

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: P302858

Luminaire Tested: **GLNA-AF-07-LED-E1-T4W-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P302858
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191569)
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-T4W-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29246.8 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 295
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

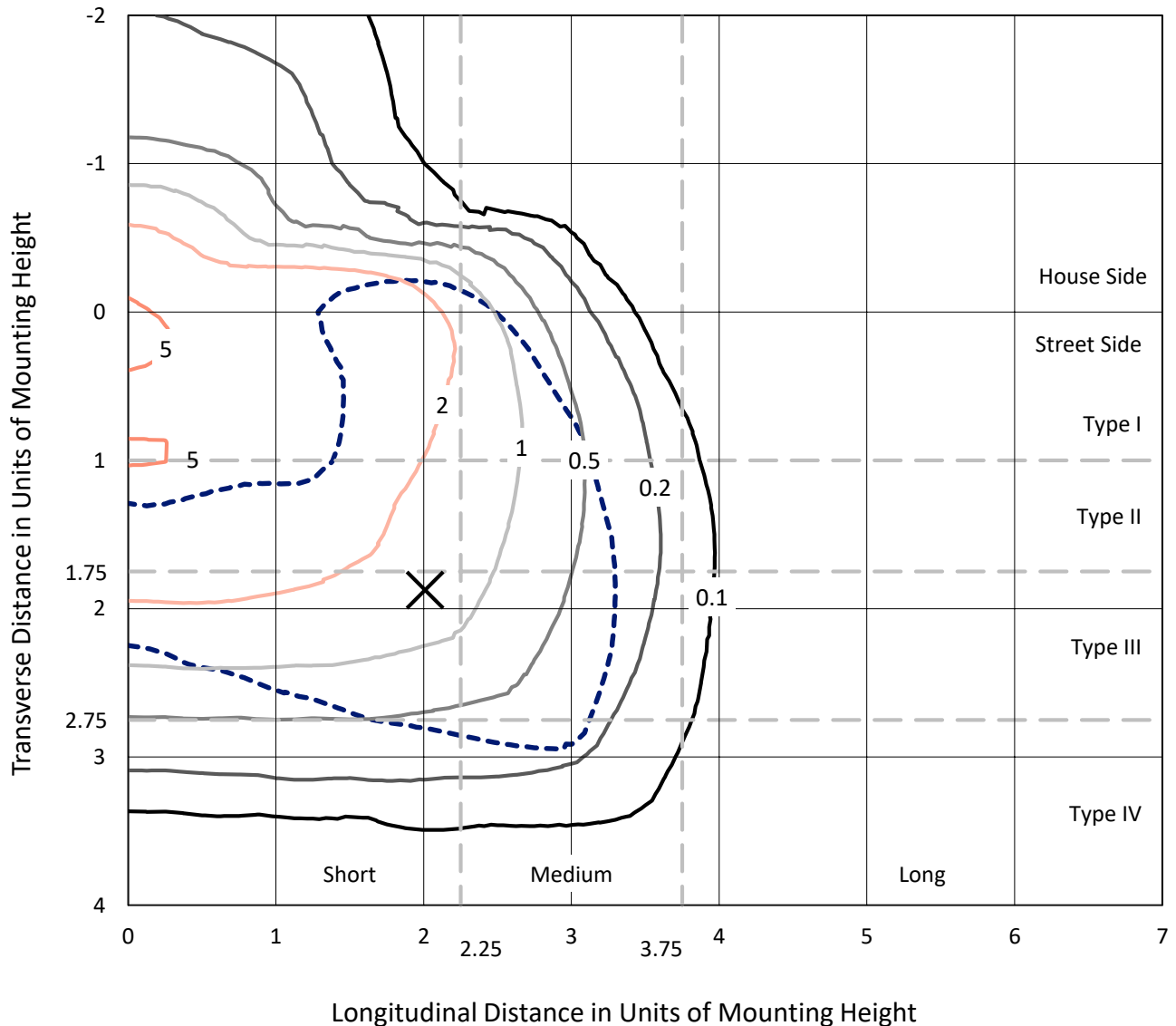


REPORT NUMBER: P302858

CATALOG NUMBER: GLNA-AF-07-LED-E1-T4W-7027-800

Iso-Footcandle Lines of Horizontal Illumination

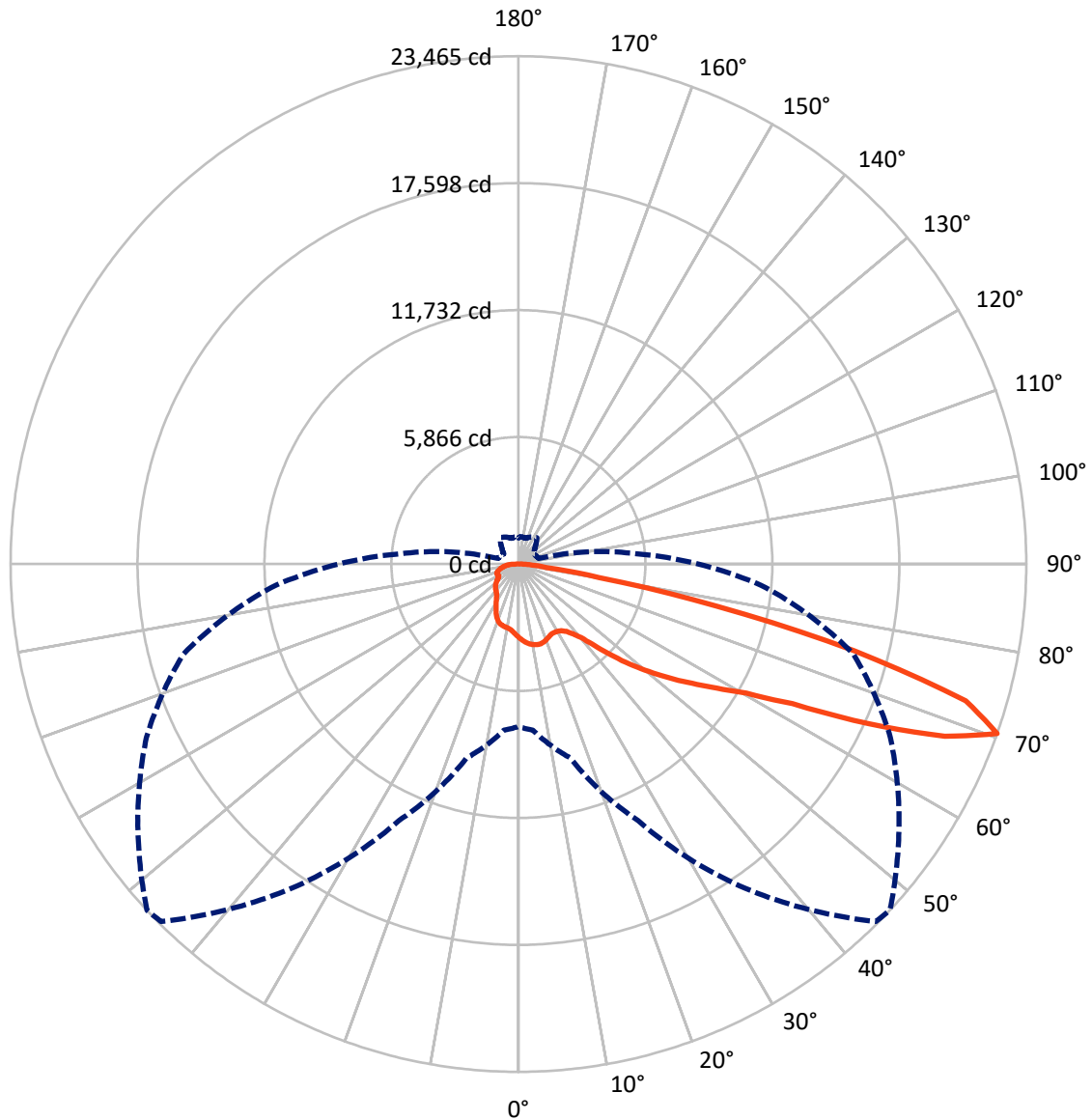
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P302858
CATALOG NUMBER: GLNA-AF-07-LED-E1-T4W-7027-800

Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P302858

CATALOG NUMBER: GLNA-AF-07-LED-E1-T4W-7027-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6101.5	0.0	6101.5
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	23145.3	0.0	23145.3
	% Fixture	79.1	0.0	79.1
Total	Lumens	29246.8	0.0	29246.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.2	1.1
10°-20°	953.9	3.3
20°-30°	1408.7	4.8
30°-40°	2047.5	7.0
40°-50°	3684.8	12.6
50°-60°	6383.5	21.8
60°-70°	9111.2	31.2
70°-80°	4677.2	16.0
80°-90°	654.8	2.2
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°	29246.8	100.0
0°-180°	29246.8	100.0



REPORT NUMBER: P302858

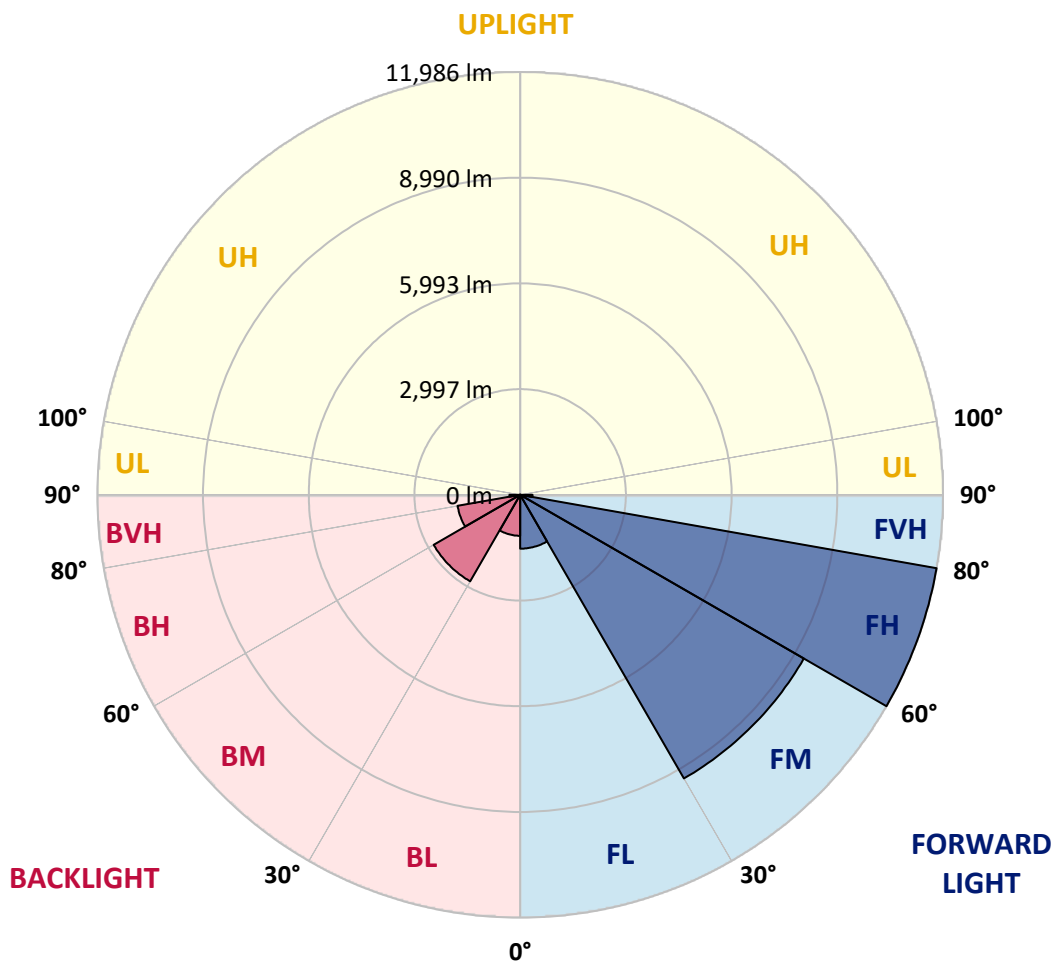
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1526.0	5.2			
FM	(30°-60°)	9283.7	31.7			
FH	(60°-80°)	11986.1	41.0			G4/12000
FVH	(80°-90°)	349.4	1.2			G3/500
BL	(0°-30°)	1161.7	4.0	B3/2500		
BM	(30°-60°)	2832.1	9.7	B3/5000		
BH	(60°-80°)	1802.2	6.2	B3/2500		G3/2500
BVH	(80°-90°)	305.4	1.0			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short





REPORT NUMBER: P302858

CATALOG NUMBER: GLNA-AF-07-LED-E1-T4W-7027-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	3393.5	3393.5	3393.5	3393.5	3393.5	3393.5	3393.5	3393.5	3393.5	3393.5	3393.5
2.5°	3592.9	3585.8	3583.0	3577.3	3570.2	3534.3	3527.2	3501.7	3466.2	3428.9	3390.6
5°	3829.2	3827.7	3811.7	3783.3	3738.0	3659.5	3641.1	3578.7	3494.6	3413.3	3332.5
7.5°	4036.6	4023.9	3994.1	3936.9	3857.5	3750.7	3725.2	3638.2	3522.9	3411.9	3302.3
10°	4188.8	4181.7	4116.5	4038.0	3934.1	3815.9	3786.2	3689.3	3562.6	3421.8	3285.2
12.5°	4275.7	4261.6	4185.9	4092.4	3968.6	3853.3	3823.0	3725.2	3583.0	3421.8	3261.1
15°	4270.1	4260.1	4184.5	4082.0	3957.2	3856.1	3829.2	3730.9	3578.7	3407.6	3230.0
17.5°	4156.2	4160.4	4096.6	3995.5	3893.0	3815.9	3791.8	3701.1	3549.9	3379.3	3193.1
20°	3957.2	3977.1	3934.1	3844.8	3787.6	3735.1	3719.5	3642.5	3505.9	3338.2	3152.9
22.5°	3757.8	3776.2	3759.2	3683.6	3675.1	3643.9	3635.4	3580.1	3467.7	3312.7	3128.8
25°	3611.3	3628.3	3625.5	3559.8	3585.8	3584.4	3577.3	3549.9	3459.1	3312.7	3133.1
27.5°	3571.6	3577.3	3571.6	3511.6	3547.0	3575.9	3570.2	3565.5	3484.7	3353.8	3187.4
30°	3708.2	3699.7	3655.3	3534.3	3567.4	3607.1	3601.4	3604.2	3561.2	3462.0	3308.4
32.5°	4253.0	4214.3	4074.9	3735.1	3648.2	3669.4	3672.3	3719.5	3726.6	3628.3	3496.0
35°	5068.2	5025.7	4844.7	4272.9	3900.0	3826.3	3826.3	3897.2	3939.7	3867.4	3787.6
37.5°	5932.1	5884.8	5788.4	5018.6	4429.3	4098.0	4091.0	4140.6	4201.5	4219.0	4238.9
40°	6913.6	6863.9	6890.9	5855.0	5167.9	4568.7	4467.6	4432.1	4597.1	4706.7	4866.4
42.5°	7988.2	7965.0	7974.9	6786.9	6008.6	5273.3	5129.6	4945.8	5145.2	5339.9	5674.5
45°	8982.4	9002.3	8992.4	7784.5	6945.2	6132.4	5980.3	5624.4	5819.6	6153.7	6699.0
47.5°	9853.4	9770.7	9898.7	8874.2	7993.8	7094.6	6906.5	6430.1	6627.7	7040.2	7962.2
50°	10910.5	10899.1	10711.5	10328.8	9261.2	8060.5	7814.3	7262.3	7569.5	8143.2	9554.7
52.5°	12021.9	11815.4	11643.4	11459.6	10606.2	9051.0	8749.0	8091.7	8676.7	9397.8	11495.5
55°	12249.3	12157.1	12370.2	12679.3	11902.4	10079.7	9728.1	9131.8	9923.3	10832.5	13733.6
57.5°	12736.0	12734.6	13175.9	13726.5	13236.9	11170.9	10816.4	10388.3	11324.4	12475.6	16109.6
60°	13064.9	13157.0	13976.9	15045.4	14547.3	12431.7	12105.6	11838.1	12918.4	14312.5	18323.5
62.5°	13236.9	13362.1	14480.7	15580.3	16399.8	14530.3	14204.7	13819.1	15027.0	16327.5	19618.4
65°	12521.4	12767.2	14402.2	16043.0	18022.1	17932.3	17785.8	17108.6	17663.4	17919.5	19150.5
67.5°	10540.5	10792.3	12696.3	15611.5	19180.3	21213.7	21244.9	20088.1	19285.7	18056.1	16101.1
70°	7509.9	7707.5	9283.0	13089.0	18298.0	23357.7	23464.5	21460.9	18962.4	16012.7	11249.3
72.5°	3565.5	3686.4	5177.8	8518.9	14520.4	21401.3	21607.8	19708.2	16123.8	11855.1	6136.7
75°	1310.4	1347.3	1749.9	3624.1	8422.0	15782.6	16026.0	14127.7	10688.4	5902.3	2337.8
77.5°	785.4	809.5	982.0	1529.7	3312.7	9021.2	9380.8	7683.4	4671.3	2196.9	1149.7
80°	549.1	566.1	704.1	951.7	1565.1	3437.9	3757.8	3135.9	1860.9	1390.3	836.4
82.5°	371.4	379.9	495.2	643.2	1040.1	1227.7	1324.6	1394.5	1255.1	1034.4	530.7
85°	243.4	251.9	336.0	423.9	661.6	634.6	648.8	820.8	916.3	702.7	294.4
87.5°	139.4	145.1	202.3	226.4	324.6	268.9	271.7	432.4	586.4	474.0	179.1
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: P302858

CATALOG NUMBER: GLNA-AF-07-LED-E1-T4W-7027-800

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3393.5	3393.5	3393.5	3393.5	3393.5	3393.5	3393.5	3393.5	3393.5	3393.5	3393.5
2.5°	3380.7	3362.3	3321.2	3295.2	3271.1	3265.4	3255.5	3254.1	3252.6	3252.6	3248.4
5°	3305.1	3273.9	3210.1	3174.2	3144.4	3141.6	3140.2	3147.3	3150.1	3152.9	3148.7
7.5°	3256.9	3214.4	3134.5	3083.5	3048.0	3039.0	3053.7	3086.3	3107.6	3116.1	3111.8
10°	3227.1	3174.2	3082.0	3026.3	2996.5	2992.3	3010.7	3049.4	3093.4	3110.4	3109.0
12.5°	3193.1	3133.1	3034.8	2976.7	2959.6	2968.2	2992.3	3027.7	3073.5	3100.5	3101.9
15°	3158.6	3089.1	2988.0	2937.0	2929.9	2941.2	2963.9	2990.8	3026.3	3053.7	3056.5
17.5°	3117.5	3044.7	2944.1	2891.1	2885.5	2891.1	2892.5	2906.7	2929.9	2955.4	2962.5
20°	3073.5	2999.3	2894.0	2841.5	2816.0	2793.3	2767.3	2770.2	2777.2	2803.2	2808.9
22.5°	3041.9	2968.2	2855.7	2782.9	2714.9	2646.3	2595.3	2588.2	2591.1	2612.3	2619.4
25°	3044.7	2966.7	2845.8	2720.5	2571.2	2461.6	2393.0	2381.7	2380.3	2395.9	2406.3
27.5°	3100.5	3022.0	2882.6	2656.3	2414.8	2252.2	2179.9	2171.4	2160.1	2164.3	2175.7
30°	3224.3	3151.5	2972.4	2591.1	2245.1	2047.6	1972.0	1963.5	1947.9	1940.8	1949.3
32.5°	3426.1	3366.5	3103.3	2528.2	2076.0	1872.3	1795.7	1777.3	1767.4	1758.9	1766.0
35°	3762.1	3736.5	3278.2	2460.2	1926.6	1737.1	1667.7	1639.3	1625.1	1640.7	1652.1
37.5°	4288.5	4302.7	3507.3	2353.4	1811.3	1647.8	1589.2	1556.6	1535.4	1548.1	1560.9
40°	5034.2	5044.1	3760.6	2202.6	1711.6	1594.9	1532.5	1502.7	1472.5	1449.8	1448.4
42.5°	6012.9	5912.2	4009.7	2039.1	1596.3	1562.3	1492.8	1455.5	1410.1	1347.3	1334.5
45°	7173.9	6820.0	4198.7	1851.0	1466.8	1522.6	1448.4	1397.4	1326.0	1258.0	1250.9
47.5°	8511.8	7794.4	4291.3	1656.3	1345.9	1464.0	1394.5	1313.2	1223.5	1189.4	1185.2
50°	10144.9	8951.2	4335.3	1466.8	1240.9	1387.4	1316.1	1220.6	1145.5	1138.4	1134.1
52.5°	12004.9	10342.9	4349.9	1311.8	1154.0	1287.7	1252.3	1159.7	1099.6	1105.8	1105.8
55°	13951.4	11780.0	4156.2	1199.4	1074.1	1185.2	1209.3	1135.6	1085.5	1108.6	1117.1
57.5°	15738.2	13053.5	3547.0	1112.9	999.0	1107.2	1193.7	1158.2	1124.2	1216.4	1222.0
60°	17110.0	13805.9	2649.2	1034.4	943.2	1079.8	1235.3	1245.2	1253.7	1473.9	1504.2
62.5°	17397.3	13555.9	1821.2	973.5	917.7	1103.0	1310.4	1311.8	1301.9	1455.5	1473.9
65°	16078.4	11971.9	1324.6	939.0	896.4	1144.1	1374.7	1344.4	1279.2	1395.9	1361.4
67.5°	12768.6	9019.8	1103.0	913.5	865.3	1141.2	1442.7	1374.7	1266.5	1367.6	1311.8
70°	8288.2	5453.8	982.0	892.2	827.9	1086.9	1482.4	1371.8	1229.1	1272.1	1206.4
72.5°	4043.7	2438.9	900.7	861.0	789.6	1011.8	1481.0	1345.9	1190.9	1188.0	1152.6
75°	1582.1	1117.1	826.5	813.7	724.4	926.2	1441.3	1309.0	1145.5	1099.6	1086.9
77.5°	926.2	796.7	732.9	744.3	646.0	840.7	1383.2	1245.2	1082.6	1028.8	1014.6
80°	674.3	596.4	624.7	643.2	552.0	755.6	1304.7	1166.8	1013.2	1040.1	1020.3
82.5°	432.4	384.2	506.6	525.0	459.8	668.7	1219.2	1084.1	914.9	830.8	810.9
85°	220.7	243.4	377.1	399.8	354.4	549.1	1115.7	974.9	803.8	691.4	702.7
87.5°	123.8	166.3	240.5	268.9	250.5	422.5	905.0	803.8	655.9	533.5	469.7
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)