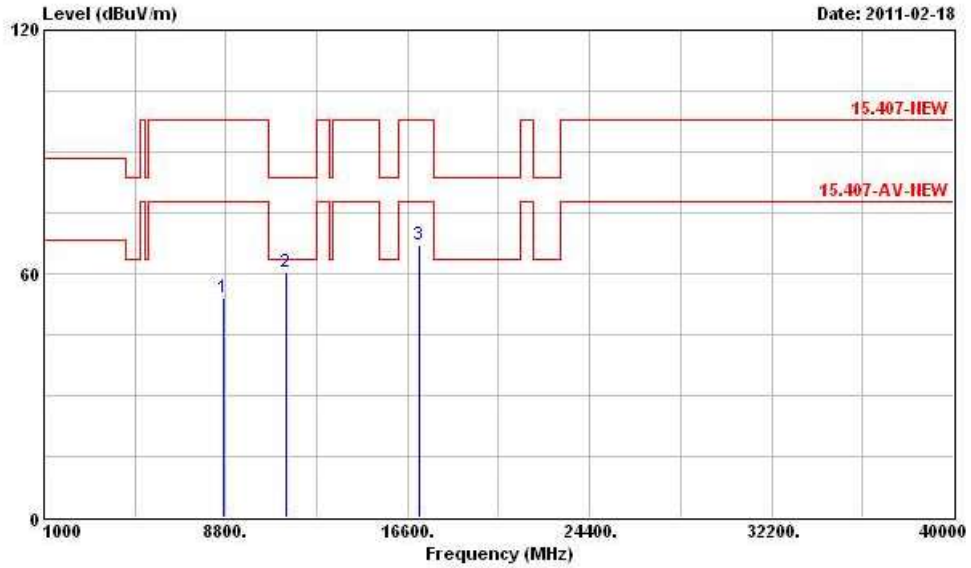
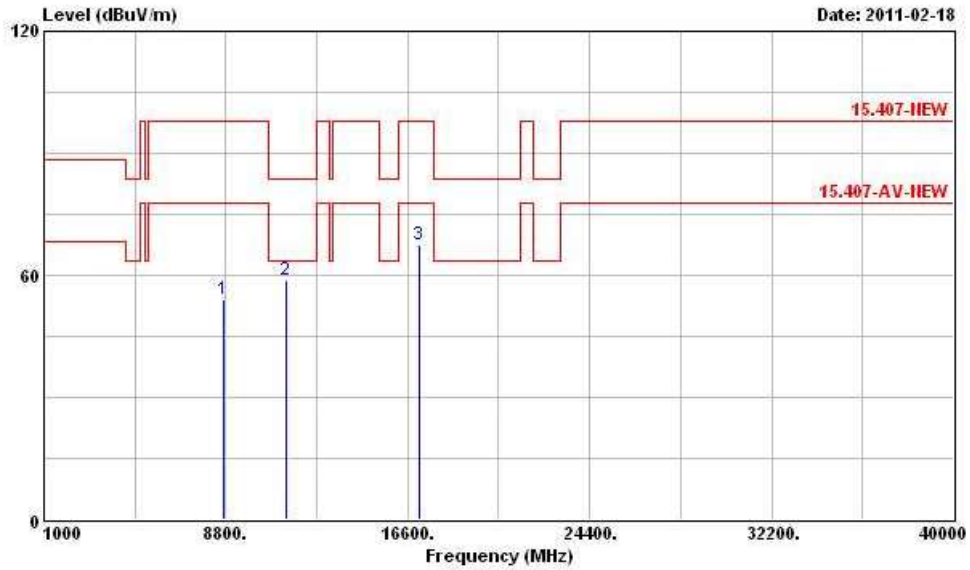
Test Mode :	802.11a	Temperature :	23°C
Test Channel :	140	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



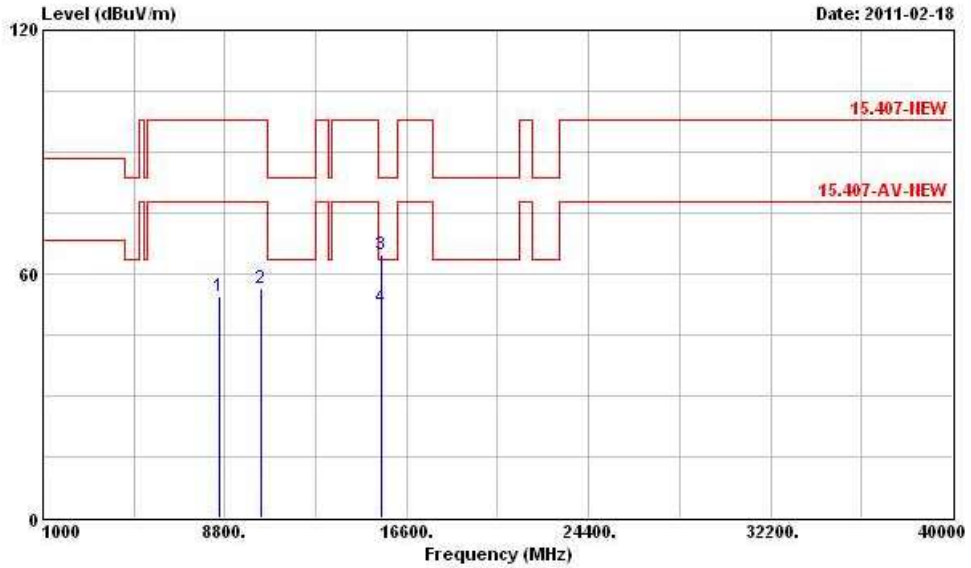
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8720.000	54.19	-43.65	97.84	44.26	38.33	6.04	34.44	Peak
2	11400.000	60.33	-3.21	63.54	46.66	40.56	6.71	33.60	PK
3	17100.000	67.07	-30.77	97.84	47.10	43.64	8.61	32.28	Peak

Test Mode :	802.11a	Temperature :	23°C
Test Channel :	140	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



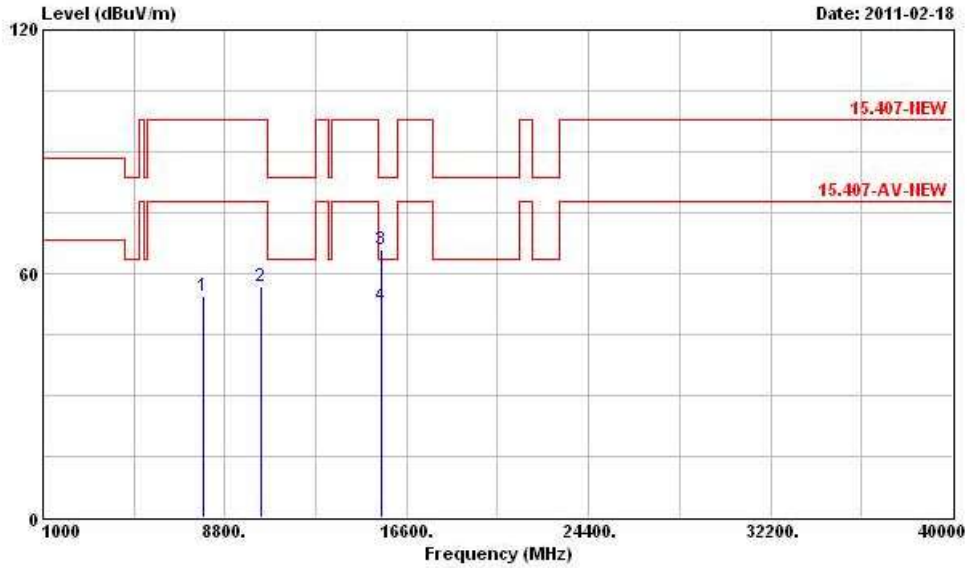
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8703.000	54.21	-43.63	97.84	44.25	38.34	6.04	34.42	Peak
2	11400.000	58.66	-4.88	63.54	44.99	40.56	6.71	33.60	PK
3	17100.000	67.34	-30.50	97.84	47.37	43.64	8.61	32.28	Peak

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	36	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



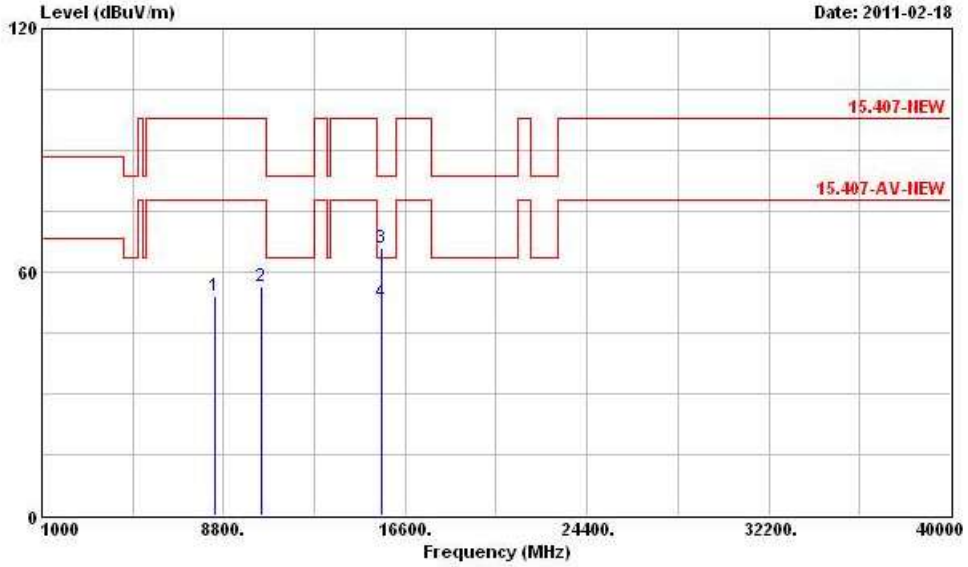
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8544.000	54.41	-43.43	97.84	44.25	38.46	5.96	34.26	Peak
2	10360.000	56.54	-41.30	97.84	43.95	40.02	6.71	34.14	Peak
3	15540.000	64.82	-18.72	83.54	46.40	42.81	8.45	32.84	Peak
4	15540.000	51.85	-11.69	63.54	33.43	42.81	8.45	32.84	Average

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	36	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



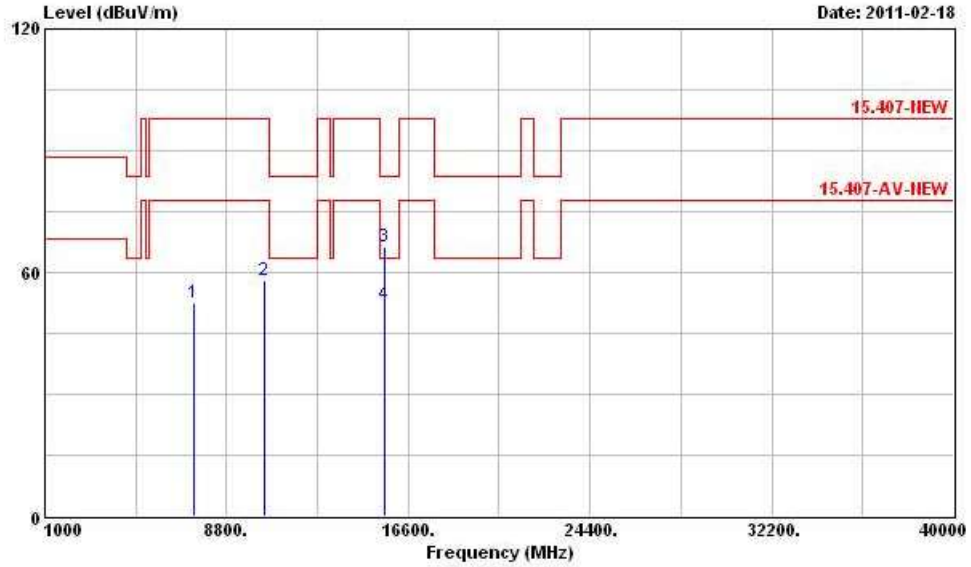
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7846.000	54.57	-43.27	97.84	45.03	38.11	5.77	34.34	Peak
2	10360.000	56.79	-41.05	97.84	44.20	40.02	6.71	34.14	Peak
3	15540.000	66.04	-17.50	83.54	47.62	42.81	8.45	32.84	Peak
4	15540.000	51.92	-11.62	63.54	33.50	42.81	8.45	32.84	Average

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	40	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



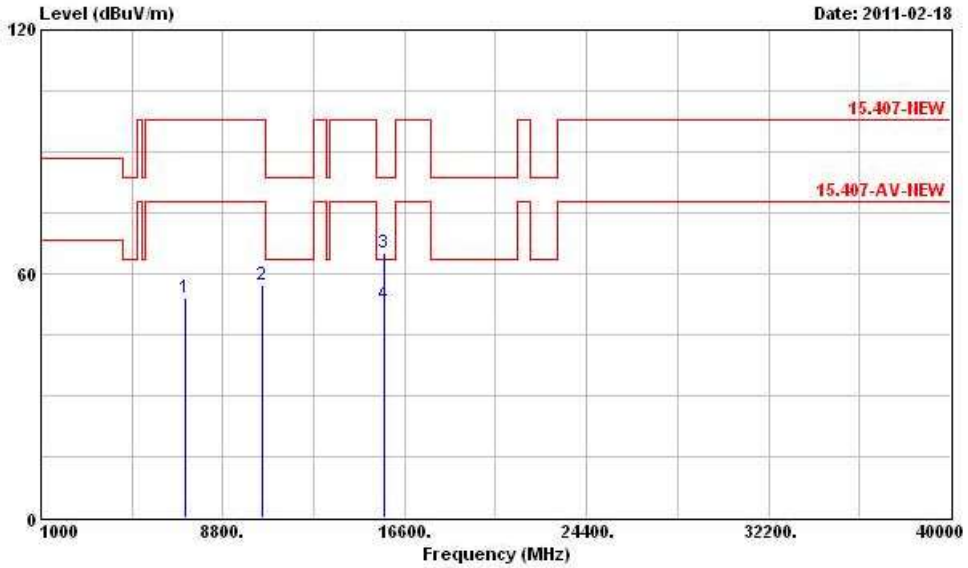
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8395.000	54.20	-23.64	77.84	44.08	38.44	5.92	34.24	PK
2	10400.000	56.58	-41.26	97.84	43.89	40.04	6.75	34.10	Peak
3	15600.000	65.77	-17.77	83.54	47.42	42.82	8.45	32.92	Peak
4	15600.000	52.42	-11.12	63.54	34.07	42.82	8.45	32.92	Average

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	40	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



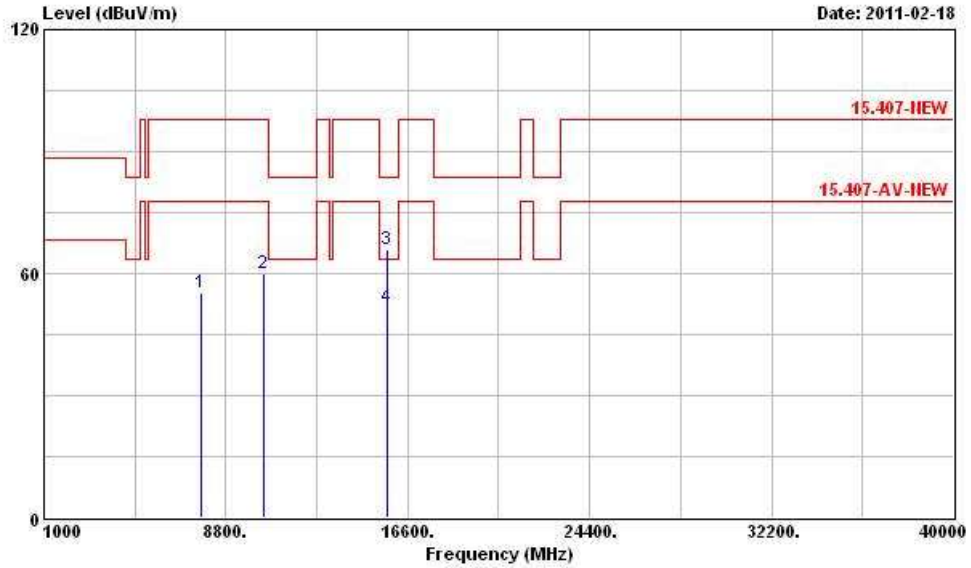
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7396.000	52.57	-25.27	77.84	43.33	37.88	5.65	34.29	PK
2	10400.000	57.88	-39.96	97.84	45.19	40.04	6.75	34.10	Peak
3	15600.000	66.12	-17.42	83.54	47.77	42.82	8.45	32.92	Peak
4	15600.000	51.97	-11.57	63.54	33.62	42.82	8.45	32.92	Average

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	48	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



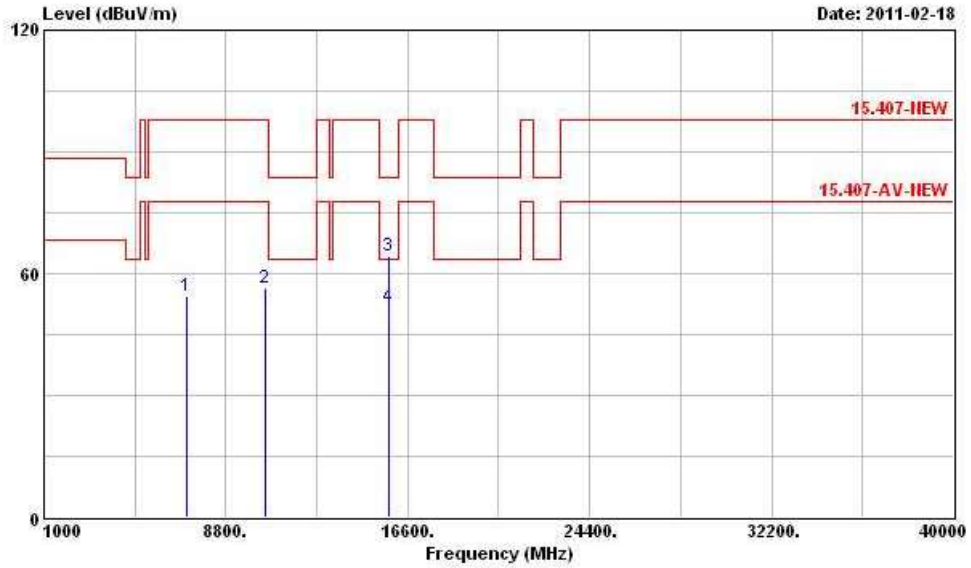
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7198.000	54.04	-43.80	97.84	44.87	37.84	5.62	34.29	Peak
2	10480.000	57.30	-40.54	97.84	44.42	40.09	6.82	34.03	Peak
3	15720.000	64.98	-18.56	83.54	46.71	42.84	8.46	33.03	Peak
4	15720.000	52.32	-11.22	63.54	34.05	42.84	8.46	33.03	Average

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	48	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



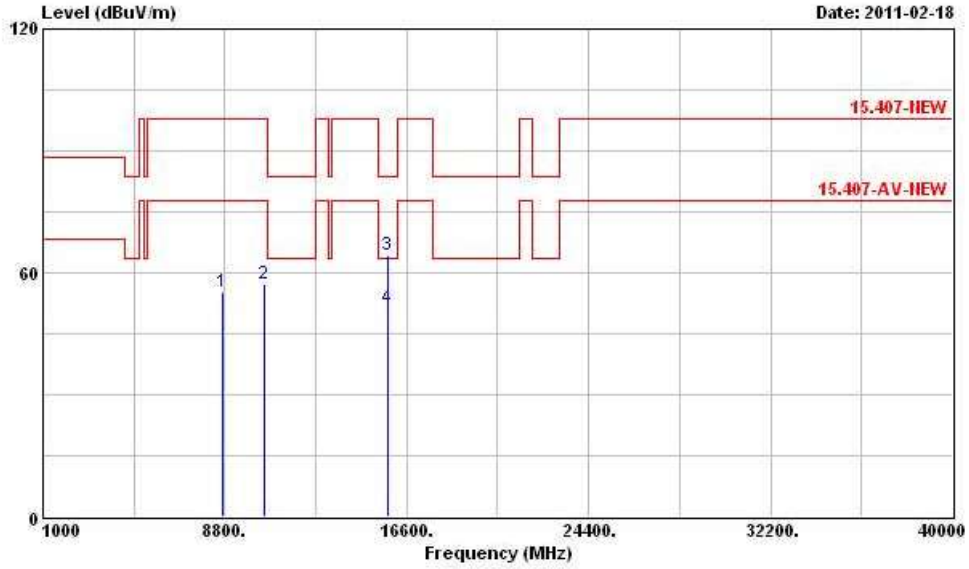
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7752.000	55.10	-42.74	97.84	45.65	38.05	5.73	34.33	Peak
2	10400.000	60.13	-37.71	97.84	47.44	40.04	6.75	34.10	Peak
3	15720.000	65.94	-17.60	83.54	47.67	42.84	8.46	33.03	Peak
4	15720.000	51.78	-11.76	63.54	33.51	42.84	8.46	33.03	Average

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	52	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



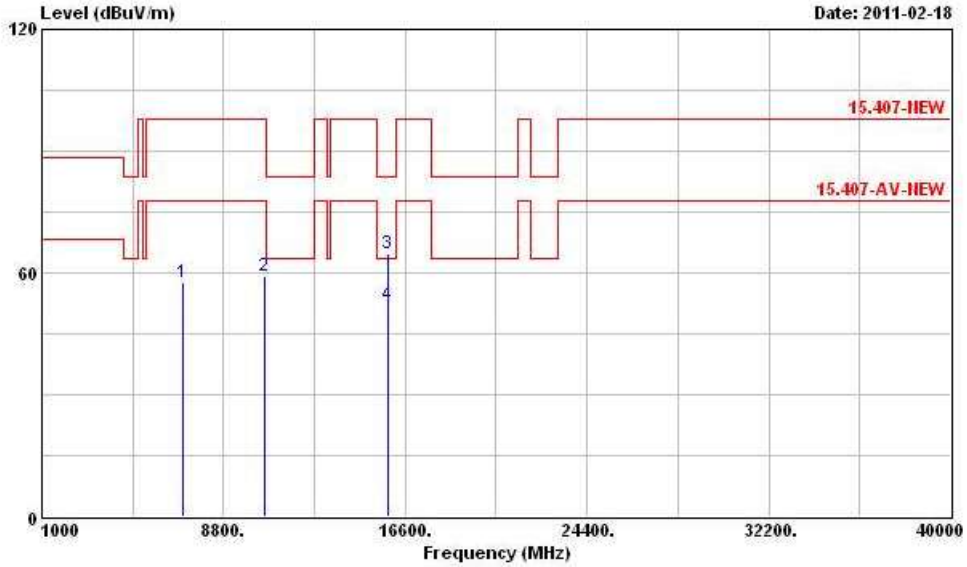
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7120.000	54.41	-43.43	97.84	45.26	37.82	5.61	34.28	Peak
2	10520.000	56.62	-41.22	97.84	43.66	40.11	6.85	34.00	Peak
3	15780.000	64.18	-19.36	83.54	45.97	42.86	8.46	33.11	Peak
4	15780.000	51.71	-11.83	63.54	33.50	42.86	8.46	33.11	Average

Test Mode :	802.11n (HT-20)	**Temperature :**	23°C
Test Channel :	52	**Relative Humidity :**	51%
Test Engineer :	Daniel	**Polarization :**	Vertical



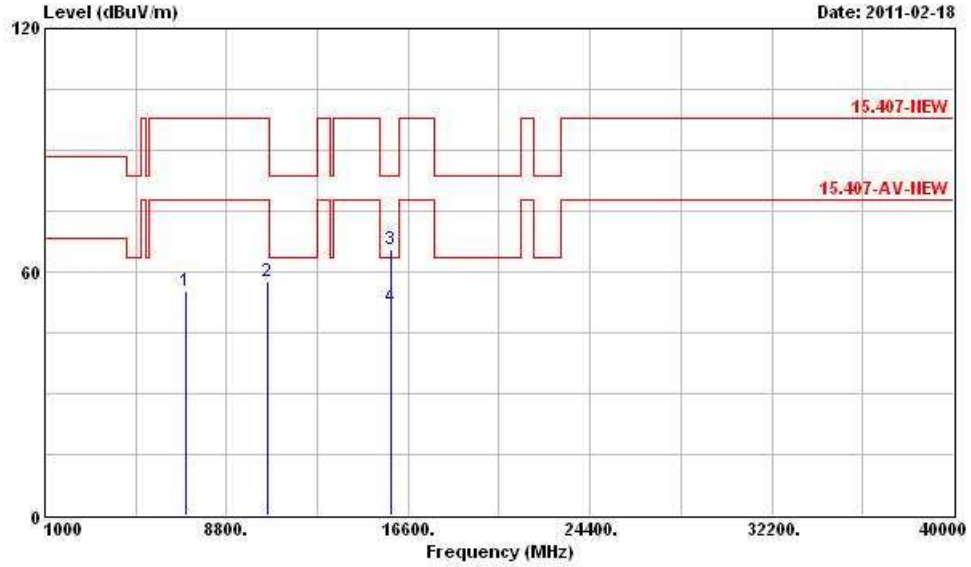
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8700.000	55.22	-42.62	97.84	45.28	38.34	6.02	34.42	Peak
2	10520.000	57.37	-40.47	97.84	44.41	40.11	6.85	34.00	Peak
3	15780.000	64.27	-19.27	83.54	46.06	42.86	8.46	33.11	Peak
4	15780.000	51.25	-12.29	63.54	33.04	42.86	8.46	33.11	Average

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	56	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



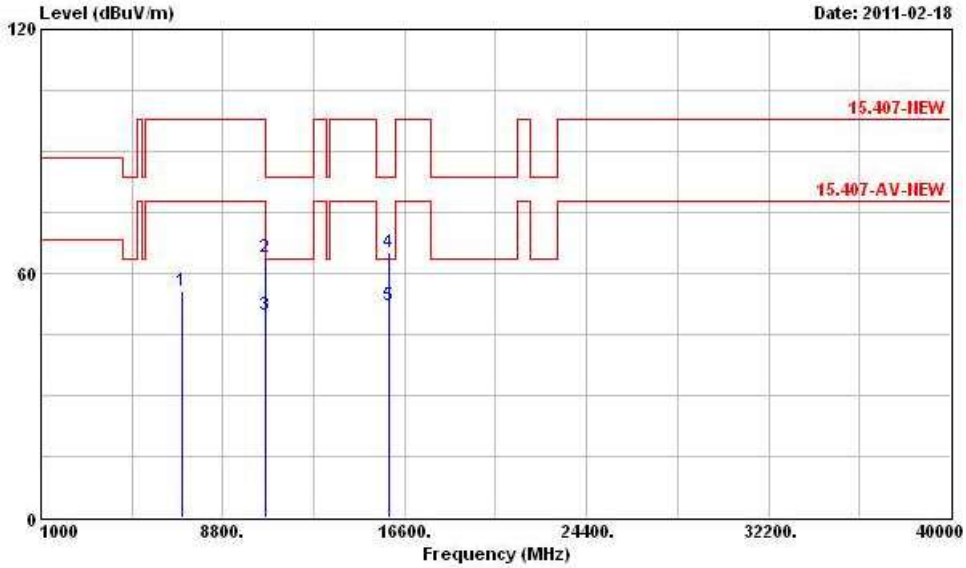
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7036.000	57.72	-40.12	97.84	48.59	37.81	5.60	34.28	Peak
2	10560.000	59.12	-38.72	97.84	46.05	40.13	6.88	33.94	Peak
3	15840.000	64.90	-18.64	83.54	46.73	42.87	8.46	33.16	Peak
4	15840.000	51.94	-11.60	63.54	33.77	42.87	8.46	33.16	Average

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	56	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



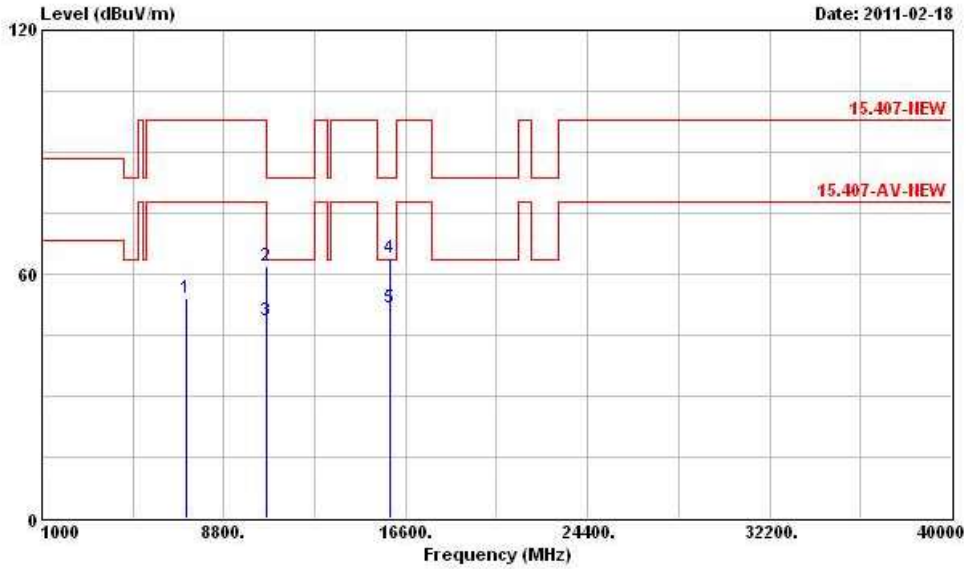
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7032.000	55.09	-42.75	97.84	45.96	37.81	5.60	34.28	Peak
2	10560.000	57.44	-40.40	97.84	44.37	40.13	6.88	33.94	Peak
3	15840.000	65.35	-18.19	83.54	47.18	42.87	8.46	33.16	Peak
4	15840.000	51.47	-12.07	63.54	33.30	42.87	8.46	33.16	Average

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	64	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



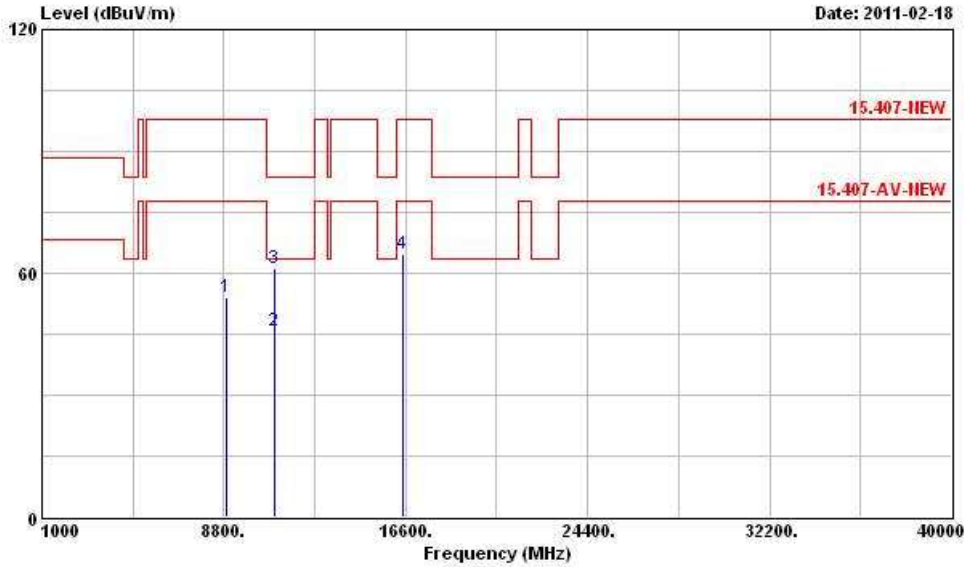
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7076.000	55.70	-42.14	97.84	46.56	37.81	5.61	34.28	Peak
2	10640.000	64.03	-19.51	83.54	50.76	40.18	6.93	33.84	Peak
3	10640.000	49.74	-13.80	63.54	36.47	40.18	6.93	33.84	Average
4	15960.000	65.27	-18.27	83.54	47.20	42.89	8.47	33.29	Peak
5	15960.000	51.99	-11.55	63.54	33.92	42.89	8.47	33.29	Average

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	64	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



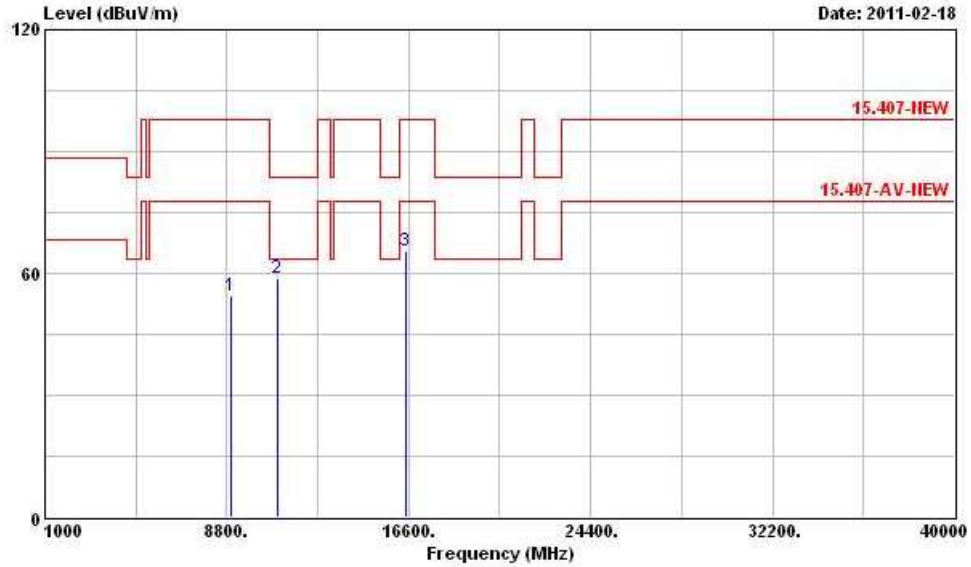
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7194.000	53.97	-43.87	97.84	44.80	37.84	5.62	34.29	Peak
2	10640.000	61.97	-21.57	83.54	48.70	40.18	6.93	33.84	Peak
3	10640.000	48.58	-14.96	63.54	35.31	40.18	6.93	33.84	Average
4	15960.000	63.89	-19.65	83.54	45.82	42.89	8.47	33.29	Peak
5	15960.000	51.86	-11.68	63.54	33.79	42.89	8.47	33.29	Average

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	100	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



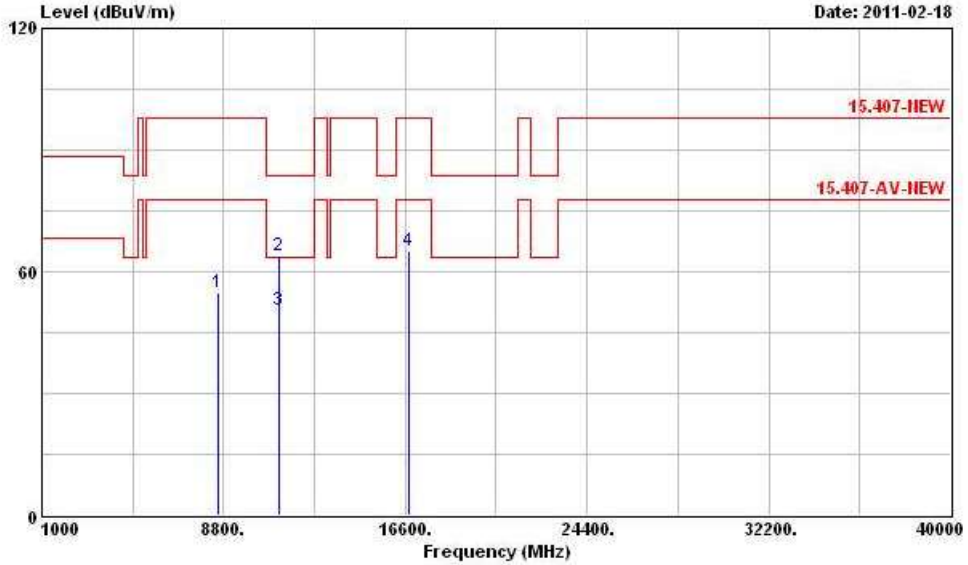
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8880.000	54.22	-43.62	97.84	44.52	38.19	6.11	34.60	Peak
2	11000.000	45.81	-17.73	63.54	31.63	40.40	7.17	33.39	Average
3	11000.000	61.33	-22.21	83.54	47.15	40.40	7.17	33.39	Peak
4	16500.000	64.93	-32.91	97.84	45.97	43.50	8.24	32.78	Peak

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	100	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



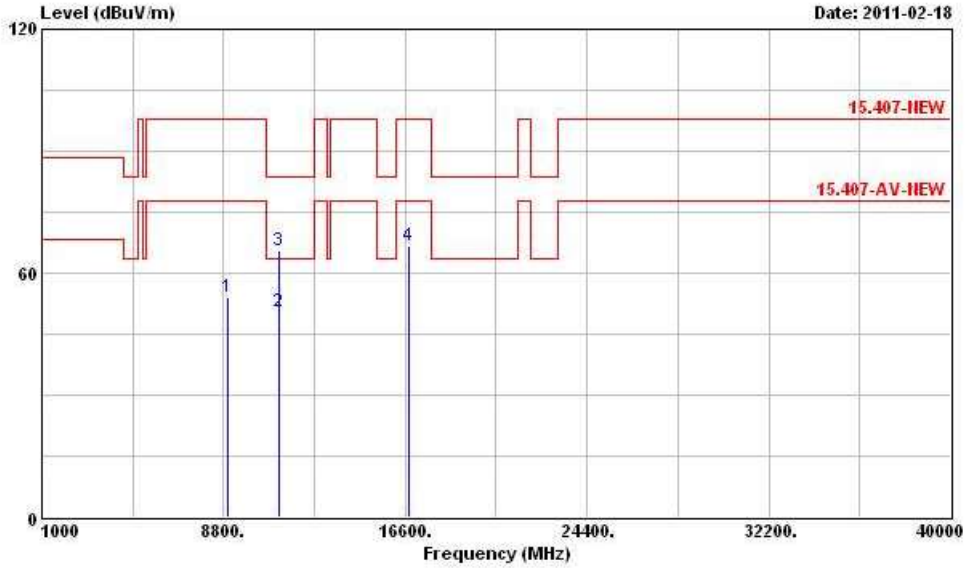
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8960.000	54.40	-43.44	97.84	44.80	38.14	6.14	34.68	Peak
2	11000.000	58.99	-4.55	63.54	44.81	40.40	7.17	33.39	PK
3	16500.000	65.40	-32.44	97.84	46.44	43.50	8.24	32.78	Peak

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	116	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



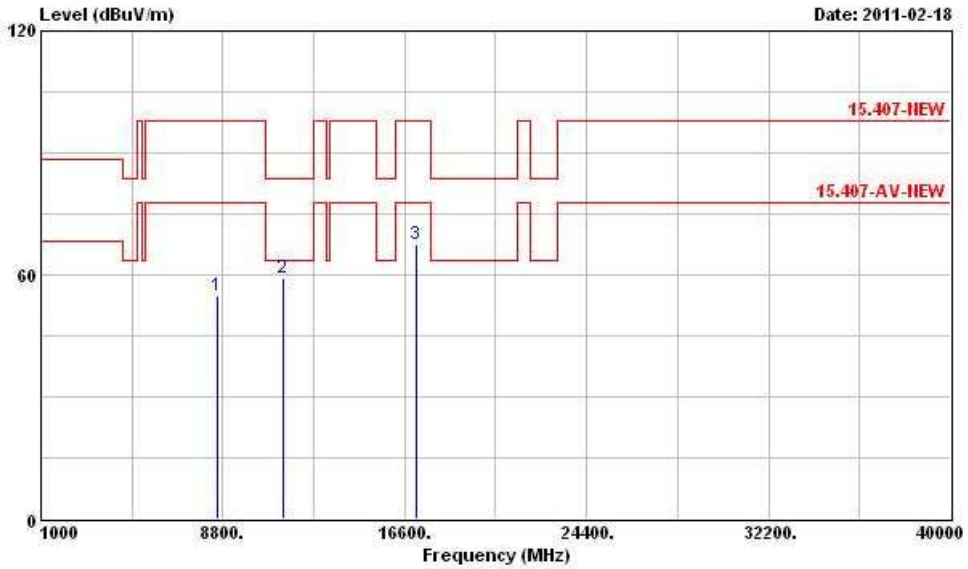
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8580.000	54.95	-42.89	97.84	44.83	38.43	5.97	34.28	Peak
2	11160.000	63.83	-19.71	83.54	49.87	40.47	6.96	33.47	Peak
3	11160.000	50.49	-13.05	63.54	36.53	40.47	6.96	33.47	Average
4	16740.000	65.14	-32.70	97.84	45.63	43.60	8.47	32.56	Peak

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	116	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



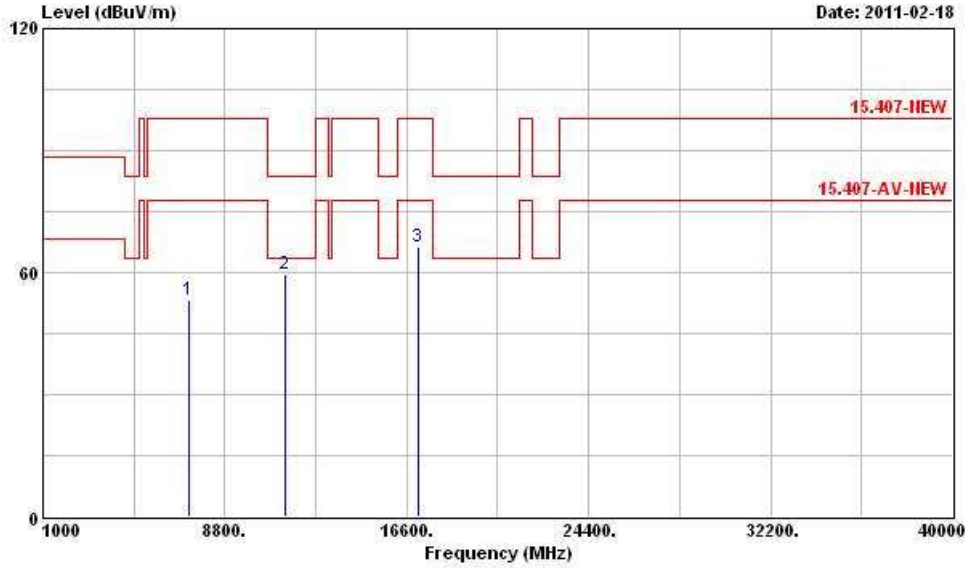
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8960.000	54.14	-43.70	97.84	44.54	38.14	6.14	34.68	Peak
2	11160.000	50.57	-12.97	63.54	36.61	40.47	6.96	33.47	Average
3	11160.000	65.56	-17.98	83.54	51.60	40.47	6.96	33.47	Peak
4	16740.000	66.89	-30.95	97.84	47.38	43.60	8.47	32.56	Peak

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	140	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



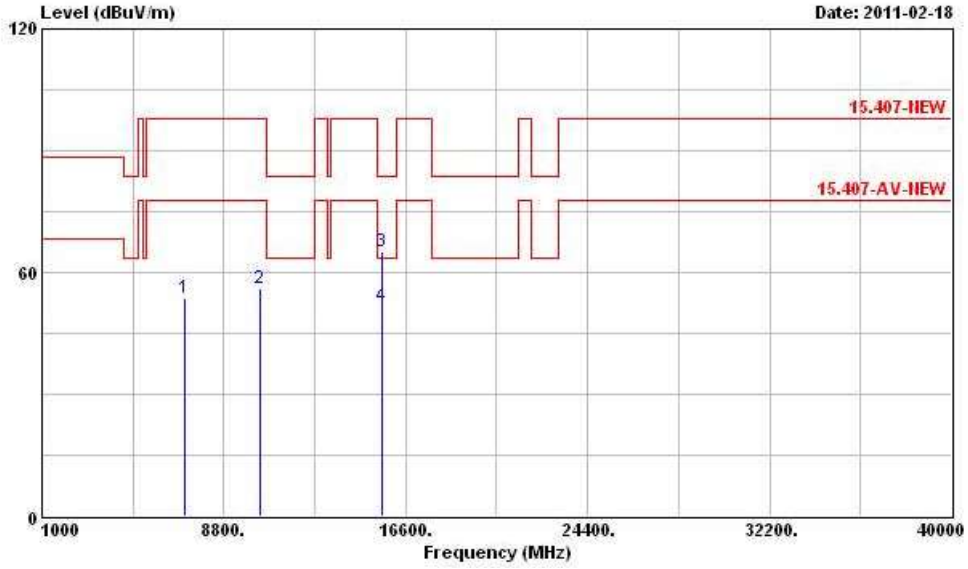
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8572.000	54.97	-42.87	97.84	44.83	38.45	5.97	34.28	Peak
2	11400.000	59.02	-4.52	63.54	45.35	40.56	6.71	33.60	PK
3	17100.000	67.57	-30.27	97.84	47.60	43.64	8.61	32.28	Peak

Test Mode :	802.11n (HT-20)	Temperature :	23°C
Test Channel :	140	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



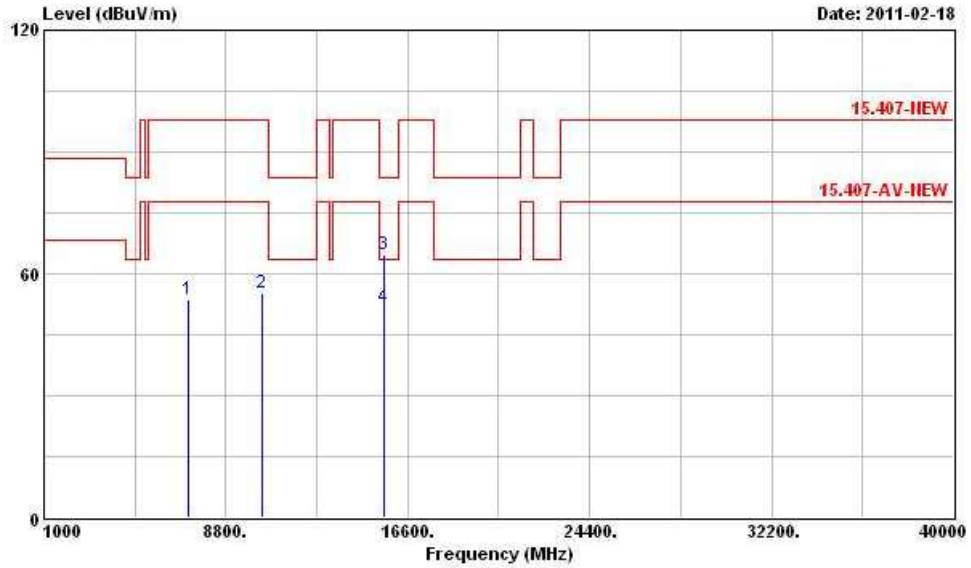
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7261.000	53.23	-44.61	97.84	44.04	37.85	5.63	34.29	Peak
2	11400.000	59.71	-3.83	63.54	46.04	40.56	6.71	33.60	PK
3	17100.000	66.43	-31.41	97.84	46.46	43.64	8.61	32.28	Peak

Test Mode :	802.11n (HT-40)	Temperature :	23°C
Test Channel :	38	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



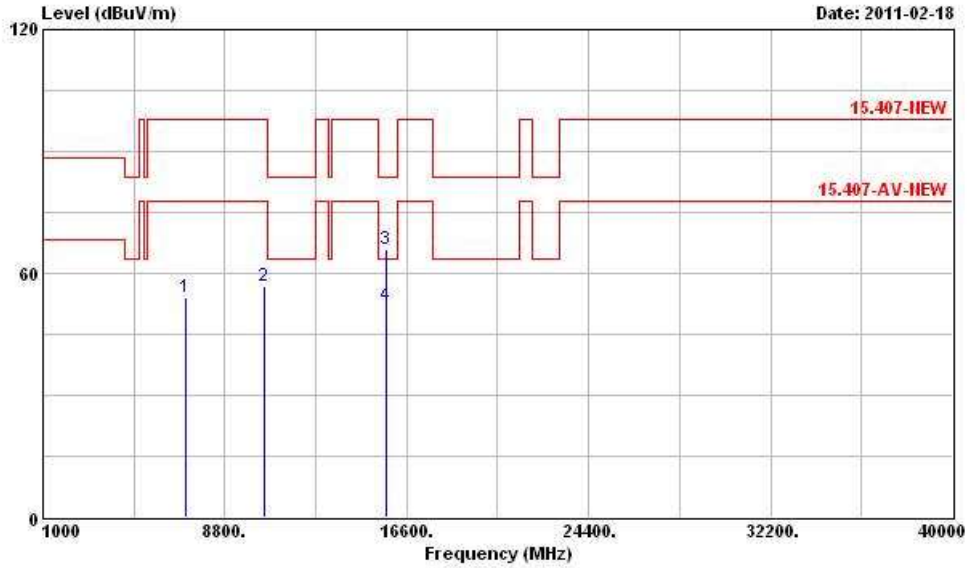
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7104.000	53.70	-44.14	97.84	44.55	37.82	5.61	34.28	Peak
2	10380.000	55.86	-41.98	97.84	43.20	40.03	6.75	34.12	Peak
3	15570.000	65.00	-18.54	83.54	46.61	42.81	8.45	32.87	Peak
4	15570.000	51.81	-11.73	63.54	33.42	42.81	8.45	32.87	Average

Test Mode :	802.11n (HT-40)	Temperature :	23°C
Test Channel :	38	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



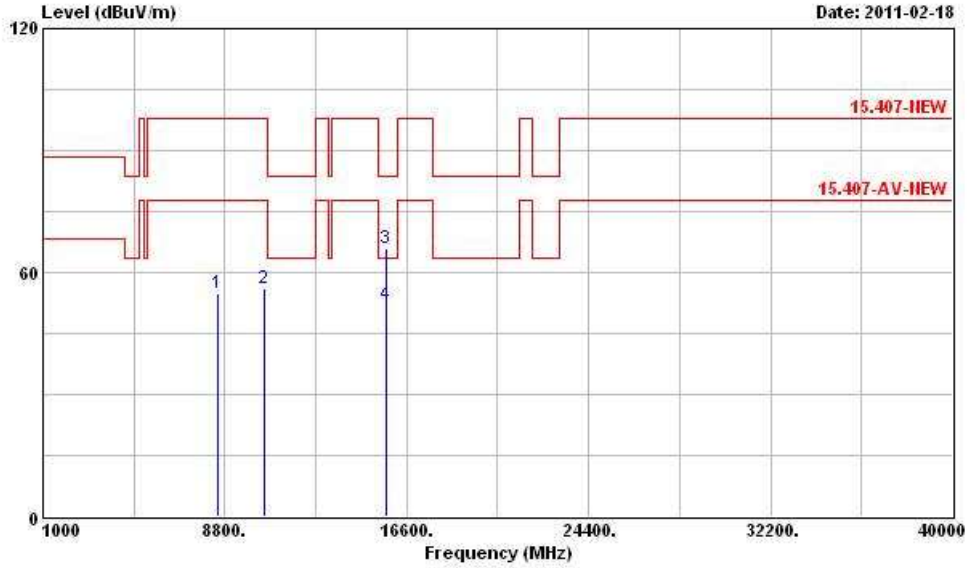
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7198.000	53.66	-44.18	97.84	44.49	37.84	5.62	34.29	Peak
2	10380.000	55.46	-42.38	97.84	42.80	40.03	6.75	34.12	Peak
3	15570.000	64.59	-18.95	83.54	46.20	42.81	8.45	32.87	Peak
4	15570.000	51.62	-11.92	63.54	33.23	42.81	8.45	32.87	Average

Test Mode :	802.11n (HT-40)	Temperature :	23°C
Test Channel :	46	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



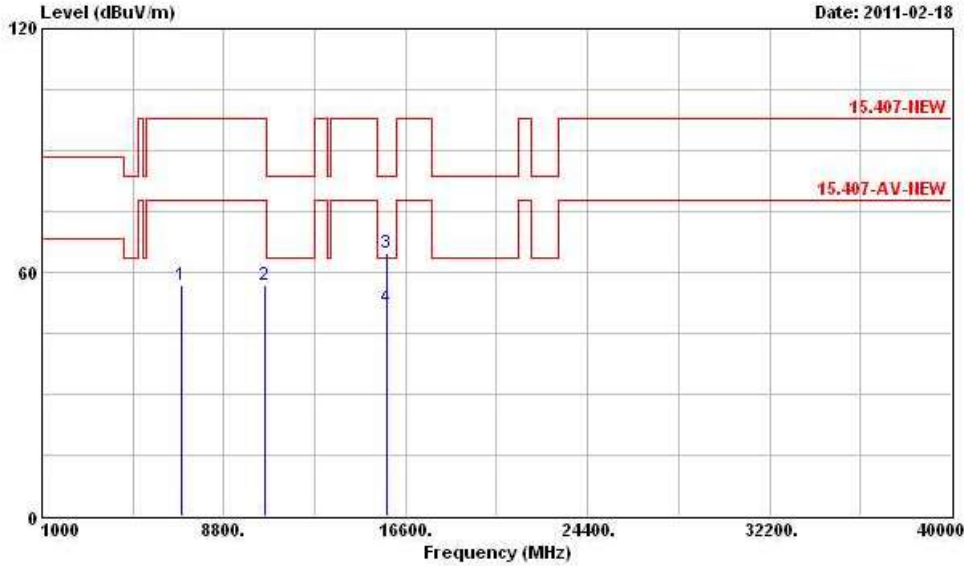
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7108.000	54.19	-43.65	97.84	45.04	37.82	5.61	34.28	Peak
2	10460.000	56.92	-40.92	97.84	44.08	40.07	6.82	34.05	Peak
3	15690.000	65.96	-17.58	83.54	47.66	42.84	8.46	33.00	Peak
4	15690.000	52.18	-11.36	63.54	33.88	42.84	8.46	33.00	Average

Test Mode :	802.11n (HT-40)	Temperature :	23°C
Test Channel :	46	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



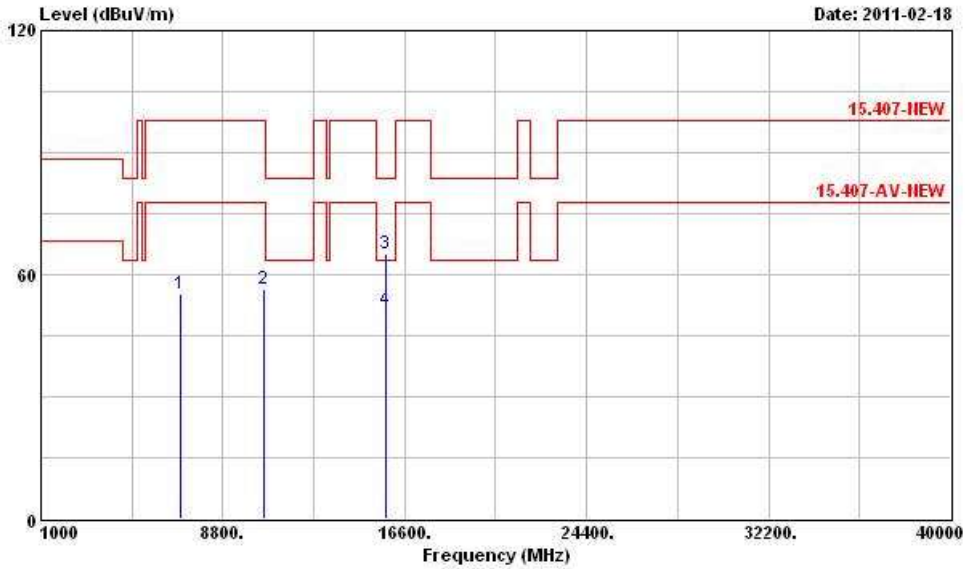
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8522.000	54.74	-43.10	97.84	44.52	38.49	5.96	34.23	Peak
2	10460.000	56.09	-41.75	97.84	43.25	40.07	6.82	34.05	Peak
3	15690.000	65.81	-17.73	83.54	47.51	42.84	8.46	33.00	Peak
4	15690.000	52.17	-11.37	63.54	33.87	42.84	8.46	33.00	Average

Test Mode :	802.11n (HT-40)	Temperature :	23°C
Test Channel :	54	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



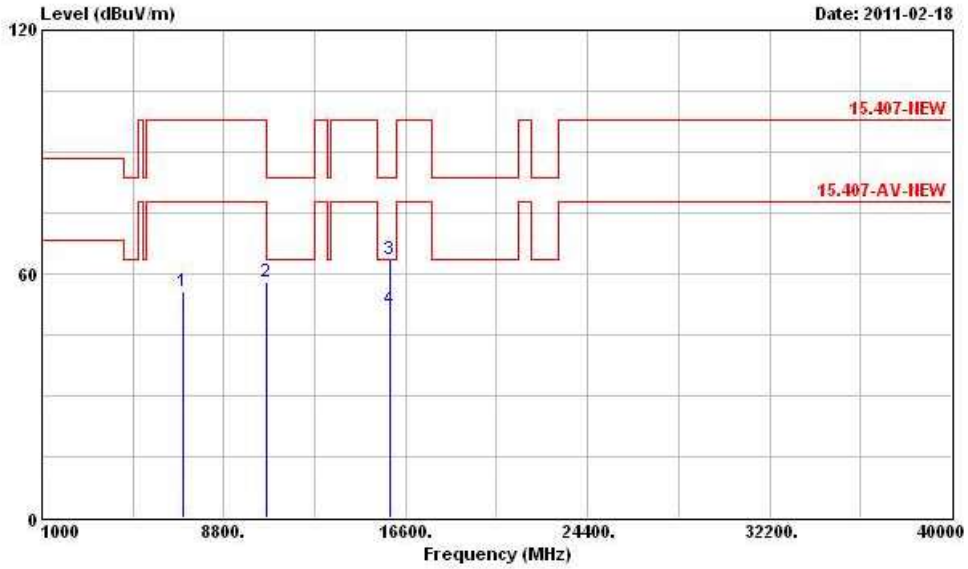
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7018.000	56.90	-40.94	97.84	47.78	37.80	5.60	34.28	Peak
2	10540.000	56.73	-41.11	97.84	43.70	40.12	6.88	33.97	Peak
3	15810.000	64.69	-18.85	83.54	46.50	42.86	8.46	33.13	Peak
4	15810.000	51.48	-12.06	63.54	33.29	42.86	8.46	33.13	Average

Test Mode :	802.11n (HT-40)	Temperature :	23°C
Test Channel :	54	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



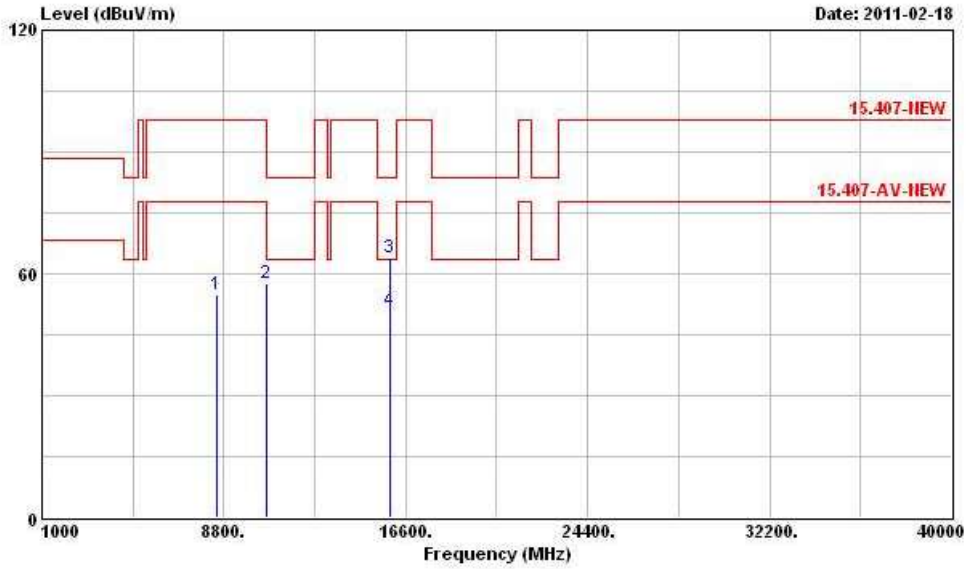
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7018.000	55.33	-42.51	97.84	46.21	37.80	5.60	34.28	Peak
2	10540.000	56.45	-41.39	97.84	43.42	40.12	6.88	33.97	Peak
3	15810.000	65.25	-18.29	83.54	47.06	42.86	8.46	33.13	Peak
4	15810.000	51.41	-12.13	63.54	33.22	42.86	8.46	33.13	Average

Test Mode :	802.11n (HT-40)	Temperature :	23°C
Test Channel :	62	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



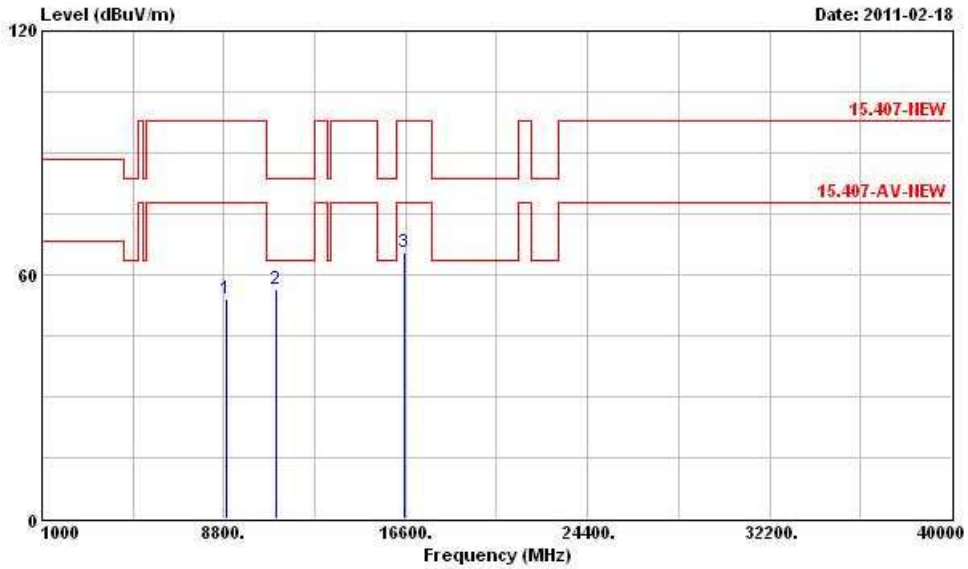
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7068.000	55.54	-42.30	97.84	46.40	37.81	5.61	34.28	Peak
2	10620.000	57.86	-5.68	63.54	44.63	40.17	6.93	33.87	PK
3	15930.000	63.74	-19.80	83.54	45.62	42.89	8.47	33.24	Peak
4	15930.000	51.15	-12.39	63.54	33.03	42.89	8.47	33.24	Average

Test Mode :	802.11n (HT-40)	Temperature :	23°C
Test Channel :	62	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



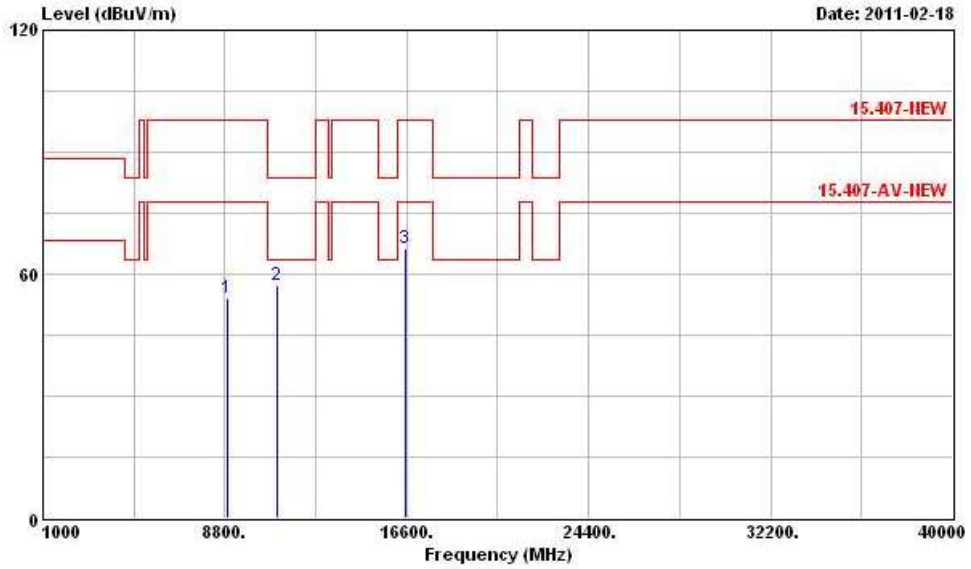
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8508.000	54.73	-43.11	97.84	44.48	38.49	5.96	34.20	Peak
2	10620.000	57.55	-5.99	63.54	44.32	40.17	6.93	33.87	PK
3	15930.000	64.11	-19.43	83.54	45.99	42.89	8.47	33.24	Peak
4	15930.000	50.89	-12.65	63.54	32.77	42.89	8.47	33.24	Average

Test Mode :	802.11n (HT-40)	Temperature :	23°C
Test Channel :	102	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



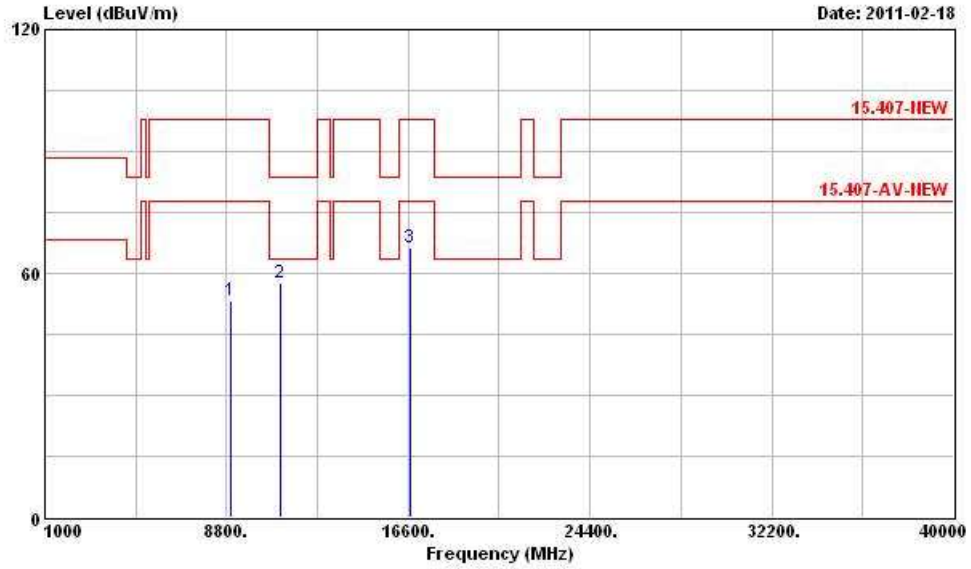
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8940.000	53.93	-43.91	97.84	44.30	38.15	6.14	34.66	Peak
2	11020.000	56.43	-7.11	63.54	42.29	40.41	7.13	33.40	PK
3	16530.000	65.58	-32.26	97.84	46.56	43.51	8.27	32.76	Peak

Test Mode :	802.11n (HT-40)	Temperature :	23°C
Test Channel :	102	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



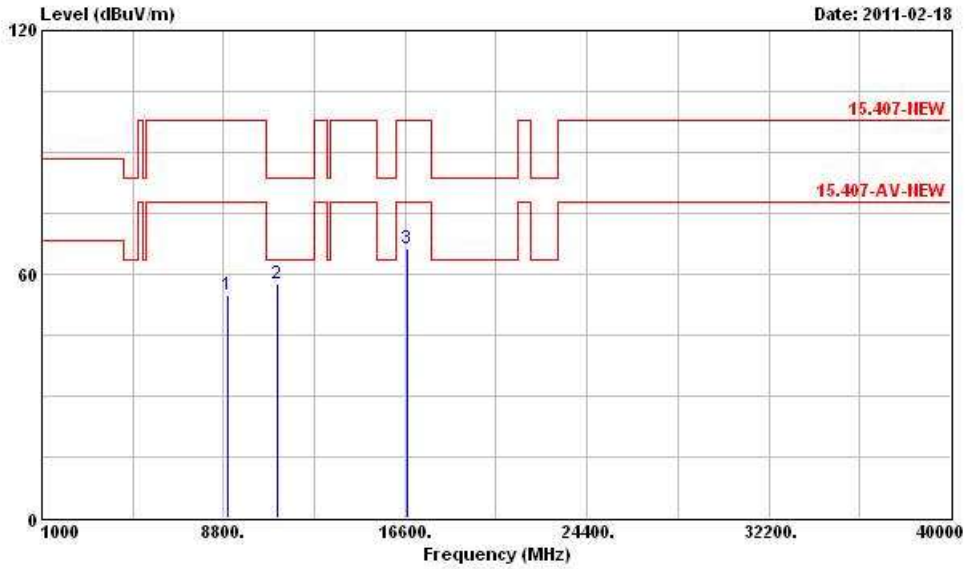
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8940.000	54.20	-43.64	97.84	44.57	38.15	6.14	34.66	Peak
2	11020.000	57.16	-6.38	63.54	43.02	40.41	7.13	33.40	PK
3	16530.000	66.12	-31.72	97.84	47.10	43.51	8.27	32.76	Peak

Test Mode :	802.11n (HT-40)	Temperature :	23°C
Test Channel :	110	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



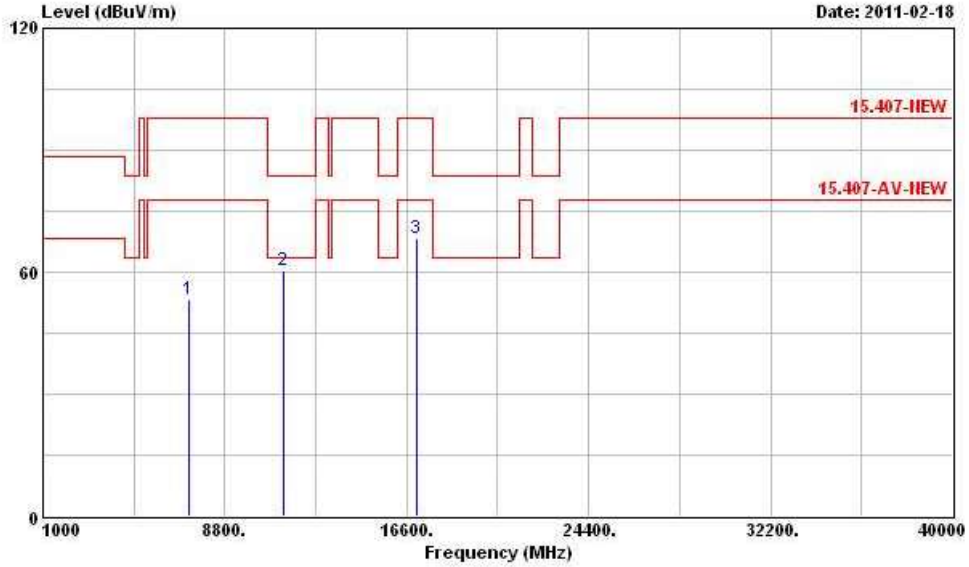
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8980.000	53.38	-44.46	97.84	43.80	38.13	6.16	34.71	Peak
2	11100.000	57.67	-25.87	83.54	43.62	40.44	7.05	33.44	Peak
3	16650.000	66.48	-31.36	97.84	47.19	43.56	8.37	32.64	Peak

Test Mode :	802.11n (HT-40)	Temperature :	23°C
Test Channel :	110	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



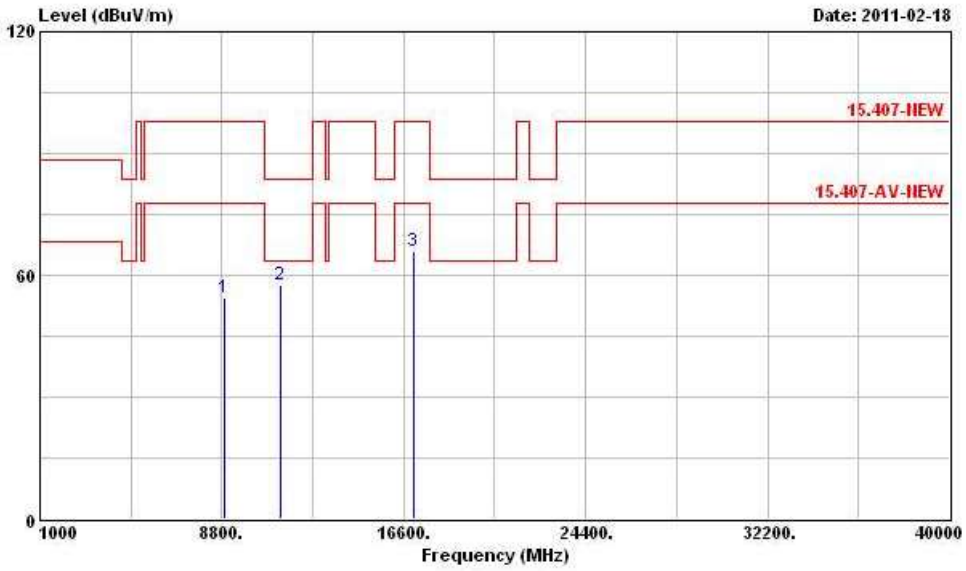
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8971.000	54.71	-43.13	97.84	45.15	38.13	6.14	34.71	Peak
2	11100.000	57.56	-5.98	63.54	43.51	40.44	7.05	33.44	PK
3	16650.000	66.28	-31.56	97.84	46.99	43.56	8.37	32.64	Peak

Test Mode :	802.11n (HT-40)	Temperature :	23°C
Test Channel :	134	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7240.000	53.23	-44.61	97.84	44.04	37.85	5.63	34.29	Peak
2	11340.000	60.46	-3.08	63.54	46.69	40.53	6.80	33.56	PK
3	17010.000	68.44	-29.40	97.84	48.41	43.69	8.65	32.31	Peak

Test Mode :	802.11n (HT-40)	Temperature :	23°C
Test Channel :	134	Relative Humidity :	51%
Test Engineer :	Daniel	Polarization :	Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8928.000	54.50	-43.34	97.84	44.86	38.17	6.13	34.66	Peak
2	11340.000	57.74	-5.80	63.54	43.97	40.53	6.80	33.56	PK
3	17010.000	65.83	-32.01	97.84	45.80	43.69	8.65	32.31	Peak

3.7 Peak Excursion Ratio Measurement

3.7.1 Limit of Peak Excursion Ratio

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

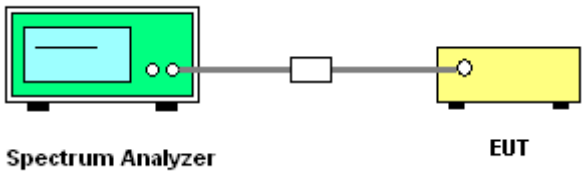
3.7.2 Measuring Instruments

See list of measuring instruments of this test report.

3.7.3 Test Procedures

1. The transmitter output is connected to the spectrum analyzer.
2. The resolution bandwidth and video bandwidth are set as below,
   Trace A: RBW=1 MHz, VBW=3 MHz
   Trace B: RBW=1 MHz, VBW=300 kHz
3. Trace A is set peak detector and to Max Hold, then to View. Then the detector is readjusted to sample detector, max hold to run for 60 seconds, and the signal under this measurement condition is captured in Trace B in Accordance with the method 3 of DA-02-2138.
4. The difference between the traces is investigated. The marker is placed at the frequency, which shows the largest difference. The amplitude delta between the traces at this frequency is the peak excursion.

3.7.4 Test Setup



3.7.5 Test Result of Peak Excursion Ratio

Test Mode :	802.11a	Temperature :	21℃
Test Engineer :	Ian	Relative Humidity :	62%

Channel	Frequency (MHz)	Peak Excursion (dB)	Max. Limits (dB)	Pass/Fail
36	5180	6.18	13	Pass
40	5200	6.17	13	Pass
48	5240	5.87	13	Pass
52	5260	6.00	13	Pass
56	5280	5.89	13	Pass
64	5320	6.00	13	Pass
100	5500	6.12	13	Pass
116	5580	5.90	13	Pass
140	5700	5.86	13	Pass

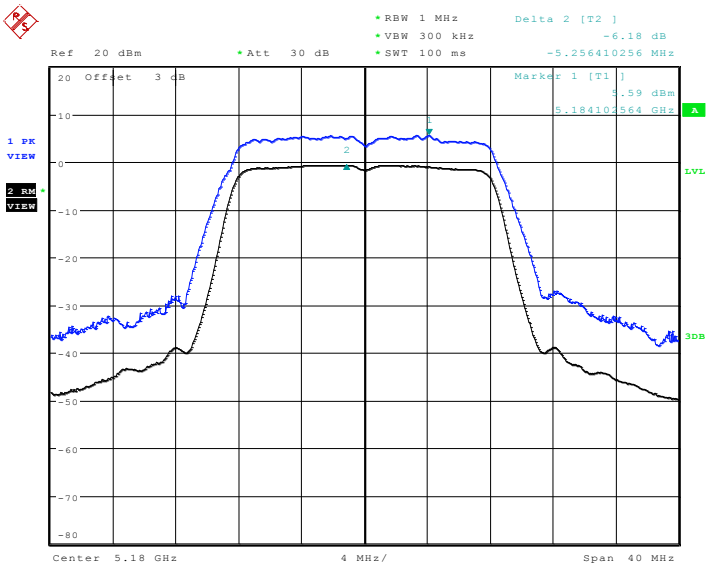
Test Mode :	802.11n (HT-20)	Temperature :	21℃
Test Engineer :	Ian	Relative Humidity :	62%

Channel	Frequency (MHz)	Peak Excursion (dB)	Max. Limits (dB)	Pass/Fail
36	5180	6.19	13	Pass
40	5200	6.03	13	Pass
48	5240	6.10	13	Pass
52	5260	5.93	13	Pass
56	5280	6.21	13	Pass
64	5320	5.83	13	Pass
100	5500	6.02	13	Pass
116	5580	6.19	13	Pass
140	5700	5.85	13	Pass

Test Mode :	802.11n (HT-40)	Temperature :	21℃
Test Engineer :	Ian	Relative Humidity :	62%

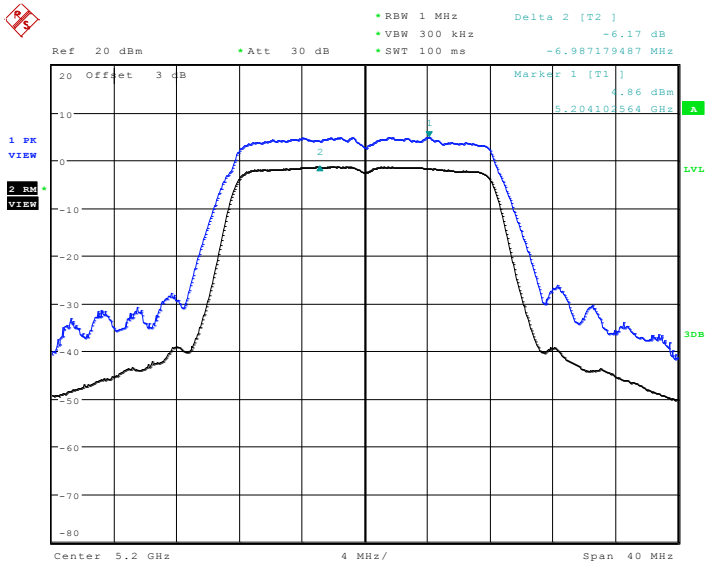
Channel	Frequency (MHz)	Peak Excursion (dB)	Max. Limits (dBm)	Pass/Fail
38	5190	5.73	13	Pass
46	5230	6.64	13	Pass
54	5270	6.46	13	Pass
62	5310	6.87	13	Pass
102	5510	6.76	13	Pass
110	5550	6.53	13	Pass
134	5670	6.19	13	Pass

Peak Excursion Ratio Plot on 802.11a Channel 36 – Chain A



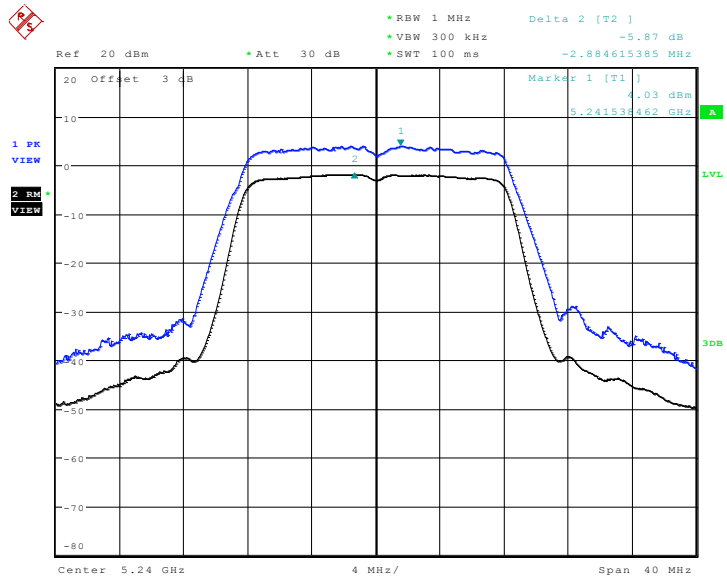
Date: 22.FEB.2011 15:40:50

Peak Excursion Ratio Plot on 802.11a Channel 40– Chain A



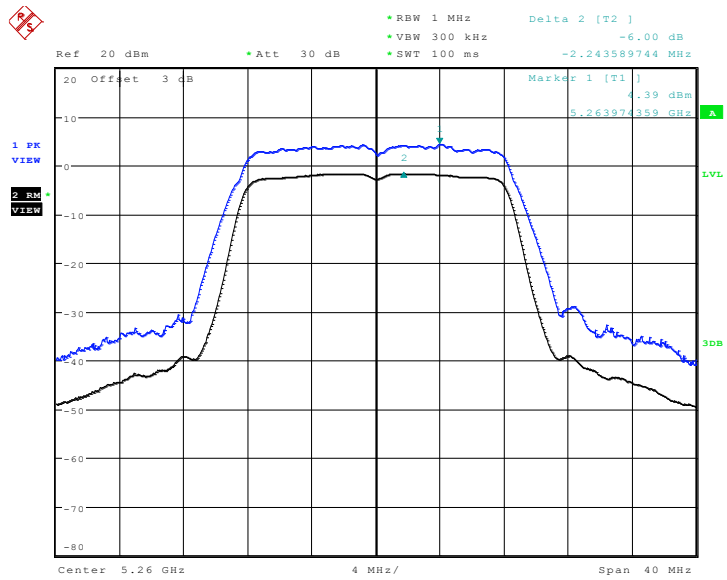
Date: 22.FEB.2011 15:43:21

Peak Excursion Ratio Plot on 802.11a Channel 48 – Chain A



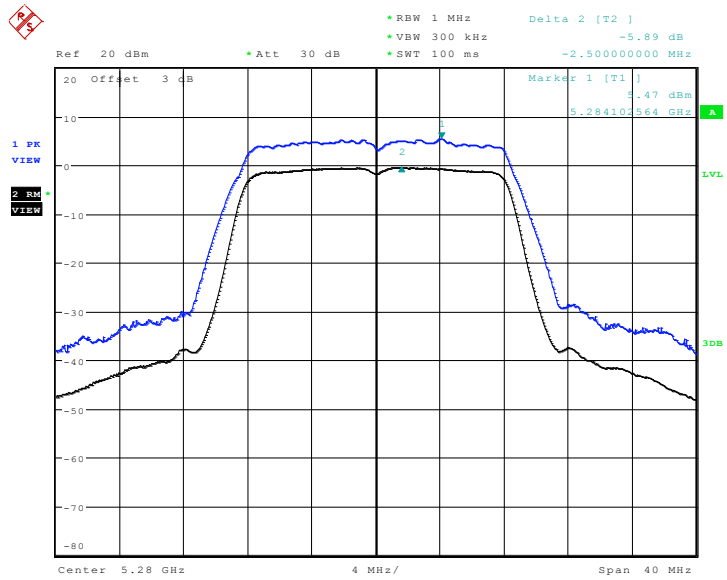
Date: 22.FEB.2011 15:44:10

Peak Excursion Ratio Plot on 802.11a Channel 52 – Chain A



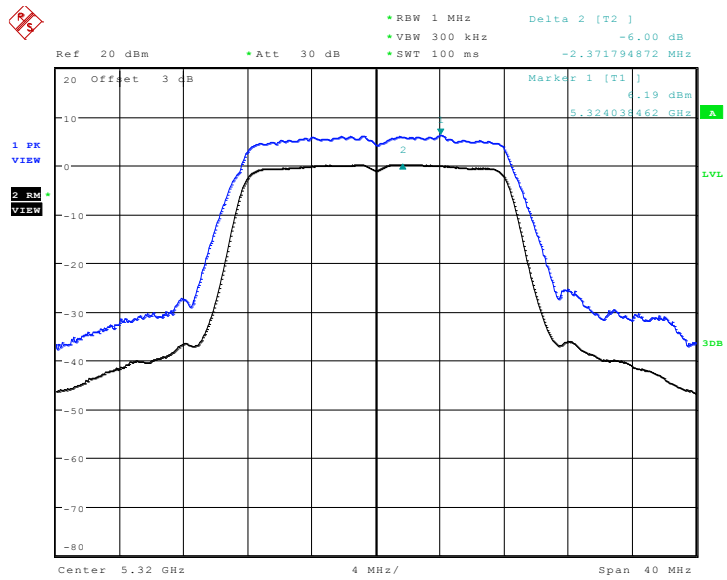
Date: 22.FEB.2011 15:44:56

Peak Excursion Ratio Plot on 802.11a Channel 56– Chain A



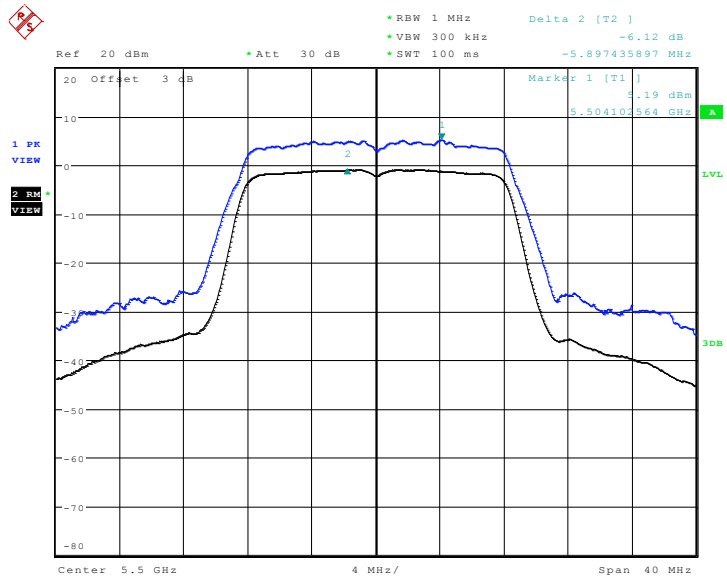
Date: 22.FEB.2011 15:45:41

Peak Excursion Ratio Plot on 802.11a Channel 64 – Chain A



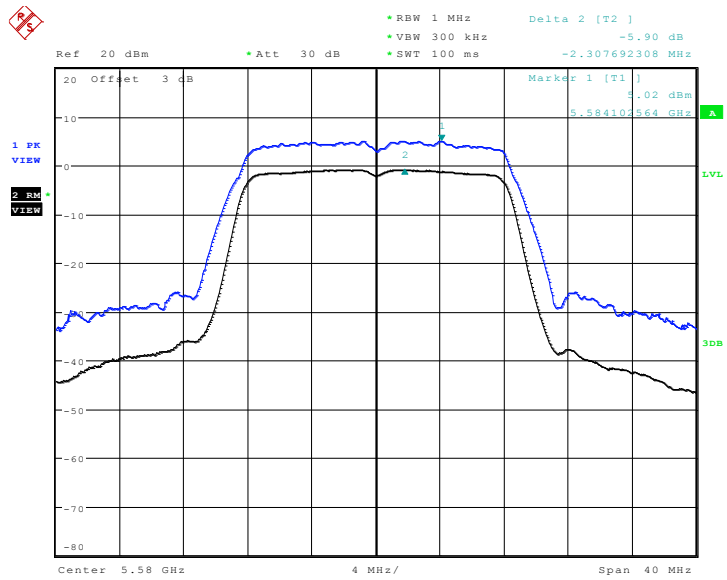
Date: 22.FEB.2011 15:46:26

Peak Excursion Ratio Plot on 802.11a Channel 100 – Chain A



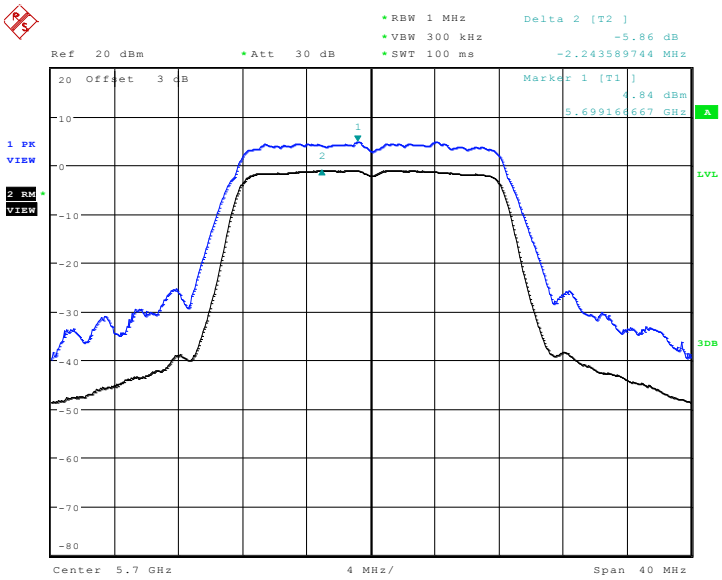
Date: 22.FEB.2011 15:47:07

Peak Excursion Ratio Plot on 802.11a Channel 116– Chain A



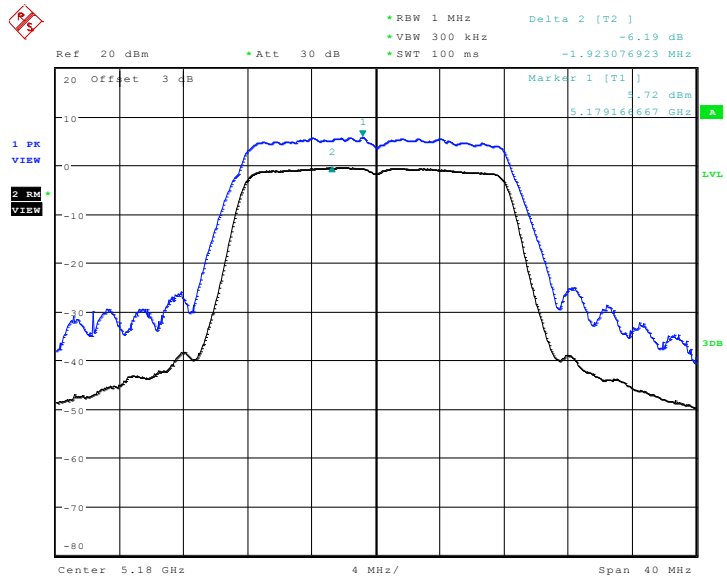
Date: 22.FEB.2011 15:47:44

Peak Excursion Ratio Plot on 802.11a Channel 140 – Chain A



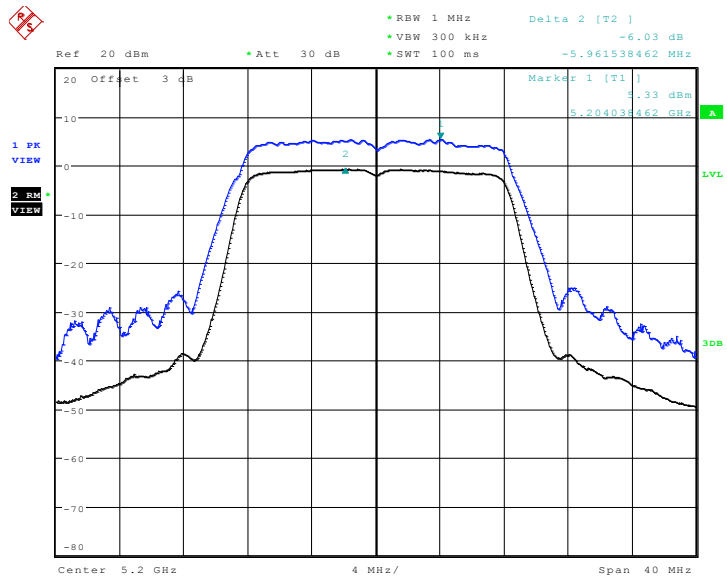
Date: 22.FEB.2011 15:48:27

Peak Excursion Ratio Plot on 802.11n Channel 36 – Chain A



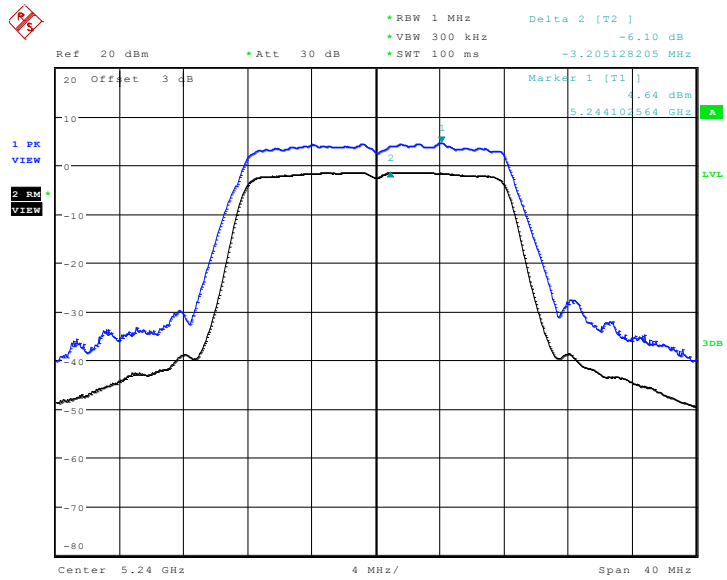
Date: 22.FEB.2011 15:59:08

Peak Excursion Ratio Plot on 802.11n Channel 40– Chain A



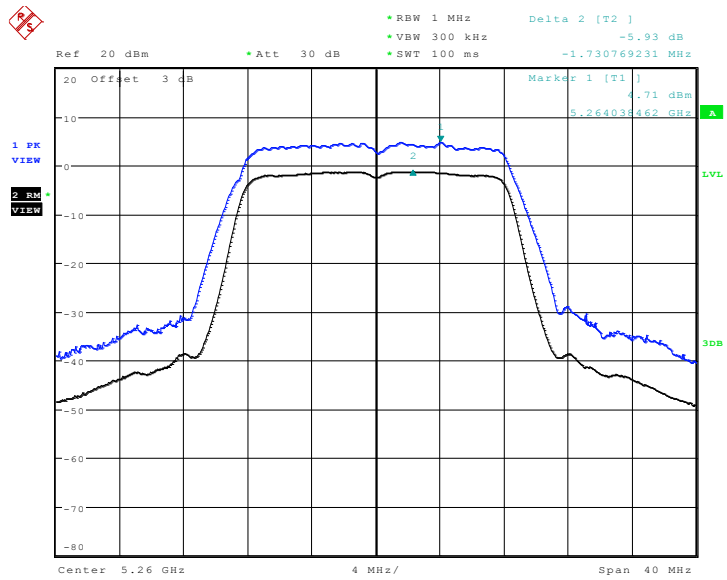
Date: 22.FEB.2011 15:59:52

Peak Excursion Ratio Plot on 802.11n Channel 48 – Chain A



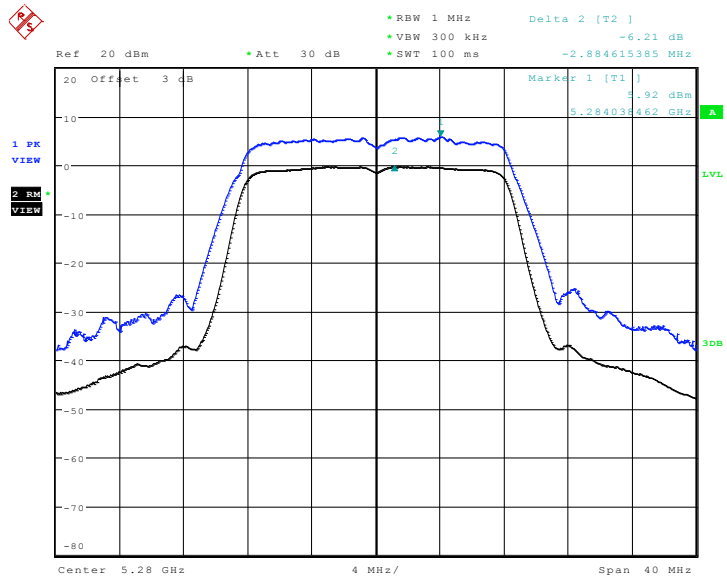
Date: 22.FEB.2011 16:00:37

Peak Excursion Ratio Plot on 802.11n Channel 52 – Chain A



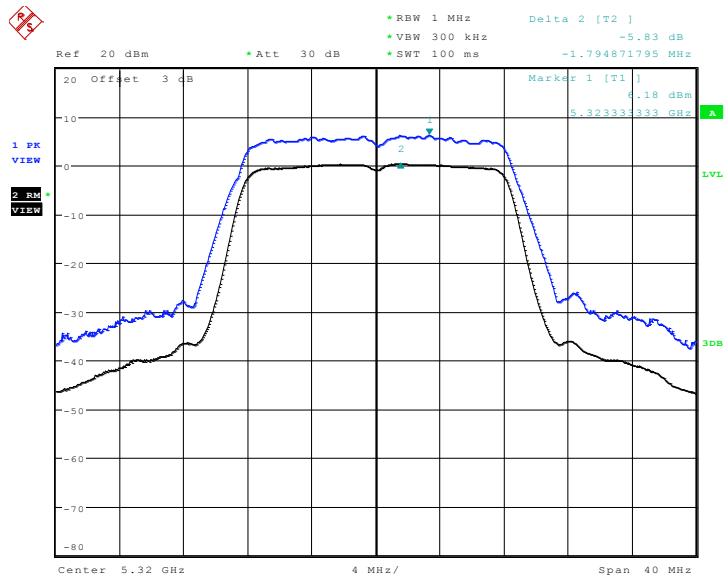
Date: 22.FEB.2011 16:01:18

Peak Excursion Ratio Plot on 802.11n Channel 56– Chain A



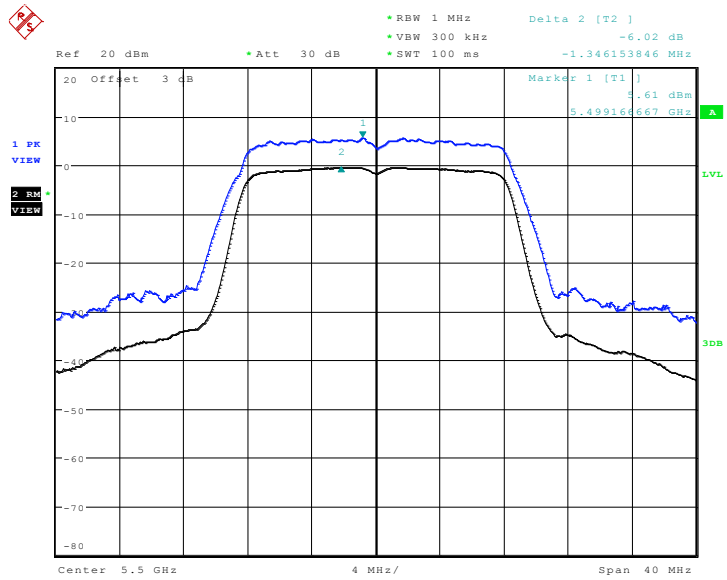
Date: 22.FEB.2011 16:01:59

Peak Excursion Ratio Plot on 802.11n Channel 64 – Chain A



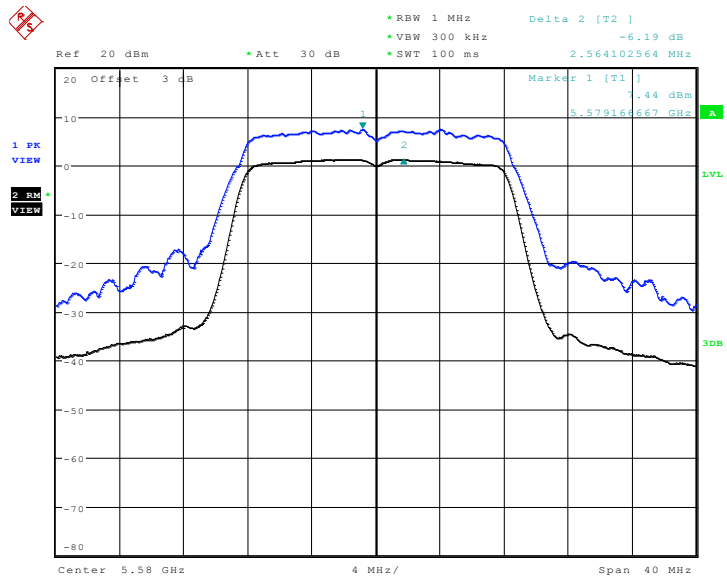
Date: 22.FEB.2011 16:02:44

Peak Excursion Ratio Plot on 802.11n Channel 100 – Chain A



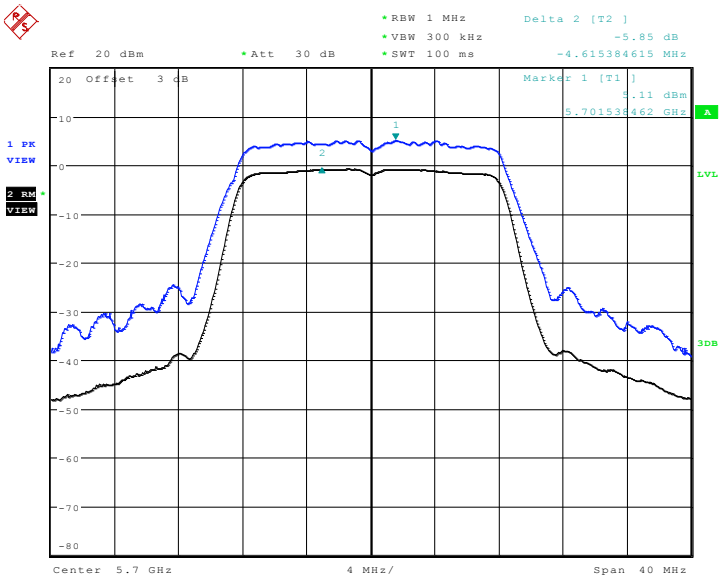
Date: 22.FEB.2011 16:03:26

Peak Excursion Ratio Plot on 802.11n Channel 116– Chain A



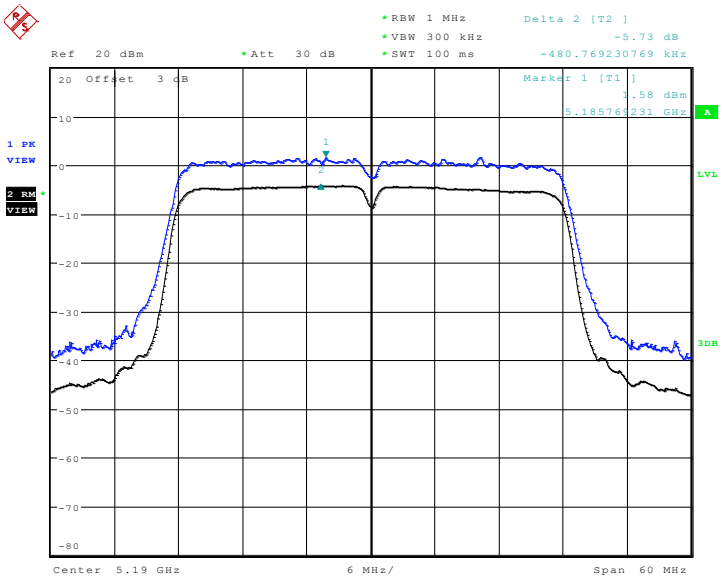
Date: 22.FEB.2011 16:04:04

Peak Excursion Ratio Plot on 802.11n Channel 140 – Chain A



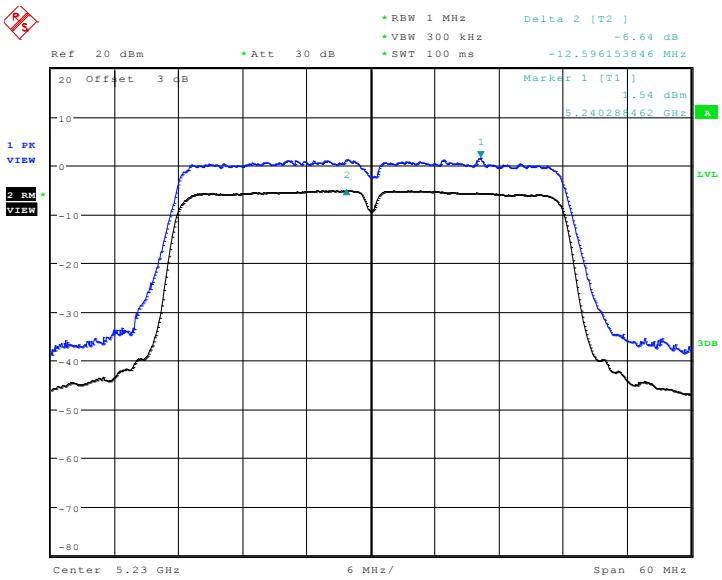
Date: 22.FEB.2011 16:04:42

Peak Excursion Ratio Plot on 802.11n Channel 38 – Chain A



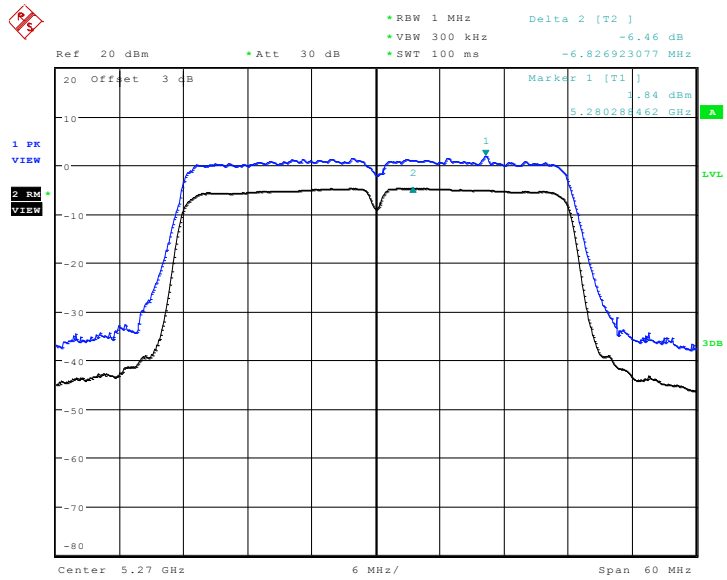
Date: 22.FEB.2011 14:10:23

Peak Excursion Ratio Plot on 802.11n Channel 46 – Chain A



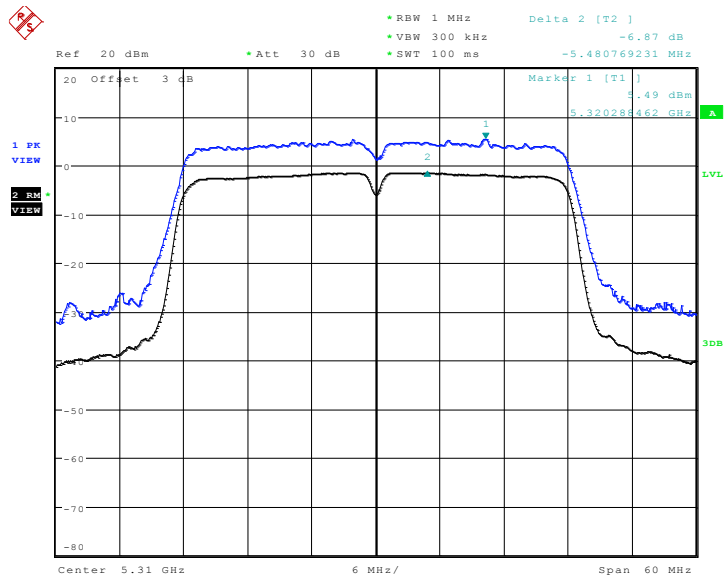
Date: 22.FEB.2011 14:11:23

Peak Excursion Ratio Plot on 802.11n Channel 54 – Chain A



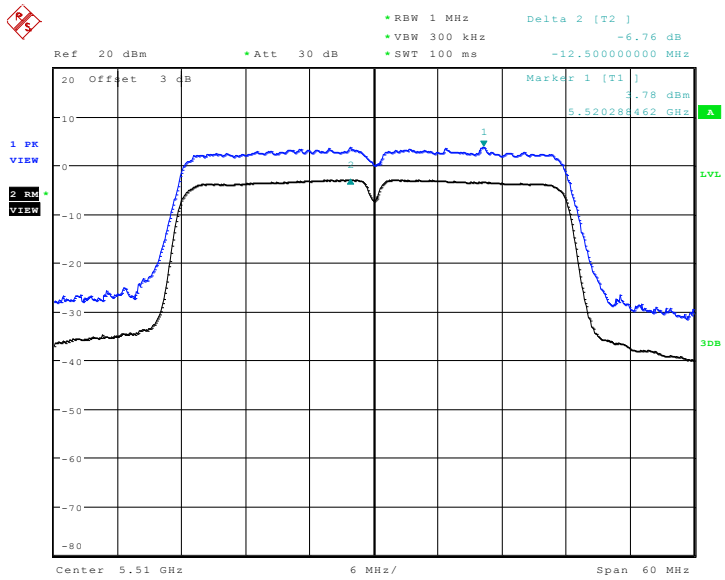
Date: 22.FEB.2011 14:12:04

Peak Excursion Ratio Plot on 802.11n Channel 62 – Chain A



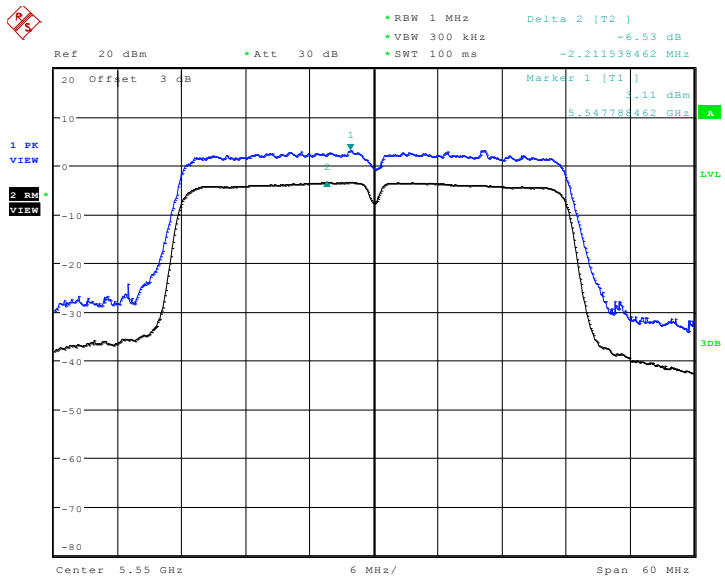
Date: 22.FEB.2011 14:14:57

Peak Excursion Ratio Plot on 802.11n Channel 102 – Chain A



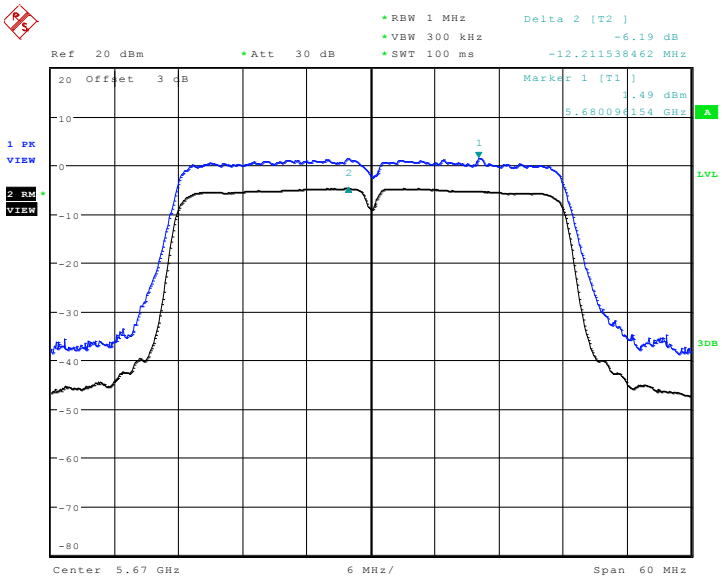
Date: 22.FEB.2011 14:15:46

Peak Excursion Ratio Plot on 802.11n Channel 110 – Chain A



Date: 22.FEB.2011 14:16:38

Peak Excursion Ratio Plot on 802.11n Channel 134 – Chain A



Date: 22.FEB.2011 14:17:27

3.8 Automatically Discontinue Transmission

3.8.1 Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

3.8.2 Measuring Instruments

See list of measuring instruments of this test report.

3.8.3 Test Result of Automatically Discontinue Transmission

During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

3.9 Frequency Stability Measurement

3.9.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

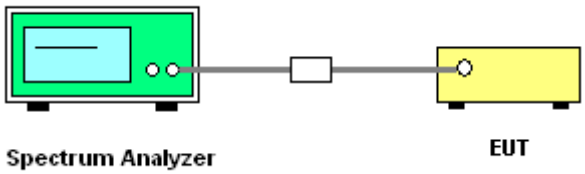
3.9.2 Measuring Instruments

See list of measuring instruments of this test report.

3.9.3 Test Procedures

1. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
2. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

3.9.4 Test Setup



3.9.5 Test Result of Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5320 MHz
5.5	5319.987545
5	5319.988462
4.5	5319.986417
Max. Deviation (MHz)	0.013583
Max. Deviation (ppm)	2.55

Temperature	Measurement Frequency (MHz)
(℃)	5320 MHz
-30	5320.017788
-20	5320.018869
-10	5320.013462
0	5320.002885
10	5319.990385
20	5319.982692
30	5319.980288
40	5319.986058
50	5319.986158
Max. Deviation (MHz)	0.019712
Max. Deviation (ppm)	3.71

3.10 Antenna Requirements

3.10.1 Standard Applicable

According to FCC 47 CFR Section 15.407(a)(1)(2) ,if transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.10.2 Antenna Connected Construction

The antennas type used in this product is PIFA Antenna with U.FL connector and it is considered to meet antenna requirement of FCC.

3.10.3 Antenna Gain

The antenna gain is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

4 List of Measuring Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Receiver	R&S	ESCS 30	838251/003	9 kHz - 2.75 GHz	Apr. 16, 2010	Conduction (CO01-LK)
LISN	SCHAFFNER	NNB 41	06/10024	9 kHz - 30 MHz	Jan. 12, 2011	Conduction (CO01-LK)
RF Cable-CON	Suhner Switzerland	RG223/U	CB017	9 kHz - 30 MHz	Nov. 04, 2010	Conduction (CO01-LK)
PULSE LIMTER	R&S	ESH3-Z2	20-6120	9 kHz - 30 MHz	May. 18. 2010	Conduction (CO01-LK)
Spectrum Analyzer	R&S	FSP40	100004	9 kHz - 40 GHz	Nov. 17, 2010	Radiation (03CH02-HY)
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30 MHz - 1 GHz 3m	May 01, 2010	Radiation (03CH02-HY)
Amplifier	Agilent	8447D	2944A11146	100 kHz – 1.3 GHz	Jul. 23, 2010	Radiation (03CH02-HY)
Amplifier	Agilent	8449B	3008A02373	1GHz – 26.5 GHz	Jul. 23, 2010	Radiation (03CH02-HY)
Horn Antenna	ETS-LINDGREN	3117	00091920	1GHz~18GHz	Nov. 11, 2010	Radiation (03CH02-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	30MHz ~ 1GHz	Feb. 26, 2010	Radiation (03CH02-HY)
RF Cable-HIGH	SUHNER	SUCOFLEX106	03CH02-HY	1GHz~40GHz	Feb. 26, 2010	Radiation (03CH02-HY)
Bilog Antenna	SCHAFFNER	CBL61128	2723	30 MHz - 2 GHz	Oct. 16, 2010	Radiation (03CH02-HY)
Turn Table	HD	DS 420	420/649/00	0 - 360 degree	N/A	Radiation (03CH02-HY)
Antenna Mast	HD	MA 240	240/559/00	1 m - 4 m	N/A	Radiation (03CH02-HY)
Spectrum Analyzer	R&S	FSU26.5	100015	20Hz ~ 26.5GHz	Nov. 19, 2010	Conducted (TH01-HY)
DC Power Source	G.W.	GPC-6030D	C671845	DC 1V ~ 60V	Apr. 16, 2010	Conducted (TH01-HY)
Temp. and Humidity Chamber	Giant Force	GTH-225-20-S	MAB0103-001	N/A	Oct. 22, 2010	Conducted (TH01-HY)
RF CABLE-1m	Jye Bao	RG142	CB034-1m	20MHz ~ 7GHz	Dec. 02, 2010	Conducted (TH01-HY)
RF CABLE-2m	Jye Bao	RG142	CB035-2m	20MHz ~ 1GHz	Dec. 02, 2010	Conducted (TH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Mar. 30, 2010	Conducted (TH01-HY)
Power Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	Jan. 06, 2011	Conducted (TH01-HY)
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	Jan. 06, 2011	Conducted (TH01-HY)

Note: Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
AC Power Source	HPC	HPA-500W	HPA-9100024	AC 0 ~ 300V	Jul. 26, 2010*	Conducted (TH01-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz - 30 MHz	Jul. 29, 2010*	Radiation (03CH02-HY)

Note: Calibration Interval of instruments listed above is two year.

5 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Contribution	Uncertainty of X_i		$u(X_i)$
	dB	Probability Distribution	
Receiver Reading	0.10	Normal (k=2)	0.05
Cable Loss	0.10	Normal (k=2)	0.05
AMN Insertion Loss	2.50	Rectangular	0.63
Receiver Specification	1.50	Rectangular	0.43
Site Imperfection	1.39	Rectangular	0.80
Mismatch	+0.34 / -0.35	U-Shape	0.24
Combined Standard Uncertainty Uc(y)	**1.13**		
Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.26**		

Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Contribution	Uncertainty of X_i		$u(X_i)$
	dB	Probability Distribution	
Receiver Reading	0.41	Normal (k=2)	0.21
Antenna Factor Calibration	0.83	Normal (k=2)	0.42
Cable Loss Calibration	0.25	Normal (k=2)	0.13
Pre-Amplifier Gain Calibration	0.27	Normal (k=2)	0.14
RCV/SPA Specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site Imperfection	1.43	Rectangular	0.83
Mismatch	+0.39 / -0.41	U-Shape	0.28
Combined Standard Uncertainty Uc(y)	**1.27**		
Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.54**		

Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)

Contribution	Uncertainty of X_i		$u(X_i)$	C_i	$C_i * u(X_i)$
	dB	Probability Distribution			
Receiver Reading	±0.10	Normal (k=2)	0.10	1	0.10
Antenna Factor Calibration	±1.70	Normal (k=2)	0.85	1	0.85
Cable Loss Calibration	±0.50	Normal (k=2)	0.25	1	0.25
Receiver Correction	±2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	±1.50	Rectangular	0.87	1	0.87
Site Imperfection	±2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR Γ1 = 0.197 Antenna VSWR Γ2 = 0.194 Uncertainty = 20Log(1-Γ1*Γ2)	+0.34 / -0.35	U-Shape	0.244	1	0.244
Combined Standard Uncertainty Uc(y)	**2.36**				
Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.72**				