

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: P510841

Luminaire Tested: **CST-CA8-480-730-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510841
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-480-730-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 68852 lumens
Efficiency: N/A
Efficacy: 143.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

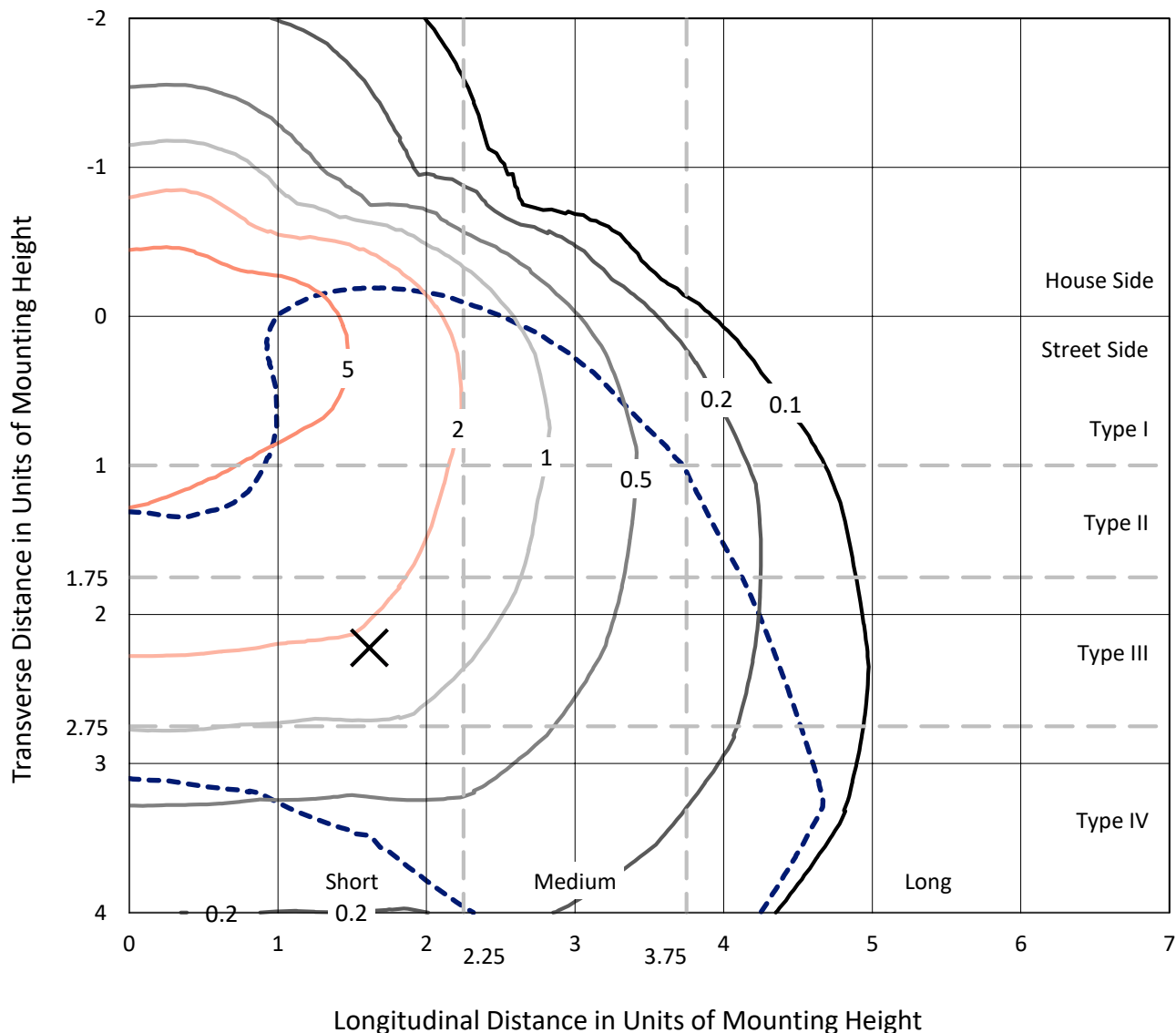
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

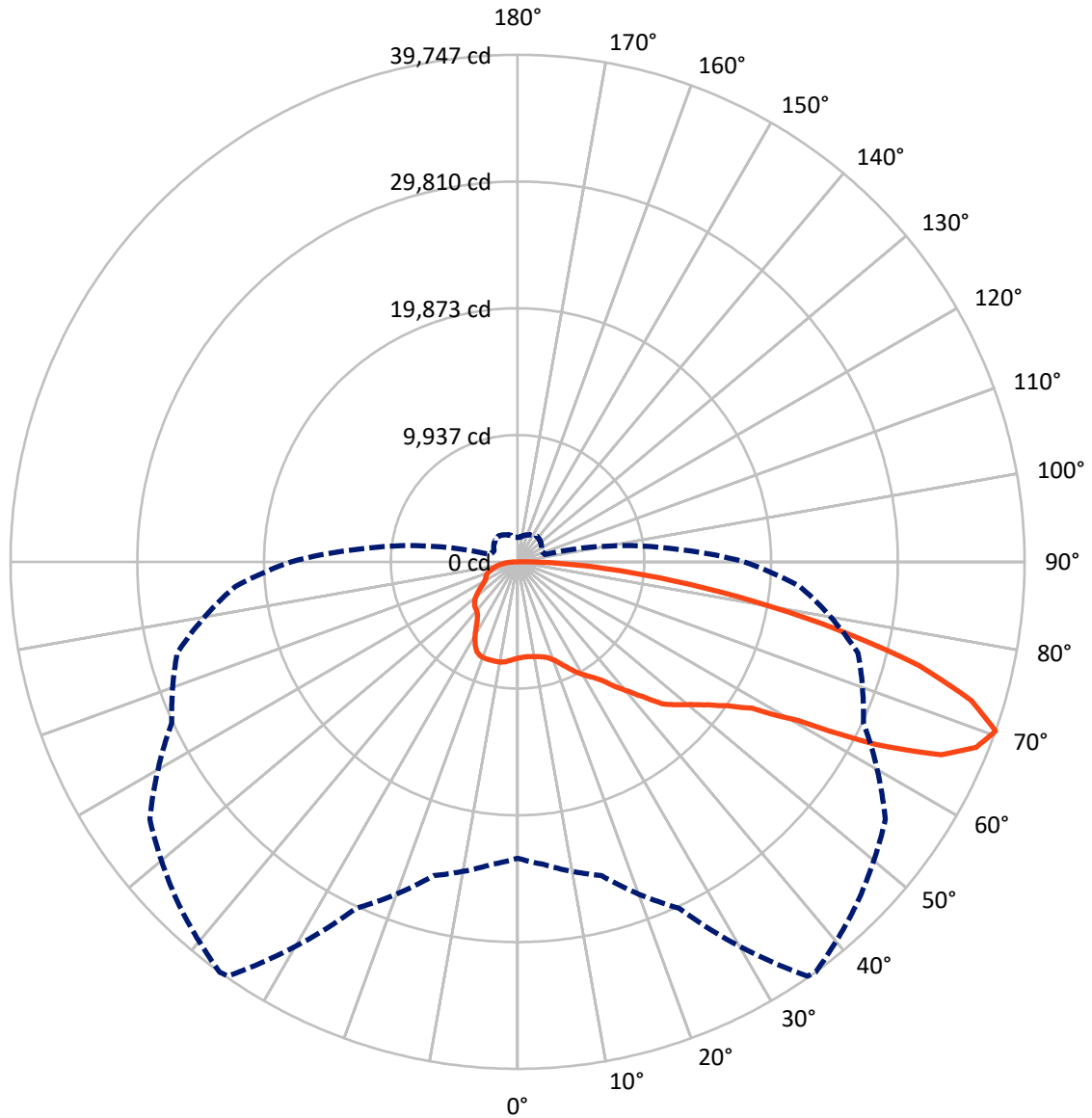
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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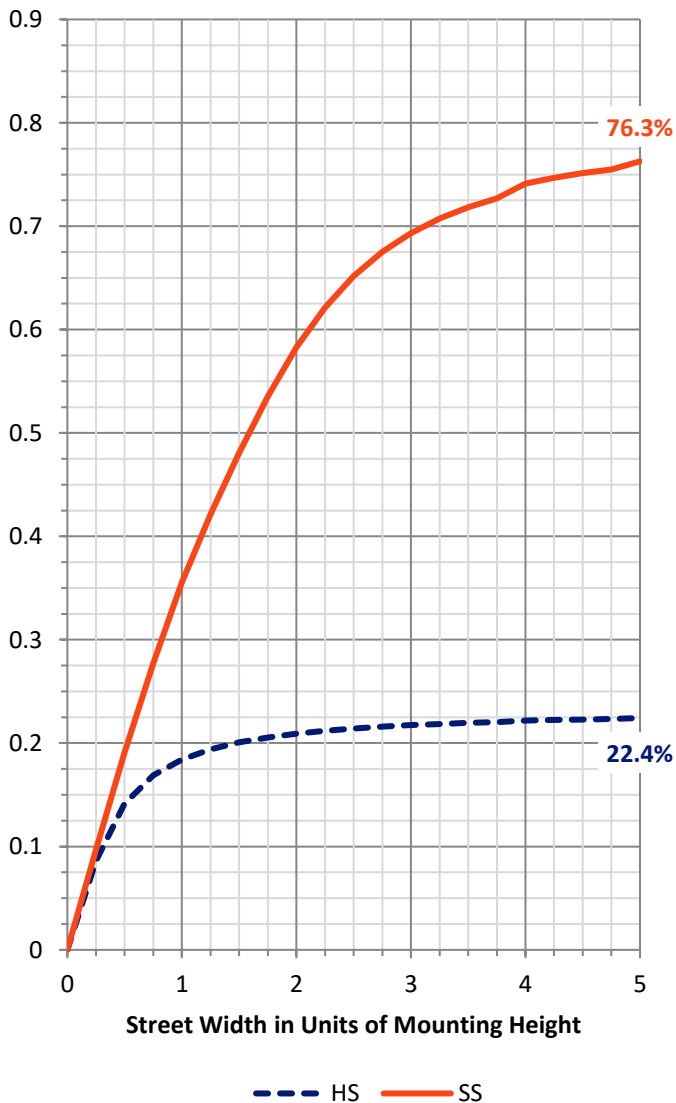
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15687.5	0.0	15687.5
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	53164.5	0.0	53164.5
	% Fixture	77.2	0.0	77.2
Total	Lumens	68852.0	0.0	68852.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	730.6	1.1
10°-20°	2258.7	3.3
20°-30°	4074.2	5.9
30°-40°	6310.2	9.2
40°-50°	9585.2	13.9
50°-60°	13285.7	19.3
60°-70°	17276.0	25.1
70°-80°	12758.2	18.5
80°-90°	2573.0	3.7
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°	68852.0	100.0
0°-180°	68852.0	100.0

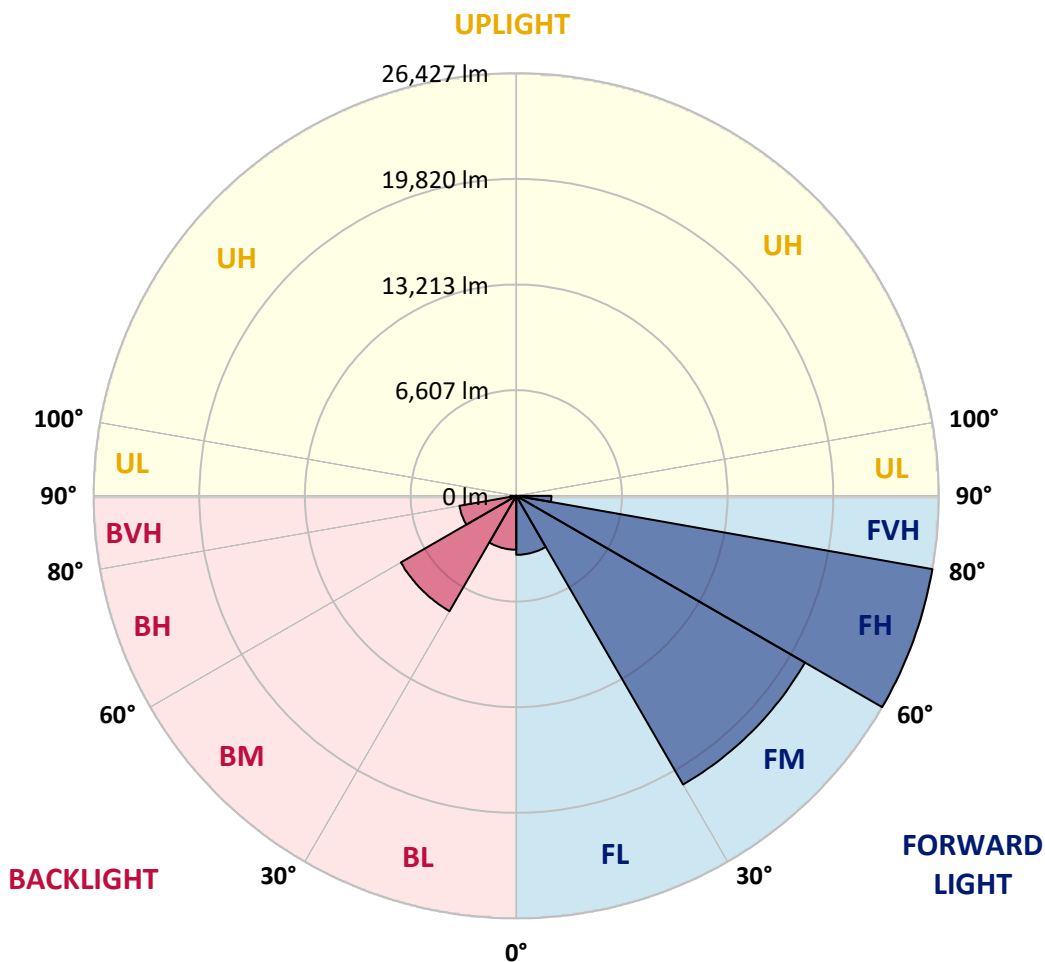


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3691.2	5.4			
FM (30°-60°)	20848.2	30.3			
FH (60°-80°)	26426.9	38.4			G5
FVH (80°-90°)	2198.2	3.2			G5
BL (0°-30°)	3372.4	4.9	B4/5000		
BM (30°-60°)	8333.0	12.1	B4/8500		
BH (60°-80°)	3607.3	5.2	B4/5000		G4/5000
BVH (80°-90°)	374.8	0.5			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	7541.3	7541.3	7541.3	7541.3	7541.3	7541.3	7541.3	7541.3	7541.3	7541.3	7541.3
2.5°	7495.7	7485.7	7480.0	7491.5	7495.7	7497.2	7500.0	7497.2	7490.0	7515.7	7547.0
5°	7497.2	7491.5	7480.0	7470.1	7470.1	7470.1	7471.5	7504.3	7518.5	7515.7	7554.2
7.5°	7508.6	7504.3	7482.9	7475.8	7492.9	7498.6	7527.1	7517.1	7532.8	7558.5	7591.2
10°	7510.0	7504.3	7485.7	7501.4	7549.9	7558.5	7571.3	7599.8	7605.5	7636.9	7669.6
12.5°	7524.2	7524.2	7531.4	7565.6	7616.9	7626.9	7675.4	7698.2	7732.4	7748.1	7788.0
15°	7599.8	7598.4	7615.5	7654.0	7736.7	7742.4	7802.2	7870.7	7896.3	7934.8	7999.0
17.5°	7779.4	7788.0	7789.4	7817.9	7916.3	7919.1	8017.5	8081.6	8140.1	8208.5	8355.4
20°	8205.7	8190.0	8172.9	8172.9	8211.4	8231.3	8306.9	8409.5	8529.3	8650.5	8822.9
22.5°	8741.7	8773.1	8710.3	8677.5	8696.1	8673.3	8730.3	8813.0	8952.7	9133.7	9351.8
25°	9381.8	9384.6	9380.4	9247.8	9206.4	9220.7	9267.7	9344.7	9530.0	9674.0	9990.5
27.5°	10006.2	9993.4	9947.7	9808.0	9768.1	9788.1	9786.6	9999.1	10188.7	10372.6	10744.6
30°	10573.6	10607.8	10526.5	10291.3	10295.6	10292.7	10358.3	10632.0	10978.4	11320.6	11702.6
32.5°	11574.3	11470.3	11360.5	10895.7	10810.2	10800.2	10838.7	11246.4	11759.7	12337.0	12796.1
35°	12516.6	12491.0	12382.6	11910.8	11416.1	11407.5	11354.8	11850.9	12572.2	13641.4	14214.5
37.5°	13480.3	13443.3	13336.4	12934.3	12442.5	12395.5	11952.1	12495.3	13470.4	15166.8	15983.7
40°	14629.4	14606.5	14441.2	13926.5	13421.9	13350.6	12890.1	13172.4	14603.7	17198.3	17774.2
42.5°	15637.2	15633.0	15443.4	14965.8	14536.7	14465.4	14073.4	14367.0	16179.0	19188.4	19527.7
45°	16377.1	16489.7	16498.3	16226.0	15929.5	15866.8	15762.7	16167.6	18000.9	20994.6	20944.7
47.5°	17001.5	17098.5	16997.3	16857.5	16756.3	16760.6	16921.7	17725.7	19800.0	22568.4	22180.7
50°	18045.1	17985.2	17459.1	17376.5	17504.8	17580.3	18047.9	19407.9	21859.9	24045.3	23289.8
52.5°	19550.5	19321.0	18288.8	18120.6	18606.7	18635.3	19379.4	20911.9	23918.5	25312.7	24304.8
55°	21610.4	21420.8	20254.7	19477.8	19723.0	19915.4	20963.2	22453.0	25599.2	26504.5	25086.0
57.5°	24655.5	24669.8	23718.9	22270.5	21436.5	21641.8	22460.1	23951.3	26987.8	27502.4	25573.6
60°	27096.1	27548.0	27264.3	26602.8	25405.4	25265.6	24642.7	25512.3	28173.8	28350.6	26039.7
62.5°	28788.3	28993.6	29968.7	30108.4	31476.9	31535.4	28551.6	27341.3	29476.8	28906.6	26138.1
65°	28702.7	28829.6	30370.7	32246.7	36289.7	36470.8	34724.4	30108.4	30369.2	29154.6	25851.6
67.5°	26704.1	26895.1	28853.8	32360.8	38854.3	38785.9	37678.2	33960.3	30662.9	28756.9	24485.9
70°	23232.8	23821.5	25466.7	29955.8	39655.5	39746.7	37705.3	35190.6	29905.9	27632.1	22209.2
72.5°	19148.5	19333.8	20887.7	25911.4	37313.3	37179.3	36160.0	33566.8	28537.4	25597.8	18224.7
75°	14562.4	14562.4	16444.1	20649.6	32042.9	32513.3	32909.6	30402.0	25281.3	20863.4	12409.7
77.5°	9666.9	10013.3	11528.7	15517.5	25364.0	25711.9	27080.4	25914.3	20699.5	15299.4	5668.1
80°	5127.8	5170.6	6795.8	10311.3	18142.0	18797.8	20679.5	19986.7	14888.8	7167.8	1432.7
82.5°	1793.4	1957.3	2988.0	5976.1	11953.5	12362.7	13718.4	11876.6	5259.0	1586.7	792.6
85°	891.0	922.4	1315.8	2845.5	6730.2	6928.3	8014.6	4626.0	846.8	692.8	538.9
87.5°	429.1	439.1	504.7	1017.9	2925.3	3060.7	3240.4	1505.4	313.6	263.7	233.8
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°	7541.3	7541.3	7541.3	7541.3	7541.3	7541.3	7541.3	7541.3	7541.3	7541.3	7541.3
2.5°	7554.2	7567.0	7591.2	7598.4	7581.3	7612.6	7642.6	7669.6	7668.2	7678.2	7713.8
5°	7571.3	7598.4	7624.0	7669.6	7713.8	7739.5	7763.7	7786.5	7793.7	7815.1	7836.4
7.5°	7624.0	7651.1	7709.6	7789.4	7792.2	7856.4	7897.7	7904.9	7910.6	7910.6	7960.5
10°	7705.3	7755.2	7849.3	7904.9	7954.8	7933.4	7976.2	7949.1	7929.1	7937.7	7971.9
12.5°	7845.0	7889.2	8024.6	8085.9	8040.3	8031.7	7989.0	7927.7	7857.8	7850.7	7882.1
15°	8064.5	8147.2	8268.4	8326.8	8212.8	8111.6	7967.6	7842.1	7706.7	7656.8	7676.8
17.5°	8418.1	8517.9	8650.5	8610.5	8402.4	8202.8	7964.7	7699.6	7437.3	7254.8	7301.8
20°	8935.6	9009.7	9118.0	8957.0	8653.3	8324.0	7933.4	7514.3	7070.9	6738.7	6700.3
22.5°	9478.7	9591.3	9525.8	9227.8	8830.1	8371.0	7867.8	7244.8	6559.1	6142.8	6080.1
25°	10133.1	10170.1	9943.5	9494.4	8880.0	8296.9	7655.4	6851.4	6035.9	5643.9	5625.4
27.5°	10827.3	10743.2	10321.2	9617.0	8824.4	8077.4	7229.1	6229.8	5562.6	5216.2	5162.0
30°	11611.4	11416.1	10633.4	9629.8	8614.8	7649.7	6690.3	5743.7	5177.7	4829.9	4774.3
32.5°	12620.7	12160.2	10922.8	9497.2	8172.9	7022.4	6043.1	5328.8	4831.3	4482.0	4432.1
35°	13910.9	13133.9	11229.3	9257.8	7628.3	6395.2	5507.0	4976.7	4550.5	4129.9	4062.9
37.5°	15397.7	14492.5	11595.7	8955.5	7031.0	5843.5	5144.9	4752.9	4342.3	3866.2	3786.4
40°	17125.6	15852.5	12160.2	8594.9	6495.0	5445.7	4969.6	4675.9	4226.9	3730.8	3639.5
42.5°	18622.4	17290.9	12831.7	8207.1	5988.9	5115.0	4891.2	4624.6	4154.2	3629.5	3525.5
45°	20006.7	18478.4	13487.5	7736.7	5455.7	4888.3	4797.1	4496.3	4025.9	3504.1	3395.7
47.5°	21131.5	19437.9	14057.7	7304.7	5029.5	4680.2	4591.8	4252.5	3810.6	3353.0	3273.1
50°	21995.4	20159.2	14369.9	6961.1	4579.0	4443.5	4326.7	3977.4	3552.6	3157.7	3089.2
52.5°	22879.2	20882.0	14523.9	6978.2	4159.9	4091.4	3971.7	3672.3	3347.3	3043.6	2969.5
55°	23393.9	21178.5	14361.3	6563.4	3775.0	3695.1	3591.0	3435.7	3241.8	2972.3	2902.5
57.5°	23694.7	21362.4	13866.7	5353.1	3311.6	3236.1	3253.2	3240.4	3080.7	2797.0	2732.8
60°	23911.3	20963.2	12853.1	3934.6	2916.7	2859.7	3000.9	2955.2	2817.0	2596.0	2541.8
62.5°	23736.0	20203.4	11028.3	2958.1	2594.6	2715.7	2839.8	2755.7	2567.5	2366.5	2303.7
65°	22666.8	18712.2	8382.4	2376.5	2490.5	2657.3	2757.1	2621.7	2430.6	2192.6	2164.0
67.5°	20720.9	16009.3	4943.9	2178.3	2412.1	2588.9	2671.5	2491.9	2323.7	2095.6	2061.4
70°	17751.4	11984.9	2208.2	2028.6	2275.2	2450.6	2504.8	2335.1	2152.6	1938.8	1904.6
72.5°	13212.3	7226.3	1488.3	1873.2	2072.8	2228.2	2288.1	2108.4	1978.7	1881.8	1871.8
75°	7337.5	2509.0	1372.8	1696.4	1851.8	1991.5	2065.7	1938.8	1836.2	1703.6	1649.4
77.5°	2336.5	1066.3	1304.4	1516.8	1713.6	1829.0	1817.6	1626.6	1593.8	1432.7	1418.5
80°	932.3	929.5	1206.0	1241.7	1462.7	1559.6	1533.9	1293.0	1335.8	1241.7	1204.6
82.5°	731.3	851.1	966.5	948.0	1137.6	1251.7	1216.0	949.4	1073.5	986.5	902.4
85°	556.0	745.6	620.1	617.3	794.1	929.5	952.3	729.9	731.3	665.7	593.0
87.5°	286.5	275.1	238.1	236.6	265.2	377.8	463.3	414.8	327.9	246.6	236.6
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)