

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: P510860

Luminaire Tested: **CST-CA8-480-750-U-T4-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510860  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-480-750-U-T4-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 64041 lumens  
Efficiency: N/A  
Efficacy: 133.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U0 - G5

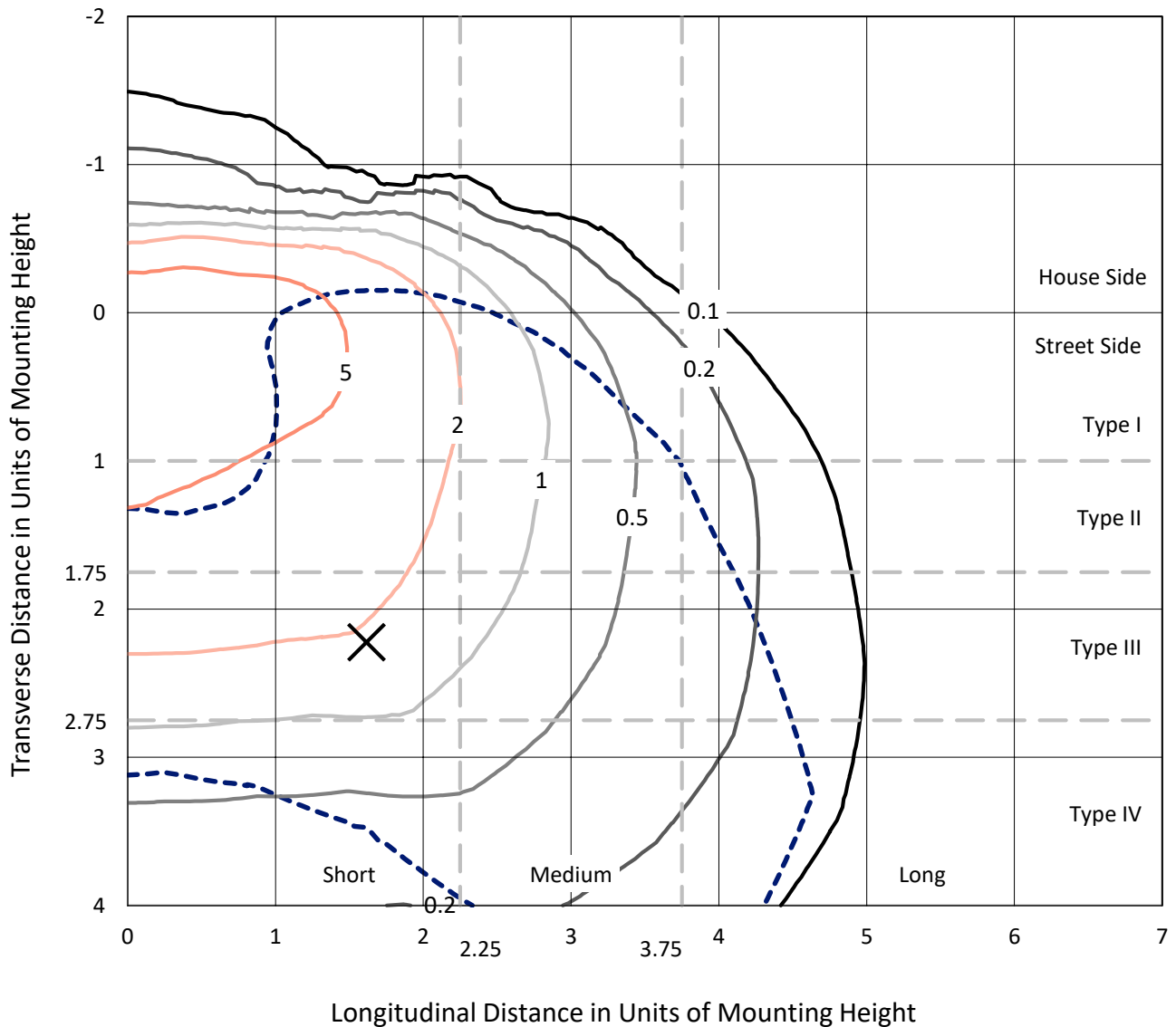
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

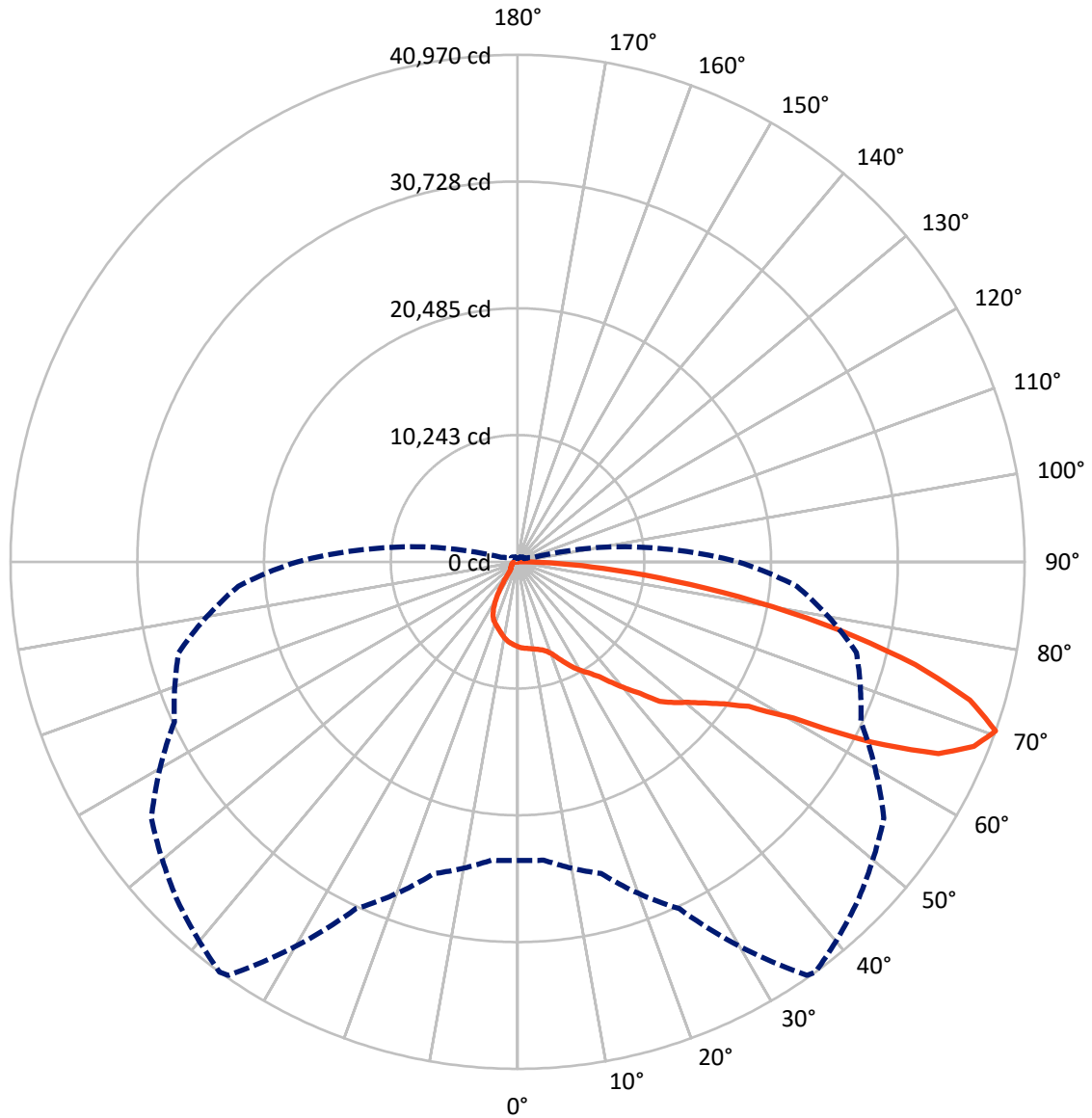
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.7 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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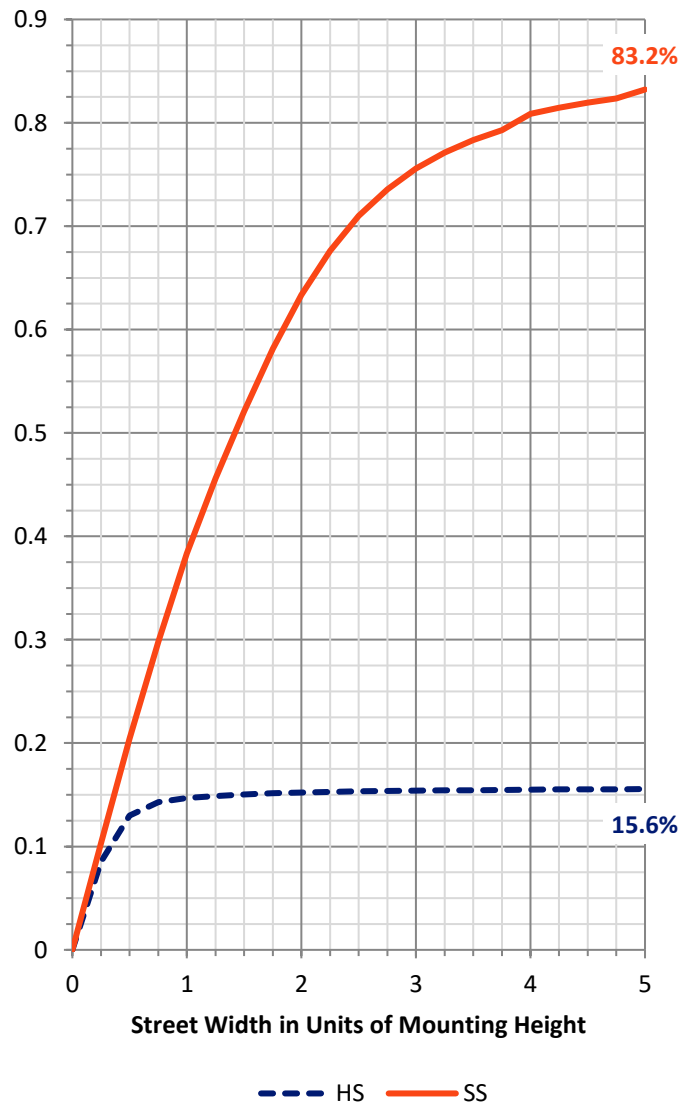
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10106.1	0.0	10106.1
	% Fixture	15.8	0.0	15.8
<b>Street Side</b>	Lumens	53934.9	0.0	53934.9
	% Fixture	84.2	0.0	84.2
<b>Total</b>	Lumens	64041.0	0.0	64041.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	650.8	1.0
10°-20°	1935.3	3.0
20°-30°	3480.2	5.4
30°-40°	5507.3	8.6
40°-50°	8606.9	13.4
50°-60°	12359.3	19.3
60°-70°	16764.3	26.2
70°-80°	12407.4	19.4
80°-90°	2329.7	3.6
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°	64041.0	100.0
0°-180°	64041.0	100.0

**Coefficient of Utilization**

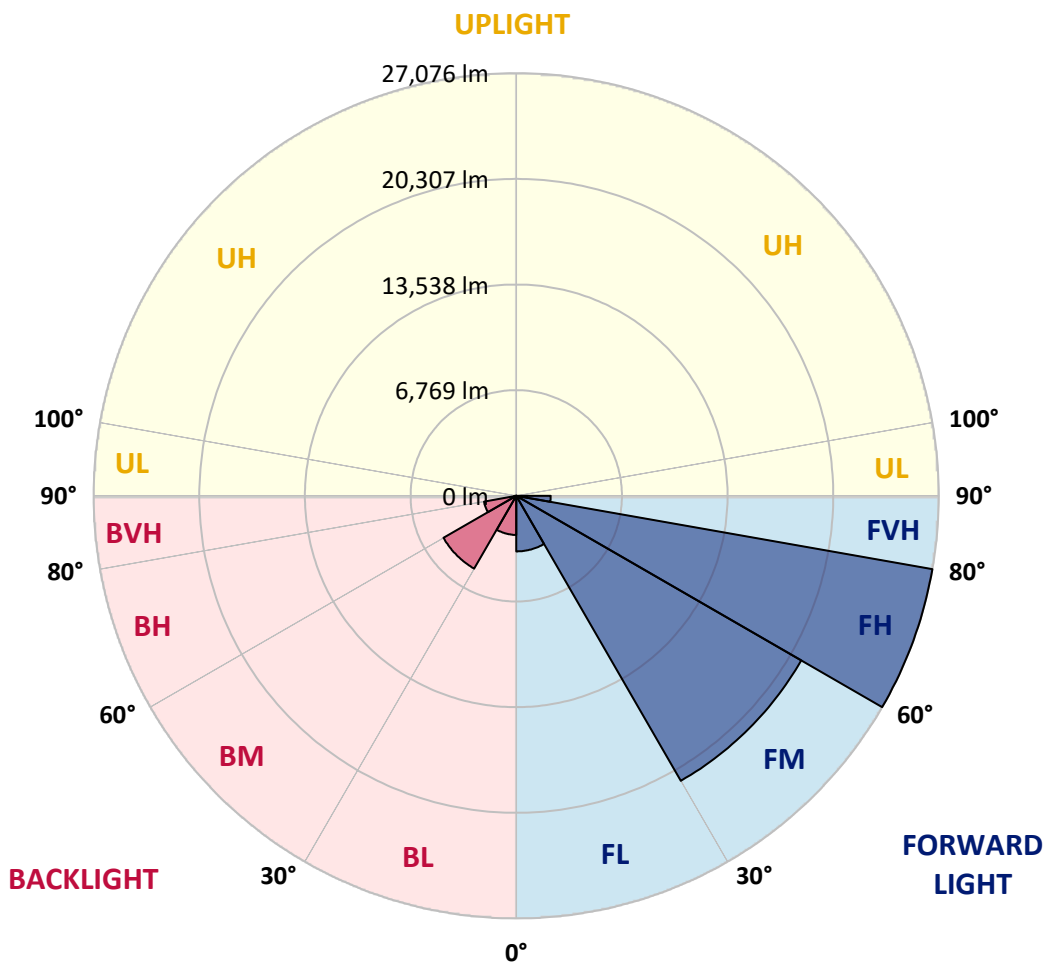


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3561.9	5.6			
FM (30°-60°)	21088.1	32.9			
FH (60°-80°)	27075.9	42.3			G5
FVH (80°-90°)	2208.9	3.4			G5
BL (0°-30°)	2504.3	3.9	B4/5000		
BM (30°-60°)	5385.3	8.4	B4/8500		
BH (60°-80°)	2095.7	3.3	B3/2500		G3/2500
BVH (80°-90°)	120.8	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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	6861.7	6861.7	6861.7	6861.7	6861.7	6861.7	6861.7	6861.7	6861.7	6861.7	6861.7
2.5°	7000.7	6985.9	6974.0	6978.5	6969.6	6975.5	6962.2	6945.9	6907.5	6891.2	6883.9
5°	7062.7	7058.3	7046.5	7037.6	7021.4	7015.4	7000.7	7014.0	6993.3	6940.0	6909.0
7.5°	7099.7	7098.2	7084.9	7065.7	7074.6	7082.0	7096.8	7076.1	7049.4	7024.3	6960.7
10°	7116.0	7116.0	7099.7	7110.1	7155.9	7160.3	7167.7	7181.0	7155.9	7118.9	7055.4
12.5°	7157.4	7154.4	7160.3	7194.3	7241.6	7252.0	7289.0	7289.0	7291.9	7269.7	7195.8
15°	7260.9	7260.9	7274.2	7305.2	7386.5	7392.5	7447.2	7495.9	7501.9	7469.3	7413.2
17.5°	7500.4	7494.5	7487.1	7506.3	7593.5	7596.5	7691.1	7753.2	7769.5	7805.0	7796.1
20°	7955.8	7949.8	7948.4	7949.8	7943.9	7935.1	8028.2	8094.7	8177.5	8239.6	8270.7
22.5°	8607.8	8594.5	8594.5	8522.0	8465.8	8474.7	8489.5	8526.5	8635.9	8745.3	8862.1
25°	9310.1	9301.2	9308.6	9123.8	9048.4	9077.9	9058.7	9116.4	9259.8	9354.4	9478.6
27.5°	9883.7	9897.0	9855.6	9712.2	9663.4	9685.6	9641.2	9806.8	9965.0	10130.6	10318.4
30°	10597.8	10526.9	10424.8	10250.4	10232.6	10235.6	10232.6	10498.8	10827.0	11063.5	11323.8
32.5°	11530.7	11542.6	11313.4	10902.4	10751.6	10730.9	10790.0	11180.3	11623.9	12148.8	12491.8
35°	12474.0	12493.2	12326.2	11897.4	11467.2	11402.1	11314.9	11822.0	12462.2	13514.9	14032.4
37.5°	13475.0	13543.0	13344.9	12961.9	12451.8	12391.2	11978.7	12477.0	13423.2	15132.3	15811.0
40°	14814.5	14742.0	14502.5	14016.1	13541.5	13443.9	12964.9	13226.6	14659.2	17157.9	17650.2
42.5°	15802.1	15781.4	15578.9	15098.3	14620.8	14542.4	14156.5	14440.4	16216.1	19211.5	19431.8
45°	16585.7	16712.9	16708.4	16406.8	16137.7	16093.4	15865.7	16284.1	18098.2	21149.8	21041.9
47.5°	17282.1	17360.4	17234.8	17103.2	16977.5	16992.3	17160.8	18021.3	20021.7	22842.7	22365.1
50°	18422.0	18321.5	17758.1	17657.6	17835.0	17842.4	18355.5	19680.2	22140.4	24306.4	23485.8
52.5°	19941.9	19832.5	18674.8	18503.3	18923.2	18954.2	19807.3	21333.1	24325.6	25705.0	24600.6
55°	22204.0	21949.7	20709.2	19940.4	20132.6	20258.3	21291.7	22922.5	26036.2	26938.1	25444.8
57.5°	24982.1	25166.9	24531.1	22793.9	21994.0	22041.3	22990.5	24443.9	27545.8	28017.4	25938.6
60°	27918.3	27874.0	28140.1	27408.3	25876.5	25622.2	25138.8	25996.3	28715.2	28926.7	26447.2
62.5°	29526.9	29785.7	30672.8	30819.1	32201.5	32067.0	28771.4	27921.3	30066.6	29497.4	26586.2
65°	29518.1	29630.4	31281.9	33097.5	37416.2	37377.7	35846.0	30705.3	31073.4	29801.9	26308.3
67.5°	27610.8	27785.3	29716.2	33263.1	39826.1	39780.3	38721.7	34618.9	31389.8	29435.3	25011.6
70°	24133.4	24192.5	26076.1	30931.5	40794.5	40970.4	38820.7	36121.0	30603.3	28345.6	22647.5
72.5°	19909.4	19786.6	21628.8	26414.7	38328.4	38223.4	37179.6	34327.6	29278.5	26229.9	18470.8
75°	14659.2	15000.8	16653.7	21208.9	32816.6	33201.0	33663.7	31583.5	26003.7	21617.0	12772.7
77.5°	9679.7	10114.4	11785.0	15902.6	25980.0	26577.3	27776.4	26862.7	21154.2	15506.4	6082.5
80°	5001.7	5330.0	6833.6	10552.0	18624.5	19486.5	21685.0	20345.5	14997.8	7011.0	1361.7
82.5°	1892.5	1849.6	3062.0	6039.6	11941.8	12725.4	14323.6	12200.5	5337.4	1231.6	632.8
85°	830.9	879.7	1268.5	2754.4	6827.7	6929.7	8114.0	4756.3	782.1	588.4	430.2
87.5°	359.3	412.5	532.3	792.5	2303.5	2659.8	3291.1	1511.0	236.6	204.0	215.9
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°	6861.7	6861.7	6861.7	6861.7	6861.7	6861.7	6861.7	6861.7	6861.7	6861.7	6861.7
2.5°	6870.5	6861.7	6846.9	6809.9	6749.3	6741.9	6736.0	6730.1	6718.3	6724.2	6758.2
5°	6885.3	6869.1	6815.8	6762.6	6709.4	6662.1	6604.4	6582.2	6552.7	6533.4	6568.9
7.5°	6935.6	6901.6	6823.2	6750.8	6605.9	6536.4	6462.5	6375.3	6313.2	6273.2	6308.7
10°	7019.9	6977.0	6879.4	6730.1	6560.1	6369.3	6239.2	6094.3	5976.1	5943.5	5976.1
12.5°	7157.4	7093.8	6980.0	6777.4	6475.8	6225.9	5979.0	5788.3	5597.6	5542.9	5559.1
15°	7380.6	7330.4	7155.9	6876.5	6477.3	6095.8	5729.2	5421.6	5171.8	5084.5	5078.6
17.5°	7738.4	7685.2	7484.1	7073.1	6530.5	5993.8	5483.7	5015.0	4636.5	4444.3	4413.3
20°	8251.5	8177.5	7873.0	7362.9	6645.8	5949.4	5256.0	4626.2	4037.8	3677.0	3622.3
22.5°	8822.2	8743.8	8294.3	7586.1	6728.6	5862.2	5038.7	4196.0	3421.2	2980.6	2918.5
25°	9531.8	9360.3	8698.0	7797.6	6709.4	5678.9	4685.3	3612.0	2772.2	2390.7	2349.3
27.5°	10232.6	10015.3	9109.0	7908.4	6625.1	5387.6	4167.9	2928.9	2170.4	1899.9	1865.9
30°	11102.0	10682.1	9474.2	7960.2	6412.2	4951.5	3474.5	2226.6	1624.9	1438.6	1406.0
32.5°	12135.4	11499.7	9817.2	7902.5	6057.4	4286.1	2701.2	1630.8	1207.9	1091.1	1089.6
35°	13498.6	12502.1	10194.2	7713.3	5513.3	3569.1	1893.9	1114.8	941.8	901.9	909.3
37.5°	15092.4	13859.4	10577.1	7402.8	4898.2	2730.8	1262.6	859.0	828.0	829.4	830.9
40°	16773.5	15358.6	11093.1	6966.6	4151.6	1976.7	909.3	771.8	770.3	785.1	789.5
42.5°	18379.1	16814.9	11728.9	6385.6	3369.5	1307.0	788.0	736.3	717.1	723.0	727.4
45°	19870.9	18064.2	12270.0	5819.3	2531.2	932.9	773.3	694.9	665.3	662.4	665.3
47.5°	21072.9	19065.1	12599.7	5154.0	1803.8	774.7	742.2	656.4	615.1	606.2	601.7
50°	21988.1	19808.8	12719.5	4400.0	1219.8	739.2	700.8	612.1	561.8	563.3	563.3
52.5°	22881.1	20484.5	12580.5	3640.0	897.4	708.2	672.7	576.6	523.4	551.5	558.9
55°	23524.3	20768.4	12175.4	2818.0	748.1	669.8	641.7	535.2	498.3	544.1	558.9
57.5°	23899.8	20991.6	11431.7	2034.4	686.0	632.8	601.7	496.8	462.8	474.6	482.0
60°	24133.4	20679.6	10448.5	1391.3	653.5	603.2	561.8	471.6	425.8	397.7	393.3
62.5°	24004.8	19899.0	9153.3	956.6	619.5	570.7	527.8	448.0	387.4	350.4	347.4
65°	22956.5	18454.5	7027.3	774.7	598.8	555.9	507.1	425.8	360.8	325.3	320.8
67.5°	21012.3	15858.3	4104.3	689.0	589.9	541.1	490.9	405.1	346.0	307.5	301.6
70°	17817.3	11928.5	1375.0	615.1	588.4	539.6	477.6	390.3	329.7	289.8	283.9
72.5°	12854.0	7197.3	669.8	541.1	550.0	517.5	467.2	378.5	319.4	269.1	258.7
75°	7305.2	2343.4	604.7	467.2	511.6	493.8	461.3	380.0	323.8	244.0	232.1
77.5°	2078.8	684.5	584.0	397.7	483.5	510.1	431.7	343.0	331.2	226.2	211.4
80°	702.3	609.1	563.3	309.0	390.3	421.4	374.1	301.6	334.1	205.5	190.7
82.5°	563.3	612.1	473.1	246.9	297.2	319.4	297.2	270.6	270.6	183.3	171.5
85°	450.9	567.7	300.1	196.6	221.8	245.4	209.9	202.6	189.2	153.8	149.3
87.5°	261.7	177.4	124.2	100.5	93.1	94.6	81.3	97.6	119.8	105.0	103.5
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)