

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: P510620

Luminaire Tested: **CST-CA10-760-750-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510620
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-760-750-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 95998 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

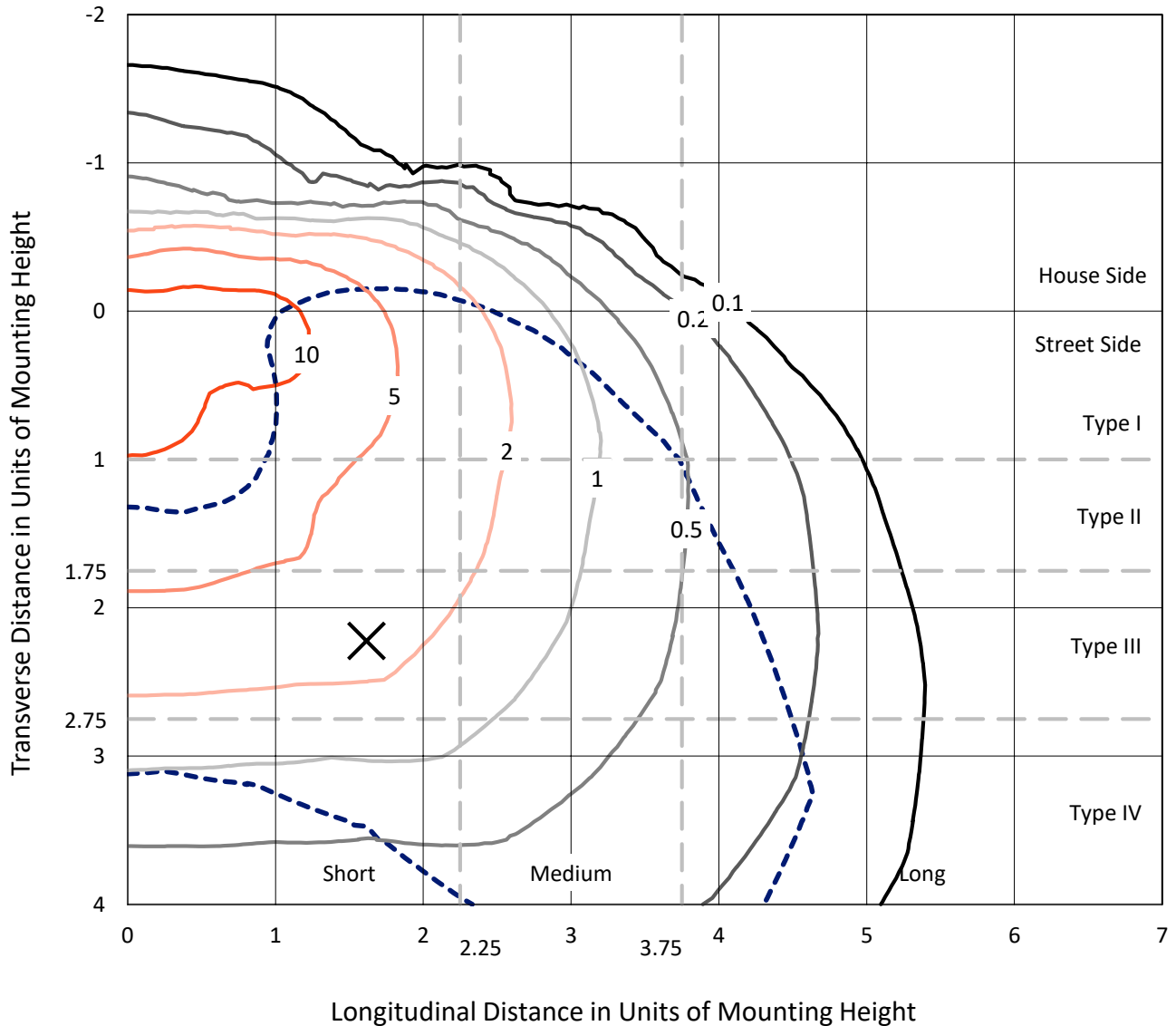
Input Watts (W): 761.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

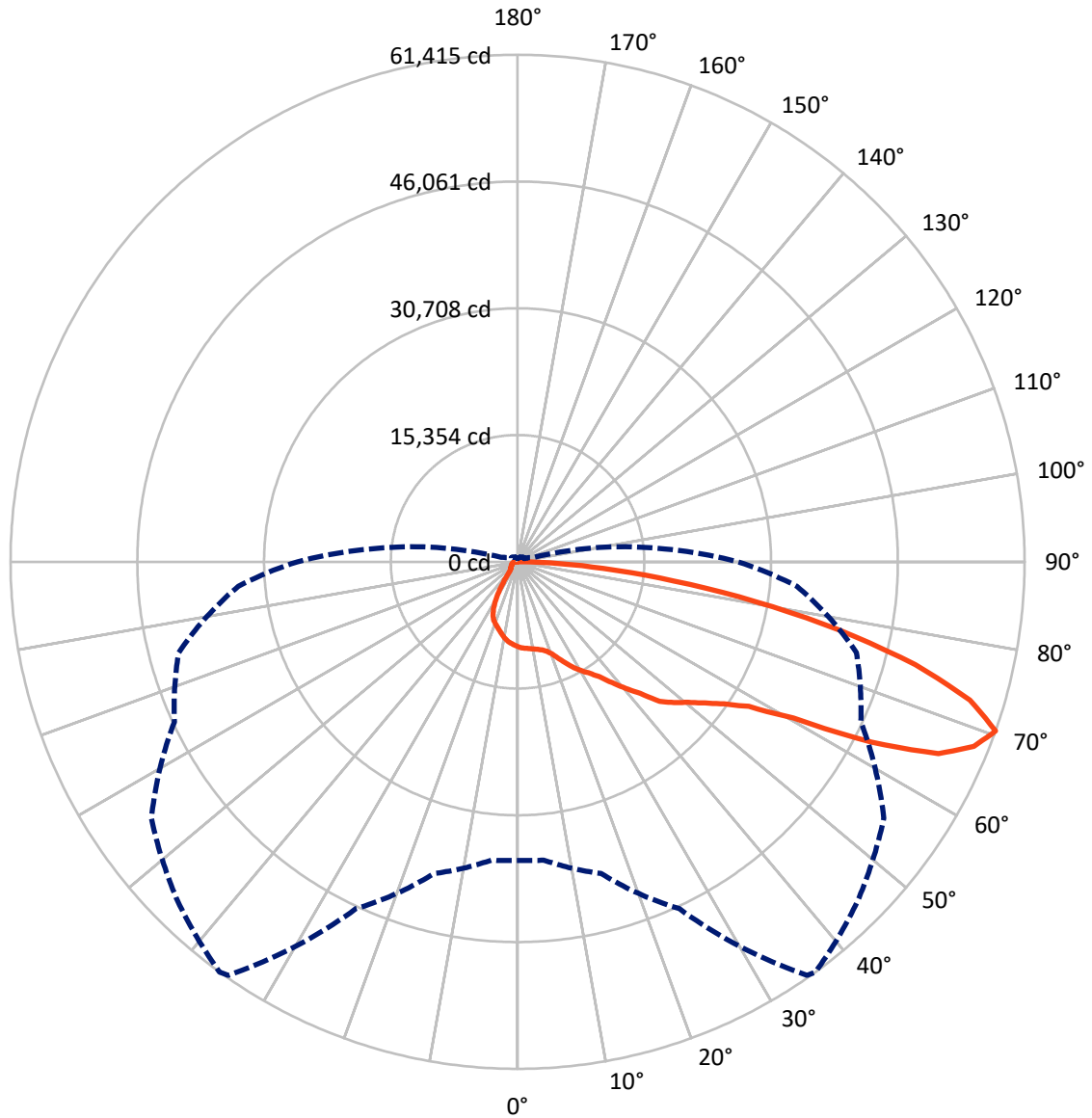
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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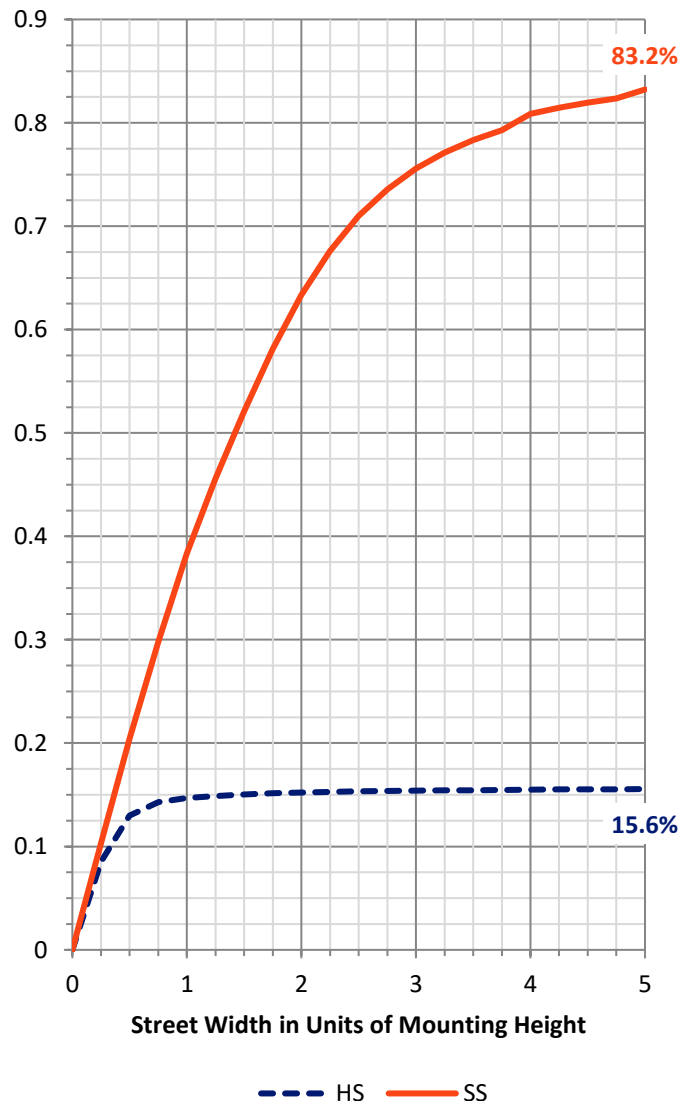
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15149.2	0.0	15149.2
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	80848.8	0.0	80848.8
	% Fixture	84.2	0.0	84.2
Total	Lumens	95998.0	0.0	95998.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	975.5	1.0
10°-20°	2901.0	3.0
20°-30°	5216.8	5.4
30°-40°	8255.5	8.6
40°-50°	12901.8	13.4
50°-60°	18526.7	19.3
60°-70°	25129.8	26.2
70°-80°	18598.7	19.4
80°-90°	3492.3	3.6
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°	95998.0	100.0
0°-180°	95998.0	100.0

Coefficient of Utilization



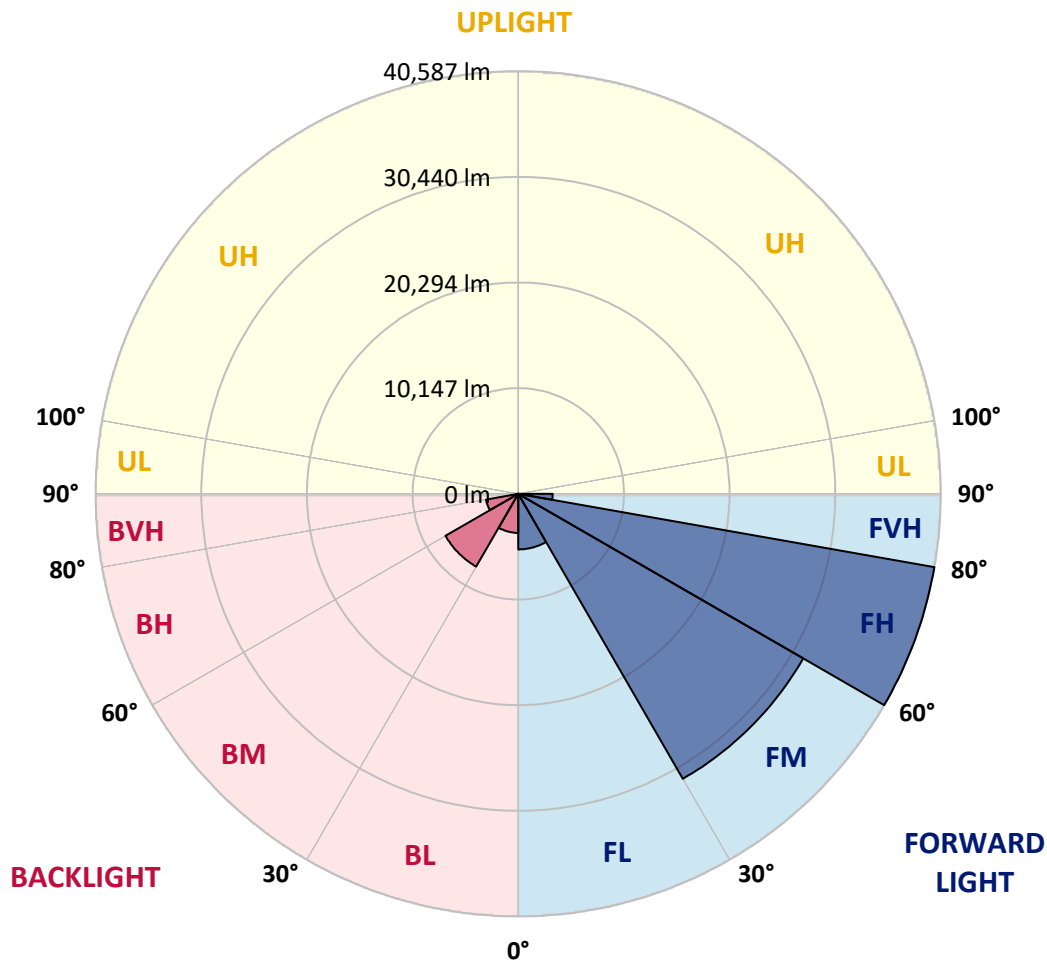
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5339.4	5.6			
FM (30°-60°)	31611.3	32.9			
FH (60°-80°)	40587.0	42.3			G5
FVH (80°-90°)	3311.1	3.4			G5
BL (0°-30°)	3753.9	3.9	B4/5000		
BM (30°-60°)	8072.7	8.4	B4/8500		
BH (60°-80°)	3141.5	3.3	B4/5000		G4/5000
BVH (80°-90°)	181.1	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	10285.7	10285.7	10285.7	10285.7	10285.7	10285.7	10285.7	10285.7	10285.7	10285.7	10285.7
2.5°	10494.0	10471.9	10454.1	10460.8	10447.5	10456.4	10436.4	10412.0	10354.4	10330.0	10319.0
5°	10587.1	10580.5	10562.7	10549.4	10525.1	10516.2	10494.0	10514.0	10483.0	10403.2	10356.6
7.5°	10642.5	10640.3	10620.4	10591.6	10604.9	10615.9	10638.1	10607.1	10567.2	10529.5	10434.2
10°	10666.9	10666.9	10642.5	10658.0	10726.7	10733.4	10744.5	10764.4	10726.7	10671.3	10576.0
12.5°	10729.0	10724.5	10733.4	10784.4	10855.3	10870.8	10926.2	10926.2	10930.6	10897.4	10786.6
15°	10884.1	10884.1	10904.0	10950.6	11072.5	11081.3	11163.4	11236.5	11245.4	11196.6	11112.4
17.5°	11243.1	11234.3	11223.2	11252.0	11382.8	11387.2	11529.0	11622.1	11646.5	11699.7	11686.4
20°	11925.7	11916.9	11914.7	11916.9	11908.0	11894.7	12034.3	12134.1	12258.2	12351.3	12397.8
22.5°	12903.1	12883.2	12883.2	12774.6	12690.4	12703.7	12725.8	12781.2	12945.2	13109.2	13284.3
25°	13955.8	13942.6	13953.6	13676.6	13563.6	13607.9	13579.1	13665.5	13880.5	14022.3	14208.5
27.5°	14815.8	14835.7	14773.7	14558.7	14485.5	14518.8	14452.3	14700.5	14937.7	15185.9	15467.3
30°	15886.2	15779.8	15626.9	15365.4	15338.8	15343.2	15338.8	15737.7	16229.7	16584.3	16974.4
32.5°	17284.7	17302.4	16958.9	16342.8	16116.7	16085.7	16174.3	16759.4	17424.3	18211.1	18725.3
35°	18698.7	18727.5	18477.0	17834.3	17189.4	17091.9	16961.1	17721.3	18680.9	20258.9	21034.6
37.5°	20199.1	20301.0	20004.0	19430.0	18665.4	18574.6	17956.2	18703.1	20121.5	22683.5	23700.8
40°	22207.0	22098.4	21739.4	21010.2	20298.8	20152.5	19434.5	19826.7	21974.3	25719.8	26457.8
42.5°	23687.5	23656.5	23352.8	22632.5	21916.7	21799.2	21220.8	21646.3	24308.0	28798.2	29128.4
45°	24862.1	25052.7	25046.1	24593.9	24190.6	24124.1	23782.8	24410.0	27129.4	31703.7	31541.9
47.5°	25906.0	26023.4	25835.1	25637.8	25449.4	25471.6	25724.2	27014.1	30012.7	34241.4	33525.5
50°	27614.7	27464.0	26619.6	26468.9	26734.9	26745.9	27515.0	29500.8	33188.6	36435.5	35205.4
52.5°	29893.0	29729.0	27993.7	27736.6	28366.0	28412.6	29691.4	31978.6	36464.3	38532.1	36876.5
55°	33283.9	32902.7	31043.3	29890.8	30178.9	30367.3	31916.5	34361.0	39028.5	40380.4	38142.0
57.5°	37448.3	37725.3	36772.3	34168.2	32969.2	33040.1	34463.0	36641.6	41291.3	41998.3	38882.2
60°	41849.8	41783.3	42182.3	41085.2	38789.2	38408.0	37683.2	38968.7	43044.4	43361.3	39644.6
62.5°	44261.1	44649.0	45978.7	46198.1	48270.4	48068.7	43128.6	41854.3	45070.1	44216.8	39853.0
65°	44247.8	44416.3	46891.8	49613.4	56087.1	56029.5	53733.5	46027.5	46579.3	44673.3	39436.3
67.5°	41388.8	41650.4	44544.8	49861.6	59699.7	59631.0	58044.1	51894.0	47053.6	44123.7	37492.6
70°	36176.2	36264.8	39088.3	46366.6	61151.3	61415.0	58192.6	54145.7	45874.6	42490.3	33948.8
72.5°	29844.3	29660.3	32421.8	39595.9	57454.6	57297.2	55732.5	51457.3	43888.8	39318.8	27687.9
75°	21974.3	22486.3	24964.1	31792.4	49192.3	49768.6	50462.2	47344.0	38979.8	32404.1	19146.4
77.5°	14509.9	15161.5	17665.9	23838.2	38944.3	39839.7	41637.1	40267.4	31710.4	23244.2	9117.7
80°	7497.6	7989.7	10243.6	15817.5	27918.3	29210.4	32506.0	30498.1	22481.8	10509.6	2041.2
82.5°	2836.8	2772.6	4589.9	9053.5	17900.8	19075.4	21471.2	18288.7	8000.7	1846.2	948.6
85°	1245.5	1318.7	1901.6	4128.9	10234.7	10387.7	12162.9	7129.7	1172.4	882.1	644.9
87.5°	538.6	618.3	797.9	1187.9	3452.9	3987.1	4933.4	2265.0	354.6	305.8	323.6
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°	10285.7	10285.7	10285.7	10285.7	10285.7	10285.7	10285.7	10285.7	10285.7	10285.7	10285.7
2.5°	10299.0	10285.7	10263.5	10208.1	10117.3	10106.2	10097.3	10088.5	10070.7	10079.6	10130.6
5°	10321.2	10296.8	10217.0	10137.2	10057.4	9986.5	9900.1	9866.8	9822.5	9793.7	9846.9
7.5°	10396.5	10345.5	10228.1	10119.5	9902.3	9798.1	9687.3	9556.6	9463.5	9403.6	9456.8
10°	10522.8	10458.6	10312.3	10088.5	9833.6	9547.7	9352.7	9135.5	8958.2	8909.4	8958.2
12.5°	10729.0	10633.7	10463.0	10159.4	9707.3	9332.7	8962.6	8676.7	8390.8	8308.8	8333.2
15°	11063.6	10988.3	10726.7	10307.9	9709.5	9137.7	8588.0	8127.1	7752.5	7621.8	7612.9
17.5°	11600.0	11520.2	11218.8	10602.6	9789.3	8984.8	8220.1	7517.6	6950.2	6662.1	6615.6
20°	12369.0	12258.2	11801.6	11037.0	9962.1	8918.3	7878.8	6934.7	6052.6	5511.9	5429.9
22.5°	13224.5	13107.0	12433.3	11371.7	10086.2	8787.5	7553.0	6289.8	5128.4	4468.0	4374.9
25°	14288.3	14031.2	13038.3	11688.6	10057.4	8512.7	7023.4	5414.3	4155.5	3583.7	3521.7
27.5°	15338.8	15013.0	13654.4	11854.8	9931.1	8076.1	6247.7	4390.4	3253.5	2847.9	2796.9
30°	16642.0	16012.5	14201.9	11932.4	9612.0	7422.3	5208.2	3337.7	2435.7	2156.4	2107.7
32.5°	18191.1	17238.1	14716.0	11846.0	9080.1	6425.0	4049.1	2444.5	1810.7	1635.6	1633.4
35°	20234.5	18740.8	15281.2	11562.3	8264.5	5350.1	2839.0	1671.1	1411.8	1351.9	1363.0
37.5°	22623.7	20775.3	15855.2	11096.9	7342.5	4093.4	1892.7	1287.7	1241.1	1243.3	1245.5
40°	25143.6	23022.6	16628.7	10443.1	6223.3	2963.2	1363.0	1156.9	1154.7	1176.8	1183.5
42.5°	27550.4	25205.6	17581.7	9572.1	5050.9	1959.2	1181.3	1103.7	1074.9	1083.8	1090.4
45°	29786.7	27078.4	18392.8	8723.2	3794.3	1398.5	1159.1	1041.6	997.3	992.9	997.3
47.5°	31588.5	28578.8	18887.0	7725.9	2703.8	1161.3	1112.6	984.0	922.0	908.7	902.0
50°	32960.4	29693.6	19066.6	6595.6	1828.4	1108.1	1050.5	917.5	842.2	844.4	844.4
52.5°	34299.0	30706.4	18858.2	5456.5	1345.3	1061.6	1008.4	864.3	784.6	826.7	837.7
55°	35263.1	31131.9	18251.0	4224.2	1121.4	1004.0	961.9	802.3	746.9	815.6	837.7
57.5°	35826.0	31466.6	17136.2	3049.6	1028.3	948.6	902.0	744.7	693.7	711.4	722.5
60°	36176.2	30999.0	15662.4	2085.5	979.6	904.2	842.2	707.0	638.3	596.2	589.5
62.5°	35983.4	29828.8	13720.9	1433.9	928.6	855.5	791.2	671.5	580.7	525.3	520.8
65°	34412.0	27663.5	10533.9	1161.3	897.6	833.3	760.2	638.3	540.8	487.6	480.9
67.5°	31497.6	23771.7	6152.4	1032.8	884.3	811.2	735.8	607.3	518.6	461.0	452.1
70°	26708.3	17880.9	2061.1	922.0	882.1	808.9	715.9	585.1	494.2	434.4	425.5
72.5°	19268.2	10788.8	1004.0	811.2	824.5	775.7	700.3	567.4	478.7	403.4	387.8
75°	10950.6	3512.8	906.5	700.3	766.8	740.2	691.5	569.6	485.4	365.7	348.0
77.5°	3116.1	1026.1	875.4	596.2	724.7	764.6	647.2	514.2	496.4	339.1	316.9
80°	1052.7	913.1	844.4	463.2	585.1	631.6	560.7	452.1	500.9	308.1	285.9
82.5°	844.4	917.5	709.2	370.1	445.5	478.7	445.5	405.6	405.6	274.8	257.1
85°	676.0	851.0	449.9	294.8	332.4	367.9	314.7	303.6	283.7	230.5	223.8
87.5°	392.3	266.0	186.2	150.7	139.6	141.8	121.9	146.3	179.5	157.4	155.1
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)