

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: P299144

Luminaire Tested: **GLNA-AF-09-LED-E1-SL2-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299144
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-09-LED-E1-SL2-7030
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Narrow OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 50250.6 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G5

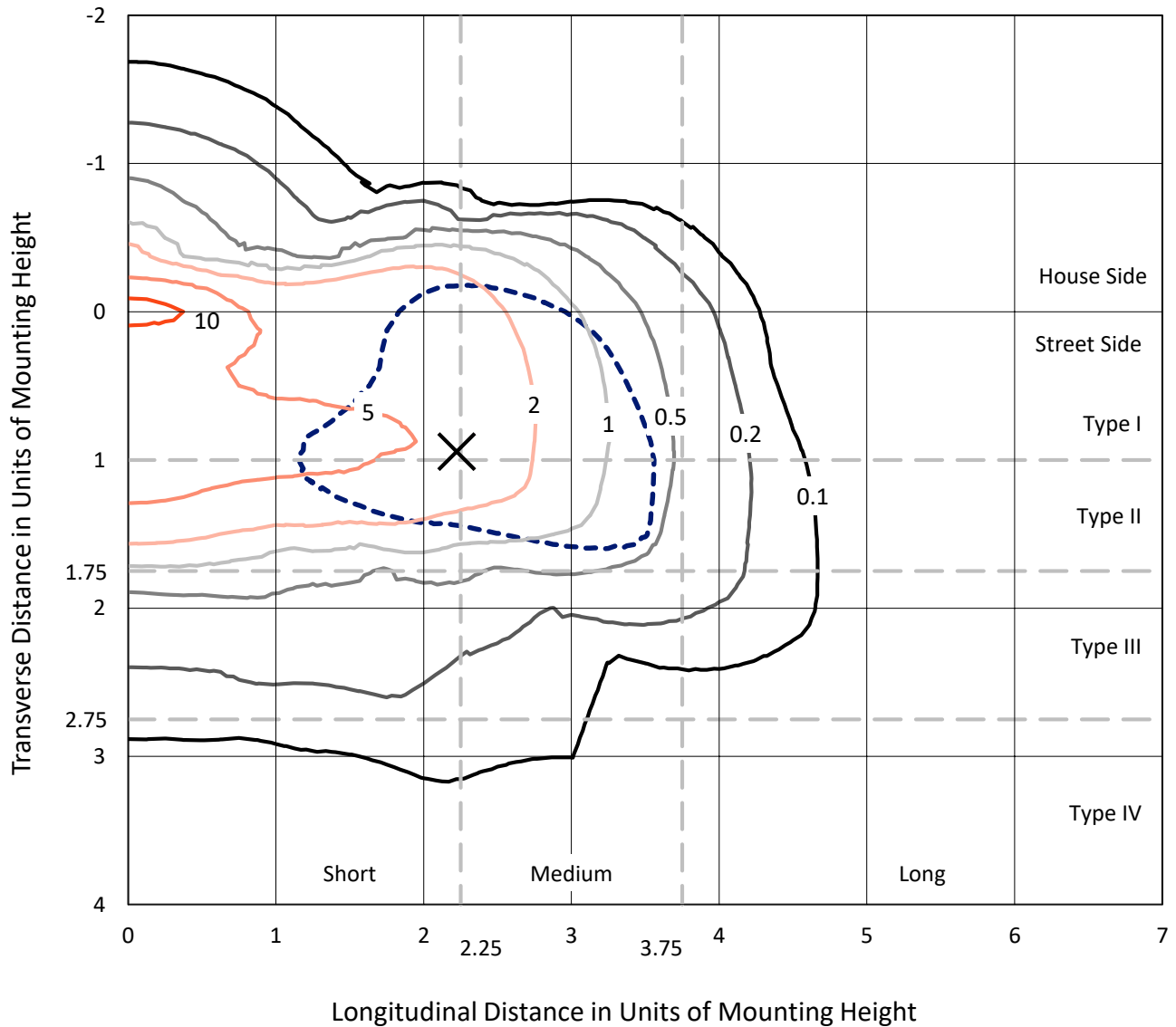
Input Watts (W): 501
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299144
 CATALOG NUMBER: GLNA-AF-09-LED-E1-SL2-7030

Iso-Footcandle Lines of Horizontal Illumination

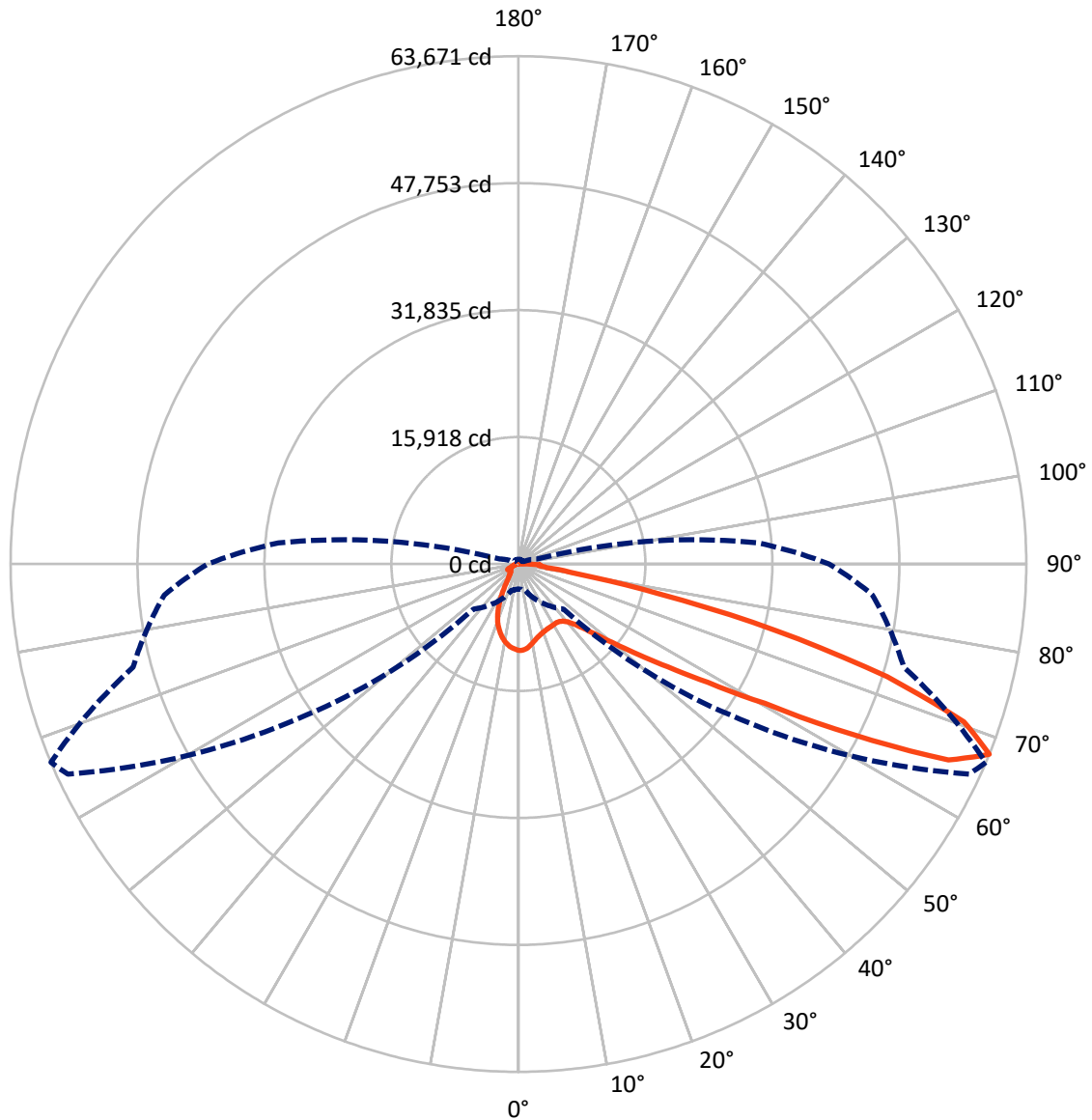
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P299144
CATALOG NUMBER: GLNA-AF-09-LED-E1-SL2-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P299144

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL2-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8326.0	0.0	8326.0
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	41924.6	0.0	41924.6
	% Fixture	83.4	0.0	83.4
Total	Lumens	50250.6	0.0	50250.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	924.7	1.8
10°-20°	2139.7	4.3
20°-30°	2900.4	5.8
30°-40°	4123.2	8.2
40°-50°	6898.2	13.7
50°-60°	10912.9	21.7
60°-70°	13901.9	27.7
70°-80°	7281.8	14.5
80°-90°	1167.9	2.3
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°	50250.6	100.0
0°-180°	50250.6	100.0



REPORT NUMBER: P299144

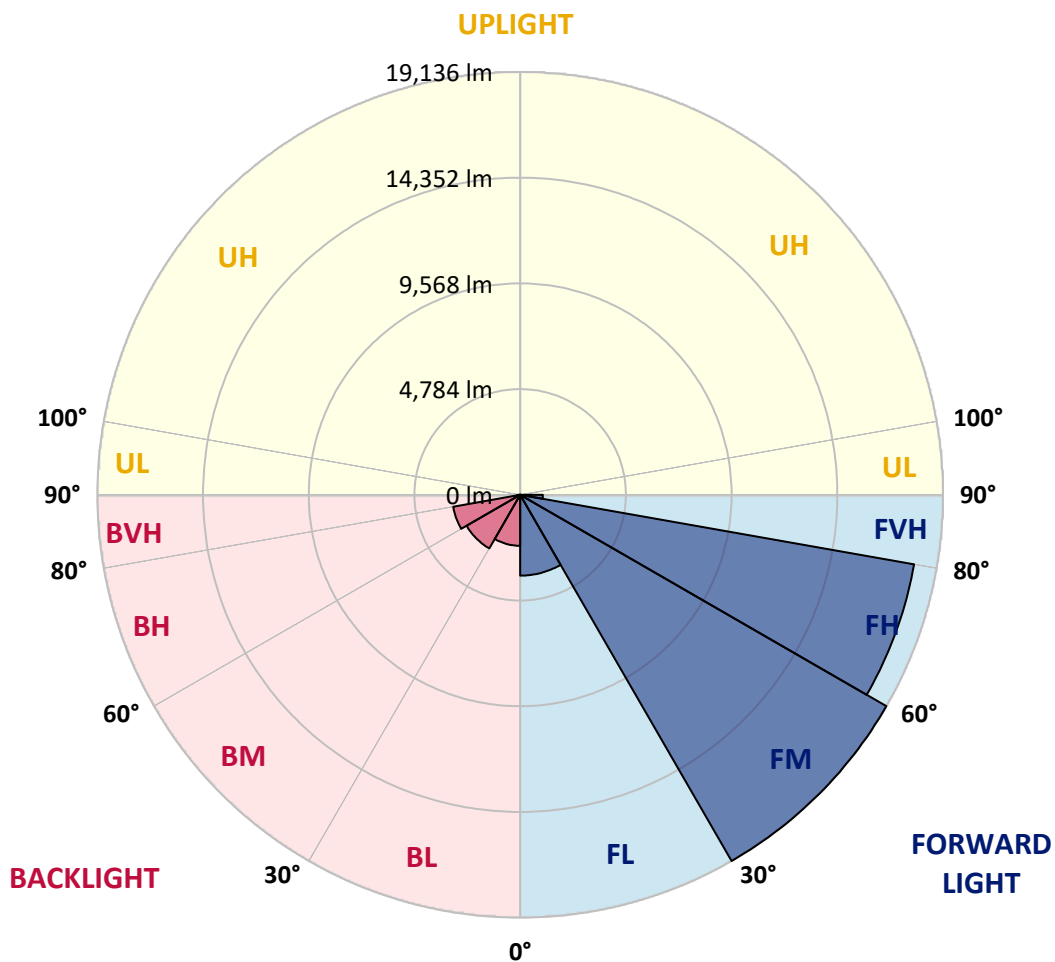
CATALOG NUMBER: GLNA-AF-09-LED-E1-SL2-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3657.0	7.3			
FM	(30°-60°)	19136.5	38.1			
FH	(60°-80°)	18104.2	36.0			G5
FVH	(80°-90°)	1026.9	2.0			G5
BL	(0°-30°)	2307.7	4.6	B3/2500		
BM	(30°-60°)	2797.8	5.6	B3/5000		
BH	(60°-80°)	3079.5	6.1	B4/5000		G4/5000
BVH	(80°-90°)	141.0	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type II Short





REPORT NUMBER: P299144

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL2-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	10838.9	10838.9	10838.9	10838.9	10838.9	10838.9	10838.9	10838.9	10838.9	10838.9	10838.9
2.5°	10392.9	10410.2	10464.8	10499.4	10655.6	10722.5	10769.5	10816.6	10824.1	10846.4	10824.1
5°	9302.6	9339.7	9441.3	9555.3	9857.6	10095.5	10345.8	10606.0	10653.1	10821.6	10868.7
7.5°	8457.5	8447.6	8531.9	8668.2	8977.9	9307.5	9746.1	10264.0	10365.6	10744.8	10928.1
10°	7840.5	7833.1	7922.3	8063.5	8358.4	8670.7	9166.3	9875.0	10018.7	10623.3	10985.1
12.5°	7384.6	7387.0	7476.2	7632.4	7932.2	8246.9	8749.9	9498.3	9681.7	10482.1	11044.6
15°	7082.2	7102.1	7173.9	7339.9	7632.4	7947.1	8440.2	9215.8	9421.5	10370.6	11111.5
17.5°	6980.6	7012.8	7037.6	7159.0	7409.3	7724.0	8207.3	9007.7	9225.7	10293.8	11171.0
20°	7074.8	7112.0	7064.9	7107.0	7265.6	7543.1	8023.9	8844.1	9067.1	10207.0	11178.4
22.5°	7478.7	7513.4	7374.6	7253.2	7243.3	7411.8	7872.7	8715.3	8945.7	10142.6	11180.9
25°	8189.9	8212.2	7979.3	7696.8	7421.7	7364.7	7766.2	8626.0	8871.4	10085.6	11133.8
27.5°	9062.2	9079.5	8811.9	8395.6	7843.0	7476.2	7729.0	8574.0	8829.2	10036.1	11054.5
30°	10122.8	10204.6	9845.2	9319.9	8514.5	7805.8	7803.3	8546.8	8782.2	9951.8	10898.4
32.5°	11208.2	11242.9	10995.1	10462.3	9419.0	8385.7	8011.5	8566.6	8769.8	9850.2	10700.2
35°	12308.4	12353.0	12191.9	11763.2	10655.6	9235.6	8417.9	8683.0	8846.6	9815.5	10561.4
37.5°	13733.3	13792.8	13569.7	13074.1	12159.7	10387.9	9094.4	8975.5	9082.0	9914.6	10519.3
40°	15985.8	15958.6	15306.8	14568.4	13805.1	11862.4	10060.8	9471.1	9533.0	10234.3	10648.1
42.5°	18607.6	18540.7	17418.1	16258.4	15614.1	13646.6	11339.5	10330.9	10318.5	10863.7	11101.6
45°	20699.0	20644.5	19633.5	18203.7	17688.2	15678.5	12992.3	11612.1	11520.4	11862.4	11939.2
47.5°	21831.5	21834.0	21251.6	20084.5	20072.1	18260.7	15116.0	13465.7	13307.1	13468.1	13386.4
50°	21435.0	21487.1	21425.1	21053.4	22247.8	21645.7	17889.0	16050.2	15730.6	15889.2	15574.5
52.5°	19517.0	19583.9	19950.7	20520.6	23162.2	25736.9	21962.8	19261.8	18890.1	18833.1	18483.7
55°	16117.2	16198.9	16947.3	18496.1	22401.5	28485.0	28390.9	23355.5	22763.2	22225.5	22076.8
57.5°	11109.0	11245.3	12449.7	14749.3	19940.8	29315.2	36045.5	29191.3	27987.0	26108.6	26143.3
60°	6262.0	6420.6	7840.5	9929.5	14974.8	28413.2	41868.9	38030.4	35488.0	30655.8	30913.5
62.5°	3982.2	4153.2	5231.1	6898.9	8985.4	23556.2	44255.3	50319.0	47090.1	36261.1	36513.9
65°	3223.9	3298.3	3806.3	5694.5	6524.7	14191.7	42443.8	60441.8	59237.5	43375.6	42196.0
67.5°	3147.1	3171.9	3434.6	4780.1	6257.0	7976.8	33854.9	62335.0	63670.7	50019.2	44562.5
70°	3109.9	3196.7	3870.7	4562.1	5991.9	6727.9	20344.7	57146.0	59254.8	51756.3	41413.0
72.5°	1509.1	1504.2	1947.7	4125.9	6750.2	6978.2	10452.4	46237.7	48353.9	44840.1	34030.9
75°	1216.7	1112.6	1063.1	1511.6	6490.0	7206.1	6661.0	31815.5	33346.9	30063.5	20919.6
77.5°	1154.8	1030.9	944.1	946.6	2743.2	7642.3	5642.5	17608.9	18055.0	13579.6	5731.7
80°	956.5	842.5	780.6	879.7	1328.2	7278.0	6100.9	7969.4	7312.7	3335.4	1908.1
82.5°	664.1	604.6	587.3	738.5	1063.1	5186.5	7094.6	4282.0	3590.7	1670.2	1177.1
85°	423.7	361.8	401.4	537.7	827.7	2393.8	7307.7	3337.9	2654.0	1060.6	664.1
87.5°	195.8	158.6	198.2	297.4	540.2	825.2	6953.4	3749.3	2733.3	560.0	418.8
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: P299144

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL2-7030

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10838.9	10838.9	10838.9	10838.9	10838.9	10838.9	10838.9	10838.9	10838.9	10838.9	10838.9
2.5°	10843.9	10796.8	10759.6	10690.3	10613.4	10539.1	10472.2	10387.9	10363.2	10340.8	10375.5
5°	10878.6	10831.5	10695.2	10482.1	10246.7	10026.1	9805.6	9617.3	9500.8	9436.4	9473.5
7.5°	10930.6	10863.7	10581.2	10189.7	9765.9	9379.4	8980.4	8660.7	8425.3	8313.8	8346.0
10°	10977.7	10848.8	10387.9	9800.6	9181.1	8606.2	7976.8	7456.4	7069.8	6866.6	6916.2
12.5°	10997.5	10791.9	10117.8	9314.9	8465.0	7622.4	6695.7	5917.6	5362.5	5159.3	5117.1
15°	11017.4	10727.4	9820.5	8762.3	7600.1	6408.2	5109.7	4178.0	3717.1	3615.5	3593.2
17.5°	11022.3	10615.9	9483.4	8162.7	6586.6	4963.5	3494.0	2901.8	2904.3	3067.8	3087.6
20°	10970.3	10449.9	9074.6	7416.8	5372.4	3432.1	2398.7	2297.1	2671.3	3080.2	3129.8
22.5°	10851.3	10229.3	8611.2	6547.0	3982.2	2260.0	1856.0	1967.6	2450.8	2951.3	3008.3
25°	10700.2	9961.7	8063.5	5538.4	2636.6	1615.7	1556.2	1692.5	2019.6	2354.1	2386.3
27.5°	10494.5	9644.5	7449.0	4383.6	1712.3	1330.7	1370.4	1462.0	1595.9	1744.5	1759.4
30°	10229.3	9265.4	6792.3	3196.7	1293.5	1196.9	1253.9	1303.4	1360.4	1444.7	1452.1
32.5°	9924.5	8901.1	6118.3	2207.9	1147.3	1127.5	1172.1	1196.9	1241.5	1293.5	1298.5
35°	9669.3	8554.2	5419.5	1561.2	1085.4	1075.5	1105.2	1115.1	1157.2	1214.2	1219.2
37.5°	9523.1	8271.7	4698.4	1258.8	1043.3	1028.4	1045.7	1045.7	1105.2	1189.5	1201.8
40°	9533.0	8115.6	3977.2	1137.4	1008.6	988.7	991.2	991.2	1068.0	1159.7	1167.2
42.5°	9803.1	8155.2	3337.9	1090.3	981.3	959.0	946.6	954.0	1018.5	1077.9	1082.9
45°	10437.5	8435.2	2738.2	1060.6	954.0	946.6	919.4	916.9	941.7	968.9	968.9
47.5°	11478.3	8987.8	2331.8	1040.8	931.7	929.3	897.0	864.8	862.4	872.3	872.3
50°	13170.8	9939.4	2059.2	1018.5	916.9	897.0	859.9	810.3	793.0	800.4	800.4
52.5°	15708.3	11636.9	1955.2	988.7	884.7	852.4	810.3	760.8	745.9	748.4	748.4
55°	19036.3	14243.8	1940.3	954.0	850.0	797.9	763.2	726.1	708.7	713.7	713.7
57.5°	23102.7	17849.3	2205.5	899.5	802.9	743.4	723.6	698.8	686.4	693.9	691.4
60°	28046.4	22567.5	3271.0	842.5	755.8	693.9	693.9	674.0	664.1	671.5	669.1
62.5°	33741.0	27987.0	4599.2	800.4	706.2	654.2	664.1	654.2	644.3	649.2	646.8
65°	38791.2	31518.2	4306.8	768.2	656.7	617.0	634.4	629.4	622.0	626.9	624.5
67.5°	38937.4	30209.8	2418.6	733.5	609.6	579.9	604.6	602.2	597.2	602.2	599.7
70°	34749.5	25508.9	1362.9	669.1	560.0	535.3	569.9	567.5	562.5	572.4	569.9
72.5°	27840.7	18510.9	996.2	589.8	510.5	488.2	527.8	525.3	525.3	540.2	532.8
75°	16020.5	9525.6	795.4	505.5	458.4	441.1	475.8	478.3	483.2	503.0	488.2
77.5°	4567.0	2968.7	649.2	428.7	394.0	386.6	421.3	426.2	428.7	451.0	431.2
80°	1697.5	1367.9	535.3	359.3	322.1	324.6	356.8	364.3	366.7	389.1	364.3
82.5°	1082.9	902.0	433.7	277.5	252.8	250.3	289.9	299.8	299.8	302.3	287.5
85°	631.9	540.2	327.1	200.7	178.4	171.0	215.6	232.9	225.5	220.5	210.6
87.5°	423.7	371.7	200.7	111.5	96.6	91.7	126.4	138.8	133.8	126.4	118.9
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)