



GUANGDONG SLEING COMM-TECH CO., LTD

SPECIFICATION APPROVAL SHEET

客 户 :

CUSTOMER

CUS PART NO

REV

X3

SPECIFICATION

2.4~2.5/5.15~7.15GHz

WIFI MAIN Antenna L=375mm(Ø0.81+MHF)

weight

SUP PART NO

SLEingB247860375

DATE

2025.01.07

SUP APPROVED

APPROVED	CHECKED	QA CHECKED	DESIGNED
JONGREI	HZH	LSY	XIANG

CUS APPROVED

APPROVED	CHECKED	QA CHECKED	DESIGNED

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RECORD SHEET

[illegible]



GUANGDONG SLEING COMM-TECH CO., LTD

承认书项目表 (Spec Item)

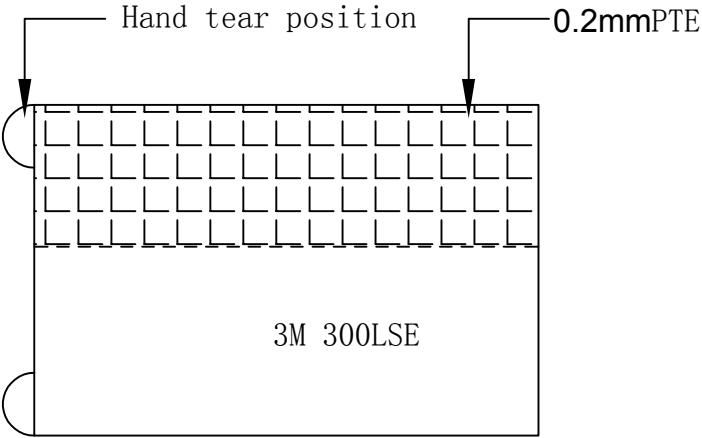
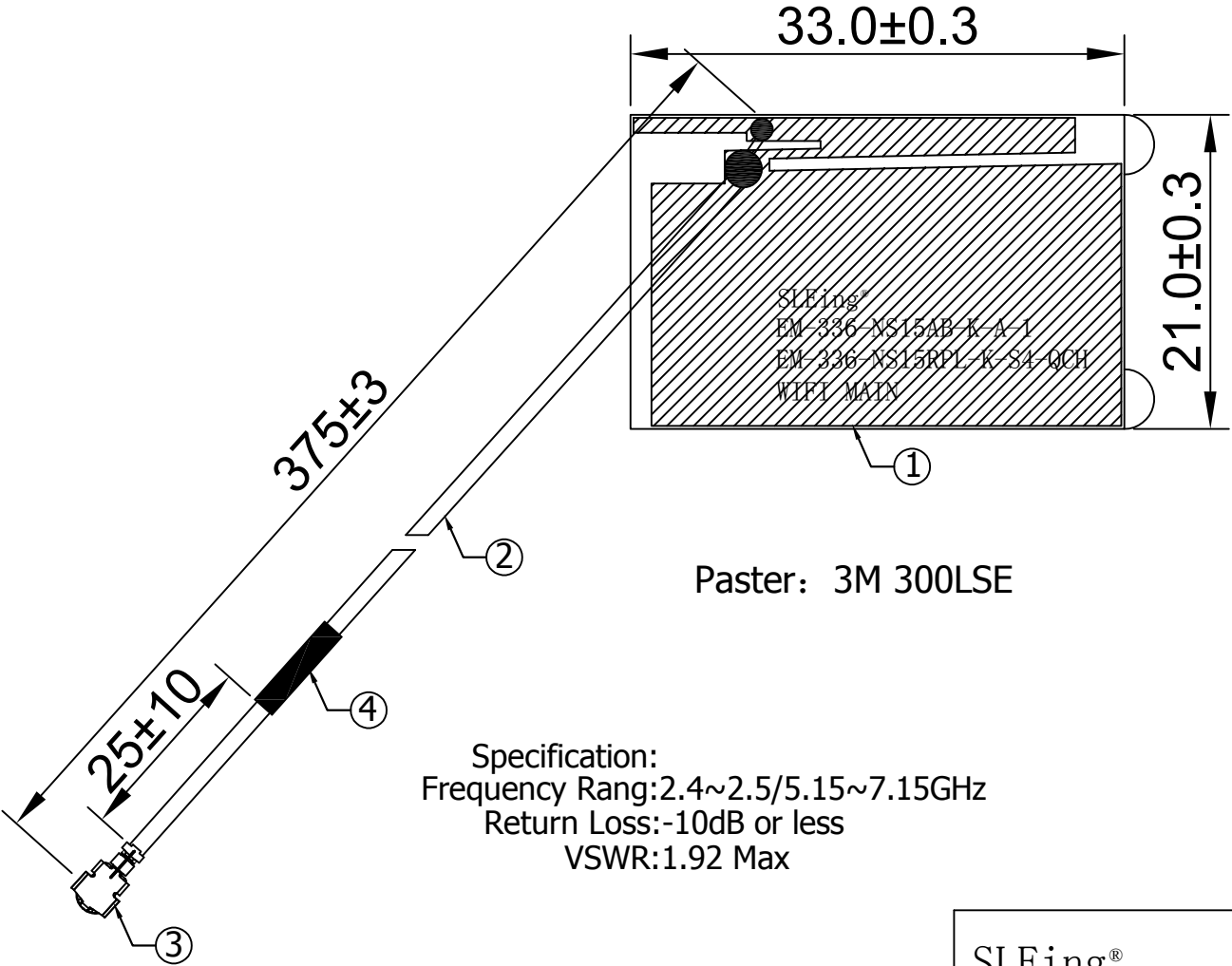
N0.	Project	Remark	Page
1	Spec Cover		1
2	MODIFICATION RECORD SHEET		2
3	Spec Item		3
4	Drawing		4
5	Test Reports		5
6	Antenna assembly diagram		6
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Give clear indication of:

1. The contents of the acknowledgement shall be arranged in order according to the items in the check sheet.
2. The number of copies of the acceptance letter shall be printed according to the customer's requirements, and the SGS report shall be stamped with the engineering seal.
3. All materials shall be confirmed by the customer. Any material/process/changes that may affect product quality and environmental quality must be re-sent to the customer for confirmation before import.
4. SGS report is valid for one year.
5. According to the contents attached to the actual acknowledgement, check the check form: "Yes" is provided, "no" is provided according to customer requirements.

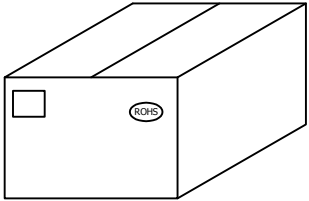
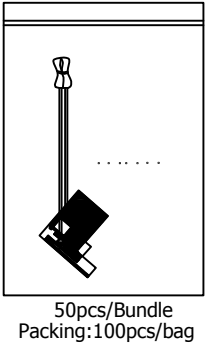
E
D
C
B
A

REV.	CONTENT	DATE
X1	First Sample	2024.08.01
X2	Modify FPC	2024.10.22
X3	Add printing	2025.01.07



Paster: 3M 300LSE

Specification:
Frequency Rang:2.4~2.5/5.15~7.15GHz
Return Loss:-10dB or less
VSWR:1.92 Max



The outer box must be attached with 1 ROHS label and 1 material label

SLEing® GUANGDONG SLEING COMM-TECH CO.,LTD	CUSTOMER			
	PART NO			
	TITLE		WIFI MAIN ANTENNA	
	S.L P/NO		SLEingB247860375	
TOLERANCE UNLESS OTHERWISE SPECIFIED UNIT:mm SHEET: 1/1 SCALE: 1/1	SIZE		DRAWN	CHECKED
	A4			
			APPROVED	

4	H.S Tube	Heat Shrink Tube,White		1
3	Connector	MHF Plug for Φ0.81 Cable		1
2	Cable	Φ0.81mm Coaxial Cable Black,50Ω		1
1	FPCB	FPCB,L33.0*W21.0*T0.4mm,Color:Black	300LSE Adhesive	1
NO	PART NAME	DESCRIPTION	REMARK	Q'TY

8 7 6 5 4 3 2 1



Test Reports

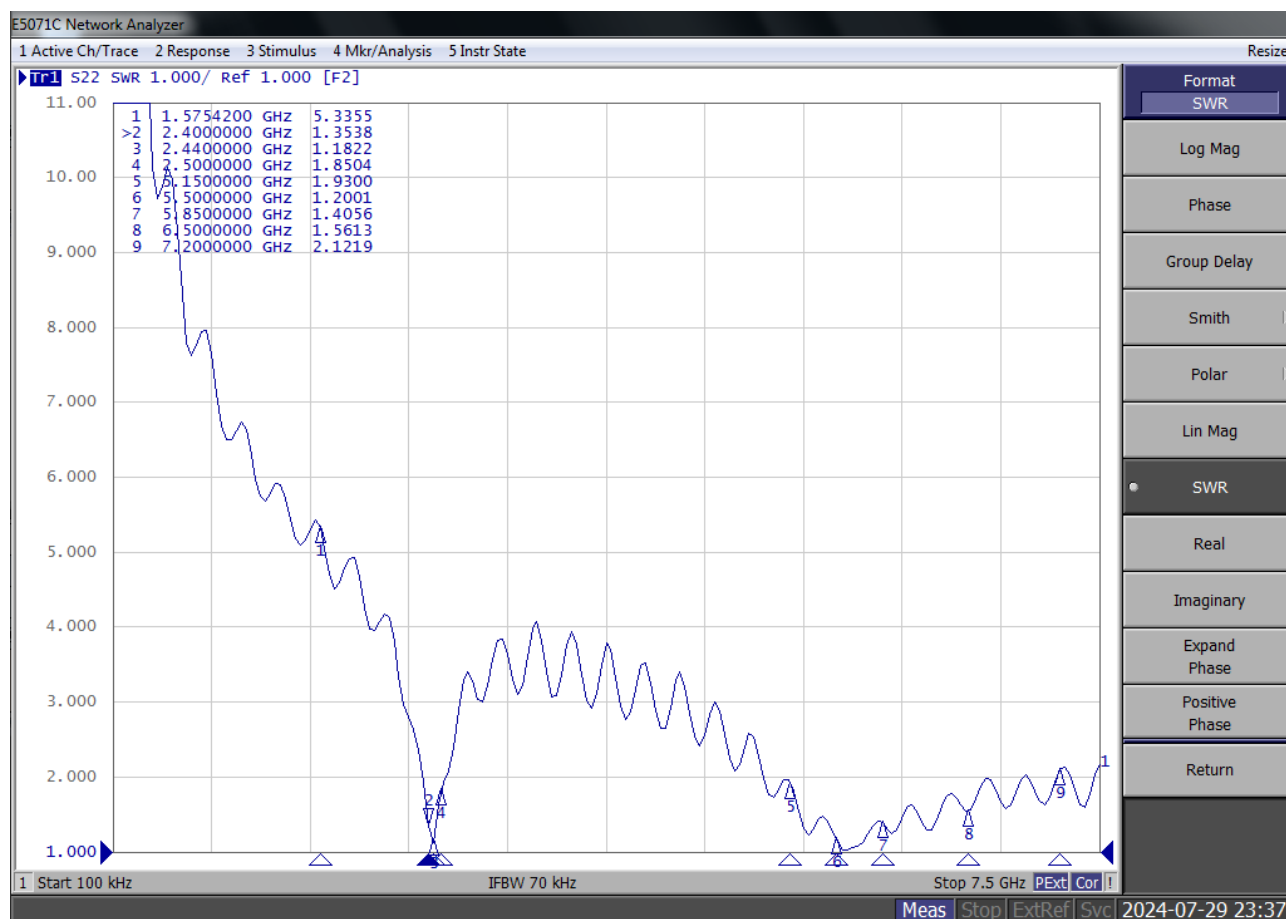
Electrical Properties	
Frequency	2.4~2.5 5.15~7.15GHz
Impedance	50 Ohm Nominal
V.S.W.R	≤ 1.92
Return Loss	-10 dB Max
Radiation	Omni-directional
Gain (Peak)	2 $\pm$ 0.5 dBi
Polarization	Linear, Vertical
Admitted Power	2 W
Connector	MHF
Physical Properties	
Antenna Material	FPCB
Cable Type	$\Phi 0.81$ mm Black
Operating Temp	-40 $^{\circ}$ C -+85 $^{\circ}$ C
Storage Temp.	-5-+30 $^{\circ}$ C

S Parameter Test

Agilent E5071C Network Analyzer



WIFI Antenna

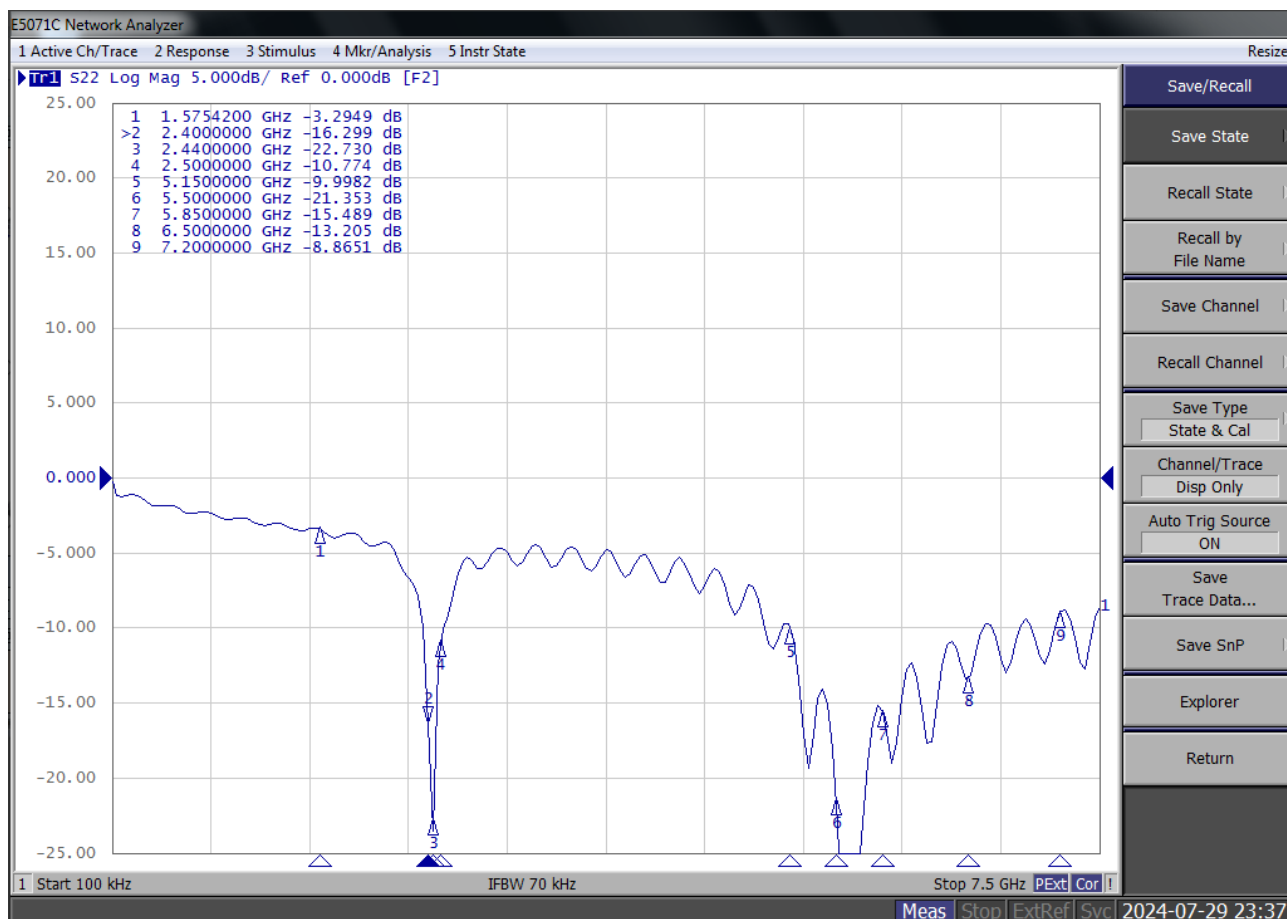


S Parameter Test

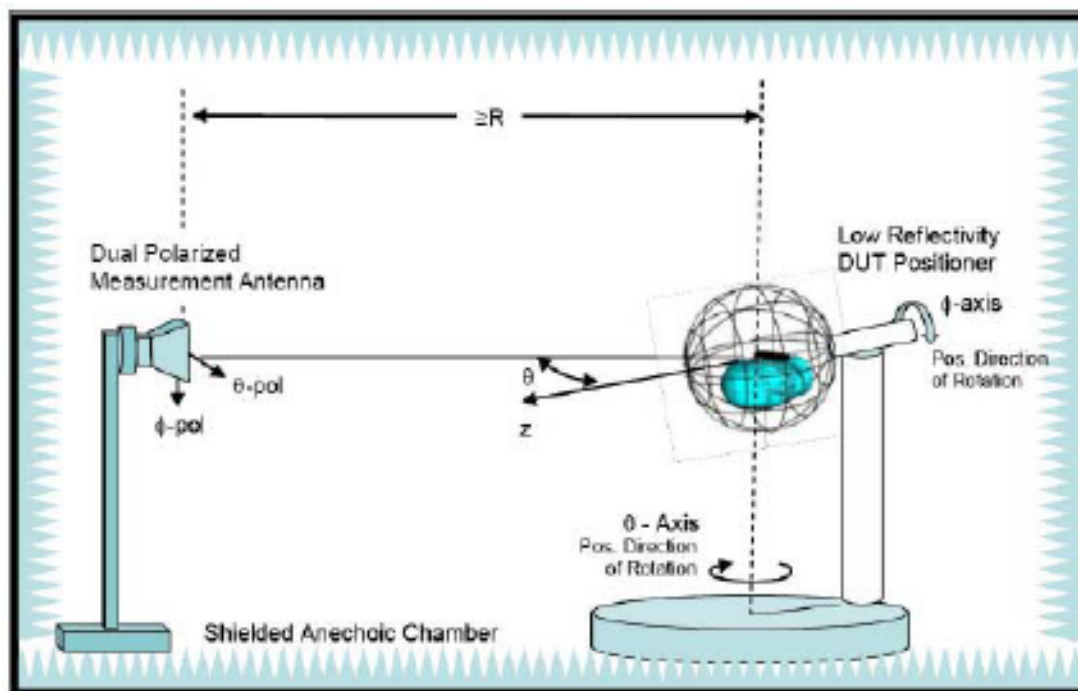
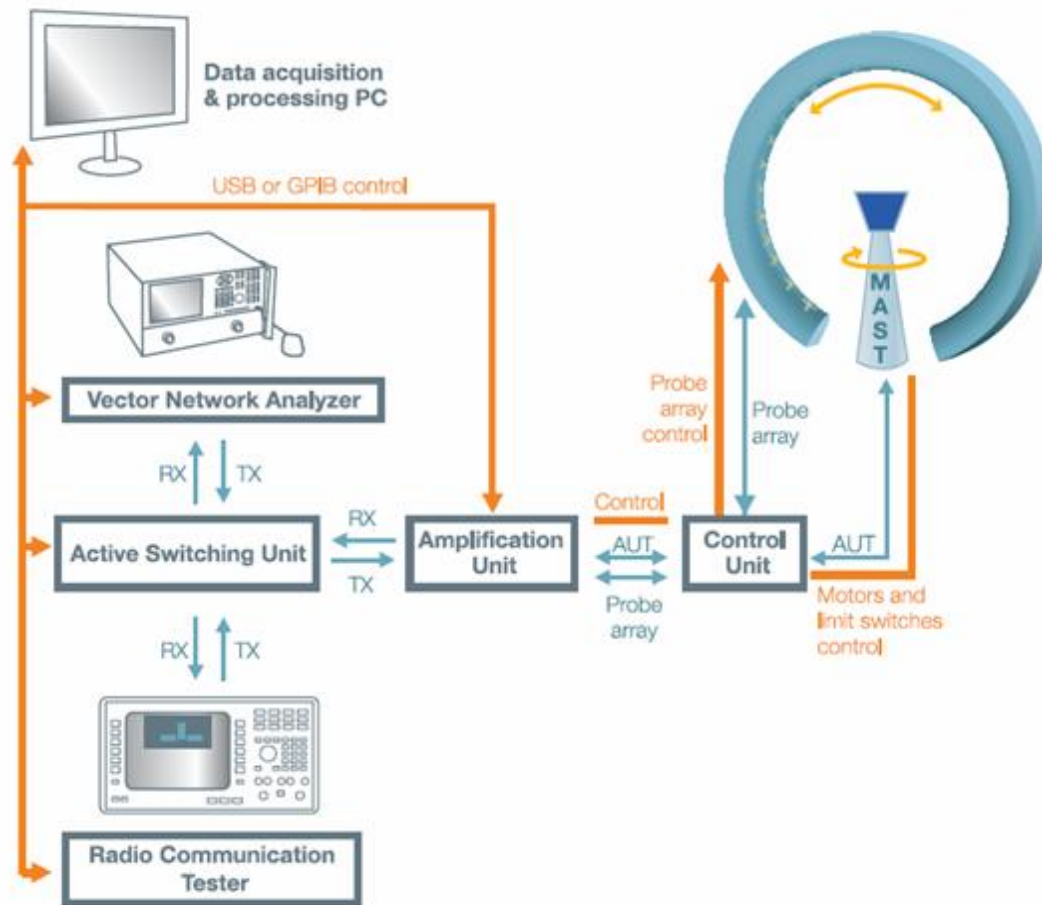
Agilent E5071C Network Analyzer



WIFI Antenna

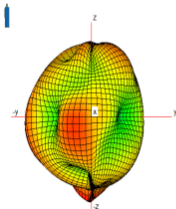
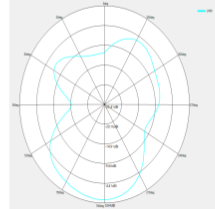
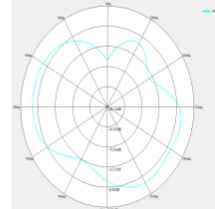
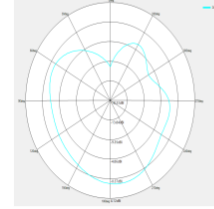


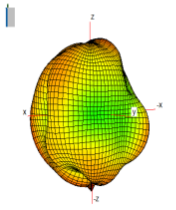
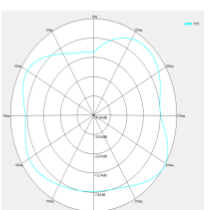
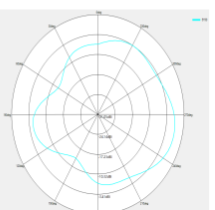
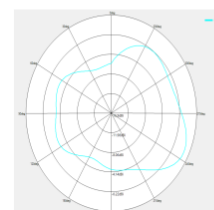
Test Setup



Test Efficiency

WIFI-MIAN 天线无源效率测试报告

	Frequency ID	1	2	3	4	5	6	7	8	9	10	11
2.4G WiFi	Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
	Gain (dBi)	0.64	1.53	1.48	1.68	1.82	1.77	1.68	1.38	1.17	1.09	1.04
	Efficiency (%)	36.13	37.23	38.31	38.41	37.53	37.31	36.90	35.79	35.33	36.53	35.20
	   											

	Frequency ID	1	2	3	4	5	6	7	8	9	10	11
5G WiFi	Frequency (MHz)	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0
	Gain (dBi)	1.53	1.59	1.20	1.37	1.78	1.16	1.15	0.99	1.40	1.06	1.56
	Efficiency (%)	33.25	33.52	34.23	31.32	30.52	371.72	32.88	31.36	30.03	35.60	31.79
	   											

	Frequency ID	12	13	14	15	16	17	18	19	20	21	22
5G WiFi	Frequency (MHz)	5700.0	5750.0	5800.0	5850.0							
	Gain (dBi)	1.28	0.69	0.20	-0.39							
	Efficiency (%)	33.04	31.95	32.63	31.65							



OTA

Bandwidth	Free Space Requirements		Channal	Testing Results		Gap	
	TRP	TIS		TRP	TIS (LCD ON)	TRP	TIS (LCD ON)
11b 11Mbps	10	-72	1	11.0	-78.6	1.0	6.6
	10	-72	6	12.9	-78.6	2.9	6.6
	10	-72	11	12.1	-79.1	2.1	7.1
	10.0	-72	Avg	12.0	-78.8	2.0	6.8
11a 6Mbps	9	-82	36	11.0	-82.6	2.0	0.6
	9	-82	100	11.1	-84.3	2.1	2.3
	9	-82	157	11.6	-82.5	2.6	0.5
	9.0	-82.0	Avg	11.2	-83.1	2.2	1.1