

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: P510539

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

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510539
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-11)
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
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: 90783 lumens
Efficiency: N/A
Efficacy: 143.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B5 - U0 - G5

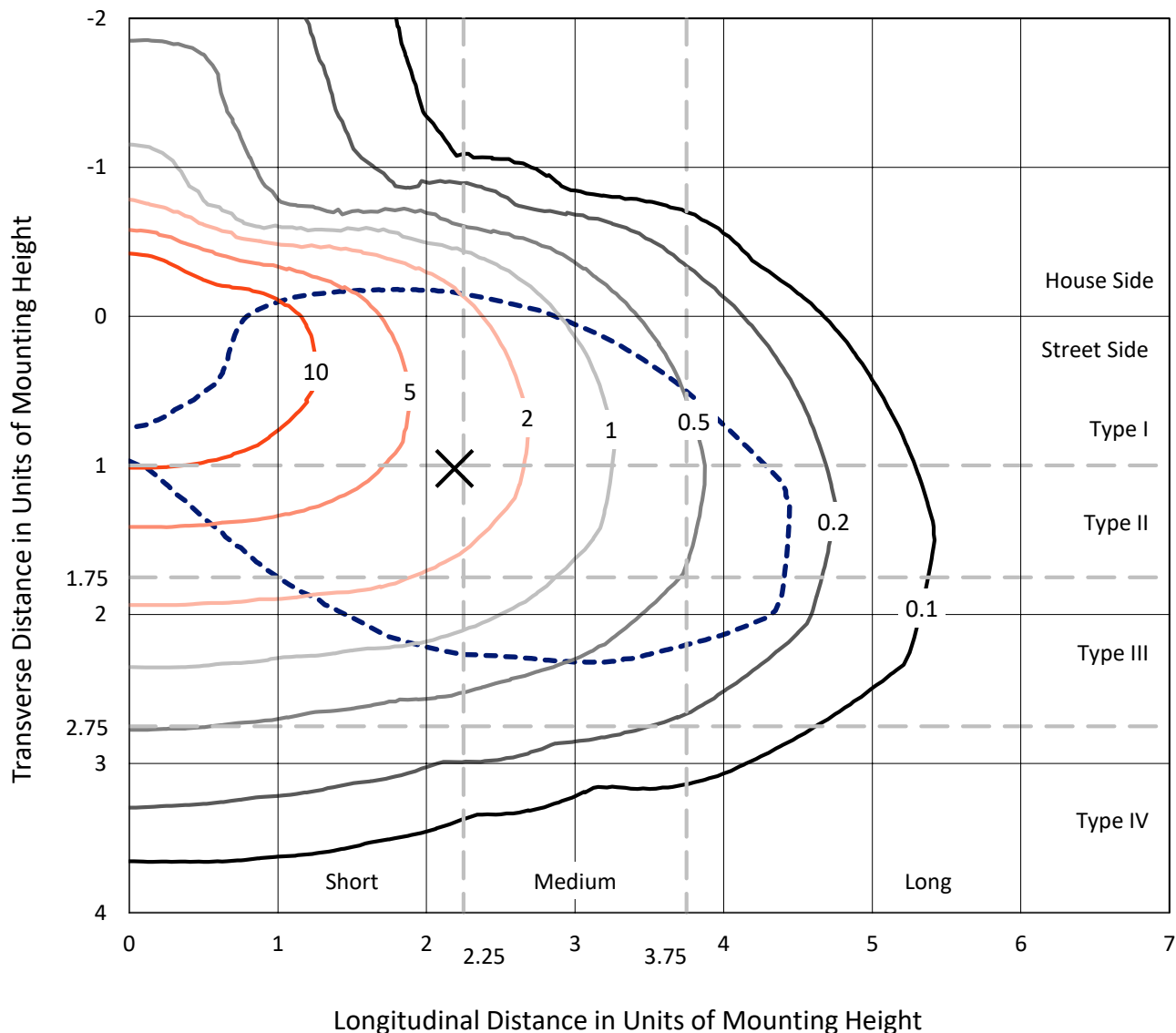
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

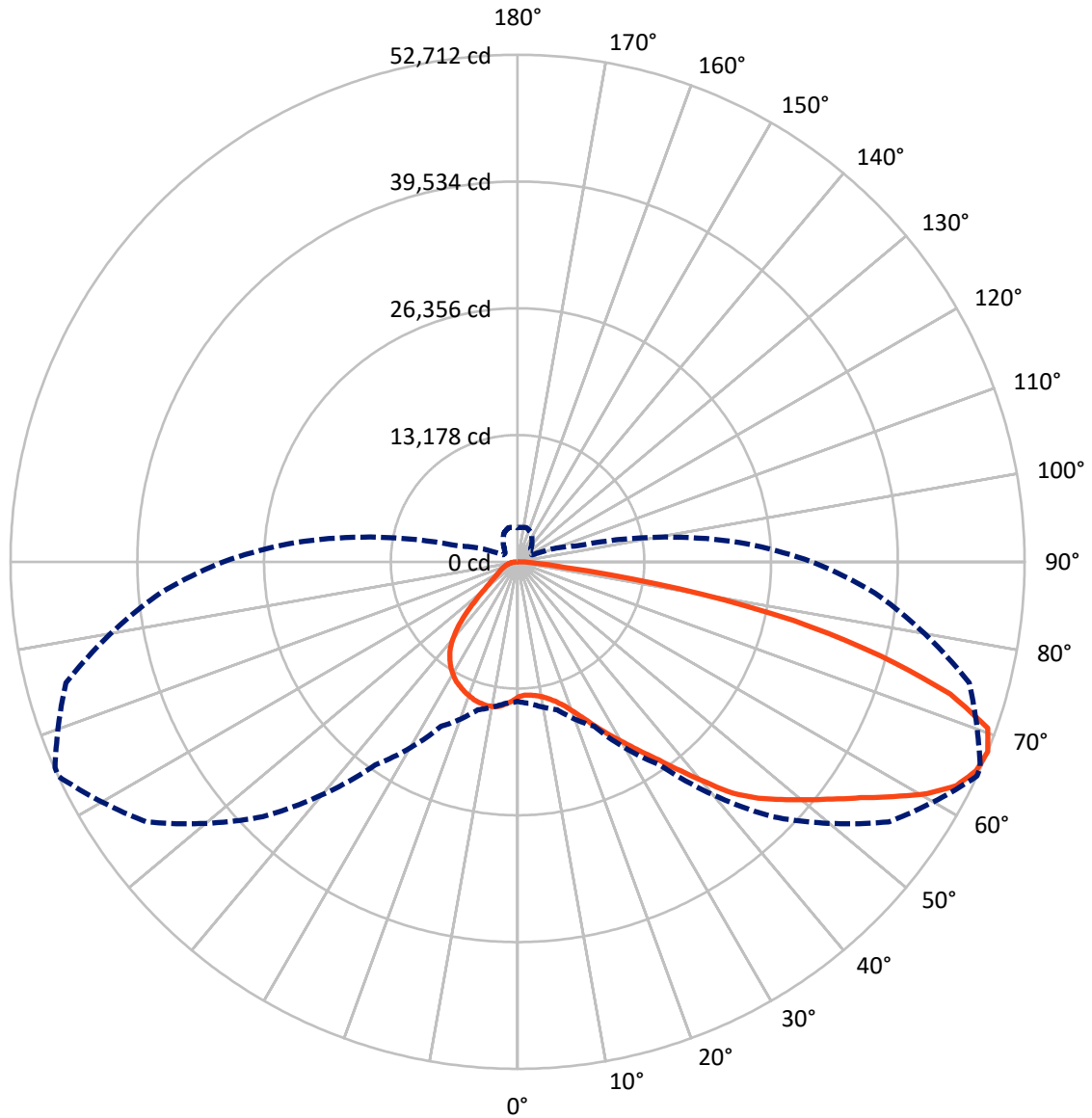
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 17.3 fc
 Type 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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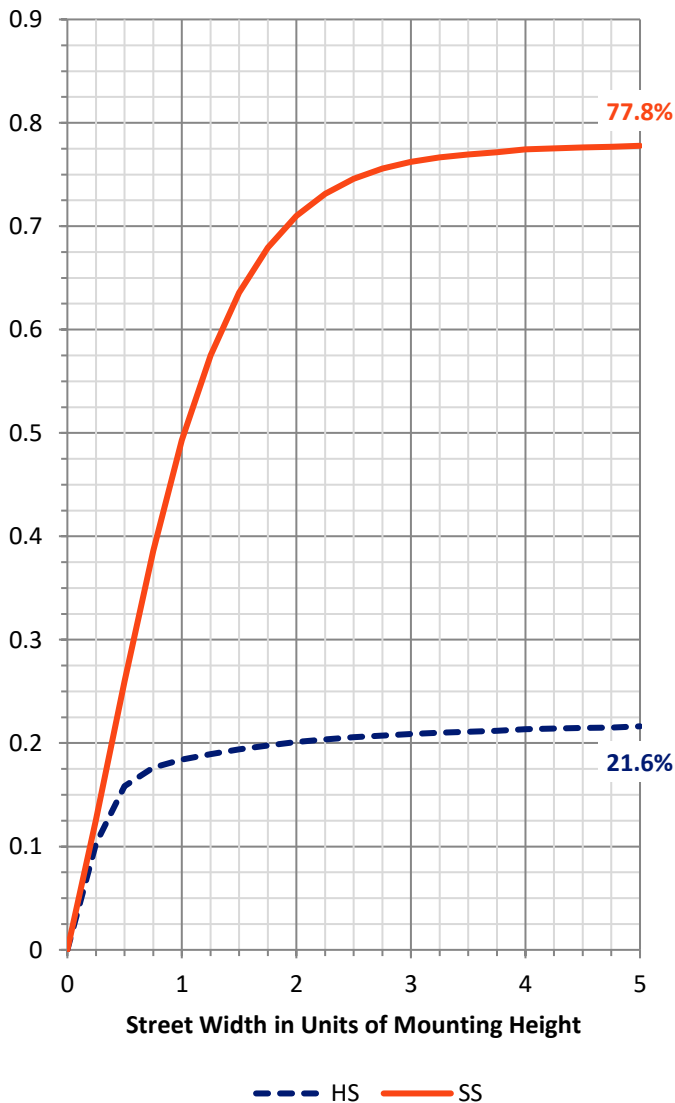
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	20052.8	0.0	20052.8
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	70730.2	0.0	70730.2
	% Fixture	77.9	0.0	77.9
Total	Lumens	90783.0	0.0	90783.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1397.1	1.5
10°-20°	4365.1	4.8
20°-30°	7556.6	8.3
30°-40°	11103.6	12.2
40°-50°	15007.9	16.5
50°-60°	18455.2	20.3
60°-70°	19775.9	21.8
70°-80°	11663.6	12.8
80°-90°	1457.9	1.6
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°	90783.0	100.0
0°-180°	90783.0	100.0

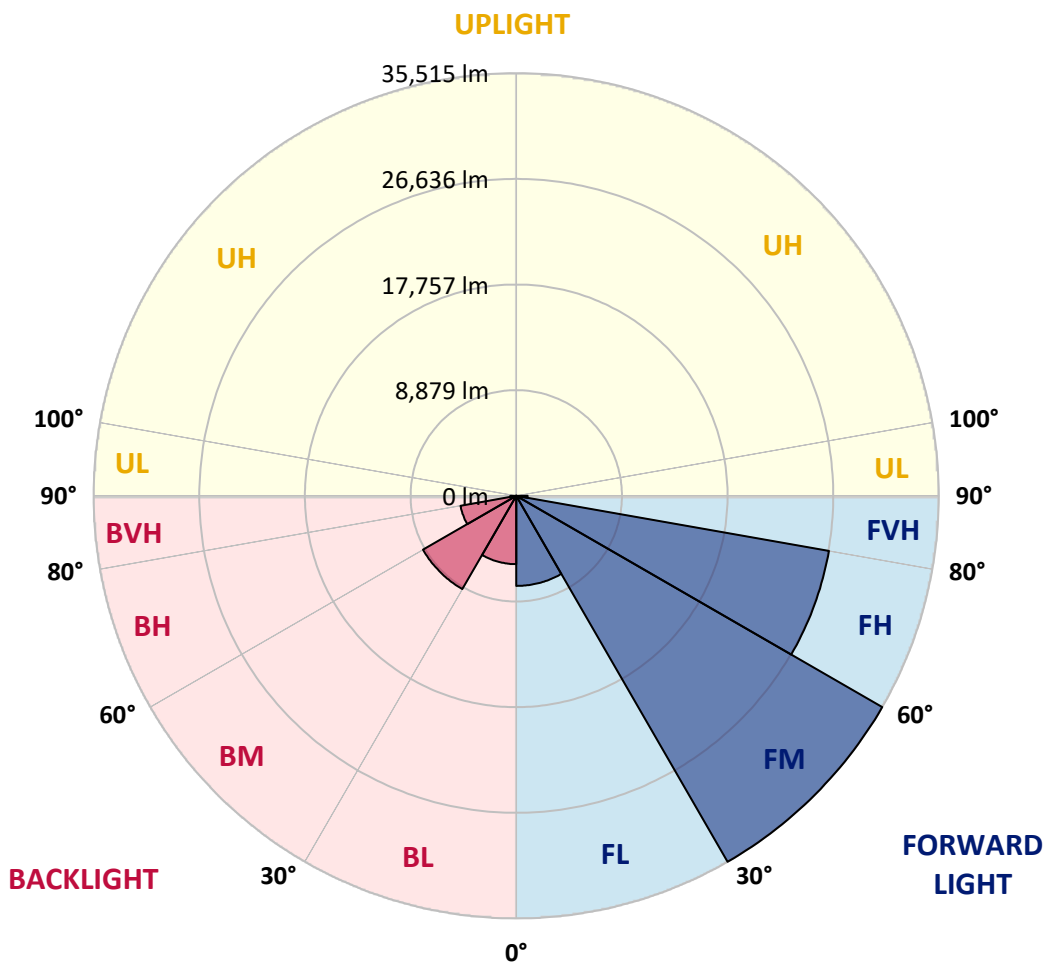


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7575.1	8.3			
FM (30°-60°)	35514.9	39.1			
FH (60°-80°)	26684.1	29.4			G5
FVH (80°-90°)	956.0	1.1			G5
BL (0°-30°)	5743.7	6.3	B5		
BM (30°-60°)	9051.8	10.0	B5		
BH (60°-80°)	4755.5	5.2	B4/5000		G4/5000
BVH (80°-90°)	501.9	0.6			G4/750
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	14022.5	14022.5	14022.5	14022.5	14022.5	14022.5	14022.5	14022.5	14022.5	14022.5	14022.5
2.5°	13757.9	13731.9	13720.8	13756.0	13781.9	13811.5	13854.1	13894.8	13900.4	13954.0	14024.4
5°	13924.4	13902.2	13878.2	13872.6	13863.4	13861.5	13872.6	13918.9	13930.0	13981.8	14133.6
7.5°	14294.6	14272.4	14228.0	14211.3	14161.4	14072.5	14029.9	14054.0	14059.6	14122.5	14311.3
10°	14898.0	14829.5	14775.9	14720.3	14563.0	14422.3	14318.7	14274.3	14265.0	14326.1	14544.5
12.5°	15618.0	15560.6	15501.4	15355.2	15155.3	14901.7	14718.5	14616.7	14609.3	14661.1	14825.8
15°	16378.7	16378.7	16338.0	16164.0	15967.8	15547.7	15264.5	15094.2	15105.3	15146.0	15221.9
17.5°	17361.6	17280.1	17261.6	17063.6	16845.2	16462.0	16012.3	15740.2	15753.1	15771.6	15714.3
20°	18361.1	18337.0	18309.3	18177.8	17979.8	17487.4	16982.1	16624.9	16626.8	16560.1	16304.7
22.5°	19682.6	19603.0	19623.4	19475.3	19206.9	18701.6	18120.5	17696.6	17724.4	17628.1	17165.4
25°	20994.9	20915.3	20872.8	20772.8	20541.5	20062.1	19371.7	18983.0	18949.7	18775.7	18103.8
27.5°	22305.4	22259.1	22294.3	22174.0	21985.2	21450.3	20817.2	20386.0	20408.2	20287.9	19286.5
30°	23662.1	23610.3	23763.9	23569.6	23452.9	22932.8	22325.7	21818.6	21837.1	21881.5	20758.0
32.5°	24685.7	24746.7	25015.1	24992.9	24970.7	24391.4	23752.8	23471.5	23499.2	23654.7	22505.3
35°	25674.0	25679.6	26057.2	26342.2	26462.5	25977.6	25315.0	25305.7	25487.1	25960.9	24941.1
37.5°	26494.0	26475.5	26978.9	27421.3	27750.8	27375.0	27010.4	27578.6	27743.4	28726.2	27393.5
40°	26941.9	26980.8	27628.6	28180.2	28828.0	28650.3	28689.2	30142.2	30547.5	31408.2	29227.8
42.5°	26627.3	26745.7	27754.5	28879.8	29857.1	30094.0	30875.1	32911.1	33083.3	33238.7	31032.4
45°	26099.8	26223.8	27341.7	29159.3	30706.7	31708.0	33049.9	35041.5	35230.3	35056.3	32533.5
47.5°	25550.0	25677.7	26923.4	29046.4	31410.0	33329.4	34984.1	36925.8	37166.4	36627.8	33977.2
50°	24852.2	25050.3	26412.6	28807.6	31980.1	35078.5	36814.7	38865.5	38976.6	38199.2	35071.1
52.5°	23993.4	24211.8	25685.1	28398.6	32426.2	36300.1	38667.5	40970.0	40958.9	40035.3	36322.4
55°	23090.2	23288.2	24806.0	27754.5	32676.1	37240.4	40148.2	43289.2	43422.5	42648.8	37455.1
57.5°	21933.3	22112.9	23767.6	26888.2	32416.9	38038.2	42547.0	46045.2	46111.8	44468.2	38356.5
60°	20400.8	20665.5	22327.6	25786.9	31672.9	38961.8	45190.1	48943.7	49025.2	46258.1	38935.8
62.5°	18718.3	18823.8	20517.4	24091.5	30590.1	39674.4	47022.5	51211.1	51092.7	47657.4	39109.8
65°	16667.5	16750.8	18216.7	21911.1	28578.1	39283.8	47679.6	52377.2	52231.0	48536.5	38574.9
67.5°	14520.4	14777.7	15929.0	18886.7	25770.3	37481.0	47124.3	52712.2	52638.2	48603.2	37297.8
70°	11733.0	11823.6	12863.9	15386.7	21502.1	33871.7	45273.4	51853.4	51796.0	47115.0	34689.8
72.5°	8273.6	8184.7	8690.0	10668.7	15531.0	26943.8	38654.5	47028.0	47124.3	42147.2	30208.8
75°	4392.2	4562.5	5349.1	6531.9	8804.8	17320.9	30817.7	38921.0	38887.7	35243.3	23878.7
77.5°	2339.6	2335.9	2876.3	3381.6	4310.8	7958.9	20326.7	29351.8	29514.7	27306.5	16395.4
80°	1123.5	1166.1	1199.4	1375.2	2148.9	3677.8	8503.1	17021.0	18131.6	16286.2	7788.7
82.5°	899.5	903.2	906.9	868.1	888.4	1497.4	3276.1	4925.3	5103.0	4101.6	2511.7
85°	666.3	625.6	620.1	525.7	594.1	899.5	1652.9	2102.6	1999.0	1945.3	1417.8
87.5°	268.4	251.7	244.3	229.5	229.5	338.7	583.0	760.7	758.9	692.2	475.7
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°	14022.5	14022.5	14022.5	14022.5	14022.5	14022.5	14022.5	14022.5	14022.5	14022.5	14022.5
2.5°	14079.9	14146.5	14302.0	14435.3	14485.3	14607.4	14722.2	14788.8	14835.1	14862.8	14988.7
5°	14226.1	14359.4	14607.4	14794.4	14975.8	15201.6	15347.8	15440.3	15492.2	15521.8	15612.5
7.5°	14450.1	14585.2	14848.0	15134.9	15301.5	15486.6	15581.0	15647.6	15681.0	15671.7	15743.9
10°	14650.0	14783.3	15046.1	15266.3	15360.7	15466.2	15516.2	15531.0	15532.9	15540.3	15612.5
12.5°	14922.1	15003.5	15144.2	15288.6	15268.2	15271.9	15314.5	15296.0	15253.4	15246.0	15294.1
15°	15214.5	15216.4	15227.5	15196.0	15068.3	15012.8	14953.5	14903.6	14787.0	14779.6	14855.4
17.5°	15581.0	15494.0	15292.3	15077.6	14774.0	14564.9	14353.8	14266.9	14124.3	14096.6	14133.6
20°	16053.0	15871.6	15381.1	14848.0	14279.8	13905.9	13650.5	13393.2	13195.2	13147.0	13182.2
22.5°	16730.4	16373.2	15494.0	14603.7	13724.5	13086.0	12589.9	12280.8	11947.7	11777.4	11794.0
25°	17548.5	16989.5	15690.2	14294.6	13071.2	12149.4	11344.3	10724.2	10348.5	10098.6	10165.2
27.5°	18620.2	17852.1	15925.3	13989.2	12258.6	10951.9	9783.9	8943.6	8560.5	8442.0	8364.3
30°	19862.2	18894.1	16173.3	13537.6	11381.3	9469.3	7973.7	7274.1	6835.4	6765.1	6705.9
32.5°	21524.3	20206.4	16637.9	13047.1	10333.7	7986.7	6363.4	5558.3	5458.3	5401.0	5388.0
35°	23667.7	21925.9	17124.7	12410.4	8967.7	6248.7	4814.2	4379.3	4331.1	4394.1	4399.6
37.5°	25942.4	23791.7	17707.7	11692.2	7396.3	4662.5	3683.3	3381.6	3435.3	3631.5	3675.9
40°	27482.4	25020.7	18237.1	10716.8	5454.6	3387.2	2680.1	2615.3	2911.5	3163.2	3215.0
42.5°	28959.4	25951.7	18451.8	9426.7	3890.6	2411.7	2163.7	2385.8	2800.4	3076.2	3113.2
45°	30219.9	27034.5	17911.3	7879.3	2637.6	2015.6	2073.0	2380.3	2841.2	3146.6	3174.3
47.5°	31419.3	27919.2	17172.8	6208.0	2080.4	1939.8	2071.2	2430.3	2931.8	3220.6	3237.3
50°	32565.0	28592.9	15912.3	4723.5	1949.0	1904.6	2087.8	2508.0	2981.8	3163.2	3155.8
52.5°	33414.6	28940.9	14570.4	3812.9	1897.2	1876.8	2132.3	2606.1	2991.1	3100.3	3092.9
55°	34038.3	28874.3	13689.4	3122.5	1854.6	1865.7	2204.4	2680.1	3079.9	3244.7	3239.1
57.5°	34095.7	28572.6	12688.0	2637.6	1802.8	1863.9	2282.2	2783.8	3524.1	3827.7	3735.1
60°	34027.2	28072.8	11688.5	2315.5	1745.4	1875.0	2363.6	3094.7	4164.6	4403.3	4338.5
62.5°	33690.4	27141.8	10191.1	2102.6	1695.4	1915.7	2424.7	3340.9	4133.1	4160.9	4068.3
65°	32650.1	25896.2	8225.5	1887.9	1645.5	1943.5	2474.7	3405.7	3796.2	3707.4	3661.1
67.5°	30591.9	23114.2	6344.9	1691.7	1580.7	1937.9	2622.7	3313.1	3668.5	3603.7	3544.5
70°	27667.5	19952.9	4405.2	1490.0	1471.5	1902.7	2585.7	3344.6	3607.4	3507.5	3427.9
72.5°	23114.2	15653.2	2802.3	1325.3	1308.6	1819.4	2493.2	3324.2	3566.7	3522.3	3413.1
75°	17404.2	10926.0	1780.6	1145.7	1164.2	1667.7	2345.1	3215.0	3546.4	3407.5	3198.4
77.5°	10957.4	5393.6	1384.5	973.6	1001.3	1438.2	2026.8	2807.8	3403.8	3320.5	3052.2
80°	4144.2	2189.6	1082.8	790.3	814.4	1118.0	1662.1	2309.9	3133.6	3270.6	3155.8
82.5°	1908.3	1369.7	812.6	634.9	644.1	814.4	1240.1	1710.2	2652.4	3002.2	3289.1
85°	1114.3	897.7	542.3	423.9	440.5	481.2	697.8	1043.9	1719.5	2289.6	2561.7
87.5°	379.4	312.8	211.0	179.5	174.0	198.0	168.4	342.4	510.9	899.5	1027.3
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)