

Product Number:

Specification For Approval

Date: 2020 /04/ 01

File No.: 200401001

Version: 1.0

Customer: _____

Customer P/N: /

INVAX P/N: Antenna SLK-LL2518

Description : Antenna

Cortec Checked By:



Customer Approved By:

**Cortec Technology Inc.**

Dongguan ZhiFeng Communication Technology Co., Ltd.
Shenzhen Zhi Feng Electronic Technology Co., Ltd.

手机: 18665349896

Index:

- 1. Reliability Testing**
- 2. Specification**
- 3. SParameter Test Data**
- 4. Antenna Radiation Pattern**
- 5. Anical DrawingSee attached files**

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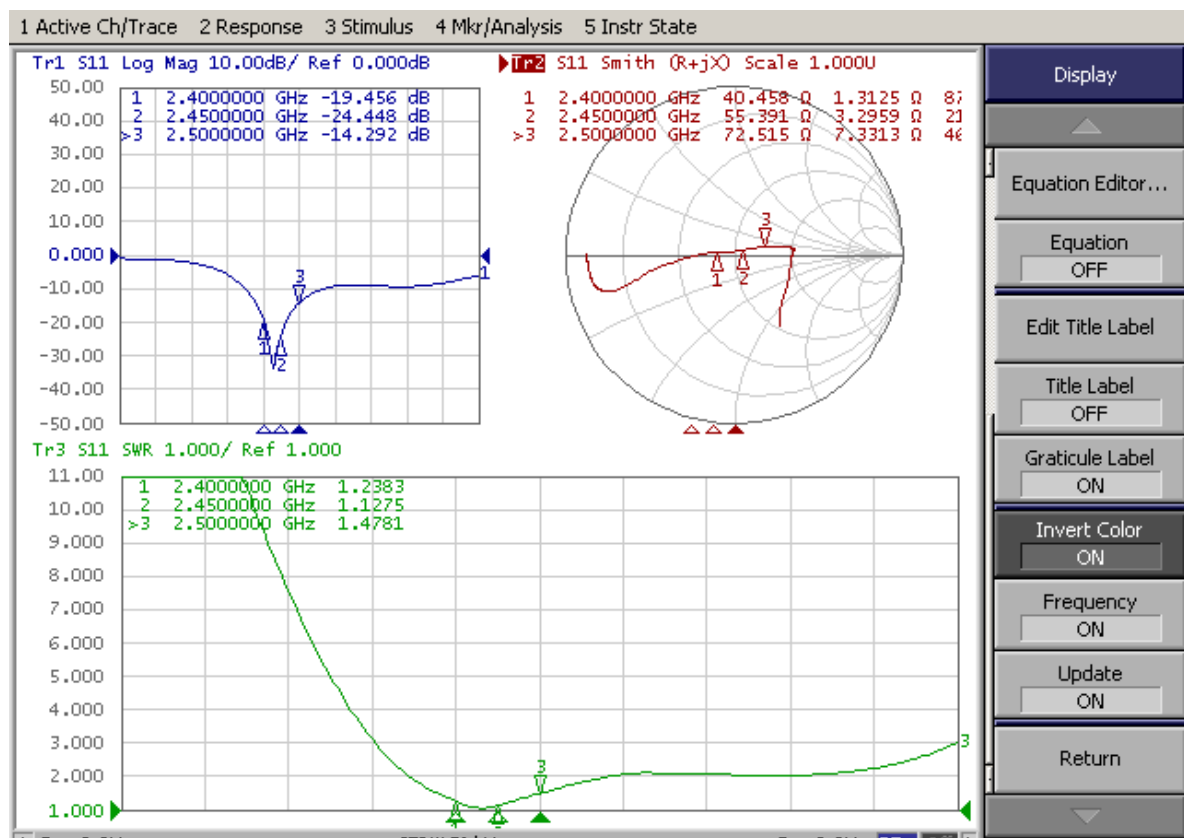
1. Reliability Testing

Test Item	Procedure	Requirement
1. Visual inspection and Dimension Check	Applicable methods using x5 magnification	follow specification
2. Rapid Changing of Temperature	-40°C (30minutes) to 90°C (30minutes); 24 cycles	After 2 hours recovery: 1. no visible damage 2. Freq. Tol.: < ±5%
3. Damp Heat	24 hours at 60°C; 90 ~ 95% RH	After 2 hours recovery: 1. no visible damage 2. Freq. Tol. : < ±5%
4. Endurance	24 hours at 90°C	After 2 hours recovery: 1. no visible damage 2. Freq Tol.: < ±5%

2.Specification

A. Electrical Characteristics	
S.W.R.	2400-5850 MHz: ≤ 1.5
Antenna Gain	$3 \pm 0.5\text{dBi}$
Impedance	50 Ohm
B. Material	
Material of Radiator	Cu (Plated)
Connector Type	SMA
C. Environmental	
Operation Temperature	- 30 °C ~ + 85 °C
Storage Temperature	- 30 °C ~ + 85 °C

3. S Parameter Test data



4. Antenna Radiation Pattern

Testing Equipment Specification:

Antenna Anechoic Chamber Dimension: 8 x 4 x 4 m

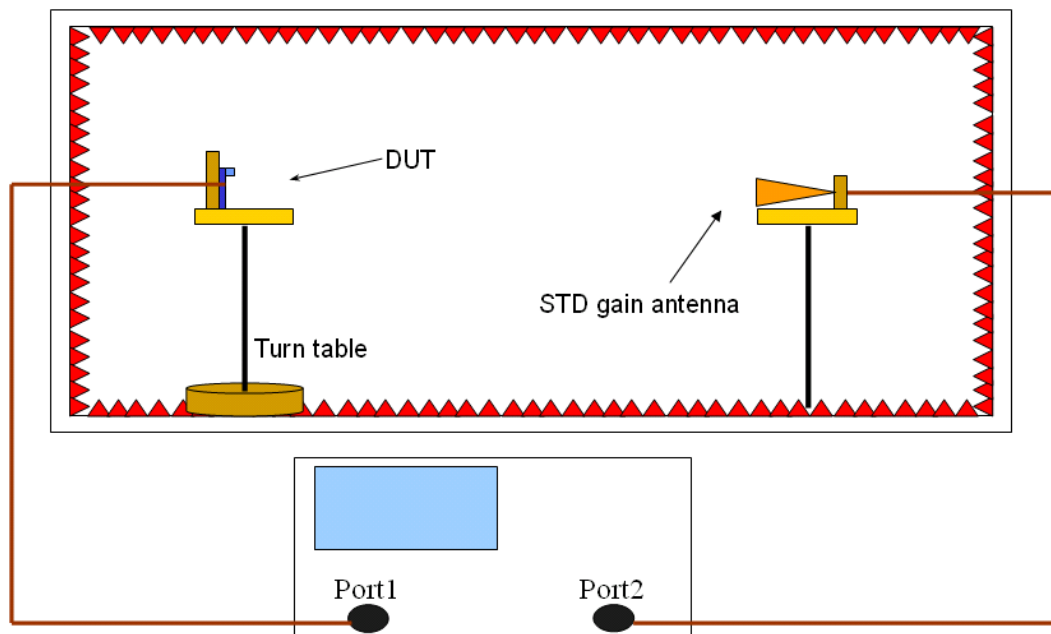
Quiet Zone: 600mm @1 GHz

Isolation: >100dB @ 1 MHz ~ 10 GHz

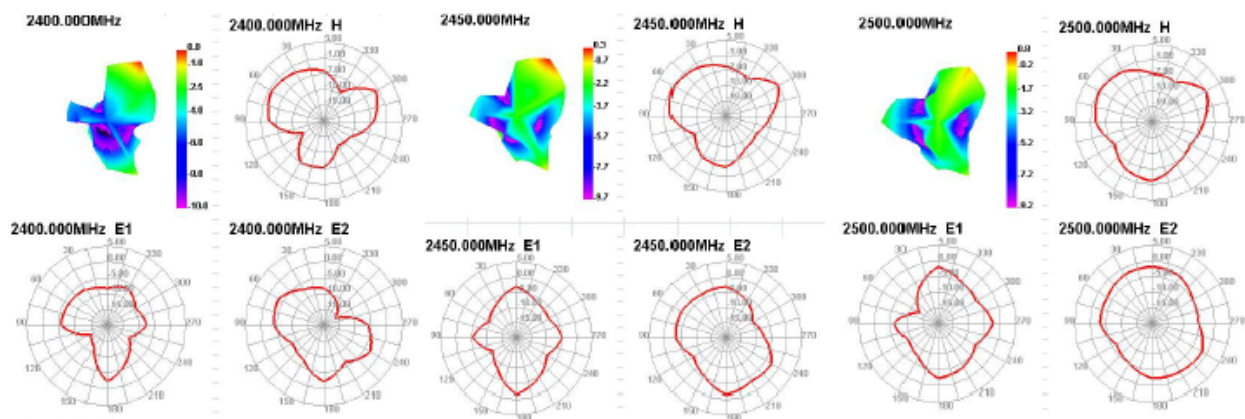
Testing Equipment: Agilent 5071B

Received Antenna: 0.6 ~ 6.0 GHz for Gain Calibration

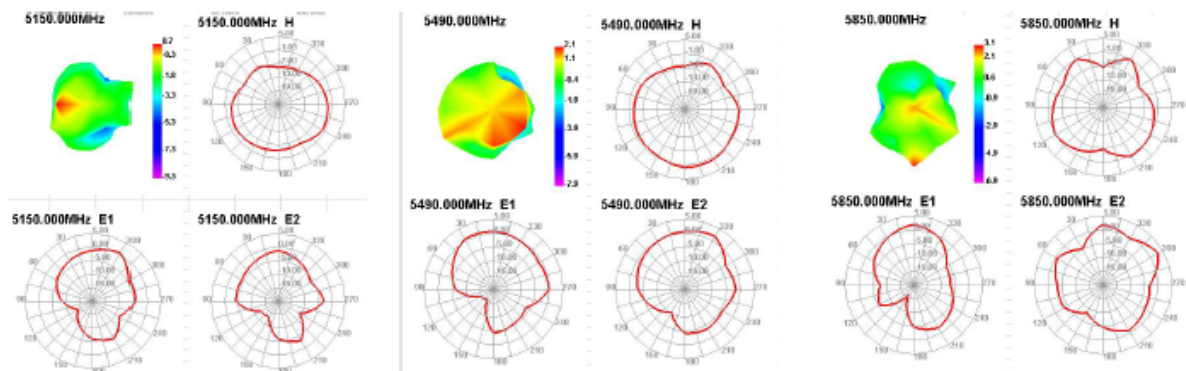
Double Ridged Horn Antenna



Passive Test For WIFI2.4								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)
2400	21.29	-0.72	0.04	-2.11	10.064	10.029	0.04	-10.25
2410	19.85	-7.02	-0.41	-2.56	9.862	9.989	-0.41	-17.19
2420	24.12	-6.18	0.2	-1.95	11.937	12.181	0.2	-21.35
2430	26.6	-5.75	0.39	-1.76	13.355	13.247	0.39	-23.65
2440	25.9	-5.87	0.1	-2.05	13.094	12.802	0.1	-19.38
2450	28.19	-5.5	0.31	-1.84	14.176	14.016	0.31	-16.07
2460	33.69	-4.72	1.03	-1.12	16.897	16.795	1.03	-13.83
2470	34.57	-4.61	1.07	-1.08	17.462	17.112	1.07	-13.66
2480	30.7	-4.35	1.14	-1.01	18.565	18.131	1.14	-12.78
2490	33.91	-4.1	1.33	-0.77	19.479	19.43	1.33	-12.57
2500	34.54	-4.62	0.77	-1.38	17.268	17.273	0.77	-13.58

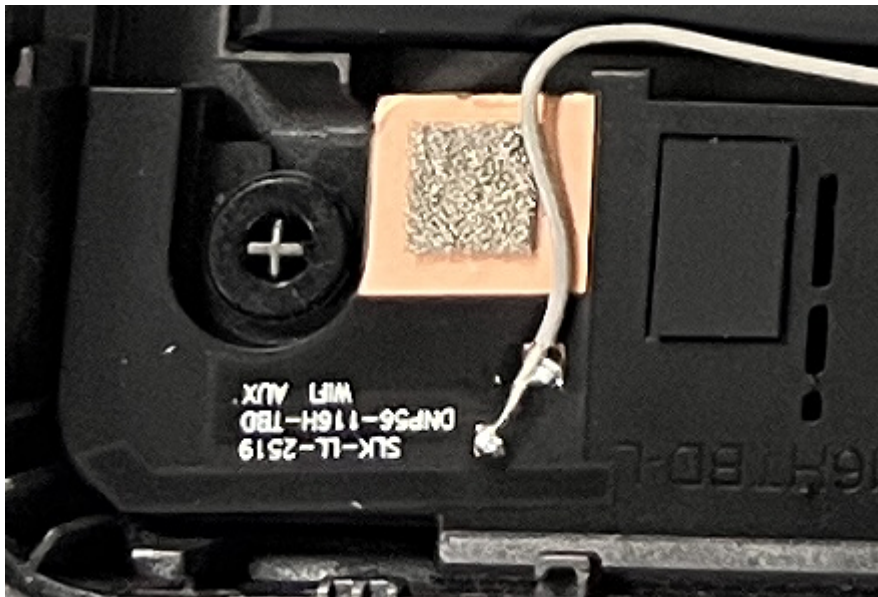


Passive Test For WiFi5G								
Freq (MHz)	Eff1 (°)	Eff1 (dB)	Gain (dBi)	Gain (dBi)	UHS (°)	DRIS (°)	Max (dB)	Min (dB)
5150	32.66	-4.86	0.7	-1.45	21.349	11.309	0.7	-14.13
5170	31.95	-4.96	0.65	-1.5	21.186	10.784	0.65	-15.81
5190	35.19	-4.54	1.34	-0.81	23.657	11.534	1.34	-15.75
5210	36.19	-4.41	1.48	-0.67	24.405	11.785	1.48	-15.71
5230	38.72	-4.12	1.34	-0.81	26.261	12.454	1.34	-16.7
5250	38.78	-4.11	0.95	-1.2	28.497	12.279	0.95	-17.54
5270	43.78	-3.59	1.82	-0.83	30.21	13.574	1.82	-17.3
5290	41.67	-3.8	1.04	-1.11	28.977	12.693	1.04	-18.03
5310	43.52	-3.61	1.48	-0.67	30.42	13.097	1.48	-20.13
5330	43.6	-3.61	1.51	-0.64	30.649	12.951	1.51	-19.63
5350	48.87	-3.11	1.87	-0.28	34.612	14.259	1.87	-18.28
5370	46.05	-3.37	1.51	-0.64	32.623	13.423	1.51	-17.62
5390	45.27	-3.44	1.42	-0.73	31.977	13.295	1.42	-17.68
5410	51.23	-2.9	1.75	-0.4	38.184	15.05	1.75	-18.43
5430	49.89	-3.02	1.68	-0.47	35.273	14.015	1.68	-17.52
5450	51.66	-2.87	2.05	-0.1	38.435	15.225	2.05	-15.2
5470	51.66	-2.87	1.96	-0.19	35.967	15.691	1.96	-14.76
5490	51.44	-2.89	2.14	-0.01	35.246	16.196	2.14	-15.7
5510	53.44	-2.72	2.53	0.38	36.663	16.78	2.53	-17.48
5530	53.68	-2.7	2.6	0.45	36.938	16.747	2.6	-18.68
5550	57.25	-2.42	2.74	0.59	38.982	18.292	2.74	-14.44
5570	54.07	-2.62	2.29	0.14	36.655	18.018	2.29	-14.73
5590	59.13	-2.28	2.53	0.38	39.43	19.701	2.53	-18.67
5610	54.73	-2.62	2.28	0.11	36.872	17.881	2.28	-17.45
5630	58.59	-2.32	2.4	0.25	39.23	19.357	2.4	-14.83
5650	53.39	-2.73	1.71	-0.44	35.056	18.331	1.71	-14.68
5670	59.41	-2.26	2	-0.15	38.432	20.974	2	-14.81
5690	54.61	-2.63	1.76	-0.39	35.302	19.303	1.76	-17.75
5710	55.56	-2.55	1.71	-0.44	35.656	19.902	1.71	-20.48
5730	57.88	-2.37	1.77	-0.38	36.361	21.519	1.77	-18.74
5750	54.1	-2.67	1.69	-0.46	33.381	20.739	1.69	-18.68
5770	57.61	-2.39	2.41	0.26	35.509	22.106	2.41	-19.23
5790	53.46	-2.72	2.24	0.09	32.748	20.709	2.24	-21.87
5810	55.73	-2.54	2.56	0.41	33.59	22.145	2.56	-21.14
5830	55.08	-2.59	2.82	0.67	32.821	22.255	2.82	-17.34
5850	57.74	-2.39	3.11	0.96	34.205	23.533	3.11	-15.98



Product Number:

5. Antenna Drawing See attached files



Antenna size:30mm*10mm