

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: P300382

Luminaire Tested: **GLNA-AF-05-LED-E1-AFL-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300382  
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-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

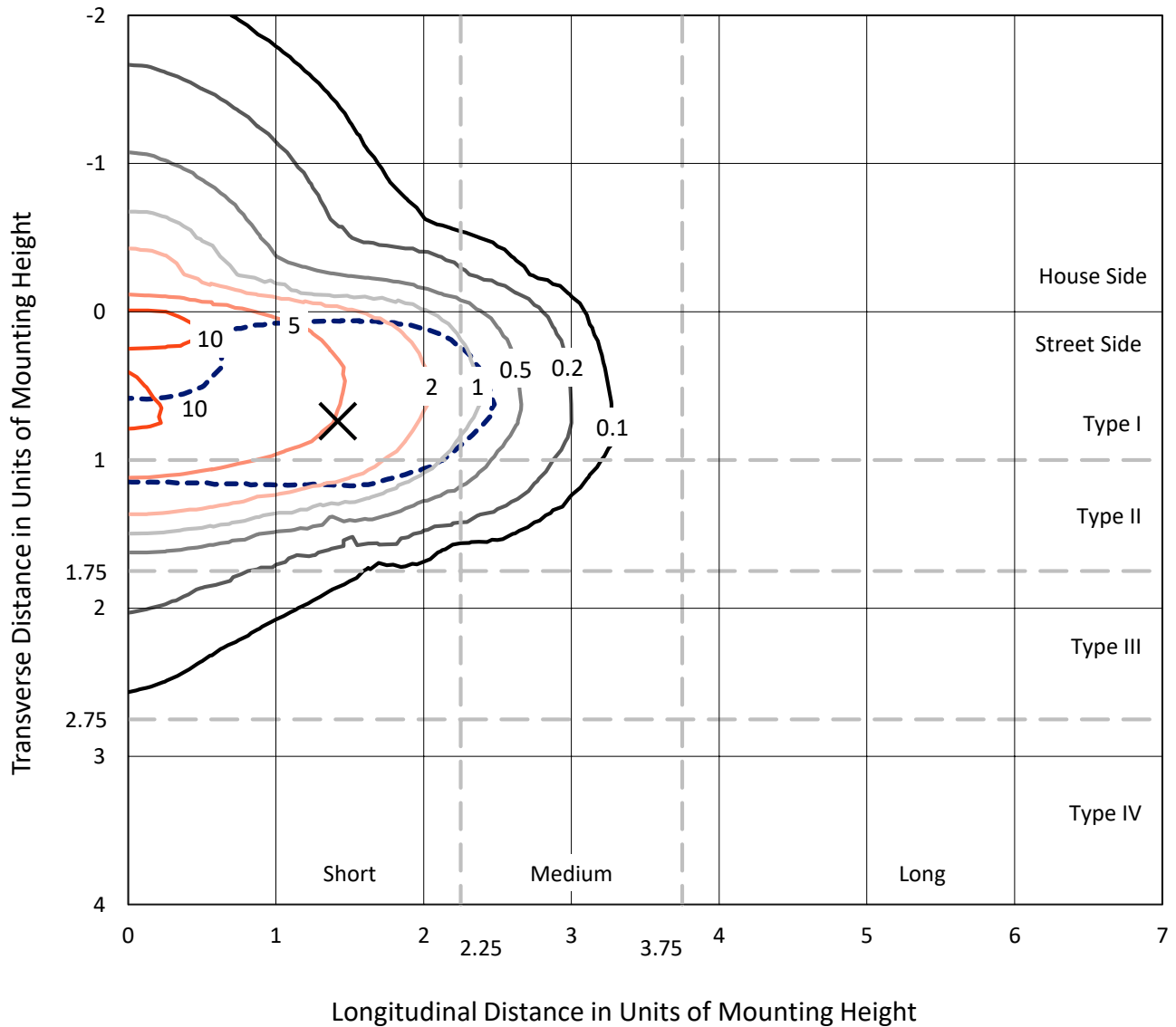
Lumens per Lamp: N/A  
Luminaire Lumens: 24573.6 lumens  
Efficiency: N/A  
Efficacy: 117.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G2  
  
Input Watts (W): 210  
Input Voltage (V): NR  
Input Current (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: P300382  
 CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-800

### Iso-Footcandle Lines of Horizontal Illumination

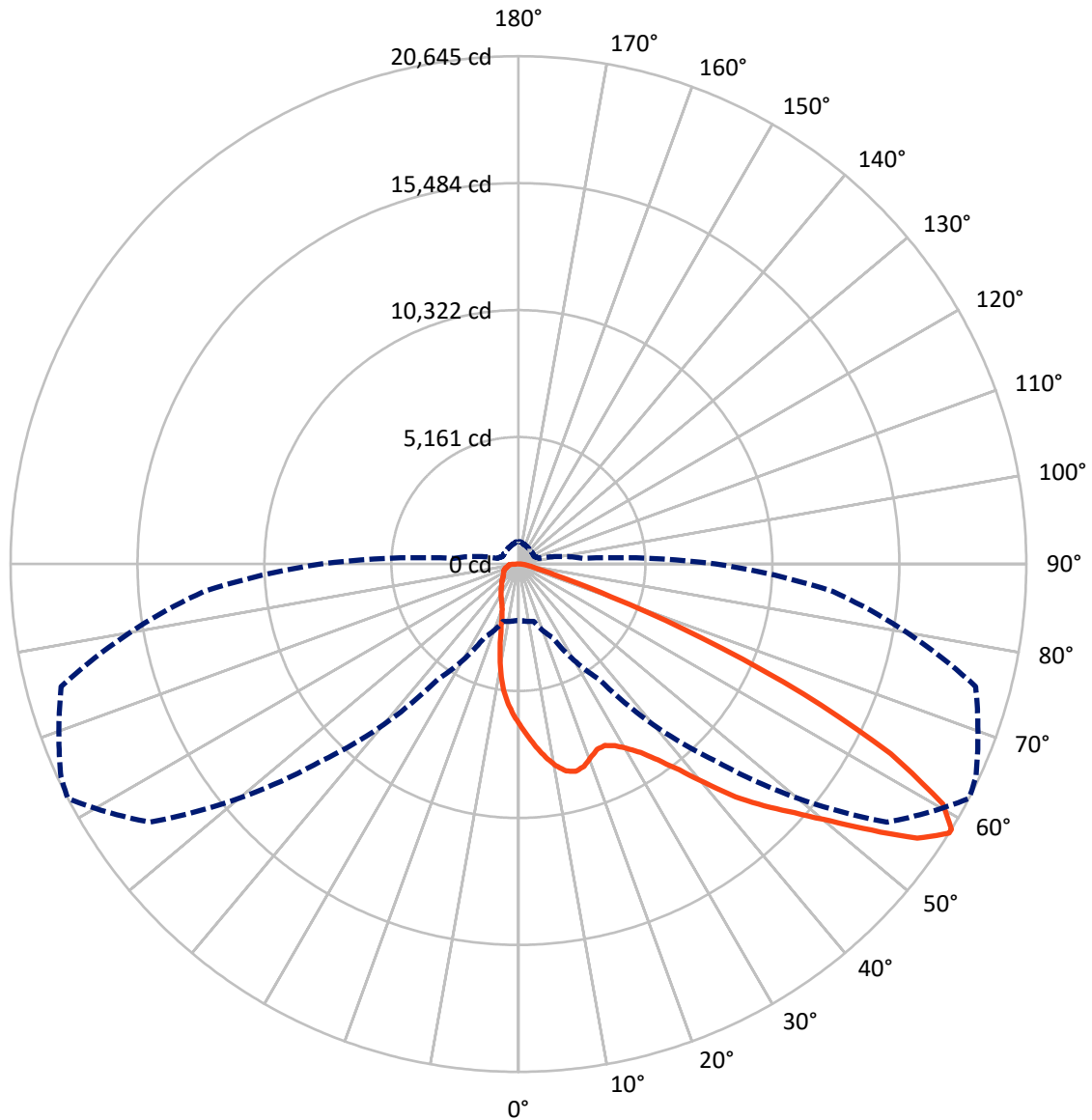
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.7 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P300382  
CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-800

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P300382

CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3747.6	0.0	3747.6
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	20826.0	0.0	20826.0
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	24573.6	0.0	24573.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	583.8	2.4
10°-20°	1492.2	6.1
20°-30°	2412.3	9.8
30°-40°	3829.5	15.6
40°-50°	5603.3	22.8
50°-60°	5860.6	23.8
60°-70°	3462.4	14.1
70°-80°	975.4	4.0
80°-90°	354.1	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°	24573.6	100.0
0°-180°	24573.6	100.0



REPORT NUMBER: P300382

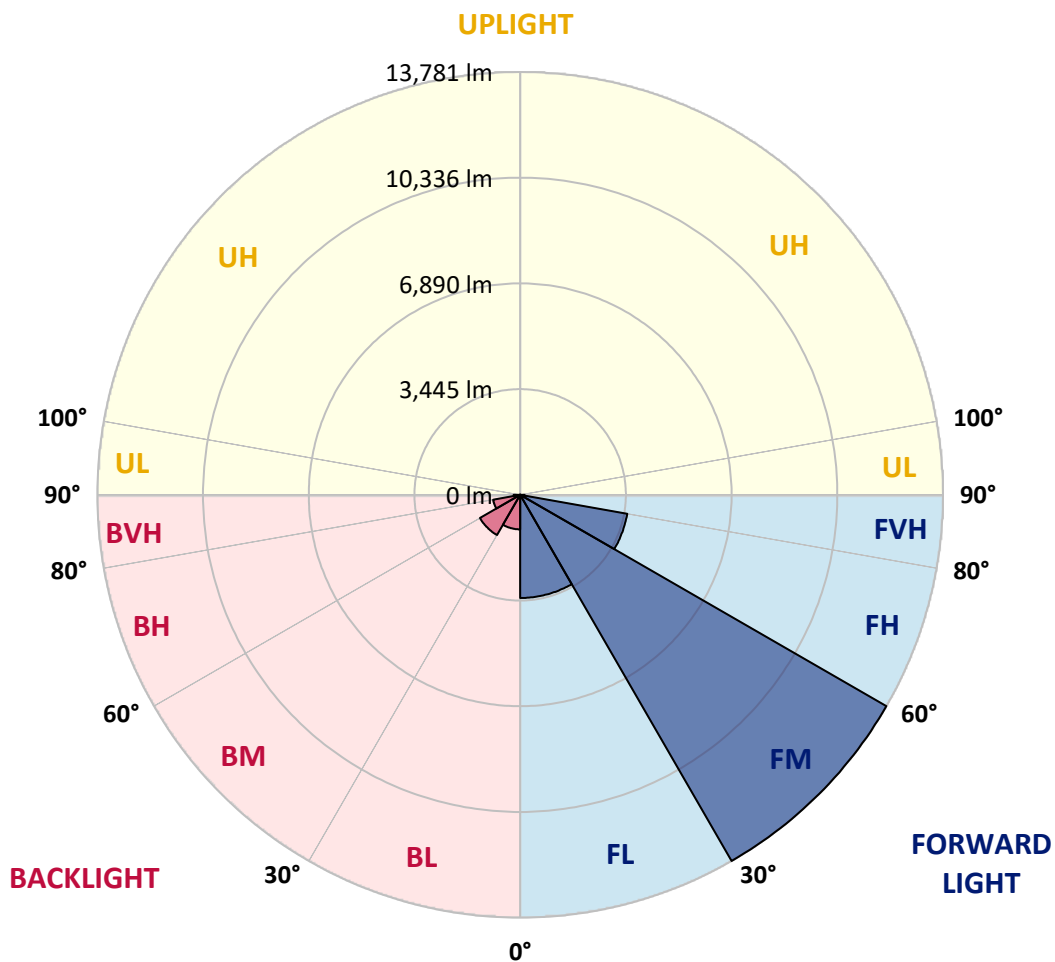
CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3362.0	13.7			
FM	(30°-60°)	13780.7	56.1			
FH	(60°-80°)	3543.6	14.4			G2/5000
FVH	(80°-90°)	139.7	0.6			G2/225
BL	(0°-30°)	1126.3	4.6	B3/2500		
BM	(30°-60°)	1512.6	6.2	B2/2500		
BH	(60°-80°)	894.2	3.6	B2/1000		G2/1000
BVH	(80°-90°)	214.4	0.9			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G2**

Type II Short





REPORT NUMBER: P300382

CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	6527.5	6527.5	6527.5	6527.5	6527.5	6527.5	6527.5	6527.5	6527.5	6527.5	6527.5
2.5°	7459.0	7398.8	7360.6	7327.1	7283.1	7189.4	7063.2	6983.4	6942.9	6805.2	6642.0
5°	8190.3	8137.1	8097.7	8052.6	7973.9	7826.9	7623.3	7461.3	7381.4	7106.0	6779.7
7.5°	8019.0	8041.0	8109.3	8228.5	8330.3	8310.6	8129.0	7923.0	7817.7	7434.7	6939.4
10°	6986.9	7025.0	7143.1	7421.9	7873.2	8336.1	8477.3	8334.9	8228.5	7759.8	7103.7
12.5°	6779.7	6778.6	6787.8	6861.9	7130.3	7781.8	8488.8	8632.3	8568.7	8069.9	7271.5
15°	6864.2	6866.5	6859.6	6890.8	6974.1	7232.2	8134.7	8746.9	8792.0	8382.4	7445.1
17.5°	7086.4	7080.6	7054.0	7054.0	7084.1	7184.7	7718.2	8640.4	8848.7	8658.9	7597.8
20°	7459.0	7432.4	7361.8	7297.0	7264.6	7319.0	7546.9	8395.1	8750.3	8900.8	7724.0
22.5°	7910.3	7889.4	7774.9	7636.0	7523.8	7522.6	7634.9	8181.0	8580.2	9128.7	7830.4
25°	8493.5	8459.9	8289.8	8067.6	7870.9	7795.7	7826.9	8170.6	8487.7	9376.4	7925.3
27.5°	9178.5	9117.2	8915.8	8595.3	8306.0	8154.4	8109.3	8359.2	8572.1	9683.0	8057.2
30°	10009.3	9938.7	9680.7	9263.0	8854.5	8605.7	8509.7	8693.6	8852.2	10056.8	8269.0
32.5°	10954.7	10852.9	10554.3	10093.8	9556.9	9177.3	9021.1	9135.7	9261.8	10506.9	8534.0
35°	12261.1	12139.6	11708.0	11072.7	10466.4	9944.5	9694.6	9777.9	9900.5	11178.0	8917.0
37.5°	13152.1	13097.7	12810.8	12213.7	11554.1	10953.6	10567.1	10615.7	10685.1	12017.0	9407.6
40°	13144.0	13166.0	13171.8	13177.6	12728.6	12153.5	11738.1	11687.2	11673.3	12938.1	9965.3
42.5°	12485.6	12575.9	12867.5	13458.8	13731.9	13468.0	13087.3	12940.4	12867.5	14023.5	10556.7
45°	11477.7	11526.3	12072.5	13227.3	14245.6	14769.8	14481.7	14018.8	13886.9	15020.9	11047.3
47.5°	10958.2	11011.4	11355.1	12614.1	14239.9	15821.7	15988.3	15106.6	14870.5	15888.8	11470.8
50°	9721.2	9832.3	10265.1	11547.2	13720.3	16305.4	17563.2	16402.6	15914.2	16733.5	11895.5
52.5°	7449.7	7621.0	8105.8	9792.9	12402.3	16065.8	18823.3	17974.0	17284.3	17608.3	12260.0
55°	4699.2	4826.5	5233.8	6916.3	9921.4	14819.6	19301.2	19673.8	19060.5	18436.8	12575.9
57.5°	2555.0	2611.7	2764.4	3818.6	6453.4	12064.4	18604.6	20641.2	20386.6	19140.4	12814.2
58°	2286.5	2324.7	2419.6	3309.4	5723.2	11311.1	18295.7	20644.7	20517.4	19243.4	12832.8
60°	1696.4	1676.7	1592.2	1888.5	3185.6	7814.2	16428.0	19818.5	20192.2	19369.5	12742.5
62.5°	1490.4	1443.0	1270.5	1250.9	1549.4	3599.9	12570.1	16976.5	17859.4	18649.7	12194.0
65°	1400.1	1349.2	1127.1	1055.3	1117.8	1522.8	7404.6	12732.1	13839.5	16467.4	10791.6
67.5°	1333.0	1267.1	1035.6	937.3	941.9	1006.7	2968.1	8019.0	9265.3	12503.0	8393.9
70°	1268.2	1196.5	958.1	844.7	818.1	796.1	1180.3	4014.1	5144.7	7897.5	5351.8
72.5°	1198.8	1128.2	889.8	771.8	719.7	646.8	770.7	1642.0	2293.5	3736.4	2427.7
75°	1098.1	1034.5	821.6	707.0	633.0	535.8	582.0	857.4	1028.7	1488.1	1169.9
77.5°	974.3	922.2	745.2	653.8	561.2	435.1	447.8	594.8	659.6	851.7	695.4
80°	700.1	718.6	663.0	587.8	499.9	352.9	343.7	433.9	468.6	547.3	452.4
82.5°	491.8	502.2	548.5	480.2	413.1	277.7	253.4	305.5	326.3	359.9	244.2
85°	339.0	327.5	376.1	334.4	298.5	185.1	173.6	207.1	219.9	223.3	126.1
87.5°	203.7	203.7	217.5	179.4	160.8	96.0	93.7	118.0	126.1	120.3	69.4
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: P300382

CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-800

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6527.5	6527.5	6527.5	6527.5	6527.5	6527.5	6527.5	6527.5	6527.5	6527.5	6527.5
2.5°	6544.8	6462.7	6287.9	6147.9	5970.9	5786.9	5683.9	5574.0	5498.8	5444.4	5531.2
5°	6594.6	6426.8	6065.8	5723.2	5344.9	4951.4	4652.9	4375.2	4181.9	4061.6	4175.0
7.5°	6673.3	6415.2	5840.1	5254.6	4575.4	3920.4	3334.9	2968.1	2754.0	2648.7	2714.7
10°	6763.5	6396.7	5575.1	4619.3	3647.3	2822.3	2384.9	2236.8	2188.2	2168.5	2177.8
12.5°	6838.7	6357.4	5250.0	3851.0	2739.0	2228.7	2102.5	2099.1	2109.5	2111.8	2115.3
15°	6892.0	6299.5	4767.4	3050.2	2190.5	2030.8	2023.9	2044.7	2064.4	2072.5	2077.1
17.5°	6927.8	6180.3	4222.4	2411.5	1962.5	1934.7	1950.9	1977.6	1998.4	2004.2	2008.8
20°	6924.4	6005.6	3573.3	2011.1	1838.7	1838.7	1866.5	1887.3	1888.5	1881.5	1885.0
22.5°	6888.5	5766.1	2943.8	1798.2	1728.8	1748.4	1776.2	1756.5	1675.5	1622.3	1625.8
25°	6828.3	5480.2	2404.6	1662.8	1626.9	1661.7	1653.6	1505.4	1389.7	1337.7	1337.7
27.5°	6775.1	5142.4	1990.3	1544.8	1525.1	1567.9	1424.4	1290.2	1241.6	1217.3	1209.2
30°	6736.9	4777.9	1713.7	1431.4	1429.1	1397.8	1235.8	1198.8	1190.7	1171.0	1164.1
32.5°	6746.2	4408.7	1536.7	1331.9	1340.0	1196.5	1145.6	1153.7	1146.7	1125.9	1116.6
35°	6822.5	4058.1	1421.0	1241.6	1217.3	1080.8	1092.3	1107.4	1105.1	1076.1	1066.9
37.5°	6959.1	3726.0	1344.6	1166.4	1062.3	1022.9	1041.4	1064.6	1058.8	1039.1	1032.2
40°	7102.6	3413.6	1282.1	1107.4	970.8	983.6	999.8	1012.5	1018.3	1024.1	1019.4
42.5°	7242.6	3087.3	1205.7	1047.2	932.7	946.5	953.5	966.2	997.5	1019.4	1018.3
45°	7325.9	2780.6	1127.1	961.6	902.6	910.7	906.0	931.5	969.7	1005.6	1006.7
47.5°	7418.5	2542.3	1064.6	882.9	873.6	879.4	865.5	891.0	925.7	969.7	974.3
50°	7530.7	2399.9	1014.8	820.4	834.3	834.3	830.8	854.0	902.6	953.5	962.7
52.5°	7658.0	2372.2	973.2	775.3	795.0	793.8	797.3	832.0	885.2	935.0	943.1
55°	7813.1	2447.4	928.0	741.7	756.8	761.4	773.0	812.3	857.4	914.1	917.6
57.5°	7993.6	2600.1	892.2	715.1	722.1	737.1	755.6	791.5	840.1	902.6	906.0
58°	8023.7	2632.5	886.4	712.8	715.1	732.5	753.3	788.0	836.6	904.9	908.4
60°	8024.8	2740.1	873.6	702.4	688.5	717.4	740.6	775.3	830.8	913.0	921.1
62.5°	7740.2	2739.0	864.4	687.3	660.7	696.6	723.2	763.7	825.0	932.7	948.9
65°	6815.6	2489.0	820.4	664.2	638.7	678.1	708.2	755.6	841.2	1018.3	1028.7
67.5°	5331.0	2040.1	738.3	631.8	609.8	659.6	698.9	754.5	858.6	1038.0	1044.9
70°	3524.7	1526.3	648.0	594.8	579.7	637.6	703.5	793.8	838.9	996.3	977.8
72.5°	1829.4	1071.5	575.1	548.5	545.0	617.9	770.7	789.2	819.3	937.3	914.1
75°	960.4	744.0	511.5	497.6	503.4	613.3	909.5	768.3	793.8	896.8	940.8
77.5°	587.8	600.6	457.1	451.3	462.9	599.4	908.4	741.7	756.8	825.0	873.6
80°	393.4	487.2	415.4	416.6	424.7	548.5	815.8	700.1	711.6	779.9	829.7
82.5°	248.8	288.1	377.2	396.9	386.5	452.4	693.1	637.6	653.8	892.2	943.1
85°	126.1	180.5	327.5	381.9	348.3	317.1	562.4	558.9	567.0	643.4	672.3
87.5°	57.9	99.5	255.7	333.3	262.7	197.9	408.5	414.3	446.7	457.1	457.1
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)