

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: P301237

Luminaire Tested: **GLNA-AF-07-LED-E1-T3R-7030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301237  
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-07-LED-E1-T3R-7030-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
Roadway OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27334.2 lumens  
Efficiency: N/A  
Efficacy: 120.9 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G4

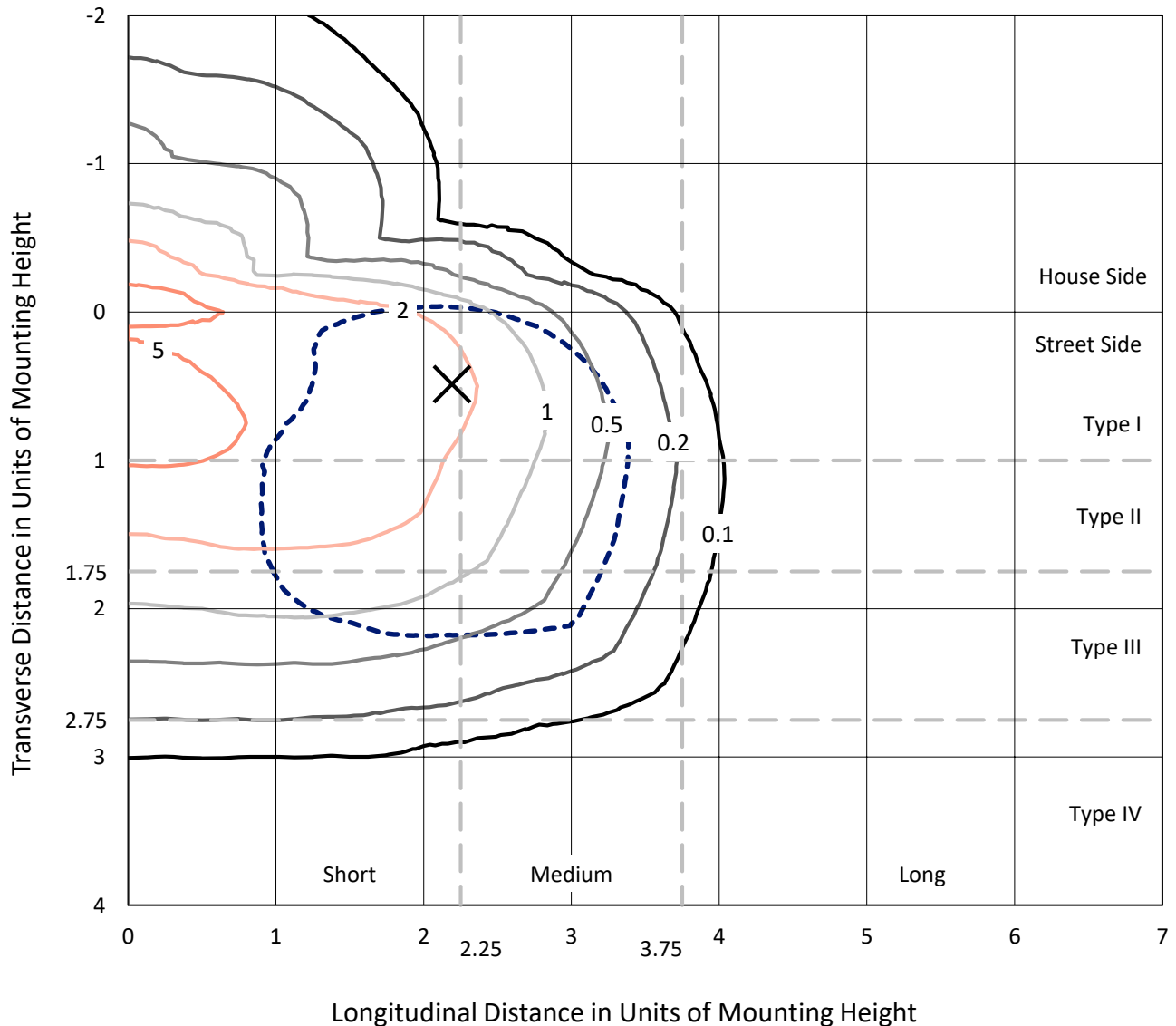
Input Watts (W): 226  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P301237  
 CATALOG NUMBER: GLNA-AF-07-LED-E1-T3R-7030-600

### Iso-Footcandle Lines of Horizontal Illumination

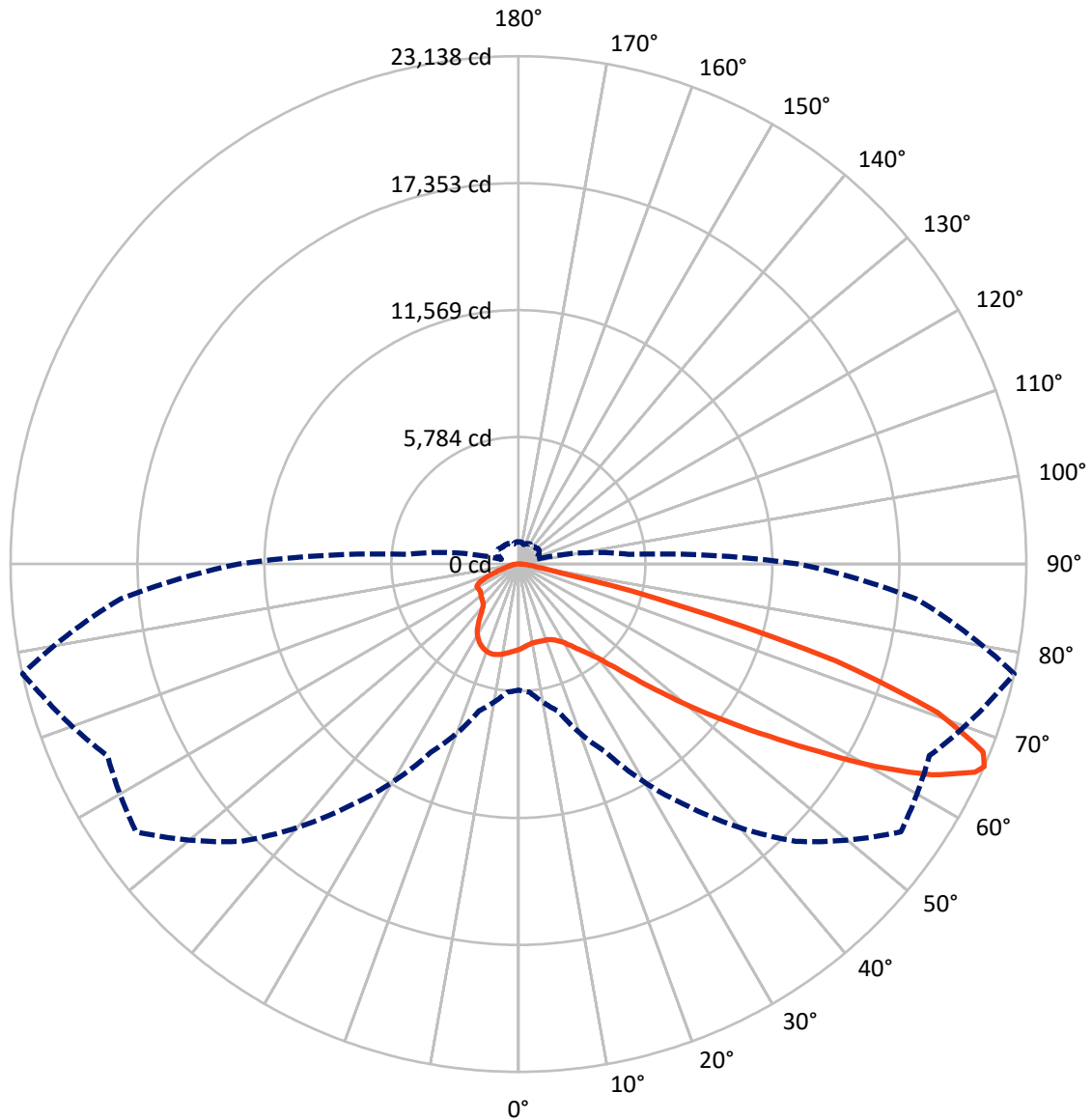
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc  
 Type III - Short - Full Cutoff

REPORT NUMBER: P301237  
CATALOG NUMBER: GLNA-AF-07-LED-E1-T3R-7030-600

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P301237

CATALOG NUMBER: GLNA-AF-07-LED-E1-T3R-7030-600

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4669.9	0.0	4669.9
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	22664.3	0.0	22664.3
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	27334.2	0.0	27334.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	348.0	1.3
10°-20°	981.8	3.6
20°-30°	1675.6	6.1
30°-40°	2682.3	9.8
40°-50°	4143.9	15.2
50°-60°	5877.5	21.5
60°-70°	7862.5	28.8
70°-80°	3414.5	12.5
80°-90°	348.2	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°	27334.2	100.0
0°-180°	27334.2	100.0

**Coefficient of Utilization**



REPORT NUMBER: P301237

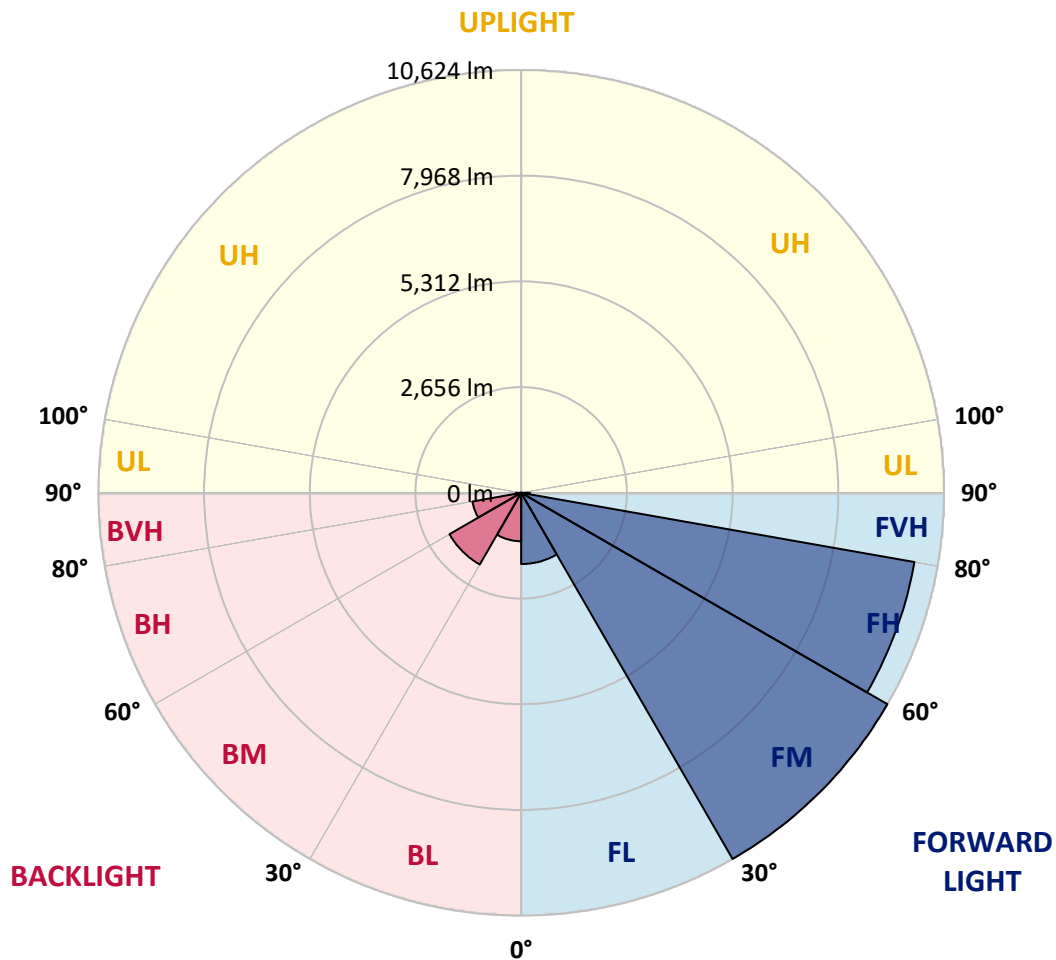
CATALOG NUMBER: GLNA-AF-07-LED-E1-T3R-7030-600

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1789.1	6.5			
FM	(30°-60°)	10623.5	38.9			
FH	(60°-80°)	10033.3	36.7			G4/12000
FVH	(80°-90°)	218.4	0.8			G2/225
BL	(0°-30°)	1216.2	4.4	B3/2500		
BM	(30°-60°)	2080.2	7.6	B2/2500		
BH	(60°-80°)	1243.7	4.5	B3/2500		G3/2500
BVH	(80°-90°)	129.8	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





REPORT NUMBER: P301237

CATALOG NUMBER: GLNA-AF-07-LED-E1-T3R-7030-600

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2
2.5°	3445.9	3469.0	3488.5	3506.5	3542.5	3601.9	3670.4	3725.9	3806.1	3821.7	3864.3
5°	3129.5	3129.5	3144.8	3172.2	3221.1	3310.2	3403.3	3527.2	3701.6	3742.7	3856.5
7.5°	2975.9	2977.0	2986.0	3009.1	3051.7	3133.1	3235.1	3381.4	3617.6	3686.0	3879.6
10°	3032.6	3019.7	3000.1	2988.8	2995.0	3042.7	3139.7	3302.4	3566.0	3653.6	3931.6
12.5°	3350.1	3325.9	3258.6	3169.4	3084.2	3049.4	3106.1	3264.9	3544.1	3646.1	4000.0
15°	3869.4	3859.2	3733.7	3549.1	3342.7	3169.4	3130.7	3250.8	3546.4	3655.1	4081.4
17.5°	4520.5	4506.0	4341.0	4072.4	3735.3	3398.2	3217.1	3262.5	3555.4	3670.4	4160.0
20°	5177.9	5133.7	4955.7	4635.5	4202.6	3709.1	3360.7	3292.2	3567.1	3687.2	4242.9
22.5°	5668.6	5632.2	5472.3	5161.0	4662.5	4069.6	3553.1	3343.8	3604.7	3736.5	4344.5
25°	6099.9	6102.3	5943.5	5642.8	5127.4	4452.1	3801.0	3481.9	3700.1	3837.0	4484.1
27.5°	6633.3	6602.4	6453.8	6155.5	5587.3	4838.0	4100.5	3671.9	3842.4	3980.5	4667.5
30°	7271.1	7249.2	7077.6	6739.3	6097.2	5252.5	4442.7	3892.5	4025.8	4169.0	4907.6
32.5°	8021.5	8011.4	7833.1	7397.8	6686.1	5741.0	4844.7	4184.6	4299.6	4448.2	5252.5
35°	8902.6	8903.7	8693.4	8170.1	7330.6	6309.2	5300.2	4560.4	4632.7	4787.6	5663.5
37.5°	9445.0	9510.7	9432.1	8898.7	8060.3	6944.6	5891.9	5059.0	5012.4	5168.9	6103.9
40°	9561.1	9641.3	9890.4	9619.4	8876.8	7644.6	6416.3	5538.0	5480.1	5671.0	6670.9
42.5°	9398.4	9509.5	10036.6	10227.4	9743.3	8507.2	7121.4	6249.7	6176.2	6433.1	7375.9
45°	9301.4	9384.3	9994.0	10544.2	10494.9	9482.5	8019.2	7143.3	7116.3	7453.4	8189.7
47.5°	9133.7	9208.8	9794.9	10617.7	10936.8	10376.0	9097.7	8236.2	8289.0	8730.9	9107.9
50°	9224.0	9254.9	9572.8	10430.4	11064.7	11031.0	10302.5	9501.7	9682.7	10234.1	10147.7
52.5°	9211.1	9291.3	9547.0	10123.0	11081.5	11435.4	11489.3	10913.3	11294.6	11927.3	11300.9
55°	7447.1	7594.1	9243.6	10045.6	11140.5	11831.5	12546.0	12401.3	13111.4	13848.9	12602.7
57.5°	7111.2	7204.3	8118.5	10208.3	11455.7	12588.6	13721.1	14039.0	15227.0	16083.4	14188.7
60°	7045.1	7160.1	8106.8	10407.3	12095.1	13821.9	15463.6	16021.6	17801.2	18739.0	16027.8
62.5°	6839.8	6963.8	8030.5	10381.1	13003.1	15528.1	17694.1	18129.3	20242.2	21154.1	17566.2
65°	6189.1	6305.2	7409.6	9964.3	13615.5	17349.2	20333.7	20061.5	22169.2	22854.7	18333.1
66°	5743.3	5857.1	6920.0	9473.5	13473.1	17865.8	21269.0	20659.4	22600.6	23137.9	18183.3
67.5°	4928.4	5017.5	5969.3	8374.3	12717.6	18010.4	22055.4	21108.7	22645.5	22835.6	17327.3
70°	3113.9	3139.7	3879.6	5780.8	9627.2	15619.6	20858.1	19993.1	20778.3	20264.0	14525.8
72.5°	1351.1	1342.1	1862.6	2940.7	5450.4	10480.8	16872.5	16496.7	16299.2	15126.5	10168.4
75°	751.6	762.2	967.5	1365.1	2214.9	5148.1	11037.3	10562.2	8917.8	7609.8	4610.8
77.5°	603.0	617.5	802.0	968.6	994.4	1795.3	5164.9	4202.6	2530.1	2030.3	1281.1
80°	476.7	502.5	700.0	754.3	670.3	739.9	1668.6	1334.3	1001.1	918.2	664.0
82.5°	377.0	395.3	600.6	570.9	468.9	498.6	799.3	779.0	651.1	592.8	383.6
85°	271.4	304.6	493.5	430.2	307.4	335.9	530.7	508.8	373.1	304.6	169.3
87.5°	111.1	144.7	348.8	285.5	171.7	156.4	264.7	249.1	176.8	129.0	84.1
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: P301237

CATALOG NUMBER: GLNA-AF-07-LED-E1-T3R-7030-600

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2
2.5°	3891.3	3922.2	3962.5	3987.1	4000.0	4009.0	4023.1	4021.9	4025.8	4027.0	4032.1
5°	3917.1	3968.7	4027.0	4042.6	4042.6	4028.2	4014.1	3990.6	3981.6	3979.3	3981.6
7.5°	3984.4	4041.1	4091.5	4073.5	4034.8	3977.7	3904.2	3839.7	3804.9	3793.2	3790.8
10°	4069.6	4138.1	4158.8	4090.4	3976.6	3839.7	3693.8	3587.9	3527.2	3510.4	3505.3
12.5°	4172.9	4237.4	4209.2	4064.5	3853.8	3633.2	3431.4	3262.5	3135.8	3095.9	3093.2
15°	4286.7	4337.1	4237.4	3984.4	3670.4	3345.0	2986.0	2694.3	2536.7	2486.3	2482.4
17.5°	4392.6	4418.4	4220.6	3844.8	3400.5	2873.8	2397.1	2172.3	2118.3	2131.2	2133.6
20°	4483.0	4483.0	4163.9	3644.6	2975.9	2252.4	1951.3	1947.8	1986.5	2025.2	2033.1
22.5°	4582.3	4522.8	4064.5	3361.8	2373.7	1843.0	1799.2	1835.2	1879.0	1921.6	1928.3
25°	4705.1	4555.3	3926.1	2933.2	1866.1	1673.7	1690.5	1720.2	1742.1	1769.5	1773.4
27.5°	4841.9	4596.4	3744.3	2342.8	1619.7	1568.1	1581.0	1591.2	1588.4	1599.0	1601.3
30°	5005.8	4644.5	3494.8	1831.3	1517.7	1477.4	1454.3	1445.3	1445.3	1462.1	1468.4
32.5°	5225.6	4715.2	3137.0	1569.3	1468.4	1412.9	1338.2	1304.5	1317.4	1374.1	1387.0
35°	5467.2	4791.5	2652.9	1480.1	1458.2	1383.1	1267.0	1204.8	1206.4	1259.2	1276.0
37.5°	5730.4	4888.5	2121.8	1463.3	1481.3	1384.7	1229.5	1144.2	1109.4	1109.4	1116.0
40°	6067.5	4987.8	1717.9	1475.0	1530.6	1399.9	1210.3	1096.5	998.3	1001.1	1006.2
42.5°	6506.6	5073.1	1500.8	1499.3	1590.0	1420.7	1208.7	1033.1	947.9	1006.2	1059.0
45°	6995.0	5115.7	1405.0	1521.6	1637.7	1433.6	1188.4	1023.0	954.5	1127.4	1228.3
47.5°	7556.6	5091.0	1352.2	1529.0	1649.4	1433.6	1164.9	1047.6	999.5	1305.7	1423.4
50°	8172.9	5020.3	1300.6	1513.7	1645.5	1430.8	1186.8	1071.9	1016.3	1336.6	1417.9
52.5°	8897.5	4960.8	1246.3	1480.1	1618.2	1416.8	1212.6	1061.7	963.5	1215.4	1272.1
55°	9723.8	4977.6	1185.7	1432.4	1575.5	1389.8	1203.6	1020.2	908.0	1070.7	1105.5
57.5°	10780.4	5177.9	1113.3	1371.8	1517.7	1344.4	1171.6	1001.1	891.2	971.4	992.1
60°	11959.4	5526.3	1023.0	1310.8	1445.3	1272.1	1146.9	1010.1	899.0	963.5	973.7
62.5°	12824.8	5729.2	945.6	1221.6	1347.2	1191.9	1116.0	1021.4	919.7	990.5	988.2
65°	13059.8	5396.1	848.6	1091.4	1214.2	1108.2	1076.9	1034.3	928.7	1012.4	1001.1
66°	12730.5	5037.1	805.9	1030.8	1146.9	1066.8	1057.8	1033.1	924.8	1015.2	995.6
67.5°	11931.2	4300.7	732.4	941.6	1039.8	1005.0	1026.9	1021.4	914.3	1012.4	985.4
70°	9730.4	2934.4	626.5	784.0	865.4	884.5	967.5	980.4	880.6	967.5	908.0
72.5°	6798.7	1787.5	554.1	608.5	700.0	754.3	886.1	923.3	835.7	844.7	788.0
75°	3285.6	949.5	502.5	471.6	543.6	630.4	788.0	845.8	764.5	706.6	685.9
77.5°	1024.2	579.9	426.2	379.7	426.2	508.8	658.5	741.4	680.8	591.7	583.8
80°	550.2	426.2	328.1	304.6	337.1	399.3	517.7	618.6	585.0	530.7	473.9
82.5°	362.9	276.5	242.8	236.2	256.9	304.6	384.8	512.7	512.7	454.8	330.8
85°	187.3	169.3	166.6	166.6	179.5	203.0	262.0	395.3	421.2	240.1	199.0
87.5°	93.1	97.0	90.3	94.2	100.9	99.3	125.1	199.0	237.8	145.9	121.2
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)