

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: P510438

Luminaire Tested: **CST-CA10-210-750-U-T3-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510438  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA10-210-750-U-T3-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 33147 lumens  
Efficiency: N/A  
Efficacy: 155.7 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

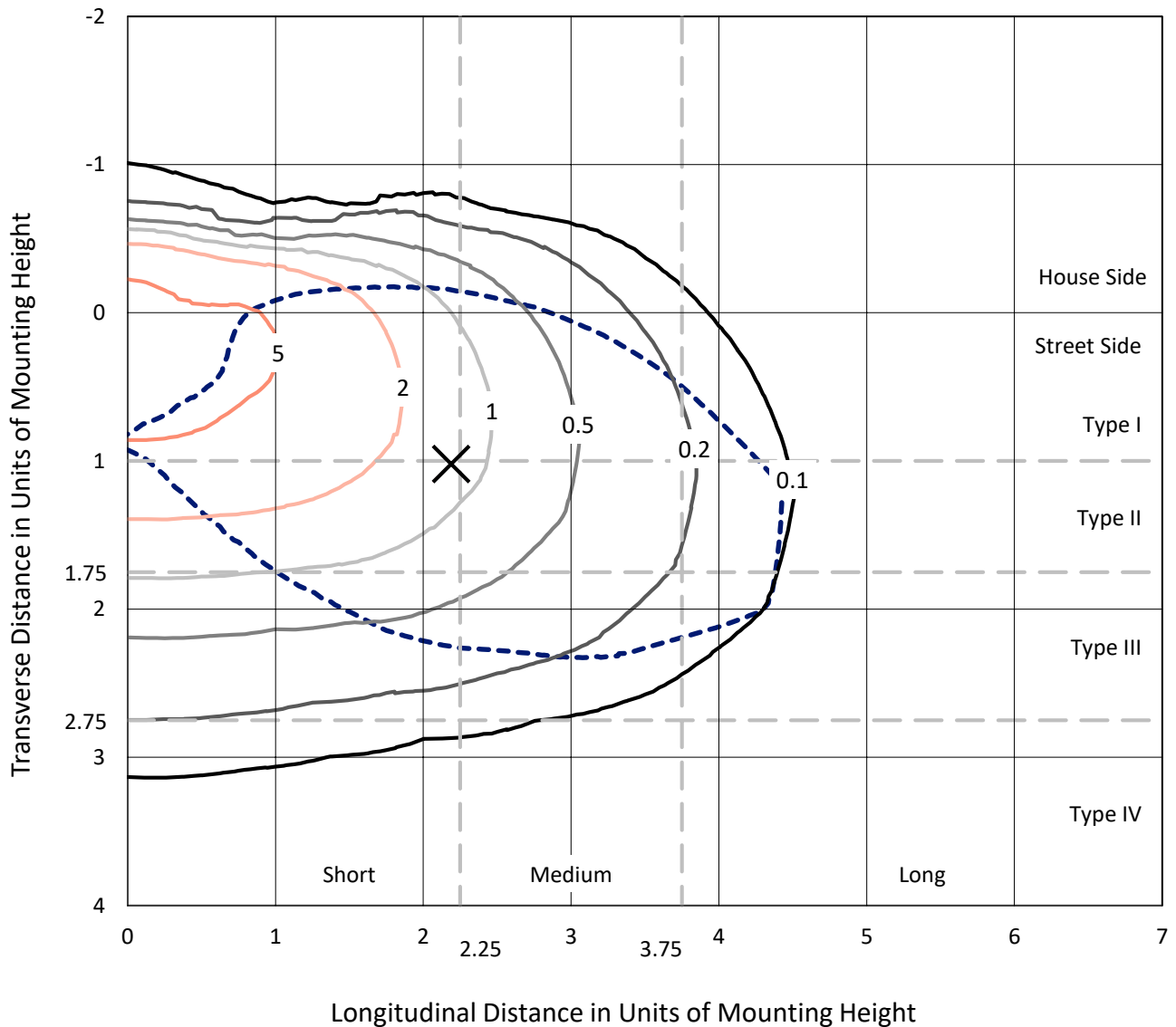
Input Watts (W): 212.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

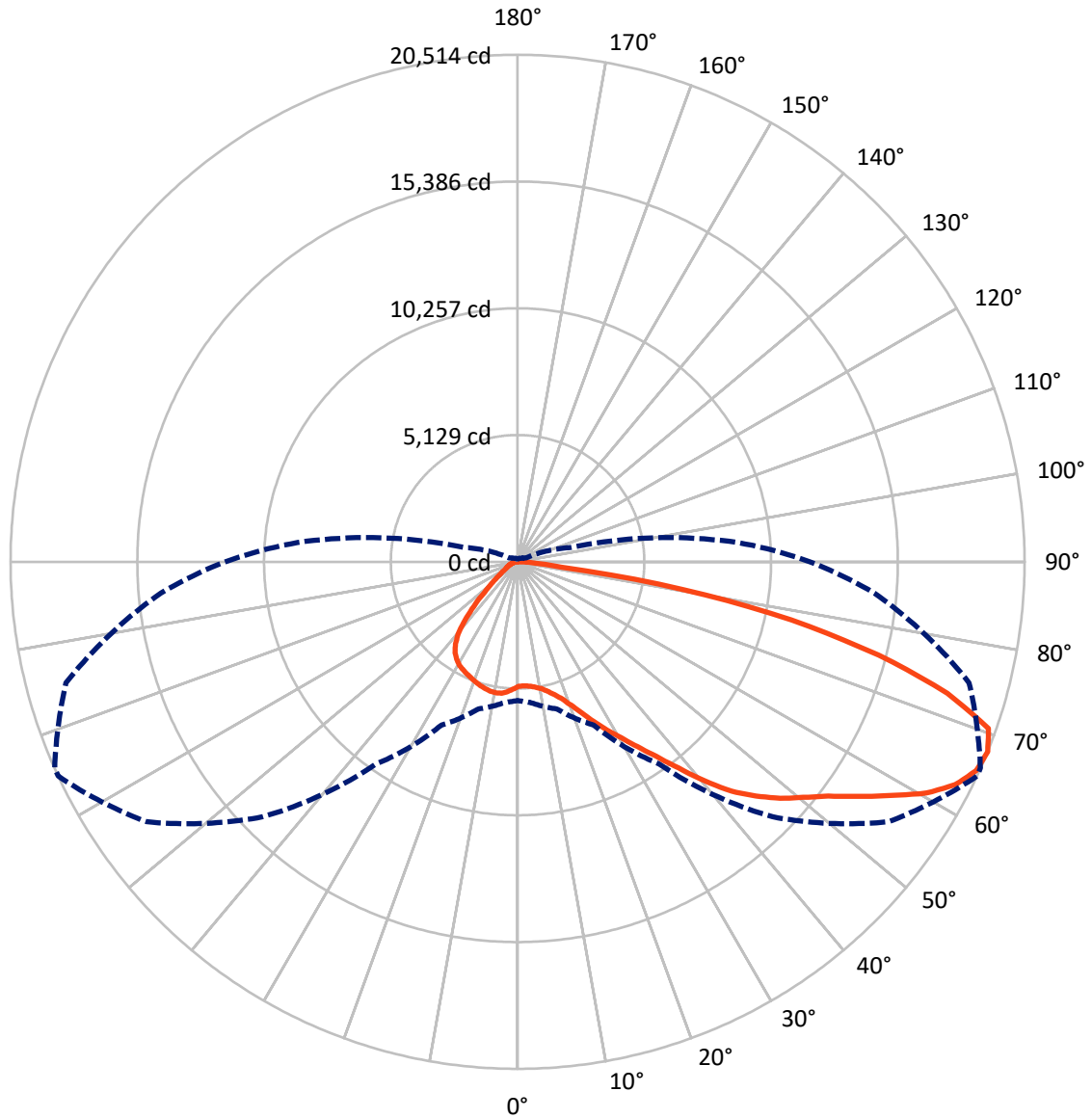
✕ Max cd  
 - - - 1/2 Max cd



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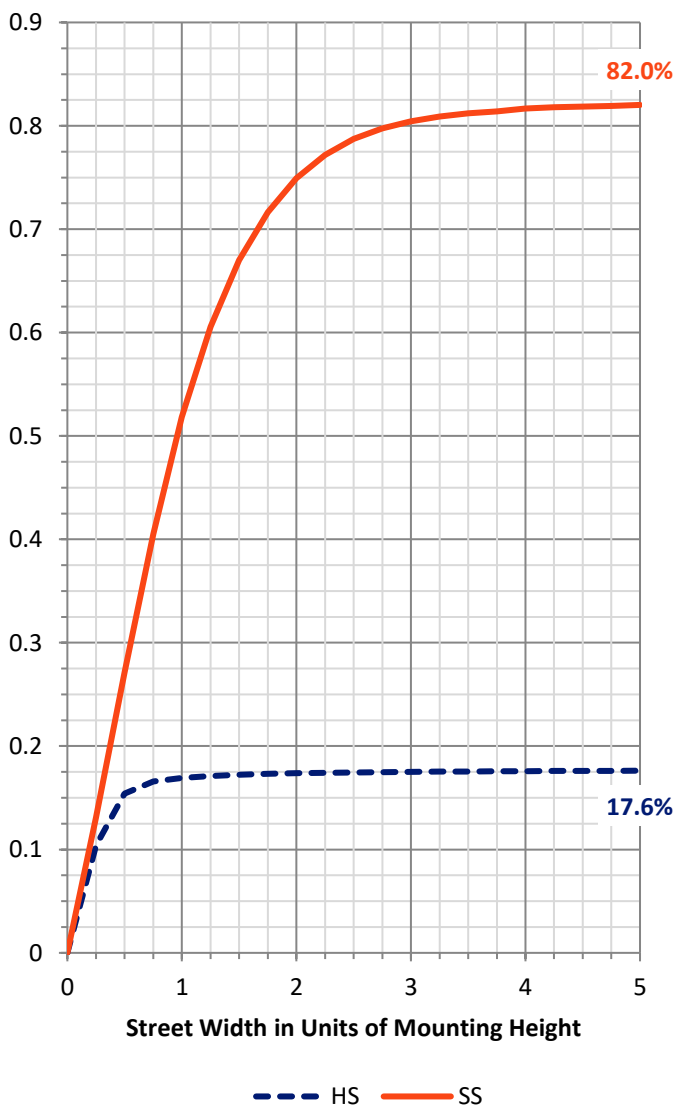
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5924.2	0.0	5924.2
	% Fixture	17.9	0.0	17.9
<b>Street Side</b>	Lumens	27222.8	0.0	27222.8
	% Fixture	82.1	0.0	82.1
<b>Total</b>	Lumens	33147.0	0.0	33147.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	498.3	1.5
10°-20°	1538.5	4.6
20°-30°	2669.0	8.1
30°-40°	4026.1	12.1
40°-50°	5582.5	16.8
50°-60°	6890.8	20.8
60°-70°	7342.0	22.1
70°-80°	4201.2	12.7
80°-90°	398.6	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°	33147.0	100.0
0°-180°	33147.0	100.0

**Coefficient of Utilization**

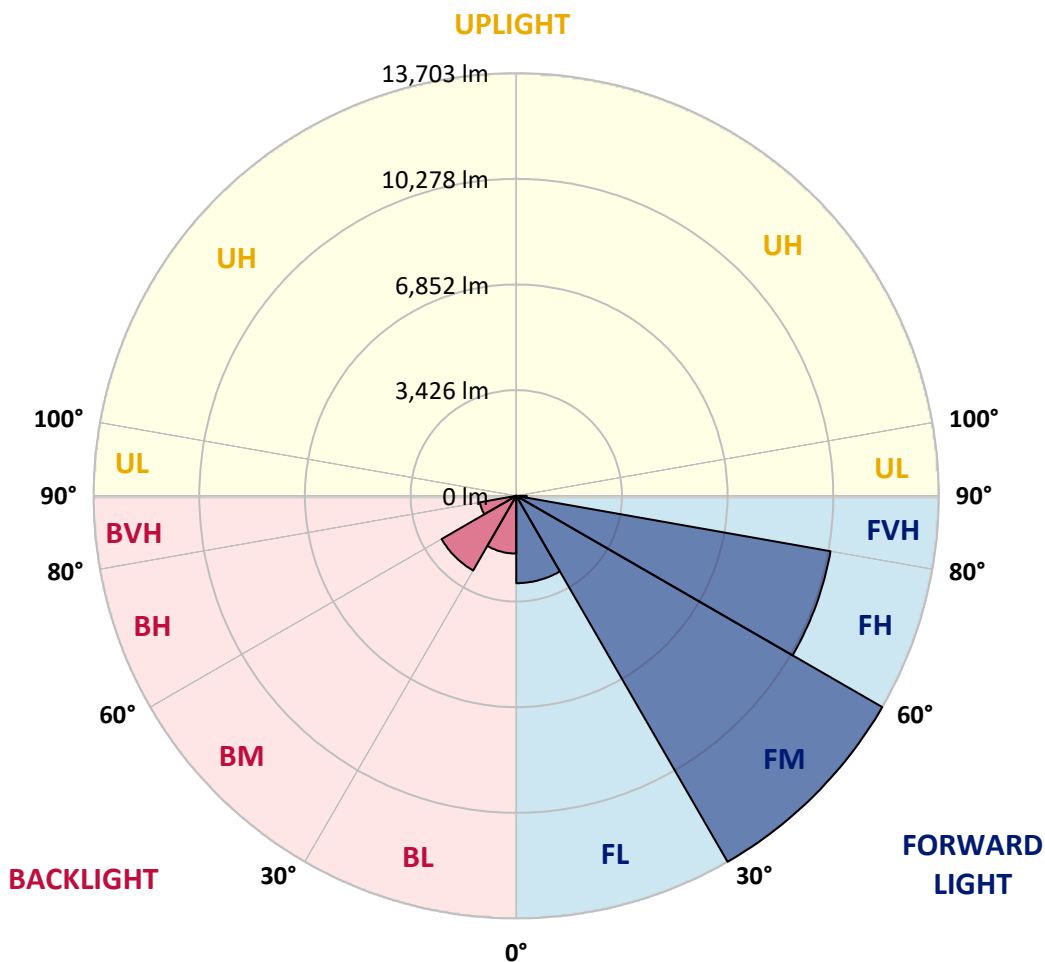


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2831.2	8.5			
FM (30°-60°)	13703.4	41.3			
FH (60°-80°)	10347.6	31.2			G4/12000
FVH (80°-90°)	340.6	1.0			G3/500
BL (0°-30°)	1874.6	5.7	B3/2500		
BM (30°-60°)	2795.9	8.4	B3/5000		
BH (60°-80°)	1195.7	3.6	B3/2500		G3/2500
BVH (80°-90°)	58.0	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-G4**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5036.9	5036.9	5036.9	5036.9	5036.9	5036.9	5036.9	5036.9	5036.9	5036.9	5036.9
2.5°	4988.3	4981.7	4975.9	4986.1	4991.9	5001.3	5015.1	5024.6	5027.5	5036.2	5047.1
5°	5068.1	5067.4	5059.4	5055.1	5042.7	5038.4	5041.3	5052.9	5053.6	5064.5	5098.6
7.5°	5225.0	5223.5	5203.9	5195.2	5169.1	5140.0	5118.2	5120.4	5119.7	5130.6	5176.3
10°	5461.7	5450.0	5422.5	5395.6	5344.8	5290.3	5250.4	5214.1	5214.1	5230.0	5280.9
12.5°	5728.9	5744.8	5707.1	5666.4	5581.5	5483.4	5413.7	5373.1	5368.7	5376.7	5413.0
15°	6060.7	6060.7	6035.3	5977.2	5902.4	5765.9	5622.1	5570.6	5563.3	5580.0	5577.8
17.5°	6434.6	6445.5	6397.6	6368.6	6253.8	6102.8	5922.7	5833.4	5833.4	5822.5	5772.4
20°	6911.7	6852.1	6857.2	6809.3	6725.1	6505.8	6322.8	6192.8	6191.4	6169.6	6028.7
22.5°	7430.1	7397.4	7369.1	7327.0	7210.8	7014.8	6760.6	6632.1	6629.2	6575.5	6366.4
25°	7941.3	7966.0	7934.7	7857.8	7772.8	7559.3	7279.1	7152.7	7152.0	7062.7	6766.5
27.5°	8467.0	8493.8	8483.7	8414.0	8300.7	8133.7	7868.7	7703.8	7693.7	7635.6	7263.1
30°	9047.8	9023.9	9055.1	9025.3	8968.7	8696.4	8456.8	8265.1	8289.8	8272.4	7827.3
32.5°	9470.4	9485.7	9588.1	9591.0	9531.4	9329.6	9036.9	8919.3	8958.5	8935.3	8520.7
35°	9852.3	9877.0	10009.2	10139.2	10182.7	9962.0	9664.3	9657.0	9707.9	9849.4	9476.2
37.5°	10180.5	10198.0	10383.1	10552.3	10693.2	10542.1	10325.8	10583.5	10658.3	10948.0	10462.3
40°	10377.3	10399.8	10639.4	10877.6	11128.8	11075.1	11054.8	11664.7	11735.1	11990.0	11181.8
42.5°	10266.2	10310.5	10709.9	11145.5	11515.1	11622.6	11900.7	12684.8	12765.4	12787.2	11889.0
45°	10068.0	10123.2	10569.7	11274.8	11877.4	12222.3	12751.6	13516.2	13560.5	13498.8	12475.0
47.5°	9854.5	9913.3	10412.2	11236.3	12168.6	12920.1	13511.9	14298.9	14330.2	14140.6	13065.3
50°	9612.0	9666.5	10203.1	11146.2	12387.9	13578.7	14293.1	14975.7	15092.6	14717.9	13524.2
52.5°	9317.2	9375.3	9944.6	11005.4	12580.3	14067.3	14982.2	15740.2	15748.2	15439.6	14041.2
55°	8935.3	9036.2	9620.0	10761.4	12681.2	14487.0	15582.7	16751.7	16803.2	16504.8	14473.9
57.5°	8510.5	8598.4	9229.4	10436.1	12590.4	14805.8	16548.4	17836.5	17829.9	17230.9	14852.2
60°	7949.3	8011.7	8720.4	10010.6	12297.8	15191.3	17554.0	18998.9	18987.3	17942.5	15095.5
62.5°	7229.0	7291.4	7958.0	9343.4	11868.0	15449.8	18236.5	19869.5	19836.1	18460.2	15170.2
65°	6394.0	6505.8	7084.5	8477.1	11107.8	15279.9	18566.2	20382.1	20328.4	18855.2	14991.6
67.5°	5611.2	5706.4	6164.5	7284.9	9985.9	14590.8	18333.8	20514.3	20498.3	18912.5	14487.0
70°	4503.2	4538.1	4957.8	5916.9	8308.7	13115.4	17530.8	20209.3	20216.6	18383.9	13473.4
72.5°	3082.3	3167.2	3353.8	4111.1	6046.2	10430.3	15110.0	18187.9	18189.3	16484.5	11738.7
75°	1657.7	1789.1	2006.9	2382.3	3380.0	6693.1	12134.5	15091.8	15120.1	13744.2	9330.3
77.5°	821.9	869.1	995.5	1274.3	1549.5	3157.8	7804.0	11328.5	11396.0	10550.1	6363.5
80°	376.1	384.1	393.5	391.4	593.2	1385.4	3350.2	6803.5	6823.8	6274.9	2905.1
82.5°	294.1	292.6	297.0	270.1	271.6	534.4	1159.6	1781.8	1900.2	1495.8	921.4
85°	177.9	177.2	191.0	148.1	182.2	289.0	585.2	710.8	719.6	585.2	477.0
87.5°	67.5	65.3	60.3	53.0	61.0	81.3	202.6	261.4	255.6	181.5	164.8
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°	5036.9	5036.9	5036.9	5036.9	5036.9	5036.9	5036.9	5036.9	5036.9	5036.9	5036.9
2.5°	5056.5	5079.7	5122.6	5155.3	5166.1	5201.0	5234.4	5240.2	5264.2	5273.6	5304.8
5°	5119.7	5158.9	5225.7	5270.0	5289.6	5347.7	5385.4	5404.3	5397.8	5401.4	5436.3
7.5°	5211.9	5248.9	5302.7	5356.4	5365.8	5376.0	5372.4	5369.5	5344.0	5322.3	5354.9
10°	5296.1	5331.0	5364.4	5372.4	5324.4	5297.6	5249.6	5212.6	5163.2	5140.7	5166.9
12.5°	5414.5	5421.7	5389.1	5345.5	5242.4	5146.5	5068.9	5001.3	4940.3	4898.2	4933.1
15°	5539.4	5511.0	5415.9	5288.9	5129.1	4991.9	4864.8	4752.3	4651.3	4626.7	4636.1
17.5°	5704.9	5627.9	5436.3	5222.8	4974.5	4761.0	4597.6	4455.3	4323.2	4268.0	4262.9
20°	5906.8	5782.6	5477.6	5139.3	4791.5	4507.6	4254.9	4042.2	3859.9	3710.3	3714.0
22.5°	6169.6	5989.5	5540.1	5052.2	4588.9	4210.6	3843.2	3481.6	3181.7	3052.5	3020.5
25°	6516.7	6248.0	5628.7	4973.0	4362.4	3833.0	3313.9	2803.4	2486.1	2360.5	2346.7
27.5°	6948.7	6595.1	5763.7	4885.1	4119.8	3385.0	2638.6	2138.3	1847.2	1715.0	1670.7
30°	7439.5	7022.8	5902.4	4793.7	3826.5	2809.3	2012.0	1521.9	1223.5	1105.1	1089.9
32.5°	8074.9	7564.4	6108.6	4649.9	3398.1	2208.0	1403.5	949.7	747.1	696.3	681.8
35°	8977.4	8297.1	6363.5	4468.4	2847.7	1542.2	869.9	556.2	448.0	422.6	417.5
37.5°	9818.9	9015.9	6620.5	4167.0	2162.3	962.8	497.4	356.5	332.6	333.3	334.7
40°	10486.2	9507.5	6828.2	3770.6	1422.4	546.7	345.6	296.2	297.0	294.8	293.3
42.5°	11080.2	9899.5	6921.8	3184.6	824.1	366.0	299.9	273.0	266.5	268.7	267.2
45°	11571.7	10299.6	6740.3	2526.1	485.8	328.2	283.2	253.4	246.1	257.8	259.2
47.5°	12088.7	10679.4	6462.2	1903.1	394.3	312.2	267.9	238.9	235.3	249.8	251.2
50°	12523.6	10954.6	5988.1	1434.0	376.1	294.8	254.1	224.4	223.6	236.7	236.7
52.5°	12887.4	11120.8	5425.4	1107.3	363.8	279.5	240.3	210.6	210.6	214.9	215.6
55°	13143.7	11087.4	5089.9	871.3	350.7	265.0	225.8	197.5	188.8	185.9	187.3
57.5°	13190.2	10998.8	4700.7	679.6	335.5	251.2	212.7	182.2	166.3	164.1	163.4
60°	13160.4	10804.3	4256.4	567.8	318.0	238.2	199.7	166.3	150.3	145.2	146.7
62.5°	13036.3	10459.4	3743.0	498.1	300.6	228.0	185.2	155.4	140.9	134.3	134.3
65°	12661.6	9965.6	2980.6	436.4	278.8	217.1	173.5	151.0	135.1	127.8	126.3
67.5°	11838.2	8941.1	2240.0	382.7	257.8	205.5	172.1	150.3	132.1	122.0	120.5
70°	10733.8	7680.6	1529.2	336.2	234.5	194.6	171.4	151.0	129.2	116.2	114.7
72.5°	8960.7	6054.9	880.8	292.6	211.3	184.4	168.5	151.8	124.2	108.2	106.0
75°	6733.1	4246.9	517.0	251.2	188.8	169.2	160.5	147.4	116.2	98.7	96.6
77.5°	4049.4	1983.0	389.2	208.4	161.9	148.8	143.0	135.1	106.0	91.5	89.3
80°	1485.6	753.0	305.7	167.0	128.5	129.2	123.4	118.4	96.6	84.2	82.8
82.5°	647.7	460.3	225.8	127.1	100.9	115.4	101.7	97.3	82.8	75.5	72.6
85°	392.8	274.5	145.2	86.4	69.7	78.4	71.2	74.8	63.9	59.5	57.4
87.5°	130.0	82.0	64.6	42.1	34.9	32.7	31.9	38.5	36.3	33.4	33.4
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)