

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: P721920

Luminaire Tested: **CST-CA8-430-740-U-T3-HSS**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721920  
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-CA8-430-740-U-T3-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

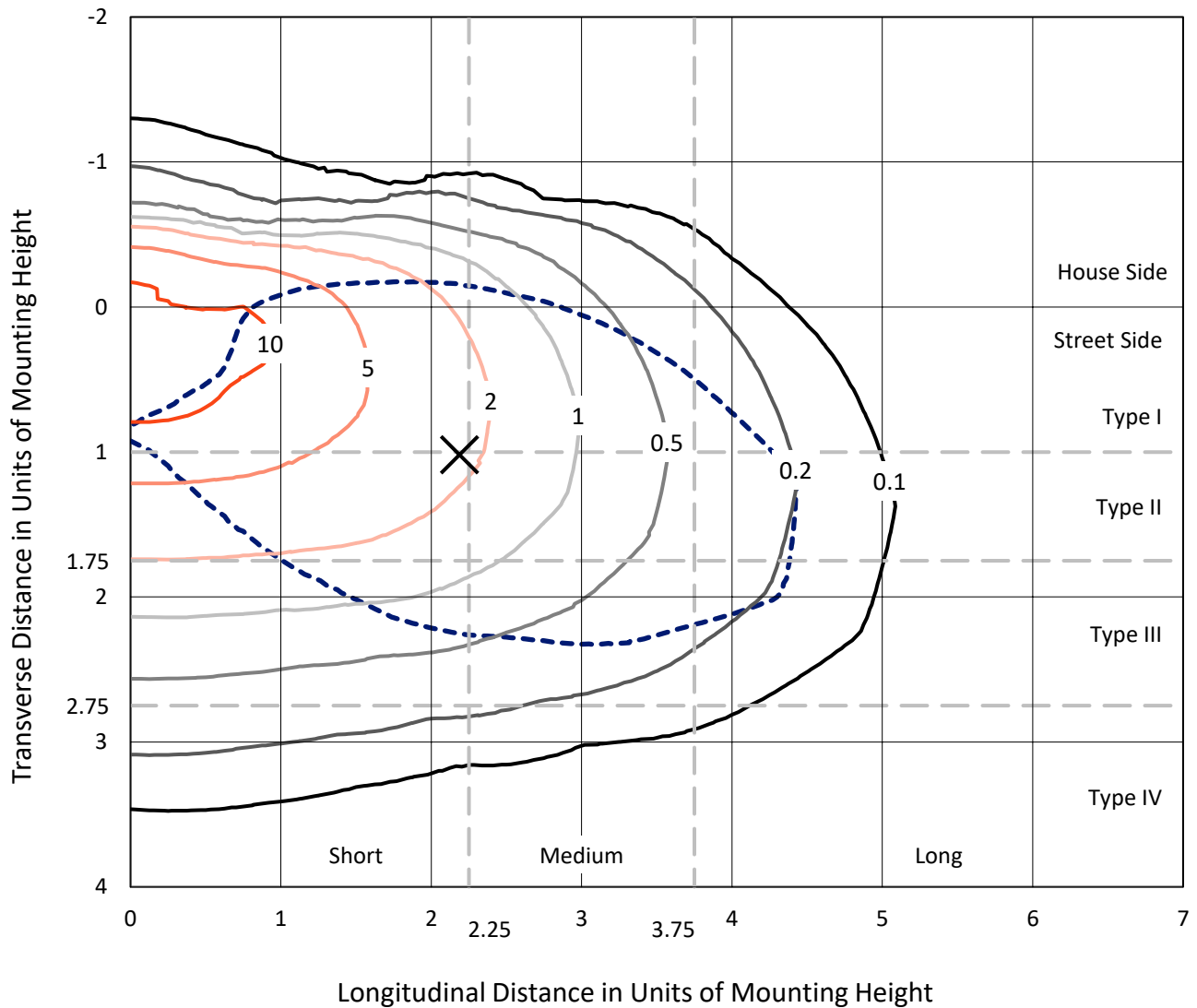
Lumens per Lamp: N/A  
Luminaire Lumens: 60818 lumens  
Efficiency: N/A  
Efficacy: 140.1 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 434.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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

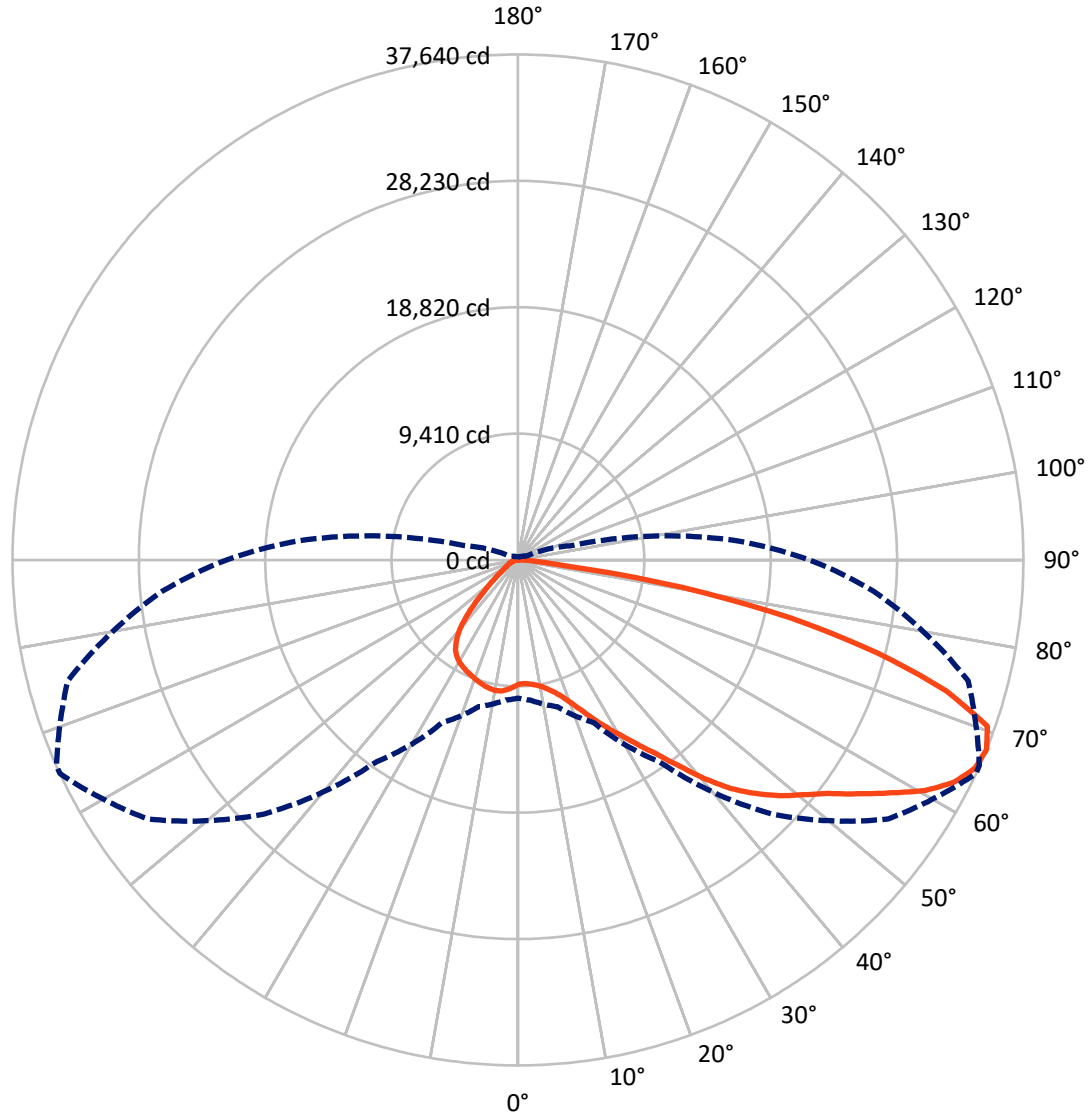
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.1 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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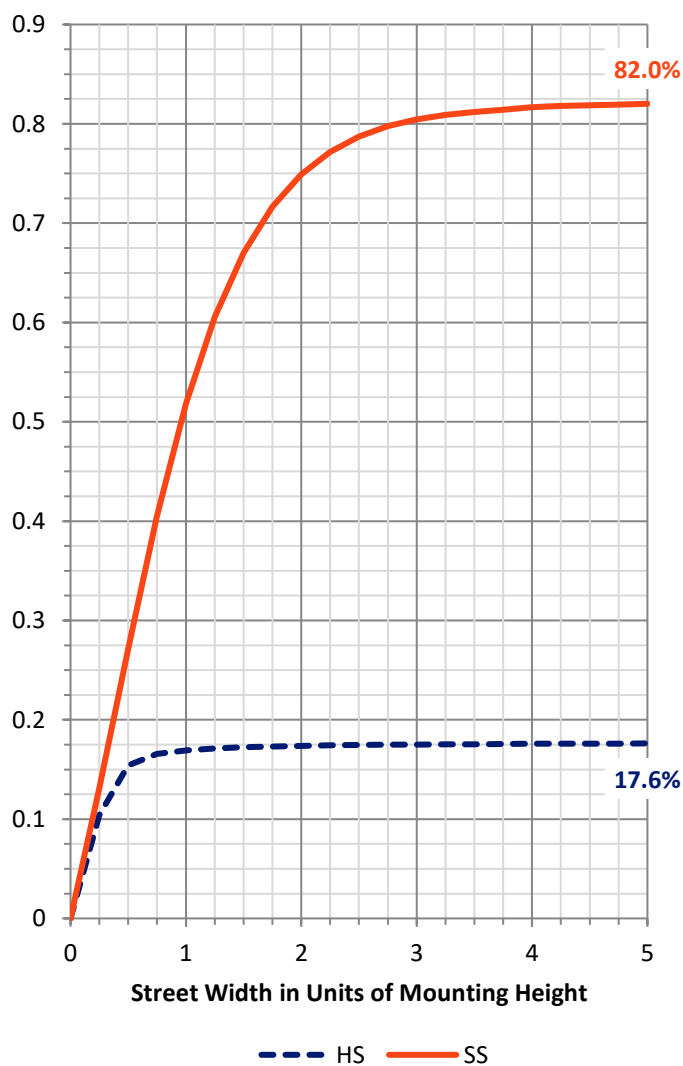
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10869.7	0.0	10869.7
	% Fixture	17.9	0.0	17.9
<b>Street Side</b>	Lumens	49948.3	0.0	49948.3
	% Fixture	82.1	0.0	82.1
<b>Total</b>	Lumens	60818.0	0.0	60818.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	914.3	1.5
10°-20°	2822.8	4.6
20°-30°	4897.0	8.1
30°-40°	7387.1	12.1
40°-50°	10242.7	16.8
50°-60°	12643.2	20.8
60°-70°	13471.2	22.1
70°-80°	7708.4	12.7
80°-90°	731.4	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°	60818.0	100.0
0°-180°	60818.0	100.0

**Coefficient of Utilization**



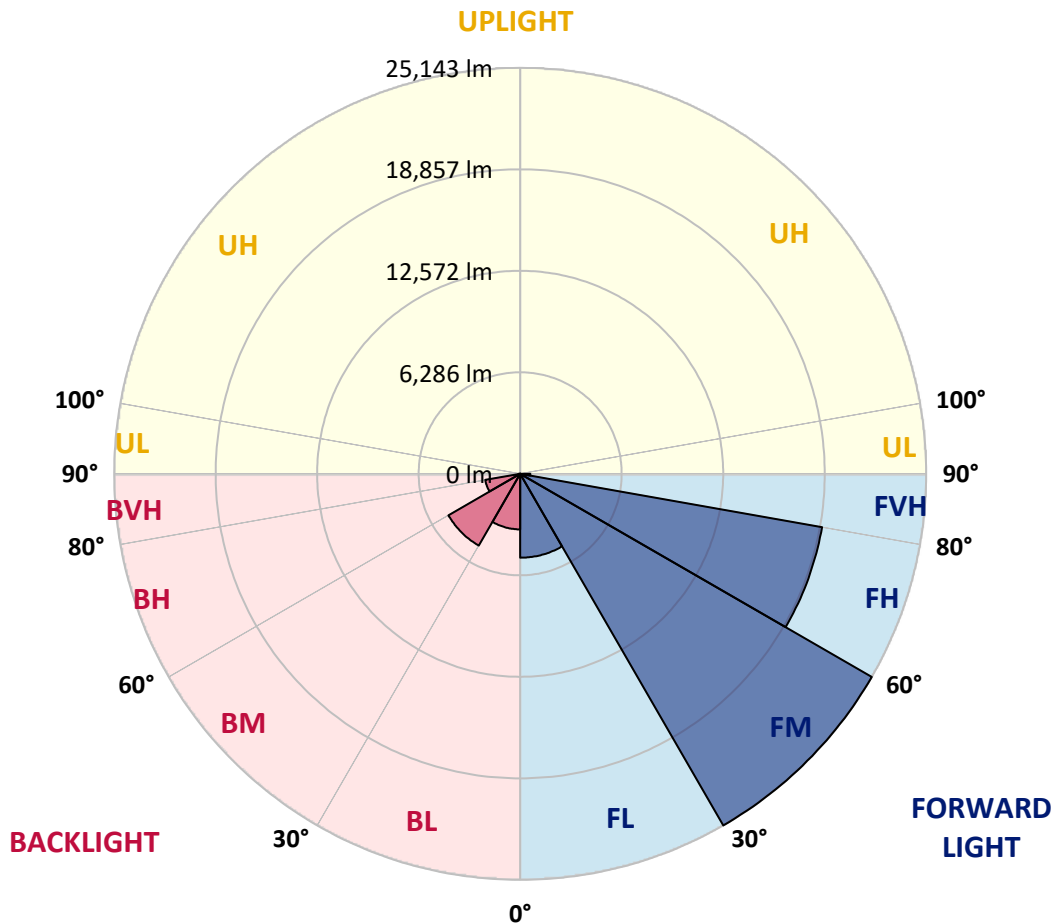
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5194.7	8.5			
FM (30°-60°)	25143.0	41.3			
FH (60°-80°)	18985.7	31.2			G5
FVH (80°-90°)	624.9	1.0			G4/750
BL (0°-30°)	3439.5	5.7	B4/5000		
BM (30°-60°)	5129.9	8.4	B4/8500		
BH (60°-80°)	2193.9	3.6	B3/2500		G3/2500
BVH (80°-90°)	106.4	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°	9241.7	9241.7	9241.7	9241.7	9241.7	9241.7	9241.7	9241.7	9241.7	9241.7	9241.7
2.5°	9152.4	9140.4	9129.8	9148.4	9159.1	9176.4	9201.7	9219.0	9224.4	9240.4	9260.3
5°	9299.0	9297.6	9283.0	9275.0	9252.3	9244.4	9249.7	9271.0	9272.3	9292.3	9354.9
7.5°	9586.7	9584.1	9548.1	9532.1	9484.2	9430.9	9390.9	9394.9	9393.6	9413.5	9497.5
10°	10021.0	9999.7	9949.1	9899.8	9806.6	9706.6	9633.4	9566.8	9566.8	9596.1	9689.3
12.5°	10511.3	10540.6	10471.3	10396.7	10240.9	10061.0	9933.1	9858.5	9850.5	9865.2	9931.8
15°	11120.1	11120.1	11073.5	10966.9	10829.7	10579.3	10315.5	10220.9	10207.6	10238.2	10234.2
17.5°	11806.2	11826.2	11738.3	11685.0	11474.5	11197.4	10867.0	10703.2	10703.2	10683.2	10591.2
20°	12681.5	12572.3	12581.6	12493.7	12339.1	11936.8	11601.1	11362.6	11359.9	11320.0	11061.5
22.5°	13632.7	13572.8	13520.8	13443.6	13230.4	12870.7	12404.4	12168.6	12163.3	12064.7	11681.0
25°	14570.6	14615.9	14558.6	14417.4	14261.5	13869.9	13355.6	13123.8	13122.5	12958.6	12415.1
27.5°	15535.2	15584.4	15565.8	15437.9	15230.1	14923.7	14437.4	14135.0	14116.3	14009.7	13326.3
30°	16600.9	16557.0	16614.3	16559.6	16455.7	15956.1	15516.5	15164.8	15210.1	15178.1	14361.5
32.5°	17376.3	17404.3	17592.1	17597.4	17488.2	17117.8	16581.0	16365.1	16437.1	16394.4	15633.7
35°	18077.1	18122.3	18364.8	18603.3	18683.2	18278.2	17732.0	17718.7	17811.9	18071.7	17387.0
37.5°	18679.2	18711.2	19050.9	19361.3	19619.8	19342.7	18945.7	19418.6	19555.8	20087.4	19196.1
40°	19040.3	19081.6	19521.2	19958.2	20419.1	20320.5	20283.2	21402.3	21531.5	21999.1	20516.4
42.5°	18836.4	18917.7	19650.4	20449.8	21127.9	21325.0	21835.3	23274.1	23422.0	23461.9	21814.0
45°	18472.7	18574.0	19393.3	20686.9	21792.6	22425.5	23396.7	24799.5	24880.8	24767.5	22889.1
47.5°	18081.0	18189.0	19104.2	20616.3	22326.9	23705.7	24791.5	26235.6	26292.9	25945.2	23972.2
50°	17636.1	17736.0	18720.5	20451.1	22729.2	24914.1	26225.0	27477.3	27691.8	27004.3	24814.1
52.5°	17095.2	17201.8	18246.2	20192.6	23082.2	25810.7	27489.3	28880.1	28894.8	28328.6	25762.7
55°	16394.4	16579.6	17650.7	19745.0	23267.4	26580.7	28591.0	30735.9	30830.5	30283.0	26556.7
57.5°	15615.1	15776.3	16934.0	19148.2	23100.9	27165.5	30362.9	32726.3	32714.3	31615.2	27250.8
60°	14585.3	14699.8	16000.1	18367.5	22564.0	27873.0	32208.0	34859.2	34837.9	32920.8	27697.1
62.5°	13263.7	13378.3	14601.3	17143.2	21775.3	28347.2	33460.3	36456.5	36395.2	33870.7	27834.3
65°	11731.6	11936.8	12998.6	15553.8	20380.5	28035.5	34065.2	37397.1	37298.5	34595.4	27506.6
67.5°	10295.5	10470.0	11310.6	13366.3	18322.2	26771.2	33638.9	37639.5	37610.2	34700.6	26580.7
70°	8262.5	8326.4	9096.5	10856.4	15244.7	24064.1	32165.4	37080.0	37093.3	33730.8	24720.9
72.5°	5655.3	5811.2	6153.6	7543.1	11093.5	19137.5	27723.7	33371.1	33373.7	30245.7	21538.2
75°	3041.5	3282.6	3682.3	4371.1	6201.5	12280.5	22264.3	27690.4	27742.4	25217.8	17119.2
77.5°	1508.1	1594.7	1826.5	2338.1	2843.0	5793.9	14318.8	20785.5	20909.4	19357.3	11675.7
80°	690.1	704.8	722.1	718.1	1088.4	2541.9	6146.9	12483.0	12520.3	11513.1	5330.3
82.5°	539.6	536.9	544.9	495.6	498.3	980.5	2127.6	3269.3	3486.5	2744.4	1690.6
85°	326.4	325.1	350.4	271.8	334.4	530.2	1073.8	1304.3	1320.2	1073.8	875.3
87.5°	123.9	119.9	110.6	97.3	111.9	149.2	371.7	479.6	468.9	333.1	302.4
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°	9241.7	9241.7	9241.7	9241.7	9241.7	9241.7	9241.7	9241.7	9241.7	9241.7	9241.7
2.5°	9277.7	9320.3	9398.9	9458.8	9478.8	9542.8	9604.1	9614.7	9658.7	9676.0	9733.3
5°	9393.6	9465.5	9588.1	9669.3	9705.3	9811.9	9881.2	9915.8	9903.8	9910.5	9974.4
7.5°	9562.8	9630.7	9729.3	9827.9	9845.2	9863.8	9857.2	9851.9	9805.2	9765.3	9825.2
10°	9717.3	9781.2	9842.5	9857.2	9769.3	9720.0	9632.0	9564.1	9473.5	9432.2	9480.2
12.5°	9934.5	9947.8	9887.8	9807.9	9618.7	9442.9	9300.3	9176.4	9064.5	8987.2	9051.2
15°	10163.6	10111.6	9937.1	9704.0	9410.9	9159.1	8926.0	8719.5	8534.3	8489.0	8506.3
17.5°	10467.3	10326.1	9974.4	9582.7	9127.1	8735.4	8435.7	8174.6	7932.1	7830.9	7821.5
20°	10837.7	10609.9	10050.4	9429.5	8791.4	8270.5	7806.9	7416.5	7082.1	6807.7	6814.4
22.5°	11320.0	10989.6	10164.9	9269.7	8419.7	7725.6	7051.5	6388.1	5837.8	5600.7	5542.1
25°	11956.8	11463.9	10327.5	9124.5	8004.0	7032.9	6080.3	5143.7	4561.6	4331.1	4305.8
27.5°	12749.5	12100.7	10575.3	8963.3	7559.1	6210.9	4841.3	3923.4	3389.2	3146.7	3065.5
30°	13650.0	12885.3	10829.7	8795.4	7020.9	5154.4	3691.6	2792.4	2244.8	2027.7	1999.7
32.5°	14815.7	13879.2	11208.1	8531.6	6234.8	4051.3	2575.2	1742.6	1370.9	1277.6	1251.0
35°	16471.7	15223.4	11675.7	8198.6	5225.0	2829.7	1596.0	1020.5	822.0	775.4	766.0
37.5°	18015.8	16542.3	12147.3	7645.7	3967.4	1766.5	912.6	654.1	610.2	611.5	614.2
40°	19240.1	17444.2	12528.3	6918.3	2609.8	1003.2	634.1	543.6	544.9	540.9	538.2
42.5°	20329.9	18163.6	12700.2	5843.2	1512.1	671.4	550.2	500.9	488.9	492.9	490.3
45°	21231.8	18897.7	12367.1	4634.8	891.3	602.2	519.6	464.9	451.6	472.9	475.6
47.5°	22180.3	19594.5	11856.9	3491.8	723.4	572.9	491.6	438.3	431.6	458.3	461.0
50°	22978.3	20099.4	10986.9	2631.2	690.1	540.9	466.3	411.7	410.3	434.3	434.3
52.5°	23645.8	20404.5	9954.4	2031.7	667.4	512.9	441.0	386.3	386.3	394.3	395.7
55°	24116.1	20343.2	9338.9	1598.7	643.5	486.3	414.3	362.4	346.4	341.1	343.7
57.5°	24201.3	20180.6	8624.9	1247.0	615.5	461.0	390.3	334.4	305.1	301.1	299.8
60°	24146.7	19823.6	7809.5	1041.8	583.5	437.0	366.4	305.1	275.8	266.4	269.1
62.5°	23918.9	19190.8	6867.7	913.9	551.5	418.3	339.7	285.1	258.5	246.5	246.5
65°	23231.5	18284.9	5468.8	800.7	511.6	398.3	318.4	277.1	247.8	234.5	231.8
67.5°	21720.7	16405.1	4109.9	702.1	472.9	377.0	315.7	275.8	242.5	223.8	221.2
70°	19694.4	14092.3	2805.7	616.8	430.3	357.0	314.4	277.1	237.1	213.2	210.5
72.5°	16441.1	11109.5	1616.0	536.9	387.7	338.4	309.1	278.4	227.8	198.5	194.5
75°	12353.8	7792.2	948.5	461.0	346.4	310.4	294.4	270.4	213.2	181.2	177.2
77.5°	7429.9	3638.3	714.1	382.4	297.1	273.1	262.4	247.8	194.5	167.9	163.9
80°	2725.7	1381.5	560.9	306.4	235.8	237.1	226.5	217.2	177.2	154.5	151.9
82.5°	1188.4	844.6	414.3	233.1	185.2	211.8	186.5	178.5	151.9	138.6	133.2
85°	720.7	503.6	266.4	158.5	127.9	143.9	130.6	137.2	117.2	109.2	105.2
87.5°	238.5	150.5	118.6	77.3	63.9	60.0	58.6	70.6	66.6	61.3	61.3
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)