

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: P510520

Luminaire Tested: **CST-CA10-630-722-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510520
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-630-722-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 66545 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

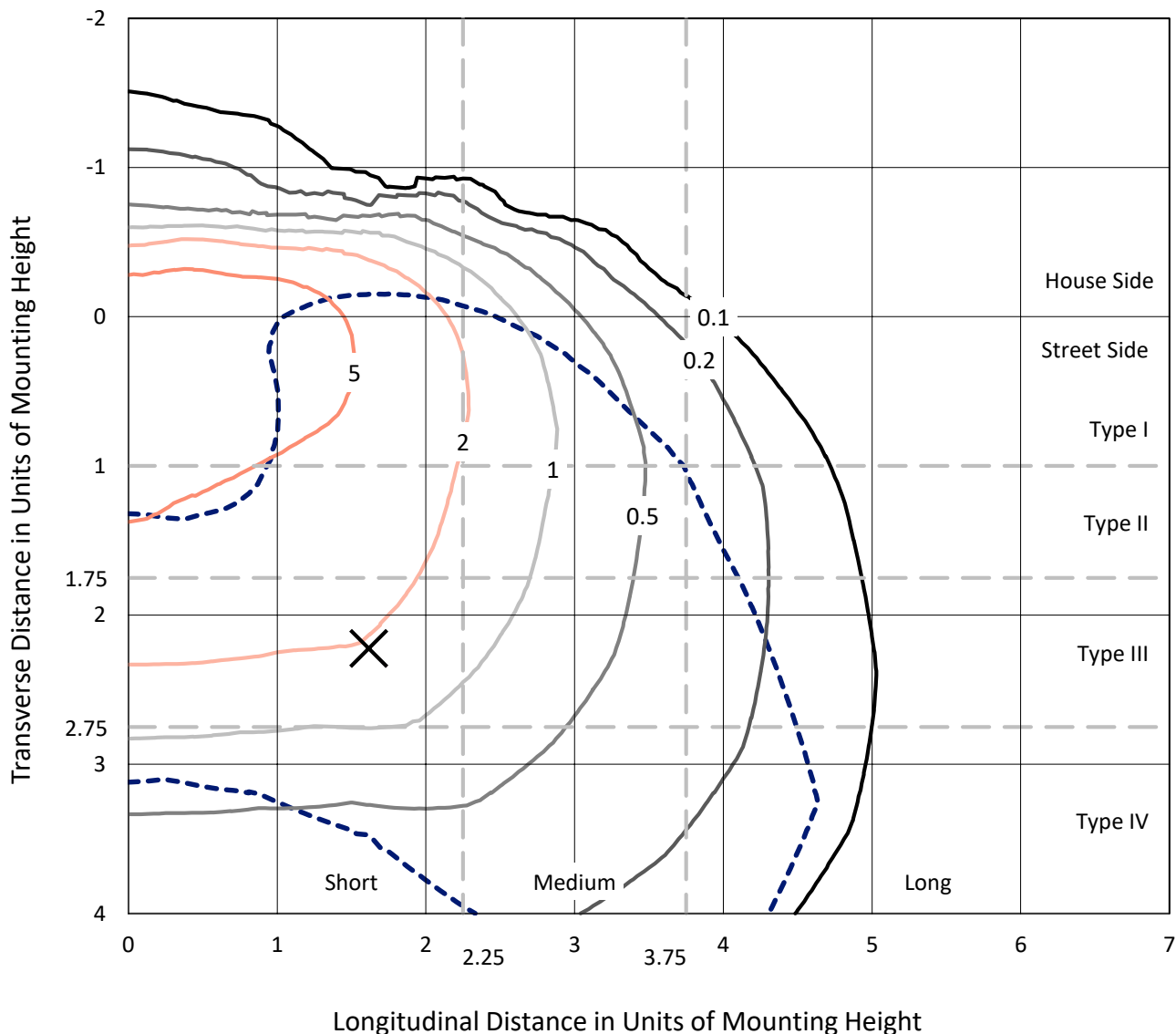
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

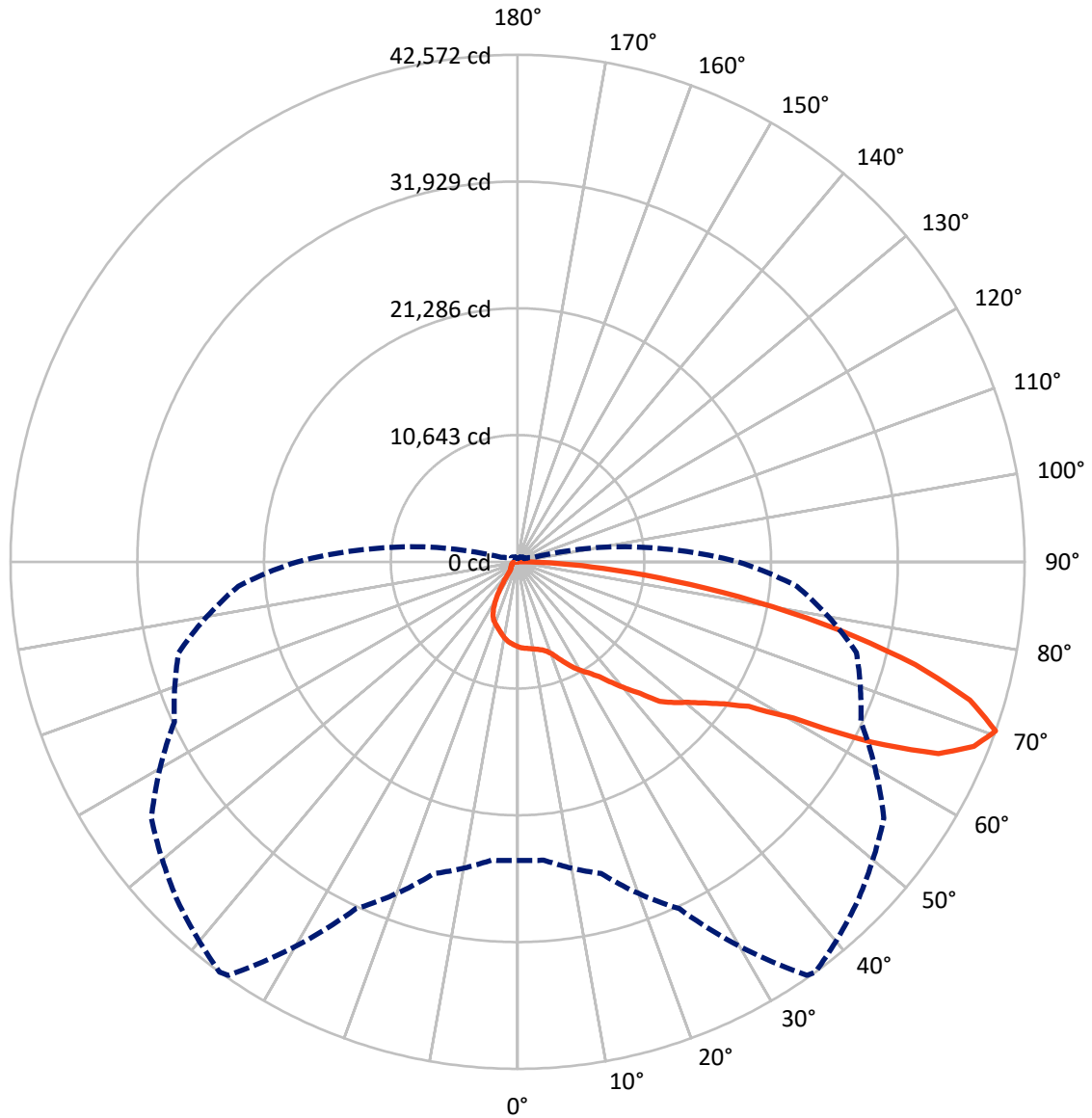
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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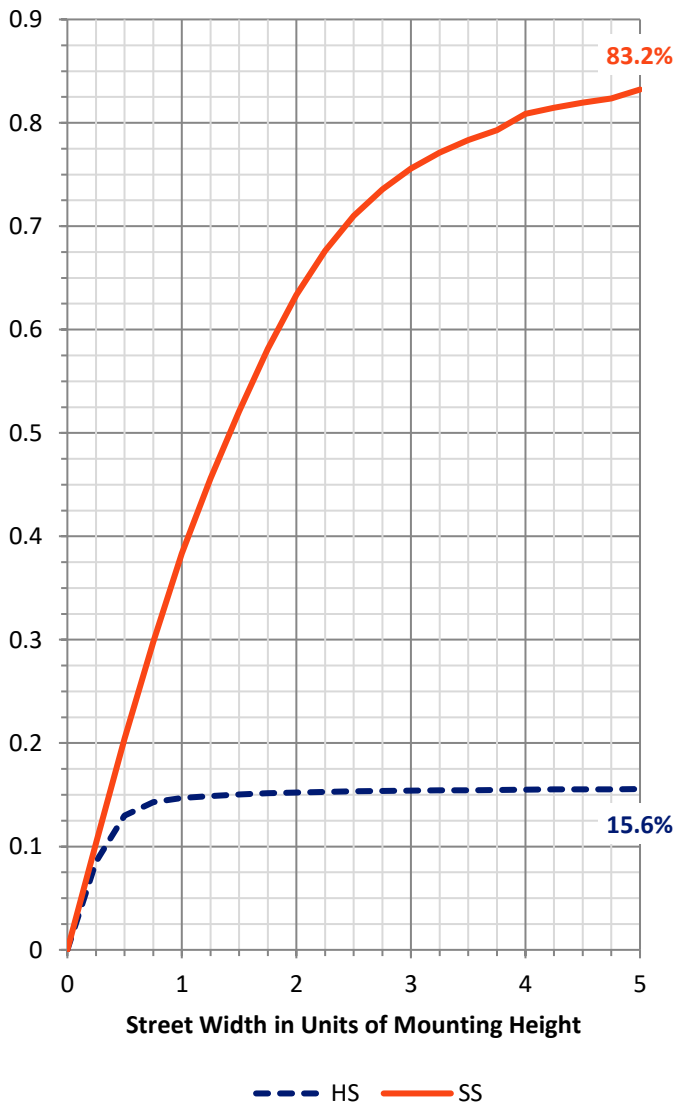
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10501.3	0.0	10501.3
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	56043.7	0.0	56043.7
	% Fixture	84.2	0.0	84.2
Total	Lumens	66545.0	0.0	66545.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	676.2	1.0
10°-20°	2010.9	3.0
20°-30°	3616.2	5.4
30°-40°	5722.6	8.6
40°-50°	8943.4	13.4
50°-60°	12842.6	19.3
60°-70°	17419.8	26.2
70°-80°	12892.5	19.4
80°-90°	2420.8	3.6
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°	66545.0	100.0
0°-180°	66545.0	100.0

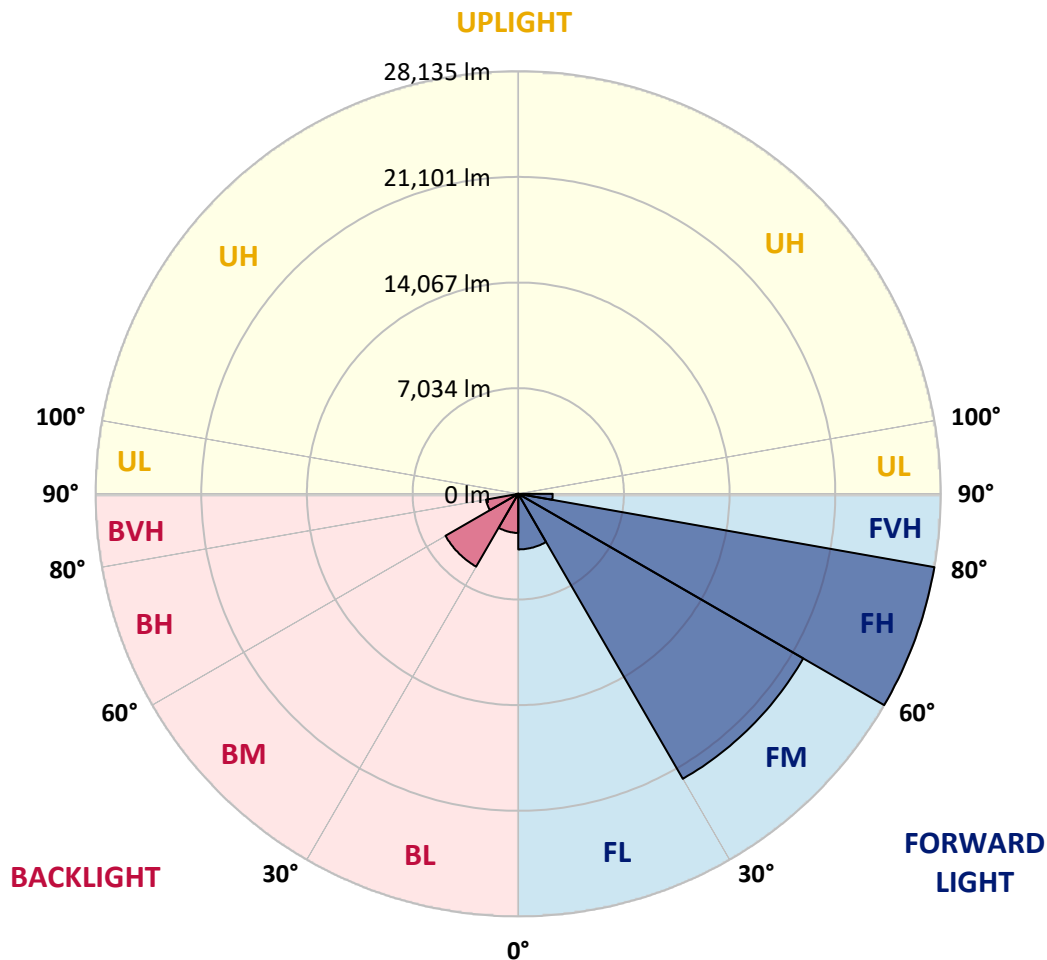


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3701.2	5.6			
FM (30°-60°)	21912.7	32.9			
FH (60°-80°)	28134.6	42.3			G5
FVH (80°-90°)	2295.3	3.4			G5
BL (0°-30°)	2602.2	3.9	B4/5000		
BM (30°-60°)	5595.9	8.4	B4/8500		
BH (60°-80°)	2177.7	3.3	B3/2500		G3/2500
BVH (80°-90°)	125.5	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	7130.0	7130.0	7130.0	7130.0	7130.0	7130.0	7130.0	7130.0	7130.0	7130.0	7130.0
2.5°	7274.4	7259.0	7246.7	7251.3	7242.1	7248.3	7234.4	7217.5	7177.6	7160.7	7153.0
5°	7338.9	7334.3	7322.0	7312.8	7295.9	7289.7	7274.4	7288.2	7266.7	7211.4	7179.1
7.5°	7377.3	7375.8	7361.9	7342.0	7351.2	7358.9	7374.2	7352.7	7325.1	7299.0	7232.9
10°	7394.2	7394.2	7377.3	7388.1	7435.7	7440.3	7448.0	7461.8	7435.7	7397.3	7331.2
12.5°	7437.2	7434.2	7440.3	7475.6	7524.8	7535.5	7574.0	7574.0	7577.0	7554.0	7477.2
15°	7544.8	7544.8	7558.6	7590.9	7675.4	7681.5	7738.3	7789.0	7795.2	7761.4	7703.0
17.5°	7793.6	7787.5	7779.8	7799.8	7890.4	7893.5	7991.8	8056.4	8073.3	8110.1	8100.9
20°	8266.8	8260.7	8259.1	8260.7	8254.5	8245.3	8342.1	8411.2	8497.3	8561.8	8594.1
22.5°	8944.3	8930.5	8930.5	8855.2	8796.8	8806.1	8821.4	8859.8	8973.5	9087.2	9208.6
25°	9674.1	9664.9	9672.5	9480.5	9402.2	9432.9	9412.9	9472.8	9621.8	9720.2	9849.2
27.5°	10270.2	10284.0	10241.0	10092.0	10041.3	10064.3	10018.2	10190.3	10354.7	10526.7	10721.8
30°	11012.2	10938.5	10832.4	10651.2	10632.7	10635.8	10632.7	10909.3	11250.3	11496.1	11766.5
32.5°	11981.6	11993.9	11755.8	11328.7	11172.0	11150.5	11211.9	11617.5	12078.4	12623.8	12980.2
35°	12961.8	12981.7	12808.1	12362.6	11915.5	11847.9	11757.3	12284.2	12949.5	14043.3	14581.0
37.5°	14001.8	14072.5	13866.6	13468.7	12938.7	12875.7	12447.1	12964.8	13948.1	15724.0	16429.2
40°	15393.7	15318.4	15069.6	14564.1	14071.0	13969.6	13471.8	13743.7	15232.4	17828.8	18340.3
42.5°	16420.0	16398.5	16188.0	15688.7	15192.5	15111.0	14710.1	15005.0	16850.1	19962.7	20191.6
45°	17234.2	17366.3	17361.7	17048.3	16768.7	16722.6	16486.0	16920.8	18805.8	21976.8	21864.6
47.5°	17957.8	18039.2	17908.6	17771.9	17641.3	17656.7	17831.8	18726.0	20804.6	23735.8	23239.6
50°	19142.3	19037.8	18452.5	18348.0	18532.4	18540.1	19073.2	20449.7	23006.1	25256.8	24404.1
52.5°	20721.6	20607.9	19405.0	19226.8	19663.1	19695.4	20581.8	22167.3	25276.7	26710.1	25562.5
55°	23072.1	22807.9	21518.9	20720.1	20919.8	21050.4	22124.2	23818.8	27054.2	27991.4	26439.7
57.5°	25958.8	26150.9	25490.3	23685.1	22854.0	22903.2	23889.5	25399.6	28622.8	29112.9	26952.8
60°	29009.9	28963.9	29240.4	28479.9	26888.3	26624.1	26121.7	27012.8	29838.0	30057.7	27481.3
62.5°	30681.4	30950.3	31872.1	32024.2	33460.6	33320.8	29896.4	29013.0	31242.2	30650.7	27625.7
65°	30672.2	30789.0	32505.0	34391.6	38879.1	38839.2	37247.6	31905.9	32288.4	30967.2	27336.9
67.5°	28690.4	28871.7	30878.1	34563.7	41383.3	41335.7	40235.7	35972.4	32617.2	30586.2	25989.6
70°	25077.0	25138.5	27095.7	32140.9	42389.6	42572.4	40338.6	37533.3	31799.9	29453.9	23533.0
72.5°	20687.8	20560.3	22474.5	27447.5	39827.0	39717.9	38633.3	35669.8	30423.3	27255.5	19193.0
75°	15232.4	15587.3	17304.9	22038.2	34099.7	34499.1	34980.0	32818.4	27020.4	22462.2	13272.1
77.5°	10058.2	10509.8	12245.8	16524.4	26995.9	27616.5	28862.5	27913.0	21981.4	16112.7	6320.3
80°	5197.3	5538.4	7100.8	10964.6	19352.8	20248.4	22532.9	21141.0	15584.2	7285.1	1414.9
82.5°	1966.5	1921.9	3181.7	6275.8	12408.7	13222.9	14883.7	12677.5	5546.0	1279.7	657.5
85°	863.4	914.1	1318.1	2862.1	7094.6	7200.6	8431.2	4942.3	812.7	611.4	447.1
87.5°	373.3	428.6	553.1	823.5	2393.6	2763.8	3419.8	1570.1	245.8	212.0	224.3
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°	7130.0	7130.0	7130.0	7130.0	7130.0	7130.0	7130.0	7130.0	7130.0	7130.0	7130.0
2.5°	7139.2	7130.0	7114.6	7076.2	7013.2	7005.5	6999.4	6993.2	6980.9	6987.1	7022.4
5°	7154.5	7137.6	7082.3	7027.0	6971.7	6922.6	6862.6	6839.6	6808.9	6788.9	6825.8
7.5°	7206.8	7171.4	7090.0	7014.7	6864.2	6792.0	6715.2	6624.5	6560.0	6518.5	6555.4
10°	7294.3	7249.8	7148.4	6993.2	6816.6	6618.4	6483.2	6332.6	6209.7	6175.9	6209.7
12.5°	7437.2	7371.2	7252.9	7042.4	6729.0	6469.4	6212.8	6014.6	5816.4	5759.6	5776.5
15°	7669.2	7617.0	7435.7	7145.3	6730.5	6334.2	5953.2	5633.6	5374.0	5283.3	5277.2
17.5°	8041.0	7985.7	7776.7	7349.7	6785.8	6228.2	5698.1	5211.1	4817.8	4618.1	4585.9
20°	8574.1	8497.3	8180.8	7650.8	6905.7	6182.1	5461.5	4807.1	4195.6	3820.8	3763.9
22.5°	9167.1	9085.7	8618.6	7882.8	6991.7	6091.4	5235.7	4360.0	3555.0	3097.2	3032.7
25°	9904.5	9726.3	9038.0	8102.4	6971.7	5900.9	4868.5	3753.2	2880.6	2484.2	2441.2
27.5°	10632.7	10406.9	9465.1	8217.7	6884.2	5598.3	4330.8	3043.4	2255.3	1974.1	1938.8
30°	11536.1	11099.8	9844.6	8271.4	6662.9	5145.1	3610.3	2313.7	1688.4	1494.8	1461.0
32.5°	12609.9	11949.3	10201.0	8211.5	6294.2	4453.7	2806.8	1694.5	1255.2	1133.8	1132.3
35°	14026.4	12990.9	10592.8	8014.9	5728.9	3708.6	1968.0	1158.4	978.6	937.1	944.8
37.5°	15682.5	14401.3	10990.7	7692.3	5089.8	2837.5	1312.0	892.6	860.3	861.9	863.4
40°	17429.3	15959.1	11526.9	7239.0	4313.9	2054.0	944.8	801.9	800.4	815.8	820.4
42.5°	19097.7	17472.3	12187.5	6635.3	3501.2	1358.1	818.8	765.1	745.1	751.3	755.9
45°	20647.9	18770.5	12749.7	6046.9	2630.1	969.4	803.5	722.1	691.3	688.3	691.3
47.5°	21896.9	19810.6	13092.3	5355.5	1874.3	805.0	771.2	682.1	639.1	629.9	625.3
50°	22847.8	20583.3	13216.8	4572.0	1267.4	768.1	728.2	636.0	583.8	585.3	585.3
52.5°	23775.8	21285.4	13072.4	3782.4	932.5	735.9	699.0	599.2	543.8	573.0	580.7
55°	24444.1	21580.4	12651.4	2928.2	777.4	695.9	666.8	556.1	517.7	565.4	580.7
57.5°	24834.3	21812.4	11878.7	2113.9	712.8	657.5	625.3	516.2	480.9	493.2	500.8
60°	25077.0	21488.2	10857.0	1445.7	679.0	626.8	583.8	490.1	442.5	413.3	408.7
62.5°	24943.4	20677.1	9511.2	994.0	643.7	593.0	548.5	465.5	402.5	364.1	361.0
65°	23854.1	19176.1	7302.0	805.0	622.2	577.6	527.0	442.5	374.9	338.0	333.4
67.5°	21833.9	16478.3	4264.8	715.9	613.0	562.3	510.1	420.9	359.5	319.6	313.4
70°	18513.9	12394.9	1428.8	639.1	611.4	560.7	496.2	405.6	342.6	301.1	295.0
72.5°	13356.6	7478.7	695.9	562.3	571.5	537.7	485.5	393.3	331.8	279.6	268.9
75°	7590.9	2435.0	628.3	485.5	531.6	513.1	479.3	394.8	336.4	253.5	241.2
77.5°	2160.0	711.3	606.8	413.3	502.4	530.0	448.6	356.4	344.1	235.1	219.7
80°	729.7	633.0	585.3	321.1	405.6	437.8	388.7	313.4	347.2	213.5	198.2
82.5°	585.3	636.0	491.6	256.6	308.8	331.8	308.8	281.1	281.1	190.5	178.2
85°	468.6	589.9	311.9	204.3	230.4	255.0	218.2	210.5	196.6	159.8	155.2
87.5°	271.9	184.4	129.0	104.5	96.8	98.3	84.5	101.4	124.4	109.1	107.5
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)