

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: P510428

Luminaire Tested: **CST-CA10-210-740-U-T3-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510428  
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-CA10-210-740-U-T3-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32550 lumens  
Efficiency: N/A  
Efficacy: 152.9 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

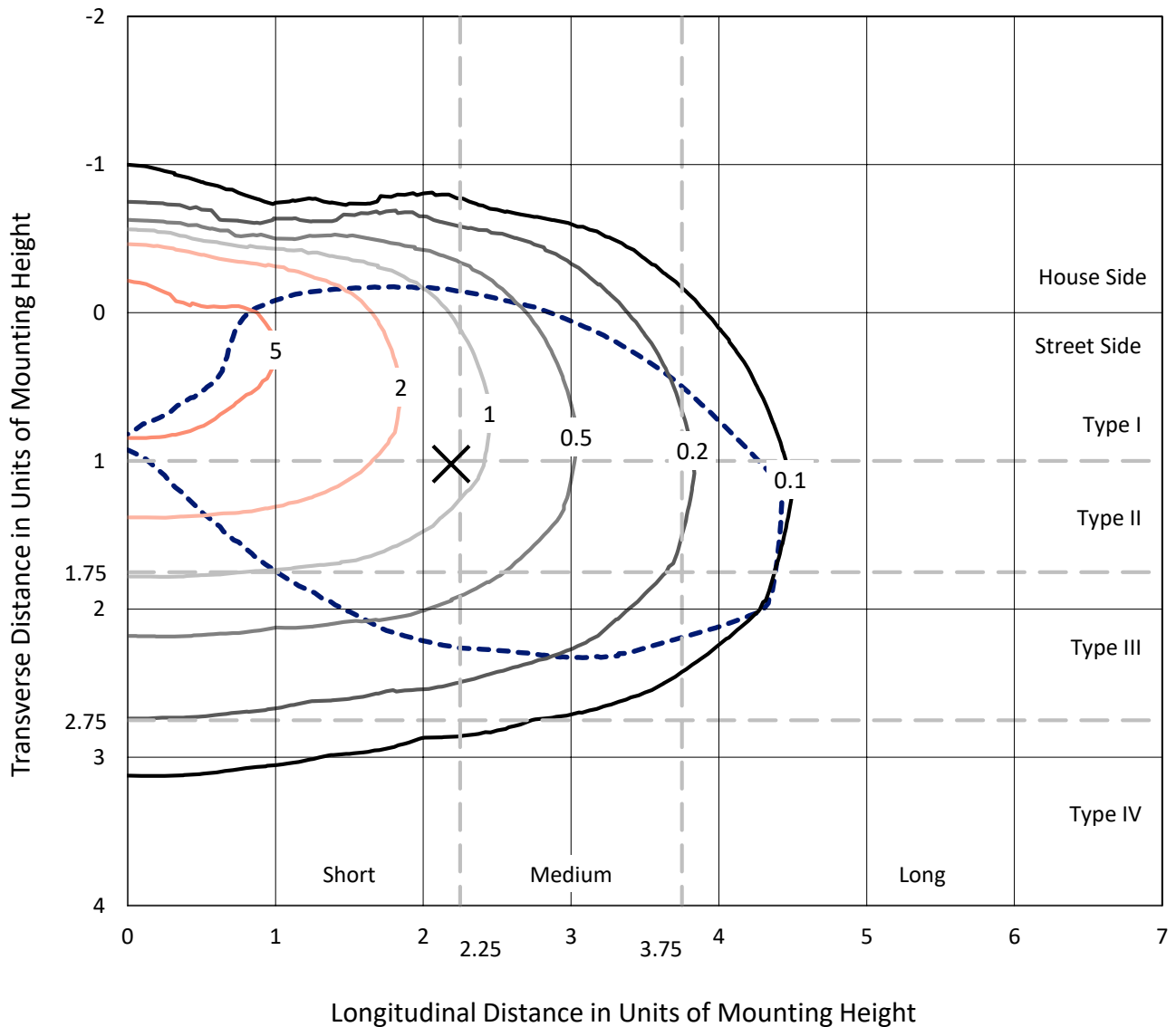
Input Watts (W): 212.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

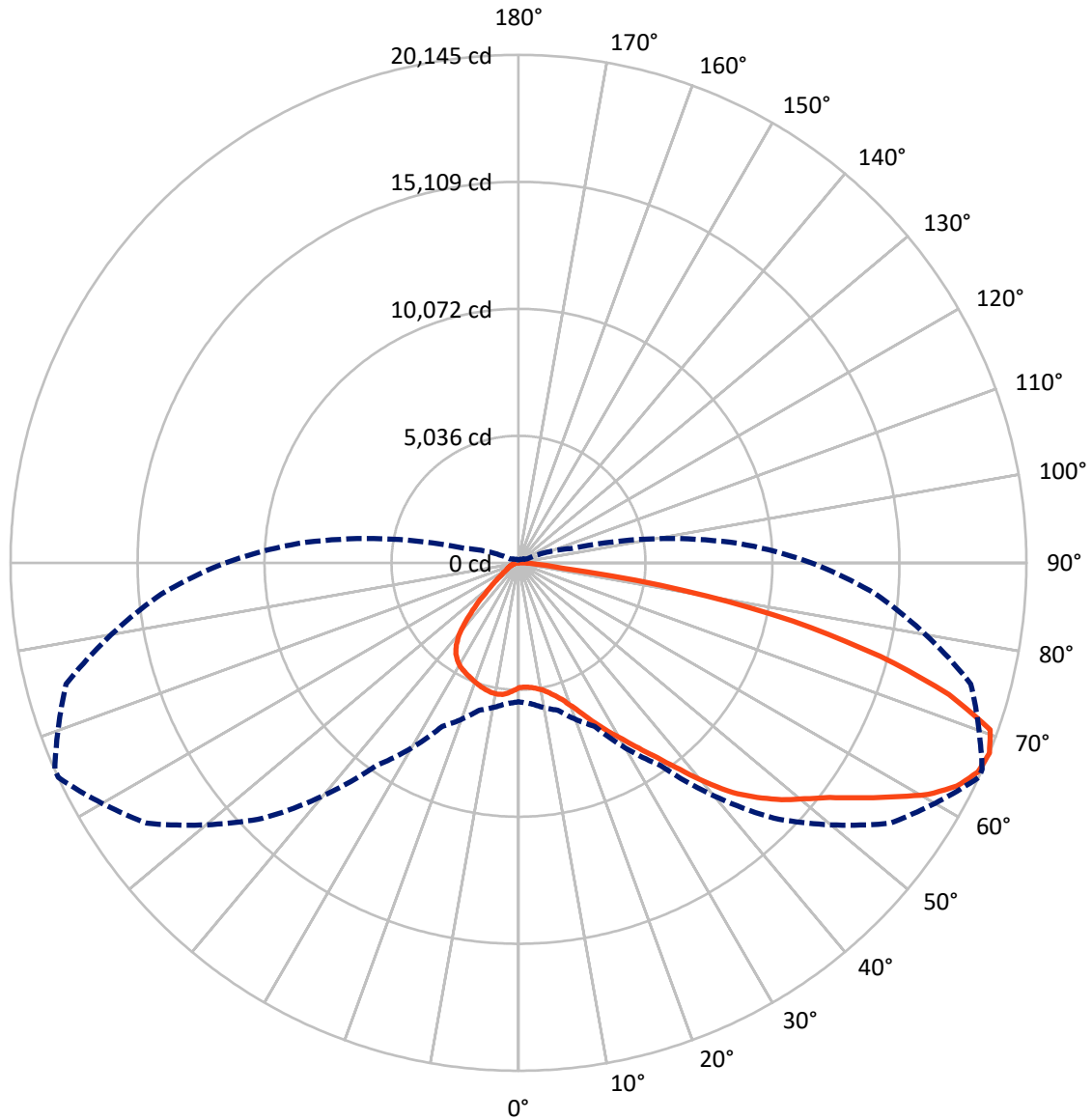
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.5 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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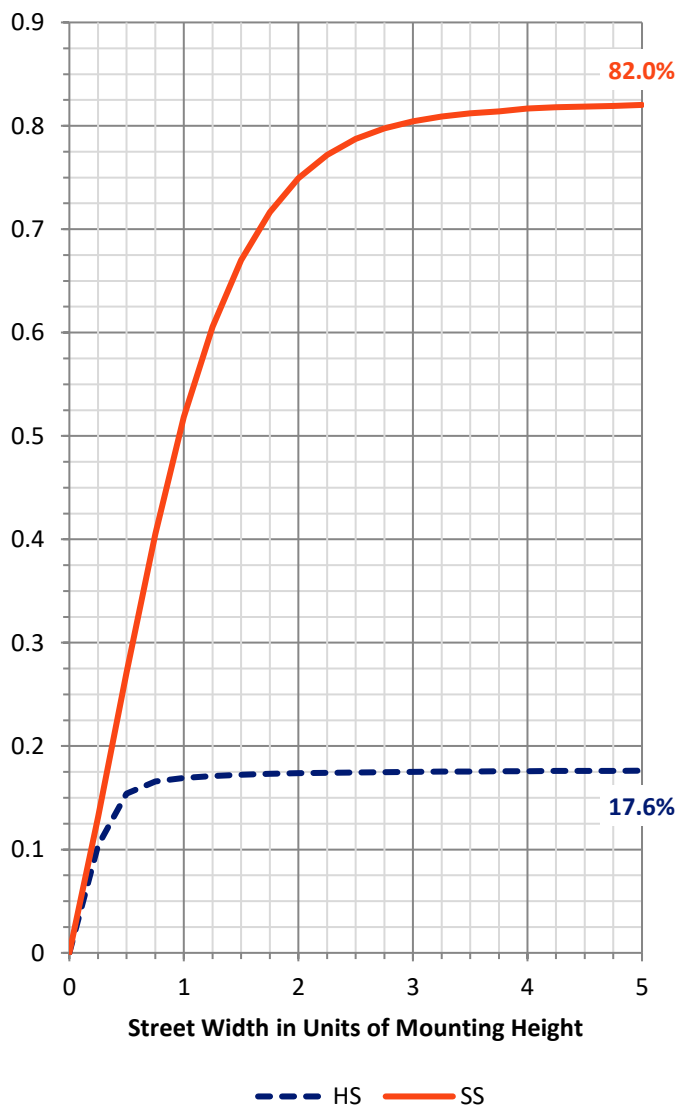
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5817.5	0.0	5817.5
	% Fixture	17.9	0.0	17.9
<b>Street Side</b>	Lumens	26732.5	0.0	26732.5
	% Fixture	82.1	0.0	82.1
<b>Total</b>	Lumens	32550.0	0.0	32550.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	489.3	1.5
10°-20°	1510.8	4.6
20°-30°	2620.9	8.1
30°-40°	3953.6	12.1
40°-50°	5481.9	16.8
50°-60°	6766.7	20.8
60°-70°	7209.8	22.1
70°-80°	4125.6	12.7
80°-90°	391.4	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°	32550.0	100.0
0°-180°	32550.0	100.0

**Coefficient of Utilization**



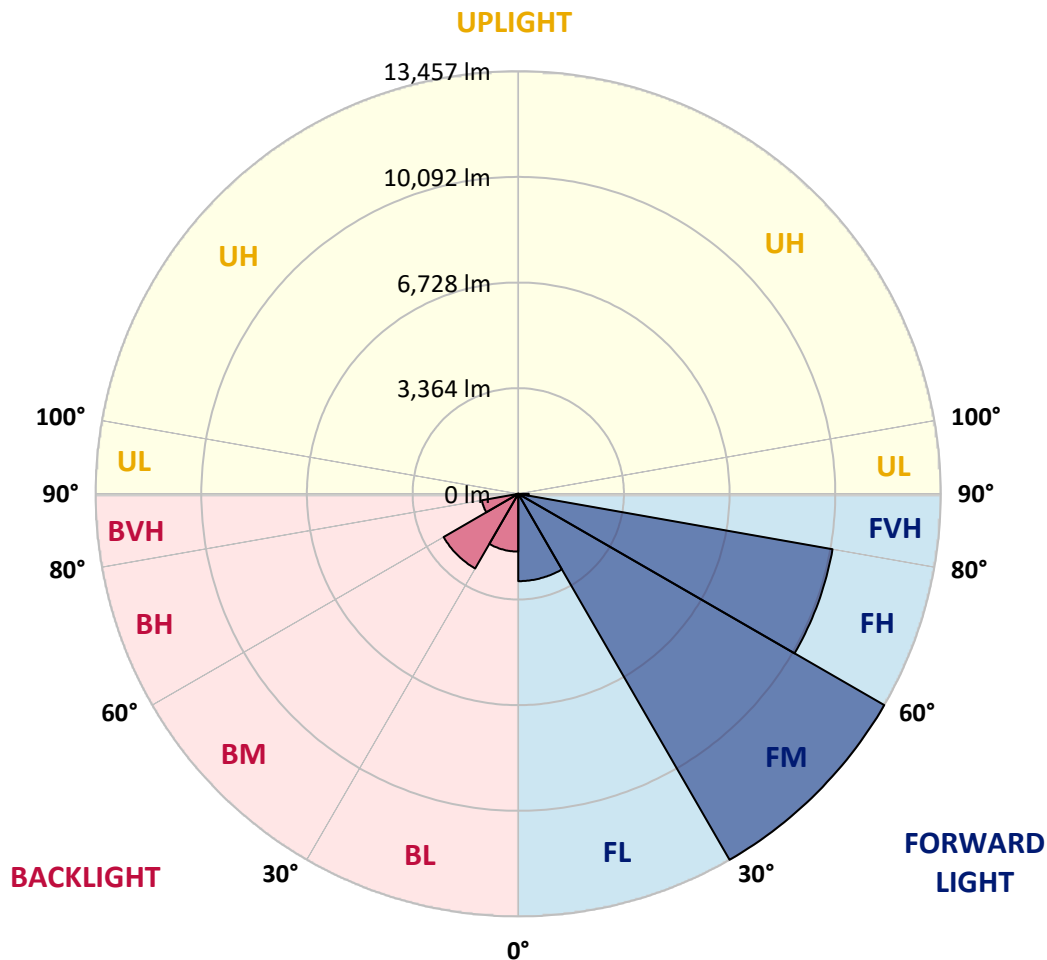
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2780.2	8.5			
FM (30°-60°)	13456.6	41.3			
FH (60°-80°)	10161.2	31.2			G4/12000
FVH (80°-90°)	334.5	1.0			G3/500
BL (0°-30°)	1840.8	5.7	B3/2500		
BM (30°-60°)	2745.5	8.4	B3/5000		
BH (60°-80°)	1174.2	3.6	B3/2500		G3/2500
BVH (80°-90°)	57.0	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°	4946.2	4946.2	4946.2	4946.2	4946.2	4946.2	4946.2	4946.2	4946.2	4946.2	4946.2
2.5°	4898.4	4892.0	4886.3	4896.3	4902.0	4911.2	4924.8	4934.1	4936.9	4945.5	4956.2
5°	4976.8	4976.1	4968.3	4964.0	4951.9	4947.6	4950.5	4961.9	4962.6	4973.3	5006.8
7.5°	5130.9	5129.4	5110.2	5101.6	5076.0	5047.4	5026.0	5028.2	5027.5	5038.2	5083.1
10°	5363.3	5351.9	5324.8	5298.4	5248.5	5195.0	5155.8	5120.2	5120.2	5135.8	5185.8
12.5°	5625.7	5641.4	5604.3	5564.4	5480.9	5384.7	5316.2	5276.3	5272.0	5279.9	5315.5
15°	5951.5	5951.5	5926.6	5869.5	5796.1	5662.1	5520.9	5470.3	5463.1	5479.5	5477.4
17.5°	6318.7	6329.4	6282.4	6253.9	6141.2	5992.9	5816.1	5728.4	5728.4	5717.7	5668.5
20°	6787.2	6728.7	6733.7	6686.7	6603.9	6388.6	6208.9	6081.3	6079.9	6058.5	5920.2
22.5°	7296.3	7264.2	7236.4	7195.0	7081.0	6888.4	6638.9	6512.7	6509.8	6457.1	6251.7
25°	7798.2	7822.5	7791.8	7716.2	7632.8	7423.2	7148.0	7023.9	7023.2	6935.5	6644.6
27.5°	8314.5	8340.8	8330.9	8262.4	8151.2	7987.2	7726.9	7565.1	7555.1	7498.1	7132.3
30°	8884.9	8861.4	8892.0	8862.8	8807.2	8539.8	8304.5	8116.2	8140.5	8123.4	7686.3
32.5°	9299.9	9314.8	9415.4	9418.2	9359.7	9161.5	8874.2	8758.7	8797.2	8774.4	8367.2
35°	9674.9	9699.1	9828.9	9956.5	9999.3	9782.6	9490.2	9483.1	9533.0	9672.0	9305.6
37.5°	9997.2	10014.3	10196.1	10362.2	10500.6	10352.3	10139.8	10392.9	10466.3	10750.8	10273.8
40°	10190.4	10212.5	10447.8	10681.7	10928.4	10875.6	10855.7	11454.6	11523.7	11774.0	10980.4
42.5°	10081.3	10124.8	10517.0	10944.8	11307.7	11413.2	11686.3	12456.4	12535.5	12556.9	11674.9
45°	9886.7	9940.9	10379.4	11071.7	11663.5	12002.2	12522.0	13272.8	13316.3	13255.7	12250.3
47.5°	9677.0	9734.8	10224.6	11033.9	11949.4	12687.4	13268.5	14041.4	14072.1	13886.0	12830.0
50°	9438.9	9492.4	10019.3	10945.5	12164.7	13334.1	14035.7	14705.9	14820.7	14452.8	13280.6
52.5°	9149.4	9206.4	9765.5	10807.2	12353.7	13814.0	14712.4	15456.7	15464.6	15161.6	13788.3
55°	8774.4	8873.5	9446.7	10567.6	12452.8	14226.1	15302.0	16450.0	16500.6	16207.5	14213.2
57.5°	8357.2	8443.5	9063.1	10248.2	12363.7	14539.1	16250.3	17515.2	17508.8	16920.6	14584.7
60°	7806.1	7867.4	8563.3	9830.3	12076.3	14917.7	17237.9	18656.7	18645.3	17619.3	14823.6
62.5°	7098.8	7160.1	7814.6	9175.1	11654.2	15171.5	17908.1	19511.7	19478.9	18127.7	14897.0
65°	6278.8	6388.6	6956.9	8324.4	10907.7	15004.7	18231.8	20015.0	19962.3	18515.6	14721.6
67.5°	5510.2	5603.6	6053.5	7153.7	9806.1	14328.0	18003.6	20144.8	20129.1	18571.9	14226.1
70°	4422.1	4456.3	4868.5	5810.4	8159.0	12879.2	17215.0	19845.3	19852.5	18052.8	13230.7
72.5°	3026.7	3110.2	3293.4	4037.1	5937.3	10242.5	14837.8	17860.3	17861.7	16187.6	11527.3
75°	1627.8	1756.9	1970.8	2339.4	3319.1	6572.6	11915.9	14820.0	14847.8	13496.7	9162.2
77.5°	807.1	853.5	977.5	1251.3	1521.6	3100.9	7663.5	11124.5	11190.8	10360.1	6248.9
80°	369.3	377.2	386.5	384.3	582.5	1360.4	3289.9	6681.0	6700.9	6161.9	2852.8
82.5°	288.8	287.3	291.6	265.2	266.7	524.8	1138.7	1749.7	1866.0	1468.8	904.8
85°	174.7	174.0	187.5	145.5	179.0	283.8	574.7	698.0	706.6	574.7	468.5
87.5°	66.3	64.2	59.2	52.1	59.9	79.9	198.9	256.7	251.0	178.3	161.9
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°	4946.2	4946.2	4946.2	4946.2	4946.2	4946.2	4946.2	4946.2	4946.2	4946.2	4946.2
2.5°	4965.4	4988.3	5030.3	5062.4	5073.1	5107.3	5140.1	5145.8	5169.4	5178.6	5209.3
5°	5027.5	5066.0	5131.6	5175.1	5194.3	5251.4	5288.4	5307.0	5300.6	5304.1	5338.3
7.5°	5118.0	5154.4	5207.1	5259.9	5269.2	5279.2	5275.6	5272.7	5247.8	5226.4	5258.5
10°	5200.7	5235.0	5267.8	5275.6	5228.5	5202.2	5155.1	5118.7	5070.2	5048.1	5073.8
12.5°	5317.0	5324.1	5292.0	5249.2	5148.0	5053.9	4977.6	4911.2	4851.4	4810.0	4844.2
15°	5439.6	5411.8	5318.4	5193.6	5036.7	4902.0	4777.2	4666.7	4567.6	4543.3	4552.6
17.5°	5602.2	5526.6	5338.3	5128.7	4884.9	4675.2	4514.8	4375.1	4245.3	4191.1	4186.1
20°	5800.4	5678.5	5379.0	5046.7	4705.2	4426.4	4178.3	3969.4	3790.4	3643.5	3647.1
22.5°	6058.5	5881.7	5440.3	4961.2	4506.3	4134.8	3774.0	3418.9	3124.4	2997.5	2966.1
25°	6399.3	6135.5	5527.3	4883.4	4283.8	3764.0	3254.2	2753.0	2441.4	2318.0	2304.5
27.5°	6823.6	6476.3	5659.9	4797.2	4045.6	3324.1	2591.1	2099.8	1813.9	1684.1	1640.6
30°	7305.6	6896.3	5796.1	4707.3	3757.6	2758.7	1975.8	1494.5	1201.4	1085.2	1070.2
32.5°	7929.4	7428.2	5998.6	4566.1	3336.9	2168.3	1378.3	932.6	733.7	683.8	669.5
35°	8815.7	8147.6	6248.9	4387.9	2796.4	1514.4	854.2	546.2	439.9	415.0	410.0
37.5°	9642.1	8853.5	6501.3	4092.0	2123.4	945.5	488.4	350.1	326.6	327.3	328.7
40°	10297.4	9336.2	6705.2	3702.7	1396.8	536.9	339.4	290.9	291.6	289.5	288.1
42.5°	10880.6	9721.2	6797.2	3127.3	809.3	359.4	294.5	268.1	261.7	263.8	262.4
45°	11363.3	10114.1	6618.9	2480.6	477.0	322.3	278.1	248.8	241.7	253.1	254.5
47.5°	11871.0	10487.0	6345.8	1868.8	387.2	306.6	263.1	234.6	231.0	245.3	246.7
50°	12298.1	10757.3	5880.2	1408.2	369.3	289.5	249.6	220.3	219.6	232.4	232.4
52.5°	12655.3	10920.5	5327.6	1087.3	357.2	274.5	236.0	206.8	206.8	211.1	211.8
55°	12907.0	10887.7	4998.2	855.6	344.4	260.3	221.7	193.9	185.4	182.5	184.0
57.5°	12952.6	10800.8	4616.1	667.4	329.4	246.7	208.9	179.0	163.3	161.1	160.4
60°	12923.4	10609.7	4179.7	557.6	312.3	233.9	196.1	163.3	147.6	142.6	144.0
62.5°	12801.5	10271.0	3675.6	489.1	295.2	223.9	181.8	152.6	138.3	131.9	131.9
65°	12433.6	9786.1	2926.9	428.5	273.8	213.2	170.4	148.3	132.6	125.5	124.1
67.5°	11625.0	8780.1	2199.7	375.8	253.1	201.8	169.0	147.6	129.8	119.8	118.4
70°	10540.5	7542.3	1501.6	330.1	230.3	191.1	168.3	148.3	126.9	114.1	112.7
72.5°	8799.3	5945.8	864.9	287.3	207.5	181.1	165.4	149.0	121.9	106.2	104.1
75°	6611.8	4170.4	507.7	246.7	185.4	166.1	157.6	144.7	114.1	97.0	94.8
77.5°	3976.5	1947.2	382.2	204.6	159.0	146.2	140.5	132.6	104.1	89.8	87.7
80°	1458.8	739.4	300.2	164.0	126.2	126.9	121.2	116.2	94.8	82.7	81.3
82.5°	636.0	452.1	221.7	124.8	99.1	113.4	99.8	95.5	81.3	74.2	71.3
85°	385.7	269.5	142.6	84.8	68.4	77.0	69.9	73.4	62.7	58.5	56.3
87.5°	127.6	80.6	63.5	41.4	34.2	32.1	31.4	37.8	35.7	32.8	32.8
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)