

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: P721832

Luminaire Tested: **CST-CA8-400-722-U-T4-HSS**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721832  
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-CA8-400-722-U-T4-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

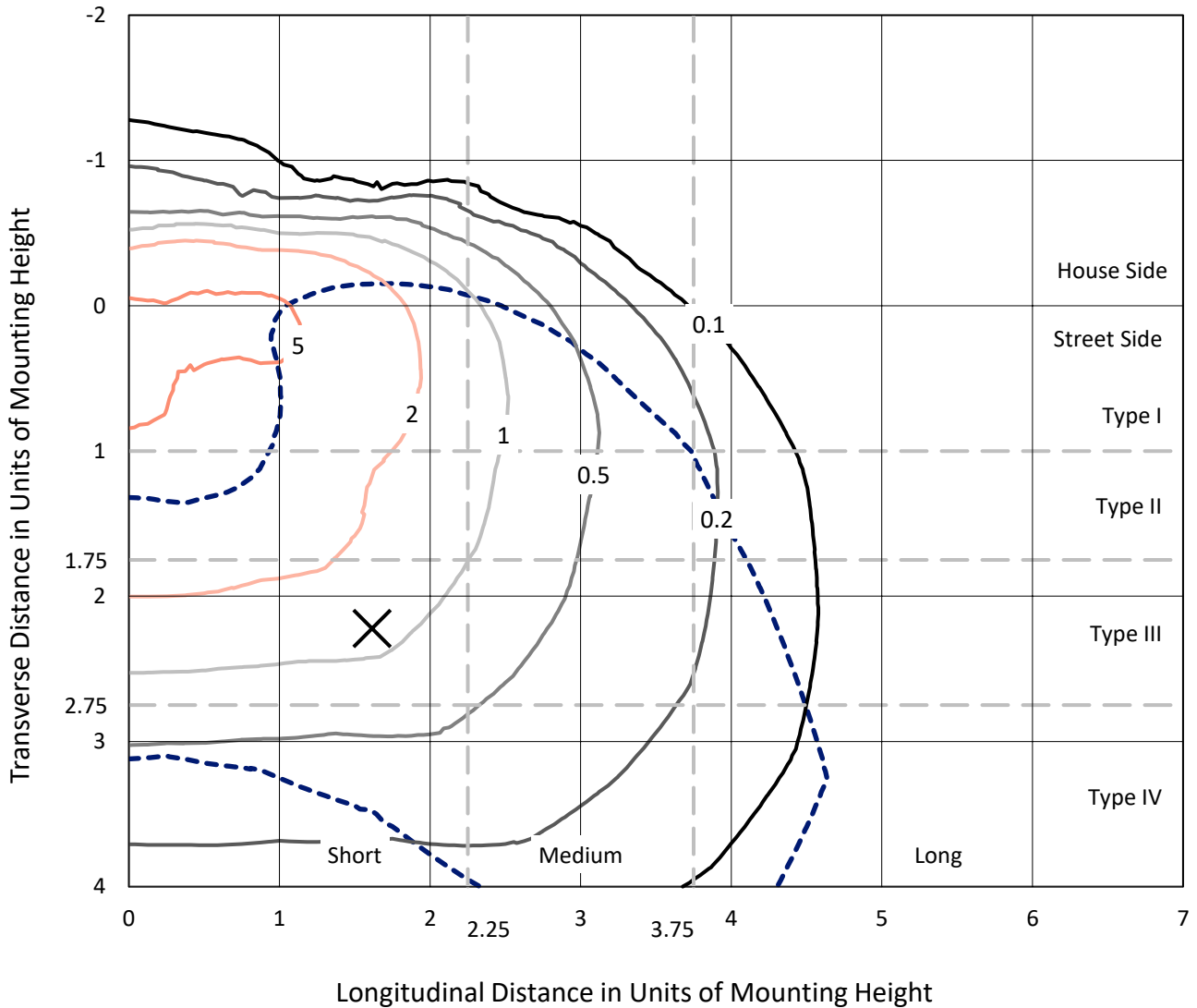
Lumens per Lamp: N/A  
Luminaire Lumens: 43805 lumens  
Efficiency: N/A  
Efficacy: 109.3 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 400.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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

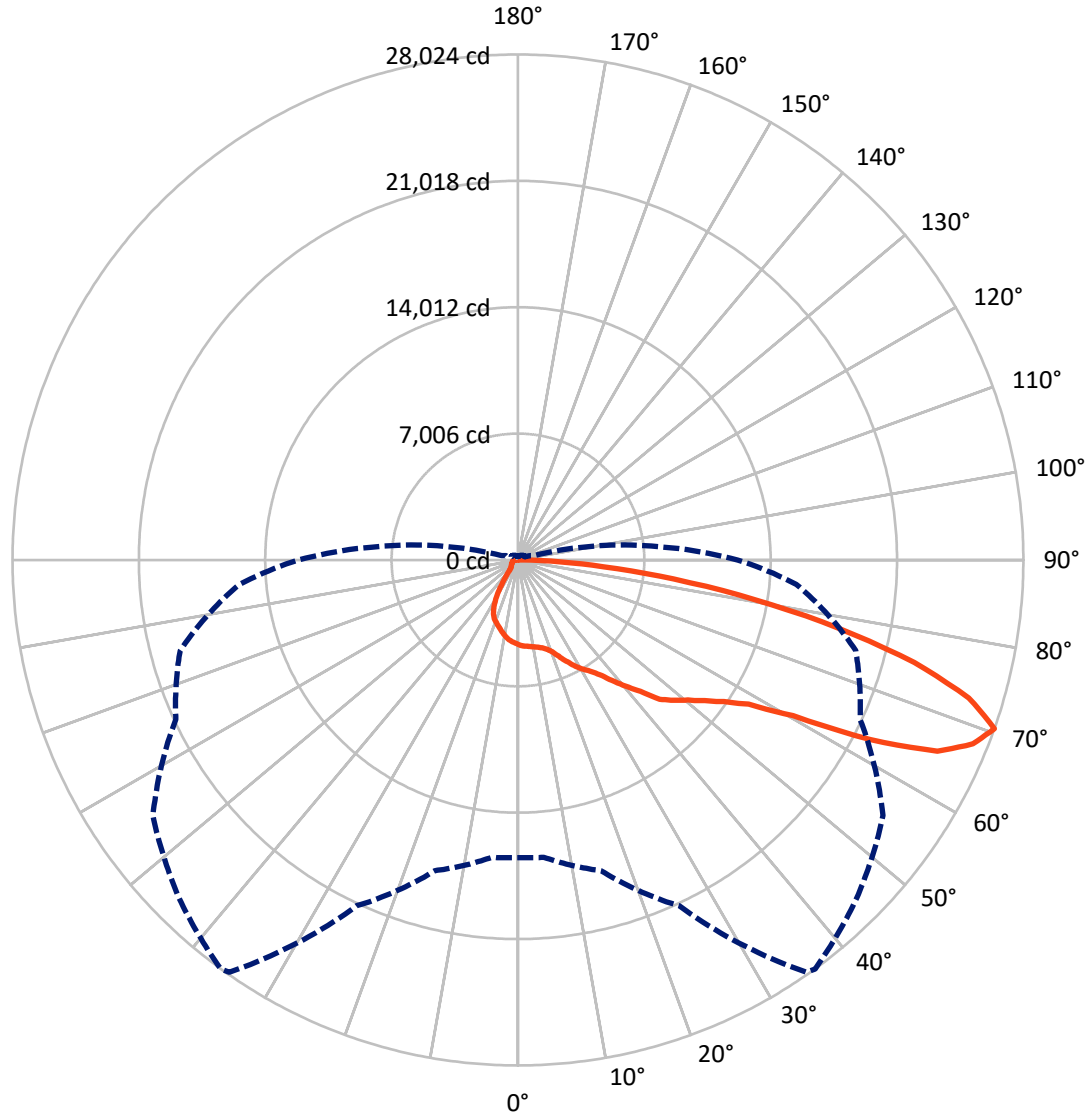
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.9 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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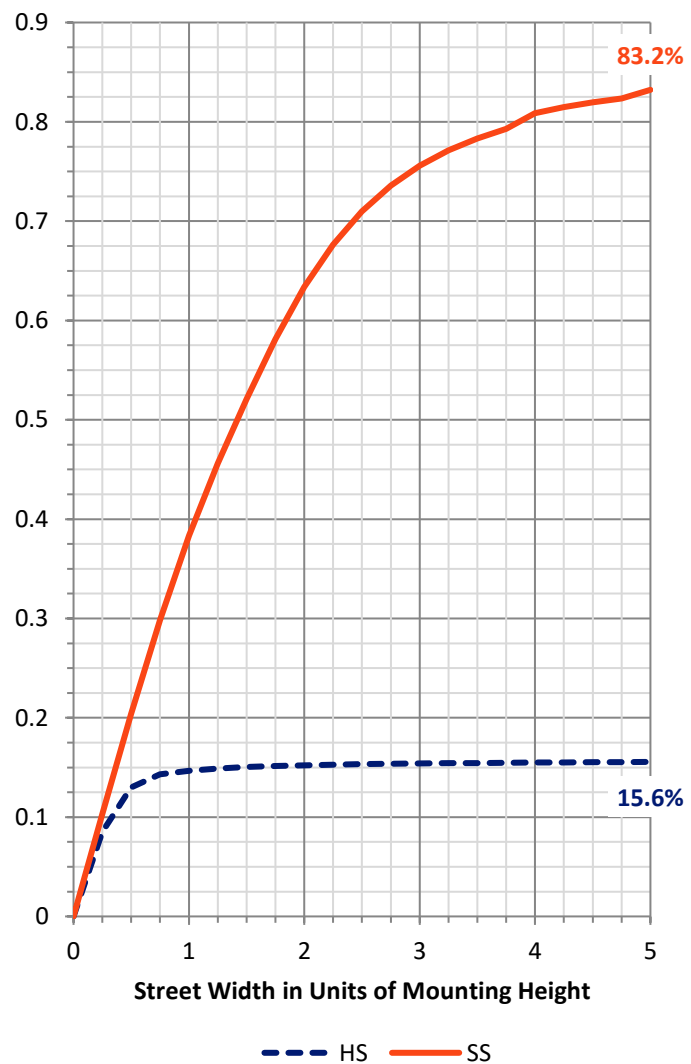
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6912.7	0.0	6912.7
	% Fixture	15.8	0.0	15.8
<b>Street Side</b>	Lumens	36892.2	0.0	36892.2
	% Fixture	84.2	0.0	84.2
<b>Total</b>	Lumens	43805.0	0.0	43805.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	445.1	1.0
10°-20°	1323.8	3.0
20°-30°	2380.5	5.4
30°-40°	3767.1	8.6
40°-50°	5887.2	13.4
50°-60°	8454.0	19.3
60°-70°	11467.0	26.2
70°-80°	8486.8	19.4
80°-90°	1593.6	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°	43805.0	100.0
0°-180°	43805.0	100.0

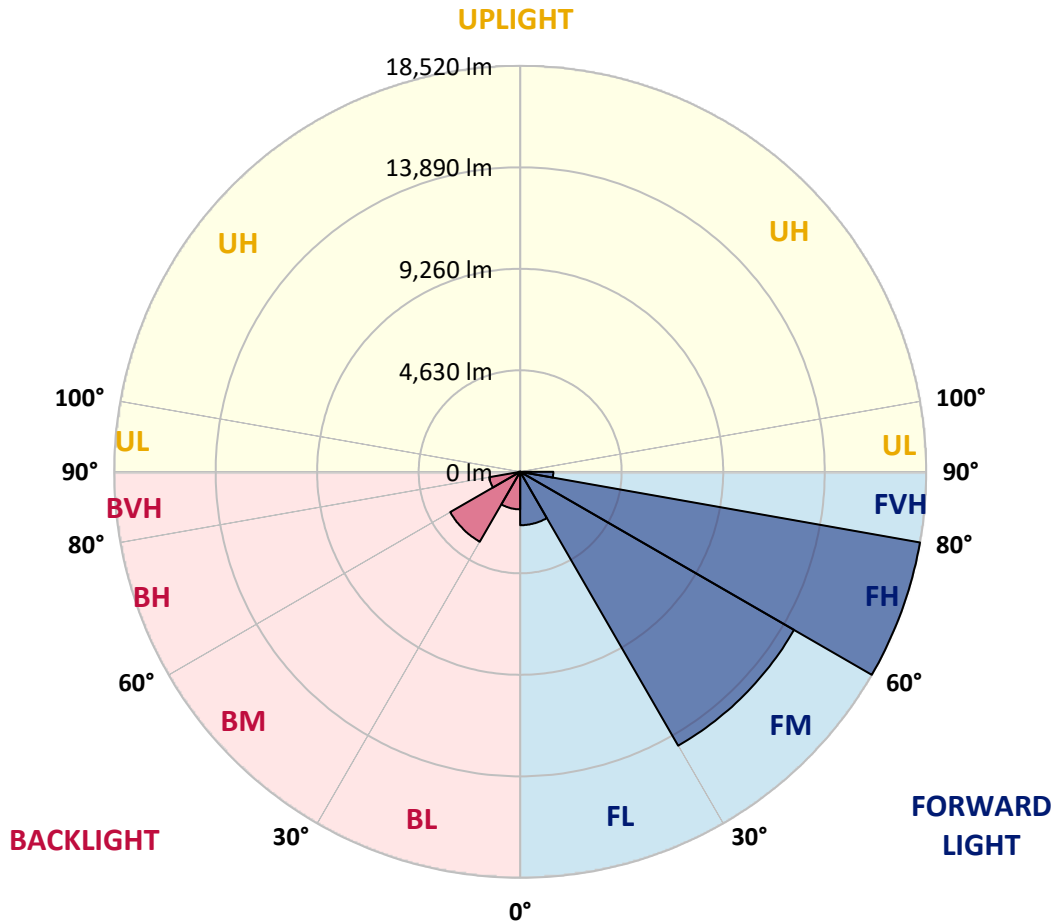


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2436.4	5.6			
FM (30°-60°)	14424.6	32.9			
FH (60°-80°)	18520.3	42.3			G5
FVH (80°-90°)	1510.9	3.4			G5
BL (0°-30°)	1712.9	3.9	B3/2500		
BM (30°-60°)	3683.6	8.4	B3/5000		
BH (60°-80°)	1433.5	3.3	B3/2500		G3/2500
BVH (80°-90°)	82.6	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°	4693.5	4693.5	4693.5	4693.5	4693.5	4693.5	4693.5	4693.5	4693.5	4693.5	4693.5
2.5°	4788.6	4778.4	4770.3	4773.4	4767.3	4771.4	4762.3	4751.1	4724.8	4713.7	4708.7
5°	4831.0	4828.0	4819.9	4813.8	4802.7	4798.7	4788.6	4797.7	4783.5	4747.1	4725.8
7.5°	4856.3	4855.3	4846.2	4833.0	4839.1	4844.2	4854.3	4840.1	4821.9	4804.7	4761.2
10°	4867.4	4867.4	4856.3	4863.4	4894.7	4897.8	4902.8	4911.9	4894.7	4869.5	4826.0
12.5°	4895.7	4893.7	4897.8	4921.0	4953.4	4960.5	4985.8	4985.8	4987.8	4972.6	4922.0
15°	4966.5	4966.5	4975.6	4996.9	5052.5	5056.5	5094.0	5127.3	5131.4	5109.1	5070.7
17.5°	5130.4	5126.3	5121.3	5134.4	5194.1	5196.1	5260.8	5303.3	5314.4	5338.7	5332.6
20°	5441.9	5437.8	5436.8	5437.8	5433.8	5427.7	5491.4	5536.9	5593.6	5636.0	5657.3
22.5°	5887.8	5878.7	5878.7	5829.2	5790.8	5796.8	5806.9	5832.2	5907.1	5981.9	6061.8
25°	6368.2	6362.1	6367.2	6240.8	6189.2	6209.4	6196.3	6235.7	6333.8	6398.6	6483.5
27.5°	6760.6	6769.7	6741.4	6643.3	6609.9	6625.1	6594.7	6708.0	6816.2	6929.5	7057.9
30°	7249.1	7200.5	7130.7	7011.4	6999.3	7001.3	6999.3	7181.3	7405.8	7567.6	7745.6
32.5°	7887.2	7895.3	7738.5	7457.4	7354.2	7340.1	7380.5	7647.5	7950.9	8309.9	8544.6
35°	8532.4	8545.6	8431.3	8138.0	7843.7	7799.2	7739.6	8086.4	8524.3	9244.4	9598.3
37.5°	9217.1	9263.6	9128.1	8866.2	8517.2	8475.8	8193.6	8534.4	9181.7	10350.8	10814.9
40°	10133.3	10083.8	9919.9	9587.2	9262.6	9195.8	8868.2	9047.2	10027.1	11736.2	12073.0
42.5°	10808.9	10794.7	10656.2	10327.5	10000.8	9947.2	9683.3	9877.5	11092.0	13141.0	13291.6
45°	11344.9	11431.8	11428.8	11222.5	11038.4	11008.1	10852.4	11138.6	12379.4	14466.8	14393.0
47.5°	11821.2	11874.8	11788.8	11698.8	11612.9	11623.0	11738.3	12326.9	13695.2	15624.7	15298.1
50°	12600.9	12532.1	12146.8	12078.1	12199.4	12204.5	12555.4	13461.5	15144.4	16625.9	16064.7
52.5°	13640.5	13565.7	12773.9	12656.5	12943.8	12965.0	13548.5	14592.2	16639.1	17582.6	16827.2
55°	15187.8	15013.9	14165.4	13639.5	13771.0	13857.0	14563.9	15679.3	17809.2	18426.1	17404.6
57.5°	17088.1	17214.5	16779.6	15591.4	15044.2	15076.6	15725.9	16720.0	18841.7	19164.3	17742.4
60°	19096.6	19066.2	19248.3	18747.7	17699.9	17526.0	17195.3	17781.9	19641.7	19786.3	18090.3
62.5°	20196.9	20373.8	20980.6	21080.7	22026.3	21934.3	19680.1	19098.6	20566.0	20176.6	18185.4
65°	20190.8	20267.7	21397.3	22639.2	25593.2	25566.9	24519.2	21002.9	21254.7	20385.0	17995.2
67.5°	18886.2	19005.5	20326.3	22752.4	27241.6	27210.3	26486.2	23679.8	21471.1	20134.2	17108.3
70°	16507.6	16548.1	17836.5	21157.6	27904.1	28024.4	26554.0	24707.3	20933.1	19388.8	15491.2
72.5°	13618.3	13534.4	14794.4	18068.1	26217.2	26145.4	25431.4	23480.6	20027.0	17941.6	12634.3
75°	10027.1	10260.7	11391.4	14507.2	22447.0	22710.0	23026.5	21603.6	17786.9	14786.4	8736.7
77.5°	6621.0	6918.4	8061.1	10877.6	17770.7	18179.3	18999.5	18374.5	14469.8	10606.6	4160.5
80°	3421.3	3645.8	4674.3	7217.7	12739.5	13329.1	14832.9	13916.6	10258.7	4795.6	931.4
82.5°	1294.5	1265.1	2094.4	4131.2	8168.3	8704.3	9797.6	8345.3	3650.8	842.4	432.8
85°	568.4	601.7	867.7	1884.1	4670.2	4740.0	5550.1	3253.4	535.0	402.5	294.3
87.5°	245.7	282.2	364.1	542.1	1575.6	1819.3	2251.2	1033.6	161.8	139.6	147.7
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°	4693.5	4693.5	4693.5	4693.5	4693.5	4693.5	4693.5	4693.5	4693.5	4693.5	4693.5
2.5°	4699.6	4693.5	4683.4	4658.1	4616.6	4611.6	4607.5	4603.5	4595.4	4599.4	4622.7
5°	4709.7	4698.5	4662.1	4625.7	4589.3	4557.0	4517.5	4502.3	4482.1	4469.0	4493.2
7.5°	4744.1	4720.8	4667.2	4617.6	4518.5	4471.0	4420.4	4360.8	4318.3	4291.0	4315.3
10°	4801.7	4772.4	4705.6	4603.5	4487.2	4356.7	4267.7	4168.6	4087.7	4065.5	4087.7
12.5°	4895.7	4852.3	4774.4	4635.8	4429.5	4258.6	4089.7	3959.3	3828.8	3791.4	3802.5
15°	5048.5	5014.1	4894.7	4703.6	4430.5	4169.6	3918.8	3708.5	3537.6	3477.9	3473.8
17.5°	5293.2	5256.8	5119.2	4838.1	4467.0	4099.8	3750.9	3430.4	3171.5	3040.0	3018.8
20°	5644.1	5593.6	5385.2	5036.3	4545.8	4069.5	3595.2	3164.4	2761.9	2515.1	2477.7
22.5°	6034.5	5980.9	5673.4	5189.0	4602.5	4009.8	3446.5	2870.1	2340.2	2038.8	1996.3
25°	6519.9	6402.6	5949.5	5333.6	4589.3	3884.4	3204.8	2470.6	1896.2	1635.3	1607.0
27.5°	6999.3	6850.6	6230.7	5409.5	4531.7	3685.2	2850.9	2003.4	1484.6	1299.5	1276.3
30°	7593.9	7306.7	6480.5	5444.9	4386.0	3386.9	2376.6	1523.0	1111.4	984.0	961.8
32.5°	8300.8	7866.0	6715.1	5405.4	4143.3	2931.8	1847.7	1115.5	826.2	746.3	745.3
35°	9233.3	8551.6	6973.0	5276.0	3771.2	2441.3	1295.5	762.5	644.2	616.9	622.0
37.5°	10323.4	9480.0	7234.9	5063.6	3350.5	1867.9	863.7	587.6	566.3	567.3	568.4
40°	11473.3	10505.5	7587.9	4765.3	2839.8	1352.1	622.0	527.9	526.9	537.0	540.0
42.5°	12571.6	11501.6	8022.7	4367.8	2304.8	894.0	539.0	503.6	490.5	494.5	497.6
45°	13592.0	12356.2	8392.9	3980.5	1731.4	638.1	528.9	475.3	455.1	453.1	455.1
47.5°	14414.2	13040.8	8618.4	3525.4	1233.8	529.9	507.7	449.0	420.7	414.6	411.6
50°	15040.2	13549.5	8700.3	3009.7	834.3	505.7	479.4	418.7	384.3	385.3	385.3
52.5°	15651.0	14011.7	8605.2	2489.8	613.9	484.4	460.1	394.4	358.0	377.2	382.3
55°	16090.9	14205.9	8328.1	1927.6	511.7	458.1	438.9	366.1	340.8	372.2	382.3
57.5°	16347.8	14358.6	7819.4	1391.6	469.2	432.8	411.6	339.8	316.5	324.6	329.7
60°	16507.6	14145.2	7146.9	951.6	447.0	412.6	384.3	322.6	291.3	272.0	269.0
62.5°	16419.6	13611.2	6261.0	654.3	423.7	390.4	361.0	306.4	265.0	239.7	237.7
65°	15702.6	12623.2	4806.8	529.9	409.6	380.3	346.9	291.3	246.8	222.5	219.5
67.5°	14372.7	10847.3	2807.4	471.3	403.5	370.1	335.8	277.1	236.6	210.4	206.3
70°	12187.3	8159.2	940.5	420.7	402.5	369.1	326.7	267.0	225.5	198.2	194.2
72.5°	8792.3	4923.1	458.1	370.1	376.2	354.0	319.6	258.9	218.4	184.1	177.0
75°	4996.9	1602.9	413.6	319.6	349.9	337.8	315.5	259.9	221.5	166.9	158.8
77.5°	1421.9	468.2	399.5	272.0	330.7	348.9	295.3	234.6	226.5	154.7	144.6
80°	480.4	416.7	385.3	211.4	267.0	288.2	255.9	206.3	228.6	140.6	130.5
82.5°	385.3	418.7	323.6	168.9	203.3	218.4	203.3	185.1	185.1	125.4	117.3
85°	308.4	388.3	205.3	134.5	151.7	167.9	143.6	138.5	129.4	105.2	102.1
87.5°	179.0	121.4	84.9	68.8	63.7	64.7	55.6	66.7	81.9	71.8	70.8
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)