

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: P510868

Luminaire Tested: **CST-CA8-480-760-U-T3-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510868  
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-CA8-480-760-U-T3-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 66064 lumens  
Efficiency: N/A  
Efficacy: 137.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5

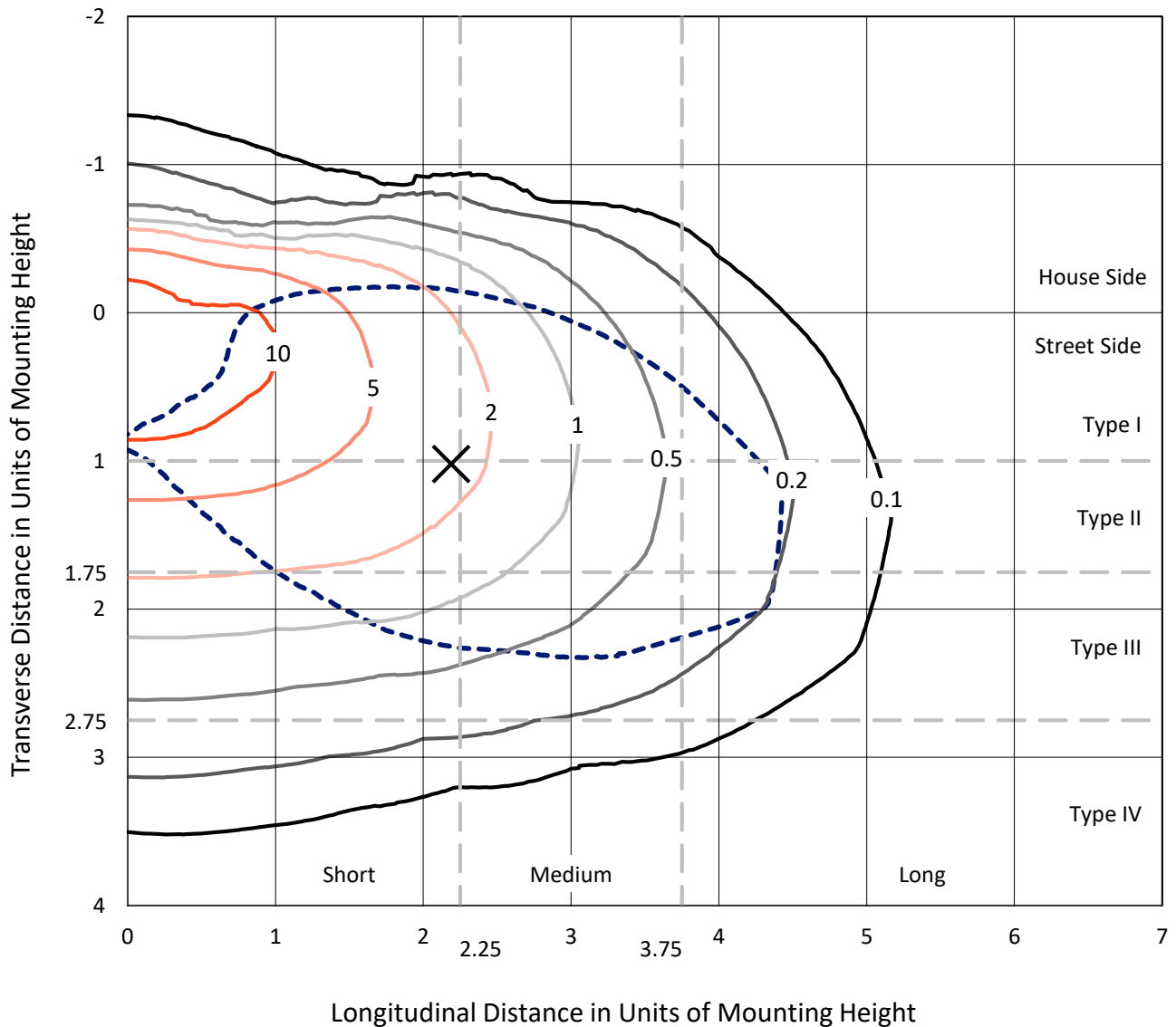
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

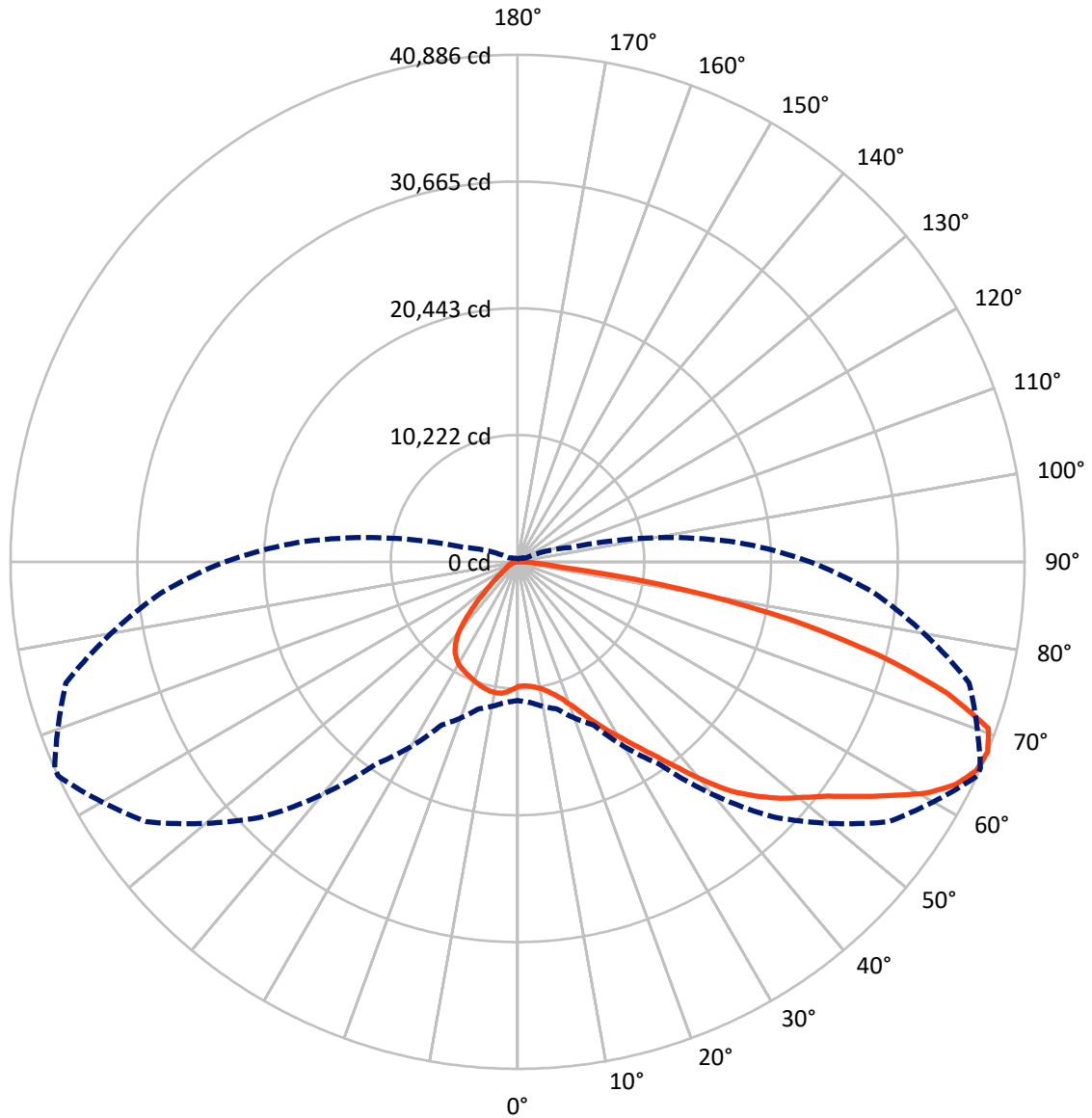
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.1 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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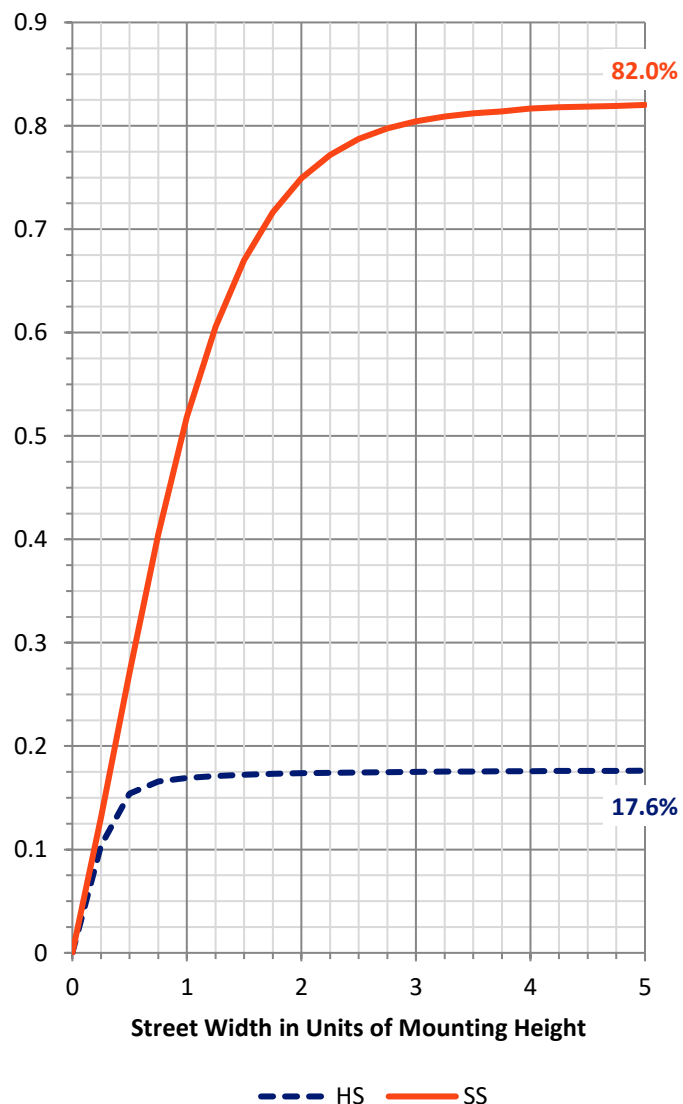
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	11807.2	0.0	11807.2
	% Fixture	17.9	0.0	17.9
<b>Street Side</b>	Lumens	54256.7	0.0	54256.7
	% Fixture	82.1	0.0	82.1
<b>Total</b>	Lumens	66064.0	0.0	66064.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	993.2	1.5
10°-20°	3066.3	4.6
20°-30°	5319.4	8.1
30°-40°	8024.2	12.1
40°-50°	11126.2	16.8
50°-60°	13733.8	20.8
60°-70°	14633.1	22.1
70°-80°	8373.3	12.7
80°-90°	794.5	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°	66064.0	100.0
0°-180°	66064.0	100.0

**Coefficient of Utilization**

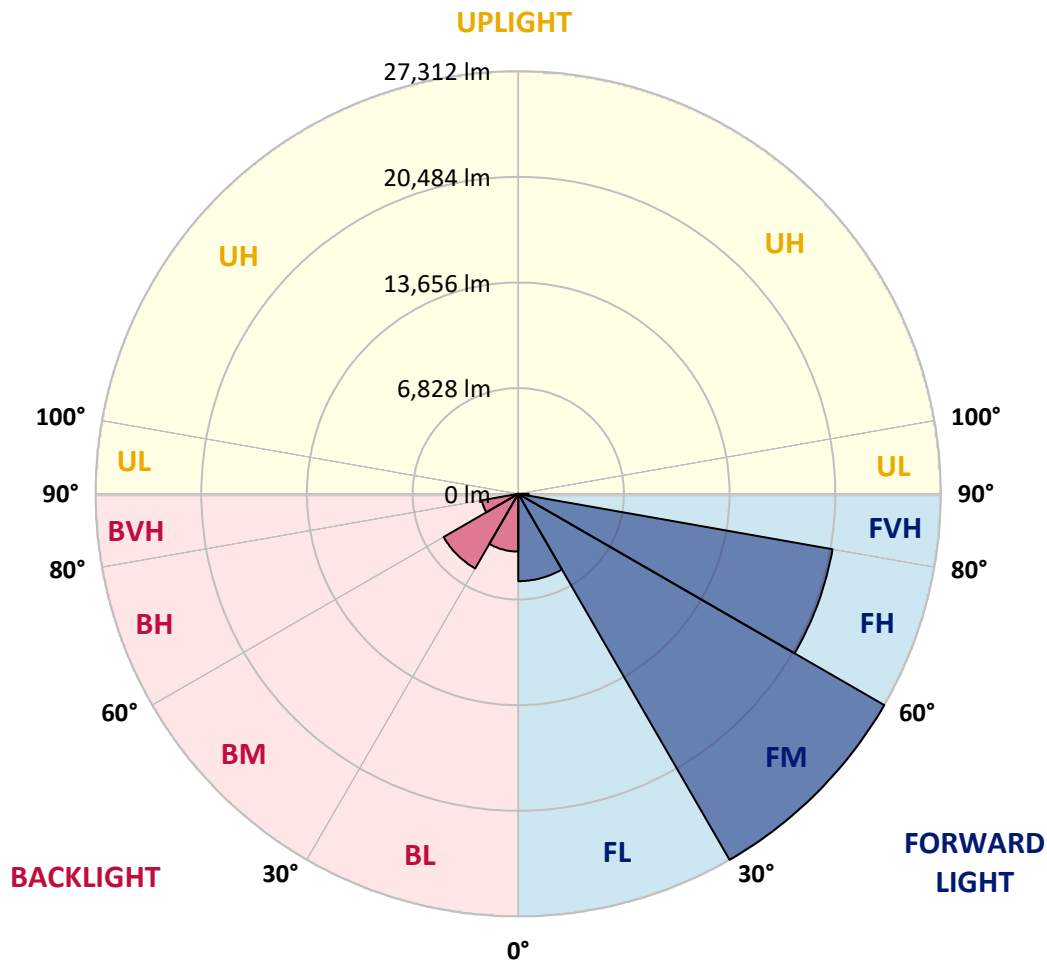


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5642.7	8.5			
FM (30°-60°)	27311.8	41.3			
FH (60°-80°)	20623.4	31.2			G5
FVH (80°-90°)	678.8	1.0			G4/750
BL (0°-30°)	3736.1	5.7	B4/5000		
BM (30°-60°)	5572.4	8.4	B4/8500		
BH (60°-80°)	2383.1	3.6	B3/2500		G3/2500
BVH (80°-90°)	115.6	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	10038.9	10038.9	10038.9	10038.9	10038.9	10038.9	10038.9	10038.9	10038.9	10038.9	10038.9
2.5°	9941.9	9928.9	9917.3	9937.6	9949.1	9967.9	9995.4	10014.3	10020.0	10037.4	10059.1
5°	10101.1	10099.6	10083.7	10075.0	10050.4	10041.8	10047.5	10070.7	10072.1	10093.8	10161.9
7.5°	10413.7	10410.8	10371.7	10354.3	10302.2	10244.4	10200.9	10205.3	10203.8	10225.5	10316.7
10°	10885.4	10862.3	10807.3	10753.7	10652.4	10543.9	10464.3	10392.0	10392.0	10423.8	10525.1
12.5°	11418.0	11449.8	11374.6	11293.5	11124.2	10928.9	10789.9	10708.9	10700.2	10716.1	10788.5
15°	12079.3	12079.3	12028.7	11912.9	11763.9	11491.8	11205.3	11102.5	11088.0	11121.3	11117.0
17.5°	12824.6	12846.3	12750.8	12692.9	12464.3	12163.3	11804.4	11626.4	11626.4	11604.7	11504.8
20°	13775.4	13656.7	13666.9	13571.3	13403.5	12966.4	12601.8	12342.7	12339.8	12296.4	12015.7
22.5°	14808.7	14743.5	14687.1	14603.2	14371.6	13980.9	13474.4	13218.2	13212.4	13105.4	12688.6
25°	15827.4	15876.6	15814.4	15661.0	15491.7	15066.2	14507.6	14255.8	14254.4	14076.4	13486.0
27.5°	16875.2	16928.7	16908.5	16769.5	16543.8	16210.9	15682.7	15354.2	15334.0	15218.2	14475.8
30°	18032.9	17985.1	18047.4	17988.0	17875.2	17332.5	16854.9	16472.9	16522.1	16487.3	15600.2
32.5°	18875.1	18905.5	19109.6	19115.4	18996.7	18594.4	18011.2	17776.7	17854.9	17808.6	16982.3
35°	19636.3	19685.5	19948.9	20208.0	20294.8	19854.9	19261.5	19247.0	19348.3	19630.5	18886.7
37.5°	20290.4	20325.2	20694.2	21031.4	21312.1	21011.1	20579.9	21093.6	21242.7	21820.1	20851.9
40°	20682.6	20727.5	21205.0	21679.7	22180.4	22073.3	22032.8	23248.4	23388.8	23896.7	22286.1
42.5°	20461.2	20549.5	21345.4	22213.7	22950.3	23164.5	23718.7	25281.7	25442.3	25485.7	23695.6
45°	20066.1	20176.1	21066.1	22471.3	23672.4	24359.8	25414.8	26938.6	27026.9	26903.9	24863.4
47.5°	19640.7	19757.9	20752.1	22394.6	24252.7	25750.5	26930.0	28498.7	28560.9	28183.2	26040.0
50°	19157.3	19265.9	20335.3	22215.1	24689.8	27063.1	28487.1	29847.4	30080.4	29333.7	26954.6
52.5°	18569.8	18685.6	19820.1	21934.4	25073.3	28037.0	29860.4	31371.2	31387.2	30772.1	27984.9
55°	17808.6	18009.7	19173.2	21448.2	25274.4	28873.5	31057.2	33387.1	33489.9	32895.1	28847.4
57.5°	16962.0	17137.1	18394.7	20799.8	25093.5	29508.8	32981.9	35549.2	35536.1	34342.2	29601.4
60°	15843.4	15967.8	17380.2	19951.8	24510.3	30277.2	34986.2	37866.0	37842.9	35760.4	30086.2
62.5°	14407.8	14532.2	15860.7	18621.9	23653.6	30792.4	36346.5	39601.2	39534.6	36792.3	30235.2
65°	12743.6	12966.4	14119.8	16895.4	22138.4	30453.8	37003.5	40622.9	40515.8	37579.5	29879.2
67.5°	11183.5	11373.1	12286.3	14519.2	19902.6	29080.4	36540.5	40886.2	40854.4	37693.8	28873.5
70°	8975.2	9044.7	9881.1	11792.8	16559.7	26139.8	34939.9	40278.4	40292.9	36640.3	26853.3
72.5°	6143.1	6312.5	6684.4	8193.7	12050.4	20788.3	30115.1	36249.6	36252.5	32854.6	23396.0
75°	3303.8	3565.8	3999.9	4748.1	6736.5	13339.8	24184.7	30078.9	30135.4	27393.0	18595.8
77.5°	1638.2	1732.2	1984.0	2539.7	3088.2	6293.6	15553.9	22578.4	22713.0	21027.0	12682.8
80°	749.6	765.5	784.4	780.0	1182.3	2761.2	6677.1	13559.8	13600.3	12506.2	5790.0
82.5°	586.1	583.2	591.9	538.3	541.2	1065.1	2311.1	3551.3	3787.2	2981.1	1836.4
85°	354.6	353.1	380.6	295.2	363.2	576.0	1166.4	1416.8	1434.1	1166.4	950.8
87.5°	134.6	130.2	120.1	105.6	121.6	162.1	403.8	521.0	509.4	361.8	328.5
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°	10038.9	10038.9	10038.9	10038.9	10038.9	10038.9	10038.9	10038.9	10038.9	10038.9	10038.9
2.5°	10077.9	10124.2	10209.6	10274.7	10296.4	10365.9	10432.5	10444.1	10491.8	10510.6	10572.9
5°	10203.8	10282.0	10415.1	10503.4	10542.5	10658.2	10733.5	10771.1	10758.1	10765.3	10834.8
7.5°	10387.6	10461.4	10568.5	10675.6	10694.4	10714.7	10707.4	10701.6	10651.0	10607.6	10672.7
10°	10555.5	10625.0	10691.5	10707.4	10611.9	10558.4	10462.9	10389.1	10290.7	10245.8	10297.9
12.5°	10791.4	10805.8	10740.7	10653.9	10448.4	10257.4	10102.5	9967.9	9846.4	9762.5	9831.9
15°	11040.3	10983.8	10794.3	10541.0	10222.6	9949.1	9695.9	9471.6	9270.4	9221.2	9240.0
17.5°	11370.2	11216.8	10834.8	10409.3	9914.4	9488.9	9163.3	8879.7	8616.3	8506.3	8496.2
20°	11772.5	11525.1	10917.3	10242.9	9549.7	8983.9	8480.3	8056.3	7693.0	7394.9	7402.2
22.5°	12296.4	11937.5	11041.7	10069.2	9146.0	8392.0	7659.7	6939.1	6341.4	6083.8	6020.1
25°	12988.1	12452.7	11218.3	9911.5	8694.5	7639.5	6604.8	5587.4	4955.0	4704.7	4677.2
27.5°	13849.2	13144.4	11487.4	9736.4	8211.1	6746.6	5258.9	4261.8	3681.5	3418.2	3329.9
30°	14827.5	13996.8	11763.9	9554.1	7626.5	5599.0	4010.0	3033.2	2438.4	2202.6	2172.2
32.5°	16093.7	15076.4	12174.8	9267.5	6772.6	4400.8	2797.3	1892.9	1489.1	1387.8	1358.9
35°	17892.5	16536.5	12682.8	8905.7	5675.7	3073.7	1733.7	1108.5	892.9	842.2	832.1
37.5°	19569.8	17969.2	13195.1	8305.2	4309.6	1918.9	991.3	710.5	662.8	664.2	667.1
40°	20899.7	18948.9	13609.0	7515.0	2835.0	1089.7	688.8	590.4	591.9	587.5	584.6
42.5°	22083.5	19730.4	13795.6	6347.2	1642.5	729.4	597.7	544.1	531.1	535.4	532.5
45°	23063.2	20527.8	13433.9	5034.6	968.1	654.1	564.4	505.1	490.6	513.7	516.6
47.5°	24093.5	21284.6	12879.6	3793.0	785.8	622.3	534.0	476.1	468.9	497.8	500.7
50°	24960.4	21833.1	11934.6	2858.1	749.6	587.5	506.5	447.2	445.7	471.8	471.8
52.5°	25685.4	22164.5	10813.1	2206.9	725.0	557.2	479.0	419.7	419.7	428.4	429.8
55°	26196.2	22097.9	10144.5	1736.6	699.0	528.2	450.1	393.6	376.3	370.5	373.4
57.5°	26288.9	21921.4	9368.8	1354.5	668.6	500.7	424.0	363.2	331.4	327.1	325.6
60°	26229.5	21533.5	8483.2	1131.7	633.9	474.7	398.0	331.4	299.6	289.4	292.3
62.5°	25982.1	20846.1	7460.0	992.7	599.1	454.4	369.0	309.7	280.7	267.7	267.7
65°	25235.3	19862.1	5940.5	869.7	555.7	432.7	345.9	301.0	269.2	254.7	251.8
67.5°	23594.3	17820.2	4464.4	762.6	513.7	409.5	343.0	299.6	263.4	243.1	240.2
70°	21393.2	15307.9	3047.7	670.0	467.4	387.8	341.5	301.0	257.6	231.5	228.6
72.5°	17859.2	12067.8	1755.4	583.2	421.1	367.6	335.7	302.5	247.5	215.6	211.3
75°	13419.4	8464.4	1030.4	500.7	376.3	337.2	319.8	293.8	231.5	196.8	192.5
77.5°	8070.7	3952.2	775.7	415.3	322.7	296.7	285.1	269.2	211.3	182.3	178.0
80°	2960.9	1500.7	609.2	332.8	256.1	257.6	246.0	235.9	192.5	167.9	165.0
82.5°	1290.9	917.5	450.1	253.3	201.2	230.1	202.6	193.9	165.0	150.5	144.7
85°	782.9	547.0	289.4	172.2	138.9	156.3	141.8	149.1	127.3	118.7	114.3
87.5°	259.0	163.5	128.8	83.9	69.5	65.1	63.7	76.7	72.4	66.6	66.6
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)