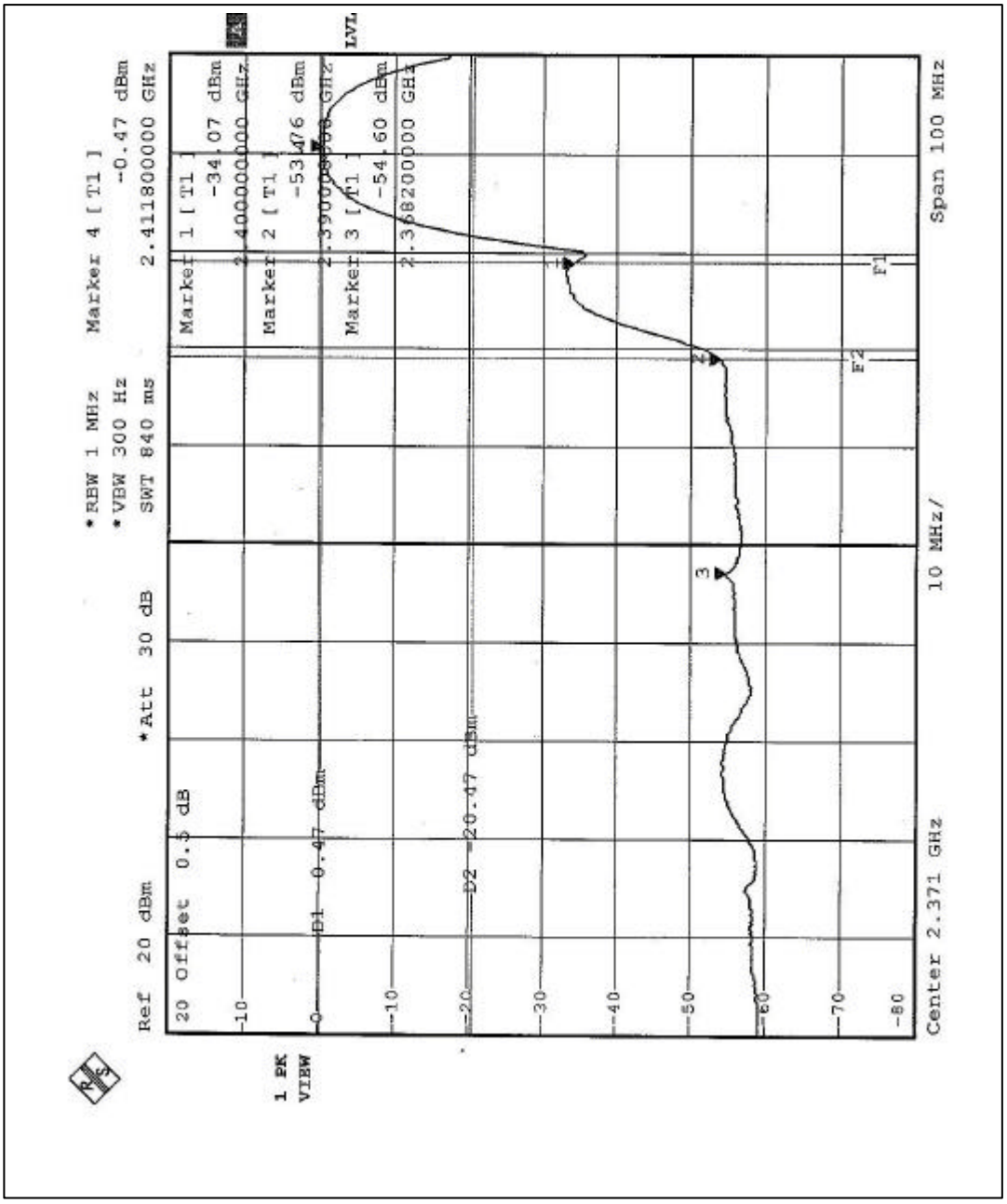
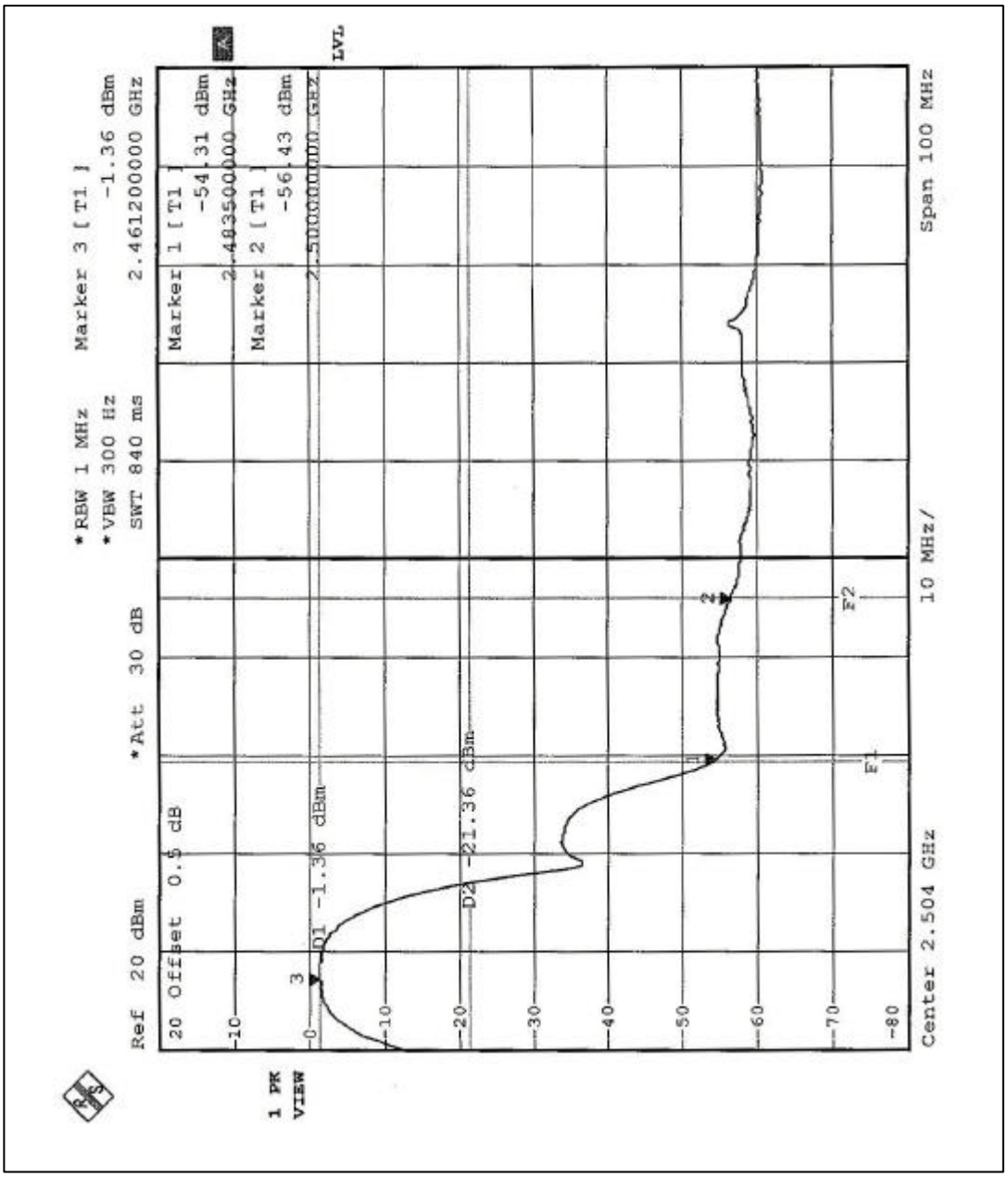

RBW 1 MHz
VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-0.47 dBm
2.411800000 GHz
Ref 20 dBm
Offset 0.5 dB
Att 30 dB
Marker 1 [T1]
-34.07 dBm
2.400000000 GHz
Marker 2 [T1]
-53.76 dBm
Marker 3 [T1]
-54.60 dBm
2.388200000 GHz
D1 -0.47 dBm
D2 -20.47 dBm
1 PK
VIEW
Center 2.371 GHz
10 MHz/
Span 100 MHz

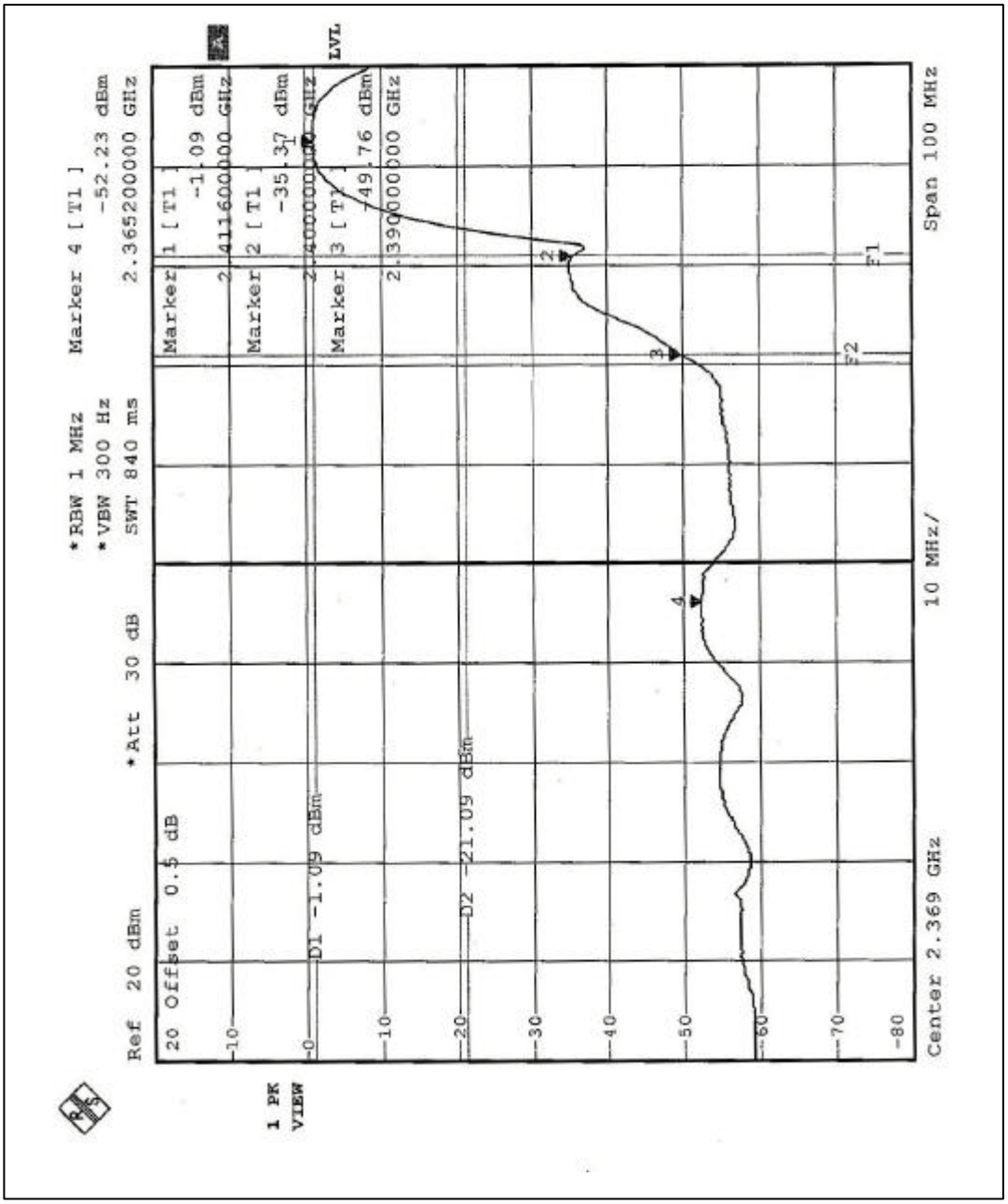

RBW 1 MHz
VBW 300 Hz
SWT 840 ms
Marker 3 [T1]
-1.36 dBm
2.461200000 GHz
Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
Marker 1 [T1]
-54.31 dBm
2.483500000 GHz
Marker 2 [T1]
-56.43 dBm
2.500000000 GHz
D1 -1.36 dBm
D2 -21.36 dBm
Center 2.504 GHz
10 MHz/
Span 100 MHz
1 PK
VIEW

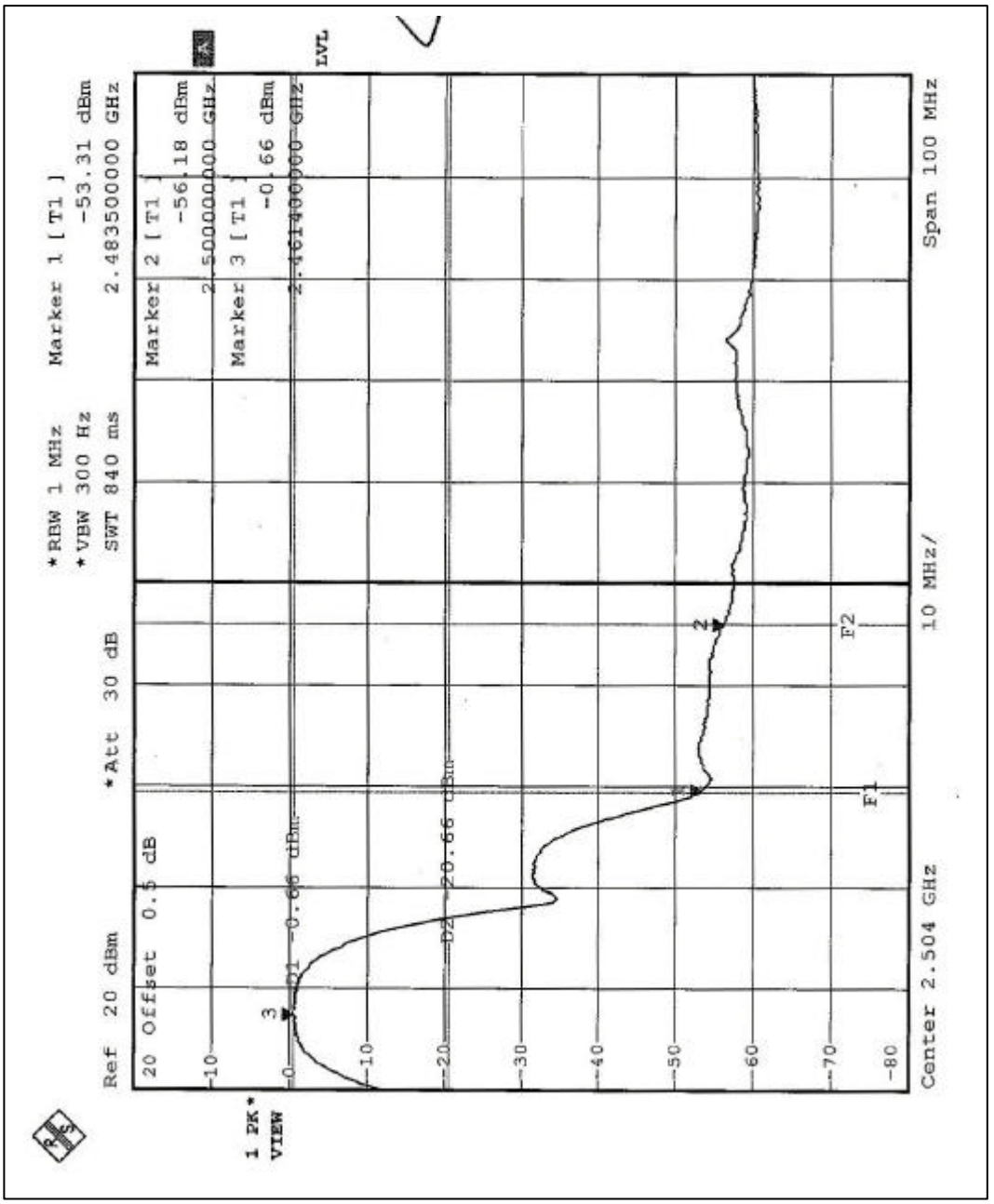
4.6.7 TEST RESULTS – DSSS (Antenna 3)

The spectrum plots are attached on the following 2 pages. 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 (1): The band edge emission plot on the following first page shows 48.67dB 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 4.2.7 is 101.4dBuV/m, so the maximum field strength in restrict band is 101.4-48.67=52.73dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 52.65dB 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 4.2.7 is 104.8dBuV/m, so the maximum field strength in restrict band is 104.8-52.65=52.15dBuV/m which is under 54 dBuV/m limit.


*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-52.23 dBm
2.365200000 GHz
Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
Marker 1 [T1]
-1.09 dBm
2.411600000 GHz
Marker 2 [T1]
-35.37 dBm
2.400000000 GHz
Marker 3 [T1]
-49.76 dBm
2.390000000 GHz
D1 -1.09 dBm
D2 -21.09 dBm
LVL
1 PK
VIEW
Center 2.369 GHz
10 MHz/
Span 100 MHz
F1
F2

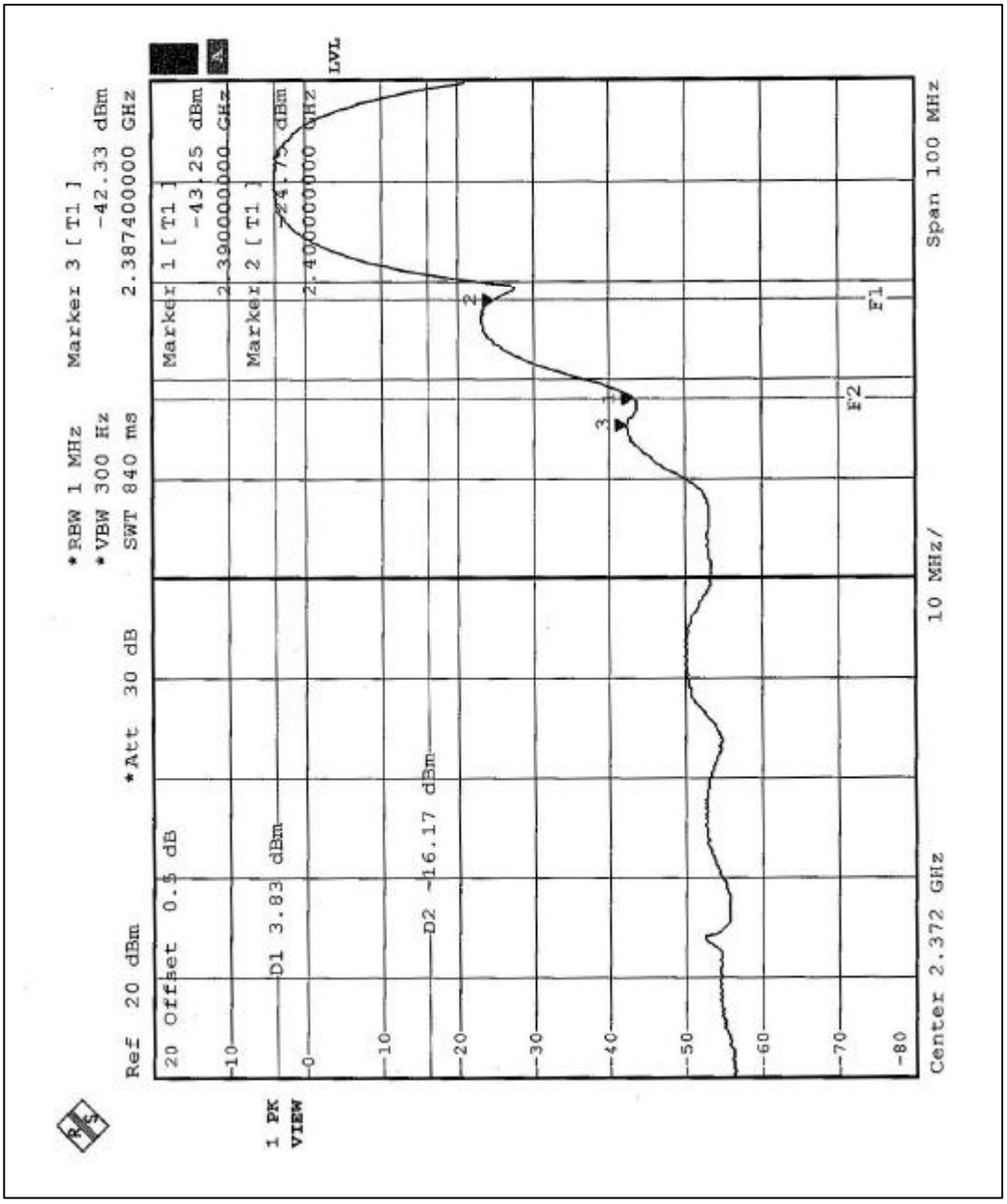

Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 1 [T1]
-53.31 dBm
2.483500000 GHz
Marker 2 [T1]
-56.18 dBm
2.500000000 GHz
Marker 3 [T1]
-0.66 dBm
2.461400000 GHz
LVL
1 PK*
VIEW
D1 -0.66 dBm
D2 -20.66 dBm
F1
F2
Center 2.504 GHz
10 MHz/
Span 100 MHz

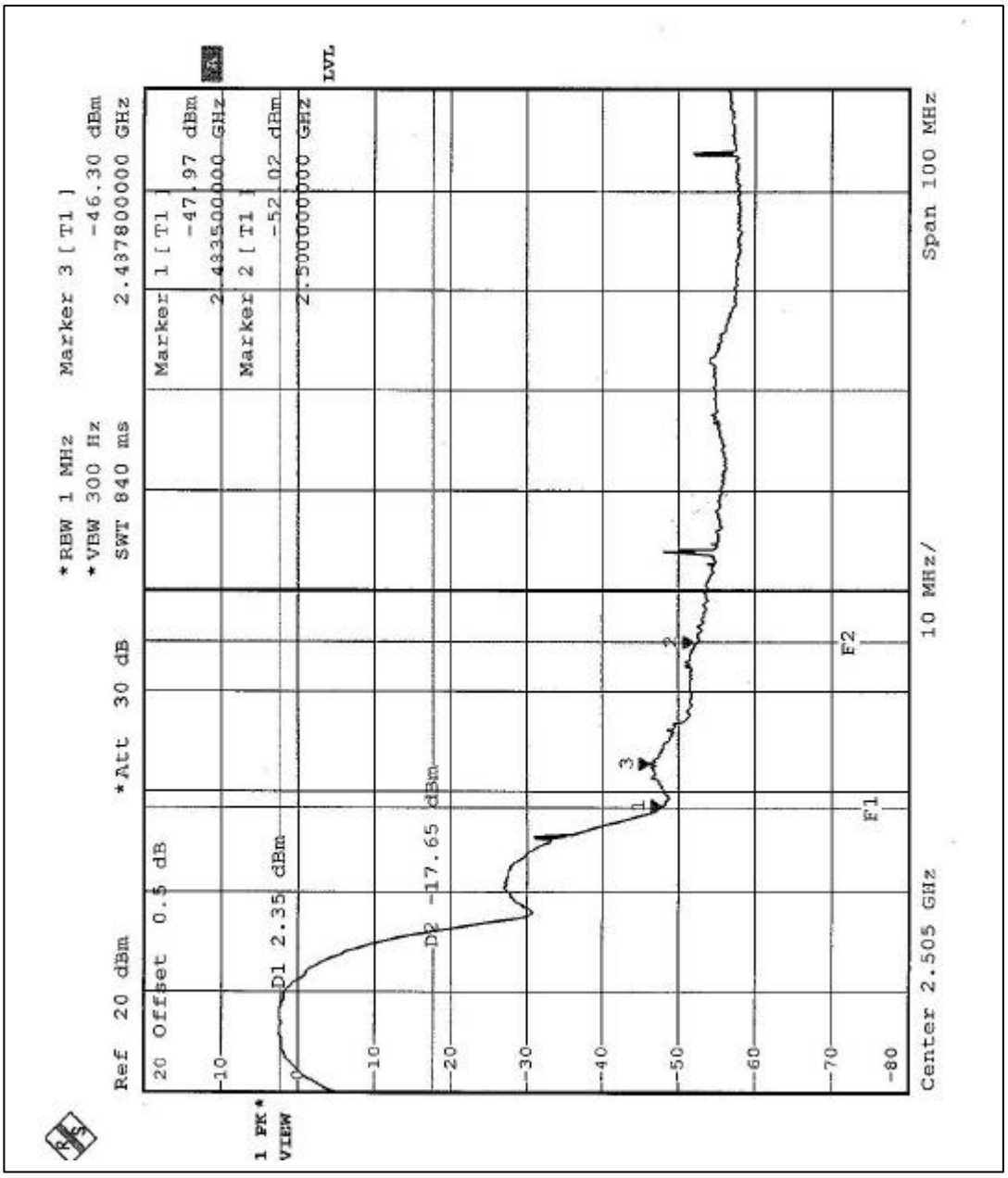
4.6.8 TEST RESULTS – DSSS (Antenna 4)

The spectrum plots are attached on the following 2 pages. 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 (1): The band edge emission plot on the following first page shows 46.16dB delta between carrier maximum power and local maximum emission in restrict band (2.3874GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 99.5dBuV/m, so the maximum field strength in restrict band is 99.5-46.16=53.34dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 48.65dB delta between carrier maximum power and local maximum emission in restrict band (2.4878GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 100.7dBuV/m, so the maximum field strength in restrict band is 100.7-48.65=52.05dBuV/m which is under 54 dBuV/m limit.


RBW 1 MHz
VBW 300 Hz
SWT 840 ms
Marker 3 [T1]
-42.33 dBm
2.387400000 GHz
Marker 1 [T1]
-43.25 dBm
2.390000000 GHz
Marker 2 [T1]
-24.75 dBm
2.400000000 GHz
LVL
Ref 20 dBm
Att 30 dB
Offset 0.5 dB
D1 3.83 dBm
D2 -16.17 dBm
1 PK
VIEW
Center 2.372 GHz
10 MHz/
Span 100 MHz
F1
F2

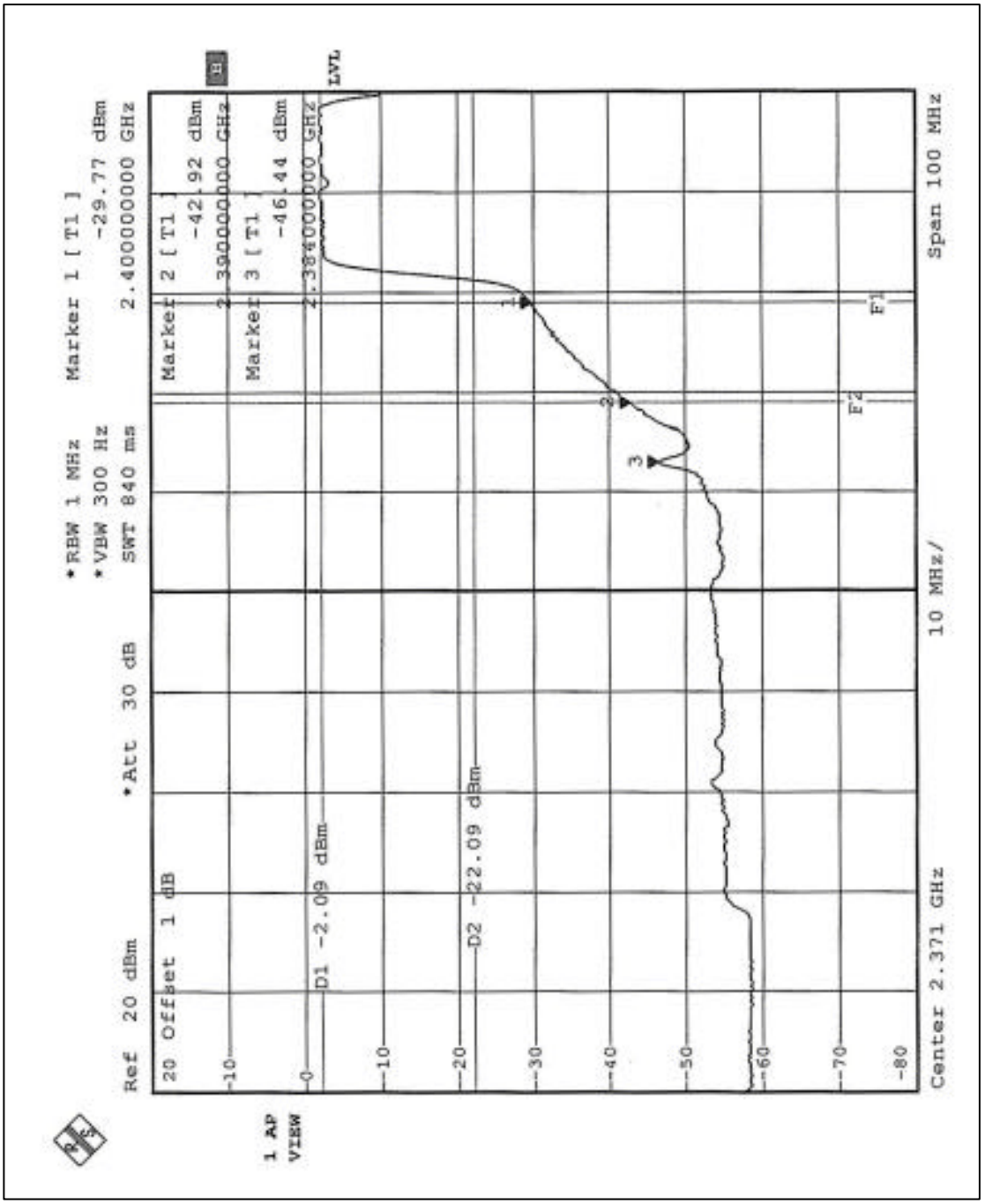

Ref 20 dBm
20 Offset 0.5 dB
*RBW 1 MHz
*VBW 300 Hz
*Att 30 dB
SWT 840 ms
Marker 3 [T1]
-46.30 dBm
2.437800000 GHz
Marker 1 [T1]
-47.97 dBm
2.433500000 GHz
Marker 2 [T1]
-52.02 dBm
2.500000000 GHz
LVL
1 PK*
VIEW
D1 2.35 dBm
D2 -17.65 dBm
F1
F2
Center 2.505 GHz
10 MHz/
Span 100 MHz

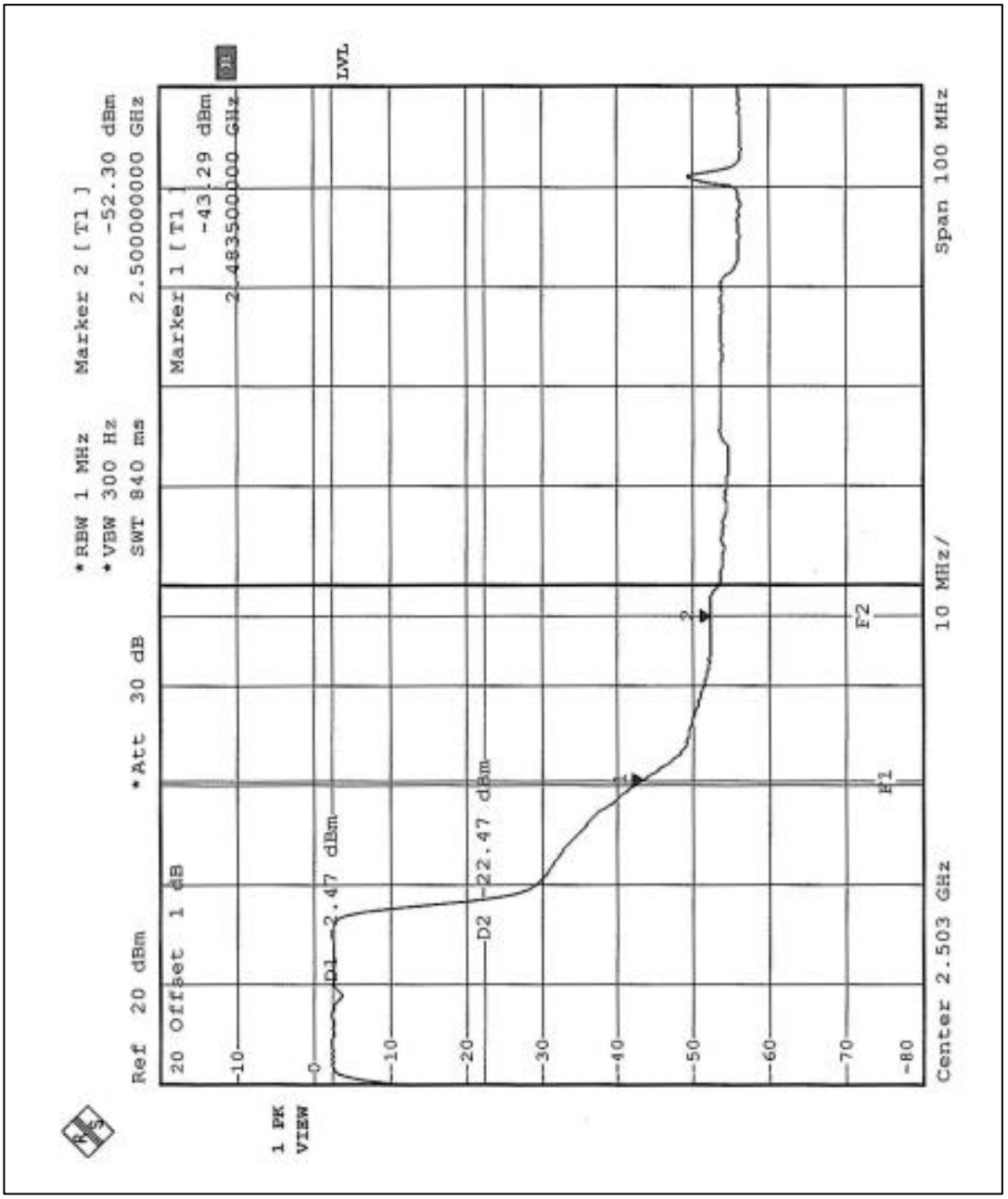
4.6.9 TEST RESULTS-OFDM (Antenna 1)

The spectrum plots are attached on the following 2 pages. 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 (1): The band edge emission plot on the following first page shows 40.83dB 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 4.2.8 is 92.6dBuV/m, so the maximum field strength in restrict band is 92.6-40.83=51.77dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 40.82dB 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 4.2.8 is 92.6dBuV/m, so the maximum field strength in restrict band is 92.6-40.82=51.78dBuV/m which is under 54 dBuV/m limit.


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 1 [T1]
-29.77 dBm
2.400000000 GHz
Marker 2 [T1]
-42.92 dBm
2.390000000 GHz
Marker 3 [T1]
-46.44 dBm
2.384000000 GHz
D1 -2.09 dBm
D2 -22.09 dBm
1 AP
VIEW
Center 2.371 GHz
10 MHz/
Span 100 MHz

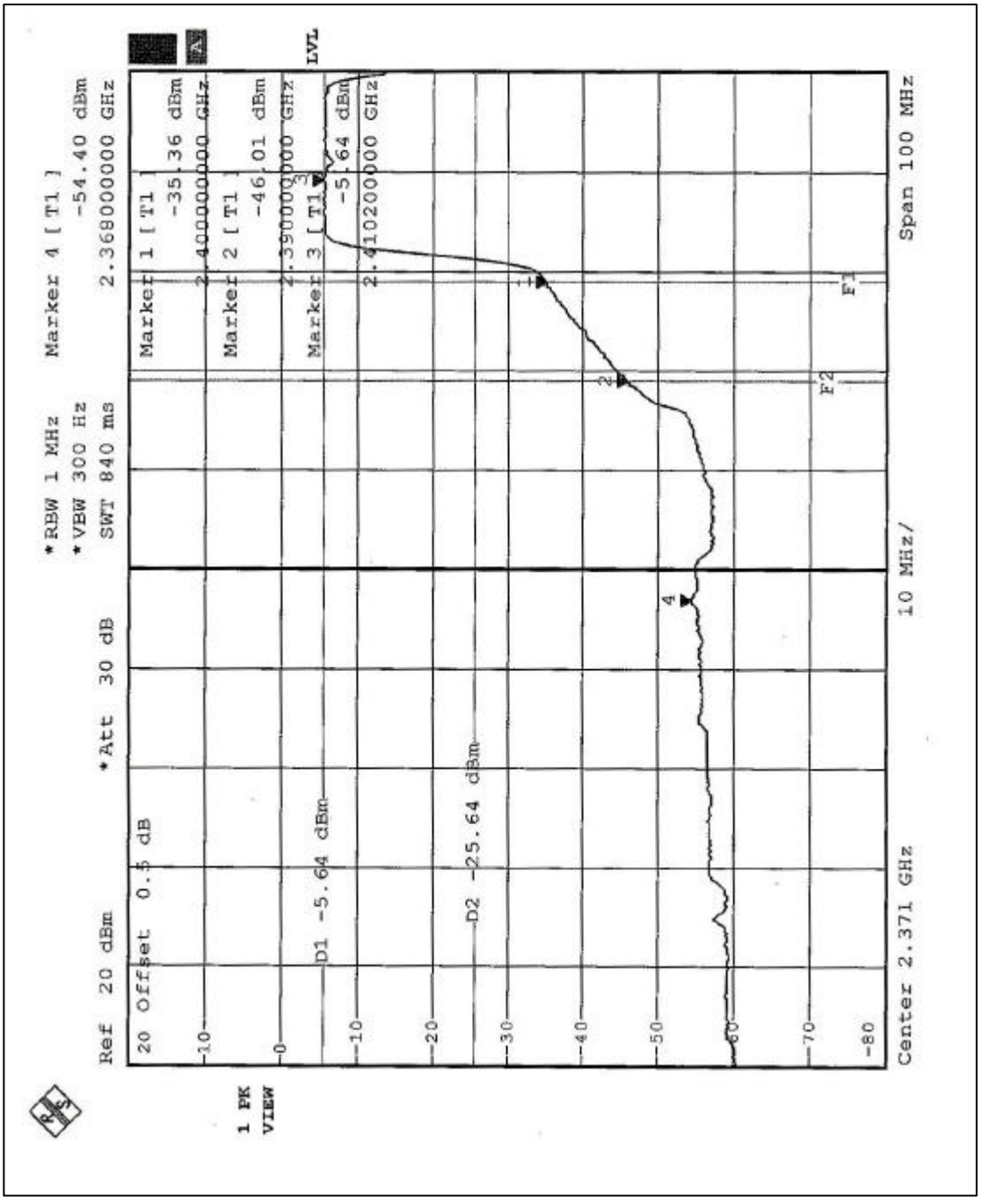

Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 2 [T1]
-52.30 dBm
2.50000000 GHz
Marker 1 [T1]
-43.29 dBm
2.48350000 GHz
LVL
D1 2.47 dBm
D2 -22.47 dBm
F2
F1
Center 2.503 GHz
10 MHz/
Span 100 MHz
1 PK
VIEW

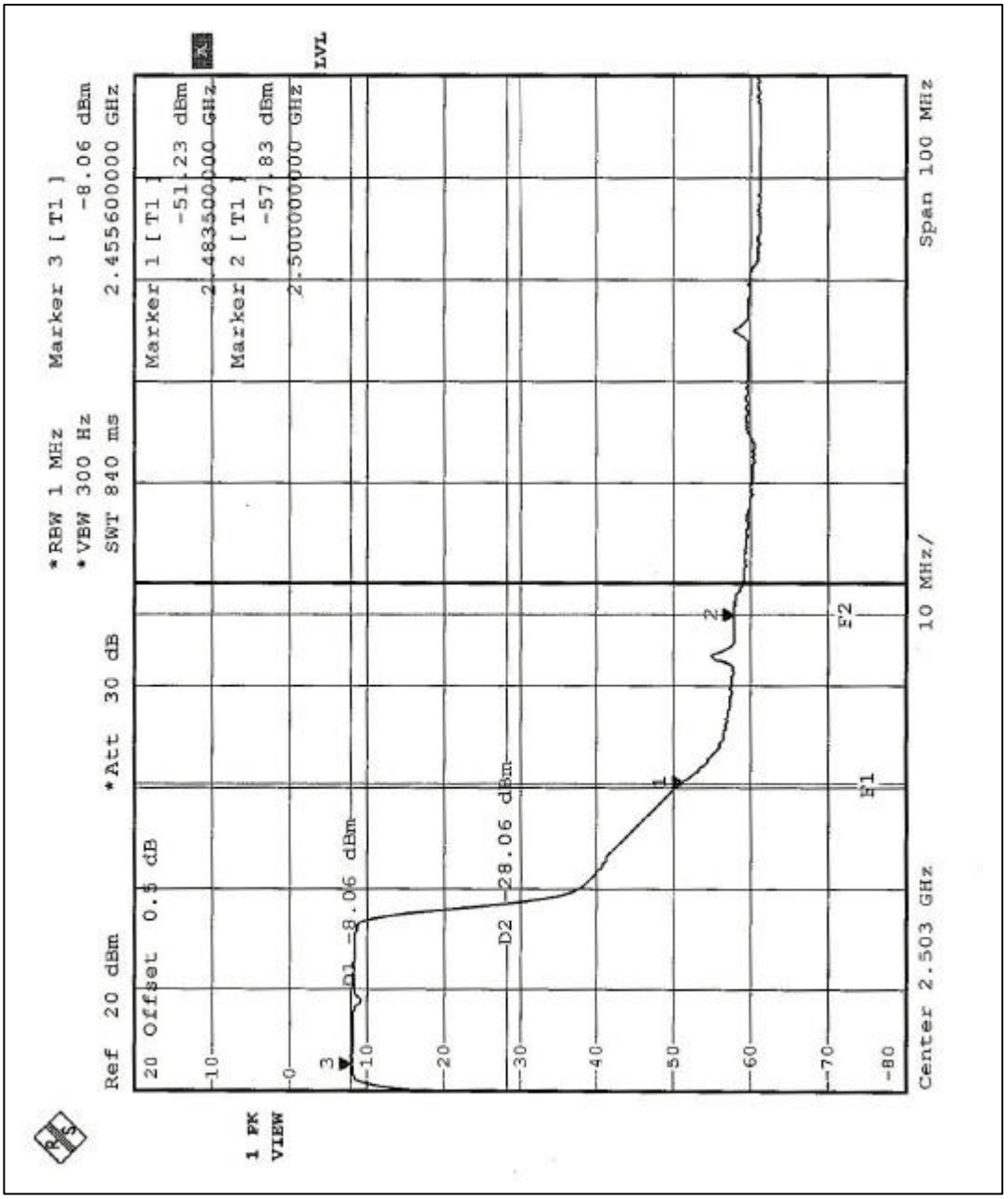
4.6.10 TEST RESULTS-OFDM (Antenna 2)

The spectrum plots are attached on the following 2 pages. 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 (1): The band edge emission plot on the following first page shows 40.37dB 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 4.2.8 is 93.8dBuV/m, so the maximum field strength in restrict band is 93.8-40.37=53.43dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 43.17dB 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 4.2.8 is 96.6dBuV/m, so the maximum field strength in restrict band is 96.6-43.17=53.43dBuV/m which is under 54 dBuV/m limit.


Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-54.40 dBm
2.368000000 GHz
Marker 1 [T1]
-35.36 dBm
2.400000000 GHz
Marker 2 [T1]
-46.01 dBm
2.390000000 GHz
Marker 3 [T1]
-5.64 dBm
2.410200000 GHz
LVL
D1 -5.64 dBm
D2 -25.64 dBm
1 PK
VIEW
Center 2.371 GHz
10 MHz/
Span 100 MHz

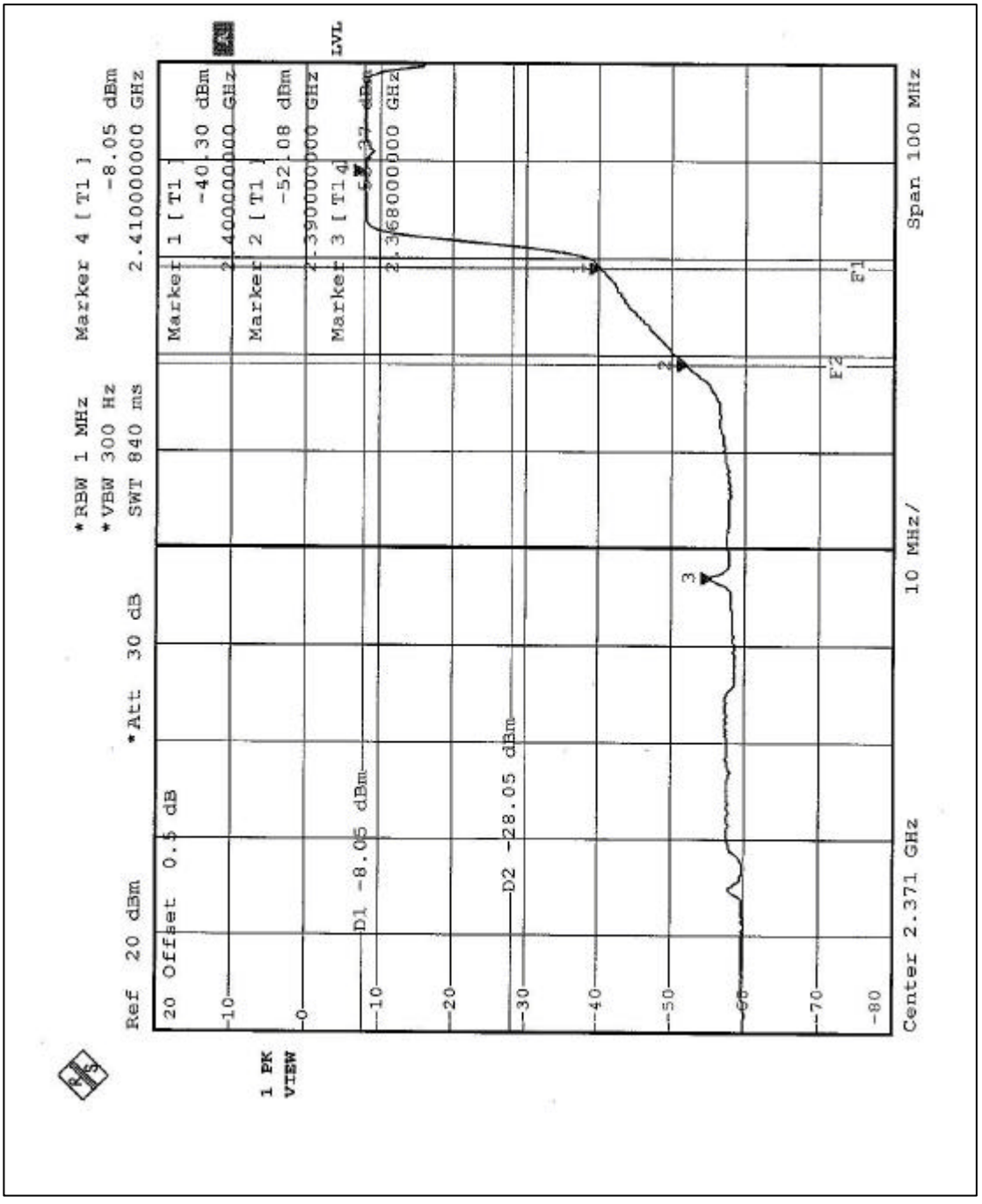

RBW 1 MHz
VBW 300 Hz
SWT 840 ms
Marker 3 [T1]
-8.06 dBm
2.455600000 GHz
Ref 20 dBm
Offset 0.5 dB
Att 30 dB
Marker 1 [T1]
-51.23 dBm
2.483500000 GHz
Marker 2 [T1]
-57.83 dBm
2.500000000 GHz
LVL
1 PK
VIEW
D1 -8.06 dBm
D2 -28.06 dBm
F1
F2
Center 2.503 GHz
10 MHz/
Span 100 MHz

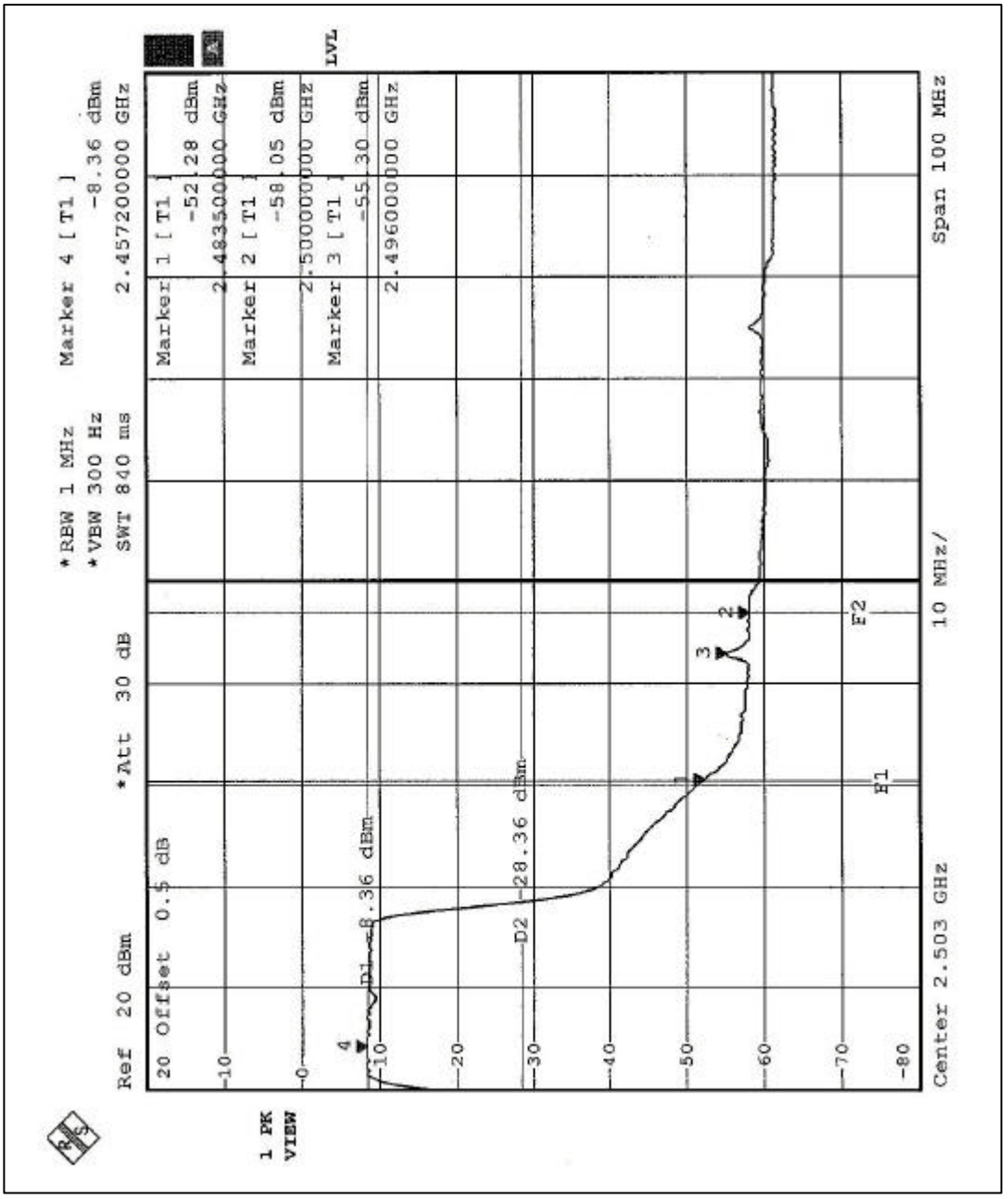
4.6.11 TEST RESULTS-OFDM (Antenna 3)

The spectrum plots are attached on the following 2 pages. 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 (1): The band edge emission plot on the following first page shows 44.03dB 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 4.2.8 is 95.2dBuV/m, so the maximum field strength in restrict band is 95.2-44.03=51.17dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 43.92dB 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 4.2.8 is 97.0dBuV/m, so the maximum field strength in restrict band is 97.0-43.92=53.08dBuV/m which is under 54 dBuV/m limit.


*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-8.05 dBm
2.41000000 GHz
Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
Marker 1 [T1]
-40.30 dBm
2.40000000 GHz
Marker 2 [T1]
-52.08 dBm
2.39000000 GHz
Marker 3 [T1]
2.36800000 GHz
D1 -8.05 dBm
D2 -28.05 dBm
1 PK
VIEW
Center 2.371 GHz
10 MHz/
Span 100 MHz

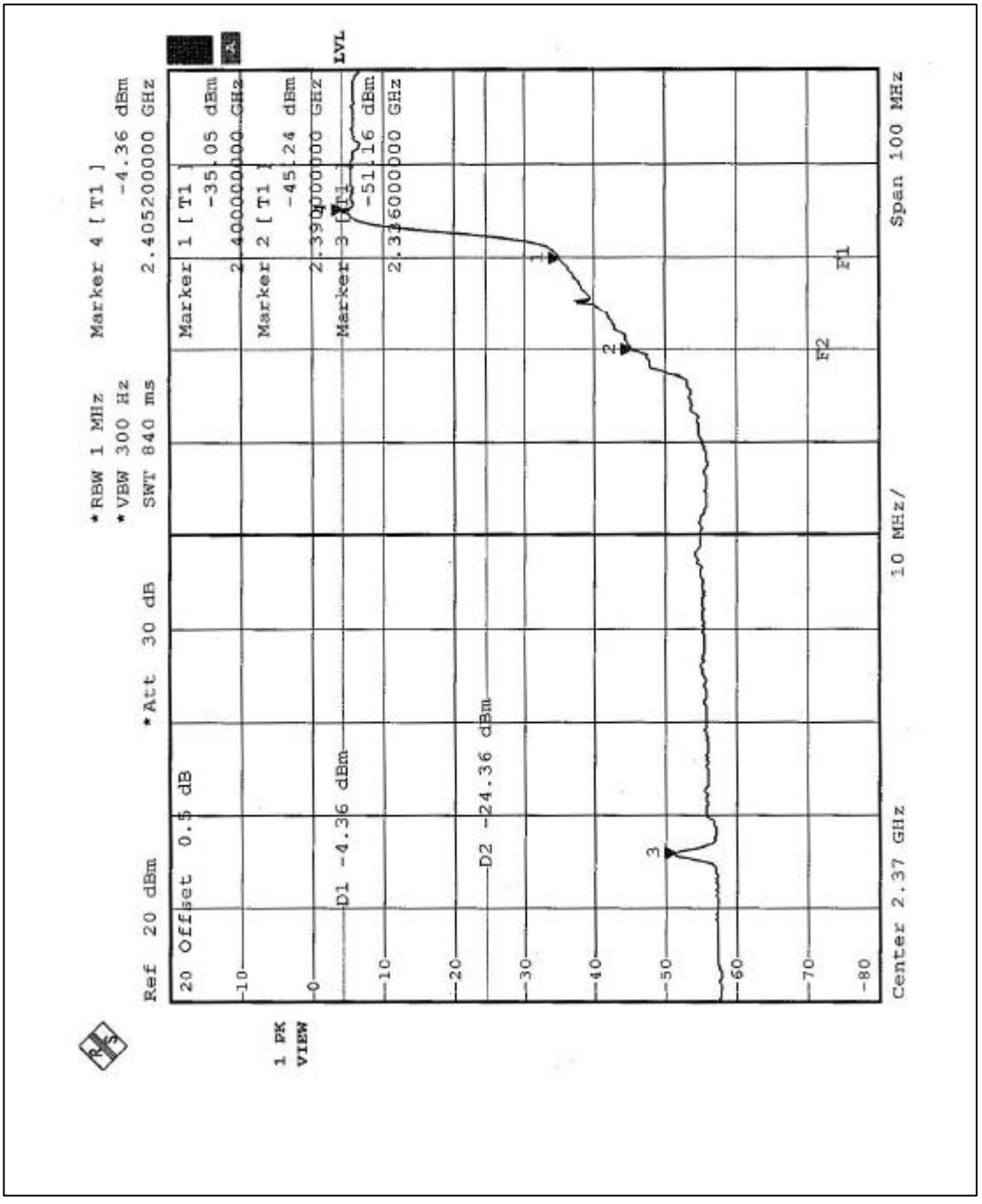

Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-8.36 dBm
2.457200000 GHz
Marker 1 [T1]
-52.28 dBm
2.483500000 GHz
Marker 2 [T1]
-58.05 dBm
2.500000000 GHz
Marker 3 [T1]
-55.30 dBm
2.496000000 GHz
LVL
1 PK
VIEW
D1 -8.36 dBm
D2 -28.36 dBm
F1
F2
Center 2.503 GHz
10 MHz/
Span 100 MHz

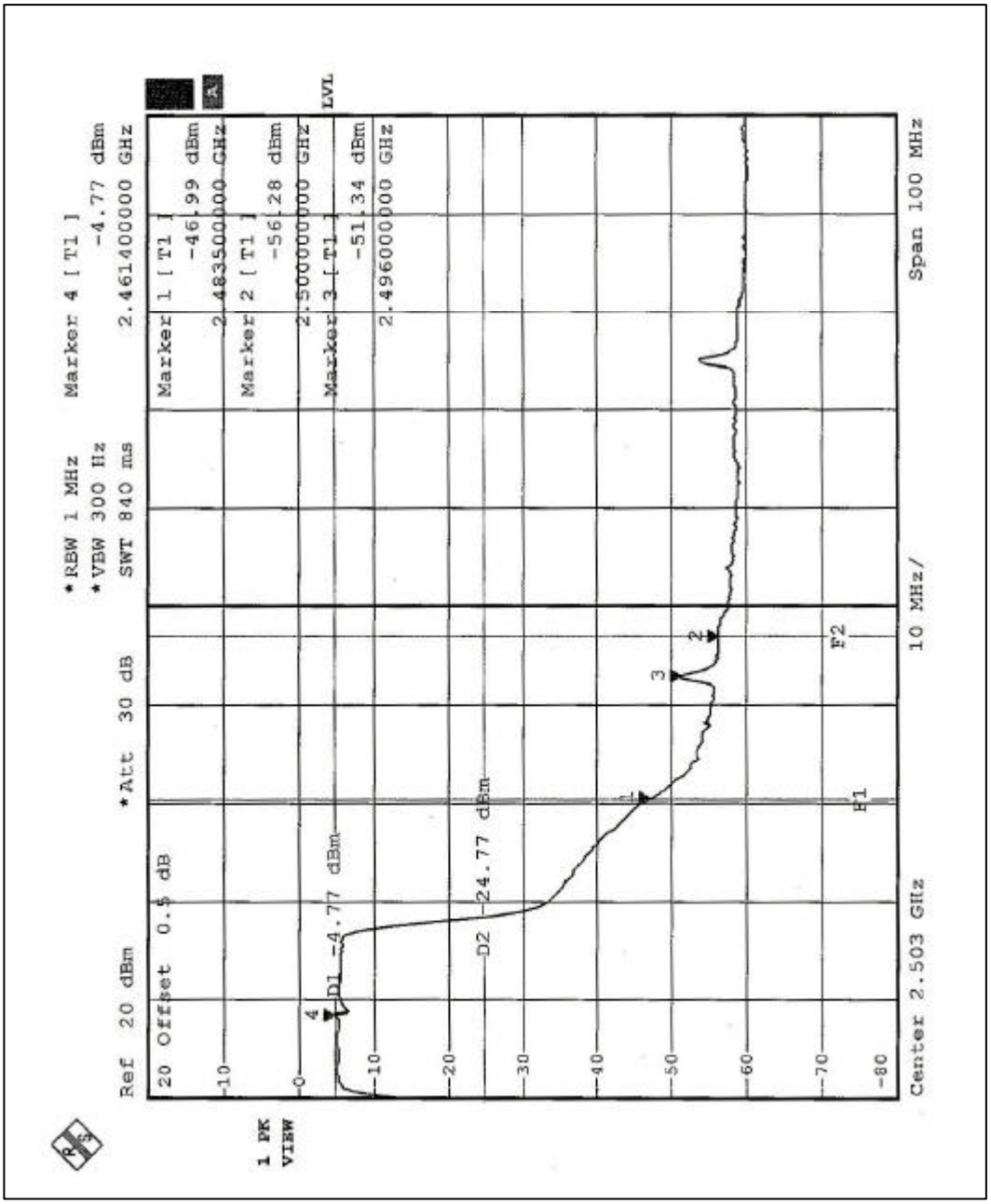
4.6.12 TEST RESULTS-OFDM (Antenna 4)

The spectrum plots are attached on the following 2 pages. 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 (1): The band edge emission plot on the following first page shows 40.88dB 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 4.2.8 is 93.1dBuV/m, so the maximum field strength in restrict band is 93.1-40.88=52.22dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 42.22dB 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 4.2.8 is 92.6dBuV/m, so the maximum field strength in restrict band is 92.6-42.22=50.38dBuV/m which is under 54 dBuV/m limit.


RBW 1 MHz
VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-4.36 dBm
2.405200000 GHz
Ref 20 dBm
Offset 0.5 dB
Att 30 dB
Marker 1 [T1]
-35.05 dBm
2.400000000 GHz
Marker 2 [T1]
-45.24 dBm
2.390000000 GHz
Marker 3 [T1]
-51.16 dBm
2.336000000 GHz
LVL
D1 -4.36 dBm
D2 -24.36 dBm
1 PK
VIEW
Center 2.37 GHz
10 MHz/
Span 100 MHz
F1
F2


Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-4.77 dBm
2.461400000 GHz
Marker 1 [T1]
-46.99 dBm
2.483500000 GHz
Marker 2 [T1]
-56.28 dBm
2.500000000 GHz
Marker 3 [T1]
-51.34 dBm
2.496000000 GHz
D1 -4.77 dBm
D2 -24.77 dBm
1 PK
VIEW
Center 2.503 GHz
10 MHz/
Span 100 MHz
F1
F2
LVL

4.7 ANTENNA REQUIREMENT

4.7.1 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.

4.7.2 ANTENNA CONNECTED CONSTRUCTION

The antennas used in this product are Detachable antenna with SMA connector and Sector-Panel, Omnidirectional, Hallway Bidirectional Antennas with N type connector.

Antenna 1: The maximum Gain of the antenna is 1.0dBi.

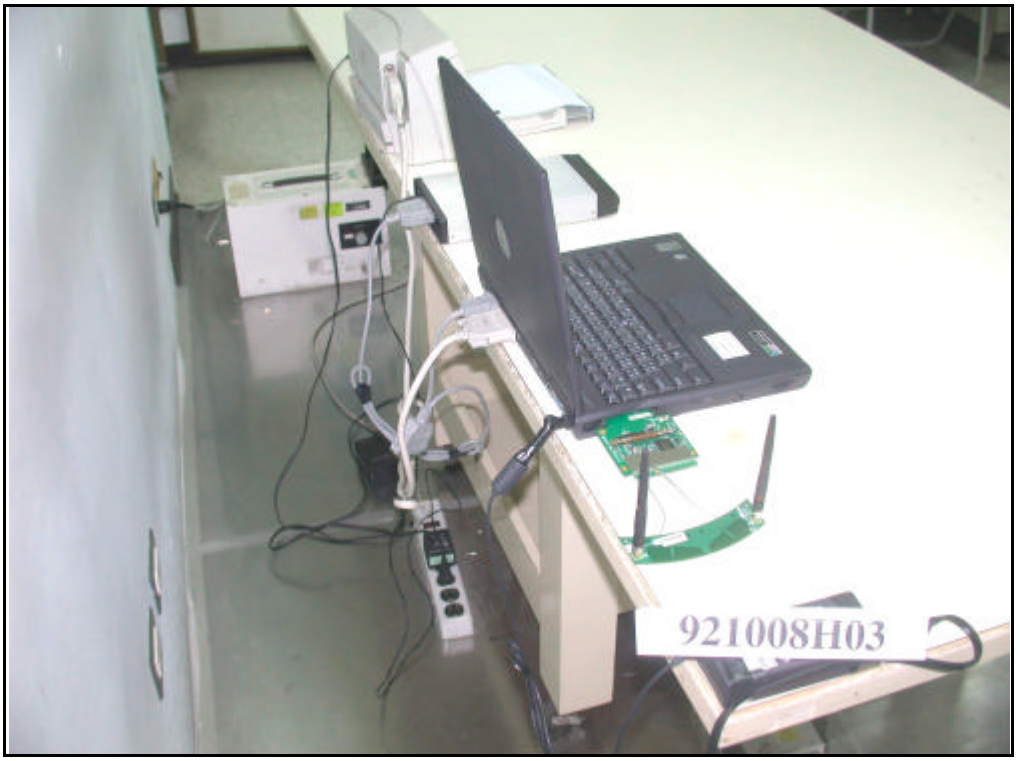
Antenna 2: The maximum Gain of the antenna is 8.0dBi.

Antenna 3: The maximum Gain of the antenna is 8.0dBi.

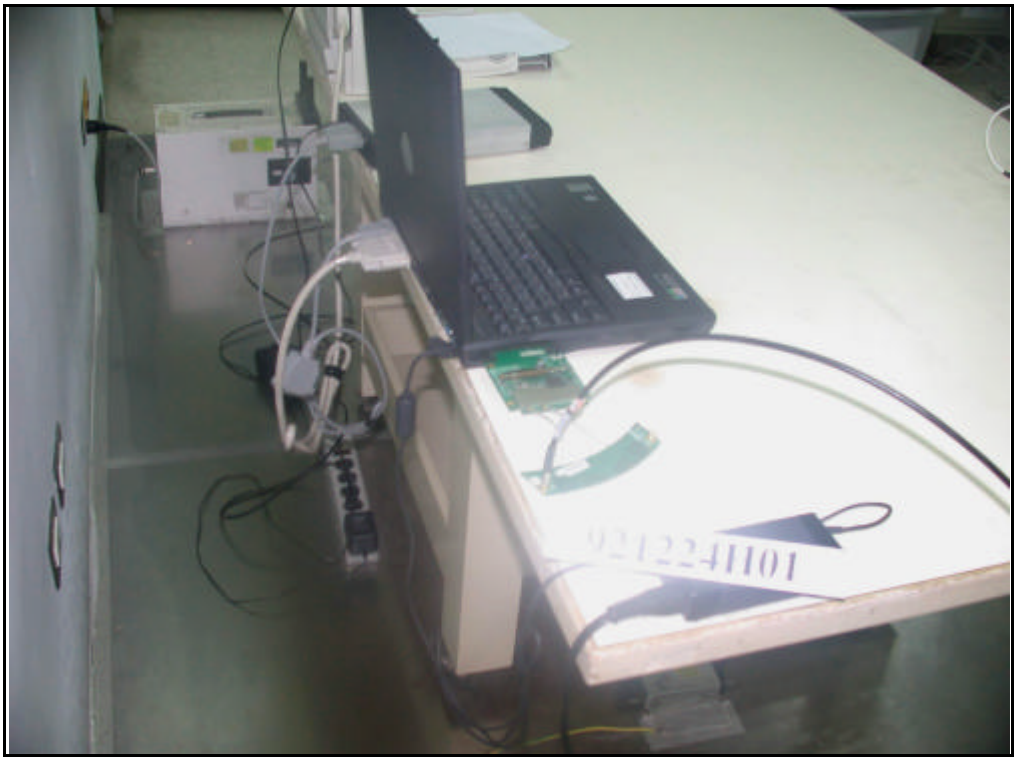
Antenna 4: The maximum Gain of the antenna is 4.0dBi.

5 PHOTOGRAPHS OF THE TEST CONFIGURATION

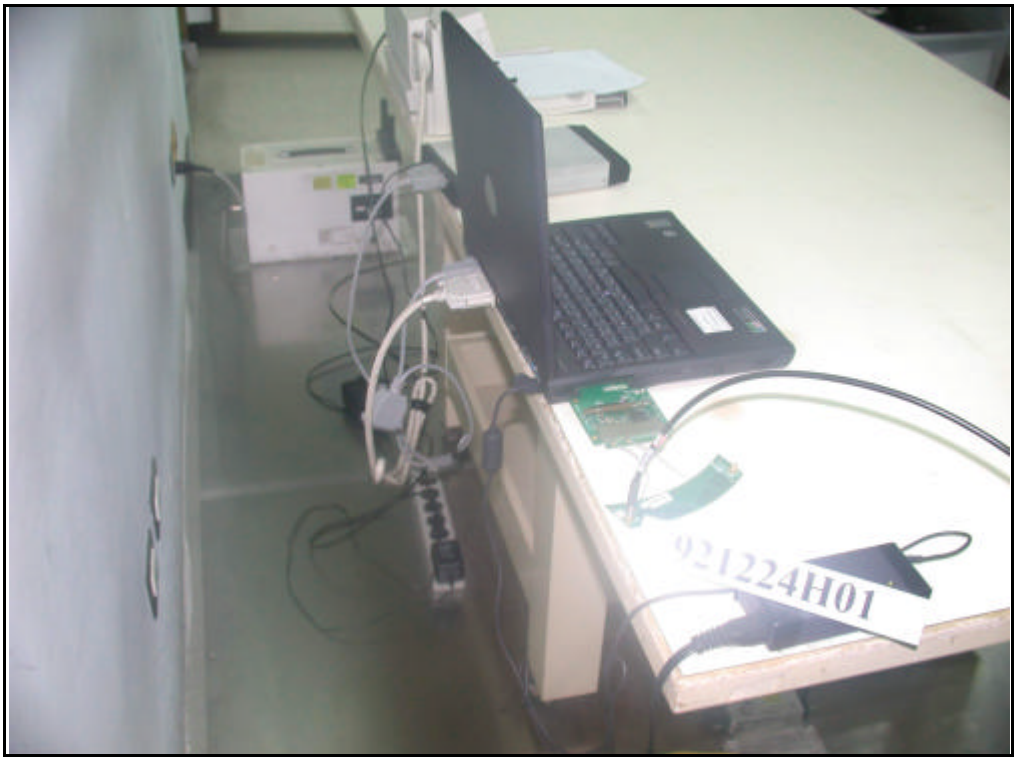
CONDUCTED EMISSION TEST (Antenna 1)



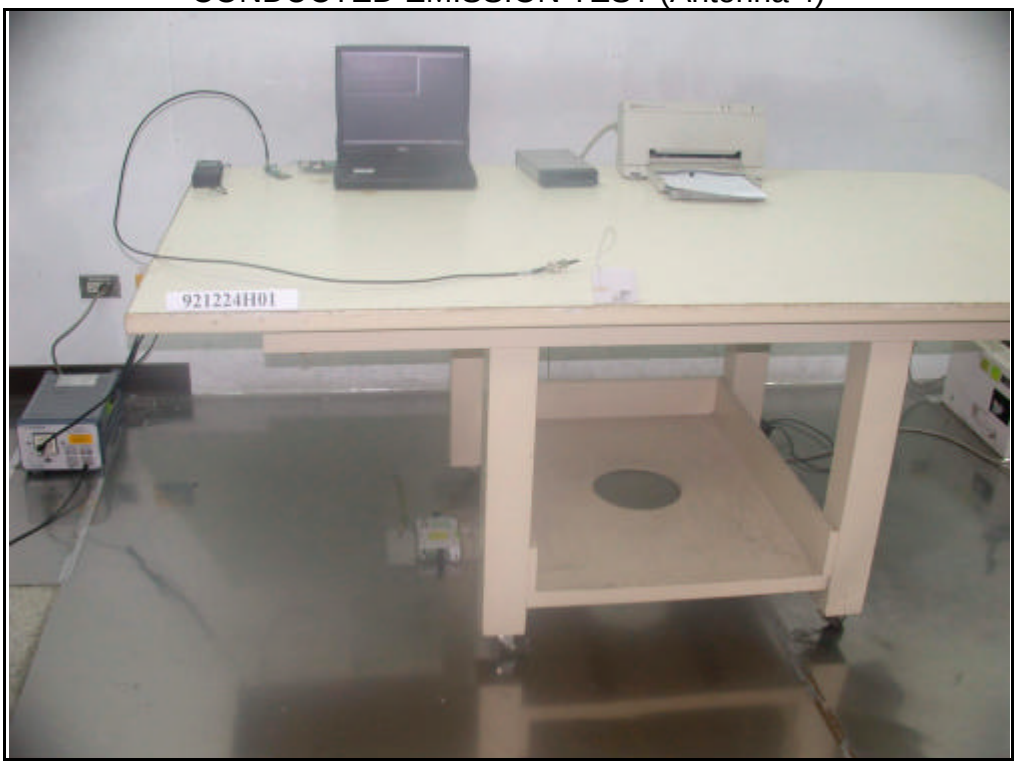
CONDUCTED EMISSION TEST (Antenna 2)

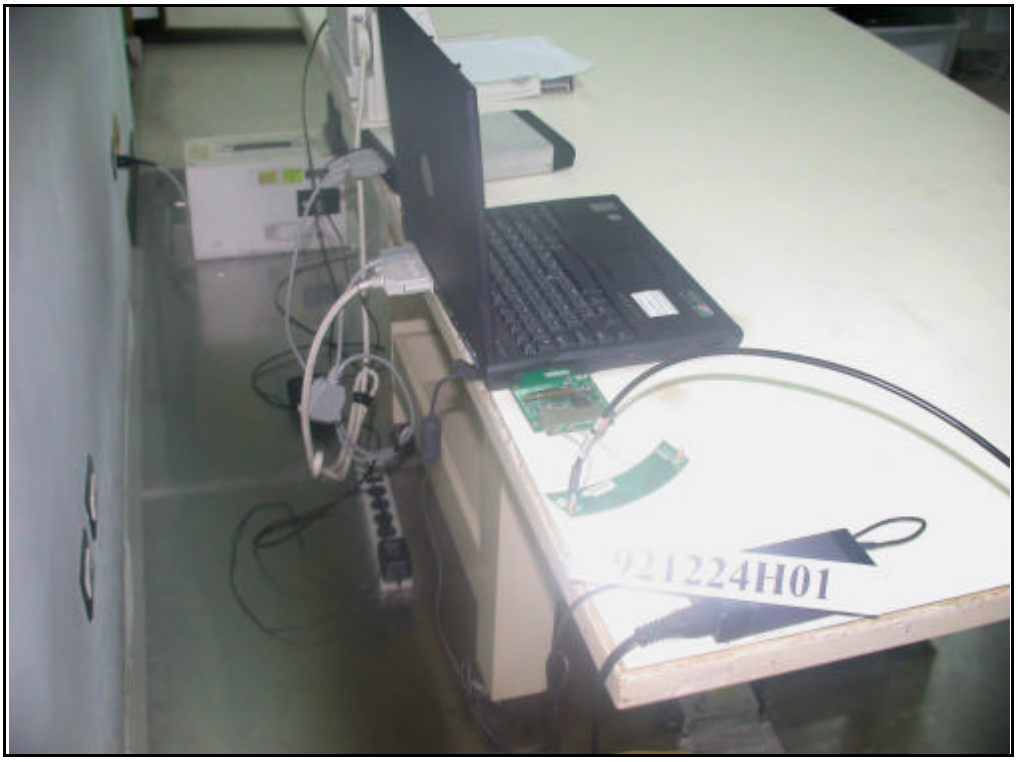


CONDUCTED EMISSION TEST (Antenna 3)

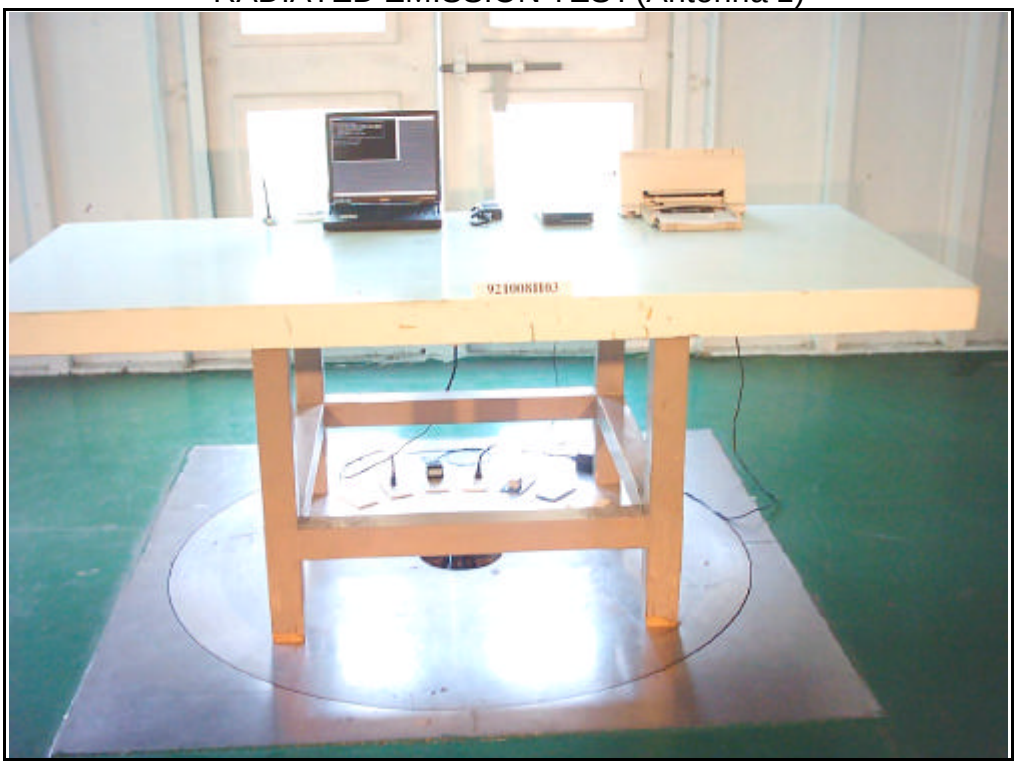


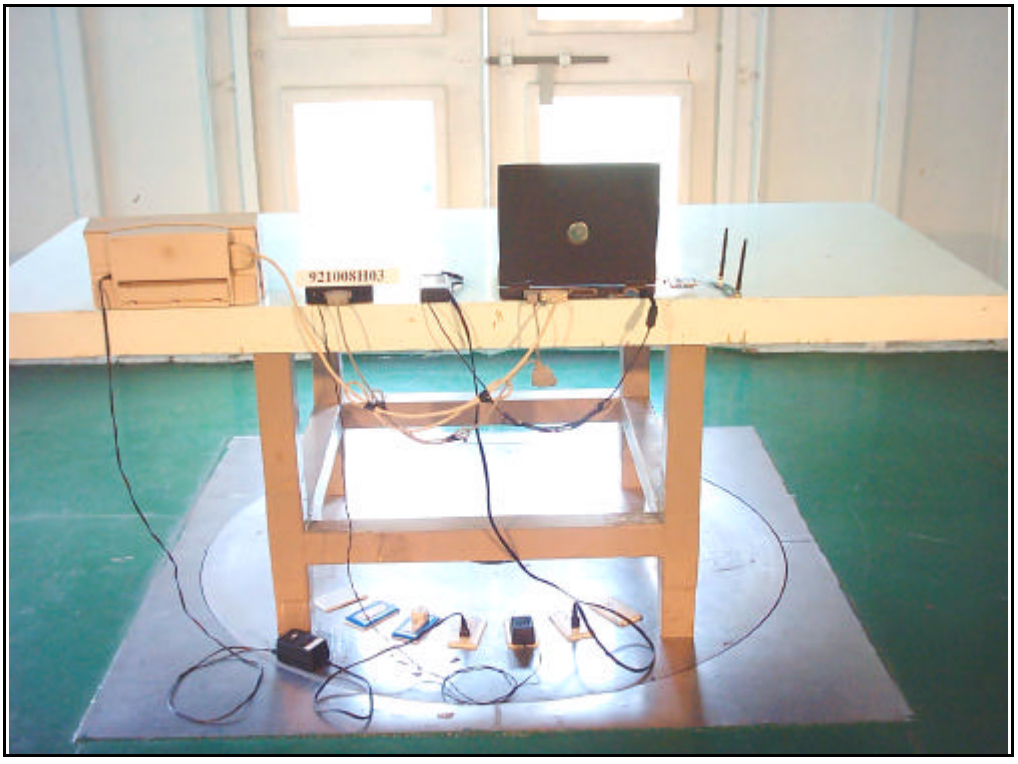
CONDUCTED EMISSION TEST (Antenna 4)

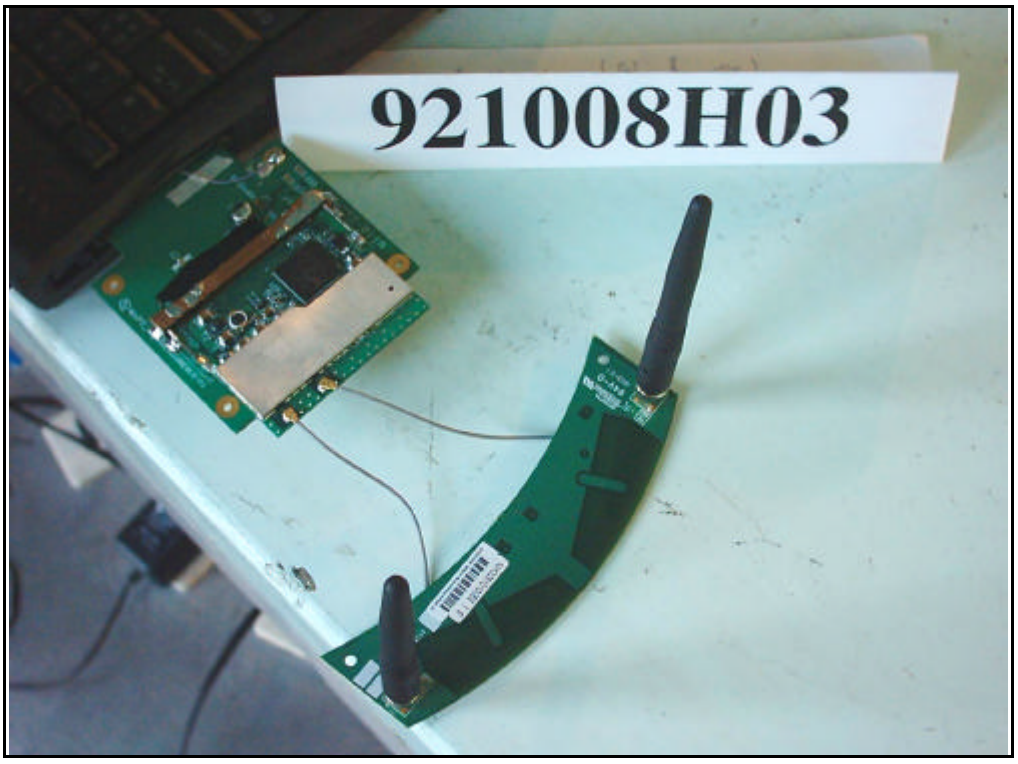




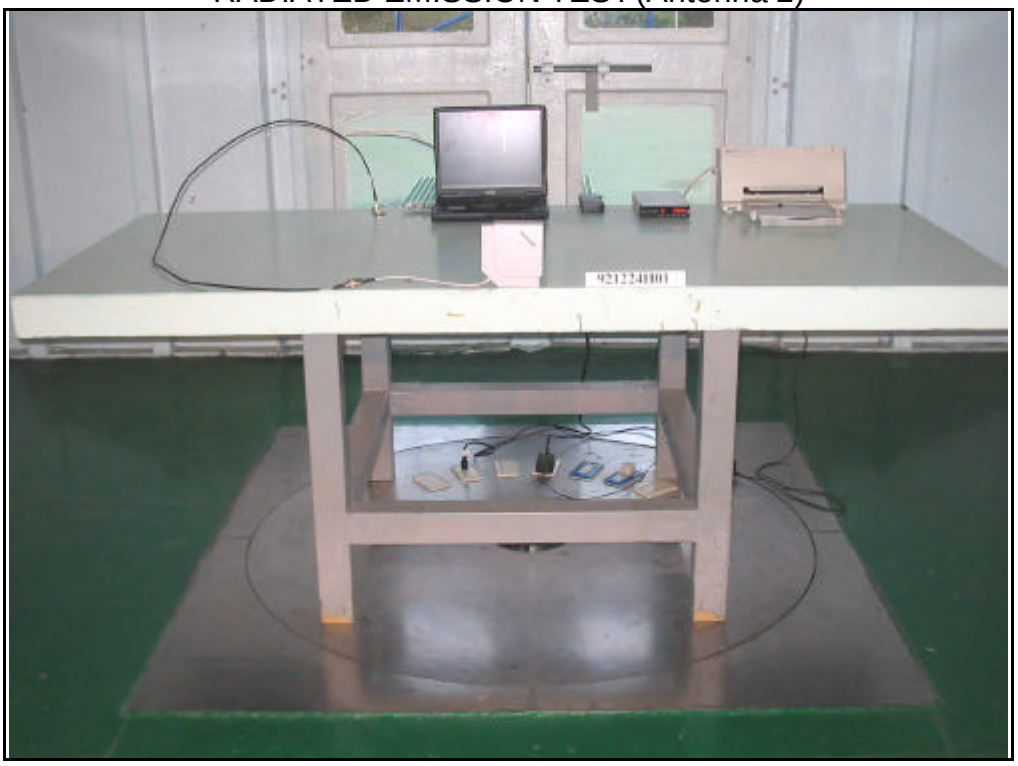
RADIATED EMISSION TEST (Antenna 1)

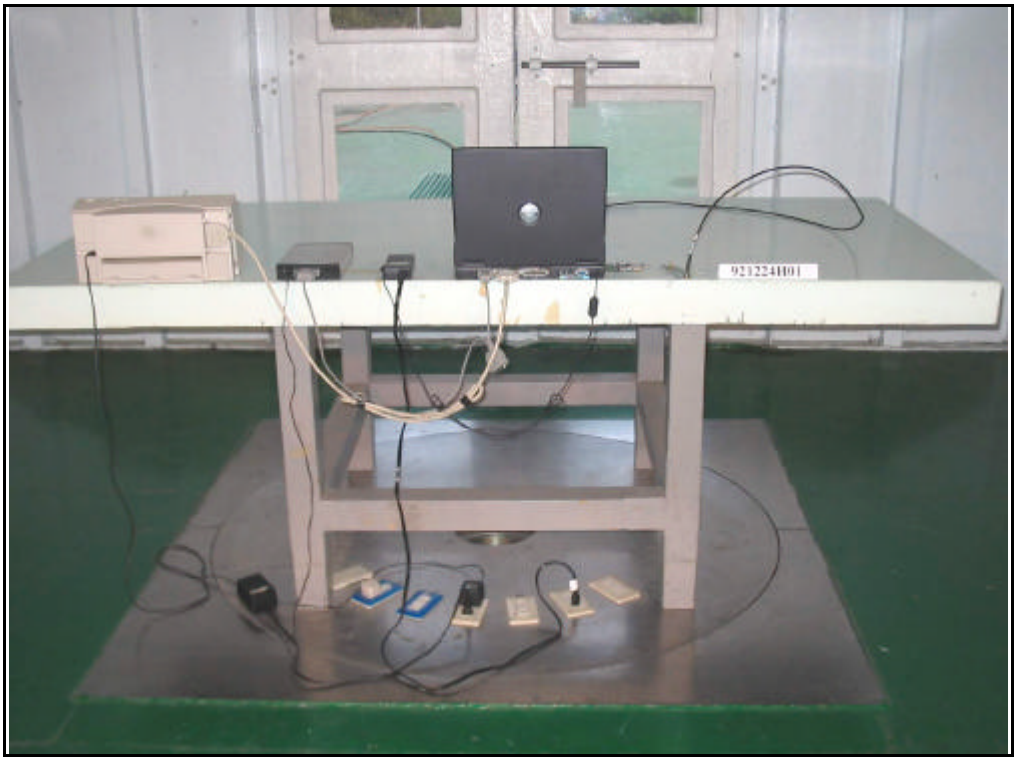





921008H03

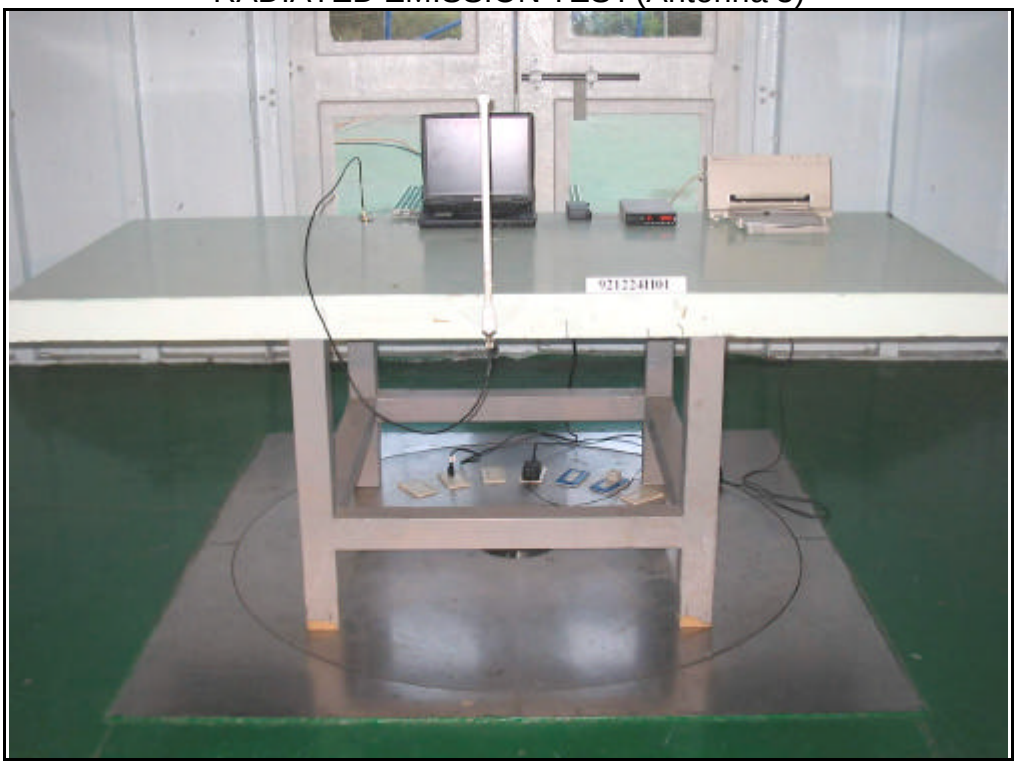
RADIATED EMISSION TEST (Antenna 2)

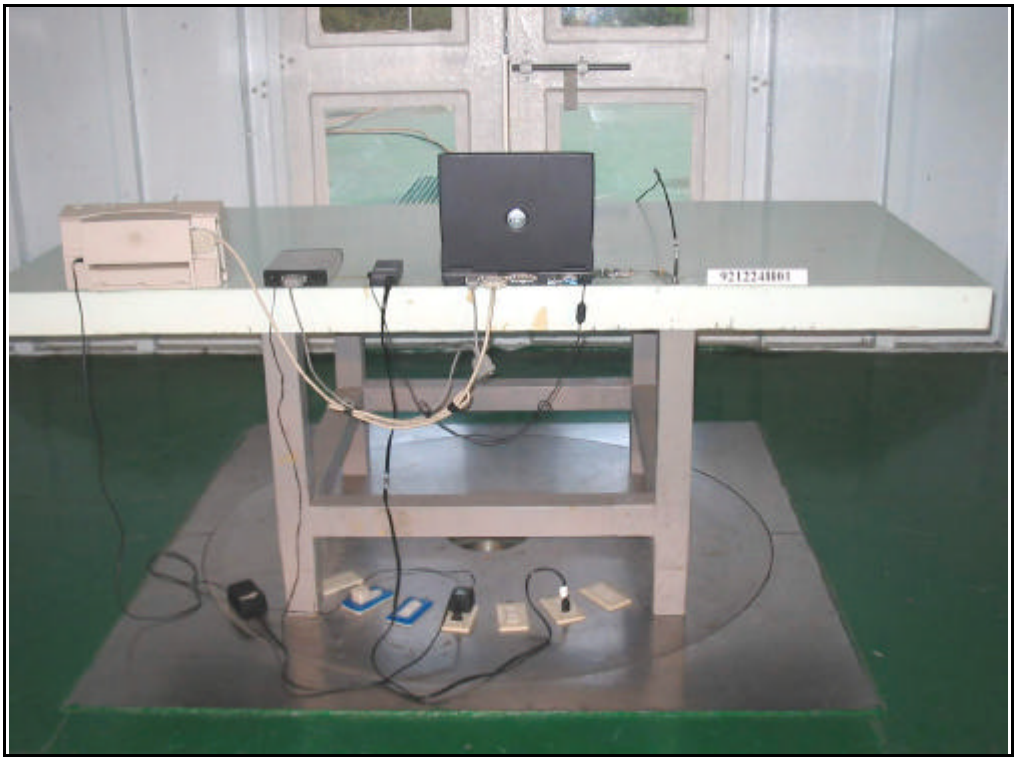




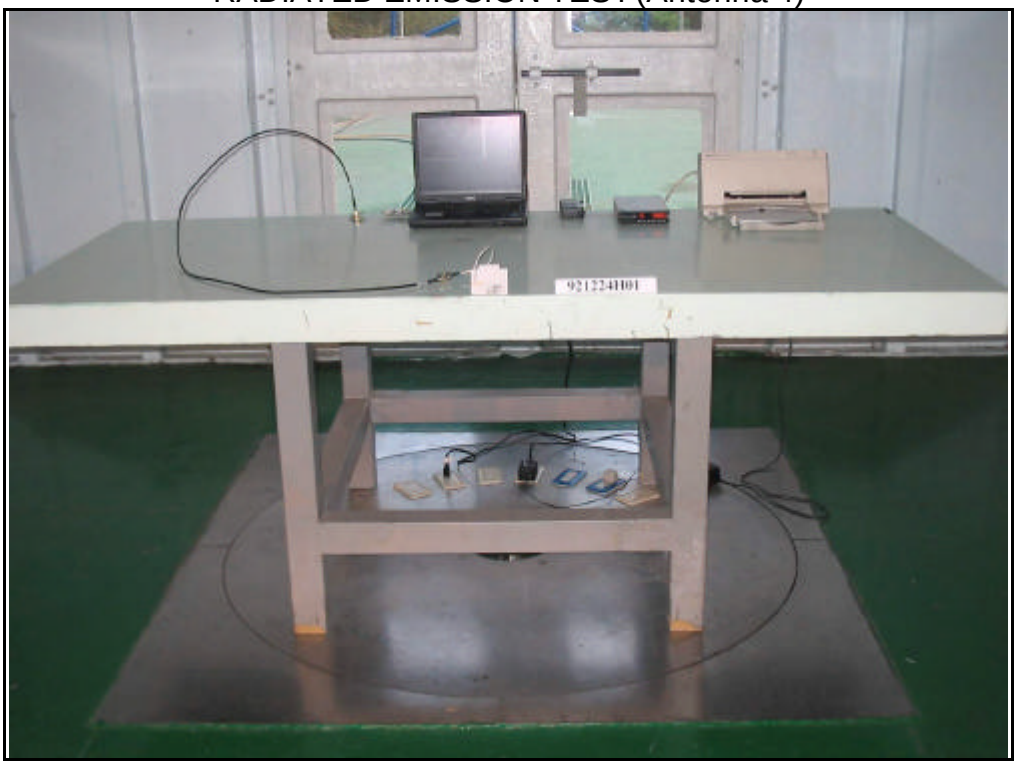

921224H01

RADIATED EMISSION TEST (Antenna 3)





RADIATED EMISSION TEST (Antenna 4)



6 INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025, Guide 25 or EN 45001:

USA	FCC, NVLAP, UL
Germany	TUV Rheinland
Japan	VCCI
New Zealand	MoC
Norway	NEMKO
Canada	INDUSTRY CANADA
R.O.C.	CNLA, BSMI

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.

If you have any comments, please feel free to contact us at the following:

Lin Kou EMC Lab:
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The address and road map of all our labs can be found in our web site also.