

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: P455927

Luminaire Tested: **GALN-SA7A-827-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P455927  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA7A-827-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23962 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

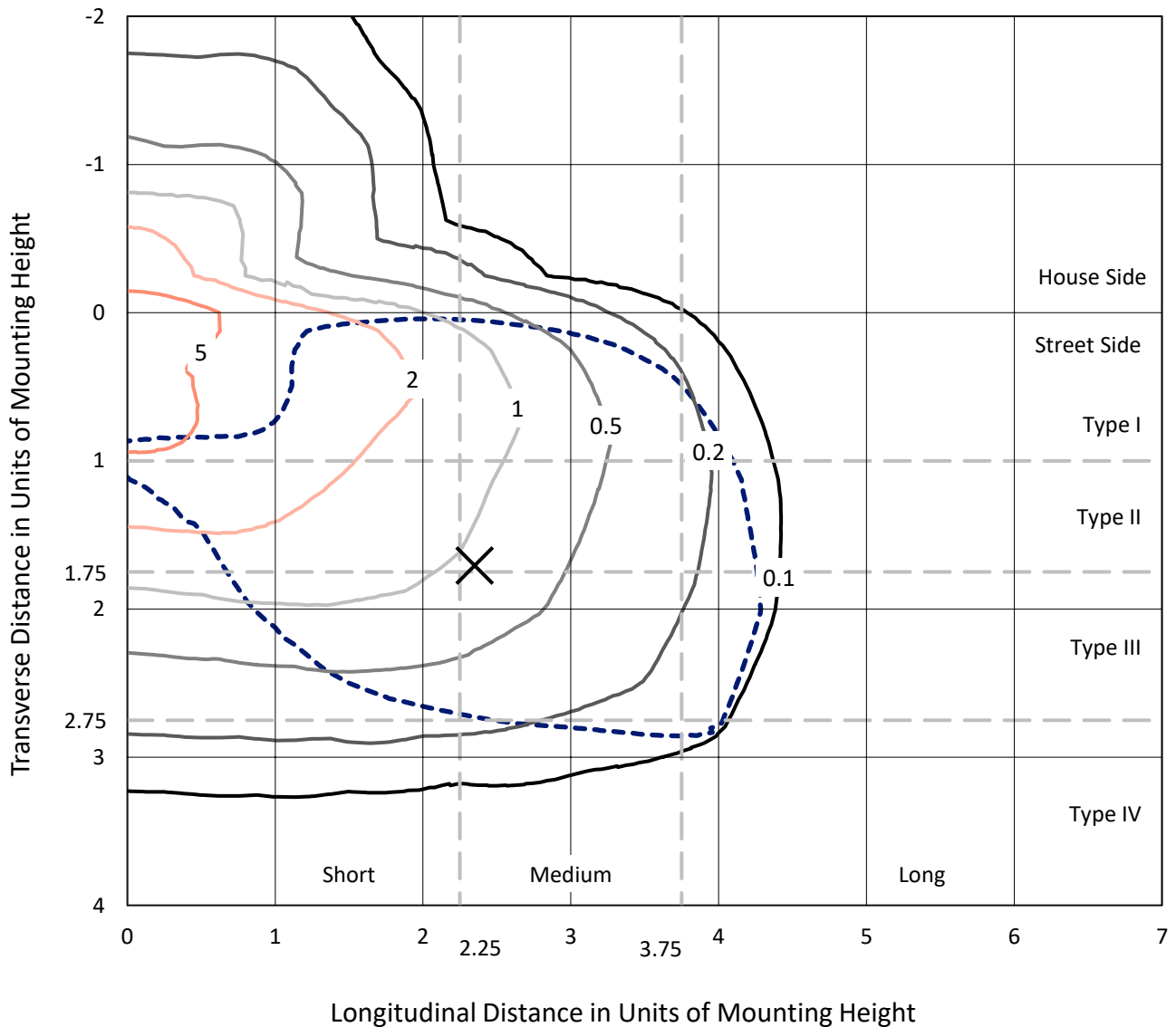
Input Watts (W): 215  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

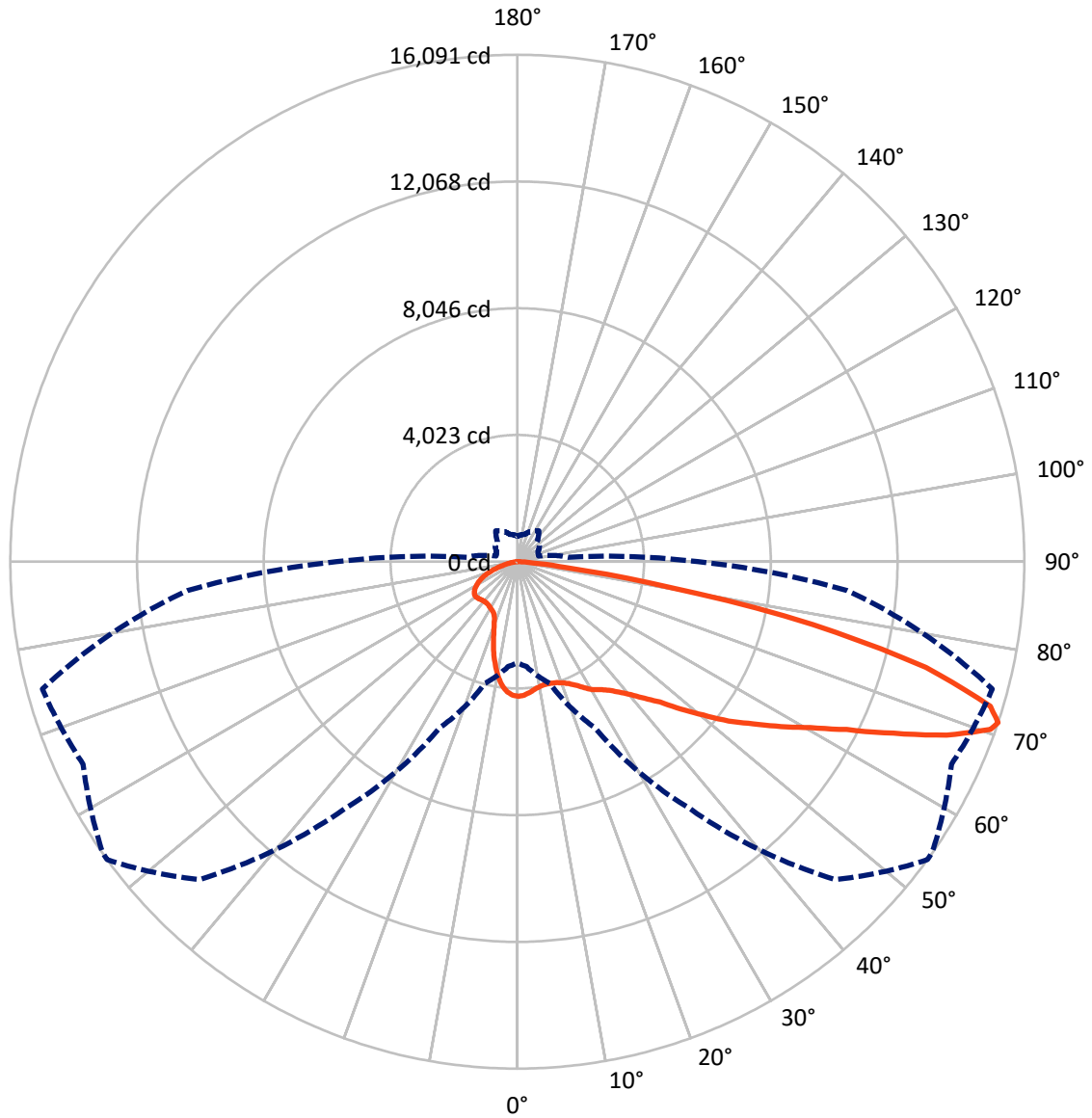
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4326.2	0.0	4326.2
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	19635.8	0.0	19635.8
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	23962.0	0.0	23962.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	381.0	1.6
10°-20°	1006.0	4.2
20°-30°	1675.0	7.0
30°-40°	2476.8	10.3
40°-50°	3488.6	14.6
50°-60°	4671.4	19.5
60°-70°	5888.0	24.6
70°-80°	4021.5	16.8
80°-90°	353.7	1.5
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°	23962.0	100.0
0°-180°	23962.0	100.0

**Coefficient of Utilization**



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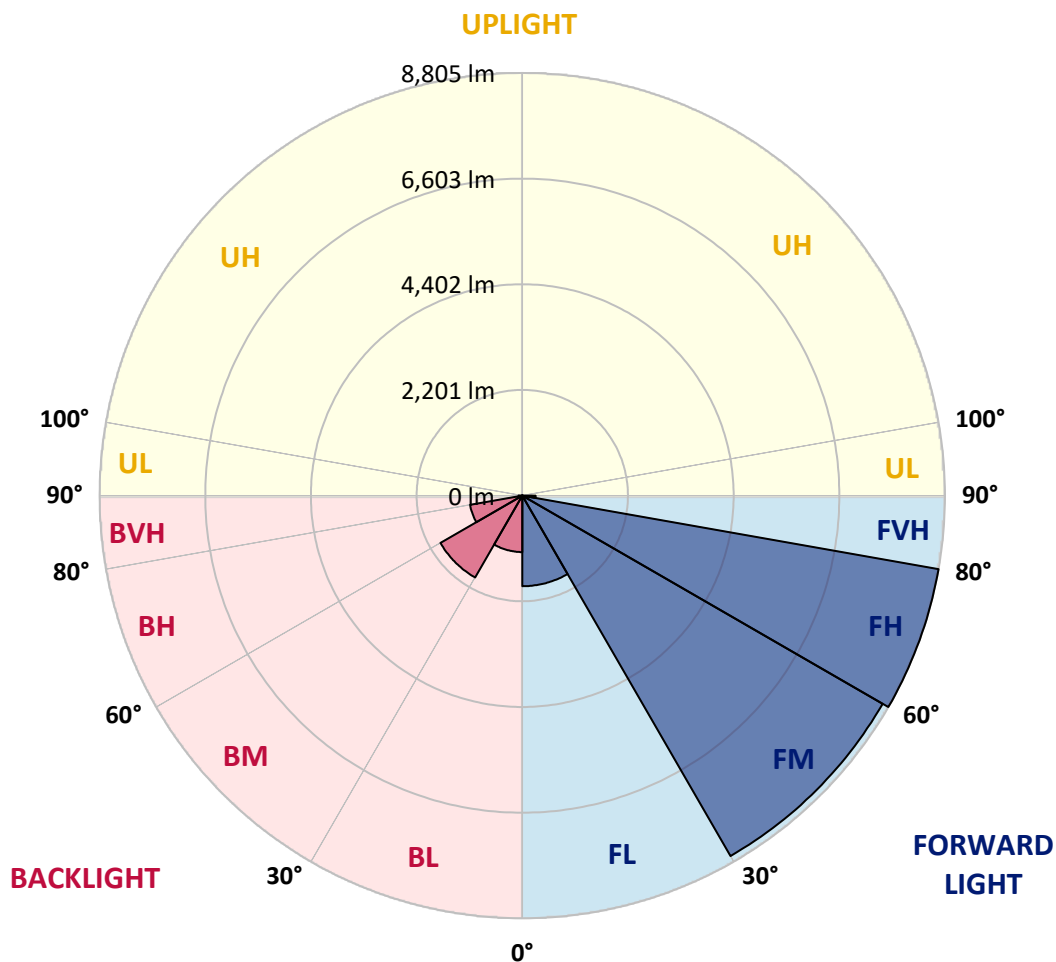
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1886.2	7.9			
FM	(30°-60°)	8668.6	36.2			
FH	(60°-80°)	8804.6	36.7			G4/12000
FVH	(80°-90°)	276.4	1.2			G3/500
BL	(0°-30°)	1175.8	4.9	B3/2500		
BM	(30°-60°)	1968.3	8.2	B2/2500		
BH	(60°-80°)	1104.9	4.6	B3/2500		G3/2500
BVH	(80°-90°)	77.2	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	4275.2	4275.2	4275.2	4275.2	4275.2	4275.2	4275.2	4275.2	4275.2	4275.2	4275.2
2.5°	4130.2	4149.6	4154.8	4167.7	4194.9	4216.9	4238.9	4236.3	4267.4	4280.4	4292.0
5°	3946.4	3951.6	3971.0	3996.9	4044.8	4105.6	4165.2	4166.5	4242.8	4303.7	4333.4
7.5°	3811.8	3828.6	3841.6	3868.8	3919.2	3985.2	4079.7	4087.5	4223.4	4343.8	4407.2
10°	3723.8	3743.2	3757.4	3791.1	3841.6	3915.4	4017.6	4031.8	4209.2	4407.2	4518.5
12.5°	3643.5	3663.0	3675.9	3719.9	3785.9	3876.5	3991.7	4008.5	4214.3	4481.0	4640.2
15°	3692.7	3708.3	3703.1	3716.0	3760.0	3863.6	4002.1	4018.9	4233.8	4552.2	4760.5
17.5°	3911.5	3924.4	3881.7	3832.5	3811.8	3888.2	4034.4	4052.6	4272.6	4625.9	4883.5
20°	4233.8	4268.7	4175.5	4065.5	3965.8	3976.2	4101.7	4121.2	4326.9	4699.7	5009.1
22.5°	4653.1	4679.0	4565.1	4383.9	4200.1	4105.6	4202.7	4214.3	4408.5	4795.5	5146.3
25°	5146.3	5161.8	5003.9	4770.9	4505.6	4326.9	4341.2	4361.9	4543.1	4904.2	5267.9
27.5°	5625.2	5674.3	5491.8	5207.1	4857.6	4559.9	4531.5	4544.4	4689.4	4965.1	5352.1
30°	6193.4	6189.5	5996.6	5666.6	5218.7	4813.6	4711.4	4708.8	4768.3	4994.8	5412.9
32.5°	6646.4	6699.5	6510.5	6150.7	5631.6	5076.4	4835.6	4830.4	4829.1	5046.6	5503.5
35°	7161.5	7169.3	6995.9	6633.4	6078.2	5406.4	5009.1	4983.2	4953.4	5157.9	5626.5
37.5°	7622.3	7658.6	7499.4	7092.9	6517.0	5749.4	5247.2	5230.4	5139.8	5350.8	5823.2
40°	7982.1	8009.3	7913.5	7526.5	6949.3	6119.6	5550.1	5519.0	5409.0	5666.6	6085.9
42.5°	8099.9	8155.6	8193.1	8002.8	7446.3	6558.4	5922.9	5884.0	5799.9	6145.5	6388.8
45°	8109.0	8197.0	8395.0	8404.1	7945.9	7083.9	6357.8	6330.6	6324.1	6759.0	6814.7
47.5°	8040.4	8129.7	8462.3	8642.2	8391.1	7614.5	6985.5	6942.8	6946.7	7517.5	7292.3
50°	7874.7	7980.8	8384.7	8795.0	8739.3	8165.9	7648.2	7634.0	7714.2	8383.4	7788.0
52.5°	7562.8	7690.9	8304.4	8890.8	8998.2	8641.0	8401.5	8361.4	8564.6	9323.1	8330.3
55°	6699.5	6892.3	8010.6	8943.8	9244.1	9095.3	9079.7	9152.2	9421.4	10348.2	8927.0
57.5°	6249.0	6394.0	7372.5	8952.9	9554.8	9623.4	9871.9	9890.0	10361.1	11436.7	9601.3
60°	6003.1	6131.2	7023.0	8893.3	9988.4	10277.0	10682.1	10746.8	11278.8	12615.8	10300.3
62.5°	5788.2	5898.3	6813.4	8687.6	10477.6	11246.4	11731.8	11762.9	12320.7	13917.9	10990.2
65°	5282.2	5407.7	6391.4	8481.8	10899.6	12457.9	13124.5	13088.3	13430.0	15041.4	11422.5
67.5°	4600.1	4759.3	5603.2	7771.2	11107.9	13782.0	14693.2	14647.9	14525.0	15777.9	11546.7
70°	3729.0	3814.4	4594.9	6542.8	10275.7	14477.1	15931.9	15884.0	15203.2	15875.0	10959.1
71°	3208.6	3342.0	4000.8	5811.5	9583.2	14264.8	16091.1	16078.2	15204.5	15607.0	10516.4
72.5°	2504.5	2586.1	3168.5	4503.0	8145.2	13058.5	15697.6	15746.8	14874.5	14862.8	9603.9
75°	1584.3	1620.5	1988.1	2650.8	4469.3	9248.0	13400.2	13533.5	13207.4	12165.4	7142.1
77.5°	920.3	966.9	1190.8	1562.3	1931.1	5019.4	9588.4	9733.4	9176.8	6698.2	2923.9
80°	535.9	587.6	784.4	907.3	886.6	1862.5	4882.2	5129.4	3973.6	1691.7	820.6
82.5°	297.7	332.6	551.4	552.7	472.4	608.3	1536.4	1607.6	1133.8	682.1	335.2
85°	216.2	244.6	355.9	322.3	226.5	261.5	534.6	560.4	458.2	287.3	108.7
87.5°	76.4	108.7	195.4	155.3	62.1	54.4	154.0	125.6	116.5	80.2	24.6
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4275.2	4275.2	4275.2	4275.2	4275.2	4275.2	4275.2	4275.2	4275.2	4275.2	4275.2
2.5°	4298.5	4301.1	4288.1	4264.8	4241.5	4211.8	4178.1	4152.2	4140.6	4139.3	4138.0
5°	4345.1	4351.5	4302.4	4229.9	4149.6	4051.3	3967.1	3871.3	3846.8	3807.9	3819.6
7.5°	4420.1	4416.3	4319.2	4165.2	3977.5	3769.1	3593.1	3490.8	3384.7	3354.9	3356.2
10°	4527.6	4503.0	4319.2	4033.1	3719.9	3410.6	3164.6	3009.3	2925.2	2855.3	2829.4
12.5°	4641.5	4579.3	4277.8	3848.0	3388.6	3009.3	2745.3	2535.6	2481.2	2424.3	2425.6
15°	4750.2	4646.6	4196.2	3587.9	3031.3	2580.9	2324.6	2199.1	2182.2	2188.7	2187.4
17.5°	4848.6	4694.5	4072.0	3298.0	2614.5	2213.3	2077.4	2086.5	2131.8	2164.1	2168.0
20°	4948.2	4723.0	3886.9	2909.7	2221.1	1990.7	1995.9	2067.0	2135.6	2179.7	2186.1
22.5°	5042.7	4736.0	3669.4	2534.3	1936.3	1896.2	1972.6	2048.9	2116.2	2158.9	2165.4
25°	5104.8	4706.2	3361.4	2142.1	1796.5	1862.5	1942.8	2007.5	2064.5	2108.5	2118.8
27.5°	5121.7	4610.4	2979.6	1825.0	1731.8	1830.2	1904.0	1951.9	1995.9	2037.3	2045.0
30°	5112.6	4469.3	2560.2	1638.6	1694.3	1792.6	1849.6	1884.5	1937.6	1970.0	1976.4
32.5°	5098.4	4304.9	2122.7	1539.0	1663.2	1757.7	1791.4	1822.4	1821.1	1808.2	1817.2
35°	5103.5	4108.2	1768.1	1479.4	1636.0	1731.8	1760.3	1721.5	1610.1	1605.0	1599.8
37.5°	5130.7	3914.1	1510.5	1438.0	1621.8	1727.9	1743.5	1564.8	1466.5	1421.2	1409.5
40°	5200.6	3687.5	1340.9	1406.9	1620.5	1757.7	1667.1	1485.9	1296.9	1208.9	1202.4
42.5°	5293.8	3464.9	1237.4	1387.5	1636.0	1803.0	1636.0	1374.6	1168.8	1117.0	1109.2
45°	5432.3	3209.9	1180.4	1378.5	1659.3	1819.8	1625.7	1293.0	1117.0	1075.6	1075.6
47.5°	5588.9	2966.6	1149.4	1372.0	1689.1	1808.2	1533.8	1267.2	1092.4	1097.6	1122.2
50°	5744.2	2755.6	1126.1	1357.8	1715.0	1801.7	1496.2	1265.9	1098.9	1164.9	1208.9
52.5°	5924.2	2606.8	1097.6	1334.5	1715.0	1760.3	1484.6	1291.7	1117.0	1136.4	1155.8
55°	6141.6	2560.2	1061.4	1284.0	1683.9	1656.7	1478.1	1329.3	1130.0	1084.6	1092.4
57.5°	6428.9	2635.3	1026.4	1220.6	1612.7	1549.3	1475.5	1339.6	1100.2	1062.6	1054.9
60°	6762.9	2784.1	1016.0	1155.8	1515.7	1457.4	1460.0	1309.9	1058.8	1019.9	1026.4
62.5°	6997.2	2873.4	1009.6	1106.7	1409.5	1356.5	1422.5	1273.6	1040.6	1007.0	1013.5
65°	6997.2	2764.7	950.0	1031.6	1272.3	1234.8	1377.2	1228.3	1017.3	978.5	972.0
67.5°	6731.8	2447.6	859.4	919.0	1120.9	1096.3	1313.7	1174.0	982.4	952.6	937.1
70°	6040.6	1856.1	745.5	787.0	929.3	951.3	1232.2	1100.2	924.2	887.9	864.6
71°	5736.5	1616.6	697.6	719.6	855.6	887.9	1193.4	1069.1	898.3	846.5	805.1
72.5°	5150.1	1361.6	625.2	634.2	731.3	789.5	1111.8	1009.6	849.1	775.3	728.7
75°	3912.8	994.0	503.5	498.3	541.0	626.5	941.0	899.6	744.2	644.6	617.4
77.5°	1690.4	541.0	376.7	380.5	367.6	475.0	740.4	772.7	638.1	524.2	499.6
80°	512.6	311.9	257.6	262.7	245.9	318.4	521.6	605.7	512.6	407.7	374.1
82.5°	262.7	186.4	176.0	173.4	156.6	179.9	315.8	414.2	366.3	255.0	225.2
85°	113.9	99.7	86.7	84.1	73.8	64.7	112.6	207.1	194.1	142.4	135.9
87.5°	28.5	25.9	16.8	15.5	9.1	1.3	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)