

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: P455827

Luminaire Tested: **GALN-SA7A-740-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P455827  
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-SA7A-740-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 4000K, 615mA 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: 31178 lumens  
Efficiency: N/A  
Efficacy: 145.0 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

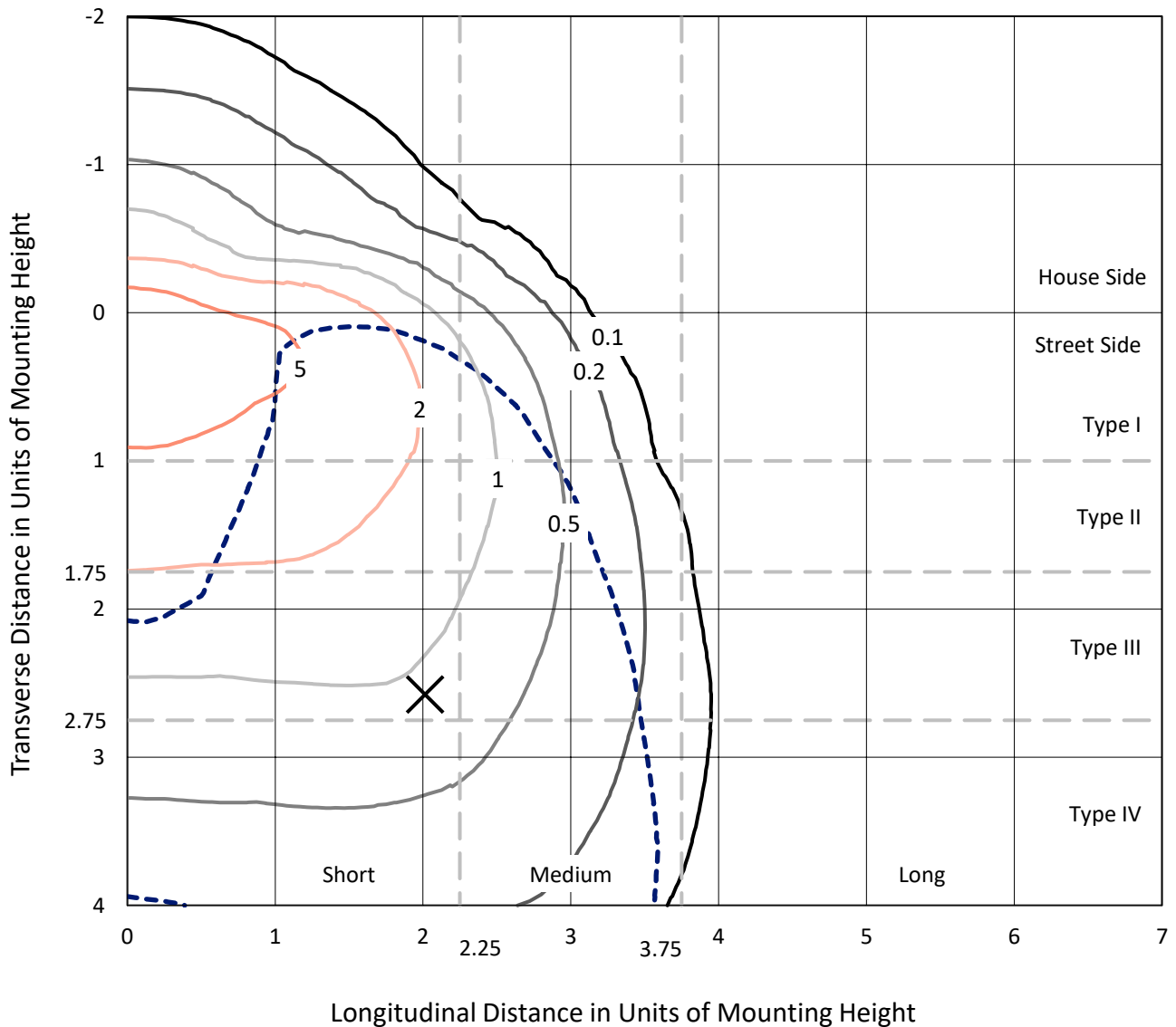
Input Watts (W): 215  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

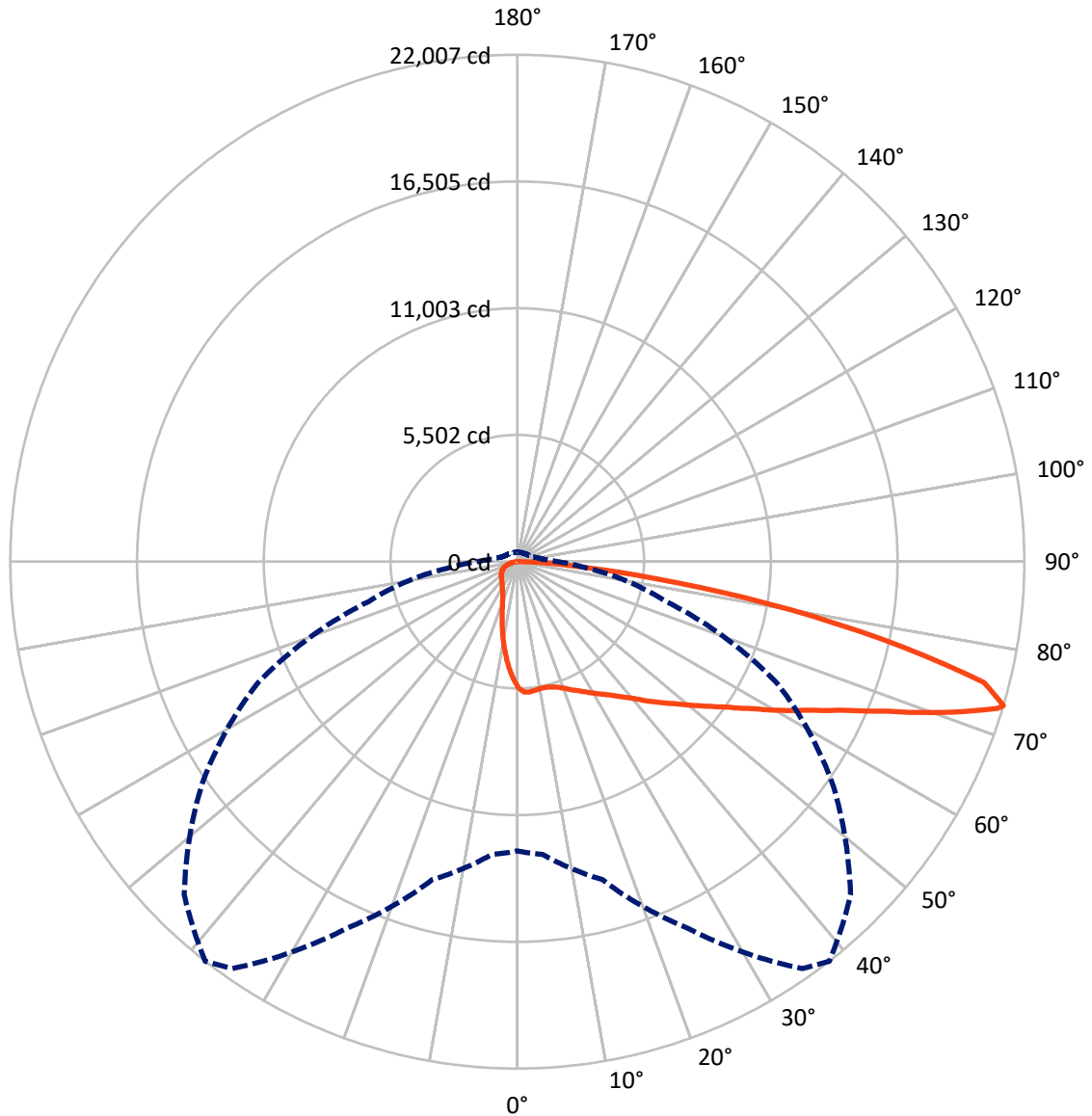
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 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	4191.2	0.0	4191.2
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	26986.8	0.0	26986.8
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	31178.0	0.0	31178.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	478.1	1.5
10°-20°	1226.1	3.9
20°-30°	1909.2	6.1
30°-40°	2800.4	9.0
40°-50°	4154.0	13.3
50°-60°	5885.4	18.9
60°-70°	7465.9	23.9
70°-80°	6214.8	19.9
80°-90°	1044.2	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°	31178.0	100.0
0°-180°	31178.0	100.0

**Coefficient of Utilization**



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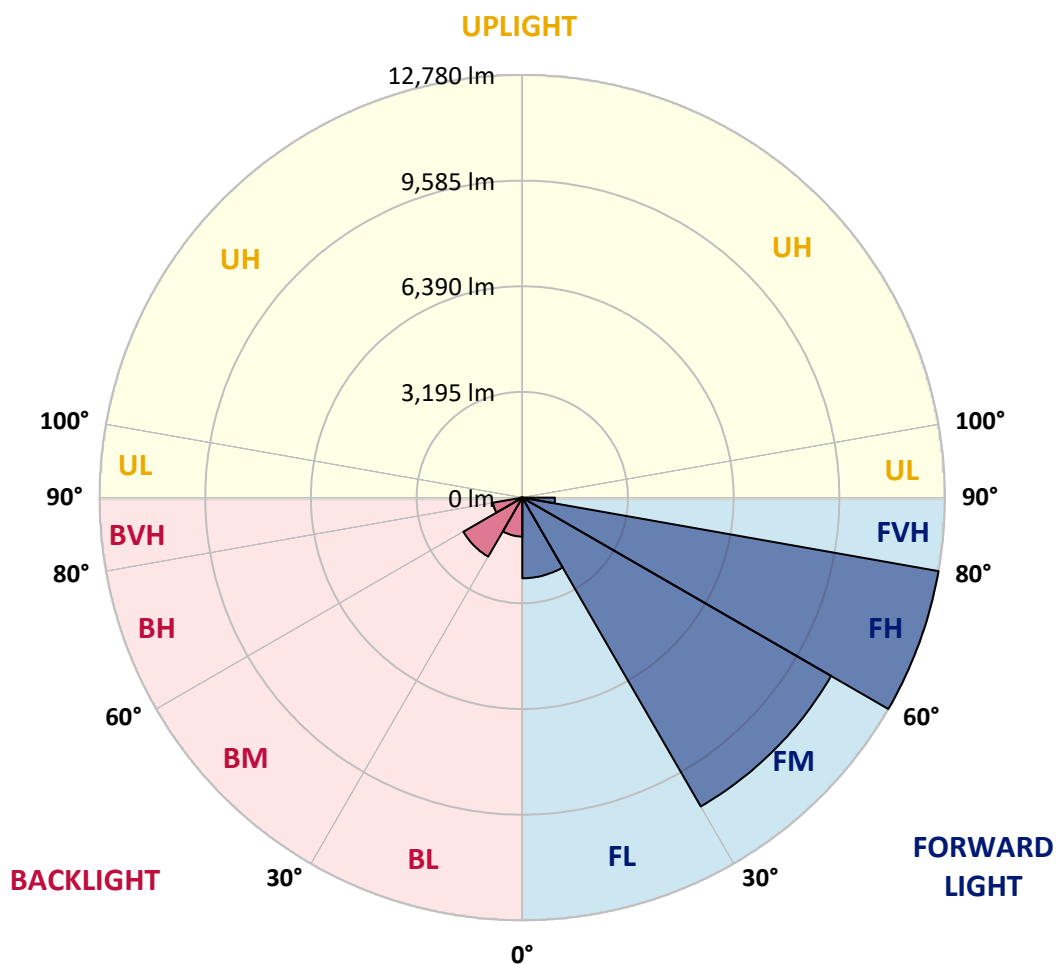
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2437.3	7.8			
FM (30°-60°)	10782.2	34.6			
FH (60°-80°)	12779.7	41.0			G5
FVH (80°-90°)	987.6	3.2			G5
BL (0°-30°)	1176.1	3.8	B3/2500		
BM (30°-60°)	2057.6	6.6	B2/2500		
BH (60°-80°)	900.9	2.9	B2/1000		G2/1000
BVH (80°-90°)	56.6	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°	5477.4	5477.4	5477.4	5477.4	5477.4	5477.4	5477.4	5477.4	5477.4	5477.4	5477.4
2.5°	5697.5	5725.7	5711.6	5692.2	5679.9	5667.6	5650.0	5598.9	5558.4	5514.4	5445.8
5°	5739.8	5757.4	5745.1	5720.4	5692.2	5679.9	5646.5	5579.6	5514.4	5440.5	5338.4
7.5°	5715.1	5722.2	5708.1	5678.2	5653.5	5630.6	5591.9	5517.9	5438.7	5348.9	5215.1
10°	5627.1	5653.5	5653.5	5628.9	5604.2	5591.9	5553.2	5482.7	5410.5	5308.4	5150.0
12.5°	5554.9	5583.1	5606.0	5598.9	5597.2	5597.2	5567.2	5514.4	5429.9	5333.1	5144.7
15°	5505.6	5539.1	5588.4	5616.5	5634.1	5639.4	5627.1	5581.3	5495.1	5382.4	5165.8
17.5°	5495.1	5535.5	5625.3	5687.0	5732.7	5731.0	5727.5	5664.1	5569.0	5452.8	5192.2
20°	5542.6	5595.4	5720.4	5817.3	5884.2	5871.8	5852.5	5769.7	5658.8	5528.5	5216.9
22.5°	5685.2	5739.8	5877.1	5982.8	6047.9	6047.9	5989.8	5880.6	5762.7	5616.5	5250.3
25°	5889.4	5949.3	6095.4	6202.8	6232.8	6209.9	6151.8	6019.7	5884.2	5743.3	5320.7
27.5°	6139.5	6211.6	6347.2	6437.0	6428.2	6410.6	6350.7	6181.7	6046.1	5917.6	5440.5
30°	6451.1	6503.9	6644.8	6665.9	6634.2	6630.7	6546.2	6377.1	6250.4	6151.8	5611.3
32.5°	6745.1	6792.7	6905.4	6914.2	6857.8	6864.9	6785.6	6630.7	6558.5	6523.3	5898.2
35°	7056.8	7081.4	7178.3	7167.7	7130.7	7125.4	7093.7	6945.8	6968.7	7032.1	6305.0
37.5°	7317.3	7366.6	7421.2	7430.0	7428.3	7445.9	7467.0	7396.6	7528.6	7727.6	6838.4
40°	7556.8	7599.1	7680.0	7708.2	7776.9	7812.1	7884.3	7886.0	8190.6	8518.1	7495.2
42.5°	7718.8	7791.0	7942.4	7993.4	8160.7	8266.3	8373.7	8488.2	8930.1	9350.9	8269.9
45°	7859.6	7954.7	8206.5	8364.9	8592.1	8720.6	8947.7	9187.2	9822.8	10373.9	9056.9
47.5°	8072.7	8157.2	8445.9	8725.9	9069.2	9217.1	9556.9	9914.3	10745.4	11349.3	9810.5
50°	8368.5	8419.5	8713.6	9169.6	9608.0	9798.1	10247.1	10763.0	11731.3	12312.4	10472.5
52.5°	8747.0	8768.1	9002.3	9609.7	10187.2	10423.2	11018.3	11620.4	12594.1	13148.7	10997.1
55°	9194.2	9159.0	9342.1	10076.3	10849.3	11157.4	11796.5	12488.4	13564.2	13824.8	11379.2
57.5°	9636.2	9581.6	9727.7	10643.3	11666.2	12037.7	12782.5	13382.9	14430.5	14456.9	11646.8
60°	10104.5	10064.0	10238.3	11308.8	12668.0	13108.2	13796.6	14310.7	15268.5	14897.0	11689.1
62.5°	10585.2	10520.0	10768.3	12057.1	13796.6	14196.3	14863.6	15296.7	16090.8	15060.8	11282.4
65°	11051.7	11021.8	11405.6	12946.2	15081.9	15536.2	16184.1	16478.1	16749.3	14814.3	10273.5
67.5°	11548.2	11608.1	12220.8	14132.9	16758.1	17328.5	18027.5	17751.1	16937.7	13647.0	8651.9
70°	12305.3	12344.1	13291.3	15687.6	18918.4	19606.8	19944.9	18203.6	16029.1	11430.3	6503.9
72.5°	12631.1	12801.8	14247.3	17319.7	21372.8	21793.6	20589.3	17194.7	13352.9	7764.6	3417.5
73°	12558.9	12763.1	14291.4	17568.0	21564.7	22006.6	20451.9	16675.3	12412.7	6687.0	2929.8
75°	11659.2	11910.9	13719.1	17360.2	21191.4	20927.3	18244.1	14212.1	8387.8	3040.7	1334.6
77.5°	9199.5	9271.7	10870.4	14018.5	16687.6	16198.2	13654.0	8882.6	3426.3	1130.4	757.1
80°	4614.7	4880.6	6127.1	8030.4	11159.1	10998.9	8618.5	4201.0	1427.9	663.8	501.8
82.5°	2220.2	2408.6	2984.3	3915.7	6165.9	6019.7	4267.9	2295.9	906.7	387.3	295.8
85°	1429.7	1570.5	1899.8	1868.1	2535.4	2420.9	1917.4	1737.8	537.0	202.5	206.0
87.5°	943.7	1033.5	1239.5	991.3	922.6	834.6	846.9	978.9	105.6	77.5	28.2
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5477.4	5477.4	5477.4	5477.4	5477.4	5477.4	5477.4	5477.4	5477.4	5477.4	5477.4
2.5°	5417.6	5394.7	5319.0	5245.0	5174.6	5107.7	5063.7	5005.6	4966.9	4977.4	4993.3
5°	5282.0	5231.0	5097.1	4966.9	4843.6	4697.5	4579.5	4484.4	4412.2	4385.8	4380.5
7.5°	5139.4	5053.1	4861.2	4637.6	4428.1	4246.7	4037.2	3933.3	3811.9	3769.6	3755.5
10°	5053.1	4936.9	4667.5	4355.9	4040.7	3739.7	3512.5	3327.7	3160.4	3128.7	3112.9
12.5°	5028.5	4875.3	4512.6	4111.2	3692.1	3322.4	2986.1	2743.1	2581.1	2544.2	2489.6
15°	5014.4	4824.2	4368.2	3864.7	3332.9	2882.2	2528.3	2244.9	2097.0	1998.4	2000.1
17.5°	5002.1	4766.1	4206.2	3595.3	3023.1	2503.7	2112.8	1857.5	1721.9	1669.1	1663.8
20°	4984.5	4697.5	4019.6	3311.8	2669.2	2158.6	1804.7	1614.5	1523.0	1479.0	1477.2
22.5°	4977.4	4630.6	3836.5	3023.1	2355.8	1892.7	1600.4	1466.6	1408.5	1378.6	1378.6
25°	4995.0	4583.0	3644.6	2748.4	2077.6	1665.6	1459.6	1368.0	1334.6	1318.7	1313.5
27.5°	5049.6	4561.9	3454.4	2473.7	1822.3	1510.7	1364.5	1301.1	1276.5	1264.2	1265.9
30°	5153.5	4560.1	3267.8	2202.6	1632.1	1392.7	1288.8	1244.8	1225.4	1218.4	1216.6
32.5°	5320.7	4598.9	3084.7	1979.0	1471.9	1294.1	1218.4	1186.7	1177.9	1172.6	1170.8
35°	5604.2	4708.0	2903.3	1774.8	1348.7	1206.1	1151.5	1135.6	1123.3	1128.6	1130.4
37.5°	5986.3	4896.4	2730.8	1614.5	1255.4	1140.9	1095.1	1081.1	1074.0	1079.3	1084.6
40°	6498.6	5167.6	2586.4	1486.0	1188.5	1086.3	1045.8	1033.5	1026.5	1035.3	1037.0
42.5°	7063.8	5481.0	2466.7	1385.6	1133.9	1040.6	1001.8	987.7	982.5	987.7	989.5
45°	7644.8	5845.4	2405.1	1313.5	1088.1	1007.1	966.6	950.8	938.4	934.9	940.2
47.5°	8217.0	6162.3	2403.3	1269.4	1051.1	977.2	933.2	915.5	899.7	890.9	889.1
50°	8683.6	6414.1	2445.6	1250.1	1019.4	943.7	899.7	882.1	861.0	843.4	846.9
52.5°	9035.8	6577.9	2464.9	1241.3	1001.8	908.5	864.5	848.6	824.0	801.1	801.1
55°	9262.9	6616.6	2417.4	1232.5	987.7	871.5	824.0	809.9	785.3	762.4	762.4
57.5°	9340.4	6496.9	2246.6	1211.3	973.7	839.8	783.5	771.2	751.8	728.9	725.4
60°	9160.8	6091.9	1947.3	1148.0	945.5	806.4	739.5	734.2	727.2	707.8	706.0
62.5°	8468.8	5232.7	1621.6	1065.2	897.9	771.2	699.0	707.8	713.1	702.5	700.7
65°	7317.3	4248.5	1385.6	950.8	834.6	721.9	655.0	677.9	691.9	691.9	688.4
67.5°	5935.2	3262.5	1167.3	852.2	755.3	655.0	605.7	623.3	633.8	630.3	639.1
70°	4218.6	2209.6	950.8	739.5	655.0	579.3	542.3	542.3	535.2	531.7	531.7
72.5°	2045.9	1262.4	771.2	618.0	558.1	494.7	464.8	452.5	438.4	436.6	427.8
73°	1709.6	1132.1	736.0	595.1	535.2	482.4	449.0	429.6	420.8	413.8	412.0
75°	1040.6	859.2	614.5	501.8	456.0	415.5	385.6	368.0	359.2	353.9	352.1
77.5°	684.9	640.9	477.1	383.8	348.6	324.0	311.6	294.0	288.7	281.7	281.7
80°	510.6	489.5	341.6	271.1	250.0	228.9	225.4	221.8	207.8	199.0	195.4
82.5°	329.2	348.6	232.4	181.3	158.5	140.9	142.6	147.9	133.8	121.5	118.0
85°	234.2	251.8	140.9	82.8	66.9	58.1	65.1	58.1	59.9	47.5	38.7
87.5°	38.7	66.9	24.6	10.6	5.3	3.5	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)