

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: P721849

Luminaire Tested: **CST-CA8-400-730-U-T2**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721849
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-CA8-400-730-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 59200 lumens
Efficiency: N/A
Efficacy: 147.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

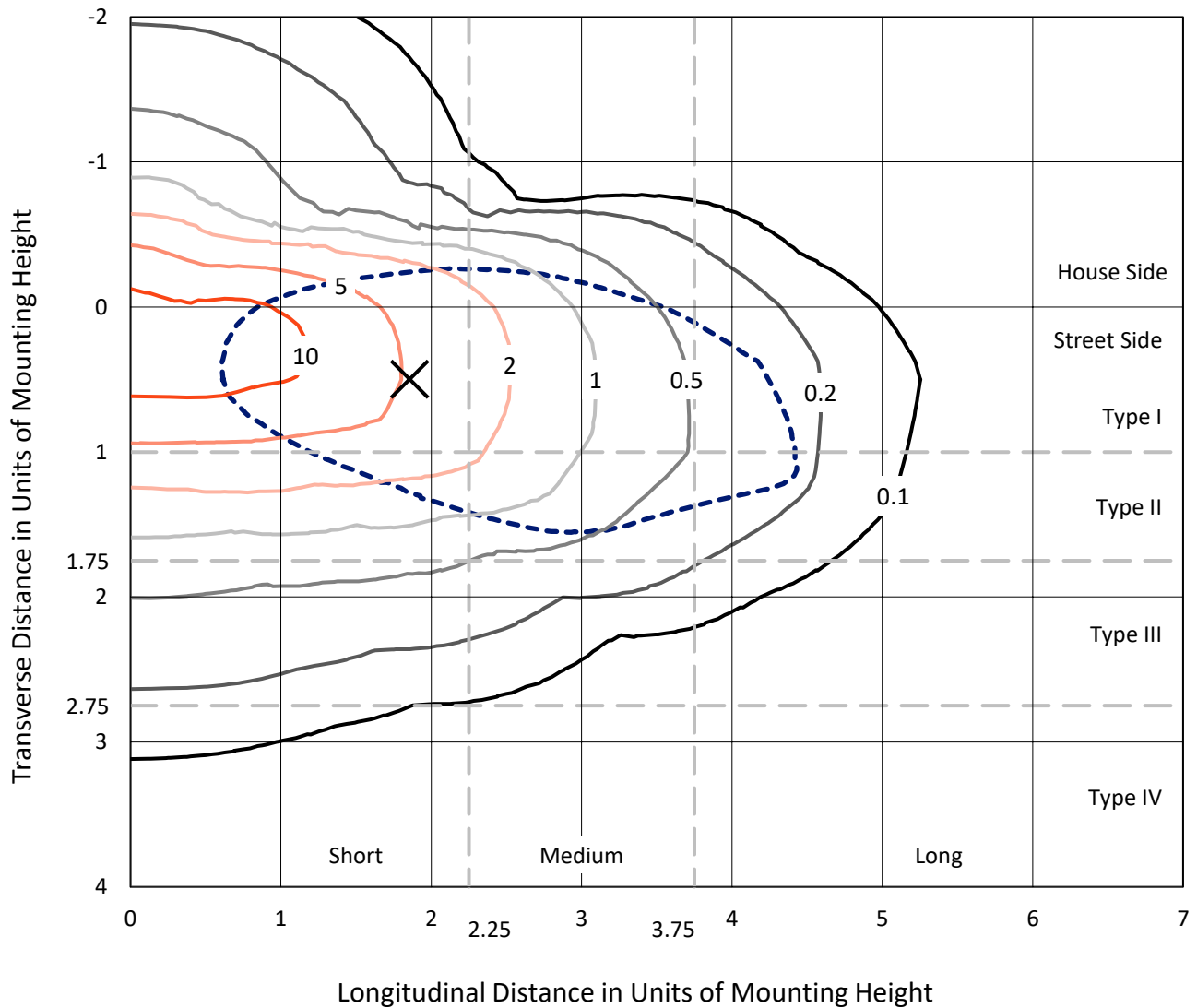
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

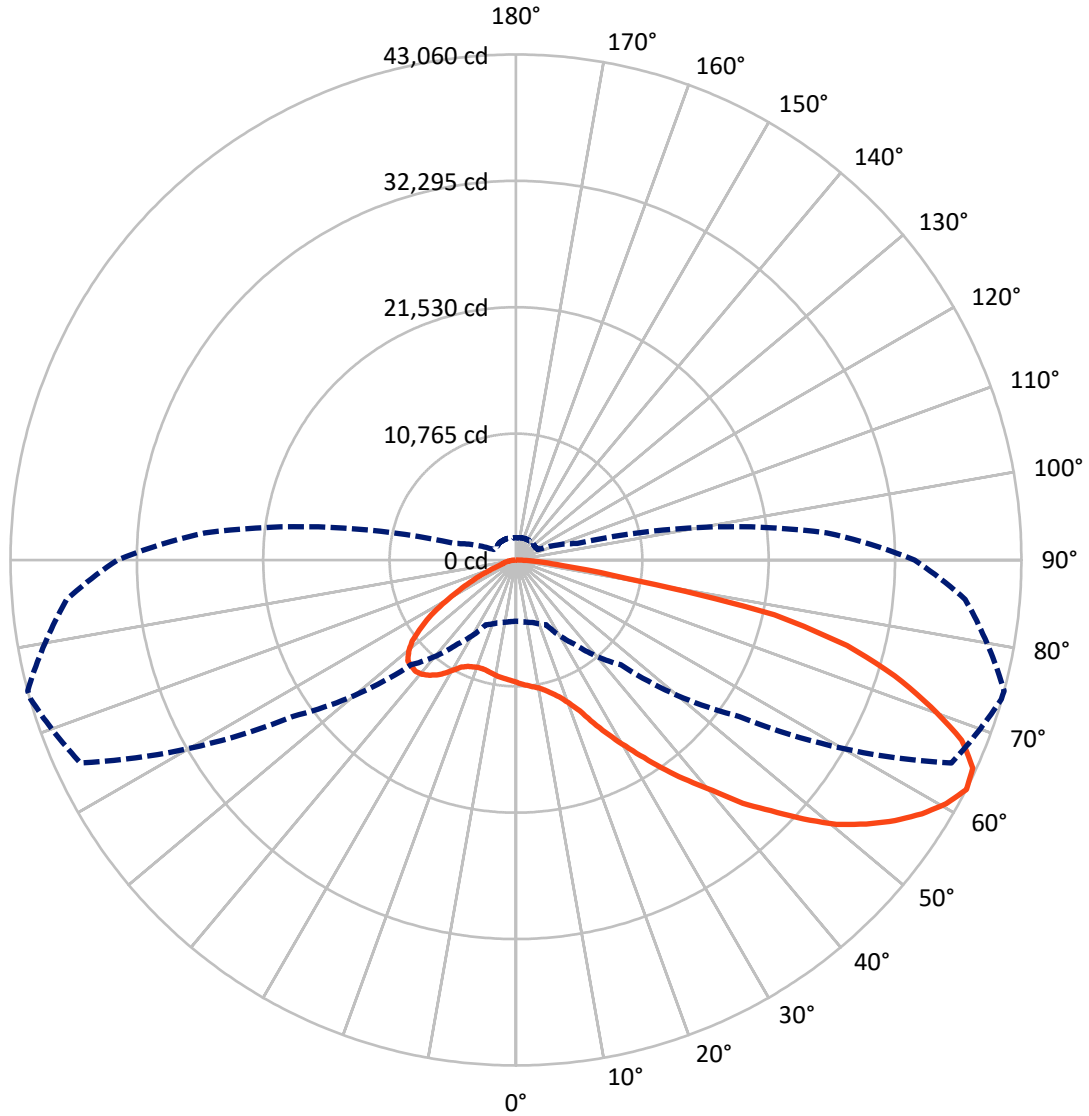
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.6 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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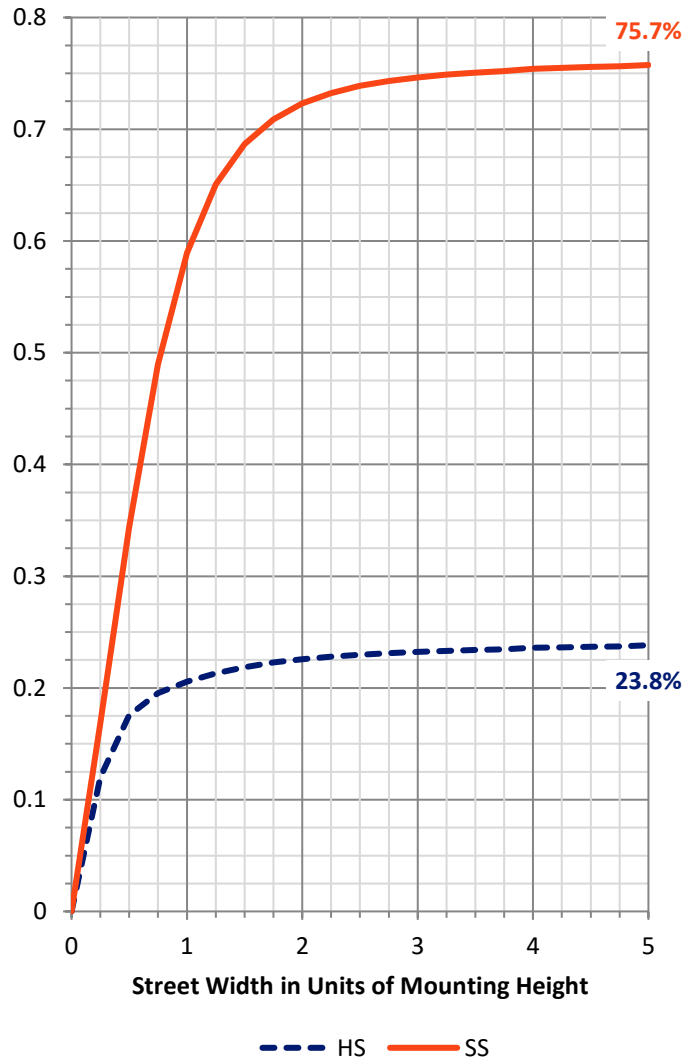
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14343.1	0.0	14343.1
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	44856.9	0.0	44856.9
	% Fixture	75.8	0.0	75.8
Total	Lumens	59200.0	0.0	59200.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1003.9	1.7
10°-20°	3046.9	5.1
20°-30°	5255.1	8.9
30°-40°	7748.8	13.1
40°-50°	10214.6	17.3
50°-60°	12021.6	20.3
60°-70°	11960.3	20.2
70°-80°	6974.9	11.8
80°-90°	973.9	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°	59200.0	100.0
0°-180°	59200.0	100.0

Coefficient of Utilization

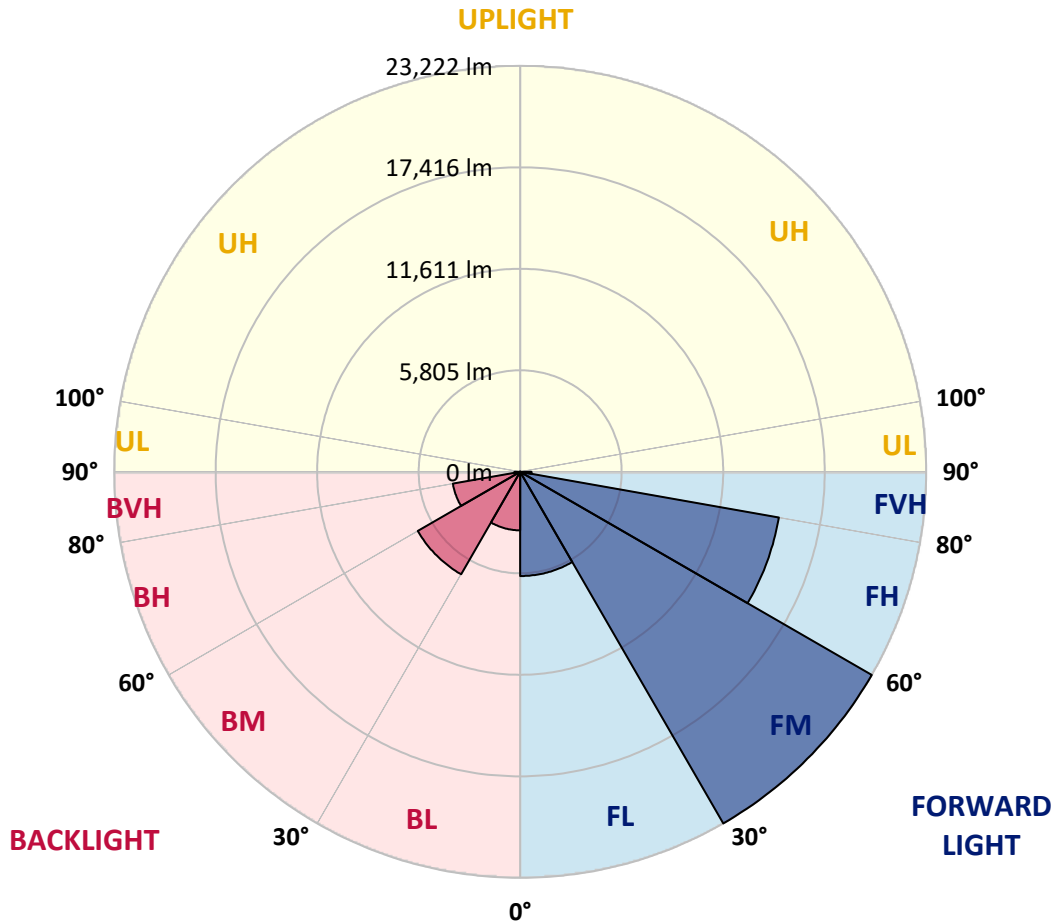


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5961.2	10.1			
FM (30°-60°)	23221.7	39.2			
FH (60°-80°)	15027.7	25.4			G5
FVH (80°-90°)	646.3	1.1			G4/750
BL (0°-30°)	3344.7	5.6	B4/5000		
BM (30°-60°)	6763.2	11.4	B4/8500		
BH (60°-80°)	3907.5	6.6	B4/5000		G4/5000
BVH (80°-90°)	327.6	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	10435.6	10435.6	10435.6	10435.6	10435.6	10435.6	10435.6	10435.6	10435.6	10435.6	10435.6
2.5°	11007.0	10962.0	10968.0	10936.4	10888.9	10853.5	10760.9	10661.0	10601.3	10596.4	10511.1
5°	11560.2	11574.8	11578.5	11477.3	11377.4	11264.1	11122.8	10930.3	10773.1	10748.7	10583.0
7.5°	12064.6	12063.4	12056.1	12000.0	11953.7	11785.6	11502.9	11200.8	10944.9	10921.8	10652.5
10°	12581.2	12577.6	12504.5	12410.6	12305.9	12151.1	11908.7	11546.8	11132.5	11102.1	10717.1
12.5°	13144.1	13103.9	13057.6	12944.3	12820.0	12552.0	12297.3	11903.8	11471.2	11416.4	10831.6
15°	13608.3	13566.9	13502.3	13425.6	13295.2	13090.5	12820.0	12353.4	11889.2	11835.6	11088.7
17.5°	14067.7	14048.2	14001.9	13920.2	13820.3	13643.7	13395.1	12999.1	12391.1	12325.3	11516.3
20°	14444.1	14397.8	14363.7	14401.5	14410.0	14279.7	14143.2	13810.6	13140.5	13039.3	12041.5
22.5°	14658.6	14648.8	14835.3	14974.2	15030.2	15059.4	15016.8	14748.7	14142.0	13965.3	12772.5
25°	14862.1	14846.2	15099.6	15446.9	15777.1	15945.2	16058.5	16093.9	15537.1	15377.4	13948.3
27.5°	14868.2	14912.0	15280.0	15862.4	16365.6	16878.5	17421.9	17484.1	16995.5	16868.8	15286.1
30°	14901.0	14920.5	15284.8	15953.7	17001.6	17824.0	18531.9	18881.6	18460.0	18401.5	16759.1
32.5°	14483.1	14508.7	15075.3	16113.4	17481.6	18802.4	19741.8	20260.8	20156.0	20081.7	18330.8
35°	14048.2	14070.1	14728.0	15886.7	17838.6	19690.6	20834.7	21854.5	22045.8	21989.7	20084.1
37.5°	13365.9	13439.0	14128.6	15616.3	17900.8	20343.6	21877.6	23442.0	24019.6	23851.4	21938.5
40°	12625.1	12678.7	13481.6	15049.7	17831.3	20772.5	22902.3	25199.0	25898.3	25808.2	23779.5
42.5°	11689.3	11833.1	12637.3	14326.0	17474.3	21039.4	23850.2	27191.1	28207.2	28327.8	25470.7
45°	10901.0	10897.4	11644.3	13278.1	16827.3	21102.7	24722.6	29205.1	30691.5	30464.9	27706.4
47.5°	9973.8	10011.6	10791.4	12235.2	15873.3	20901.7	25402.5	31585.8	33090.6	32967.5	29540.1
50°	7828.2	8099.9	9576.6	11338.4	14583.0	20341.2	25969.0	33904.5	35341.0	35397.0	31206.9
52.5°	6748.7	6853.5	7668.6	10435.6	13437.7	19400.6	26590.4	36513.1	37515.8	37373.2	33099.1
55°	6316.2	6372.2	6763.3	8813.9	12330.2	17944.6	26888.9	38895.0	39211.8	39188.7	34656.2
57.5°	6003.1	6045.7	6323.5	7355.5	11114.3	16075.6	26636.7	40444.8	40937.1	40786.0	36125.6
60°	5551.0	5585.2	5999.4	6628.1	9863.0	14188.3	25085.7	41147.9	42188.4	42132.3	37424.4
62.5°	5211.1	5269.6	5501.1	6090.8	8794.4	12633.6	23237.4	40928.5	43009.6	43059.5	38416.2
65°	4851.7	4904.1	5100.2	5615.6	7825.8	11611.4	21244.0	39829.5	42631.9	42764.7	38577.0
67.5°	4408.2	4448.4	4681.1	5127.0	6693.9	10589.1	18996.1	37886.2	40536.2	40963.9	36976.0
70°	3850.1	3864.8	4149.9	4453.3	5558.3	9047.8	15104.5	34704.9	37503.6	37512.1	33953.2
72.5°	3064.3	3076.5	3152.0	3382.3	4175.5	7160.5	11102.1	28998.0	33816.7	33754.6	30176.1
75°	2083.5	2190.7	2452.6	2672.0	3011.9	5028.3	6904.7	19537.1	28650.7	29138.1	24787.2
77.5°	1646.1	1655.8	1764.2	1965.3	2258.9	3756.3	3869.6	10809.7	21359.8	22518.5	19483.5
80°	1147.7	1164.8	1106.3	1155.0	1575.4	2570.8	2261.4	4704.2	8907.7	9510.8	11697.9
82.5°	547.1	566.6	650.6	604.3	783.4	1092.9	1194.0	2430.7	3847.7	3948.8	4554.4
85°	360.6	360.6	361.9	342.4	456.9	476.4	542.2	1036.9	1878.8	1942.1	1931.2
87.5°	115.7	127.9	124.3	145.0	175.4	158.4	165.7	325.3	644.5	638.4	533.7
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°	10435.6	10435.6	10435.6	10435.6	10435.6	10435.6	10435.6	10435.6	10435.6	10435.6	10435.6
2.5°	10450.2	10400.3	10283.3	10181.0	10079.8	10003.1	9937.3	9849.6	9808.1	9770.4	9849.6
5°	10480.7	10391.7	10182.2	9972.6	9780.1	9638.8	9552.3	9488.9	9431.6	9431.6	9458.5
7.5°	10516.0	10395.4	10095.7	9798.4	9509.6	9348.8	9225.7	9145.3	9099.0	9101.5	9158.7
10°	10539.2	10354.0	9997.0	9596.1	9281.8	9023.5	8902.9	8787.1	8699.4	8647.0	8705.5
12.5°	10566.0	10340.6	9864.2	9412.2	9029.6	8737.2	8486.2	8399.7	8314.4	8248.6	8280.3
15°	10731.7	10391.7	9753.3	9178.2	8734.7	8370.4	8041.4	7883.1	7858.7	7813.6	7824.6
17.5°	11002.2	10529.4	9681.4	8891.9	8380.2	7950.1	7533.4	7328.7	7279.9	7256.8	7269.0
20°	11405.5	10791.4	9703.3	8690.9	7980.5	7499.3	6960.7	6720.7	6558.7	6568.4	6615.9
22.5°	12022.0	11214.2	9822.8	8470.3	7548.0	6916.9	6373.5	6046.9	5883.7	5848.3	5901.9
25°	13004.0	11895.3	9954.3	8259.5	7130.1	6288.2	5686.3	5332.9	5123.4	5110.0	5169.7
27.5°	14262.6	12939.4	10240.7	8076.8	6611.0	5532.8	4934.5	4632.4	4409.4	4382.6	4363.1
30°	15550.5	14099.3	10758.5	7799.0	6005.5	4753.0	4232.7	3996.4	3746.6	3645.5	3667.4
32.5°	16915.1	15180.1	11365.2	7604.0	5328.1	4067.0	3615.0	3389.6	3160.5	3014.3	2980.2
35°	18289.4	16254.7	11875.8	7312.8	4686.0	3522.4	3089.9	2857.2	2657.3	2537.9	2529.4
37.5°	19897.7	17373.2	12285.1	7003.4	4019.5	3096.0	2575.7	2441.7	2345.4	2240.6	2251.6
40°	21508.4	18676.9	12612.9	6491.6	3466.4	2637.8	2191.9	2218.7	2239.4	2151.7	2144.4
42.5°	22846.2	19772.2	12762.8	5828.8	2976.6	2239.4	2022.5	2144.4	2234.5	2177.3	2170.0
45°	24204.8	20694.5	12704.3	5006.4	2569.6	2049.4	2009.1	2133.4	2249.2	2235.8	2229.7
47.5°	25681.5	21903.2	12603.1	4069.5	2278.4	2031.1	2038.4	2096.9	2243.1	2267.4	2257.7
50°	27487.1	23015.6	12004.9	3169.1	2137.1	2060.3	2104.2	2073.7	2198.0	2248.0	2256.5
52.5°	29284.3	23872.1	11204.4	2746.3	2081.0	2088.3	2195.6	2092.0	2146.8	2190.7	2230.9
55°	30670.8	24744.5	9909.3	2491.6	2062.8	2101.7	2221.1	2131.0	2129.8	2129.8	2143.2
57.5°	32090.3	25913.0	8614.1	2327.1	2031.1	2116.4	2190.7	2138.3	2121.2	2096.9	2081.0
60°	33078.4	26345.5	6949.8	2218.7	1998.2	2095.7	2105.4	2098.1	2045.7	2022.5	2004.3
62.5°	33955.6	26580.6	5410.9	2094.4	1953.1	2046.9	1995.7	1979.9	1949.4	1893.4	1903.1
65°	33720.5	26076.2	4123.1	1954.3	1921.4	1988.4	1899.5	1861.7	1864.2	1805.7	1825.2
67.5°	32207.2	23813.7	2960.7	1739.9	1834.9	1872.7	1789.8	1761.8	1720.4	1691.1	1717.9
70°	29150.3	21110.0	1997.0	1443.8	1637.5	1719.2	1664.3	1615.6	1551.0	1531.5	1560.8
72.5°	24534.9	17621.7	1378.0	1161.1	1413.3	1519.3	1498.6	1448.7	1402.4	1449.9	1507.2
75°	20156.0	13036.9	1124.6	951.6	1086.8	1265.9	1326.8	1341.5	1480.4	1943.4	1990.9
77.5°	14508.7	8081.7	1011.3	773.7	867.5	1012.5	1134.3	1184.3	1808.1	1731.3	1727.7
80°	8459.4	4710.3	771.2	610.4	701.8	742.0	887.0	1390.2	1559.6	1337.8	1304.9
82.5°	3859.9	2078.6	537.3	488.6	487.4	491.0	604.3	1337.8	1196.5	1053.9	1014.9
85°	1419.4	731.0	326.5	282.7	324.1	281.5	396.0	980.8	693.3	682.3	569.0
87.5°	349.7	149.9	110.9	92.6	75.5	71.9	120.6	322.9	169.4	154.7	148.6
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)