5.5.9 TEST RESULTS(ANTENNA 3)

802.11a OFDM modulation

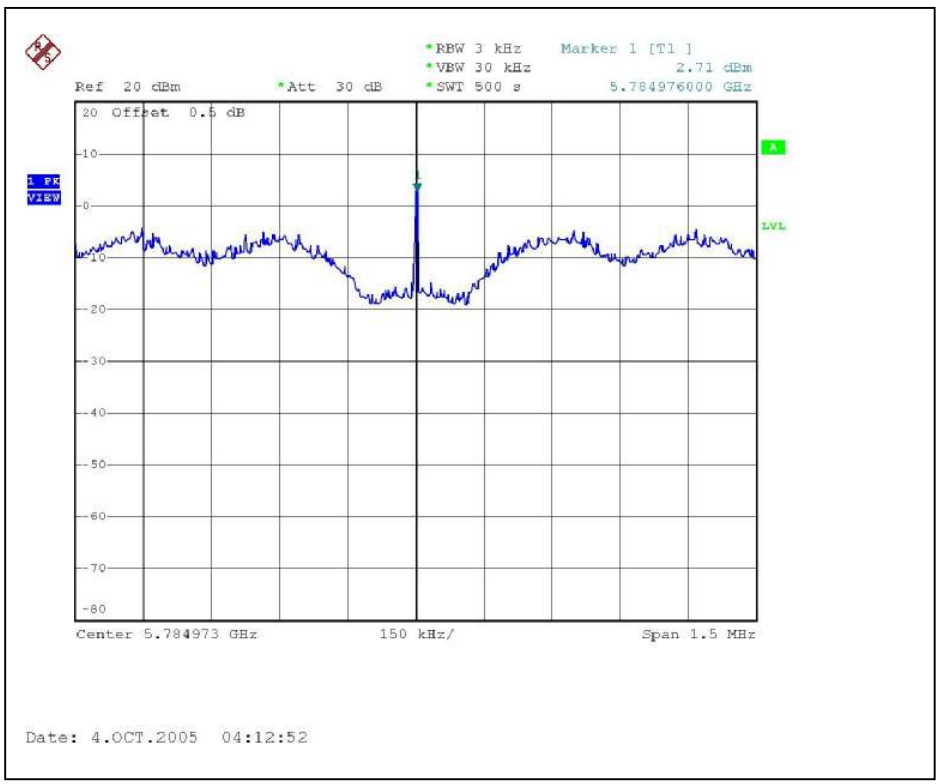
EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**TRANSFER RATE**	6Mbps
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	27deg. C, 53%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5745	3.41	8	PASS
3	5785	2.71	8	PASS
5	5825	2.47	8	PASS

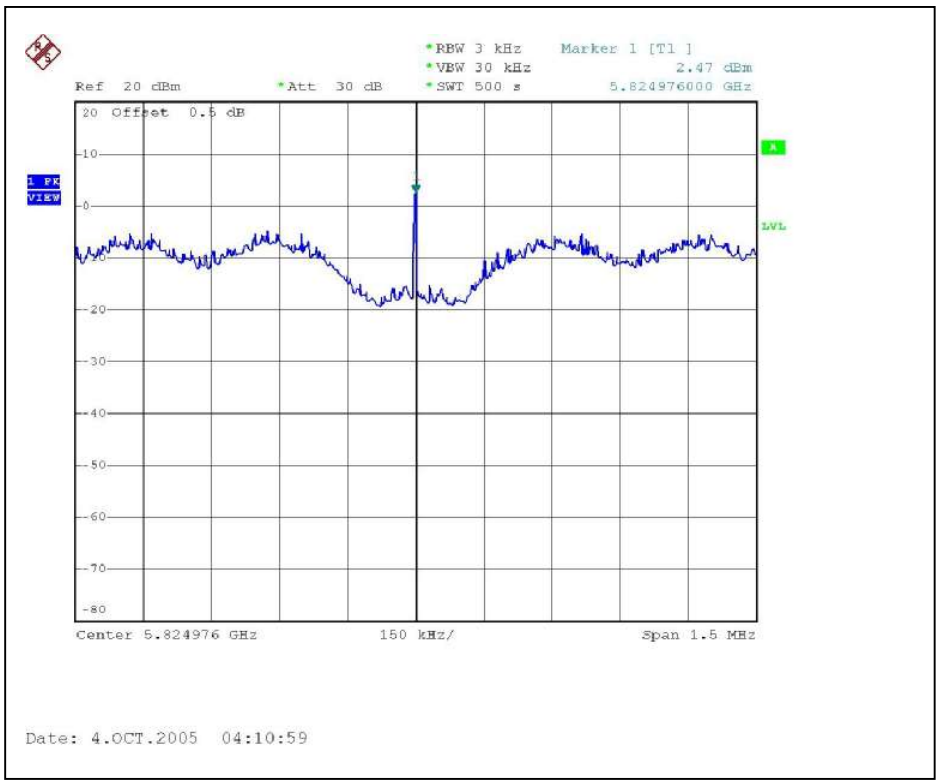
CH1


*RBW 3 kHz
Marker 1 [T1]
*VBW 30 kHz
3.41 dBm
Ref 20 dBm
*Att 30 dB
*SWT 500 s
5.744976000 GHz
20 Offset 0.5 dB
1 PK
VIEW
A
LVL
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 5.744976 GHz
150 kHz/
Span 1.5 MHz

CH3


*RBW 3 kHz
Marker 1 [T1]
*VBW 30 kHz
2.71 dBm
Ref 20 dBm
*Att 30 dB
*SWT 500 s
5.784976000 GHz
20 Offset 0.5 dB
1 PK
VIEW
A
LVL
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 5.784973 GHz
150 kHz/
Span 1.5 MHz
Date: 4.OCT.2005 04:12:52

CH5

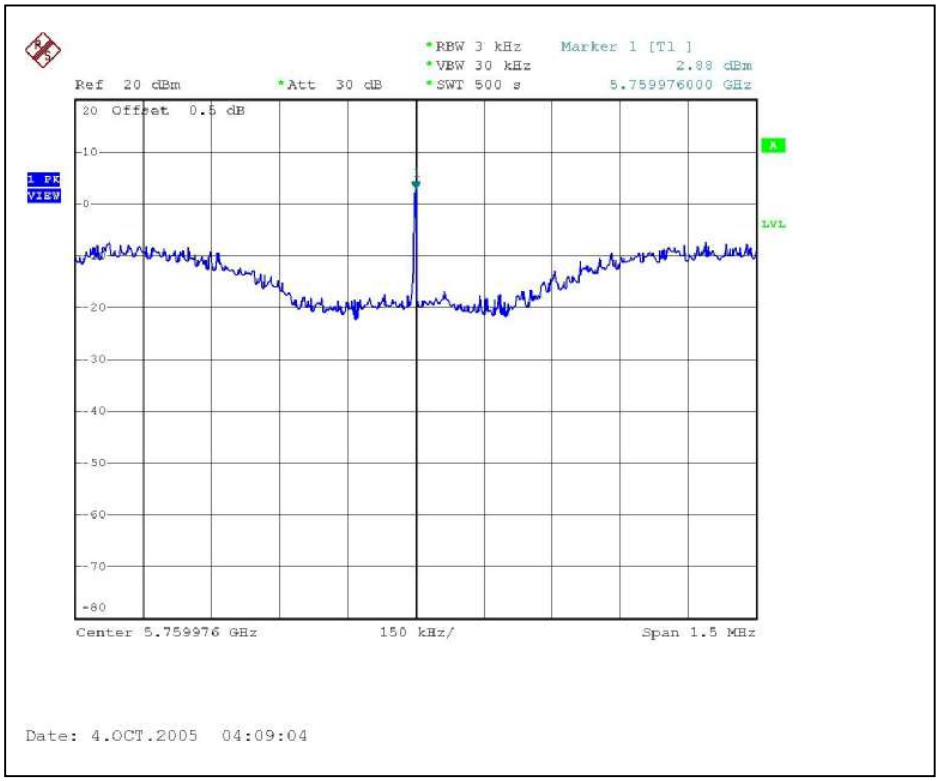

*RBW 3 kHz
Marker 1 [T1]
*VBW 30 kHz
2.47 dBm
Ref 20 dBm
*Att 30 dB
*SWT 500 s
5.824976000 GHz
20 Offset 0.5 dB
10
0
-10
-20
-30
-40
-50
-60
-70
-80
1 PK
VIEW
A
LVL
Center 5.824976 GHz
150 kHz/
Span 1.5 MHz
Date: 4.OCT.2005 04:10:59

802.11a Turbo OFDM modulation

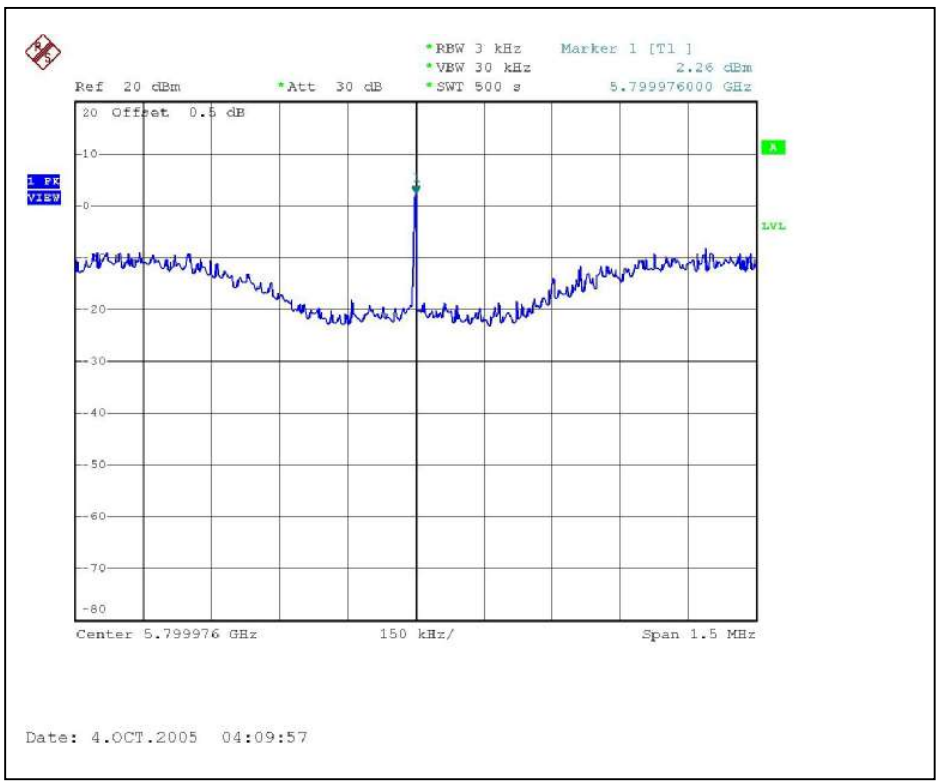
EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**TRANSFER RATE**	12Mbps
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	27deg. C, 53%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5760	2.88	8	PASS
2	5800	2.26	8	PASS

CH1


RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
2.88 dBm
5.759976000 GHz
Ref 20 dBm
Att 30 dB
Offset 0.5 dB
1 PK VIEW
A
LVL
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 5.759976 GHz
150 kHz/
Span 1.5 MHz
Date: 4.OCT.2005 04:09:04

CH2


RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
2.26 dBm
5.799976000 GHz
Ref 20 dBm
Att 30 dB
Offset 0.5 dB
1 PK VIEW
A
LVL
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 5.799976 GHz
150 kHz/
Span 1.5 MHz
Date: 4.OCT.2005 04:09:57

5.5.10 TEST RESULTS(ANTENNA 4)

802.11a OFDM modulation

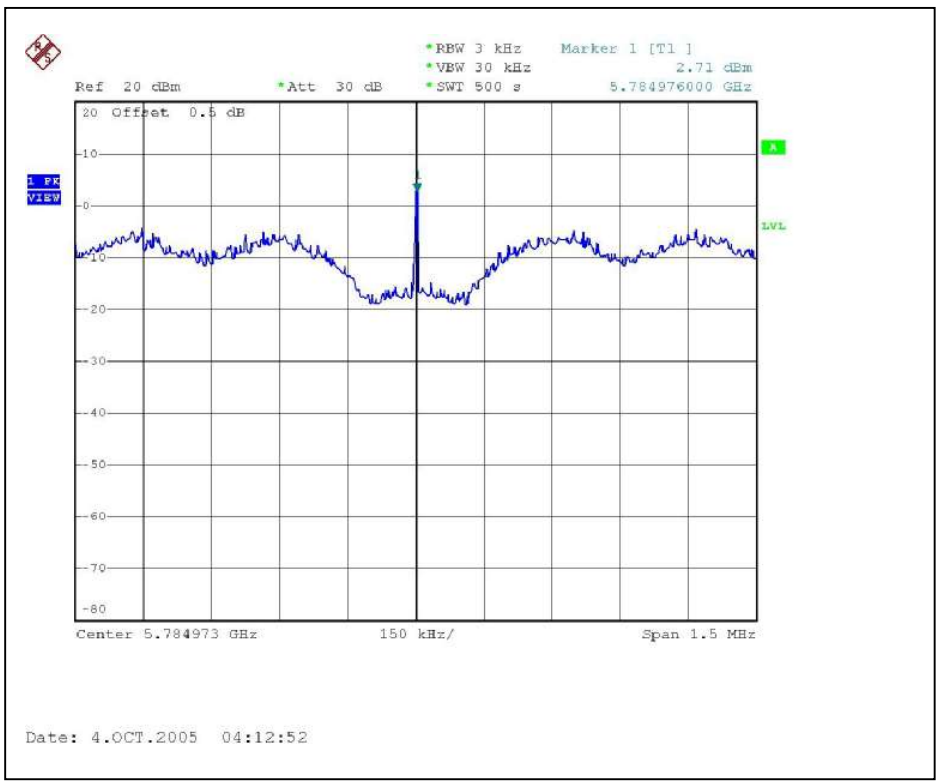
EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**TRANSFER RATE**	6Mbps
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	27deg. C, 53%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5745	3.41	8	PASS
3	5785	2.71	8	PASS
5	5825	2.47	8	PASS

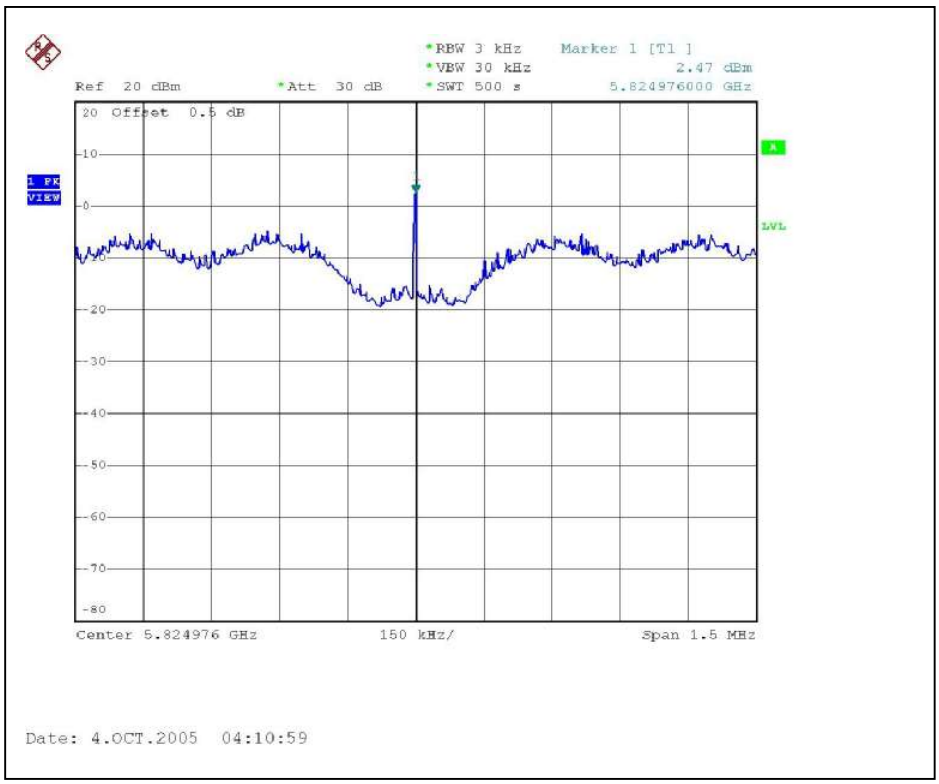
CH1


*RBW 3 kHz
Marker 1 [T1]
*VBW 30 kHz
3.41 dBm
Ref 20 dBm
*Att 30 dB
*SWT 500 s
5.744976000 GHz
20 Offset 0.5 dB
1 PK
VIEW
A
LVL
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 5.744976 GHz
150 kHz/
Span 1.5 MHz

CH3


*RBW 3 kHz
Marker 1 [T1]
*VBW 30 kHz
2.71 dBm
Ref 20 dBm
*Att 30 dB
*SWT 500 s
5.784976000 GHz
20 Offset 0.5 dB
1 PK
VIEW
A
LVL
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 5.784973 GHz
150 kHz/
Span 1.5 MHz
Date: 4.OCT.2005 04:12:52

CH5

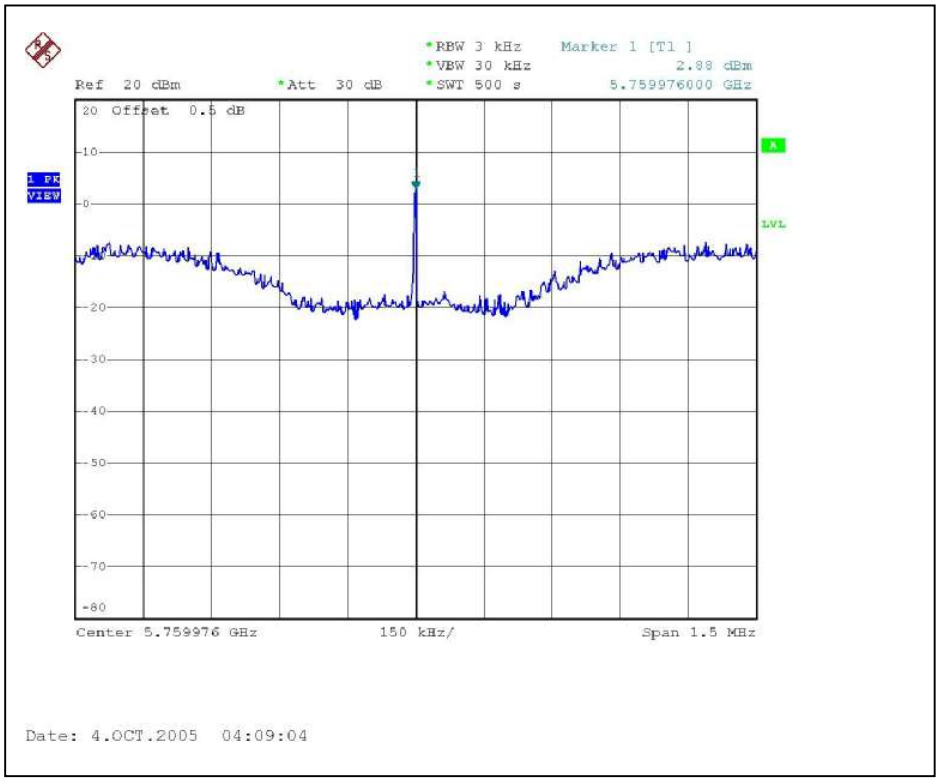

*RBW 3 kHz
Marker 1 [T1]
*VBW 30 kHz
2.47 dBm
Ref 20 dBm
*Att 30 dB
*SWT 500 s
5.824976000 GHz
20 Offset 0.5 dB
1 PK VIEW
A
LVL
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 5.824976 GHz
150 kHz/
Span 1.5 MHz
Date: 4.OCT.2005 04:10:59

802.11a Turbo OFDM modulation

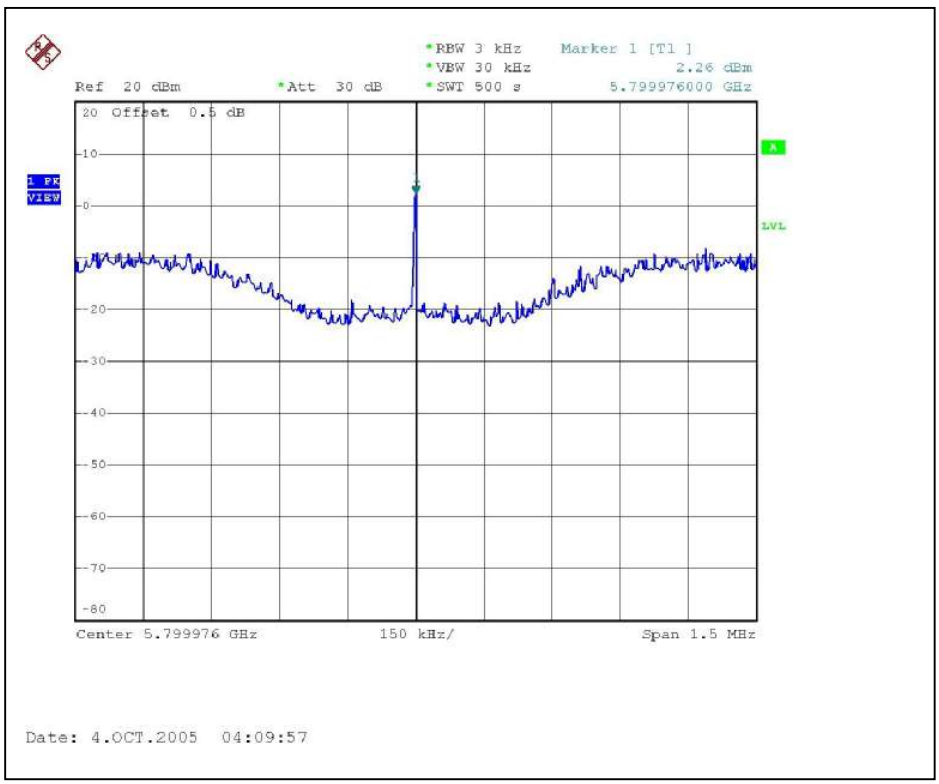
EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**TRANSFER RATE**	12Mbps
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	27deg. C, 53%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5760	2.88	8	PASS
2	5800	2.26	8	PASS

CH1


RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
2.88 dBm
5.759976000 GHz
Ref 20 dBm
Att 30 dB
Offset 0.5 dB
1 PK VIEW
A
LVL
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 5.759976 GHz
150 kHz/
Span 1.5 MHz
Date: 4.OCT.2005 04:09:04

CH2


RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
2.26 dBm
5.799976000 GHz
Ref 20 dBm
Att 30 dB
Offset 0.5 dB
1 PK VIEW
A
LVL
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 5.799976 GHz
150 kHz/
Span 1.5 MHz
Date: 4.OCT.2005 04:09:57

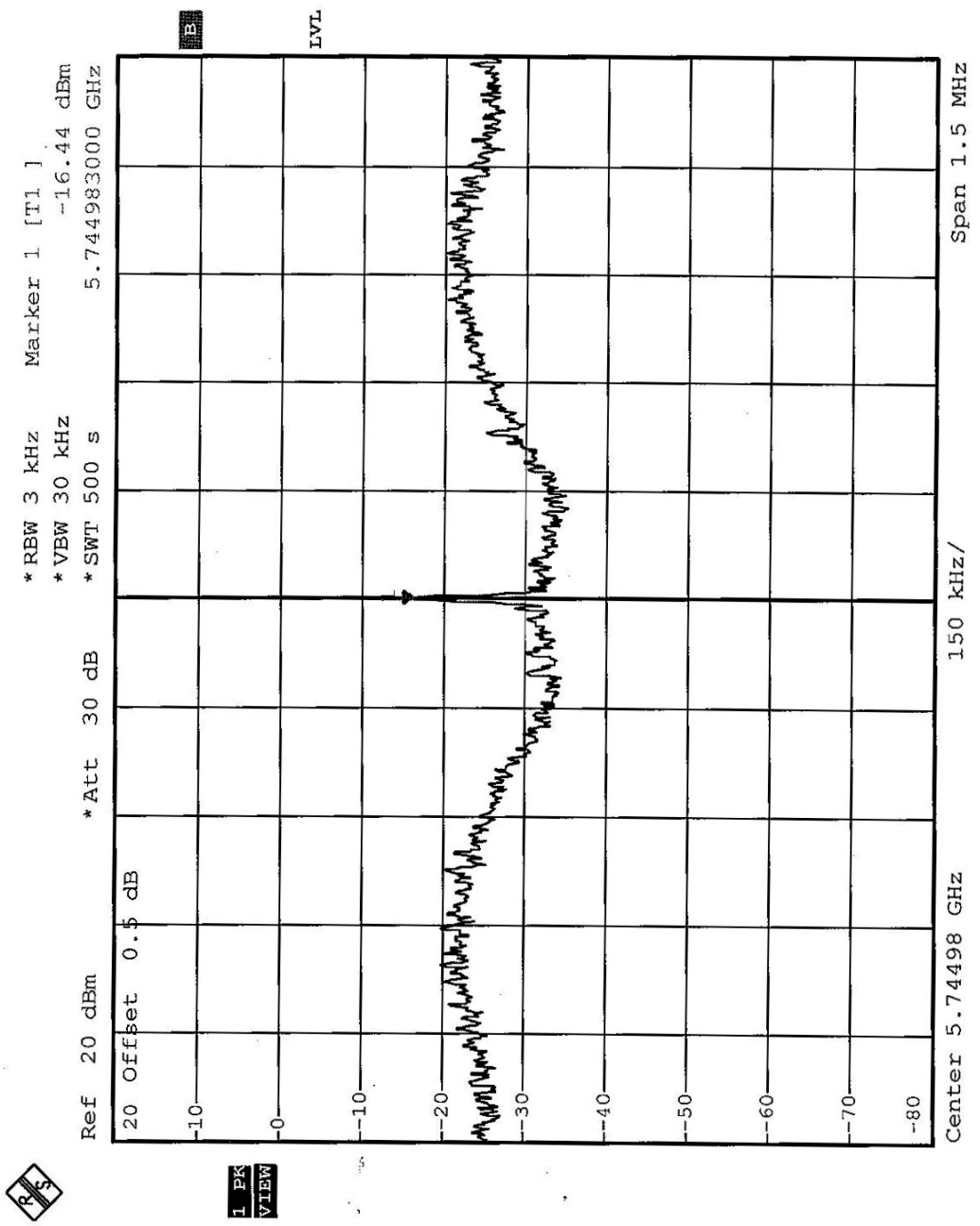
5.5.11 TEST RESULTS(ANTENNA 5)

802.11a OFDM modulation

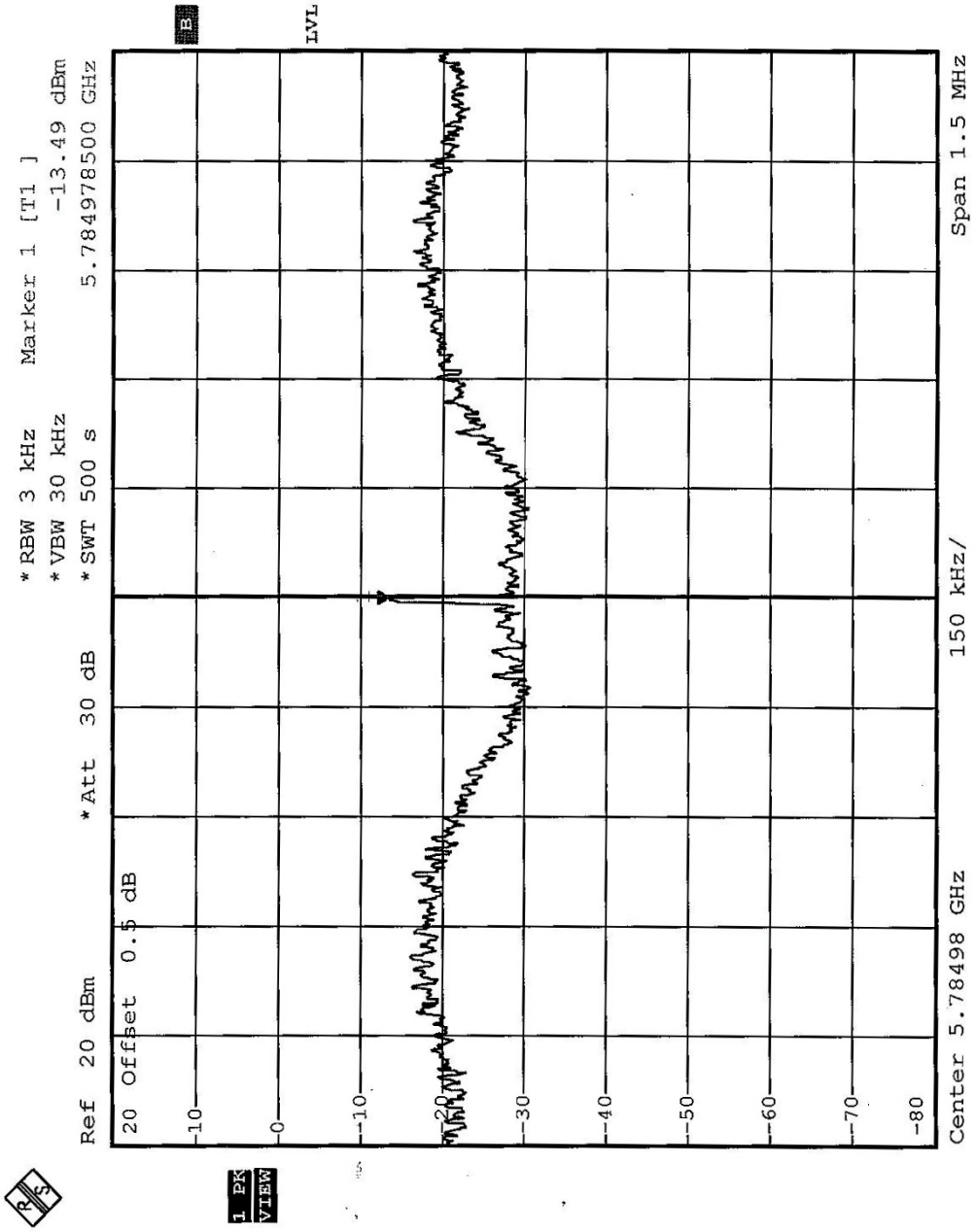
EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Slave		
MODEL	AP-80SB	**TRANSFER RATE**	6Mbps
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	27deg. C, 53%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5745	-16.44	8	PASS
3	5785	-13.49	8	PASS
5	5825	-14.81	8	PASS

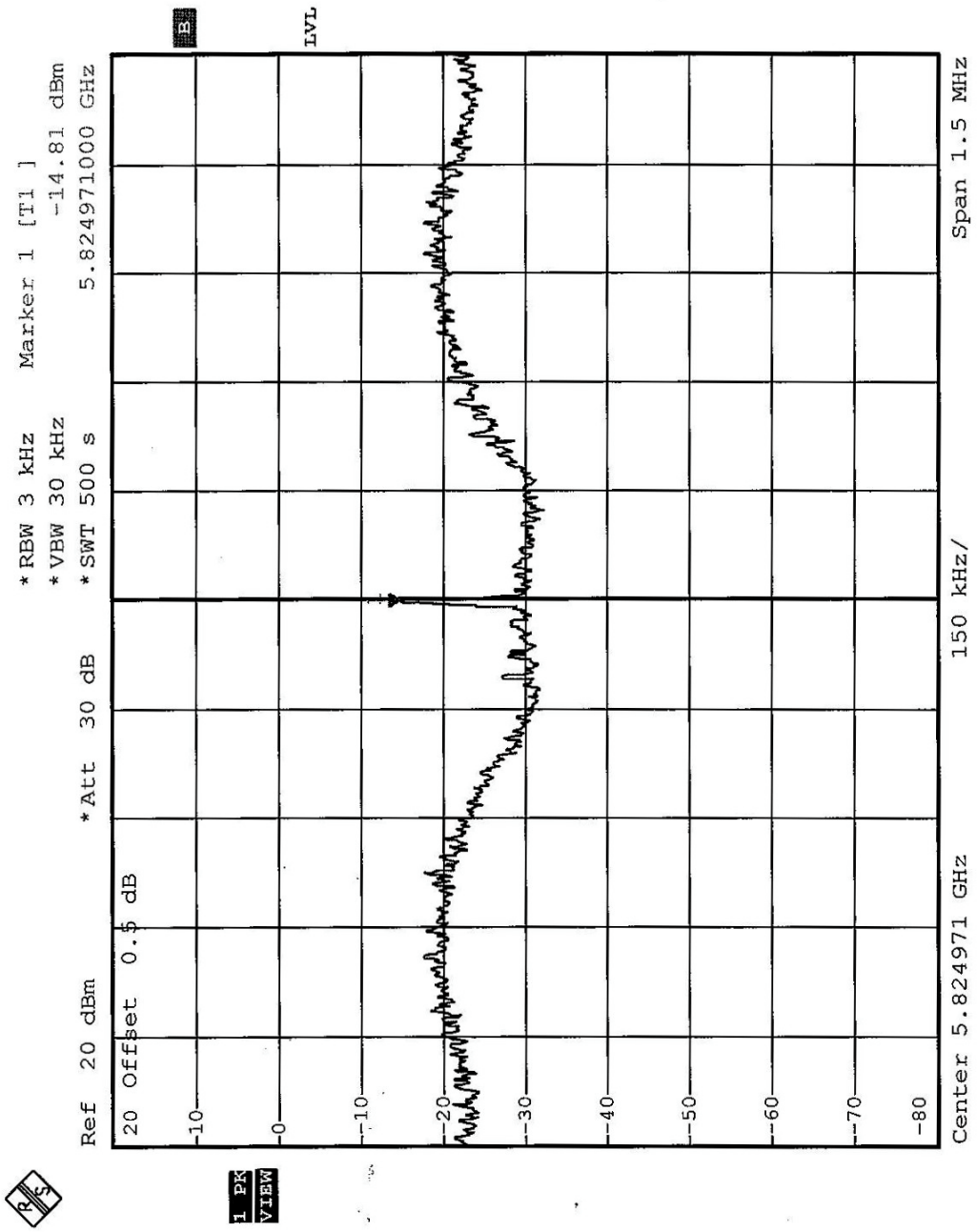
CH1


Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-16.44 dBm
5.74983000 GHz
LVL
Center 5.74498 GHz
150 kHz/
Span 1.5 MHz
1 PK VIEW

CH3


Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-13.49 dBm
5.784978500 GHz
LVL
1 PK VIEW
Center 5.78498 GHz
150 kHz/
Span 1.5 MHz

CH5

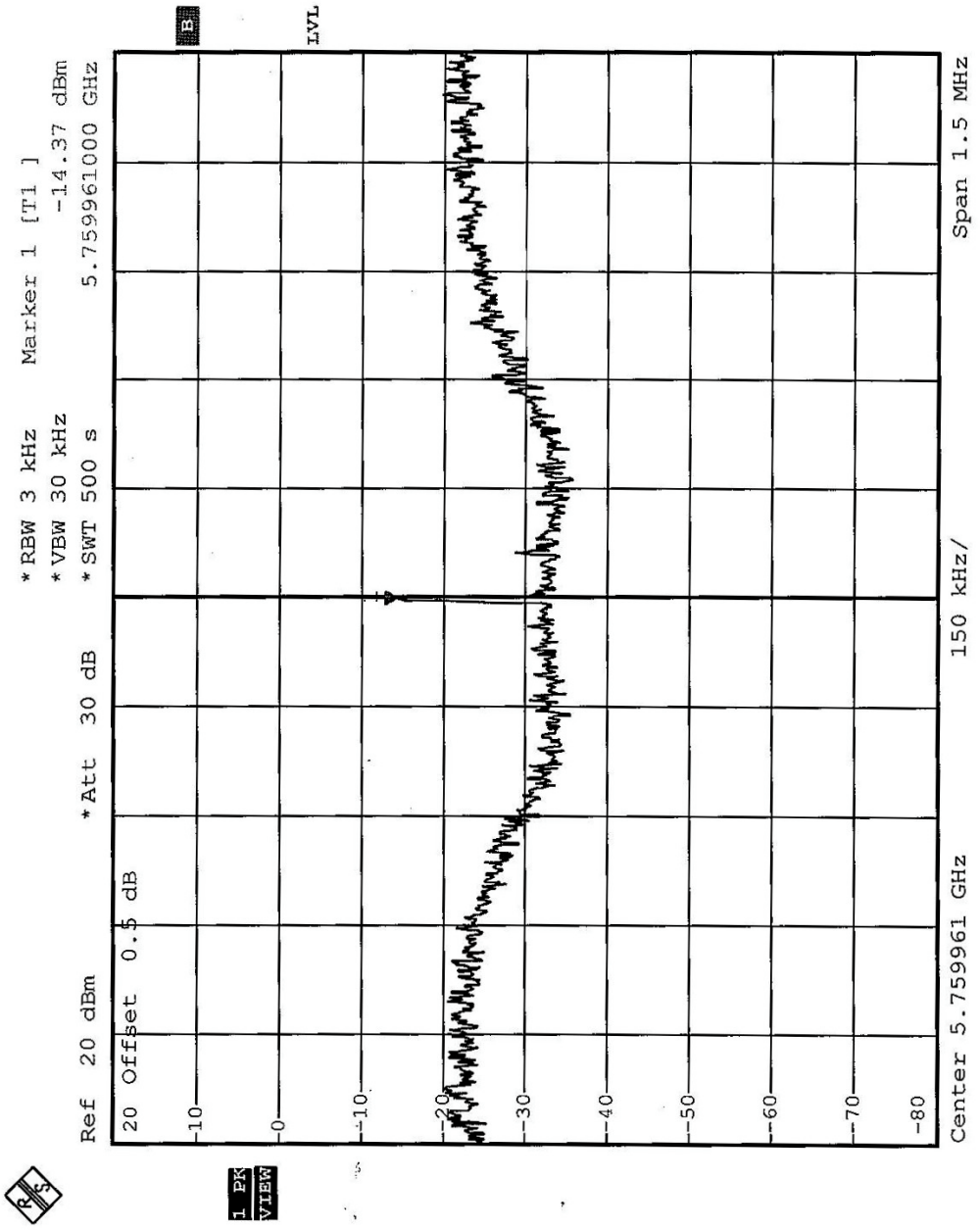

Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-14.81 dBm
5.82497100 GHz
Center 5.824971 GHz
150 kHz/
Span 1.5 MHz
1 PK VIEW

802.11a Turbo OFDM modulation

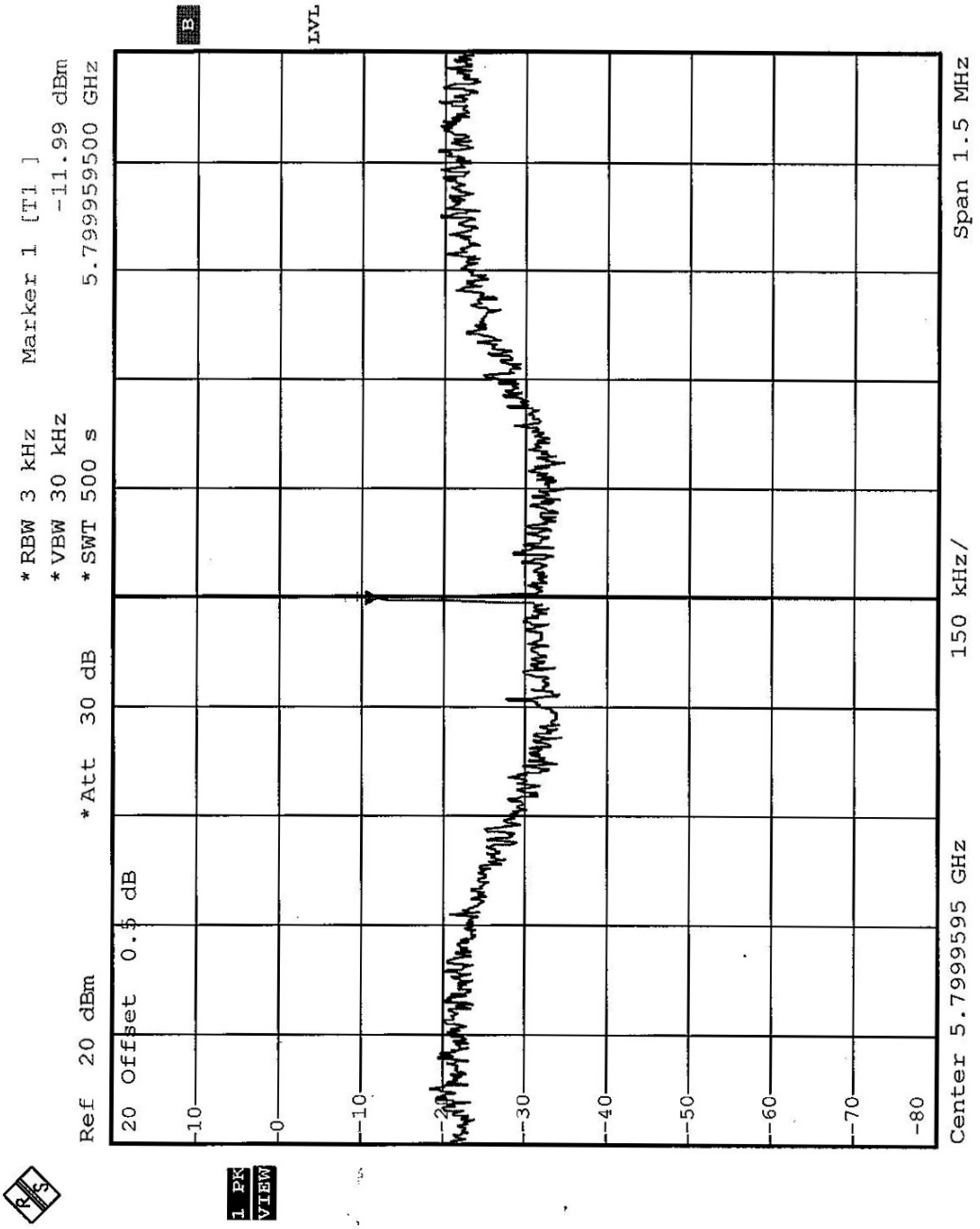
EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Slave		
MODEL	AP-80SB	**TRANSFER RATE**	12Mbps
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	27deg. C, 53%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5760	-14.37	8	PASS
2	5800	-11.99	8	PASS

CH1


RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
-14.37 dBm
5.759961000 GHz
Ref 20 dBm
Offset 0.5 dB
Att 30 dB
Center 5.759961 GHz
150 kHz/
Span 1.5 MHz
1 PK
VIEW

CH2


Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-11.99 dBm
5.799959500 GHz
Center 5.7999595 GHz
150 kHz/
Span 1.5 MHz
1 PK
VIEW
LVL
B

5.6 BAND EDGES MEASUREMENT

5.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

5.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP40	100036	Nov. 23, 2005

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

5.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100 kHz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.

5.6.4 DEVIATION FROM TEST STANDARD

No deviation

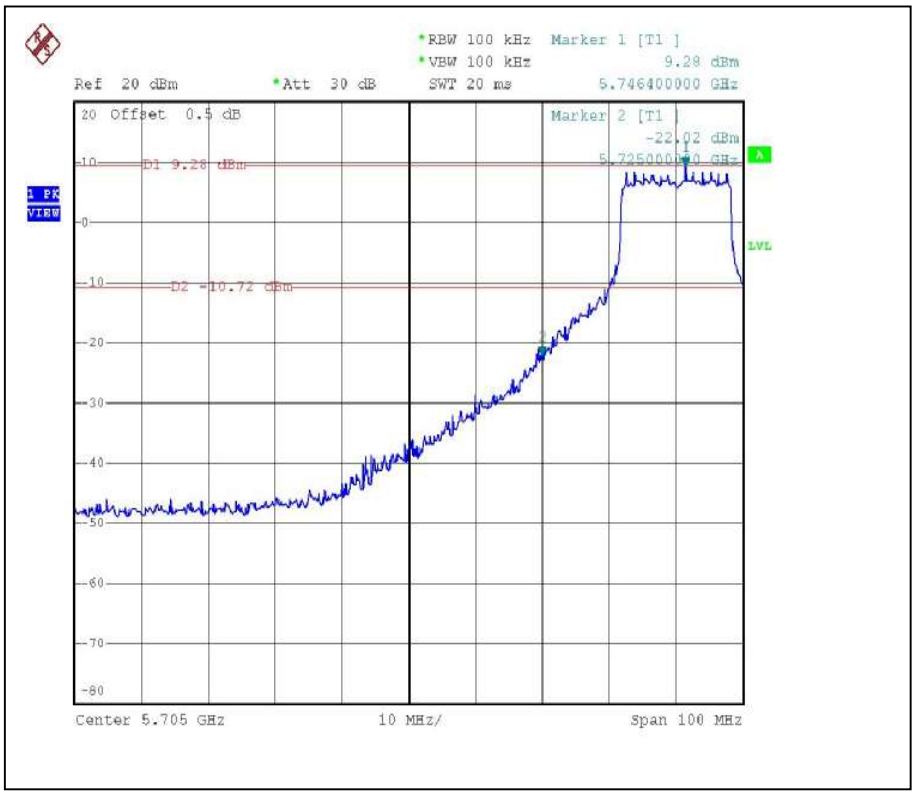
5.6.5 EUT OPERATING CONDITION

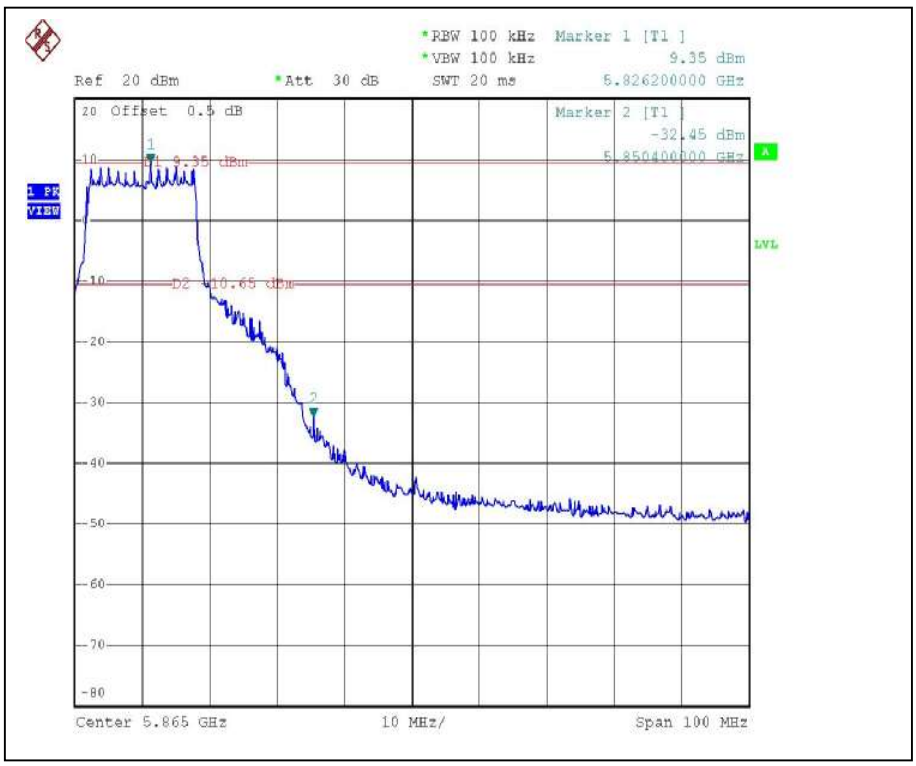
Same as Item 4.3.6

5.6.6 TEST RESULTS (ANTENNA 1)

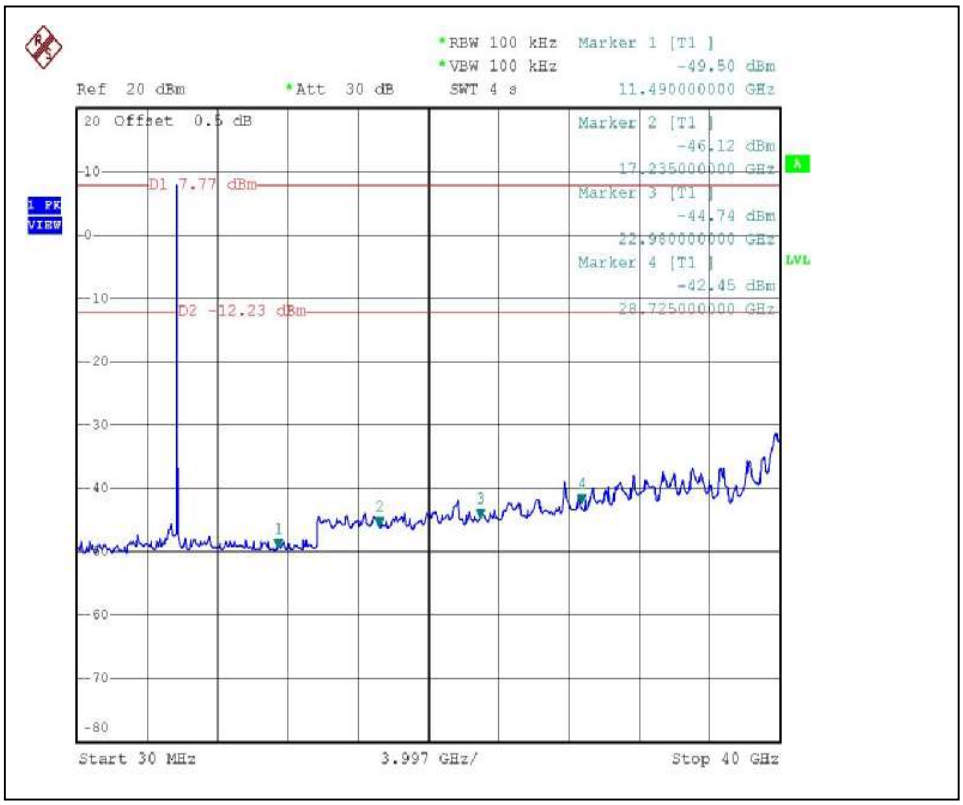
The spectrum plots are attached on the following pages. D2 line indicates the highest level, D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(d).

802.11a OFDM modulation

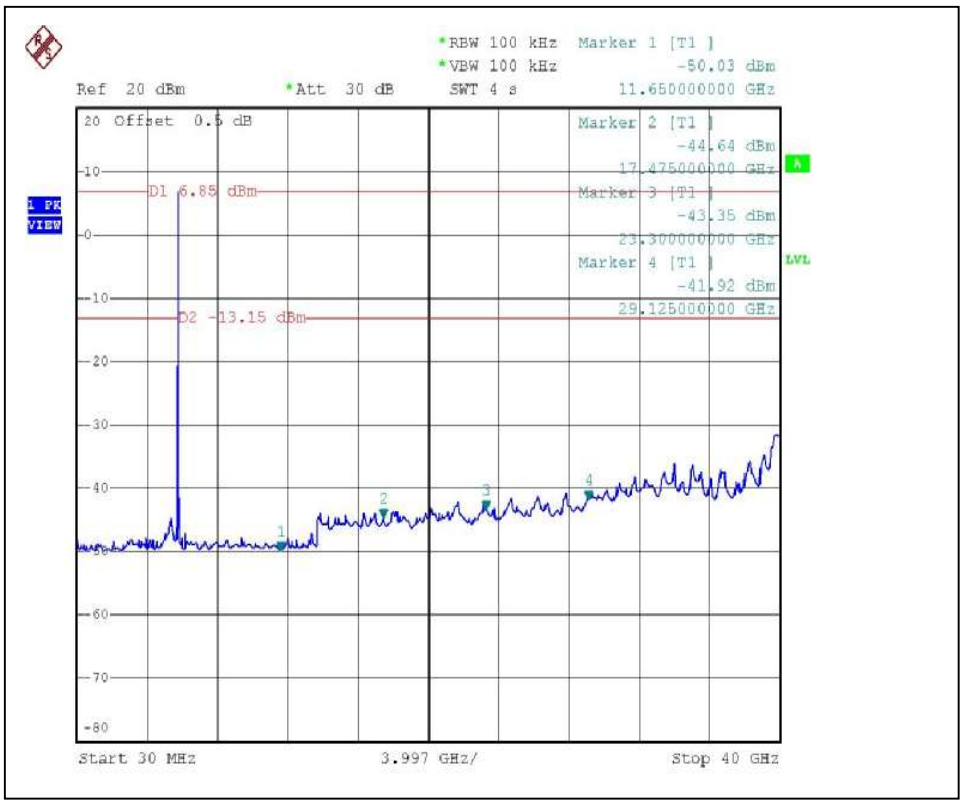




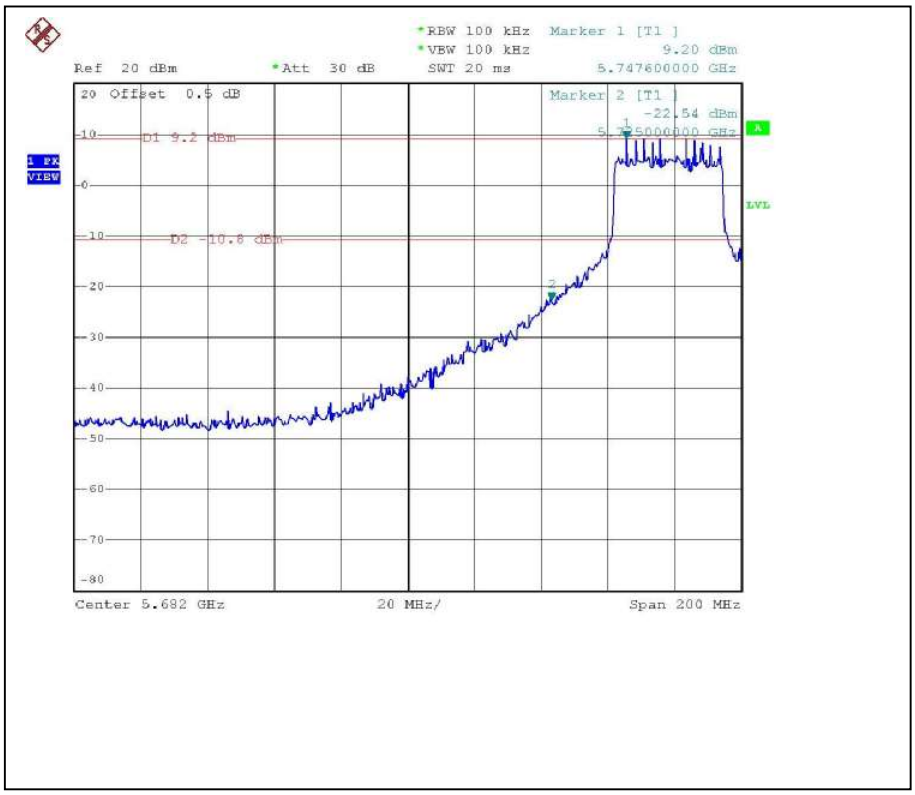
CH 1

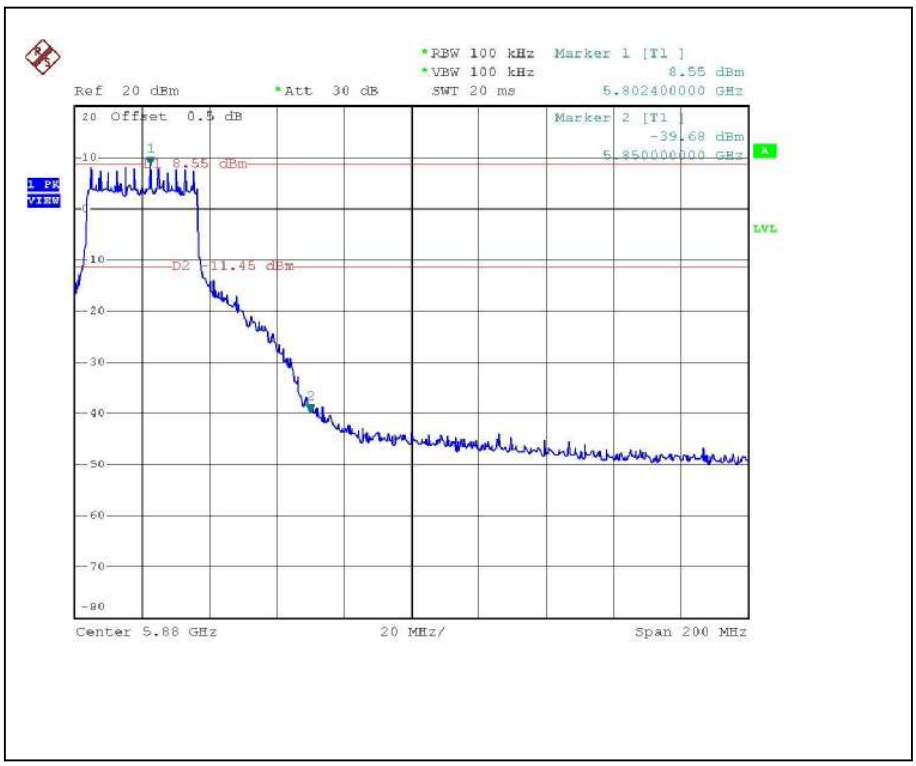

*RBW 100 kHz
*VBW 100 kHz
Ref 20 dBm
*Att 30 dB
SWT 4 s
Marker 1 [T1]
-49.50 dBm
11.490000000 GHz
20 Offset 0.5 dB
Marker 2 [T1]
-46.12 dBm
17.235000000 GHz
D1 7.77 dBm
Marker 3 [T1]
-44.74 dBm
22.980000000 GHz
Marker 4 [T1]
-42.45 dBm
28.725000000 GHz
D2 -12.23 dBm
1 PK VIEW
LVL
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH 5

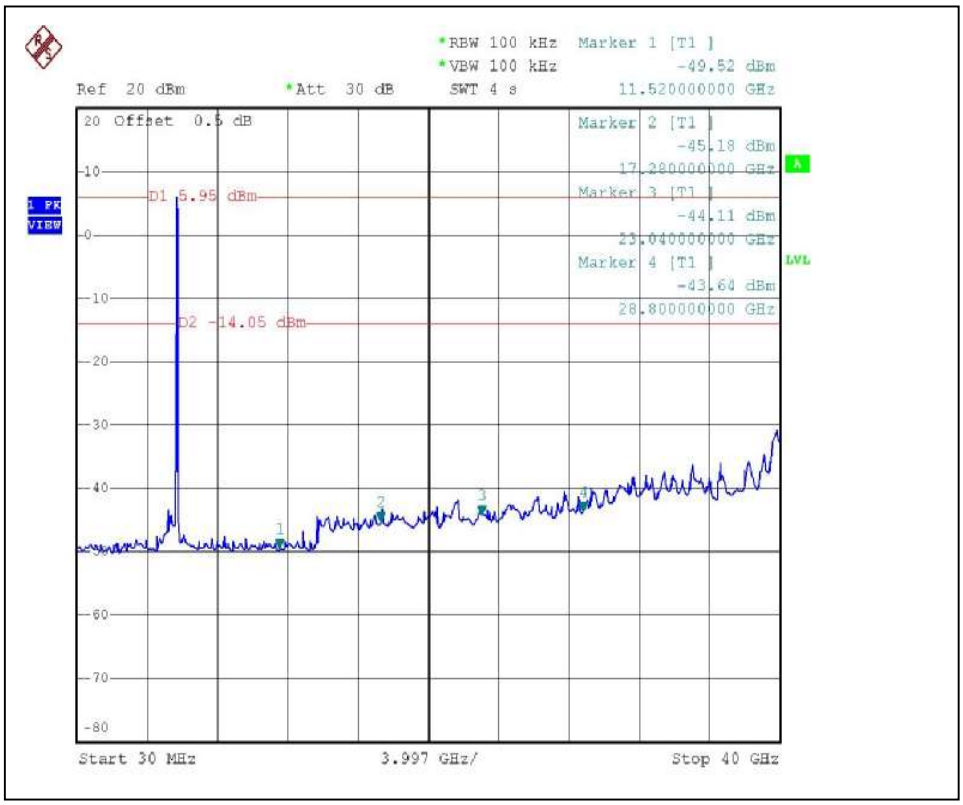

*RBW 100 kHz
*VBW 100 kHz
Ref 20 dBm
*Att 30 dB
SWT 4 s
Marker 1 [T1]
-50.03 dBm
11.650000000 GHz
20 Offset 0.5 dB
Marker 2 [T1]
-44.64 dBm
17.475000000 GHz
D1 6.85 dBm
Marker 3 [T1]
-43.35 dBm
23.300000000 GHz
Marker 4 [T1]
-41.92 dBm
29.125000000 GHz
D2 -13.15 dBm
1 PK VIEW
LVL
Start 30 MHz
3.997 GHz/
Stop 40 GHz

802.11a Turbo OFDM modulation

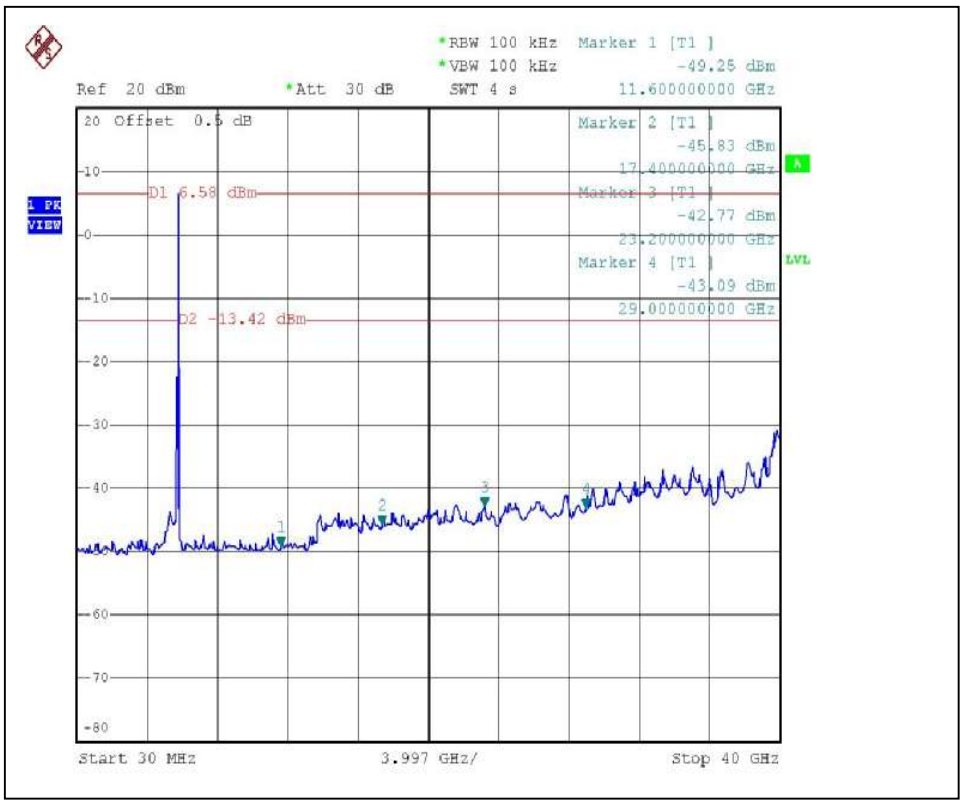




Turbo CH 1



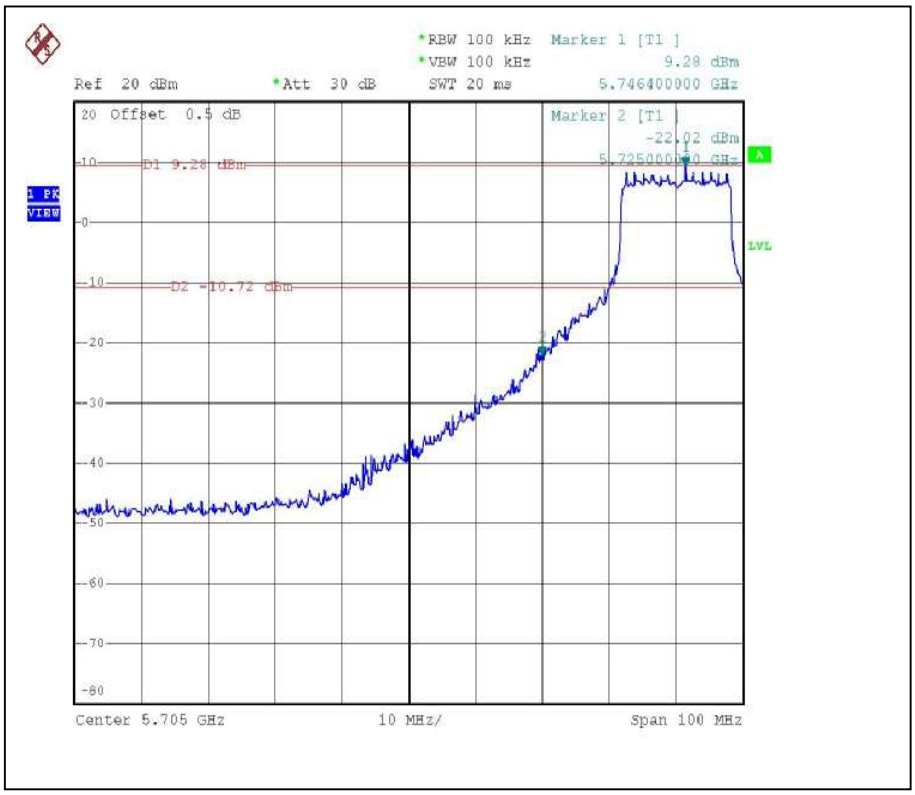
Turbo CH 2

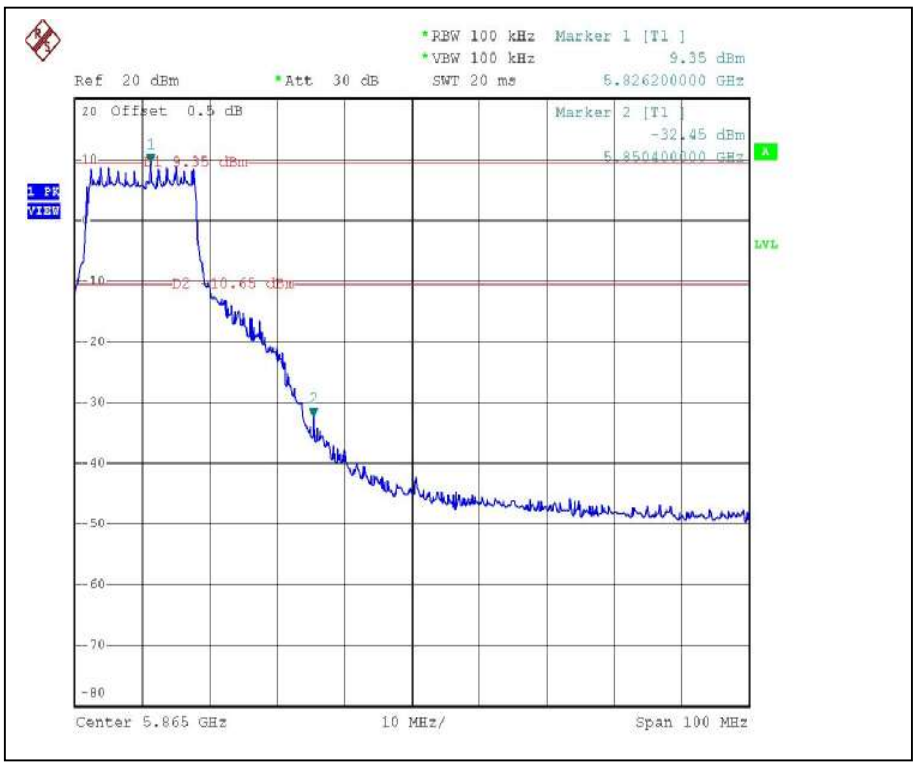


5.6.7 TEST RESULTS (ANTENNA 2)

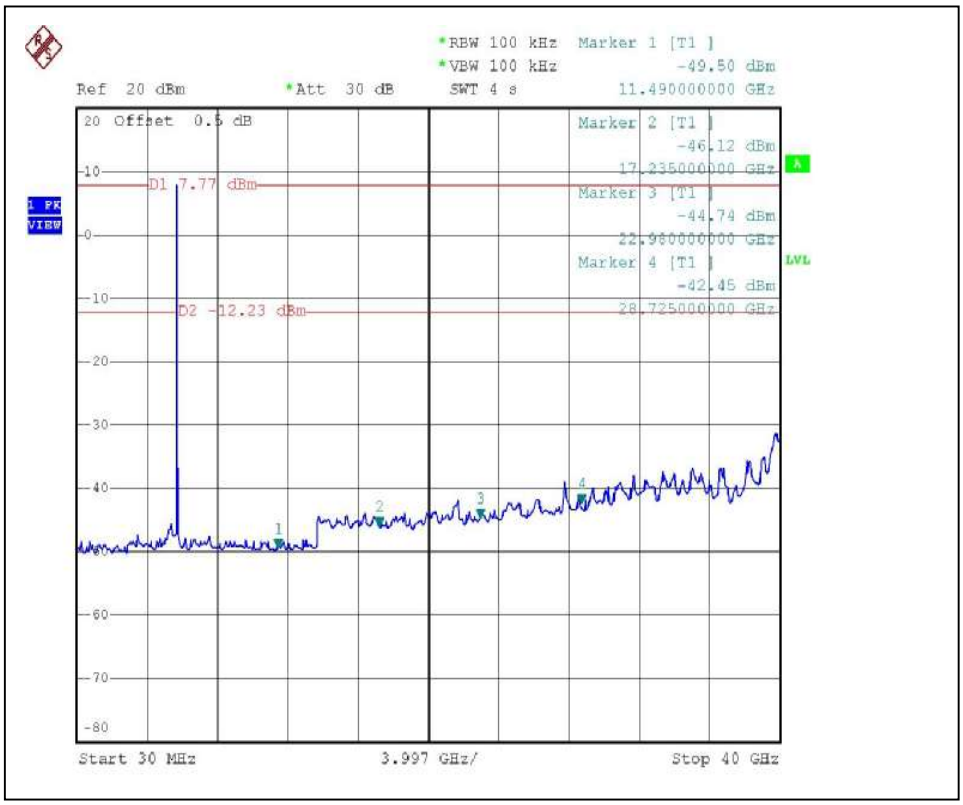
The spectrum plots are attached on the following pages. D2 line indicates the highest level, D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(d).

802.11a OFDM modulation

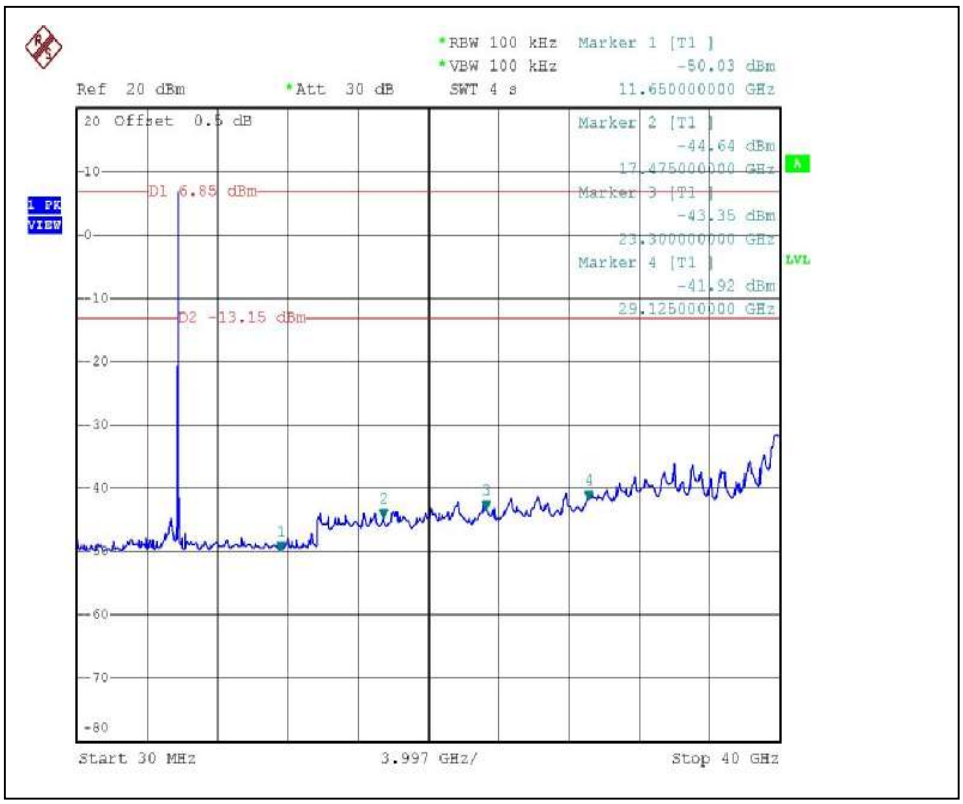




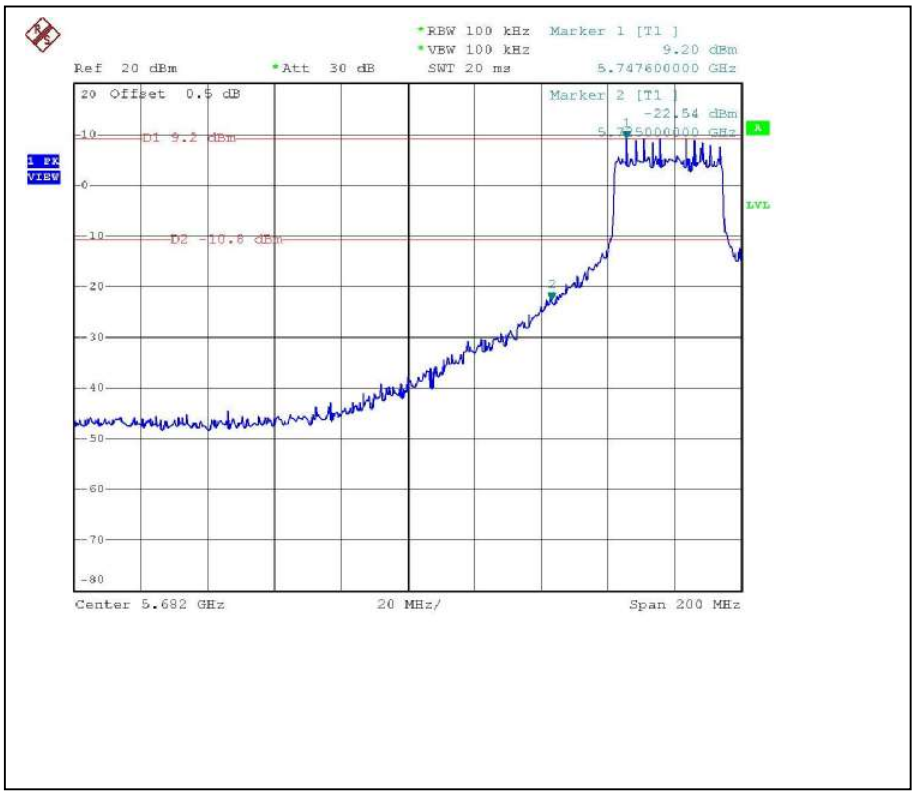
CH 1

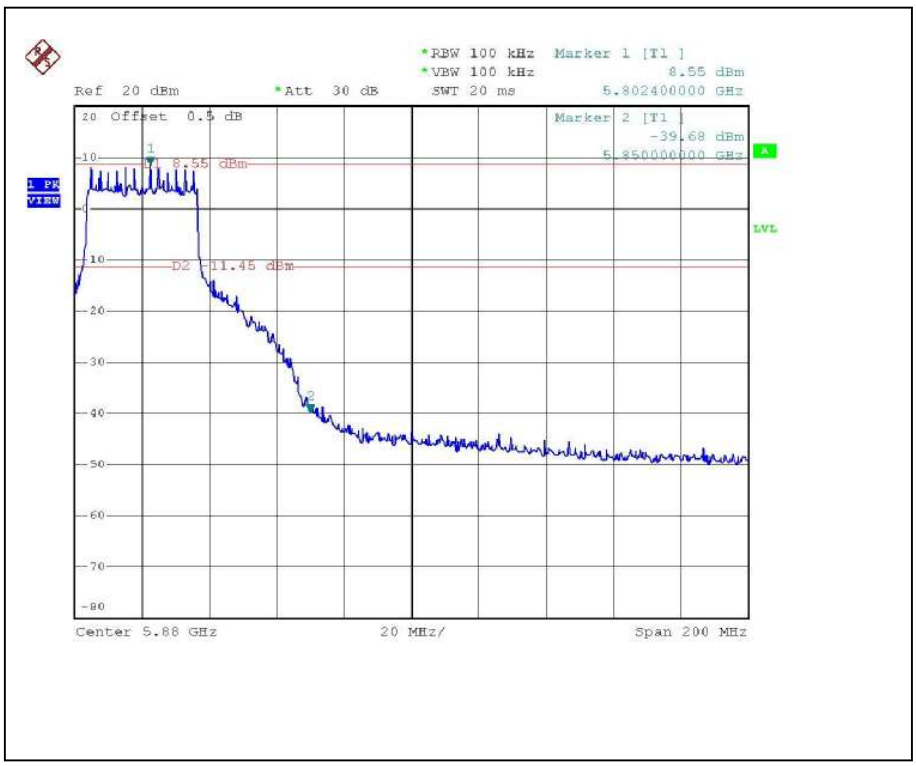

*RBW 100 kHz
*VBW 100 kHz
Ref 20 dBm
*Att 30 dB
SWT 4 s
Marker 1 [T1]
-49.50 dBm
11.490000000 GHz
20 Offset 0.5 dB
Marker 2 [T1]
-46.12 dBm
17.235000000 GHz
D1 7.77 dBm
Marker 3 [T1]
-44.74 dBm
22.980000000 GHz
Marker 4 [T1]
-42.45 dBm
28.725000000 GHz
D2 -12.23 dBm
1 PK VIEW
LVL
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH 5

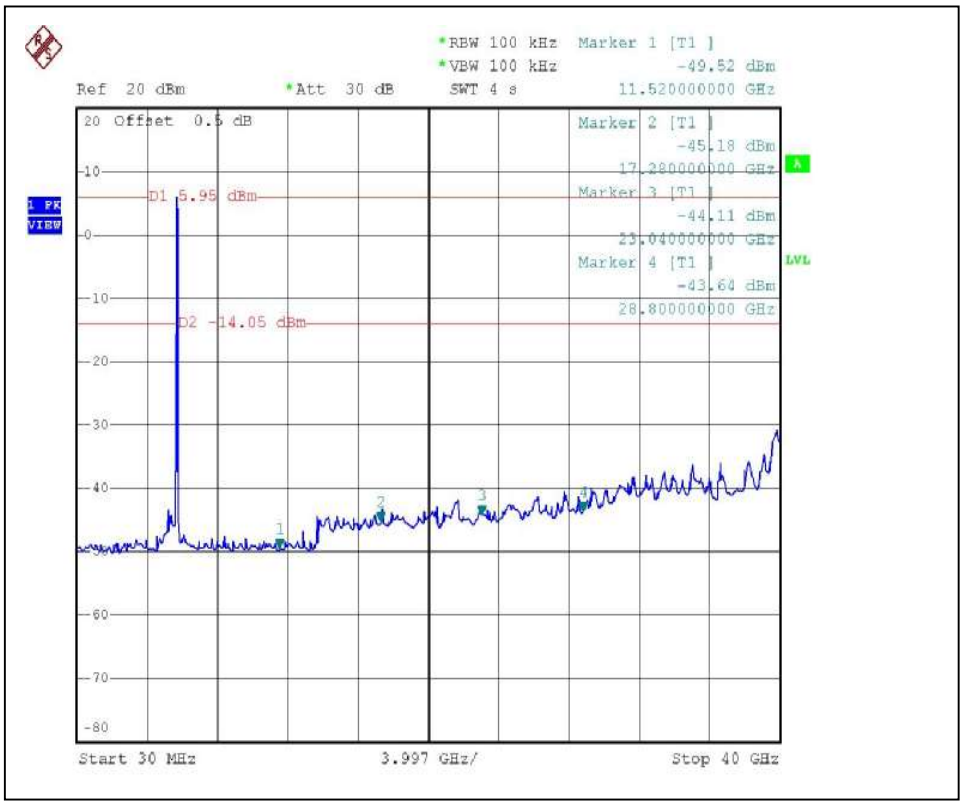

*RBW 100 kHz
*VBW 100 kHz
Ref 20 dBm
*Att 30 dB
SWT 4 s
Marker 1 [T1]
-50.03 dBm
11.650000000 GHz
20 Offset 0.5 dB
Marker 2 [T1]
-44.64 dBm
17.475000000 GHz
D1 6.85 dBm
Marker 3 [T1]
-43.35 dBm
23.300000000 GHz
Marker 4 [T1]
-41.92 dBm
29.125000000 GHz
D2 -13.15 dBm
1 PK VIEW
LVL
Start 30 MHz
3.997 GHz/
Stop 40 GHz

802.11a Turbo OFDM modulation

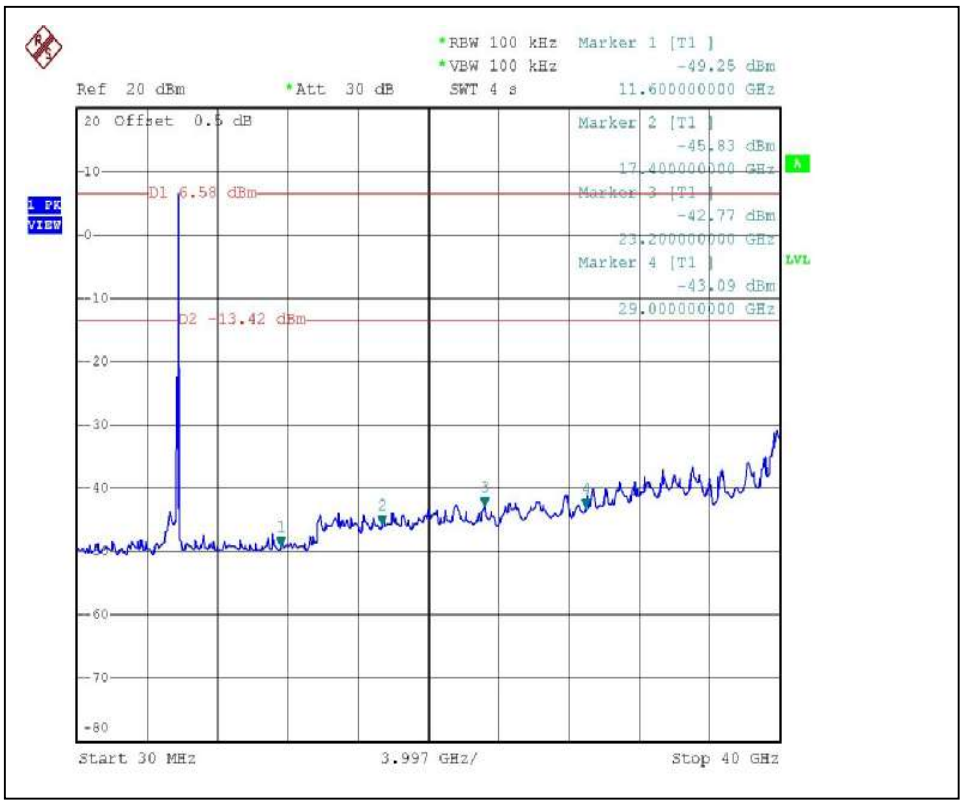




Turbo CH 1



Turbo CH 2



5.6.8 TEST RESULTS (ANTENNA 3)

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