

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: P721890

Luminaire Tested: **CST-CA8-430-722-U-T3-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721890
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-CA8-430-722-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 49567 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

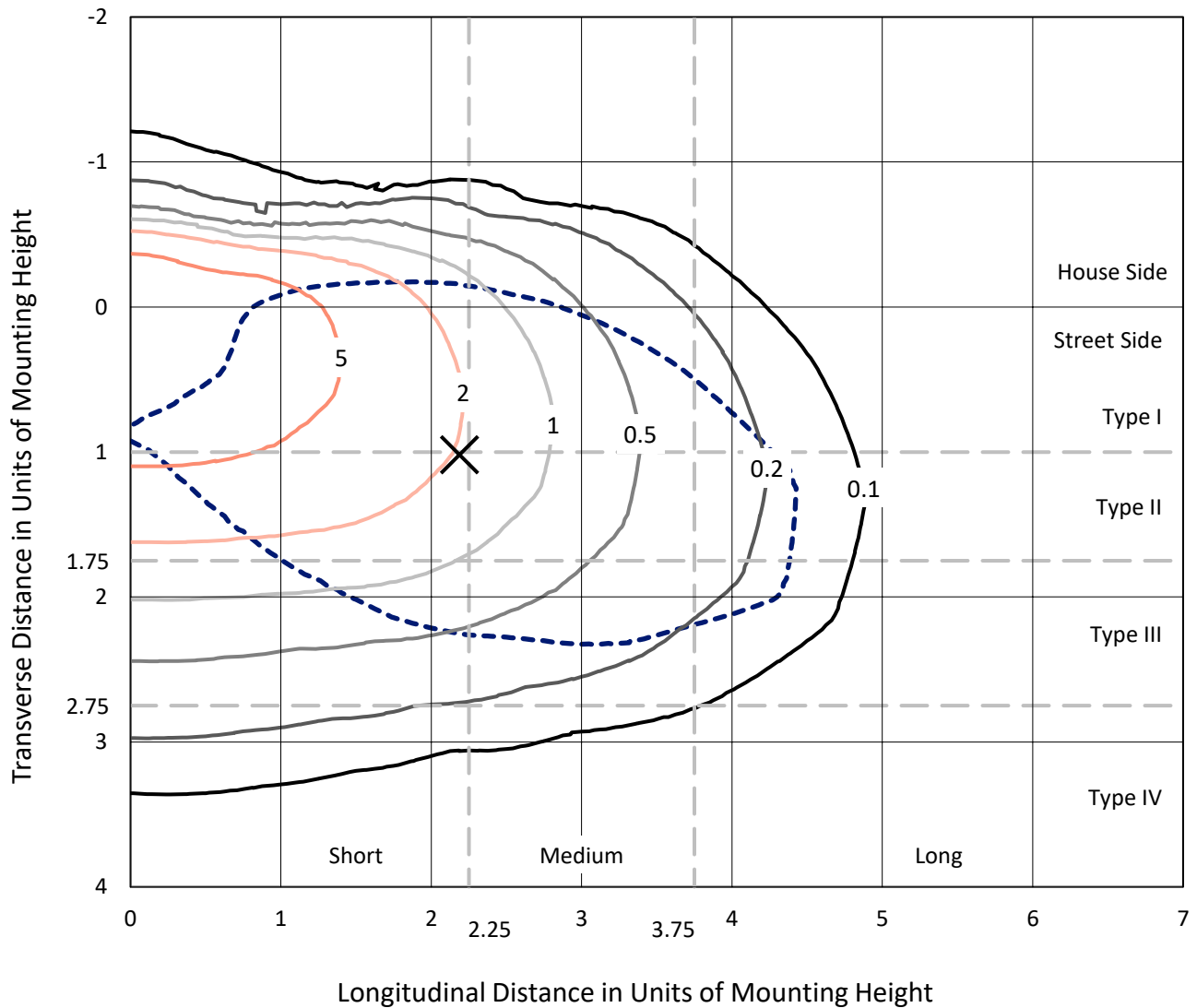
Input Watts (W): 434.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

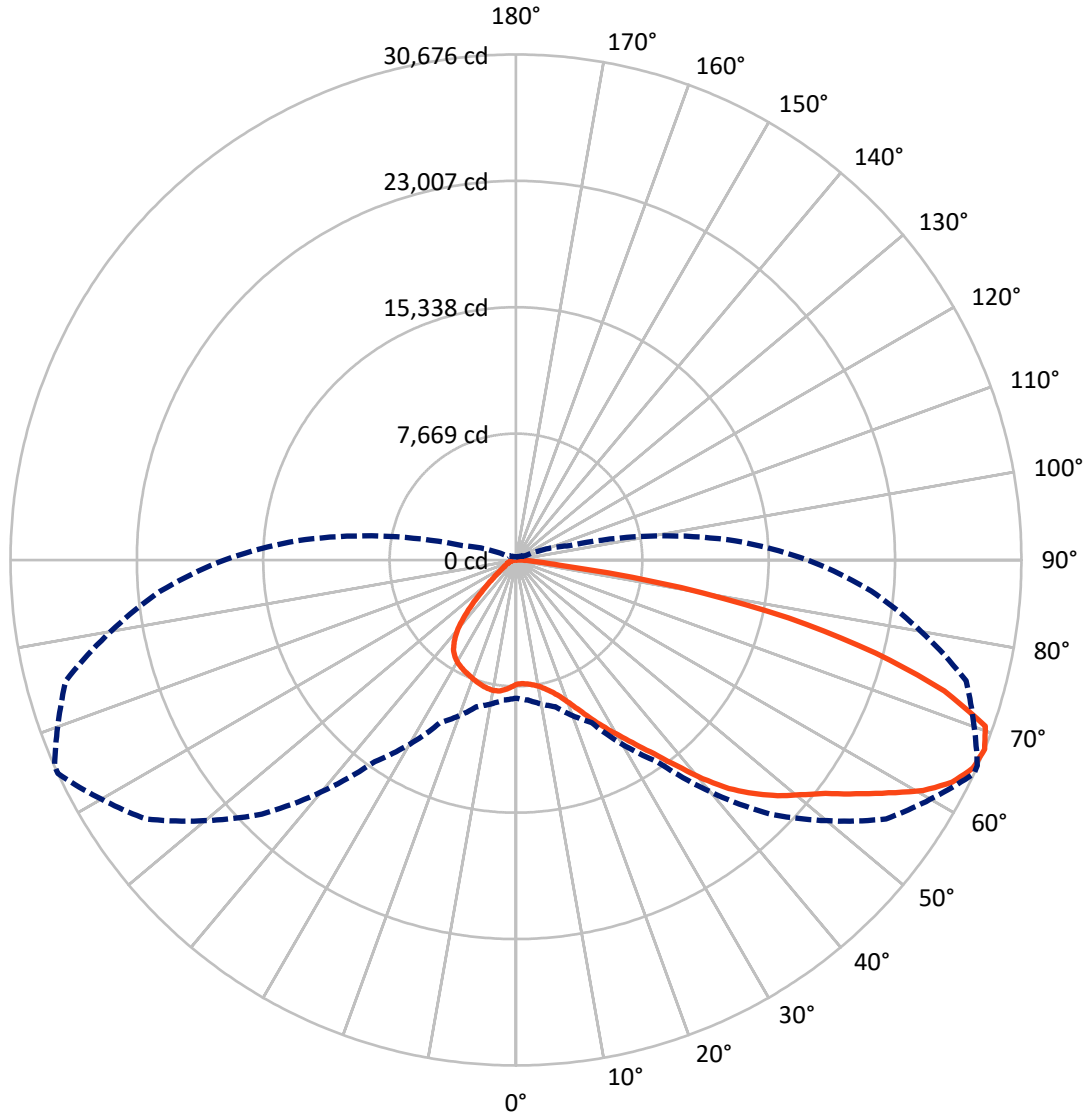
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.8 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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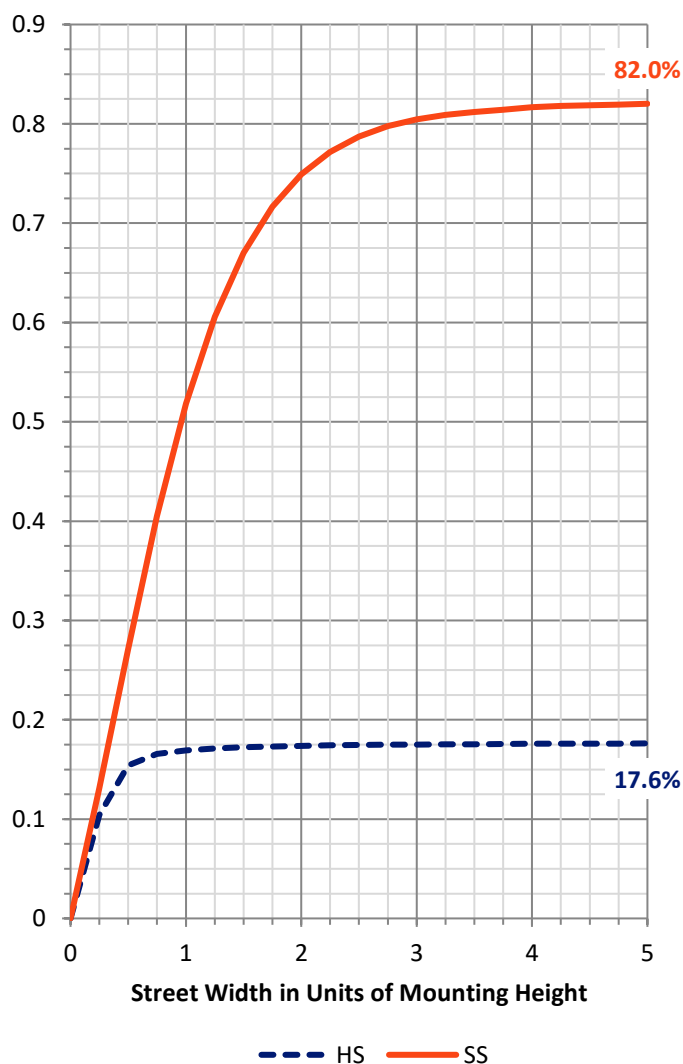
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8858.8	0.0	8858.8
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	40708.2	0.0	40708.2
	% Fixture	82.1	0.0	82.1
Total	Lumens	49567.0	0.0	49567.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	745.2	1.5
10°-20°	2300.6	4.6
20°-30°	3991.1	8.1
30°-40°	6020.5	12.1
40°-50°	8347.8	16.8
50°-60°	10304.3	20.8
60°-70°	10979.1	22.1
70°-80°	6282.4	12.7
80°-90°	596.1	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°	49567.0	100.0
0°-180°	49567.0	100.0

Coefficient of Utilization

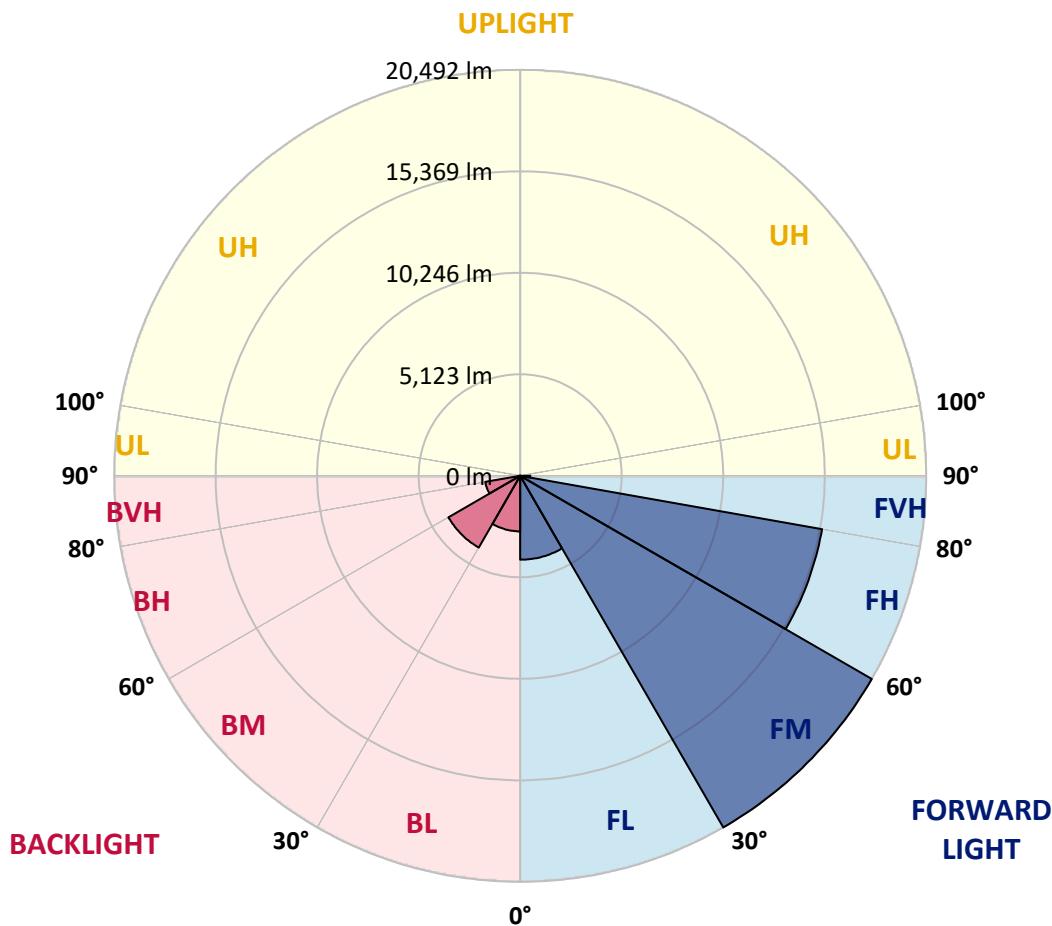


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4233.7	8.5			
FM (30°-60°)	20491.7	41.3			
FH (60°-80°)	15473.5	31.2			G5
FVH (80°-90°)	509.3	1.0			G4/750
BL (0°-30°)	2803.2	5.7	B4/5000		
BM (30°-60°)	4180.9	8.4	B3/5000		
BH (60°-80°)	1788.0	3.6	B3/2500		G3/2500
BVH (80°-90°)	86.8	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°	7532.0	7532.0	7532.0	7532.0	7532.0	7532.0	7532.0	7532.0	7532.0	7532.0	7532.0
2.5°	7459.3	7449.5	7440.8	7456.0	7464.7	7478.8	7499.5	7513.6	7517.9	7530.9	7547.2
5°	7578.7	7577.6	7565.7	7559.2	7540.7	7534.2	7538.5	7555.9	7557.0	7573.3	7624.3
7.5°	7813.2	7811.1	7781.8	7768.7	7729.6	7686.2	7653.6	7656.9	7655.8	7672.1	7740.5
10°	8167.2	8149.8	8108.6	8068.4	7992.4	7911.0	7851.2	7797.0	7797.0	7820.8	7896.8
12.5°	8566.8	8590.7	8534.2	8473.4	8346.4	8199.8	8095.5	8034.7	8028.2	8040.2	8094.5
15°	9063.0	9063.0	9025.0	8938.1	8826.3	8622.1	8407.2	8330.1	8319.2	8344.2	8340.9
17.5°	9622.1	9638.4	9566.8	9523.3	9351.8	9125.9	8856.7	8723.1	8723.1	8706.8	8631.9
20°	10335.5	10246.5	10254.1	10182.4	10056.5	9728.6	9454.9	9260.6	9258.4	9225.8	9015.2
22.5°	11110.7	11061.9	11019.5	10956.6	10782.8	10489.7	10109.7	9917.5	9913.1	9832.8	9520.1
25°	11875.1	11912.1	11865.4	11750.3	11623.2	11304.0	10884.9	10696.0	10694.9	10561.3	10118.3
27.5°	12661.2	12701.4	12686.2	12582.0	12412.6	12162.9	11766.6	11520.1	11504.9	11418.0	10861.0
30°	13529.9	13494.0	13540.7	13496.2	13411.5	13004.3	12646.0	12359.4	12396.3	12370.2	11704.7
32.5°	14161.8	14184.6	14337.7	14342.0	14253.0	13951.1	13513.6	13337.7	13396.3	13361.6	12741.6
35°	14732.9	14769.8	14967.4	15161.8	15226.9	14896.8	14451.7	14440.8	14516.8	14728.6	14170.5
37.5°	15223.7	15249.7	15526.6	15779.6	15990.2	15764.4	15440.8	15826.3	15938.1	16371.3	15644.9
40°	15517.9	15551.6	15909.9	16266.0	16641.7	16561.3	16530.9	17443.0	17548.3	17929.4	16721.0
42.5°	15351.8	15418.0	16015.2	16666.7	17219.3	17380.0	17795.9	18968.5	19089.0	19121.6	17778.5
45°	15055.4	15137.9	15805.6	16859.9	17761.1	18276.9	19068.4	20211.7	20278.0	20185.7	18654.7
47.5°	14736.2	14824.1	15570.0	16802.4	18196.5	19320.3	20205.2	21382.2	21428.9	21145.5	19537.5
50°	14373.5	14454.9	15257.3	16667.7	18524.4	20305.1	21373.5	22394.1	22568.9	22008.7	20223.7
52.5°	13932.7	14019.5	14870.8	16457.1	18812.2	21035.8	22403.9	23537.5	23549.4	23087.9	20996.7
55°	13361.6	13512.5	14385.4	16092.3	18963.1	21663.4	23301.8	25049.9	25127.0	24680.8	21643.9
57.5°	12726.4	12857.8	13801.3	15605.9	18827.4	22140.1	24745.9	26672.1	26662.3	25766.6	22209.6
60°	11887.1	11980.5	13040.2	14969.6	18389.8	22716.6	26249.7	28410.4	28393.0	26830.6	22573.3
62.5°	10810.0	10903.4	11900.1	13971.8	17747.0	23103.1	27270.4	29712.3	29662.3	27604.8	22685.1
65°	9561.3	9728.6	10593.9	12676.4	16610.2	22849.1	27763.3	30478.8	30398.5	28195.4	22418.0
67.5°	8390.9	8533.1	9218.2	10893.6	14932.7	21818.7	27415.8	30676.4	30652.5	28281.2	21663.4
70°	6734.0	6786.1	7413.7	8848.0	12424.5	19612.4	26215.0	30220.4	30231.3	27490.8	20147.7
72.5°	4609.1	4736.2	5015.2	6147.7	9041.3	15597.2	22595.0	27197.6	27199.8	24650.4	17553.7
75°	2478.8	2675.4	3001.1	3562.4	5054.3	10008.7	18145.5	22567.9	22610.2	20552.7	13952.2
77.5°	1229.1	1299.7	1488.6	1905.5	2317.0	4722.0	11669.9	16940.3	17041.3	15776.3	9515.7
80°	562.4	574.4	588.5	585.2	887.1	2071.7	5009.8	10173.7	10204.1	9383.3	4344.2
82.5°	439.7	437.6	444.1	403.9	406.1	799.1	1734.0	2664.5	2841.5	2236.7	1377.8
85°	266.0	264.9	285.6	221.5	272.5	432.1	875.1	1063.0	1076.0	875.1	713.4
87.5°	101.0	97.7	90.1	79.3	91.2	121.6	302.9	390.9	382.2	271.4	246.5
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°	7532.0	7532.0	7532.0	7532.0	7532.0	7532.0	7532.0	7532.0	7532.0	7532.0	7532.0
2.5°	7561.3	7596.1	7660.2	7709.0	7725.3	7777.4	7827.4	7836.0	7871.9	7886.0	7932.7
5°	7655.8	7714.4	7814.3	7880.6	7909.9	7996.7	8053.2	8081.4	8071.7	8077.1	8129.2
7.5°	7793.7	7849.1	7929.4	8009.8	8023.9	8039.1	8033.7	8029.3	7991.3	7958.7	8007.6
10°	7919.7	7971.8	8021.7	8033.7	7962.0	7921.8	7850.2	7794.8	7721.0	7687.3	7726.4
12.5°	8096.6	8107.5	8058.6	7993.5	7839.3	7696.0	7579.8	7478.8	7387.6	7324.6	7376.8
15°	8283.4	8241.0	8098.8	7908.8	7669.9	7464.7	7274.7	7106.4	6955.5	6918.6	6932.7
17.5°	8530.9	8415.9	8129.2	7810.0	7438.7	7119.4	6875.1	6662.3	6464.7	6382.2	6374.6
20°	8832.8	8647.1	8191.1	7685.1	7165.0	6740.5	6362.6	6044.5	5772.0	5548.3	5553.7
22.5°	9225.8	8956.6	8284.5	7554.8	6862.1	6296.4	5747.0	5206.3	4757.9	4564.6	4516.8
25°	9744.8	9343.1	8416.9	7436.5	6523.3	5731.8	4955.5	4192.2	3717.7	3529.9	3509.2
27.5°	10390.9	9862.1	8618.9	7305.1	6160.7	5061.9	3945.7	3197.6	2762.2	2564.6	2498.4
30°	11124.9	10501.6	8826.3	7168.3	5722.0	4200.9	3008.7	2275.8	1829.5	1652.6	1629.7
32.5°	12074.9	11311.6	9134.6	6953.3	5081.4	3301.8	2098.8	1420.2	1117.3	1041.3	1019.5
35°	13424.5	12407.2	9515.7	6681.9	4258.4	2306.2	1300.8	831.7	669.9	631.9	624.3
37.5°	14683.0	13482.1	9900.1	6231.3	3233.4	1439.7	743.8	533.1	497.3	498.4	500.5
40°	15680.8	14217.2	10210.6	5638.4	2127.0	817.6	516.8	443.0	444.1	440.8	438.7
42.5°	16568.9	14803.5	10350.7	4762.2	1232.4	547.2	448.4	408.3	398.5	401.7	399.6
45°	17304.0	15401.7	10079.3	3777.4	726.4	490.8	423.5	378.9	368.1	385.5	387.6
47.5°	18077.1	15969.6	9663.4	2845.8	589.6	466.9	400.7	357.2	351.8	373.5	375.7
50°	18727.5	16381.1	8954.4	2144.4	562.4	440.8	380.0	335.5	334.4	354.0	354.0
52.5°	19271.4	16629.7	8112.9	1655.8	544.0	418.0	359.4	314.9	314.9	321.4	322.5
55°	19654.7	16579.8	7611.3	1302.9	524.4	396.3	337.7	295.3	282.3	278.0	280.1
57.5°	19724.2	16447.3	7029.3	1016.3	501.6	375.7	318.1	272.5	248.6	245.4	244.3
60°	19679.7	16156.3	6364.8	849.1	475.6	356.1	298.6	248.6	224.8	217.2	219.3
62.5°	19494.0	15640.6	5597.2	744.8	449.5	340.9	276.9	232.4	210.6	200.9	200.9
65°	18933.8	14902.3	4457.1	652.6	416.9	324.6	259.5	225.8	202.0	191.1	188.9
67.5°	17702.5	13370.2	3349.6	572.2	385.5	307.3	257.3	224.8	197.6	182.4	180.2
70°	16051.0	11485.3	2286.6	502.7	350.7	291.0	256.2	225.8	193.3	173.7	171.6
72.5°	13399.6	9054.3	1317.0	437.6	316.0	275.8	251.9	226.9	185.7	161.8	158.5
75°	10068.4	6350.7	773.1	375.7	282.3	253.0	240.0	220.4	173.7	147.7	144.4
77.5°	6055.4	2965.3	582.0	311.6	242.1	222.6	213.9	202.0	158.5	136.8	133.6
80°	2221.5	1125.9	457.1	249.7	192.2	193.3	184.6	177.0	144.4	126.0	123.8
82.5°	968.5	688.4	337.7	190.0	150.9	172.6	152.0	145.5	123.8	112.9	108.6
85°	587.4	410.4	217.2	129.2	104.2	117.3	106.4	111.8	95.5	89.0	85.8
87.5°	194.4	122.7	96.6	63.0	52.1	48.9	47.8	57.5	54.3	49.9	49.9
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)