

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: P301170

Luminaire Tested: **GLNA-AF-06-LED-E1-T3R-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301170  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194839)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-06-LED-E1-T3R-7027-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
Roadway OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

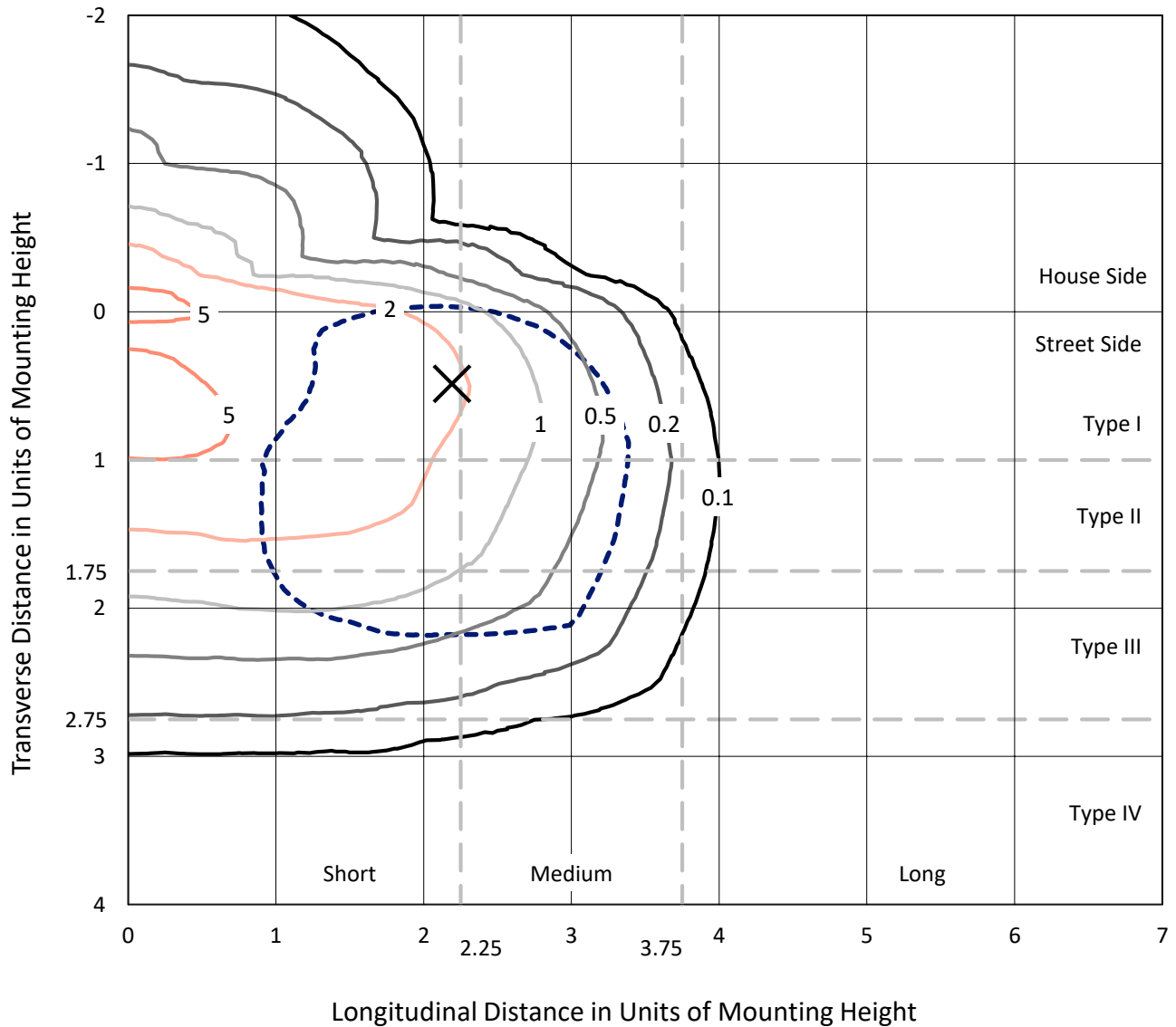
Lumens per Lamp: N/A  
Luminaire Lumens: 25460.6 lumens  
Efficiency: N/A  
Efficacy: 102.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 249  
Input Voltage (V): NR  
Input Current (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: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

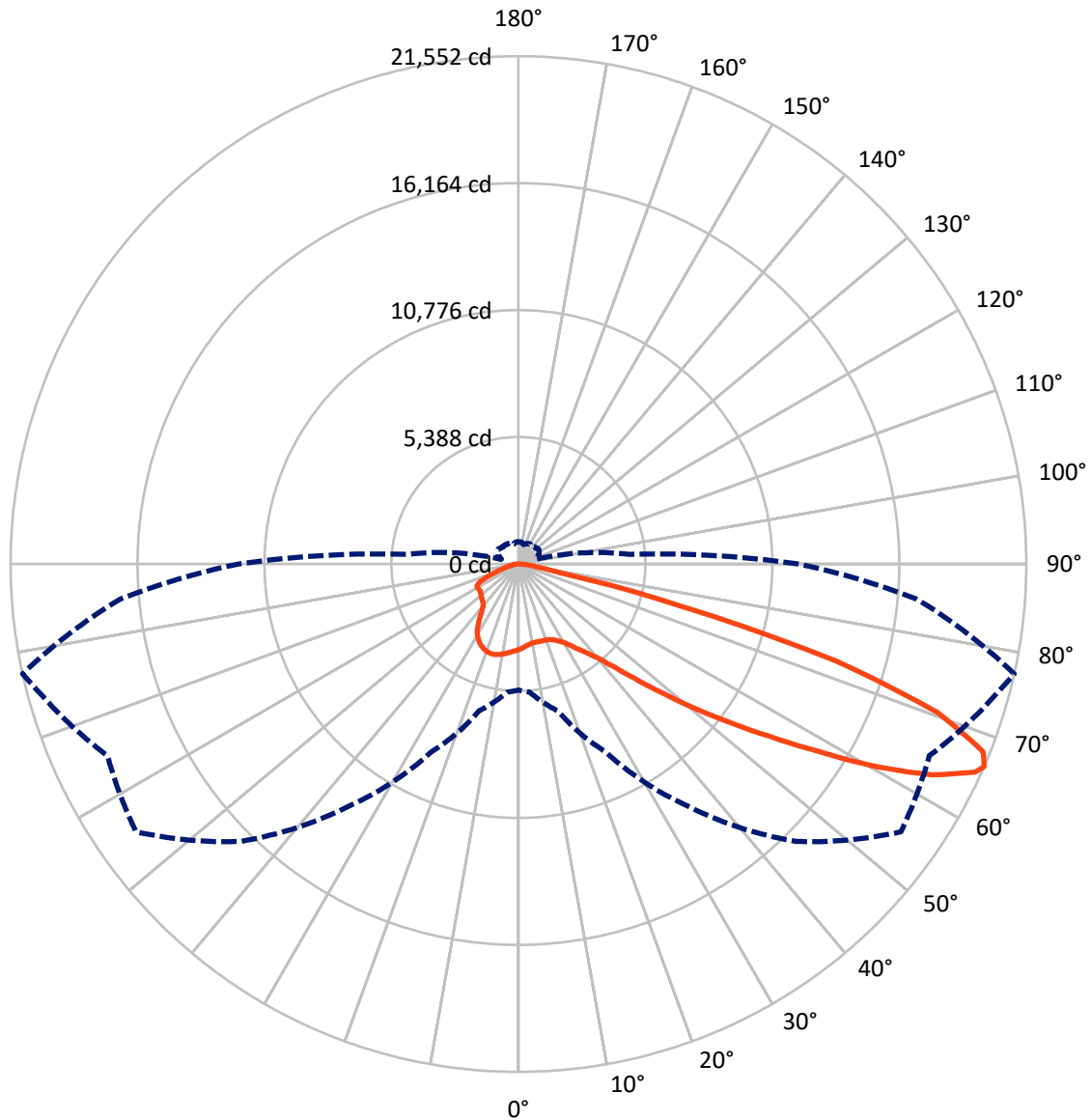
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc  
 Type III - Short - Full Cutoff

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CATALOG NUMBER: GLNA-AF-06-LED-E1-T3R-7027-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

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CATALOG NUMBER: GLNA-AF-06-LED-E1-T3R-7027-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4349.8	0.0	4349.8
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	21110.8	0.0	21110.8
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	25460.6	0.0	25460.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	324.2	1.3
10°-20°	914.5	3.6
20°-30°	1560.7	6.1
30°-40°	2498.4	9.8
40°-50°	3859.8	15.2
50°-60°	5474.6	21.5
60°-70°	7323.5	28.8
70°-80°	3180.5	12.5
80°-90°	324.3	1.3
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°	25460.6	100.0
0°-180°	25460.6	100.0



REPORT NUMBER: P301170

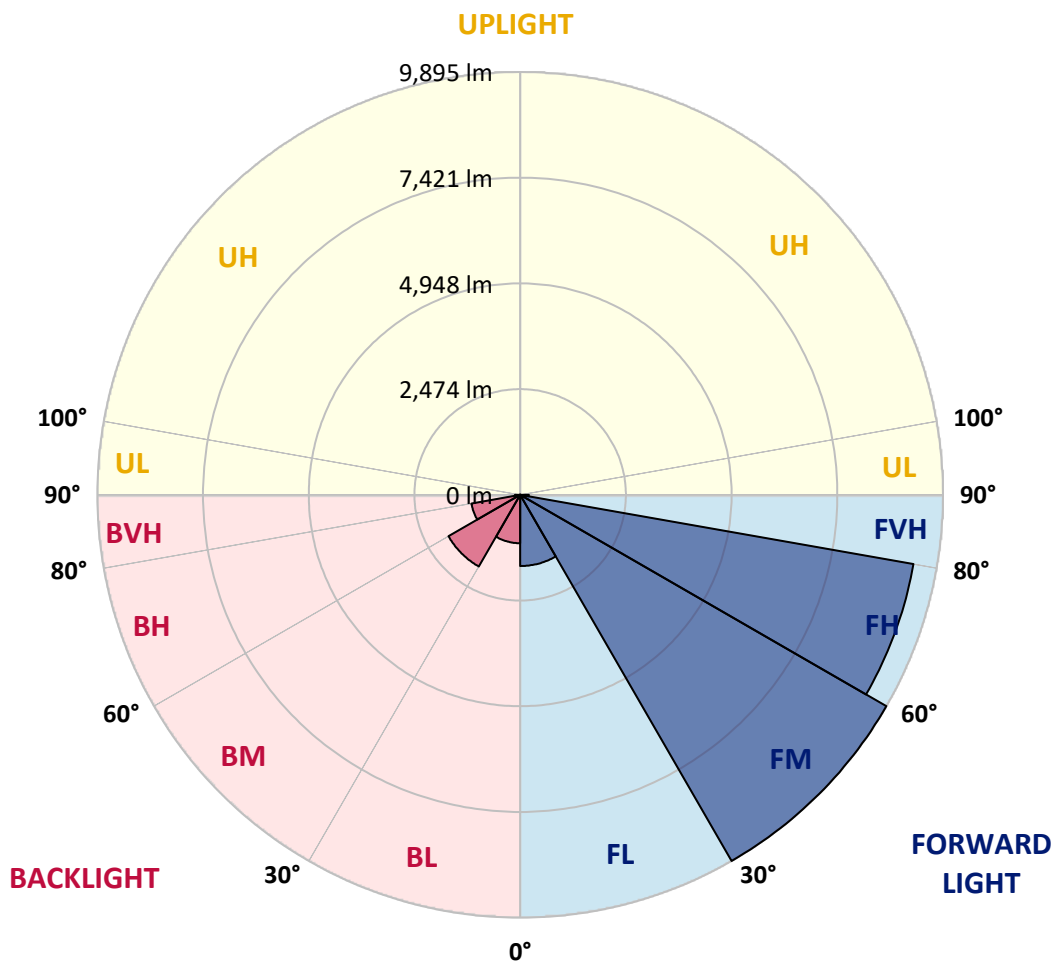
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1666.5	6.5			
FM	(30°-60°)	9895.3	38.9			
FH	(60°-80°)	9345.6	36.7			G4/12000
FVH	(80°-90°)	203.4	0.8			G2/225
BL	(0°-30°)	1132.9	4.4	B3/2500		
BM	(30°-60°)	1937.6	7.6	B2/2500		
BH	(60°-80°)	1158.4	4.5	B3/2500		G3/2500
BVH	(80°-90°)	120.9	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	3628.2	3628.2	3628.2	3628.2	3628.2	3628.2	3628.2	3628.2	3628.2	3628.2	3628.2
2.5°	3209.7	3231.2	3249.4	3266.2	3299.7	3355.0	3418.8	3470.5	3545.2	3559.7	3599.4
5°	2915.0	2915.0	2929.2	2954.7	3000.3	3083.3	3170.0	3285.5	3447.9	3486.2	3592.2
7.5°	2771.9	2773.0	2781.4	2802.8	2842.5	2918.3	3013.4	3149.6	3369.6	3433.3	3613.6
10°	2824.7	2812.7	2794.5	2783.9	2789.7	2834.2	2924.5	3076.0	3321.5	3403.1	3662.1
12.5°	3120.5	3097.9	3035.2	2952.2	2872.8	2840.4	2893.2	3041.1	3301.1	3396.2	3725.8
15°	3604.2	3594.7	3477.8	3305.9	3113.5	2952.2	2916.1	3027.9	3303.3	3404.6	3801.6
17.5°	4210.6	4197.2	4043.5	3793.2	3479.2	3165.3	2996.6	3038.9	3311.7	3418.8	3874.8
20°	4822.9	4781.8	4616.0	4317.7	3914.5	3454.8	3130.3	3066.6	3322.6	3434.4	3952.0
22.5°	5280.1	5246.2	5097.2	4807.3	4342.9	3790.7	3309.5	3114.6	3357.6	3480.3	4046.7
25°	5681.8	5684.0	5536.1	5256.0	4775.9	4146.9	3540.4	3243.2	3446.5	3573.9	4176.8
27.5°	6178.6	6149.9	6011.5	5733.5	5204.3	4506.4	3819.4	3420.2	3579.0	3707.6	4347.6
30°	6772.7	6752.3	6592.4	6277.4	5679.3	4892.5	4138.2	3625.7	3749.9	3883.2	4571.2
32.5°	7471.7	7462.2	7296.1	6890.7	6227.8	5347.4	4512.6	3897.8	4004.8	4143.3	4892.5
35°	8292.3	8293.4	8097.5	7610.1	6828.1	5876.7	4936.9	4247.8	4315.2	4459.4	5275.3
37.5°	8797.5	8858.7	8785.5	8288.7	7507.8	6468.6	5488.0	4712.2	4668.9	4814.6	5685.5
40°	8905.7	8980.4	9212.4	8960.0	8268.3	7120.6	5976.5	5158.4	5104.5	5282.2	6213.6
42.5°	8754.2	8857.6	9348.6	9526.4	9075.5	7924.1	6633.2	5821.3	5752.8	5992.2	6870.3
45°	8663.9	8741.1	9308.9	9821.4	9775.5	8832.5	7469.5	6653.6	6628.5	6942.5	7628.3
47.5°	8507.6	8577.5	9123.5	9889.9	10187.1	9664.8	8474.1	7671.7	7720.8	8132.4	8483.6
50°	8591.8	8620.5	8916.7	9715.4	10306.2	10274.9	9596.3	8850.4	9019.0	9532.6	9452.1
52.5°	8579.7	8654.4	8892.6	9429.1	10321.9	10651.5	10701.8	10165.3	10520.4	11109.8	10526.2
55°	6936.6	7073.6	8610.0	9357.0	10376.9	11020.5	11686.0	11551.2	12212.7	12899.6	11738.8
57.5°	6623.7	6710.4	7562.0	9508.5	10670.5	11725.7	12780.5	13076.7	14183.2	14980.9	13216.2
60°	6562.2	6669.3	7551.1	9693.9	11266.0	12874.5	14403.6	14923.4	16581.0	17454.5	14929.2
62.5°	6371.0	6486.4	7480.1	9669.5	12111.8	14463.7	16481.2	16886.6	18854.6	19704.1	16362.1
65°	5764.9	5873.0	6901.7	9281.3	12682.2	16160.0	18939.9	18686.4	20649.6	21288.1	17076.4
66°	5349.6	5455.6	6445.6	8824.1	12549.6	16641.1	19811.1	19243.3	21051.4	21551.9	16936.9
67.5°	4590.5	4673.6	5560.2	7800.3	11845.9	16775.9	20543.6	19661.8	21093.3	21270.3	16139.6
70°	2900.5	2924.5	3613.6	5384.6	8967.3	14548.9	19428.3	18622.6	19354.0	18875.0	13530.1
72.5°	1258.5	1250.1	1734.9	2739.1	5076.8	9762.4	15716.0	15365.9	15182.0	14089.6	9471.4
75°	700.1	709.9	901.1	1271.6	2063.1	4795.3	10280.7	9838.2	8306.5	7088.2	4294.8
77.5°	561.7	575.1	747.1	902.2	926.3	1672.2	4810.9	3914.5	2356.6	1891.1	1193.3
80°	444.0	468.1	652.0	702.6	624.3	689.1	1554.2	1242.8	932.5	855.2	618.5
82.5°	351.1	368.2	559.5	531.8	436.7	464.4	744.5	725.6	606.5	552.2	357.3
85°	252.8	283.7	459.7	400.7	286.3	312.9	494.3	473.9	347.5	283.7	157.7
87.5°	103.4	134.8	324.9	265.9	159.9	145.7	246.6	232.0	164.6	120.2	78.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P301170

CATALOG NUMBER: GLNA-AF-06-LED-E1-T3R-7027-800

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3628.2	3628.2	3628.2	3628.2	3628.2	3628.2	3628.2	3628.2	3628.2	3628.2	3628.2
2.5°	3624.6	3653.4	3690.9	3713.8	3725.8	3734.2	3747.3	3746.2	3749.9	3751.0	3755.7
5°	3648.6	3696.7	3751.0	3765.5	3765.5	3752.1	3738.9	3717.1	3708.7	3706.5	3708.7
7.5°	3711.3	3764.1	3811.1	3794.3	3758.3	3705.1	3636.6	3576.5	3544.1	3533.2	3531.0
10°	3790.7	3854.4	3873.7	3810.0	3704.0	3576.5	3440.6	3341.9	3285.5	3269.8	3265.1
12.5°	3886.8	3946.9	3920.7	3785.9	3589.6	3384.2	3196.2	3038.9	2920.9	2883.7	2881.2
15°	3992.8	4039.8	3946.9	3711.3	3418.8	3115.7	2781.4	2509.6	2362.8	2315.9	2312.2
17.5°	4091.5	4115.6	3931.3	3581.2	3167.5	2676.8	2232.8	2023.4	1973.1	1985.1	1987.3
20°	4175.7	4175.7	3878.5	3394.7	2771.9	2098.0	1817.6	1814.3	1850.4	1886.4	1893.7
22.5°	4268.2	4212.8	3785.9	3131.4	2211.0	1716.7	1675.9	1709.4	1750.2	1789.9	1796.1
25°	4382.6	4243.1	3657.0	2732.2	1738.2	1559.0	1574.6	1602.3	1622.7	1648.2	1651.8
27.5°	4510.0	4281.3	3487.6	2182.2	1508.7	1460.6	1472.6	1482.1	1479.6	1489.4	1491.6
30°	4662.7	4326.1	3255.2	1705.7	1413.6	1376.1	1354.6	1346.2	1346.2	1361.9	1367.7
32.5°	4867.4	4392.0	2922.0	1461.7	1367.7	1316.0	1246.4	1215.1	1227.1	1279.9	1292.0
35°	5092.5	4463.1	2471.0	1378.7	1358.3	1288.3	1180.1	1122.2	1123.7	1172.9	1188.5
37.5°	5337.6	4553.4	1976.4	1363.0	1379.8	1289.8	1145.2	1065.8	1033.4	1033.4	1039.5
40°	5651.6	4645.9	1600.1	1373.9	1425.6	1304.0	1127.3	1021.3	929.9	932.5	937.2
42.5°	6060.6	4725.3	1398.0	1396.5	1481.0	1323.3	1125.9	962.3	882.9	937.2	986.4
45°	6515.6	4765.0	1308.7	1417.3	1525.4	1335.3	1106.9	952.9	889.1	1050.1	1144.1
47.5°	7038.6	4742.1	1259.6	1424.2	1536.4	1335.3	1085.1	975.8	931.0	1216.2	1325.8
50°	7612.7	4676.1	1211.5	1410.0	1532.7	1332.8	1105.5	998.4	946.7	1245.0	1320.7
52.5°	8287.6	4620.8	1160.8	1378.7	1507.2	1319.7	1129.5	988.9	897.5	1132.1	1184.9
55°	9057.3	4636.4	1104.4	1334.2	1467.5	1294.5	1121.1	950.3	845.8	997.3	1029.7
57.5°	10041.4	4822.9	1037.0	1277.8	1413.6	1252.3	1091.3	932.5	830.1	904.8	924.1
60°	11139.6	5147.5	952.9	1220.9	1346.2	1184.9	1068.3	940.8	837.4	897.5	907.0
62.5°	11945.7	5336.5	880.7	1137.9	1254.8	1110.2	1039.5	951.4	856.7	922.6	920.4
65°	12164.6	5026.2	790.4	1016.6	1131.0	1032.3	1003.1	963.4	865.1	943.0	932.5
66°	11857.9	4691.8	750.7	960.1	1068.3	993.7	985.3	962.3	861.4	945.6	927.4
67.5°	11113.4	4005.9	682.2	877.1	968.5	936.1	956.5	951.4	851.6	943.0	917.9
70°	9063.4	2733.3	583.5	730.3	806.1	823.9	901.1	913.2	820.3	901.1	845.8
72.5°	6332.7	1665.0	516.1	566.8	652.0	702.6	825.4	860.0	778.4	786.8	733.9
75°	3060.4	884.4	468.1	439.3	506.3	587.2	733.9	787.9	712.1	658.2	638.9
77.5°	954.0	540.2	397.0	353.7	397.0	473.9	613.4	690.6	634.1	551.1	543.8
80°	512.5	397.0	305.6	283.7	314.0	371.9	482.3	576.2	544.9	494.3	441.5
82.5°	338.0	257.5	226.2	220.0	239.3	283.7	358.4	477.5	477.5	423.6	308.1
85°	174.5	157.7	155.2	155.2	167.2	189.0	244.0	368.2	392.3	223.6	185.4
87.5°	86.7	90.3	84.1	87.8	94.0	92.5	116.6	185.4	221.5	135.9	112.9
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)