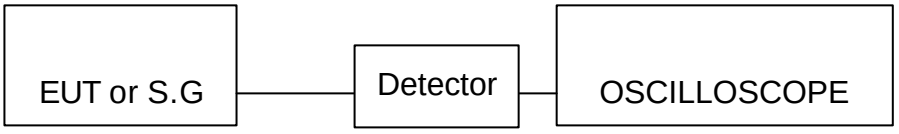
5.4.3 TEST PROCEDURE

1. The transmitter output was connected to the spectrum analyzer.
2. Set the spectrum bandwidth span to view the entire spectrum.
3. Using peak detector and Max-hold function for Trace 1 (RB=1MHz, VB=3MHz) and 2 (RB=1MHz, VB=30KHz).
4. The largest difference between Trace 1 and Trace 2 in any 1MHz band on any frequency was recorded.

5.4.4 DEVIATION FROM TEST STANDARD

No deviation

5.4.5 TEST SETUP



5.4.6 EUT OPERATING CONDITIONS

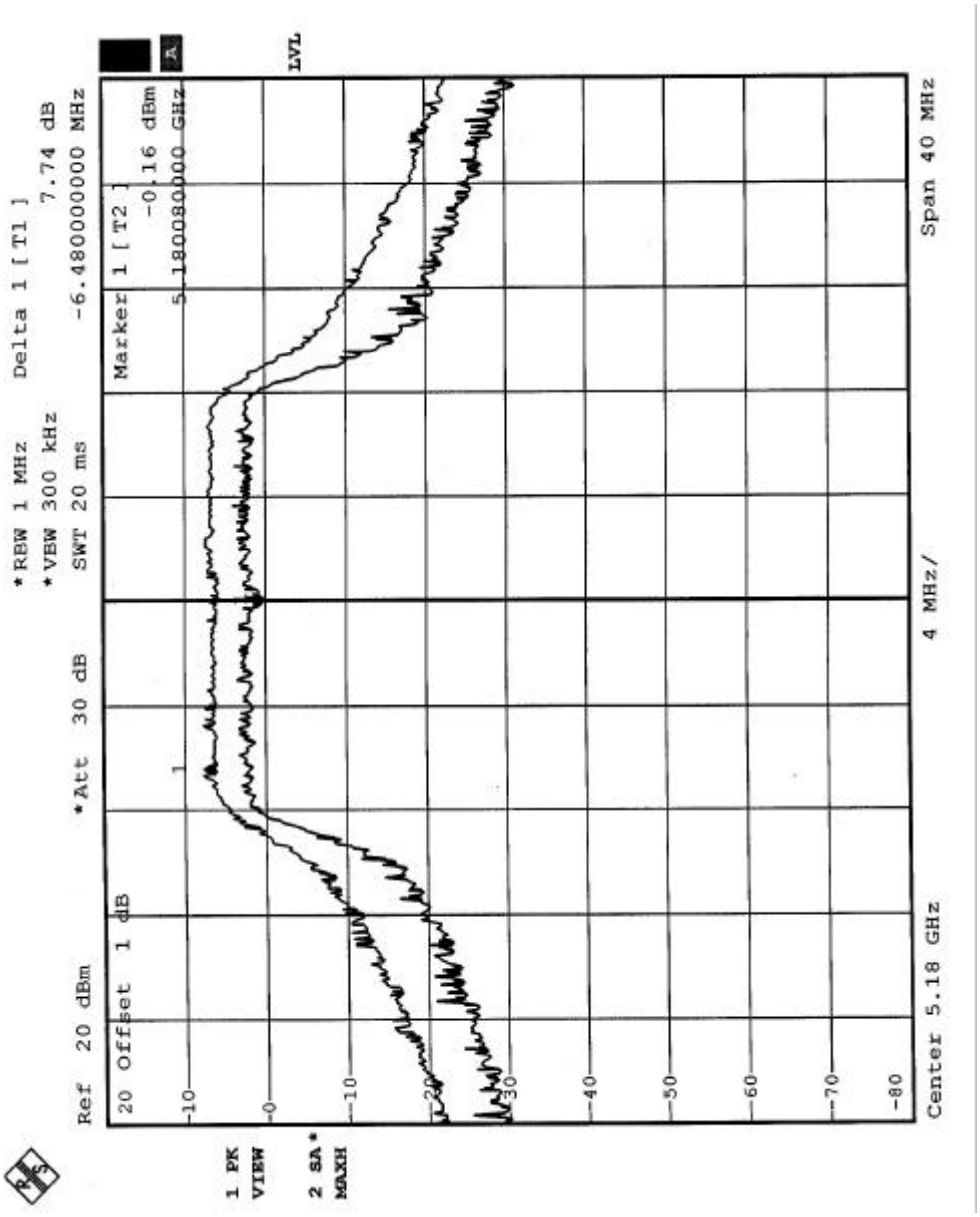
The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

5.4.7 TEST RESULTS

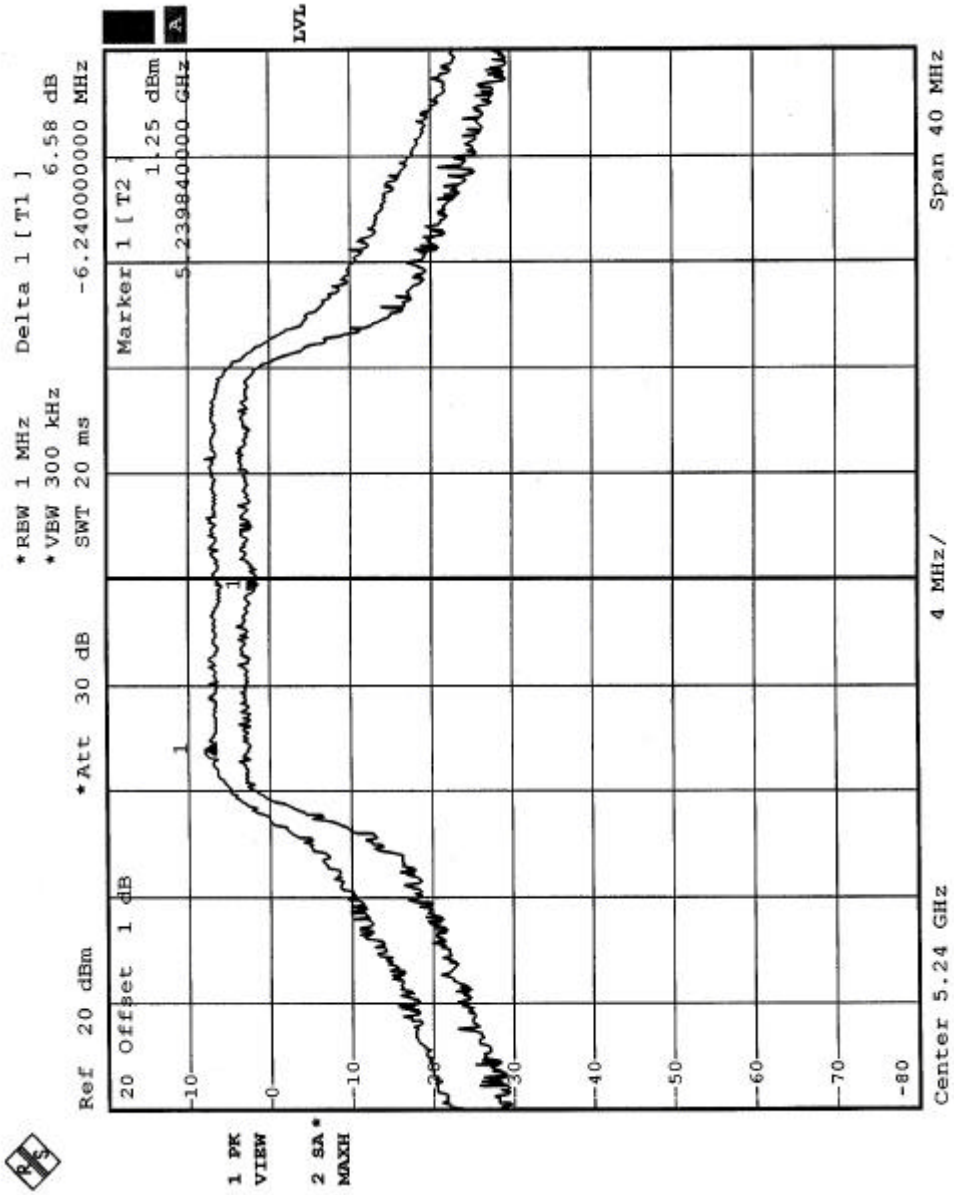
EUT	EliteConnect Universal 2.4GHz/5GHz Wireless Access Point	**MODEL**	SMC2555W-AG
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	21eg. C, 58RH, 976 hPa	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5180	7.74	13	PASS
4	5240	6.58	13	PASS
5	5260	6.78	13	PASS
8	5320	7.36	13	PASS
9	5745	7.43	13	PASS
12	5805	6.45	13	PASS

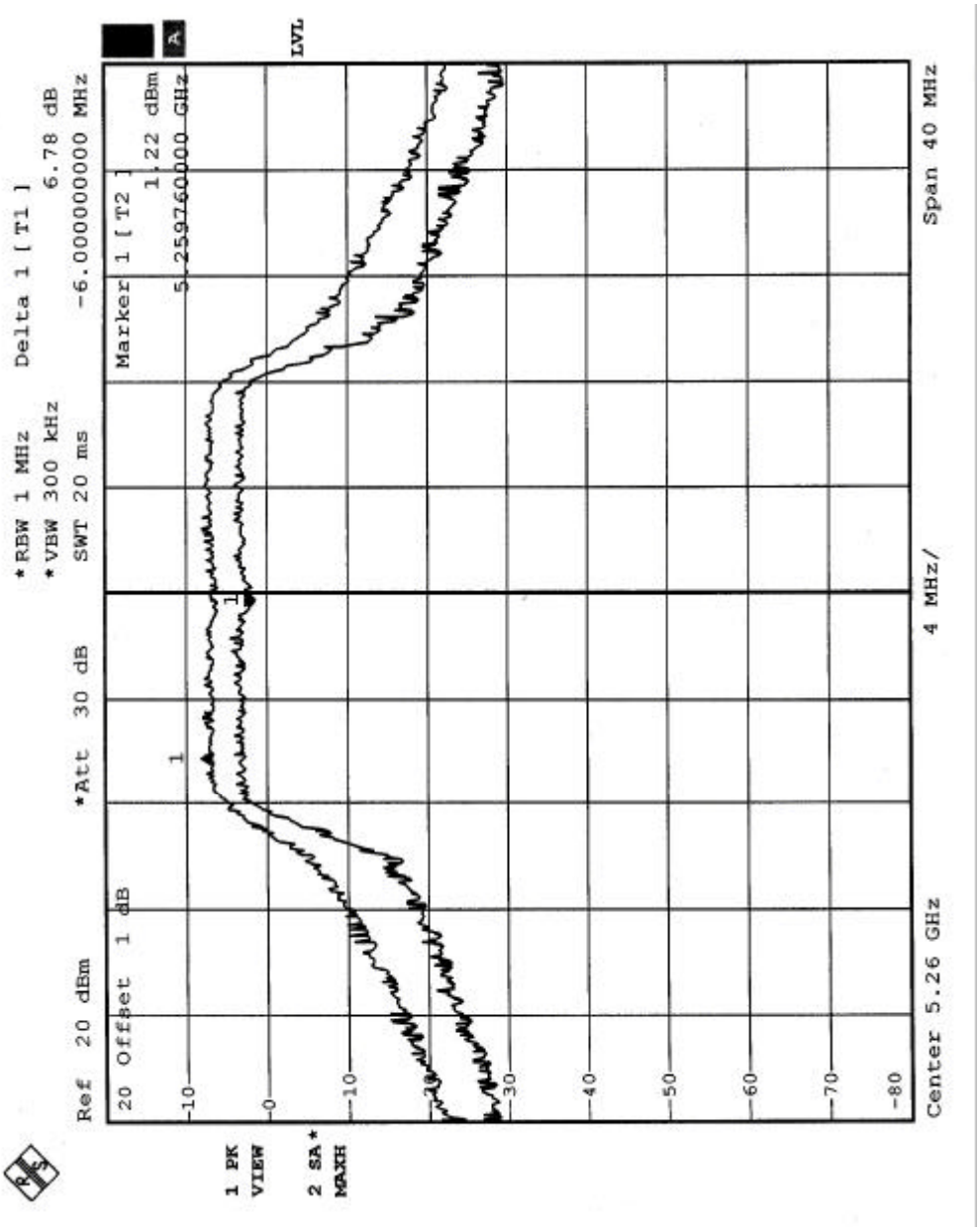
CHANNEL 1


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
7.74 dB
-6.48000000 MHz
Marker 1 [T2]
-0.16 dBm
5.18080000 GHz
LVL
1 PK
VIEW
2 SA*
MAXH
Center 5.18 GHz
4 MHz/
Span 40 MHz

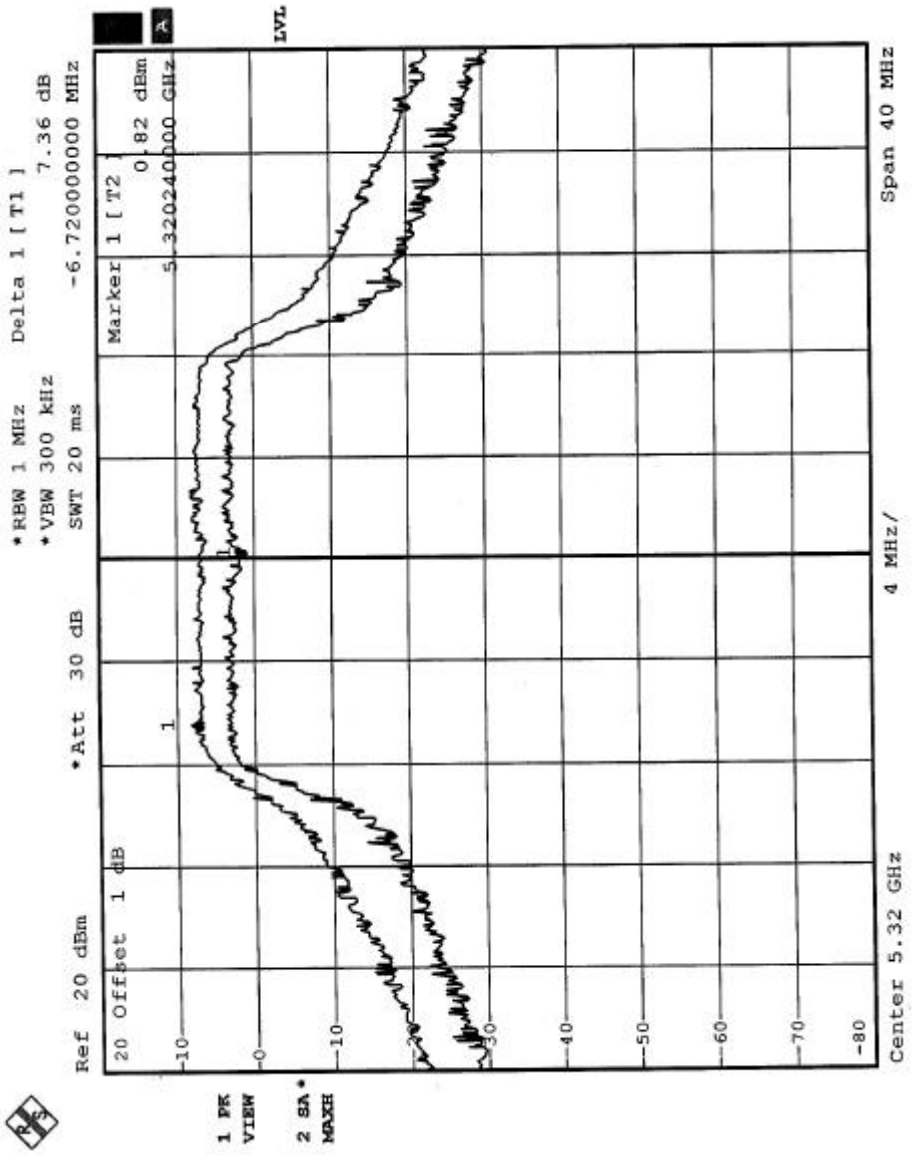
CHANNEL 4


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
6.58 dB
-6.24000000 MHz
Marker 1 [T2]
1.25 dBm
5.23840000 GHz
LVL
1 PK VIEW
2 SA* MAXH
Center 5.24 GHz
4 MHz/
Span 40 MHz

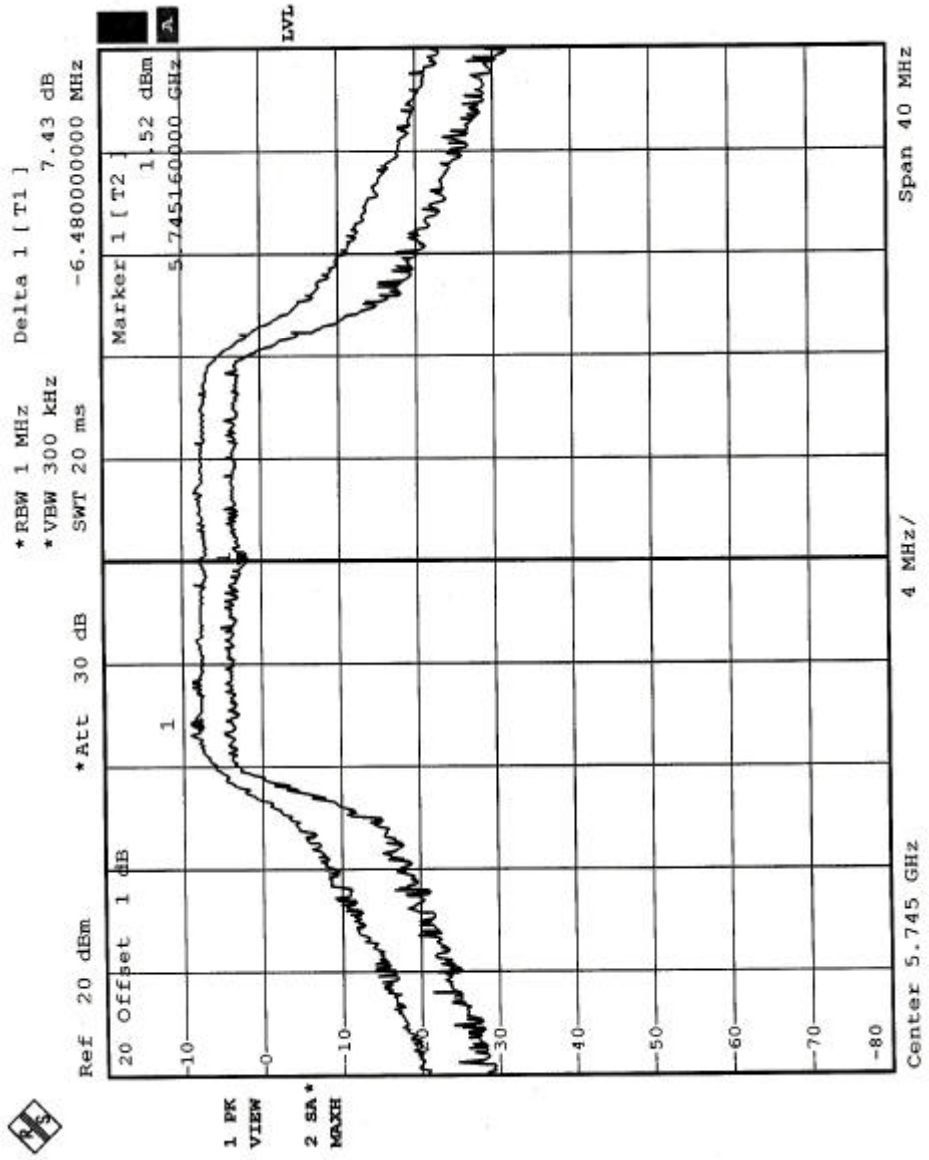
CHANNEL 5


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
6.78 dB
-6.000000000 MHz
Marker 1 [T2]
1.22 dBm
5.259760000 GHz
1 PK
VIEW
2 SA*
MAXH
LVL
Center 5.26 GHz
4 MHz/
Span 40 MHz

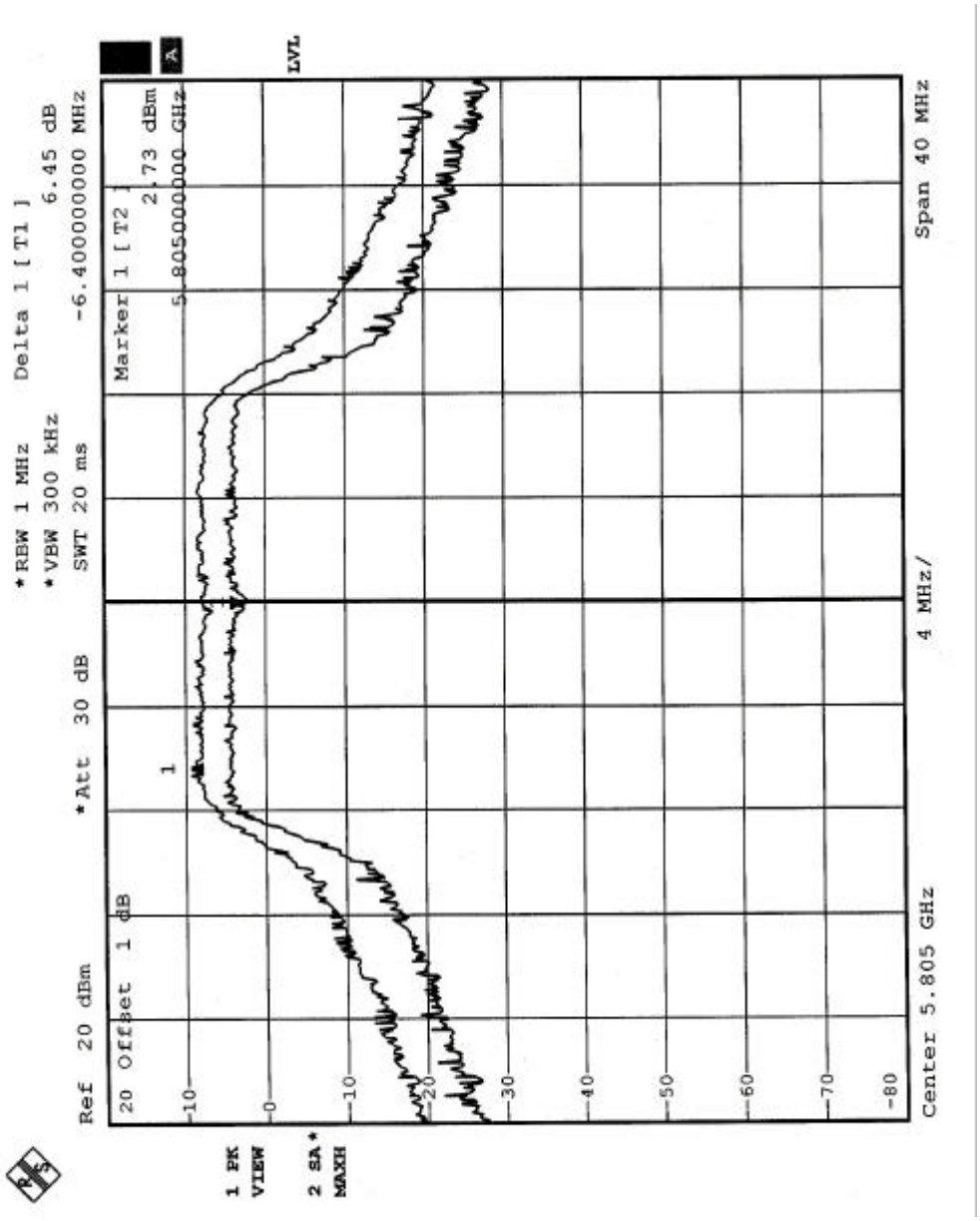
CHANNEL 8


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
7.36 dB
-6.72000000 MHz
Marker 1 [T2]
0.82 dBm
5.32240000 GHz
LVL
1 PK VIEW
2 SA * MAXH
Center 5.32 GHz
4 MHz/
Span 40 MHz

CHANNEL 9


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
7.43 dB
-6.480000000 MHz
Marker 1 [T2]
1.52 dBm
5.745160000 GHz
LVL
1 PK VIEW
2 SA* MAXH
Center 5.745 GHz
4 MHz/
Span 40 MHz

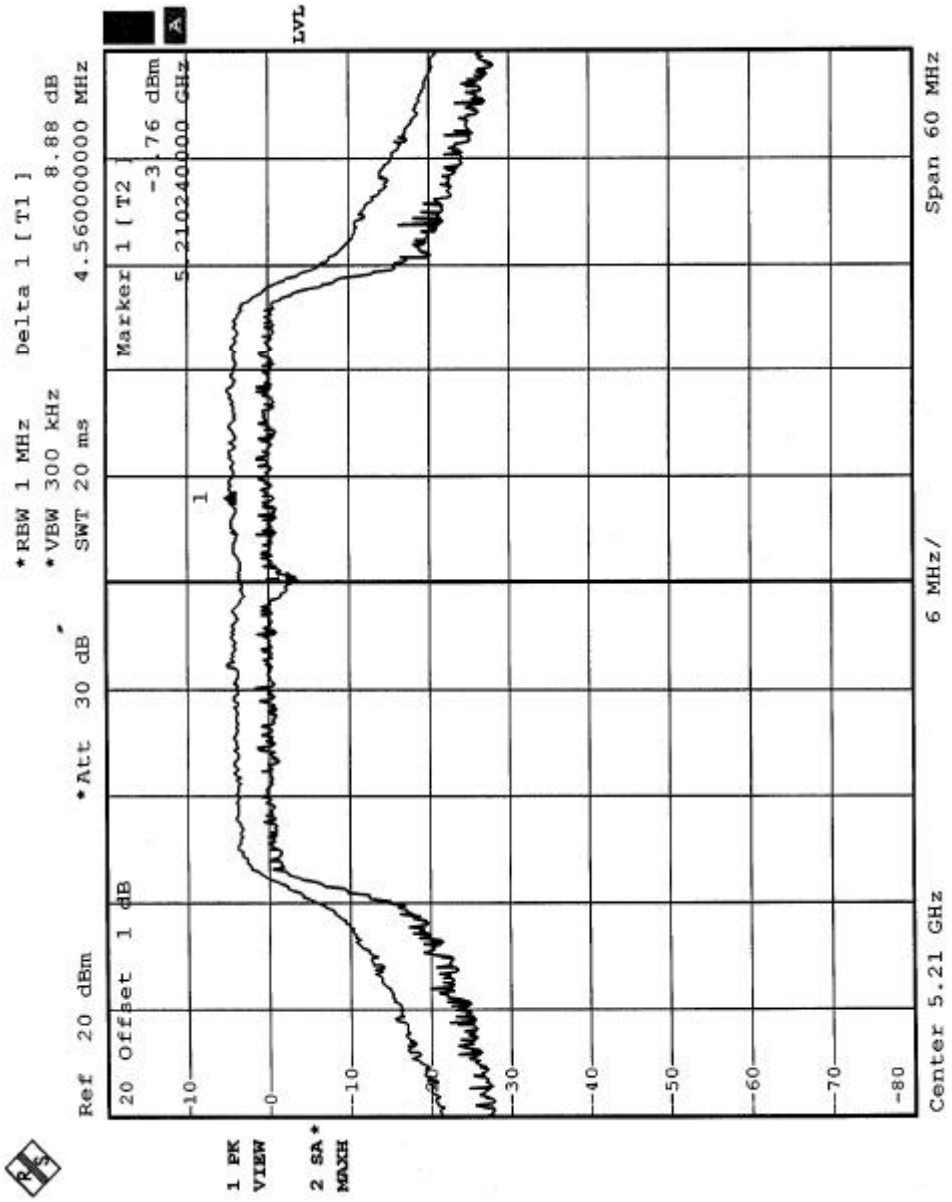
CHANNEL 12


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
6.45 dB
-6.400000000 MHz
Marker 1 [T2]
2.73 dBm
5.805000000 GHz
LVL
1 PK VIEW
2 SA* MAXH
Center 5.805 GHz
4 MHz/
Span 40 MHz

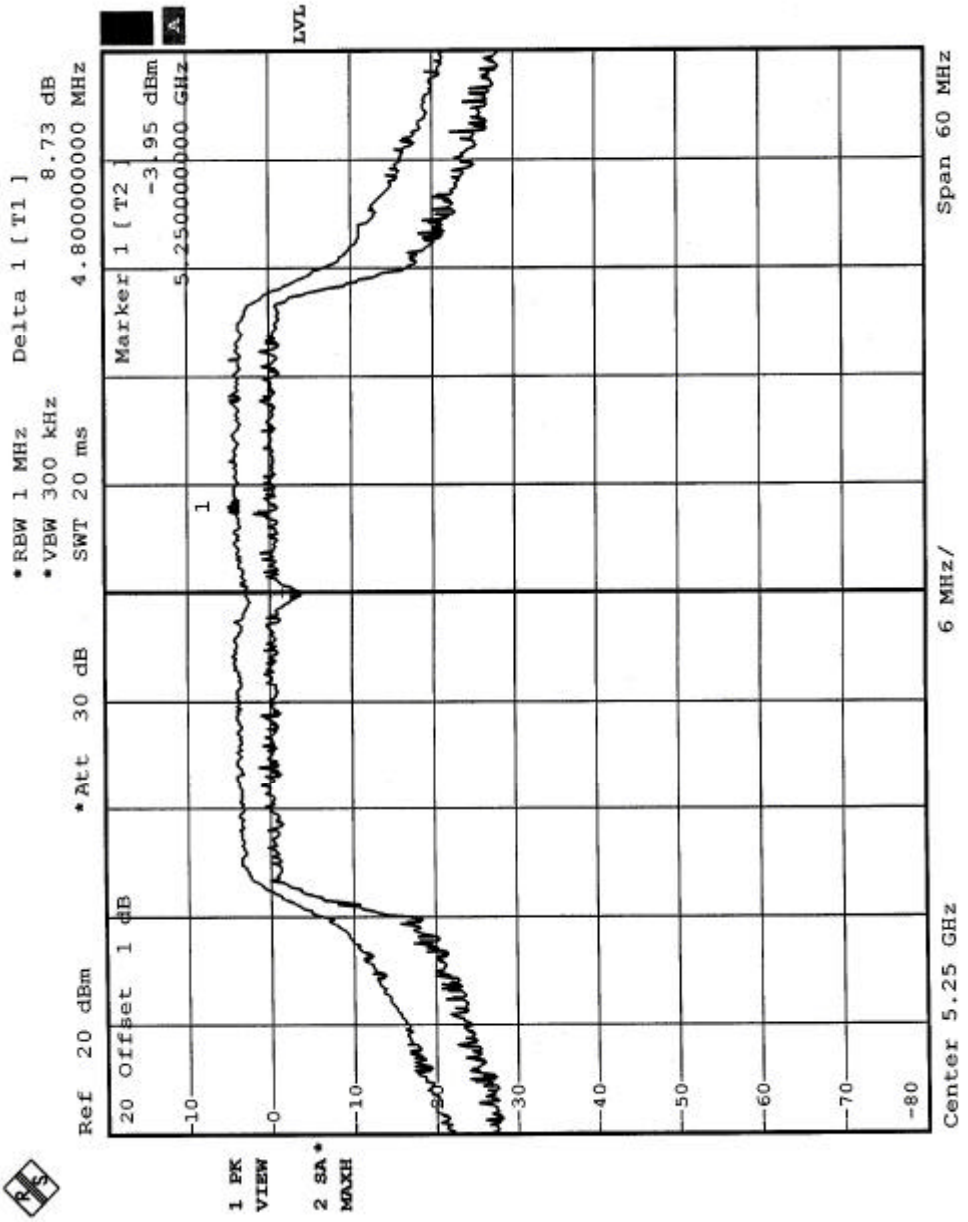
EUT	EliteConnect Universal 2.4GHz/5GHz Wireless Access Point	**MODEL**	SMC2555W-AG
MODE	Turbo	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	21eg. C, 58RH, 976 hPa	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5210	8.88	13	PASS
2	5250	8.73	13	PASS
3	5290	7.32	13	PASS
4	5760	7.54	13	PASS
5	5800	7.54	13	PASS

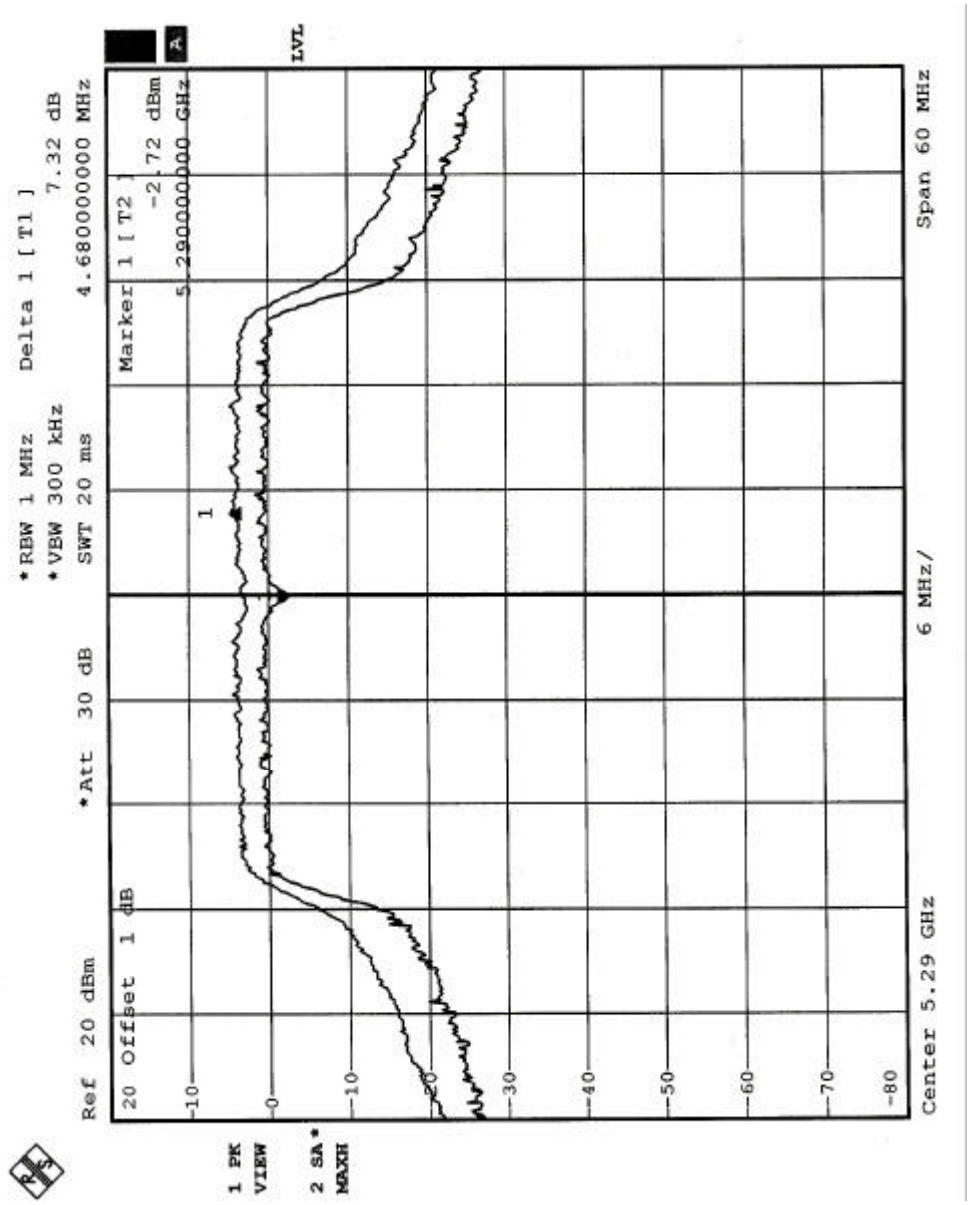
CHANNEL 1


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
8.88 dB
4.56000000 MHz
Marker 1 [T2]
-3.76 dBm
5.21024000 GHz
1 PK
VIEW
2 SA *
MAXH
LVL
Center 5.21 GHz
6 MHz/
Span 60 MHz

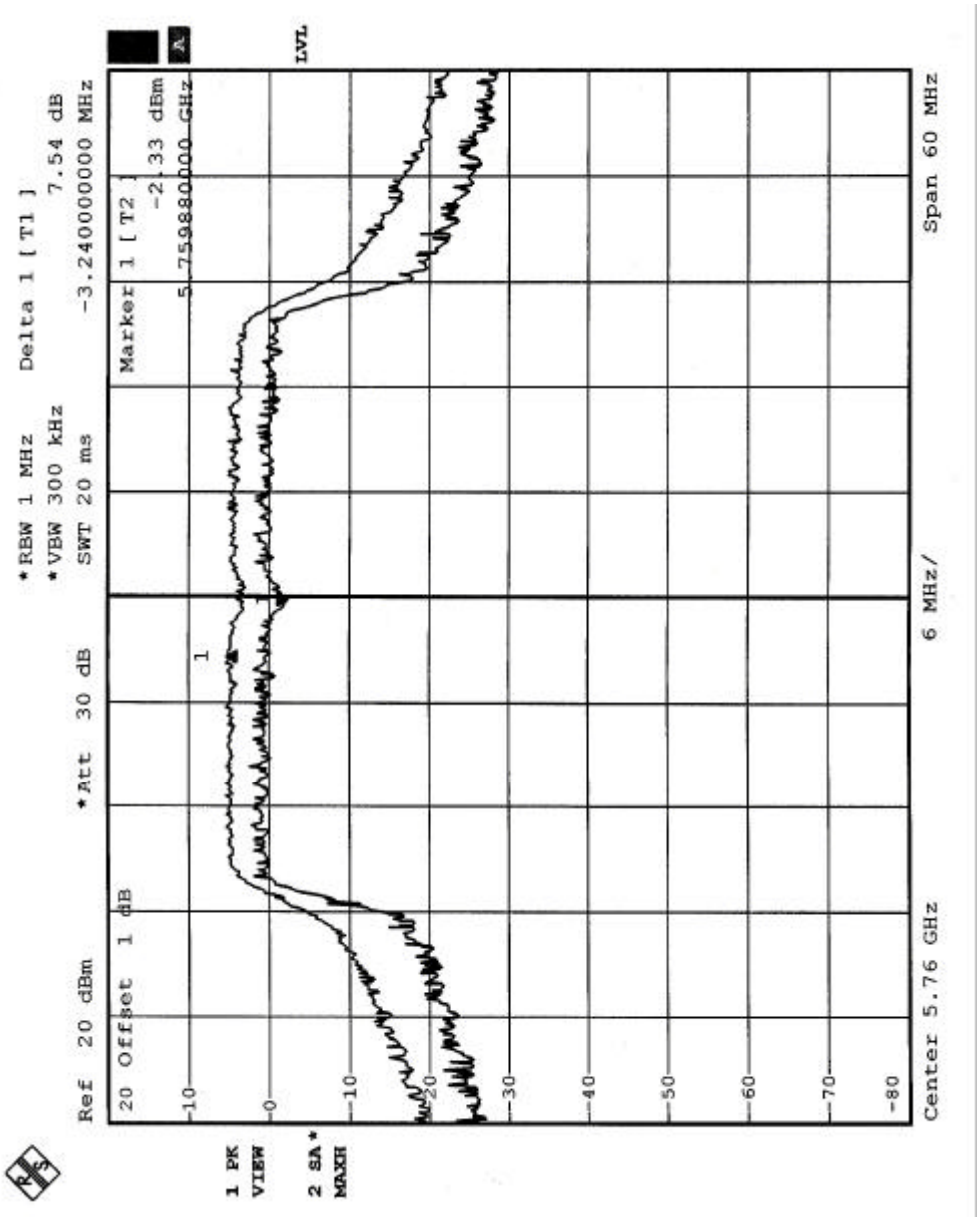
CHANNEL 2


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
8.73 dB
4.800000000 MHz
Marker 1 [T2]
-3.95 dBm
5.250000000 GHz
LVL
1 PK VIEW
2 SA* MAXH
Center 5.25 GHz
6 MHz/
Span 60 MHz

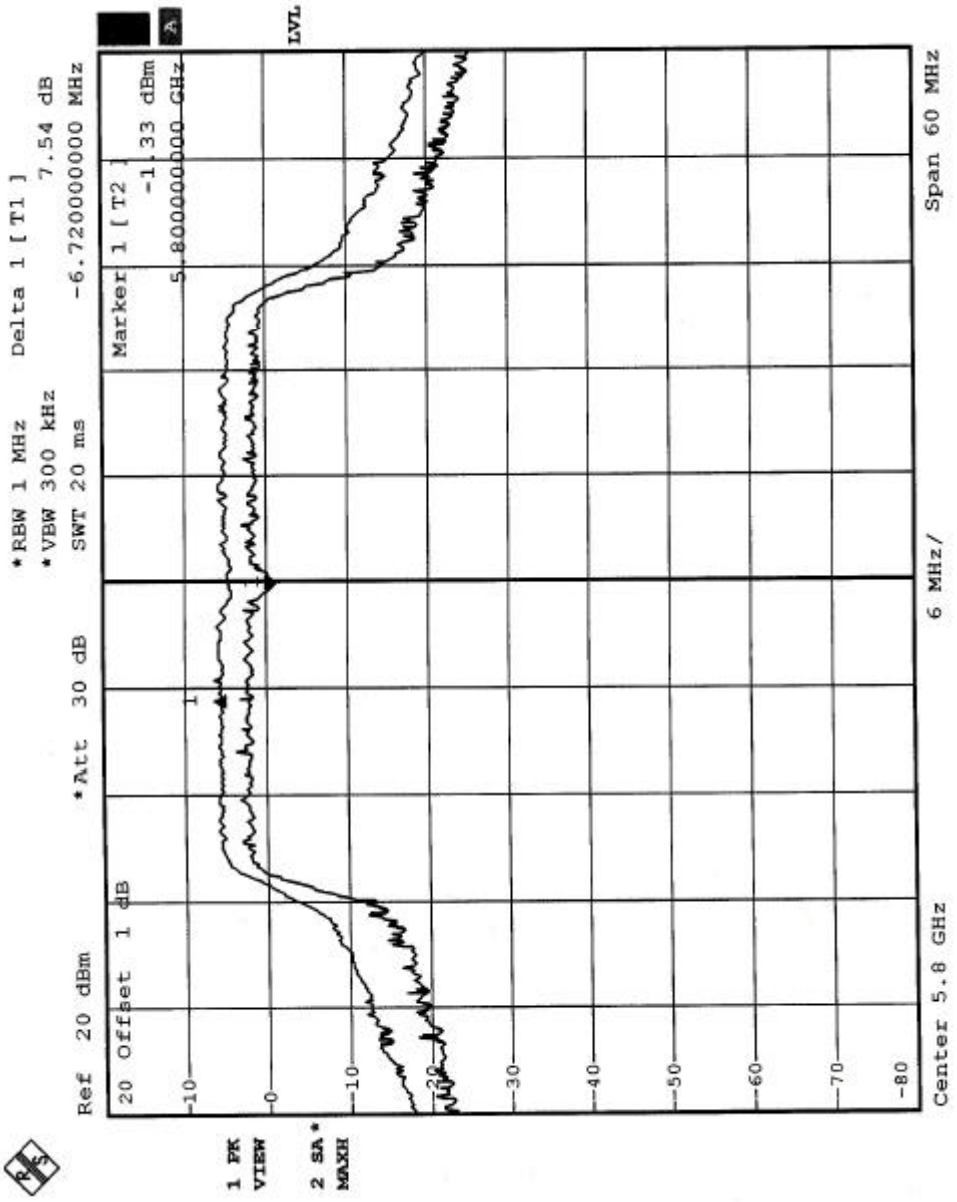
CHANNEL 3


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
7.32 dB
4.680000000 MHz
Marker 1 [T2]
-2.72 dBm
5.290000000 GHz
1 PK
VIEW
2 SA*
MAXH
LVL
Center 5.29 GHz
6 MHz/
Span 60 MHz

CHANNEL 4


Ref 20 dBm
Att 30 dB
RBW 1 MHz
VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
7.54 dB
-3.240000000 MHz
Marker 1 [T2]
-2.33 dBm
5.759880000 GHz
1 PK VIEW
2 SA* MAXH
Center 5.76 GHz
6 MHz/
Span 60 MHz

CHANNEL 5


Ref 20 dBm
Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Delta 1 [T1]
7.54 dB
-6.720000000 MHz
Marker 1 [T2]
-1.33 dBm
5.800000000 GHz
LVL
1 PK VIEW
2 SA * MAXH
Center 5.8 GHz
6 MHz/
Span 60 MHz

5.5 PEAK POWER SPECTRAL DENSITY MEASUREMENT

5.5.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Frequency Band	Limit
5.15 – 5.25 GHz	4dBm
5.25 – 5.35 GHz	11dBm
5.725 – 5.825 GHz	17dBm

5.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP30	100019	Dec. 19, 2003

NOTE:
The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

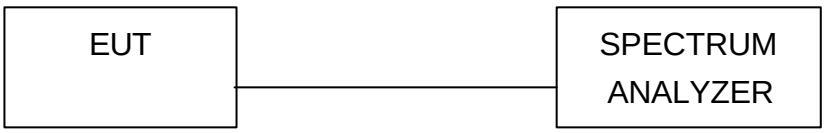
5.5.3 TEST PROCEDURES

1. The transmitter output was connected to the spectrum analyzer.
2. Set RBW=1MHz, VBW=3MHz. The PPSD is the highest level found across the emission in any 1MHz band.

5.5.4 DEVIATION FROM TEST STANDARD

No deviation

5.5.5 TEST SETUP



5.5.6 EUT OPERATING CONDITIONS

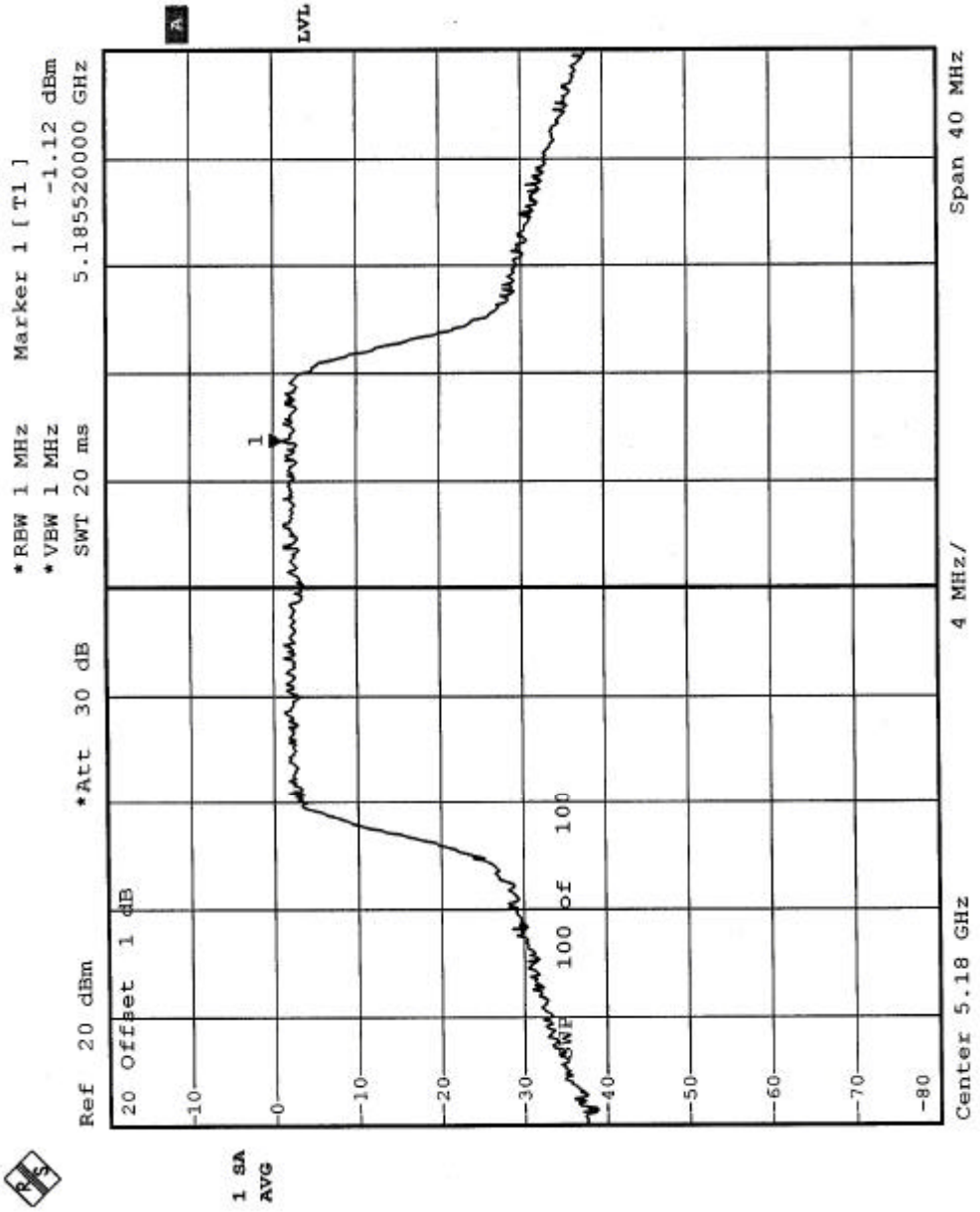
Same as 5.3.6

5.5.7 TEST RESULTS

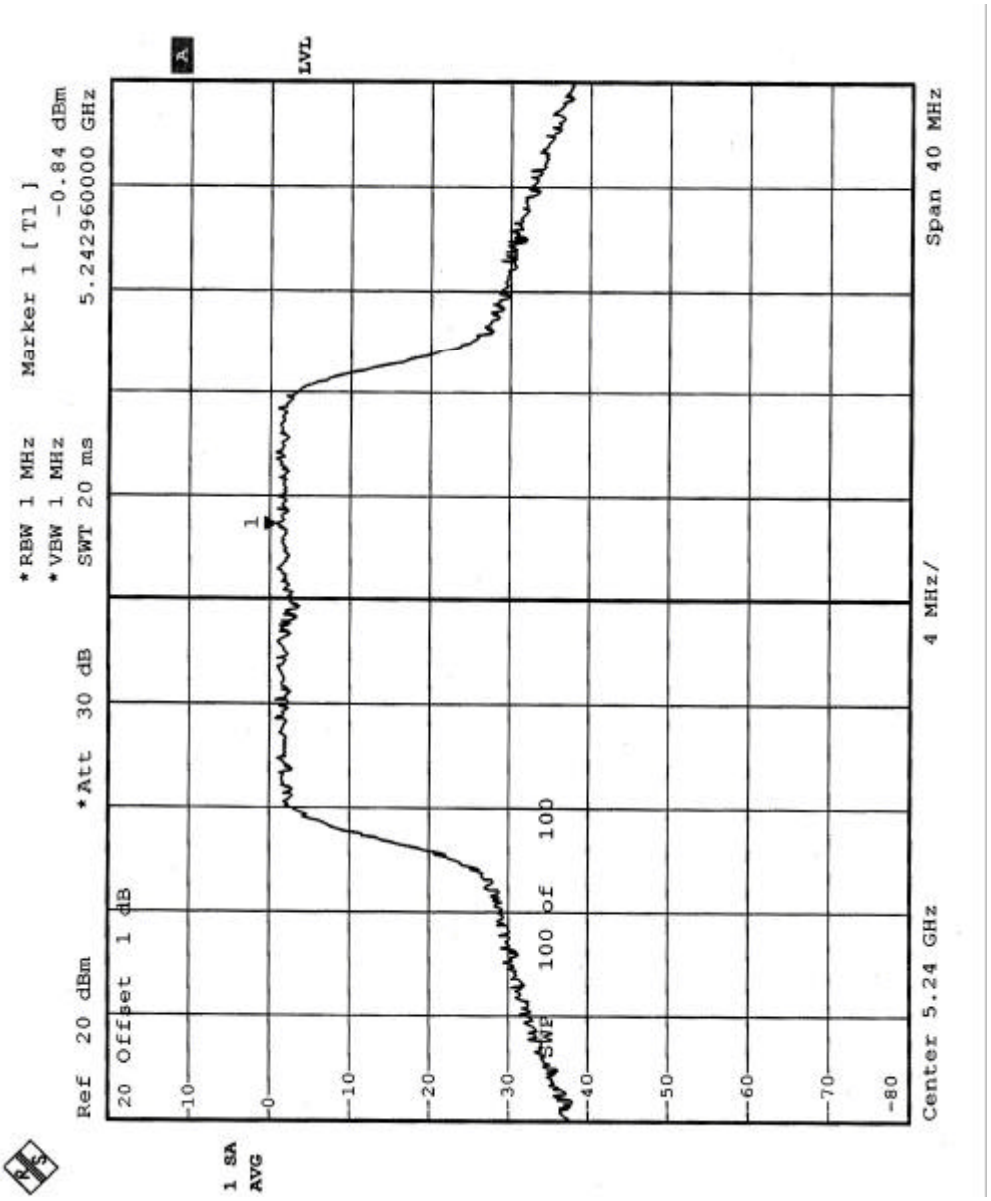
EUT	EliteConnect Universal 2.4GHz/5GHz Wireless Access Point	**MODEL**	SMC2555W-AG
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	21eg. C, 58RH, 976 hPa	**TESTED BY**	Eric Lee

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1 MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5180	-1.12	4	PASS
4	5240	-0.84	4	PASS
5	5260	-1.15	11	PASS
8	5320	-0.23	11	PASS
9	5745	-0.46	17	PASS
12	5805	-0.22	17	PASS

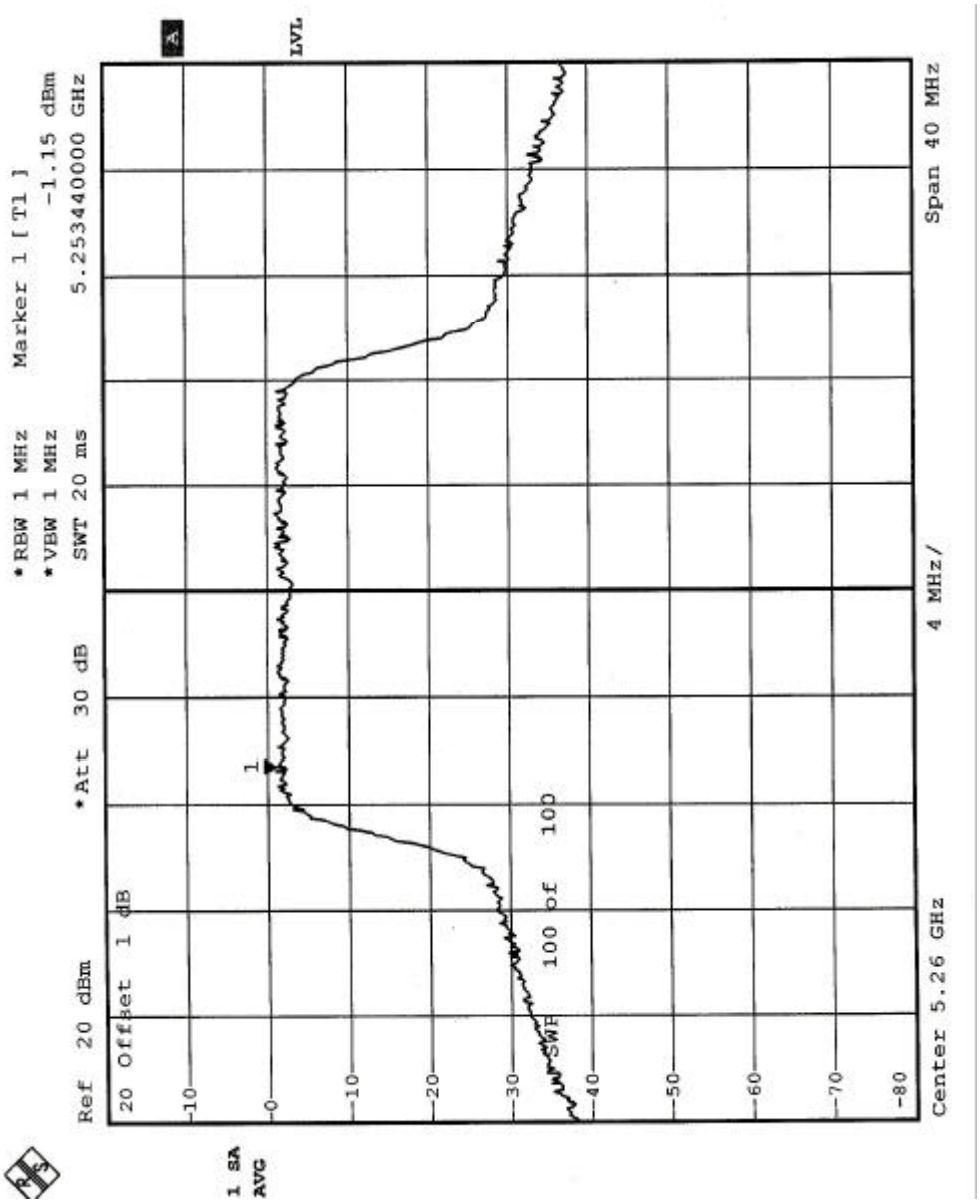
CHANNEL 1


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 1 MHz
SWT 20 ms
Marker 1 [T1]
-1.12 dBm
5.185520000 GHz
1 SA
AVG
LVL
Center 5.18 GHz
4 MHz/
Span 40 MHz

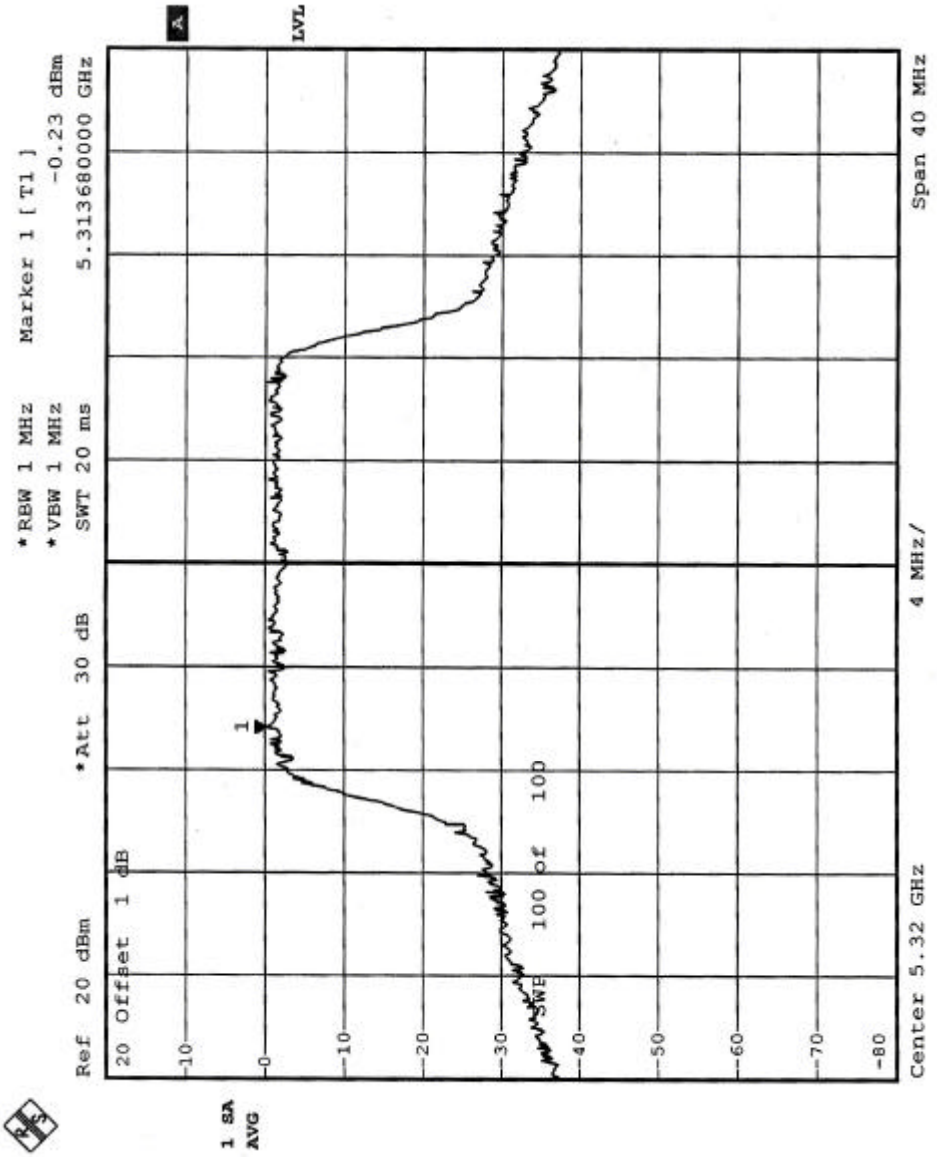
CHANNEL 4


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 1 MHz
SWT 20 ms
Marker 1 [T1]
-0.84 dBm
5.24296000 GHz
1 SA
AVG
LVL
SWP 100 of 100
Center 5.24 GHz
4 MHz/
Span 40 MHz

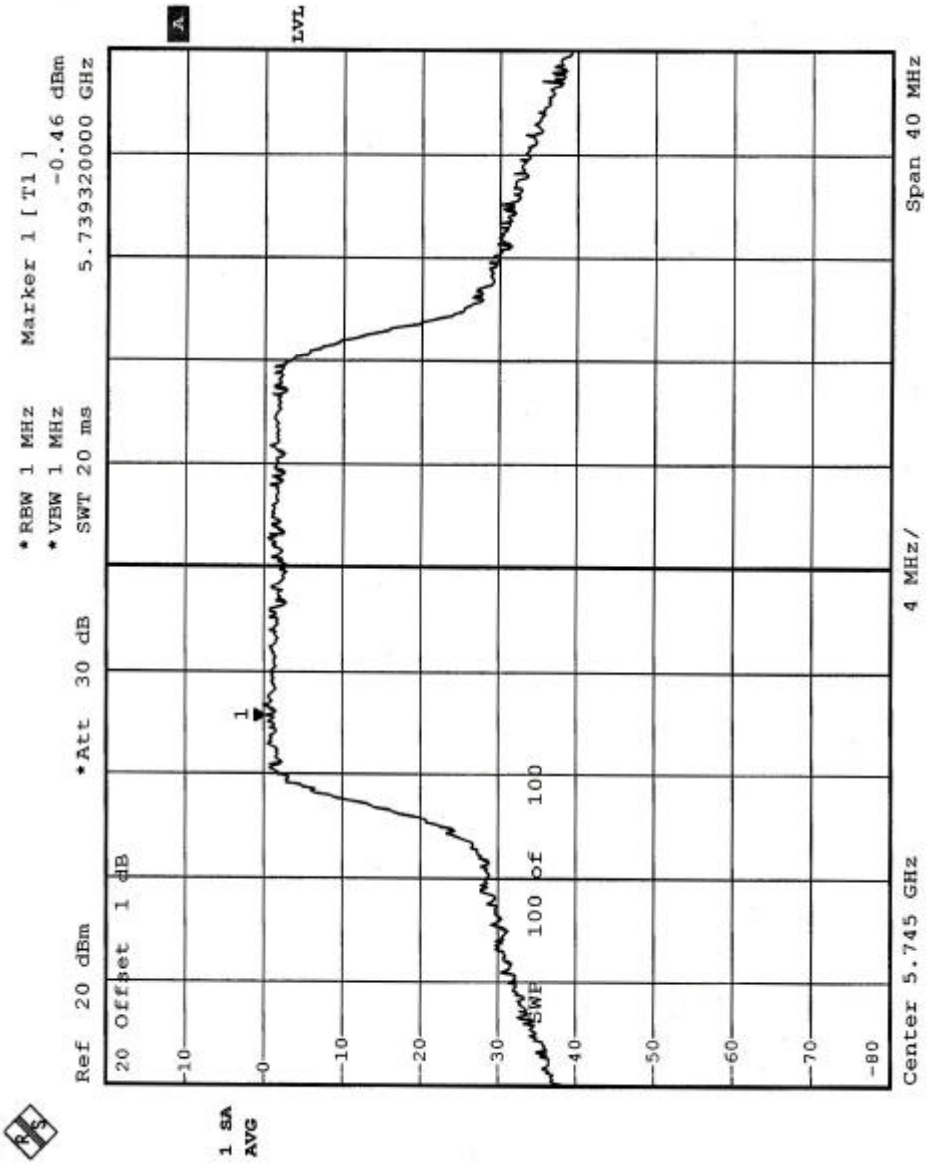
CHANNEL 5


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 1 MHz
SWT 20 ms
Marker 1 [T1]
-1.15 dBm
5.253440000 GHz
1 SA
AVG
LVL
SWP 100 of 100
Center 5.26 GHz
4 MHz/
Span 40 MHz

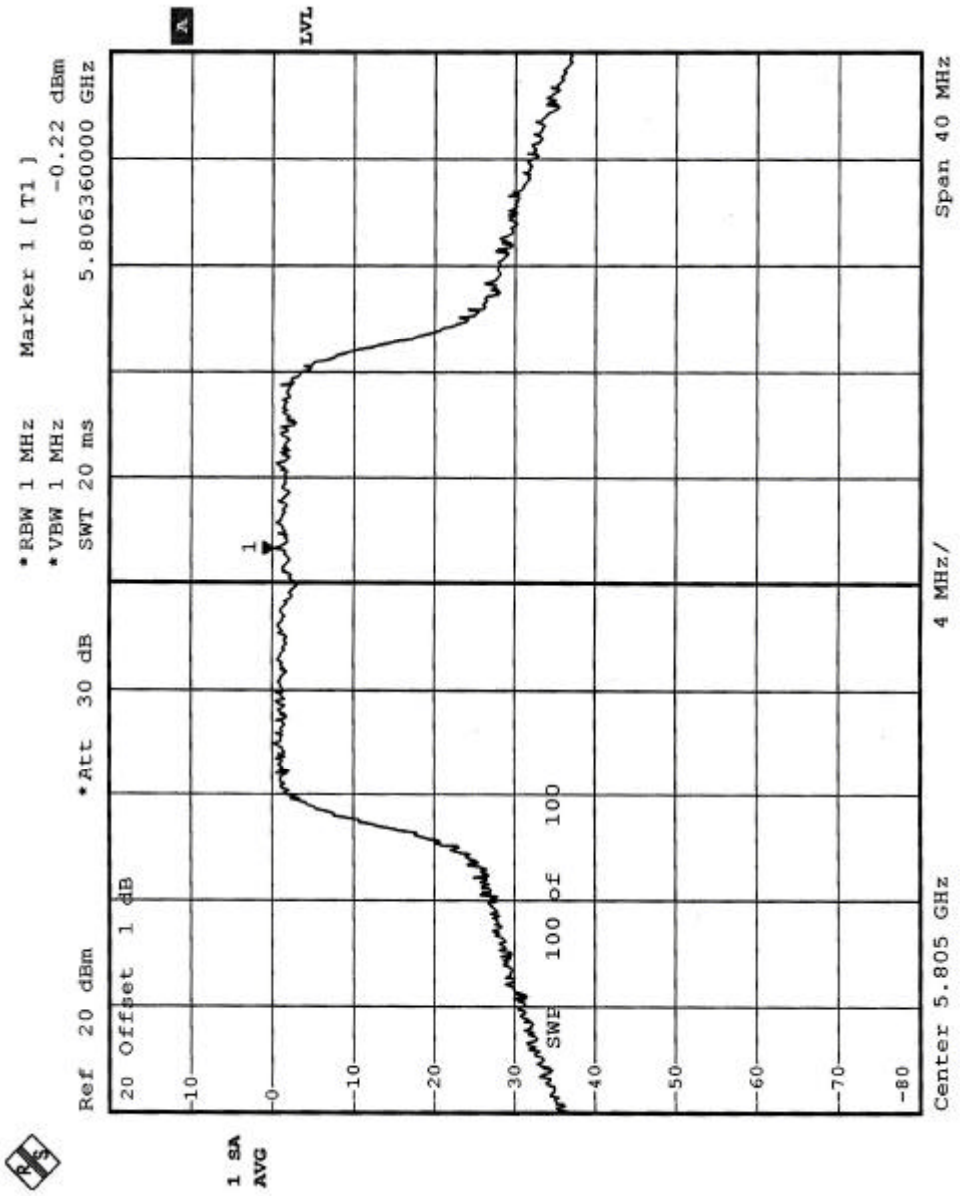
CHANNEL 8


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 1 MHz
SWT 20 ms
Marker 1 [T1]
-0.23 dBm
5.313680000 GHz
1 SA
AVG
LVL
SWP 100 of 100
Center 5.32 GHz
4 MHz/
Span 40 MHz

CHANNEL 9


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 1 MHz
SWT 20 ms
Marker 1 [T1]
-0.46 dBm
5.739320000 GHz
1 SA
AVG
LVL
SWP 100 of 100
Center 5.745 GHz
4 MHz/
Span 40 MHz

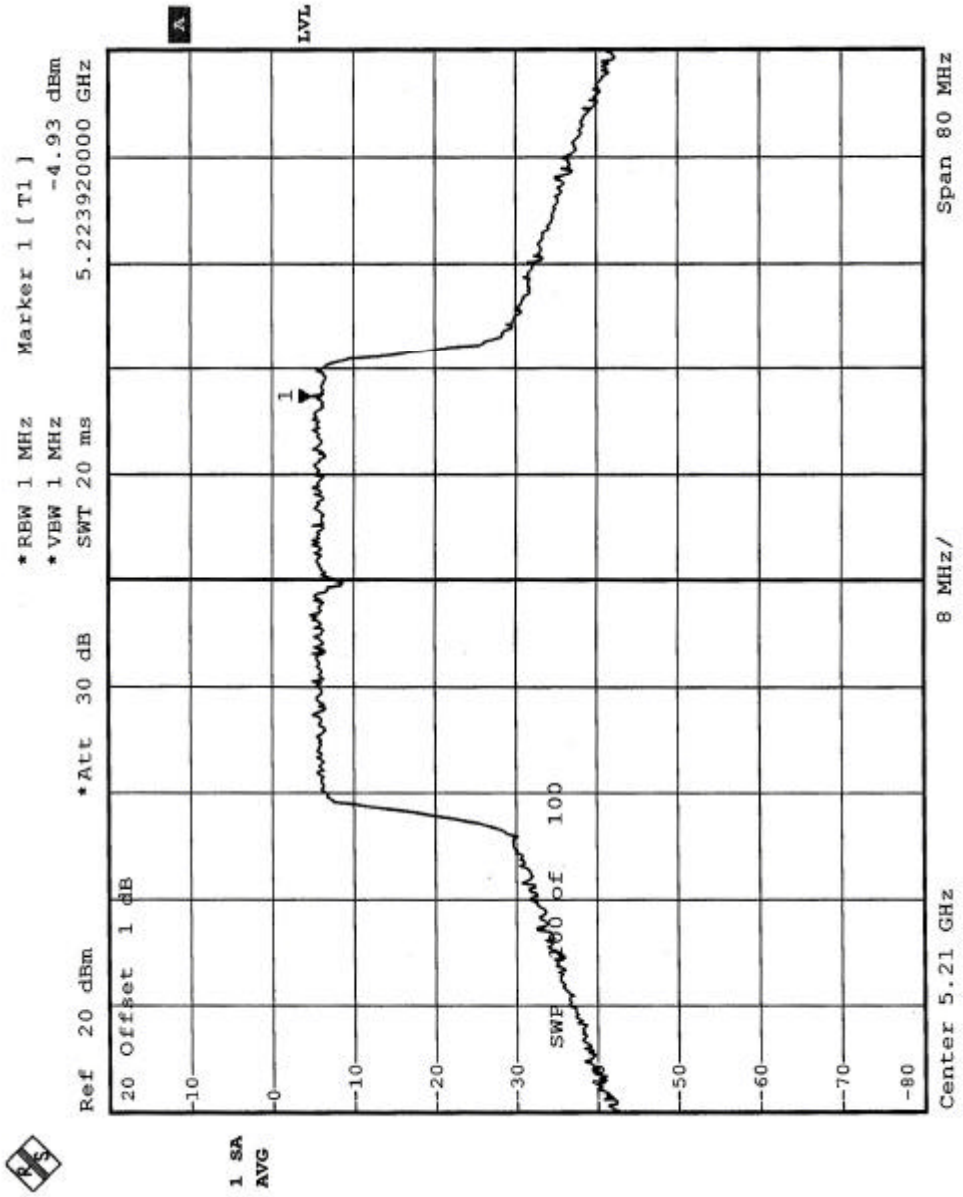
CHANNEL 12


Ref 20 dBm
Att 30 dB
RBW 1 MHz
VBW 1 MHz
SWT 20 ms
Marker 1 [T1]
-0.22 dBm
5.806360000 GHz
Span 40 MHz
4 MHz/
Center 5.805 GHz
1 SA
AVG
LVL
SWP 100 of 100

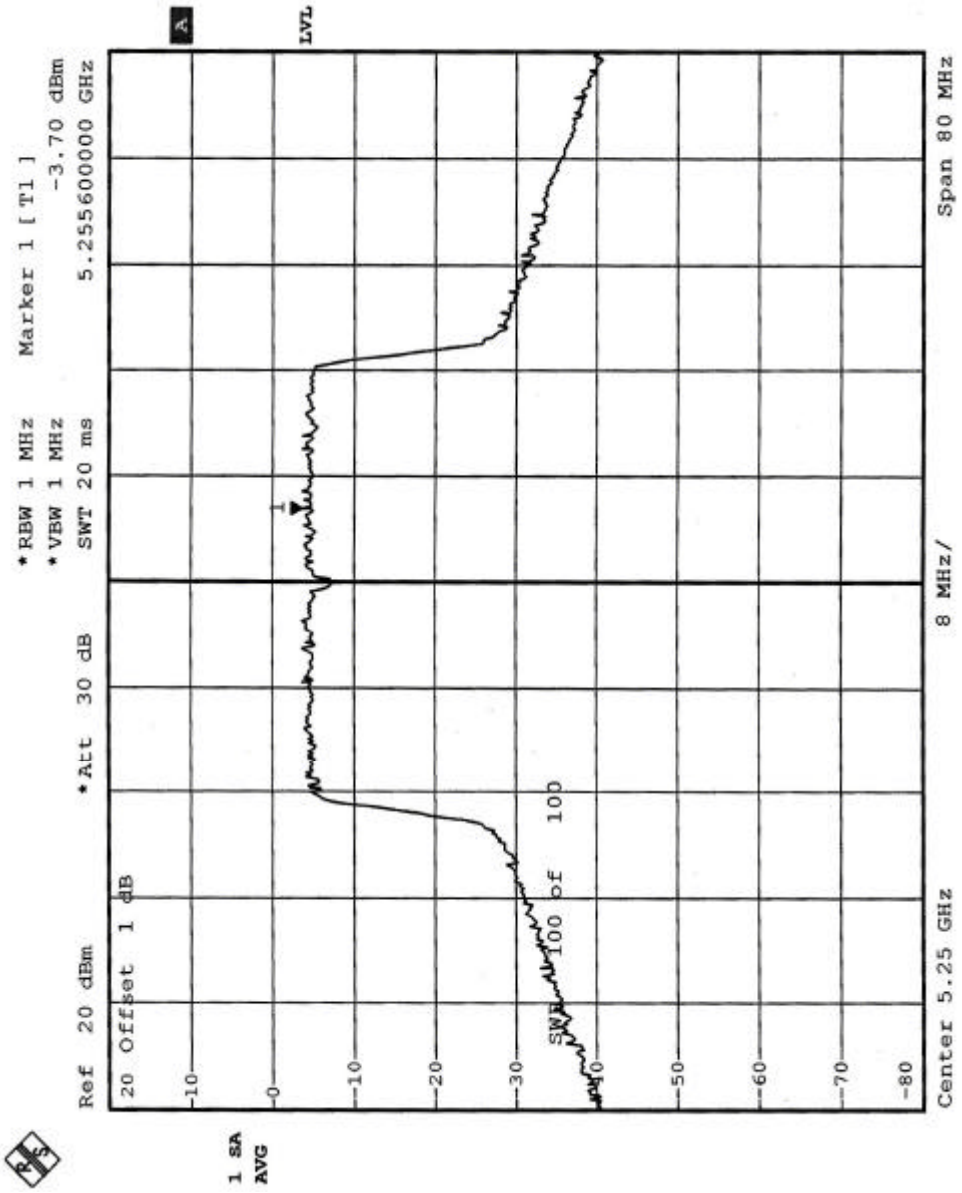
EUT	EliteConnect Universal 2.4GHz/5GHz Wireless Access Point	**MODEL**	SMC2555W-AG
MODE	Turbo	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	21eg. C, 58RH, 976 hPa	**TESTED BY**	Eric Lee

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1 MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5210	-4.93	4	PASS
2	5250	-3.70	4	PASS
3	5290	-3.81	11	PASS
4	5760	-2.46	17	PASS
5	5800	-2.76	17	PASS

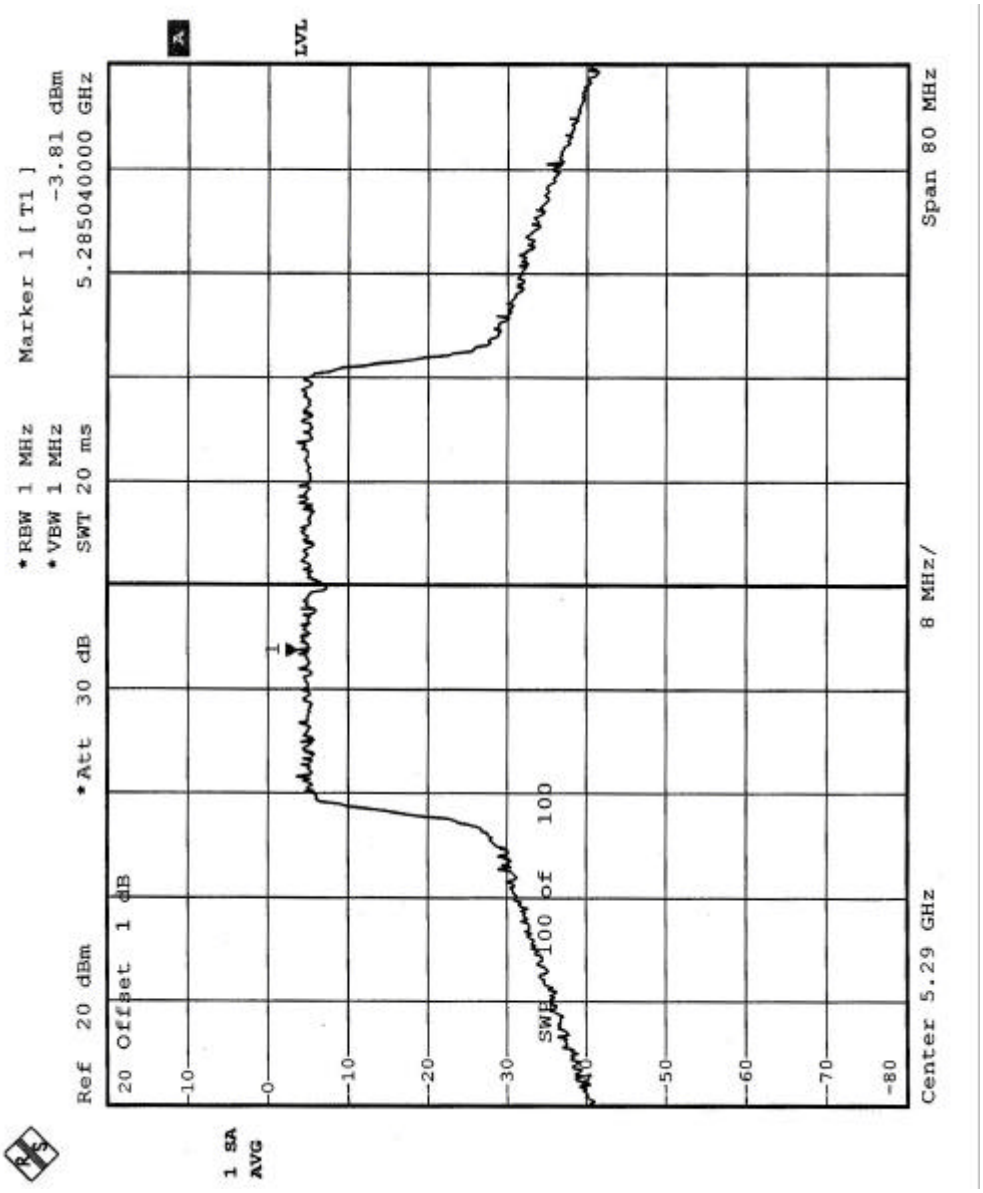
CHANNEL 1


Ref 20 dBm
*Att 30 dB
*RBW 1 MHz
*VBW 1 MHz
SWT 20 ms
Marker 1 [T1]
-4.93 dBm
5.223920000 GHz
Offset 1 dB
SWP 100 of 100
Center 5.21 GHz
8 MHz/
Span 80 MHz
1 SA
AVG
LVL
A

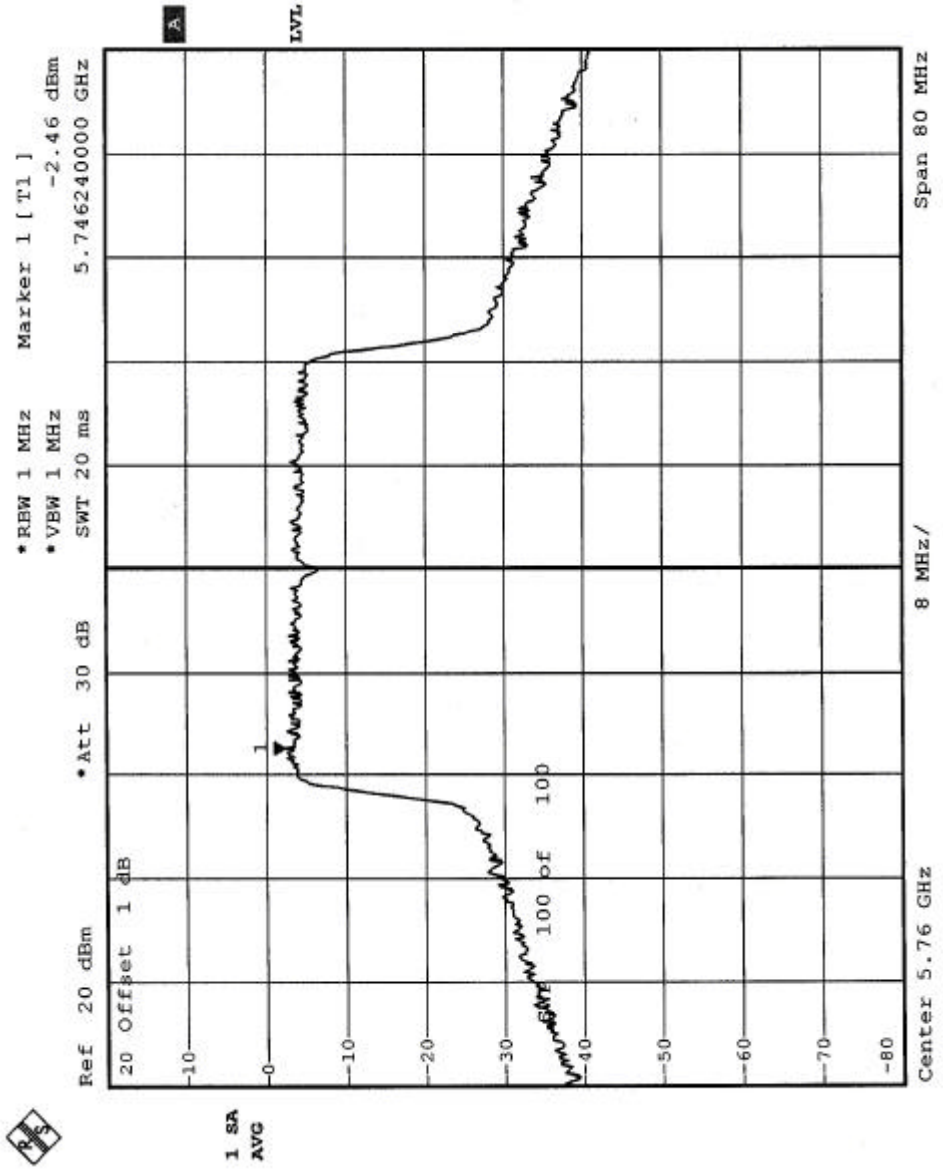
CHANNEL 2


Ref 20 dBm
20 Offset 1 dB
* Att 30 dB
* RBW 1 MHz
* VBW 1 MHz
SWT 20 ms
Marker 1 [T1]
-3.70 dBm
5.25560000 GHz
1 SA
AVG
LVL
SWP 100 of 100
Center 5.25 GHz
8 MHz/
Span 80 MHz

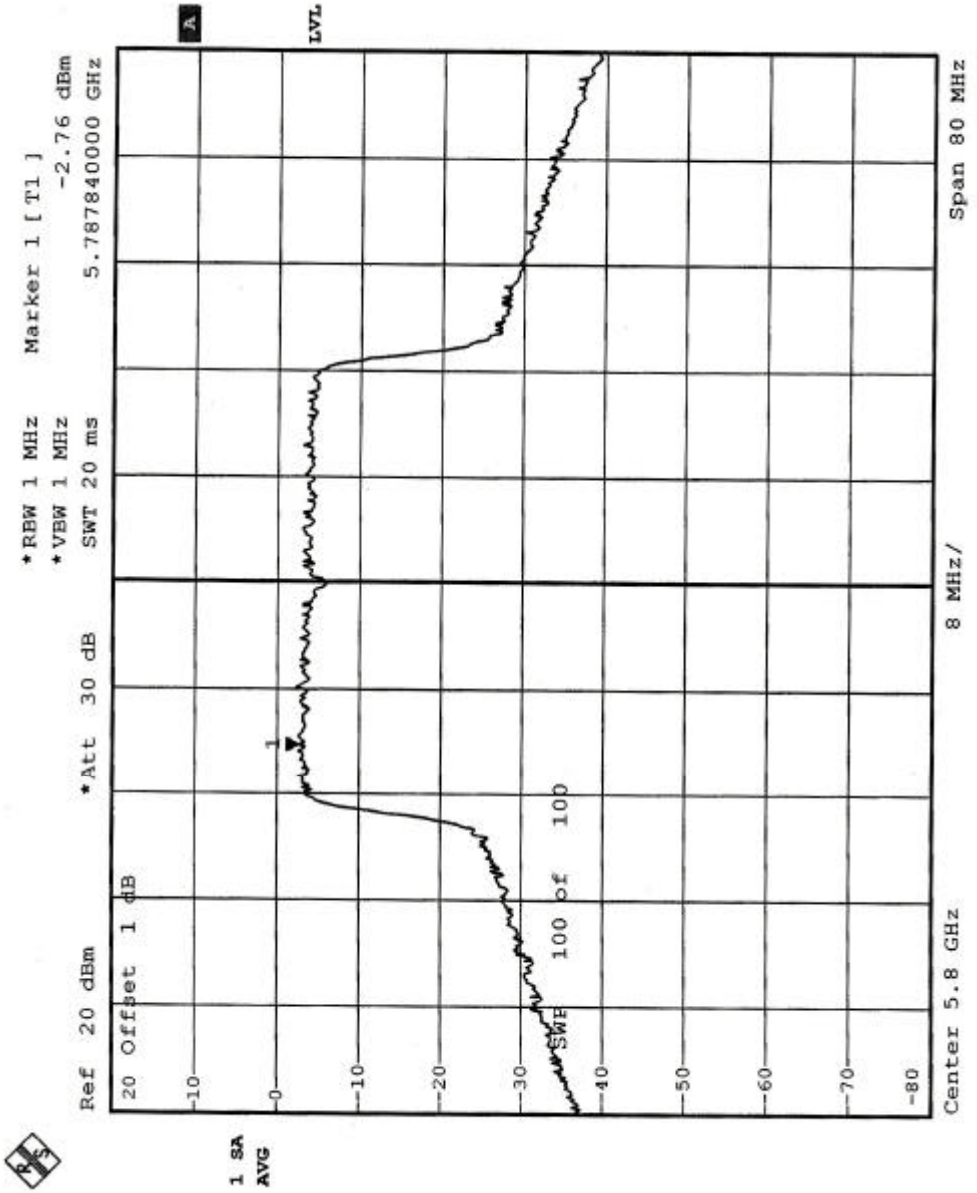
CHANNEL 3


Ref 20 dBm
Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 1 MHz
SWT 20 ms
Marker 1 [T1]
-3.81 dBm
5.285040000 GHz
1 SA
AVG
LVL
SWP 100 of 100
Center 5.29 GHz
8 MHz/
Span 80 MHz

CHANNEL 4


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 1 MHz
SWT 20 ms
Marker 1 [T1]
-2.46 dBm
5.746240000 GHz
1 SA
AVG
LVL
Center 5.76 GHz
8 MHz/
Span 80 MHz

CHANNEL 5


Ref 20 dBm
20 Offset 1 dB
*Att 30 dB
*RBW 1 MHz
*VBW 1 MHz
SWT 20 ms
Marker 1 [T1]
-2.76 dBm
5.787840000 GHz
1 SA
AVG
SWP 100 of 100
LVL
A
Center 5.8 GHz
8 MHz/
Span 80 MHz

5.6 FREQUENCY STABILITY

5.6.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency tolerance of the carrier signal shall be maintained within +/- 0.02% of the operating frequency over a temperature variation of –30 degrees to 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

5.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP30	100019	Dec. 19, 2003

NOTE:
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

1. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
2. Turn the EUT on and couple its output to a spectrum analyzer.
3. Turn the EUT off and set the chamber to the highest temperature specified.
4. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
5. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
6. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

5.6.4 DEVIATION FROM TEST STANDARD

No deviation