

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: P300345

Luminaire Tested: **GLNA-AF-09-LED-E1-T4FT-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300345  
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-09-LED-E1-T4FT-7030  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 51607.5 lumens  
Efficiency: N/A  
Efficacy: 103.0 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

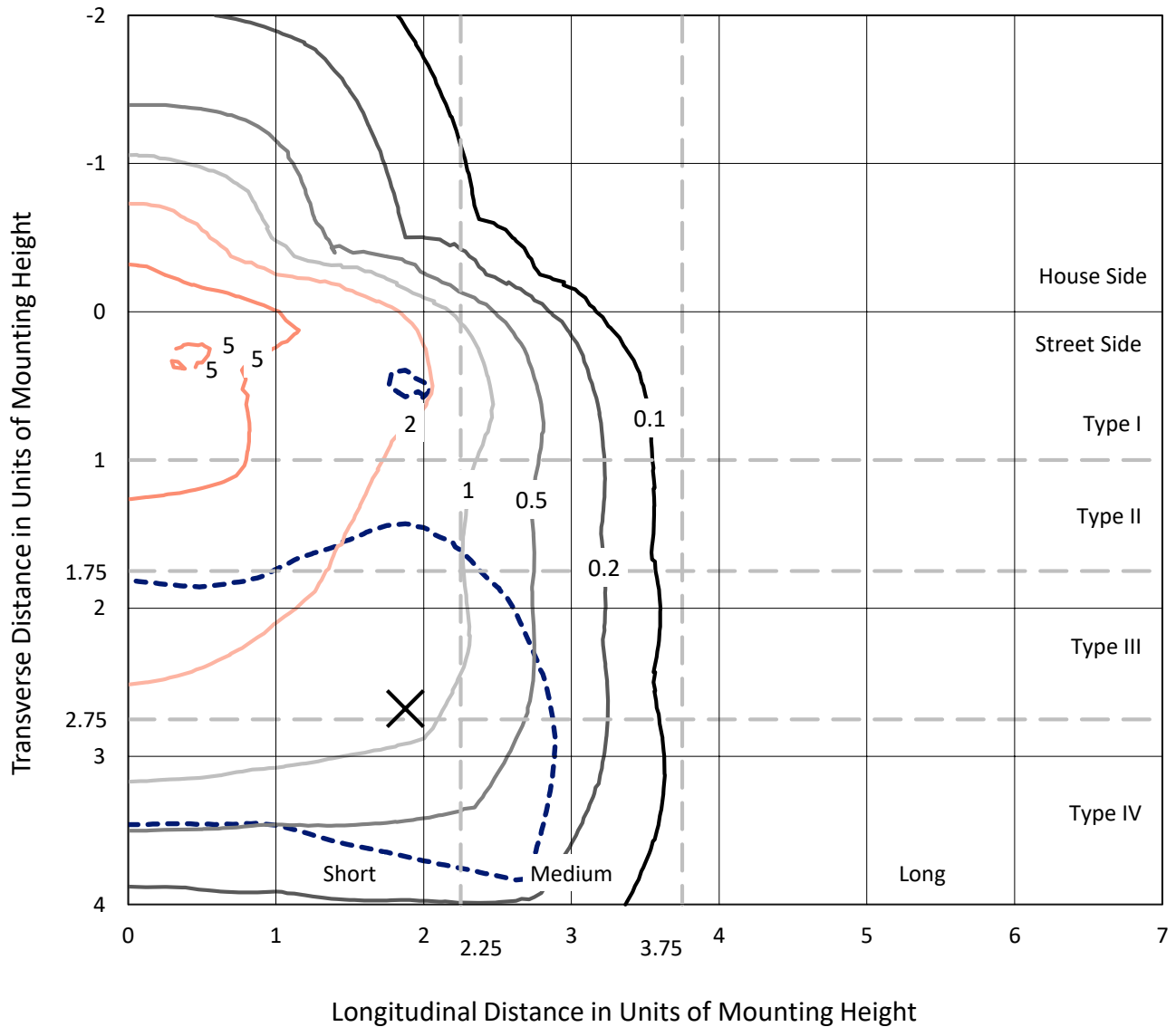
Input Watts (W): 501  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

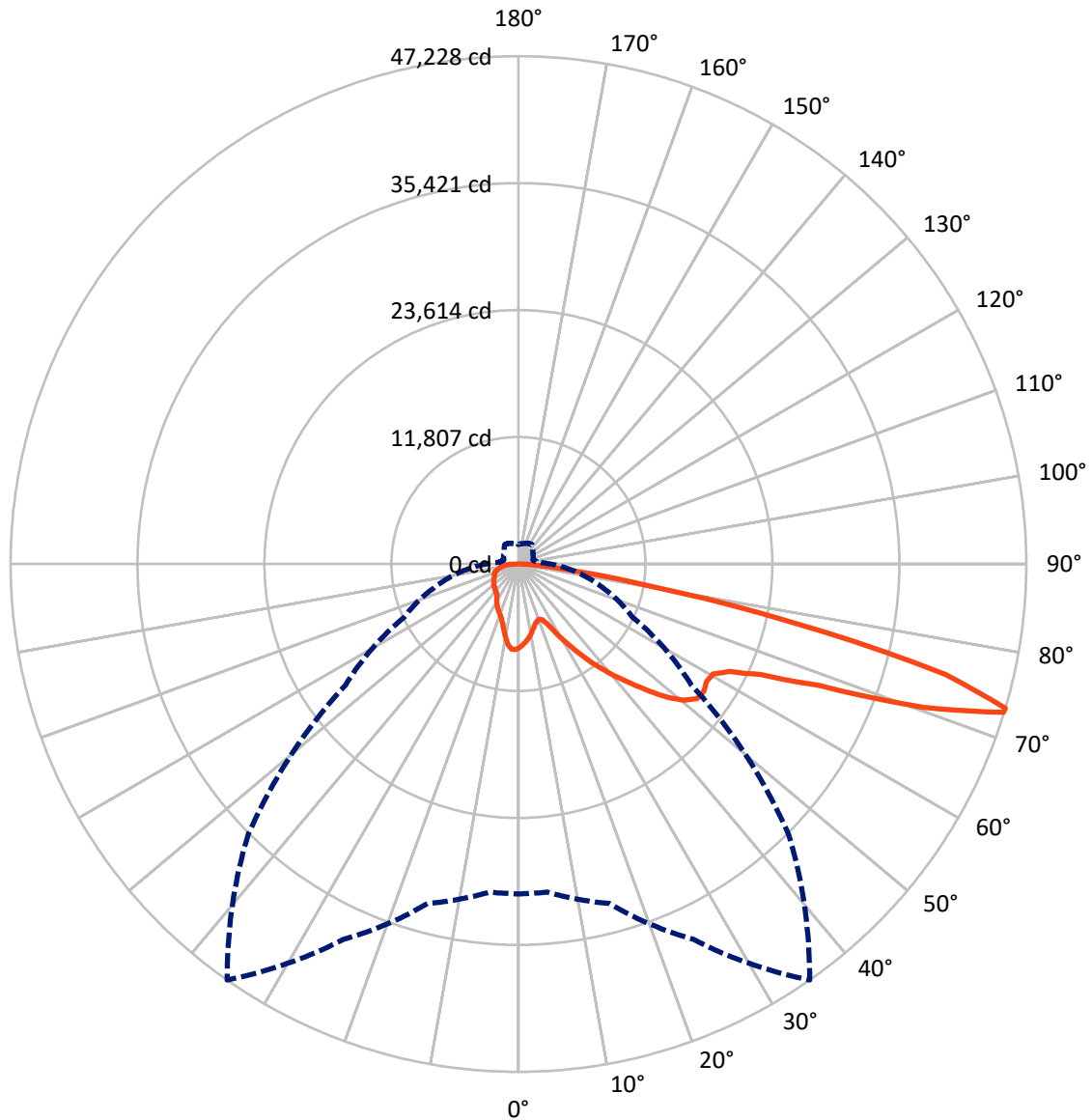
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.7 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P300345  
CATALOG NUMBER: GLNA-AF-09-LED-E1-T4FT-7030

### Luminous Intensity Polar Plot



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

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CATALOG NUMBER: GLNA-AF-09-LED-E1-T4FT-7030

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9843.0	0.0	9843.0
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	41764.6	0.0	41764.6
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	51607.5	0.0	51607.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	705.1	1.4
10°-20°	1759.9	3.4
20°-30°	2845.2	5.5
30°-40°	4771.0	9.2
40°-50°	7354.2	14.3
50°-60°	9866.5	19.1
60°-70°	13144.2	25.5
70°-80°	10025.0	19.4
80°-90°	1136.3	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°	51607.5	100.0
0°-180°	51607.5	100.0

**Coefficient of Utilization**



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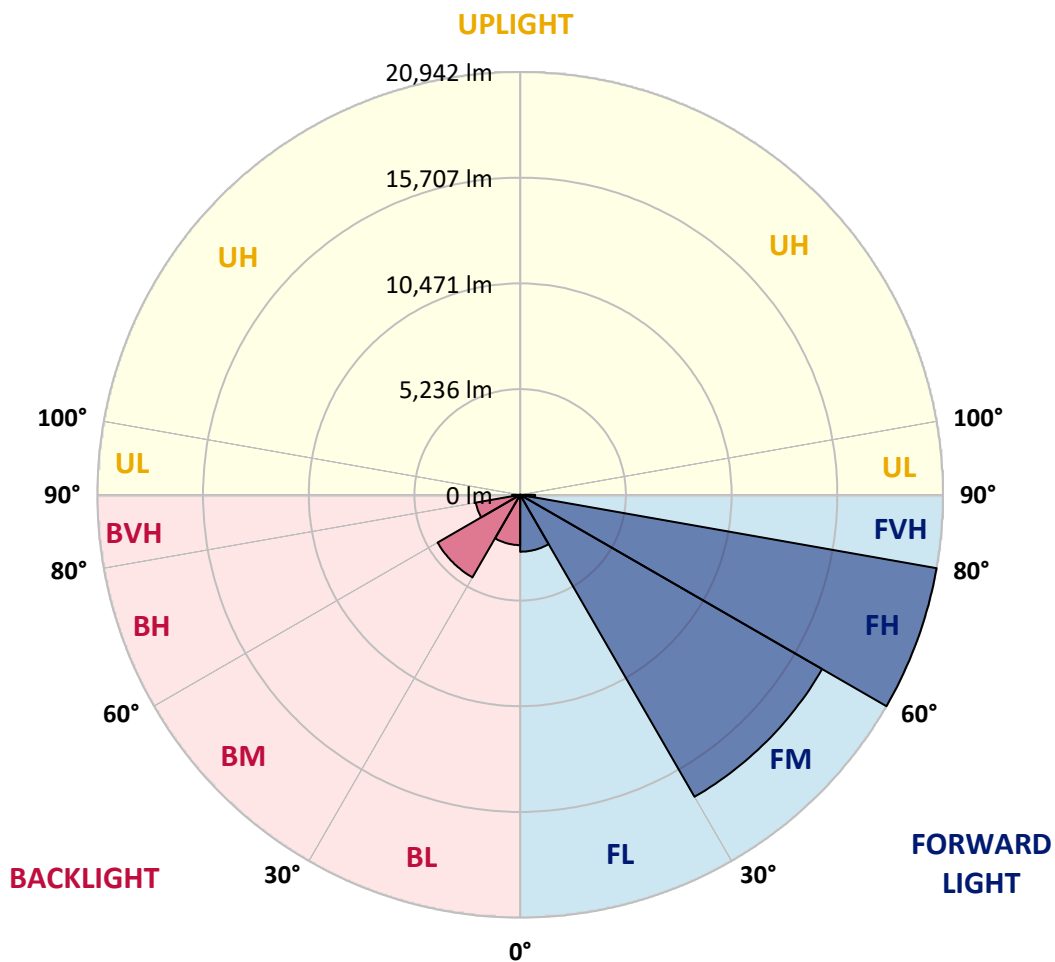
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2819.5	5.5			
FM	(30°-60°)	17268.2	33.5			
FH	(60°-80°)	20942.3	40.6			G5
FVH	(80°-90°)	734.5	1.4			G4/750
BL	(0°-30°)	2490.7	4.8	B3/2500		
BM	(30°-60°)	4723.5	9.2	B3/5000		
BH	(60°-80°)	2226.9	4.3	B3/2500		G3/2500
BVH	(80°-90°)	401.8	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: P300345

CATALOG NUMBER: GLNA-AF-09-LED-E1-T4FT-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7789.2	7789.2	7789.2	7789.2	7789.2	7789.2	7789.2	7789.2	7789.2	7789.2	7789.2
2.5°	7481.9	7496.7	7479.4	7501.7	7538.9	7578.5	7605.8	7645.4	7690.1	7752.0	7766.9
5°	7130.0	7152.3	7152.3	7191.9	7263.8	7328.2	7387.7	7452.1	7546.3	7652.9	7695.0
7.5°	6743.4	6755.7	6778.1	6837.5	6941.6	7033.3	7117.6	7221.7	7350.5	7491.8	7566.1
10°	6277.4	6294.8	6329.5	6413.7	6555.0	6681.4	6802.8	6946.6	7110.1	7286.1	7380.3
12.5°	5947.8	5942.9	5957.7	6019.7	6143.6	6297.3	6473.2	6656.6	6857.4	7063.1	7177.1
15°	5836.3	5809.0	5752.0	5737.2	5804.1	5957.7	6161.0	6386.5	6626.9	6874.7	7016.0
17.5°	5905.7	5858.6	5702.5	5588.5	5578.6	5695.0	5910.7	6163.4	6441.0	6743.4	6919.3
20°	6341.9	6230.4	5846.2	5581.0	5489.4	5546.4	5734.7	6002.4	6329.5	6731.0	6956.5
22.5°	7385.2	7221.7	6406.3	5913.1	5603.4	5534.0	5675.2	5960.2	6341.9	6884.6	7172.1
25°	8904.4	8671.4	7367.9	6740.9	6101.5	5732.2	5764.4	6056.9	6517.8	7241.5	7588.4
27.5°	10103.9	9952.7	8624.4	7908.1	7008.5	6267.5	6054.4	6299.7	6877.2	7826.4	8180.7
30°	10817.6	10725.9	9967.6	9231.5	8165.9	7120.1	6609.5	6755.7	7439.7	8636.7	8929.2
32.5°	11645.4	11590.8	11219.1	10542.5	9414.9	8240.2	7489.3	7437.3	8193.1	9610.7	9744.5
35°	12502.8	12485.5	12267.4	11781.7	10755.7	9717.3	8656.6	8304.7	9013.4	10621.8	10537.6
37.5°	13300.8	13271.1	13144.7	12862.2	12158.4	11303.4	9846.1	9194.4	9898.2	11588.4	11214.1
40°	14770.5	14537.5	14103.8	13890.7	13575.9	12639.1	10790.4	10024.6	10815.1	12510.3	11799.0
42.5°	16562.2	16183.1	15375.1	15082.7	15038.1	13692.4	11434.7	10830.0	11739.5	13424.8	12374.0
45°	17972.4	17615.5	16919.1	16549.8	16713.4	14646.5	12081.5	11690.0	12691.2	14383.8	12966.3
47.5°	19476.7	18916.6	17994.7	18106.2	18463.1	15548.6	12740.8	12614.4	13734.5	15456.9	13702.3
50°	19531.2	19102.5	18698.5	19365.2	19920.3	16378.8	13566.0	13583.4	15010.8	16807.6	14681.2
52.5°	18398.6	18306.9	18948.8	19997.1	20797.6	17035.6	14505.3	14584.6	16644.0	18359.0	15756.8
55°	18002.1	17898.0	18639.0	19776.5	20916.5	17578.3	15523.8	15667.6	18619.2	19994.6	16805.1
57.5°	18968.6	18738.2	18787.7	19672.5	20626.6	18173.1	16634.1	16924.1	20765.4	21424.6	17479.2
60°	21669.9	21176.8	20240.0	20217.7	20782.7	19065.3	17917.8	18272.2	22995.8	22108.6	17216.5
62.5°	25459.2	24966.0	23211.4	22068.9	21984.7	20537.4	19494.0	19588.2	24284.5	21181.7	15613.1
65°	29560.7	29119.6	27159.3	25545.9	24767.8	22976.0	21325.5	20175.5	23863.2	18631.6	12807.7
67.5°	34539.6	34066.2	32381.0	30891.6	30143.1	26911.5	22611.7	19613.0	21189.2	14433.4	9206.7
70°	38021.5	37538.3	36874.1	38081.0	39912.4	32589.2	22777.7	17325.5	15826.2	9593.4	5541.4
72.5°	33478.9	33253.3	34465.2	39548.1	47176.2	36034.0	20589.4	12614.4	9191.9	5092.8	3206.9
73°	30673.5	30623.9	32690.8	38519.7	47228.3	35503.6	19630.3	11724.7	7883.4	4505.5	2931.8
75°	13851.0	14250.0	18780.3	29421.9	41032.6	29255.9	13816.3	6726.0	4453.4	3112.7	2213.1
77.5°	3328.3	3467.1	5876.0	13972.5	25912.7	17434.6	6260.1	3325.8	2847.5	2198.2	1615.8
80°	1417.6	1464.7	2262.7	5162.2	12200.5	7020.9	2884.7	2228.0	1970.2	1534.0	1132.6
82.5°	788.1	837.7	1283.7	2342.0	4924.3	2394.0	1759.6	1551.4	1296.1	924.4	736.0
85°	446.1	473.3	750.9	1308.5	2086.7	961.6	1053.3	1031.0	731.1	475.8	361.8
87.5°	210.7	228.0	361.8	607.2	817.8	376.7	535.3	589.8	458.5	290.0	188.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7789.2	7789.2	7789.2	7789.2	7789.2	7789.2	7789.2	7789.2	7789.2	7789.2
2.5°	7784.2	7828.8	7880.9	7908.1	7932.9	7962.7	7992.4	7992.4	7997.4	7999.8
5°	7729.7	7821.4	7903.2	7937.9	7945.3	7945.3	7937.9	7898.2	7863.5	7878.4
7.5°	7615.7	7749.5	7818.9	7806.5	7712.4	7603.3	7511.6	7400.1	7343.1	7333.2
10°	7452.1	7605.8	7618.2	7494.3	7261.3	7028.4	6835.1	6646.7	6557.5	6535.2
12.5°	7271.2	7412.5	7333.2	7077.9	6703.7	6364.2	6118.8	5928.0	5843.7	5821.4
15°	7125.0	7221.7	7020.9	6619.4	6148.6	5789.2	5586.0	5444.7	5385.3	5367.9
17.5°	7048.2	7068.0	6701.2	6158.5	5657.9	5358.0	5231.6	5164.7	5142.4	5130.0
20°	7085.4	6946.6	6396.4	5729.7	5256.4	5045.7	5016.0	4998.7	4993.7	4986.3
22.5°	7271.2	6909.4	6116.4	5323.3	4904.5	4812.8	4837.6	4835.1	4830.1	4825.2
25°	7603.3	6941.6	5843.7	4936.7	4609.6	4589.7	4634.4	4634.4	4614.5	4614.5
27.5°	8042.0	7008.5	5538.9	4569.9	4341.9	4344.4	4379.1	4369.2	4346.9	4332.0
30°	8577.3	7050.7	5182.0	4240.3	4091.6	4081.7	4091.6	4049.5	3982.6	3977.6
32.5°	9125.0	6998.6	4768.2	3947.9	3826.4	3804.1	3796.7	3737.2	3660.4	3638.1
35°	9620.6	6807.8	4346.9	3714.9	3573.7	3524.1	3558.8	3539.0	3469.6	3452.2
37.5°	9982.4	6453.4	3967.7	3509.2	3392.7	3380.4	3402.7	3410.1	3328.3	3311.0
40°	10225.3	5972.6	3643.0	3335.7	3358.0	3311.0	3236.6	3184.6	3159.8	3152.4
42.5°	10421.1	5472.0	3370.4	3254.0	3365.5	3229.2	3068.1	2983.8	3028.4	3048.3
45°	10646.6	4983.8	3142.4	3152.4	3328.3	3135.0	2951.6	2869.8	2887.2	2892.1
47.5°	10956.4	4389.0	2897.1	2988.8	3204.4	3070.6	2879.7	2763.3	2681.5	2644.3
50°	11385.1	3685.2	2641.8	2805.4	3083.0	3023.5	2768.2	2644.3	2493.1	2458.4
52.5°	11682.5	3028.4	2431.2	2651.7	2973.9	2929.3	2679.0	2517.9	2359.3	2329.6
55°	11521.4	2515.4	2247.8	2480.7	2830.2	2812.8	2604.7	2389.0	2265.1	2240.4
57.5°	10716.0	2190.8	2106.5	2319.7	2654.2	2713.7	2505.5	2280.0	2190.8	2173.4
60°	9179.5	1987.6	2017.3	2210.6	2510.5	2614.6	2406.4	2220.5	2161.0	2148.7
62.5°	7122.5	1851.3	1950.4	2131.3	2399.0	2545.2	2351.9	2213.1	2190.8	2175.9
65°	5102.7	1742.2	1878.5	2052.0	2297.4	2480.7	2332.0	2203.2	2208.1	2195.7
67.5°	3467.1	1645.6	1791.8	1962.8	2198.2	2423.7	2304.8	2168.5	2230.4	2215.6
70°	2426.2	1551.4	1690.2	1848.8	2074.3	2344.4	2255.2	2116.4	2111.5	2052.0
72.5°	1893.4	1427.5	1551.4	1690.2	1915.7	2232.9	2156.1	2000.0	1918.2	1856.2
73°	1806.7	1397.7	1516.7	1655.5	1881.0	2205.7	2128.8	1967.7	1876.0	1819.0
75°	1494.4	1268.9	1377.9	1501.8	1732.3	2076.8	1995.0	1821.5	1705.0	1670.3
77.5°	1174.7	1085.5	1189.6	1301.1	1526.6	1888.4	1796.7	1630.7	1566.3	1536.5
80°	869.9	899.6	991.3	1090.4	1323.4	1687.7	1605.9	1439.9	1727.3	1655.5
82.5°	612.1	681.5	765.8	855.0	1110.3	1491.9	1392.8	1221.8	1263.9	1050.8
85°	361.8	446.1	525.4	602.2	800.5	1236.7	1149.9	974.0	798.0	760.8
87.5°	210.7	247.8	270.1	349.4	550.2	931.8	810.4	721.2	413.9	280.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)