

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: P510536

Luminaire Tested: **CST-CA10-630-730-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510536
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-CA10-630-730-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 82458 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

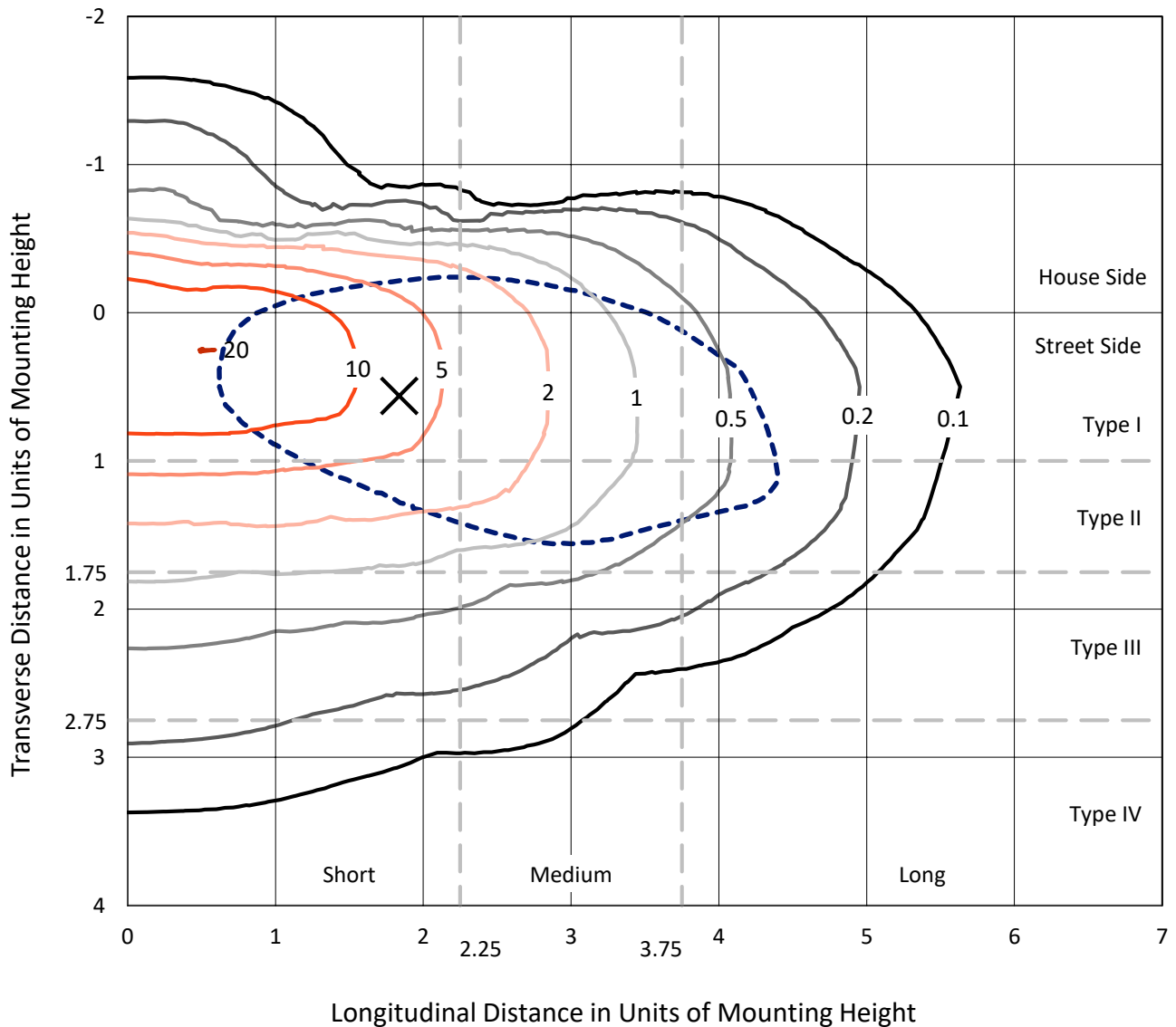
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

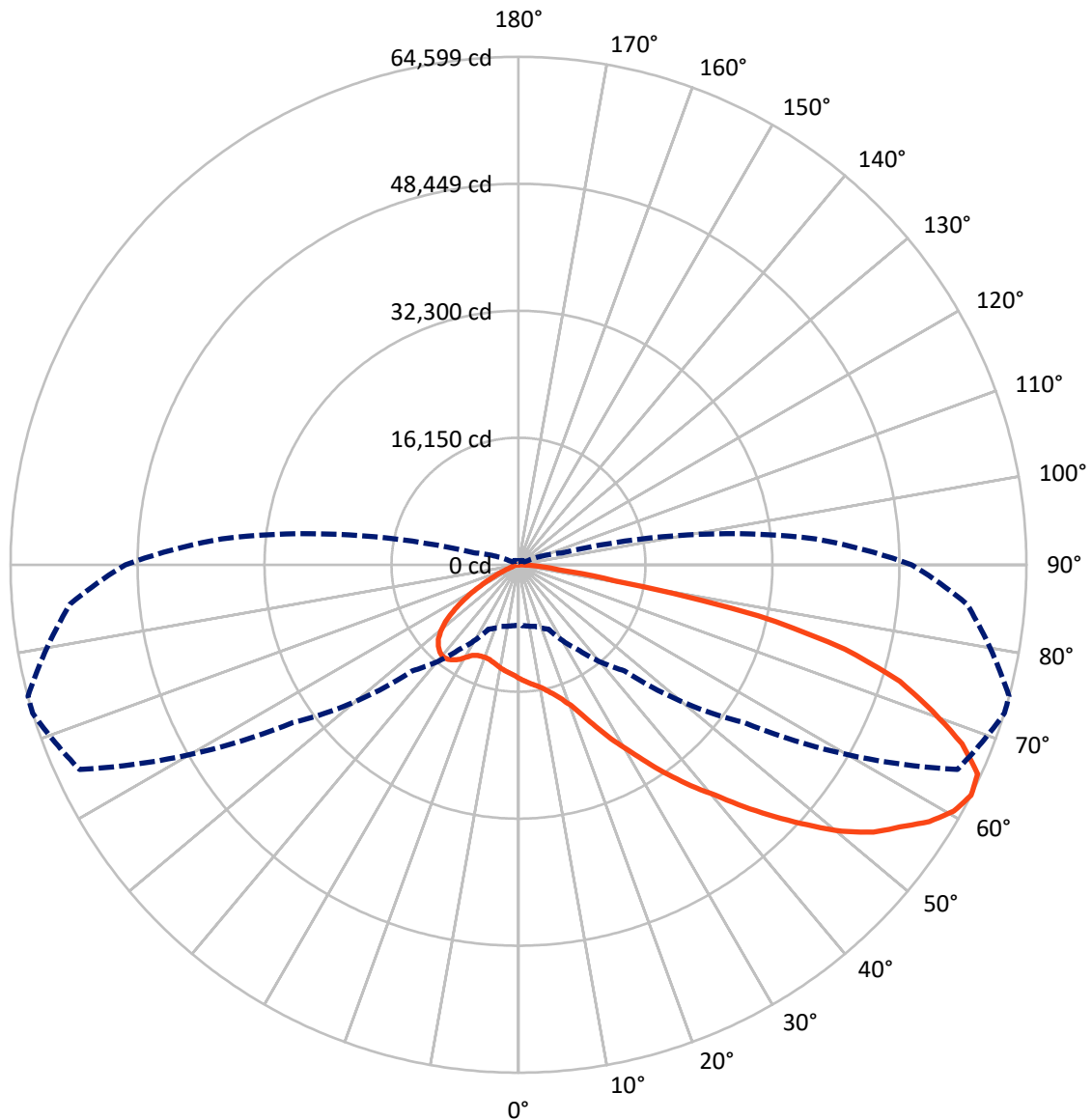
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 20.1 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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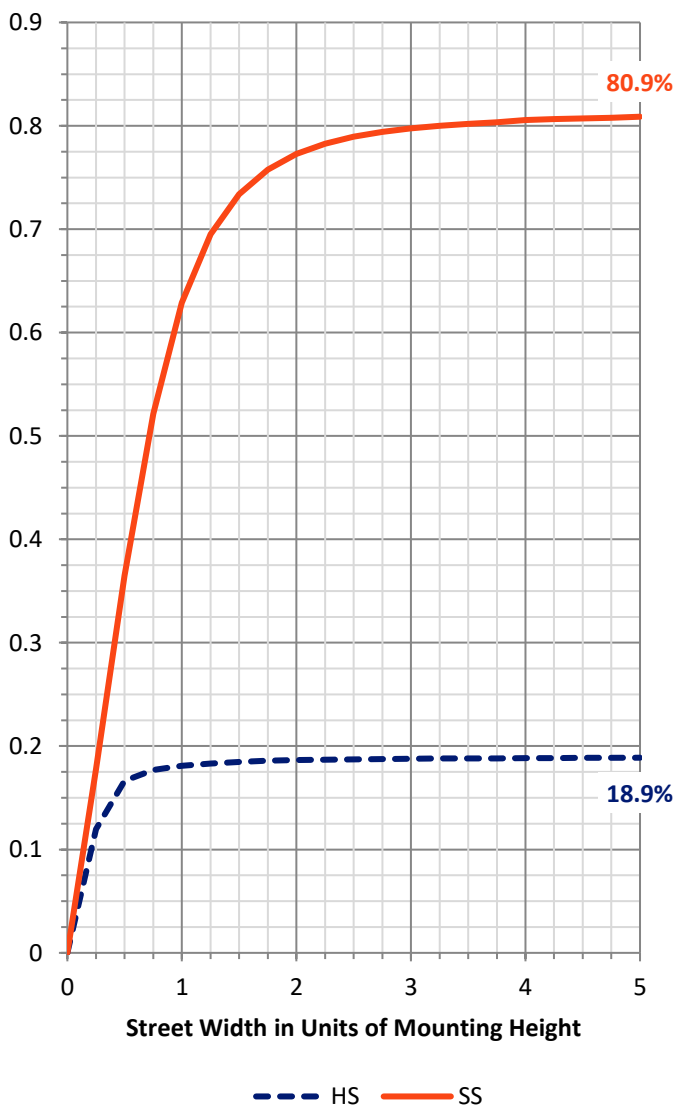
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15773.8	0.0	15773.8
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	66684.2	0.0	66684.2
	% Fixture	80.9	0.0	80.9
Total	Lumens	82458.0	0.0	82458.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1381.2	1.7
10°-20°	4154.5	5.0
20°-30°	7178.0	8.7
30°-40°	10794.0	13.1
40°-50°	14392.7	17.5
50°-60°	16950.3	20.6
60°-70°	16851.6	20.4
70°-80°	9674.9	11.7
80°-90°	1080.8	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°	82458.0	100.0
0°-180°	82458.0	100.0

Coefficient of Utilization

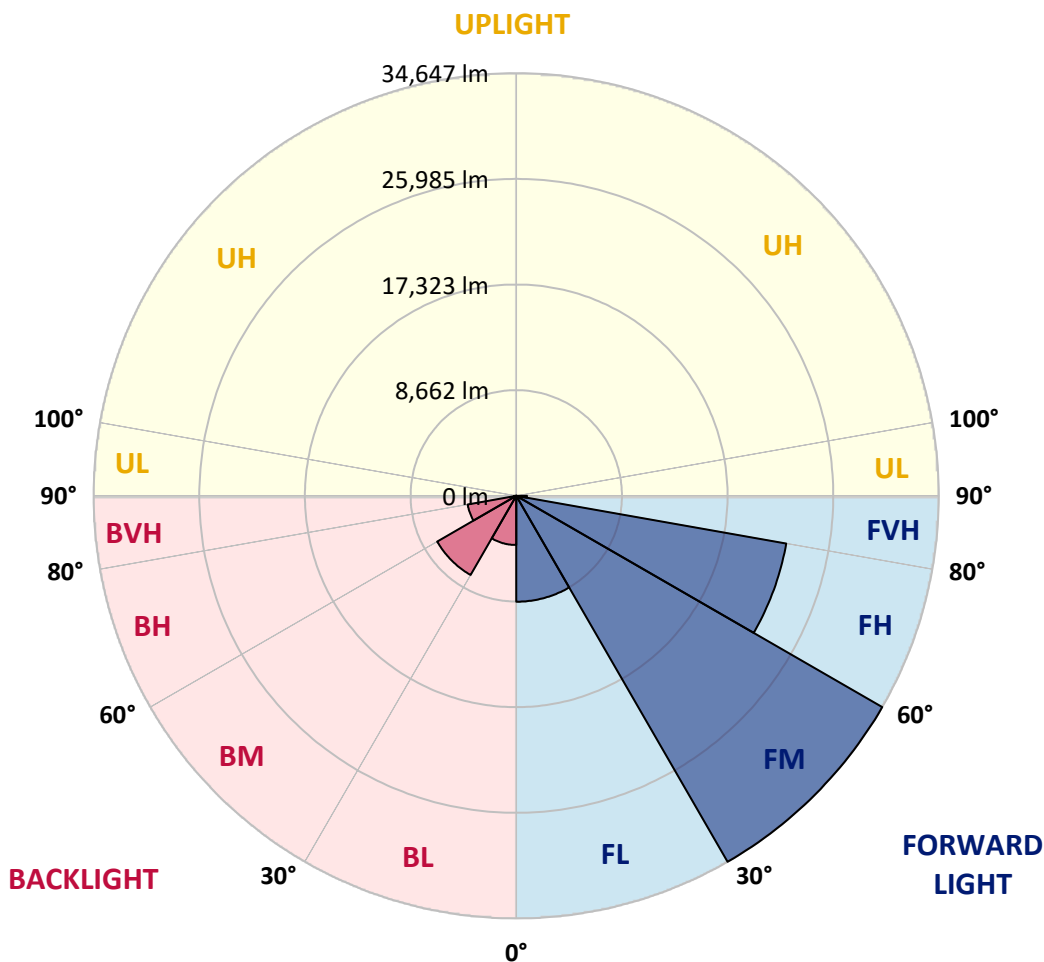


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	8682.7	10.5			
FM (30°-60°)	34646.9	42.0			
FH (60°-80°)	22476.8	27.3			G5
FVH (80°-90°)	877.8	1.1			G5
BL (0°-30°)	4031.0	4.9	B4/5000		
BM (30°-60°)	7490.1	9.1	B4/8500		
BH (60°-80°)	4049.7	4.9	B4/5000		G4/5000
BVH (80°-90°)	203.0	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	14461.3	14461.3	14461.3	14461.3	14461.3	14461.3	14461.3	14461.3	14461.3	14461.3	14461.3
2.5°	15471.9	15510.7	15464.5	15444.1	15421.9	15277.5	15109.1	14936.9	14798.1	14775.9	14594.5
5°	16558.4	16578.7	16502.8	16415.8	16265.9	16027.1	15725.4	15427.4	15149.8	15075.8	14744.4
7.5°	17393.1	17354.2	17335.7	17261.7	17130.3	16867.5	16410.3	15921.6	15492.2	15388.6	14885.1
10°	18176.1	18159.4	18018.7	17926.2	17717.0	17474.6	17098.8	16478.8	15873.5	15706.9	15007.3
12.5°	19023.8	18986.8	18929.4	18729.5	18559.2	18150.1	17696.7	17132.1	16458.4	16236.3	15216.4
15°	19786.4	19686.4	19654.9	19445.8	19273.7	18960.8	18505.5	17850.3	17130.3	16939.6	15614.4
17.5°	20511.9	20465.6	20395.3	20252.8	20060.3	19819.7	19455.0	18753.5	18009.5	17731.8	16290.0
20°	21128.3	21070.9	21009.8	21048.7	21006.1	20852.5	20623.0	20025.1	19116.3	18847.9	17111.8
22.5°	21557.7	21555.8	21800.2	21942.7	22024.1	22018.6	21963.0	21624.3	20710.0	20437.9	18340.8
25°	21914.9	21942.7	22251.8	22794.1	23279.0	23323.5	23715.9	23554.8	22777.4	22494.3	20189.9
27.5°	22020.4	22075.9	22636.8	23490.1	24226.7	24933.8	25509.4	25803.7	25083.7	24745.0	22177.8
30°	22096.3	22118.5	22668.2	23690.0	25242.9	26362.7	27391.8	27889.7	27269.6	27021.6	24393.3
32.5°	21561.4	21568.8	22411.0	23958.3	25988.8	27930.4	29148.3	30086.7	29923.9	29596.2	26816.2
35°	20824.7	20961.7	21927.9	23699.2	26603.3	29370.4	31028.9	32428.2	32753.9	32518.9	29237.2
37.5°	19914.1	20021.4	21056.1	23314.2	26738.4	30360.7	32491.1	34808.4	35659.9	35621.0	32159.8
40°	18794.3	18925.7	20163.9	22485.0	26671.8	31080.7	34206.9	37444.2	38525.1	38402.9	35058.3
42.5°	17470.9	17663.4	18864.6	21418.9	26185.0	31521.2	35611.7	40128.0	42073.3	41993.7	37623.7
45°	16162.3	16265.9	17361.7	19934.4	25289.2	31663.7	36933.3	43826.1	45712.2	45623.4	40714.7
47.5°	14812.9	14903.6	16047.5	18370.4	23734.4	31376.8	37979.1	47002.3	49419.6	49330.8	43785.4
50°	11673.8	12016.2	14361.3	16995.2	21963.0	30564.3	38965.6	50959.6	53299.2	52921.6	46474.8
52.5°	9987.6	10111.6	11327.6	15608.8	20195.4	29177.9	39624.5	54626.3	56490.1	55946.0	49225.3
55°	9336.1	9419.3	10015.3	13052.7	18535.1	27080.8	40400.1	58302.2	58883.4	58744.6	51468.6
57.5°	8841.9	8934.4	9360.1	10901.9	16786.0	24141.6	40157.6	60887.9	61615.4	61171.1	53850.7
60°	8142.2	8255.1	8819.6	9787.7	14798.1	21157.9	38023.5	61946.7	63601.4	63101.6	55662.8
62.5°	7701.7	7775.7	8099.6	9038.1	13150.8	19058.9	34986.1	61606.1	64599.0	64580.5	57234.2
65°	7103.8	7213.0	7559.2	8319.9	11684.9	17432.0	32120.9	59923.6	64169.6	64186.3	57558.1
67.5°	6478.2	6522.7	6885.4	7496.2	9958.0	15942.0	28413.5	57045.4	60825.0	61206.3	55316.7
70°	5697.1	5674.9	6067.3	6513.4	8138.5	13535.8	22870.0	51925.8	55883.0	56040.4	50783.8
72.5°	4482.9	4503.3	4612.5	4921.6	6178.4	10652.1	16595.4	43870.6	50717.1	50996.6	44990.4
75°	3013.3	3046.6	3555.6	3857.3	4444.1	7655.4	10435.5	29612.9	42874.8	43663.3	36822.2
77.5°	2298.8	2319.2	2467.3	2796.7	3215.1	5456.5	5656.4	16136.3	31214.0	33085.2	28805.9
80°	1628.8	1636.2	1490.0	1325.3	1712.1	3701.8	3340.9	6872.5	12438.2	14698.2	16919.3
82.5°	729.3	718.2	845.9	703.4	986.5	1432.6	1577.0	3335.4	5165.9	5552.8	6045.1
85°	338.7	379.4	435.0	364.6	586.7	553.4	614.5	1421.5	2421.0	2672.7	2657.9
87.5°	83.3	90.7	114.8	146.2	212.9	188.8	185.1	418.3	540.5	538.6	827.4
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°	14461.3	14461.3	14461.3	14461.3	14461.3	14461.3	14461.3	14461.3	14461.3	14461.3	14461.3
2.5°	14470.5	14374.3	14146.6	13926.3	13717.2	13578.4	13422.9	13260.0	13161.9	13115.6	13215.6
5°	14542.7	14359.5	13924.5	13487.7	13117.5	12801.0	12578.9	12390.1	12288.3	12297.5	12303.1
7.5°	14603.8	14346.5	13737.5	13121.2	12543.7	12151.3	11860.7	11657.1	11540.5	11451.7	11518.3
10°	14657.5	14292.8	13519.1	12697.3	12069.9	11488.7	11094.4	10848.3	10633.5	10513.2	10607.6
12.5°	14714.8	14272.5	13274.8	12317.9	11505.3	10855.7	10315.2	10070.9	9859.9	9769.2	9826.5
15°	14964.7	14350.2	13047.2	11871.8	10948.2	10107.9	9524.8	9225.0	9058.4	8949.2	8973.3
17.5°	15394.1	14555.7	12900.9	11405.4	10326.3	9437.9	8682.7	8332.9	8057.1	7979.3	7959.0
20°	16004.9	14946.2	12900.9	11011.1	9621.1	8693.8	7823.8	7233.4	6804.0	6643.0	6767.0
22.5°	17030.3	15610.7	13028.6	10653.9	9014.0	7921.9	6885.4	5984.0	5404.7	5169.6	5306.6
25°	18464.8	16637.9	13235.9	10341.1	8460.6	7033.5	5695.3	4658.8	4020.2	3740.7	3737.0
27.5°	20337.9	18209.4	13654.3	10085.7	7797.9	5884.1	4453.3	3455.7	2856.0	2687.5	2711.6
30°	22414.7	19912.2	14444.6	9715.5	6992.8	4597.7	3242.8	2539.5	2117.5	1895.3	1899.0
32.5°	24417.4	21676.2	15383.0	9474.9	5947.0	3466.8	2311.8	1812.1	1549.2	1417.8	1438.2
35°	26564.4	23197.6	16080.8	9071.4	4719.9	2506.1	1634.4	1358.6	1249.4	1180.9	1184.6
37.5°	28883.6	24870.8	16654.6	8530.9	3568.6	1721.4	1206.8	1164.2	1118.0	1031.0	1023.6
40°	31306.5	26808.8	16997.0	7657.3	2480.2	1192.0	1025.4	1073.5	1047.6	934.7	925.5
42.5°	33361.0	28304.3	17082.2	6500.4	1604.7	966.2	929.2	1003.2	1008.8	894.0	879.2
45°	35334.1	29637.0	16915.6	4977.1	1112.4	908.8	869.9	971.7	979.1	875.5	851.4
47.5°	37542.3	31460.1	16613.9	3320.6	919.9	858.8	849.6	919.9	945.8	860.7	831.1
50°	40224.2	32942.7	15719.9	2039.7	868.1	827.4	827.4	869.9	905.1	831.1	816.3
52.5°	42974.7	34234.7	14396.5	1399.3	836.6	794.0	818.1	836.6	849.6	782.9	795.9
55°	44945.9	35380.4	12423.4	1125.4	818.1	771.8	829.2	792.2	773.7	716.3	703.4
57.5°	47133.7	36742.7	10405.9	997.6	794.0	784.8	792.2	721.9	670.0	610.8	597.8
60°	48660.7	37475.6	7936.8	938.4	766.3	771.8	731.1	636.7	542.3	499.7	490.5
62.5°	49993.4	37893.9	5817.4	862.5	740.4	738.5	662.6	544.2	446.1	399.8	392.4
65°	49791.7	37240.6	3770.3	801.4	720.0	695.9	594.1	466.4	372.0	336.9	333.2
67.5°	47572.4	34349.4	2374.7	738.5	684.8	642.3	533.1	416.5	342.4	301.7	298.0
70°	42913.6	30357.0	1453.0	657.1	609.0	568.2	472.0	390.5	323.9	275.8	266.5
72.5°	36474.3	25999.9	1027.3	579.3	531.2	483.1	399.8	372.0	309.1	248.0	240.6
75°	29966.4	19151.5	860.7	505.3	453.5	388.7	340.6	346.1	290.6	225.8	220.3
77.5°	21102.4	11940.3	801.4	412.8	357.2	309.1	294.3	316.5	266.5	207.3	201.8
80°	12316.0	6705.9	662.6	325.8	268.4	238.8	246.2	268.4	233.2	186.9	179.5
82.5°	4971.6	2654.2	466.4	253.6	196.2	190.6	201.8	218.4	192.5	157.3	153.6
85°	1775.0	829.2	264.7	166.6	125.9	131.4	129.6	155.5	138.8	114.8	112.9
87.5°	466.4	164.7	118.5	66.6	53.7	53.7	50.0	72.2	66.6	51.8	57.4
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)