

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: P510641

Luminaire Tested: **CST-CA6-230-722-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510641  
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-CA6-230-722-U-T4  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (6) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27707 lumens  
Efficiency: N/A  
Efficacy: 121.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

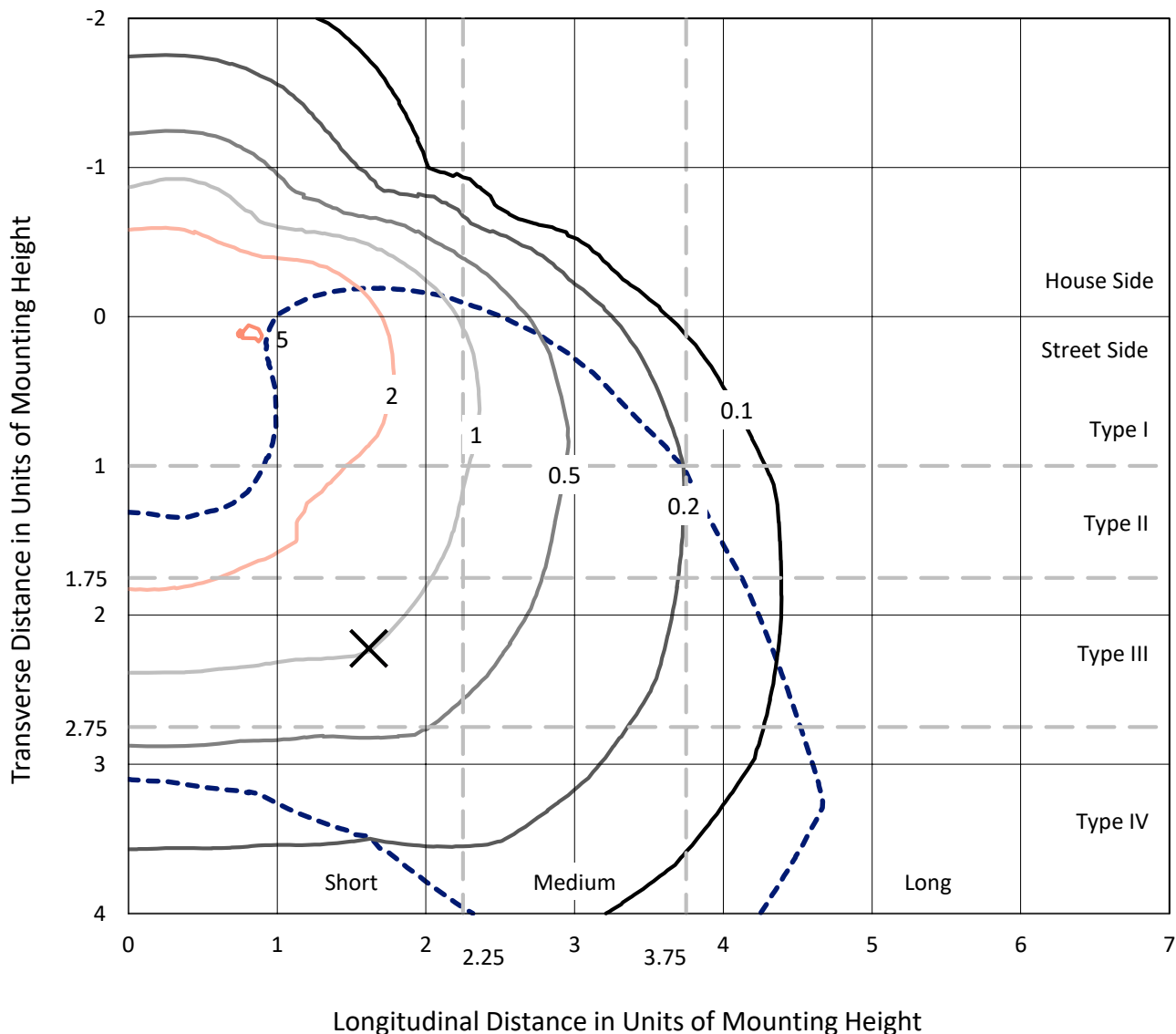
Input Watts (W): 227.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

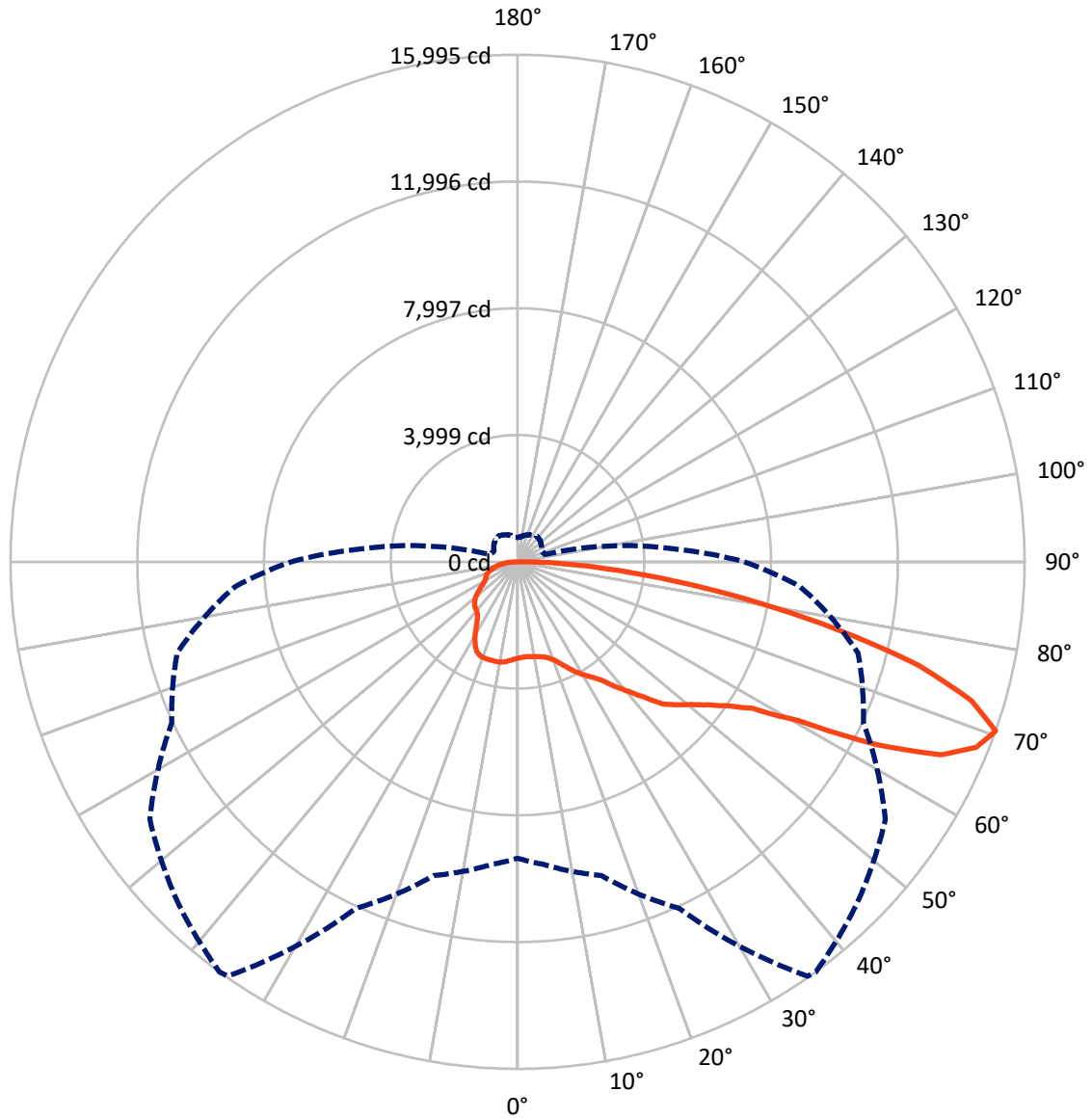
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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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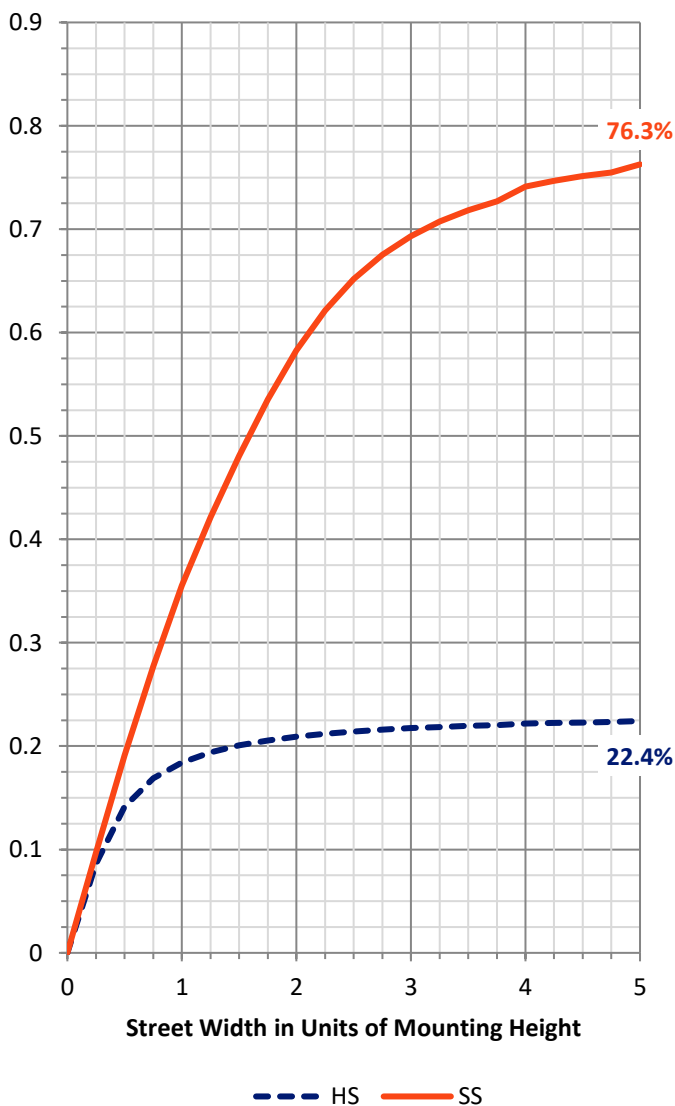
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6312.9	0.0	6312.9
	% Fixture	22.8	0.0	22.8
<b>Street Side</b>	Lumens	21394.1	0.0	21394.1
	% Fixture	77.2	0.0	77.2
<b>Total</b>	Lumens	27707.0	0.0	27707.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	294.0	1.1
10°-20°	908.9	3.3
20°-30°	1639.5	5.9
30°-40°	2539.3	9.2
40°-50°	3857.2	13.9
50°-60°	5346.4	19.3
60°-70°	6952.1	25.1
70°-80°	5134.1	18.5
80°-90°	1035.4	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°	27707.0	100.0
0°-180°	27707.0	100.0

**Coefficient of Utilization**



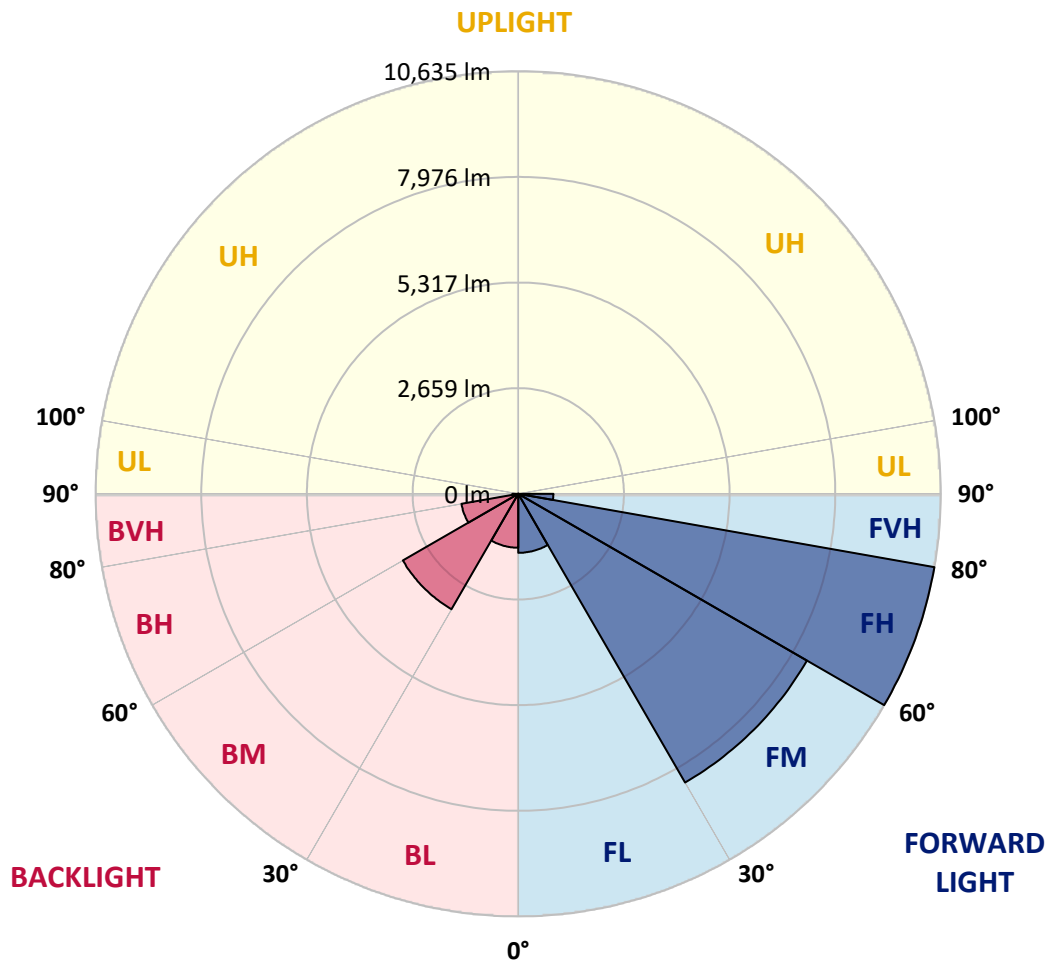
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1485.4	5.4			
FM (30°-60°)	8389.6	30.3			
FH (60°-80°)	10634.6	38.4			G4/12000
FVH (80°-90°)	884.6	3.2			G5
BL (0°-30°)	1357.1	4.9	B3/2500		
BM (30°-60°)	3353.3	12.1	B3/5000		
BH (60°-80°)	1451.6	5.2	B3/2500		G3/2500
BVH (80°-90°)	150.8	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°	3034.7	3034.7	3034.7	3034.7	3034.7	3034.7	3034.7	3034.7	3034.7	3034.7	3034.7
2.5°	3016.4	3012.4	3010.1	3014.7	3016.4	3017.0	3018.1	3017.0	3014.1	3024.4	3037.0
5°	3017.0	3014.7	3010.1	3006.1	3006.1	3006.1	3006.6	3019.8	3025.6	3024.4	3039.9
7.5°	3021.5	3019.8	3011.2	3008.4	3015.2	3017.5	3029.0	3025.0	3031.3	3041.6	3054.8
10°	3022.1	3019.8	3012.4	3018.7	3038.2	3041.6	3046.8	3058.3	3060.6	3073.2	3086.4
12.5°	3027.9	3027.9	3030.7	3044.5	3065.1	3069.2	3088.7	3097.8	3111.6	3117.9	3134.0
15°	3058.3	3057.7	3064.6	3080.1	3113.3	3115.6	3139.7	3167.3	3177.6	3193.1	3218.9
17.5°	3130.5	3134.0	3134.6	3146.0	3185.6	3186.8	3226.4	3252.2	3275.7	3303.2	3362.3
20°	3302.1	3295.8	3288.9	3288.9	3304.4	3312.4	3342.8	3384.1	3432.3	3481.1	3550.5
22.5°	3517.8	3530.4	3505.2	3492.0	3499.4	3490.2	3513.2	3546.5	3602.7	3675.5	3763.3
25°	3775.4	3776.5	3774.8	3721.4	3704.8	3710.5	3729.5	3760.4	3835.0	3893.0	4020.3
27.5°	4026.6	4021.5	4003.1	3946.9	3930.8	3938.9	3938.3	4023.8	4100.1	4174.1	4323.8
30°	4255.0	4268.7	4236.0	4141.4	4143.1	4141.9	4168.3	4278.5	4417.9	4555.6	4709.3
32.5°	4657.7	4615.8	4571.6	4384.6	4350.2	4346.2	4361.7	4525.7	4732.2	4964.6	5149.3
35°	5036.9	5026.5	4982.9	4793.1	4594.0	4590.6	4569.3	4769.0	5059.2	5489.5	5720.1
37.5°	5424.7	5409.8	5366.7	5205.0	5007.0	4988.1	4809.7	5028.3	5420.7	6103.3	6432.0
40°	5887.1	5877.9	5811.3	5604.2	5401.2	5372.5	5187.2	5300.8	5876.7	6920.8	7152.6
42.5°	6292.6	6290.9	6214.6	6022.4	5849.8	5821.1	5663.3	5781.5	6510.6	7721.7	7858.2
45°	6590.4	6635.7	6639.1	6529.6	6410.2	6385.0	6343.1	6506.1	7243.8	8448.5	8428.4
47.5°	6841.7	6880.7	6839.9	6783.7	6743.0	6744.7	6809.5	7133.1	7967.8	9081.9	8925.8
50°	7261.6	7237.5	7025.8	6992.5	7044.2	7074.6	7262.7	7810.0	8796.7	9676.2	9372.1
52.5°	7867.4	7775.0	7359.7	7292.0	7487.6	7499.1	7798.5	8415.2	9625.1	10186.2	9780.6
55°	8696.3	8620.0	8150.8	7838.1	7936.8	8014.2	8435.9	9035.4	10301.5	10665.8	10095.0
57.5°	9921.7	9927.5	9544.8	8962.0	8626.4	8709.0	9038.3	9638.3	10860.2	11067.3	10291.2
60°	10903.8	11085.7	10971.5	10705.4	10223.5	10167.2	9916.6	10266.5	11337.5	11408.7	10478.8
62.5°	11584.8	11667.4	12059.8	12116.0	12666.8	12690.3	11489.6	11002.5	11861.9	11632.4	10518.3
65°	11550.4	11601.4	12221.6	12976.5	14603.5	14676.3	13973.6	12116.0	12221.0	11732.2	10403.0
67.5°	10746.1	10823.0	11611.2	13022.4	15635.5	15608.0	15162.2	13666.1	12339.2	11572.2	9853.4
70°	9349.2	9586.1	10248.1	12054.6	15957.9	15994.6	15173.1	14161.2	12034.6	11119.5	8937.3
72.5°	7705.6	7780.2	8405.5	10427.1	15015.4	14961.5	14551.3	13507.8	11483.8	10300.9	7333.9
75°	5860.1	5860.1	6617.3	8309.7	12894.5	13083.8	13243.3	12234.2	10173.6	8395.7	4993.8
77.5°	3890.1	4029.5	4639.3	6244.5	10206.8	10346.8	10897.5	10428.3	8329.8	6156.7	2280.9
80°	2063.5	2080.7	2734.7	4149.4	7300.6	7564.5	8321.7	8042.9	5991.5	2884.4	576.5
82.5°	721.7	787.7	1202.4	2404.8	4810.3	4974.9	5520.5	4779.3	2116.3	638.5	319.0
85°	358.5	371.2	529.5	1145.1	2708.3	2788.1	3225.2	1861.6	340.8	278.8	216.8
87.5°	172.7	176.7	203.1	409.6	1177.2	1231.7	1304.0	605.8	126.2	106.1	94.1
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°	3034.7	3034.7	3034.7	3034.7	3034.7	3034.7	3034.7	3034.7	3034.7	3034.7	3034.7
2.5°	3039.9	3045.1	3054.8	3057.7	3050.8	3063.4	3075.5	3086.4	3085.8	3089.8	3104.2
5°	3046.8	3057.7	3068.0	3086.4	3104.2	3114.5	3124.2	3133.4	3136.3	3144.9	3153.5
7.5°	3068.0	3078.9	3102.4	3134.6	3135.7	3161.5	3178.2	3181.0	3183.3	3183.3	3203.4
10°	3100.7	3120.8	3158.7	3181.0	3201.1	3192.5	3209.7	3198.8	3190.8	3194.2	3208.0
12.5°	3156.9	3174.7	3229.2	3253.9	3235.5	3232.1	3214.9	3190.2	3162.1	3159.2	3171.9
15°	3245.3	3278.6	3327.3	3350.8	3304.9	3264.2	3206.3	3155.8	3101.3	3081.2	3089.2
17.5°	3387.6	3427.7	3481.1	3465.0	3381.2	3300.9	3205.1	3098.4	2992.9	2919.4	2938.4
20°	3595.8	3625.6	3669.2	3604.4	3482.2	3349.7	3192.5	3023.8	2845.4	2711.8	2696.3
22.5°	3814.4	3859.7	3833.3	3713.4	3553.3	3368.6	3166.1	2915.4	2639.5	2472.0	2446.7
25°	4077.7	4092.6	4001.4	3820.7	3573.4	3338.8	3080.6	2757.1	2428.9	2271.2	2263.7
27.5°	4357.1	4323.2	4153.4	3870.0	3551.1	3250.4	2909.1	2507.0	2238.5	2099.1	2077.3
30°	4672.6	4594.0	4279.0	3875.2	3466.7	3078.3	2692.3	2311.3	2083.6	1943.6	1921.2
32.5°	5078.7	4893.5	4395.5	3821.8	3288.9	2825.9	2431.8	2144.4	1944.2	1803.6	1783.6
35°	5597.9	5285.3	4518.8	3725.4	3069.7	2573.5	2216.1	2002.7	1831.2	1661.9	1635.0
37.5°	6196.3	5832.0	4666.3	3603.8	2829.4	2351.5	2070.4	1912.6	1747.4	1555.8	1523.7
40°	6891.6	6379.3	4893.5	3458.7	2613.7	2191.4	1999.8	1881.7	1700.9	1501.3	1464.6
42.5°	7493.9	6958.1	5163.7	3302.6	2410.0	2058.3	1968.3	1861.0	1671.7	1460.6	1418.7
45°	8051.0	7436.0	5427.5	3113.3	2195.5	1967.1	1930.4	1809.4	1620.1	1410.1	1366.5
47.5°	8503.6	7822.1	5657.0	2939.5	2023.9	1883.4	1847.8	1711.3	1533.4	1349.3	1317.2
50°	8851.2	8112.3	5782.6	2801.3	1842.6	1788.1	1741.1	1600.6	1429.6	1270.7	1243.2
52.5°	9206.9	8403.2	5844.6	2808.1	1674.0	1646.4	1598.3	1477.8	1347.0	1224.8	1195.0
55°	9414.0	8522.5	5779.2	2641.2	1519.1	1487.0	1445.1	1382.6	1304.5	1196.1	1168.0
57.5°	9535.1	8596.5	5580.1	2154.2	1332.6	1302.2	1309.1	1304.0	1239.7	1125.6	1099.7
60°	9622.3	8435.9	5172.3	1583.3	1173.7	1150.8	1207.6	1189.2	1133.6	1044.7	1022.9
62.5°	9551.7	8130.1	4438.0	1190.4	1044.1	1092.9	1142.8	1108.9	1033.2	952.3	927.1
65°	9121.4	7530.1	3373.2	956.3	1002.2	1069.3	1109.5	1055.0	978.1	882.3	870.8
67.5°	8338.4	6442.4	1989.5	876.6	970.7	1041.8	1075.1	1002.8	935.1	843.3	829.5
70°	7143.4	4822.9	888.6	816.3	915.6	986.1	1007.9	939.7	866.2	780.2	766.4
72.5°	5316.8	2908.0	598.9	753.8	834.1	896.7	920.7	848.5	796.3	757.3	753.2
75°	2952.7	1009.7	552.4	682.7	745.2	801.4	831.3	780.2	738.9	685.5	663.7
77.5°	940.3	429.1	524.9	610.4	689.6	736.0	731.4	654.6	641.4	576.5	570.8
80°	375.2	374.0	485.3	499.7	588.6	627.6	617.3	520.3	537.5	499.7	484.8
82.5°	294.3	342.5	389.0	381.5	457.8	503.7	489.3	382.1	432.0	397.0	363.1
85°	223.7	300.0	249.5	248.4	319.5	374.0	383.2	293.7	294.3	267.9	238.6
87.5°	115.3	110.7	95.8	95.2	106.7	152.0	186.4	166.9	131.9	99.2	95.2
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)