

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: P191607

Luminaire Tested: **GLEON-AF-09-LED-E1-5MQ-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191607
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-7050-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5000K, 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: 45165 lumens
Efficiency: N/A
Efficacy: 120.8 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

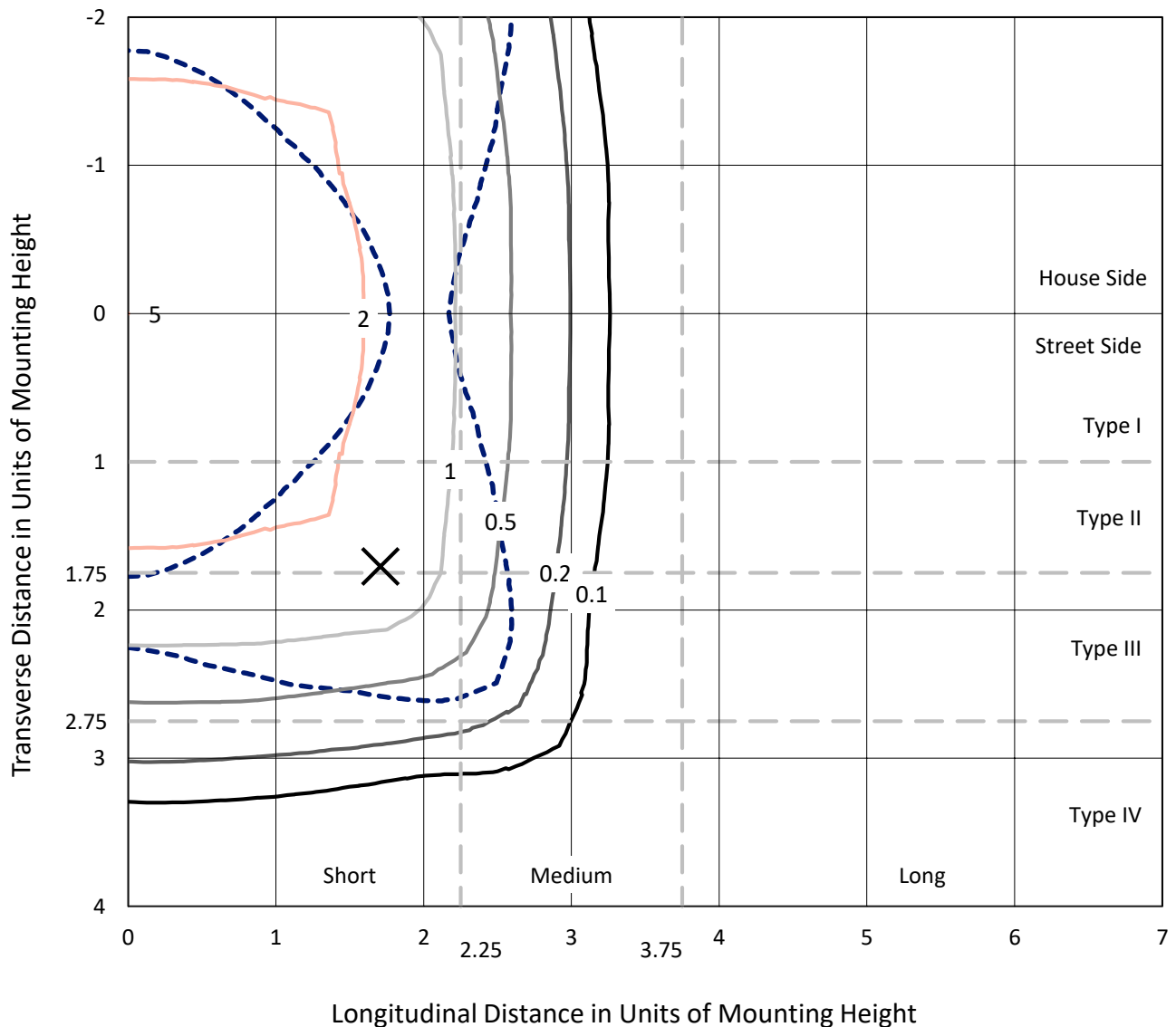
Input Watts (W): 374
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

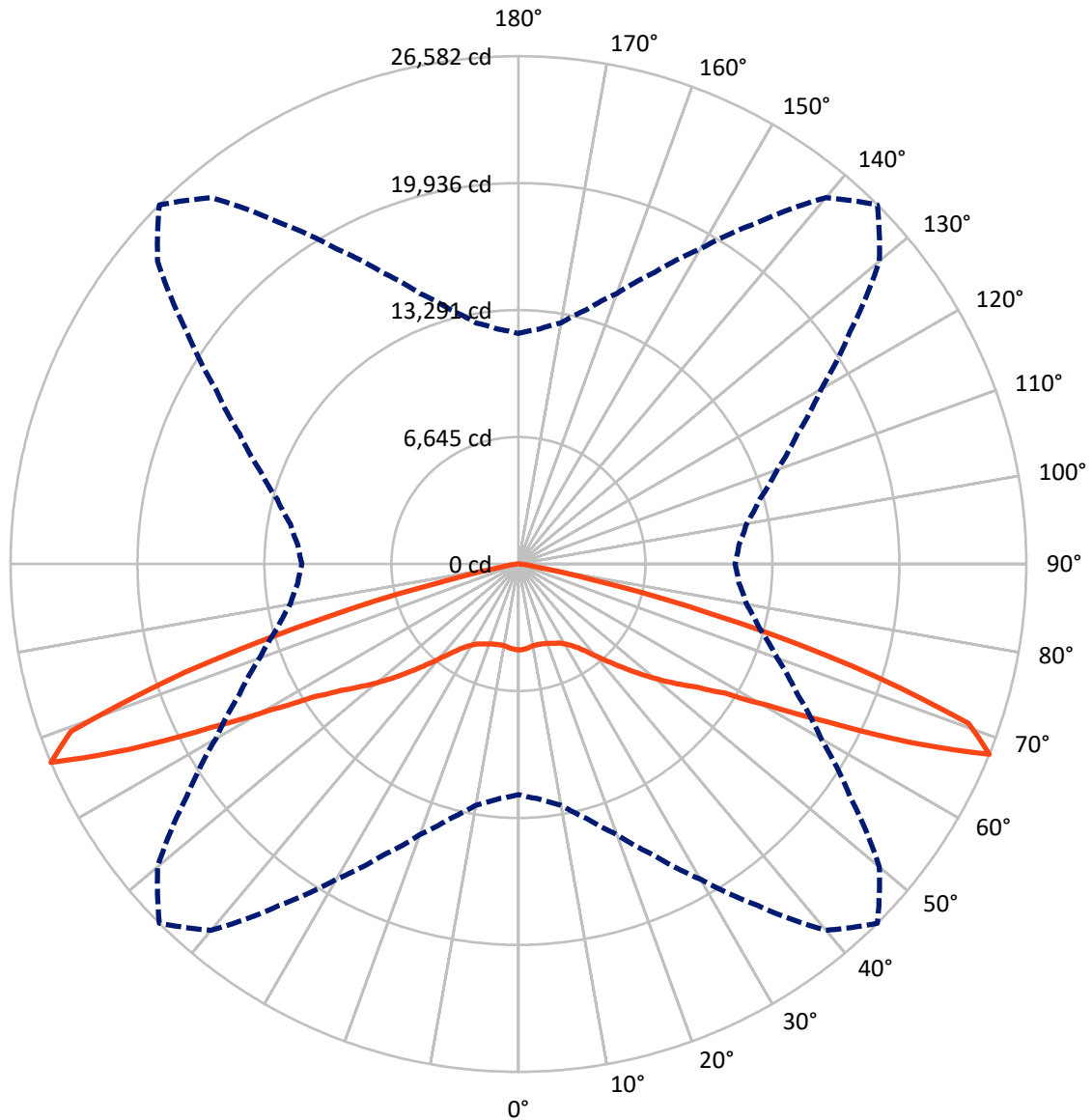
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5 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	22582.5	0.0	22582.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	22582.5	0.0	22582.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	45165.0	0.0	45165.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.3	0.9
10°-20°	1222.4	2.7
20°-30°	2078.1	4.6
30°-40°	3397.0	7.5
40°-50°	6064.3	13.4
50°-60°	10224.6	22.6
60°-70°	15867.1	35.1
70°-80°	5575.0	12.3
80°-90°	315.1	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°	45165.0	100.0
0°-180°	45165.0	100.0



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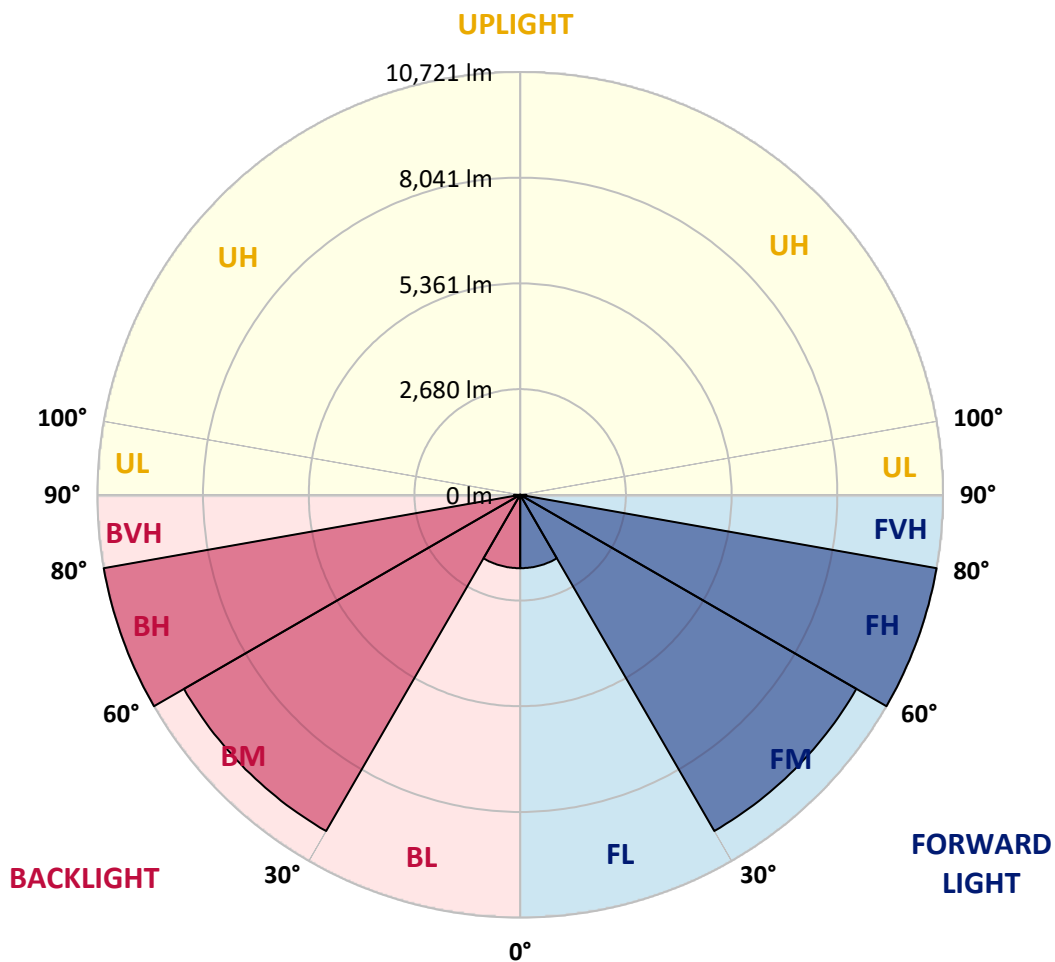
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1860.9	4.1			
FM	(30°-60°)	9843.0	21.8			
FH	(60°-80°)	10721.1	23.7			G4/12000
FVH	(80°-90°)	157.5	0.3			G2/225
BL	(0°-30°)	1860.9	4.1	B3/2500		
BM	(30°-60°)	9843.0	21.8	B5		
BH	(60°-80°)	10721.1	23.7	B5		G4/12000
BVH	(80°-90°)	157.5	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4500.9	4500.9	4500.9	4500.9	4500.9	4500.9	4500.9	4500.9	4500.9	4500.9	4500.9
2.5°	4484.3	4488.4	4488.4	4488.4	4486.3	4486.3	4482.2	4486.3	4484.3	4478.0	4480.1
5°	4446.9	4451.0	4451.0	4449.0	4455.2	4453.1	4446.9	4451.0	4449.0	4444.8	4446.9
7.5°	4392.9	4399.1	4399.1	4397.0	4403.3	4401.2	4397.0	4399.1	4399.1	4392.9	4392.9
10°	4332.6	4336.8	4336.8	4334.7	4345.1	4345.1	4343.0	4349.3	4351.3	4345.1	4341.0
12.5°	4276.6	4282.8	4282.8	4291.1	4301.5	4305.6	4316.0	4324.3	4332.6	4330.6	4322.3
15°	4243.3	4247.5	4255.8	4266.2	4282.8	4297.3	4314.0	4332.6	4349.3	4353.4	4341.0
17.5°	4222.6	4228.8	4241.3	4255.8	4278.6	4303.6	4328.5	4353.4	4376.3	4384.6	4370.0
20°	4216.3	4220.5	4232.9	4257.9	4289.0	4326.4	4361.7	4390.8	4422.0	4432.3	4422.0
22.5°	4228.8	4237.1	4251.6	4280.7	4322.3	4370.0	4411.6	4451.0	4490.5	4509.2	4494.7
25°	4284.9	4293.2	4311.9	4349.3	4395.0	4444.8	4492.6	4538.3	4573.6	4592.3	4581.9
27.5°	4388.7	4399.1	4422.0	4459.3	4509.2	4563.2	4615.1	4652.5	4681.6	4687.8	4675.4
30°	4544.5	4567.3	4594.3	4635.9	4694.0	4739.7	4791.7	4824.9	4860.2	4860.2	4849.8
32.5°	4787.5	4810.4	4839.4	4878.9	4924.6	4974.4	5020.1	5049.2	5086.6	5088.7	5063.8
35°	5151.0	5161.4	5186.3	5211.2	5252.8	5296.4	5335.8	5354.5	5385.7	5387.8	5364.9
37.5°	5630.8	5632.9	5649.5	5657.8	5695.2	5742.9	5780.3	5792.8	5821.9	5817.7	5794.9
40°	6189.5	6199.9	6206.1	6218.6	6258.0	6303.7	6343.2	6349.4	6380.6	6374.3	6345.3
42.5°	6835.4	6839.6	6874.9	6893.6	6931.0	6953.8	7003.7	7009.9	7047.3	7030.7	6997.4
45°	7560.3	7597.7	7630.9	7668.3	7707.8	7734.8	7774.3	7765.9	7790.9	7765.9	7747.3
47.5°	8322.6	8349.6	8424.4	8482.5	8546.9	8569.7	8625.8	8600.9	8625.8	8590.5	8584.3
50°	9161.7	9209.5	9273.9	9340.3	9408.9	9446.2	9518.9	9487.8	9521.0	9487.8	9469.1
52.5°	9988.3	10000.8	10142.0	10239.7	10335.2	10378.8	10422.4	10407.9	10410.0	10407.9	10389.2
55°	10773.5	10802.5	10943.8	11076.7	11242.9	11365.4	11440.2	11431.9	11413.2	11394.5	11363.3
57.5°	11658.3	11687.3	11849.3	12013.4	12202.4	12376.9	12528.5	12684.3	12744.5	12761.2	12692.6
60°	12854.6	12852.5	13068.6	13267.9	13538.0	13797.6	14129.9	14468.5	14856.9	15037.6	14798.7
62.5°	14071.7	14121.6	14433.1	14786.2	15342.9	15885.0	16497.7	17100.0	17714.8	18215.4	17683.7
65°	13926.4	14117.4	14580.6	15380.3	16408.4	17629.7	18950.6	20348.5	21611.3	22479.5	21505.4
67.5°	12069.5	12341.6	12813.1	13785.1	15070.8	16832.1	19050.3	21814.8	25028.0	26581.6	24656.2
70°	8748.4	9055.8	9550.1	10499.3	11772.5	13446.6	15855.9	19175.0	23428.7	24994.7	22874.1
72.5°	4353.4	4519.6	4824.9	5429.3	6393.0	7751.4	9936.4	13126.7	16890.3	18327.5	16389.7
75°	1478.8	1555.7	1607.6	1804.9	2110.2	2644.0	3730.3	5738.8	8754.6	10495.1	8630.0
77.5°	853.7	855.7	891.0	926.3	978.3	1036.4	1181.8	1551.5	2683.5	3811.3	2777.0
80°	552.5	550.4	579.5	606.5	641.8	670.9	679.2	718.6	828.7	982.4	878.6
82.5°	286.6	321.9	386.3	421.6	488.1	500.6	483.9	469.4	496.4	515.1	527.6
85°	157.9	137.1	205.6	265.9	294.9	299.1	299.1	282.5	292.9	286.6	311.6
87.5°	72.7	66.5	81.0	130.9	139.2	118.4	124.6	110.1	78.9	76.8	87.2
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°	4500.9	4500.9	4500.9	4500.9	4500.9	4500.9	4500.9	4500.9
2.5°	4480.1	4482.2	4482.2	4488.4	4490.5	4494.7	4498.8	4500.9
5°	4444.8	4451.0	4446.9	4453.1	4453.1	4457.3	4457.3	4459.3
7.5°	4392.9	4399.1	4399.1	4399.1	4397.0	4403.3	4403.3	4403.3
10°	4338.9	4343.0	4341.0	4336.8	4332.6	4338.9	4336.8	4334.7
12.5°	4322.3	4311.9	4303.6	4299.4	4291.1	4293.2	4287.0	4287.0
15°	4332.6	4314.0	4299.4	4293.2	4284.9	4280.7	4276.6	4278.6
17.5°	4359.6	4336.8	4318.1	4307.7	4297.3	4291.1	4282.8	4284.9
20°	4407.4	4380.4	4353.4	4332.6	4314.0	4303.6	4297.3	4295.3
22.5°	4478.0	4438.6	4399.1	4368.0	4343.0	4328.5	4322.3	4318.1
25°	4559.0	4515.4	4469.7	4434.4	4409.5	4390.8	4378.3	4378.3
27.5°	4660.8	4625.5	4584.0	4542.4	4519.6	4500.9	4492.6	4488.4
30°	4831.1	4797.9	4764.7	4725.2	4696.1	4677.4	4662.9	4650.4
32.5°	5049.2	5022.2	4995.2	4966.1	4939.1	4914.2	4891.4	4881.0
35°	5356.6	5335.8	5317.1	5283.9	5273.5	5259.0	5246.5	5236.1
37.5°	5780.3	5772.0	5772.0	5736.7	5728.4	5722.2	5709.7	5711.8
40°	6337.0	6345.3	6334.9	6322.4	6316.2	6299.6	6299.6	6314.1
42.5°	6995.4	7001.6	7024.5	7003.7	7026.5	7005.8	6993.3	7003.7
45°	7759.7	7782.6	7828.3	7807.5	7822.0	7786.7	7743.1	7745.2
47.5°	8617.5	8638.3	8657.0	8642.4	8644.5	8586.4	8528.2	8513.7
50°	9508.6	9516.9	9527.2	9506.5	9510.6	9446.2	9379.8	9381.9
52.5°	10389.2	10428.7	10470.2	10414.1	10401.7	10329.0	10235.5	10198.1
55°	11396.6	11452.6	11404.9	11307.2	11209.6	11112.0	10989.5	10968.7
57.5°	12638.6	12543.1	12393.5	12208.7	12073.7	11936.6	11812.0	11760.0
60°	14366.7	14007.4	13737.4	13463.2	13290.8	13122.6	12958.5	12933.5
62.5°	16809.2	16188.2	15650.3	15083.3	14620.1	14258.7	13970.0	13889.0
65°	19870.8	18402.3	17129.1	15941.1	14908.8	14129.9	13639.7	13423.7
67.5°	21187.6	18288.1	16105.1	14418.6	13068.6	12125.6	11596.0	11332.2
70°	18618.3	15166.3	12792.3	11103.7	9874.1	8868.8	8389.0	8106.6
72.5°	12808.9	9647.7	7628.9	6226.9	5244.5	4403.3	4070.9	4046.0
75°	5751.2	3809.2	2625.3	2023.0	1703.1	1480.9	1412.4	1360.4
77.5°	1609.7	1190.1	1061.4	992.8	926.3	849.5	820.4	826.7
80°	783.0	739.4	710.3	666.7	606.5	542.1	513.0	525.5
82.5°	519.3	513.0	531.7	500.6	413.3	351.0	294.9	270.0
85°	315.7	319.9	326.1	328.2	278.3	195.2	132.9	149.5
87.5°	124.6	143.3	155.8	162.0	151.6	93.5	74.8	76.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)