

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: P721852

Luminaire Tested: **CST-CA8-400-730-U-T4-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721852
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-400-730-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52776 lumens
Efficiency: N/A
Efficacy: 131.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

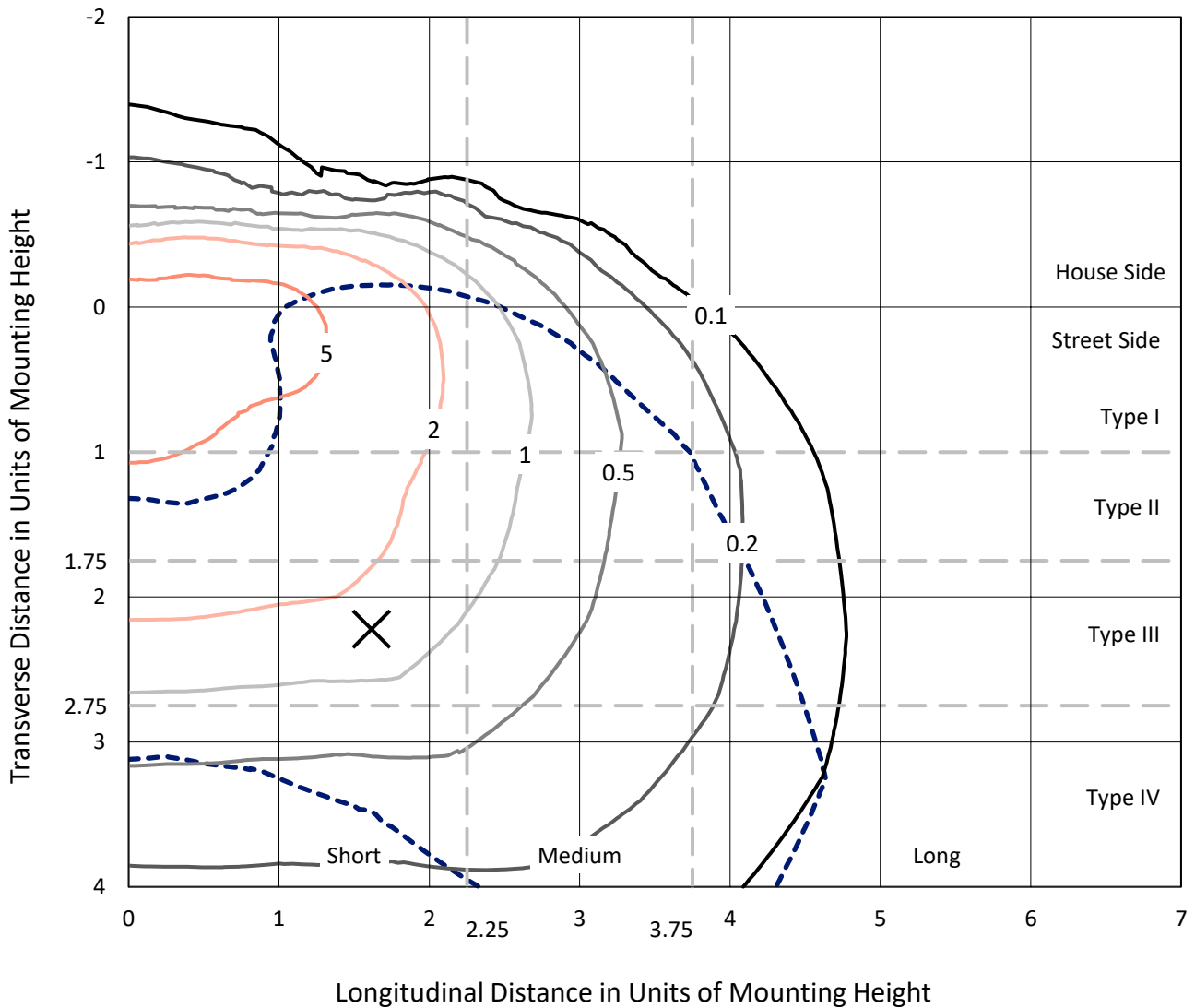
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

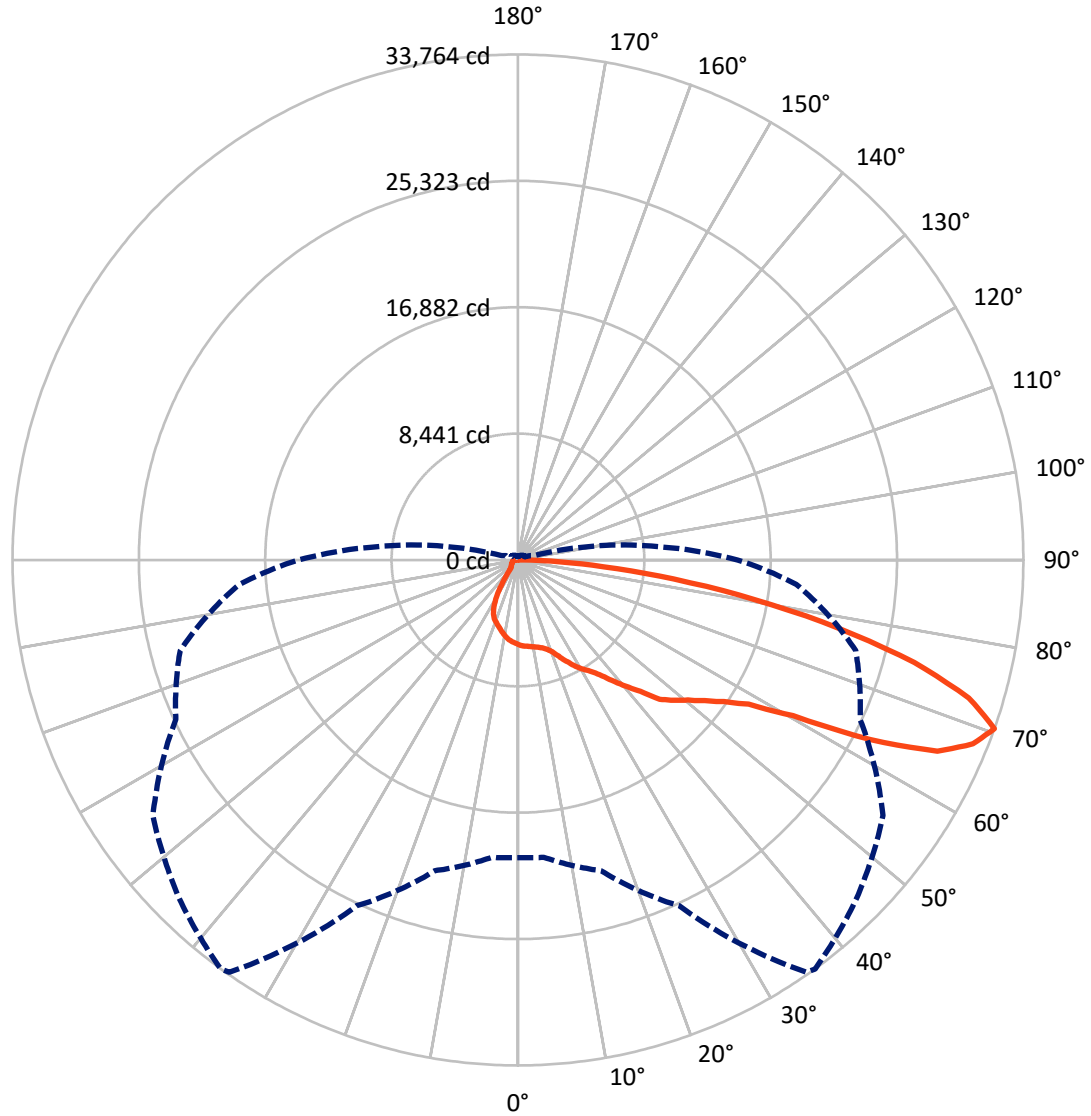
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.2 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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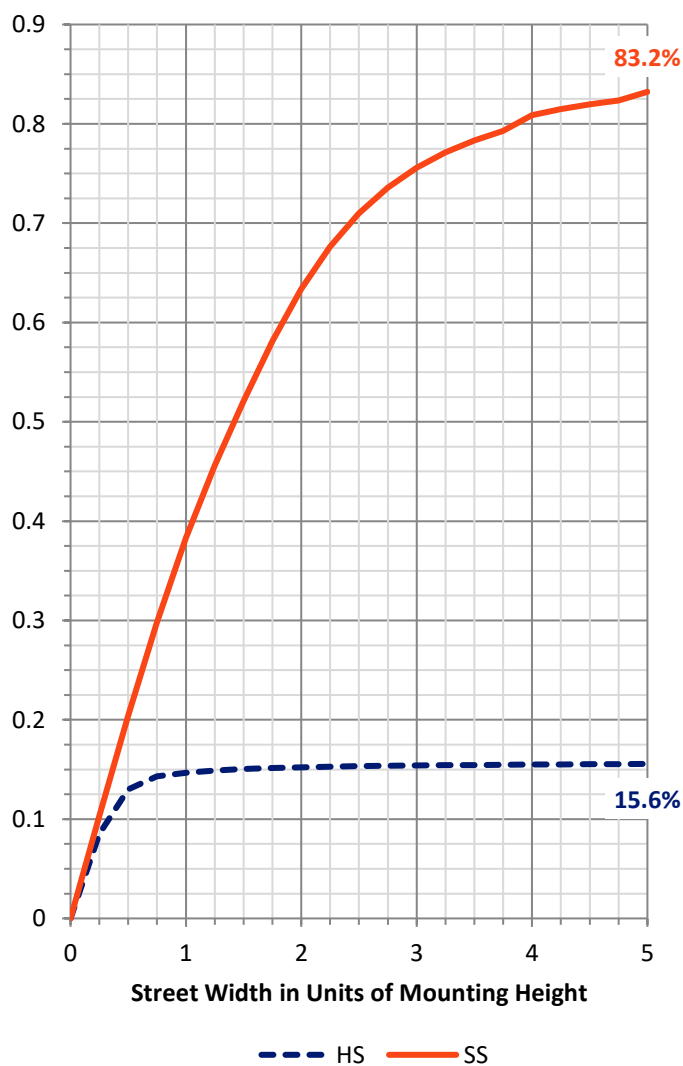
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8328.4	0.0	8328.4
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	44447.6	0.0	44447.6
	% Fixture	84.2	0.0	84.2
Total	Lumens	52776.0	0.0	52776.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	536.3	1.0
10°-20°	1594.8	3.0
20°-30°	2868.0	5.4
30°-40°	4538.5	8.6
40°-50°	7092.9	13.4
50°-60°	10185.3	19.3
60°-70°	13815.4	26.2
70°-80°	10224.9	19.4
80°-90°	1919.9	3.6
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°	52776.0	100.0
0°-180°	52776.0	100.0

Coefficient of Utilization



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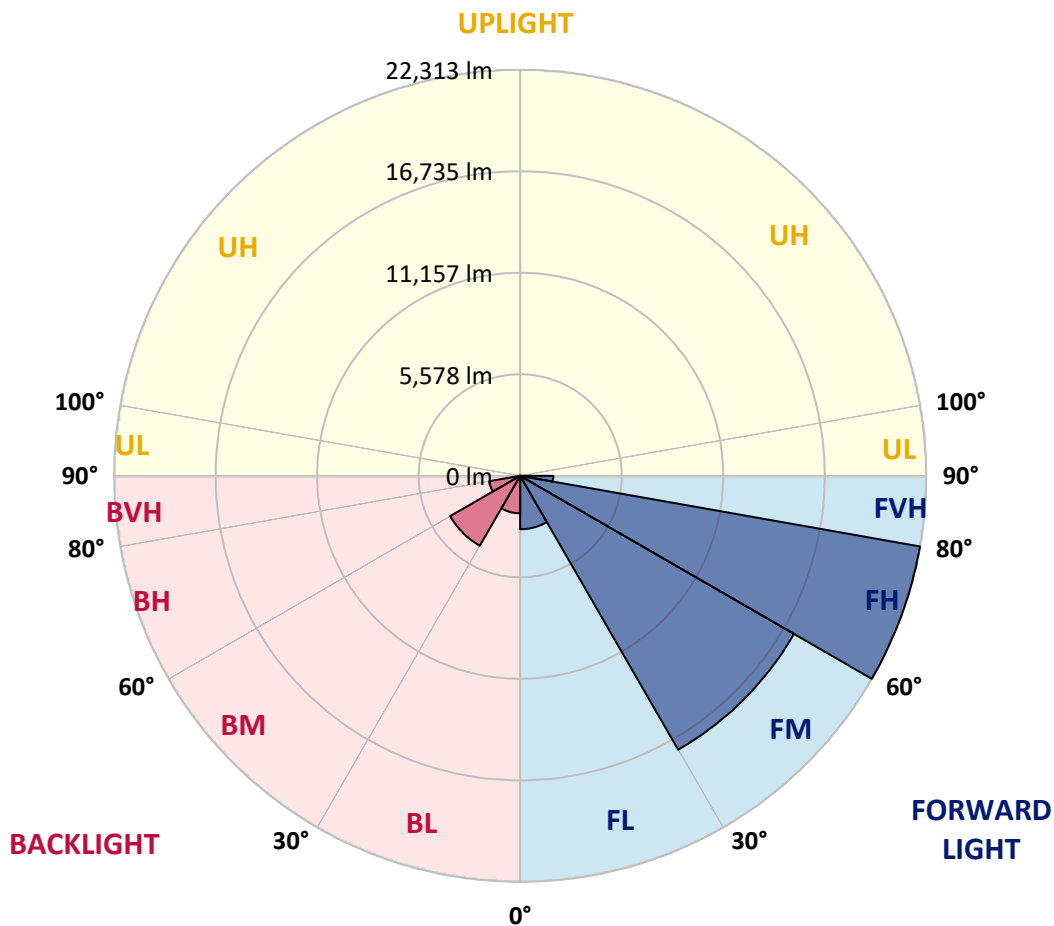
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2935.4	5.6			
FM (30°-60°)	17378.7	32.9			
FH (60°-80°)	22313.2	42.3			G5
FVH (80°-90°)	1820.3	3.4			G5
BL (0°-30°)	2063.7	3.9	B3/2500		
BM (30°-60°)	4438.0	8.4	B3/5000		
BH (60°-80°)	1727.1	3.3	B3/2500		G3/2500
BVH (80°-90°)	99.6	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	5654.7	5654.7	5654.7	5654.7	5654.7	5654.7	5654.7	5654.7	5654.7	5654.7	5654.7
2.5°	5769.2	5757.0	5747.3	5750.9	5743.6	5748.5	5737.5	5724.1	5692.5	5679.1	5673.0
5°	5820.4	5816.7	5807.0	5799.7	5786.3	5781.4	5769.2	5780.2	5763.1	5719.3	5693.7
7.5°	5850.9	5849.6	5838.7	5822.8	5830.1	5836.2	5848.4	5831.4	5809.4	5788.7	5736.3
10°	5864.3	5864.3	5850.9	5859.4	5897.2	5900.8	5906.9	5917.9	5897.2	5866.7	5814.3
12.5°	5898.4	5895.9	5900.8	5928.8	5967.8	5976.3	6006.8	6006.8	6009.2	5991.0	5930.0
15°	5983.7	5983.7	5994.6	6020.2	6087.2	6092.1	6137.2	6177.4	6182.3	6155.5	6109.2
17.5°	6181.0	6176.2	6170.1	6185.9	6257.8	6260.2	6338.2	6389.4	6402.8	6432.0	6424.7
20°	6556.3	6551.4	6550.2	6551.4	6546.6	6539.3	6616.0	6670.8	6739.1	6790.3	6815.8
22.5°	7093.6	7082.7	7082.7	7023.0	6976.7	6984.0	6996.2	7026.6	7116.8	7207.0	7303.2
25°	7672.4	7665.1	7671.2	7518.9	7456.7	7481.1	7465.3	7512.8	7631.0	7708.9	7811.3
27.5°	8145.1	8156.1	8122.0	8003.8	7963.6	7981.9	7945.3	8081.8	8212.1	8348.6	8503.4
30°	8733.6	8675.1	8591.1	8447.3	8432.7	8435.1	8432.7	8652.0	8922.5	9117.4	9331.9
32.5°	9502.5	9512.2	9323.3	8984.6	8860.3	8843.3	8892.0	9213.7	9579.2	10011.8	10294.4
35°	10279.8	10295.6	10158.0	9804.6	9450.1	9396.5	9324.6	9742.5	10270.1	11137.6	11564.0
37.5°	11104.7	11160.7	10997.5	10681.9	10261.5	10211.6	9871.6	10282.2	11062.0	12470.5	13029.8
40°	12208.6	12148.9	11951.5	11550.6	11159.5	11079.1	10684.3	10900.0	12080.6	14139.8	14545.5
42.5°	13022.5	13005.4	12838.5	12442.5	12049.0	11984.4	11666.4	11900.3	13363.6	15832.1	16013.7
45°	13668.2	13773.0	13769.4	13520.8	13299.1	13262.5	13074.9	13419.7	14914.7	17429.5	17340.5
47.5°	14242.1	14306.7	14203.1	14094.7	13991.1	14003.3	14142.2	14851.3	16499.8	18824.6	18431.0
50°	15181.5	15098.7	14634.4	14551.6	14697.8	14703.9	15126.7	16218.4	18245.8	20030.8	19354.6
52.5°	16434.0	16343.9	15389.9	15248.5	15594.6	15620.1	16323.2	17580.6	20046.7	21183.4	20273.3
55°	18298.2	18088.7	17066.4	16432.8	16591.2	16694.8	17546.5	18890.4	21456.4	22199.6	20969.0
57.5°	20587.6	20739.9	20216.0	18784.4	18125.2	18164.2	18946.4	20144.1	22700.4	23089.1	21376.0
60°	23007.4	22970.9	23190.2	22587.1	21324.8	21115.2	20716.8	21423.5	23664.1	23838.4	21795.1
62.5°	24333.1	24546.3	25277.3	25398.0	26537.2	26426.3	23710.4	23009.9	24777.8	24308.7	21909.6
65°	24325.7	24418.3	25779.3	27275.5	30834.5	30802.9	29540.6	25304.1	25607.5	24559.7	21680.6
67.5°	22754.0	22897.8	24489.0	27412.0	32820.6	32782.8	31910.4	28529.3	25868.3	24257.5	20612.0
70°	19888.3	19937.0	21489.3	25490.6	33618.6	33763.6	31992.0	29767.2	25220.1	23359.5	18663.8
72.5°	16407.2	16306.1	17824.3	21768.3	31586.3	31499.8	30639.6	28289.3	24128.4	21616.0	15221.7
75°	12080.6	12362.1	13724.3	17478.2	27044.0	27360.8	27742.2	26027.9	21429.6	17814.5	10525.9
77.5°	7977.0	8335.2	9712.0	13105.3	21410.1	21902.3	22890.4	22137.5	17433.1	12778.8	5012.6
80°	4121.9	4392.4	5631.5	8695.9	15348.4	16058.8	17870.6	16766.7	12359.6	5777.7	1122.2
82.5°	1559.6	1524.2	2523.3	4977.2	9841.2	10486.9	11804.0	10054.4	4398.5	1014.9	521.5
85°	684.8	725.0	1045.4	2269.9	5626.7	5710.7	6686.7	3919.7	644.5	484.9	354.6
87.5°	296.1	339.9	438.6	653.1	1898.3	2191.9	2712.2	1245.2	194.9	168.1	177.9
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°	5654.7	5654.7	5654.7	5654.7	5654.7	5654.7	5654.7	5654.7	5654.7	5654.7	5654.7
2.5°	5662.0	5654.7	5642.5	5612.0	5562.1	5556.0	5551.1	5546.2	5536.5	5541.4	5569.4
5°	5674.2	5660.8	5616.9	5573.1	5529.2	5490.2	5442.7	5424.4	5400.0	5384.2	5413.4
7.5°	5715.6	5687.6	5623.0	5563.3	5443.9	5386.6	5325.7	5253.8	5202.7	5169.8	5199.0
10°	5785.1	5749.7	5669.3	5546.2	5406.1	5249.0	5141.7	5022.3	4924.9	4898.0	4924.9
12.5°	5898.4	5846.0	5752.2	5585.2	5336.7	5130.8	4927.3	4770.1	4612.9	4567.9	4581.3
15°	6082.4	6040.9	5897.2	5666.9	5337.9	5023.5	4721.4	4467.9	4262.0	4190.1	4185.3
17.5°	6377.2	6333.3	6167.6	5828.9	5381.8	4939.5	4519.1	4132.9	3821.0	3662.6	3637.0
20°	6800.0	6739.1	6488.1	6067.7	5476.8	4902.9	4331.5	3812.4	3327.5	3030.2	2985.1
22.5°	7270.3	7205.7	6835.3	6251.7	5545.0	4831.0	4152.4	3457.9	2819.4	2456.3	2405.2
25°	7855.2	7713.8	7168.0	6425.9	5529.2	4679.9	3861.2	2976.6	2284.5	1970.2	1936.1
27.5°	8432.7	8253.6	7506.7	6517.3	5459.7	4439.9	3434.7	2413.7	1788.6	1565.7	1537.6
30°	9149.1	8803.1	7807.6	6560.0	5284.3	4080.5	2863.3	1834.9	1339.0	1185.5	1158.7
32.5°	10000.8	9476.9	8090.3	6512.5	4991.9	3532.2	2226.1	1343.9	995.4	899.2	898.0
35°	11124.2	10303.0	8401.0	6356.5	4543.5	2941.3	1560.8	918.7	776.1	743.2	749.3
37.5°	12437.6	11421.5	8716.6	6100.6	4036.6	2250.4	1040.5	707.9	682.3	683.5	684.8
40°	13823.0	12656.9	9141.8	5741.2	3421.3	1629.0	749.3	636.0	634.8	647.0	650.6
42.5°	15146.2	13857.1	9665.7	5262.4	2776.8	1077.1	649.4	606.8	590.9	595.8	599.5
45°	16375.6	14886.7	10111.7	4795.7	2085.9	768.8	637.2	572.7	548.3	545.9	548.3
47.5°	17366.1	15711.5	10383.4	4247.4	1486.5	638.5	611.6	541.0	506.9	499.6	495.9
50°	18120.3	16324.4	10482.1	3626.0	1005.2	609.2	577.5	504.4	463.0	464.2	464.2
52.5°	18856.3	16881.2	10367.5	2999.7	739.6	583.6	554.4	475.2	431.3	454.5	460.6
55°	19386.3	17115.1	10033.7	2322.3	616.5	551.9	528.8	441.1	410.6	448.4	460.6
57.5°	19695.8	17299.1	9420.8	1676.5	565.3	521.5	495.9	409.4	381.4	391.1	397.2
60°	19888.3	17042.0	8610.6	1146.5	538.5	497.1	463.0	388.7	350.9	327.8	324.1
62.5°	19782.3	16398.7	7543.2	788.3	510.5	470.3	435.0	369.2	319.2	288.8	286.3
65°	18918.4	15208.3	5791.1	638.5	493.5	458.1	417.9	350.9	297.3	268.1	264.4
67.5°	17316.2	13068.8	3382.3	567.8	486.1	445.9	404.5	333.8	285.1	253.4	248.6
70°	14683.2	9830.2	1133.1	506.9	484.9	444.7	393.5	321.7	271.7	238.8	233.9
72.5°	10592.9	5931.3	551.9	445.9	453.3	426.4	385.0	311.9	263.2	221.8	213.2
75°	6020.2	1931.2	498.3	385.0	421.6	407.0	380.1	313.1	266.8	201.0	191.3
77.5°	1713.1	564.1	481.3	327.8	398.4	420.4	355.8	282.7	272.9	186.4	174.2
80°	578.7	502.0	464.2	254.6	321.7	347.2	308.3	248.6	275.4	169.4	157.2
82.5°	464.2	504.4	389.9	203.5	244.9	263.2	244.9	223.0	223.0	151.1	141.3
85°	371.6	467.9	247.3	162.0	182.8	202.3	173.0	166.9	156.0	126.7	123.1
87.5°	215.7	146.2	102.3	82.9	76.8	78.0	67.0	80.4	98.7	86.5	85.3
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)