

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: P510477

Luminaire Tested: **CST-CA10-310-730-U-T2**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510477  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-10)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA10-310-730-U-T2  
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: 47225 lumens  
Efficiency: N/A  
Efficacy: 151.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G4

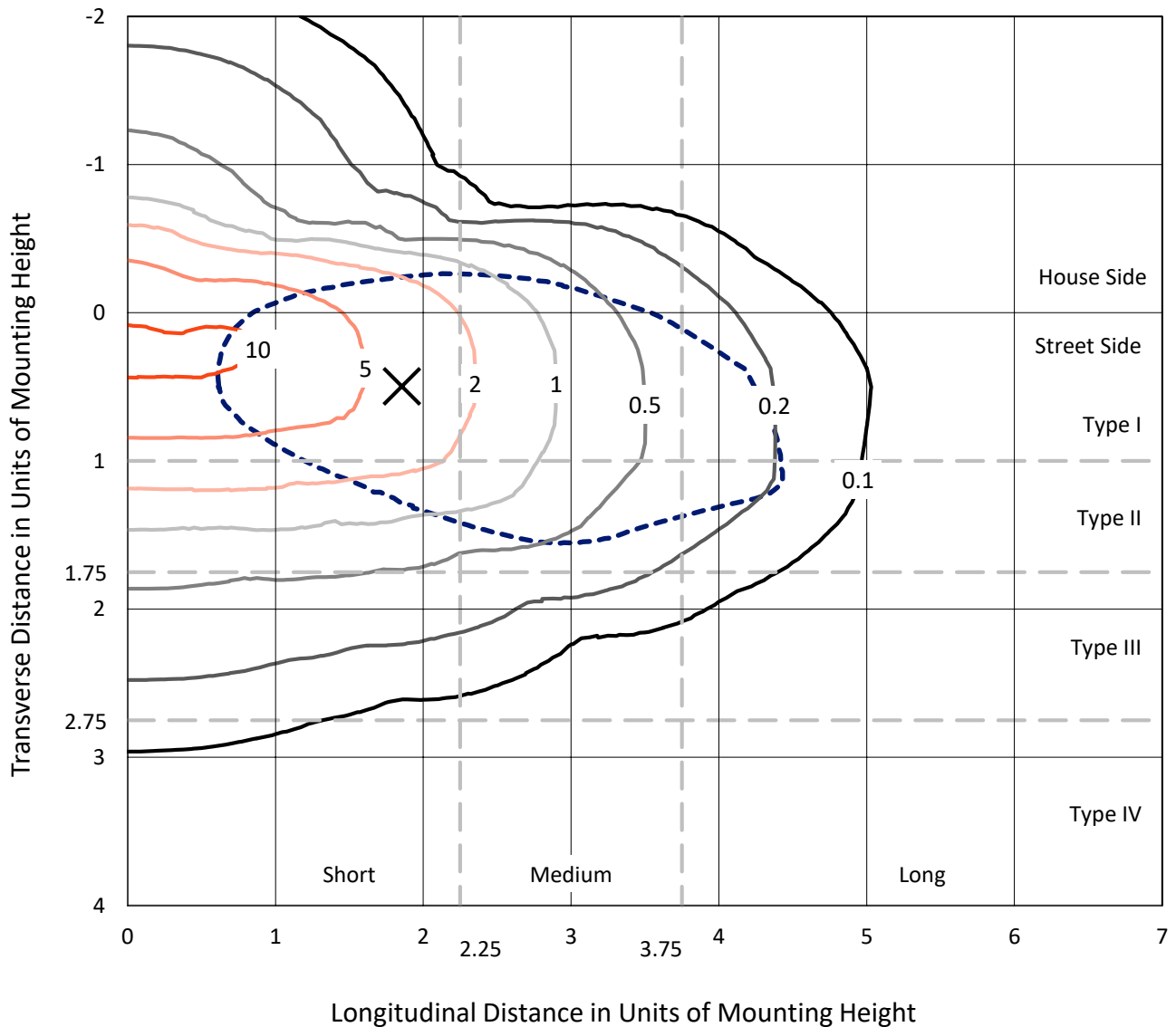
Input Watts (W): 312.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

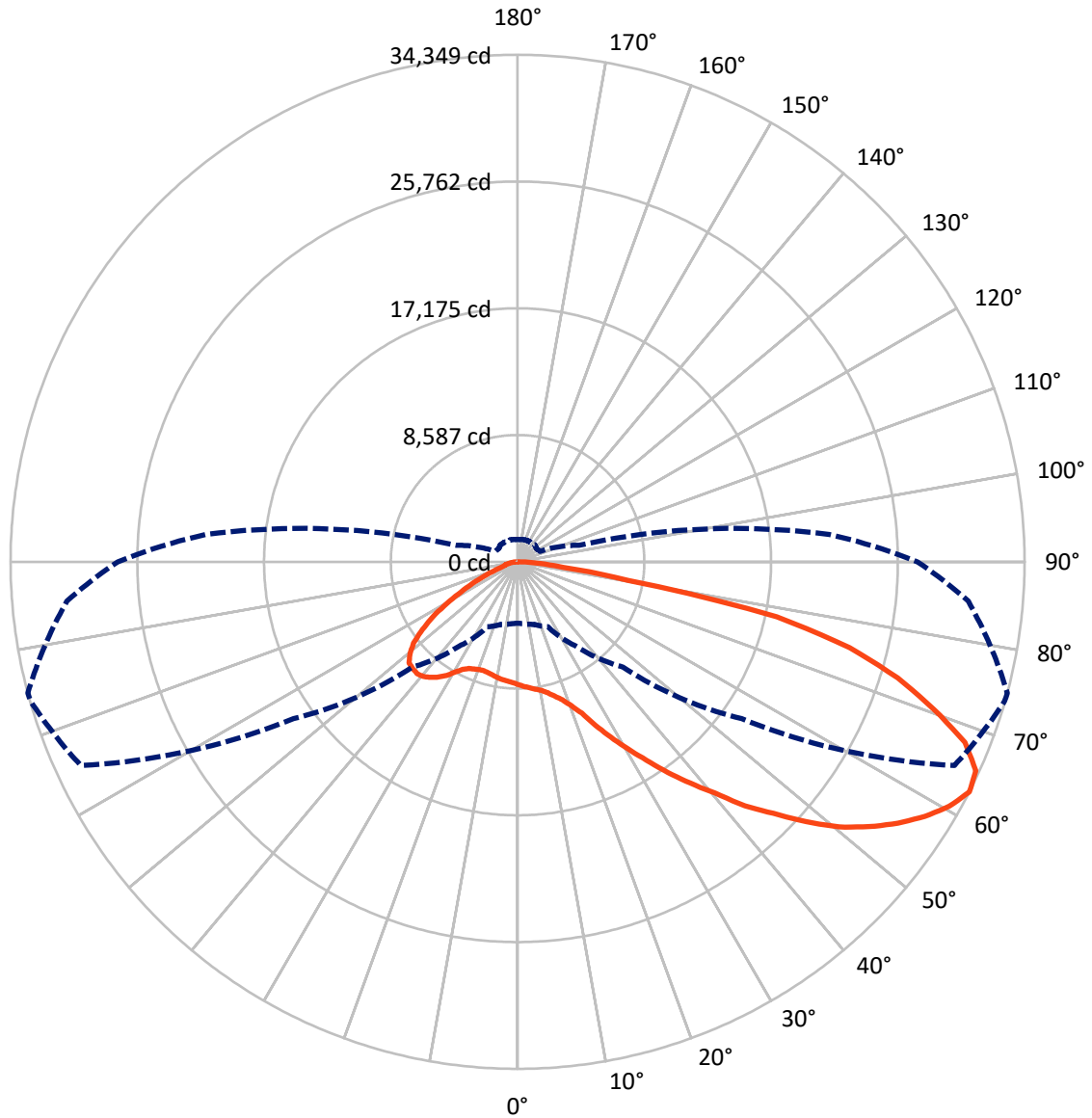
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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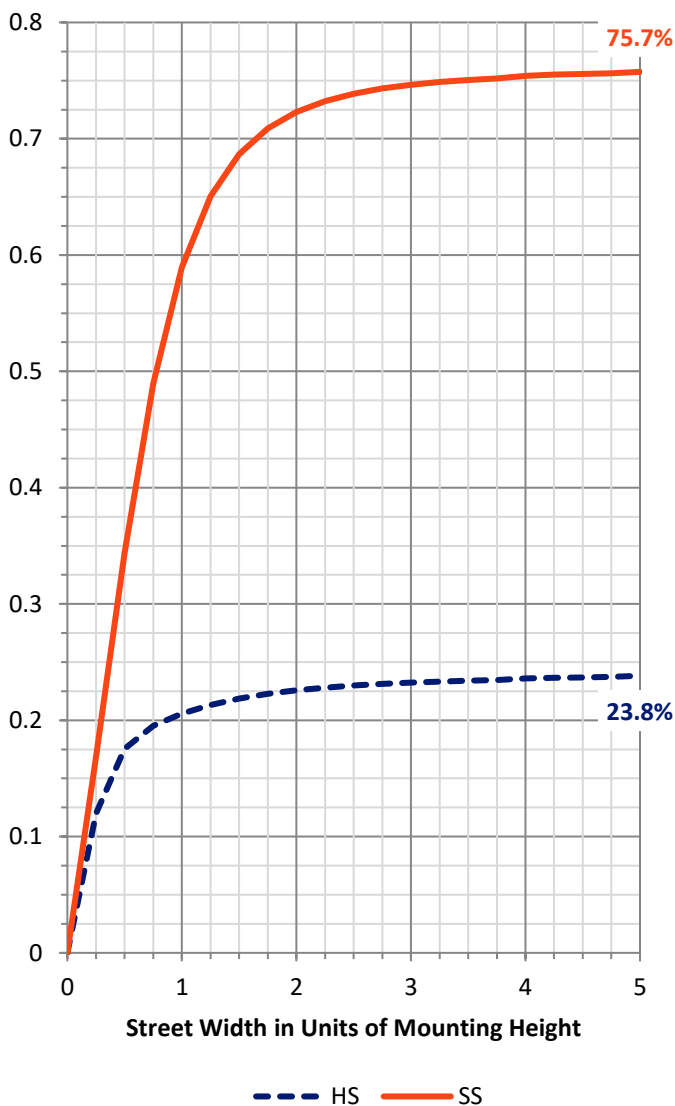
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	11441.8	0.0	11441.8
	% Fixture	24.2	0.0	24.2
<b>Street Side</b>	Lumens	35783.2	0.0	35783.2
	% Fixture	75.8	0.0	75.8
<b>Total</b>	Lumens	47225.0	0.0	47225.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	800.9	1.7
10°-20°	2430.6	5.1
20°-30°	4192.1	8.9
30°-40°	6181.3	13.1
40°-50°	8148.4	17.3
50°-60°	9589.9	20.3
60°-70°	9541.0	20.2
70°-80°	5564.0	11.8
80°-90°	776.9	1.6
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°	47225.0	100.0
0°-180°	47225.0	100.0

**Coefficient of Utilization**

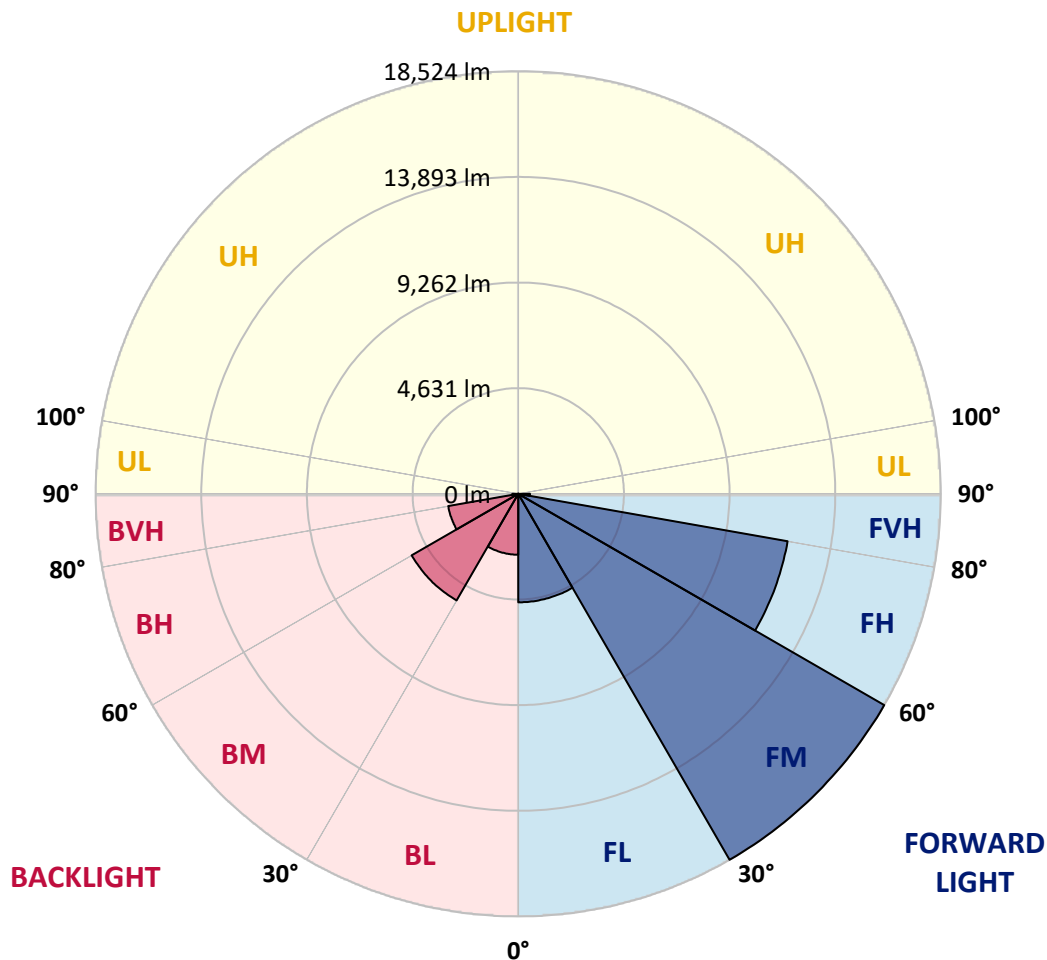


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4755.4	10.1			
FM (30°-60°)	18524.4	39.2			
FH (60°-80°)	11987.9	25.4			G4/12000
FVH (80°-90°)	515.5	1.1			G4/750
BL (0°-30°)	2668.2	5.6	B4/5000		
BM (30°-60°)	5395.1	11.4	B4/8500		
BH (60°-80°)	3117.1	6.6	B4/5000		G4/5000
BVH (80°-90°)	261.3	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	8324.7	8324.7	8324.7	8324.7	8324.7	8324.7	8324.7	8324.7	8324.7	8324.7	8324.7
2.5°	8780.5	8744.6	8749.4	8724.2	8686.3	8658.1	8584.2	8504.5	8456.9	8453.0	8384.9
5°	9221.8	9233.5	9236.4	9155.7	9076.0	8985.6	8872.9	8719.3	8593.9	8574.5	8442.3
7.5°	9624.2	9623.2	9617.4	9572.7	9535.7	9401.6	9176.1	8935.1	8731.0	8712.5	8497.7
10°	10036.3	10033.4	9975.0	9900.2	9816.6	9693.2	9499.8	9211.1	8880.6	8856.3	8549.2
12.5°	10485.3	10453.2	10416.3	10325.9	10226.8	10013.0	9809.8	9495.9	9150.8	9107.1	8640.6
15°	10855.6	10822.6	10771.1	10709.8	10605.8	10442.6	10226.8	9854.5	9484.2	9441.5	8845.7
17.5°	11222.1	11206.5	11169.6	11104.4	11024.7	10883.8	10685.5	10369.7	9884.7	9832.2	9186.8
20°	11522.4	11485.4	11458.2	11488.4	11495.2	11391.2	11282.3	11017.0	10482.4	10401.7	9605.7
22.5°	11693.4	11685.7	11834.4	11945.2	11989.9	12013.2	11979.2	11765.4	11281.3	11140.4	10188.9
25°	11855.8	11843.1	12045.3	12322.3	12585.7	12719.8	12810.2	12838.4	12394.2	12266.9	11126.8
27.5°	11860.6	11895.6	12189.1	12653.7	13055.1	13464.3	13897.8	13947.4	13557.6	13456.5	12194.0
30°	11886.9	11902.4	12193.0	12726.6	13562.5	14218.5	14783.2	15062.2	14725.9	14679.3	13369.1
32.5°	11553.5	11573.9	12025.8	12853.9	13945.4	14999.0	15748.4	16162.4	16078.8	16019.6	14622.9
35°	11206.5	11224.0	11748.8	12673.2	14230.2	15707.6	16620.2	17433.7	17586.3	17541.6	16021.5
37.5°	10662.2	10720.5	11270.6	12457.4	14279.8	16228.5	17452.2	18700.2	19160.9	19026.7	17500.8
40°	10071.3	10114.0	10754.5	12005.4	14224.4	16570.7	18269.6	20101.7	20659.6	20587.7	18969.4
42.5°	9324.8	9439.5	10081.0	11428.1	13939.6	16783.5	19025.8	21690.8	22501.4	22597.7	20318.5
45°	8696.0	8693.1	9288.9	10592.2	13423.5	16834.0	19721.7	23297.5	24483.2	24302.5	22102.0
47.5°	7956.3	7986.5	8608.5	9760.2	12662.5	16673.7	20264.0	25196.6	26397.0	26298.8	23564.8
50°	6244.7	6461.5	7639.5	9044.9	11633.2	16226.6	20716.0	27046.2	28192.2	28236.9	24894.4
52.5°	5383.6	5467.2	6117.4	8324.7	10719.6	15476.2	21211.7	29127.2	29927.1	29813.4	26403.8
55°	5038.6	5083.3	5395.3	7031.0	9836.1	14314.8	21449.8	31027.3	31280.0	31261.6	27645.9
57.5°	4788.8	4822.8	5044.4	5867.6	8866.1	12823.8	21248.6	32263.6	32656.3	32535.8	28818.1
60°	4428.2	4455.4	4785.8	5287.4	7867.9	11318.3	20011.3	32824.4	33654.5	33609.8	29854.2
62.5°	4157.0	4203.7	4388.3	4858.7	7015.5	10078.1	18536.9	32649.5	34309.6	34349.4	30645.4
65°	3870.3	3912.1	4068.6	4479.7	6242.8	9262.6	16946.8	31772.8	34008.3	34114.2	30773.6
67.5°	3516.5	3548.6	3734.2	4089.9	5339.9	8447.2	15153.6	30222.6	32336.5	32677.7	29496.5
70°	3071.3	3083.0	3310.4	3552.5	4434.0	7217.6	12049.2	27684.8	29917.4	29924.2	27085.1
72.5°	2444.4	2454.2	2514.4	2698.1	3330.8	5712.1	8856.3	23132.2	26976.3	26926.7	24072.1
75°	1662.0	1747.6	1956.5	2131.5	2402.6	4011.2	5508.0	15585.1	22855.2	23244.0	19773.2
77.5°	1313.1	1320.9	1407.4	1567.7	1802.0	2996.5	3086.9	8623.1	17039.1	17963.4	15542.3
80°	915.6	929.2	882.5	921.4	1256.7	2050.8	1803.9	3752.7	7105.9	7587.0	9331.6
82.5°	436.4	452.0	519.0	482.1	625.0	871.8	952.5	1939.0	3069.4	3150.1	3633.1
85°	287.7	287.7	288.7	273.1	364.5	380.0	432.5	827.1	1498.7	1549.3	1540.5
87.5°	92.3	102.1	99.1	115.7	140.0	126.4	132.2	259.5	514.2	509.3	425.7
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°	8324.7	8324.7	8324.7	8324.7	8324.7	8324.7	8324.7	8324.7	8324.7	8324.7	8324.7
2.5°	8336.4	8296.5	8203.2	8121.6	8040.9	7979.6	7927.2	7857.2	7824.1	7794.0	7857.2
5°	8360.7	8289.7	8122.5	7955.4	7801.8	7689.0	7620.0	7569.5	7523.8	7523.8	7545.2
7.5°	8388.8	8292.6	8053.5	7816.4	7586.0	7457.7	7359.5	7295.4	7258.5	7260.4	7306.1
10°	8407.3	8259.6	7974.8	7655.0	7404.3	7198.2	7102.0	7009.7	6939.7	6897.9	6944.5
12.5°	8428.7	8248.9	7868.8	7508.3	7203.1	6969.8	6769.6	6700.6	6632.5	6580.1	6605.3
15°	8560.9	8289.7	7780.4	7321.6	6967.9	6677.2	6414.8	6288.5	6269.0	6233.1	6241.8
17.5°	8776.6	8399.5	7723.1	7093.2	6685.0	6341.9	6009.5	5846.2	5807.4	5788.9	5798.6
20°	9098.4	8608.5	7740.6	6932.9	6366.2	5982.3	5552.7	5361.2	5232.0	5239.7	5277.6
22.5°	9590.2	8945.8	7835.8	6756.9	6021.2	5517.7	5084.2	4823.8	4693.5	4665.3	4708.1
25°	10373.5	9489.1	7940.8	6588.8	5687.8	5016.2	4536.1	4254.2	4087.0	4076.3	4124.0
27.5°	11377.6	10322.0	8169.2	6443.0	5273.8	4413.6	3936.4	3695.3	3517.5	3496.1	3480.5
30°	12404.9	11247.3	8582.3	6221.4	4790.7	3791.5	3376.5	3188.0	2988.7	2908.1	2925.5
32.5°	13493.5	12109.4	9066.3	6065.9	4250.3	3244.3	2883.8	2703.9	2521.2	2404.6	2377.4
35°	14589.8	12966.7	9473.5	5833.6	3738.1	2809.9	2464.8	2279.2	2119.8	2024.6	2017.8
37.5°	15872.8	13858.9	9800.1	5586.7	3206.4	2469.7	2054.7	1947.8	1871.0	1787.4	1796.2
40°	17157.7	14898.9	10061.6	5178.5	2765.2	2104.3	1748.5	1769.9	1786.4	1716.5	1710.6
42.5°	18224.9	15772.7	10181.1	4649.8	2374.5	1786.4	1613.4	1710.6	1782.5	1736.9	1731.0
45°	19308.6	16508.4	10134.4	3993.7	2049.8	1634.8	1602.7	1701.9	1794.2	1783.5	1778.7
47.5°	20486.6	17472.6	10053.8	3246.3	1817.5	1620.2	1626.1	1672.7	1789.3	1808.8	1801.0
50°	21927.0	18360.0	9576.6	2528.0	1704.8	1643.6	1678.5	1654.2	1753.4	1793.2	1800.0
52.5°	23360.6	19043.3	8938.0	2190.8	1660.1	1665.9	1751.4	1668.8	1712.6	1747.6	1779.6
55°	24466.7	19739.2	7904.8	1987.6	1645.5	1676.6	1771.9	1699.9	1699.0	1699.0	1709.6
57.5°	25599.0	20671.3	6871.6	1856.4	1620.2	1688.3	1747.6	1705.8	1692.2	1672.7	1660.1
60°	26387.3	21016.3	5544.0	1769.9	1594.0	1671.7	1679.5	1673.7	1631.9	1613.4	1598.8
62.5°	27087.1	21203.9	4316.4	1670.8	1558.0	1632.9	1592.0	1579.4	1555.1	1510.4	1518.2
65°	26899.5	20801.5	3289.1	1559.0	1532.8	1586.2	1515.3	1485.1	1487.1	1440.4	1456.0
67.5°	25692.3	18996.6	2361.8	1387.9	1463.7	1493.9	1427.8	1405.4	1372.4	1349.1	1370.4
70°	23253.7	16839.9	1593.0	1151.8	1306.3	1371.4	1327.7	1288.8	1237.3	1221.7	1245.1
72.5°	19572.0	14057.2	1099.3	926.3	1127.5	1212.0	1195.5	1155.6	1118.7	1156.6	1202.3
75°	16078.8	10399.8	897.1	759.1	867.0	1009.8	1058.4	1070.1	1180.9	1550.2	1588.2
77.5°	11573.9	6446.9	806.7	617.2	692.0	807.7	904.9	944.7	1442.4	1381.1	1378.2
80°	6748.2	3757.5	615.2	486.9	559.8	591.9	707.6	1109.0	1244.1	1067.2	1041.0
82.5°	3079.1	1658.1	428.6	389.7	388.8	391.7	482.1	1067.2	954.4	840.7	809.6
85°	1132.3	583.2	260.5	225.5	258.5	224.5	315.9	782.4	553.0	544.3	453.9
87.5°	278.9	119.5	88.4	73.9	60.3	57.3	96.2	257.6	135.1	123.4	118.6
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)