

# IA.0260.LB.3FI (WIFI/GPS)

## Antenna Specification

### 1. Application:

This application shall apply for antenna unit which shall be used such as automotive, conventional communications, smart home, etc..

### 1. Electrical Specification:

*Those specifications were specially defined for customer's model, and all characteristics were measured under the model's handset testing jig .*

#### 2-1. Frequency Band:

Frequency Band	MHz
GPS/WIFI2.4/5.8G	1575.42/2400-2500/5150-5850

#### 2-2. Impedance

50 ohm nominal


#### 2-3. VSWR

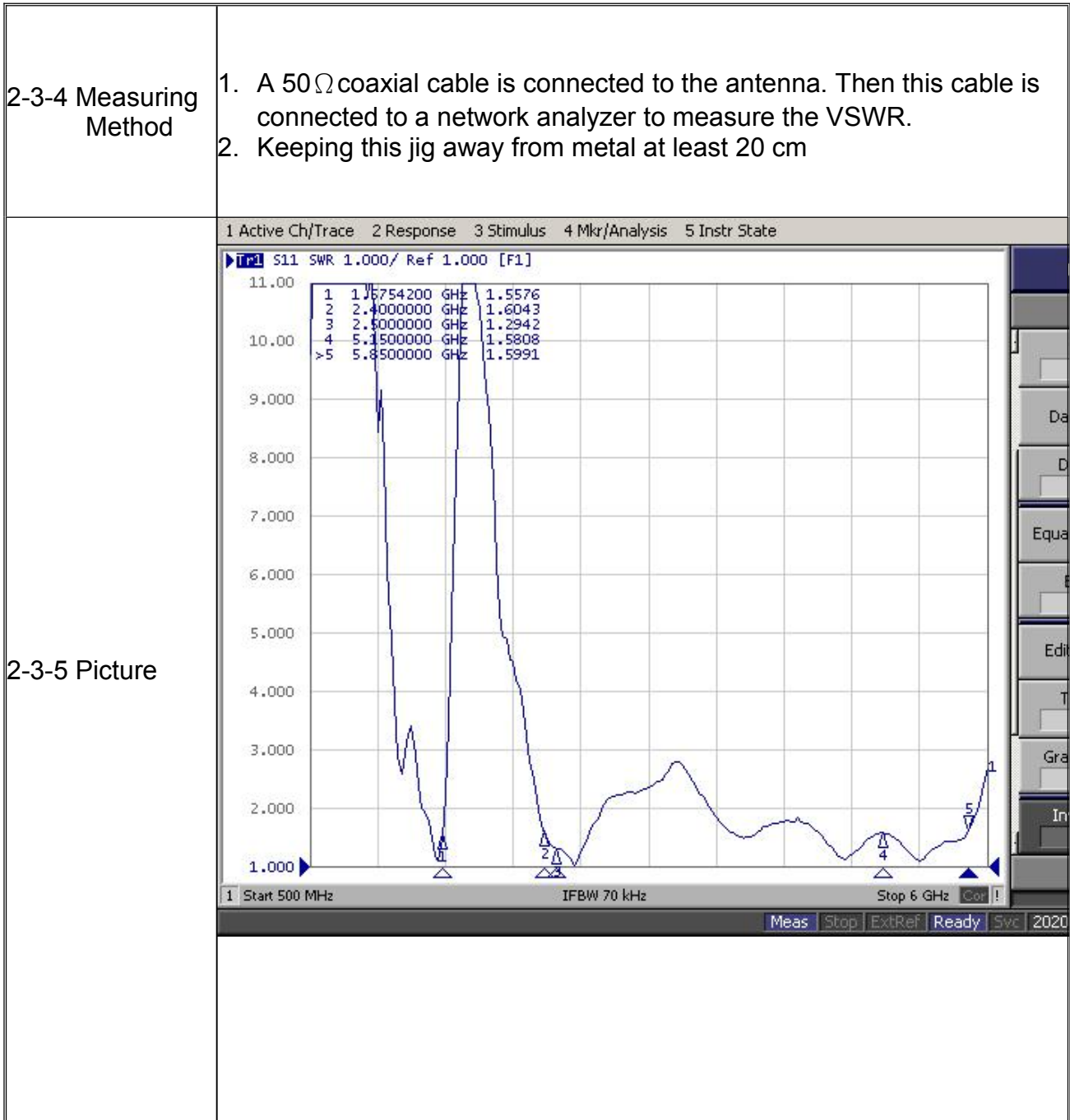
##### 2-3-1.Measurement frequency points and VSWR value

Frequency Band(MHz)	1575.42	2400	2500	5150	5850
2-3-3. Typical Value:	1.5	1.6	1.2	1.5	1.6

##### 2-3-2. VSWR

Frequency Band(MHz)	1575.42	2400	2500	5150	5850
2-3-3. Typical Value:	≤2	≤2	≤2	≤2	≤2

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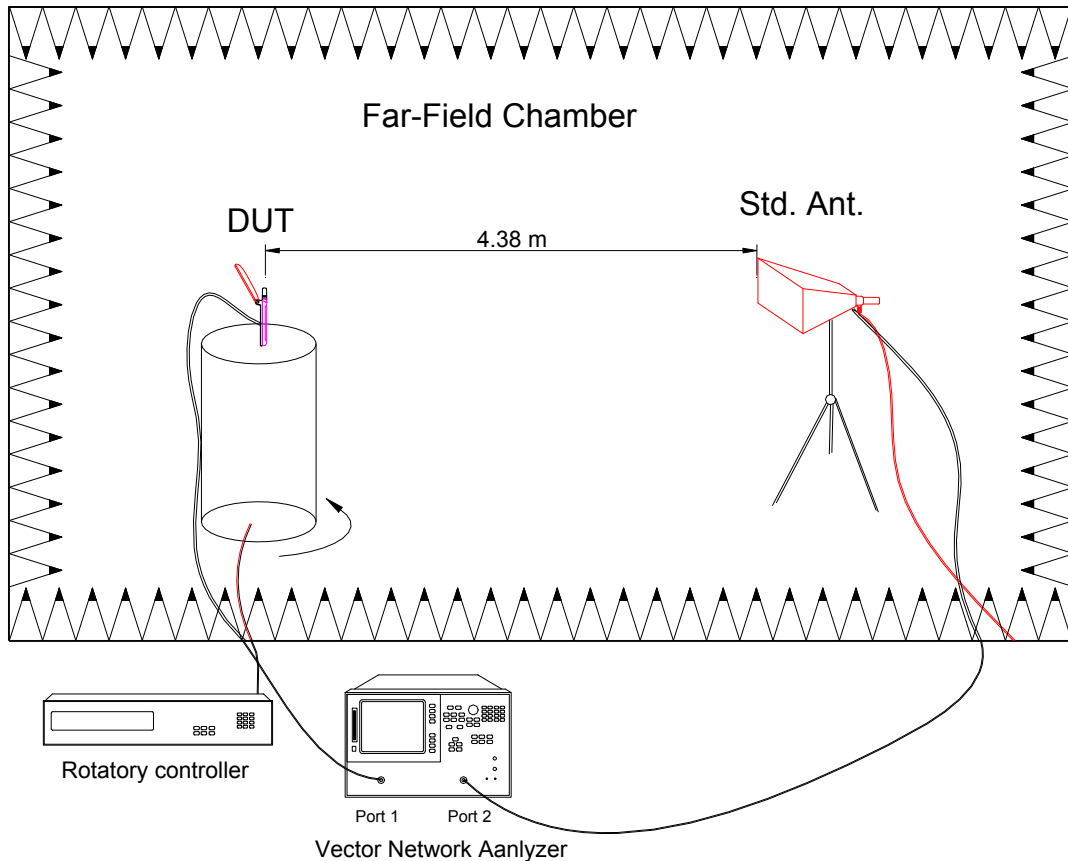
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## 2-4. Efficiency and Gain

### 4-5.1 Measure method

1. Using a low loss coaxial cable to link a standard handset jig
2. Fixed this handset jig on chamber's rotator plane
3. Linking jig into network analyzer port and using a probing horn antenna to collect data.
4. Using another standard gain horn antenna to calibrated those data

### 4-5.2 Chamber definition



1. An anechoic chamber (7mx4mx3m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quite room region is 40cmx40cmx40cm at the center of rotator
3. The distance between DUT and standard antenna is 4.38 m
4. Probing antenna (9120D horn antenna) and standard gain horn antenna (BBHA9120 LPF 700MHz ~6GHz)

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## 2-4-1 Efficiency and Gain

BD

1559	65.85	-1.81	2.93
1560	65.45	-1.84	2.89
1561	62.9	-2.01	2.76
1562	60.23	-2.2	2.57
1563	57.8	-2.38	2.41

GPS


1573	58.22	-2.35	2.63
1574	60.11	-2.21	2.79
1575	61.66	-2.1	2.91
1576	62.64	-2.03	2.99
1577	62.94	-2.01	3.02

GLONASS

1600	56.2	-2.5	2.83
1601	54.5	-2.64	2.74
1602	52.49	-2.8	2.6
1603	50.37	-2.98	2.44
1604	48.32	-3.16	2.28

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	59.43	-2.26	2.35
2410	59.63	-2.25	2.22
2420	58.21	-2.35	2.16
2430	56.58	-2.47	1.8
2440	56.41	-2.49	1.84
2450	58.32	-2.34	1.98
2460	61.13	-2.14	1.83
2470	50.43	-2.97	0.99
2480	59.07	-2.29	1.76
2490	59.38	-2.26	1.86
2500	60.59	-2.18	2.07

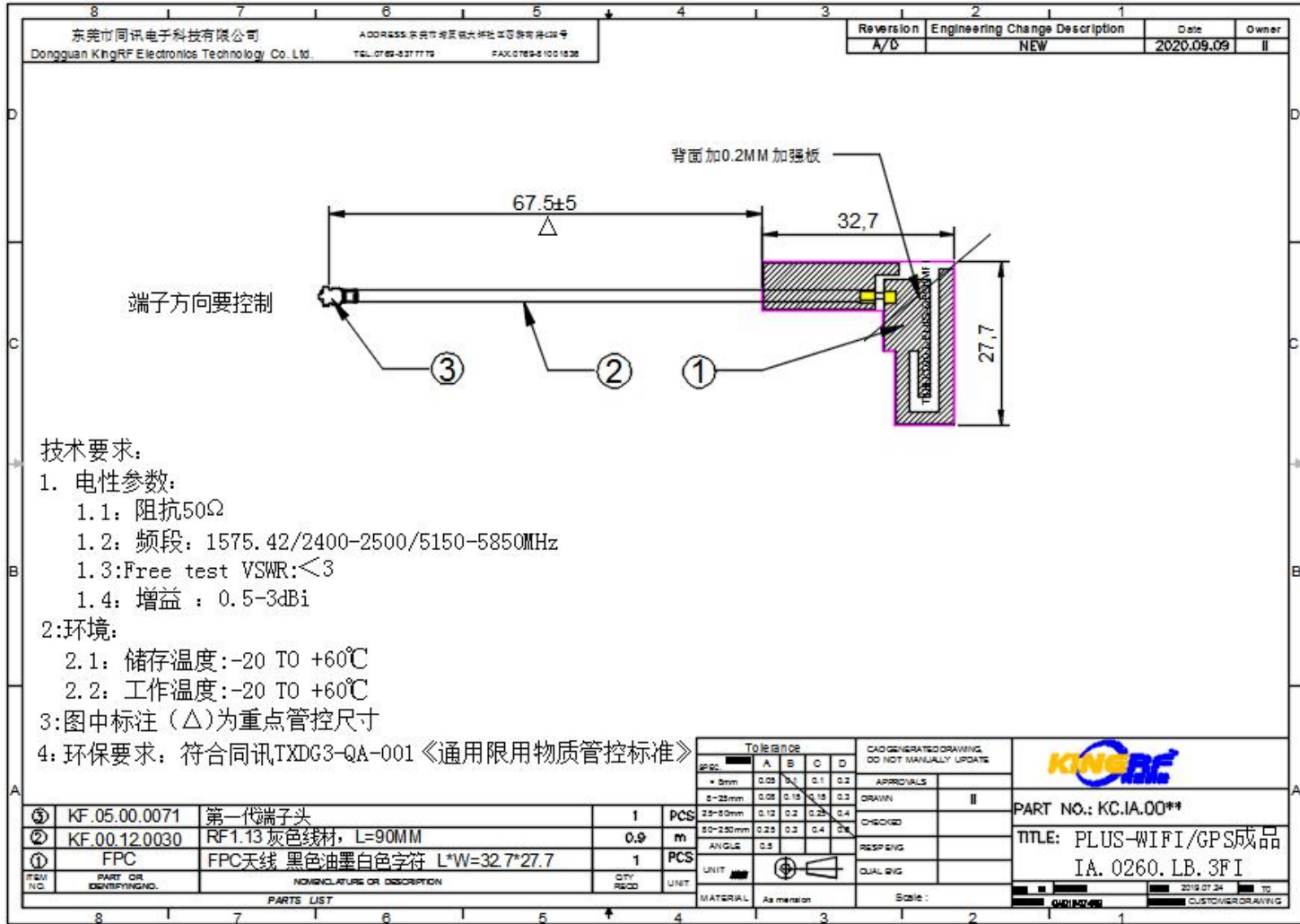
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	40.89	-3.88	1.34
5200	41.77	-4.98	1.73
5250	47.45	-5.61	1.06
5300	46.08	-4.43	1.89
5350	43.23	-4.78	1.9
5400	44.13	-3.55	1.98
5450	55.68	-2.54	3.58
5500	40.9	-3.88	1.92
5550	42.58	-3.71	2.1
5600	41.18	-5.06	0.44
5650	47.33	-3.25	2.55
5700	45.86	-3.39	2.93
5750	43.76	-4.72	1.37
5800	47.47	-3.24	3.49
5850	46.09	-3.36	3.04

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### 3. Mechanical Specification:

#### 3-1. Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing




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### 3-2. Connector appearance:

IPEX

### 3-3.Product Image:

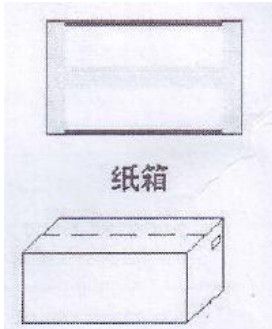



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## 5.包装规格:

产品料号: <b>XXX</b>			
产品型号: <b>XXX</b>			
一、标签要求:			
需方	XXX		
供方	XXXXX		
物料编码	XX		
产品型号	XX		
数量/单	XXX PCS	出厂日期	X 年 X 月 X 日
备注/其他			
二、装箱要求:			
作业说明:			
1. 内包装:			
产品 <b>XXpcs</b> 一袋, 放入小 <b>PE</b> 袋;			
2. 外包装:			
<b>XxPCS</b> 一箱;			
3. 注意事项:			
a. 是否要增设隔板、珍珠棉;			
b. 标签的帖附, 如 <b>ROHS</b> 等;			





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