

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: P510649

Luminaire Tested: **CST-CA6-230-727-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510649
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-CA6-230-727-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29235 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

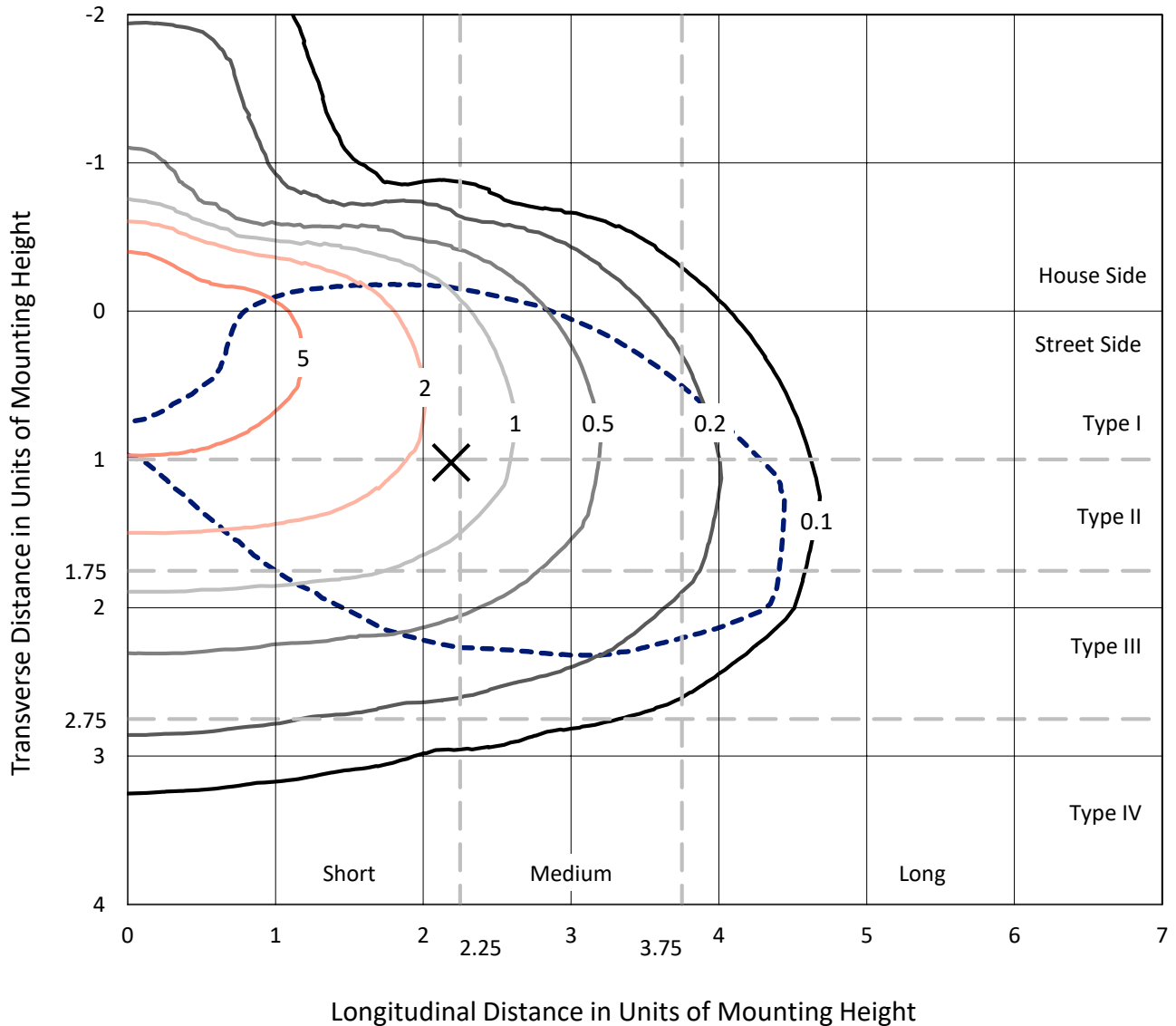
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

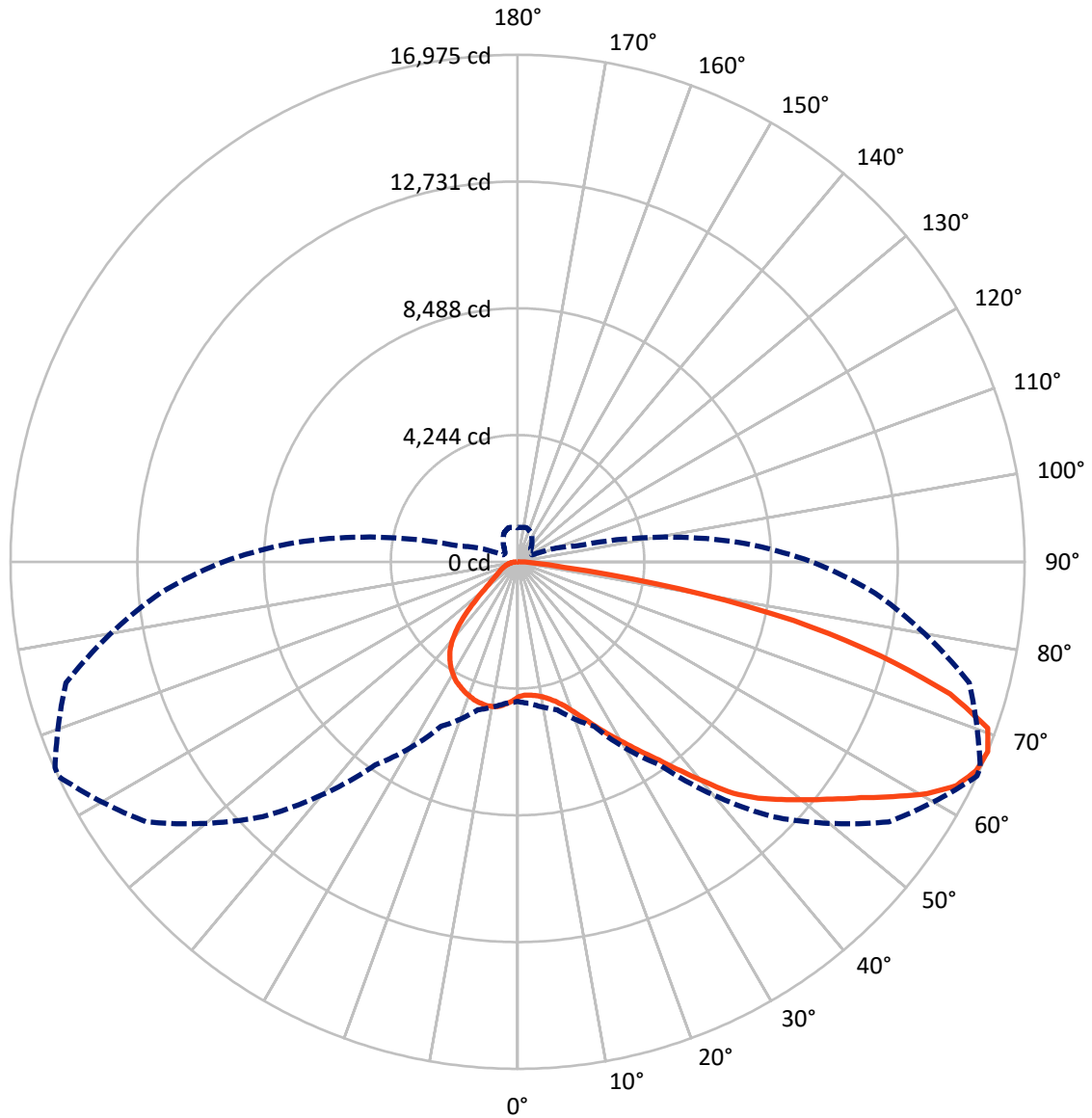
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 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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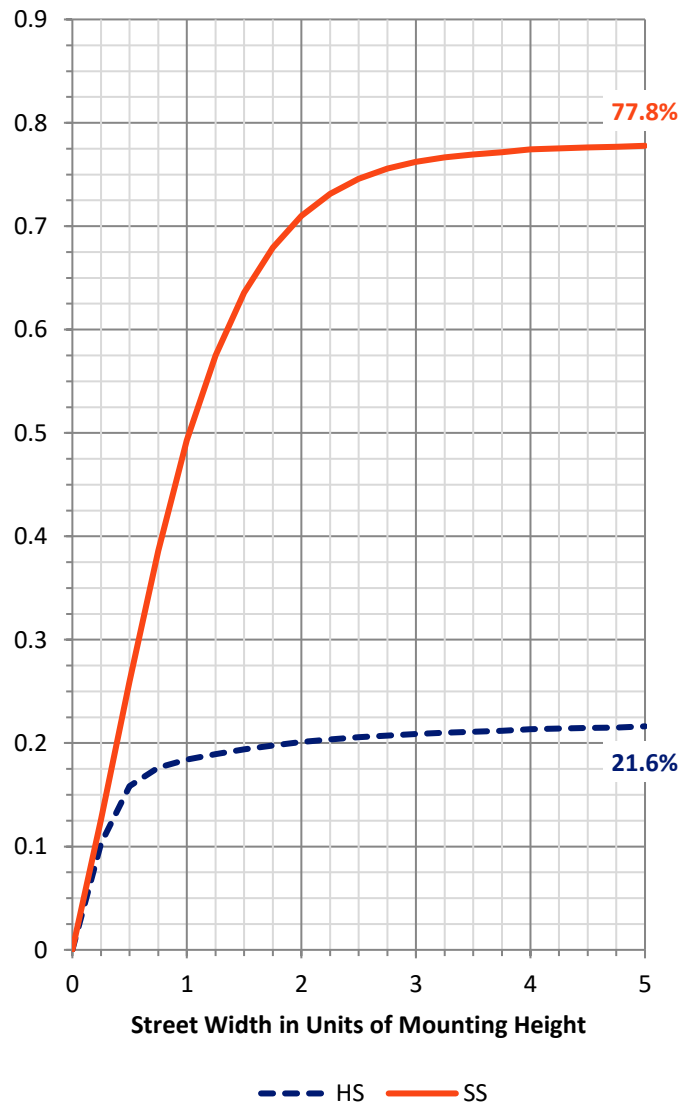
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6457.6	0.0	6457.6
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	22777.4	0.0	22777.4
	% Fixture	77.9	0.0	77.9
Total	Lumens	29235.0	0.0	29235.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	449.9	1.5
10°-20°	1405.7	4.8
20°-30°	2433.4	8.3
30°-40°	3575.7	12.2
40°-50°	4833.0	16.5
50°-60°	5943.2	20.3
60°-70°	6368.5	21.8
70°-80°	3756.1	12.8
80°-90°	469.5	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°	29235.0	100.0
0°-180°	29235.0	100.0

Coefficient of Utilization

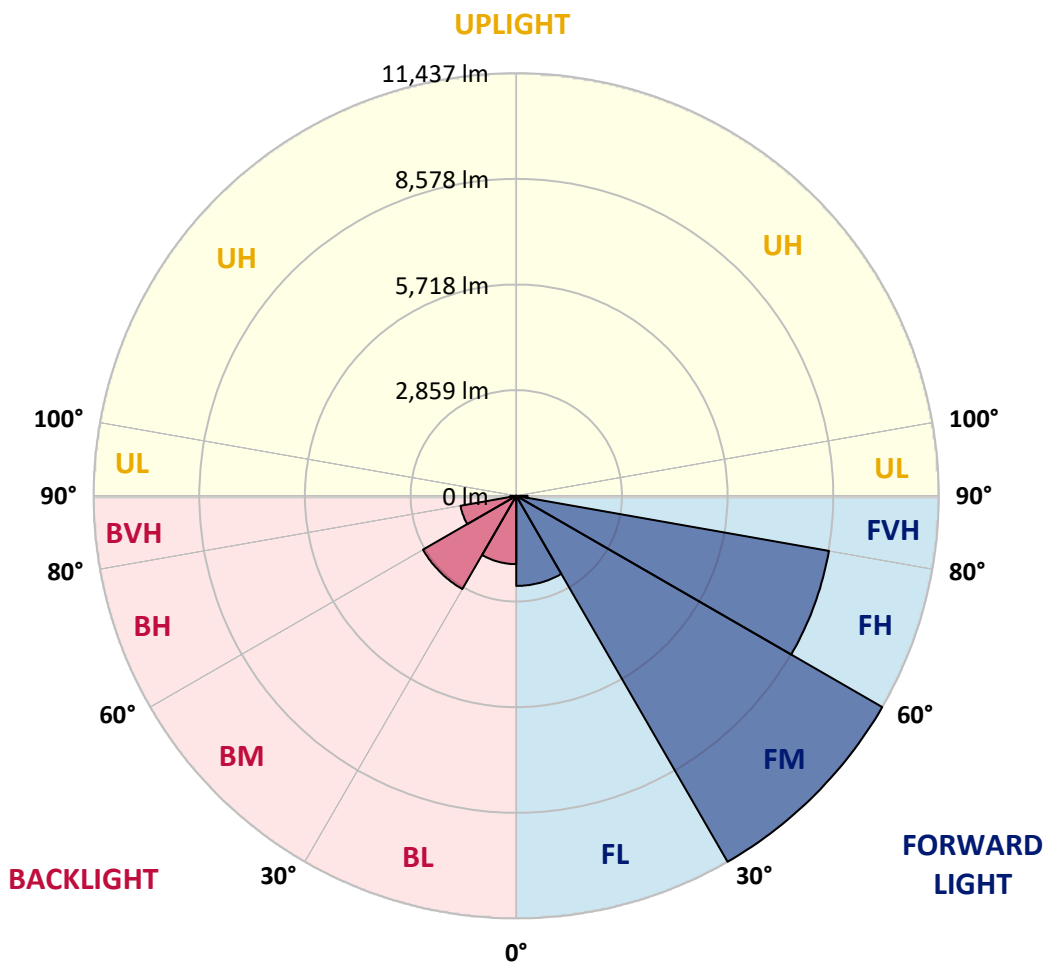


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2439.4	8.3			
FM (30°-60°)	11436.9	39.1			
FH (60°-80°)	8593.1	29.4			G4/12000
FVH (80°-90°)	307.9	1.1			G3/500
BL (0°-30°)	1849.6	6.3	B3/2500		
BM (30°-60°)	2915.0	10.0	B3/5000		
BH (60°-80°)	1531.4	5.2	B3/2500		G3/2500
BVH (80°-90°)	161.6	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°	4515.7	4515.7	4515.7	4515.7	4515.7	4515.7	4515.7	4515.7	4515.7	4515.7	4515.7
2.5°	4430.5	4422.1	4418.5	4429.9	4438.2	4447.7	4461.5	4474.6	4476.4	4493.6	4516.3
5°	4484.1	4477.0	4469.2	4467.4	4464.4	4463.8	4467.4	4482.3	4485.9	4502.6	4551.5
7.5°	4603.3	4596.2	4581.9	4576.5	4560.4	4531.8	4518.1	4525.8	4527.6	4547.9	4608.7
10°	4797.6	4775.6	4758.3	4740.4	4689.7	4644.4	4611.1	4596.8	4593.8	4613.5	4683.8
12.5°	5029.5	5011.0	4991.9	4944.9	4880.5	4798.8	4739.8	4707.0	4704.6	4721.3	4774.4
15°	5274.5	5274.5	5261.4	5205.3	5142.2	5006.8	4915.7	4860.8	4864.4	4877.5	4901.9
17.5°	5591.0	5564.8	5558.8	5495.0	5424.7	5301.3	5156.5	5068.8	5073.0	5079.0	5060.5
20°	5912.8	5905.1	5896.2	5853.8	5790.1	5631.5	5468.8	5353.8	5354.3	5332.9	5250.6
22.5°	6338.4	6312.8	6319.4	6271.7	6185.2	6022.5	5835.4	5698.9	5707.8	5676.8	5527.8
25°	6761.0	6735.4	6721.7	6689.5	6615.0	6460.6	6238.3	6113.1	6102.4	6046.4	5830.0
27.5°	7183.0	7168.1	7179.5	7140.7	7079.9	6907.7	6703.8	6564.9	6572.1	6533.3	6210.9
30°	7619.9	7603.3	7652.7	7590.1	7552.6	7385.1	7189.6	7026.3	7032.2	7046.5	6684.7
32.5°	7949.6	7969.2	8055.7	8048.5	8041.4	7854.8	7649.2	7558.6	7567.5	7617.6	7247.4
35°	8267.9	8269.6	8391.2	8483.0	8521.8	8365.6	8152.2	8149.2	8207.7	8360.2	8031.8
37.5°	8531.9	8525.9	8688.1	8830.5	8936.6	8815.6	8698.2	8881.2	8934.2	9250.7	8821.6
40°	8676.2	8688.7	8897.3	9074.9	9283.5	9226.3	9238.8	9706.7	9837.3	10114.4	9412.3
42.5°	8574.8	8613.0	8937.8	9300.2	9614.9	9691.2	9942.8	10598.4	10653.9	10703.9	9993.4
45°	8404.9	8444.9	8804.9	9390.2	9888.5	10211.0	10643.1	11284.5	11345.3	11289.2	10476.8
47.5°	8227.9	8269.0	8670.2	9353.9	10115.0	10733.1	11266.0	11891.3	11968.7	11795.3	10941.7
50°	8003.2	8067.0	8505.7	9277.0	10298.6	11296.4	11855.5	12515.9	12551.7	12301.3	11294.0
52.5°	7726.6	7797.0	8271.4	9145.2	10442.3	11689.8	12452.1	13193.6	13190.1	12892.6	11696.9
55°	7435.8	7499.5	7988.3	8937.8	10522.7	11992.6	12929.0	13940.5	13983.4	13734.3	12061.7
57.5°	7063.2	7121.0	7653.9	8658.9	10439.3	12249.5	13701.5	14828.0	14849.5	14320.2	12352.0
60°	6569.7	6654.9	7190.2	8304.2	10199.7	12546.9	14552.6	15761.4	15787.7	14896.6	12538.6
62.5°	6027.9	6061.9	6607.3	7758.2	9851.0	12776.4	15142.7	16491.6	16453.5	15347.2	12594.6
65°	5367.5	5394.3	5866.4	7056.1	9203.1	12650.6	15354.3	16867.1	16820.0	15630.3	12422.3
67.5°	4676.0	4758.9	5129.6	6082.1	8298.8	12070.1	15175.5	16975.0	16951.2	15651.8	12011.1
70°	3778.4	3807.6	4142.6	4955.0	6924.4	10907.8	14579.5	16698.4	16680.0	15172.5	11171.2
72.5°	2664.4	2635.7	2798.5	3435.7	5001.5	8676.7	12448.0	15144.5	15175.5	13572.7	9728.2
75°	1414.4	1469.3	1722.6	2103.5	2835.4	5577.9	9924.3	12533.8	12523.1	11349.4	7689.7
77.5°	753.4	752.2	926.3	1089.0	1388.2	2563.0	6545.9	9452.2	9504.7	8793.6	5279.8
80°	361.8	375.5	386.2	442.9	692.0	1184.4	2738.3	5481.3	5838.9	5244.7	2508.2
82.5°	289.7	290.9	292.1	279.5	286.1	482.2	1055.0	1586.1	1643.3	1320.9	808.8
85°	214.6	201.5	199.7	169.3	191.3	289.7	532.3	677.1	643.7	626.5	456.6
87.5°	86.4	81.1	78.7	73.9	73.9	109.1	187.8	245.0	244.4	222.9	153.2
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4515.7	4515.7	4515.7	4515.7	4515.7	4515.7	4515.7	4515.7	4515.7	4515.7	4515.7
2.5°	4534.2	4555.6	4605.7	4648.6	4664.7	4704.1	4741.0	4762.5	4777.4	4786.3	4826.8
5°	4581.3	4624.2	4704.1	4764.3	4822.7	4895.4	4942.5	4972.3	4989.0	4998.5	5027.7
7.5°	4653.4	4696.9	4781.5	4873.9	4927.6	4987.2	5017.6	5039.0	5049.8	5046.8	5070.0
10°	4717.8	4760.7	4845.3	4916.2	4946.6	4980.6	4996.7	5001.5	5002.1	5004.5	5027.7
12.5°	4805.4	4831.6	4876.9	4923.4	4916.8	4918.0	4931.7	4925.8	4912.1	4909.7	4925.2
15°	4899.6	4900.2	4903.7	4893.6	4852.5	4834.6	4815.5	4799.4	4761.9	4759.5	4783.9
17.5°	5017.6	4989.6	4924.6	4855.4	4757.7	4690.3	4622.4	4594.4	4548.5	4539.5	4551.5
20°	5169.6	5111.2	4953.2	4781.5	4598.6	4478.1	4395.9	4313.0	4249.3	4233.8	4245.1
22.5°	5387.7	5272.7	4989.6	4702.9	4419.7	4214.1	4054.4	3954.8	3847.5	3792.7	3798.1
25°	5651.2	5471.2	5052.7	4603.3	4209.3	3912.5	3653.2	3453.5	3332.5	3252.1	3273.5
27.5°	5996.3	5748.9	5128.4	4505.0	3947.7	3526.8	3150.7	2880.1	2756.7	2718.6	2693.6
30°	6396.2	6084.5	5208.3	4359.5	3665.1	3049.4	2567.8	2342.5	2201.2	2178.6	2159.5
32.5°	6931.5	6507.1	5357.9	4201.6	3327.8	2572.0	2049.2	1789.9	1757.8	1739.3	1735.1
35°	7621.7	7060.8	5514.7	3996.5	2887.9	2012.3	1550.3	1410.3	1394.8	1415.0	1416.8
37.5°	8354.3	7661.7	5702.4	3765.3	2381.8	1501.5	1186.1	1089.0	1106.3	1169.5	1183.8
40°	8850.2	8057.4	5872.9	3451.1	1756.6	1090.8	863.1	842.2	937.6	1018.7	1035.3
42.5°	9325.8	8357.3	5942.1	3035.7	1252.9	776.7	696.8	768.3	901.8	990.6	1002.6
45°	9731.8	8706.0	5768.0	2537.4	849.4	649.1	667.6	766.5	914.9	1013.3	1022.2
47.5°	10118.0	8990.9	5530.2	1999.2	670.0	624.7	667.0	782.6	944.1	1037.1	1042.5
50°	10487.0	9207.8	5124.3	1521.1	627.6	613.3	672.3	807.7	960.2	1018.7	1016.3
52.5°	10760.5	9319.9	4692.1	1227.9	611.0	604.4	686.7	839.2	963.2	998.4	996.0
55°	10961.4	9298.4	4408.4	1005.5	597.2	600.8	709.9	863.1	991.8	1044.9	1043.1
57.5°	10979.9	9201.3	4085.9	849.4	580.6	600.2	734.9	896.5	1134.9	1232.6	1202.8
60°	10957.8	9040.3	3764.1	745.7	562.1	603.8	761.2	996.6	1341.1	1418.0	1397.1
62.5°	10849.4	8740.5	3281.9	677.1	546.0	616.9	780.8	1075.9	1331.0	1339.9	1310.1
65°	10514.4	8339.4	2648.9	608.0	529.9	625.9	796.9	1096.7	1222.5	1193.9	1179.0
67.5°	9851.6	7443.5	2043.3	544.8	509.0	624.1	844.6	1066.9	1181.4	1160.5	1141.4
70°	8909.8	6425.5	1418.6	479.8	473.9	612.7	832.7	1077.1	1161.7	1129.5	1103.9
72.5°	7443.5	5040.8	902.4	426.8	421.4	585.9	802.9	1070.5	1148.6	1134.3	1099.1
75°	5604.7	3518.5	573.4	369.0	374.9	537.0	755.2	1035.3	1142.0	1097.3	1030.0
77.5°	3528.6	1736.9	445.8	313.5	322.5	463.1	652.7	904.2	1096.1	1069.3	982.9
80°	1334.6	705.1	348.7	254.5	262.3	360.0	535.3	743.9	1009.1	1053.2	1016.3
82.5°	614.5	441.1	261.7	204.4	207.4	262.3	399.4	550.8	854.1	966.8	1059.2
85°	358.8	289.1	174.6	136.5	141.9	155.0	224.7	336.2	553.7	737.3	824.9
87.5°	122.2	100.7	68.0	57.8	56.0	63.8	54.2	110.3	164.5	289.7	330.8
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)