

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: P510721

Luminaire Tested: **CST-CA8-230-730-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510721  
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-CA8-230-730-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: 34728 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

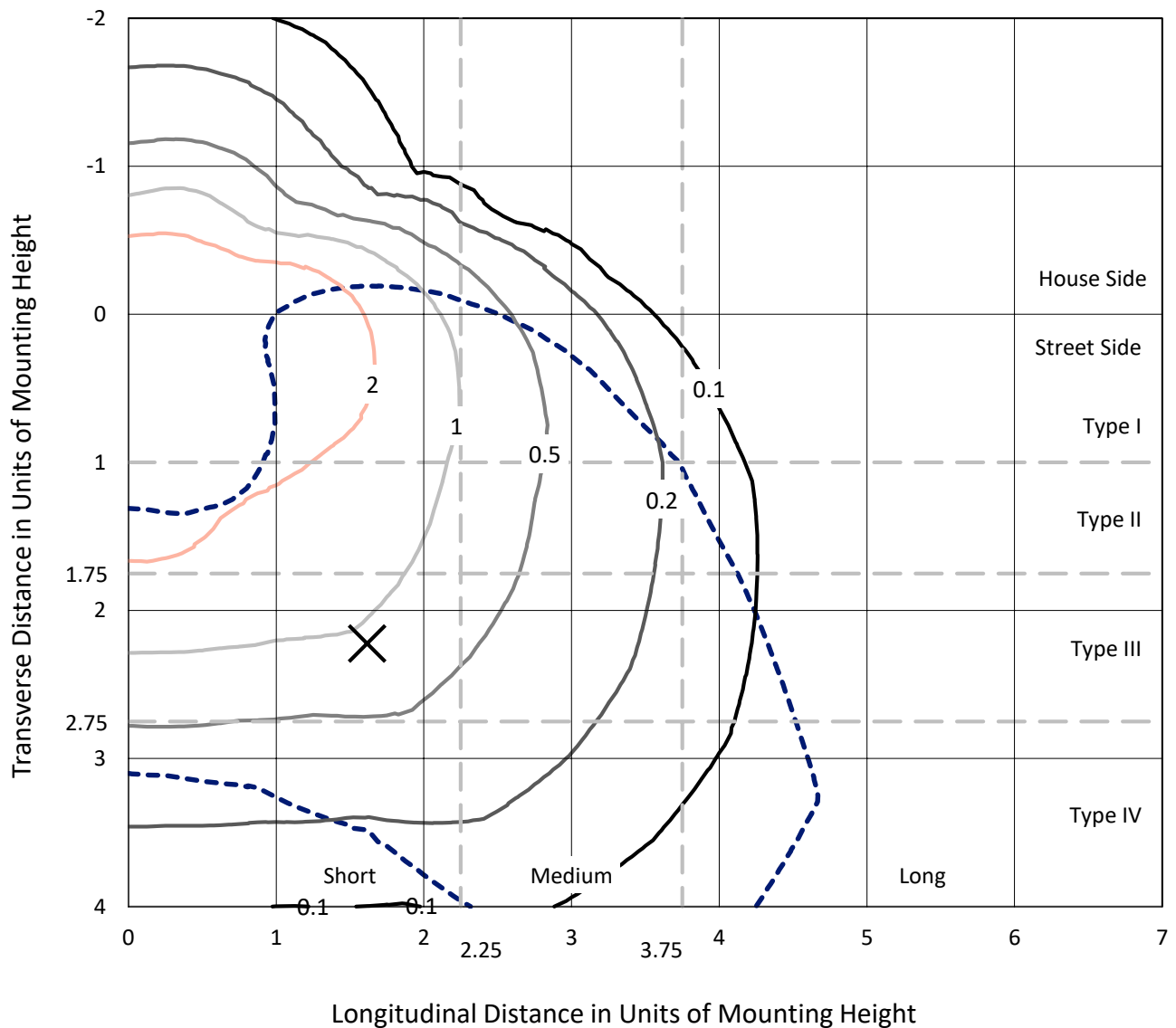
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

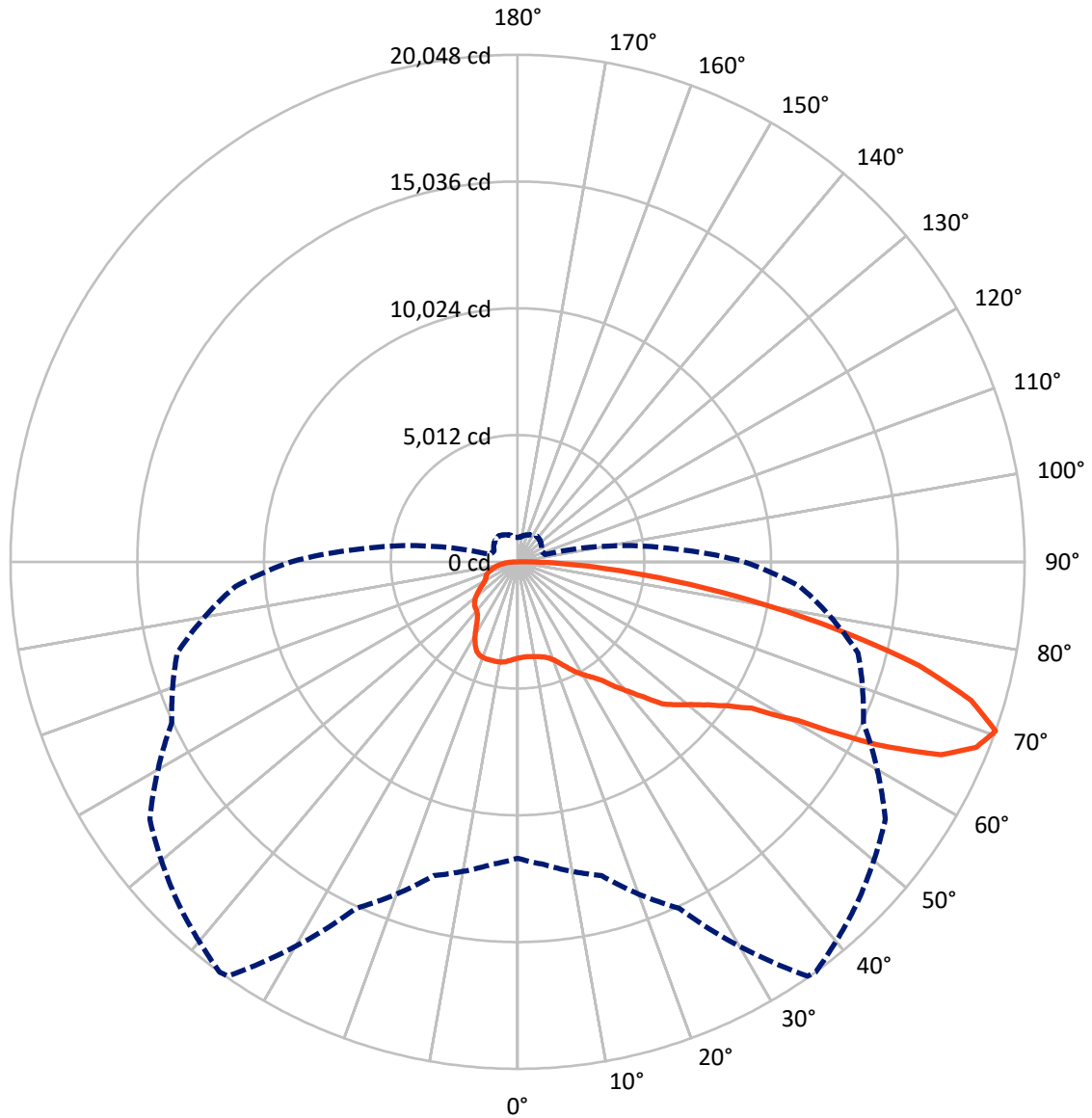
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.4 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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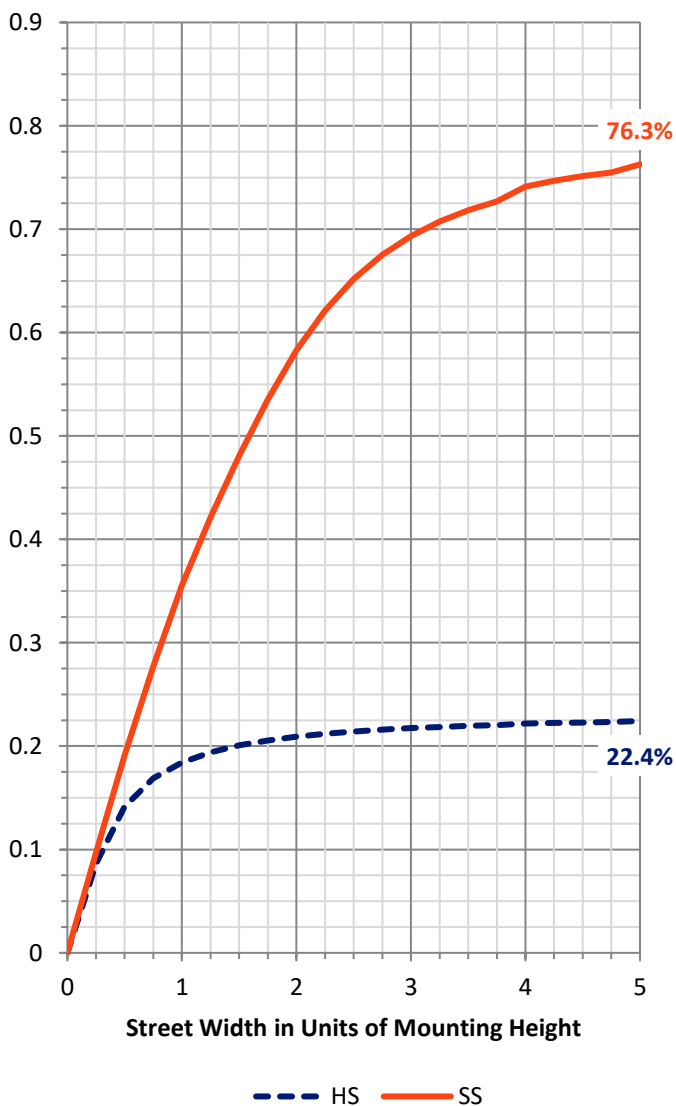
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7912.6	0.0	7912.6
	% Fixture	22.8	0.0	22.8
<b>Street Side</b>	Lumens	26815.4	0.0	26815.4
	% Fixture	77.2	0.0	77.2
<b>Total</b>	Lumens	34728.0	0.0	34728.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	368.5	1.1
10°-20°	1139.2	3.3
20°-30°	2055.0	5.9
30°-40°	3182.8	9.2
40°-50°	4834.7	13.9
50°-60°	6701.1	19.3
60°-70°	8713.8	25.1
70°-80°	6435.0	18.5
80°-90°	1297.8	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°	34728.0	100.0
0°-180°	34728.0	100.0

**Coefficient of Utilization**



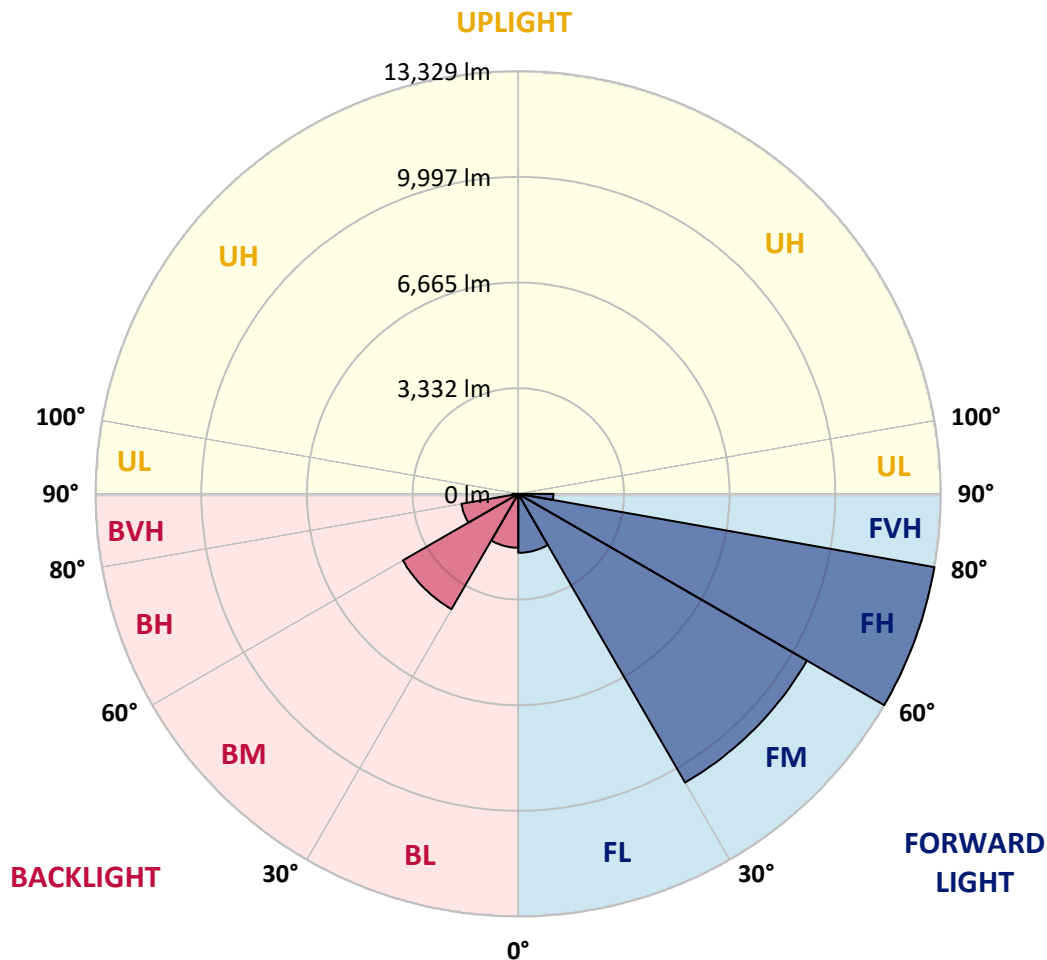
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1861.8	5.4			
FM (30°-60°)	10515.5	30.3			
FH (60°-80°)	13329.4	38.4			G5
FVH (80°-90°)	1108.7	3.2			G5
BL (0°-30°)	1701.0	4.9	B3/2500		
BM (30°-60°)	4203.1	12.1	B3/5000		
BH (60°-80°)	1819.5	5.2	B3/2500		G3/2500
BVH (80°-90°)	189.1	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3803.8	3803.8	3803.8	3803.8	3803.8	3803.8	3803.8	3803.8	3803.8	3803.8	3803.8
2.5°	3780.7	3775.7	3772.8	3778.6	3780.7	3781.5	3782.9	3781.5	3777.9	3790.8	3806.6
5°	3781.5	3778.6	3772.8	3767.8	3767.8	3767.8	3768.5	3785.1	3792.2	3790.8	3810.2
7.5°	3787.2	3785.1	3774.3	3770.7	3779.3	3782.2	3796.6	3791.5	3799.4	3812.4	3828.9
10°	3787.9	3785.1	3775.7	3783.6	3808.1	3812.4	3818.9	3833.2	3836.1	3851.9	3868.5
12.5°	3795.1	3795.1	3798.7	3816.0	3841.9	3846.9	3871.3	3882.8	3900.1	3908.0	3928.1
15°	3833.2	3832.5	3841.1	3860.6	3902.3	3905.1	3935.3	3969.9	3982.8	4002.2	4034.6
17.5°	3923.8	3928.1	3928.9	3943.2	3992.9	3994.3	4043.9	4076.3	4105.8	4140.3	4214.3
20°	4138.8	4130.9	4122.3	4122.3	4141.7	4151.8	4189.9	4241.7	4302.0	4363.2	4450.2
22.5°	4409.2	4425.0	4393.4	4376.8	4386.2	4374.7	4403.4	4445.1	4515.6	4606.9	4716.9
25°	4732.0	4733.5	4731.3	4664.4	4643.6	4650.8	4674.5	4713.3	4806.8	4879.4	5039.1
27.5°	5047.0	5040.5	5017.5	4947.0	4926.9	4937.0	4936.2	5043.4	5139.0	5231.8	5419.4
30°	5333.2	5350.4	5309.4	5190.8	5192.9	5191.5	5224.6	5362.6	5537.4	5709.9	5902.6
32.5°	5837.9	5785.4	5730.1	5495.7	5452.5	5447.5	5466.9	5672.6	5931.4	6222.6	6454.2
35°	6313.2	6300.3	6245.6	6007.6	5758.1	5753.8	5727.2	5977.4	6341.3	6880.5	7169.6
37.5°	6799.3	6780.6	6726.7	6523.9	6275.8	6252.1	6028.5	6302.4	6794.3	7649.9	8061.9
40°	7378.8	7367.3	7283.9	7024.4	6769.8	6733.9	6501.6	6644.0	7365.9	8674.6	8965.1
42.5°	7887.2	7885.1	7789.4	7548.5	7332.1	7296.2	7098.4	7246.5	8160.4	9678.4	9849.5
45°	8260.4	8317.2	8321.5	8184.2	8034.6	8003.0	7950.5	8154.7	9079.4	10589.4	10564.2
47.5°	8575.3	8624.2	8573.2	8502.7	8451.7	8453.8	8535.1	8940.6	9986.8	11383.2	11187.6
50°	9101.7	9071.5	8806.2	8764.4	8829.2	8867.3	9103.1	9789.1	11025.8	12128.1	11747.0
52.5°	9861.0	9745.2	9224.6	9139.8	9385.0	9399.4	9774.7	10547.7	12064.1	12767.4	12259.0
55°	10900.0	10804.4	10216.2	9824.3	9948.0	10045.1	10573.6	11325.0	12911.9	13368.5	12653.0
57.5°	12435.9	12443.1	11963.5	11232.9	10812.3	10915.8	11328.6	12080.7	13612.3	13871.8	12899.0
60°	13666.9	13894.8	13751.7	13418.1	12814.1	12743.6	12429.4	12868.0	14210.5	14299.7	13134.1
62.5°	14520.4	14624.0	15115.8	15186.2	15876.5	15906.0	14401.0	13790.6	14867.7	14580.1	13183.7
65°	14477.3	14541.3	15318.5	16264.8	18304.0	18395.3	17514.5	15186.2	15317.8	14705.2	13039.2
67.5°	13469.2	13565.5	14553.5	16322.3	19597.6	19563.1	19004.4	17129.1	15466.0	14504.6	12350.3
70°	11718.3	12015.3	12845.0	15109.3	20001.7	20047.7	19018.0	17749.6	15084.1	13937.3	11202.0
72.5°	9658.2	9751.7	10535.5	13069.4	18820.3	18752.7	18238.6	16930.6	14393.9	12911.2	9192.3
75°	7345.1	7345.1	8294.2	10415.4	16162.0	16399.3	16599.2	15334.4	12751.6	10523.2	6259.3
77.5°	4875.8	5050.6	5814.9	7826.8	12793.3	12968.7	13659.0	13070.8	10440.5	7716.8	2858.9
80°	2586.4	2608.0	3427.7	5200.9	9150.6	9481.3	10430.5	10081.0	7509.7	3615.4	722.6
82.5°	904.6	987.2	1507.1	3014.2	6029.2	6235.6	6919.4	5990.4	2652.6	800.3	399.8
85°	449.4	465.2	663.7	1435.2	3394.6	3494.6	4042.5	2333.3	427.1	349.5	271.8
87.5°	216.4	221.5	254.5	513.4	1475.5	1543.8	1634.4	759.3	158.2	133.0	117.9
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°	3803.8	3803.8	3803.8	3803.8	3803.8	3803.8	3803.8	3803.8	3803.8	3803.8	3803.8
2.5°	3810.2	3816.7	3828.9	3832.5	3823.9	3839.7	3854.8	3868.5	3867.7	3872.8	3890.8
5°	3818.9	3832.5	3845.5	3868.5	3890.8	3903.7	3915.9	3927.4	3931.0	3941.8	3952.6
7.5°	3845.5	3859.1	3888.6	3928.9	3930.3	3962.7	3983.5	3987.1	3990.0	3990.0	4015.2
10°	3886.4	3911.6	3959.1	3987.1	4012.3	4001.5	4023.1	4009.4	3999.3	4003.6	4020.9
12.5°	3956.9	3979.2	4047.5	4078.4	4055.4	4051.1	4029.5	3998.6	3963.4	3959.8	3975.6
15°	4067.6	4109.3	4170.5	4199.9	4142.4	4091.4	4018.7	3955.5	3887.2	3862.0	3872.1
17.5°	4246.0	4296.3	4363.2	4343.0	4238.1	4137.4	4017.3	3883.6	3751.3	3659.2	3683.0
20°	4507.0	4544.4	4599.0	4517.8	4364.6	4198.5	4001.5	3790.1	3566.5	3398.9	3379.5
22.5°	4780.9	4837.7	4804.7	4654.4	4453.8	4222.2	3968.4	3654.2	3308.3	3098.4	3066.7
25°	5111.0	5129.7	5015.3	4788.8	4478.9	4184.8	3861.3	3455.7	3044.4	2846.7	2837.4
27.5°	5461.2	5418.7	5205.9	4850.7	4450.9	4074.1	3646.3	3142.2	2805.7	2631.0	2603.7
30°	5856.6	5758.1	5363.4	4857.2	4345.2	3858.4	3374.5	2897.0	2611.6	2436.1	2408.1
32.5°	6365.7	6133.5	5509.3	4790.3	4122.3	3542.0	3048.0	2687.8	2436.8	2260.7	2235.5
35°	7016.4	6624.6	5663.9	4669.5	3847.6	3225.6	2777.7	2510.2	2295.2	2083.1	2049.3
37.5°	7766.4	7309.8	5848.7	4517.0	3546.3	2947.4	2595.0	2397.3	2190.2	1950.1	1909.8
40°	8637.9	7995.8	6133.5	4335.1	3276.0	2746.8	2506.6	2358.5	2132.0	1881.7	1835.7
42.5°	9392.9	8721.3	6472.1	4139.5	3020.7	2579.9	2467.0	2332.6	2095.3	1830.7	1778.2
45°	10091.1	9320.3	6802.9	3902.3	2751.8	2465.6	2419.6	2267.9	2030.6	1767.4	1712.8
47.5°	10658.4	9804.2	7090.5	3684.4	2536.8	2360.6	2316.0	2144.9	1922.0	1691.2	1650.9
50°	11094.2	10168.0	7248.0	3511.1	2309.6	2241.3	2182.3	2006.1	1791.9	1592.7	1558.2
52.5°	11540.0	10532.6	7325.6	3519.7	2098.2	2063.7	2003.3	1852.3	1688.3	1535.2	1497.8
55°	11799.5	10682.1	7243.7	3310.5	1904.0	1863.8	1811.3	1732.9	1635.1	1499.2	1464.0
57.5°	11951.3	10774.9	6994.2	2700.0	1670.3	1632.2	1640.9	1634.4	1553.9	1410.8	1378.4
60°	12060.6	10573.6	6482.9	1984.6	1471.2	1442.4	1513.6	1490.6	1420.8	1309.4	1282.1
62.5°	11972.1	10190.3	5562.5	1492.0	1308.7	1369.8	1432.3	1389.9	1295.0	1193.6	1162.0
65°	11432.8	9438.2	4228.0	1198.6	1256.2	1340.3	1390.6	1322.3	1226.0	1105.9	1091.5
67.5°	10451.3	8074.9	2493.7	1098.7	1216.6	1305.8	1347.5	1256.9	1172.0	1057.0	1039.7
70°	8953.6	6045.0	1113.8	1023.2	1147.6	1236.0	1263.4	1177.8	1085.8	977.9	960.6
72.5°	6664.1	3644.8	750.7	944.8	1045.5	1123.9	1154.1	1063.5	998.0	949.1	944.1
75°	3700.9	1265.5	692.4	855.7	934.0	1004.5	1041.9	977.9	926.1	859.3	831.9
77.5°	1178.5	537.8	657.9	765.1	864.3	922.5	916.8	820.4	803.9	722.6	715.5
80°	470.3	468.8	608.3	626.3	737.7	786.6	773.7	652.2	673.7	626.3	607.6
82.5°	368.9	429.3	487.5	478.2	573.8	631.3	613.3	478.9	541.4	497.6	455.2
85°	280.4	376.1	312.8	311.3	400.5	468.8	480.3	368.2	368.9	335.8	299.1
87.5°	144.5	138.8	120.1	119.4	133.7	190.5	233.7	209.2	165.4	124.4	119.4
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)