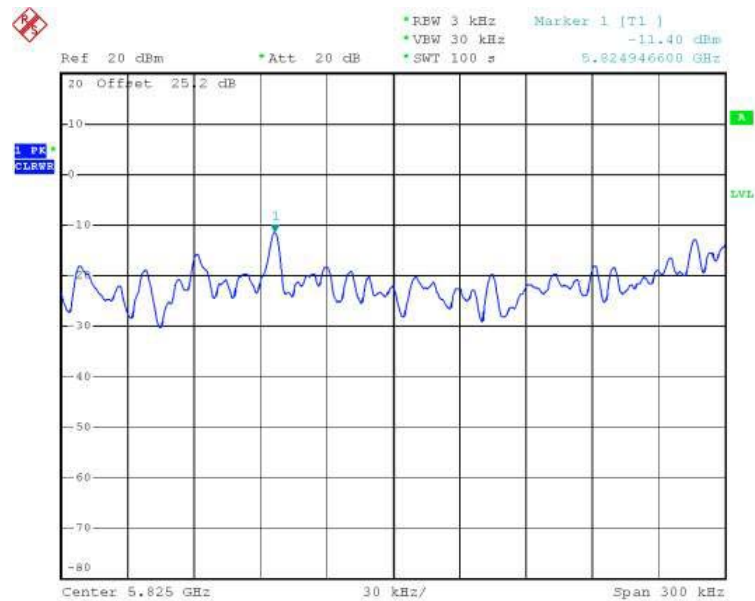


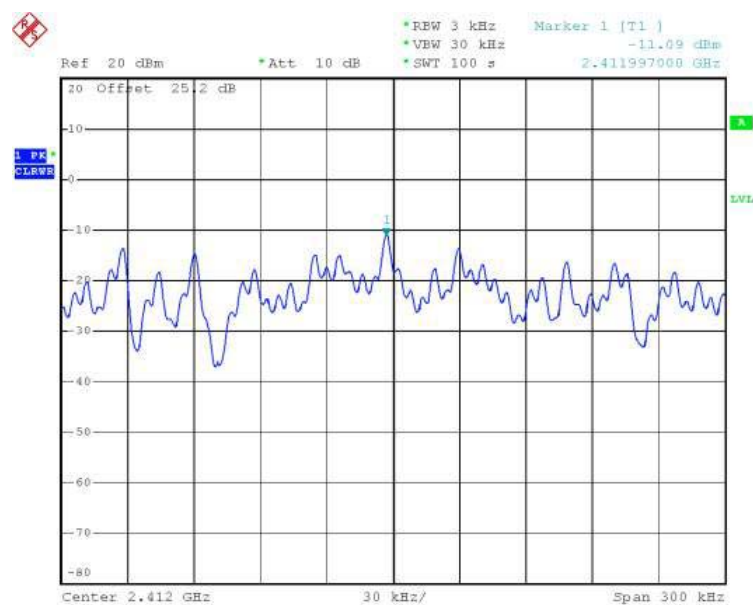
1-9



Date: 2.AUG.2004 13:42:35

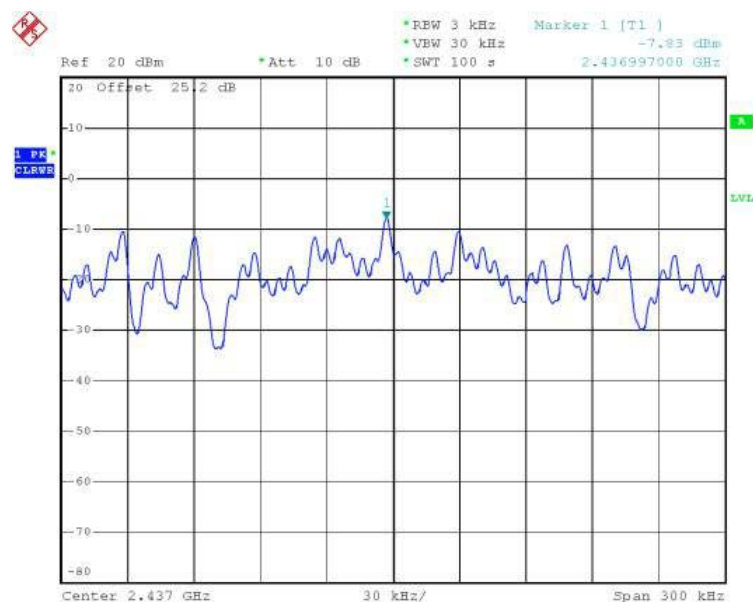
5.3.5.2 Antenna 2

2-1



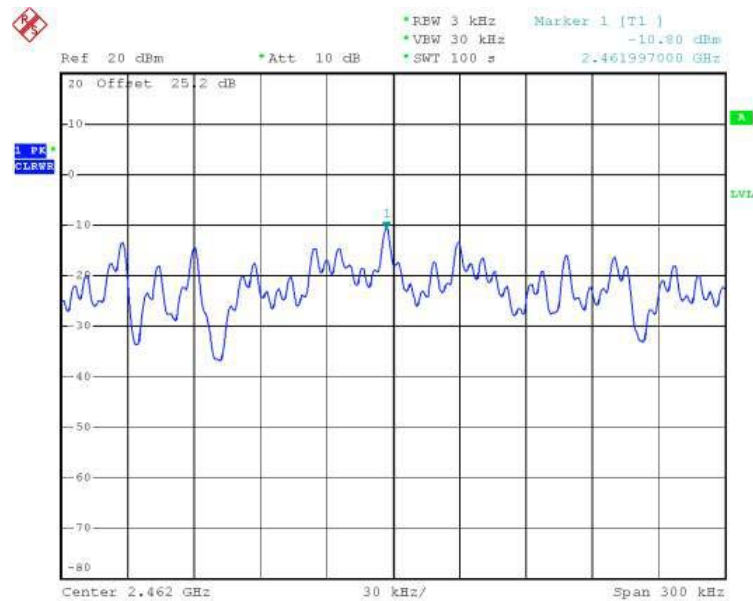
Date: 26.JUL.2004 16:01:53

2-2



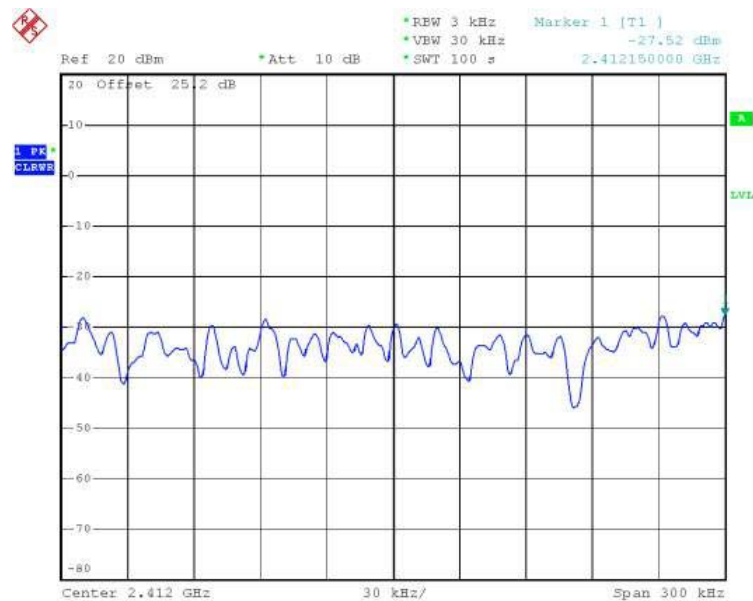
Date: 26.JUL.2004 16:08:53

2-3



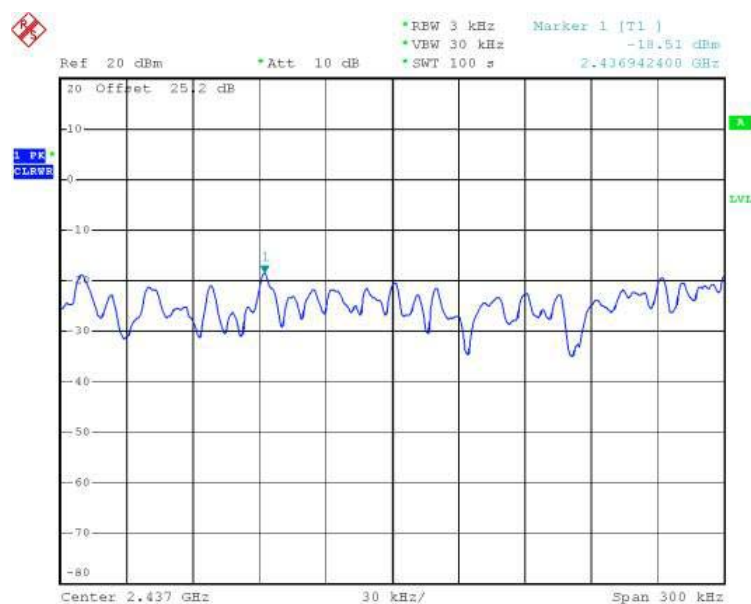
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2-4



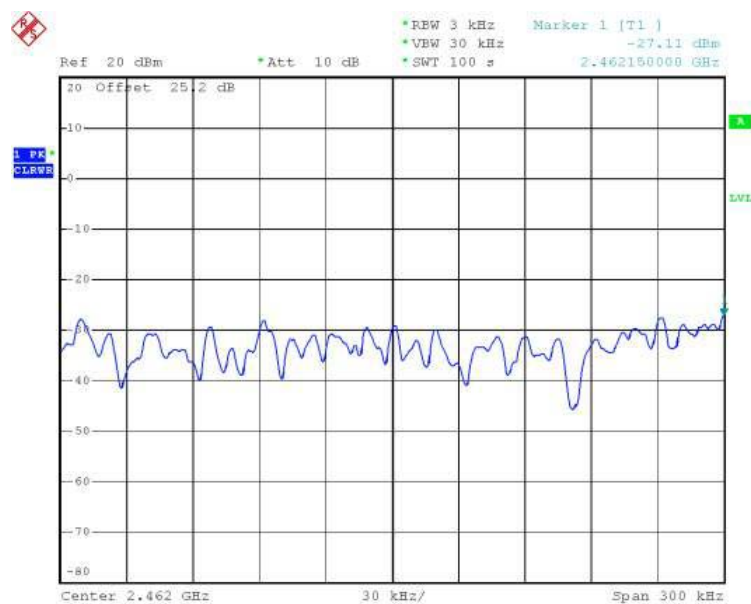
Date: 26.JUL.2004 16:28:17

2-5



Date: 26.JUL.2004 16:22:44

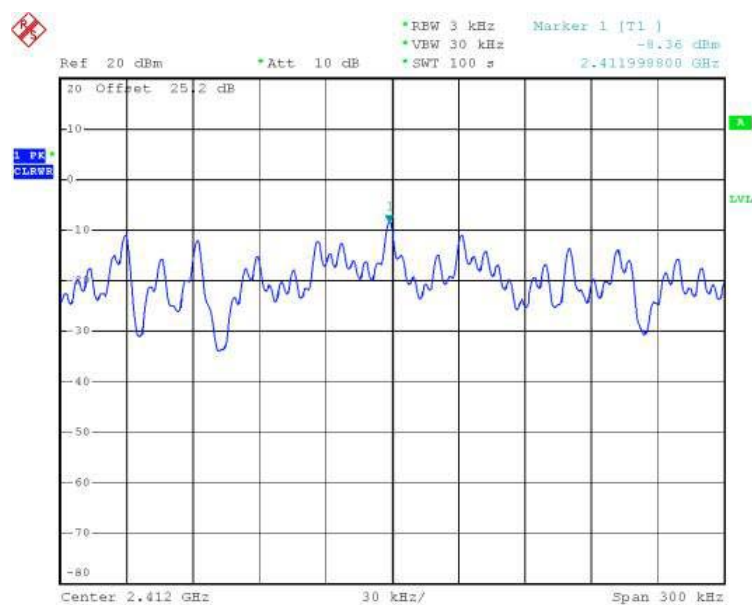
2-6



Date: 26.JUL.2004 16:17:56

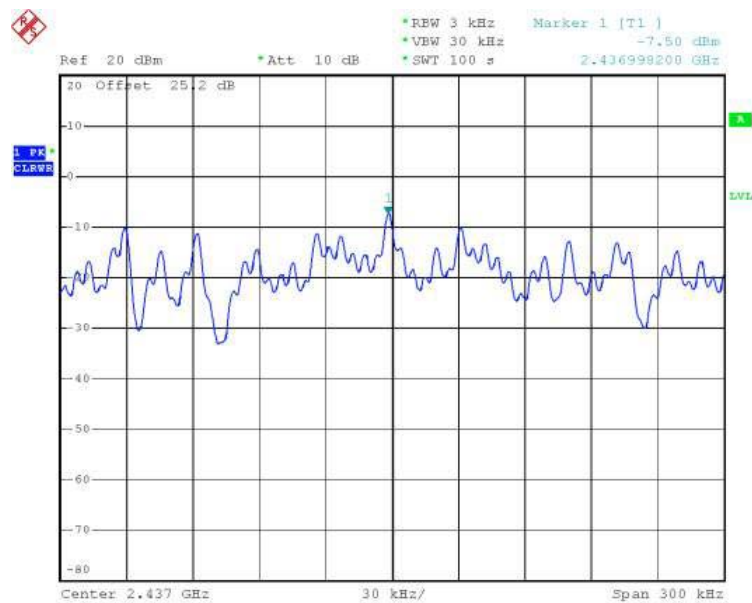
5.3.5.3 Antenna 3

3-1



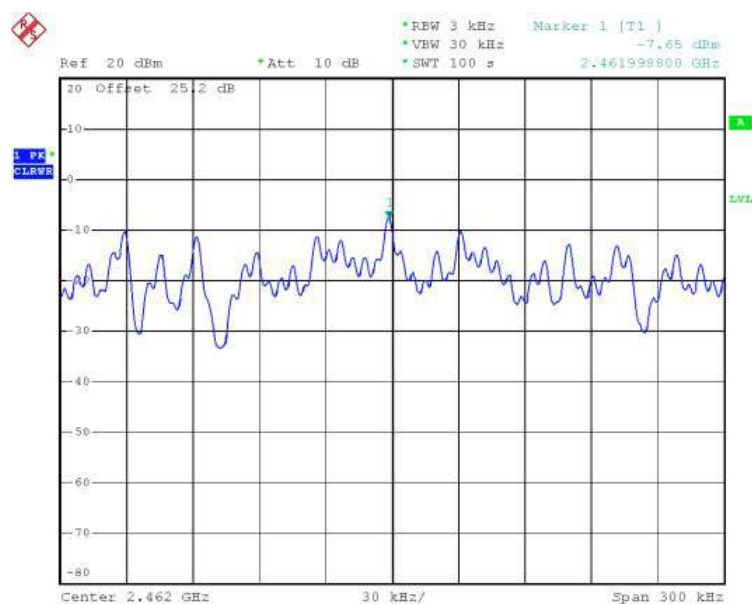
Date: 26.JUL.2004 13:43:49

3-2



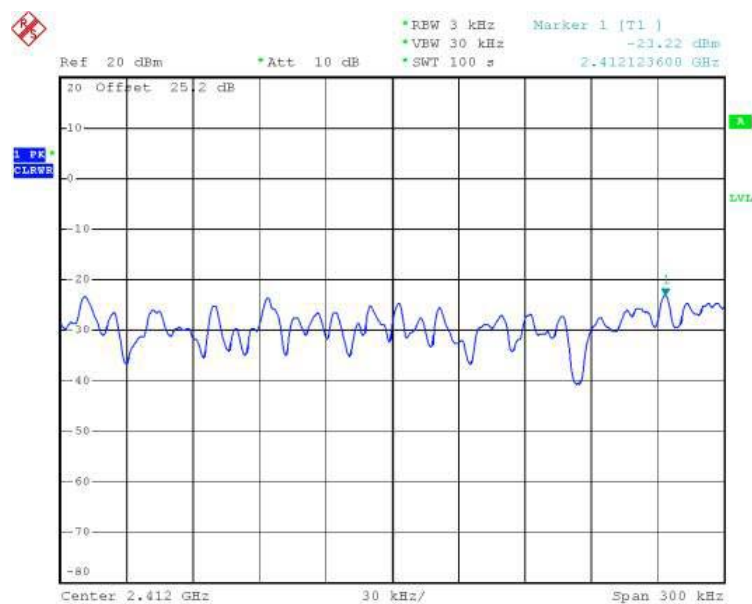
Date: 26.JUL.2004 13:50:59

3-3



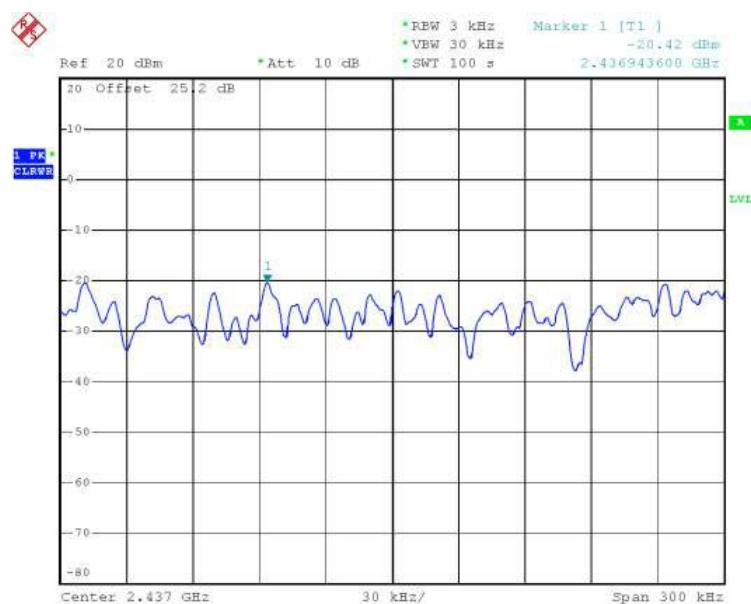
Date: 26.JUL.2004 13:55:01

3-4



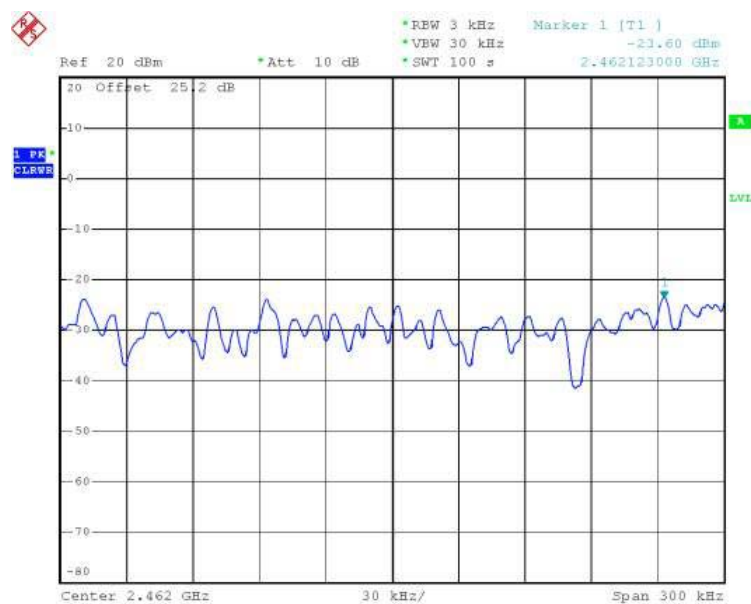
Date: 26.JUL.2004 14:07:50

3-5



Date: 26.JUL.2004 14:03:48

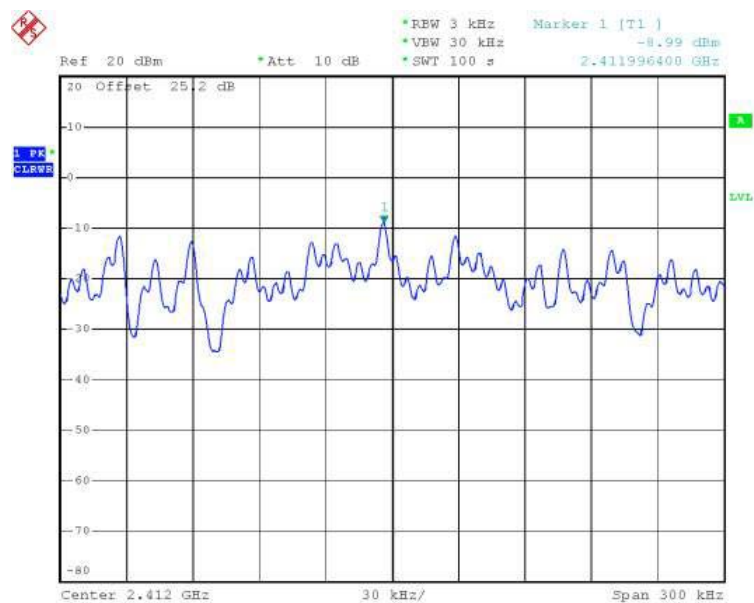
3-6



Date: 26.JUL.2004 13:59:36

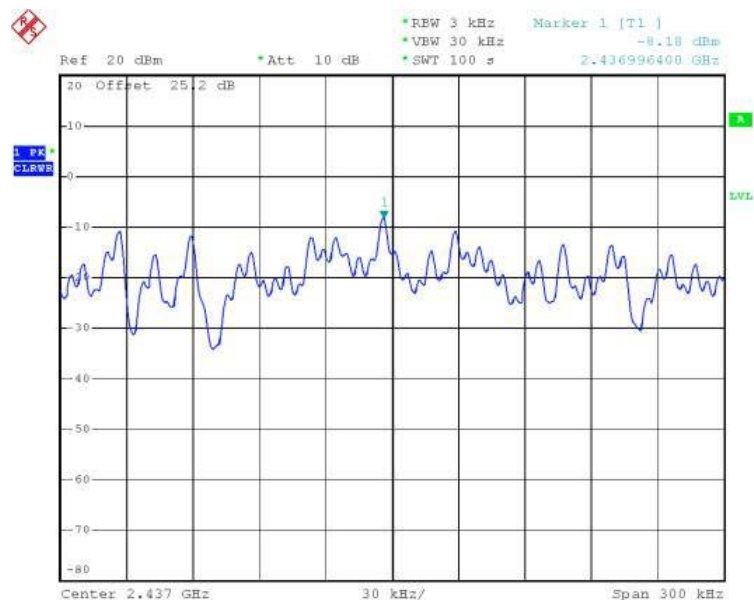
5.3.5.4 Antenna 4

4-1



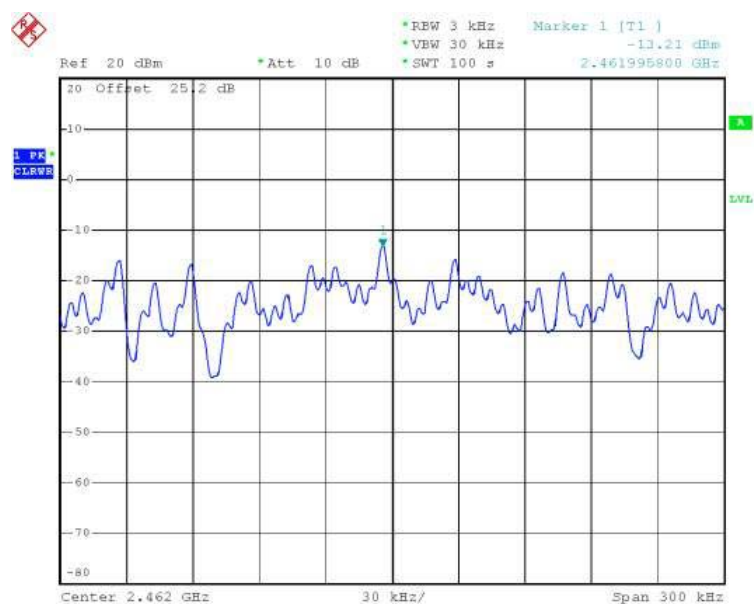
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4-2



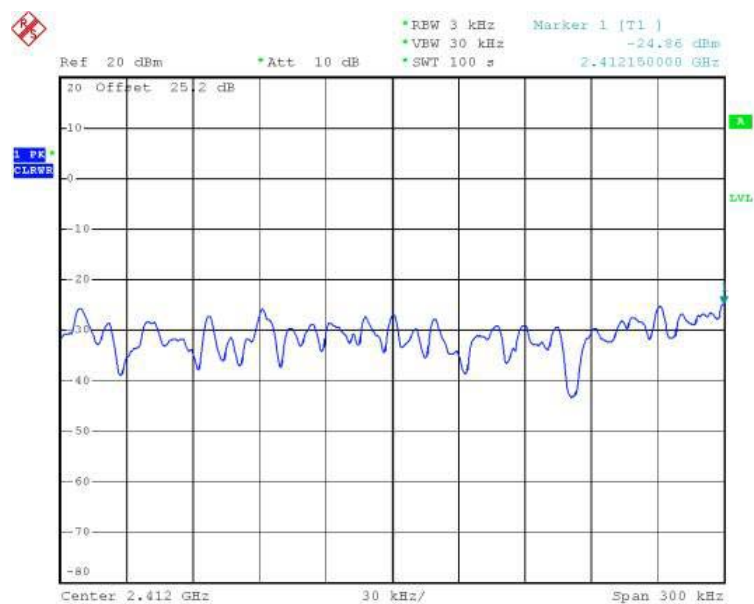
Date: 26.JUL.2004 18:11:26

4-3



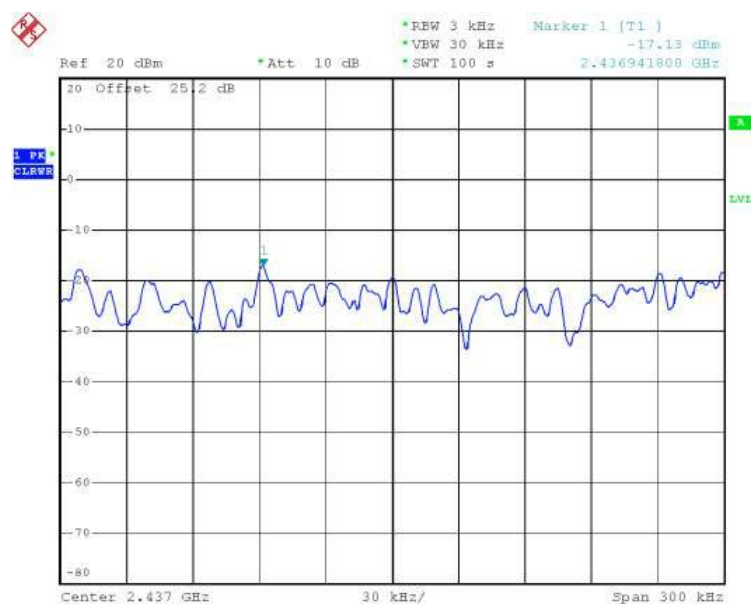
Date: 26.JUL.2004 18:16:11

4-4



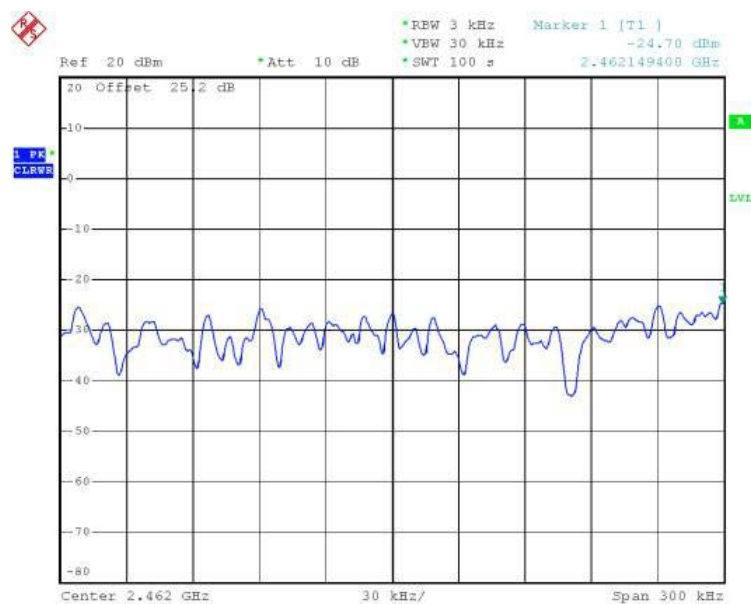
Date: 26.JUL.2004 17:53:49

4-5



Date: 26.JUL.2004 17:57:41

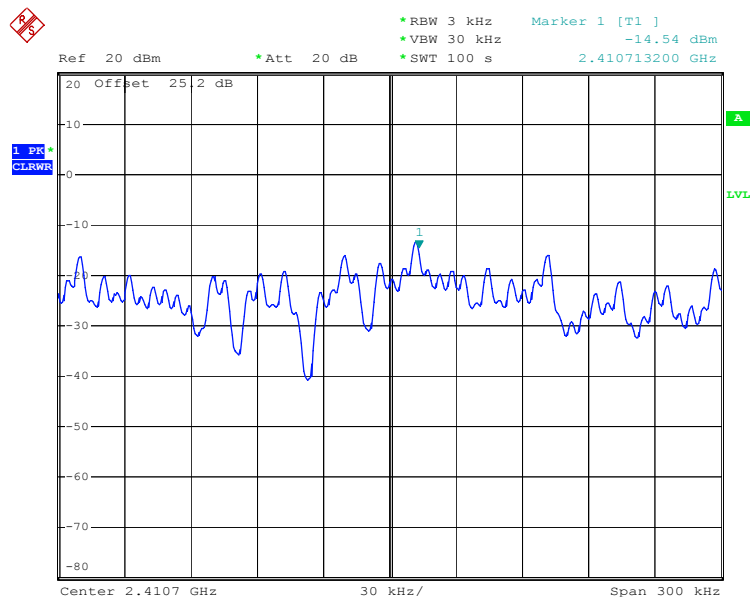
4-6



Date: 26.JUL.2004 18:01:34

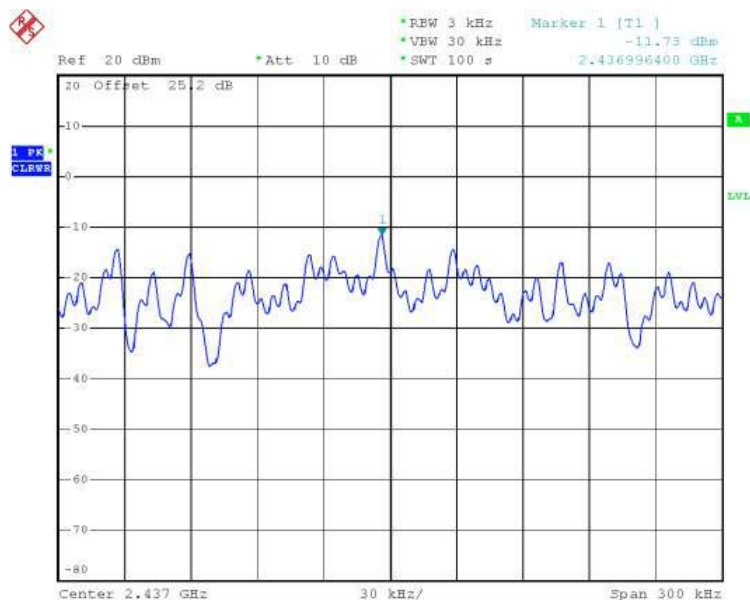
5.3.5.5 Antenna 5

5-1



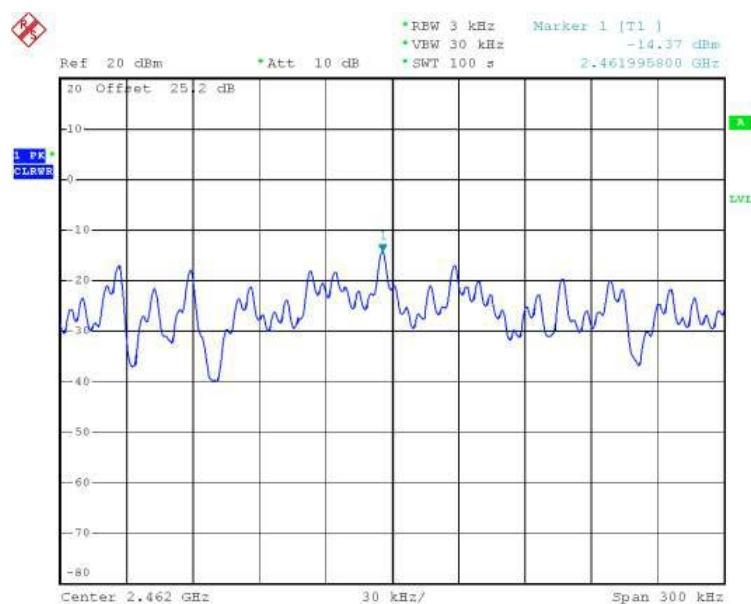
Date: 2.AUG.2004 15:14:37

5-2



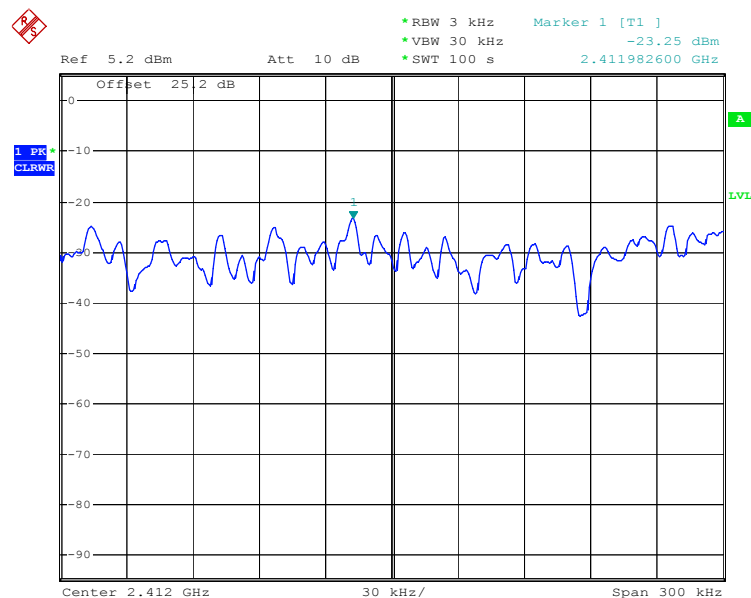
Date: 26.JUL.2004 18:28:33

5-3



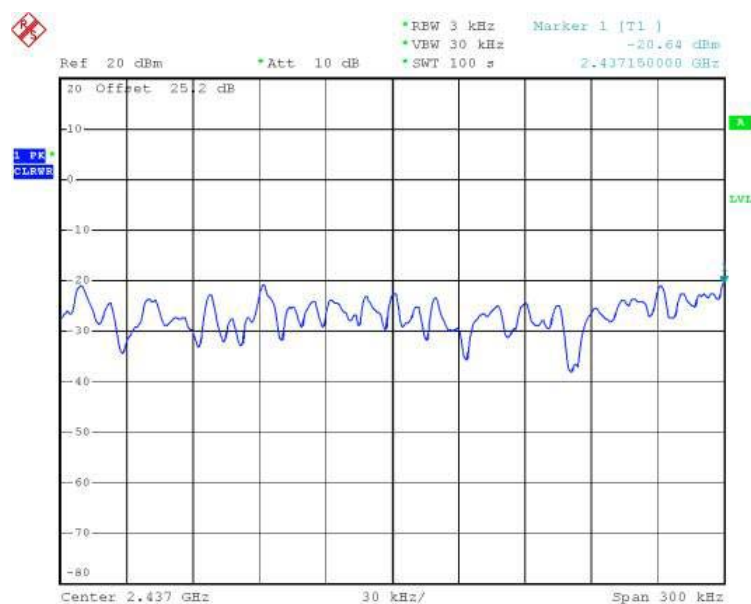
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5-4



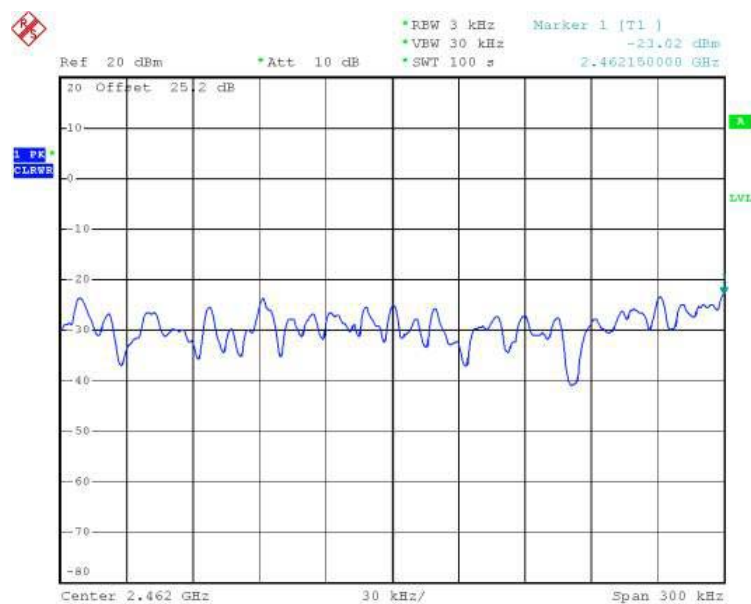
Date: 2.AUG.2004 10:54:03

5-5



Date: 26.JUL.2004 17:37:11

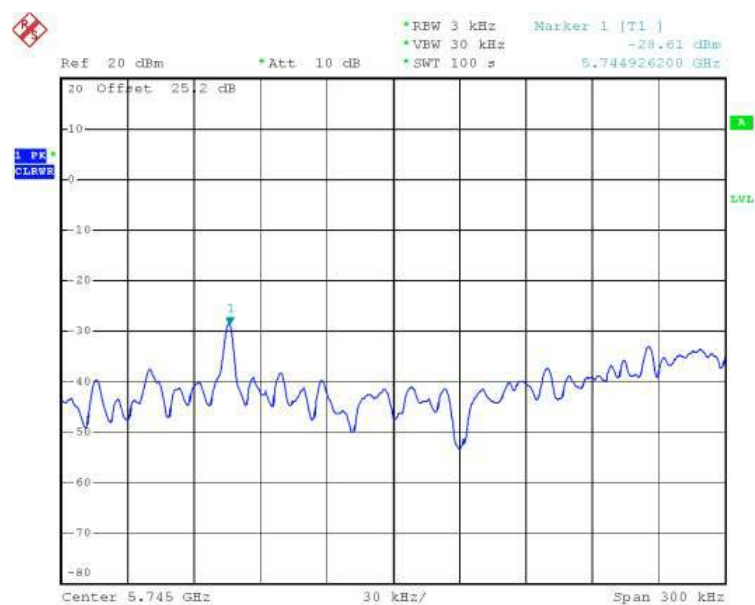
5-6



Date: 26.JUL.2004 17:41:08

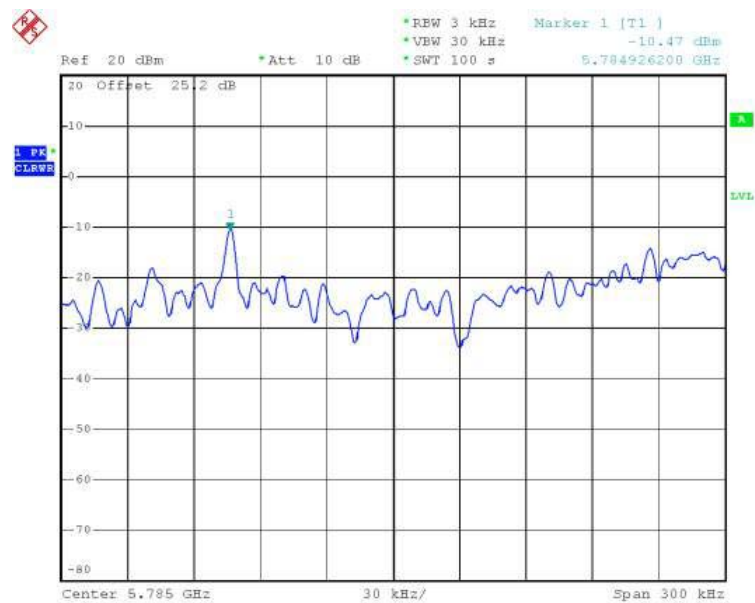
5.3.5.6 Antenna 6

6-1



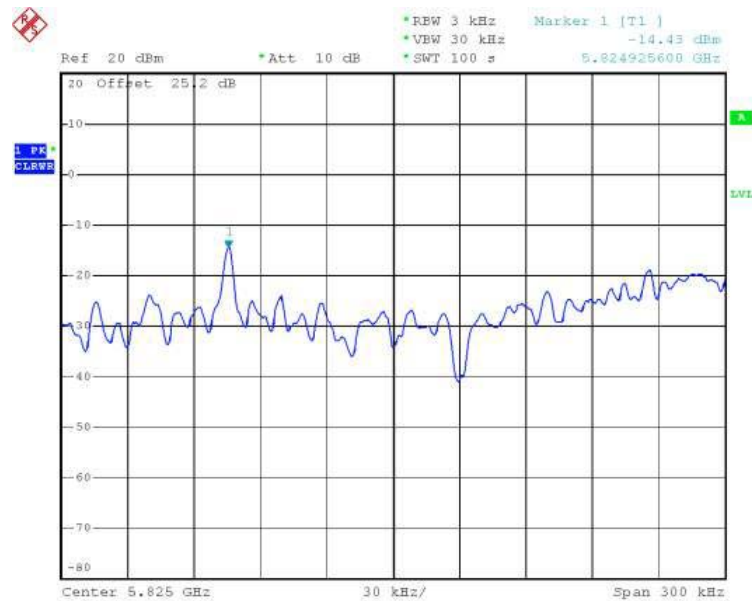
Date: 26.JUL.2004 20:23:28

6-2



Date: 26.JUL.2004 20:02:32

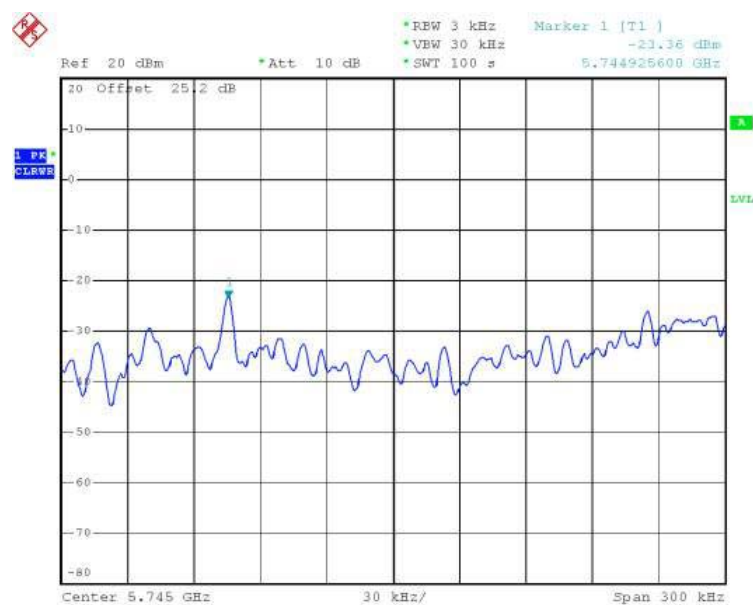
6-3



Date: 26.JUL.2004 20:16:24

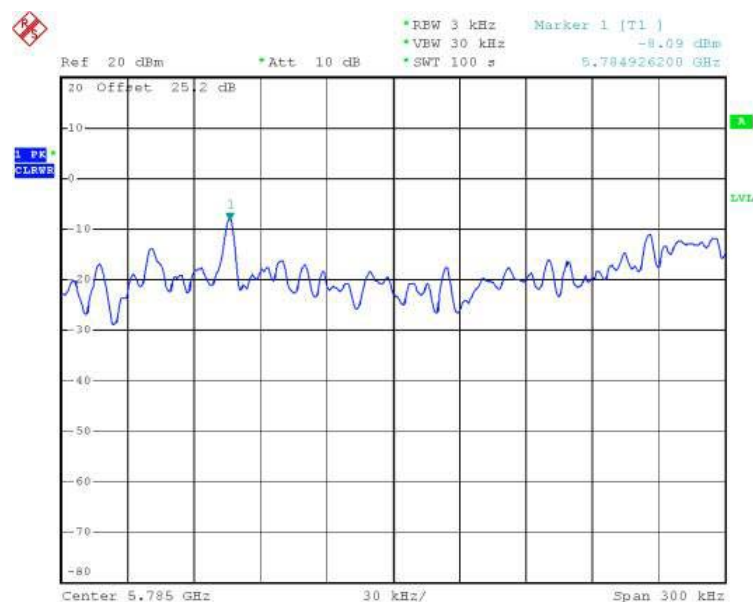
5.3.5.7 Antenna 7

7-1



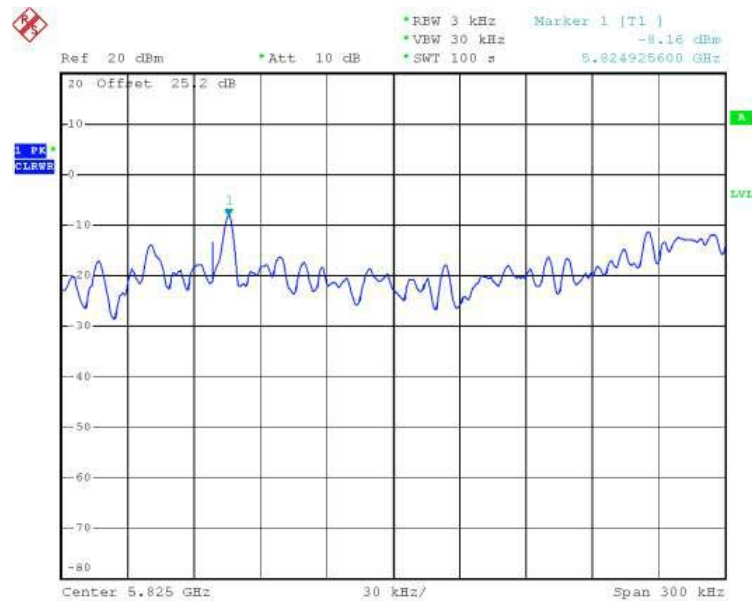
Date: 26.JUL.2004 20:26:01

7-2



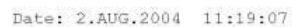
Date: 26.JUL.2004 19:59:22

7-3

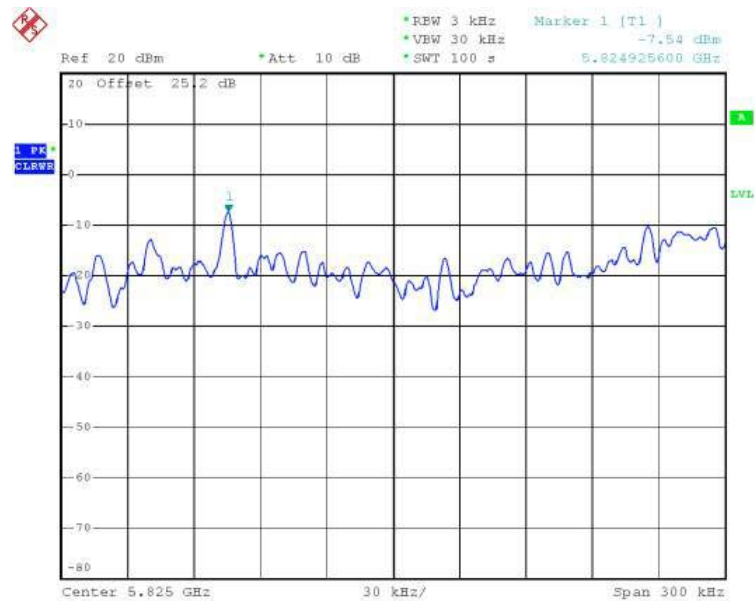


Date: 26.JUL.2004 20:12:09

8-1



8-3



Date: 26.JUL.2004 20:08:22

5.4 Band Edges Measurement

5.4.1 Measuring Instruments :

As described in chapter 10 of this test report.

5.4.2 Test Procedure :

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

5.4.3 Test Result for Restricted Band

5.4.3.1 Antenna 1

802.11b CH01 (Vertical)

		Over		Limit	Read	Antenna	Preamp	Cable			Ant	Table
Frequency		Limit	Level	Line	Level	Factor	Factor	Loss			Pos	Pos
(MHz)		(dB)	(dBuV/m)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	Remark	(cm)	(deg)	
1	!	2390	-2.41	51.59	54	64.2	28.4	44.34	3.33	Average	0	0
2		2390	-13.89	60.11	74	72.72	28.4	44.34	3.33	Peak	0	0
3	X	2412		112.4		125	28.41	44.34	3.35	Peak	0	0
4	X	2412		105.1		117.7	28.41	44.34	3.32	Average	0	0
5		2484	-20.16	53.84	74	66.27	28.48	44.31	3.4	Peak	-	-
6		2484	-11.31	42.69	54	55.12	28.48	44.31	3.4	Average	0	0

802.11b CH11 (Vertical)

	Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamp Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1	2390	-16.64	57.36	74	69.97	28.4	44.34	3.33	Peak	-	-
2	2390	-7.85	46.15	54	58.76	28.4	44.34	3.33	Average	0	0
3	X 2462		111.3		123.77	28.47	44.32	3.38	Peak	-	-
4	X 2462		103.05		115.52	28.47	44.32	3.38	Average	-	-
5	2483.5	-2.69	51.31	54	63.74	28.48	44.31	3.4	Average	0	0
6	2483.5	-10.7	63.3	74	75.73	28.48	44.31	3.4	Peak	-	-

802.11g CH01 (Vertical)

		Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamp Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1	!	2390	-3.85	70.15	74	82.77	28.4	44.34	3.32	Peak	0	0
2	!	2390	-1.13	52.87	54	65.49	28.4	44.34	3.32	Average	0	0
3	X	2410		101.93		114.54	28.41	44.34	3.32	Peak	0	0
4	X	2410		92.48		105.09	28.41	44.34	3.32	Average	0	0
5		2483.5	-17.43	36.57	54	49.02	28.48	44.31	3.38	Average	0	0
6		2483.5	-21.68	52.32	74	64.77	28.48	44.31	3.38	Peak	0	0

802.11g CH11 (Vertical)

		Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamp Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1		2390	-14.13	39.87	54	52.49	28.4	44.34	3.32	Average	0	0
2		2390	-23.17	50.83	74	63.45	28.4	44.34	3.32	Peak	0	0
3	X	2463		109.82		122.3	28.47	44.31	3.36	Peak	0	0
4	X	2463		100.65		113.13	28.47	44.31	3.36	Average	0	0
5	!	2483.5	-1.63	52.37	54	64.82	28.48	44.31	3.38	Average	0	0
6	!	2483.5	-4.56	69.44	74	81.89	28.48	44.31	3.38	Peak	0	0

5.4.3.2 Antenna 2**802.11b CH01 (Vertical)**

		Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamp Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1	!	2390	-2.05	51.95	54	64.56	28.4	44.34	3.33	Average	0	0
2		2390	-10.95	63.05	74	75.66	28.4	44.34	3.33	Peak	0	0
3	X	2412		112.02		124.6	28.41	44.34	3.35	Peak	0	0
4	X	2412		103.87		116.45	28.41	44.34	3.35	Average	0	0
5		2483.5	-14.45	39.55	54	51.98	28.48	44.31	3.4	Average	0	0
6		2483.5	-20.94	53.06	74	65.49	28.48	44.31	3.4	Peak	0	0

802.11b CH11 (Vertical)

	Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1	2390	-13.75	40.25	54	52.86	28.4	44.34	3.33	Average	0	0
2	2390	-23.13	50.87	74	63.48	28.4	44.34	3.33	Peak	-	-
3	X 2462		103.9		116.37	28.47	44.32	3.38	Average	0	0
4	X 2462		112.08		124.55	28.47	44.32	3.38	Peak	0	0
5	! 2483.5	-1.6	52.4	54	64.83	28.48	44.31	3.4	Average	0	0
6	2483.5	-9.93	64.07	74	76.5	28.48	44.31	3.4	Peak	0	0

802.11g CH01 (Vertical)

	Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1	! 2390	-1.06	52.94	54	65.55	28.4	44.34	3.33	Average	0	0
2	! 2390	-3.87	70.13	74	82.74	28.4	44.34	3.33	Peak	0	0
3	X 2414		107.21		119.79	28.41	44.34	3.35	Peak	-	-
4	X 2414		97.11		109.69	28.41	44.34	3.35	Average	0	0
5	2483.5	-22.24	51.76	74	64.19	28.48	44.31	3.4	Peak	-	-
6	2483.5	-13.13	40.87	54	53.3	28.48	44.31	3.4	Average	0	0

802.11g CH11 (Vertical)

	Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1	2390	-15.08	38.92	54	51.53	28.4	44.34	3.33	Average	0	0
2	2390	-21.94	52.06	74	64.67	28.4	44.34	3.33	Peak	0	0
3	X 2462		106.34		118.81	28.47	44.32	3.38	Peak	-	-
4	X 2462		96.68		109.15	28.47	44.32	3.38	Average	0	0
5	2483.5	-6.1	67.9	74	80.33	28.48	44.31	3.4	Peak	0	0
6	! 2483.5	-1.67	52.33	54	64.76	28.48	44.31	3.4	Average	0	0

5.4.3.3 Antenna 3

802.11b CH01 (Vertical)

		Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1	!	2390	-2.6	51.4	54	64.01	28.4	44.34	3.33	Average	100	82
2		2390	-10.44	63.56	74	76.17	28.4	44.34	3.33	Peak	-	-
3	X	2412		111.38		123.96	28.41	44.34	3.35	Peak	-	-
4	X	2412		103.38		115.96	28.41	44.34	3.35	Average	100	81
5		2483.5	-22.01	51.99	74	64.42	28.48	44.31	3.4	Peak	-	-
6		2483.5	-13.88	40.12	54	52.55	28.48	44.31	3.4	Average	100	82

802.11b CH11 (Vertical)

		Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1		2390	-22.72	51.28	74	63.89	28.4	44.34	3.33	Peak	-	-
2		2390	-13.85	40.15	54	52.76	28.4	44.34	3.33	Average	0	0
3	X	2462		103.18		115.65	28.47	44.32	3.38	Average	0	0
4	X	2462		111.03		123.5	28.47	44.32	3.38	Peak	0	0
5	!	2483.5	-2.97	51.03	54	63.46	28.48	44.31	3.4	Average	100	258
6		2483.5	-10.99	63.01	74	75.44	28.48	44.31	3.4	Peak	0	0

802.11g CH01 (Vertical)

		Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1	!	2390	-1.25	52.75	54	65.36	28.4	44.34	3.33	Average	162	194
2	!	2390	-4.46	69.54	74	82.15	28.4	44.34	3.33	Peak	-	-
3	X	2414.68		98.22		110.8	28.41	44.34	3.35	Average	156	231
4	X	2414.68		107.61		120.19	28.41	44.34	3.35	Peak	-	-
5		2483.5	-24.63	49.37	74	61.8	28.48	44.31	3.4	Peak	-	-
6		2483.5	-15.55	38.45	54	50.88	28.48	44.31	3.4	Average	-	-

802.11g CH11 (Vertical)

	Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamp Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1	2390	-24.12	49.88	74	62.49	28.4	44.34	3.33	Peak	-	-
2	2390	-14.17	39.83	54	52.44	28.4	44.34	3.33	Average	0	0
3	X 2464		107.37		119.84	28.47	44.32	3.38	Peak	0	0
4	X 2464		97.94		110.41	28.47	44.32	3.38	Average	0	0
5	! 2483.5	-5.33	68.67	74	81.1	28.48	44.31	3.4	Peak	0	0
6	! 2483.5	-1.25	52.75	54	65.18	28.48	44.31	3.4	Average	110	84

5.4.3.4 Antenna 4**802.11b CH01 (Vertical)**

	Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamp Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1	! 2390	-0.19	73.81	74	86.42	28.4	44.34	3.33	Peak	-	-
2	! 2390	-3.13	50.87	54	63.48	28.4	44.34	3.33	Average	100	0
3	X 2414		111.87		124.45	28.41	44.34	3.35	Peak	-	-
4	X 2414		103.27		115.85	28.41	44.34	3.35	Average	100	0
5	2494	-18.94	55.06	74	67.47	28.5	44.3	3.39	Peak	-	-
6	2494	-13.5	40.5	54	52.91	28.5	44.3	3.39	Average	100	0

802.11b CH11 (Vertical)

	Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1	2364	-20.96	53.04	74	65.73	28.36	44.36	3.31	Peak	-	-
2	2364	-14.93	39.07	54	51.76	28.36	44.36	3.31	Average	100	20
3	X 2462		107.74		120.21	28.47	44.32	3.38	Peak	-	-
4	X 2462		99.16		111.63	28.47	44.32	3.38	Average	100	20
5	2483.5	-11.28	62.72	74	75.15	28.48	44.31	3.4	Peak	-	-
6	! 2483.5	-3.77	50.23	54	62.66	28.48	44.31	3.4	Average	100	20

802.11g CH01 (Vertical)

	Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1	! 2390	-5.29	68.71	74	81.32	28.4	44.34	3.33	Peak	0	0
2	! 2390	-2.43	51.57	54	64.18	28.4	44.34	3.33	Average	100	331
3	X 2414.24		107.82		120.4	28.41	44.34	3.35	Peak	0	0
4	X 2414.24		98.26		110.84	28.41	44.34	3.35	Average	0	0
5	2483.5	-24.19	49.81	74	62.24	28.48	44.31	3.4	Peak	-	-
6	2483.5	-15.52	38.48	54	50.91	28.48	44.31	3.4	Average	0	0

802.11g CH11 (Vertical)

	Frequency (MHz)	Over Limit (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Cable Loss (dB)	Remark	Ant Pos (cm)	Table Pos (deg)
1	2390	-23.41	50.59	74	63.2	28.4	44.34	3.33	Peak	-	-
2	2390	-15.13	38.87	54	51.48	28.4	44.34	3.33	Average	0	0
3	X 2468.49		97.73		110.2	28.47	44.32	3.38	Average	0	0
4	X 2468.49		106.77		119.24	28.47	44.32	3.38	Peak	0	0
5	! 2483.5	-0.89	53.11	54	65.54	28.48	44.31	3.4	Average	0	0
6	2483.5	-7.07	66.93	74	79.36	28.48	44.31	3.4	Peak	0	0