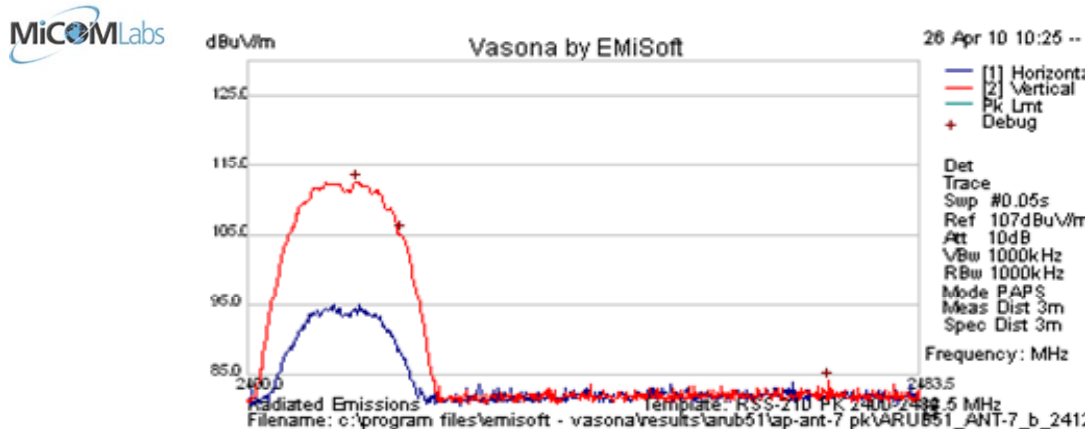
7.6.9 AP-ANT-7 - Transmitter Peak Emissions (RSS-210/RSS-GEN)

2400 – 2483.5 MHz: 802.11b

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (ºC)**	21
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	38
Power Setting	6.5 in ART test utility	**Press. (mBars)**	1002
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

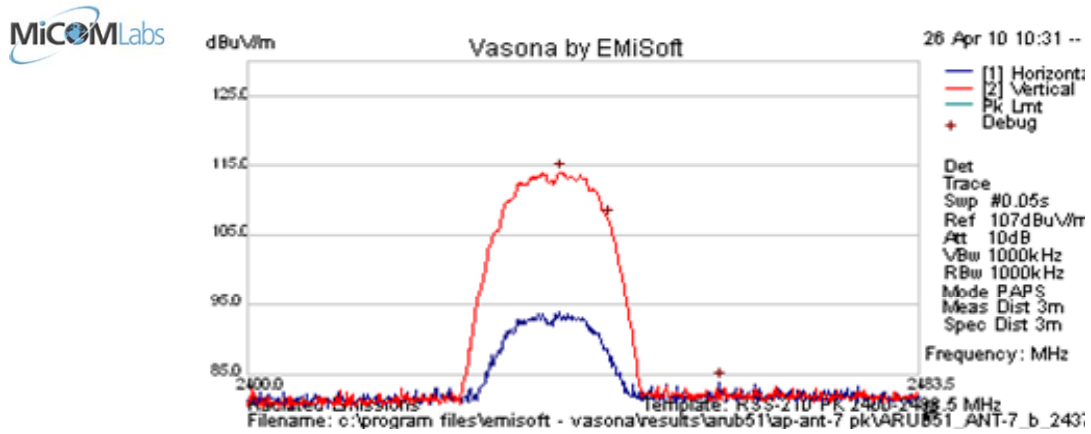


Formally measured emission peaks

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
2413.360	75.0	7.1	30.4	112.6	Peak [Scan]	V						PK

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

Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (°C)**	21
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	38
Power Setting	6 in ART test utility	**Press. (mBars)**	1002
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

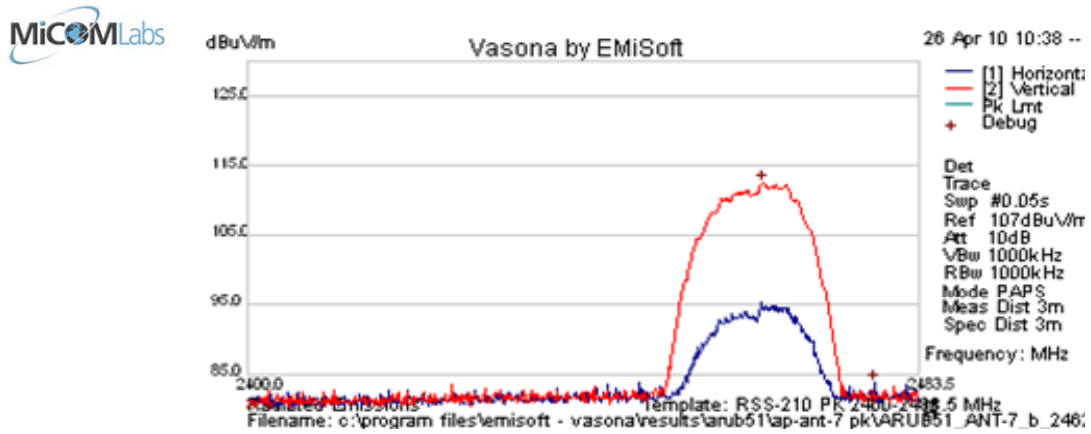


Formally measured emission peaks

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
2438.549	76.4	7.1	30.5	114.0	Peak [Scan]	V						PK

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

Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11b; 1 Mbs	**Temp (°C)**	21
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	38
Power Setting	6 in ART test utility	**Press. (mBars)**	1002
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



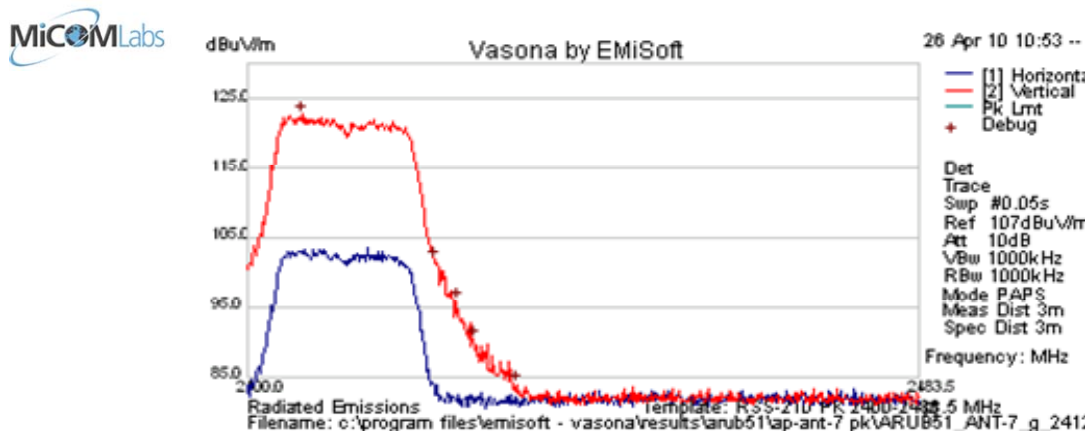
Formally measured emission peaks

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	74.7	7.2	30.6	112.5	Peak [Scan]	V						PK

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

2400 – 2483.5 MHz: 802.11g

Test Freq.	2412 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (ºC)**	21
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	38
Power Setting	13 in ART test utility	**Press. (mBars)**	1002
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

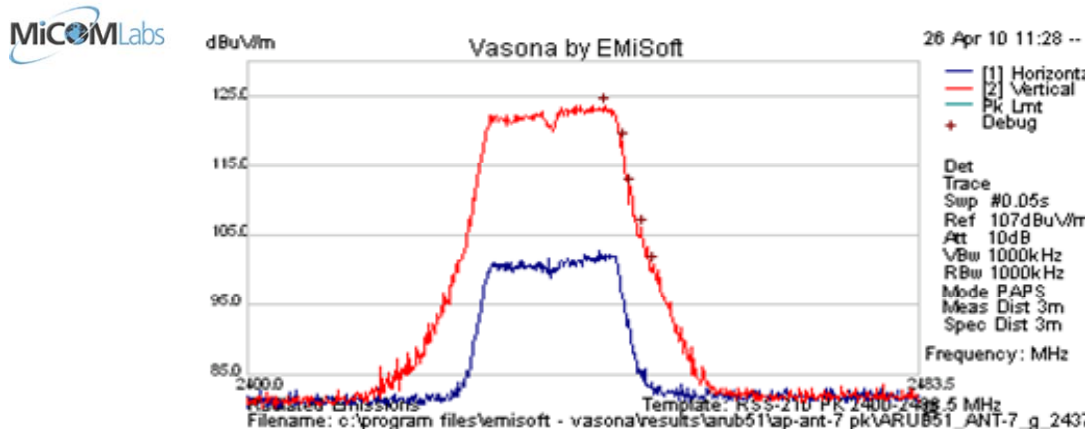


Formally measured emission peaks

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	85.2	7.1	30.4	122.7	Peak [Scan]	V						PK

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

Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	21
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	38
Power Setting	13 in ART test utility	**Press. (mBars)**	1002
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

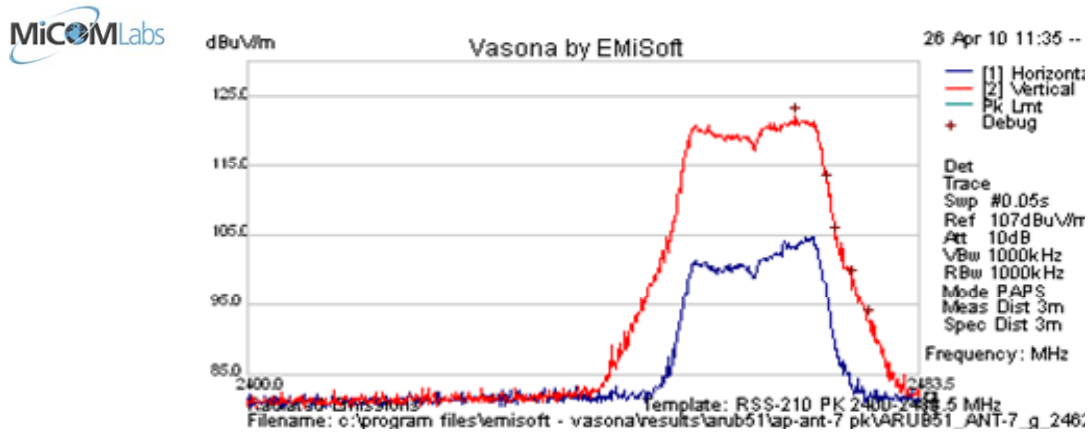


Formally measured emission peaks

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
2444.116	86.0	7.2	30.5	123.7	Peak [Scan]	V						PK

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

Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11g; 6 Mbs	**Temp (°C)**	21
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	38
Power Setting	13 in ART test utility	**Press. (mBars)**	1002
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



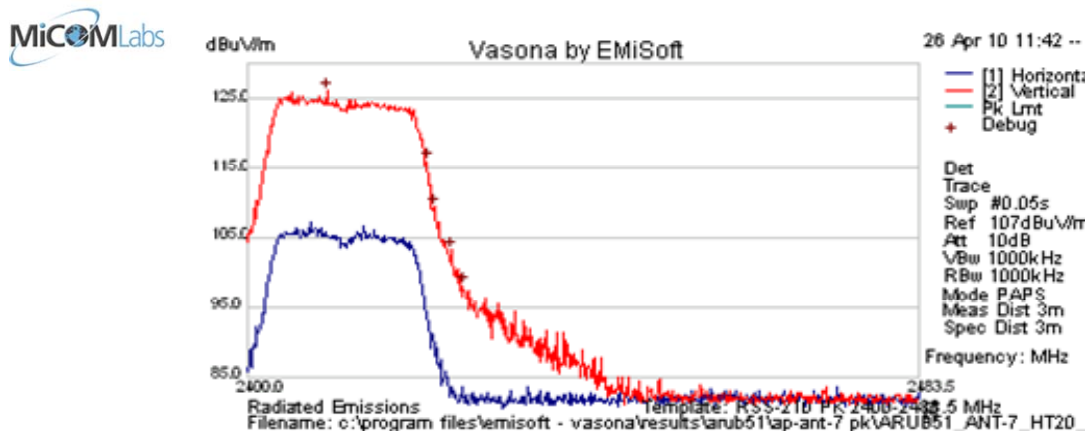
Formally measured emission peaks

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
2467.913	84.4	7.2	30.6	122.1	Peak [Scan]	V						PK

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

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	2400 - 2483.5 MHz	**Rel. Hum.(%)**	38
Power Setting	16 in ART test utility	**Press. (mBars)**	1002
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

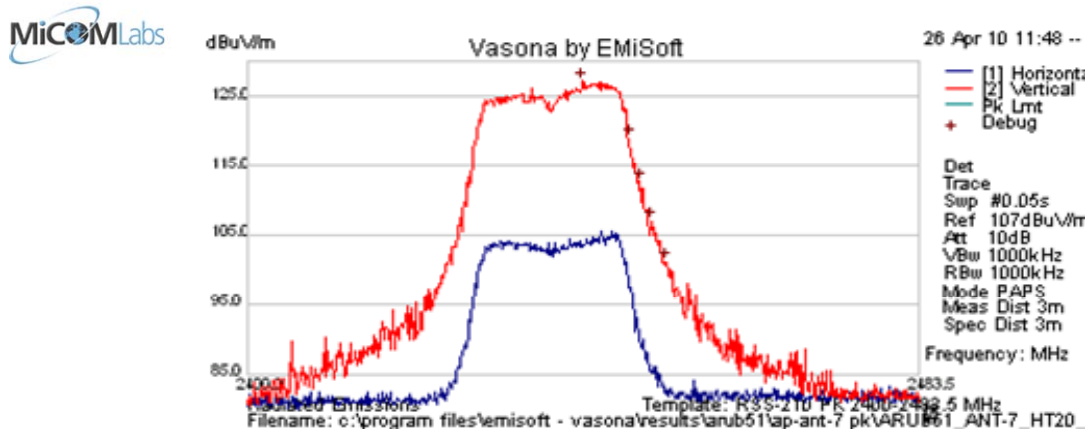


Formally measured emission peaks

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
2409.881	88.5	7.1	30.4	126.0	Peak [Scan]	V						PK

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

Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	21
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	38
Power Setting	16 in ART test utility	**Press. (mBars)**	1002
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

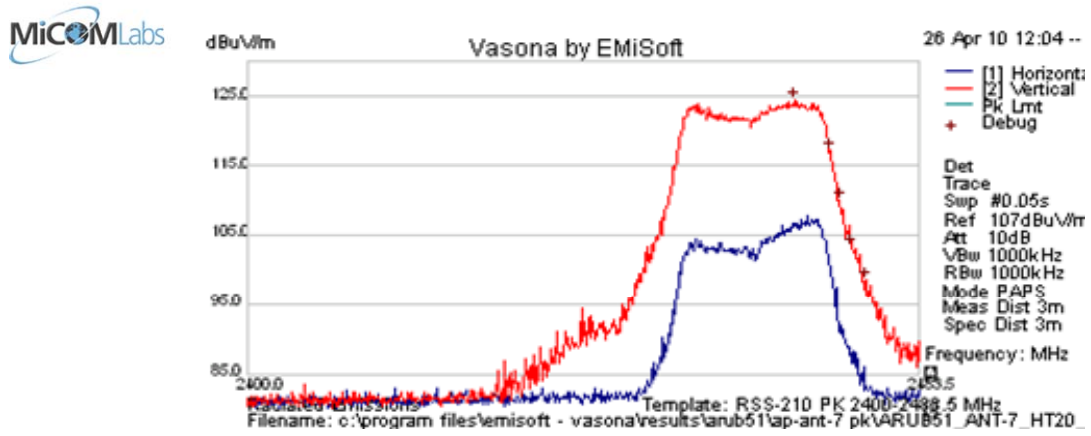


Formally measured emission peaks

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
2441.333	89.5	7.2	30.5	127.2	Peak [Scan]	V						PK

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

Test Freq.	2462 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	21
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	38
Power Setting	15.5 in ART test utility	**Press. (mBars)**	1002
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



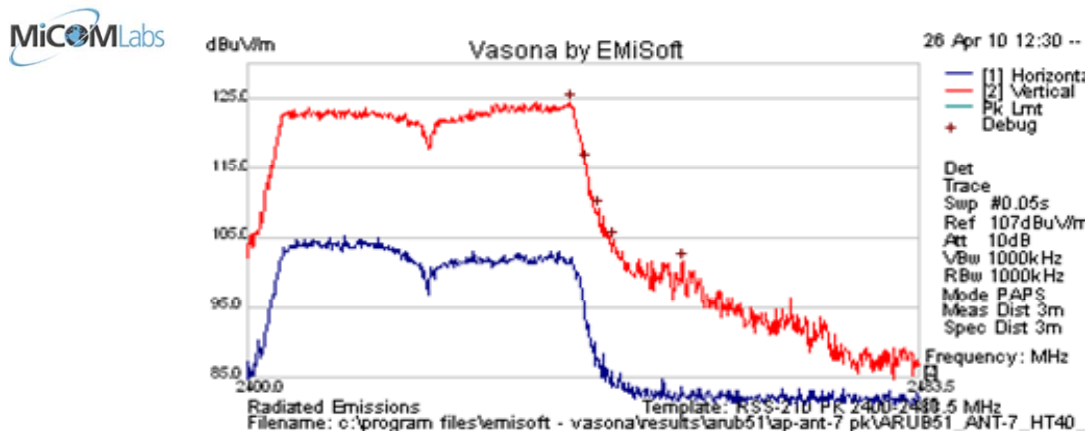
Formally measured emission peaks

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
2467.774	86.7	7.2	30.6	124.5	Peak [Scan]	V						PK

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

2400 – 2483.5 MHz: 802.11n HT-40

Test Freq.	2422 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	21
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	38
Power Setting	18 in ART test utility	**Press. (mBars)**	1002
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

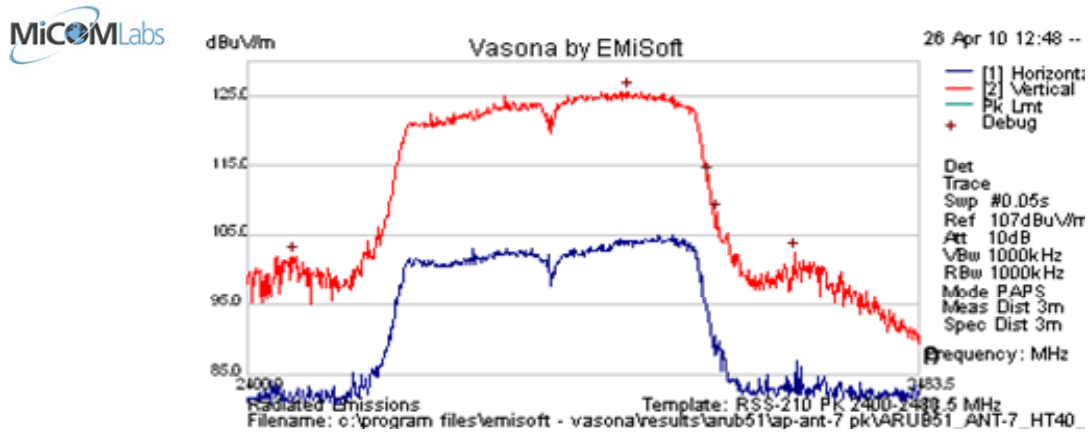


Formally measured emission peaks

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
2439.802	86.9	7.1	30.5	124.5	Peak [Scan]	V						PK

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

Test Freq.	2437 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	21
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	38
Power Setting	18 in ART test utility	**Press. (mBars)**	1002
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

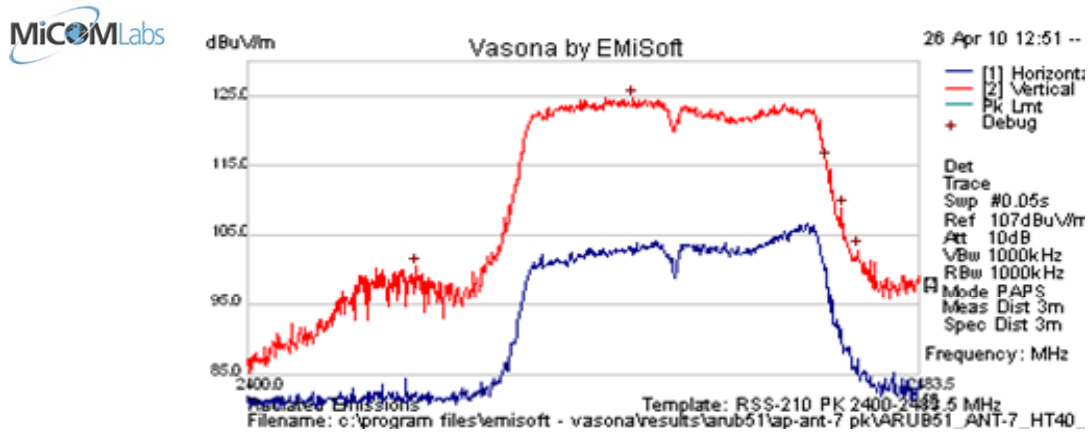


Formally measured emission peaks

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
2447.038	88.0	7.2	30.5	125.7	Peak [Scan]	V						PK

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

Test Freq.	2452 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	21
Freq. Range	2400 - 2483.5 MHz	**Rel. Hum.(%)**	38
Power Setting	18 in ART test utility	**Press. (mBars)**	1002
Antenna	AP-ANT-7	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



Formally measured emission peaks

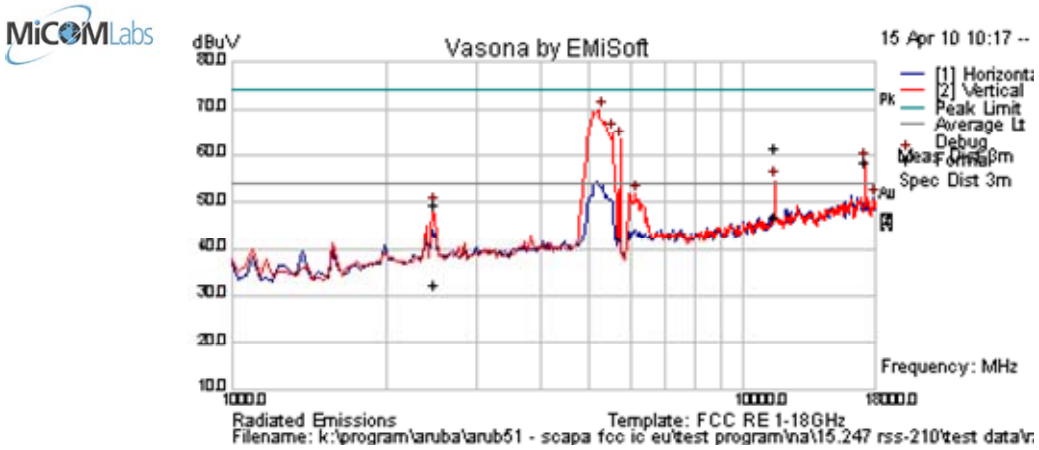
Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
2447.595	87.0	7.2	30.5	124.7	Peak [Scan]	V						PK

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

7.6.10 AP-ANT-10 - Transmitter Radiated Spurious Emissions – Above 1 GHz

5725 – 5850 MHz: 802.11a

Test Freq.	5745 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (ºC)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	18 in ART test utility	**Press. (mBars)**	1009
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		

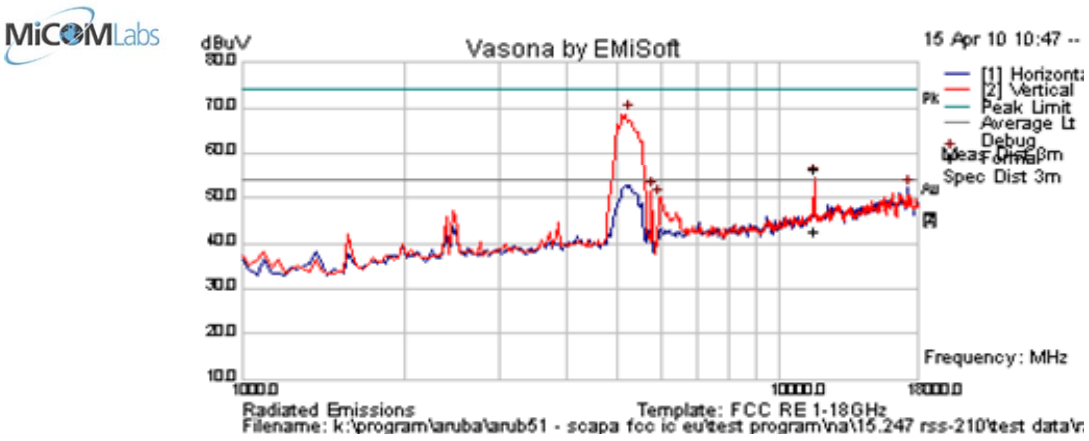


Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
2492.569	57.7	3.0	-11.1	49.6	Peak Max	V	113	317	74.0	-24.4	Pass	RB
2492.56876	40.4	3.0	-11.1	32.2	Average Max	V	113	317	54.0	-21.8	Pass	RB
11493.054	41.4	6.8	-1.1	47.1	Average Max	V	98	347	54	-6.9	Pass	RB
11493.054	56.0	6.8	-1.1	61.7	Peak Max	V	98	347	74	-12.3	Pass	RB
17238.557	48.4	8.6	1.5	58.5	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

Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	13.5 in ART test utility	**Press. (mBars)**	1009
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		

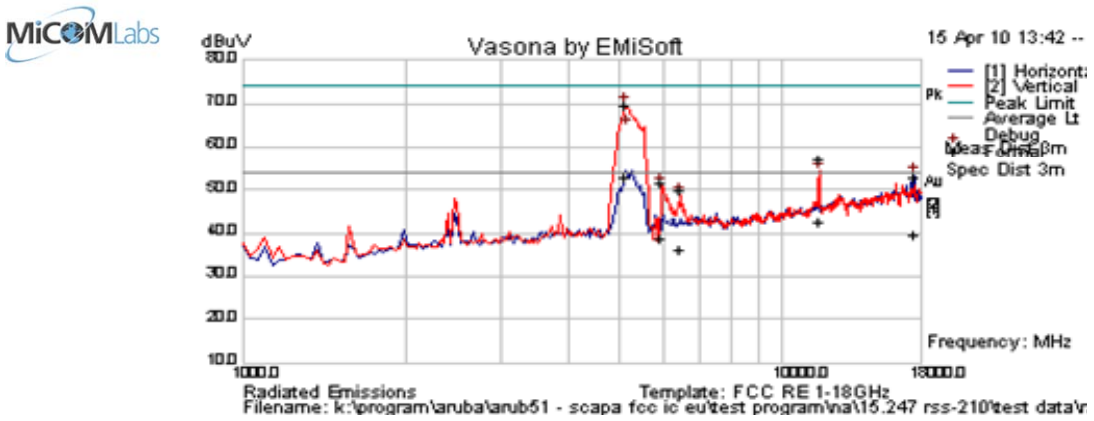


Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
11569.058	50.9	6.8	-1.2	56.5	Peak Max	V	98	350	74.0	-17.5	Pass	RB
11569.058	36.9	6.8	-1.2	42.6	Average Max	V	98	350	54.0	-11.5	Pass	RB
17296.592	41.9	8.7	1.5	52.1	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

Test Freq.	5825 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	10.5 in ART test utility	**Press. (mBars)**	1009
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



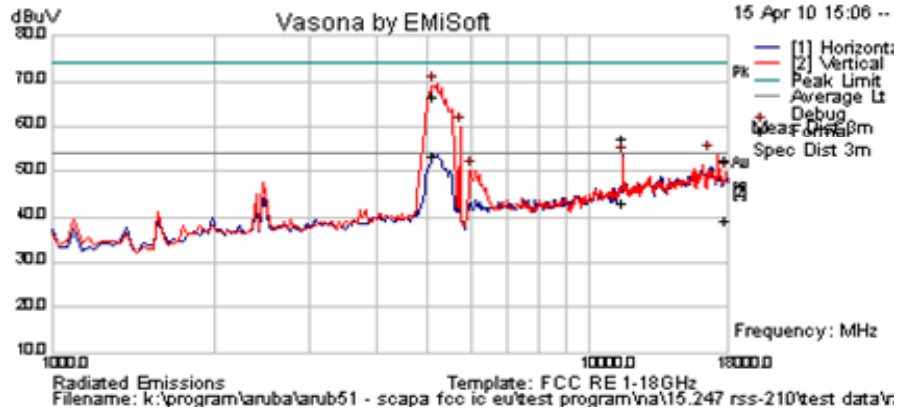
Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5088.064	74.0	4.6	-8.8	69.8	Peak Max	V	132	77	74.0	-4.2	Pass	RB
5088.065	57.1	4.6	-8.8	52.9	Average	V	133	77	54.0	-1.1	Pass	RB
5969.691	55.1	4.9	-8.2	51.8	Peak Max	V	> 20dB below fundamental				Pass	NRB
6478.221	51.4	5.1	-6.5	50.0	Peak Max	V	> 20dB below fundamental				Pass	NRB
11650.093	52.2	6.8	-1.9	57.1	Peak Max	V	101	66	74	-16.9	Pass	RB
11650.093	37.5	6.8	-1.9	42.5	Average Max	V	101	66	54	-11.5	Pass	RB
17545.203	42.9	8.8	1.2	52.9	Peak Max	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

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.(%)**	37
Power Setting	9.5 in ART test utility	**Press. (mBars)**	1009
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		

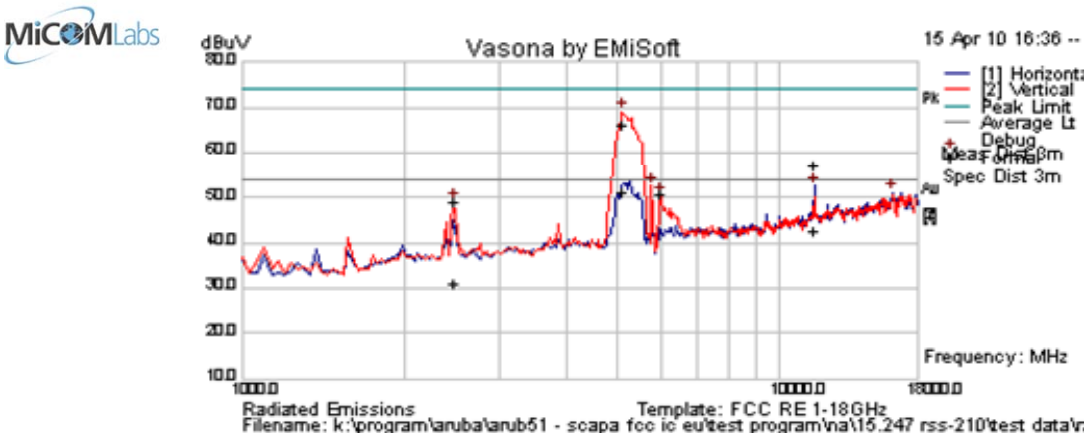


Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5099.320	57.7	4.6	-8.8	53.5	Average	V	112	77	54.0	-0.5	Pass	RB
5099.32	70.7	4.6	-8.8	66.5	Peak	V	112	77	74.0	-7.5	Pass	RB
5984.449	53.6	4.9	-8.3	50.2	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB
11492.305	37.4	6.8	-1.1	43.1	Average Max	V	98	0	54	-10.9	Pass	RB
11492.305	51.7	6.8	-1.1	57.3	Peak Max	V	98	0	74	-16.7	Pass	RB
16646.413	44.2	8.7	1.0	53.9	Peak [Scan]	H	> 20dB below fundamental				Pass	NRB
17846.573	29.8	8.8	0.6	39.2	Average Max	V	164	320	54	-14.8	Pass	RB
17846.573	43.0	8.8	0.6	52.4	Peak Max	H	151	178	74	-21.6	Pass	RB

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

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.(%)**	37
Power Setting	9 in ART test utility	**Press. (mBars)**	1009
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		

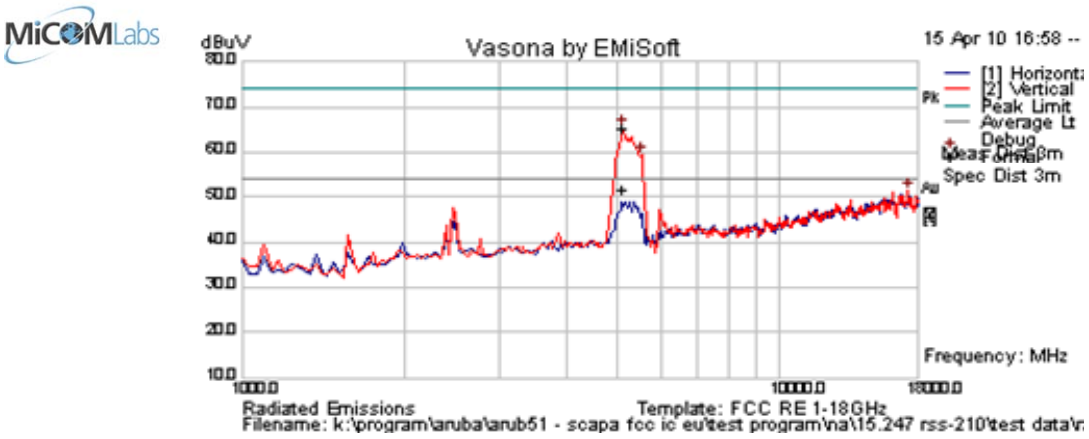


Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
2490.240	39.3	3.0	-11.1	31.2	Average Max	V	138	312	54.0	-22.8	Pass	RB
2490.24	57.1	3.0	-11.1	49.0	Peak Max	V	138	312	74.0	-25.0	Pass	RB
5097.956	55.3	4.6	-8.8	51.1	Average	V	112	78	54	-2.9	Pass	RB
5097.956	70.3	4.6	-8.8	66.1	Peak	V	112	78	74	-7.9	Pass	RB
5983.647	54.0	4.9	-8.3	50.6	Peak [Scan]	V	> 20dB below fundamental				Pass	NRB
11569.659	36.9	6.8	-1.2	42.5	Average Max	V	98	350	54	-11.5	Pass	RB
11569.659	51.5	6.8	-1.2	57.1	Peak Max	V	98	350	74	-16.9	Pass	RB

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

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.(%)**	37
Power Setting	9 in ART test utility	**Press. (mBars)**	1009
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



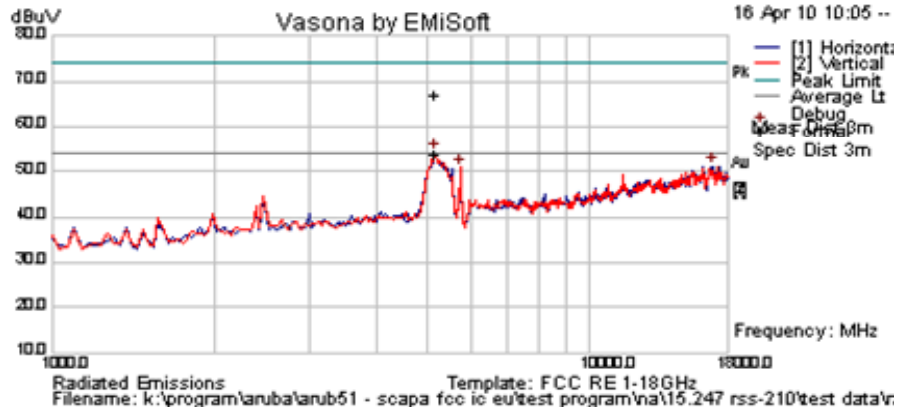
Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5097.583	69.3	4.6	-8.8	65.1	Peak Max	V	138	362	74.0	-8.9	Pass	RB
5097.583	56.0	4.6	-8.8	51.8	Average Max	V	138	362	54.0	-2.2	Pass	RB

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

5725 – 5850 MHz: 802.11n HT-40

Test Freq.	5755 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	10.5 in ART test utility	**Press. (mBars)**	1009
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		

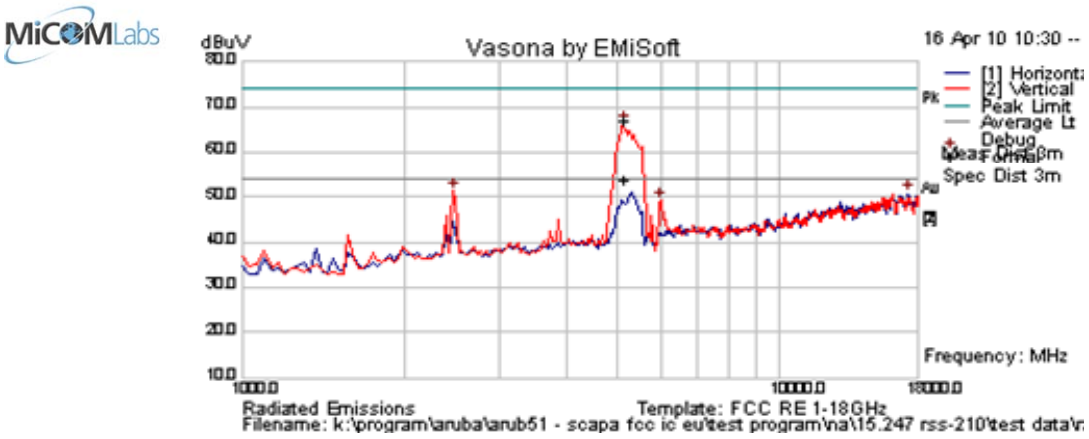


Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5140.638	71.9	4.6	-9.4	67.1	Peak Max	V	113	58	74.0	-6.9	Pass	RB
5139.5561	58.3	4.6	-9.4	53.6	Average Max	V	103	14	54.0	-0.4	Pass	RB

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

Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	10.5 in ART test utility	**Press. (mBars)**	1009
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		

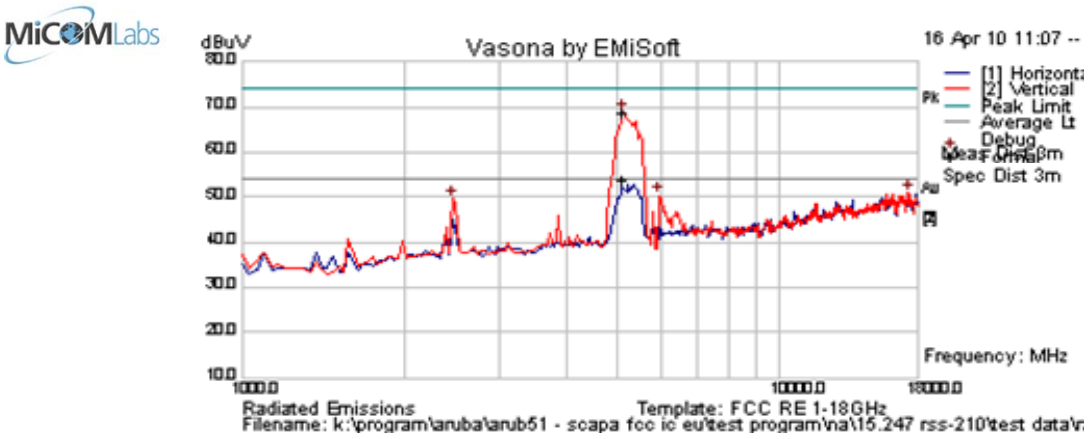


Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5140.201	71.9	4.6	-9.4	67.1	Peak Max	V	101	74	74.0	-6.9	Pass	RB
5140.201	58.7	4.6	-9.4	53.9	Average Max	V	101	74	54.0	-0.1	Pass	RB

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

Test Freq.	5815 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (°C)**	21
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	9.5 in ART test utility	**Press. (mBars)**	1009
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



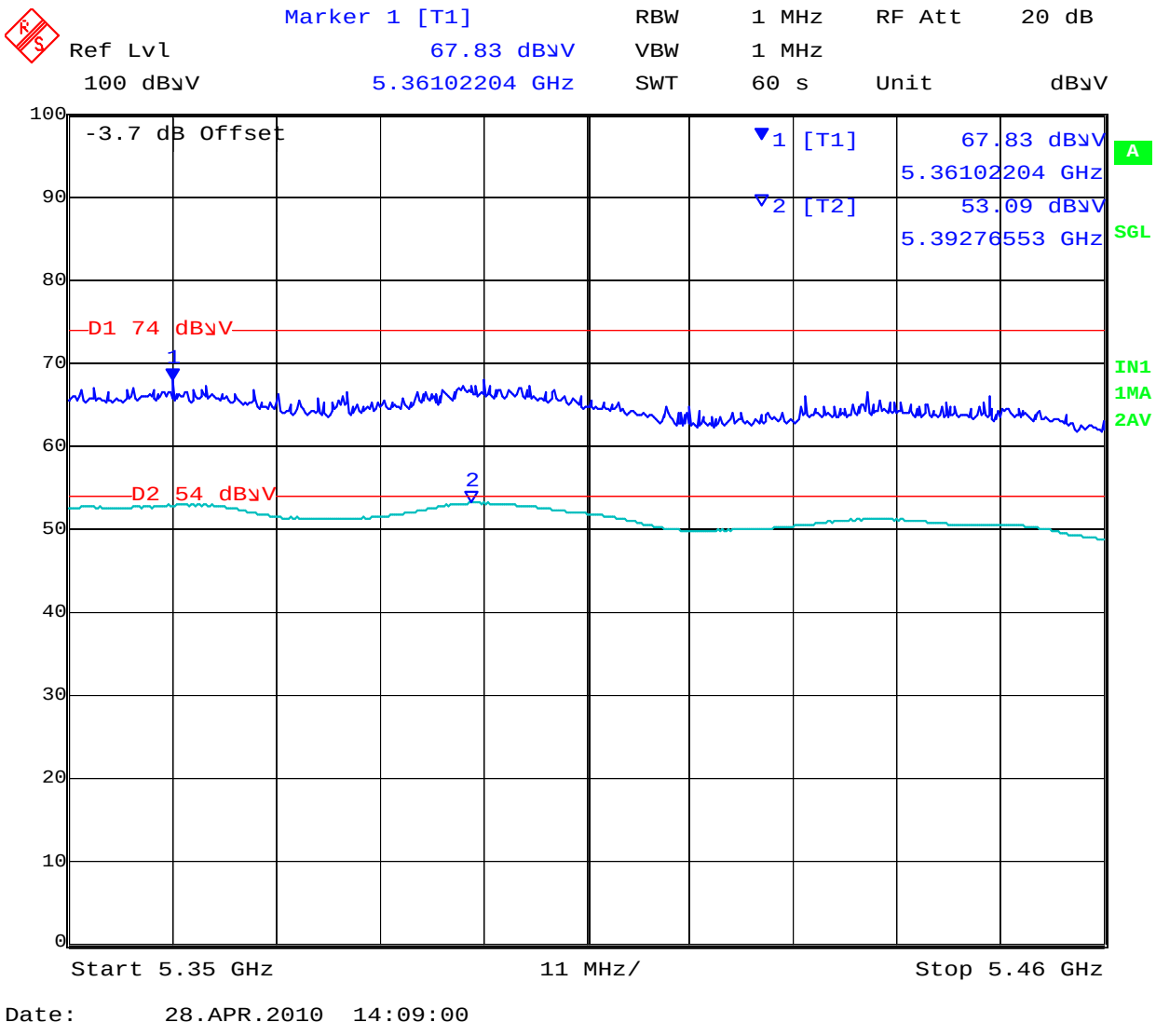
Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5097.099	72.8	4.6	-8.8	68.7	Peak Max	V	115	60	74.0	-5.3	Pass	RB
5097.049	57.8	4.6	-8.8	53.7	Average	V	115	60	54.0	-0.3	Pass	RB

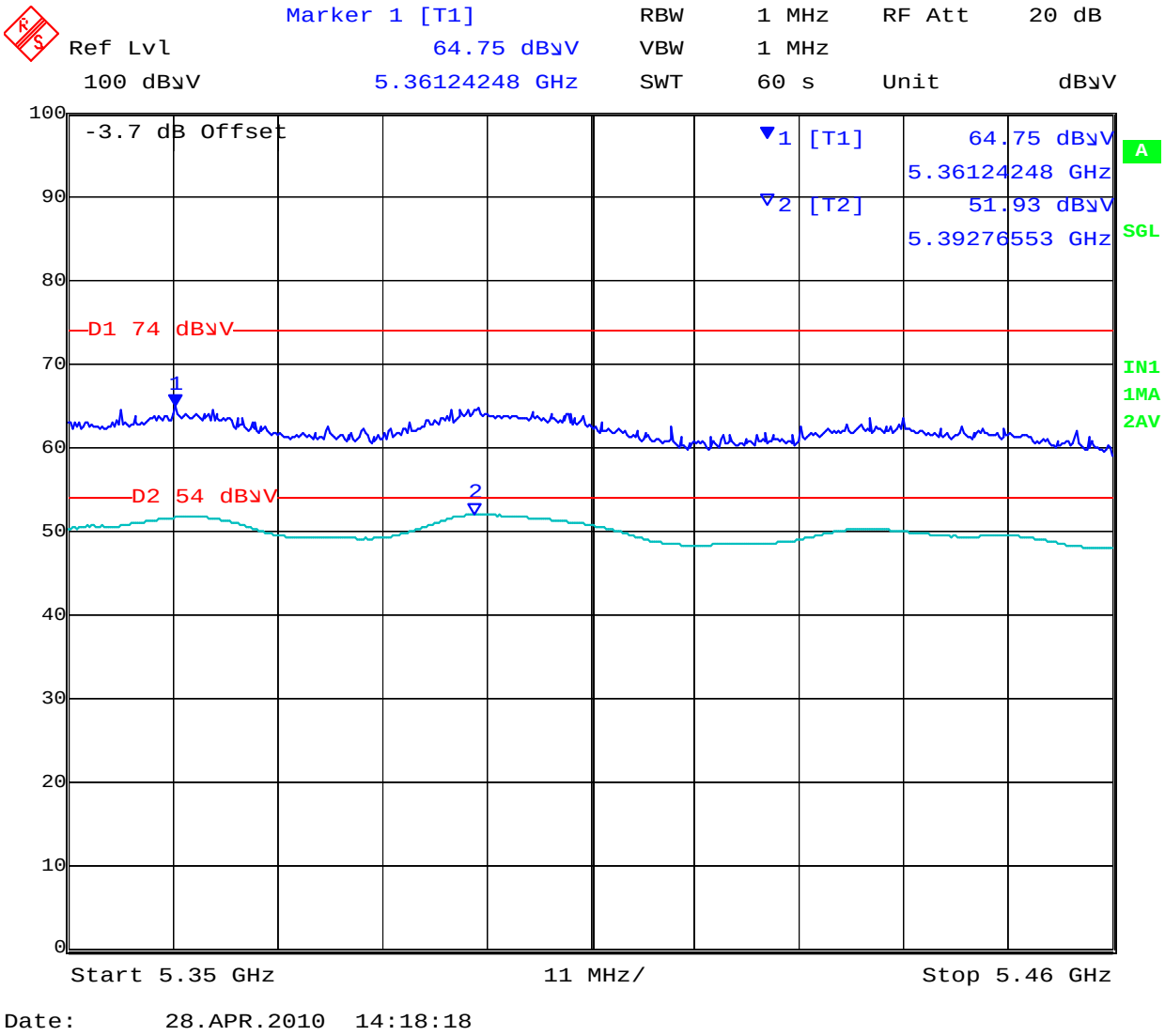
Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

7.6.11 AP-ANT-10 - Transmitter Band edge spurious emissions

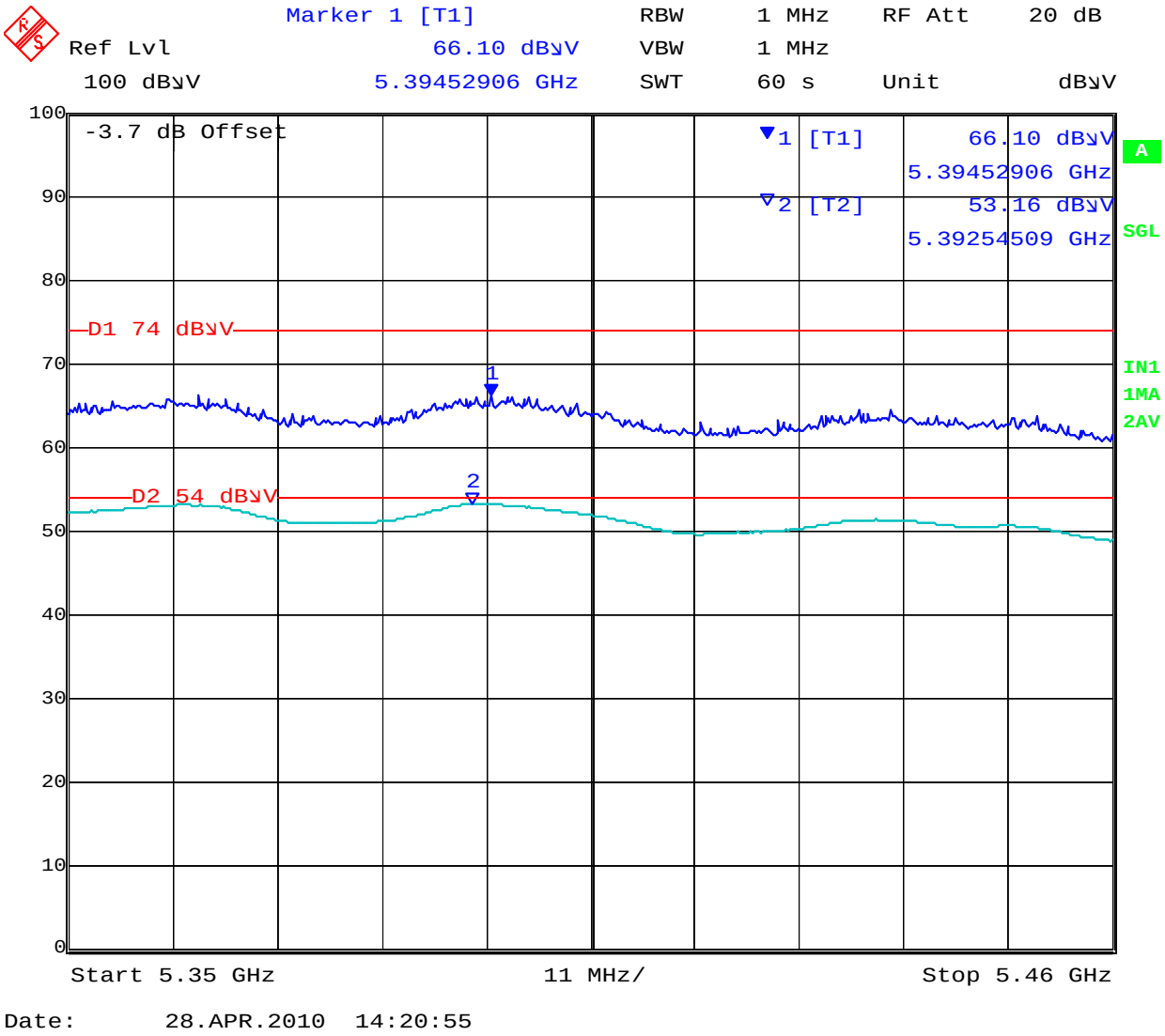
5745 MHz - 802.11a; 5350 - 5460 MHz



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



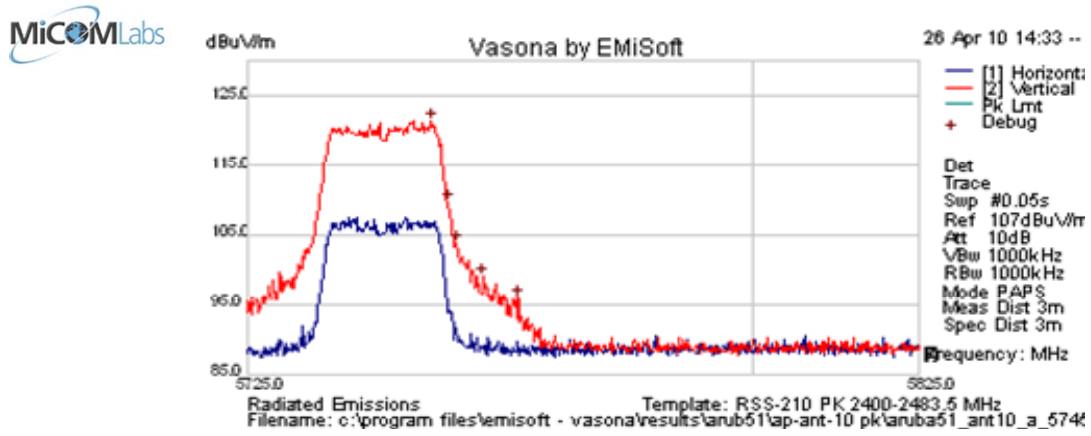
5755 MHz - 802.11n HT-40; 5350 - 5460 MHz



7.6.12 AP-ANT-10 - Transmitter Peak Emissions (RSS-210/RSS-GEN)

5725 – 5850 MHz: 802.11a

Test Freq.	5745 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (ºC)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	34
Power Setting	18 in art	**Press. (mBars)**	1005
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

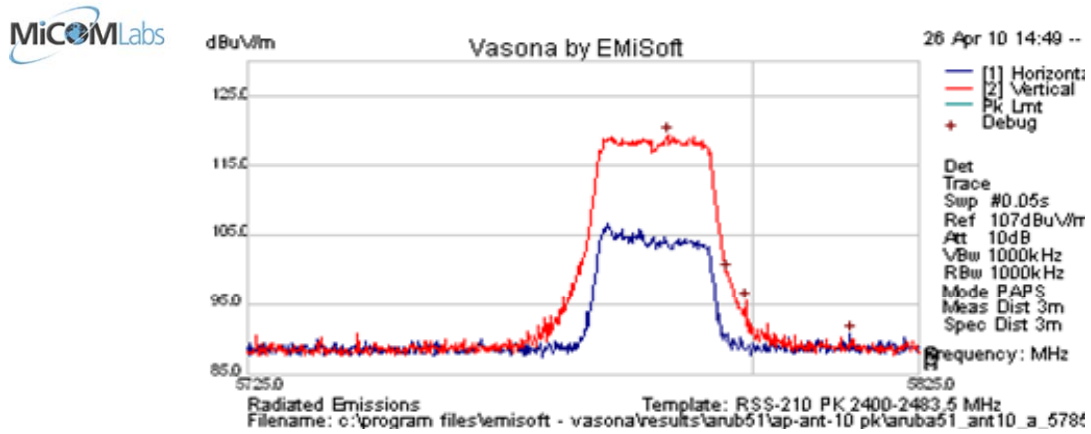


Formally measured emission peaks

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
5752.333	73.1	11.9	36.5	121.4	Peak [Scan]	V						PK

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

Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (°C)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	34
Power Setting	13.5 in art	**Press. (mBars)**	1005
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

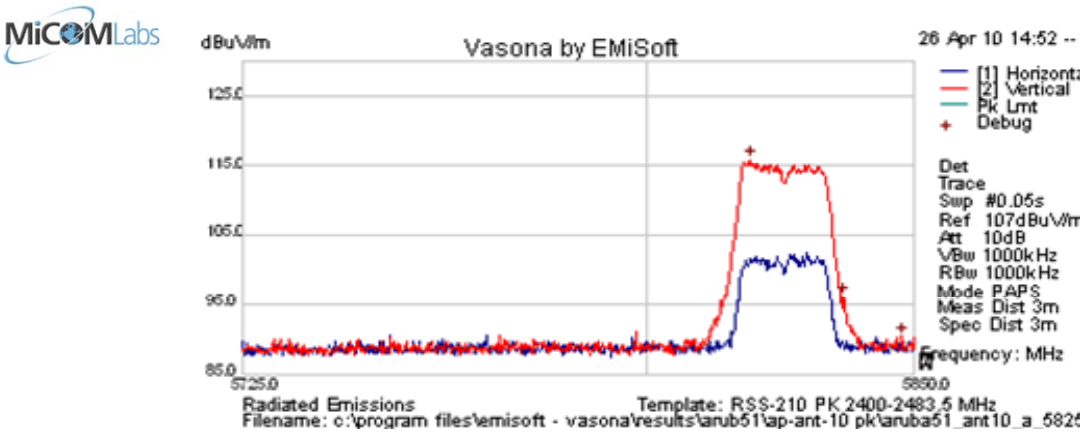


Formally measured emission peaks

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
5787.500	71.0	12.0	36.5	119.5	Peak [Scan]	V						PK

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

Test Freq.	5825 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (°C)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	34
Power Setting	10.5 in art	**Press. (mBars)**	1005
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



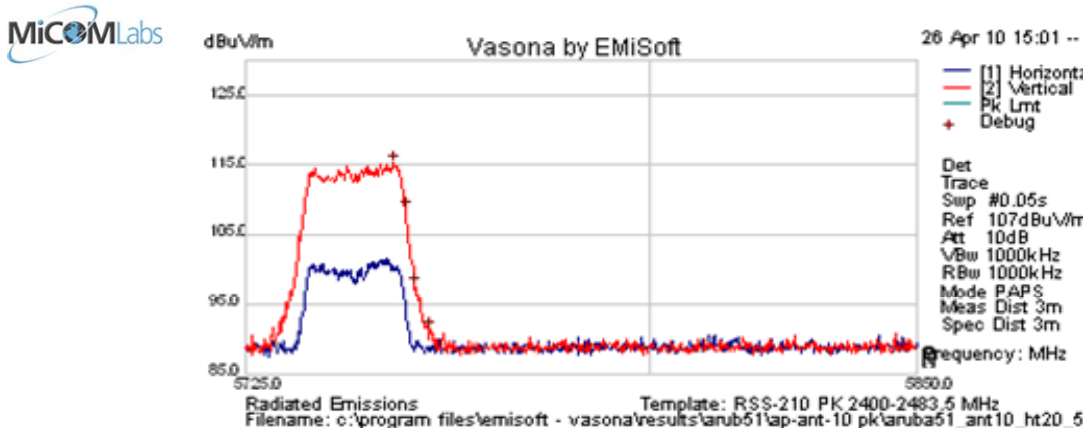
Formally measured emission peaks

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
5819.375	67.4	12.0	36.6	115.9	Peak [Scan]	V						PK

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

5725 – 5850 MHz: 802.11n HT-20

Test Freq.	5745 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (ºC)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	34
Power Setting	9.5 in art	**Press. (mBars)**	1005
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

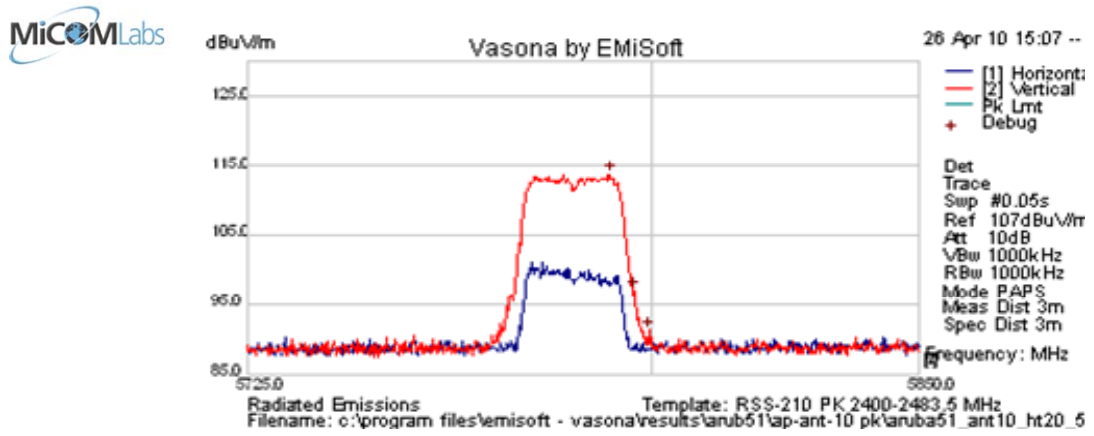


Formally measured emission peaks

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
5752.500	66.9	11.9	36.5	115.3	Peak [Scan]	V						PK

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

Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	34
Power Setting	9 in art	**Press. (mBars)**	1005
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

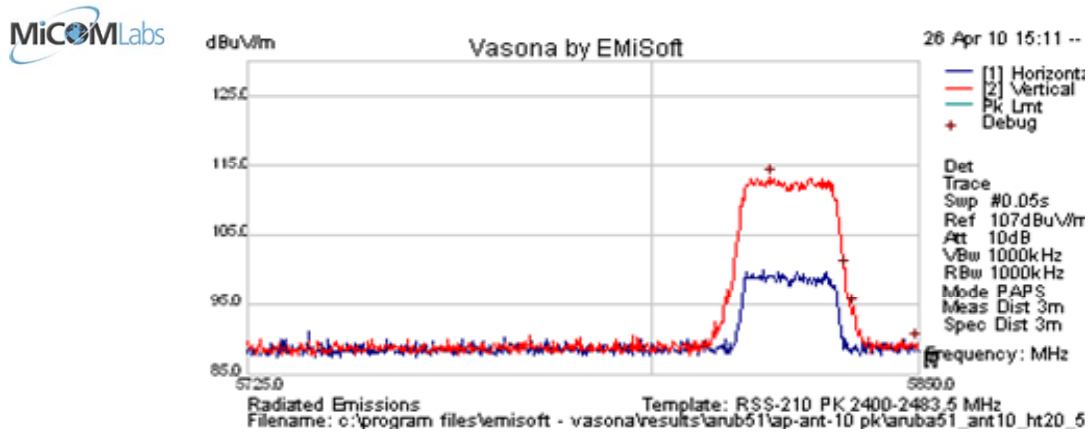


Formally measured emission peaks

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
5792.292	65.2	12.0	36.5	113.7	Peak [Scan]	V						PK

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

Test Freq.	5825 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	34
Power Setting	9 in art	**Press. (mBars)**	1005
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



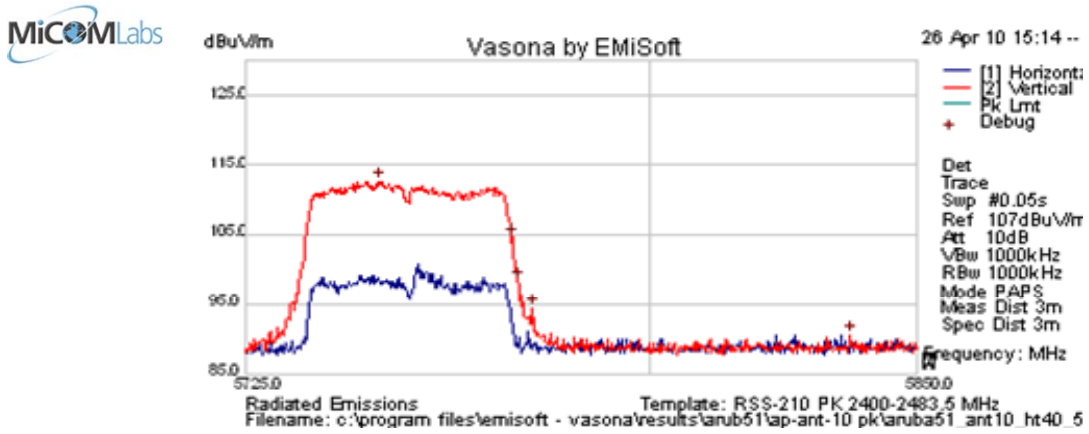
Formally measured emission peaks

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
5822.083	64.7	12.0	36.6	113.3	Peak [Scan]	V						PK

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

5725 – 5850 MHz: 802.11n HT-40

Test Freq.	5755 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	34
Power Setting	10.5 in art	**Press. (mBars)**	1005
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

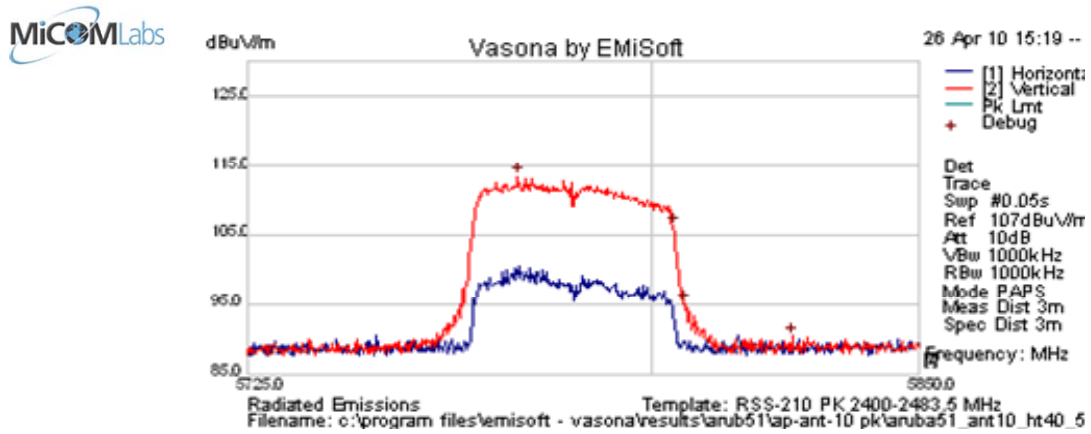


Formally measured emission peaks

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
5750.000	64.2	11.9	36.5	112.6	Peak [Scan]	V						PK

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

Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	34
Power Setting	10.5 in art	**Press. (mBars)**	1005
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

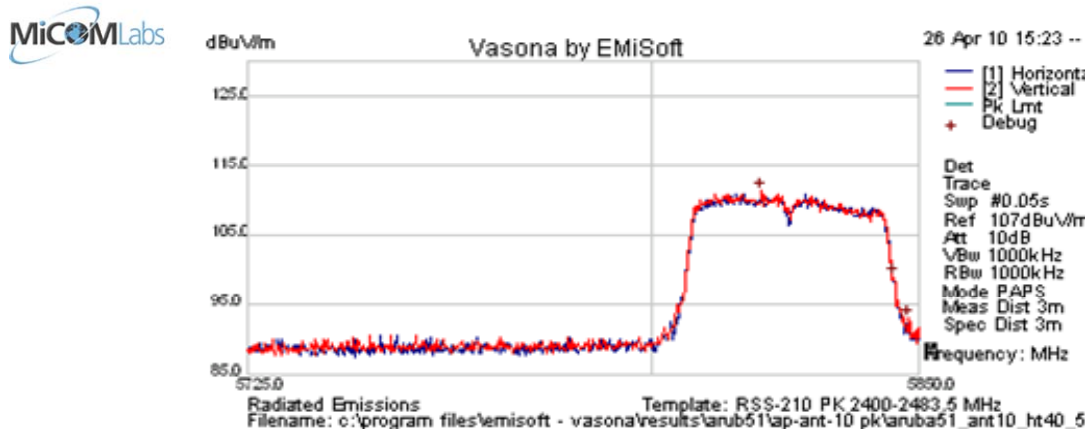


Formally measured emission peaks

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
5775.000	65.0	12.0	36.5	113.5	Peak [Scan]	V						PK

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

Test Freq.	5815 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	34
Power Setting	9.5 in art	**Press. (mBars)**	1005
Antenna	AP-ANT-10	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



Formally measured emission peaks

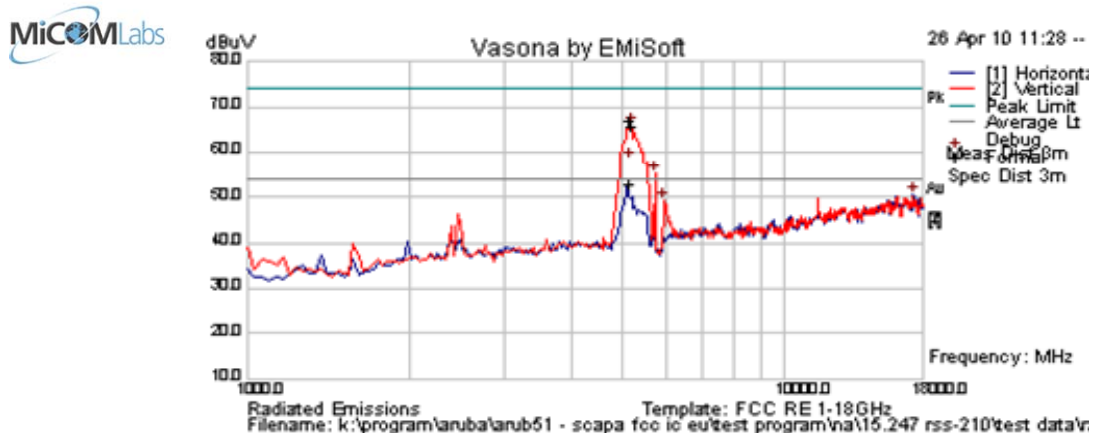
Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
5820.417	62.7	12.0	36.6	111.3	Peak [Scan]	V						PK

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

7.6.13 AP-ANT-12 - Transmitter Radiated Spurious Emissions – Above 1 GHz

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.(%)**	37
Power Setting	7 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		

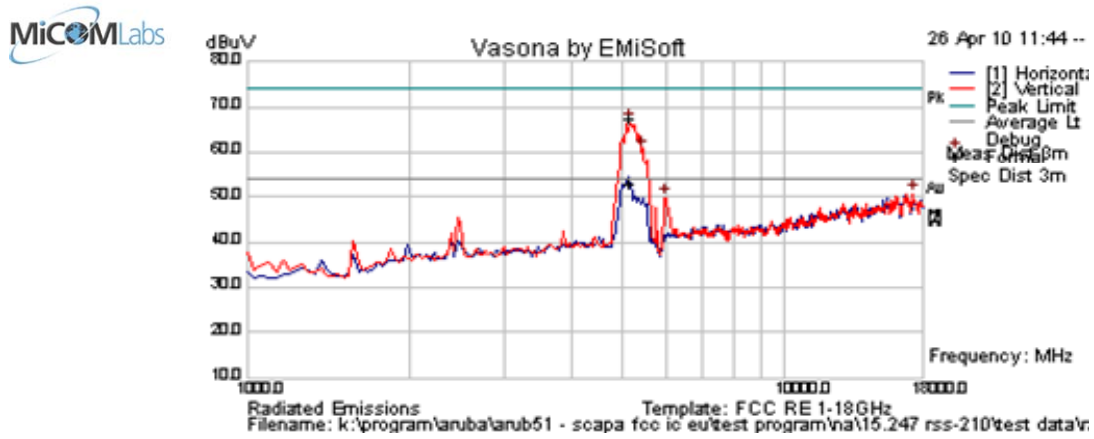


Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5135.571	57.6	4.6	-9.3	52.9	Average	V	100	360	54.0	-1.1	Pass	RB
5135.571	71.9	4.6	-9.3	67.2	Peak	V	100	360	74.0	-6.8	Pass	RB
5190.381	70.3	4.6	-9.2	65.8	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

Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	6.5 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		

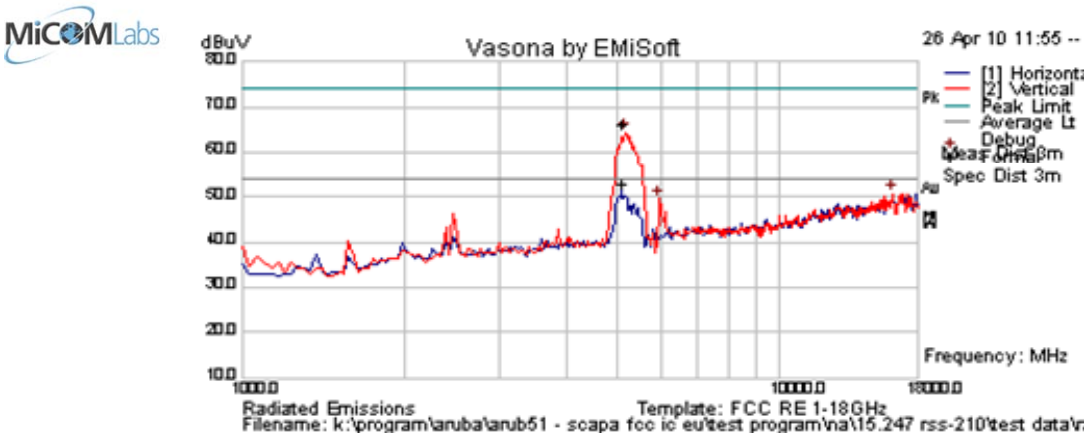


Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5136.408	72.3	4.6	-9.3	67.6	Peak Max	V	99	348	74.0	-6.4	Pass	RB
5136.408	57.7	4.6	-9.3	53.1	Average Max	V	99	348	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

Test Freq.	5825 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	6.5 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



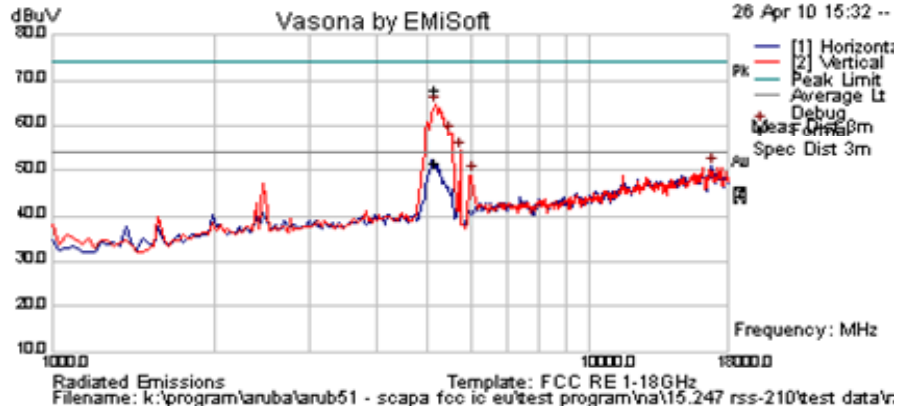
Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5098.297	70.4	4.6	-8.8	66.3	Peak Max	V	102	348	74.0	-7.8	Pass	RB
5098.297	57.1	4.6	-8.8	52.9	Average Max	V	102	348	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

5725 – 5850 MHz: 802.11n HT-20

Test Freq.	5745 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	6.0 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		

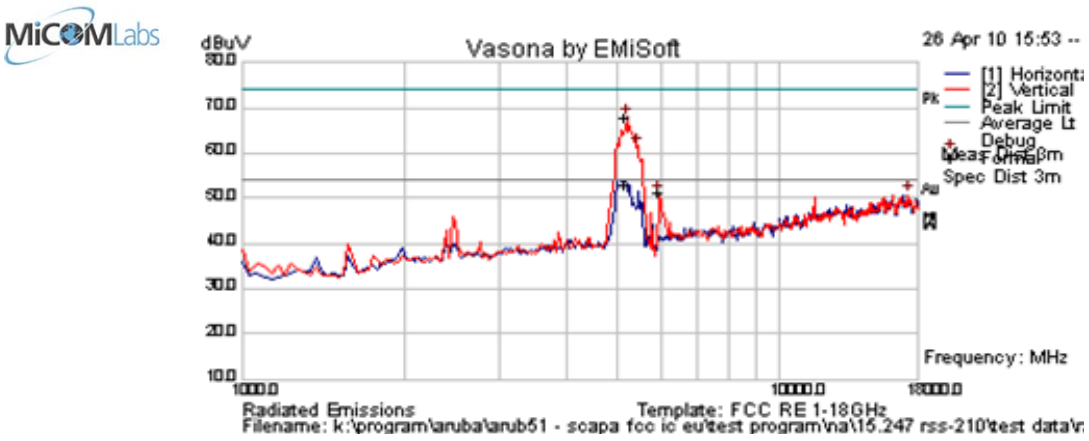


Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5136.399	72.5	4.6	-9.3	67.9	Peak Max	V	98	342	74.0	-6.1	Pass	RB
5136.399	56.4	4.6	-9.3	51.8	Average Max	V	98	342	54.0	-2.3	Pass	RB

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

Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	6.5 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		

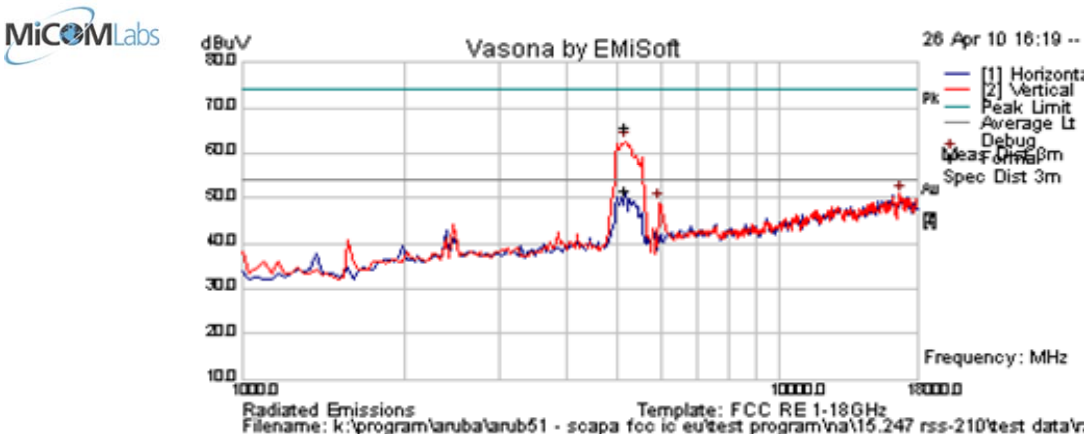


Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5137.675	72.8	4.6	-9.3	68.1	Peak Max	V	101	346	74.0	-5.9	Pass	RB
5137.675	57.7	4.6	-9.3	53.0	Average	V	101	346	54.0	-1.0	Pass	RB
5973.948	54.4	4.9	-8.2	51.0	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

Test Freq.	5825 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	6.5 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



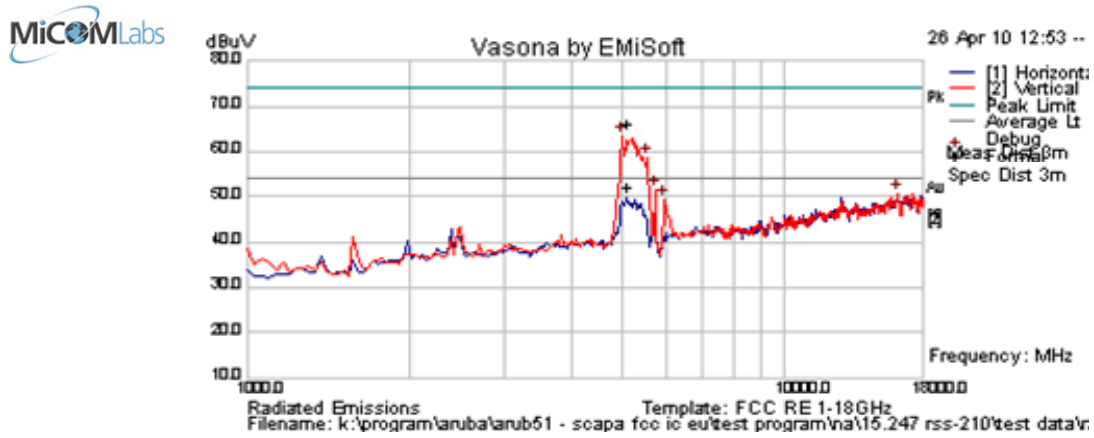
Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5136.893	70.6	4.6	-9.3	65.9	Peak Max	V	102	360	74.0	-8.1	Pass	RB
5136.893	56.5	4.6	-9.3	51.8	Average Max	V	102	360	54.0	-2.2	Pass	RB
5973.948	52.4	4.9	-8.2	49.1	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

5725 – 5850 MHz: 802.11n HT-40

Test Freq.	5755 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	6 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		

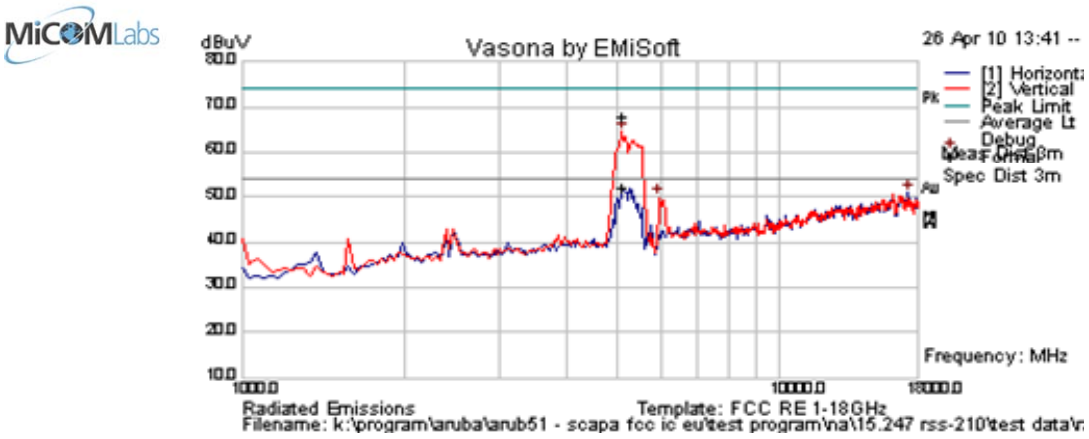


Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5095.630	70.3	4.6	-8.7	66.2	Peak Max	V	105	0	74.0	-7.8	Pass	RB
5095.630	56.3	4.6	-8.7	52.2	Average Max	V	105	0	54.0	-1.8	Pass	RB

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

Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	6.5 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		

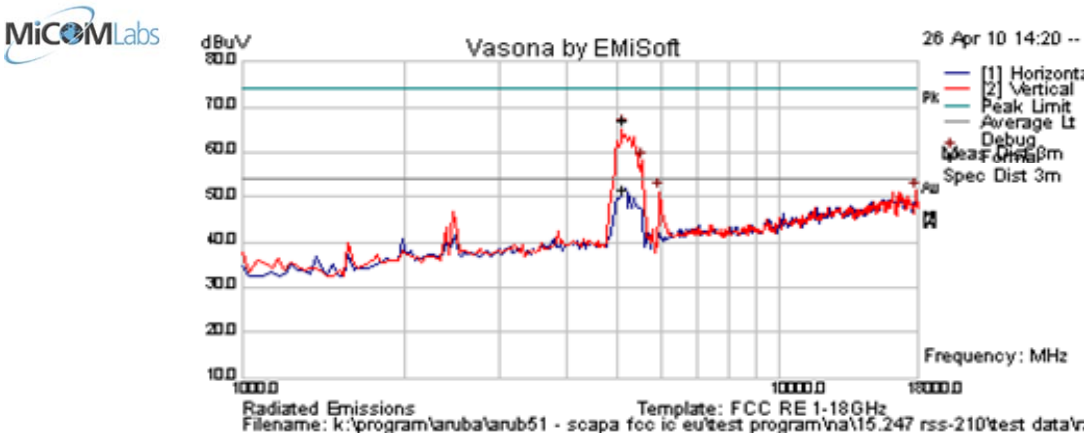


Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5094.990	72.0	4.6	-8.7	67.9	Peak Max	V	133	360	74.0	-6.1	Pass	RB
5094.99	56.4	4.6	-8.7	52.3	Average Max	V	133	360	54.0	-1.8	Pass	RB

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

Test Freq.	5815 MHz	**Engineer**	CSB
Variant	802.11n; HT-40; 13.5 MCS	**Temp (°C)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	37
Power Setting	6.5 in ART test utility	**Press. (mBars)**	1003
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1	EUT vertical on table.		
Test Notes 2	Fundamental attenuated by notch filter		



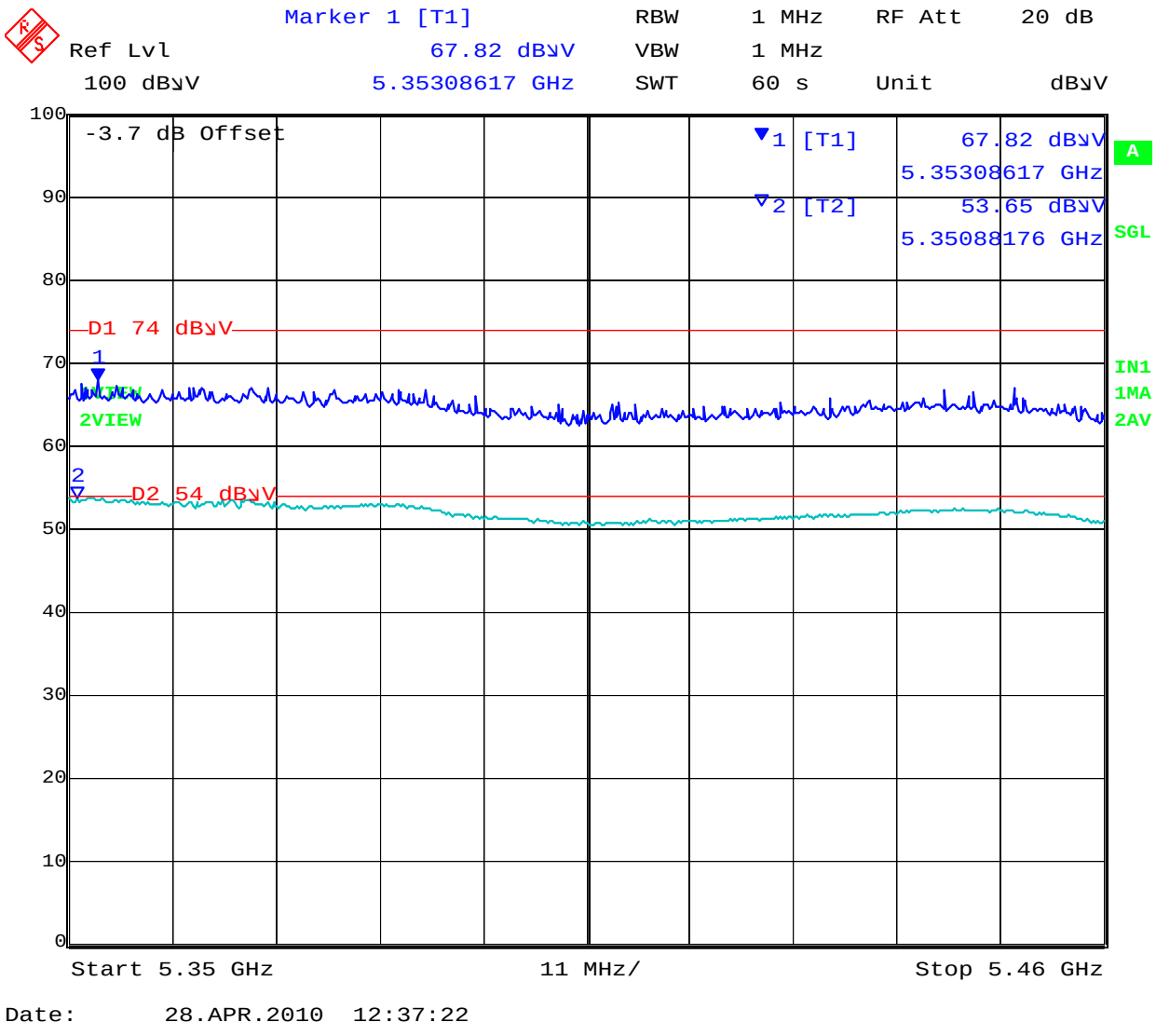
Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
5096.921	71.1	4.6	-8.8	67.0	Peak Max	V	107	360	74.0	-7.1	Pass	RB
5096.921	55.7	4.6	-8.8	51.6	Average Max	V	107	360	54.0	-2.5	Pass	RB

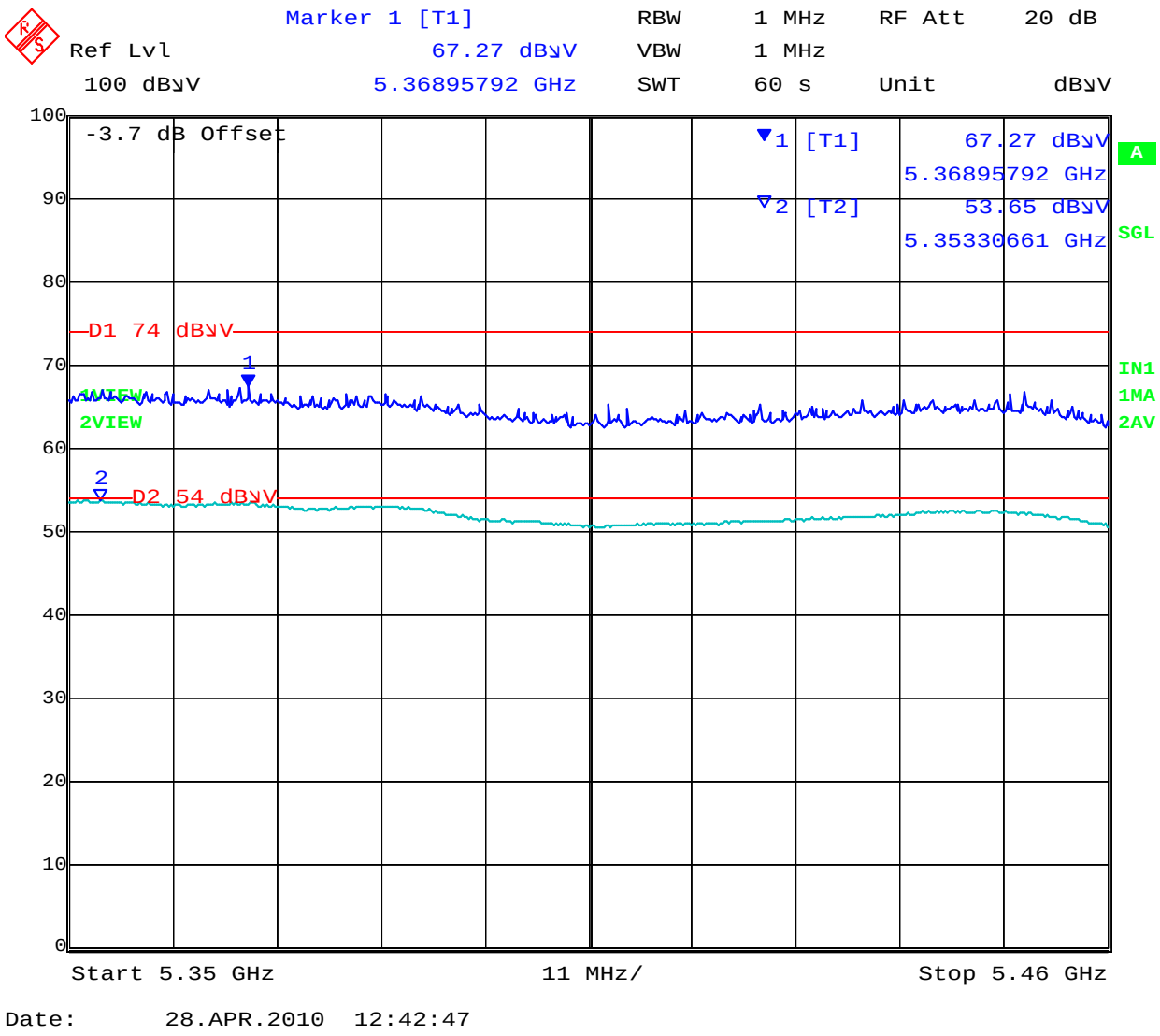
Legend:	TX = Transmitter Emissions; DIG = Digital Emissions; FUND = Fundamental; WB = Wideband Emission
	NRB = Non Restricted Band, Limit is 20dB below fundamental peak

7.6.14 AP-ANT-12 - Transmitter Band edge spurious emissions

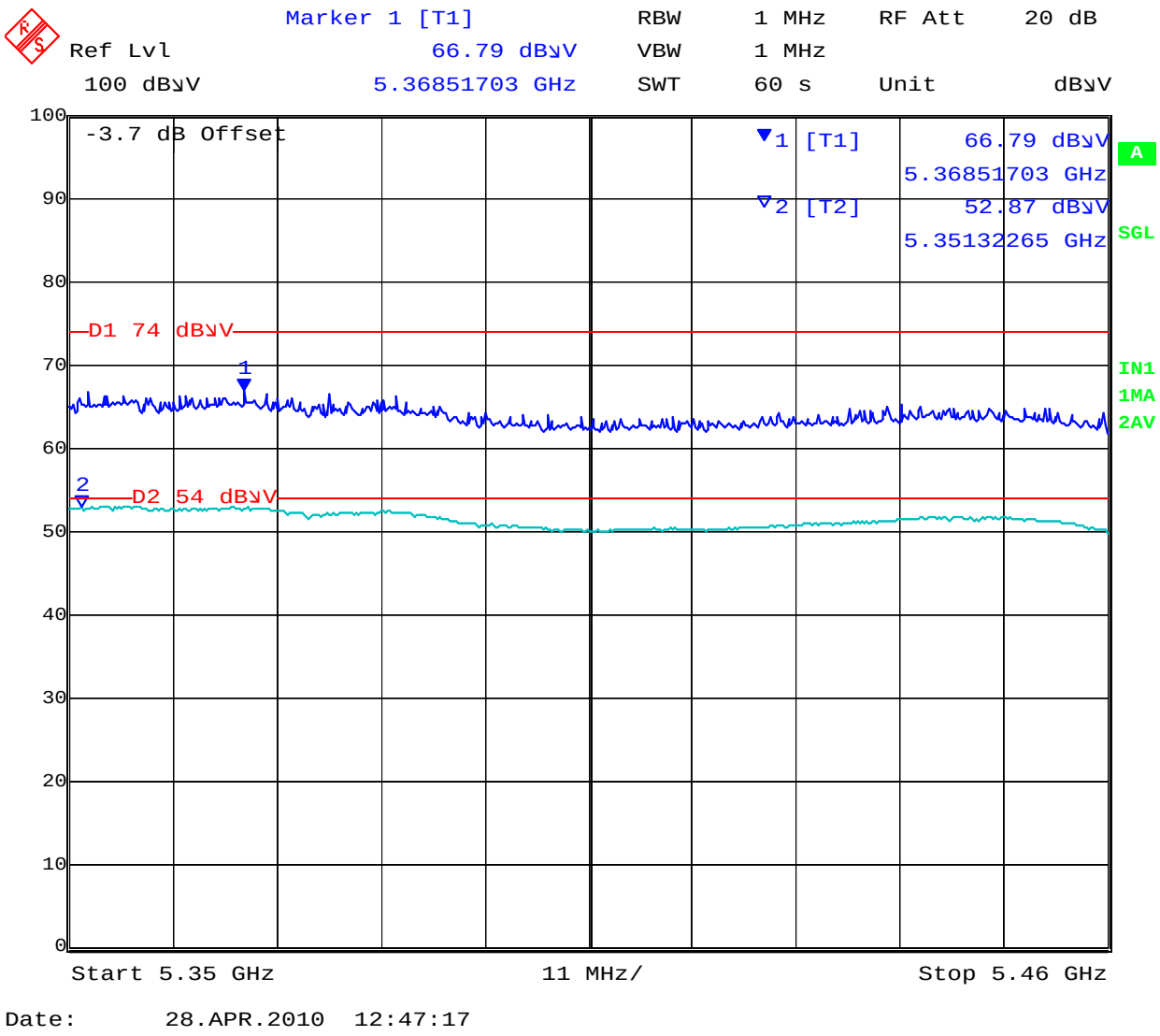
5745 MHz - 802.11a; 5350 - 5460 MHz



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



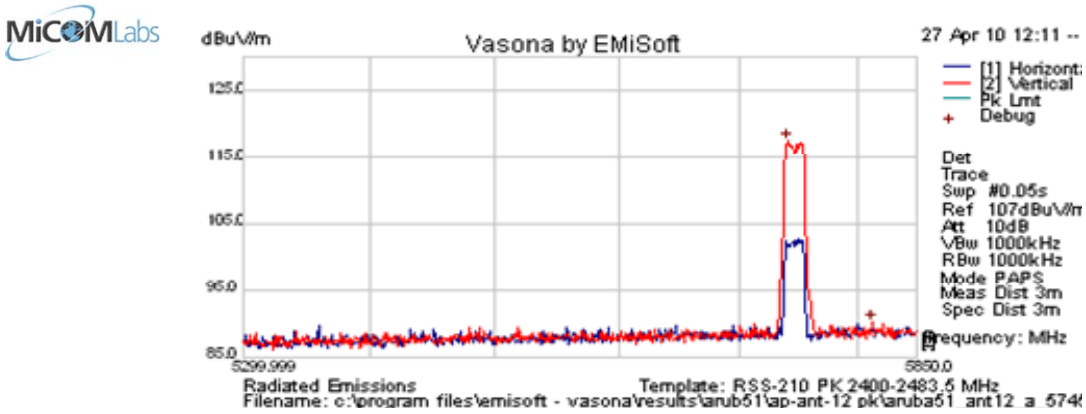
5755 MHz - 802.11n HT-40; 5350 - 5460 MHz



7.6.15 AP-ANT-12 - Transmitter Peak Emissions (RSS-210/RSS-GEN)

5725 – 5850 MHz: 802.11a

Test Freq.	5745 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (°C)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	41
Power Setting	7 in art	**Press. (mBars)**	1001
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

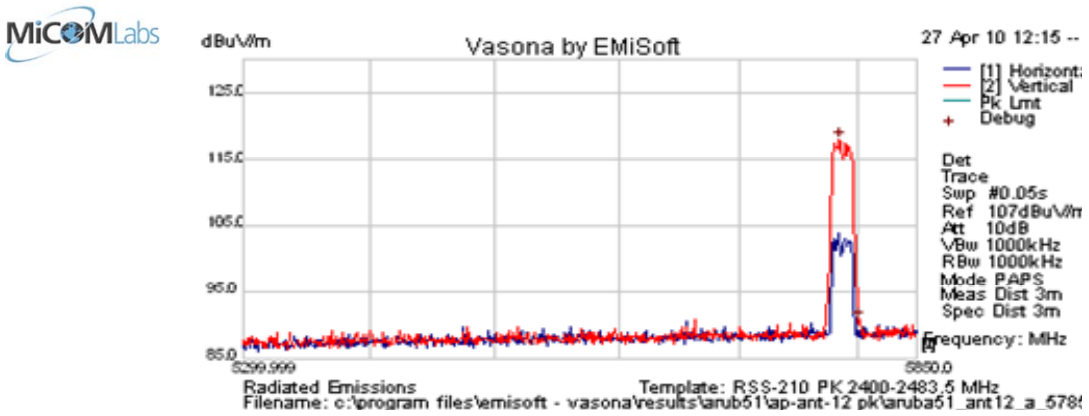


Formally measured emission peaks

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
5740.916	69.2	11.9	36.4	117.6	Peak [Scan]	V						PK

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

Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (ºC)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	41
Power Setting	6.5 in art	**Press. (mBars)**	1001
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

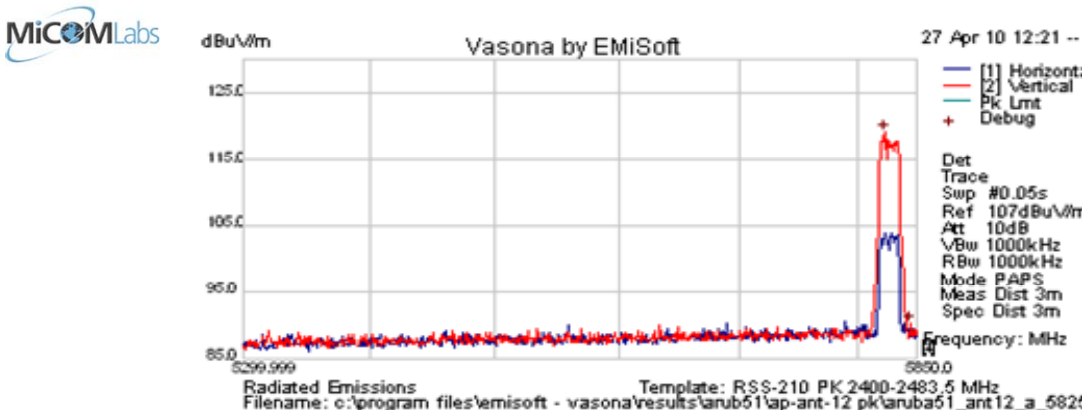


Formally measured emission peaks

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
5784.000	69.5	12.0	36.5	118.0	Peak [Scan]	V						PK

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

Test Freq.	5825 MHz	**Engineer**	CSB
Variant	802.11a; 6 Mbs	**Temp (ºC)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	41
Power Setting	6.5 in art	**Press. (mBars)**	1001
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



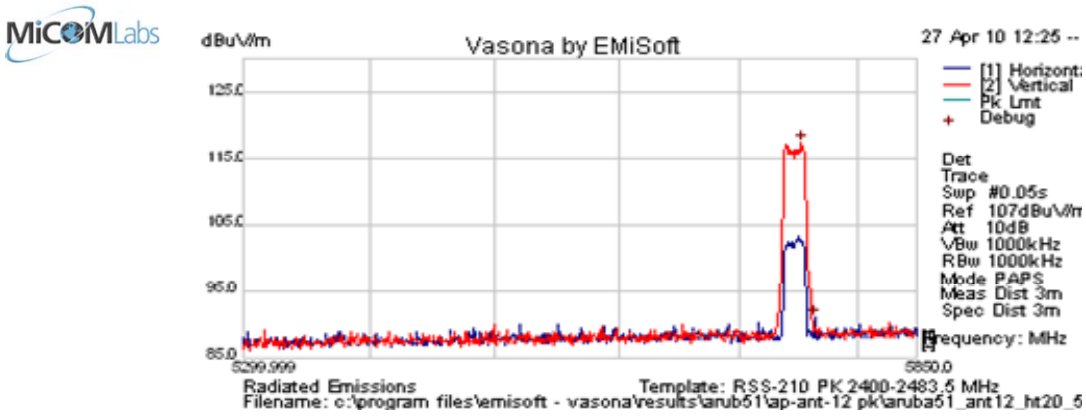
Formally measured emission peaks

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
5822.500	70.5	12.0	36.6	119.1	Peak [Scan]	V						PK

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

5725 – 5850 MHz: 802.11n HT-20

Test Freq.	5745 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (ºC)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	41
Power Setting	6.5 in art	**Press. (mBars)**	1001
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

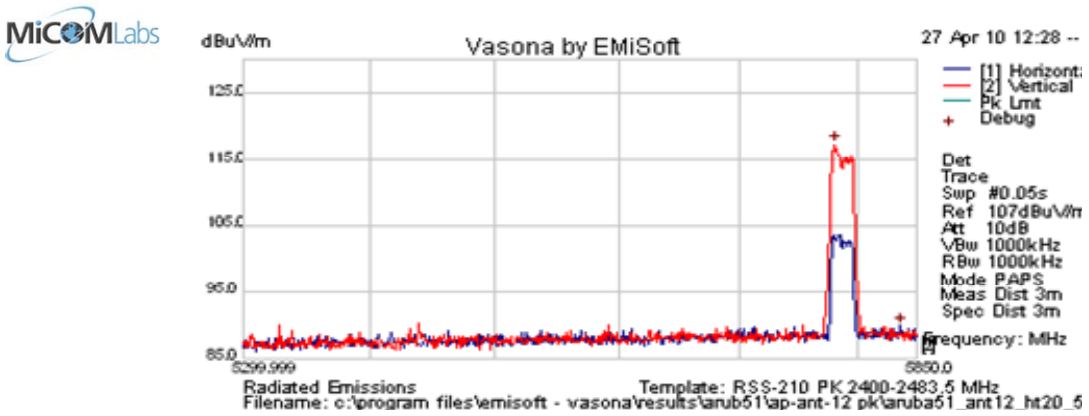


Formally measured emission peaks

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
5751.916	69.1	11.9	36.5	117.4	Peak [Scan]	V						PK

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

Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	41
Power Setting	6.5 in art	**Press. (mBars)**	1001
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

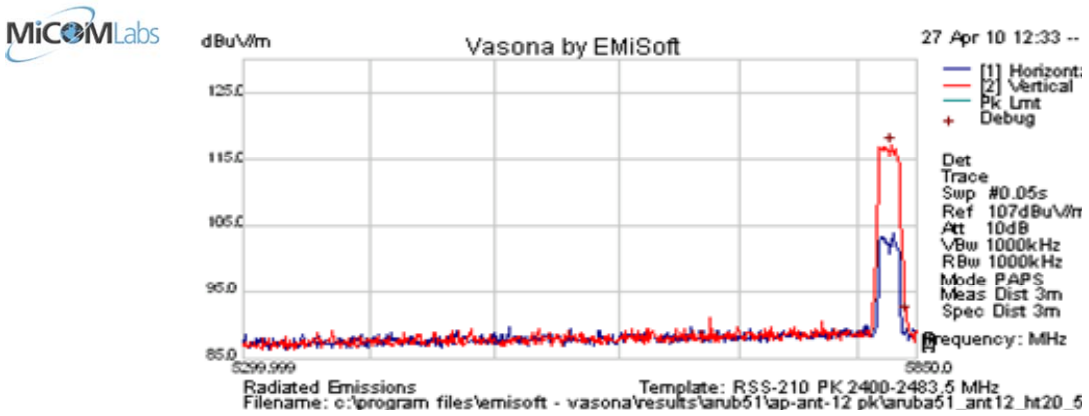


Formally measured emission peaks

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
5780.333	68.9	12.0	36.5	117.3	Peak [Scan]	V						PK

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

Test Freq.	5825 MHz	**Engineer**	CSB
Variant	802.11n HT-20; 6.5 MCS	**Temp (°C)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	41
Power Setting	6.5 in art	**Press. (mBars)**	1001
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			



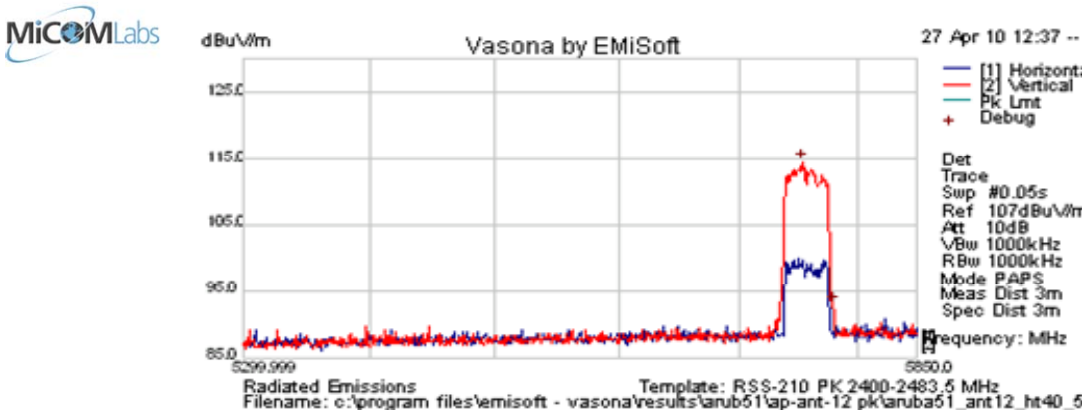
Formally measured emission peaks

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
5828.000	68.5	12.0	36.6	117.1	Peak [Scan]	V						PK

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

5725 – 5850 MHz: 802.11n HT-40

Test Freq.	5755 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (ºC)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	41
Power Setting	6 in art	**Press. (mBars)**	1001
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

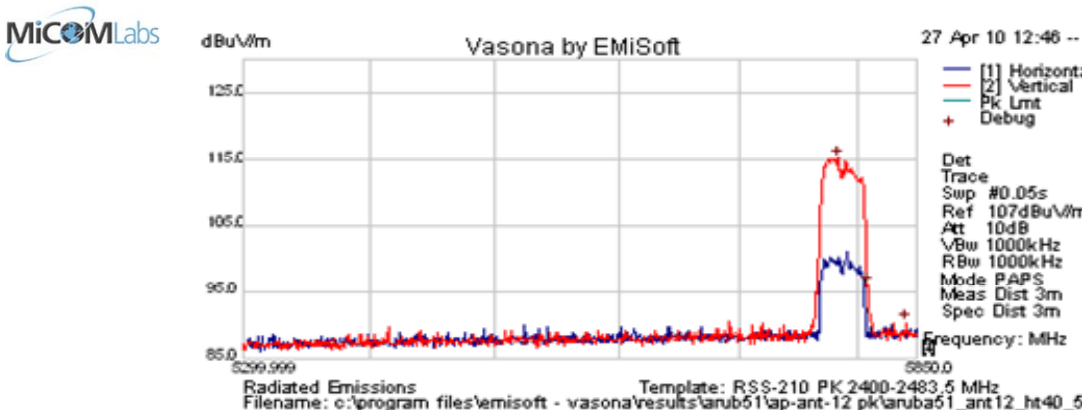


Formally measured emission peaks

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
5752.833	66.2	11.9	36.5	114.6	Peak [Scan]	V						PK

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

Test Freq.	5785 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	41
Power Setting	6.5 in art	**Press. (mBars)**	1001
Antenna	AP-ANT-12	**Duty Cycle (%)**	100
Test Notes 1			
Test Notes 2			

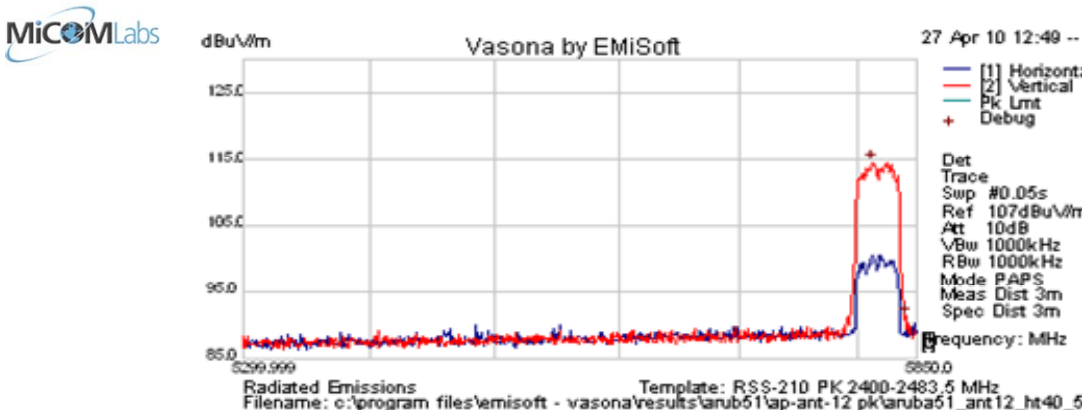


Formally measured emission peaks

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
5783.083	66.7	12.0	36.5	115.2	Peak [Scan]	V						PK

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

Test Freq.	5815 MHz	**Engineer**	CSB
Variant	802.11n HT-40; 13.5 MCS	**Temp (°C)**	19.5
Freq. Range	5725 - 5850 MHz	**Rel. Hum.(%)**	41
Power Setting	6.5 in art	**Press. (mBars)**	1001
Antenna	AP-ANT-12	**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
5811.500	66.0	12.0	36.5	114.6	Peak [Scan]	V						PK

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

7.6.16 Receiver Radiated Spurious Emissions

Specification

Industry Canada RSS-Gen §4.10,
The search for spurious emissions shall be from the lowest frequency internally generated or used in the receiver (e.g. local oscillator, intermediate or carrier frequency), or 30 MHz, whichever is the higher, to at least 3 times the highest tunable or local oscillator frequency, whichever is the higher, without exceeding 40 GHz.

RSS-Gen §6
The following receiver spurious emission limits shall be complied with;
(a) If a radiated measurement is made, all spurious emissions hall comply with the limits of Table 1.

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 Radiated Emissions

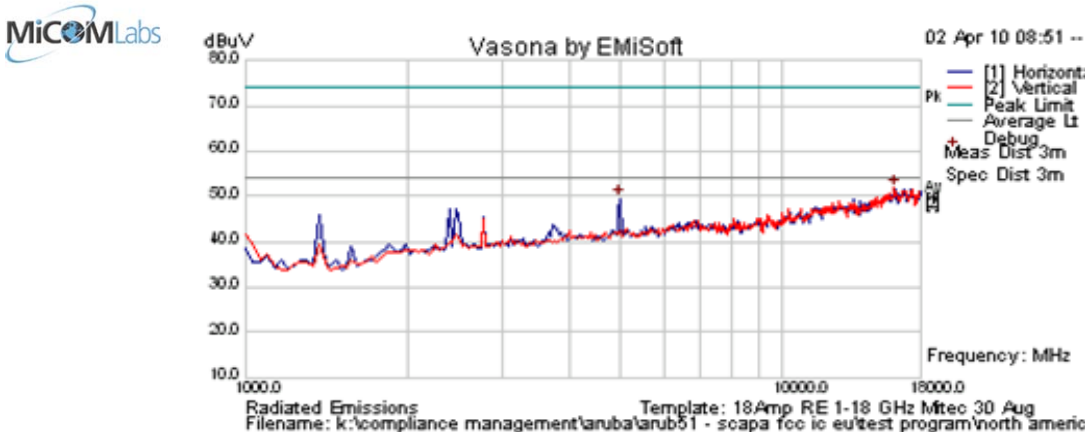
Measurement uncertainty	+5.6/ -4.5 dB

Traceability

Method	Test Equipment Used
Measurements were made per work instruction WI-03 'Measurement of Radiated Emissions'	0088, 0158, 0134, 0304, 0311, 0315, 0310, 0312

Measurement Results for Receiver Emissions

Test Freq.	2437 MHz	**Engineer**	CSB
Variant	Receive in Test Utility	**Temp (ºC)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	Not Applicable in Receive Mode	**Press. (mBars)**	1011
Antenna	Integral Antenna's connected during testing		
Test Notes 1	AC Powered		
Test Notes 2			

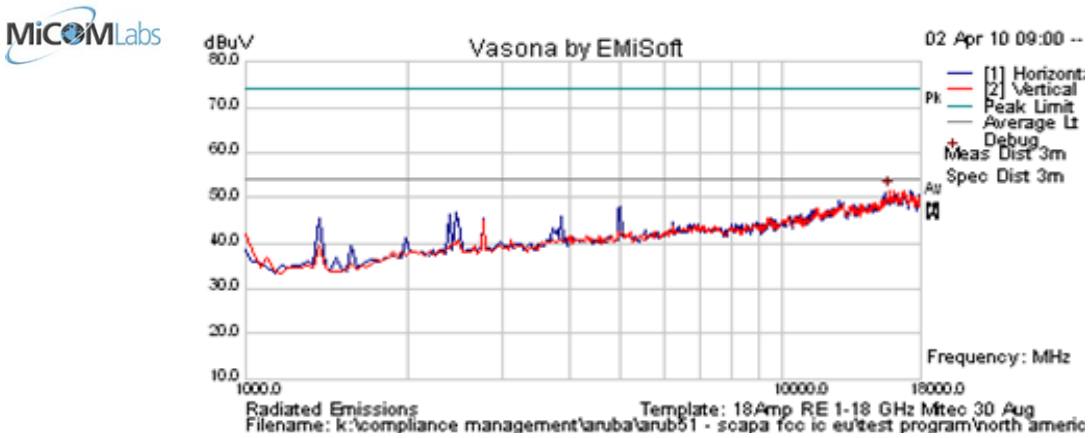


Formally measured emission peaks

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
No Receiver Emissions within 6dB of limit.												

Legend:	TRANS = Transient Emission; RB = Restricted Band; NRB = Non-Restricted Band;
	BE = Emission in Restricted Band Nearest Transmission Band Edge; FUND = Fundamental Freq.

Test Freq.	5785 MHz	**Engineer**	CSB
Variant	Receive in Test Utility	**Temp (ºC)**	19
Freq. Range	1000 MHz - 18000 MHz	**Rel. Hum.(%)**	35
Power Setting	Not Applicable in Receive Mode	**Press. (mBars)**	1011
Antenna	Integral Antenna's connected during testing		
Test Notes 1	AC Powered		
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
No Receiver Emissions within 6dB of limit.												

Legend:	TRANS = Transient Emission; RB = Restricted Band; NRB = Non-Restricted Band;
	BE = Emission in Restricted Band Nearest Transmission Band Edge; FUND = Fundamental Freq.

7.6.17 Measurement Results: Radiated Spurious Emissions – Below 1 GHz

Specification

Limits

§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.

§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.

§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.

§15.209 (a) and **RSS-Gen §2.2** Limit Matrix

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 Radiated Emissions

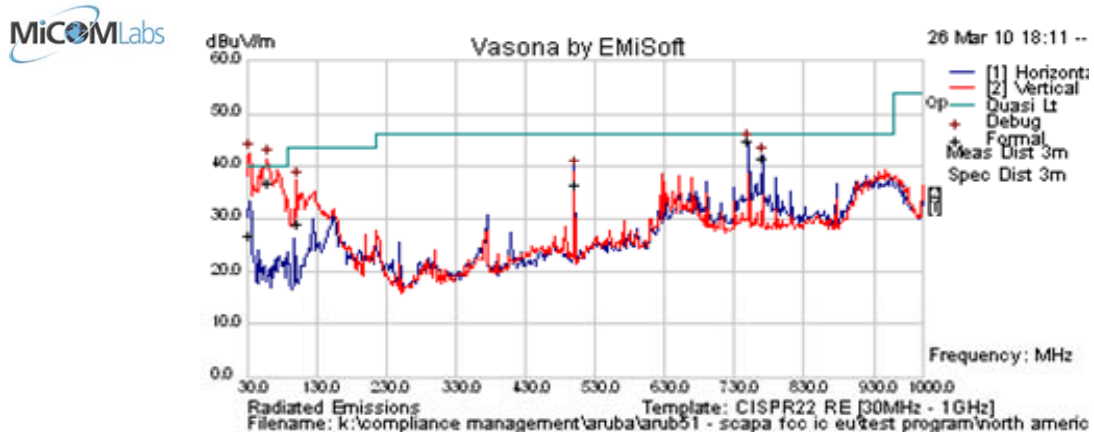
Measurement uncertainty	+5.6/ -4.5 dB

Traceability

Method	Test Equipment Used
Measurements were made per work instruction WI-03 'Measurement of Radiated Emissions'	0088, 0158, 0134, 0304, 0311, 0315, 0310, 0312

Note: No radio emissions were present below 1 GHz. Emissions were investigated while the unit was transmitting at maximum power and in receive mode for both AC Adaptor powered and POE (Power Over Ethernet) configuration.

Test Freq.	2437 MHz	**Engineer**	CSB
Variant	Digital Emissions	**Temp (ºC)**	23
Freq. Range	30 MHz - 1000 MHz	**Rel. Hum.(%)**	38
Power Setting	N/A - Receive Mode	**Press. (mBars)**	1013
Antenna	Integral Antennas		
Test Notes 1	AC Power - 120V AC; 60 Hz		
Test Notes 2			

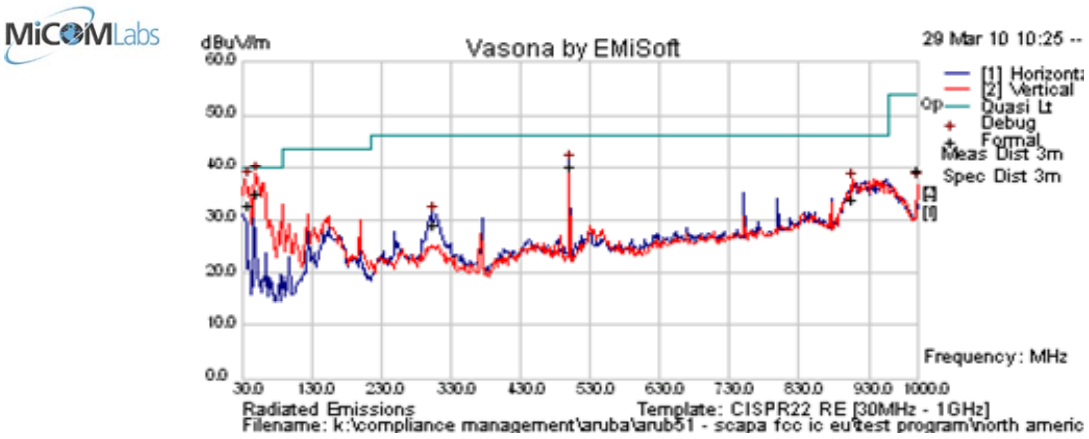


Formally measured emission peaks

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
33.051	35.2	3.4	-11.8	26.8	Quasi Max	V	261	113	40	-13.2	Pass	DIG
60.938	56.8	3.8	-23.8	36.9	Quasi Max	V	134	77	40	-3.1	Pass	DIG
103.311	44.8	4.2	-19.9	29.1	Quasi Max	V	98	102	43.5	-14.4	Pass	DIG
499.984	42.8	6.0	-12.6	36.3	Quasi Max	H	98	142	46	-9.8	Pass	DIG
749.984	46.9	6.9	-9.0	44.8	Quasi Max	H	109	350	46	-1.2	Pass	DIG
769.990	43.2	7.0	-8.8	41.4	Quasi Max	H	109	353	46	-4.6	Pass	DIG

Legend:	DIG = Digital Device Emission; TX = Transmitter Emission; FUND = Fundamental Frequency
	NRB = Non-Restricted Band, Limit is 20 dB below Fundamental; RB = Restricted Band

Test Freq.	2437 MHz - Rx Mode	**Engineer**	CSB
Variant	Digital Emissions	**Temp (°C)**	21.5
Freq. Range	30 MHz - 1000 MHz	**Rel. Hum.(%)**	36
Power Setting	N/A	**Press. (mBars)**	1008
Antenna	Integral Antenna		
Test Notes 1	EUT powered via PoE (Power Over Ethernet) - PowerDsine 7001G		
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
40.261	46.0	3.6	-17.0	32.6	Quasi Max	V	101	176	40	-7.4	Pass	DIG
50.782	54.4	3.7	-23.2	35.0	Quasi Max	V	98	113	40	-5.0	Pass	DIG
305.043	40.3	5.2	-16.7	28.9	Quasi Max	H	99	48	46	-17.1	Pass	DIG
499.989	46.8	6.0	-12.6	40.2	Quasi Max	V	116	228	46	-5.8	Pass	DIG
906.845	33.7	7.3	-7.2	33.9	Quasi Max	V	132	14	46	-12.1	Pass	DIG
999.988	37.7	7.7	-6.1	39.2	Quasi Max	V	108	353	54	-14.8	Pass	DIG

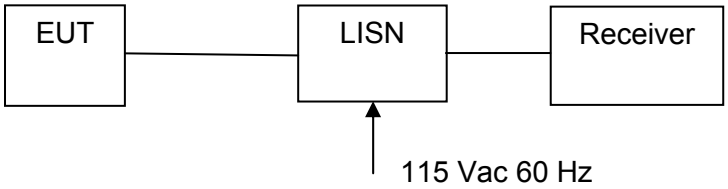
Legend:	DIG = Digital Device Emission; TX = Transmitter Emission; FUND = Fundamental Frequency
	NRB = Non-Restricted Band, Limit is 20 dB below Fundamental; RB = Restricted Band

7.7 AC Wireline Conducted Emissions (150 kHz – 30 MHz)

FCC, Part 15 Subpart C §15.407(b)(6)/15.207
Industry Canada RSS-Gen §7.2.2

Test Procedure
The EUT is configured in accordance with ANSI C63.4. The conducted emissions are measured in a shielded room with a spectrum analyzer in peak hold in the first instance. Emissions closest to the limit are measured in the quasi-peak mode (QP) with the tuned receiver using a bandwidth of 9 kHz. The emissions are maximized further by cable manipulation. The highest emissions relative to the limit are listed.

Test Measurement Set up



Measurement set up for AC Wireline Conducted Emissions Test

Specification

Limit

§15.407 (b)(6); Any U-NII devices using an AC power line are required to comply also with the limits set forth in Section 15.207.

§15.207 (a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μΩ line impedance stabilization network (LISN), see §15.207 (a) matrix below. Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal.

RSS-Gen §7.2.2

The radio frequency voltage that is conducted back into the AC power lines in the frequency range of 0.15 MHz to 30 MHz shall not exceed the limits shown in the table below. The tighter limit applies at the frequency range boundaries.

§15.207 (a) and **RSS-Gen §7.2.2** Limit Matrix
The lower limit applies at the boundary between frequency ranges

Frequency of Emission (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency

Laboratory Measurement Uncertainty for Conducted Emissions

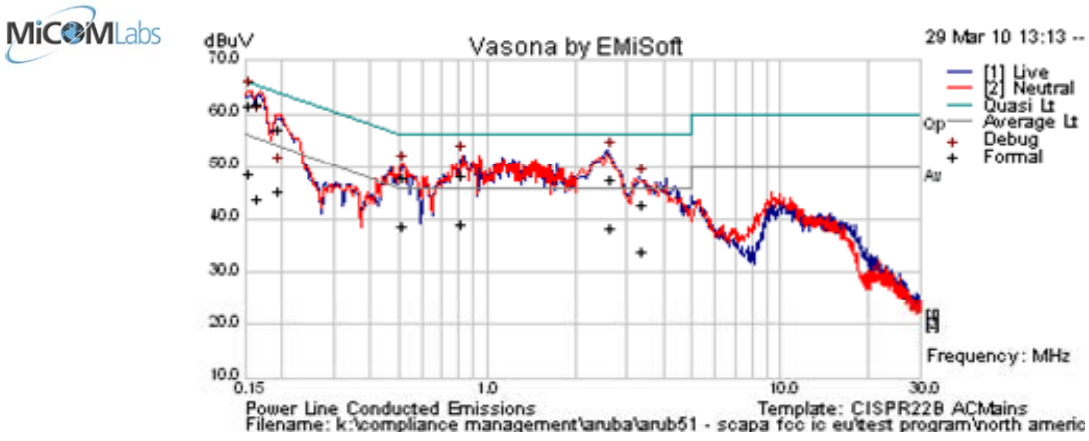
Measurement uncertainty	±2.64 dB

Traceability

Method	Test Equipment Used
Measurements were made per work instruction WI-EMC-01 'Measurement of Conducted Emissions'	0158, 0184, 0287, 0190, 0293, 0307

Measurement Results for AC Wireline Conducted Emissions (150 kHz – 30 MHz)

Test Freq.	2437 - Rx Mode	**Engineer**	CSB
Variant	AC Line Emissions	**Temp (ºC)**	22
Freq. Range	0.150 MHz - 30 MHz	**Rel. Hum.(%)**	38
Power Setting	N/A	**Press. (mBars)**	1006
Antenna	Integral Antennas		
Test Notes 1	AC Powered - 120V AC 60Hz		
Test Notes 2			

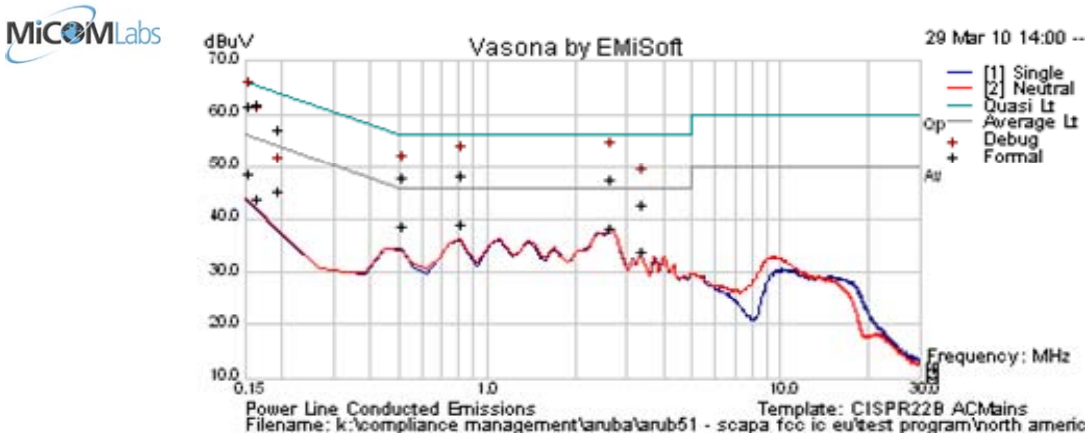


Formally measured emission peaks

Frequency MHz	Raw dBuV	Cable Loss	Factors dB	Level dBuV	Measurement Type	Line	Limit dBuV	Margin dB	Pass /Fail	Comments
0.155	38.8	9.9	0.1	48.8	Average	Neutral	55.73	-7.0	Pass	DIG
0.155	51.6	9.9	0.1	61.6	Quasi Peak	Neutral	65.73	-4.2	Pass	DIG
0.167	33.8	9.9	0.1	43.7	Average	Neutral	55.11	-11.4	Pass	DIG
0.167	51.7	9.9	0.1	61.7	Quasi Peak	Neutral	65.11	-3.4	Pass	DIG
0.194	35.4	9.9	0.1	45.3	Average	Neutral	53.86	-8.5	Pass	DIG
0.194	47.2	9.9	0.1	57.1	Quasi Peak	Neutral	63.86	-6.7	Pass	DIG
0.516	28.6	9.9	0.1	38.6	Average	Neutral	46	-7.4	Pass	DIG
0.516	37.8	9.9	0.1	47.9	Quasi Peak	Neutral	56	-8.2	Pass	DIG
0.828	38.4	9.9	0.1	48.4	Quasi Peak	Neutral	56	-7.6	Pass	DIG
0.828	29.1	9.9	0.1	39.1	Average	Neutral	46	-6.9	Pass	DIG
2.661	28.2	10.1	0.1	38.4	Average	Live	46	-7.6	Pass	DIG
2.661	37.3	10.1	0.1	47.6	Quasi Peak	Live	56	-8.5	Pass	DIG

Legend:	DIG = Digital Device Emission; TX = Transmitter Emission; FUND = Fundamental Frequency
	NRB = Non-Restricted Band, Limit is 20 dB below Fundamental; RB = Restricted Band

Test Freq.	2437 - Rx Mode		CSB
Variant	AC Line Emissions		22
Freq. Range	0.150 MHz - 30 MHz		38
Power Setting	N/A		1006
Antenna	Integral Antennas		
Test Notes 1	AC Powered - 120V AC 60Hz		
Test Notes 2	Red trace = Neautral, AVG Detector; Blue trace = Live, AVG Detector		



8 TEST EQUIPMENT DETAILS

Asset #	Instrument	Manufacturer	Part #	Serial #
0088	Spectrum Analyzer	Hewlett Packard	8564E	3410A00141
0134	Amplifier	Com Power	PA 122	181910
0158	Barometer /Thermometer	Control Co.	4196	E2846
0287	EMI Receiver	Rhode & Schwartz	ESIB 40	100201
0252	SMA Cable	Megaphase	Sucoflex 104	None
0310	2m SMA Cable	Micro-Coax	UFA210A-0-0787-3G03G0	209089-001
0312	3m SMA Cable	Micro-Coax	UFA210A-1-1181-3G0300	209092-001
0313	Coupler	Hewlett Packard	86205A	3140A01285
0314	30dB N-Type Attenuator	ARRA	N9444-30	1623
0070	Power Meter	Hewlett Packard	437B	3125U11552
0116	Power Sensor	Hewlett Packard	8485A	3318A19694
0117	Power Sensor	Hewlett Packard	8487D	3318A00371
0184	Pulse Limiter	Rhode & Schwartz	ESH3Z2	357.8810.52
0190	LISN	Rhode & Schwartz	ESH3Z5	836679/006
0293	BNC Cable	Megaphase	1689 1GVT4	15F50B001
0301	5.6 GHz Notch Filter	Micro-Tronics	RBC50704	001
0302	5.25 GHz Notch Filter	Micro-Tronics	BRC50703	002
0303	5.8 GHz Notch Filter	Micro-Tronics	BRC50705	003
0304	2.4GHzHz Notch Filter	Micro-Tronics	--	001
0307	BNC Cable	Megaphase	1689 1GVT4	15F50B002
0335	1-18GHz Horn Antenna	ETS- Lindgren	3117	00066580
0337	Amplifier	MiCOM Labs	--	--
0338	Antenna	Sunol Sciences	JB-3	A052907

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