

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: P510870

Luminaire Tested: **CST-CA8-480-760-U-T4-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510870  
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-CA8-480-760-U-T4-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: 62684 lumens  
Efficiency: N/A  
Efficacy: 130.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U0 - G5

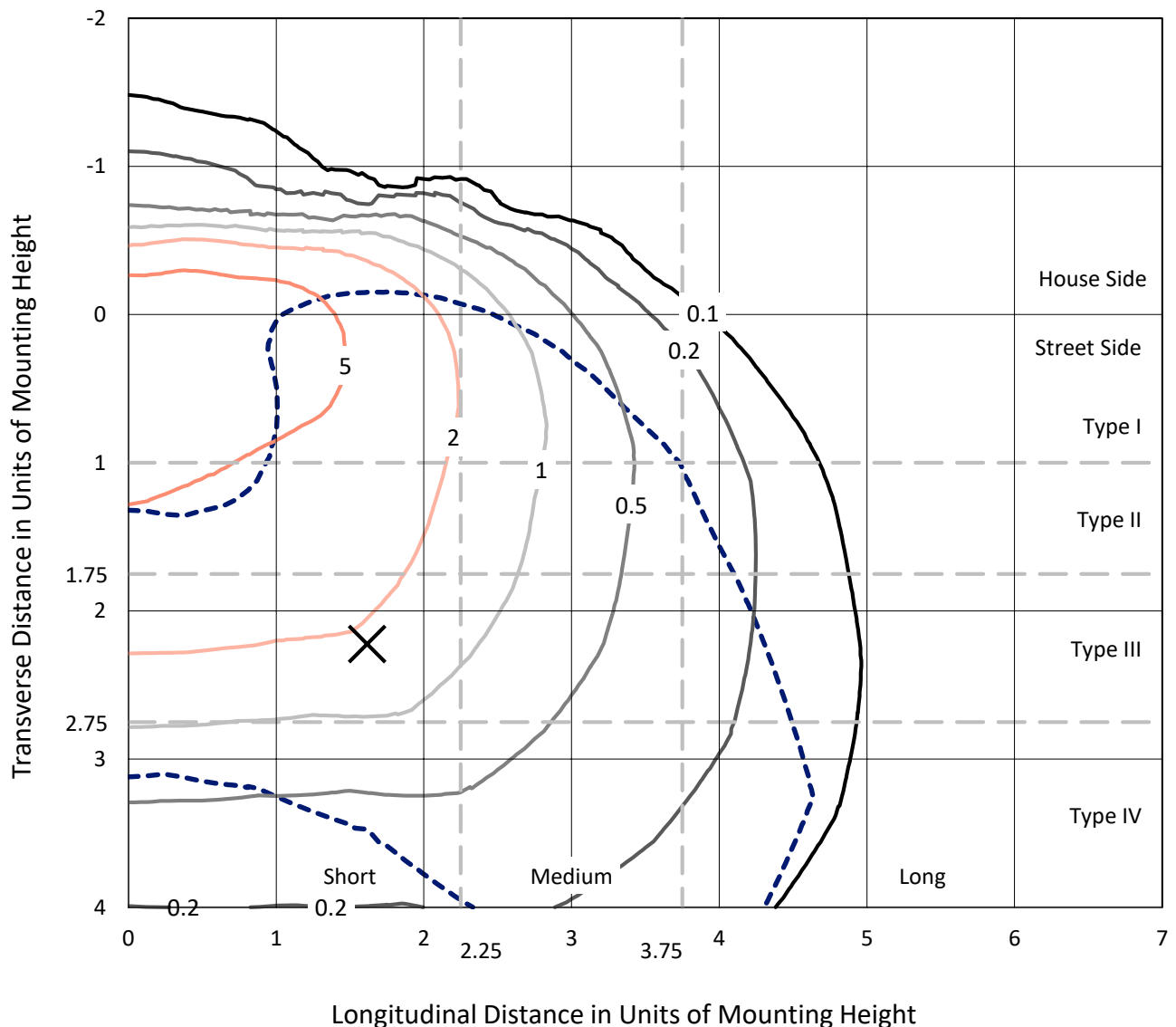
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

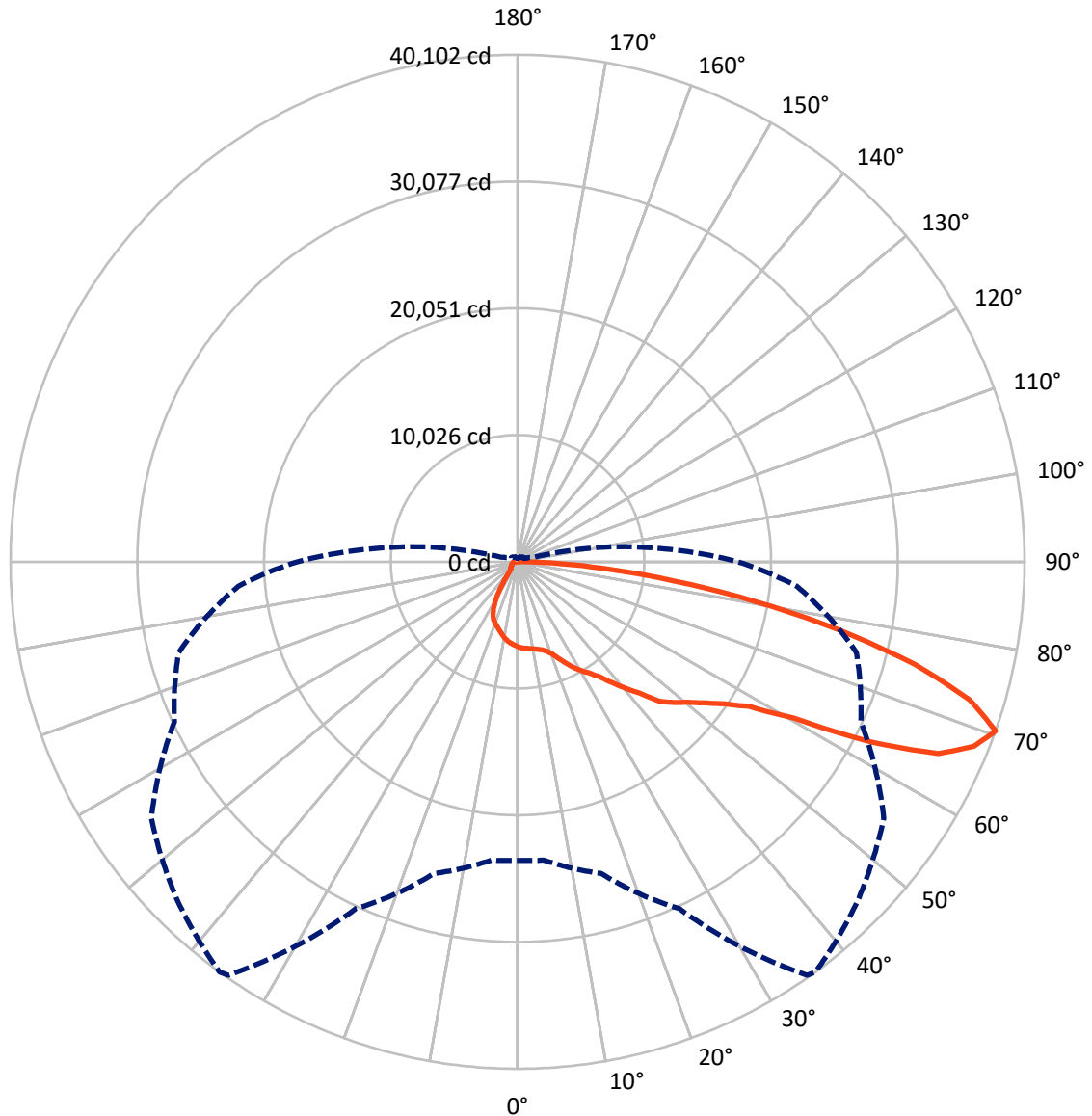
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.5 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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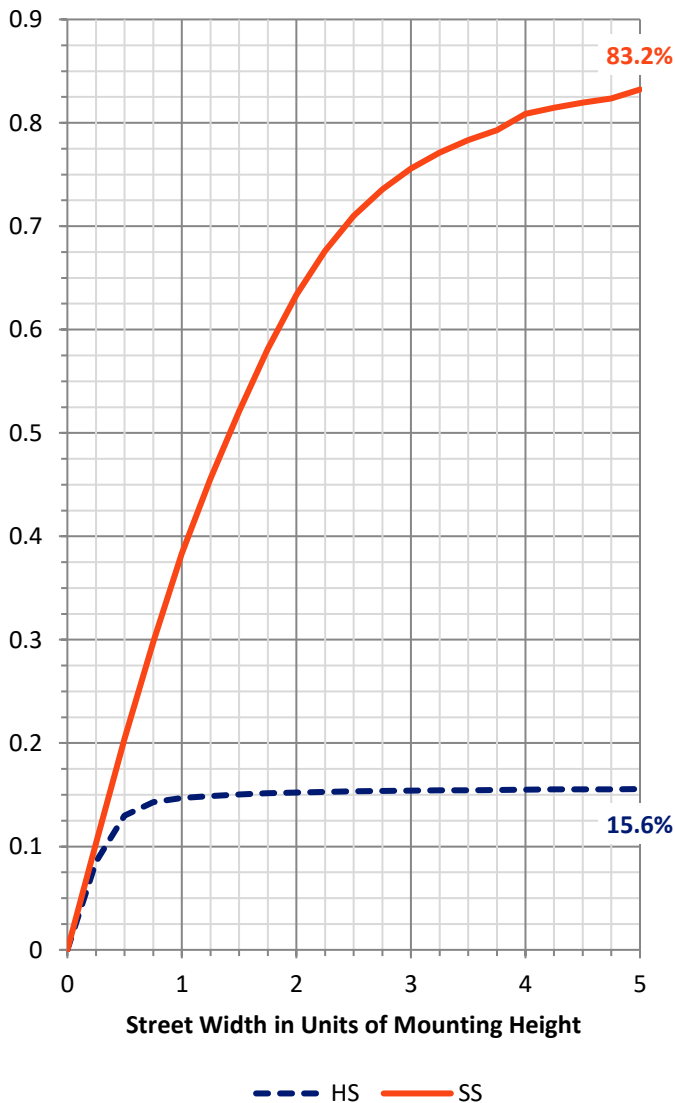
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9892.0	0.0	9892.0
	% Fixture	15.8	0.0	15.8
<b>Street Side</b>	Lumens	52792.0	0.0	52792.0
	% Fixture	84.2	0.0	84.2
<b>Total</b>	Lumens	62684.0	0.0	62684.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	637.0	1.0
10°-20°	1894.3	3.0
20°-30°	3406.4	5.4
30°-40°	5390.6	8.6
40°-50°	8424.5	13.4
50°-60°	12097.4	19.3
60°-70°	16409.1	26.2
70°-80°	12144.4	19.4
80°-90°	2280.4	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°	62684.0	100.0
0°-180°	62684.0	100.0

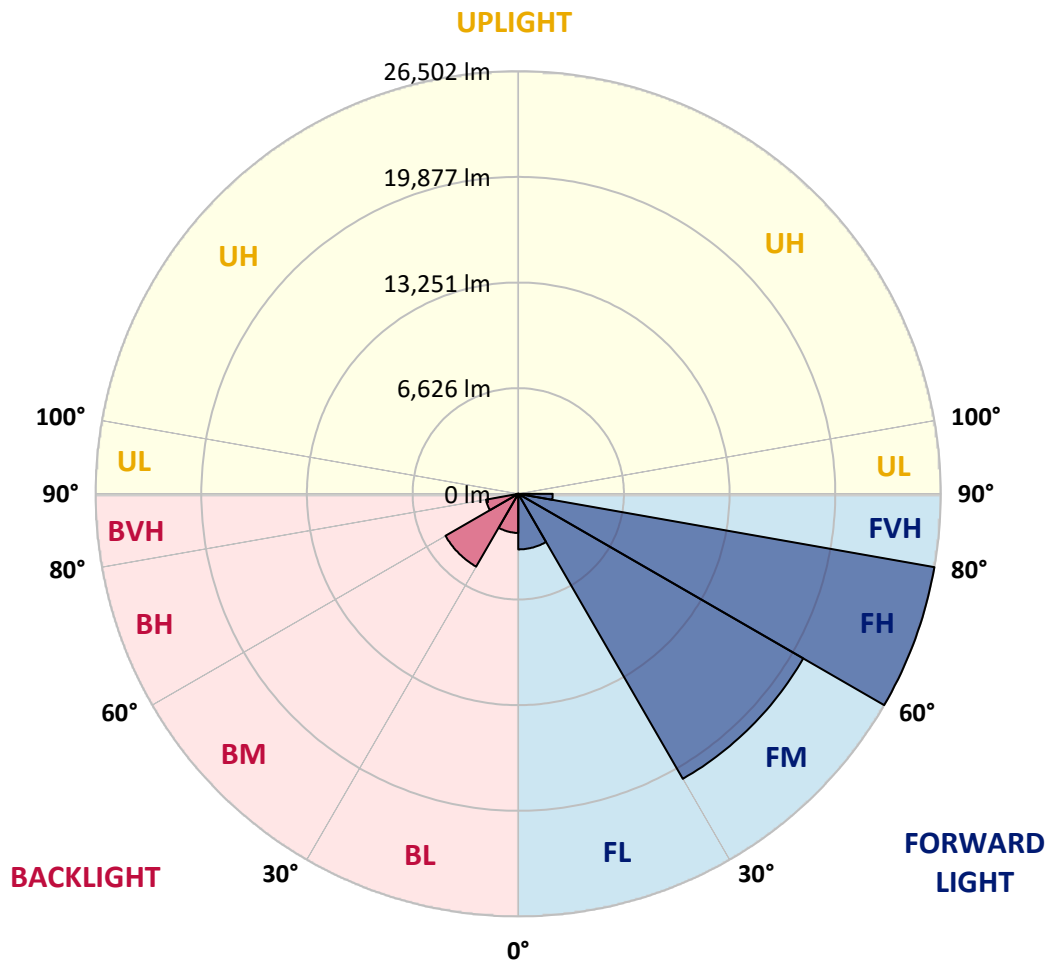


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3486.5	5.6			
FM (30°-60°)	20641.3	32.9			
FH (60°-80°)	26502.2	42.3			G5
FVH (80°-90°)	2162.1	3.4			G5
BL (0°-30°)	2451.2	3.9	B3/2500		
BM (30°-60°)	5271.2	8.4	B4/8500		
BH (60°-80°)	2051.3	3.3	B3/2500		G3/2500
BVH (80°-90°)	118.3	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°	6716.3	6716.3	6716.3	6716.3	6716.3	6716.3	6716.3	6716.3	6716.3	6716.3	6716.3
2.5°	6852.3	6837.8	6826.3	6830.6	6821.9	6827.7	6814.7	6798.8	6761.1	6745.2	6738.0
5°	6913.1	6908.8	6897.2	6888.5	6872.6	6866.8	6852.3	6865.3	6845.1	6793.0	6762.6
7.5°	6949.3	6947.8	6934.8	6916.0	6924.7	6931.9	6946.4	6926.1	6900.1	6875.5	6813.2
10°	6965.2	6965.2	6949.3	6959.4	7004.3	7008.6	7015.8	7028.9	7004.3	6968.1	6905.9
12.5°	7005.7	7002.8	7008.6	7041.9	7088.2	7098.3	7134.5	7134.5	7137.4	7115.7	7043.3
15°	7107.0	7107.0	7120.0	7150.4	7230.0	7235.8	7289.4	7337.1	7342.9	7311.1	7256.1
17.5°	7341.5	7335.7	7328.4	7347.2	7432.6	7435.5	7528.1	7588.9	7604.8	7639.6	7630.9
20°	7787.2	7781.4	7779.9	7781.4	7775.6	7766.9	7858.1	7923.2	8004.3	8065.0	8095.4
22.5°	8425.4	8412.4	8412.4	8341.4	8286.4	8295.1	8309.6	8345.8	8452.9	8560.0	8674.3
25°	9112.8	9104.1	9111.3	8930.4	8856.6	8885.6	8866.8	8923.2	9063.6	9156.2	9277.8
27.5°	9674.3	9687.3	9646.8	9506.4	9458.6	9480.4	9436.9	9599.0	9753.9	9916.0	10099.7
30°	10373.3	10303.8	10203.9	10033.2	10015.8	10018.7	10015.8	10276.3	10597.6	10829.1	11083.8
32.5°	11286.4	11298.0	11073.7	10671.4	10523.8	10503.5	10561.4	10943.4	11377.6	11891.3	12227.1
35°	12209.7	12228.5	12065.0	11645.3	11224.2	11160.5	11075.1	11571.5	12198.1	13228.5	13735.0
37.5°	13189.4	13256.0	13062.1	12687.3	12188.0	12128.7	11724.9	12212.6	13138.8	14811.7	15475.9
40°	14500.6	14429.7	14195.2	13719.1	13254.6	13159.0	12690.2	12946.3	14348.6	16794.3	17276.2
42.5°	15467.3	15447.0	15248.7	14778.4	14311.0	14234.3	13856.6	14134.4	15872.5	18804.4	19020.0
45°	16234.3	16358.7	16354.4	16059.2	15795.8	15752.4	15529.5	15939.0	17714.7	20701.7	20596.0
47.5°	16915.9	16992.6	16869.6	16740.8	16617.8	16632.2	16797.2	17639.5	19597.5	22358.7	21891.2
50°	18031.6	17933.2	17381.9	17283.5	17457.1	17464.3	17966.5	19263.2	21671.2	23791.3	22988.2
52.5°	19519.3	19412.2	18279.1	18111.2	18522.2	18552.6	19387.6	20881.1	23810.2	25160.4	24079.3
55°	21733.5	21484.6	20270.4	19517.9	19706.0	19829.0	20840.6	22436.8	25484.5	26367.3	24905.7
57.5°	24452.7	24633.6	24011.3	22310.9	21528.0	21574.3	22503.4	23925.9	26962.1	27423.7	25389.0
60°	27326.8	27283.3	27543.8	26827.5	25328.2	25079.3	24606.1	25445.4	28106.8	28313.7	25886.8
62.5°	28901.3	29154.5	30022.8	30166.1	31519.2	31387.5	28161.8	27329.7	29429.5	28872.3	26022.9
65°	28892.6	29002.6	30619.1	32396.2	36623.3	36585.7	35086.4	30054.7	30415.0	29170.4	25750.8
67.5°	27025.7	27196.5	29086.5	32558.2	38982.2	38937.3	37901.2	33885.3	30724.7	28811.5	24481.6
70°	23622.0	23679.9	25523.6	30276.1	39930.1	40102.3	37998.1	35355.6	29954.8	27745.0	22167.6
72.5°	19487.5	19367.4	21170.5	25855.0	37516.2	37413.5	36391.8	33600.2	28658.1	25674.1	18079.4
75°	14348.6	14682.9	16300.8	20759.5	32121.2	32497.5	32950.4	30914.3	25452.7	21159.0	12502.0
77.5°	9474.6	9900.0	11535.3	15565.7	25429.5	26014.2	27187.8	26293.5	20706.0	15177.8	5953.6
80°	4895.7	5217.0	6688.8	10328.4	18229.9	19073.6	21225.5	19914.4	14680.0	6862.4	1332.8
82.5°	1852.4	1810.4	2997.1	5911.7	11688.7	12455.7	14020.1	11942.0	5224.3	1205.5	619.4
85°	813.3	861.1	1241.7	2696.1	6683.0	6782.8	7942.0	4655.5	765.5	576.0	421.1
87.5°	351.7	403.8	521.0	775.7	2254.7	2603.4	3221.4	1479.0	231.5	199.7	211.3
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°	6716.3	6716.3	6716.3	6716.3	6716.3	6716.3	6716.3	6716.3	6716.3	6716.3	6716.3
2.5°	6725.0	6716.3	6701.8	6665.6	6606.3	6599.1	6593.3	6587.5	6575.9	6581.7	6615.0
5°	6739.4	6723.5	6671.4	6619.3	6567.2	6520.9	6464.5	6442.8	6413.8	6395.0	6429.7
7.5°	6788.6	6755.4	6678.7	6607.7	6465.9	6397.9	6325.5	6240.2	6179.4	6140.3	6175.0
10°	6871.1	6829.2	6733.6	6587.5	6421.1	6234.4	6107.0	5965.2	5849.4	5817.6	5849.4
12.5°	7005.7	6943.5	6832.1	6633.8	6338.6	6094.0	5852.3	5665.6	5479.0	5425.4	5441.3
15°	7224.2	7175.0	7004.3	6730.7	6340.0	5966.6	5607.8	5306.7	5062.2	4976.8	4971.0
17.5°	7574.4	7522.3	7325.5	6923.2	6392.1	5866.8	5367.5	4908.8	4538.3	4350.2	4319.8
20°	8076.6	8004.3	7706.1	7206.9	6505.0	5823.4	5144.7	4528.2	3952.2	3599.1	3545.5
22.5°	8635.2	8558.5	8118.6	7425.4	6586.0	5738.0	4931.9	4107.0	3348.7	2917.5	2856.7
25°	9329.9	9162.0	8513.7	7632.3	6567.2	5558.5	4586.1	3535.4	2713.4	2340.1	2299.5
27.5°	10015.8	9803.1	8916.0	7740.9	6484.7	5273.5	4079.5	2866.8	2124.4	1859.6	1826.3
30°	10866.7	10455.7	9273.4	7791.5	6276.3	4846.5	3400.8	2179.4	1590.4	1408.1	1376.3
32.5°	11878.3	11256.0	9609.2	7735.1	5929.0	4195.3	2644.0	1596.2	1182.3	1068.0	1066.6
35°	13212.6	12237.2	9978.2	7549.8	5396.5	3493.4	1853.8	1091.2	921.8	882.8	890.0
37.5°	14772.6	13565.7	10353.0	7245.9	4794.4	2672.9	1235.9	840.8	810.4	811.9	813.3
40°	16418.1	15033.1	10858.1	6819.0	4063.6	1934.9	890.0	755.4	754.0	768.4	772.8
42.5°	17989.7	16458.6	11480.3	6250.3	3298.1	1279.3	771.3	720.7	701.9	707.7	712.0
45°	19449.9	17681.4	12010.0	5696.0	2477.5	913.2	756.9	680.2	651.2	648.3	651.2
47.5°	20626.4	18661.2	12332.7	5044.8	1765.5	758.3	726.5	642.5	602.0	593.3	589.0
50°	21522.2	19389.1	12449.9	4306.8	1193.9	723.6	686.0	599.1	549.9	551.4	551.4
52.5°	22396.3	20050.4	12313.9	3562.9	878.4	693.2	658.5	564.4	512.3	539.8	547.0
55°	23025.8	20328.3	11917.4	2758.3	732.3	655.6	628.1	523.9	487.7	532.6	547.0
57.5°	23393.4	20546.8	11189.5	1991.3	671.5	619.4	589.0	486.2	453.0	464.5	471.8
60°	23622.0	20241.5	10227.1	1361.8	639.6	590.4	549.9	461.6	416.8	389.3	384.9
62.5°	23496.1	19477.4	8959.4	936.3	606.4	558.6	516.6	438.5	379.2	343.0	340.1
65°	22470.1	18063.5	6878.4	758.3	586.1	544.1	496.4	416.8	353.1	318.4	314.0
67.5°	20567.1	15522.3	4017.3	674.4	577.4	529.7	480.5	396.5	338.6	301.0	295.2
70°	17439.7	11675.7	1345.9	602.0	576.0	528.2	467.4	382.1	322.7	283.6	277.9
72.5°	12581.6	7044.8	655.6	529.7	538.3	506.5	457.3	370.5	312.6	263.4	253.3
75°	7150.4	2293.8	591.9	457.3	500.7	483.4	451.5	371.9	316.9	238.8	227.2
77.5°	2034.7	670.0	571.6	389.3	473.2	499.3	422.6	335.7	324.2	221.4	206.9
80°	687.4	596.2	551.4	302.5	382.1	412.4	366.1	295.2	327.1	201.2	186.7
82.5°	551.4	599.1	463.1	241.7	290.9	312.6	290.9	264.8	264.8	179.4	167.9
85°	441.4	555.7	293.8	192.5	217.1	240.2	205.5	198.3	185.2	150.5	146.2
87.5°	256.1	173.7	121.6	98.4	91.2	92.6	79.6	95.5	117.2	102.7	101.3
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)