

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: P721870

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

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721870  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)  
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-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

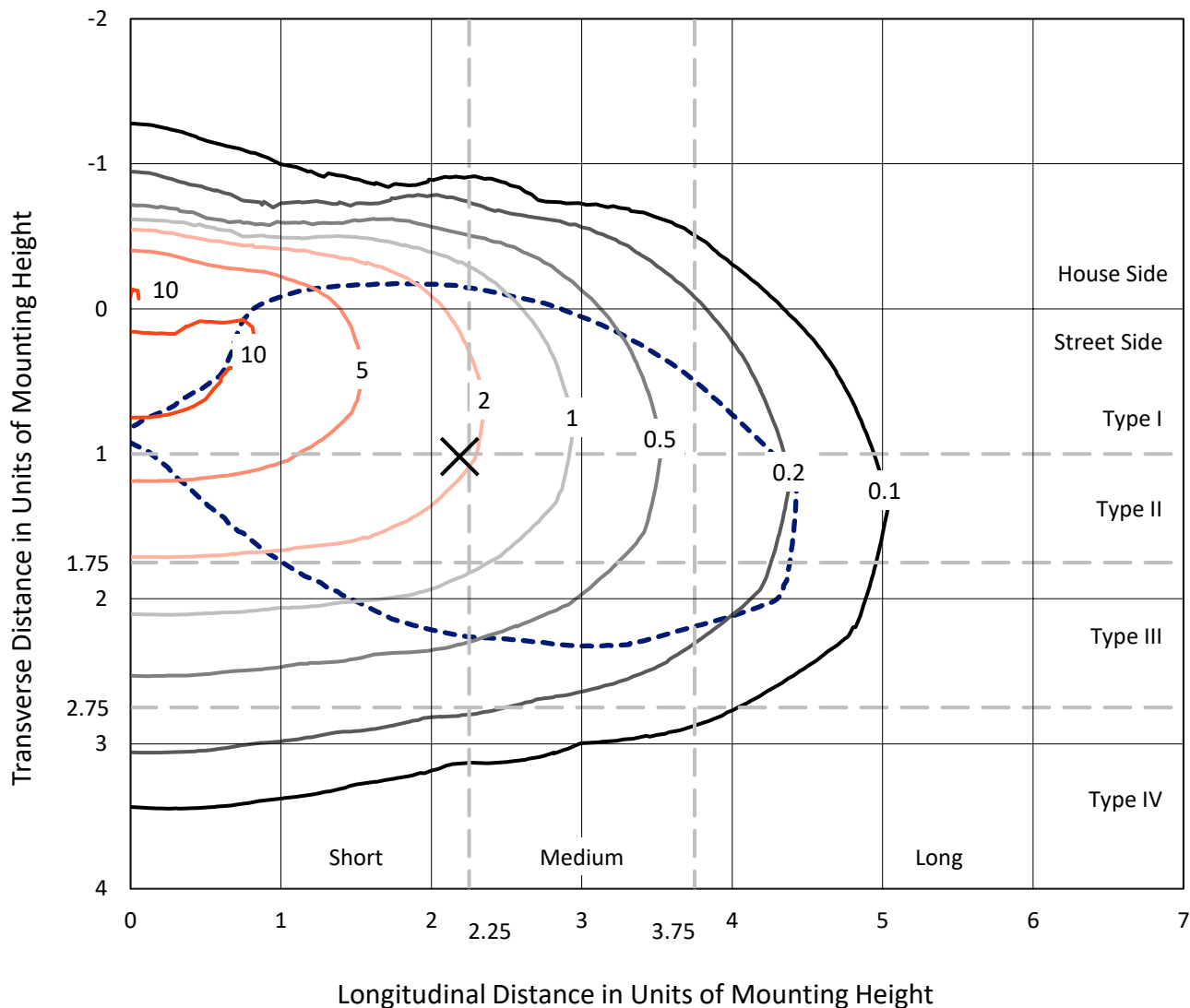
Lumens per Lamp: N/A  
Luminaire Lumens: 57687 lumens  
Efficiency: N/A  
Efficacy: 143.9 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 400.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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

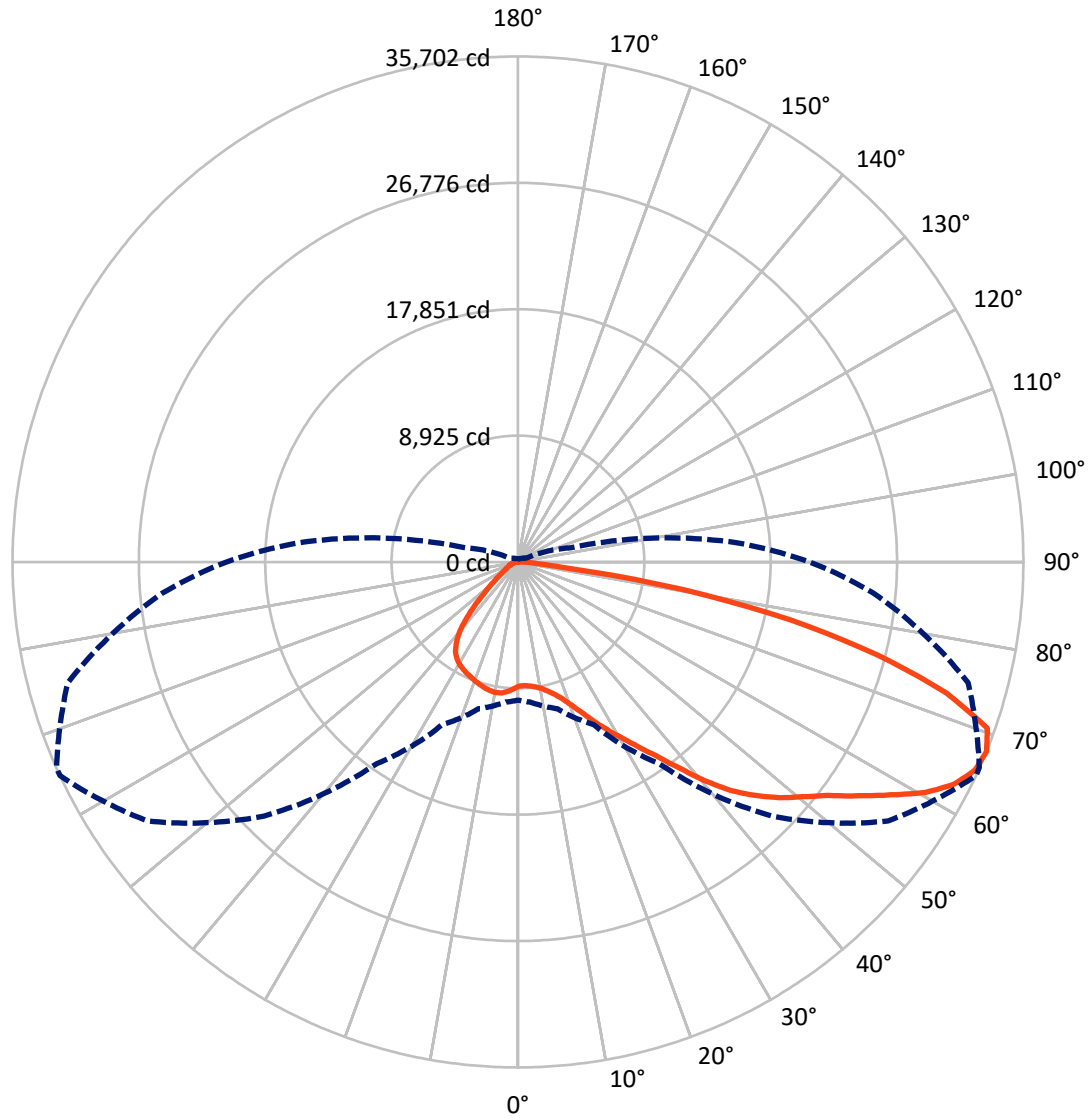
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.5 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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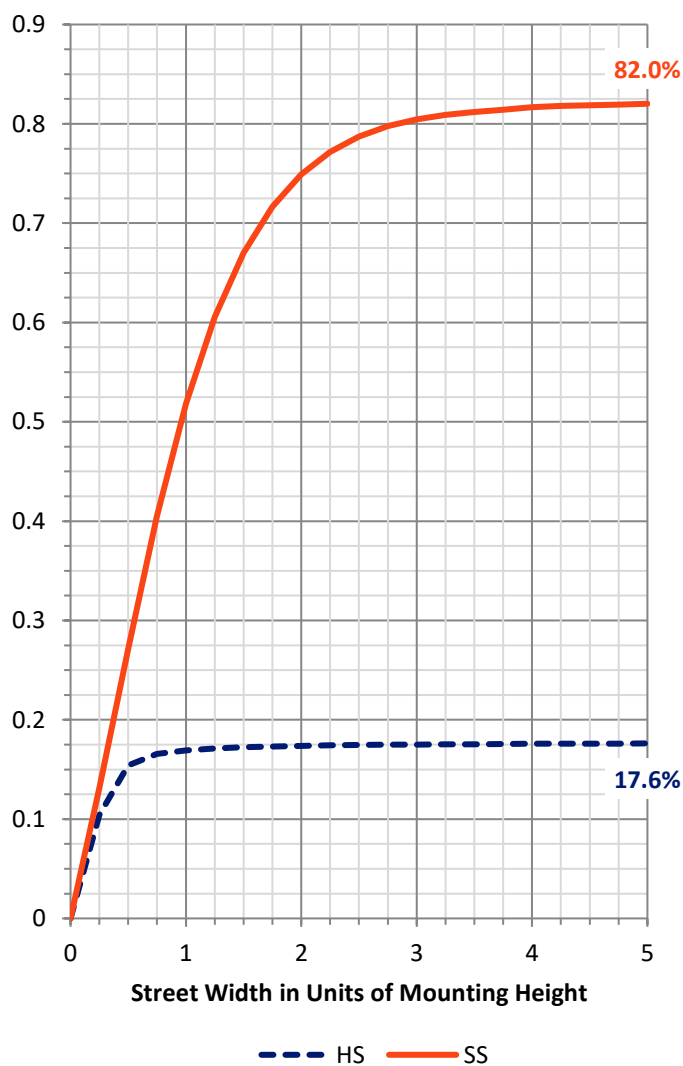
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10310.1	0.0	10310.1
	% Fixture	17.9	0.0	17.9
<b>Street Side</b>	Lumens	47376.9	0.0	47376.9
	% Fixture	82.1	0.0	82.1
<b>Total</b>	Lumens	57687.0	0.0	57687.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	867.2	1.5
10°-20°	2677.5	4.6
20°-30°	4644.9	8.1
30°-40°	7006.8	12.1
40°-50°	9715.4	16.8
50°-60°	11992.3	20.8
60°-70°	12777.6	22.1
70°-80°	7311.6	12.7
80°-90°	693.7	1.2
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°	57687.0	100.0
0°-180°	57687.0	100.0

**Coefficient of Utilization**

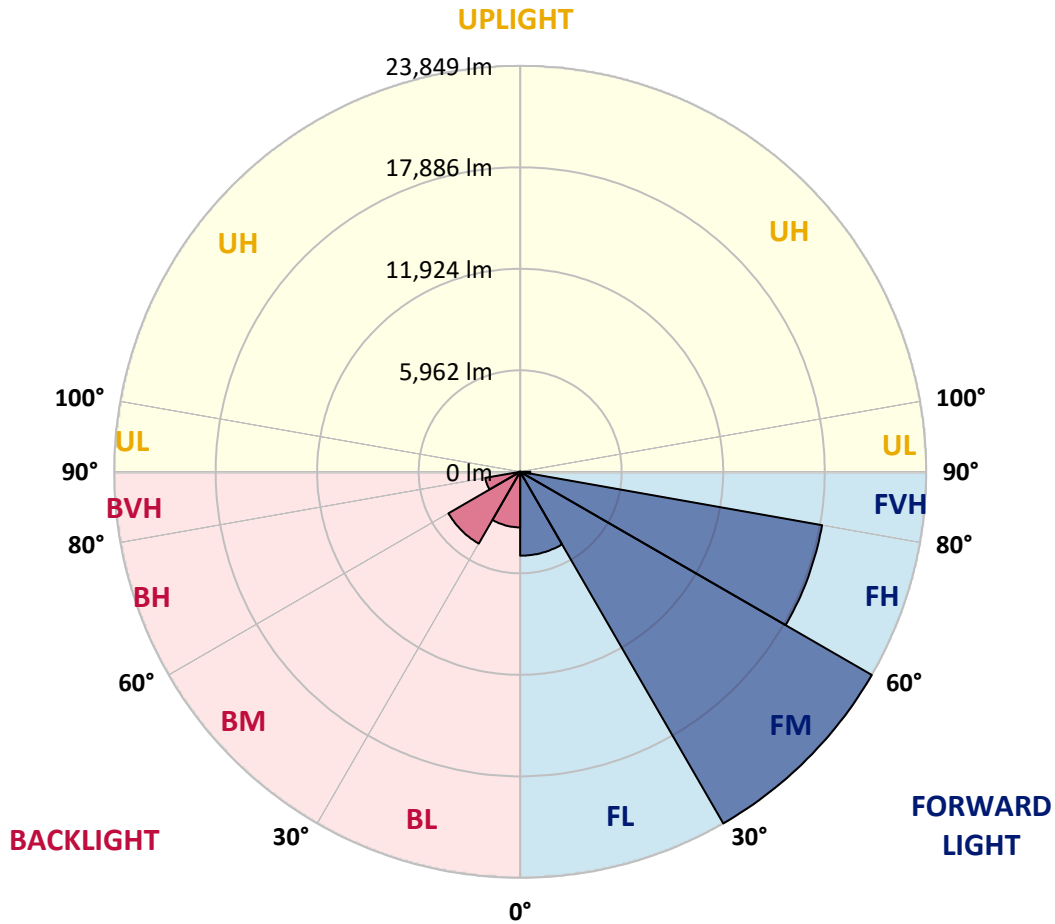


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4927.2	8.5			
FM (30°-60°)	23848.6	41.3			
FH (60°-80°)	18008.3	31.2			G5
FVH (80°-90°)	592.8	1.0			G4/750
BL (0°-30°)	3262.4	5.7	B4/5000		
BM (30°-60°)	4865.8	8.4	B3/5000		
BH (60°-80°)	2080.9	3.6	B3/2500		G3/2500
BVH (80°-90°)	101.0	0.2			G2/225
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°	8765.9	8765.9	8765.9	8765.9	8765.9	8765.9	8765.9	8765.9	8765.9	8765.9	8765.9
2.5°	8681.3	8669.9	8659.8	8677.5	8687.6	8704.0	8728.0	8744.4	8749.5	8764.7	8783.6
5°	8820.3	8819.0	8805.1	8797.5	8776.0	8768.4	8773.5	8793.7	8795.0	8813.9	8873.3
7.5°	9093.2	9090.7	9056.6	9041.4	8995.9	8945.4	8907.4	8911.2	8910.0	8928.9	9008.5
10°	9505.1	9484.9	9436.9	9390.2	9301.7	9206.9	9137.4	9074.2	9074.2	9102.0	9190.5
12.5°	9970.2	9998.0	9932.3	9861.5	9713.7	9543.1	9421.7	9351.0	9343.4	9357.3	9420.5
15°	10547.7	10547.7	10503.4	10402.3	10272.2	10034.6	9784.4	9694.7	9682.1	9711.1	9707.3
17.5°	11198.4	11217.4	11134.0	11083.4	10883.8	10620.9	10307.6	10152.1	10152.1	10133.2	10046.0
20°	12028.7	11925.0	11933.9	11850.5	11703.9	11322.3	11003.8	10777.6	10775.1	10737.2	10492.1
22.5°	12930.9	12874.0	12824.7	12751.5	12549.3	12208.1	11765.8	11542.1	11537.1	11443.6	11079.7
25°	13820.5	13863.5	13809.1	13675.2	13527.3	13155.8	12668.1	12448.2	12446.9	12291.5	11775.9
27.5°	14735.4	14782.1	14764.4	14643.1	14446.0	14155.4	13694.1	13407.3	13389.6	13288.5	12640.3
30°	15746.3	15704.6	15758.9	15707.1	15608.6	15134.7	14717.7	14384.1	14427.1	14396.7	13622.1
32.5°	16481.7	16508.3	16686.5	16691.5	16587.9	16236.6	15727.3	15522.6	15590.9	15550.4	14828.9
35°	17146.4	17189.4	17419.4	17645.6	17721.4	17337.2	16819.1	16806.5	16895.0	17141.4	16491.9
37.5°	17717.6	17747.9	18070.1	18364.6	18609.7	18346.9	17970.3	18418.9	18549.1	19053.3	18207.9
40°	18060.0	18099.2	18516.2	18930.7	19367.9	19274.4	19239.0	20300.5	20423.1	20866.6	19460.2
42.5°	17866.7	17943.8	18638.8	19397.0	20040.2	20227.2	20711.2	22075.9	22216.2	22254.1	20690.9
45°	17521.7	17617.8	18394.9	19621.9	20670.7	21271.0	22192.2	23522.8	23599.9	23492.5	21710.7
47.5°	17150.2	17252.6	18120.7	19554.9	21177.5	22485.3	23515.2	24885.0	24939.3	24609.5	22738.1
50°	16728.2	16822.9	17756.8	19398.2	21559.1	23631.5	24874.9	26062.7	26266.2	25614.1	23536.7
52.5°	16215.1	16316.2	17306.9	19153.1	21893.9	24481.9	26074.1	27393.3	27407.2	26870.2	24436.4
55°	15550.4	15726.1	16742.1	18728.5	22069.6	25212.3	27119.1	29153.6	29243.3	28723.9	25189.5
57.5°	14811.2	14964.1	16062.2	18162.4	21911.6	25767.0	28799.8	31041.5	31030.1	29987.6	25847.9
60°	13834.4	13943.1	15176.4	17421.9	21402.4	26438.0	30549.9	33064.6	33044.4	31226.0	26271.2
62.5°	12580.9	12689.5	13849.6	16260.6	20654.3	26887.9	31737.7	34579.7	34521.6	32126.9	26401.4
65°	11127.7	11322.3	12329.4	14753.1	19331.3	26592.2	32311.4	35471.8	35378.3	32814.4	26090.5
67.5°	9765.5	9931.0	10728.4	12678.2	17378.9	25393.0	31907.1	35701.8	35674.0	32914.2	25212.3
70°	7837.1	7897.8	8628.2	10297.5	14459.9	22825.2	30509.5	35171.1	35183.7	31994.3	23448.2
72.5°	5364.2	5512.0	5836.8	7154.8	10522.4	18152.3	26296.5	31653.1	31655.6	28688.6	20429.4
75°	2884.9	3113.6	3492.7	4146.0	5882.3	11648.3	21118.1	26264.9	26314.2	23919.6	16237.9
77.5°	1430.4	1512.6	1732.5	2217.7	2696.6	5495.6	13581.7	19715.4	19832.9	18360.8	11074.6
80°	654.6	668.5	684.9	681.1	1032.4	2411.0	5830.5	11840.4	11875.8	10920.4	5055.8
82.5°	511.8	509.2	516.8	470.1	472.6	930.0	2018.0	3101.0	3307.0	2603.1	1603.6
85°	309.6	308.3	332.3	257.8	317.2	502.9	1018.5	1237.1	1252.3	1018.5	830.2
87.5°	117.5	113.7	104.9	92.2	106.1	141.5	352.6	454.9	444.8	315.9	286.8
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°	8765.9	8765.9	8765.9	8765.9	8765.9	8765.9	8765.9	8765.9	8765.9	8765.9	8765.9
2.5°	8800.0	8840.5	8915.0	8971.9	8990.8	9051.5	9109.6	9119.7	9161.4	9177.9	9232.2
5°	8910.0	8978.2	9094.5	9171.5	9205.7	9306.8	9372.5	9405.3	9393.9	9400.3	9460.9
7.5°	9070.5	9134.9	9228.4	9321.9	9338.3	9356.0	9349.7	9344.7	9300.4	9262.5	9319.4
10°	9217.0	9277.7	9335.8	9349.7	9266.3	9219.6	9136.2	9071.7	8985.8	8946.6	8992.1
12.5°	9423.0	9435.6	9378.8	9303.0	9123.5	8956.7	8821.5	8704.0	8597.9	8524.6	8585.2
15°	9640.4	9591.1	9425.5	9204.4	8926.4	8687.6	8466.4	8270.6	8094.9	8052.0	8068.4
17.5°	9928.5	9794.5	9460.9	9089.4	8657.2	8285.7	8001.4	7753.7	7523.8	7427.7	7418.9
20°	10279.8	10063.7	9532.9	8944.1	8338.8	7844.7	7405.0	7034.7	6717.5	6457.2	6463.6
22.5°	10737.2	10423.8	9641.6	8792.5	7986.2	7327.9	6688.5	6059.2	5537.3	5312.4	5256.8
25°	11341.2	10873.7	9795.8	8654.7	7592.0	6670.8	5767.3	4878.9	4326.7	4108.1	4084.1
27.5°	12093.1	11477.7	10030.8	8501.8	7169.9	5891.1	4592.1	3721.4	3214.7	2984.7	2907.7
30°	12947.3	12222.0	10272.2	8342.6	6659.4	4889.0	3501.6	2648.6	2129.2	1923.3	1896.7
32.5°	14053.0	13164.7	10631.1	8092.4	5913.9	3842.7	2442.6	1652.8	1300.3	1211.8	1186.6
35°	15623.7	14439.7	11074.6	7776.5	4956.0	2684.0	1513.8	968.0	779.7	735.4	726.6
37.5°	17088.3	15690.7	11521.9	7252.1	3763.1	1675.6	865.6	620.5	578.8	580.0	582.5
40°	18249.6	16546.2	11883.3	6562.1	2475.5	951.5	601.5	515.6	516.8	513.0	510.5
42.5°	19283.2	17228.6	12046.3	5542.4	1434.2	636.9	521.9	475.1	463.8	467.5	465.0
45°	20138.7	17924.8	11730.4	4396.2	845.4	571.2	492.8	441.0	428.4	448.6	451.1
47.5°	21038.5	18585.7	11246.5	3312.0	686.2	543.4	466.3	415.7	409.4	434.7	437.2
50°	21795.4	19064.6	10421.3	2495.7	654.6	513.0	442.3	390.5	389.2	411.9	411.9
52.5°	22428.5	19354.0	9442.0	1927.1	633.1	486.5	418.3	366.5	366.5	374.0	375.3
55°	22874.5	19295.9	8858.2	1516.4	610.3	461.2	393.0	343.7	328.5	323.5	326.0
57.5°	22955.4	19141.7	8180.8	1182.8	583.8	437.2	370.2	317.2	289.4	285.6	284.3
60°	22903.6	18803.1	7407.5	988.2	553.5	414.5	347.5	289.4	261.6	252.7	255.3
62.5°	22687.5	18202.8	6514.1	866.9	523.1	396.8	322.2	270.4	245.1	233.8	233.8
65°	22035.5	17343.5	5187.3	759.5	485.2	377.8	302.0	262.8	235.0	222.4	219.9
67.5°	20602.5	15560.5	3898.3	665.9	448.6	357.6	299.5	261.6	230.0	212.3	209.8
70°	18680.5	13366.9	2661.2	585.1	408.2	338.7	298.2	262.8	224.9	202.2	199.7
72.5°	15594.7	10537.5	1532.8	509.2	367.7	321.0	293.2	264.1	216.1	188.3	184.5
75°	11717.8	7391.1	899.7	437.2	328.5	294.4	279.3	256.5	202.2	171.9	168.1
77.5°	7047.4	3451.0	677.3	362.7	281.8	259.0	248.9	235.0	184.5	159.2	155.4
80°	2585.4	1310.4	532.0	290.6	223.7	224.9	214.8	206.0	168.1	146.6	144.1
82.5°	1127.2	801.2	393.0	221.1	175.6	200.9	176.9	169.3	144.1	131.4	126.4
85°	683.6	477.7	252.7	150.4	121.3	136.5	123.8	130.2	111.2	103.6	99.8
87.5°	226.2	142.8	112.5	73.3	60.7	56.9	55.6	67.0	63.2	58.1	58.1
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)