

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: P721921

Luminaire Tested: **CST-CA8-430-740-U-T3**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721921  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-11)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-430-740-U-T3  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

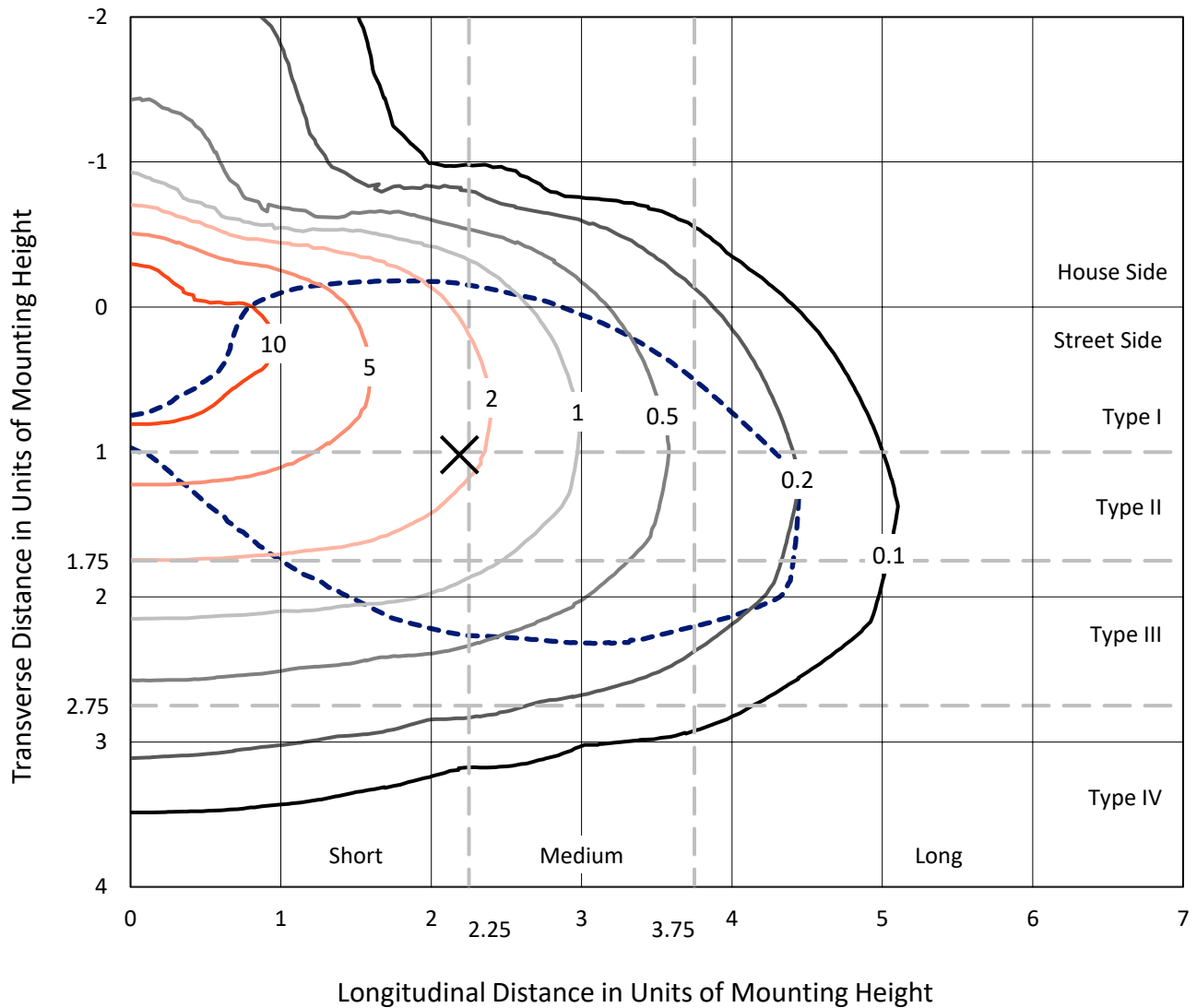
Lumens per Lamp: N/A  
Luminaire Lumens: 65344 lumens  
Efficiency: N/A  
Efficacy: 150.5 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 434.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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



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### Iso-Footcandle Lines of Horizontal Illumination

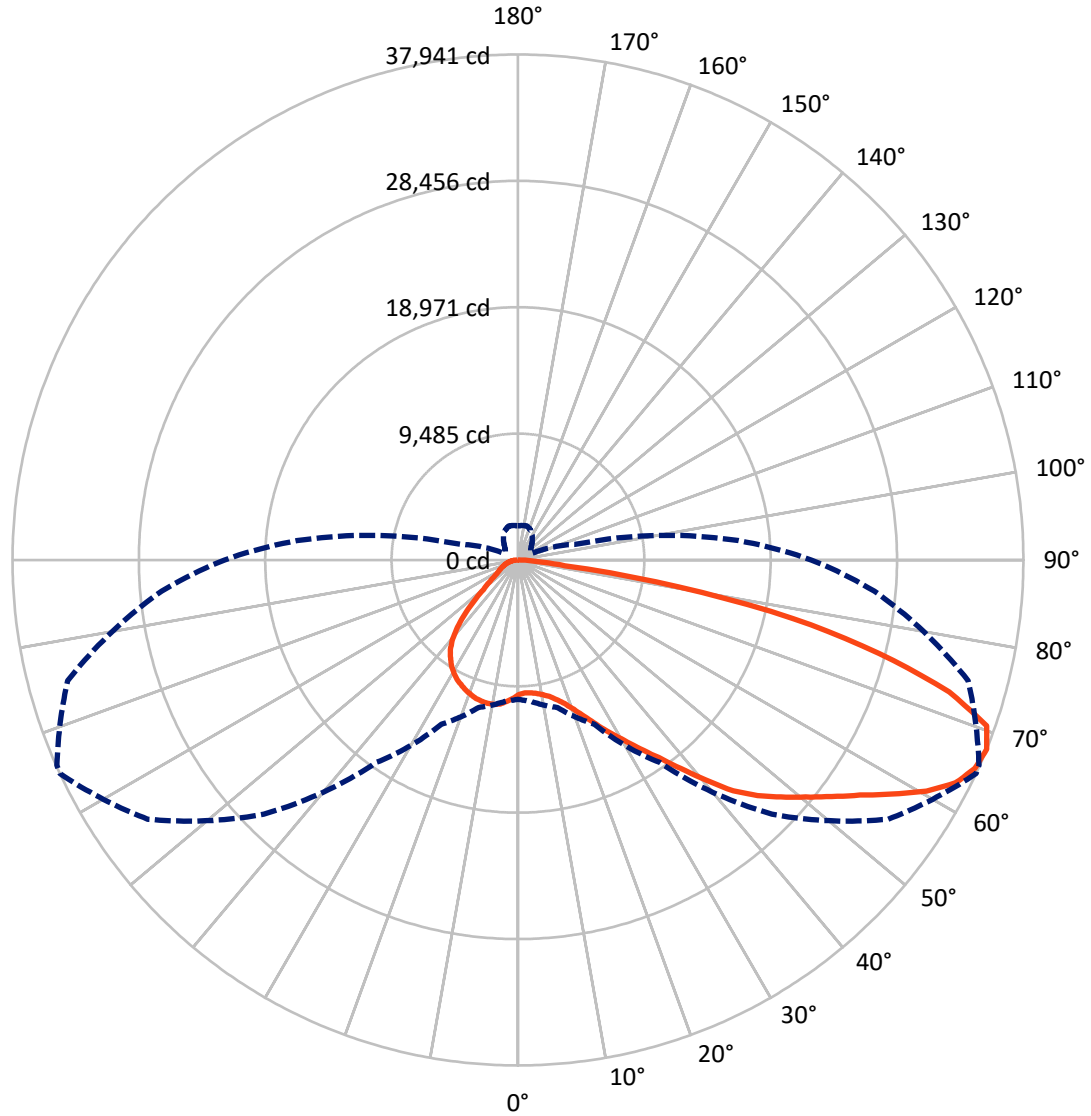
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.5 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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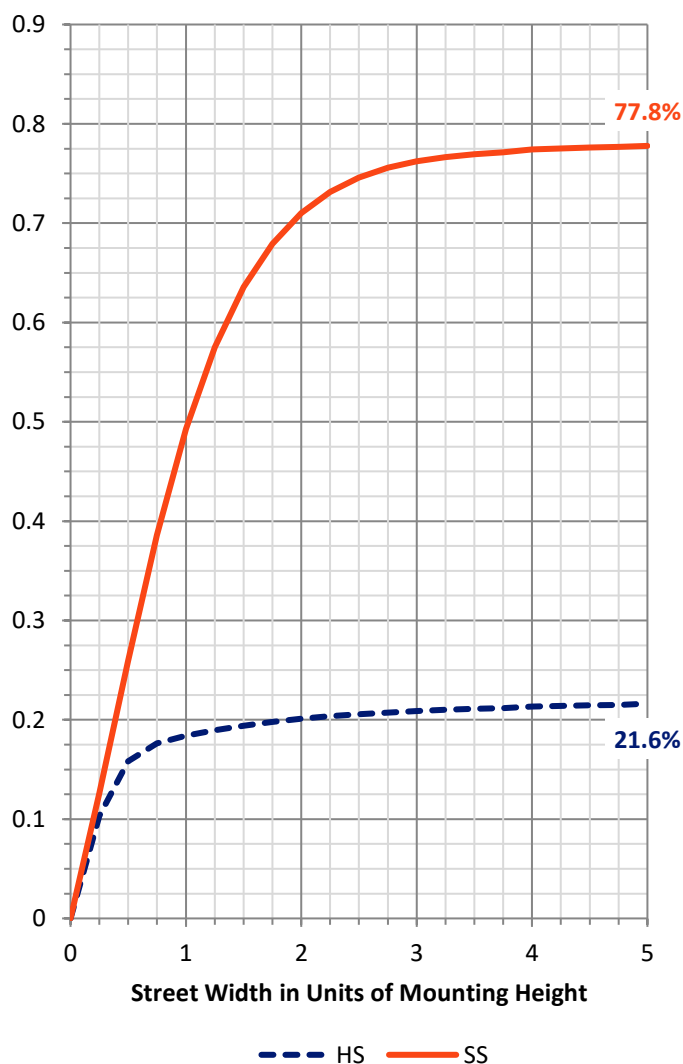
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14433.7	0.0	14433.7
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	50910.3	0.0	50910.3
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	65344.0	0.0	65344.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1005.6	1.5
10°-20°	3141.9	4.8
20°-30°	5439.1	8.3
30°-40°	7992.2	12.2
40°-50°	10802.4	16.5
50°-60°	13283.7	20.3
60°-70°	14234.4	21.8
70°-80°	8395.3	12.8
80°-90°	1049.4	1.6
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°	65344.0	100.0
0°-180°	65344.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P721921

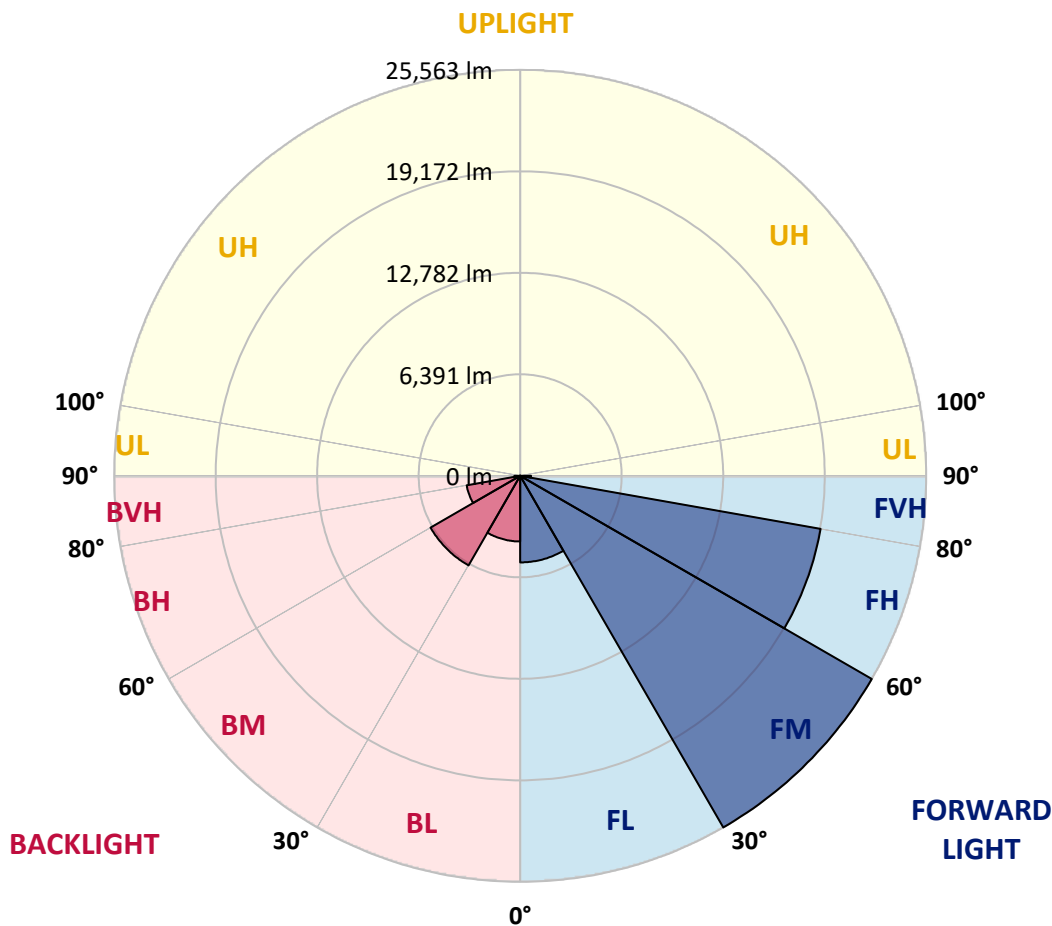
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5452.4	8.3			
FM (30°-60°)	25563.0	39.1			
FH (60°-80°)	19206.7	29.4			G5
FVH (80°-90°)	688.1	1.1			G4/750
BL (0°-30°)	4134.2	6.3	B4/5000		
BM (30°-60°)	6515.3	10.0	B4/8500		
BH (60°-80°)	3422.9	5.2	B4/5000		G4/5000
BVH (80°-90°)	361.3	0.6			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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	10093.2	10093.2	10093.2	10093.2	10093.2	10093.2	10093.2	10093.2	10093.2	10093.2	10093.2
2.5°	9902.7	9884.0	9876.0	9901.3	9920.0	9941.3	9971.9	10001.2	10005.2	10043.9	10094.5
5°	10022.6	10006.6	9989.3	9985.3	9978.6	9977.3	9985.3	10018.6	10026.6	10063.9	10173.1
7.5°	10289.0	10273.0	10241.1	10229.1	10193.1	10129.1	10098.5	10115.8	10119.8	10165.1	10301.0
10°	10723.3	10674.0	10635.4	10595.4	10482.2	10380.9	10306.3	10274.4	10267.7	10311.7	10468.9
12.5°	11241.6	11200.3	11157.6	11052.4	10908.5	10726.0	10594.1	10520.8	10515.5	10552.8	10671.4
15°	11789.1	11789.1	11759.8	11634.6	11493.4	11190.9	10987.1	10864.5	10872.5	10901.9	10956.5
17.5°	12496.6	12437.9	12424.6	12282.1	12124.9	11849.1	11525.3	11329.5	11338.8	11352.2	11310.9
20°	13216.0	13198.7	13178.7	13084.1	12941.5	12587.2	12223.4	11966.3	11967.7	11919.7	11735.8
22.5°	14167.2	14109.9	14124.6	14018.0	13824.8	13461.1	13042.8	12737.7	12757.7	12688.4	12355.3
25°	15111.8	15054.5	15023.9	14951.9	14785.4	14440.3	13943.4	13663.6	13639.6	13514.4	13030.8
27.5°	16055.0	16021.7	16047.0	15960.4	15824.5	15439.5	14983.9	14673.5	14689.5	14602.9	13882.1
30°	17031.6	16994.3	17104.8	16964.9	16881.0	16506.7	16069.7	15704.6	15718.0	15749.9	14941.3
32.5°	17768.3	17812.3	18005.4	17989.5	17973.5	17556.5	17096.8	16894.3	16914.3	17026.2	16198.9
35°	18479.7	18483.7	18755.5	18960.7	19047.3	18698.2	18221.3	18214.6	18345.2	18686.2	17952.1
37.5°	19069.9	19056.6	19419.0	19737.4	19974.5	19704.1	19441.6	19850.6	19969.2	20676.6	19717.4
40°	19392.3	19420.3	19886.6	20283.6	20749.9	20622.0	20650.0	21695.8	21987.6	22607.1	21037.7
42.5°	19165.8	19251.1	19977.2	20787.2	21490.6	21661.1	22223.4	23688.8	23812.7	23924.7	22336.6
45°	18786.1	18875.4	19680.1	20988.4	22102.1	22822.9	23788.8	25222.3	25358.2	25232.9	23417.1
47.5°	18390.5	18482.4	19379.0	20907.1	22608.4	23989.9	25181.0	26578.5	26751.7	26364.0	24456.2
50°	17888.2	18030.8	19011.3	20735.2	23018.7	25248.9	26498.6	27974.7	28054.6	27495.1	25243.6
52.5°	17270.0	17427.2	18487.7	20440.8	23339.8	26128.2	27832.2	29489.5	29481.5	28816.7	26144.2
55°	16619.9	16762.4	17854.9	19977.2	23519.6	26805.0	28898.0	31158.8	31254.7	30697.8	26959.5
57.5°	15787.2	15916.5	17107.5	19353.7	23333.1	27379.2	30624.6	33142.5	33190.5	32007.4	27608.3
60°	14684.1	14874.6	16071.0	18561.0	22797.6	28044.0	32527.0	35228.8	35287.5	33295.7	28025.3
62.5°	13473.1	13549.0	14768.1	17340.6	22018.2	28556.9	33846.0	36860.9	36775.6	34302.9	28150.6
65°	11997.0	12056.9	13112.1	15771.2	20570.0	28275.8	34318.9	37700.2	37594.9	34935.7	27765.5
67.5°	10451.5	10636.7	11465.4	13594.3	18549.0	26978.2	33919.2	37941.3	37888.0	34983.7	26846.3
70°	8445.2	8510.5	9259.2	11075.0	15476.8	24380.3	32587.0	37323.1	37281.8	33912.6	24969.1
72.5°	5955.2	5891.2	6254.9	7679.1	11179.0	19393.6	27822.8	33850.0	33919.2	30336.8	21743.7
75°	3161.4	3284.0	3850.2	4701.5	6337.5	12467.3	22182.1	28014.7	27990.7	25367.5	17187.4
77.5°	1684.0	1681.3	2070.3	2434.0	3102.8	5728.7	14630.8	21126.9	21244.2	19654.8	11801.1
80°	808.7	839.3	863.3	989.9	1546.7	2647.2	6120.4	12251.4	13050.8	11722.5	5606.1
82.5°	647.5	650.1	652.8	624.8	639.5	1077.8	2358.1	3545.1	3673.0	2952.3	1807.9
85°	479.6	450.3	446.3	378.4	427.7	647.5	1189.7	1513.4	1438.8	1400.2	1020.5
87.5°	193.2	181.2	175.9	165.2	165.2	243.8	419.7	547.6	546.2	498.3	342.4
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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CATALOG NUMBER: CST-CA8-430-740-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10093.2	10093.2	10093.2	10093.2	10093.2	10093.2	10093.2	10093.2	10093.2	10093.2	10093.2
2.5°	10134.5	10182.4	10294.3	10390.3	10426.2	10514.2	10596.8	10644.7	10678.0	10698.0	10788.6
5°	10239.7	10335.6	10514.2	10648.7	10779.3	10941.8	11047.1	11113.7	11151.0	11172.3	11237.6
7.5°	10400.9	10498.2	10687.4	10893.9	11013.8	11147.0	11214.9	11262.9	11286.9	11280.2	11332.2
10°	10544.8	10640.7	10829.9	10988.4	11056.4	11132.3	11168.3	11179.0	11180.3	11185.6	11237.6
12.5°	10740.6	10799.3	10900.5	11004.4	10989.8	10992.4	11023.1	11009.8	10979.1	10973.8	11008.4
15°	10951.1	10952.5	10960.5	10937.8	10845.9	10805.9	10763.3	10727.3	10643.4	10638.1	10692.7
17.5°	11214.9	11152.3	11007.1	10852.6	10634.1	10483.5	10331.6	10269.0	10166.4	10146.5	10173.1
20°	11554.7	11424.1	11071.0	10687.4	10278.4	10009.2	9825.4	9640.2	9497.7	9463.0	9488.3
22.5°	12042.3	11785.1	11152.3	10511.5	9878.7	9419.0	9062.0	8839.5	8599.7	8477.1	8489.1
25°	12631.1	12228.8	11293.5	10289.0	9408.4	8744.9	8165.4	7719.1	7448.6	7268.8	7316.7
27.5°	13402.5	12849.6	11462.7	10069.2	8823.5	7883.0	7042.3	6437.5	6161.7	6076.4	6020.5
30°	14296.4	13599.7	11641.3	9744.1	8192.0	6815.8	5739.4	5235.8	4920.0	4869.4	4826.8
32.5°	15492.8	14544.2	11975.6	9391.1	7438.0	5748.7	4580.3	4000.8	3928.8	3887.5	3878.2
35°	17035.6	15781.9	12326.0	8932.8	6454.8	4497.7	3465.2	3152.1	3117.5	3162.8	3166.8
37.5°	18672.9	17124.8	12745.7	8415.9	5323.7	3356.0	2651.2	2434.0	2472.7	2613.9	2645.9
40°	19781.3	18009.4	13126.7	7713.8	3926.2	2438.0	1929.1	1882.5	2095.6	2276.8	2314.1
42.5°	20844.5	18679.6	13281.3	6785.2	2800.4	1735.9	1557.4	1717.3	2015.7	2214.2	2240.9
45°	21751.7	19458.9	12892.2	5671.4	1898.5	1450.8	1492.1	1713.3	2045.0	2264.8	2284.8
47.5°	22615.0	20095.7	12360.7	4468.4	1497.5	1396.2	1490.8	1749.3	2110.3	2318.1	2330.1
50°	23439.7	20580.7	11453.4	3399.9	1402.9	1370.9	1502.8	1805.2	2146.3	2276.8	2271.5
52.5°	24051.2	20831.2	10487.5	2744.4	1365.6	1350.9	1534.8	1875.8	2152.9	2231.5	2226.2
55°	24500.2	20783.2	9853.4	2247.5	1334.9	1342.9	1586.7	1929.1	2216.9	2335.4	2331.4
57.5°	24541.5	20566.0	9132.6	1898.5	1297.6	1341.6	1642.7	2003.7	2536.6	2755.1	2688.5
60°	24492.2	20206.3	8413.2	1666.7	1256.3	1349.6	1701.3	2227.5	2997.6	3169.4	3122.8
62.5°	24249.7	19536.2	7335.4	1513.4	1220.3	1378.9	1745.3	2404.7	2974.9	2994.9	2928.3
65°	23501.0	18639.6	5920.5	1358.9	1184.4	1398.9	1781.2	2451.4	2732.5	2668.5	2635.2
67.5°	22019.5	16637.2	4567.0	1217.7	1137.7	1394.9	1887.8	2384.7	2640.5	2593.9	2551.3
70°	19914.6	14361.7	3170.8	1072.5	1059.1	1369.6	1861.2	2407.4	2596.6	2524.6	2467.3
72.5°	16637.2	11266.9	2017.0	953.9	941.9	1309.6	1794.5	2392.7	2567.3	2535.3	2456.7
75°	12527.2	7864.3	1281.6	824.7	838.0	1200.4	1688.0	2314.1	2552.6	2452.7	2302.1
77.5°	7887.0	3882.2	996.5	700.8	720.8	1035.2	1458.8	2021.0	2450.0	2390.1	2196.9
80°	2982.9	1576.1	779.4	568.9	586.2	804.7	1196.4	1662.7	2255.5	2354.1	2271.5
82.5°	1373.6	985.9	584.9	457.0	463.6	586.2	892.6	1231.0	1909.1	2160.9	2367.4
85°	802.0	646.1	390.4	305.1	317.1	346.4	502.3	751.4	1237.7	1648.0	1843.8
87.5°	273.1	225.2	151.9	129.2	125.2	142.6	121.2	246.5	367.7	647.5	739.4
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)