

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: McGRAW-EDISON

Report Number: P591143

Luminaire Tested: **CTN-CA6-230-722-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591143  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/19/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA6-230-722-U-T1-SSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE  
Light Source: (6) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16337 lumens  
Efficiency: N/A  
Efficacy: 71.7 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type I - Short  
BUG Rating: B4 - U0 - G4

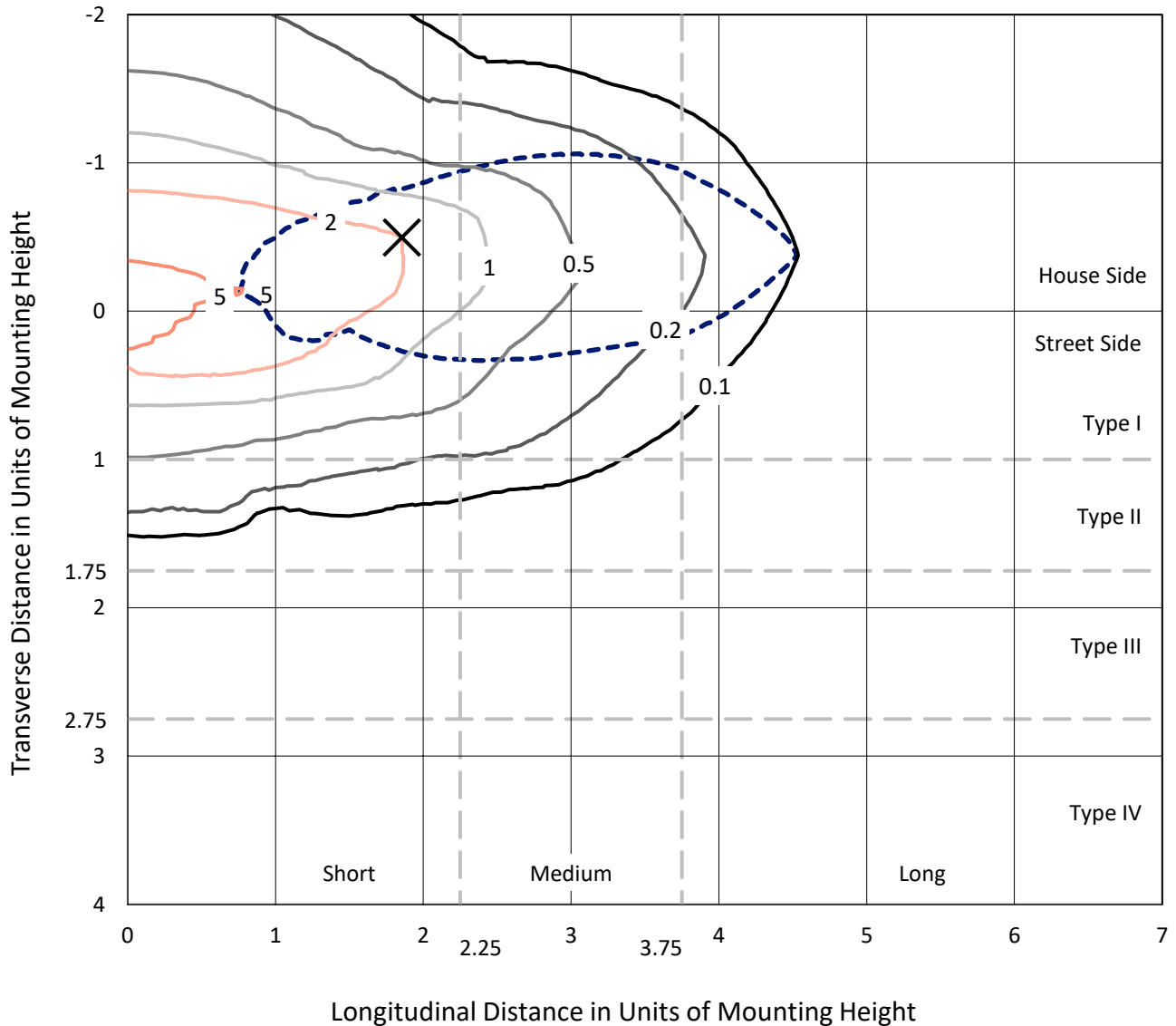
Input Watts (W): 227.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

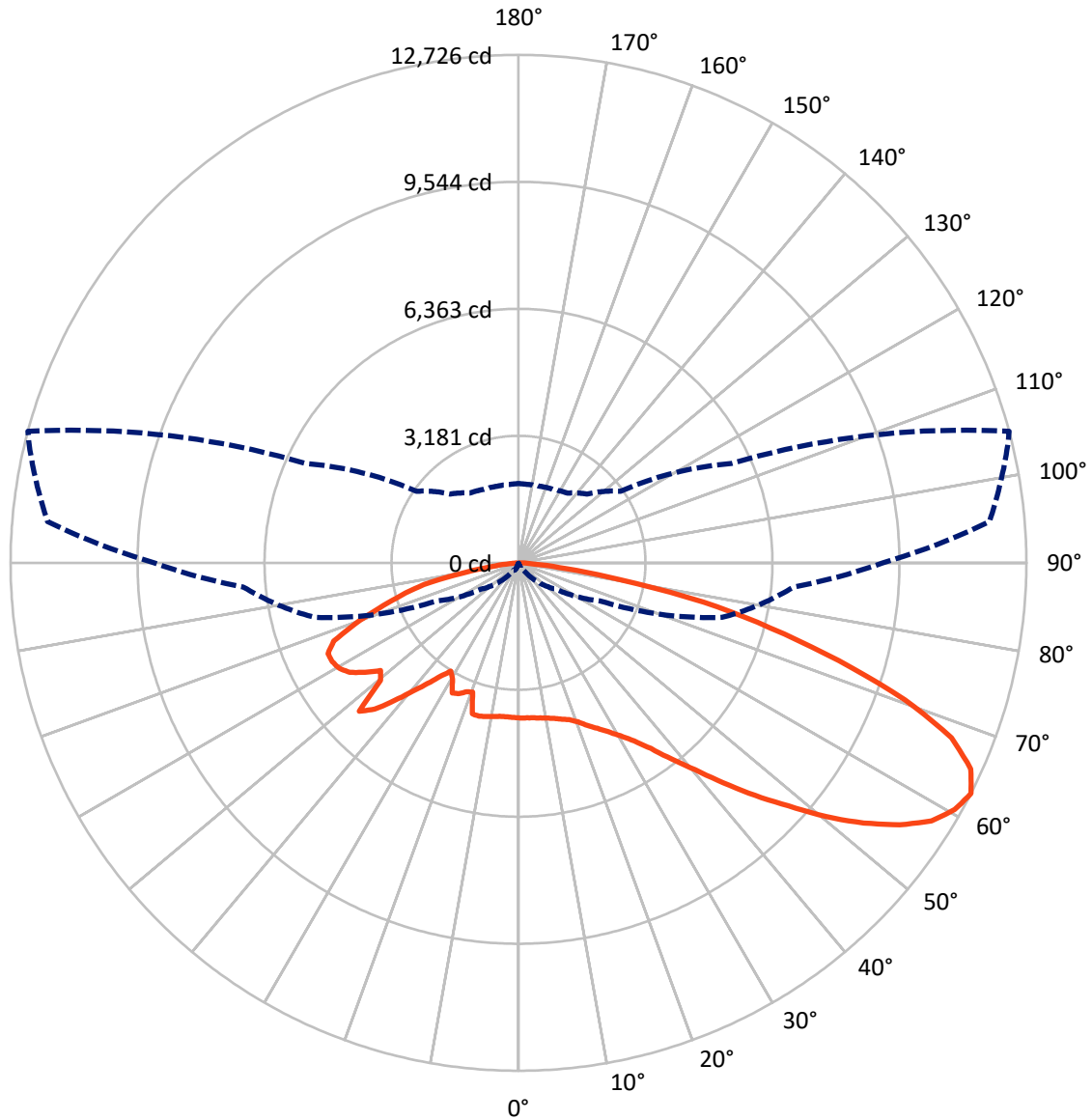
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 105-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical



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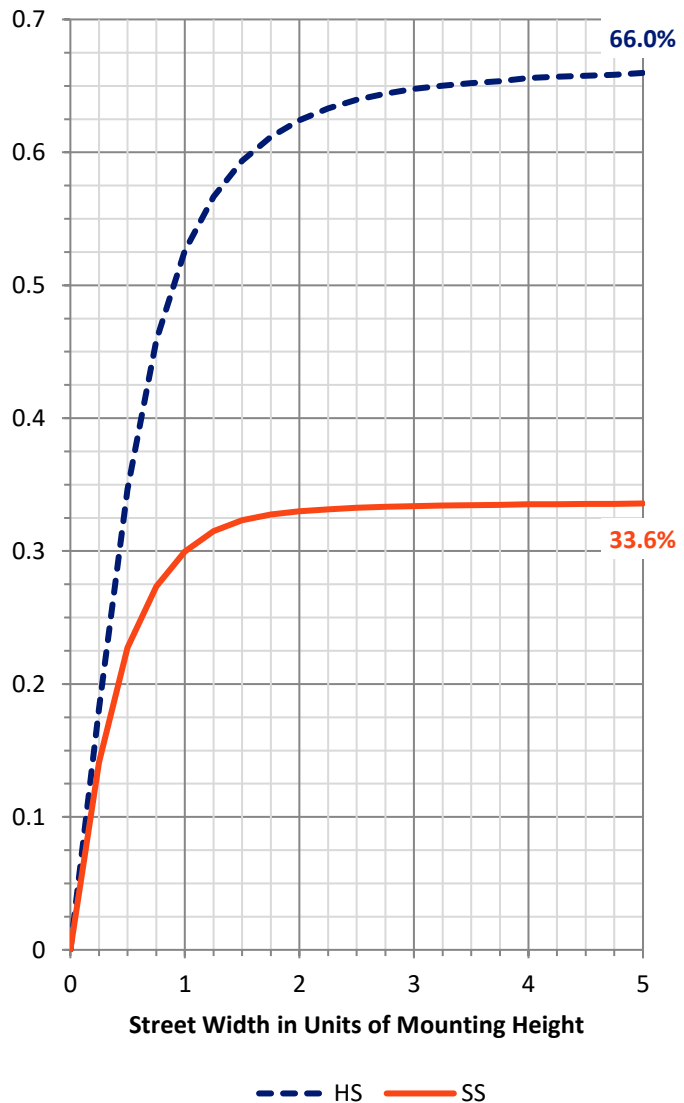
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10870.5	0.0	10870.5
	% Fixture	66.5	0.0	66.5
<b>Street Side</b>	Lumens	5466.5	0.0	5466.5
	% Fixture	33.5	0.0	33.5
<b>Total</b>	Lumens	16337.0	0.0	16337.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	370.8	2.3
10°-20°	1047.4	6.4
20°-30°	1476.1	9.0
30°-40°	2005.5	12.3
40°-50°	2728.2	16.7
50°-60°	3232.1	19.8
60°-70°	3169.5	19.4
70°-80°	1999.0	12.2
80°-90°	308.4	1.9
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°	16337.0	100.0
0°-180°	16337.0	100.0

**Coefficient of Utilization**

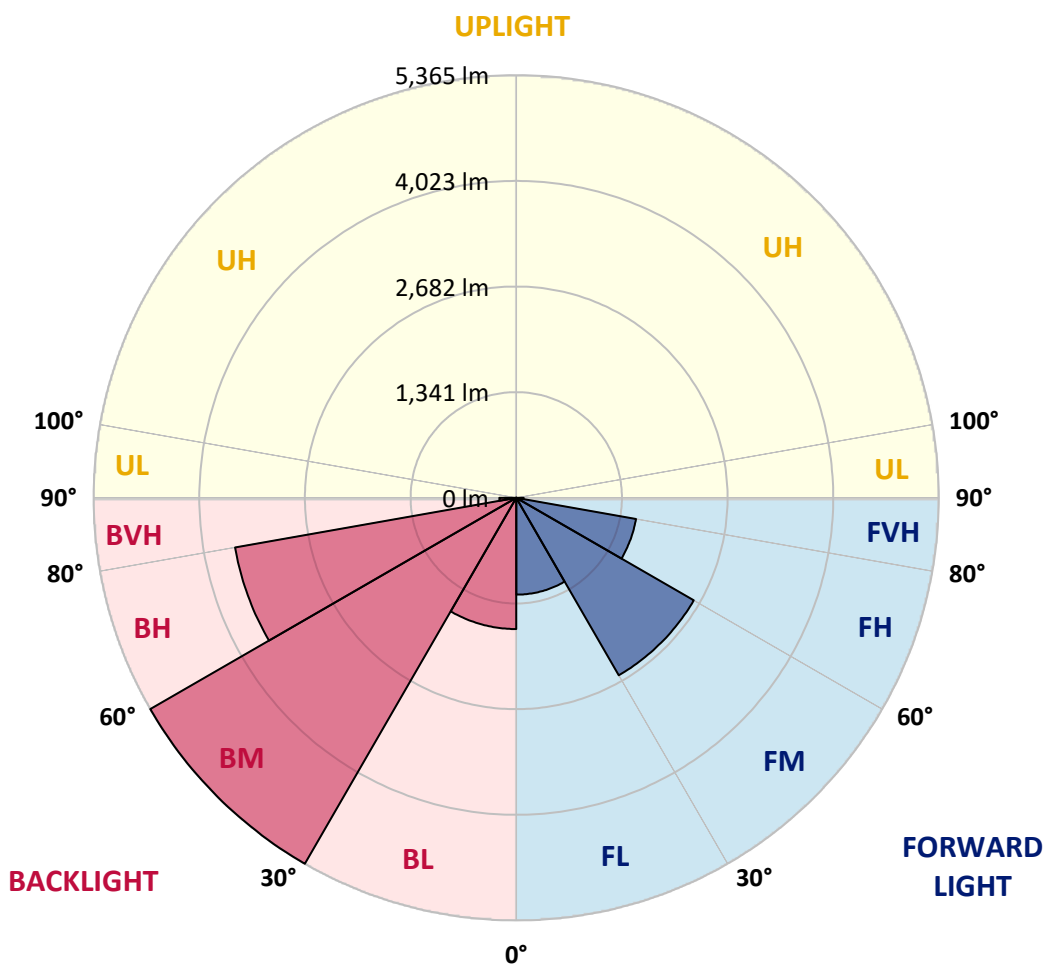


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1228.8	7.5			
FM (30°-60°)	2601.3	15.9			
FH (60°-80°)	1543.5	9.4			G1/1800
FVH (80°-90°)	93.0	0.6			G1/100
BL (0°-30°)	1665.5	10.2	B3/2500		
BM (30°-60°)	5364.6	32.8	B4/8500		
BH (60°-80°)	3625.0	22.2	B4/5000		G4/5000
BVH (80°-90°)	215.3	1.3			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**  
 Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3886.3	3886.3	3886.3	3886.3	3886.3	3886.3	3886.3	3886.3	3886.3	3886.3	3886.3
2.5°	3888.9	3858.5	3880.2	3913.2	3863.7	3892.4	3844.7	3883.7	3874.2	3876.8	3895.0
5°	3858.5	3826.4	3852.5	3895.9	3847.3	3879.4	3840.3	3873.3	3869.8	3882.0	3896.7
7.5°	3829.9	3799.5	3826.4	3855.1	3829.9	3861.1	3831.6	3872.4	3875.0	3901.9	3914.1
10°	3799.5	3769.1	3795.2	3828.2	3807.3	3846.4	3834.2	3883.7	3902.8	3938.4	3948.8
12.5°	3732.7	3705.8	3727.5	3765.7	3769.1	3826.4	3834.2	3910.6	3934.0	3980.9	3996.5
15°	3330.9	3360.4	3475.8	3586.9	3634.6	3740.5	3798.7	3934.9	3967.9	4034.7	4059.0
17.5°	2694.7	2639.2	2459.5	2506.4	2770.2	3126.1	3260.6	3599.0	3956.6	4102.4	4133.7
20°	1592.5	1706.2	2057.7	2165.3	2262.5	2645.3	3097.4	3298.8	3435.9	3954.0	4236.1
22.5°	1313.1	1320.9	1572.6	2069.0	2178.3	2328.5	2678.2	3341.3	3482.8	3586.0	3900.2
25°	1217.6	1225.4	1268.8	1652.4	2118.5	2292.0	2445.7	3054.0	3603.4	3731.0	3976.6
27.5°	1141.2	1151.7	1191.6	1299.2	1975.3	2281.6	2476.0	2708.6	3657.2	3902.8	4132.8
30°	1084.0	1088.3	1129.1	1233.2	1493.6	2284.2	2520.3	2768.5	3350.0	4120.6	4351.5
32.5°	1031.9	1034.5	1077.0	1178.6	1335.6	2115.9	2587.1	2893.5	3199.0	4299.4	4651.8
35°	992.0	990.2	1028.4	1128.2	1284.4	1620.3	2661.7	3043.6	3440.2	4130.2	5099.6
37.5°	953.8	951.2	984.2	1076.2	1239.3	1517.0	2575.0	3224.1	3786.5	4258.6	5063.1
40°	924.3	919.1	946.8	1029.3	1192.4	1491.0	2028.2	3415.1	4166.6	4920.8	5369.5
42.5°	898.2	894.8	918.2	984.2	1144.7	1459.8	1890.2	3518.3	4639.6	5686.3	6161.9
45°	859.2	864.4	890.4	953.8	1093.5	1415.5	1904.1	2825.8	5140.4	6350.2	6951.6
47.5°	842.7	841.8	858.3	918.2	1049.3	1353.9	1894.6	2591.5	5455.4	7045.3	7724.9
50°	816.7	812.3	708.2	876.5	1004.1	1277.5	1854.6	2659.1	4539.8	7727.5	8434.8
52.5°	768.1	683.0	619.7	847.0	958.1	1194.2	1765.2	2688.7	4383.6	7606.0	9044.9
55°	407.9	454.8	586.7	805.4	904.3	1119.5	1634.2	2667.8	4721.2	6082.0	8396.6
57.5°	361.9	360.2	373.2	636.1	471.3	1038.0	1476.2	2572.4	5040.6	6359.7	8553.7
60°	28.6	29.5	34.7	211.8	249.9	730.7	1306.1	2454.3	5209.8	6687.8	8934.7
62.5°	13.9	15.6	20.8	189.2	228.2	664.8	1152.5	2253.0	5281.0	6924.7	9123.0
65°	3.5	4.3	9.5	166.6	198.7	591.9	998.0	2016.9	5287.0	6934.3	9274.9
67.5°	2.6	4.3	9.5	151.0	181.4	527.7	862.7	1852.0	5028.4	6898.7	9198.5
70°	2.6	4.3	9.5	135.4	164.0	457.4	742.9	1690.6	4368.0	6765.9	8939.0
72.5°	2.6	5.2	9.5	118.9	144.1	387.9	630.9	1512.7	3665.9	6211.3	8361.0
75°	2.6	5.2	10.4	96.3	123.2	309.0	518.1	1295.7	3048.8	5386.0	7402.9
77.5°	2.6	5.2	10.4	74.6	99.8	230.9	392.3	1026.7	2432.6	3972.2	5201.1
80°	2.6	5.2	10.4	52.9	81.6	162.3	285.5	700.4	1451.1	2088.1	2648.7
82.5°	2.6	5.2	10.4	38.2	59.0	117.2	176.2	345.4	692.6	1002.4	1257.5
85°	1.7	4.3	9.5	25.2	31.2	71.2	105.0	153.6	207.4	274.2	370.6
87.5°	1.7	2.6	6.1	9.5	13.0	25.2	39.1	34.7	39.1	81.6	117.2
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):**

	95°	104°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3886.3	3886.3	3886.3	3886.3	3886.3	3886.3	3886.3	3886.3	3886.3	3886.3	3886.3
2.5°	3892.4	3888.9	3889.8	3908.9	3892.4	3895.9	3867.2	3924.5	3919.3	3911.5	3934.0
5°	3896.7	3895.0	3901.9	3918.4	3893.3	3897.6	3870.7	3937.5	3921.0	3918.4	3945.3
7.5°	3918.4	3915.8	3922.8	3930.6	3902.8	3902.8	3879.4	3932.3	3922.8	3905.4	3935.8
10°	3957.5	3947.9	3954.9	3959.2	3916.7	3915.0	3871.6	3934.0	3909.7	3901.1	3940.1
12.5°	4012.2	3990.5	4000.9	3993.9	3937.5	3927.1	3869.0	3909.7	3879.4	3874.2	3909.7
15°	4085.9	4057.3	4065.1	4052.1	3980.9	3950.5	3856.8	3874.2	3825.6	3821.2	3847.3
17.5°	4154.5	4137.1	4132.8	4132.8	4049.5	3974.0	3845.5	3821.2	3757.0	3752.7	3765.7
20°	4278.6	4255.2	4252.6	4231.7	4108.5	3993.1	3827.3	3752.7	3657.2	3635.5	3659.8
22.5°	4318.5	4432.2	4424.4	4332.4	4158.0	4008.7	3790.0	3666.7	3535.7	3494.0	3506.2
25°	4437.4	4608.4	4594.5	4460.8	4208.3	4017.4	3744.8	3572.1	3391.6	3318.7	3321.3
27.5°	4625.7	4800.2	4790.6	4598.0	4270.8	4020.0	3694.5	3472.3	3248.4	3153.0	3160.8
30°	4865.3	5041.4	5027.6	4750.7	4365.4	4025.2	3656.3	3352.6	3117.4	3014.1	3012.4
32.5°	5198.5	5358.2	5317.4	4954.7	4479.1	4046.9	3606.0	3238.9	2997.6	2889.1	2880.5
35°	5701.9	5760.9	5710.6	5197.7	4599.7	4060.8	3525.3	3127.8	2886.5	2779.8	2772.0
37.5°	6382.3	6309.4	6241.7	5471.0	4724.7	4057.3	3422.9	3020.2	2791.1	2689.5	2689.5
40°	6449.1	6939.5	6814.5	5759.2	4837.5	4038.2	3325.7	2915.2	2713.8	2631.4	2644.4
42.5°	6762.4	7711.0	7535.7	6037.8	4919.1	3982.6	3221.5	2819.7	2641.8	2575.0	2580.2
45°	7532.2	8413.1	8310.7	6306.8	4963.3	3884.6	3100.9	2726.0	2561.1	2508.1	2518.6
47.5°	8360.2	9248.0	9097.9	6555.0	4939.0	3739.6	2972.4	2640.1	2476.9	2443.0	2462.1
50°	9143.0	10126.3	10001.3	6729.4	4831.4	3536.6	2835.3	2548.9	2410.9	2384.0	2393.6
52.5°	9911.0	10923.8	10830.1	6824.0	4616.2	3323.9	2708.6	2462.1	2349.3	2315.5	2328.5
55°	10544.6	11679.8	11588.6	6814.5	4292.5	3101.8	2582.8	2368.4	2286.8	2256.5	2266.9
57.5°	11039.3	12268.2	12203.1	6669.6	3915.8	2897.8	2440.4	2276.4	2204.4	2177.5	2186.2
60°	11481.9	12641.4	12557.2	6349.3	3516.6	2673.0	2293.8	2167.1	2107.2	2085.5	2099.4
62.5°	11844.7	12649.2	12725.5	5885.9	3125.2	2435.2	2130.6	2032.5	1989.2	1976.1	1984.8
65°	11937.5	12416.6	12453.9	5313.1	2728.6	2199.2	1934.5	1870.3	1852.0	1844.2	1861.6
67.5°	11809.1	11926.2	11704.1	4828.8	2366.7	1931.9	1722.7	1682.8	1694.1	1695.8	1718.4
70°	11477.5	10614.0	10271.2	4423.5	2029.1	1635.9	1490.1	1477.1	1507.5	1532.7	1549.1
72.5°	10632.2	8714.3	8387.9	3850.7	1599.5	1252.3	1173.4	1215.0	1204.6	1215.9	1245.4
75°	9153.4	6726.0	6523.8	3133.9	1218.5	910.4	804.5	808.9	821.9	879.1	910.4
77.5°	6520.3	4837.5	4747.2	2404.0	807.1	535.5	553.7	615.3	633.5	635.3	657.0
80°	3455.0	2696.5	2574.1	1416.4	533.7	382.7	416.6	443.5	467.8	492.9	499.0
82.5°	1557.0	1219.4	1185.5	703.8	338.5	295.1	302.9	348.9	368.8	373.2	377.5
85°	604.9	420.9	401.0	292.5	222.2	199.6	221.3	268.2	287.3	278.6	276.0
87.5°	161.4	98.9	90.3	98.1	104.1	110.2	125.8	143.2	164.0	158.0	152.7
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)