

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: P721848

Luminaire Tested: **CST-CA8-400-730-U-T2-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721848
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)
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-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54280 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

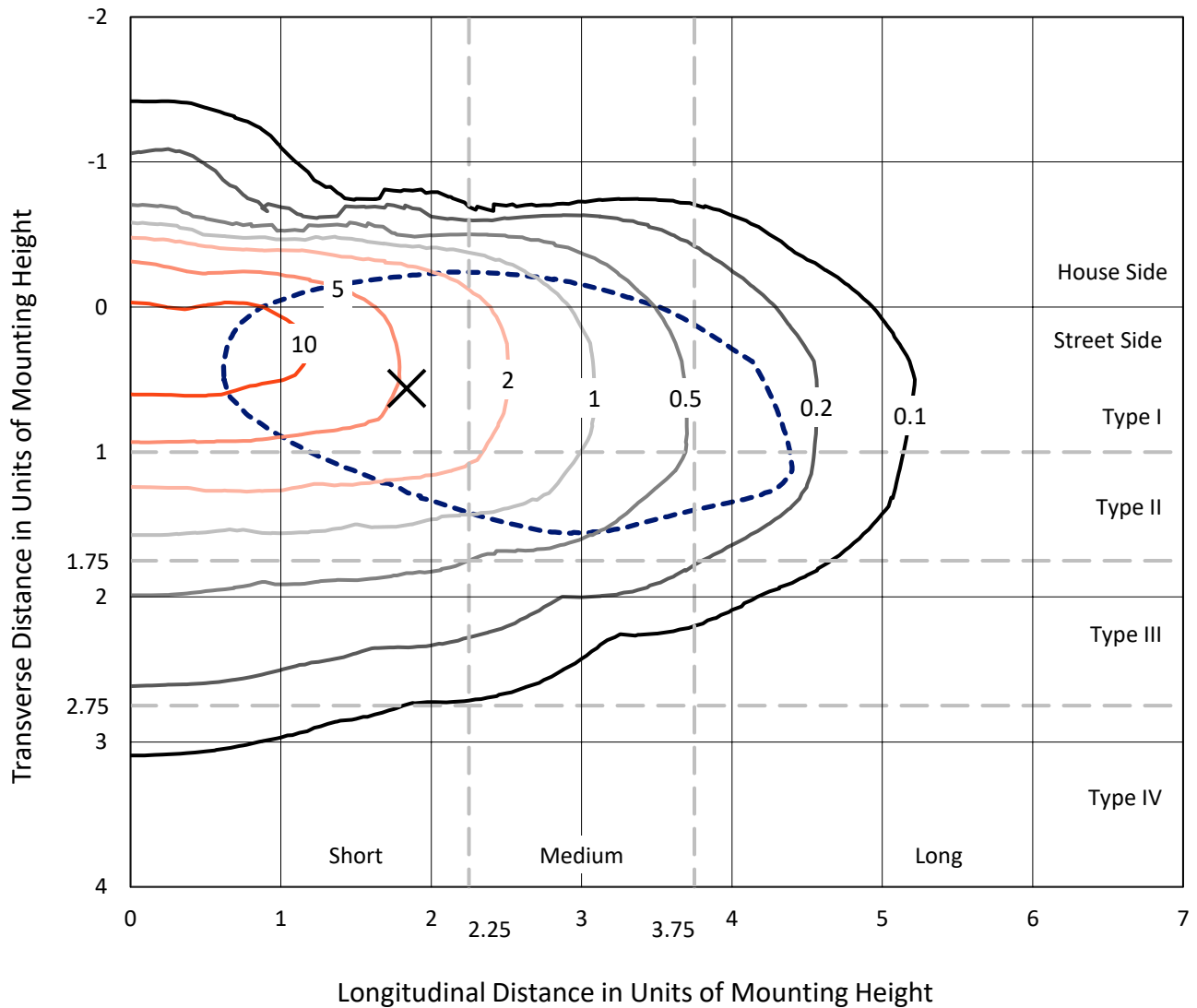
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

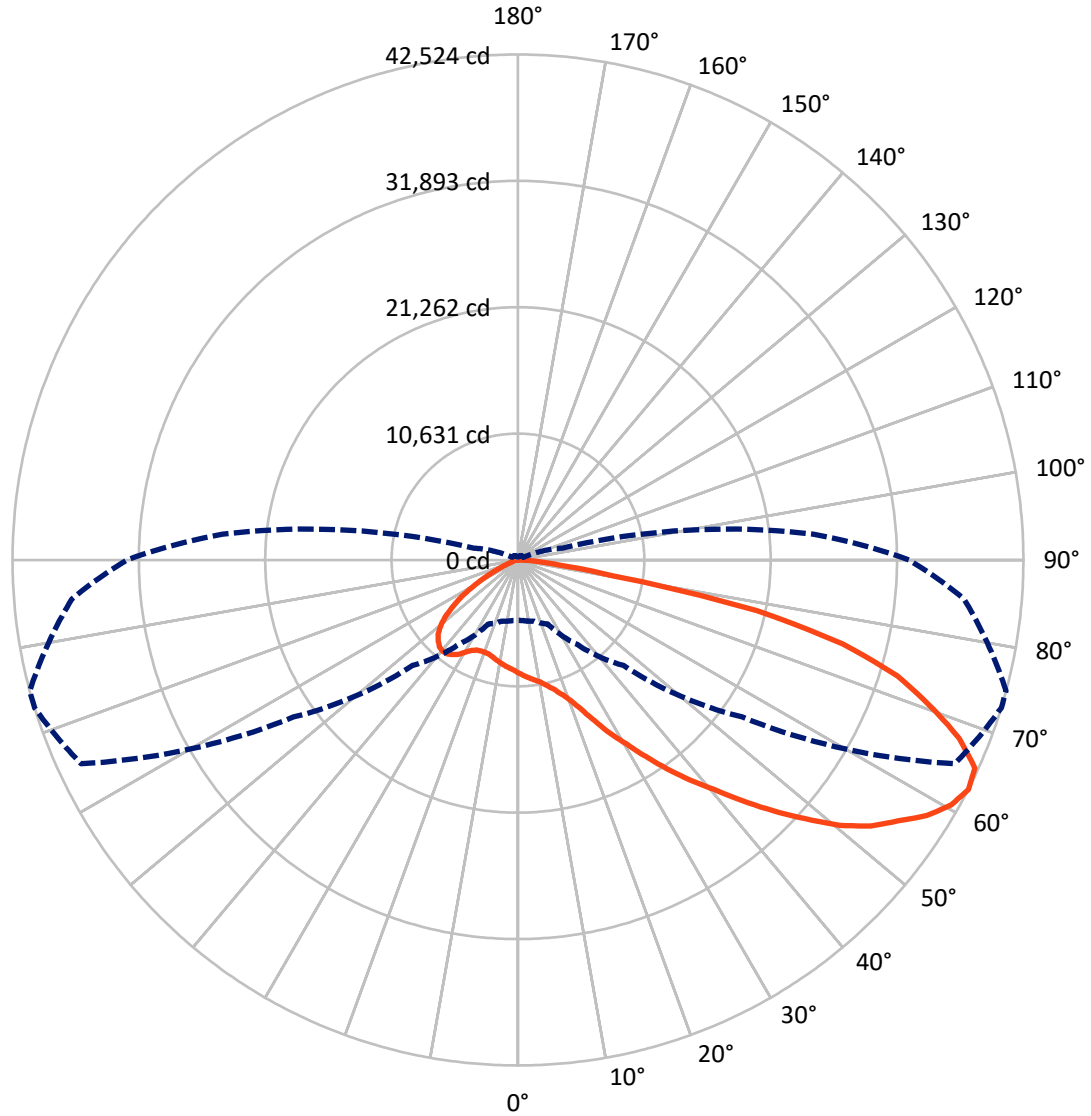
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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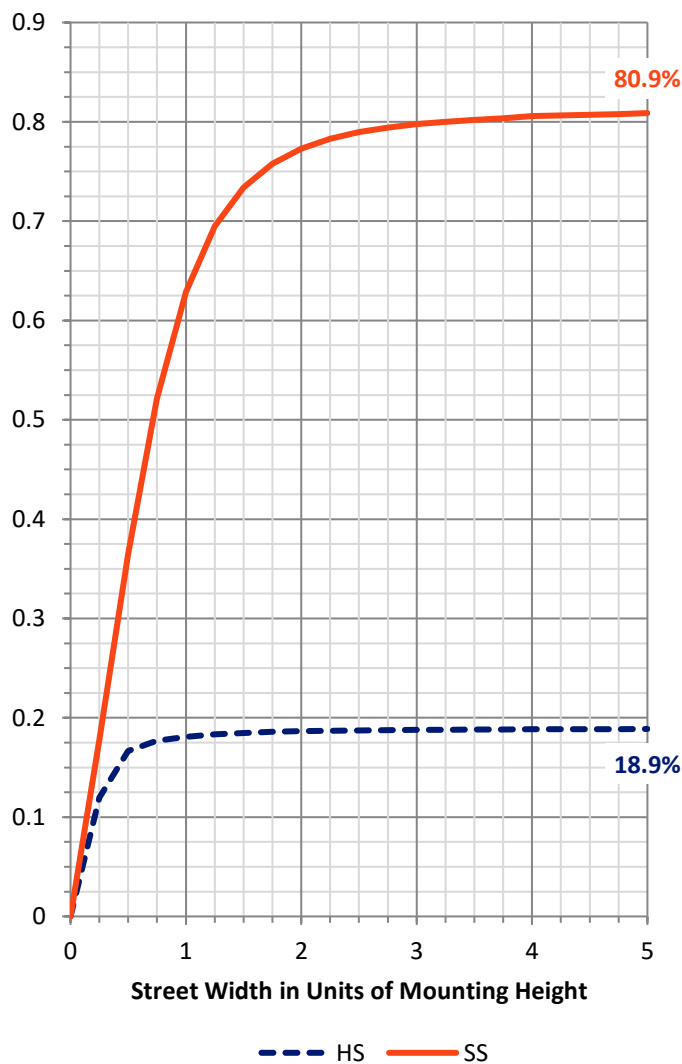
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10383.5	0.0	10383.5
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	43896.5	0.0	43896.5
	% Fixture	80.9	0.0	80.9
Total	Lumens	54280.0	0.0	54280.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	909.2	1.7
10°-20°	2734.8	5.0
20°-30°	4725.1	8.7
30°-40°	7105.4	13.1
40°-50°	9474.4	17.5
50°-60°	11158.0	20.6
60°-70°	11093.0	20.4
70°-80°	6368.8	11.7
80°-90°	711.5	1.3
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°	54280.0	100.0
0°-180°	54280.0	100.0

Coefficient of Utilization



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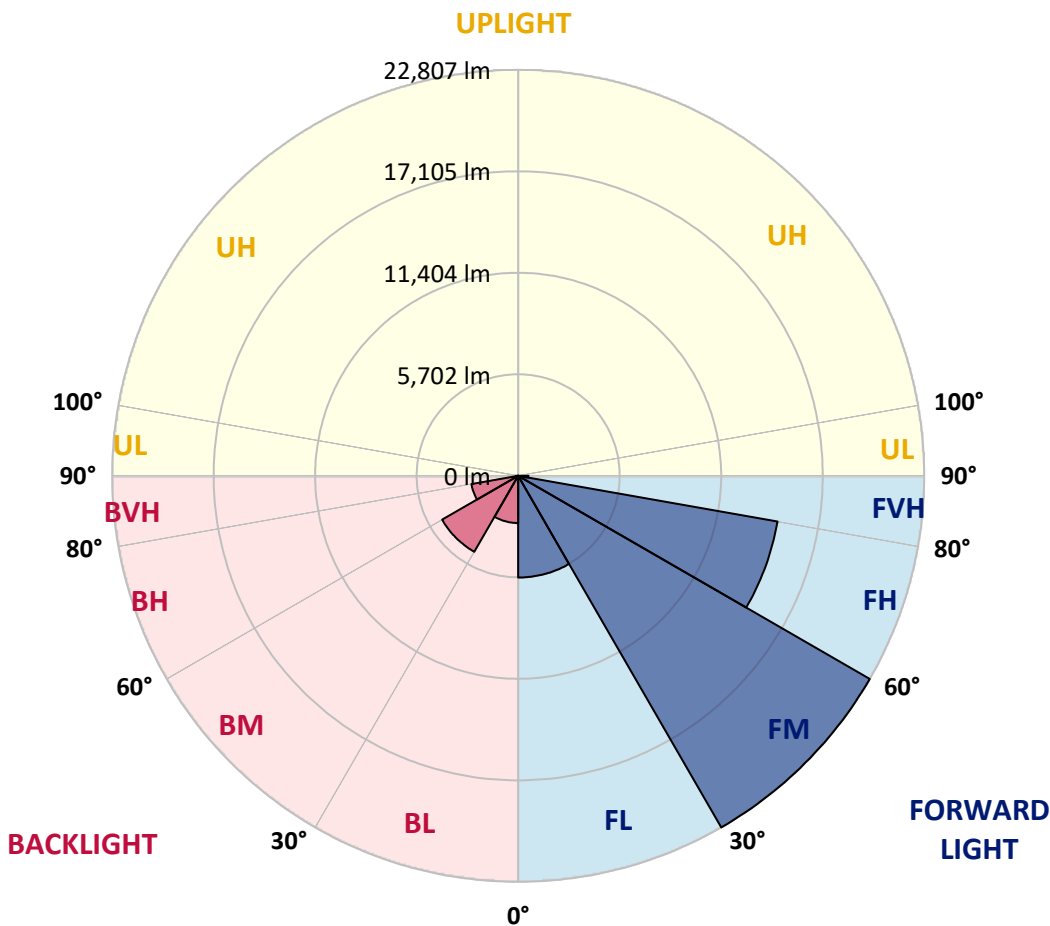
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5715.6	10.5			
FM (30°-60°)	22807.2	42.0			
FH (60°-80°)	14795.9	27.3			G5
FVH (80°-90°)	577.8	1.1			G4/750
BL (0°-30°)	2653.5	4.9	B4/5000		
BM (30°-60°)	4930.6	9.1	B3/5000		
BH (60°-80°)	2665.8	4.9	B4/5000		G4/5000
BVH (80°-90°)	133.6	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	9519.5	9519.5	9519.5	9519.5	9519.5	9519.5	9519.5	9519.5	9519.5	9519.5	9519.5
2.5°	10184.7	10210.3	10179.9	10166.5	10151.8	10056.8	9945.9	9832.6	9741.2	9726.6	9607.2
5°	10899.9	10913.3	10863.4	10806.1	10707.4	10550.3	10351.7	10155.5	9972.7	9924.0	9705.9
7.5°	11449.4	11423.9	11411.7	11362.9	11276.4	11103.4	10802.5	10480.8	10198.1	10129.9	9798.5
10°	11964.8	11953.9	11861.3	11800.3	11662.7	11503.1	11255.7	10847.5	10449.1	10339.5	9878.9
12.5°	12522.9	12498.5	12460.7	12329.1	12217.0	11947.8	11649.3	11277.6	10834.1	10687.9	10016.6
15°	13024.9	12959.1	12938.3	12800.7	12687.4	12481.4	12181.7	11750.4	11276.4	11150.9	10278.5
17.5°	13502.5	13472.0	13425.7	13331.9	13205.2	13046.8	12806.8	12345.0	11855.2	11672.4	10723.3
20°	13908.2	13870.4	13830.2	13855.8	13827.8	13726.7	13575.6	13182.0	12583.8	12407.1	11264.2
22.5°	14190.9	14189.7	14350.5	14444.3	14497.9	14494.3	14457.7	14234.7	13632.8	13453.7	12073.3
25°	14426.0	14444.3	14647.8	15004.8	15324.0	15353.2	15611.6	15505.5	14993.8	14807.4	13290.5
27.5°	14495.5	14532.0	14901.2	15462.9	15947.8	16413.3	16792.2	16985.9	16512.0	16289.0	14599.0
30°	14545.4	14560.1	14921.9	15594.5	16616.7	17353.9	18031.3	18359.1	17950.9	17787.6	16057.5
32.5°	14193.3	14198.2	14752.6	15771.2	17107.8	18385.9	19187.6	19805.3	19698.1	19482.5	17652.4
35°	13708.4	13798.5	14434.6	15600.6	17512.3	19333.8	20425.5	21346.6	21561.1	21406.3	19246.1
37.5°	13108.9	13179.6	13860.7	15347.2	17601.2	19985.7	21388.1	22913.5	23474.0	23448.4	21170.0
40°	12371.8	12458.3	13273.4	14801.3	17557.4	20459.6	22517.5	24648.5	25360.1	25279.7	23078.0
42.5°	11500.6	11627.3	12418.1	14099.5	17236.9	20749.6	23442.3	26415.2	27695.8	27643.4	24766.7
45°	10639.2	10707.4	11428.7	13122.3	16647.2	20843.4	24312.3	28849.6	30091.2	30032.7	26801.5
47.5°	9751.0	9810.7	10563.7	12092.8	15623.7	20654.6	25000.7	30940.4	32531.7	32473.2	28822.8
50°	7684.5	7909.9	9453.7	11187.5	14457.7	20119.7	25650.1	33545.4	35085.5	34836.9	30593.2
52.5°	6574.6	6656.2	7456.7	10274.9	13294.1	19207.1	26083.8	35959.1	37186.0	36827.8	32403.7
55°	6145.7	6200.5	6592.8	8592.3	12201.2	17826.6	26594.3	38378.9	38761.4	38670.1	33880.5
57.5°	5820.4	5881.3	6161.5	7176.5	11049.8	15891.8	26434.7	40081.0	40559.8	40267.4	35448.6
60°	5359.8	5434.1	5805.7	6443.0	9741.2	13927.7	25029.9	40777.9	41867.2	41538.2	36641.4
62.5°	5069.8	5118.6	5331.8	5949.5	8656.8	12546.0	23030.5	40553.7	42523.9	42511.7	37675.8
65°	4676.3	4748.2	4976.0	5476.8	7691.9	11475.0	21144.4	39446.2	42241.2	42252.2	37889.0
67.5°	4264.5	4293.7	4532.5	4934.6	6555.1	10494.2	18703.9	37551.5	40039.6	40290.5	36413.5
70°	3750.3	3735.7	3994.0	4287.6	5357.4	8910.3	15054.7	34181.4	36786.4	36889.9	33429.7
72.5°	2951.0	2964.4	3036.3	3239.8	4067.1	7012.0	10924.3	28878.9	33385.8	33569.8	29616.0
75°	1983.6	2005.5	2340.6	2539.2	2925.4	5039.4	6869.4	19493.4	28223.4	28742.4	24239.1
77.5°	1513.3	1526.7	1624.1	1841.0	2116.4	3591.9	3723.5	10622.1	20547.3	21779.2	18962.2
80°	1072.2	1077.1	980.8	872.4	1127.0	2436.8	2199.2	4524.0	8187.7	9675.4	11137.5
82.5°	480.1	472.7	556.8	463.0	649.4	943.1	1038.1	2195.6	3400.6	3655.2	3979.3
85°	223.0	249.8	286.3	240.0	386.2	364.3	404.5	935.7	1593.7	1759.4	1749.6
87.5°	54.8	59.7	75.5	96.3	140.1	124.3	121.8	275.4	355.8	354.6	544.6
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°	9519.5	9519.5	9519.5	9519.5	9519.5	9519.5	9519.5	9519.5	9519.5	9519.5	9519.5
2.5°	9525.6	9462.2	9312.3	9167.4	9029.7	8938.3	8835.9	8728.7	8664.1	8633.7	8699.5
5°	9573.1	9452.5	9166.1	8878.6	8634.9	8426.6	8280.3	8156.1	8089.1	8095.1	8098.8
7.5°	9613.3	9443.9	9043.1	8637.3	8257.2	7998.9	7807.6	7673.6	7596.8	7538.3	7582.2
10°	9648.6	9408.6	8899.3	8358.3	7945.3	7562.7	7303.2	7141.1	6999.8	6920.6	6982.7
12.5°	9686.4	9395.2	8738.5	8108.6	7573.7	7146.0	6790.2	6629.4	6490.5	6430.8	6468.6
15°	9850.9	9446.4	8588.6	7814.9	7206.9	6653.8	6270.0	6072.6	5962.9	5891.0	5906.9
17.5°	10133.6	9581.6	8492.4	7507.9	6797.5	6212.7	5715.6	5485.3	5303.8	5252.6	5239.2
20°	10535.6	9838.7	8492.4	7248.4	6333.3	5722.9	5150.2	4761.6	4478.9	4372.9	4454.5
22.5°	11210.6	10276.1	8576.4	7013.2	5933.7	5214.8	4532.5	3939.1	3557.8	3403.0	3493.2
25°	12154.9	10952.3	8712.9	6807.3	5569.4	4630.0	3749.1	3066.8	2646.4	2462.4	2460.0
27.5°	13387.9	11986.8	8988.2	6639.1	5133.2	3873.3	2931.5	2274.8	1880.0	1769.1	1785.0
30°	14755.0	13107.7	9508.5	6395.5	4603.2	3026.5	2134.7	1671.7	1393.9	1247.7	1250.1
32.5°	16073.3	14268.9	10126.2	6237.1	3914.8	2282.1	1521.8	1192.8	1019.8	933.3	946.7
35°	17486.7	15270.4	10585.6	5971.5	3107.0	1649.7	1075.9	894.3	822.4	777.3	779.8
37.5°	19013.4	16371.8	10963.3	5615.7	2349.1	1133.1	794.4	766.4	735.9	678.7	673.8
40°	20608.3	17647.5	11188.7	5040.6	1632.7	784.7	675.0	706.7	689.6	615.3	609.2
42.5°	21960.7	18632.0	11244.8	4279.1	1056.4	636.0	611.6	660.4	664.0	588.5	578.7
45°	23259.5	19509.3	11135.1	3276.3	732.3	598.2	572.7	639.7	644.5	576.3	560.5
47.5°	24713.1	20709.4	10936.5	2185.8	605.6	565.3	559.3	605.6	622.6	566.6	547.1
50°	26478.6	21685.3	10348.0	1342.7	571.4	544.6	544.6	572.7	595.8	547.1	537.3
52.5°	28289.2	22535.8	9476.8	921.1	550.7	522.7	538.5	550.7	559.3	515.4	523.9
55°	29586.8	23290.0	8178.0	740.8	538.5	508.1	545.8	521.5	509.3	471.5	463.0
57.5°	31026.9	24186.8	6849.9	656.7	522.7	516.6	521.5	475.2	441.1	402.1	393.5
60°	32032.1	24669.2	5224.6	617.7	504.4	508.1	481.3	419.1	357.0	329.0	322.9
62.5°	32909.4	24944.6	3829.5	567.8	487.4	486.1	436.2	358.2	293.6	263.2	258.3
65°	32776.6	24514.5	2481.9	527.6	474.0	458.1	391.1	307.0	244.9	221.8	219.3
67.5°	31315.7	22611.3	1563.2	486.1	450.8	422.8	350.9	274.1	225.4	198.6	196.2
70°	28249.0	19983.2	956.5	432.5	400.9	374.1	310.7	257.1	213.2	181.5	175.5
72.5°	24010.1	17115.1	676.2	381.4	349.7	318.0	263.2	244.9	203.5	163.3	158.4
75°	19726.1	12606.9	566.6	332.6	298.5	255.9	224.2	227.8	191.3	148.6	145.0
77.5°	13891.1	7860.0	527.6	271.7	235.2	203.5	193.7	208.3	175.5	136.5	132.8
80°	8107.3	4414.3	436.2	214.4	176.7	157.2	162.0	176.7	153.5	123.1	118.2
82.5°	3272.7	1747.2	307.0	166.9	129.2	125.5	132.8	143.8	126.7	103.6	101.1
85°	1168.5	545.8	174.2	109.7	82.9	86.5	85.3	102.3	91.4	75.5	74.3
87.5°	307.0	108.4	78.0	43.9	35.3	35.3	32.9	47.5	43.9	34.1	37.8
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)