

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: P510646

Luminaire Tested: **CST-CA6-230-727-U-T2-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510646  
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-CA6-230-727-U-T2-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (6) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26554 lumens  
Efficiency: N/A  
Efficacy: 116.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

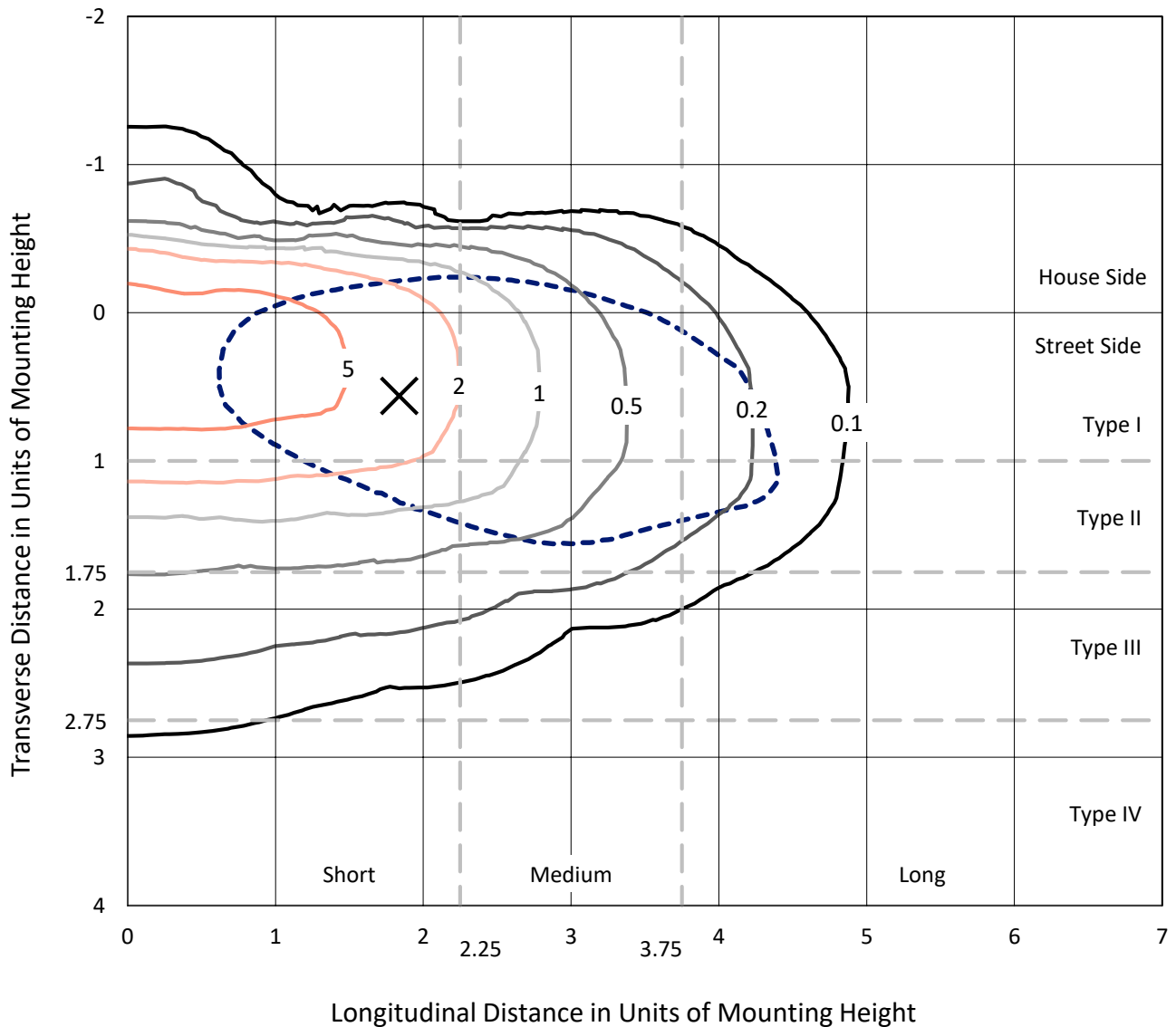
Input Watts (W): 227.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

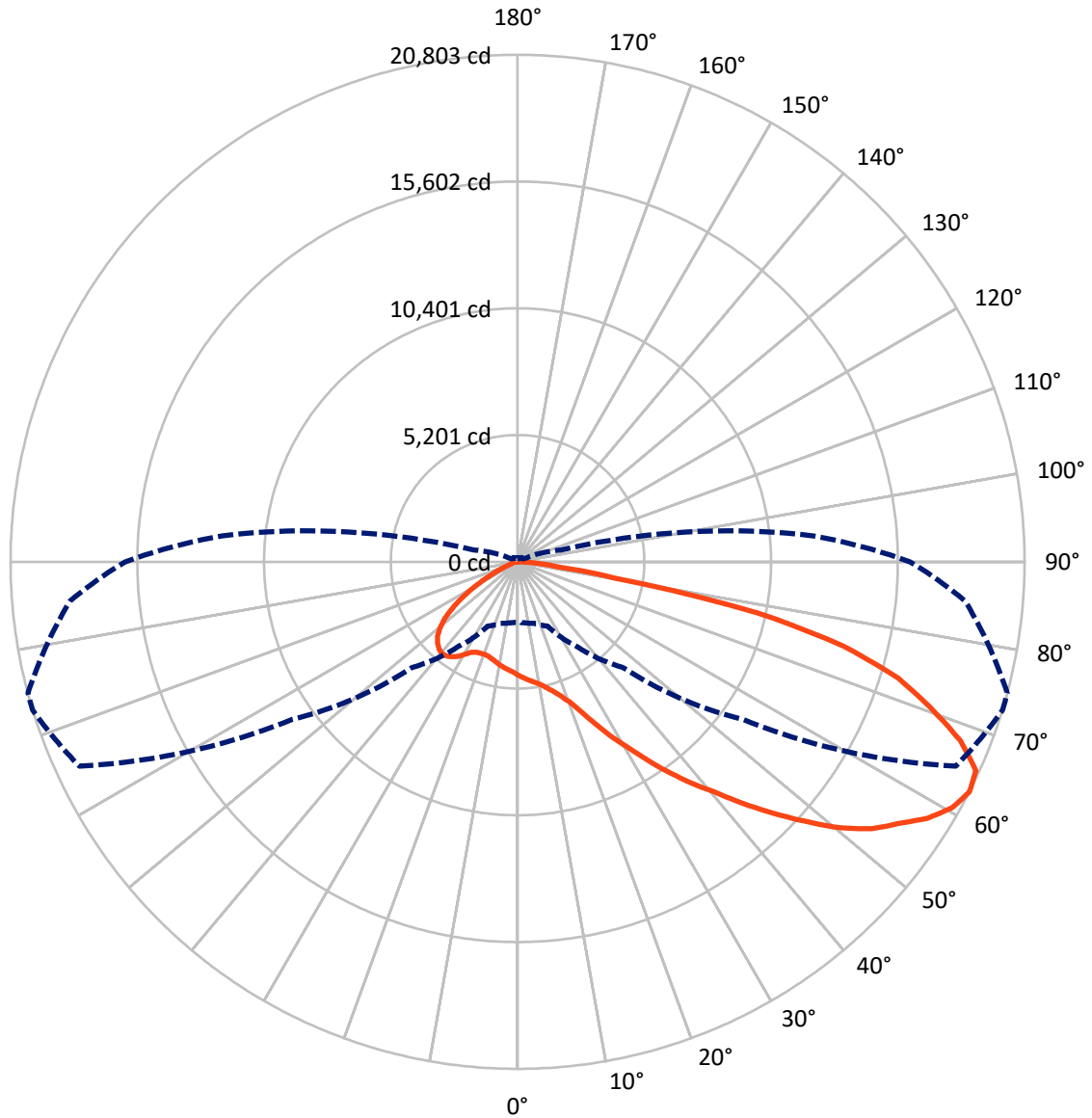
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.3 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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 CATALOG NUMBER: CST-CA6-230-727-U-T2-HSS

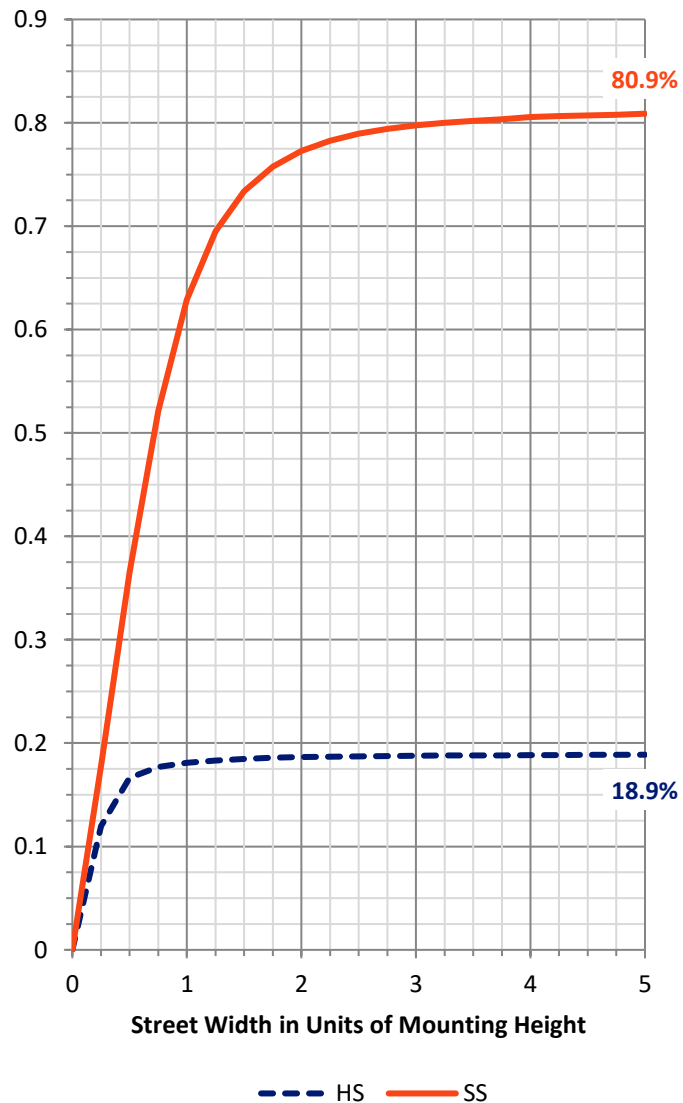
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5079.7	0.0	5079.7
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	21474.3	0.0	21474.3
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	26554.0	0.0	26554.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	444.8	1.7
10°-20°	1337.9	5.0
20°-30°	2311.5	8.7
30°-40°	3476.0	13.1
40°-50°	4634.9	17.5
50°-60°	5458.5	20.6
60°-70°	5426.7	20.4
70°-80°	3115.6	11.7
80°-90°	348.0	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°	26554.0	100.0
0°-180°	26554.0	100.0

**Coefficient of Utilization**



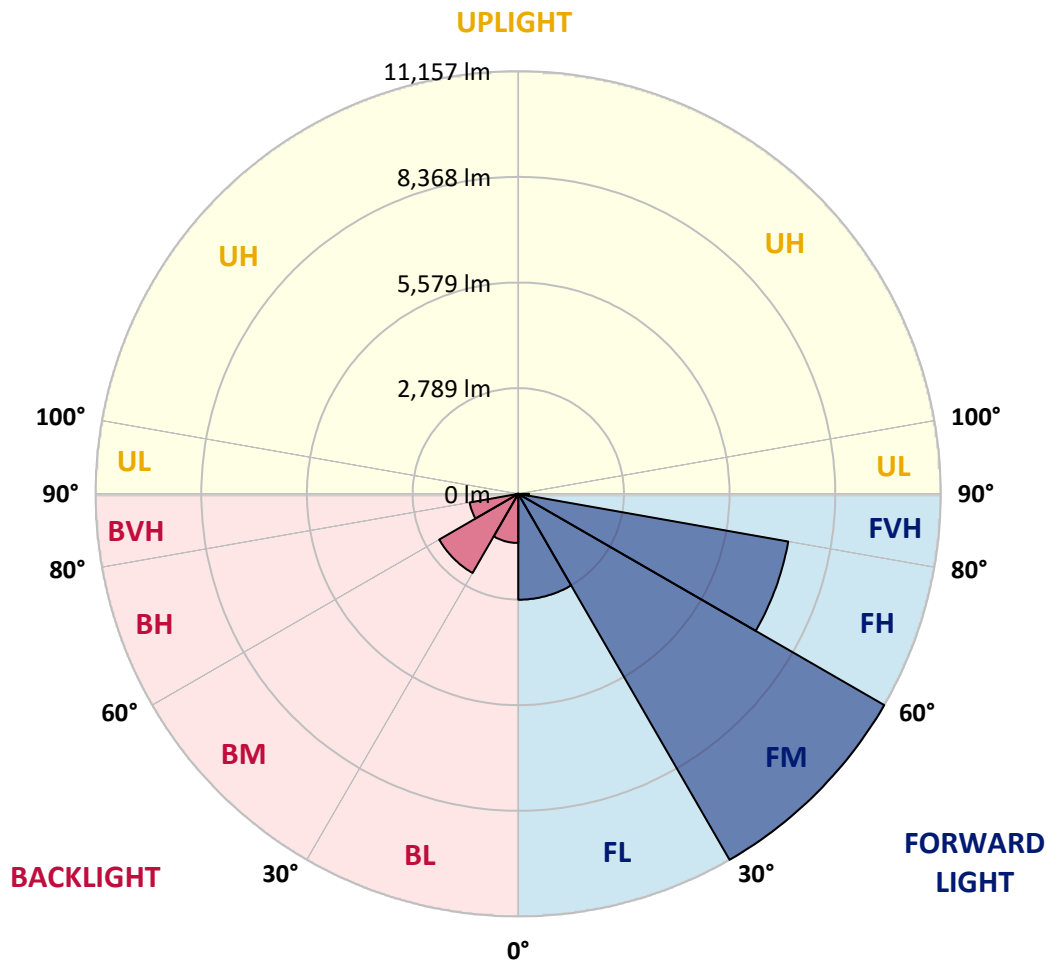
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2796.1	10.5			
FM (30°-60°)	11157.4	42.0			
FH (60°-80°)	7238.2	27.3			G3/7500
FVH (80°-90°)	282.7	1.1			G3/500
BL (0°-30°)	1298.1	4.9	B3/2500		
BM (30°-60°)	2412.1	9.1	B2/2500		
BH (60°-80°)	1304.1	4.9	B3/2500		G3/2500
BVH (80°-90°)	65.4	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	4657.0	4657.0	4657.0	4657.0	4657.0	4657.0	4657.0	4657.0	4657.0	4657.0	4657.0
2.5°	4982.4	4994.9	4980.0	4973.5	4966.3	4919.8	4865.6	4810.2	4765.4	4758.3	4699.9
5°	5332.3	5338.9	5314.4	5286.4	5238.1	5161.2	5064.1	4968.1	4878.7	4854.9	4748.2
7.5°	5601.1	5588.6	5582.6	5558.8	5516.5	5431.8	5284.6	5127.3	4989.0	4955.6	4793.5
10°	5853.2	5847.9	5802.6	5772.8	5705.4	5627.3	5506.3	5306.7	5111.8	5058.1	4832.8
12.5°	6126.2	6114.3	6095.8	6031.5	5976.6	5844.9	5698.9	5517.1	5300.1	5228.6	4900.2
15°	6371.8	6339.6	6329.5	6262.1	6206.7	6106.0	5959.3	5748.3	5516.5	5455.1	5028.3
17.5°	6605.5	6590.6	6567.9	6522.0	6460.0	6382.5	6265.1	6039.2	5799.6	5710.2	5245.9
20°	6804.0	6785.5	6765.8	6778.3	6764.6	6715.1	6641.2	6448.7	6156.0	6069.6	5510.5
22.5°	6942.2	6941.6	7020.3	7066.2	7092.4	7090.7	7072.8	6963.7	6669.2	6581.6	5906.3
25°	7057.3	7066.2	7165.8	7340.4	7496.6	7510.9	7637.2	7585.4	7335.0	7243.8	6501.8
27.5°	7091.2	7109.1	7289.7	7564.5	7801.7	8029.4	8214.8	8309.6	8077.7	7968.6	7141.9
30°	7115.7	7122.8	7299.9	7628.9	8129.0	8489.6	8821.0	8981.3	8781.7	8701.8	7855.4
32.5°	6943.4	6945.8	7217.0	7715.3	8369.2	8994.4	9386.7	9688.9	9636.4	9530.9	8635.6
35°	6706.2	6750.3	7061.4	7631.9	8567.1	9458.2	9992.2	10442.9	10547.8	10472.1	9415.3
37.5°	6412.9	6447.5	6780.7	7507.9	8610.6	9777.1	10463.1	11209.4	11483.6	11471.1	10356.4
40°	6052.3	6094.6	6493.4	7240.9	8589.1	10008.9	11015.7	12058.2	12406.3	12366.9	11289.9
42.5°	5626.2	5688.1	6075.0	6897.5	8432.4	10150.8	11468.1	12922.4	13548.9	13523.3	12116.0
45°	5204.7	5238.1	5591.0	6419.5	8143.9	10196.7	11893.7	14113.4	14720.7	14692.1	13111.4
47.5°	4770.2	4799.4	5167.8	5915.8	7643.2	10104.3	12230.4	15136.2	15914.6	15886.0	14100.2
50°	3759.3	3869.6	4624.8	5473.0	7072.8	9842.6	12548.1	16410.5	17164.0	17042.4	14966.3
52.5°	3216.3	3256.2	3647.8	5026.5	6503.5	9396.2	12760.3	17591.3	18191.6	18016.3	15852.0
55°	3006.5	3033.3	3225.2	4203.4	5968.9	8720.9	13010.1	18775.1	18962.3	18917.5	16574.5
57.5°	2847.3	2877.2	3014.2	3510.8	5405.6	7774.3	12932.0	19607.8	19842.0	19699.0	17341.6
60°	2622.0	2658.4	2840.2	3151.9	4765.4	6813.5	12244.7	19948.7	20481.6	20320.7	17925.1
62.5°	2480.2	2504.0	2608.3	2910.5	4235.0	6137.6	11266.6	19839.0	20802.9	20796.9	18431.2
65°	2287.7	2322.8	2434.3	2679.3	3762.9	5613.6	10343.9	19297.2	20664.6	20669.9	18535.5
67.5°	2086.2	2100.5	2217.3	2414.0	3206.8	5133.8	9150.0	18370.4	19587.5	19710.3	17813.7
70°	1834.7	1827.5	1953.9	2097.5	2620.8	4358.9	7364.8	16721.7	17996.1	18046.7	16353.9
72.5°	1443.6	1450.2	1485.4	1584.9	1989.6	3430.3	5344.2	14127.7	16332.5	16422.5	14488.3
75°	970.4	981.1	1145.0	1242.2	1431.1	2465.3	3360.6	9536.3	13807.0	14060.9	11857.9
77.5°	740.3	746.9	794.5	900.6	1035.3	1757.2	1821.5	5196.4	10051.8	10654.5	9276.4
80°	524.5	526.9	479.8	426.8	551.3	1192.1	1075.9	2213.1	4005.5	4733.3	5448.5
82.5°	234.8	231.3	272.4	226.5	317.7	461.3	507.8	1074.1	1663.6	1788.2	1946.7
85°	109.1	122.2	140.1	117.4	188.9	178.2	197.9	457.8	779.6	860.7	855.9
87.5°	26.8	29.2	37.0	47.1	68.5	60.8	59.6	134.7	174.0	173.5	266.4
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°	4657.0	4657.0	4657.0	4657.0	4657.0	4657.0	4657.0	4657.0	4657.0	4657.0	4657.0
2.5°	4659.9	4629.0	4555.6	4484.7	4417.4	4372.6	4322.6	4270.1	4238.5	4223.6	4255.8
5°	4683.2	4624.2	4484.1	4343.4	4224.2	4122.3	4050.8	3990.0	3957.2	3960.2	3962.0
7.5°	4702.9	4620.0	4423.9	4225.4	4039.5	3913.1	3819.5	3753.9	3716.4	3687.8	3709.2
10°	4720.1	4602.7	4353.6	4088.9	3886.9	3699.7	3572.7	3493.5	3424.3	3385.6	3416.0
12.5°	4738.6	4596.2	4274.9	3966.7	3705.1	3495.9	3321.8	3243.1	3175.2	3146.0	3164.4
15°	4819.1	4621.2	4201.6	3823.1	3525.7	3255.0	3067.3	2970.7	2917.1	2881.9	2889.7
17.5°	4957.4	4687.4	4154.5	3672.9	3325.4	3039.3	2796.1	2683.4	2594.6	2569.6	2563.0
20°	5154.1	4813.1	4154.5	3545.9	3098.3	2799.7	2519.5	2329.4	2191.1	2139.2	2179.2
22.5°	5484.3	5027.1	4195.6	3430.9	2902.8	2551.1	2217.3	1927.0	1740.5	1664.8	1708.9
25°	5946.2	5357.9	4262.4	3330.2	2724.6	2265.0	1834.1	1500.3	1294.6	1204.6	1203.4
27.5°	6549.4	5864.0	4397.1	3247.9	2511.2	1894.9	1434.1	1112.8	919.7	865.5	873.2
30°	7218.2	6412.3	4651.6	3128.7	2251.9	1480.6	1044.3	817.8	681.9	610.4	611.6
32.5°	7863.1	6980.4	4953.8	3051.2	1915.1	1116.4	744.5	583.5	498.9	456.6	463.1
35°	8554.6	7470.3	5178.5	2921.3	1519.9	807.1	526.3	437.5	402.3	380.3	381.5
37.5°	9301.4	8009.2	5363.3	2747.2	1149.2	554.3	388.6	374.9	360.0	332.0	329.6
40°	10081.7	8633.2	5473.6	2465.9	798.7	383.9	330.2	345.7	337.4	301.0	298.0
42.5°	10743.3	9114.9	5501.0	2093.3	516.8	311.1	299.2	323.1	324.8	287.9	283.1
45°	11378.7	9544.0	5447.3	1602.8	358.2	292.7	280.1	312.9	315.3	281.9	274.2
47.5°	12089.8	10131.1	5350.2	1069.3	296.2	276.6	273.6	296.2	304.6	277.2	267.6
50°	12953.4	10608.6	5062.3	656.9	279.5	266.4	266.4	280.1	291.5	267.6	262.9
52.5°	13839.2	11024.6	4636.1	450.6	269.4	255.7	263.5	269.4	273.6	252.1	256.3
55°	14474.0	11393.6	4000.7	362.4	263.5	248.6	267.0	255.1	249.2	230.7	226.5
57.5°	15178.5	11832.3	3351.0	321.3	255.7	252.7	255.1	232.5	215.8	196.7	192.5
60°	15670.2	12068.3	2555.9	302.2	246.8	248.6	235.4	205.0	174.6	160.9	158.0
62.5°	16099.4	12203.0	1873.4	277.8	238.4	237.8	213.4	175.2	143.6	128.7	126.4
65°	16034.4	11992.6	1214.2	258.1	231.9	224.1	191.3	150.2	119.8	108.5	107.3
67.5°	15319.8	11061.6	764.7	237.8	220.5	206.8	171.7	134.1	110.3	97.2	96.0
70°	13819.5	9775.9	467.9	211.6	196.1	183.0	152.0	125.8	104.3	88.8	85.8
72.5°	11745.8	8372.8	330.8	186.6	171.1	155.6	128.7	119.8	99.5	79.9	77.5
75°	9650.1	6167.4	277.2	162.7	146.0	125.2	109.7	111.5	93.6	72.7	70.9
77.5°	6795.6	3845.1	258.1	132.9	115.0	99.5	94.8	101.9	85.8	66.8	65.0
80°	3966.1	2159.5	213.4	104.9	86.4	76.9	79.3	86.4	75.1	60.2	57.8
82.5°	1601.0	854.7	150.2	81.7	63.2	61.4	65.0	70.3	62.0	50.7	49.5
85°	571.6	267.0	85.2	53.6	40.5	42.3	41.7	50.1	44.7	37.0	36.4
87.5°	150.2	53.0	38.1	21.5	17.3	17.3	16.1	23.2	21.5	16.7	18.5
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)