

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: P510566

Luminaire Tested: **CST-CA10-630-760-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510566
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-CA10-630-760-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 83706 lumens
Efficiency: N/A
Efficacy: 132.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

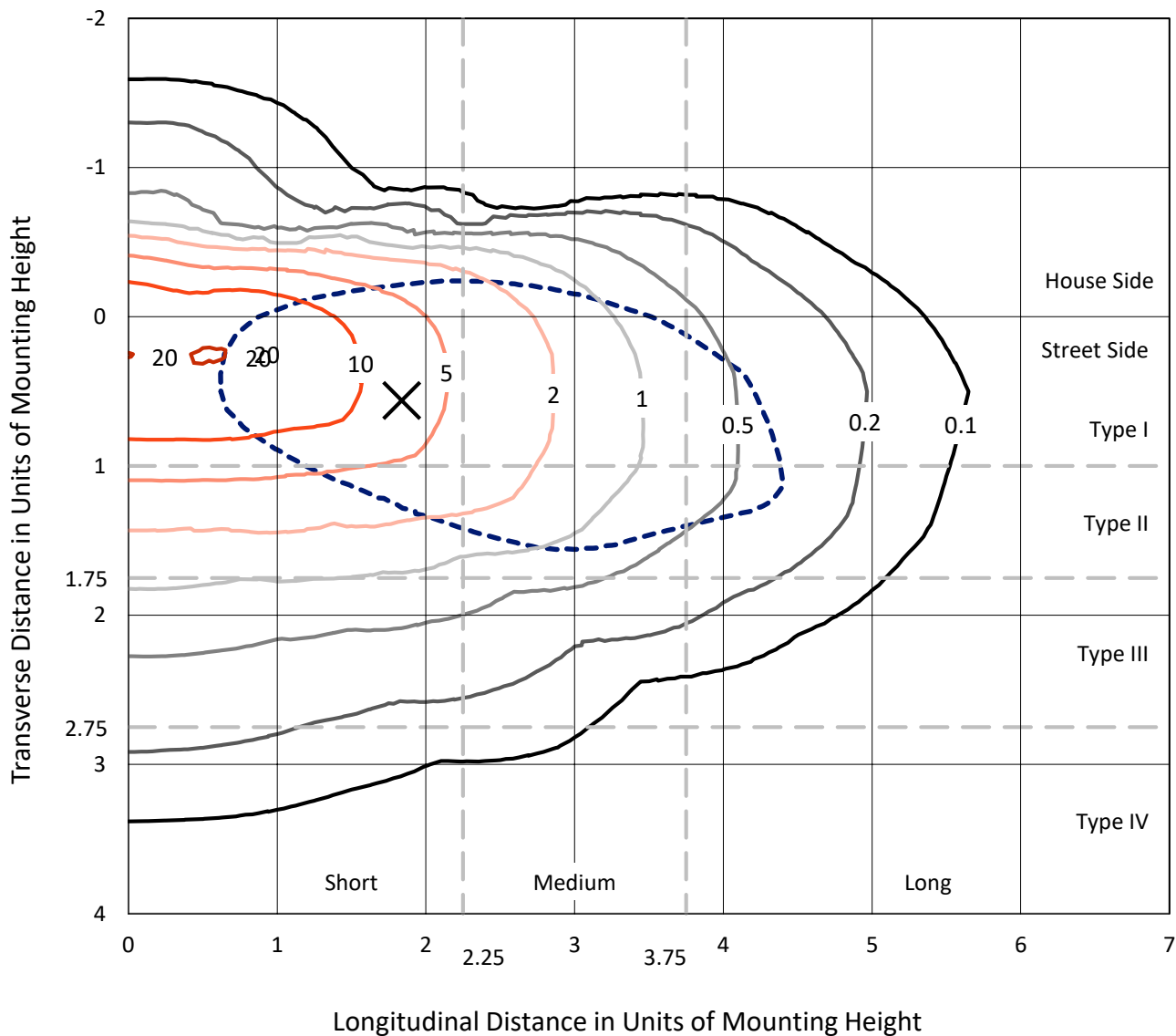
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

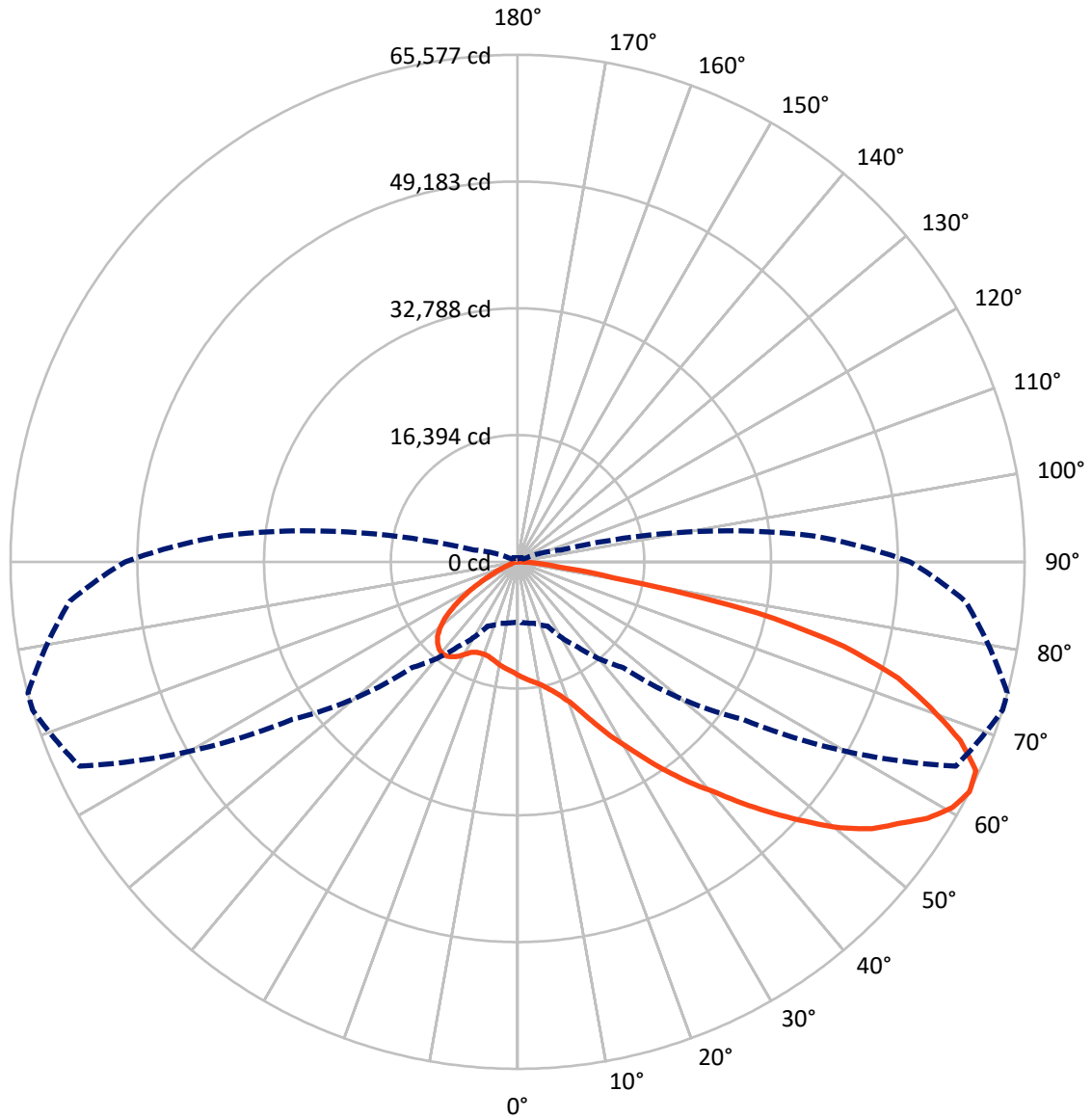
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 20.4 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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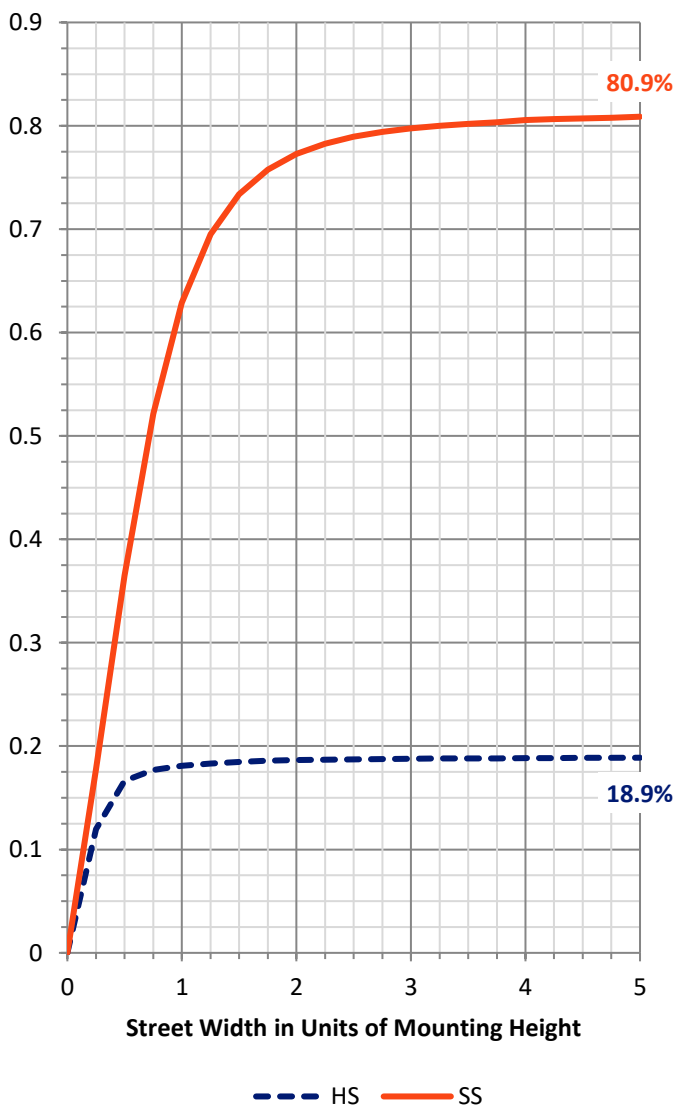
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16012.6	0.0	16012.6
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	67693.4	0.0	67693.4
	% Fixture	80.9	0.0	80.9
Total	Lumens	83706.0	0.0	83706.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1402.1	1.7
10°-20°	4217.3	5.0
20°-30°	7286.7	8.7
30°-40°	10957.4	13.1
40°-50°	14610.5	17.5
50°-60°	17206.9	20.6
60°-70°	17106.6	20.4
70°-80°	9821.3	11.7
80°-90°	1097.1	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°	83706.0	100.0
0°-180°	83706.0	100.0

Coefficient of Utilization

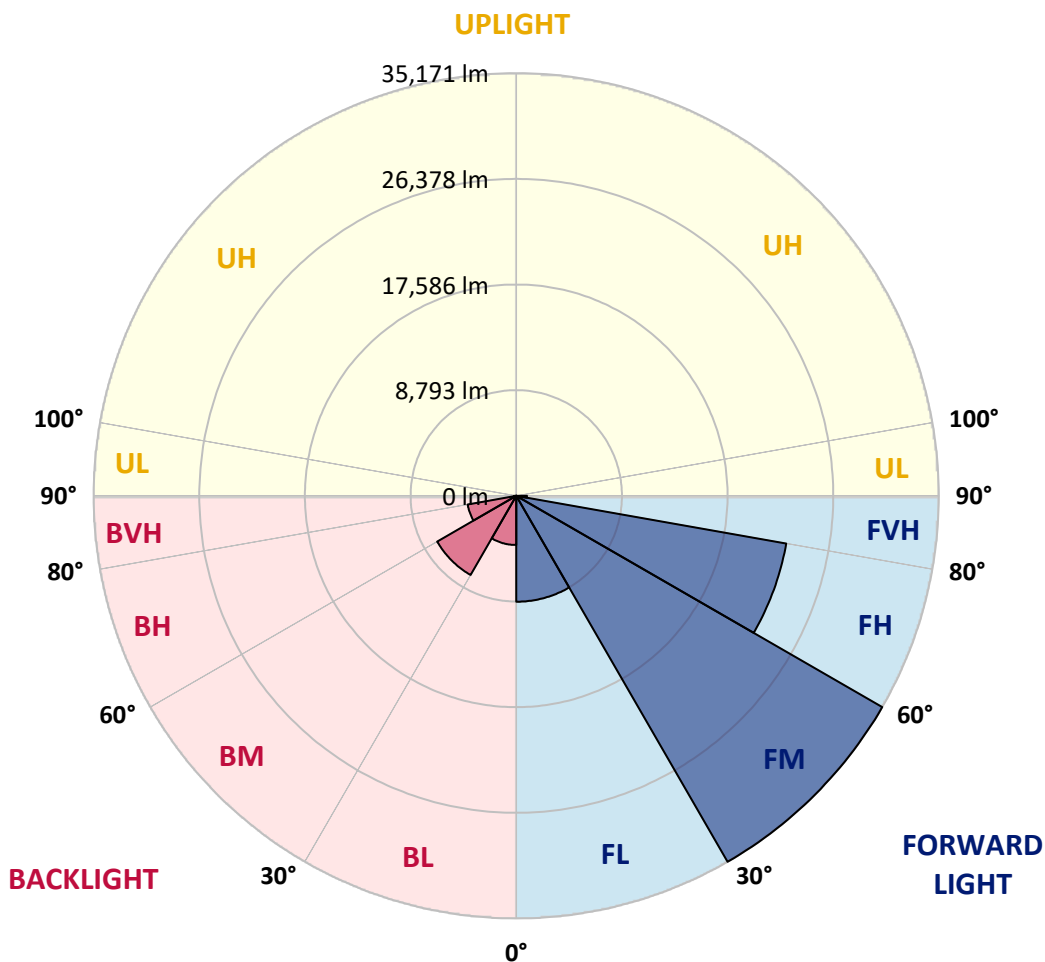


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	8814.2	10.5			
FM (30°-60°)	35171.2	42.0			
FH (60°-80°)	22816.9	27.3			G5
FVH (80°-90°)	891.1	1.1			G5
BL (0°-30°)	4092.0	4.9	B4/5000		
BM (30°-60°)	7603.5	9.1	B4/8500		
BH (60°-80°)	4111.0	4.9	B4/5000		G4/5000
BVH (80°-90°)	206.1	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°	14680.1	14680.1	14680.1	14680.1	14680.1	14680.1	14680.1	14680.1	14680.1	14680.1	14680.1
2.5°	15706.0	15745.5	15698.5	15677.8	15655.3	15508.7	15337.8	15163.0	15022.1	14999.5	14815.4
5°	16809.0	16829.6	16752.6	16664.3	16512.1	16269.7	15963.4	15660.9	15379.1	15303.9	14967.6
7.5°	17656.4	17616.9	17598.1	17523.0	17389.6	17122.7	16658.6	16162.6	15726.7	15621.5	15110.4
10°	18451.2	18434.2	18291.4	18197.5	17985.2	17739.0	17357.6	16728.2	16113.8	15944.7	15234.4
12.5°	19311.7	19274.1	19215.9	19013.0	18840.1	18424.8	17964.5	17391.4	16707.5	16482.0	15446.7
15°	20085.8	19984.4	19952.4	19740.1	19565.4	19247.8	18785.6	18120.5	17389.6	17196.0	15850.7
17.5°	20822.4	20775.4	20704.0	20559.3	20363.9	20119.6	19749.5	19037.4	18282.0	18000.2	16536.5
20°	21448.1	21389.8	21327.8	21367.3	21324.0	21168.1	20935.1	20328.2	19405.7	19133.2	17370.8
22.5°	21884.0	21882.1	22130.1	22274.8	22357.5	22351.8	22295.5	21951.6	21023.4	20747.2	18618.4
25°	22246.6	22274.8	22588.6	23139.1	23631.4	23676.5	24074.8	23911.3	23122.2	22834.7	20495.4
27.5°	22353.7	22410.1	22979.4	23845.6	24593.4	25311.1	25895.5	26194.2	25463.3	25119.5	22513.4
30°	22430.7	22453.3	23011.3	24048.5	25624.9	26761.7	27806.4	28311.8	27682.4	27430.6	24762.5
32.5°	21887.7	21895.2	22750.2	24320.9	26382.1	28353.1	29589.5	30542.1	30376.8	30044.2	27222.0
35°	21139.9	21278.9	22259.8	24057.9	27005.9	29815.0	31498.5	32919.0	33249.7	33011.0	29679.7
37.5°	20215.5	20324.4	21374.8	23667.1	27143.1	30820.2	32982.8	35335.3	36199.6	36160.1	32646.5
40°	19078.7	19212.1	20469.1	22825.3	27075.5	31551.1	34724.6	38010.9	39108.2	38984.2	35588.9
42.5°	17735.3	17930.7	19150.1	21743.0	26581.3	31998.3	36150.7	40735.3	42710.1	42629.3	38193.1
45°	16406.9	16512.1	17624.4	20236.1	25671.9	32143.0	37492.3	44489.4	46404.1	46313.9	41331.0
47.5°	15037.1	15129.2	16290.4	18648.4	24093.6	31851.7	38553.9	47713.7	50167.6	50077.4	44448.1
50°	11850.4	12198.1	14578.7	17252.4	22295.5	31026.9	39555.4	51730.9	54105.8	53722.5	47178.2
52.5°	10138.7	10264.6	11499.1	15845.1	20501.1	29619.5	40224.3	55453.0	57345.1	56792.7	49970.3
55°	9477.4	9561.9	10166.9	13250.3	18815.7	27490.7	41011.5	59184.6	59774.6	59633.7	52247.6
57.5°	8975.7	9069.6	9501.8	11066.9	17040.1	24507.0	40765.4	61809.5	62547.9	62097.0	54665.8
60°	8265.4	8380.1	8953.1	9935.8	15022.1	21478.1	38599.0	62884.2	64564.0	64056.7	56505.2
62.5°	7818.3	7893.4	8222.2	9174.8	13349.8	19347.4	35515.6	62538.5	65576.7	65558.0	58100.5
65°	7211.4	7322.2	7673.6	8445.8	11861.7	17695.8	32607.1	60830.6	65140.8	65157.7	58429.3
67.5°	6576.3	6621.4	6989.6	7609.7	10108.7	16183.3	28843.5	57908.8	61745.6	62132.7	56153.9
70°	5783.4	5760.8	6159.2	6612.0	8261.7	13740.7	23216.1	52711.7	56728.8	56888.5	51552.4
72.5°	4550.8	4571.5	4682.3	4996.1	6271.9	10813.3	16846.5	44534.5	51484.7	51768.4	45671.3
75°	3058.9	3092.7	3609.4	3915.7	4511.3	7771.3	10593.4	30061.1	43523.7	44324.1	37379.6
77.5°	2333.6	2354.3	2504.6	2839.1	3263.7	5539.1	5742.0	16380.6	31686.4	33586.0	29241.9
80°	1653.5	1661.0	1512.5	1345.3	1738.0	3757.9	3391.5	6976.5	12626.4	14920.6	17175.4
82.5°	740.3	729.0	858.7	714.0	1001.5	1454.3	1600.9	3385.8	5244.1	5636.8	6136.6
85°	343.8	385.2	441.5	370.2	595.6	561.8	623.8	1443.0	2457.6	2713.2	2698.2
87.5°	84.6	92.1	116.5	148.4	216.1	191.7	187.9	424.6	548.6	546.8	839.9
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°	14680.1	14680.1	14680.1	14680.1	14680.1	14680.1	14680.1	14680.1	14680.1	14680.1	14680.1
2.5°	14689.5	14591.8	14360.7	14137.1	13924.8	13783.9	13626.0	13460.7	13361.1	13314.1	13415.6
5°	14762.8	14576.8	14135.2	13691.8	13316.0	12994.7	12769.2	12577.6	12474.3	12483.7	12489.3
7.5°	14824.8	14563.6	13945.5	13319.8	12733.5	12335.2	12040.2	11833.5	11715.2	11625.0	11692.6
10°	14879.3	14509.1	13723.7	12889.5	12252.5	11662.6	11262.3	11012.4	10794.5	10672.4	10768.2
12.5°	14937.5	14488.5	13475.7	12504.3	11679.5	11020.0	10471.3	10223.3	10009.1	9917.0	9975.3
15°	15191.2	14567.4	13244.6	12051.5	11113.9	10260.9	9669.0	9364.6	9195.5	9084.7	9109.1
17.5°	15627.1	14776.0	13096.2	11578.0	10482.6	9580.7	8814.1	8459.0	8179.0	8100.1	8079.4
20°	16247.2	15172.4	13096.2	11177.8	9766.7	8825.4	7942.3	7342.9	6907.0	6743.5	6869.4
22.5°	17288.1	15846.9	13225.8	10815.2	9150.4	8041.8	6989.6	6074.6	5486.5	5247.9	5386.9
25°	18744.3	16889.8	13436.3	10497.6	8588.6	7140.0	5781.5	4729.3	4081.0	3797.3	3793.6
27.5°	20645.7	18485.0	13860.9	10238.3	7916.0	5973.1	4520.7	3508.0	2899.2	2728.2	2752.6
30°	22753.9	20213.6	14663.2	9862.5	7098.6	4667.3	3291.9	2577.9	2149.5	1924.0	1927.8
32.5°	24786.9	22004.2	15615.8	9618.3	6037.0	3519.2	2346.8	1839.5	1572.7	1439.3	1459.9
35°	26966.5	23548.7	16324.2	9208.7	4791.3	2544.1	1659.1	1379.1	1268.3	1198.8	1202.5
37.5°	29320.8	25247.3	16906.7	8660.0	3622.6	1747.4	1225.1	1181.9	1134.9	1046.6	1039.1
40°	31780.3	27214.5	17254.3	7773.2	2517.8	1210.0	1040.9	1089.8	1063.5	948.9	939.5
42.5°	33865.9	28732.7	17340.7	6598.8	1629.0	980.8	943.2	1018.4	1024.0	907.5	892.5
45°	35868.9	30085.5	17171.6	5052.5	1129.2	922.6	883.1	986.4	994.0	888.7	864.3
47.5°	38110.5	31936.3	16865.3	3370.8	933.8	871.8	862.4	933.8	960.1	873.7	843.6
50°	40833.0	33441.3	15957.8	2070.6	881.2	839.9	839.9	883.1	918.8	843.6	828.6
52.5°	43625.1	34752.8	14614.4	1420.5	849.3	806.1	830.5	849.3	862.4	794.8	807.9
55°	45626.2	35915.9	12611.4	1142.4	830.5	783.5	841.8	804.2	785.4	727.1	714.0
57.5°	47847.1	37298.8	10563.4	1012.7	806.1	796.7	804.2	732.8	680.2	620.0	606.9
60°	49397.2	38042.8	8056.9	952.6	777.9	783.5	742.2	646.4	550.5	507.3	497.9
62.5°	50750.1	38467.5	5905.5	875.6	751.6	749.7	672.7	552.4	452.8	405.9	398.3
65°	50545.3	37804.2	3827.4	813.6	730.9	706.5	603.1	473.5	377.7	342.0	338.2
67.5°	48292.4	34869.3	2410.7	749.7	695.2	652.0	541.1	422.8	347.6	306.3	302.5
70°	43563.1	30816.4	1475.0	667.0	618.2	576.8	479.1	396.5	328.8	280.0	270.6
72.5°	37026.3	26393.4	1042.8	588.1	539.3	490.4	405.9	377.7	313.8	251.8	244.3
75°	30420.0	19441.4	873.7	512.9	460.3	394.6	345.7	351.4	295.0	229.2	223.6
77.5°	21421.7	12121.0	813.6	419.0	362.6	313.8	298.8	321.3	270.6	210.4	204.8
80°	12502.4	6807.4	672.7	330.7	272.4	242.4	249.9	272.4	236.7	189.8	182.3
82.5°	5046.8	2694.4	473.5	257.4	199.2	193.5	204.8	221.7	195.4	159.7	156.0
85°	1801.9	841.8	268.7	169.1	127.8	133.4	131.5	157.8	140.9	116.5	114.6
87.5°	473.5	167.2	120.3	67.6	54.5	54.5	50.7	73.3	67.6	52.6	58.2
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)