

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: P721902

Luminaire Tested: **CST-CA8-430-727-U-T4-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721902
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-CA8-430-727-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48866 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

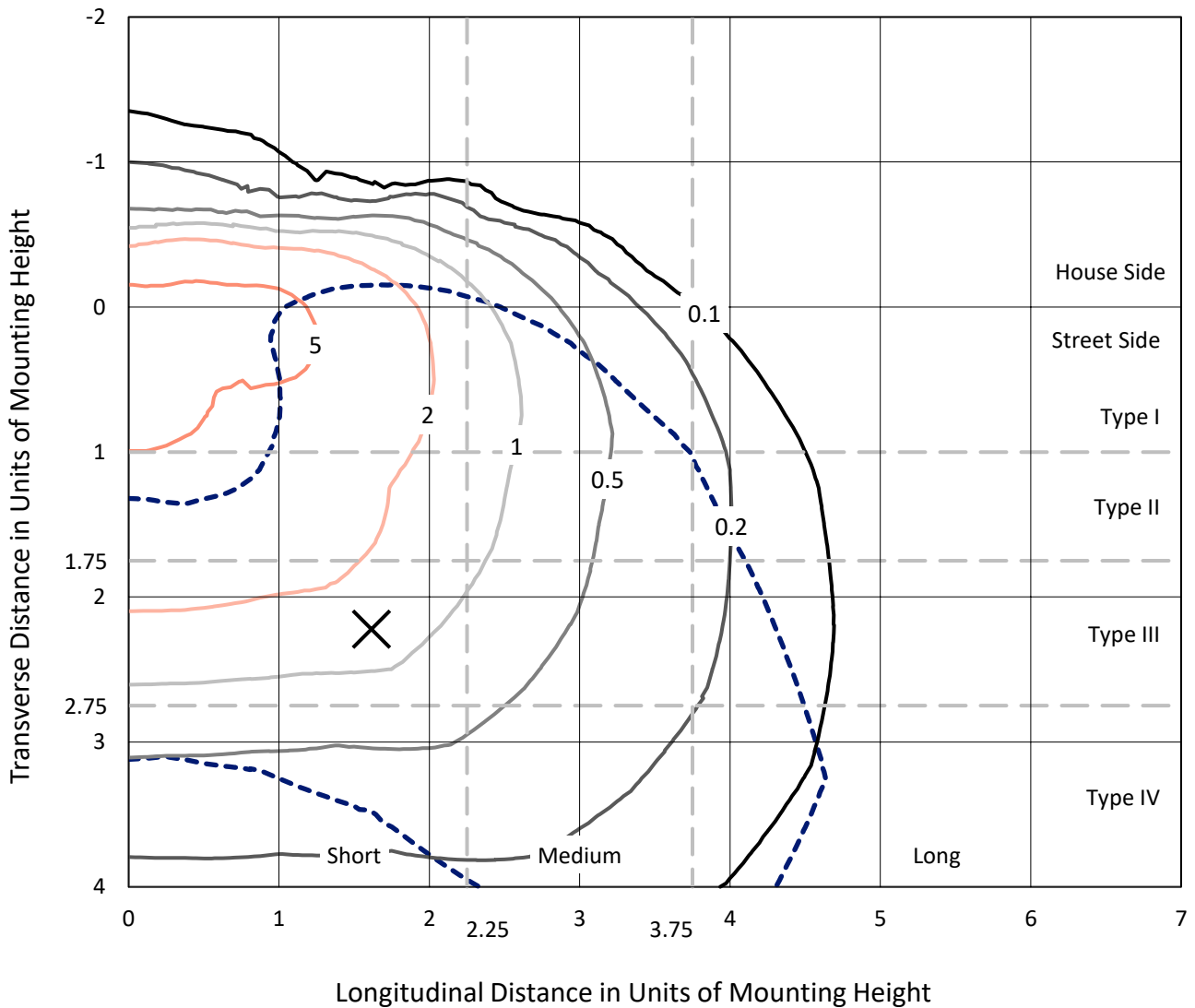
Input Watts (W): 434.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

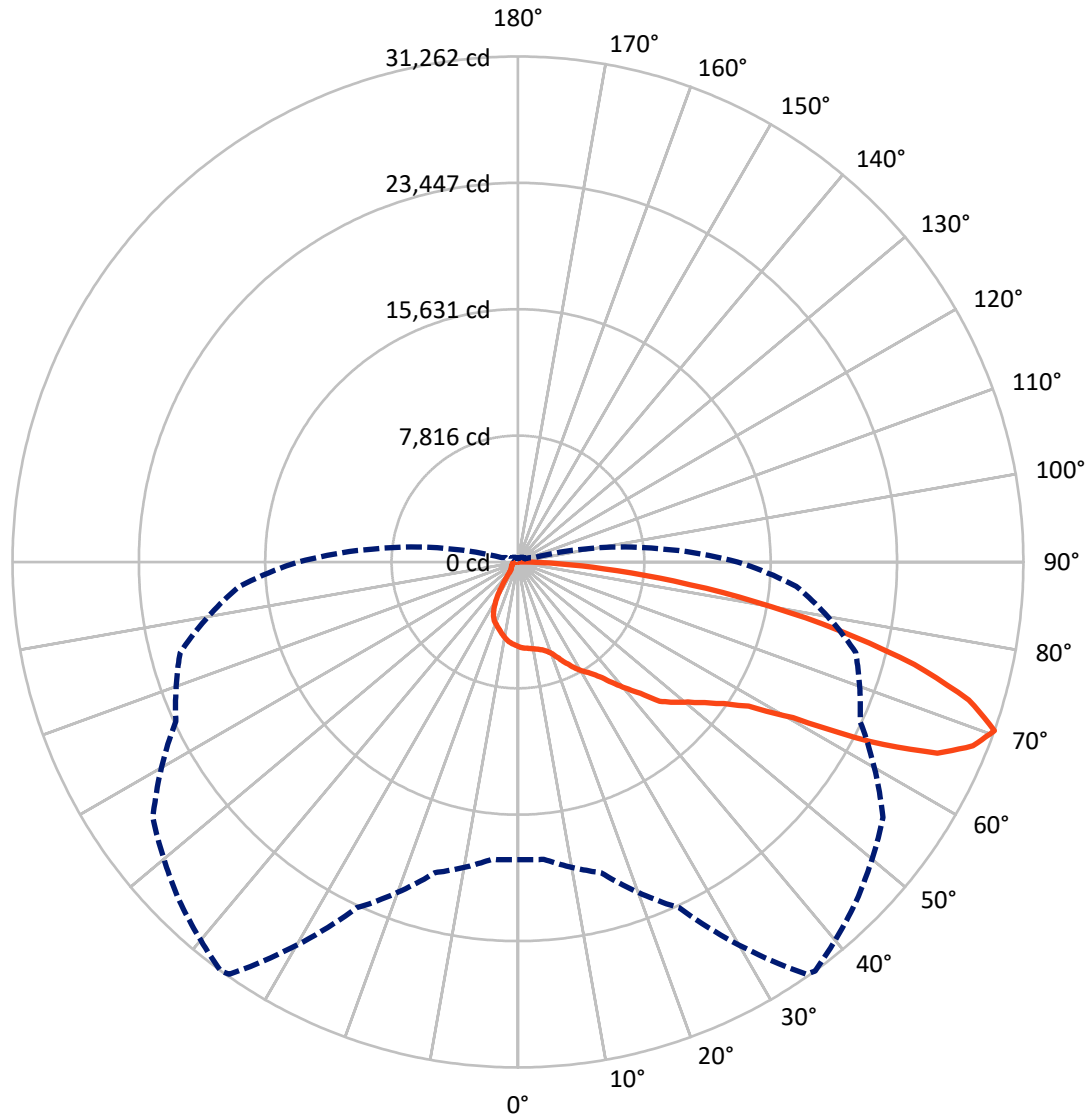
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.6 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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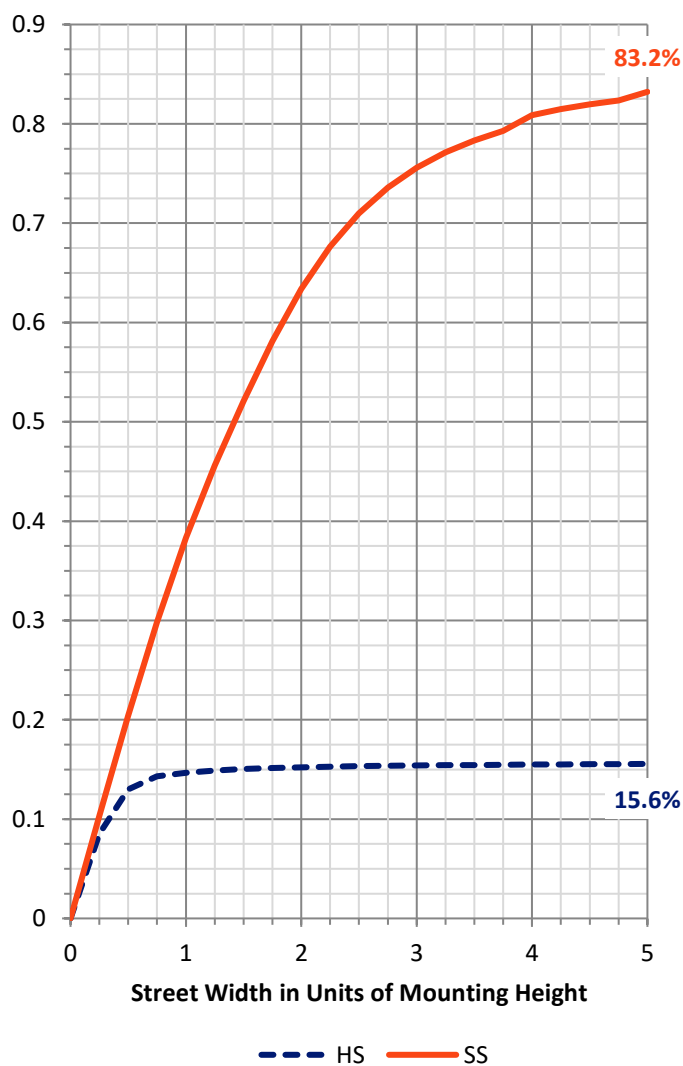
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7711.4	0.0	7711.4
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	41154.6	0.0	41154.6
	% Fixture	84.2	0.0	84.2
Total	Lumens	48866.0	0.0	48866.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	496.6	1.0
10°-20°	1476.7	3.0
20°-30°	2655.5	5.4
30°-40°	4202.3	8.6
40°-50°	6567.4	13.4
50°-60°	9430.7	19.3
60°-70°	12791.9	26.2
70°-80°	9467.3	19.4
80°-90°	1777.7	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°	48866.0	100.0
0°-180°	48866.0	100.0

Coefficient of Utilization

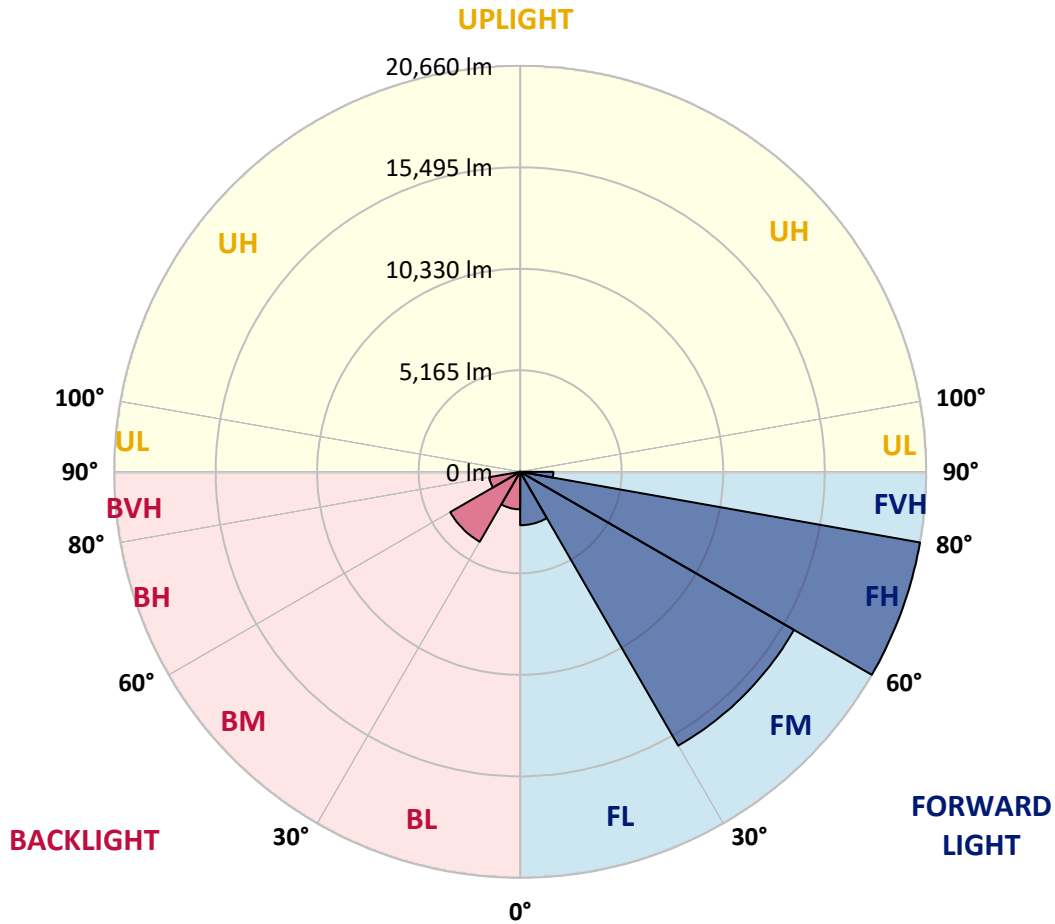


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2717.9	5.6			
FM (30°-60°)	16091.1	32.9			
FH (60°-80°)	20660.1	42.3			G5
FVH (80°-90°)	1685.5	3.4			G5
BL (0°-30°)	1910.9	3.9	B3/2500		
BM (30°-60°)	4109.2	8.4	B3/5000		
BH (60°-80°)	1599.1	3.3	B3/2500		G3/2500
BVH (80°-90°)	92.2	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°	5235.7	5235.7	5235.7	5235.7	5235.7	5235.7	5235.7	5235.7	5235.7	5235.7	5235.7
2.5°	5341.8	5330.5	5321.5	5324.9	5318.1	5322.6	5312.5	5300.1	5270.7	5258.3	5252.7
5°	5389.2	5385.8	5376.8	5370.0	5357.6	5353.1	5341.8	5351.9	5336.2	5295.5	5271.8
7.5°	5417.4	5416.3	5406.1	5391.4	5398.2	5403.8	5415.1	5399.3	5379.0	5359.8	5311.3
10°	5429.8	5429.8	5417.4	5425.3	5460.3	5463.6	5469.3	5479.4	5460.3	5432.0	5383.5
12.5°	5461.4	5459.1	5463.6	5489.6	5525.7	5533.6	5561.8	5561.8	5564.0	5547.1	5490.7
15°	5540.3	5540.3	5550.5	5574.2	5636.2	5640.8	5682.5	5719.7	5724.2	5699.4	5656.5
17.5°	5723.1	5718.6	5713.0	5727.6	5794.2	5796.4	5868.6	5916.0	5928.4	5955.5	5948.7
20°	6070.6	6066.1	6064.9	6066.1	6061.6	6054.8	6125.9	6176.6	6239.8	6287.2	6310.9
22.5°	6568.1	6557.9	6557.9	6502.7	6459.8	6466.6	6477.8	6506.0	6589.5	6673.0	6762.1
25°	7104.0	7097.2	7102.8	6961.8	6904.3	6926.8	6912.2	6956.2	7065.6	7137.8	7232.6
27.5°	7541.7	7551.8	7520.3	7410.8	7373.6	7390.5	7356.7	7483.0	7603.7	7730.1	7873.4
30°	8086.6	8032.4	7954.6	7821.5	7807.9	7810.2	7807.9	8011.0	8261.4	8442.0	8640.5
32.5°	8798.4	8807.5	8632.6	8319.0	8203.9	8188.1	8233.2	8531.1	8869.5	9270.0	9531.7
35°	9518.2	9532.9	9405.4	9078.2	8749.9	8700.3	8633.7	9020.7	9509.2	10312.4	10707.3
37.5°	10282.0	10333.9	10182.7	9890.5	9501.3	9455.0	9140.3	9520.5	10242.5	11546.6	12064.4
40°	11304.1	11248.8	11066.0	10694.9	10332.7	10258.3	9892.8	10092.4	11185.6	13092.2	13467.9
42.5°	12057.7	12041.9	11887.3	11520.7	11156.3	11096.5	10802.0	11018.6	12373.6	14659.2	14827.3
45°	12655.6	12752.6	12749.2	12519.1	12313.8	12279.9	12106.2	12425.5	13809.7	16138.2	16055.8
47.5°	13187.0	13246.7	13150.9	13050.4	12954.6	12965.8	13094.4	13751.0	15277.4	17429.9	17065.5
50°	14056.8	13980.0	13550.2	13473.5	13608.9	13614.5	14006.0	15016.8	16894.1	18546.8	17920.7
52.5°	15216.5	15133.0	14249.7	14118.8	14439.2	14462.9	15113.8	16278.1	18561.5	19614.0	18771.3
55°	16942.6	16748.5	15802.0	15215.4	15362.0	15457.9	16246.5	17490.9	19866.7	20554.9	19415.5
57.5°	19062.4	19203.4	18718.3	17392.7	16782.4	16818.5	17542.7	18651.7	21018.6	21378.5	19792.3
60°	21302.9	21269.0	21472.1	20913.7	19744.9	19550.9	19182.0	19836.3	21910.9	22072.3	20180.4
62.5°	22530.3	22727.7	23404.6	23516.3	24571.1	24468.5	21953.8	21305.1	22942.1	22507.7	20286.4
65°	22523.5	22609.3	23869.4	25254.8	28550.1	28520.8	27352.0	23429.4	23710.3	22740.1	20074.3
67.5°	21068.2	21201.3	22674.7	25381.1	30389.0	30354.0	29546.3	26415.7	23951.8	22460.4	19084.9
70°	18414.8	18459.9	19897.2	23602.0	31127.9	31262.2	29621.9	27561.9	23351.6	21628.9	17281.0
72.5°	15191.7	15098.0	16503.7	20155.5	29246.2	29166.1	28369.6	26193.4	22340.8	20014.5	14094.0
75°	11185.6	11446.2	12707.5	16183.3	25040.4	25333.8	25686.9	24099.6	19841.9	16494.7	9746.1
77.5°	7386.0	7717.7	8992.5	12134.4	19823.9	20279.6	21194.6	20497.4	16141.6	11832.0	4641.2
80°	3816.5	4067.0	5214.3	8051.6	14211.3	14869.0	16546.6	15524.5	11444.0	5349.7	1039.0
82.5°	1444.0	1411.3	2336.4	4608.5	9112.1	9710.0	10929.5	9309.5	4072.6	939.7	482.8
85°	634.0	671.2	968.0	2101.7	5209.8	5287.6	6191.3	3629.3	596.8	449.0	328.3
87.5°	274.1	314.8	406.1	604.7	1757.7	2029.5	2511.3	1153.0	180.5	155.7	164.7
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°	5235.7	5235.7	5235.7	5235.7	5235.7	5235.7	5235.7	5235.7	5235.7	5235.7	5235.7
2.5°	5242.5	5235.7	5224.5	5196.3	5150.0	5144.4	5139.9	5135.3	5126.3	5130.8	5156.8
5°	5253.8	5241.4	5200.8	5160.2	5119.5	5083.4	5039.5	5022.5	5000.0	4985.3	5012.4
7.5°	5292.2	5266.2	5206.4	5151.1	5040.6	4987.6	4931.1	4864.6	4817.2	4786.7	4813.8
10°	5356.5	5323.7	5249.3	5135.3	5005.6	4860.1	4760.8	4650.2	4560.0	4535.2	4560.0
12.5°	5461.4	5412.9	5326.0	5171.4	4941.3	4750.6	4562.2	4416.7	4271.2	4229.4	4241.8
15°	5631.7	5593.4	5460.3	5247.0	4942.4	4651.4	4371.6	4136.9	3946.3	3879.7	3875.2
17.5°	5904.7	5864.1	5710.7	5397.1	4983.0	4573.5	4184.3	3826.7	3537.9	3391.2	3367.5
20°	6296.2	6239.8	6007.4	5618.2	5071.0	4539.7	4010.6	3530.0	3081.0	2805.7	2764.0
22.5°	6731.7	6671.9	6328.9	5788.5	5134.2	4473.1	3844.7	3201.7	2610.5	2274.4	2227.0
25°	7273.2	7142.3	6636.9	5949.9	5119.5	4333.2	3575.1	2756.1	2115.3	1824.2	1792.6
27.5°	7807.9	7642.1	6950.5	6034.5	5055.2	4111.0	3180.3	2234.9	1656.1	1449.7	1423.7
30°	8471.3	8150.9	7229.2	6074.0	4892.8	3778.2	2651.2	1699.0	1239.8	1097.7	1072.9
32.5°	9259.9	8774.8	7490.9	6030.0	4622.0	3270.5	2061.1	1244.4	921.7	832.6	831.4
35°	10300.0	9539.6	7778.6	5885.6	4206.9	2723.4	1445.2	850.6	718.6	688.2	693.8
37.5°	11516.2	10575.3	8070.8	5648.7	3737.6	2083.7	963.4	655.5	631.8	632.9	634.0
40°	12798.9	11719.2	8464.5	5315.8	3167.8	1508.3	693.8	588.9	587.8	599.0	602.4
42.5°	14024.0	12830.5	8949.6	4872.5	2571.1	997.3	601.3	561.8	547.2	551.7	555.1
45°	15162.3	13783.7	9362.5	4440.4	1931.4	711.9	590.0	530.2	507.7	505.4	507.7
47.5°	16079.5	14547.5	9614.1	3932.7	1376.3	591.2	566.3	500.9	469.3	462.5	459.2
50°	16777.9	15115.0	9705.5	3357.4	930.7	564.1	534.7	467.1	428.7	429.8	429.8
52.5°	17459.3	15630.5	9599.4	2777.5	684.8	540.4	513.3	440.0	399.4	420.8	426.4
55°	17950.0	15847.1	9290.3	2150.3	570.8	511.1	489.6	408.4	380.2	415.2	426.4
57.5°	18236.6	16017.5	8722.9	1552.3	523.5	482.8	459.2	379.1	353.1	362.1	367.8
60°	18414.8	15779.4	7972.6	1061.6	498.6	460.3	428.7	359.9	324.9	303.5	300.1
62.5°	18316.7	15183.8	6984.4	729.9	472.7	435.5	402.7	341.8	295.6	267.4	265.1
65°	17516.8	14081.6	5362.1	591.2	456.9	424.2	387.0	324.9	275.3	248.2	244.8
67.5°	16033.3	12100.5	3131.7	525.7	450.1	412.9	374.5	309.1	264.0	234.7	230.1
70°	13595.3	9101.9	1049.2	469.3	449.0	411.8	364.4	297.8	251.6	221.1	216.6
72.5°	9808.1	5491.8	511.1	412.9	419.7	394.9	356.5	288.8	243.7	205.3	197.4
75°	5574.2	1788.1	461.4	356.5	390.3	376.8	352.0	289.9	247.1	186.1	177.1
77.5°	1586.2	522.3	445.6	303.5	368.9	389.2	329.4	261.7	252.7	172.6	161.3
80°	535.9	464.8	429.8	235.8	297.8	321.5	285.4	230.1	255.0	156.8	145.5
82.5°	429.8	467.1	361.0	188.4	226.8	243.7	226.8	206.5	206.5	139.9	130.9
85°	344.1	433.2	229.0	150.0	169.2	187.3	160.2	154.6	144.4	117.3	113.9
87.5°	199.7	135.4	94.8	76.7	71.1	72.2	62.0	74.5	91.4	80.1	79.0
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)