

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: P652490

Luminaire Tested: **GALN-SA7B-840-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P652490  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA7B-840-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 33657.7 lumens  
Efficiency: N/A  
Efficacy: 117.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

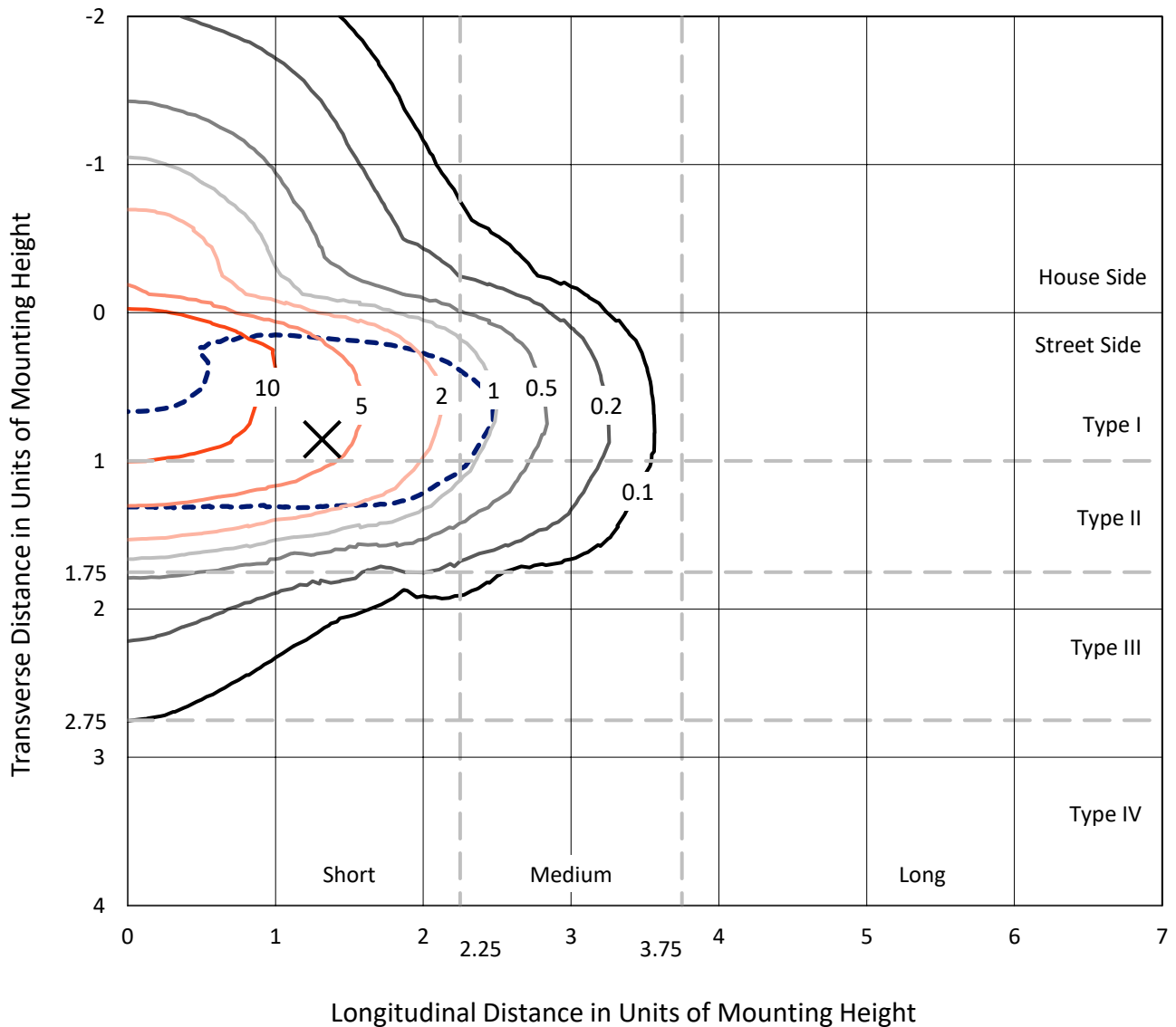
Input Watts (W): 286  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

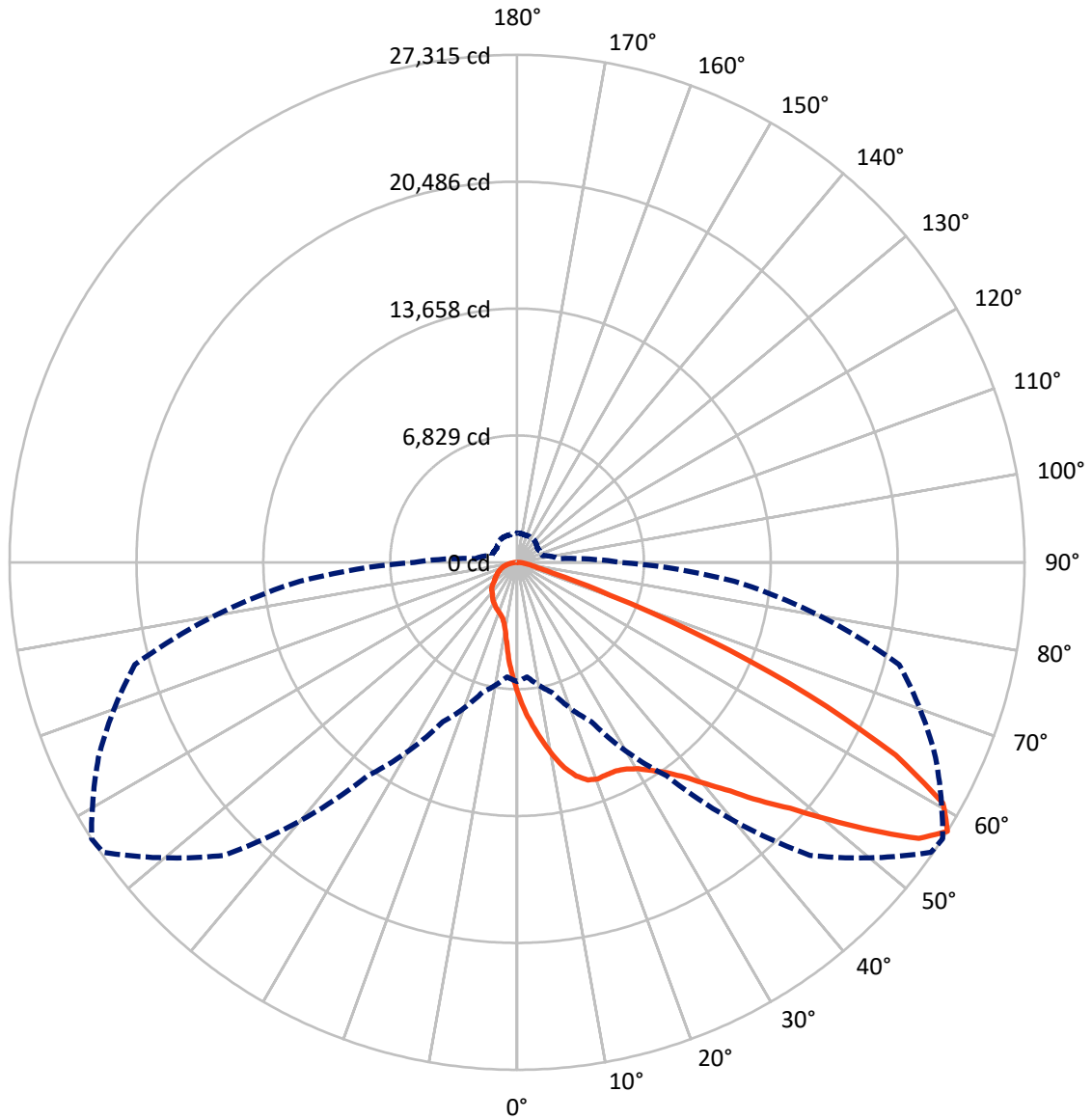
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 57.5-Deg Vertical

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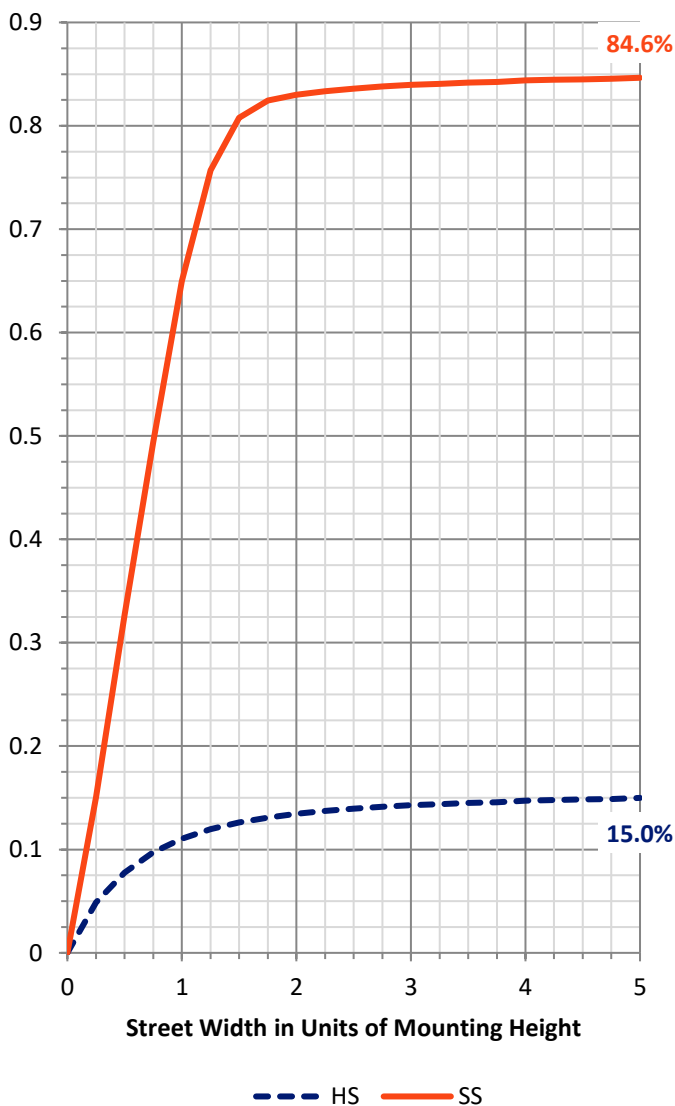
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5118.4	0.0	5118.4
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	28539.3	0.0	28539.3
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	33657.7	0.0	33657.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	679.6	2.0
10°-20°	2002.8	6.0
20°-30°	3325.7	9.9
30°-40°	5009.5	14.9
40°-50°	7521.3	22.3
50°-60°	8430.4	25.0
60°-70°	4933.9	14.7
70°-80°	1459.4	4.3
80°-90°	295.0	0.9
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°	33657.7	100.0
0°-180°	33657.7	100.0

**Coefficient of Utilization**



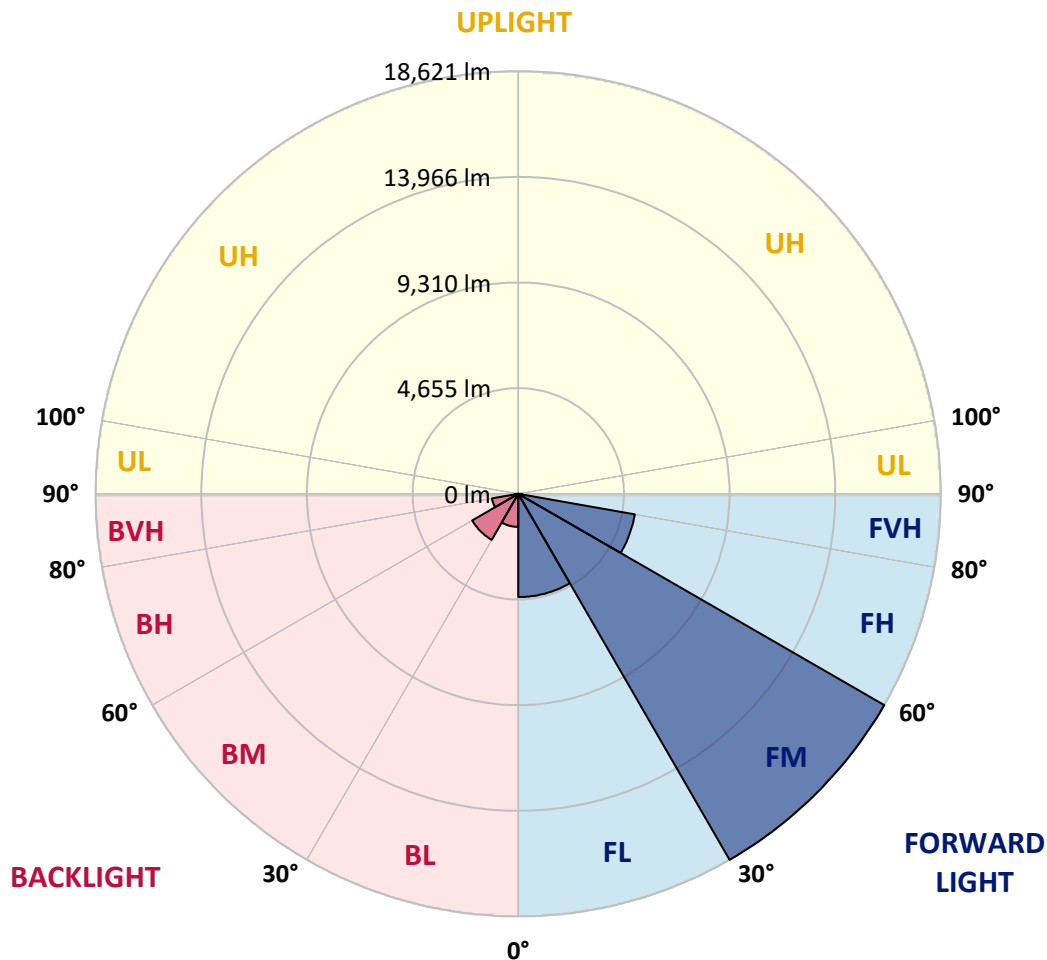
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4549.7	13.5			
FM (30°-60°)	18620.9	55.3			
FH (60°-80°)	5215.6	15.5			G3/7500
FVH (80°-90°)	153.1	0.5			G2/225
BL (0°-30°)	1458.4	4.3	B3/2500		
BM (30°-60°)	2340.3	7.0	B2/2500		
BH (60°-80°)	1177.7	3.5	B3/2500		G3/2500
BVH (80°-90°)	141.9	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	7071.1	7071.1	7071.1	7071.1	7071.1	7071.1	7071.1	7071.1	7071.1	7071.1	7071.1
2.5°	8786.3	8690.6	8615.0	8548.7	8462.1	8228.1	7994.1	7990.4	7804.4	7516.9	7222.2
5°	10217.9	10088.9	10105.5	9899.2	9692.8	9353.8	8858.2	8832.4	8436.3	7898.3	7351.1
7.5°	11150.1	11152.0	11100.4	10982.5	10759.6	10374.5	9812.5	9685.5	9134.6	8318.4	7498.5
10°	11102.2	11152.0	11238.5	11339.9	11408.1	11218.3	10706.1	10551.4	9834.7	8826.9	7662.5
12.5°	10464.7	10542.2	10665.6	10919.9	11330.7	11643.9	11468.9	11343.6	10645.3	9333.5	7843.1
15°	10066.9	10112.9	10181.1	10352.4	10794.6	11544.4	11997.6	11931.4	11409.9	9906.6	8045.7
17.5°	9945.2	9991.2	10013.4	10118.4	10433.4	11201.7	12205.9	12323.8	12087.9	10433.4	8250.2
20°	10066.9	10088.9	10088.9	10151.5	10398.5	11000.9	12196.6	12434.3	12644.4	11065.4	8441.8
22.5°	10385.5	10394.8	10381.9	10404.0	10588.2	11056.2	12110.1	12404.8	13093.9	11601.5	8591.1
25°	10903.2	10918.0	10833.3	10781.6	10916.2	11299.3	12157.9	12428.7	13445.7	12113.7	8690.6
27.5°	11491.0	11509.4	11406.2	11286.5	11349.1	11599.7	12345.9	12589.0	13709.2	12618.5	8753.2
30°	12211.3	12218.7	12045.6	11901.8	11861.3	12047.4	12666.4	12893.0	14037.1	13213.6	8847.2
32.5°	12948.3	13003.5	12780.7	12578.0	12509.8	12566.9	13140.0	13359.2	14427.8	13853.0	8998.2
35°	13950.6	13959.8	13692.7	13445.7	13221.0	13294.7	13746.1	13904.5	14967.5	14591.7	9212.0
37.5°	15201.6	15286.3	14917.8	14457.2	14180.9	14074.1	14479.3	14652.5	15724.8	15498.2	9534.3
40°	16590.7	16622.0	16307.0	16019.5	15514.8	15205.2	15485.2	15673.2	16658.9	16579.6	9908.4
42.5°	17464.0	17532.2	17556.1	17526.6	17147.1	16627.6	16734.4	16822.9	17764.3	17594.8	10291.6
45°	17758.8	17860.1	18202.8	18928.7	18969.3	18457.1	18208.3	18293.1	18969.3	18619.2	10658.2
47.5°	17270.5	17443.8	18075.7	19564.4	20679.0	20717.7	19967.8	19781.7	20067.3	19468.6	10923.5
50°	16008.5	16045.4	17012.6	19168.2	21480.4	22878.8	22103.2	21756.8	21110.1	20096.8	11105.9
52.5°	14055.5	14097.9	14908.6	17327.6	20986.7	24389.6	24601.4	23982.4	22169.4	20585.0	11225.7
55°	10433.4	10678.5	11570.2	13908.2	18646.8	24247.7	26587.5	26235.6	23449.9	20971.9	11413.6
57.5°	6415.2	6190.4	7248.0	9462.5	14024.3	22298.4	27201.1	27315.3	24859.4	21296.1	11728.7
60°	2951.5	2995.7	3432.4	4880.5	8548.7	17443.8	25620.2	26342.5	25638.7	21285.1	11807.9
62.5°	2034.0	1993.5	1882.9	2142.7	3898.5	11032.2	21640.7	22864.0	24076.3	20623.7	11492.9
65°	1818.4	1777.9	1564.2	1492.4	1790.8	4808.7	15732.2	17276.1	20271.8	18954.5	10707.9
67.5°	1698.7	1643.4	1422.3	1282.3	1278.7	1914.3	9276.4	11135.4	15035.7	16025.1	9278.2
70°	1573.4	1529.2	1309.9	1155.2	1088.8	1203.1	4077.2	5337.4	9762.8	11548.1	7227.7
72.5°	1448.1	1396.6	1199.4	1033.6	947.0	901.0	1562.3	2032.2	5516.1	6923.7	4431.0
75°	1265.7	1239.9	1072.3	935.9	842.0	727.7	991.2	1131.2	2638.3	3180.0	2223.8
77.5°	1107.3	1079.7	952.5	818.0	749.8	591.4	703.8	768.3	1112.8	1289.7	1004.1
80°	810.6	838.3	803.3	722.3	668.8	464.3	473.5	526.9	661.4	731.4	613.5
82.5°	514.0	565.6	619.1	556.4	506.6	366.7	327.9	348.2	451.4	479.0	272.7
85°	215.5	219.2	359.3	339.0	289.2	217.4	197.1	208.2	241.4	252.4	127.2
87.5°	82.9	81.1	127.2	117.9	90.2	62.7	62.7	70.0	95.8	88.5	40.5
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°	7071.1	7071.1	7071.1	7071.1	7071.1	7071.1	7071.1	7071.1	7071.1	7071.1	7071.1
2.5°	7095.0	6964.2	6704.5	6382.0	6146.2	5880.9	5646.9	5479.3	5416.6	5387.1	5331.9
5°	7089.5	6831.6	6293.6	5729.8	5276.6	4812.3	4419.9	4165.6	4143.5	3974.1	3957.5
7.5°	7091.4	6697.1	5840.4	5011.3	4320.4	3845.1	3520.8	3436.1	3334.7	3308.9	3321.9
10°	7096.9	6525.7	5354.0	4300.1	3631.4	3320.0	3198.4	3165.2	3168.9	3180.0	3181.8
12.5°	7104.3	6359.9	4849.2	3760.3	3244.4	3115.5	3102.6	3132.1	3163.4	3187.3	3192.9
15°	7113.4	6170.2	4357.2	3325.5	3051.0	3040.0	3082.3	3132.1	3176.3	3211.3	3216.8
17.5°	7102.4	5949.1	3944.5	3058.4	2944.2	2997.6	3067.5	3130.2	3170.7	3203.9	3207.6
20°	7076.6	5702.2	3546.6	2870.4	2877.8	2964.4	3040.0	3098.9	3143.2	3159.7	3172.6
22.5°	6977.1	5407.4	3200.3	2724.9	2798.6	2918.4	3008.6	3043.7	2993.9	2958.9	2968.1
25°	6807.6	5024.2	2877.8	2607.0	2726.8	2853.8	2945.9	2861.3	2820.7	2806.0	2813.3
27.5°	6595.8	4604.1	2634.6	2483.6	2634.6	2782.0	2756.2	2741.5	2723.1	2699.1	2704.7
30°	6367.3	4193.3	2428.3	2387.8	2535.1	2619.9	2630.9	2654.9	2634.6	2597.8	2612.5
32.5°	6155.4	3806.4	2271.6	2306.7	2465.1	2452.2	2535.1	2562.8	2468.8	2345.4	2350.8
35°	5974.9	3447.1	2153.7	2227.5	2345.4	2350.8	2433.8	2338.0	2236.6	2177.7	2181.4
37.5°	5838.6	3167.0	2076.3	2159.3	2192.4	2262.5	2218.2	2168.5	2155.6	2115.0	2116.9
40°	5757.5	2922.1	2026.6	2105.9	2100.3	2148.3	2006.4	2056.1	2074.5	2061.6	2063.5
42.5°	5676.4	2748.8	1975.0	2032.2	2030.3	1936.3	1905.0	1947.4	1995.3	2000.8	1997.1
45°	5611.9	2614.3	1921.6	1919.8	1956.6	1809.2	1800.0	1825.8	1894.0	1927.2	1925.3
47.5°	5540.1	2502.0	1840.5	1789.0	1800.0	1730.0	1715.3	1726.3	1809.2	1862.6	1877.4
50°	5449.8	2389.6	1739.2	1669.2	1623.1	1656.3	1660.0	1661.8	1744.7	1805.5	1818.4
52.5°	5377.9	2304.8	1623.1	1571.6	1516.3	1590.0	1617.6	1621.3	1671.1	1720.8	1730.0
55°	5420.3	2256.9	1508.9	1472.1	1422.3	1521.8	1575.3	1582.6	1593.7	1630.5	1636.1
57.5°	5547.4	2268.0	1416.8	1368.9	1332.1	1440.7	1531.0	1536.6	1529.2	1573.4	1580.7
60°	5586.1	2262.5	1348.6	1254.7	1232.6	1354.2	1466.5	1477.6	1475.8	1540.2	1553.2
62.5°	5424.0	2192.4	1280.4	1158.9	1144.1	1265.7	1376.3	1420.4	1429.7	1521.8	1538.4
65°	5042.6	2048.8	1190.2	1057.6	1057.6	1171.8	1289.7	1350.5	1376.3	1499.7	1518.1
67.5°	4539.6	1879.2	1098.1	970.9	967.2	1081.4	1197.6	1260.2	1300.7	1468.4	1479.4
70°	3767.7	1650.8	983.8	877.0	877.0	980.2	1085.1	1160.7	1219.7	1409.4	1409.4
72.5°	2581.2	1372.6	845.6	770.1	772.0	867.7	974.6	1059.4	1129.4	1291.5	1295.2
75°	1632.4	1072.3	694.6	655.9	663.3	753.5	864.0	952.5	1092.5	1276.8	1282.3
77.5°	867.7	753.5	552.7	543.5	552.7	635.6	759.1	880.7	1096.2	1107.3	1088.8
80°	562.0	534.3	436.6	418.2	421.9	512.2	676.2	836.5	880.7	891.7	851.2
82.5°	305.9	339.0	309.5	291.1	291.1	399.8	576.7	665.1	631.9	525.1	501.2
85°	130.8	158.4	160.3	140.0	134.5	246.9	386.9	363.0	337.2	322.4	318.7
87.5°	36.8	51.6	51.6	38.7	29.5	68.2	77.4	22.1	0.0	1.9	3.7
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)