

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: P721942

Luminaire Tested: **CST-CA8-430-760-U-T4-HSS**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721942  
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-CA8-430-760-U-T4-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

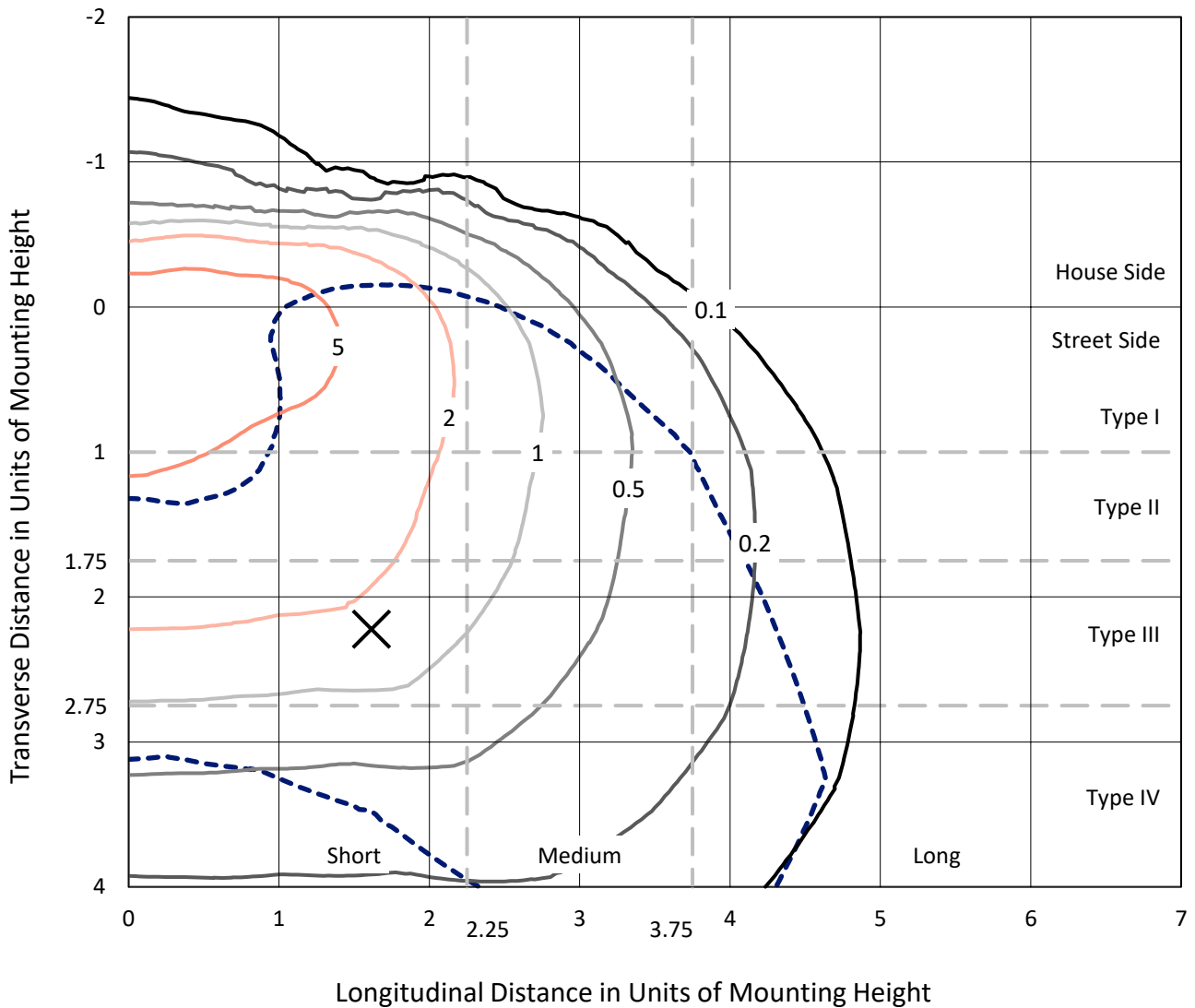
Lumens per Lamp: N/A  
Luminaire Lumens: 57519 lumens  
Efficiency: N/A  
Efficacy: 132.5 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 434.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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

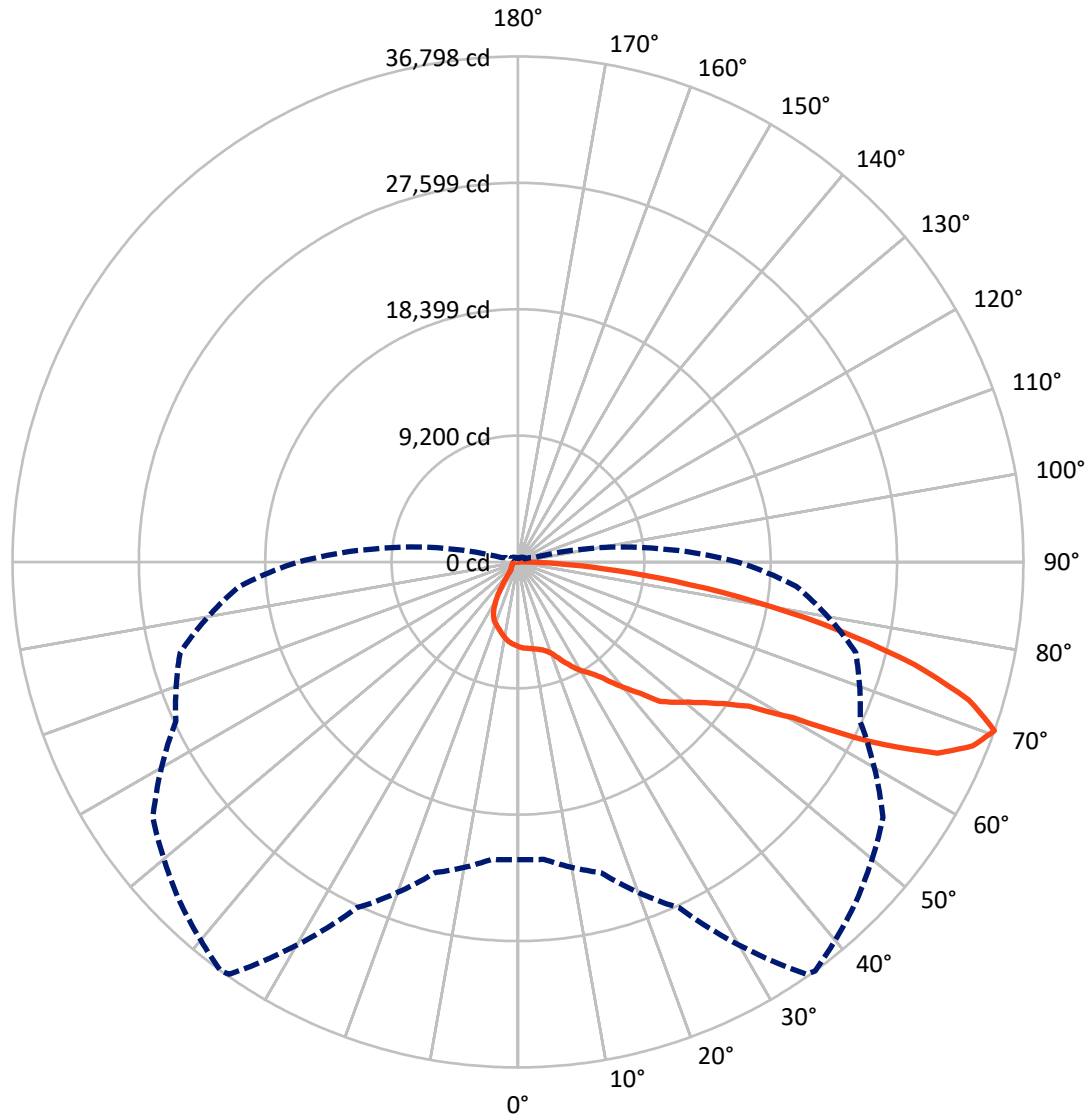
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.8 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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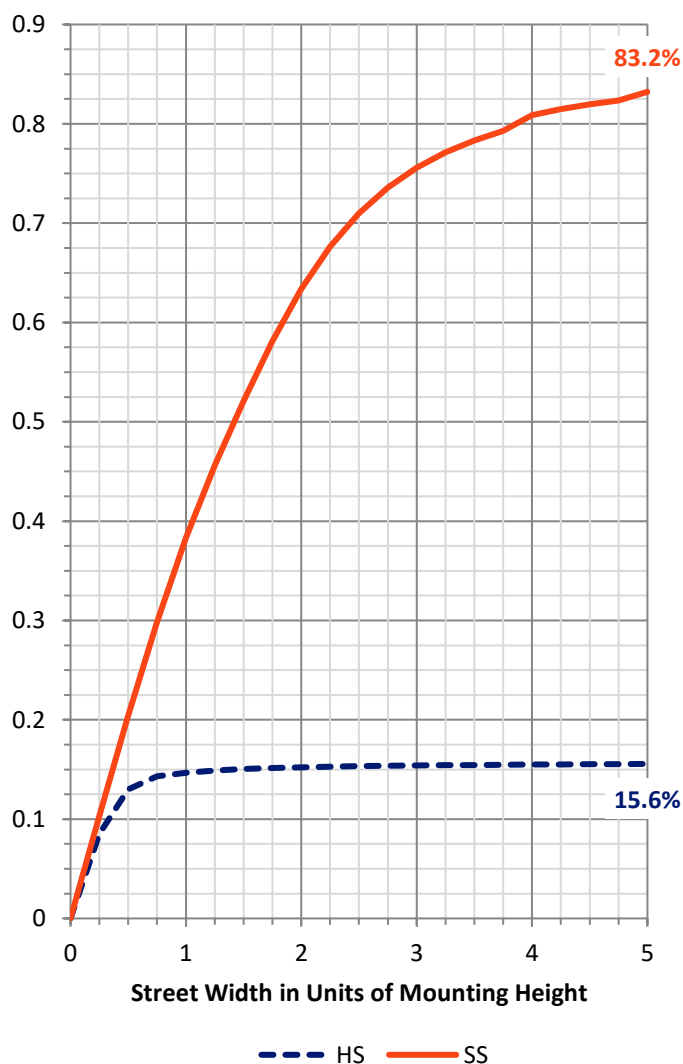
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9076.9	0.0	9076.9
	% Fixture	15.8	0.0	15.8
<b>Street Side</b>	Lumens	48442.1	0.0	48442.1
	% Fixture	84.2	0.0	84.2
<b>Total</b>	Lumens	57519.0	0.0	57519.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	584.5	1.0
10°-20°	1738.2	3.0
20°-30°	3125.7	5.4
30°-40°	4946.4	8.6
40°-50°	7730.3	13.4
50°-60°	11100.6	19.3
60°-70°	15057.0	26.2
70°-80°	11143.8	19.4
80°-90°	2092.5	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°	57519.0	100.0
0°-180°	57519.0	100.0

**Coefficient of Utilization**



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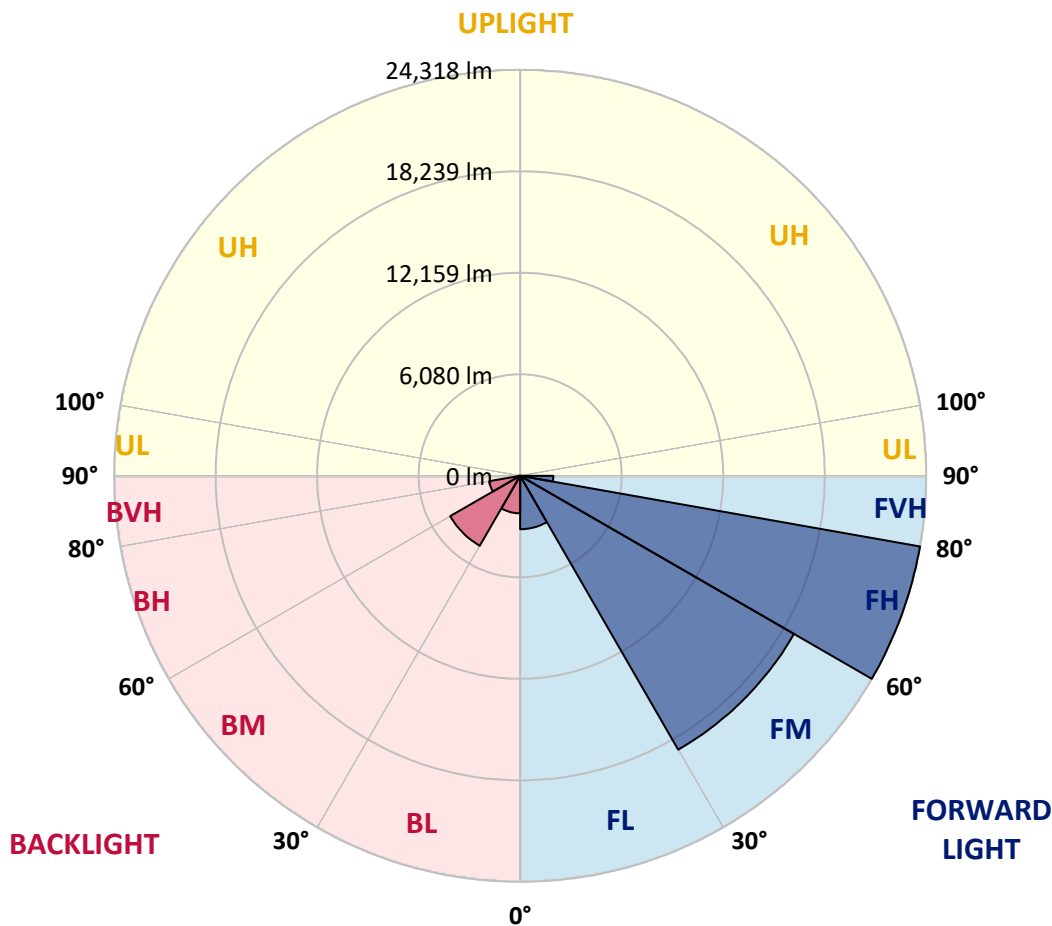
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3199.2	5.6			
FM (30°-60°)	18940.5	32.9			
FH (60°-80°)	24318.5	42.3			G5
FVH (80°-90°)	1983.9	3.4			G5
BL (0°-30°)	2249.2	3.9	B3/2500		
BM (30°-60°)	4836.9	8.4	B3/5000		
BH (60°-80°)	1882.3	3.3	B3/2500		G3/2500
BVH (80°-90°)	108.5	0.2			G2/225
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°	6162.9	6162.9	6162.9	6162.9	6162.9	6162.9	6162.9	6162.9	6162.9	6162.9	6162.9
2.5°	6287.7	6274.4	6263.8	6267.8	6259.8	6265.1	6253.2	6238.6	6204.0	6189.4	6182.8
5°	6343.5	6339.5	6328.9	6320.9	6306.3	6301.0	6287.7	6299.6	6281.1	6233.3	6205.4
7.5°	6376.7	6375.3	6363.4	6346.1	6354.1	6360.7	6374.0	6355.4	6331.5	6308.9	6251.8
10°	6391.3	6391.3	6376.7	6386.0	6427.1	6431.1	6437.8	6449.7	6427.1	6393.9	6336.8
12.5°	6428.5	6425.8	6431.1	6461.7	6504.1	6513.4	6546.6	6546.6	6549.3	6529.4	6463.0
15°	6521.4	6521.4	6533.4	6561.3	6634.3	6639.6	6688.7	6732.6	6737.9	6708.6	6658.2
17.5°	6736.5	6731.2	6724.6	6741.8	6820.2	6822.9	6907.8	6963.6	6978.2	7010.1	7002.1
20°	7145.5	7140.2	7138.9	7140.2	7134.9	7126.9	7210.6	7270.4	7344.7	7400.5	7428.4
22.5°	7731.1	7719.2	7719.2	7654.1	7603.7	7611.6	7624.9	7658.1	7756.4	7854.6	7959.5
25°	8361.9	8353.9	8360.6	8194.6	8126.9	8153.4	8136.2	8188.0	8316.8	8401.7	8513.3
27.5°	8877.1	8889.1	8851.9	8723.1	8679.3	8699.2	8659.4	8808.1	8950.2	9098.9	9267.5
30°	9518.5	9454.8	9363.2	9206.5	9190.5	9193.2	9190.5	9429.6	9724.4	9936.8	10170.5
32.5°	10356.4	10367.1	10161.2	9792.1	9656.6	9638.0	9691.2	10041.7	10440.1	10911.5	11219.6
35°	11203.7	11220.9	11070.9	10685.8	10299.3	10240.9	10162.6	10618.0	11193.0	12138.5	12603.3
37.5°	12102.7	12163.7	11985.8	11641.9	11183.7	11129.3	10758.8	11206.3	12056.2	13591.3	14200.8
40°	13305.8	13240.7	13025.6	12588.7	12162.4	12074.8	11644.5	11879.6	13166.3	15410.5	15852.7
42.5°	14192.8	14174.2	13992.3	13560.7	13131.8	13061.4	12714.8	12969.8	14564.6	17255.0	17452.8
45°	14896.6	15010.8	15006.8	14735.9	14494.2	14454.4	14249.9	14625.7	16255.1	18995.9	18898.9
47.5°	15522.1	15592.4	15479.6	15361.4	15248.5	15261.8	15413.2	16186.0	17982.7	20516.4	20087.4
50°	16545.9	16455.6	15949.6	15859.3	16018.7	16025.3	16486.1	17675.9	19885.6	21831.0	21094.0
52.5°	17911.0	17812.7	16773.0	16618.9	16996.0	17023.9	17790.1	19160.5	21848.3	23087.2	22095.3
55°	19942.7	19714.3	18600.2	17909.6	18082.3	18195.2	19123.4	20588.1	23384.7	24194.7	22853.5
57.5°	22437.9	22603.8	22032.8	20472.5	19754.1	19796.6	20649.1	21954.5	24740.5	25164.1	23297.0
60°	25075.1	25035.3	25274.3	24617.0	23241.2	23012.8	22578.6	23348.8	25790.9	25980.7	23753.8
62.5°	26519.9	26752.3	27549.0	27680.5	28922.1	28801.2	25841.3	25077.8	27004.6	26493.3	23878.6
65°	26511.9	26612.8	28096.1	29726.8	33605.7	33571.1	32195.4	27578.2	27908.9	26766.9	23629.0
67.5°	24798.9	24955.6	26689.9	29875.5	35770.2	35729.0	34778.2	31093.2	28193.1	26437.5	22464.4
70°	21675.6	21728.7	23420.5	27781.4	36640.0	36798.0	34867.2	32442.4	27486.6	25458.9	20341.1
72.5°	17881.8	17771.5	19426.1	23724.6	34425.0	34330.7	33393.2	30831.6	26296.8	23558.6	16589.7
75°	13166.3	13473.1	14957.7	19049.0	29474.5	29819.8	30235.4	28367.0	23355.4	19415.5	11471.9
77.5°	8693.9	9084.3	10584.8	14283.1	23334.2	23870.7	24947.6	24127.0	18999.9	13927.2	5463.1
80°	4492.4	4787.1	6137.6	9477.4	16727.8	17502.0	19476.6	18273.5	13470.4	6297.0	1223.0
82.5°	1699.7	1661.2	2750.1	5424.6	10725.6	11429.4	12864.9	10958.0	4793.8	1106.2	568.3
85°	746.3	790.1	1139.4	2473.9	6132.3	6224.0	7287.6	4271.9	702.5	528.5	386.4
87.5°	322.7	370.5	478.1	711.8	2068.9	2388.9	2955.9	1357.1	212.5	183.3	193.9
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°	6162.9	6162.9	6162.9	6162.9	6162.9	6162.9	6162.9	6162.9	6162.9	6162.9	6162.9
2.5°	6170.8	6162.9	6149.6	6116.4	6062.0	6055.3	6050.0	6044.7	6034.1	6039.4	6069.9
5°	6184.1	6169.5	6121.7	6073.9	6026.1	5983.6	5931.8	5911.9	5885.3	5868.1	5899.9
7.5°	6229.3	6198.7	6128.3	6063.3	5933.1	5870.7	5804.3	5726.0	5670.2	5634.4	5666.2
10°	6305.0	6266.5	6178.8	6044.7	5892.0	5720.7	5603.8	5473.7	5367.5	5338.2	5367.5
12.5°	6428.5	6371.4	6269.1	6087.2	5816.3	5591.9	5370.1	5198.8	5027.5	4978.4	4993.0
15°	6629.0	6583.8	6427.1	6176.2	5817.6	5475.0	5145.7	4869.5	4645.1	4566.7	4561.4
17.5°	6950.3	6902.5	6721.9	6352.8	5865.4	5383.4	4925.3	4504.3	4164.4	3991.7	3963.8
20°	7411.1	7344.7	7071.2	6613.0	5969.0	5343.5	4720.8	4155.1	3626.5	3302.5	3253.4
22.5°	7923.7	7853.3	7449.6	6813.6	6043.4	5265.2	4525.5	3768.6	3072.8	2677.1	2621.3
25°	8561.1	8407.1	7812.2	7003.4	6026.1	5100.5	4208.2	3244.1	2489.8	2147.2	2110.1
27.5°	9190.5	8995.3	8181.3	7103.0	5950.4	4838.9	3743.4	2630.6	1949.4	1706.4	1675.8
30°	9971.3	9594.2	8509.3	7149.5	5759.2	4447.2	3120.6	1999.8	1459.4	1292.1	1262.9
32.5°	10899.6	10328.6	8817.4	7097.7	5440.5	3849.6	2426.1	1464.7	1084.9	980.0	978.7
35°	12123.9	11228.9	9156.0	6927.8	4951.8	3205.6	1701.1	1001.3	845.9	810.0	816.7
37.5°	13555.4	12447.9	9499.9	6648.9	4399.4	2452.7	1134.0	771.5	743.6	745.0	746.3
40°	15065.2	13794.4	9963.4	6257.2	3728.8	1775.4	816.7	693.2	691.8	705.1	709.1
42.5°	16507.4	15102.4	10534.4	5735.3	3026.3	1173.9	707.8	661.3	644.0	649.4	653.3
45°	17847.2	16224.5	11020.4	5226.7	2273.4	837.9	694.5	624.1	597.6	594.9	597.6
47.5°	18926.8	17123.5	11316.5	4629.1	1620.1	695.8	666.6	589.6	552.4	544.4	540.5
50°	19748.8	17791.5	11424.1	3951.9	1095.5	664.0	629.4	549.8	504.6	505.9	505.9
52.5°	20550.9	18398.3	11299.3	3269.3	806.0	636.1	604.2	517.9	470.1	495.3	502.0
55°	21128.5	18653.3	10935.4	2531.0	671.9	601.5	576.3	480.7	447.5	488.7	502.0
57.5°	21465.8	18853.8	10267.5	1827.2	616.2	568.3	540.5	446.2	415.6	426.3	432.9
60°	21675.6	18573.6	9384.4	1249.6	586.9	541.8	504.6	423.6	382.4	357.2	353.2
62.5°	21560.1	17872.5	8221.1	859.2	556.4	512.6	474.1	402.4	347.9	314.7	312.1
65°	20618.6	16575.1	6311.6	695.8	537.8	499.3	455.5	382.4	324.0	292.1	288.2
67.5°	18872.4	14243.3	3686.3	618.8	529.8	486.0	440.9	363.8	310.7	276.2	270.9
70°	16002.8	10713.7	1235.0	552.4	528.5	484.7	428.9	350.6	296.1	260.3	255.0
72.5°	11544.9	6464.3	601.5	486.0	494.0	464.8	419.6	339.9	286.8	241.7	232.4
75°	6561.3	2104.8	543.1	419.6	459.5	443.5	414.3	341.3	290.8	219.1	208.5
77.5°	1867.1	614.8	524.5	357.2	434.2	458.1	387.8	308.1	297.5	203.2	189.9
80°	630.8	547.1	505.9	277.5	350.6	378.5	336.0	270.9	300.1	184.6	171.3
82.5°	505.9	549.8	424.9	221.8	266.9	286.8	266.9	243.0	243.0	164.7	154.0
85°	405.0	509.9	269.6	176.6	199.2	220.4	188.6	181.9	170.0	138.1	134.1
87.5°	235.0	159.4	111.5	90.3	83.7	85.0	73.0	87.6	107.6	94.3	93.0
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)