

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: P510526

Luminaire Tested: **CST-CA10-630-727-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510526
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-630-727-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 71113 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

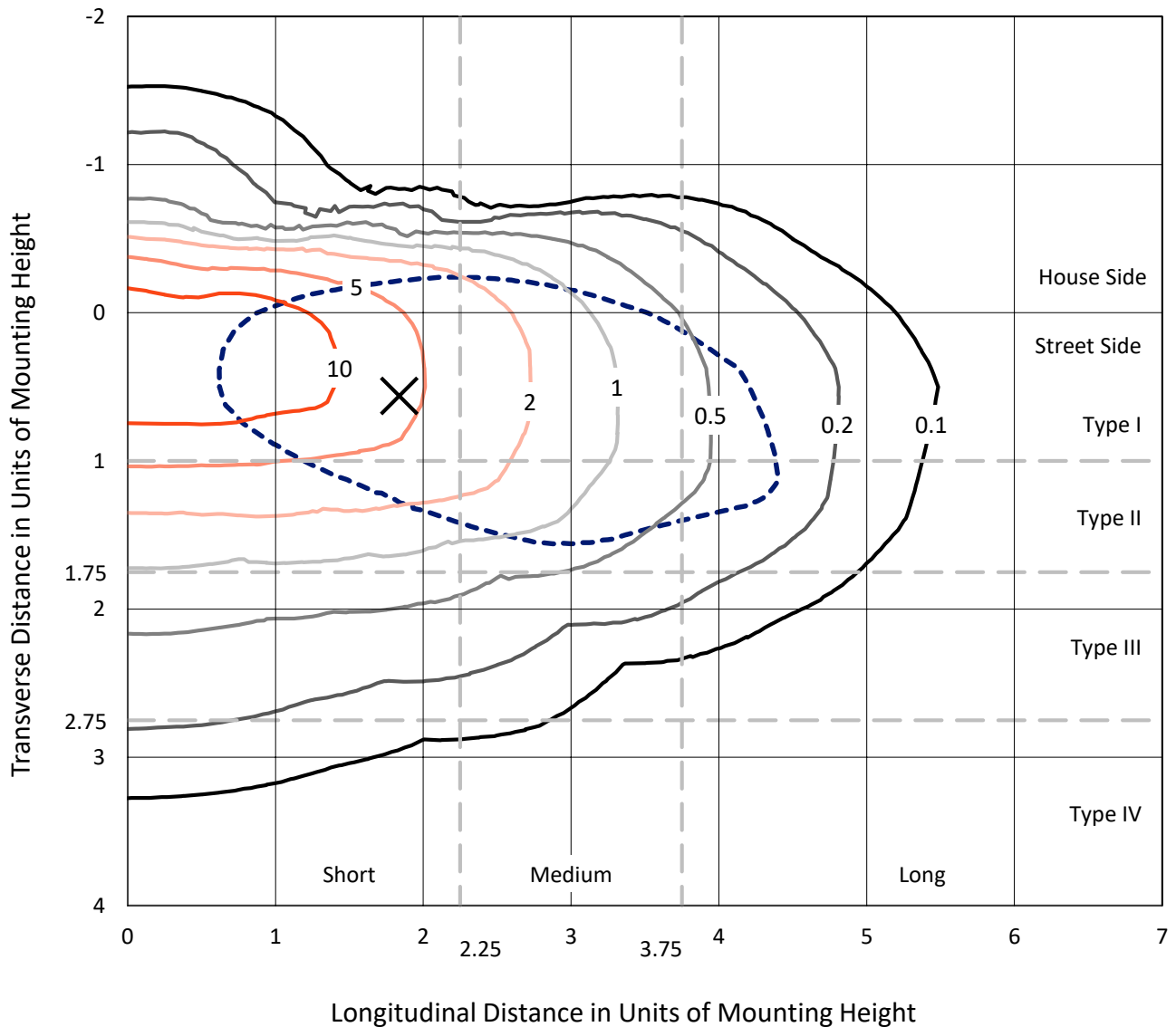
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

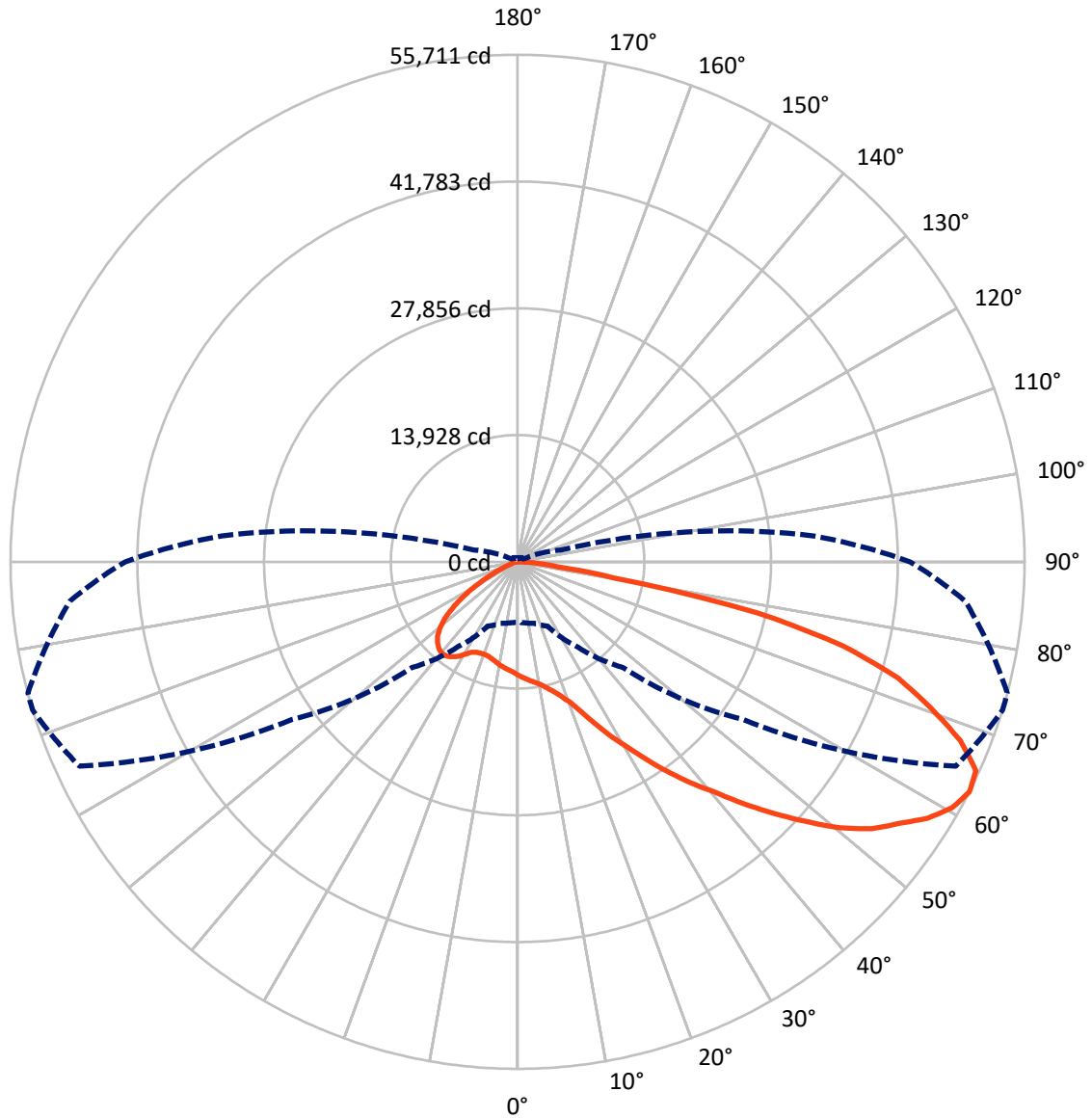
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 17.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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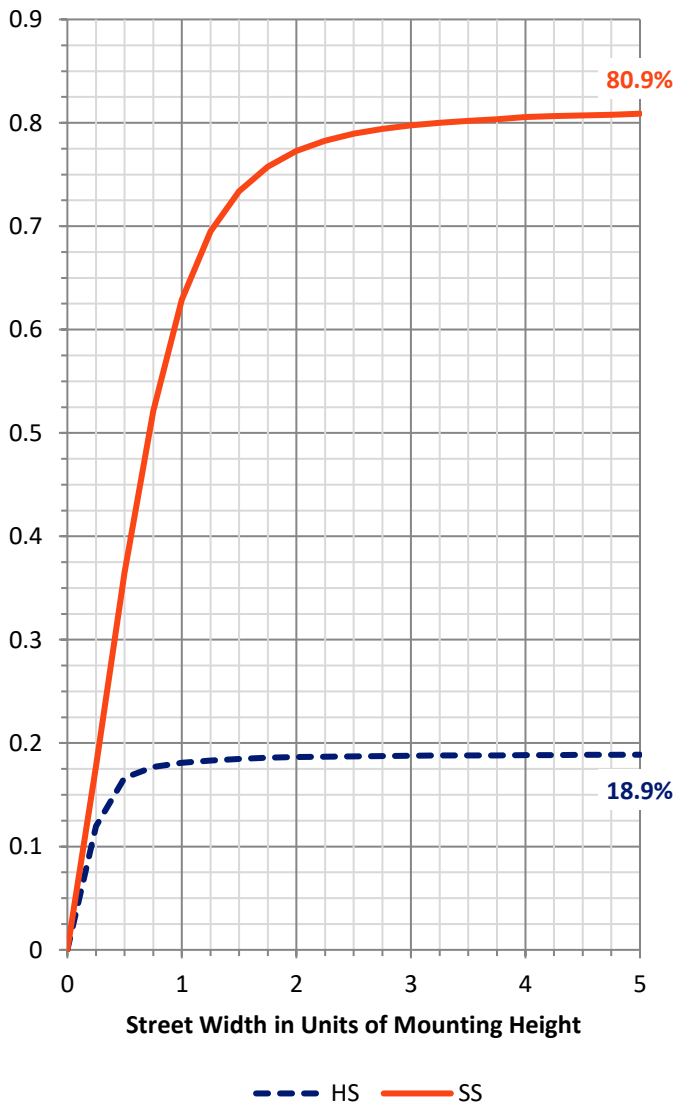
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13603.6	0.0	13603.6
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	57509.4	0.0	57509.4
	% Fixture	80.9	0.0	80.9
Total	Lumens	71113.0	0.0	71113.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1191.2	1.7
10°-20°	3582.9	5.0
20°-30°	6190.4	8.7
30°-40°	9308.9	13.1
40°-50°	12412.5	17.5
50°-60°	14618.2	20.6
60°-70°	14533.1	20.4
70°-80°	8343.8	11.7
80°-90°	932.1	1.3
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°	71113.0	100.0
0°-180°	71113.0	100.0

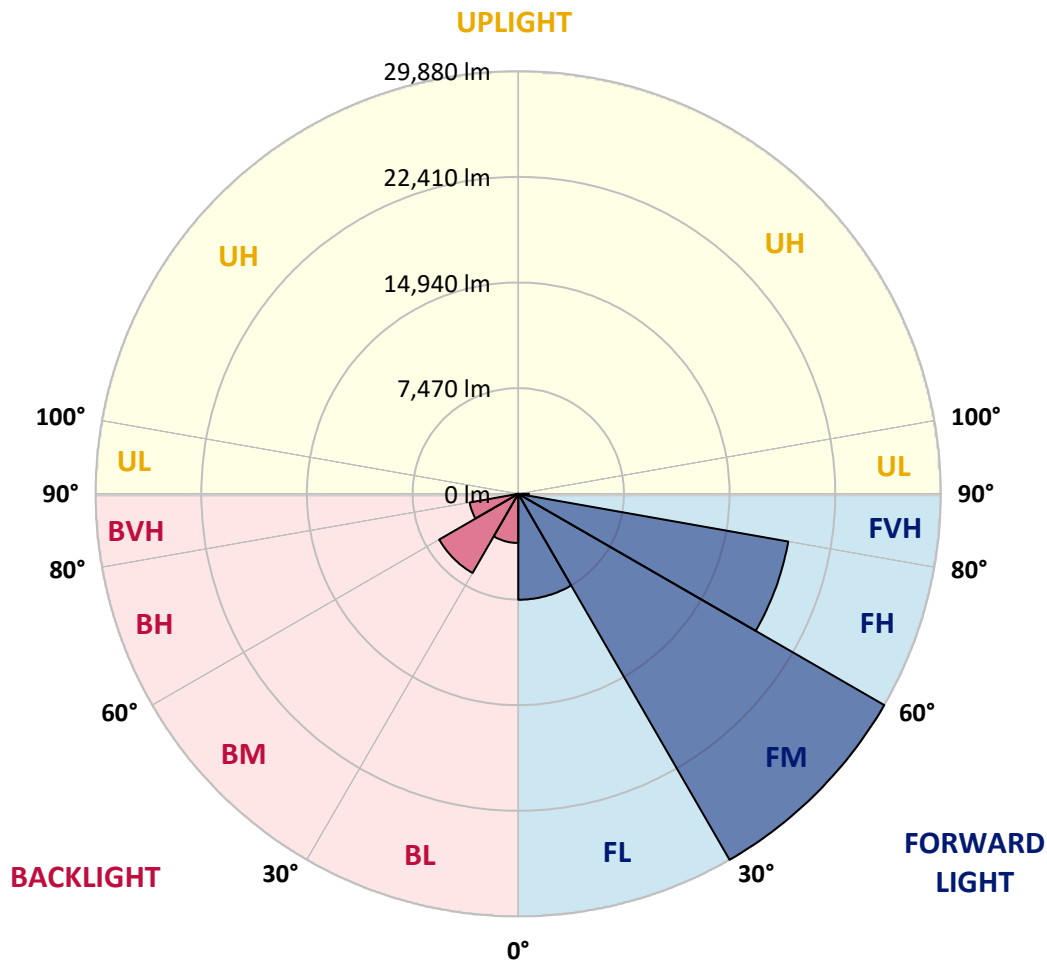


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7488.1	10.5			
FM (30°-60°)	29880.0	42.0			
FH (60°-80°)	19384.3	27.3			G5
FVH (80°-90°)	757.0	1.1			G5
BL (0°-30°)	3476.4	4.9	B4/5000		
BM (30°-60°)	6459.6	9.1	B4/8500		
BH (60°-80°)	3492.6	4.9	B4/5000		G4/5000
BVH (80°-90°)	175.1	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	12471.6	12471.6	12471.6	12471.6	12471.6	12471.6	12471.6	12471.6	12471.6	12471.6	12471.6
2.5°	13343.2	13376.7	13336.8	13319.2	13300.1	13175.6	13030.3	12881.8	12762.1	12743.0	12586.5
5°	14280.2	14297.7	14232.3	14157.3	14028.0	13822.0	13561.8	13304.9	13065.4	13001.6	12715.8
7.5°	15000.1	14966.6	14950.6	14886.7	14773.4	14546.7	14152.5	13731.1	13360.7	13271.3	12837.1
10°	15675.3	15660.9	15539.6	15459.8	15279.4	15070.3	14746.3	14211.5	13689.5	13545.9	12942.5
12.5°	16406.4	16374.5	16325.0	16152.6	16005.7	15653.0	15261.9	14775.0	14194.0	14002.4	13122.9
15°	17064.0	16977.9	16950.7	16770.3	16621.9	16352.1	15959.4	15394.4	14773.4	14609.0	13466.1
17.5°	17689.8	17649.9	17589.2	17466.3	17300.3	17092.8	16778.3	16173.3	15531.6	15292.2	14048.7
20°	18221.3	18171.9	18119.2	18152.7	18116.0	17983.5	17785.6	17270.0	16486.2	16254.7	14757.4
22.5°	18591.7	18590.1	18800.8	18923.7	18993.9	18989.1	18941.3	18649.1	17860.6	17625.9	15817.4
25°	18899.8	18923.7	19190.3	19658.0	20076.2	20114.5	20452.9	20314.0	19643.6	19399.4	17412.0
27.5°	18990.7	19038.6	19522.3	20258.2	20893.5	21503.3	21999.7	22253.5	21632.6	21340.4	19126.4
30°	19056.2	19075.3	19549.4	20430.6	21769.8	22735.6	23623.1	24052.5	23517.7	23303.8	21037.1
32.5°	18594.9	18601.2	19327.5	20662.0	22413.1	24087.6	25137.9	25947.3	25806.8	25524.2	23126.7
35°	17959.6	18077.7	18910.9	20438.5	22943.1	25329.5	26759.7	27966.5	28247.5	28044.7	25214.6
37.5°	17174.2	17266.8	18159.1	20106.5	23059.6	26183.5	28020.8	30019.3	30753.6	30720.1	27735.1
40°	16208.5	16321.8	17389.7	19391.4	23002.1	26804.4	29500.5	32292.4	33224.6	33119.3	30234.8
42.5°	15067.1	15233.1	16269.1	18472.0	22582.3	27184.4	30712.1	34607.0	36284.6	36216.0	32447.2
45°	13938.6	14028.0	14972.9	17191.7	21809.7	27307.3	31851.8	37796.3	39422.9	39346.3	35113.0
47.5°	12774.9	12853.1	13839.6	15842.9	20468.9	27059.8	32753.7	40535.5	42620.2	42543.6	37761.2
50°	10067.6	10362.9	12385.4	14656.9	18941.3	26359.1	33604.5	43948.3	45966.0	45640.3	40080.6
52.5°	8613.4	8720.4	9769.1	13461.3	17416.8	25163.5	34172.8	47110.5	48717.9	48248.6	42452.6
55°	8051.5	8123.4	8637.4	11256.8	15985.0	23354.9	34841.6	50280.7	50781.9	50662.2	44387.3
57.5°	7625.3	7705.2	8072.3	9402.0	14476.5	20820.1	34632.5	52510.7	53138.0	52754.9	46441.7
60°	7022.0	7119.3	7606.2	8441.0	12762.1	18246.9	32792.0	53423.7	54850.8	54419.8	48004.4
62.5°	6642.0	6705.9	6985.2	7794.6	11341.4	16436.7	30172.6	53130.0	55711.2	55695.2	49359.6
65°	6126.5	6220.6	6519.1	7175.2	10077.2	15033.6	27701.5	51679.0	55340.8	55355.2	49639.0
67.5°	5586.9	5625.2	5938.1	6464.9	8587.9	13748.6	24504.2	49196.8	52456.4	52785.2	47705.9
70°	4913.3	4894.1	5232.5	5617.2	7018.8	11673.5	19723.4	44781.6	48194.4	48330.0	43796.7
72.5°	3866.1	3883.7	3977.9	4244.5	5328.3	9186.5	14312.1	37834.6	43739.2	43980.2	38800.4
75°	2598.7	2627.4	3066.4	3326.6	3832.6	6602.1	8999.7	25538.6	36975.8	37655.8	31756.1
77.5°	1982.6	2000.1	2127.8	2412.0	2772.7	4705.8	4878.2	13916.2	26919.4	28533.2	24842.6
80°	1404.7	1411.1	1285.0	1142.9	1476.5	3192.5	2881.3	5926.9	10726.9	12675.9	14591.4
82.5°	628.9	619.3	729.5	606.6	850.8	1235.5	1360.0	2876.5	4455.2	4788.8	5213.4
85°	292.1	327.2	375.1	314.5	506.0	477.3	530.0	1225.9	2087.9	2305.0	2292.2
87.5°	71.8	78.2	99.0	126.1	183.6	162.8	159.6	360.8	466.1	464.5	713.5
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°	12471.6	12471.6	12471.6	12471.6	12471.6	12471.6	12471.6	12471.6	12471.6	12471.6	12471.6
2.5°	12479.6	12396.6	12200.2	12010.3	11829.9	11710.2	11576.1	11435.6	11351.0	11311.1	11397.3
5°	12541.8	12383.8	12008.7	11632.0	11312.7	11039.8	10848.2	10685.4	10597.6	10605.6	10610.4
7.5°	12594.5	12372.6	11847.5	11315.9	10817.9	10479.5	10228.9	10053.3	9952.7	9876.1	9933.5
10°	12640.8	12326.3	11659.1	10950.4	10409.2	9908.0	9568.0	9355.7	9170.5	9066.8	9148.2
12.5°	12690.3	12308.8	11448.4	10623.1	9922.4	9362.1	8896.0	8685.3	8503.3	8425.1	8474.6
15°	12905.8	12375.8	11252.1	10238.4	9441.9	8717.2	8214.4	7955.8	7812.1	7717.9	7738.7
17.5°	13276.1	12553.0	11126.0	9836.2	8905.5	8139.3	7488.1	7186.4	6948.5	6881.5	6863.9
20°	13802.9	12889.8	11126.0	9496.2	8297.4	7497.6	6747.4	6238.2	5867.9	5729.0	5835.9
22.5°	14687.2	13462.9	11236.1	9188.1	7773.8	6832.0	5938.1	5160.7	4661.1	4458.4	4576.5
25°	15924.3	14348.8	11414.9	8918.3	7296.5	6065.8	4911.7	4017.8	3467.1	3226.0	3222.9
27.5°	17539.7	15704.0	11775.6	8698.0	6725.1	5074.5	3840.6	2980.2	2463.0	2317.8	2338.5
30°	19330.7	17172.6	12457.2	8378.8	6030.7	3965.1	2796.7	2190.1	1826.1	1634.6	1637.8
32.5°	21057.9	18693.8	13266.5	8171.3	5128.8	2989.8	1993.7	1562.7	1336.1	1222.7	1240.3
35°	22909.6	20006.0	13868.3	7823.3	4070.5	2161.3	1409.5	1171.7	1077.5	1018.4	1021.6
37.5°	24909.7	21449.0	14363.2	7357.2	3077.6	1484.5	1040.8	1004.0	964.1	889.1	882.7
40°	26999.2	23120.3	14658.5	6603.7	2139.0	1028.0	884.3	925.8	903.5	806.1	798.1
42.5°	28771.0	24410.1	14731.9	5606.1	1384.0	833.2	801.3	865.2	870.0	771.0	758.2
45°	30472.7	25559.4	14588.2	4292.4	959.4	783.8	750.2	838.0	844.4	755.0	734.3
47.5°	32377.0	27131.7	14328.1	2863.7	793.3	740.7	732.7	793.3	815.7	742.3	716.7
50°	34690.0	28410.3	13557.1	1759.1	748.6	713.5	713.5	750.2	780.6	716.7	704.0
52.5°	37062.0	29524.5	12415.7	1206.8	721.5	684.8	705.5	721.5	732.7	675.2	686.4
55°	38762.0	30512.6	10714.1	970.5	705.5	665.6	715.1	683.2	667.2	617.8	606.6
57.5°	40648.8	31687.4	8974.2	860.4	684.8	676.8	683.2	622.5	577.8	526.8	515.6
60°	41965.7	32319.5	6844.8	809.3	660.9	665.6	630.5	549.1	467.7	431.0	423.0
62.5°	43115.1	32680.3	5017.1	743.9	638.5	636.9	571.5	469.3	384.7	344.8	338.4
65°	42941.1	32116.8	3251.6	691.2	620.9	600.2	512.4	402.3	320.8	290.5	287.3
67.5°	41027.1	29623.4	2048.0	636.9	590.6	553.9	459.7	359.2	295.3	260.2	257.0
70°	37009.4	26180.3	1253.1	566.7	525.2	490.1	407.0	336.8	279.3	237.8	229.9
72.5°	31456.0	22422.7	885.9	499.6	458.1	416.6	344.8	320.8	266.6	213.9	207.5
75°	25843.5	16516.5	742.3	435.8	391.1	335.2	293.7	298.5	250.6	194.7	190.0
77.5°	18199.0	10297.5	691.2	356.0	308.1	266.6	253.8	273.0	229.9	178.8	174.0
80°	10621.5	5783.3	571.5	280.9	231.5	205.9	212.3	231.5	201.1	161.2	154.8
82.5°	4287.6	2289.0	402.3	218.7	169.2	164.4	174.0	188.4	166.0	135.7	132.5
85°	1530.8	715.1	228.3	143.7	108.5	113.3	111.7	134.1	119.7	99.0	97.4
87.5°	402.3	142.1	102.2	57.5	46.3	46.3	43.1	62.3	57.5	44.7	49.5
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)