

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: P721930

Luminaire Tested: **CST-CA8-430-750-U-T3-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721930
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-430-750-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 61934 lumens
Efficiency: N/A
Efficacy: 142.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

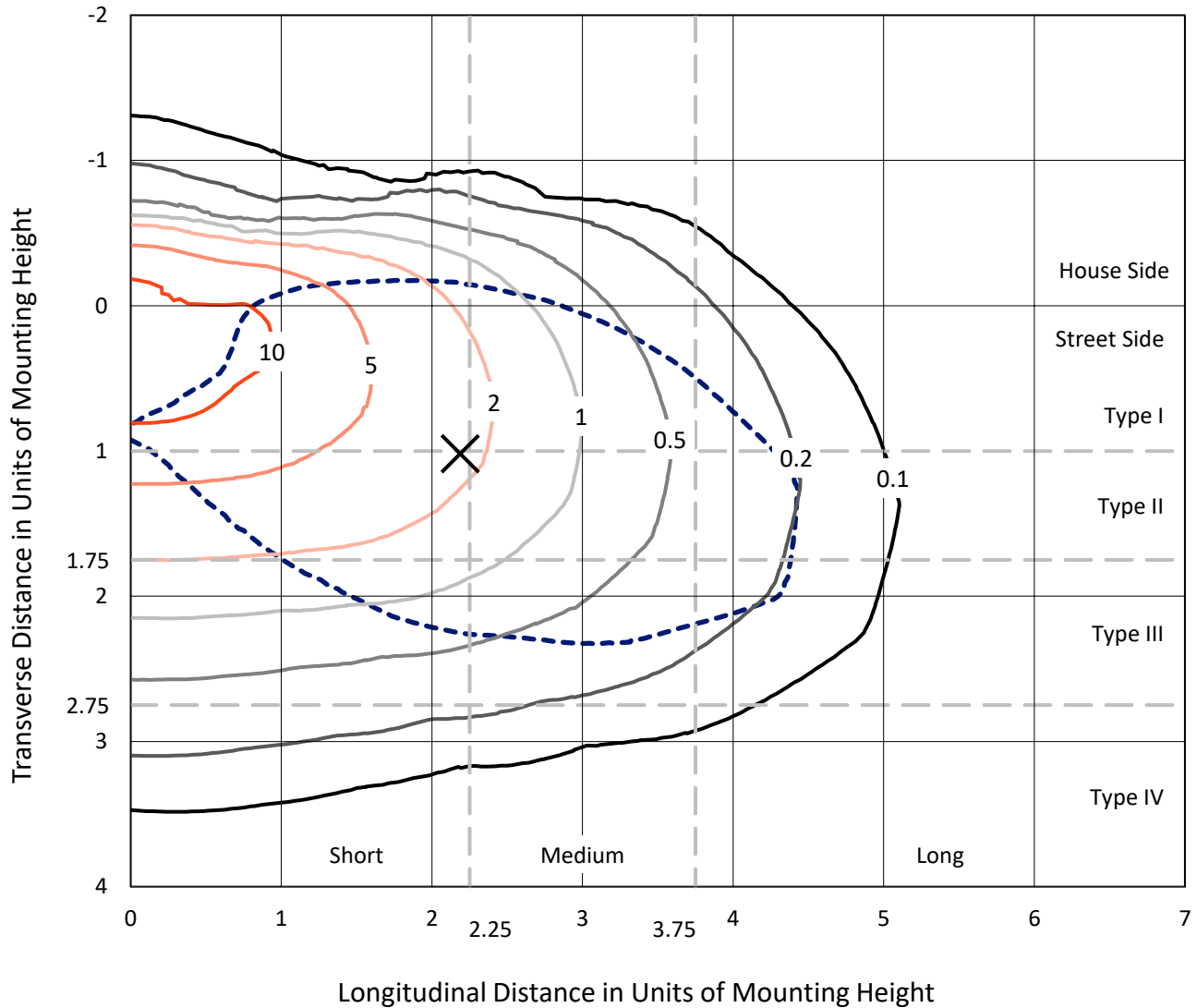
Input Watts (W): 434.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

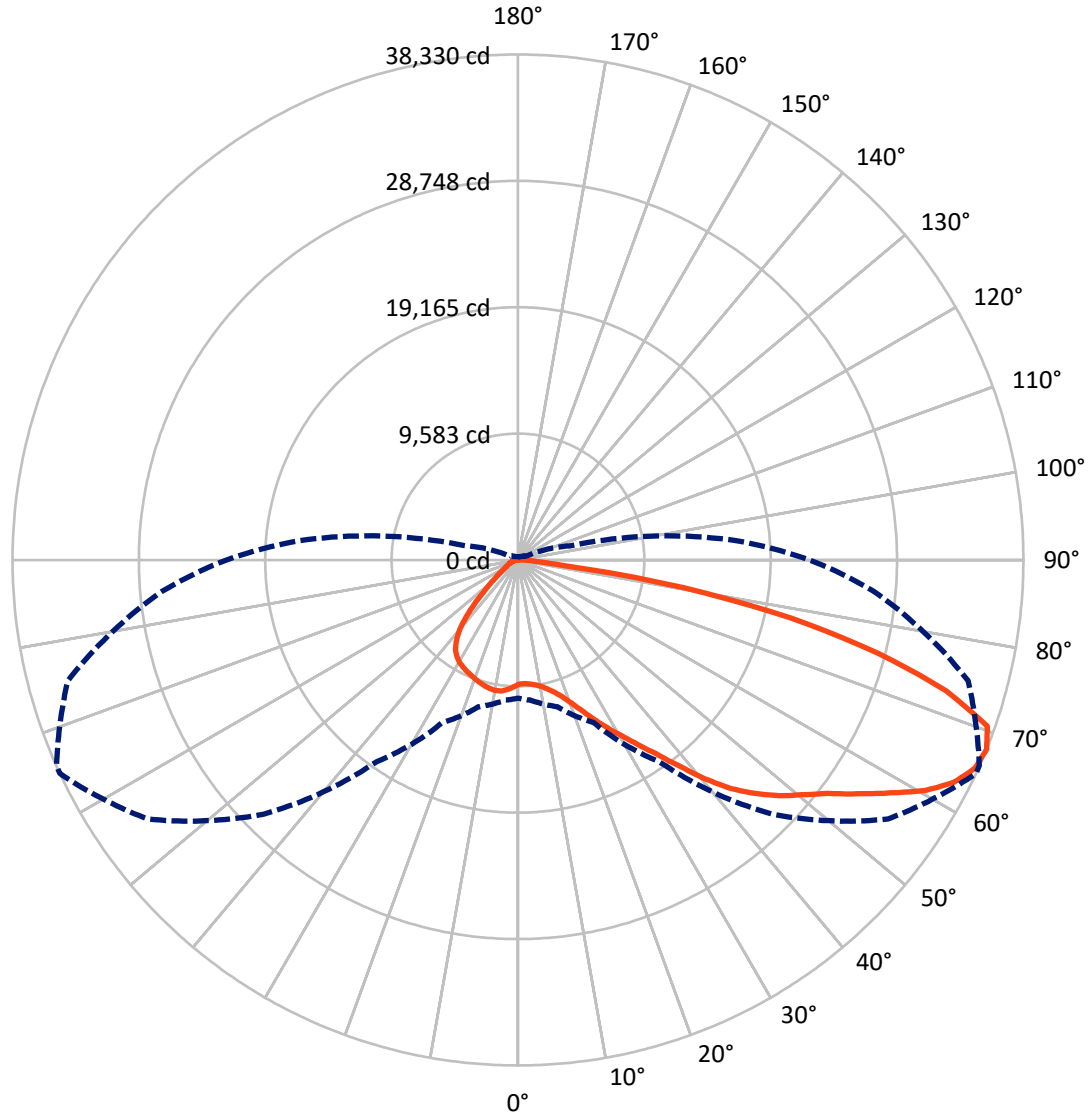
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.3 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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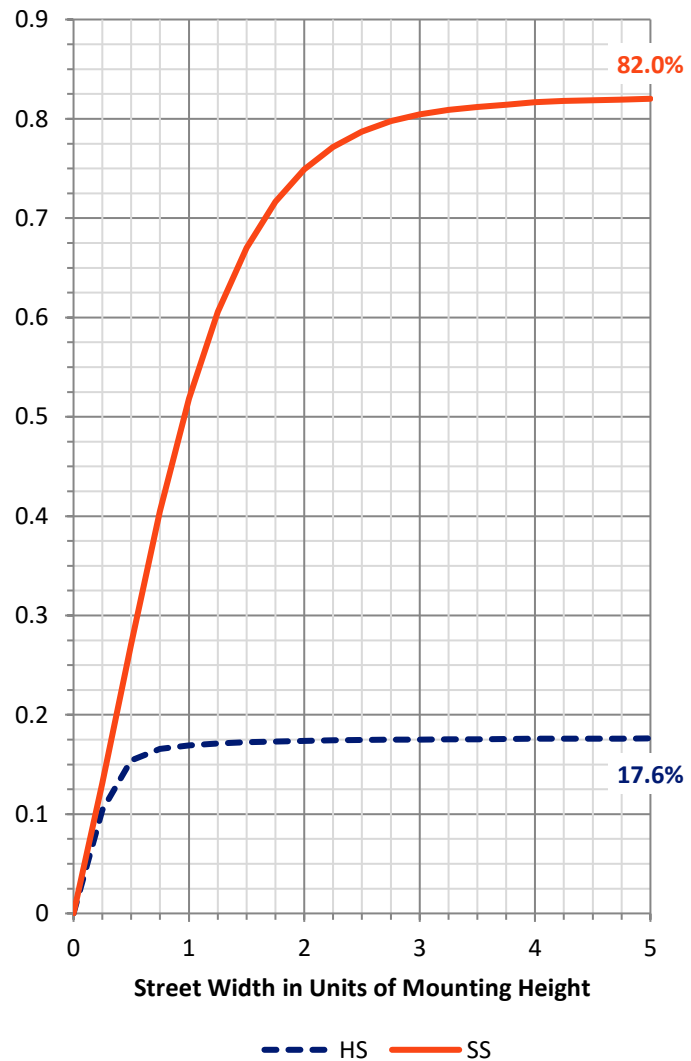
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11069.1	0.0	11069.1
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	50864.9	0.0	50864.9
	% Fixture	82.1	0.0	82.1
Total	Lumens	61934.0	0.0	61934.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	931.1	1.5
10°-20°	2874.6	4.6
20°-30°	4986.9	8.1
30°-40°	7522.6	12.1
40°-50°	10430.6	16.8
50°-60°	12875.2	20.8
60°-70°	13718.3	22.1
70°-80°	7849.9	12.7
80°-90°	744.8	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°	61934.0	100.0
0°-180°	61934.0	100.0



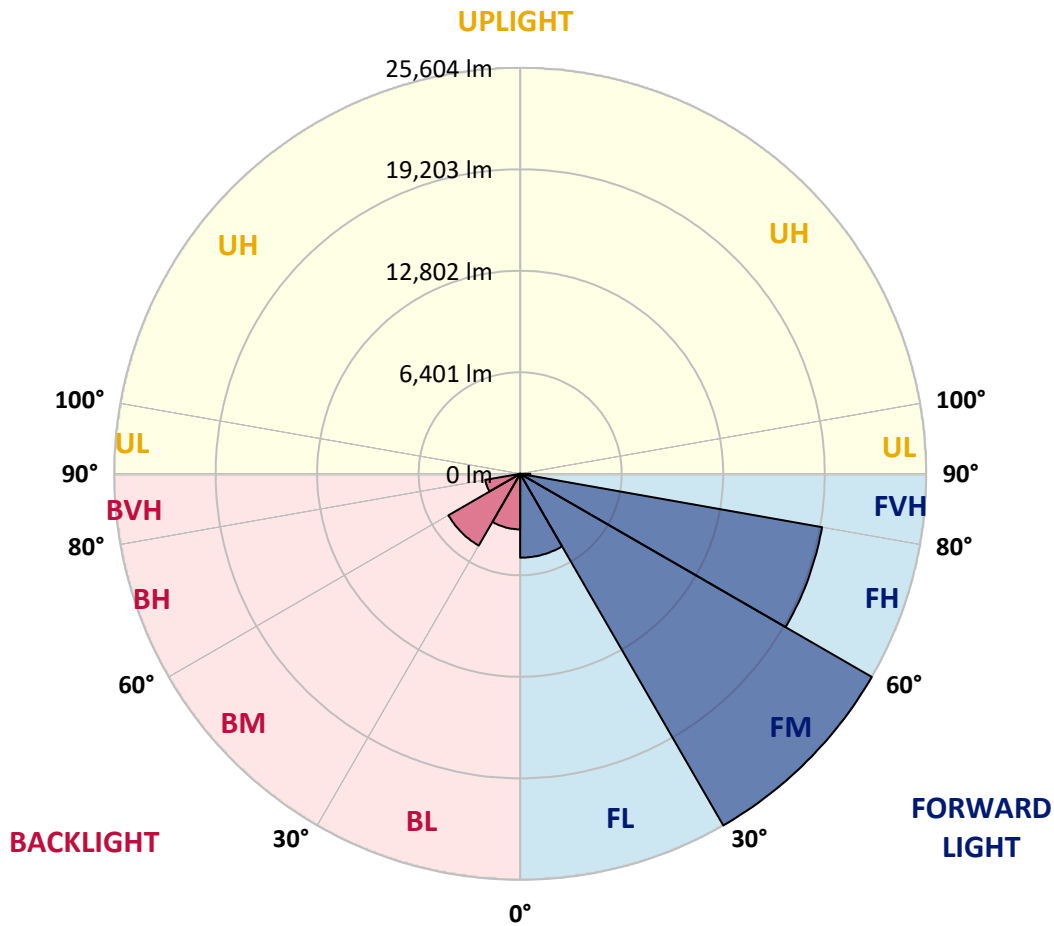
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5290.0	8.5			
FM (30°-60°)	25604.4	41.3			
FH (60°-80°)	19334.1	31.2			G5
FVH (80°-90°)	636.4	1.0			G4/750
BL (0°-30°)	3502.6	5.7	B4/5000		
BM (30°-60°)	5224.0	8.4	B4/8500		
BH (60°-80°)	2234.1	3.6	B3/2500		G3/2500
BVH (80°-90°)	108.4	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	9411.3	9411.3	9411.3	9411.3	9411.3	9411.3	9411.3	9411.3	9411.3	9411.3	9411.3
2.5°	9320.4	9308.2	9297.3	9316.3	9327.2	9344.8	9370.6	9388.2	9393.6	9409.9	9430.3
5°	9469.6	9468.3	9453.3	9445.2	9422.1	9414.0	9419.4	9441.1	9442.5	9462.8	9526.6
7.5°	9762.7	9759.9	9723.3	9707.0	9658.2	9603.9	9563.2	9567.3	9565.9	9586.3	9671.8
10°	10204.9	10183.2	10131.7	10081.5	9986.5	9884.8	9810.1	9742.3	9742.3	9772.2	9867.1
12.5°	10704.2	10734.0	10663.5	10587.5	10428.8	10245.6	10115.4	10039.4	10031.3	10046.2	10114.0
15°	11324.2	11324.2	11276.7	11168.2	11028.4	10773.4	10504.8	10408.4	10394.9	10426.1	10422.0
17.5°	12022.9	12043.2	11953.7	11899.4	11685.1	11402.9	11066.4	10899.6	10899.6	10879.2	10785.6
20°	12914.2	12803.0	12812.5	12722.9	12565.6	12155.8	11814.0	11571.1	11568.4	11527.7	11264.5
22.5°	13882.9	13821.8	13768.9	13690.2	13473.2	13106.9	12632.0	12391.9	12386.5	12286.1	11895.4
25°	14838.0	14884.1	14825.8	14682.0	14523.2	14124.4	13600.7	13364.6	13363.3	13196.4	12642.9
27.5°	15820.2	15870.4	15851.4	15721.2	15509.5	15197.5	14702.3	14394.4	14375.4	14266.8	13570.9
30°	16905.6	16860.8	16919.1	16863.5	16757.7	16248.9	15801.2	15443.1	15489.2	15456.6	14625.0
32.5°	17695.2	17723.6	17914.9	17920.4	17809.1	17432.0	16885.2	16665.4	16738.7	16695.3	15920.6
35°	18408.8	18454.9	18701.8	18944.7	19026.1	18613.6	18057.4	18043.8	18138.8	18403.3	17706.0
37.5°	19022.0	19054.5	19400.5	19716.6	19979.8	19697.6	19293.3	19774.9	19914.7	20456.0	19548.4
40°	19389.6	19431.7	19879.4	20324.4	20793.8	20693.4	20655.4	21795.0	21926.6	22402.8	20892.8
42.5°	19182.1	19264.8	20011.0	20825.0	21515.6	21716.3	22236.0	23701.2	23851.8	23892.5	22214.2
45°	18811.7	18914.8	19749.2	21066.5	22192.5	22837.0	23826.0	25254.6	25337.3	25222.0	23309.1
47.5°	18412.8	18522.7	19454.8	20994.6	22736.6	24140.7	25246.4	26717.1	26775.4	26421.3	24412.1
50°	17959.7	18061.5	19064.0	20826.4	23146.3	25371.2	26706.2	27981.5	28199.9	27499.9	25269.5
52.5°	17408.9	17517.4	18581.1	20563.2	23505.8	26284.3	27993.7	29410.1	29425.0	28848.4	26235.4
55°	16695.3	16883.9	17974.6	20107.3	23694.4	27068.4	29115.7	31299.9	31396.2	30838.6	27044.0
57.5°	15901.6	16065.8	17244.7	19499.5	23524.8	27664.0	30920.0	33326.8	33314.6	32195.3	27750.8
60°	14852.9	14969.6	16293.7	18704.5	22978.1	28384.4	32799.0	35498.8	35477.1	33524.9	28205.3
62.5°	13507.1	13623.8	14869.2	17457.7	22174.9	28867.4	34074.3	37125.5	37063.1	34492.2	28345.1
65°	11946.9	12155.8	13237.1	15839.2	20754.5	28549.9	34690.3	38083.3	37982.9	35230.2	28011.3
67.5°	10484.4	10662.1	11518.2	13611.6	18658.4	27262.4	34256.1	38330.2	38300.4	35337.4	27068.4
70°	8414.1	8479.2	9263.4	11055.6	15524.5	24505.7	32755.6	37760.4	37774.0	34349.7	25174.5
72.5°	5759.1	5917.8	6266.5	7681.5	11297.1	19488.7	28232.5	33983.4	33986.1	30800.7	21933.4
75°	3097.3	3342.9	3749.9	4451.3	6315.3	12505.9	22672.8	28198.6	28251.5	25680.6	17433.3
77.5°	1535.8	1623.9	1860.0	2381.0	2895.2	5900.2	14581.6	21166.9	21293.1	19712.5	11889.9
80°	702.8	717.7	735.3	731.2	1108.4	2588.5	6259.7	12712.1	12750.1	11724.4	5428.1
82.5°	549.5	546.7	554.9	504.7	507.4	998.5	2166.6	3329.3	3550.4	2794.8	1721.6
85°	332.4	331.0	356.8	276.8	340.5	540.0	1093.5	1328.2	1344.5	1093.5	891.3
87.5°	126.2	122.1	112.6	99.0	114.0	151.9	378.5	488.4	477.6	339.2	308.0
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°	9411.3	9411.3	9411.3	9411.3	9411.3	9411.3	9411.3	9411.3	9411.3	9411.3	9411.3
2.5°	9447.9	9491.3	9571.4	9632.4	9652.8	9717.9	9780.3	9791.1	9835.9	9853.6	9911.9
5°	9565.9	9639.2	9764.0	9846.8	9883.4	9991.9	10062.5	10097.8	10085.5	10092.3	10157.4
7.5°	9738.2	9807.4	9907.8	10008.2	10025.9	10044.8	10038.1	10032.6	9985.2	9944.4	10005.5
10°	9895.6	9960.7	10023.1	10038.1	9948.5	9898.3	9808.8	9739.6	9647.3	9605.3	9654.1
12.5°	10116.7	10130.3	10069.3	9987.9	9795.2	9616.1	9471.0	9344.8	9230.8	9152.1	9217.3
15°	10350.1	10297.2	10119.5	9882.0	9583.6	9327.2	9089.7	8879.5	8690.9	8644.8	8662.4
17.5°	10659.4	10515.6	10157.4	9758.6	9294.6	8895.7	8590.5	8324.6	8077.7	7974.6	7965.1
20°	11036.6	10804.6	10234.8	9602.6	8952.7	8422.3	7950.1	7552.6	7212.1	6932.6	6939.4
22.5°	11527.7	11191.2	10351.5	9439.8	8574.2	7867.4	7180.9	6505.3	5945.0	5703.5	5643.8
25°	12176.2	11674.2	10517.0	9291.9	8150.9	7161.9	6191.9	5238.1	4645.3	4410.6	4384.8
27.5°	12983.4	12322.7	10769.3	9127.7	7697.8	6324.8	4930.2	3995.4	3451.4	3204.5	3121.7
30°	13900.5	13121.8	11028.4	8956.8	7149.7	5249.0	3759.4	2843.6	2286.0	2064.9	2036.4
32.5°	15087.6	14133.9	11413.7	8688.2	6349.3	4125.7	2622.5	1774.5	1396.0	1301.1	1273.9
35°	16774.0	15502.8	11889.9	8349.0	5320.9	2881.6	1625.3	1039.2	837.1	789.6	780.1
37.5°	18346.4	16845.9	12370.2	7786.0	4040.2	1799.0	929.3	666.1	621.4	622.7	625.4
40°	19593.1	17764.3	12758.2	7045.2	2657.7	1021.6	645.8	553.5	554.9	550.8	548.1
42.5°	20702.9	18496.9	12933.2	5950.4	1539.8	683.8	560.3	510.1	497.9	502.0	499.3
45°	21621.4	19244.5	12594.0	4719.9	907.6	613.2	529.1	473.5	459.9	481.6	484.3
47.5°	22587.3	19954.0	12074.4	3555.9	736.7	583.4	500.6	446.3	439.6	466.7	469.4
50°	23400.0	20468.2	11188.5	2679.4	702.8	550.8	474.8	419.2	417.9	442.3	442.3
52.5°	24079.7	20778.9	10137.1	2068.9	679.7	522.3	449.1	393.4	393.4	401.6	402.9
55°	24558.6	20716.5	9510.3	1628.0	655.3	495.2	421.9	369.0	352.7	347.3	350.0
57.5°	24645.4	20551.0	8783.1	1269.9	626.8	469.4	397.5	340.5	310.7	306.6	305.3
60°	24589.8	20187.4	7952.8	1060.9	594.2	445.0	373.1	310.7	280.8	271.3	274.0
62.5°	24357.8	19542.9	6993.7	930.7	561.7	426.0	346.0	290.3	263.2	251.0	251.0
65°	23657.8	18620.4	5569.2	815.4	521.0	405.6	324.2	282.2	252.3	238.8	236.1
67.5°	22119.3	16706.1	4185.4	715.0	481.6	383.9	321.5	280.8	246.9	227.9	225.2
70°	20055.8	14350.9	2857.2	628.1	438.2	363.6	320.2	282.2	241.5	217.1	214.4
72.5°	16742.8	11313.3	1645.7	546.7	394.8	344.6	314.7	283.5	232.0	202.1	198.1
75°	12580.5	7935.2	966.0	469.4	352.7	316.1	299.8	275.4	217.1	184.5	180.4
77.5°	7566.2	3705.1	727.2	389.4	302.5	278.1	267.3	252.3	198.1	170.9	166.9
80°	2775.8	1406.9	571.2	312.0	240.1	241.5	230.6	221.1	180.4	157.4	154.7
82.5°	1210.2	860.1	421.9	237.4	188.6	215.7	189.9	181.8	154.7	141.1	135.7
85°	734.0	512.8	271.3	161.4	130.2	146.5	133.0	139.7	119.4	111.2	107.2
87.5°	242.8	153.3	120.7	78.7	65.1	61.1	59.7	71.9	67.8	62.4	62.4
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)