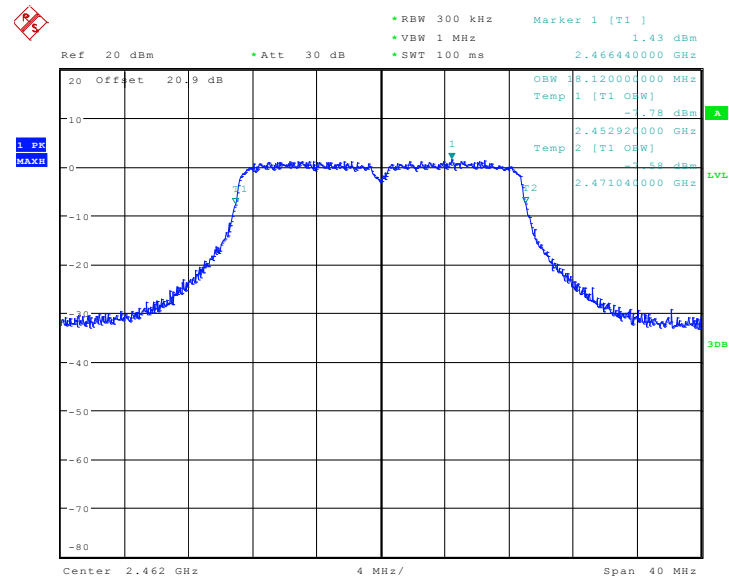


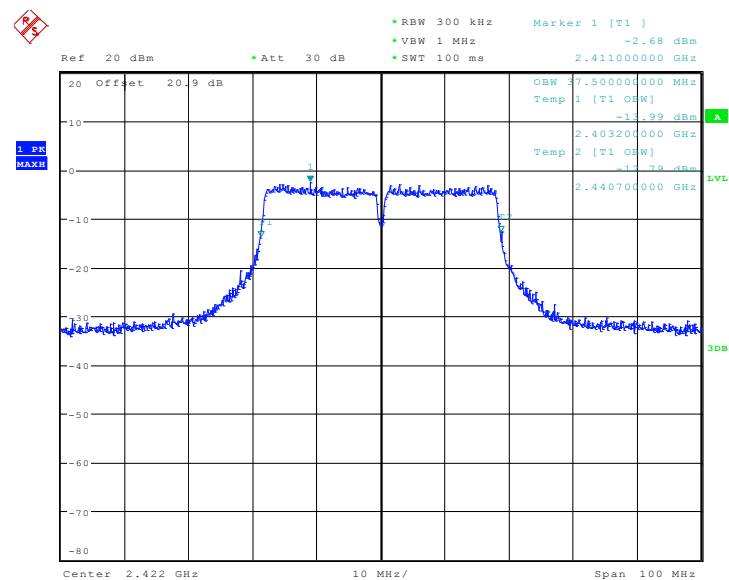


99% Bandwidth Plot on 802.11n (HT-20) Channel 11 - Chain 2



Date: 5.NOV.2010 19:15:14

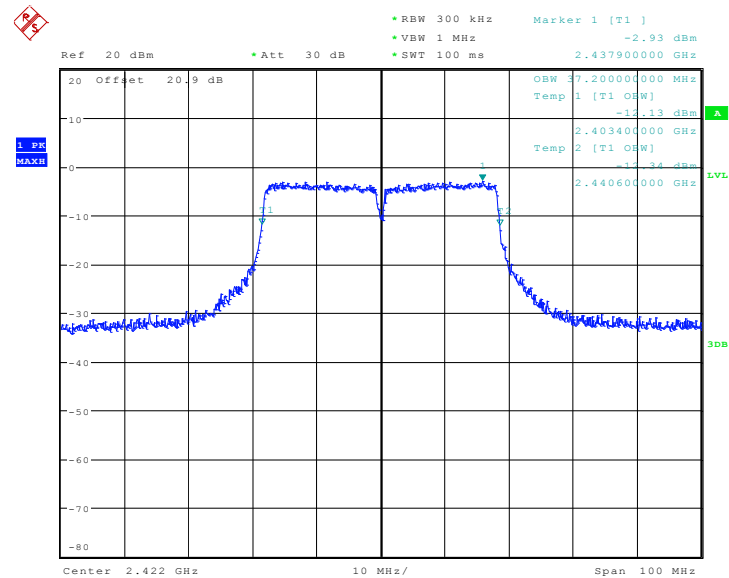
99% Bandwidth Plot on 802.11n (HT-40) Channel 03 - Chain 0



Date: 5.NOV.2010 19:03:03

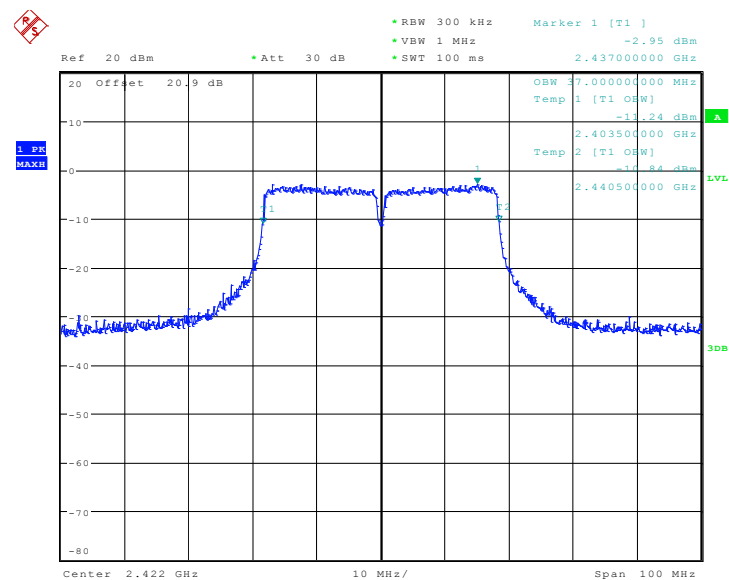


99% Bandwidth Plot on 802.11n (HT-40) Channel 03 - Chain 1



Date: 5.NOV.2010 19:05:50

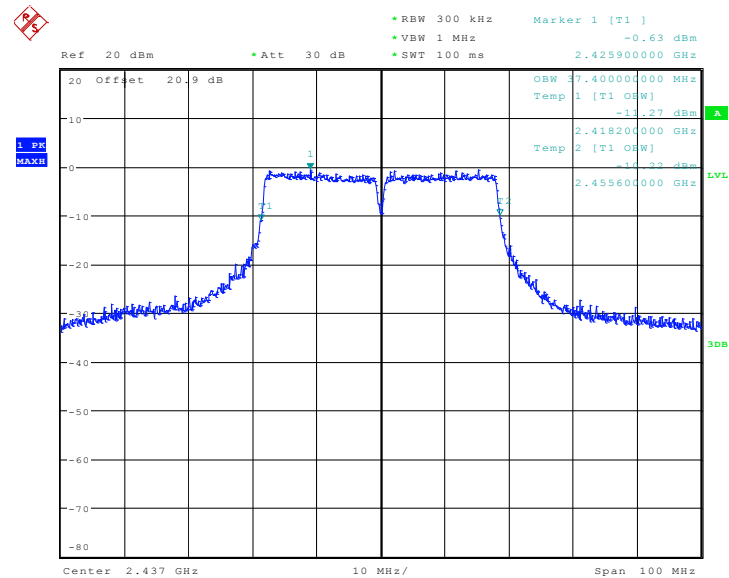
99% Bandwidth Plot on 802.11n (HT-40) Channel 03 - Chain 2



Date: 5.NOV.2010 19:16:51

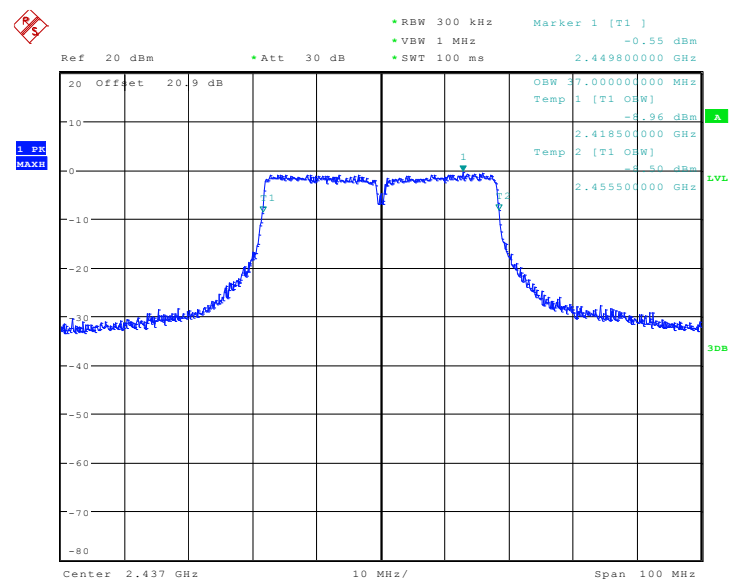


99% Bandwidth Plot on 802.11n (HT-40) Channel 06 - Chain 0



Date: 5.NOV.2010 19:03:36

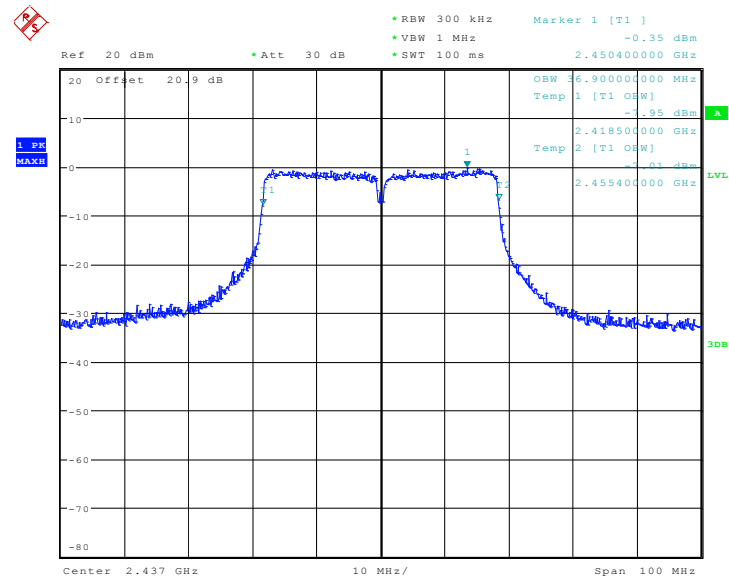
99% Bandwidth Plot on 802.11n (HT-40) Channel 06 - Chain 1



Date: 5.NOV.2010 19:05:23

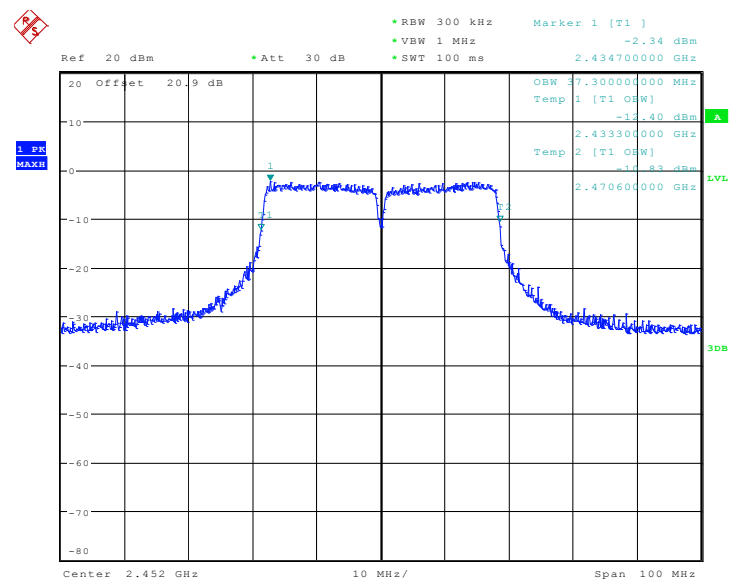


99% Bandwidth Plot on 802.11n (HT-40) Channel 06 - Chain 2



Date: 5.NOV.2010 19:16:27

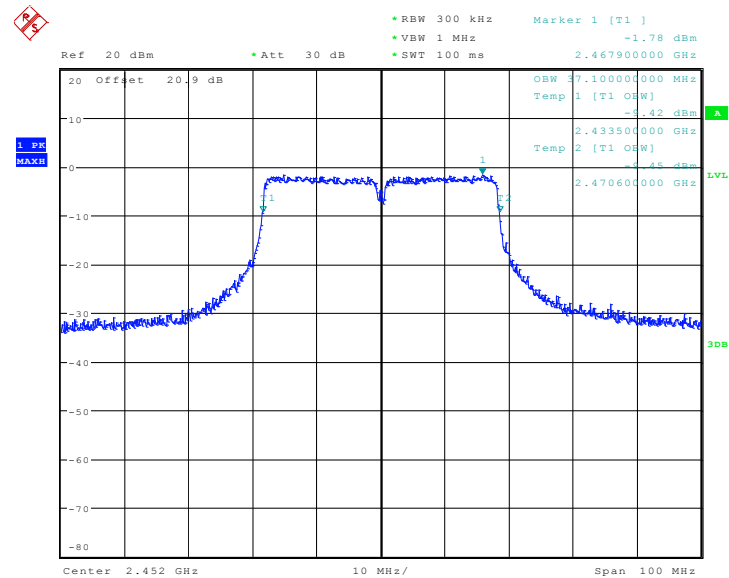
99% Bandwidth Plot on 802.11n (HT-40) Channel 09 - Chain 0



Date: 5.NOV.2010 19:04:18

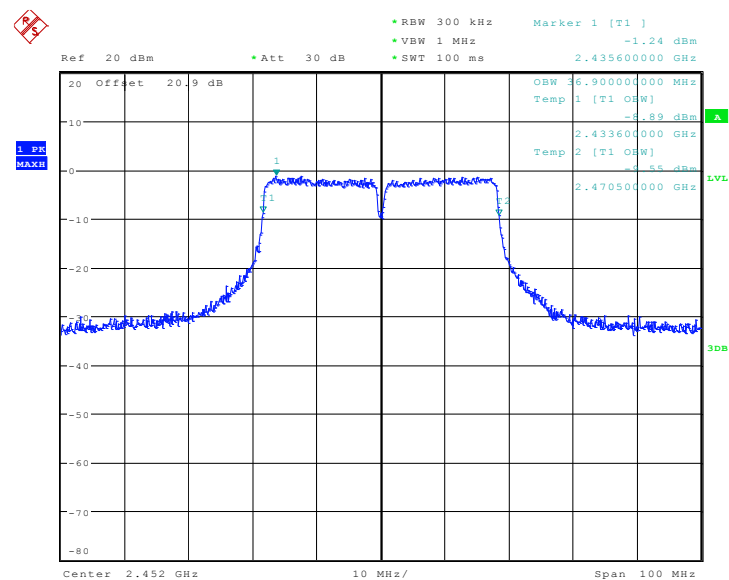


99% Bandwidth Plot on 802.11n (HT-40) Channel 09 – Chain 1



Date: 5.NOV.2010 19:05:00

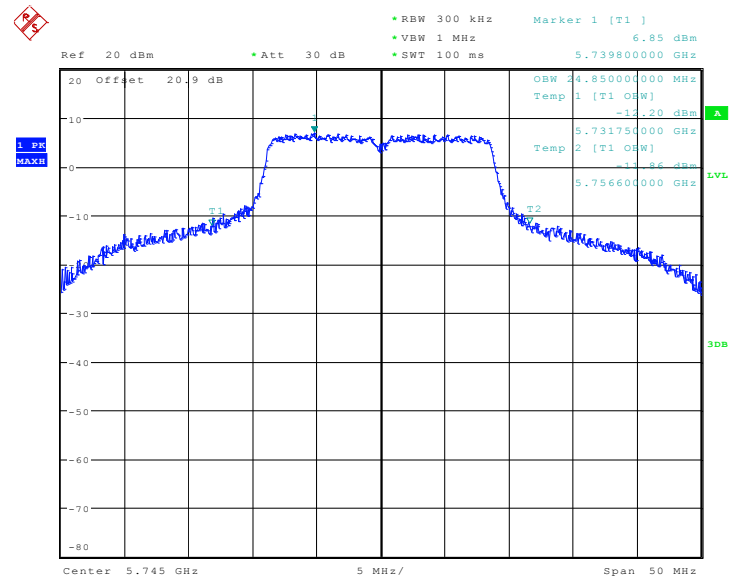
99% Bandwidth Plot on 802.11n (HT-40) Channel 09 - Chain 2



Date: 5.NOV.2010 19:15:47

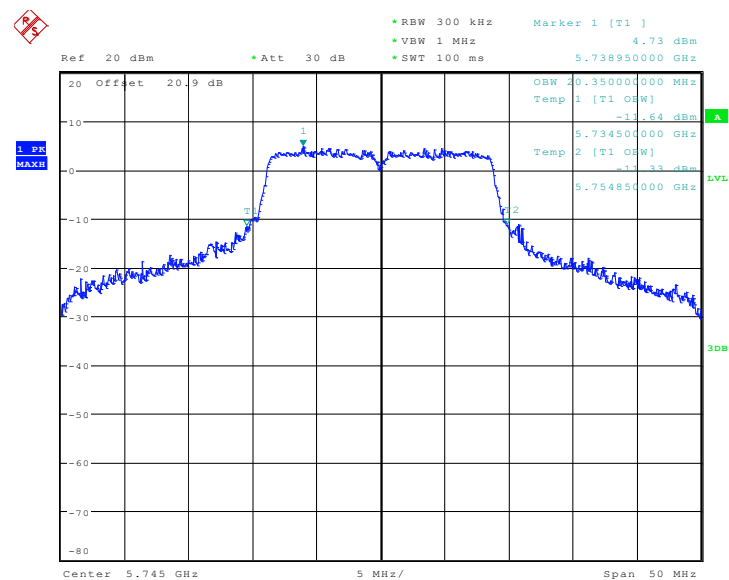


99% Bandwidth Plot on 802.11n (HT-20) Channel 149 - Chain 0



Date: 5.NOV.2010 19:36:37

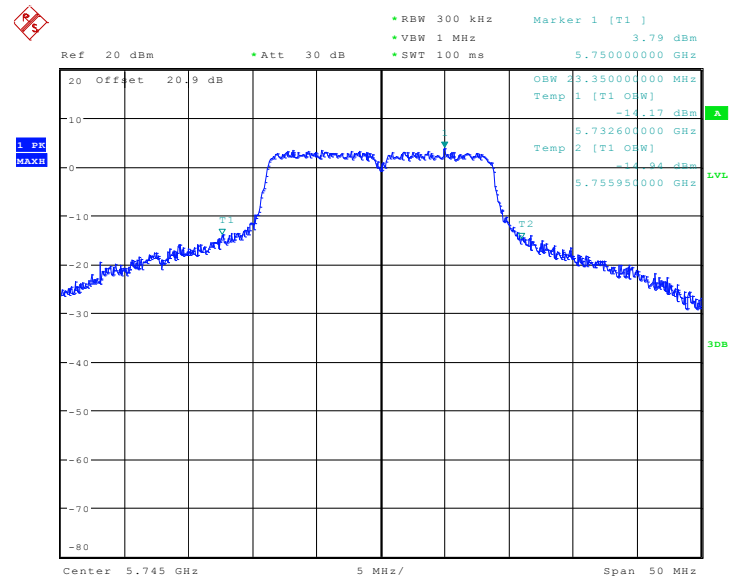
99% Bandwidth Plot on 802.11n (HT-20) Channel 149 - Chain 1



Date: 5.NOV.2010 19:48:37

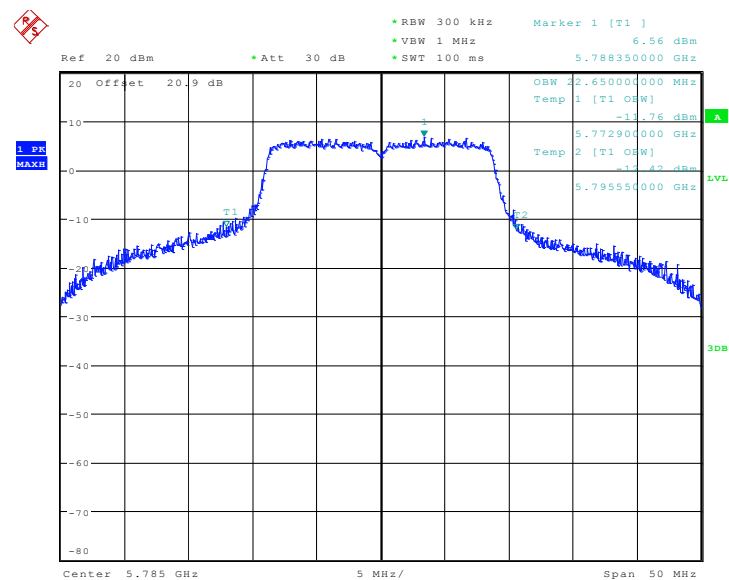


99% Bandwidth Plot on 802.11n (HT-20) Channel 149 - Chain 2



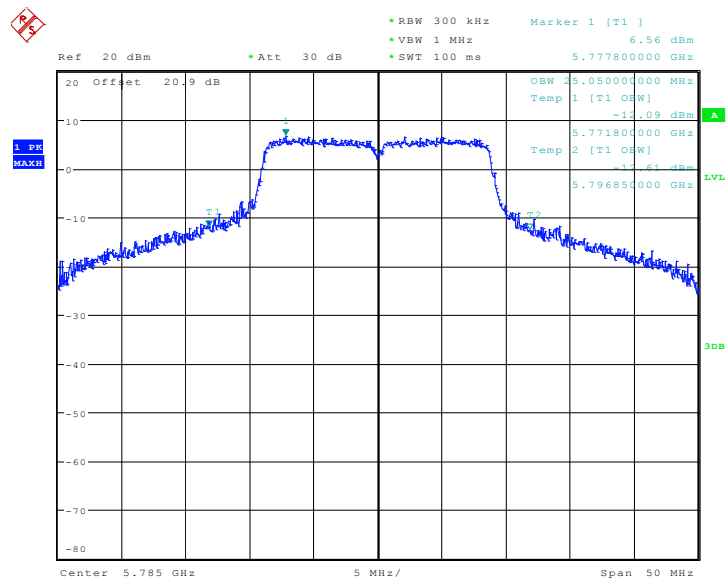
Date: 5.NOV.2010 20:11:51

99% Bandwidth Plot on 802.11n (HT-20) Channel 157 - Chain 0



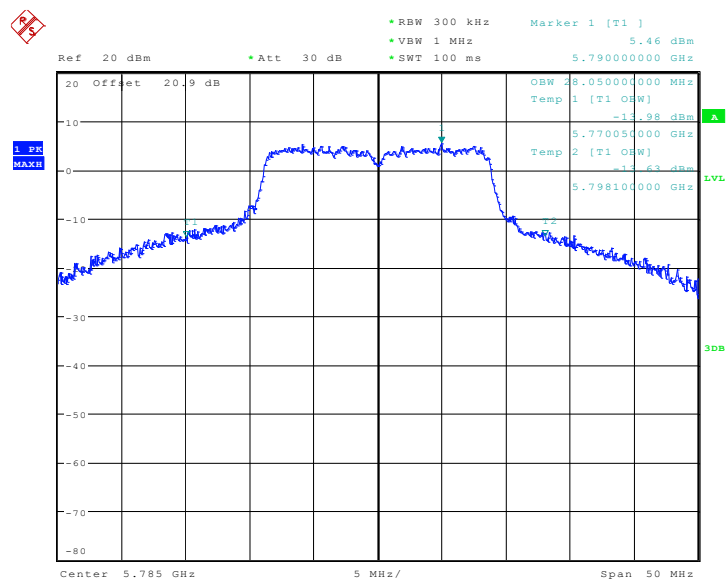
Date: 5.NOV.2010 19:34:09

99% Bandwidth Plot on 802.11n (HT-20) Channel 157 - Chain 1



Date: 5.NOV.2010 19:50:15

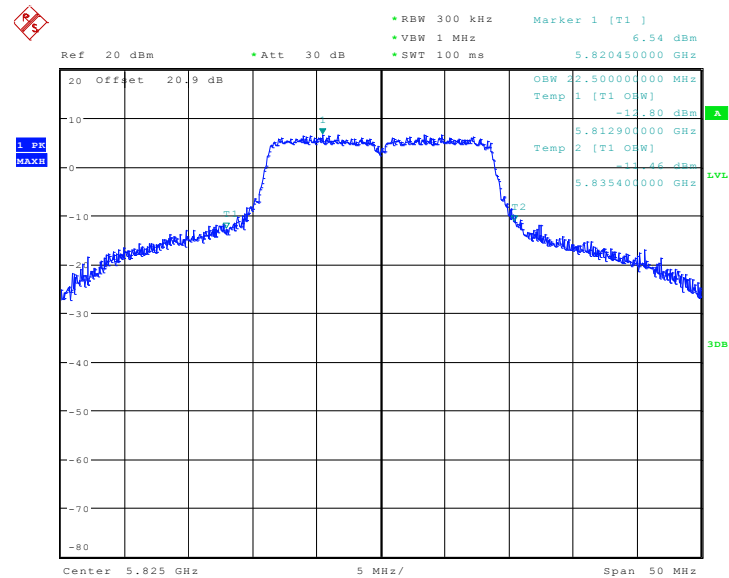
99% Bandwidth Plot on 802.11n (HT-20) Channel 157 - Chain 2



Date: 5.NOV.2010 20:08:50

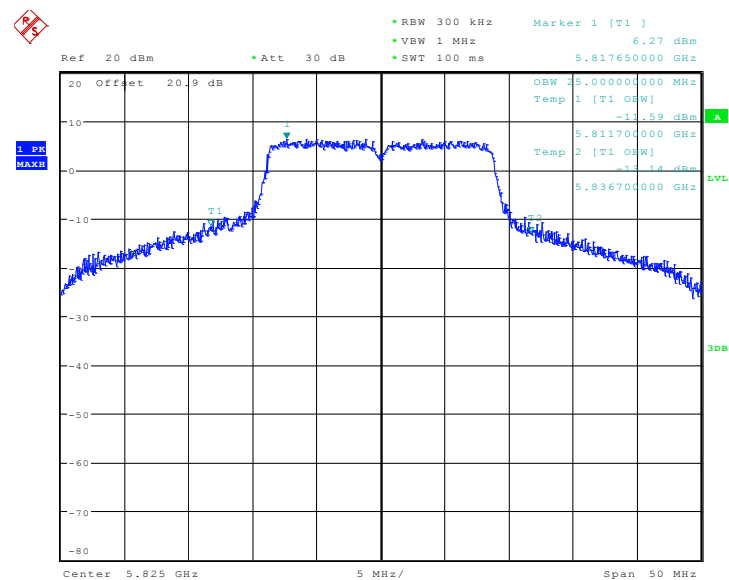


99% Bandwidth Plot on 802.11n (HT-20) Channel 165 - Chain 0



Date: 5.NOV.2010 19:32:00

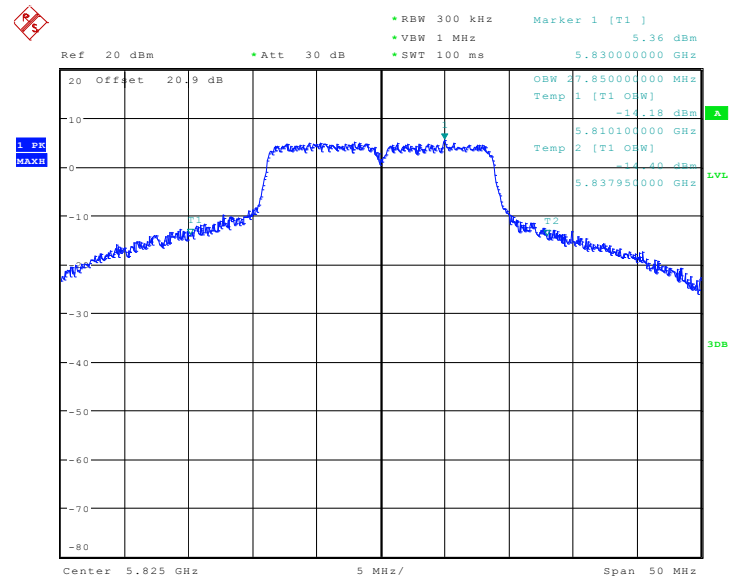
99% Bandwidth Plot on 802.11n (HT-20) Channel 165 - Chain 1



Date: 5.NOV.2010 19:52:25

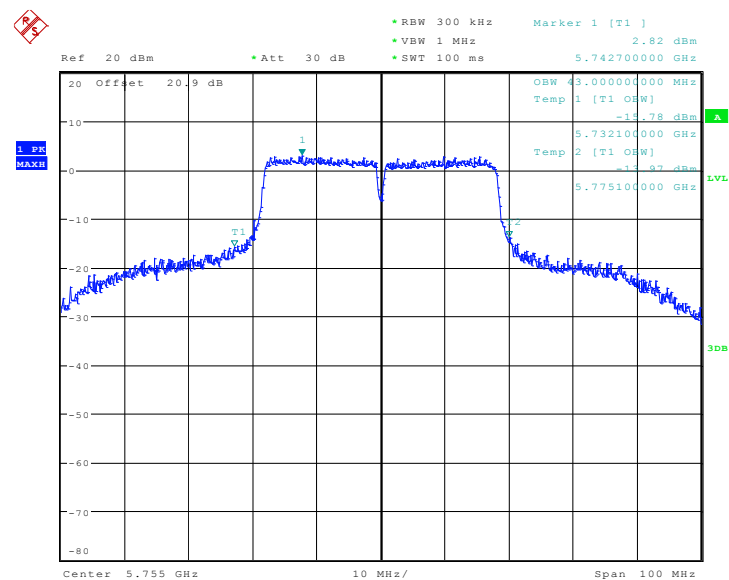


99% Bandwidth Plot on 802.11n (HT-20) Channel 165 - Chain 2



Date: 5.NOV.2010 20:07:16

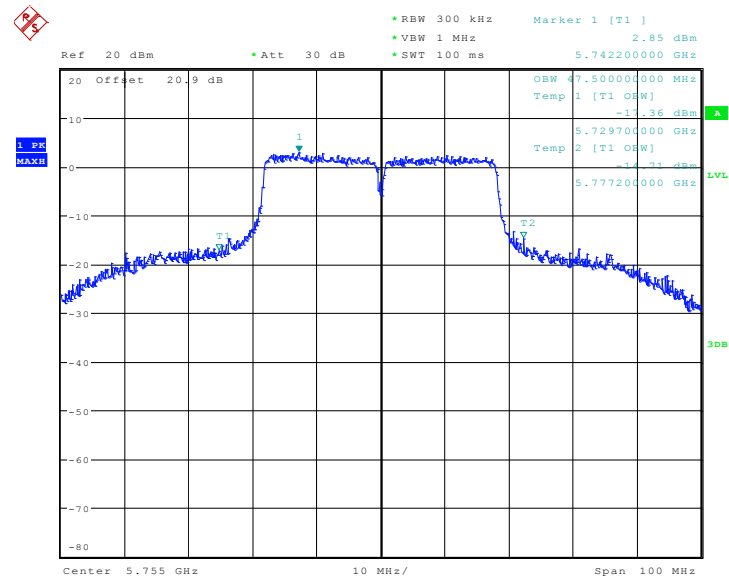
99% Bandwidth Plot on 802.11n (HT-40) Channel 151 - Chain 0



Date: 5.NOV.2010 19:39:00

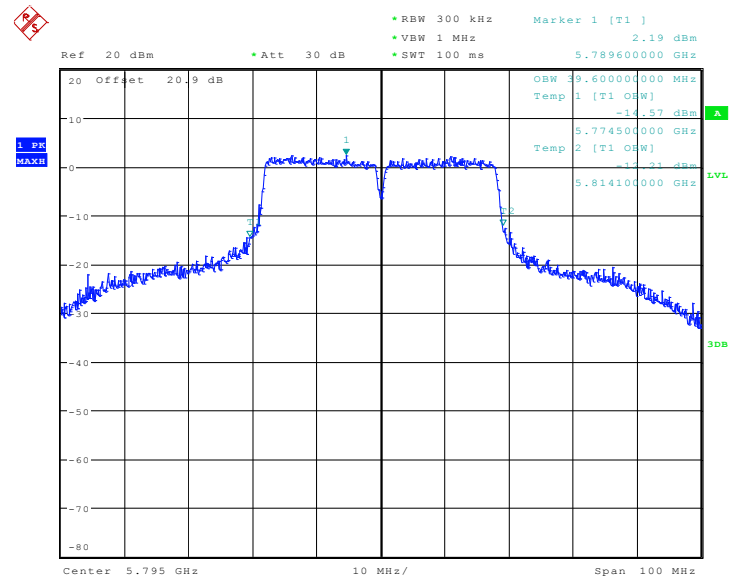


99% Bandwidth Plot on 802.11n (HT-40) Channel 151 - Chain 1



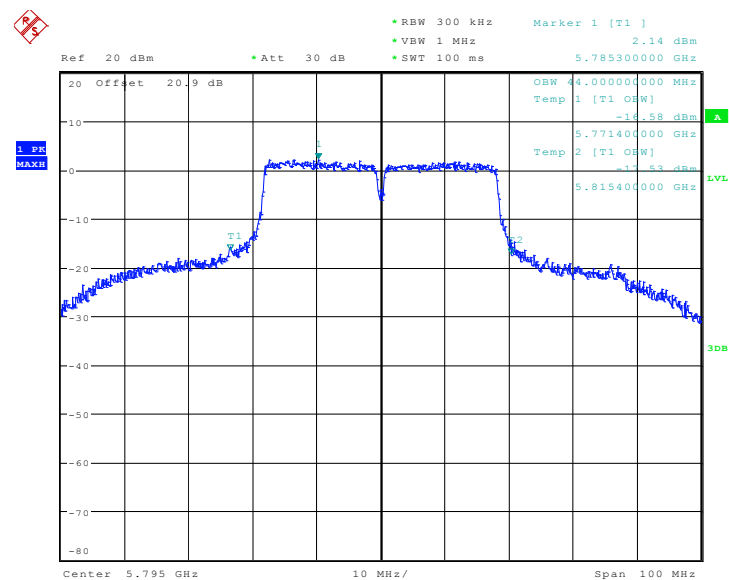


99% Bandwidth Plot on 802.11n (HT-40) Channel 159 - Chain 0



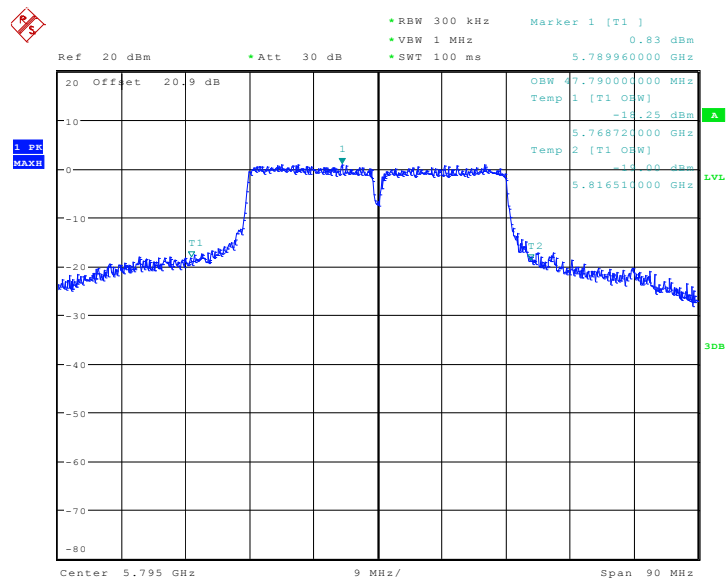
Date: 5.NOV.2010 19:41:39

99% Bandwidth Plot on 802.11n (HT-40) Channel 159 - Chain 1



Date: 5.NOV.2010 19:44:15

99% Bandwidth Plot on 802.11n (HT-40) Channel 159 - Chain 2

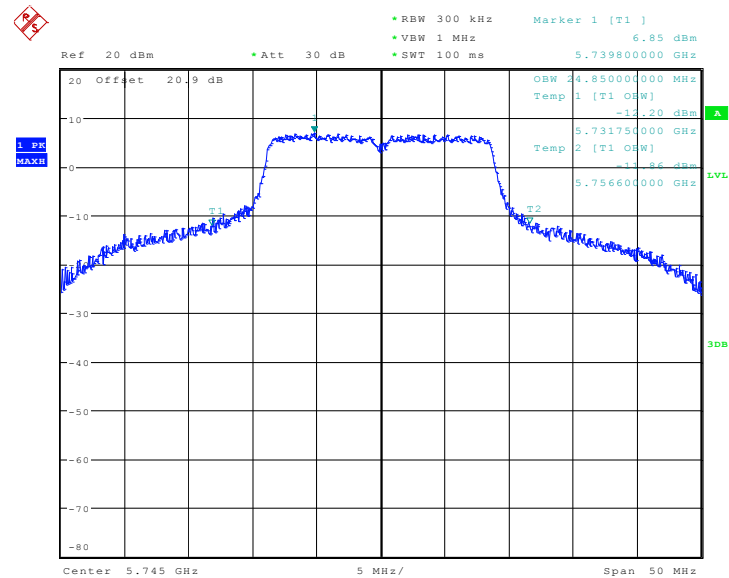


Date: 5.NOV.2010 20:15:21



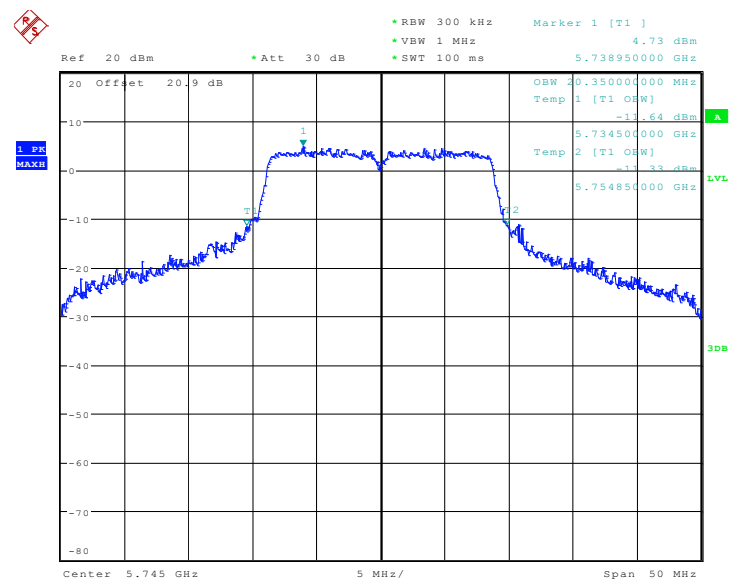
<Beam-Forming Off: 2x3>

99% Bandwidth Plot on 802.11n (HT-20) Channel 149 - Chain 0



Date: 5.NOV.2010 19:36:37

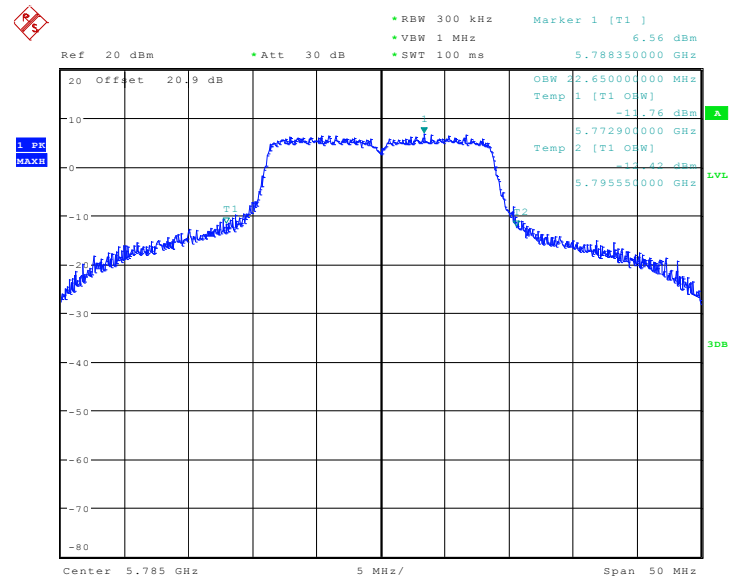
99% Bandwidth Plot on 802.11n (HT-20) Channel 149 - Chain 1



Date: 5.NOV.2010 19:48:37

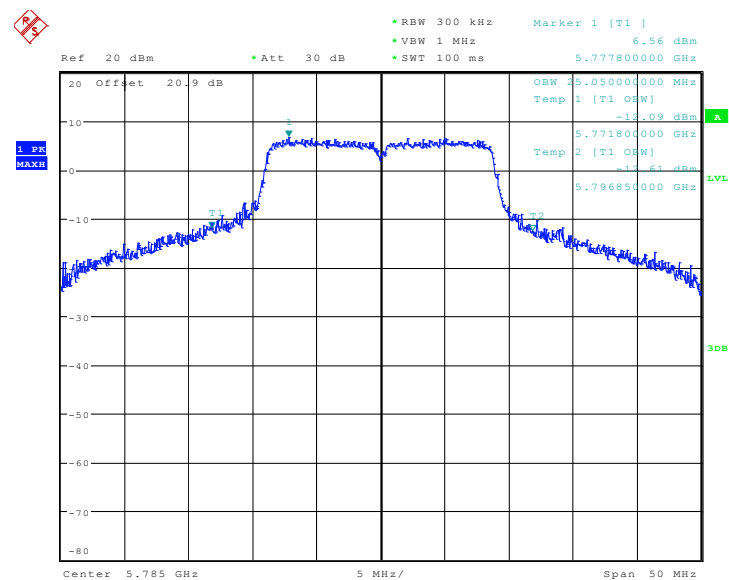


99% Bandwidth Plot on 802.11n (HT-20) Channel 157 - Chain 0



Date: 5.NOV.2010 19:34:09

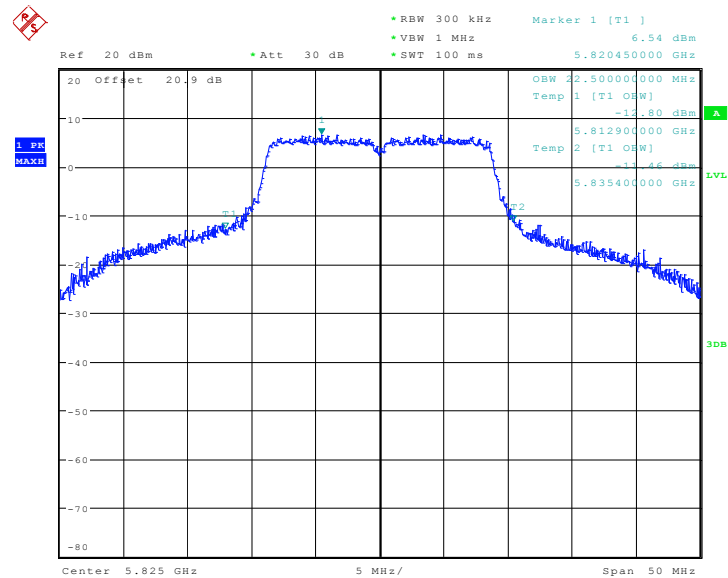
99% Bandwidth Plot on 802.11n (HT-20) Channel 157 - Chain 1



Date: 5.NOV.2010 19:50:15

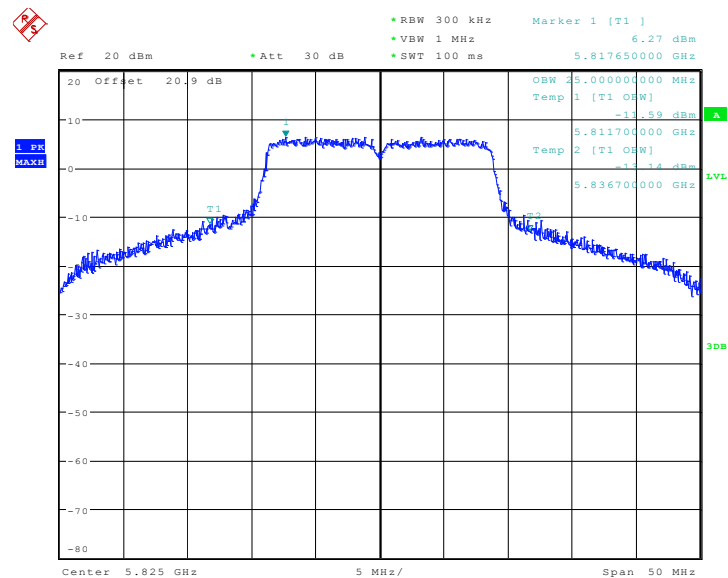


99% Bandwidth Plot on 802.11n (HT-20) Channel 165 - Chain 0



Date: 5.NOV.2010 19:32:00

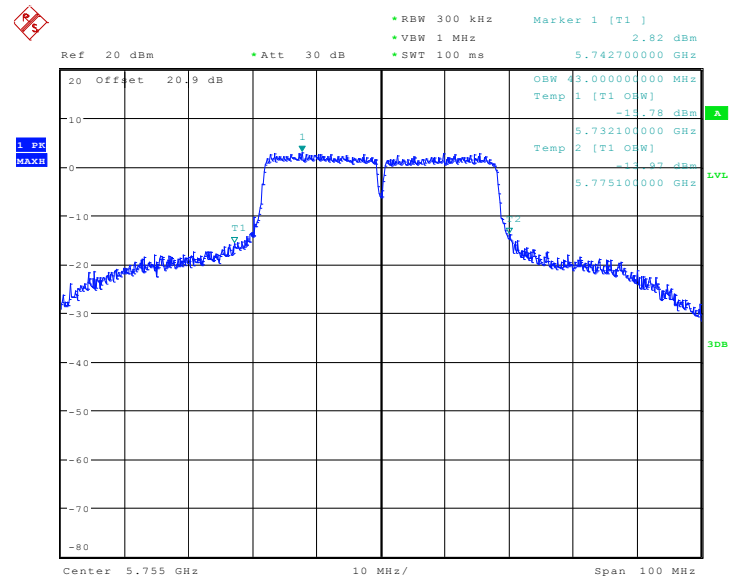
99% Bandwidth Plot on 802.11n (HT-20) Channel 165 - Chain 1



Date: 5.NOV.2010 19:52:25

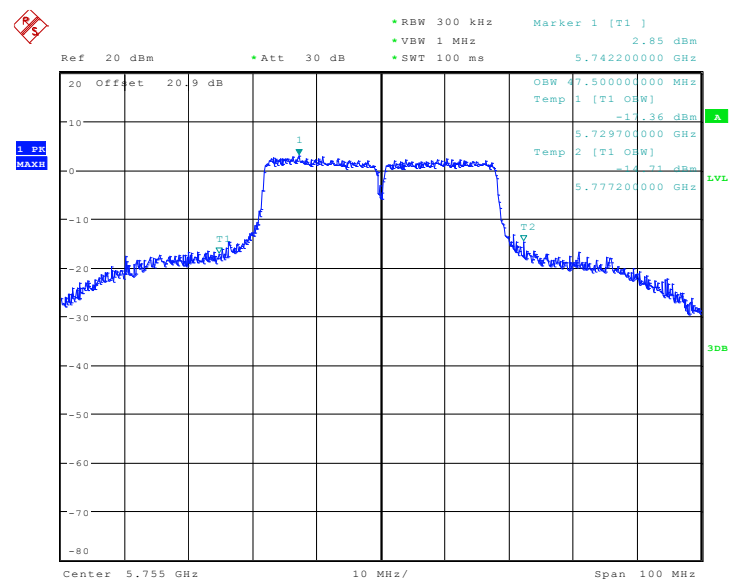


99% Bandwidth Plot on 802.11n (HT-40) Channel 151 - Chain 0



Date: 5.NOV.2010 19:39:00

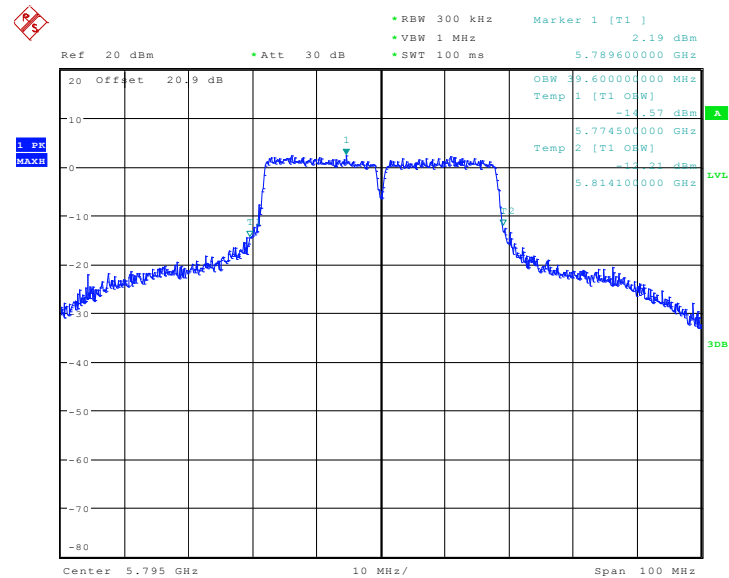
99% Bandwidth Plot on 802.11n (HT-40) Channel 151 - Chain 1



Date: 5.NOV.2010 19:46:21

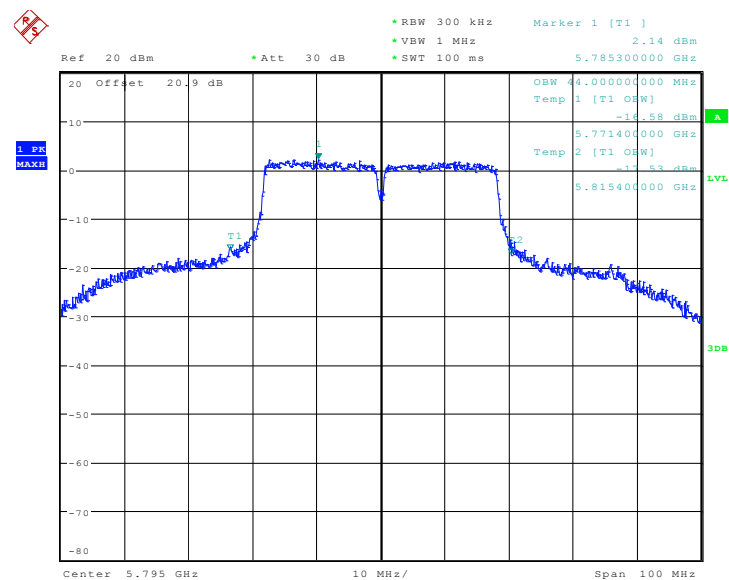


99% Bandwidth Plot on 802.11n (HT-40) Channel 159 - Chain 0



Date: 5.NOV.2010 19:41:39

99% Bandwidth Plot on 802.11n (HT-40) Channel 159 - Chain 1



Date: 5.NOV.2010 19:44:15

3.2 Power Spectral Density Measurement

3.2.1 Limit of Power Spectral Density

The peak power spectral density shall not be greater than 8dBm in any 3kHz band at any time interval of continuous transmission.

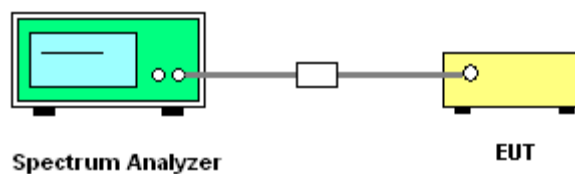
3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

3.2.3 Test Procedures

1. The test follows FCC KDB Publication No. 558074 (Measurement Guidelines of DTS).
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Take the measured data from spectrum analyzer.

3.2.4 Test Setup



3.2.5 Test Result of Power Spectral Density

<Normal Mode: 3x3>

Test Mode :	802.11b L/M/H channel	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11b Measured PSD (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
01	2412	-7.45	-7.27	-7.39	-2.60	8	Pass
06	2437	-7.41	-7.29	-6.70	-2.35	8	Pass
11	2462	-8.05	-7.96	-7.26	-2.97	8	Pass

Test Mode :	802.11g L/M/H channels	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11g Measured PSD (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
01	2412	-14.41	-8.48	-13	-6.42	8	Pass
06	2437	-10.20	-10.04	-9.25	-5.04	8	Pass
11	2462	-13.09	-9.22	-11.66	-6.25	8	Pass

Test Mode :	802.11 a L/M/H channel	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11a Measured PSD (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
149	5745	-9.22	-9.59	-11.54	-5.23	8	Pass
157	5785	-11.06	-10.77	-12.35	-6.57	8	Pass
165	5825	-9.63	-9.29	-11.00	-5.14	8	Pass



<Normal Mode: 2x3>

Test Mode :	802.11 a L/M/H channel	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11a Measured PSD (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Summation		
149	5745	-9.22	-9.59	-6.39	8	Pass
157	5785	-11.06	-10.77	-7.90	8	Pass
165	5825	-9.63	-9.29	-6.45	8	Pass

**<Beam-Forming On: 3x3>**

Test Mode :	802.11n (HT-20) L/M/H channel at 2.4G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 3Tx) Measured PSD (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
01	2412	-14.69	-8.29	-13.57	-6.46	8	Pass
06	2437	-11.37	-10.41	-10.00	-5.78	8	Pass
11	2462	-15.61	-8.79	-14.61	-7.12	8	Pass

Test Mode :	802.11n (HT-40) L/M/H channel at 2.4G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 3Tx) Measured PSD (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
03	2422	-19.02	-18.89	-18.80	-14.13	8	Pass
06	2437	-15.43	-15.34	-14.99	-10.48	8	Pass
09	2452	-17.23	-16.40	-15.95	-11.72	8	Pass



Test Mode :	802.11n (HT-20) L/M/H channel at 5.8G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 3Tx) Measured PSD (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
149	5745	-9.43	-11.49	-12.68	-6.22	8	Pass
157	5785	-9.73	-9.86	-11.62	-5.55	8	Pass
165	5825	-10.03	-9.67	-11.52	-5.56	8	Pass

Test Mode :	802.11n (HT-40) L/M/H channel at 5.8G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 3Tx) Measured PSD (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
151	5755	-13.57	-14.14	-15.49	-9.56	8	Pass
159	5795	-13.23	-15.47	-16.71	-10.12	8	Pass

**<Beam-Forming On: 2x3>**

Test Mode :	802.11n (HT-20) L/M/H channel at 5.8G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 2Tx) Measured PSD (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Summation		
149	5745	-9.43	-11.49	-7.33	8	Pass
157	5785	-9.73	-9.86	-6.78	8	Pass
165	5825	-10.03	-9.67	-6.84	8	Pass

Test Mode :	802.11n (HT-40) L/M/H channel at 5.8G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 2Tx) Measured PSD (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Summation		
151	5755	-13.57	-14.14	-10.84	8	Pass
159	5795	-13.23	-15.47	-11.20	8	Pass

**<Beam-Forming Off: 3x3>**

Test Mode :	802.11n (HT-20) L/M/H channel at 2.4G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 3Tx) Measured PSD (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
01	2412	-14.69	-8.29	-13.57	-6.46	8.00	Pass
06	2437	-11.37	-10.41	-10.00	-5.78	8.00	Pass
11	2462	-15.61	-8.79	-14.61	-7.12	8.00	Pass

Test Mode :	802.11n (HT-40) L/M/H channel at 2.4G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 3Tx) Measured PSD (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
03	2422	-19.02	-18.89	-18.80	-14.13	8.00	Pass
06	2437	-15.43	-15.34	-14.99	-10.48	8.00	Pass
09	2452	-17.23	-16.40	-15.95	-11.72	8.00	Pass



Test Mode :	802.11n (HT-20) L/M/H channel at 5.8G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 3Tx) Measured PSD (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
149	5745	-9.43	-11.49	-12.68	-6.22	8.00	Pass
157	5785	-9.73	-9.86	-11.62	-5.55	8.00	Pass
165	5825	-10.03	-9.67	-11.52	-5.56	8.00	Pass

Test Mode :	802.11n (HT-40) L/M/H channel at 5.8G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 3Tx) Measured PSD (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
151	5755	-13.57	-14.14	-15.49	-9.56	8.00	Pass
159	5795	-13.23	-15.47	-16.71	-10.12	8.00	Pass

**<Beam-Forming Off: 2x3>**

Test Mode :	802.11n (HT-20) L/M/H channel at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 2Tx) Measured PSD (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Summation		
149	5745	-9.43	-11.49	-7.33	8.00	Pass
157	5785	-9.73	-9.86	-6.78	8.00	Pass
165	5825	-10.03	-9.67	-6.84	8.00	Pass

Test Mode :	802.11n (HT-40) L/M/H channel at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

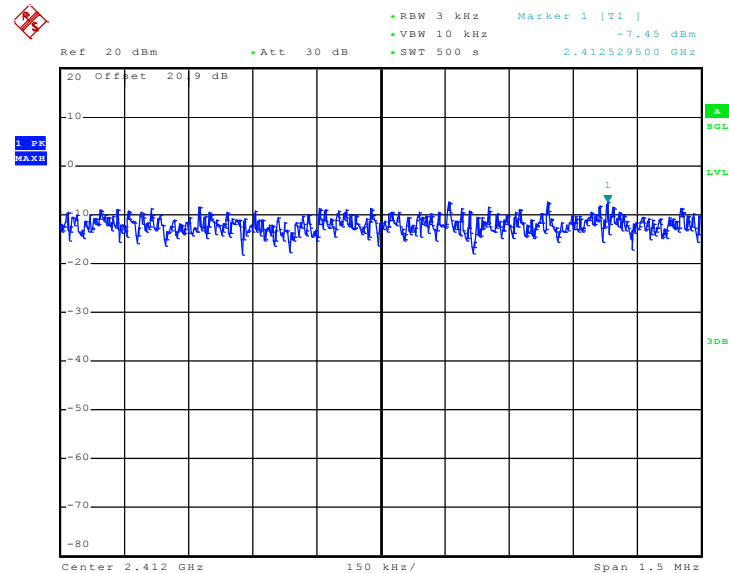
Channel	Frequency (MHz)	802.11n (HT-40, 2Tx) Measured PSD (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Summation		
151	5755	-13.57	-14.14	-10.84	8.00	Pass
159	5795	-13.23	-15.47	-11.20	8.00	Pass



3.2.6 Test Result of Power Spectral Density Plots

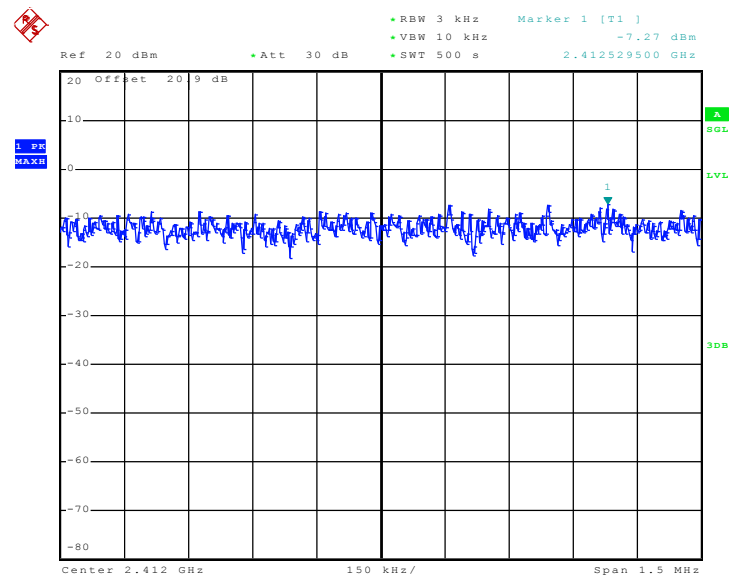
<Normal Mode: 3x3>

PSD Plot on 802.11b Channel 01 - Chain 0



Date: 27.OCT.2010 09:11:13

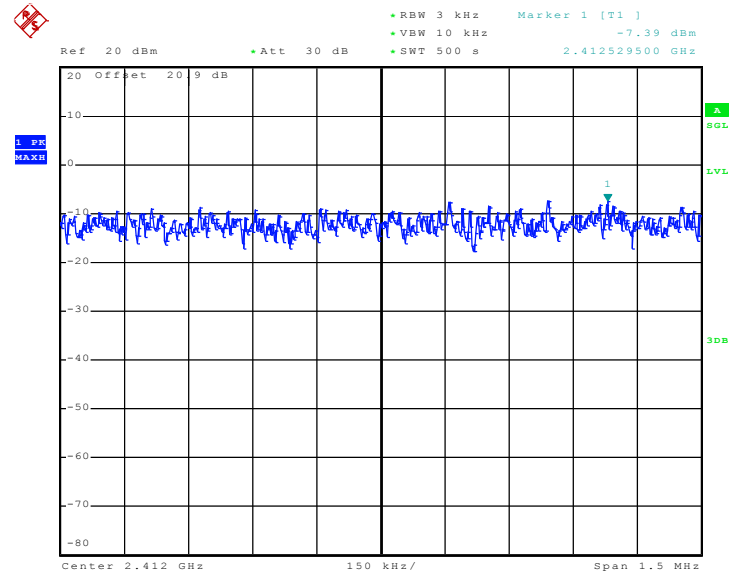
PSD Plot on 802.11b Channel 01 - Chain 1



Date: 26.OCT.2010 10:22:06



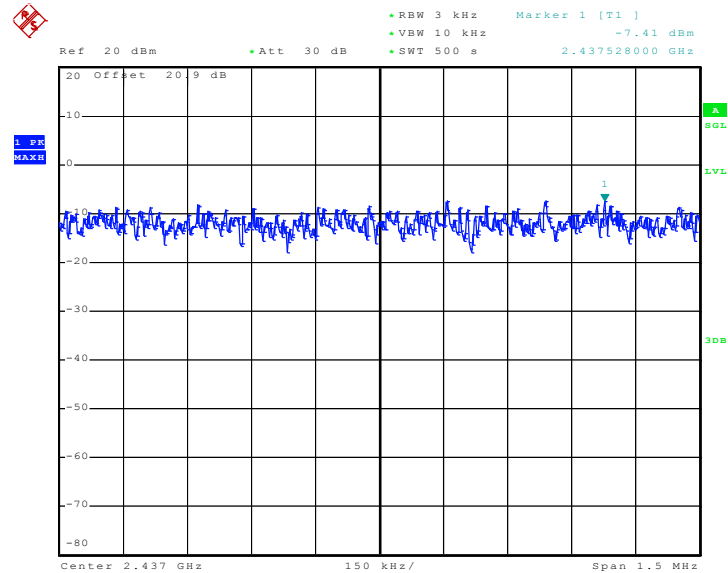
PSD Plot on 802.11b Channel 01 - Chain 2



Date: 26.OCT.2010 10:38:30

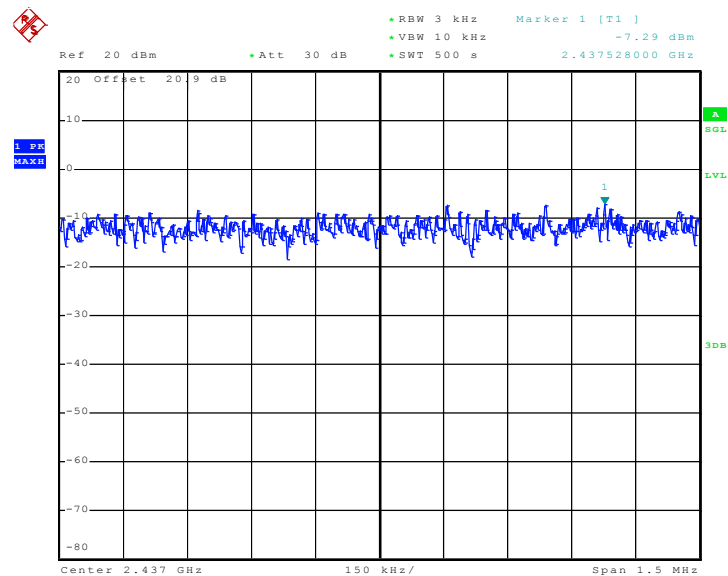


PSD Plot on 802.11b Channel 06 - Chain 0



Date: 9.NOV.2010 18:59:51

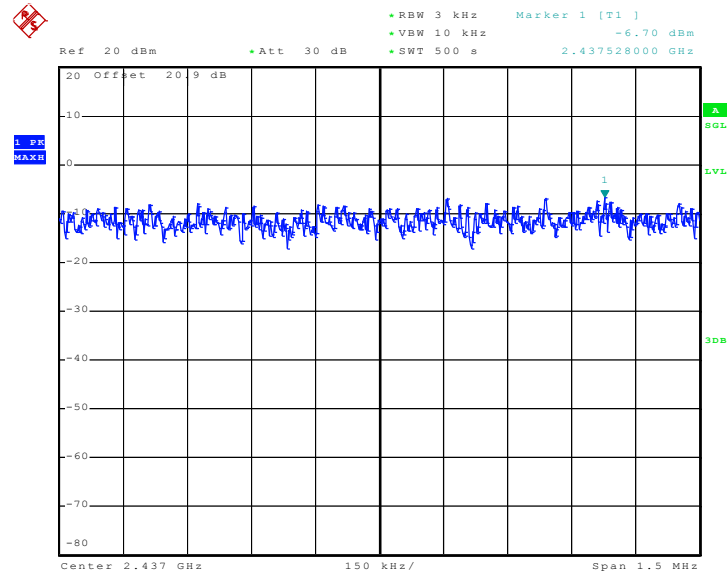
PSD Plot on 802.11b Channel 06 - Chain 1



Date: 9.NOV.2010 19:41:07

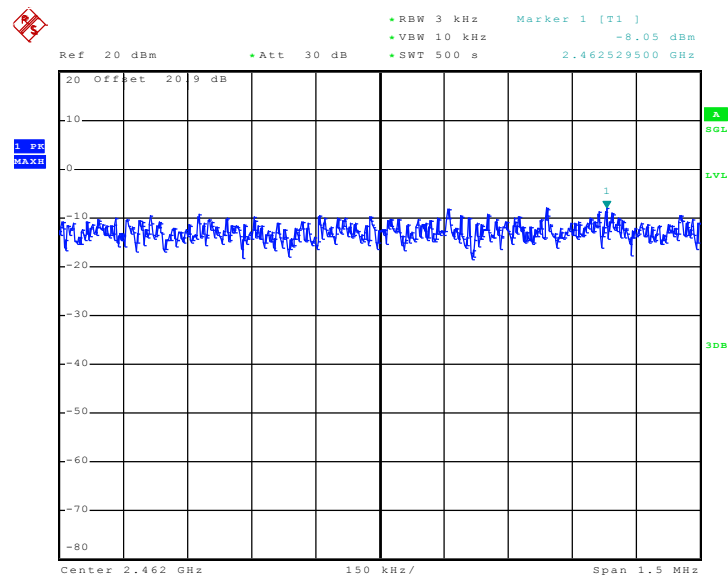


PSD Plot on 802.11b Channel 06 - Chain 2



Date: 9.NOV.2010 20:21:04

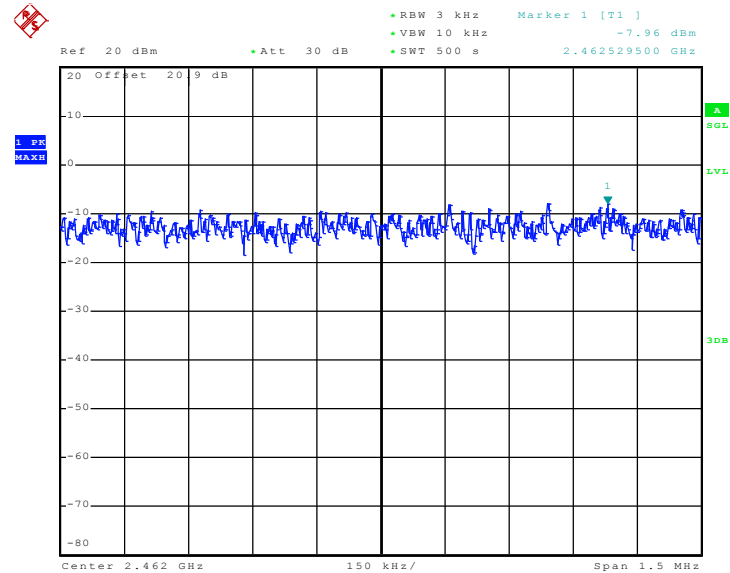
PSD Plot on 802.11b Channel 11 - Chain 0



Date: 27.OCT.2010 09:30:34

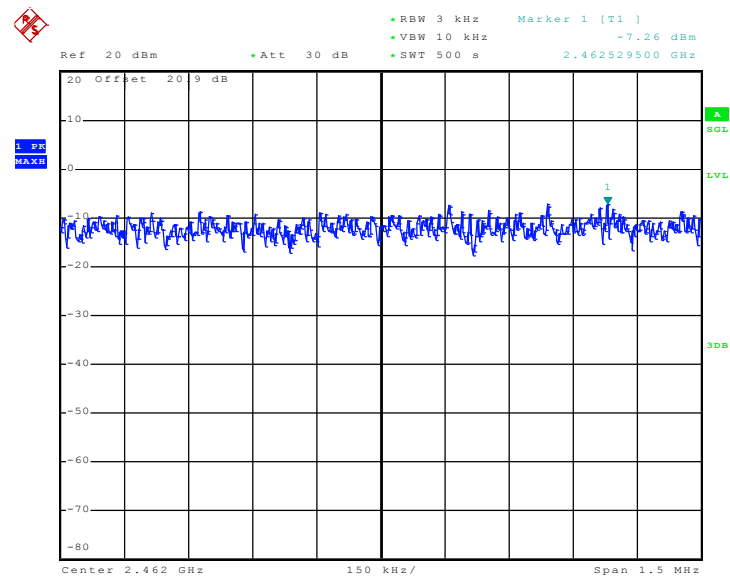


PSD Plot on 802.11b Channel 11 - Chain 1



Date: 26.OCT.2010 11:06:37

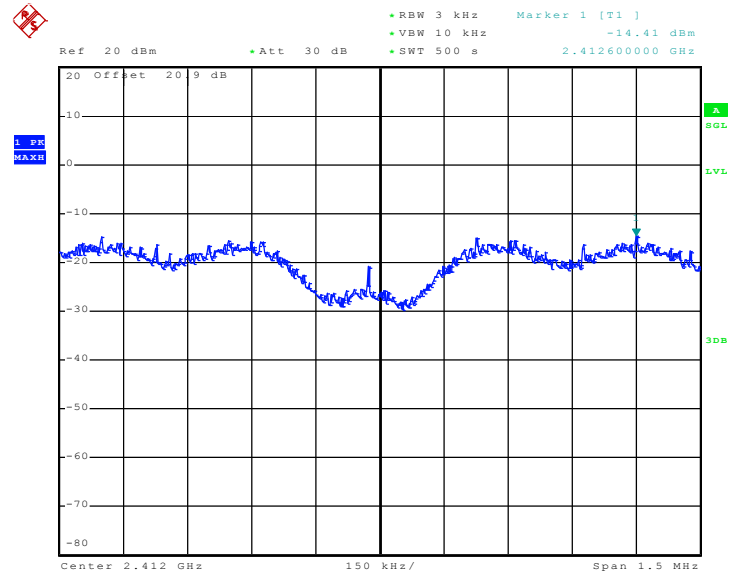
PSD Plot on 802.11b Channel 11 - Chain 2



Date: 26.OCT.2010 11:15:40

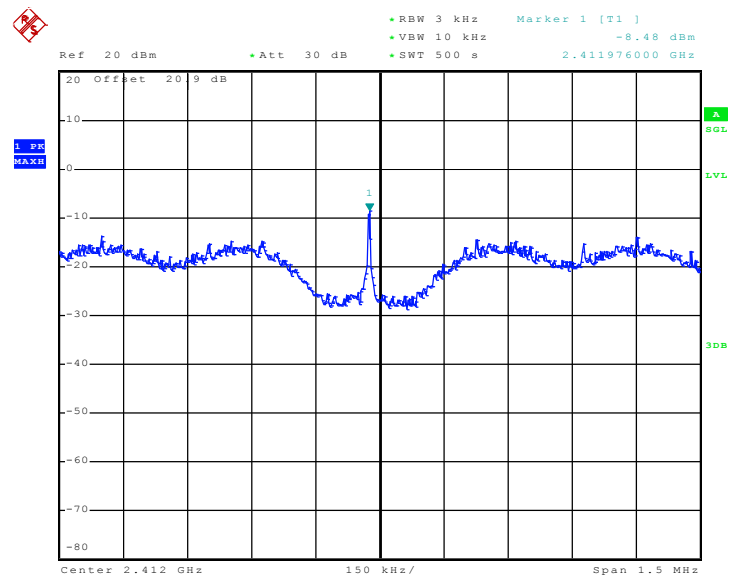


PSD Plot on 802.11g Channel 01 - Chain 0



Date: 27.OCT.2010 09:45:34

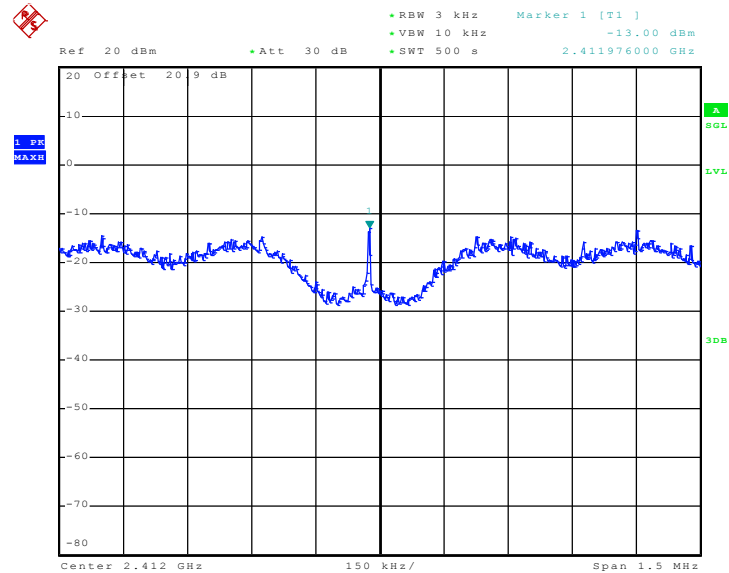
PSD Plot on 802.11g Channel 01 - Chain 1



Date: 26.OCT.2010 11:34:26

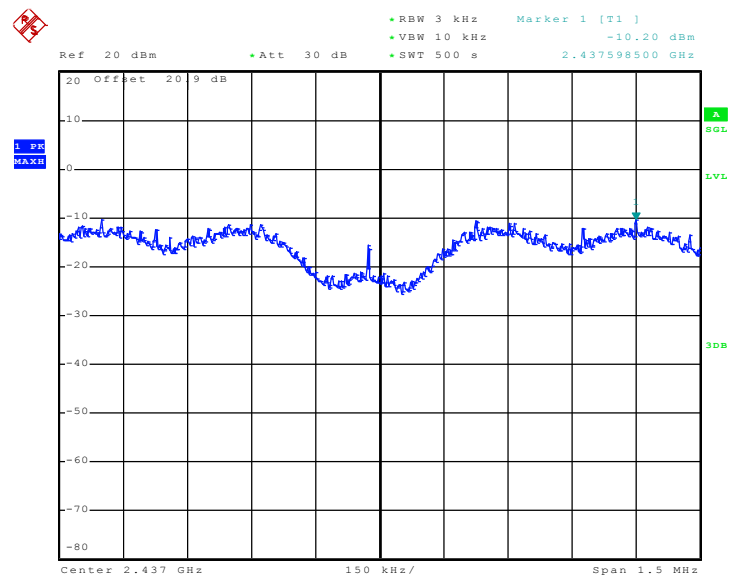


PSD Plot on 802.11g Channel 01 - Chain 2



Date: 26.OCT.2010 11:25:18

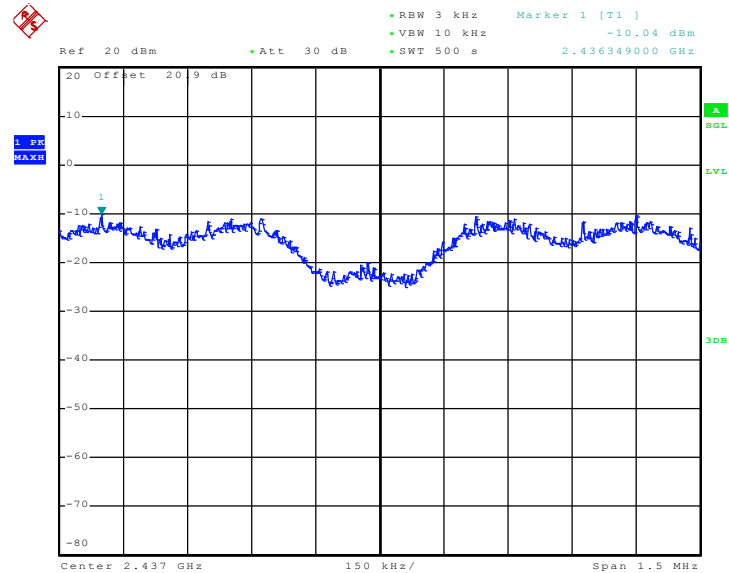
PSD Plot on 802.11g Channel 06 - Chain 0



Date: 9.NOV.2010 19:09:59

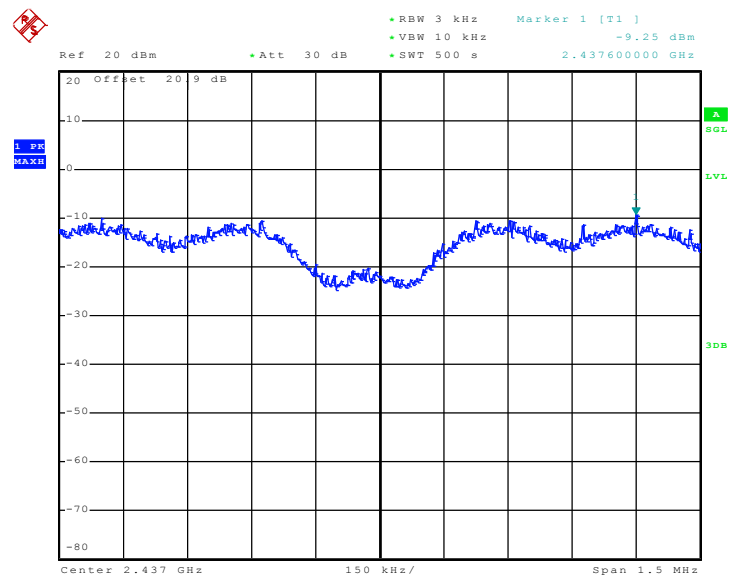


PSD Plot on 802.11g Channel 06 - Chain 1



Date: 9.NOV.2010 19:50:37

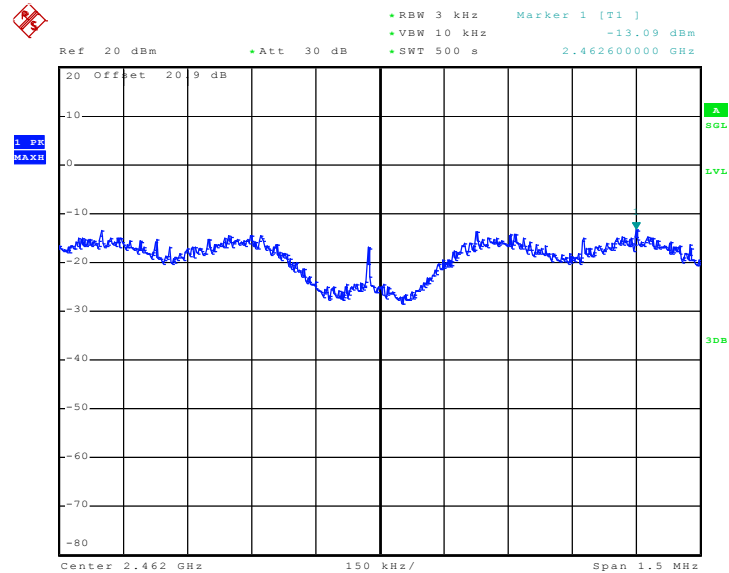
PSD Plot on 802.11g Channel 06 - Chain 2



Date: 9.NOV.2010 20:30:12

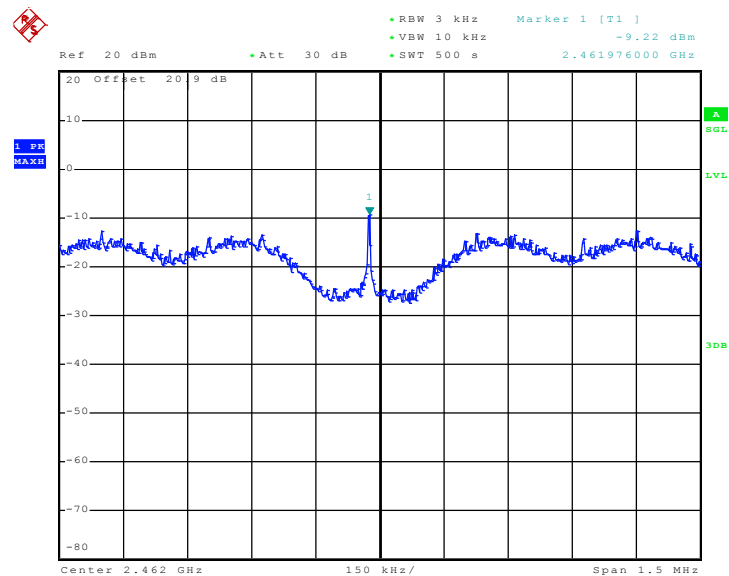


PSD Plot on 802.11g Channel 11 - Chain 0



Date: 27.OCT.2010 10:04:11

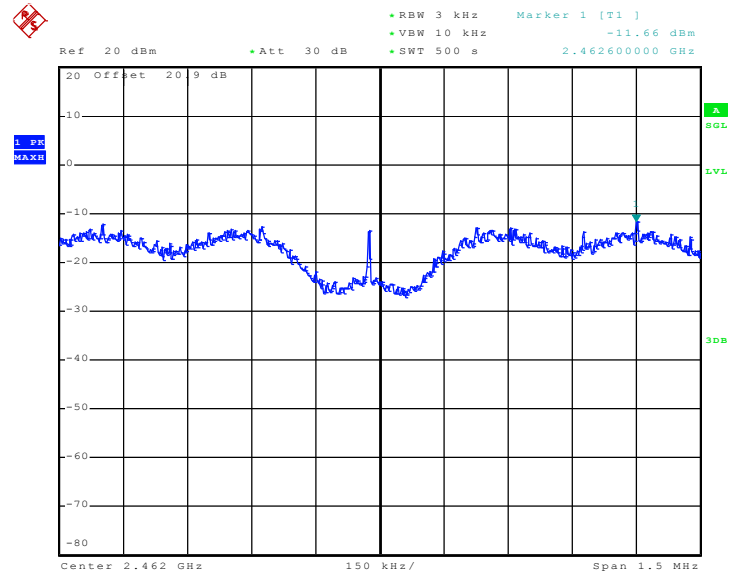
PSD Plot on 802.11g Channel 11 - Chain 1



Date: 26.OCT.2010 13:42:23

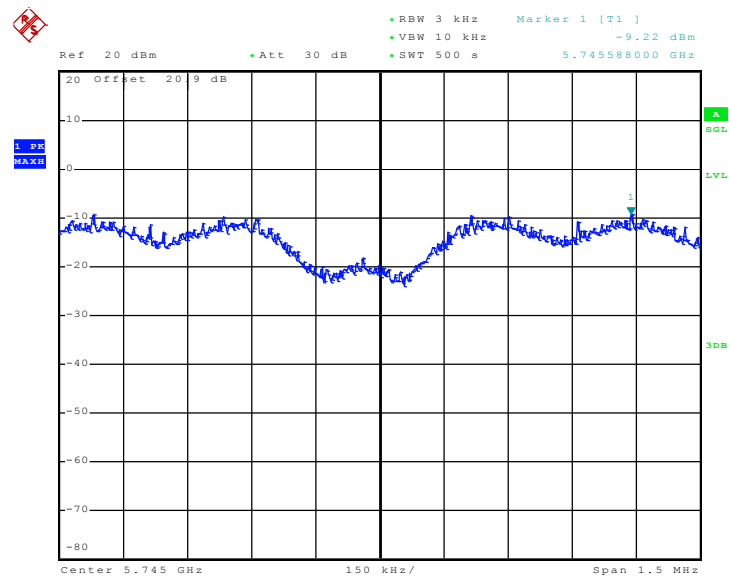


PSD Plot on 802.11g Channel 11 - Chain 2



Date: 26.OCT.2010 13:33:26

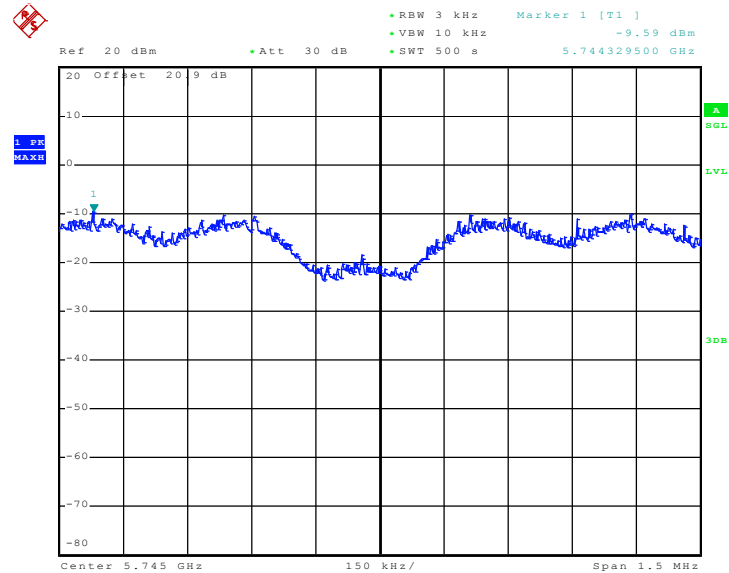
PSD Plot on 802.11a Channel 149 - Chain 0



Date: 26.OCT.2010 16:21:18

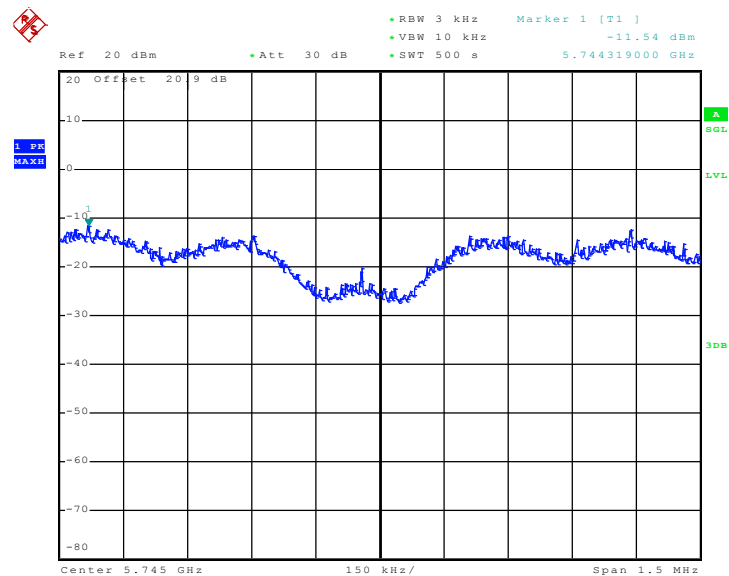


PSD Plot on 802.11a Channel 149 - Chain 1



Date: 26.OCT.2010 16:12:18

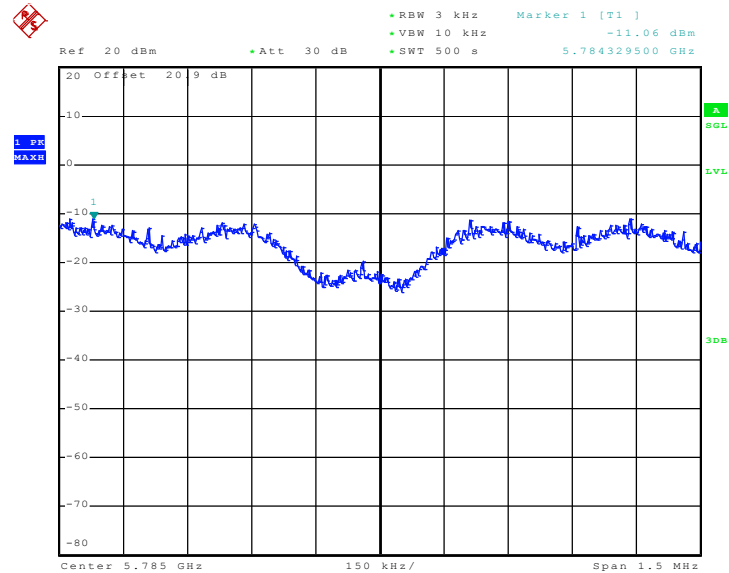
PSD Plot on 802.11a Channel 149 - Chain 2



Date: 26.OCT.2010 16:03:18

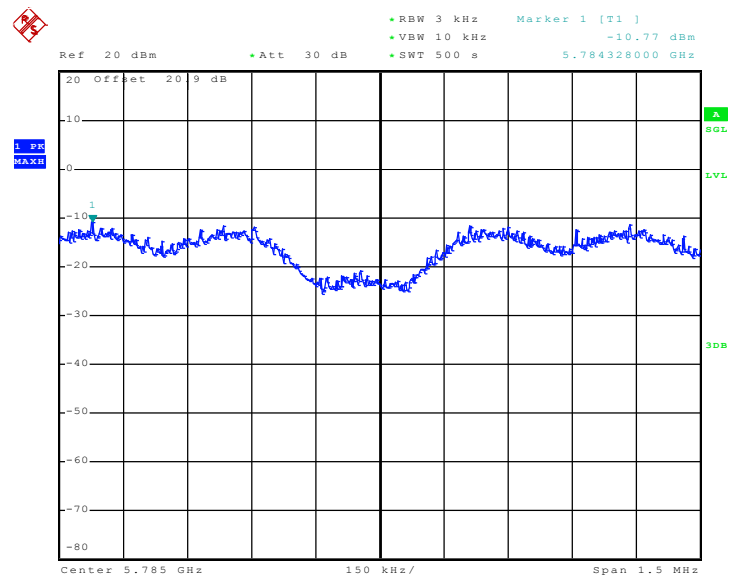


PSD Plot on 802.11a Channel 157 - Chain 0



Date: 26.OCT.2010 16:30:22

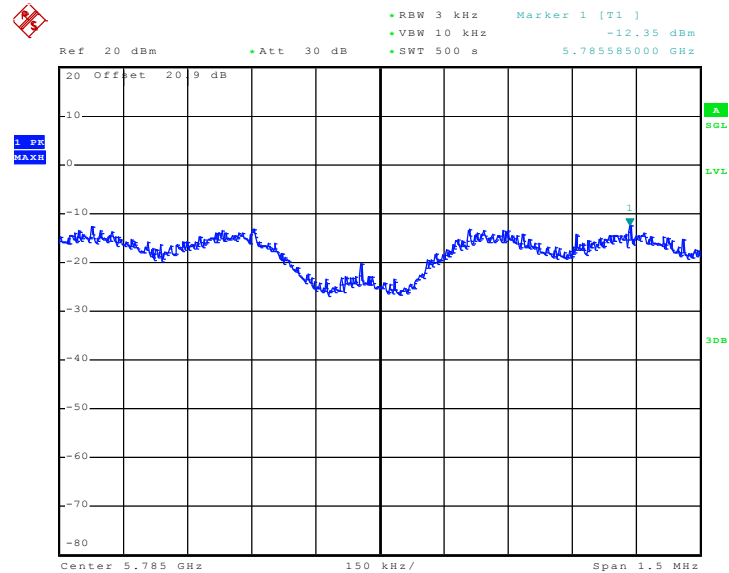
PSD Plot on 802.11a Channel 157 - Chain 1



Date: 26.OCT.2010 16:39:17

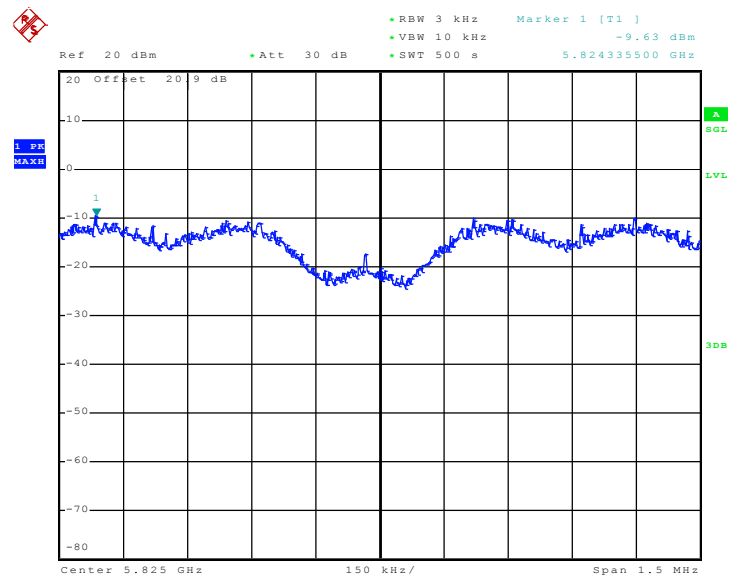


PSD Plot on 802.11a Channel 157 - Chain 2



Date: 26.OCT.2010 16:48:09

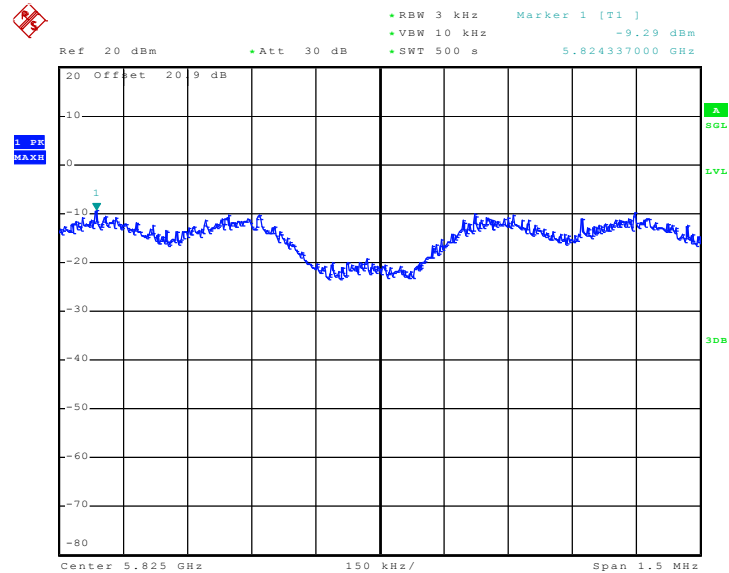
PSD Plot on 802.11a Channel 165 - Chain 0



Date: 26.OCT.2010 17:15:03

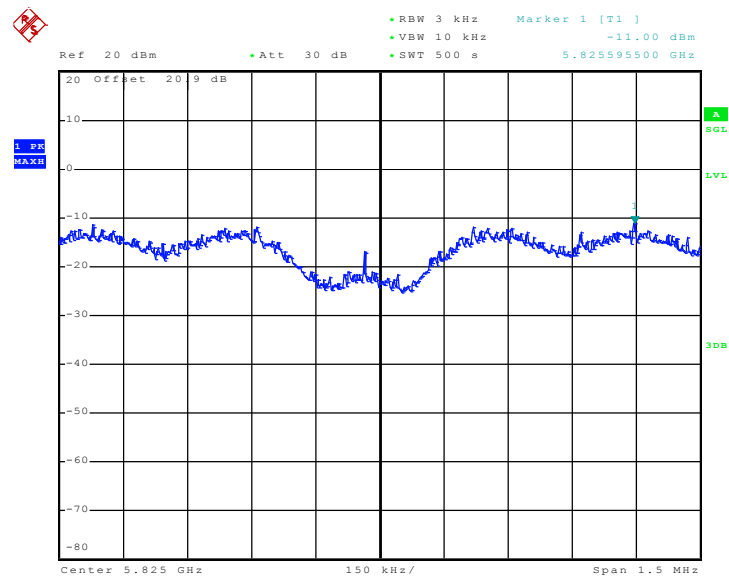


PSD Plot on 802.11a Channel 165 - Chain 1



Date: 26.OCT.2010 17:06:06

PSD Plot on 802.11a Channel 165 - Chain 2

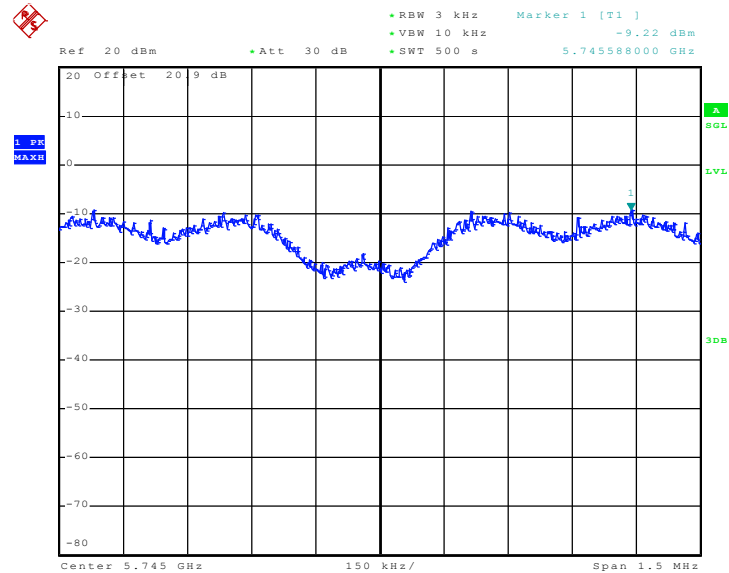


Date: 26.OCT.2010 16:57:10



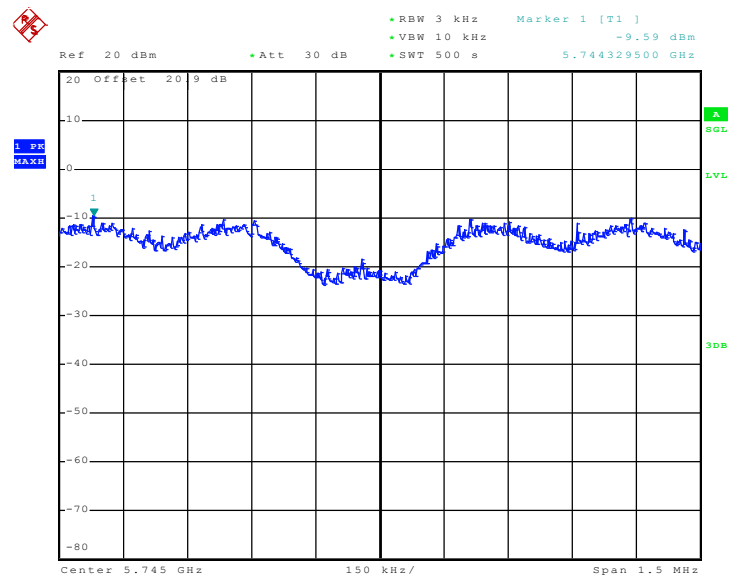
<Normal Mode: 2x3>

PSD Plot on 802.11a Channel 149 - Chain 0



Date: 26.OCT.2010 16:21:18

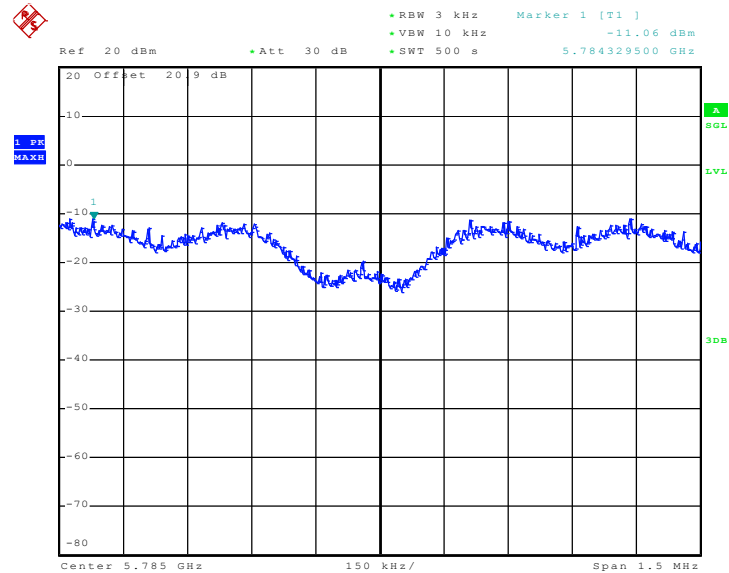
PSD Plot on 802.11a Channel 149 - Chain 1



Date: 26.OCT.2010 16:12:18

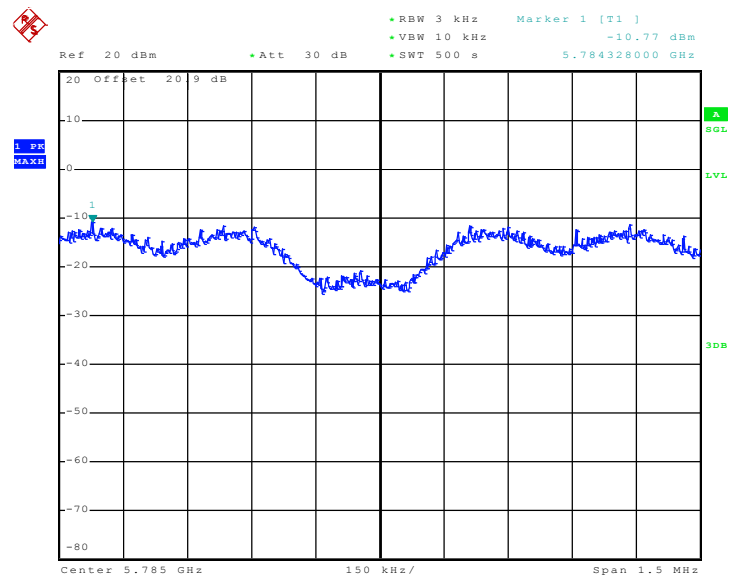


PSD Plot on 802.11a Channel 157 - Chain 0



Date: 26.OCT.2010 16:30:22

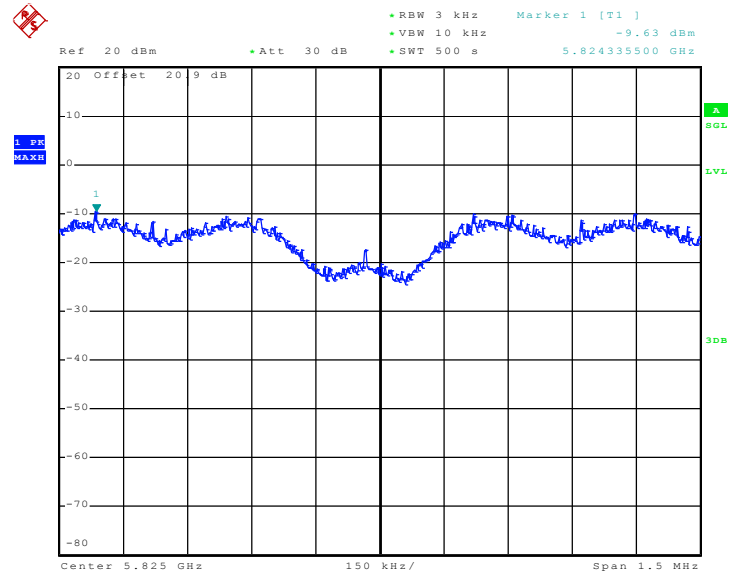
PSD Plot on 802.11a Channel 157 - Chain 1



Date: 26.OCT.2010 16:39:17

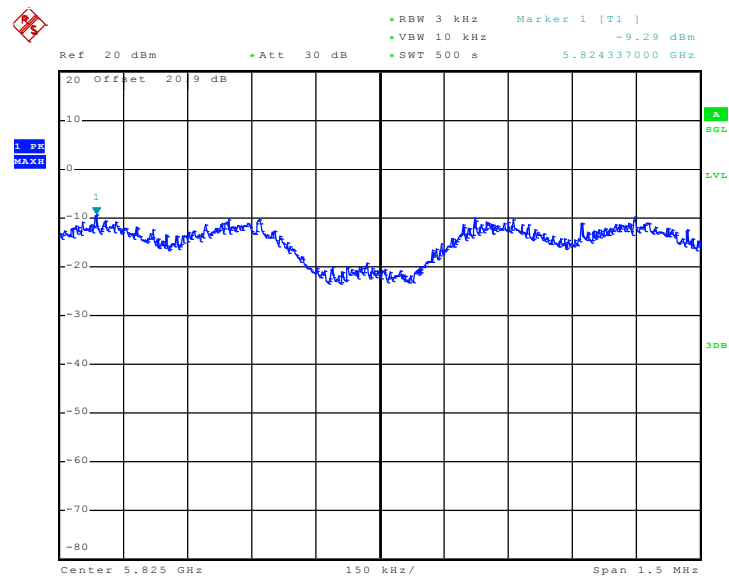


PSD Plot on 802.11a Channel 165 - Chain 0



Date: 26.OCT.2010 17:15:03

PSD Plot on 802.11a Channel 165 - Chain 1

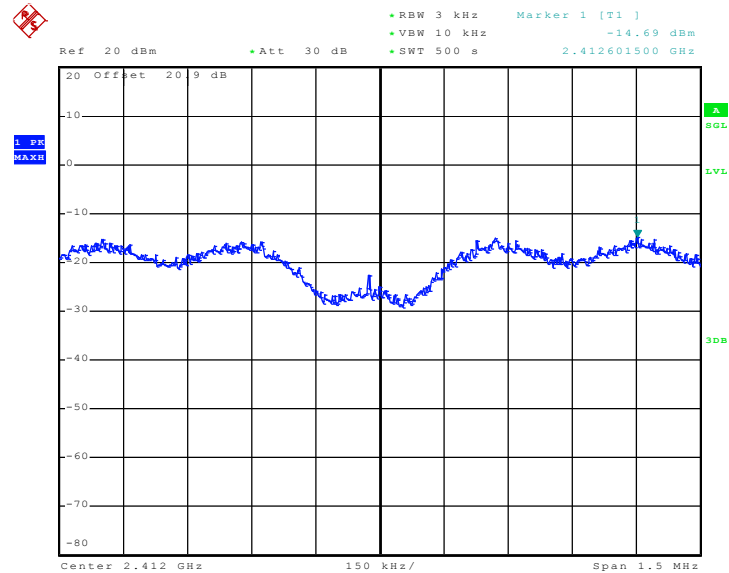


Date: 26.OCT.2010 17:06:06



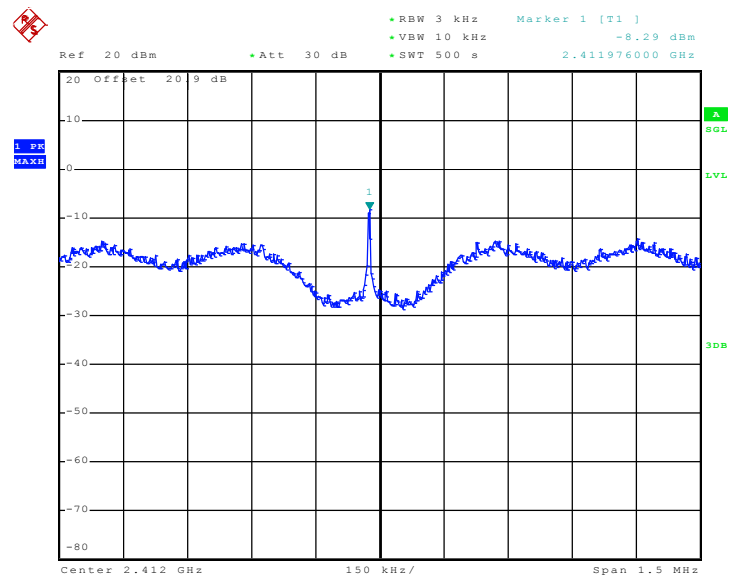
<Beam-Forming On: 3x3>

PSD Plot on 802.11n (HT-20) Channel 01 - Chain 0



Date: 27.OCT.2010 10:13:27

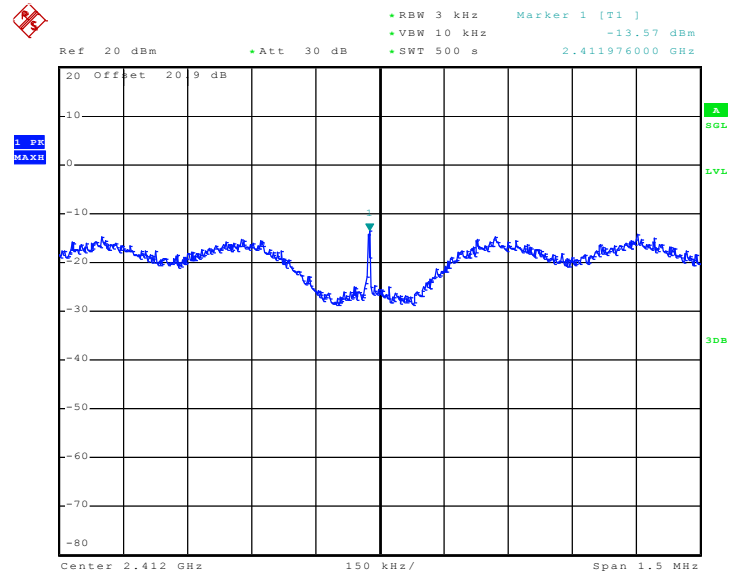
PSD Plot on 802.11n (HT-20) Channel 01 - Chain 1



Date: 26.OCT.2010 13:51:50

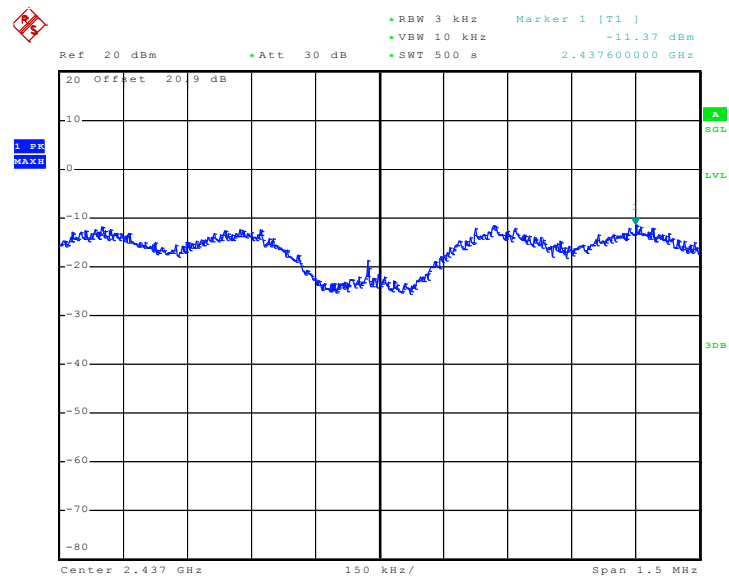


PSD Plot on 802.11n (HT-20) Channel 01 - Chain 2



Date: 26.OCT.2010 14:03:22

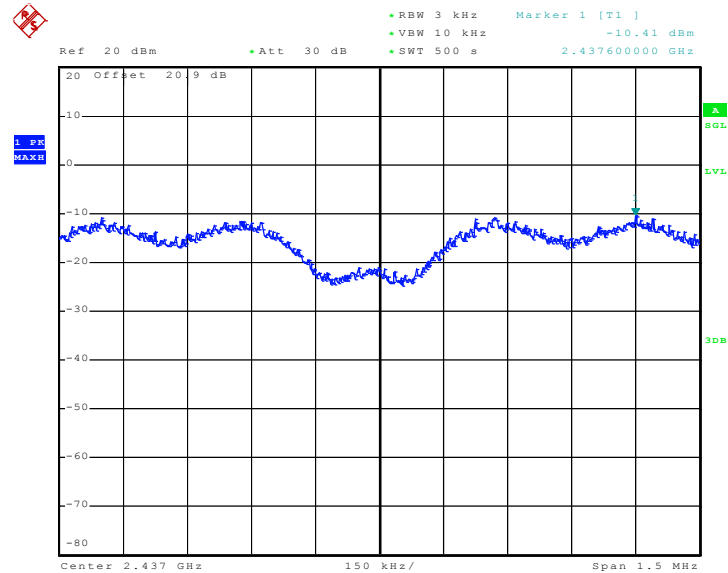
PSD Plot on 802.11n (HT-20) Channel 06 - Chain 0



Date: 9.NOV.2010 19:20:48

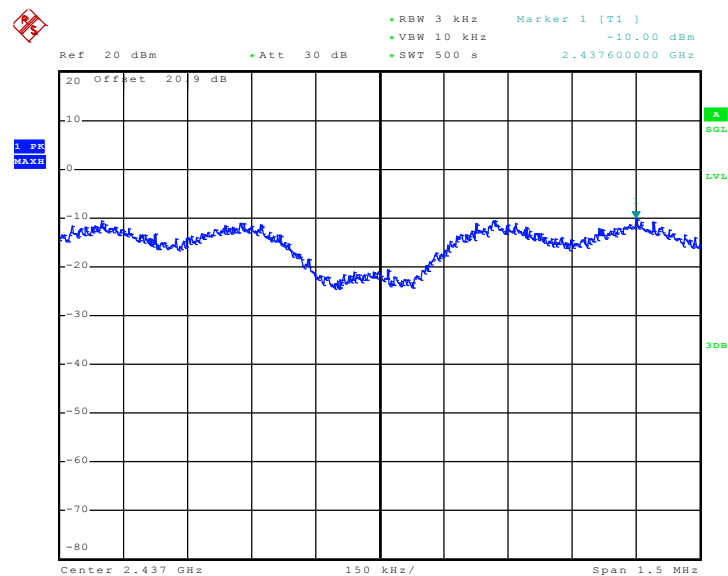


PSD Plot on 802.11n (HT-20) Channel 06 - Chain 1



Date: 9.NOV.2010 20:00:36

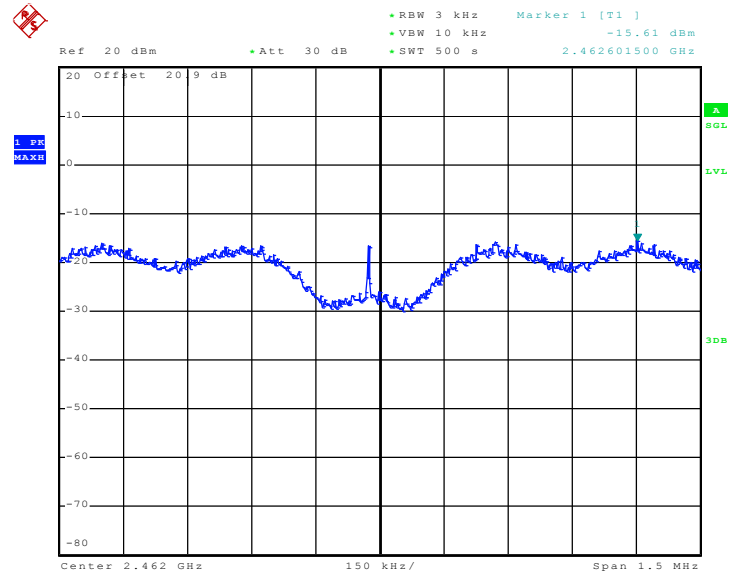
PSD Plot on 802.11n (HT-20) Channel 06 - Chain 2



Date: 9.NOV.2010 20:39:19

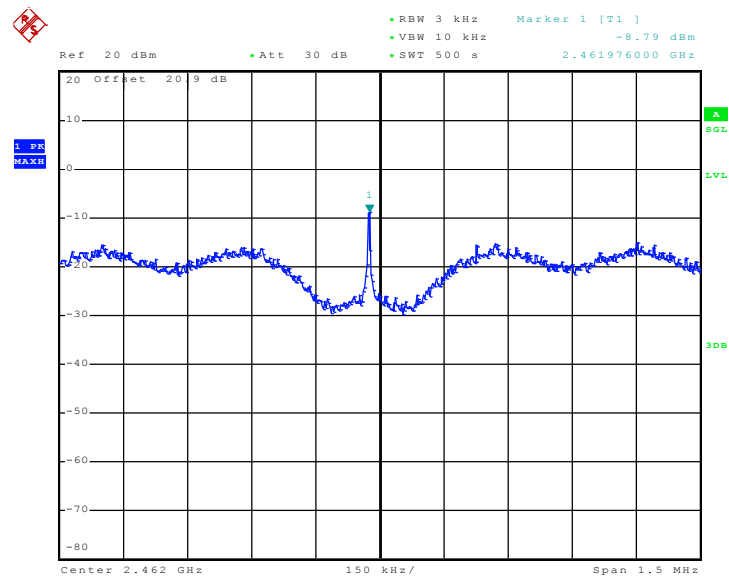


PSD Plot on 802.11n (HT-20) Channel 11 - Chain 0



Date: 27.OCT.2010 10:33:33

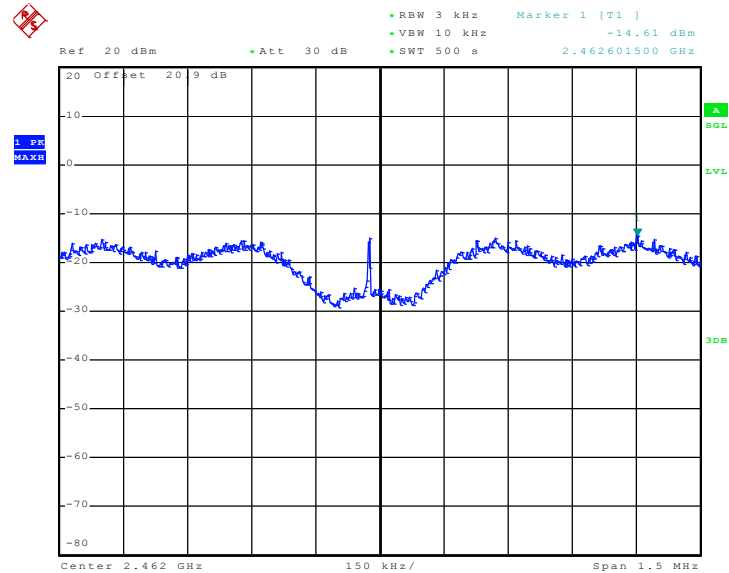
PSD Plot on 802.11n (HT-20) Channel 11 - Chain 1



Date: 26.OCT.2010 14:31:26

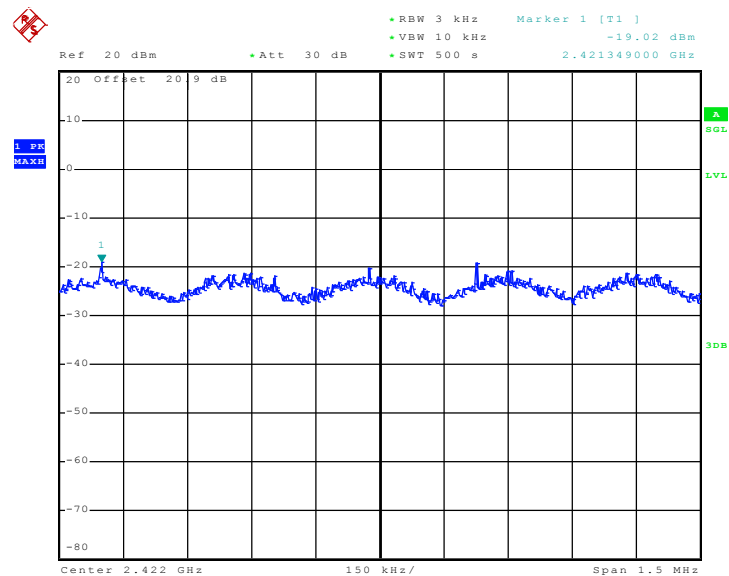


PSD Plot on 802.11n (HT-20) Channel 11 - Chain 2



Date: 26.OCT.2010 14:41:01

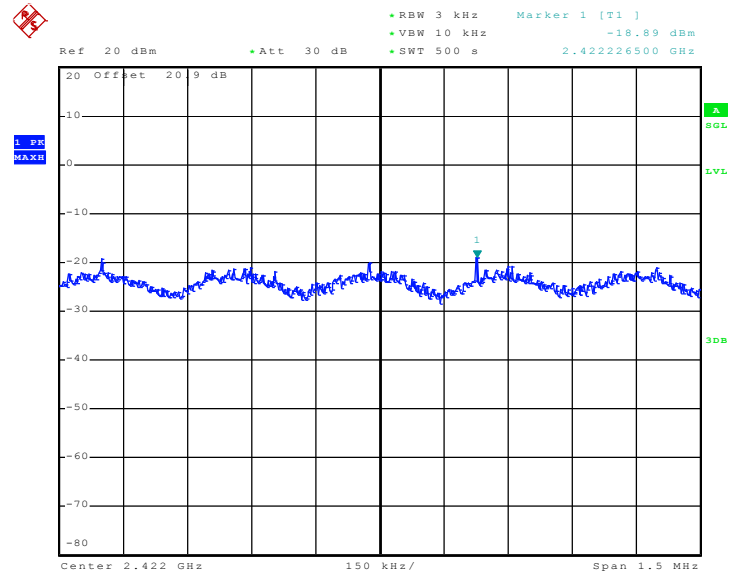
PSD Plot on 802.11n (HT-40) Channel 03 - Chain 0



Date: 27.OCT.2010 10:43:34

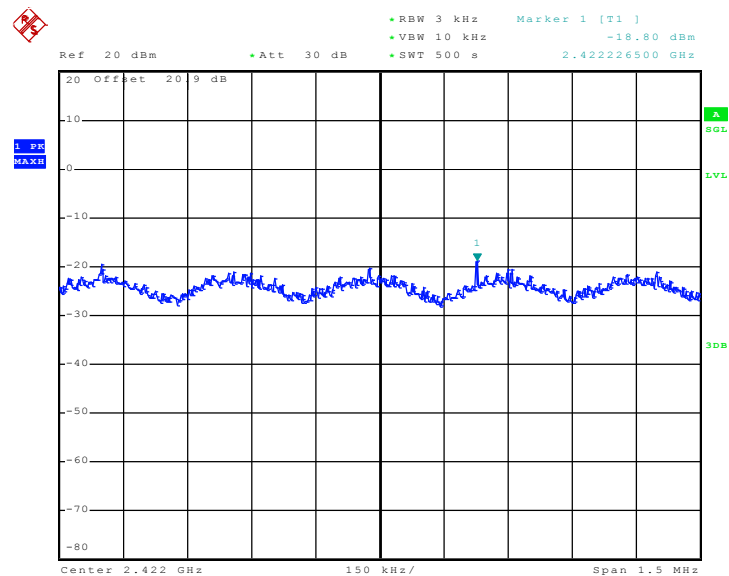


PSD Plot on 802.11n (HT-40) Channel 03 - Chain 1



Date: 26.OCT.2010 15:08:02

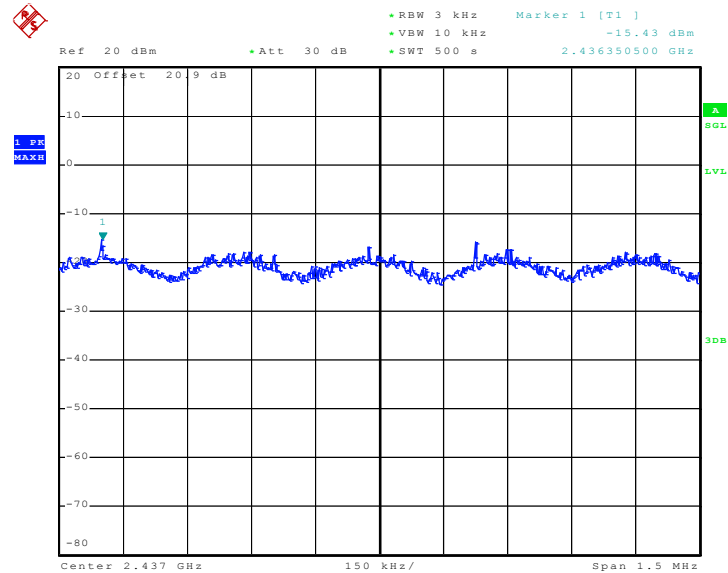
PSD Plot on 802.11n (HT-40) Channel 03 - Chain 2



Date: 26.OCT.2010 15:17:08

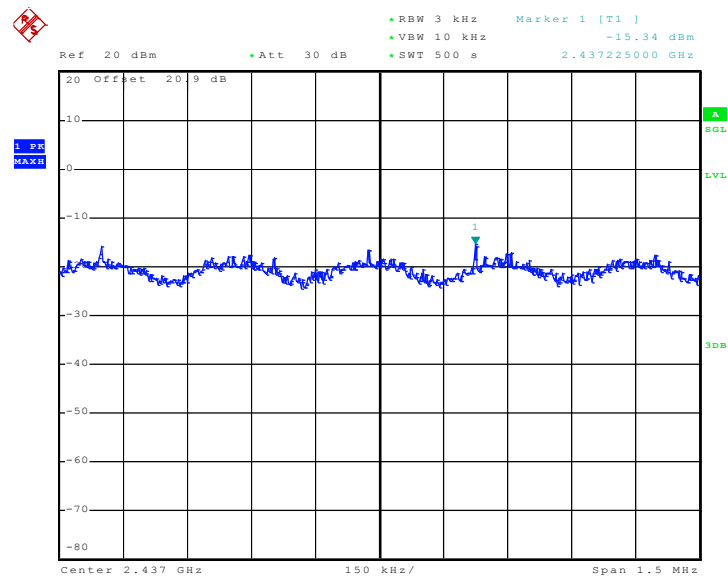


PSD Plot on 802.11n (HT-40) Channel 06 - Chain 0



Date: 9.NOV.2010 19:30:26

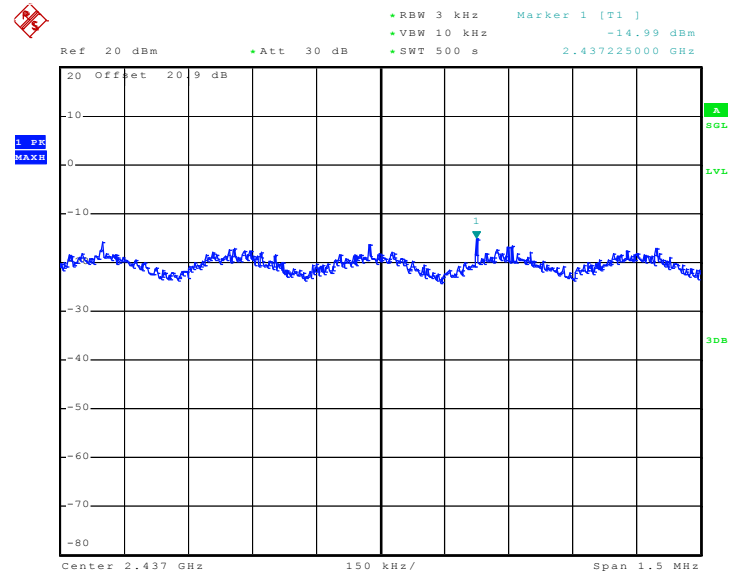
PSD Plot on 802.11n (HT-40) Channel 06 - Chain 1



Date: 9.NOV.2010 20:09:43

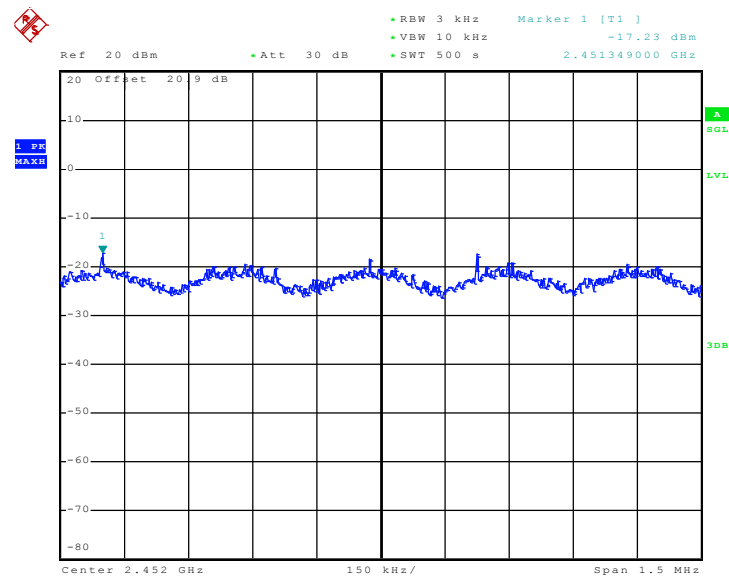


PSD Plot on 802.11n (HT-40) Channel 06 - Chain 2



Date: 9.NOV.2010 20:48:26

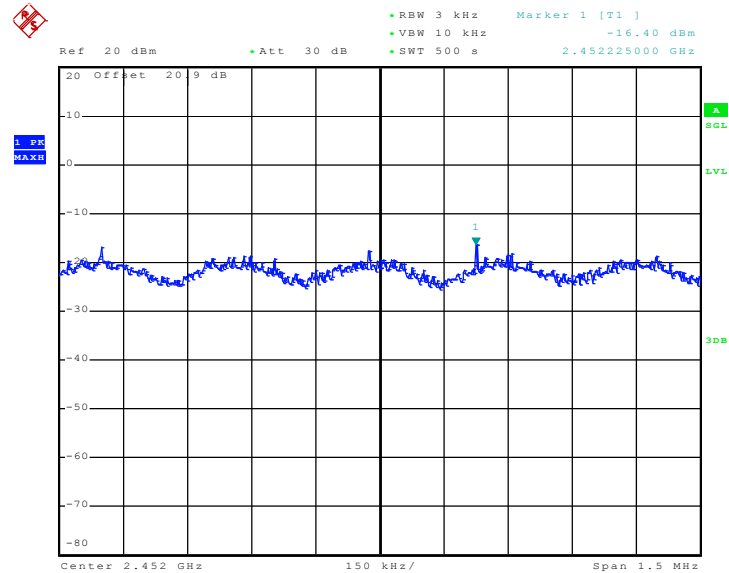
PSD Plot on 802.11n (HT-40) Channel 09 - Chain 0



Date: 27.OCT.2010 11:01:39

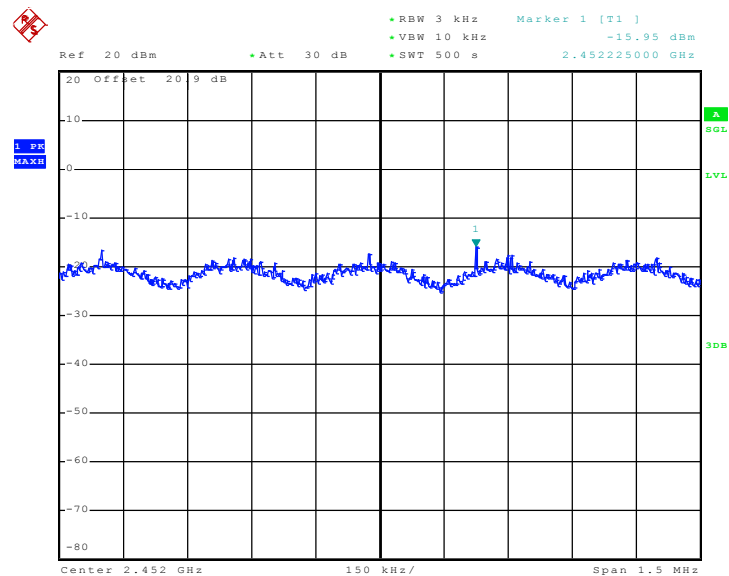


PSD Plot on 802.11n (HT-40) Channel 09 - Chain 1



Date: 26.OCT.2010 15:44:37

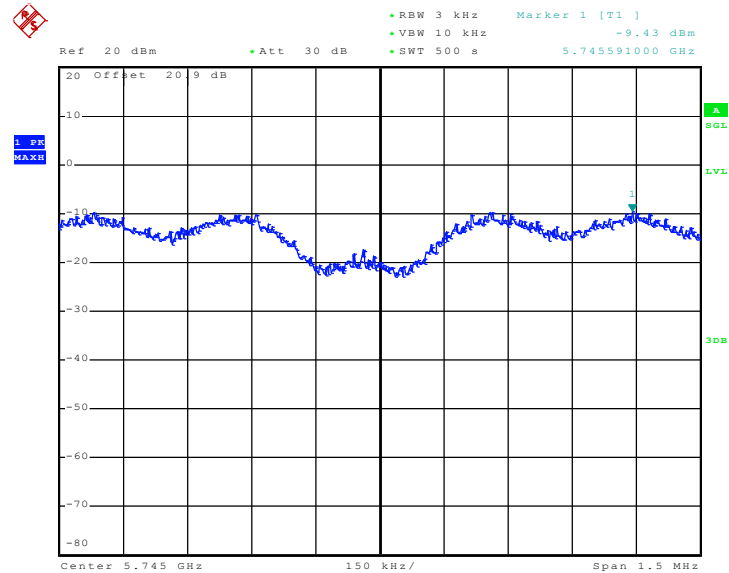
PSD Plot on 802.11n (HT-40) Channel 09 - Chain 2



Date: 26.OCT.2010 15:53:42

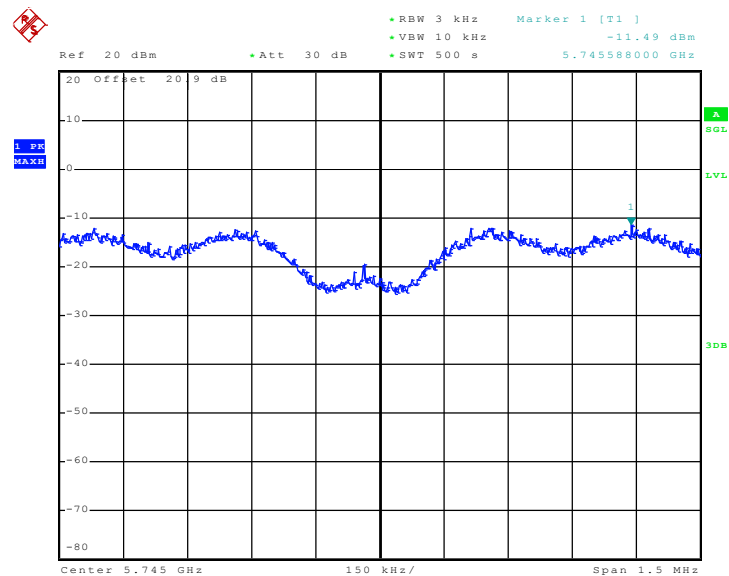


PSD Plot on 802.11n (HT-20) Channel 149 - Chain 0



Date: 26.OCT.2010 17:24:26

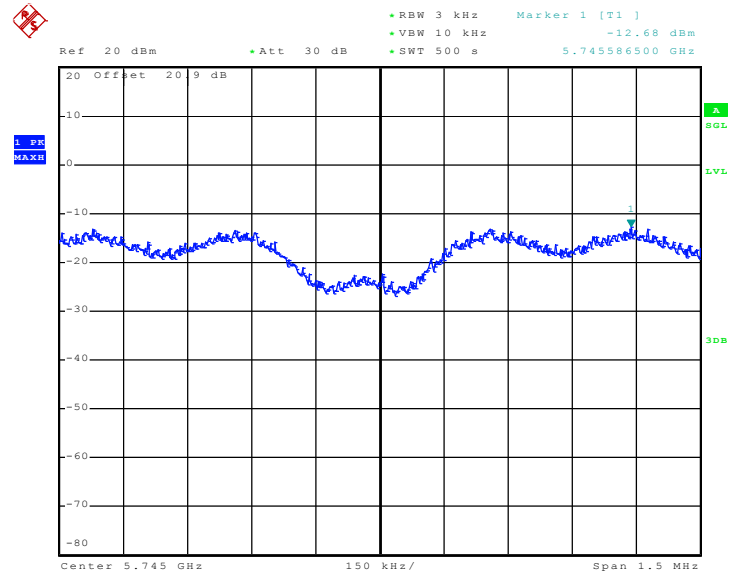
PSD Plot on 802.11n (HT-20) Channel 149 - Chain 1



Date: 26.OCT.2010 17:33:24

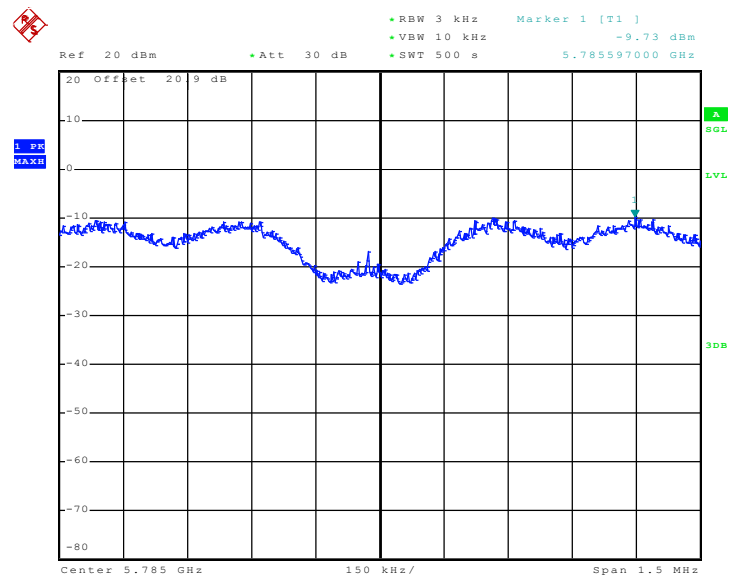


PSD Plot on 802.11n (HT-20) Channel 149 - Chain 2



Date: 26.OCT.2010 17:42:25

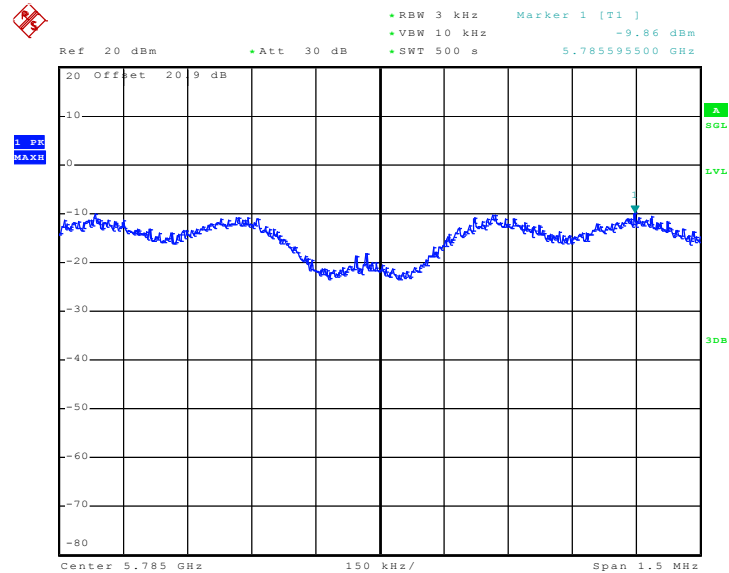
PSD Plot on 802.11n (HT-20) Channel 157 - Chain 0



Date: 26.OCT.2010 18:09:33

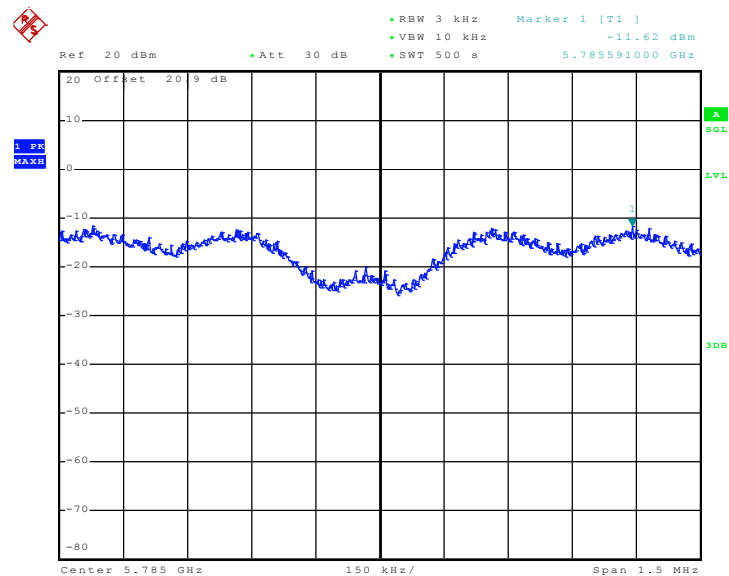


PSD Plot on 802.11n (HT-20) Channel 157 - Chain 1



Date: 26.OCT.2010 18:00:34

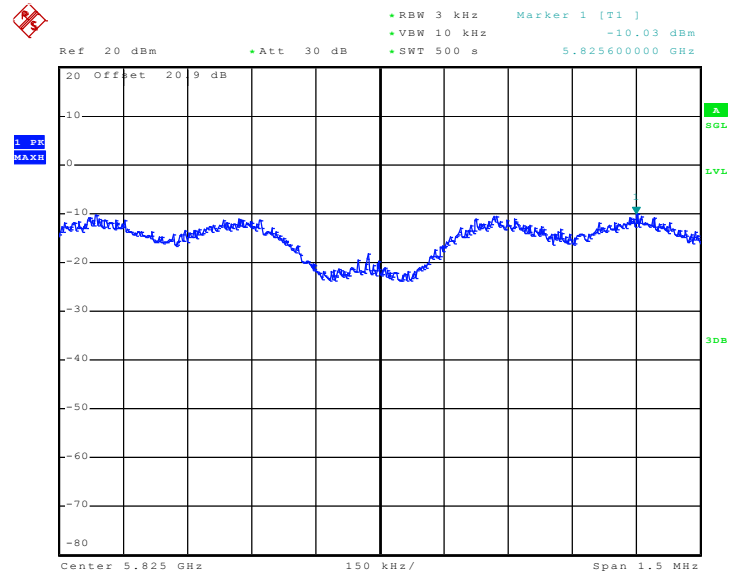
PSD Plot on 802.11n (HT-20) Channel 157 - Chain 2



Date: 26.OCT.2010 17:51:42

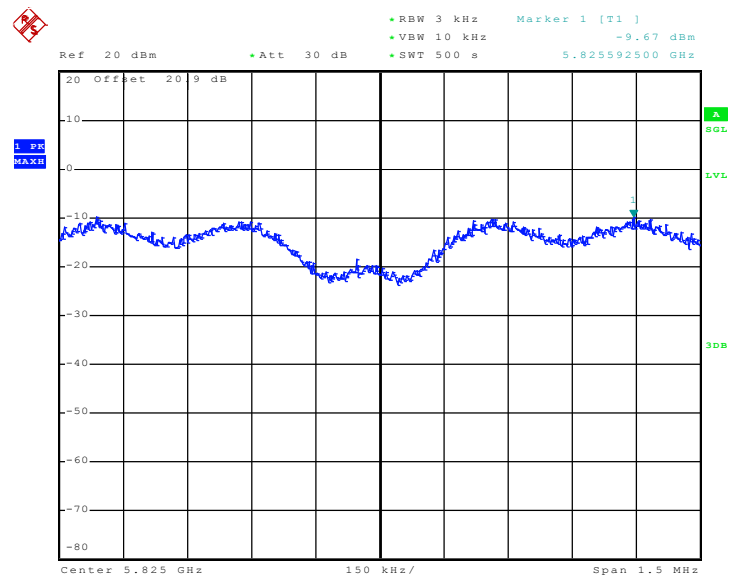


PSD Plot on 802.11n (HT-20) Channel 165 - Chain 0



Date: 26.OCT.2010 18:18:39

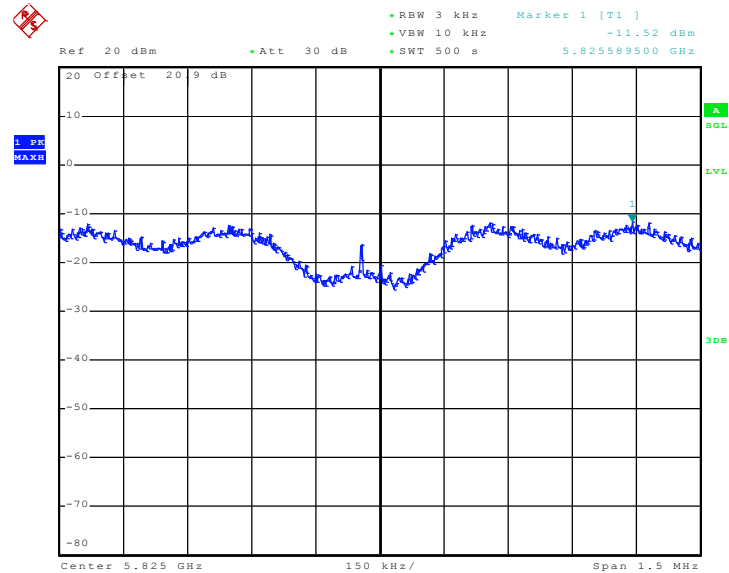
PSD Plot on 802.11n (HT-20) Channel 165 - Chain 1



Date: 26.OCT.2010 18:27:36

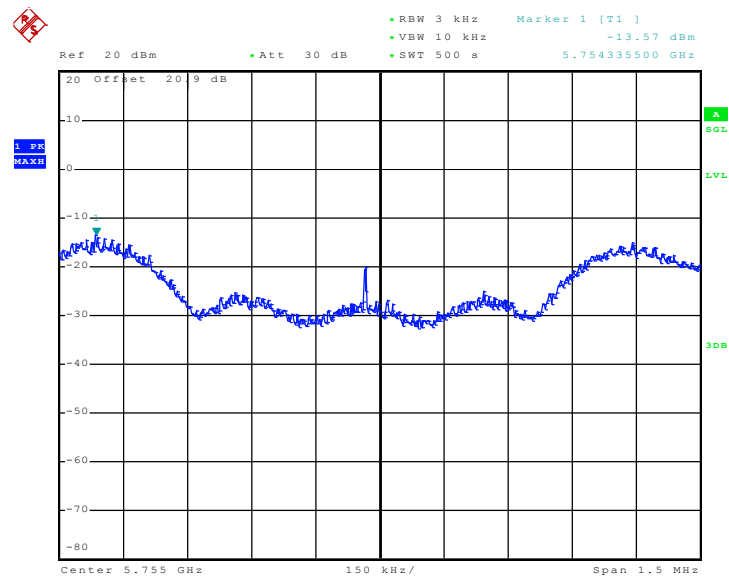


PSD Plot on 802.11n (HT-20) Channel 165 - Chain 2



Date: 26.OCT.2010 19:06:32

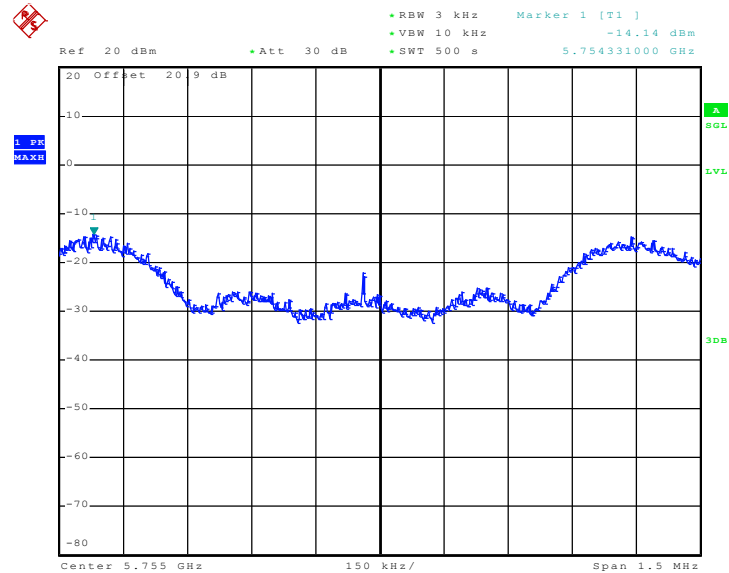
PSD Plot on 802.11n (HT-40) Channel 151 - Chain 0



Date: 26.OCT.2010 19:33:46

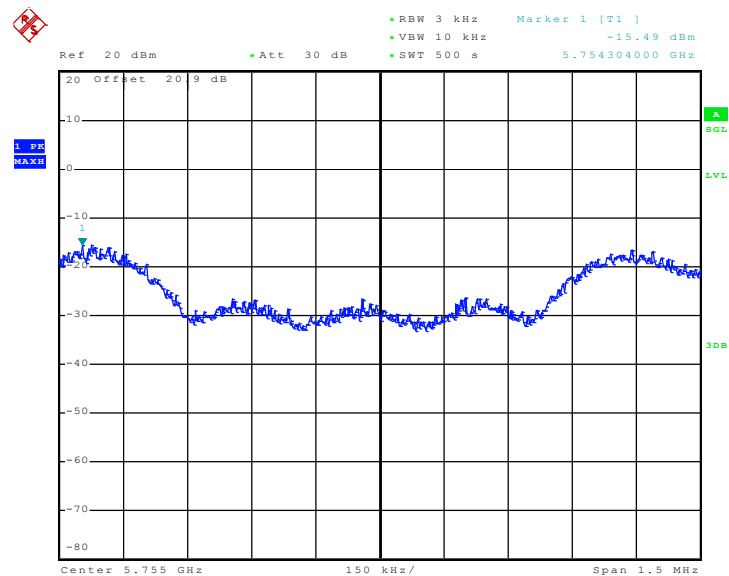


PSD Plot on 802.11n (HT-40) Channel 151 - Chain 1



Date: 26.OCT.2010 19:24:54

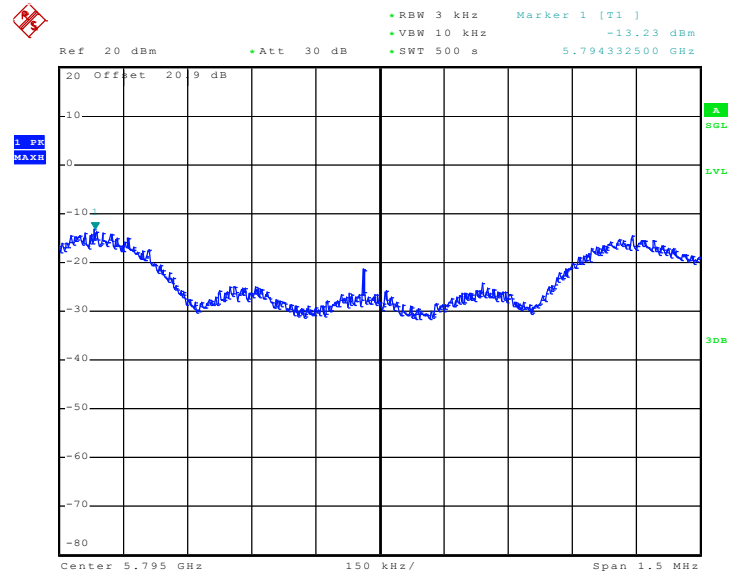
PSD Plot on 802.11n (HT-40) Channel 151 - Chain 2



Date: 26.OCT.2010 19:15:56

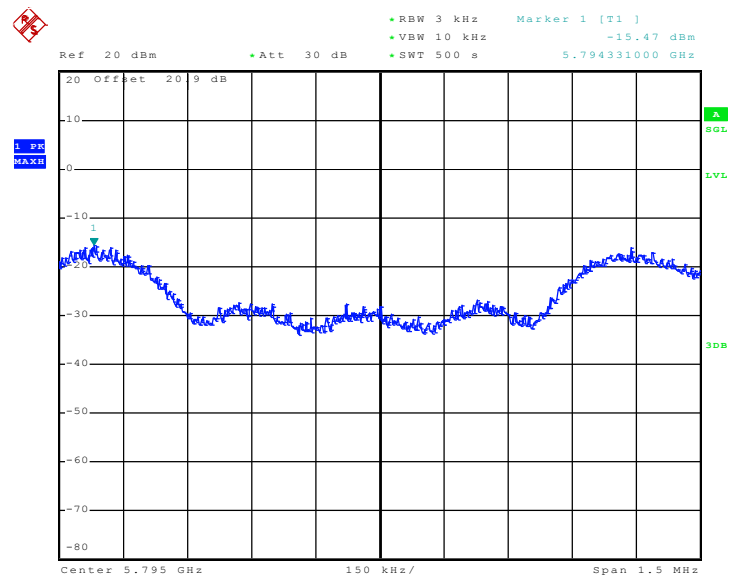


PSD Plot on 802.11n (HT-40) Channel 159 - Chain 0



Date: 26.OCT.2010 19:42:51

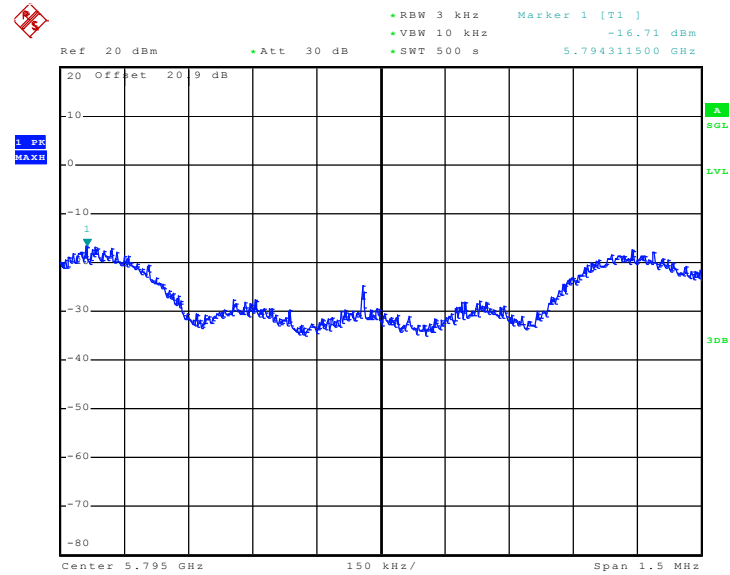
PSD Plot on 802.11n (HT-40) Channel 159 - Chain 1



Date: 26.OCT.2010 19:51:51



PSD Plot on 802.11n (HT-40) Channel 159 - Chain 2

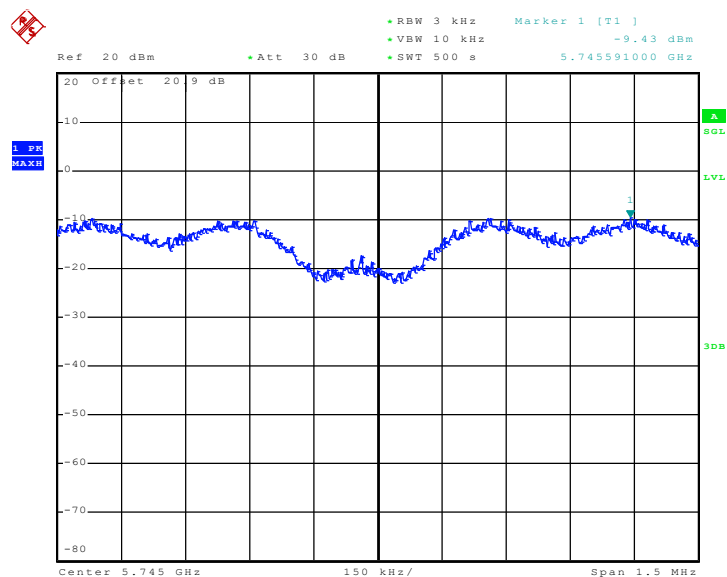


Date: 26.OCT.2010 20:02:23



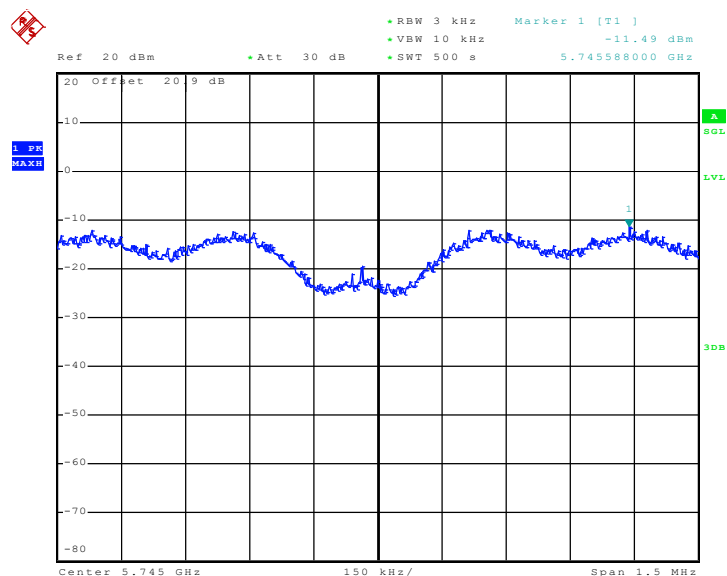
<Beam-Forming On: 2x3>

PSD Plot on 802.11n (HT-20) Channel 149 - Chain 0



Date: 26.OCT.2010 17:24:26

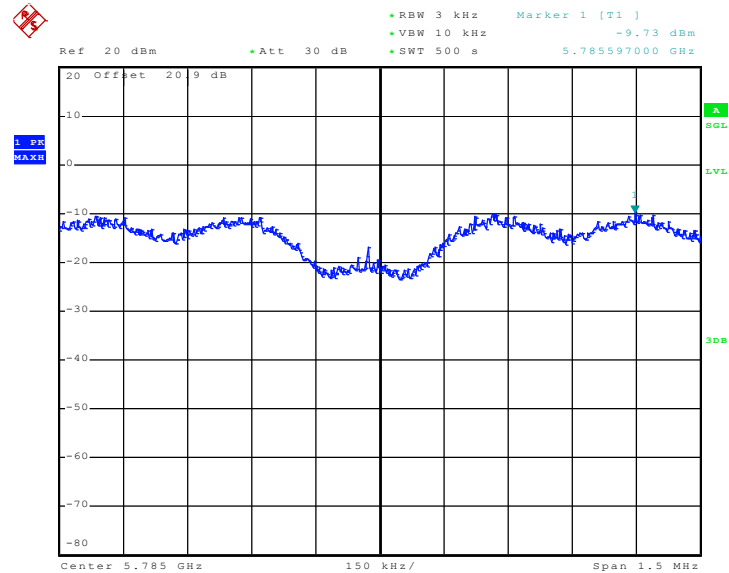
PSD Plot on 802.11n (HT-20) Channel 149 - Chain 1



Date: 26.OCT.2010 17:33:24

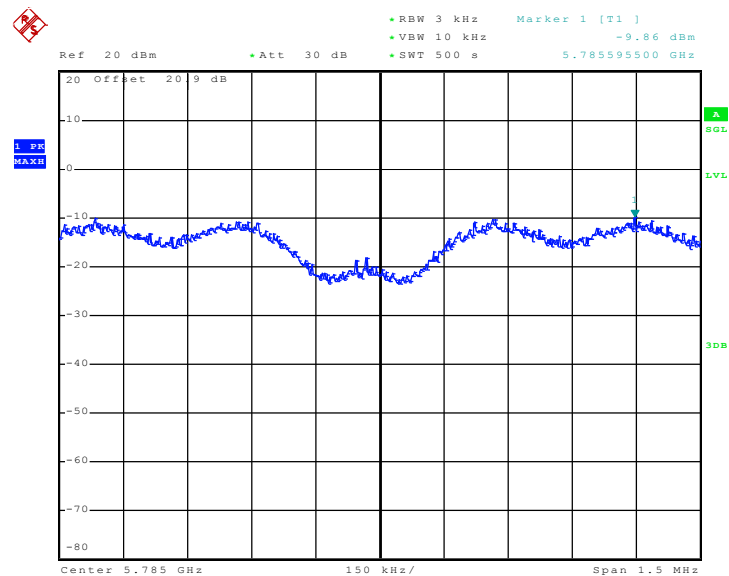


PSD Plot on 802.11n (HT-20) Channel 157 - Chain 0



Date: 26.OCT.2010 18:09:33

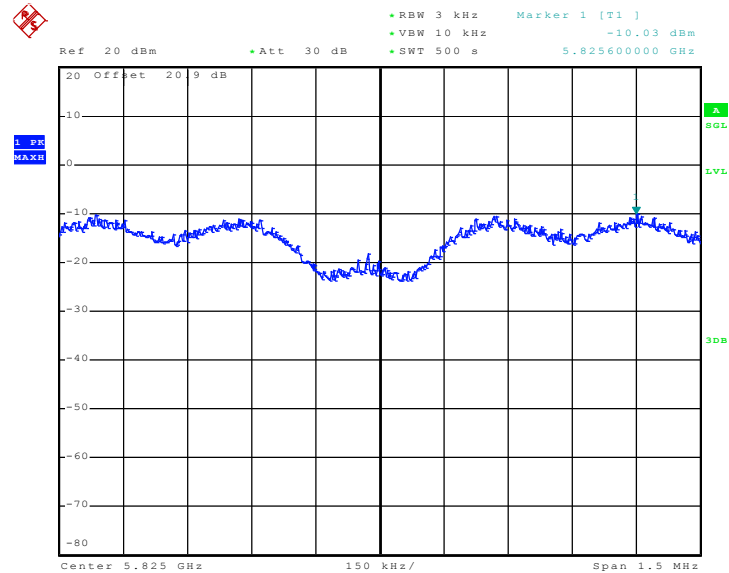
PSD Plot on 802.11n (HT-20) Channel 157 - Chain 1



Date: 26.OCT.2010 18:00:34

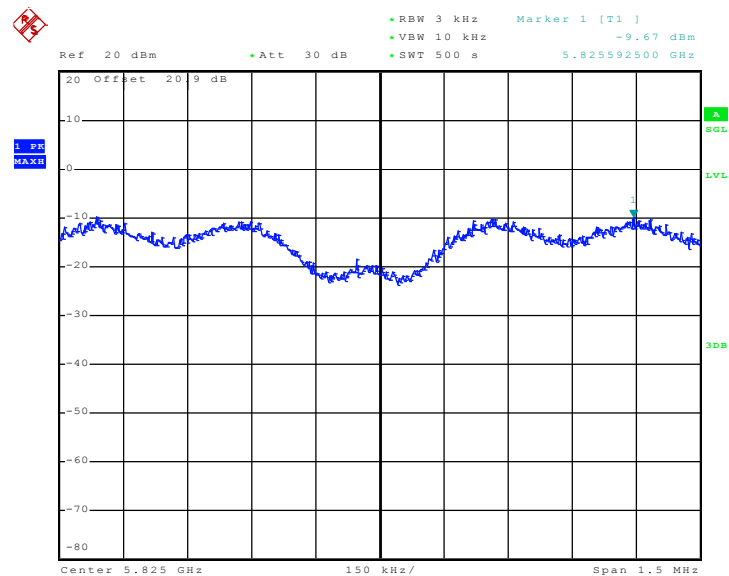


PSD Plot on 802.11n (HT-20) Channel 165 - Chain 0



Date: 26.OCT.2010 18:18:39

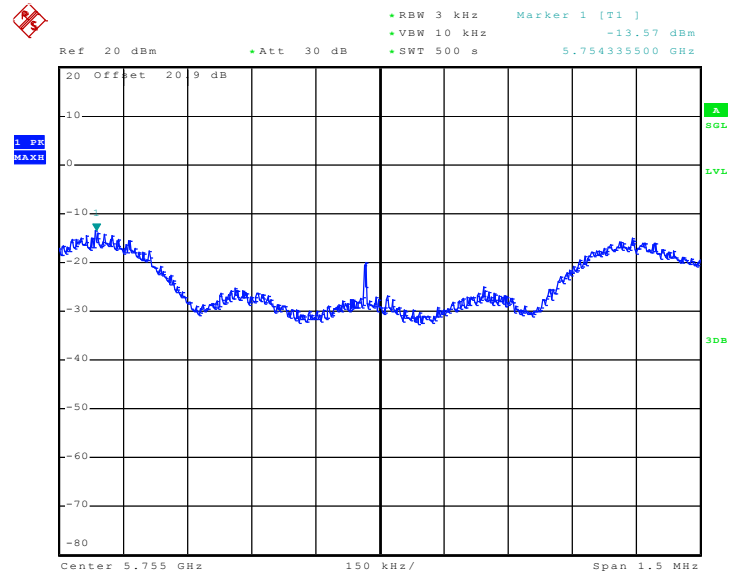
PSD Plot on 802.11n (HT-20) Channel 165 - Chain 1



Date: 26.OCT.2010 18:27:36

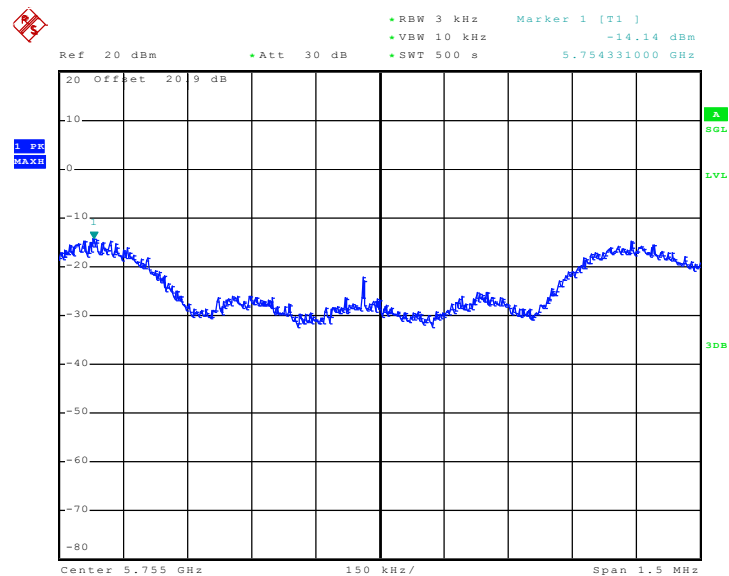


PSD Plot on 802.11n (HT-40) Channel 151 - Chain 0



Date: 26.OCT.2010 19:33:46

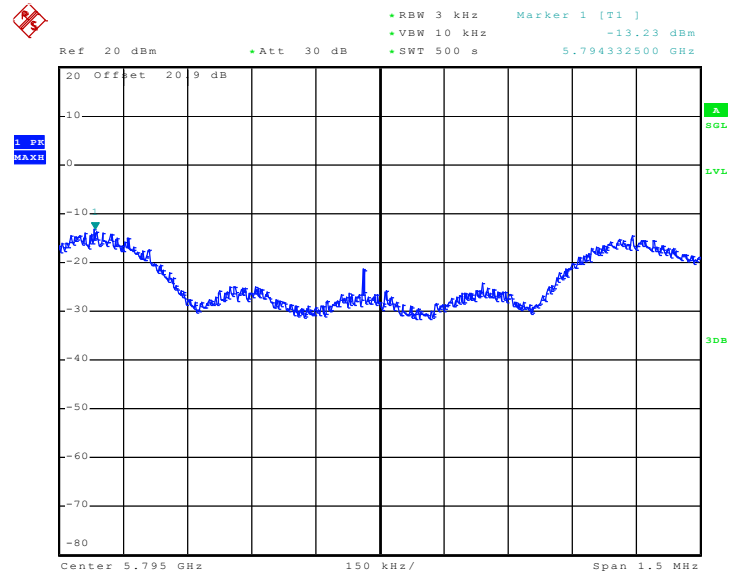
PSD Plot on 802.11n (HT-40) Channel 151 - Chain 1



Date: 26.OCT.2010 19:24:54

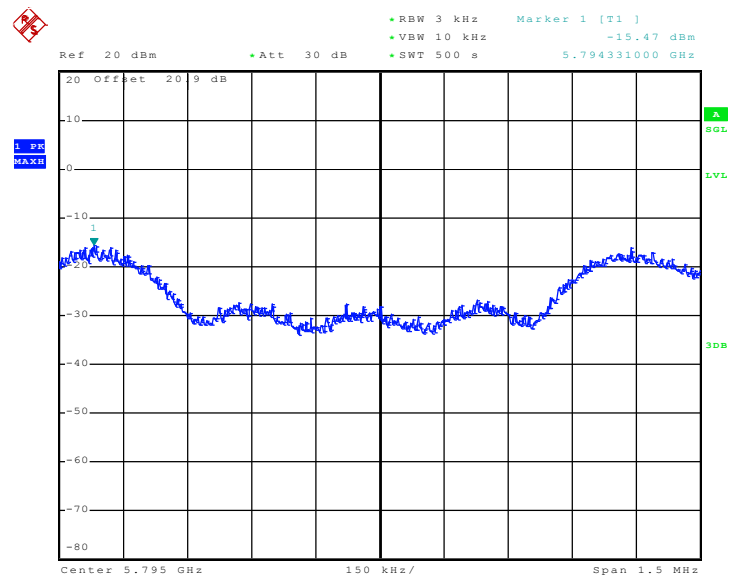


PSD Plot on 802.11n (HT-40) Channel 159 - Chain 0



Date: 26.OCT.2010 19:42:51

PSD Plot on 802.11n (HT-40) Channel 159 - Chain 1

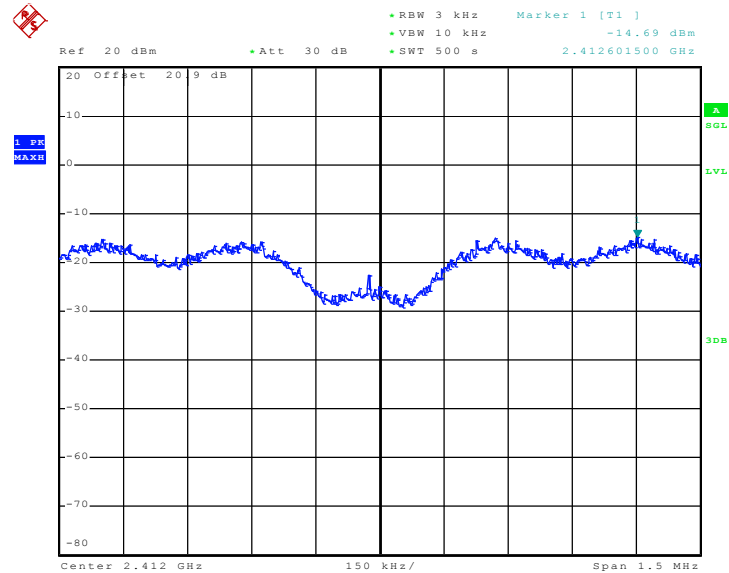


Date: 26.OCT.2010 19:51:51



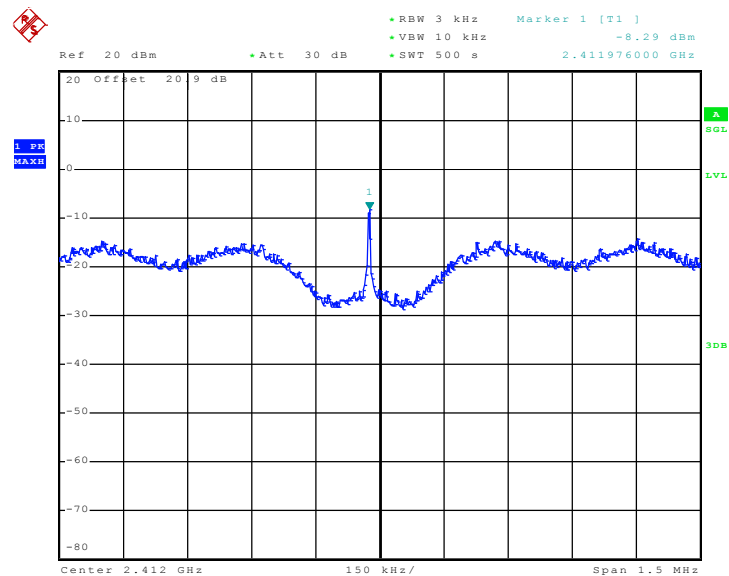
<Beam-Forming Off: 3x3>

PSD Plot on 802.11n (HT-20) Channel 01 - Chain 0



Date: 27.OCT.2010 10:13:27

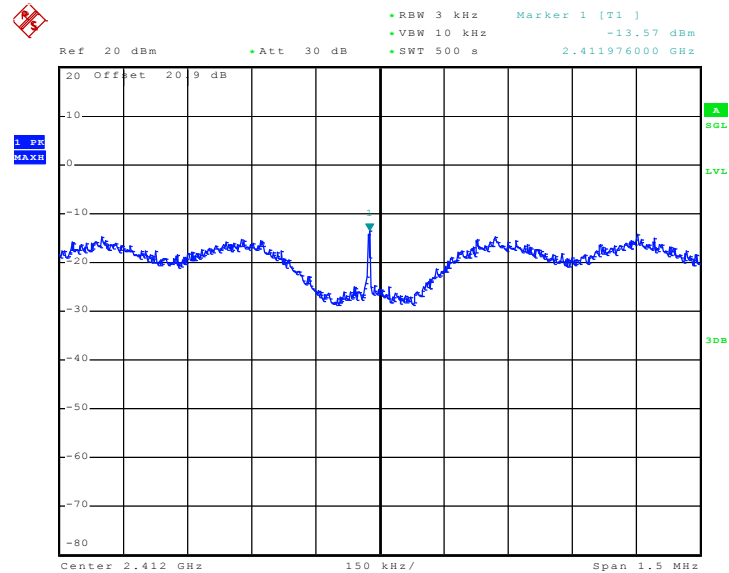
PSD Plot on 802.11n (HT-20) Channel 01 - Chain 1



Date: 26.OCT.2010 13:51:50

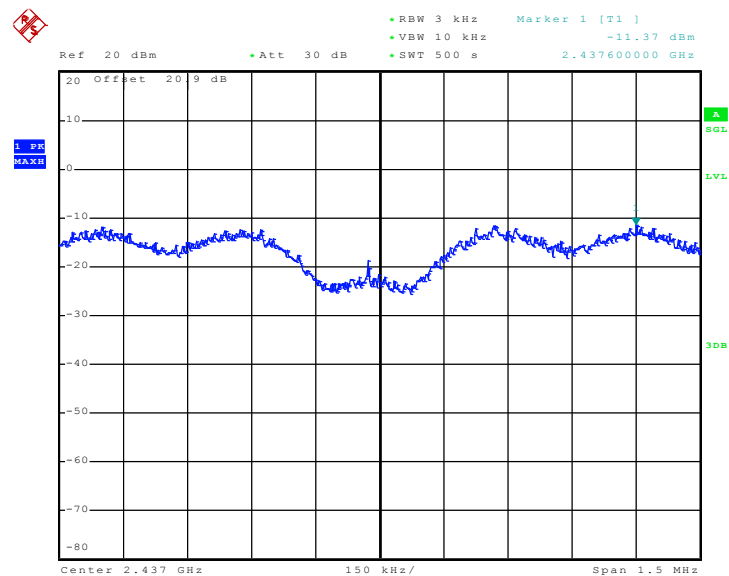


PSD Plot on 802.11n (HT-20) Channel 01 - Chain 2



Date: 26.OCT.2010 14:03:22

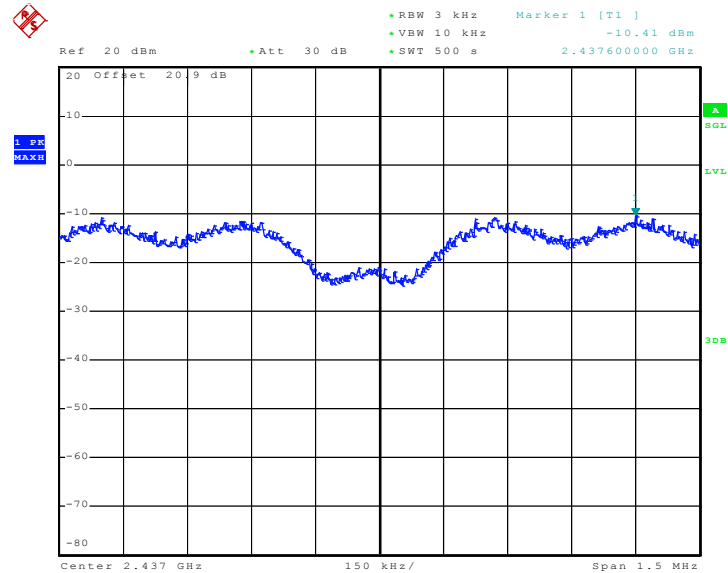
PSD Plot on 802.11n (HT-20) Channel 06 - Chain 0



Date: 9.NOV.2010 19:20:48

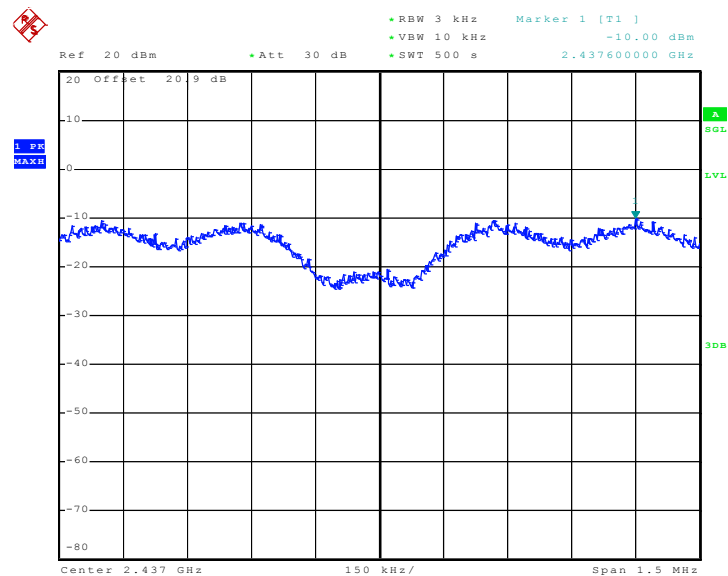


PSD Plot on 802.11n (HT-20) Channel 06 - Chain 1



Date: 9.NOV.2010 20:00:36

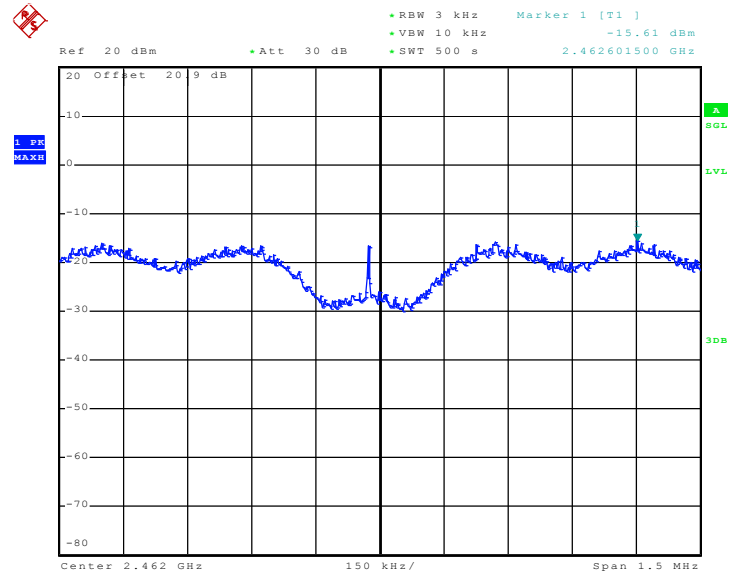
PSD Plot on 802.11n (HT-20) Channel 06 - Chain 2



Date: 9.NOV.2010 20:39:19

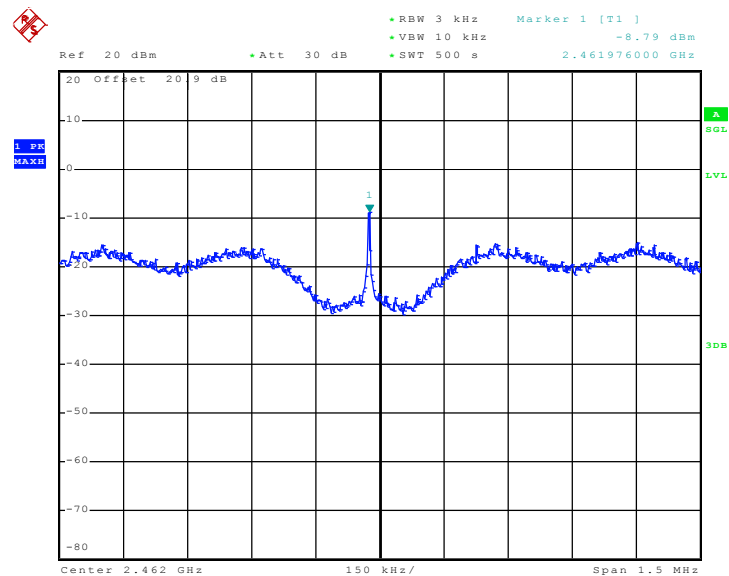


PSD Plot on 802.11n (HT-20) Channel 11 - Chain 0



Date: 27.OCT.2010 10:33:33

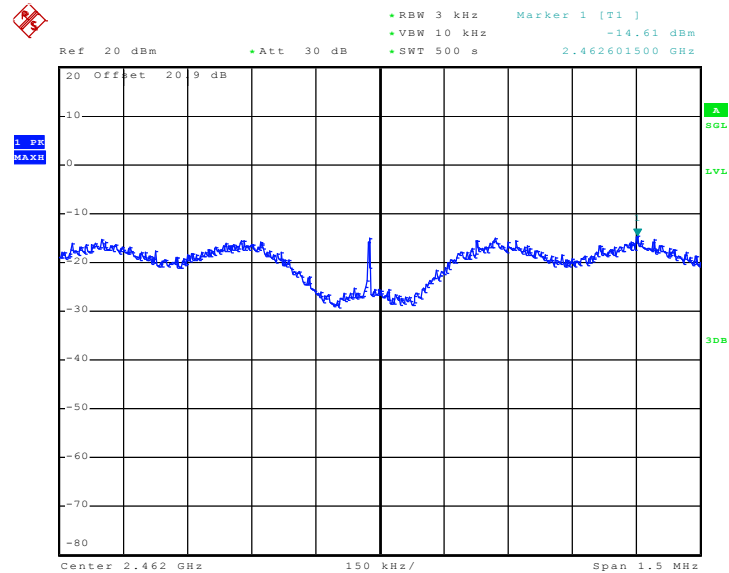
PSD Plot on 802.11n (HT-20) Channel 11 - Chain 1



Date: 26.OCT.2010 14:31:26

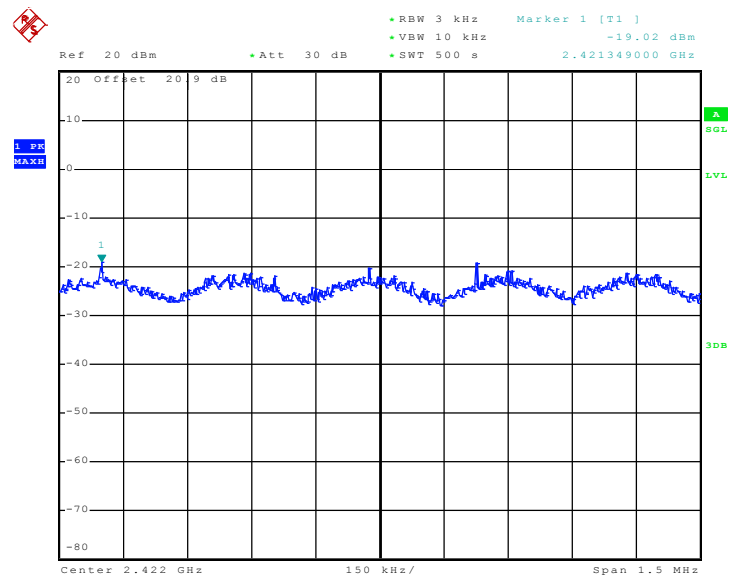


PSD Plot on 802.11n (HT-20) Channel 11 - Chain 2



Date: 26.OCT.2010 14:41:01

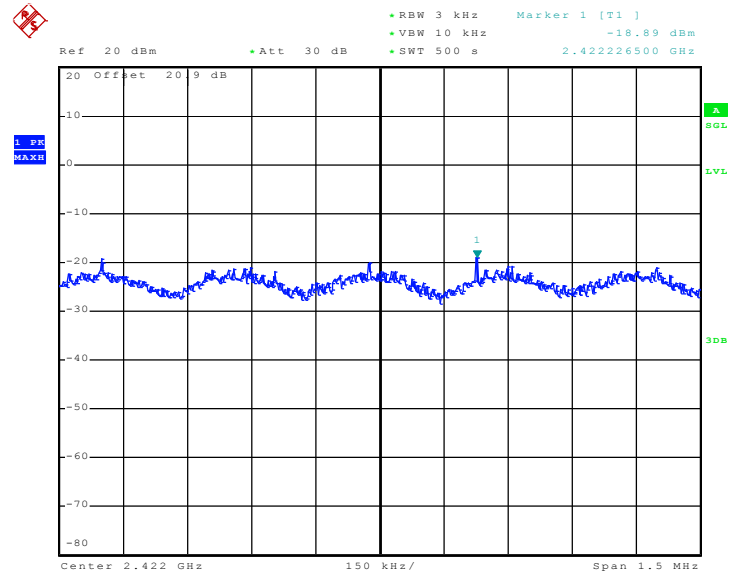
PSD Plot on 802.11n (HT-40) Channel 03 - Chain 0



Date: 27.OCT.2010 10:43:34

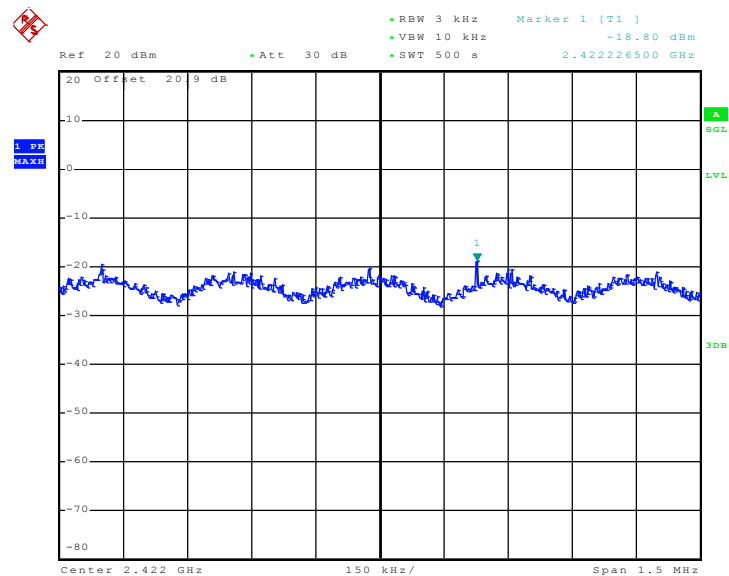


PSD Plot on 802.11n (HT-40) Channel 03 - Chain 1



Date: 26.OCT.2010 15:08:02

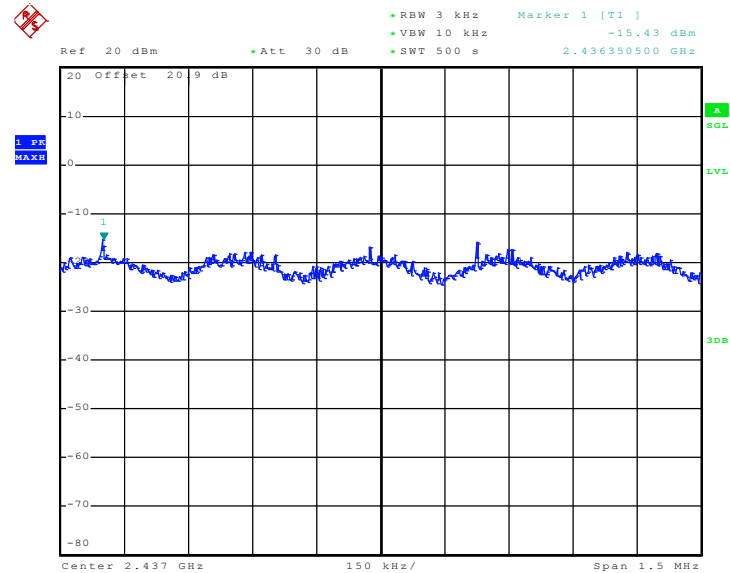
PSD Plot on 802.11n (HT-40) Channel 03 - Chain 2



Date: 26.OCT.2010 15:17:08

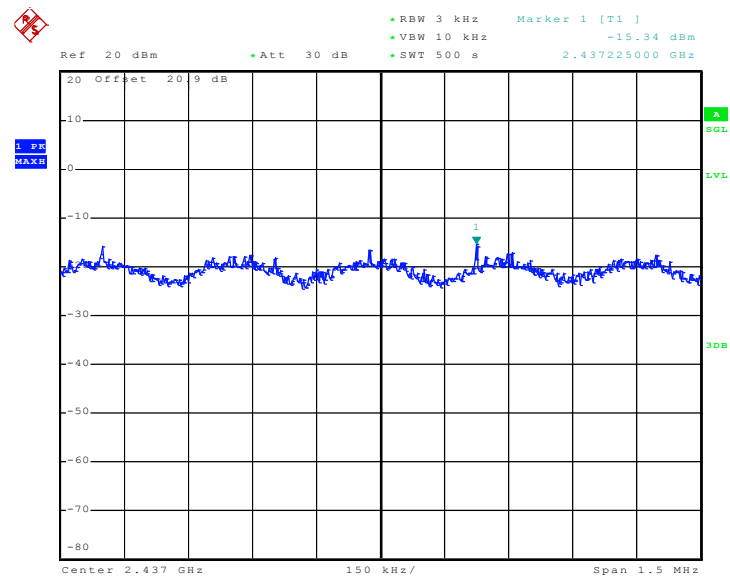


PSD Plot on 802.11n (HT-40) Channel 06 - Chain 0



Date: 9.NOV.2010 19:30:26

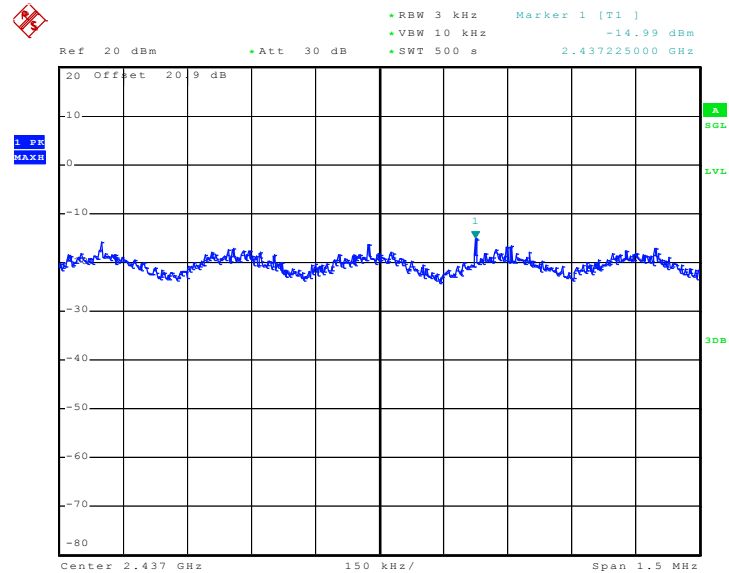
PSD Plot on 802.11n (HT-40) Channel 06 - Chain 1



Date: 9.NOV.2010 20:09:43

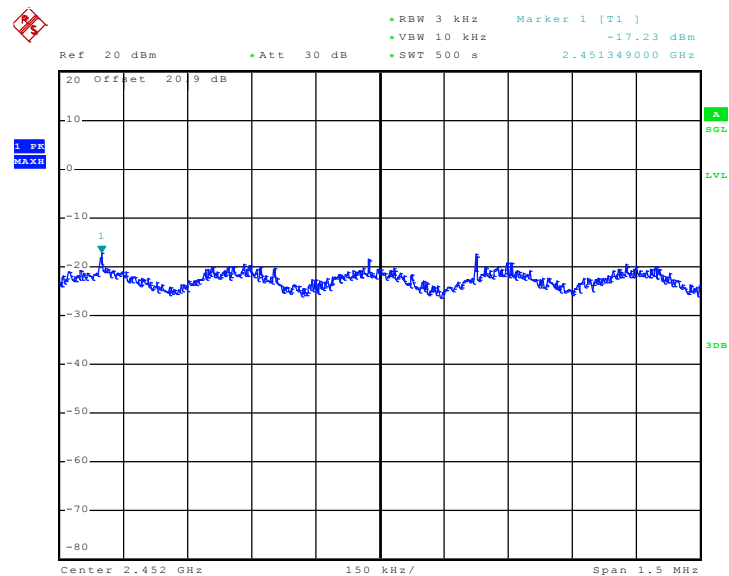


PSD Plot on 802.11n (HT-40) Channel 06 - Chain 2



Date: 9.NOV.2010 20:48:26

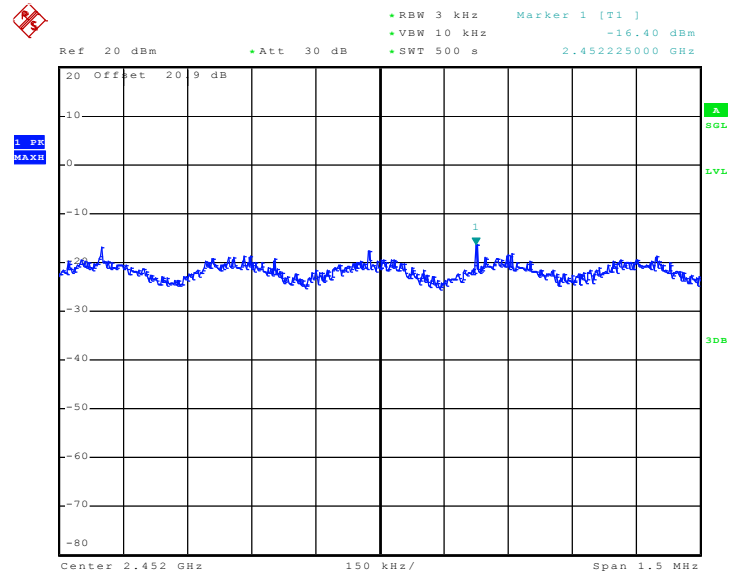
PSD Plot on 802.11n (HT-40) Channel 09 - Chain 0



Date: 27.OCT.2010 11:01:39

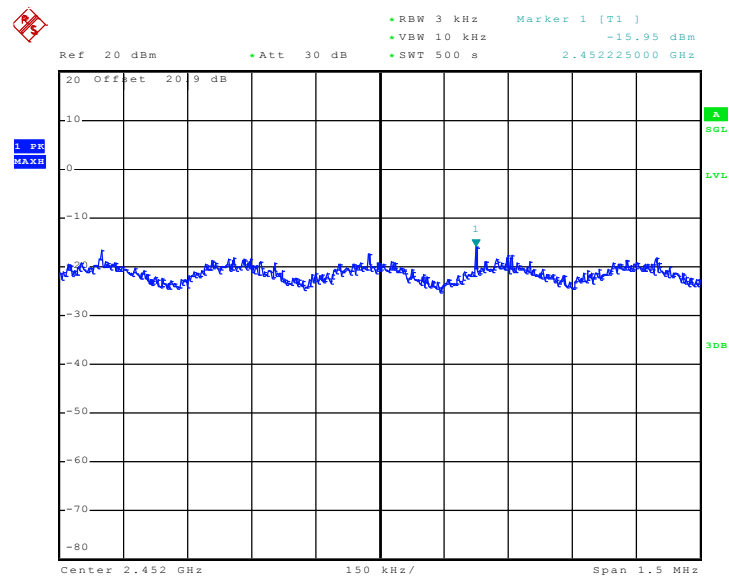


PSD Plot on 802.11n (HT-40) Channel 09 - Chain 1



Date: 26.OCT.2010 15:44:37

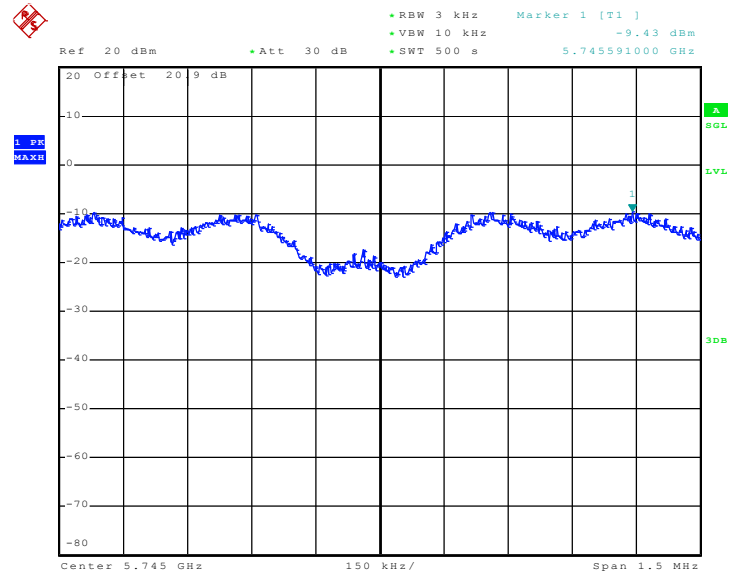
PSD Plot on 802.11n (HT-40) Channel 09 - Chain 2



Date: 26.OCT.2010 15:53:42

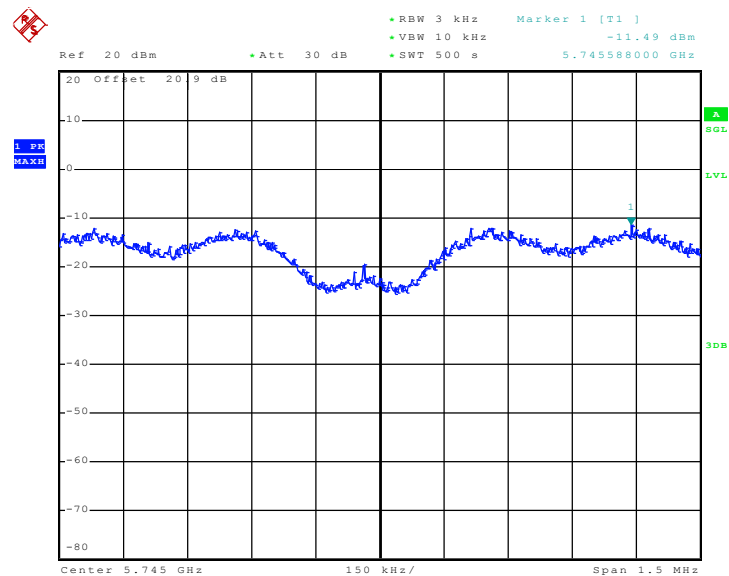


PSD Plot on 802.11n (HT-20) Channel 149 - Chain 0



Date: 26.OCT.2010 17:24:26

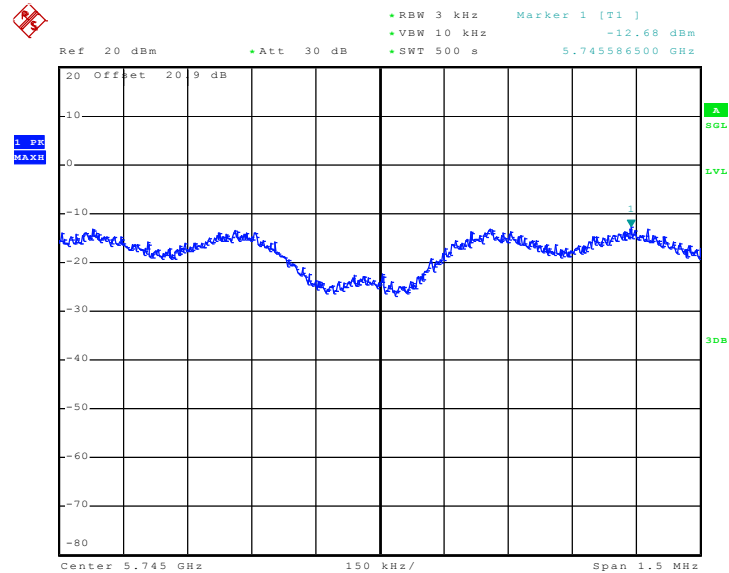
PSD Plot on 802.11n (HT-20) Channel 149 - Chain 1



Date: 26.OCT.2010 17:33:24

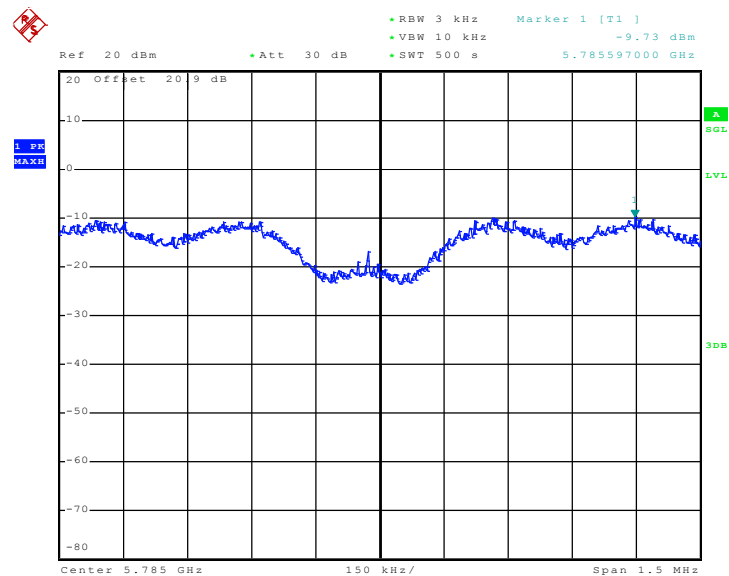


PSD Plot on 802.11n (HT-20) Channel 149 - Chain 2



Date: 26.OCT.2010 17:42:25

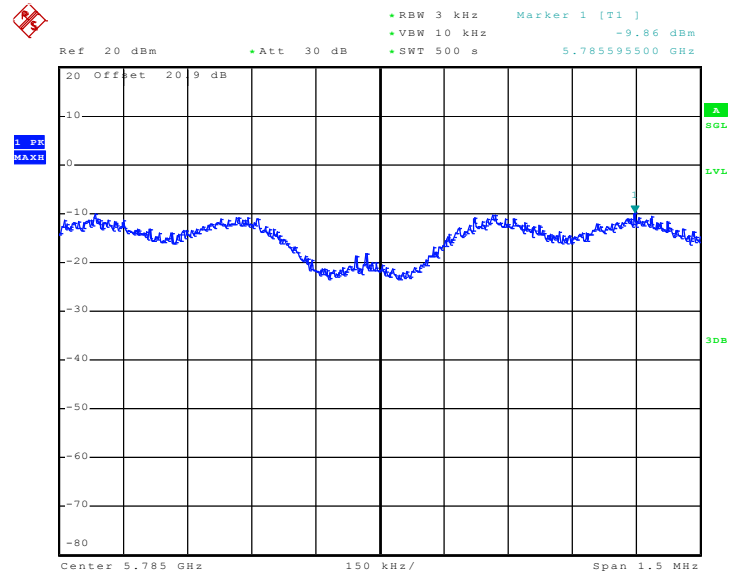
PSD Plot on 802.11n (HT-20) Channel 157 - Chain 0



Date: 26.OCT.2010 18:09:33

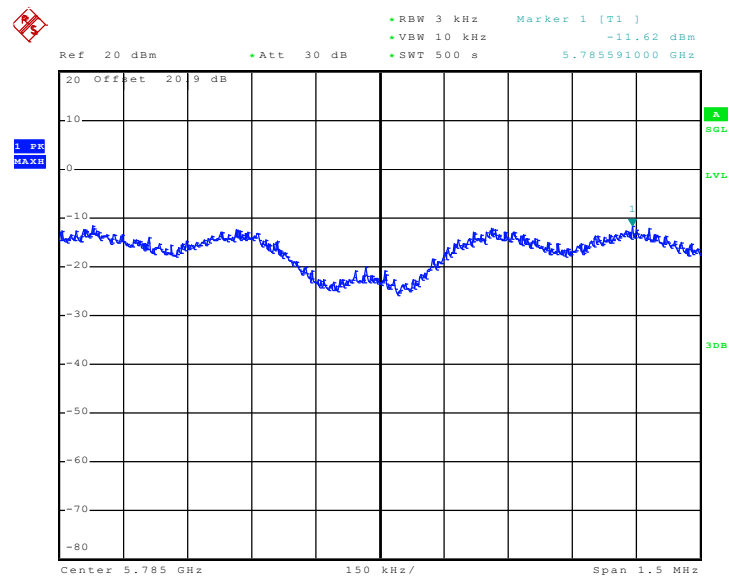


PSD Plot on 802.11n (HT-20) Channel 157 - Chain 1



Date: 26.OCT.2010 18:00:34

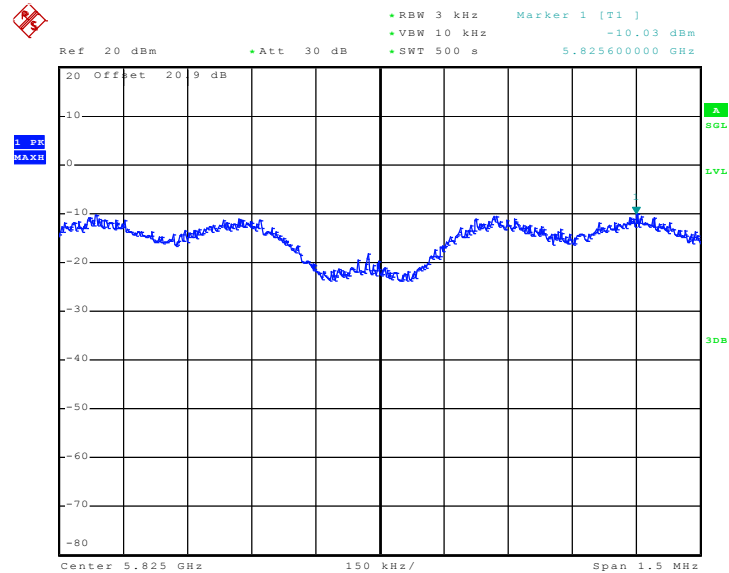
PSD Plot on 802.11n (HT-20) Channel 157 - Chain 2



Date: 26.OCT.2010 17:51:42

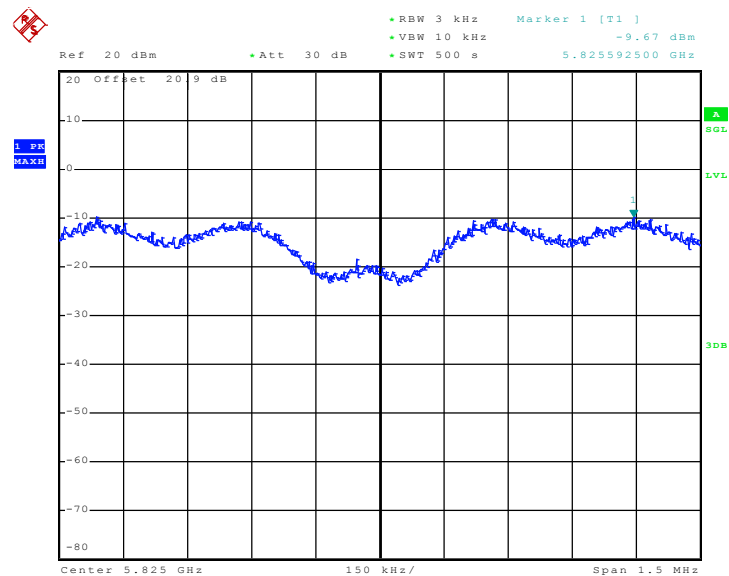


PSD Plot on 802.11n (HT-20) Channel 165 - Chain 0



Date: 26.OCT.2010 18:18:39

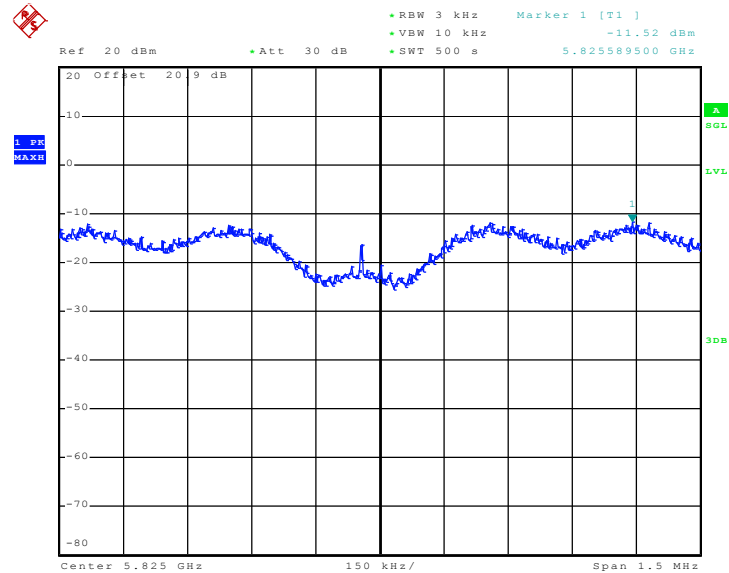
PSD Plot on 802.11n (HT-20) Channel 165 - Chain 1



Date: 26.OCT.2010 18:27:36

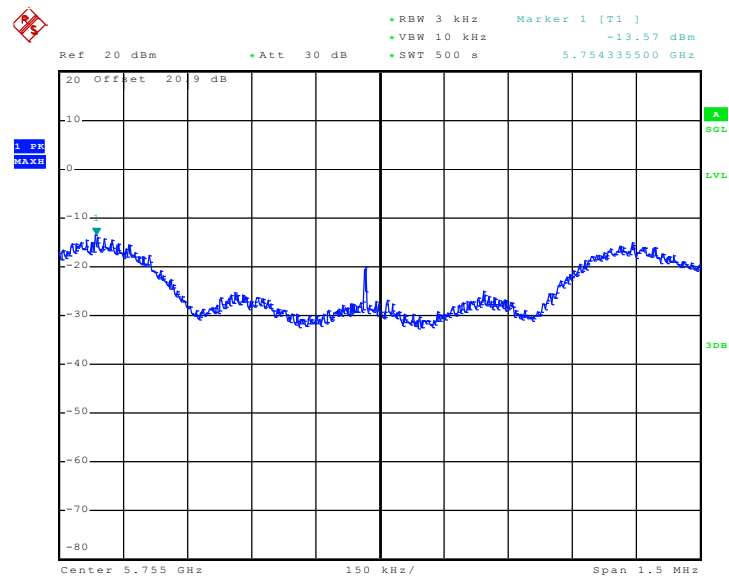


PSD Plot on 802.11n (HT-20) Channel 165 - Chain 2



Date: 26.OCT.2010 19:06:32

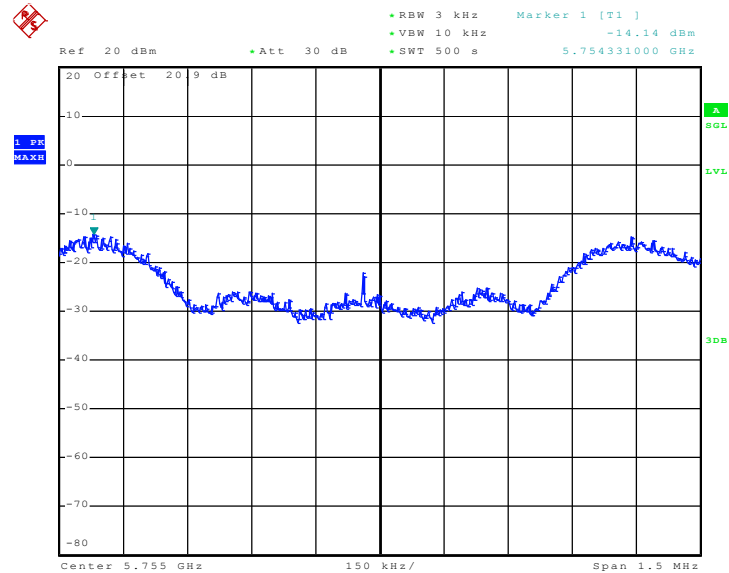
PSD Plot on 802.11n (HT-40) Channel 151 - Chain 0



Date: 26.OCT.2010 19:33:46

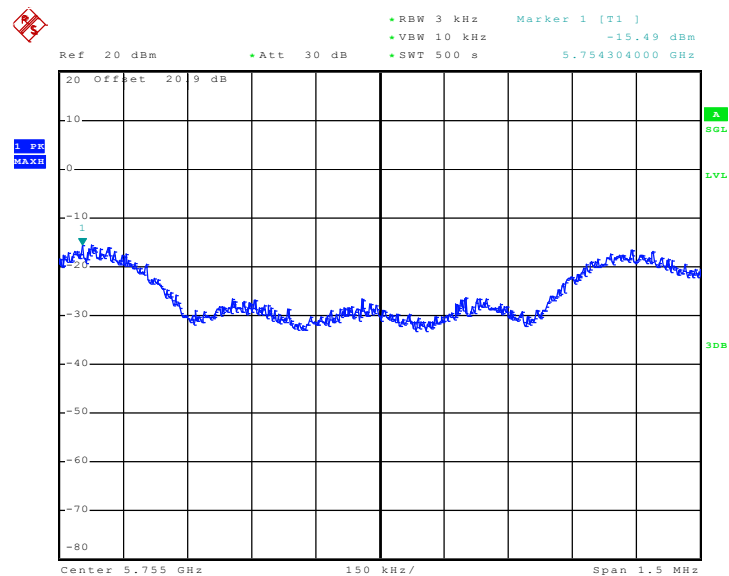


PSD Plot on 802.11n (HT-40) Channel 151 - Chain 1



Date: 26.OCT.2010 19:24:54

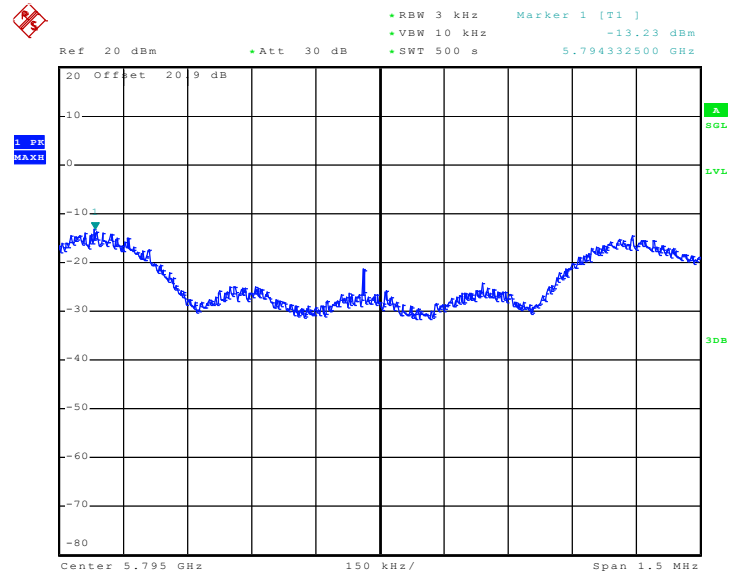
PSD Plot on 802.11n (HT-40) Channel 151 - Chain 2



Date: 26.OCT.2010 19:15:56

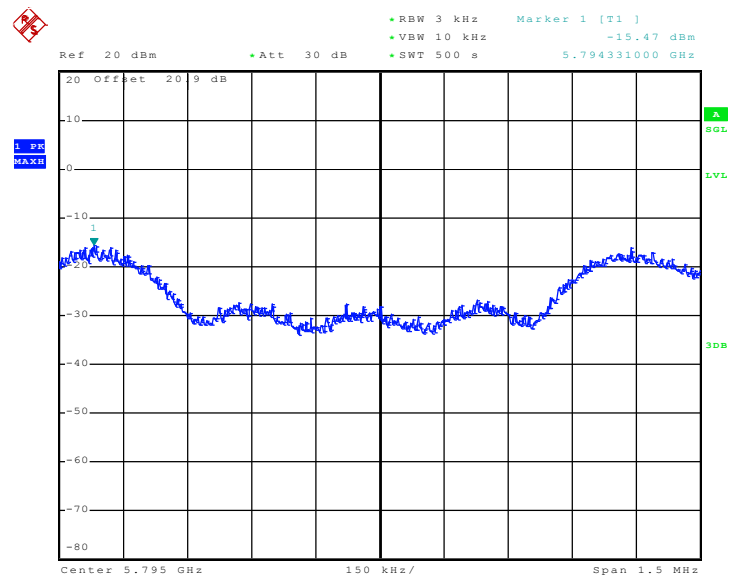


PSD Plot on 802.11n (HT-40) Channel 159 - Chain 0



Date: 26.OCT.2010 19:42:51

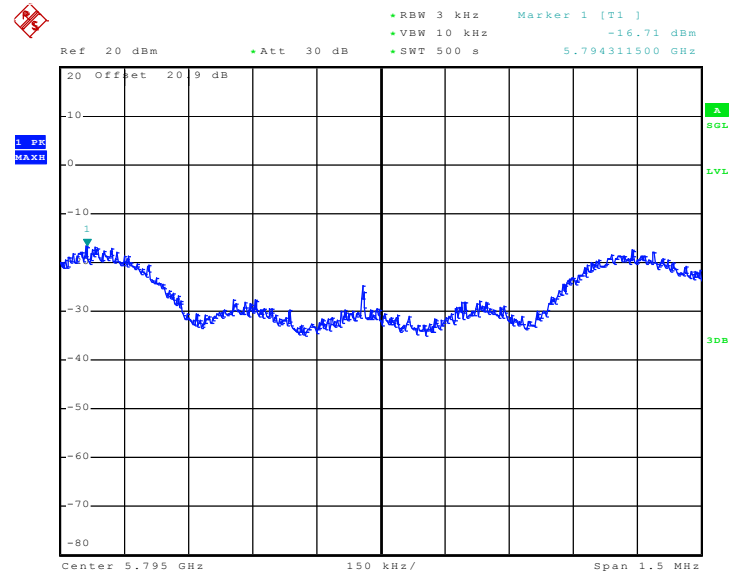
PSD Plot on 802.11n (HT-40) Channel 159 - Chain 1



Date: 26.OCT.2010 19:51:51



PSD Plot on 802.11n (HT-40) Channel 159 - Chain 2

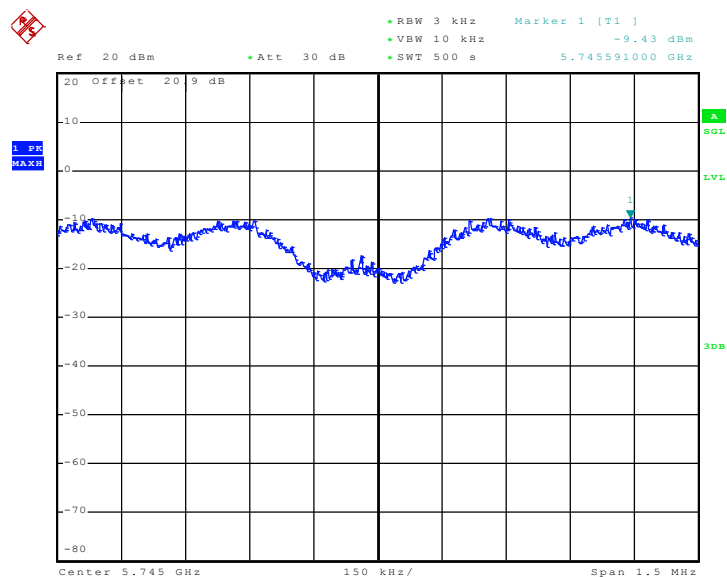


Date: 26.OCT.2010 20:02:23



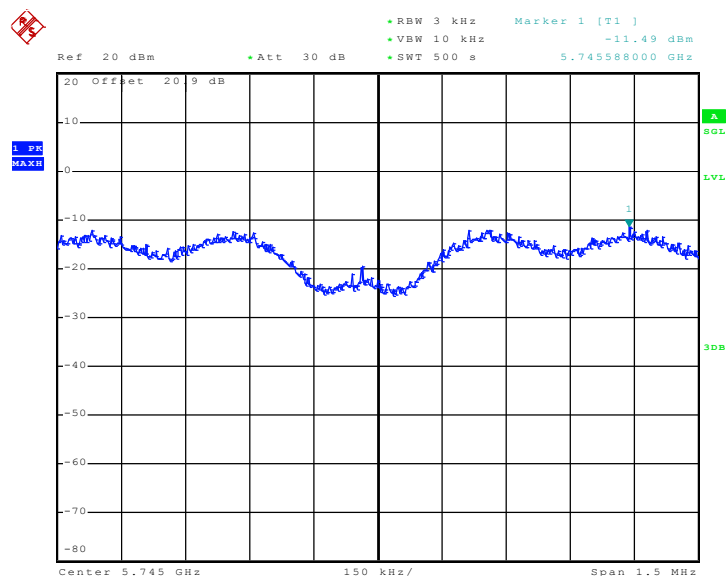
<Beam-Forming Off: 2x3>

PSD Plot on 802.11n (HT-20) Channel 149 - Chain 0



Date: 26.OCT.2010 17:24:26

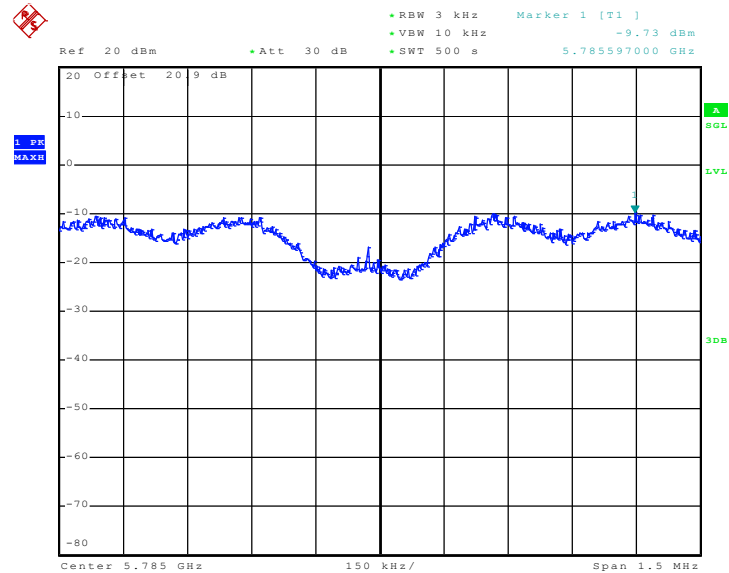
PSD Plot on 802.11n (HT-20) Channel 149 - Chain 1



Date: 26.OCT.2010 17:33:24

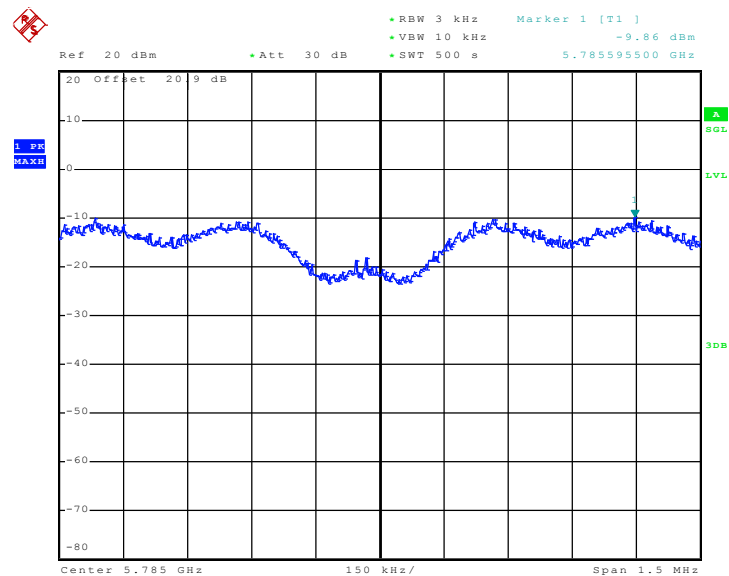


PSD Plot on 802.11n (HT-20) Channel 157 - Chain 0



Date: 26.OCT.2010 18:09:33

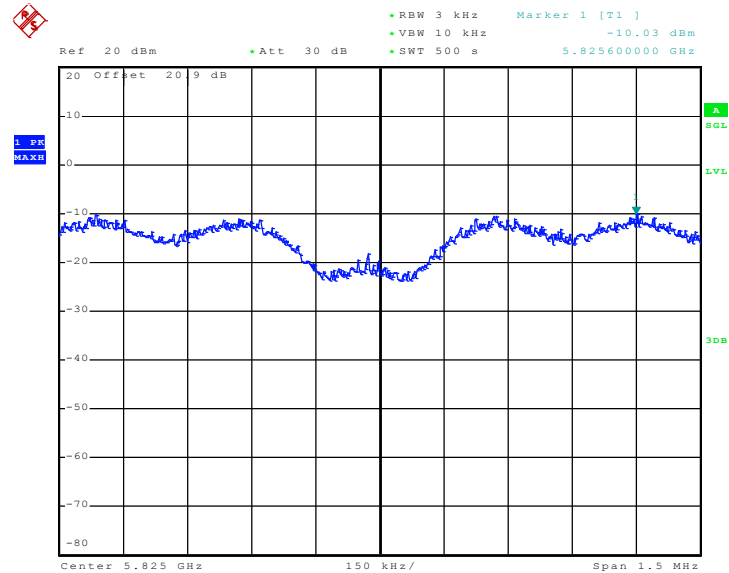
PSD Plot on 802.11n (HT-20) Channel 157 - Chain 1



Date: 26.OCT.2010 18:00:34

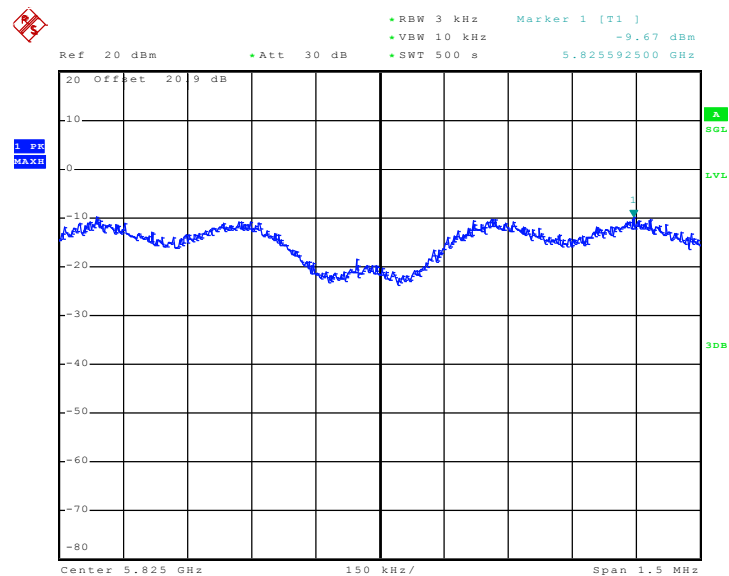


PSD Plot on 802.11n (HT-20) Channel 165 - Chain 0



Date: 26.OCT.2010 18:18:39

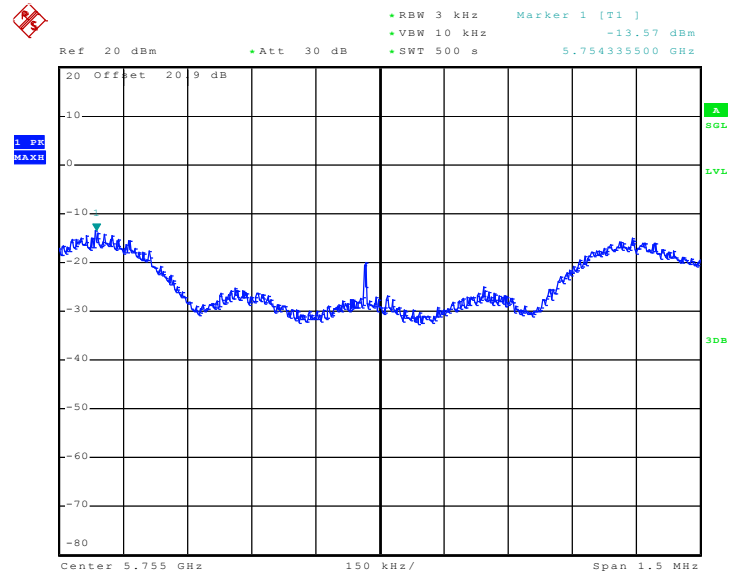
PSD Plot on 802.11n (HT-20) Channel 165 - Chain 1



Date: 26.OCT.2010 18:27:36

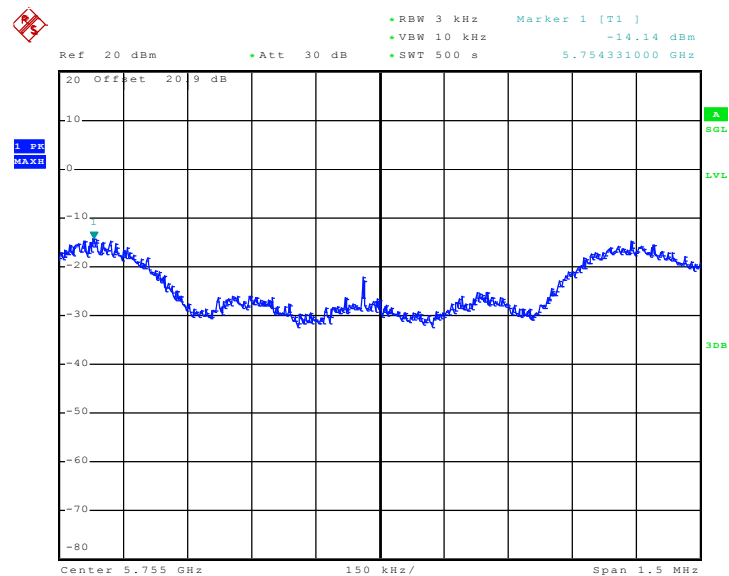


PSD Plot on 802.11n (HT-40) Channel 151 - Chain 0



Date: 26.OCT.2010 19:33:46

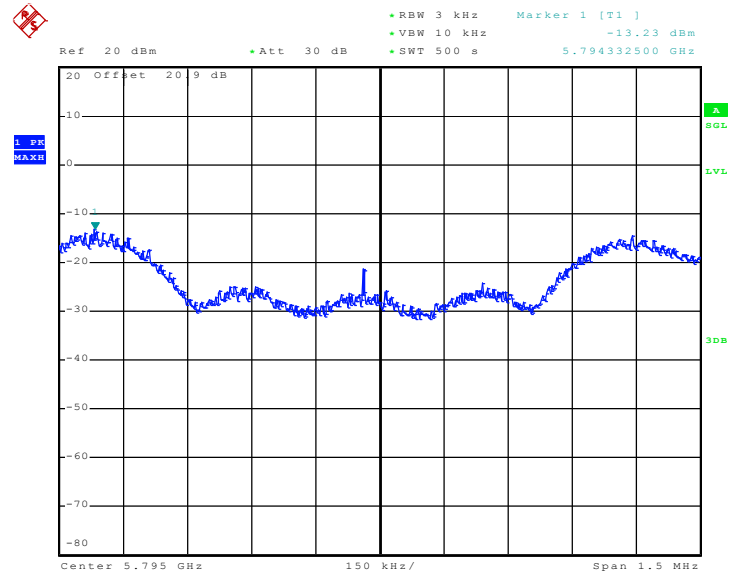
PSD Plot on 802.11n (HT-40) Channel 151 - Chain 1



Date: 26.OCT.2010 19:24:54

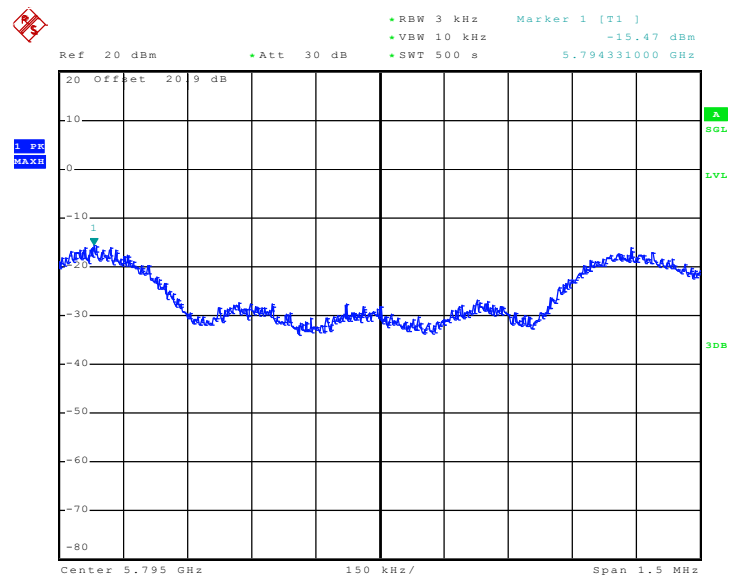


PSD Plot on 802.11n (HT-40) Channel 159 - Chain 0



Date: 26.OCT.2010 19:42:51

PSD Plot on 802.11n (HT-40) Channel 159 - Chain 1



Date: 26.OCT.2010 19:51:51

3.3 Average Power Measurement

3.3.1 Limit of Average Power

None; for reporting purposes only.

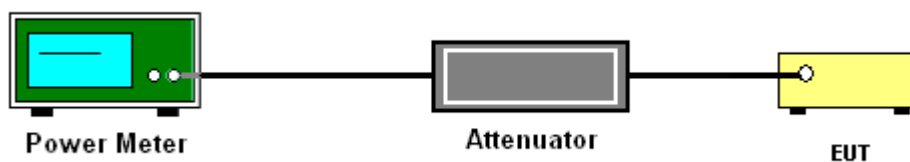
3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

3.3.3 Test Procedures

1. The RF output of EUT was connected to the power meter by a low loss cable.
2. Measure the power by power meter.

3.3.4 Test Setup



3.3.5 Test Result of Average Power

<Normal Mode: 3x3>

Test Mode :	802.11b L/M/H channels	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11b Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total Power
01	2412	17.46	17.43	17.33	22.18
06	2437	17.38	17.65	18.06	22.48
11	2462	17.02	17.11	17.67	22.05

Test Mode :	802.11g L/M/H channels	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11g Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total Power
01	2412	10.77	10.60	10.53	15.41
06	2437	14.24	14.47	14.60	19.21
11	2462	12.84	12.85	12.62	17.54

Test Mode :	802.11a L/M/H channels	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11a Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total Power
149	5745	16.13	15.83	14.58	20.33
157	5785	15.48	15.63	14.07	19.89
165	5825	15.57	15.48	14.18	19.89



<Normal Mode: 2x3>

Test Mode :	802.11a L/M/H channels	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11a Measured Output Power (dBm)		
		Chain 0	Chain 1	Total Power
149	5745	16.13	15.83	18.99
157	5785	15.48	15.63	18.57
165	5825	15.57	15.48	18.54

**<Beam-Forming On: 3x3>**

Test Mode :	802.11n (HT-20) L/M/H channels at 2.4G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 3Tx) Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total power
01	2412	10.62	10.64	10.94	15.51
06	2437	14.36	14.62	14.82	19.38
11	2462	9.71	9.86	10.46	14.79

Test Mode :	802.11n (HT-40) L/M/H channels at 2.4G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 3Tx) Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total power
03	2422	9.02	9.22	9.12	13.89
06	2437	10.54	10.83	11.77	15.85
09	2452	9.53	10.15	10.78	14.95

**<Beam-Forming On: 3x3>**

Test Mode :	802.11n (HT-20) L/M/H channels at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 3Tx) Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total Power
149	5745	16.47	16.23	14.87	20.68
157	5785	15.88	15.74	14.47	20.18
165	5825	15.47	15.83	14.26	20.01

Test Mode :	802.11n (HT-40) L/M/H channels at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 3Tx) Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total Power
151	5755	15.19	15.14	14.7	19.79
159	5795	15.43	15.48	15.55	20.26

**<Beam-Forming On: 2x3>**

Test Mode :	802.11n (HT-20) L/M/H channels at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 2Tx) Measured Output Power (dBm)		
		Chain 0	Chain 1	Total Power
149	5745	16.47	16.23	19.36
157	5785	15.88	15.74	18.82
165	5825	15.47	15.83	18.66

Test Mode :	802.11n (HT-40) L/M/H channels at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 2Tx) Measured Output Power (dBm)		
		Chain 0	Chain 1	Total Power
151	5755	15.19	15.14	18.18
159	5795	15.43	15.48	18.47

**<Beam-Forming Off: 3x3>**

Test Mode :	802.11n (HT-20) L/M/H channels at 2.4G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 3Tx) Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total power
01	2412	10.62	10.64	10.94	15.51
06	2437	14.36	14.62	14.82	19.38
11	2462	9.71	9.86	10.46	14.79

Test Mode :	802.11n (HT-40) L/M/H channels at 2.4G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 3Tx) Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total power
03	2422	9.02	9.22	9.12	13.89
06	2437	10.54	10.83	11.77	15.85
09	2452	9.53	10.15	10.78	14.95

**<Beam-Forming Off: 3x3>**

Test Mode :	802.11n (HT-20) L/M/H channels at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 3Tx) Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total Power
149	5745	16.47	16.23	14.87	20.68
157	5785	15.88	15.74	14.47	20.18
165	5825	15.47	15.83	14.26	20.01

Test Mode :	802.11n (HT-40) L/M/H channels at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 3Tx) Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total Power
151	5755	15.19	15.14	14.7	19.79
159	5795	15.43	15.48	15.55	20.26

**<Beam-Forming Off: 2x3>**

Test Mode :	802.11n (HT-20) L/M/H channels at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 2Tx) Measured Output Power (dBm)		
		Chain 0	Chain 1	Total Power
149	5745	16.47	16.23	19.36
157	5785	15.88	15.74	18.82
165	5825	15.47	15.83	18.66

Test Mode :	802.11n (HT-40) L/M/H channels at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 2Tx) Measured Output Power (dBm)		
		Chain 0	Chain 1	Total Power
151	5755	15.19	15.14	18.18
159	5795	15.43	15.48	18.47

3.4 Peak Power Measurement

3.4.1 Limit of Peak Power

For systems using digital modulation in the 2400-2483.5MHz and 5725-5850MHz, the limit for peak output power is 30dBm. If transmitting antenna of directional gain greater than 6dBi are used the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of P-to-M operation, the limit has to be reduced by 1dB for every 1dB that the directional gain of the antenna exceeds 6dBi.

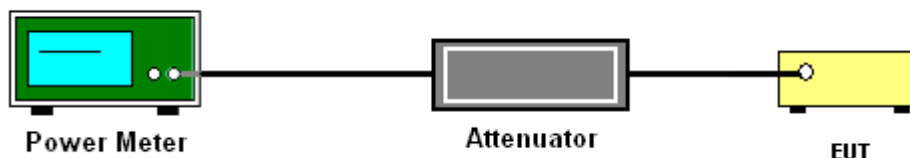
3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

3.4.3 Test Procedures

3. The testing follows FCC KDB Publication No. 558074 (Measurement Guidelines of DTS).
4. The RF output of EUT was connected to the power meter by a low loss cable.
5. Measure the power by power meter.

3.4.4 Test Setup





3.4.5 Test Result of Peak Power

<Normal Mode: 3x3>

Test Mode :	802.11b L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11b Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Total Power		
01	2412	19.82	19.7	19.56	24.47	27.63	Pass
06	2437	19.90	19.94	20.18	24.78	27.63	Pass
11	2462	19.55	19.46	19.83	24.39	27.63	Pass

Note: The maximum composite antenna gain is 8.37 dBi; therefore the limit is 27.63 dBm.

Test Mode :	802.11g L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11g Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Total Power		
01	2412	20.11	20.31	20.19	24.98	27.63	Pass
06	2437	22.65	22.73	23.11	27.61	27.63	Pass
11	2462	22.11	21.84	21.83	26.70	27.63	Pass

Note: The maximum composite antenna gain is 8.37 dBi; therefore the limit is 27.63 dBm.

Test Mode :	802.11a L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11a Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Total Power		
149	5745	21.14	20.71	19.23	25.21	26.47	Pass
157	5785	21.10	20.81	19.24	25.23	26.47	Pass
165	5825	20.89	20.54	18.83	24.95	26.47	Pass

Note: The maximum composite antenna gain is 9.53 dBi; therefore the limit is 26.47 dBm.



<Normal Mode: 2x3>

Test Mode :	802.11a L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11a Measured Output Power (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Total Power		
149	5745	21.14	20.71	23.94	28.23	Pass
157	5785	21.10	20.81	23.97	28.23	Pass
165	5825	20.89	20.54	23.73	28.23	Pass

Note: The maximum composite antenna gain is 7.77 dBi; therefore the limit is 28.23 dBm.

**<Beam-Forming On: 3x3>**

Test Mode :	802.11n (HT-20) L/M/H channels at 2.4G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 3Tx) Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Total Power		
01	2412	19.91	20.22	20.61	25.03	27.63	Pass
06	2437	22.70	22.63	23.11	27.59	27.63	Pass
11	2462	19.53	19.21	20.12	24.41	27.63	Pass

Note: The maximum composite antenna gain is 8.37 dBi; therefore the limit is 27.63 dBm.

Test Mode :	802.11n (HT-40) L/M/H channels at 2.4G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 3Tx) Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Total Power		
03	2422	18.57	18.86	18.87	23.54	27.63	Pass
06	2437	19.92	20.23	21.08	25.21	27.63	Pass
09	2452	19.31	19.35	20.21	24.41	27.63	Pass

Note: The maximum composite antenna gain is 8.37 dBi; therefore the limit is 27.63 dBm.

**<Beam-Forming On: 3x3>**

Test Mode :	802.11n (HT-20) L/M/H channels at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 3Tx) Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Total Power		
149	5745	21.45	20.80	18.92	25.29	26.47	Pass
157	5785	21.05	20.74	18.83	25.08	26.47	Pass
165	5825	20.88	20.70	18.75	24.98	26.47	Pass

Note: The maximum composite antenna gain is 9.53 dBi; therefore the limit is 26.47dBm.

Test Mode :	802.11n (HT-40) L/M/H channels at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 3Tx) Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Total Power		
151	5755	20.71	20.22	19.62	24.98	26.47	Pass
159	5795	21.88	21.55	19.88	25.96	26.47	Pass

Note: The maximum composite antenna gain is 9.53 dBi; therefore the limit is 26.47 dBm.

**<Beam-Forming On: 2x3>**

Test Mode :	802.11n (HT-20) L/M/H channels at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 2Tx) Measured Output Power (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Total Power		
149	5745	21.45	20.80	24.15	28.23	Pass
157	5785	21.05	20.74	23.91	28.23	Pass
165	5825	20.88	20.70	23.80	28.23	Pass

Note: The maximum composite antenna gain is 7.77 dBi; therefore the limit is 28.23 dBm.

Test Mode :	802.11n (HT-40) L/M/H channels at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 2Tx) Measured Output Power (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Total Power		
151	5755	20.71	20.22	23.48	28.23	Pass
159	5795	21.88	21.55	24.73	28.23	Pass

Note: The maximum composite antenna gain is 7.77 dBi; therefore the limit is 28.23 dBm.

**<Beam-Forming Off: 3x3>**

Test Mode :	802.11n (HT-20) L/M/H channels at 2.4G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 3Tx) Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Total Power		
01	2412	19.91	20.22	20.61	25.03	30.00	Pass
06	2437	22.70	22.63	23.11	27.59	30.00	Pass
11	2462	19.53	19.21	20.12	24.41	30.00	Pass

Test Mode :	802.11n (HT-40) L/M/H channels at 2.4G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 3Tx) Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Total Power		
03	2422	18.57	18.86	18.87	23.54	30.00	Pass
06	2437	19.92	20.23	21.08	25.21	30.00	Pass
09	2452	19.31	19.35	20.21	24.41	30.00	Pass

**<Beam-Forming Off: 3x3>**

Test Mode :	802.11n (HT-20) L/M/H channels at 5.8G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 3Tx) Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Total Power		
149	5745	21.45	20.80	18.92	25.29	30.00	Pass
157	5785	21.05	20.74	18.83	25.08	30.00	Pass
165	5825	20.88	20.70	18.75	24.98	30.00	Pass

Test Mode :	802.11n (HT-40) L/M/H channels at 5.8G band	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 3Tx) Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Total Power		
151	5755	20.71	20.22	19.62	24.98	30.00	Pass
159	5795	21.88	21.55	19.88	25.96	30.00	Pass

**<Beam-Forming Off: 2x3>**

Test Mode :	802.11n (HT-20) L/M/H channels at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20, 2Tx) Measured Output Power (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Total Power		
149	5745	21.45	20.80	24.15	30.00	Pass
157	5785	21.05	20.74	23.91	30.00	Pass
165	5825	20.88	20.70	23.80	30.00	Pass

Test Mode :	802.11n (HT-40) L/M/H channels at 5.8G band	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40, 2Tx) Measured Output Power (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Total Power		
151	5755	20.71	20.22	23.48	30.00	Pass
159	5795	21.88	21.55	24.73	30.00	Pass

3.5 Conducted Spurious Emission Measurement

3.5.1 Limit of Spurious Emission Measurement

All harmonics/spurs must be at least 20 dB down from the highest emission level within the authorized band.

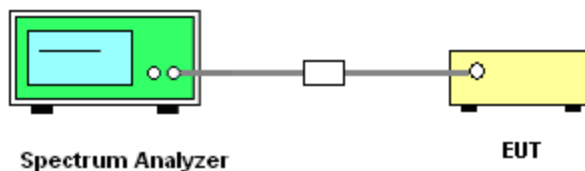
3.5.2 Measuring Instruments

See list of measuring instruments of this test report.

3.5.3 Test Procedure

1. The transmitter output was connected to the spectrum analyzer via a low lose cable.
2. Set RBW = 100 kHz, Video bandwidth (VBW) > RBW, scan up through 10th harmonic. All harmonics/spurs must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

3.5.4 Test Setup



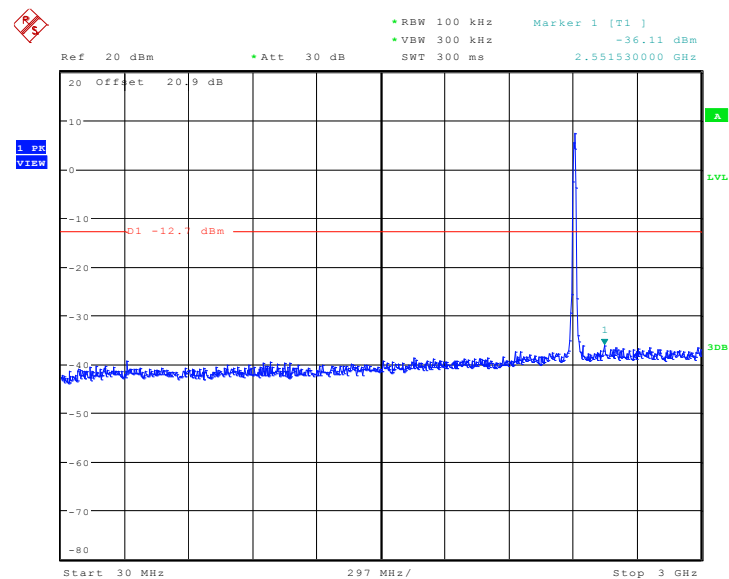


3.5.5 Test Result

<Normal Mode: 3x3>

Test Mode :	802.11b L/M/H channels	Temperature :	25~27°C
Test Band :	802.11b	Relative Humidity :	64~66%
Test Channel :	01, 06, 11	Test Engineer :	Lewis He

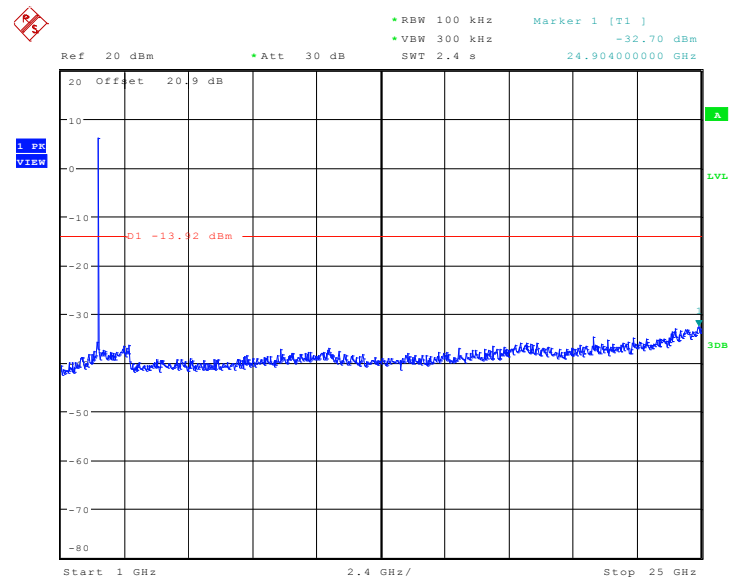
Conducted Spurious Emission Plot on 802.11b Channel 01 - Chain 0



Date: 5.NOV.2010 17:47:09

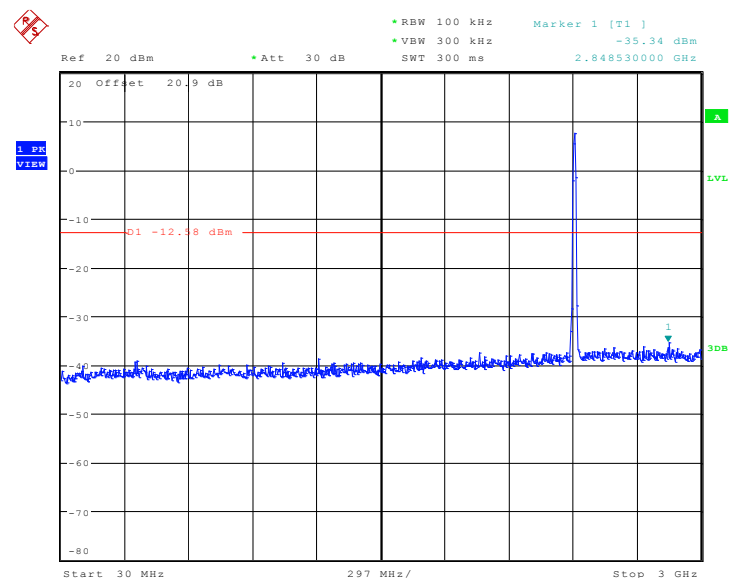


Conducted Spurious Emission Plot on
802.11b Channel 01 - Chain 0



Date: 5.NOV.2010 17:47:25

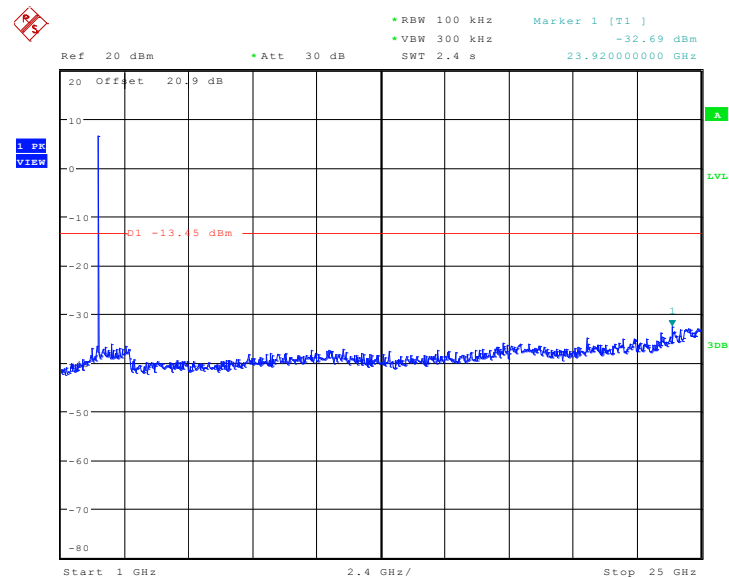
Conducted Spurious Emission Plot on
802.11b Channel 01 - Chain 1



Date: 5.NOV.2010 17:45:15

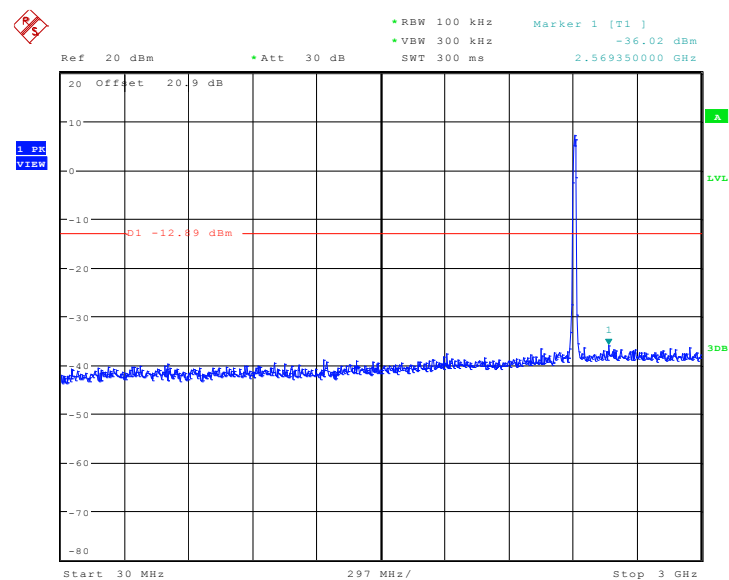


Conducted Spurious Emission Plot on
802.11b Channel 01 - Chain 1



Date: 5.NOV.2010 17:45:31

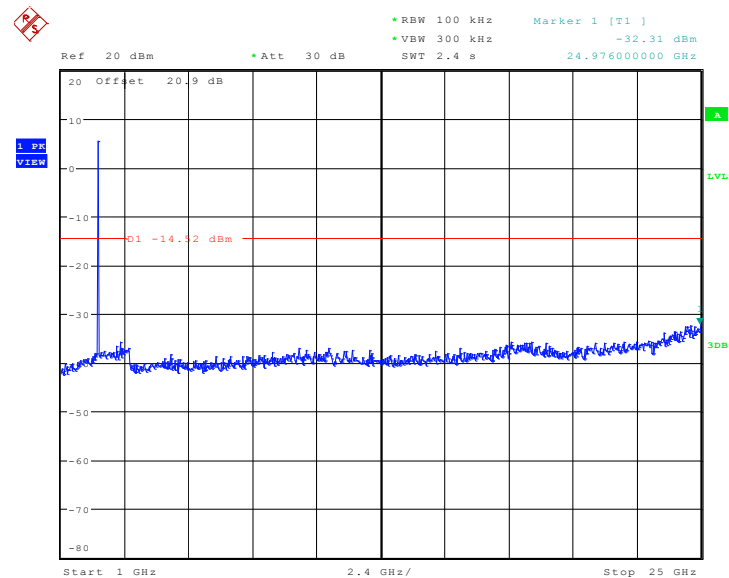
Conducted Spurious Emission Plot on
802.11b Channel 01 - Chain 2



Date: 5.NOV.2010 17:43:33

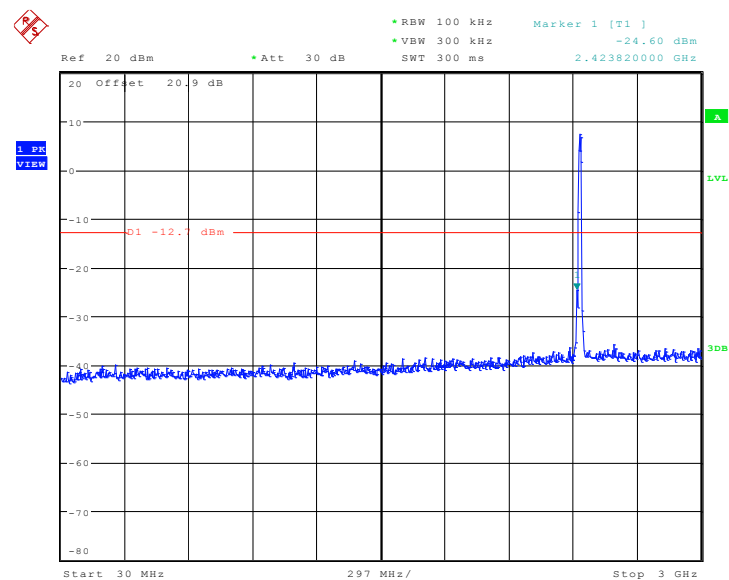


Conducted Spurious Emission Plot on
802.11b Channel 01 - Chain 2



Date: 5.NOV.2010 17:43:49

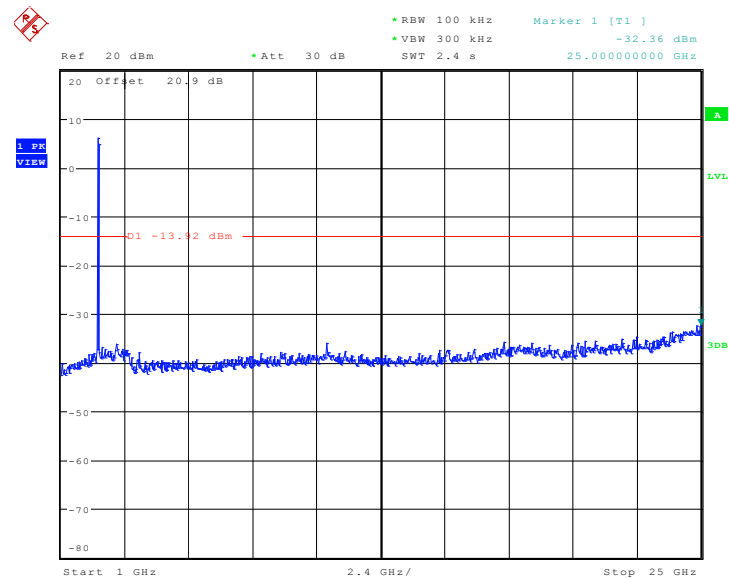
Conducted Spurious Emission Plot on
802.11b Channel 06 - Chain 0



Date: 5.NOV.2010 17:35:04

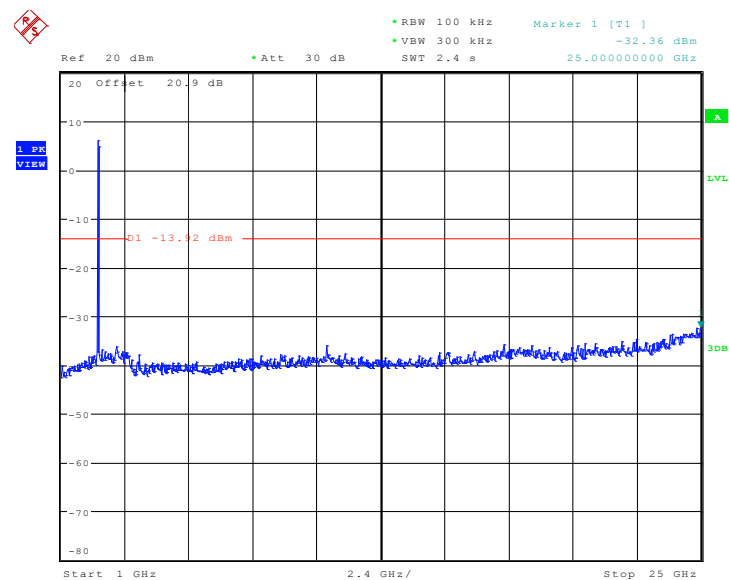


Conducted Spurious Emission Plot on
802.11b Channel 06 - Chain 0



Date: 5.NOV.2010 17:35:21

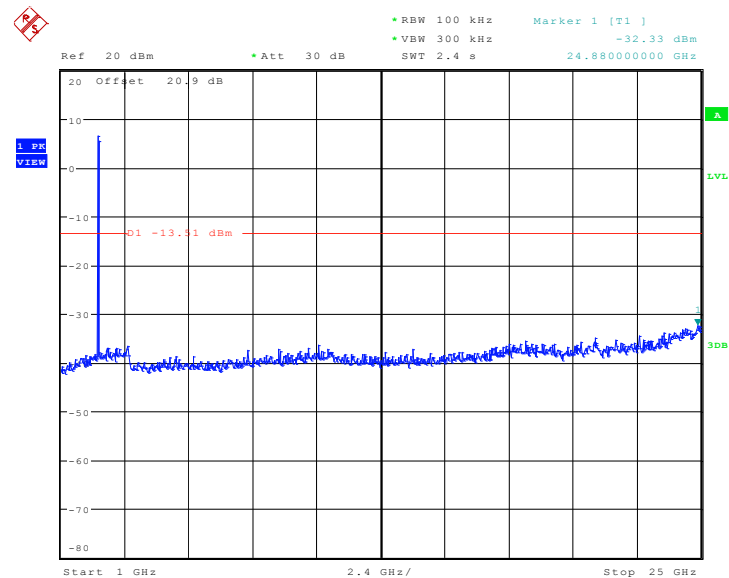
Conducted Spurious Emission Plot on
802.11b Channel 06 – Chain 1



Date: 5.NOV.2010 17:35:21

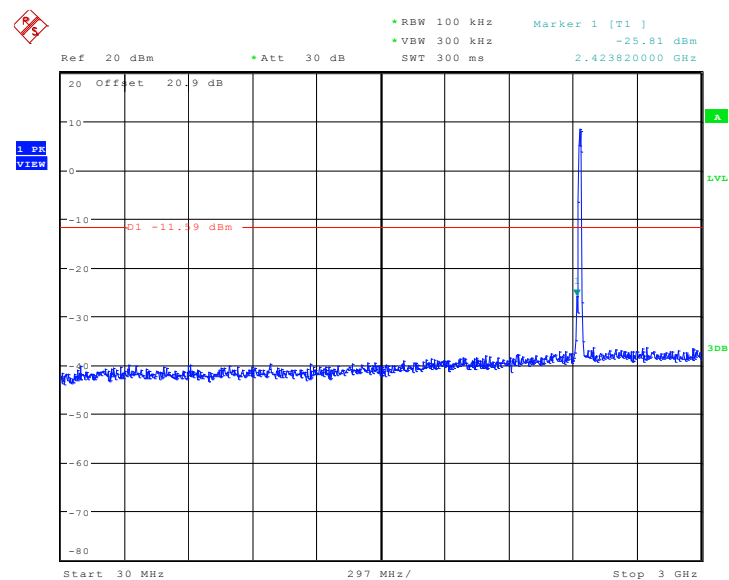


Conducted Spurious Emission Plot on
802.11b Channel 06 - Chain 1



Date: 5.NOV.2010 17:36:23

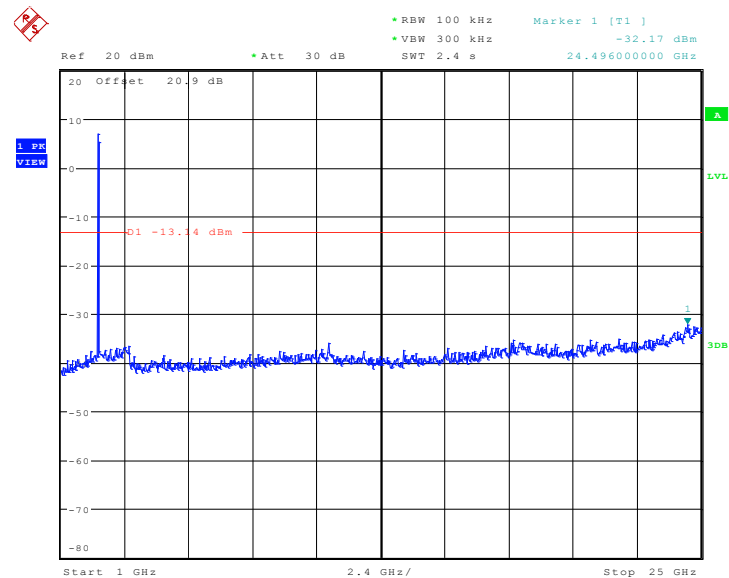
Conducted Spurious Emission Plot on
802.11b Channel 06 - Chain 2



Date: 5.NOV.2010 17:40:42

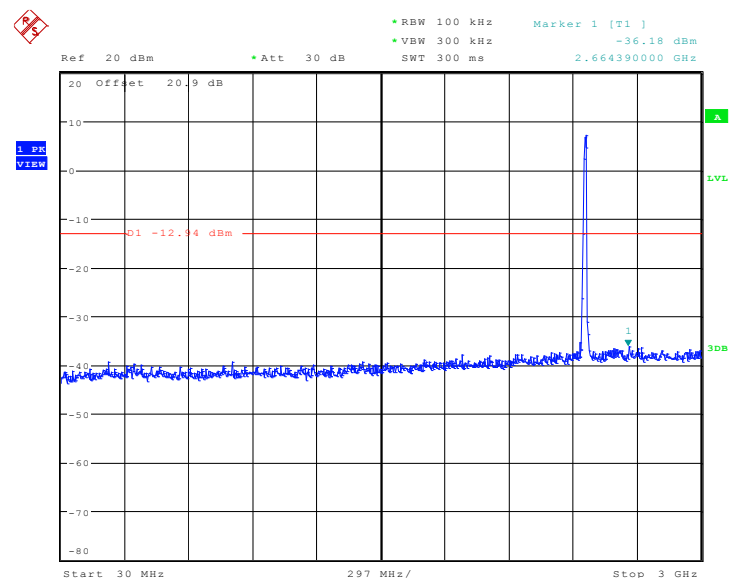


Conducted Spurious Emission Plot on
802.11b Channel 06 - Chain 2



Date: 5.NOV.2010 17:40:58

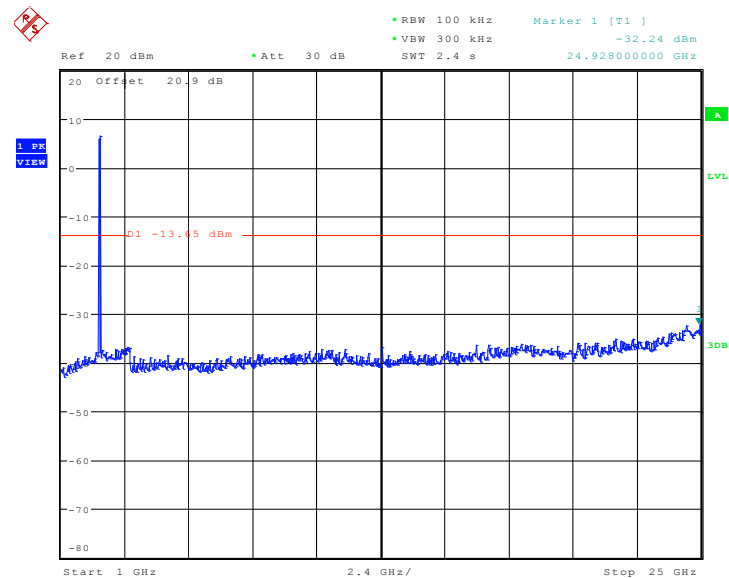
Conducted Spurious Emission Plot on
802.11b Channel 11 - Chain 0



Date: 5.NOV.2010 17:34:08

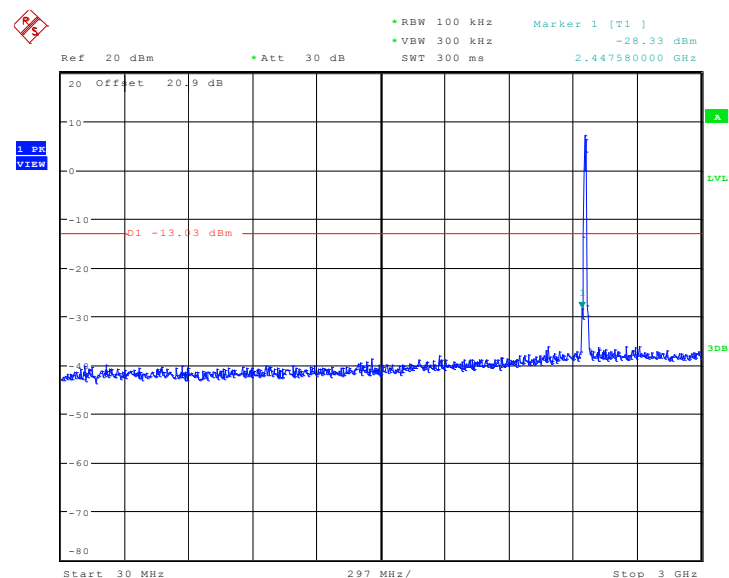


Conducted Spurious Emission Plot on
802.11b Channel 11 - Chain 0



Date: 5.NOV.2010 17:34:25

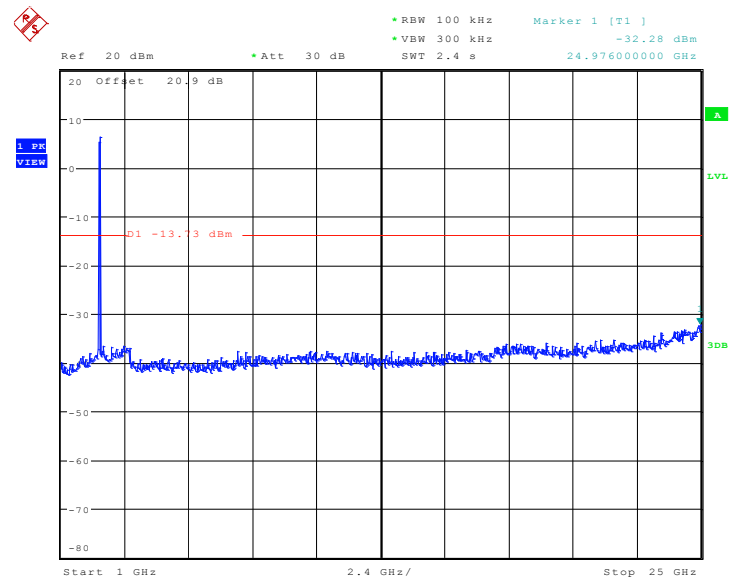
Conducted Spurious Emission Plot on
802.11b Channel 11 - Chain 1



Date: 5.NOV.2010 17:32:42

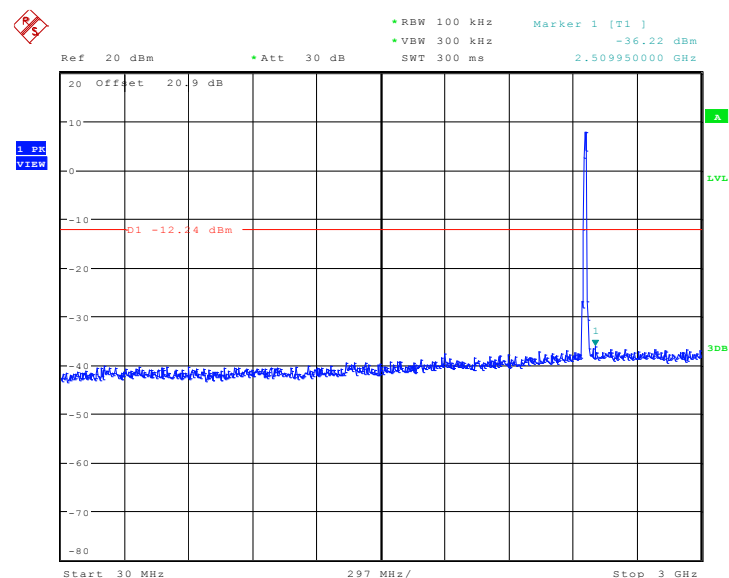


Conducted Spurious Emission Plot on
802.11b Channel 11 - Chain 1



Date: 5.NOV.2010 17:32:58

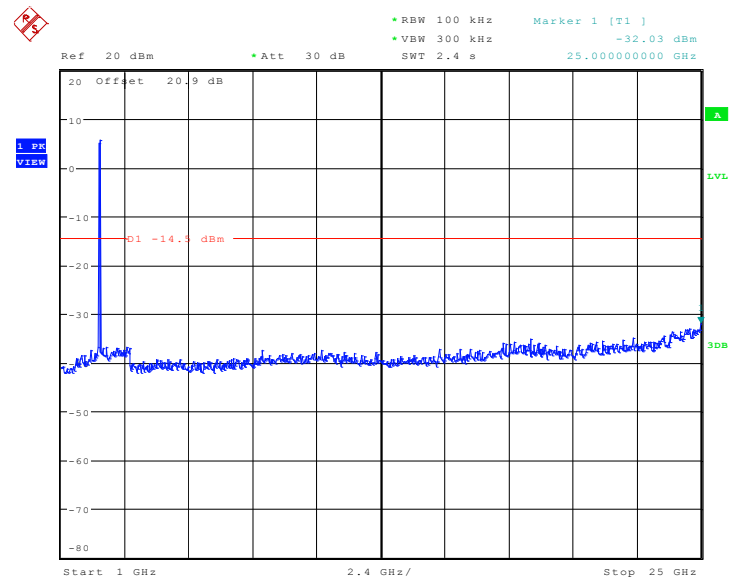
Conducted Spurious Emission Plot on
802.11b Channel 11 - Chain 2



Date: 5.NOV.2010 17:41:34



Conducted Spurious Emission Plot on
802.11b Channel 11 - Chain 2

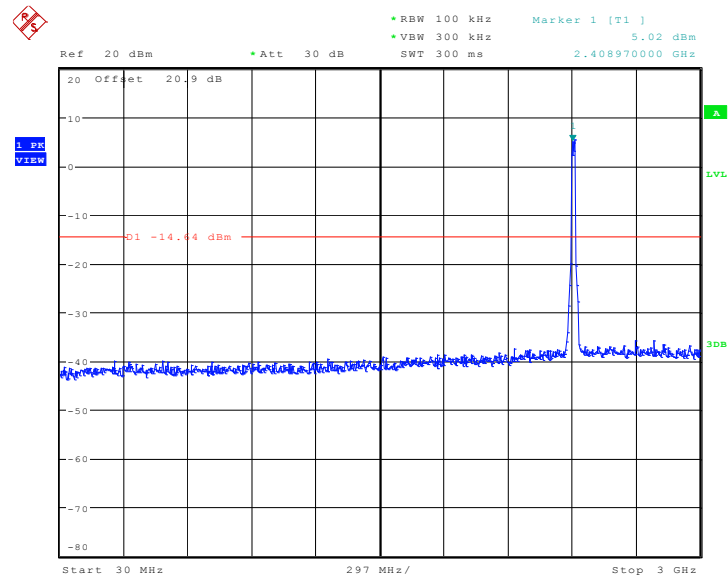


Date: 5.NOV.2010 17:41:50



Test Mode :	802.11g L/M/H channels	Temperature :	25~27°C
Test Band :	802.11g	Relative Humidity :	64~66%
Test Channel :	01, 06, 11	Test Engineer :	Lewis He

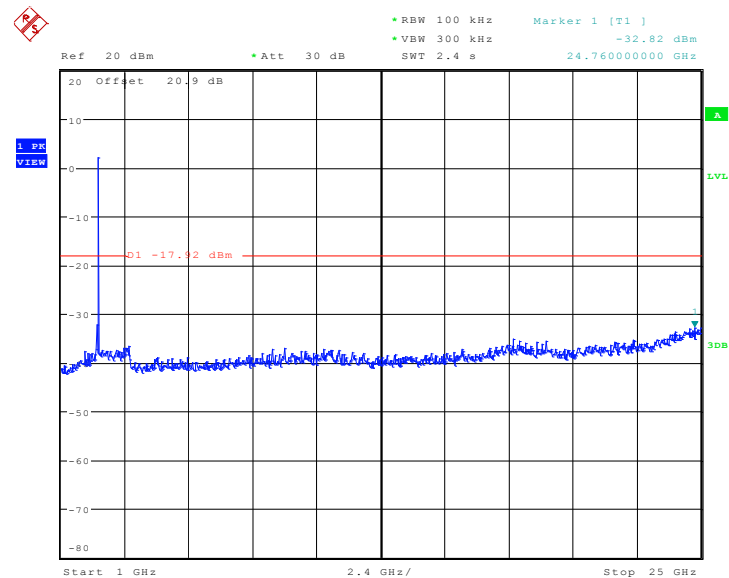
**Conducted Spurious Emission Plot on
802.11g Channel 01 - Chain 0**



Date: 5.NOV.2010 16:25:51

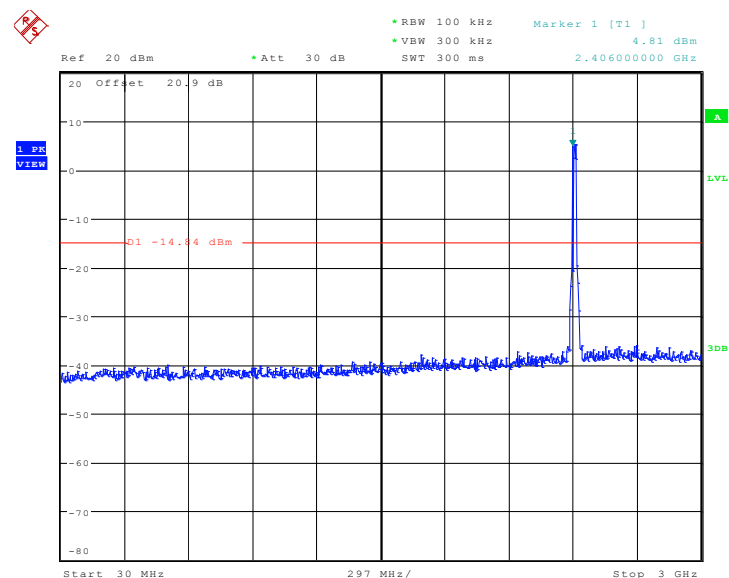


Conducted Spurious Emission Plot on
802.11g Channel 01 - Chain 0



Date: 5.NOV.2010 16:26:07

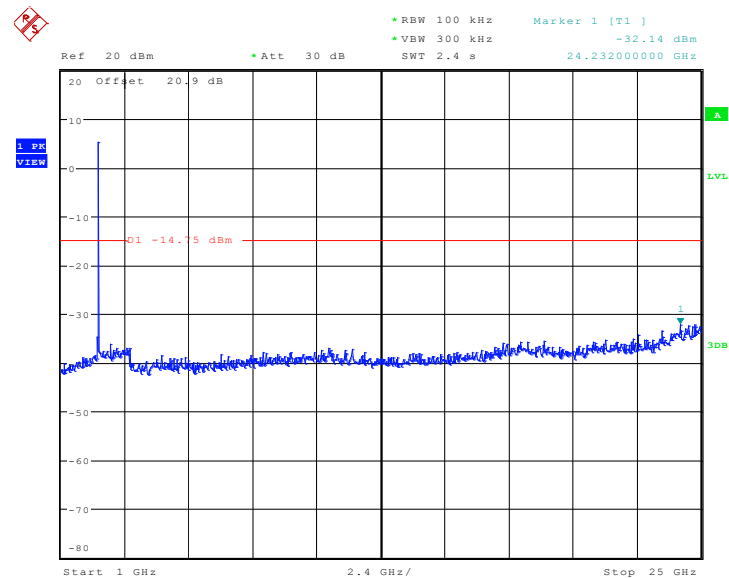
Conducted Spurious Emission Plot on
802.11g Channel 01 - Chain 1



Date: 5.NOV.2010 16:31:58

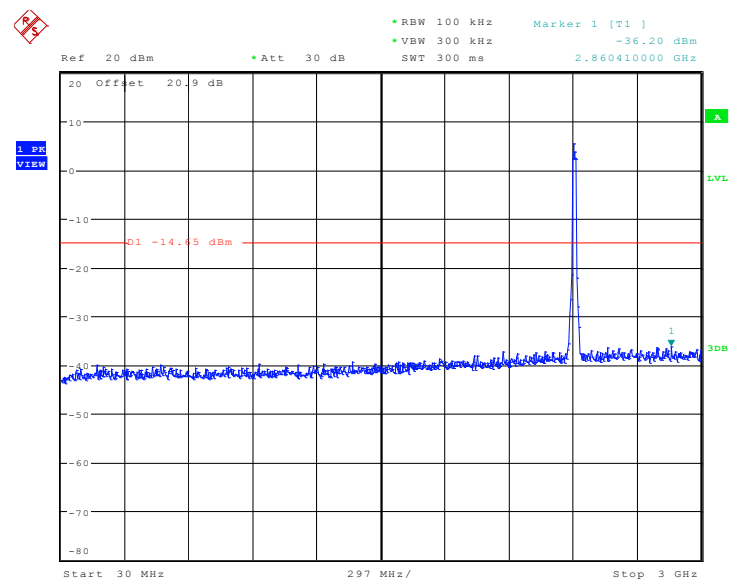


Conducted Spurious Emission Plot on
802.11g Channel 01 - Chain 1



Date: 5.NOV.2010 16:32:15

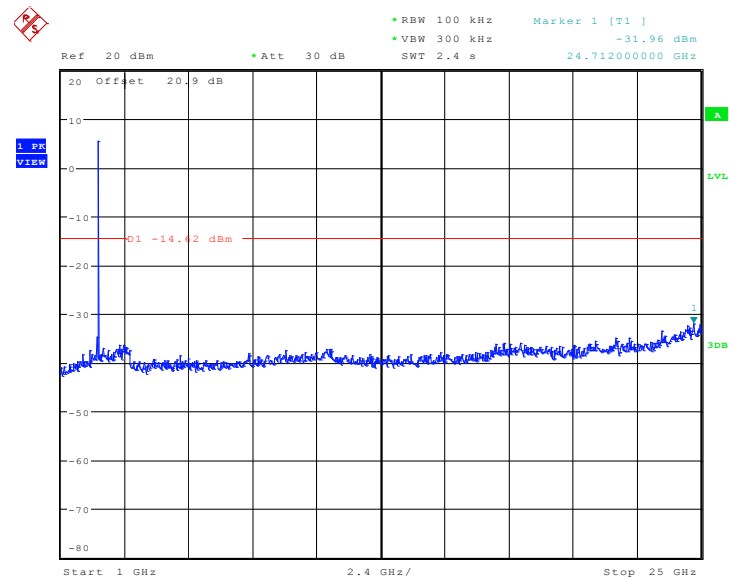
Conducted Spurious Emission Plot on
802.11g Channel 01 - Chain 2



Date: 5.NOV.2010 16:39:53

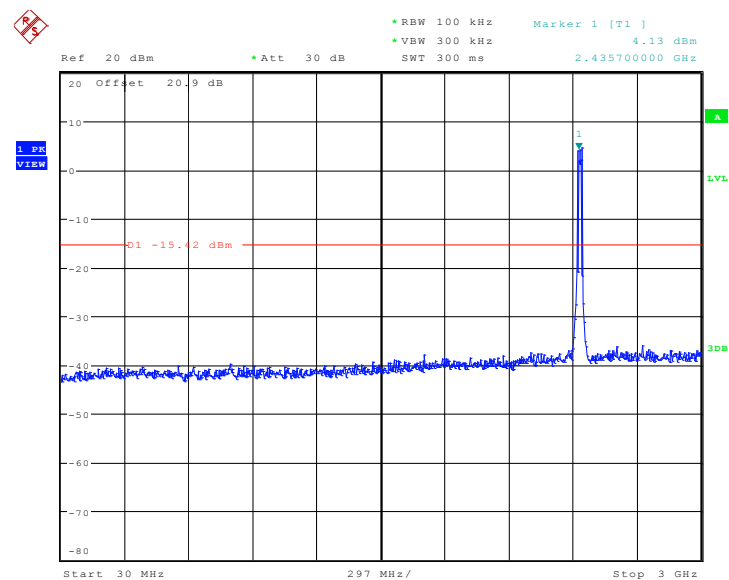


Conducted Spurious Emission Plot on
802.11g Channel 01 - Chain 2



Date: 5.NOV.2010 16:40:09

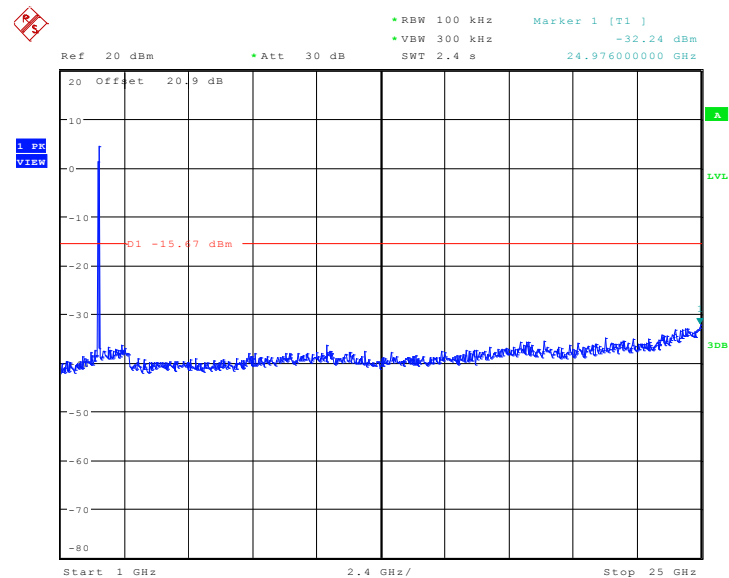
Conducted Spurious Emission Plot on
802.11g Channel 06 - Chain 0



Date: 5.NOV.2010 16:43:21

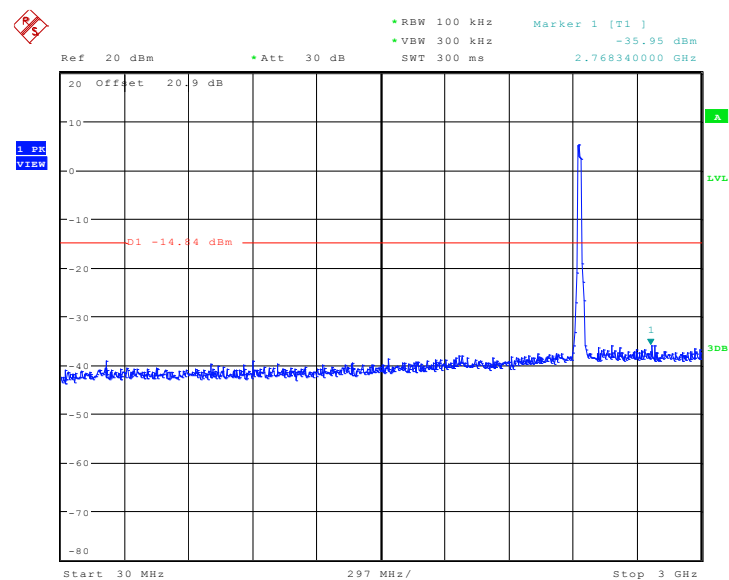


Conducted Spurious Emission Plot on
802.11g Channel 06 - Chain 0



Date: 5.NOV.2010 16:43:37

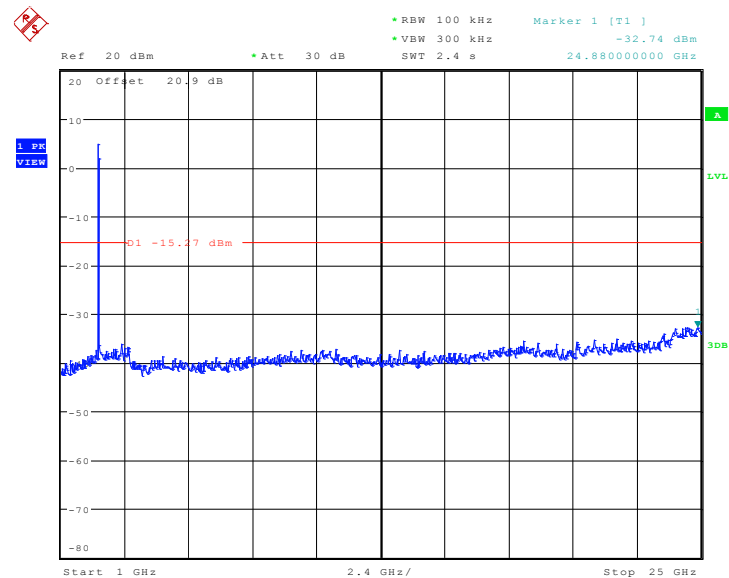
Conducted Spurious Emission Plot on
802.11g Channel 06 - Chain 1



Date: 5.NOV.2010 16:42:24

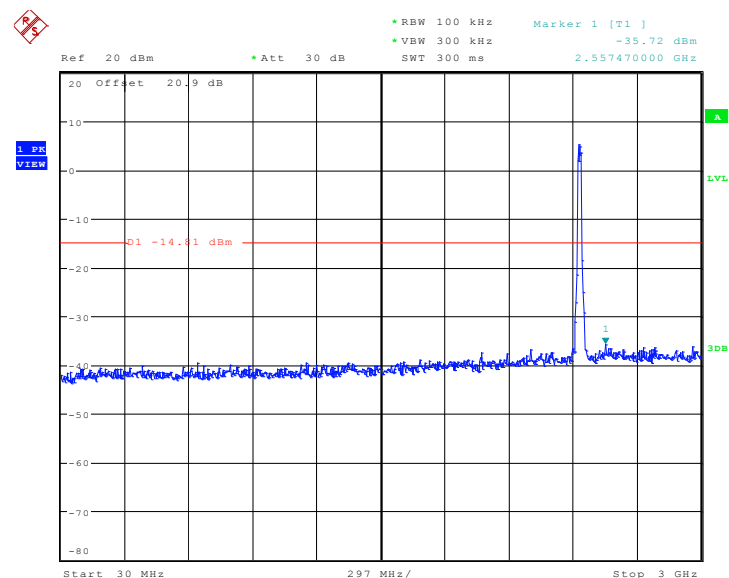


Conducted Spurious Emission Plot on
802.11g Channel 06 - Chain 1



Date: 5.NOV.2010 16:42:40

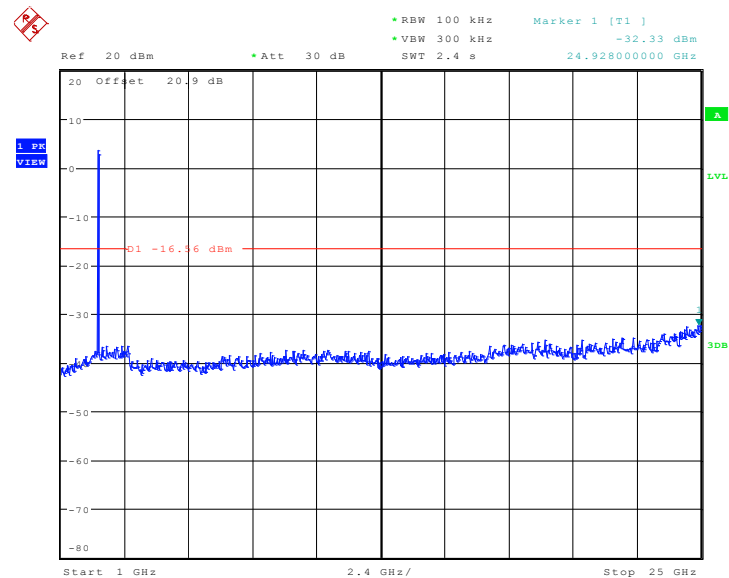
Conducted Spurious Emission Plot on
802.11g Channel 06 - Chain 2



Date: 5.NOV.2010 16:41:22

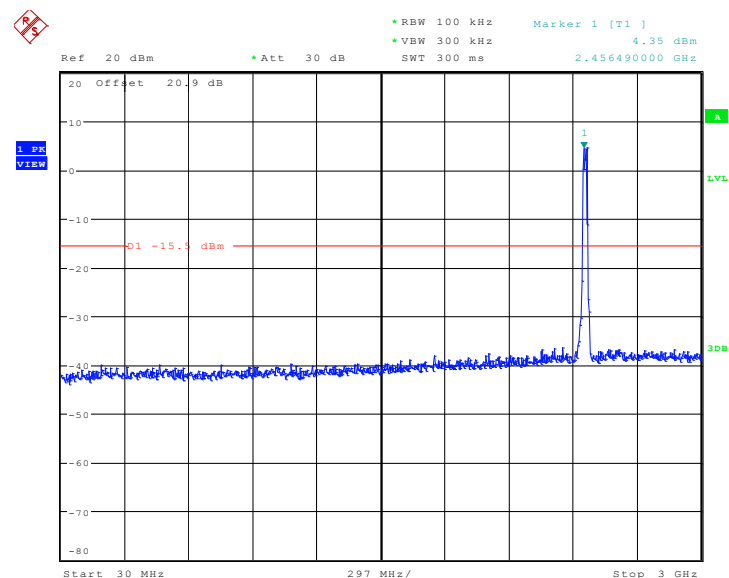


Conducted Spurious Emission Plot on
802.11g Channel 06 - Chain 2



Date: 5.NOV.2010 16:41:38

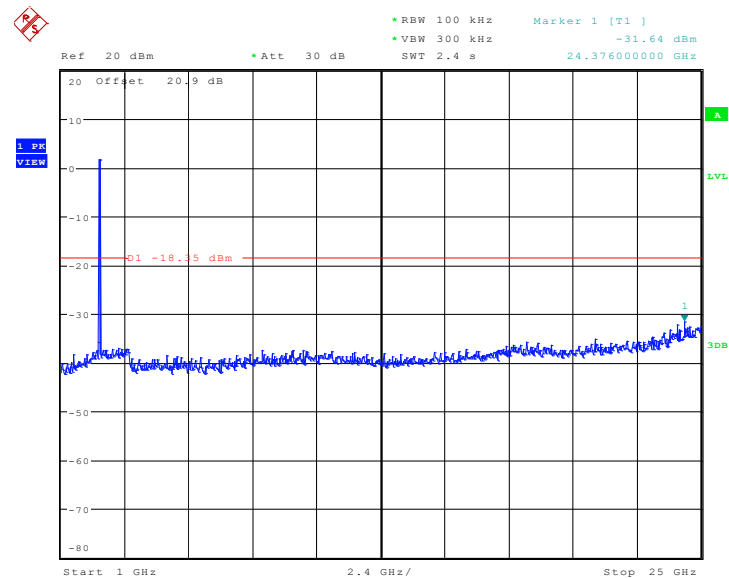
Conducted Spurious Emission Plot on
802.11g Channel 11 - Chain 0



Date: 5.NOV.2010 16:45:37

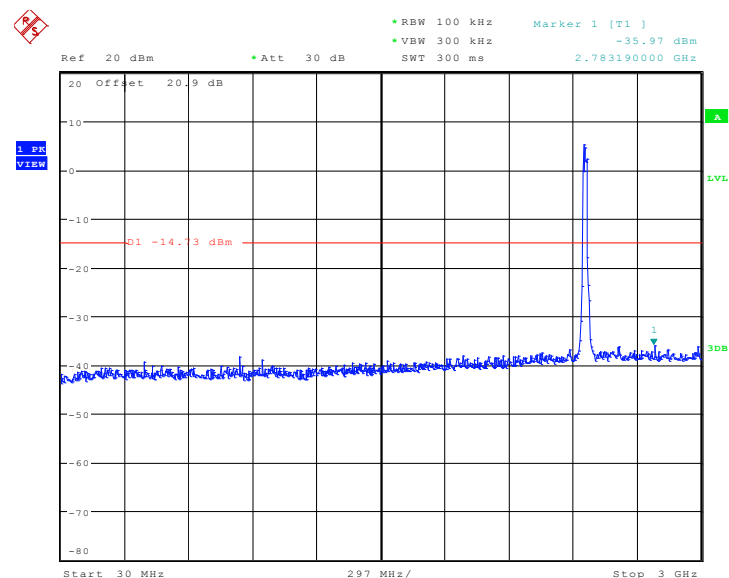


Conducted Spurious Emission Plot on
802.11g Channel 11 - Chain 0



Date: 5.NOV.2010 16:45:54

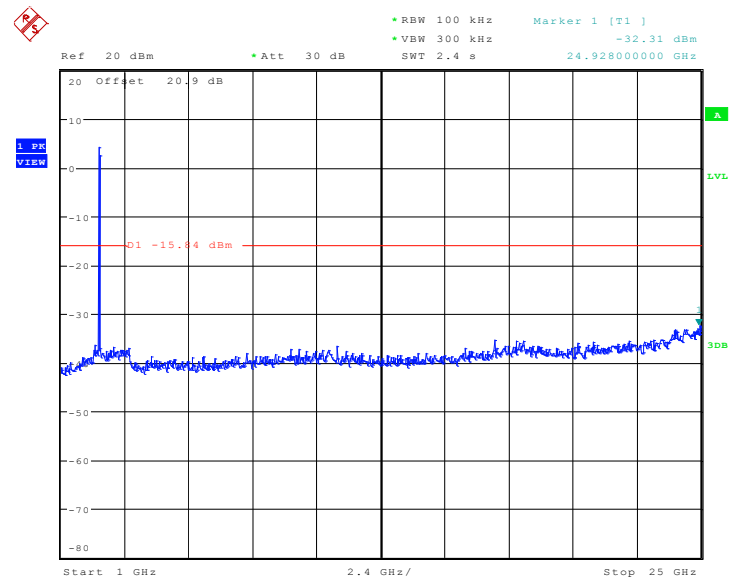
Conducted Spurious Emission Plot on
802.11g Channel 11 - Chain 1



Date: 5.NOV.2010 17:24:36

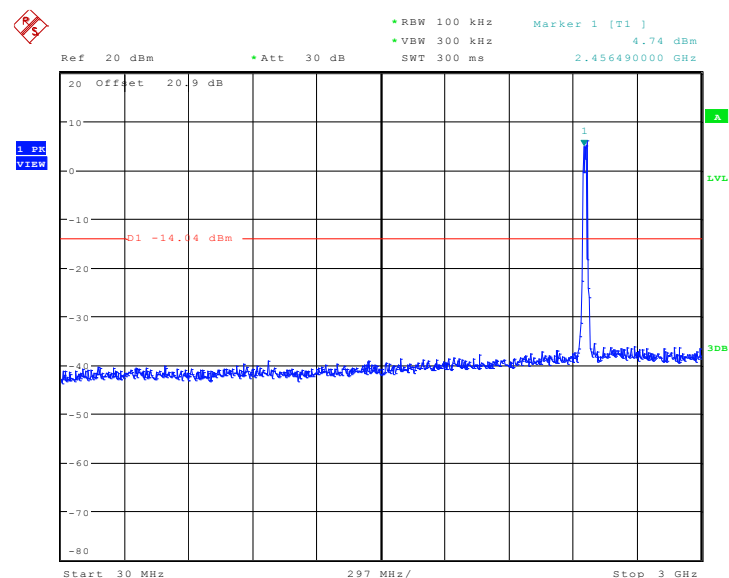


Conducted Spurious Emission Plot on
802.11g Channel 11 - Chain 1



Date: 5.NOV.2010 17:24:53

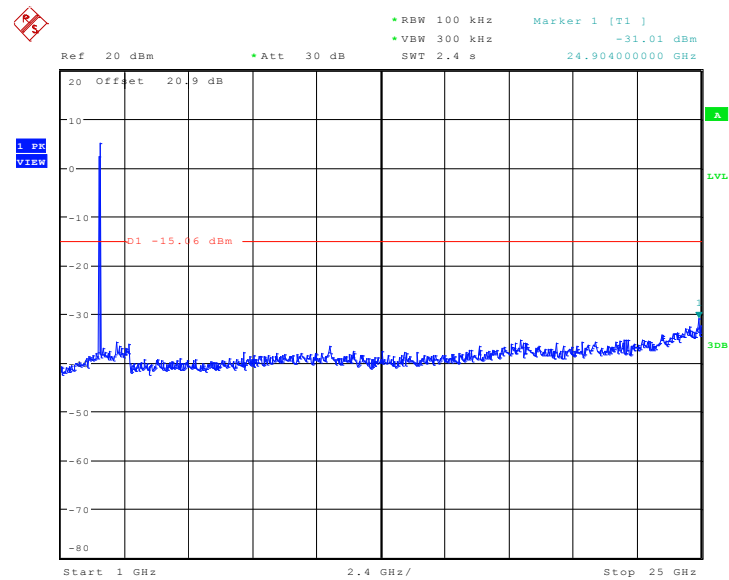
Conducted Spurious Emission Plot on
802.11g Channel 11 - Chain 2



Date: 5.NOV.2010 17:26:36



Conducted Spurious Emission Plot on
802.11g Channel 11 - Chain 2

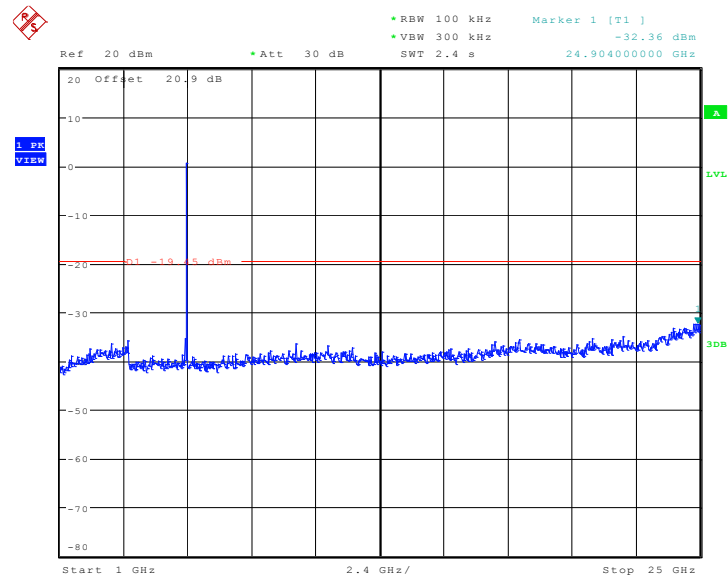


Date: 5.NOV.2010 17:26:53



Test Mode :	802.11a L/M/H channels	Temperature :	25~27°C
Test Band :	802.11a	Relative Humidity :	64~66%
Test Channel :	149, 157, 165	Test Engineer :	Lewis He

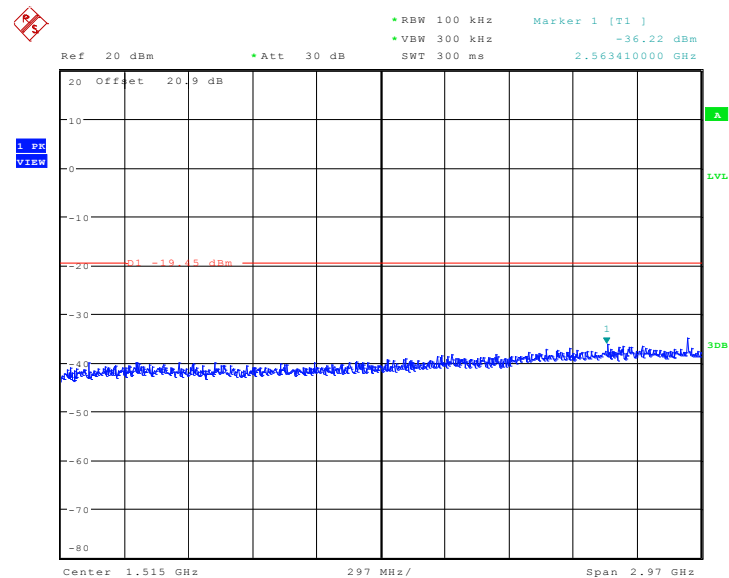
**Conducted Spurious Emission Plot on
802.11a Channel 149 - Chain 0**



Date: 5.NOV.2010 19:24:37

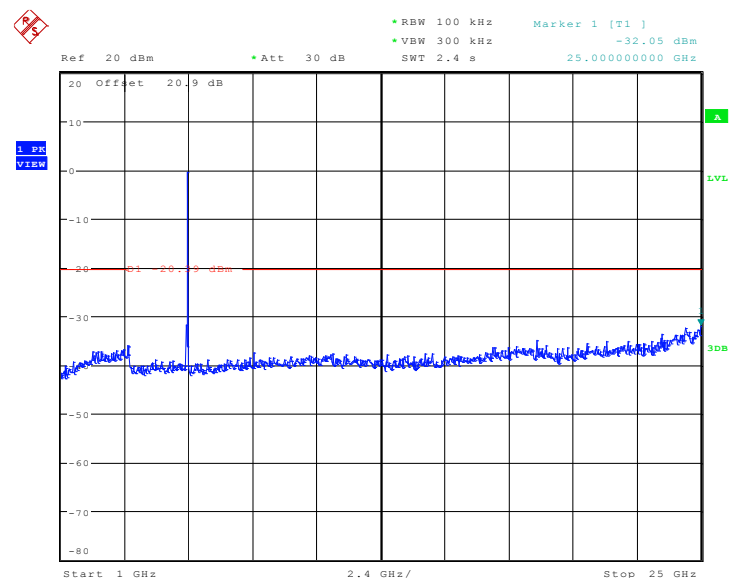


Conducted Spurious Emission Plot on
802.11a Channel 149 - Chain 0



Date: 5.NOV.2010 19:26:09

Conducted Spurious Emission Plot on
802.11a Channel 149 - Chain 1



Date: 5.NOV.2010 19:58:55

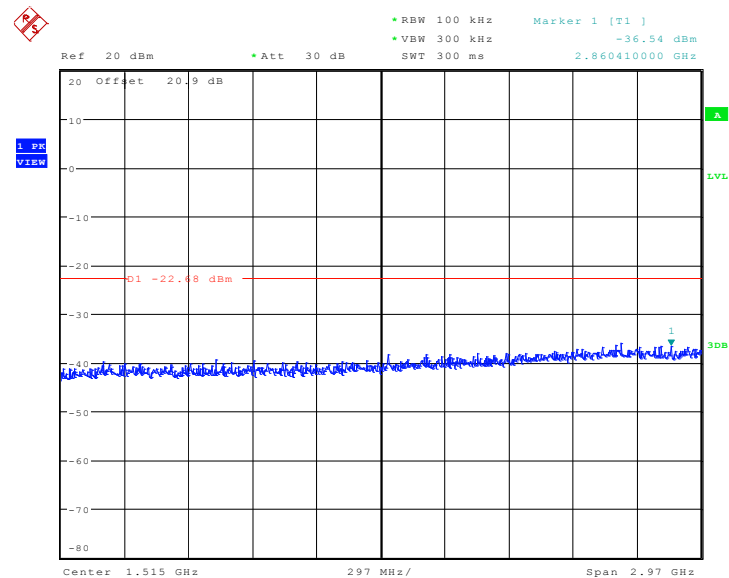


**Conducted Spurious Emission Plot on
802.11a Channel 149 - Chain 2**



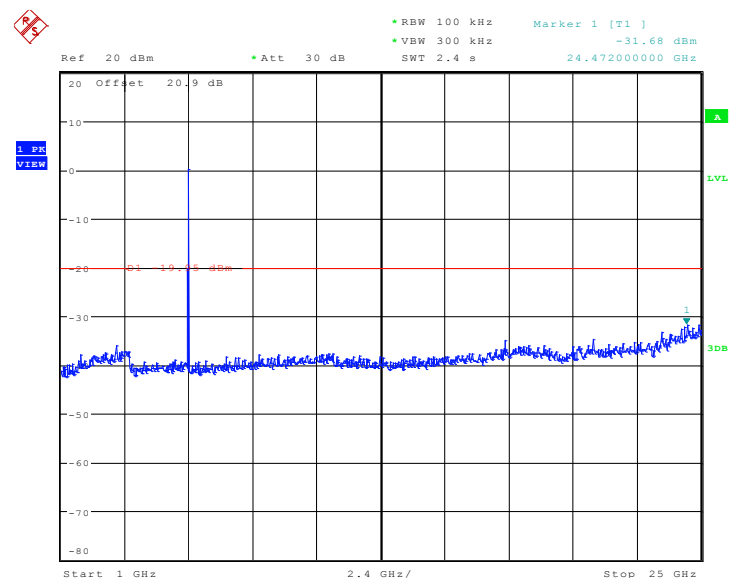


Conducted Spurious Emission Plot on
802.11a Channel 149 - Chain 2



Date: 5.NOV.2010 20:01:45

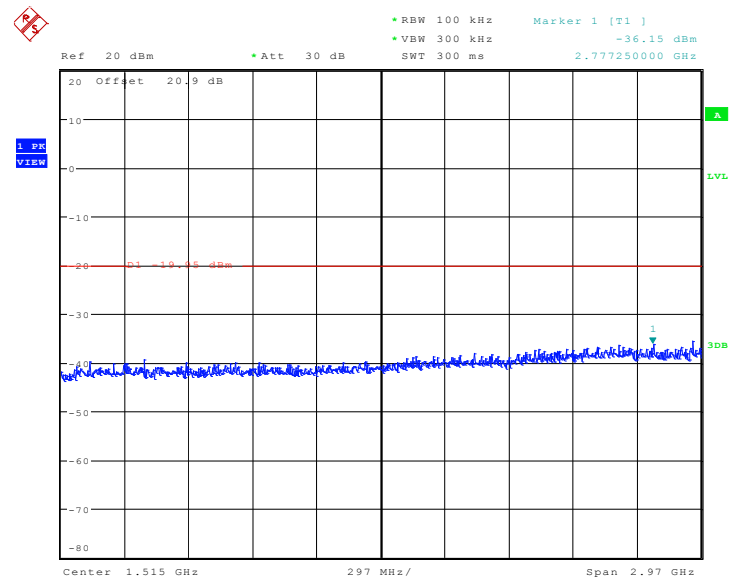
Conducted Spurious Emission Plot on
802.11a Channel 157 - Chain 0



Date: 5.NOV.2010 19:27:38

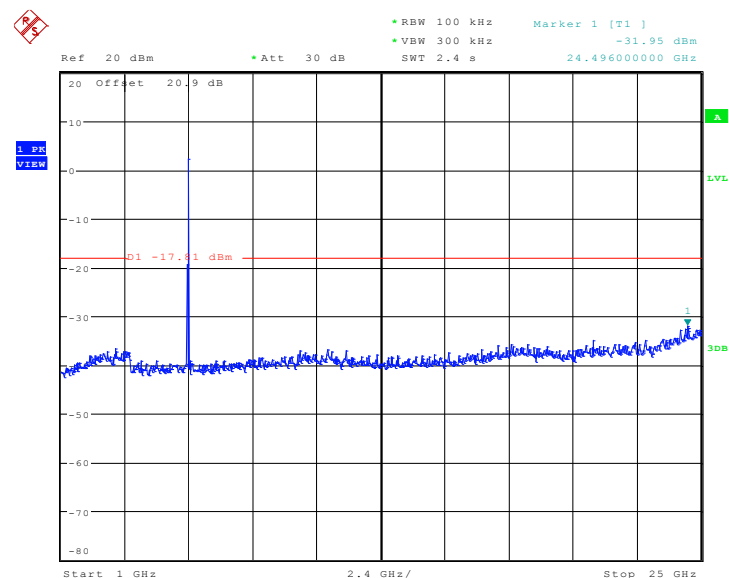


Conducted Spurious Emission Plot on
802.11a Channel 157 - Chain 0



Date: 5.NOV.2010 19:28:42

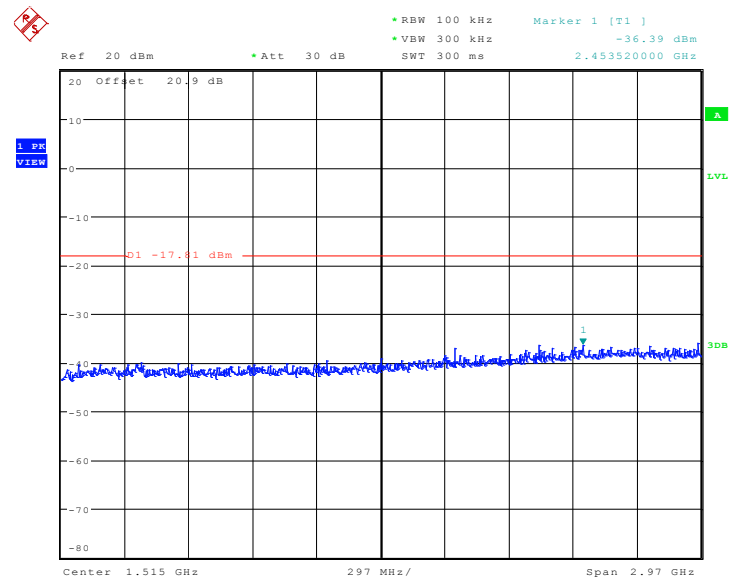
Conducted Spurious Emission Plot on
802.11a Channel 157 - Chain 1



Date: 5.NOV.2010 19:56:37

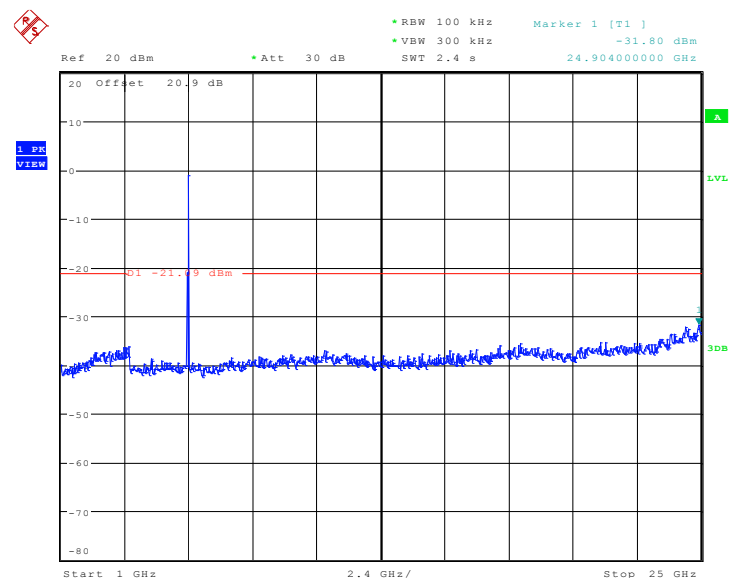


Conducted Spurious Emission Plot on
802.11a Channel 157 - Chain 1



Date: 5.NOV.2010 19:57:28

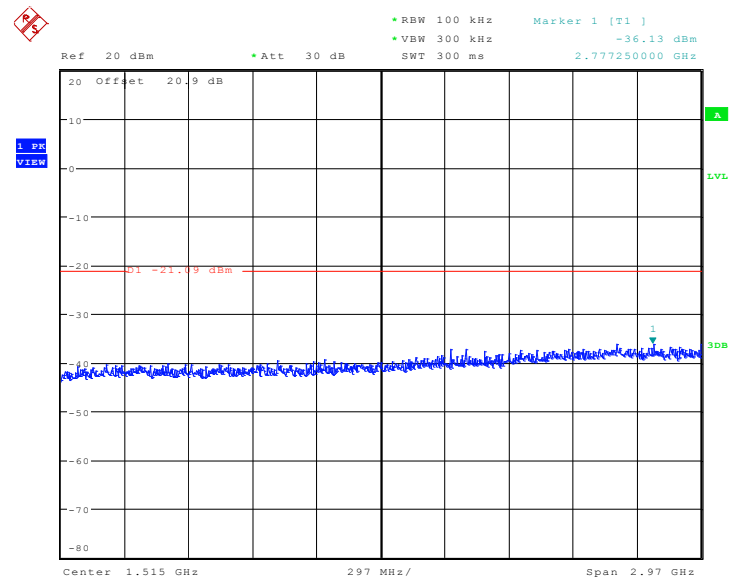
Conducted Spurious Emission Plot on
802.11a Channel 157 - Chain 2



Date: 5.NOV.2010 20:02:41

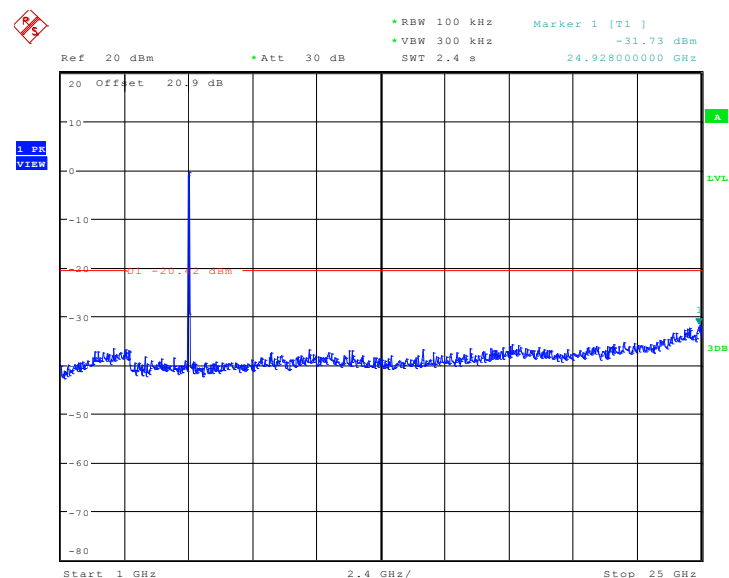


Conducted Spurious Emission Plot on
802.11a Channel 157 - Chain 2



Date: 5.NOV.2010 20:03:21

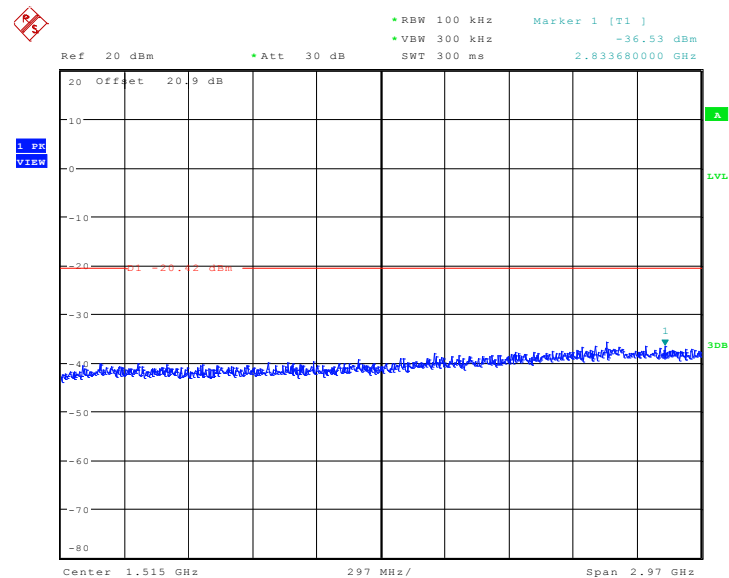
Conducted Spurious Emission Plot on
802.11a Channel 165 - Chain 0



Date: 5.NOV.2010 19:30:06

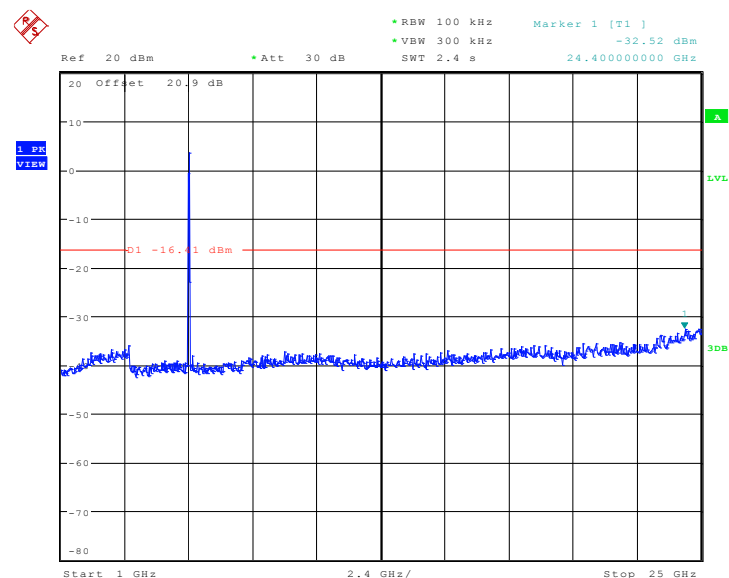


Conducted Spurious Emission Plot on
802.11a Channel 165 - Chain 0



Date: 5.NOV.2010 19:30:55

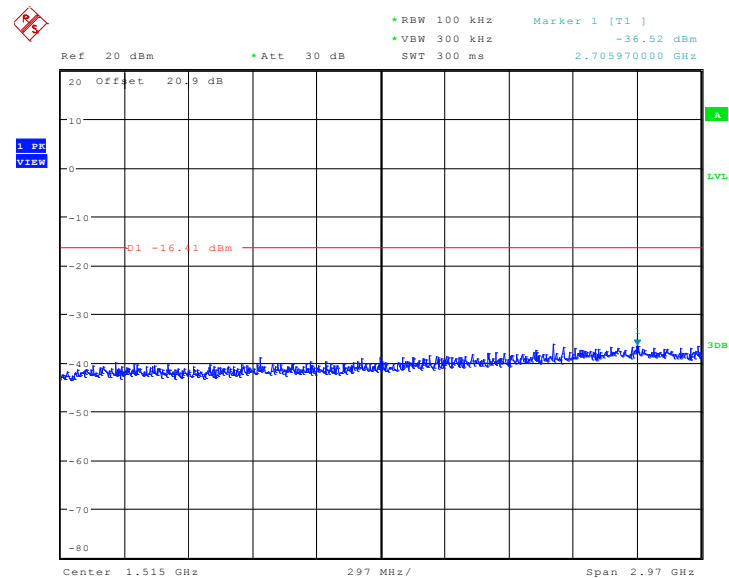
Conducted Spurious Emission Plot on
802.11a Channel 165 - Chain 1



Date: 5.NOV.2010 19:54:59

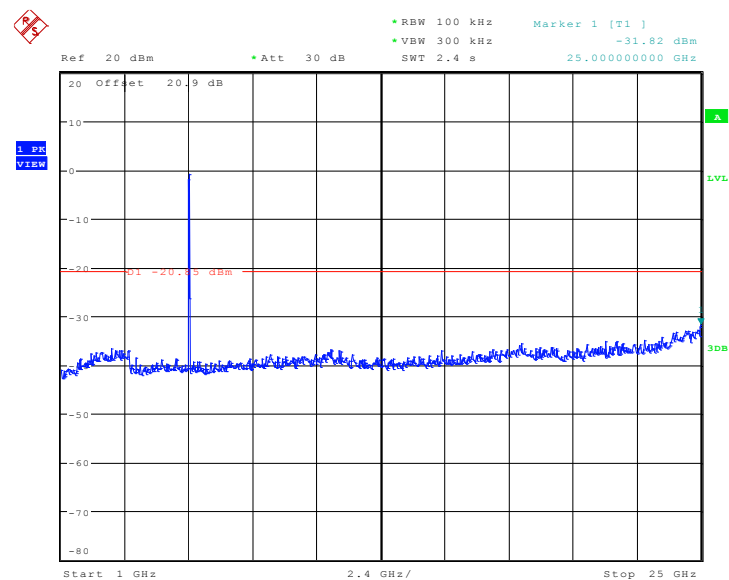


Conducted Spurious Emission Plot on
802.11a Channel 165 - Chain 1



Date: 5.NOV.2010 19:55:48

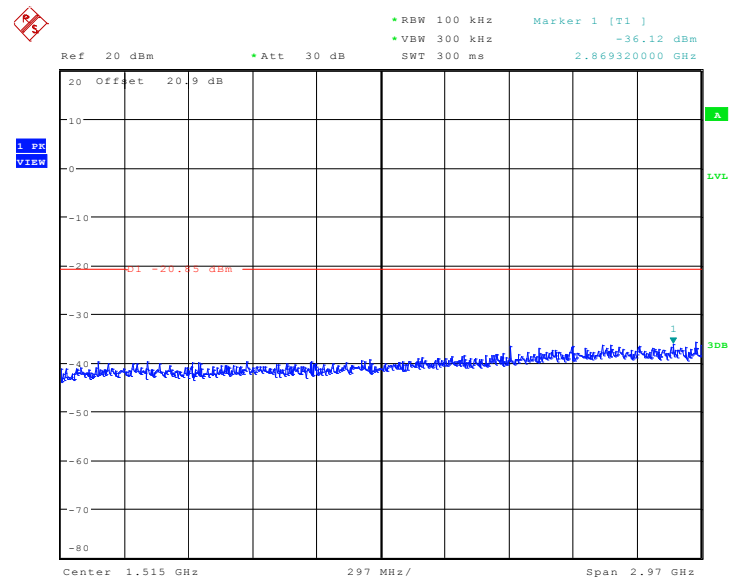
Conducted Spurious Emission Plot on
802.11a Channel 165 - Chain 2



Date: 5.NOV.2010 20:05:18



Conducted Spurious Emission Plot on
802.11a Channel 165 - Chain 2



Date: 5.NOV.2010 20:06:16



Report No. : FR0O0823A

Test Mode :	802.11a L/M/H channels	Temperature :	25~27℃
Test Band :	802.11a	Relative Humidity :	64~66%
Test Channel :	149, 157, 165	Test Engineer :	Lewis He

Ref 20 dBm Att 30 dB RBW 100 kHz VBW 300 kHz SWT 2.4 s Marker 1 [T1] -32.36 dBm 24.904000000 GHz

1. V21 VIEW

20 Offset 20.9 dB

20 10 0 -10 -20 -30 -40 -50 -60 -70 -80

1 GHz 2.4 GHz/ 25 GHz

30 dB

Date: 5.NOV.2010 19:24:37