

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: P453230

Luminaire Tested: **GALN-SA4B-727-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453230  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA4B-727-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19265 lumens  
Efficiency: N/A  
Efficacy: 117.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G3

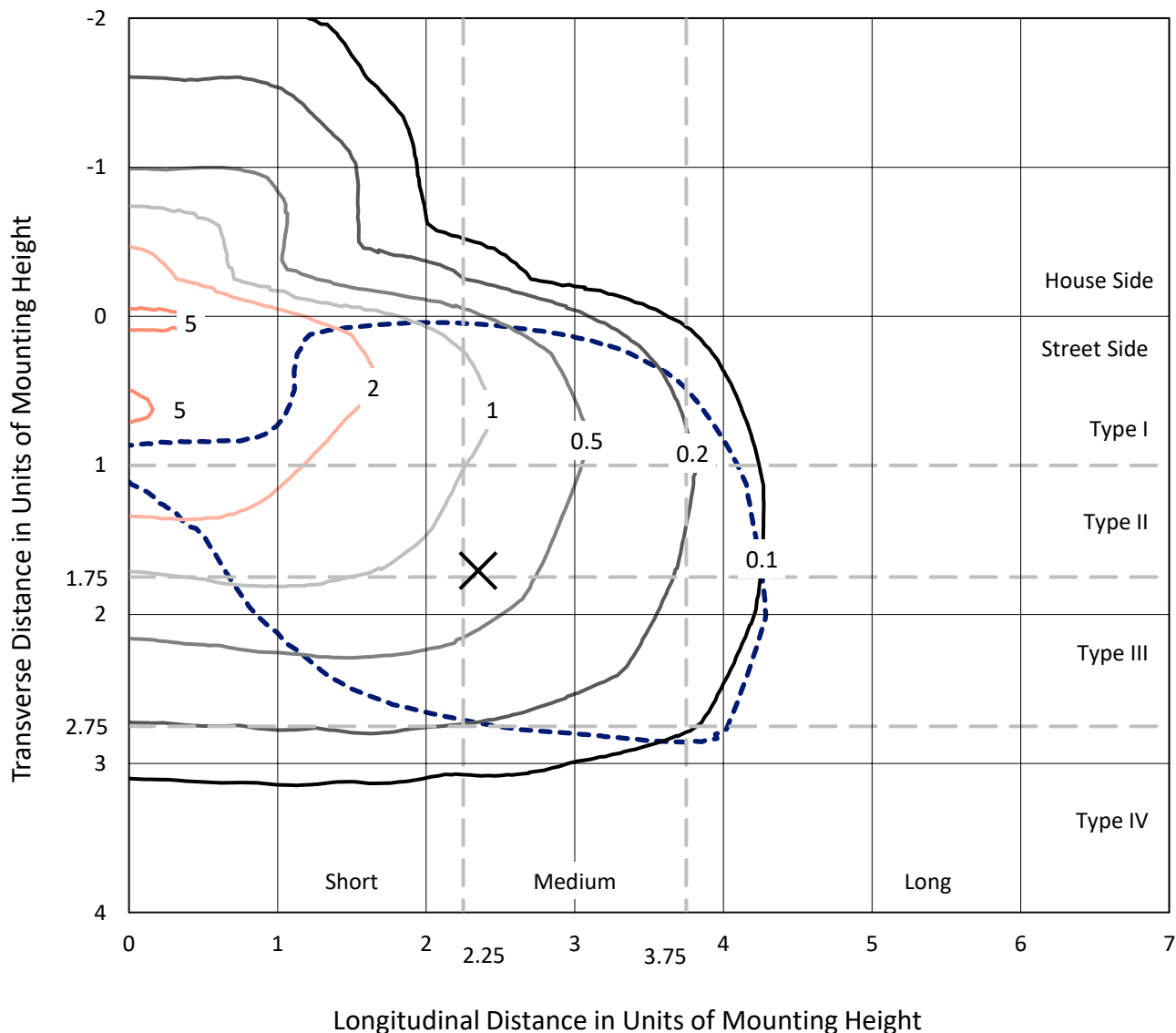
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

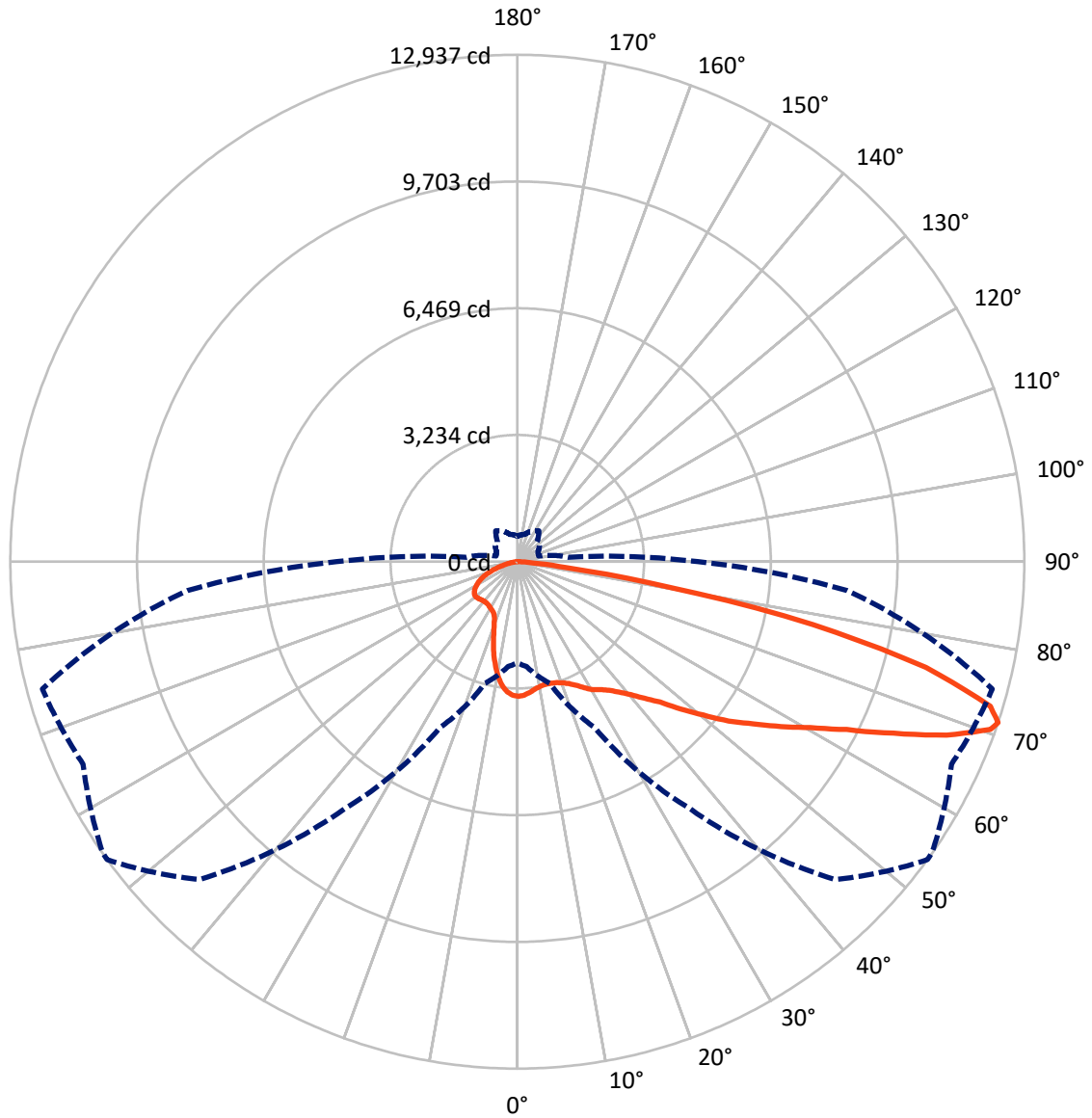
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3478.2	0.0	3478.2
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	15786.8	0.0	15786.8
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	19265.0	0.0	19265.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	306.3	1.6
10°-20°	808.8	4.2
20°-30°	1346.7	7.0
30°-40°	1991.3	10.3
40°-50°	2804.8	14.6
50°-60°	3755.8	19.5
60°-70°	4733.8	24.6
70°-80°	3233.2	16.8
80°-90°	284.3	1.5
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°	19265.0	100.0
0°-180°	19265.0	100.0



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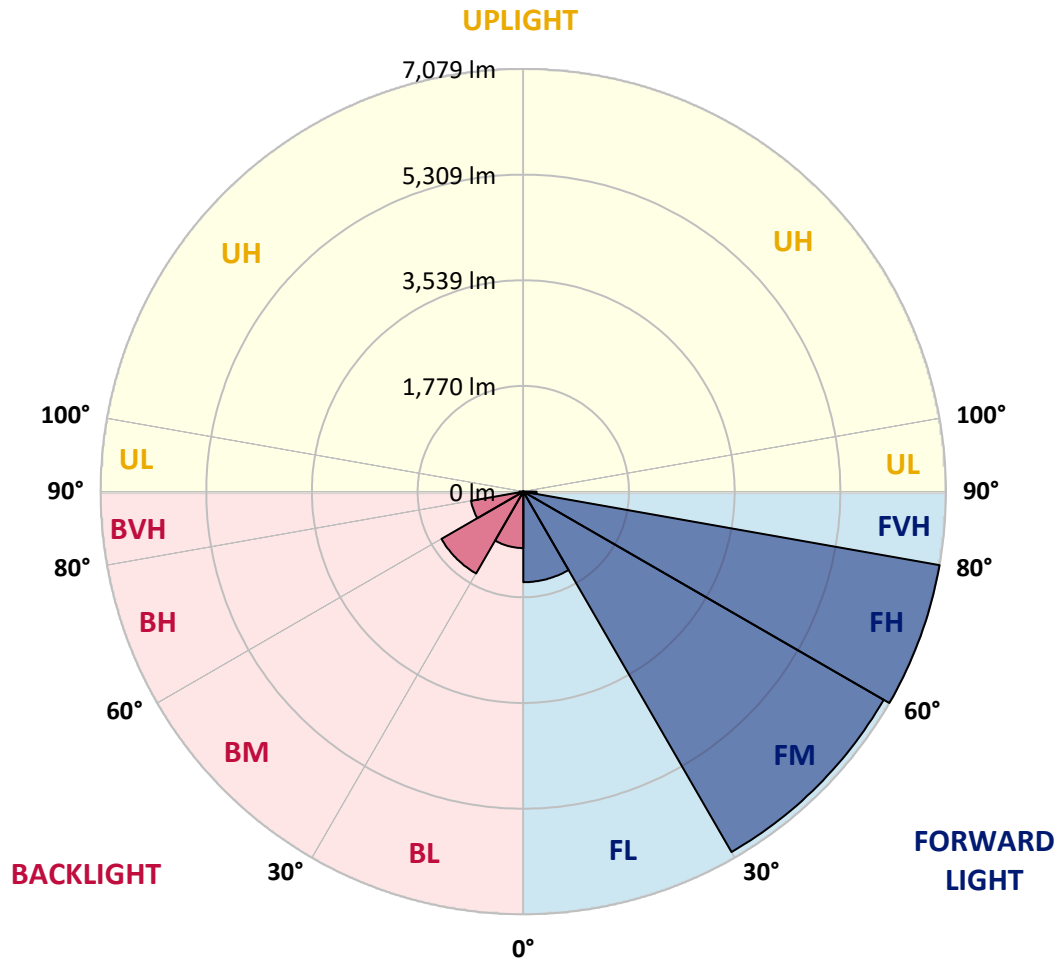
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1516.5	7.9			
FM	(30°-60°)	6969.4	36.2			
FH	(60°-80°)	7078.7	36.7			G3/7500
FVH	(80°-90°)	222.3	1.2			G2/225
BL	(0°-30°)	945.3	4.9	B2/1000		
BM	(30°-60°)	1582.5	8.2	B2/2500		
BH	(60°-80°)	888.3	4.6	B2/1000		G2/1000
BVH	(80°-90°)	62.1	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	3437.2	3437.2	3437.2	3437.2	3437.2	3437.2	3437.2	3437.2	3437.2	3437.2	3437.2
2.5°	3320.6	3336.2	3340.4	3350.8	3372.6	3390.3	3408.0	3405.9	3430.9	3441.3	3450.7
5°	3172.8	3177.0	3192.6	3213.4	3251.9	3300.8	3348.7	3349.7	3411.1	3460.1	3484.0
7.5°	3064.6	3078.1	3088.6	3110.4	3151.0	3204.1	3280.0	3286.3	3395.5	3492.3	3543.3
10°	2993.9	3009.5	3020.9	3048.0	3088.6	3147.9	3230.1	3241.5	3384.1	3543.3	3632.8
12.5°	2929.3	2944.9	2955.4	2990.7	3043.8	3116.7	3209.3	3222.8	3388.3	3602.6	3730.6
15°	2968.9	2981.4	2977.2	2987.6	3023.0	3106.2	3217.6	3231.1	3403.9	3659.9	3827.4
17.5°	3144.7	3155.2	3120.8	3081.3	3064.6	3126.0	3243.6	3258.2	3435.1	3719.2	3926.3
20°	3403.9	3432.0	3357.0	3268.6	3188.5	3196.8	3297.7	3313.3	3478.8	3778.5	4027.2
22.5°	3741.0	3761.8	3670.3	3524.6	3376.8	3300.8	3378.9	3388.3	3544.3	3855.5	4137.5
25°	4137.5	4150.0	4023.0	3835.7	3622.4	3478.8	3490.2	3506.9	3652.6	3942.9	4235.3
27.5°	4522.5	4562.1	4415.3	4186.4	3905.4	3666.1	3643.2	3653.6	3770.2	3991.8	4303.0
30°	4979.4	4976.2	4821.2	4555.8	4195.8	3870.1	3787.8	3785.8	3833.6	4015.7	4351.9
32.5°	5343.6	5386.2	5234.3	4945.0	4527.7	4081.3	3887.7	3883.6	3882.5	4057.4	4424.7
35°	5757.7	5764.0	5624.5	5333.2	4886.7	4346.7	4027.2	4006.4	3982.4	4146.9	4523.6
37.5°	6128.2	6157.3	6029.3	5702.6	5239.5	4622.4	4218.7	4205.1	4132.3	4301.9	4681.7
40°	6417.5	6439.3	6362.3	6051.2	5587.1	4920.0	4462.2	4437.2	4348.7	4555.8	4893.0
42.5°	6512.2	6556.9	6587.1	6434.1	5986.7	5272.8	4761.9	4730.6	4663.0	4940.9	5136.5
45°	6519.5	6590.2	6749.4	6756.7	6388.4	5695.3	5111.5	5089.7	5084.5	5434.1	5478.9
47.5°	6464.3	6536.1	6803.6	6948.2	6746.3	6122.0	5616.2	5581.9	5585.0	6043.9	5862.8
50°	6331.1	6416.5	6741.1	7071.0	7026.3	6565.3	6149.0	6137.6	6202.1	6740.1	6261.4
52.5°	6080.3	6183.4	6676.6	7148.0	7234.4	6947.2	6754.7	6722.4	6885.8	7495.6	6697.4
55°	5386.2	5541.3	6440.4	7190.7	7432.1	7312.4	7299.9	7358.2	7574.7	8319.7	7177.1
57.5°	5024.1	5140.7	5927.4	7198.0	7681.8	7737.0	7936.8	7951.4	8330.1	9194.9	7719.3
60°	4826.4	4929.4	5646.4	7150.1	8030.4	8262.5	8588.2	8640.3	9067.9	10142.9	8281.2
62.5°	4653.6	4742.1	5477.8	6984.6	8423.8	9041.9	9432.2	9457.1	9905.6	11189.8	8835.9
65°	4246.8	4347.7	5138.6	6819.2	8763.0	10015.9	10551.9	10522.7	10797.5	12093.0	9183.5
67.5°	3698.4	3826.4	4504.8	6247.9	8930.6	11080.5	11813.1	11776.7	11677.8	12685.1	9283.4
70°	2998.0	3066.7	3694.2	5260.3	8261.5	11639.3	12809.0	12770.5	12223.1	12763.2	8810.9
71°	2579.7	2686.9	3216.6	4672.4	7704.7	11468.7	12937.0	12926.6	12224.1	12547.8	8455.0
72.5°	2013.6	2079.2	2547.4	3620.3	6548.6	10498.8	12620.6	12660.2	11958.8	11949.4	7721.4
75°	1273.7	1302.9	1598.4	2131.2	3593.3	7435.2	10773.5	10880.7	10618.5	9780.8	5742.1
77.5°	739.9	777.3	957.4	1256.0	1552.6	4035.5	7708.9	7825.4	7378.0	5385.2	2350.8
80°	430.8	472.4	630.6	729.5	712.8	1497.4	3925.2	4124.0	3194.7	1360.1	659.8
82.5°	239.3	267.4	443.3	444.3	379.8	489.1	1235.2	1292.4	911.6	548.4	269.5
85°	173.8	196.7	286.2	259.1	182.1	210.2	429.8	450.6	368.4	231.0	87.4
87.5°	61.4	87.4	157.1	124.9	49.9	43.7	123.8	100.9	93.7	64.5	19.8
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°	3437.2	3437.2	3437.2	3437.2	3437.2	3437.2	3437.2	3437.2	3437.2	3437.2	3437.2
2.5°	3455.9	3458.0	3447.6	3428.8	3410.1	3386.2	3359.1	3338.3	3328.9	3327.9	3326.9
5°	3493.4	3498.6	3459.0	3400.7	3336.2	3257.1	3189.5	3112.5	3092.7	3061.5	3070.9
7.5°	3553.7	3550.6	3472.5	3348.7	3197.8	3030.3	2888.8	2806.5	2721.2	2697.3	2698.3
10°	3640.1	3620.3	3472.5	3242.6	2990.7	2742.0	2544.3	2419.4	2351.8	2295.6	2274.8
12.5°	3731.7	3681.7	3439.2	3093.8	2724.3	2419.4	2207.2	2038.6	1994.9	1949.1	1950.1
15°	3819.1	3735.8	3373.7	2884.6	2437.1	2075.0	1868.9	1768.0	1754.5	1759.7	1758.6
17.5°	3898.2	3774.3	3273.8	2651.5	2102.0	1779.5	1670.2	1677.5	1713.9	1739.9	1743.0
20°	3978.3	3797.2	3125.0	2339.3	1785.7	1600.5	1604.6	1661.9	1717.0	1752.4	1757.6
22.5°	4054.2	3807.6	2950.2	2037.5	1556.8	1524.5	1585.9	1647.3	1701.4	1735.8	1741.0
25°	4104.2	3783.7	2702.5	1722.2	1444.4	1497.4	1562.0	1614.0	1659.8	1695.2	1703.5
27.5°	4117.7	3706.7	2395.5	1467.3	1392.3	1471.4	1530.7	1569.3	1604.6	1637.9	1644.2
30°	4110.4	3593.3	2058.3	1317.4	1362.2	1441.3	1487.0	1515.1	1557.8	1583.8	1589.0
32.5°	4099.0	3461.1	1706.6	1237.3	1337.2	1413.2	1440.2	1465.2	1464.1	1453.7	1461.0
35°	4103.2	3302.9	1421.5	1189.4	1315.3	1392.3	1415.2	1384.0	1294.5	1290.4	1286.2
37.5°	4125.0	3146.8	1214.4	1156.1	1303.9	1389.2	1401.7	1258.1	1179.0	1142.6	1133.2
40°	4181.2	2964.7	1078.1	1131.2	1302.9	1413.2	1340.3	1194.6	1042.7	971.9	966.7
42.5°	4256.1	2785.7	994.8	1115.5	1315.3	1449.6	1315.3	1105.1	939.7	898.1	891.8
45°	4367.5	2580.7	949.0	1108.3	1334.1	1463.1	1307.0	1039.6	898.1	864.8	864.8
47.5°	4493.4	2385.1	924.1	1103.1	1358.0	1453.7	1233.1	1018.8	878.3	882.4	902.2
50°	4618.3	2215.5	905.3	1091.6	1378.8	1448.5	1203.0	1017.7	883.5	936.6	971.9
52.5°	4762.9	2095.8	882.4	1072.9	1378.8	1415.2	1193.6	1038.5	898.1	913.7	929.3
55°	4937.7	2058.3	853.3	1032.3	1353.8	1332.0	1188.4	1068.7	908.5	872.0	878.3
57.5°	5168.7	2118.7	825.2	981.3	1296.6	1245.6	1186.3	1077.0	884.5	854.3	848.1
60°	5437.2	2238.4	816.9	929.3	1218.6	1171.7	1173.8	1053.1	851.2	820.0	825.2
62.5°	5625.6	2310.2	811.7	889.7	1133.2	1090.6	1143.6	1024.0	836.7	809.6	814.8
65°	5625.6	2222.8	763.8	829.4	1022.9	992.7	1107.2	987.5	817.9	786.7	781.5
67.5°	5412.3	1967.8	691.0	738.8	901.2	881.4	1056.2	943.8	789.8	765.9	753.4
70°	4856.6	1492.2	599.4	632.7	747.2	764.9	990.7	884.5	743.0	713.9	695.1
71°	4612.0	1299.7	560.9	578.6	687.8	713.9	959.4	859.6	722.2	680.6	647.3
72.5°	4140.6	1094.7	502.6	509.9	587.9	634.8	893.9	811.7	682.6	623.3	585.9
75°	3145.8	799.2	404.8	400.6	435.0	503.7	756.5	723.2	598.4	518.2	496.4
77.5°	1359.0	435.0	302.8	305.9	295.5	381.9	595.2	621.2	513.0	421.5	401.7
80°	412.1	250.8	207.1	211.2	197.7	256.0	419.4	487.0	412.1	327.8	300.7
82.5°	211.2	149.8	141.5	139.4	125.9	144.6	253.9	333.0	294.5	205.0	181.1
85°	91.6	80.1	69.7	67.6	59.3	52.0	90.5	166.5	156.1	114.5	109.3
87.5°	22.9	20.8	13.5	12.5	7.3	1.0	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)