

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: P300319

Luminaire Tested: **GLNA-AF-05-LED-E1-AFL-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300319
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-05-LED-E1-AFL-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26427.7 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 279
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

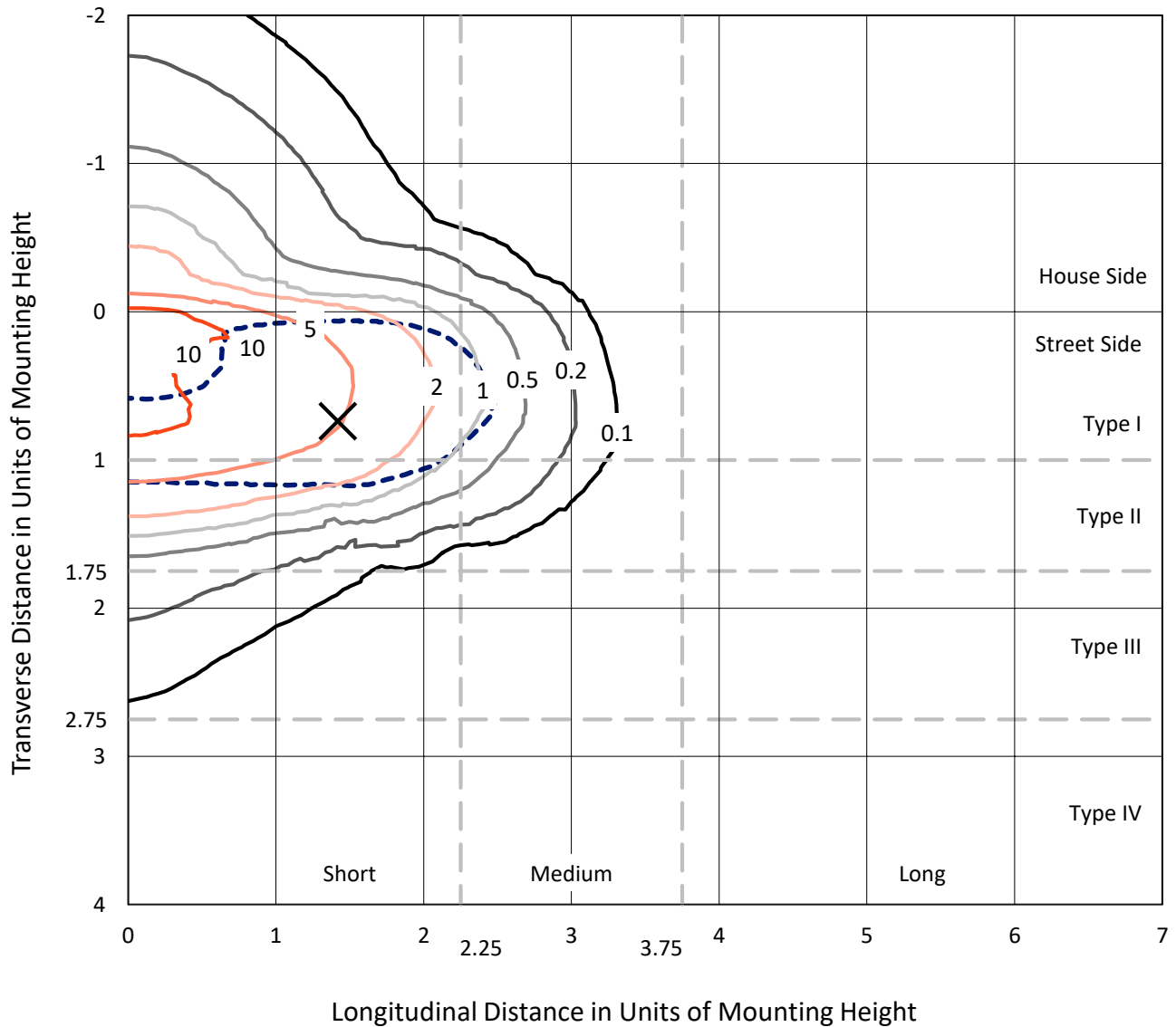


REPORT NUMBER: P300319

CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-7027

Iso-Footcandle Lines of Horizontal Illumination

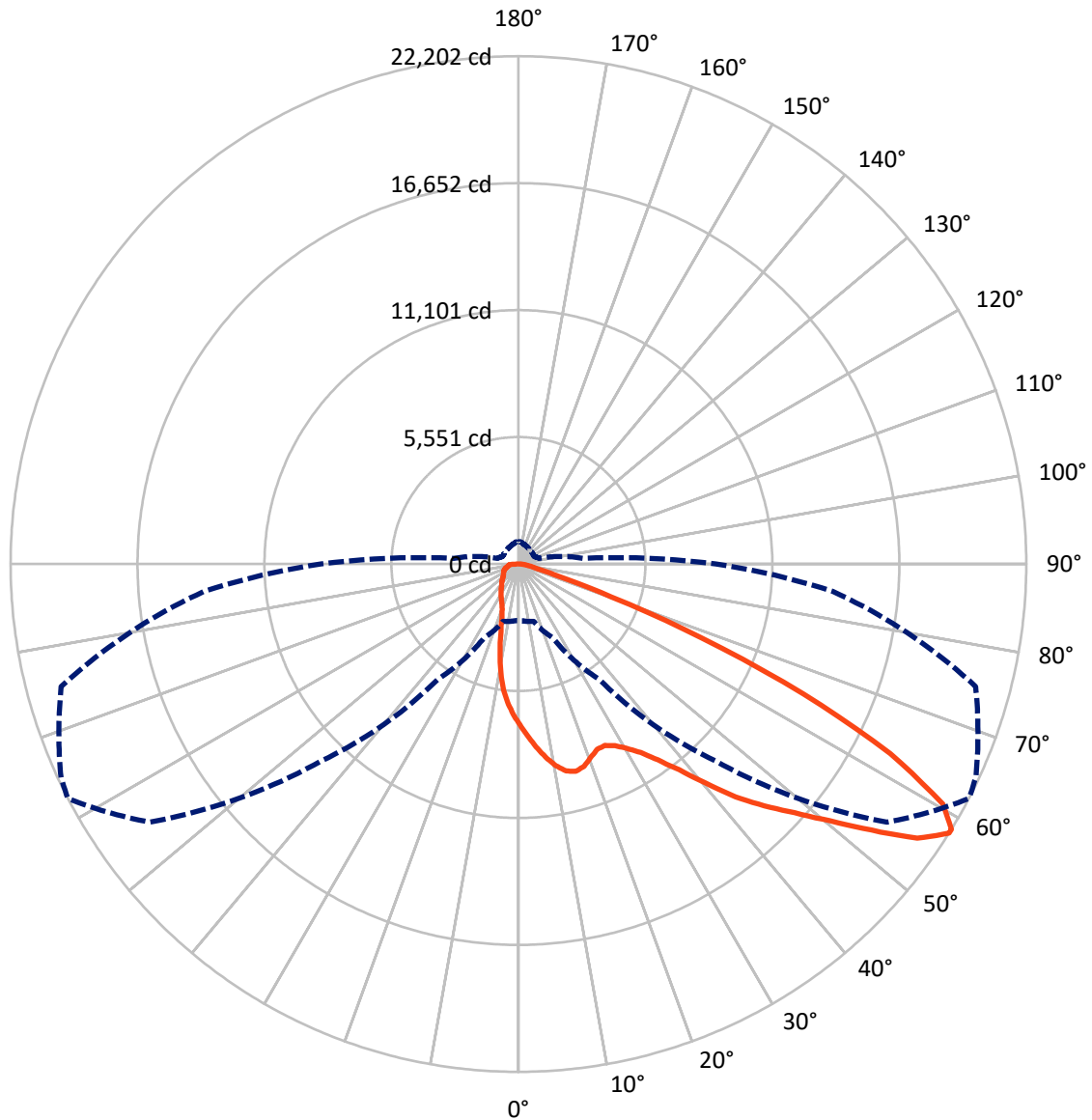
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.7 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P300319
CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

REPORT NUMBER: P300319

CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4030.3	0.0	4030.3
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	22397.4	0.0	22397.4
	% Fixture	84.7	0.0	84.7
Total	Lumens	26427.7	0.0	26427.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	627.8	2.4
10°-20°	1604.8	6.1
20°-30°	2594.3	9.8
30°-40°	4118.4	15.6
40°-50°	6026.1	22.8
50°-60°	6302.8	23.8
60°-70°	3723.7	14.1
70°-80°	1049.0	4.0
80°-90°	380.8	1.4
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°	26427.7	100.0
0°-180°	26427.7	100.0



REPORT NUMBER: P300319

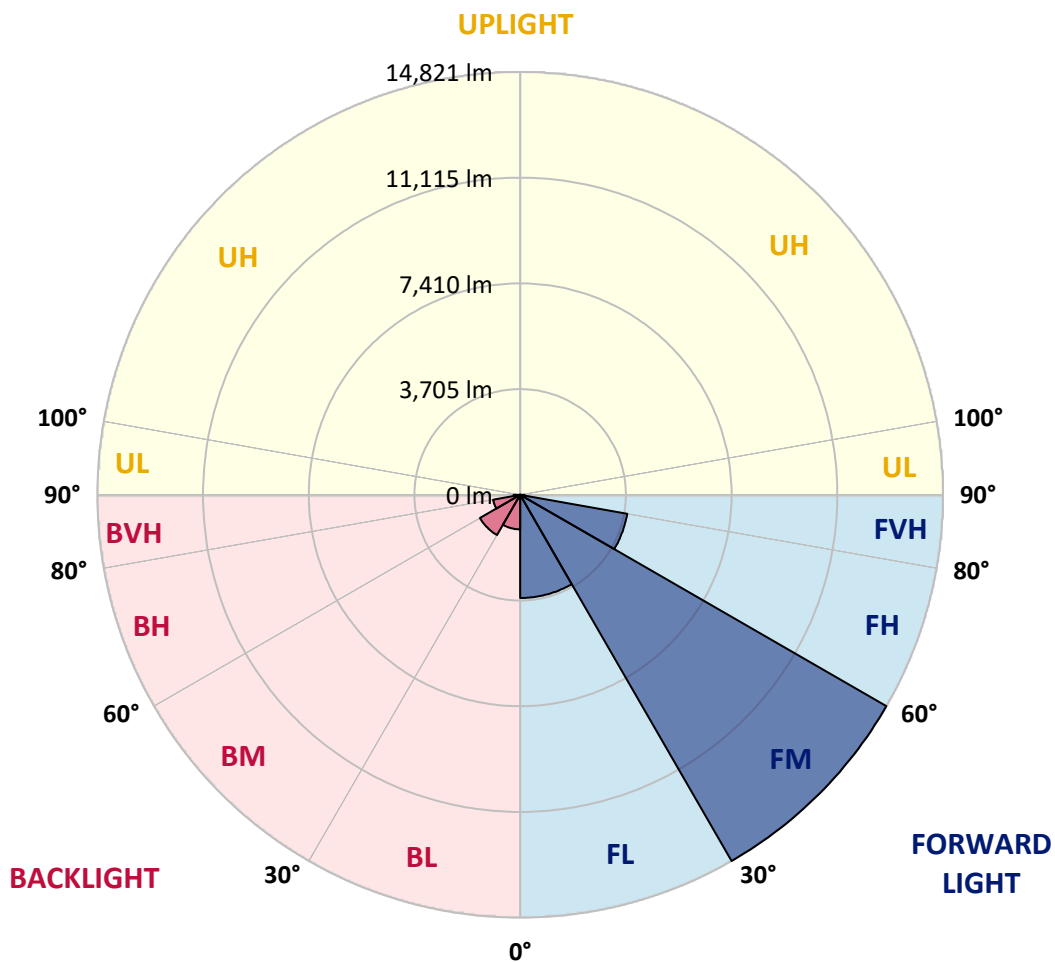
CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3615.6	13.7			
FM	(30°-60°)	14820.5	56.1			
FH	(60°-80°)	3811.0	14.4			G2/5000
FVH	(80°-90°)	150.2	0.6			G2/225
BL	(0°-30°)	1211.3	4.6	B3/2500		
BM	(30°-60°)	1626.7	6.2	B2/2500		
BH	(60°-80°)	961.7	3.6	B2/1000		G2/1000
BVH	(80°-90°)	230.6	0.9			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





REPORT NUMBER: P300319

CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	7020.0	7020.0	7020.0	7020.0	7020.0	7020.0	7020.0	7020.0	7020.0	7020.0	7020.0
2.5°	8021.8	7957.1	7916.0	7879.9	7832.6	7731.8	7596.2	7510.3	7466.7	7318.7	7143.2
5°	8808.3	8751.0	8708.7	8660.2	8575.6	8417.5	8198.5	8024.3	7938.4	7642.2	7291.3
7.5°	8624.1	8647.7	8721.2	8849.3	8958.9	8937.7	8742.3	8520.8	8407.6	7995.6	7463.0
10°	7514.0	7555.1	7682.0	7982.0	8467.3	8965.1	9116.9	8963.8	8849.3	8345.3	7639.7
12.5°	7291.3	7290.0	7300.0	7379.6	7668.4	8369.0	9129.3	9283.7	9215.2	8678.9	7820.2
15°	7382.1	7384.6	7377.1	7410.7	7500.3	7777.9	8748.5	9406.9	9455.4	9014.9	8006.8
17.5°	7621.1	7614.8	7586.2	7586.2	7618.6	7726.8	8300.5	9292.4	9516.4	9312.3	8171.1
20°	8021.8	7993.2	7917.2	7847.6	7812.7	7871.2	8116.4	9028.5	9410.6	9572.4	8306.8
22.5°	8507.1	8484.7	8361.5	8212.2	8091.5	8090.2	8210.9	8798.3	9227.7	9817.5	8421.2
25°	9134.3	9098.2	8915.3	8676.4	8464.8	8383.9	8417.5	8787.1	9128.1	10083.8	8523.3
27.5°	9871.0	9805.1	9588.6	9243.8	8932.7	8769.7	8721.2	8990.0	9218.9	10413.6	8665.2
30°	10764.6	10688.7	10411.1	9961.9	9522.6	9255.0	9151.7	9349.6	9520.1	10815.6	8892.9
32.5°	11781.3	11671.8	11350.7	10855.4	10278.0	9869.8	9701.8	9825.0	9960.6	11299.7	9177.9
35°	13186.3	13055.6	12591.4	11908.2	11256.1	10694.9	10426.1	10515.7	10647.6	12021.5	9589.8
37.5°	14144.5	14086.0	13777.4	13135.3	12425.9	11780.0	11364.4	11416.7	11491.3	12923.7	10117.4
40°	14135.8	14159.4	14165.7	14171.9	13689.0	13070.5	12623.8	12569.0	12554.1	13914.3	10717.3
42.5°	13427.7	13524.8	13838.4	14474.3	14768.0	14484.2	14074.8	13916.8	13838.4	15081.6	11353.2
45°	12343.8	12396.0	12983.4	14225.4	15320.5	15884.3	15574.4	15076.6	14934.7	16154.3	11880.8
47.5°	11785.0	11842.3	12211.9	13565.8	15314.3	17015.5	17194.7	16246.4	15992.5	17087.7	12336.3
50°	10454.7	10574.2	11039.6	12418.4	14755.5	17535.7	18888.4	17640.2	17115.0	17996.1	12793.0
52.5°	8011.8	8196.0	8717.4	10531.9	13338.1	17278.1	20243.6	19330.2	18588.5	18936.9	13185.0
55°	5053.7	5190.6	5628.7	7438.1	10670.0	15937.8	20757.6	21158.3	20498.7	19828.0	13524.8
57.5°	2747.8	2808.7	2973.0	4106.7	6940.3	12974.7	20008.4	22198.6	21924.9	20584.6	13781.1
58°	2459.0	2500.1	2602.2	3559.2	6155.1	12164.6	19676.1	22202.4	22065.5	20695.3	13801.0
60°	1824.4	1803.2	1712.4	2031.0	3426.0	8403.8	17667.6	21313.8	21715.8	20831.0	13704.0
62.5°	1602.9	1551.8	1366.4	1345.3	1666.3	3871.5	13518.6	18257.4	19207.0	20056.9	13114.1
65°	1505.8	1451.0	1212.1	1134.9	1202.1	1637.7	7963.3	13692.8	14883.7	17709.9	11605.8
67.5°	1433.6	1362.7	1113.8	1008.0	1013.0	1082.7	3192.0	8624.1	9964.4	13446.4	9027.3
70°	1363.9	1286.8	1030.4	908.5	879.8	856.2	1269.3	4317.0	5532.9	8493.4	5755.6
72.5°	1289.3	1213.3	957.0	830.1	774.1	695.7	828.8	1765.9	2466.5	4018.4	2610.9
75°	1181.0	1112.5	883.6	760.4	680.7	576.2	626.0	922.1	1106.3	1600.4	1258.1
77.5°	1047.8	991.8	801.4	703.1	603.6	467.9	481.6	639.7	709.3	915.9	747.9
80°	752.9	772.8	713.1	632.2	537.6	379.6	369.6	466.7	504.0	588.6	486.6
82.5°	528.9	540.1	589.9	516.5	444.3	298.7	272.5	328.5	350.9	387.0	262.6
85°	364.6	352.2	404.4	359.6	321.1	199.1	186.7	222.8	236.4	240.2	135.6
87.5°	219.0	219.0	234.0	192.9	173.0	103.3	100.8	126.9	135.6	129.4	74.7
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: P300319

CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7020.0	7020.0	7020.0	7020.0	7020.0	7020.0	7020.0	7020.0	7020.0	7020.0	7020.0
2.5°	7038.7	6950.3	6762.4	6611.8	6421.4	6223.5	6112.8	5994.6	5913.7	5855.2	5948.5
5°	7092.2	6911.7	6523.5	6155.1	5748.2	5325.0	5004.0	4705.3	4497.5	4368.0	4490.0
7.5°	7176.8	6899.3	6280.8	5651.1	4920.6	4216.2	3586.5	3192.0	2961.8	2848.6	2919.5
10°	7273.9	6879.4	5995.8	4967.9	3922.5	3035.2	2564.8	2405.5	2353.3	2332.1	2342.1
12.5°	7354.7	6837.1	5646.1	4141.6	2945.6	2396.8	2261.2	2257.4	2268.6	2271.1	2274.9
15°	7412.0	6774.8	5127.2	3280.4	2355.8	2184.0	2176.6	2199.0	2220.1	2228.8	2233.8
17.5°	7450.6	6646.7	4541.0	2593.5	2110.6	2080.7	2098.2	2126.8	2149.2	2155.4	2160.4
20°	7446.8	6458.7	3842.9	2162.9	1977.4	1977.4	2007.3	2029.7	2031.0	2023.5	2027.2
22.5°	7408.3	6201.1	3165.9	1933.9	1859.2	1880.4	1910.2	1889.1	1802.0	1744.7	1748.5
25°	7343.5	5893.8	2586.0	1788.3	1749.7	1787.0	1778.3	1619.0	1494.6	1438.6	1438.6
27.5°	7286.3	5530.4	2140.5	1661.4	1640.2	1686.2	1531.9	1387.6	1335.3	1309.2	1300.5
30°	7245.2	5138.4	1843.0	1539.4	1536.9	1503.3	1329.1	1289.3	1280.5	1259.4	1251.9
32.5°	7255.2	4741.4	1652.6	1432.4	1441.1	1286.8	1232.0	1240.7	1233.3	1210.9	1200.9
35°	7337.3	4364.3	1528.2	1335.3	1309.2	1162.3	1174.8	1190.9	1188.5	1157.3	1147.4
37.5°	7484.2	4007.2	1446.1	1254.4	1142.4	1100.1	1120.0	1144.9	1138.7	1117.5	1110.1
40°	7638.5	3671.2	1378.9	1190.9	1044.1	1057.8	1075.2	1088.9	1095.1	1101.3	1096.4
42.5°	7789.1	3320.2	1296.7	1126.2	1003.0	1018.0	1025.4	1039.1	1072.7	1096.4	1095.1
45°	7878.7	2990.4	1212.1	1034.1	970.7	979.4	974.4	1001.8	1042.9	1081.4	1082.7
47.5°	7978.2	2734.1	1144.9	949.5	939.6	945.8	930.9	958.2	995.6	1042.9	1047.8
50°	8098.9	2581.0	1091.4	882.3	897.3	897.3	893.5	918.4	970.7	1025.4	1035.4
52.5°	8235.8	2551.1	1046.6	833.8	854.9	853.7	857.4	894.8	952.0	1005.5	1014.2
55°	8402.6	2632.0	998.1	797.7	813.9	818.9	831.3	873.6	922.1	983.1	986.9
57.5°	8596.7	2796.3	959.5	769.1	776.5	792.7	812.6	851.2	903.5	970.7	974.4
58°	8629.1	2831.1	953.3	766.6	769.1	787.7	810.1	847.5	899.7	973.2	976.9
60°	8630.3	2946.9	939.6	755.4	740.5	771.6	796.5	833.8	893.5	981.9	990.6
62.5°	8324.2	2945.6	929.6	739.2	710.6	749.2	777.8	821.3	887.3	1003.0	1020.5
65°	7329.9	2676.8	882.3	714.3	686.9	729.3	761.6	812.6	904.7	1095.1	1106.3
67.5°	5733.2	2194.0	794.0	679.5	655.8	709.3	751.7	811.4	923.4	1116.3	1123.7
70°	3790.6	1641.4	696.9	639.7	623.5	685.7	756.6	853.7	902.2	1071.5	1051.6
72.5°	1967.5	1152.4	618.5	589.9	586.1	664.5	828.8	848.7	881.1	1008.0	983.1
75°	1032.9	800.2	550.1	535.1	541.3	659.6	978.1	826.3	853.7	964.5	1011.7
77.5°	632.2	645.9	491.6	485.3	497.8	644.6	976.9	797.7	813.9	887.3	939.6
80°	423.1	523.9	446.8	448.0	456.7	589.9	877.3	752.9	765.3	838.8	892.3
82.5°	267.6	309.9	405.7	426.8	415.6	486.6	745.4	685.7	703.1	959.5	1014.2
85°	135.6	194.1	352.2	410.7	374.6	341.0	604.8	601.1	609.8	691.9	723.0
87.5°	62.2	107.0	275.0	358.4	282.5	212.8	439.3	445.5	480.4	491.6	491.6
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)