

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: P510866

Luminaire Tested: **CST-CA8-480-760-U-T2-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510866  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)  
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-T2-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: 64471 lumens  
Efficiency: N/A  
Efficacy: 134.1 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G5

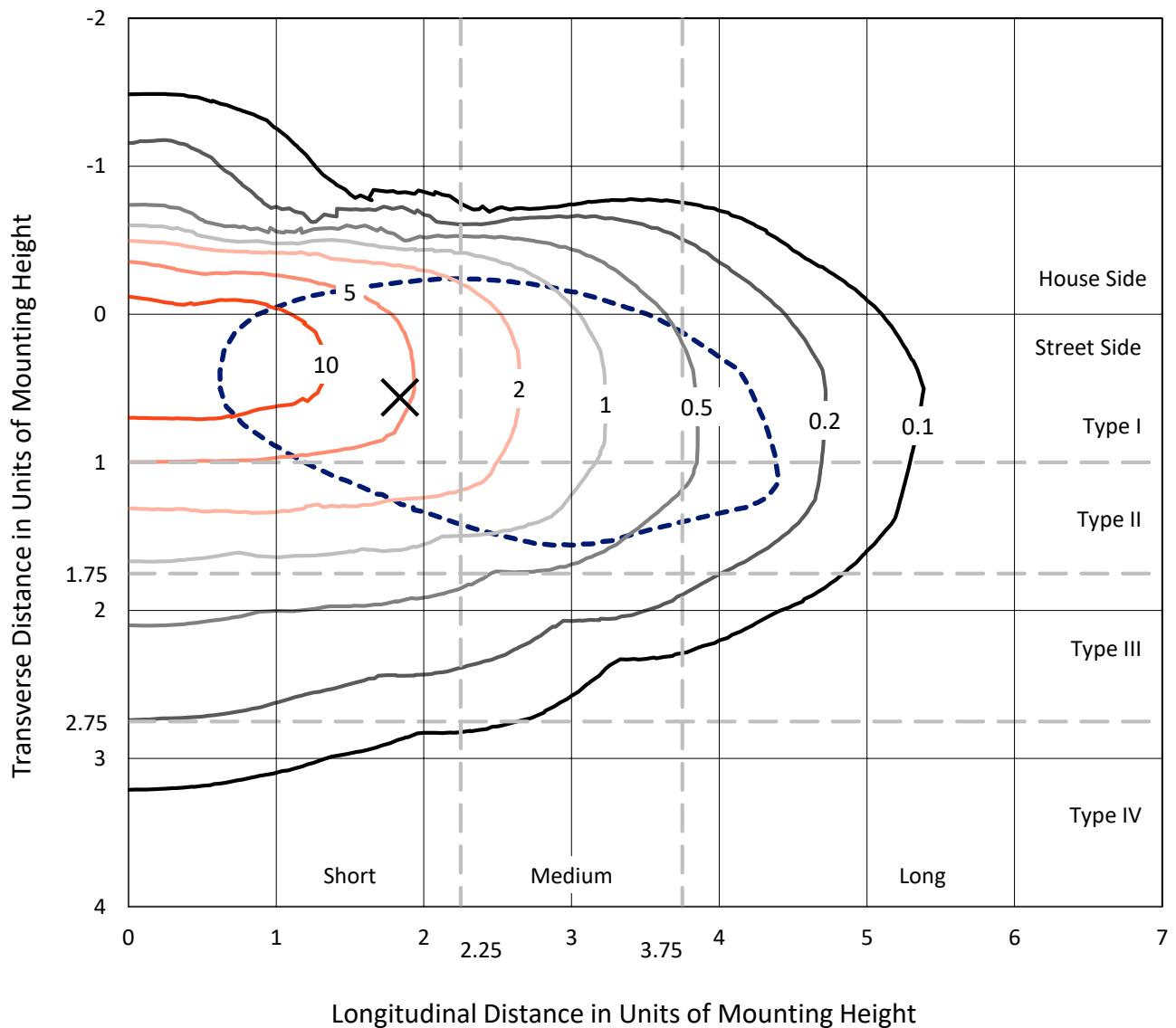
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

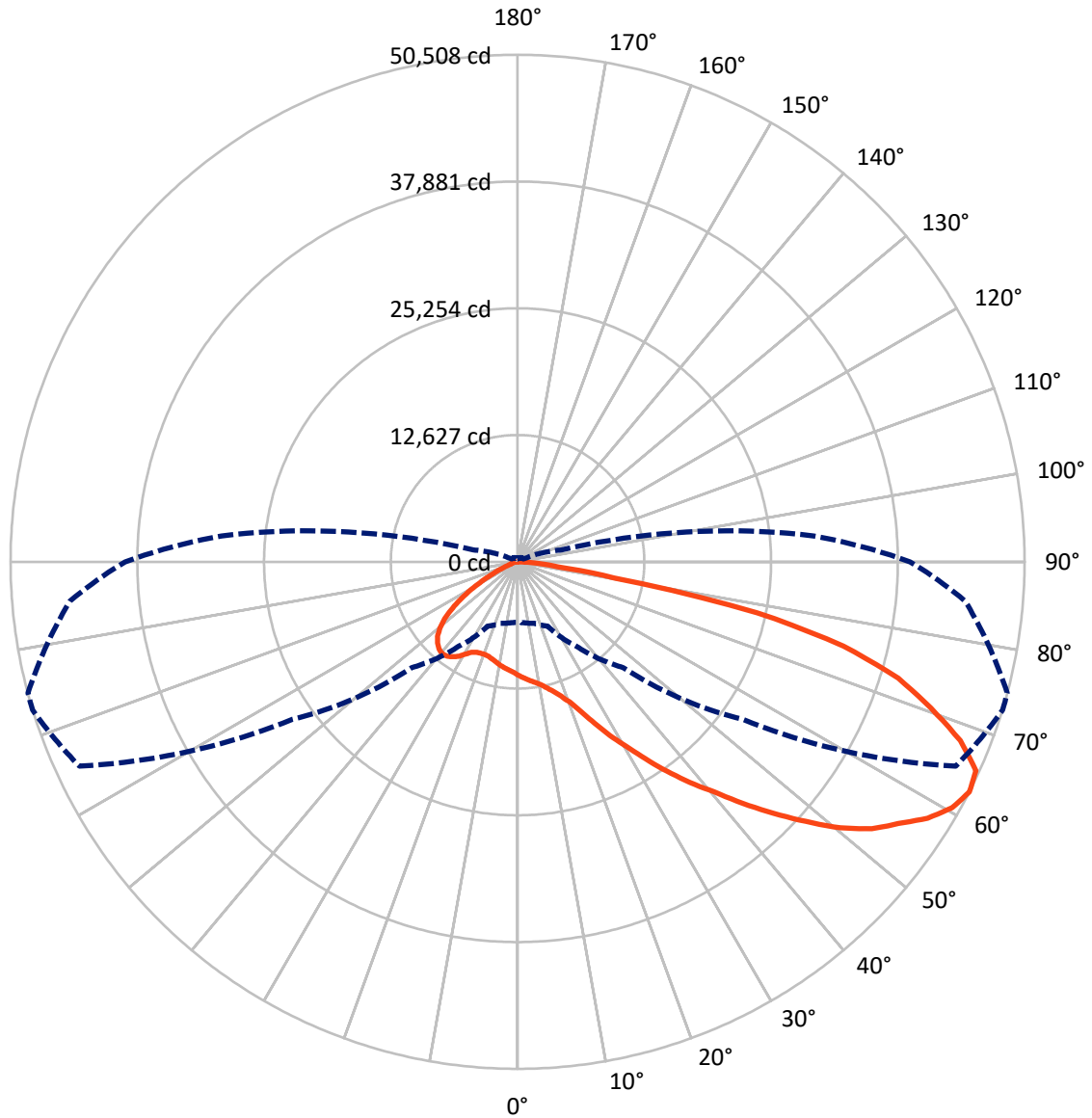
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 15.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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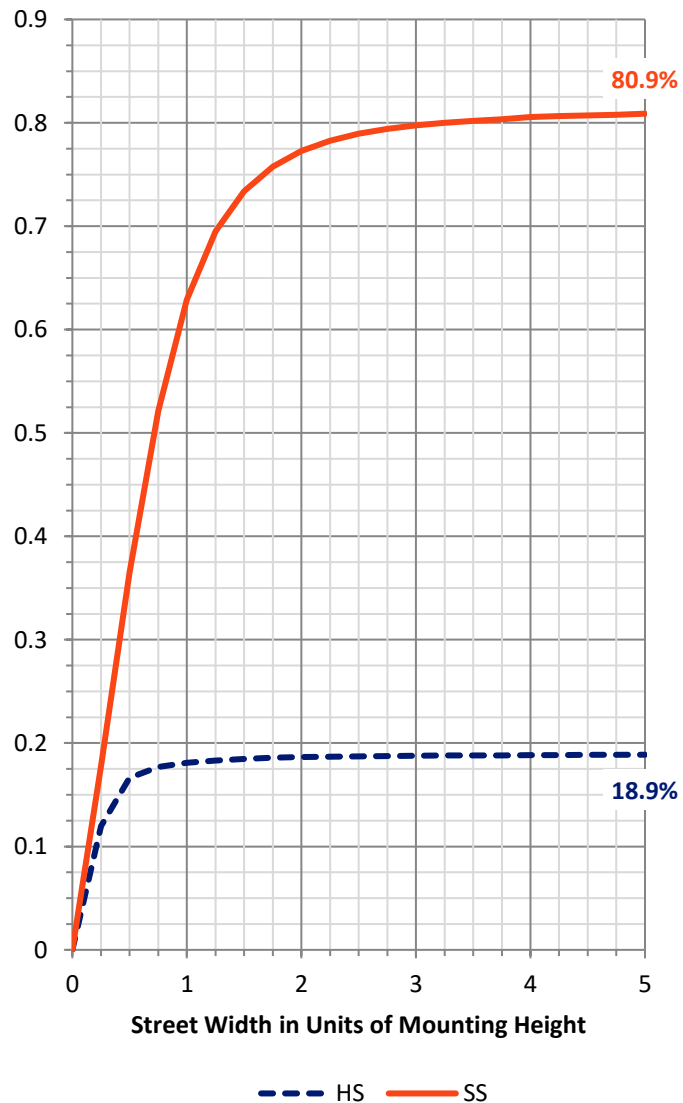
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12333.0	0.0	12333.0
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	52138.0	0.0	52138.0
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	64471.0	0.0	64471.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1079.9	1.7
10°-20°	3248.2	5.0
20°-30°	5612.2	8.7
30°-40°	8439.4	13.1
40°-50°	11253.2	17.5
50°-60°	13252.8	20.6
60°-70°	13175.7	20.4
70°-80°	7564.5	11.7
80°-90°	845.0	1.3
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°	64471.0	100.0
0°-180°	64471.0	100.0

**Coefficient of Utilization**

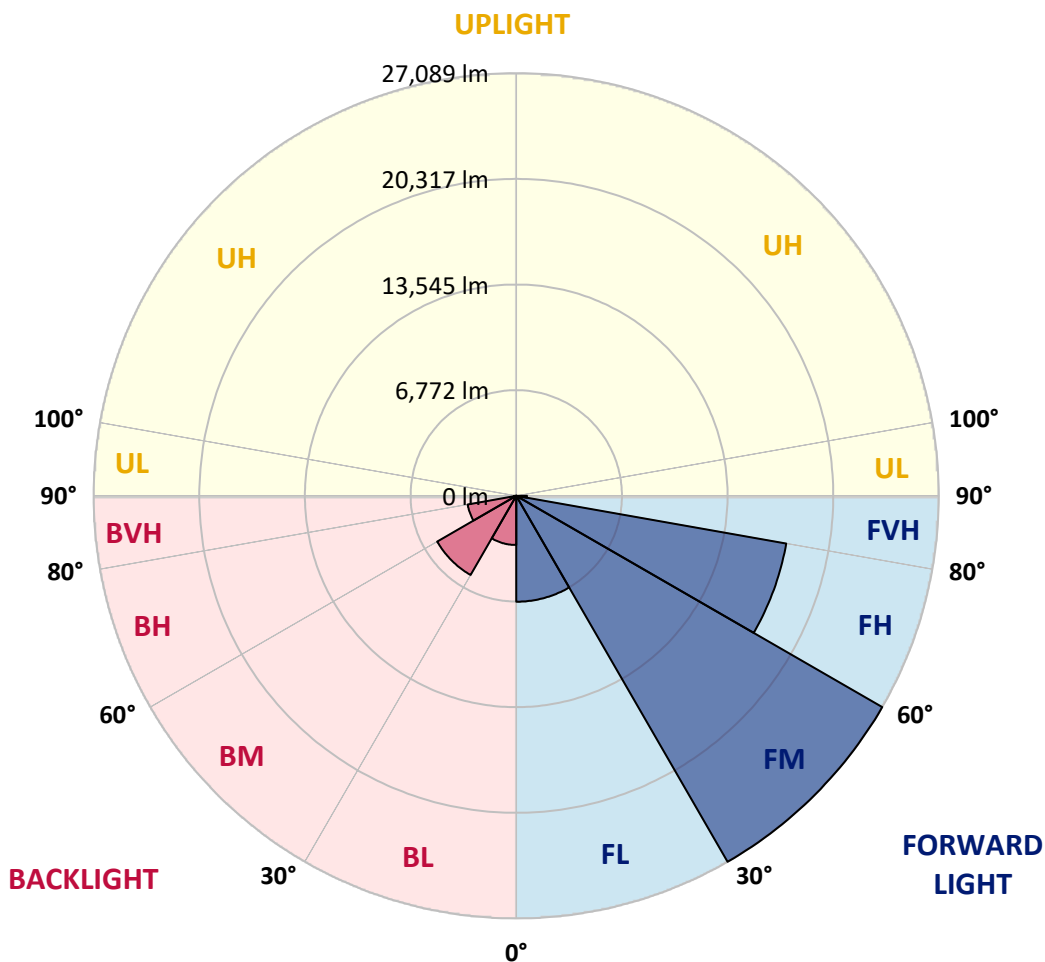


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6788.7	10.5			
FM (30°-60°)	27089.2	42.0			
FH (60°-80°)	17573.8	27.3			G5
FVH (80°-90°)	686.3	1.1			G4/750
BL (0°-30°)	3151.7	4.9	B4/5000		
BM (30°-60°)	5856.3	9.1	B4/8500		
BH (60°-80°)	3166.3	4.9	B4/5000		G4/5000
BVH (80°-90°)	158.7	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	11306.7	11306.7	11306.7	11306.7	11306.7	11306.7	11306.7	11306.7	11306.7	11306.7	11306.7
2.5°	12096.9	12127.3	12091.1	12075.2	12057.8	11944.9	11813.3	11678.7	11570.1	11552.8	11410.9
5°	12946.4	12962.3	12903.0	12835.0	12717.7	12531.1	12295.2	12062.2	11845.1	11787.2	11528.2
7.5°	13599.1	13568.7	13554.2	13496.3	13393.6	13188.1	12830.6	12448.6	12112.8	12031.8	11638.1
10°	14211.2	14198.2	14088.2	14015.8	13852.3	13662.7	13369.0	12884.2	12410.9	12280.7	11733.7
12.5°	14874.0	14845.1	14800.2	14643.9	14510.8	14191.0	13836.4	13395.0	12868.2	12694.6	11897.2
15°	15470.3	15392.1	15367.5	15204.0	15069.4	14824.8	14468.8	13956.5	13393.6	13244.5	12208.3
17.5°	16037.5	16001.4	15946.4	15834.9	15684.4	15496.3	15211.2	14662.7	14081.0	13863.9	12736.6
20°	16519.5	16474.6	16426.8	16457.2	16423.9	16303.8	16124.4	15656.9	14946.4	14736.5	13379.1
22.5°	16855.2	16853.8	17044.8	17156.2	17219.9	17215.5	17172.1	16907.3	16192.4	15979.7	14340.0
25°	17134.5	17156.2	17397.9	17821.9	18201.1	18235.8	18542.6	18416.7	17808.9	17587.5	15785.7
27.5°	17217.0	17260.4	17698.9	18366.0	18942.0	19494.8	19944.9	20175.0	19612.1	19347.2	17340.0
30°	17276.3	17293.7	17723.5	18522.3	19736.5	20612.1	21416.7	21806.0	21321.2	21127.2	19072.3
32.5°	16858.1	16863.9	17522.3	18732.2	20319.7	21837.8	22790.0	23523.8	23396.4	23140.3	20966.6
35°	16282.1	16389.2	17144.6	18529.6	20800.2	22963.7	24260.4	25354.4	25609.1	25425.3	22859.5
37.5°	15570.1	15654.0	16463.0	18228.6	20905.8	23737.9	25403.6	27215.5	27881.2	27850.8	25144.6
40°	14694.6	14797.3	15765.5	17580.2	20853.7	24300.9	26745.2	29276.3	30121.4	30025.9	27410.9
42.5°	13659.8	13810.4	14749.6	16746.7	20473.1	24645.3	27843.6	31374.7	32895.6	32833.4	29416.6
45°	12636.7	12717.7	13574.5	15586.0	19772.7	24756.8	28876.8	34266.1	35740.8	35671.3	31833.4
47.5°	11581.7	11652.6	12547.0	14363.2	18557.1	24532.4	29694.5	36749.5	38639.5	38570.0	34234.3
50°	9127.3	9395.0	11228.6	13287.9	17172.1	23897.1	30465.8	39843.5	41672.7	41377.5	36337.0
52.5°	7808.9	7905.9	8856.7	12204.0	15790.1	22813.2	30981.0	42710.4	44167.7	43742.2	38487.5
55°	7299.5	7364.7	7830.6	10205.4	14492.0	21173.6	31587.4	45584.4	46038.8	45930.3	40241.5
57.5°	6913.1	6985.5	7318.3	8523.8	13124.4	18875.4	31397.8	47606.1	48174.9	47827.5	42104.0
60°	6366.1	6454.4	6895.8	7652.6	11570.1	16542.6	29729.2	48433.9	49727.7	49336.9	43520.8
62.5°	6021.7	6079.6	6332.8	7066.5	10282.1	14901.5	27354.4	48167.6	50507.7	50493.2	44749.4
65°	5554.2	5639.6	5910.2	6505.0	9136.0	13629.5	25114.2	46852.2	50172.0	50185.0	45002.7
67.5°	5065.1	5099.8	5383.5	5861.0	7785.8	12464.5	22215.5	44601.8	47556.9	47855.0	43250.1
70°	4454.4	4437.0	4743.8	5092.6	6363.2	10583.2	17881.2	40598.9	43693.0	43816.0	39706.0
72.5°	3505.0	3521.0	3606.3	3848.0	4830.7	8328.5	12975.3	34300.8	39653.9	39872.4	35176.4
75°	2356.0	2382.0	2780.0	3015.9	3474.7	5985.5	8159.1	23153.3	33522.3	34138.8	28790.0
77.5°	1797.4	1813.3	1929.1	2186.7	2513.7	4266.3	4422.6	12616.4	24405.1	25868.2	22522.3
80°	1273.5	1279.3	1165.0	1036.2	1338.6	2894.3	2612.1	5373.3	9725.0	11492.0	13228.6
82.5°	570.2	561.5	661.4	549.9	771.3	1120.1	1233.0	2607.8	4039.1	4341.5	4726.5
85°	264.8	296.7	340.1	285.1	458.8	432.7	480.5	1111.4	1892.9	2089.7	2078.1
87.5°	65.1	70.9	89.7	114.3	166.4	147.6	144.7	327.1	422.6	421.1	646.9
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°	11306.7	11306.7	11306.7	11306.7	11306.7	11306.7	11306.7	11306.7	11306.7	11306.7	11306.7
2.5°	11314.0	11238.7	11060.7	10888.5	10725.0	10616.4	10494.9	10367.5	10290.8	10254.7	10332.8
5°	11370.4	11227.2	10887.1	10545.5	10256.1	10008.6	9835.0	9687.4	9607.8	9615.0	9619.3
7.5°	11418.2	11217.0	10740.9	10259.0	9807.5	9500.7	9273.5	9114.3	9023.1	8953.6	9005.7
10°	11460.1	11175.1	10570.1	9927.6	9437.0	8982.6	8674.3	8481.9	8314.0	8219.9	8293.7
12.5°	11505.0	11159.1	10379.1	9630.9	8995.6	8487.7	8065.1	7874.1	7709.1	7638.2	7683.0
15°	11700.4	11219.9	10201.1	9282.2	8560.0	7903.0	7447.1	7212.7	7082.5	6997.1	7015.9
17.5°	12036.1	11380.6	10086.8	8917.5	8073.8	7379.1	6788.7	6515.2	6299.5	6238.8	6222.8
20°	12513.7	11685.9	10086.8	8609.2	7522.4	6797.4	6117.2	5655.5	5319.8	5193.9	5290.9
22.5°	13315.4	12205.4	10186.6	8329.9	7047.7	6193.9	5383.5	4678.7	4225.7	4041.9	4149.0
25°	14437.0	13008.6	10348.7	8085.3	6615.0	5499.2	4452.9	3642.5	3143.3	2924.7	2921.8
27.5°	15901.5	14237.3	10675.8	7885.6	6096.9	4600.6	3481.9	2701.9	2233.0	2101.3	2120.1
30°	17525.2	15568.7	11293.7	7596.2	5467.4	3594.8	2535.4	1985.5	1655.6	1481.9	1484.8
32.5°	19091.1	16947.8	12027.4	7408.1	4649.8	2710.6	1807.5	1416.8	1211.3	1108.5	1124.5
35°	20769.8	18137.4	12573.0	7092.6	3690.3	1959.5	1277.9	1062.2	976.8	923.3	926.2
37.5°	22583.1	19445.6	13021.6	6670.0	2790.1	1345.9	943.6	910.3	874.1	806.1	800.3
40°	24477.4	20960.8	13289.4	5986.9	1939.2	932.0	801.7	839.4	819.1	730.8	723.6
42.5°	26083.8	22130.1	13355.9	5082.5	1254.7	755.4	726.5	784.4	788.7	699.0	687.4
45°	27626.5	23172.1	13225.7	3891.4	869.7	710.6	680.2	759.8	765.6	684.5	665.7
47.5°	29353.0	24597.6	12989.8	2596.2	719.2	671.5	664.3	719.2	739.5	672.9	649.8
50°	31449.9	25756.7	12290.8	1594.8	678.7	646.9	646.9	680.2	707.7	649.8	638.2
52.5°	33600.4	26766.9	11256.1	1094.1	654.1	620.8	639.6	654.1	664.3	612.2	622.3
55°	35141.6	27662.7	9713.4	879.9	639.6	603.5	648.3	619.4	604.9	560.1	549.9
57.5°	36852.2	28727.8	8136.0	780.0	620.8	613.6	619.4	564.4	523.9	477.6	467.4
60°	38046.1	29300.9	6205.5	733.7	599.1	603.5	571.6	497.8	424.0	390.7	383.5
62.5°	39088.1	29627.9	4548.5	674.4	578.9	577.4	518.1	425.5	348.8	312.6	306.8
65°	38930.3	29117.1	2947.9	626.6	562.9	544.1	464.5	364.7	290.9	263.4	260.5
67.5°	37195.2	26856.6	1856.7	577.4	535.5	502.2	416.8	325.6	267.7	235.9	233.0
70°	33552.7	23735.0	1136.0	513.7	476.1	444.3	369.0	305.4	253.3	215.6	208.4
72.5°	28517.9	20328.4	803.2	453.0	415.3	377.7	312.6	290.9	241.7	193.9	188.1
75°	23429.7	14973.9	672.9	395.1	354.6	303.9	266.3	270.6	227.2	176.6	172.2
77.5°	16499.2	9335.7	626.6	322.7	279.3	241.7	230.1	247.5	208.4	162.1	157.7
80°	9629.5	5243.1	518.1	254.7	209.8	186.7	192.5	209.8	182.3	146.2	140.4
82.5°	3887.1	2075.2	364.7	198.3	153.4	149.1	157.7	170.8	150.5	123.0	120.1
85°	1387.8	648.3	206.9	130.2	98.4	102.7	101.3	121.6	108.5	89.7	88.3
87.5°	364.7	128.8	92.6	52.1	42.0	42.0	39.1	56.4	52.1	40.5	44.9
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)