

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: P510436

Luminaire Tested: **CST-CA10-210-750-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510436
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-CA10-210-750-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32348 lumens
Efficiency: N/A
Efficacy: 151.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

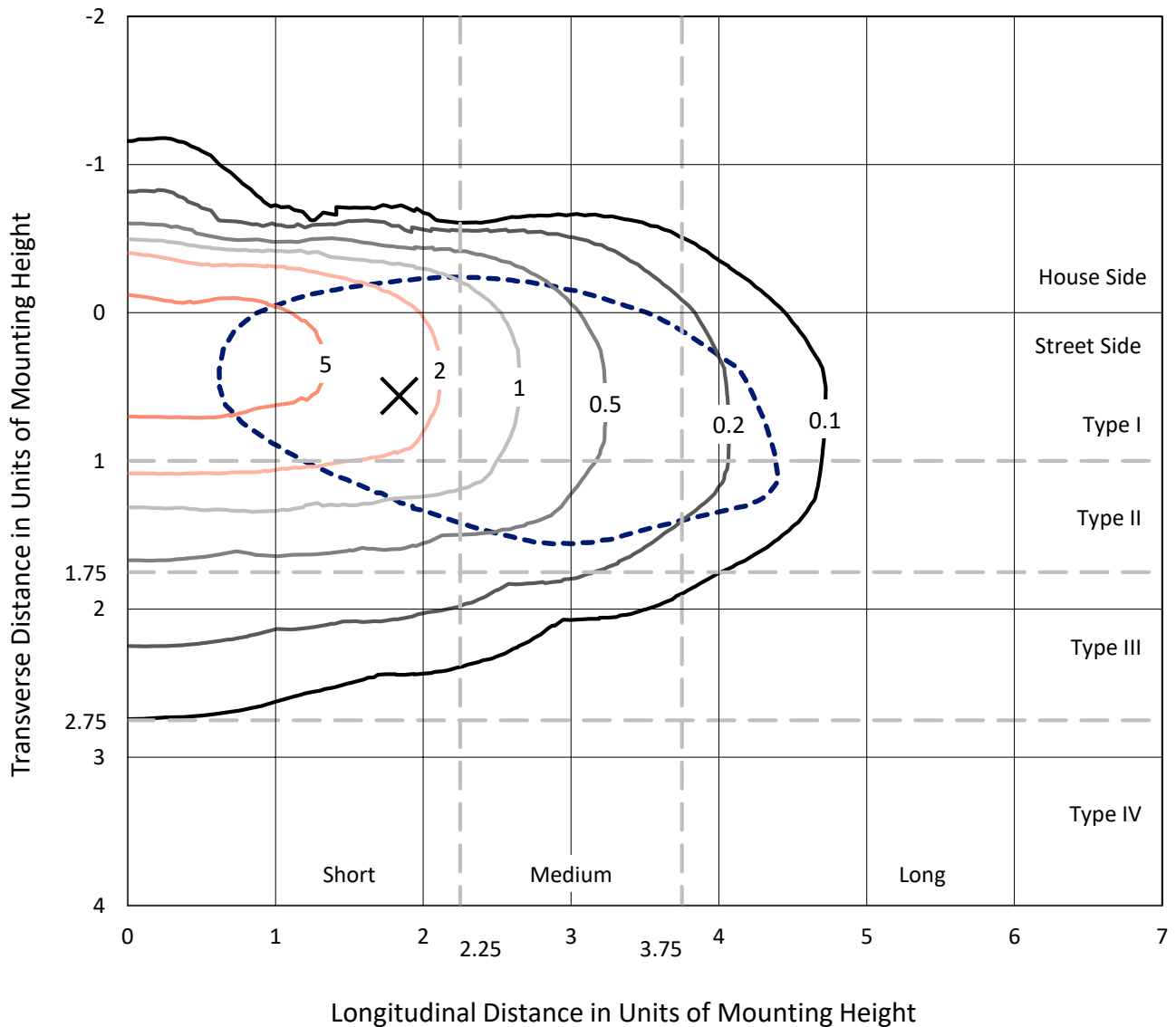
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

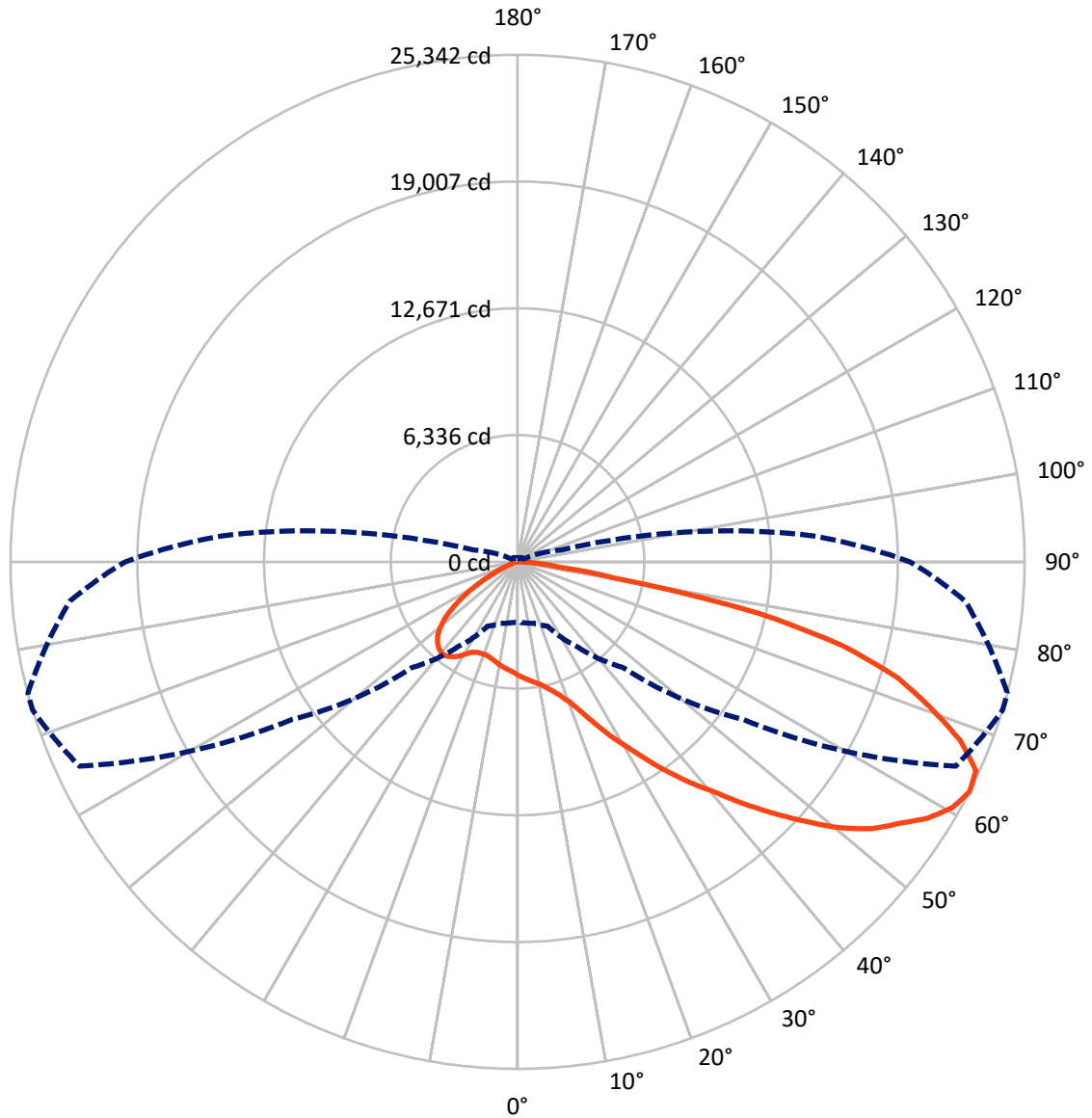
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.9 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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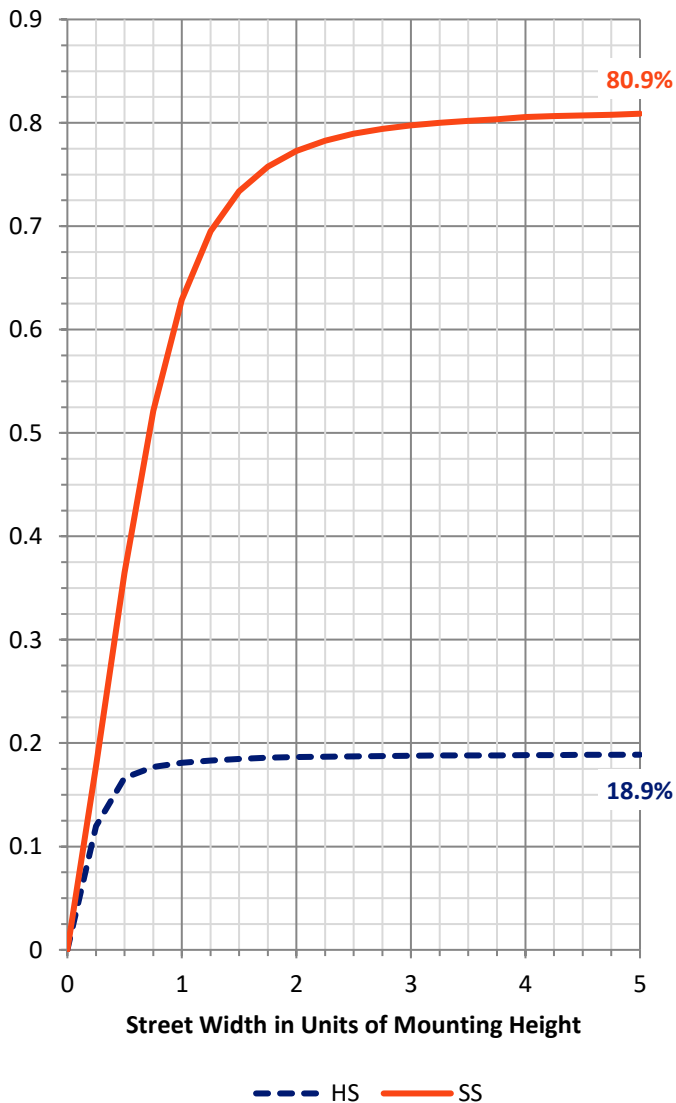
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6188.0	0.0	6188.0
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	26160.0	0.0	26160.0
	% Fixture	80.9	0.0	80.9
Total	Lumens	32348.0	0.0	32348.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	541.8	1.7
10°-20°	1629.8	5.0
20°-30°	2815.9	8.7
30°-40°	4234.4	13.1
40°-50°	5646.2	17.5
50°-60°	6649.6	20.6
60°-70°	6610.8	20.4
70°-80°	3795.4	11.7
80°-90°	424.0	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°	32348.0	100.0
0°-180°	32348.0	100.0

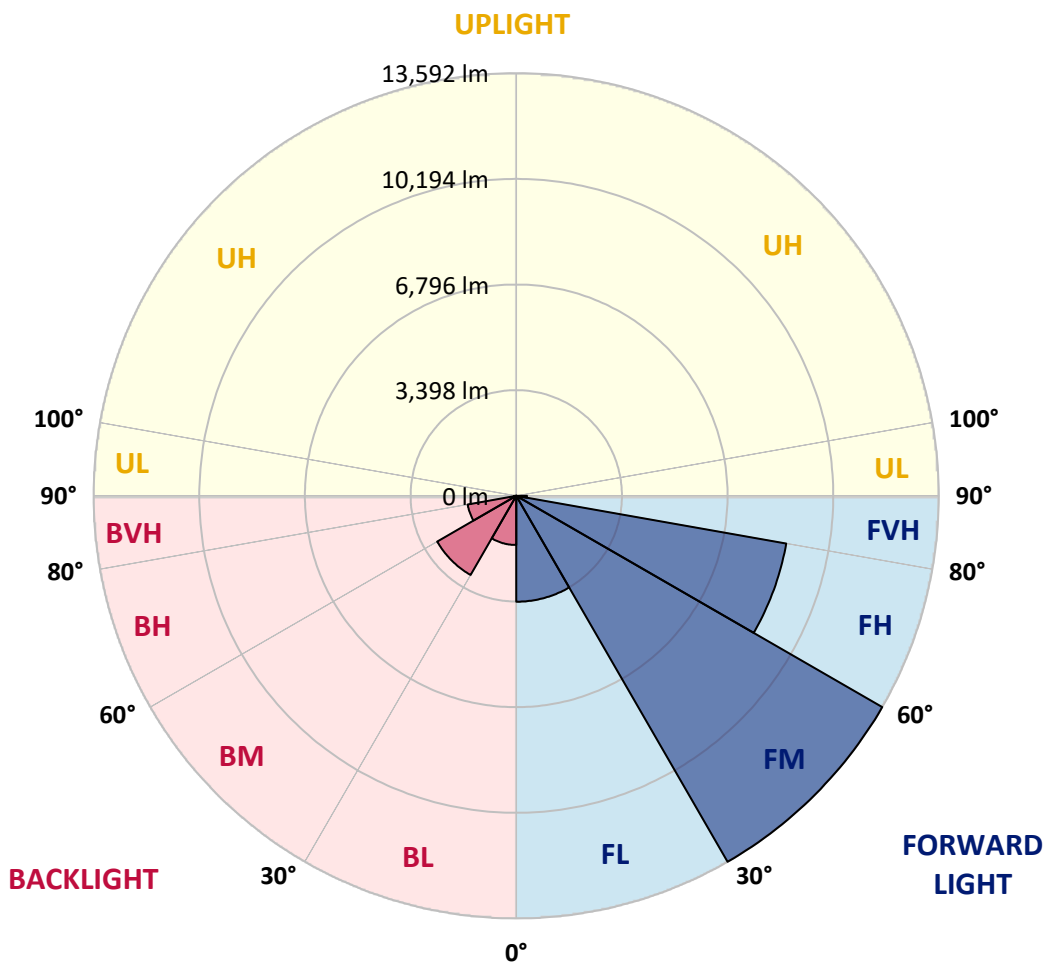


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3406.2	10.5			
FM (30°-60°)	13591.9	42.0			
FH (60°-80°)	8817.6	27.3			G4/12000
FVH (80°-90°)	344.4	1.1			G3/500
BL (0°-30°)	1581.3	4.9	B3/2500		
BM (30°-60°)	2938.4	9.1	B3/5000		
BH (60°-80°)	1588.7	4.9	B3/2500		G3/2500
BVH (80°-90°)	79.6	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-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	5673.1	5673.1	5673.1	5673.1	5673.1	5673.1	5673.1	5673.1	5673.1	5673.1	5673.1
2.5°	6069.6	6084.8	6066.7	6058.7	6050.0	5993.3	5927.2	5859.7	5805.3	5796.5	5725.4
5°	6495.8	6503.8	6474.0	6439.9	6381.1	6287.4	6169.0	6052.1	5943.2	5914.2	5784.2
7.5°	6823.3	6808.0	6800.8	6771.7	6720.2	6617.0	6437.7	6246.0	6077.5	6036.9	5839.4
10°	7130.4	7123.9	7068.7	7032.4	6950.3	6855.2	6707.8	6464.6	6227.1	6161.8	5887.3
12.5°	7463.0	7448.4	7425.9	7347.5	7280.7	7120.2	6942.3	6720.9	6456.6	6369.4	5969.4
15°	7762.1	7722.9	7710.6	7628.5	7561.0	7438.3	7259.7	7002.6	6720.2	6645.4	6125.5
17.5°	8046.8	8028.6	8001.0	7945.1	7869.6	7775.2	7632.1	7357.0	7065.1	6956.1	6390.5
20°	8288.6	8266.0	8242.1	8257.3	8240.6	8180.4	8090.3	7855.8	7499.3	7394.0	6712.9
22.5°	8457.0	8456.3	8552.1	8608.0	8640.0	8637.8	8616.0	8483.2	8124.5	8017.7	7195.0
25°	8597.2	8608.0	8729.3	8942.1	9132.3	9149.7	9303.7	9240.5	8935.5	8824.4	7920.4
27.5°	8638.5	8660.3	8880.3	9215.1	9504.1	9781.4	10007.3	10122.7	9840.3	9707.4	8700.3
30°	8668.3	8677.0	8892.7	9293.5	9902.7	10342.0	10745.7	10941.0	10697.8	10600.5	9569.4
32.5°	8458.5	8461.4	8791.7	9398.8	10195.3	10957.0	11434.8	11802.9	11739.0	11610.5	10519.9
35°	8169.5	8223.2	8602.2	9297.1	10436.4	11521.9	12172.5	12721.5	12849.3	12757.0	11469.6
37.5°	7812.2	7854.3	8260.2	9146.1	10489.4	11910.4	12746.1	13655.2	13989.2	13974.0	12616.2
40°	7372.9	7424.5	7910.2	8820.8	10463.3	12192.9	13419.3	14689.2	15113.3	15065.3	13753.3
42.5°	6853.8	6929.3	7400.5	8402.6	10272.3	12365.7	13970.4	15742.1	16505.2	16474.0	14759.7
45°	6340.4	6381.1	6810.9	7820.2	9920.9	12421.6	14488.8	17192.8	17932.8	17897.9	15972.3
47.5°	5811.1	5846.6	6295.4	7206.6	9310.9	12309.0	14899.1	18438.9	19387.2	19352.3	17176.9
50°	4579.6	4713.9	5633.9	6667.1	8616.0	11990.3	15286.1	19991.3	20909.1	20761.0	18231.9
52.5°	3918.1	3966.7	4443.8	6123.3	7922.6	11446.4	15544.6	21429.7	22160.9	21947.4	19310.9
55°	3662.5	3695.2	3929.0	5120.5	7271.3	10623.7	15848.8	22871.8	23099.8	23045.3	20191.0
57.5°	3468.6	3504.9	3671.9	4276.8	6585.1	9470.7	15753.7	23886.1	24171.5	23997.2	21125.5
60°	3194.2	3238.5	3459.9	3839.7	5805.3	8300.2	14916.5	24301.5	24950.6	24754.6	21836.3
62.5°	3021.3	3050.4	3177.5	3545.6	5159.0	7476.8	13724.9	24167.9	25342.0	25334.7	22452.8
65°	2786.8	2829.7	2965.4	3263.9	4583.9	6838.5	12600.9	23507.8	25173.5	25180.1	22579.9
67.5°	2541.4	2558.8	2701.1	2940.7	3906.5	6254.0	11146.5	22378.7	23861.4	24011.0	21700.5
70°	2235.0	2226.3	2380.2	2555.2	3192.7	5310.0	8971.8	20370.3	21922.7	21984.5	19922.3
72.5°	1758.6	1766.6	1809.5	1930.7	2423.8	4178.8	6510.3	17210.3	19896.2	20005.8	17649.6
75°	1182.1	1195.2	1394.9	1513.2	1743.4	3003.2	4093.8	11617.0	16819.6	17129.0	14445.2
77.5°	901.8	909.8	967.9	1097.2	1261.3	2140.6	2219.0	6330.2	12245.1	12979.2	11300.5
80°	639.0	641.9	584.5	519.9	671.7	1452.2	1310.6	2696.0	4879.5	5766.0	6637.4
82.5°	286.1	281.7	331.8	275.9	387.0	562.0	618.6	1308.5	2026.6	2178.3	2371.5
85°	132.9	148.9	170.6	143.0	230.2	217.1	241.1	557.7	949.8	1048.5	1042.7
87.5°	32.7	35.6	45.0	57.4	83.5	74.1	72.6	164.1	212.0	211.3	324.6
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°	5673.1	5673.1	5673.1	5673.1	5673.1	5673.1	5673.1	5673.1	5673.1	5673.1	5673.1
2.5°	5676.7	5639.0	5549.7	5463.3	5381.2	5326.7	5265.8	5201.9	5163.4	5145.2	5184.4
5°	5705.1	5633.2	5462.5	5291.2	5145.9	5021.8	4934.6	4860.6	4820.6	4824.3	4826.5
7.5°	5729.0	5628.1	5389.2	5147.4	4920.9	4766.9	4652.9	4573.0	4527.3	4492.4	4518.6
10°	5750.1	5607.0	5303.5	4981.1	4735.0	4507.0	4352.3	4255.7	4171.5	4124.3	4161.3
12.5°	5772.6	5599.0	5207.7	4832.3	4513.5	4258.6	4046.6	3950.8	3868.0	3832.4	3854.9
15°	5870.6	5629.5	5118.4	4657.3	4294.9	3965.3	3736.6	3618.9	3553.6	3510.7	3520.2
17.5°	6039.1	5710.1	5061.0	4474.3	4051.0	3702.4	3406.2	3269.0	3160.8	3130.3	3122.3
20°	6278.7	5863.3	5061.0	4319.6	3774.3	3410.5	3069.3	2837.6	2669.2	2606.0	2654.7
22.5°	6680.9	6124.0	5111.1	4179.5	3536.2	3107.8	2701.1	2347.5	2120.2	2028.0	2081.8
25°	7243.7	6527.0	5192.4	4056.8	3319.1	2759.2	2234.2	1827.6	1577.1	1467.5	1466.0
27.5°	7978.5	7143.5	5356.5	3956.6	3059.1	2308.3	1747.0	1355.6	1120.4	1054.3	1063.8
30°	8793.2	7811.5	5666.6	3811.4	2743.2	1803.7	1272.1	996.2	830.7	743.5	745.0
32.5°	9578.9	8503.5	6034.7	3717.0	2333.0	1360.0	906.9	710.9	607.8	556.2	564.2
35°	10421.1	9100.3	6308.4	3558.7	1851.6	983.2	641.2	533.0	490.1	463.3	464.7
37.5°	11331.0	9756.7	6533.5	3346.6	1399.9	675.3	473.4	456.7	438.6	404.4	401.5
40°	12281.4	10517.0	6667.9	3003.9	973.0	467.6	402.3	421.1	411.0	366.7	363.1
42.5°	13087.4	11103.7	6701.3	2550.1	629.5	379.0	364.5	393.6	395.7	350.7	344.9
45°	13861.5	11626.5	6635.9	1952.5	436.4	356.5	341.3	381.2	384.1	343.5	334.0
47.5°	14727.7	12341.7	6517.6	1302.6	360.9	336.9	333.3	360.9	371.0	337.6	326.0
50°	15779.8	12923.3	6166.9	800.2	340.5	324.6	324.6	341.3	355.1	326.0	320.2
52.5°	16858.8	13430.1	5647.7	548.9	328.2	311.5	320.9	328.2	333.3	307.1	312.2
55°	17632.1	13879.6	4873.7	441.5	320.9	302.8	325.3	310.8	303.5	281.0	275.9
57.5°	18490.4	14414.0	4082.2	391.4	311.5	307.9	310.8	283.2	262.9	239.6	234.5
60°	19089.4	14701.6	3113.6	368.1	300.6	302.8	286.8	249.8	212.8	196.0	192.4
62.5°	19612.2	14865.7	2282.2	338.4	290.4	289.7	259.9	213.5	175.0	156.8	153.9
65°	19533.1	14609.3	1479.1	314.4	282.5	273.0	233.1	183.0	145.9	132.2	130.7
67.5°	18662.5	13475.2	931.6	289.7	268.7	252.0	209.1	163.4	134.3	118.4	116.9
70°	16834.9	11908.9	570.0	257.8	238.9	222.9	185.2	153.2	127.1	108.2	104.6
72.5°	14308.7	10199.7	403.0	227.3	208.4	189.5	156.8	145.9	121.3	97.3	94.4
75°	11755.7	7513.1	337.6	198.2	177.9	152.5	133.6	135.8	114.0	88.6	86.4
77.5°	8278.4	4684.1	314.4	161.9	140.1	121.3	115.5	124.2	104.6	81.3	79.1
80°	4831.5	2630.7	259.9	127.8	105.3	93.7	96.6	105.3	91.5	73.3	70.4
82.5°	1950.3	1041.2	183.0	99.5	77.0	74.8	79.1	85.7	75.5	61.7	60.3
85°	696.3	325.3	103.8	65.3	49.4	51.6	50.8	61.0	54.5	45.0	44.3
87.5°	183.0	64.6	46.5	26.1	21.1	21.1	19.6	28.3	26.1	20.3	22.5
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)