

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: P510837

Luminaire Tested: **CST-CA8-480-730-U-T2**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510837  
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-CA8-480-730-U-T2  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 69267 lumens  
Efficiency: N/A  
Efficacy: 144.1 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G5

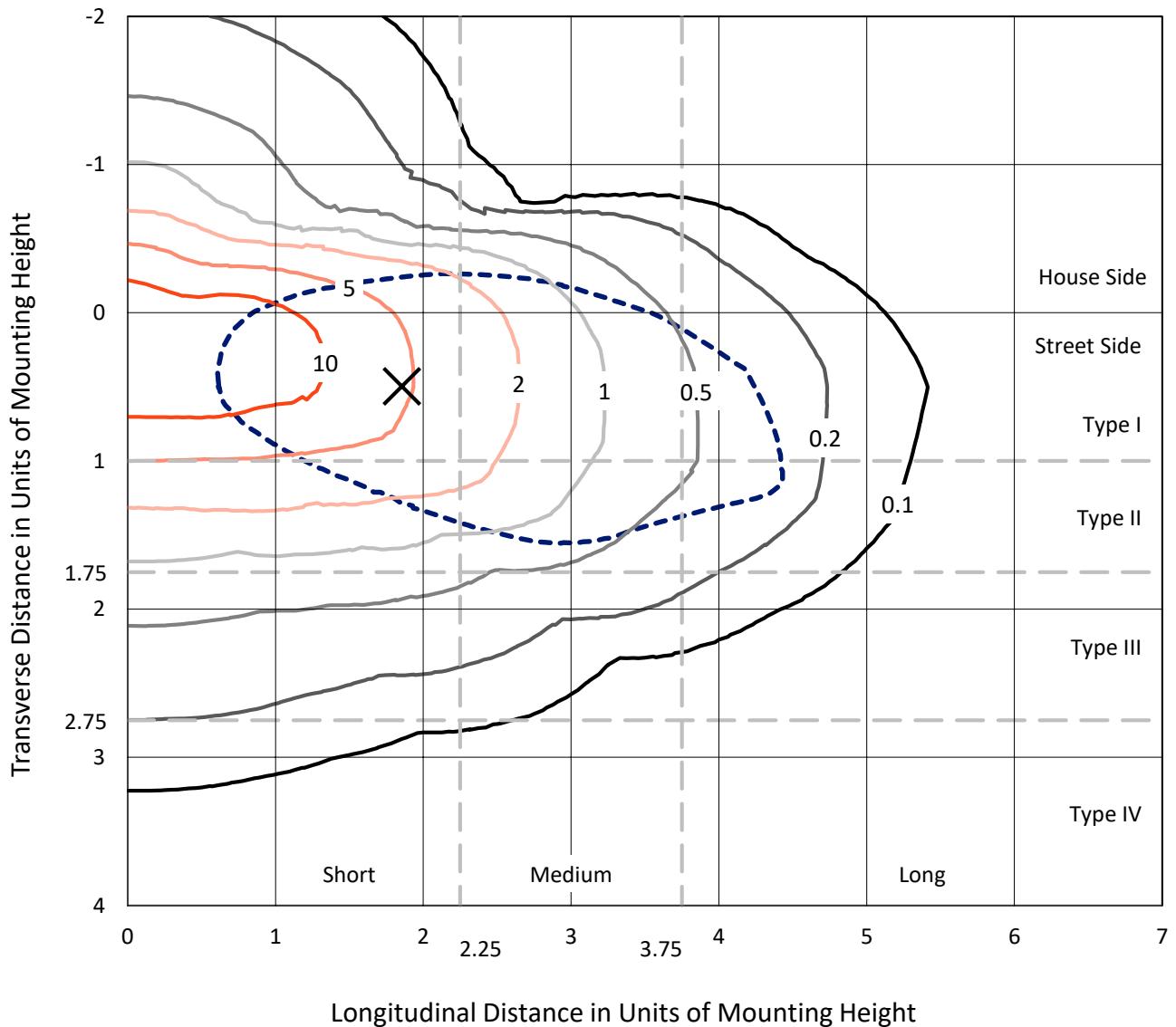
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

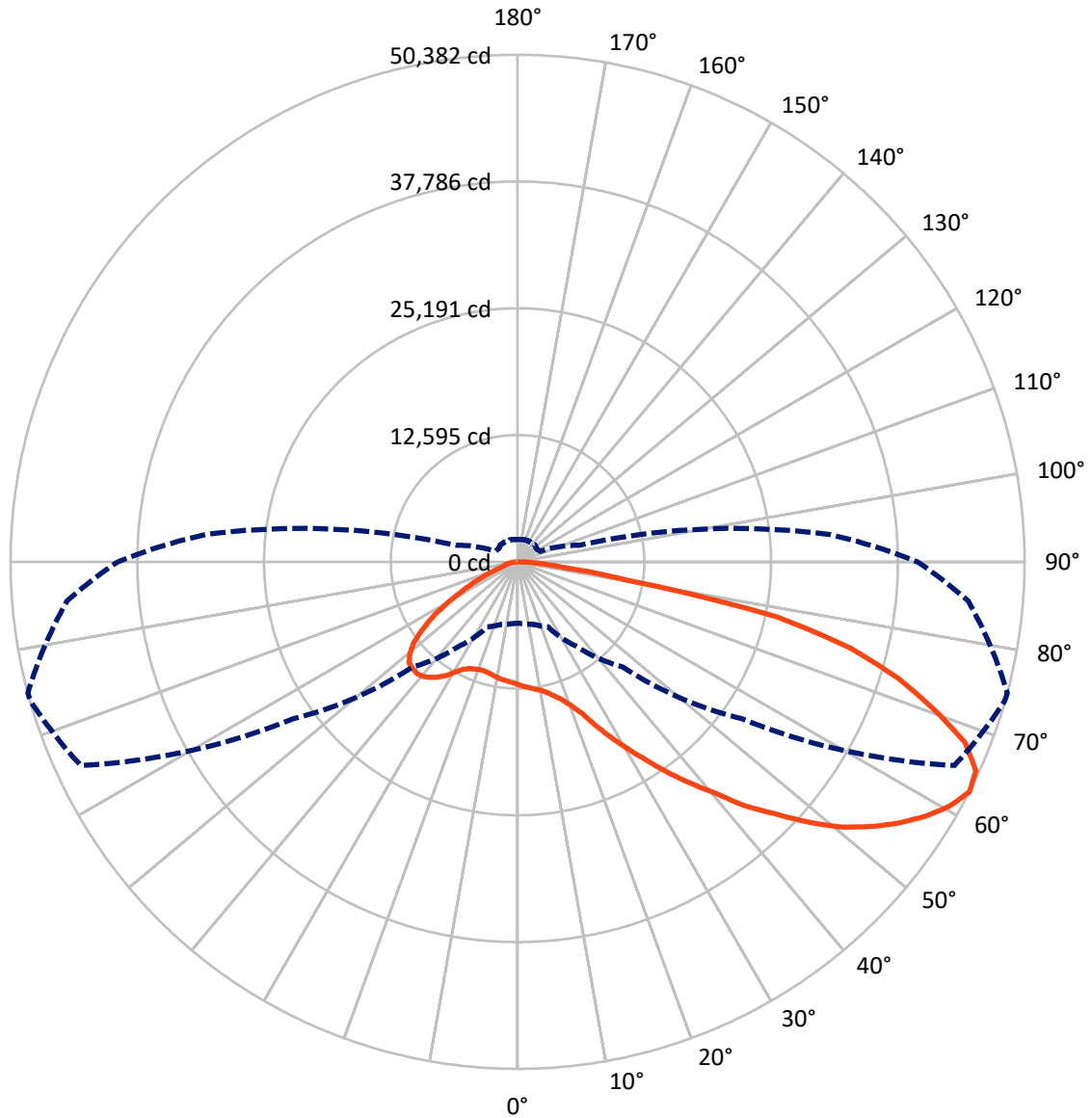
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 15.9 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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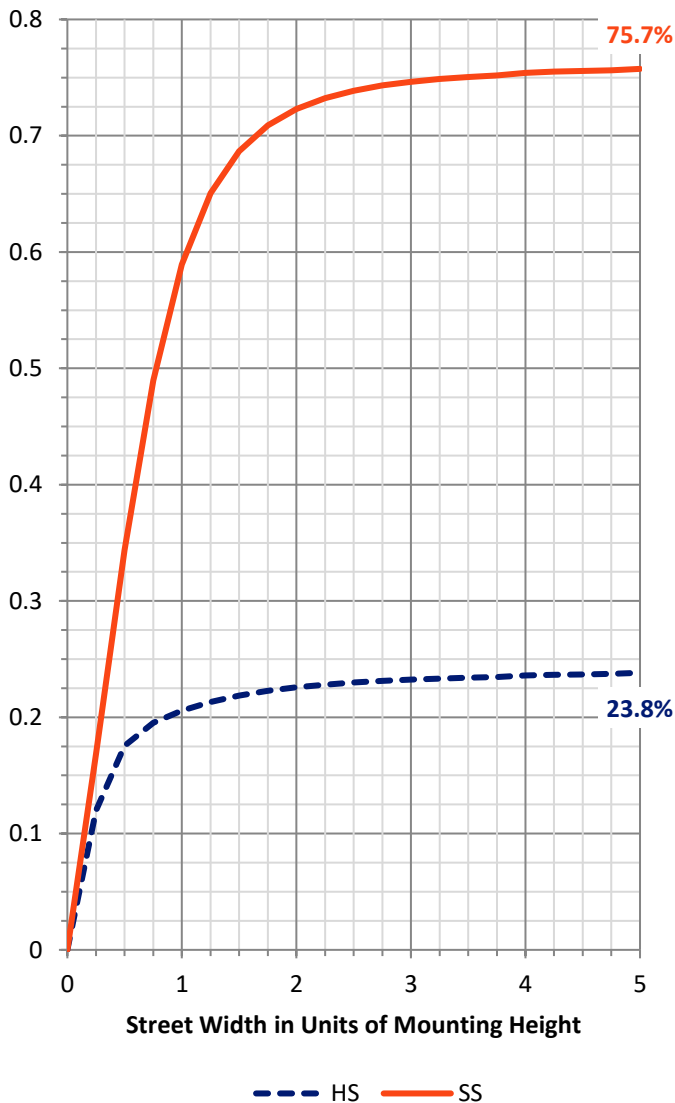
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	16782.2	0.0	16782.2
	% Fixture	24.2	0.0	24.2
<b>Street Side</b>	Lumens	52484.8	0.0	52484.8
	% Fixture	75.8	0.0	75.8
<b>Total</b>	Lumens	69267.0	0.0	69267.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1174.7	1.7
10°-20°	3565.0	5.1
20°-30°	6148.7	8.9
30°-40°	9066.4	13.1
40°-50°	11951.6	17.3
50°-60°	14065.9	20.3
60°-70°	13994.2	20.2
70°-80°	8161.0	11.8
80°-90°	1139.5	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°	69267.0	100.0
0°-180°	69267.0	100.0

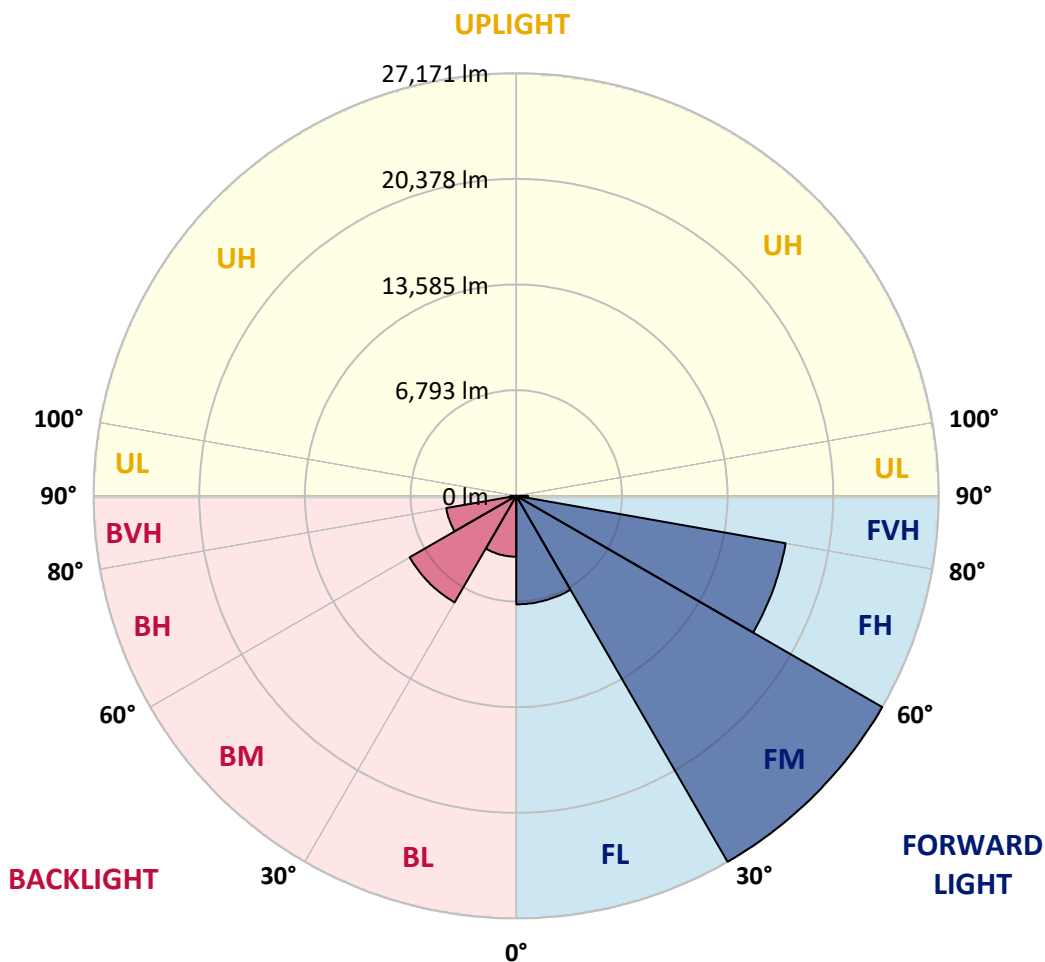


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6974.9	10.1			
FM (30°-60°)	27170.6	39.2			
FH (60°-80°)	17583.2	25.4			G5
FVH (80°-90°)	756.2	1.1			G5
BL (0°-30°)	3913.5	5.6	B4/5000		
BM (30°-60°)	7913.3	11.4	B4/8500		
BH (60°-80°)	4572.0	6.6	B4/5000		G4/5000
BVH (80°-90°)	383.3	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-G5**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	12210.2	12210.2	12210.2	12210.2	12210.2	12210.2	12210.2	12210.2	12210.2	12210.2	12210.2
2.5°	12878.8	12826.0	12833.2	12796.1	12740.5	12699.2	12590.8	12473.9	12404.1	12398.4	12298.6
5°	13526.0	13543.1	13547.4	13429.1	13312.2	13179.6	13014.2	12789.0	12605.1	12576.6	12382.7
7.5°	14116.2	14114.8	14106.2	14040.6	13986.5	13789.7	13459.0	13105.5	12806.1	12779.0	12463.9
10°	14720.7	14716.4	14630.8	14521.1	14398.5	14217.4	13933.7	13510.3	13025.6	12990.0	12539.5
12.5°	15379.3	15332.2	15278.1	15145.5	15000.1	14686.4	14388.5	13928.0	13421.9	13357.8	12673.5
15°	15922.4	15874.0	15798.4	15708.6	15556.1	15316.6	15000.1	14454.1	13910.9	13848.2	12974.3
17.5°	16459.9	16437.1	16382.9	16287.4	16170.5	15963.8	15673.0	15209.6	14498.3	14421.3	13474.7
20°	16900.4	16846.2	16806.3	16850.5	16860.5	16707.9	16548.3	16159.1	15375.0	15256.7	14089.1
22.5°	17151.3	17139.9	17358.0	17520.5	17586.1	17620.3	17570.4	17256.8	16546.8	16340.1	14944.5
25°	17389.4	17370.8	17667.4	18073.6	18460.0	18656.7	18789.3	18830.6	18179.1	17992.4	16320.2
27.5°	17396.5	17447.8	17878.3	18559.8	19148.5	19748.7	20384.5	20457.2	19885.6	19737.3	17885.5
30°	17435.0	17457.8	17884.0	18666.7	19892.7	20855.0	21683.2	22092.4	21599.1	21530.7	19609.0
32.5°	16946.0	16975.9	17638.8	18853.4	20454.4	21999.7	23098.9	23706.2	23583.6	23496.6	21448.0
35°	16437.1	16462.7	17232.5	18588.3	20872.1	23039.0	24377.6	25570.8	25794.7	25729.1	23499.4
37.5°	15638.7	15724.3	16531.2	18271.8	20944.8	23803.1	25597.9	27428.4	28104.1	27907.4	25669.2
40°	14772.0	14834.7	15774.2	17608.9	20863.5	24304.9	26796.8	29484.1	30302.4	30196.9	27823.3
42.5°	13677.1	13845.3	14786.2	16762.1	20445.8	24617.1	27906.0	31814.9	33003.9	33145.0	29802.0
45°	12754.8	12750.5	13624.4	15536.1	19688.8	24691.2	28926.7	34171.4	35910.6	35645.5	32417.9
47.5°	11669.9	11714.1	12626.5	14315.8	18572.6	24456.0	29722.2	36957.0	38717.6	38573.7	34563.5
50°	9159.4	9477.3	11205.1	13266.6	17062.9	23800.2	30385.1	39669.9	41350.7	41416.3	36513.7
52.5°	7896.4	8019.0	8972.7	12210.2	15722.8	22699.7	31112.1	42722.1	43895.4	43728.6	38727.6
55°	7390.3	7455.8	7913.5	10312.7	14427.0	20996.1	31461.4	45509.2	45879.8	45852.7	40549.5
57.5°	7023.9	7073.8	7398.8	8606.3	13004.2	18809.3	31166.3	47322.5	47898.4	47721.7	42268.8
60°	6495.0	6534.9	7019.6	7755.2	11540.2	16601.0	29351.5	48145.1	49362.5	49297.0	43788.5
62.5°	6097.3	6165.7	6436.5	7126.5	10289.9	14782.0	27188.9	47888.5	50323.4	50381.8	44948.9
65°	5676.7	5738.0	5967.5	6570.6	9156.6	13585.9	24856.6	46602.6	49881.4	50036.8	45137.1
67.5°	5157.8	5204.8	5477.1	5998.9	7832.2	12389.8	22226.4	44328.8	47429.4	47929.8	43263.8
70°	4504.9	4522.0	4855.6	5210.5	6503.5	10586.4	17673.1	40606.5	43881.1	43891.1	39727.0
72.5°	3585.4	3599.6	3688.0	3957.4	4885.5	8378.2	12990.0	33929.1	39567.3	39494.6	35307.6
75°	2437.8	2563.2	2869.7	3126.3	3524.1	5883.4	8078.8	22859.4	33522.8	34093.0	29002.2
77.5°	1926.0	1937.4	2064.3	2299.5	2643.0	4395.1	4527.7	12647.8	24992.0	26347.8	22796.6
80°	1342.9	1362.9	1294.4	1351.5	1843.3	3008.0	2645.9	5504.2	10422.5	11128.2	13687.1
82.5°	640.1	662.9	761.3	707.1	916.7	1278.8	1397.1	2844.1	4502.0	4620.3	5328.9
85°	422.0	422.0	423.4	400.6	534.6	557.4	634.4	1213.2	2198.3	2272.4	2259.6
87.5°	135.4	149.7	145.4	169.6	205.3	185.3	193.9	380.6	754.1	747.0	624.4
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°	12210.2	12210.2	12210.2	12210.2	12210.2	12210.2	12210.2	12210.2	12210.2	12210.2	12210.2
2.5°	12227.3	12168.8	12032.0	11912.2	11793.9	11704.1	11627.1	11524.5	11476.0	11431.8	11524.5
5°	12262.9	12158.9	11913.7	11668.5	11443.2	11277.9	11176.6	11102.5	11035.5	11035.5	11066.9
7.5°	12304.3	12163.1	11812.5	11464.6	11126.7	10938.6	10794.6	10700.5	10646.3	10649.2	10716.2
10°	12331.4	12114.7	11697.0	11228.0	10860.2	10557.9	10416.8	10281.4	10178.7	10117.4	10185.9
12.5°	12362.7	12099.0	11541.6	11012.7	10565.1	10222.9	9929.2	9828.0	9728.2	9651.3	9688.3
15°	12556.6	12158.9	11411.9	10739.0	10220.1	9793.8	9408.9	9223.6	9195.1	9142.3	9155.1
17.5°	12873.1	12320.0	11327.7	10404.0	9805.2	9302.0	8814.4	8574.9	8517.9	8490.8	8505.1
20°	13345.0	12626.5	11353.4	10168.7	9337.6	8774.5	8144.4	7863.6	7674.0	7685.4	7741.0
22.5°	14066.3	13121.1	11493.1	9910.7	8831.5	8093.1	7457.3	7075.2	6884.2	6842.8	6905.6
25°	15215.3	13918.0	11647.1	9664.1	8342.6	7357.5	6653.2	6239.8	5994.6	5978.9	6048.8
27.5°	16688.0	15139.8	11982.1	9450.2	7735.3	6473.6	5773.6	5420.1	5159.2	5127.9	5105.0
30°	18194.8	16496.9	12588.0	9125.2	7026.7	5561.2	4952.5	4675.9	4383.7	4265.4	4291.0
32.5°	19791.5	17761.4	13297.9	8897.1	6234.1	4758.6	4229.7	3966.0	3698.0	3526.9	3487.0
35°	21399.6	19018.8	13895.2	8556.4	5482.8	4121.4	3615.3	3343.0	3109.2	2969.5	2959.5
37.5°	23281.3	20327.5	14374.2	8194.3	4703.0	3622.4	3013.7	2856.9	2744.3	2621.7	2634.5
40°	25166.0	21852.9	14757.7	7595.6	4055.8	3086.4	2564.6	2596.0	2620.2	2517.6	2509.0
42.5°	26731.3	23134.5	14933.1	6820.0	3482.7	2620.2	2366.5	2509.0	2614.5	2547.5	2539.0
45°	28320.8	24213.7	14864.6	5857.8	3006.6	2397.8	2350.8	2496.2	2631.6	2616.0	2608.8
47.5°	30048.6	25627.9	14746.3	4761.5	2665.9	2376.5	2385.0	2453.4	2624.5	2653.0	2641.6
50°	32161.3	26929.4	14046.4	3708.0	2500.5	2410.7	2462.0	2426.4	2571.8	2630.2	2640.2
52.5°	34264.1	27931.6	13109.7	3213.3	2434.9	2443.5	2568.9	2447.7	2511.9	2563.2	2610.3
55°	35886.4	28952.3	11594.3	2915.3	2413.5	2459.1	2598.9	2493.4	2491.9	2491.9	2507.6
57.5°	37547.2	30319.5	10078.9	2722.9	2376.5	2476.3	2563.2	2501.9	2482.0	2453.4	2434.9
60°	38703.4	30825.6	8131.6	2596.0	2338.0	2452.0	2463.4	2454.9	2393.6	2366.5	2345.1
62.5°	39729.8	31100.7	6331.1	2450.6	2285.2	2395.0	2335.1	2316.6	2280.9	2215.4	2226.8
65°	39454.7	30510.5	4824.2	2286.6	2248.2	2326.6	2222.5	2178.3	2181.2	2112.7	2135.5
67.5°	37684.1	27863.2	3464.2	2035.7	2146.9	2191.1	2094.2	2061.4	2012.9	1978.7	2010.1
70°	34107.3	24699.8	2336.5	1689.3	1916.0	2011.5	1947.4	1890.3	1814.8	1792.0	1826.2
72.5°	28707.1	20618.3	1612.3	1358.6	1653.7	1777.7	1753.5	1695.0	1640.9	1696.5	1763.5
75°	23583.6	15253.8	1315.8	1113.4	1271.6	1481.2	1552.5	1569.6	1732.1	2273.8	2329.4
77.5°	16975.9	9455.9	1183.2	905.3	1015.0	1184.7	1327.2	1385.7	2115.6	2025.8	2021.5
80°	9897.9	5511.3	902.4	714.2	821.1	868.2	1037.8	1626.6	1824.8	1565.3	1526.8
82.5°	4516.3	2432.1	628.7	571.7	570.2	574.5	707.1	1565.3	1399.9	1233.1	1187.5
85°	1660.8	855.4	382.1	330.7	379.2	329.3	463.3	1147.6	811.2	798.3	665.8
87.5°	409.1	175.3	129.7	108.3	88.4	84.1	141.1	377.8	198.2	181.1	173.9
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)