

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: P510528

Luminaire Tested: **CST-CA10-630-727-U-T3-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510528  
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-CA10-630-727-U-T3-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: 72870 lumens  
Efficiency: N/A  
Efficacy: 115.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5

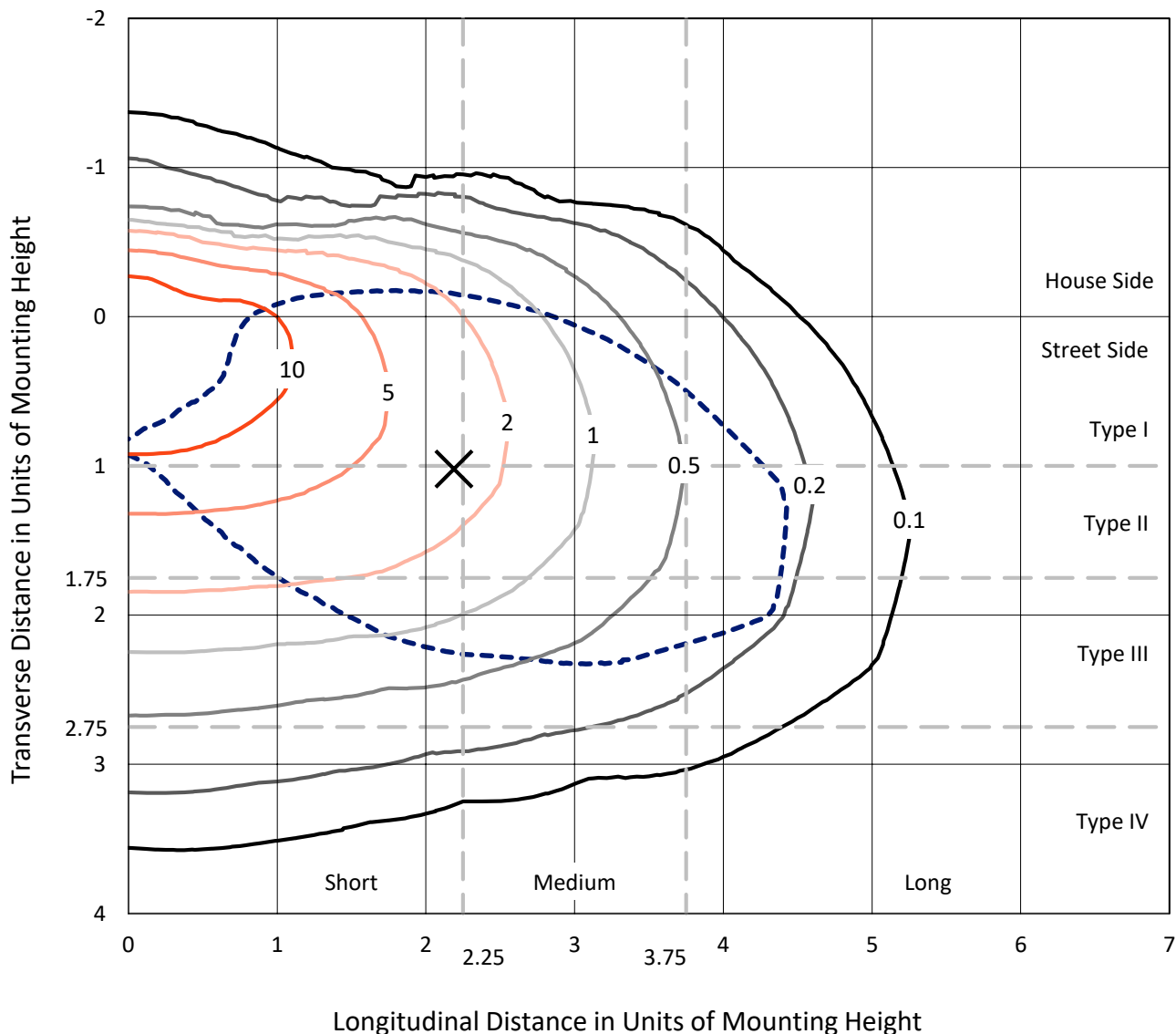
Input Watts (W): 631.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

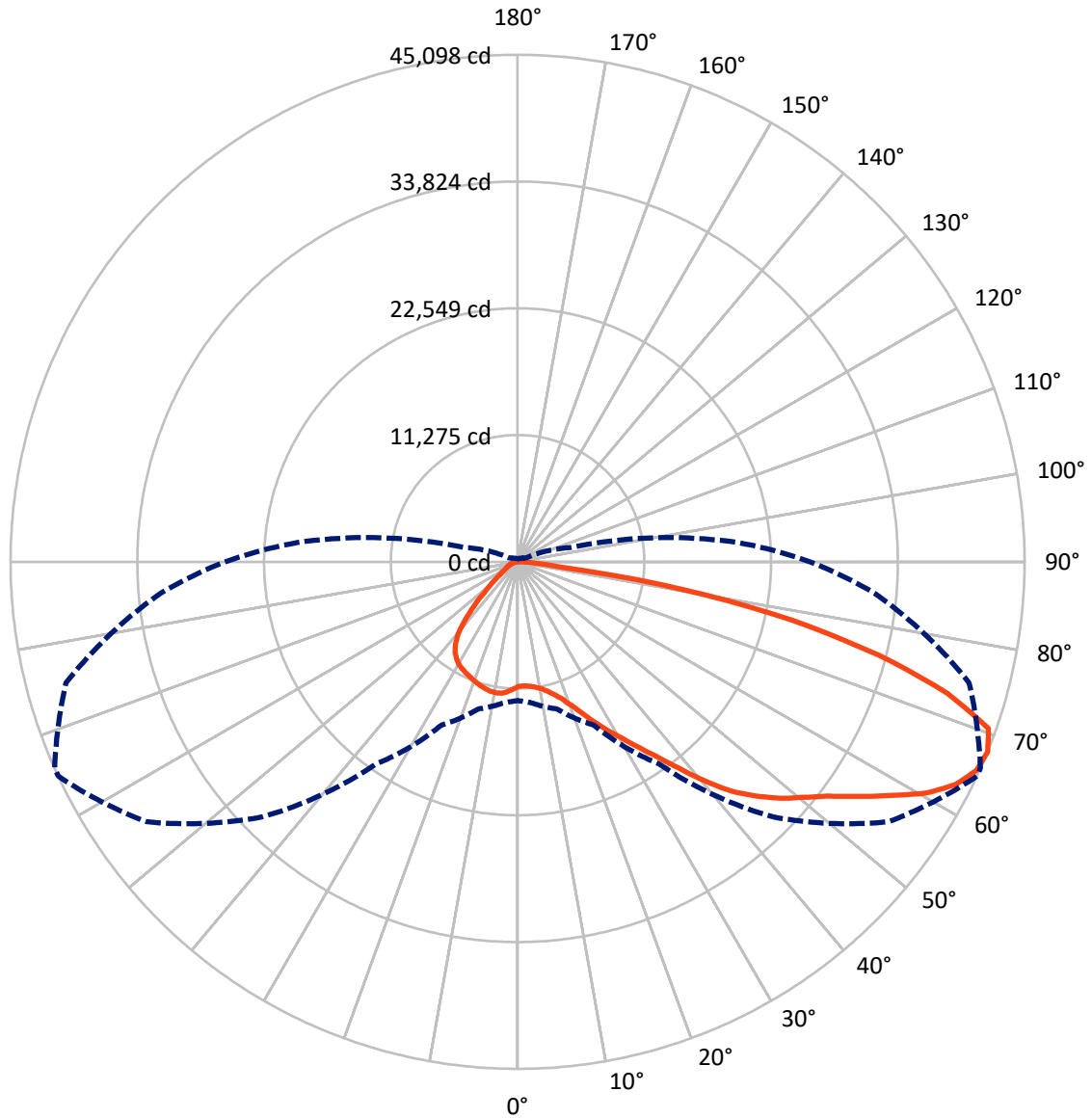
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 14.5 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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 CATALOG NUMBER: CST-CA10-630-727-U-T3-HSS

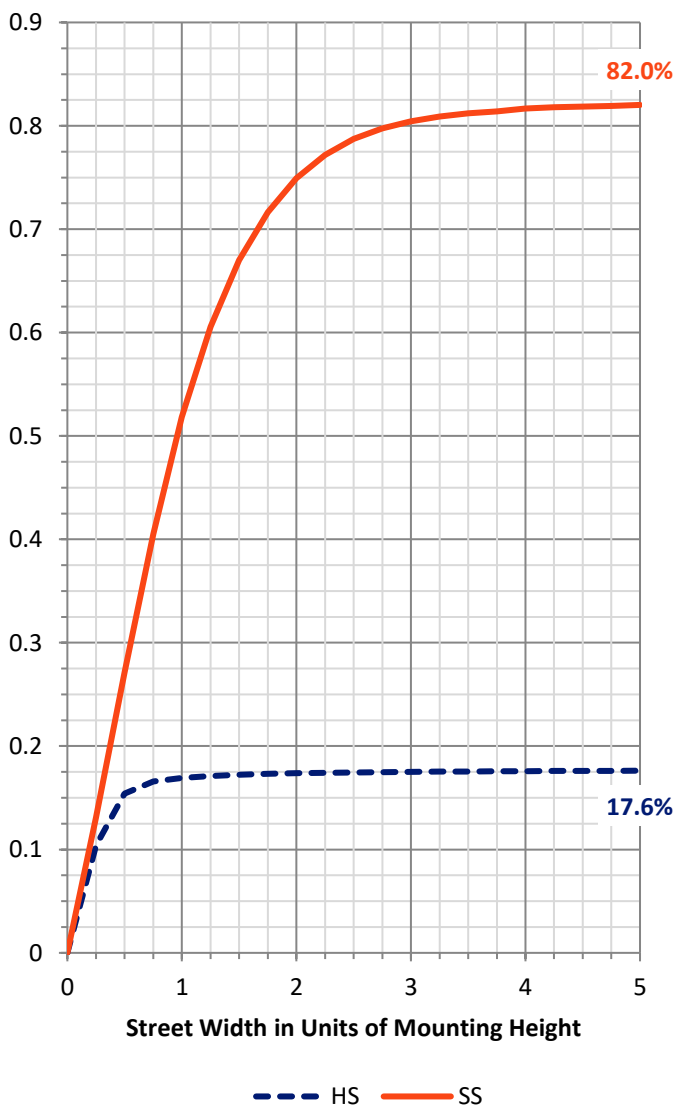
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	13023.6	0.0	13023.6
	% Fixture	17.9	0.0	17.9
<b>Street Side</b>	Lumens	59846.4	0.0	59846.4
	% Fixture	82.1	0.0	82.1
<b>Total</b>	Lumens	72870.0	0.0	72870.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1095.5	1.5
10°-20°	3382.2	4.6
20°-30°	5867.4	8.1
30°-40°	8850.9	12.1
40°-50°	12272.4	16.8
50°-60°	15148.7	20.8
60°-70°	16140.7	22.1
70°-80°	9235.9	12.7
80°-90°	876.3	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°	72870.0	100.0
0°-180°	72870.0	100.0

**Coefficient of Utilization**

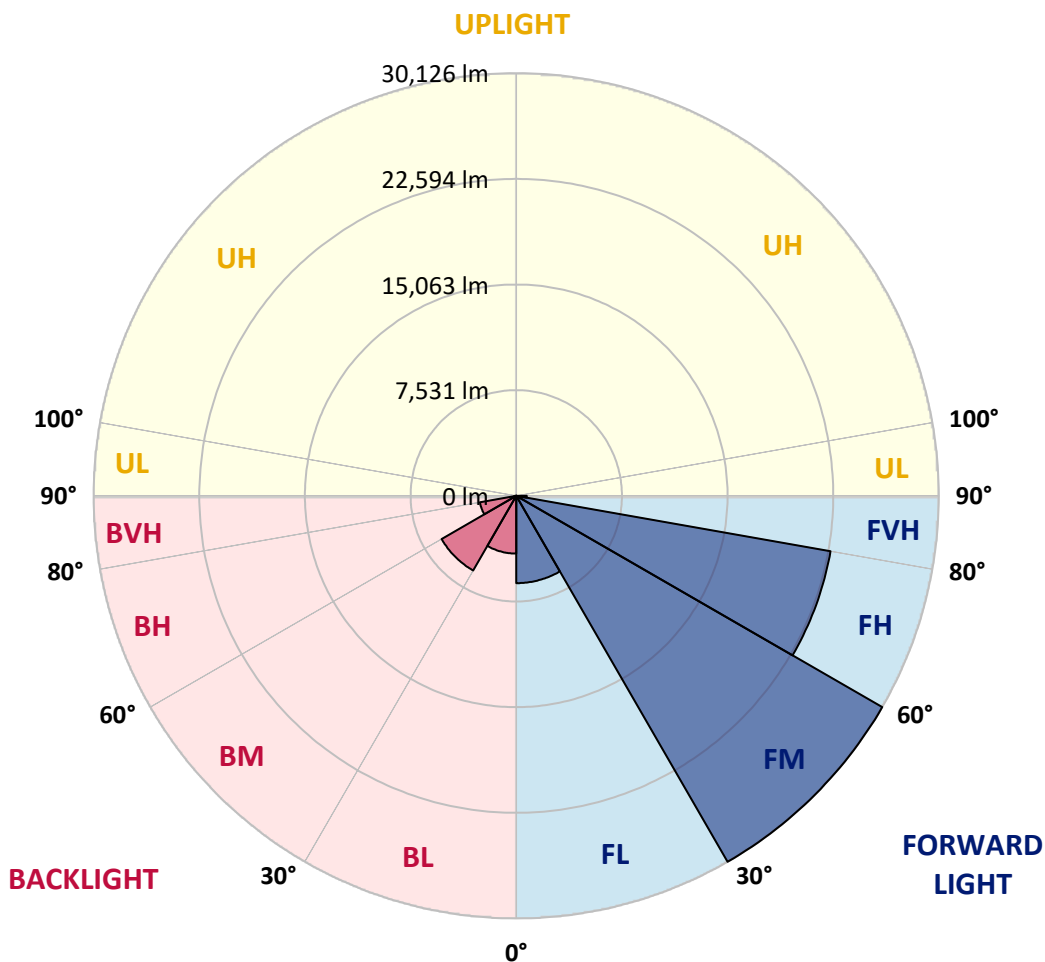


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 CATALOG NUMBER: CST-CA10-630-727-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6224.1	8.5			
FM (30°-60°)	30125.5	41.3			
FH (60°-80°)	22748.0	31.2			G5
FVH (80°-90°)	748.8	1.0			G4/750
BL (0°-30°)	4121.0	5.7	B4/5000		
BM (30°-60°)	6146.5	8.4	B4/8500		
BH (60°-80°)	2628.6	3.6	B4/5000		G4/5000
BVH (80°-90°)	127.5	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°	11073.1	11073.1	11073.1	11073.1	11073.1	11073.1	11073.1	11073.1	11073.1	11073.1	11073.1
2.5°	10966.1	10951.8	10939.0	10961.3	10974.1	10994.9	11025.2	11045.9	11052.3	11071.5	11095.4
5°	11141.7	11140.1	11122.6	11113.0	11085.8	11076.3	11082.6	11108.2	11109.8	11133.7	11208.8
7.5°	11486.5	11483.3	11440.2	11421.1	11363.6	11299.7	11251.9	11256.6	11255.0	11279.0	11379.5
10°	12006.9	11981.3	11920.7	11861.6	11749.9	11630.2	11542.4	11462.6	11462.6	11497.7	11609.4
12.5°	12594.3	12629.4	12546.4	12457.0	12270.2	12054.8	11901.5	11812.1	11802.6	11820.1	11899.9
15°	13323.8	13323.8	13267.9	13140.2	12975.8	12675.7	12359.6	12246.3	12230.3	12267.1	12262.3
17.5°	14145.8	14169.8	14064.4	14000.6	13748.4	13416.3	13020.5	12824.1	12824.1	12800.2	12690.1
20°	15194.5	15063.7	15074.8	14969.5	14784.3	14302.3	13900.0	13614.3	13611.1	13563.2	13253.5
22.5°	16334.3	16262.4	16200.2	16107.6	15852.2	15421.2	14862.5	14580.0	14573.6	14455.5	13995.8
25°	17458.0	17512.3	17443.6	17274.4	17087.7	16618.4	16002.2	15724.5	15722.9	15526.6	14875.3
27.5°	18613.7	18672.7	18650.4	18497.2	18248.1	17881.0	17298.4	16936.0	16913.7	16786.0	15967.1
30°	19890.7	19838.0	19906.6	19841.2	19716.7	19118.1	18591.3	18169.9	18224.2	18185.9	17207.4
32.5°	20819.7	20853.2	21078.3	21084.6	20953.8	20510.0	19866.7	19608.1	19694.3	19643.2	18731.8
35°	21659.3	21713.6	22004.1	22289.8	22385.6	21900.3	21245.9	21229.9	21341.6	21652.9	20832.4
37.5°	22380.8	22419.1	22826.1	23198.1	23507.7	23175.7	22700.0	23266.7	23431.1	24068.0	23000.1
40°	22813.4	22862.9	23389.6	23913.2	24465.5	24347.4	24302.7	25643.5	25798.3	26358.6	24582.0
42.5°	22569.1	22666.5	23544.4	24502.2	25314.7	25550.9	26162.3	27886.2	28063.4	28111.3	26136.7
45°	22133.4	22254.7	23236.4	24786.3	26111.2	26869.4	28033.1	29713.9	29811.3	29675.6	27424.9
47.5°	21664.1	21793.4	22890.0	24701.7	26751.3	28403.4	29704.3	31434.6	31503.3	31086.6	28722.6
50°	21130.9	21250.7	22430.3	24503.8	27233.3	29851.2	31421.9	32922.3	33179.3	32355.7	29731.4
52.5°	20482.9	20610.6	21862.0	24194.1	27656.3	30925.4	32936.7	34603.2	34620.7	33942.3	30868.0
55°	19643.2	19865.1	21148.5	23657.8	27878.2	31848.1	34256.8	36826.7	36940.0	36284.0	31819.3
57.5°	18709.5	18902.6	20289.7	22942.7	27678.7	32548.8	36379.8	39211.5	39197.1	37880.2	32651.0
60°	17475.6	17612.8	19170.8	22007.3	27035.4	33396.4	38590.5	41767.0	41741.5	39444.5	33185.7
62.5°	15892.1	16029.4	17494.7	20540.3	26090.4	33964.7	40091.0	43680.9	43607.5	40582.6	33350.1
65°	14056.4	14302.3	15574.5	18636.0	24419.2	33591.1	40815.7	44807.9	44689.8	41451.0	32957.4
67.5°	12335.7	12544.8	13552.0	16015.0	21953.0	32076.3	40304.9	45098.4	45063.3	41577.1	31848.1
70°	9899.8	9976.5	10899.1	13007.7	18265.7	28832.8	38539.5	44428.0	44443.9	40415.0	29619.7
72.5°	6776.0	6962.8	7373.0	9037.9	13291.8	22929.9	33217.6	39984.1	39987.2	36239.3	25806.3
75°	3644.2	3933.1	4412.0	5237.2	7430.5	14714.1	26676.3	33177.7	33240.0	30215.1	20511.6
77.5°	1806.9	1910.7	2188.4	2801.4	3406.4	6942.0	17156.3	24904.4	25052.9	23193.3	13989.4
80°	826.8	844.4	865.2	860.4	1304.1	3045.6	7365.0	14956.7	15001.4	13794.7	6386.5
82.5°	646.5	643.3	652.9	593.8	597.0	1174.8	2549.2	3917.2	4177.3	3288.2	2025.6
85°	391.1	389.5	419.8	325.6	400.7	635.3	1286.6	1562.7	1581.9	1286.6	1048.7
87.5°	148.4	143.7	132.5	116.5	134.1	178.8	445.3	574.6	561.9	399.1	362.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P510528

CATALOG NUMBER: CST-CA10-630-727-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	11073.1	11073.1	11073.1	11073.1	11073.1	11073.1	11073.1	11073.1	11073.1	11073.1	11073.1
2.5°	11116.2	11167.2	11261.4	11333.3	11357.2	11433.8	11507.2	11520.0	11572.7	11593.4	11662.1
5°	11255.0	11341.2	11488.1	11585.5	11628.6	11756.3	11839.3	11880.8	11866.4	11874.4	11951.0
7.5°	11457.8	11539.2	11657.3	11775.4	11796.2	11818.5	11810.5	11804.1	11748.3	11700.4	11772.2
10°	11642.9	11719.5	11793.0	11810.5	11705.2	11646.1	11540.8	11459.4	11350.8	11301.3	11358.8
12.5°	11903.1	11919.1	11847.2	11751.5	11524.8	11314.1	11143.3	10994.9	10860.8	10768.2	10844.8
15°	12177.7	12115.4	11906.3	11627.0	11275.8	10974.1	10694.8	10447.3	10225.5	10171.2	10192.0
17.5°	12541.6	12372.4	11951.0	11481.7	10935.8	10466.5	10107.4	9794.5	9504.0	9382.7	9371.5
20°	12985.4	12712.4	12042.0	11298.1	10533.5	9909.4	9353.9	8886.2	8485.6	8156.8	8164.7
22.5°	13563.2	13167.3	12179.3	11106.6	10088.2	9256.6	8448.9	7653.9	6994.7	6710.6	6640.3
25°	14326.2	13735.6	12374.0	10932.6	9590.2	8426.5	7285.2	6163.1	5465.5	5189.4	5159.0
27.5°	15276.0	14498.6	12670.9	10739.5	9057.0	7441.6	5800.7	4700.9	4060.8	3770.3	3672.9
30°	16355.0	15438.8	12975.8	10538.3	8412.2	6175.8	4423.2	3345.7	2689.7	2429.5	2395.9
32.5°	17751.7	16629.6	13429.1	10222.3	7470.4	4854.1	3085.5	2087.9	1642.5	1530.8	1498.9
35°	19735.8	18240.2	13989.4	9823.2	6260.4	3390.4	1912.3	1222.7	984.9	929.0	917.8
37.5°	21585.9	19820.4	14554.5	9160.8	4753.6	2116.6	1093.4	783.8	731.1	732.7	735.9
40°	23052.8	20901.1	15011.0	8289.2	3127.0	1202.0	759.8	651.3	652.9	648.1	644.9
42.5°	24358.5	21763.0	15216.9	7001.1	1811.7	804.5	659.2	600.2	585.8	590.6	587.4
45°	25439.2	22642.6	14817.8	5553.3	1067.9	721.5	622.5	557.1	541.1	566.7	569.9
47.5°	26575.7	23477.4	14206.5	4183.7	866.8	686.4	589.0	525.2	517.2	549.1	552.3
50°	27531.8	24082.4	13164.1	3152.6	826.8	648.1	558.7	493.2	491.6	520.4	520.4
52.5°	28331.5	24447.9	11927.1	2434.3	799.7	614.5	528.4	462.9	462.9	472.5	474.1
55°	28895.0	24374.5	11189.6	1915.5	771.0	582.6	496.4	434.2	415.0	408.6	411.8
57.5°	28997.2	24179.7	10334.0	1494.1	737.5	552.3	467.7	400.7	365.5	360.7	359.2
60°	28931.7	23752.0	9357.1	1248.3	699.2	523.6	439.0	365.5	330.4	319.2	322.4
62.5°	28658.8	22993.7	8228.6	1095.0	660.8	501.2	407.0	341.6	309.7	295.3	295.3
65°	27835.1	21908.3	6552.5	959.3	613.0	477.3	381.5	332.0	296.9	280.9	277.7
67.5°	26025.0	19656.0	4924.4	841.2	566.7	451.7	378.3	330.4	290.5	268.2	265.0
70°	23597.1	16885.0	3361.7	739.1	515.6	427.8	376.7	332.0	284.1	255.4	252.2
72.5°	19699.1	13311.0	1936.2	643.3	464.5	405.4	370.3	333.6	273.0	237.8	233.1
75°	14801.9	9336.4	1136.5	552.3	415.0	371.9	352.8	324.0	255.4	217.1	212.3
77.5°	8902.2	4359.3	855.6	458.1	356.0	327.2	314.5	296.9	233.1	201.1	196.3
80°	3265.9	1655.3	672.0	367.1	282.5	284.1	271.4	260.2	212.3	185.2	182.0
82.5°	1423.8	1012.0	496.4	279.3	221.9	253.8	223.5	213.9	182.0	166.0	159.6
85°	863.6	603.4	319.2	190.0	153.2	172.4	156.4	164.4	140.5	130.9	126.1
87.5°	285.7	180.4	142.1	92.6	76.6	71.8	70.2	84.6	79.8	73.4	73.4
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)