

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: P510801

Luminaire Tested: **CST-CA8-330-750-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510801
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-CA8-330-750-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: 49183 lumens
Efficiency: N/A
Efficacy: 148.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

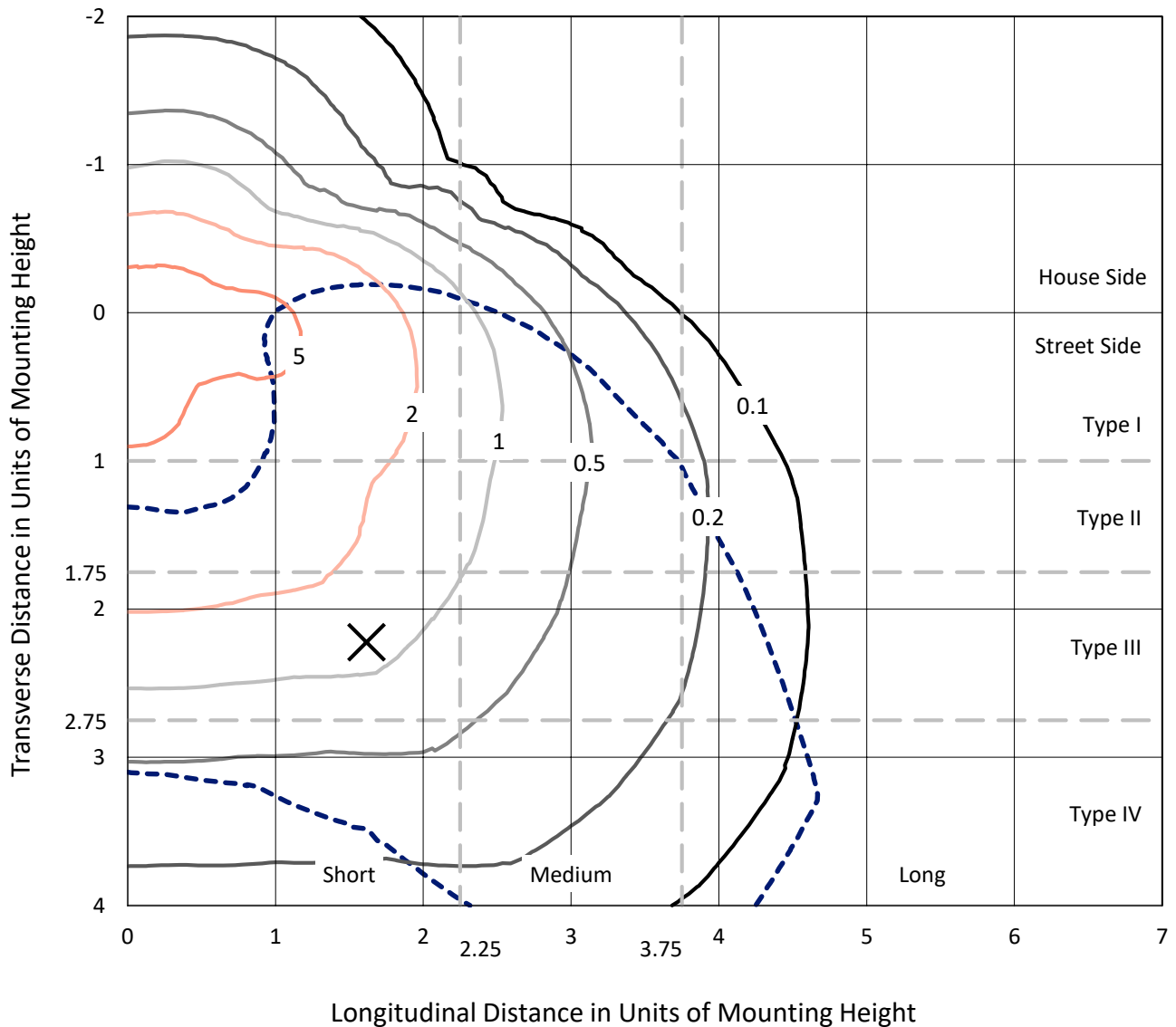
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

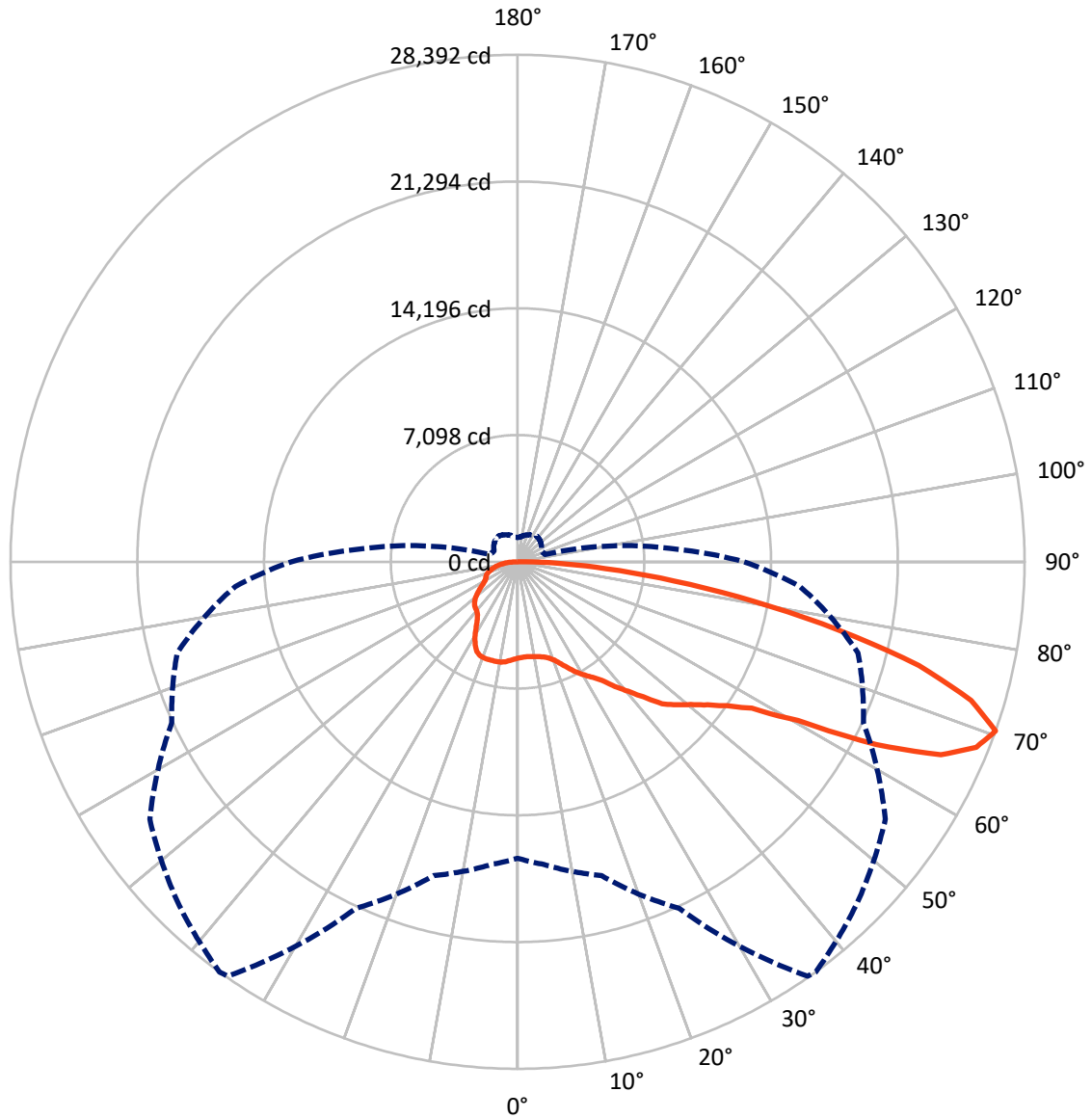
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.2 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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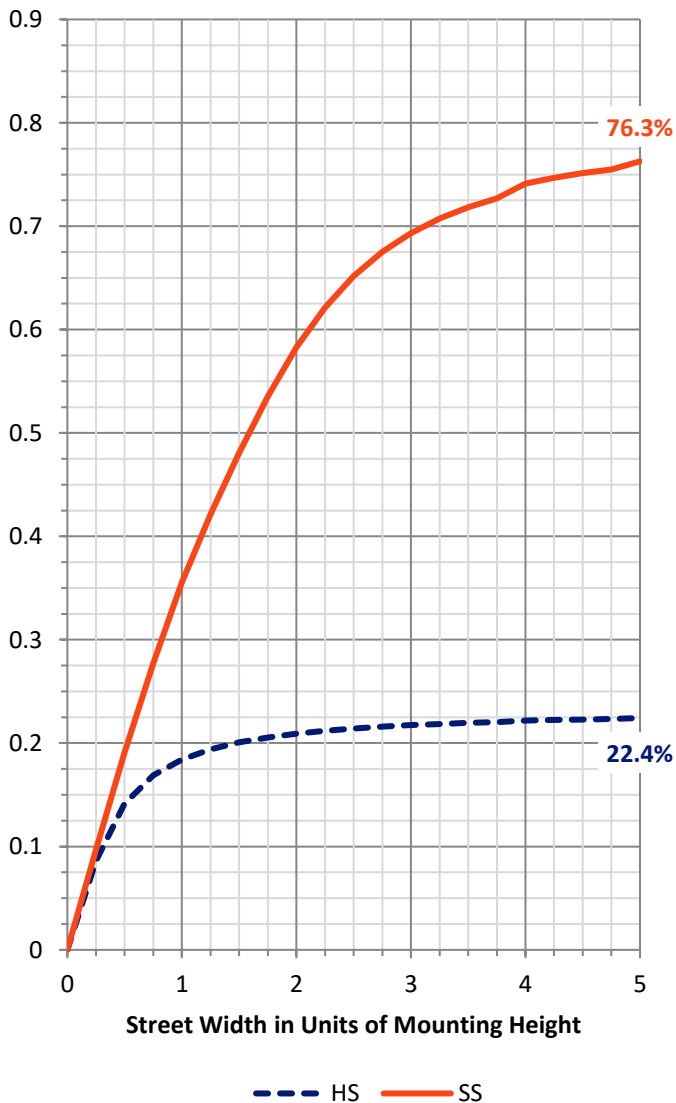
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11206.0	0.0	11206.0
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	37977.0	0.0	37977.0
	% Fixture	77.2	0.0	77.2
Total	Lumens	49183.0	0.0	49183.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	521.9	1.1
10°-20°	1613.4	3.3
20°-30°	2910.4	5.9
30°-40°	4507.6	9.2
40°-50°	6847.0	13.9
50°-60°	9490.4	19.3
60°-70°	12340.8	25.1
70°-80°	9113.5	18.5
80°-90°	1838.0	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°	49183.0	100.0
0°-180°	49183.0	100.0

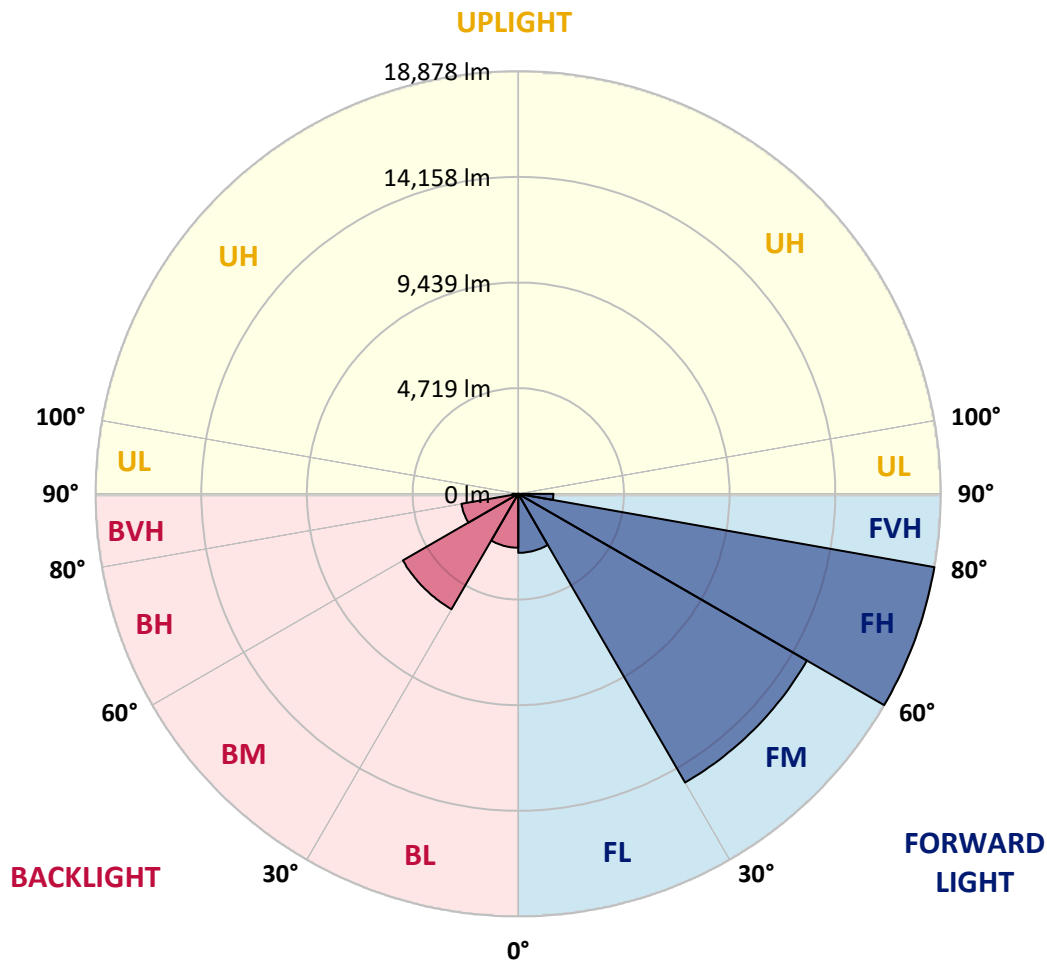


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2636.7	5.4			
FM (30°-60°)	14892.5	30.3			
FH (60°-80°)	18877.5	38.4			G5
FVH (80°-90°)	1570.2	3.2			G5
BL (0°-30°)	2409.0	4.9	B3/2500		
BM (30°-60°)	5952.5	12.1	B4/8500		
BH (60°-80°)	2576.8	5.2	B4/5000		G4/5000
BVH (80°-90°)	267.8	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	5387.0	5387.0	5387.0	5387.0	5387.0	5387.0	5387.0	5387.0	5387.0	5387.0	5387.0
2.5°	5354.4	5347.3	5343.2	5351.4	5354.4	5355.4	5357.5	5355.4	5350.3	5368.7	5391.1
5°	5355.4	5351.4	5343.2	5336.1	5336.1	5336.1	5337.1	5360.5	5370.7	5368.7	5396.2
7.5°	5363.6	5360.5	5345.3	5340.2	5352.4	5356.5	5376.8	5369.7	5380.9	5399.2	5422.6
10°	5364.6	5360.5	5347.3	5358.5	5393.1	5399.2	5408.4	5428.8	5432.8	5455.2	5478.7
12.5°	5374.8	5374.8	5379.9	5404.3	5441.0	5448.1	5482.7	5499.0	5523.5	5534.7	5563.2
15°	5428.8	5427.7	5440.0	5467.5	5526.5	5530.6	5573.4	5622.2	5640.6	5668.1	5713.9
17.5°	5557.1	5563.2	5564.2	5584.6	5654.8	5656.9	5727.1	5773.0	5814.7	5863.6	5968.5
20°	5861.6	5850.3	5838.1	5838.1	5865.6	5879.9	5933.9	6007.2	6092.7	6179.3	6302.5
22.5°	6244.4	6266.8	6222.0	6198.6	6211.9	6195.6	6236.3	6295.4	6395.2	6524.5	6680.3
25°	6701.7	6703.7	6700.7	6606.0	6576.4	6586.6	6620.2	6675.2	6807.6	6910.4	7136.5
27.5°	7147.7	7138.5	7106.0	7006.2	6977.6	6991.9	6990.9	7142.6	7278.1	7409.4	7675.2
30°	7553.0	7577.4	7519.4	7351.4	7354.4	7352.4	7399.2	7594.8	7842.2	8086.6	8359.5
32.5°	8267.9	8193.5	8115.1	7783.2	7722.1	7714.9	7742.4	8033.7	8400.3	8812.7	9140.6
35°	8941.0	8922.7	8845.3	8508.2	8154.8	8148.7	8111.1	8465.4	8980.7	9744.5	10153.8
37.5°	9629.4	9602.9	9526.5	9239.4	8888.0	8854.4	8537.7	8925.7	9622.3	10834.1	11417.6
40°	10450.2	10433.9	10315.8	9948.1	9587.6	9536.7	9207.8	9409.4	10431.8	12285.2	12696.6
42.5°	11170.1	11167.1	11031.6	10690.5	10384.0	10333.1	10053.0	10262.8	11557.1	13706.8	13949.2
45°	11698.7	11779.1	11785.2	11590.7	11378.9	11334.1	11259.8	11549.0	12858.5	14997.1	14961.4
47.5°	12144.7	12213.9	12141.6	12041.8	11969.5	11972.6	12087.7	12662.0	14143.7	16121.3	15844.3
50°	12890.1	12847.3	12471.6	12412.5	12504.2	12558.1	12892.2	13863.6	15615.2	17176.3	16636.6
52.5°	13965.5	13801.5	13064.3	12944.1	13291.3	13311.7	13843.3	14938.0	17085.7	18081.6	17361.6
55°	15437.0	15301.5	14468.5	13913.5	14088.7	14226.2	14974.7	16038.8	18286.3	18932.9	17919.7
57.5°	17612.1	17622.3	16943.1	15908.5	15312.7	15459.4	16043.9	17109.1	19278.1	19645.8	18268.0
60°	19355.5	19678.4	19475.7	19003.2	18147.8	18048.0	17603.0	18224.2	20125.4	20251.7	18601.0
62.5°	20564.3	20710.9	21407.5	21507.3	22484.9	22526.6	20395.3	19530.7	21056.2	20648.8	18671.2
65°	20503.2	20593.8	21694.7	23034.8	25922.8	26052.1	24804.7	21507.3	21693.6	20826.0	18466.5
67.5°	19075.5	19212.0	20611.1	23116.3	27754.8	27705.9	26914.7	24258.8	21903.4	20541.9	17491.0
70°	16595.8	17016.4	18191.6	21398.3	28327.1	28392.3	26934.0	25137.7	21362.7	19738.4	15864.7
72.5°	13678.3	13810.7	14920.7	18509.3	26654.0	26558.2	25830.1	23977.8	20385.1	18285.3	13018.4
75°	10402.3	10402.3	11746.5	14750.6	22889.2	23225.2	23508.3	21717.1	18059.2	14903.4	8864.6
77.5°	6905.3	7152.8	8235.3	11084.6	18118.3	18366.7	19344.3	18511.3	14786.3	10928.8	4048.9
80°	3663.0	3693.5	4854.4	7365.6	12959.4	13427.8	14772.0	14277.1	10635.5	5120.2	1023.4
82.5°	1281.1	1398.2	2134.4	4268.9	8538.8	8831.0	9799.5	8483.8	3756.6	1133.4	566.2
85°	636.5	658.9	939.9	2032.6	4807.6	4949.1	5725.1	3304.5	604.9	494.9	384.9
87.5°	306.5	313.6	360.5	727.1	2089.6	2186.4	2314.7	1075.4	224.0	188.4	167.0
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°	5387.0	5387.0	5387.0	5387.0	5387.0	5387.0	5387.0	5387.0	5387.0	5387.0	5387.0
2.5°	5396.2	5405.3	5422.6	5427.7	5415.5	5437.9	5459.3	5478.7	5477.6	5484.8	5510.2
5°	5408.4	5427.7	5446.1	5478.7	5510.2	5528.6	5545.9	5562.2	5567.3	5582.5	5597.8
7.5°	5446.1	5465.4	5507.2	5564.2	5566.2	5612.1	5641.6	5646.7	5650.8	5650.8	5686.4
10°	5504.1	5539.8	5607.0	5646.7	5682.3	5667.0	5697.6	5678.2	5664.0	5670.1	5694.5
12.5°	5603.9	5635.5	5732.2	5776.0	5743.4	5737.3	5706.8	5663.0	5613.1	5608.0	5630.4
15°	5760.7	5819.8	5906.4	5948.1	5866.6	5794.3	5691.5	5601.9	5505.1	5469.5	5483.7
17.5°	6013.3	6084.6	6179.3	6150.8	6002.1	5859.5	5689.5	5500.0	5312.7	5182.3	5215.9
20°	6382.9	6435.9	6513.3	6398.2	6181.3	5946.1	5667.0	5367.7	5051.0	4813.7	4786.2
22.5°	6770.9	6851.4	6804.5	6591.7	6307.6	5979.7	5620.2	5175.2	4685.4	4388.0	4343.2
25°	7238.3	7264.8	7102.9	6782.1	6343.2	5926.7	5468.5	4894.1	4311.6	4031.6	4018.4
27.5°	7734.3	7674.2	7372.8	6869.7	6303.5	5769.9	5164.0	4450.1	3973.6	3726.1	3687.4
30°	8294.4	8154.8	7595.8	6878.9	6153.8	5464.4	4779.1	4102.9	3698.6	3450.1	3410.4
32.5°	9015.3	8686.4	7802.5	6784.2	5838.1	5016.3	4316.7	3806.5	3451.1	3201.7	3166.0
35°	9936.9	9381.9	8021.4	6613.1	5449.1	4568.3	3933.8	3555.0	3250.5	2950.1	2902.3
37.5°	10999.1	10352.4	8283.2	6397.2	5022.4	4174.2	3675.2	3395.1	3101.9	2761.7	2704.7
40°	12233.3	11323.9	8686.4	6139.6	4639.5	3890.0	3549.9	3340.1	3019.4	2665.0	2599.8
42.5°	13302.5	12351.4	9166.1	5862.6	4278.0	3653.8	3493.9	3303.5	2967.4	2592.7	2518.3
45°	14291.3	13199.7	9634.5	5526.5	3897.2	3491.9	3426.7	3211.8	2875.8	2503.1	2425.7
47.5°	15094.8	13885.0	10041.8	5218.0	3592.7	3343.2	3280.1	3037.7	2722.0	2395.1	2338.1
50°	15711.9	14400.3	10264.8	4972.5	3270.9	3174.2	3090.7	2841.2	2537.7	2255.6	2206.7
52.5°	16343.3	14916.6	10374.8	4984.8	2971.5	2922.6	2837.1	2623.2	2391.1	2174.2	2121.2
55°	16710.9	15128.4	10258.7	4688.4	2696.6	2639.5	2565.2	2454.2	2315.7	2123.2	2073.3
57.5°	16925.8	15259.8	9905.4	3823.9	2365.6	2311.6	2323.8	2314.7	2200.6	1998.0	1952.2
60°	17080.6	14974.7	9181.3	2810.6	2083.5	2042.8	2143.6	2111.0	2012.2	1854.4	1815.7
62.5°	16955.3	14431.9	7877.9	2113.1	1853.4	1939.9	2028.5	1968.4	1834.0	1690.4	1645.6
65°	16191.6	13366.7	5987.8	1697.6	1779.0	1898.2	1969.5	1872.7	1736.3	1566.2	1545.8
67.5°	14801.5	11435.9	3531.6	1556.0	1723.0	1849.3	1908.4	1780.1	1659.9	1497.0	1472.5
70°	12680.3	8561.2	1577.4	1449.1	1625.3	1750.5	1789.2	1668.0	1537.7	1384.9	1360.5
72.5°	9438.0	5162.0	1063.1	1338.1	1480.7	1591.7	1634.4	1506.1	1413.5	1344.2	1337.1
75°	5241.4	1792.3	980.7	1211.8	1322.8	1422.6	1475.6	1384.9	1311.6	1216.9	1178.2
77.5°	1669.1	761.7	931.8	1083.5	1224.0	1306.5	1298.4	1161.9	1138.5	1023.4	1013.2
80°	666.0	664.0	861.5	887.0	1044.8	1114.1	1095.7	923.6	954.2	887.0	860.5
82.5°	522.4	607.9	690.4	677.2	812.6	894.1	868.6	678.2	766.8	704.7	644.6
85°	397.2	532.6	443.0	440.9	567.2	664.0	680.2	521.4	522.4	475.6	423.6
87.5°	204.7	196.5	170.1	169.0	189.4	269.9	331.0	296.3	234.2	176.2	169.0
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)