

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: P299191

Luminaire Tested: **GLNA-AF-07-LED-E1-T3-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299191
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)
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-T3-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29457.3 lumens
Efficiency: N/A
Efficacy: 99.9 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

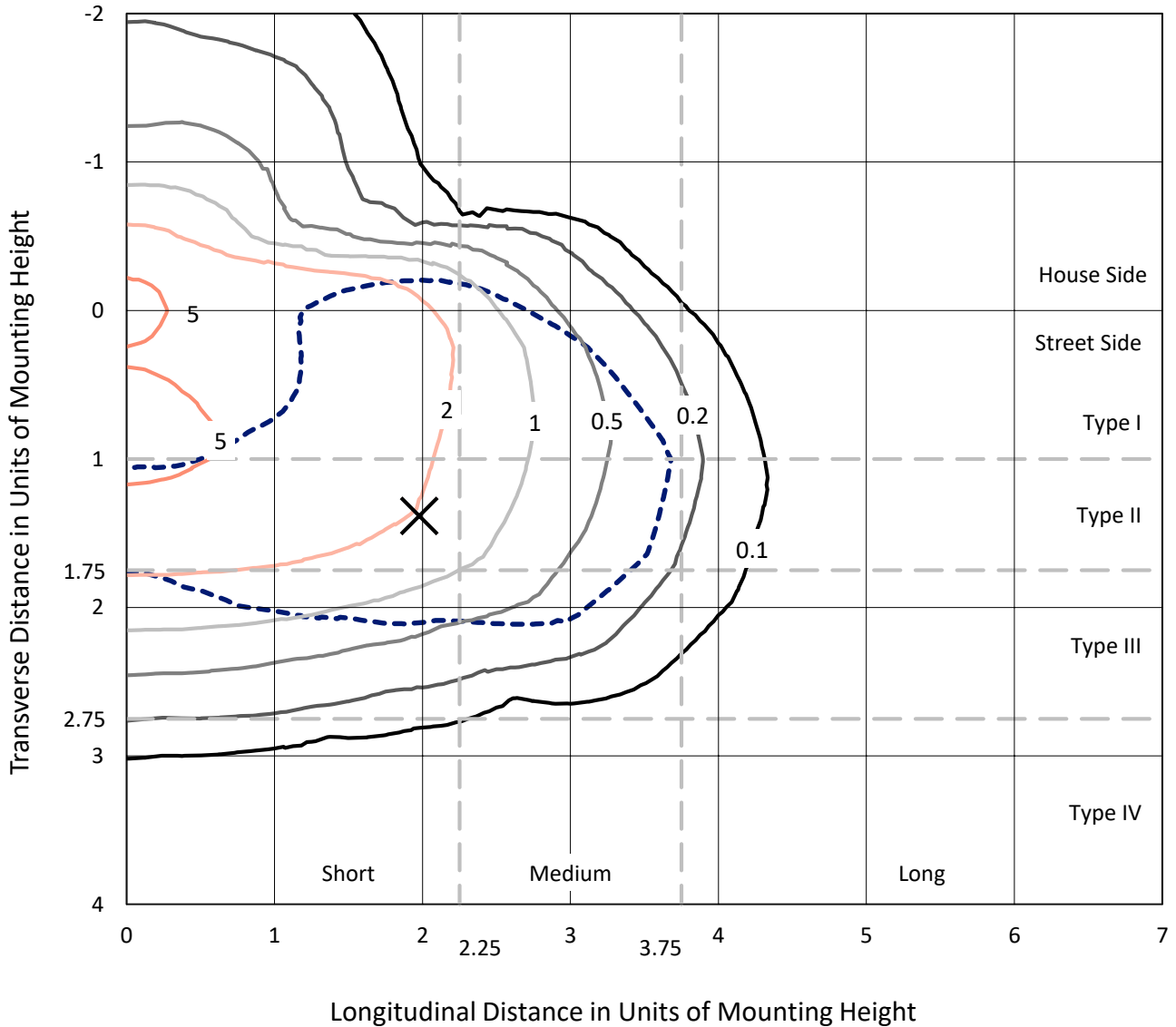
Input Watts (W): 295
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

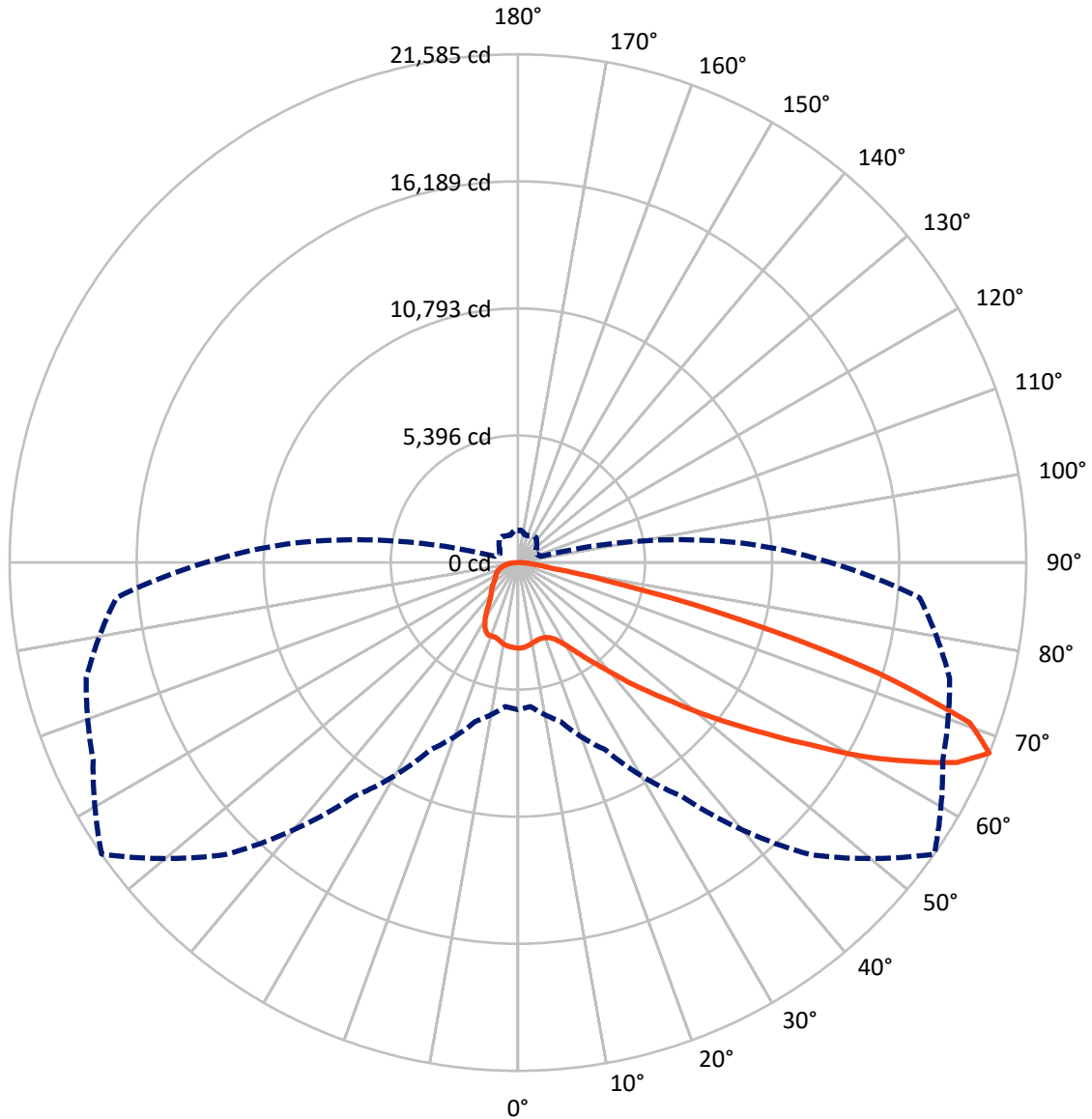
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6363.4	0.0	6363.4
	% Fixture	21.6	0.0	21.6
Street Side	Lumens	23093.9	0.0	23093.9
	% Fixture	78.4	0.0	78.4
Total	Lumens	29457.3	0.0	29457.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	339.0	1.2
10°-20°	960.2	3.3
20°-30°	1608.5	5.5
30°-40°	2645.1	9.0
40°-50°	4452.5	15.1
50°-60°	7007.9	23.8
60°-70°	8363.2	28.4
70°-80°	3591.3	12.2
80°-90°	489.6	1.7
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°	29457.3	100.0
0°-180°	29457.3	100.0



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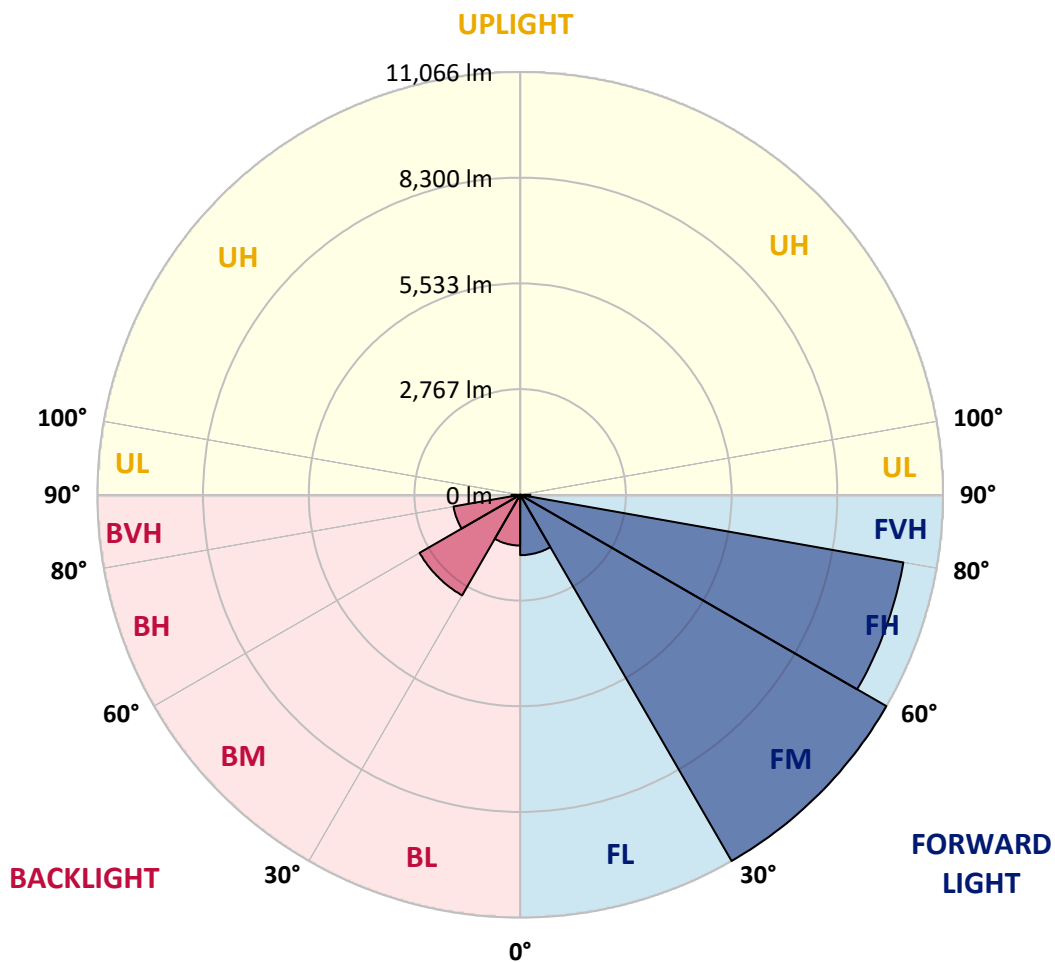
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1579.0	5.4			
FM	(30°-60°)	11066.3	37.6			
FH	(60°-80°)	10183.5	34.6			G4/12000
FVH	(80°-90°)	265.0	0.9			G3/500
BL	(0°-30°)	1328.8	4.5	B3/2500		
BM	(30°-60°)	3039.1	10.3	B3/5000		
BH	(60°-80°)	1770.9	6.0	B3/2500		G3/2500
BVH	(80°-90°)	224.6	0.8			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°	85°	90°
0°	3632.4	3632.4	3632.4	3632.4	3632.4	3632.4	3632.4	3632.4	3632.4	3632.4	3632.4
2.5°	3601.1	3602.5	3605.4	3616.8	3626.7	3623.9	3625.3	3619.6	3618.2	3609.6	3618.2
5°	3555.6	3559.8	3561.3	3579.8	3591.1	3594.0	3589.7	3582.6	3574.1	3565.5	3569.8
7.5°	3451.7	3463.1	3464.5	3490.1	3508.6	3532.8	3534.2	3535.7	3531.4	3525.7	3534.2
10°	3386.3	3389.1	3387.7	3406.2	3420.4	3447.4	3463.1	3490.1	3501.5	3504.4	3510.0
12.5°	3382.0	3379.2	3374.9	3374.9	3370.6	3382.0	3410.5	3448.9	3475.9	3484.4	3491.6
15°	3427.5	3426.1	3411.9	3390.5	3363.5	3355.0	3379.2	3421.8	3457.4	3475.9	3483.0
17.5°	3530.0	3521.4	3498.7	3450.3	3392.0	3369.2	3372.0	3407.6	3448.9	3473.1	3480.2
20°	3717.8	3717.8	3669.4	3578.3	3474.5	3420.4	3394.8	3416.1	3456.0	3488.7	3498.7
22.5°	4042.2	4045.0	3963.9	3814.5	3639.5	3524.3	3460.3	3456.0	3502.9	3539.9	3551.3
25°	4501.7	4490.4	4376.5	4163.1	3897.1	3706.4	3595.4	3569.8	3609.6	3650.9	3665.1
27.5°	5036.7	4995.5	4860.3	4602.8	4258.4	3979.6	3808.8	3767.6	3806.0	3852.9	3867.2
30°	5566.0	5523.3	5362.5	5080.8	4698.1	4345.2	4100.5	4033.6	4087.7	4154.6	4163.1
32.5°	6095.3	6095.3	5916.0	5587.3	5170.5	4782.0	4488.9	4409.3	4498.9	4580.0	4598.5
35°	6728.4	6731.3	6557.7	6162.2	5714.0	5302.8	4979.8	4921.5	5056.6	5113.5	5157.7
37.5°	7506.7	7522.3	7299.0	6820.9	6330.0	5897.5	5513.4	5433.7	5568.8	5723.9	5866.2
40°	8347.6	8367.5	8121.3	7532.3	7041.4	6589.0	6173.5	6029.8	6254.6	6550.6	6734.1
42.5°	9150.0	9252.5	9014.9	8408.8	7880.9	7412.8	6991.6	6782.5	7064.2	7511.0	7670.3
45°	10309.6	10383.6	9969.6	9420.4	8923.8	8400.2	7842.5	7621.9	8016.1	8579.5	8612.2
47.5°	11082.2	11026.7	10816.1	10474.7	10160.2	9670.8	8831.3	8589.4	9113.0	9776.1	9592.5
50°	11493.4	11510.5	11482.0	11501.9	11513.3	11206.0	10043.6	9712.0	10336.6	11137.7	10715.1
52.5°	11877.5	11763.7	11857.6	12324.3	12887.7	12773.9	11362.5	11016.7	11648.5	12648.7	11901.7
55°	11869.0	11695.4	12001.3	12825.1	14047.3	14178.2	12843.6	12445.2	13035.7	14269.3	13159.5
57.5°	11449.3	11457.8	11928.8	13007.2	14855.5	15498.6	14562.4	13964.8	14506.9	15911.2	14307.7
60°	10871.6	10949.9	11628.6	12977.4	15502.8	16581.3	16671.0	15602.4	15948.2	17403.7	15258.1
62.5°	9939.7	10022.2	10958.4	12667.2	15404.7	17624.2	18577.5	17460.6	17454.9	18308.6	15537.0
65°	8469.9	8445.7	9428.9	11507.6	14580.9	18395.4	20471.3	19067.0	18590.3	18322.8	14976.4
67.5°	6246.1	6138.0	6981.7	8764.5	12119.4	17531.8	21585.3	19903.6	18977.3	17117.7	13263.4
70°	3241.1	3133.0	3816.0	5117.8	7970.5	13683.1	20351.7	19471.0	18122.2	14348.9	10390.7
72.5°	1385.8	1367.3	1644.8	2245.2	3855.8	7892.3	15958.1	16853.1	15549.8	10690.9	7143.9
75°	931.9	926.2	1030.1	1223.6	1734.4	3202.7	9986.6	11962.9	11376.7	6628.8	4018.0
77.5°	731.3	724.2	785.4	879.3	1124.0	1263.4	4432.0	6422.5	5944.5	2885.4	1758.6
80°	572.0	566.3	604.7	655.9	808.2	796.8	1458.4	2555.4	1977.7	1105.5	855.1
82.5°	451.0	451.0	482.3	483.8	573.4	543.5	761.2	1125.4	987.4	644.5	523.6
85°	412.6	412.6	445.3	361.4	374.2	342.9	472.4	667.3	626.0	264.6	227.6
87.5°	207.7	202.0	374.2	320.1	203.5	182.1	230.5	323.0	347.2	146.5	113.8
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3632.4	3632.4	3632.4	3632.4	3632.4	3632.4	3632.4	3632.4	3632.4	3632.4
2.5°	3615.3	3613.9	3616.8	3618.2	3629.6	3645.2	3652.3	3662.3	3668.0	3665.1
5°	3572.7	3575.5	3586.9	3595.4	3615.3	3640.9	3655.2	3666.6	3676.5	3672.2
7.5°	3537.1	3544.2	3561.3	3568.4	3579.8	3586.9	3585.5	3589.7	3598.3	3588.3
10°	3517.2	3525.7	3538.5	3528.5	3501.5	3463.1	3427.5	3409.0	3414.7	3407.6
12.5°	3497.2	3508.6	3498.7	3451.7	3376.3	3326.5	3299.5	3302.3	3315.1	3318.0
15°	3485.9	3490.1	3447.4	3359.2	3282.4	3275.3	3289.5	3286.7	3288.1	3288.1
17.5°	3485.9	3474.5	3394.8	3306.6	3273.9	3261.1	3217.0	3161.5	3137.3	3128.7
20°	3504.4	3474.5	3377.7	3319.4	3248.3	3138.7	3022.0	2919.6	2874.1	2861.3
22.5°	3559.8	3508.6	3426.1	3325.1	3123.0	2939.5	2754.5	2632.2	2549.7	2535.4
25°	3672.2	3615.3	3521.4	3249.7	2923.9	2662.1	2451.5	2314.9	2232.4	2221.0
27.5°	3868.6	3831.6	3572.7	3083.2	2659.2	2378.9	2184.0	2078.7	2017.5	2013.3
30°	4164.5	4146.0	3547.0	2837.1	2333.4	2104.3	2010.4	1949.2	1903.7	1902.3
32.5°	4636.9	4487.5	3463.1	2536.9	2036.0	1909.4	1871.0	1834.0	1798.4	1798.4
35°	5244.4	4763.5	3303.7	2215.3	1855.3	1801.3	1752.9	1694.6	1647.6	1644.8
37.5°	5958.7	4934.3	3017.8	1956.4	1770.0	1728.7	1657.6	1570.8	1488.2	1474.0
40°	6680.1	4985.5	2615.1	1797.0	1715.9	1656.1	1569.3	1466.9	1387.2	1383.0
42.5°	7341.7	4887.3	2188.3	1687.4	1661.8	1582.2	1491.1	1400.0	1337.4	1336.0
45°	7896.5	4632.6	1829.7	1583.6	1604.9	1515.3	1434.2	1360.2	1311.8	1301.9
47.5°	8418.7	4272.7	1577.9	1474.0	1548.0	1478.3	1410.0	1340.3	1293.3	1286.2
50°	9024.8	3884.2	1401.5	1367.3	1498.2	1465.5	1429.9	1357.4	1279.1	1270.6
52.5°	9759.0	3548.5	1263.4	1273.4	1459.8	1482.6	1481.1	1405.7	1269.1	1257.8
55°	10578.5	3175.7	1159.6	1196.6	1444.1	1513.9	1493.9	1451.3	1277.7	1260.6
57.5°	11385.3	2740.3	1087.0	1138.2	1421.4	1511.0	1432.8	1371.6	1297.6	1273.4
60°	11989.9	2155.5	1031.5	1087.0	1371.6	1464.1	1365.9	1284.8	1293.3	1274.8
62.5°	12029.8	1666.1	964.7	1042.9	1296.2	1417.1	1321.8	1246.4	1311.8	1294.7
65°	11322.6	1259.2	900.6	990.3	1215.1	1387.2	1279.1	1225.0	1350.2	1331.7
67.5°	9532.8	1013.0	846.6	936.2	1134.0	1324.6	1240.7	1205.1	1384.4	1351.7
70°	6882.1	863.6	793.9	870.8	1061.4	1253.5	1206.5	1169.5	1291.9	1240.7
72.5°	4237.1	748.4	734.2	784.0	1005.9	1179.5	1155.3	1102.7	1163.9	1122.6
75°	2115.7	648.8	667.3	698.6	927.7	1095.6	1069.9	1017.3	1025.8	1017.3
77.5°	1013.0	554.9	589.0	613.2	826.6	1000.2	973.2	919.1	909.2	910.6
80°	641.7	463.8	496.6	513.6	738.4	889.3	862.2	808.2	922.0	855.1
82.5°	401.2	377.0	385.6	416.9	643.1	774.0	738.4	690.1	830.9	657.3
85°	222.0	263.2	274.6	301.6	495.1	647.4	611.8	550.6	493.7	485.2
87.5°	132.3	156.5	160.8	180.7	332.9	468.1	414.0	392.7	325.8	324.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)