

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: P510556

Luminaire Tested: **CST-CA10-630-750-U-T2-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510556  
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-CA10-630-750-U-T2-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: 85519 lumens  
Efficiency: N/A  
Efficacy: 135.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G5

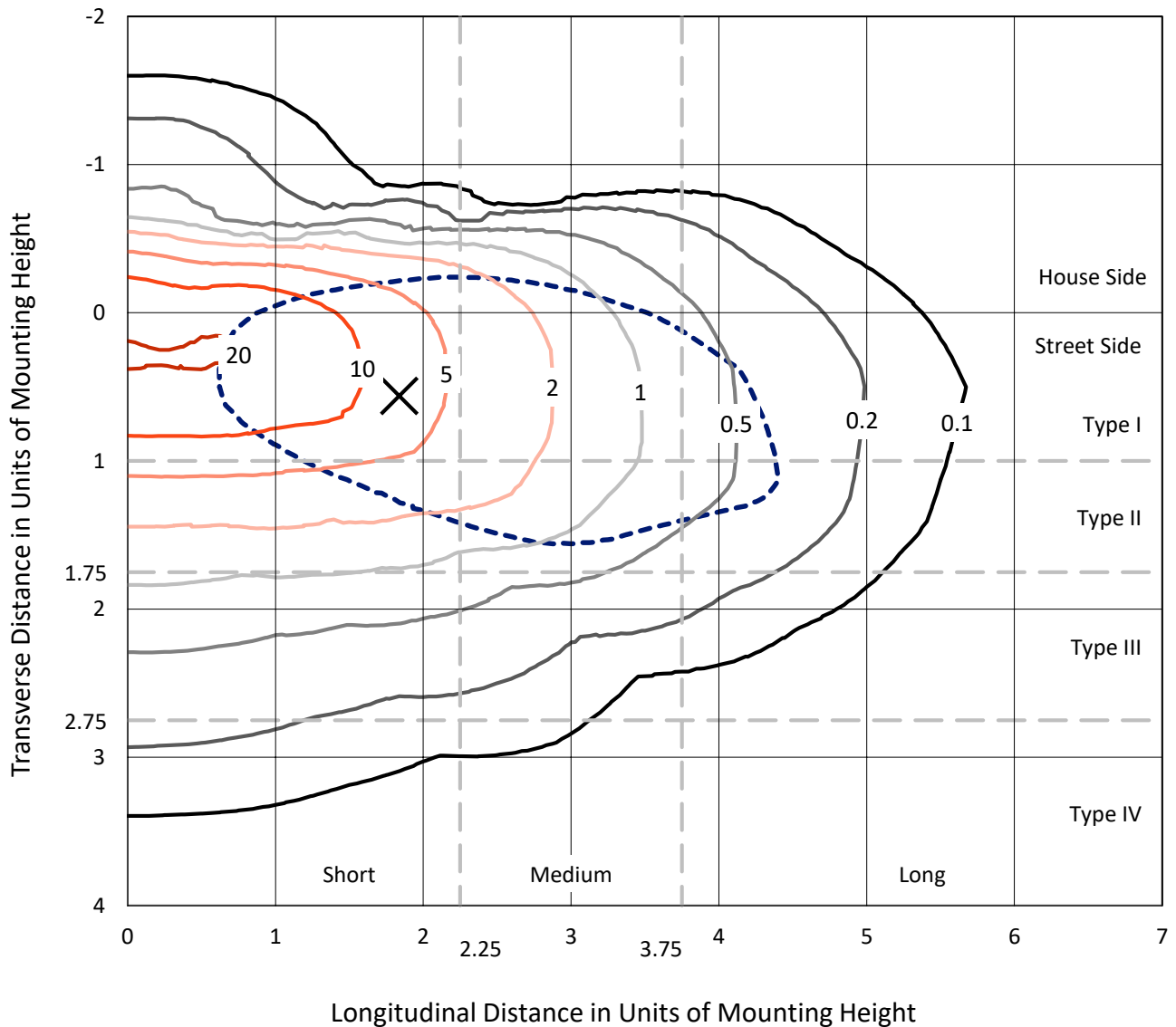
Input Watts (W): 631.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

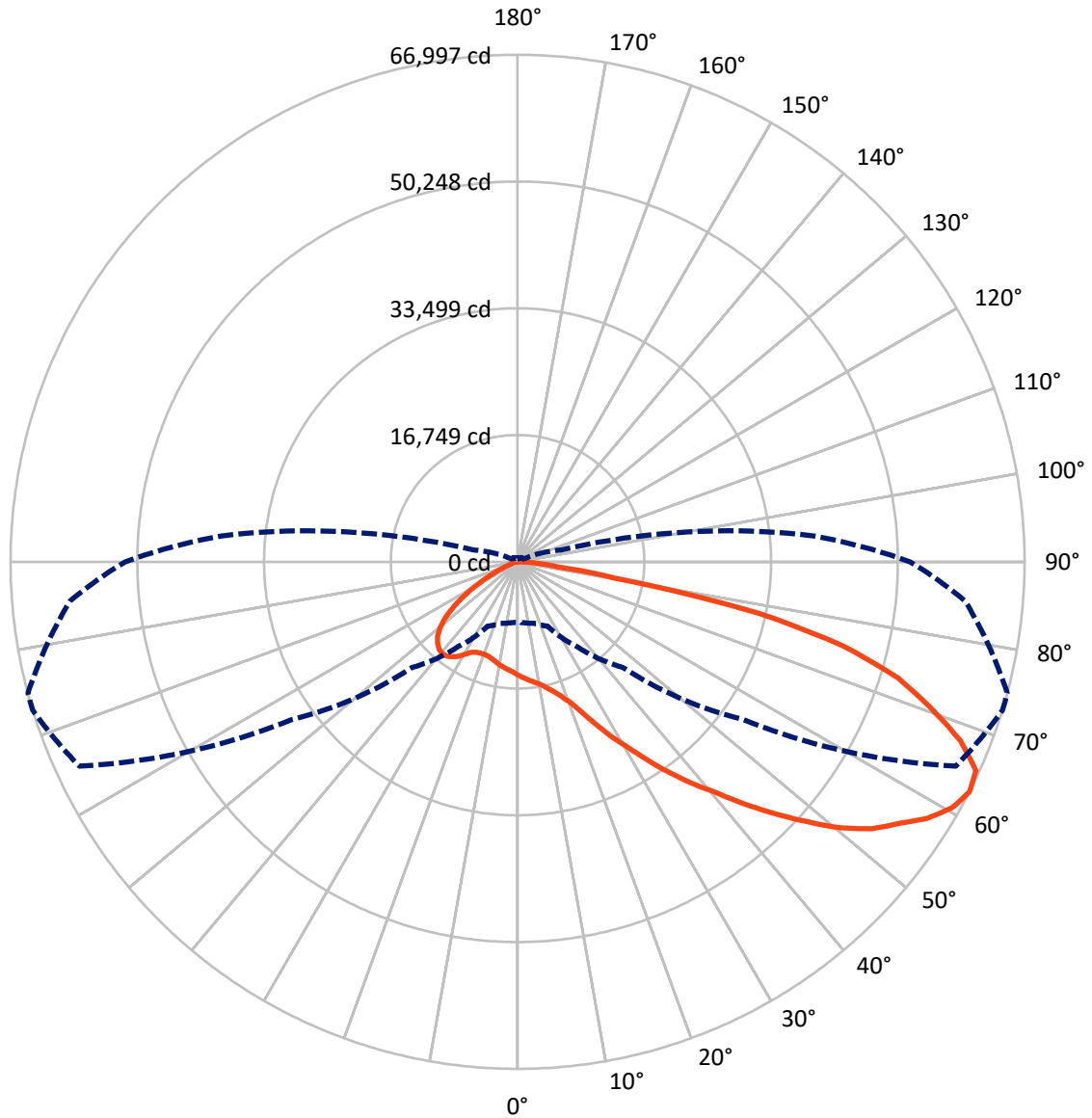
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 20.8 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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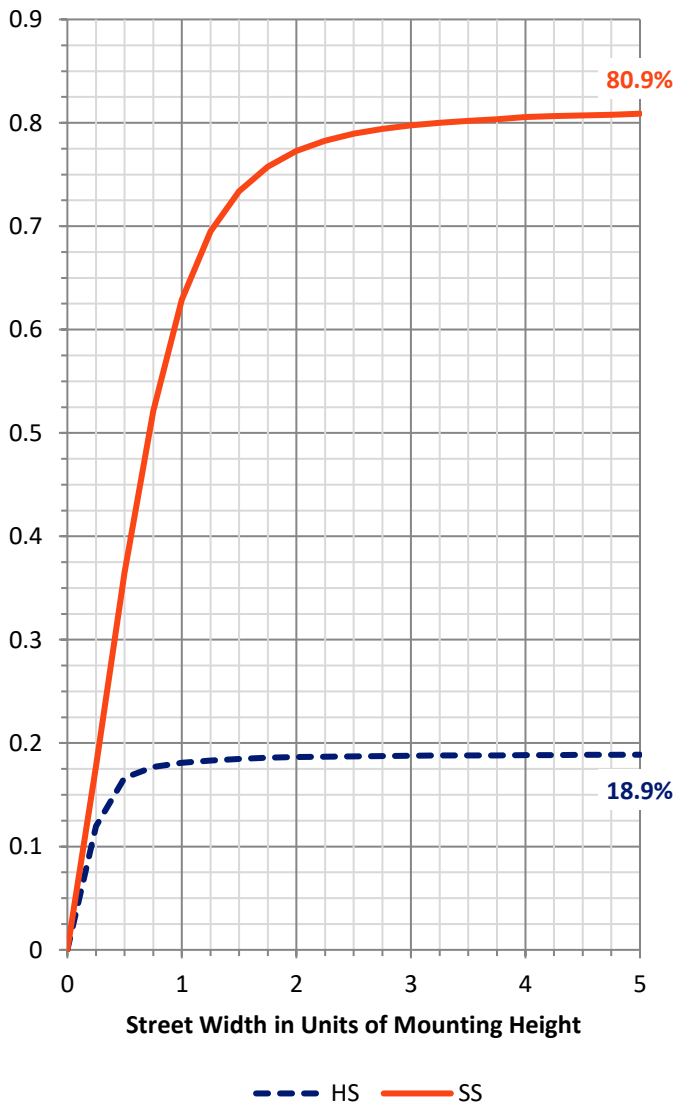
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	16359.4	0.0	16359.4
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	69159.6	0.0	69159.6
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	85519.0	0.0	85519.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1432.5	1.7
10°-20°	4308.7	5.0
20°-30°	7444.5	8.7
30°-40°	11194.7	13.1
40°-50°	14927.0	17.5
50°-60°	17579.5	20.6
60°-70°	17477.1	20.4
70°-80°	10034.1	11.7
80°-90°	1120.9	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°	85519.0	100.0
0°-180°	85519.0	100.0

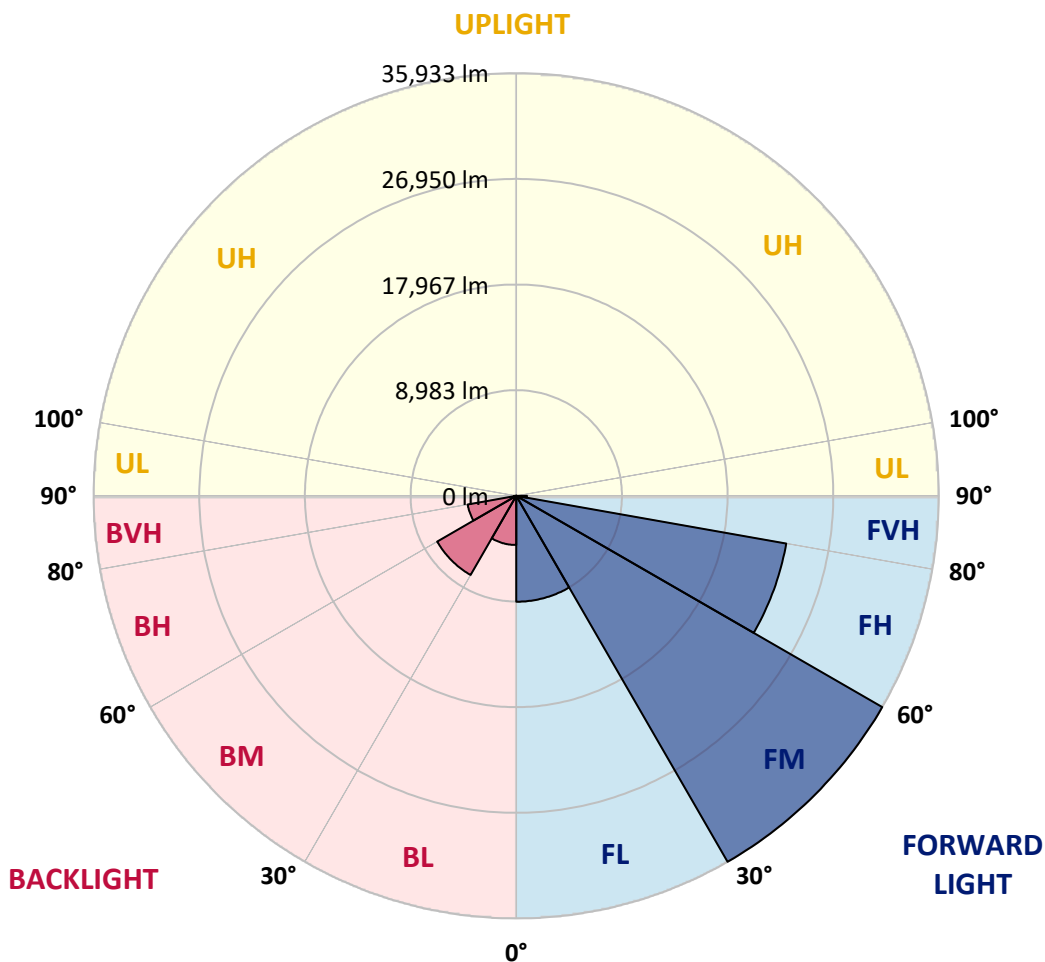


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	9005.1	10.5			
FM (30°-60°)	35933.0	42.0			
FH (60°-80°)	23311.1	27.3			G5
FVH (80°-90°)	910.4	1.1			G5
BL (0°-30°)	4180.6	4.9	B4/5000		
BM (30°-60°)	7768.2	9.1	B4/8500		
BH (60°-80°)	4200.1	4.9	B4/5000		G4/5000
BVH (80°-90°)	210.5	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	14998.1	14998.1	14998.1	14998.1	14998.1	14998.1	14998.1	14998.1	14998.1	14998.1	14998.1
2.5°	16046.2	16086.5	16038.5	16017.4	15994.4	15844.6	15670.0	15491.4	15347.5	15324.4	15136.3
5°	17173.0	17194.1	17115.4	17025.2	16869.7	16622.1	16309.2	16000.1	15712.2	15635.4	15291.8
7.5°	18038.8	17998.5	17979.3	17902.5	17766.2	17493.6	17019.5	16512.7	16067.3	15959.8	15437.7
10°	18850.8	18833.5	18687.6	18591.6	18374.7	18123.2	17733.6	17090.5	16462.8	16290.0	15564.4
12.5°	19730.0	19691.6	19632.1	19424.8	19248.2	18823.9	18353.6	17768.1	17069.4	16839.0	15781.3
15°	20520.9	20417.2	20384.6	20167.7	19989.1	19664.7	19192.5	18512.9	17766.2	17568.5	16194.0
17.5°	21273.4	21225.4	21152.4	21004.6	20805.0	20555.4	20177.3	19449.7	18678.0	18390.1	16894.7
20°	21912.6	21853.1	21789.7	21830.1	21785.9	21626.6	21388.5	20768.5	19826.0	19547.6	17747.0
22.5°	22358.0	22356.0	22609.4	22757.2	22841.7	22835.9	22778.4	22427.1	21478.8	21196.6	19021.6
25°	22728.4	22757.2	23077.8	23640.3	24143.2	24189.3	24596.2	24429.2	23623.0	23329.3	20939.3
27.5°	22837.9	22895.5	23477.1	24362.1	25126.1	25859.4	26456.4	26761.6	26014.9	25663.6	23001.0
30°	22916.6	22939.6	23509.7	24569.4	26179.9	27341.3	28408.6	28925.0	28281.9	28024.7	25298.8
32.5°	22361.8	22369.5	23242.9	24847.7	26953.6	28967.2	30230.4	31203.6	31034.7	30694.9	27811.6
35°	21597.8	21739.8	22741.9	24579.0	27590.9	30460.7	32180.7	33632.0	33969.8	33726.0	30322.5
37.5°	20653.3	20764.7	21837.7	24179.7	27731.0	31487.7	33697.2	36100.6	36983.6	36943.3	33353.6
40°	19491.9	19628.2	20912.5	23319.7	27661.9	32234.5	35476.7	38834.2	39955.2	39828.5	36359.8
42.5°	18119.4	18319.0	19564.9	22214.0	27157.0	32691.3	36933.7	41617.6	43635.2	43552.6	39020.4
45°	16762.2	16869.7	18006.1	20674.4	26227.9	32839.1	38304.3	45453.0	47409.2	47317.0	42226.1
47.5°	15362.8	15456.9	16643.2	19052.3	24615.4	32541.6	39388.9	48747.1	51254.2	51162.0	45410.8
50°	12107.1	12462.3	14894.4	17626.1	22778.4	31698.9	40412.1	52851.3	55277.7	54886.1	48200.0
52.5°	10358.3	10486.9	11748.1	16188.3	20945.1	30261.1	41095.5	56654.1	58587.2	58022.8	51052.6
55°	9682.6	9769.0	10387.1	13537.2	19223.2	28086.1	41899.8	60466.5	61069.3	60925.3	53379.2
57.5°	9170.1	9266.1	9707.6	11306.6	17409.1	25037.8	41648.3	63148.2	63902.6	63441.9	55849.8
60°	8444.5	8561.6	9147.0	10151.0	15347.5	21943.3	39435.0	64246.2	65962.4	65444.1	57729.1
62.5°	7987.6	8064.4	8400.3	9373.6	13639.0	19766.5	36284.9	63893.0	66997.1	66977.9	59358.9
65°	7367.5	7480.8	7839.8	8628.7	12118.6	18079.1	33313.3	62148.1	66551.7	66569.0	59694.8
67.5°	6718.7	6764.8	7141.0	7774.5	10327.6	16533.8	29468.3	59163.1	63082.9	63478.4	57370.1
70°	5908.6	5885.6	6292.6	6755.2	8440.6	14038.3	23719.0	53853.4	57957.5	58120.7	52668.9
72.5°	4649.3	4670.5	4783.7	5104.3	6407.7	11047.5	17211.4	45499.1	52599.8	52889.7	46660.5
75°	3125.2	3159.7	3687.6	4000.5	4609.0	7939.6	10822.9	30712.2	44466.4	45284.1	38189.2
77.5°	2384.2	2405.3	2558.9	2900.6	3334.4	5659.1	5866.4	16735.4	32372.7	34313.4	29875.2
80°	1689.3	1697.0	1545.3	1374.5	1775.7	3839.3	3464.9	7127.6	12899.9	15243.8	17547.4
82.5°	756.3	744.8	877.3	729.5	1023.2	1485.8	1635.5	3459.2	5357.7	5758.9	6269.5
85°	351.3	393.5	451.1	378.2	608.5	574.0	637.3	1474.3	2510.9	2771.9	2756.6
87.5°	86.4	94.1	119.0	151.7	220.8	195.8	192.0	433.8	560.5	558.6	858.1
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°	14998.1	14998.1	14998.1	14998.1	14998.1	14998.1	14998.1	14998.1	14998.1	14998.1	14998.1
2.5°	15007.7	14907.9	14671.7	14443.3	14226.4	14082.4	13921.2	13752.2	13650.5	13602.5	13706.2
5°	15082.5	14892.5	14441.4	13988.4	13604.4	13276.2	13045.8	12850.0	12744.4	12754.0	12759.8
7.5°	15145.9	14879.1	14247.5	13608.3	13009.3	12602.4	12301.0	12089.8	11968.9	11876.8	11945.9
10°	15201.6	14823.4	14021.0	13168.7	12517.9	11915.2	11506.3	11251.0	11028.3	10903.5	11001.4
12.5°	15261.1	14802.3	13767.6	12775.2	11932.4	11258.6	10698.1	10444.7	10225.9	10131.8	10191.3
15°	15520.2	14882.9	13531.5	12312.5	11354.6	10483.1	9878.4	9567.4	9394.7	9281.4	9306.4
17.5°	15965.6	15096.0	13379.8	11828.8	10709.6	9788.2	9005.0	8642.2	8356.2	8275.5	8254.4
20°	16599.1	15501.0	13379.8	11419.9	9978.2	9016.5	8114.3	7501.9	7056.6	6889.6	7018.2
22.5°	17662.5	16190.2	13512.3	11049.4	9348.6	8216.0	7141.0	6206.2	5605.3	5361.5	5503.6
25°	19150.2	17255.6	13727.3	10725.0	8774.6	7294.6	5906.7	4831.7	4169.4	3879.6	3875.7
27.5°	21092.9	18885.3	14161.1	10460.1	8087.4	6102.5	4618.6	3584.0	2962.0	2787.3	2812.3
30°	23246.7	20651.4	14980.8	10076.1	7252.4	4768.4	3363.2	2633.7	2196.1	1965.7	1969.5
32.5°	25323.8	22480.8	15954.1	9826.6	6167.8	3595.5	2397.6	1879.3	1606.7	1470.4	1491.6
35°	27550.6	24058.7	16677.8	9408.1	4895.1	2599.2	1695.0	1409.0	1295.8	1224.7	1228.6
37.5°	29955.9	25794.1	17272.8	8847.6	3701.1	1785.3	1251.6	1207.4	1159.5	1069.2	1061.6
40°	32468.7	27804.0	17628.0	7941.5	2572.3	1236.2	1063.5	1113.4	1086.5	969.4	959.8
42.5°	34599.4	29355.0	17716.3	6741.7	1664.3	1002.0	963.7	1040.4	1046.2	927.2	911.8
45°	36645.8	30737.1	17543.5	5161.9	1153.7	942.5	902.2	1007.8	1015.5	908.0	883.0
47.5°	38935.9	32628.0	17230.6	3443.8	954.1	890.7	881.1	954.1	980.9	892.6	861.9
50°	41717.4	34165.6	16303.4	2115.4	900.3	858.1	858.1	902.2	938.7	861.9	846.6
52.5°	44570.0	35505.5	14930.9	1451.2	867.7	823.5	848.5	867.7	881.1	812.0	825.4
55°	46614.4	36693.8	12884.6	1167.1	848.5	800.5	860.0	821.6	802.4	742.9	729.5
57.5°	48883.4	38106.6	10792.2	1034.7	823.5	813.9	821.6	748.7	694.9	633.5	620.0
60°	50467.1	38866.8	8231.4	973.3	794.7	800.5	758.3	660.4	562.5	518.3	508.7
62.5°	51849.3	39300.6	6033.4	894.5	767.9	765.9	687.2	564.4	462.6	414.6	407.0
65°	51640.0	38623.0	3910.3	831.2	746.7	721.8	616.2	483.7	385.8	349.4	345.5
67.5°	49338.4	35624.5	2462.9	765.9	710.3	666.1	552.9	431.9	355.1	312.9	309.1
70°	44506.7	31483.9	1506.9	681.5	631.6	589.3	489.5	405.0	335.9	286.0	276.4
72.5°	37828.3	26965.1	1065.4	600.8	550.9	501.0	414.6	385.8	320.6	257.2	249.6
75°	31078.8	19862.4	892.6	524.1	470.3	403.1	353.2	359.0	301.4	234.2	228.4
77.5°	21885.7	12383.5	831.2	428.1	370.5	320.6	305.2	328.3	276.4	215.0	209.2
80°	12773.2	6954.8	687.2	337.9	278.3	247.6	255.3	278.3	241.9	193.9	186.2
82.5°	5156.1	2752.8	483.7	263.0	203.5	197.7	209.2	226.5	199.6	163.2	159.3
85°	1840.9	860.0	274.5	172.8	130.5	136.3	134.4	161.2	144.0	119.0	117.1
87.5°	483.7	170.8	122.9	69.1	55.7	55.7	51.8	74.9	69.1	53.7	59.5
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)