

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: P300449

Luminaire Tested: **GLNA-AF-06-LED-E1-T4FT-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300449  
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-06-LED-E1-T4FT-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 4000K 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: 23514.3 lumens  
Efficiency: N/A  
Efficacy: 121.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G4

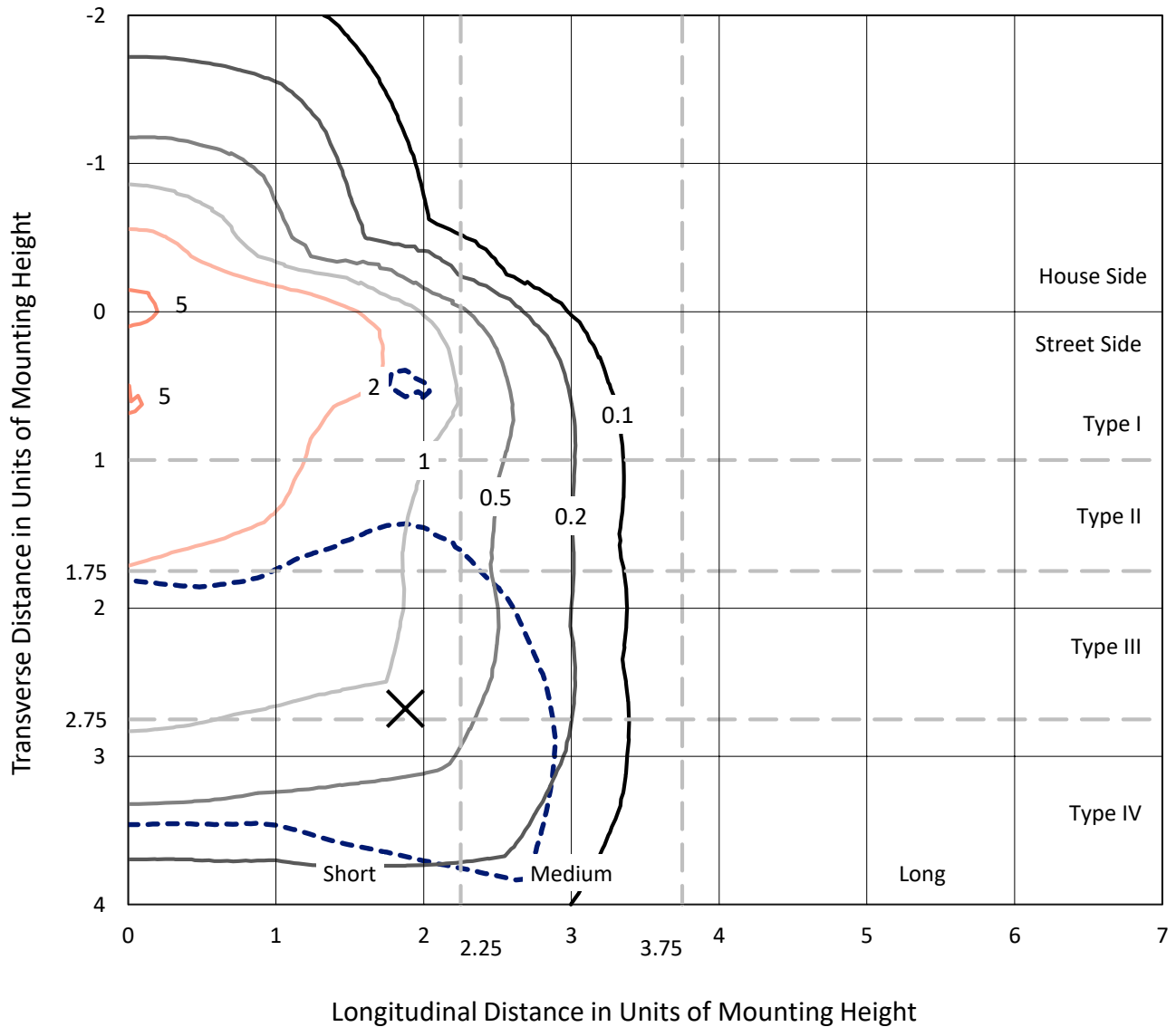
Input Watts (W): 193  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

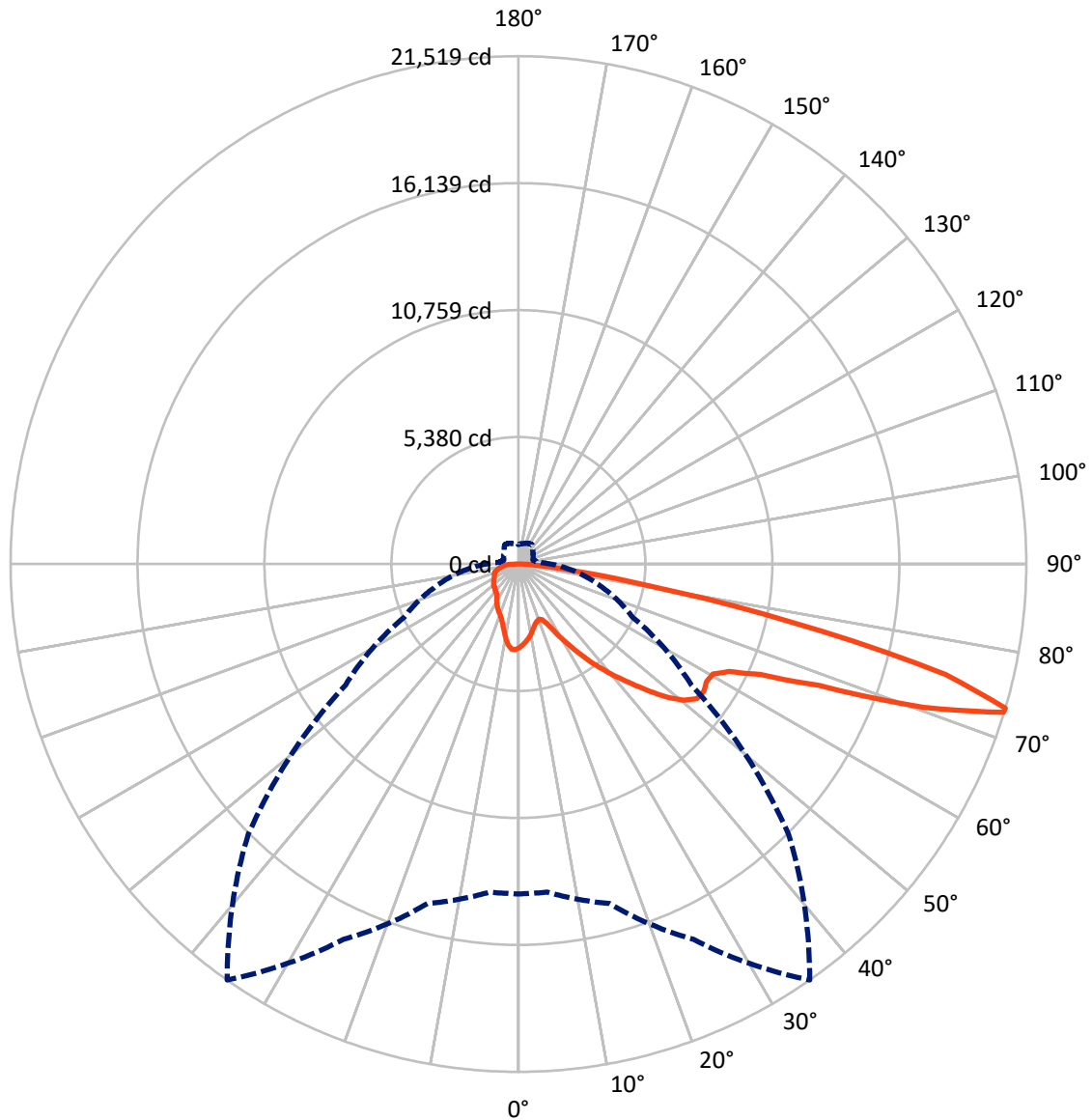
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 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	4484.8	0.0	4484.8
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	19029.5	0.0	19029.5
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	23514.3	0.0	23514.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	321.3	1.4
10°-20°	801.9	3.4
20°-30°	1296.4	5.5
30°-40°	2173.8	9.2
40°-50°	3350.9	14.3
50°-60°	4495.5	19.1
60°-70°	5989.0	25.5
70°-80°	4567.8	19.4
80°-90°	517.7	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°	23514.3	100.0
0°-180°	23514.3	100.0



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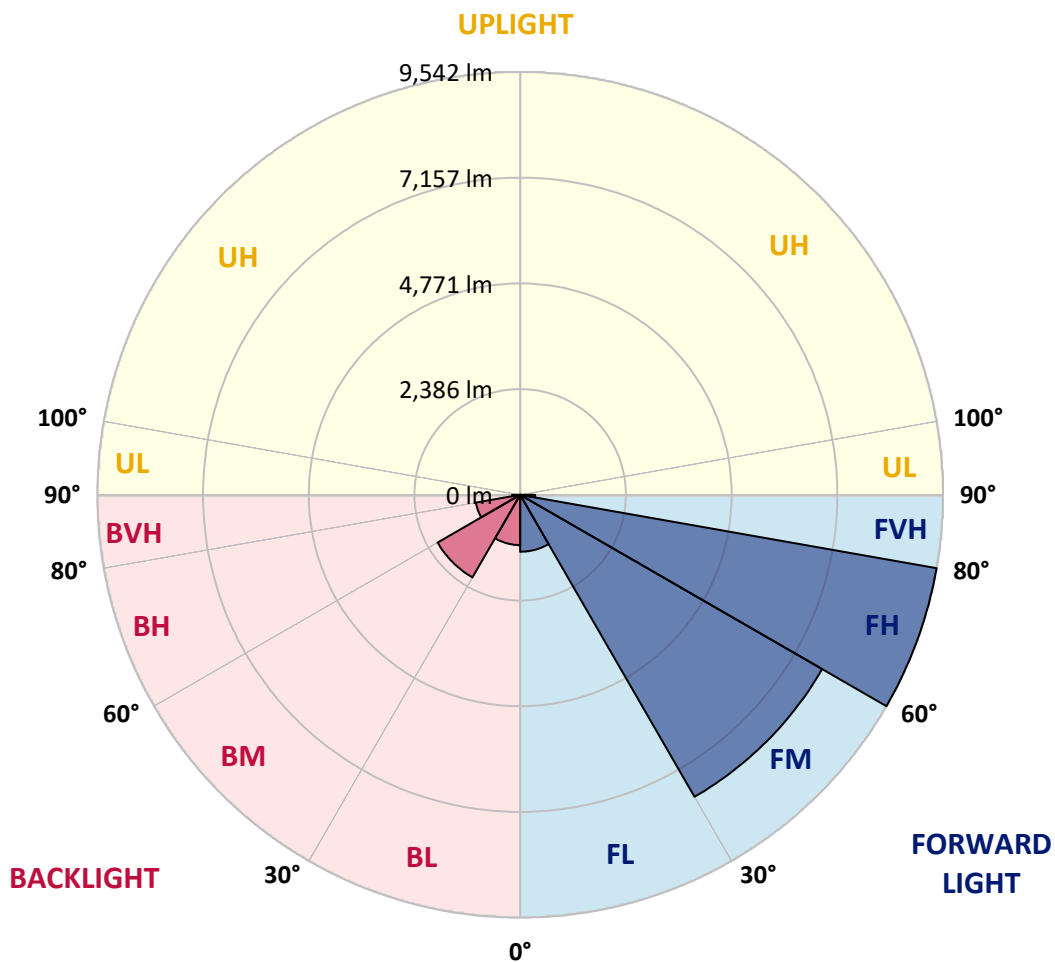
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1284.7	5.5			
FM	(30°-60°)	7868.0	33.5			
FH	(60°-80°)	9542.1	40.6			G4/12000
FVH	(80°-90°)	334.7	1.4			G3/500
BL	(0°-30°)	1134.9	4.8	B3/2500		
BM	(30°-60°)	2152.2	9.2	B2/2500		
BH	(60°-80°)	1014.7	4.3	B3/2500		G3/2500
BVH	(80°-90°)	183.1	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°	3549.0	3549.0	3549.0	3549.0	3549.0	3549.0	3549.0	3549.0	3549.0	3549.0	3549.0
2.5°	3409.0	3415.8	3407.9	3418.0	3435.0	3453.1	3465.5	3483.5	3503.9	3532.1	3538.9
5°	3248.7	3258.8	3258.8	3276.9	3309.6	3339.0	3366.1	3395.5	3438.4	3486.9	3506.1
7.5°	3072.5	3078.2	3088.3	3115.4	3162.9	3204.6	3243.0	3290.5	3349.2	3413.5	3447.4
10°	2860.2	2868.1	2883.9	2922.3	2986.7	3044.3	3099.6	3165.1	3239.6	3319.8	3362.7
12.5°	2710.0	2707.8	2714.6	2742.8	2799.3	2869.3	2949.4	3033.0	3124.5	3218.2	3270.1
15°	2659.2	2646.8	2620.8	2614.1	2644.6	2714.6	2807.2	2909.9	3019.4	3132.4	3196.7
17.5°	2690.9	2669.4	2598.3	2546.3	2541.8	2594.9	2693.1	2808.3	2934.8	3072.5	3152.7
20°	2889.6	2838.8	2663.8	2542.9	2501.1	2527.1	2612.9	2734.9	2883.9	3066.9	3169.6
22.5°	3365.0	3290.5	2918.9	2694.2	2553.1	2521.5	2585.8	2715.7	2889.6	3136.9	3267.9
25°	4057.2	3951.0	3357.1	3071.4	2780.1	2611.8	2626.5	2759.7	2969.8	3299.5	3457.6
27.5°	4603.7	4534.8	3929.6	3603.2	3193.3	2855.7	2758.6	2870.4	3133.5	3566.0	3727.4
30°	4928.9	4887.1	4541.6	4206.2	3720.7	3244.2	3011.5	3078.2	3389.8	3935.2	4068.5
32.5°	5306.0	5281.2	5111.8	4803.6	4289.8	3754.5	3412.4	3388.7	3733.1	4379.0	4440.0
35°	5696.7	5688.8	5589.5	5368.2	4900.7	4427.5	3944.2	3783.9	4106.9	4839.7	4801.3
37.5°	6060.3	6046.8	5989.2	5860.5	5539.8	5150.2	4486.3	4189.3	4510.0	5280.1	5109.6
40°	6730.0	6623.8	6426.2	6329.1	6185.7	5758.9	4916.5	4567.6	4927.8	5700.1	5376.1
42.5°	7546.4	7373.6	7005.5	6872.2	6851.9	6238.8	5210.1	4934.5	5349.0	6116.8	5638.0
45°	8188.9	8026.3	7709.0	7540.7	7615.2	6673.5	5504.8	5326.4	5782.6	6553.8	5907.9
47.5°	8874.3	8619.1	8199.0	8249.8	8412.4	7084.5	5805.1	5747.6	6258.0	7042.7	6243.3
50°	8899.1	8703.8	8519.7	8823.5	9076.4	7462.8	6181.2	6189.1	6839.5	7658.1	6689.3
52.5°	8383.1	8341.3	8633.8	9111.4	9476.1	7762.0	6609.1	6645.3	7583.6	8365.0	7179.4
55°	8202.4	8155.0	8492.6	9010.9	9530.3	8009.3	7073.2	7138.7	8483.6	9110.3	7657.0
57.5°	8642.8	8537.8	8560.4	8963.5	9398.2	8280.3	7579.1	7711.2	9461.5	9761.8	7964.2
60°	9873.6	9648.9	9222.1	9211.9	9469.4	8686.8	8164.0	8325.5	10477.7	10073.5	7844.5
62.5°	11600.1	11375.4	10576.0	10055.4	10017.0	9357.6	8882.2	8925.1	11064.9	9651.2	7113.9
65°	13468.9	13267.9	12374.8	11639.7	11285.1	10468.7	9716.7	9192.7	10872.9	8489.2	5835.6
67.5°	15737.5	15521.8	14754.0	14075.3	13734.3	12261.8	10302.7	8936.4	9654.5	6576.4	4194.9
70°	17324.0	17103.8	16801.2	17351.1	18185.6	14848.8	10378.4	7894.1	7211.0	4371.1	2524.9
72.5°	15254.2	15151.4	15703.6	18019.6	21495.2	16418.4	9381.3	5747.6	4188.2	2320.5	1461.2
73°	13975.9	13953.4	14895.1	17551.0	21518.9	16176.7	8944.3	5342.2	3591.9	2052.9	1335.8
75°	6311.0	6492.8	8557.0	13405.7	18695.9	13330.1	6295.2	3064.6	2029.1	1418.3	1008.4
77.5°	1516.5	1579.7	2677.3	6366.4	11806.8	7943.8	2852.3	1515.4	1297.4	1001.6	736.2
80°	645.9	667.3	1030.9	2352.1	5559.0	3199.0	1314.4	1015.1	897.7	699.0	516.0
82.5°	359.1	381.7	584.9	1067.1	2243.7	1090.8	801.7	706.9	590.6	421.2	335.4
85°	203.3	215.7	342.1	596.2	950.8	438.1	479.9	469.7	333.1	216.8	164.9
87.5°	96.0	103.9	164.9	276.7	372.6	171.6	243.9	268.7	208.9	132.1	85.8
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°	3549.0	3549.0	3549.0	3549.0	3549.0	3549.0	3549.0	3549.0	3549.0	3549.0
2.5°	3546.8	3567.1	3590.8	3603.2	3614.5	3628.1	3641.6	3641.6	3643.9	3645.0
5°	3521.9	3563.7	3601.0	3616.8	3620.2	3620.2	3616.8	3598.7	3582.9	3589.7
7.5°	3470.0	3531.0	3562.6	3556.9	3514.0	3464.3	3422.6	3371.8	3345.8	3341.3
10°	3395.5	3465.5	3471.1	3414.7	3308.5	3202.4	3114.3	3028.5	2987.8	2977.7
12.5°	3313.0	3377.4	3341.3	3225.0	3054.5	2899.8	2788.0	2701.0	2662.6	2652.5
15°	3246.4	3290.5	3199.0	3016.1	2801.5	2637.8	2545.2	2480.8	2453.7	2445.8
17.5°	3211.4	3220.4	3053.3	2806.0	2577.9	2441.3	2383.7	2353.2	2343.1	2337.4
20°	3228.3	3165.1	2914.4	2610.7	2395.0	2299.0	2285.5	2277.6	2275.3	2271.9
22.5°	3313.0	3148.2	2786.8	2425.5	2234.7	2192.9	2204.2	2203.0	2200.8	2198.5
25°	3464.3	3162.9	2662.6	2249.3	2100.3	2091.3	2111.6	2111.6	2102.5	2102.5
27.5°	3664.2	3193.3	2523.7	2082.2	1978.3	1979.5	1995.3	1990.8	1980.6	1973.8
30°	3908.1	3212.5	2361.1	1932.0	1864.3	1859.8	1864.3	1845.1	1814.6	1812.3
32.5°	4157.7	3188.8	2172.6	1798.8	1743.5	1733.3	1729.9	1702.8	1667.8	1657.6
35°	4383.5	3101.9	1980.6	1692.7	1628.3	1605.7	1621.5	1612.5	1580.9	1573.0
37.5°	4548.4	2940.4	1807.8	1598.9	1545.9	1540.2	1550.4	1553.8	1516.5	1508.6
40°	4659.0	2721.3	1659.9	1519.9	1530.0	1508.6	1474.7	1451.0	1439.7	1436.3
42.5°	4748.2	2493.2	1535.7	1482.6	1533.4	1471.3	1397.9	1359.5	1379.9	1388.9
45°	4851.0	2270.8	1431.8	1436.3	1516.5	1428.4	1344.9	1307.6	1315.5	1317.8
47.5°	4992.1	1999.8	1320.0	1361.8	1460.0	1399.1	1312.1	1259.0	1221.8	1204.8
50°	5187.5	1679.1	1203.7	1278.2	1404.7	1377.6	1261.3	1204.8	1136.0	1120.2
52.5°	5323.0	1379.9	1107.7	1208.2	1355.0	1334.7	1220.7	1147.3	1075.0	1061.4
55°	5249.6	1146.1	1024.2	1130.3	1289.5	1281.6	1186.8	1088.5	1032.1	1020.8
57.5°	4882.6	998.2	959.8	1056.9	1209.4	1236.5	1141.6	1038.9	998.2	990.3
60°	4182.5	905.6	919.2	1007.2	1143.9	1191.3	1096.4	1011.8	984.7	979.0
62.5°	3245.3	843.5	888.7	971.1	1093.1	1159.7	1071.6	1008.4	998.2	991.4
65°	2325.0	793.8	855.9	935.0	1046.8	1130.3	1062.6	1003.8	1006.1	1000.5
67.5°	1579.7	749.8	816.4	894.3	1001.6	1104.3	1050.1	988.0	1016.3	1009.5
70°	1105.5	706.9	770.1	842.4	945.1	1068.2	1027.6	964.3	962.1	935.0
72.5°	862.7	650.4	706.9	770.1	872.9	1017.4	982.4	911.3	874.0	845.8
73°	823.2	636.9	691.1	754.3	857.1	1005.0	970.0	896.6	854.8	828.8
75°	680.9	578.1	627.8	684.3	789.3	946.3	909.0	830.0	776.9	761.1
77.5°	535.2	494.6	542.0	592.8	695.6	860.4	818.7	743.0	713.6	700.1
80°	396.3	409.9	451.7	496.8	603.0	769.0	731.7	656.1	787.0	754.3
82.5°	278.9	310.5	348.9	389.6	505.9	679.8	634.6	556.7	575.9	478.8
85°	164.9	203.3	239.4	274.4	364.7	563.5	523.9	443.8	363.6	346.7
87.5°	96.0	112.9	123.1	159.2	250.7	424.6	369.2	328.6	188.6	127.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)