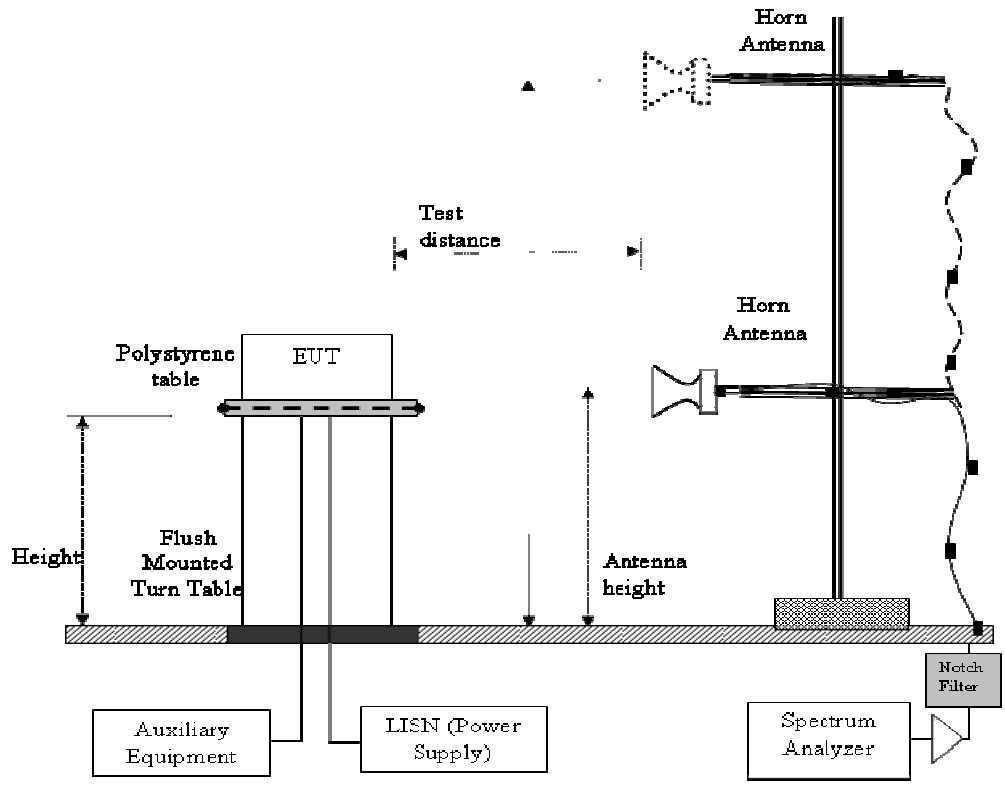
7.6 Radiated Spurious Emissions

Test Procedure

Testing was performed in a 3-meter anechoic chamber. Preliminary radiated emissions were measured on every azimuth and with the receiving antenna in both horizontal and vertical polarizations. Preliminary emissions were recorded with in Spectrum Analyzer mode, using a maximum peak detector while in peak hold mode.

Emissions nearest the limits were chosen for maximization and formal measurement using a CISPR Compliant receiver. Emissions above 1000 MHz are measured utilizing a CISPR compliant average detector with a tuned receiver, using a bandwidth of 1 MHz. Emissions from 30 MHz – 1000 MHz are measured utilizing a CISPR compliant quasi-peak detector with a tuned receiver, using a bandwidth of 120 kHz. Only the highest emissions relative to the limit are listed.

Test Measurement Set Up



Radiated Emission Measurement Setup – Above 1 GHz

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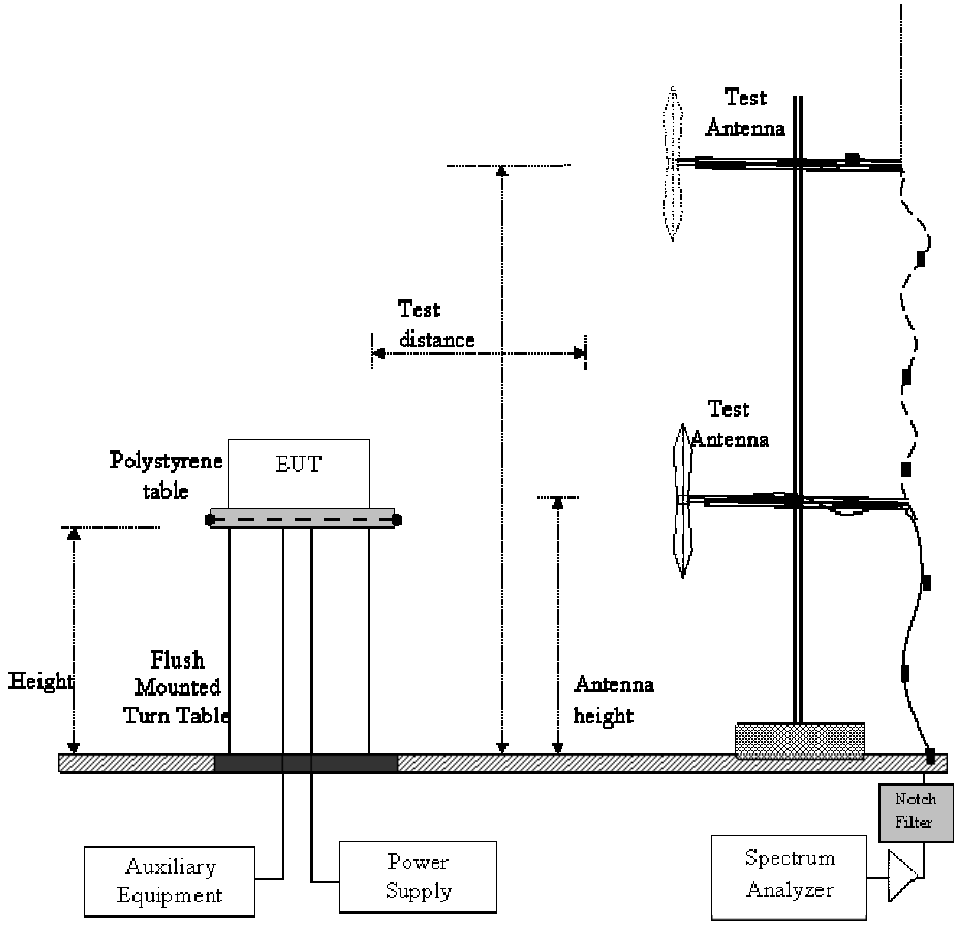

Radiated Emission Measurement Setup – Below 1 GHz

Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Loss, and subtracting Amplifier Gain from the measured reading. All factors are included in the reported data.

FS = R + AF + CORR – FO

FS = Field Strength
R = Measured Spectrum analyzer Input Amplitude
AF = Antenna Factor

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CORR = Correction Factor = CL – AG + NFL

CL = Cable Loss
AG = Amplifier Gain
FO = Distance Falloff Factor
NFL = Notch Filter Loss or Waveguide Loss

Field Strength Calculation Example:

Given receiver input reading of 51.5 dBμV; Antenna Factor of 8.5 dB; Cable Loss of 1.3 dB; Falloff Factor of 0 dB, an Amplifier Gain of 26 dB and Notch Filter Loss of 1 dB. The Field Strength of the measured emission is:

FS = 51.5 + 8.5 + 1.3 - 26.0 +1 = 36.3 dBμV/m

Conversion between dBμV/m (or dBμV) and μV/m (or μV) are done as:

Level (dBμV/m) = 20 * Log (level (μV/m))

40 dBμV/m = 100 μV/m
48 dBμV/m = 250 μV/m

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Specification

Radiated Spurious Emissions

FCC §15.247(d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section §15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(a)).

FCC §15.205 (a) Except as shown in paragraph (d) of 15.205 (a), only spurious emissions are permitted in any of the frequency bands listed.

FCC §15.205 (a) Except as shown in paragraphs (d) and (e) of this section, the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

FCC §15.209 (a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table.

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Table 1: FCC 15.209 Spurious Emissions Limits

Frequency (MHz)	Field Strength (µV/m)	Field Strength (dBµV/m)	Measurement Distance (meters)
30-88	100	40.0	3
88-216	150	43.5	3
216-960	200	46.0	3
Above 960	500	54.0	3

Laboratory Measurement Uncertainty for Spectrum Measurement

Measurement Uncertainty	+5.6/ -4.5 dB

Traceability:

Method	Test Equipment Used
Work instruction WI-03	0088, 0158, 0134, 0304, 0311, 0315, 0310, 0312

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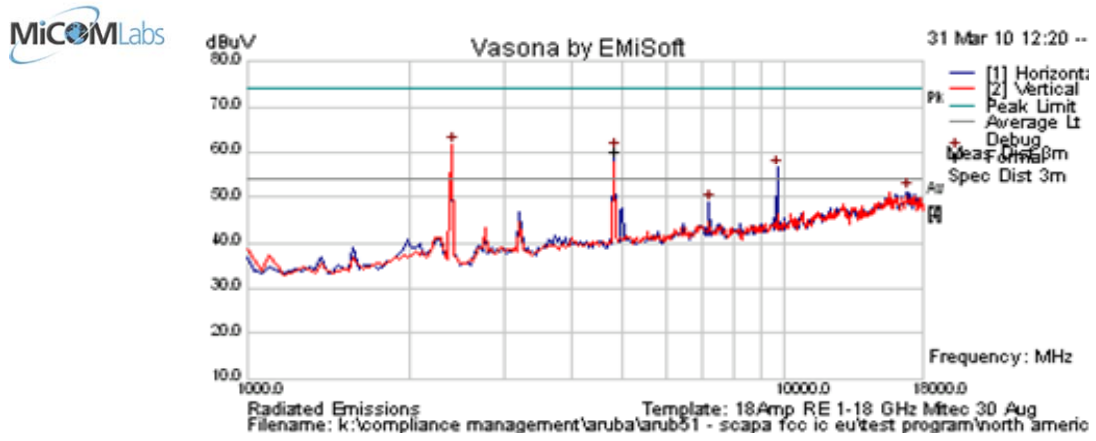
7.6.1 Integral Antenna - Transmitter Radiated Spurious Emissions – Above 1 GHz

2400 – 2483.5 MHz: 802.11b

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (ºC)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	12 in ART test utility	**Press. (mBars)**	1003
Antenna	Integral Antennas	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4824.042	64.7	4.5	-9.4	59.7	Peak Max	H	149	360	74.0	-14.3	Pass	RB
4824.042	58.2	4.5	-9.4	53.2	Average	H	149	360	54.0	-0.8	Pass	RB
7232.505	48.6	5.4	-5.3	48.8	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB
9648.076	53.4	6.3	-3.4	56.4	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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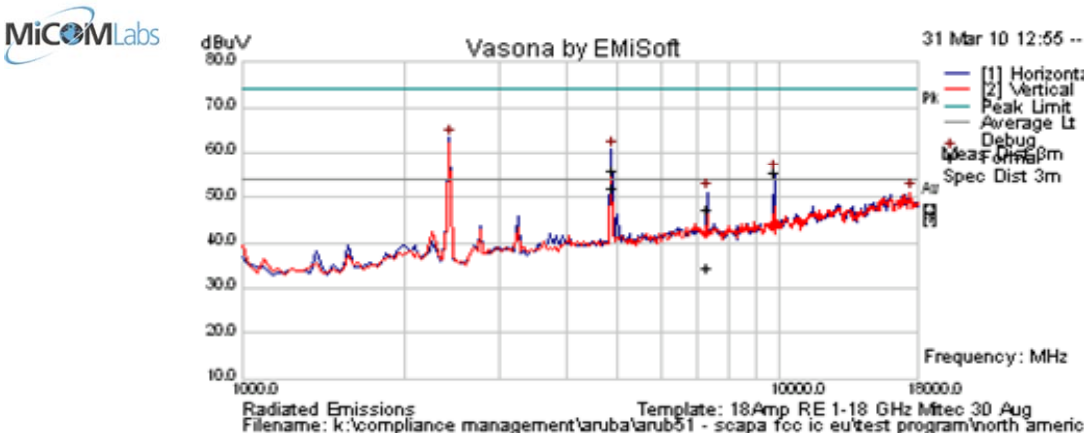
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	12 in ART test utility	**Press. (mBars)**	1003
Antenna	Integral Antennas	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4874.048	56.9	4.5	-9.3	52.1	Average Max	H	104	360	54.0	-1.9	Pass	RB
4874.048	60.5	4.5	-9.3	55.7	Peak Max	H	104	360	74.0	-18.3	Pass	RB
7313.026	34.2	5.4	-5.0	34.7	Average Max	H	98	327	54	-19.3	Pass	RB
7313.026	46.7	5.4	-5.0	47.2	Peak Max	H	98	327	74	-26.8	Pass	RB
9748.114	52.7	6.4	-3.6	55.4	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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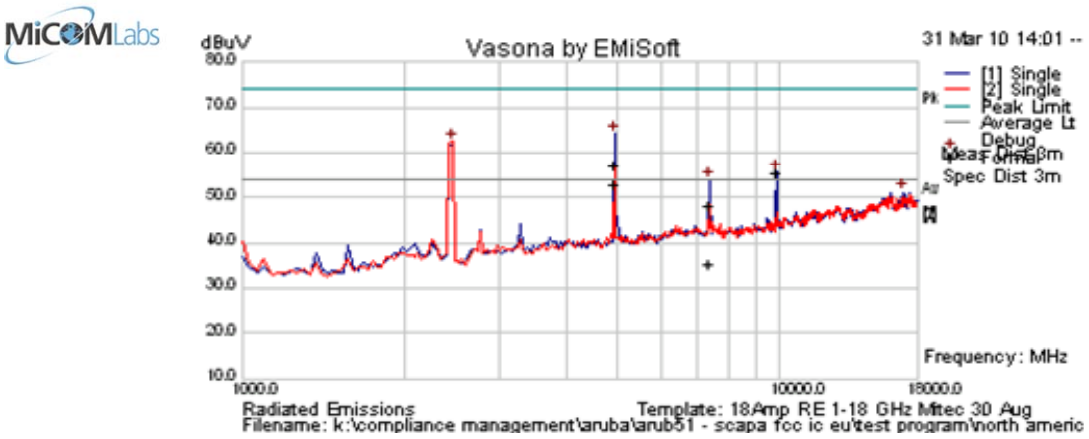
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	10.5 in ART test utility	**Press. (mBars)**	1003
Antenna	Integral Antennas	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4924.013	61.9	4.6	-9.1	57.4	Peak Max	H	98	356	74.0	-16.6	Pass	RB
4924.01293	57.5	4.6	-9.1	52.9	Average Max	H	98	356	54.0	-1.1	Pass	RB
7388.260	34.6	5.5	-4.8	35.3	Average Max	H	98	314	54	-18.7	Pass	RB
7388.260	47.4	5.5	-4.8	48.0	Peak Max	H	98	314	74	-26.0	Pass	RB
9848.041	52.4	6.4	-3.2	55.6	Peak [Scan]	H	> 20dB below fundamental					NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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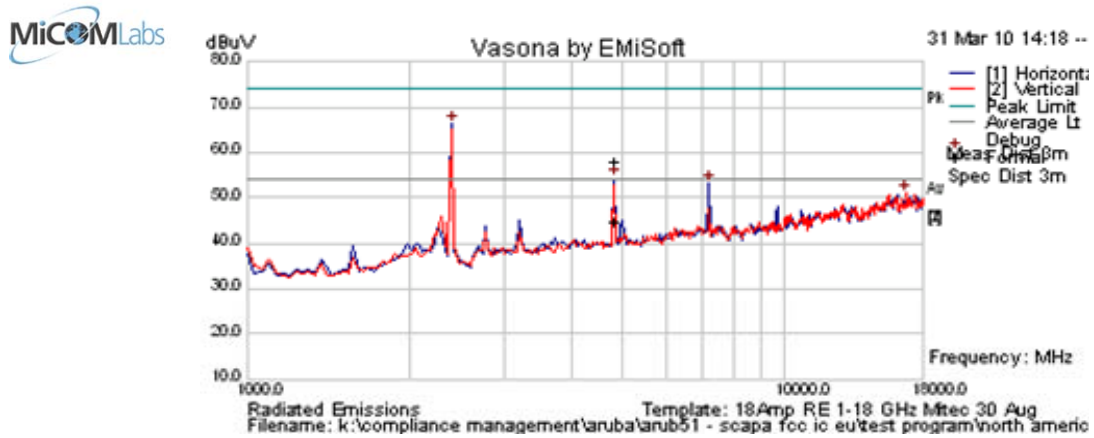
2400 – 2483.5 MHz: 802.11g

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in ART test utility	**Press. (mBars)**	1003
Antenna	Integral Antennas	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4824.369	63.2	4.5	-9.4	58.2	Peak Max	H	164	358	74.0	-15.8	Pass	RB
4824.369	49.6	4.5	-9.4	44.6	Average Max	H	164	358	54.0	-9.4	Pass	RB
7231.864	53.0	5.4	-5.3	53.2	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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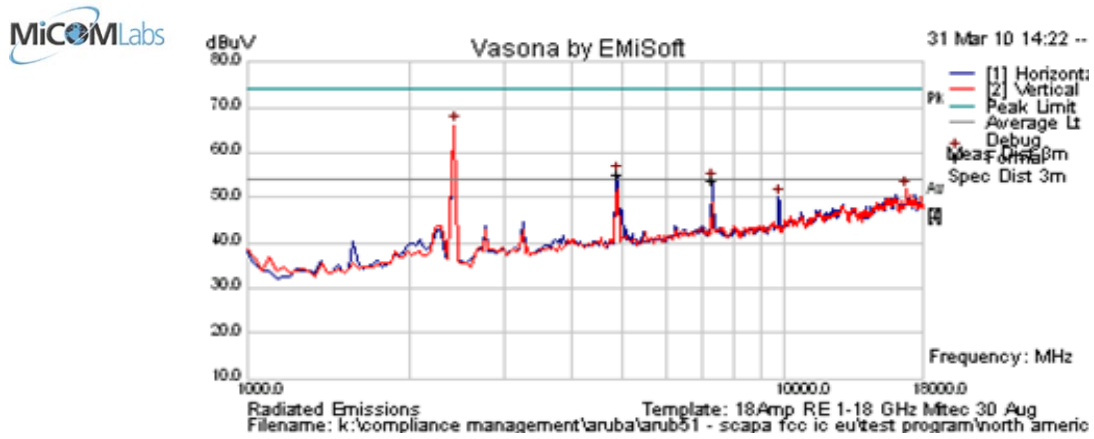
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in ART test utility	**Press. (mBars)**	1003
Antenna	Integral Antennas	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4875.541	48.3	4.5	-9.3	43.5	Average Max	H	132	360	54.0	-10.5	Pass	RB
4875.541	63.0	4.5	-9.3	58.2	Peak Max	H	132	360	74.0	-15.8	Pass	RB
7312.745	40.4	5.4	-4.9	40.9	Average Max	H	98	322	54	-13.1	Pass	RB
7312.745	56.3	5.4	-4.9	56.8	Peak Max	H	98	322	74	-17.2	Pass	RB
9754.589	47.4	6.4	-3.7	50.1	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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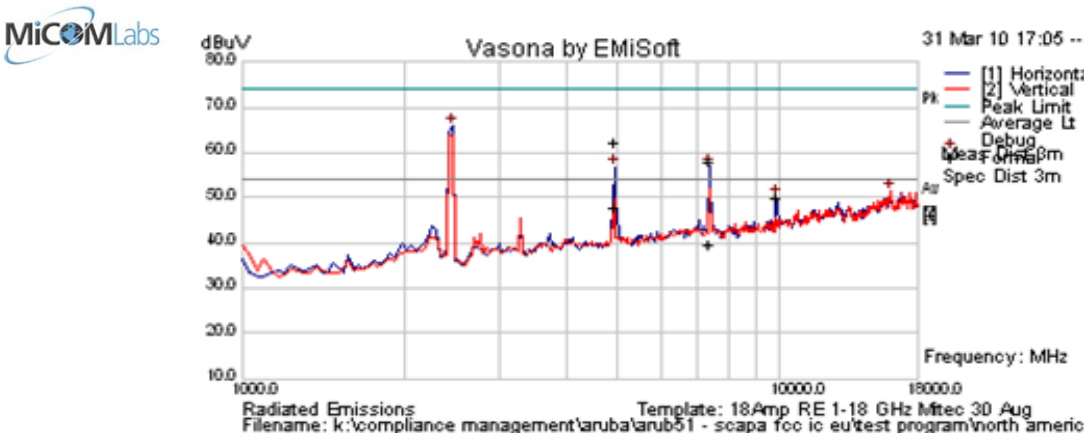
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in ART test utility	**Press. (mBars)**	1003
Antenna	Integral Antennas	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4926.172	66.6	4.6	-9.1	62.2	Peak Max	H	98	360	74.0	-11.9	Pass	RB
4926.172	52.3	4.6	-9.1	47.8	Average Max	H	98	360	54.0	-6.2	Pass	RB
7383.207	38.9	5.5	-4.8	39.5	Average Max	H	157	329	54	-14.5	Pass	RB
7383.207	57.5	5.5	-4.8	58.1	Peak Max	H	157	329	74	-15.9	Pass	RB
9836.874	46.7	6.4	-3.2	49.9	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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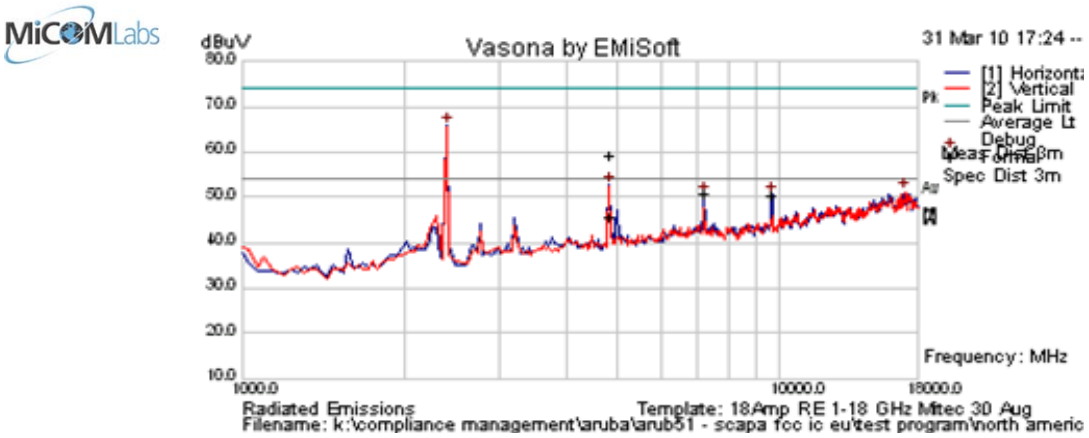
2400 – 2483.5 MHz: 802.11n HT-20

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in ART test utility	**Press. (mBars)**	1003
Antenna	Integral Antenna	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4822.255	50.7	4.5	-9.4	45.7	Average	H	167	0	54.0	-8.3	Pass	RB
4822.255	64.2	4.5	-9.4	59.3	Peak	H	167	0	74.0	-14.7	Pass	RB
7234.910	50.4	5.4	-5.2	50.6	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB
9653.306	47.6	6.3	-3.5	50.4	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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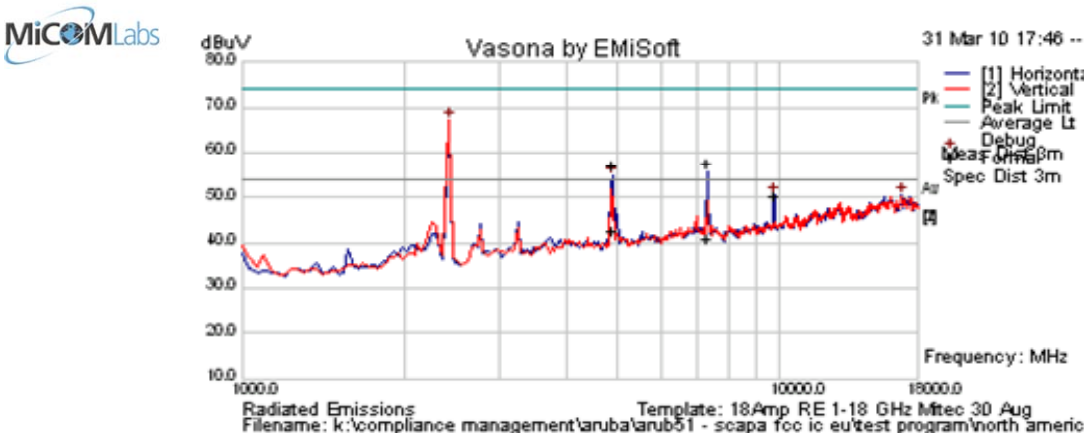
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in ART test utility	**Press. (mBars)**	1003
Antenna	Integral Antenna	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4877.595	47.6	4.5	-9.3	42.7	Average Max	H	118	0	54.0	-11.3	Pass	RB
4877.595	62.1	4.5	-9.3	57.2	Peak Max	H	118	0	74.0	-16.8	Pass	RB
7311.022	40.5	5.4	-4.9	41.0	Average Max	H	98	320	54	-13.0	Pass	RB
7311.022	57.1	5.4	-4.9	57.6	Peak Max	H	98	320	74	-16.4	Pass	RB
9754.309	47.8	6.4	-3.7	50.5	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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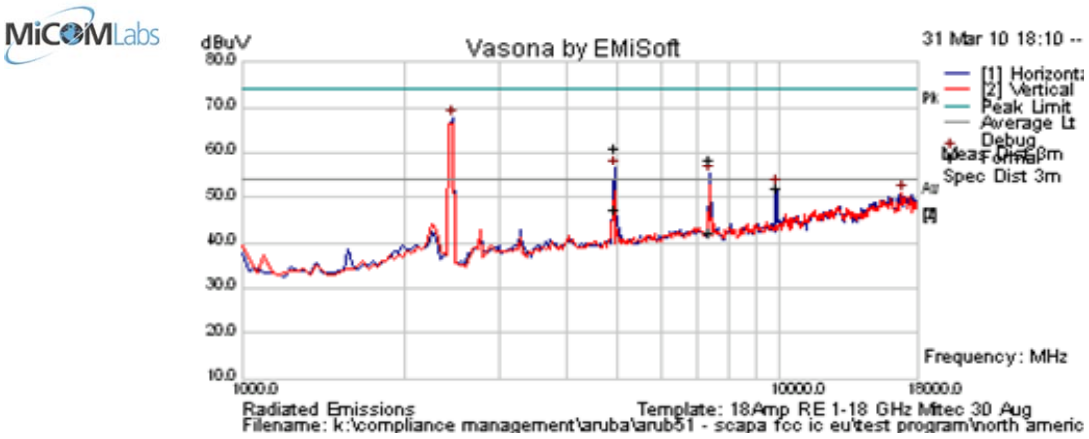
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in ART test utility	**Press. (mBars)**	1003
Antenna	Integral Antenna	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4925.130	51.7	4.6	-9.1	47.2	Average Max	H	98	360	54.0	-6.8	Pass	RB
4925.13	65.6	4.6	-9.1	61.1	Peak Max	H	98	360	74.0	-12.9	Pass	RB
7386.693	41.7	5.5	-4.8	42.4	Average Max	H	98	25	54	-11.6	Pass	RB
7386.693	57.9	5.5	-4.8	58.5	Peak Max	H	98	25	74	-15.5	Pass	RB
9837.916	48.7	6.4	-3.2	52.0	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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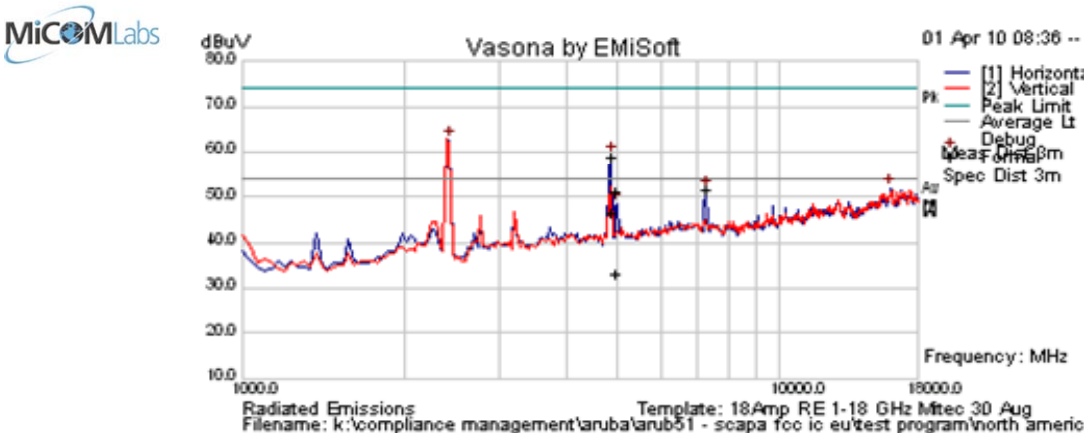
2400 – 2483.5 MHz: 802.11n HT-40

Test Freq.	2422 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	18 in ART test utility	**Press. (mBars)**	1008
Antenna	Integral Antenna	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4861.002	51.1	4.5	-9.3	46.3	Average Max	H	98	346	54.0	-7.7	Pass	RB
4861.002	63.7	4.5	-9.3	58.9	Peak Max	H	98	346	74.0	-15.1	Pass	RB
4989.259	37.8	4.6	-9.1	33.3	Average Max	H	101	338	54	-20.8	Pass	RB
4989.259	55.9	4.6	-9.1	51.4	Peak Max	H	101	338	74	-22.6	Pass	RB
7299.760	51.2	5.4	-4.9	51.7	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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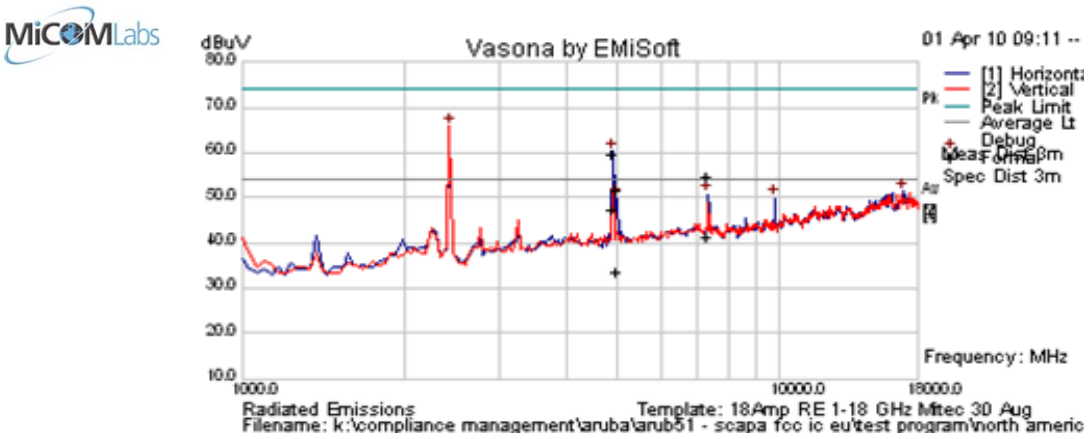
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	18 in ART test utility	**Press. (mBars)**	1008
Antenna	Integral Antenna	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4892.826	52.2	4.5	-9.3	47.4	Average Max	H	98	347	54.0	-6.6	Pass	RB
4892.826	64.4	4.5	-9.3	59.6	Peak Max	H	98	347	74.0	-14.4	Pass	RB
4988.497	56.0	4.6	-9.1	51.5	Peak Max	H	98	346	74	-22.5	Pass	RB
4988.497	38.0	4.6	-9.1	33.5	Average Max	H	98	346	54	-20.5	Pass	RB
7344.970	41.0	5.5	-5.0	41.5	Average Max	H	102	343	54	-12.6	Pass	RB
7344.970	54.3	5.5	-5.0	54.8	Peak Max	H	102	343	74	-19.2	Pass	RB
9793.828	46.9	6.4	-3.4	49.8	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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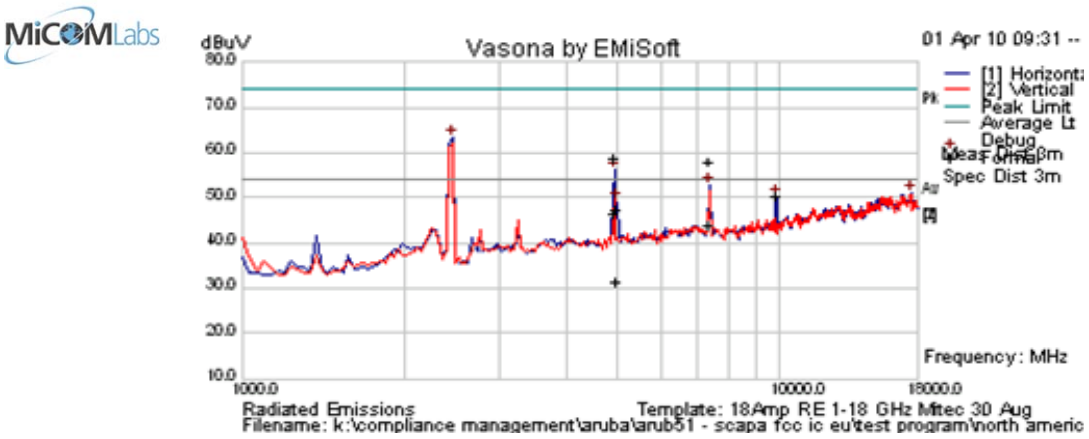
Test Freq.	2452 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	18 in ART test utility	**Press. (mBars)**	1008
Antenna	Integral Antenna	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4925.491	50.8	4.6	-9.1	46.3	Average Max	H	137	360	54.0	-7.7	Pass	RB
4925.491	63.3	4.6	-9.1	58.8	Peak Max	H	137	360	74.0	-15.2	Pass	RB
4988.577	36.0	4.6	-9.1	31.5	Average Max	H	115	360	54	-22.5	Pass	RB
4988.577	51.7	4.6	-9.1	47.2	Peak Max	H	115	360	74	-26.9	Pass	RB
7383.687	43.2	5.5	-4.8	43.8	Average Max	H	119	340	54	-10.2	Pass	RB
7383.687	57.2	5.5	-4.8	57.9	Peak Max	H	119	340	74	-16.2	Pass	RB
9835.752	46.9	6.4	-3.2	50.1	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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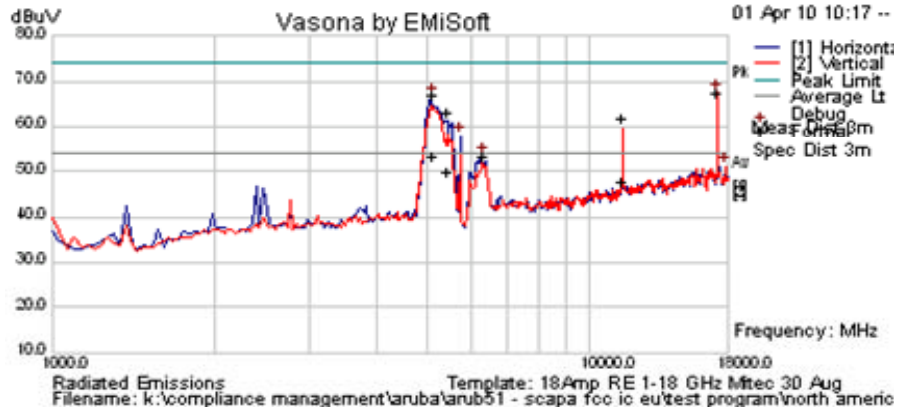
5725 – 5850 MHz: 802.11a

Test Freq.	5745 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (ºC)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	18 in ART test utility	**Press. (mBars)**	1008
Antenna	Integral Antenna	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5100.923	71.4	4.6	-8.8	67.1	Peak Max	H	99	0	74.0	-6.9	Pass	RB
5100.923	57.7	4.6	-8.8	53.5	Average Max	V	108	27	54.0	-0.5	Pass	RB
5427.375	67.7	4.6	-9.2	63.1	Peak Max	H	98	54	74	-10.9	Pass	RB
5427.375	54.4	4.6	-9.2	49.8	Average Max	H	98	54	54	-4.2	Pass	RB
6329.218	54.8	5.1	-6.6	53.3	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB
11489.569	56.2	6.8	-1.1	61.8	Peak Max	H	126	318	74	-12.2	Pass	RB
11489.569	42.3	6.8	-1.1	47.9	Average Max	H	126	318	54	-6.1	Pass	RB
17241.603	57.4	8.6	1.6	67.7	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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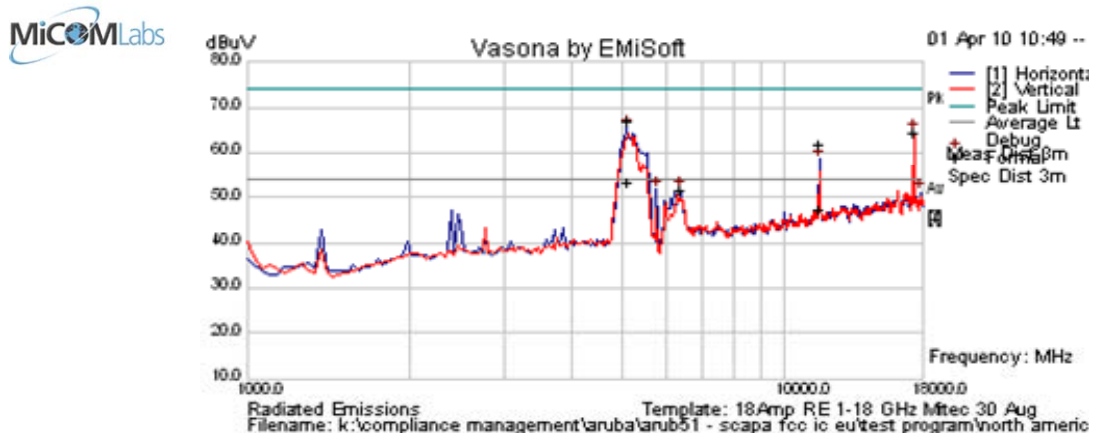
Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	13.5 in ART test utility	**Press. (mBars)**	1008
Antenna	Integral Antenna	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5098.455	57.5	4.6	-8.8	53.4	Average	H	98	16	54.0	-0.6	Pass	RB
5098.455	71.1	4.6	-8.8	66.9	Peak	H	98	16	74.0	-7.1	Pass	RB
6375.391	53.1	5.1	-6.7	51.5	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB
11570.781	41.6	6.8	-1.2	47.2	Average Max	H	98	325	54	-6.8	Pass	RB
11570.781	56.3	6.8	-1.2	61.9	Peak Max	H	98	325	74	-12.1	Pass	RB
17348.937	53.9	8.7	1.9	64.5	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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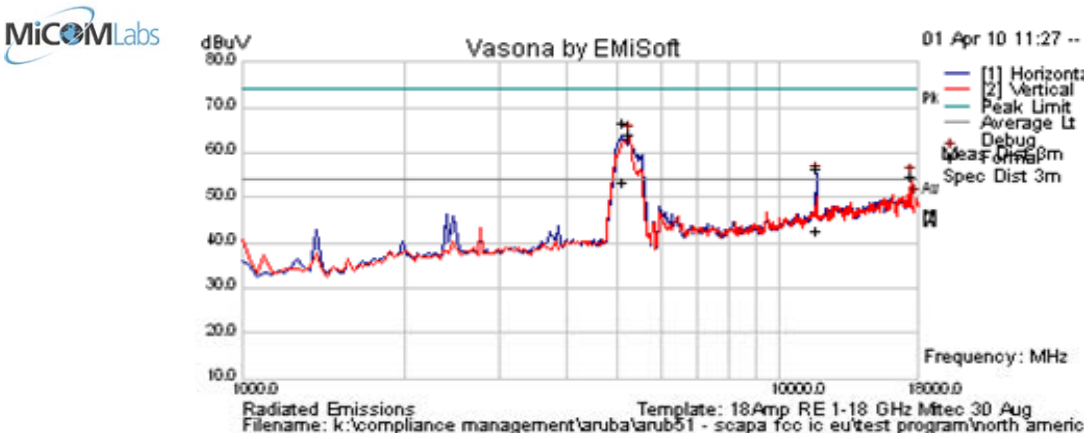
Test Freq.	5825 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	14 in ART test utility	**Press. (mBars)**	1008
Antenna	Integral Antenna	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5099.809	70.8	4.6	-8.8	66.6	Peak Max	V	104	33	74.0	-7.4	Pass	RB
5099.809	57.6	4.6	-8.8	53.4	Average Max	V	104	33	54.0	-0.6	Pass	RB
5224.449	69.0	4.6	-9.4	64.2	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB
11648.958	37.8	6.8	-1.9	42.7	Average Max	H	109	83	54	-11.3	Pass	RB
11648.958	51.4	6.8	-1.9	56.4	Peak Max	H	109	83	74	-17.7	Pass	RB
17481.884	44.2	8.8	1.6	54.6	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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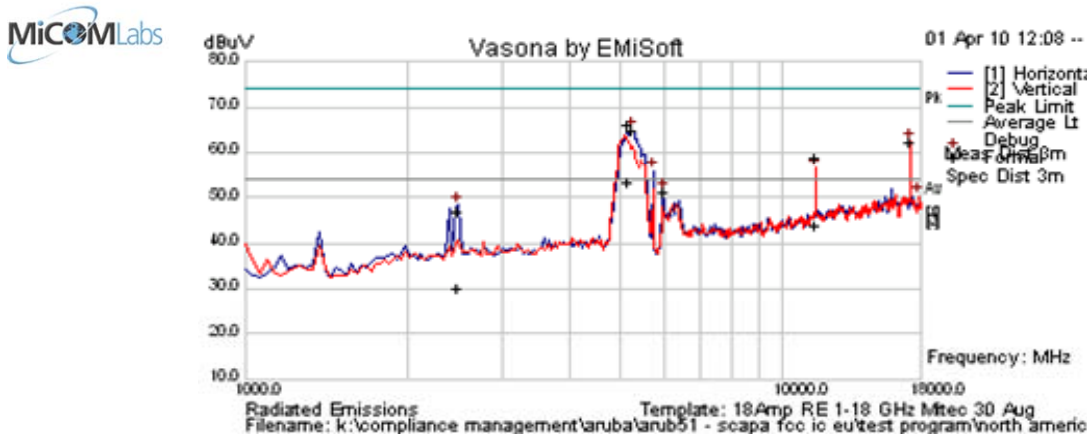
5725 – 5850 MHz: 802.11n HT-20

Test Freq.	5745 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	26
Power Setting	14 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antenna	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
2493.377	55.0	3.0	-11.1	46.9	Peak Max	H	102	58	74.0	-27.1	Pass	RB
2493.377	38.3	3.0	-11.1	30.2	Average Max	H	102	58	54.0	-23.8	Pass	RB
5137.675	58.0	4.6	-9.3	53.3	Average Max	V	100	46	54	-0.7	Pass	RB
5137.675	71.0	4.6	-9.3	66.3	Peak Max	V	100	46	74	-7.7	Pass	RB
5241.122	70.0	4.6	-9.7	64.9	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB
5985.571	54.4	4.9	-8.3	51.1	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB
11494.639	38.3	6.8	-1.2	44.0	Average Max	V	100	353	54	-10.0	Pass	RB
11494.639	53.4	6.8	-1.2	59.0	Peak Max	V	100	353	74	-15.0	Pass	RB
17238.348	52.1	8.6	1.5	62.2	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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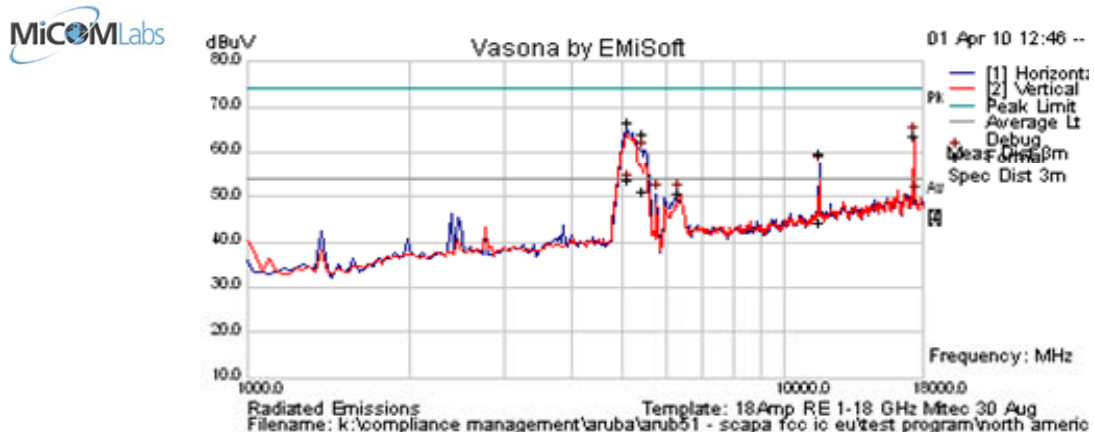
Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	26
Power Setting	14 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antenna	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5099.125	58.0	4.6	-8.8	53.8	Average Max	H	98	342	54.0	-0.2	Pass	RB
5099.125	71.0	4.6	-8.8	66.8	Peak Max	H	98	342	74.0	-7.2	Pass	RB
5415.802	55.6	4.6	-9.2	51.0	Average Max	H	142	21	54	-3.0	Pass	RB
5415.802	68.8	4.6	-9.2	64.2	Peak Max	H	142	21	74	-9.8	Pass	RB
6348.697	52.6	5.1	-7.0	50.7	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB
11568.737	38.9	6.8	-1.2	44.5	Average Max	H	98	326	54	-9.5	Pass	RB
11568.737	54.2	6.8	-1.2	59.8	Peak Max	H	98	326	74	-14.2	Pass	RB
17349.980	53.0	8.7	1.9	63.6	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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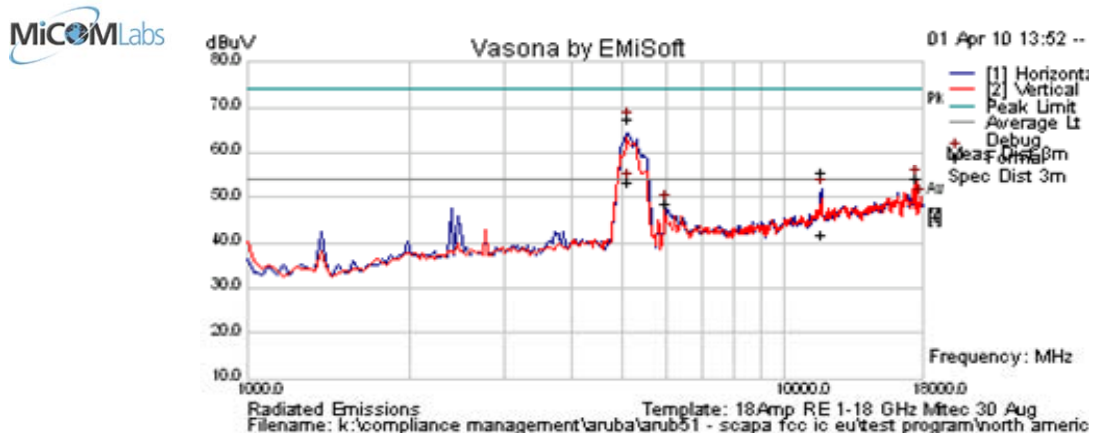
Test Freq.	5825 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	26
Power Setting	13.5 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antenna	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5099.857	57.7	4.6	-8.8	53.5	Average	H	98	11	54.0	-0.5	Pass	RB
5099.857	71.5	4.6	-8.8	67.3	Peak	H	98	11	74.0	-6.7	Pass	RB
5986.052	52.1	4.9	-8.3	48.7	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB
11646.032	50.6	6.8	-1.8	55.6	Peak Max	H	98	84	74	-18.4	Pass	RB
11646.032	36.6	6.8	-1.8	41.6	Average Max	H	98	84	54	-12.4	Pass	RB
17478.798	43.8	8.8	1.6	54.2	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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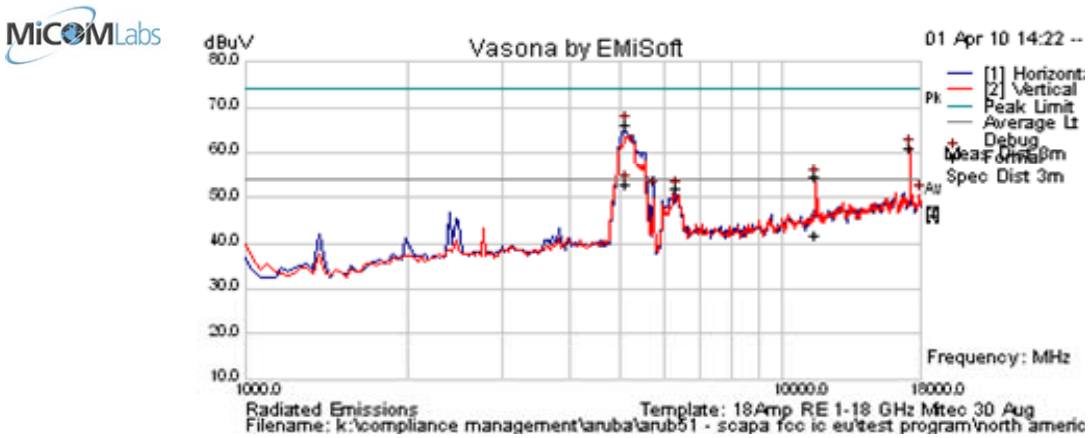
5725 – 5850 MHz: 802.11n HT-40

Test Freq.	5755 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (ºC)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	13.5 in ART test utility	**Press. (mBars)**	1008
Antenna	Integral Antenna	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5097.234	57.2	4.6	-8.8	53.1	Average	H	98	17	54.0	-0.9	Pass	RB
5098.036	70.3	4.6	-8.8	66.1	Peak	H	98	17	74.0	-7.9	Pass	RB
6314.629	53.6	5.0	-6.8	51.8	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB
11500.040	49.0	6.8	-1.2	54.7	Peak Max	H	101	89	74	-19.3	Pass	RB
11500.040	36.1	6.8	-1.2	41.7	Average Max	H	101	89	54	-12.3	Pass	RB
17270.140	51.1	8.6	1.5	61.2	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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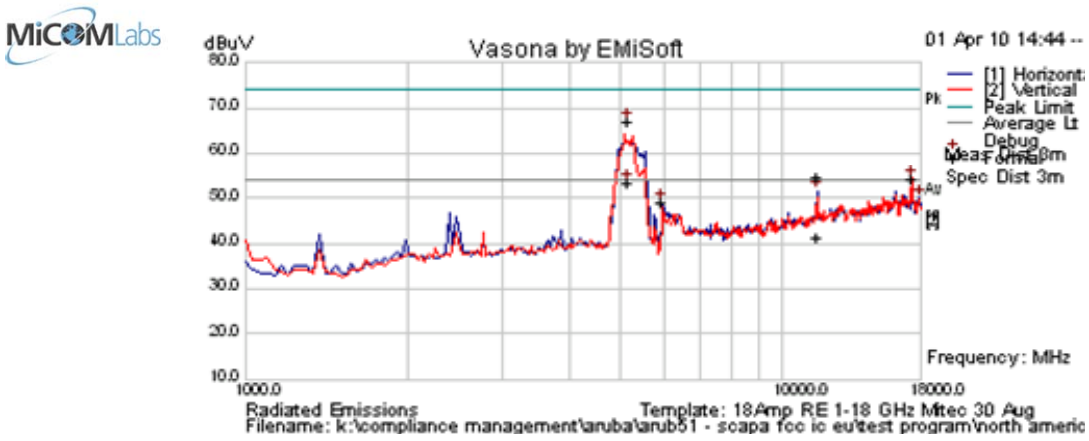
Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (ºC)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	13.5 in ART test utility	**Press. (mBars)**	1008
Antenna	Integral Antenna	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5138.577	58.1	4.6	-9.3	53.4	Average	V	99	42	54.0	-0.7	Pass	RB
5138.577	71.7	4.6	-9.3	67.0	Peak	V	99	42	74.0	-7.0	Pass	RB
5973.948	52.4	4.9	-8.2	49.0	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB
11573.387	49.0	6.8	-1.2	54.6	Peak Max	H	109	324	74	-19.4	Pass	RB
11573.387	35.5	6.8	-1.2	41.1	Average Max	H	109	324	54	-12.9	Pass	RB
17343.968	44.0	8.7	1.7	54.3	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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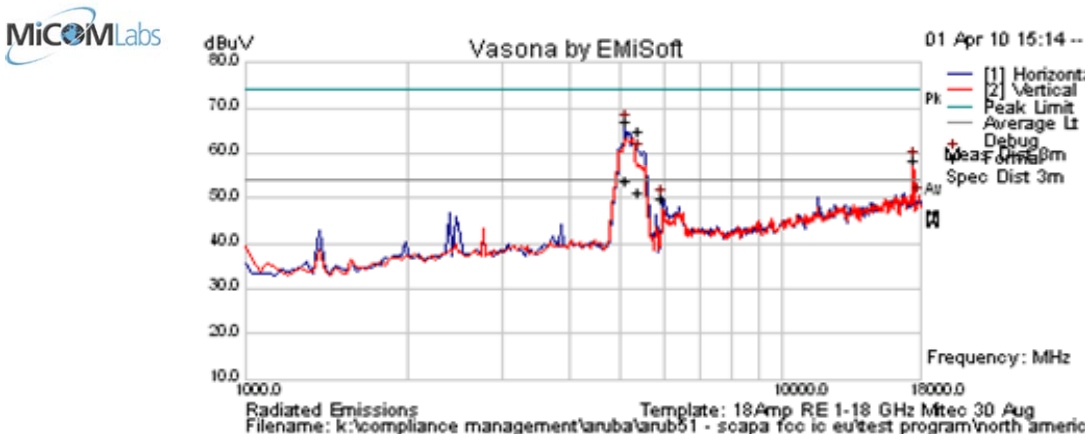
Test Freq.	5815 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (ºC)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	14 in ART test utility	**Press. (mBars)**	1008
Antenna	Integral Antenna	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5099.028	71.1	4.6	-8.8	66.9	Peak	H	98	19	74.0	-7.1	Pass	RB
5099.028	57.9	4.6	-8.8	53.8	Average	H	98	19	54.0	-0.2	Pass	RB
5411.062	55.9	4.6	-9.1	51.4	Average Max	H	129	17	54	-2.6	Pass	RB
5411.062	69.5	4.6	-9.1	65.0	Peak Max	H	129	17	74	-9.0	Pass	RB
5973.948	53.4	4.9	-8.2	50.0	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB
17443.848	47.7	8.7	2.0	58.4	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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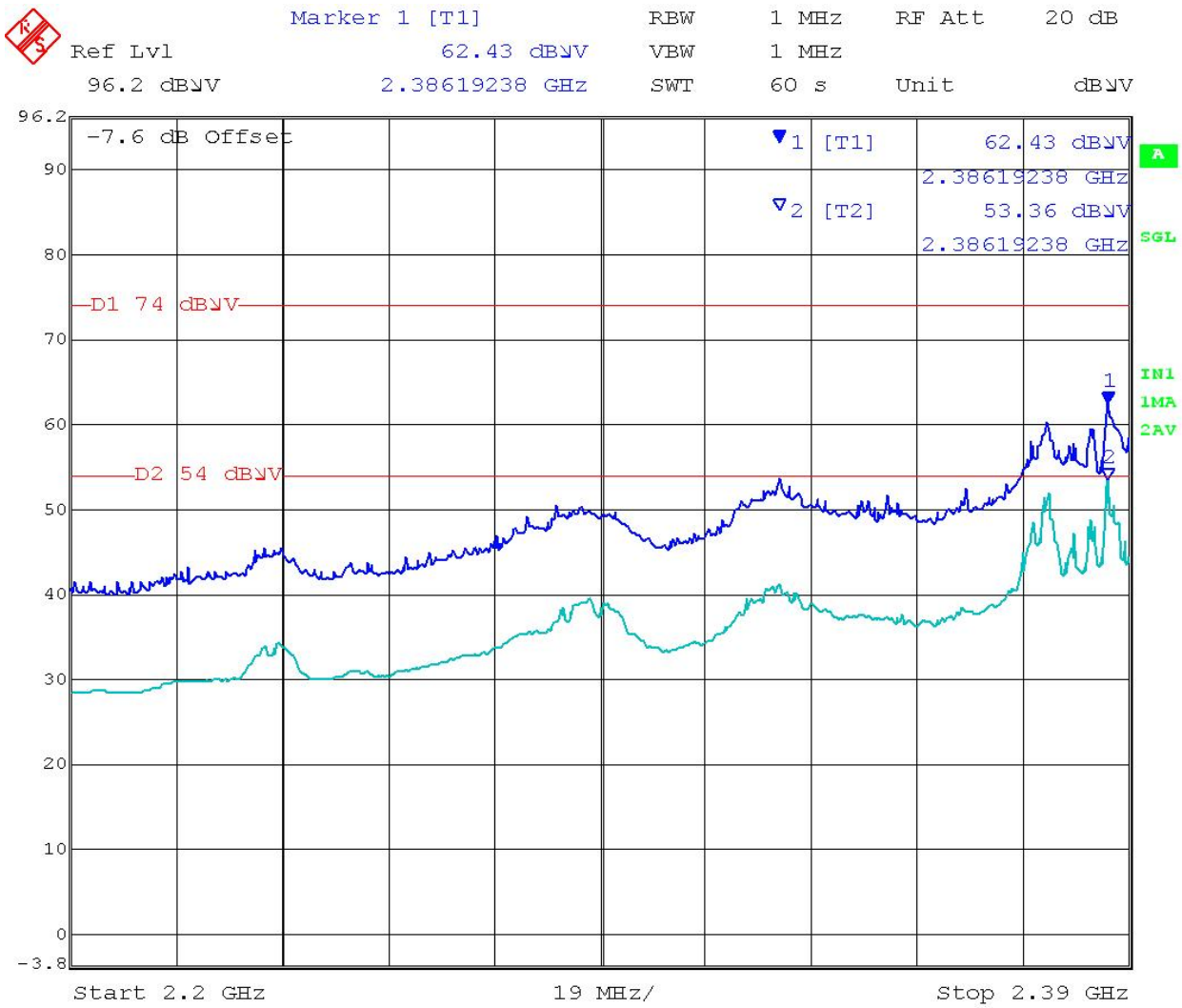
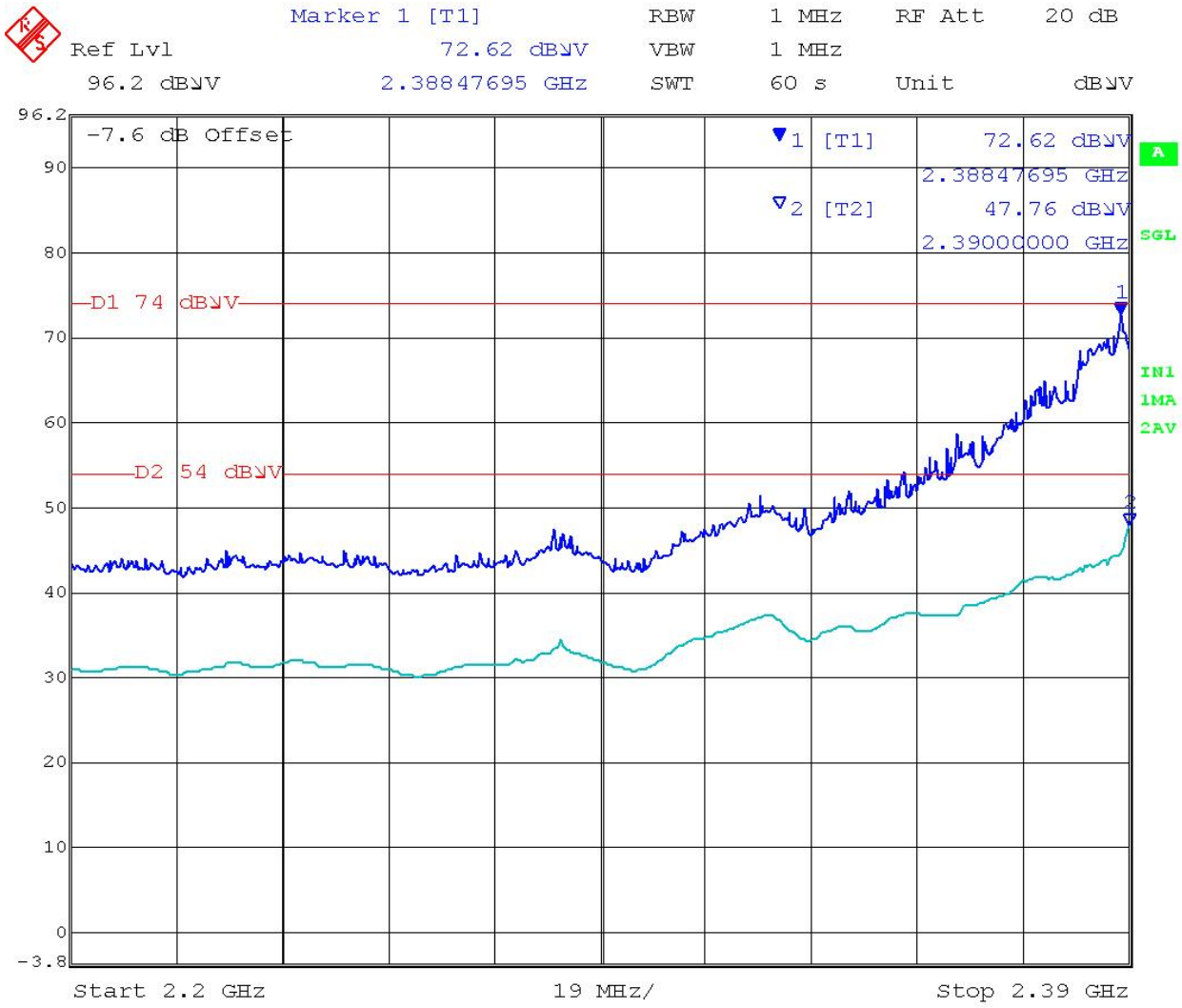
7.6.2 Integral Antenna - Transmitter Band edge spurious emissions

2412 MHz - 802.11b; 2200 - 2390 MHz



2412 MHz - 802.11g; 2200 - 2390 MHz



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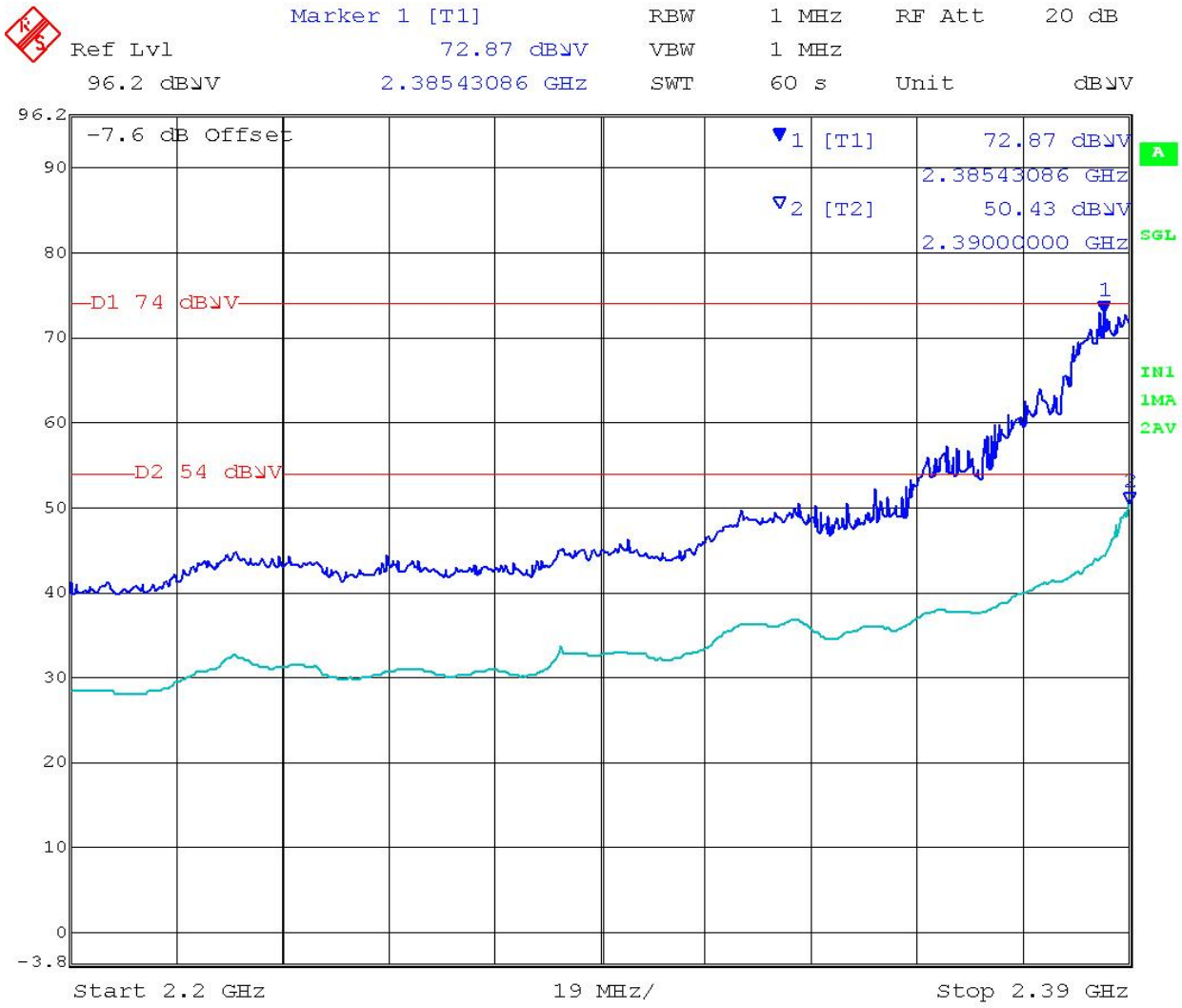
2412 MHz - 802.11n HT-20; 2200 - 2390 MHz



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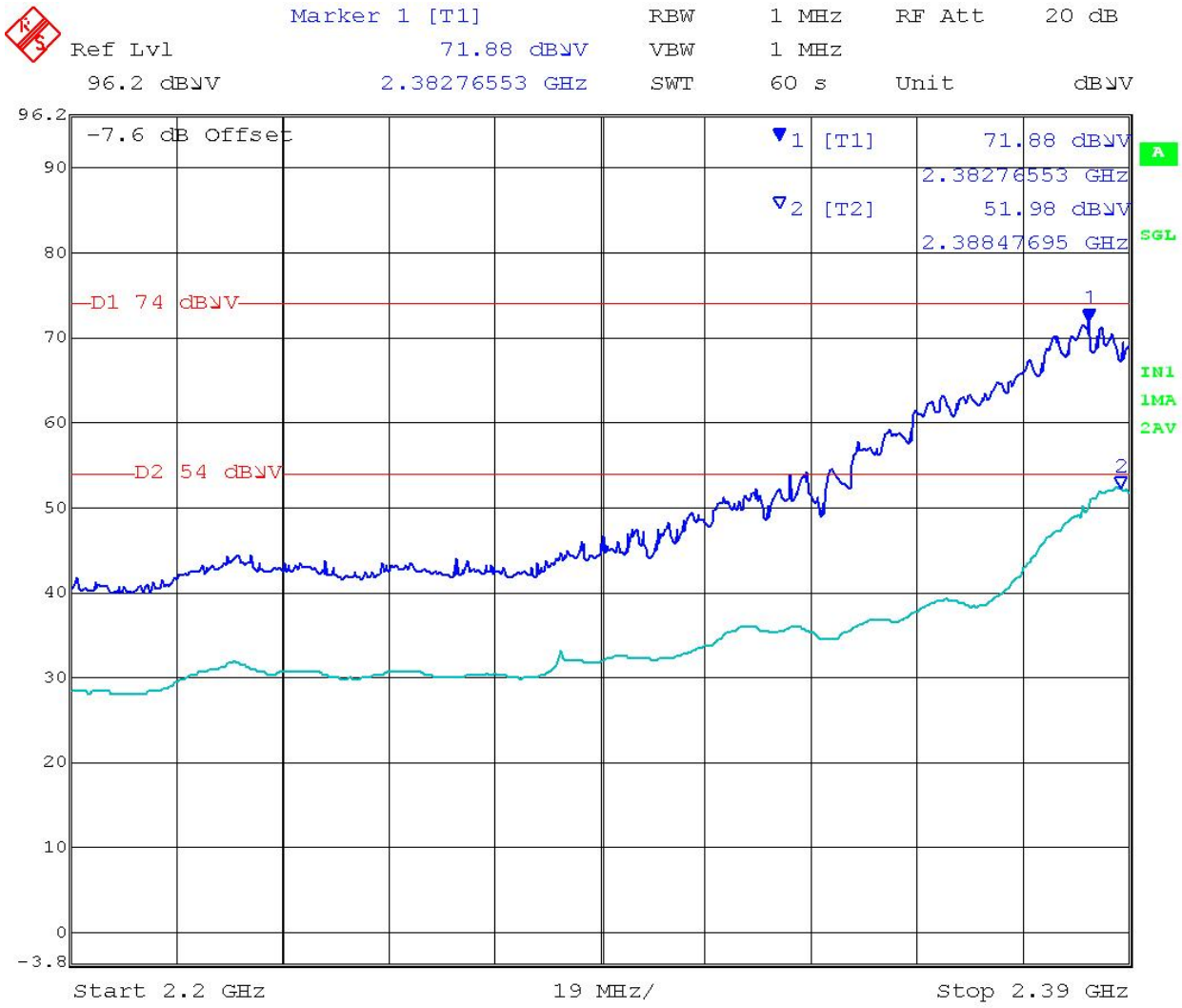
2422 MHz - 802.11n HT-40; 2200 - 2390 MHz



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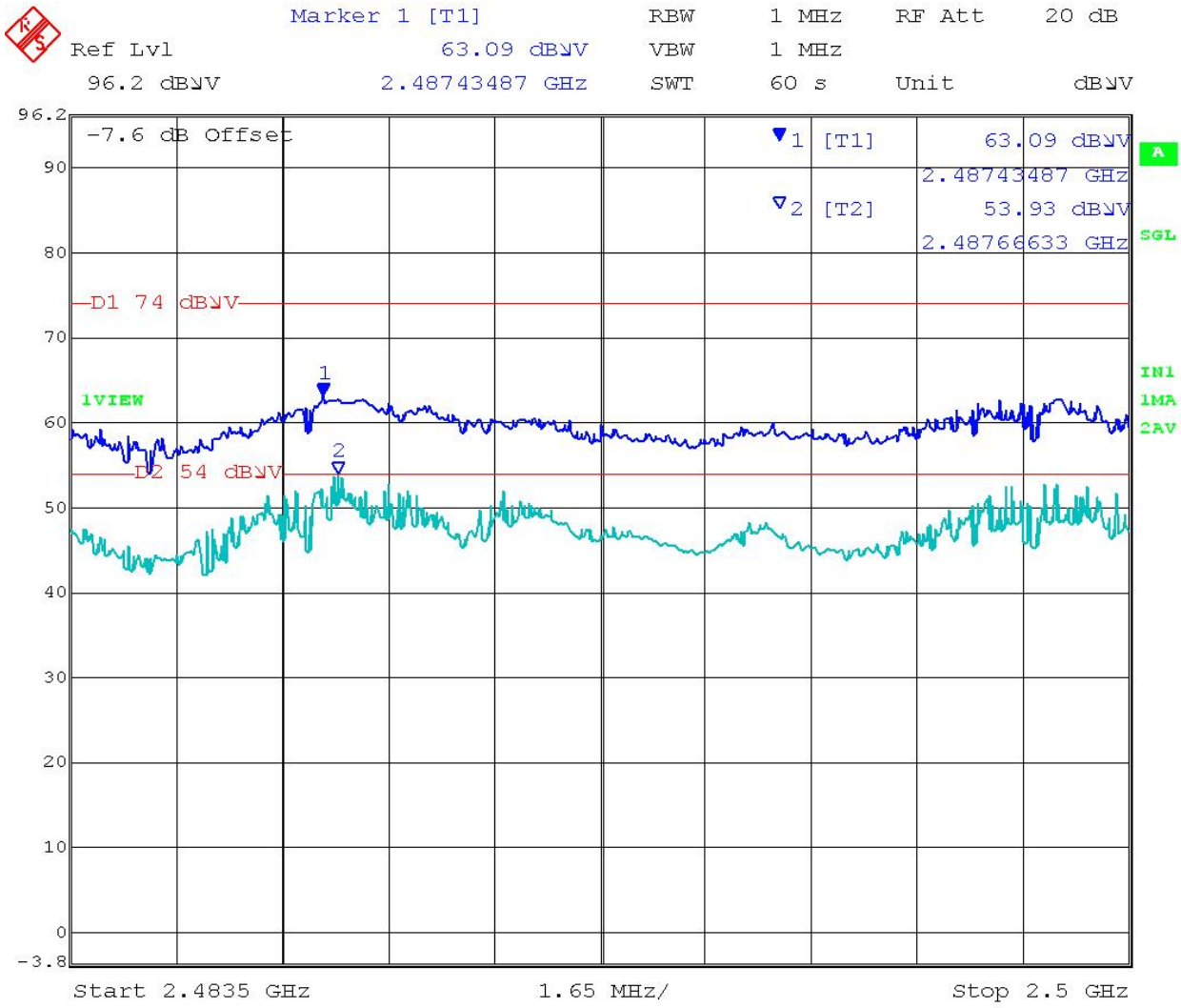
2462 MHz - 802.11b; 2483.5 - 2500 MHz



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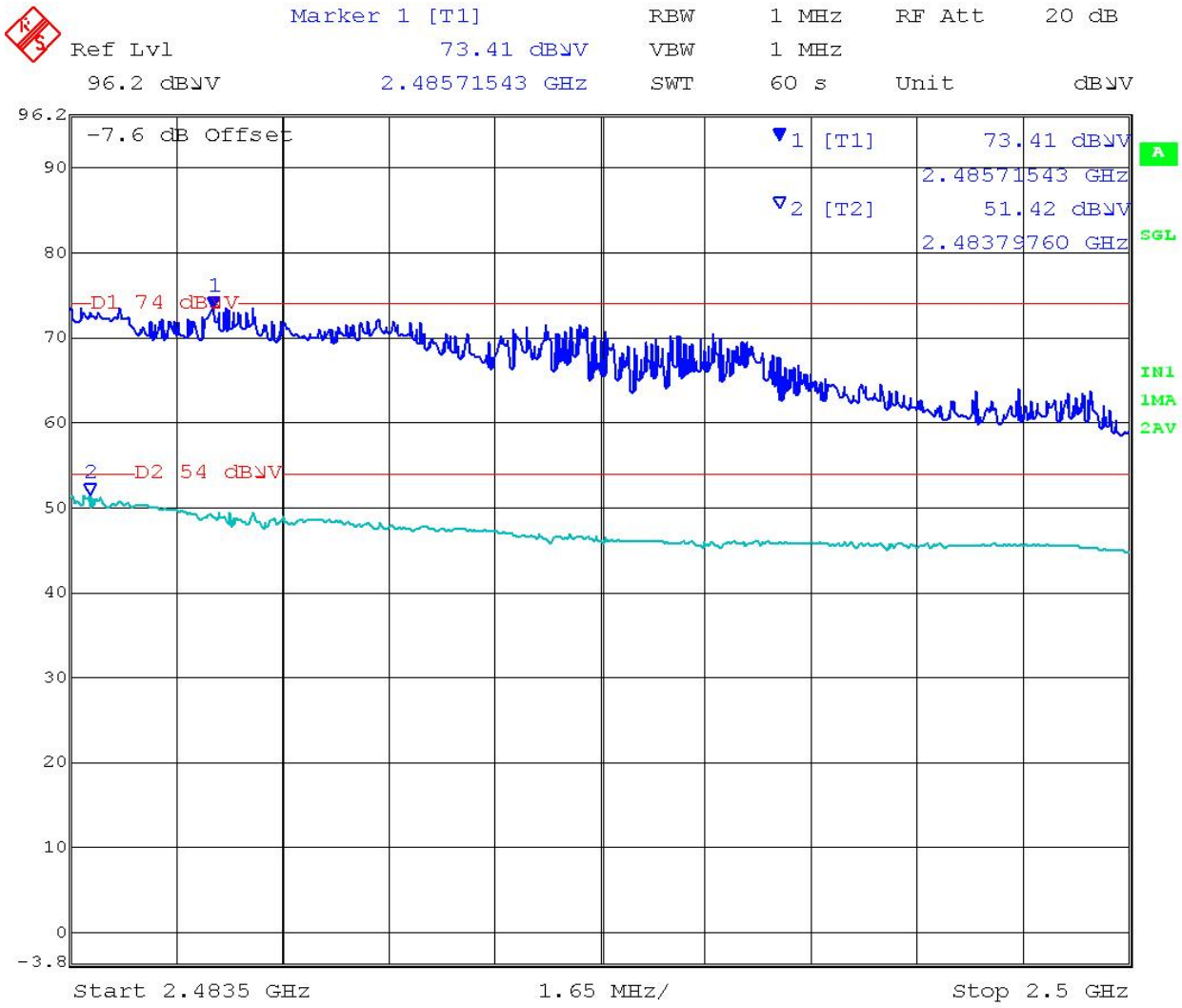
2462 MHz - 802.11g; 2483.5 - 2500 MHz



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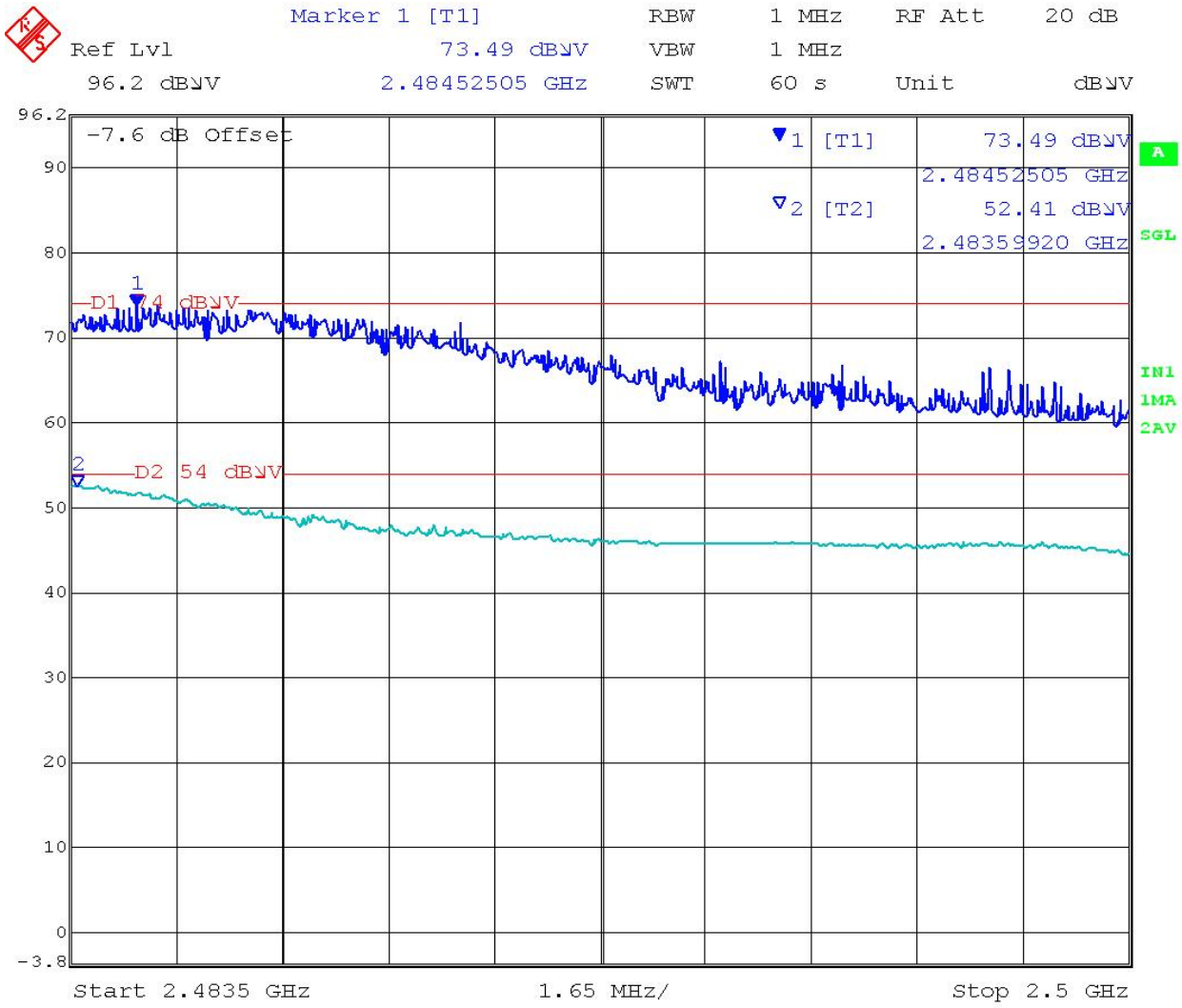
2462 MHz - 802.11n HT-20; 2483.5 - 2500 MHz



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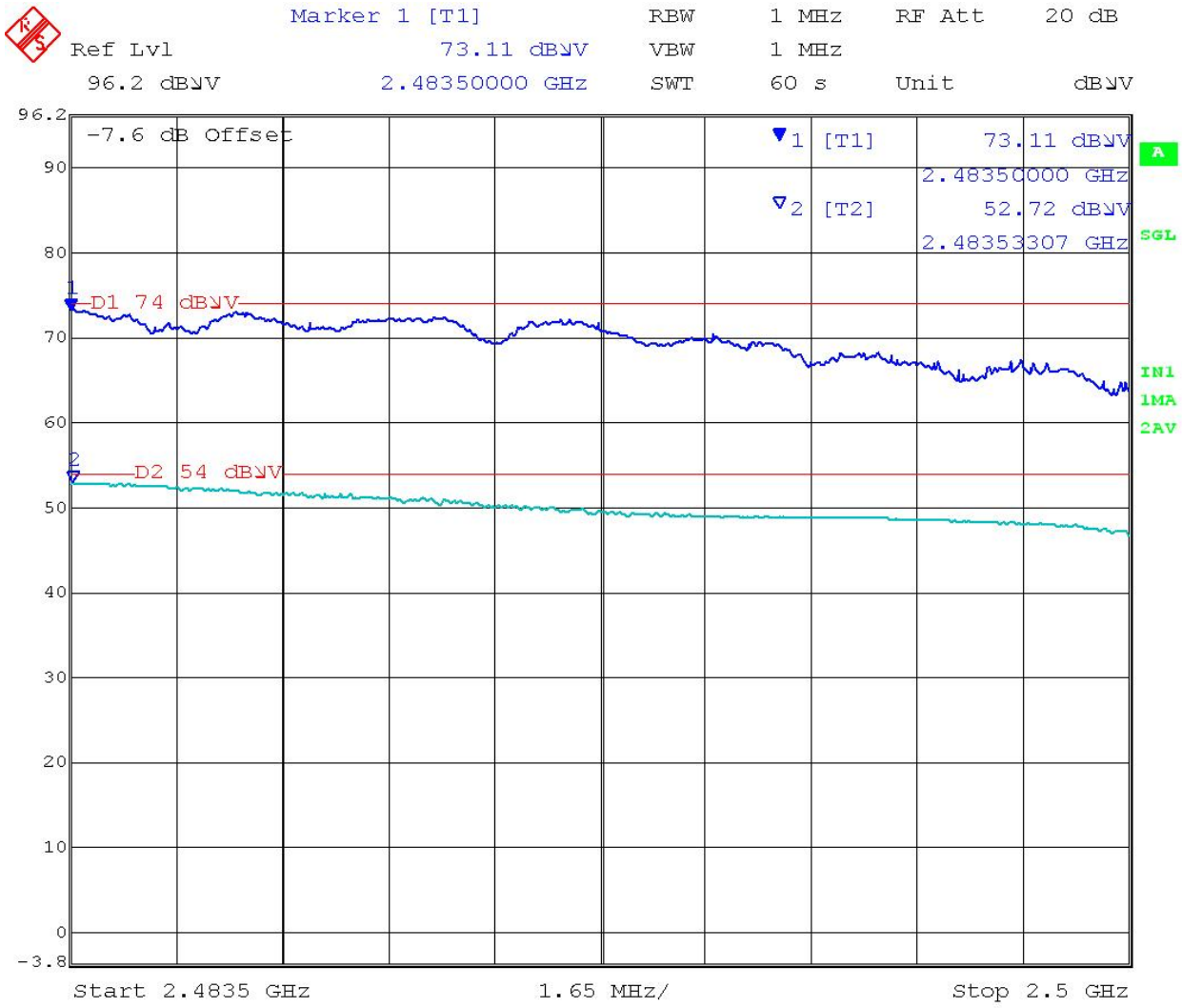
2452 MHz - 802.11n HT-40; 2483.5 - 2500 MHz



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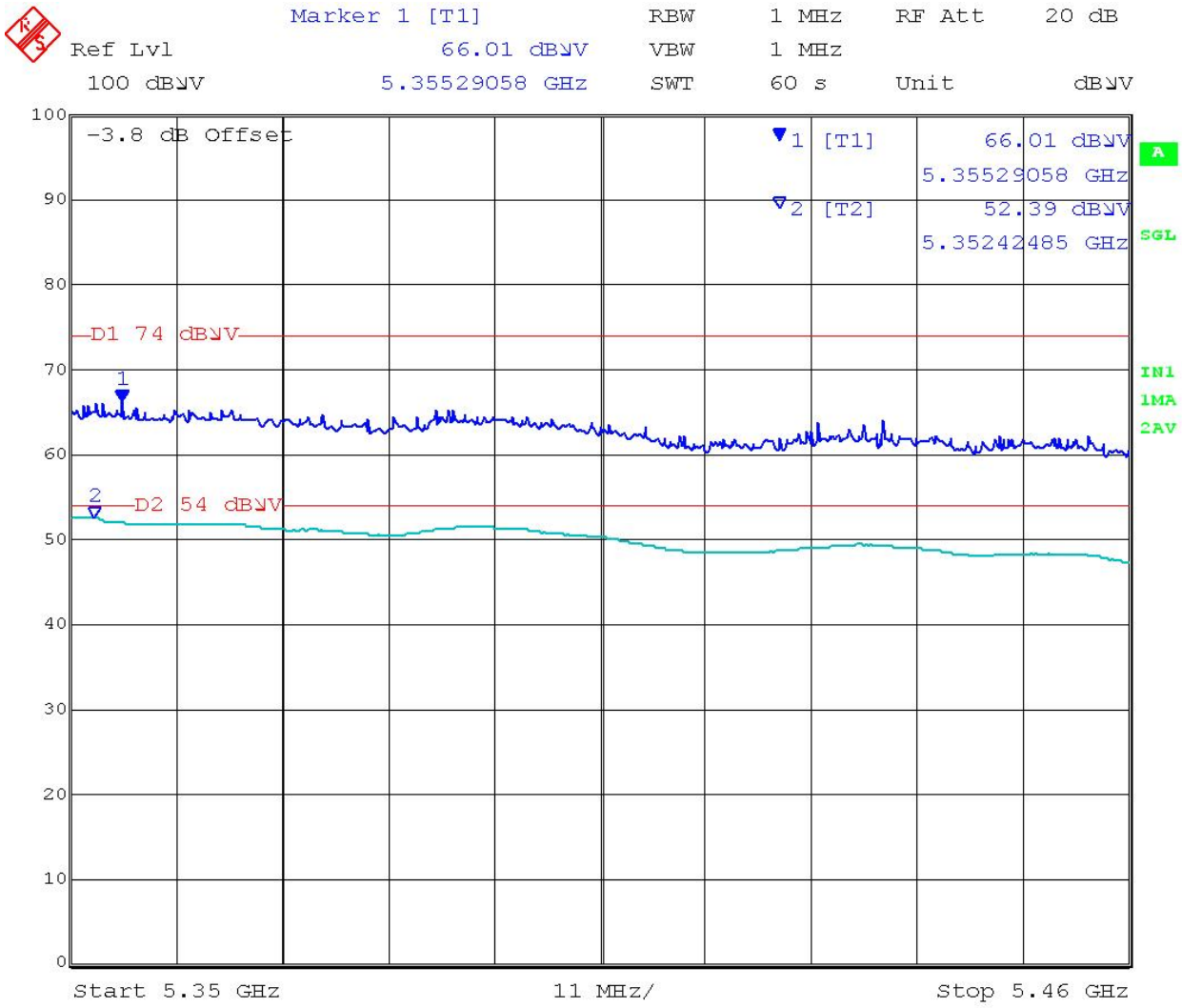
5745 MHz - 802.11a; 5350 - 5460 MHz



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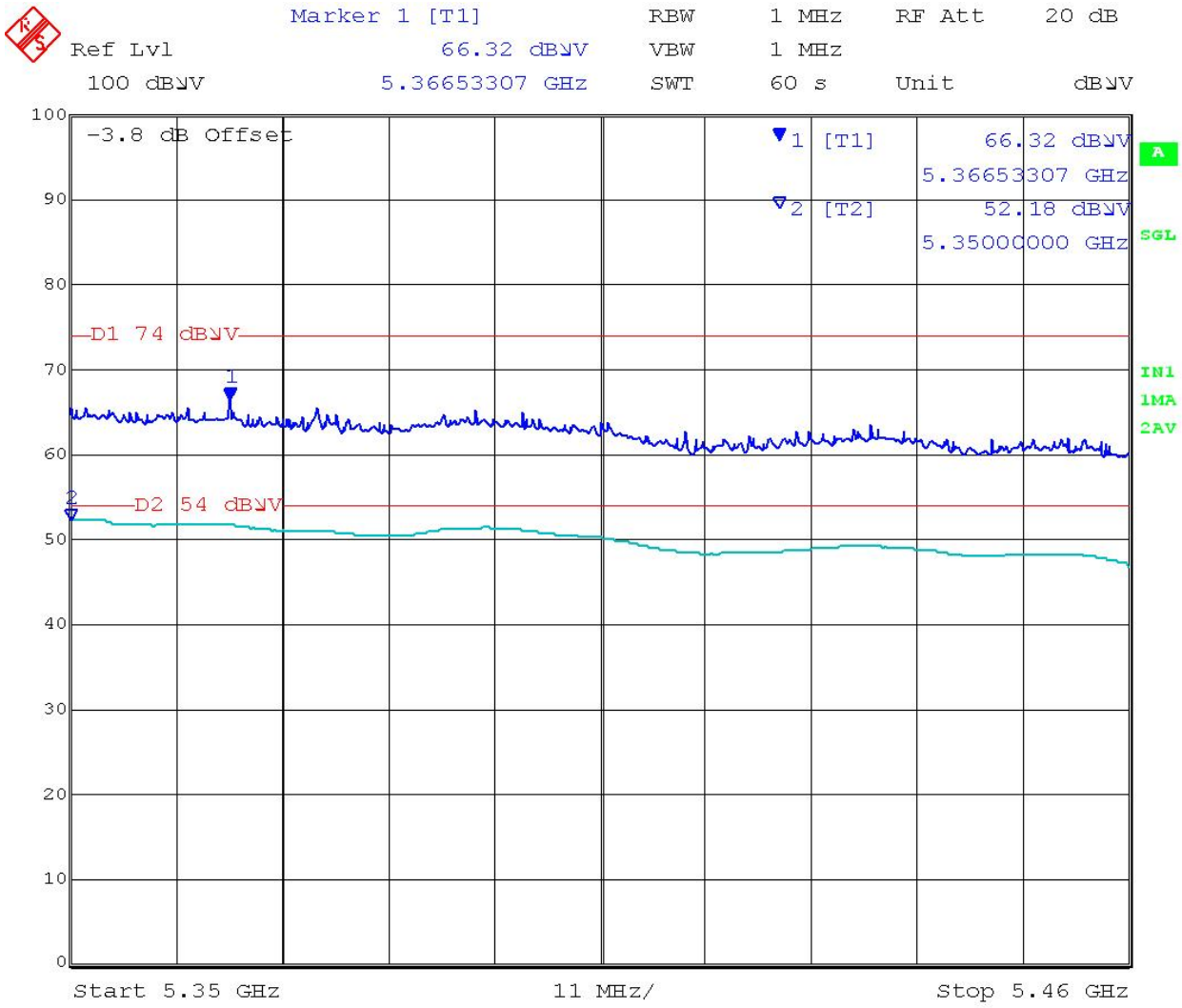
5745 MHz - 802.11n HT-20; 5350 - 5460 MHz



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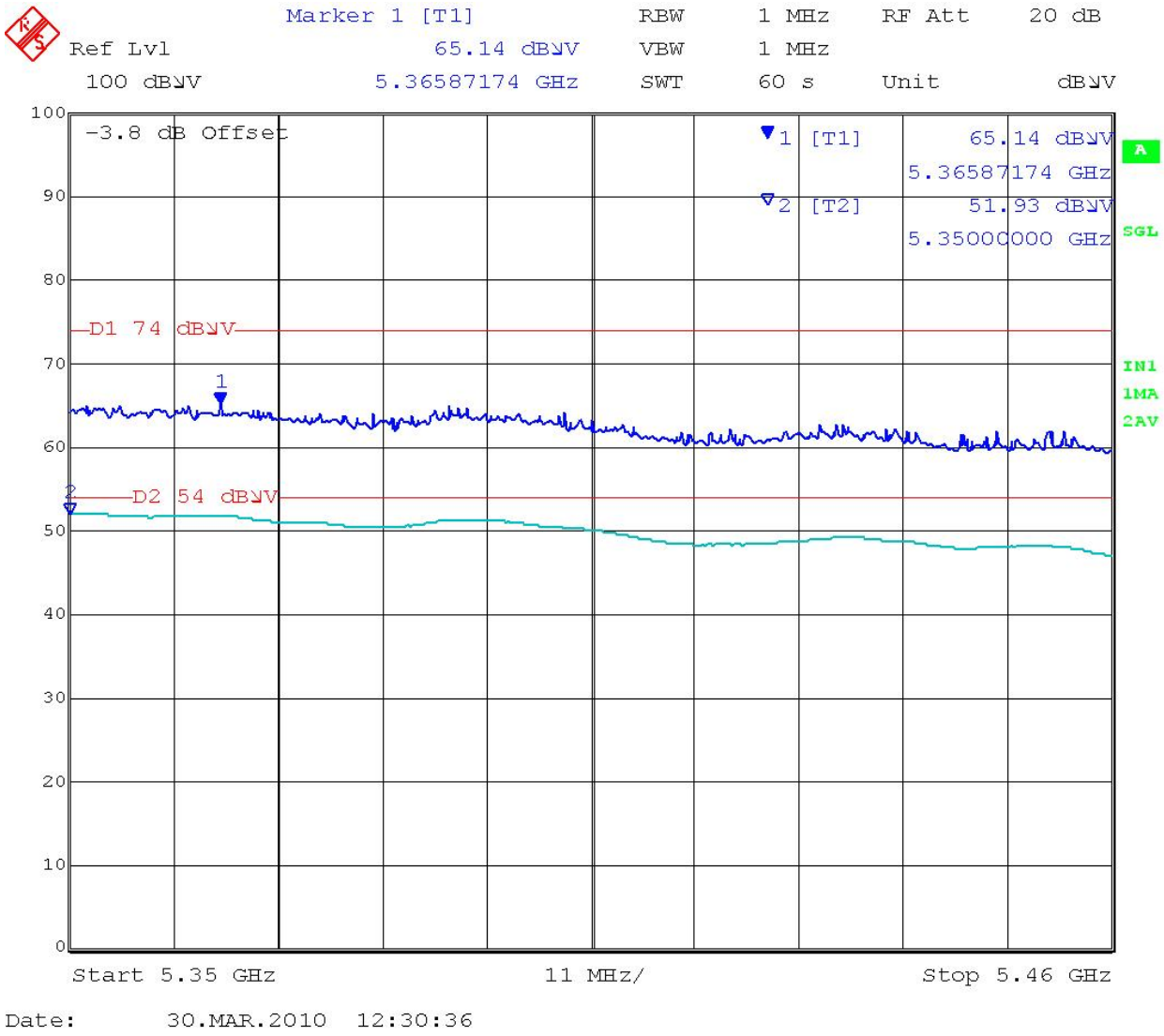
5755 MHz - 802.11n HT-40; 5350 - 5460 MHz



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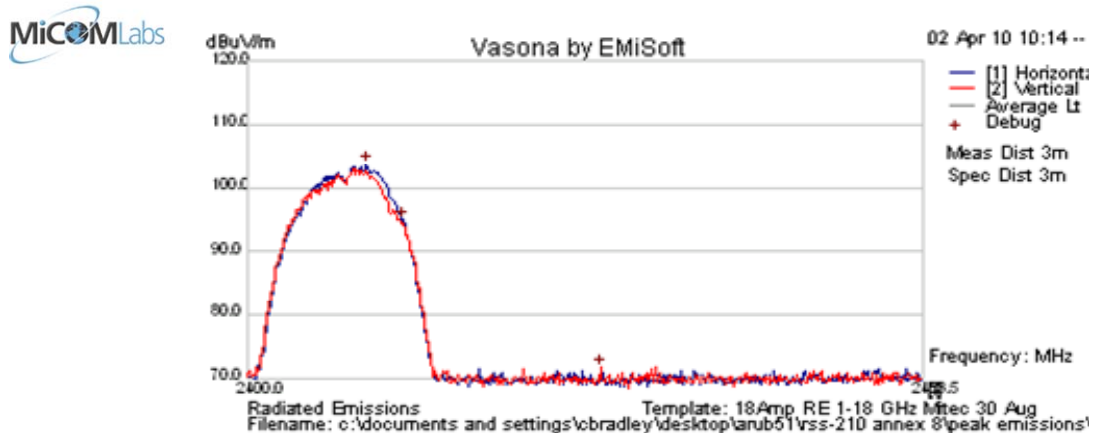
7.6.3 Integral Antenna - Transmitter Peak Emissions (RSS-210/RSS-GEN)

2400 – 2483.5 MHz: 802.11b

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (ºC)**	19.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	12 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2414.558	58.4	13.0	32.2	103.6	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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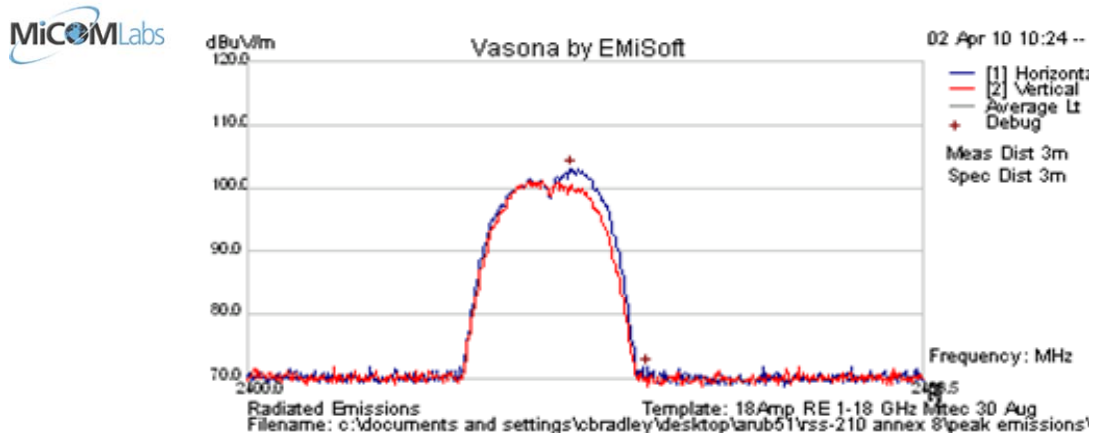
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (°C)**	19.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	12 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2439.658	57.8	13.0	32.2	103.0	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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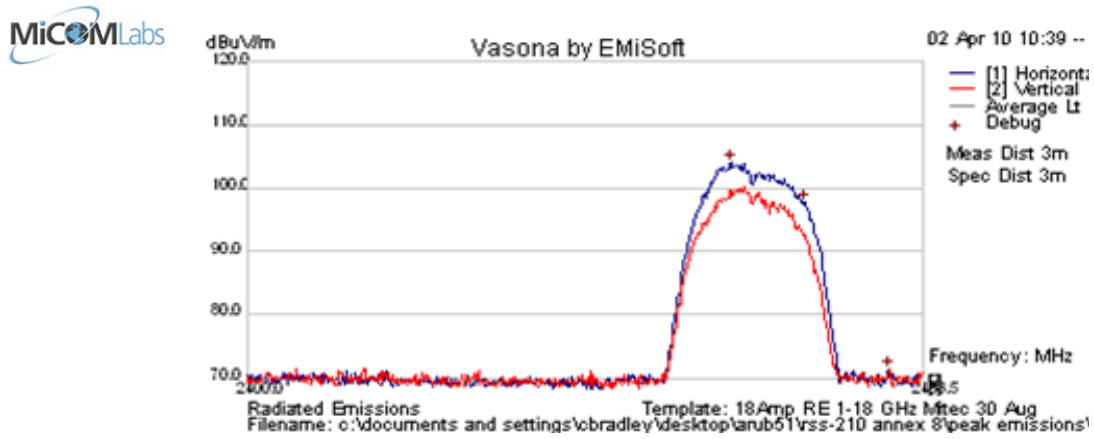
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (°C)**	19.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	10.5 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2459.571	58.8	13.0	32.3	104.0	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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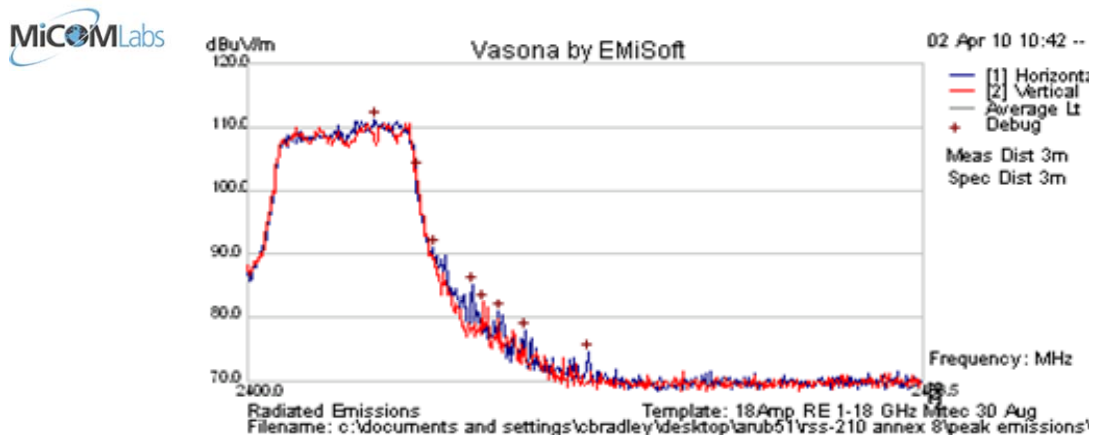
2400 – 2483.5 MHz: 802.11g

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (ºC)**	19.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	18 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2415.562	65.9	13.0	32.2	111.1	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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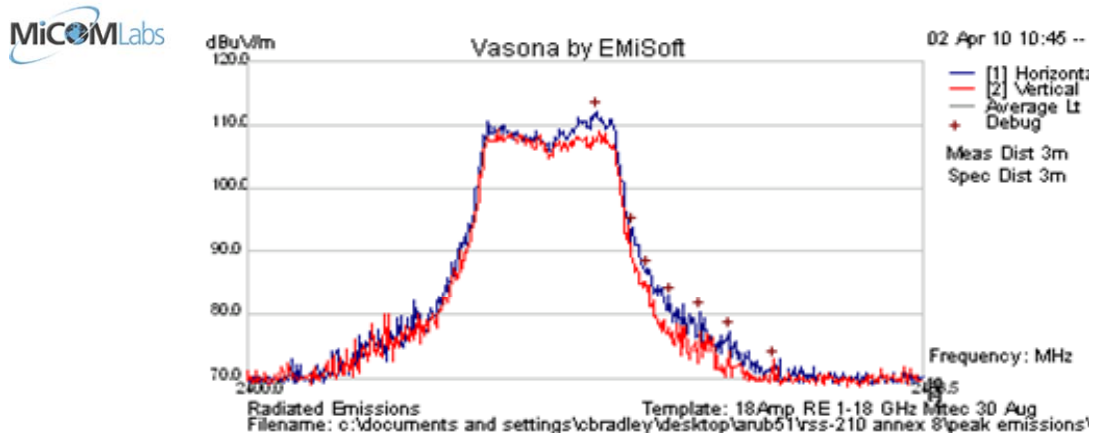
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	19.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	18 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2442.838	67.0	13.0	32.3	112.2	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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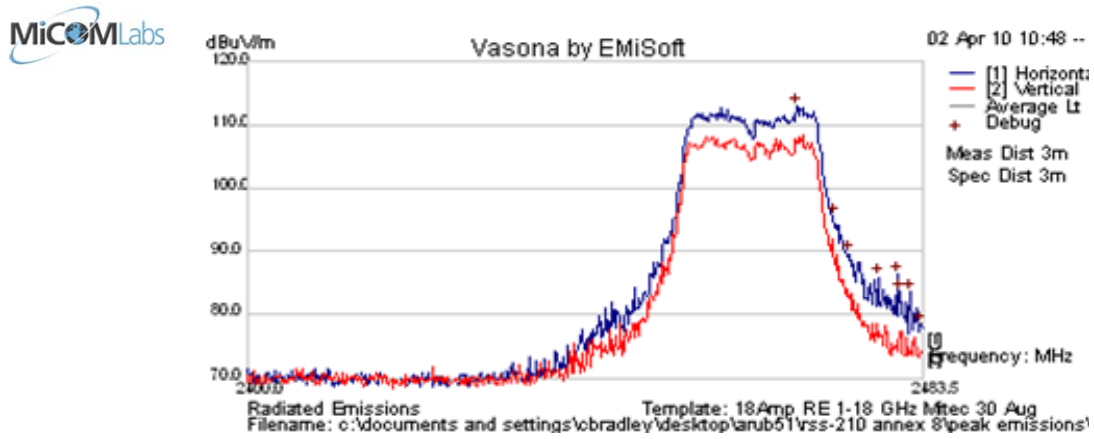
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	19.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	18 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2467.771	67.8	13.0	32.3	113.0	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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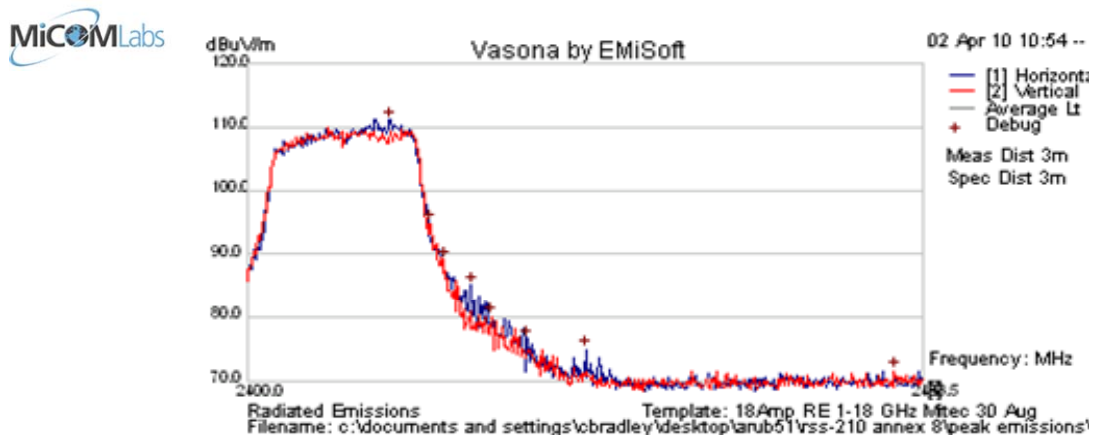
2400 – 2483.5 MHz: 802.11n HT-20

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11n; HT-20; 6.5 MCS	**Temp (°C)**	20
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	18 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2417.570	66.1	13.0	32.2	111.2	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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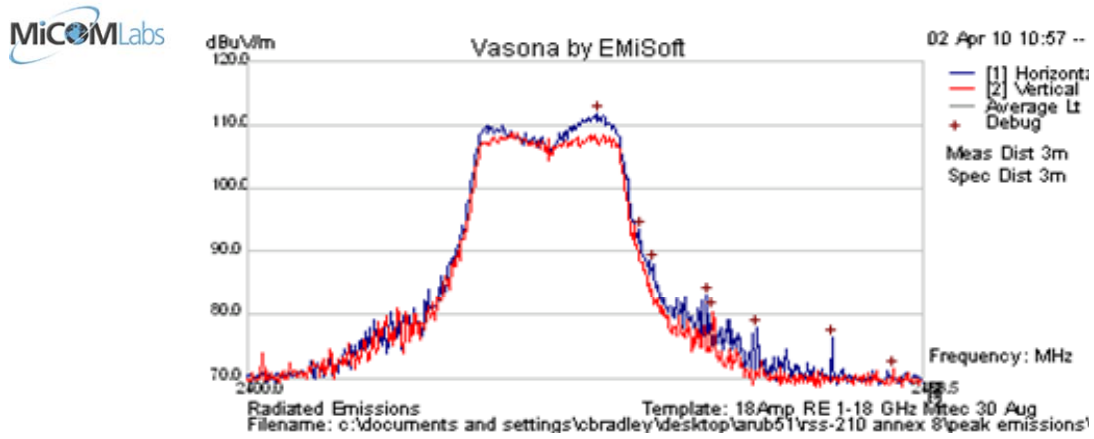
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11n; HT-20; 6.5 MCS	**Temp (°C)**	20
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	18 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2443.005	66.5	13.0	32.3	111.7	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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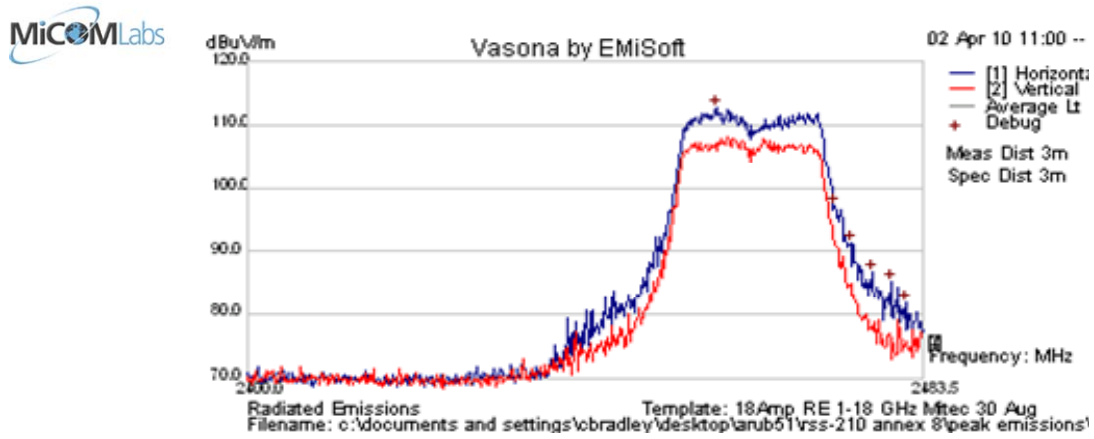
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11n; HT-20; 6.5 MCS	**Temp (°C)**	20
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	18 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2457.730	67.4	13.0	32.3	112.7	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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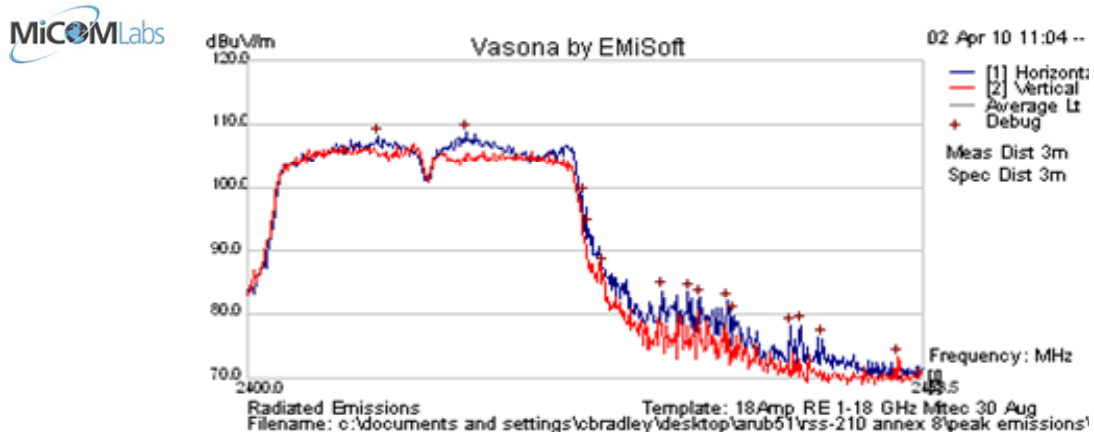
2400 – 2483.5 MHz: 802.11n HT-40

Test Freq.	2422 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	20
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	18 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2426.774	63.5	13.0	32.2	108.7	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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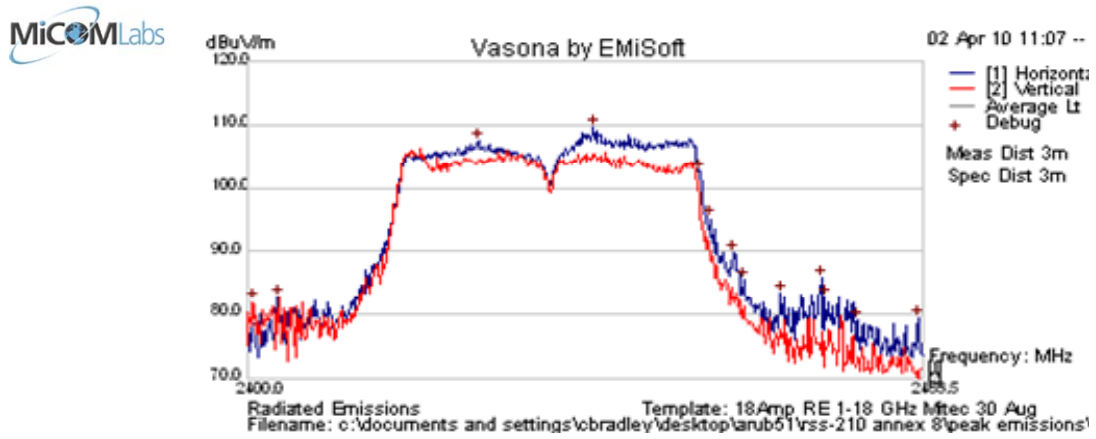
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (°C)**	20
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	18 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2442.503	64.5	13.0	32.3	109.7	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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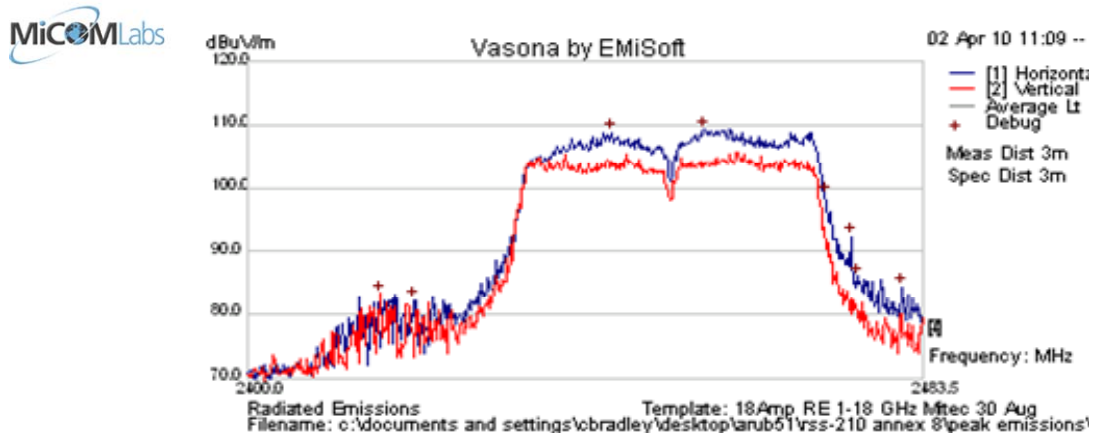
Test Freq.	2452 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (°C)**	20
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	18 in ART test utility	**Press. (mBars)**	1009
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2456.224	64.1	13.0	32.3	109.3	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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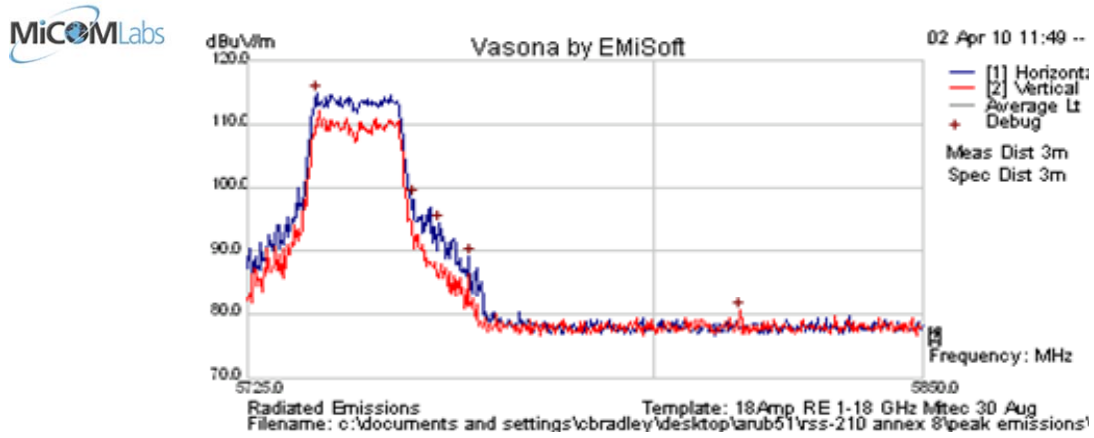
5725 – 5850 MHz: 802.11a

Test Freq.	5745 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (ºC)**	20.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	18 in ART test utility	**Press. (mBars)**	1010
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
5737.776	65.2	14.8	35.0	114.9	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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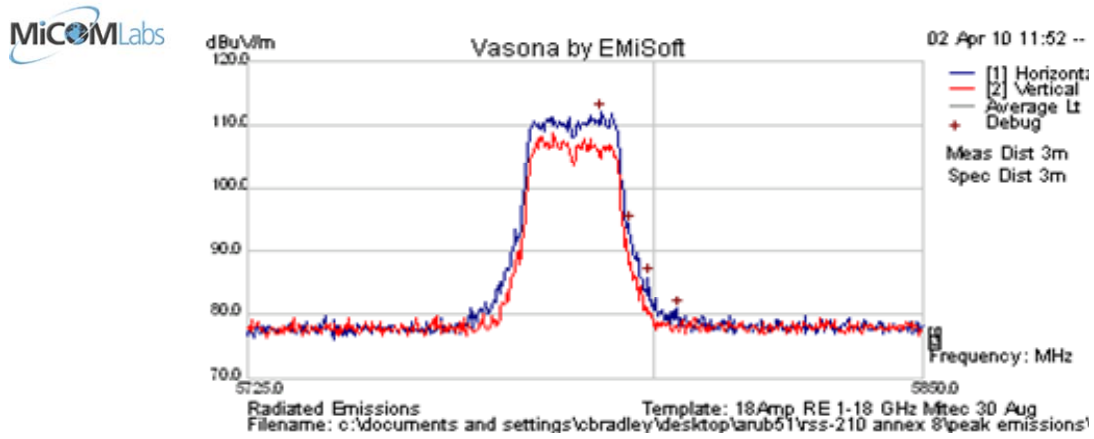
Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (°C)**	20.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	13.5 in ART test utility	**Press. (mBars)**	1010
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
5790.130	62.4	14.8	35.0	112.1	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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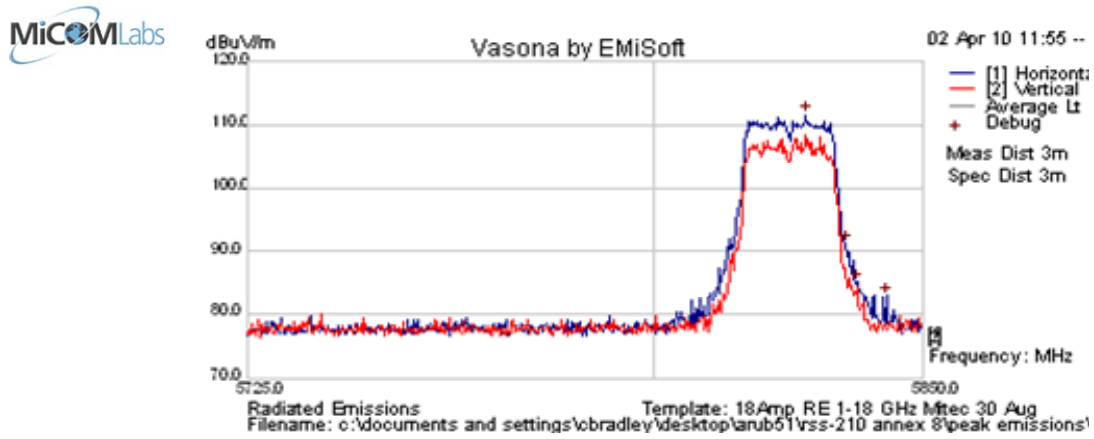
Test Freq.	5825 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (°C)**	20.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	14 in ART test utility	**Press. (mBars)**	1010
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
5828.206	61.8	14.8	35.0	111.7	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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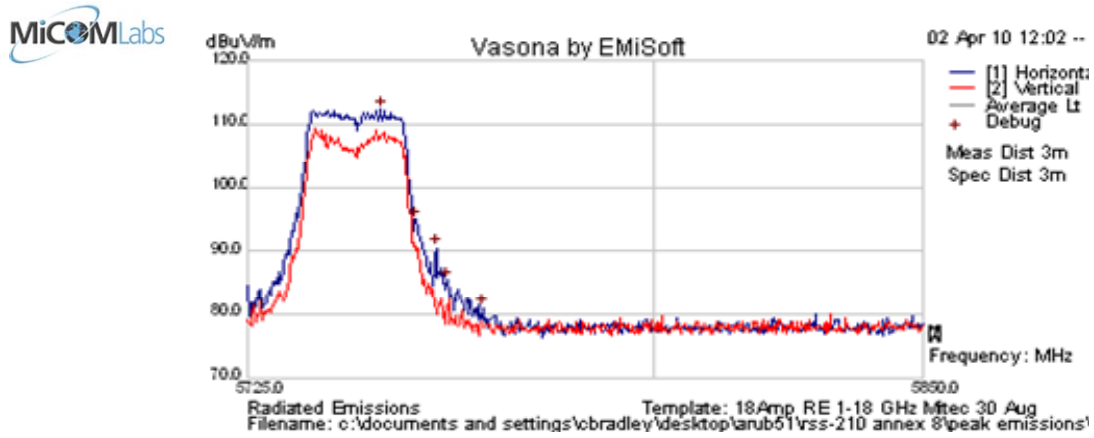
5725 – 5850 MHz: 802.11n HT-20

Test Freq.	5745 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	20.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	14 in ART test utility	**Press. (mBars)**	1010
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
5749.549	62.6	14.8	35.0	112.3	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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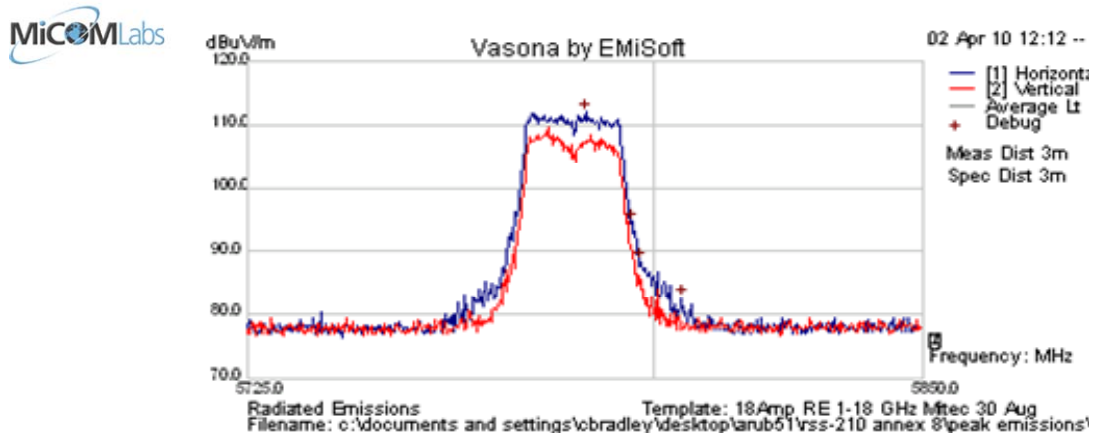
Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	20.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	13.5 in ART test utility	**Press. (mBars)**	1010
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
5787.375	62.4	14.8	35.0	112.2	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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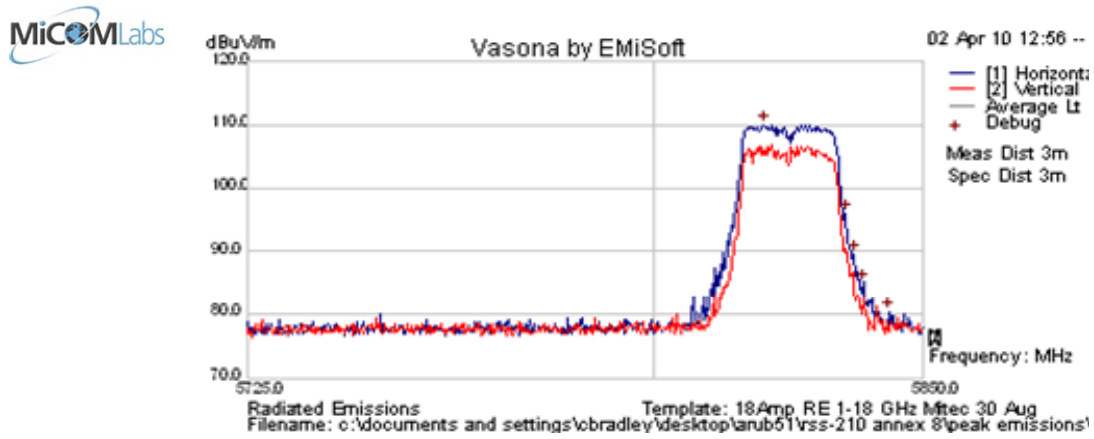
Test Freq.	5825 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	20.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	13.5 in ART test utility	**Press. (mBars)**	1010
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
5820.441	60.3	14.8	35.0	110.1	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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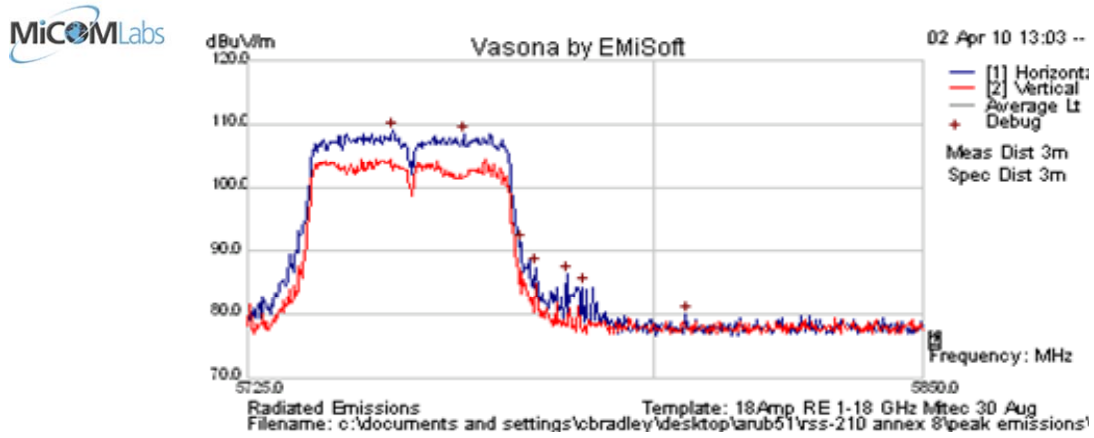
5725 – 5850 MHz: 802.11n HT-40

Test Freq.	5755 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	20.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	13.5 in ART test utility	**Press. (mBars)**	1010
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
5751.804	59.2	14.8	35.0	108.9	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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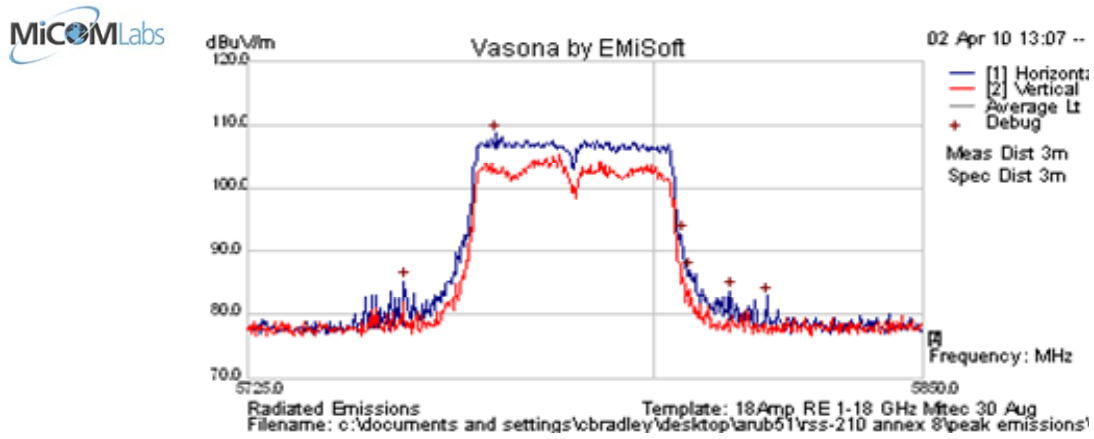
Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	20.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	13.5 in ART test utility	**Press. (mBars)**	1010
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
5770.842	58.9	14.8	35.0	108.7	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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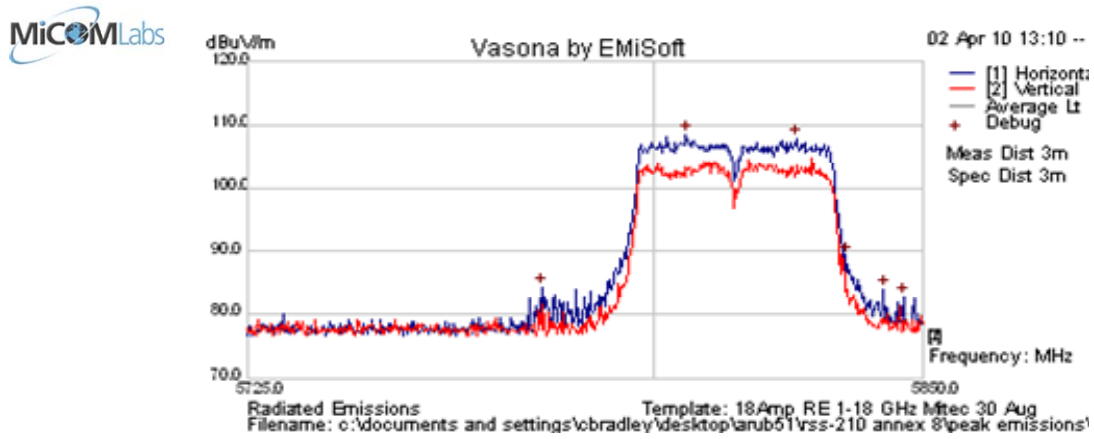
Test Freq.	5815 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (°C)**	20.5
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	14 in ART test utility	**Press. (mBars)**	1010
Antenna	Integral Antennas	**Duty Cycle (%)**	100
Test Notes 1	Peak Emissions		
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
5805.912	58.7	14.8	35.0	108.5	Peak [Scan]	H						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak Emission of Fundamental

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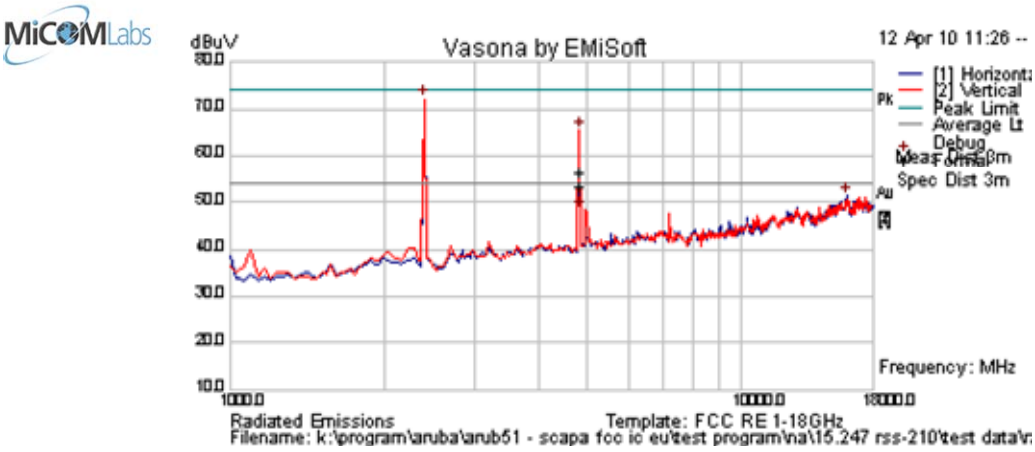
7.6.4 AP-ANT-2 - Transmitter Radiated Spurious Emissions – Above 1 GHz

2400 – 2483.5 MHz: 802.11b

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (ºC)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	42
Power Setting	6 in ART test utility	**Press. (mBars)**	1000
Antenna	AP-ANT-2	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4824.011	61.4	4.5	-9.4	56.4	Peak	V	98	322	74.0	-17.6	Pass	RB
4823.967	58.3	4.5	-9.4	53.3	Average	V	98	322	54.0	-0.7	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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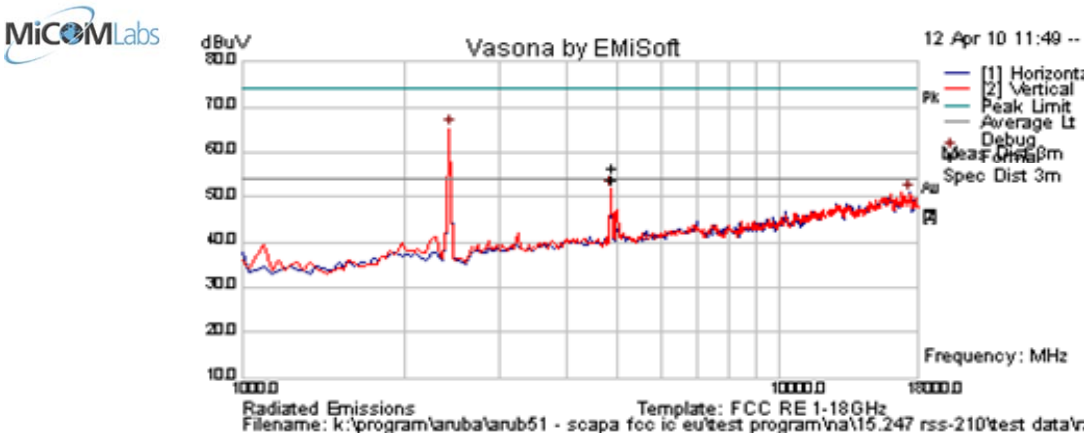
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	42
Power Setting	7.5 in ART test utility	**Press. (mBars)**	1000
Antenna	AP-ANT-2	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4874.029	61.0	4.5	-9.3	56.1	Peak Max	V	98	317	74.0	-17.9	Pass	RB
4874.029	58.6	4.5	-9.3	53.8	Average Max	V	98	317	54.0	-0.2	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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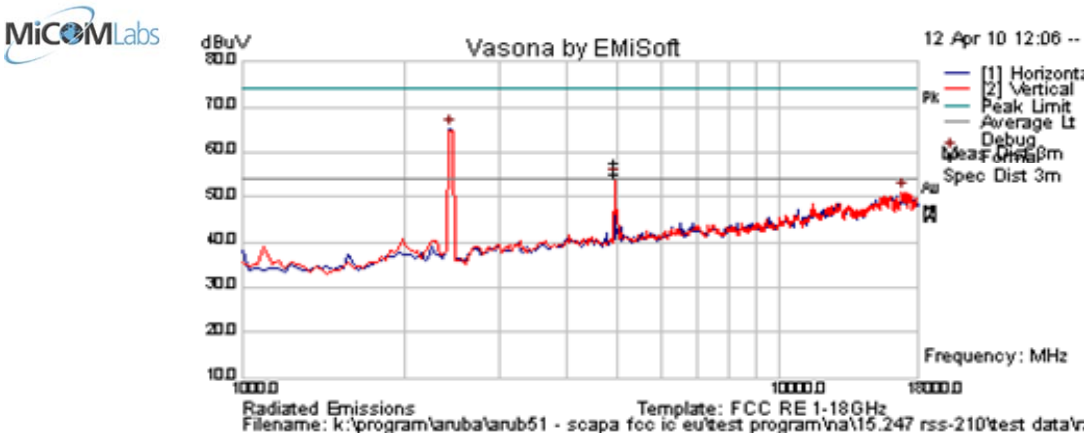
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	42
Power Setting	7.0 in ART test utility	**Press. (mBars)**	1000
Antenna	AP-ANT-2	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4924.037	62.1	4.6	-9.1	57.5	Peak Max	V	172	319	74.0	-16.5	Pass	RB
4923.987	57.4	4.6	-9.1	52.9	Average	V	172	319	54.0	-1.1	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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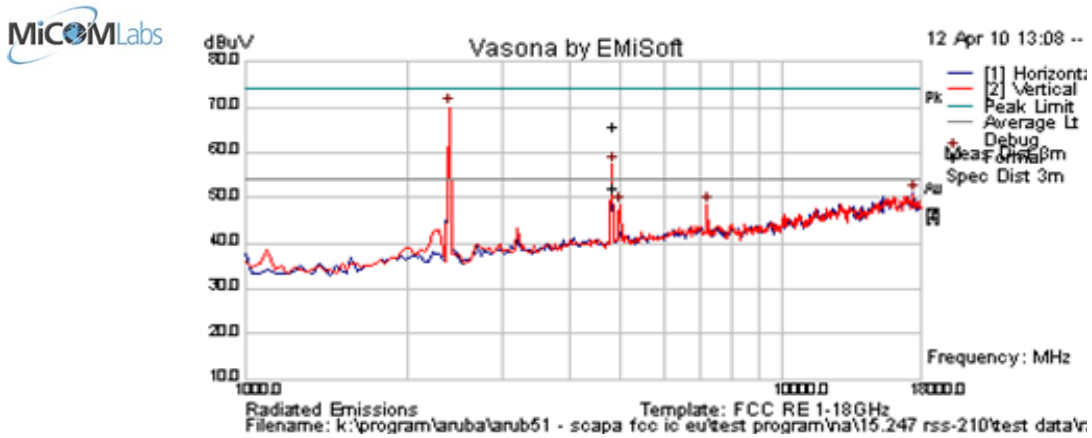
2400 – 2483.5 MHz: 802.11g

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	13 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-2	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4823.608	70.7	4.5	-9.4	65.7	Peak Max	V	98	316	74.0	-8.3	Pass	RB
4823.608	56.9	4.5	-9.4	51.9	Average Max	V	98	316	54.0	-2.1	Pass	RB
7235.752	48.0	5.4	-5.2	48.2	Peak [Scan]	V	> 20 dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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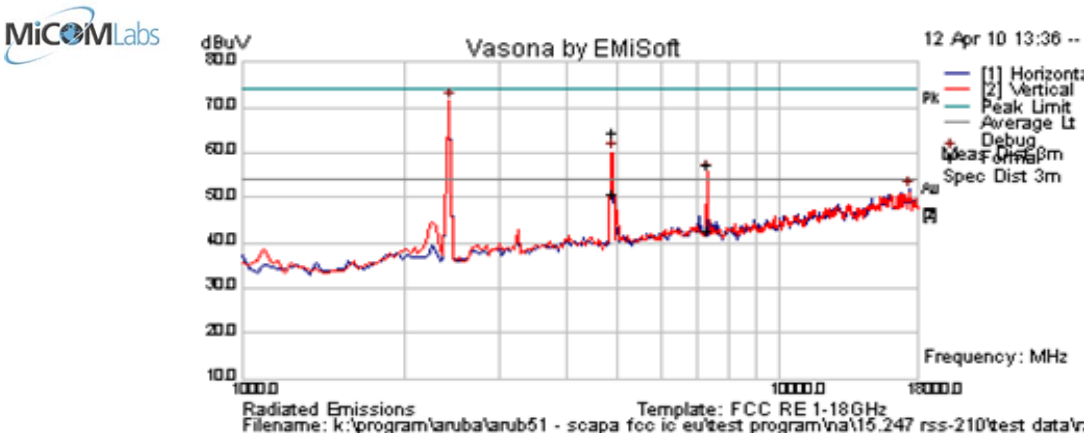
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	13 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-2	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4873.788	55.5	4.5	-9.3	50.7	Average Max	H	190	227	54.0	-3.3	Pass	RB
4873.788	69.4	4.5	-9.3	64.6	Peak Max	H	190	227	74.0	-9.4	Pass	RB
7310.035	42.0	5.4	-4.9	42.5	Average Max	V	98	10	54	-11.5	Pass	RB
7310.035	56.8	5.4	-4.9	57.4	Peak Max	V	98	10	74	-16.7	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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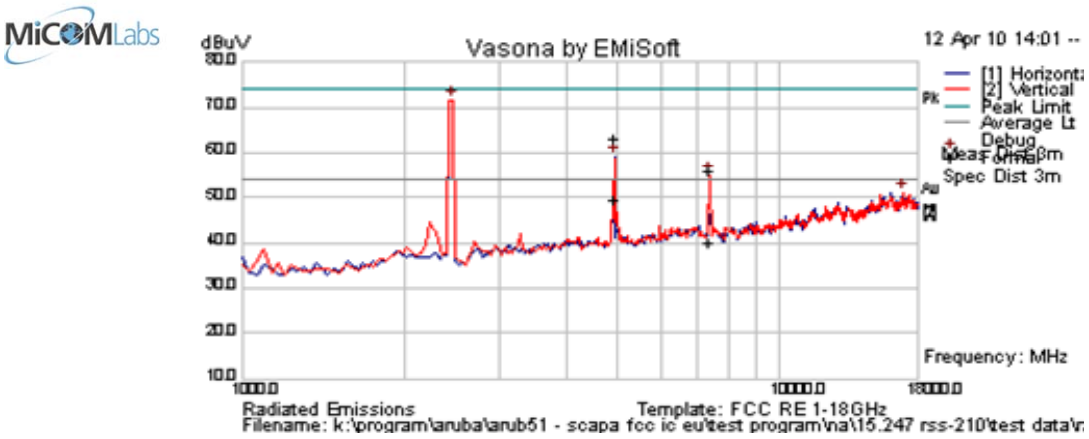
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	13 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-2	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4923.808	53.9	4.6	-9.1	49.3	Average Max	V	190	0	54.0	-4.7	Pass	RB
4923.808	67.9	4.6	-9.1	63.4	Peak Max	V	190	0	74.0	-10.6	Pass	RB
7385.070	39.5	5.5	-4.8	40.2	Average Max	V	116	11	54	-13.9	Pass	RB
7385.070	55.1	5.5	-4.8	55.8	Peak Max	V	116	11	74	-18.3	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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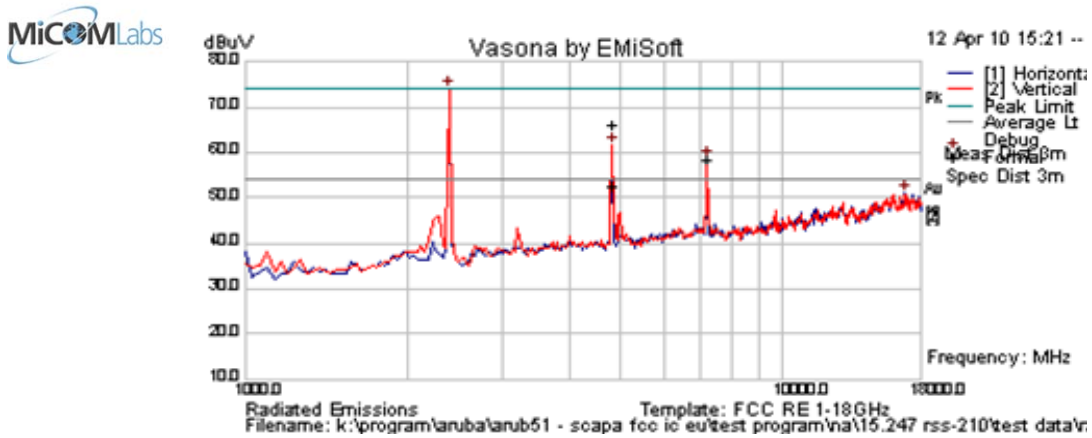
2400 – 2483.5 MHz: 802.11n HT-20

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-2	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4818.357	71.1	4.5	-9.3	66.2	Peak	V	100	0	74.0	-7.8	Pass	RB
4818.357	57.5	4.5	-9.3	52.6	Average	V	100	0	54.0	-1.4	Pass	RB
7237.675	58.2	5.4	-5.1	58.5	Peak [Scan]	V	> 20 dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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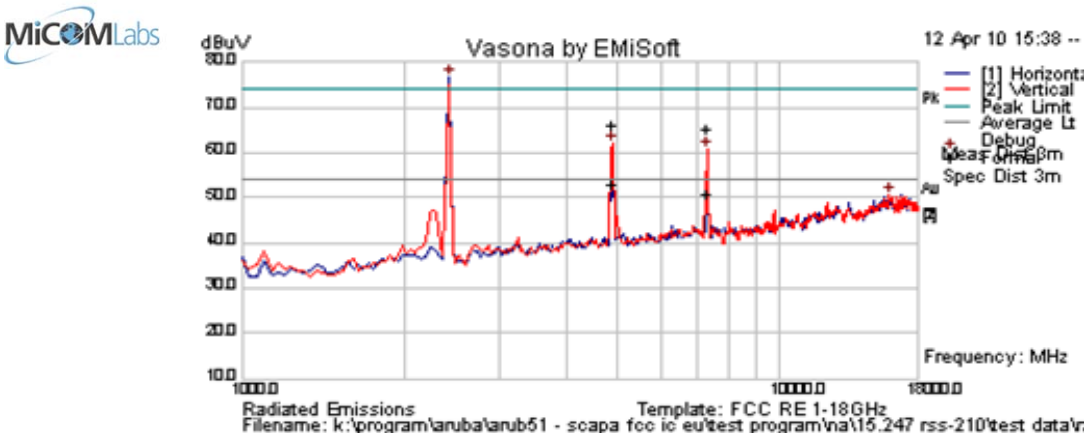
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-2	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4873.547	57.9	4.5	-9.3	53.1	Average Max	V	98	26	54.0	-0.9	Pass	RB
4873.547	71.1	4.5	-9.3	66.3	Peak Max	V	98	26	74.0	-7.7	Pass	RB
7310.060	50.2	5.4	-4.9	50.8	Average Max	V	106	16	54	-3.2	Pass	RB
7310.060	64.9	5.4	-4.9	65.4	Peak Max	V	106	16	74	-8.6	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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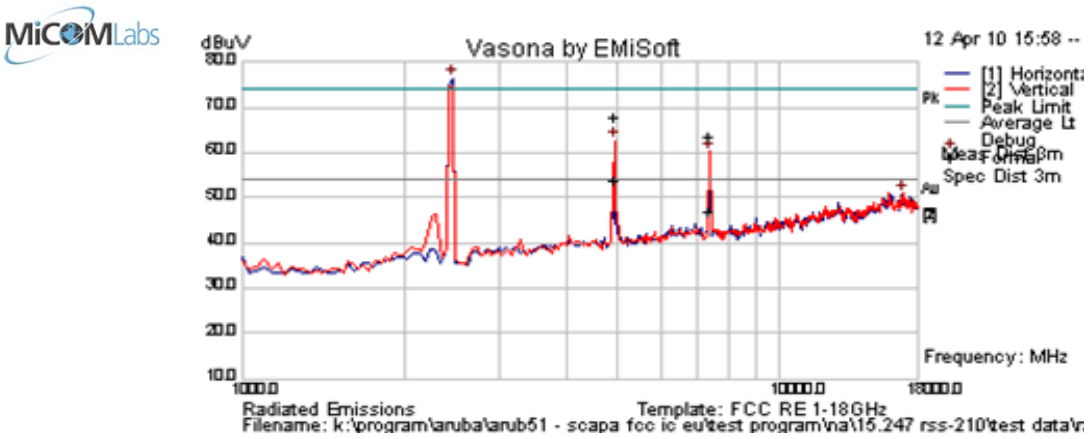
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-2	**Duty Cycle (%)**	100%
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4923.447	58.2	4.6	-9.1	53.6	Average Max	V	157	26	54.0	-0.4	Pass	RB
4923.447	72.4	4.6	-9.1	67.9	Peak Max	V	157	26	74.0	-6.2	Pass	RB
7389.259	46.3	5.5	-4.8	47.0	Average Max	V	180	12	54	-7.0	Pass	RB
7389.259	63.0	5.5	-4.8	63.7	Peak Max	V	180	12	74	-10.3	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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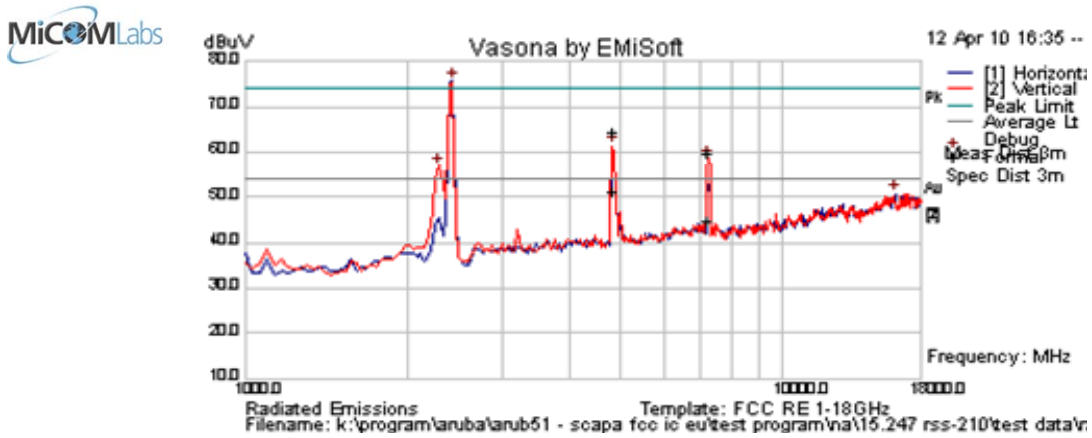
2400 – 2483.5 MHz: 802.11n HT-40

Test Freq.	2422 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	18 in ART test utility	**Press. (mBars)**	1008
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4841.924	55.9	4.5	-9.4	51.0	Average Max	H	174	229	54.0	-3.0	Pass	RB
4841.924	69.2	4.5	-9.4	64.3	Peak Max	H	174	229	74.0	-9.7	Pass	RB
7272.666	44.4	5.4	-5.1	44.8	Average Max	V	153	0	54	-9.3	Pass	RB
7272.666	59.3	5.4	-5.1	59.6	Peak Max	V	153	0	74	-14.4	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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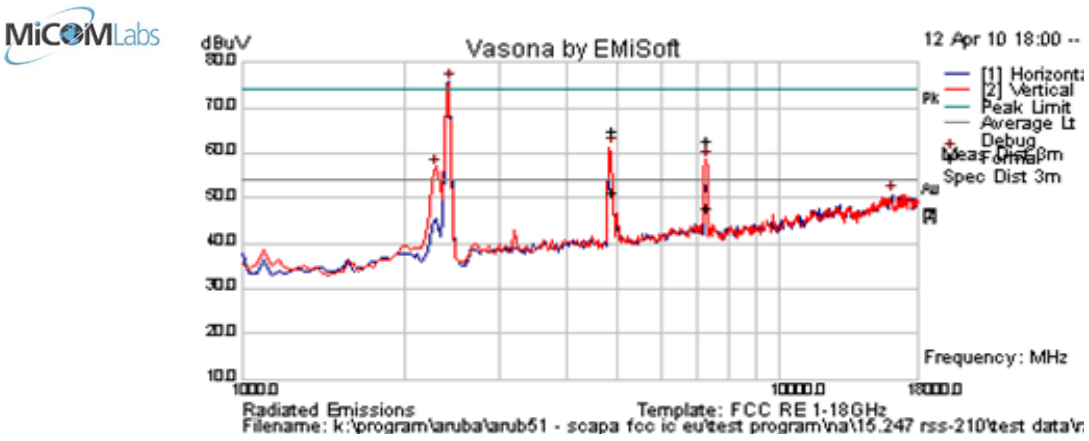
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	18 in ART test utility	**Press. (mBars)**	1008
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4872.926	56.1	4.5	-9.3	51.3	Average Max	V	162	336	54.0	-2.7	Pass	RB
4872.926	69.9	4.5	-9.3	65.1	Peak Max	V	162	336	74.0	-8.9	Pass	RB
7308.017	47.4	5.4	-4.9	47.9	Average Max	V	136	8	54	-6.1	Pass	RB
7308.017	62.3	5.4	-4.9	62.9	Peak Max	V	136	8	74	-11.1	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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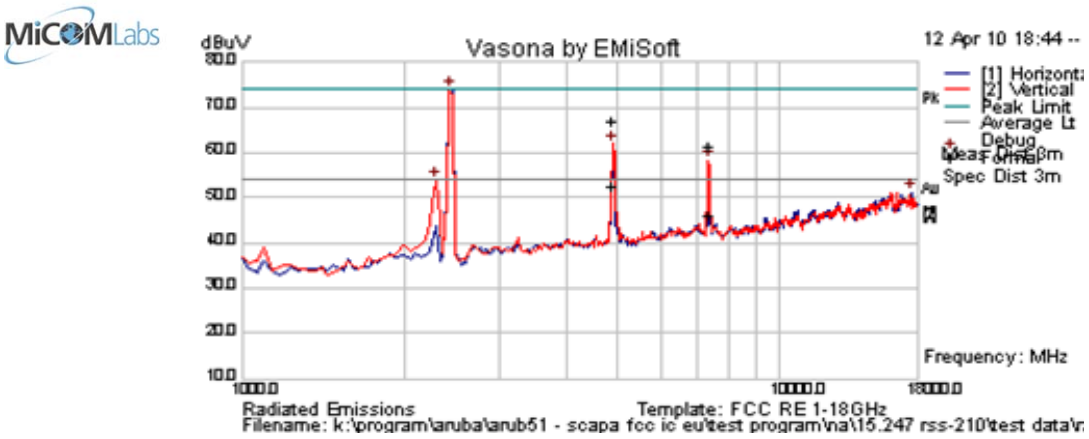
Test Freq.	2452 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	18 in ART test utility	**Press. (mBars)**	1008
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4900.601	57.1	4.5	-9.3	52.3	Average Max	H	191	236	54.0	-1.7	Pass	RB
4900.601	71.7	4.5	-9.3	67.0	Peak Max	H	191	236	74.0	-7.0	Pass	RB
7363.046	45.7	5.5	-4.9	46.2	Average Max	V	115	14	54	-7.8	Pass	RB
7363.046	61.1	5.5	-4.9	61.7	Peak Max	V	115	14	74	-12.4	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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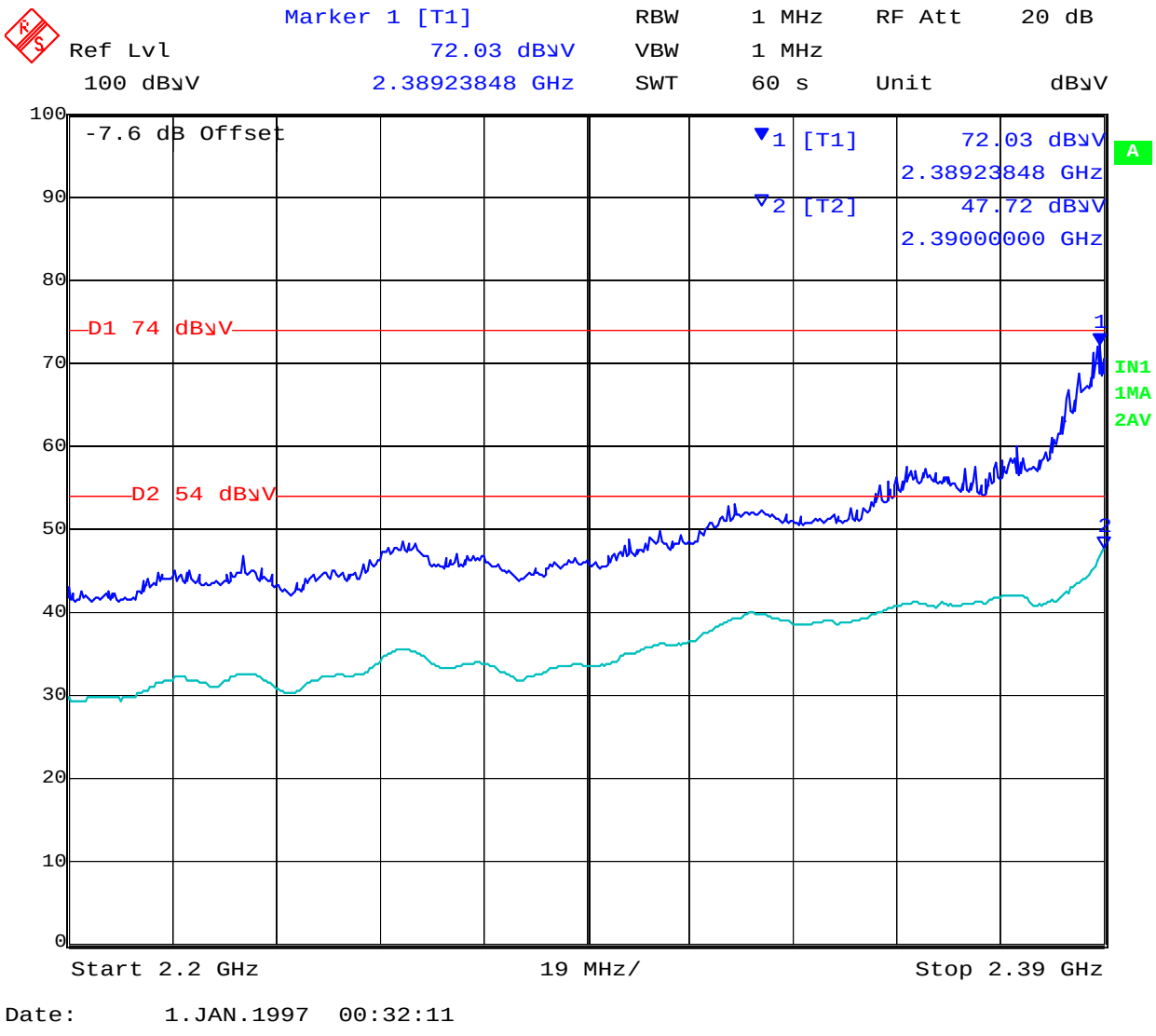
7.6.5 AP-ANT-2 - Transmitter Band edge spurious emissions

2412 MHz - 802.11b; 2200 - 2390 MHz



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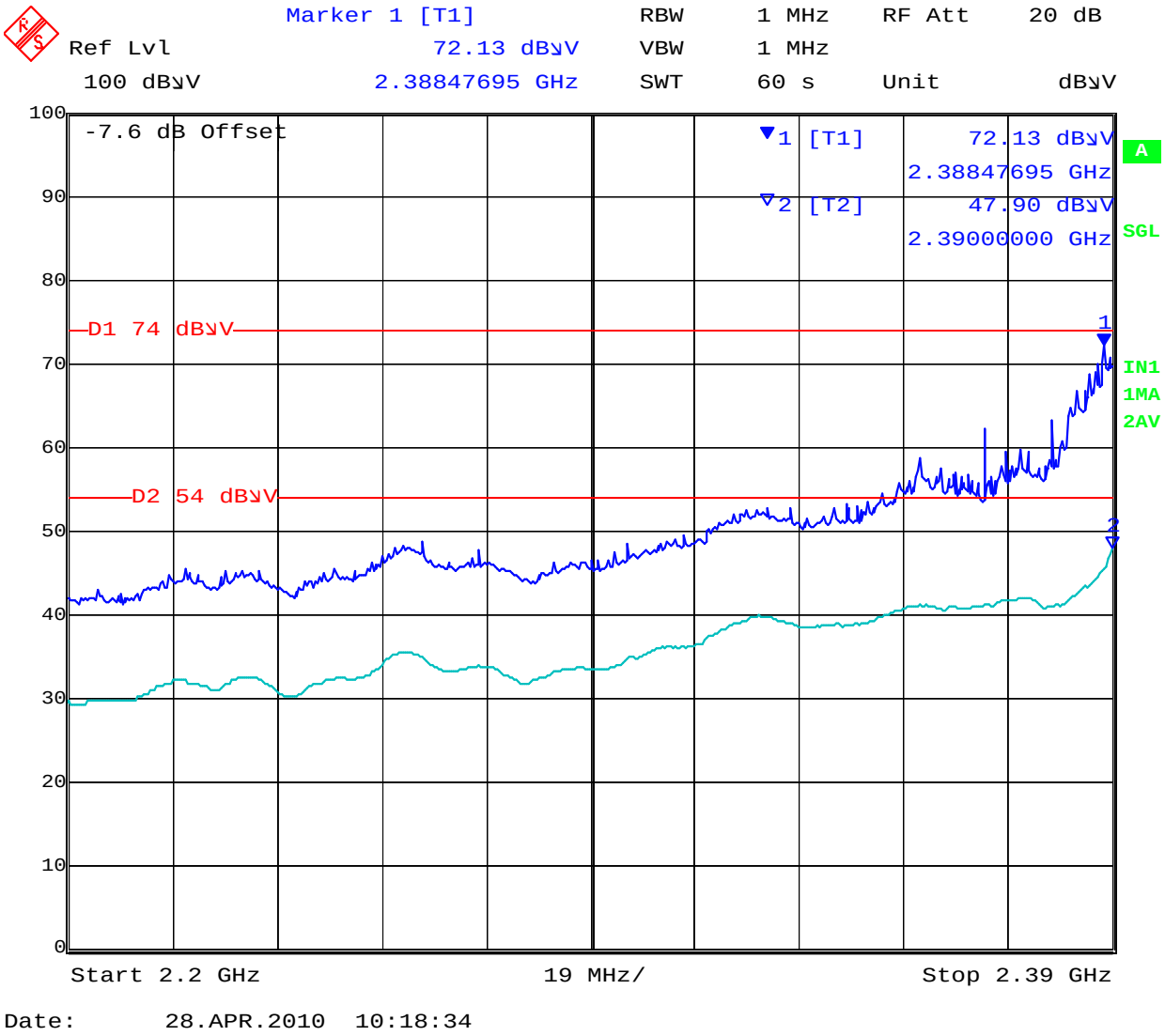
2412 MHz - 802.11g; 2200 - 2390 MHz



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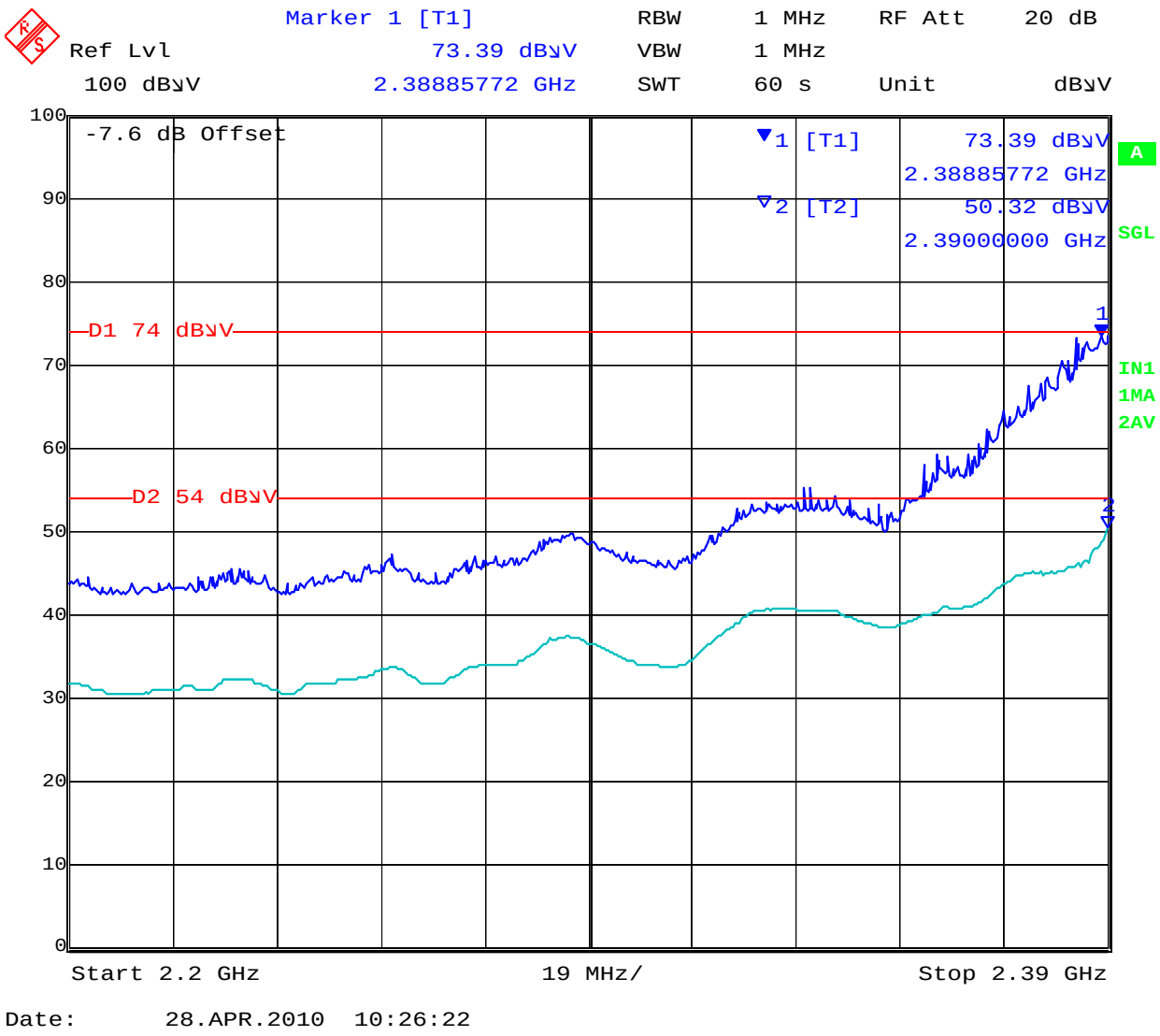
2412 MHz - 802.11n HT-20; 2200 - 2390 MHz



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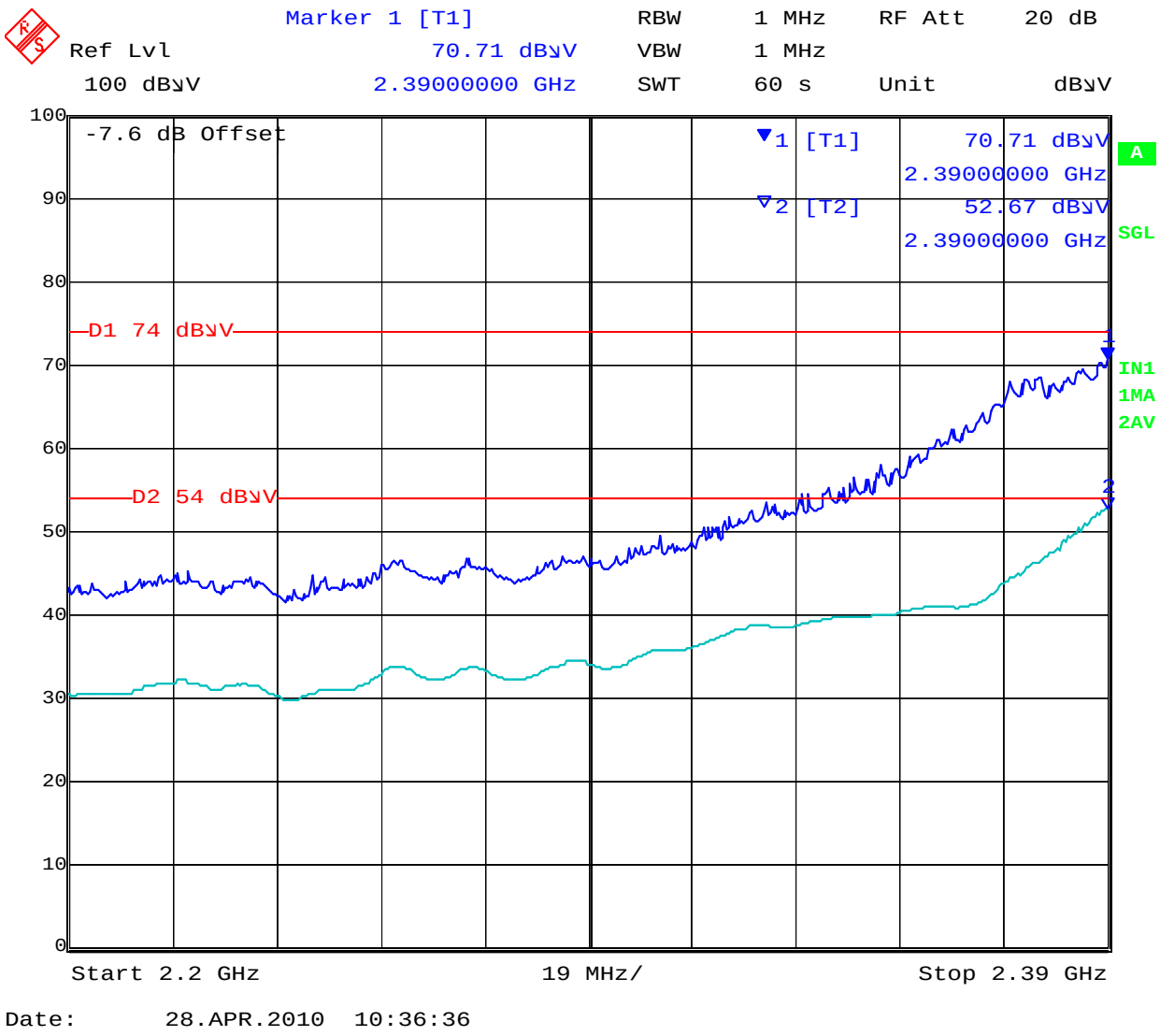
2422 MHz - 802.11n HT-40; 2200 - 2390 MHz



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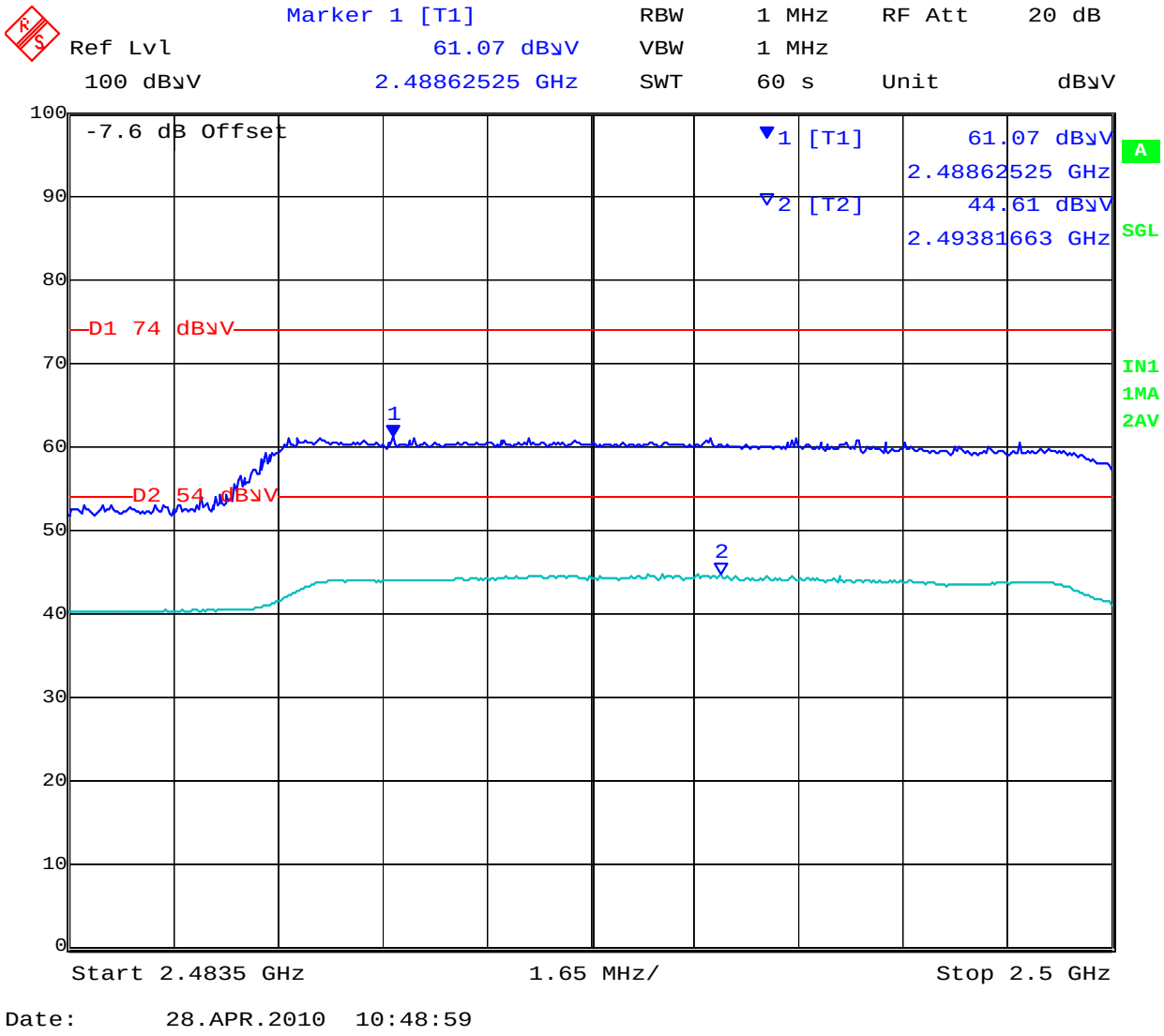
2462 MHz - 802.11b; 2483.5 - 2500 MHz



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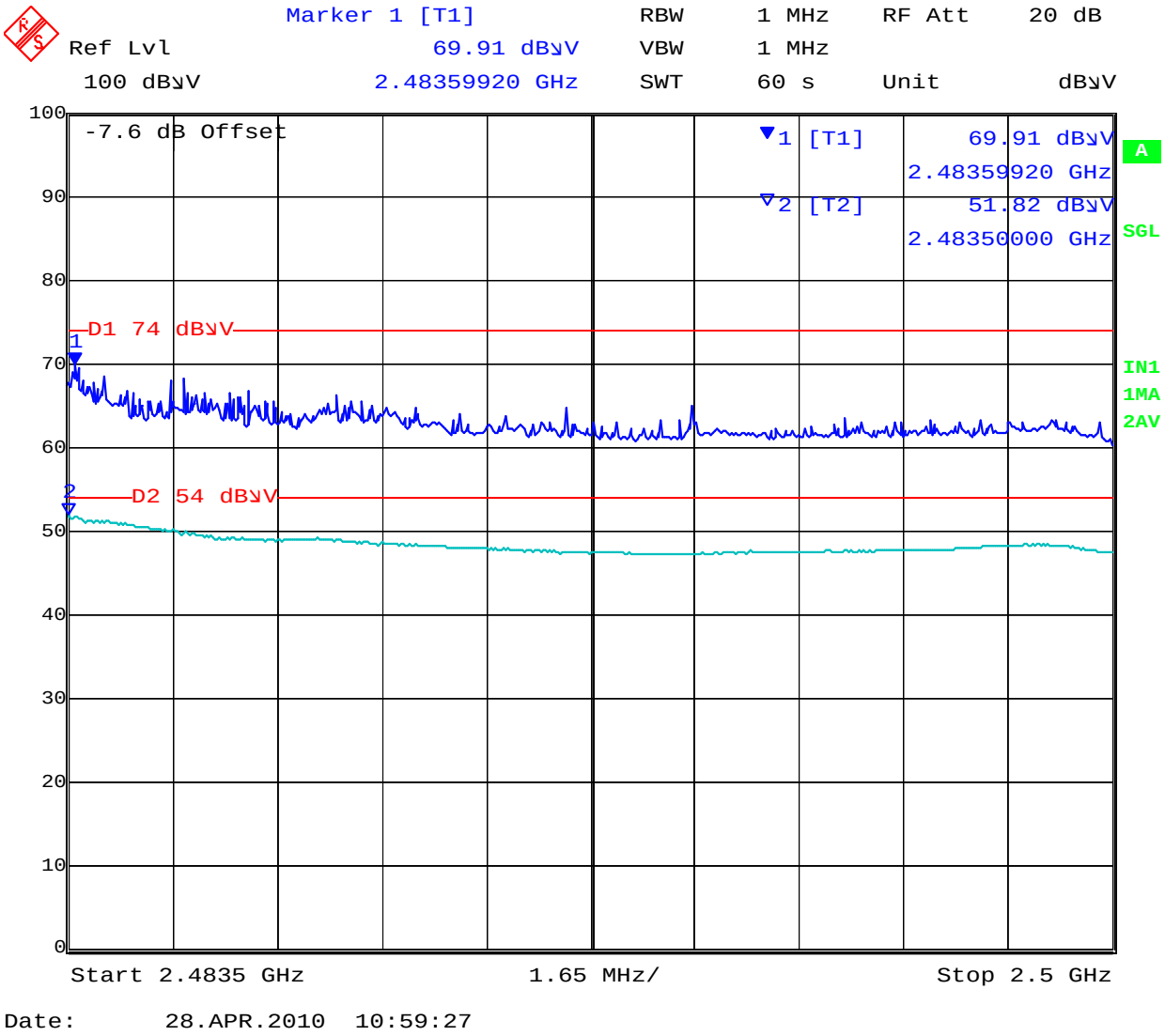
2462 MHz - 802.11g; 2483.5 - 2500 MHz



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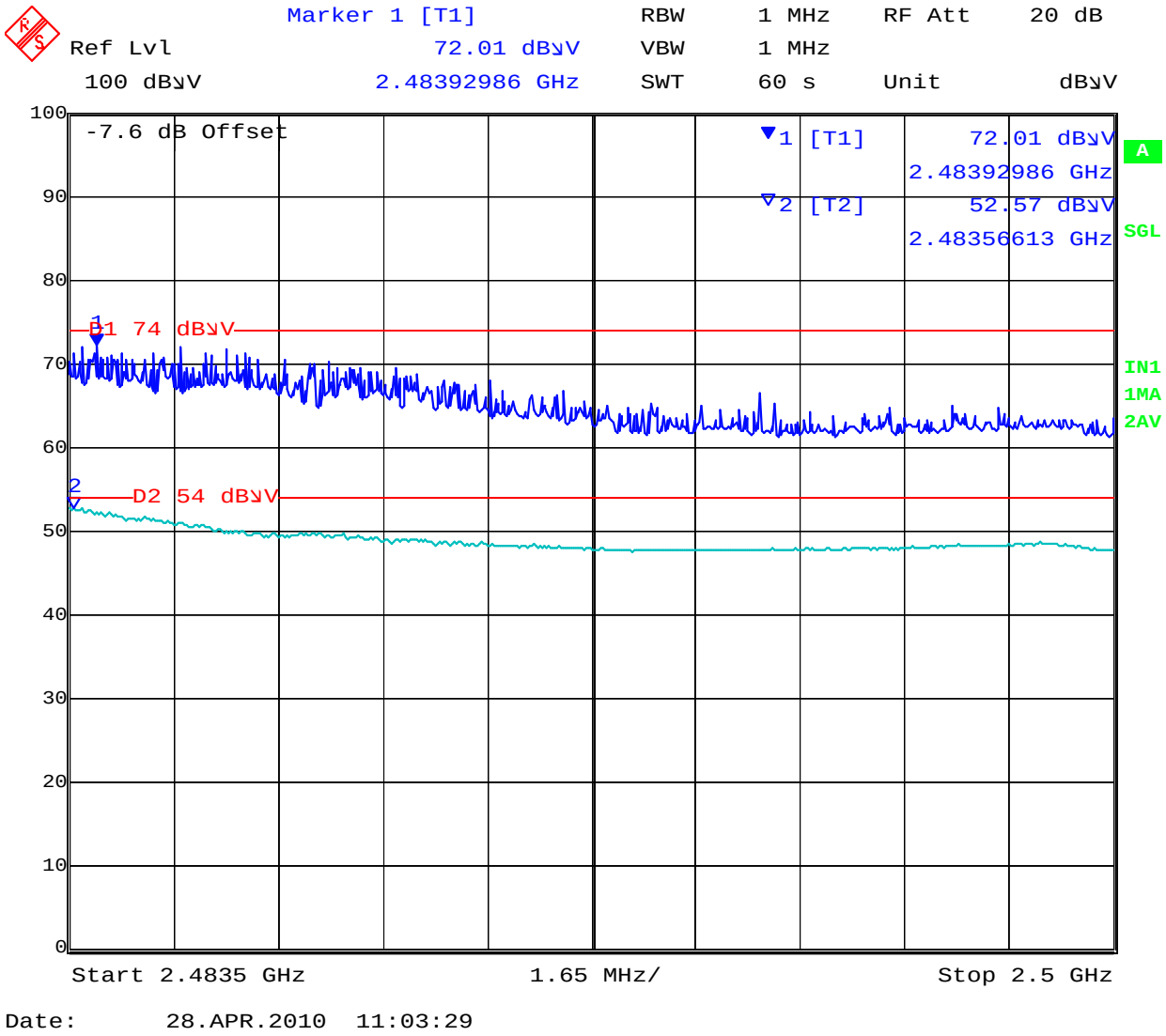
2462 MHz - 802.11n HT-20; 2483.5 - 2500 MHz



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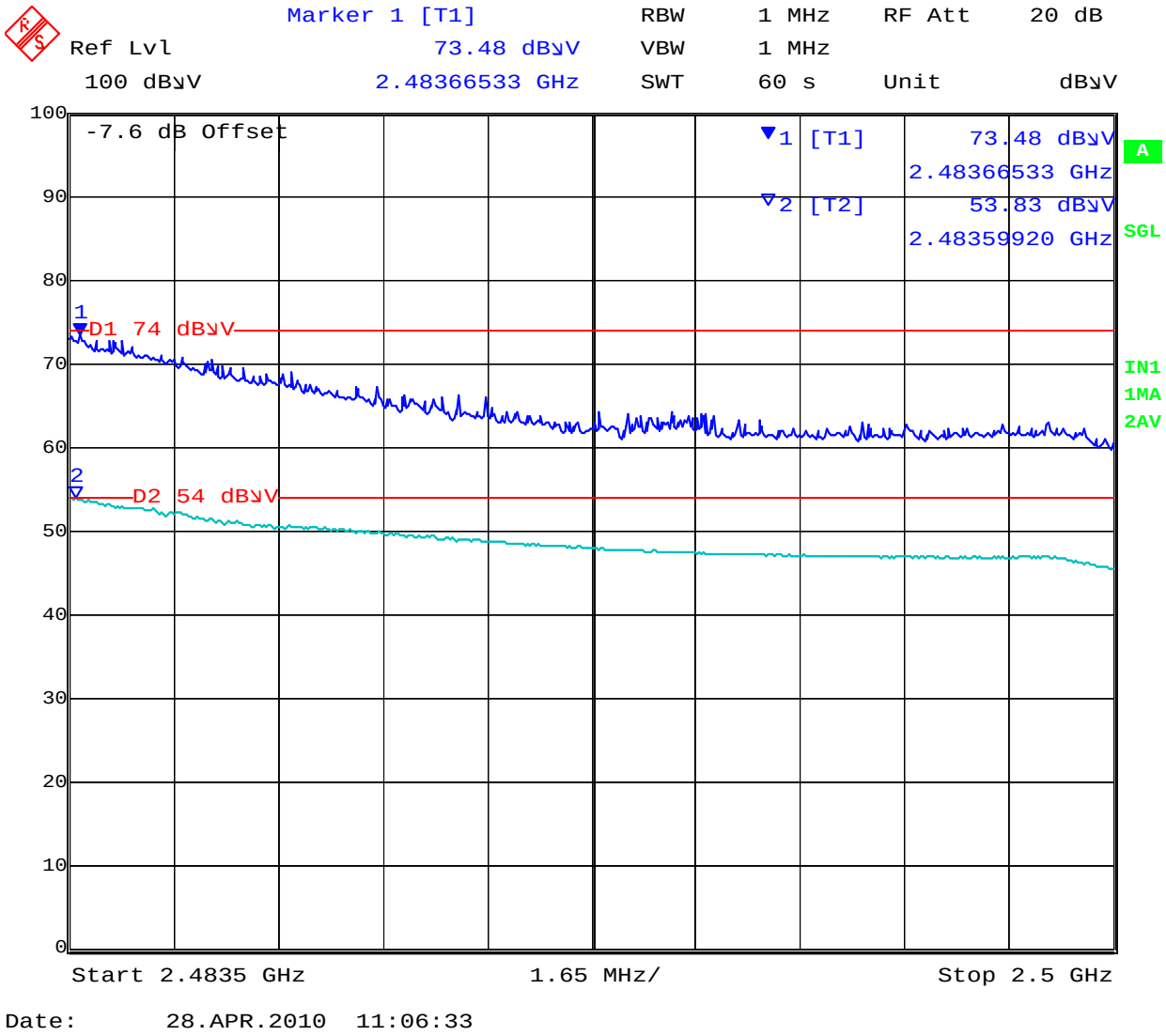
2452 MHz - 802.11n HT-40; 2483.5 - 2500 MHz



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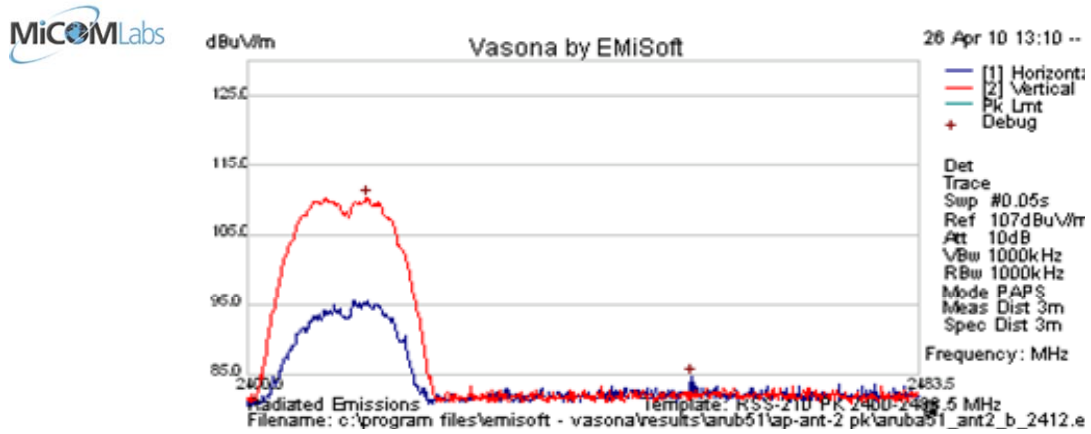
7.6.6 AP-ANT-2 - Transmitter Peak Emissions (RSS-210/RSS-GEN)

2400 – 2483.5 MHz: 802.11b

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (ºC)**	18.5
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	37
Power Setting	6 in art	**Press. (mBars)**	1004
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2414.752	72.7	7.1	30.4	110.2	Peak [Scan]	V						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak emissions of Fundamental

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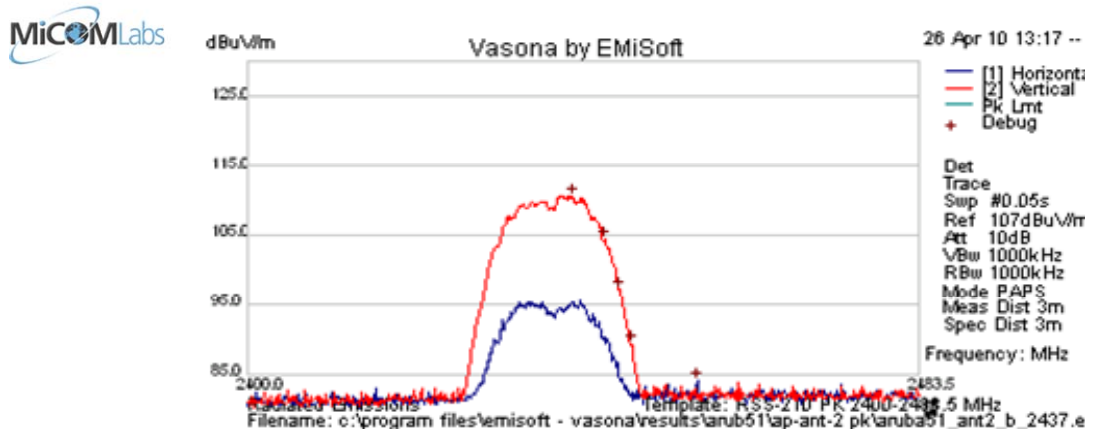
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (°C)**	18.5
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	37
Power Setting	7.5 in art	**Press. (mBars)**	1004
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2440.080	72.9	7.2	30.5	110.5	Peak [Scan]	V						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak emissions of Fundamental

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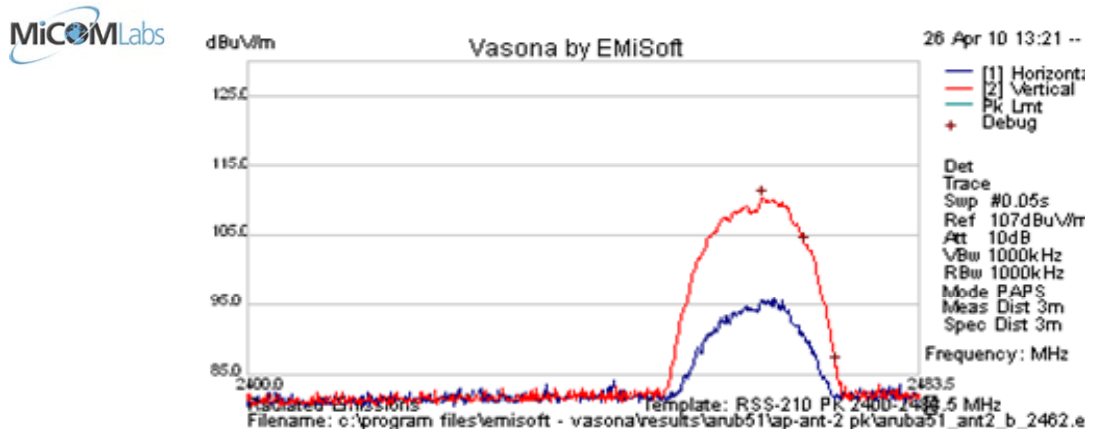
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (°C)**	18.5
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	37
Power Setting	7 in art	**Press. (mBars)**	1004
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2463.878	72.5	7.2	30.6	110.3	Peak [Scan]	V						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak emissions of Fundamental

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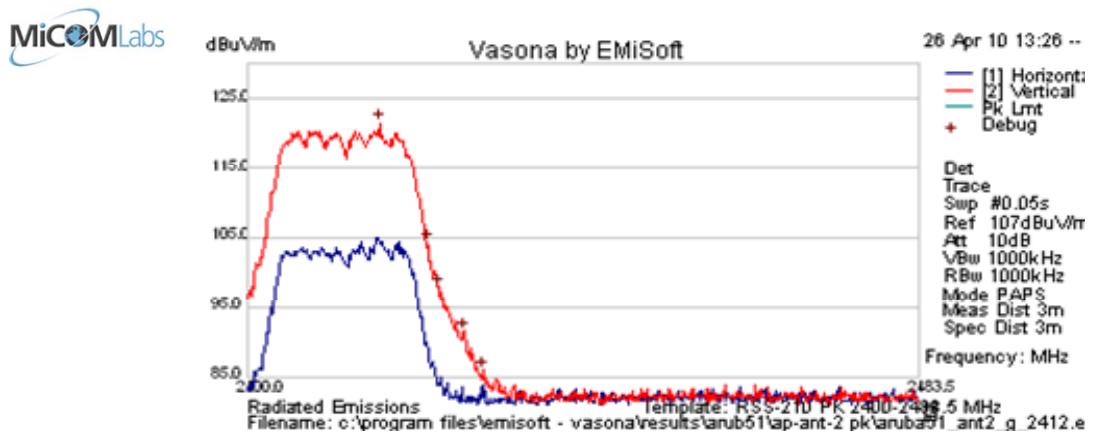
2400 – 2483.5 MHz: 802.11g

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (ºC)**	18.5
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	37
Power Setting	13 in art	**Press. (mBars)**	1004
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2416.283	84.0	7.1	30.4	121.6	Peak [Scan]	V						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak emissions of Fundamental

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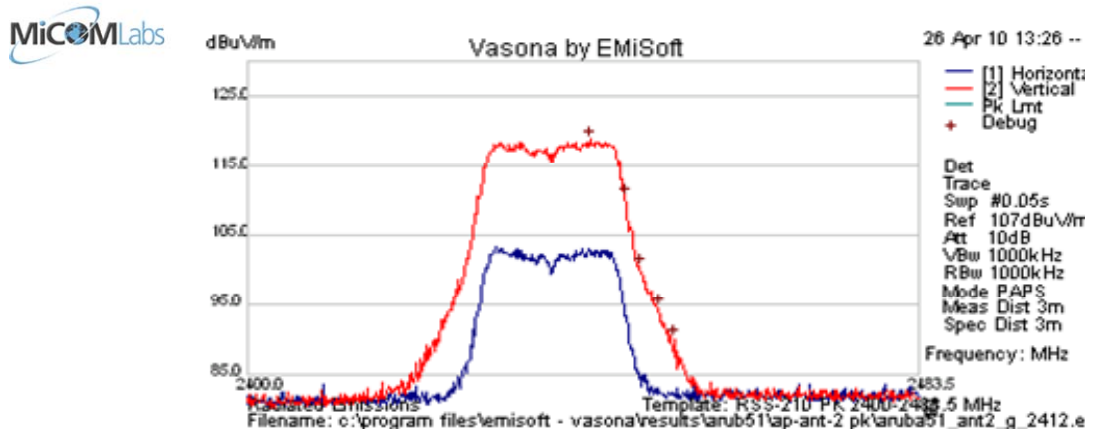
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	18.5
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	37
Power Setting	13 in art	**Press. (mBars)**	1004
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2442.307	81.2	7.2	30.5	118.9	Peak [Scan]	V						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak emissions of Fundamental

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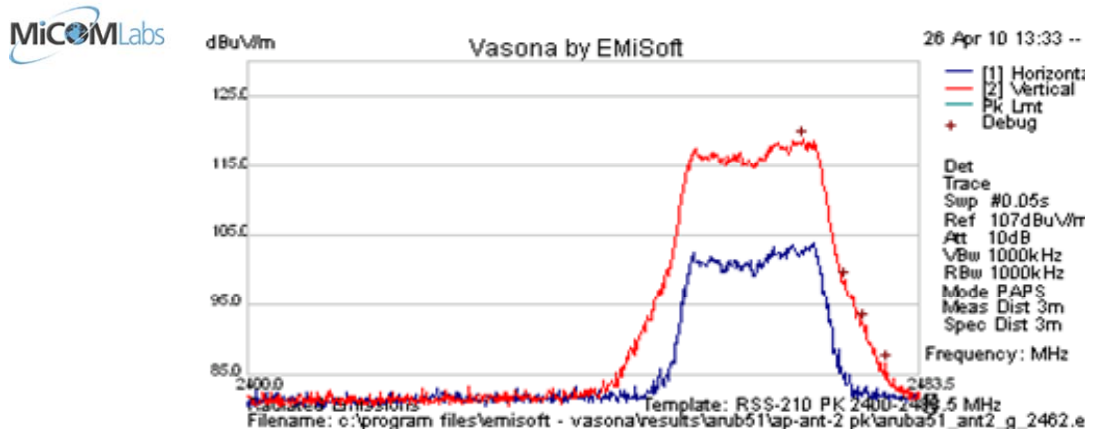
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	18.5
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	37
Power Setting	13 in art	**Press. (mBars)**	1004
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2468.888	81.0	7.2	30.6	118.8	Peak [Scan]	V						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak emissions of Fundamental

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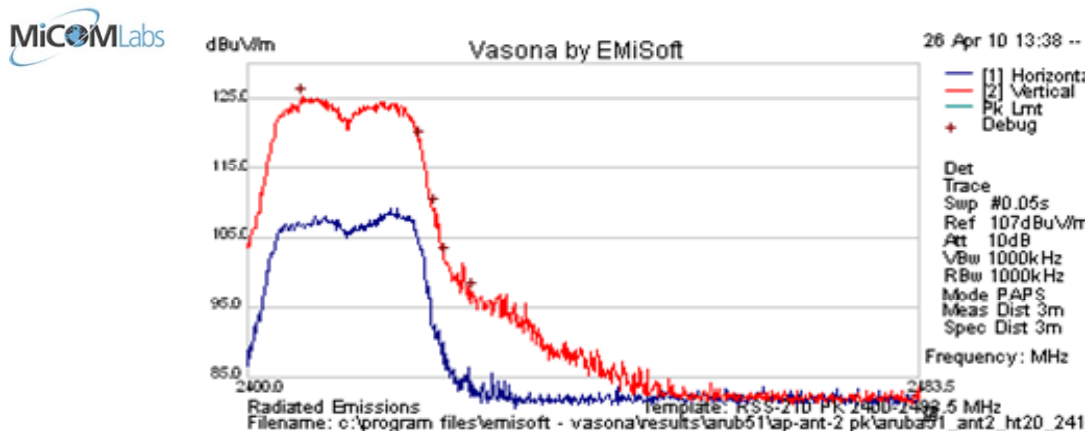
2400 – 2483.5 MHz: 802.11n HT-20

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (ºC)**	18.5
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in art	**Press. (mBars)**	1004
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2406.680	87.9	7.1	30.4	125.4	Peak [Scan]	V						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak emissions of Fundamental

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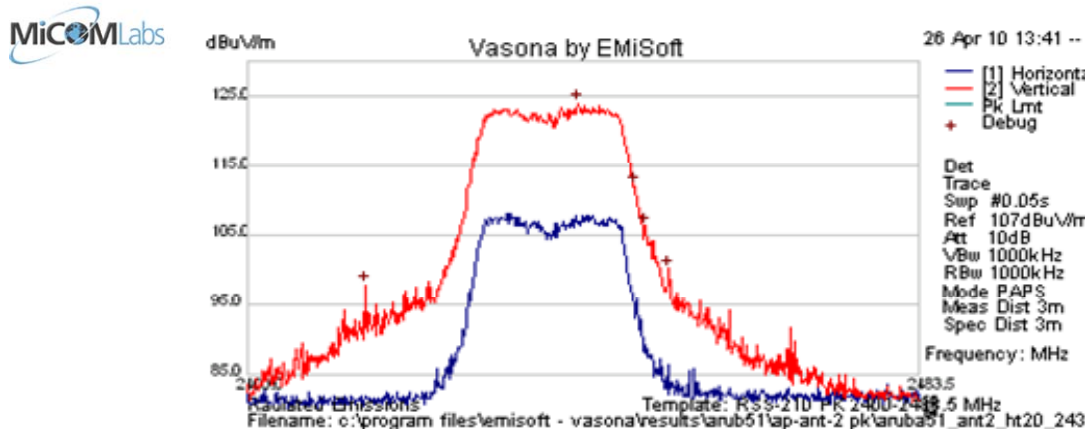
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	18.5
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in art	**Press. (mBars)**	1004
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2440.776	86.4	7.2	30.5	124.0	Peak [Scan]	V						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak emissions of Fundamental

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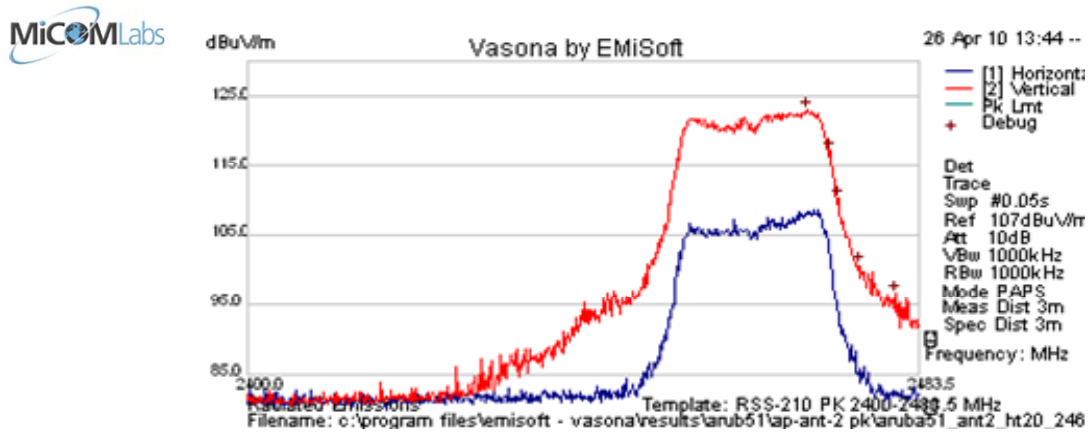
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	18.5
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in art	**Press. (mBars)**	1004
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2469.305	85.2	7.2	30.6	123.0	Peak [Scan]	V						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak emissions of Fundamental

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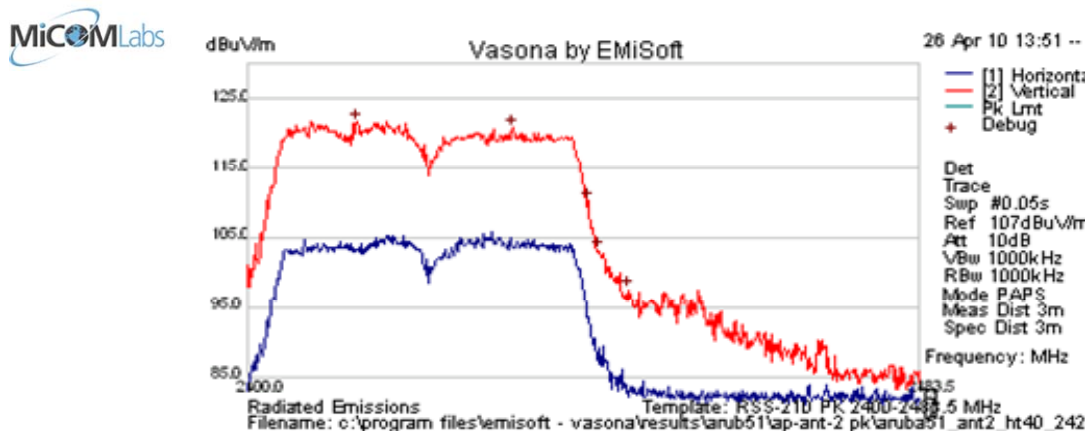
2400 – 2483.5 MHz: 802.11n HT-40

Test Freq.	2422 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	18.5
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in art	**Press. (mBars)**	1004
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2413.499	84.2	7.1	30.4	121.7	Peak [Scan]	V						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak emissions of Fundamental

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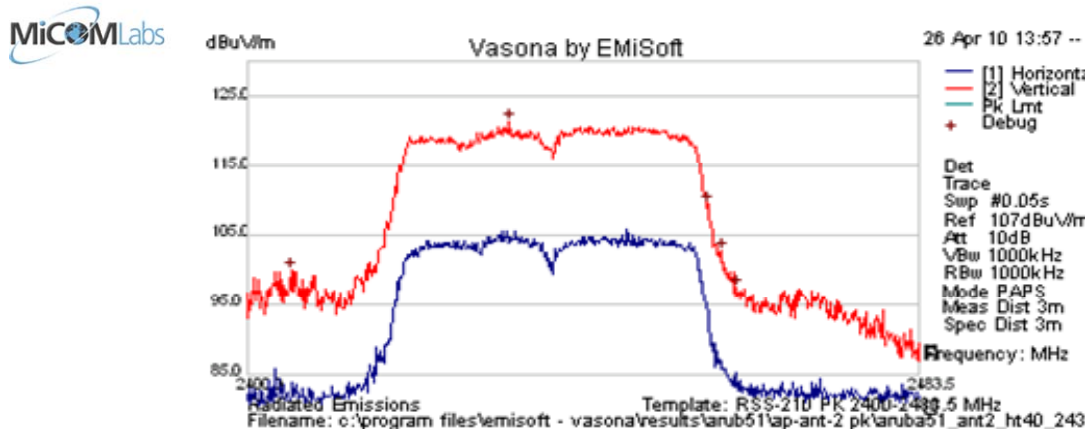
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	18.5
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in art	**Press. (mBars)**	1004
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2432.287	83.7	7.1	30.5	121.3	Peak [Scan]	V						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak emissions of Fundamental

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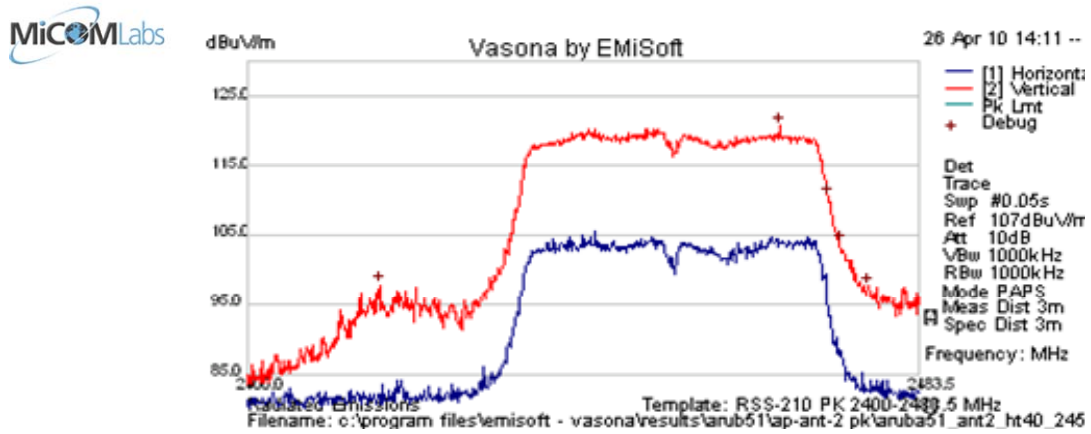
Test Freq.	2452 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	18.5
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in art	**Press. (mBars)**	1004
Antenna	AP-ANT-2	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2465.965	83.0	7.2	30.6	120.8	Peak [Scan]	V						PK

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	PK = Peak emissions of Fundamental

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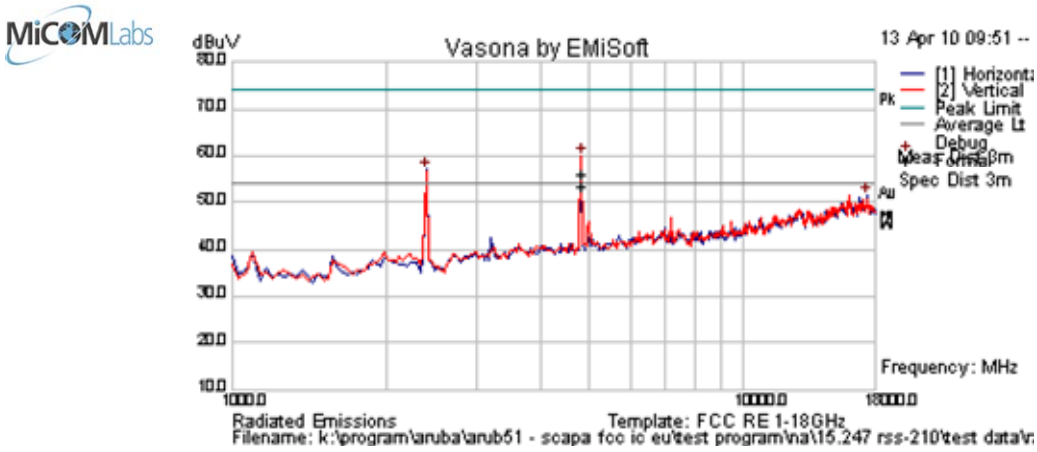
7.6.7 AP-ANT-7 - Transmitter Radiated Spurious Emissions – Above 1 GHz

2400 – 2483.5 MHz: 802.11b

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (ºC)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	42
Power Setting	6 in ART test utility	**Press. (mBars)**	1000
Antenna	AP-ANT-7	**Duty Cycle (%)**	100%
Test Notes 1	EUT Horizontal on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4824.032	60.7	4.5	-9.4	55.7	Peak	V	100	104	74.0	-18.3	Pass	RB
4824.032	58.1	4.5	-9.4	53.2	Average	V	100	104	54.0	-0.9	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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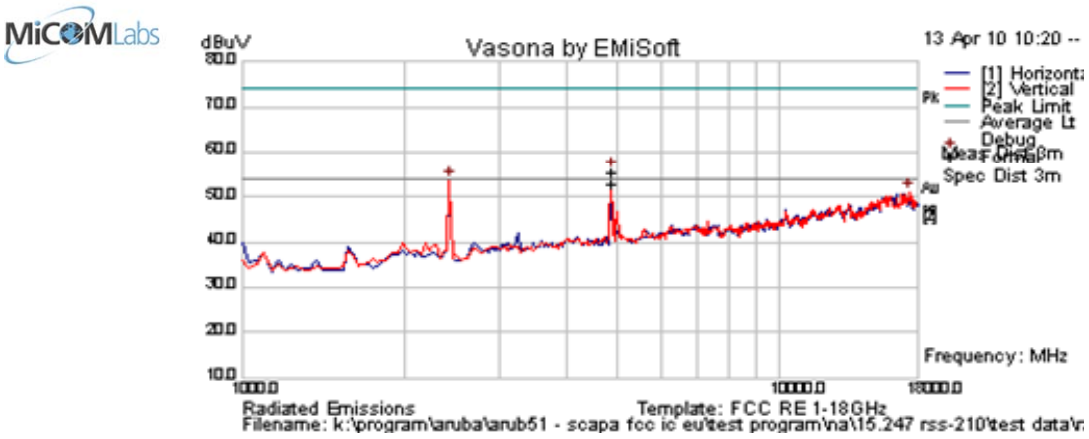
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	42
Power Setting	6.5 in ART test utility	**Press. (mBars)**	1000
Antenna	AP-ANT-7	**Duty Cycle (%)**	100%
Test Notes 1	EUT Horizontal on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4873.956	60.4	4.5	-9.3	55.6	Peak	V	98	103	74.0	-18.4	Pass	RB
4873.956	57.9	4.5	-9.3	53.1	Average	V	98	103	54.0	-0.9	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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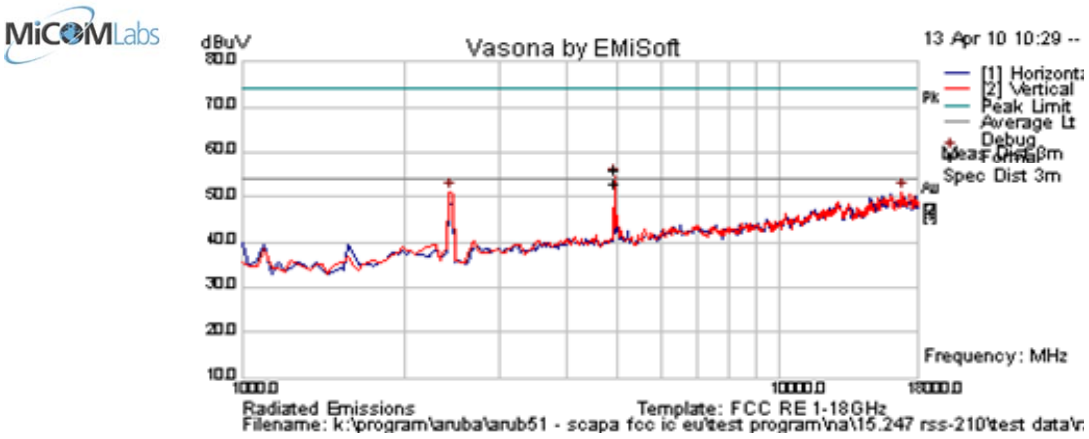
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	42
Power Setting	7.0 in ART test utility	**Press. (mBars)**	1000
Antenna	AP-ANT-7	**Duty Cycle (%)**	100%
Test Notes 1	EUT Horizontal on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4924.057	60.4	4.6	-9.1	55.9	Peak Max	V	98	122	74.0	-18.2	Pass	RB
4924.057	57.3	4.6	-9.1	52.8	Average Max	V	98	122	54.0	-1.3	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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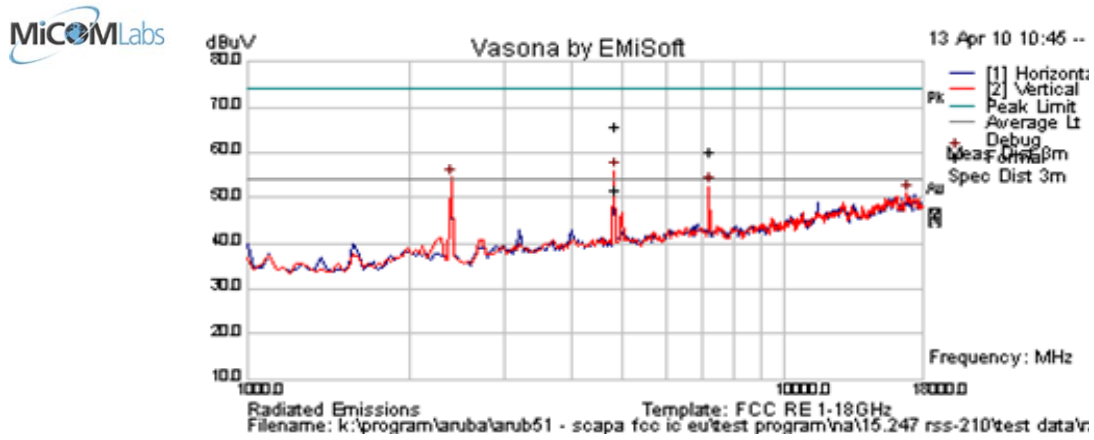
2400 – 2483.5 MHz: 802.11g

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	13 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-7	**Duty Cycle (%)**	100%
Test Notes 1	EUT Horizontal on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4823.568	70.6	4.5	-9.4	65.6	Peak Max	V	101	104	74.0	-8.4	Pass	RB
4823.568	56.6	4.5	-9.4	51.7	Average Max	V	101	104	54.0	-2.3	Pass	RB
7236.885	60.0	5.4	-5.2	60.2	Peak	V	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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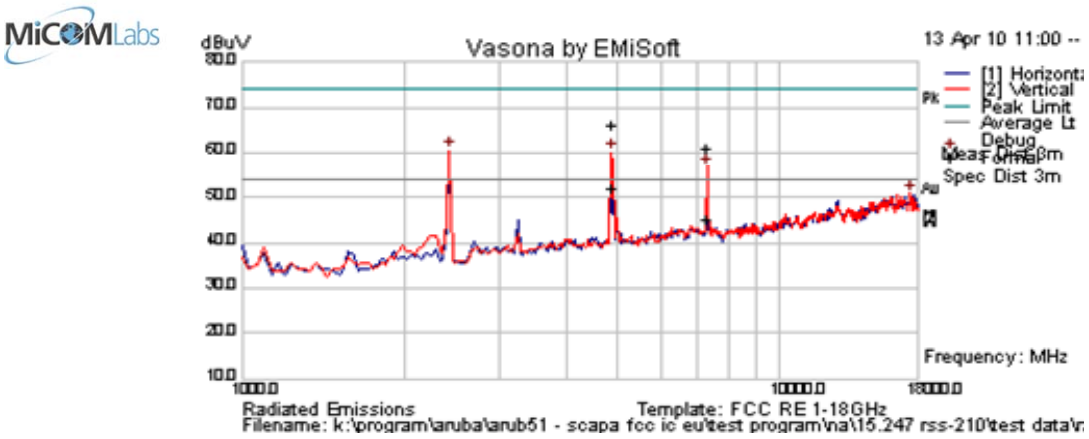
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	13 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-7	**Duty Cycle (%)**	100%
Test Notes 1	EUT Horizontal on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4873.525	57.0	4.5	-9.3	52.2	Average Max	V	102	88	54.0	-1.9	Pass	RB
4873.525	71.0	4.5	-9.3	66.1	Peak Max	V	102	88	74.0	-7.9	Pass	RB
7307.500	44.4	5.4	-4.9	45.0	Average Max	V	129	117	54	-9.0	Pass	RB
7307.500	60.7	5.4	-4.9	61.3	Peak Max	V	129	117	74	-12.8	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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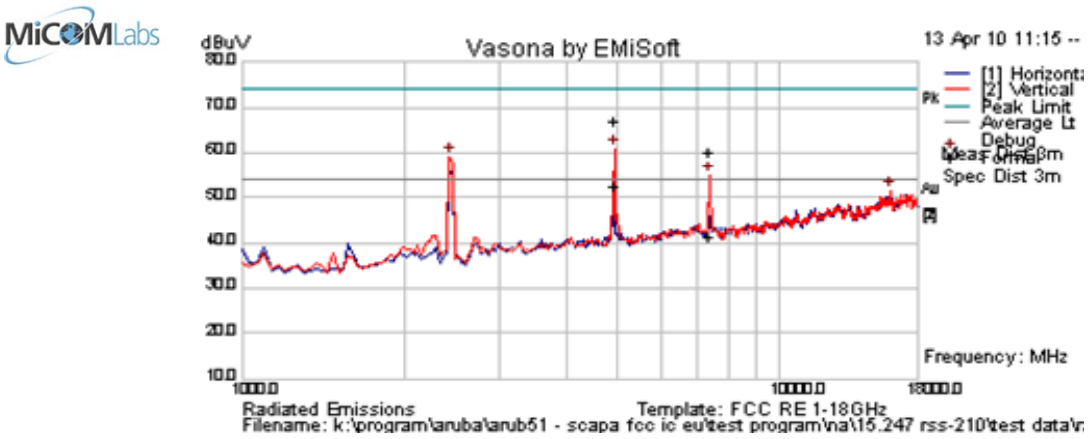
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	13 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-7	**Duty Cycle (%)**	100%
Test Notes 1	EUT Horizontal on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4923.530	57.2	4.6	-9.1	52.7	Average Max	V	98	116	54.0	-1.3	Pass	RB
4923.53	71.5	4.6	-9.1	66.9	Peak Max	V	98	116	74.0	-7.1	Pass	RB
7381.082	40.8	5.5	-4.8	41.4	Average Max	V	98	116	54	-12.6	Pass	RB
7381.082	59.7	5.5	-4.8	60.3	Peak Max	V	98	116	74	-13.7	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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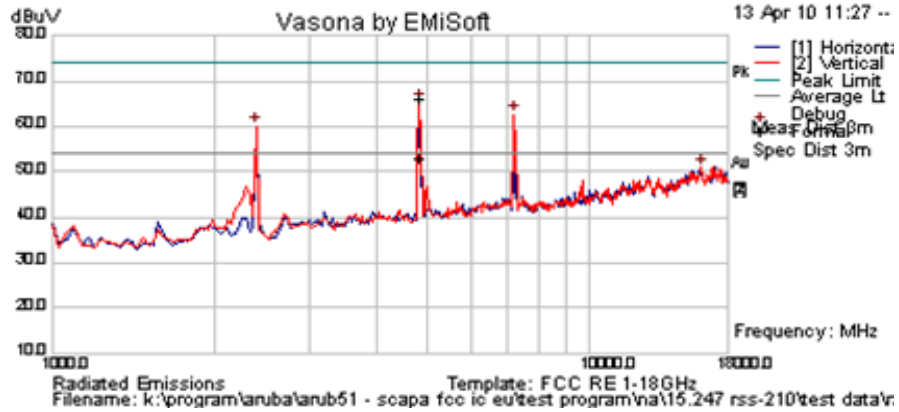
2400 – 2483.5 MHz: 802.11n HT-20

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	16 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-7	**Duty Cycle (%)**	100%
Test Notes 1	EUT Horizontal on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4823.136	71.2	4.5	-9.4	66.3	Peak	V	98	121	74.0	-7.7	Pass	RB
4823.136	58.0	4.5	-9.4	53.1	Average	V	98	121	54.0	-0.9	Pass	RB
7233.788	62.5	5.4	-5.2	62.7	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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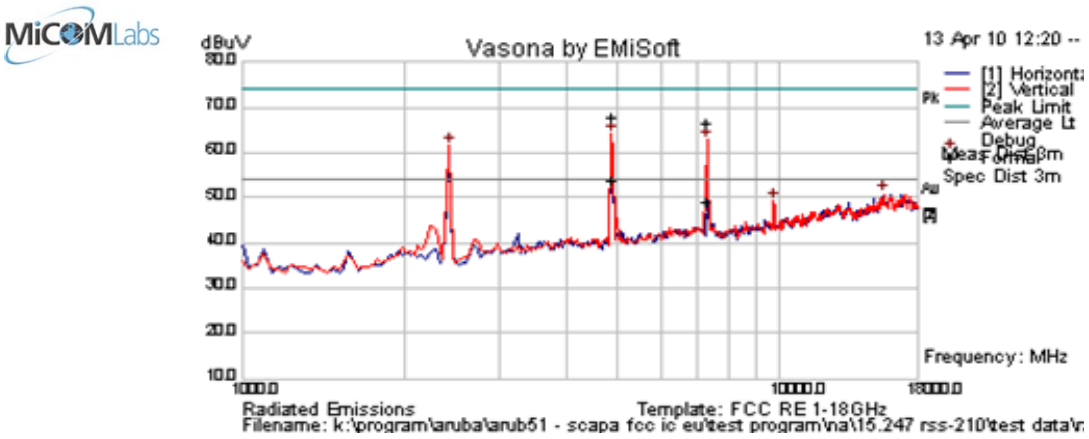
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	16 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-7	**Duty Cycle (%)**	100%
Test Notes 1	EUT Horizontal on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4872.876	58.5	4.5	-9.3	53.7	Average Max	V	98	129	54.0	-0.3	Pass	RB
4872.876	72.9	4.5	-9.3	68.1	Peak Max	V	98	129	74.0	-5.9	Pass	RB
7310.461	48.7	5.4	-4.9	49.3	Average Max	V	98	119	54	-4.7	Pass	RB
7310.461	66.1	5.4	-4.9	66.7	Peak Max	V	98	119	74	-7.3	Pass	RB
9737.956	46.3	6.4	-3.5	49.2	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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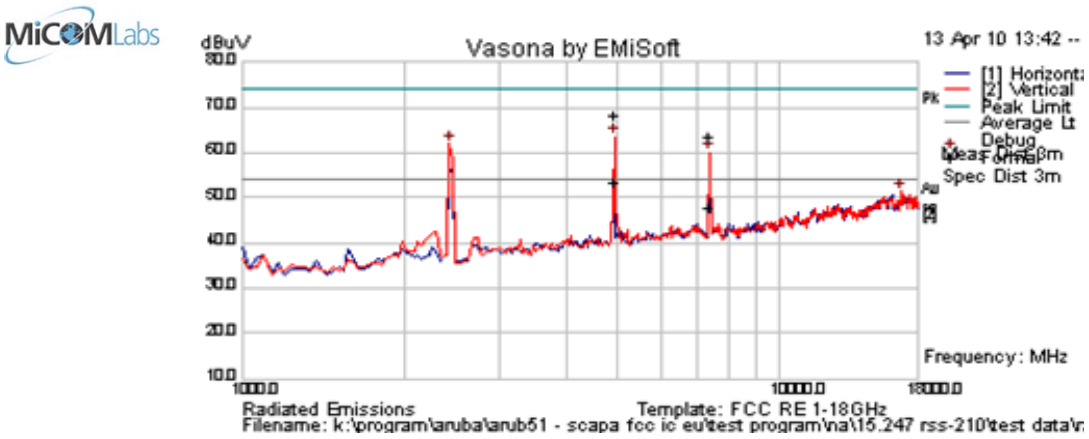
Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	15.5 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-7	**Duty Cycle (%)**	100%
Test Notes 1	EUT Horizontal on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4922.555	73.1	4.6	-9.1	68.5	Peak Max	V	98	121	74.0	-5.5	Pass	RB
4922.556	58.0	4.6	-9.1	53.4	Average	V	98	121	54.0	-0.6	Pass	RB
7382.044	46.9	5.5	-4.8	47.6	Average Max	V	98	116	54	-6.4	Pass	RB
7382.044	62.9	5.5	-4.8	63.5	Peak Max	V	98	116	74	-10.5	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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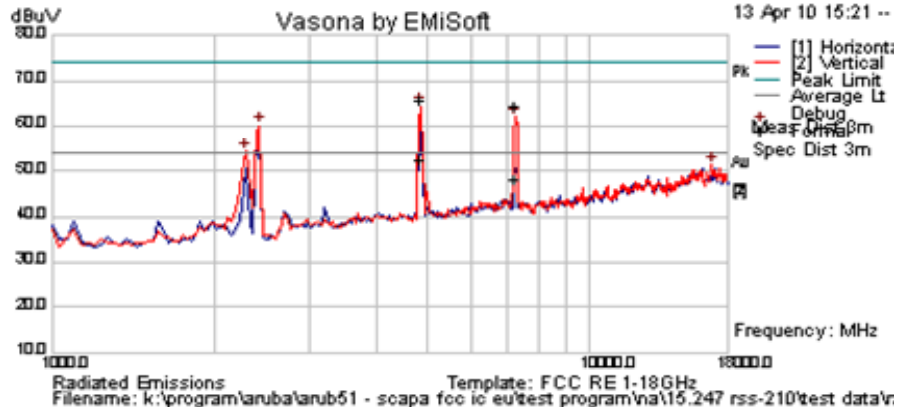
2400 – 2483.5 MHz: 802.11n HT-40

Test Freq.	2422 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	18 in ART test utility	**Press. (mBars)**	1008
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1	EUT Horizontal on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4842.991	70.7	4.5	-9.4	65.8	Peak Max	V	98	124	74.0	-8.2	Pass	RB
4842.991	57.3	4.5	-9.4	52.4	Average Max	V	98	124	54.0	-1.6	Pass	RB
7275.271	47.8	5.4	-5.1	48.1	Average Max	V	106	118	54	-5.9	Pass	RB
7275.271	64.1	5.4	-5.1	64.4	Peak Max	V	106	118	74	-9.6	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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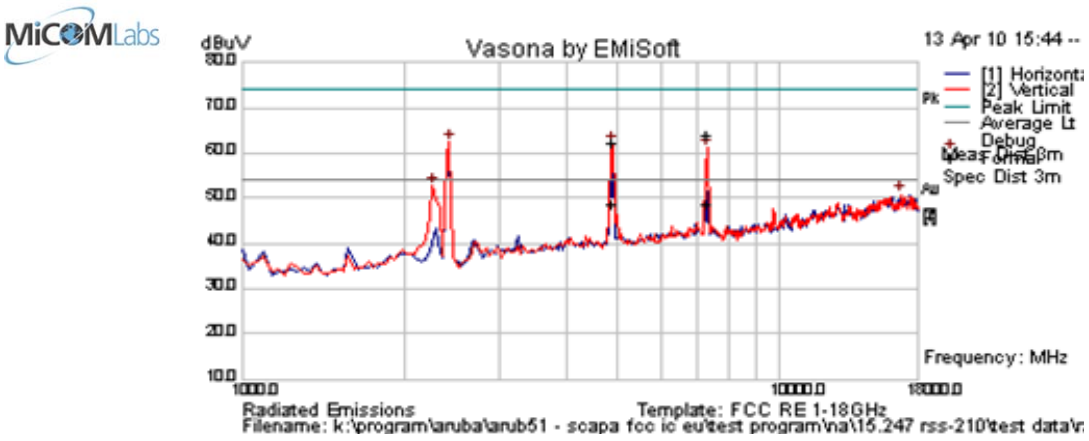
Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	18 in ART test utility	**Press. (mBars)**	1008
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1	EUT Horizontal on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4870.982	67.3	4.5	-9.3	62.5	Peak Max	V	169	119	74.0	-11.5	Pass	RB
4870.982	53.5	4.5	-9.3	48.7	Average Max	V	169	119	54.0	-5.3	Pass	RB
7308.537	48.3	5.4	-4.9	48.8	Average Max	V	98	119	54	-5.2	Pass	RB
7308.537	63.3	5.4	-4.9	63.9	Peak Max	V	98	119	74	-10.1	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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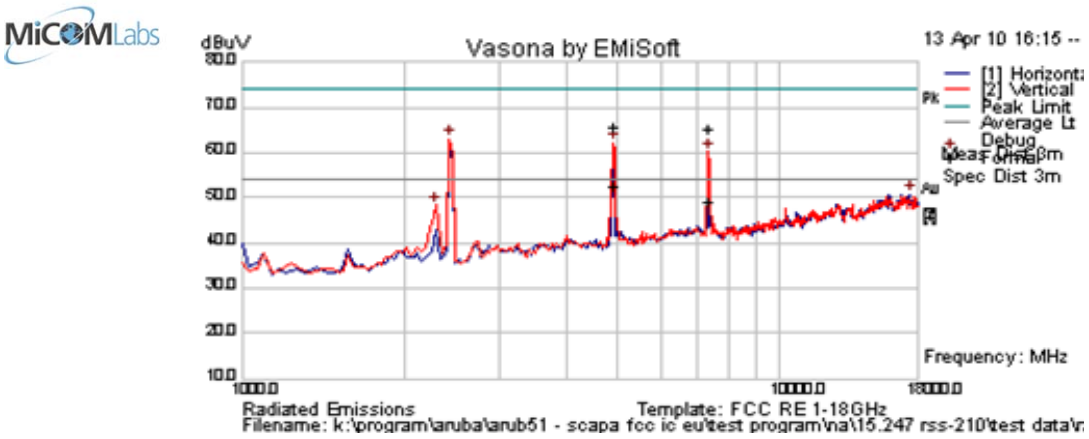
Test Freq.	2452 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	36
Power Setting	18 in ART test utility	**Press. (mBars)**	1008
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1	EUT Horizontal on table.		
Test Notes 2	Fundamental attenuated by notch filter		



Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
4902.575	57.4	4.5	-9.3	52.6	Average Max	V	110	118	54.0	-1.4	Pass	RB
4902.575	70.6	4.5	-9.3	65.8	Peak Max	V	110	118	74.0	-8.2	Pass	RB
7350.942	48.4	5.5	-4.9	48.9	Average Max	V	98	112	54	-5.1	Pass	RB
7350.942	64.6	5.5	-4.9	65.1	Peak Max	V	98	112	74	-8.9	Pass	RB

Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

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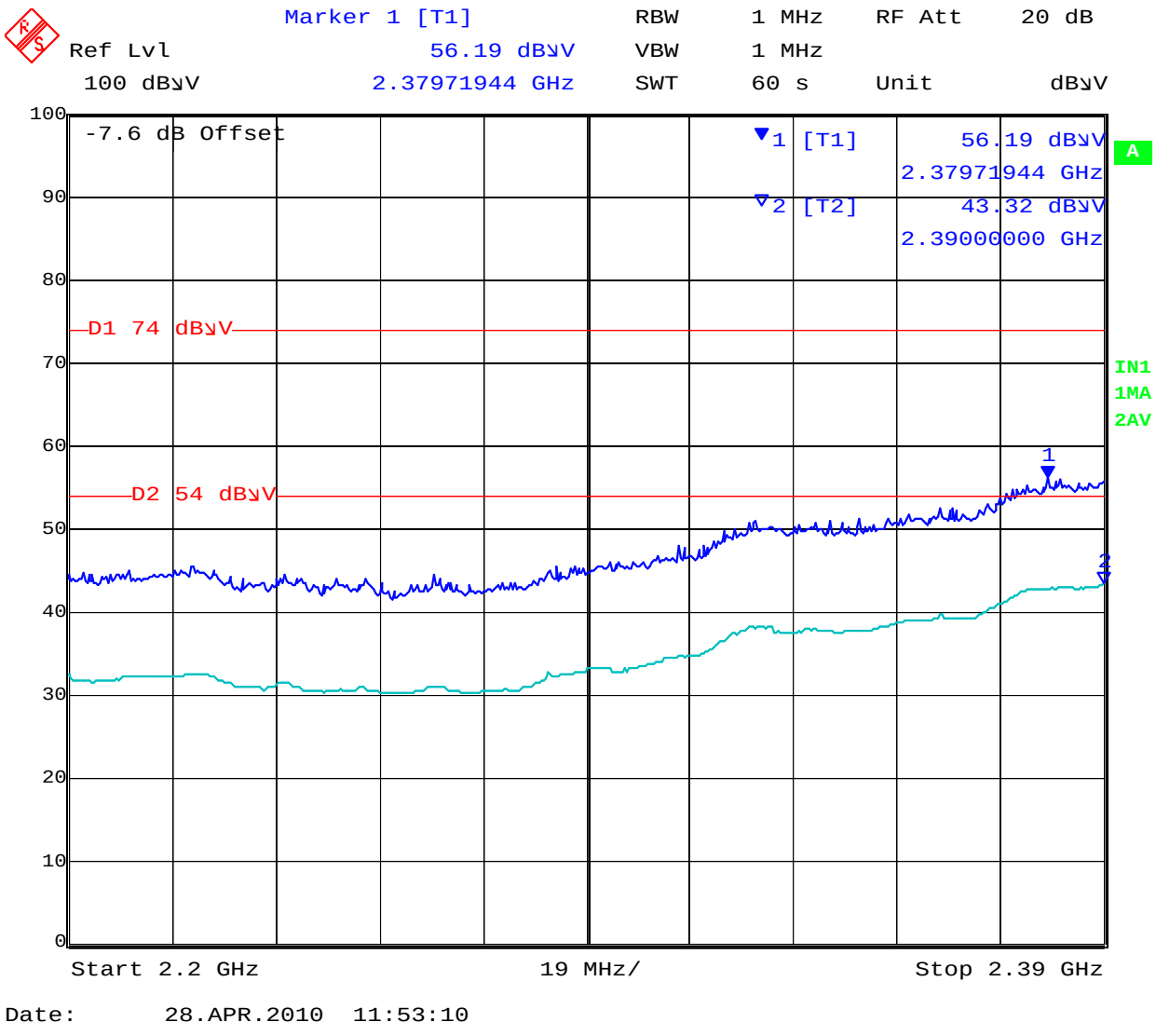
7.6.8 AP-ANT-7 - Transmitter Band edge spurious emissions

2412 MHz - 802.11b; 2200 - 2390 MHz



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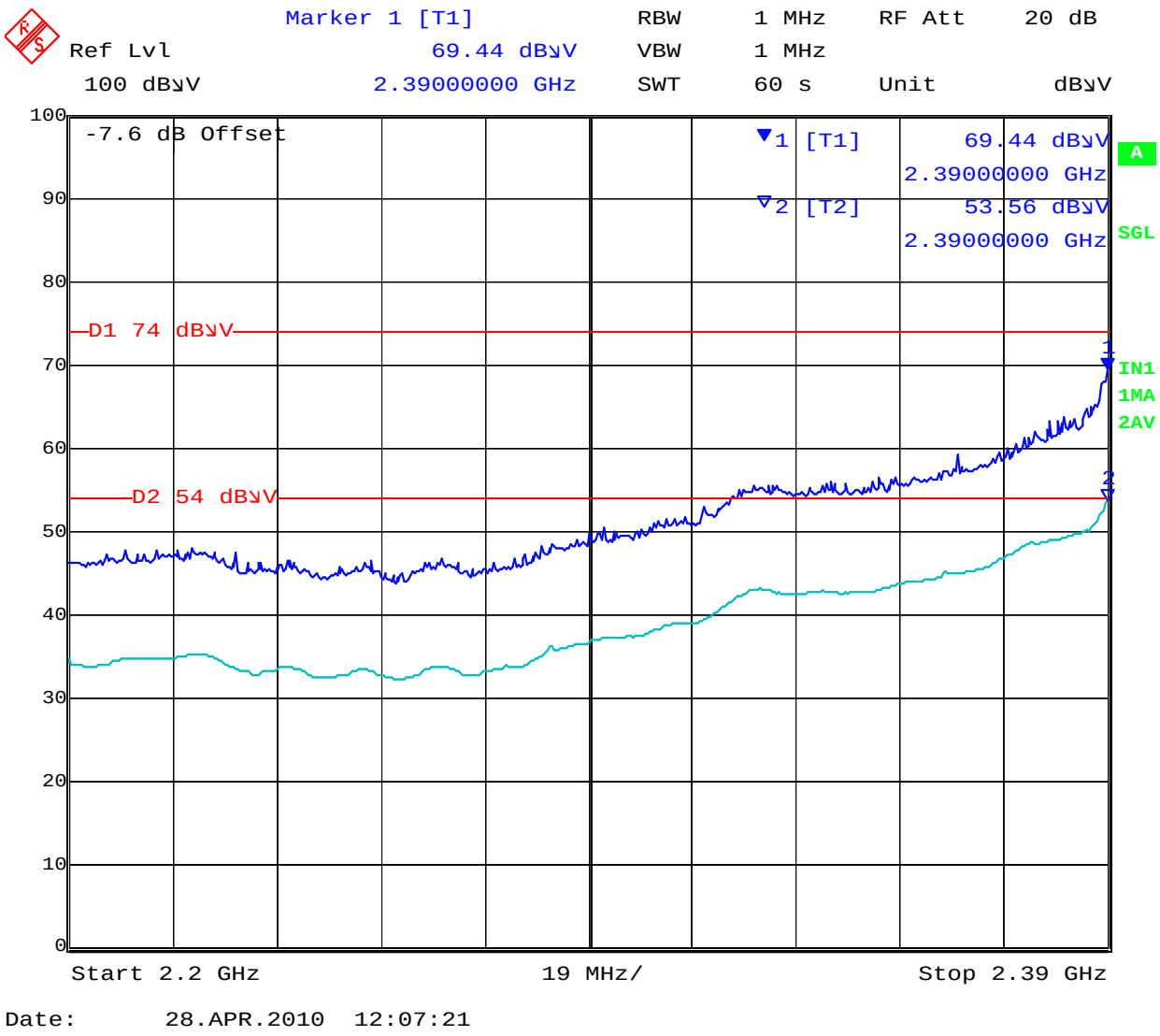
2412 MHz - 802.11g; 2200 - 2390 MHz



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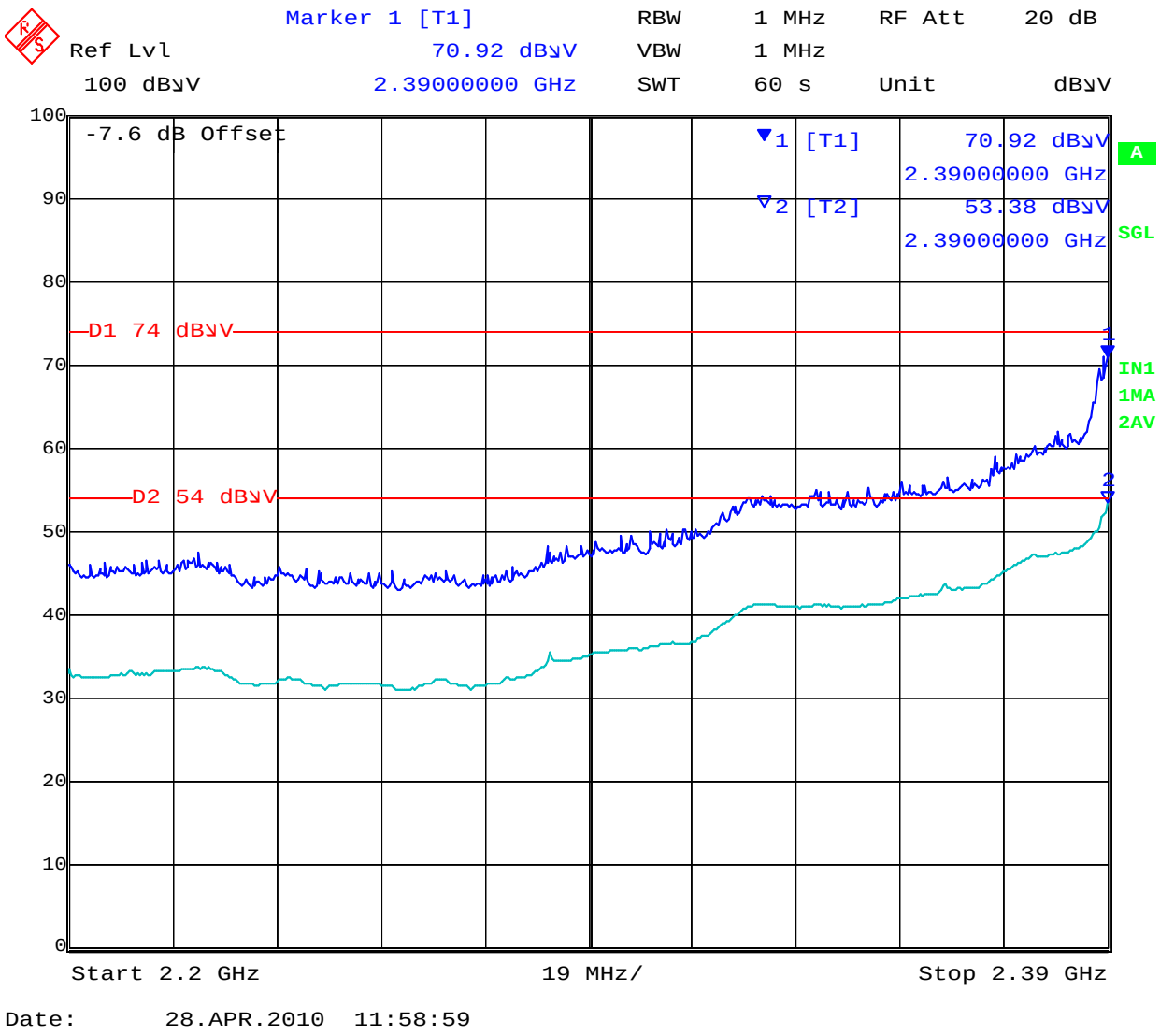
2412 MHz - 802.11n HT-20; 2200 - 2390 MHz



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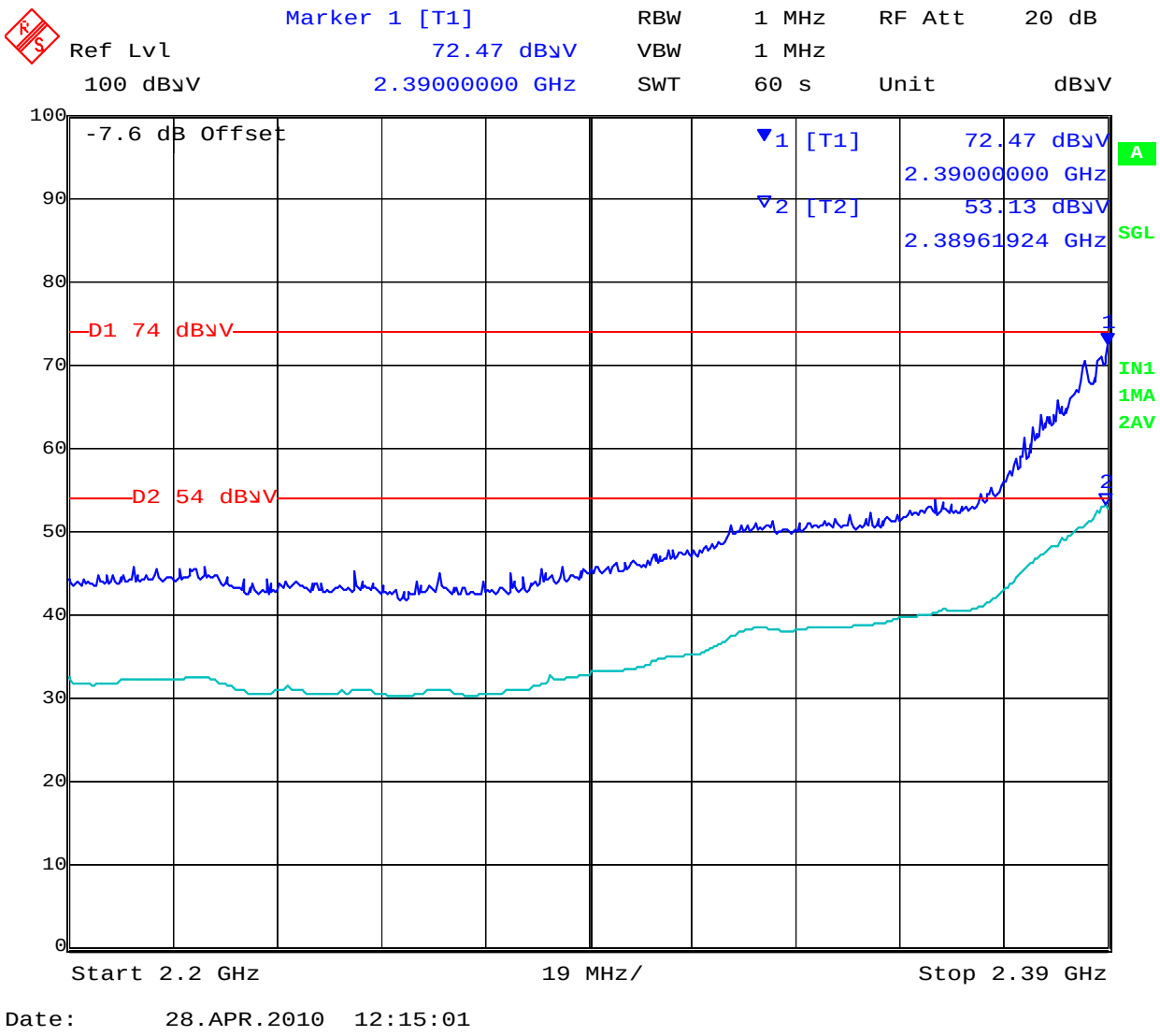
2422 MHz - 802.11n HT-40; 2200 - 2390 MHz



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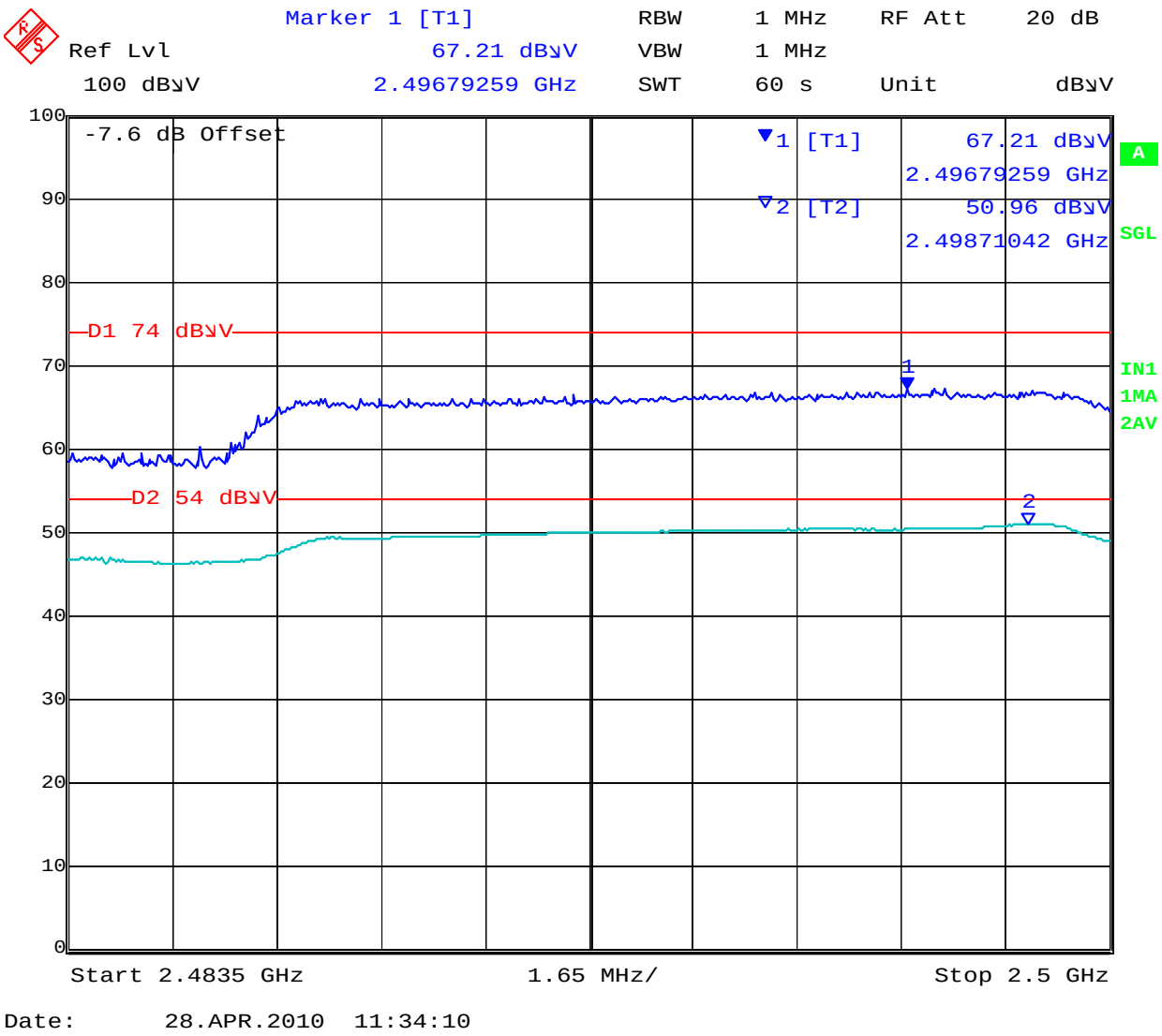
2462 MHz - 802.11b; 2483.5 - 2500 MHz



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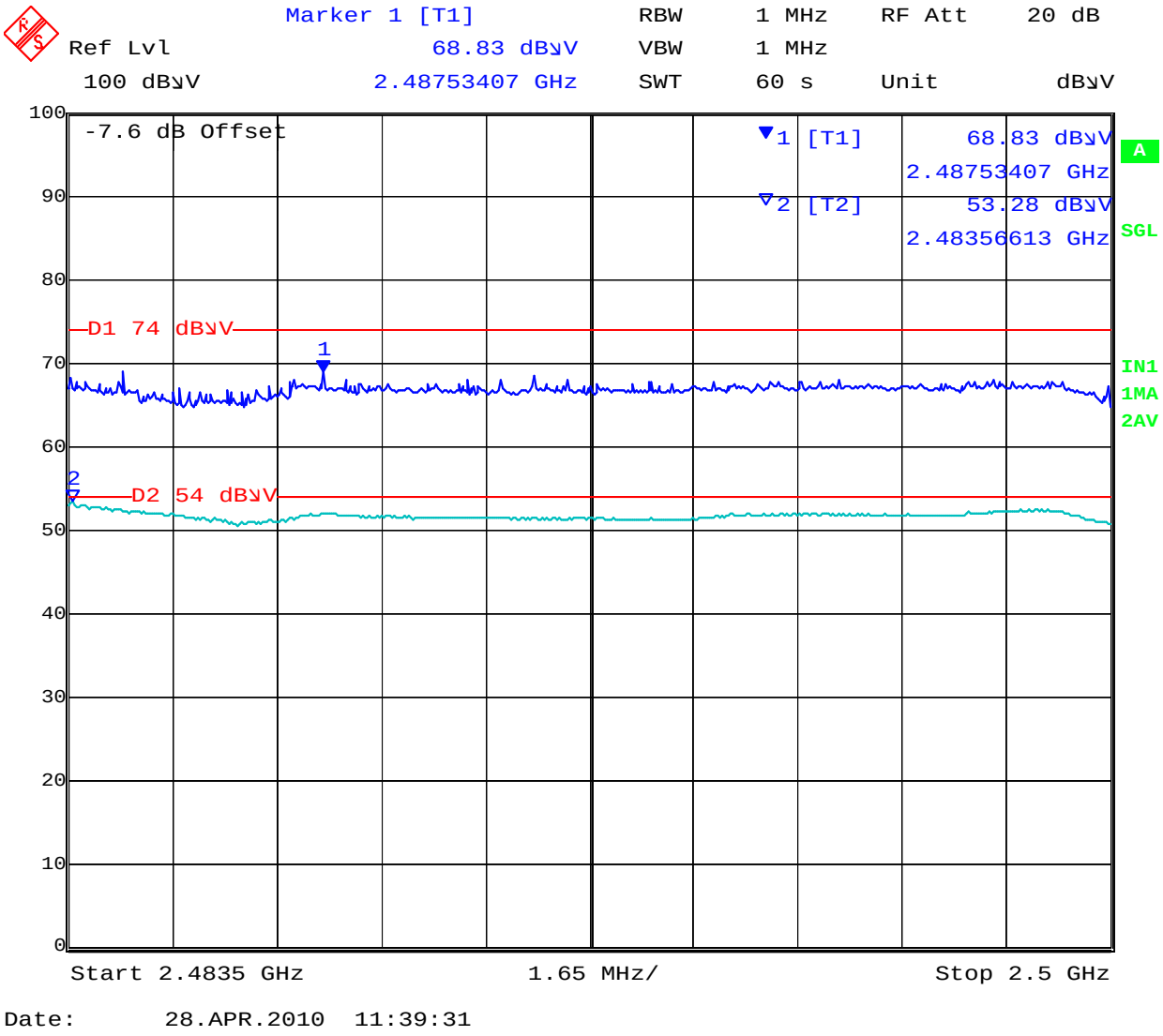
2462 MHz - 802.11g; 2483.5 - 2500 MHz



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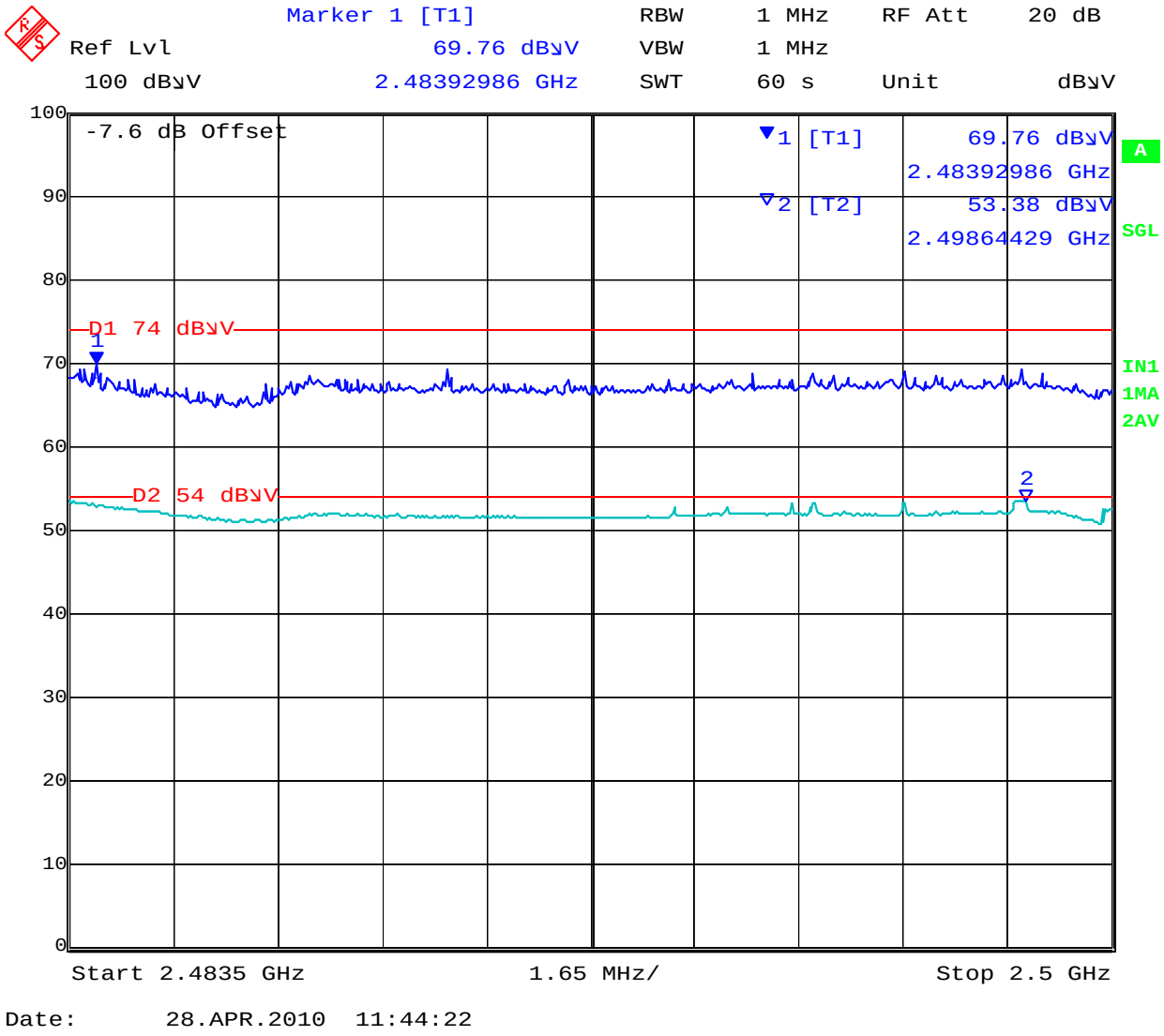
2462 MHz - 802.11n HT-20; 2483.5 - 2500 MHz



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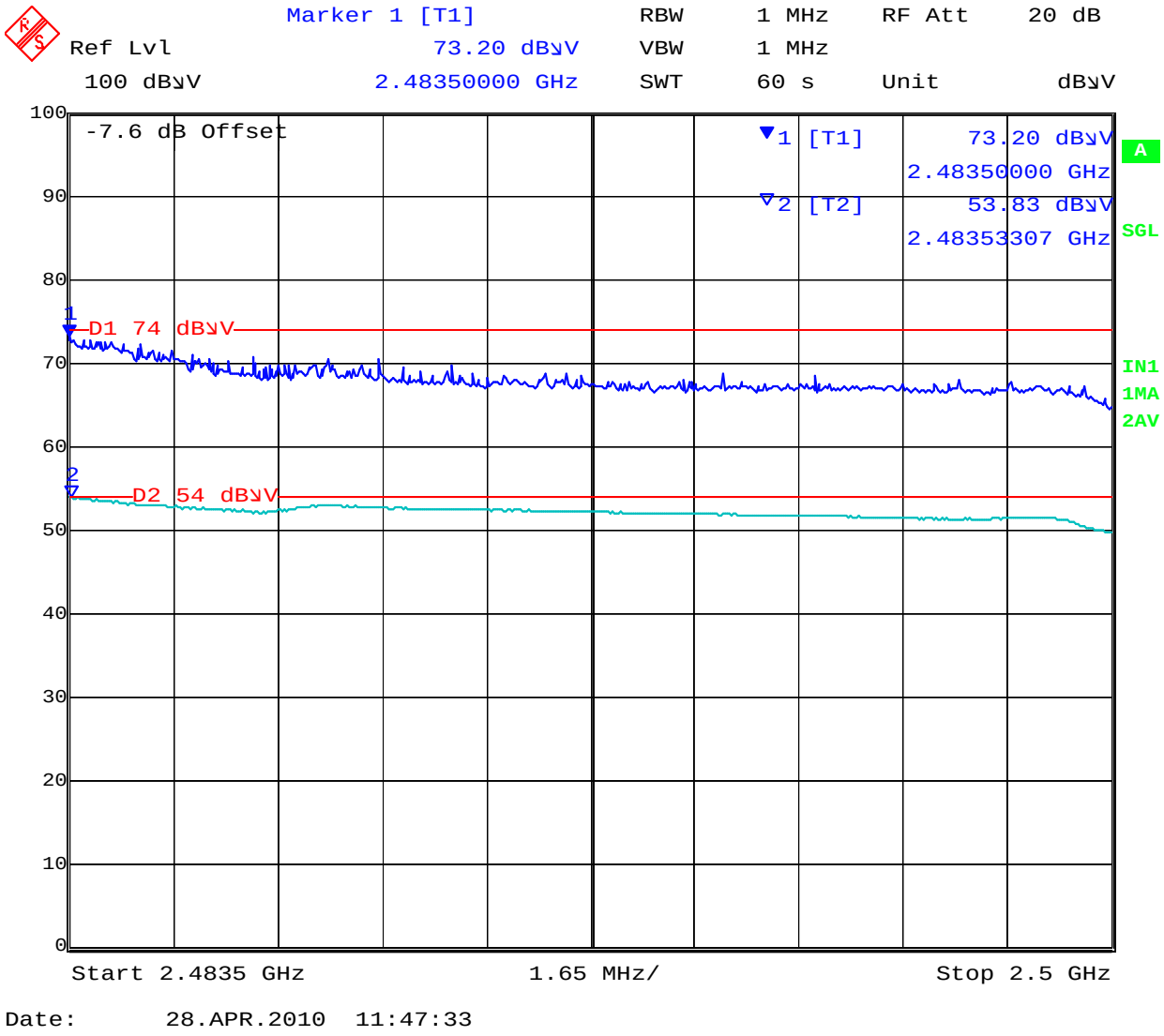
2452 MHz - 802.11n HT-40; 2483.5 - 2500 MHz



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