

承 认 书

SPECIFICATION APPROVAL SHEET

客 户 :
CUSTOMER

客 户 料 号 :
CUS PART NO

版次:
REV

X1

品 名 / 规格 : 2.4~2.5/5.15~5.85GHz
SPECIFICATION WIFI Antenna L=300mm(Ø0.81+MHF)

单重:
weight

供 方 料 号 :
SUP PART NO

SLEingB245440300

日 期 :
DATE

2024.08.23

厂 商 核 准 :
SUP APPROVED

核准 APPROVED	结构审核 Structure audit	RF审核 RF CHECKED	品保审核 QA CHECKED	承办 DESIGNED
1 李心健	陈国海	2024.08.23	2024.08.23	何国海

客 户 核 准 :
CUS APPROVED

核准 APPROVED	审核 CHECKED	品保审核 QA CHECKED	承办 DESIGNED

东莞市森岭智能科技有限公司

DONGGUAN CITY SLEing INTEL-TECH CO., LTD

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正本由承办单位保存

[illegible]



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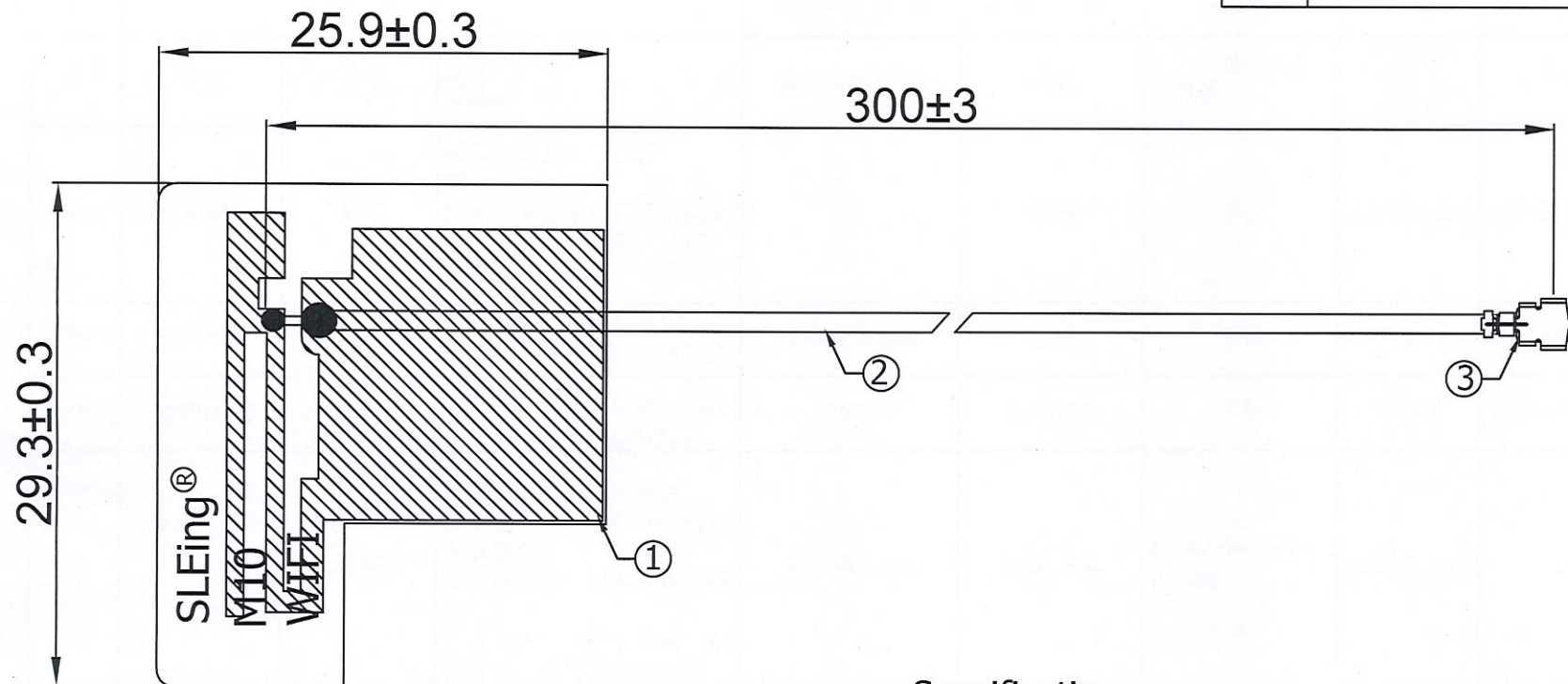
承认书项目表 (Spec Item)

序号 (NO.)	项目 (Project)	备注 (Remark)	页码 (Page)
1	承认书封面 (Spec Cover)		1
2	变更记录 (MODIFICATION RECORD SHEET)		2
3	承认书项目表 (Spec Item)		3
4	工程成品图 (Drawing)		4
5	电性测试报告 (Test Reports)		5
6	天线组装图 (Antenna assembly diagram)		6
7	S参数测试 (S Parameter Test)		7
8	测试设备 (Test Setup)		8
9	测试效率 (Test Efficiency)		9

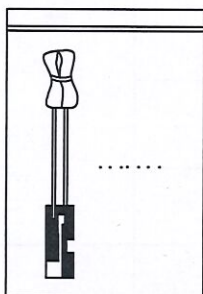
Give clear indication of:

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.

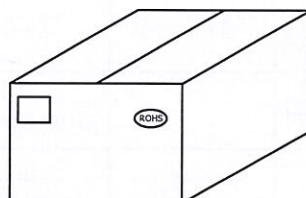
REV.	CONTENT	DATE
X1	First Sample	2024.08.23



Specification:
Frequency Rang:2.4~2.5/5.15~5.85GHz(带机测试)
Return Loss:-10dB or less
VSWR:1.92 Max



50pcs/Bundle
Packing:100pcs/bag



外箱须贴ROHS标签与物料标签各1PCS

SLEing® 森岭
东莞市森岭智能科技有限公司
DONGGUAN SLEing INTEL-TECH CO.,LTD

TOLERANCE UNLESS OTHERWISE SPECIFIED		
UNIT:mm	ANGLES ±0.5°	X. ±0.3
SHEET: 1/1	0.XX ±0.05	XX. ±0.5
SCALE: 1/1		XXX. ±2.0

CUSTOMER			
PART NO			
TITLE		WIFI ANTENNA	
S.L P/NO		SLEingB245440300	
SIZE	DRAWN	CHECKED	APPROVED
A4			

3	Connector	MHF Plug for Φ0.81 Cable	第四代端子	1
2	Cable	Φ0.81mm Coaxial Cable Grey,50Ω		1
1	FPCB	FPC,L29.3*W25.9*T0.2mm,Color:Black	300LSE Adhesive	1
NO	PART NAME	DESCRIPTION	REMARK	Q'TY



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电性测试报告

Test Reports

Electrical Properties	
Frequency	2.4~2.5/5.15~5.85GHz(带机测试)
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	Φ 0.81mm Grey
Operating Temp.	-40~+85 °C
Storage Temp.	-5~+30 °C



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天线组装图

Antenna Profile

Device



Antenna



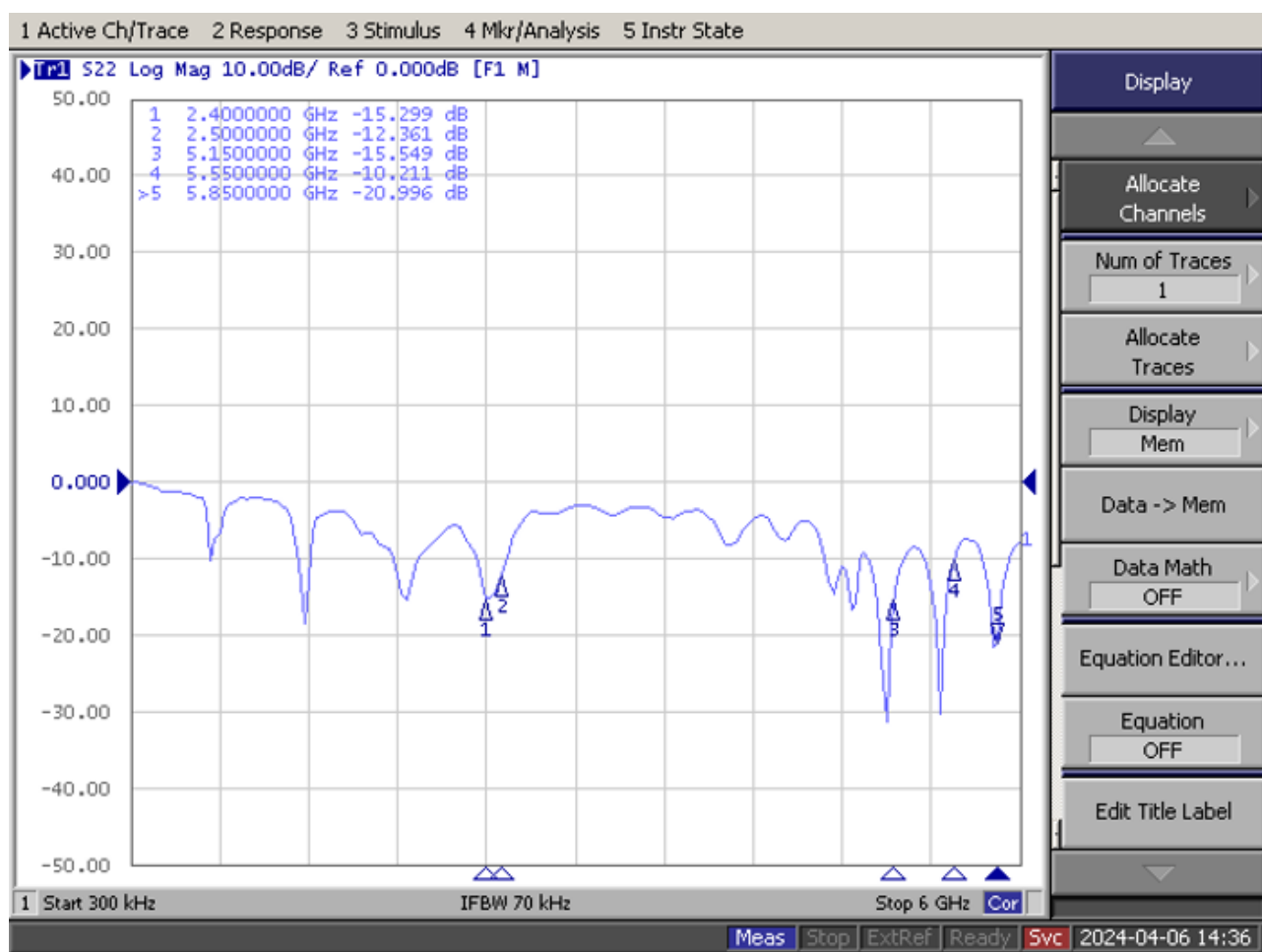
S 参数测试

S Parameter Test

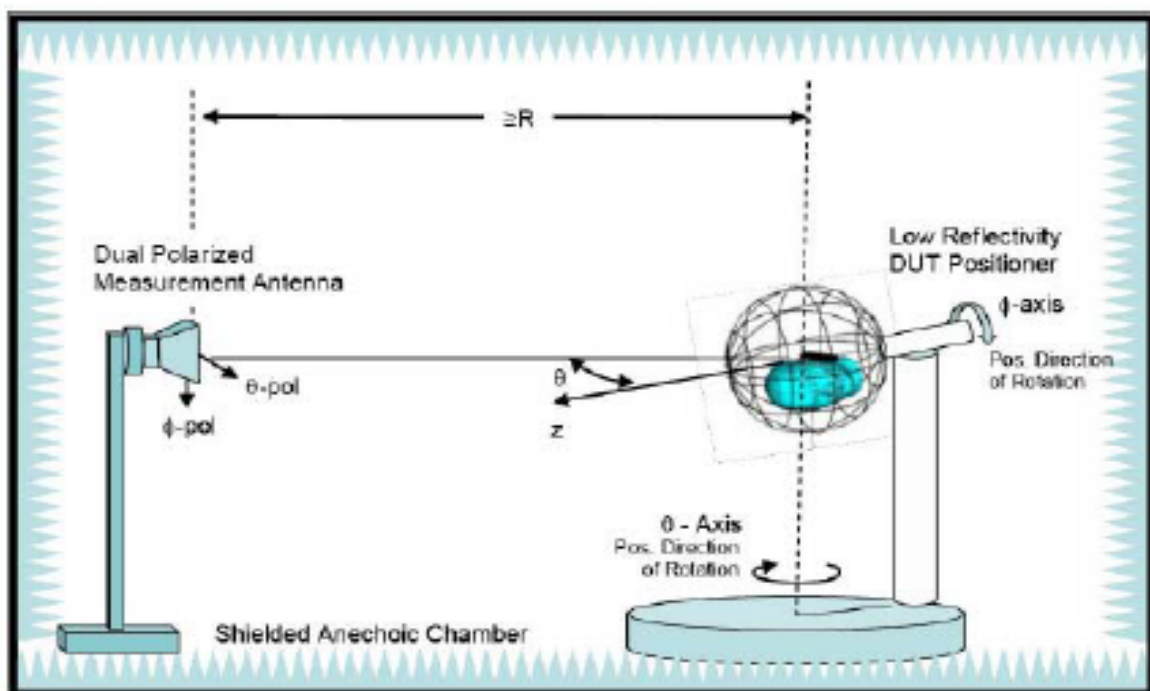
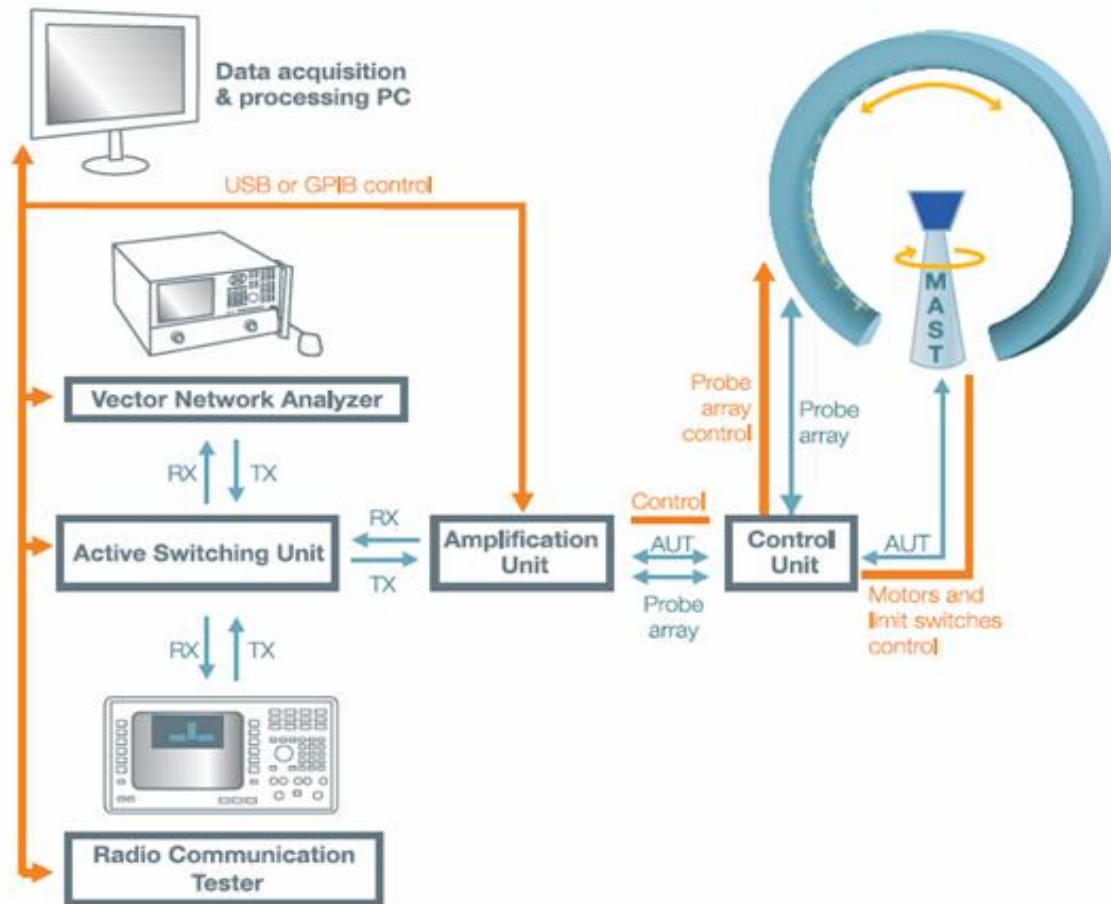
Agilent E5071C Network Analyzer



WiFi Antenna (NO.1)



测试设备 Test Setup

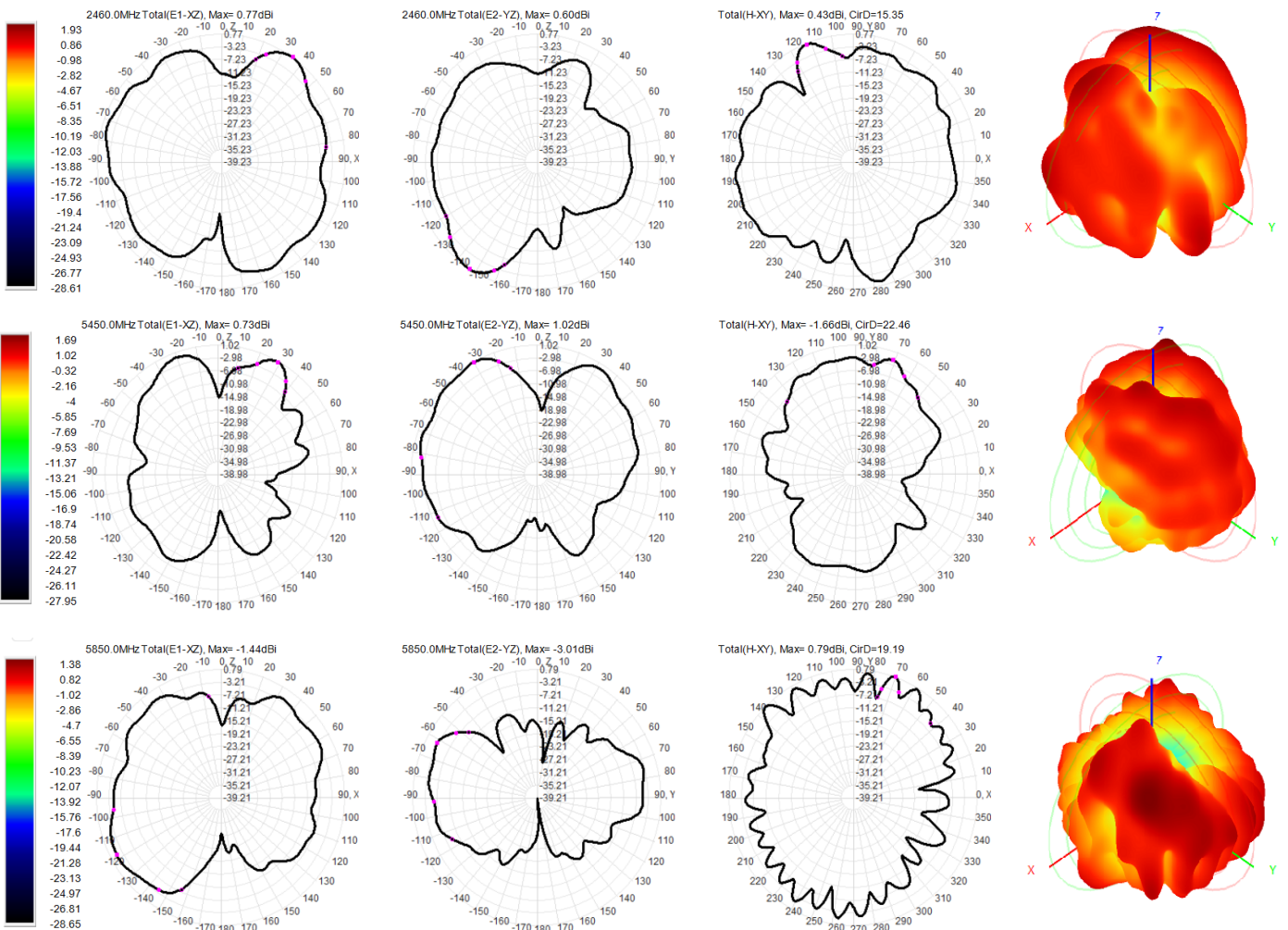


测试效率

Test Efficiency

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	1.63	1.03	1.85	1.65	1.65	1.04	1.93	1.06	1.60	1.12	0.98
Efficiency (%)	45.30	48.16	46.79	46.28	46.22	42.31	39.93	33.62	38.09	35.25	34.40

12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850
1.40	1.19	1.01	0.92	1.54	1.57	1.69	1.46	1.17	1.24	1.43	1.39	1.28	1.31	1.38
35.94	35.41	36.49	35.10	34.15	35.28	34.79	36.03	41.30	33.88	41.01	34.39	35.20	37.79	37.29





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测试功率 灵敏度

Test TRP TIS

**WLAN Antenna Performance
Table**

WLAN Whole Band TRP (dBm) **11.97**
WLAN Whole Band TIS (dBm) **-77.45**

		Channel No.	Freq. (MHz)	TRP (dBm)	TIS (dBm)
Phone Tx (Uplink Path)	<u>1</u>	1	--	11.79	--
	<u>2</u>	6	--	11.81	--
	<u>3</u>	11	--	12.33	--
Phone Rx (Downlink Path)	<u>1</u>	1	--	--	-76.30
	<u>2</u>	6	--	--	-78.00
	<u>3</u>	11	--	--	-78.06

**WLAN Antenna Performance
Table**

WLAN Whole Band TRP (dBm) **10.29**
WLAN Whole Band TIS (dBm) **-68.45**

		Channel No.	Freq. (MHz)	TRP (dBm)	TIS (dBm)
Phone Tx (Uplink Path)	<u>1</u>	1	--	10.79	--
	<u>2</u>	6	--	10.21	--
	<u>3</u>	11	--	9.89	--
Phone Rx (Downlink Path)	<u>1</u>	1	--	--	-69.30
	<u>2</u>	6	--	--	-68.00
	<u>3</u>	11	--	--	-68.06