

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: P721850

Luminaire Tested: **CST-CA8-400-730-U-T3-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721850
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-CA8-400-730-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: 55622 lumens
Efficiency: N/A
Efficacy: 138.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

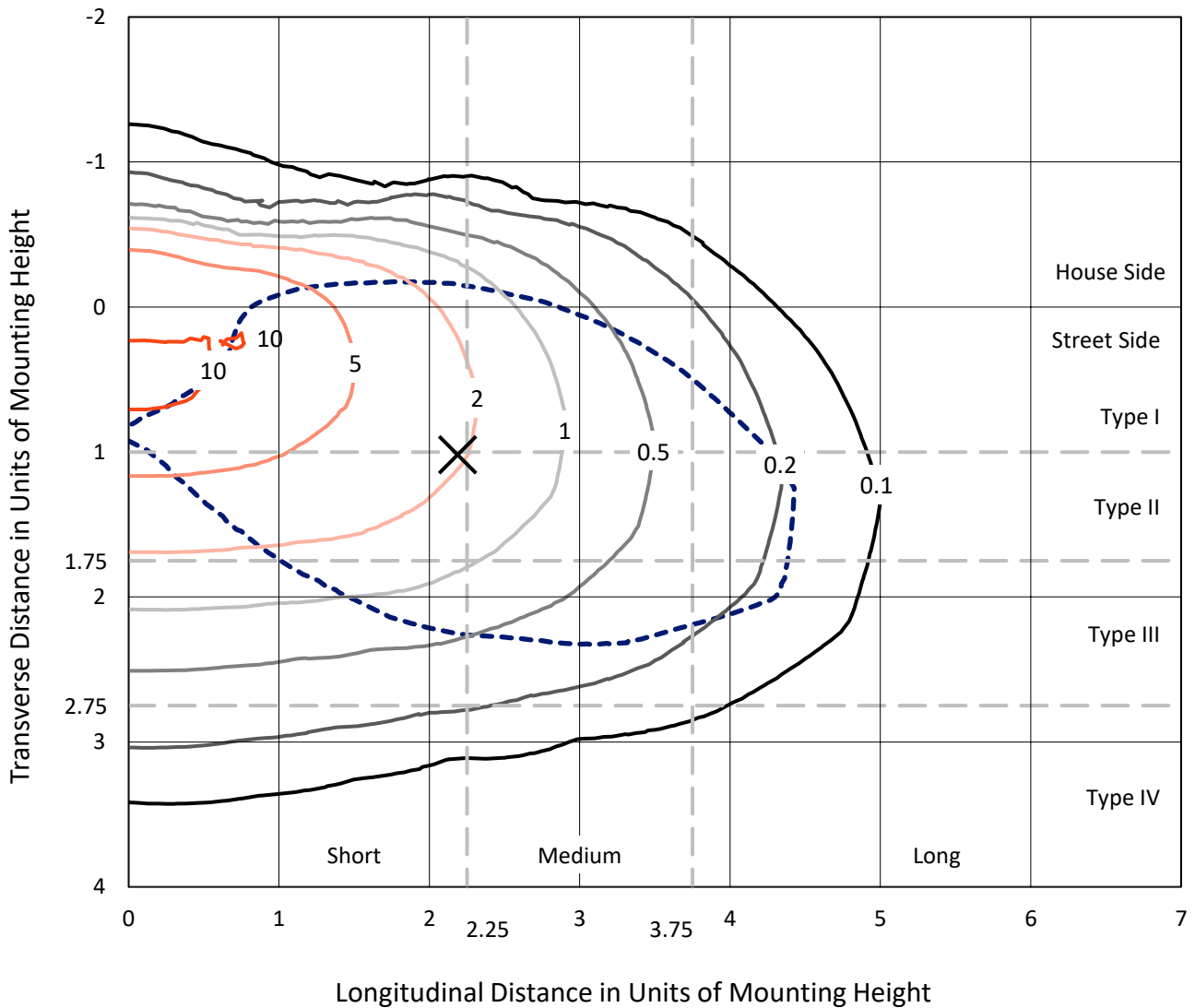
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

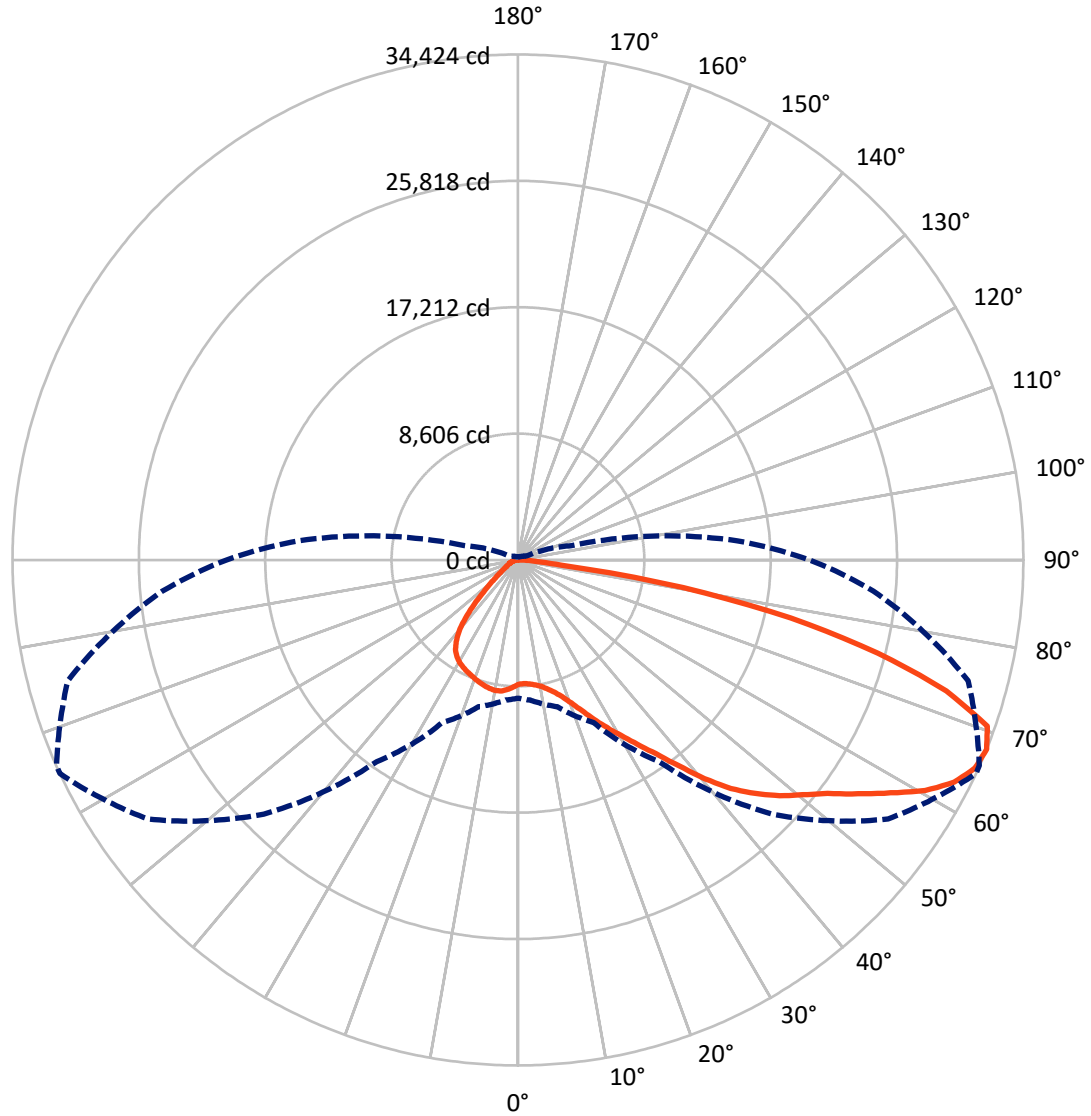
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11 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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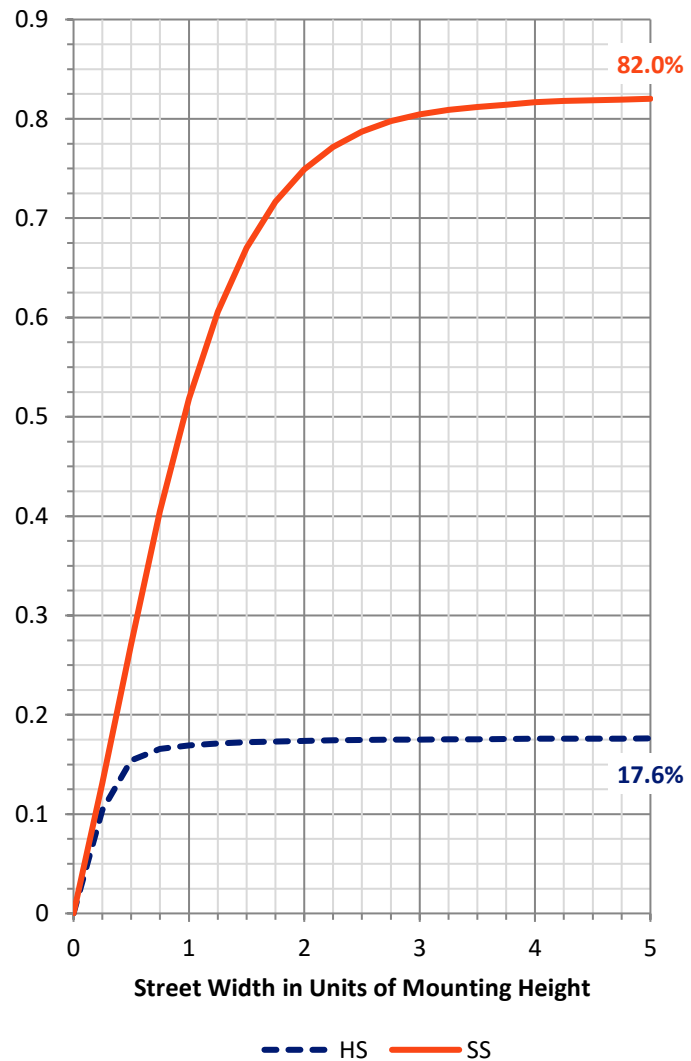
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9941.0	0.0	9941.0
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	45681.0	0.0	45681.0
	% Fixture	82.1	0.0	82.1
Total	Lumens	55622.0	0.0	55622.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	836.2	1.5
10°-20°	2581.6	4.6
20°-30°	4478.6	8.1
30°-40°	6755.9	12.1
40°-50°	9367.6	16.8
50°-60°	11563.0	20.8
60°-70°	12320.2	22.1
70°-80°	7049.8	12.7
80°-90°	668.9	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°	55622.0	100.0
0°-180°	55622.0	100.0

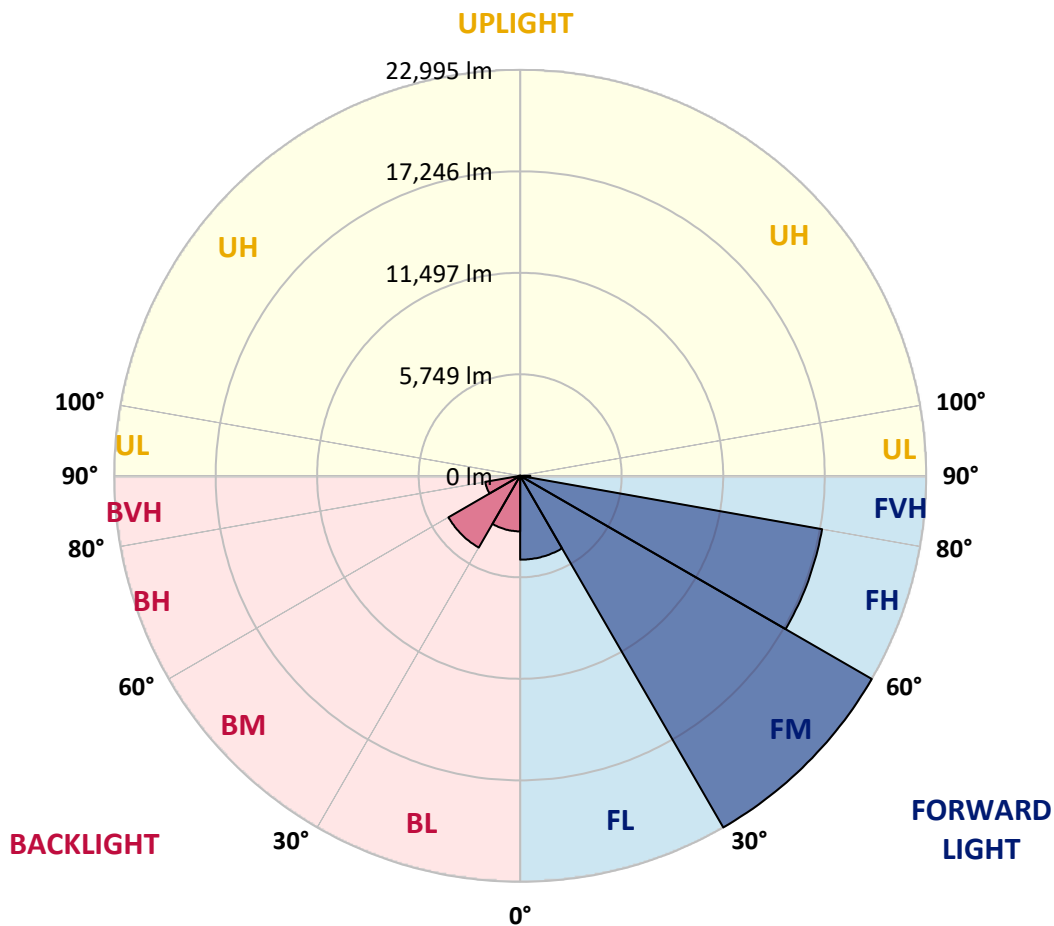


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4750.9	8.5			
FM (30°-60°)	22994.9	41.3			
FH (60°-80°)	17363.7	31.2			G5
FVH (80°-90°)	571.5	1.0			G4/750
BL (0°-30°)	3145.6	5.7	B4/5000		
BM (30°-60°)	4691.6	8.4	B3/5000		
BH (60°-80°)	2006.4	3.6	B3/2500		G3/2500
BVH (80°-90°)	97.4	0.2			G1/100
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°	8452.1	8452.1	8452.1	8452.1	8452.1	8452.1	8452.1	8452.1	8452.1	8452.1	8452.1
2.5°	8370.5	8359.5	8349.8	8366.8	8376.6	8392.4	8415.6	8431.4	8436.3	8450.9	8469.2
5°	8504.5	8503.3	8489.9	8482.6	8461.9	8454.6	8459.4	8478.9	8480.1	8498.4	8555.7
7.5°	8767.7	8765.3	8732.4	8717.7	8673.9	8625.1	8588.6	8592.2	8591.0	8609.3	8686.1
10°	9164.9	9145.4	9099.1	9054.0	8968.7	8877.4	8810.3	8749.4	8749.4	8776.2	8861.5
12.5°	9613.3	9640.1	9576.7	9508.5	9365.9	9201.4	9084.5	9016.3	9008.9	9022.3	9083.3
15°	10170.1	10170.1	10127.4	10030.0	9904.5	9675.4	9434.2	9347.7	9335.5	9363.5	9359.8
17.5°	10797.6	10815.8	10735.4	10686.7	10494.2	10240.8	9938.6	9788.7	9788.7	9770.4	9686.4
20°	11598.1	11498.2	11506.7	11426.3	11284.9	10917.0	10609.9	10391.8	10389.4	10352.8	10116.5
22.5°	12468.0	12413.2	12365.7	12295.0	12100.1	11771.1	11344.6	11129.0	11124.1	11033.9	10683.0
25°	13325.8	13367.2	13314.8	13185.7	13043.1	12684.9	12214.6	12002.6	12001.4	11851.5	11354.4
27.5°	14207.9	14253.0	14235.9	14119.0	13928.9	13648.7	13203.9	12927.4	12910.3	12812.8	12187.8
30°	15182.6	15142.4	15194.8	15144.9	15049.8	14592.9	14190.8	13869.2	13910.6	13881.4	13134.5
32.5°	15891.8	15917.3	16089.1	16094.0	15994.1	15655.4	15164.4	14967.0	15032.8	14993.8	14298.1
35°	16532.6	16574.1	16795.8	17013.9	17087.0	16716.6	16217.1	16204.9	16290.2	16527.8	15901.5
37.5°	17083.4	17112.6	17423.3	17707.2	17943.6	17690.1	17327.0	17759.6	17885.1	18371.2	17556.1
40°	17413.5	17451.3	17853.4	18253.0	18674.6	18584.4	18550.3	19573.8	19692.0	20119.6	18763.5
42.5°	17227.1	17301.5	17971.6	18702.6	19322.8	19503.1	19969.8	21285.7	21420.9	21457.5	19950.3
45°	16894.5	16987.1	17736.4	18919.5	19930.8	20509.5	21397.8	22680.7	22755.1	22651.5	20933.5
47.5°	16536.3	16635.0	17472.0	18854.9	20419.4	21680.4	22673.4	23994.2	24046.6	23728.6	21924.1
50°	16129.3	16220.7	17121.1	18703.8	20787.3	22785.5	23984.4	25129.8	25325.9	24697.2	22694.1
52.5°	15634.7	15732.1	16687.4	18467.5	21110.2	23605.5	25140.7	26412.7	26426.1	25908.3	23561.7
55°	14993.8	15163.1	16142.7	18058.1	21279.6	24309.8	26148.3	28110.0	28196.5	27695.7	24287.8
57.5°	14281.0	14428.4	15487.2	17512.2	21127.3	24844.6	27768.8	29930.3	29919.3	28914.1	24922.6
60°	13339.2	13444.0	14633.1	16798.2	20636.2	25491.6	29456.3	31881.0	31861.5	30108.2	25330.8
62.5°	12130.5	12235.3	13353.8	15678.5	19914.9	25925.4	30601.6	33341.9	33285.8	30976.9	25456.3
65°	10729.3	10917.0	11888.0	14225.0	18639.3	25640.3	31154.8	34202.1	34111.9	31639.7	25156.6
67.5°	9415.9	9575.5	10344.3	12224.3	16756.8	24484.0	30764.9	34423.8	34397.0	31736.0	24309.8
70°	7556.6	7615.1	8319.3	9928.8	13942.3	22008.2	29417.3	33912.1	33924.3	30849.0	22608.9
72.5°	5172.2	5314.7	5627.8	6898.7	10145.7	17502.5	25355.2	30520.0	30522.4	27661.6	19698.1
75°	2781.6	3002.2	3367.7	3997.6	5671.7	11231.3	20362.1	25324.7	25372.2	23063.3	15656.6
77.5°	1379.2	1458.4	1670.4	2138.3	2600.1	5298.9	13095.5	19009.7	19123.0	17703.5	10678.2
80°	631.1	644.5	660.4	656.7	995.4	2324.7	5621.8	11416.5	11450.6	10529.5	4874.9
82.5°	493.5	491.0	498.3	453.2	455.7	896.8	1945.8	2990.0	3188.6	2509.9	1546.2
85°	298.5	297.3	320.4	248.6	305.8	484.9	982.0	1192.8	1207.4	982.0	800.5
87.5°	113.3	109.7	101.1	88.9	102.3	136.5	339.9	438.6	428.9	304.6	276.6
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°	8452.1	8452.1	8452.1	8452.1	8452.1	8452.1	8452.1	8452.1	8452.1	8452.1	8452.1
2.5°	8485.0	8524.0	8595.9	8650.7	8669.0	8727.5	8783.5	8793.3	8833.5	8849.3	8901.7
5°	8591.0	8656.8	8768.9	8843.2	8876.1	8973.6	9037.0	9068.6	9057.7	9063.8	9122.3
7.5°	8745.8	8807.9	8898.1	8988.2	9004.1	9021.1	9015.0	9010.2	8967.5	8931.0	8985.8
10°	8887.1	8945.6	9001.6	9015.0	8934.6	8889.5	8809.1	8747.0	8664.1	8626.4	8670.2
12.5°	9085.7	9097.9	9043.1	8970.0	8796.9	8636.1	8505.7	8392.4	8290.1	8219.4	8277.9
15°	9295.3	9247.7	9088.1	8874.9	8606.9	8376.6	8163.4	7974.5	7805.1	7763.7	7779.6
17.5°	9573.1	9443.9	9122.3	8764.0	8347.3	7989.1	7715.0	7476.2	7254.4	7161.8	7153.3
20°	9911.8	9703.4	9191.7	8623.9	8040.3	7563.9	7139.9	6782.9	6477.1	6226.1	6232.2
22.5°	10352.8	10050.7	9296.5	8477.7	7700.4	7065.6	6449.1	5842.3	5339.1	5122.2	5068.6
25°	10935.3	10484.4	9445.1	8344.9	7320.2	6432.0	5560.8	4704.3	4171.8	3961.1	3937.9
27.5°	11660.2	11066.8	9671.8	8197.5	6913.3	5680.2	4427.7	3588.2	3099.6	2877.9	2803.6
30°	12483.9	11784.5	9904.5	8044.0	6421.0	4714.0	3376.2	2553.8	2053.0	1854.4	1828.8
32.5°	13550.0	12693.4	10250.5	7802.7	5702.2	3705.2	2355.2	1593.7	1253.7	1168.5	1144.1
35°	15064.4	13922.8	10678.2	7498.1	4778.6	2587.9	1459.7	933.3	751.8	709.1	700.6
37.5°	16476.6	15129.0	11109.5	6992.5	3628.4	1615.6	834.6	598.2	558.0	559.3	561.7
40°	17596.3	15953.9	11457.9	6327.2	2386.9	917.5	580.0	497.1	498.3	494.7	492.2
42.5°	18593.0	16611.8	11615.1	5344.0	1382.9	614.1	503.2	458.1	447.2	450.8	448.4
45°	19417.8	17283.2	11310.5	4238.9	815.1	550.7	475.2	425.2	413.0	432.5	435.0
47.5°	20285.3	17920.4	10843.9	3193.5	661.6	523.9	449.6	400.9	394.8	419.1	421.6
50°	21015.2	18382.2	10048.2	2406.4	631.1	494.7	426.4	376.5	375.3	397.2	397.2
52.5°	21625.6	18661.2	9104.0	1858.1	610.4	469.1	403.3	353.3	353.3	360.7	361.9
55°	22055.7	18605.2	8541.1	1462.1	588.5	444.7	378.9	331.4	316.8	311.9	314.4
57.5°	22133.7	18456.5	7888.0	1140.4	562.9	421.6	357.0	305.8	279.0	275.4	274.1
60°	22083.7	18130.0	7142.3	952.8	533.7	399.6	335.1	279.0	252.2	243.7	246.1
62.5°	21875.4	17551.2	6280.9	835.8	504.4	382.6	310.7	260.7	236.4	225.4	225.4
65°	21246.7	16722.7	5001.6	732.3	467.9	364.3	291.2	253.4	226.6	214.4	212.0
67.5°	19865.0	15003.5	3758.8	642.1	432.5	344.8	288.8	252.2	221.8	204.7	202.3
70°	18011.8	12888.4	2566.0	564.1	393.5	326.5	287.5	253.4	216.9	194.9	192.5
72.5°	15036.4	10160.3	1477.9	491.0	354.6	309.5	282.7	254.6	208.3	181.5	177.9
75°	11298.3	7126.5	867.5	421.6	316.8	283.9	269.3	247.3	194.9	165.7	162.0
77.5°	6795.1	3327.5	653.1	349.7	271.7	249.8	240.0	226.6	177.9	153.5	149.9
80°	2492.9	1263.5	513.0	280.2	215.7	216.9	207.1	198.6	162.0	141.3	138.9
82.5°	1086.8	772.5	378.9	213.2	169.4	193.7	170.6	163.3	138.9	126.7	121.8
85°	659.2	460.6	243.7	145.0	117.0	131.6	119.4	125.5	107.2	99.9	96.3
87.5°	218.1	137.7	108.4	70.7	58.5	54.8	53.6	64.6	60.9	56.0	56.0
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)