

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: P721860

Luminaire Tested: **CST-CA8-400-740-U-T3-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721860
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-CA8-400-740-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 4000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 56648 lumens
Efficiency: N/A
Efficacy: 141.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

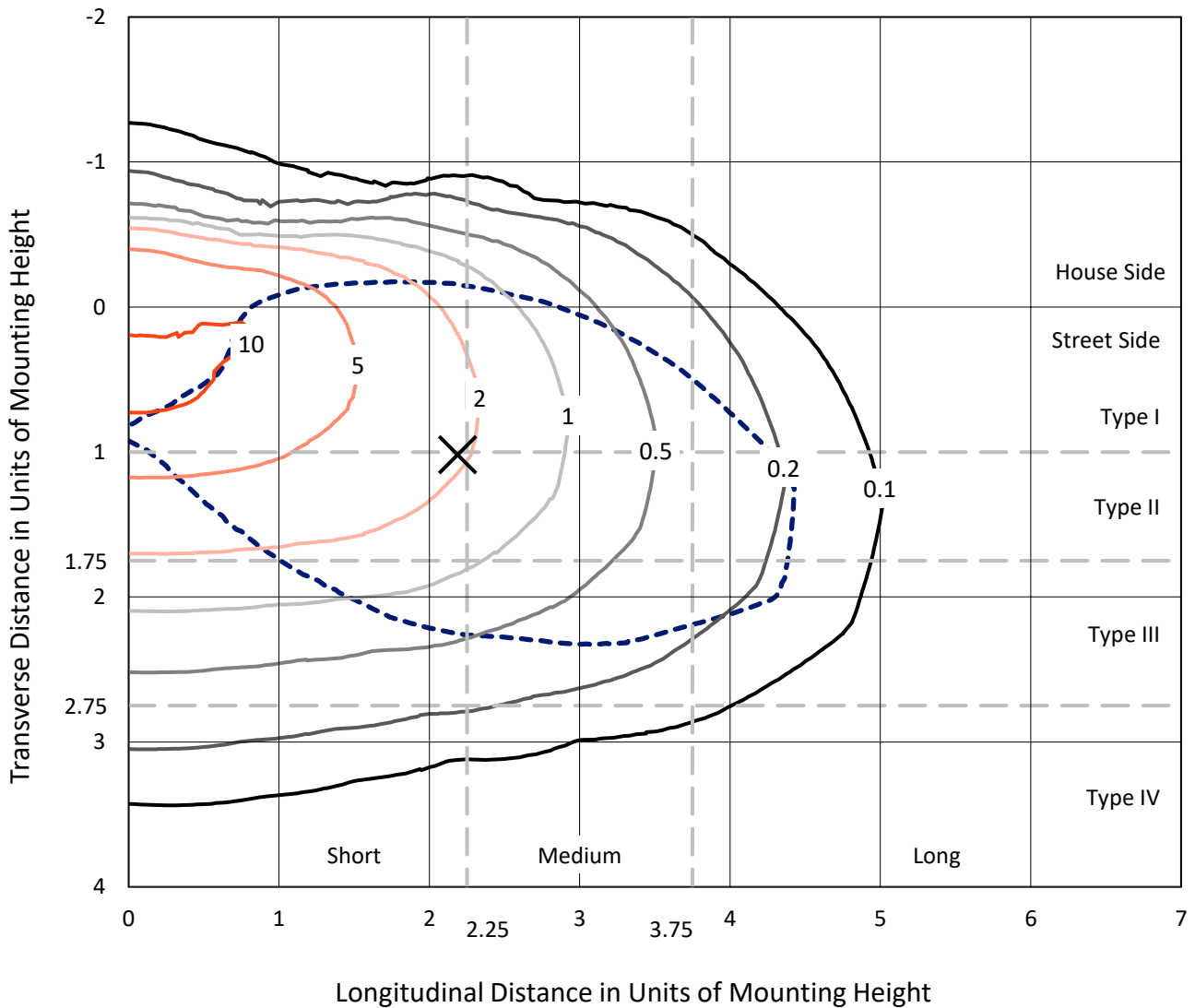
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

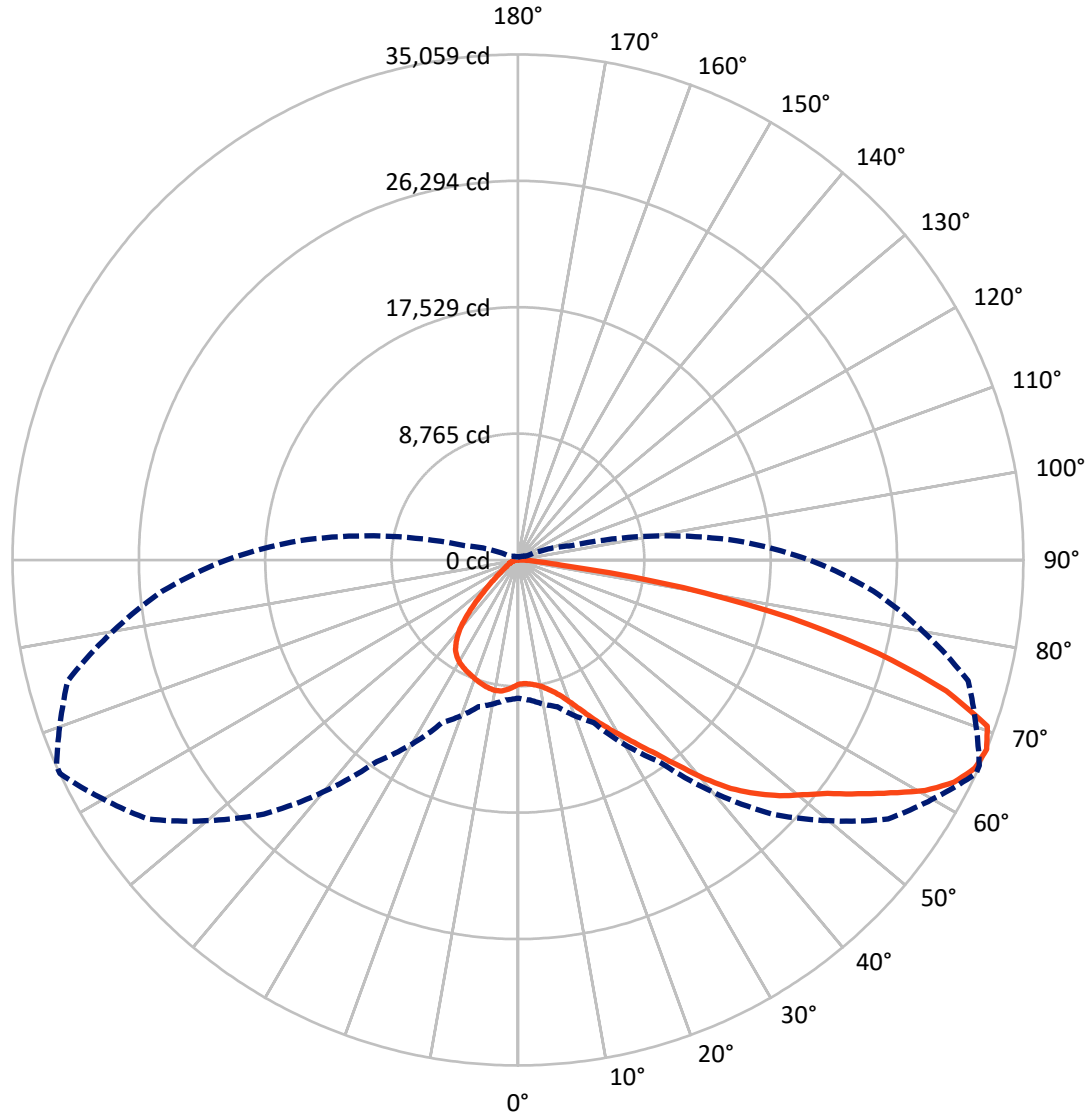
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.2 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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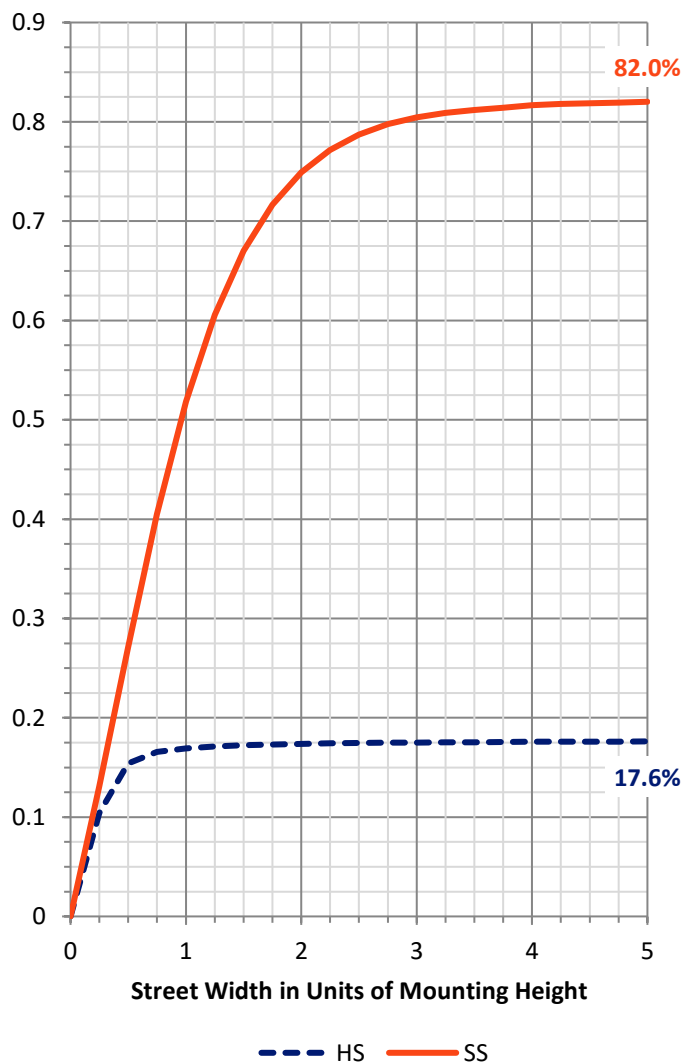
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10124.4	0.0	10124.4
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	46523.6	0.0	46523.6
	% Fixture	82.1	0.0	82.1
Total	Lumens	56648.0	0.0	56648.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	851.6	1.5
10°-20°	2629.3	4.6
20°-30°	4561.2	8.1
30°-40°	6880.6	12.1
40°-50°	9540.4	16.8
50°-60°	11776.3	20.8
60°-70°	12547.5	22.1
70°-80°	7179.9	12.7
80°-90°	681.2	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°	56648.0	100.0
0°-180°	56648.0	100.0

Coefficient of Utilization

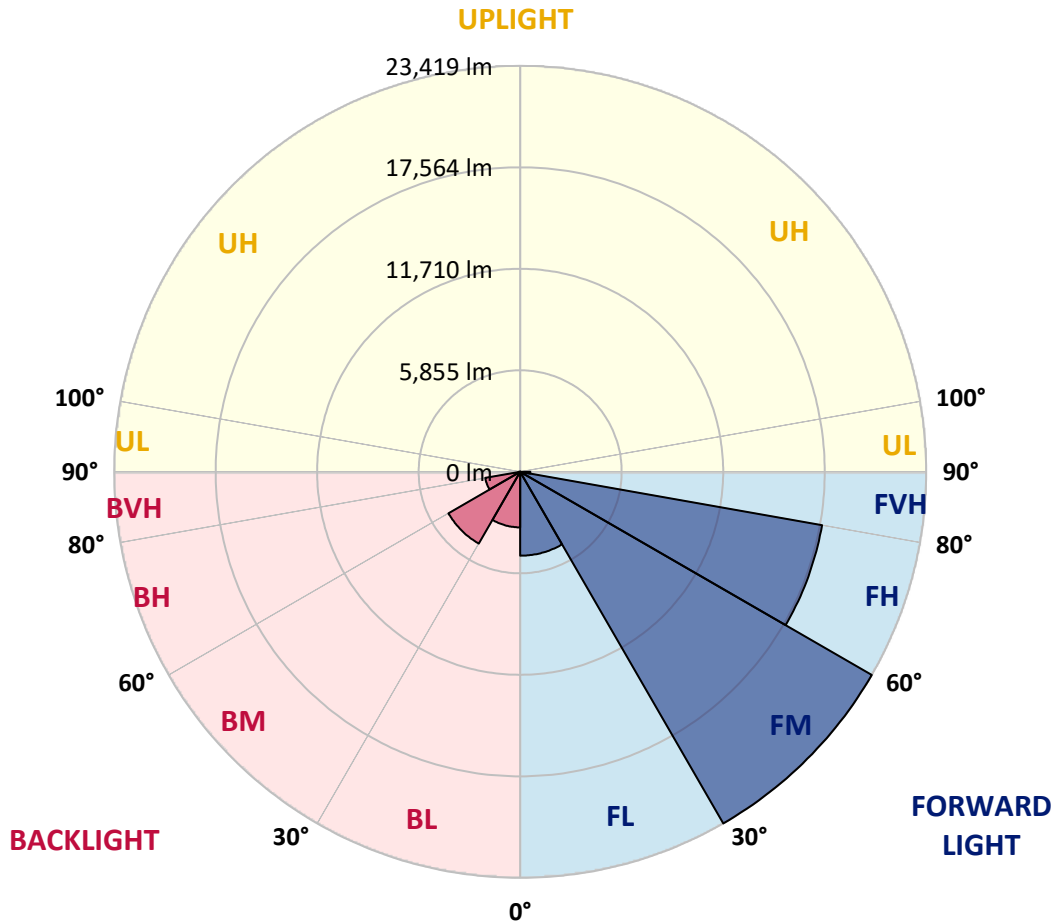


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4838.5	8.5			
FM (30°-60°)	23419.1	41.3			
FH (60°-80°)	17683.9	31.2			G5
FVH (80°-90°)	582.1	1.0			G4/750
BL (0°-30°)	3203.6	5.7	B4/5000		
BM (30°-60°)	4778.2	8.4	B3/5000		
BH (60°-80°)	2043.4	3.6	B3/2500		G3/2500
BVH (80°-90°)	99.1	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°	8608.0	8608.0	8608.0	8608.0	8608.0	8608.0	8608.0	8608.0	8608.0	8608.0	8608.0
2.5°	8524.9	8513.7	8503.8	8521.2	8531.1	8547.2	8570.8	8586.9	8591.9	8606.8	8625.4
5°	8661.4	8660.2	8646.5	8639.1	8618.0	8610.5	8615.5	8635.3	8636.6	8655.2	8713.5
7.5°	8929.4	8926.9	8893.4	8878.5	8833.9	8784.2	8747.0	8750.7	8749.5	8768.1	8846.3
10°	9334.0	9314.1	9266.9	9221.0	9134.2	9041.1	8972.9	8910.8	8910.8	8938.1	9025.0
12.5°	9790.6	9817.9	9753.4	9683.9	9538.7	9371.2	9252.1	9182.6	9175.1	9188.8	9250.8
15°	10357.7	10357.7	10314.3	10215.0	10087.2	9853.9	9608.2	9520.1	9507.7	9536.2	9532.5
17.5°	10996.7	11015.4	10933.5	10883.8	10687.8	10429.7	10121.9	9969.3	9969.3	9950.7	9865.1
20°	11812.0	11710.3	11718.9	11637.0	11493.1	11118.3	10805.6	10583.5	10581.0	10543.8	10303.1
22.5°	12698.0	12642.2	12593.8	12521.8	12323.2	11988.2	11553.9	11334.3	11329.3	11237.5	10880.1
25°	13571.6	13613.8	13560.4	13428.9	13283.7	12918.9	12439.9	12224.0	12222.7	12070.1	11563.8
27.5°	14470.0	14515.9	14498.5	14379.4	14185.8	13900.4	13447.5	13165.8	13148.4	13049.2	12412.6
30°	15462.7	15421.7	15475.1	15424.2	15327.4	14862.1	14452.6	14125.0	14167.2	14137.4	13376.8
32.5°	16184.9	16210.9	16385.9	16390.9	16289.1	15944.2	15444.1	15243.1	15310.1	15270.4	14561.8
35°	16837.6	16879.8	17105.6	17327.7	17402.2	17025.0	16516.2	16503.8	16590.7	16832.6	16194.8
37.5°	17398.5	17428.3	17744.7	18033.8	18274.5	18016.4	17646.7	18087.2	18215.0	18710.1	17879.9
40°	17734.8	17773.2	18182.7	18589.7	19019.1	18927.2	18892.5	19934.8	20055.2	20490.8	19109.7
42.5°	17544.9	17620.6	18303.1	19047.6	19679.2	19862.9	20338.1	21678.3	21816.0	21853.3	20318.3
45°	17206.1	17300.4	18063.6	19268.5	20298.4	20887.9	21792.5	23099.1	23174.8	23069.3	21319.7
47.5°	16841.3	16941.8	17794.3	19202.7	20796.0	22080.3	23091.7	24436.8	24490.1	24166.3	22328.5
50°	16426.9	16519.9	17436.9	19048.9	21170.8	23205.8	24426.9	25593.3	25793.1	25152.8	23112.8
52.5°	15923.1	16022.3	16995.2	18808.1	21499.6	24040.9	25604.5	26899.9	26913.6	26386.2	23996.3
55°	15270.4	15442.8	16440.5	18391.2	21672.1	24758.2	26630.7	28628.5	28716.6	28206.6	24735.8
57.5°	14544.4	14694.6	15772.9	17835.3	21517.0	25302.9	28281.1	30482.4	30471.2	29447.5	25382.3
60°	13585.2	13691.9	14903.1	17108.1	21016.9	25961.8	29999.7	32469.0	32449.2	30663.6	25798.0
62.5°	12354.3	12461.0	13600.1	15967.7	20282.3	26403.6	31166.1	33956.9	33899.8	31548.3	25925.9
65°	10927.3	11118.3	12107.3	14487.4	18983.1	26113.2	31729.5	34832.9	34741.1	32223.4	25620.6
67.5°	9589.6	9752.1	10535.1	12449.8	17065.9	24935.6	31332.4	35058.8	35031.5	32321.4	24758.2
70°	7696.0	7755.5	8472.8	10112.0	14199.5	22414.1	29960.0	34537.6	34550.0	31418.0	23025.9
72.5°	5267.6	5412.7	5731.7	7025.9	10332.9	17825.3	25822.9	31083.0	31085.5	28171.9	20061.4
75°	2832.9	3057.5	3429.8	4071.4	5776.3	11438.5	20737.7	25791.8	25840.2	23488.8	15945.4
77.5°	1404.7	1485.3	1701.3	2177.8	2648.1	5396.6	13337.1	19360.3	19475.7	18030.1	10875.1
80°	642.8	656.4	672.6	668.8	1013.8	2367.6	5725.5	11627.1	11661.9	10723.7	4964.8
82.5°	502.6	500.1	507.5	461.6	464.1	913.3	1981.7	3045.1	3247.4	2556.2	1574.7
85°	304.0	302.8	326.4	253.1	311.5	493.9	1000.2	1214.8	1229.7	1000.2	815.3
87.5°	115.4	111.7	103.0	90.6	104.2	139.0	346.2	446.7	436.8	310.2	281.7
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°	8608.0	8608.0	8608.0	8608.0	8608.0	8608.0	8608.0	8608.0	8608.0	8608.0	8608.0
2.5°	8641.5	8681.2	8754.5	8810.3	8828.9	8888.5	8945.6	8955.5	8996.4	9012.6	9065.9
5°	8749.5	8816.5	8930.7	9006.4	9039.9	9139.1	9203.7	9235.9	9224.8	9231.0	9290.5
7.5°	8907.1	8970.4	9062.2	9154.0	9170.2	9187.5	9181.3	9176.4	9132.9	9095.7	9151.5
10°	9051.0	9110.6	9167.7	9181.3	9099.4	9053.5	8971.6	8908.3	8823.9	8785.5	8830.2
12.5°	9253.3	9265.7	9209.9	9135.4	8959.2	8795.4	8662.6	8547.2	8443.0	8371.0	8430.6
15°	9466.7	9418.3	9255.8	9038.6	8765.6	8531.1	8313.9	8121.6	7949.1	7906.9	7923.1
17.5°	9749.6	9618.1	9290.5	8925.7	8501.3	8136.5	7857.3	7614.1	7388.2	7293.9	7285.2
20°	10094.6	9882.4	9361.3	8783.0	8188.6	7703.4	7271.6	6908.0	6596.6	6340.9	6347.1
22.5°	10543.8	10236.1	9468.0	8634.1	7842.4	7195.9	6568.0	5950.1	5437.6	5216.7	5162.1
25°	11137.0	10677.8	9619.4	8498.8	7455.2	6550.6	5663.4	4791.1	4248.8	4034.1	4010.5
27.5°	11875.3	11271.0	9850.2	8348.7	7040.8	5785.0	4509.4	3654.4	3156.8	2931.0	2855.3
30°	12714.1	12001.9	10087.2	8192.3	6539.5	4801.0	3438.5	2600.9	2090.9	1888.6	1862.6
32.5°	13799.9	12927.6	10439.6	7946.6	5807.4	3773.5	2398.6	1623.1	1276.9	1190.0	1165.2
35°	15342.3	14179.6	10875.1	7636.4	4866.8	2635.6	1486.6	950.5	765.6	722.2	713.5
37.5°	16780.5	15408.1	11314.4	7121.5	3695.4	1645.4	850.0	609.3	568.3	569.6	572.0
40°	17920.9	16248.2	11669.3	6443.9	2430.9	934.4	590.7	506.3	507.5	503.8	501.3
42.5°	18935.9	16918.3	11829.4	5442.5	1408.4	625.4	512.5	466.6	455.4	459.1	456.6
45°	19776.0	17602.0	11519.2	4317.0	830.2	560.9	483.9	433.1	420.7	440.5	443.0
47.5°	20659.5	18251.0	11043.9	3252.4	673.8	533.6	457.9	408.3	402.0	426.9	429.3
50°	21402.8	18721.3	10233.6	2450.8	642.8	503.8	434.3	383.4	382.2	404.5	404.5
52.5°	22024.5	19005.4	9271.9	1892.4	621.7	477.7	410.7	359.9	359.9	367.3	368.5
55°	22462.5	18948.3	8698.6	1489.1	599.3	452.9	385.9	337.5	322.6	317.7	320.1
57.5°	22542.0	18797.0	8033.5	1161.5	573.3	429.3	363.6	311.5	284.2	280.4	279.2
60°	22491.1	18464.4	7274.1	970.4	543.5	407.0	341.2	284.2	256.9	248.2	250.7
62.5°	22278.9	17875.0	6396.8	851.2	513.7	389.6	316.4	265.5	240.7	229.6	229.6
65°	21638.6	17031.2	5093.8	745.8	476.5	371.0	296.6	258.1	230.8	218.4	215.9
67.5°	20231.4	15280.3	3828.1	653.9	440.5	351.2	294.1	256.9	225.8	208.5	206.0
70°	18344.0	13126.1	2613.3	574.5	400.8	332.6	292.8	258.1	220.9	198.5	196.1
72.5°	15313.8	10347.8	1505.2	500.1	361.1	315.2	287.9	259.3	212.2	184.9	181.2
75°	11506.7	7257.9	883.5	429.3	322.6	289.1	274.2	251.9	198.5	168.8	165.0
77.5°	6920.4	3388.9	665.1	356.1	276.7	254.4	244.5	230.8	181.2	156.4	152.6
80°	2538.9	1286.8	522.4	285.4	219.6	220.9	211.0	202.3	165.0	143.9	141.5
82.5°	1106.9	786.7	385.9	217.2	172.5	197.3	173.7	166.3	141.5	129.1	124.1
85°	671.3	469.1	248.2	147.7	119.1	134.0	121.6	127.8	109.2	101.8	98.0
87.5°	222.1	140.2	110.4	72.0	59.6	55.8	54.6	65.8	62.0	57.1	57.1
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)