

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: P453710

Luminaire Tested: **GALN-SA4D-730-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453710  
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-SA4D-730-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3000K, 1200mA 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: 27281 lumens  
Efficiency: N/A  
Efficacy: 111.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

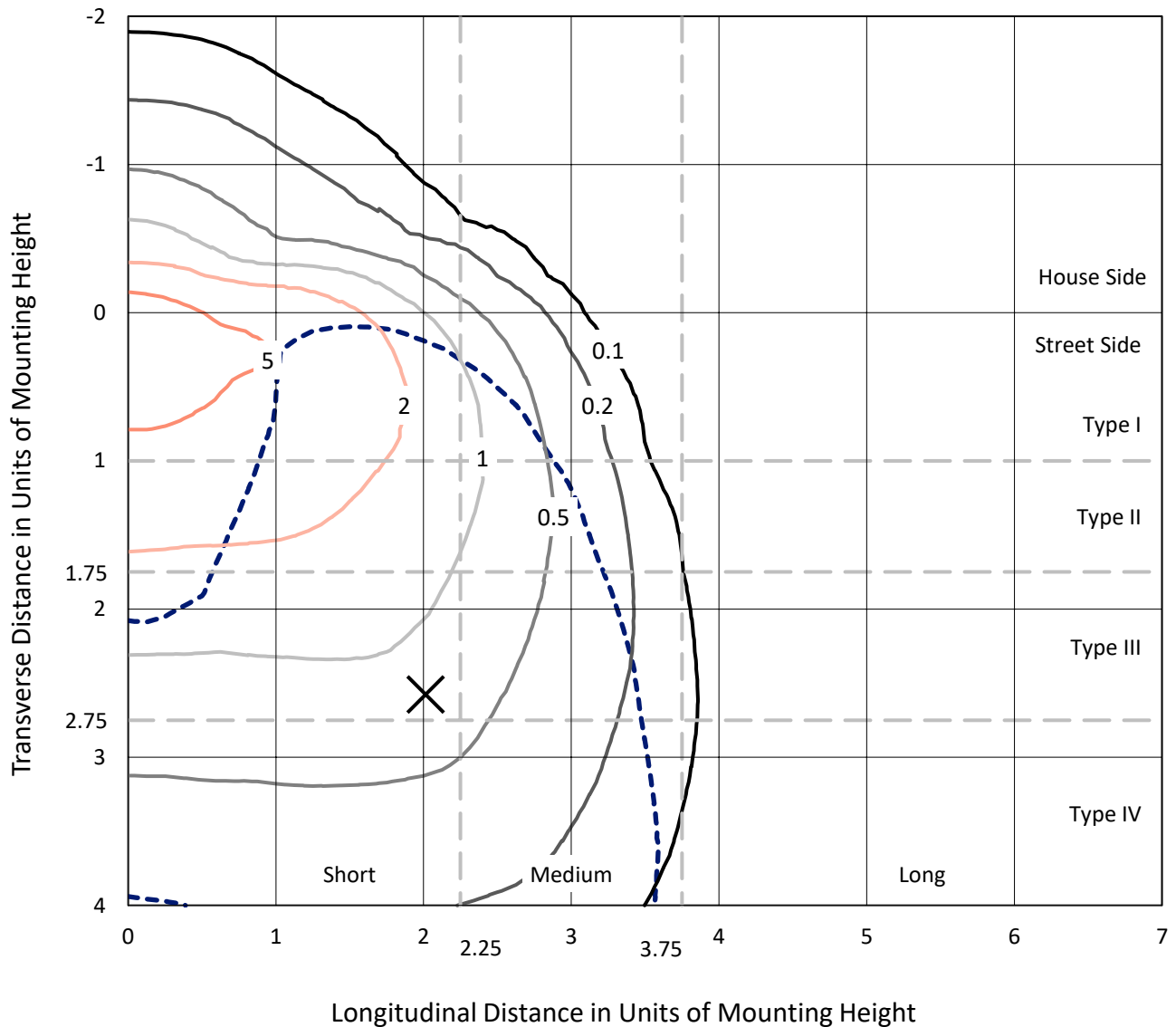
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

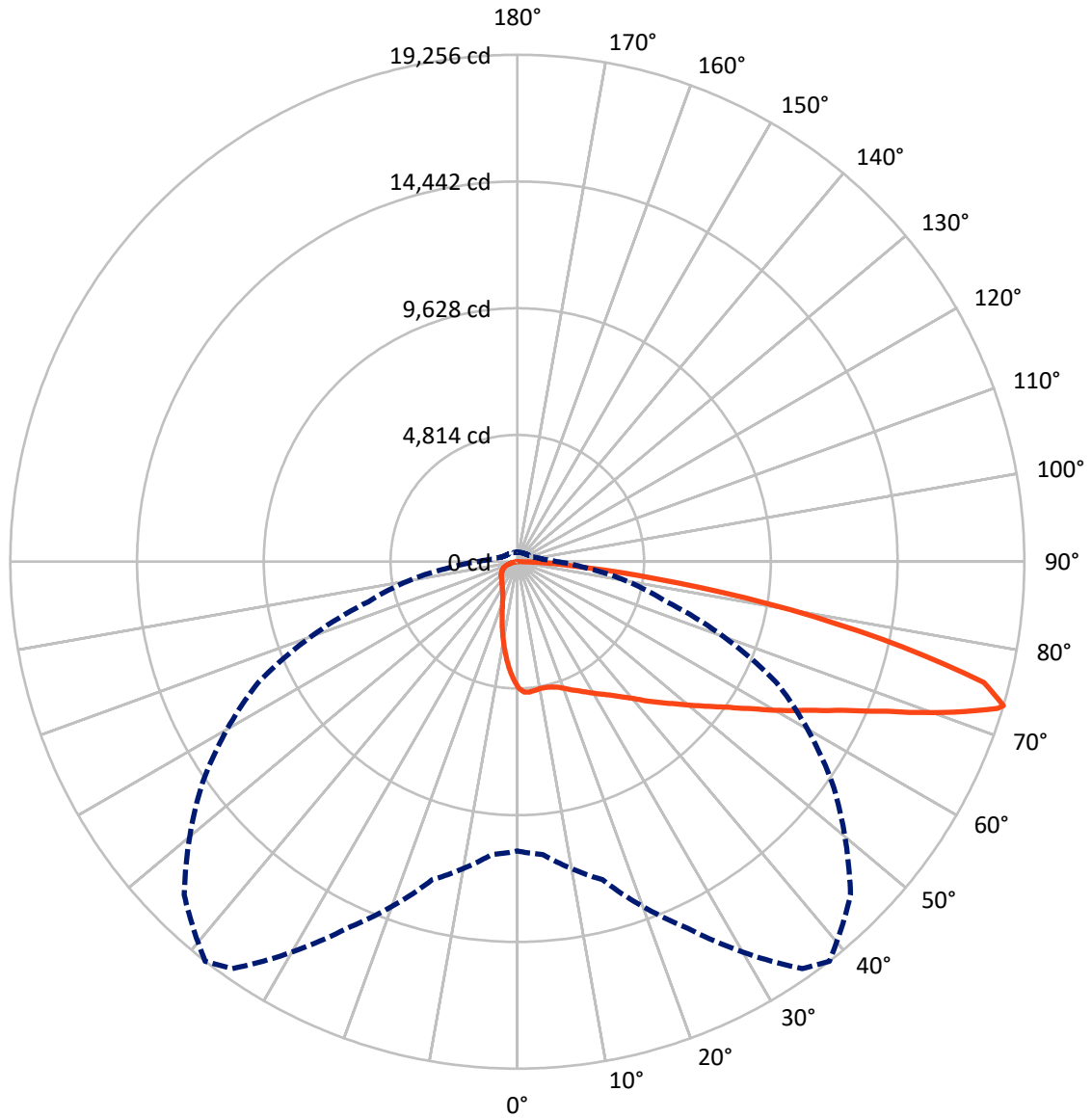
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3667.4	0.0	3667.4
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	23613.6	0.0	23613.6
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	27281.0	0.0	27281.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	418.4	1.5
10°-20°	1072.8	3.9
20°-30°	1670.6	6.1
30°-40°	2450.3	9.0
40°-50°	3634.8	13.3
50°-60°	5149.8	18.9
60°-70°	6532.7	23.9
70°-80°	5438.0	19.9
80°-90°	913.7	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°	27281.0	100.0
0°-180°	27281.0	100.0

**Coefficient of Utilization**



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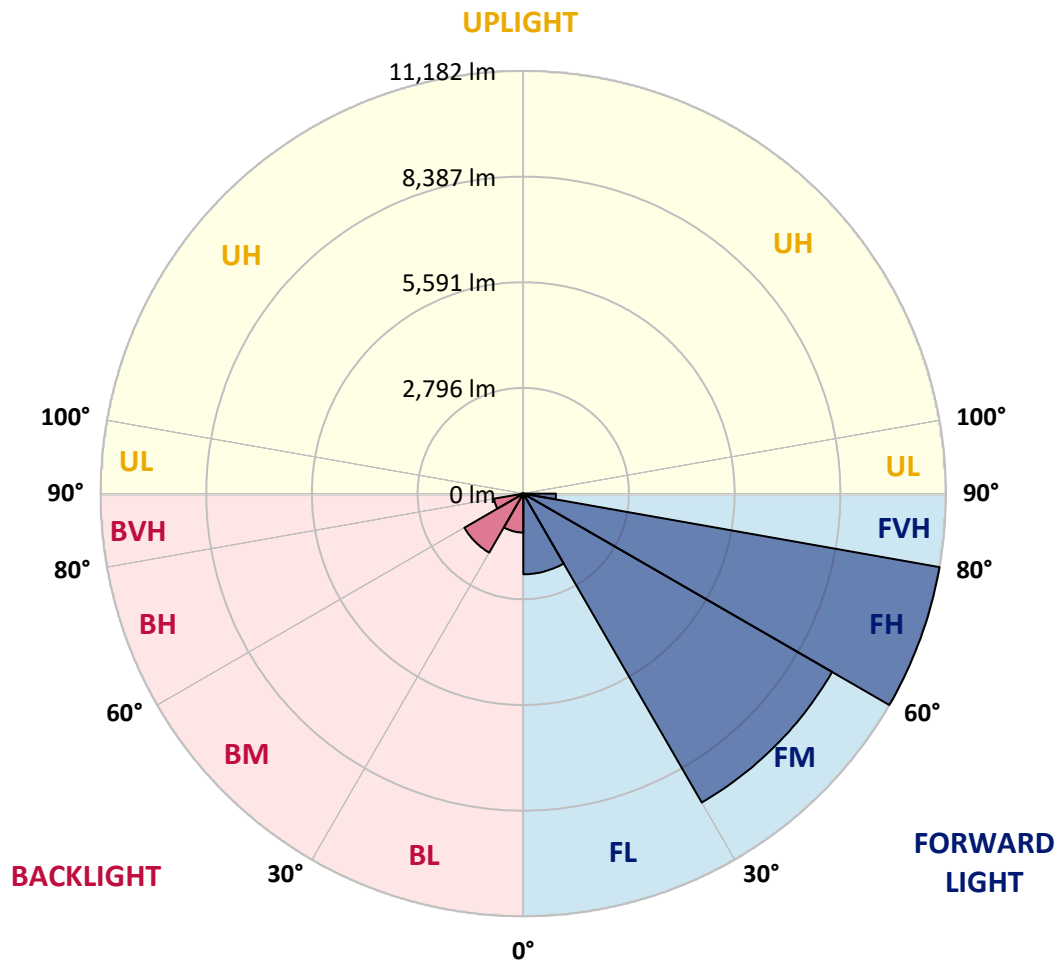
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2132.6	7.8			
FM (30°-60°)	9434.5	34.6			
FH (60°-80°)	11182.4	41.0			G4/12000
FVH (80°-90°)	864.1	3.2			G5
BL (0°-30°)	1029.1	3.8	B3/2500		
BM (30°-60°)	1800.5	6.6	B2/2500		
BH (60°-80°)	788.3	2.9	B2/1000		G2/1000
BVH (80°-90°)	49.5	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	4792.8	4792.8	4792.8	4792.8	4792.8	4792.8	4792.8	4792.8	4792.8	4792.8	4792.8
2.5°	4985.4	5010.0	4997.7	4980.8	4970.0	4959.2	4943.8	4899.1	4863.7	4825.2	4765.1
5°	5022.4	5037.8	5027.0	5005.4	4980.8	4970.0	4940.7	4882.2	4825.2	4760.5	4671.1
7.5°	5000.8	5007.0	4994.6	4968.4	4946.9	4926.8	4892.9	4828.2	4758.9	4680.3	4563.3
10°	4923.8	4946.9	4946.9	4925.3	4903.7	4892.9	4859.1	4797.4	4734.3	4644.9	4506.3
12.5°	4860.6	4885.2	4905.3	4899.1	4897.6	4897.6	4871.4	4825.2	4751.2	4666.5	4501.6
15°	4817.5	4846.7	4889.9	4914.5	4929.9	4934.5	4923.8	4883.7	4808.2	4709.6	4520.1
17.5°	4808.2	4843.6	4922.2	4976.1	5016.2	5014.7	5011.6	4956.1	4872.9	4771.2	4543.2
20°	4849.8	4896.0	5005.4	5090.1	5148.7	5137.9	5121.0	5048.5	4951.5	4837.5	4564.8
22.5°	4974.6	5022.4	5142.5	5235.0	5292.0	5292.0	5241.1	5145.6	5042.4	4914.5	4594.1
25°	5153.3	5205.7	5333.6	5427.5	5453.7	5433.7	5382.9	5267.3	5148.7	5025.4	4655.7
27.5°	5372.1	5435.2	5553.9	5632.4	5624.7	5609.3	5556.9	5409.0	5290.4	5178.0	4760.5
30°	5644.8	5691.0	5814.2	5832.7	5805.0	5801.9	5728.0	5580.1	5469.1	5382.9	4909.9
32.5°	5902.0	5943.6	6042.2	6049.9	6000.6	6006.8	5937.5	5801.9	5738.7	5707.9	5161.0
35°	6174.7	6196.3	6281.0	6271.8	6239.4	6234.8	6207.1	6077.7	6097.7	6153.2	5516.9
37.5°	6402.7	6445.9	6493.6	6501.3	6499.8	6515.2	6533.7	6472.1	6587.6	6761.7	5983.7
40°	6612.3	6649.2	6720.1	6744.8	6804.8	6835.6	6898.8	6900.4	7166.9	7453.4	6558.3
42.5°	6754.0	6817.2	6949.7	6994.3	7140.7	7233.1	7327.1	7427.2	7813.9	8182.1	7236.2
45°	6877.2	6960.4	7180.7	7319.4	7518.1	7630.6	7829.3	8038.9	8595.0	9077.2	7924.9
47.5°	7063.7	7137.6	7390.3	7635.2	7935.6	8065.0	8362.4	8675.1	9402.3	9930.7	8584.2
50°	7322.5	7367.2	7624.4	8023.4	8407.1	8573.4	8966.3	9417.7	10265.0	10773.4	9163.5
52.5°	7653.7	7672.2	7877.1	8408.6	8913.9	9120.4	9641.1	10168.0	11019.9	11505.2	9622.6
55°	8045.0	8014.2	8174.4	8816.9	9493.2	9762.8	10322.0	10927.5	11868.8	12096.8	9956.9
57.5°	8431.7	8383.9	8511.8	9312.9	10208.0	10533.1	11184.8	11710.1	12626.8	12649.9	10191.1
60°	8841.5	8806.1	8958.6	9895.3	11084.6	11469.8	12072.1	12522.0	13360.1	13035.0	10228.0
62.5°	9262.1	9205.1	9422.3	10550.0	12072.1	12421.9	13005.8	13384.7	14079.6	13178.3	9872.2
65°	9670.4	9644.2	9980.0	11328.0	13196.8	13594.3	14161.2	14418.5	14655.7	12962.6	8989.4
67.5°	10104.8	10157.2	10693.3	12366.4	14663.4	15162.6	15774.2	15532.3	14820.6	11941.2	7570.5
70°	10767.3	10801.2	11630.0	13726.8	16553.8	17156.1	17451.9	15928.3	14025.6	10001.6	5691.0
72.5°	11052.3	11201.7	12466.5	15154.9	18701.4	19069.6	18015.8	15045.5	11683.9	6794.0	2990.3
73°	10989.1	11167.8	12505.1	15372.1	18869.3	19256.0	17895.6	14591.0	10861.2	5851.2	2563.6
75°	10201.9	10422.2	12004.4	15190.3	18542.7	18311.6	15963.7	12435.7	7339.4	2660.6	1167.8
77.5°	8049.6	8112.8	9511.7	12266.3	14601.8	14173.5	11947.4	7772.3	2998.0	989.1	662.5
80°	4037.9	4270.5	5361.3	7026.7	9764.3	9624.1	7541.2	3675.9	1249.4	580.8	439.1
82.5°	1942.7	2107.5	2611.3	3426.3	5395.2	5267.3	3734.4	2008.9	793.4	338.9	258.8
85°	1251.0	1374.2	1662.3	1634.6	2218.5	2118.3	1677.7	1520.6	469.9	177.2	180.3
87.5°	825.8	904.3	1084.6	867.4	807.3	730.2	741.0	856.6	92.4	67.8	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°	4792.8	4792.8	4792.8	4792.8	4792.8	4792.8	4792.8	4792.8	4792.8	4792.8	4792.8
2.5°	4740.4	4720.4	4654.2	4589.5	4527.8	4469.3	4430.8	4379.9	4346.0	4355.3	4369.1
5°	4621.8	4577.1	4460.0	4346.0	4238.2	4110.3	4007.1	3923.9	3860.7	3837.6	3833.0
7.5°	4497.0	4421.5	4253.6	4057.9	3874.6	3715.9	3532.6	3441.7	3335.4	3298.4	3286.1
10°	4421.5	4319.8	4084.1	3811.4	3535.7	3272.2	3073.5	2911.7	2765.4	2737.6	2723.8
12.5°	4400.0	4265.9	3948.6	3597.3	3230.6	2907.1	2612.9	2400.3	2258.5	2226.2	2178.4
15°	4387.6	4221.2	3822.2	3381.6	2916.4	2522.0	2212.3	1964.3	1834.9	1748.6	1750.1
17.5°	4376.8	4170.4	3680.5	3145.9	2645.2	2190.7	1848.7	1625.3	1506.7	1460.5	1455.9
20°	4361.4	4110.3	3517.2	2897.9	2335.6	1888.8	1579.1	1412.7	1332.6	1294.1	1292.6
22.5°	4355.3	4051.8	3357.0	2645.2	2061.3	1656.1	1400.4	1283.3	1232.5	1206.3	1206.3
25°	4370.7	4010.2	3189.0	2404.9	1817.9	1457.4	1277.2	1197.0	1167.8	1153.9	1149.3
27.5°	4418.4	3991.7	3022.7	2164.5	1594.5	1321.8	1194.0	1138.5	1116.9	1106.2	1107.7
30°	4509.3	3990.2	2859.4	1927.3	1428.1	1218.6	1127.7	1089.2	1072.3	1066.1	1064.6
32.5°	4655.7	4024.0	2699.1	1731.6	1287.9	1132.3	1066.1	1038.4	1030.7	1026.0	1024.5
35°	4903.7	4119.6	2540.5	1552.9	1180.1	1055.3	1007.6	993.7	982.9	987.5	989.1
37.5°	5238.0	4284.4	2389.5	1412.7	1098.4	998.3	958.3	945.9	939.8	944.4	949.0
40°	5686.4	4521.7	2263.1	1300.3	1039.9	950.6	915.1	904.3	898.2	905.9	907.4
42.5°	6180.9	4795.9	2158.4	1212.5	992.1	910.5	876.6	864.3	859.7	864.3	865.8
45°	6689.3	5114.8	2104.5	1149.3	952.1	881.2	845.8	831.9	821.1	818.1	822.7
47.5°	7190.0	5392.1	2102.9	1110.8	919.7	855.0	816.5	801.1	787.2	779.5	778.0
50°	7598.2	5612.4	2139.9	1093.8	892.0	825.8	787.2	771.8	753.4	737.9	741.0
52.5°	7906.4	5755.7	2156.8	1086.1	876.6	795.0	756.4	742.6	721.0	701.0	701.0
55°	8105.1	5789.6	2115.2	1078.4	864.3	762.6	721.0	708.7	687.1	667.1	667.1
57.5°	8172.9	5684.8	1965.8	1059.9	852.0	734.9	685.6	674.8	657.8	637.8	634.7
60°	8015.7	5330.5	1703.9	1004.5	827.3	705.6	647.1	642.4	636.3	619.3	617.8
62.5°	7410.3	4578.7	1418.9	932.1	785.7	674.8	611.6	619.3	623.9	614.7	613.2
65°	6402.7	3717.5	1212.5	831.9	730.2	631.6	573.1	593.1	605.5	605.5	602.4
67.5°	5193.4	2854.7	1021.4	745.7	660.9	573.1	530.0	545.4	554.6	551.5	559.2
70°	3691.3	1933.5	831.9	647.1	573.1	506.9	474.5	474.5	468.3	465.3	465.3
72.5°	1790.2	1104.6	674.8	540.8	488.4	432.9	406.7	395.9	383.6	382.1	374.4
73°	1495.9	990.6	644.0	520.7	468.3	422.1	392.9	375.9	368.2	362.0	360.5
75°	910.5	751.8	537.7	439.1	399.0	363.6	337.4	322.0	314.3	309.7	308.1
77.5°	599.3	560.8	417.5	335.9	305.0	283.5	272.7	257.3	252.7	246.5	246.5
80°	446.8	428.3	298.9	237.3	218.8	200.3	197.2	194.1	181.8	174.1	171.0
82.5°	288.1	305.0	203.4	158.7	138.7	123.2	124.8	129.4	117.1	106.3	103.2
85°	204.9	220.3	123.2	72.4	58.5	50.8	57.0	50.8	52.4	41.6	33.9
87.5°	33.9	58.5	21.6	9.2	4.6	3.1	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)