

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: P510808

Luminaire Tested: **CST-CA8-330-760-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510808
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-330-760-U-T3-HSS
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: 45503 lumens
Efficiency: N/A
Efficacy: 137.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

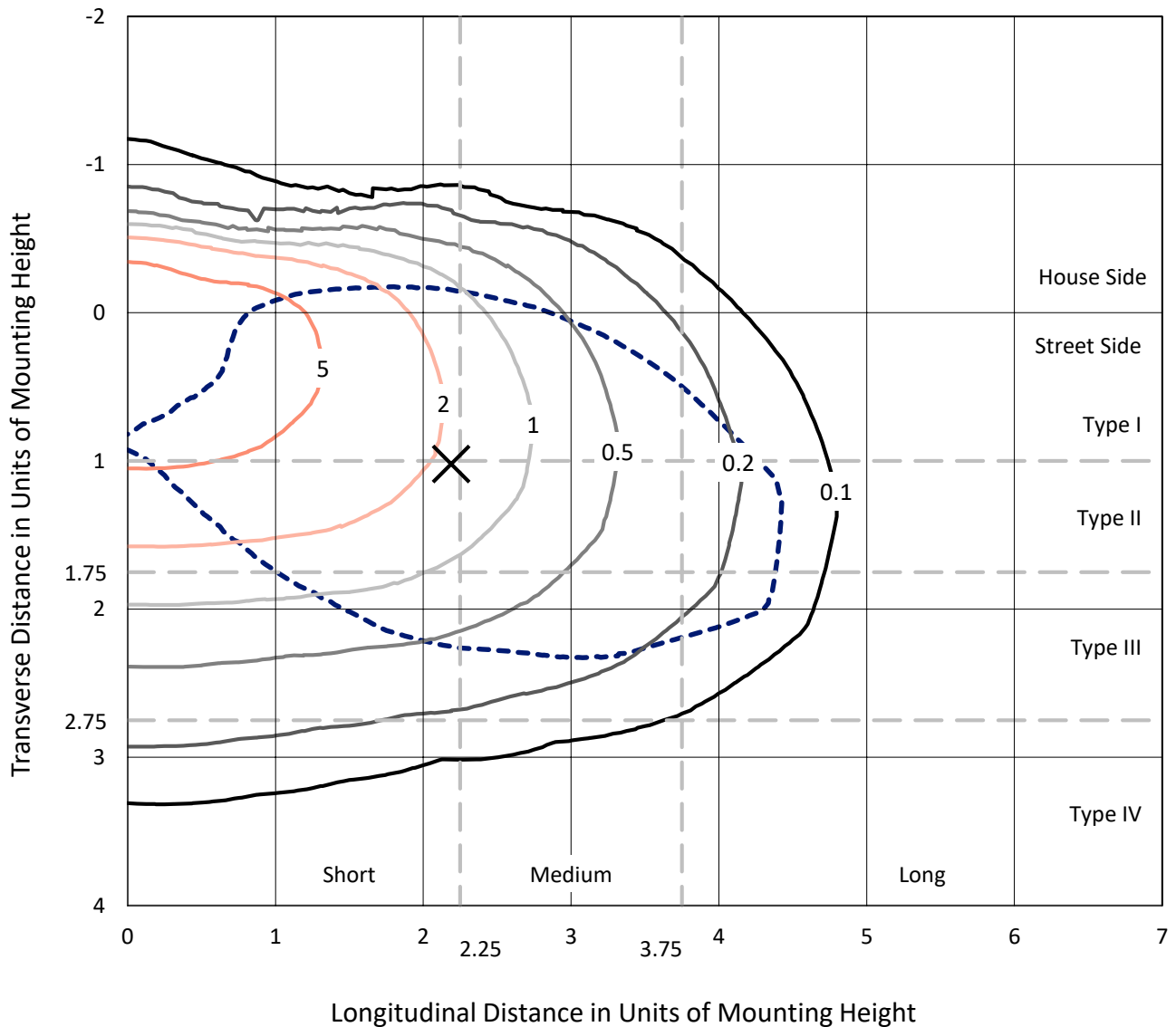
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

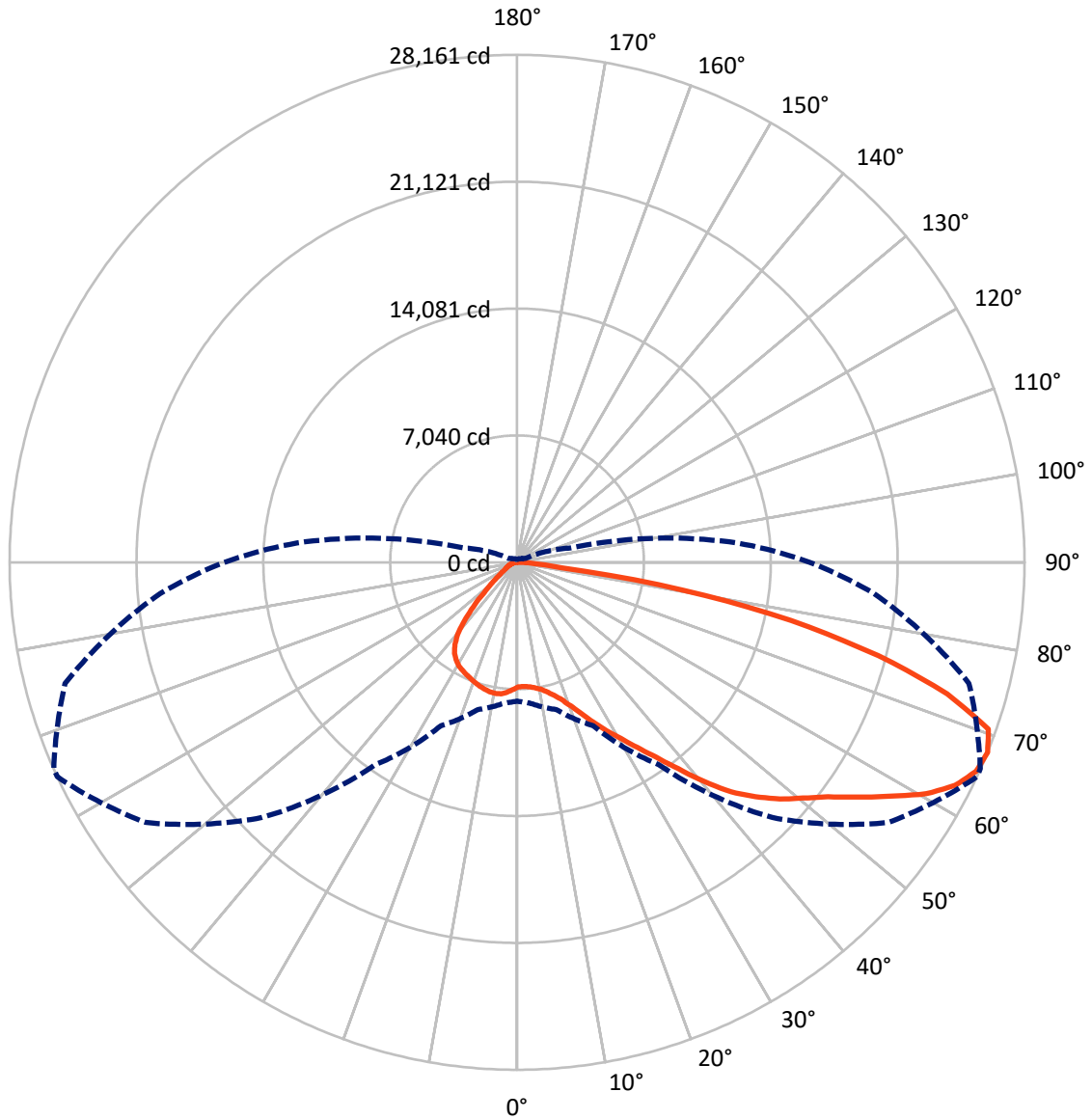
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9 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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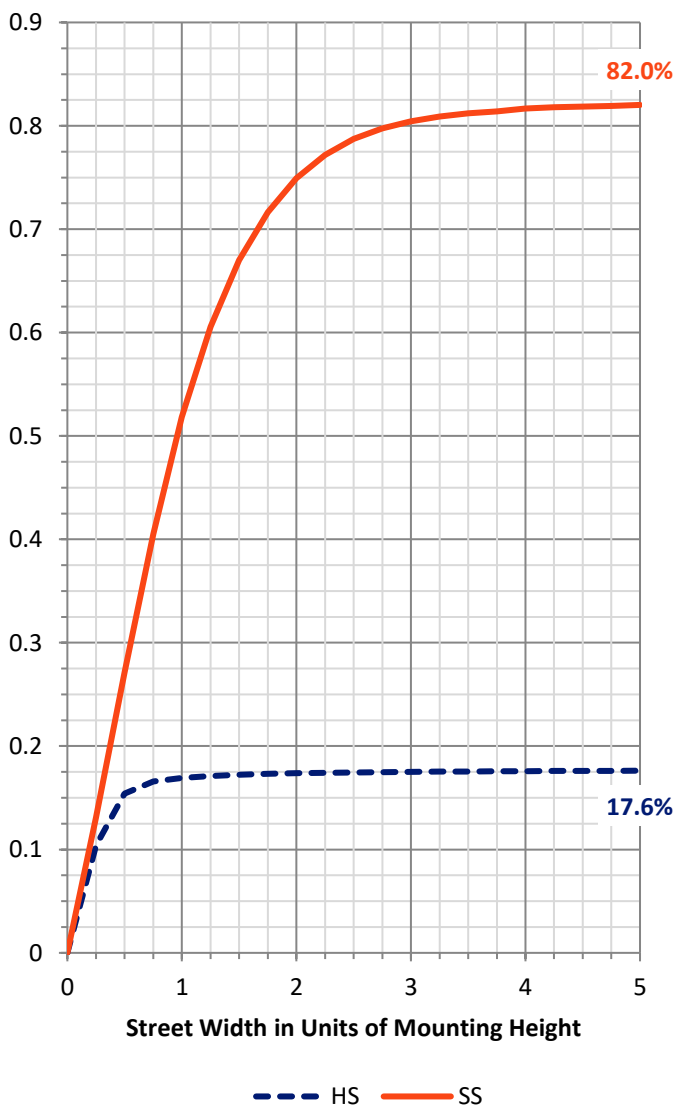
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8132.5	0.0	8132.5
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	37370.5	0.0	37370.5
	% Fixture	82.1	0.0	82.1
Total	Lumens	45503.0	0.0	45503.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	684.1	1.5
10°-20°	2112.0	4.6
20°-30°	3663.9	8.1
30°-40°	5526.9	12.1
40°-50°	7663.4	16.8
50°-60°	9459.5	20.8
60°-70°	10078.9	22.1
70°-80°	5767.3	12.7
80°-90°	547.2	1.2
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°	45503.0	100.0
0°-180°	45503.0	100.0

Coefficient of Utilization



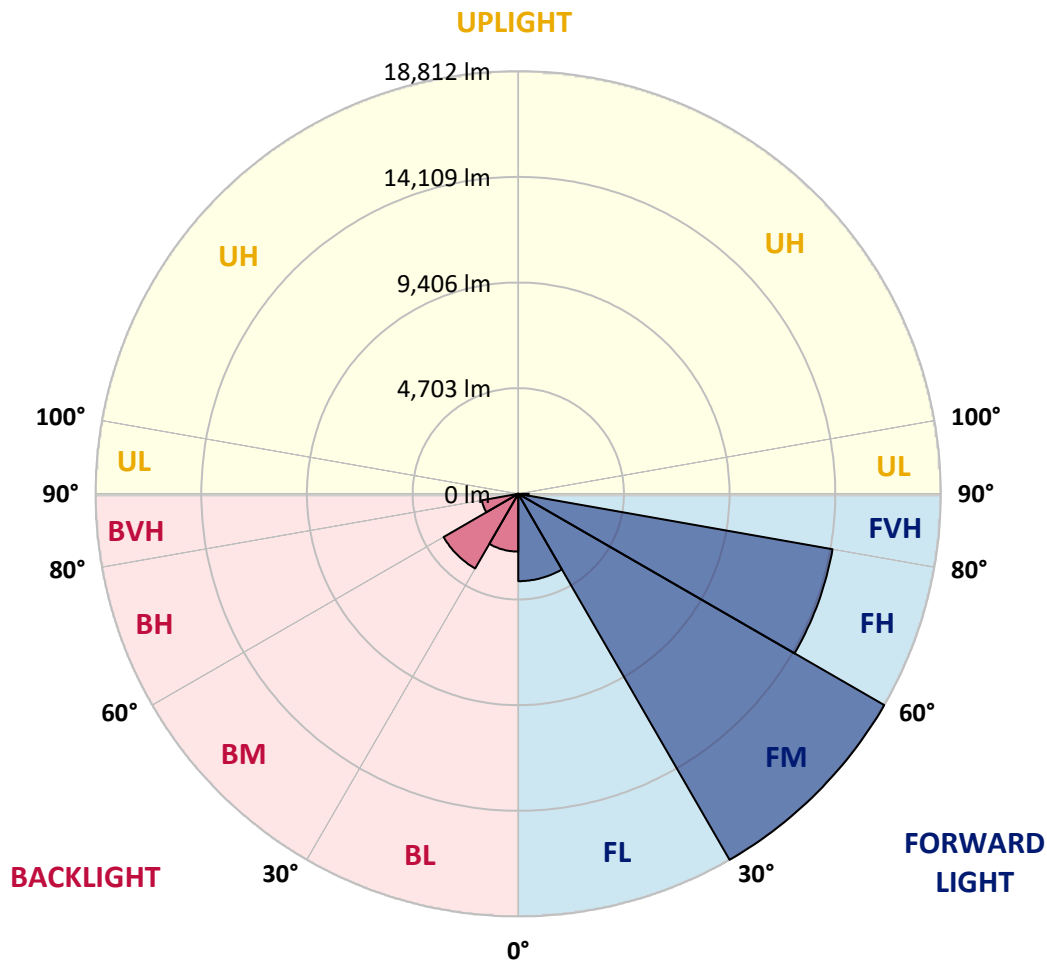
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3886.6	8.5			
FM (30°-60°)	18811.6	41.3			
FH (60°-80°)	14204.8	31.2			G5
FVH (80°-90°)	467.6	1.0			G3/500
BL (0°-30°)	2573.3	5.7	B4/5000		
BM (30°-60°)	3838.1	8.4	B3/5000		
BH (60°-80°)	1641.4	3.6	B3/2500		G3/2500
BVH (80°-90°)	79.6	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6914.5	6914.5	6914.5	6914.5	6914.5	6914.5	6914.5	6914.5	6914.5	6914.5	6914.5
2.5°	6847.7	6838.7	6830.8	6844.7	6852.7	6865.6	6884.6	6897.5	6901.5	6913.5	6928.4
5°	6957.3	6956.3	6945.4	6939.4	6922.5	6916.5	6920.5	6936.4	6937.4	6952.4	6999.2
7.5°	7172.6	7170.6	7143.7	7131.8	7095.9	7056.0	7026.1	7029.1	7028.1	7043.1	7105.9
10°	7497.6	7481.6	7443.8	7406.9	7337.1	7262.3	7207.5	7157.7	7157.7	7179.6	7249.4
12.5°	7864.4	7886.3	7834.5	7778.7	7662.0	7527.5	7431.8	7376.0	7370.0	7381.0	7430.8
15°	8319.9	8319.9	8285.0	8205.3	8102.6	7915.2	7717.9	7647.1	7637.1	7660.0	7657.1
17.5°	8833.2	8848.2	8782.4	8742.5	8585.0	8377.7	8130.5	8007.9	8007.9	7993.0	7924.2
20°	9488.1	9406.4	9413.3	9347.6	9231.9	8930.9	8679.7	8501.3	8499.3	8469.4	8276.0
22.5°	10199.8	10154.9	10116.0	10058.2	9898.8	9629.6	9280.8	9104.3	9100.4	9026.6	8739.5
25°	10901.5	10935.4	10892.5	10786.9	10670.2	10377.2	9992.5	9819.0	9818.0	9695.4	9288.7
27.5°	11623.1	11660.0	11646.1	11550.4	11394.9	11165.6	10801.8	10575.6	10561.6	10481.9	9970.5
30°	12420.5	12387.7	12430.5	12389.6	12311.9	11938.1	11609.2	11346.0	11379.9	11356.0	10745.0
32.5°	13000.7	13021.6	13162.1	13166.1	13084.4	12807.3	12405.6	12244.1	12297.9	12266.0	11696.9
35°	13524.9	13558.8	13740.2	13918.7	13978.5	13675.5	13266.8	13256.8	13326.6	13521.0	13008.6
37.5°	13975.5	13999.4	14253.6	14485.8	14679.2	14471.9	14174.8	14528.7	14631.3	15029.0	14362.2
40°	14245.6	14276.5	14605.4	14932.4	15277.2	15203.5	15175.6	16012.8	16109.5	16459.4	15350.0
42.5°	14093.1	14153.9	14702.1	15300.2	15807.5	15955.0	16336.8	17413.3	17523.9	17553.8	16320.8
45°	13821.0	13896.7	14509.7	15477.6	16304.9	16778.3	17505.0	18554.6	18615.4	18530.6	17125.2
47.5°	13527.9	13608.7	14293.4	15424.8	16704.6	17736.2	18548.6	19629.1	19671.9	19411.8	17935.6
50°	13195.0	13269.8	14006.4	15301.2	17005.6	18640.3	19621.1	20558.0	20718.5	20204.2	18565.5
52.5°	12790.3	12870.1	13651.5	15107.8	17269.7	19311.1	20567.0	21607.6	21618.6	21195.0	19275.2
55°	12266.0	12404.6	13206.0	14772.9	17408.3	19887.2	21391.3	22996.1	23066.9	22657.2	19869.3
57.5°	11682.9	11803.6	12669.7	14326.3	17283.7	20324.8	22717.0	24485.2	24476.3	23654.0	20388.6
60°	10912.5	10998.2	11971.0	13742.2	16882.0	20854.1	24097.5	26081.0	26065.1	24630.8	20722.5
62.5°	9923.7	10009.4	10924.4	12826.2	16291.9	21208.9	25034.5	27276.2	27230.3	25341.5	20825.2
65°	8777.4	8930.9	9725.3	11637.1	15248.3	20975.7	25487.0	27979.9	27906.1	25883.7	20580.0
67.5°	7702.9	7833.5	8462.4	10000.4	13708.3	20029.8	25168.0	28161.3	28139.3	25962.4	19887.2
70°	6181.9	6229.7	6805.8	8122.5	11405.8	18004.4	24065.6	27742.6	27752.6	25236.8	18495.8
72.5°	4231.2	4347.8	4604.0	5643.6	8300.0	14318.4	20742.4	24967.7	24969.7	22629.3	16114.5
75°	2275.6	2456.0	2755.0	3270.3	4639.9	9188.1	16657.7	20717.5	20756.4	18867.5	12808.3
77.5°	1128.3	1193.1	1366.5	1749.3	2127.1	4334.9	10713.1	15551.3	15644.0	14482.8	8735.5
80°	516.3	527.3	540.2	537.3	814.3	1901.8	4599.0	9339.6	9367.5	8613.9	3988.0
82.5°	403.7	401.7	407.7	370.8	372.8	733.6	1591.8	2446.0	2608.5	2053.3	1264.9
85°	244.2	243.2	262.1	203.3	250.2	396.7	803.4	975.8	987.8	803.4	654.9
87.5°	92.7	89.7	82.7	72.8	83.7	111.6	278.1	358.8	350.9	249.2	226.3
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°	6914.5	6914.5	6914.5	6914.5	6914.5	6914.5	6914.5	6914.5	6914.5	6914.5	6914.5
2.5°	6941.4	6973.3	7032.1	7076.9	7091.9	7139.7	7185.6	7193.6	7226.5	7239.4	7282.3
5°	7028.1	7081.9	7173.6	7234.4	7261.3	7341.1	7392.9	7418.8	7409.9	7414.8	7462.7
7.5°	7154.7	7205.5	7279.3	7353.0	7366.0	7380.0	7375.0	7371.0	7336.1	7306.2	7351.1
10°	7270.3	7318.2	7364.0	7375.0	7309.2	7272.3	7206.5	7155.7	7087.9	7057.0	7092.9
12.5°	7432.8	7442.8	7397.9	7338.1	7196.6	7065.0	6958.3	6865.6	6781.9	6724.1	6771.9
15°	7604.2	7565.4	7434.8	7260.4	7041.1	6852.7	6678.2	6523.8	6385.2	6351.3	6364.3
17.5°	7831.5	7725.8	7462.7	7169.6	6828.8	6535.7	6311.4	6116.1	5934.7	5858.9	5851.9
20°	8108.6	7938.1	7519.5	7055.0	6577.6	6187.8	5841.0	5548.9	5298.7	5093.4	5098.4
22.5°	8469.4	8222.2	7605.2	6935.4	6299.5	5780.2	5275.8	4779.4	4367.8	4190.4	4146.5
25°	8945.9	8577.1	7726.8	6826.8	5988.5	5261.9	4549.2	3848.5	3412.9	3240.4	3221.5
27.5°	9538.9	9053.5	7912.2	6706.2	5655.6	4646.9	3622.2	2935.4	2535.7	2354.3	2293.5
30°	10212.7	9640.6	8102.6	6580.6	5252.9	3856.4	2762.0	2089.2	1679.5	1517.1	1496.1
32.5°	11084.9	10384.2	8385.7	6383.2	4664.8	3031.1	1926.7	1303.8	1025.7	955.9	936.0
35°	12323.9	11389.9	8735.5	6134.0	3909.3	2117.1	1194.1	763.5	615.0	580.1	573.1
37.5°	13479.1	12376.7	9088.4	5720.4	2968.3	1321.7	682.8	489.4	456.5	457.5	459.5
40°	14395.1	13051.5	9373.5	5176.1	1952.6	750.6	474.5	406.7	407.7	404.7	402.7
42.5°	15210.5	13589.7	9502.0	4371.8	1131.3	502.4	411.7	374.8	365.8	368.8	366.8
45°	15885.3	14138.9	9252.9	3467.7	666.8	450.5	388.7	347.9	337.9	353.8	355.8
47.5°	16594.9	14660.2	8871.1	2612.5	541.2	428.6	367.8	327.9	322.9	342.9	344.9
50°	17192.0	15038.0	8220.2	1968.6	516.3	404.7	348.9	308.0	307.0	324.9	324.9
52.5°	17691.4	15266.3	7447.7	1520.0	499.4	383.8	329.9	289.1	289.1	295.0	296.0
55°	18043.2	15220.4	6987.2	1196.1	481.4	363.8	310.0	271.1	259.2	255.2	257.2
57.5°	18107.0	15098.8	6453.0	933.0	460.5	344.9	292.0	250.2	228.3	225.3	224.3
60°	18066.2	14831.7	5843.0	779.5	436.6	326.9	274.1	228.3	206.3	199.4	201.3
62.5°	17895.7	14358.2	5138.3	683.8	412.7	313.0	254.2	213.3	193.4	184.4	184.4
65°	17381.4	13680.4	4091.7	599.0	382.8	298.0	238.2	207.3	185.4	175.4	173.4
67.5°	16251.1	12274.0	3075.0	525.3	353.8	282.1	236.2	206.3	181.4	167.5	165.5
70°	14735.0	10543.7	2099.2	461.5	322.0	267.1	235.2	207.3	177.4	159.5	157.5
72.5°	12300.9	8311.9	1209.1	401.7	290.1	253.2	231.2	208.3	170.4	148.5	145.5
75°	9242.9	5830.0	709.7	344.9	259.2	232.2	220.3	202.3	159.5	135.6	132.6
77.5°	5558.9	2722.1	534.3	286.1	222.3	204.3	196.4	185.4	145.5	125.6	122.6
80°	2039.4	1033.6	419.6	229.3	176.4	177.4	169.4	162.5	132.6	115.6	113.6
82.5°	889.1	631.9	310.0	174.4	138.5	158.5	139.5	133.6	113.6	103.7	99.7
85°	539.2	376.8	199.4	118.6	95.7	107.6	97.7	102.7	87.7	81.7	78.7
87.5°	178.4	112.6	88.7	57.8	47.8	44.9	43.9	52.8	49.8	45.9	45.9
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)