

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: P721829

Luminaire Tested: **CST-CA8-400-722-U-T2**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721829  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-10)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-400-722-U-T2  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

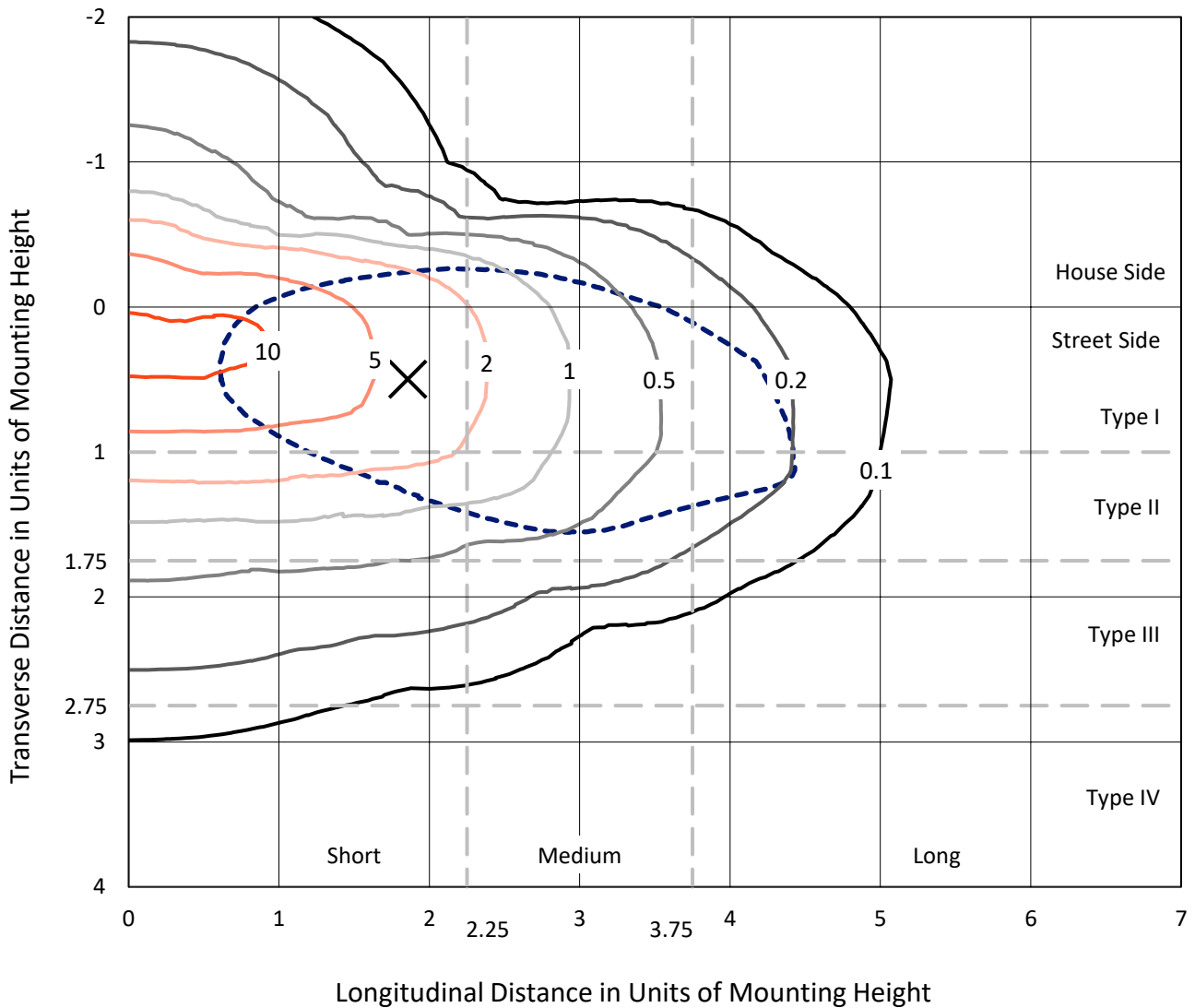
Lumens per Lamp: N/A  
Luminaire Lumens: 49138 lumens  
Efficiency: N/A  
Efficacy: 122.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 400.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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

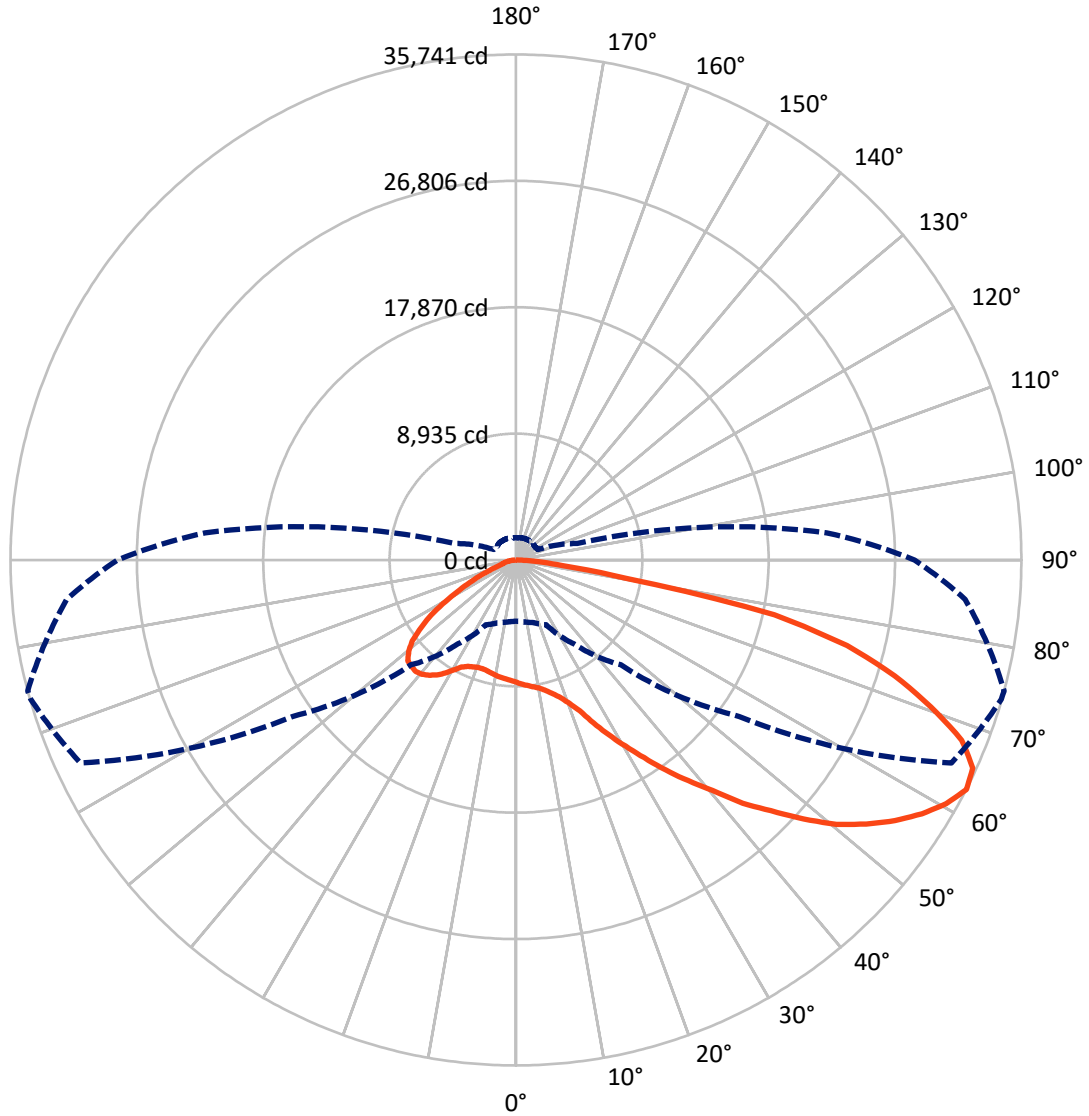
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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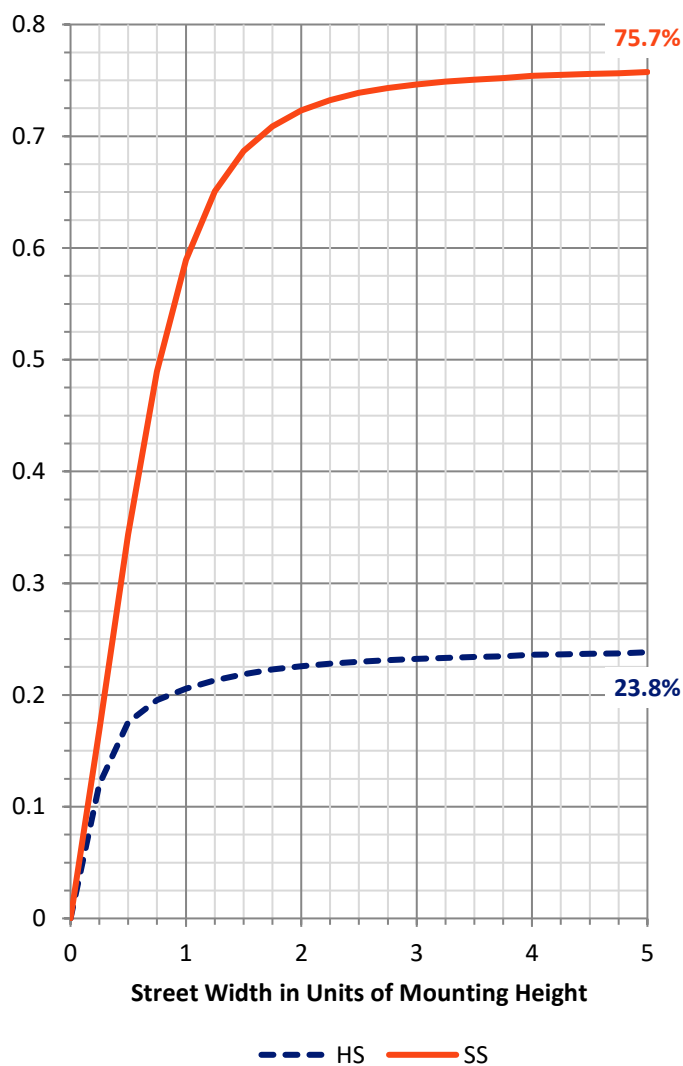
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	11905.3	0.0	11905.3
	% Fixture	24.2	0.0	24.2
<b>Street Side</b>	Lumens	37232.7	0.0	37232.7
	% Fixture	75.8	0.0	75.8
<b>Total</b>	Lumens	49138.0	0.0	49138.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	833.3	1.7
10°-20°	2529.0	5.1
20°-30°	4361.9	8.9
30°-40°	6431.7	13.1
40°-50°	8478.4	17.3
50°-60°	9978.3	20.3
60°-70°	9927.5	20.2
70°-80°	5789.4	11.8
80°-90°	808.4	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°	49138.0	100.0
0°-180°	49138.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P721829

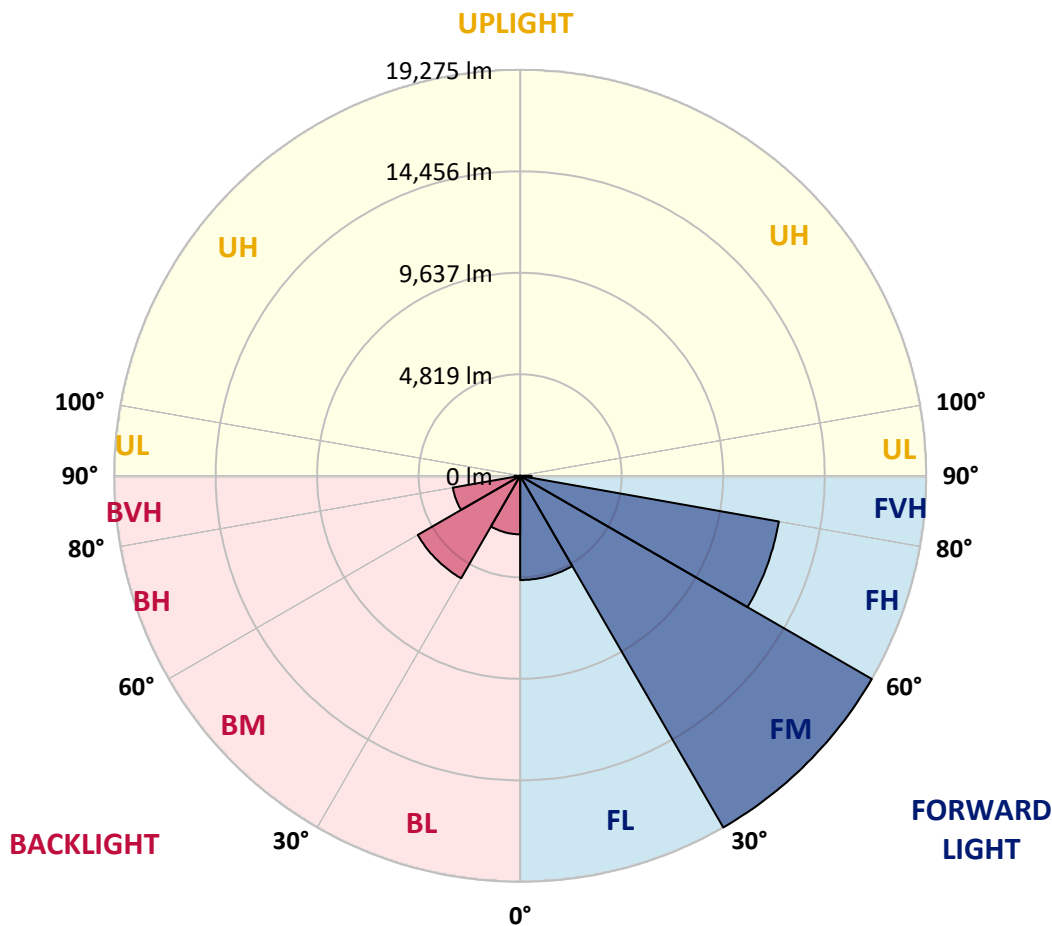
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4948.0	10.1			
FM (30°-60°)	19274.8	39.2			
FH (60°-80°)	12473.5	25.4			G5
FVH (80°-90°)	536.4	1.1			G4/750
BL (0°-30°)	2776.2	5.6	B4/5000		
BM (30°-60°)	5613.7	11.4	B4/8500		
BH (60°-80°)	3243.4	6.6	B4/5000		G4/5000
BVH (80°-90°)	271.9	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	8661.9	8661.9	8661.9	8661.9	8661.9	8661.9	8661.9	8661.9	8661.9	8661.9	8661.9
2.5°	9136.2	9098.8	9103.9	9077.6	9038.1	9008.8	8931.9	8849.0	8799.4	8795.4	8724.6
5°	9595.4	9607.5	9610.5	9526.6	9443.7	9349.6	9232.3	9072.5	8942.0	8921.8	8784.3
7.5°	10014.0	10013.0	10007.0	9960.4	9922.0	9782.4	9547.8	9297.0	9084.6	9065.4	8841.9
10°	10442.8	10439.8	10379.1	10301.2	10214.3	10085.8	9884.6	9584.2	9240.4	9215.1	8895.5
12.5°	10910.1	10876.7	10838.3	10744.2	10641.0	10418.6	10207.2	9880.5	9521.5	9476.0	8990.6
15°	11295.4	11261.0	11207.4	11143.7	11035.5	10865.6	10641.0	10253.7	9868.4	9823.9	9204.0
17.5°	11676.6	11660.5	11622.0	11554.3	11471.3	11324.7	11118.4	10789.7	10285.1	10230.5	9558.9
20°	11989.1	11950.7	11922.4	11953.7	11960.8	11852.6	11739.3	11463.2	10907.0	10823.1	9994.8
22.5°	12167.1	12159.0	12313.8	12429.1	12475.6	12499.8	12464.4	12242.0	11738.3	11591.7	10601.6
25°	12336.0	12322.9	12533.2	12821.4	13095.5	13235.1	13329.1	13358.5	12896.3	12763.8	11577.5
27.5°	12341.1	12377.5	12682.9	13166.3	13584.0	14009.7	14460.8	14512.4	14106.8	14001.6	12687.9
30°	12368.4	12384.6	12686.9	13242.1	14111.9	14794.5	15382.1	15672.3	15322.4	15273.9	13910.6
32.5°	12021.5	12042.7	12513.0	13374.6	14510.3	15606.6	16386.3	16817.1	16730.2	16668.5	15215.2
35°	11660.5	11678.7	12224.8	13186.5	14806.7	16343.9	17293.5	18139.9	18298.7	18252.2	16670.5
37.5°	11094.1	11154.8	11727.2	12962.0	14858.2	16885.9	18159.2	19457.7	19937.1	19797.5	18209.7
40°	10479.2	10523.7	11190.2	12491.8	14800.6	17241.9	19009.7	20916.0	21496.5	21421.7	19737.8
42.5°	9702.5	9821.9	10489.4	11891.0	14504.3	17463.4	19796.5	22569.5	23412.9	23513.1	21141.5
45°	9048.2	9045.2	9665.1	11021.3	13967.3	17516.0	20520.6	24241.2	25475.0	25286.9	22997.3
47.5°	8278.6	8310.0	8957.2	10155.6	13175.4	17349.1	21084.9	26217.3	27466.3	27364.1	24519.3
50°	6497.7	6723.2	7948.9	9411.3	12104.4	16883.9	21555.2	28141.8	29334.2	29380.7	25902.8
52.5°	5601.7	5688.6	6365.2	8661.9	11153.8	16103.2	22070.9	30307.1	31139.4	31021.1	27473.4
55°	5242.7	5289.2	5613.8	7315.8	10234.5	14894.6	22318.7	32284.2	32547.1	32527.9	28765.8
57.5°	4982.7	5018.1	5248.7	6105.3	9225.2	13343.3	22109.4	33570.6	33979.2	33853.7	29985.5
60°	4607.5	4635.9	4979.7	5501.5	8186.6	11776.8	20822.0	34154.1	35017.8	34971.2	31063.5
62.5°	4325.4	4373.9	4566.1	5055.6	7299.7	10486.3	19287.8	33972.1	35699.4	35740.9	31886.7
65°	4027.1	4070.5	4233.4	4661.1	6495.7	9637.8	17633.3	33059.9	35385.9	35496.1	32020.2
67.5°	3658.9	3692.3	3885.5	4255.6	5556.2	8789.3	15767.4	31446.8	33646.4	34001.4	30691.4
70°	3195.8	3207.9	3444.5	3696.4	4613.6	7510.0	12537.3	28806.3	31129.3	31136.3	28182.3
72.5°	2543.5	2553.6	2616.3	2807.4	3465.8	5943.5	9215.1	24069.3	28069.0	28017.5	25047.2
75°	1729.3	1818.3	2035.8	2217.8	2500.0	4173.7	5731.1	16216.4	23781.1	24185.6	20574.2
77.5°	1366.3	1374.4	1464.4	1631.3	1875.0	3117.9	3211.9	8972.4	17729.4	18691.1	16171.9
80°	952.7	966.8	918.3	958.7	1307.6	2133.9	1877.0	3904.7	7393.7	7894.3	9709.6
82.5°	454.1	470.3	540.0	501.6	650.3	907.1	991.1	2017.6	3193.7	3277.7	3780.3
85°	299.3	299.3	300.4	284.2	379.2	395.4	450.0	860.6	1559.4	1612.0	1602.9
87.5°	96.1	106.2	103.2	120.3	145.6	131.5	137.5	270.0	535.0	529.9	443.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P721829

CATALOG NUMBER: CST-CA8-400-722-U-T2

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8661.9	8661.9	8661.9	8661.9	8661.9	8661.9	8661.9	8661.9	8661.9	8661.9	8661.9
2.5°	8674.0	8632.6	8535.5	8450.5	8366.6	8302.9	8248.3	8175.5	8141.1	8109.7	8175.5
5°	8699.3	8625.5	8451.6	8277.6	8117.8	8000.5	7928.7	7876.1	7828.6	7828.6	7850.8
7.5°	8728.7	8628.5	8379.8	8133.0	7893.3	7759.8	7657.7	7590.9	7552.5	7554.5	7602.0
10°	8747.9	8594.1	8297.8	7965.1	7704.2	7489.8	7389.7	7293.6	7220.8	7177.3	7225.8
12.5°	8770.1	8583.0	8187.6	7812.4	7494.9	7252.1	7043.8	6972.0	6901.2	6846.6	6872.9
15°	8907.7	8625.5	8095.6	7618.2	7250.1	6947.7	6674.7	6543.2	6523.0	6485.6	6494.7
17.5°	9132.2	8739.8	8035.9	7380.6	6955.8	6598.8	6253.0	6083.1	6042.6	6023.4	6033.5
20°	9466.9	8957.2	8054.1	7213.7	6624.1	6224.6	5777.6	5578.4	5443.9	5452.0	5491.4
22.5°	9978.6	9308.1	8153.2	7030.7	6265.1	5741.2	5290.2	5019.2	4883.6	4854.3	4898.8
25°	10793.8	9873.5	8262.4	6855.7	5918.2	5219.4	4719.8	4426.5	4252.6	4241.5	4291.0
27.5°	11838.4	10740.2	8500.1	6704.0	5487.4	4592.4	4095.8	3845.0	3659.9	3637.7	3621.5
30°	12907.4	11702.9	8929.9	6473.4	4984.8	3945.1	3513.3	3317.1	3109.8	3025.9	3044.1
32.5°	14040.1	12600.0	9433.5	6311.6	4422.5	3375.8	3000.6	2813.5	2623.3	2502.0	2473.7
35°	15180.8	13491.9	9857.3	6069.9	3889.5	2923.7	2564.7	2371.5	2205.7	2106.6	2099.5
37.5°	16515.8	14420.3	10197.1	5813.0	3336.3	2569.7	2137.9	2026.7	1946.8	1859.8	1868.9
40°	17852.7	15502.4	10469.1	5388.3	2877.2	2189.5	1819.4	1841.6	1858.8	1786.0	1779.9
42.5°	18963.2	16411.6	10593.5	4838.1	2470.6	1858.8	1678.8	1779.9	1854.8	1807.2	1801.2
45°	20090.8	17177.2	10545.0	4155.5	2132.9	1701.0	1667.7	1770.8	1866.9	1855.8	1850.7
47.5°	21316.5	18180.4	10461.0	3377.8	1891.2	1685.9	1691.9	1740.5	1861.8	1882.1	1874.0
50°	22815.3	19103.7	9964.5	2630.4	1773.8	1710.1	1746.5	1721.3	1824.4	1865.9	1873.0
52.5°	24306.9	19814.7	9300.0	2279.5	1727.3	1733.4	1822.4	1736.4	1781.9	1818.3	1851.7
55°	25457.8	20538.8	8225.0	2068.1	1712.2	1744.5	1843.6	1768.8	1767.8	1767.8	1778.9
57.5°	26636.0	21508.6	7150.0	1931.6	1685.9	1756.7	1818.3	1774.9	1760.7	1740.5	1727.3
60°	27456.2	21867.6	5768.5	1841.6	1658.6	1739.5	1747.6	1741.5	1698.0	1678.8	1663.6
62.5°	28184.3	22062.8	4491.2	1738.4	1621.1	1699.0	1656.5	1643.4	1618.1	1571.6	1579.7
65°	27989.1	21644.1	3422.3	1622.1	1594.8	1650.5	1576.6	1545.3	1547.3	1498.8	1514.9
67.5°	26733.1	19766.1	2457.5	1444.2	1523.0	1554.4	1485.6	1462.4	1428.0	1403.7	1426.0
70°	24195.7	17522.0	1657.5	1198.4	1359.2	1427.0	1381.5	1341.0	1287.4	1271.2	1295.5
72.5°	20364.8	14626.6	1143.8	963.8	1173.1	1261.1	1243.9	1202.5	1164.0	1203.5	1251.0
75°	16730.2	10821.1	933.4	789.8	902.1	1050.8	1101.3	1113.5	1228.7	1613.0	1652.5
77.5°	12042.7	6708.0	839.4	642.2	720.1	840.4	941.5	983.0	1500.8	1437.1	1434.0
80°	7021.6	3909.7	640.2	506.7	582.5	615.9	736.2	1153.9	1294.5	1110.4	1083.1
82.5°	3203.8	1725.3	446.0	405.5	404.5	407.6	501.6	1110.4	993.1	874.8	842.4
85°	1178.2	606.8	271.0	234.6	269.0	233.6	328.7	814.1	575.4	566.3	472.3
87.5°	290.2	124.4	92.0	76.9	62.7	59.7	100.1	268.0	140.6	128.4	123.4
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)