

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: P510661

Luminaire Tested: **CST-CA6-230-730-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510661
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-CA6-230-730-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33381 lumens
Efficiency: N/A
Efficacy: 146.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

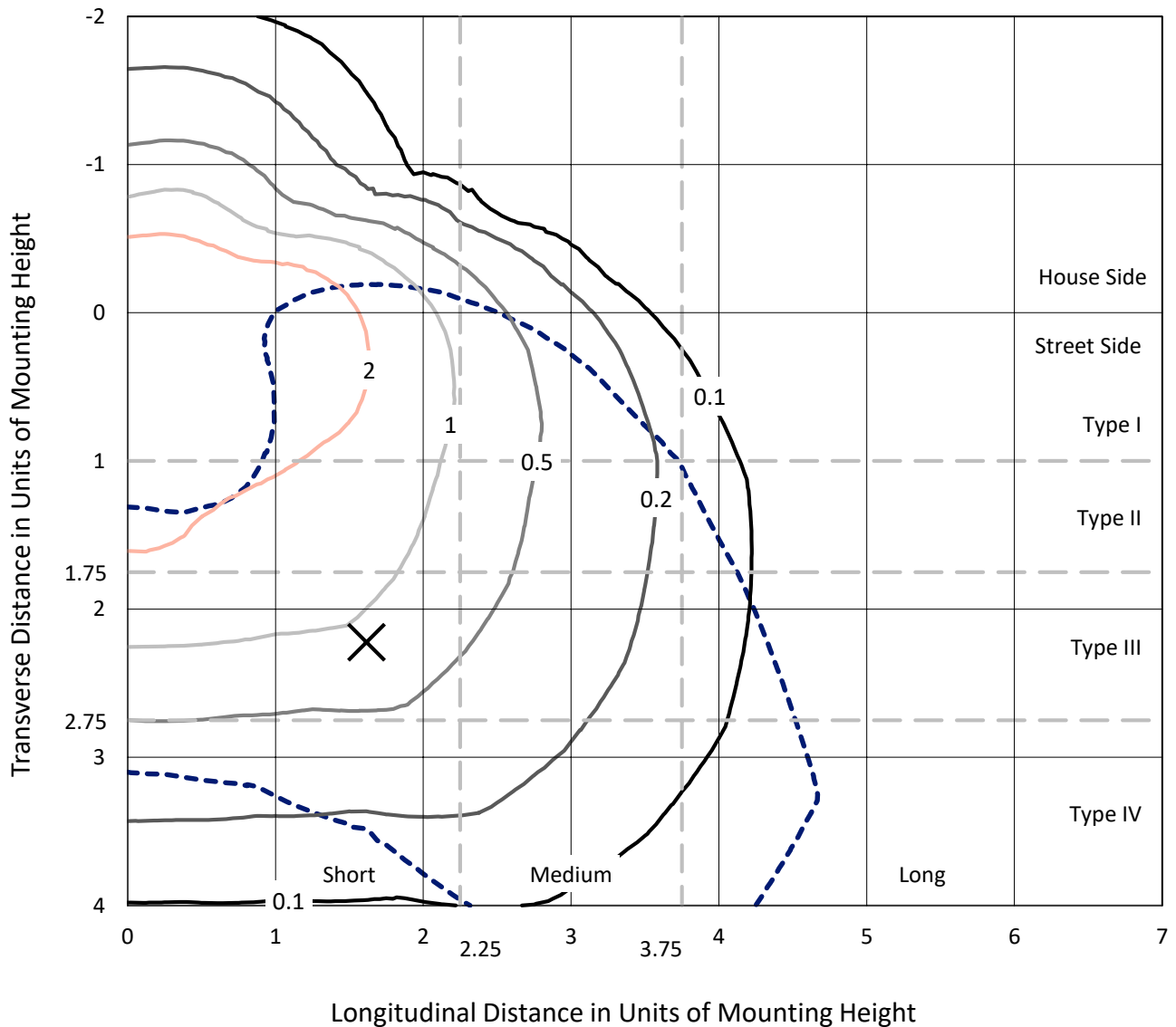
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510661
 CATALOG NUMBER: CST-CA6-230-730-U-T4

Iso-Footcandle Lines of Horizontal Illumination

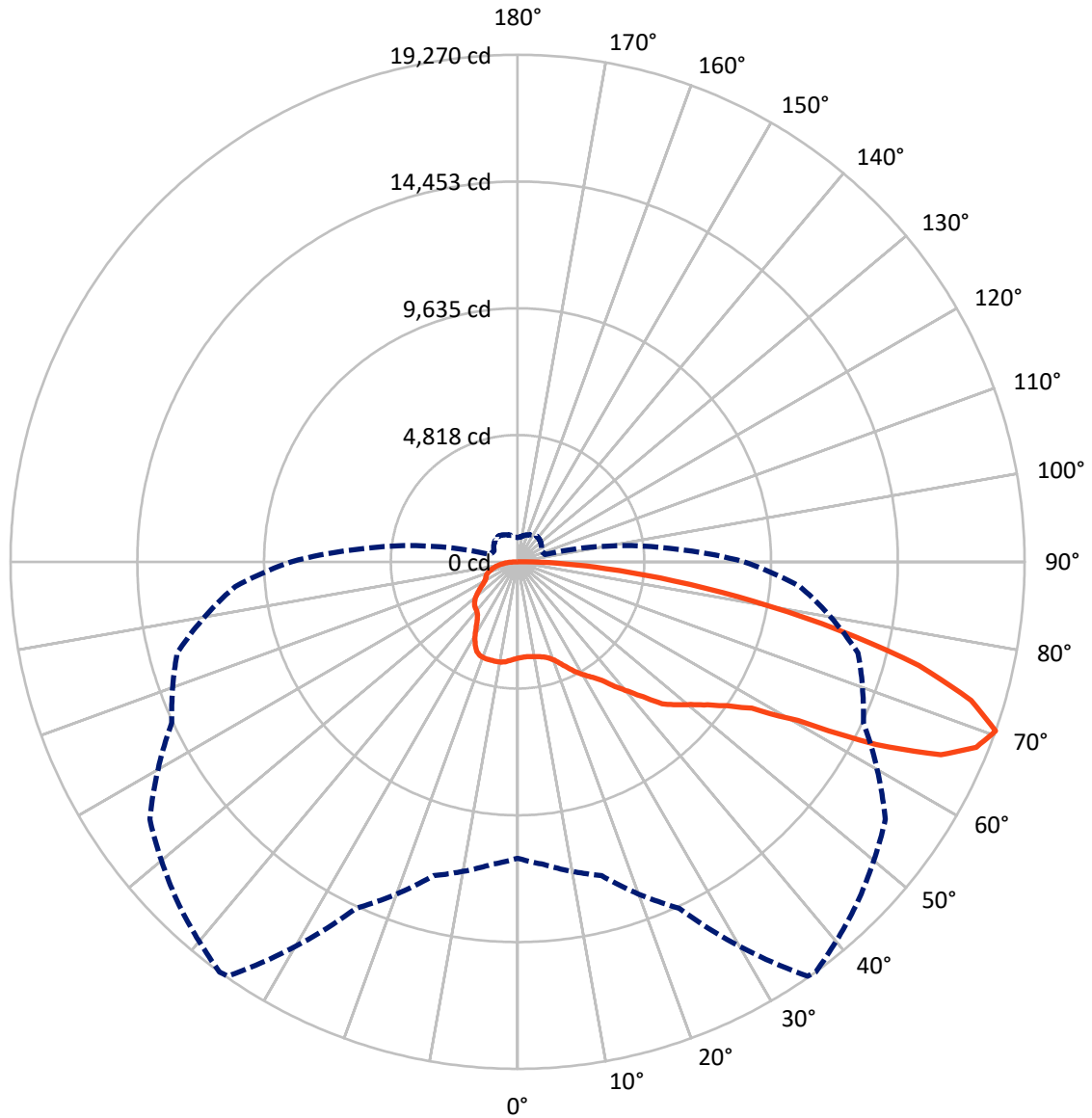
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.2 fc
 Type IV - Short - N/A

REPORT NUMBER: P510661
CATALOG NUMBER: CST-CA6-230-730-U-T4

Luminous Intensity Polar Plot



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

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 CATALOG NUMBER: CST-CA6-230-730-U-T4

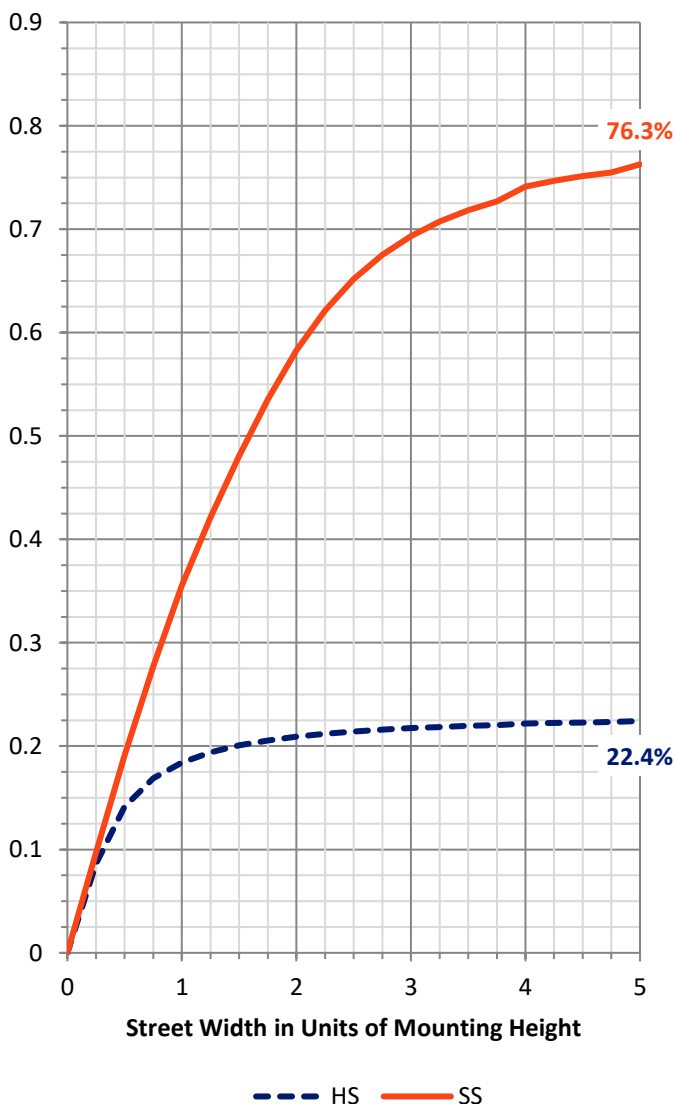
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7605.7	0.0	7605.7
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	25775.4	0.0	25775.4
	% Fixture	77.2	0.0	77.2
Total	Lumens	33381.0	0.0	33381.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	354.2	1.1
10°-20°	1095.1	3.3
20°-30°	1975.3	5.9
30°-40°	3059.3	9.2
40°-50°	4647.1	13.9
50°-60°	6441.2	19.3
60°-70°	8375.8	25.1
70°-80°	6185.5	18.5
80°-90°	1247.5	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°	33381.0	100.0
0°-180°	33381.0	100.0

Coefficient of Utilization



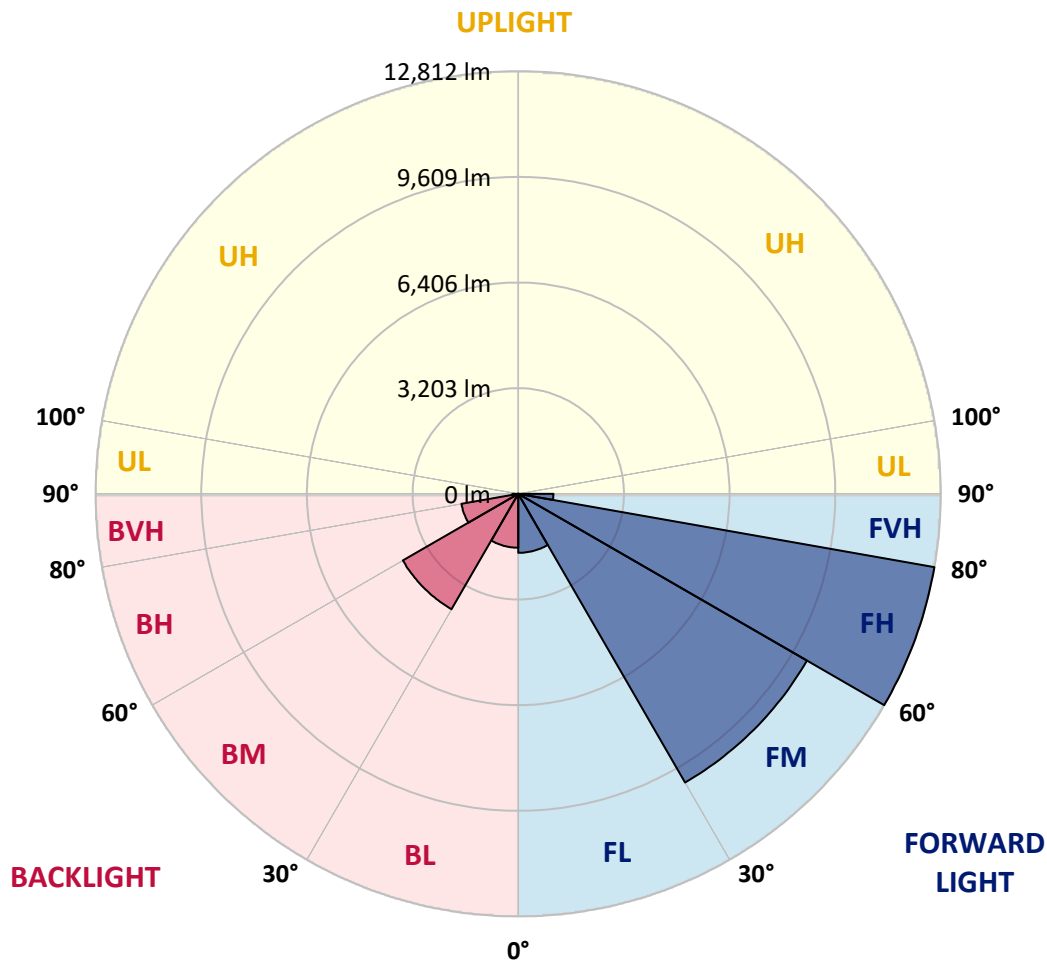
REPORT NUMBER: P510661
 CATALOG NUMBER: CST-CA6-230-730-U-T4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1789.6	5.4			
FM (30°-60°)	10107.7	30.3			
FH (60°-80°)	12812.4	38.4			G5
FVH (80°-90°)	1065.7	3.2			G5
BL (0°-30°)	1635.0	4.9	B3/2500		
BM (30°-60°)	4040.0	12.1	B3/5000		
BH (60°-80°)	1748.9	5.2	B3/2500		G3/2500
BVH (80°-90°)	181.7	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





REPORT NUMBER: P510661
 CATALOG NUMBER: CST-CA6-230-730-U-T4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3656.2	3656.2	3656.2	3656.2	3656.2	3656.2	3656.2	3656.2	3656.2	3656.2	3656.2
2.5°	3634.1	3629.3	3626.5	3632.0	3634.1	3634.8	3636.2	3634.8	3631.3	3643.8	3659.0
5°	3634.8	3632.0	3626.5	3621.7	3621.7	3621.7	3622.3	3638.2	3645.2	3643.8	3662.4
7.5°	3640.3	3638.2	3627.9	3624.4	3632.7	3635.5	3649.3	3644.5	3652.1	3664.5	3680.4
10°	3641.0	3638.2	3629.3	3636.9	3660.4	3664.5	3670.7	3684.6	3687.3	3702.5	3718.4
12.5°	3647.9	3647.9	3651.4	3668.0	3692.8	3697.7	3721.2	3732.2	3748.8	3756.4	3775.8
15°	3684.6	3683.9	3692.2	3710.8	3750.9	3753.7	3782.7	3815.9	3828.3	3847.0	3878.1
17.5°	3771.6	3775.8	3776.5	3790.3	3838.0	3839.4	3887.1	3918.2	3946.5	3979.7	4050.9
20°	3978.3	3970.7	3962.4	3962.4	3981.1	3990.7	4027.4	4077.1	4135.2	4193.9	4277.6
22.5°	4238.2	4253.4	4223.0	4207.1	4216.1	4205.0	4232.6	4272.7	4340.5	4428.2	4534.0
25°	4548.5	4549.9	4547.8	4483.5	4463.5	4470.4	4493.2	4530.5	4620.4	4690.2	4843.6
27.5°	4851.2	4845.0	4822.9	4755.2	4735.8	4745.5	4744.8	4847.8	4939.7	5028.9	5209.2
30°	5126.3	5142.9	5103.5	4989.5	4991.5	4990.1	5021.9	5154.6	5322.6	5488.5	5673.7
32.5°	5611.5	5561.0	5507.8	5282.5	5241.0	5236.2	5254.9	5452.5	5701.3	5981.3	6203.8
35°	6068.3	6055.9	6003.4	5774.6	5534.8	5530.6	5505.1	5745.6	6095.3	6613.7	6891.5
37.5°	6535.6	6517.6	6465.8	6270.9	6032.4	6009.6	5794.7	6058.0	6530.7	7353.2	7749.2
40°	7092.6	7081.6	7001.4	6751.9	6507.2	6472.7	6249.4	6386.3	7080.2	8338.1	8617.3
42.5°	7581.3	7579.2	7487.3	7255.8	7047.7	7013.2	6823.1	6965.5	7843.9	9303.0	9467.5
45°	7940.0	7994.6	7998.7	7866.7	7723.0	7692.6	7642.1	7838.4	8727.2	10178.7	10154.5
47.5°	8242.7	8289.7	8240.7	8172.9	8123.8	8125.9	8204.0	8593.8	9599.5	10941.7	10753.7
50°	8748.7	8719.6	8464.6	8424.5	8486.7	8523.3	8750.0	9409.4	10598.2	11657.7	11291.4
52.5°	9478.5	9367.2	8866.8	8785.3	9021.0	9034.8	9395.6	10138.6	11596.2	12272.2	11783.5
55°	10477.2	10385.3	9819.9	9443.3	9562.1	9655.4	10163.4	10885.7	12411.1	12850.0	12162.3
57.5°	11953.5	11960.5	11499.5	10797.2	10392.9	10492.4	10889.2	11612.1	13084.3	13333.8	12398.6
60°	13136.8	13355.9	13218.4	12897.7	12317.1	12249.4	11947.3	12368.9	13659.3	13745.0	12624.7
62.5°	13957.2	14056.7	14529.5	14597.2	15260.7	15289.1	13842.5	13255.7	14291.0	14014.6	12672.3
65°	13915.7	13977.2	14724.4	15633.9	17594.1	17681.8	16835.2	14597.2	14723.7	14134.8	12533.4
67.5°	12946.7	13039.3	13989.0	15689.2	18837.5	18804.3	18267.3	16464.7	14866.1	13942.0	11871.3
70°	11263.8	11549.2	12346.8	14523.3	19225.9	19270.1	18280.4	17061.2	14499.1	13396.7	10767.5
72.5°	9283.6	9373.5	10126.8	12562.4	18090.3	18025.3	17531.2	16274.0	13835.6	12410.4	8835.7
75°	7060.2	7060.2	7972.5	10011.4	15535.1	15763.2	15955.3	14739.6	12257.0	10115.1	6016.5
77.5°	4686.7	4854.7	5589.4	7523.2	12297.0	12465.7	13129.2	12563.8	10035.6	7417.5	2748.0
80°	2486.1	2506.8	3294.7	4999.1	8795.7	9113.6	10025.9	9690.0	7218.4	3475.1	694.6
82.5°	869.5	949.0	1448.7	2897.3	5795.3	5993.7	6651.0	5758.0	2549.7	769.3	384.3
85°	432.0	447.2	637.9	1379.5	3262.9	3359.0	3885.7	2242.8	410.5	335.9	261.3
87.5°	208.0	212.9	244.7	493.5	1418.3	1483.9	1571.0	729.9	152.1	127.9	113.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P510661
 CATALOG NUMBER: CST-CA6-230-730-U-T4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3656.2	3656.2	3656.2	3656.2	3656.2	3656.2	3656.2	3656.2	3656.2	3656.2	3656.2
2.5°	3662.4	3668.7	3680.4	3683.9	3675.6	3690.8	3705.3	3718.4	3717.7	3722.6	3739.8
5°	3670.7	3683.9	3696.3	3718.4	3739.8	3752.3	3764.0	3775.1	3778.5	3788.9	3799.3
7.5°	3696.3	3709.4	3737.8	3776.5	3777.9	3809.0	3829.0	3832.5	3835.2	3835.2	3859.4
10°	3735.7	3759.9	3805.5	3832.5	3856.6	3846.3	3867.0	3853.9	3844.2	3848.4	3864.9
12.5°	3803.4	3824.9	3890.5	3920.2	3898.1	3894.0	3873.2	3843.5	3809.7	3806.2	3821.4
15°	3909.9	3950.0	4008.7	4037.0	3981.7	3932.7	3862.9	3802.0	3736.4	3712.2	3721.9
17.5°	4081.3	4129.7	4193.9	4174.6	4073.7	3976.9	3861.5	3732.9	3605.8	3517.3	3540.1
20°	4332.2	4368.1	4420.6	4342.5	4195.3	4035.7	3846.3	3643.1	3428.1	3267.1	3248.4
22.5°	4595.5	4650.1	4618.3	4473.9	4281.0	4058.5	3814.5	3512.5	3180.0	2978.2	2947.8
25°	4912.7	4930.7	4820.8	4603.1	4305.2	4022.5	3711.5	3321.7	2926.4	2736.3	2727.3
27.5°	5249.3	5208.6	5004.0	4662.5	4278.3	3916.1	3504.9	3020.4	2696.9	2528.9	2502.7
30°	5629.5	5534.8	5155.3	4668.8	4176.7	3708.7	3243.6	2784.7	2510.3	2341.6	2314.7
32.5°	6118.8	5895.6	5295.6	4604.5	3962.4	3404.6	2929.8	2583.5	2342.3	2173.0	2148.8
35°	6744.3	6367.6	5444.2	4488.4	3698.4	3100.5	2669.9	2412.8	2206.2	2002.3	1969.8
37.5°	7465.2	7026.3	5621.9	4341.8	3408.8	2833.0	2494.4	2304.3	2105.3	1874.4	1835.7
40°	8302.9	7685.7	5895.6	4167.0	3148.9	2640.2	2409.4	2267.0	2049.3	1808.8	1764.5
42.5°	9028.6	8383.0	6221.1	3979.0	2903.5	2479.9	2371.4	2242.1	2014.0	1759.7	1709.2
45°	9699.7	8958.8	6539.0	3750.9	2645.1	2370.0	2325.7	2179.9	1951.8	1698.9	1646.3
47.5°	10245.0	9423.9	6815.5	3541.5	2438.4	2269.1	2226.2	2061.7	1847.5	1625.6	1586.9
50°	10663.8	9773.6	6966.9	3374.9	2220.0	2154.3	2097.7	1928.3	1722.4	1530.9	1497.7
52.5°	11092.4	10124.1	7041.5	3383.2	2016.8	1983.6	1925.6	1780.4	1622.8	1475.6	1439.7
55°	11341.9	10267.8	6962.7	3182.1	1830.2	1791.5	1741.0	1665.7	1571.7	1441.1	1407.2
57.5°	11487.7	10357.0	6722.9	2595.3	1605.6	1568.9	1577.2	1571.0	1493.6	1356.0	1324.9
60°	11592.8	10163.4	6231.5	1907.6	1414.1	1386.5	1454.9	1432.8	1365.7	1258.6	1232.3
62.5°	11507.7	9795.1	5346.8	1434.1	1257.9	1316.7	1376.8	1336.0	1244.8	1147.3	1116.9
65°	10989.4	9072.1	4064.0	1152.2	1207.4	1288.3	1336.7	1271.0	1178.4	1063.0	1049.2
67.5°	10046.0	7761.7	2396.9	1056.1	1169.4	1255.1	1295.2	1208.1	1126.6	1016.0	999.4
70°	8606.3	5810.5	1070.6	983.5	1103.1	1188.1	1214.4	1132.1	1043.6	940.0	923.4
72.5°	6405.6	3503.5	721.6	908.2	1004.9	1080.3	1109.3	1022.2	959.3	912.3	907.5
75°	3557.4	1216.4	665.6	822.5	897.8	965.5	1001.5	940.0	890.2	825.9	799.7
77.5°	1132.8	517.0	632.4	735.4	830.8	886.8	881.2	788.6	772.7	694.6	687.7
80°	452.0	450.6	584.7	602.0	709.1	756.1	743.7	626.9	647.6	602.0	584.0
82.5°	354.6	412.6	468.6	459.6	551.5	606.8	589.6	460.3	520.4	478.3	437.5
85°	269.6	361.5	300.7	299.3	385.0	450.6	461.7	353.9	354.6	322.8	287.5
87.5°	138.9	133.4	115.4	114.7	128.6	183.2	224.6	201.1	159.0	119.6	114.7
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)