

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: P510586

Luminaire Tested: **CST-CA10-760-727-U-T2-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510586  
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-CA10-760-727-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: 82103 lumens  
Efficiency: N/A  
Efficacy: 107.8 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G5

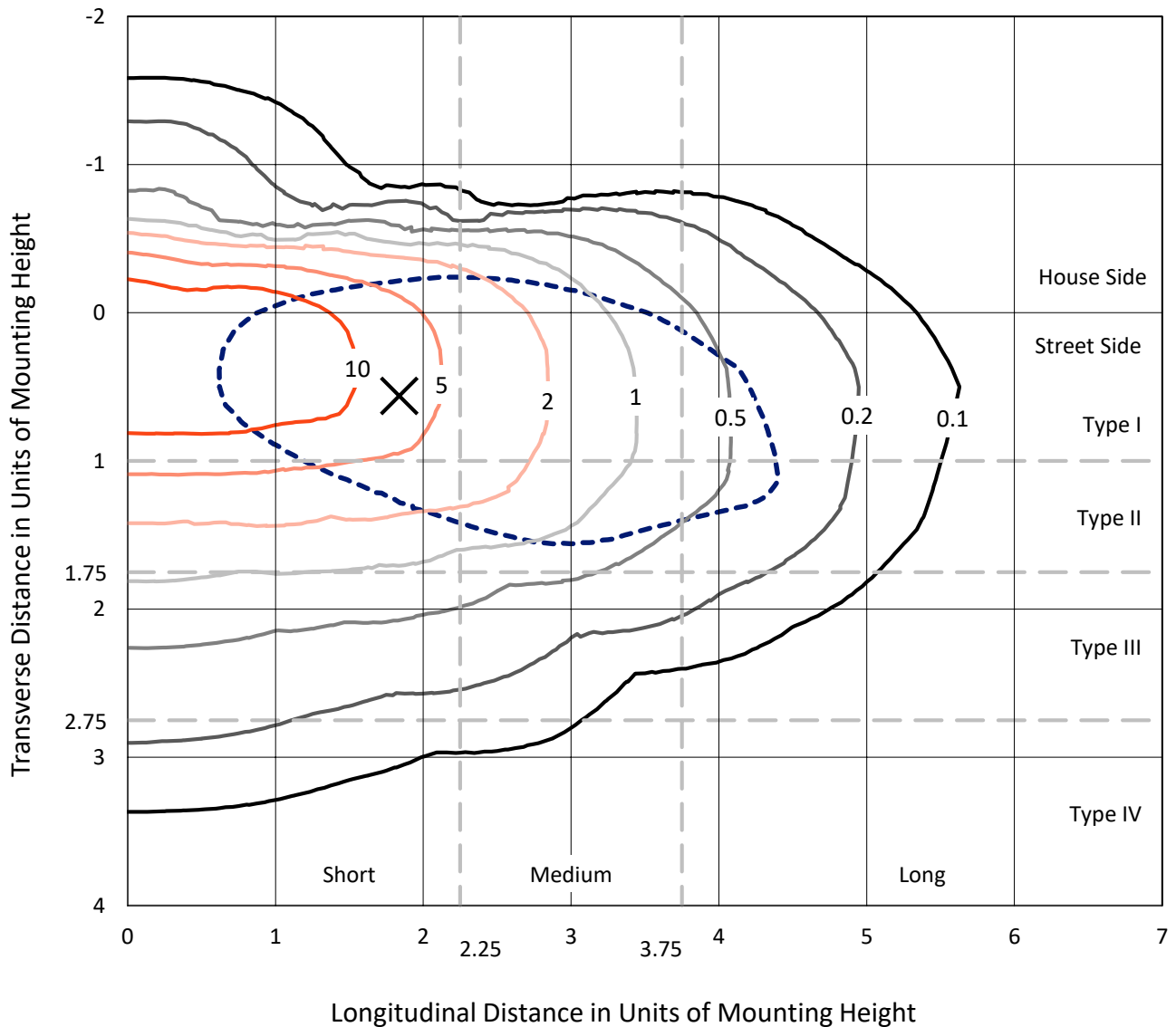
Input Watts (W): 761.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

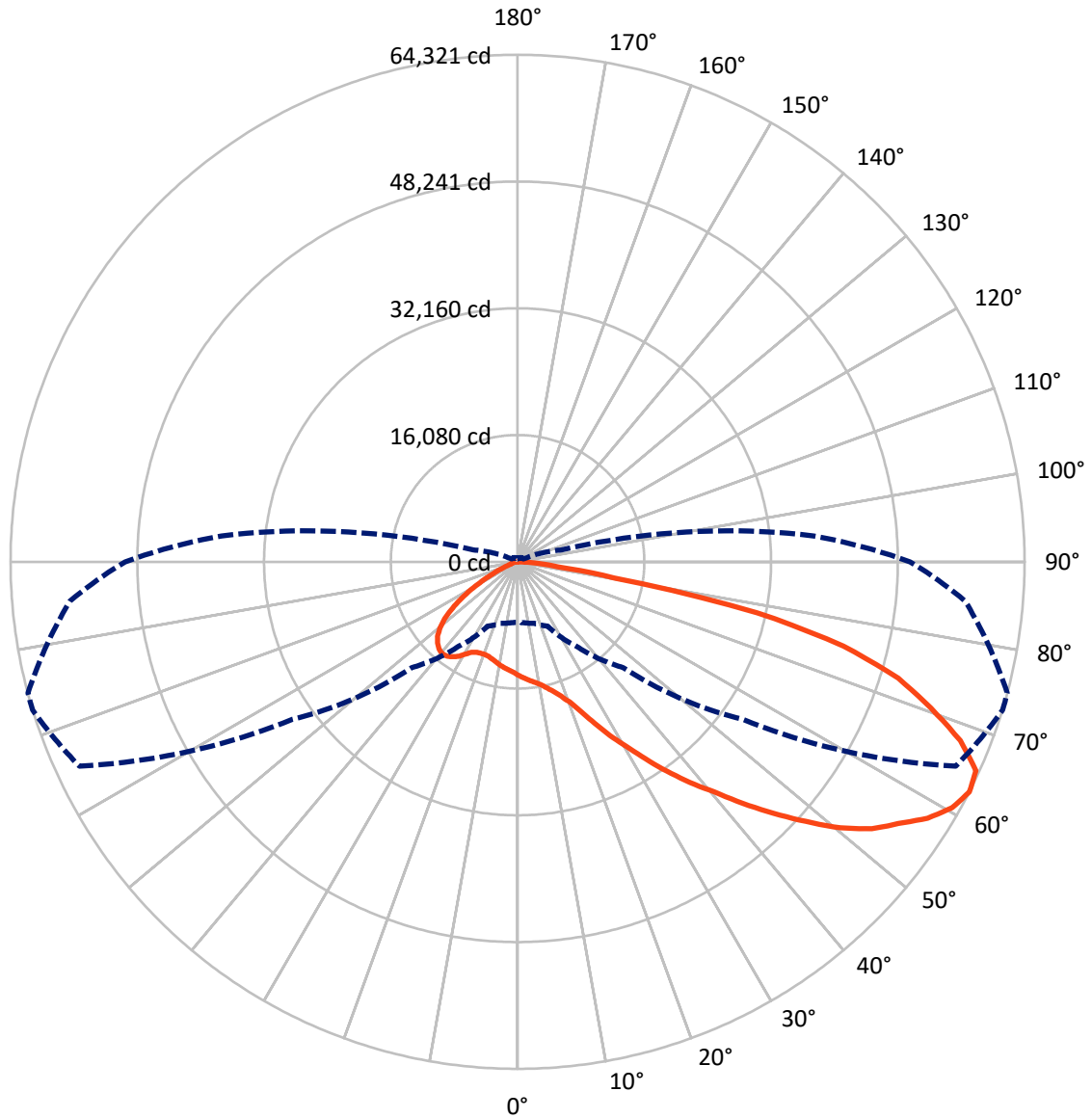
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 20 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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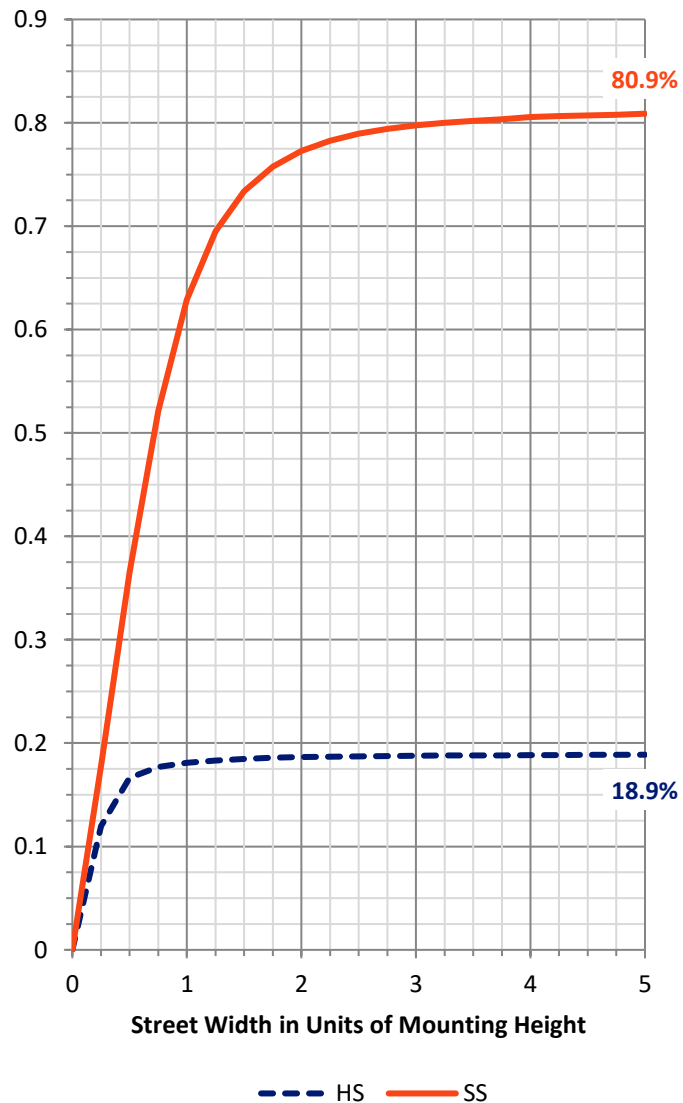
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	15705.9	0.0	15705.9
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	66397.1	0.0	66397.1
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	82103.0	0.0	82103.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1375.3	1.7
10°-20°	4136.6	5.0
20°-30°	7147.1	8.7
30°-40°	10747.5	13.1
40°-50°	14330.8	17.5
50°-60°	16877.3	20.6
60°-70°	16779.0	20.4
70°-80°	9633.3	11.7
80°-90°	1076.1	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°	82103.0	100.0
0°-180°	82103.0	100.0

**Coefficient of Utilization**

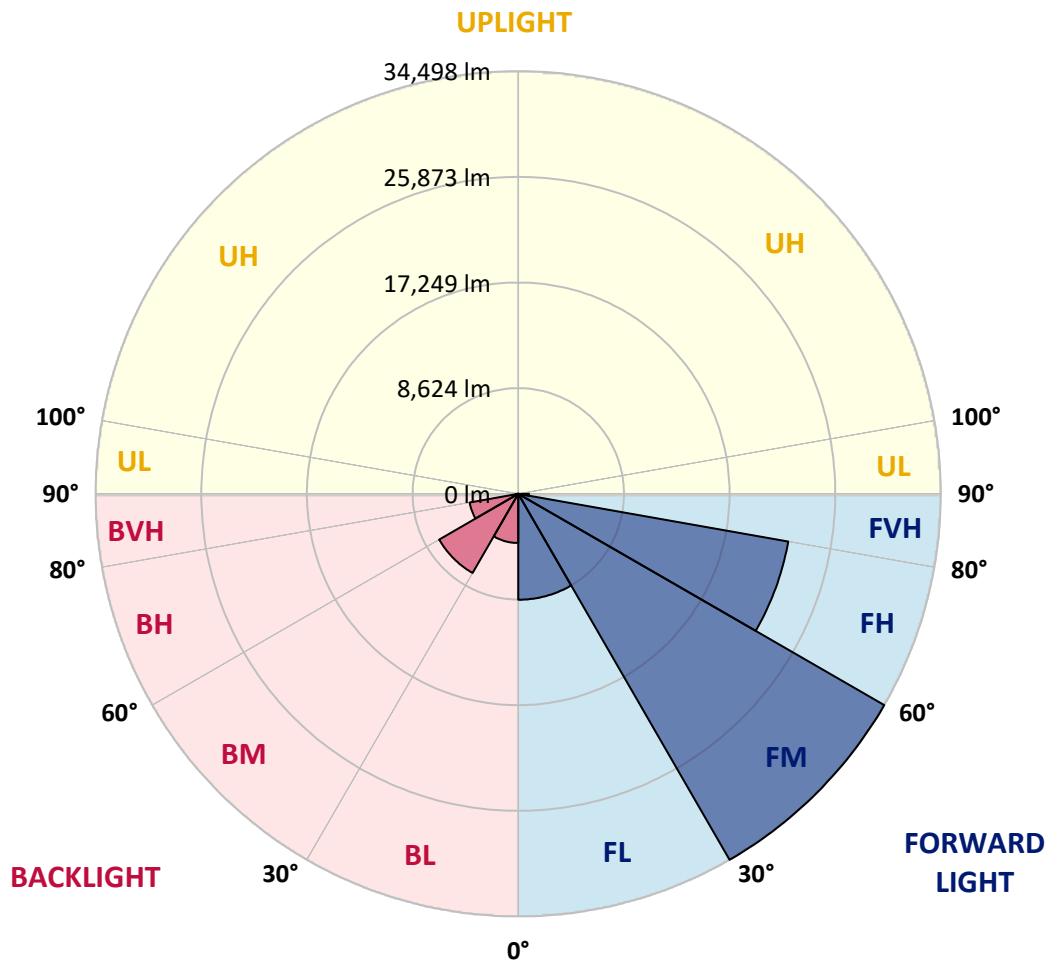


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	8645.4	10.5			
FM (30°-60°)	34497.7	42.0			
FH (60°-80°)	22380.0	27.3			G5
FVH (80°-90°)	874.0	1.1			G5
BL (0°-30°)	4013.6	4.9	B4/5000		
BM (30°-60°)	7457.9	9.1	B4/8500		
BH (60°-80°)	4032.3	4.9	B4/5000		G4/5000
BVH (80°-90°)	202.1	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°	14399.0	14399.0	14399.0	14399.0	14399.0	14399.0	14399.0	14399.0	14399.0	14399.0	14399.0
2.5°	15405.2	15444.0	15397.9	15377.6	15355.5	15211.7	15044.0	14872.6	14734.4	14712.3	14531.7
5°	16487.1	16507.3	16431.8	16345.2	16195.9	15958.1	15657.7	15361.0	15084.6	15010.9	14681.0
7.5°	17318.2	17279.5	17261.1	17187.4	17056.5	16794.8	16339.6	15853.1	15425.5	15322.3	14821.0
10°	18097.8	18081.2	17941.2	17849.0	17640.8	17399.3	17025.2	16407.8	15805.2	15639.3	14942.7
12.5°	18941.9	18905.0	18847.9	18648.8	18479.3	18072.0	17620.5	17058.4	16387.5	16166.4	15150.9
15°	19701.2	19601.7	19570.3	19362.1	19190.7	18879.2	18425.9	17773.4	17056.5	16866.7	15547.2
17.5°	20423.6	20377.5	20307.5	20165.6	19973.9	19734.3	19371.3	18672.8	17931.9	17655.5	16219.8
20°	21037.3	20980.2	20919.4	20958.1	20915.7	20762.7	20534.2	19938.9	19034.0	18766.8	17038.1
22.5°	21464.9	21463.0	21706.3	21848.2	21929.3	21923.8	21868.5	21531.2	20620.8	20349.9	18261.8
25°	21820.6	21848.2	22156.0	22696.0	23178.8	23223.1	23613.8	23453.4	22679.4	22397.4	20102.9
27.5°	21925.6	21980.9	22539.3	23388.9	24122.4	24826.4	25399.6	25692.6	24975.7	24638.4	22082.3
30°	22001.2	22023.3	22570.7	23588.0	25134.2	26249.2	27273.9	27769.6	27152.2	26905.3	24288.3
32.5°	21468.6	21475.9	22314.5	23855.2	25876.9	27810.2	29022.8	29957.2	29795.0	29468.8	26700.7
35°	20735.1	20871.4	21833.5	23597.2	26488.8	29244.0	30895.3	32288.5	32612.9	32378.9	29111.3
37.5°	19828.3	19935.2	20965.4	23213.8	26623.3	30230.0	32351.2	34658.6	35506.3	35467.6	32021.3
40°	18713.4	18844.2	20077.1	22388.2	26557.0	30946.9	34059.6	37283.0	38359.2	38237.6	34907.4
42.5°	17395.6	17587.3	18783.4	21326.7	26072.3	31385.5	35458.4	39955.2	41892.2	41812.9	37461.7
45°	16092.7	16195.9	17286.9	19848.6	25180.3	31527.4	36774.3	43637.5	45515.4	45427.0	40539.5
47.5°	14749.2	14839.5	15978.4	18291.3	23632.2	31241.7	37815.6	46800.0	49206.9	49118.4	43596.9
50°	11623.5	11964.5	14299.5	16922.0	21868.5	30432.7	38797.9	50740.2	53069.7	52693.7	46274.7
52.5°	9944.6	10068.1	11278.9	15541.6	20108.5	29052.3	39454.0	54391.1	56246.9	55705.1	49013.4
55°	9295.9	9378.8	9972.2	12996.5	18455.3	26964.3	40226.1	58051.2	58629.9	58491.7	51247.0
57.5°	8803.8	8895.9	9319.8	10855.0	16713.7	24037.6	39984.7	60625.8	61350.1	60907.8	53618.9
60°	8107.2	8219.6	8781.7	9745.5	14734.4	21066.8	37859.8	61680.0	63327.6	62830.0	55423.1
62.5°	7668.5	7742.2	8064.8	8999.1	13094.2	18976.9	34835.5	61340.9	64320.9	64302.5	56987.8
65°	7073.3	7182.0	7526.6	8284.1	11634.6	17356.9	31982.6	59665.6	63893.4	63909.9	57310.3
67.5°	6450.3	6494.6	6855.8	7464.0	9915.1	15873.4	28291.2	56799.8	60563.1	60942.8	55078.5
70°	5672.6	5650.5	6041.2	6485.4	8103.5	13477.5	22771.5	51702.2	55642.5	55799.1	50565.1
72.5°	4463.6	4483.9	4592.6	4900.4	6151.8	10606.2	16523.9	43681.7	50498.8	50777.1	44796.7
75°	3000.3	3033.5	3540.3	3840.7	4424.9	7622.5	10390.6	29485.4	42690.2	43475.3	36663.7
77.5°	2288.9	2309.2	2456.7	2784.7	3201.2	5433.0	5632.1	16066.9	31079.6	32942.8	28681.9
80°	1621.8	1629.2	1483.6	1319.6	1704.7	3685.9	3326.5	6842.9	12384.6	14634.9	16846.4
82.5°	726.1	715.1	842.2	700.3	982.3	1426.4	1570.2	3321.0	5143.7	5528.9	6019.1
85°	337.3	377.8	433.1	363.1	584.2	551.0	611.9	1415.4	2410.6	2661.2	2646.5
87.5°	82.9	90.3	114.3	145.6	211.9	188.0	184.3	416.5	538.1	536.3	823.8
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°	14399.0	14399.0	14399.0	14399.0	14399.0	14399.0	14399.0	14399.0	14399.0	14399.0	14399.0
2.5°	14408.2	14312.4	14085.7	13866.4	13658.1	13519.9	13365.1	13202.9	13105.2	13059.2	13158.7
5°	14480.1	14297.6	13864.5	13429.6	13061.0	12745.9	12524.7	12336.7	12235.4	12244.6	12250.1
7.5°	14540.9	14284.7	13678.4	13064.7	12489.7	12099.0	11809.6	11606.9	11490.8	11402.4	11468.7
10°	14594.3	14231.3	13460.9	12642.7	12017.9	11439.2	11046.7	10801.6	10587.8	10468.0	10562.0
12.5°	14651.5	14211.0	13217.7	12264.9	11455.8	10808.9	10270.8	10027.5	9817.4	9727.1	9784.2
15°	14900.3	14288.4	12991.0	11820.7	10901.1	10064.4	9483.8	9185.3	9019.4	8910.7	8934.6
17.5°	15327.8	14493.0	12845.4	11356.3	10281.8	9397.2	8645.3	8297.0	8022.4	7945.0	7924.7
20°	15936.0	14881.9	12845.4	10963.7	9579.7	8656.4	7790.2	7202.3	6774.7	6614.4	6737.8
22.5°	16957.0	15543.5	12972.6	10608.0	8975.2	7887.8	6855.8	5958.3	5381.4	5147.4	5283.7
25°	18385.3	16566.3	13179.0	10296.6	8424.1	7003.2	5670.8	4638.7	4002.9	3724.6	3720.9
27.5°	20250.4	18131.0	13595.5	10042.3	7764.4	5858.7	4434.1	3440.8	2843.7	2676.0	2699.9
30°	22318.2	19826.5	14382.4	9673.7	6962.7	4577.9	3228.9	2528.5	2108.3	1887.2	1890.9
32.5°	24312.2	21582.8	15316.8	9434.1	5921.4	3451.9	2301.8	1804.3	1542.6	1411.7	1432.0
35°	26450.1	23097.7	16011.6	9032.3	4699.5	2495.4	1627.3	1352.7	1244.0	1175.8	1179.5
37.5°	28759.3	24763.8	16582.9	8494.2	3553.2	1713.9	1201.6	1159.2	1113.1	1026.5	1019.2
40°	31171.7	26693.3	16923.8	7624.3	2469.6	1186.9	1021.0	1068.9	1043.1	930.7	921.5
42.5°	33217.4	28182.4	17008.6	6472.5	1597.8	962.0	925.2	998.9	1004.4	890.1	875.4
45°	35182.0	29509.4	16842.8	4955.7	1107.6	904.9	866.2	967.6	974.9	871.7	847.8
47.5°	37380.6	31324.7	16542.4	3306.3	915.9	855.1	845.9	915.9	941.7	857.0	827.5
50°	40051.1	32800.9	15652.2	2030.9	864.3	823.8	823.8	866.2	901.2	827.5	812.7
52.5°	42789.7	34087.3	14334.5	1393.3	833.0	790.6	814.6	833.0	845.9	779.6	792.5
55°	44752.4	35228.1	12369.9	1120.5	814.6	768.5	825.6	788.8	770.4	713.2	700.3
57.5°	46930.8	36584.5	10361.1	993.4	790.6	781.4	788.8	718.8	667.1	608.2	595.3
60°	48451.3	37314.3	7902.6	934.4	763.0	768.5	728.0	634.0	540.0	497.6	488.4
62.5°	49778.2	37730.8	5792.4	858.8	737.2	735.3	659.8	541.8	444.2	398.1	390.7
65°	49577.3	37080.2	3754.1	798.0	716.9	693.0	591.6	464.4	370.4	335.4	331.7
67.5°	47367.6	34201.5	2364.5	735.3	681.9	639.5	530.8	414.7	340.9	300.4	296.7
70°	42728.9	30226.3	1446.7	654.2	606.3	565.8	470.0	388.9	322.5	274.6	265.4
72.5°	36317.2	25888.0	1022.8	576.8	528.9	481.0	398.1	370.4	307.8	247.0	239.6
75°	29837.4	19069.0	857.0	503.1	451.5	387.0	339.1	344.6	289.3	224.8	219.3
77.5°	21011.5	11888.9	798.0	411.0	355.7	307.8	293.0	315.1	265.4	206.4	200.9
80°	12263.0	6677.0	659.8	324.4	267.2	237.7	245.1	267.2	232.2	186.1	178.8
82.5°	4950.2	2642.8	464.4	252.5	195.4	189.8	200.9	217.5	191.7	156.7	153.0
85°	1767.4	825.6	263.5	165.9	125.3	130.8	129.0	154.8	138.2	114.3	112.4
87.5°	464.4	164.0	117.9	66.3	53.4	53.4	49.8	71.9	66.3	51.6	57.1
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)