

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: P300414

Luminaire Tested: **GLNA-AF-10-LED-E1-T4FT-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300414
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-10-LED-E1-T4FT-7050-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47722.1 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

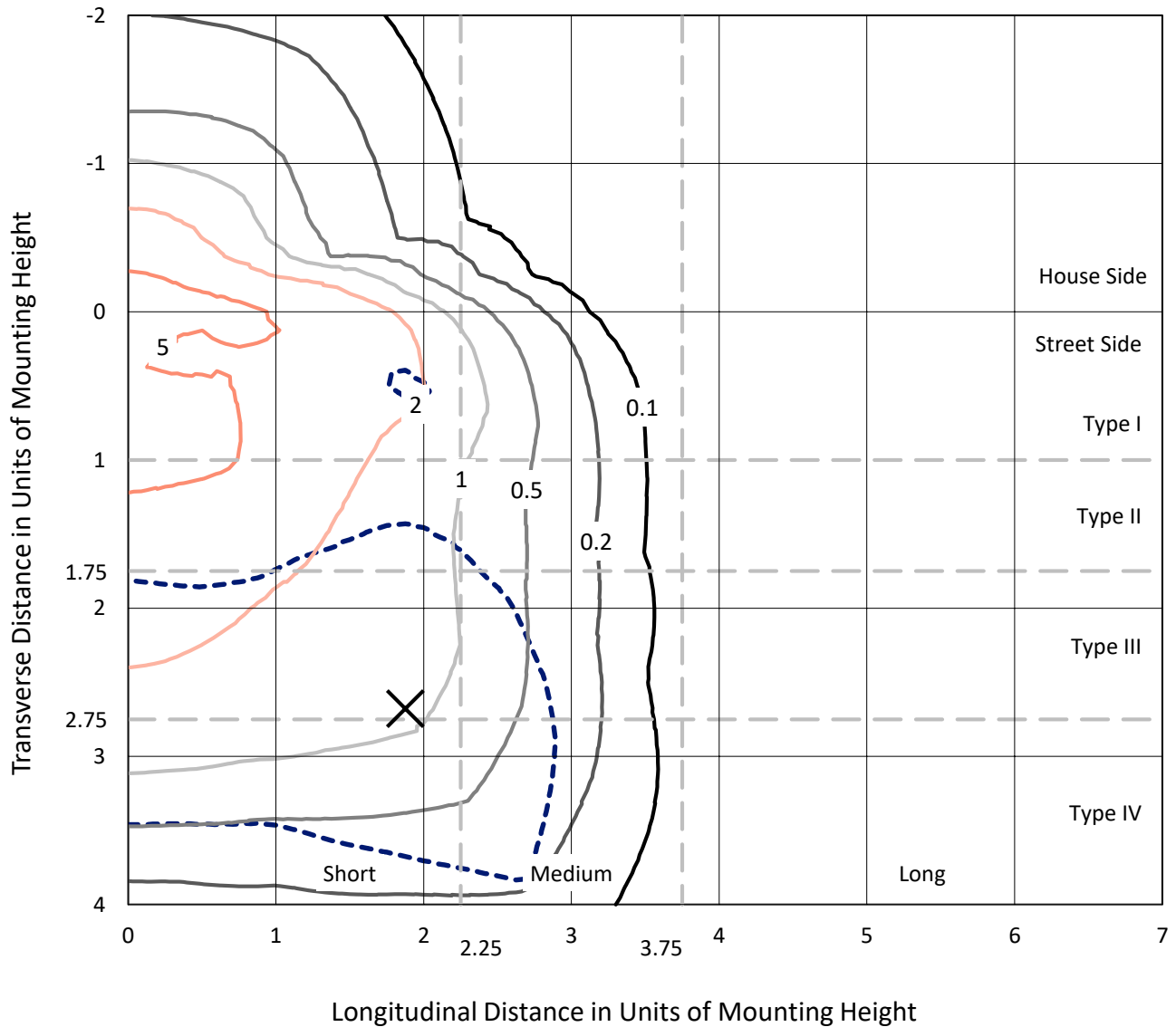
Input Watts (W): 419
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P300414
 CATALOG NUMBER: GLNA-AF-10-LED-E1-T4FT-7050-800

Iso-Footcandle Lines of Horizontal Illumination

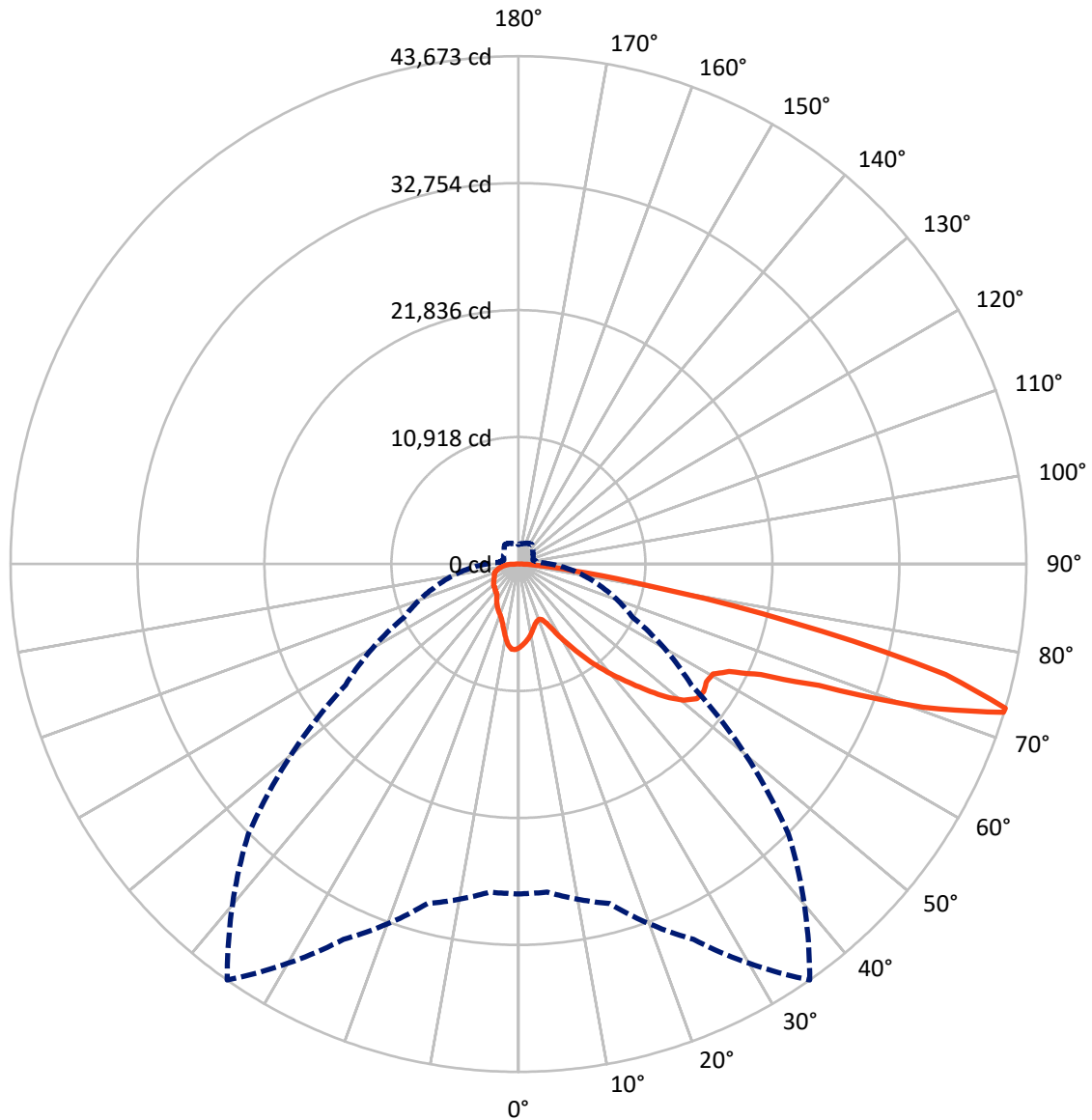
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P300414
CATALOG NUMBER: GLNA-AF-10-LED-E1-T4FT-7050-800

Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

REPORT NUMBER: P300414

CATALOG NUMBER: GLNA-AF-10-LED-E1-T4FT-7050-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9101.9	0.0	9101.9
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	38620.1	0.0	38620.1
	% Fixture	80.9	0.0	80.9
Total	Lumens	47722.1	0.0	47722.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	652.1	1.4
10°-20°	1627.4	3.4
20°-30°	2631.0	5.5
30°-40°	4411.8	9.2
40°-50°	6800.6	14.3
50°-60°	9123.7	19.1
60°-70°	12154.6	25.5
70°-80°	9270.3	19.4
80°-90°	1050.7	2.2
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°	47722.1	100.0
0°-180°	47722.1	100.0



REPORT NUMBER: P300414

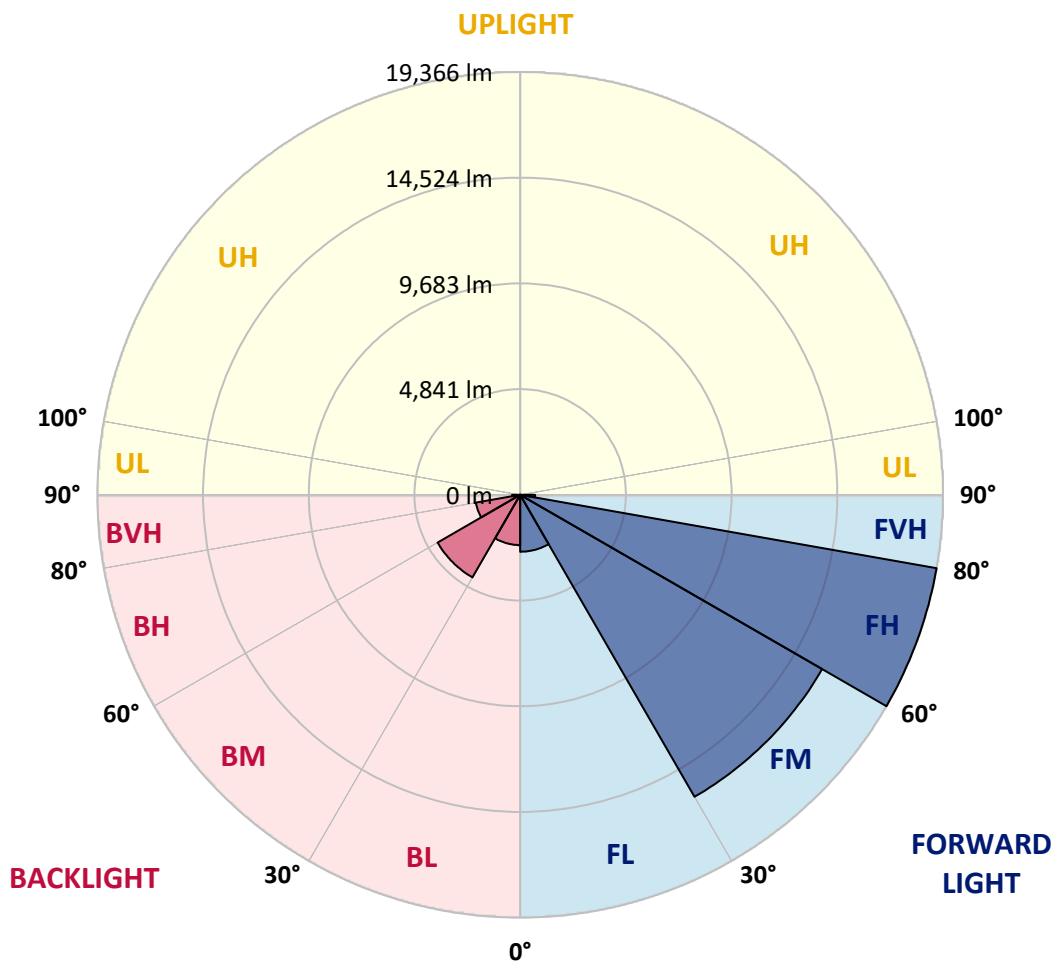
CATALOG NUMBER: GLNA-AF-10-LED-E1-T4FT-7050-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2607.2	5.5			
FM	(30°-60°)	15968.1	33.5			
FH	(60°-80°)	19365.6	40.6			G5
FVH	(80°-90°)	679.2	1.4			G4/750
BL	(0°-30°)	2303.2	4.8	B3/2500		
BM	(30°-60°)	4367.9	9.2	B3/5000		
BH	(60°-80°)	2059.2	4.3	B3/2500		G3/2500
BVH	(80°-90°)	371.5	0.8			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





REPORT NUMBER: P300414

CATALOG NUMBER: GLNA-AF-10-LED-E1-T4FT-7050-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7202.7	7202.7	7202.7	7202.7	7202.7	7202.7	7202.7	7202.7	7202.7	7202.7	7202.7
2.5°	6918.6	6932.3	6916.3	6936.9	6971.3	7007.9	7033.2	7069.8	7111.1	7168.4	7182.1
5°	6593.2	6613.8	6613.8	6650.4	6716.9	6776.5	6831.5	6891.1	6978.2	7076.7	7115.7
7.5°	6235.7	6247.1	6267.7	6322.7	6419.0	6503.8	6581.7	6677.9	6797.1	6927.7	6996.5
10°	5804.8	5820.9	5852.9	5930.9	6061.5	6178.4	6290.7	6423.6	6574.8	6737.5	6824.6
12.5°	5500.0	5495.4	5509.2	5566.5	5681.1	5823.2	5985.9	6155.4	6341.1	6531.3	6636.7
15°	5396.9	5371.7	5319.0	5305.2	5367.1	5509.2	5697.1	5905.7	6127.9	6357.1	6487.7
17.5°	5461.1	5417.5	5273.1	5167.7	5158.6	5266.3	5465.6	5699.4	5956.1	6235.7	6398.4
20°	5864.4	5761.3	5406.1	5160.9	5076.1	5128.8	5302.9	5550.4	5852.9	6224.2	6432.7
22.5°	6829.2	6677.9	5924.0	5467.9	5181.5	5117.3	5247.9	5511.5	5864.4	6366.3	6632.1
25°	8234.0	8018.6	6813.2	6233.4	5642.1	5300.6	5330.4	5600.9	6027.1	6696.3	7017.1
27.5°	9343.2	9203.4	7975.0	7312.7	6480.9	5795.7	5598.6	5825.4	6359.4	7237.1	7564.8
30°	10003.2	9918.4	9217.1	8536.5	7551.1	6584.0	6111.9	6247.1	6879.6	7986.5	8256.9
32.5°	10768.6	10718.2	10374.4	9748.8	8706.1	7619.8	6925.4	6877.3	7576.3	8887.1	9010.9
35°	11561.5	11545.5	11343.8	10894.6	9945.9	8985.7	8004.8	7679.4	8334.8	9822.1	9744.2
37.5°	12299.4	12271.9	12155.1	11893.8	11243.0	10452.3	9104.8	8502.1	9153.0	10715.9	10369.8
40°	13658.4	13443.0	13041.9	12844.8	12553.8	11687.6	9978.0	9269.8	10000.9	11568.4	10910.7
42.5°	15315.3	14964.6	14217.6	13947.1	13905.9	12661.5	10573.8	10014.6	10855.7	12414.0	11442.3
45°	16619.2	16289.2	15645.3	15303.8	15455.1	13543.8	11171.9	10809.8	11735.7	13300.9	11990.1
47.5°	18010.3	17492.4	16639.9	16743.0	17073.0	14378.0	11781.5	11664.6	12700.5	14293.2	12670.7
50°	18060.7	17664.2	17290.7	17907.2	18420.5	15145.7	12544.6	12560.7	13880.7	15542.2	13575.9
52.5°	17013.4	16928.6	17522.2	18491.5	19231.8	15753.0	13413.2	13486.5	15390.9	16976.7	14570.5
55°	16646.7	16550.5	17235.7	18287.6	19341.8	16254.9	14355.1	14488.0	17217.4	18489.2	15539.9
57.5°	17540.5	17327.4	17373.2	18191.3	19073.6	16804.9	15381.7	15649.9	19202.0	19811.5	16163.2
60°	20038.4	19582.4	18716.1	18695.5	19218.0	17629.9	16568.8	16896.5	21264.5	20444.0	15920.3
62.5°	23542.4	23086.4	21463.8	20407.4	20329.5	18991.1	18026.3	18113.4	22456.1	19587.0	14437.6
65°	27335.1	26927.2	25114.5	23622.6	22903.0	21246.1	19719.9	18656.5	22066.6	17228.8	11843.4
67.5°	31939.1	31501.4	29943.0	28565.8	27873.7	24885.3	20909.3	18136.3	19593.8	13346.7	8513.6
70°	35158.9	34712.0	34097.9	35213.9	36907.5	30135.5	21062.8	16021.1	14634.6	8871.1	5124.2
72.5°	30958.3	30749.7	31870.3	36570.6	43624.4	33321.0	19039.3	11664.6	8499.8	4709.4	2965.4
73°	28364.1	28318.2	30229.5	35619.5	43672.5	32830.6	18152.4	10841.9	7289.8	4166.3	2711.1
75°	12808.2	13177.1	17366.3	27206.8	37943.3	27053.2	12776.1	6219.6	4118.1	2878.3	2046.5
77.5°	3077.7	3206.1	5433.6	12920.5	23961.8	16121.9	5788.8	3075.4	2633.1	2032.7	1494.2
80°	1310.8	1354.4	2092.3	4773.6	11281.9	6492.3	2667.5	2060.2	1821.9	1418.5	1047.3
82.5°	728.8	774.6	1187.1	2165.6	4553.6	2213.8	1627.1	1434.6	1198.5	854.8	680.6
85°	412.5	437.7	694.4	1210.0	1929.6	889.2	974.0	953.3	676.0	440.0	334.6
87.5°	194.8	210.8	334.6	561.5	756.3	348.3	495.0	545.4	424.0	268.1	174.2
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: P300414

CATALOG NUMBER: GLNA-AF-10-LED-E1-T4FT-7050-800

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7202.7	7202.7	7202.7	7202.7	7202.7	7202.7	7202.7	7202.7	7202.7	7202.7
2.5°	7198.2	7239.4	7287.5	7312.7	7335.7	7363.2	7390.7	7390.7	7395.2	7397.5
5°	7147.7	7232.5	7308.2	7340.2	7347.1	7347.1	7340.2	7303.6	7271.5	7285.2
7.5°	7042.3	7166.1	7230.2	7218.8	7131.7	7030.9	6946.1	6842.9	6790.2	6781.1
10°	6891.1	7033.2	7044.6	6930.0	6714.6	6499.2	6320.4	6146.3	6063.8	6043.2
12.5°	6723.8	6854.4	6781.1	6545.0	6199.0	5885.0	5658.1	5481.7	5403.8	5383.1
15°	6588.6	6677.9	6492.3	6121.1	5685.6	5353.4	5165.4	5034.8	4979.8	4963.8
17.5°	6517.5	6535.9	6196.7	5694.8	5231.9	4954.6	4837.7	4775.9	4755.2	4743.8
20°	6551.9	6423.6	5914.8	5298.4	4860.6	4665.9	4638.4	4622.3	4617.7	4610.9
22.5°	6723.8	6389.2	5655.9	4922.5	4535.2	4450.4	4473.4	4471.1	4466.5	4461.9
25°	7030.9	6419.0	5403.8	4565.0	4262.5	4244.2	4285.4	4285.4	4267.1	4267.1
27.5°	7436.5	6480.9	5121.9	4225.9	4015.0	4017.3	4049.4	4040.2	4019.6	4005.9
30°	7931.5	6519.8	4791.9	3921.1	3783.6	3774.4	3783.6	3744.6	3682.7	3678.1
32.5°	8438.0	6471.7	4409.2	3650.6	3538.3	3517.7	3510.8	3455.8	3384.8	3364.2
35°	8896.3	6295.2	4019.6	3435.2	3304.6	3258.8	3290.8	3272.5	3208.3	3192.3
37.5°	9230.9	5967.5	3669.0	3245.0	3137.3	3125.8	3146.5	3153.3	3077.7	3061.7
40°	9455.5	5522.9	3368.8	3084.6	3105.2	3061.7	2992.9	2944.8	2921.9	2915.0
42.5°	9636.5	5060.0	3116.7	3009.0	3112.1	2986.1	2837.1	2759.2	2800.4	2818.8
45°	9845.0	4608.6	2905.8	2915.0	3077.7	2899.0	2729.4	2653.8	2669.8	2674.4
47.5°	10131.5	4058.6	2679.0	2763.8	2963.1	2839.4	2662.9	2555.2	2479.6	2445.2
50°	10528.0	3407.7	2442.9	2594.2	2850.8	2795.8	2559.8	2445.2	2305.4	2273.3
52.5°	10803.0	2800.4	2248.1	2452.1	2750.0	2708.8	2477.3	2328.3	2181.7	2154.2
55°	10654.0	2326.1	2078.6	2294.0	2617.1	2601.1	2408.6	2209.2	2094.6	2071.7
57.5°	9909.2	2025.8	1947.9	2145.0	2454.4	2509.4	2316.9	2108.3	2025.8	2009.8
60°	8488.4	1837.9	1865.4	2044.2	2321.5	2417.7	2225.2	2053.3	1998.3	1986.9
62.5°	6586.3	1711.9	1803.5	1970.8	2218.3	2353.6	2174.8	2046.5	2025.8	2012.1
65°	4718.6	1611.0	1737.1	1897.5	2124.4	2294.0	2156.5	2037.3	2041.9	2030.4
67.5°	3206.1	1521.7	1656.9	1815.0	2032.7	2241.3	2131.3	2005.2	2062.5	2048.8
70°	2243.6	1434.6	1562.9	1709.6	1918.1	2167.9	2085.4	1957.1	1952.5	1897.5
72.5°	1750.8	1320.0	1434.6	1562.9	1771.5	2064.8	1993.8	1849.4	1773.8	1716.5
73°	1670.6	1292.5	1402.5	1530.8	1739.4	2039.6	1968.6	1819.6	1734.8	1682.1
75°	1381.9	1173.3	1274.2	1388.8	1601.9	1920.4	1844.8	1684.4	1576.7	1544.6
77.5°	1086.3	1003.8	1100.0	1203.1	1411.7	1746.3	1661.5	1507.9	1448.3	1420.8
80°	804.4	831.9	916.7	1008.3	1223.8	1560.6	1485.0	1331.5	1597.3	1530.8
82.5°	566.0	630.2	708.1	790.6	1026.7	1379.6	1287.9	1129.8	1168.8	971.7
85°	334.6	412.5	485.8	556.9	740.2	1143.5	1063.3	900.6	737.9	703.5
87.5°	194.8	229.2	249.8	323.1	508.8	861.7	749.4	666.9	382.7	259.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)