

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: P510538

Luminaire Tested: **CST-CA10-630-730-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510538
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)
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-T3-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: 84496 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

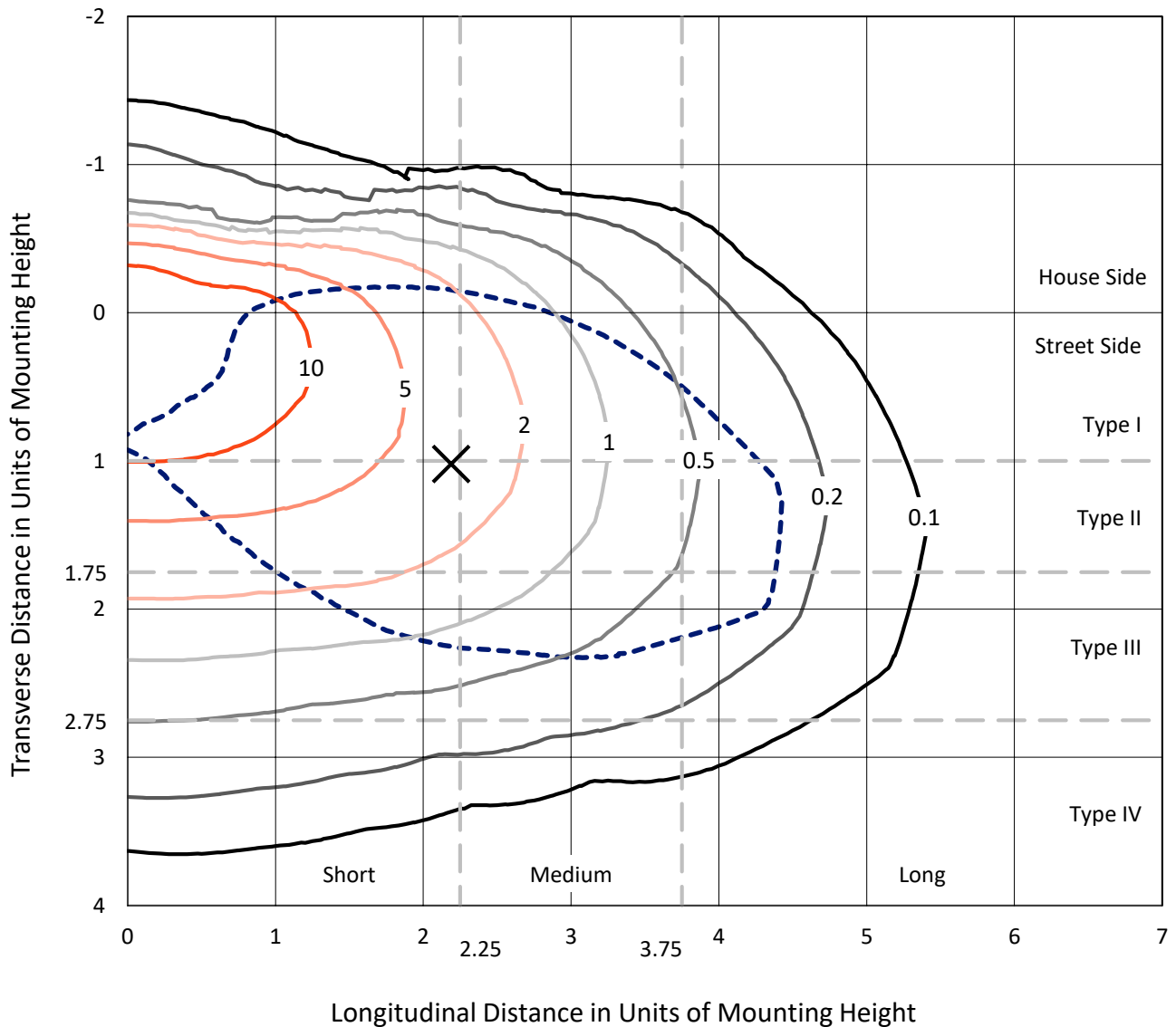
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

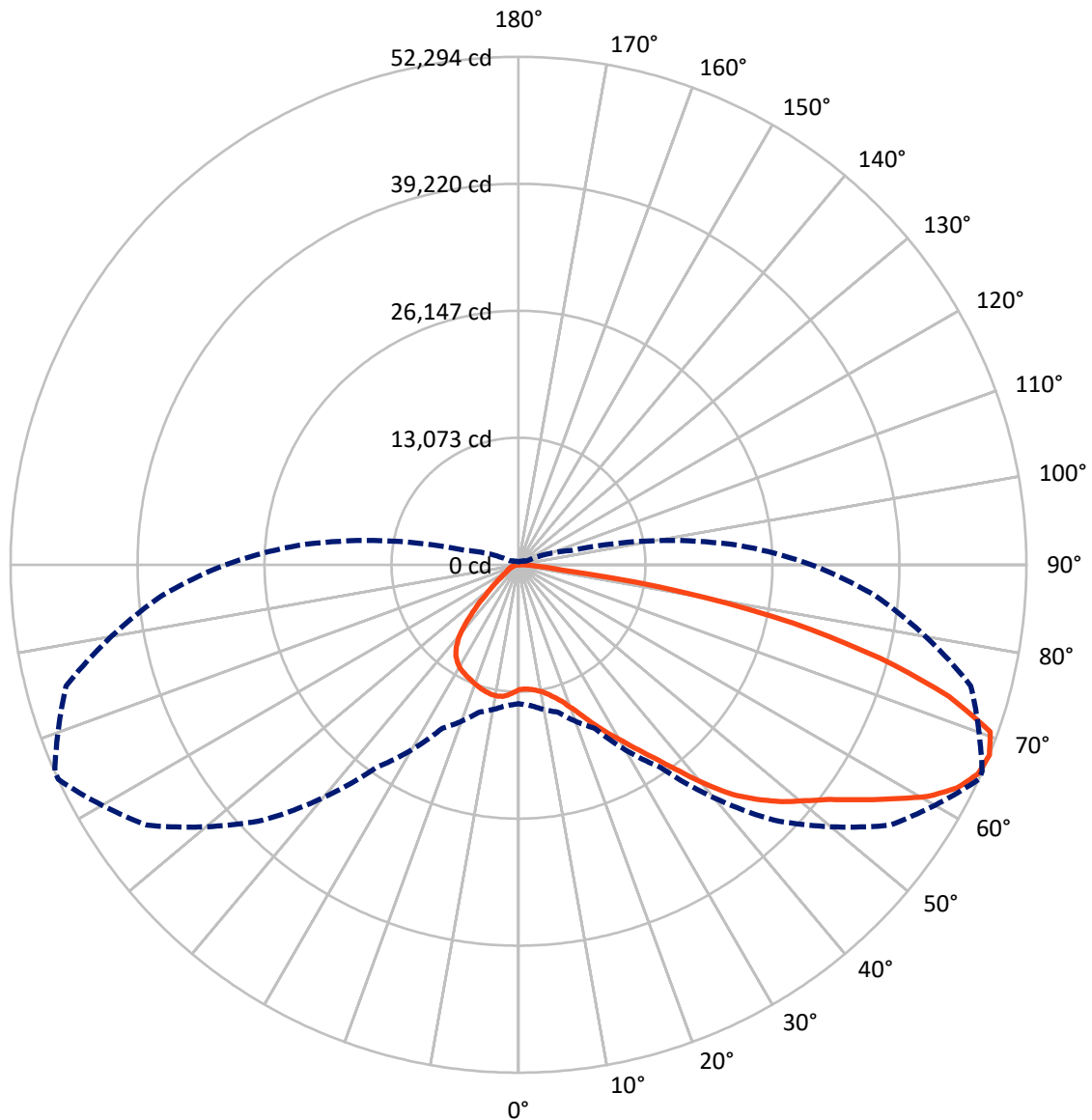
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 16.8 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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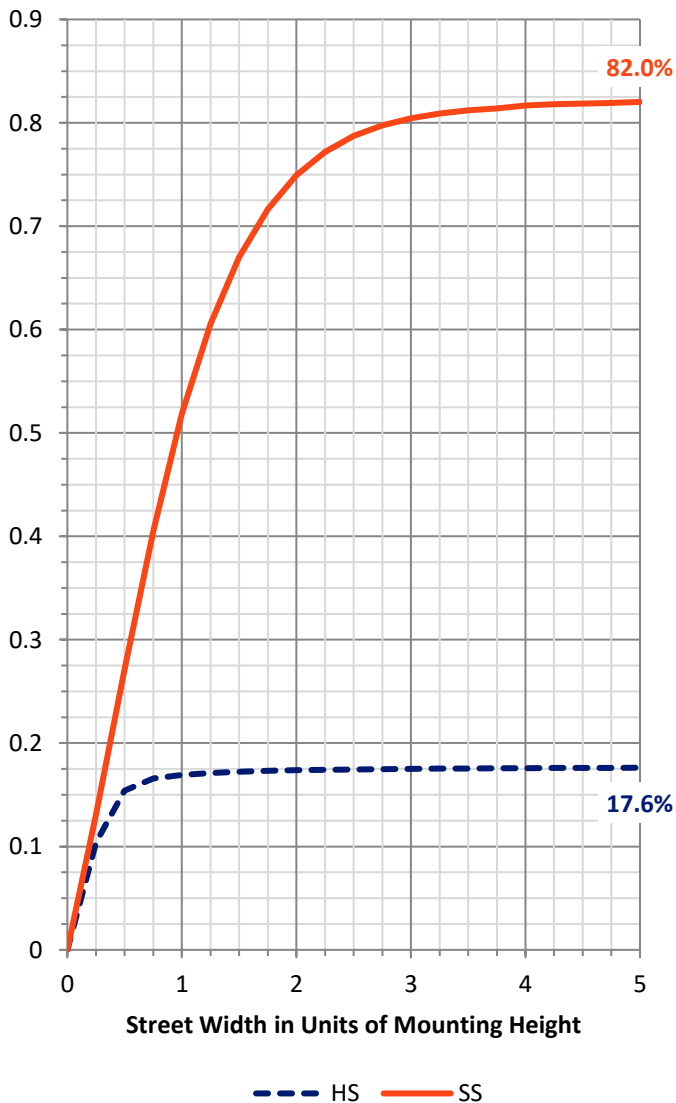
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15101.5	0.0	15101.5
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	69394.5	0.0	69394.5
	% Fixture	82.1	0.0	82.1
Total	Lumens	84496.0	0.0	84496.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1270.3	1.5
10°-20°	3921.8	4.6
20°-30°	6803.5	8.1
30°-40°	10263.0	12.1
40°-50°	14230.4	16.8
50°-60°	17565.6	20.8
60°-70°	18715.8	22.1
70°-80°	10709.5	12.7
80°-90°	1016.1	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°	84496.0	100.0
0°-180°	84496.0	100.0

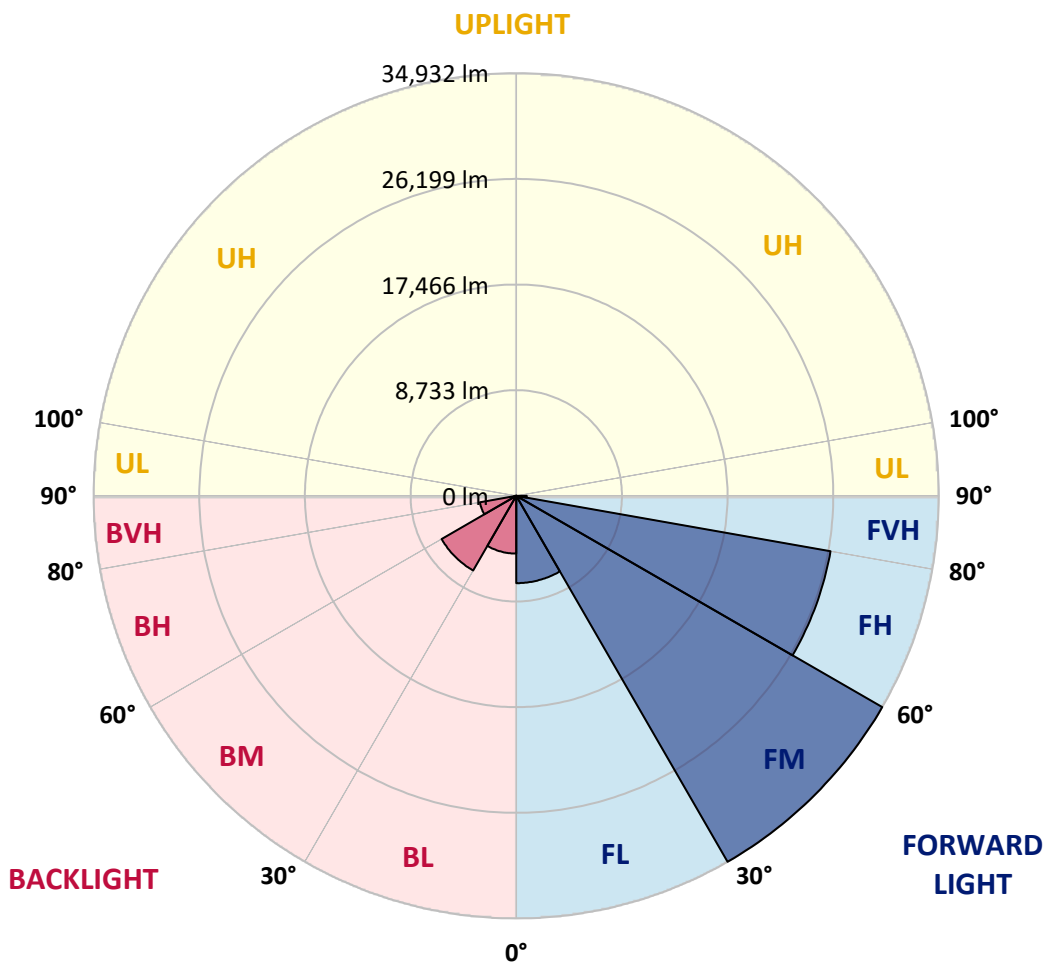


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7217.1	8.5			
FM (30°-60°)	34931.9	41.3			
FH (60°-80°)	26377.3	31.2			G5
FVH (80°-90°)	868.2	1.0			G5
BL (0°-30°)	4778.5	5.7	B4/5000		
BM (30°-60°)	7127.1	8.4	B4/8500		
BH (60°-80°)	3048.0	3.6	B4/5000		G4/5000
BVH (80°-90°)	147.9	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°	12839.7	12839.7	12839.7	12839.7	12839.7	12839.7	12839.7	12839.7	12839.7	12839.7	12839.7
2.5°	12715.7	12699.0	12684.2	12710.2	12725.0	12749.0	12784.2	12808.3	12815.7	12837.9	12865.6
5°	12919.3	12917.5	12897.1	12886.0	12854.5	12843.4	12850.8	12880.4	12882.3	12910.1	12997.0
7.5°	13319.1	13315.4	13265.4	13243.2	13176.6	13102.5	13047.0	13052.6	13050.7	13078.5	13195.1
10°	13922.5	13892.9	13822.5	13754.1	13624.5	13485.7	13383.9	13291.3	13291.3	13332.1	13461.6
12.5°	14603.6	14644.3	14548.1	14444.5	14227.9	13978.0	13800.3	13696.7	13685.6	13705.9	13798.5
15°	15449.5	15449.5	15384.7	15236.6	15046.0	14698.0	14331.5	14200.1	14181.6	14224.2	14218.6
17.5°	16402.7	16430.5	16308.3	16234.3	15941.8	15556.8	15097.8	14870.2	14870.2	14842.4	14714.7
20°	17618.8	17467.0	17479.9	17357.8	17143.1	16584.1	16117.7	15786.4	15782.7	15727.1	15368.1
22.5°	18940.3	18857.0	18784.8	18677.5	18381.3	17881.6	17233.8	16906.2	16898.8	16761.8	16228.7
25°	20243.3	20306.3	20226.7	20030.5	19813.9	19269.8	18555.3	18233.3	18231.4	18003.7	17248.6
27.5°	21583.4	21651.9	21626.0	21448.3	21159.5	20733.8	20058.2	19638.1	19612.2	19464.1	18514.6
30°	23064.1	23003.0	23082.6	23006.7	22862.4	22168.3	21557.5	21068.8	21131.8	21087.3	19952.7
32.5°	24141.3	24180.2	24441.2	24448.6	24296.8	23782.3	23036.3	22736.5	22836.4	22777.2	21720.4
35°	25114.9	25177.8	25514.7	25846.0	25957.1	25394.4	24635.5	24617.0	24746.6	25107.5	24156.1
37.5°	25951.5	25995.9	26467.9	26899.2	27258.3	26873.3	26321.7	26978.8	27169.4	27907.9	26669.7
40°	26453.1	26510.5	27121.3	27728.4	28368.8	28231.8	28180.0	29734.8	29914.3	30564.0	28503.9
42.5°	26169.9	26282.8	27300.8	28411.4	29353.5	29627.4	30336.3	32335.3	32540.7	32596.3	30306.7
45°	25664.6	25805.3	26943.6	28740.8	30277.1	31156.3	32505.6	34454.6	34567.5	34410.1	31800.4
47.5°	25120.5	25270.4	26542.0	28642.7	31019.3	32935.0	34443.5	36449.8	36529.4	36046.3	33305.2
50°	24502.3	24641.1	26008.9	28413.2	31578.3	34613.7	36435.0	38174.9	38472.9	37517.8	34474.9
52.5°	23750.8	23898.9	25350.0	28054.1	32068.8	35859.4	38191.5	40123.9	40144.2	39357.6	35792.8
55°	22777.2	23034.5	24522.6	27432.2	32326.0	36929.2	39722.2	42702.2	42833.6	42072.9	36895.9
57.5°	21694.4	21918.4	23526.8	26603.0	32094.7	37741.8	42183.9	45467.4	45450.8	43923.8	37860.2
60°	20263.7	20422.9	22229.4	25518.4	31348.8	38724.6	44747.4	48430.7	48401.1	45737.7	38480.3
62.5°	18427.6	18586.8	20285.9	23817.4	30253.0	39383.5	46487.3	50650.0	50564.8	47057.4	38670.9
65°	16299.1	16584.1	18059.3	21609.3	28315.1	38950.4	47327.6	51956.7	51819.7	48064.3	38215.6
67.5°	14303.8	14546.3	15714.2	18570.1	25455.5	37193.9	46735.3	52293.6	52252.9	48210.5	36929.2
70°	11479.3	11568.1	12638.0	15083.0	21179.9	33432.9	44688.2	51516.2	51534.7	46863.0	34345.4
72.5°	7857.1	8073.6	8549.3	10479.8	15412.5	26588.2	38517.3	46363.3	46367.0	42021.1	29923.6
75°	4225.6	4560.6	5115.9	6072.8	8616.0	17061.6	30932.3	38471.0	38543.2	35035.8	23784.1
77.5°	2095.2	2215.5	2537.6	3248.3	3949.8	8049.6	19893.5	28877.8	29049.9	26893.6	16221.3
80°	958.8	979.1	1003.2	997.6	1512.2	3531.5	8540.1	17343.0	17394.8	15995.5	7405.5
82.5°	749.6	745.9	757.0	688.5	692.2	1362.3	2955.9	4542.1	4843.8	3812.9	2348.8
85°	453.5	451.6	486.8	377.6	464.6	736.7	1491.8	1812.0	1834.2	1491.8	1216.0
87.5°	172.1	166.6	153.6	135.1	155.5	207.3	516.4	666.3	651.5	462.7	420.2
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°	12839.7	12839.7	12839.7	12839.7	12839.7	12839.7	12839.7	12839.7	12839.7	12839.7	12839.7
2.5°	12889.7	12948.9	13058.1	13141.4	13169.2	13258.0	13343.2	13358.0	13419.1	13443.1	13522.7
5°	13050.7	13150.7	13321.0	13433.9	13483.8	13631.9	13728.2	13776.3	13759.6	13768.9	13857.7
7.5°	13285.8	13380.2	13517.1	13654.1	13678.2	13704.1	13694.8	13687.4	13622.7	13567.1	13650.4
10°	13500.5	13589.3	13674.5	13694.8	13572.7	13504.2	13382.0	13287.6	13161.8	13104.4	13171.0
12.5°	13802.2	13820.7	13737.4	13626.4	13363.5	13119.2	12921.2	12749.0	12593.5	12486.2	12575.0
15°	14120.5	14048.4	13805.9	13482.0	13074.8	12725.0	12401.1	12114.2	11856.9	11794.0	11818.0
17.5°	14542.5	14346.4	13857.7	13313.5	12680.5	12136.4	11719.9	11357.1	11020.3	10879.6	10866.7
20°	15057.1	14740.6	13963.2	13100.7	12214.1	11490.4	10846.3	10304.0	9839.4	9458.1	9467.4
22.5°	15727.1	15268.1	14122.4	12878.6	11697.7	10733.4	9796.8	8875.1	8110.7	7781.2	7699.8
25°	16611.9	15927.0	14348.2	12676.8	11120.2	9770.9	8447.5	7146.3	6337.5	6017.3	5982.1
27.5°	17713.1	16811.8	14692.5	12452.9	10502.0	8628.9	6726.2	5450.9	4708.7	4371.8	4258.9
30°	18964.4	17901.9	15046.0	12219.7	9754.3	7161.1	5128.9	3879.5	3118.8	2817.1	2778.2
32.5°	20583.9	19282.7	15571.7	11853.2	8662.2	5628.6	3577.8	2421.0	1904.6	1775.0	1738.0
35°	22884.6	21150.3	16221.3	11390.5	7259.2	3931.3	2217.4	1417.8	1142.0	1077.2	1064.3
37.5°	25029.8	22982.7	16876.5	10622.3	5512.0	2454.3	1267.9	908.8	847.7	849.6	853.3
40°	26730.8	24235.7	17405.9	9611.7	3625.9	1393.7	881.0	755.2	757.0	751.5	747.8
42.5°	28244.8	25235.2	17644.7	8118.1	2100.8	932.9	764.4	695.9	679.3	684.8	681.1
45°	29497.9	26255.1	17181.9	6439.3	1238.3	836.6	721.9	646.0	627.5	657.1	660.8
47.5°	30815.7	27223.1	16473.0	4851.2	1005.0	795.9	683.0	608.9	599.7	636.7	640.4
50°	31924.4	27924.6	15264.4	3655.5	958.8	751.5	647.8	571.9	570.1	603.4	603.4
52.5°	32851.7	28348.4	13830.0	2822.6	927.3	712.6	612.6	536.8	536.8	547.9	549.7
55°	33505.1	28263.3	12974.8	2221.1	894.0	675.6	575.6	503.4	481.2	473.8	477.5
57.5°	33623.5	28037.5	11982.8	1732.4	855.1	640.4	542.3	464.6	423.9	418.3	416.5
60°	33547.6	27541.4	10850.0	1447.4	810.7	607.1	509.0	423.9	383.1	370.2	373.9
62.5°	33231.1	26662.3	9541.4	1269.7	766.3	581.2	472.0	396.1	359.1	342.4	342.4
65°	32276.1	25403.7	7598.0	1112.4	710.7	553.4	442.4	385.0	344.3	325.8	322.1
67.5°	30177.1	22792.0	5710.0	975.4	657.1	523.8	438.7	383.1	336.9	311.0	307.3
70°	27361.9	19578.9	3898.0	857.0	597.8	496.0	436.8	385.0	329.5	296.1	292.4
72.5°	22842.0	15434.7	2245.1	745.9	538.6	470.1	429.4	386.8	316.5	275.8	270.2
75°	17163.4	10825.9	1317.8	640.4	481.2	431.3	409.0	375.7	296.1	251.7	246.2
77.5°	10322.5	5054.8	992.1	531.2	412.8	379.4	364.6	344.3	270.2	233.2	227.7
80°	3786.9	1919.4	779.2	425.7	327.6	329.5	314.7	301.7	246.2	214.7	211.0
82.5°	1651.0	1173.5	575.6	323.9	257.3	294.3	259.1	248.0	211.0	192.5	185.1
85°	1001.3	699.6	370.2	220.3	177.7	199.9	181.4	190.6	162.9	151.8	146.2
87.5°	331.3	209.2	164.7	107.4	88.8	83.3	81.4	98.1	92.5	85.1	85.1
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)