

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: P510658

Luminaire Tested: **CST-CA6-230-730-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510658
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-CA6-230-730-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31552 lumens
Efficiency: N/A
Efficacy: 138.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

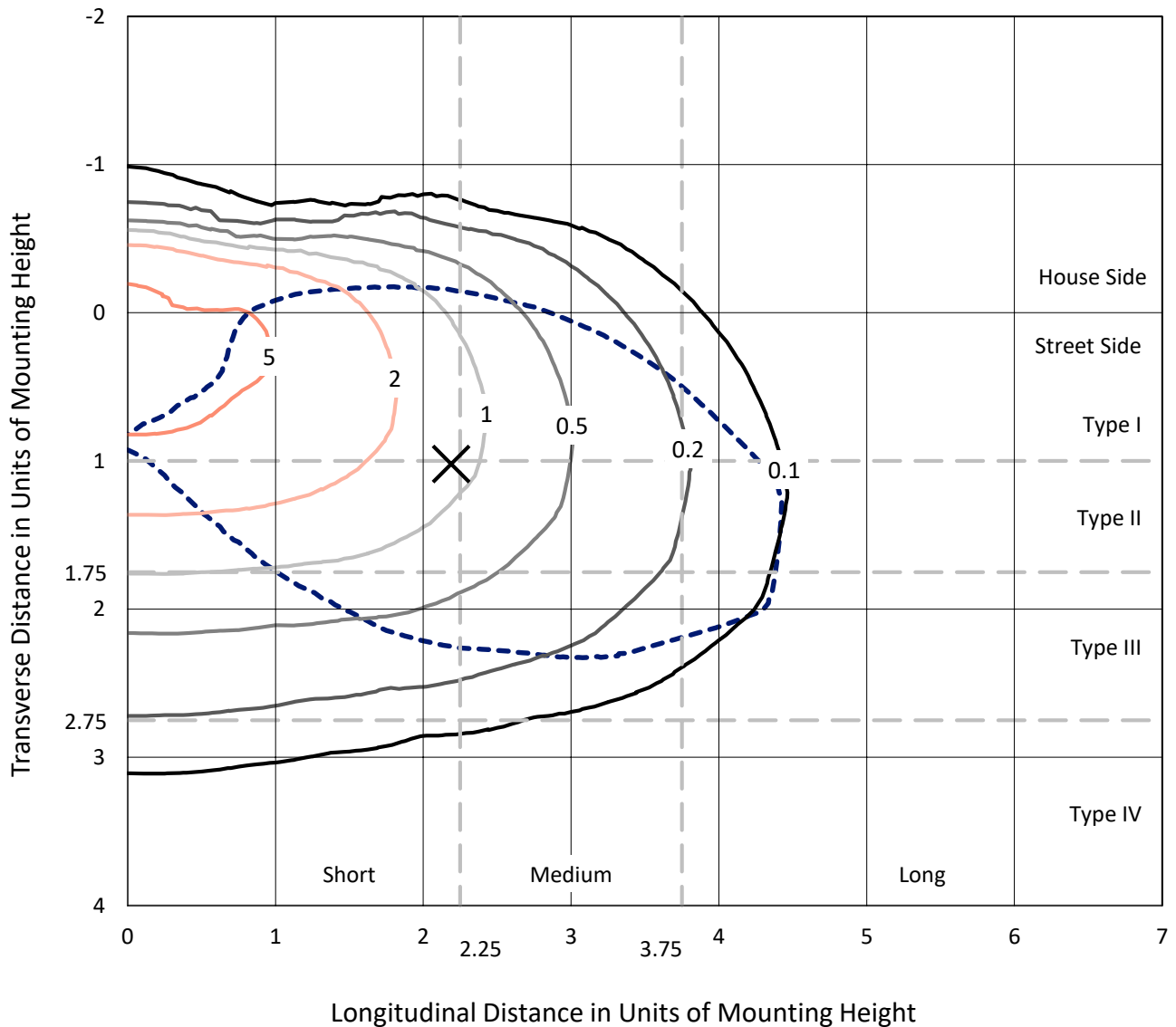
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510658
 CATALOG NUMBER: CST-CA6-230-730-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

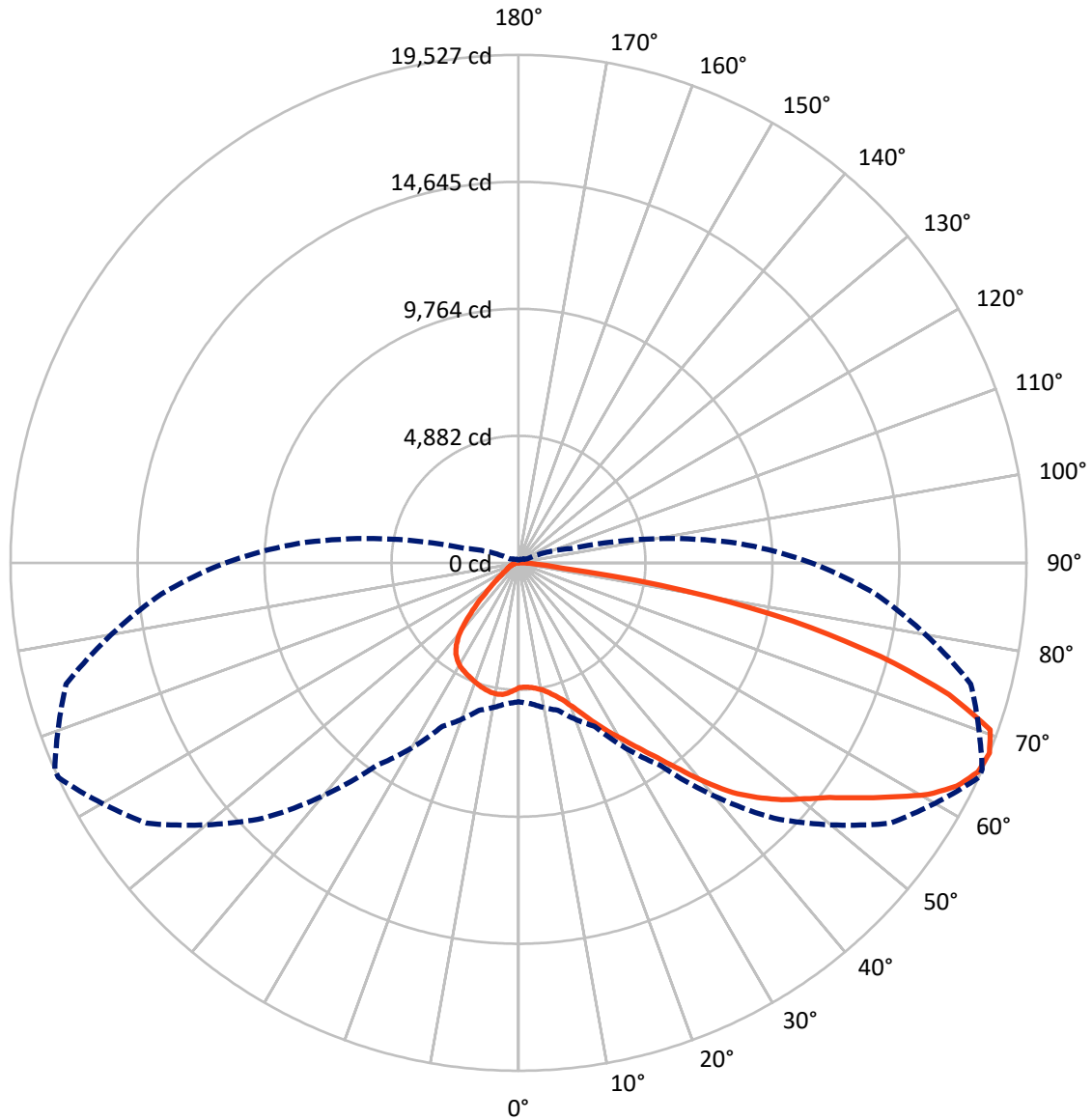
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.3 fc
 Type III - Short - N/A

REPORT NUMBER: P510658
CATALOG NUMBER: CST-CA6-230-730-U-T3-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510658
 CATALOG NUMBER: CST-CA6-230-730-U-T3-HSS

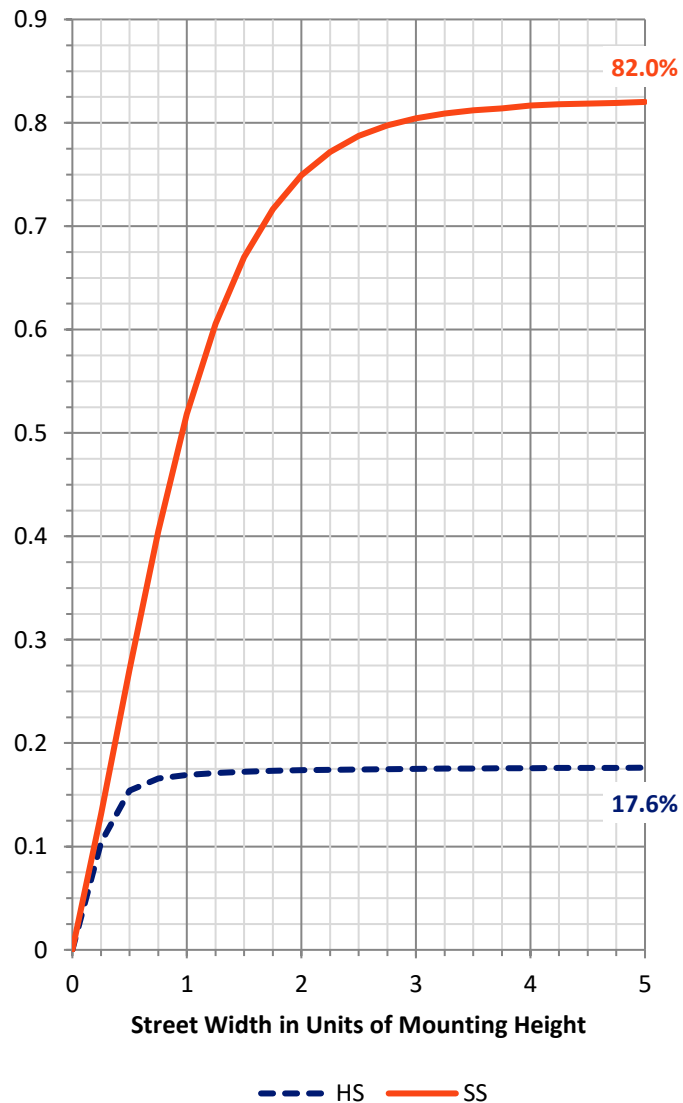
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5639.1	0.0	5639.1
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	25912.9	0.0	25912.9
	% Fixture	82.1	0.0	82.1
Total	Lumens	31552.0	0.0	31552.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	474.3	1.5
10°-20°	1464.5	4.6
20°-30°	2540.5	8.1
30°-40°	3832.4	12.1
40°-50°	5313.8	16.8
50°-60°	6559.2	20.8
60°-70°	6988.8	22.1
70°-80°	3999.1	12.7
80°-90°	379.4	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°	31552.0	100.0
0°-180°	31552.0	100.0

Coefficient of Utilization



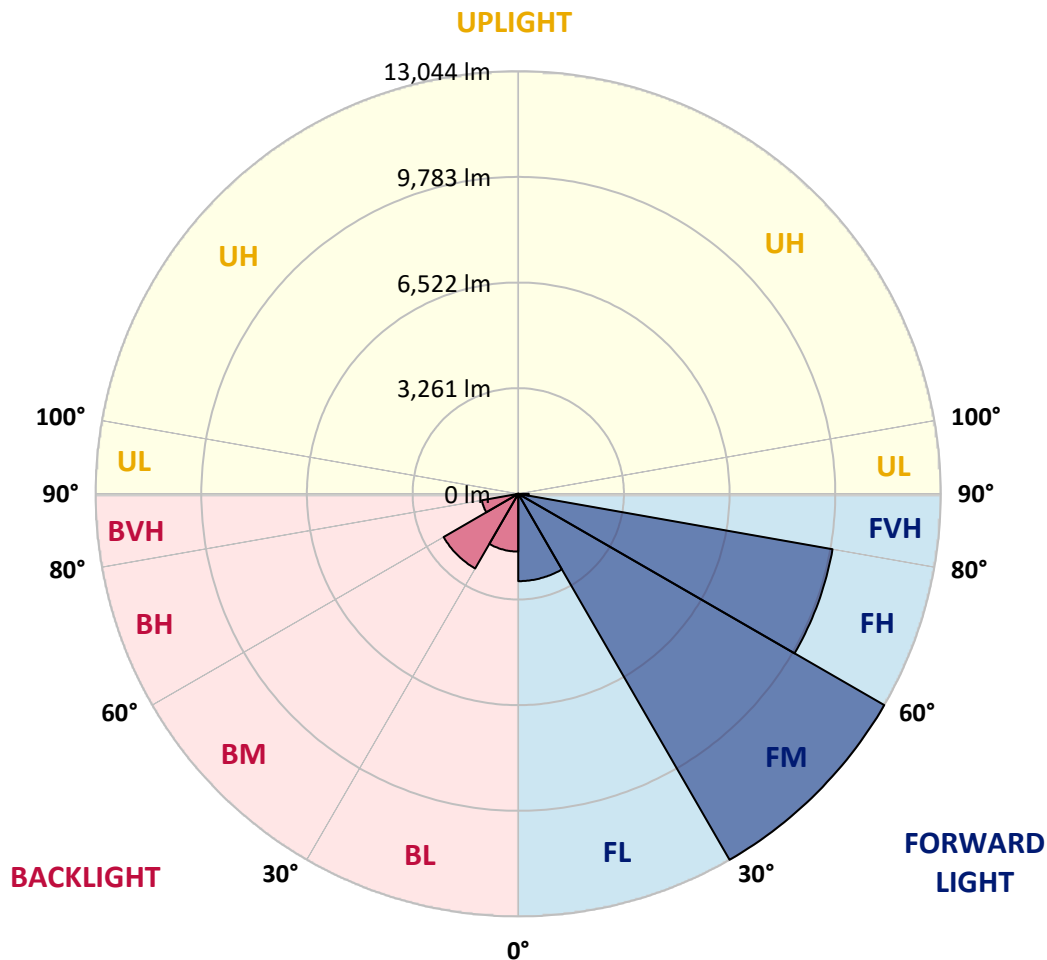
REPORT NUMBER: P510658
 CATALOG NUMBER: CST-CA6-230-730-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2695.0	8.5			
FM	(30°-60°)	13044.0	41.3			
FH	(60°-80°)	9849.7	31.2			G4/12000
FVH	(80°-90°)	324.2	1.0			G3/500
BL	(0°-30°)	1784.4	5.7	B3/2500		
BM	(30°-60°)	2661.4	8.4	B3/5000		
BH	(60°-80°)	1138.2	3.6	B3/2500		G3/2500
BVH	(80°-90°)	55.2	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: P510658

CATALOG NUMBER: CST-CA6-230-730-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4794.5	4794.5	4794.5	4794.5	4794.5	4794.5	4794.5	4794.5	4794.5	4794.5	4794.5
2.5°	4748.2	4742.0	4736.5	4746.2	4751.7	4760.7	4773.8	4782.8	4785.5	4793.8	4804.2
5°	4824.3	4823.6	4816.0	4811.8	4800.1	4795.9	4798.7	4809.7	4810.4	4820.8	4853.3
7.5°	4973.5	4972.2	4953.5	4945.2	4920.3	4892.7	4871.9	4874.0	4873.3	4883.7	4927.2
10°	5198.9	5187.8	5161.5	5136.0	5087.6	5035.7	4997.7	4963.2	4963.2	4978.4	5026.8
12.5°	5453.2	5468.4	5432.5	5393.8	5312.9	5219.6	5153.2	5114.5	5110.4	5118.0	5152.5
15°	5769.1	5769.1	5744.9	5689.6	5618.4	5488.5	5351.6	5302.5	5295.6	5311.5	5309.4
17.5°	6125.0	6135.4	6089.8	6062.1	5952.9	5809.1	5637.7	5552.7	5552.7	5542.4	5494.7
20°	6579.1	6522.4	6527.3	6481.6	6401.5	6192.7	6018.6	5894.8	5893.5	5872.7	5738.6
22.5°	7072.6	7041.5	7014.5	6974.4	6863.8	6677.2	6435.3	6313.0	6310.2	6259.1	6060.0
25°	7559.1	7582.6	7552.9	7479.7	7398.8	7195.6	6928.8	6808.6	6807.9	6722.9	6440.9
27.5°	8059.5	8085.1	8075.4	8009.1	7901.3	7742.3	7490.0	7333.1	7323.5	7268.2	6913.6
30°	8612.5	8589.7	8619.4	8591.0	8537.1	8277.9	8049.9	7867.4	7890.9	7874.3	7450.6
32.5°	9014.7	9029.2	9126.7	9129.4	9072.8	8880.6	8602.1	8490.1	8527.5	8505.3	8110.7
35°	9378.3	9401.8	9527.6	9651.3	9692.7	9482.6	9199.3	9192.3	9240.7	9375.5	9020.2
37.5°	9690.7	9707.3	9883.5	10044.5	10178.6	10034.9	9828.9	10074.3	10145.4	10421.2	9958.8
40°	9878.0	9899.4	10127.5	10354.2	10593.3	10542.2	10522.8	11103.4	11170.4	11413.0	10643.8
42.5°	9772.2	9814.4	10194.5	10609.2	10961.0	11063.3	11328.0	12074.5	12151.2	12171.9	11316.9
45°	9583.5	9636.1	10061.1	10732.2	11305.9	11634.2	12138.0	12865.8	12908.0	12849.2	11874.7
47.5°	9380.3	9436.3	9911.1	10695.6	11583.0	12298.4	12861.7	13610.9	13640.6	13460.2	12436.6
50°	9149.5	9201.3	9712.1	10609.9	11791.8	12925.3	13605.4	14255.0	14366.3	14009.7	12873.4
52.5°	8868.9	8924.2	9466.0	10475.8	11974.9	13390.4	14261.3	14982.8	14990.4	14696.7	13365.5
55°	8505.3	8601.4	9157.1	10243.6	12071.0	13789.9	14832.8	15945.6	15994.7	15710.6	13777.5
57.5°	8101.0	8184.6	8785.3	9934.0	11984.6	14093.3	15752.1	16978.2	16972.0	16401.8	14137.5
60°	7566.7	7626.2	8300.8	9528.9	11706.1	14460.3	16709.3	18084.7	18073.7	17079.1	14369.1
62.5°	6881.1	6940.6	7575.0	8893.8	11296.9	14706.4	17359.0	18913.4	18881.6	17571.9	14440.3
65°	6086.3	6192.7	6743.6	8069.2	10573.3	14544.6	17672.8	19401.4	19350.2	17947.9	14270.2
67.5°	5341.2	5431.8	5867.9	6934.3	9505.4	13888.7	17451.6	19527.2	19512.0	18002.5	13789.9
70°	4286.5	4319.7	4719.2	5632.2	7908.9	12484.3	16687.2	19236.9	19243.8	17499.3	12825.0
72.5°	2933.9	3014.8	3192.4	3913.3	5755.2	9928.4	14382.9	17312.7	17314.1	15691.3	11173.9
75°	1577.9	1703.0	1910.3	2267.7	3217.3	6371.1	11550.6	14365.6	14392.6	13082.8	8881.3
77.5°	782.4	827.3	947.6	1213.0	1474.9	3005.8	7428.5	10783.4	10847.7	10042.5	6057.3
80°	358.0	365.6	374.6	372.5	564.7	1318.7	3189.0	6476.1	6495.5	5972.9	2765.3
82.5°	279.9	278.5	282.7	257.1	258.5	508.7	1103.8	1696.1	1808.7	1423.8	877.1
85°	169.3	168.6	181.8	141.0	173.5	275.1	557.1	676.6	684.9	557.1	454.1
87.5°	64.3	62.2	57.4	50.5	58.1	77.4	192.8	248.8	243.3	172.8	156.9
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: P510658
 CATALOG NUMBER: CST-CA6-230-730-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4794.5	4794.5	4794.5	4794.5	4794.5	4794.5	4794.5	4794.5	4794.5	4794.5	4794.5
2.5°	4813.2	4835.3	4876.1	4907.2	4917.6	4950.7	4982.5	4988.1	5010.9	5019.8	5049.6
5°	4873.3	4910.6	4974.2	5016.4	5035.1	5090.3	5126.3	5144.3	5138.0	5141.5	5174.7
7.5°	4961.1	4996.3	5047.5	5098.6	5107.6	5117.3	5113.8	5111.1	5086.9	5066.2	5097.3
10°	5041.3	5074.4	5106.2	5113.8	5068.2	5042.7	4997.0	4961.8	4914.8	4893.4	4918.2
12.5°	5153.9	5160.8	5129.7	5088.3	4990.1	4898.9	4824.9	4760.7	4702.6	4662.5	4695.7
15°	5272.8	5245.9	5155.3	5034.4	4882.3	4751.7	4630.7	4523.6	4427.5	4404.0	4413.0
17.5°	5430.4	5357.1	5174.7	4971.5	4735.1	4531.9	4376.4	4240.9	4115.1	4062.6	4057.8
20°	5622.5	5504.3	5214.1	4892.0	4560.9	4290.7	4050.2	3847.7	3674.2	3531.8	3535.3
22.5°	5872.7	5701.3	5273.5	4809.0	4368.1	4008.0	3658.3	3314.1	3028.6	2905.6	2875.2
25°	6203.1	5947.4	5357.8	4733.7	4152.5	3648.6	3154.4	2668.5	2366.5	2246.9	2233.8
27.5°	6614.3	6277.7	5486.4	4650.1	3921.6	3222.2	2511.7	2035.4	1758.3	1632.5	1590.3
30°	7081.6	6684.8	5618.4	4563.0	3642.4	2674.1	1915.2	1448.7	1164.6	1051.9	1037.4
32.5°	7686.3	7200.4	5814.7	4426.1	3234.6	2101.8	1336.0	904.0	711.2	662.8	649.0
35°	8545.4	7897.8	6057.3	4253.4	2710.7	1468.0	828.0	529.4	426.4	402.3	397.4
37.5°	9346.5	8582.1	6301.9	3966.5	2058.3	916.5	473.4	339.4	316.5	317.2	318.6
40°	9981.6	9050.0	6499.6	3589.2	1354.0	520.4	329.0	282.0	282.7	280.6	279.2
42.5°	10547.0	9423.2	6588.8	3031.4	784.5	348.3	285.4	259.9	253.7	255.7	254.3
45°	11014.9	9804.0	6416.0	2404.5	462.4	312.4	269.5	241.2	234.3	245.4	246.7
47.5°	11507.0	10165.5	6151.3	1811.5	375.3	297.2	255.0	227.4	223.9	237.8	239.1
50°	11921.0	10427.4	5699.9	1365.0	358.0	280.6	241.9	213.6	212.9	225.3	225.3
52.5°	12267.3	10585.7	5164.3	1054.0	346.3	266.1	228.8	200.4	200.4	204.6	205.3
55°	12511.3	10553.9	4845.0	829.4	333.8	252.3	214.9	188.0	179.7	176.9	178.3
57.5°	12555.5	10469.6	4474.5	646.9	319.3	239.1	202.5	173.5	158.3	156.2	155.5
60°	12527.2	10284.4	4051.5	540.5	302.7	226.7	190.1	158.3	143.1	138.2	139.6
62.5°	12409.0	9956.1	3562.9	474.1	286.1	217.0	176.2	147.9	134.1	127.9	127.9
65°	12052.3	9486.1	2837.2	415.4	265.4	206.7	165.2	143.8	128.6	121.6	120.3
67.5°	11268.6	8510.9	2132.2	364.2	245.4	195.6	163.8	143.1	125.8	116.1	114.7
70°	10217.3	7311.0	1455.6	320.0	223.2	185.2	163.1	143.8	123.0	110.6	109.2
72.5°	8529.5	5763.5	838.4	278.5	201.1	175.6	160.3	144.5	118.2	103.0	100.9
75°	6409.1	4042.6	492.1	239.1	179.7	161.0	152.7	140.3	110.6	94.0	91.9
77.5°	3854.6	1887.5	370.5	198.4	154.1	141.7	136.2	128.6	100.9	87.1	85.0
80°	1414.1	716.7	291.0	159.0	122.3	123.0	117.5	112.7	91.9	80.2	78.8
82.5°	616.5	438.2	214.9	121.0	96.1	109.9	96.8	92.6	78.8	71.9	69.1
85°	373.9	261.3	138.2	82.2	66.4	74.6	67.7	71.2	60.8	56.7	54.6
87.5°	123.7	78.1	61.5	40.1	33.2	31.1	30.4	36.6	34.6	31.8	31.8
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)