

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: P721933

Luminaire Tested: **CST-CA8-430-750-U-T4**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721933  
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-CA8-430-750-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: 65524 lumens  
Efficiency: N/A  
Efficacy: 150.9 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U0 - G5

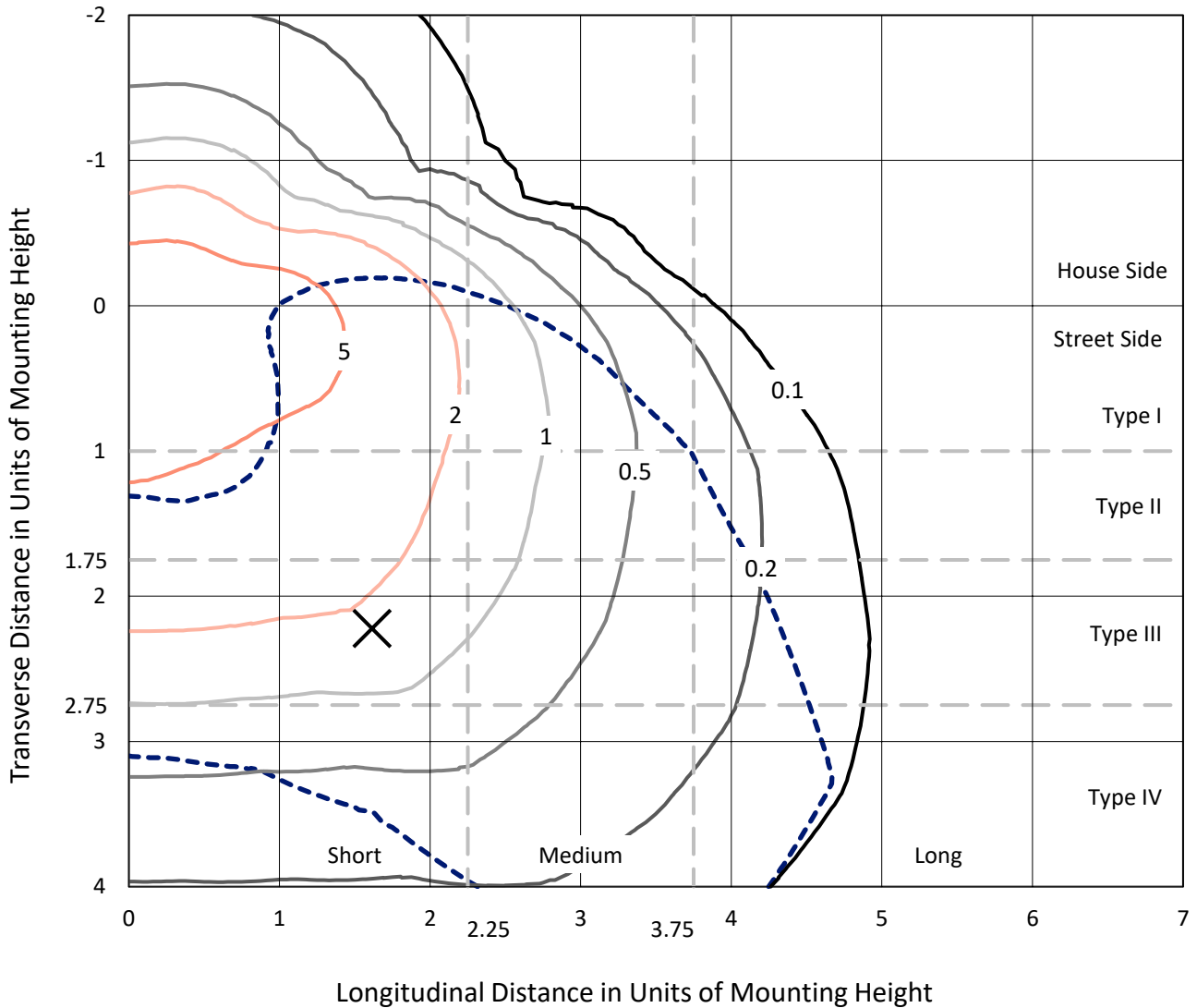
Input Watts (W): 434.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P721933  
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### Iso-Footcandle Lines of Horizontal Illumination

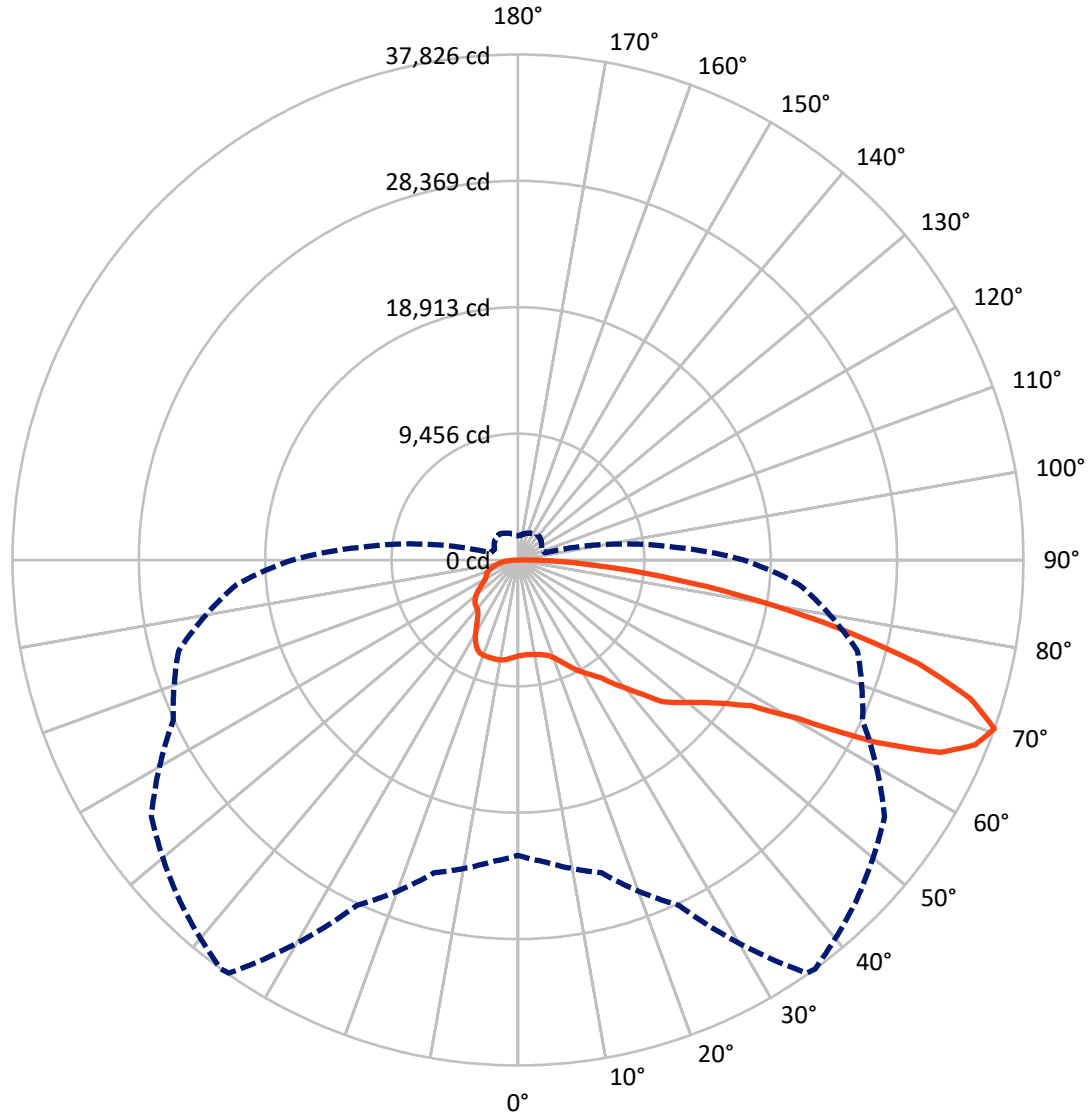
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.3 fc  
 Type IV - Short - N/A

REPORT NUMBER: P721933  
CATALOG NUMBER: CST-CA8-430-750-U-T4

### Luminous Intensity Polar Plot



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

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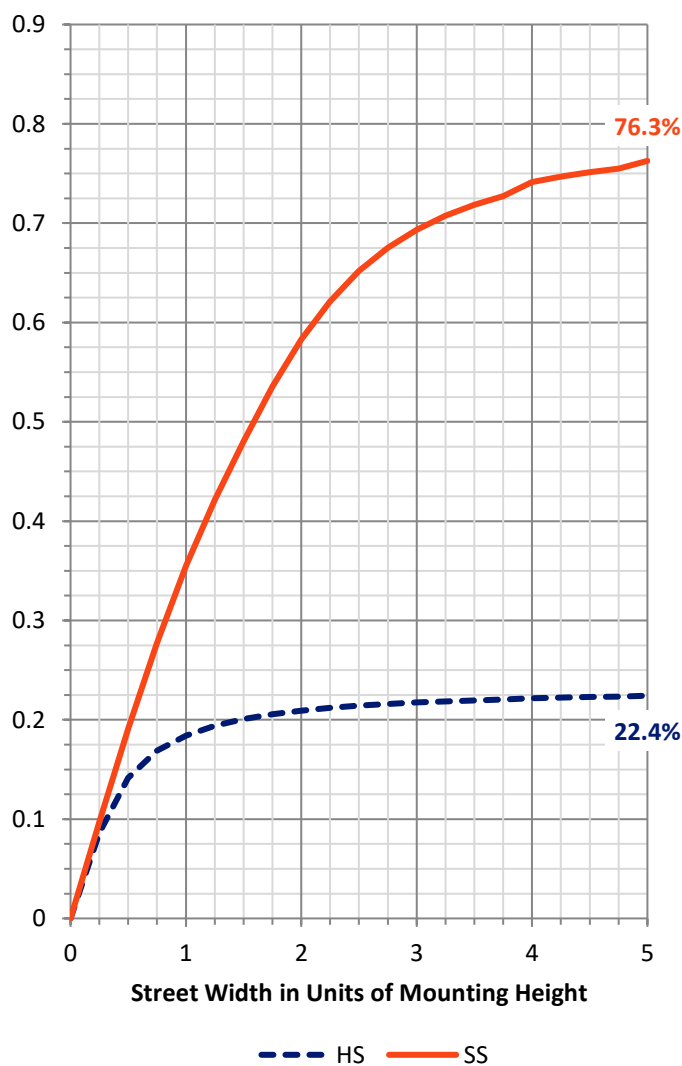
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14929.3	0.0	14929.3
	% Fixture	22.8	0.0	22.8
<b>Street Side</b>	Lumens	50594.8	0.0	50594.8
	% Fixture	77.2	0.0	77.2
<b>Total</b>	Lumens	65524.0	0.0	65524.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	695.3	1.1
10°-20°	2149.5	3.3
20°-30°	3877.3	5.9
30°-40°	6005.2	9.2
40°-50°	9121.9	13.9
50°-60°	12643.6	19.3
60°-70°	16441.0	25.1
70°-80°	12141.5	18.5
80°-90°	2448.7	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°	65524.0	100.0
0°-180°	65524.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P721933

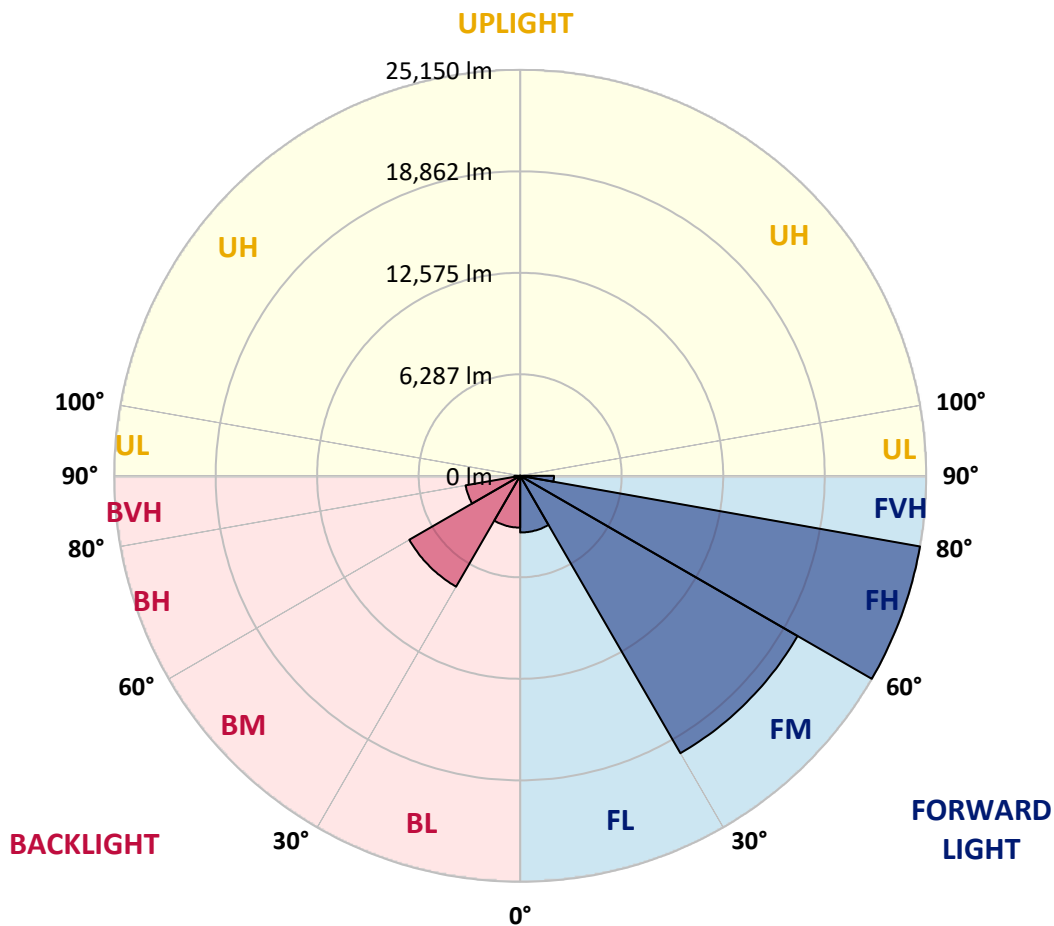
CATALOG NUMBER: CST-CA8-430-750-U-T4

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3512.7	5.4			
FM (30°-60°)	19840.5	30.3			
FH (60°-80°)	25149.6	38.4			G5
FVH (80°-90°)	2091.9	3.2			G5
BL (0°-30°)	3209.4	4.9	B4/5000		
BM (30°-60°)	7930.2	12.1	B4/8500		
BH (60°-80°)	3432.9	5.2	B4/5000		G4/5000
BVH (80°-90°)	356.7	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: P721933

CATALOG NUMBER: CST-CA8-430-750-U-T4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	7176.8	7176.8	7176.8	7176.8	7176.8	7176.8	7176.8	7176.8	7176.8	7176.8	7176.8
2.5°	7133.4	7123.9	7118.5	7129.3	7133.4	7134.8	7137.5	7134.8	7128.0	7152.4	7182.3
5°	7134.8	7129.3	7118.5	7109.0	7109.0	7109.0	7110.4	7141.6	7155.1	7152.4	7189.0
7.5°	7145.6	7141.6	7121.2	7114.4	7130.7	7136.1	7163.3	7153.8	7168.7	7193.1	7224.3
10°	7147.0	7141.6	7123.9	7138.8	7185.0	7193.1	7205.3	7232.5	7237.9	7267.7	7298.9
12.5°	7160.6	7160.6	7167.3	7199.9	7248.7	7258.2	7304.4	7326.1	7358.6	7373.5	7411.5
15°	7232.5	7231.1	7247.4	7284.0	7362.7	7368.1	7425.1	7490.2	7514.6	7551.3	7612.3
17.5°	7403.4	7411.5	7412.9	7440.0	7533.6	7536.4	7630.0	7691.0	7746.6	7811.8	7951.5
20°	7809.0	7794.1	7777.8	7777.8	7814.5	7833.5	7905.4	8003.0	8117.0	8232.3	8396.5
22.5°	8319.2	8349.0	8289.3	8258.1	8275.7	8254.0	8308.3	8387.0	8519.9	8692.2	8899.8
25°	8928.3	8931.0	8926.9	8800.8	8761.4	8775.0	8819.8	8893.0	9069.4	9206.4	9507.6
27.5°	9522.5	9510.3	9466.9	9334.0	9296.0	9315.0	9313.6	9515.7	9696.2	9871.2	10225.3
30°	10062.5	10095.0	10017.7	9793.9	9797.9	9795.2	9857.6	10118.1	10447.8	10773.4	11137.0
32.5°	11014.9	10915.8	10811.4	10369.1	10287.7	10278.2	10314.8	10702.8	11191.2	11740.7	12177.6
35°	11911.6	11887.2	11784.1	11335.1	10864.3	10856.1	10805.9	11278.1	11964.6	12982.1	13527.4
37.5°	12828.8	12793.5	12691.7	12309.1	11841.1	11796.3	11374.4	11891.3	12819.3	14433.7	15211.1
40°	13922.2	13900.5	13743.2	13253.4	12773.1	12705.3	12267.1	12535.7	13897.8	16367.0	16915.1
42.5°	14881.4	14877.3	14696.9	14242.4	13834.1	13766.2	13393.1	13672.6	15396.9	18260.9	18583.8
45°	15585.5	15692.7	15700.8	15441.7	15159.5	15099.8	15000.8	15386.1	17130.8	19979.8	19932.3
47.5°	16179.8	16272.0	16175.7	16042.7	15946.4	15950.5	16103.8	16868.9	18842.9	21477.6	21108.6
50°	17172.8	17115.9	16615.2	16536.6	16658.7	16730.6	17175.6	18469.8	20803.3	22883.1	22164.1
52.5°	18605.5	18387.1	17404.8	17244.7	17707.4	17734.5	18442.7	19901.1	22762.4	24089.2	23130.0
55°	20565.9	20385.5	19275.7	18536.3	18769.7	18952.8	19950.0	21367.7	24361.9	25223.4	23873.5
57.5°	23463.8	23477.3	22572.4	21194.0	20400.4	20595.7	21374.5	22793.6	25683.3	26173.0	24337.5
60°	25786.4	26216.5	25946.5	25317.0	24177.4	24044.4	23451.6	24279.1	26812.0	26980.3	24781.1
62.5°	27396.8	27592.1	28520.1	28653.1	29955.5	30011.1	27171.6	26019.7	28052.1	27509.4	24874.7
65°	27315.4	27436.1	28902.7	30688.1	34535.6	34707.9	33046.0	28653.1	28901.3	27745.4	24602.0
67.5°	25413.3	25595.1	27459.2	30796.6	36976.3	36911.2	35857.0	32318.8	29180.8	27366.9	23302.3
70°	22109.8	22670.1	24235.7	28507.9	37738.7	37825.6	35882.8	33489.6	28460.4	26296.5	21135.7
72.5°	18222.9	18399.3	19878.1	24659.0	35509.7	35382.2	34412.2	31944.4	27158.0	24360.5	17343.8
75°	13858.5	13858.5	15649.3	19651.5	30494.1	30941.8	31318.9	28932.5	24059.3	19855.0	11809.9
77.5°	9199.6	9529.3	10971.5	14767.5	24138.0	24469.1	25771.5	24661.7	19699.0	14559.9	5394.2
80°	4880.0	4920.7	6467.3	9812.9	17265.1	17889.2	19680.0	19020.6	14169.2	6821.4	1363.5
82.5°	1706.7	1862.7	2843.6	5687.2	11375.8	11765.1	13055.3	11302.5	5004.8	1510.0	754.3
85°	847.9	877.8	1252.2	2707.9	6404.9	6593.5	7627.2	4402.4	805.9	659.3	512.8
87.5°	408.4	417.9	480.3	968.7	2783.9	2912.8	3083.7	1432.7	298.5	251.0	222.5
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°	7176.8	7176.8	7176.8	7176.8	7176.8	7176.8	7176.8	7176.8	7176.8	7176.8	7176.8
2.5°	7189.0	7201.3	7224.3	7231.1	7214.8	7244.7	7273.2	7298.9	7297.6	7307.1	7341.0
5°	7205.3	7231.1	7255.5	7298.9	7341.0	7365.4	7388.5	7410.2	7417.0	7437.3	7457.7
7.5°	7255.5	7281.3	7336.9	7412.9	7415.6	7476.7	7516.0	7522.8	7528.2	7528.2	7575.7
10°	7332.8	7380.3	7469.9	7522.8	7570.3	7549.9	7590.6	7564.8	7545.8	7554.0	7586.5
12.5°	7465.8	7507.9	7636.7	7695.1	7651.7	7643.5	7602.8	7544.5	7478.0	7471.2	7501.1
15°	7674.7	7753.4	7868.7	7924.4	7815.8	7719.5	7582.5	7463.1	7334.2	7286.7	7305.7
17.5°	8011.2	8106.2	8232.3	8194.3	7996.3	7806.3	7579.8	7327.4	7077.8	6904.1	6948.9
20°	8503.7	8574.2	8677.3	8524.0	8235.0	7921.6	7549.9	7151.1	6729.1	6413.0	6376.4
22.5°	9020.6	9127.7	9065.3	8781.8	8403.3	7966.4	7487.5	6894.6	6242.1	5845.9	5786.2
25°	9643.3	9678.5	9462.8	9035.5	8450.8	7895.9	7285.4	6520.2	5744.2	5371.1	5353.5
27.5°	10304.0	10223.9	9822.4	9152.2	8397.8	7686.9	6879.7	5928.7	5293.8	4964.1	4912.5
30°	11050.1	10864.3	10119.5	9164.4	8198.4	7279.9	6366.9	5466.1	4927.5	4596.4	4543.5
32.5°	12010.7	11572.5	10394.9	9038.2	7777.8	6683.0	5751.0	5071.3	4597.8	4265.4	4217.9
35°	13238.5	12499.1	10686.6	8810.3	7259.6	6086.1	5240.9	4736.2	4330.5	3930.3	3866.5
37.5°	14653.5	13792.0	11035.2	8522.7	6691.1	5561.0	4896.3	4523.2	4132.4	3679.3	3603.3
40°	16297.8	15086.3	11572.5	8179.4	6181.0	5182.5	4729.4	4449.9	4022.6	3550.4	3463.6
42.5°	17722.3	16455.2	12211.5	7810.4	5699.4	4867.8	4654.8	4401.1	3953.4	3454.1	3355.1
45°	19039.6	17585.3	12835.5	7362.7	5192.0	4652.1	4565.2	4279.0	3831.3	3334.7	3231.6
47.5°	20110.1	18498.3	13378.2	6951.6	4786.4	4454.0	4369.9	4047.0	3626.4	3190.9	3114.9
50°	20932.2	19184.8	13675.3	6624.7	4357.7	4228.8	4117.5	3785.1	3380.8	3005.0	2939.9
52.5°	21773.3	19872.6	13821.8	6640.9	3958.8	3893.7	3779.7	3494.8	3185.5	2896.5	2826.0
55°	22263.1	20154.8	13667.2	6246.1	3592.5	3516.5	3417.5	3269.6	3085.1	2828.7	2762.2
57.5°	22549.4	20329.8	13196.4	5094.3	3151.6	3079.7	3095.9	3083.7	2931.8	2661.8	2600.8
60°	22755.6	19950.0	12231.8	3744.4	2775.8	2721.5	2855.8	2812.4	2680.8	2470.5	2419.0
62.5°	22588.7	19226.9	10495.3	2815.1	2469.2	2584.5	2702.5	2622.5	2443.4	2252.1	2192.4
65°	21571.2	17807.8	7977.3	2261.6	2370.1	2528.8	2623.8	2494.9	2313.1	2086.6	2059.4
67.5°	19719.3	15235.5	4705.0	2073.0	2295.5	2463.7	2542.4	2371.5	2211.4	1994.3	1961.8
70°	16893.4	11405.6	2101.5	1930.6	2165.3	2332.1	2383.7	2222.2	2048.6	1845.1	1812.5
72.5°	12573.7	6877.0	1416.4	1782.7	1972.6	2120.5	2177.5	2006.5	1883.1	1790.8	1781.3
75°	6982.8	2387.8	1306.5	1614.4	1762.3	1895.3	1965.8	1845.1	1747.4	1621.2	1569.7
77.5°	2223.6	1014.8	1241.4	1443.5	1630.7	1740.6	1729.8	1548.0	1516.8	1363.5	1349.9
80°	887.3	884.6	1147.8	1181.7	1392.0	1484.2	1459.8	1230.5	1271.2	1181.7	1146.4
82.5°	696.0	809.9	919.8	902.2	1082.6	1191.2	1157.2	903.5	1021.6	938.8	858.8
85°	529.1	709.5	590.2	587.4	755.7	884.6	906.3	694.6	696.0	633.6	564.4
87.5°	272.7	261.8	226.6	225.2	252.3	359.5	440.9	394.8	312.0	234.7	225.2
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)