

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: P510699

Luminaire Tested: **CST-CA8-230-722-U-T3**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510699  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-11)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-230-722-U-T3  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29273 lumens  
Efficiency: N/A  
Efficacy: 128.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

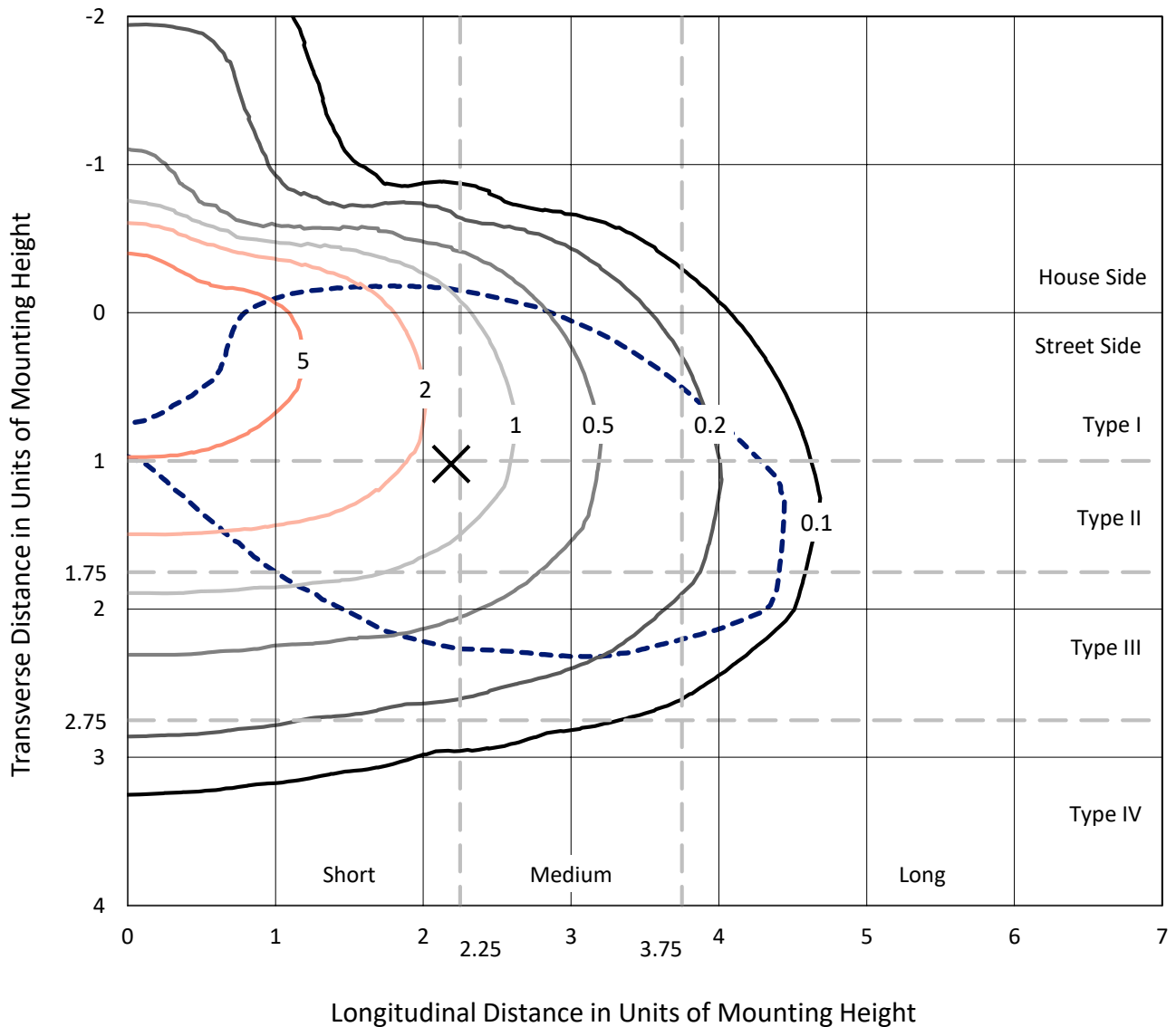
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

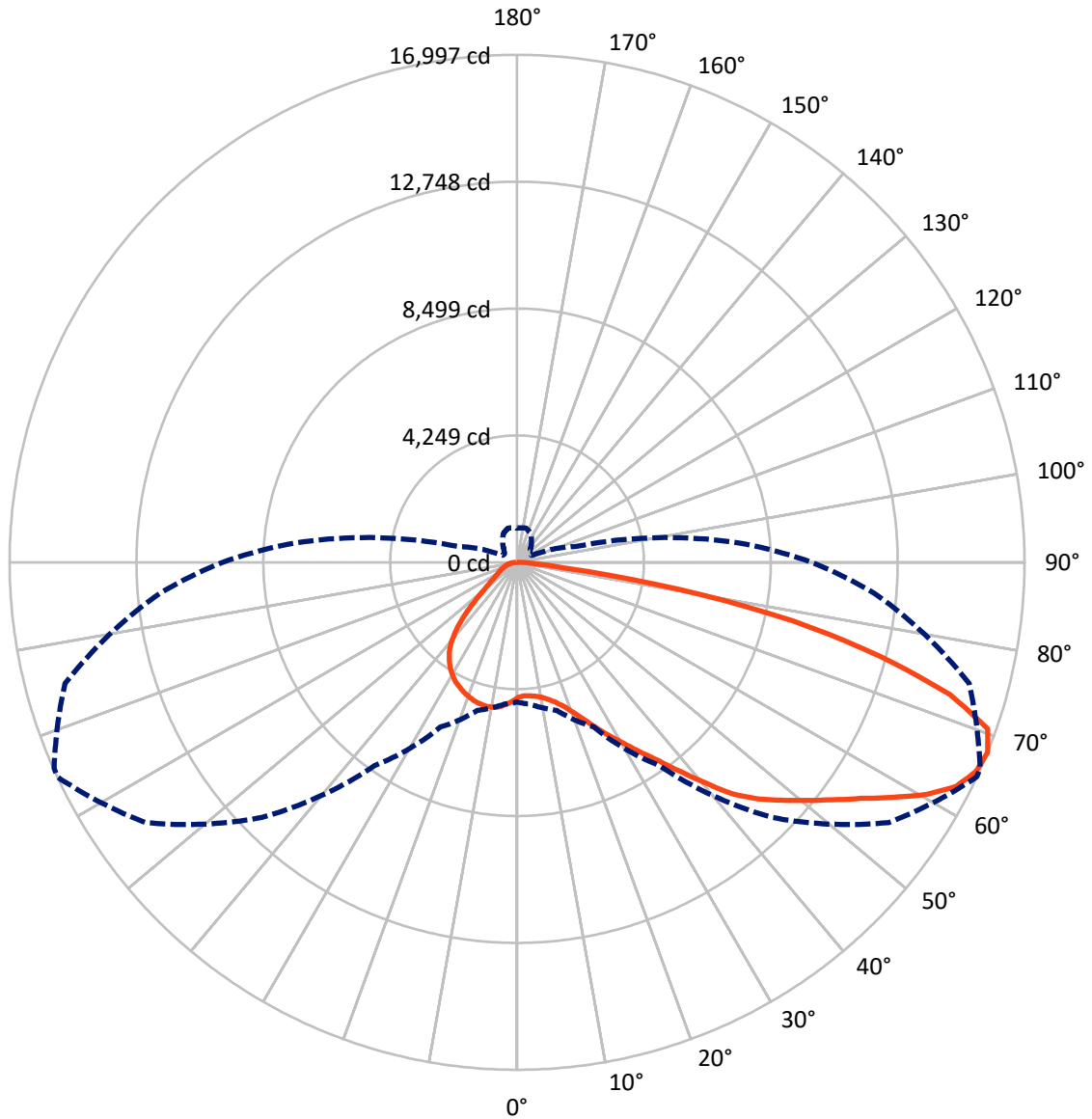
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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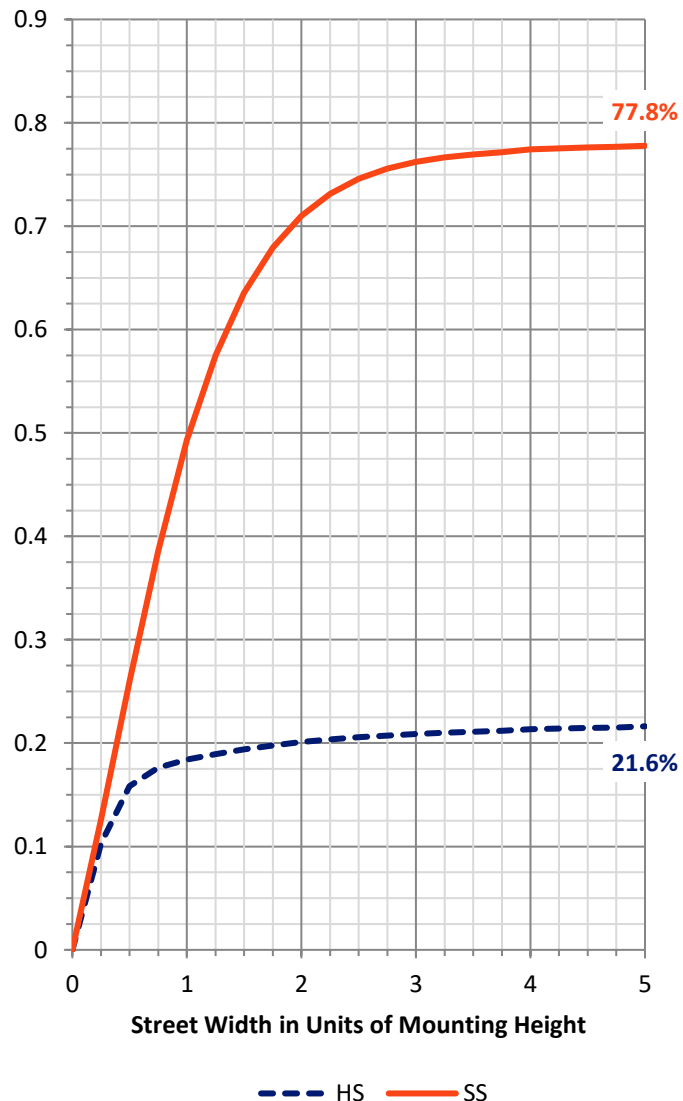
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6466.0	0.0	6466.0
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	22807.0	0.0	22807.0
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	29273.0	0.0	29273.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	450.5	1.5
10°-20°	1407.5	4.8
20°-30°	2436.6	8.3
30°-40°	3580.4	12.2
40°-50°	4839.3	16.5
50°-60°	5950.9	20.3
60°-70°	6376.8	21.8
70°-80°	3760.9	12.8
80°-90°	470.1	1.6
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°	29273.0	100.0
0°-180°	29273.0	100.0

**Coefficient of Utilization**



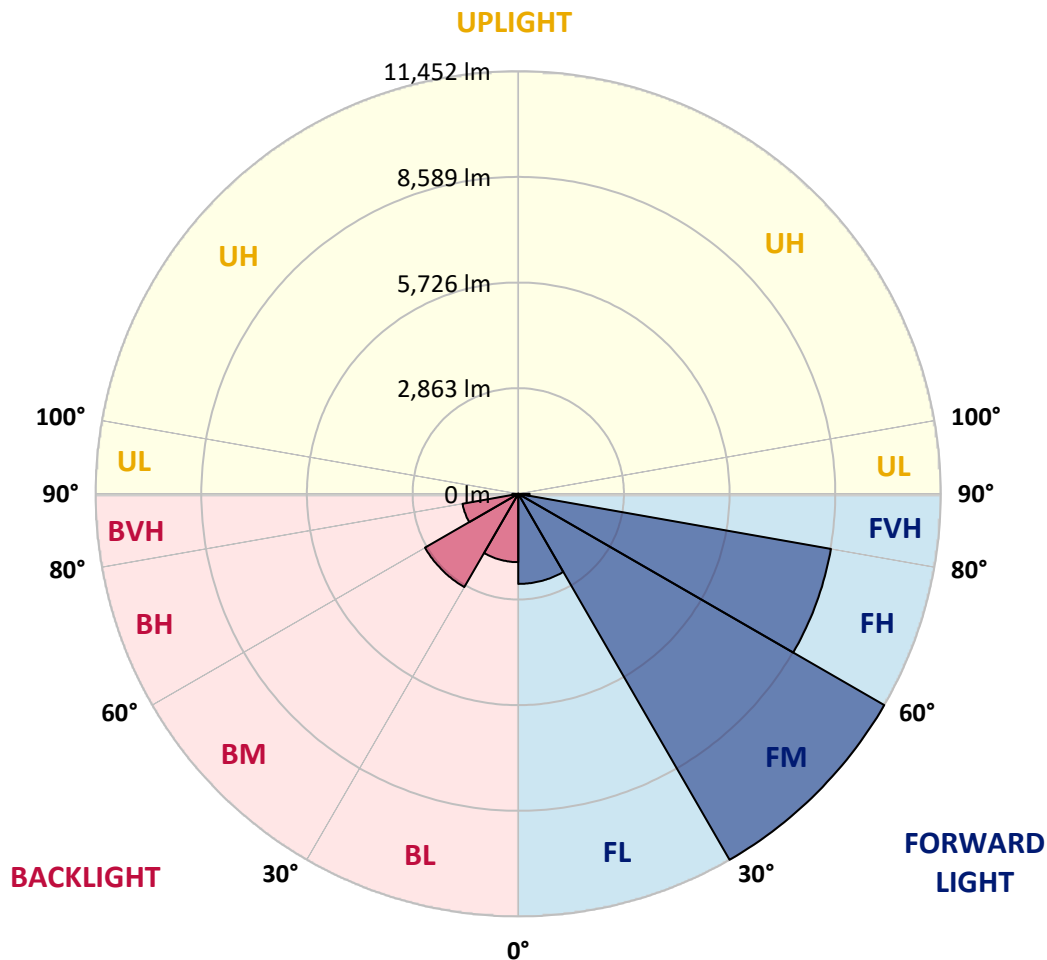
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2442.6	8.3			
FM (30°-60°)	11451.8	39.1			
FH (60°-80°)	8604.3	29.4			G4/12000
FVH (80°-90°)	308.3	1.1			G3/500
BL (0°-30°)	1852.1	6.3	B3/2500		
BM (30°-60°)	2918.7	10.0	B3/5000		
BH (60°-80°)	1533.4	5.2	B3/2500		G3/2500
BVH (80°-90°)	161.8	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4521.6	4521.6	4521.6	4521.6	4521.6	4521.6	4521.6	4521.6	4521.6	4521.6	4521.6
2.5°	4436.2	4427.9	4424.3	4435.6	4444.0	4453.5	4467.3	4480.4	4482.2	4499.5	4522.2
5°	4489.9	4482.8	4475.0	4473.2	4470.2	4469.6	4473.2	4488.1	4491.7	4508.4	4557.4
7.5°	4609.3	4602.1	4587.8	4582.4	4566.3	4537.7	4524.0	4531.7	4533.5	4553.8	4614.7
10°	4803.9	4781.8	4764.5	4746.6	4695.8	4650.5	4617.1	4602.7	4599.8	4619.4	4689.9
12.5°	5036.0	5017.5	4998.4	4951.3	4886.8	4805.1	4746.0	4713.2	4710.8	4727.5	4780.6
15°	5281.3	5281.3	5268.2	5212.1	5148.8	5013.4	4922.0	4867.1	4870.7	4883.8	4908.3
17.5°	5598.2	5572.0	5566.0	5502.2	5431.7	5308.2	5163.2	5075.4	5079.6	5085.6	5067.1
20°	5920.5	5912.8	5903.8	5861.4	5797.6	5638.8	5475.9	5360.7	5361.3	5339.8	5257.5
22.5°	6346.7	6321.0	6327.6	6279.8	6193.3	6030.3	5842.9	5706.3	5715.2	5684.2	5535.0
25°	6769.8	6744.2	6730.4	6698.2	6623.6	6469.0	6246.4	6121.1	6110.3	6054.2	5837.6
27.5°	7192.4	7177.5	7188.8	7150.0	7089.1	6916.6	6712.5	6573.5	6580.6	6541.8	6218.9
30°	7629.8	7613.1	7662.7	7600.0	7562.4	7394.7	7198.9	7035.4	7041.4	7055.7	6693.4
32.5°	7959.9	7979.6	8066.1	8059.0	8051.8	7865.0	7659.1	7568.4	7577.3	7627.5	7256.8
35°	8278.6	8280.4	8402.1	8494.1	8532.8	8376.5	8162.8	8159.8	8218.3	8371.1	8042.3
37.5°	8543.0	8537.0	8699.4	8842.0	8948.2	8827.1	8709.5	8892.7	8945.9	9262.8	8833.1
40°	8687.4	8700.0	8908.9	9086.7	9295.6	9238.3	9250.8	9719.3	9850.0	10127.6	9424.5
42.5°	8586.0	8624.2	8949.4	9312.3	9627.4	9703.8	9955.7	10612.2	10667.7	10717.8	10006.4
45°	8415.9	8455.9	8816.3	9402.4	9901.4	10224.3	10657.0	11299.1	11360.0	11303.9	10490.4
47.5°	8238.6	8279.8	8681.5	9366.0	10128.2	10747.1	11280.6	11906.7	11984.3	11810.6	10956.0
50°	8013.6	8077.5	8516.7	9289.0	10312.0	11311.1	11870.9	12532.2	12568.0	12317.3	11308.7
52.5°	7736.7	7807.1	8282.2	9157.1	10455.8	11705.0	12468.3	13210.8	13207.2	12909.4	11712.2
55°	7445.4	7509.3	7998.7	8949.4	10536.4	12008.2	12945.8	13958.6	14001.6	13752.1	12077.4
57.5°	7072.4	7130.3	7663.9	8670.1	10452.8	12265.4	13719.3	14847.3	14868.8	14338.8	12368.1
60°	6578.2	6663.6	7199.5	8315.0	10212.9	12563.2	14571.6	15781.9	15808.2	14915.9	12554.9
62.5°	6035.7	6069.7	6615.8	7768.3	9863.8	12793.0	15162.4	16513.0	16474.8	15367.1	12611.0
65°	5374.4	5401.3	5874.0	7065.2	9215.0	12667.1	15374.3	16889.0	16841.9	15650.6	12438.5
67.5°	4682.1	4765.1	5136.3	6090.0	8309.6	12085.8	15195.2	16997.1	16973.2	15672.1	12026.7
70°	3783.3	3812.5	4148.0	4961.4	6933.4	10922.0	14598.4	16720.1	16701.6	15192.3	11185.8
72.5°	2667.8	2639.2	2802.1	3440.1	5008.0	8688.0	12464.2	15164.2	15195.2	13590.4	9740.8
75°	1416.3	1471.2	1724.8	2106.2	2839.1	5585.1	9937.2	12550.1	12539.4	11364.2	7699.7
77.5°	754.4	753.2	927.5	1090.4	1390.0	2566.4	6554.4	9464.5	9517.0	8805.0	5286.7
80°	362.3	376.0	386.7	443.4	692.9	1185.9	2741.8	5488.4	5846.5	5251.5	2511.5
82.5°	290.1	291.3	292.4	279.9	286.5	482.8	1056.4	1588.2	1645.5	1322.6	809.9
85°	214.9	201.7	199.9	169.5	191.6	290.1	533.0	678.0	644.6	627.3	457.2
87.5°	86.5	81.2	78.8	74.0	74.0	109.2	188.0	245.3	244.7	223.2	153.4
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°	4521.6	4521.6	4521.6	4521.6	4521.6	4521.6	4521.6	4521.6	4521.6	4521.6	4521.6
2.5°	4540.1	4561.6	4611.7	4654.7	4670.8	4710.2	4747.2	4768.7	4783.6	4792.5	4833.1
5°	4587.2	4630.2	4710.2	4770.4	4828.9	4901.7	4948.9	4978.7	4995.5	5005.0	5034.2
7.5°	4659.4	4703.0	4787.8	4880.3	4934.0	4993.7	5024.1	5045.6	5056.3	5053.3	5076.6
10°	4723.9	4766.9	4851.6	4922.6	4953.1	4987.1	5003.2	5008.0	5008.6	5011.0	5034.2
12.5°	4811.6	4837.9	4883.2	4929.8	4923.2	4924.4	4938.2	4932.2	4918.5	4916.1	4931.6
15°	4905.9	4906.5	4910.1	4900.0	4858.8	4840.9	4821.8	4805.7	4768.1	4765.7	4790.1
17.5°	5024.1	4996.0	4931.0	4861.8	4763.9	4696.4	4628.4	4600.4	4554.4	4545.4	4557.4
20°	5176.3	5117.8	4959.6	4787.8	4604.5	4484.0	4401.6	4318.6	4254.8	4239.3	4250.6
22.5°	5394.7	5279.5	4996.0	4709.0	4425.5	4219.6	4059.6	3960.0	3852.5	3797.6	3803.0
25°	5658.5	5478.3	5059.3	4609.3	4214.8	3917.6	3658.0	3458.0	3336.9	3256.3	3277.8
27.5°	6004.1	5756.4	5135.1	4510.8	3952.8	3531.4	3154.8	2883.9	2760.3	2722.1	2697.1
30°	6404.6	6092.4	5215.1	4365.2	3669.9	3053.4	2571.1	2345.5	2204.1	2181.4	2162.3
32.5°	6940.5	6515.6	5364.9	4207.0	3332.1	2575.3	2051.9	1792.3	1760.0	1741.5	1737.4
35°	7631.6	7070.0	5521.9	4001.7	2891.6	2014.9	1552.3	1412.1	1396.6	1416.9	1418.7
37.5°	8365.1	7671.6	5709.9	3770.2	2384.9	1503.4	1187.7	1090.4	1107.7	1171.0	1185.3
40°	8861.7	8067.9	5880.5	3455.6	1758.9	1092.2	864.2	843.3	938.8	1020.0	1036.7
42.5°	9338.0	8368.1	5949.8	3039.6	1254.5	777.7	697.7	769.3	903.0	991.9	1003.9
45°	9744.4	8717.3	5775.5	2540.7	850.5	649.9	668.4	767.5	916.1	1014.6	1023.6
47.5°	10131.2	9002.6	5537.4	2001.8	670.8	625.5	667.9	783.6	945.4	1038.5	1043.9
50°	10500.6	9219.8	5130.9	1523.1	628.5	614.1	673.2	808.7	961.5	1020.0	1017.6
52.5°	10774.5	9332.0	4698.2	1229.5	611.7	605.2	687.5	840.3	964.5	999.7	997.3
55°	10975.7	9310.5	4414.1	1006.8	598.0	601.6	710.8	864.2	993.1	1046.2	1044.4
57.5°	10994.2	9213.2	4091.3	850.5	581.3	601.0	735.9	897.6	1136.4	1234.2	1204.4
60°	10972.1	9052.1	3769.0	746.6	562.8	604.6	762.1	997.9	1342.9	1419.9	1399.0
62.5°	10863.5	8751.9	3286.1	678.0	546.7	617.7	781.8	1077.3	1332.7	1341.7	1311.8
65°	10528.0	8350.2	2652.3	608.8	530.6	626.7	798.0	1098.2	1224.1	1195.4	1180.5
67.5°	9864.4	7453.2	2045.9	545.5	509.7	624.9	845.7	1068.3	1182.9	1162.0	1142.9
70°	8921.4	6433.8	1420.5	480.4	474.5	613.5	833.8	1078.5	1163.2	1131.0	1105.3
72.5°	7453.2	5047.4	903.6	427.3	422.0	586.7	803.9	1071.9	1150.1	1135.8	1100.6
75°	5612.0	3523.1	574.1	369.4	375.4	537.7	756.2	1036.7	1143.5	1098.8	1031.3
77.5°	3533.2	1739.2	446.4	313.9	322.9	463.7	653.5	905.4	1097.6	1070.7	984.2
80°	1336.3	706.0	349.1	254.8	262.6	360.5	536.0	744.8	1010.4	1054.6	1017.6
82.5°	615.3	441.7	262.0	204.7	207.7	262.6	399.9	551.5	855.3	968.1	1060.6
85°	359.3	289.5	174.9	136.7	142.0	155.2	225.0	336.6	554.5	738.3	826.0
87.5°	122.3	100.9	68.0	57.9	56.1	63.9	54.3	110.4	164.7	290.1	331.2
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)