

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: P510741

Luminaire Tested: **CST-CA8-230-750-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510741  
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-CA8-230-750-U-T4  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36017 lumens  
Efficiency: N/A  
Efficacy: 157.7 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

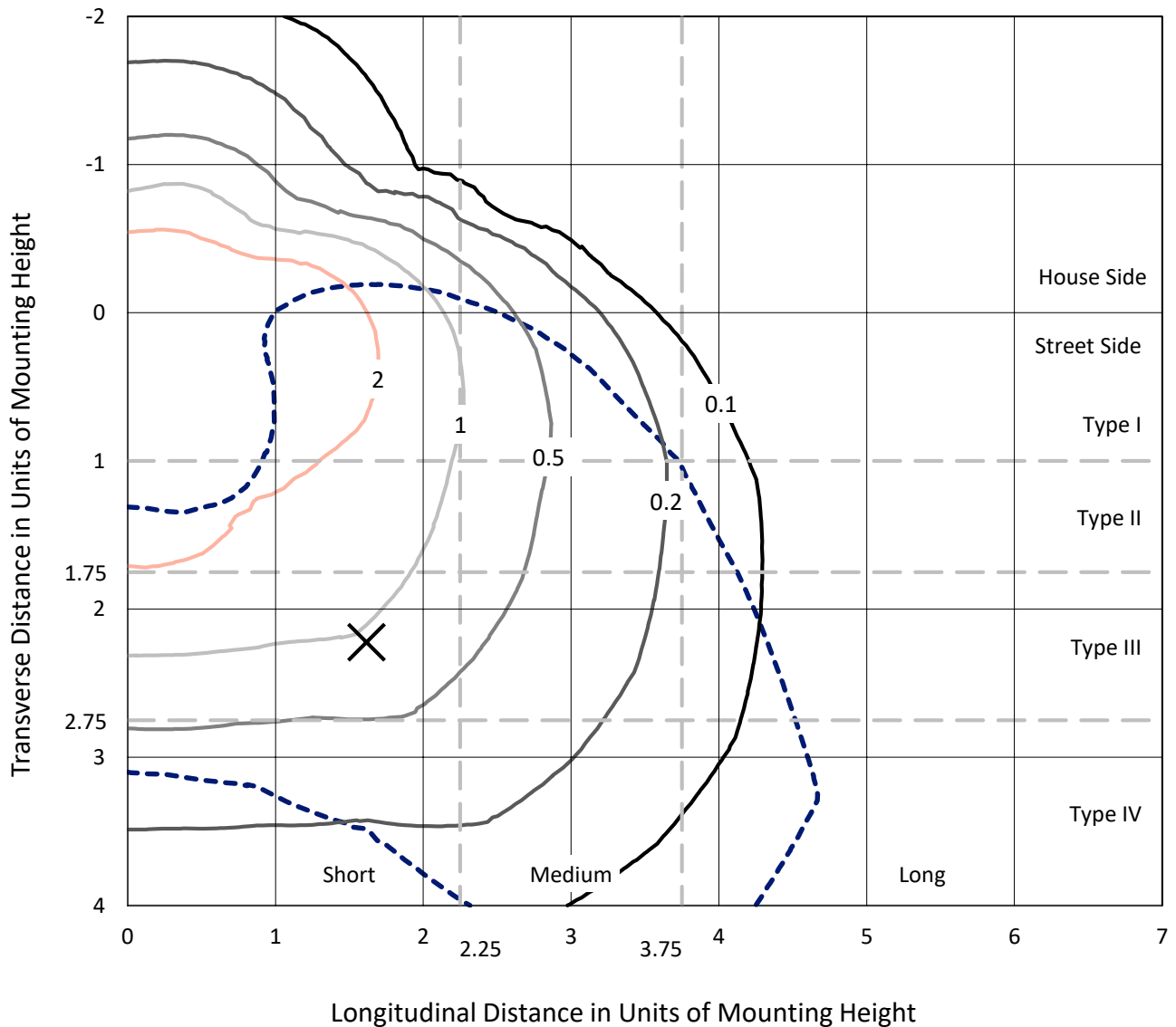
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

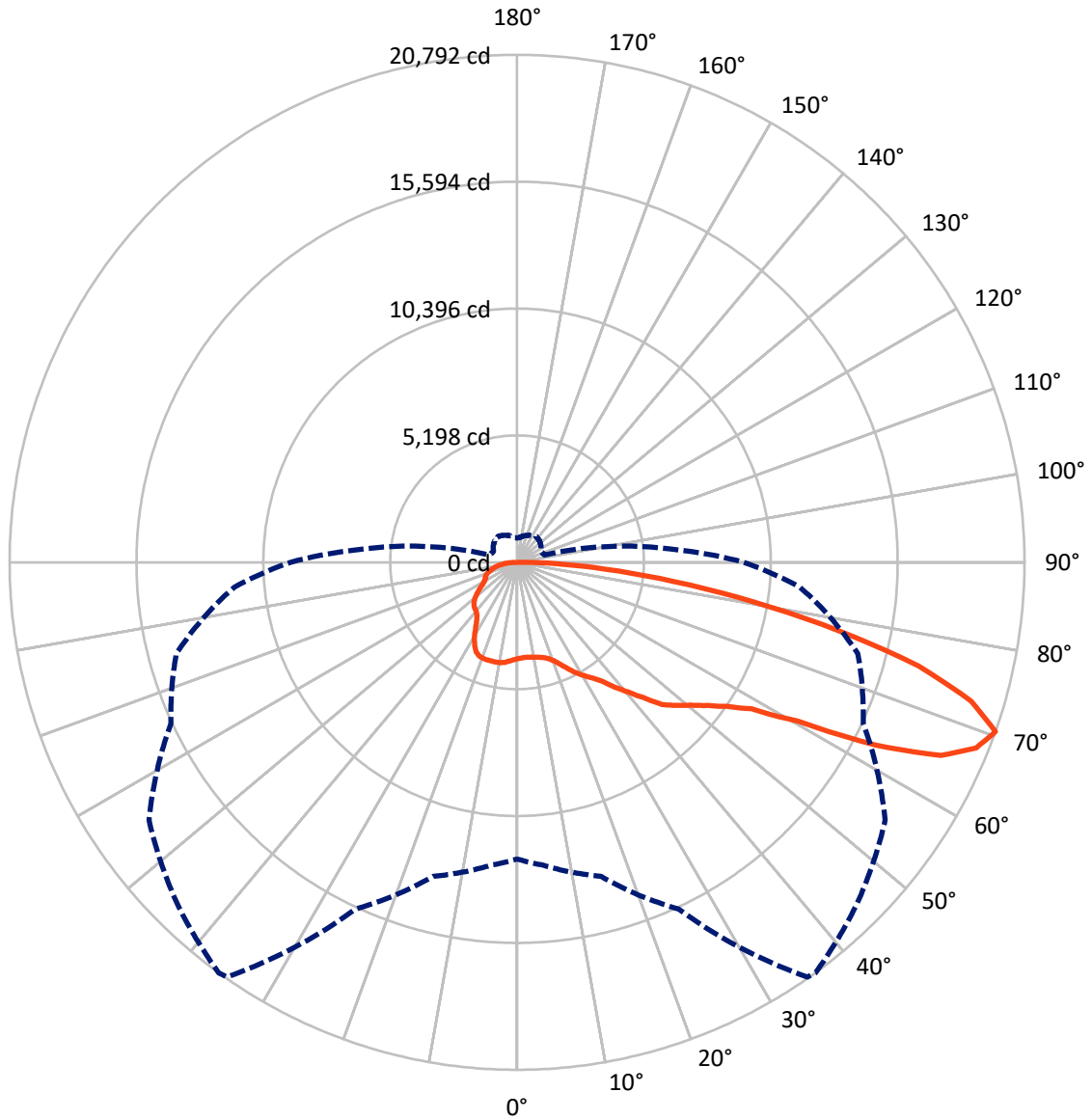
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.6 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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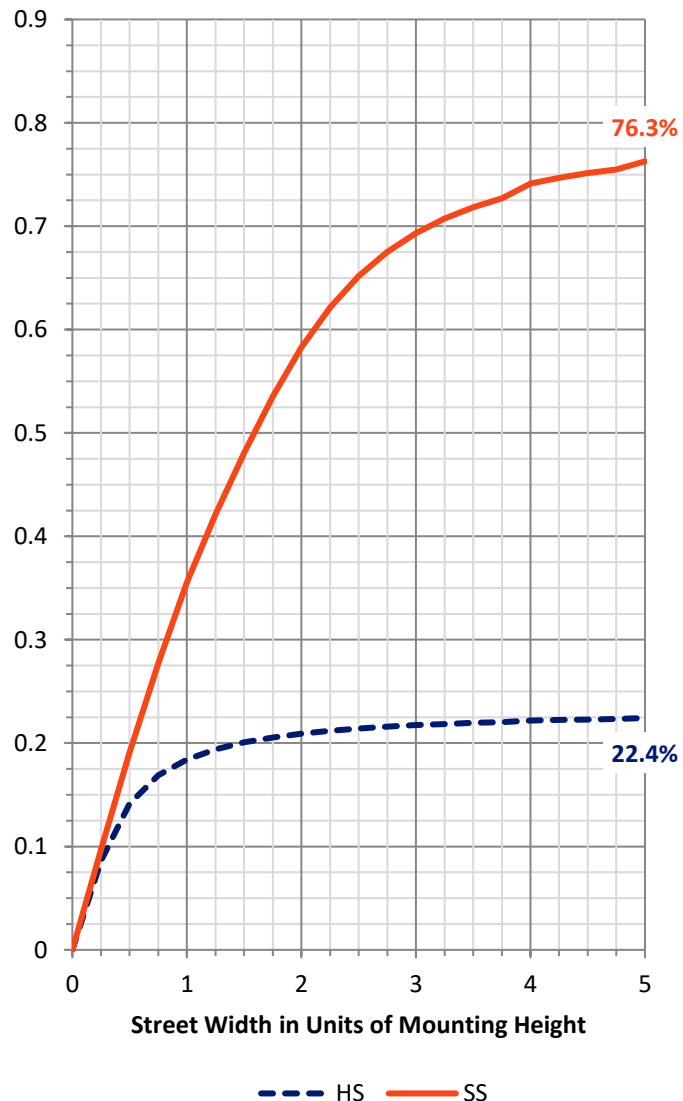
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8206.2	0.0	8206.2
	% Fixture	22.8	0.0	22.8
<b>Street Side</b>	Lumens	27810.8	0.0	27810.8
	% Fixture	77.2	0.0	77.2
<b>Total</b>	Lumens	36017.0	0.0	36017.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	382.2	1.1
10°-20°	1181.5	3.3
20°-30°	2131.3	5.9
30°-40°	3300.9	9.2
40°-50°	5014.1	13.9
50°-60°	6949.9	19.3
60°-70°	9037.2	25.1
70°-80°	6673.9	18.5
80°-90°	1346.0	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°	36017.0	100.0
0°-180°	36017.0	100.0

**Coefficient of Utilization**

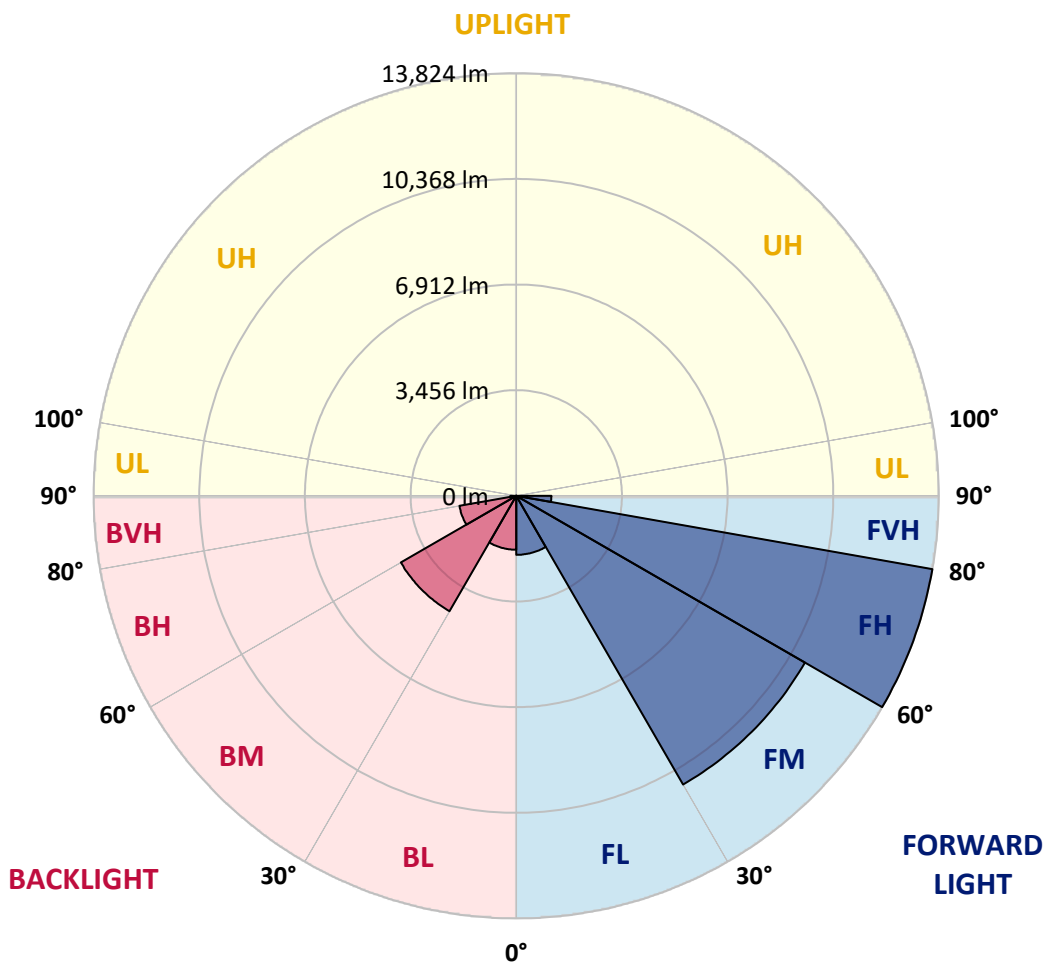


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1930.9	5.4			
FM (30°-60°)	10905.9	30.3			
FH (60°-80°)	13824.1	38.4			G5
FVH (80°-90°)	1149.9	3.2			G5
BL (0°-30°)	1764.1	4.9	B3/2500		
BM (30°-60°)	4359.1	12.1	B3/5000		
BH (60°-80°)	1887.0	5.2	B3/2500		G3/2500
BVH (80°-90°)	196.1	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°	3944.9	3944.9	3944.9	3944.9	3944.9	3944.9	3944.9	3944.9	3944.9	3944.9	3944.9
2.5°	3921.1	3915.9	3912.9	3918.8	3921.1	3921.8	3923.3	3921.8	3918.1	3931.5	3947.9
5°	3921.8	3918.8	3912.9	3907.6	3907.6	3907.6	3908.4	3925.5	3933.0	3931.5	3951.6
7.5°	3927.8	3925.5	3914.4	3910.6	3919.6	3922.6	3937.5	3932.3	3940.5	3953.9	3971.0
10°	3928.5	3925.5	3915.9	3924.1	3949.4	3953.9	3960.6	3975.5	3978.5	3994.9	4012.1
12.5°	3936.0	3936.0	3939.7	3957.6	3984.5	3989.7	4015.0	4027.0	4044.9	4053.1	4073.9
15°	3975.5	3974.8	3983.7	4003.8	4047.1	4050.1	4081.4	4117.2	4130.6	4150.8	4184.3
17.5°	4069.5	4073.9	4074.7	4089.6	4141.1	4142.6	4194.0	4227.6	4258.1	4293.9	4370.7
20°	4292.4	4284.2	4275.3	4275.3	4295.4	4305.9	4345.4	4399.1	4461.7	4525.1	4615.4
22.5°	4572.8	4589.2	4556.4	4539.3	4549.0	4537.0	4566.9	4610.1	4683.2	4777.9	4892.0
25°	4907.7	4909.2	4906.9	4837.6	4816.0	4823.4	4848.0	4888.3	4985.2	5060.6	5226.1
27.5°	5234.3	5227.6	5203.7	5130.7	5109.8	5120.2	5119.5	5230.6	5329.8	5426.0	5620.6
30°	5531.1	5549.0	5506.5	5383.5	5385.7	5384.2	5418.5	5561.7	5742.9	5921.9	6121.7
32.5°	6054.6	6000.2	5942.8	5699.6	5654.9	5649.7	5669.8	5883.1	6151.6	6453.6	6693.7
35°	6547.5	6534.1	6477.4	6230.6	5971.8	5967.4	5939.8	6199.3	6576.6	7135.9	7435.7
37.5°	7051.7	7032.3	6976.3	6766.0	6508.8	6484.2	6252.2	6536.4	7046.4	7933.9	8361.2
40°	7652.7	7640.8	7554.3	7285.1	7021.1	6983.8	6742.9	6890.6	7639.3	8996.5	9297.8
42.5°	8180.0	8177.7	8078.5	7828.7	7604.3	7567.0	7361.9	7515.5	8463.3	10037.6	10215.1
45°	8567.0	8625.9	8630.4	8487.9	8332.8	8300.0	8245.6	8457.4	9416.4	10982.4	10956.3
47.5°	8893.6	8944.3	8891.4	8818.3	8765.4	8767.6	8851.9	9272.5	10357.5	11805.7	11602.9
50°	9439.5	9408.2	9133.0	9089.8	9156.9	9196.4	9441.0	10152.4	11435.1	12578.3	12183.1
52.5°	10227.0	10106.9	9567.0	9479.0	9733.3	9748.2	10137.5	10939.2	12511.9	13241.3	12714.0
55°	11304.6	11205.4	10595.4	10189.0	10317.2	10417.9	10966.0	11745.3	13391.2	13864.7	13122.7
57.5°	12897.5	12904.9	12407.5	11649.9	11213.6	11321.0	11749.0	12529.1	14117.5	14386.7	13377.7
60°	14174.2	14410.6	14262.2	13916.2	13289.7	13216.7	12890.8	13345.7	14738.0	14830.4	13621.6
62.5°	15059.4	15166.7	15676.8	15749.9	16465.8	16496.4	14935.6	14302.4	15419.6	15121.3	13673.0
65°	15014.6	15081.0	15887.1	16868.5	18983.4	19078.1	18164.6	15749.9	15886.4	15251.0	13523.1
67.5°	13969.1	14069.0	15093.7	16928.2	20325.0	20289.2	19709.8	17764.9	16040.0	15043.0	12808.7
70°	12153.2	12461.2	13321.8	15670.1	20744.1	20791.8	19723.9	18408.5	15644.0	14454.6	11617.8
72.5°	10016.7	10113.7	10926.5	13554.5	19518.9	19448.8	18915.6	17559.1	14928.1	13390.4	9533.5
75°	7617.7	7617.7	8602.0	10802.0	16761.9	17008.0	17215.3	15903.5	13224.9	10913.8	6491.6
77.5°	5056.8	5238.0	6030.8	8117.3	13268.1	13450.1	14166.0	13556.0	10828.1	8003.2	2965.0
80°	2682.4	2704.8	3554.9	5393.9	9490.2	9833.3	10817.6	10455.2	7788.5	3749.6	749.5
82.5°	938.1	1023.9	1563.1	3126.1	6253.0	6467.0	7176.2	6212.7	2751.0	830.0	414.6
85°	466.1	482.5	688.3	1488.5	3520.6	3624.3	4192.5	2419.9	443.0	362.4	281.9
87.5°	224.5	229.7	264.0	532.5	1530.2	1601.1	1695.1	787.5	164.1	138.0	122.3
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°	3944.9	3944.9	3944.9	3944.9	3944.9	3944.9	3944.9	3944.9	3944.9	3944.9	3944.9
2.5°	3951.6	3958.4	3971.0	3974.8	3965.8	3982.2	3997.9	4012.1	4011.3	4016.5	4035.2
5°	3960.6	3974.8	3988.2	4012.1	4035.2	4048.6	4061.3	4073.2	4076.9	4088.1	4099.3
7.5°	3988.2	4002.4	4032.9	4074.7	4076.2	4109.7	4131.4	4135.1	4138.1	4138.1	4164.2
10°	4030.7	4056.8	4106.0	4135.1	4161.2	4150.0	4172.4	4158.2	4147.8	4152.2	4170.1
12.5°	4103.8	4126.9	4197.7	4229.8	4205.9	4201.5	4179.1	4147.0	4110.5	4106.8	4123.2
15°	4218.6	4261.9	4325.3	4355.8	4296.2	4243.2	4167.9	4102.3	4031.4	4005.3	4015.8
17.5°	4403.6	4455.8	4525.1	4504.2	4395.4	4291.0	4166.4	4027.7	3890.5	3795.0	3819.7
20°	4674.3	4713.0	4769.7	4685.4	4526.6	4354.3	4150.0	3930.8	3698.8	3525.1	3505.0
22.5°	4958.4	5017.3	4983.0	4827.1	4619.1	4379.0	4115.7	3789.8	3431.1	3213.4	3180.6
25°	5300.7	5320.1	5201.5	4966.6	4645.2	4340.2	4004.6	3584.0	3157.4	2952.4	2942.7
27.5°	5663.9	5619.9	5399.1	5030.7	4616.1	4225.3	3781.6	3258.9	2909.9	2728.6	2700.3
30°	6074.0	5971.8	5562.4	5037.4	4506.5	4001.6	3499.7	3004.6	2708.5	2526.5	2497.5
32.5°	6602.0	6361.1	5713.8	4968.1	4275.3	3673.5	3161.2	2787.6	2527.3	2344.6	2318.5
35°	7276.9	6870.5	5874.2	4842.8	3990.4	3345.4	2880.8	2603.4	2380.4	2160.4	2125.3
37.5°	8054.7	7581.1	6065.8	4684.7	3678.0	3056.8	2691.4	2486.3	2271.5	2022.4	1980.7
40°	8958.5	8292.6	6361.1	4496.0	3397.6	2848.7	2599.6	2446.0	2211.1	1951.6	1903.9
42.5°	9741.5	9045.0	6712.4	4293.2	3132.8	2675.7	2558.6	2419.2	2173.1	1898.6	1844.2
45°	10465.6	9666.2	7055.4	4047.1	2853.9	2557.1	2509.4	2352.0	2106.0	1833.0	1776.3
47.5°	11054.0	10168.1	7353.7	3821.1	2631.0	2448.2	2402.0	2224.5	1993.3	1754.0	1712.2
50°	11505.9	10545.4	7517.0	3641.4	2395.3	2324.5	2263.3	2080.6	1858.4	1651.8	1616.0
52.5°	11968.3	10923.5	7597.5	3650.4	2176.1	2140.3	2077.6	1921.0	1751.0	1592.1	1553.4
55°	12237.5	11078.6	7512.5	3433.4	1974.7	1932.9	1878.5	1797.2	1695.8	1554.9	1518.3
57.5°	12394.9	11174.8	7253.8	2800.2	1732.3	1692.8	1701.8	1695.1	1611.5	1463.1	1429.6
60°	12508.2	10966.0	6723.5	2058.2	1525.8	1495.9	1569.8	1545.9	1473.6	1358.0	1329.6
62.5°	12416.5	10568.5	5769.0	1547.4	1357.2	1420.6	1485.5	1441.5	1343.1	1237.9	1205.1
65°	11857.2	9788.5	4384.9	1243.1	1302.8	1390.0	1442.3	1371.4	1271.5	1146.9	1132.0
67.5°	10839.3	8374.6	2586.2	1139.5	1261.8	1354.3	1397.5	1303.5	1215.5	1096.2	1078.3
70°	9285.9	6269.4	1155.1	1061.2	1190.2	1281.9	1310.3	1221.5	1126.1	1014.2	996.3
72.5°	6911.5	3780.1	778.5	979.9	1084.3	1165.6	1196.9	1102.9	1035.1	984.4	979.1
75°	3838.3	1312.5	718.1	887.4	968.7	1041.8	1080.6	1014.2	960.5	891.2	862.8
77.5°	1222.3	557.8	682.3	793.5	896.4	956.8	950.8	850.9	833.7	749.5	742.0
80°	487.7	486.2	630.9	649.5	765.1	815.8	802.4	676.4	698.8	649.5	630.1
82.5°	382.6	445.2	505.6	495.9	595.1	654.8	636.1	496.7	561.5	516.0	472.0
85°	290.8	390.0	324.4	322.9	415.4	486.2	498.2	381.8	382.6	348.3	310.2
87.5°	149.9	143.9	124.5	123.8	138.7	197.6	242.4	217.0	171.5	129.0	123.8
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)