

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: P510668

Luminaire Tested: **CST-CA6-230-740-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510668
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA6-230-740-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32134 lumens
Efficiency: N/A
Efficacy: 141.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

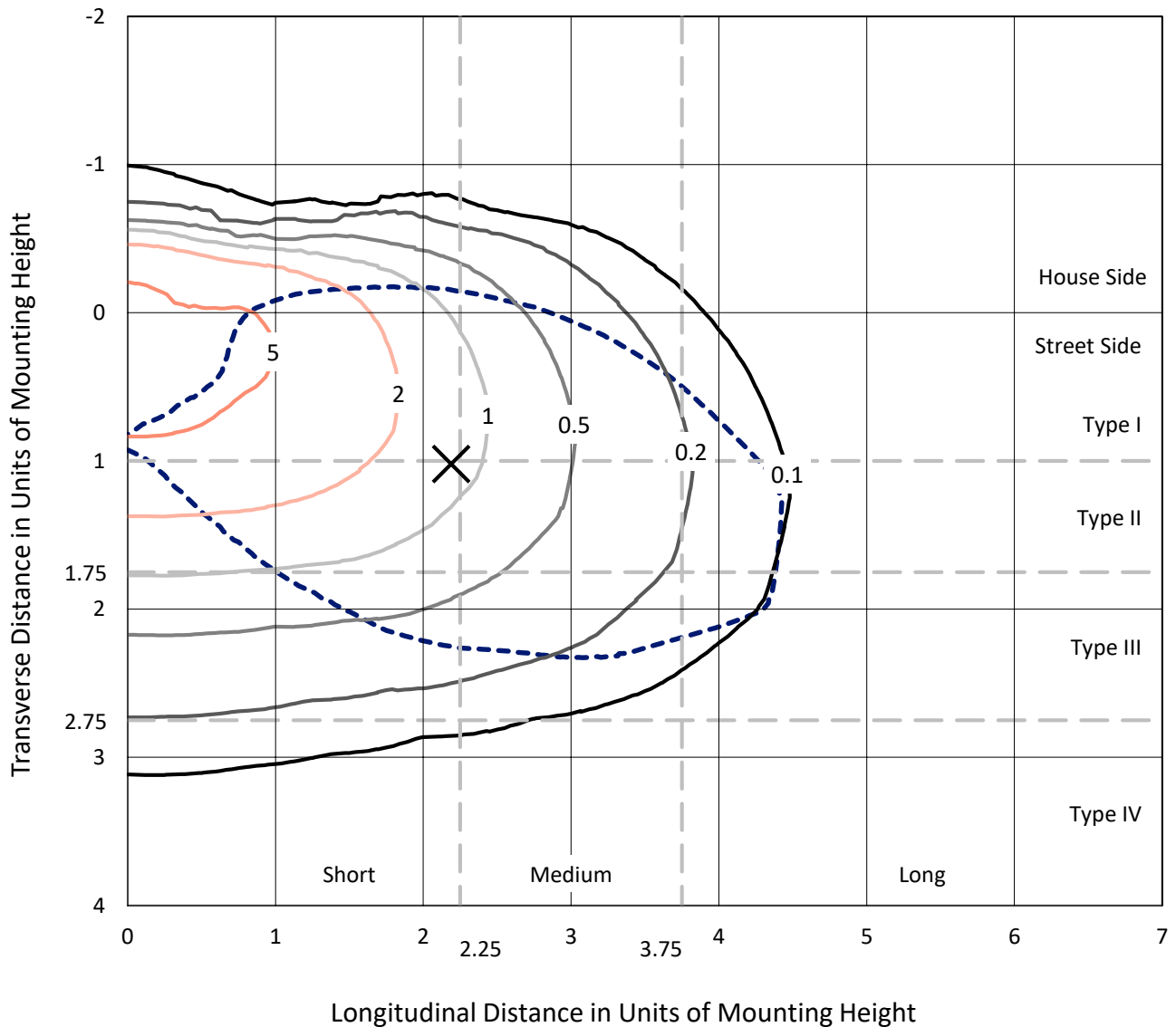
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510668
 CATALOG NUMBER: CST-CA6-230-740-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

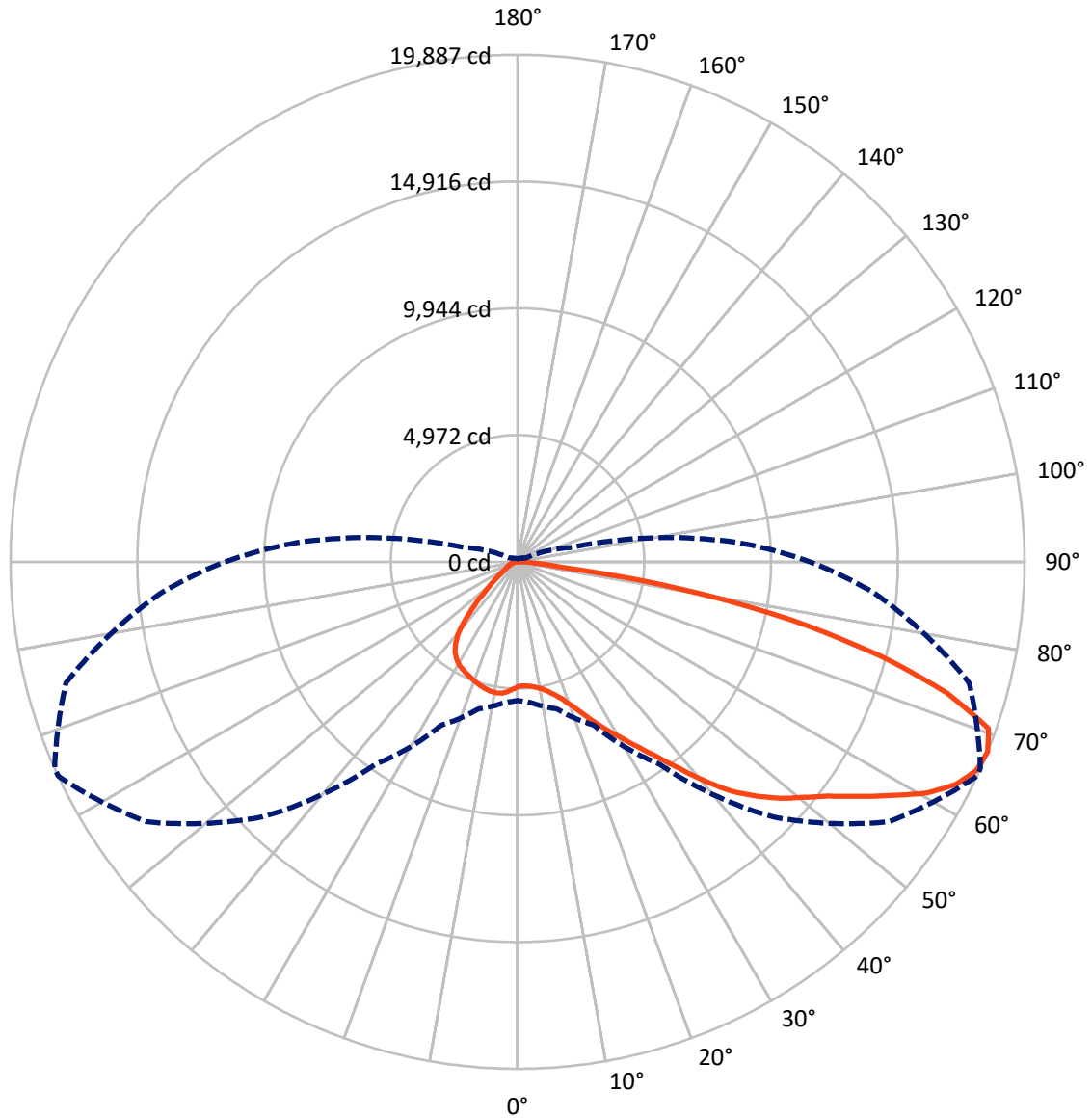
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.4 fc
 Type III - Short - N/A

REPORT NUMBER: P510668
CATALOG NUMBER: CST-CA6-230-740-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P510668
 CATALOG NUMBER: CST-CA6-230-740-U-T3-HSS

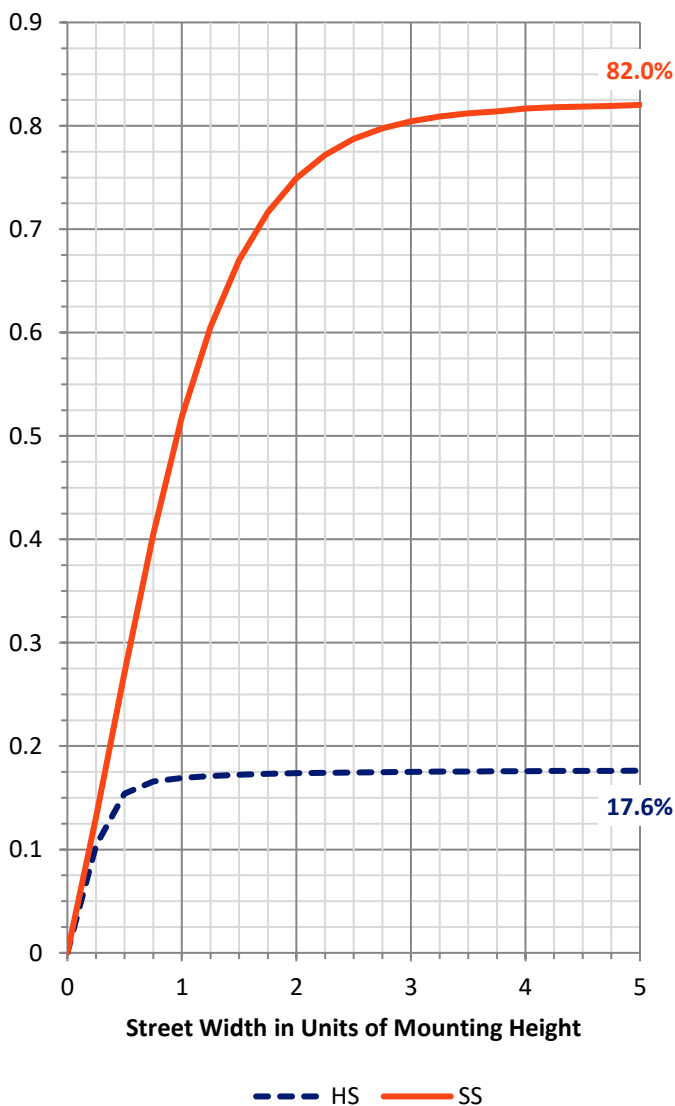
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5743.1	0.0	5743.1
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	26390.9	0.0	26390.9
	% Fixture	82.1	0.0	82.1
Total	Lumens	32134.0	0.0	32134.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	483.1	1.5
10°-20°	1491.5	4.6
20°-30°	2587.4	8.1
30°-40°	3903.0	12.1
40°-50°	5411.8	16.8
50°-60°	6680.2	20.8
60°-70°	7117.7	22.1
70°-80°	4072.8	12.7
80°-90°	386.4	1.2
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°	32134.0	100.0
0°-180°	32134.0	100.0

Coefficient of Utilization



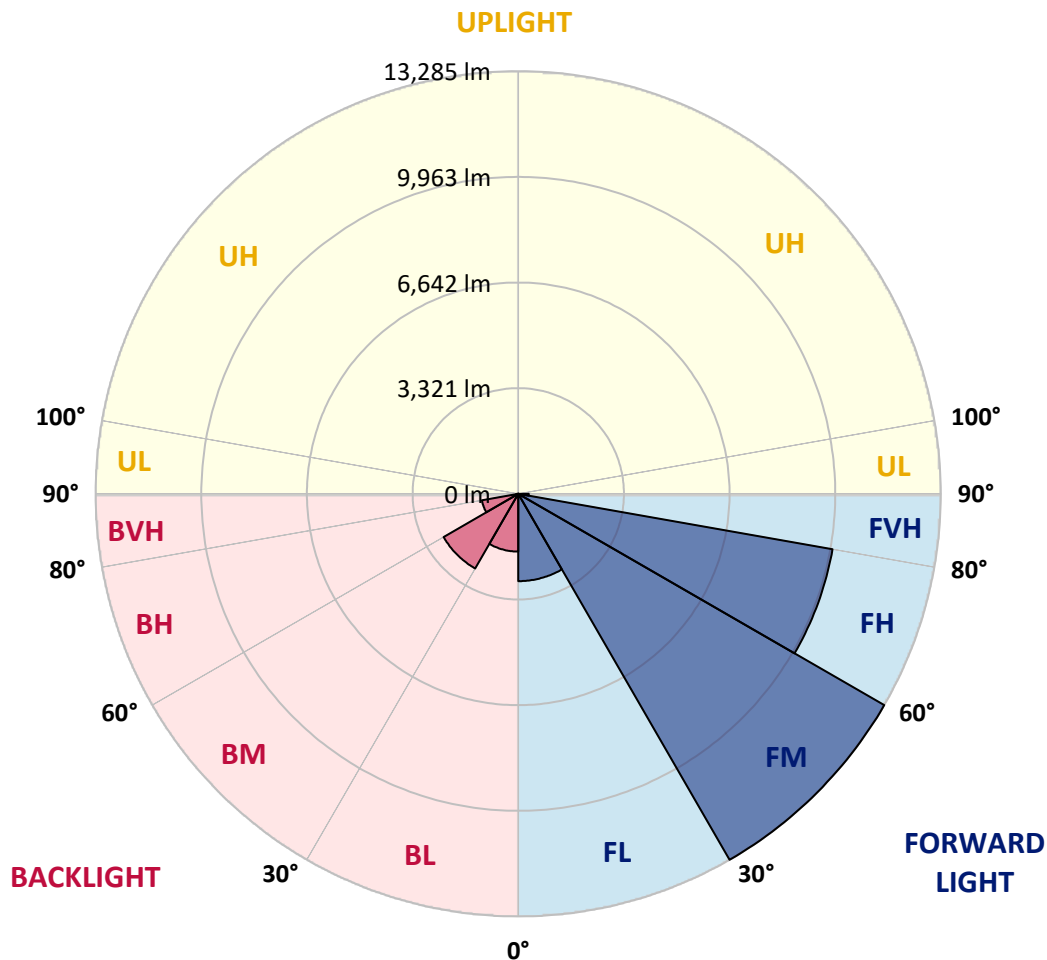
REPORT NUMBER: P510668
 CATALOG NUMBER: CST-CA6-230-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2744.7	8.5			
FM (30°-60°)	13284.7	41.3			
FH (60°-80°)	10031.4	31.2			G4/12000
FVH (80°-90°)	330.2	1.0			G3/500
BL (0°-30°)	1817.3	5.7	B3/2500		
BM (30°-60°)	2710.5	8.4	B3/5000		
BH (60°-80°)	1159.2	3.6	B3/2500		G3/2500
BVH (80°-90°)	56.2	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-G4

Type III Short





REPORT NUMBER: P510668

CATALOG NUMBER: CST-CA6-230-740-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4883.0	4883.0	4883.0	4883.0	4883.0	4883.0	4883.0	4883.0	4883.0	4883.0	4883.0
2.5°	4835.8	4829.5	4823.8	4833.7	4839.3	4848.5	4861.9	4871.0	4873.8	4882.3	4892.8
5°	4913.2	4912.5	4904.8	4900.6	4888.6	4884.4	4887.2	4898.5	4899.2	4909.7	4942.8
7.5°	5065.3	5063.9	5044.9	5036.4	5011.1	4982.9	4961.8	4963.9	4963.2	4973.8	5018.1
10°	5294.8	5283.5	5256.7	5230.7	5181.4	5128.6	5089.9	5054.7	5054.7	5070.2	5119.5
12.5°	5553.8	5569.3	5532.7	5493.3	5410.9	5315.9	5248.3	5208.9	5204.7	5212.4	5247.6
15°	5875.5	5875.5	5850.8	5794.5	5722.0	5589.7	5450.3	5400.3	5393.3	5409.5	5407.4
17.5°	6238.0	6248.5	6202.1	6173.9	6062.7	5916.3	5741.7	5655.2	5655.2	5644.6	5596.0
20°	6700.4	6642.7	6647.7	6601.2	6519.5	6307.0	6129.6	6003.6	6002.2	5981.1	5844.5
22.5°	7203.0	7171.4	7143.9	7103.1	6990.5	6800.4	6554.0	6429.4	6426.6	6374.5	6171.8
25°	7698.6	7722.5	7692.2	7617.6	7535.3	7328.3	7056.6	6934.1	6933.4	6846.9	6559.7
27.5°	8208.2	8234.3	8224.4	8156.8	8047.0	7885.1	7628.2	7468.4	7458.5	7402.2	7041.1
30°	8771.3	8748.1	8778.4	8749.5	8694.6	8430.6	8198.4	8012.5	8036.5	8019.6	7588.1
32.5°	9181.0	9195.8	9295.0	9297.8	9240.1	9044.4	8760.8	8646.7	8684.7	8662.2	8260.3
35°	9551.3	9575.2	9703.3	9829.3	9871.5	9657.5	9368.9	9361.9	9411.2	9548.4	9186.6
37.5°	9869.4	9886.3	10065.8	10229.8	10366.4	10220.0	10010.2	10260.1	10332.6	10613.4	10142.5
40°	10060.2	10082.0	10314.3	10545.2	10788.7	10736.6	10716.9	11308.2	11376.5	11623.5	10840.1
42.5°	9952.5	9995.4	10382.6	10804.9	11163.2	11267.4	11537.0	12297.2	12375.3	12396.4	11525.7
45°	9760.3	9813.8	10246.7	10930.2	11514.4	11848.8	12361.9	13103.1	13146.1	13086.2	12093.7
47.5°	9553.4	9610.4	10094.0	10892.9	11796.7	12525.2	13098.9	13862.0	13892.2	13708.5	12666.0
50°	9318.3	9371.1	9891.2	10805.6	12009.3	13163.7	13856.3	14518.0	14631.3	14268.1	13110.9
52.5°	9032.5	9088.8	9640.6	10669.0	12195.8	13637.4	14524.3	15259.2	15266.9	14967.8	13612.1
55°	8662.2	8760.1	9326.0	10432.5	12293.7	14044.3	15106.4	16239.7	16289.7	16000.4	14031.6
57.5°	8250.4	8335.6	8947.3	10117.2	12205.7	14353.3	16042.6	17291.4	17285.0	16704.3	14398.3
60°	7706.3	7766.9	8453.9	9704.7	11922.0	14727.0	17017.5	18418.3	18407.0	17394.1	14634.1
62.5°	7008.1	7068.6	7714.8	9057.8	11505.3	14977.6	17679.2	19262.3	19229.9	17896.0	14706.6
65°	6198.6	6307.0	6868.0	8218.1	10768.3	14812.9	17998.8	19759.2	19707.2	18278.9	14533.5
67.5°	5439.8	5532.0	5976.1	7062.3	9680.8	14144.9	17773.5	19887.4	19871.9	18334.5	14044.3
70°	4365.6	4399.4	4806.2	5736.1	8054.8	12714.6	16995.0	19591.7	19598.8	17822.1	13061.6
72.5°	2988.1	3070.4	3251.3	3985.5	5861.4	10111.6	14648.2	17632.1	17633.5	15980.7	11380.0
75°	1607.0	1734.4	1945.6	2309.5	3276.7	6488.6	11763.6	14630.6	14658.1	13324.2	9045.1
77.5°	796.8	842.6	965.1	1235.3	1502.1	3061.3	7565.5	10982.3	11047.7	10227.7	6169.0
80°	364.6	372.4	381.5	379.4	575.1	1343.0	3247.8	6595.6	6615.3	6083.1	2816.3
82.5°	285.1	283.7	287.9	261.9	263.3	518.1	1124.1	1727.4	1842.1	1450.0	893.3
85°	172.5	171.8	185.1	143.6	176.7	280.2	567.3	689.1	697.6	567.3	462.5
87.5°	65.5	63.4	58.4	51.4	59.1	78.8	196.4	253.4	247.8	176.0	159.8
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: P510668

CATALOG NUMBER: CST-CA6-230-740-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4883.0	4883.0	4883.0	4883.0	4883.0	4883.0	4883.0	4883.0	4883.0	4883.0	4883.0
2.5°	4902.0	4924.5	4966.0	4997.7	5008.3	5042.1	5074.4	5080.1	5103.3	5112.4	5142.7
5°	4963.2	5001.2	5066.0	5108.9	5127.9	5184.2	5220.8	5239.1	5232.8	5236.3	5270.1
7.5°	5052.6	5088.5	5140.6	5192.7	5201.8	5211.7	5208.2	5205.4	5180.7	5159.6	5191.3
10°	5134.3	5168.1	5200.4	5208.2	5161.7	5135.7	5089.2	5053.3	5005.5	4983.6	5009.0
12.5°	5249.0	5256.0	5224.4	5182.1	5082.2	4989.3	4913.9	4848.5	4789.4	4748.5	4782.3
15°	5370.1	5342.6	5250.4	5127.2	4972.4	4839.3	4716.1	4607.0	4509.2	4485.3	4494.4
17.5°	5530.6	5455.9	5270.1	5063.2	4822.4	4615.5	4457.1	4319.1	4191.0	4137.5	4132.6
20°	5726.2	5605.9	5310.2	4982.2	4645.1	4369.8	4124.9	3918.6	3741.9	3596.9	3600.5
22.5°	5981.1	5806.5	5370.8	4897.8	4448.7	4081.9	3725.8	3375.2	3084.5	2959.2	2928.2
25°	6317.5	6057.1	5456.7	4821.0	4229.0	3715.9	3212.6	2717.8	2410.2	2288.4	2275.0
27.5°	6736.3	6393.5	5587.6	4735.9	3993.9	3281.6	2558.0	2073.0	1790.7	1662.6	1619.7
30°	7212.2	6808.1	5722.0	4647.2	3709.6	2723.4	1950.5	1475.4	1186.1	1071.3	1056.6
32.5°	7828.1	7333.3	5921.9	4507.8	3294.3	2140.6	1360.6	920.7	724.3	675.0	661.0
35°	8703.0	8043.5	6169.0	4331.8	2760.7	1495.1	843.3	539.2	434.3	409.7	404.7
37.5°	9518.9	8740.4	6418.2	4039.7	2096.2	933.4	482.2	345.6	322.4	323.1	324.5
40°	10165.8	9216.9	6619.5	3655.4	1378.9	530.0	335.1	287.2	287.9	285.8	284.4
42.5°	10741.6	9597.0	6710.3	3087.3	798.9	354.8	290.7	264.7	258.3	260.4	259.0
45°	11218.1	9984.9	6534.3	2448.9	470.9	318.2	274.5	245.7	238.6	249.9	251.3
47.5°	11719.3	10353.0	6264.7	1844.9	382.2	302.7	259.7	231.6	228.1	242.1	243.6
50°	12140.9	10619.8	5805.1	1390.2	364.6	285.8	246.4	217.5	216.8	229.5	229.5
52.5°	12493.6	10781.0	5259.6	1073.5	352.7	271.0	233.0	204.1	204.1	208.4	209.1
55°	12742.0	10748.6	4934.4	844.7	340.0	256.9	218.9	191.5	183.0	180.2	181.6
57.5°	12787.1	10662.7	4557.1	658.9	325.2	243.6	206.2	176.7	161.2	159.1	158.4
60°	12758.2	10474.1	4126.3	550.5	308.3	230.9	193.6	161.2	145.7	140.8	142.2
62.5°	12637.9	10139.7	3628.6	482.9	291.4	221.0	179.5	150.6	136.6	130.2	130.2
65°	12274.7	9661.1	2889.5	423.0	270.3	210.5	168.2	146.4	130.9	123.9	122.5
67.5°	11476.4	8667.9	2171.5	371.0	249.9	199.2	166.8	145.7	128.1	118.3	116.8
70°	10405.8	7445.9	1482.4	325.9	227.4	188.6	166.1	146.4	125.3	112.6	111.2
72.5°	8686.9	5869.8	853.8	283.7	204.8	178.8	163.3	147.1	120.4	104.9	102.8
75°	6527.3	4117.1	501.2	243.6	183.0	164.0	155.6	142.9	112.6	95.7	93.6
77.5°	3925.7	1922.4	377.3	202.0	157.0	144.3	138.7	130.9	102.8	88.7	86.6
80°	1440.2	729.9	296.3	161.9	124.6	125.3	119.7	114.7	93.6	81.7	80.2
82.5°	627.9	446.3	218.9	123.2	97.8	111.9	98.5	94.3	80.2	73.2	70.4
85°	380.8	266.1	140.8	83.8	67.6	76.0	69.0	72.5	61.9	57.7	55.6
87.5°	126.0	79.5	62.6	40.8	33.8	31.7	31.0	37.3	35.2	32.4	32.4
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)