

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: P456146

Luminaire Tested: **GALN-SA7B-827-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P456146  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA7B-827-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28518 lumens  
Efficiency: N/A  
Efficacy: 99.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

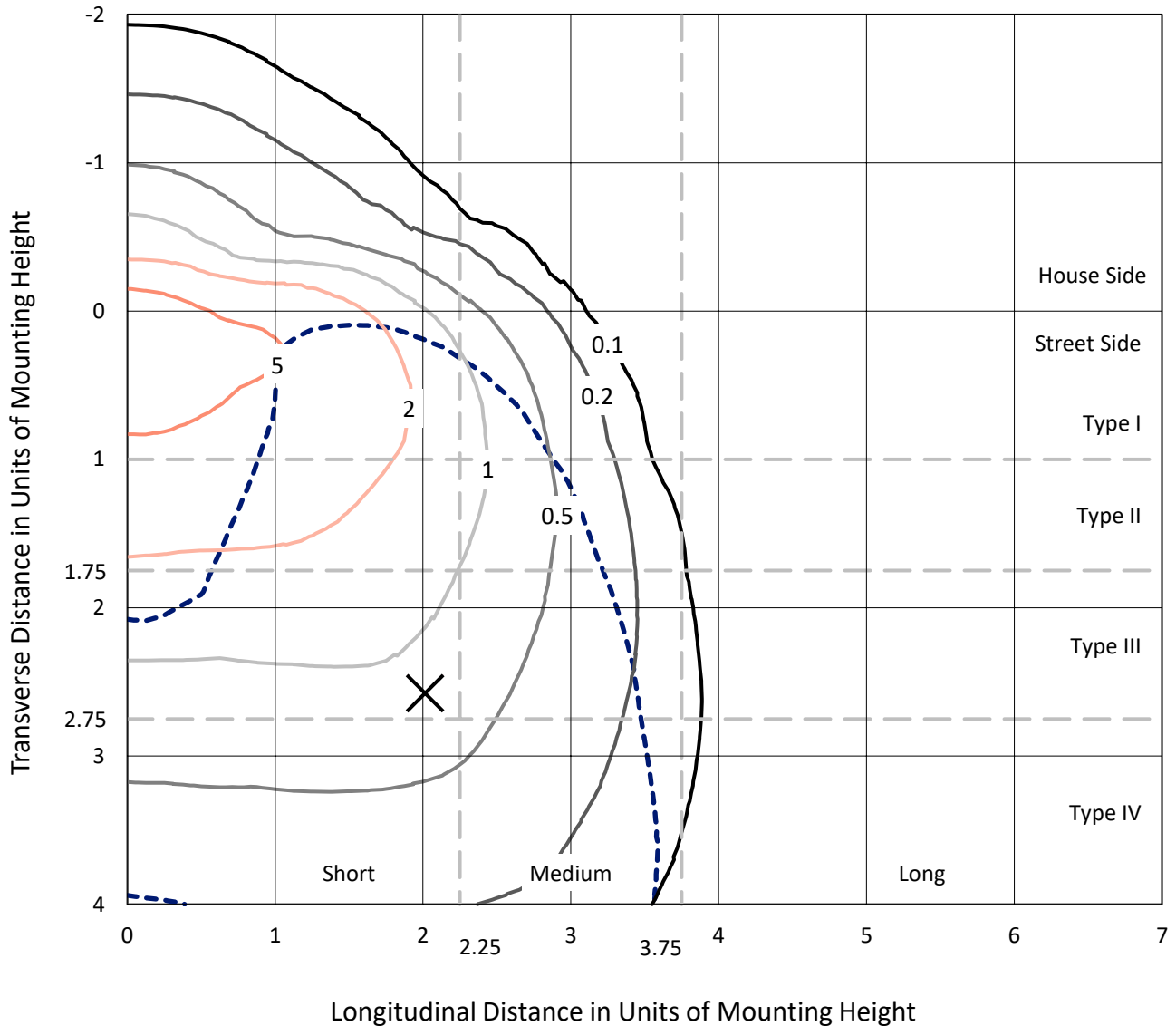
Input Watts (W): 286  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P456146  
 CATALOG NUMBER: GALN-SA7B-827-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

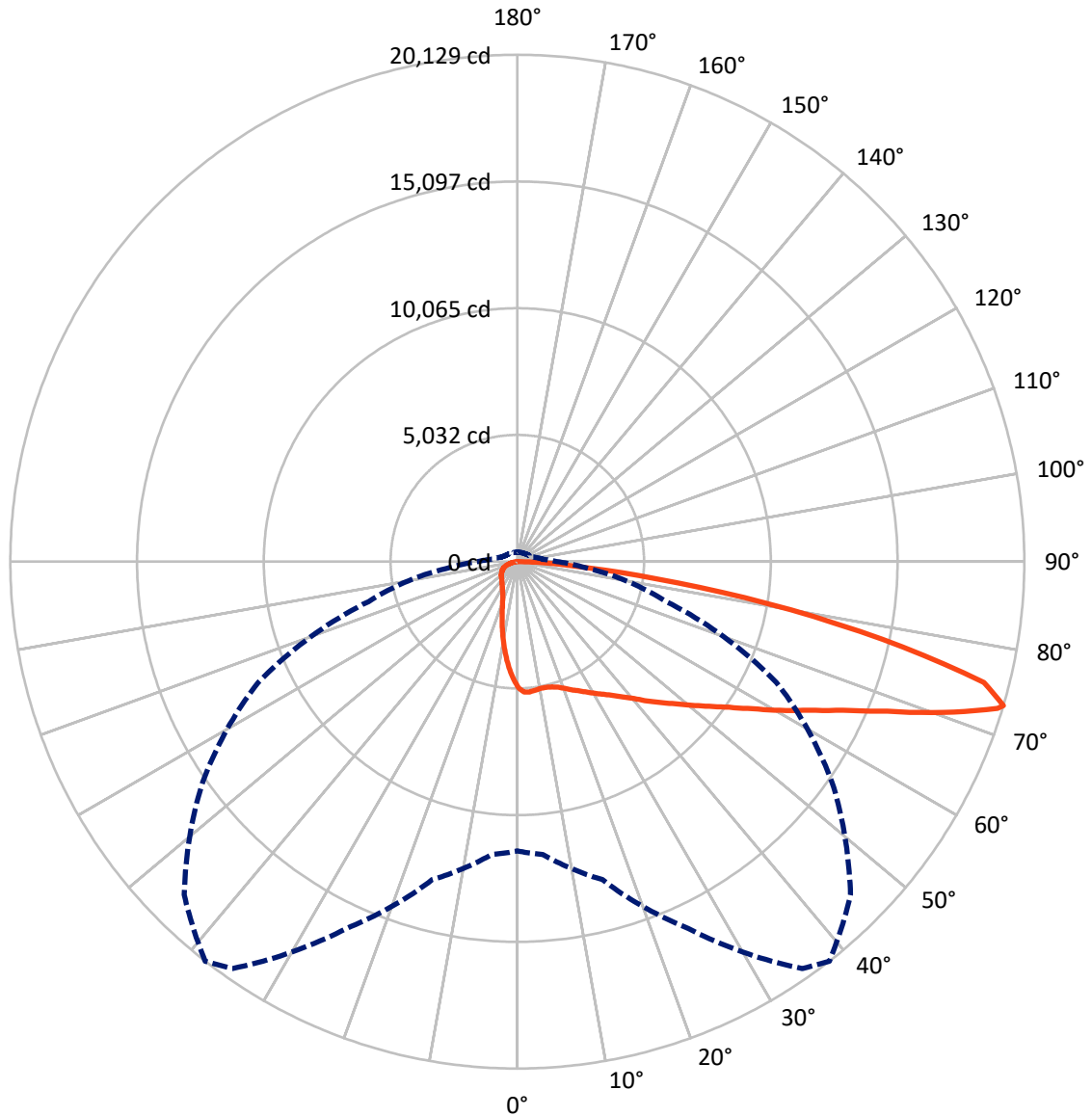
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 fc  
 Type IV - Short - N/A

REPORT NUMBER: P456146  
CATALOG NUMBER: GALN-SA7B-827-U-SL4

### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

REPORT NUMBER: P456146

CATALOG NUMBER: GALN-SA7B-827-U-SL4

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3833.7	0.0	3833.7
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	24684.3	0.0	24684.3
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	28518.0	0.0	28518.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	437.3	1.5
10°-20°	1121.5	3.9
20°-30°	1746.3	6.1
30°-40°	2561.5	9.0
40°-50°	3799.6	13.3
50°-60°	5383.3	18.9
60°-70°	6828.9	23.9
70°-80°	5684.5	19.9
80°-90°	955.1	3.3
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°	28518.0	100.0
0°-180°	28518.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P456146

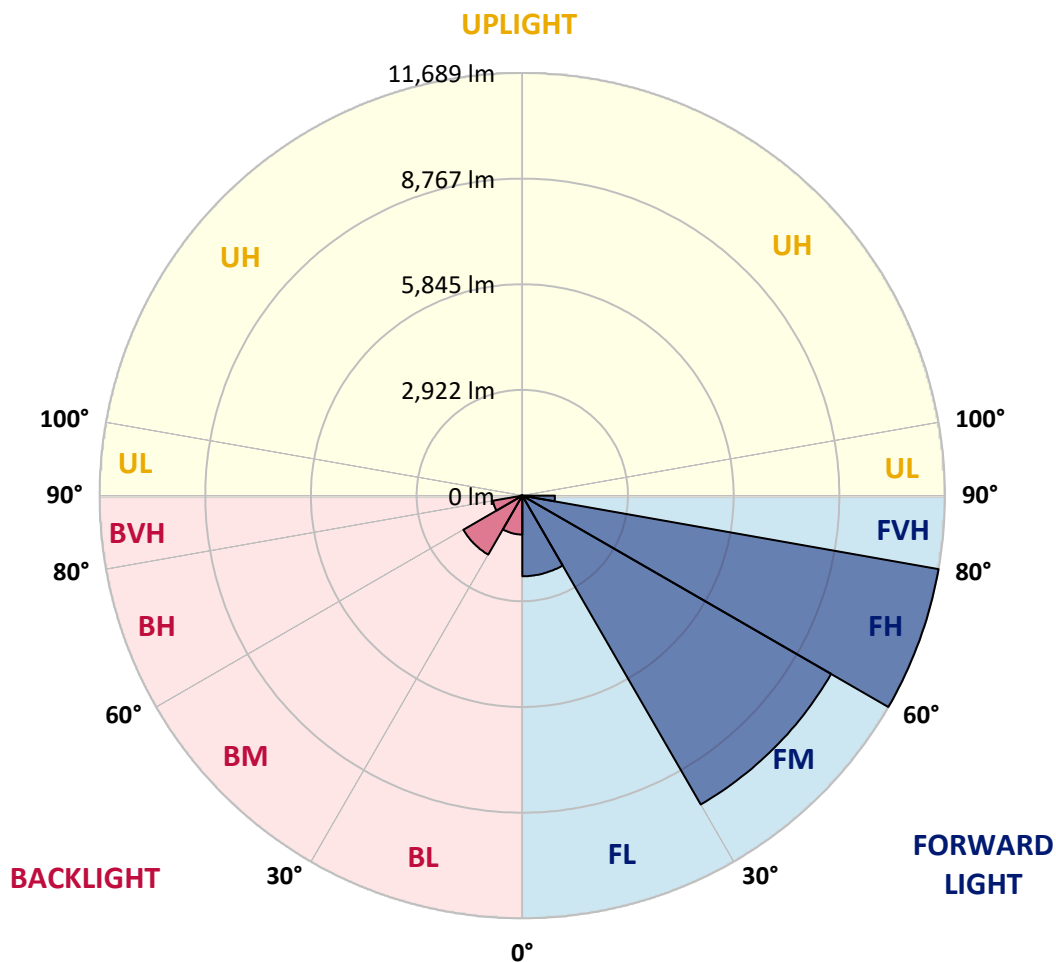
CATALOG NUMBER: GALN-SA7B-827-U-SL4

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2229.3	7.8			
FM	(30°-60°)	9862.3	34.6			
FH	(60°-80°)	11689.4	41.0			G4/12000
FVH	(80°-90°)	903.3	3.2			G5
BL	(0°-30°)	1075.8	3.8	B3/2500		
BM	(30°-60°)	1882.1	6.6	B2/2500		
BH	(60°-80°)	824.0	2.9	B2/1000		G2/1000
BVH	(80°-90°)	51.8	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Short





REPORT NUMBER: P456146

CATALOG NUMBER: GALN-SA7B-827-U-SL4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	5010.1	5010.1	5010.1	5010.1	5010.1	5010.1	5010.1	5010.1	5010.1	5010.1	5010.1
2.5°	5211.4	5237.2	5224.3	5206.6	5195.3	5184.1	5168.0	5121.3	5084.2	5043.9	4981.1
5°	5250.1	5266.2	5254.9	5232.4	5206.6	5195.3	5164.7	5103.5	5043.9	4976.3	4882.9
7.5°	5227.5	5234.0	5221.1	5193.7	5171.2	5150.2	5114.8	5047.2	4974.7	4892.6	4770.2
10°	5147.0	5171.2	5171.2	5148.6	5126.1	5114.8	5079.4	5015.0	4948.9	4855.5	4710.6
12.5°	5081.0	5106.8	5127.7	5121.3	5119.6	5119.6	5092.3	5043.9	4966.6	4878.1	4705.8
15°	5035.9	5066.5	5111.6	5137.4	5153.5	5158.3	5147.0	5105.1	5026.2	4923.2	4725.1
17.5°	5026.2	5063.3	5145.4	5201.8	5243.6	5242.0	5238.8	5180.8	5093.9	4987.6	4749.2
20°	5069.7	5118.0	5232.4	5320.9	5382.1	5370.9	5353.2	5277.5	5176.0	5056.8	4771.8
22.5°	5200.2	5250.1	5375.7	5472.3	5531.9	5531.9	5478.8	5378.9	5271.0	5137.4	4802.4
25°	5387.0	5441.7	5575.4	5673.6	5701.0	5680.1	5626.9	5506.1	5382.1	5253.3	4866.8
27.5°	5615.7	5681.7	5805.7	5887.8	5879.8	5863.7	5808.9	5654.3	5530.3	5412.7	4976.3
30°	5900.7	5949.0	6077.9	6097.2	6068.2	6065.0	5987.7	5833.1	5717.1	5626.9	5132.5
32.5°	6169.7	6213.1	6316.2	6324.3	6272.7	6279.2	6206.7	6065.0	5998.9	5966.7	5395.0
35°	6454.7	6477.3	6565.8	6556.2	6522.3	6517.5	6488.5	6353.2	6374.2	6432.2	5767.0
37.5°	6693.1	6738.1	6788.1	6796.1	6794.5	6810.6	6829.9	6765.5	6886.3	7068.3	6255.0
40°	6912.1	6950.7	7024.8	7050.6	7113.4	7145.6	7211.6	7213.2	7491.8	7791.4	6855.7
42.5°	7060.2	7126.3	7264.8	7311.5	7464.5	7561.1	7659.3	7764.0	8168.2	8553.1	7564.3
45°	7189.1	7276.0	7506.3	7651.3	7859.0	7976.6	8184.3	8403.4	8984.7	9488.8	8284.2
47.5°	7383.9	7461.2	7725.4	7981.4	8295.5	8430.7	8741.6	9068.5	9828.6	10381.0	8973.5
50°	7654.5	7701.2	7970.1	8387.3	8788.3	8962.2	9372.9	9844.7	10730.5	11261.9	9579.0
52.5°	8000.7	8020.1	8234.3	8789.9	9318.1	9533.9	10078.2	10629.0	11519.6	12026.9	10058.9
55°	8409.8	8377.6	8545.1	9216.6	9923.6	10205.5	10790.1	11423.0	12407.0	12645.3	10408.4
57.5°	8814.0	8764.1	8897.8	9735.2	10670.9	11010.7	11691.9	12241.1	13199.3	13223.5	10653.2
60°	9242.4	9205.4	9364.8	10344.0	11587.2	11989.8	12619.5	13089.8	13965.9	13626.1	10691.8
62.5°	9682.1	9622.5	9849.6	11028.4	12619.5	12985.1	13595.5	13991.6	14718.0	13775.8	10319.8
65°	10108.8	10081.5	10432.5	11841.7	13795.2	14210.7	14803.3	15072.3	15320.3	13550.4	9397.0
67.5°	10563.0	10617.7	11178.2	12927.1	15328.3	15850.1	16489.5	16236.6	15492.6	12482.6	7913.8
70°	11255.5	11290.9	12157.3	14349.2	17304.4	17934.0	18243.2	16650.5	14661.6	10455.1	5949.0
72.5°	11553.4	11709.6	13031.8	15842.1	19549.3	19934.2	18832.7	15727.7	12213.7	7102.1	3125.9
73°	11487.4	11674.2	13072.1	16069.1	19724.9	20129.1	18707.1	15252.6	11353.7	6116.5	2679.8
75°	10664.4	10894.7	12548.7	15879.1	19383.5	19141.9	16687.5	12999.6	7672.2	2781.3	1220.7
77.5°	8414.6	8480.7	9943.0	12822.5	15263.9	14816.2	12489.1	8124.8	3133.9	1033.9	692.5
80°	4221.0	4464.2	5604.4	7345.3	10207.1	10060.5	7883.2	3842.5	1306.1	607.1	459.0
82.5°	2030.8	2203.1	2729.7	3581.7	5639.8	5506.1	3903.7	2100.0	829.4	354.3	270.6
85°	1307.7	1436.5	1737.7	1708.7	2319.1	2214.4	1753.8	1589.5	491.2	185.2	188.4
87.5°	863.2	945.3	1133.8	906.7	843.9	763.4	774.6	895.4	96.6	70.9	25.8
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: P456146

CATALOG NUMBER: GALN-SA7B-827-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5010.1	5010.1	5010.1	5010.1	5010.1	5010.1	5010.1	5010.1	5010.1	5010.1	5010.1
2.5°	4955.4	4934.4	4865.2	4797.5	4733.1	4671.9	4631.7	4578.5	4543.1	4552.8	4567.3
5°	4831.4	4784.7	4662.3	4543.1	4430.4	4296.7	4188.8	4101.8	4035.8	4011.6	4006.8
7.5°	4700.9	4622.0	4446.5	4241.9	4050.3	3884.4	3692.8	3597.8	3486.6	3448.0	3435.1
10°	4622.0	4515.7	4269.3	3984.3	3696.0	3420.6	3212.9	3043.8	2890.8	2861.8	2847.3
12.5°	4599.5	4459.4	4127.6	3760.4	3377.1	3038.9	2731.3	2509.1	2360.9	2327.1	2277.2
15°	4586.6	4412.7	3995.5	3535.0	3048.6	2636.3	2312.6	2053.3	1918.1	1827.9	1829.5
17.5°	4575.3	4359.5	3847.4	3288.6	2765.2	2290.1	1932.5	1699.0	1575.0	1526.7	1521.9
20°	4559.2	4296.7	3676.7	3029.3	2441.5	1974.4	1650.7	1476.8	1393.0	1352.8	1351.2
22.5°	4552.8	4235.5	3509.2	2765.2	2154.8	1731.2	1463.9	1341.5	1288.4	1261.0	1261.0
25°	4568.9	4192.0	3333.6	2513.9	1900.3	1523.5	1335.1	1251.3	1220.7	1206.2	1201.4
27.5°	4618.8	4172.7	3159.7	2262.7	1666.8	1381.8	1248.1	1190.1	1167.6	1156.3	1157.9
30°	4713.8	4171.1	2989.0	2014.7	1492.9	1273.9	1178.9	1138.6	1120.9	1114.4	1112.8
32.5°	4866.8	4206.5	2821.5	1810.2	1346.3	1183.7	1114.4	1085.4	1077.4	1072.6	1071.0
35°	5126.1	4306.4	2655.6	1623.3	1233.6	1103.2	1053.2	1038.7	1027.5	1032.3	1033.9
37.5°	5475.6	4478.7	2497.8	1476.8	1148.3	1043.6	1001.7	988.8	982.4	987.2	992.0
40°	5944.2	4726.7	2365.8	1359.2	1087.1	993.7	956.6	945.3	938.9	946.9	948.6
42.5°	6461.2	5013.4	2256.2	1267.4	1037.1	951.8	916.3	903.5	898.6	903.5	905.1
45°	6992.6	5346.7	2199.9	1201.4	995.3	921.2	884.1	869.6	858.4	855.2	860.0
47.5°	7516.0	5636.6	2198.3	1161.1	961.4	893.8	853.5	837.4	822.9	814.9	813.3
50°	7942.8	5866.9	2236.9	1143.4	932.5	863.2	822.9	806.8	787.5	771.4	774.6
52.5°	8264.9	6016.7	2254.6	1135.4	916.3	831.0	790.7	776.2	753.7	732.8	732.8
55°	8472.6	6052.1	2211.2	1127.3	903.5	797.2	753.7	740.8	718.3	697.3	697.3
57.5°	8543.5	5942.6	2054.9	1108.0	890.6	768.2	716.7	705.4	687.7	666.7	663.5
60°	8379.2	5572.2	1781.2	1050.0	864.8	737.6	676.4	671.6	665.1	647.4	645.8
62.5°	7746.3	4786.3	1483.2	974.3	821.3	705.4	639.4	647.4	652.2	642.6	641.0
65°	6693.1	3886.0	1267.4	869.6	763.4	660.3	599.1	620.0	632.9	632.9	629.7
67.5°	5428.8	2984.2	1067.7	779.5	690.9	599.1	554.0	570.1	579.8	576.5	584.6
70°	3858.7	2021.1	869.6	676.4	599.1	529.8	496.0	496.0	489.6	486.4	486.4
72.5°	1871.4	1154.7	705.4	565.3	510.5	452.5	425.2	413.9	401.0	399.4	391.3
73°	1563.8	1035.5	673.2	544.3	489.6	441.3	410.7	393.0	384.9	378.5	376.8
75°	951.8	785.9	562.0	459.0	417.1	380.1	352.7	336.6	328.5	323.7	322.1
77.5°	626.5	586.2	436.4	351.1	318.9	296.3	285.1	268.9	264.1	257.7	257.7
80°	467.0	447.7	312.4	248.0	228.7	209.4	206.1	202.9	190.0	182.0	178.8
82.5°	301.2	318.9	212.6	165.9	144.9	128.8	130.4	135.3	122.4	111.1	107.9
85°	214.2	230.3	128.8	75.7	61.2	53.1	59.6	53.1	54.8	43.5	35.4
87.5°	35.4	61.2	22.5	9.7	4.8	3.2	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)