

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: P721883

Luminaire Tested: **CST-CA8-400-760-U-T4**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721883  
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-CA8-400-760-U-T4  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

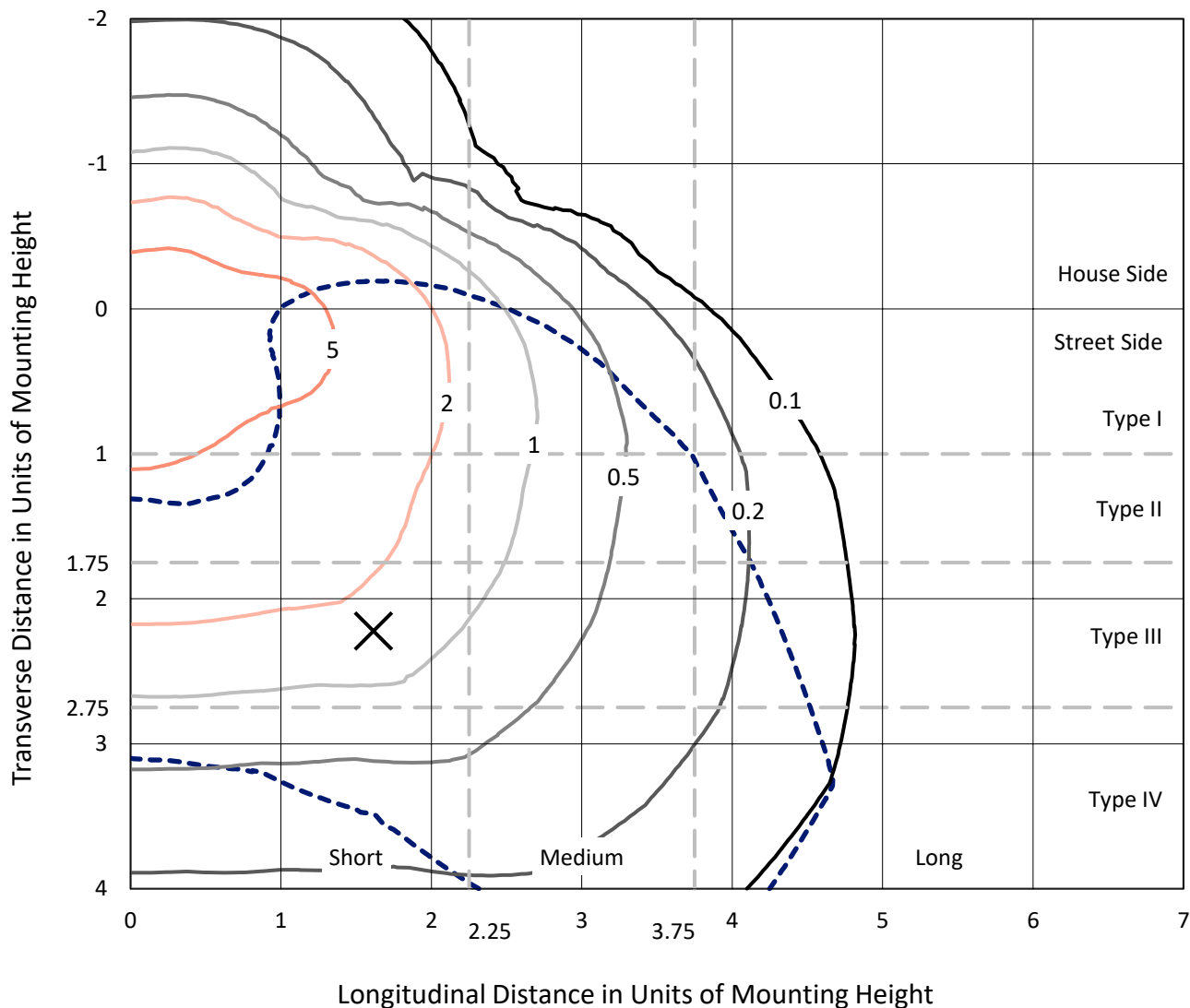
Lumens per Lamp: N/A  
Luminaire Lumens: 59736 lumens  
Efficiency: N/A  
Efficacy: 149.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 400.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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



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### Iso-Footcandle Lines of Horizontal Illumination

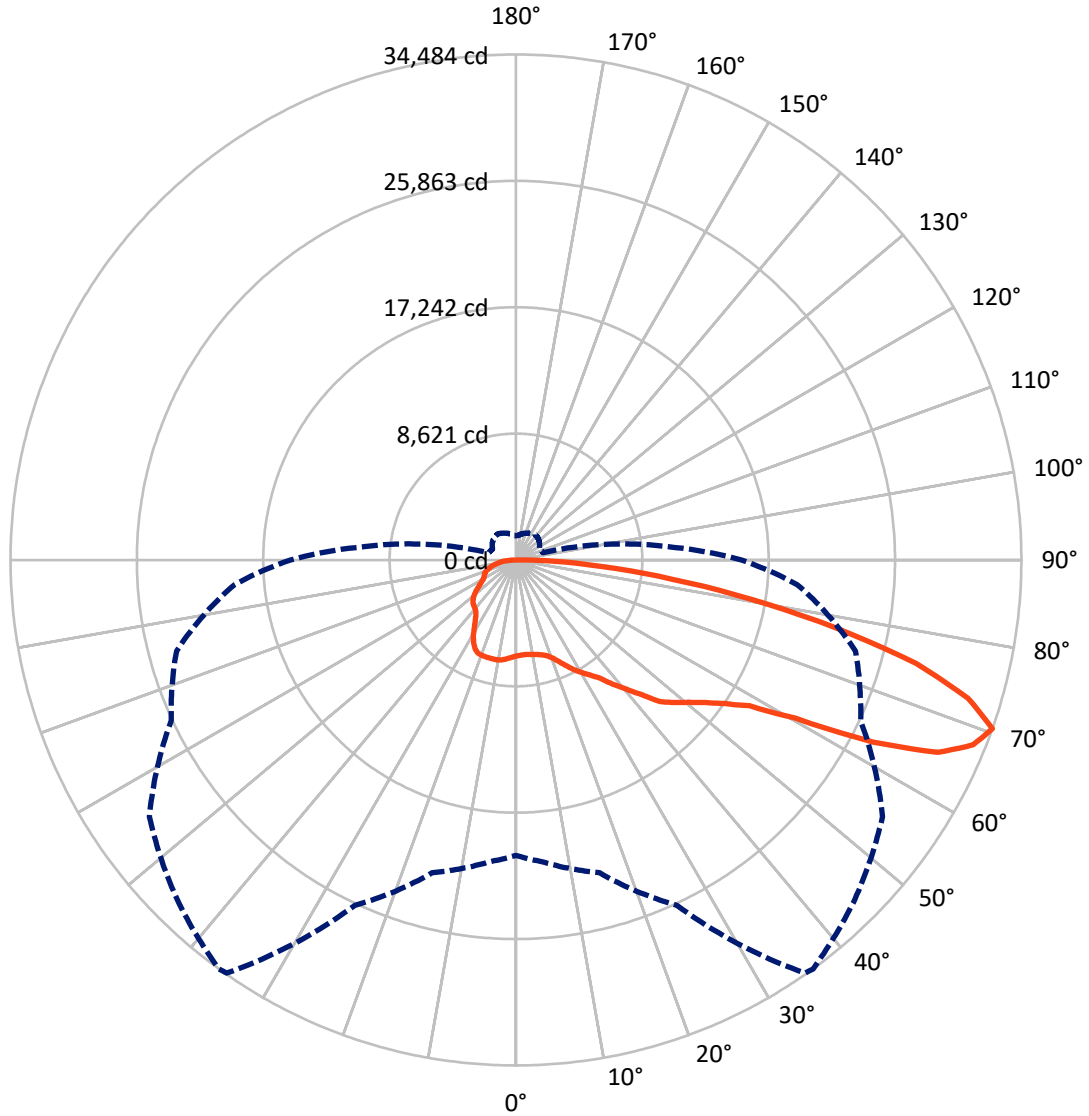
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.6 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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

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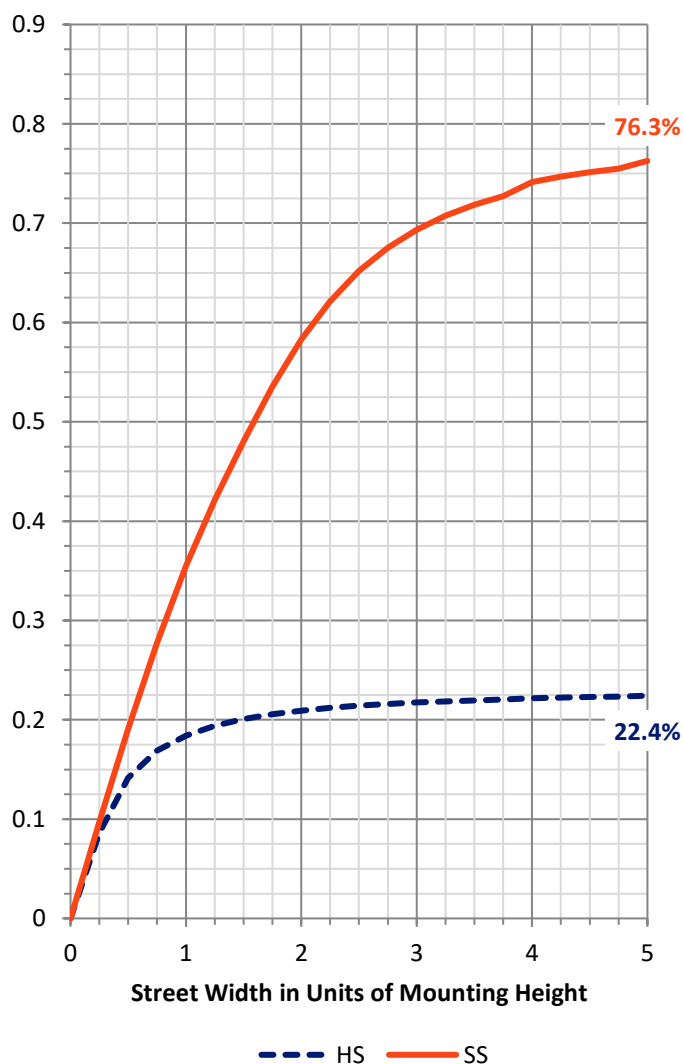
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	13610.5	0.0	13610.5
	% Fixture	22.8	0.0	22.8
<b>Street Side</b>	Lumens	46125.5	0.0	46125.5
	% Fixture	77.2	0.0	77.2
<b>Total</b>	Lumens	59736.0	0.0	59736.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	633.9	1.1
10°-20°	1959.6	3.3
20°-30°	3534.8	5.9
30°-40°	5474.8	9.2
40°-50°	8316.2	13.9
50°-60°	11526.7	19.3
60°-70°	14988.7	25.1
70°-80°	11069.0	18.5
80°-90°	2232.4	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°	59736.0	100.0
0°-180°	59736.0	100.0

**Coefficient of Utilization**



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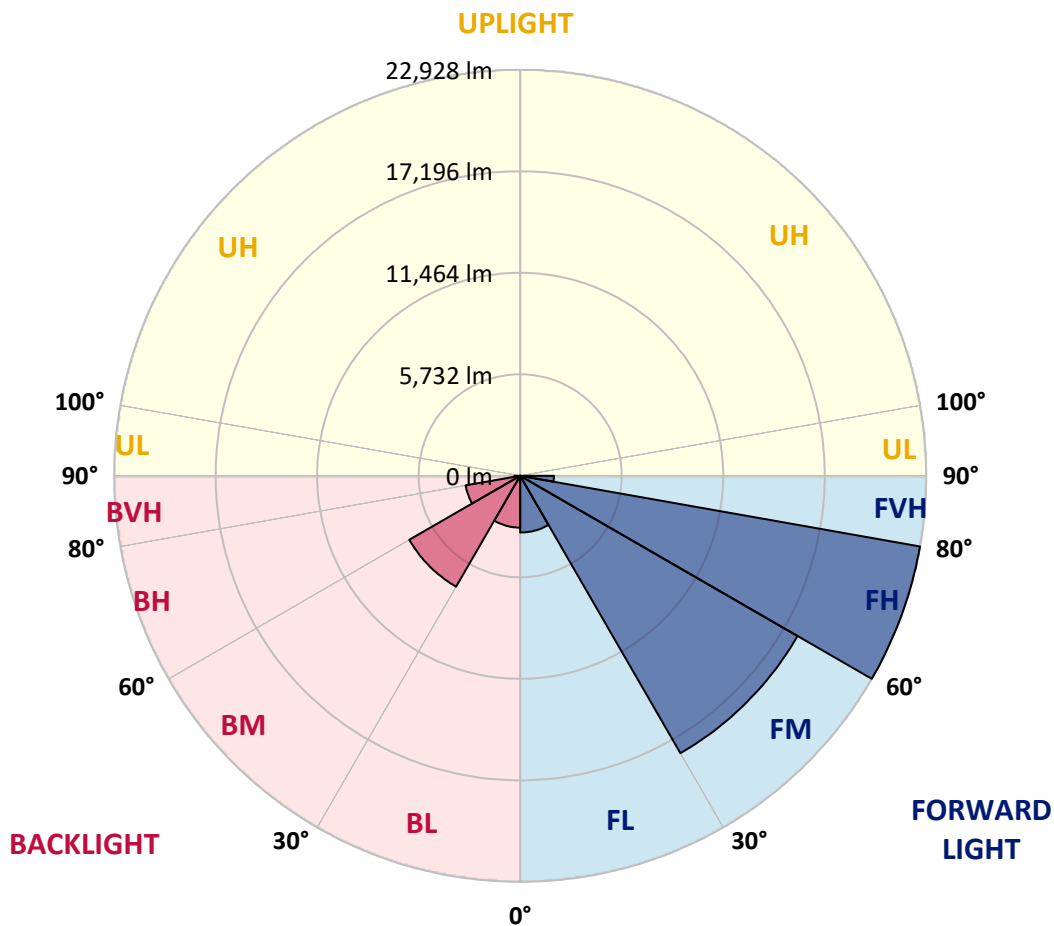
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3202.4	5.4			
FM (30°-60°)	18087.9	30.3			
FH (60°-80°)	22928.0	38.4			G5
FVH (80°-90°)	1907.2	3.2			G5
BL (0°-30°)	2925.9	4.9	B4/5000		
BM (30°-60°)	7229.7	12.1	B4/8500		
BH (60°-80°)	3129.7	5.2	B4/5000		G4/5000
BVH (80°-90°)	325.2	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	6542.9	6542.9	6542.9	6542.9	6542.9	6542.9	6542.9	6542.9	6542.9	6542.9	6542.9
2.5°	6503.3	6494.6	6489.7	6499.6	6503.3	6504.5	6507.0	6504.5	6498.3	6520.6	6547.8
5°	6504.5	6499.6	6489.7	6481.0	6481.0	6481.0	6482.3	6510.7	6523.1	6520.6	6554.0
7.5°	6514.4	6510.7	6492.2	6486.0	6500.8	6505.8	6530.5	6521.8	6535.5	6557.7	6586.2
10°	6515.7	6510.7	6494.6	6508.2	6550.3	6557.7	6568.8	6593.6	6598.5	6625.7	6654.2
12.5°	6528.0	6528.0	6534.2	6563.9	6608.4	6617.1	6659.1	6678.9	6708.6	6722.2	6756.8
15°	6593.6	6592.3	6607.2	6640.6	6712.3	6717.3	6769.2	6828.6	6850.8	6884.2	6939.9
17.5°	6749.4	6756.8	6758.1	6782.8	6868.2	6870.6	6956.0	7011.6	7062.3	7121.7	7249.1
20°	7119.2	7105.6	7090.8	7090.8	7124.2	7141.5	7207.1	7296.1	7400.0	7505.1	7654.8
22.5°	7584.3	7611.5	7557.1	7528.6	7544.7	7524.9	7574.4	7646.1	7767.3	7924.4	8113.7
25°	8139.6	8142.1	8138.4	8023.4	7987.5	7999.9	8040.7	8107.5	8268.3	8393.2	8667.8
27.5°	8681.4	8670.2	8630.7	8509.4	8474.8	8492.1	8490.9	8675.2	8839.7	8999.2	9322.0
30°	9173.6	9203.3	9132.8	8928.7	8932.4	8930.0	8986.9	9224.3	9524.9	9821.7	10153.2
32.5°	10041.9	9951.6	9856.4	9453.2	9378.9	9370.3	9403.7	9757.4	10202.7	10703.6	11101.9
35°	10859.4	10837.2	10743.2	10333.8	9904.6	9897.2	9851.4	10281.8	10907.7	11835.3	12332.5
37.5°	11695.5	11663.4	11570.6	11221.8	10795.1	10754.3	10369.6	10840.9	11686.9	13158.7	13867.4
40°	12692.4	12672.6	12529.2	12082.7	11644.8	11583.0	11183.5	11428.4	12670.2	14921.2	15420.9
42.5°	13566.9	13563.2	13398.7	12984.3	12612.0	12550.2	12210.1	12464.9	14036.9	16647.8	16942.2
45°	14208.8	14306.5	14313.9	14077.7	13820.4	13766.0	13675.7	14027.0	15617.6	18214.9	18171.6
47.5°	14750.5	14834.6	14746.8	14625.6	14537.8	14541.5	14681.3	15378.8	17178.4	19580.4	19244.0
50°	15655.9	15603.9	15147.6	15075.8	15187.1	15252.7	15658.4	16838.3	18965.7	20861.7	20206.2
52.5°	16962.0	16762.9	15867.4	15721.4	16143.2	16167.9	16813.6	18143.2	20751.7	21961.3	21086.9
55°	18749.2	18584.7	17573.0	16898.9	17111.7	17278.6	18187.7	19480.2	22209.9	22995.3	21764.6
57.5°	21391.1	21403.5	20578.5	19321.9	18598.3	18776.4	19486.4	20780.1	23414.6	23861.1	22187.6
60°	23508.6	23900.7	23654.5	23080.6	22041.7	21920.5	21380.0	22134.5	24443.6	24597.0	22592.1
62.5°	24976.7	25154.8	26000.8	26122.0	27309.4	27360.1	24771.4	23721.3	25574.1	25079.4	22677.4
65°	24902.5	25012.6	26349.6	27977.3	31484.9	31642.0	30126.9	26122.0	26348.4	25294.6	22428.8
67.5°	23168.4	23334.2	25033.6	28076.2	33710.0	33650.7	32689.6	29464.0	26603.1	24949.5	21243.9
70°	20156.7	20667.6	22094.9	25989.7	34405.1	34484.3	32713.1	30531.3	25946.4	23973.6	19268.7
72.5°	16613.2	16774.0	18122.2	22480.8	32373.0	32256.7	31372.4	29122.6	24759.0	22208.7	15811.7
75°	12634.3	12634.3	14266.9	17915.6	27800.4	28208.6	28552.4	26376.8	21934.1	18101.1	10766.7
77.5°	8387.0	8687.6	10002.3	13463.0	22005.8	22307.6	23495.0	22483.2	17958.9	13273.7	4917.7
80°	4448.9	4486.0	5896.0	8946.0	15740.0	16308.9	17941.6	17340.5	12917.5	6218.8	1243.0
82.5°	1555.9	1698.2	2592.4	5184.8	10370.9	10725.9	11902.1	10304.1	4562.7	1376.6	687.7
85°	773.0	800.2	1141.6	2468.7	5839.1	6011.0	6953.5	4013.5	734.7	601.1	467.5
87.5°	372.3	380.9	437.8	883.1	2538.0	2655.5	2811.3	1306.1	272.1	228.8	202.8
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6542.9	6542.9	6542.9	6542.9	6542.9	6542.9	6542.9	6542.9	6542.9	6542.9	6542.9
2.5°	6554.0	6565.1	6586.2	6592.3	6577.5	6604.7	6630.7	6654.2	6653.0	6661.6	6692.5
5°	6568.8	6592.3	6614.6	6654.2	6692.5	6714.8	6735.8	6755.6	6761.8	6780.3	6798.9
7.5°	6614.6	6638.1	6688.8	6758.1	6760.6	6816.2	6852.1	6858.3	6863.2	6863.2	6906.5
10°	6685.1	6728.4	6810.0	6858.3	6901.6	6883.0	6920.1	6896.6	6879.3	6886.7	6916.4
12.5°	6806.3	6844.7	6962.2	7015.3	6975.8	6968.3	6931.2	6878.1	6817.5	6811.3	6838.5
15°	6996.8	7068.5	7173.7	7224.4	7125.4	7037.6	6912.7	6803.8	6686.3	6643.1	6660.4
17.5°	7303.5	7390.1	7505.1	7470.5	7289.9	7116.8	6910.2	6680.2	6452.6	6294.3	6335.1
20°	7752.5	7816.8	7910.8	7771.1	7507.6	7221.9	6883.0	6519.4	6134.7	5846.5	5813.1
22.5°	8223.7	8321.4	8264.6	8006.1	7661.0	7262.7	6826.1	6285.6	5690.7	5329.5	5275.1
25°	8791.4	8823.6	8626.9	8237.3	7704.3	7198.4	6641.8	5944.2	5236.8	4896.6	4880.6
27.5°	9393.8	9320.8	8954.7	8343.7	7656.0	7007.9	6272.0	5405.0	4826.1	4525.6	4478.6
30°	10074.0	9904.6	9225.6	8354.8	7474.2	6636.9	5804.5	4983.2	4492.2	4190.4	4142.2
32.5°	10949.7	10550.2	9476.7	8239.8	7090.8	6092.7	5243.0	4623.3	4191.6	3888.6	3845.3
35°	12069.1	11395.0	9742.6	8032.0	6618.3	5548.5	4777.9	4317.8	3948.0	3583.1	3525.0
37.5°	13359.1	12573.7	10060.4	7769.8	6100.1	5069.8	4463.7	4123.6	3767.4	3354.3	3285.0
40°	14858.1	13753.6	10550.2	7456.9	5635.0	4724.7	4311.6	4056.8	3667.2	3236.8	3157.6
42.5°	16156.8	15001.6	11132.8	7120.5	5196.0	4437.8	4243.6	4012.3	3604.1	3149.0	3058.7
45°	17357.8	16031.9	11701.7	6712.3	4733.4	4241.1	4162.0	3901.0	3492.8	3040.1	2946.1
47.5°	18333.6	16864.3	12196.5	6337.6	4363.6	4060.5	3983.9	3689.5	3306.1	2909.0	2839.8
50°	19083.2	17490.1	12467.3	6039.5	3972.7	3855.2	3753.8	3450.8	3082.2	2739.6	2680.2
52.5°	19850.0	18117.2	12600.9	6054.3	3609.1	3549.7	3445.8	3186.1	2904.1	2640.6	2576.3
55°	20296.5	18374.5	12459.9	5694.4	3275.1	3205.9	3115.6	2980.8	2812.6	2578.8	2518.2
57.5°	20557.5	18534.0	12030.7	4644.3	2873.2	2807.6	2822.5	2811.3	2672.8	2426.7	2371.0
60°	20745.5	18187.7	11151.3	3413.7	2530.6	2481.1	2603.5	2564.0	2444.0	2252.3	2205.3
62.5°	20593.4	17528.5	9568.2	2566.4	2251.0	2356.2	2463.8	2390.8	2227.5	2053.2	1998.7
65°	19665.7	16234.7	7272.6	2061.8	2160.8	2305.5	2392.0	2274.5	2108.8	1902.3	1877.5
67.5°	17977.4	13889.7	4289.4	1889.9	2092.7	2246.1	2317.8	2162.0	2016.0	1818.2	1788.5
70°	15401.1	10398.1	1915.9	1760.0	1974.0	2126.1	2173.1	2025.9	1867.6	1682.1	1652.4
72.5°	11463.0	6269.5	1291.3	1625.2	1798.4	1933.2	1985.1	1829.3	1716.7	1632.6	1624.0
75°	6366.0	2176.8	1191.1	1471.8	1606.7	1727.9	1792.2	1682.1	1593.0	1478.0	1431.0
77.5°	2027.2	925.2	1131.7	1316.0	1486.7	1586.9	1577.0	1411.2	1382.8	1243.0	1230.7
80°	808.9	806.4	1046.4	1077.3	1269.0	1353.1	1330.8	1121.8	1158.9	1077.3	1045.1
82.5°	634.5	738.4	838.6	822.5	987.0	1085.9	1055.0	823.7	931.3	855.9	782.9
85°	482.4	646.9	538.0	535.6	688.9	806.4	826.2	633.3	634.5	577.6	514.5
87.5°	248.6	238.7	206.6	205.3	230.1	327.8	402.0	359.9	284.5	214.0	205.3
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)