

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: P510529

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

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510529  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-11)  
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  
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: 78293 lumens  
Efficiency: N/A  
Efficacy: 124.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5

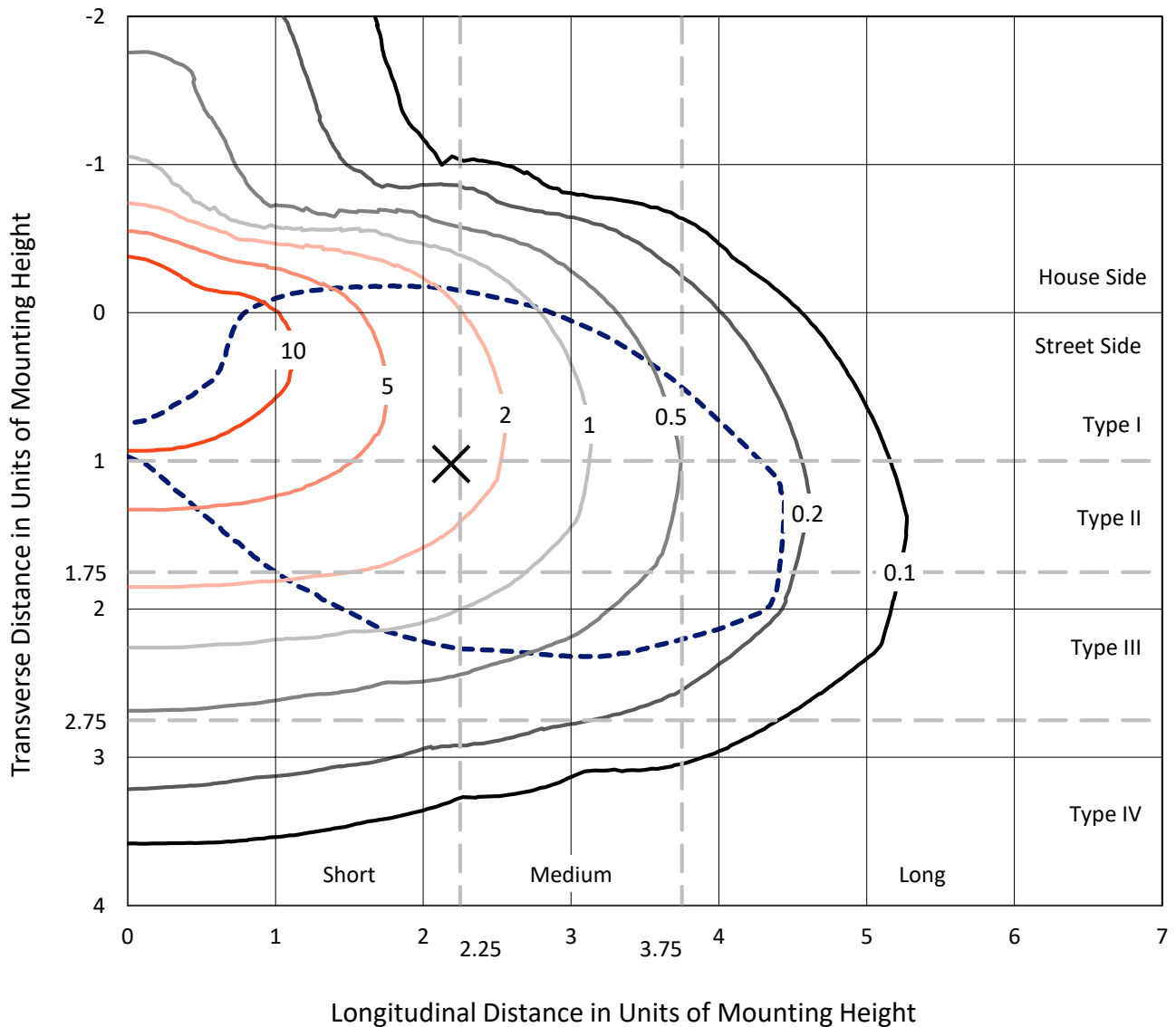
Input Watts (W): 631.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

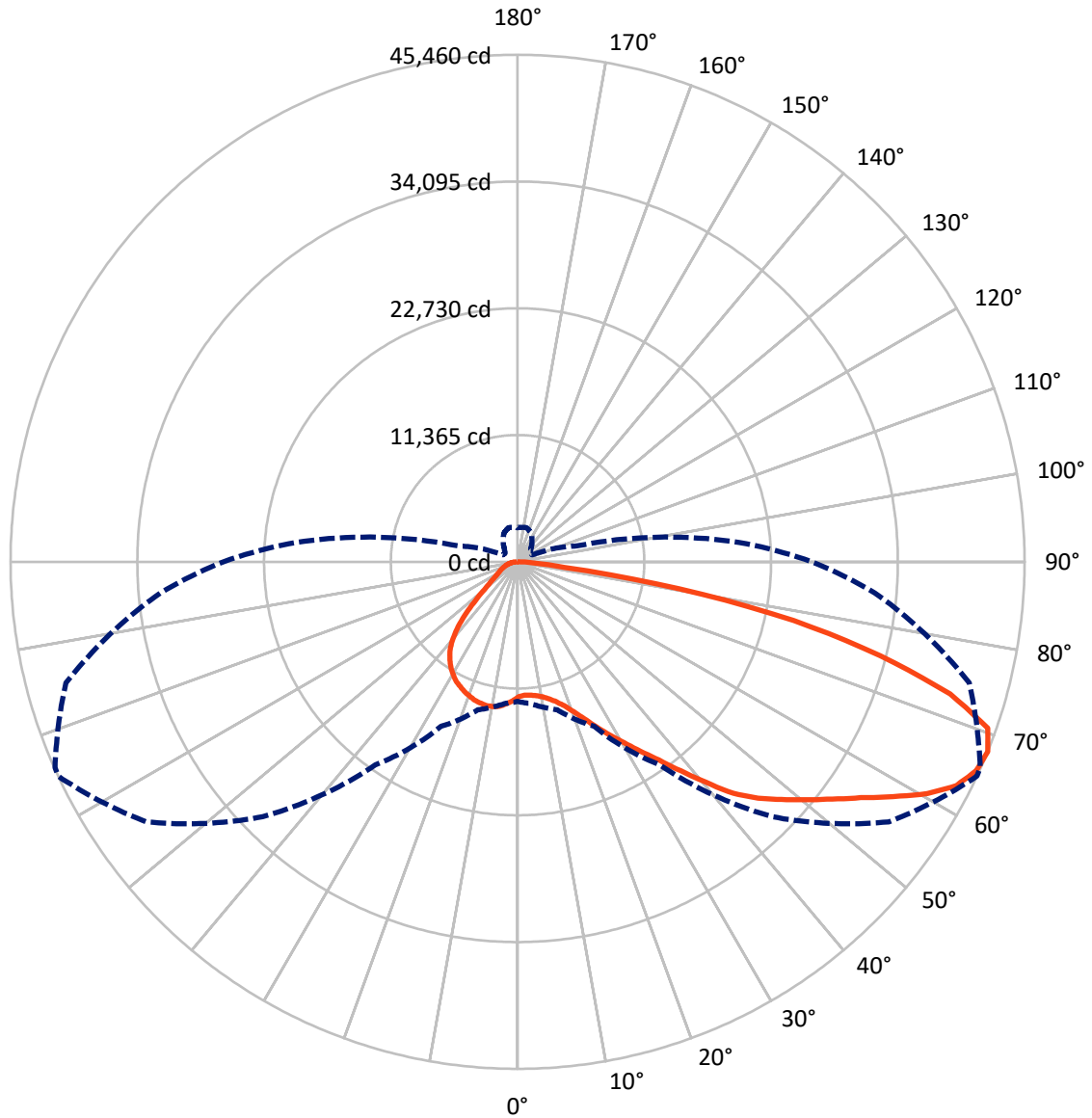
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 15 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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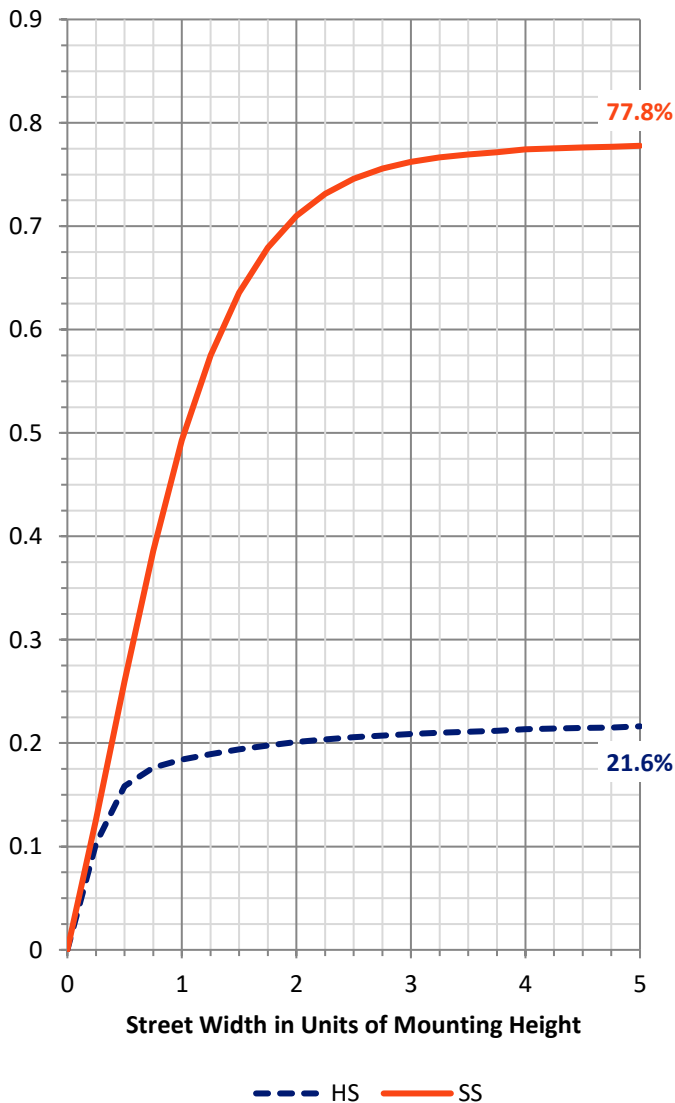
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	17293.9	0.0	17293.9
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	60999.1	0.0	60999.1
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	78293.0	0.0	78293.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1204.9	1.5
10°-20°	3764.6	4.8
20°-30°	6516.9	8.3
30°-40°	9575.9	12.2
40°-50°	12943.1	16.5
50°-60°	15916.1	20.3
60°-70°	17055.2	21.8
70°-80°	10058.9	12.8
80°-90°	1257.3	1.6
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°	78293.0	100.0
0°-180°	78293.0	100.0

**Coefficient of Utilization**

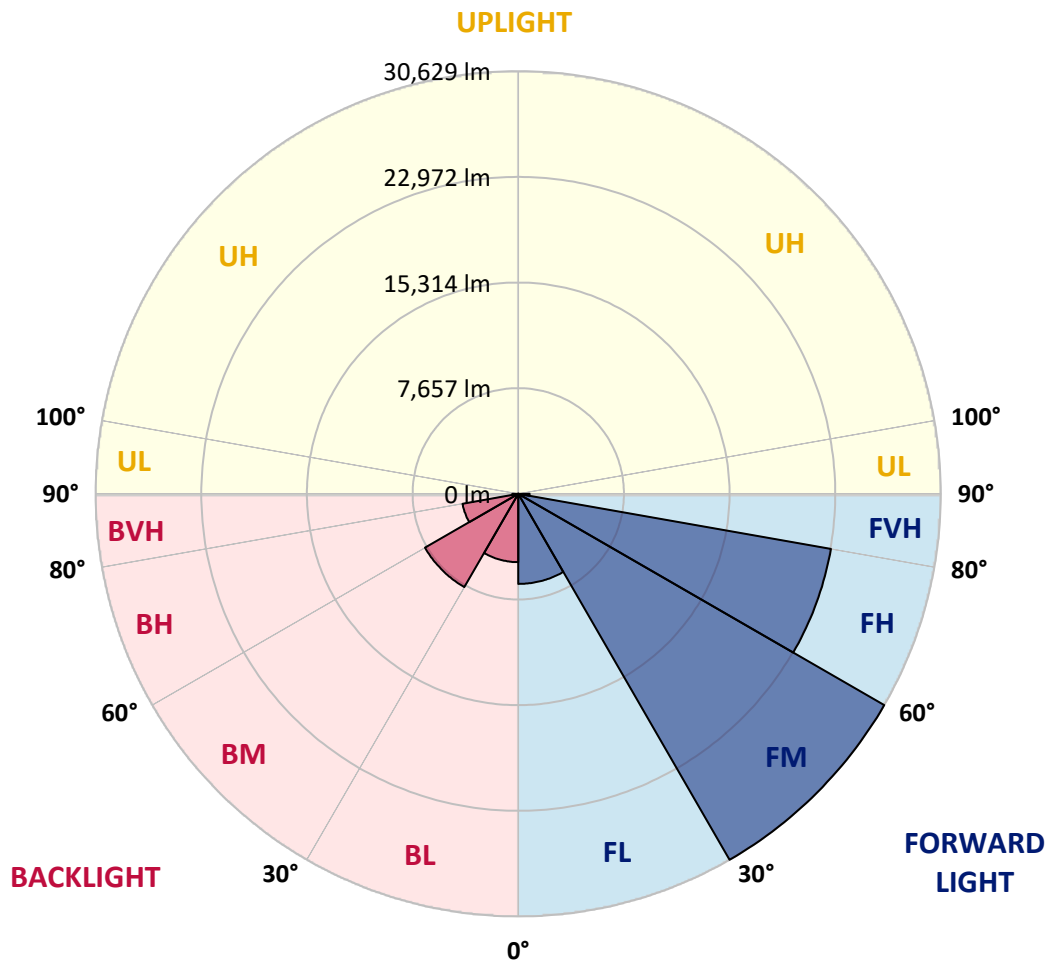


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6532.9	8.3			
FM (30°-60°)	30628.8	39.1			
FH (60°-80°)	23012.9	29.4			G5
FVH (80°-90°)	824.5	1.1			G5
BL (0°-30°)	4953.5	6.3	B4/5000		
BM (30°-60°)	7806.4	10.0	B4/8500		
BH (60°-80°)	4101.2	5.2	B4/5000		G4/5000
BVH (80°-90°)	432.8	0.6			G3/500
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°	12093.3	12093.3	12093.3	12093.3	12093.3	12093.3	12093.3	12093.3	12093.3	12093.3	12093.3
2.5°	11865.0	11842.7	11833.1	11863.4	11885.8	11911.3	11948.0	11983.2	11987.9	12034.2	12094.9
5°	12008.7	11989.5	11968.8	11964.0	11956.0	11954.4	11964.0	12003.9	12013.5	12058.2	12189.1
7.5°	12328.0	12308.8	12270.5	12256.1	12213.0	12136.4	12099.7	12120.4	12125.2	12179.5	12342.3
10°	12848.3	12789.3	12743.0	12695.1	12559.4	12438.1	12348.7	12310.4	12302.4	12355.1	12543.4
12.5°	13469.3	13419.8	13368.7	13242.6	13070.2	12851.5	12693.5	12605.7	12599.3	12644.0	12786.1
15°	14125.3	14125.3	14090.2	13940.2	13771.0	13408.6	13164.4	13017.5	13027.1	13062.2	13127.7
17.5°	14973.0	14902.7	14886.8	14716.0	14527.6	14197.2	13809.3	13574.6	13585.8	13601.8	13552.3
20°	15834.9	15814.2	15790.2	15676.9	15506.1	15081.5	14645.7	14337.6	14339.2	14281.8	14061.5
22.5°	16974.7	16906.0	16923.6	16795.9	16564.4	16128.7	15627.4	15261.9	15285.8	15202.8	14803.8
25°	18106.4	18037.8	18001.1	17914.9	17715.3	17301.9	16706.5	16371.3	16342.6	16192.5	15613.1
27.5°	19236.6	19196.7	19227.0	19123.2	18960.4	18499.1	17953.2	17581.3	17600.4	17496.7	16633.1
30°	20406.6	20362.0	20494.4	20326.8	20226.3	19777.7	19254.1	18816.8	18832.7	18871.0	17902.1
32.5°	21289.4	21342.1	21573.5	21554.4	21535.2	21035.6	20484.9	20242.2	20266.2	20400.3	19409.0
35°	22141.8	22146.6	22472.2	22718.0	22821.8	22403.6	21832.1	21824.1	21980.6	22389.2	21509.7
37.5°	22848.9	22833.0	23267.2	23648.7	23932.8	23608.8	23294.3	23784.3	23926.4	24774.0	23624.7
40°	23235.2	23268.7	23827.4	24303.1	24861.8	24708.6	24742.1	25995.2	26344.8	27087.0	25206.6
42.5°	22963.9	23066.0	23936.0	24906.5	25749.3	25953.7	26627.3	28383.2	28531.6	28665.7	26763.0
45°	22508.9	22615.9	23580.0	25147.6	26482.0	27345.6	28502.9	30220.5	30383.3	30233.3	28057.5
47.5°	22034.8	22145.0	23219.3	25050.2	27088.6	28743.9	30171.0	31845.5	32053.0	31588.5	29302.6
50°	21433.0	21603.8	22778.7	24844.3	27580.3	30252.4	31749.7	33518.4	33614.1	32943.7	30246.0
52.5°	20692.4	20880.7	22151.4	24491.5	27965.0	31305.9	33347.6	35333.3	35323.7	34527.2	31325.1
55°	19913.4	20084.2	21393.1	23936.0	28180.5	32116.8	34624.6	37333.4	37448.4	36781.1	32302.0
57.5°	18915.7	19070.6	20497.6	23188.9	27957.0	32804.8	36693.3	39710.3	39767.7	38350.3	33079.4
60°	17594.0	17822.3	19255.7	22239.2	27315.3	33601.4	38972.8	42210.0	42280.3	39893.8	33579.0
62.5°	16143.0	16234.0	17694.6	20777.0	26381.5	34215.9	40553.1	44165.4	44063.3	41100.6	33729.1
65°	14374.4	14446.2	15710.4	18896.6	24646.3	33879.1	41119.8	45171.1	45045.0	41858.8	33267.8
67.5°	12522.7	12744.6	13737.5	16288.3	22224.8	32324.4	40640.9	45460.0	45396.2	41916.3	32166.3
70°	10118.7	10196.9	11094.0	13269.7	18543.8	29211.6	39044.6	44719.4	44669.9	40632.9	29917.2
72.5°	7135.3	7058.7	7494.5	9200.9	13394.3	23236.8	33336.4	40557.9	40640.9	36348.5	26052.6
75°	3787.9	3934.8	4613.2	5633.2	7593.4	14937.8	26577.8	33566.3	33537.5	30394.5	20593.4
77.5°	2017.7	2014.5	2480.6	2916.4	3717.7	6863.9	17530.2	25313.6	25454.0	23549.7	14139.7
80°	968.9	1005.6	1034.4	1186.0	1853.3	3171.8	7333.2	14679.2	15637.0	14045.5	6717.1
82.5°	775.8	779.0	782.2	748.6	766.2	1291.4	2825.4	4247.7	4400.9	3537.3	2166.1
85°	574.7	539.5	534.7	453.3	512.4	775.8	1425.5	1813.4	1724.0	1677.7	1222.7
87.5°	231.5	217.1	210.7	197.9	197.9	292.1	502.8	656.1	654.5	597.0	410.2
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°	12093.3	12093.3	12093.3	12093.3	12093.3	12093.3	12093.3	12093.3	12093.3	12093.3	12093.3
2.5°	12142.8	12200.3	12334.3	12449.3	12492.4	12597.7	12696.7	12754.2	12794.1	12818.0	12926.6
5°	12268.9	12383.8	12597.7	12758.9	12915.4	13110.1	13236.2	13316.0	13360.7	13386.3	13464.5
7.5°	12462.0	12578.6	12805.2	13052.7	13196.3	13355.9	13437.4	13494.8	13523.6	13515.6	13577.8
10°	12634.4	12749.4	12976.0	13166.0	13247.4	13338.4	13381.5	13394.3	13395.9	13402.2	13464.5
12.5°	12869.1	12939.3	13060.6	13185.1	13167.6	13170.8	13207.5	13191.5	13154.8	13148.4	13189.9
15°	13121.3	13122.9	13132.5	13105.3	12995.2	12947.3	12896.2	12853.1	12752.6	12746.2	12811.6
17.5°	13437.4	13362.3	13188.3	13003.2	12741.4	12561.0	12379.0	12304.0	12181.1	12157.2	12189.1
20°	13844.4	13688.0	13265.0	12805.2	12315.2	11992.7	11772.5	11550.6	11379.8	11338.3	11368.6
22.5°	14428.6	14120.6	13362.3	12594.5	11836.3	11285.6	10857.8	10591.2	10303.9	10157.0	10171.4
25°	15134.2	14652.1	13531.5	12328.0	11272.8	10477.9	9783.5	9248.8	8924.7	8709.2	8766.7
27.5°	16058.4	15396.0	13734.3	12064.6	10572.1	9445.1	8437.9	7713.2	7382.7	7280.6	7213.5
30°	17129.5	16294.7	13948.2	11675.1	9815.4	8166.5	6876.7	6273.3	5895.0	5834.3	5783.3
32.5°	18563.0	17426.4	14348.8	11252.1	8911.9	6887.9	5488.0	4793.6	4707.4	4657.9	4646.7
35°	20411.4	18909.4	14768.6	10703.0	7733.9	5389.0	4151.9	3776.8	3735.3	3789.5	3794.3
37.5°	22373.2	20518.4	15271.5	10083.6	6378.7	4021.0	3176.6	2916.4	2962.7	3131.9	3170.2
40°	23701.3	21578.3	15728.0	9242.4	4704.2	2921.2	2311.4	2255.5	2510.9	2728.0	2772.7
42.5°	24975.2	22381.2	15913.2	8129.8	3355.3	2079.9	1866.0	2057.6	2415.1	2653.0	2684.9
45°	26062.2	23315.0	15447.1	6795.3	2274.7	1738.3	1787.8	2052.8	2450.3	2713.6	2737.6
47.5°	27096.6	24078.1	14810.1	5353.9	1794.2	1672.9	1786.2	2095.9	2528.5	2777.5	2791.9
50°	28084.7	24659.1	13723.1	4073.7	1680.9	1642.6	1800.6	2162.9	2571.6	2728.0	2721.6
52.5°	28817.4	24959.2	12565.8	3288.3	1636.2	1618.6	1838.9	2247.5	2579.6	2673.7	2667.4
55°	29355.3	24901.7	11806.0	2692.9	1599.5	1609.0	1901.2	2311.4	2656.2	2798.3	2793.5
57.5°	29404.8	24641.5	10942.4	2274.7	1554.8	1607.4	1968.2	2400.8	3039.3	3301.1	3221.3
60°	29345.7	24210.5	10080.4	1996.9	1505.3	1617.0	2038.4	2669.0	3591.6	3797.5	3741.6
62.5°	29055.2	23407.6	8789.0	1813.4	1462.2	1652.1	2091.1	2881.3	3564.5	3588.4	3508.6
65°	28158.1	22333.3	7093.8	1628.2	1419.1	1676.1	2134.2	2937.1	3273.9	3197.3	3157.4
67.5°	26383.1	19934.2	5472.0	1459.0	1363.2	1671.3	2261.9	2857.3	3163.8	3107.9	3056.8
70°	23861.0	17207.7	3799.1	1285.0	1269.0	1641.0	2230.0	2884.5	3111.1	3024.9	2956.3
72.5°	19934.2	13499.6	2416.7	1142.9	1128.6	1569.1	2150.2	2866.9	3076.0	3037.7	2943.5
75°	15009.7	9422.7	1535.6	988.1	1004.1	1438.2	2022.5	2772.7	3058.4	2938.7	2758.3
77.5°	9449.9	4651.5	1194.0	839.6	863.6	1240.3	1747.9	2421.5	2935.5	2863.7	2632.2
80°	3574.0	1888.4	933.8	681.6	702.4	964.1	1433.4	1992.1	2702.5	2820.6	2721.6
82.5°	1645.7	1181.2	700.8	547.5	555.5	702.4	1069.5	1474.9	2287.4	2589.1	2836.6
85°	961.0	774.2	467.7	365.5	379.9	415.0	601.8	900.3	1482.9	1974.6	2209.2
87.5°	327.2	269.8	182.0	154.8	150.0	170.8	145.3	295.3	440.6	775.8	885.9
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)