

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: P721910

Luminaire Tested: **CST-CA8-430-730-U-T3-HSS**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721910  
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-CA8-430-730-U-T3-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

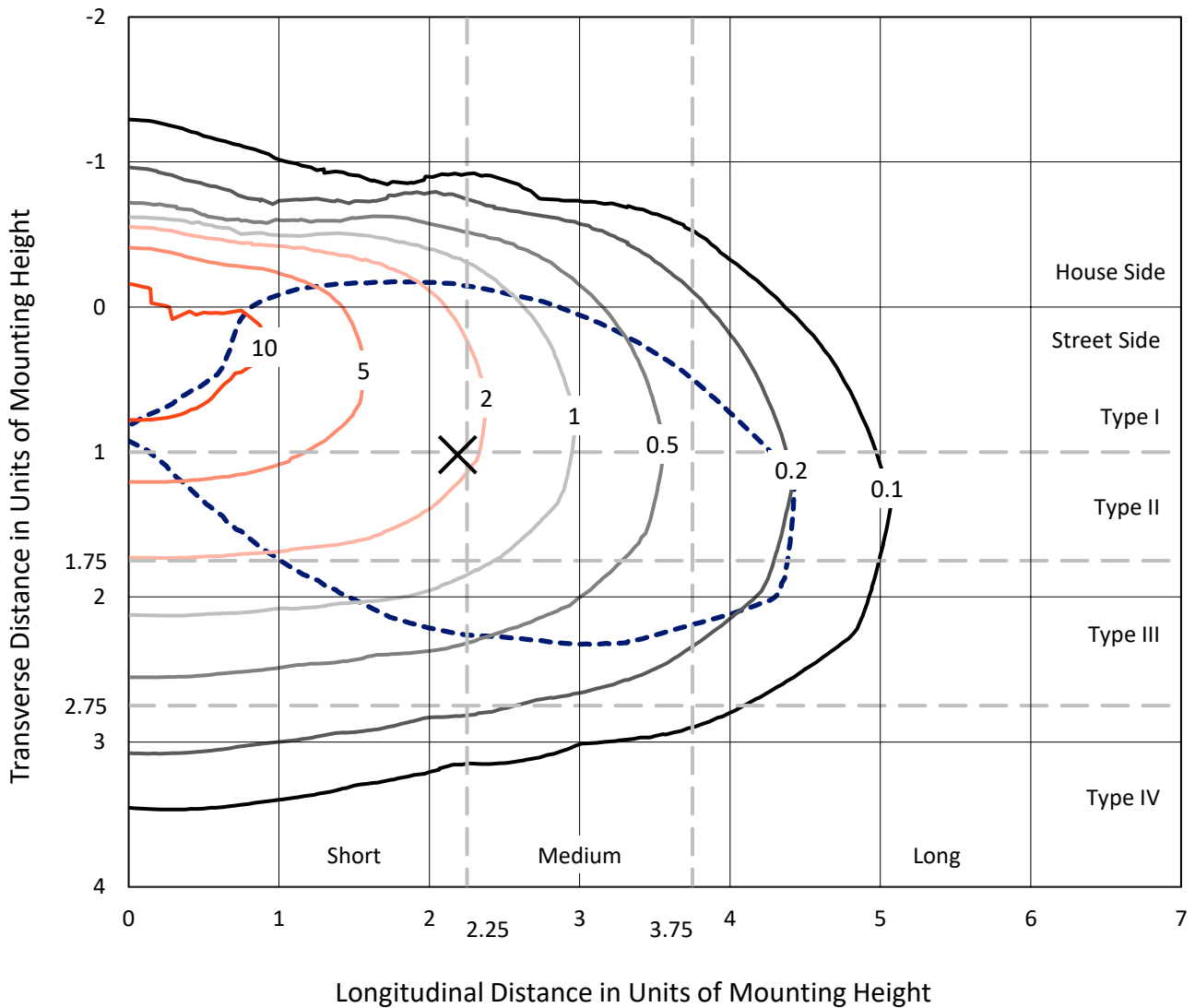
Lumens per Lamp: N/A  
Luminaire Lumens: 59718 lumens  
Efficiency: N/A  
Efficacy: 137.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 434.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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

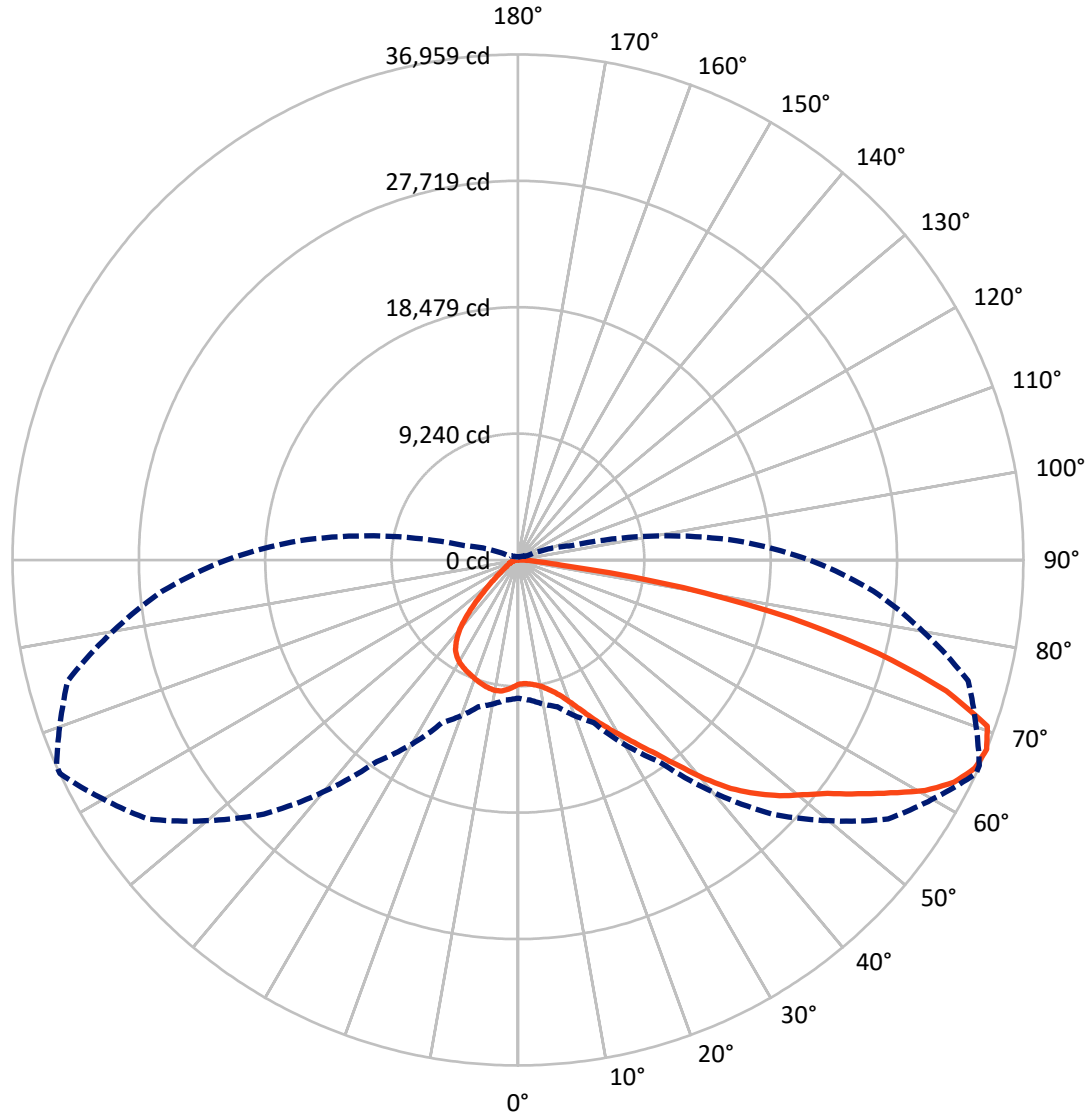
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.9 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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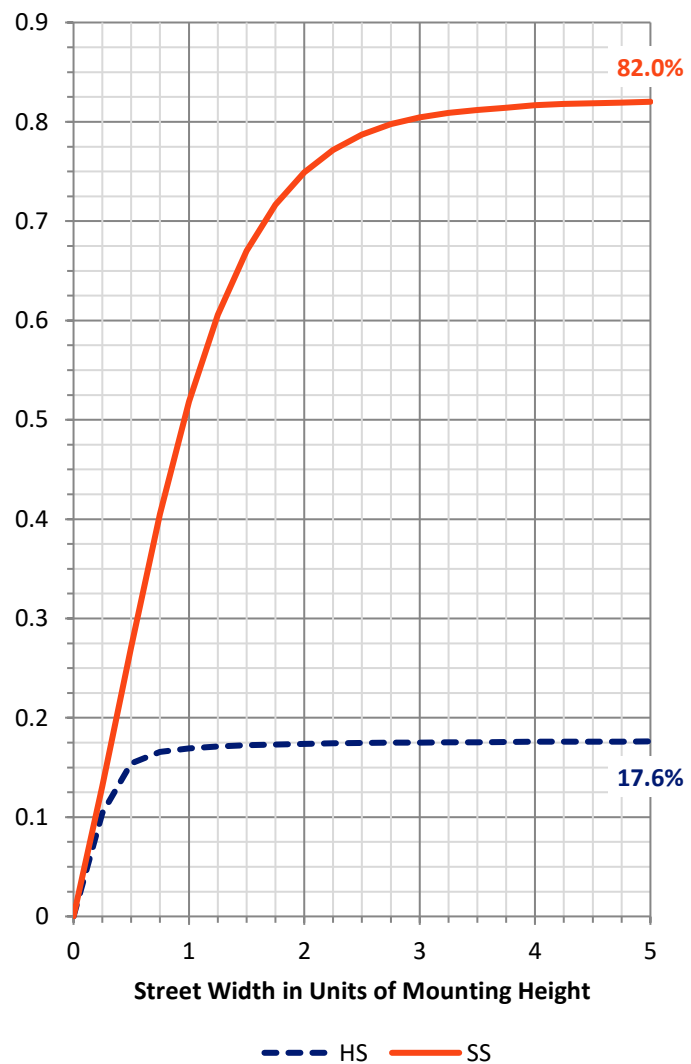
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10673.1	0.0	10673.1
	% Fixture	17.9	0.0	17.9
<b>Street Side</b>	Lumens	49044.9	0.0	49044.9
	% Fixture	82.1	0.0	82.1
<b>Total</b>	Lumens	59718.0	0.0	59718.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	897.8	1.5
10°-20°	2771.8	4.6
20°-30°	4808.4	8.1
30°-40°	7253.4	12.1
40°-50°	10057.4	16.8
50°-60°	12414.6	20.8
60°-70°	13227.5	22.1
70°-80°	7569.0	12.7
80°-90°	718.1	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°	59718.0	100.0
0°-180°	59718.0	100.0

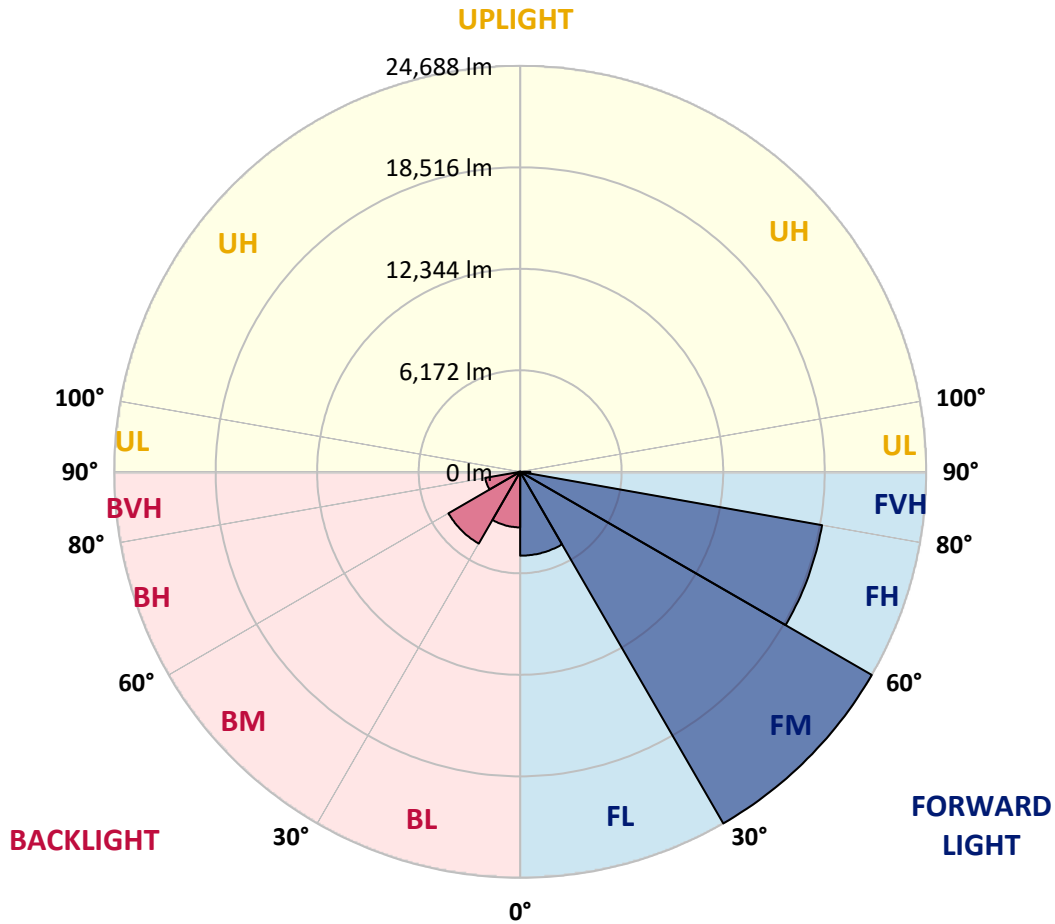


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5100.7	8.5			
FM (30°-60°)	24688.3	41.3			
FH (60°-80°)	18642.3	31.2			G5
FVH (80°-90°)	613.6	1.0			G4/750
BL (0°-30°)	3377.2	5.7	B4/5000		
BM (30°-60°)	5037.1	8.4	B4/8500		
BH (60°-80°)	2154.2	3.6	B3/2500		G3/2500
BVH (80°-90°)	104.5	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°	9074.5	9074.5	9074.5	9074.5	9074.5	9074.5	9074.5	9074.5	9074.5	9074.5	9074.5
2.5°	8986.9	8975.1	8964.7	8983.0	8993.4	9010.4	9035.3	9052.3	9057.5	9073.2	9092.9
5°	9130.8	9129.5	9115.1	9107.2	9085.0	9077.2	9082.4	9103.3	9104.6	9124.2	9185.7
7.5°	9413.3	9410.7	9375.4	9359.7	9312.6	9260.3	9221.1	9225.0	9223.7	9243.3	9325.7
10°	9839.8	9818.9	9769.2	9720.8	9629.2	9531.1	9459.1	9393.7	9393.7	9422.5	9514.1
12.5°	10321.2	10350.0	10281.9	10208.7	10055.6	9879.0	9753.5	9680.2	9672.4	9686.7	9752.2
15°	10919.0	10919.0	10873.2	10768.6	10633.8	10387.9	10128.9	10036.0	10022.9	10053.0	10049.1
17.5°	11592.7	11612.3	11526.0	11473.7	11267.0	10994.9	10670.5	10509.6	10509.6	10489.9	10399.7
20°	12452.1	12344.9	12354.0	12267.7	12116.0	11720.9	11391.2	11157.1	11154.5	11115.2	10861.5
22.5°	13386.2	13327.3	13276.3	13200.4	12991.1	12637.9	12180.1	11948.5	11943.3	11846.5	11469.7
25°	14307.1	14351.6	14295.3	14156.6	14003.6	13619.0	13114.1	12886.4	12885.1	12724.2	12190.5
27.5°	15254.2	15302.6	15284.3	15158.7	14954.6	14653.7	14176.3	13879.3	13861.0	13756.4	13085.3
30°	16300.7	16257.5	16313.8	16260.1	16158.1	15667.5	15235.9	14890.5	14935.0	14903.6	14101.7
32.5°	17062.0	17089.5	17273.9	17279.2	17171.9	16808.2	16281.1	16069.1	16139.8	16097.9	15351.0
35°	17750.1	17794.6	18032.7	18266.8	18345.3	17947.6	17411.3	17398.2	17489.8	17744.9	17072.5
37.5°	18341.4	18372.8	18706.3	19011.1	19264.9	18992.8	18603.0	19067.4	19202.1	19724.1	18848.9
40°	18695.9	18736.4	19168.1	19597.2	20049.8	19953.0	19916.4	21015.2	21142.1	21601.3	20145.3
42.5°	18495.7	18575.5	19295.0	20079.9	20745.7	20939.3	21440.3	22853.1	22998.3	23037.6	21419.4
45°	18138.6	18238.0	19042.5	20312.7	21398.5	22019.9	22973.5	24351.0	24430.7	24319.6	22475.1
47.5°	17754.0	17860.0	18758.7	20243.4	21923.1	23277.0	24343.1	25761.1	25817.4	25475.9	23538.6
50°	17317.1	17415.2	18381.9	20081.2	22318.1	24463.5	25750.7	26980.3	27190.9	26515.9	24365.3
52.5°	16786.0	16890.7	17916.2	19827.4	22664.8	25343.8	26992.1	28357.8	28372.2	27816.2	25296.7
55°	16097.9	16279.8	17331.5	19387.9	22846.6	26099.9	28073.9	30180.0	30272.9	29735.2	26076.4
57.5°	15332.7	15490.9	16627.7	18801.8	22683.1	26674.2	29813.7	32134.4	32122.6	31043.4	26757.9
60°	14321.5	14434.0	15710.7	18035.3	22155.9	27368.8	31625.5	34228.7	34207.8	32325.3	27196.1
62.5°	13023.8	13136.3	14337.2	16833.1	21381.5	27834.5	32855.1	35797.1	35737.0	33258.1	27330.9
65°	11519.4	11720.9	12763.5	15272.5	20011.9	27528.4	33449.0	36720.7	36623.9	33969.7	27009.1
67.5°	10109.3	10280.6	11106.1	13124.5	17990.8	26287.0	33030.4	36958.8	36930.0	34073.0	26099.9
70°	8113.1	8175.9	8932.0	10660.0	14969.0	23628.9	31583.6	36409.4	36422.4	33120.7	24273.8
72.5°	5553.0	5706.1	6042.3	7406.7	10892.8	18791.4	27222.3	32767.5	32770.1	29698.6	21148.6
75°	2986.5	3223.2	3615.7	4292.0	6089.4	12058.4	21861.6	27189.6	27240.6	24761.7	16809.5
77.5°	1480.8	1565.8	1793.5	2295.8	2791.6	5689.1	14059.8	20409.5	20531.2	19007.2	11464.5
80°	677.6	692.0	709.0	705.1	1068.7	2495.9	6035.7	12257.2	12293.9	11304.9	5233.9
82.5°	529.8	527.2	535.0	486.6	489.2	962.8	2089.1	3210.2	3423.4	2694.8	1660.0
85°	320.5	319.2	344.0	266.9	328.3	520.6	1054.4	1280.7	1296.4	1054.4	859.4
87.5°	121.7	117.7	108.6	95.5	109.9	146.5	365.0	470.9	460.5	327.0	296.9
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°	9074.5	9074.5	9074.5	9074.5	9074.5	9074.5	9074.5	9074.5	9074.5	9074.5	9074.5
2.5°	9109.9	9151.7	9228.9	9287.8	9307.4	9370.2	9430.4	9440.8	9484.0	9501.0	9557.2
5°	9223.7	9294.3	9414.7	9494.5	9529.8	9634.4	9702.4	9736.5	9724.7	9731.2	9794.0
7.5°	9389.8	9456.5	9553.3	9650.1	9667.1	9685.4	9678.9	9673.7	9627.9	9588.6	9647.5
10°	9541.5	9604.3	9664.5	9678.9	9592.6	9544.2	9457.8	9391.1	9302.2	9261.6	9308.7
12.5°	9754.8	9767.9	9709.0	9630.5	9444.7	9272.1	9132.1	9010.4	8900.6	8824.7	8887.5
15°	9979.8	9928.8	9757.4	9528.5	9240.7	8993.4	8764.5	8561.8	8379.9	8335.4	8352.4
17.5°	10278.0	10139.4	9794.0	9409.4	8962.0	8577.4	8283.1	8026.7	7788.6	7689.2	7680.1
20°	10641.7	10418.0	9868.6	9259.0	8632.4	8120.9	7665.7	7282.4	6954.1	6684.6	6691.1
22.5°	11115.2	10790.8	9981.1	9102.0	8267.4	7585.9	6924.0	6272.5	5732.3	5499.4	5441.8
25°	11740.5	11256.5	10140.7	8959.4	7859.3	6905.7	5970.3	5050.7	4479.1	4252.8	4227.9
27.5°	12518.9	11881.8	10384.0	8801.1	7422.4	6098.5	4753.8	3852.5	3327.9	3089.8	3010.0
30°	13403.2	12652.3	10633.8	8636.3	6893.9	5061.2	3624.8	2741.9	2204.2	1991.0	1963.5
32.5°	14547.8	13628.2	11005.3	8377.3	6122.1	3978.0	2528.6	1711.0	1346.1	1254.5	1228.3
35°	16173.8	14948.1	11464.5	8050.3	5130.5	2778.5	1567.1	1002.0	807.1	761.3	752.2
37.5°	17689.9	16243.1	11927.6	7507.4	3895.6	1734.6	896.1	642.3	599.1	600.4	603.1
40°	18892.1	17128.7	12301.7	6793.2	2562.6	985.0	622.7	533.7	535.0	531.1	528.5
42.5°	19962.2	17835.1	12470.5	5737.5	1484.7	659.3	540.3	491.9	480.1	484.0	481.4
45°	20847.8	18555.9	12143.4	4551.0	875.1	591.3	510.2	456.5	443.5	464.4	467.0
47.5°	21779.2	19240.1	11642.4	3428.6	710.3	562.5	482.7	430.4	423.8	450.0	452.6
50°	22562.7	19735.8	10788.2	2583.6	677.6	531.1	457.8	404.2	402.9	426.5	426.5
52.5°	23218.1	20035.4	9774.4	1994.9	655.4	503.6	433.0	379.4	379.4	387.2	388.5
55°	23679.9	19975.2	9170.0	1569.8	631.8	477.5	406.8	355.8	340.1	334.9	337.5
57.5°	23763.6	19815.6	8468.9	1224.4	604.4	452.6	383.3	328.3	299.6	295.6	294.3
60°	23710.0	19465.1	7668.3	1023.0	573.0	429.1	359.7	299.6	270.8	261.6	264.2
62.5°	23486.3	18843.7	6743.4	897.4	541.6	410.8	333.6	279.9	253.8	242.0	242.0
65°	22811.3	17954.2	5369.9	786.2	502.3	391.1	312.6	272.1	243.3	230.2	227.6
67.5°	21327.9	16108.4	4035.6	689.4	464.4	370.2	310.0	270.8	238.1	219.8	217.2
70°	19338.2	13837.5	2754.9	605.7	422.5	350.6	308.7	272.1	232.8	209.3	206.7
72.5°	16143.7	10908.5	1586.8	527.2	380.7	332.3	303.5	273.4	223.7	194.9	191.0
75°	12130.3	7651.3	931.4	452.6	340.1	304.8	289.1	265.6	209.3	177.9	174.0
77.5°	7295.5	3572.5	701.2	375.4	291.7	268.2	257.7	243.3	191.0	164.8	160.9
80°	2676.4	1356.5	550.7	300.9	231.5	232.8	222.4	213.2	174.0	151.7	149.1
82.5°	1166.9	829.4	406.8	228.9	181.8	208.0	183.1	175.3	149.1	136.0	130.8
85°	707.7	494.5	261.6	155.7	125.6	141.3	128.2	134.7	115.1	107.3	103.3
87.5°	234.2	147.8	116.4	75.9	62.8	58.9	57.6	69.3	65.4	60.2	60.2
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)