

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: P721912

Luminaire Tested: **CST-CA8-430-730-U-T4-HSS**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721912  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-430-730-U-T4-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

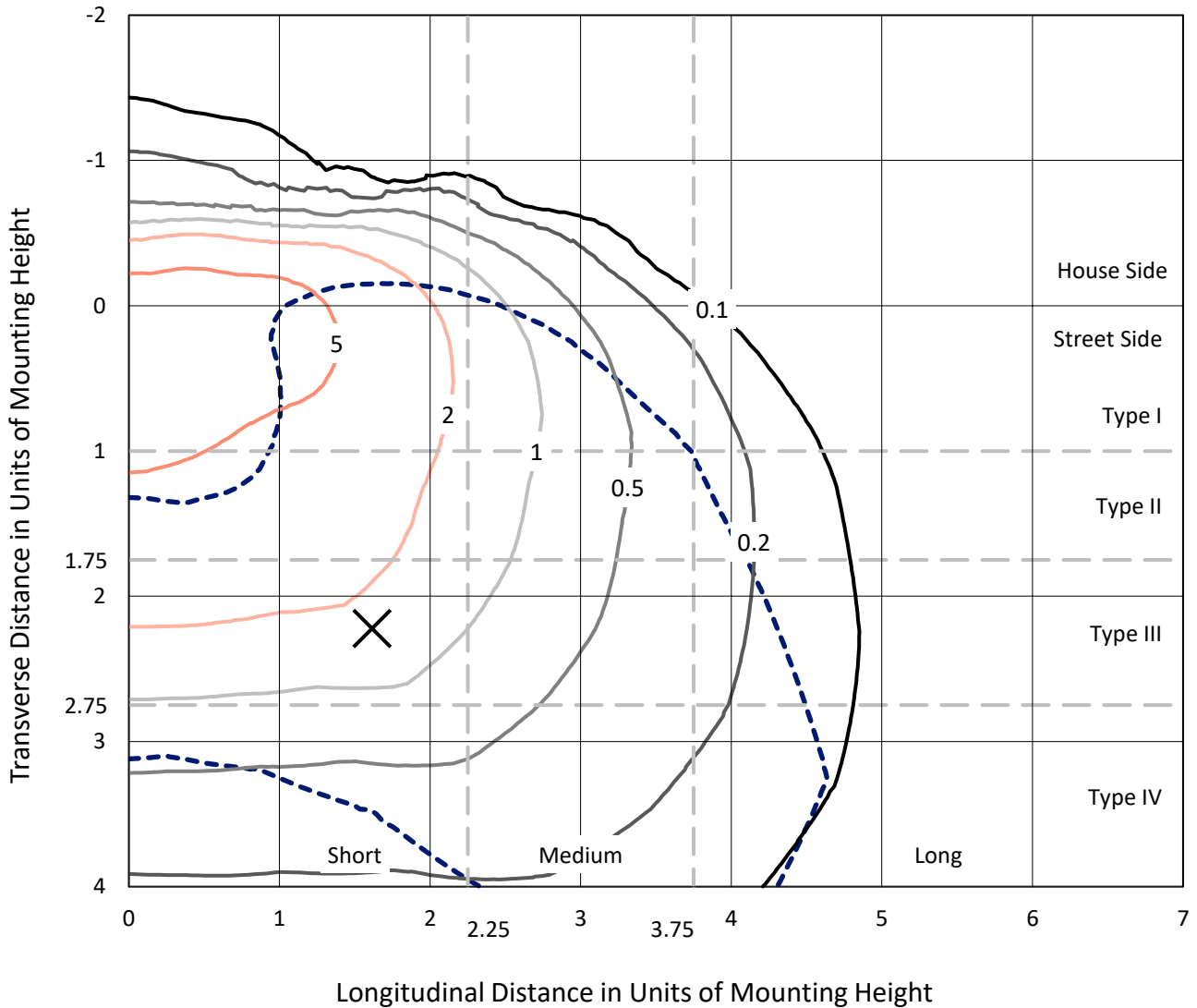
Lumens per Lamp: N/A  
Luminaire Lumens: 56662 lumens  
Efficiency: N/A  
Efficacy: 130.5 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 434.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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

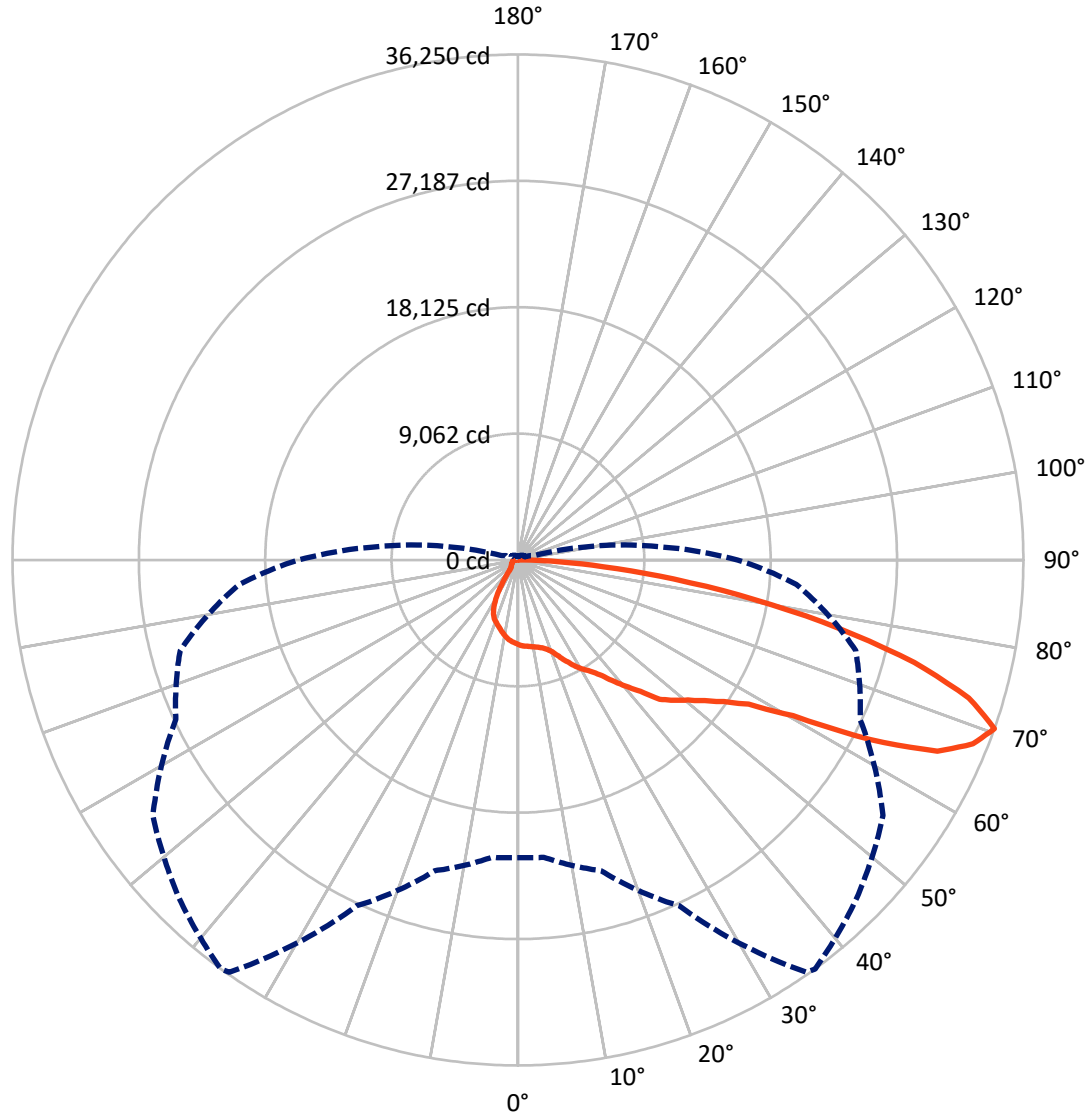
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.7 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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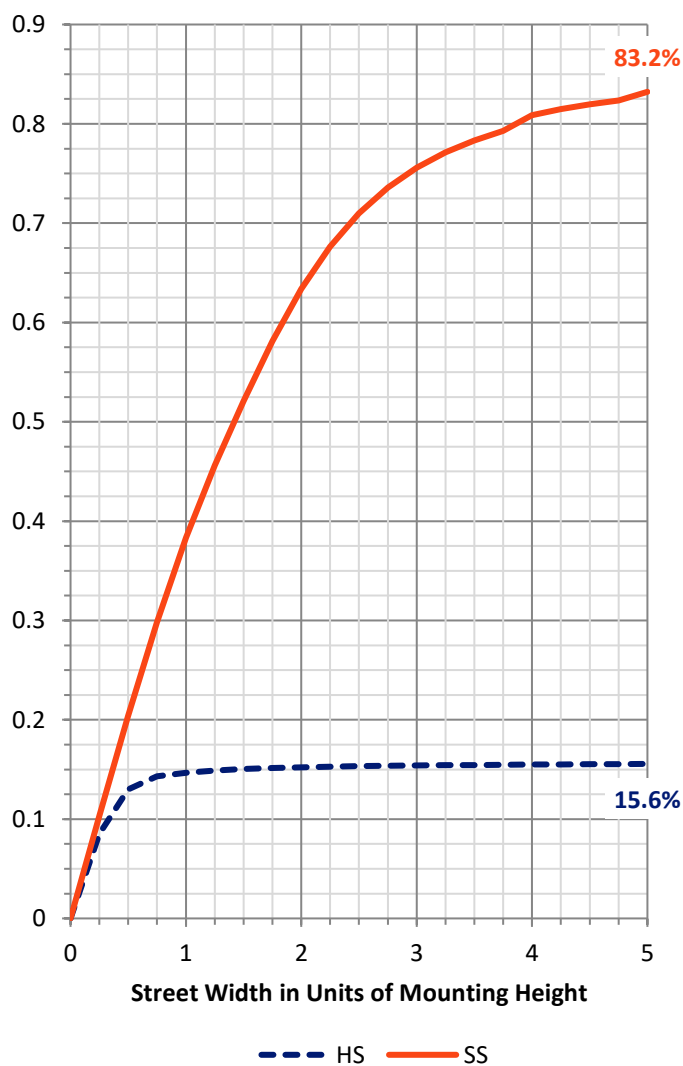
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8941.7	0.0	8941.7
	% Fixture	15.8	0.0	15.8
<b>Street Side</b>	Lumens	47720.3	0.0	47720.3
	% Fixture	84.2	0.0	84.2
<b>Total</b>	Lumens	56662.0	0.0	56662.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	575.8	1.0
10°-20°	1712.3	3.0
20°-30°	3079.2	5.4
30°-40°	4872.7	8.6
40°-50°	7615.2	13.4
50°-60°	10935.2	19.3
60°-70°	14832.7	26.2
70°-80°	10977.7	19.4
80°-90°	2061.3	3.6
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°	56662.0	100.0
0°-180°	56662.0	100.0

**Coefficient of Utilization**



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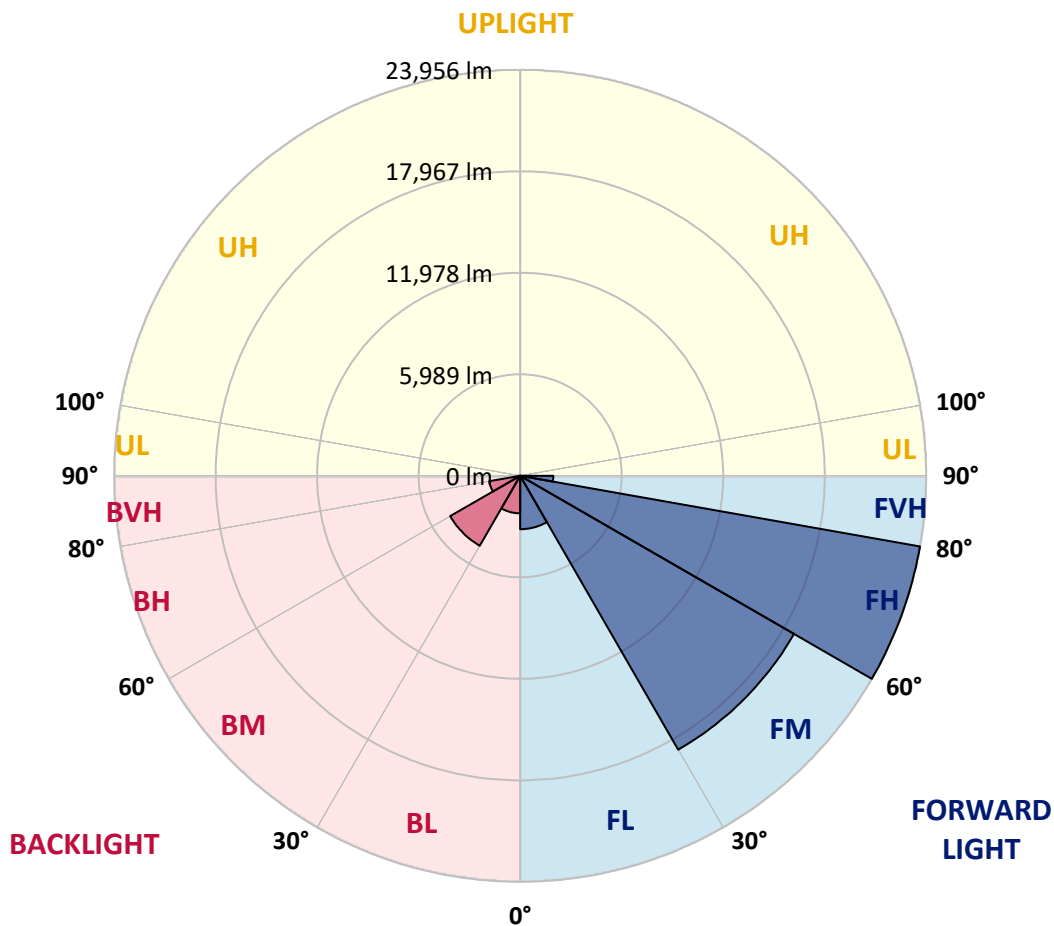
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3151.5	5.6			
FM (30°-60°)	18658.3	32.9			
FH (60°-80°)	23956.1	42.3			G5
FVH (80°-90°)	1954.4	3.4			G5
BL (0°-30°)	2215.7	3.9	B3/2500		
BM (30°-60°)	4764.8	8.4	B3/5000		
BH (60°-80°)	1854.3	3.3	B3/2500		G3/2500
BVH (80°-90°)	106.9	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	6071.1	6071.1	6071.1	6071.1	6071.1	6071.1	6071.1	6071.1	6071.1	6071.1	6071.1
2.5°	6194.0	6180.9	6170.5	6174.4	6166.5	6171.8	6160.0	6145.6	6111.6	6097.2	6090.7
5°	6249.0	6245.0	6234.6	6226.7	6212.3	6207.1	6194.0	6205.8	6187.5	6140.4	6112.9
7.5°	6281.7	6280.4	6268.6	6251.6	6259.4	6266.0	6279.0	6260.7	6237.2	6214.9	6158.7
10°	6296.1	6296.1	6281.7	6290.8	6331.4	6335.3	6341.8	6353.6	6331.4	6298.7	6242.4
12.5°	6332.7	6330.1	6335.3	6365.4	6407.2	6416.4	6449.1	6449.1	6451.7	6432.1	6366.7
15°	6424.2	6424.2	6436.0	6463.5	6535.4	6540.7	6589.1	6632.2	6637.5	6608.7	6559.0
17.5°	6636.2	6630.9	6624.4	6641.4	6718.6	6721.2	6804.9	6859.9	6874.2	6905.6	6897.8
20°	7039.1	7033.8	7032.5	7033.8	7028.6	7020.8	7103.2	7162.0	7235.3	7290.2	7317.7
22.5°	7616.0	7604.2	7604.2	7540.1	7490.4	7498.2	7511.3	7544.0	7640.8	7737.6	7841.0
25°	8237.3	8229.5	8236.0	8072.5	8005.8	8031.9	8014.9	8066.0	8192.8	8276.6	8386.4
27.5°	8744.9	8756.7	8720.0	8593.1	8550.0	8569.6	8530.3	8676.9	8816.8	8963.3	9129.5
30°	9376.7	9313.9	9223.7	9069.3	9053.6	9056.2	9053.6	9289.1	9579.5	9788.8	10019.0
32.5°	10202.1	10212.6	10009.8	9646.2	9512.8	9494.4	9546.8	9892.1	10284.6	10748.9	11052.4
35°	11036.7	11053.7	10905.9	10526.6	10145.9	10088.3	10011.2	10459.8	11026.3	11957.7	12415.5
37.5°	11922.3	11982.5	11807.2	11468.4	11017.1	10963.5	10598.5	11039.3	11876.6	13388.8	13989.2
40°	13107.5	13043.4	12831.5	12401.1	11981.2	11894.9	11471.0	11702.6	12970.2	15180.9	15616.5
42.5°	13981.3	13963.0	13783.8	13358.7	12936.1	12866.8	12525.4	12776.5	14347.6	16997.9	17192.8
45°	14674.6	14787.1	14783.2	14516.4	14278.3	14239.0	14037.6	14407.8	16012.9	18712.9	18617.4
47.5°	15290.8	15360.1	15248.9	15132.5	15021.3	15034.4	15183.5	15944.8	17714.8	20210.7	19788.1
50°	16299.4	16210.4	15712.0	15623.0	15780.0	15786.6	16240.5	17412.6	19589.3	21505.7	20779.7
52.5°	17644.1	17547.3	16523.0	16371.3	16742.8	16770.3	17525.1	18875.1	21522.7	22743.2	21766.0
55°	19645.6	19420.6	18323.0	17642.8	17812.9	17924.1	18838.4	20281.3	23036.2	23834.2	22513.0
57.5°	22103.5	22267.1	21704.6	20167.5	19459.8	19501.7	20341.5	21627.4	24371.8	24789.1	22949.9
60°	24701.5	24662.3	24897.7	24250.2	22895.0	22670.0	22242.2	23000.9	25406.6	25593.6	23399.9
62.5°	26124.7	26353.7	27138.6	27268.1	28491.2	28372.1	25456.3	24704.1	26602.2	26098.6	23522.9
65°	26116.9	26216.3	27677.5	29283.9	33105.0	33070.9	31715.7	27167.3	27493.1	26368.1	23276.9
67.5°	24429.4	24583.8	26292.2	29430.4	35237.2	35196.7	34260.0	30630.0	27773.0	26043.6	22129.7
70°	21352.7	21405.0	23071.6	27367.5	36094.0	36249.7	34347.7	31959.0	27077.1	25079.5	20038.0
72.5°	17615.3	17506.8	19136.7	23371.1	33912.1	33819.2	32895.7	30372.3	25905.0	23207.6	16342.5
75°	12970.2	13272.3	14734.8	18765.2	29035.3	29375.5	29784.9	27944.4	23007.5	19126.2	11301.0
77.5°	8564.4	8948.9	10427.1	14070.3	22986.5	23515.0	24575.9	23767.5	18716.8	13719.7	5381.7
80°	4425.4	4715.8	6046.2	9336.2	16478.6	17241.2	19186.4	18001.2	13269.7	6203.2	1204.8
82.5°	1674.4	1636.5	2709.1	5343.7	10565.8	11259.1	12673.2	10794.7	4722.4	1089.7	559.9
85°	735.2	778.3	1122.4	2437.1	6041.0	6131.2	7179.0	4208.3	692.0	520.6	380.7
87.5°	317.9	365.0	470.9	701.2	2038.1	2353.3	2911.9	1336.9	209.3	180.5	191.0
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°	6071.1	6071.1	6071.1	6071.1	6071.1	6071.1	6071.1	6071.1	6071.1	6071.1	6071.1
2.5°	6078.9	6071.1	6058.0	6025.3	5971.6	5965.1	5959.9	5954.6	5944.2	5949.4	5979.5
5°	6092.0	6077.6	6030.5	5983.4	5936.3	5894.5	5843.4	5823.8	5797.7	5780.6	5812.0
7.5°	6136.5	6106.4	6037.0	5972.9	5844.7	5783.3	5717.9	5640.7	5585.7	5550.4	5581.8
10°	6211.0	6173.1	6086.7	5954.6	5804.2	5635.4	5520.3	5392.1	5287.5	5258.7	5287.5
12.5°	6332.7	6276.4	6175.7	5996.5	5729.6	5508.6	5290.1	5121.3	4952.6	4904.2	4918.6
15°	6530.2	6485.7	6331.4	6084.1	5730.9	5393.4	5069.0	4796.9	4575.9	4498.7	4493.4
17.5°	6846.8	6799.7	6621.8	6258.1	5778.0	5303.2	4851.9	4437.2	4102.3	3932.3	3904.8
20°	7300.7	7235.3	6965.8	6514.5	5880.1	5263.9	4650.4	4093.2	3572.5	3253.3	3204.9
22.5°	7805.6	7736.3	7338.6	6712.0	5953.3	5186.8	4458.1	3712.5	3027.0	2637.2	2582.3
25°	8433.5	8281.8	7695.8	6899.1	5936.3	5024.5	4145.5	3195.8	2452.8	2115.3	2078.6
27.5°	9053.6	8861.3	8059.4	6997.2	5861.7	4766.8	3687.6	2591.4	1920.3	1681.0	1650.9
30°	9822.8	9451.3	8382.5	7043.0	5673.4	4380.9	3074.1	1970.1	1437.6	1272.8	1244.0
32.5°	10737.2	10174.7	8686.0	6992.0	5359.4	3792.3	2390.0	1442.9	1068.7	965.4	964.1
35°	11943.3	11061.6	9019.6	6824.5	4878.0	3157.8	1675.7	986.3	833.3	798.0	804.5
37.5°	13353.4	12262.5	9358.4	6549.8	4333.8	2416.1	1117.1	760.0	732.6	733.9	735.2
40°	14840.8	13588.9	9814.9	6163.9	3673.2	1749.0	804.5	682.8	681.5	694.6	698.5
42.5°	16261.4	14877.4	10377.4	5649.8	2981.2	1156.4	697.2	651.5	634.4	639.7	643.6
45°	17581.3	15982.8	10856.2	5148.8	2239.5	825.4	684.2	614.8	588.7	586.0	588.7
47.5°	18644.8	16868.4	11147.9	4560.2	1595.9	685.5	656.7	580.8	544.2	536.3	532.4
50°	19454.6	17526.4	11253.9	3893.0	1079.2	654.1	620.1	541.6	497.1	498.4	498.4
52.5°	20244.7	18124.2	11130.9	3220.6	794.0	626.6	595.2	510.2	463.1	487.9	494.5
55°	20813.7	18375.4	10772.5	2493.3	661.9	592.6	567.7	473.5	440.8	481.4	494.5
57.5°	21146.0	18572.9	10114.5	1800.0	607.0	559.9	532.4	439.5	409.4	419.9	426.5
60°	21352.7	18296.9	9244.6	1231.0	578.2	533.7	497.1	417.3	376.7	351.9	348.0
62.5°	21238.9	17606.2	8098.7	846.4	548.1	504.9	467.0	396.4	342.7	310.0	307.4
65°	20311.4	16328.1	6217.6	685.5	529.8	491.9	448.7	376.7	319.2	287.8	283.9
67.5°	18591.2	14031.0	3631.4	609.6	521.9	478.8	434.3	358.4	306.1	272.1	266.9
70°	15764.3	10554.0	1216.6	544.2	520.6	477.5	422.5	345.3	291.7	256.4	251.2
72.5°	11372.9	6368.0	592.6	478.8	486.6	457.8	413.4	334.9	282.6	238.1	228.9
75°	6463.5	2073.4	535.0	413.4	452.6	436.9	408.1	336.2	286.5	215.8	205.4
77.5°	1839.2	605.7	516.7	351.9	427.8	451.3	382.0	303.5	293.0	200.1	187.1
80°	621.4	539.0	498.4	273.4	345.3	372.8	331.0	266.9	295.6	181.8	168.7
82.5°	498.4	541.6	418.6	218.5	262.9	282.6	262.9	239.4	239.4	162.2	151.7
85°	399.0	502.3	265.6	174.0	196.2	217.2	185.8	179.2	167.4	136.0	132.1
87.5°	231.5	157.0	109.9	89.0	82.4	83.7	71.9	86.3	106.0	92.9	91.6
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)