

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: P510829

Luminaire Tested: **CST-CA8-480-727-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510829
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-CA8-480-727-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 60302 lumens
Efficiency: N/A
Efficacy: 125.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

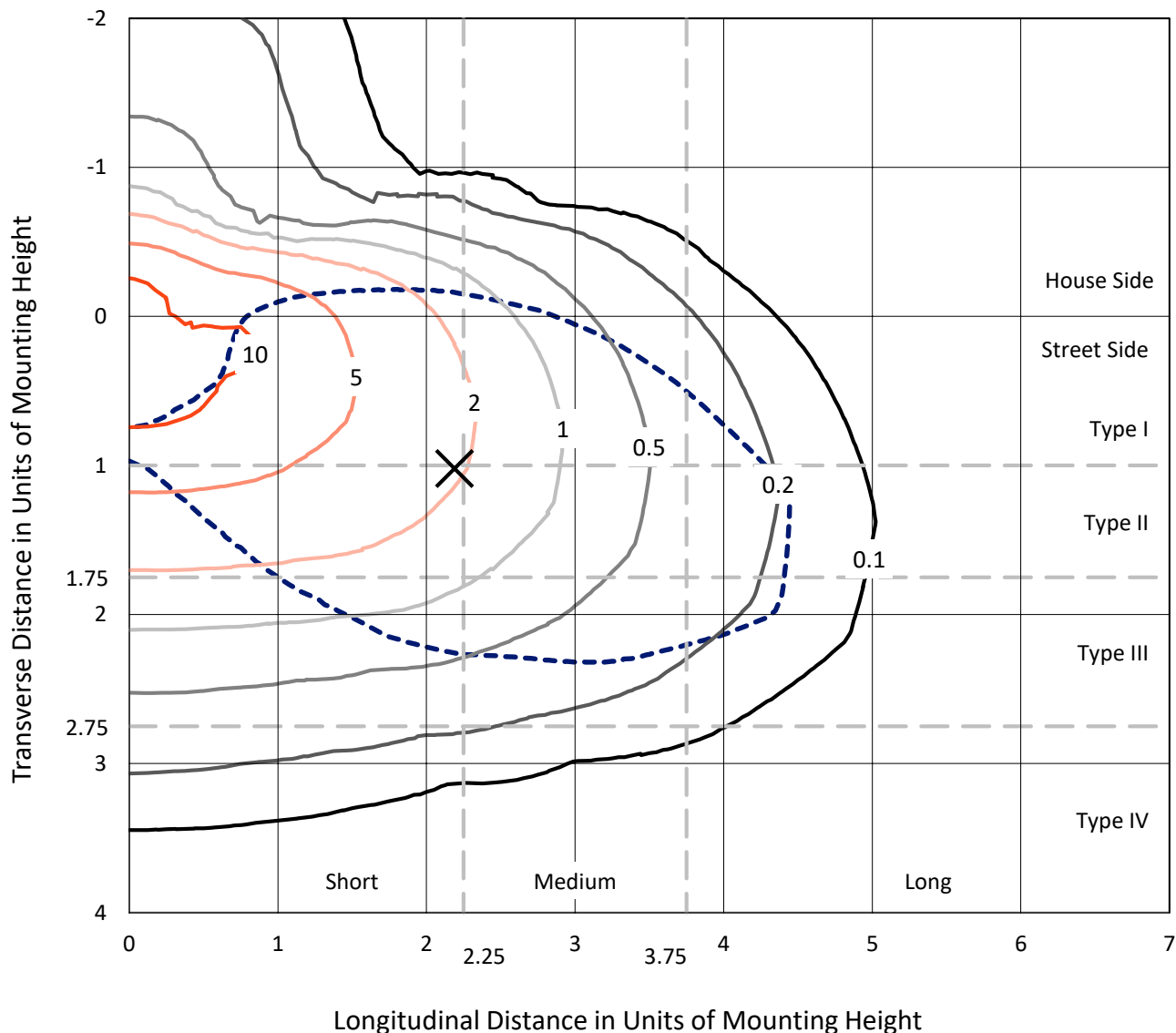
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

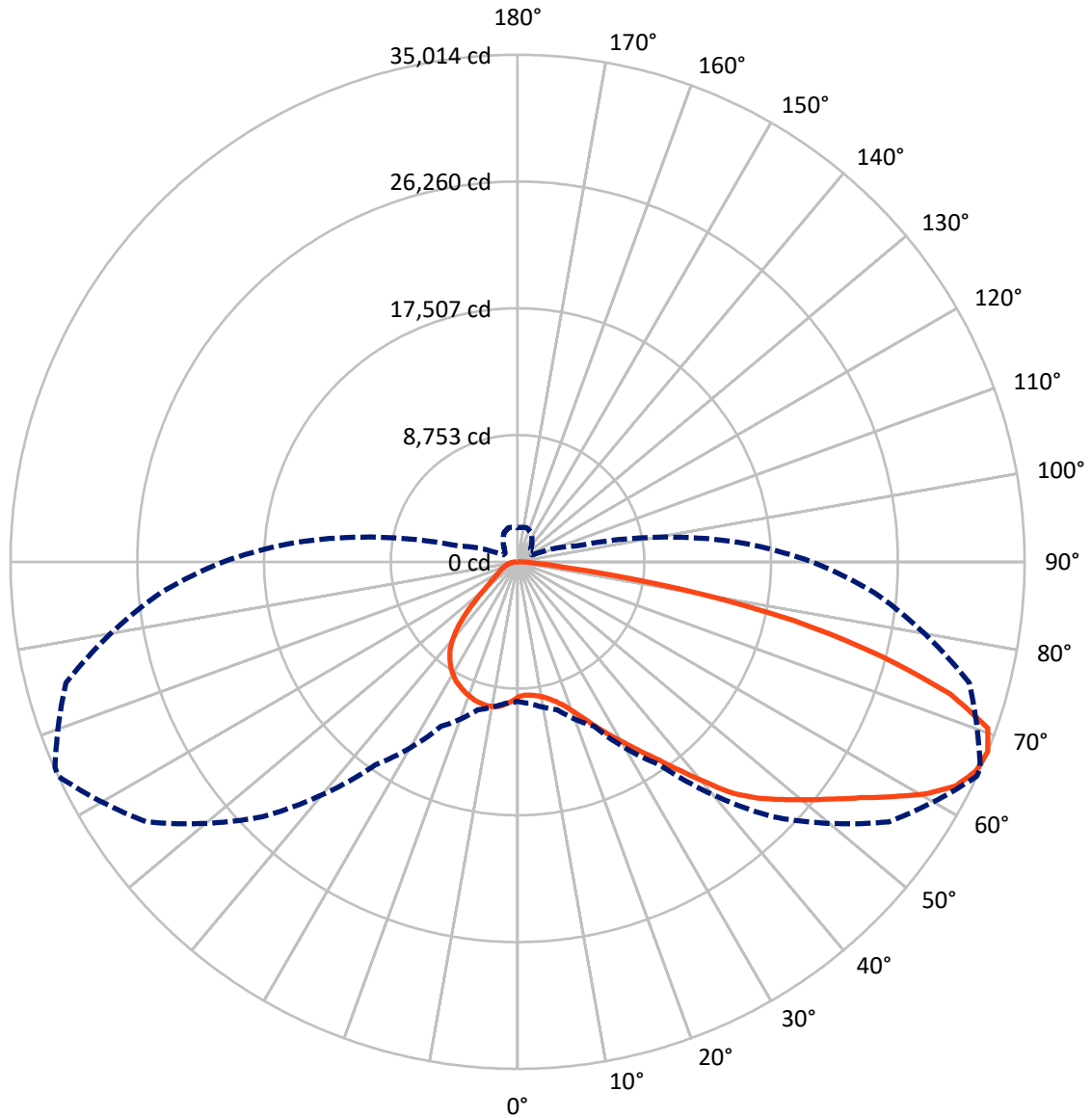
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.5 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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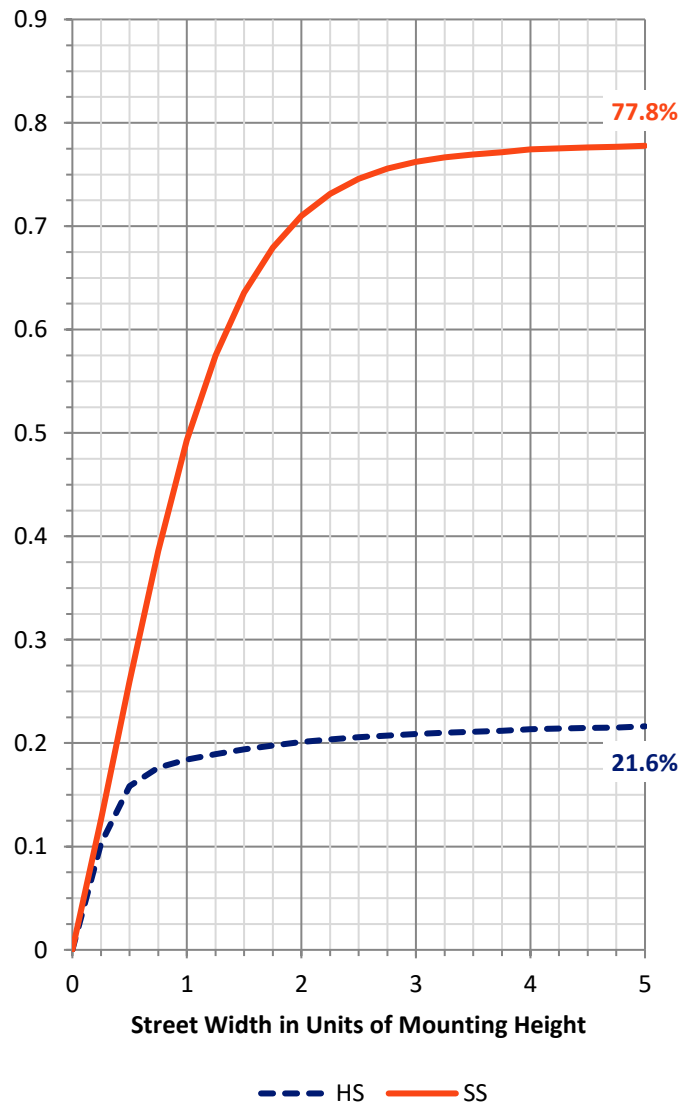
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13320.0	0.0	13320.0
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	46982.1	0.0	46982.1
	% Fixture	77.9	0.0	77.9
Total	Lumens	60302.0	0.0	60302.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	928.0	1.5
10°-20°	2899.5	4.8
20°-30°	5019.4	8.3
30°-40°	7375.5	12.2
40°-50°	9968.9	16.5
50°-60°	12258.8	20.3
60°-70°	13136.0	21.8
70°-80°	7747.5	12.8
80°-90°	968.4	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°	60302.0	100.0
0°-180°	60302.0	100.0

Coefficient of Utilization

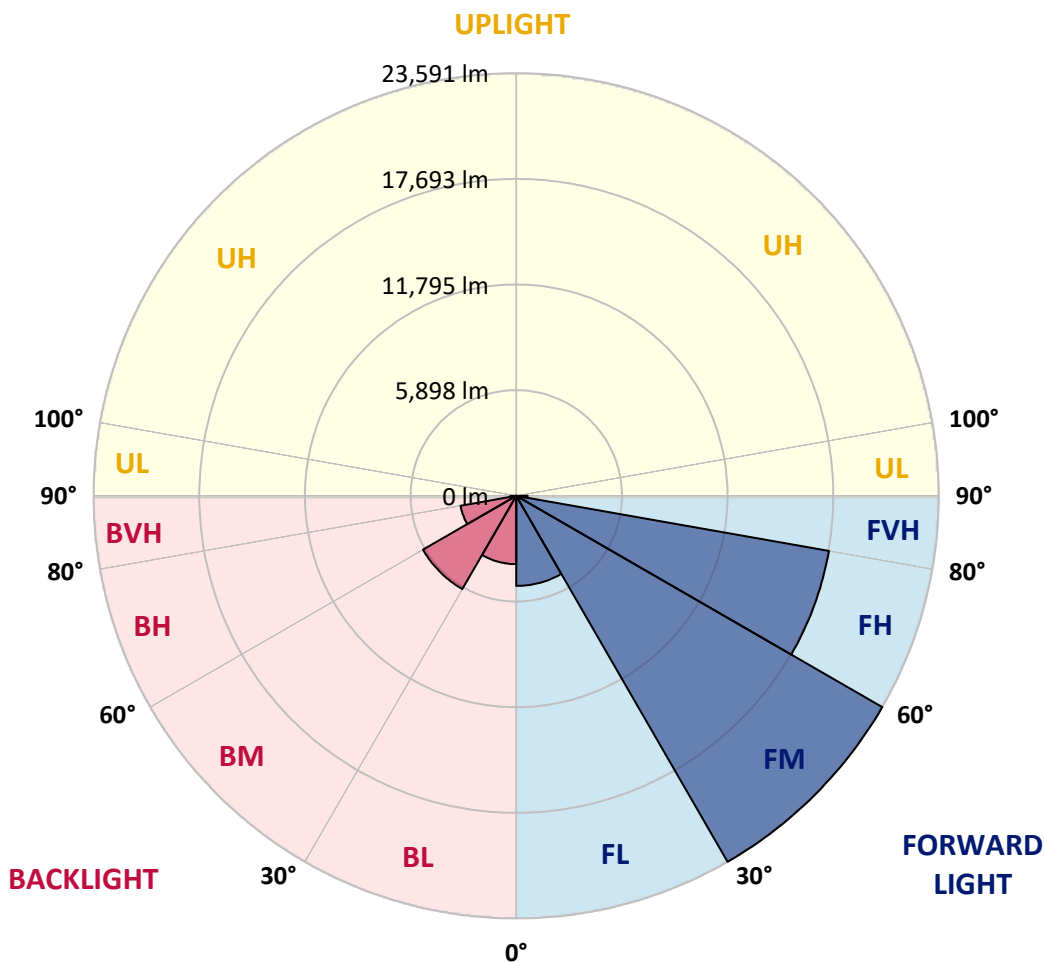


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5031.7	8.3			
FM (30°-60°)	23590.6	39.1			
FH (60°-80°)	17724.7	29.4			G5
FVH (80°-90°)	635.0	1.1			G4/750
BL (0°-30°)	3815.2	6.3	B4/5000		
BM (30°-60°)	6012.6	10.0	B4/8500		
BH (60°-80°)	3158.8	5.2	B4/5000		G4/5000
BVH (80°-90°)	333.4	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°	9314.4	9314.4	9314.4	9314.4	9314.4	9314.4	9314.4	9314.4	9314.4	9314.4	9314.4
2.5°	9138.6	9121.3	9114.0	9137.3	9154.5	9174.2	9202.5	9229.5	9233.2	9268.9	9315.6
5°	9249.2	9234.5	9218.5	9214.8	9208.6	9207.4	9214.8	9245.5	9252.9	9287.3	9388.1
7.5°	9495.1	9480.3	9450.8	9439.8	9406.6	9347.6	9319.3	9335.3	9339.0	9380.8	9506.2
10°	9895.9	9850.4	9814.8	9777.9	9673.4	9579.9	9511.1	9481.6	9475.4	9516.0	9661.1
12.5°	10374.2	10336.1	10296.7	10199.6	10066.8	9898.4	9776.6	9709.0	9704.1	9738.5	9848.0
15°	10879.5	10879.5	10852.4	10736.9	10606.5	10327.4	10139.3	10026.2	10033.6	10060.7	10111.1
17.5°	11532.3	11478.2	11465.9	11334.4	11189.3	10934.8	10636.0	10455.3	10463.9	10476.2	10438.1
20°	12196.2	12180.2	12161.8	12074.5	11943.0	11615.9	11280.3	11043.0	11044.2	11000.0	10830.3
22.5°	13074.1	13021.2	13034.7	12936.4	12758.1	12422.4	12036.4	11754.8	11773.3	11709.4	11402.0
25°	13945.7	13892.9	13864.6	13798.2	13644.5	13326.1	12867.5	12609.3	12587.2	12471.6	12025.3
27.5°	14816.2	14785.5	14808.8	14728.9	14603.5	14248.2	13827.7	13541.2	13556.0	13476.1	12811.0
30°	15717.4	15683.0	15785.0	15655.9	15578.5	15233.0	14829.7	14492.8	14505.1	14534.7	13788.4
32.5°	16397.3	16437.9	16616.1	16601.4	16586.6	16201.8	15777.6	15590.8	15609.2	15712.5	14949.0
35°	17053.8	17057.5	17308.3	17497.6	17577.6	17255.4	16815.3	16809.1	16929.6	17244.4	16566.9
37.5°	17598.5	17586.2	17920.6	18214.4	18433.3	18183.7	17941.5	18318.9	18428.3	19081.2	18196.0
40°	17896.0	17921.8	18352.1	18718.5	19148.8	19030.8	19056.6	20021.7	20291.0	20862.7	19414.4
42.5°	17687.0	17765.7	18435.7	19183.2	19832.4	19989.8	20508.6	21861.0	21975.3	22078.6	20613.1
45°	17336.6	17419.0	18161.6	19368.9	20396.7	21061.8	21953.2	23276.1	23401.5	23285.9	21610.2
47.5°	16971.4	17056.3	17883.7	19293.9	20863.9	22138.8	23238.0	24527.7	24687.5	24329.7	22569.2
50°	16507.9	16639.5	17544.4	19135.3	21242.6	23300.7	24453.9	25816.2	25889.9	25373.6	23295.8
52.5°	15937.5	16082.5	17061.2	18863.6	21538.9	24112.1	25684.6	27214.1	27206.7	26593.2	24126.9
55°	15337.5	15469.0	16477.2	18435.7	21704.8	24736.7	26668.2	28754.6	28843.1	28329.2	24879.3
57.5°	14569.1	14688.3	15787.5	17860.3	21532.7	25266.6	28261.5	30585.2	30629.5	29537.7	25478.1
60°	13551.1	13726.9	14831.0	17128.8	21038.5	25880.1	30017.2	32510.6	32564.7	30726.6	25862.9
62.5°	12433.5	12503.6	13628.5	16002.6	20319.3	26353.4	31234.4	34016.6	33938.0	31656.1	25978.4
65°	11071.3	11126.6	12100.3	14554.3	18982.8	26094.0	31670.8	34791.2	34694.1	32240.1	25623.1
67.5°	9645.1	9816.0	10580.7	12545.4	17117.7	24896.5	31302.0	35013.7	34964.6	32284.3	24774.8
70°	7793.5	7853.8	8544.7	10220.5	14282.6	22499.1	30072.5	34443.3	34405.1	31295.9	23042.5
72.5°	5495.7	5436.7	5772.3	7086.6	10316.4	17897.2	25676.0	31238.1	31302.0	27996.0	20066.0
75°	2917.5	3030.6	3553.1	4338.8	5848.5	11505.3	20470.5	25853.0	25830.9	23410.1	15861.2
77.5°	1554.0	1551.6	1910.6	2246.2	2863.4	5286.7	13501.9	19496.7	19604.9	18138.2	10890.5
80°	746.3	774.6	796.7	913.5	1427.4	2442.9	5648.1	11306.1	12043.8	10818.0	5173.6
82.5°	597.5	600.0	602.4	576.6	590.1	994.6	2176.1	3271.6	3389.6	2724.5	1668.4
85°	442.6	415.6	411.9	349.2	394.7	597.5	1097.9	1396.7	1327.8	1292.2	941.8
87.5°	178.3	167.2	162.3	152.5	152.5	225.0	387.3	505.3	504.1	459.8	316.0
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°	9314.4	9314.4	9314.4	9314.4	9314.4	9314.4	9314.4	9314.4	9314.4	9314.4	9314.4
2.5°	9352.5	9396.7	9500.0	9588.5	9621.7	9702.9	9779.1	9823.4	9854.1	9872.5	9956.2
5°	9449.6	9538.1	9702.9	9827.1	9947.5	10097.5	10194.7	10256.1	10290.6	10310.2	10370.5
7.5°	9598.4	9688.1	9862.7	10053.3	10163.9	10286.9	10349.6	10393.8	10416.0	10409.8	10457.8
10°	9731.2	9819.7	9994.3	10140.6	10203.3	10273.4	10306.5	10316.4	10317.6	10322.5	10370.5
12.5°	9911.9	9966.0	10059.4	10155.3	10141.8	10144.3	10172.5	10160.2	10132.0	10127.0	10159.0
15°	10106.1	10107.4	10114.8	10093.8	10009.0	9972.1	9932.8	9899.6	9822.1	9817.2	9867.6
17.5°	10349.6	10291.8	10157.8	10015.2	9813.5	9674.6	9534.4	9476.7	9382.0	9363.6	9388.1
20°	10663.1	10542.6	10216.8	9862.7	9485.3	9236.9	9067.3	8896.4	8764.8	8732.8	8756.2
22.5°	11113.1	10875.8	10291.8	9700.4	9116.4	8692.3	8362.8	8157.5	7936.2	7823.0	7834.1
25°	11656.5	11285.2	10422.1	9495.1	8682.4	8070.2	7535.3	7123.5	6873.9	6707.9	6752.2
27.5°	12368.3	11858.1	10578.3	9292.2	8142.7	7274.7	6498.9	5940.7	5686.2	5607.6	5555.9
30°	13193.3	12550.3	10743.0	8992.3	7559.9	6289.9	5296.5	4831.8	4540.4	4493.7	4454.3
32.5°	14297.4	13422.0	11051.6	8666.4	6864.1	5305.1	4226.9	3692.1	3625.7	3587.6	3579.0
35°	15721.1	14564.2	11374.9	8243.5	5956.7	4150.6	3197.8	2908.9	2876.9	2918.7	2922.4
37.5°	17232.1	15803.5	11762.2	7766.5	4912.9	3097.0	2446.6	2246.2	2281.9	2412.2	2441.7
40°	18255.0	16619.8	12113.8	7118.6	3623.2	2249.9	1780.3	1737.2	1933.9	2101.1	2135.6
42.5°	19236.1	17238.2	12256.5	6261.6	2584.3	1602.0	1437.2	1584.8	1860.2	2043.4	2067.9
45°	20073.4	17957.5	11897.5	5233.8	1752.0	1338.9	1377.0	1581.1	1887.2	2090.1	2108.5
47.5°	20870.0	18545.1	11406.9	4123.6	1381.9	1288.5	1375.8	1614.3	1947.5	2139.3	2150.3
50°	21631.1	18992.7	10569.6	3137.6	1294.6	1265.1	1386.8	1665.9	1980.7	2101.1	2096.2
52.5°	22195.4	19223.8	9678.3	2532.7	1260.2	1246.7	1416.3	1731.1	1986.8	2059.3	2054.4
55°	22609.7	19179.5	9093.1	2074.1	1231.9	1239.3	1464.3	1780.3	2045.8	2155.2	2151.6
57.5°	22647.8	18979.1	8427.9	1752.0	1197.5	1238.1	1515.9	1849.1	2340.9	2542.5	2481.0
60°	22602.4	18647.2	7764.0	1538.1	1159.4	1245.4	1570.0	2055.7	2766.3	2924.9	2881.8
62.5°	22378.6	18028.8	6769.4	1396.7	1126.2	1272.5	1610.6	2219.2	2745.4	2763.8	2702.3
65°	21687.6	17201.3	5463.7	1254.0	1093.0	1290.9	1643.8	2262.2	2521.6	2462.6	2431.9
67.5°	20320.5	15353.5	4214.6	1123.7	1050.0	1287.2	1742.1	2200.7	2436.8	2393.8	2354.4
70°	18377.9	13253.6	2926.1	989.7	977.4	1263.9	1717.6	2221.6	2396.2	2329.8	2277.0
72.5°	15353.5	10397.5	1861.4	880.3	869.2	1208.6	1656.1	2208.1	2369.2	2339.7	2267.1
75°	11560.6	7257.5	1182.7	761.0	773.3	1107.7	1557.7	2135.6	2355.6	2263.4	2124.5
77.5°	7278.4	3582.6	919.6	646.7	665.1	955.3	1346.3	1865.1	2261.0	2205.6	2027.4
80°	2752.8	1454.4	719.2	525.0	541.0	742.6	1104.1	1534.4	2081.5	2172.5	2096.2
82.5°	1267.6	909.8	539.7	421.7	427.9	541.0	823.7	1136.0	1761.8	1994.2	2184.7
85°	740.1	596.3	360.2	281.5	292.6	319.7	463.5	693.4	1142.2	1520.8	1701.6
87.5°	252.0	207.8	140.2	119.3	115.6	131.6	111.9	227.4	339.3	597.5	682.3
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)