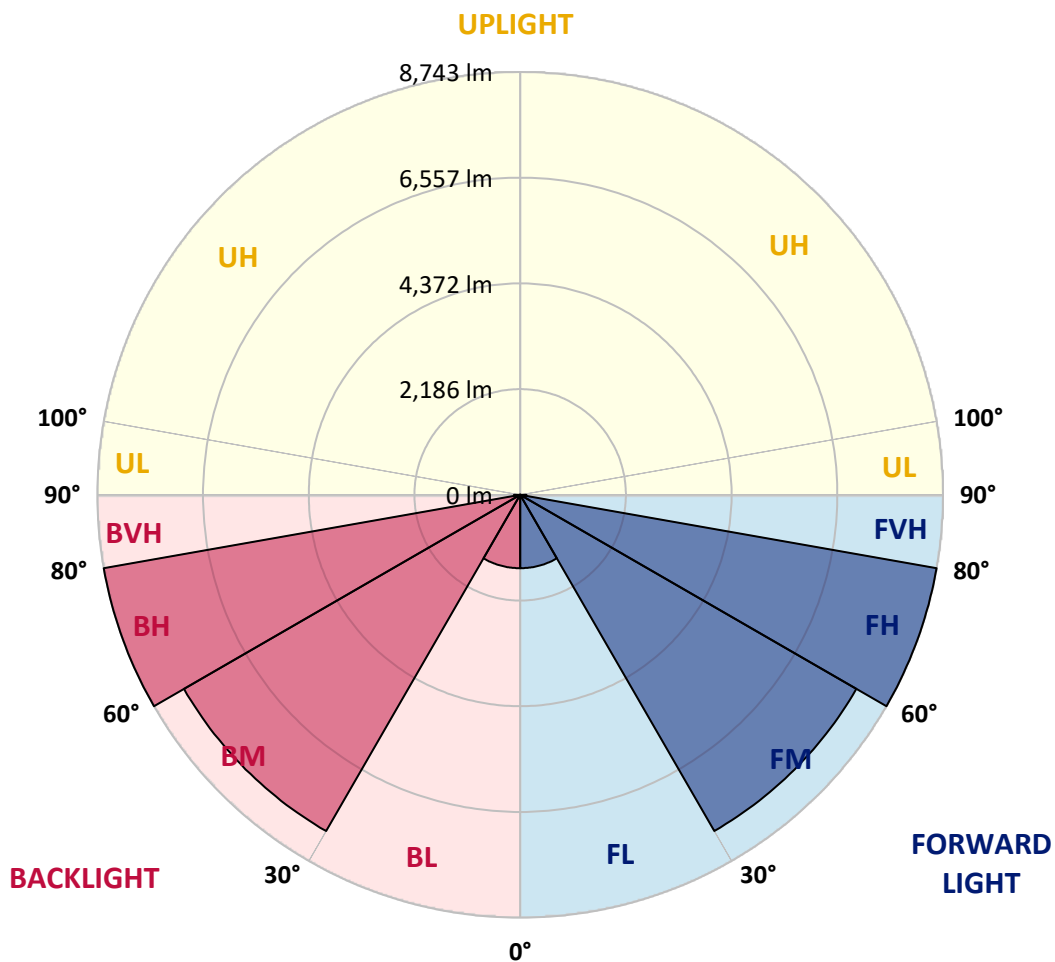
CATALOG NUMBER: GLEON-AF-09-LED-E1-5MQ-7050-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1517.6	4.1			
FM	(30°-60°)	8027.0	21.8			
FH	(60°-80°)	8743.0	23.7			G4/12000
FVH	(80°-90°)	128.5	0.3			G2/225
BL	(0°-30°)	1517.6	4.1	B3/2500		
BM	(30°-60°)	8027.0	21.8	B4/8500		
BH	(60°-80°)	8743.0	23.7	B5		G4/12000
BVH	(80°-90°)	128.5	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





REPORT NUMBER: P191597

CATALOG NUMBER: GLEON-AF-09-LED-E1-5MQ-7050-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3670.5	3670.5	3670.5	3670.5	3670.5	3670.5	3670.5	3670.5	3670.5	3670.5	3670.5
2.5°	3656.9	3660.3	3660.3	3660.3	3658.6	3658.6	3655.2	3658.6	3656.9	3651.8	3653.5
5°	3626.4	3629.8	3629.8	3628.1	3633.2	3631.5	3626.4	3629.8	3628.1	3624.7	3626.4
7.5°	3582.4	3587.5	3587.5	3585.8	3590.9	3589.2	3585.8	3587.5	3587.5	3582.4	3582.4
10°	3533.3	3536.7	3536.7	3535.0	3543.4	3543.4	3541.7	3546.8	3548.5	3543.4	3540.0
12.5°	3487.5	3492.6	3492.6	3499.4	3507.9	3511.2	3519.7	3526.5	3533.3	3531.6	3524.8
15°	3460.4	3463.8	3470.6	3479.1	3492.6	3504.5	3518.0	3533.3	3546.8	3550.2	3540.0
17.5°	3443.5	3448.6	3458.7	3470.6	3489.2	3509.6	3529.9	3550.2	3568.8	3575.6	3563.8
20°	3438.4	3441.8	3452.0	3472.3	3497.7	3528.2	3557.0	3580.7	3606.1	3614.6	3606.1
22.5°	3448.6	3455.4	3467.2	3490.9	3524.8	3563.8	3597.6	3629.8	3662.0	3677.2	3665.4
25°	3494.3	3501.1	3516.3	3546.8	3584.1	3624.7	3663.7	3701.0	3729.7	3745.0	3736.5
27.5°	3579.0	3587.5	3606.1	3636.6	3677.2	3721.3	3763.6	3794.1	3817.8	3822.9	3812.7
30°	3706.0	3724.7	3746.7	3780.6	3828.0	3865.3	3907.6	3934.7	3963.5	3963.5	3955.0
32.5°	3904.2	3922.8	3946.6	3978.7	4016.0	4056.7	4093.9	4117.6	4148.1	4149.8	4129.5
35°	4200.6	4209.1	4229.4	4249.7	4283.6	4319.2	4351.4	4366.6	4392.0	4393.7	4375.1
37.5°	4591.9	4593.6	4607.1	4613.9	4644.4	4683.4	4713.8	4724.0	4747.7	4744.3	4725.7
40°	5047.5	5056.0	5061.1	5071.2	5103.4	5140.7	5172.9	5177.9	5203.4	5198.3	5174.6
42.5°	5574.3	5577.7	5606.5	5621.7	5652.2	5670.8	5711.5	5716.6	5747.1	5733.5	5706.4
45°	6165.4	6195.9	6223.0	6253.5	6285.7	6307.7	6339.9	6333.1	6353.4	6333.1	6317.9
47.5°	6787.1	6809.1	6870.1	6917.5	6970.0	6988.6	7034.4	7014.0	7034.4	7005.6	7000.5
50°	7471.4	7510.3	7562.8	7617.0	7672.9	7703.4	7762.7	7737.3	7764.4	7737.3	7722.0
52.5°	8145.5	8155.6	8270.8	8350.4	8428.3	8463.9	8499.5	8487.6	8489.3	8487.6	8472.4
55°	8785.7	8809.5	8924.6	9033.0	9168.5	9268.5	9329.4	9322.7	9307.4	9292.2	9266.8
57.5°	9507.3	9531.0	9663.1	9796.9	9951.1	10093.4	10217.0	10344.0	10393.2	10406.7	10350.8
60°	10482.9	10481.2	10657.4	10820.0	11040.2	11251.9	11522.9	11799.0	12115.7	12263.1	12068.3
62.5°	11475.5	11516.1	11770.2	12058.2	12512.1	12954.2	13453.9	13945.1	14446.4	14854.6	14421.0
65°	11356.9	11512.8	11890.5	12542.6	13381.0	14377.0	15454.2	16594.2	17624.0	18332.0	17537.6
67.5°	9842.7	10064.6	10449.1	11241.7	12290.2	13726.6	15535.5	17790.0	20410.3	21677.2	20107.1
70°	7134.3	7385.0	7788.1	8562.2	9600.5	10965.7	12930.5	15637.2	19106.1	20383.2	18653.8
72.5°	3550.2	3685.7	3934.7	4427.6	5213.5	6321.3	8103.1	10704.8	13774.0	14946.1	13365.8
75°	1206.0	1268.7	1311.0	1471.9	1720.9	2156.2	3042.1	4680.0	7139.4	8558.8	7037.7
77.5°	696.2	697.8	726.6	755.4	797.8	845.2	963.8	1265.3	2188.4	3108.1	2264.6
80°	450.6	448.9	472.6	494.6	523.4	547.1	553.9	586.1	675.8	801.2	716.5
82.5°	233.7	262.5	315.0	343.8	398.0	408.2	394.7	382.8	404.8	420.1	430.2
85°	128.7	111.8	167.7	216.8	240.5	243.9	243.9	230.4	238.8	233.7	254.1
87.5°	59.3	54.2	66.1	106.7	113.5	96.5	101.6	89.8	64.4	62.7	71.1
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: P191597

CATALOG NUMBER: GLEON-AF-09-LED-E1-5MQ-7050-600

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3670.5	3670.5	3670.5	3670.5	3670.5	3670.5	3670.5	3670.5
2.5°	3653.5	3655.2	3655.2	3660.3	3662.0	3665.4	3668.8	3670.5
5°	3624.7	3629.8	3626.4	3631.5	3631.5	3634.9	3634.9	3636.6
7.5°	3582.4	3587.5	3587.5	3587.5	3585.8	3590.9	3590.9	3590.9
10°	3538.3	3541.7	3540.0	3536.7	3533.3	3538.3	3536.7	3535.0
12.5°	3524.8	3516.3	3509.6	3506.2	3499.4	3501.1	3496.0	3496.0
15°	3533.3	3518.0	3506.2	3501.1	3494.3	3490.9	3487.5	3489.2
17.5°	3555.3	3536.7	3521.4	3512.9	3504.5	3499.4	3492.6	3494.3
20°	3594.2	3572.2	3550.2	3533.3	3518.0	3509.6	3504.5	3502.8
22.5°	3651.8	3619.7	3587.5	3562.1	3541.7	3529.9	3524.8	3521.4
25°	3717.9	3682.3	3645.1	3616.3	3595.9	3580.7	3570.5	3570.5
27.5°	3800.9	3772.1	3738.2	3704.3	3685.7	3670.5	3663.7	3660.3
30°	3939.8	3912.7	3885.6	3853.4	3829.7	3814.4	3802.6	3792.4
32.5°	4117.6	4095.6	4073.6	4049.9	4027.9	4007.5	3988.9	3980.4
35°	4368.3	4351.4	4336.1	4309.0	4300.6	4288.7	4278.5	4270.1
37.5°	4713.8	4707.1	4707.1	4678.3	4671.5	4666.4	4656.3	4657.9
40°	5167.8	5174.6	5166.1	5155.9	5150.8	5137.3	5137.3	5149.2
42.5°	5704.7	5709.8	5728.4	5711.5	5730.1	5713.2	5703.0	5711.5
45°	6328.0	6346.7	6383.9	6367.0	6378.9	6350.1	6314.5	6316.2
47.5°	7027.6	7044.5	7059.8	7047.9	7049.6	7002.2	6954.7	6942.9
50°	7754.2	7761.0	7769.5	7752.5	7755.9	7703.4	7649.2	7650.9
52.5°	8472.4	8504.6	8538.4	8492.7	8482.5	8423.3	8347.0	8316.6
55°	9293.9	9339.6	9300.7	9221.0	9141.4	9061.8	8961.9	8945.0
57.5°	10306.8	10228.9	10106.9	9956.2	9846.1	9734.3	9632.6	9590.3
60°	11716.0	11423.0	11202.8	10979.2	10838.6	10701.4	10567.6	10547.3
62.5°	13707.9	13201.5	12762.8	12300.4	11922.7	11627.9	11392.5	11326.4
65°	16204.6	15007.1	13968.8	12999.9	12158.1	11522.9	11123.2	10947.0
67.5°	17278.5	14913.9	13133.7	11758.4	10657.4	9888.4	9456.5	9241.4
70°	15183.2	12368.1	10432.1	9055.1	8052.3	7232.5	6841.3	6610.9
72.5°	10445.7	7867.7	6221.3	5078.0	4276.8	3590.9	3319.8	3299.5
75°	4690.1	3106.4	2141.0	1649.8	1388.9	1207.7	1151.8	1109.4
77.5°	1312.7	970.5	865.5	809.6	755.4	692.8	669.1	674.1
80°	638.6	603.0	579.3	543.7	494.6	442.1	418.4	428.5
82.5°	423.4	418.4	433.6	408.2	337.1	286.3	240.5	220.2
85°	257.5	260.8	265.9	267.6	227.0	159.2	108.4	122.0
87.5°	101.6	116.9	127.0	132.1	123.6	76.2	61.0	62.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)