



3.12.11 TEST RESULTS (ANTENNA 3 – OFDM)

The spectrum plots are attached on the following page. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(C).

Note - The delta method is only used up to 2 MHz away from the restricted bandage, The radiated emissions which located in other restricted frequency band, the result, please refer to 4.2.

NOTE (Peak):

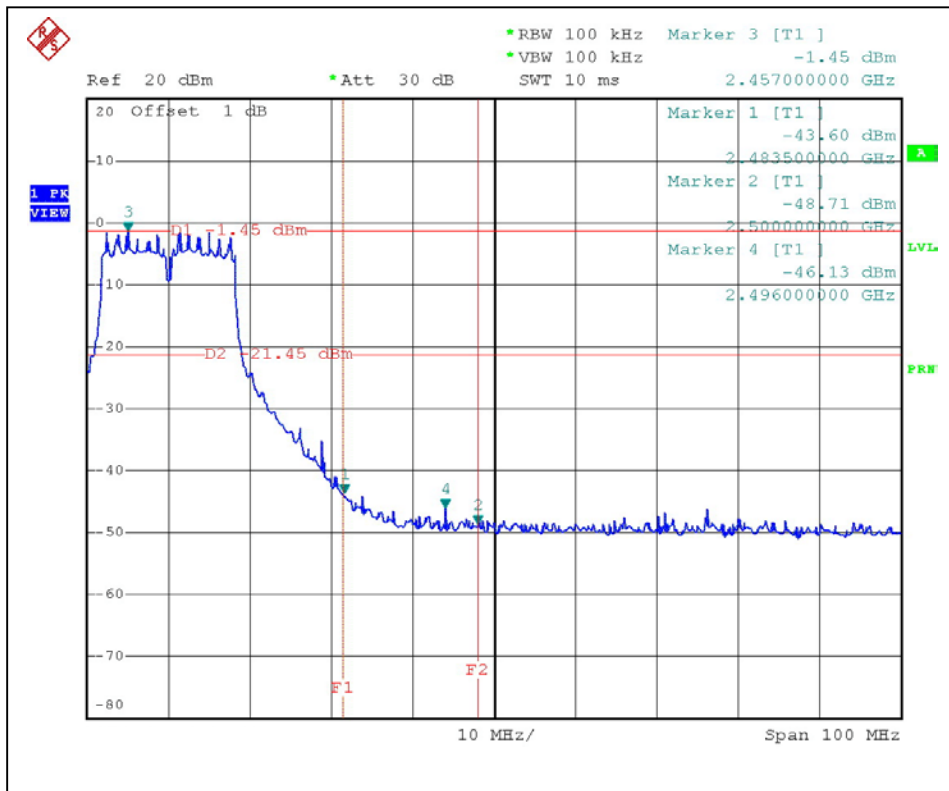
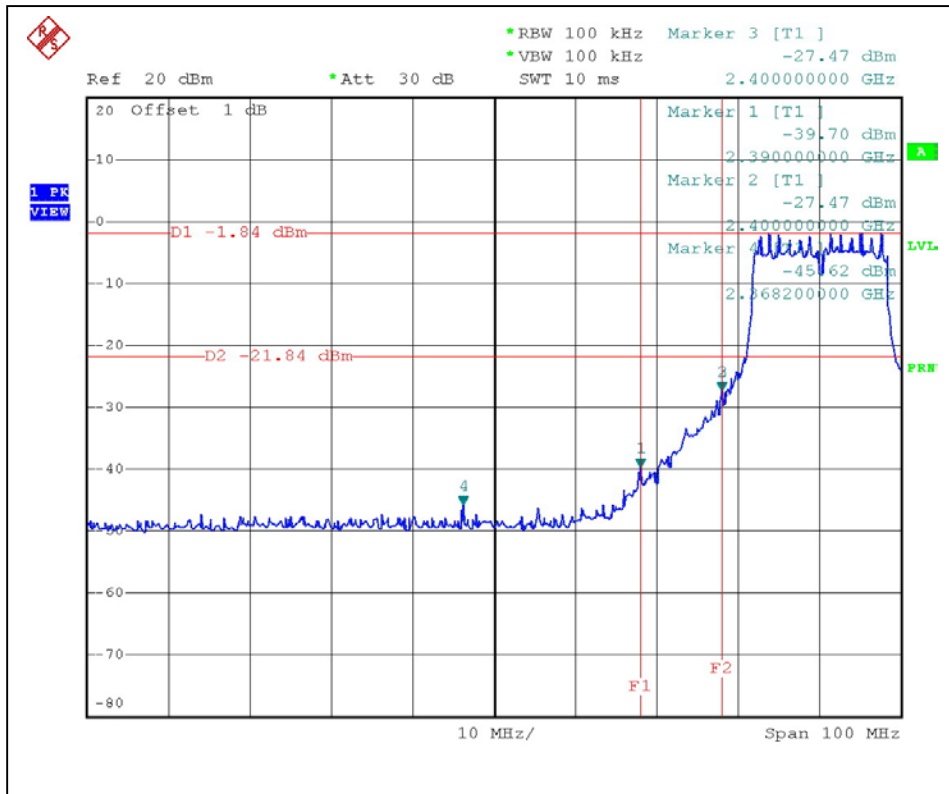
The band edge emission plot of DSSS technique on the following first page show 37.86dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 104.7dBuV/m, so the maximum field strength in restrict band is $104.7-37.86=66.84$ dBuV/m which is under 74 dBuV/m limit.

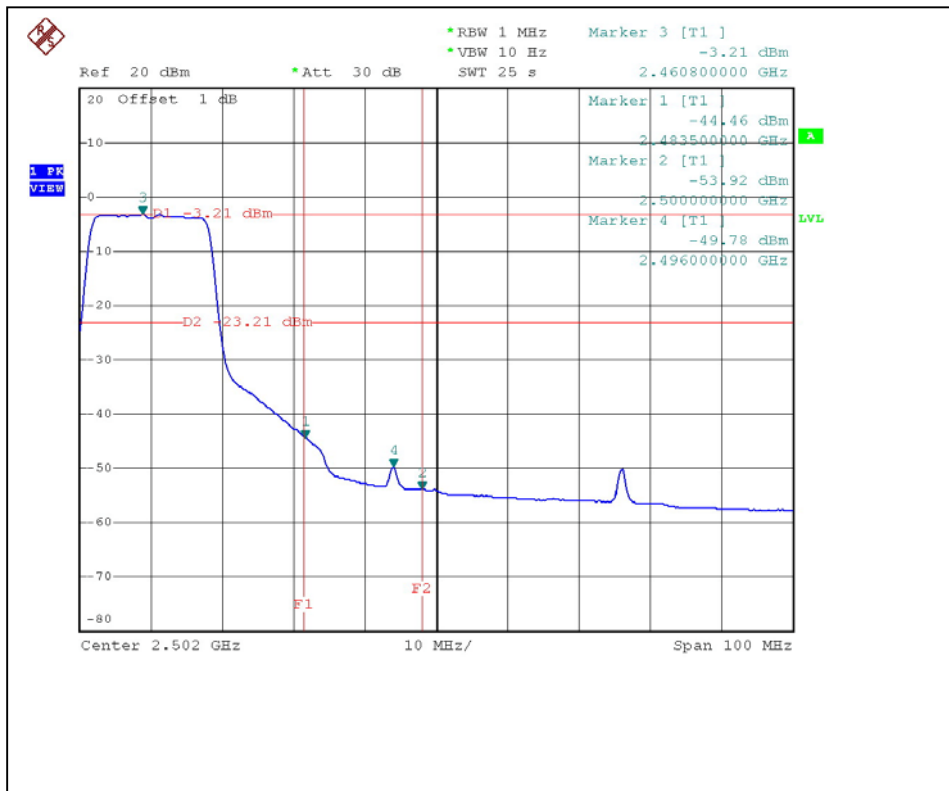
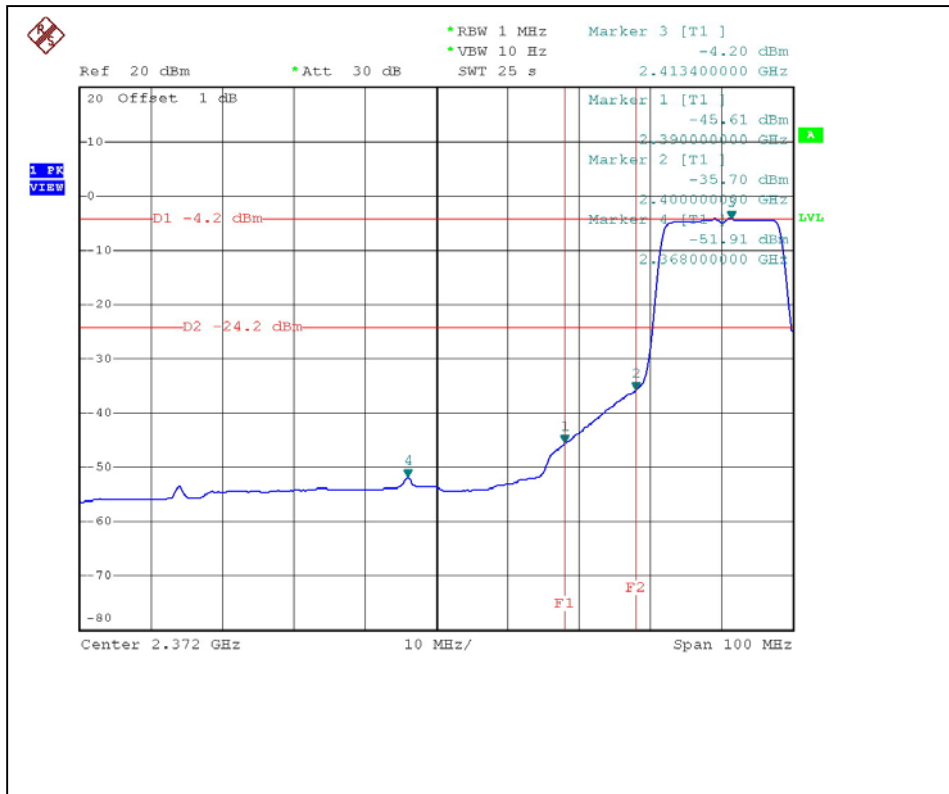
The band edge emission plot of DSSS technique on the following first page shows 42.15dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 104.2dBuV/m, so the maximum field strength in restrict band is $104.2-42.15=62.05$ dBuV/m which is under 74 dBuV/m limit.

NOTE (Average):

The band edge emission plot of DSSS technique on the following second page shows 41.41dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 94.6dBuV/m, so the maximum field strength in restrict band is $94.6-41.41=53.19$ dBuV/m which is under 54 dBuV/m limit.

The band edge emission plot of DSSS technique on the following second page shows 41.25dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 94.3dBuV/m, so the maximum field strength in restrict band is $94.3-41.25=53.05$ dBuV/m which is under 54 dBuV/m limit.







3.12.12 TEST RESULTS (ANTENNA 4 – OFDM)

The spectrum plots are attached on the following page. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(C).

Note - The delta method is only used up to 2 MHz away from the restricted bandage, The radiated emissions which located in other restricted frequency band, the result, please refer to 4.2.

NOTE (Peak):

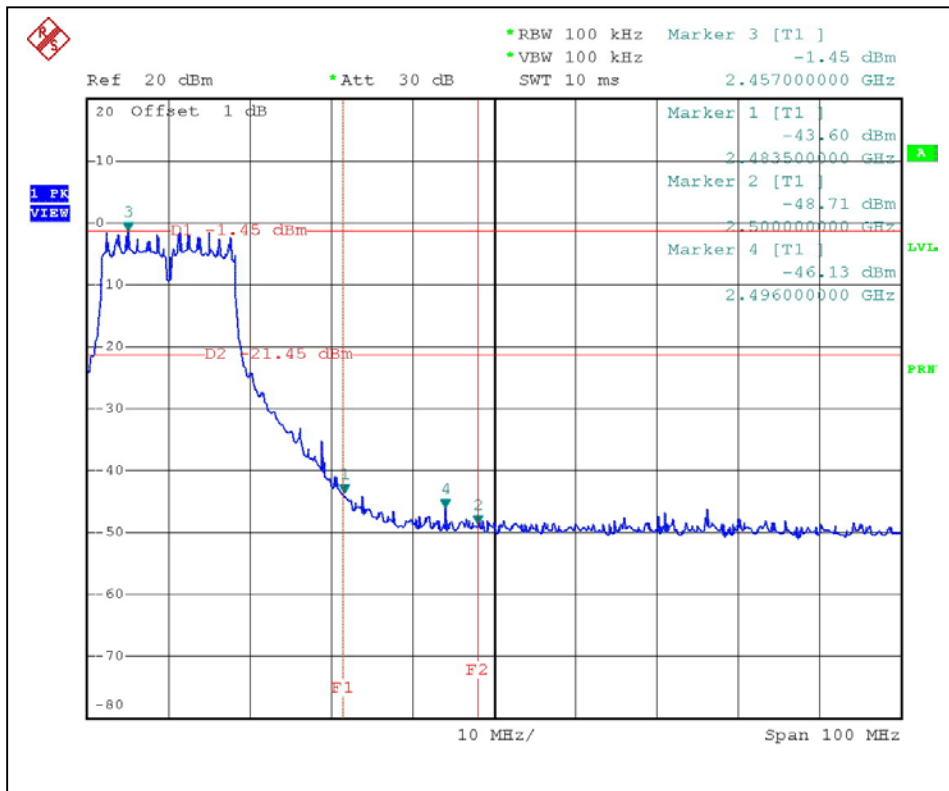
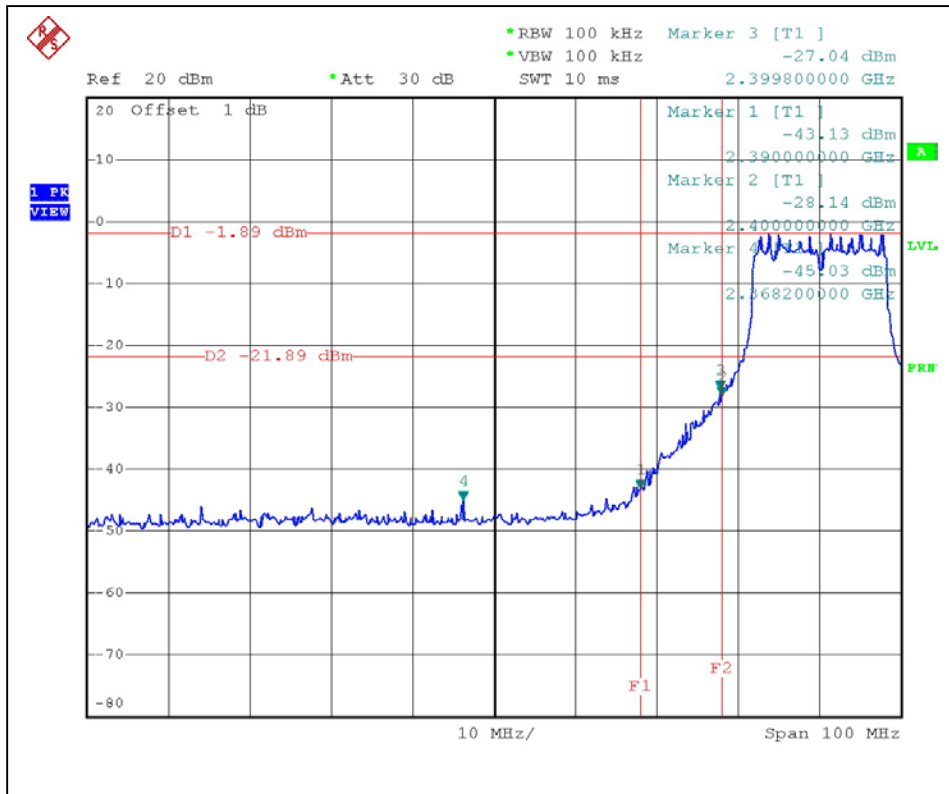
The band edge emission plot of DSSS technique on the following first page show 41.24dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 104.3dBuV/m, so the maximum field strength in restrict band is $104.3-41.24=63.06$ dBuV/m which is under 74 dBuV/m limit.

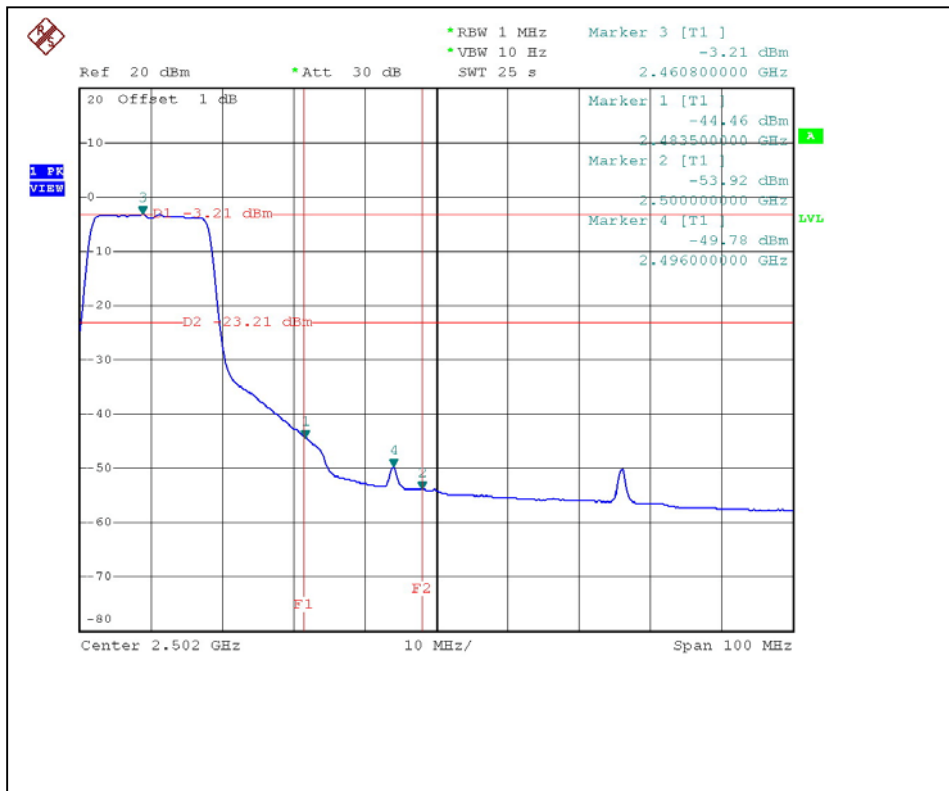
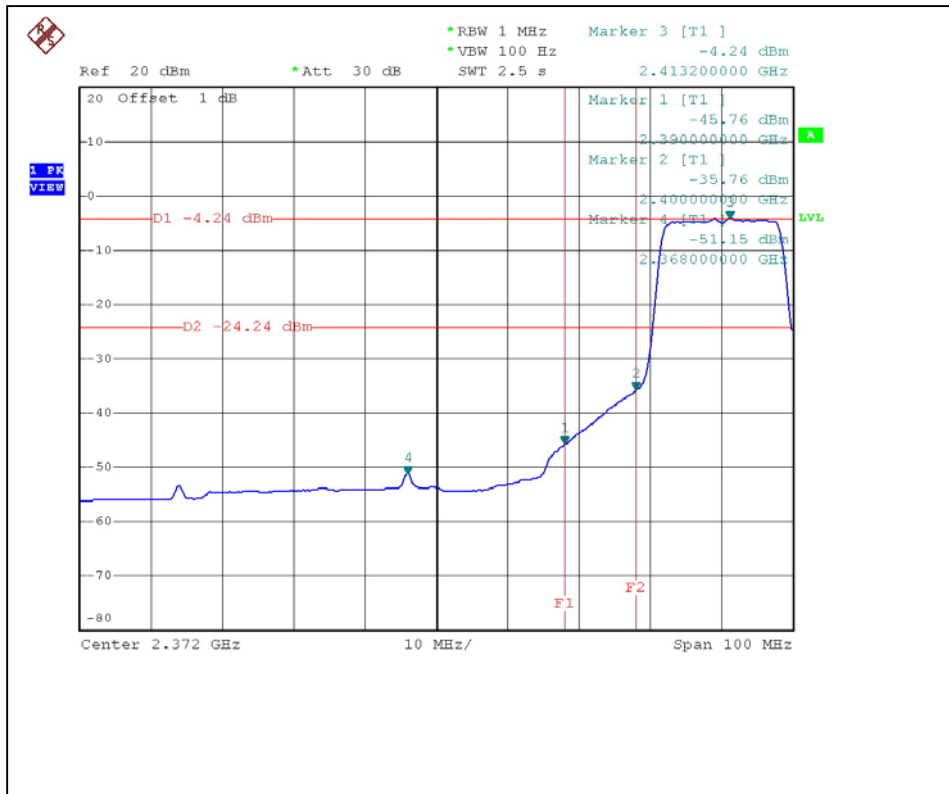
The band edge emission plot of DSSS technique on the following first page shows 42.15dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 104.2dBuV/m, so the maximum field strength in restrict band is $104.2-42.15=62.05$ dBuV/m which is under 74 dBuV/m limit.

NOTE (Average):

The band edge emission plot of DSSS technique on the following second page shows 41.52dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 94.6dBuV/m, so the maximum field strength in restrict band is $94.6-41.52=53.08$ dBuV/m which is under 54 dBuV/m limit.

The band edge emission plot of DSSS technique on the following second page shows 41.25dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 94.6dBuV/m, so the maximum field strength in restrict band is $94.6-41.25=53.35$ dBuV/m which is under 54 dBuV/m limit.





3.13 ANTENNA REQUIREMENT

3.13.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

3.13.2 ANTENNA CONNECTED CONSTRUCTION

The antenna used in this product are as following.

No.	Model	Antenna Type	2.4/ 5GHz Antenna Gain	Connector Type
1	3CWE591 (Z1996)	High gain omni antenna	6 / 8 dBi	N Femal
2	3CWE598 (Z1997)	Medium gain panel antenna	8 / 10 dBi	N Femal
3	3CWE592	Ceiling omni antenna	3 / 4 dBi	N Female
4	3CWE597 (Z2000)	Hallway bi-directional antenna	6 / 8 dBi	N Female

4 PHOTOGRAPHS OF THE TEST CONFIGURATION CONDUCTED EMISSION TEST (Mode 1)



CONDUCTED EMISSION TEST (Mode 2)



CONDUCTED EMISSION TEST (Mode 3)



CONDUCTED EMISSION TEST (Mode 4)



RADIATED EMISSION TEST (Mode 1)



RADIATED EMISSION TEST (Mode 2)



RADIATED EMISSION TEST (Mode 3)



RADIATED EMISSION TEST (Mode 4)





5 INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025:

USA	FCC, NVLAP, UL, A2LA
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA, CSA
R.O.C.	CNLA, BSMI, DGT
Netherlands	Telefication
Singapore	PSB, GOST-ASIA (MOU)
Russia	CERTIS (MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml.

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The address and road map of all our labs can be found in our web site also.