

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: P721940

Luminaire Tested: **CST-CA8-430-760-U-T3-HSS**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721940  
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-CA8-430-760-U-T3-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 60621 lumens  
Efficiency: N/A  
Efficacy: 139.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5

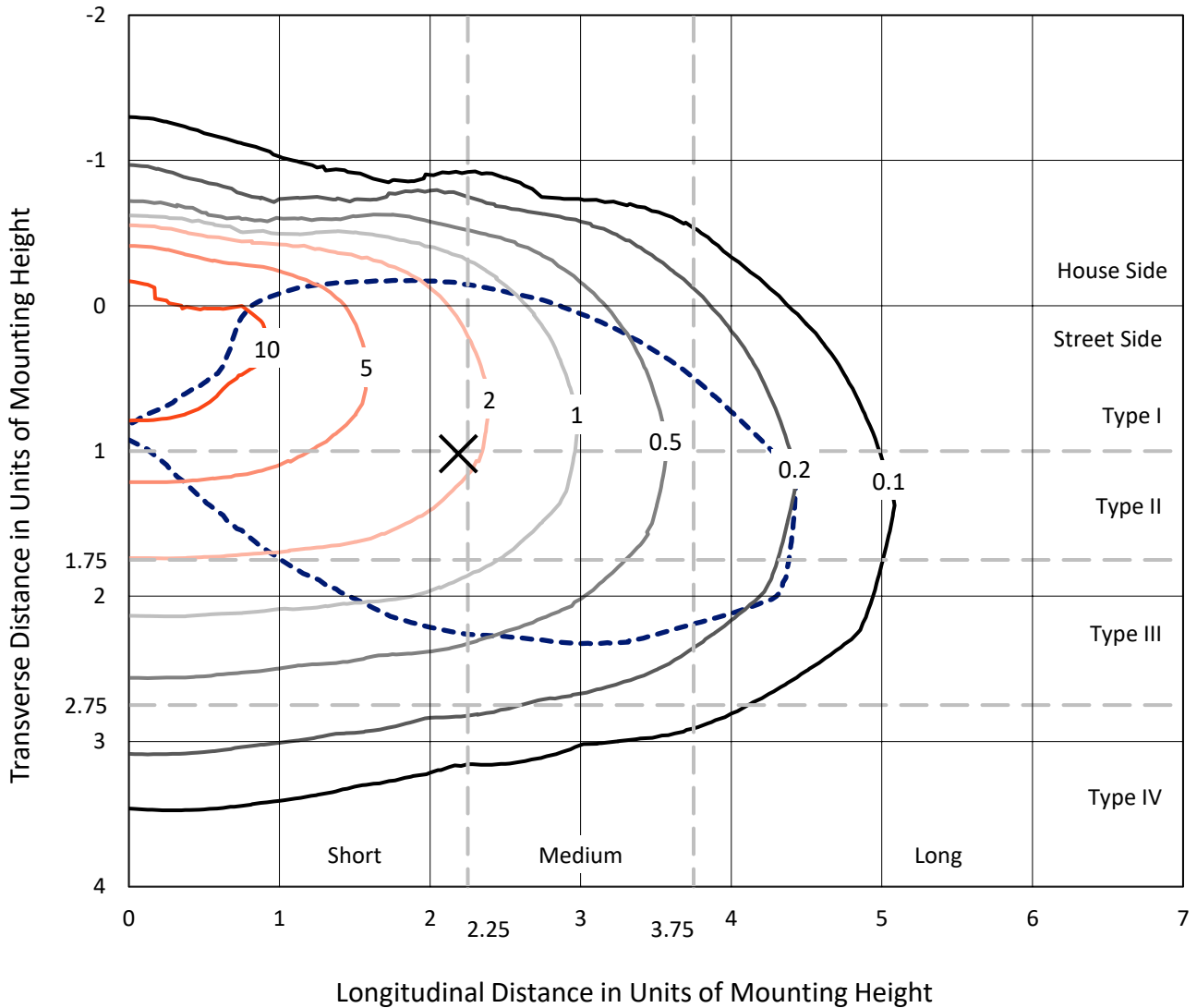
Input Watts (W): 434.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

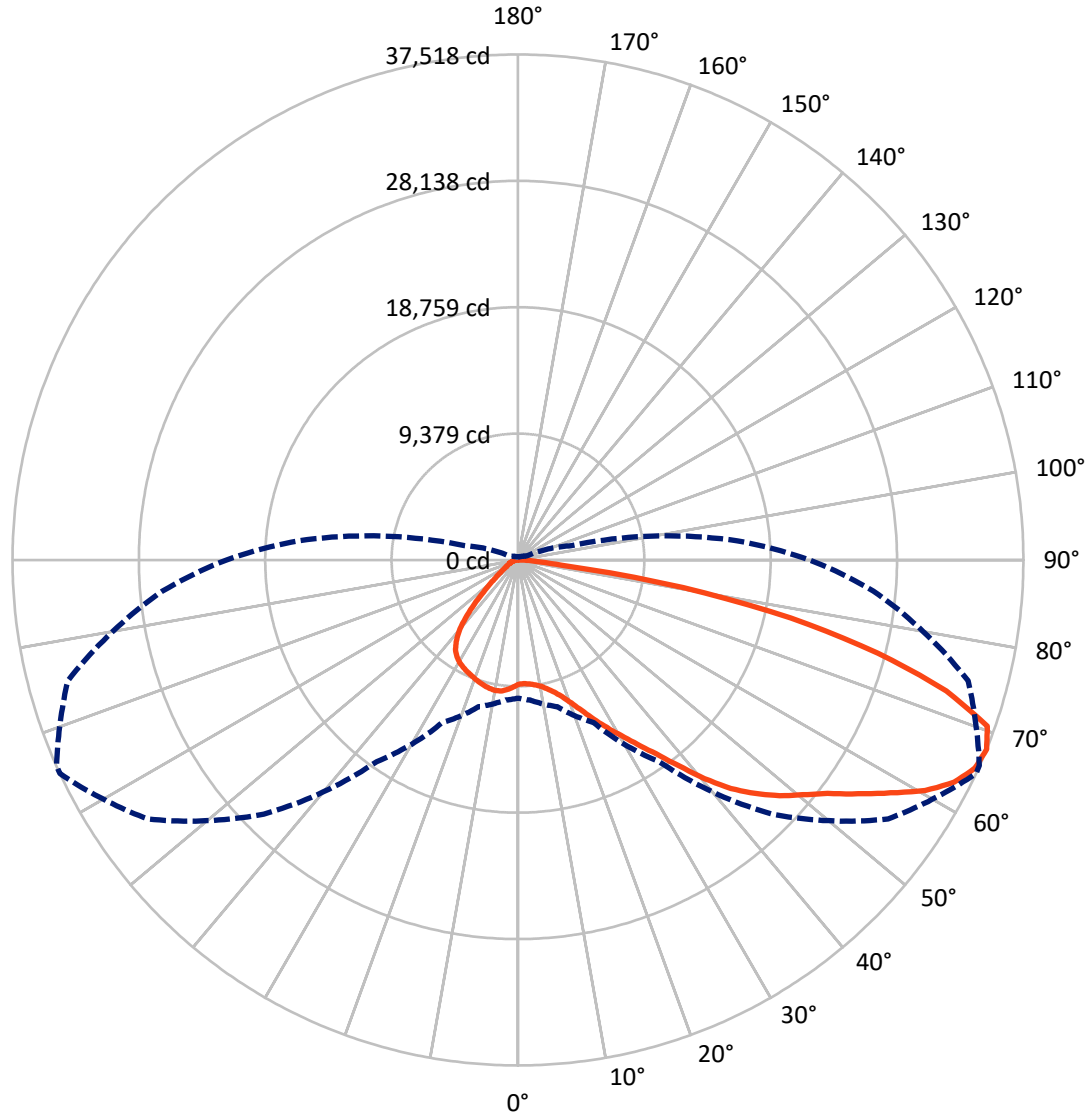
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12 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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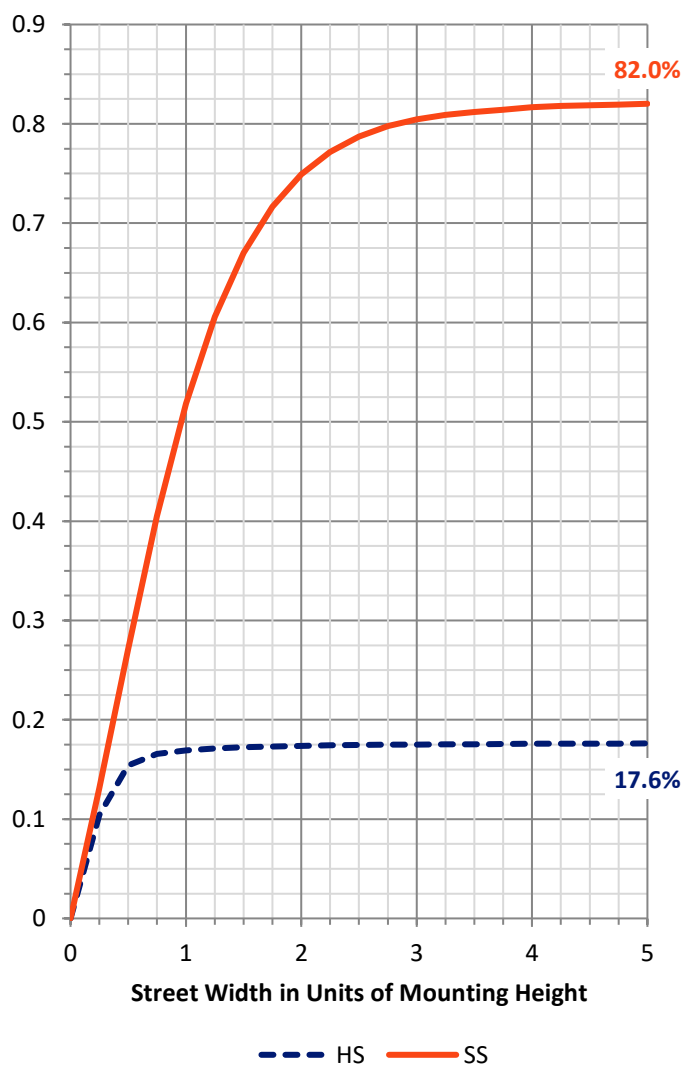
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10834.5	0.0	10834.5
	% Fixture	17.9	0.0	17.9
<b>Street Side</b>	Lumens	49786.5	0.0	49786.5
	% Fixture	82.1	0.0	82.1
<b>Total</b>	Lumens	60621.0	0.0	60621.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	911.3	1.5
10°-20°	2813.7	4.6
20°-30°	4881.1	8.1
30°-40°	7363.1	12.1
40°-50°	10209.5	16.8
50°-60°	12602.3	20.8
60°-70°	13427.5	22.1
70°-80°	7683.4	12.7
80°-90°	729.0	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°	60621.0	100.0
0°-180°	60621.0	100.0

**Coefficient of Utilization**

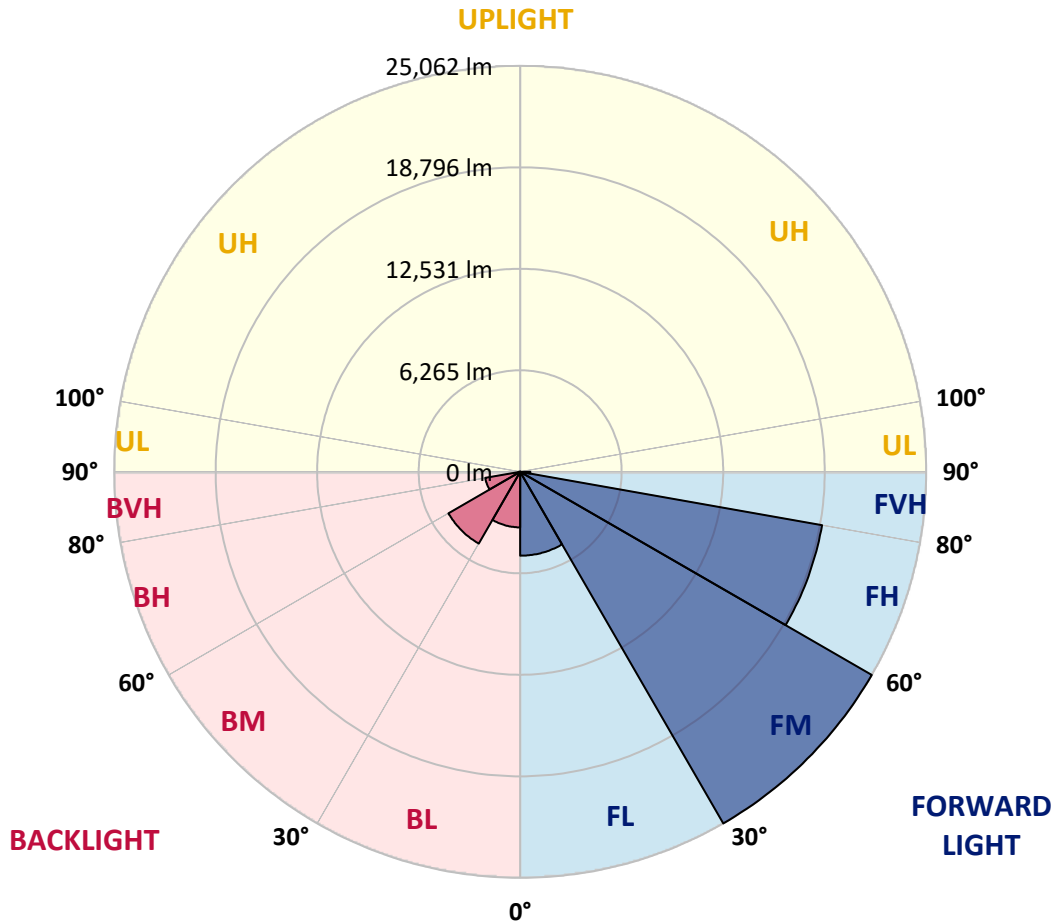


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5177.8	8.5			
FM (30°-60°)	25061.6	41.3			
FH (60°-80°)	18924.2	31.2			G5
FVH (80°-90°)	622.9	1.0			G4/750
BL (0°-30°)	3428.3	5.7	B4/5000		
BM (30°-60°)	5113.3	8.4	B4/8500		
BH (60°-80°)	2186.8	3.6	B3/2500		G3/2500
BVH (80°-90°)	106.1	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°	9211.8	9211.8	9211.8	9211.8	9211.8	9211.8	9211.8	9211.8	9211.8	9211.8	9211.8
2.5°	9122.8	9110.8	9100.2	9118.8	9129.4	9146.7	9171.9	9189.2	9194.5	9210.4	9230.3
5°	9268.9	9267.5	9252.9	9245.0	9222.4	9214.4	9219.7	9241.0	9242.3	9262.2	9324.6
7.5°	9555.7	9553.0	9517.2	9501.2	9453.4	9400.3	9360.5	9364.5	9363.1	9383.1	9466.7
10°	9988.6	9967.3	9916.9	9867.7	9774.8	9675.2	9602.2	9535.8	9535.8	9565.0	9657.9
12.5°	10477.3	10506.5	10437.4	10363.1	10207.7	10028.4	9900.9	9826.6	9818.6	9833.2	9899.6
15°	11084.1	11084.1	11037.6	10931.4	10794.6	10545.0	10282.1	10187.8	10174.5	10205.0	10201.1
17.5°	11768.0	11787.9	11700.3	11647.2	11437.3	11161.1	10831.8	10668.5	10668.5	10648.6	10556.9
20°	12640.4	12531.5	12540.8	12453.2	12299.2	11898.1	11563.5	11325.8	11323.1	11283.3	11025.7
22.5°	13588.6	13528.8	13477.0	13400.0	13187.5	12829.0	12364.2	12129.2	12123.9	12025.6	11643.2
25°	14523.4	14568.6	14511.5	14370.7	14215.3	13824.9	13312.4	13081.3	13080.0	12916.6	12374.9
27.5°	15484.8	15534.0	15515.4	15387.9	15180.7	14875.3	14390.6	14089.2	14070.6	13964.4	13283.1
30°	16547.2	16503.3	16560.4	16506.0	16402.4	15904.5	15466.2	15115.7	15160.8	15129.0	14314.9
32.5°	17320.0	17347.9	17535.1	17540.4	17431.6	17062.4	16527.2	16312.1	16383.8	16341.3	15583.1
35°	18018.5	18063.6	18305.3	18543.0	18622.7	18219.0	17674.6	17661.3	17754.2	18013.2	17330.6
37.5°	18618.7	18650.6	18989.2	19298.6	19556.2	19280.0	18884.3	19355.7	19492.5	20022.3	19133.9
40°	18978.6	19019.7	19458.0	19893.5	20353.0	20254.7	20217.5	21333.0	21461.8	21927.9	20449.9
42.5°	18775.4	18856.4	19586.8	20383.5	21059.4	21256.0	21764.6	23198.7	23346.1	23385.9	21743.3
45°	18412.9	18513.8	19330.5	20619.9	21722.1	22352.8	23320.9	24719.2	24800.2	24687.3	22814.9
47.5°	18022.5	18130.0	19042.3	20549.5	22254.6	23628.9	24711.2	26150.7	26207.8	25861.2	23894.5
50°	17579.0	17678.6	18659.9	20384.8	22655.6	24833.4	26140.0	27388.3	27602.1	26916.9	24733.8
52.5°	17039.8	17146.1	18187.1	20127.2	23007.5	25727.1	27400.2	28786.6	28801.2	28236.8	25679.2
55°	16341.3	16525.9	17593.6	19681.0	23192.1	26494.6	28498.4	30636.4	30730.6	30184.9	26470.7
57.5°	15564.5	15725.2	16879.1	19086.1	23026.1	27077.5	30264.5	32620.3	32608.3	31512.8	27162.5
60°	14538.0	14652.2	15948.3	18308.0	22490.9	27782.7	32103.7	34746.3	34725.0	32814.1	27607.4
62.5°	13220.7	13334.9	14554.0	17087.6	21704.8	28255.4	33351.9	36338.4	36277.3	33760.9	27744.2
65°	11693.6	11898.1	12956.5	15503.4	20314.5	27944.7	33954.8	37275.9	37177.7	34483.3	27417.5
67.5°	10262.1	10436.1	11274.0	13323.0	18262.8	26684.5	33529.9	37517.6	37488.4	34588.2	26494.6
70°	8235.7	8299.5	9067.0	10821.2	15195.3	23986.2	32061.2	36959.9	36973.2	33621.5	24640.8
72.5°	5637.0	5792.4	6133.6	7518.7	11057.6	19075.5	27633.9	33263.0	33265.6	30147.7	21468.4
75°	3031.6	3272.0	3670.4	4356.9	6181.5	12240.7	22192.1	27600.7	27652.5	25136.1	17063.7
77.5°	1503.2	1589.5	1820.6	2330.5	2833.8	5775.1	14272.4	20718.2	20841.6	19294.6	11637.9
80°	687.9	702.5	719.7	715.7	1084.9	2533.7	6127.0	12442.6	12479.8	11475.9	5313.0
82.5°	537.8	535.2	543.1	494.0	496.6	977.3	2120.7	3258.7	3475.2	2735.5	1685.1
85°	325.3	324.0	349.2	270.9	333.3	528.5	1070.3	1300.0	1316.0	1070.3	872.4
87.5°	123.5	119.5	110.2	96.9	111.5	148.7	370.5	478.0	467.4	332.0	301.4
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°	9211.8	9211.8	9211.8	9211.8	9211.8	9211.8	9211.8	9211.8	9211.8	9211.8	9211.8
2.5°	9247.6	9290.1	9368.5	9428.2	9448.1	9511.9	9572.9	9583.6	9627.4	9644.7	9701.8
5°	9363.1	9434.8	9557.0	9638.0	9673.9	9780.1	9849.2	9883.7	9871.7	9878.4	9942.1
7.5°	9531.8	9599.5	9697.8	9796.0	9813.3	9831.9	9825.3	9819.9	9773.5	9733.6	9793.4
10°	9685.8	9749.6	9810.6	9825.3	9737.6	9688.5	9600.8	9533.1	9442.8	9401.6	9449.5
12.5°	9902.3	9915.6	9855.8	9776.1	9587.6	9412.3	9270.2	9146.7	9035.1	8958.1	9021.9
15°	10130.7	10078.9	9904.9	9672.5	9380.4	9129.4	8897.0	8691.2	8506.6	8461.5	8478.7
17.5°	10433.4	10292.7	9942.1	9551.7	9097.6	8707.1	8408.4	8148.1	7906.4	7805.5	7796.2
20°	10802.6	10575.5	10017.8	9399.0	8762.9	8243.7	7781.6	7392.5	7059.2	6785.7	6792.3
22.5°	11283.3	10954.0	10132.0	9239.6	8392.4	7700.6	7028.7	6367.4	5818.9	5582.6	5524.1
25°	11918.1	11426.7	10294.0	9094.9	7978.1	7010.1	6060.6	5127.1	4546.8	4317.1	4291.8
27.5°	12708.2	12061.5	10541.0	8934.2	7534.6	6190.7	4825.6	3910.7	3378.2	3136.5	3055.5
30°	13605.8	12843.6	10794.6	8766.9	6998.1	5137.7	3679.7	2783.3	2237.5	2021.1	1993.2
32.5°	14767.8	13834.2	11171.8	8504.0	6214.6	4038.2	2566.9	1736.9	1366.4	1273.5	1246.9
35°	16418.4	15174.1	11637.9	8172.0	5208.1	2820.5	1590.8	1017.2	819.3	772.8	763.6
37.5°	17957.4	16488.7	12107.9	7620.9	3954.5	1760.8	909.6	652.0	608.2	609.5	612.2
40°	19177.8	17387.7	12487.7	6895.9	2601.4	999.9	632.1	541.8	543.1	539.1	536.5
42.5°	20264.0	18104.8	12659.0	5824.2	1507.2	669.3	548.4	499.3	487.3	491.3	488.7
45°	21163.0	18836.5	12327.0	4619.8	888.4	600.2	517.9	463.4	450.2	471.4	474.1
47.5°	22108.5	19531.0	11818.5	3480.5	721.1	571.0	490.0	436.9	430.2	456.8	459.5
50°	22903.9	20034.3	10951.3	2622.6	687.9	539.1	464.8	410.3	409.0	432.9	432.9
52.5°	23569.2	20338.4	9922.2	2025.1	665.3	511.2	439.5	385.1	385.1	393.1	394.4
55°	24037.9	20277.3	9308.7	1593.5	641.4	484.7	413.0	361.2	345.3	339.9	342.6
57.5°	24122.9	20115.3	8596.9	1242.9	613.5	459.5	389.1	333.3	304.1	300.1	298.8
60°	24068.5	19759.4	7784.2	1038.4	581.6	435.6	365.2	304.1	274.9	265.6	268.2
62.5°	23841.4	19128.6	6845.4	911.0	549.8	417.0	338.6	284.2	257.6	245.7	245.7
65°	23156.2	18225.7	5451.1	798.1	509.9	397.0	317.4	276.2	247.0	233.7	231.1
67.5°	21650.4	16352.0	4096.6	699.8	471.4	375.8	314.7	274.9	241.7	223.1	220.4
70°	19630.6	14046.7	2796.6	614.8	428.9	355.9	313.4	276.2	236.4	212.5	209.8
72.5°	16387.8	11073.5	1610.8	535.2	386.4	337.3	308.1	277.5	227.1	197.9	193.9
75°	12313.8	7767.0	945.5	459.5	345.3	309.4	293.5	269.6	212.5	180.6	176.6
77.5°	7405.8	3626.5	711.8	381.1	296.1	272.2	261.6	247.0	193.9	167.3	163.3
80°	2716.9	1377.0	559.1	305.4	235.0	236.4	225.7	216.5	176.6	154.0	151.4
82.5°	1184.5	841.9	413.0	232.4	184.6	211.1	185.9	177.9	151.4	138.1	132.8
85°	718.4	502.0	265.6	158.0	127.5	143.4	130.1	136.8	116.9	108.9	104.9
87.5°	237.7	150.1	118.2	77.0	63.7	59.8	58.4	70.4	66.4	61.1	61.1
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)