

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: P510749

Luminaire Tested: **CST-CA8-230-760-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510749
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-CA8-230-760-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35802 lumens
Efficiency: N/A
Efficacy: 156.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

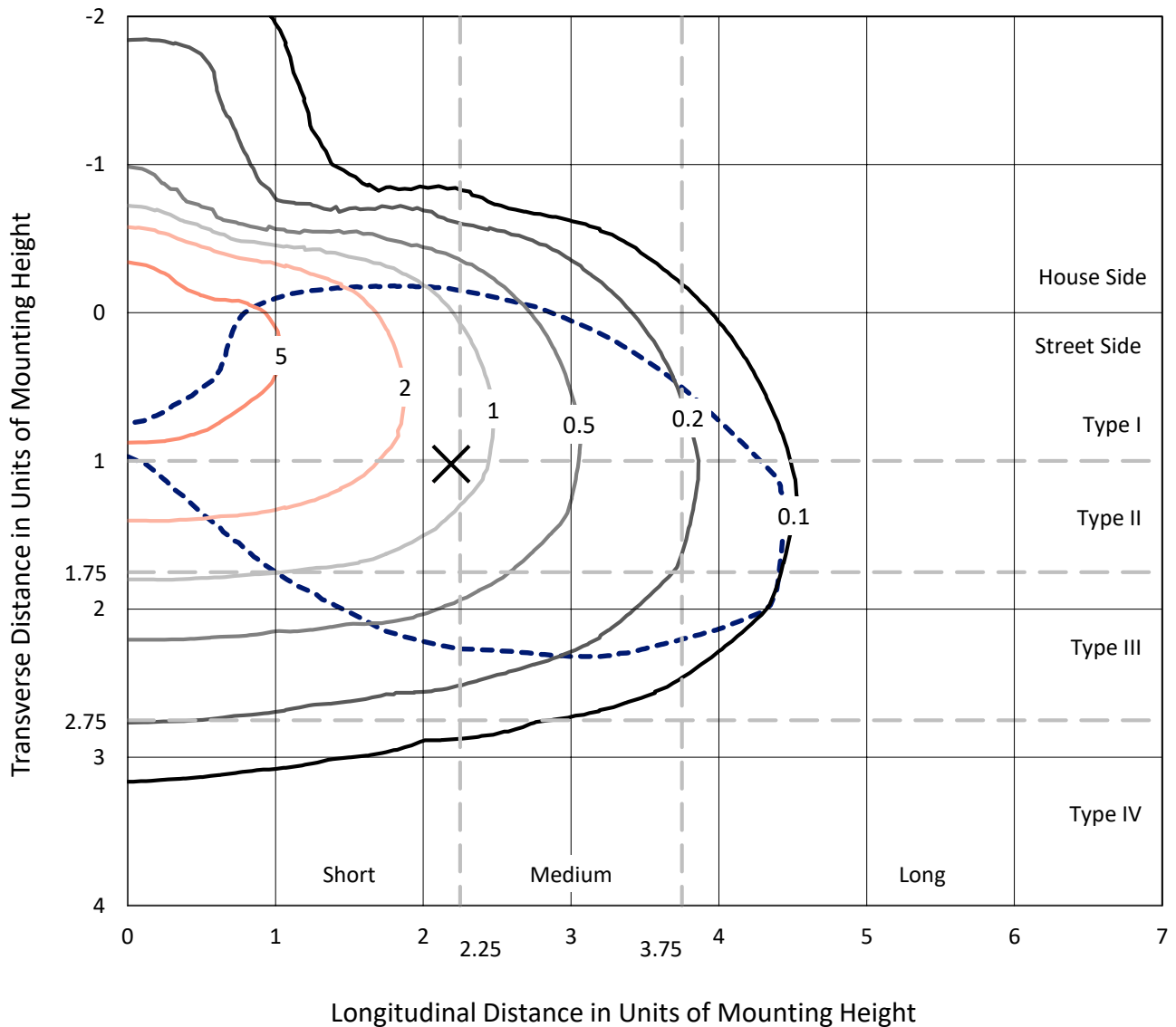
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

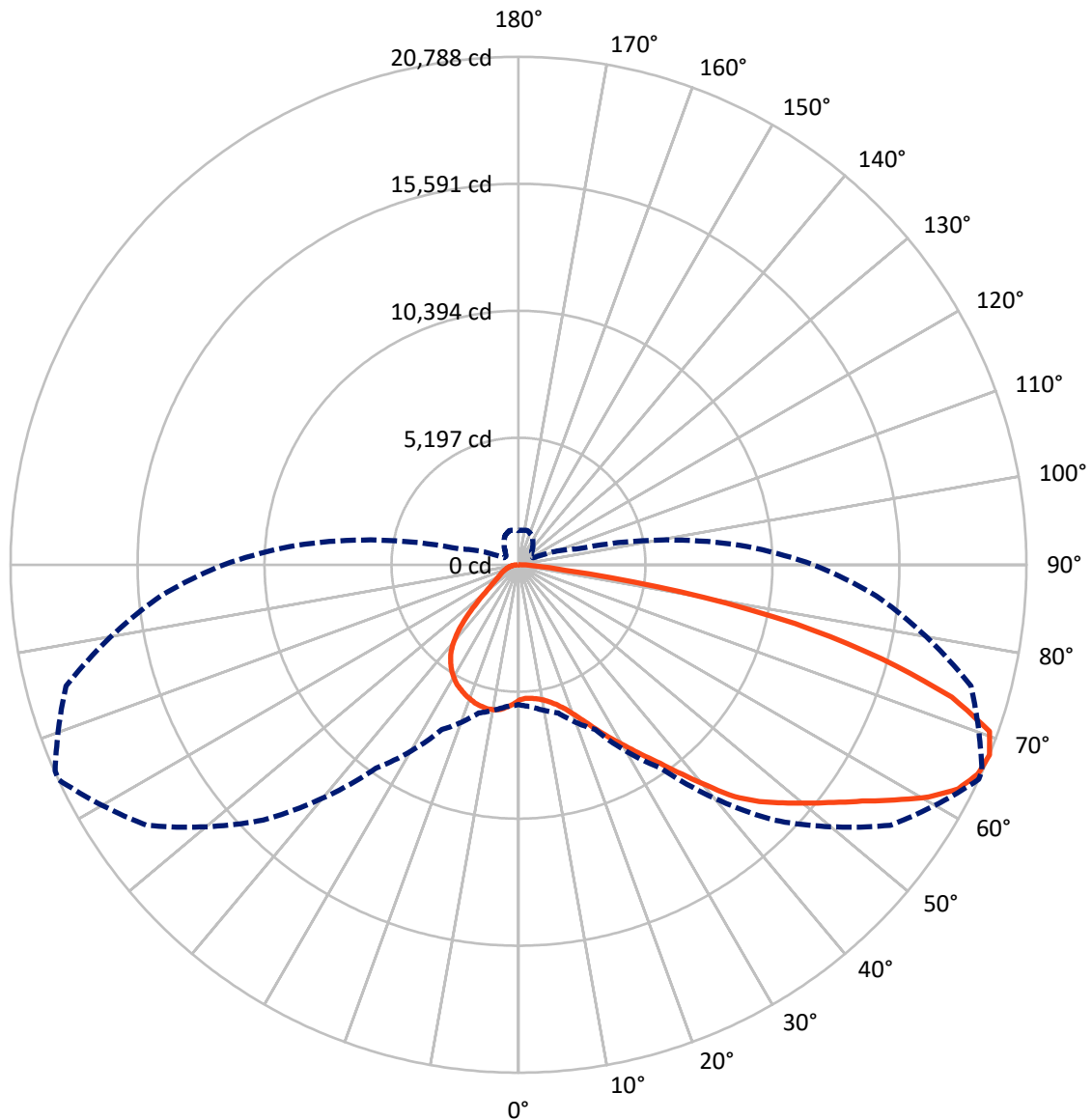
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.8 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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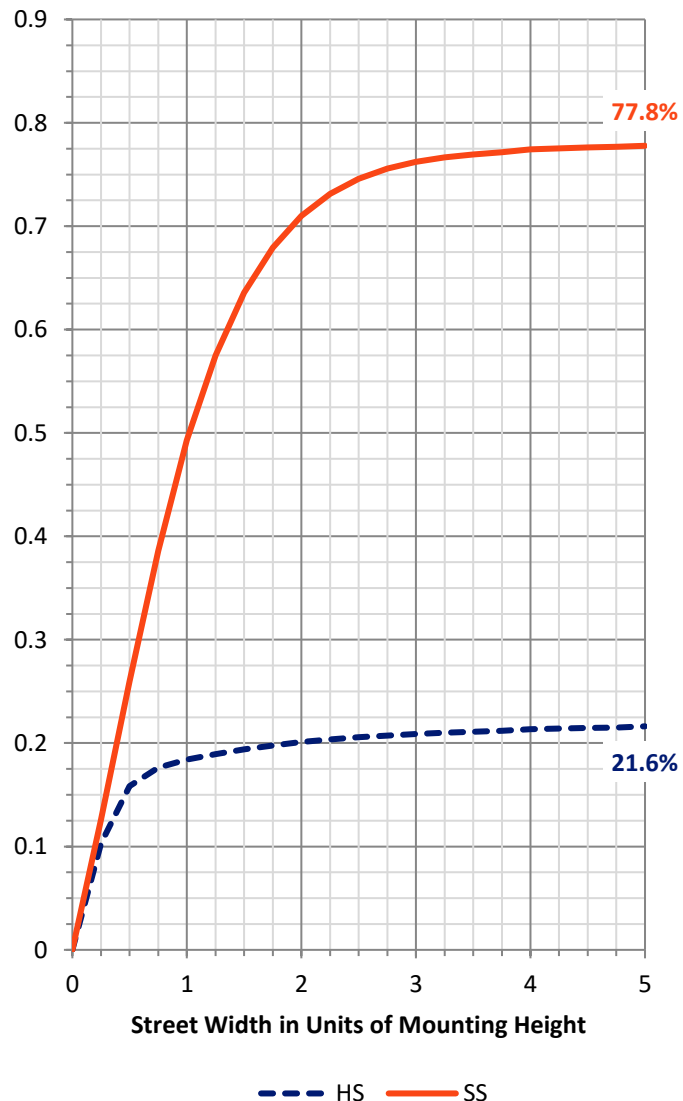
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7908.2	0.0	7908.2
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	27893.8	0.0	27893.8
	% Fixture	77.9	0.0	77.9
Total	Lumens	35802.0	0.0	35802.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	551.0	1.5
10°-20°	1721.5	4.8
20°-30°	2980.1	8.3
30°-40°	4378.9	12.2
40°-50°	5918.7	16.5
50°-60°	7278.2	20.3
60°-70°	7799.0	21.8
70°-80°	4599.8	12.8
80°-90°	575.0	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°	35802.0	100.0
0°-180°	35802.0	100.0

Coefficient of Utilization

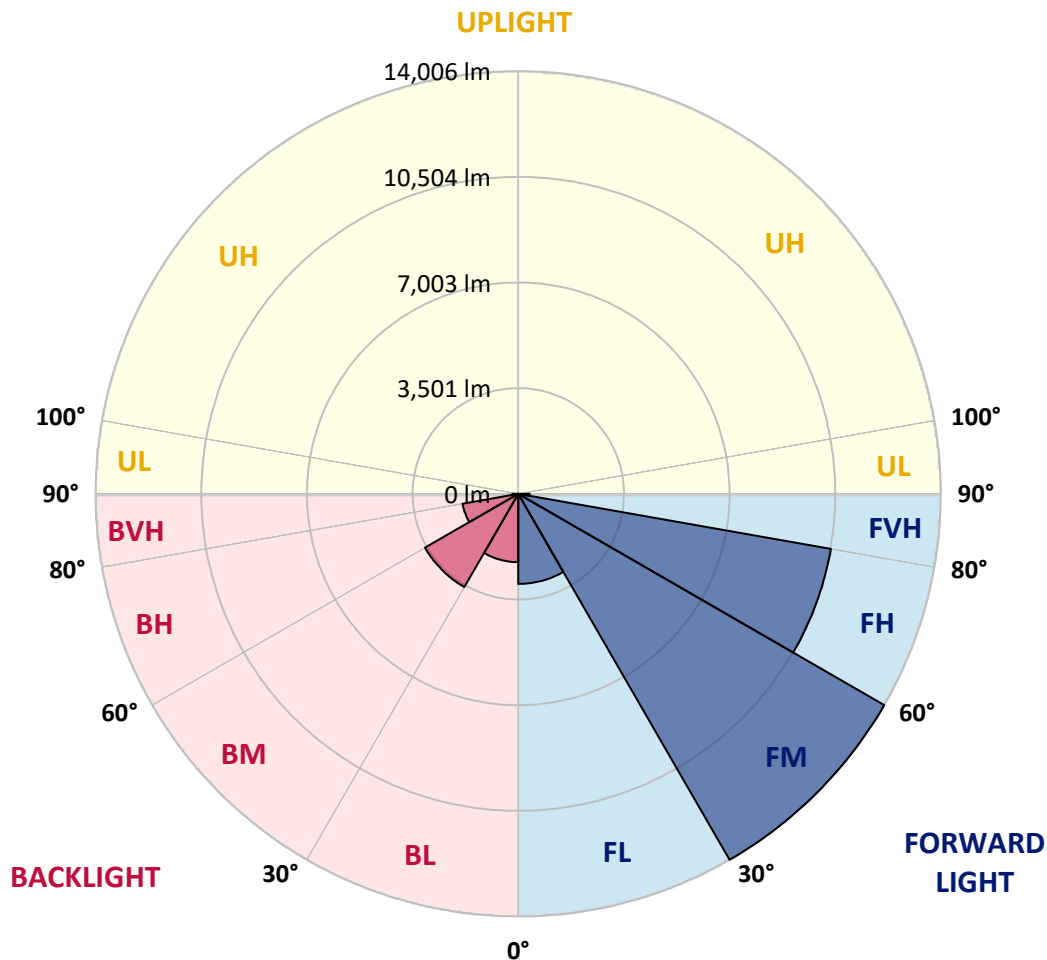


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2987.4	8.3			
FM (30°-60°)	14006.0	39.1			
FH (60°-80°)	10523.4	29.4			G4/12000
FVH (80°-90°)	377.0	1.1			G3/500
BL (0°-30°)	2265.1	6.3	B3/2500		
BM (30°-60°)	3569.7	10.0	B3/5000		
BH (60°-80°)	1875.4	5.2	B3/2500		G3/2500
BVH (80°-90°)	197.9	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°	5530.1	5530.1	5530.1	5530.1	5530.1	5530.1	5530.1	5530.1	5530.1	5530.1	5530.1
2.5°	5425.7	5415.5	5411.1	5424.9	5435.2	5446.8	5463.6	5479.7	5481.9	5503.0	5530.8
5°	5491.4	5482.6	5473.1	5470.9	5467.3	5466.5	5470.9	5489.2	5493.6	5514.0	5573.8
7.5°	5637.4	5628.6	5611.1	5604.5	5584.8	5549.8	5533.0	5542.5	5544.7	5569.5	5643.9
10°	5875.3	5848.3	5827.1	5805.2	5743.2	5687.7	5646.8	5629.3	5625.7	5649.8	5735.9
12.5°	6159.3	6136.6	6113.3	6055.6	5976.8	5876.8	5804.5	5764.4	5761.4	5781.9	5846.8
15°	6459.3	6459.3	6443.2	6374.6	6297.2	6131.5	6019.8	5952.7	5957.1	5973.1	6003.1
17.5°	6846.9	6814.8	6807.5	6729.3	6643.2	6492.1	6314.7	6207.4	6212.5	6219.8	6197.2
20°	7241.0	7231.6	7220.6	7168.8	7090.7	6896.5	6697.2	6556.4	6557.1	6530.8	6430.1
22.5°	7762.2	7730.8	7738.9	7680.5	7574.6	7375.3	7146.1	6979.0	6989.9	6952.0	6769.5
25°	8279.7	8248.4	8231.6	8192.2	8100.9	7911.9	7639.6	7486.3	7473.2	7404.5	7139.6
27.5°	8796.5	8778.3	8792.2	8744.7	8670.3	8459.3	8209.7	8039.6	8048.4	8000.9	7606.0
30°	9331.6	9311.2	9371.7	9295.1	9249.1	9044.0	8804.6	8604.6	8611.9	8629.4	8186.3
32.5°	9735.3	9759.3	9865.2	9856.4	9847.7	9619.2	9367.4	9256.4	9267.4	9328.7	8875.4
35°	10125.0	10127.2	10276.1	10388.6	10436.0	10244.8	9983.4	9979.8	10051.3	10238.2	9836.0
37.5°	10448.4	10441.1	10639.7	10814.1	10944.0	10795.9	10652.1	10876.2	10941.1	11328.7	10803.2
40°	10625.1	10640.4	10895.9	11113.4	11368.9	11298.8	11314.1	11887.1	12047.0	12386.4	11526.5
42.5°	10501.0	10547.7	10945.5	11389.3	11774.7	11868.2	12176.2	12979.1	13047.0	13108.3	12238.2
45°	10292.9	10341.8	10782.7	11499.5	12109.8	12504.7	13033.9	13819.3	13893.7	13825.1	12830.2
47.5°	10076.1	10126.5	10617.8	11455.0	12387.1	13144.1	13796.7	14562.4	14657.3	14444.9	13399.6
50°	9801.0	9879.1	10416.3	11360.8	12612.0	13833.9	14518.6	15327.4	15371.1	15064.6	13831.0
52.5°	9462.3	9548.4	10129.4	11199.5	12787.9	14315.7	15249.2	16157.3	16152.9	15788.7	14324.4
55°	9106.0	9184.1	9782.7	10945.5	12886.4	14686.5	15833.2	17071.9	17124.5	16819.4	14771.1
57.5°	8649.8	8720.6	9373.2	10603.9	12784.2	15001.1	16779.2	18158.8	18185.1	17536.9	15126.6
60°	8045.4	8149.8	8805.3	10169.6	12490.8	15365.3	17821.6	19301.9	19334.0	18242.7	15355.1
62.5°	7381.9	7423.5	8091.4	9500.9	12063.8	15646.3	18544.2	20196.1	20149.4	18794.6	15423.7
65°	6573.1	6606.0	7184.1	8641.1	11270.3	15492.3	18803.3	20655.9	20598.3	19141.3	15212.8
67.5°	5726.4	5827.9	6281.9	7448.3	10163.0	14781.4	18584.4	20788.1	20758.9	19167.6	14709.1
70°	4627.1	4662.9	5073.1	6068.0	8479.8	13358.0	17854.4	20449.4	20426.7	18580.7	13680.6
72.5°	3262.8	3227.8	3427.1	4207.4	6125.0	10625.8	15244.1	18546.4	18584.4	16621.5	11913.4
75°	1732.2	1799.3	2109.5	2576.0	3472.3	6830.8	12153.6	15349.3	15336.1	13898.9	9417.0
77.5°	922.6	921.2	1134.3	1333.6	1700.0	3138.8	8016.2	11575.4	11639.7	10768.9	6465.8
80°	443.1	459.9	473.0	542.3	847.5	1450.4	3353.4	6712.6	7150.5	6422.8	3071.6
82.5°	354.8	356.2	357.7	342.3	350.4	590.5	1292.0	1942.4	2012.5	1617.6	990.5
85°	262.8	246.7	244.5	207.3	234.3	354.8	651.8	829.2	788.3	767.2	559.1
87.5°	105.8	99.3	96.4	90.5	90.5	133.6	229.9	300.0	299.3	273.0	187.6
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°	5530.1	5530.1	5530.1	5530.1	5530.1	5530.1	5530.1	5530.1	5530.1	5530.1	5530.1
2.5°	5552.7	5579.0	5640.3	5692.8	5712.5	5760.7	5806.0	5832.2	5850.5	5861.4	5911.1
5°	5610.3	5662.9	5760.7	5834.4	5906.0	5995.0	6052.7	6089.2	6109.6	6121.3	6157.1
7.5°	5698.7	5752.0	5855.6	5968.7	6034.4	6107.4	6144.7	6170.9	6184.1	6180.4	6208.9
10°	5777.5	5830.1	5933.7	6020.6	6057.8	6099.4	6119.1	6125.0	6125.7	6128.6	6157.1
12.5°	5884.8	5916.9	5972.4	6029.3	6021.3	6022.8	6039.6	6032.3	6015.5	6012.5	6031.5
15°	6000.1	6000.9	6005.2	5992.8	5942.5	5920.6	5897.2	5877.5	5831.5	5828.6	5858.5
17.5°	6144.7	6110.4	6030.8	5946.1	5826.4	5743.9	5660.7	5626.4	5570.2	5559.2	5573.8
20°	6330.8	6259.3	6065.8	5855.6	5631.5	5484.1	5383.3	5281.9	5203.8	5184.8	5198.7
22.5°	6598.0	6457.1	6110.4	5759.3	5412.5	5160.7	4965.1	4843.2	4711.8	4644.6	4651.2
25°	6920.6	6700.2	6187.7	5637.4	5154.9	4791.3	4473.8	4229.3	4081.1	3982.6	4008.8
27.5°	7343.2	7040.3	6280.4	5516.9	4834.4	4319.1	3858.5	3527.1	3376.0	3329.3	3298.6
30°	7833.0	7451.3	6378.2	5338.8	4488.4	3734.4	3144.6	2868.7	2695.7	2667.9	2644.6
32.5°	8488.5	7968.8	6561.5	5145.4	4075.3	3149.7	2509.5	2192.0	2152.6	2130.0	2124.9
35°	9333.8	8646.9	6753.4	4894.3	3536.6	2464.3	1898.6	1727.0	1708.1	1732.9	1735.1
37.5°	10230.9	9382.7	6983.4	4611.1	2916.9	1838.7	1452.6	1333.6	1354.8	1432.1	1449.7
40°	10838.2	9867.4	7192.1	4226.4	2151.1	1335.8	1057.0	1031.4	1148.2	1247.5	1267.9
42.5°	11420.7	10234.5	7276.8	3717.6	1534.3	951.1	853.3	940.9	1104.4	1213.2	1227.8
45°	11917.8	10661.6	7063.7	3107.4	1040.2	794.9	817.5	938.7	1120.5	1240.9	1251.9
47.5°	12390.8	11010.5	6772.4	2448.2	820.5	765.0	816.8	958.4	1156.2	1270.1	1276.7
50°	12842.6	11276.2	6275.3	1862.8	768.6	751.1	823.4	989.1	1175.9	1247.5	1244.6
52.5°	13177.7	11413.4	5746.1	1503.7	748.2	740.2	840.9	1027.8	1179.6	1222.7	1219.7
55°	13423.7	11387.1	5398.7	1231.4	731.4	735.8	869.4	1057.0	1214.6	1279.6	1277.4
57.5°	13446.3	11268.1	5003.8	1040.2	711.0	735.1	900.0	1097.8	1389.8	1509.5	1473.0
60°	13419.3	11071.1	4609.6	913.2	688.3	739.4	932.1	1220.5	1642.4	1736.5	1711.0
62.5°	13286.4	10703.9	4019.1	829.2	668.6	755.5	956.2	1317.5	1630.0	1640.9	1604.4
65°	12876.2	10212.6	3243.9	744.5	648.9	766.4	975.9	1343.1	1497.1	1462.1	1443.8
67.5°	12064.5	9115.5	2502.2	667.2	623.4	764.3	1034.3	1306.6	1446.7	1421.2	1397.8
70°	10911.2	7868.8	1737.3	587.6	580.3	750.4	1019.7	1319.0	1422.7	1383.2	1351.9
72.5°	9115.5	6173.1	1105.1	522.6	516.1	717.5	983.2	1311.0	1406.6	1389.1	1346.0
75°	6863.7	4308.9	702.2	451.8	459.1	657.7	924.8	1267.9	1398.6	1343.8	1261.3
77.5°	4321.3	2127.1	546.0	384.0	394.9	567.2	799.3	1107.3	1342.4	1309.5	1203.7
80°	1634.3	863.5	427.0	311.7	321.2	440.9	655.5	911.0	1235.8	1289.8	1244.6
82.5°	752.6	540.2	320.4	250.4	254.0	321.2	489.1	674.5	1046.0	1184.0	1297.1
85°	439.4	354.0	213.9	167.2	173.7	189.8	275.2	411.7	678.1	902.9	1010.2
87.5°	149.6	123.4	83.2	70.8	68.6	78.1	66.4	135.0	201.5	354.8	405.1
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)