

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: STREETWORKS

Report Number: P721873

Luminaire Tested: **CST-CA8-400-750-U-T4**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721873  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-400-750-U-T4  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

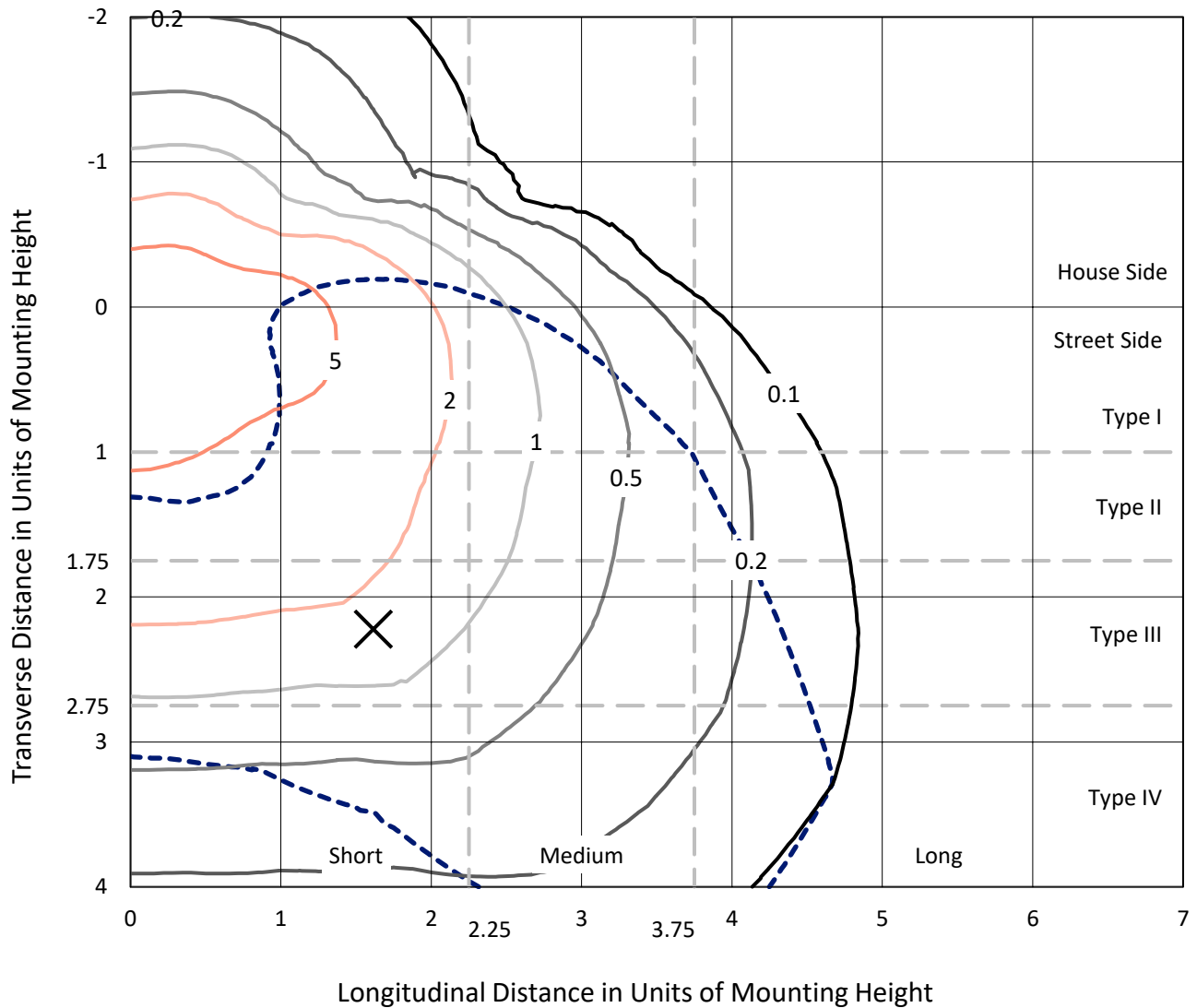
Lumens per Lamp: N/A  
Luminaire Lumens: 61030 lumens  
Efficiency: N/A  
Efficacy: 152.3 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 400.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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: 28.75 FT



REPORT NUMBER: P721873  
 CATALOG NUMBER: CST-CA8-400-750-U-T4

### Iso-Footcandle Lines of Horizontal Illumination

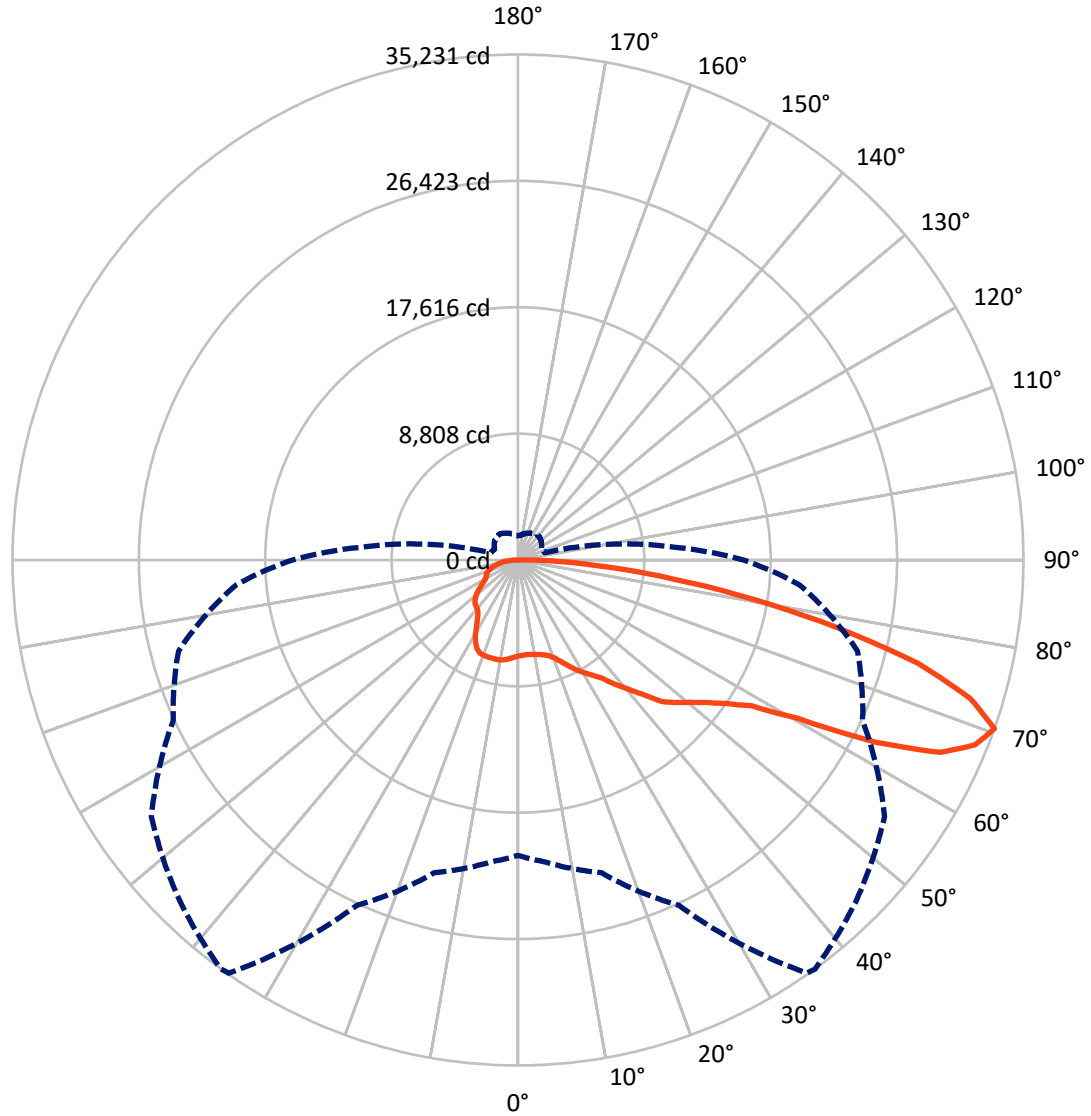
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.7 fc  
 Type IV - Short - N/A

REPORT NUMBER: P721873  
CATALOG NUMBER: CST-CA8-400-750-U-T4

### Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P721873  
 CATALOG NUMBER: CST-CA8-400-750-U-T4

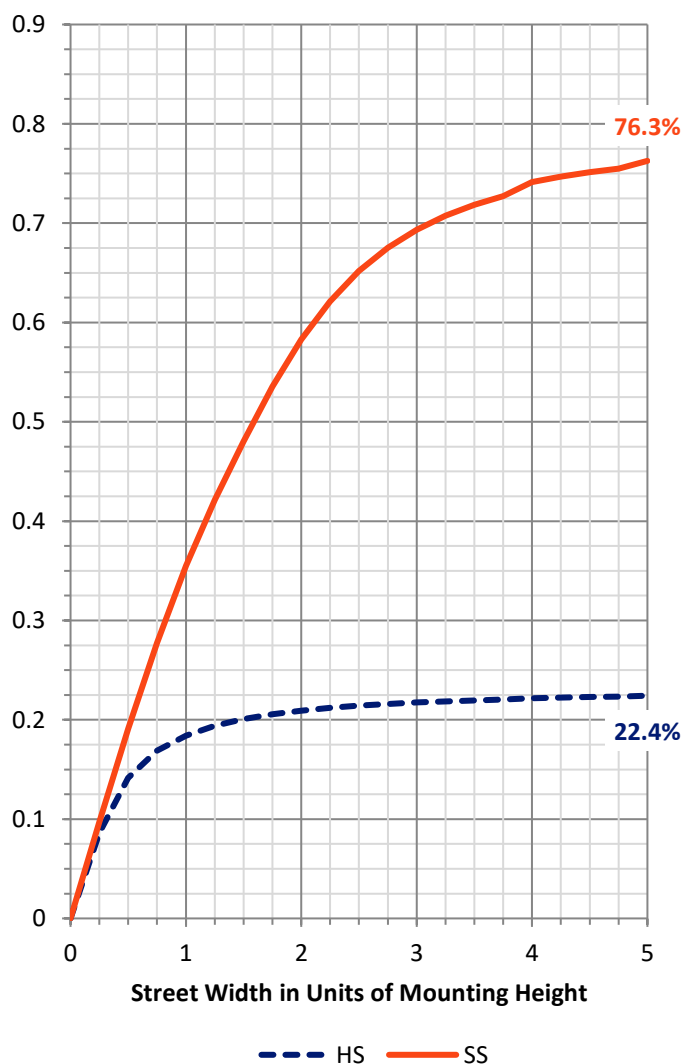
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	13905.3	0.0	13905.3
	% Fixture	22.8	0.0	22.8
<b>Street Side</b>	Lumens	47124.7	0.0	47124.7
	% Fixture	77.2	0.0	77.2
<b>Total</b>	Lumens	61030.0	0.0	61030.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	647.6	1.1
10°-20°	2002.1	3.3
20°-30°	3611.4	5.9
30°-40°	5593.4	9.2
40°-50°	8496.3	13.9
50°-60°	11776.4	19.3
60°-70°	15313.4	25.1
70°-80°	11308.8	18.5
80°-90°	2280.7	3.7
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°	61030.0	100.0
0°-180°	61030.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P721873

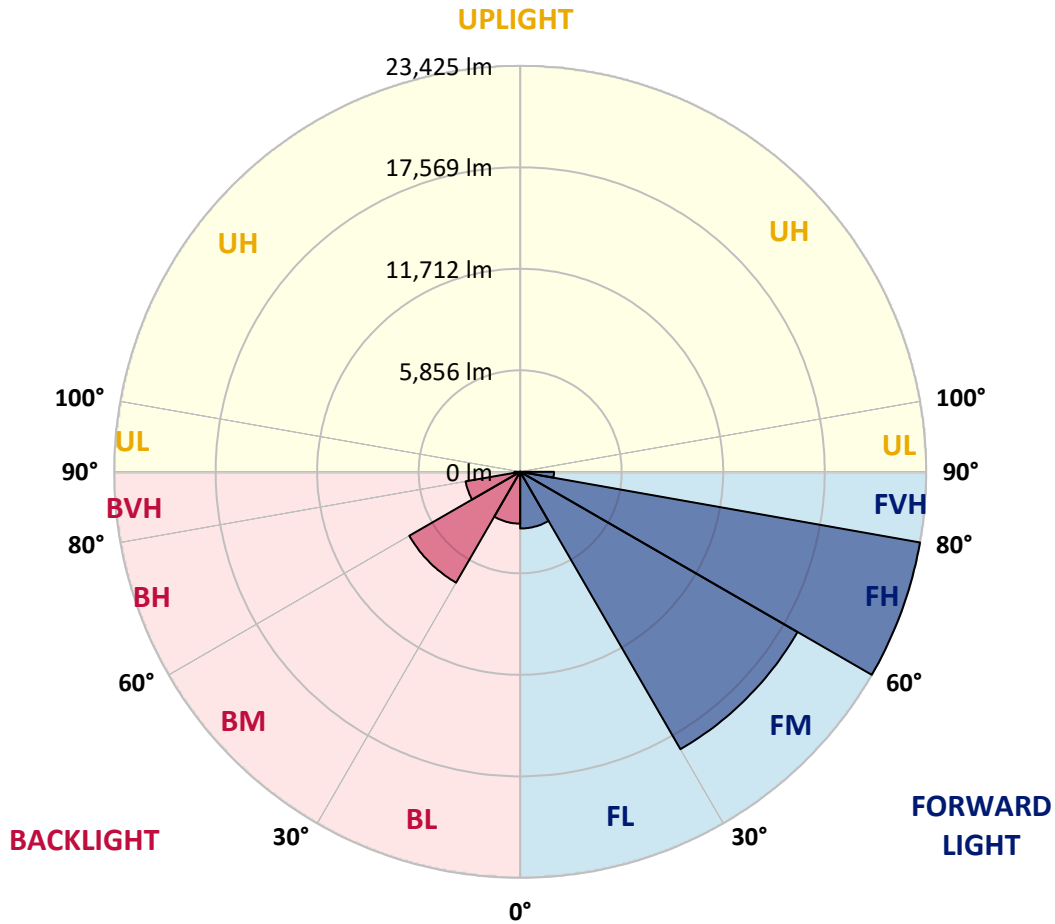
CATALOG NUMBER: CST-CA8-400-750-U-T4

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3271.8	5.4			
FM	(30°-60°)	18479.7	30.3			
FH	(60°-80°)	23424.7	38.4			G5
FVH	(80°-90°)	1948.5	3.2			G5
BL	(0°-30°)	2989.3	4.9	B4/5000		
BM	(30°-60°)	7386.3	12.1	B4/8500		
BH	(60°-80°)	3197.5	5.2	B4/5000		G4/5000
BVH	(80°-90°)	332.2	0.5			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 IV Short





REPORT NUMBER: P721873

CATALOG NUMBER: CST-CA8-400-750-U-T4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	6684.6	6684.6	6684.6	6684.6	6684.6	6684.6	6684.6	6684.6	6684.6	6684.6	6684.6
2.5°	6644.2	6635.3	6630.3	6640.4	6644.2	6645.4	6648.0	6645.4	6639.1	6661.9	6689.7
5°	6645.4	6640.4	6630.3	6621.4	6621.4	6621.4	6622.7	6651.8	6664.4	6661.9	6696.0
7.5°	6655.5	6651.8	6632.8	6626.5	6641.6	6646.7	6672.0	6663.1	6677.0	6699.8	6728.8
10°	6656.8	6651.8	6635.3	6649.2	6692.2	6699.8	6711.1	6736.4	6741.5	6769.3	6798.3
12.5°	6669.4	6669.4	6675.8	6706.1	6751.6	6760.4	6803.4	6823.6	6853.9	6867.8	6903.2
15°	6736.4	6735.1	6750.3	6784.4	6857.7	6862.8	6915.8	6976.5	6999.2	7033.4	7090.2
17.5°	6895.6	6903.2	6904.5	6929.7	7016.9	7019.5	7106.7	7163.5	7215.3	7276.0	7406.1
20°	7273.5	7259.6	7244.4	7244.4	7278.5	7296.2	7363.2	7454.2	7560.3	7667.7	7820.6
22.5°	7748.6	7776.4	7720.8	7691.7	7708.1	7687.9	7738.5	7811.8	7935.6	8096.1	8289.4
25°	8316.0	8318.5	8314.7	8197.2	8160.5	8173.2	8214.9	8283.1	8447.4	8575.0	8855.5
27.5°	8869.4	8858.0	8817.6	8693.8	8658.4	8676.1	8674.8	8863.1	9031.2	9194.2	9524.0
30°	9372.3	9402.7	9330.6	9122.1	9125.9	9123.4	9181.5	9424.2	9731.2	10034.5	10373.1
32.5°	10259.4	10167.2	10069.9	9657.9	9582.1	9573.3	9607.4	9968.8	10423.7	10935.5	11342.3
35°	11094.7	11071.9	10975.9	10557.6	10119.2	10111.6	10064.8	10504.6	11144.0	12091.7	12599.7
37.5°	11948.9	11916.0	11821.3	11464.9	11029.0	10987.3	10594.3	11075.7	11940.0	13443.8	14167.8
40°	12967.4	12947.2	12800.6	12344.4	11897.1	11833.9	11425.7	11675.9	12944.6	15244.4	15754.9
42.5°	13860.8	13857.0	13688.9	13265.6	12885.2	12822.1	12474.6	12734.9	14340.9	17008.5	17309.2
45°	14516.6	14616.4	14624.0	14382.6	14119.8	14064.2	13972.0	14330.8	15955.9	18609.5	18565.3
47.5°	15070.1	15156.0	15066.3	14942.4	14852.7	14856.5	14999.3	15712.0	17550.6	20004.5	19660.8
50°	15995.0	15942.0	15475.7	15402.4	15516.1	15583.1	15997.6	17203.1	19376.5	21313.7	20643.9
52.5°	17329.4	17126.0	16211.1	16062.0	16492.9	16518.2	17177.8	18536.2	21201.2	22437.0	21543.6
55°	19155.4	18987.3	17953.7	17265.0	17482.3	17652.9	18581.7	19902.2	22691.0	23493.4	22236.1
57.5°	21854.5	21867.1	21024.3	19740.4	19001.2	19183.2	19908.5	21230.3	23921.8	24378.0	22668.3
60°	24017.8	24418.4	24166.9	23580.6	22519.2	22395.3	21843.1	22613.9	24973.1	25129.8	23081.5
62.5°	25517.8	25699.7	26564.0	26687.9	27901.0	27952.8	25308.0	24235.2	26128.1	25622.6	23168.7
65°	25441.9	25554.4	26920.4	28583.3	32167.0	32327.5	30779.5	26687.9	26919.1	25842.5	22914.7
67.5°	23670.3	23839.7	25575.9	28684.4	34440.2	34379.6	33397.8	30102.2	27179.4	25490.0	21704.1
70°	20593.4	21115.3	22573.5	26552.7	35150.4	35231.3	33421.8	31192.7	26508.4	24492.9	19686.1
72.5°	16973.1	17137.4	18514.7	22967.7	33074.3	32955.5	32052.0	29753.4	25295.4	22689.7	16154.3
75°	12908.0	12908.0	14576.0	18303.7	28402.6	28819.6	29170.9	26948.2	22409.2	18493.2	10999.9
77.5°	8568.7	8875.7	10219.0	13754.6	22482.5	22790.8	24003.9	22970.3	18347.9	13561.3	5024.2
80°	4545.3	4583.2	6023.7	9139.8	16081.0	16662.2	18330.2	17716.1	13197.4	6353.5	1269.9
82.5°	1589.6	1735.0	2648.6	5297.1	10595.5	10958.2	12159.9	10527.3	4661.5	1406.4	702.6
85°	789.8	817.6	1166.3	2522.2	5965.6	6141.2	7104.1	4100.5	750.6	614.1	477.7
87.5°	380.4	389.2	447.3	902.2	2593.0	2713.0	2872.2	1334.4	278.0	233.8	207.2
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: P721873  
 CATALOG NUMBER: CST-CA8-400-750-U-T4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6684.6	6684.6	6684.6	6684.6	6684.6	6684.6	6684.6	6684.6	6684.6	6684.6	6684.6
2.5°	6696.0	6707.3	6728.8	6735.1	6720.0	6747.8	6774.3	6798.3	6797.1	6805.9	6837.5
5°	6711.1	6735.1	6757.9	6798.3	6837.5	6860.2	6881.7	6901.9	6908.3	6927.2	6946.2
7.5°	6757.9	6781.9	6833.7	6904.5	6907.0	6963.9	7000.5	7006.8	7011.9	7011.9	7056.1
10°	6829.9	6874.1	6957.5	7006.8	7051.1	7032.1	7070.0	7046.0	7028.3	7035.9	7066.2
12.5°	6953.8	6992.9	7113.0	7167.3	7126.9	7119.3	7081.4	7027.0	6965.1	6958.8	6986.6
15°	7148.4	7221.6	7329.1	7380.9	7279.8	7190.1	7062.4	6951.2	6831.2	6787.0	6804.6
17.5°	7461.7	7550.2	7667.7	7632.3	7447.8	7270.9	7059.9	6824.9	6592.4	6430.6	6472.3
20°	7920.4	7986.1	8082.2	7939.4	7670.2	7378.3	7032.1	6660.6	6267.6	5973.2	5939.1
22.5°	8401.9	8501.7	8443.6	8179.5	7826.9	7420.0	6974.0	6421.8	5814.0	5445.0	5389.4
25°	8981.9	9014.7	8813.8	8415.8	7871.2	7354.3	6785.7	6073.0	5350.2	5002.7	4986.3
27.5°	9597.3	9522.7	9148.7	8524.5	7821.9	7159.7	6407.9	5522.1	4930.7	4623.6	4575.6
30°	10292.3	10119.2	9425.4	8535.8	7636.1	6780.6	5930.2	5091.2	4589.5	4281.2	4231.9
32.5°	11186.9	10778.8	9681.9	8418.3	7244.4	6224.6	5356.5	4723.5	4282.4	3972.9	3928.6
35°	12330.5	11641.8	9953.6	8206.0	6761.7	5668.6	4881.4	4411.3	4033.5	3660.7	3601.3
37.5°	13648.5	12846.1	10278.4	7938.1	6232.2	5179.6	4560.4	4212.9	3849.0	3427.0	3356.2
40°	15180.0	14051.6	10778.8	7618.4	5757.1	4827.1	4405.0	4144.7	3746.7	3306.9	3226.0
42.5°	16506.8	15326.6	11373.9	7274.7	5308.5	4533.9	4335.5	4099.2	3682.2	3217.2	3125.0
45°	17733.8	16379.2	11955.2	6857.7	4835.9	4333.0	4252.1	3985.5	3568.5	3106.0	3010.0
47.5°	18730.8	17229.6	12460.7	6474.8	4458.1	4148.5	4070.2	3769.4	3377.7	2972.1	2901.3
50°	19496.6	17869.0	12737.4	6170.3	4058.8	3938.7	3835.1	3525.5	3149.0	2798.9	2738.3
52.5°	20280.0	18509.7	12873.9	6185.5	3687.3	3626.6	3520.5	3255.1	2967.0	2697.9	2632.1
55°	20736.2	18772.5	12729.8	5817.8	3346.1	3275.3	3183.1	3045.3	2873.5	2634.7	2572.8
57.5°	21002.8	18935.5	12291.3	4744.9	2935.4	2868.4	2883.6	2872.2	2730.7	2479.2	2422.4
60°	21194.9	18581.7	11392.9	3487.6	2585.4	2534.8	2659.9	2619.5	2496.9	2301.1	2253.1
62.5°	21039.4	17908.2	9775.4	2622.0	2299.8	2407.2	2517.2	2442.6	2275.8	2097.6	2042.0
65°	20091.7	16586.4	7430.1	2106.5	2207.6	2355.4	2443.9	2323.8	2154.5	1943.5	1918.2
67.5°	18366.9	14190.6	4382.3	1930.8	2138.1	2294.8	2368.0	2208.8	2059.7	1857.5	1827.2
70°	15734.7	10623.3	1957.4	1798.1	2016.8	2172.2	2220.2	2069.8	1908.1	1718.5	1688.2
72.5°	11711.3	6405.3	1319.2	1660.4	1837.3	1975.1	2028.1	1868.9	1753.9	1668.0	1659.1
75°	6503.9	2224.0	1216.9	1503.7	1641.5	1765.3	1831.0	1718.5	1627.6	1510.0	1462.0
77.5°	2071.1	945.2	1156.2	1344.5	1518.9	1621.2	1611.1	1441.8	1412.7	1269.9	1257.3
80°	826.4	823.9	1069.0	1100.6	1296.5	1382.4	1359.7	1146.1	1184.0	1100.6	1067.8
82.5°	648.2	754.4	856.7	840.3	1008.4	1109.5	1077.9	841.6	951.5	874.4	799.9
85°	492.8	660.9	549.7	547.2	703.8	823.9	844.1	647.0	648.2	590.1	525.7
87.5°	254.0	243.9	211.0	209.8	235.0	334.9	410.7	367.7	290.6	218.6	209.8
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)