

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: P190807

Luminaire Tested: **GLEON-AF-09-LED-E1-5MQ-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190807
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-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 46201.6 lumens
Efficiency: N/A
Efficacy: 123.5 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

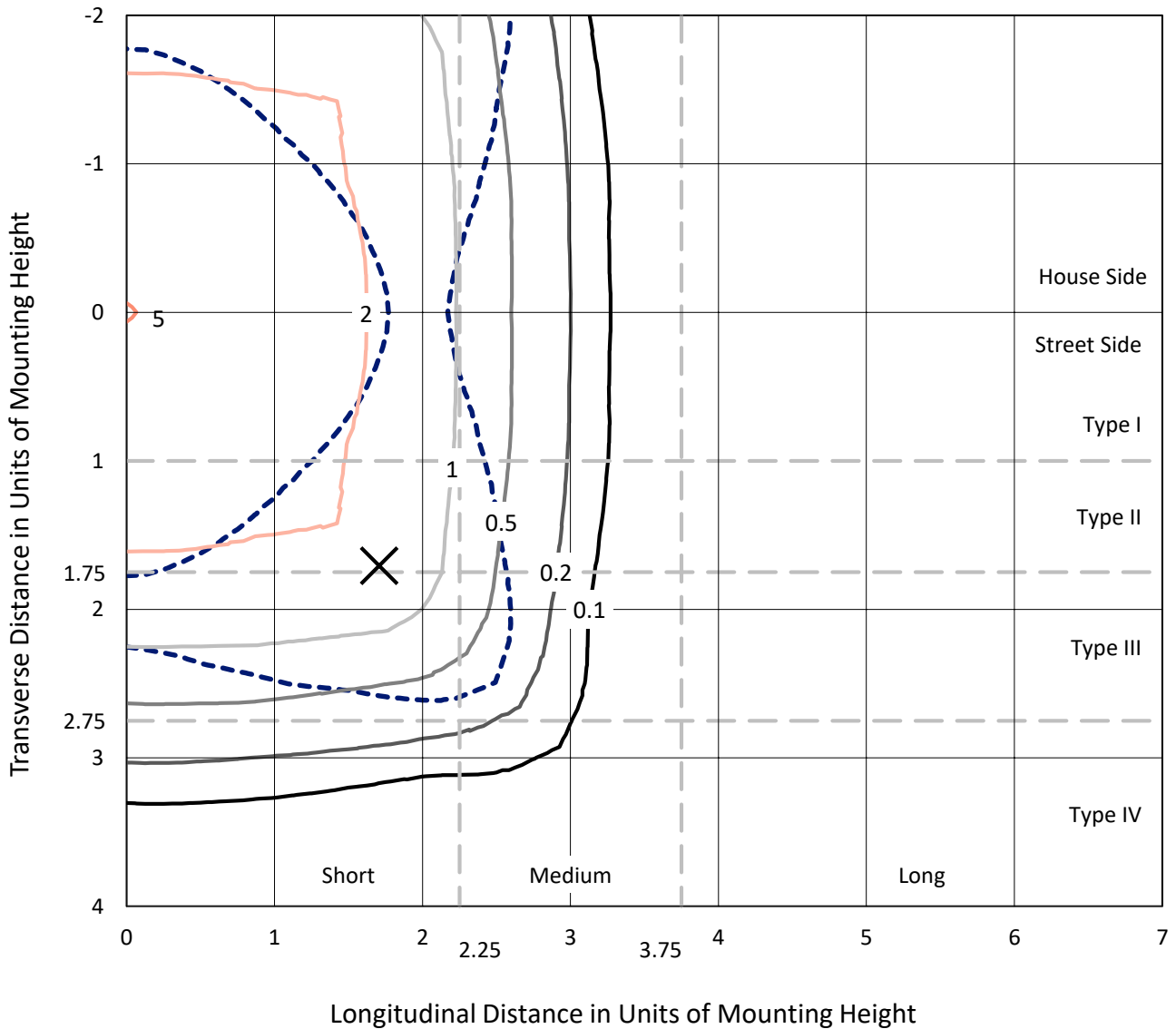
Input Watts (W): 374
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P190807
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Iso-Footcandle Lines of Horizontal Illumination

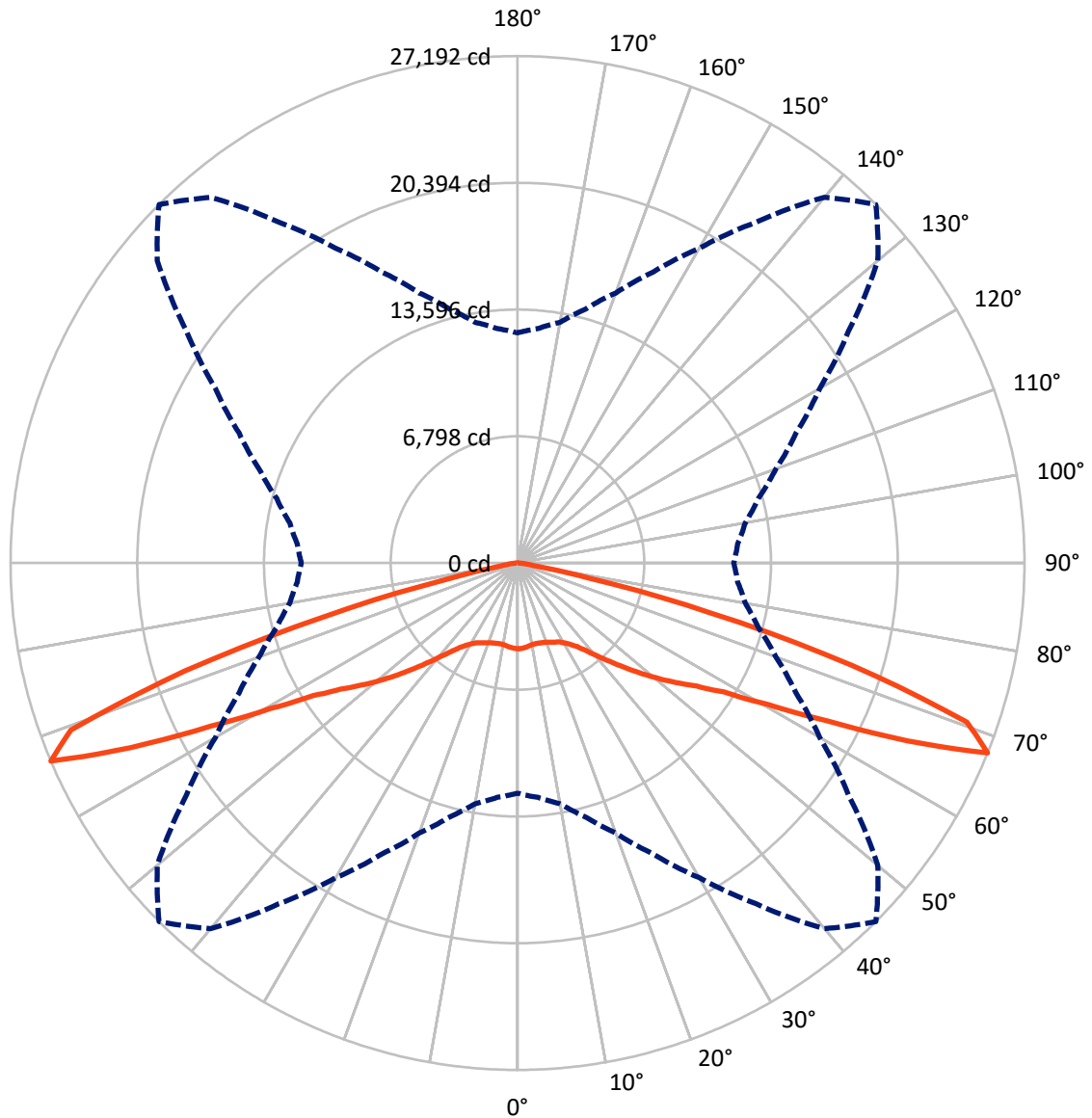
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.1 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P190807
CATALOG NUMBER: GLEON-AF-09-LED-E1-5MQ-800

Luminous Intensity Polar Plot



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

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CATALOG NUMBER: GLEON-AF-09-LED-E1-5MQ-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	23100.8	0.0	23100.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	23100.8	0.0	23100.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	46201.6	0.0	46201.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	430.9	0.9
10°-20°	1250.5	2.7
20°-30°	2125.8	4.6
30°-40°	3475.0	7.5
40°-50°	6203.5	13.4
50°-60°	10459.3	22.6
60°-70°	16231.3	35.1
70°-80°	5702.9	12.3
80°-90°	322.3	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°	46201.6	100.0
0°-180°	46201.6	100.0



REPORT NUMBER: P190807

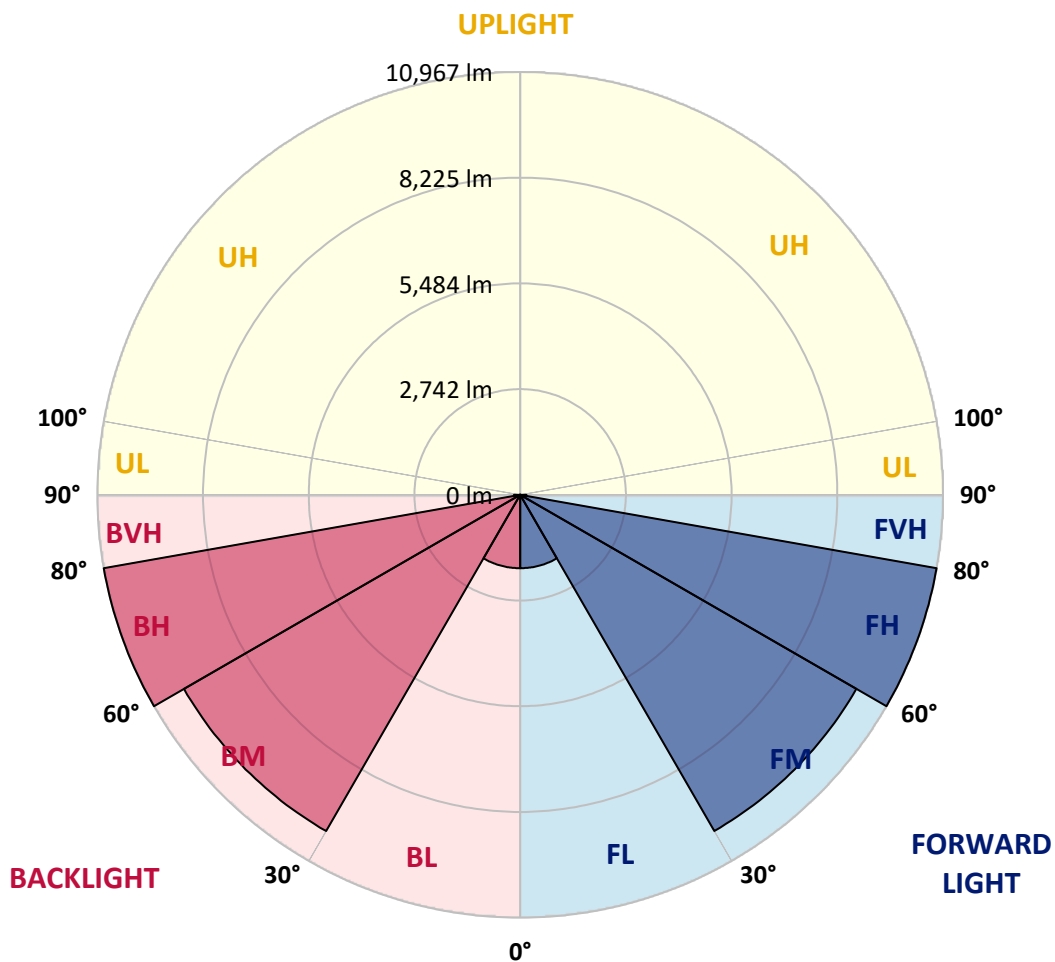
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1903.6	4.1			
FM	(30°-60°)	10068.9	21.8			
FH	(60°-80°)	10967.1	23.7			G4/12000
FVH	(80°-90°)	161.1	0.3			G2/225
BL	(0°-30°)	1903.6	4.1	B3/2500		
BM	(30°-60°)	10068.9	21.8	B5		
BH	(60°-80°)	10967.1	23.7	B5		G4/12000
BVH	(80°-90°)	161.1	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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 CATALOG NUMBER: GLEON-AF-09-LED-E1-5MQ-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4604.2	4604.2	4604.2	4604.2	4604.2	4604.2	4604.2	4604.2	4604.2	4604.2	4604.2
2.5°	4587.2	4591.4	4591.4	4591.4	4589.3	4589.3	4585.1	4589.3	4587.2	4580.8	4582.9
5°	4549.0	4553.2	4553.2	4551.1	4557.5	4555.3	4549.0	4553.2	4551.1	4546.8	4549.0
7.5°	4493.7	4500.1	4500.1	4497.9	4504.4	4502.2	4497.9	4500.1	4500.1	4493.7	4493.7
10°	4432.0	4436.3	4436.3	4434.2	4444.8	4444.8	4442.7	4449.1	4451.2	4444.8	4440.6
12.5°	4374.8	4381.1	4381.1	4389.6	4400.2	4404.4	4415.1	4423.5	4432.0	4430.0	4421.5
15°	4340.7	4345.0	4353.5	4364.1	4381.1	4395.9	4413.0	4432.0	4449.1	4453.3	4440.6
17.5°	4319.5	4325.9	4338.6	4353.5	4376.8	4402.4	4427.8	4453.3	4476.7	4485.2	4470.3
20°	4313.1	4317.4	4330.0	4355.6	4387.4	4425.7	4461.8	4491.6	4523.5	4534.0	4523.5
22.5°	4325.9	4334.3	4349.2	4378.9	4421.5	4470.3	4512.8	4553.2	4593.6	4612.7	4597.9
25°	4383.2	4391.7	4410.9	4449.1	4495.9	4546.8	4595.7	4642.5	4678.6	4697.7	4687.1
27.5°	4489.4	4500.1	4523.5	4561.6	4612.7	4667.9	4721.0	4759.3	4789.0	4795.4	4782.7
30°	4648.8	4672.1	4699.7	4742.3	4801.7	4848.5	4901.7	4935.6	4971.7	4971.7	4961.1
32.5°	4897.4	4920.8	4950.5	4990.9	5037.6	5088.6	5135.3	5165.1	5203.3	5205.5	5180.0
35°	5269.2	5279.9	5305.3	5330.8	5373.4	5418.0	5458.3	5477.4	5509.3	5511.5	5488.0
37.5°	5760.0	5762.2	5779.2	5787.7	5825.9	5874.7	5913.0	5925.7	5955.5	5951.2	5927.9
40°	6331.6	6342.2	6348.5	6361.3	6401.6	6448.4	6488.8	6495.1	6527.0	6520.6	6490.9
42.5°	6992.3	6996.6	7032.7	7051.8	7090.1	7113.4	7164.4	7170.8	7209.0	7192.1	7158.0
45°	7733.8	7772.1	7806.0	7844.3	7884.7	7912.3	7952.7	7944.1	7969.7	7944.1	7925.1
47.5°	8513.6	8541.2	8617.7	8677.2	8743.1	8766.4	8823.8	8798.3	8823.8	8787.7	8781.3
50°	9372.0	9420.9	9486.7	9554.7	9624.8	9663.0	9737.4	9705.6	9739.5	9705.6	9686.4
52.5°	10217.5	10230.3	10374.8	10474.7	10572.4	10617.0	10661.6	10646.8	10648.9	10646.8	10627.6
55°	11020.8	11050.4	11195.0	11330.9	11500.9	11626.2	11702.8	11694.3	11675.1	11656.0	11624.1
57.5°	11925.9	11955.5	12121.3	12289.1	12482.5	12661.0	12816.0	12975.4	13037.0	13054.1	12983.9
60°	13149.6	13147.5	13368.5	13572.4	13848.7	14114.3	14454.2	14800.6	15197.9	15382.7	15138.3
62.5°	14394.7	14445.7	14764.4	15125.6	15695.0	16249.6	16876.3	17492.5	18121.4	18633.5	18089.6
65°	14246.0	14441.4	14915.2	15733.3	16785.0	18034.3	19385.5	20815.5	22107.3	22995.4	21999.0
67.5°	12346.5	12624.8	13107.2	14101.5	15416.7	17218.4	19487.5	22315.5	25602.4	27191.7	25222.1
70°	8949.2	9263.6	9769.3	10740.3	12042.7	13755.2	16219.8	19615.1	23966.4	25568.3	23399.1
72.5°	4453.3	4623.3	4935.6	5553.9	6539.7	7929.3	10164.4	13428.0	17277.9	18748.1	16765.9
75°	1512.7	1591.4	1644.5	1846.3	2158.6	2704.7	3815.9	5870.5	8955.5	10736.0	8828.1
77.5°	873.3	875.3	911.4	947.6	1000.8	1060.2	1208.9	1587.1	2745.1	3898.8	2840.7
80°	565.2	563.0	592.8	620.4	656.5	686.3	694.8	735.1	847.7	1004.9	898.8
82.5°	293.2	329.3	395.2	431.3	499.3	512.1	495.0	480.2	507.8	526.9	539.7
85°	161.5	140.2	210.3	272.0	301.7	306.0	306.0	289.0	299.6	293.2	318.8
87.5°	74.4	68.0	82.9	133.9	142.4	121.1	127.5	112.6	80.7	78.6	89.2
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: P190807

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	4604.2	4604.2	4604.2	4604.2	4604.2	4604.2	4604.2	4604.2
2.5°	4582.9	4585.1	4585.1	4591.4	4593.6	4597.9	4602.1	4604.2
5°	4546.8	4553.2	4549.0	4555.3	4555.3	4559.6	4559.6	4561.6
7.5°	4493.7	4500.1	4500.1	4500.1	4497.9	4504.4	4504.4	4504.4
10°	4438.5	4442.7	4440.6	4436.3	4432.0	4438.5	4436.3	4434.2
12.5°	4421.5	4410.9	4402.4	4398.1	4389.6	4391.7	4385.4	4385.4
15°	4432.0	4413.0	4398.1	4391.7	4383.2	4378.9	4374.8	4376.8
17.5°	4459.7	4436.3	4417.2	4406.6	4395.9	4389.6	4381.1	4383.2
20°	4508.6	4480.9	4453.3	4432.0	4413.0	4402.4	4395.9	4393.9
22.5°	4580.8	4540.5	4500.1	4468.2	4442.7	4427.8	4421.5	4417.2
25°	4663.6	4619.0	4572.3	4536.2	4510.7	4491.6	4478.8	4478.8
27.5°	4767.8	4731.7	4689.2	4646.7	4623.3	4604.2	4595.7	4591.4
30°	4942.0	4908.0	4874.1	4833.6	4803.9	4784.8	4769.9	4757.1
32.5°	5165.1	5137.5	5109.8	5080.1	5052.5	5027.0	5003.7	4993.0
35°	5479.5	5458.3	5439.1	5405.2	5394.5	5379.7	5366.9	5356.3
37.5°	5913.0	5904.5	5904.5	5868.4	5859.9	5853.5	5840.7	5842.9
40°	6482.4	6490.9	6480.3	6467.5	6461.2	6444.2	6444.2	6459.0
42.5°	7156.0	7162.3	7185.7	7164.4	7187.8	7166.6	7153.8	7164.4
45°	7937.8	7961.2	8008.0	7986.7	8001.5	7965.4	7920.8	7923.0
47.5°	8815.3	8836.6	8855.7	8840.8	8842.9	8783.5	8723.9	8709.1
50°	9726.8	9735.3	9745.9	9724.7	9728.9	9663.0	9595.1	9597.2
52.5°	10627.6	10668.0	10710.5	10653.1	10640.4	10566.1	10470.4	10432.2
55°	11658.2	11715.4	11666.7	11566.7	11466.9	11367.0	11241.7	11220.4
57.5°	12928.7	12831.0	12677.9	12488.9	12350.8	12210.6	12083.1	12029.9
60°	14696.4	14328.9	14052.7	13772.2	13595.8	13423.8	13255.9	13230.3
62.5°	17195.0	16559.7	16009.5	15429.5	14955.6	14585.9	14290.6	14207.8
65°	20326.9	18824.6	17522.2	16307.0	15251.0	14454.2	13952.7	13731.8
67.5°	21673.9	18707.8	16474.7	14749.5	13368.5	12403.9	11862.1	11592.3
70°	19045.6	15514.4	13085.9	11358.5	10100.7	9072.3	8581.5	8292.7
72.5°	13102.9	9869.1	7804.0	6369.8	5364.9	4504.4	4164.3	4138.9
75°	5883.2	3896.6	2685.6	2069.4	1742.2	1514.9	1444.8	1391.6
77.5°	1646.6	1217.4	1085.8	1015.6	947.6	869.0	839.2	845.7
80°	801.0	756.4	726.6	682.0	620.4	554.5	524.8	537.6
82.5°	531.2	524.8	543.9	512.1	422.8	359.1	301.7	276.2
85°	322.9	327.2	333.6	335.7	284.7	199.7	136.0	152.9
87.5°	127.5	146.6	159.4	165.7	155.1	95.6	76.5	78.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)