

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: P298904

Luminaire Tested: **GLNA-AF-09-LED-E1-T2-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P298904
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24139)
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-T2-7030
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 50338.6 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B4 - U0 - G5

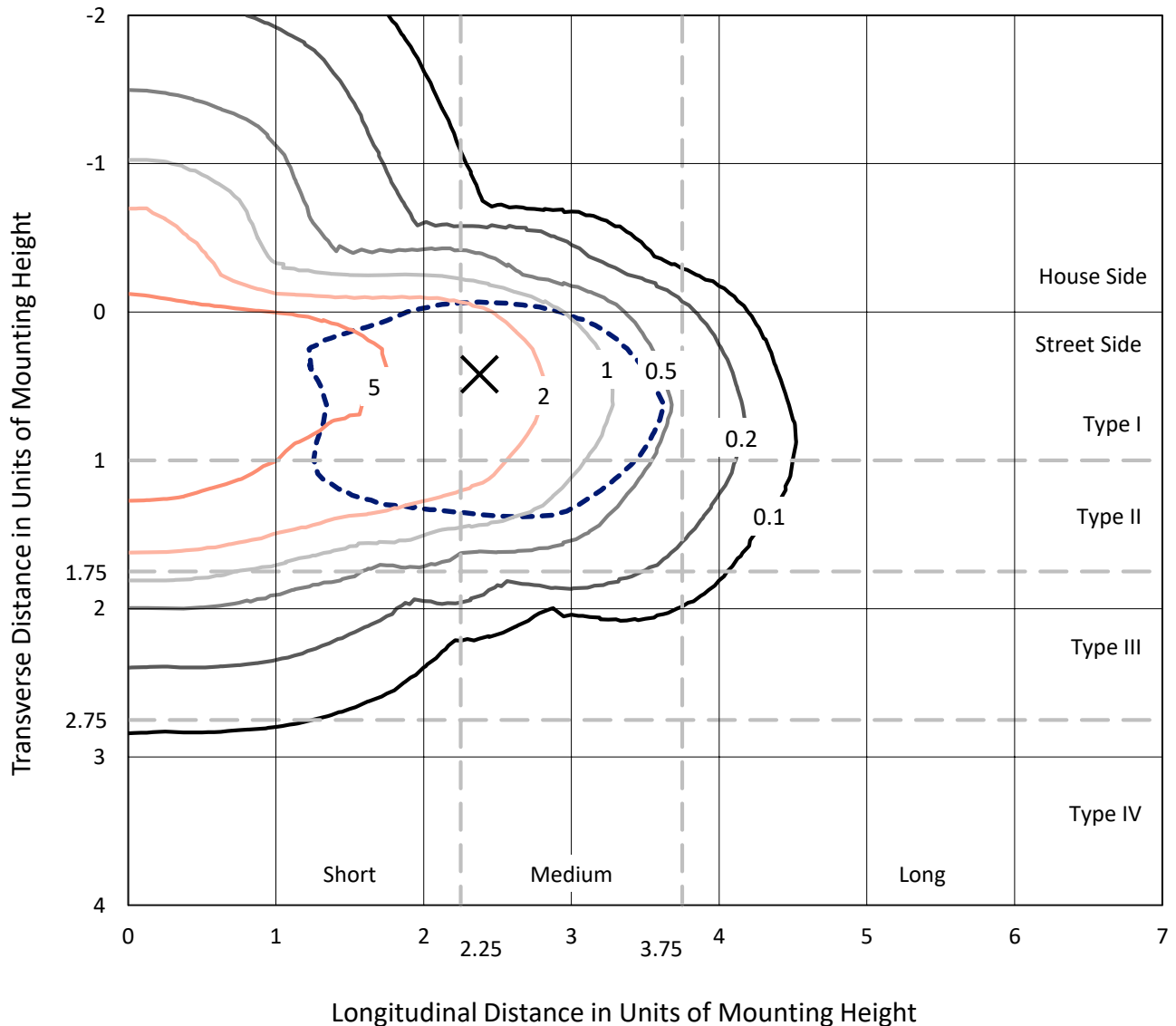
Input Watts (W): 501
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P298904
 CATALOG NUMBER: GLNA-AF-09-LED-E1-T2-7030

Iso-Footcandle Lines of Horizontal Illumination

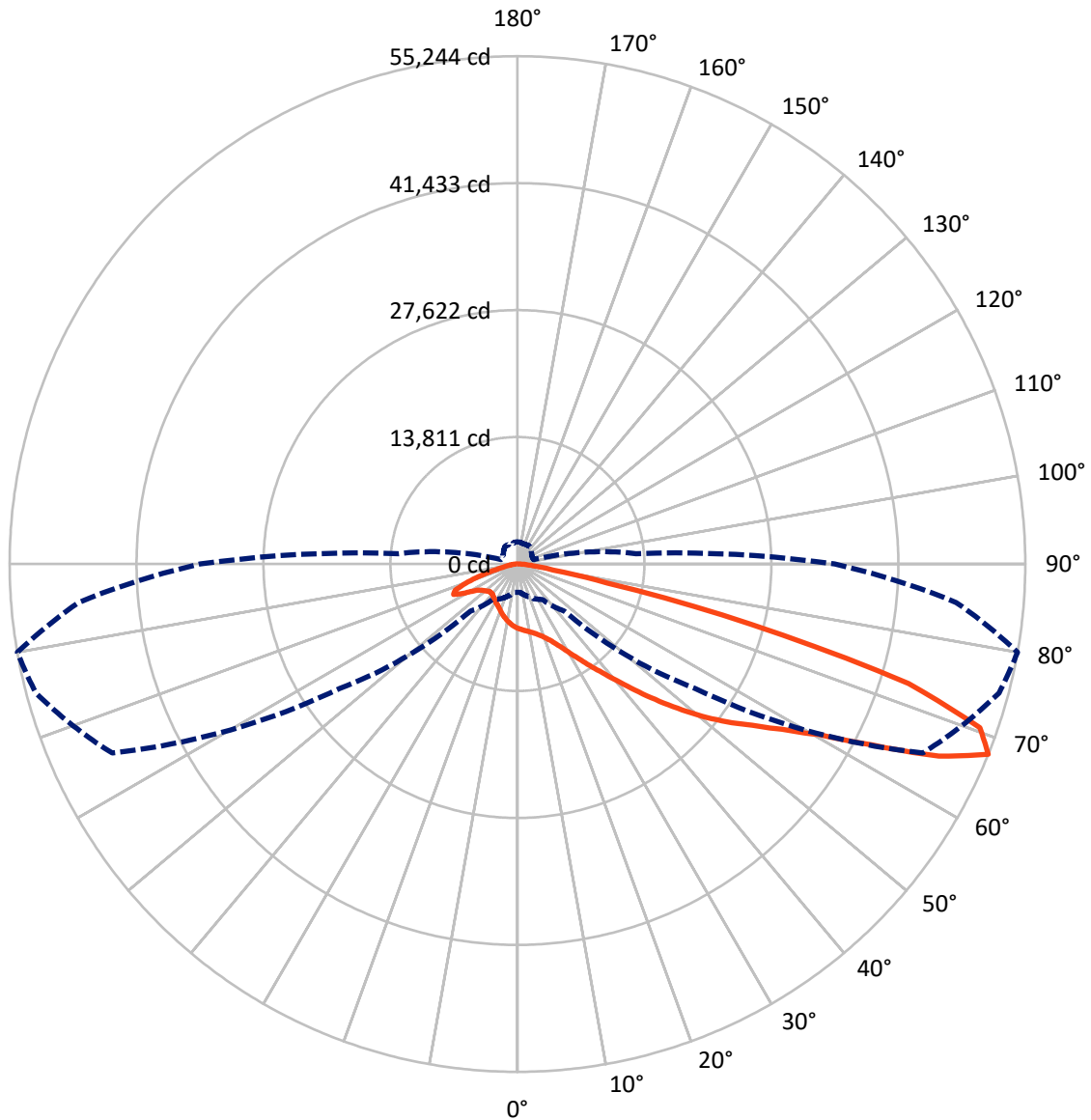
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.4 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P298904
CATALOG NUMBER: GLNA-AF-09-LED-E1-T2-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P298904

CATALOG NUMBER: GLNA-AF-09-LED-E1-T2-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9270.5	0.0	9270.5
	% Fixture	18.4	0.0	18.4
Street Side	Lumens	41068.2	0.0	41068.2
	% Fixture	81.6	0.0	81.6
Total	Lumens	50338.6	0.0	50338.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	645.1	1.3
10°-20°	1858.4	3.7
20°-30°	3076.1	6.1
30°-40°	5031.6	10.0
40°-50°	8124.1	16.1
50°-60°	11728.8	23.3
60°-70°	12943.4	25.7
70°-80°	5966.1	11.9
80°-90°	965.0	1.9
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°	50338.6	100.0
0°-180°	50338.6	100.0



REPORT NUMBER: P298904

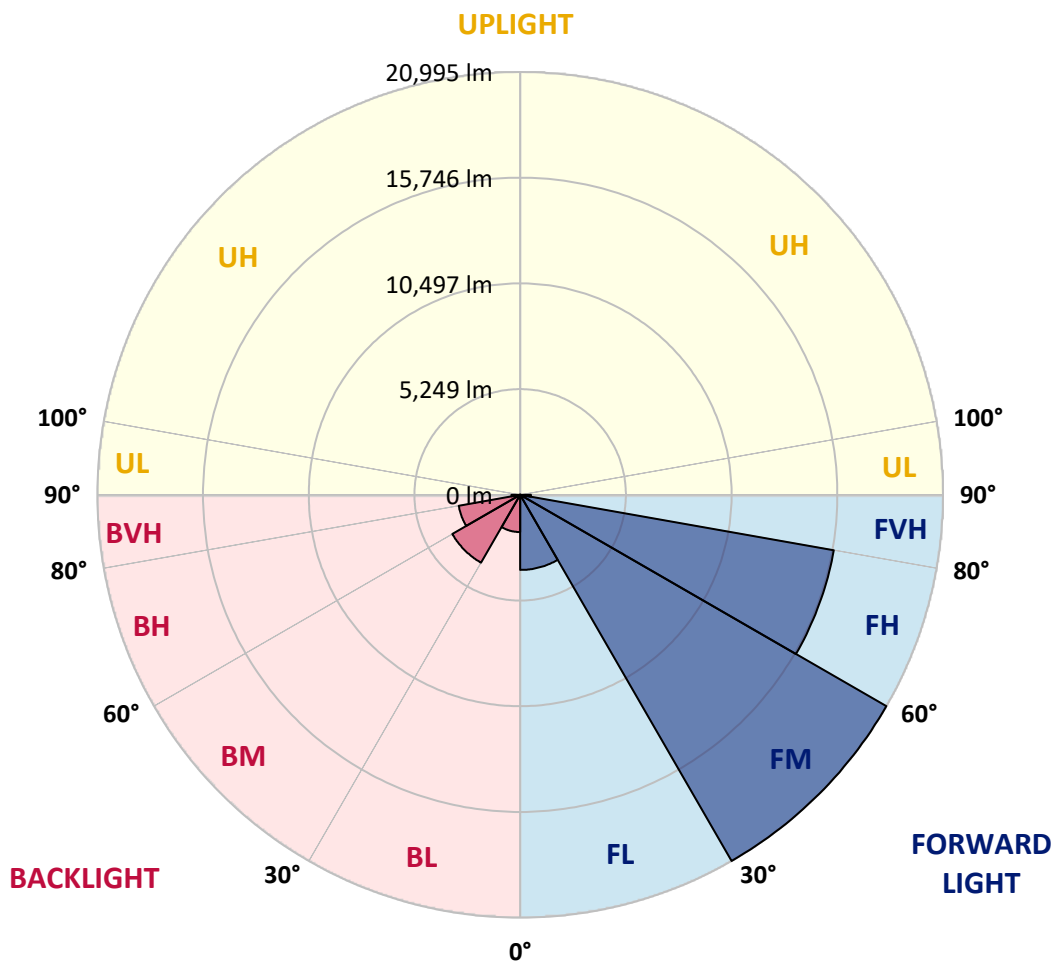
CATALOG NUMBER: GLNA-AF-09-LED-E1-T2-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3730.0	7.4			
FM (30°-60°)	20995.0	41.7			
FH (60°-80°)	15812.7	31.4			G5
FVH (80°-90°)	530.5	1.1			G4/750
BL (0°-30°)	1849.6	3.7	B3/2500		
BM (30°-60°)	3889.5	7.7	B3/5000		
BH (60°-80°)	3096.9	6.2	B4/5000		G4/5000
BVH (80°-90°)	434.4	0.9			G3/500
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 Medium





REPORT NUMBER: P298904

CATALOG NUMBER: GLNA-AF-09-LED-E1-T2-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	6993.5	6993.5	6993.5	6993.5	6993.5	6993.5	6993.5	6993.5	6993.5	6993.5	6993.5
2.5°	7650.2	7605.6	7613.1	7600.7	7563.5	7499.1	7429.7	7303.3	7171.9	7102.5	7048.0
5°	8289.6	8277.2	8259.9	8220.2	8126.0	7992.2	7826.2	7603.1	7362.8	7236.4	7114.9
7.5°	8767.9	8760.5	8738.2	8713.4	8621.7	8460.6	8210.3	7893.1	7543.7	7370.2	7181.8
10°	8807.5	8819.9	8837.3	8904.2	8916.6	8829.9	8574.6	8190.5	7732.0	7509.0	7268.6
12.5°	8470.5	8497.8	8564.7	8735.7	8916.6	9023.2	8891.8	8502.7	7952.6	7682.4	7377.6
15°	8024.4	8039.3	8121.1	8356.5	8681.2	9010.8	9134.7	8847.2	8237.6	7905.5	7541.2
17.5°	7833.6	7841.0	7898.0	8054.2	8356.5	8827.4	9271.0	9221.4	8587.0	8183.0	7741.9
20°	7737.0	7754.3	7836.1	7989.7	8180.6	8591.9	9290.8	9625.4	9003.3	8530.0	7994.7
22.5°	8012.0	8004.6	8034.3	8111.2	8272.3	8520.1	9275.9	10041.7	9533.7	8976.1	8324.3
25°	8653.9	8681.2	8629.1	8542.4	8594.4	8767.9	9355.2	10492.7	10197.8	9548.5	8755.5
27.5°	9568.4	9541.1	9464.3	9261.1	9154.5	9228.8	9617.9	10978.5	11023.1	10301.9	9325.5
30°	10480.3	10458.0	10383.7	10135.9	9917.8	9855.8	10128.4	11536.1	12006.9	11206.5	10024.3
32.5°	11427.0	11402.2	11332.8	11085.0	10822.3	10678.6	10854.5	12180.4	13166.7	12287.0	10847.1
35°	12594.2	12547.2	12400.9	12056.5	11798.7	11687.2	11769.0	12990.8	14504.9	13565.7	11845.8
37.5°	13692.1	13764.0	13615.3	13139.5	12804.9	12765.2	12856.9	13979.6	15947.3	14995.6	12993.2
40°	14794.9	14807.3	14673.5	14284.4	13939.9	13875.5	14106.0	15179.0	17649.8	16705.6	14388.5
42.5°	15934.9	15959.7	15734.1	15374.8	15122.0	15134.4	15397.1	16584.2	19602.6	18720.4	15994.3
45°	17285.5	17322.7	17074.8	16604.0	16373.5	16836.9	16727.9	18160.3	21743.8	21010.2	17838.1
47.5°	18698.1	18755.1	18566.7	18125.6	17838.1	18475.0	18058.7	19907.4	24048.5	23466.1	19862.8
50°	19468.8	19550.6	19734.0	19701.7	19639.8	19533.2	19543.1	21781.0	26425.1	26023.7	21944.5
52.5°	19054.9	19052.5	19721.6	20534.4	21401.8	21466.2	21352.2	23756.1	28645.6	28524.2	23904.8
55°	17161.6	17290.5	18304.0	19877.7	22246.9	23726.4	24063.4	26018.7	30826.4	30967.7	25894.8
57.5°	14009.3	14115.9	15483.8	17677.1	21106.9	25069.5	27919.5	29307.3	33265.0	33924.2	28544.0
60°	9501.4	9630.3	11080.1	13714.4	18038.9	24321.1	31589.7	35175.7	36184.3	37683.6	32261.3
62.5°	5583.4	5699.9	6882.0	8651.4	12700.8	20844.2	33200.5	43524.7	40821.0	43356.2	37931.4
65°	3843.7	3923.0	4497.9	5385.1	7298.3	14039.0	31203.1	49289.1	47955.8	50384.4	44506.1
67.5°	3092.8	3082.9	3538.9	4143.6	4698.7	7238.8	23595.0	48637.3	54230.6	55244.2	47918.6
70°	2547.6	2537.7	2847.5	3348.1	3754.5	4076.7	12852.0	41044.1	52951.8	53363.2	44776.2
72.5°	2131.3	2141.2	2339.4	2711.2	3080.4	3070.5	5647.8	28873.6	41656.2	44501.2	35693.6
75°	1799.2	1804.1	1935.5	2198.2	2500.5	2473.3	3063.1	15642.4	24214.6	26194.6	19786.0
77.5°	1531.5	1536.5	1620.7	1767.0	1982.6	1972.7	2235.3	6758.1	10101.2	9977.3	6768.0
80°	1365.5	1365.5	1405.1	1432.4	1551.4	1506.7	1657.9	3246.5	4270.0	3942.8	2701.2
82.5°	1070.6	1075.5	1318.4	1308.5	1221.8	1164.8	1164.8	1913.2	2262.6	2091.6	1581.1
85°	602.2	599.7	850.0	1026.0	1075.5	820.3	812.9	1070.6	1231.7	1085.5	765.8
87.5°	257.7	262.7	394.0	456.0	609.6	510.5	503.1	552.6	627.0	542.7	354.4
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: P298904

CATALOG NUMBER: GLNA-AF-09-LED-E1-T2-7030

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6993.5	6993.5	6993.5	6993.5	6993.5	6993.5	6993.5	6993.5	6993.5	6993.5	6993.5
2.5°	6996.0	6931.5	6790.3	6614.3	6455.7	6351.6	6257.5	6121.2	6128.6	6034.4	5965.0
5°	6991.0	6857.2	6530.1	6141.0	5766.8	5496.7	5293.5	5110.1	5065.5	4978.7	4926.7
7.5°	6996.0	6777.9	6227.7	5605.7	5142.3	4800.3	4626.8	4530.2	4507.9	4478.1	4480.6
10°	7013.3	6706.0	5895.7	5105.1	4619.4	4393.9	4351.7	4381.5	4416.2	4426.1	4428.6
12.5°	7053.0	6641.6	5531.4	4659.0	4292.3	4222.9	4294.7	4396.3	4463.3	4495.5	4493.0
15°	7142.2	6592.0	5181.9	4309.6	4111.3	4148.5	4282.3	4426.1	4522.7	4567.3	4569.8
17.5°	7238.8	6520.2	4822.6	4042.0	3977.5	4071.7	4237.7	4406.3	4525.2	4574.8	4584.7
20°	7365.2	6430.9	4445.9	3841.2	3851.1	3957.7	4113.8	4282.3	4413.7	4455.8	4475.6
22.5°	7531.3	6334.3	4116.3	3677.7	3707.4	3789.2	3910.6	4056.8	4170.8	4190.6	4208.0
25°	7754.3	6230.2	3853.6	3529.0	3541.4	3588.4	3670.2	3757.0	3836.3	3814.0	3831.3
27.5°	8054.2	6141.0	3657.8	3392.7	3370.4	3380.3	3422.4	3449.7	3491.8	3429.8	3437.3
30°	8406.1	6044.3	3506.7	3273.7	3211.8	3194.4	3204.3	3219.2	3251.4	3167.1	3154.8
32.5°	8815.0	5927.9	3365.4	3169.6	3082.9	3048.2	3053.2	3092.8	3216.7	3164.7	3137.4
35°	9290.8	5796.5	3216.7	3055.6	2996.2	2946.6	2941.6	3065.5	3434.8	3402.6	3377.8
37.5°	9848.4	5665.2	3068.0	2926.8	2931.7	2877.2	2859.9	3001.1	3476.9	3350.5	3333.2
40°	10557.2	5595.8	2941.6	2790.5	2852.4	2845.0	2810.3	2882.2	3199.4	2968.9	2939.2
42.5°	11434.4	5605.7	2847.5	2644.2	2758.2	2837.5	2783.0	2785.5	2899.5	2726.0	2698.8
45°	12517.4	5722.2	2780.5	2527.8	2651.7	2830.1	2773.1	2733.5	2743.4	2651.7	2636.8
47.5°	13781.3	5962.6	2733.5	2431.1	2550.1	2802.9	2770.6	2718.6	2696.3	2646.7	2634.3
50°	15186.5	6312.0	2698.8	2339.4	2458.4	2758.2	2773.1	2703.7	2678.9	2659.1	2651.7
52.5°	16566.8	6711.0	2646.7	2260.1	2386.5	2703.7	2780.5	2688.9	2661.6	2646.7	2639.3
55°	18105.8	7209.1	2567.4	2193.2	2327.0	2634.3	2780.5	2666.6	2636.8	2639.3	2636.8
57.5°	20185.0	8014.5	2473.3	2136.2	2255.2	2550.1	2733.5	2641.8	2604.6	2607.1	2609.6
60°	23433.9	9434.5	2359.3	2079.2	2166.0	2450.9	2669.0	2587.2	2550.1	2560.0	2562.5
62.5°	28211.9	11518.7	2210.6	1995.0	2071.8	2344.4	2579.8	2517.9	2480.7	2505.5	2505.5
65°	33178.2	13357.5	2027.2	1888.4	1972.7	2227.9	2468.3	2431.1	2393.9	2450.9	2448.5
67.5°	34514.0	12946.2	1843.8	1771.9	1873.5	2099.0	2334.5	2314.6	2294.8	2393.9	2389.0
70°	30660.4	10393.6	1675.3	1653.0	1764.5	1960.3	2190.7	2190.7	2178.3	2252.7	2235.3
72.5°	23359.6	7370.2	1514.2	1526.6	1640.6	1809.1	2034.6	2052.0	2032.1	2069.3	2054.4
75°	12505.0	4217.9	1353.1	1387.8	1486.9	1655.4	1861.1	1878.5	1866.1	1863.6	1871.0
77.5°	4156.0	2061.9	1184.6	1239.1	1325.8	1496.8	1680.2	1707.5	1677.7	1672.8	1670.3
80°	1851.2	1296.1	998.7	1070.6	1147.4	1315.9	1489.4	1511.7	1479.5	1524.1	1467.1
82.5°	1189.5	852.5	800.5	879.8	954.1	1135.0	1298.6	1303.5	1273.8	1479.5	1261.4
85°	577.4	527.9	602.2	674.1	738.5	892.2	1075.5	1078.0	1003.7	914.5	882.2
87.5°	287.5	307.3	401.5	465.9	498.1	612.1	783.1	768.2	736.0	669.1	617.1
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)