SPECIFICATION FOR APPROVAL

CUSTOMER/PROJECT： _____

CUSTOMER P.N： _____

PRODUCT NAME： **LTE Antenna**

MODEL NO： **12C001B**

SPECIFICATION： _____

SUPPLIER AUTHORIZED SIGNATURE		
PREPARED	CHECKED	APPROVED
JENNY		

CUSTOMER AUTHORIZED SIGNATURE			
PM		QE	

P lea se ret urn to us one copy of "SPECIFICATION FOR APPROVAL"with your approved signature.

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TEL: +86-21-66276925(26/29/35)－615

Content

1 Noun explanation

dBi	Decibel relative isotropic antenna
Tx	Transmit frequency
Rx	Receive frequency
TRP	Total Radiated Power
TIS	Total Isotropic Sensitivity
VSWR	Voltage Standing Wave Ratio
GSM	Global Service for Mobile communication
DCS	Digital Communication System
CDMA	Code Division Multiple Access
WCDMA	Wideband Code Division Multiple Access

2 Test equipment

network analyzer
Agilent8960
SATIMO64 chamber

3 Working frequency band

The yellow Identification is the using band

band	uplink	downlink
GSM850	824MHz～849MHz	869MHz～894MHz
GSM915	890MHz～920MHz	
DCS1800	1710MHz～1785MHz	1805MHz～1880MHz
PCS1900	1850MHz～1910MHz	1930MHz～1990MHz
CDMA800	825MHz～835MHz	870MHz～880 MHz
CDMA2000	824MHz ～849MHz	869MHz ～894MHz
WCDMA900	880MHz～915MHz	925MHz～960MHz
WCDMA2100	1920MHz～1980MHz	2110MHz～2170MHz
TD-SCDMA1900	1880MHz～1920MHz	1880MHz～1920MHz
LTE	824MHz ～2690MHz	

4 Test project

4.1 VSWR plot

4.2 Simth plot

4.3 Radiation pattern

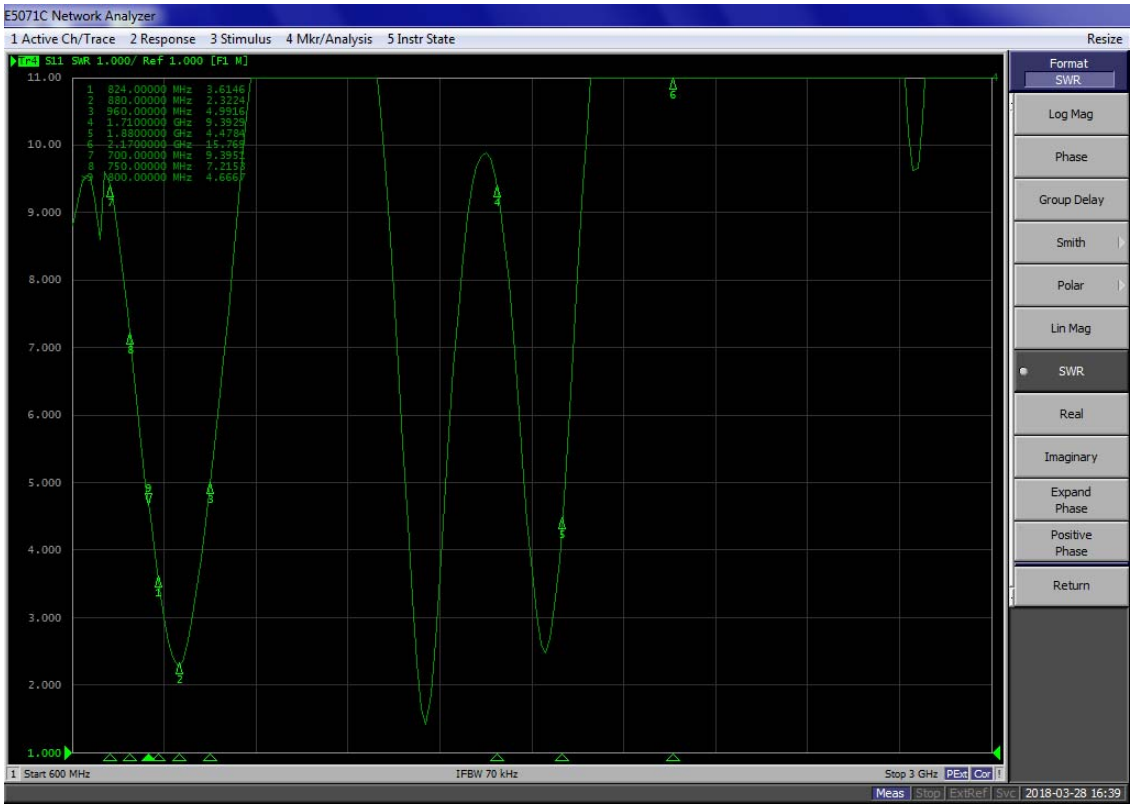
4.4 Gain & Efficiency

4.5 TRP&TIS

5 Antenna parameter

5.1 VSWR

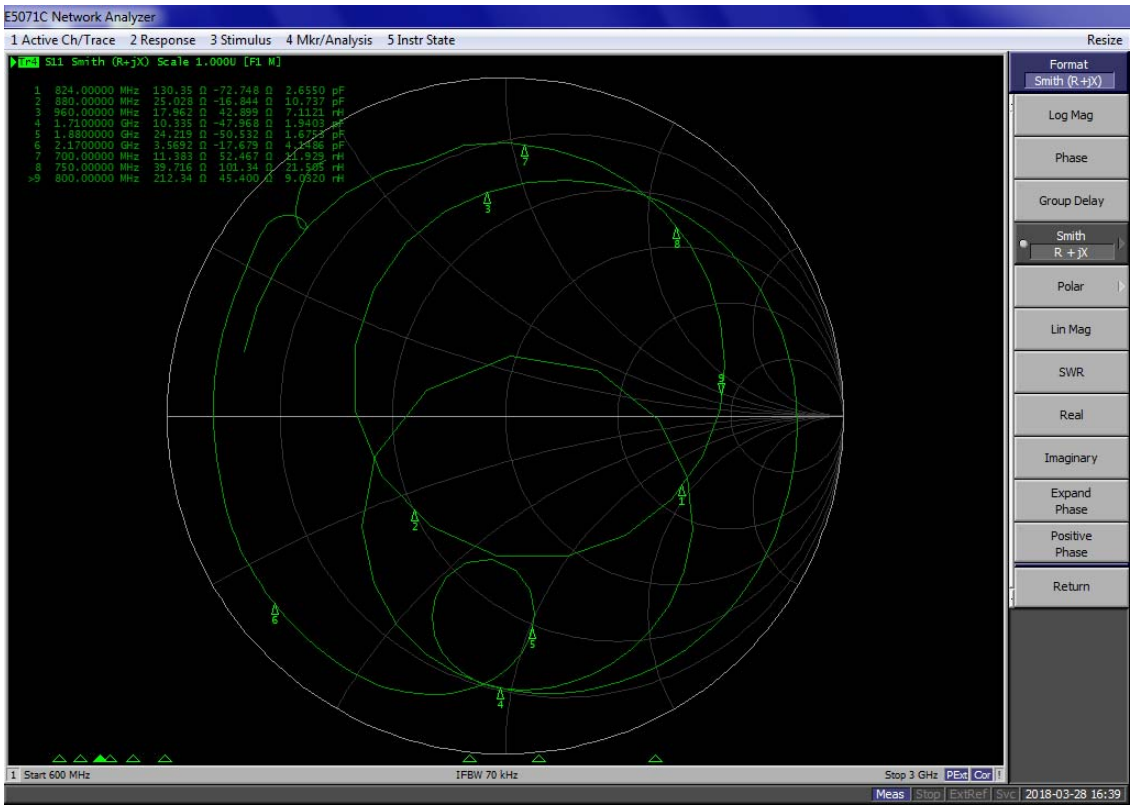
5.1.1 VSWR plot



5.1.2 VSWR data

Freq/MHz	700	800	880	960	1710	1880	2170
VSWR	9.3	4.6	3.6	4.9	9.3	4.4	15

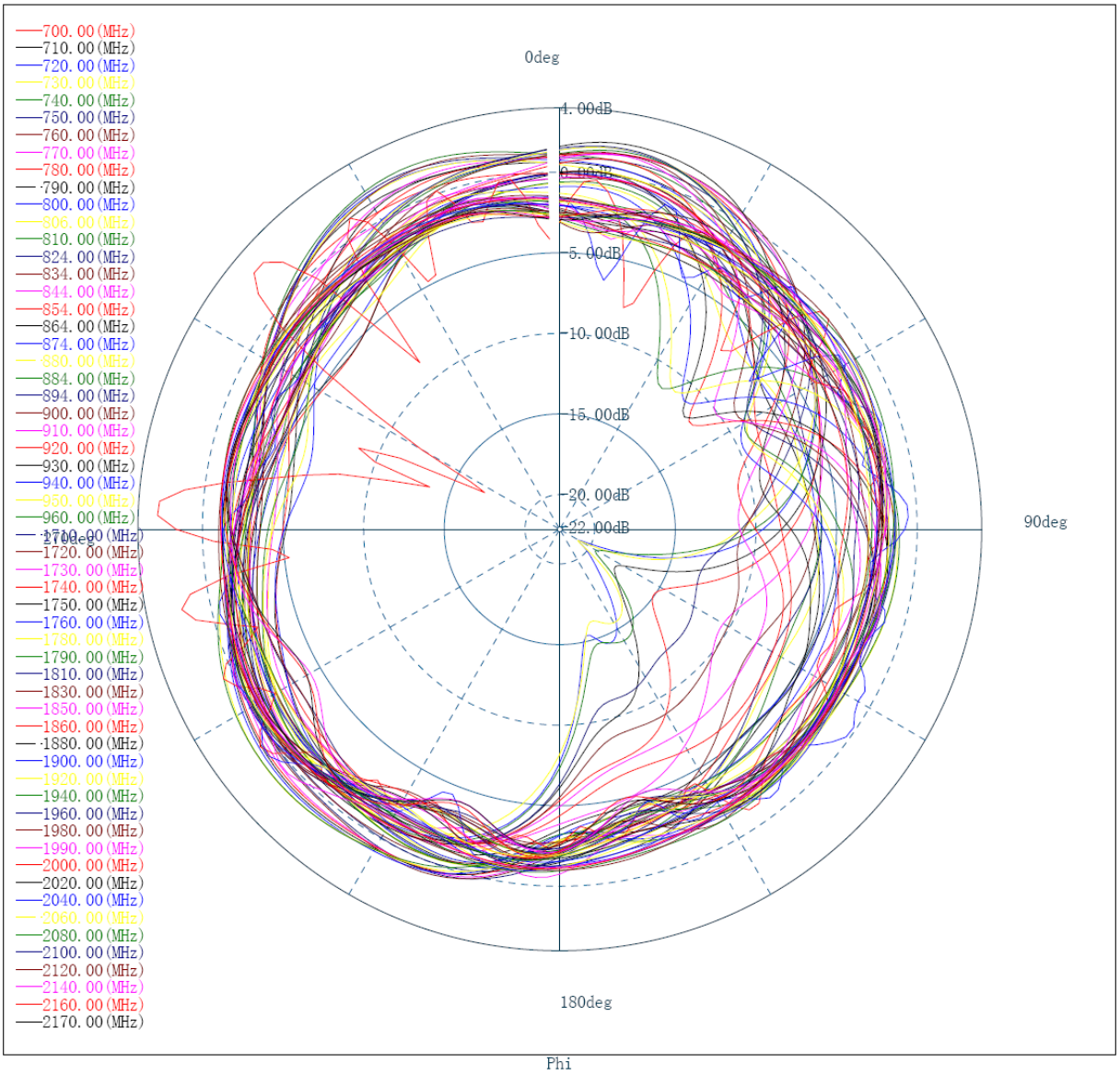
5.2 Simth plot



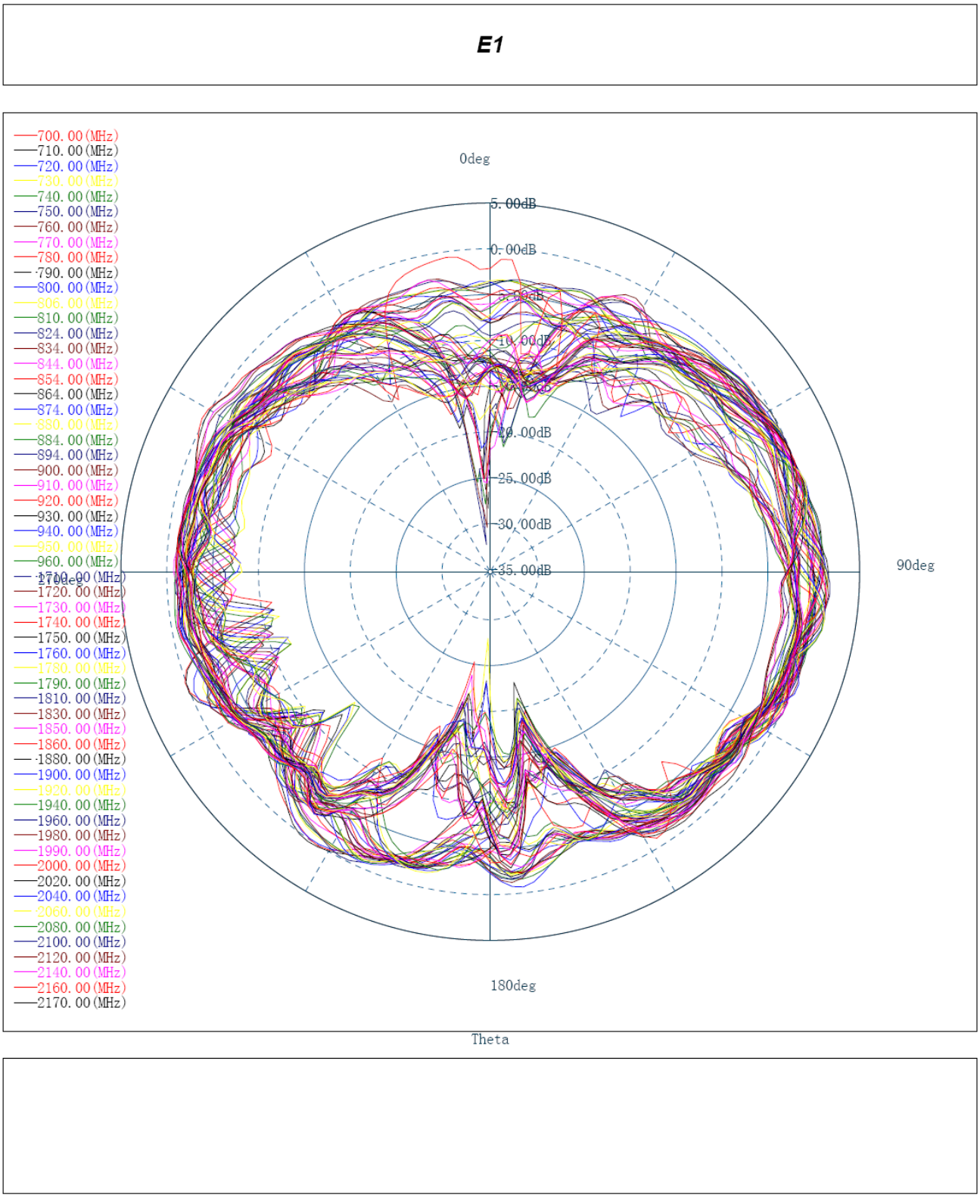
5.3 Radiation pattern

5.3.1 H-plane

H



5.3.2 E-plane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2170.00(MHz)
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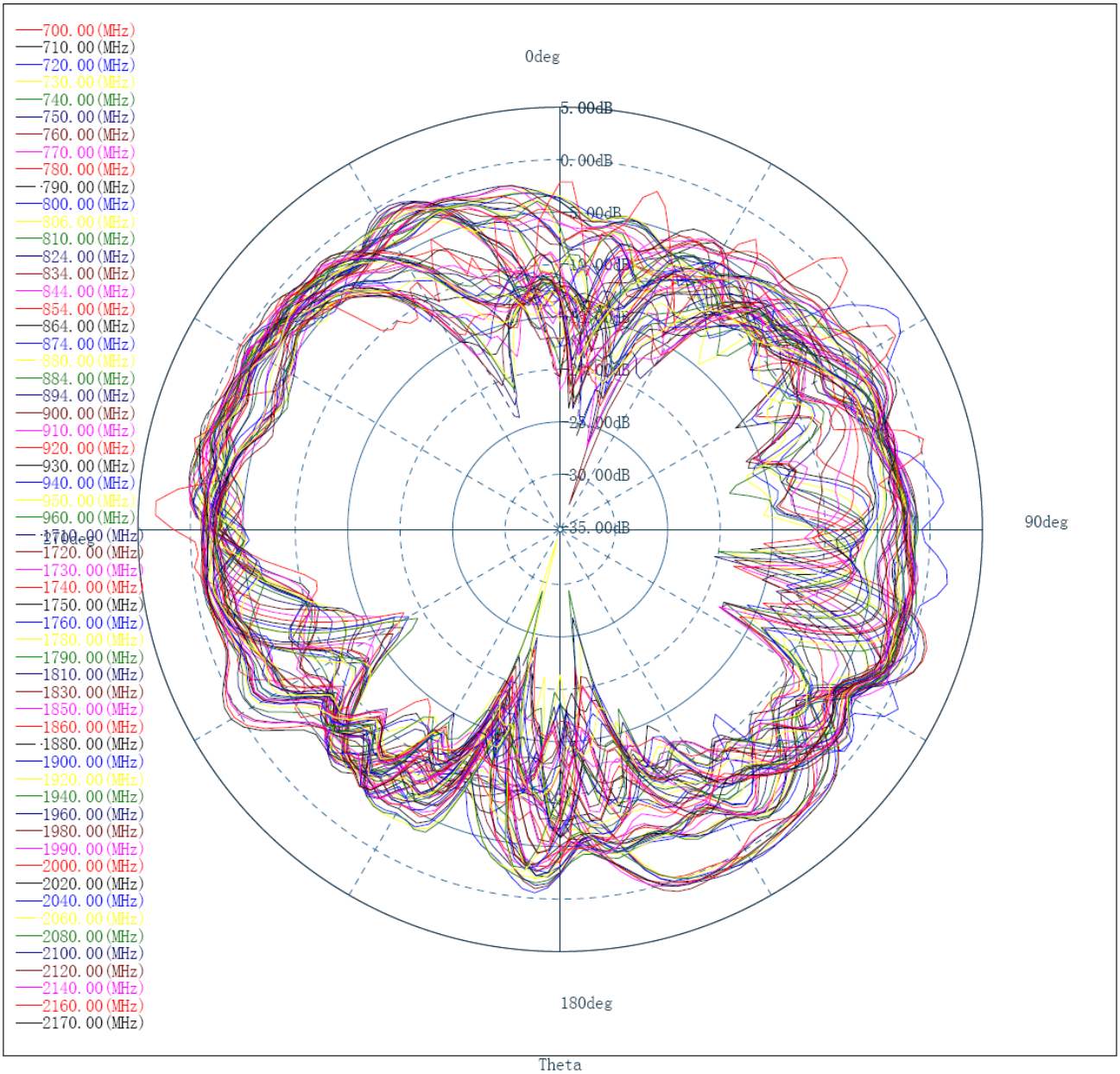
0.00dB
10.00dB
20.00dB
25.00dB
30.00dB
35.00dB
90deg
180deg
Theta

E2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5.00dB
0.00dB
90deg
180deg
Theta

5.4 UGain & Efficiency

Frequency [Hz]	Efficiency	Gain [dBi]
7E+08	49%	1.632948
7.1E+08	51%	1.826395
7.2E+08	49%	1.833288
7.3E+08	44%	1.600659
7.4E+08	46%	1.896142
7.5E+08	50%	1.936788
7.6E+08	50%	1.721112
7.7E+08	46%	1.406281
7.8E+08	45%	1.491829
7.9E+08	47%	1.8309
8E+08	45%	1.843967
8.06E+08	41%	1.714366
8.1E+08	45%	2.215538
8.24E+08	42%	1.97312
8.34E+08	44%	1.890023
8.44E+08	42%	1.407188
8.54E+08	42%	1.453714
8.64E+08	47%	2.111646
8.74E+08	46%	1.93289
8.8E+08	48%	1.960958
8.84E+08	46%	1.930333
8.94E+08	52%	2.347337
9E+08	50%	2.192946
9.1E+08	50%	2.265394
9.2E+08	49%	2.081987

9.3E+08	48%	2.005751
9.4E+08	49%	2.128994
9.5E+08	49%	2.305449
9.6E+08	48%	2.233022
1.71E+09	35%	0.02584
1.72E+09	35%	0.0088
1.73E+09	36%	0.647356
1.74E+09	44%	0.806863
1.75E+09	35%	0.03676
1.76E+09	46%	0.549059
1.78E+09	34%	0.14522
1.79E+09	35%	0.41562
1.81E+09	36%	0.35094
1.83E+09	34%	0.30882
1.85E+09	38%	0.430313
1.86E+09	35%	0.33059
1.88E+09	37%	0.008792
1.9E+09	43%	0.479122
1.92E+09	40%	0.111459
1.94E+09	46%	0.407999
1.96E+09	44%	0.037526
1.98E+09	48%	0.405617
1.99E+09	48%	0.112167
2E+09	47%	0.144104
2.02E+09	46%	0.14634
2.04E+09	47%	0.033818
2.06E+09	45%	0.112366
2.08E+09	51%	0.672779

2.1E+09	48%	0.291807
2.12E+09	54%	0.939911
2.14E+09	54%	1.161325
2.16E+09	59%	1.631935
2.17E+09	59%	1.967355

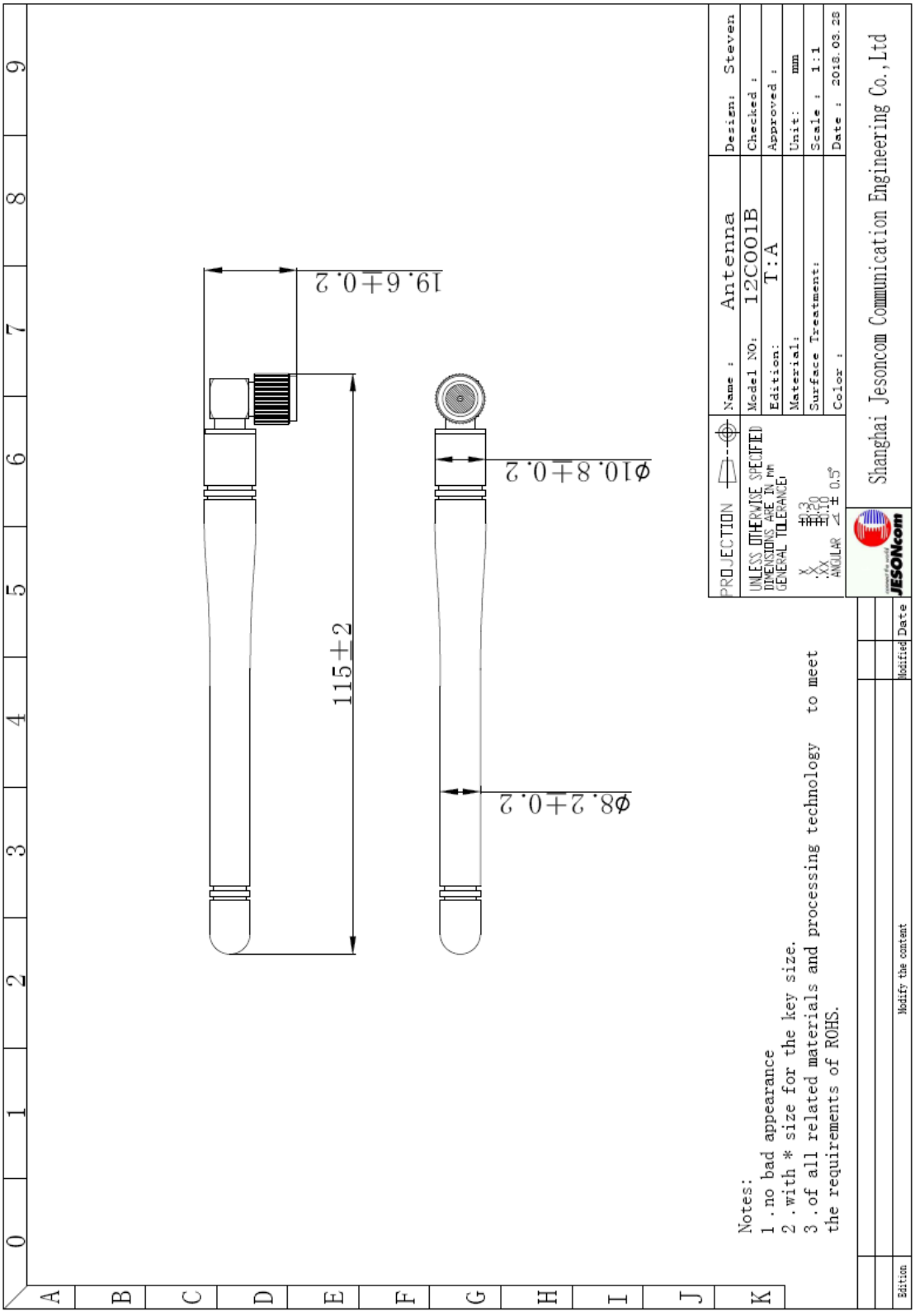
6 Environmental treatment suggestions

Environment does not need treatment

7 Impedance matching

The matching circuit has not been changed

8 Antenna plan



9 Antenna installation guide

9.1 Antenna installation instructions

9.2

10 Other