

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: P510768

Luminaire Tested: **CST-CA8-330-727-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510768
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-CA8-330-727-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38657 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G5

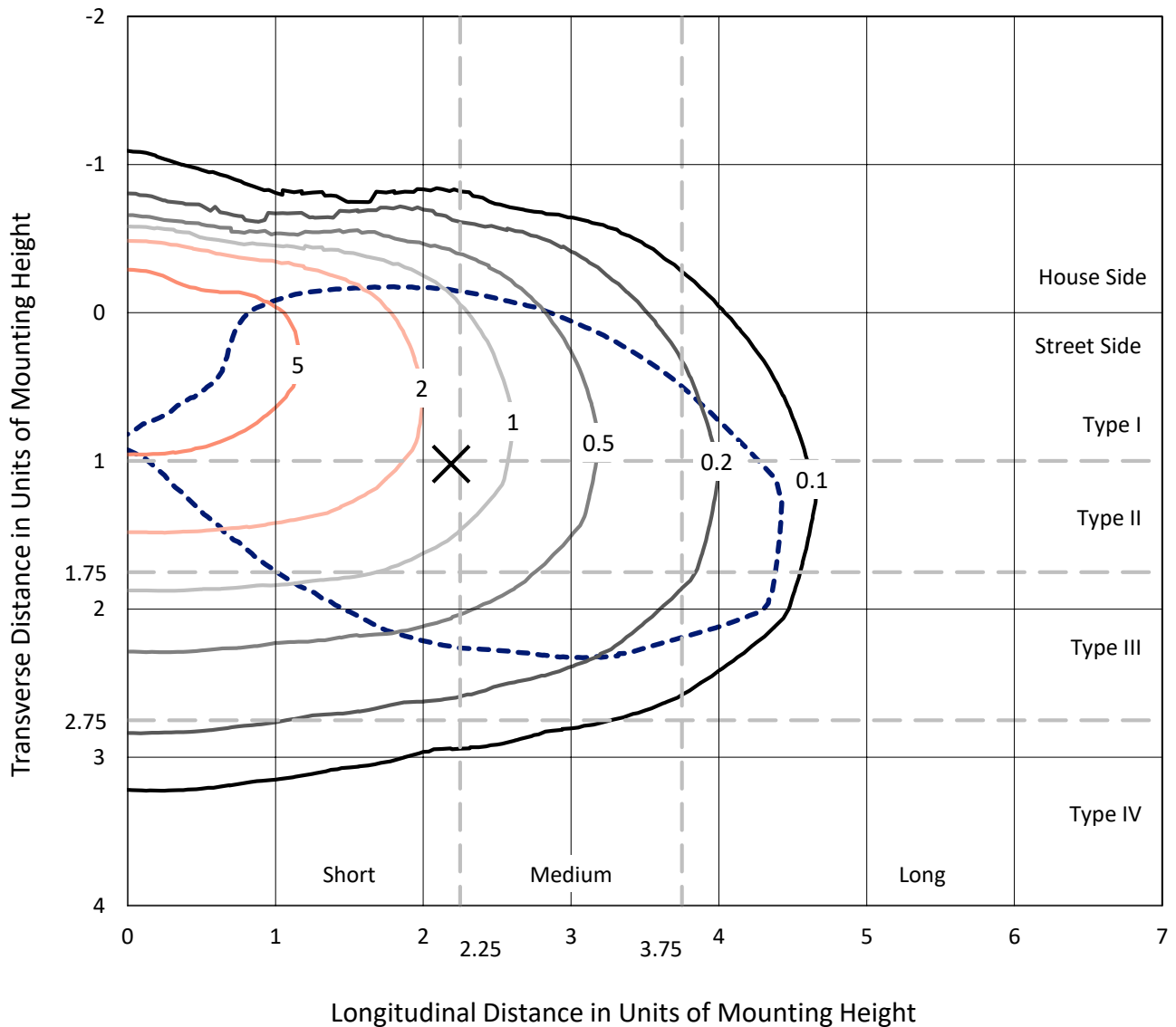
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

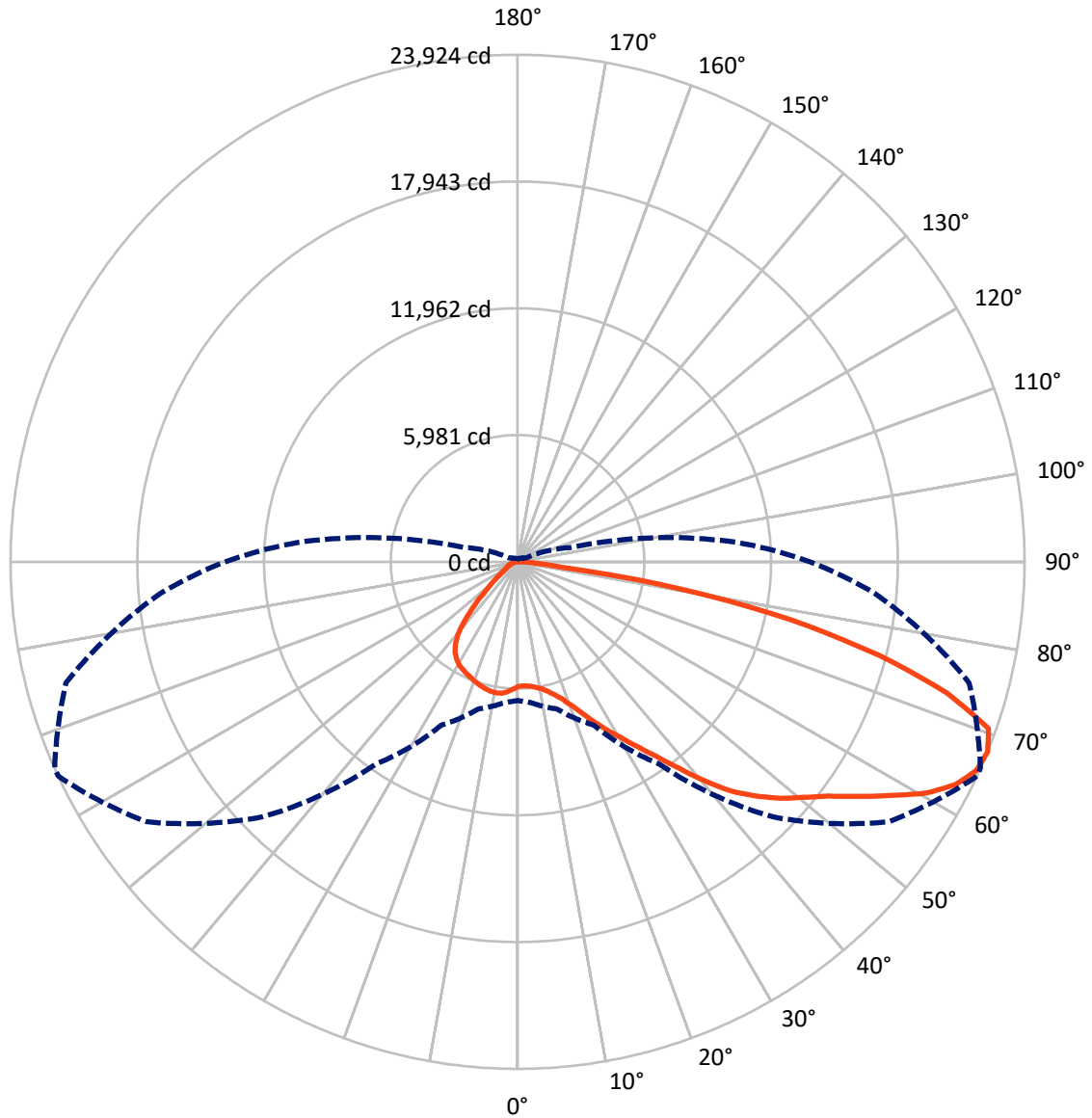
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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

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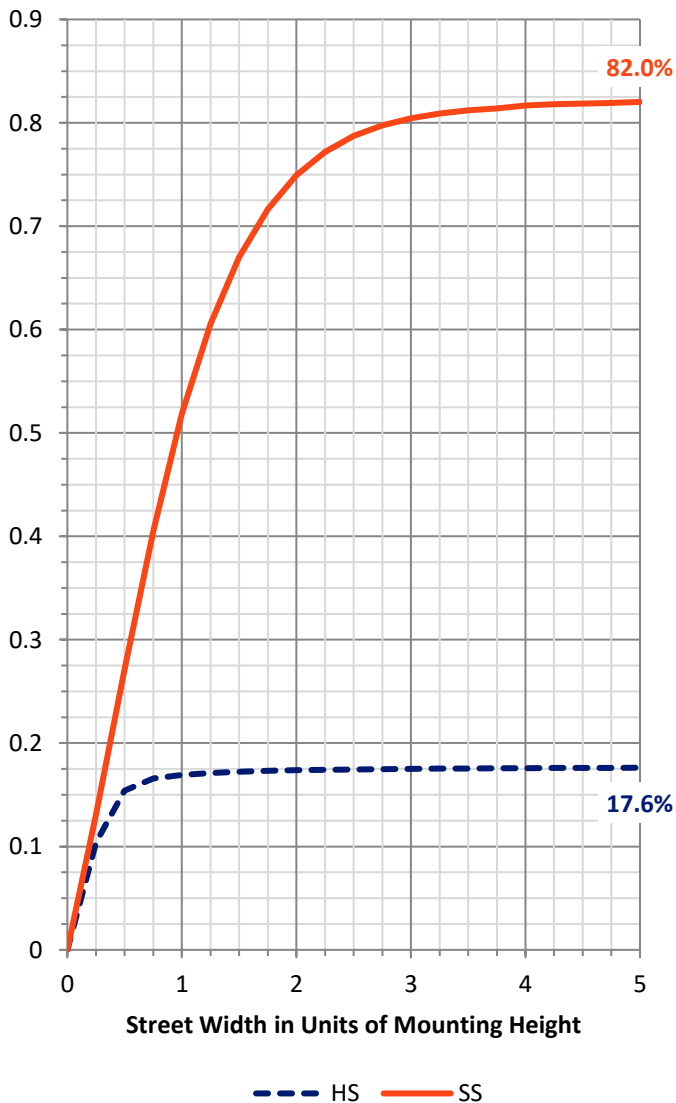
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6909.0	0.0	6909.0
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	31748.0	0.0	31748.0
	% Fixture	82.1	0.0	82.1
Total	Lumens	38657.0	0.0	38657.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	581.2	1.5
10°-20°	1794.2	4.6
20°-30°	3112.6	8.1
30°-40°	4695.3	12.1
40°-50°	6510.4	16.8
50°-60°	8036.3	20.8
60°-70°	8562.5	22.1
70°-80°	4899.6	12.7
80°-90°	464.9	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°	38657.0	100.0
0°-180°	38657.0	100.0



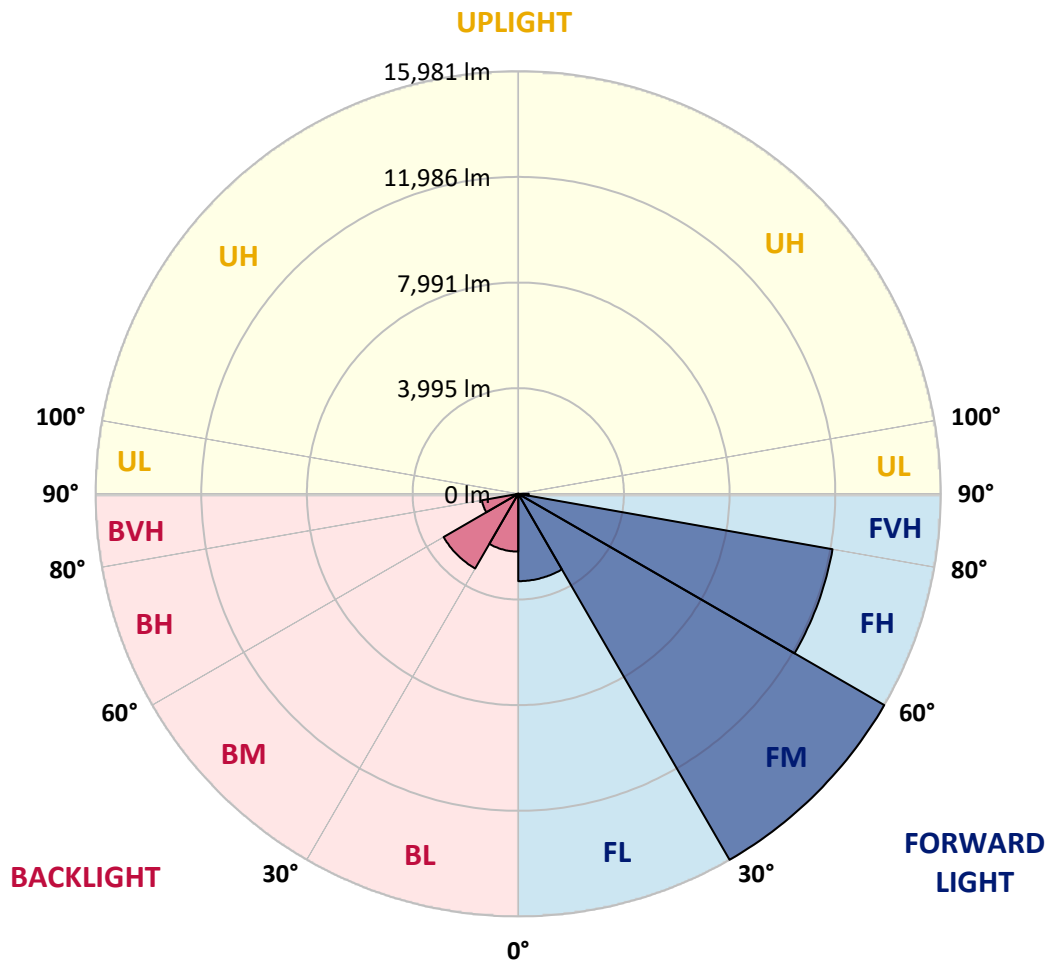
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3301.8	8.5			
FM (30°-60°)	15981.4	41.3			
FH (60°-80°)	12067.7	31.2			G5
FVH (80°-90°)	397.2	1.0			G3/500
BL (0°-30°)	2186.2	5.7	B3/2500		
BM (30°-60°)	3260.7	8.4	B3/5000		
BH (60°-80°)	1394.5	3.6	B3/2500		G3/2500
BVH (80°-90°)	67.7	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-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5874.2	5874.2	5874.2	5874.2	5874.2	5874.2	5874.2	5874.2	5874.2	5874.2	5874.2
2.5°	5817.4	5809.8	5803.1	5814.9	5821.7	5832.7	5848.8	5859.8	5863.2	5873.3	5886.0
5°	5910.6	5909.7	5900.4	5895.4	5881.0	5875.9	5879.3	5892.8	5893.7	5906.4	5946.2
7.5°	6093.5	6091.8	6068.9	6058.8	6028.3	5994.4	5969.0	5971.6	5970.7	5983.4	6036.8
10°	6369.6	6356.0	6323.8	6292.5	6233.2	6169.7	6123.1	6080.8	6080.8	6099.4	6158.7
12.5°	6681.2	6699.8	6655.8	6608.4	6509.3	6395.0	6313.7	6266.2	6261.2	6270.5	6312.8
15°	7068.2	7068.2	7038.5	6970.8	6883.6	6724.4	6556.7	6496.6	6488.1	6507.6	6505.0
17.5°	7504.3	7517.0	7461.1	7427.2	7293.4	7117.3	6907.3	6803.1	6803.1	6790.4	6732.0
20°	8060.6	7991.2	7997.1	7941.2	7843.0	7587.2	7373.8	7222.3	7220.6	7195.2	7030.9
22.5°	8665.2	8627.1	8594.1	8545.0	8409.5	8180.8	7884.5	7734.6	7731.2	7668.5	7424.7
25°	9261.3	9290.1	9253.7	9164.0	9064.9	8815.9	8489.1	8341.7	8340.9	8236.7	7891.2
27.5°	9874.4	9905.8	9893.9	9812.6	9680.5	9485.7	9176.7	8984.4	8972.6	8904.8	8470.4
30°	10551.9	10523.9	10560.3	10525.6	10459.6	10142.0	9862.6	9639.0	9667.8	9647.5	9128.4
32.5°	11044.7	11062.5	11181.9	11185.3	11115.8	10880.4	10539.2	10402.0	10447.7	10420.6	9937.1
35°	11490.1	11518.9	11673.0	11824.6	11875.4	11618.0	11270.8	11262.3	11321.6	11486.7	11051.5
37.5°	11872.8	11893.2	12109.1	12306.4	12470.7	12294.5	12042.2	12342.8	12430.0	12767.9	12201.4
40°	12102.3	12128.6	12408.0	12685.8	12978.8	12916.1	12892.4	13603.7	13685.8	13983.0	13040.6
42.5°	11972.8	12024.4	12490.2	12998.2	13429.2	13554.6	13878.9	14793.4	14887.4	14912.8	13865.3
45°	11741.6	11805.9	12326.7	13149.0	13851.8	14254.0	14871.3	15763.0	15814.7	15742.7	14548.7
47.5°	11492.6	11561.2	12143.0	13104.1	14191.4	15067.8	15757.9	16675.8	16712.3	16491.2	15237.1
50°	11209.8	11273.3	11899.1	12999.1	14447.1	15835.8	16669.1	17465.0	17601.4	17164.4	15772.3
52.5°	10866.0	10933.8	11597.6	12834.8	14671.5	16405.7	17472.7	18356.7	18366.0	18006.1	16375.2
55°	10420.6	10538.3	11219.1	12550.3	14789.2	16895.2	18173.0	19536.3	19596.4	19248.4	16879.9
57.5°	9925.2	10027.7	10763.5	12170.9	14683.3	17266.9	19299.2	20801.4	20793.8	20095.2	17321.1
60°	9270.7	9343.5	10169.9	11674.7	14342.1	17716.5	20472.0	22157.1	22143.6	20925.0	17604.8
62.5°	8430.6	8503.5	9280.8	10896.5	13840.8	18018.0	21268.0	23172.4	23133.5	21528.8	17692.0
65°	7456.8	7587.2	8262.1	9886.3	12954.2	17819.9	21652.4	23770.2	23707.6	21989.4	17483.7
67.5°	6544.0	6654.9	7189.2	8495.8	11645.9	17016.2	21381.5	23924.4	23905.7	22056.3	16895.2
70°	5251.8	5292.4	5781.9	6900.5	9689.8	15295.6	20444.9	23568.7	23577.2	21439.9	15713.0
72.5°	3594.6	3693.7	3911.3	4794.5	7051.2	12164.1	17621.7	21211.2	21212.9	19224.7	13690.1
75°	1933.2	2086.5	2340.5	2778.3	3941.8	7805.7	14151.6	17600.5	17633.6	16028.9	10881.3
77.5°	958.6	1013.6	1160.9	1486.1	1807.1	3682.7	9101.3	13211.6	13290.4	12303.9	7421.3
80°	438.6	448.0	459.0	456.4	691.8	1615.7	3907.1	7934.4	7958.1	7318.0	3388.0
82.5°	343.0	341.3	346.3	315.0	316.7	623.2	1352.3	2078.0	2216.0	1744.4	1074.6
85°	207.5	206.6	222.7	172.7	212.5	337.0	682.5	829.0	839.2	682.5	556.3
87.5°	78.8	76.2	70.3	61.8	71.1	94.8	236.3	304.8	298.1	211.7	192.2
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°	5874.2	5874.2	5874.2	5874.2	5874.2	5874.2	5874.2	5874.2	5874.2	5874.2	5874.2
2.5°	5897.0	5924.1	5974.1	6012.2	6024.9	6065.6	6104.5	6111.3	6139.2	6150.2	6186.6
5°	5970.7	6016.4	6094.3	6146.0	6168.9	6236.6	6280.6	6302.7	6295.0	6299.3	6339.9
7.5°	6078.3	6121.4	6184.1	6246.8	6257.8	6269.6	6265.4	6262.0	6232.4	6207.0	6245.1
10°	6176.5	6217.1	6256.1	6265.4	6209.5	6178.2	6122.3	6079.1	6021.5	5995.3	6025.8
12.5°	6314.5	6323.0	6284.9	6234.1	6113.8	6002.0	5911.4	5832.7	5761.6	5712.4	5753.1
15°	6460.2	6427.1	6316.2	6168.0	5981.7	5821.7	5673.5	5542.2	5424.5	5395.7	5406.8
17.5°	6653.2	6563.5	6339.9	6091.0	5801.4	5552.4	5361.9	5195.9	5041.8	4977.4	4971.5
20°	6888.6	6743.8	6388.2	5993.6	5588.0	5256.9	4962.2	4714.1	4501.5	4327.1	4331.3
22.5°	7195.2	6985.2	6461.0	5892.0	5351.7	4910.5	4482.1	4060.4	3710.6	3559.9	3522.6
25°	7599.9	7286.6	6564.3	5799.7	5087.5	4470.2	3864.8	3269.5	2899.4	2752.9	2736.8
27.5°	8103.8	7691.4	6721.8	5697.2	4804.7	3947.7	3077.2	2493.8	2154.2	2000.1	1948.5
30°	8676.2	8190.2	6883.6	5590.5	4462.6	3276.2	2346.5	1774.9	1426.8	1288.8	1271.0
32.5°	9417.2	8821.9	7124.0	5422.8	3963.0	2575.1	1636.8	1107.6	871.3	812.1	795.1
35°	10469.7	9676.3	7421.3	5211.1	3321.1	1798.6	1014.5	648.6	522.5	492.8	486.9
37.5°	11451.1	10514.6	7721.0	4859.7	2521.7	1122.8	580.1	415.8	387.8	388.7	390.4
40°	12229.3	11087.9	7963.2	4397.4	1658.9	637.6	403.1	345.5	346.3	343.8	342.1
42.5°	12922.0	11545.1	8072.5	3714.0	961.1	426.8	349.7	318.4	310.8	313.3	311.6
45°	13495.3	12011.7	7860.8	2946.0	566.5	382.7	330.2	295.5	287.1	300.6	302.3
47.5°	14098.2	12454.6	7536.4	2219.4	459.8	364.1	312.5	278.6	274.4	291.3	293.0
50°	14605.4	12775.5	6983.5	1672.4	438.6	343.8	296.4	261.7	260.8	276.1	276.1
52.5°	15029.7	12969.4	6327.2	1291.4	424.2	326.0	280.3	245.6	245.6	250.6	251.5
55°	15328.6	12930.5	5936.0	1016.1	409.0	309.1	263.4	230.3	220.2	216.8	218.5
57.5°	15382.8	12827.2	5482.1	792.6	391.2	293.0	248.1	212.5	193.9	191.4	190.5
60°	15348.1	12600.2	4963.9	662.2	370.9	277.7	232.9	193.9	175.3	169.4	171.1
62.5°	15203.3	12198.0	4365.2	580.9	350.6	265.9	215.9	181.2	164.3	156.7	156.7
65°	14766.3	11622.2	3476.1	508.9	325.2	253.2	202.4	176.1	157.5	149.0	147.3
67.5°	13806.1	10427.4	2612.3	446.3	300.6	239.6	200.7	175.3	154.1	142.3	140.6
70°	12518.1	8957.3	1783.3	392.1	273.5	226.9	199.8	176.1	150.7	135.5	133.8
72.5°	10450.2	7061.4	1027.2	341.3	246.4	215.1	196.5	177.0	144.8	126.2	123.6
75°	7852.3	4952.9	602.9	293.0	220.2	197.3	187.1	171.9	135.5	115.2	112.6
77.5°	4722.5	2312.6	453.9	243.0	188.8	173.6	166.8	157.5	123.6	106.7	104.2
80°	1732.5	878.1	356.5	194.8	149.9	150.7	144.0	138.0	112.6	98.2	96.5
82.5°	755.3	536.9	263.4	148.2	117.7	134.6	118.6	113.5	96.5	88.1	84.7
85°	458.1	320.1	169.4	100.8	81.3	91.5	83.0	87.2	74.5	69.4	66.9
87.5°	151.6	95.7	75.4	49.1	40.6	38.1	37.3	44.9	42.3	39.0	39.0
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)