

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: P510681

Luminaire Tested: **CST-CA6-230-750-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510681
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-CA6-230-750-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34620 lumens
Efficiency: N/A
Efficacy: 152.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

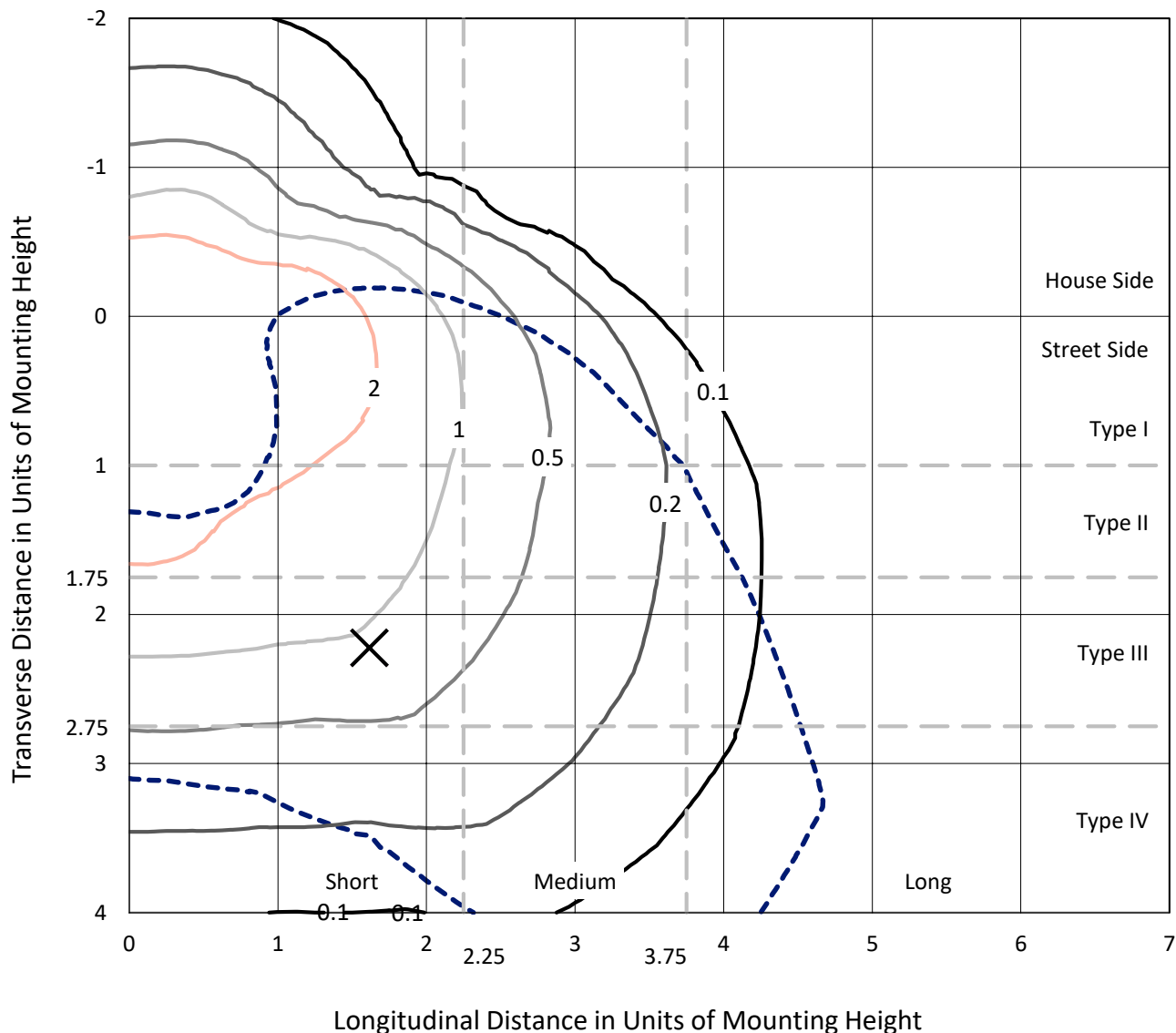
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510681
 CATALOG NUMBER: CST-CA6-230-750-U-T4

Iso-Footcandle Lines of Horizontal Illumination

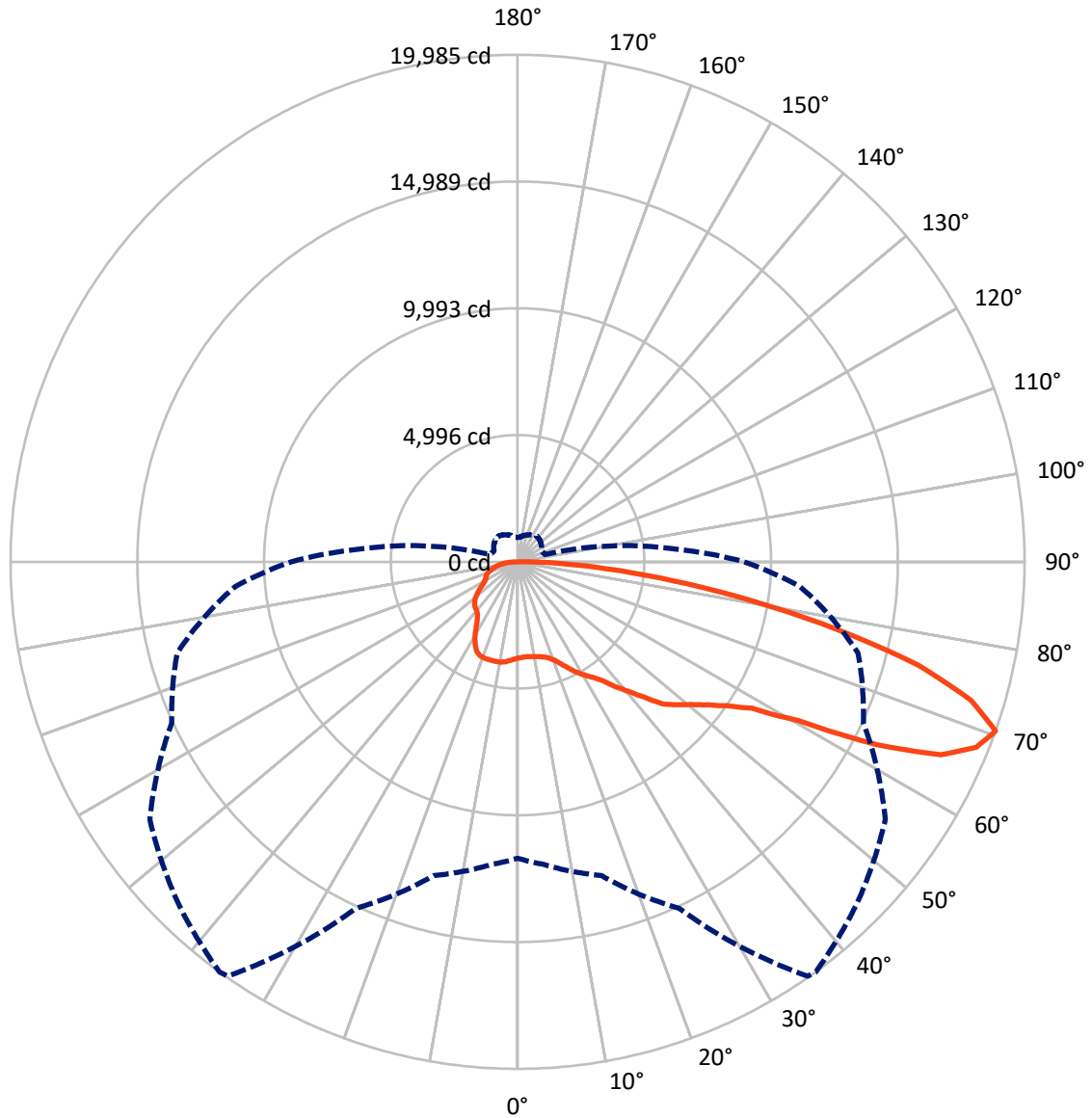
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Short - N/A

REPORT NUMBER: P510681
CATALOG NUMBER: CST-CA6-230-750-U-T4

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510681
 CATALOG NUMBER: CST-CA6-230-750-U-T4

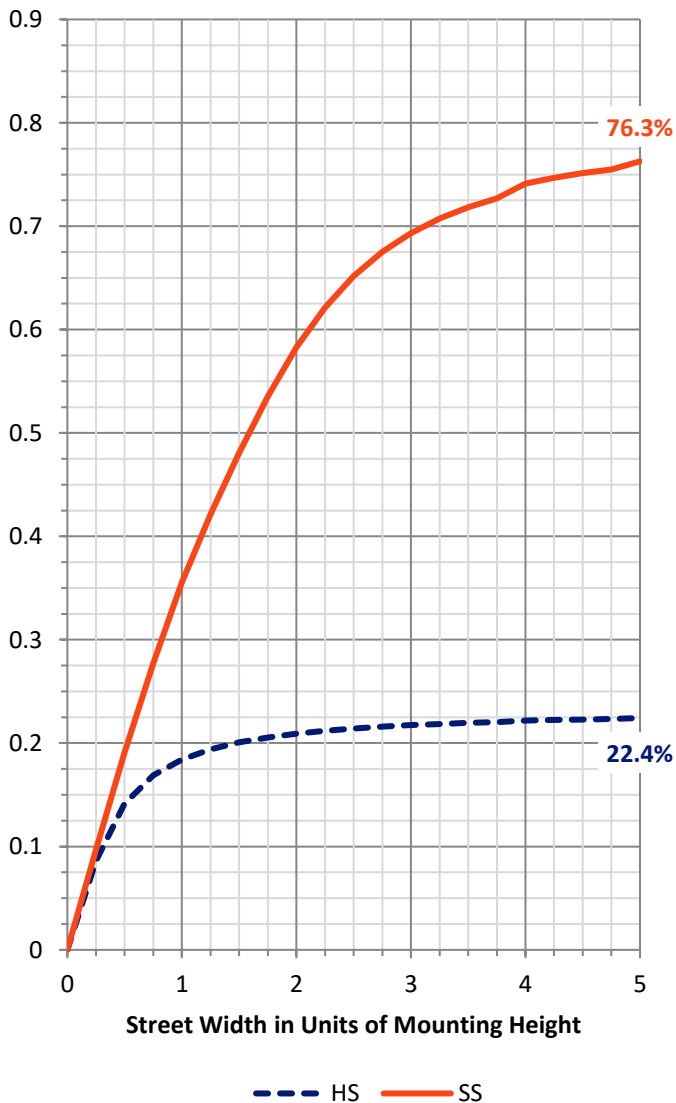
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7888.0	0.0	7888.0
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	26732.0	0.0	26732.0
	% Fixture	77.2	0.0	77.2
Total	Lumens	34620.0	0.0	34620.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	367.4	1.1
10°-20°	1135.7	3.3
20°-30°	2048.6	5.9
30°-40°	3172.9	9.2
40°-50°	4819.6	13.9
50°-60°	6680.3	19.3
60°-70°	8686.7	25.1
70°-80°	6415.0	18.5
80°-90°	1293.8	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°	34620.0	100.0
0°-180°	34620.0	100.0



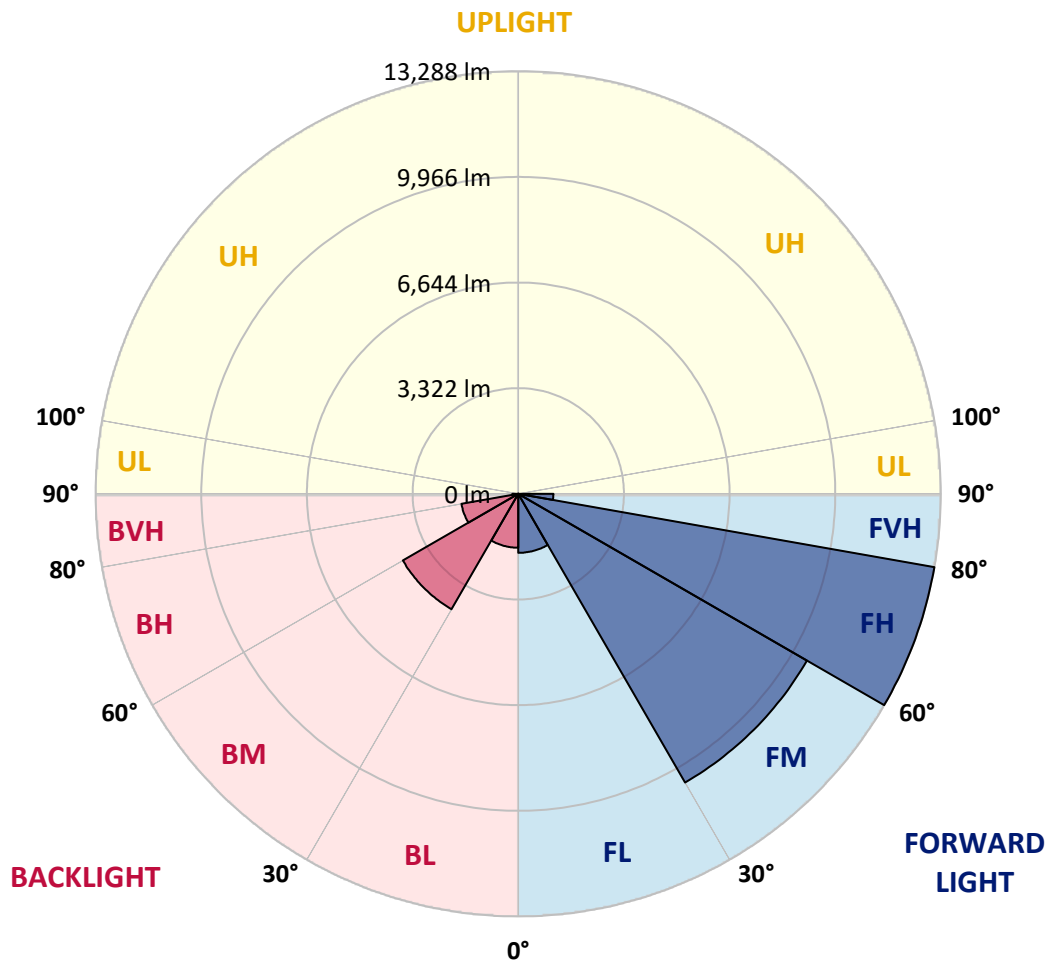
REPORT NUMBER: P510681
 CATALOG NUMBER: CST-CA6-230-750-U-T4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1856.0	5.4			
FM (30°-60°)	10482.8	30.3			
FH (60°-80°)	13287.9	38.4			G5
FVH (80°-90°)	1105.3	3.2			G5
BL (0°-30°)	1695.7	4.9	B3/2500		
BM (30°-60°)	4190.0	12.1	B3/5000		
BH (60°-80°)	1813.8	5.2	B3/2500		G3/2500
BVH (80°-90°)	188.5	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: P510681
 CATALOG NUMBER: CST-CA6-230-750-U-T4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3791.9	3791.9	3791.9	3791.9	3791.9	3791.9	3791.9	3791.9	3791.9	3791.9	3791.9
2.5°	3769.0	3764.0	3761.1	3766.8	3769.0	3769.7	3771.1	3769.7	3766.1	3779.0	3794.8
5°	3769.7	3766.8	3761.1	3756.1	3756.1	3756.1	3756.8	3773.3	3780.5	3779.0	3798.4
7.5°	3775.4	3773.3	3762.5	3758.9	3767.6	3770.4	3784.8	3779.7	3787.6	3800.5	3817.0
10°	3776.2	3773.3	3764.0	3771.9	3796.2	3800.5	3807.0	3821.3	3824.2	3839.9	3856.4
12.5°	3783.3	3783.3	3786.9	3804.1	3829.9	3834.9	3859.3	3870.8	3888.0	3895.9	3915.9
15°	3821.3	3820.6	3829.2	3848.6	3890.1	3893.0	3923.1	3957.5	3970.4	3989.8	4022.0
17.5°	3911.6	3915.9	3916.6	3931.0	3980.4	3981.9	4031.3	4063.6	4093.0	4127.4	4201.2
20°	4126.0	4118.1	4109.5	4109.5	4128.8	4138.9	4176.8	4228.5	4288.7	4349.6	4436.3
22.5°	4395.5	4411.2	4379.7	4363.2	4372.5	4361.1	4389.7	4431.3	4501.6	4592.6	4702.3
25°	4717.3	4718.8	4716.6	4649.9	4629.2	4636.3	4660.0	4698.7	4791.9	4864.3	5023.4
27.5°	5031.3	5024.8	5001.9	4931.6	4911.6	4921.6	4920.9	5027.7	5123.0	5215.5	5402.6
30°	5316.6	5333.8	5292.9	5174.6	5176.8	5175.4	5208.3	5346.0	5520.1	5692.2	5884.3
32.5°	5819.8	5767.4	5712.3	5478.6	5435.6	5430.5	5449.9	5654.9	5913.0	6203.3	6434.1
35°	6293.6	6280.7	6226.2	5988.9	5740.2	5735.9	5709.4	5958.8	6321.5	6859.1	7147.3
37.5°	6778.2	6759.5	6705.8	6503.6	6256.3	6232.7	6009.7	6282.8	6773.1	7626.1	8036.9
40°	7355.9	7344.4	7261.3	7002.5	6748.8	6712.9	6481.4	6623.3	7343.0	8647.6	8937.2
42.5°	7862.7	7860.5	7765.2	7525.1	7309.3	7273.5	7076.3	7224.0	8135.1	9648.3	9818.9
45°	8234.7	8291.3	8295.6	8158.7	8009.6	7978.1	7925.8	8129.3	9051.2	10556.5	10531.4
47.5°	8548.7	8597.4	8546.5	8476.3	8425.4	8427.5	8508.5	8912.8	9955.8	11347.8	11152.8
50°	9073.4	9043.3	8778.8	8737.2	8801.7	8839.7	9074.8	9758.6	10991.6	12090.4	11710.5
52.5°	9830.3	9714.9	9195.9	9111.4	9355.8	9370.1	9744.3	10514.9	12026.6	12727.7	12220.9
55°	10866.1	10770.8	10184.4	9793.8	9917.1	10013.8	10540.7	11289.7	12871.7	13326.9	12613.7
57.5°	12397.2	12404.4	11926.3	11198.0	10778.7	10881.9	11293.3	12043.1	13569.9	13828.7	12858.8
60°	13624.4	13851.6	13709.0	13376.4	12774.3	12704.0	12390.8	12828.0	14166.3	14255.2	13093.2
62.5°	14475.3	14578.5	15068.8	15139.0	15827.2	15856.5	14356.3	13747.7	14821.5	14534.7	13142.7
65°	14432.2	14496.0	15270.9	16214.2	18247.1	18338.1	17460.0	15139.0	15270.2	14659.5	12998.6
67.5°	13427.3	13523.3	14508.2	16271.6	19536.6	19502.2	18945.3	17075.8	15417.9	14459.5	12311.9
70°	11681.8	11977.9	12805.1	15062.3	19939.5	19985.4	18958.9	17694.4	15037.2	13893.9	11167.2
72.5°	9628.2	9721.4	10502.7	13028.7	18761.8	18694.4	18181.9	16878.0	14349.1	12871.0	9163.7
75°	7322.2	7322.2	8268.4	10383.0	16111.7	16348.3	16547.5	15286.7	12711.9	10490.5	6239.8
77.5°	4860.7	5034.9	5796.8	7802.5	12753.5	12928.4	13616.5	13030.2	10408.1	7692.8	2850.0
80°	2578.4	2599.9	3417.0	5184.7	9122.1	9451.8	10398.0	10049.7	7486.4	3604.1	720.4
82.5°	901.7	984.2	1502.4	3004.9	6010.4	6216.2	6897.9	5971.7	2644.3	797.8	398.5
85°	448.0	463.8	661.6	1430.8	3384.1	3483.7	4029.9	2326.0	425.8	348.4	271.0
87.5°	215.8	220.8	253.8	511.8	1470.9	1539.0	1629.3	757.0	157.7	132.6	117.6
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: P510681
 CATALOG NUMBER: CST-CA6-230-750-U-T4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3791.9	3791.9	3791.9	3791.9	3791.9	3791.9	3791.9	3791.9	3791.9	3791.9	3791.9
2.5°	3798.4	3804.8	3817.0	3820.6	3812.0	3827.8	3842.8	3856.4	3855.7	3860.7	3878.7
5°	3807.0	3820.6	3833.5	3856.4	3878.7	3891.6	3903.7	3915.2	3918.8	3929.5	3940.3
7.5°	3833.5	3847.1	3876.5	3916.6	3918.1	3950.3	3971.1	3974.7	3977.6	3977.6	4002.7
10°	3874.4	3899.4	3946.8	3974.7	3999.8	3989.0	4010.5	3996.9	3986.9	3991.2	4008.4
12.5°	3944.6	3966.8	4034.9	4065.7	4042.8	4038.5	4017.0	3986.2	3951.1	3947.5	3963.2
15°	4055.0	4096.6	4157.5	4186.9	4129.5	4078.6	4006.2	3943.2	3875.1	3850.0	3860.0
17.5°	4232.8	4282.9	4349.6	4329.5	4224.9	4124.5	4004.8	3871.5	3739.6	3647.8	3671.5
20°	4493.0	4530.2	4584.7	4503.7	4351.0	4185.5	3989.0	3778.3	3555.4	3388.4	3369.0
22.5°	4766.1	4822.7	4789.7	4639.9	4439.9	4209.1	3956.1	3642.8	3298.0	3088.7	3057.2
25°	5095.1	5113.7	4999.7	4774.0	4465.0	4171.8	3849.3	3445.0	3035.0	2837.8	2828.5
27.5°	5444.2	5401.9	5189.7	4835.6	4437.1	4061.4	3634.9	3132.5	2797.0	2622.8	2595.6
30°	5838.4	5740.2	5346.7	4842.0	4331.7	3846.4	3364.0	2888.0	2603.5	2428.6	2400.6
32.5°	6345.9	6114.4	5492.2	4775.4	4109.5	3531.0	3038.6	2679.4	2429.3	2253.6	2228.6
35°	6994.6	6604.0	5646.3	4655.0	3835.6	3215.6	2769.0	2502.4	2288.1	2076.6	2042.9
37.5°	7742.3	7287.1	5830.5	4503.0	3535.3	2938.2	2587.0	2389.8	2183.4	1944.0	1903.8
40°	8611.0	7970.9	6114.4	4321.6	3265.8	2738.2	2498.8	2351.1	2125.3	1875.9	1830.0
42.5°	9363.7	8694.2	6452.0	4126.7	3011.3	2571.9	2459.4	2325.3	2088.8	1825.0	1772.7
45°	10059.7	9291.3	6781.7	3890.1	2743.2	2457.9	2412.1	2260.8	2024.3	1761.9	1707.4
47.5°	10625.3	9773.7	7068.5	3672.9	2528.9	2353.3	2308.8	2138.2	1916.0	1685.9	1645.8
50°	11059.7	10136.4	7225.4	3500.2	2302.4	2234.3	2175.5	1999.9	1786.3	1587.7	1553.3
52.5°	11504.1	10499.8	7302.9	3508.8	2091.7	2057.2	1997.0	1846.5	1683.1	1530.4	1493.1
55°	11762.8	10648.9	7221.1	3300.2	1898.1	1858.0	1805.6	1727.5	1630.0	1494.5	1459.4
57.5°	11914.1	10741.4	6972.4	2691.6	1665.1	1627.2	1635.8	1629.3	1549.0	1406.4	1374.1
60°	12023.0	10540.7	6462.8	1978.4	1466.6	1437.9	1508.9	1485.9	1416.4	1305.3	1278.1
62.5°	11934.9	10158.6	5545.2	1487.4	1304.6	1365.5	1427.9	1385.6	1291.0	1189.9	1158.4
65°	11397.3	9408.8	4214.8	1194.9	1252.3	1336.1	1386.3	1318.2	1222.2	1102.5	1088.1
67.5°	10418.8	8049.8	2485.9	1095.3	1212.8	1301.7	1343.3	1253.0	1168.4	1053.7	1036.5
70°	8925.7	6026.2	1110.3	1020.0	1144.0	1232.2	1259.4	1174.1	1082.4	974.9	957.7
72.5°	6643.4	3633.5	748.3	941.9	1042.2	1120.4	1150.5	1060.2	994.9	946.2	941.2
75°	3689.4	1261.6	690.3	853.0	931.1	1001.4	1038.7	974.9	923.3	856.6	829.3
77.5°	1174.9	536.2	655.9	762.7	861.6	919.7	913.9	817.9	801.4	720.4	713.2
80°	468.8	467.4	606.4	624.3	735.4	784.2	771.3	650.1	671.7	624.3	605.7
82.5°	367.7	427.9	486.0	476.7	572.0	629.4	611.4	477.4	539.8	496.0	453.7
85°	279.6	374.9	311.8	310.4	399.3	467.4	478.8	367.0	367.7	334.8	298.2
87.5°	144.1	138.3	119.7	119.0	133.3	190.0	233.0	208.6	164.9	124.0	119.0
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)