

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: P459075

Luminaire Tested: **GALN-SA5D-735-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459075  
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-SA5D-735-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3500K, 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: 35325 lumens  
Efficiency: N/A  
Efficacy: 114.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

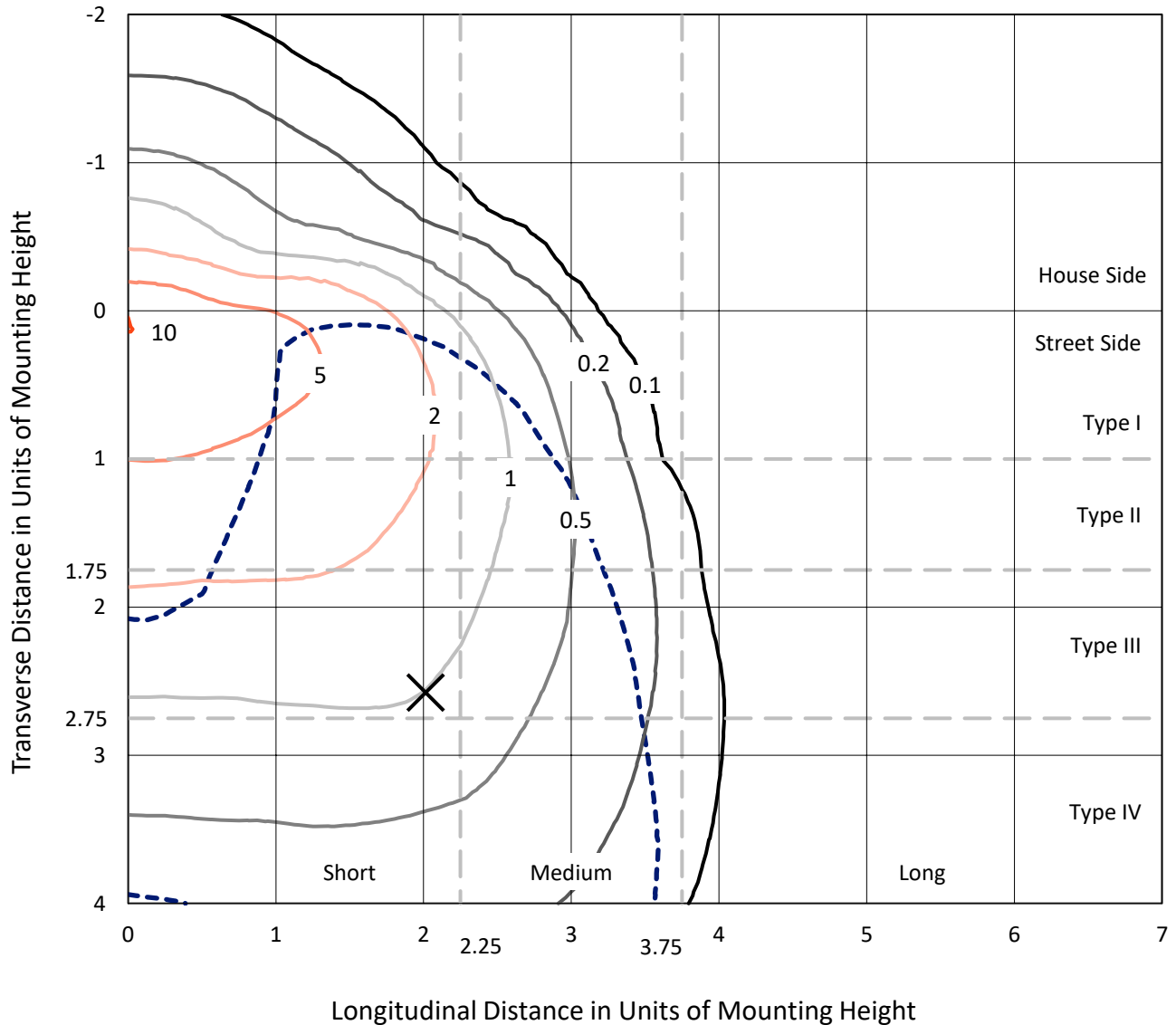
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

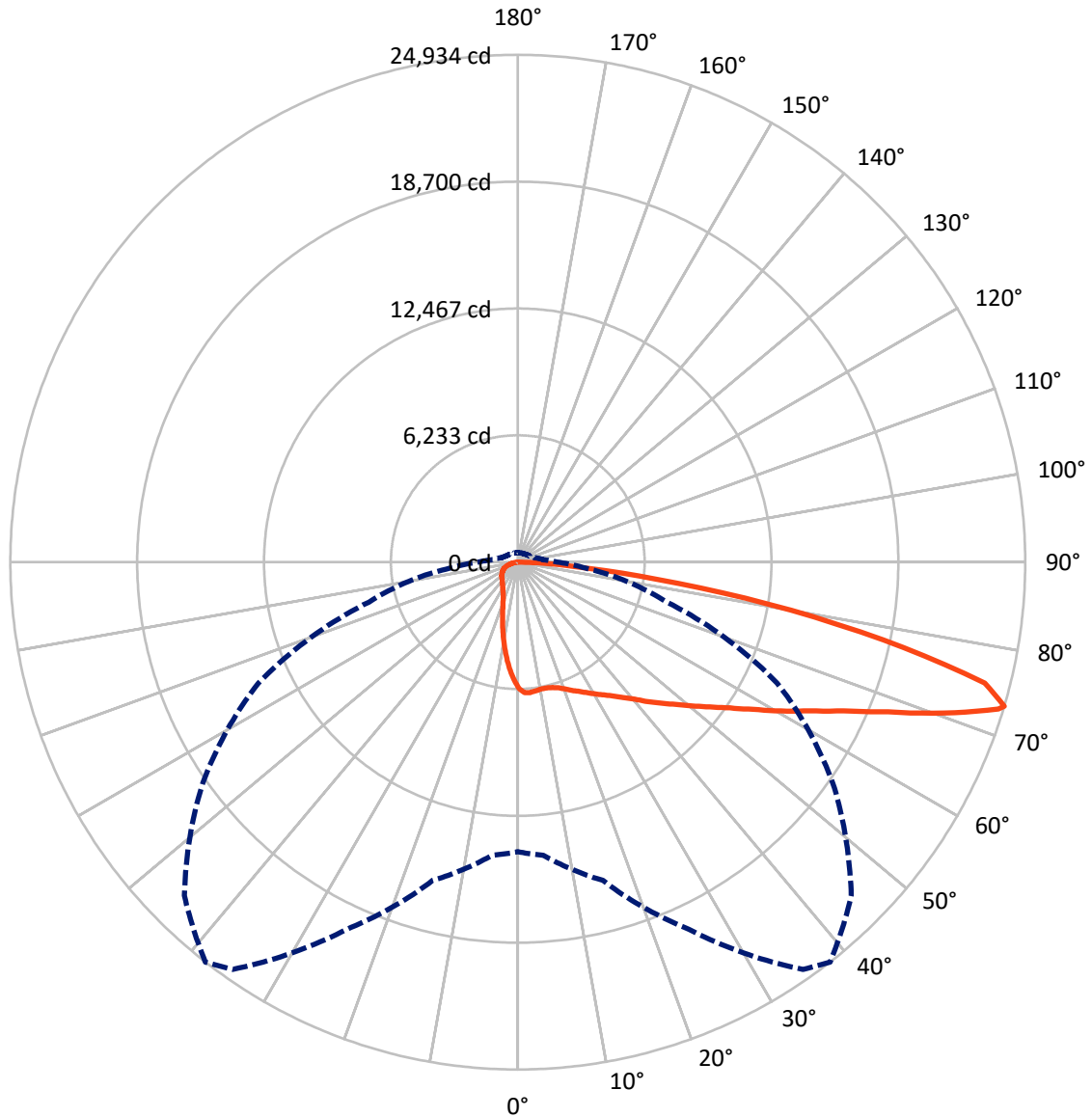
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 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	4748.7	0.0	4748.7
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	30576.3	0.0	30576.3
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	35325.0	0.0	35325.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	541.7	1.5
10°-20°	1389.1	3.9
20°-30°	2163.2	6.1
30°-40°	3172.8	9.0
40°-50°	4706.6	13.3
50°-60°	6668.3	18.9
60°-70°	8458.9	23.9
70°-80°	7041.4	19.9
80°-90°	1183.1	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°	35325.0	100.0
0°-180°	35325.0	100.0



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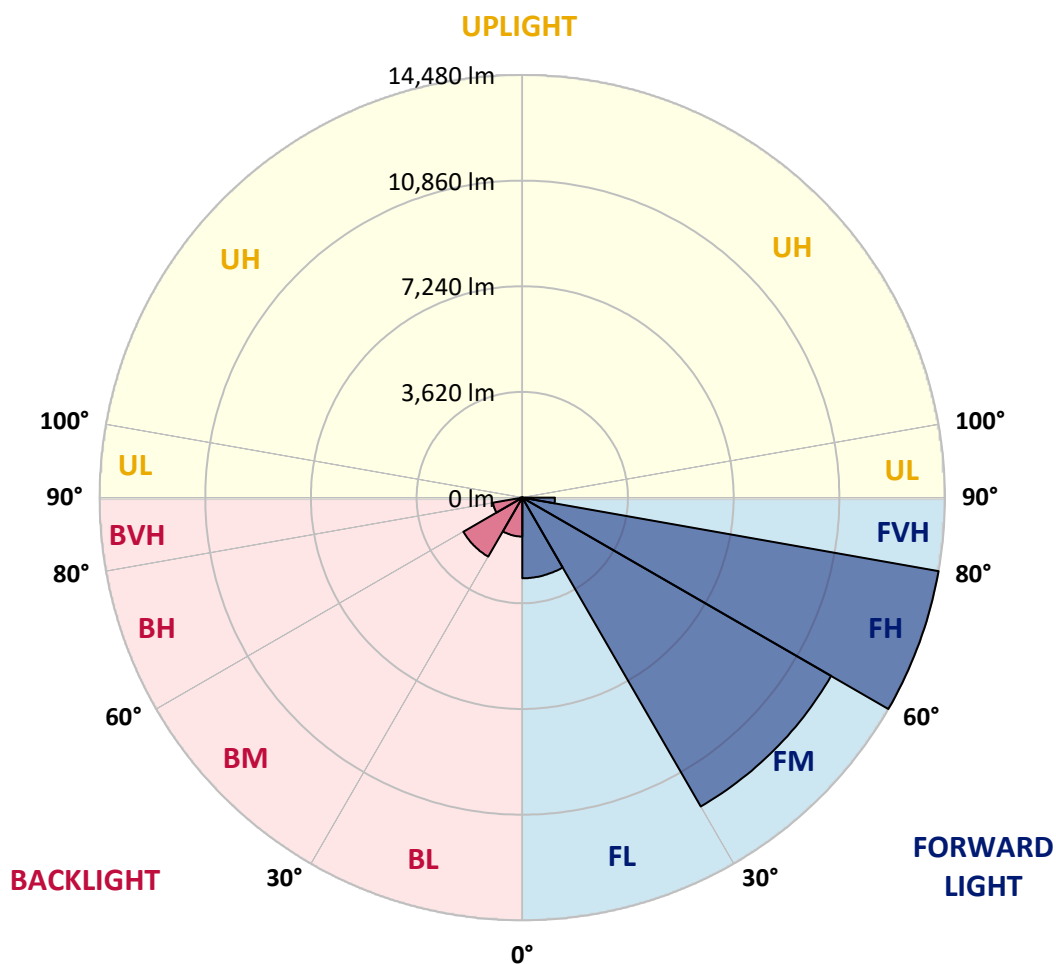
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2761.5	7.8			
FM	(30°-60°)	12216.3	34.6			
FH	(60°-80°)	14479.6	41.0			G5
FVH	(80°-90°)	1118.9	3.2			G5
BL	(0°-30°)	1332.5	3.8	B3/2500		
BM	(30°-60°)	2331.3	6.6	B2/2500		
BH	(60°-80°)	1020.7	2.9	B3/2500		G3/2500
BVH	(80°-90°)	64.2	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°	6206.0	6206.0	6206.0	6206.0	6206.0	6206.0	6206.0	6206.0	6206.0	6206.0	6206.0
2.5°	6455.4	6487.3	6471.3	6449.4	6435.4	6421.4	6401.5	6343.6	6297.8	6247.9	6170.1
5°	6503.2	6523.2	6509.2	6481.3	6449.4	6435.4	6397.5	6321.7	6247.9	6164.1	6048.4
7.5°	6475.3	6483.3	6467.3	6433.4	6405.5	6379.6	6335.7	6251.9	6162.1	6060.4	5908.8
10°	6375.6	6405.5	6405.5	6377.6	6349.6	6335.7	6291.8	6212.0	6130.2	6014.5	5835.0
12.5°	6293.8	6325.7	6351.6	6343.6	6341.7	6341.7	6307.7	6247.9	6152.1	6042.4	5829.0
15°	6237.9	6275.8	6331.7	6363.6	6383.5	6389.5	6375.6	6323.7	6226.0	6098.3	5852.9
17.5°	6226.0	6271.8	6373.6	6443.4	6495.3	6493.3	6489.3	6417.5	6309.7	6178.1	5882.8
20°	6279.8	6339.7	6481.3	6591.0	6666.8	6652.9	6630.9	6537.2	6411.5	6263.9	5910.8
22.5°	6441.4	6503.2	6658.8	6778.5	6852.3	6852.3	6786.5	6662.8	6529.2	6363.6	5948.7
25°	6672.8	6740.6	6906.2	7027.9	7061.8	7035.9	6970.0	6820.4	6666.8	6507.2	6028.5
27.5°	6956.1	7037.9	7191.5	7293.2	7283.2	7263.3	7195.5	7003.9	6850.3	6704.7	6164.1
30°	7309.2	7369.0	7528.6	7552.5	7516.6	7512.6	7416.9	7225.4	7081.7	6970.0	6357.6
32.5°	7642.3	7696.2	7823.8	7833.8	7770.0	7778.0	7688.2	7512.6	7430.8	7390.9	6682.8
35°	7995.4	8023.3	8133.0	8121.1	8079.2	8073.2	8037.3	7869.7	7895.6	7967.5	7143.6
37.5°	8290.6	8346.5	8408.3	8418.3	8416.3	8436.3	8460.2	8380.4	8530.0	8755.4	7748.0
40°	8561.9	8609.8	8701.6	8733.5	8811.3	8851.2	8933.0	8935.0	9280.1	9651.1	8492.1
42.5°	8745.5	8827.2	8998.8	9056.7	9246.2	9365.9	9487.5	9617.2	10117.9	10594.7	9369.8
45°	8905.0	9012.8	9298.0	9477.6	9734.9	9880.5	10137.9	10409.2	11129.3	11753.7	10261.6
47.5°	9146.4	9242.2	9569.3	9886.5	10275.5	10443.1	10828.1	11233.0	12174.6	12858.9	11115.3
50°	9481.6	9539.4	9872.6	10389.2	10885.9	11101.4	11610.1	12194.6	13291.7	13950.0	11865.4
52.5°	9910.5	9934.4	10199.7	10887.9	11542.2	11809.6	12483.8	13166.1	14269.2	14897.6	12459.9
55°	10417.1	10377.3	10584.7	11416.6	12292.3	12641.4	13365.5	14149.5	15368.4	15663.6	12892.8
57.5°	10917.9	10856.0	11021.6	12058.9	13217.9	13638.8	14482.7	15162.9	16349.9	16379.8	13196.0
60°	11448.5	11402.6	11600.1	12813.0	14353.0	14851.7	15631.7	16214.2	17299.4	16878.5	13243.9
62.5°	11993.1	11919.3	12200.6	13660.8	15631.7	16084.5	16840.6	17331.3	18231.0	17064.0	12783.1
65°	12521.7	12487.8	12922.7	14668.2	17088.0	17602.6	18336.7	18669.9	18977.1	16784.7	11640.0
67.5°	13084.3	13152.1	13846.3	16012.7	18987.1	19633.4	20425.4	20112.2	19190.5	15462.1	9802.7
70°	13942.1	13986.0	15059.2	17774.2	21434.8	22214.7	22597.8	20624.8	18161.2	12950.6	7369.0
72.5°	14311.1	14504.6	16142.4	19623.4	24215.6	24692.4	23327.9	19481.8	15129.0	8797.3	3872.0
73°	14229.3	14460.7	16192.3	19904.7	24433.0	24933.7	23172.3	18893.3	14063.8	7576.5	3319.4
75°	13210.0	13495.2	15543.9	19669.3	24010.1	23710.9	20670.7	16102.5	9503.5	3445.1	1512.1
77.5°	10423.1	10504.9	12316.3	15883.1	18907.3	18352.7	15470.1	10064.1	3882.0	1280.7	857.8
80°	5228.5	5529.7	6942.1	9098.5	12643.4	12461.9	9764.8	4759.7	1617.8	752.1	568.5
82.5°	2515.5	2729.0	3381.3	4436.6	6986.0	6820.4	4835.5	2601.3	1027.4	438.9	335.1
85°	1619.8	1779.4	2152.5	2116.5	2872.6	2742.9	2172.4	1968.9	608.4	229.4	233.4
87.5°	1069.2	1171.0	1404.4	1123.1	1045.3	945.6	959.5	1109.1	119.7	87.8	31.9
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°	6206.0	6206.0	6206.0	6206.0	6206.0	6206.0	6206.0	6206.0	6206.0	6206.0	6206.0
2.5°	6138.2	6112.2	6026.5	5942.7	5862.9	5787.1	5737.2	5671.4	5627.5	5639.5	5657.4
5°	5984.6	5926.7	5775.1	5627.5	5487.9	5322.3	5188.6	5080.9	4999.1	4969.2	4963.2
7.5°	5823.0	5725.2	5507.8	5254.5	5017.1	4811.6	4574.2	4456.5	4318.9	4271.0	4255.0
10°	5725.2	5593.6	5288.4	4935.3	4578.2	4237.1	3979.7	3770.3	3580.8	3544.9	3526.9
12.5°	5697.3	5523.8	5112.8	4658.0	4183.2	3764.3	3383.3	3108.0	2924.5	2882.6	2820.7
15°	5681.4	5465.9	4949.2	4378.7	3776.3	3265.6	2864.6	2543.4	2375.9	2264.2	2266.2
17.5°	5667.4	5400.1	4765.7	4073.5	3425.2	2836.7	2393.8	2104.6	1951.0	1891.1	1885.1
20°	5647.4	5322.3	4554.3	3752.3	3024.2	2445.7	2044.7	1829.3	1725.6	1675.7	1673.7
22.5°	5639.5	5246.5	4346.8	3425.2	2669.1	2144.5	1813.3	1661.7	1595.9	1562.0	1562.0
25°	5659.4	5192.6	4129.4	3114.0	2353.9	1887.1	1653.7	1550.0	1512.1	1494.1	1488.2
27.5°	5721.3	5168.7	3913.9	2802.8	2064.7	1711.6	1546.0	1474.2	1446.3	1432.3	1434.3
30°	5838.9	5166.7	3702.5	2495.6	1849.2	1577.9	1460.2	1410.4	1388.4	1380.4	1378.4
32.5°	6028.5	5210.6	3495.0	2242.2	1667.7	1466.2	1380.4	1344.5	1334.6	1328.6	1326.6
35°	6349.6	5334.3	3289.5	2010.8	1528.1	1366.5	1304.6	1286.7	1272.7	1278.7	1280.7
37.5°	6782.5	5547.7	3094.0	1829.3	1422.3	1292.7	1240.8	1224.8	1216.9	1222.8	1228.8
40°	7363.0	5854.9	2930.4	1683.7	1346.5	1230.8	1184.9	1171.0	1163.0	1173.0	1175.0
42.5°	8003.4	6210.0	2794.8	1570.0	1284.7	1179.0	1135.1	1119.1	1113.1	1119.1	1121.1
45°	8661.7	6622.9	2725.0	1488.2	1232.8	1141.1	1095.2	1077.2	1063.3	1059.3	1065.3
47.5°	9310.0	6982.0	2723.0	1438.3	1190.9	1107.1	1057.3	1037.3	1019.4	1009.4	1007.4
50°	9838.6	7267.3	2770.9	1416.3	1155.0	1069.2	1019.4	999.4	975.5	955.5	959.5
52.5°	10237.6	7452.8	2792.8	1406.4	1135.1	1029.3	979.5	961.5	933.6	907.7	907.7
55°	10494.9	7496.7	2738.9	1396.4	1119.1	987.5	933.6	917.6	889.7	863.8	863.8
57.5°	10582.7	7361.0	2545.4	1372.5	1103.2	951.5	887.7	873.7	851.8	825.9	821.9
60°	10379.2	6902.2	2206.3	1300.6	1071.2	913.6	837.8	831.9	823.9	801.9	799.9
62.5°	9595.3	5928.7	1837.3	1206.9	1017.4	873.7	792.0	801.9	807.9	795.9	794.0
65°	8290.6	4813.6	1570.0	1077.2	945.6	817.9	742.1	768.0	784.0	784.0	780.0
67.5°	6724.7	3696.5	1322.6	965.5	855.8	742.1	686.2	706.2	718.1	714.2	724.1
70°	4779.7	2503.5	1077.2	837.8	742.1	656.3	614.4	614.4	606.4	602.4	602.4
72.5°	2318.0	1430.3	873.7	700.2	632.4	560.6	526.6	512.7	496.7	494.7	484.8
73°	1937.0	1282.7	833.9	674.3	606.4	546.6	508.7	486.7	476.8	468.8	466.8
75°	1179.0	973.5	696.2	568.5	516.7	470.8	436.9	416.9	407.0	401.0	399.0
77.5°	776.0	726.1	540.6	434.9	395.0	367.1	353.1	333.1	327.2	319.2	319.2
80°	578.5	554.6	387.0	307.2	283.3	259.3	255.3	251.4	235.4	225.4	221.4
82.5°	373.0	395.0	263.3	205.5	179.5	159.6	161.6	167.6	151.6	137.6	133.7
85°	265.3	285.3	159.6	93.8	75.8	65.8	73.8	65.8	67.8	53.9	43.9
87.5°	43.9	75.8	27.9	12.0	6.0	4.0	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)