

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: P721871

Luminaire Tested: **CST-CA8-400-750-U-T3**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721871  
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-CA8-400-750-U-T3  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

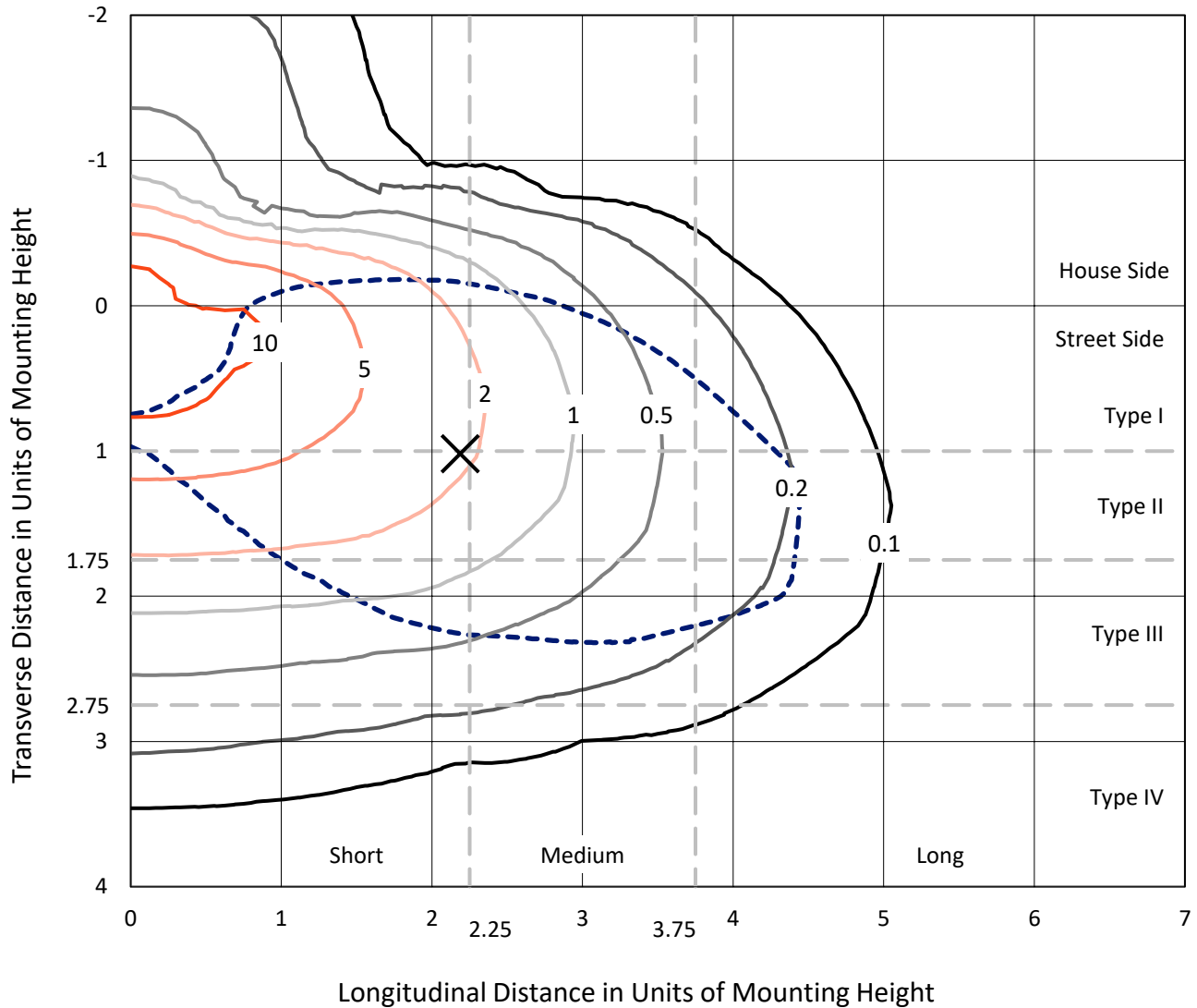
Lumens per Lamp: N/A  
Luminaire Lumens: 61979 lumens  
Efficiency: N/A  
Efficacy: 154.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 400.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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

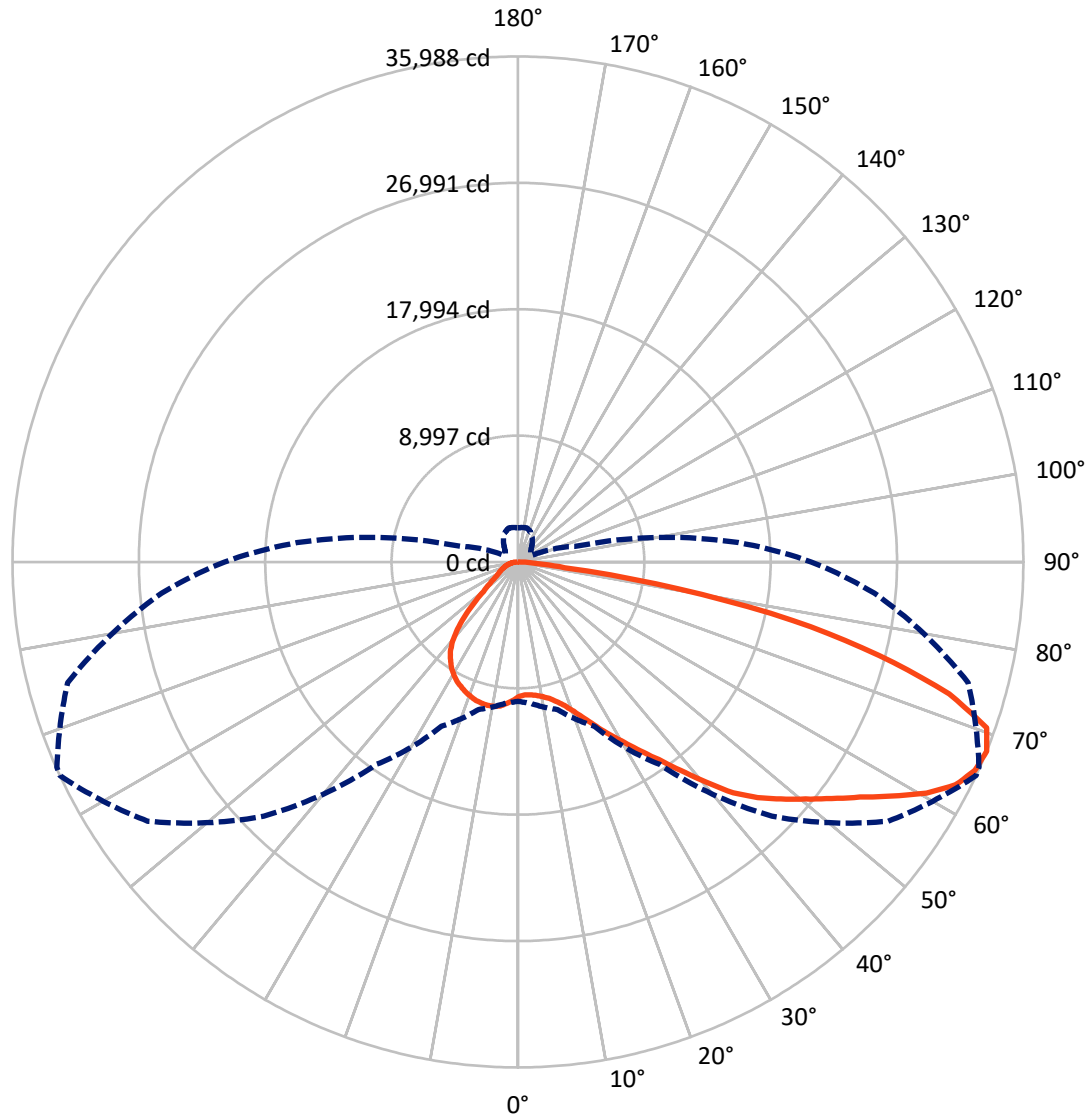
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.8 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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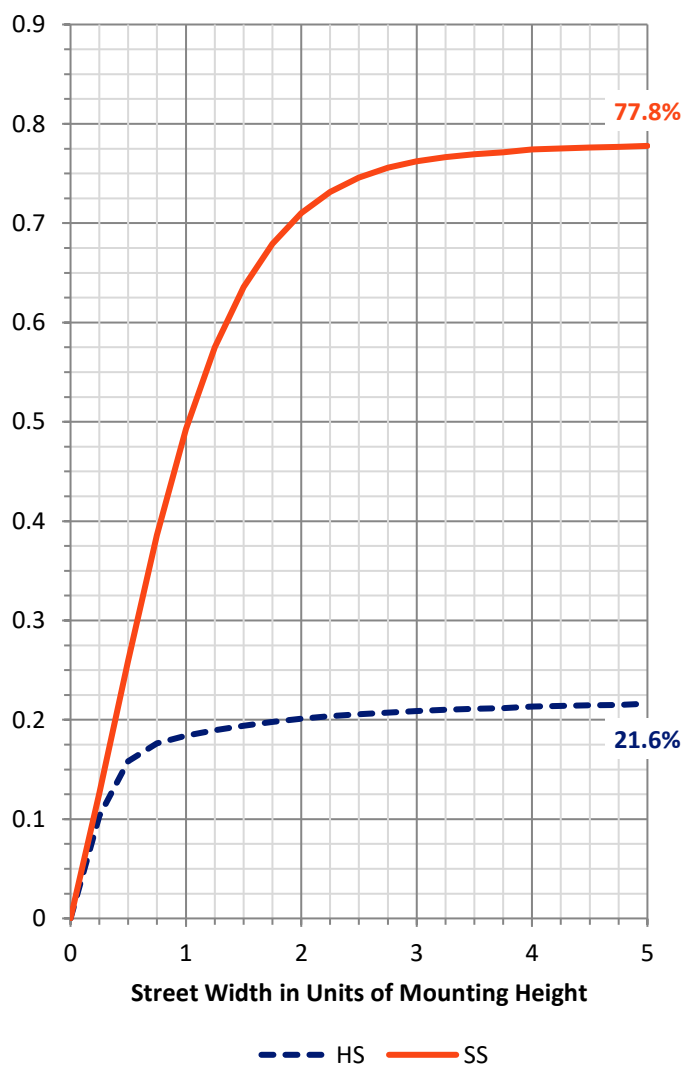
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	13690.4	0.0	13690.4
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	48288.6	0.0	48288.6
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	61979.0	0.0	61979.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	953.8	1.5
10°-20°	2980.1	4.8
20°-30°	5159.0	8.3
30°-40°	7580.6	12.2
40°-50°	10246.1	16.5
50°-60°	12599.7	20.3
60°-70°	13501.4	21.8
70°-80°	7962.9	12.8
80°-90°	995.3	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°	61979.0	100.0
0°-180°	61979.0	100.0

**Coefficient of Utilization**

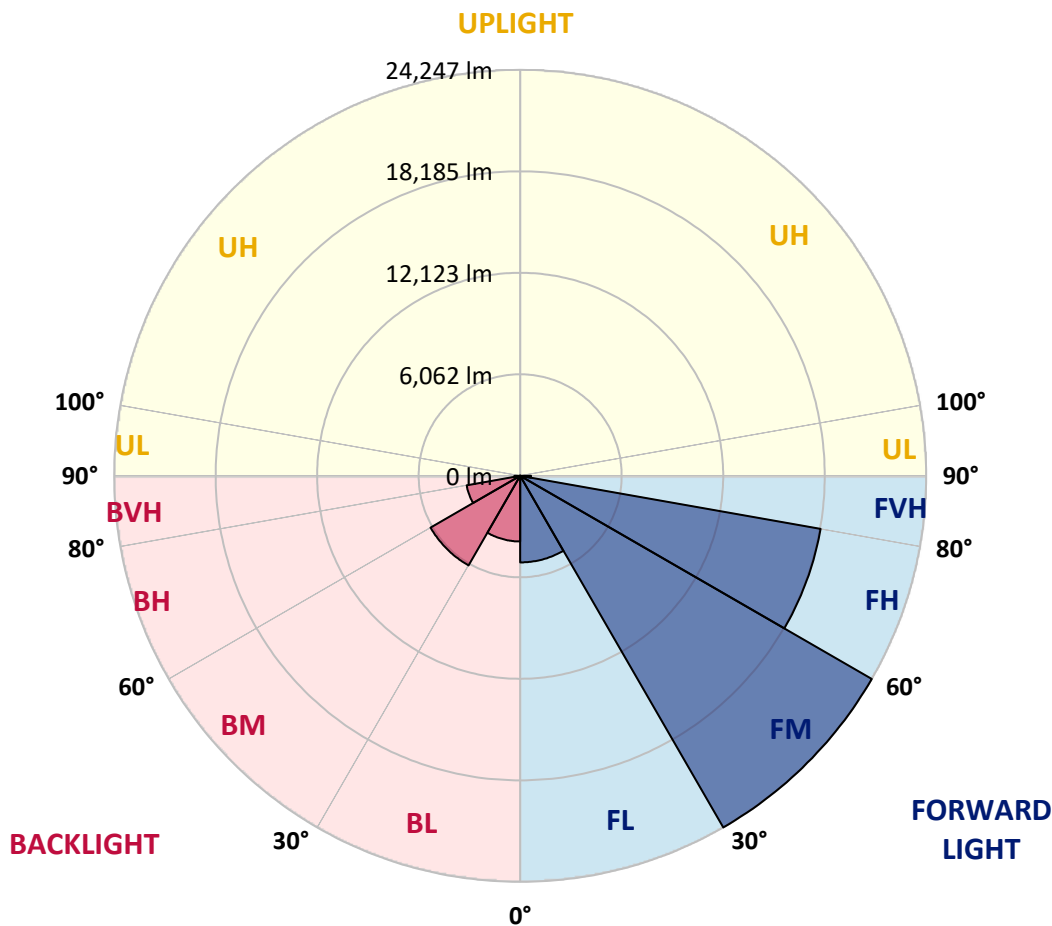


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5171.7	8.3			
FM (30°-60°)	24246.6	39.1			
FH (60°-80°)	18217.7	29.4			G5
FVH (80°-90°)	652.7	1.1			G4/750
BL (0°-30°)	3921.3	6.3	B4/5000		
BM (30°-60°)	6179.8	10.0	B4/8500		
BH (60°-80°)	3246.6	5.2	B4/5000		G4/5000
BVH (80°-90°)	342.6	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°	9573.4	9573.4	9573.4	9573.4	9573.4	9573.4	9573.4	9573.4	9573.4	9573.4	9573.4
2.5°	9392.7	9375.0	9367.4	9391.4	9409.1	9429.3	9458.4	9486.2	9490.0	9526.7	9574.7
5°	9506.4	9491.3	9474.8	9471.1	9464.7	9463.5	9471.1	9502.6	9510.2	9545.6	9649.2
7.5°	9759.2	9744.0	9713.7	9702.3	9668.2	9607.5	9578.5	9594.9	9598.7	9641.6	9770.5
10°	10171.1	10124.4	10087.7	10049.8	9942.4	9846.4	9775.6	9745.3	9738.9	9780.6	9929.8
12.5°	10662.7	10623.5	10583.1	10483.2	10346.8	10173.6	10048.5	9979.0	9974.0	10009.4	10121.8
15°	11182.0	11182.0	11154.2	11035.4	10901.5	10614.7	10421.3	10305.1	10312.6	10340.4	10392.3
17.5°	11853.0	11797.4	11784.8	11649.6	11500.5	11238.9	10931.8	10746.1	10754.9	10767.6	10728.4
20°	12535.4	12519.0	12500.0	12410.3	12275.1	11939.0	11594.0	11350.1	11351.4	11305.9	11131.5
22.5°	13437.6	13383.3	13397.2	13296.1	13112.9	12767.9	12371.1	12081.7	12100.7	12035.0	11719.1
25°	14333.6	14279.2	14250.2	14181.9	14024.0	13696.7	13225.4	12960.0	12937.2	12818.5	12359.8
27.5°	15228.2	15196.6	15220.7	15138.5	15009.6	14644.4	14212.3	13917.8	13933.0	13850.9	13167.2
30°	16154.5	16119.1	16224.0	16091.3	16011.7	15656.6	15242.1	14895.9	14908.5	14938.9	14171.8
32.5°	16853.3	16895.0	17078.2	17063.1	17047.9	16652.4	16216.4	16024.3	16043.3	16149.4	15364.7
35°	17528.1	17531.9	17789.7	17984.3	18066.4	17735.3	17282.9	17276.6	17400.4	17723.9	17027.7
37.5°	18087.9	18075.2	18418.9	18721.0	18945.9	18689.4	18440.4	18828.4	18940.8	19611.8	18702.0
40°	18393.7	18420.2	18862.5	19239.1	19681.3	19560.0	19586.6	20578.5	20855.3	21442.9	19954.3
42.5°	18178.9	18259.7	18948.4	19716.7	20383.9	20545.7	21078.9	22468.9	22586.5	22692.6	21186.3
45°	17818.7	17903.4	18666.6	19907.5	20963.9	21647.6	22563.7	23923.4	24052.3	23933.5	22211.2
47.5°	17443.4	17530.6	18381.0	19830.4	21444.1	22754.5	23884.2	25209.8	25374.1	25006.4	23196.8
50°	16967.0	17102.2	18032.3	19667.4	21833.3	23948.7	25134.0	26534.1	26609.9	26079.2	23943.6
52.5°	16380.7	16529.8	17535.7	19388.2	22137.9	24782.7	26398.9	27970.9	27963.3	27332.7	24797.9
55°	15764.0	15899.2	16935.4	18948.4	22308.5	25424.6	27409.8	29554.2	29645.2	29117.0	25571.2
57.5°	14974.2	15096.8	16226.5	18357.0	22131.6	25969.3	29047.5	31435.8	31481.3	30359.2	26186.6
60°	13927.9	14108.6	15243.4	17605.2	21623.6	26599.8	30852.0	33414.7	33470.3	31581.1	26582.1
62.5°	12779.3	12851.3	14007.6	16447.7	20884.3	27086.3	32103.0	34962.6	34881.8	32536.4	26700.9
65°	11379.2	11436.0	12436.8	14959.1	19510.7	26819.7	32551.6	35758.7	35658.9	33136.7	26335.7
67.5°	9913.3	10089.0	10875.0	12894.3	17593.8	25588.9	32172.5	35987.5	35936.9	33182.2	25463.8
70°	8010.3	8072.2	8782.4	10504.7	14679.8	23124.8	30908.9	35401.1	35362.0	32166.2	23683.3
72.5°	5648.5	5587.9	5932.8	7283.7	10603.3	18394.9	26390.0	32106.8	32172.5	28774.6	20624.0
75°	2998.6	3114.9	3651.9	4459.4	6011.2	11825.2	21039.8	26572.0	26549.3	24061.1	16302.3
77.5°	1597.3	1594.7	1963.7	2308.7	2943.0	5433.7	13877.4	20038.9	20150.1	18642.6	11193.4
80°	767.0	796.1	818.8	938.9	1467.1	2510.9	5805.2	11620.5	12378.7	11118.8	5317.4
82.5°	614.1	616.7	619.2	592.7	606.6	1022.3	2236.7	3362.6	3483.9	2800.2	1714.8
85°	454.9	427.1	423.3	358.9	405.6	614.1	1128.4	1435.5	1364.7	1328.1	968.0
87.5°	183.2	171.9	166.8	156.7	156.7	231.2	398.0	519.4	518.1	472.6	324.8
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°	9573.4	9573.4	9573.4	9573.4	9573.4	9573.4	9573.4	9573.4	9573.4	9573.4	9573.4
2.5°	9612.6	9658.1	9764.2	9855.2	9889.3	9972.7	10051.1	10096.6	10128.1	10147.1	10233.0
5°	9712.4	9803.4	9972.7	10100.3	10224.2	10378.4	10478.2	10541.4	10576.7	10597.0	10658.9
7.5°	9865.3	9957.6	10137.0	10332.9	10446.6	10573.0	10637.4	10682.9	10705.6	10699.3	10748.6
10°	10001.8	10092.8	10272.2	10422.6	10487.0	10559.1	10593.2	10603.3	10604.5	10609.6	10658.9
12.5°	10187.5	10243.1	10339.2	10437.7	10423.8	10426.4	10455.4	10442.8	10413.7	10408.7	10441.5
15°	10387.2	10388.5	10396.0	10374.6	10287.4	10249.5	10209.0	10174.9	10095.3	10090.2	10142.0
17.5°	10637.4	10578.0	10440.3	10293.7	10086.4	9943.7	9799.6	9740.2	9642.9	9624.0	9649.2
20°	10959.6	10835.8	10500.9	10137.0	9749.1	9493.8	9319.4	9143.8	9008.6	8975.7	8999.7
22.5°	11422.1	11178.2	10578.0	9970.2	9370.0	8934.0	8595.3	8384.3	8156.9	8040.6	8052.0
25°	11980.7	11599.0	10712.0	9759.2	8923.9	8294.6	7744.9	7321.6	7065.1	6894.5	6940.0
27.5°	12712.3	12187.9	10872.4	9550.7	8369.1	7477.0	6679.6	6106.0	5844.4	5763.5	5710.4
30°	13560.2	12899.3	11041.8	9242.3	7770.2	6464.8	5443.8	4966.1	4666.7	4618.6	4578.2
32.5°	14695.0	13795.3	11358.9	8907.5	7055.0	5452.6	4344.4	3794.7	3726.5	3687.3	3678.5
35°	16158.3	14969.2	11691.3	8472.8	6122.4	4266.1	3286.8	2989.8	2956.9	2999.9	3003.7
37.5°	17711.3	16242.9	12089.3	7982.5	5049.5	3183.1	2514.7	2308.7	2345.3	2479.3	2509.6
40°	18762.7	17082.0	12450.7	7316.5	3724.0	2312.5	1829.8	1785.5	1987.7	2159.6	2195.0
42.5°	19771.1	17717.6	12597.3	6435.8	2656.2	1646.5	1477.2	1628.8	1911.9	2100.2	2125.5
45°	20631.6	18456.9	12228.3	5379.4	1800.7	1376.1	1415.3	1625.1	1939.7	2148.2	2167.2
47.5°	21450.4	19060.9	11724.1	4238.3	1420.3	1324.3	1414.0	1659.2	2001.6	2198.7	2210.1
50°	22232.6	19520.9	10863.6	3224.8	1330.6	1300.3	1425.4	1712.2	2035.7	2159.6	2154.5
52.5°	22812.7	19758.4	9947.4	2603.1	1295.2	1281.3	1455.7	1779.2	2042.1	2116.6	2111.6
55°	23238.5	19712.9	9345.9	2131.8	1266.2	1273.8	1505.0	1829.8	2102.7	2215.2	2211.4
57.5°	23277.7	19507.0	8662.3	1800.7	1230.8	1272.5	1558.1	1900.5	2406.0	2613.2	2550.0
60°	23230.9	19165.8	7979.9	1580.8	1191.6	1280.1	1613.7	2112.8	2843.2	3006.2	2962.0
62.5°	23000.9	18530.2	6957.7	1435.5	1157.5	1307.9	1655.4	2280.9	2821.7	2840.7	2777.5
65°	22290.8	17679.7	5615.7	1288.9	1123.4	1326.8	1689.5	2325.1	2591.7	2531.1	2499.5
67.5°	20885.6	15780.5	4331.8	1155.0	1079.2	1323.0	1790.6	2261.9	2504.6	2460.3	2419.9
70°	18889.0	13622.1	3007.5	1017.2	1004.6	1299.0	1765.3	2283.4	2462.9	2394.6	2340.3
72.5°	15780.5	10686.7	1913.2	904.8	893.4	1242.2	1702.1	2269.5	2435.1	2404.7	2330.2
75°	11882.1	7459.3	1215.6	782.2	794.8	1138.5	1601.0	2195.0	2421.2	2326.4	2183.6
77.5°	7480.8	3682.3	945.2	664.7	683.6	981.9	1383.7	1917.0	2323.9	2267.0	2083.8
80°	2829.3	1494.9	739.2	539.6	556.0	763.2	1134.8	1577.0	2139.4	2232.9	2154.5
82.5°	1302.8	935.1	554.7	433.4	439.7	556.0	846.6	1167.6	1810.8	2049.6	2245.5
85°	760.7	612.9	370.2	289.4	300.7	328.5	476.4	712.7	1173.9	1563.1	1748.9
87.5°	259.0	213.6	144.1	122.6	118.8	135.2	115.0	233.8	348.8	614.1	701.3
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)