

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: P510859

Luminaire Tested: **CST-CA8-480-750-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510859
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-CA8-480-750-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 72518 lumens
Efficiency: N/A
Efficacy: 150.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

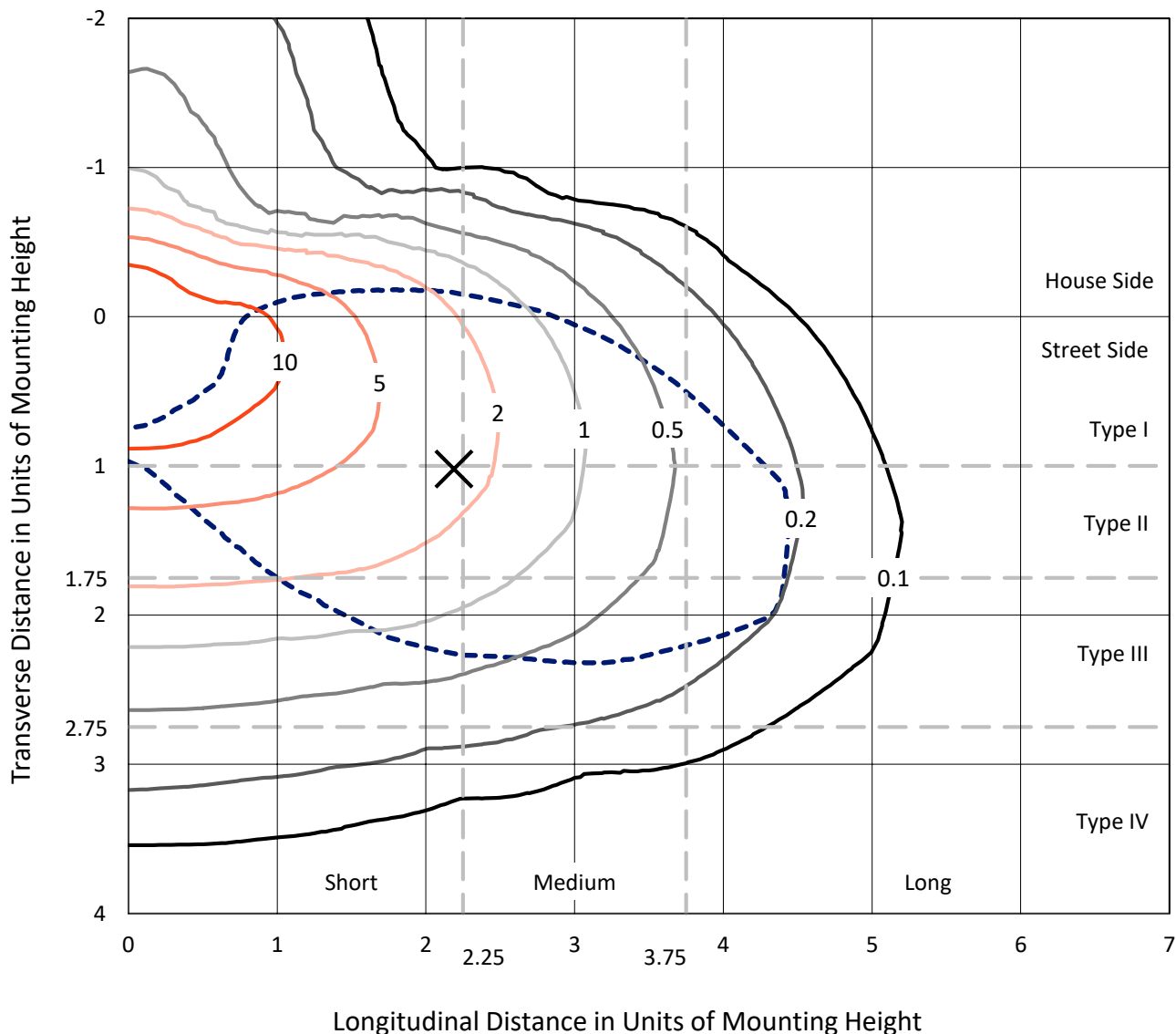
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

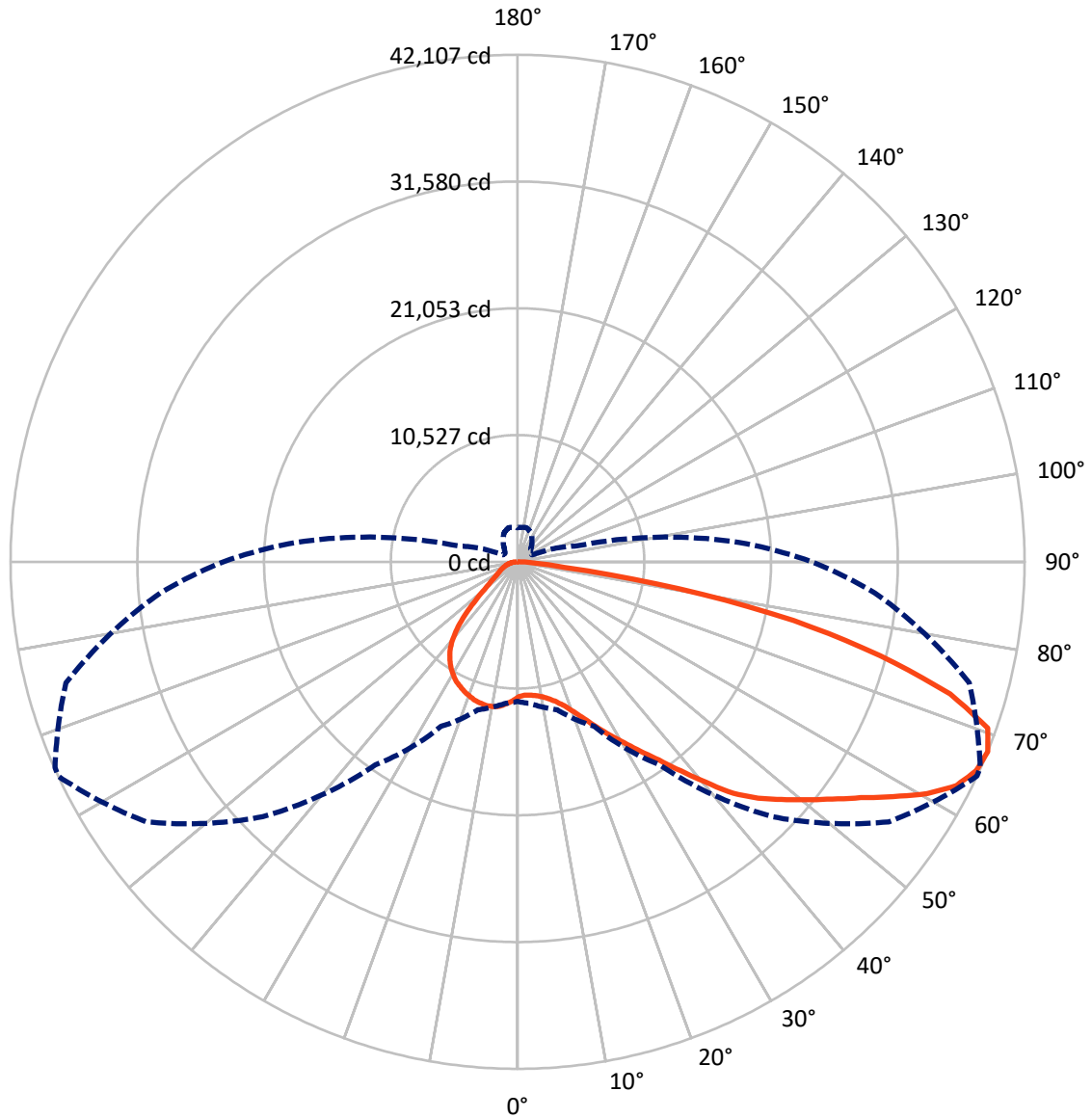
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.9 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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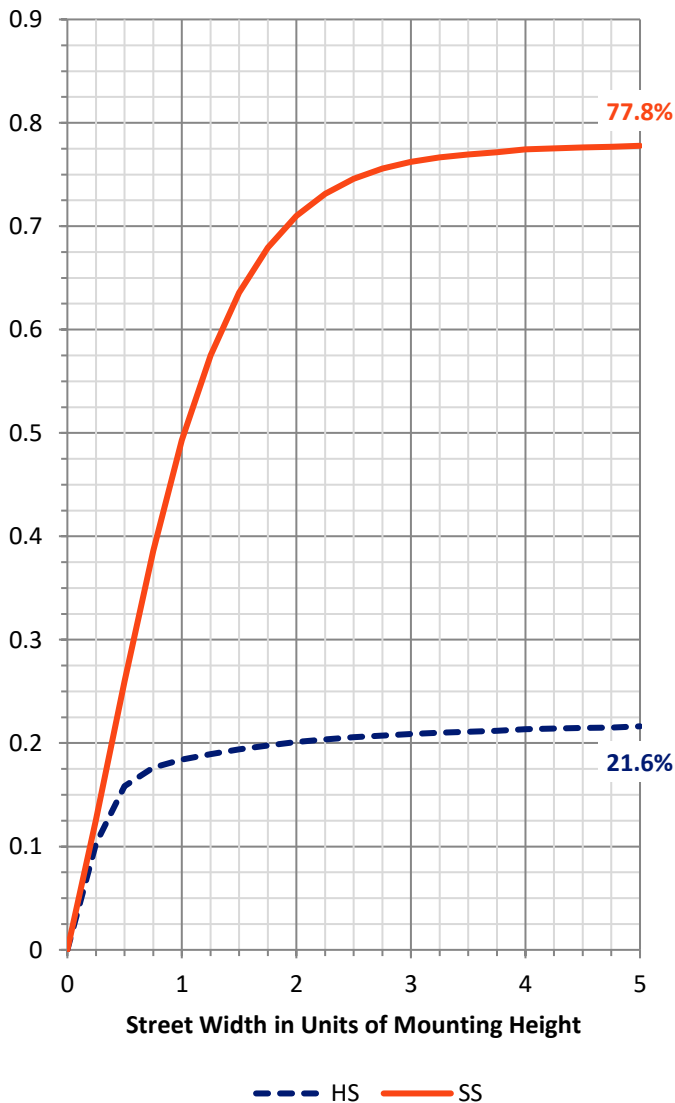
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16018.3	0.0	16018.3
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	56499.7	0.0	56499.7
	% Fixture	77.9	0.0	77.9
Total	Lumens	72518.0	0.0	72518.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1116.0	1.5
10°-20°	3486.9	4.8
20°-30°	6036.2	8.3
30°-40°	8869.6	12.2
40°-50°	11988.4	16.5
50°-60°	14742.1	20.3
60°-70°	15797.1	21.8
70°-80°	9317.0	12.8
80°-90°	1164.6	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°	72518.0	100.0
0°-180°	72518.0	100.0



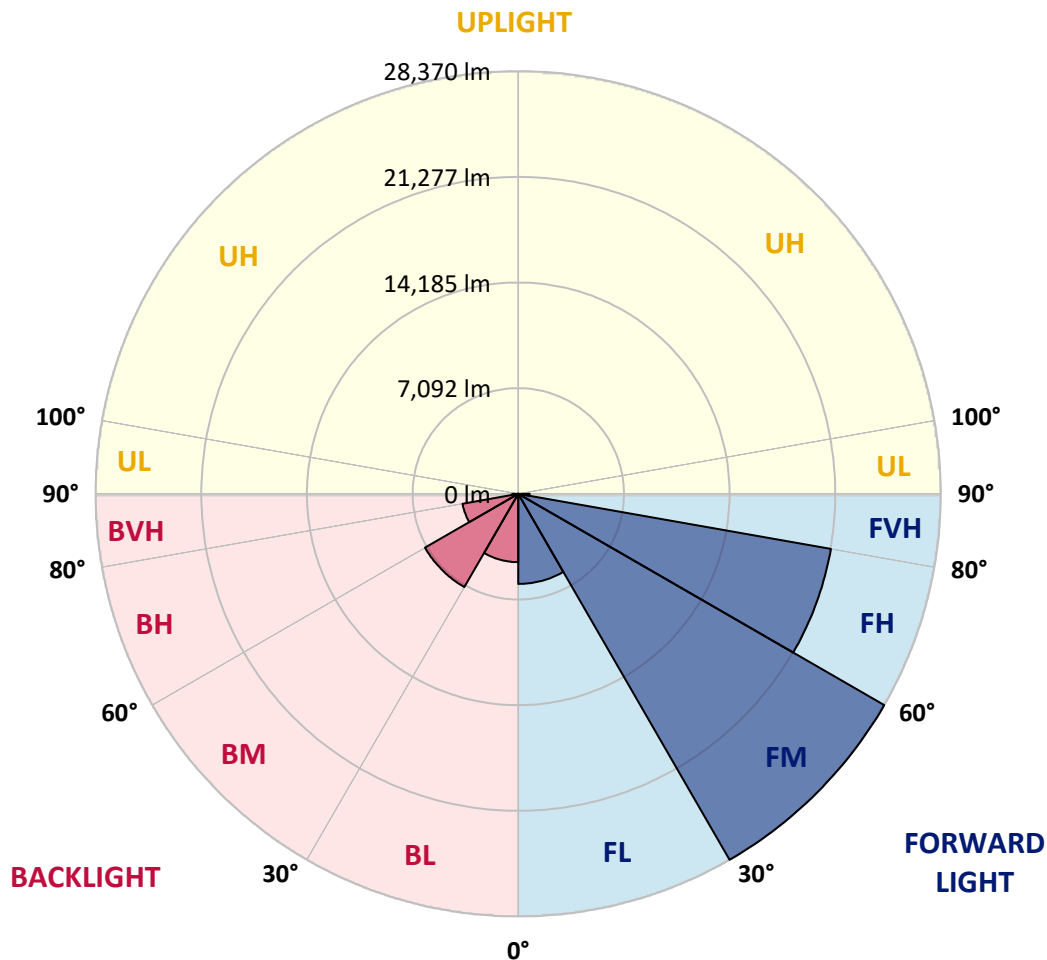
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6051.0	8.3			
FM (30°-60°)	28369.5	39.1			
FH (60°-80°)	21315.4	29.4			G5
FVH (80°-90°)	763.7	1.1			G5
BL (0°-30°)	4588.1	6.3	B4/5000		
BM (30°-60°)	7230.6	10.0	B4/8500		
BH (60°-80°)	3798.7	5.2	B4/5000		G4/5000
BVH (80°-90°)	400.9	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°	11201.3	11201.3	11201.3	11201.3	11201.3	11201.3	11201.3	11201.3	11201.3	11201.3	11201.3
2.5°	10989.9	10969.2	10960.3	10988.4	11009.1	11032.7	11066.7	11099.3	11103.7	11146.6	11202.8
5°	11122.9	11105.2	11086.0	11081.5	11074.1	11072.7	11081.5	11118.5	11127.4	11168.8	11290.0
7.5°	11418.6	11400.9	11365.4	11352.1	11312.2	11241.2	11207.2	11226.4	11230.9	11281.1	11431.9
10°	11900.6	11845.9	11803.0	11758.7	11633.0	11520.6	11437.8	11402.4	11395.0	11443.8	11618.2
12.5°	12475.8	12429.9	12382.6	12265.8	12106.1	11903.6	11757.2	11675.9	11670.0	11711.4	11843.0
15°	13083.4	13083.4	13050.9	12911.9	12755.2	12419.6	12193.4	12057.3	12066.2	12098.7	12159.4
17.5°	13868.5	13803.5	13788.7	13630.5	13456.0	13150.0	12790.7	12573.4	12583.7	12598.5	12552.7
20°	14666.9	14647.7	14625.5	14520.6	14362.4	13969.1	13565.4	13280.1	13281.6	13228.3	13024.3
22.5°	15722.6	15659.0	15675.3	15557.0	15342.6	14939.0	14474.7	14136.1	14158.3	14081.4	13711.8
25°	16770.9	16707.3	16673.3	16593.5	16408.6	16025.7	15474.2	15163.7	15137.1	14998.1	14461.4
27.5°	17817.7	17780.7	17808.8	17712.7	17561.9	17134.6	16628.9	16284.4	16302.2	16206.1	15406.2
30°	18901.4	18860.0	18982.7	18827.5	18734.4	18318.9	17833.9	17428.8	17443.6	17479.1	16581.6
32.5°	19719.0	19767.8	19982.2	19964.5	19946.7	19484.0	18973.9	18749.1	18771.3	18895.5	17977.3
35°	20508.6	20513.0	20814.6	21042.3	21138.4	20751.1	20221.7	20214.4	20359.2	20737.7	19923.1
37.5°	21163.6	21148.8	21550.9	21904.3	22167.5	21867.3	21576.1	22030.0	22161.6	22946.7	21882.1
40°	21521.4	21552.4	22069.9	22510.5	23028.0	22886.0	22917.1	24077.7	24401.5	25089.0	23347.3
42.5°	21270.0	21364.6	22170.4	23069.4	23850.0	24039.3	24663.2	26289.6	26427.1	26551.3	24788.9
45°	20848.6	20947.7	21840.7	23292.6	24528.7	25328.6	26400.5	27991.4	28142.2	28003.2	25988.0
47.5°	20409.5	20511.5	21506.6	23202.4	25090.5	26623.7	27945.5	29496.5	29688.7	29258.5	27141.2
50°	19852.1	20010.3	21098.5	23011.7	25545.9	28020.9	29407.8	31046.0	31134.7	30513.7	28015.0
52.5°	19166.1	19340.5	20517.4	22685.0	25902.2	28996.8	30887.8	32727.1	32718.2	31980.4	29014.5
55°	18444.6	18602.8	19815.2	22170.4	26101.8	29747.9	32070.6	34579.7	34686.1	34068.1	29919.4
57.5°	17520.5	17663.9	18985.7	21478.5	25894.8	30385.1	33986.8	36781.2	36834.4	35521.5	30639.4
60°	16296.3	16507.7	17835.4	20598.8	25300.5	31122.9	36098.1	39096.6	39161.6	36951.2	31102.2
62.5°	14952.3	15036.6	16389.4	19244.4	24435.5	31692.1	37561.8	40907.7	40813.1	38069.0	31241.2
65°	13314.1	13380.6	14551.6	17502.7	22828.4	31380.1	38086.7	41839.2	41722.4	38771.3	30813.9
67.5°	11599.0	11804.5	12724.2	15086.8	20585.5	29940.1	37643.2	42106.8	42047.7	38824.5	29793.7
70°	9372.4	9444.8	10275.7	12291.0	17176.0	27057.0	36164.6	41420.8	41375.0	37635.8	27710.5
72.5°	6609.0	6538.0	6941.7	8522.2	12406.3	21522.8	30877.5	37566.3	37643.2	33667.4	24131.0
75°	3508.5	3644.6	4272.9	5217.7	7033.3	13836.0	24617.4	31090.4	31063.7	28152.5	19074.4
77.5°	1868.9	1865.9	2297.6	2701.3	3443.5	6357.6	16237.1	23446.4	23576.5	21812.6	13096.7
80°	897.5	931.5	958.1	1098.5	1716.6	2937.8	6792.3	13596.5	14483.6	13009.5	6221.6
82.5°	718.6	721.5	724.5	693.4	709.7	1196.1	2617.0	3934.3	4076.3	3276.4	2006.4
85°	532.3	499.7	495.3	419.9	474.6	718.6	1320.3	1679.6	1596.8	1553.9	1132.5
87.5°	214.4	201.1	195.2	183.3	183.3	270.6	465.7	607.7	606.2	553.0	380.0
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°	11201.3	11201.3	11201.3	11201.3	11201.3	11201.3	11201.3	11201.3	11201.3	11201.3	11201.3
2.5°	11247.1	11300.3	11424.5	11531.0	11570.9	11668.5	11760.2	11813.4	11850.4	11872.5	11973.1
5°	11363.9	11470.4	11668.5	11817.8	11962.7	12143.1	12259.9	12333.8	12375.2	12398.9	12471.3
7.5°	11542.8	11650.8	11860.7	12089.9	12222.9	12370.8	12446.2	12499.4	12526.0	12518.6	12576.3
10°	11702.5	11809.0	12018.9	12194.8	12270.3	12354.5	12394.4	12406.3	12407.8	12413.7	12471.3
12.5°	11919.8	11984.9	12097.3	12212.6	12196.3	12199.3	12233.3	12218.5	12184.5	12178.6	12217.0
15°	12153.5	12154.9	12163.8	12138.7	12036.6	11992.3	11945.0	11905.1	11811.9	11806.0	11866.6
17.5°	12446.2	12376.7	12215.5	12044.0	11801.6	11634.5	11465.9	11396.4	11282.6	11260.4	11290.0
20°	12823.2	12678.3	12286.5	11860.7	11406.8	11108.1	10904.1	10698.6	10540.4	10501.9	10530.0
22.5°	13364.4	13079.0	12376.7	11665.5	10963.2	10453.1	10056.9	9810.0	9543.9	9407.8	9421.1
25°	14017.9	13571.4	12533.4	11418.6	10441.3	9705.0	9061.9	8566.6	8266.4	8066.8	8120.0
27.5°	14873.9	14260.3	12721.2	11174.7	9792.3	8748.4	7815.5	7144.2	6838.2	6743.5	6681.4
30°	15866.0	15092.8	12919.3	10813.9	9091.4	7564.1	6369.5	5810.6	5460.2	5404.0	5356.7
32.5°	17193.7	16141.0	13290.4	10422.1	8254.6	6379.8	5083.2	4440.0	4360.2	4314.3	4304.0
35°	18905.9	17514.6	13679.3	9913.5	7163.4	4991.5	3845.6	3498.2	3459.7	3510.0	3514.4
37.5°	20723.0	19004.9	14145.0	9339.8	5908.2	3724.4	2942.3	2701.3	2744.1	2900.9	2936.3
40°	21953.1	19986.7	14567.9	8560.6	4357.2	2705.7	2140.9	2089.2	2325.7	2526.8	2568.2
42.5°	23133.0	20730.4	14739.4	7530.1	3107.9	1926.5	1728.4	1905.8	2237.0	2457.3	2486.9
45°	24139.8	21595.3	14307.7	6294.1	2106.9	1610.1	1655.9	1901.4	2269.5	2513.5	2535.7
47.5°	25097.9	22302.0	13717.7	4959.0	1661.9	1549.5	1654.5	1941.3	2342.0	2572.6	2585.9
50°	26013.1	22840.2	12710.9	3773.2	1556.9	1521.4	1667.8	2003.4	2381.9	2526.8	2520.9
52.5°	26691.8	23118.2	11638.9	3045.8	1515.5	1499.2	1703.3	2081.8	2389.3	2476.5	2470.6
55°	27190.0	23064.9	10935.1	2494.3	1481.5	1490.4	1760.9	2140.9	2460.3	2591.8	2587.4
57.5°	27235.9	22823.9	10135.3	2106.9	1440.1	1488.9	1823.0	2223.7	2815.1	3057.6	2983.7
60°	27181.1	22424.7	9336.9	1849.6	1394.2	1497.7	1888.1	2472.1	3326.7	3517.4	3465.7
62.5°	26912.1	21681.0	8140.7	1679.6	1354.3	1530.3	1936.9	2668.7	3301.5	3323.7	3249.8
65°	26081.1	20686.0	6570.6	1508.1	1314.4	1552.4	1976.8	2720.5	3032.4	2961.5	2924.5
67.5°	24437.0	18463.8	5068.4	1351.4	1262.7	1548.0	2095.1	2646.6	2930.4	2878.7	2831.4
70°	22100.9	15938.5	3518.9	1190.2	1175.4	1519.9	2065.5	2671.7	2881.6	2801.8	2738.2
72.5°	18463.8	12503.9	2238.5	1058.6	1045.3	1453.4	1991.6	2655.4	2849.1	2813.6	2726.4
75°	13902.5	8727.7	1422.3	915.2	930.0	1332.1	1873.3	2568.2	2832.8	2722.0	2554.9
77.5°	8752.8	4308.4	1105.9	777.7	799.9	1148.8	1619.0	2242.9	2719.0	2652.5	2438.1
80°	3310.4	1749.1	864.9	631.3	650.5	893.0	1327.7	1845.2	2503.1	2612.5	2520.9
82.5°	1524.4	1094.1	649.1	507.1	514.5	650.5	990.6	1366.2	2118.7	2398.2	2627.3
85°	890.1	717.1	433.2	338.6	351.9	384.4	557.4	833.9	1373.5	1828.9	2046.3
87.5°	303.1	249.9	168.6	143.4	139.0	158.2	134.5	273.5	408.1	718.6	820.6
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)