

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: P510406

Luminaire Tested: **CST-CA10-210-727-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510406
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-CA10-210-727-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26899 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

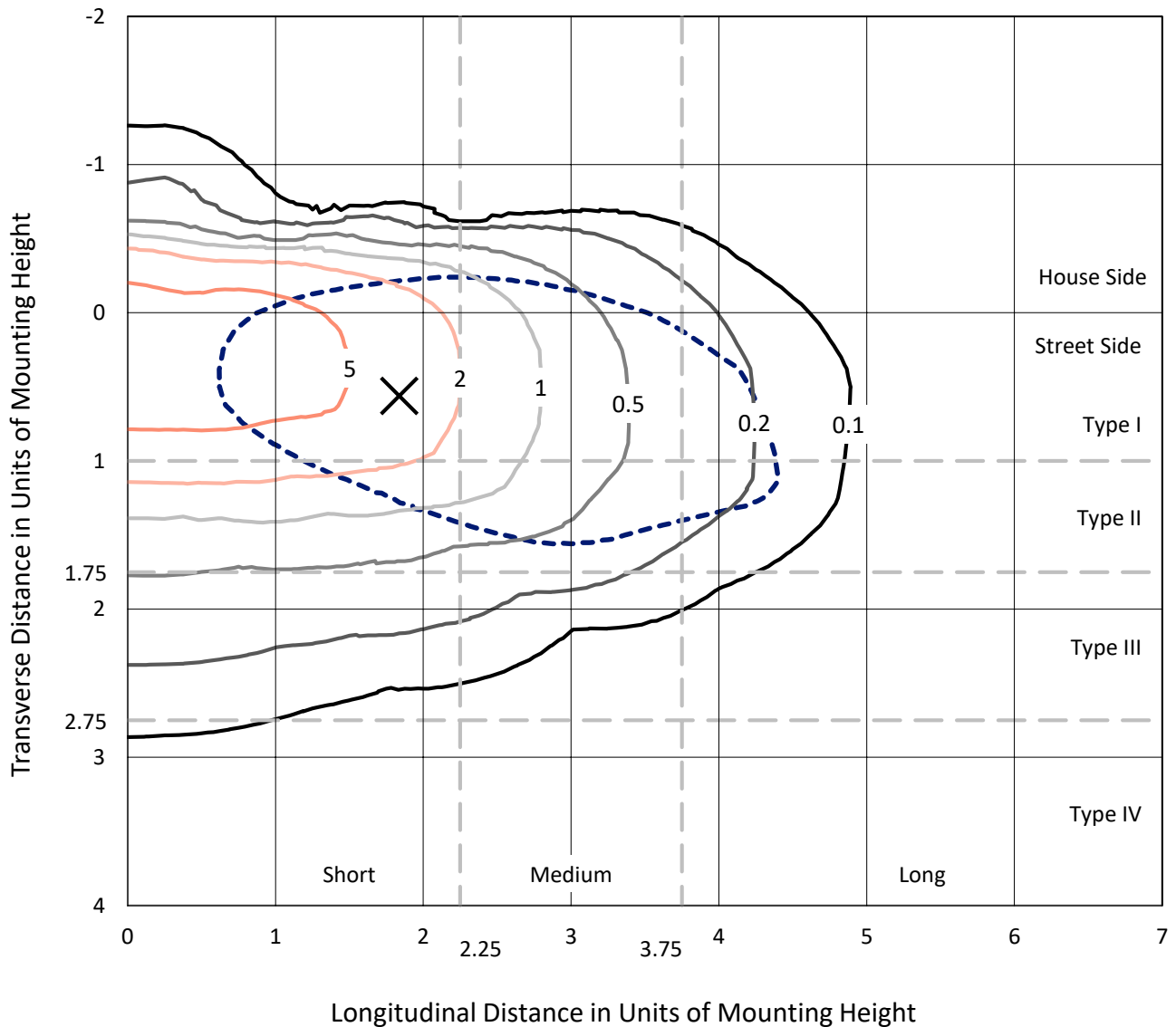
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510406
 CATALOG NUMBER: CST-CA10-210-727-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

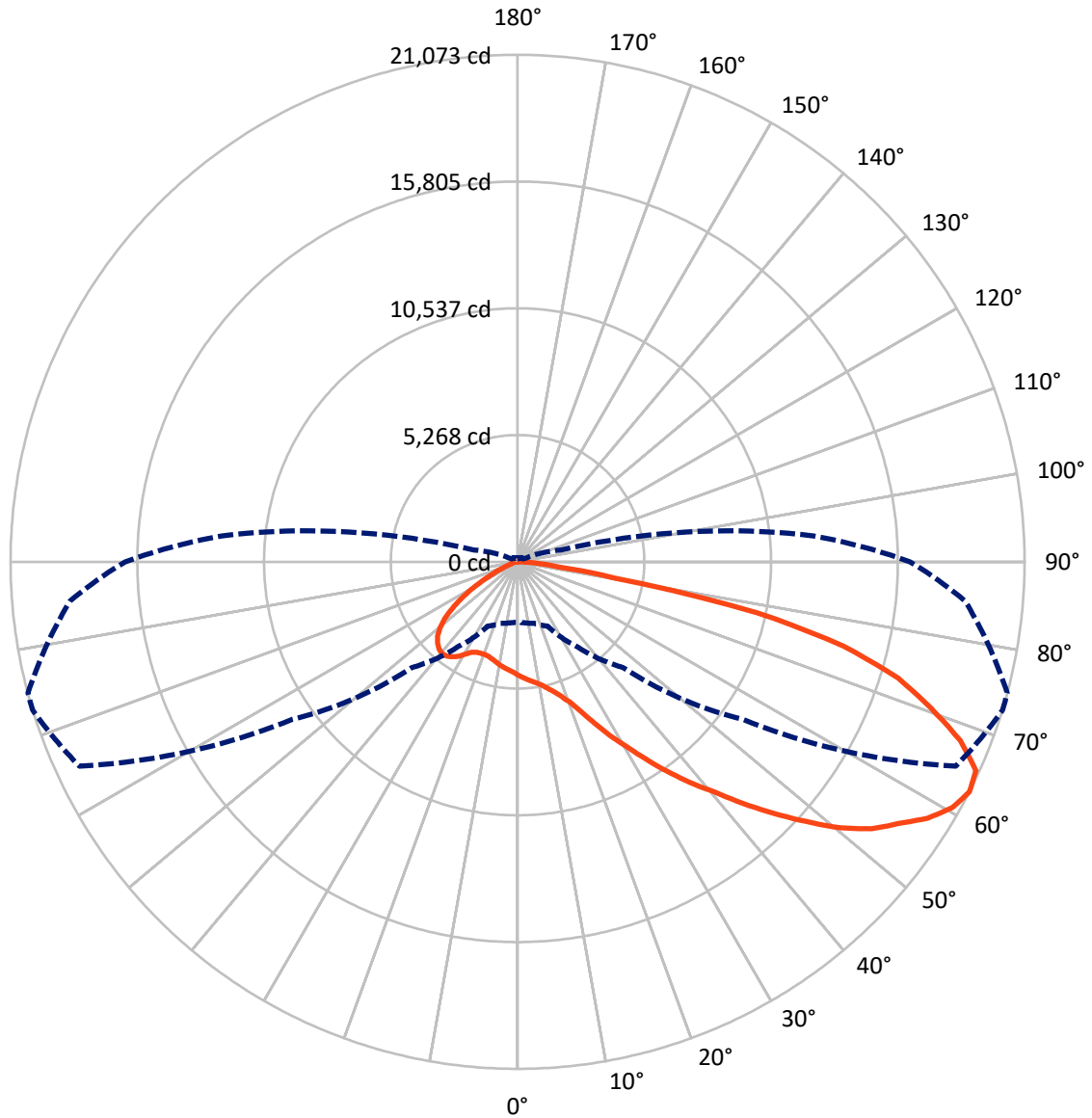
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
 Type II - Short - N/A

REPORT NUMBER: P510406
CATALOG NUMBER: CST-CA10-210-727-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510406
 CATALOG NUMBER: CST-CA10-210-727-U-T2-HSS

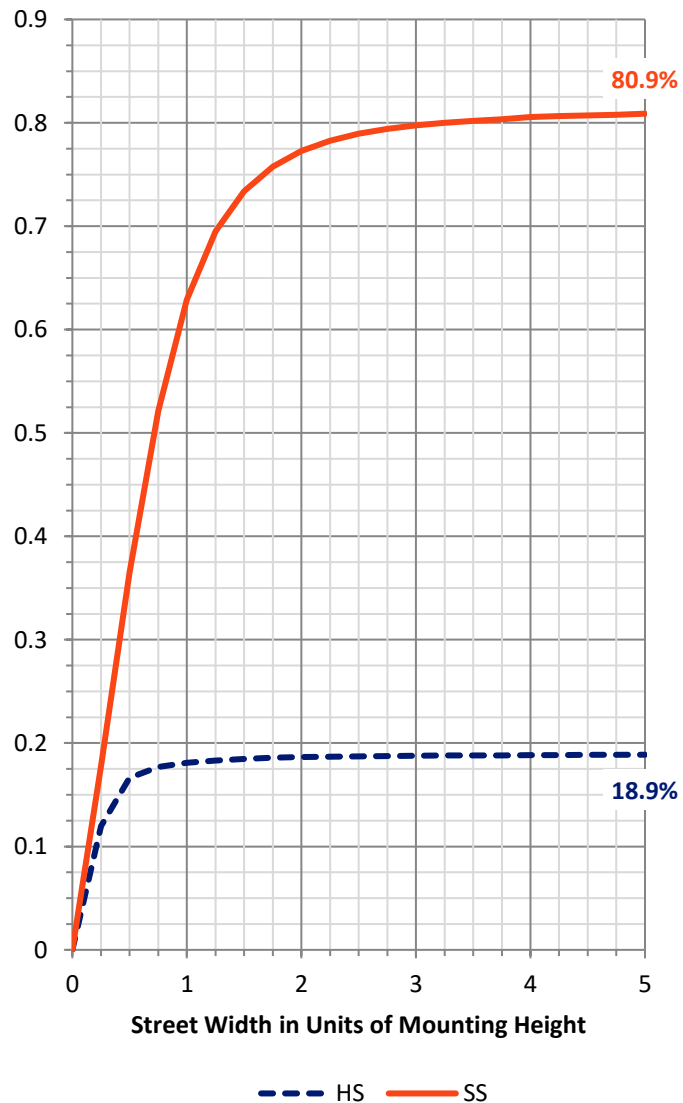
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5145.6	0.0	5145.6
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	21753.3	0.0	21753.3
	% Fixture	80.9	0.0	80.9
Total	Lumens	26899.0	0.0	26899.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	450.6	1.7
10°-20°	1355.2	5.0
20°-30°	2341.6	8.7
30°-40°	3521.2	13.1
40°-50°	4695.1	17.5
50°-60°	5529.4	20.6
60°-70°	5497.2	20.4
70°-80°	3156.1	11.7
80°-90°	352.6	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°	26899.0	100.0
0°-180°	26899.0	100.0

Coefficient of Utilization

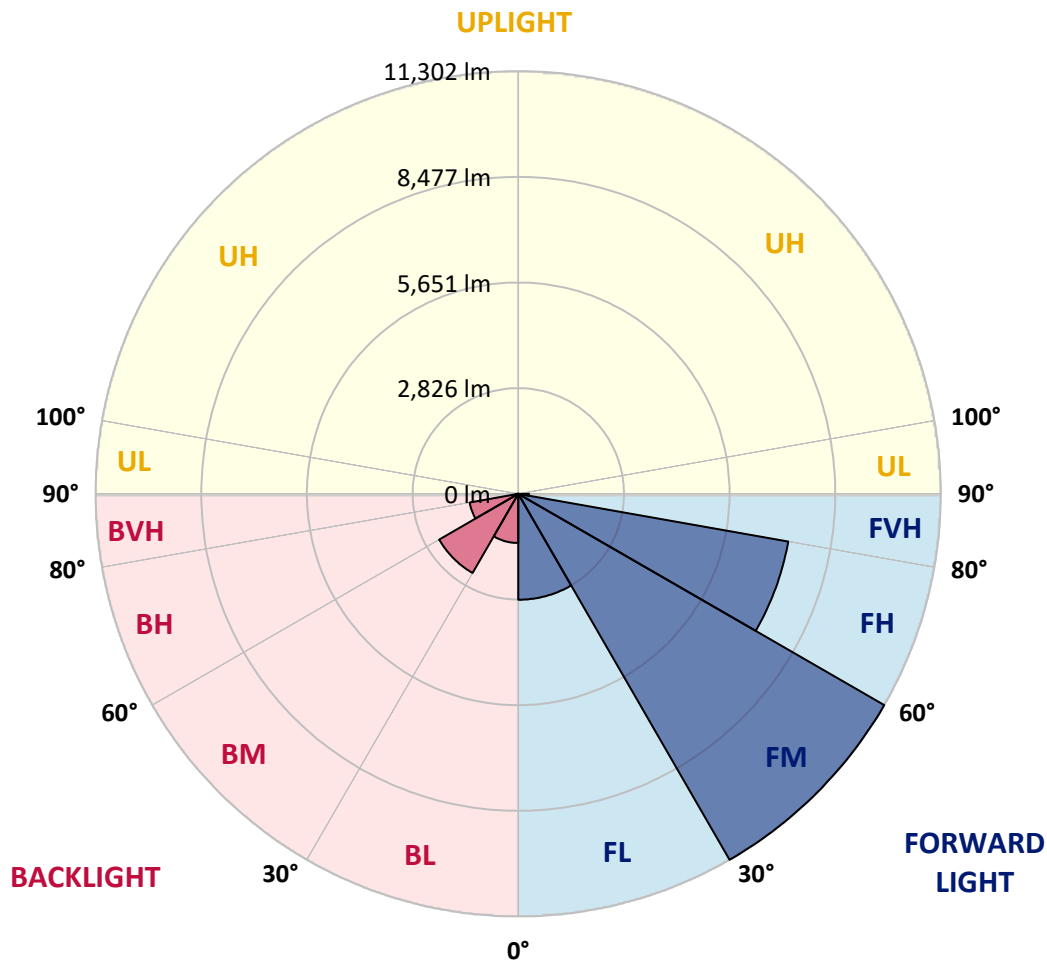


REPORT NUMBER: P510406
 CATALOG NUMBER: CST-CA10-210-727-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2832.4	10.5			
FM (30°-60°)	11302.3	42.0			
FH (60°-80°)	7332.3	27.3			G3/7500
FVH (80°-90°)	286.4	1.1			G3/500
BL (0°-30°)	1315.0	4.9	B3/2500		
BM (30°-60°)	2443.4	9.1	B2/2500		
BH (60°-80°)	1321.1	4.9	B3/2500		G3/2500
BVH (80°-90°)	66.2	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





REPORT NUMBER: P510406

CATALOG NUMBER: CST-CA10-210-727-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	4717.5	4717.5	4717.5	4717.5	4717.5	4717.5	4717.5	4717.5	4717.5	4717.5	4717.5
2.5°	5047.1	5059.8	5044.7	5038.1	5030.8	4983.7	4928.8	4872.6	4827.4	4820.1	4760.9
5°	5401.6	5408.2	5383.5	5355.1	5306.2	5228.3	5129.9	5032.7	4942.1	4917.9	4809.9
7.5°	5673.9	5661.2	5655.2	5631.0	5588.1	5502.4	5353.3	5193.9	5053.8	5020.0	4855.7
10°	5929.3	5923.9	5878.0	5847.8	5779.6	5700.5	5577.9	5375.6	5178.2	5123.8	4895.6
12.5°	6205.8	6193.8	6175.0	6109.8	6054.3	5920.8	5772.9	5588.8	5369.0	5296.5	4963.8
15°	6454.6	6422.0	6411.7	6343.5	6287.3	6185.3	6036.8	5823.0	5588.1	5526.0	5093.6
17.5°	6691.3	6676.2	6653.2	6606.8	6544.0	6465.5	6346.5	6117.7	5875.0	5784.4	5314.0
20°	6892.4	6873.6	6853.7	6866.4	6852.5	6802.4	6727.5	6532.5	6236.0	6148.5	5582.1
22.5°	7032.4	7031.8	7111.5	7158.0	7184.6	7182.8	7164.7	7054.2	6755.9	6667.1	5983.0
25°	7149.0	7158.0	7258.9	7435.8	7594.0	7608.5	7736.5	7683.9	7430.3	7338.0	6586.2
27.5°	7183.4	7201.5	7384.4	7662.8	7903.1	8133.8	8321.5	8417.5	8182.7	8072.2	7234.7
30°	7208.1	7215.4	7394.7	7728.0	8234.6	8599.9	8935.6	9098.0	8895.8	8814.8	7957.5
32.5°	7033.6	7036.1	7310.8	7815.6	8477.9	9111.3	9508.6	9814.7	9761.6	9654.7	8747.8
35°	6793.3	6838.0	7153.2	7731.0	8678.4	9581.1	10122.1	10578.5	10684.8	10608.1	9537.6
37.5°	6496.3	6531.3	6868.8	7605.4	8722.5	9904.1	10599.1	11355.0	11632.8	11620.1	10491.0
40°	6131.0	6173.8	6577.8	7334.9	8700.7	10139.0	11158.8	12214.8	12567.4	12527.6	11436.5
42.5°	5699.2	5762.0	6153.9	6987.1	8541.9	10282.7	11617.1	13090.3	13724.9	13699.0	12273.4
45°	5272.4	5306.2	5663.6	6502.9	8249.7	10329.2	12048.2	14296.7	14912.0	14883.0	13281.7
47.5°	4832.2	4861.8	5234.9	5992.7	7742.5	10235.6	12389.3	15332.8	16121.4	16092.4	14283.4
50°	3808.2	3919.9	4684.9	5544.1	7164.7	9970.5	12711.2	16623.8	17387.0	17263.8	15160.8
52.5°	3258.1	3298.5	3695.2	5091.8	6588.0	9518.3	12926.1	17819.9	18427.9	18250.4	16058.0
55°	3045.6	3072.7	3267.1	4258.0	6046.4	8834.2	13179.1	19019.0	19208.6	19163.3	16789.8
57.5°	2884.3	2914.5	3053.4	3556.4	5475.8	7875.3	13100.0	19862.5	20099.8	19954.9	17566.9
60°	2656.1	2692.9	2877.1	3192.9	4827.4	6902.0	12403.8	20207.9	20747.7	20584.7	18158.0
62.5°	2512.4	2536.6	2642.2	2948.3	4290.0	6217.3	11413.0	20096.8	21073.1	21067.1	18670.6
65°	2317.4	2353.0	2465.9	2714.1	3811.8	5686.6	10478.3	19548.0	20933.1	20938.5	18776.3
67.5°	2113.3	2127.8	2246.1	2445.4	3248.4	5200.5	9268.9	18609.0	19842.0	19966.4	18045.1
70°	1858.5	1851.2	1979.2	2124.8	2654.9	4415.6	7460.5	16938.9	18229.9	18281.2	16566.4
72.5°	1462.4	1469.0	1504.7	1605.5	2015.5	3474.9	5413.7	14311.2	16544.7	16635.8	14676.5
75°	983.0	993.9	1159.9	1258.3	1449.7	2497.3	3404.2	9660.2	13986.4	14243.6	12012.0
77.5°	749.9	756.6	804.9	912.3	1048.8	1780.0	1845.2	5263.9	10182.4	10792.9	9396.9
80°	531.3	533.8	486.1	432.3	558.5	1207.6	1089.9	2241.9	4057.5	4794.8	5519.3
82.5°	237.9	234.3	275.9	229.4	321.8	467.3	514.4	1088.0	1685.2	1811.4	1972.0
85°	110.5	123.8	141.9	118.9	191.4	180.5	200.5	463.7	789.8	871.9	867.1
87.5°	27.2	29.6	37.4	47.7	69.4	61.6	60.4	136.5	176.3	175.7	269.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P510406

CATALOG NUMBER: CST-CA10-210-727-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4717.5	4717.5	4717.5	4717.5	4717.5	4717.5	4717.5	4717.5	4717.5	4717.5	4717.5
2.5°	4720.5	4689.1	4614.8	4543.0	4474.7	4429.5	4378.7	4325.6	4293.6	4278.5	4311.1
5°	4744.0	4684.3	4542.4	4399.9	4279.1	4175.9	4103.4	4041.8	4008.6	4011.6	4013.4
7.5°	4764.0	4680.0	4481.4	4280.3	4091.9	3963.9	3869.1	3802.7	3764.7	3735.7	3757.4
10°	4781.5	4662.5	4410.1	4142.1	3937.4	3747.8	3619.2	3538.9	3468.8	3429.6	3460.4
12.5°	4800.2	4655.9	4330.4	4018.3	3753.2	3541.3	3365.0	3285.3	3216.4	3186.8	3205.6
15°	4881.7	4681.2	4256.2	3872.8	3571.5	3297.3	3107.1	3009.3	2955.0	2919.4	2927.2
17.5°	5021.8	4748.3	4208.5	3720.6	3368.6	3078.8	2832.4	2718.3	2628.3	2603.0	2596.3
20°	5221.0	4875.7	4208.5	3592.0	3138.5	2836.0	2552.3	2359.6	2219.6	2167.0	2207.5
22.5°	5555.5	5092.4	4250.1	3475.5	2940.5	2584.3	2246.1	1952.1	1763.1	1686.4	1731.1
25°	6023.5	5427.5	4317.8	3373.4	2760.0	2294.4	1857.9	1519.8	1311.4	1220.3	1219.1
27.5°	6634.5	5940.2	4454.2	3290.1	2543.8	1919.5	1452.7	1127.3	931.7	876.7	884.6
30°	7312.0	6495.7	4712.0	3169.3	2281.1	1499.8	1057.9	828.4	690.7	618.3	619.5
32.5°	7965.3	7071.1	5018.2	3090.8	1940.0	1130.9	754.1	591.1	505.4	462.5	469.2
35°	8665.7	7567.4	5245.8	2959.2	1539.7	817.5	533.2	443.2	407.6	385.2	386.4
37.5°	9422.3	8113.2	5433.0	2782.9	1164.1	561.5	393.7	379.8	364.7	336.3	333.9
40°	10212.6	8745.4	5544.7	2497.9	809.1	388.8	334.5	350.2	341.7	304.9	301.9
42.5°	10882.9	9233.3	5572.4	2120.5	523.5	315.2	303.1	327.3	329.1	291.6	286.8
45°	11526.5	9668.0	5518.1	1623.6	362.9	296.5	283.8	317.0	319.4	285.6	277.7
47.5°	12246.8	10262.8	5419.7	1083.2	300.1	280.2	277.1	300.1	308.5	280.8	271.1
50°	13121.7	10746.4	5128.1	665.4	283.2	269.9	269.9	283.8	295.3	271.1	266.3
52.5°	14019.0	11167.8	4696.3	456.5	272.9	259.0	266.9	272.9	277.1	255.4	259.6
55°	14662.0	11541.6	4052.7	367.1	266.9	251.8	270.5	258.4	252.4	233.7	229.4
57.5°	15375.7	11986.0	3394.6	325.4	259.0	256.0	258.4	235.5	218.6	199.3	195.0
60°	15873.8	12225.1	2589.1	306.1	250.0	251.8	238.5	207.7	176.9	163.0	160.0
62.5°	16308.6	12361.6	1897.7	281.4	241.5	240.9	216.2	177.5	145.5	130.4	128.0
65°	16242.8	12148.4	1229.9	261.4	234.9	227.0	193.8	152.2	121.4	109.9	108.7
67.5°	15518.8	11205.3	774.7	240.9	223.4	209.5	173.9	135.9	111.7	98.4	97.2
70°	13999.1	9902.9	474.0	214.3	198.6	185.4	154.0	127.4	105.7	90.0	86.9
72.5°	11898.4	8481.5	335.1	189.0	173.3	157.6	130.4	121.4	100.8	80.9	78.5
75°	9775.5	6247.5	280.8	164.8	147.9	126.8	111.1	112.9	94.8	73.7	71.9
77.5°	6883.9	3895.1	261.4	134.6	116.5	100.8	96.0	103.2	86.9	67.6	65.8
80°	4017.7	2187.6	216.2	106.3	87.6	77.9	80.3	87.6	76.1	61.0	58.6
82.5°	1621.8	865.8	152.2	82.7	64.0	62.2	65.8	71.2	62.8	51.3	50.1
85°	579.0	270.5	86.3	54.3	41.1	42.9	42.3	50.7	45.3	37.4	36.8
87.5°	152.2	53.7	38.6	21.7	17.5	17.5	16.3	23.5	21.7	16.9	18.7
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)