

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: P300452

Luminaire Tested: **GLNA-AF-07-LED-E1-T4FT-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300452  
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-07-LED-E1-T4FT-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24161 lumens  
Efficiency: N/A  
Efficacy: 106.9 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G4

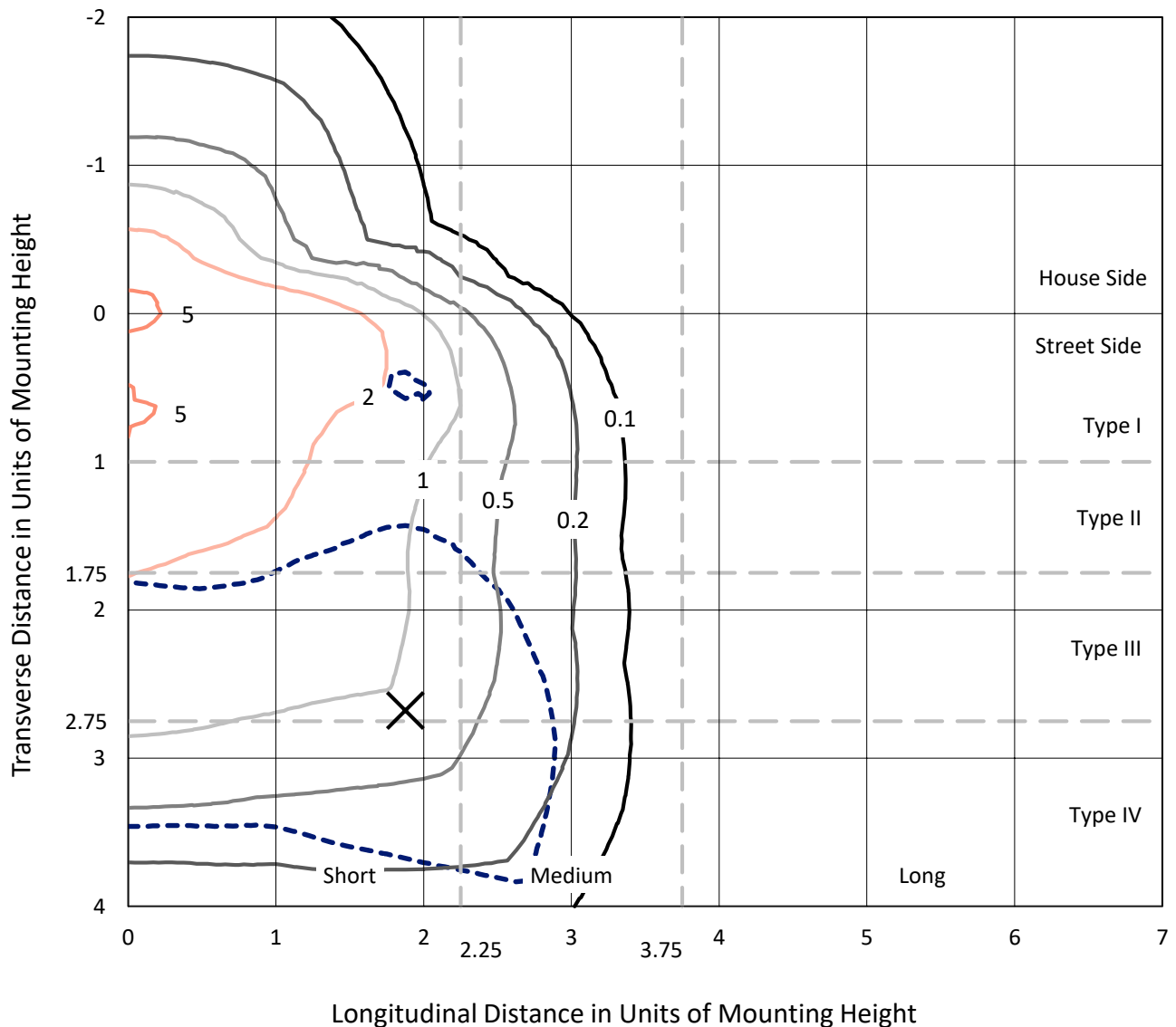
Input Watts (W): 226  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

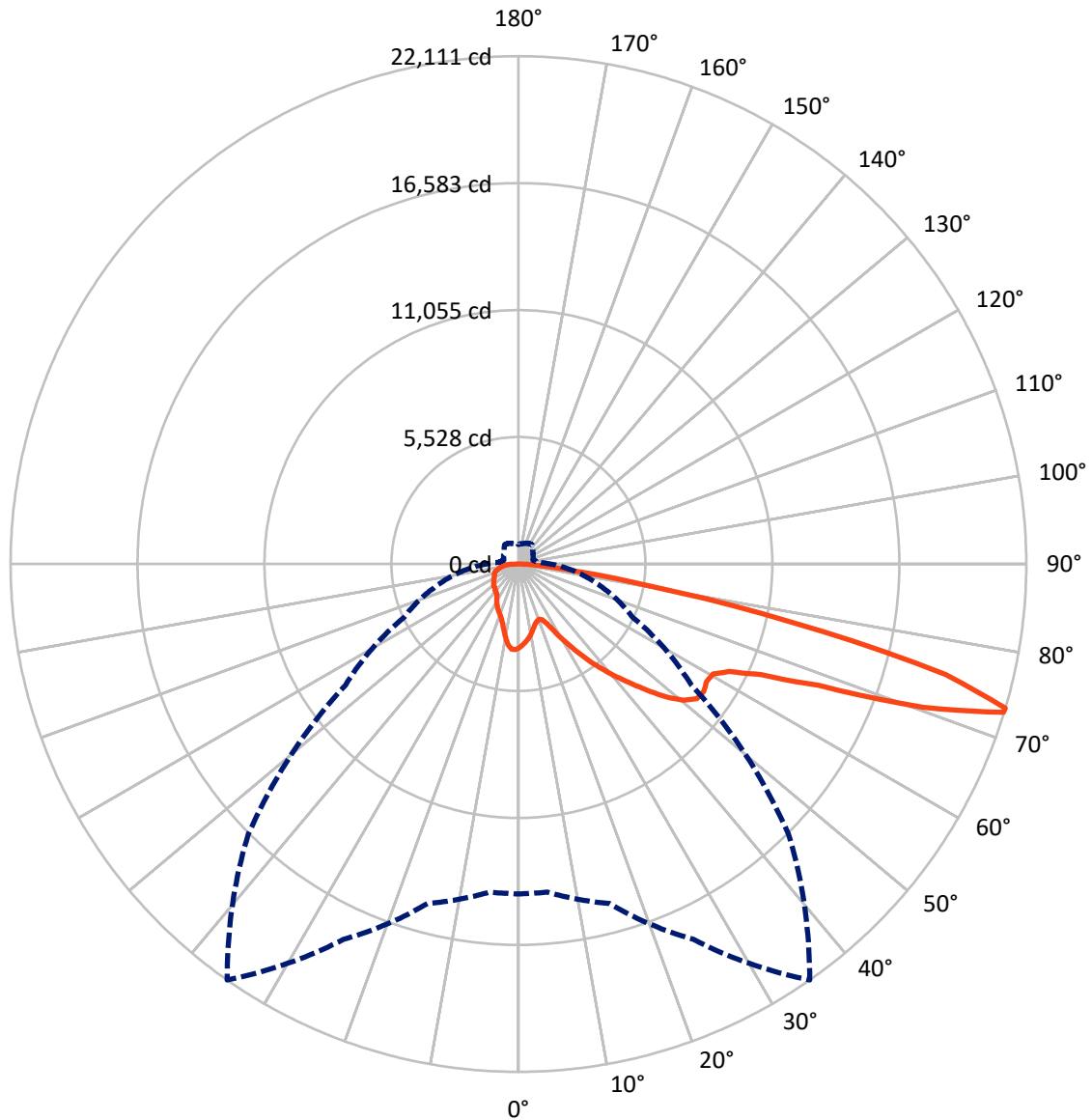
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4608.2	0.0	4608.2
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	19552.8	0.0	19552.8
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	24161.0	0.0	24161.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	330.1	1.4
10°-20°	823.9	3.4
20°-30°	1332.0	5.5
30°-40°	2233.6	9.2
40°-50°	3443.0	14.3
50°-60°	4619.2	19.1
60°-70°	6153.7	25.5
70°-80°	4693.4	19.4
80°-90°	532.0	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°	24161.0	100.0
0°-180°	24161.0	100.0

**Coefficient of Utilization**



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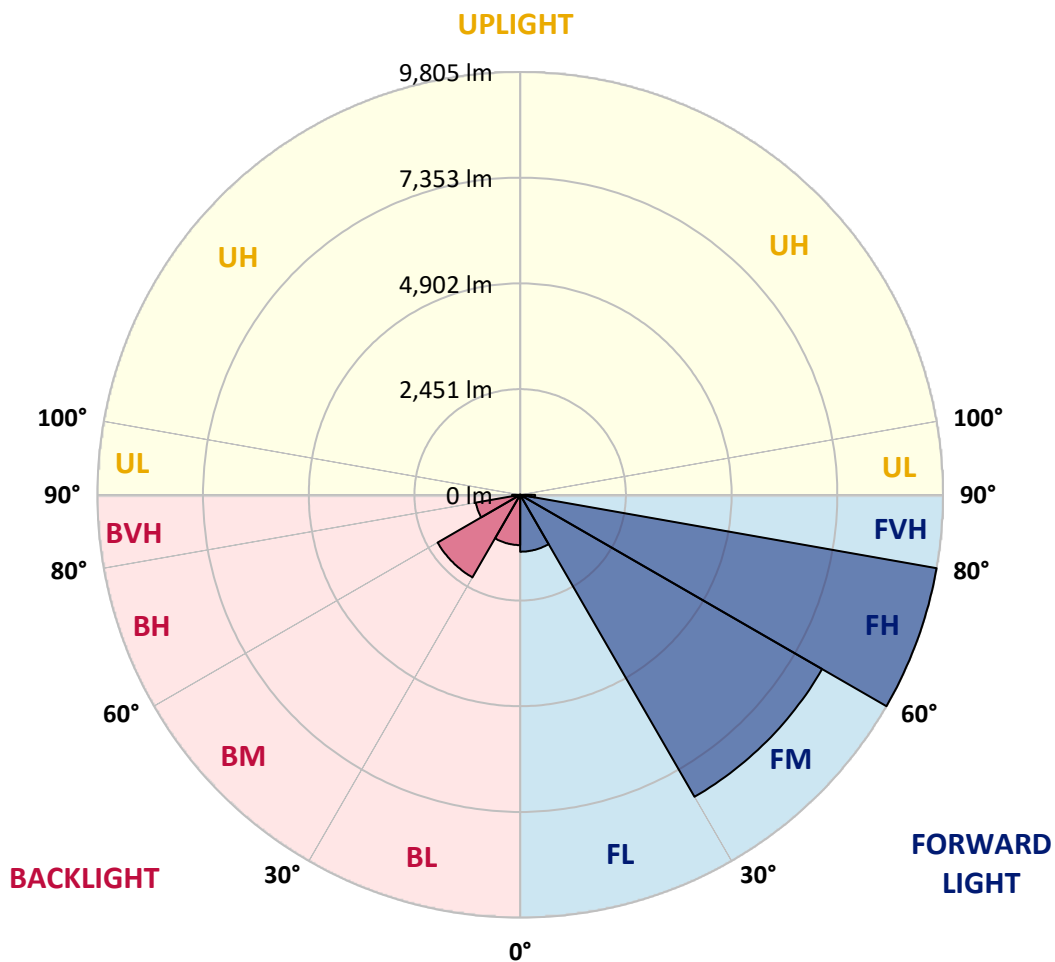
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1320.0	5.5			
FM	(30°-60°)	8084.4	33.5			
FH	(60°-80°)	9804.5	40.6			G4/12000
FVH	(80°-90°)	343.9	1.4			G3/500
BL	(0°-30°)	1166.1	4.8	B3/2500		
BM	(30°-60°)	2211.4	9.2	B2/2500		
BH	(60°-80°)	1042.6	4.3	B3/2500		G3/2500
BVH	(80°-90°)	188.1	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3646.6	3646.6	3646.6	3646.6	3646.6	3646.6	3646.6	3646.6	3646.6	3646.6	3646.6
2.5°	3502.8	3509.7	3501.6	3512.0	3529.5	3548.0	3560.8	3579.3	3600.2	3629.2	3636.2
5°	3338.0	3348.5	3348.5	3367.0	3400.7	3430.8	3458.7	3488.8	3532.9	3582.8	3602.5
7.5°	3157.0	3162.8	3173.3	3201.1	3249.8	3292.8	3332.2	3380.9	3441.3	3507.4	3542.2
10°	2938.9	2947.0	2963.3	3002.7	3068.8	3128.0	3184.9	3252.2	3328.7	3411.1	3455.2
12.5°	2784.6	2782.3	2789.2	2818.2	2876.2	2948.2	3030.5	3116.4	3210.4	3306.7	3360.1
15°	2732.4	2719.6	2692.9	2686.0	2717.3	2789.2	2884.4	2989.9	3102.5	3218.5	3284.6
17.5°	2764.9	2742.8	2669.7	2616.3	2611.7	2666.2	2767.2	2885.5	3015.5	3157.0	3239.4
20°	2969.1	2916.8	2737.0	2612.9	2569.9	2596.6	2684.8	2810.1	2963.3	3151.2	3256.8
22.5°	3457.5	3380.9	2999.2	2768.3	2623.3	2590.8	2657.0	2790.4	2969.1	3223.1	3357.7
25°	4168.7	4059.7	3449.4	3155.9	2856.5	2683.6	2698.7	2835.6	3051.4	3390.2	3552.7
27.5°	4730.3	4659.5	4037.6	3702.3	3281.2	2934.2	2834.5	2949.3	3219.7	3664.0	3830.0
30°	5064.5	5021.5	4666.5	4321.9	3823.0	3333.4	3094.4	3162.8	3483.0	4043.4	4180.3
32.5°	5452.0	5426.4	5252.4	4935.7	4407.8	3857.8	3506.2	3481.9	3835.8	4499.4	4562.1
35°	5853.4	5845.3	5743.2	5515.8	5035.4	4549.3	4052.7	3888.0	4219.8	4972.8	4933.3
37.5°	6227.0	6213.1	6153.9	6021.7	5692.1	5291.9	4609.6	4304.5	4634.0	5425.3	5250.1
40°	6915.0	6806.0	6602.9	6503.2	6355.8	5917.2	5051.7	4693.2	5063.3	5856.9	5523.9
42.5°	7753.9	7576.4	7198.1	7061.2	7040.3	6410.3	5353.4	5070.3	5496.1	6285.0	5793.1
45°	8414.1	8247.0	7921.0	7748.1	7824.7	6857.0	5656.2	5472.9	5941.6	6734.0	6070.4
47.5°	9118.3	8856.1	8424.5	8476.7	8643.8	7279.4	5964.8	5905.6	6430.1	7236.4	6415.0
50°	9143.9	8943.1	8754.0	9066.1	9326.0	7668.0	6351.2	6359.3	7027.6	7868.8	6873.3
52.5°	8613.6	8570.7	8871.2	9362.0	9736.7	7975.5	6790.9	6828.0	7792.2	8595.1	7376.8
55°	8428.0	8379.3	8726.2	9258.7	9792.4	8229.6	7267.7	7335.0	8716.9	9360.8	7867.6
57.5°	8880.5	8772.6	8795.8	9210.0	9656.7	8508.0	7787.5	7923.3	9721.7	10030.3	8183.2
60°	10145.1	9914.3	9475.7	9465.2	9729.8	8925.7	8388.5	8554.5	10765.9	10350.5	8060.2
62.5°	11919.2	11688.3	10866.8	10331.9	10292.5	9614.9	9126.5	9170.5	11369.2	9916.6	7309.5
65°	13839.4	13632.8	12715.1	11959.8	11595.4	10756.6	9983.9	9445.5	11172.0	8722.7	5996.1
67.5°	16170.3	15948.7	15159.7	14462.4	14112.0	12599.1	10586.0	9182.1	9920.1	6757.2	4310.3
70°	17800.4	17574.2	17263.2	17828.3	18685.7	15257.2	10663.8	8111.2	7409.3	4491.3	2594.3
72.5°	15673.7	15568.1	16135.5	18515.1	22086.3	16869.9	9639.3	5905.6	4303.3	2384.3	1501.4
73°	14360.3	14337.1	15304.7	18033.6	22110.7	16621.6	9190.3	5489.1	3690.7	2109.3	1372.6
75°	6484.6	6671.4	8792.3	13774.4	19210.1	13696.6	6468.3	3148.9	2085.0	1457.3	1036.1
77.5°	1558.2	1623.2	2750.9	6541.4	12131.5	8162.3	2930.8	1557.0	1333.1	1029.1	756.5
80°	663.7	685.7	1059.3	2416.8	5711.9	3287.0	1350.5	1043.1	922.4	718.2	530.2
82.5°	369.0	392.2	601.0	1096.4	2305.4	1120.8	823.8	726.3	606.8	432.8	344.6
85°	208.8	221.6	351.6	612.6	976.9	450.2	493.1	482.7	342.3	222.8	169.4
87.5°	98.6	106.7	169.4	284.3	382.9	176.4	250.6	276.1	214.6	135.7	88.2
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°	3646.6	3646.6	3646.6	3646.6	3646.6	3646.6	3646.6	3646.6	3646.6	3646.6
2.5°	3644.3	3665.2	3689.6	3702.3	3713.9	3727.9	3741.8	3741.8	3744.1	3745.3
5°	3618.8	3661.7	3700.0	3716.3	3719.7	3719.7	3716.3	3697.7	3681.4	3688.4
7.5°	3565.4	3628.1	3660.6	3654.8	3610.7	3559.6	3516.7	3464.5	3437.8	3433.2
10°	3488.8	3560.8	3566.6	3508.6	3399.5	3290.4	3199.9	3111.8	3070.0	3059.6
12.5°	3404.1	3470.3	3433.2	3313.6	3138.5	2979.5	2864.6	2775.3	2735.8	2725.4
15°	3335.7	3380.9	3287.0	3099.0	2878.6	2710.3	2615.2	2549.0	2521.2	2513.1
17.5°	3299.7	3309.0	3137.3	2883.2	2648.8	2508.4	2449.3	2417.9	2407.5	2401.7
20°	3317.1	3252.2	2994.6	2682.5	2460.9	2362.3	2348.3	2340.2	2337.9	2334.4
22.5°	3404.1	3234.8	2863.5	2492.2	2296.1	2253.2	2264.8	2263.6	2261.3	2259.0
25°	3559.6	3249.8	2735.8	2311.2	2158.0	2148.8	2169.7	2169.7	2160.4	2160.4
27.5°	3765.0	3281.2	2593.1	2139.5	2032.7	2033.9	2050.1	2045.5	2035.1	2028.1
30°	4015.6	3300.9	2426.1	1985.2	1915.6	1910.9	1915.6	1895.8	1864.5	1862.2
32.5°	4272.0	3276.5	2232.3	1848.3	1791.4	1781.0	1777.5	1749.6	1713.7	1703.2
35°	4504.1	3187.2	2035.1	1739.2	1673.1	1649.9	1666.1	1656.8	1624.3	1616.2
37.5°	4673.5	3021.3	1857.5	1642.9	1588.4	1582.6	1593.0	1596.5	1558.2	1550.1
40°	4787.2	2796.2	1705.6	1561.7	1572.1	1550.1	1515.3	1490.9	1479.3	1475.8
42.5°	4878.8	2561.8	1577.9	1523.4	1575.6	1511.8	1436.4	1396.9	1417.8	1427.1
45°	4984.4	2333.2	1471.2	1475.8	1558.2	1467.7	1381.8	1343.6	1351.7	1354.0
47.5°	5129.4	2054.8	1356.3	1399.3	1500.2	1437.5	1348.2	1293.7	1255.4	1238.0
50°	5330.1	1725.3	1236.8	1313.4	1443.3	1415.5	1296.0	1238.0	1167.2	1151.0
52.5°	5469.4	1417.8	1138.2	1241.5	1392.3	1371.4	1254.2	1178.8	1104.5	1090.6
55°	5394.0	1177.6	1052.3	1161.4	1325.0	1316.9	1219.4	1118.5	1060.5	1048.9
57.5°	5016.9	1025.7	986.2	1086.0	1242.6	1270.5	1173.0	1067.4	1025.7	1017.5
60°	4297.5	930.5	944.4	1034.9	1175.3	1224.1	1126.6	1039.6	1011.7	1005.9
62.5°	3334.5	866.7	913.1	997.8	1123.1	1191.6	1101.1	1036.1	1025.7	1018.7
65°	2388.9	815.6	879.5	960.7	1075.5	1161.4	1091.8	1031.5	1033.8	1028.0
67.5°	1623.2	770.4	838.9	918.9	1029.1	1134.7	1079.0	1015.2	1044.2	1037.3
70°	1135.9	726.3	791.3	865.5	971.1	1097.6	1055.8	990.8	988.5	960.7
72.5°	886.4	668.3	726.3	791.3	896.9	1045.4	1009.4	936.3	898.0	869.0
73°	845.8	654.4	710.1	775.0	880.6	1032.6	996.6	921.2	878.3	851.6
75°	699.6	594.0	645.1	703.1	811.0	972.3	934.0	852.8	798.2	782.0
77.5°	550.0	508.2	556.9	609.1	714.7	884.1	841.2	763.4	733.3	719.3
80°	407.2	421.2	464.1	510.5	619.6	790.1	751.8	674.1	808.7	775.0
82.5°	286.6	319.1	358.5	400.3	519.8	698.5	652.1	572.0	591.7	491.9
85°	169.4	208.8	246.0	281.9	374.8	579.0	538.4	456.0	373.6	356.2
87.5°	98.6	116.0	126.5	163.6	257.6	436.3	379.4	337.6	193.8	131.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)