

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: P510418

Luminaire Tested: **CST-CA10-210-730-U-T3-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510418  
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-CA10-210-730-U-T3-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31960.9 lumens  
Efficiency: N/A  
Efficacy: 150.1 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

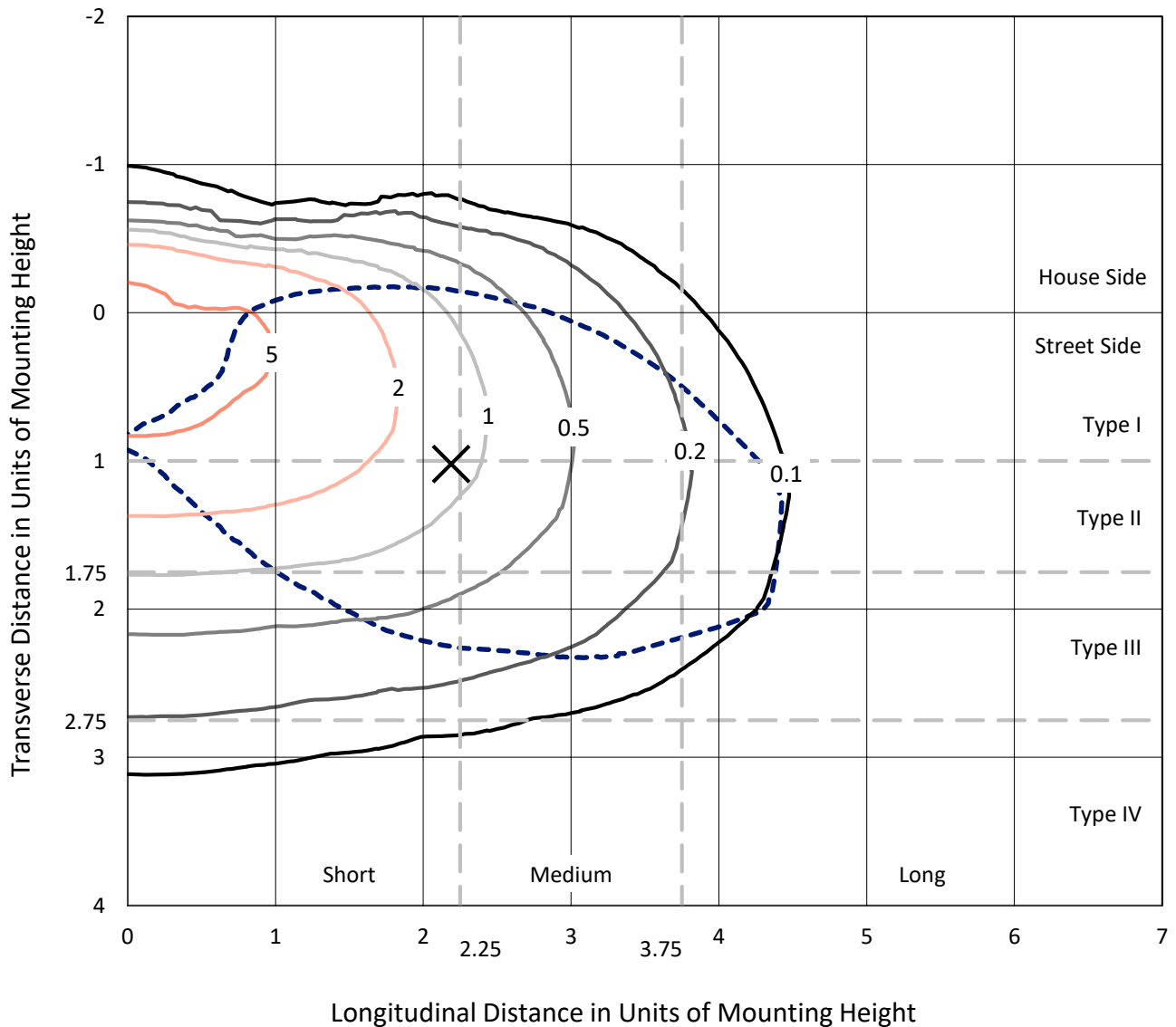




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### Iso-Footcandle Lines of Horizontal Illumination

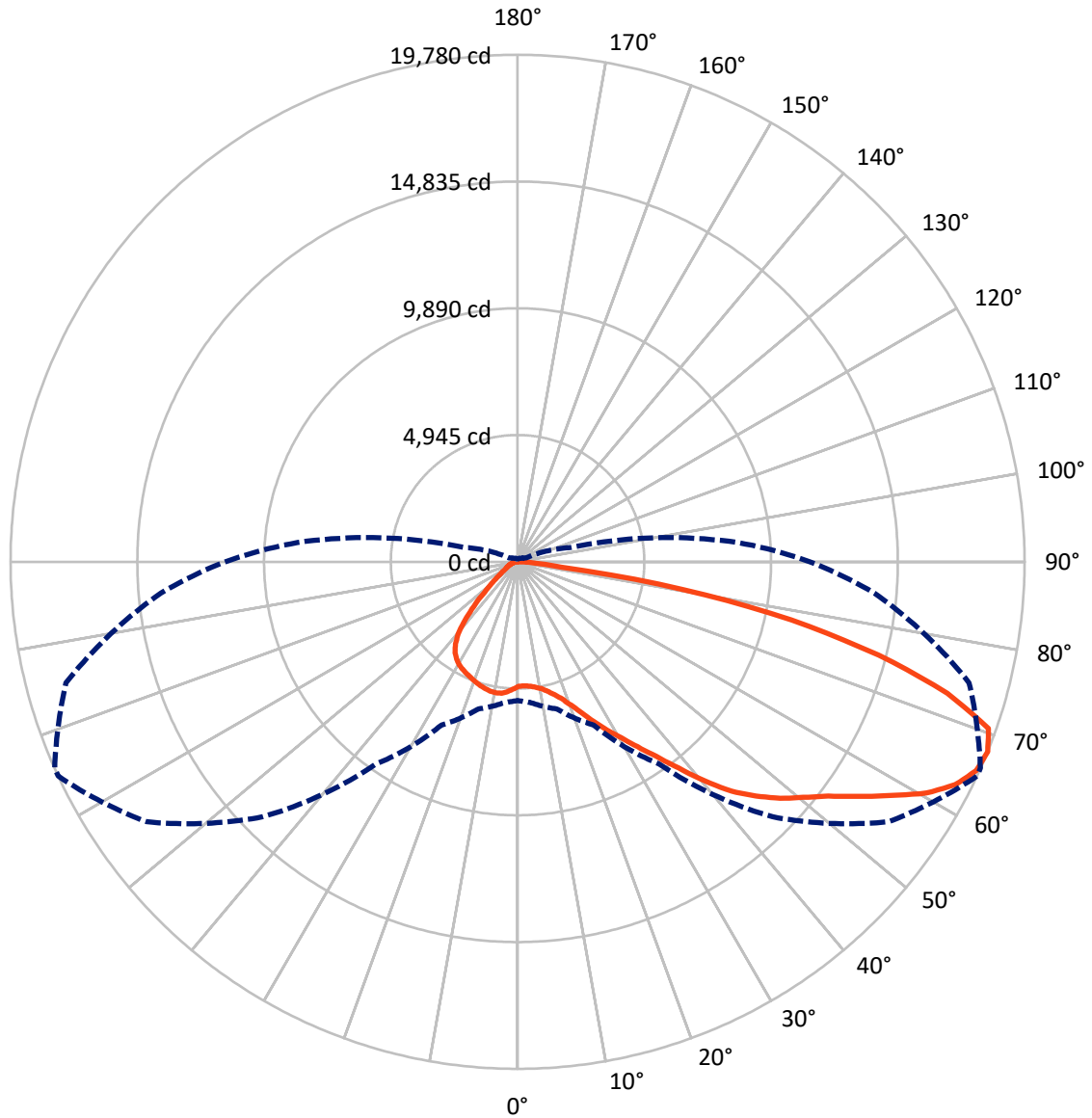
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.3 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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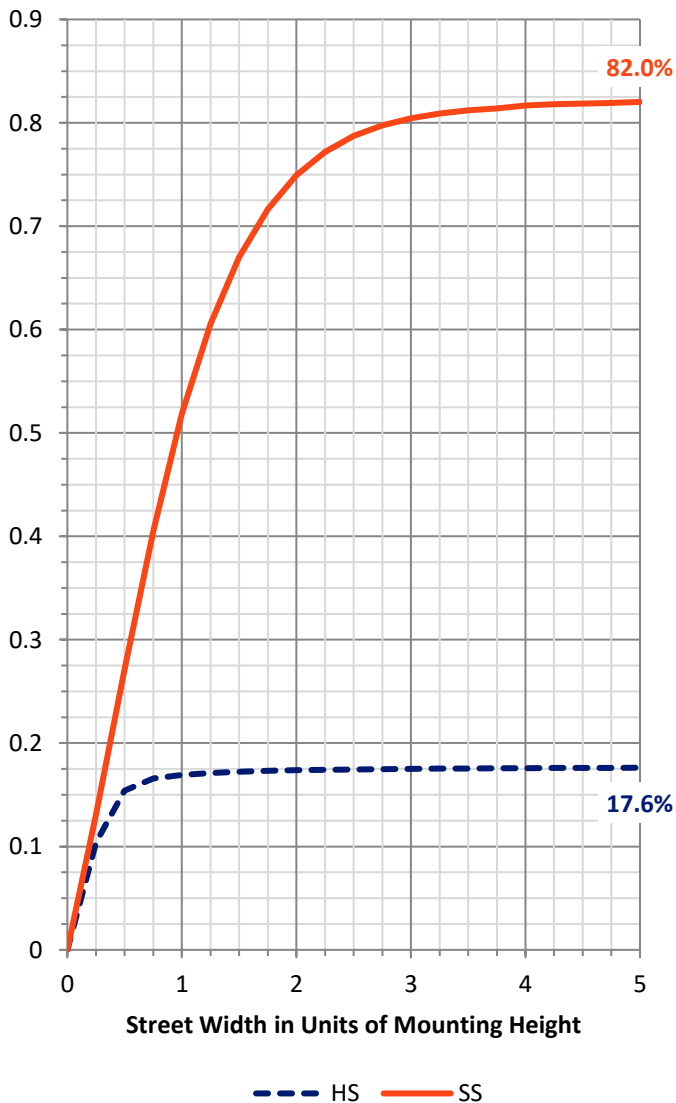
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5712.2	0.0	5712.2
	% Fixture	17.9	0.0	17.9
<b>Street Side</b>	Lumens	26248.8	0.0	26248.8
	% Fixture	82.1	0.0	82.1
<b>Total</b>	Lumens	31960.9	0.0	31960.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	480.5	1.5
10°-20°	1483.4	4.6
20°-30°	2573.5	8.1
30°-40°	3882.0	12.1
40°-50°	5382.7	16.8
50°-60°	6644.2	20.8
60°-70°	7079.3	22.1
70°-80°	4050.9	12.7
80°-90°	384.3	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°	31960.9	100.0
0°-180°	31960.9	100.0



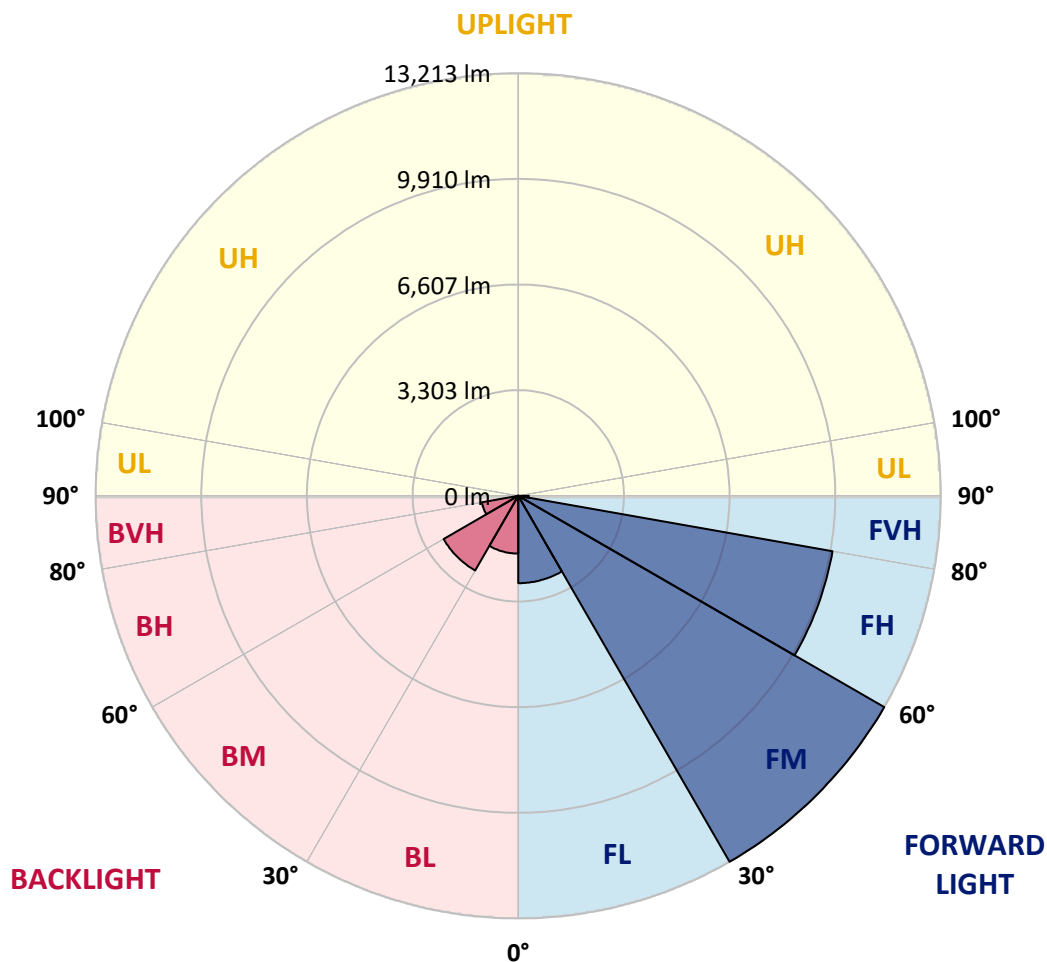
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2729.9	8.5			
FM (30°-60°)	13213.1	41.3			
FH (60°-80°)	9977.3	31.2			G4/12000
FVH (80°-90°)	328.4	1.0			G3/500
BL (0°-30°)	1807.5	5.7	B3/2500		
BM (30°-60°)	2695.8	8.4	B3/5000		
BH (60°-80°)	1152.9	3.6	B3/2500		G3/2500
BVH (80°-90°)	55.9	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°	4856.7	4856.7	4856.7	4856.7	4856.7	4856.7	4856.7	4856.7	4856.7	4856.7	4856.7
2.5°	4809.8	4803.5	4797.9	4807.7	4813.3	4822.4	4835.7	4844.8	4847.6	4856.0	4866.5
5°	4886.8	4886.1	4878.4	4874.2	4862.3	4858.1	4860.9	4872.1	4872.8	4883.3	4916.2
7.5°	5038.0	5036.6	5017.7	5009.3	4984.1	4956.1	4935.1	4937.2	4936.5	4947.0	4991.1
10°	5266.2	5255.0	5228.4	5202.5	5153.5	5101.0	5062.5	5027.5	5027.5	5042.9	5091.9
12.5°	5523.9	5539.3	5502.9	5463.7	5381.8	5287.3	5220.0	5180.8	5176.6	5184.3	5219.3
15°	5843.8	5843.8	5819.3	5763.3	5691.2	5559.6	5421.0	5371.3	5364.3	5380.4	5378.3
17.5°	6204.4	6214.9	6168.7	6140.7	6030.1	5884.4	5710.8	5624.7	5624.7	5614.2	5565.9
20°	6664.4	6607.0	6611.9	6565.7	6484.4	6273.0	6096.6	5971.3	5969.9	5948.9	5813.0
22.5°	7164.3	7132.7	7105.4	7064.8	6952.8	6763.8	6518.8	6394.8	6392.0	6340.2	6138.6
25°	7657.1	7680.9	7650.8	7576.6	7494.7	7288.9	7018.6	6896.8	6896.1	6810.0	6524.4
27.5°	8164.0	8189.9	8180.1	8112.9	8003.7	7842.7	7587.1	7428.2	7418.4	7362.4	7003.2
30°	8724.1	8701.0	8731.1	8702.4	8647.8	8385.3	8154.2	7969.4	7993.2	7976.4	7547.2
32.5°	9131.6	9146.3	9245.0	9247.8	9190.4	8995.7	8713.6	8600.2	8638.0	8615.6	8215.8
35°	9499.8	9523.6	9651.1	9776.4	9818.4	9605.5	9318.5	9311.5	9360.5	9497.0	9137.2
37.5°	9816.3	9833.1	10011.6	10174.7	10310.6	10164.9	9956.3	10204.8	10277.0	10556.3	10087.9
40°	10006.0	10027.7	10258.8	10488.4	10730.6	10678.8	10659.2	11247.3	11315.2	11561.0	10781.7
42.5°	9898.9	9941.6	10326.7	10746.7	11103.1	11206.7	11474.8	12231.0	12308.7	12329.7	11463.6
45°	9707.8	9761.0	10191.5	10871.4	11452.4	11785.0	12295.4	13032.6	13075.3	13015.8	12028.6
47.5°	9501.9	9558.6	10039.6	10834.2	11733.2	12457.8	13028.4	13787.3	13817.4	13634.7	12597.8
50°	9268.1	9320.6	9838.0	10747.4	11944.6	13092.8	13781.7	14439.8	14552.5	14191.3	13040.3
52.5°	8983.8	9039.9	9588.7	10611.6	12130.2	13564.0	14446.1	15177.0	15184.7	14887.2	13538.8
55°	8615.6	8712.9	9275.8	10376.4	12227.5	13968.7	15025.1	16152.3	16202.0	15914.3	13956.0
57.5°	8206.0	8290.7	8899.1	10062.7	12140.0	14276.0	15956.3	17198.3	17192.0	16614.4	14320.8
60°	7664.8	7725.0	8408.4	9652.5	11857.8	14647.8	16925.9	18319.2	18307.9	17300.5	14555.3
62.5°	6970.3	7030.5	7673.2	9009.1	11443.3	14897.0	17584.0	19158.6	19126.4	17799.7	14627.5
65°	6165.2	6273.0	6831.0	8173.8	10710.3	14733.2	17901.9	19652.9	19601.1	18180.5	14455.2
67.5°	5410.5	5502.2	5944.0	7024.2	9628.7	14068.8	17677.8	19780.3	19764.9	18235.8	13968.7
70°	4342.1	4375.7	4780.4	5705.2	8011.4	12646.1	16903.5	19486.2	19493.2	17726.2	12991.3
72.5°	2972.0	3053.9	3233.8	3964.0	5829.8	10057.1	14569.3	17537.1	17538.5	15894.7	11318.7
75°	1598.4	1725.1	1935.1	2297.1	3259.0	6453.6	11700.3	14551.8	14579.1	13252.4	8996.4
77.5°	792.5	838.0	959.9	1228.7	1494.0	3044.8	7524.8	10923.2	10988.3	10172.6	6135.8
80°	362.7	370.4	379.5	377.4	572.0	1335.8	3230.3	6560.1	6579.7	6050.4	2801.2
82.5°	283.5	282.1	286.3	260.4	261.8	515.3	1118.1	1718.1	1832.2	1442.2	888.4
85°	171.5	170.8	184.1	142.8	175.7	278.6	564.3	685.4	693.8	564.3	460.0
87.5°	65.1	63.0	58.1	51.1	58.8	78.4	195.3	252.0	246.4	175.0	158.9
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°	4856.7	4856.7	4856.7	4856.7	4856.7	4856.7	4856.7	4856.7	4856.7	4856.7	4856.7
2.5°	4875.6	4898.0	4939.3	4970.8	4981.3	5014.9	5047.1	5052.7	5075.8	5084.9	5115.0
5°	4936.5	4974.3	5038.7	5081.4	5100.3	5156.3	5192.7	5210.9	5204.6	5208.1	5241.7
7.5°	5025.4	5061.1	5112.9	5164.7	5173.8	5183.6	5180.1	5177.3	5152.8	5131.8	5163.3
10°	5106.6	5140.2	5172.4	5180.1	5133.9	5108.0	5061.8	5026.1	4978.5	4956.8	4982.0
12.5°	5220.7	5227.7	5196.2	5154.2	5054.8	4962.4	4887.5	4822.4	4763.6	4723.0	4756.6
15°	5341.2	5313.9	5222.1	5099.6	4945.6	4813.3	4690.8	4582.2	4484.9	4461.1	4470.2
17.5°	5500.8	5426.6	5241.7	5035.9	4796.5	4590.6	4433.1	4295.9	4168.5	4115.3	4110.4
20°	5695.4	5575.7	5281.7	4955.4	4620.0	4346.3	4102.7	3897.5	3721.8	3577.6	3581.1
22.5°	5948.9	5775.2	5341.9	4871.4	4424.7	4060.0	3705.7	3357.0	3067.9	2943.3	2912.5
25°	6283.5	6024.5	5427.3	4795.1	4206.3	3695.9	3195.3	2703.1	2397.2	2276.1	2262.8
27.5°	6700.1	6359.1	5557.5	4710.4	3972.4	3263.9	2544.2	2061.8	1781.1	1653.7	1611.0
30°	7173.4	6771.5	5691.2	4622.1	3689.6	2708.7	1940.0	1467.4	1179.7	1065.6	1050.9
32.5°	7786.0	7293.8	5890.0	4483.5	3276.5	2129.0	1353.3	915.7	720.4	671.4	657.4
35°	8656.2	8000.2	6135.8	4308.5	2745.8	1487.0	838.7	536.3	432.0	407.5	402.6
37.5°	9467.6	8693.3	6383.6	4017.9	2084.9	928.3	479.6	343.8	320.7	321.4	322.8
40°	10111.0	9167.3	6583.9	3635.7	1371.5	527.2	333.3	285.6	286.3	284.2	282.8
42.5°	10683.7	9545.3	6674.2	3070.7	794.6	352.9	289.1	263.2	256.9	259.0	257.6
45°	11157.7	9931.1	6499.1	2435.7	468.4	316.5	273.0	244.3	237.3	248.5	249.9
47.5°	11656.2	10297.3	6231.0	1835.0	380.2	301.0	258.3	230.3	226.8	240.8	242.2
50°	12075.5	10562.6	5773.8	1382.7	362.7	284.2	245.0	216.3	215.6	228.2	228.2
52.5°	12426.3	10722.9	5231.2	1067.7	350.8	269.5	231.7	203.0	203.0	207.2	207.9
55°	12673.4	10690.7	4907.8	840.1	338.2	255.5	217.7	190.4	182.0	179.2	180.6
57.5°	12718.2	10605.3	4532.5	655.3	323.5	242.2	205.1	175.7	160.3	158.2	157.5
60°	12689.5	10417.7	4104.1	547.5	306.6	229.6	192.5	160.3	144.9	140.0	141.4
62.5°	12569.8	10085.1	3609.1	480.3	289.8	219.8	178.5	149.8	135.8	129.5	129.5
65°	12208.6	9609.0	2874.0	420.8	268.8	209.3	167.3	145.6	130.2	123.2	121.8
67.5°	11414.6	8621.2	2159.8	369.0	248.5	198.1	165.9	144.9	127.4	117.6	116.2
70°	10349.8	7405.8	1474.4	324.2	226.1	187.6	165.2	145.6	124.6	112.0	110.6
72.5°	8640.1	5838.2	849.2	282.1	203.7	177.8	162.4	146.3	119.7	104.3	102.2
75°	6492.1	4095.0	498.5	242.2	182.0	163.1	154.7	142.1	112.0	95.2	93.1
77.5°	3904.5	1912.0	375.3	200.9	156.1	143.5	137.9	130.2	102.2	88.2	86.1
80°	1432.4	726.0	294.7	161.0	123.9	124.6	119.0	114.1	93.1	81.2	79.8
82.5°	624.5	443.9	217.7	122.5	97.3	111.3	98.0	93.8	79.8	72.8	70.0
85°	378.8	264.6	140.0	83.3	67.2	75.6	68.6	72.1	61.6	57.4	55.3
87.5°	125.3	79.1	62.3	40.6	33.6	31.5	30.8	37.1	35.0	32.2	32.2
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)