

# Antenna Test Report

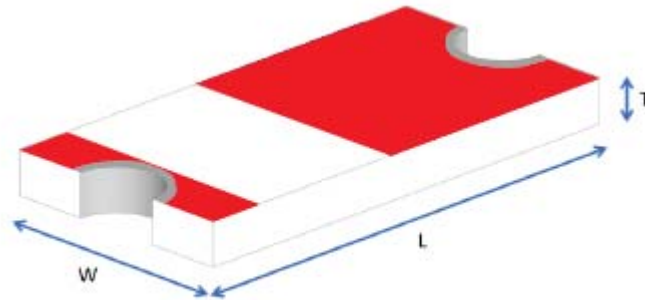
## G129 V1.0

<b>Customer</b>	<b>Dacom</b>
<b>Agent</b>	<b>LeDiamond</b>
<b>Project name</b>	<b>G129</b>
<b>Model. IC</b>	<b>Jieli</b>
<b>Model. ANT</b>	<b>KBAN3216G245H01</b>

Fanson 2022/12/02

# Antenna Information

- Antenna Type : Chip Antenna

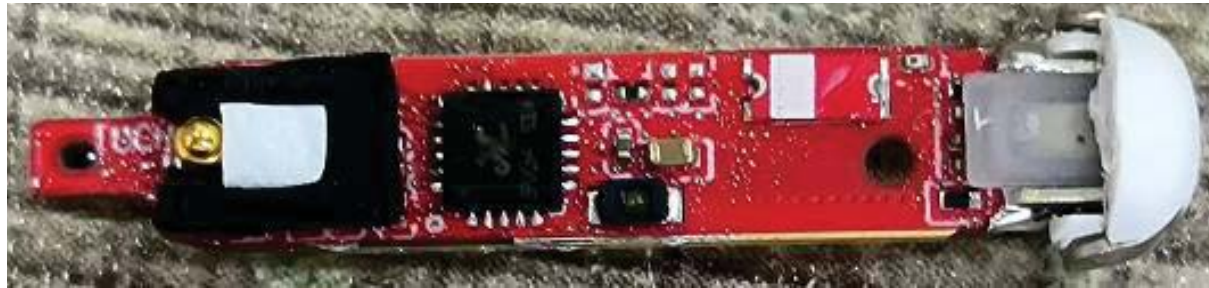


P/N: KBAN3216G245H01

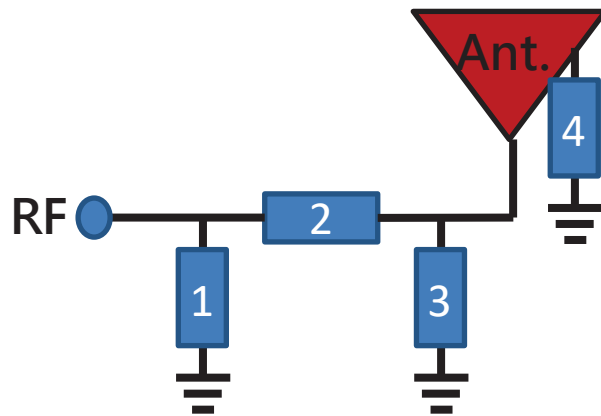
	Dimension (mm)
L	3.23 ± 0.20
W	1.66 ± 0.20
T	0.45 ± 0.20

# Ant. Matching

- Antenna Placement

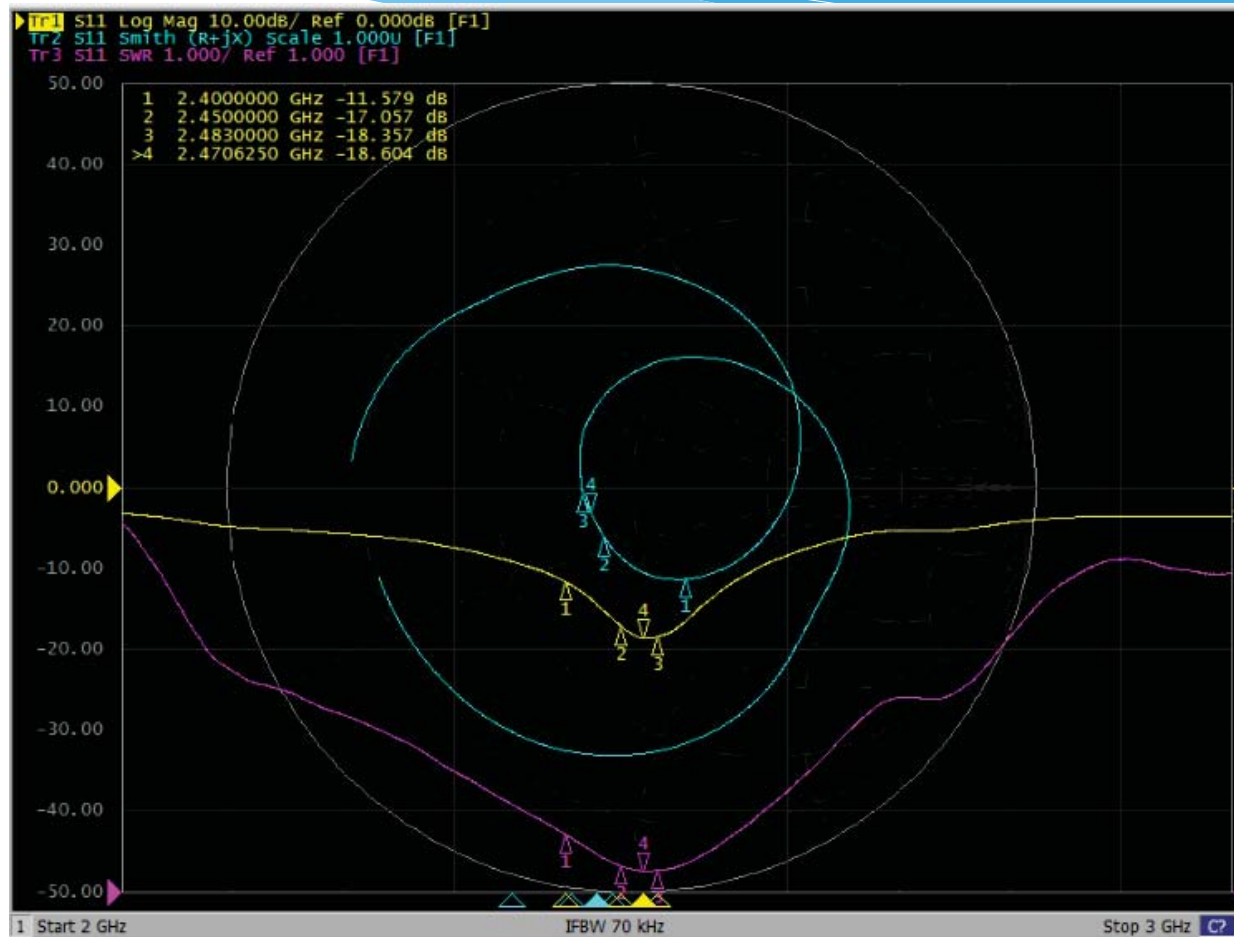


- Matching Circuit



	LC	P/N
Ant.	KBAN3216G245H01	
1	NC	--
2	0R	--
3	1pF	--
4	1nH	

# Ant. S11 Parameter ( ANT2 )



Fre.(MHz)	2400	2450	2483
S11(dB)	-11.5	-17.0	-18.3

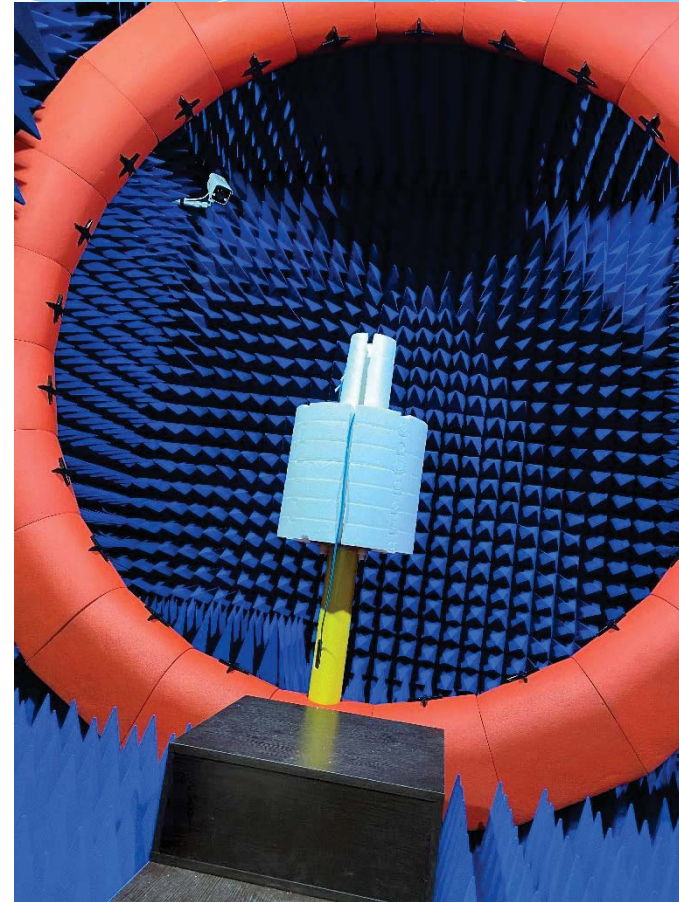
# Equipment of OTA test



Network analyzer E5071C



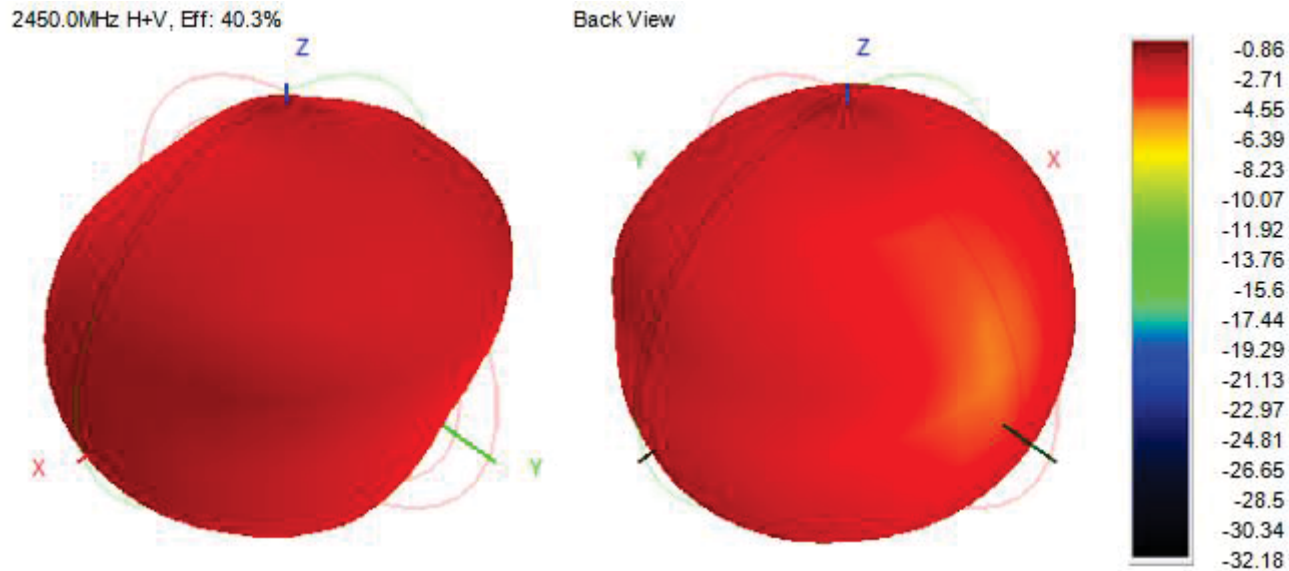
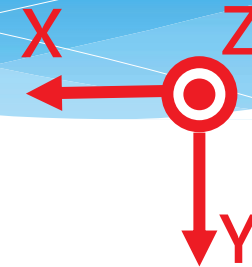
Bluetooth Comprehensive Tester  
CMW500



Anechoic Chamber  
FTM-24D multi-probe

# Ant. Gain Pattern @2.4GHz

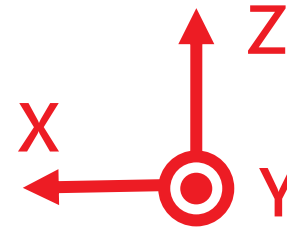
- Active Test



Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-4.51	-4.47	-4.39	-4.27	-4.13	-3.95	-3.82	-3.73	-3.68	-3.74	-3.92
Gain (dBi)	-0.85	-0.98	-1.02	-0.95	-0.89	-0.86	-0.96	-0.94	-0.73	-0.54	-0.42
Efficiency (%)	35.43	35.73	36.36	37.42	38.66	40.28	41.47	42.35	42.89	42.30	40.55

# Ant. Gain Pattern @2.45GHz (Date 7/18)

- Active Test



	CH.	TIS(dBm)	TRP (dBm)
BT	0	-88.43	2.57
	39	-87.74	3.01
	78	-88.46	2.96

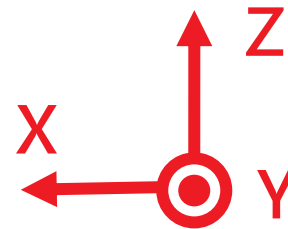
L

	CH.	TIS(dBm)	TRP (dBm)
BT	0	-90.44	2.69
	39	-90.59	3.59
	78	-90.9	4.1

R

# Ant. Gain Pattern @2.45GHz (Date 12/2)

- Active Test



	CH.	TIS(dBm)	TRP (dBm)
BT	0	-89.99	2.64
	39	-88.83	3.4
	78	-88.32	4.2

L

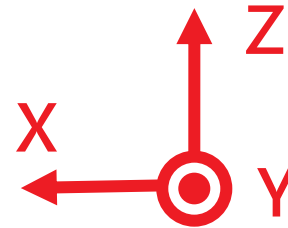
	CH.	TIS(dBm)	TRP (dBm)
BT	0	-89.45	2.04
	39	-88.91	3.08
	78	-87.03	3.74

R



# Ant. Gain Pattern @2.45GHz

- With Head



	CH.	TIS(dBm)	TRP (dBm)
BT	0	-83.94	-2.83
	39	-83.49	-1.79
	78	-81.37	-2.65

L

	CH.	TIS(dBm)	TRP (dBm)
BT	0	-82.2	-5.21
	39	-81.45	-5.7
	78	-81.38	-5.9

R

# Real test

- Test environment : Empty parking lot
- Phone model : Redmi K30
- Test distance : 10 meters
- Ear covering test : OK

