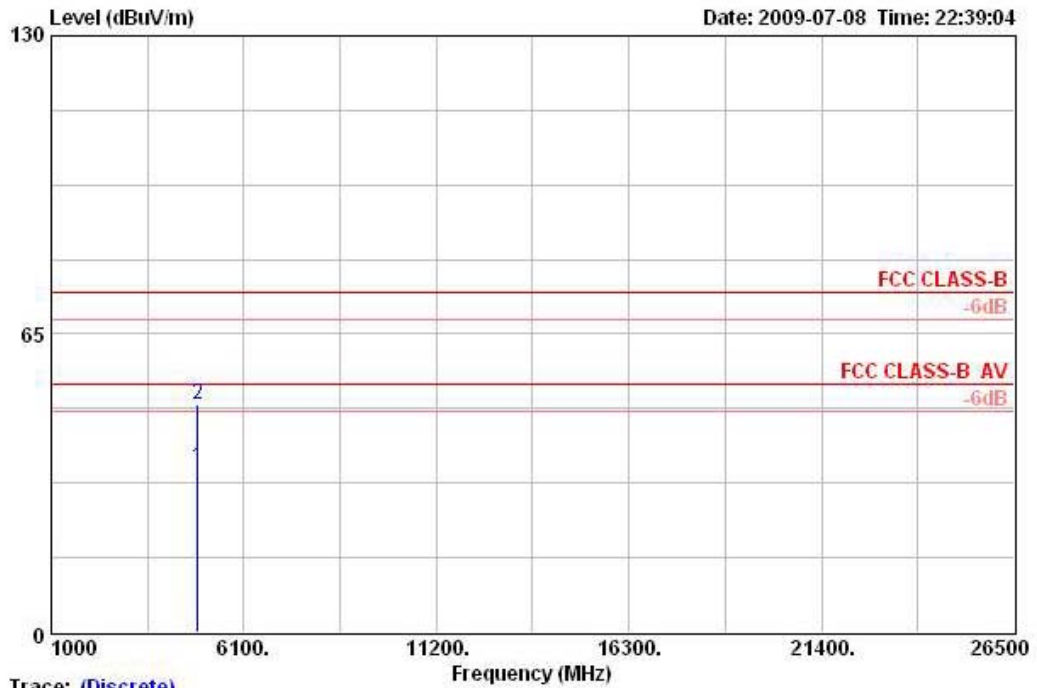
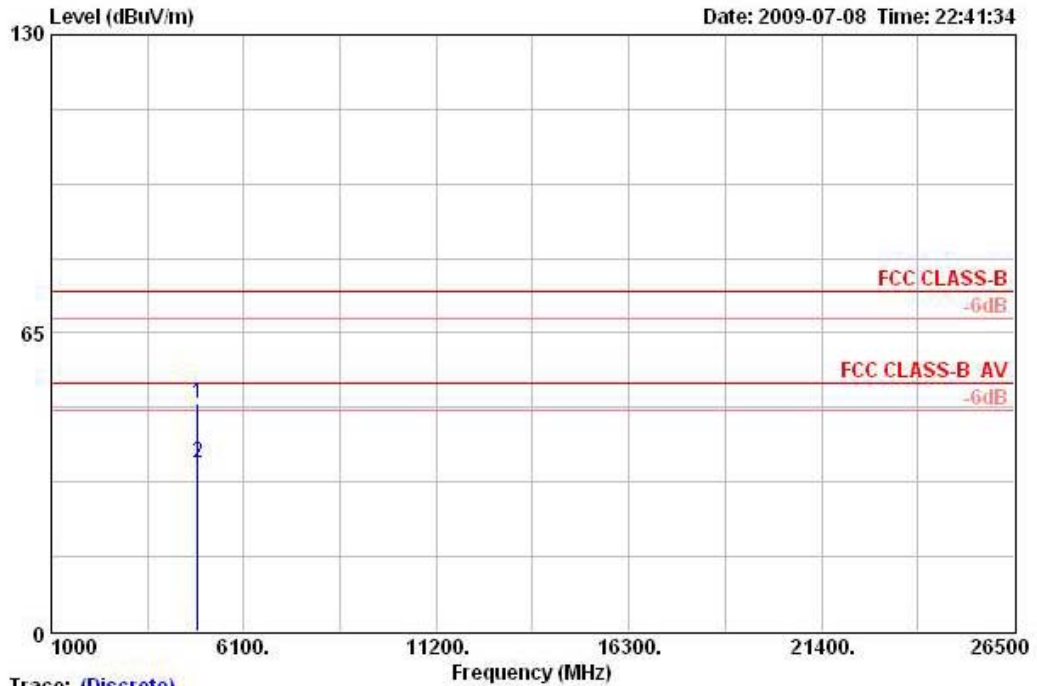


Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11g CH 6 (Ant. 2)



Trace: (Discrete)
 Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 VERTICAL 0cm 0deg
 eut : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 'C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ2
 : Tx 11g CH06

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB			deg	cm
1	4874.320	35.98	-18.02	54.00	30.87	33.58	35.20	6.73	AVERAGE	VERTICAL	0	100
2	4874.320	49.61	-24.39	74.00	44.51	33.58	35.20	6.73	PEAK	VERTICAL	0	100

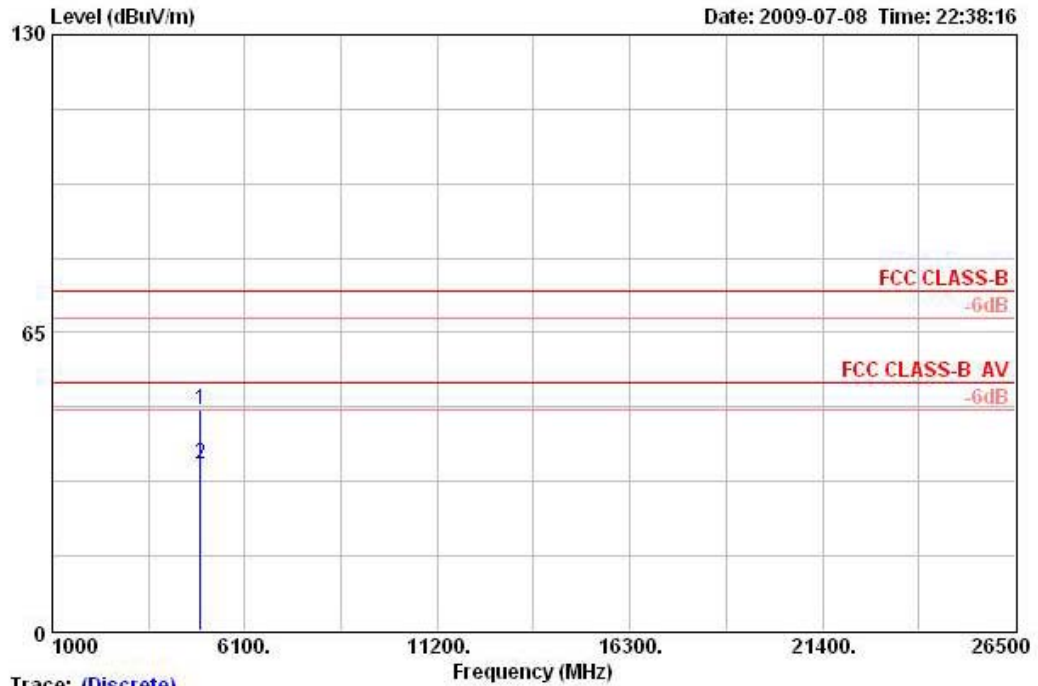


Trace: (Discrete)

Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18CHORN ANT:20070301 HORIZONTAL 0cm 0deg
 Ant : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 'C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ2
 : Tx 11g CH06

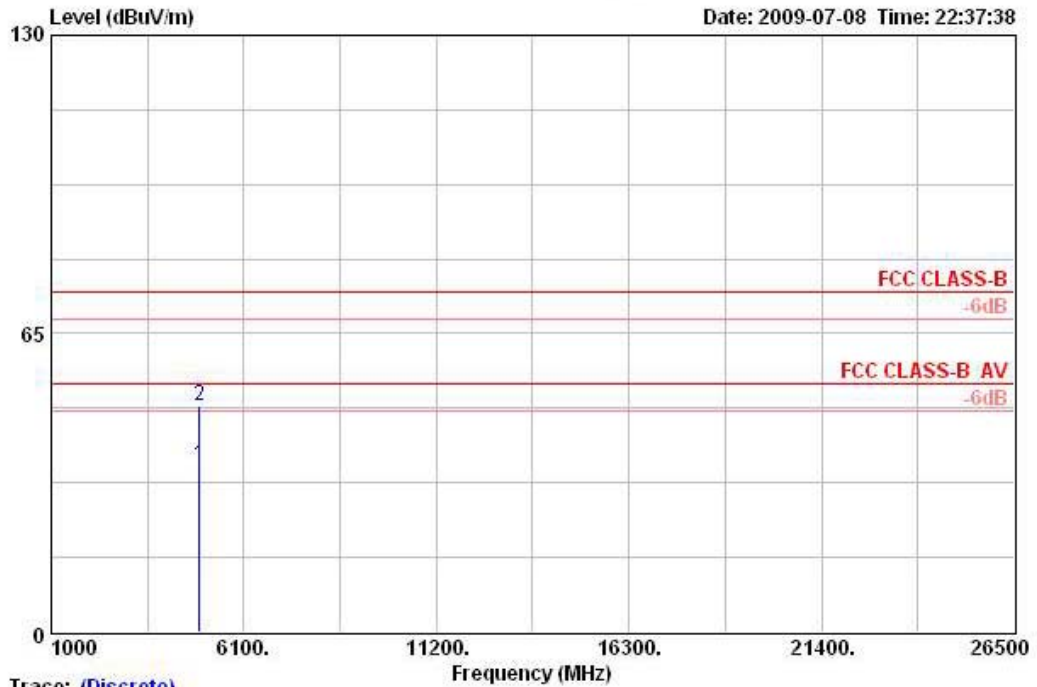
	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
	MHz	dBuV/m	Limit	Line	Level	Factor	Factor	Loss			Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4873.950	49.48	-24.52	74.00	44.37	33.58	35.20	6.73	PEAK	HORIZONTAL	360	100
2	4873.950	36.61	-17.39	54.00	31.50	33.58	35.20	6.73	AVERAGE	HORIZONTAL	2	100

Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11g CH 11 (Ant. 2)



Trace: (Discrete)
 Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 VERTICAL 0cm 0deg
 eut : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 'C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ2
 : Tx 11g CH11

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4921.560	48.25	-25.75	74.00	43.14	33.58	35.20	6.73	PEAK	VERTICAL	0	100
2	4926.400	36.32	-17.68	54.00	31.21	33.58	35.20	6.73	AVERAGE	VERTICAL	0	100



Trace: (Discrete)

Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 HORIZONTAL 0cm 0deg
 Ant : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 °C
 Relative Humidity : 56 %
 Atmosphere : 98.6 Kpa
 memo : WJ2
 : Tx 11g CH11

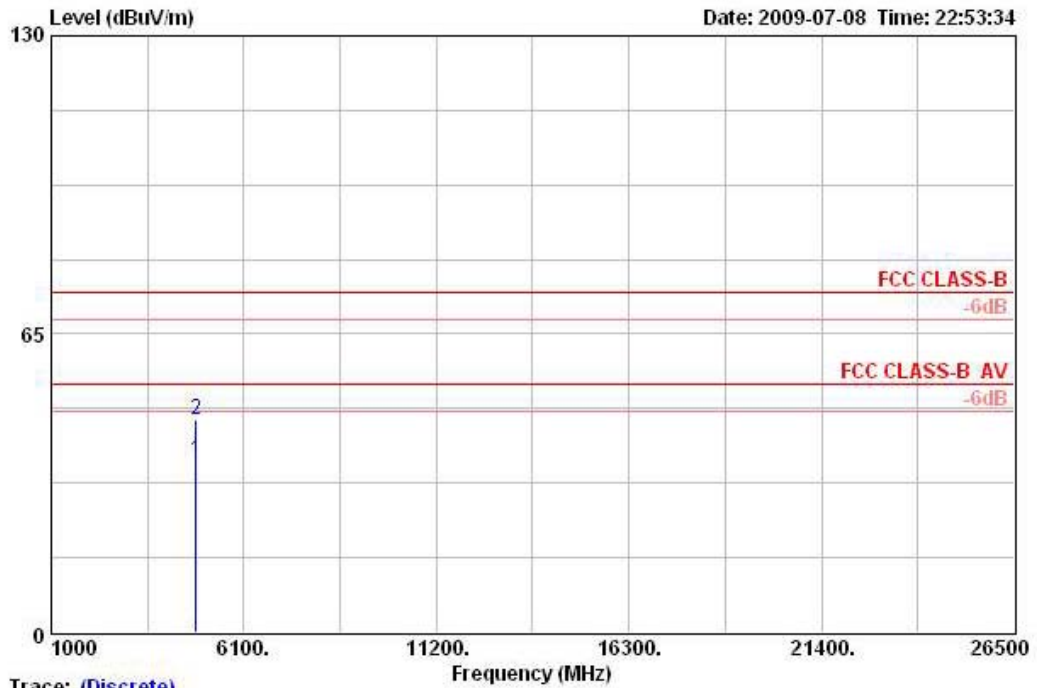
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4923.240	36.15	-17.85	54.00	31.04	33.58	35.20	6.73	AVERAGE	HORIZONTAL	0	100
2	4925.960	49.38	-24.62	74.00	44.28	33.58	35.20	6.73	PEAK	HORIZONTAL	0	100

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBUV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

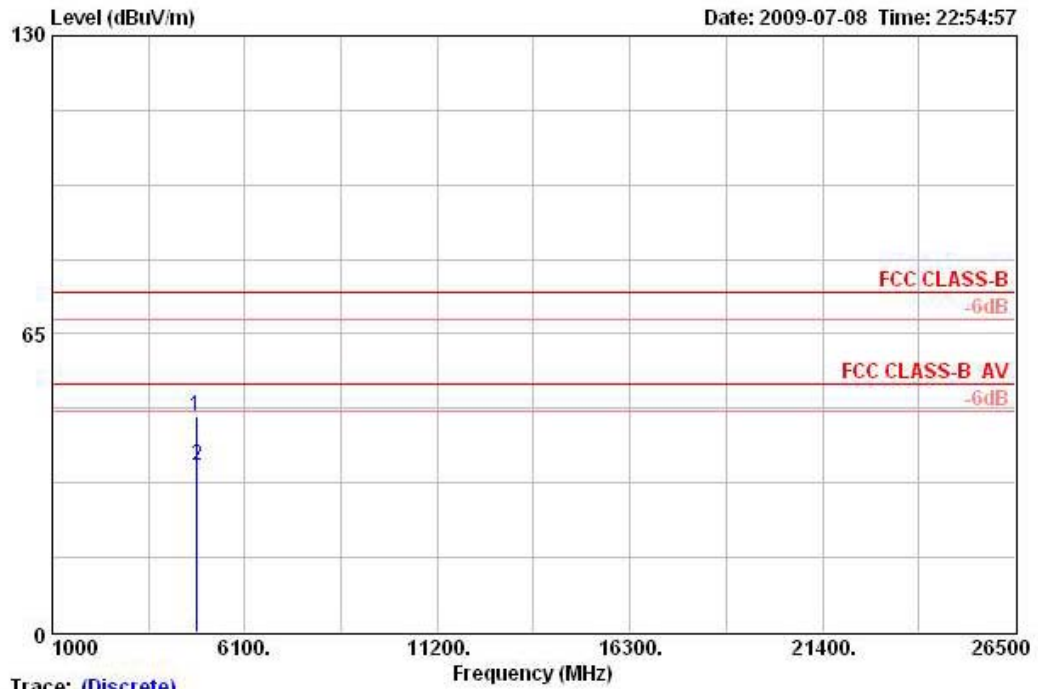
Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11n CH 1 (Ant. 1) MCS0



Trace: (Discrete)

Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 VERTICAL 0cm 0deg
 eut : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 'C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ1
 : Tx 11n CH01

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4825.560	37.39	-16.61	54.00	32.81	33.39	35.20	6.39	AVERAGE	VERTICAL	0	100
2	4825.730	46.17	-27.83	74.00	41.59	33.39	35.20	6.39	PEAK	VERTICAL	0	100

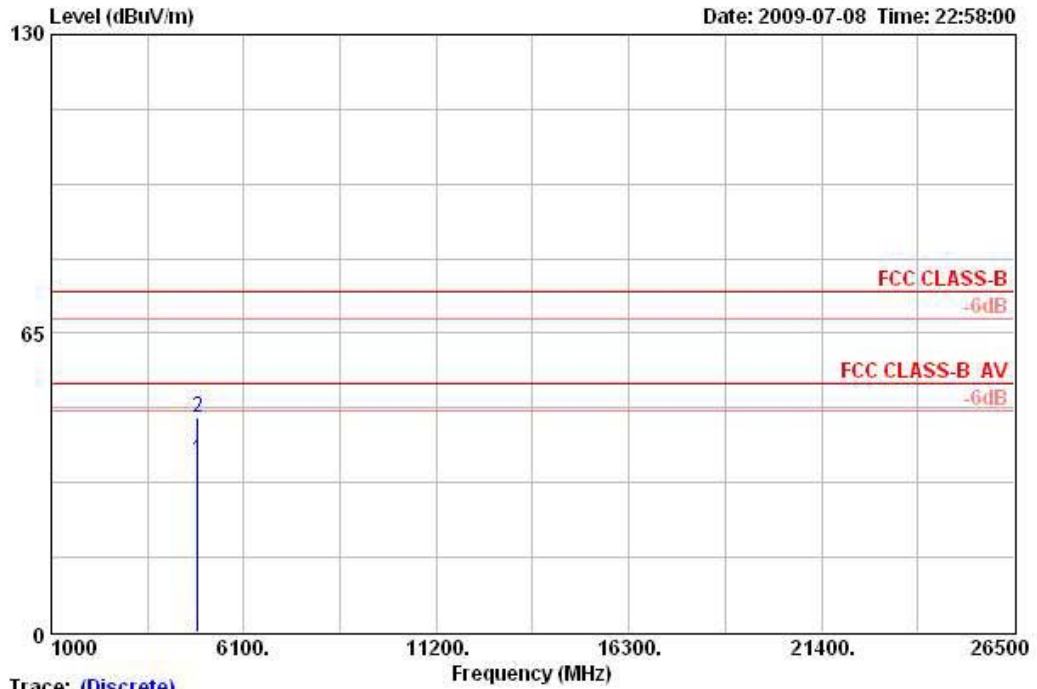


Trace: (Discrete)

Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 HORIZONTAL 0cm 0deg
 Ant : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 °C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJI
 : Tx 11n CH01

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
	MHz	dBUV/m	Limit	Line	Level	Factor	Factor	Loss			Pos	Pos
			dB	dBUV/m	dBuV	dB/m	dB	dB			deg	cm
1	4822.500	47.11	-26.89	74.00	42.53	33.39	35.20	6.39	PEAK	HORIZONTAL	0	100
2	4823.610	36.39	-17.61	54.00	31.82	33.39	35.20	6.39	AVERAGE	HORIZONTAL	0	100

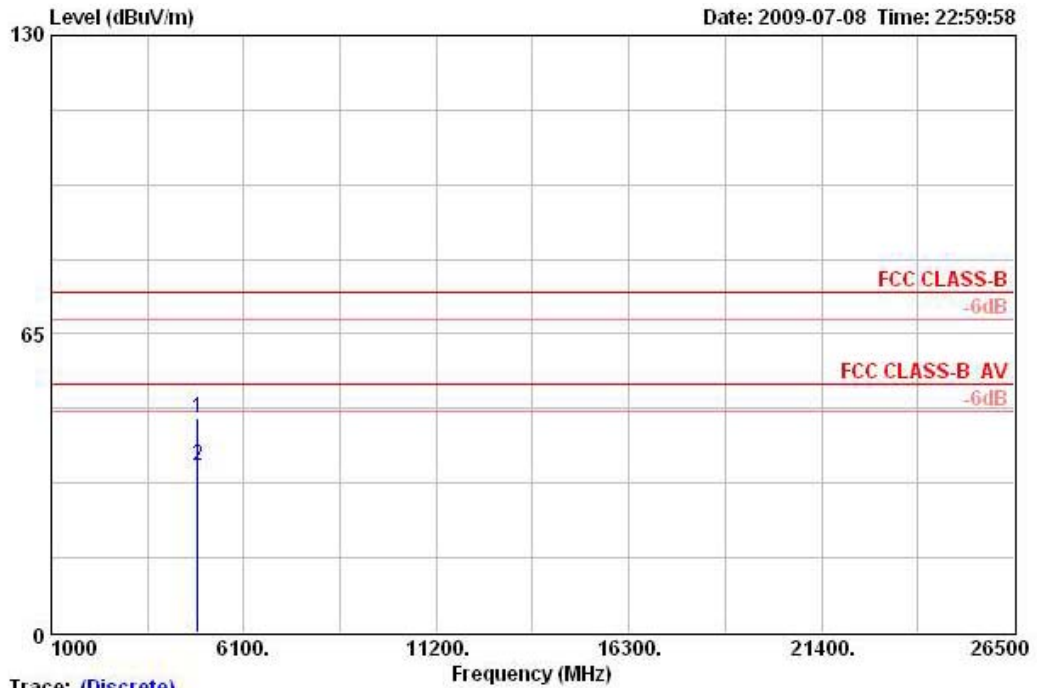
Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11n CH 6 (Ant. 1) MCS0



Trace: (Discrete)

Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 VERTICAL 0cm 0deg
 eut : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 °C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ1
 : Tx 11n CH06

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4873.880	37.43	-16.57	54.00	32.59	33.48	35.20	6.56	AVERAGE	VERTICAL	21	100
2	4873.910	46.64	-27.36	74.00	41.80	33.48	35.20	6.56	PEAK	VERTICAL	21	100

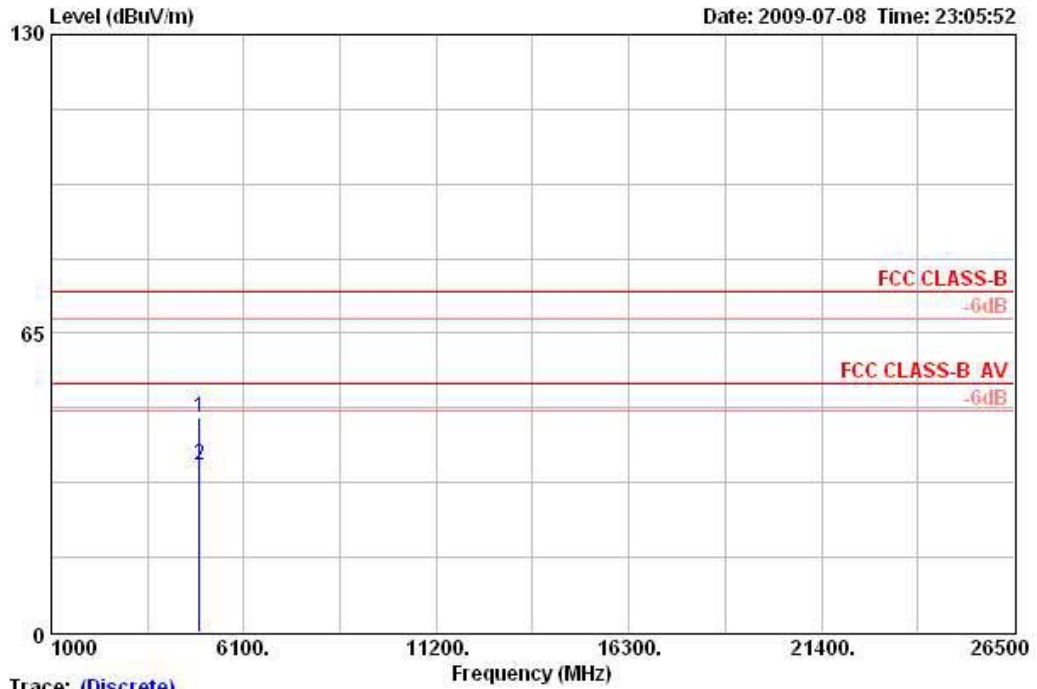


Trace: (Discrete)

Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 HORIZONTAL 0cm 0deg
 Ant : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 'C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJI
 : Tx 11n CH06

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
	MHz	dBuV/m	Limit	Line	Level	Factor	Factor	Loss			Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4873.760	46.85	-27.15	74.00	42.01	33.48	35.20	6.56	PEAK	HORIZONTAL	360	100
2	4874.090	36.44	-17.56	54.00	31.60	33.48	35.20	6.56	AVERAGE	HORIZONTAL	360	100

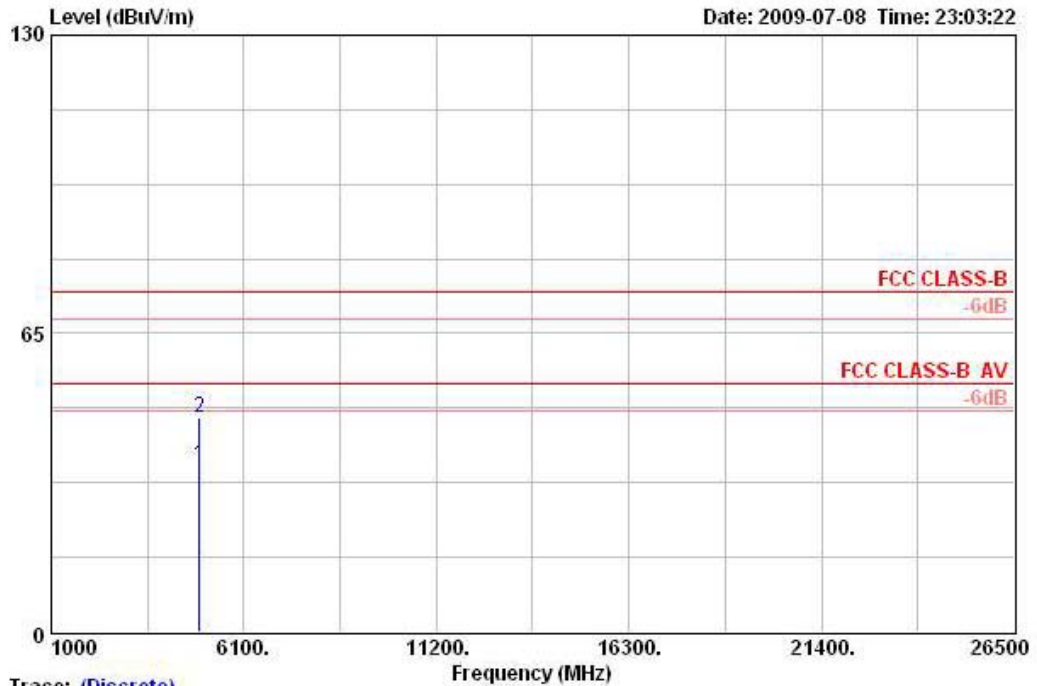
Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11n CH 11 (Ant. 1) MCS0



Trace: (Discrete)

Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 VERTICAL 0cm 0deg
 eut : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 °C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ1
 : Tx 11n CH11

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4923.920	46.75	-27.25	74.00	41.64	33.58	35.20	6.73	PEAK	VERTICAL	269	100
2	4924.010	36.36	-17.64	54.00	31.26	33.58	35.20	6.73	AVERAGE	VERTICAL	269	100



Trace: (Discrete)

Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18CHORN ANT:20070301 HORIZONTAL 0cm 0deg
 eut : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 'C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ1
 : Tx 11n CH11

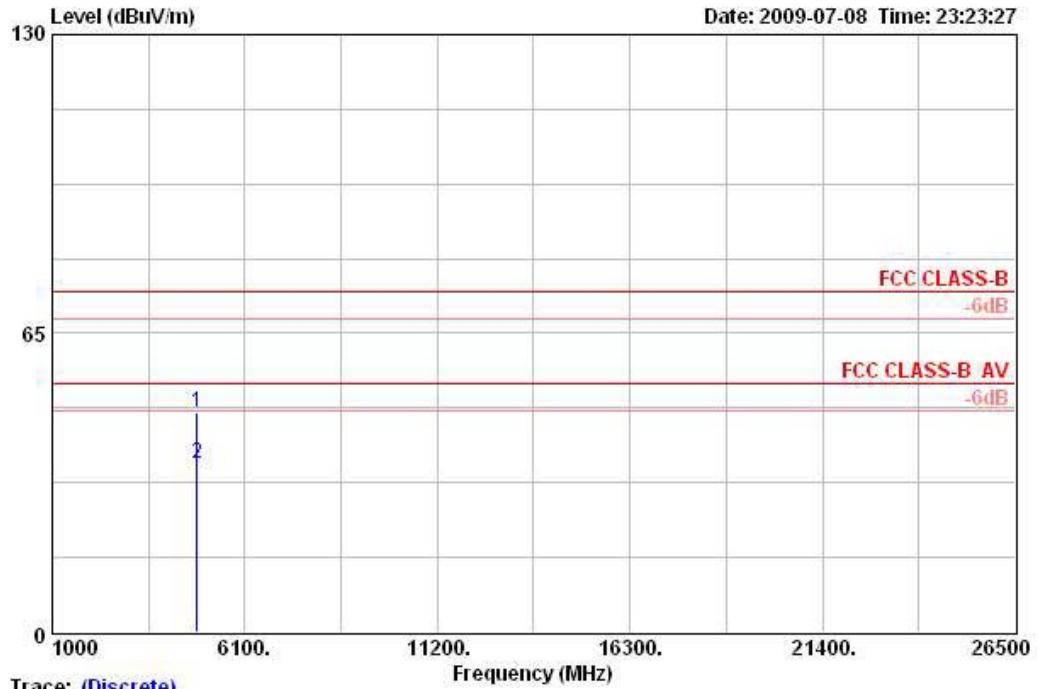
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4923.960	36.35	-17.65	54.00	31.24	33.58	35.20	6.73	AVERAGE	HORIZONTAL	359	100
2	4924.000	46.81	-27.19	74.00	41.71	33.58	35.20	6.73	PEAK	HORIZONTAL	359	100

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

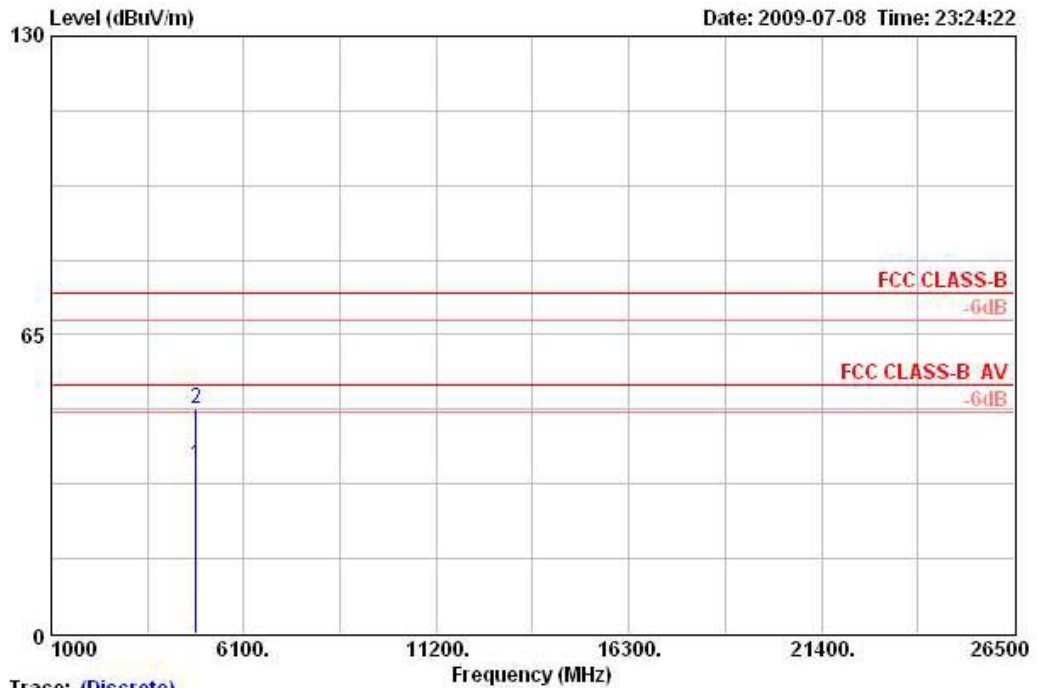
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11n CH 1 (Ant. 2) MCS0



Trace: (Discrete)
 Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 VERTICAL 0cm 0deg
 eut : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 °C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ2
 : Tx 11n CH01

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4823.440	47.73	-26.27	74.00	43.15	33.39	35.20	6.39	PEAK	VERTICAL	0	100
2	4823.950	36.81	-17.19	54.00	32.23	33.39	35.20	6.39	AVERAGE	VERTICAL	0	100

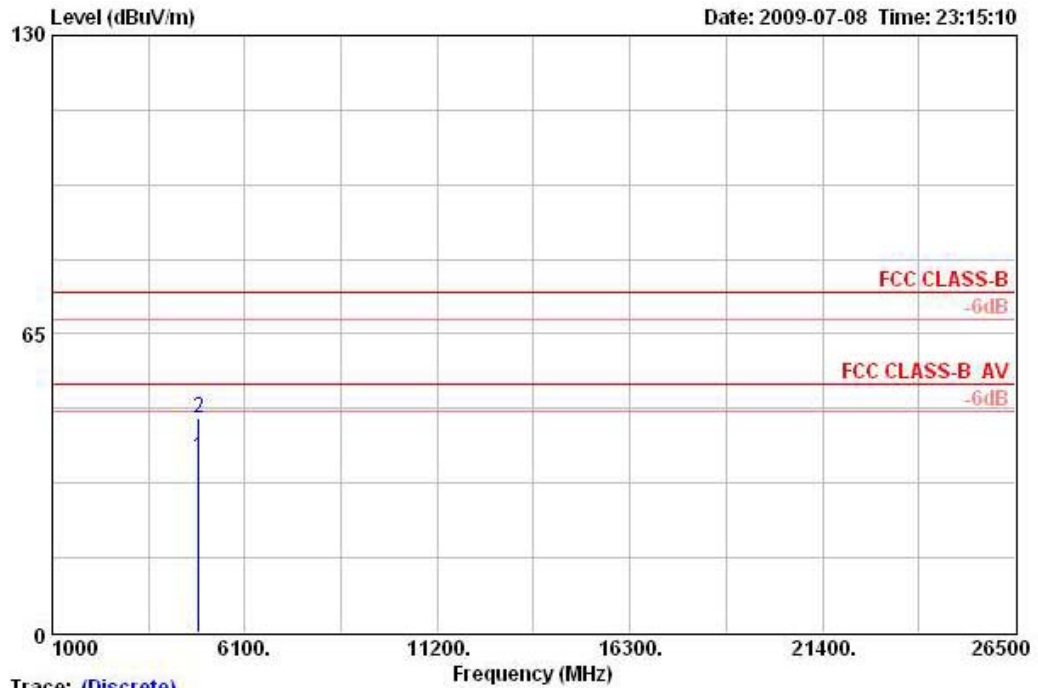


Trace: (Discrete)

Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 HORIZONTAL 0cm 0deg
 Antenna : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 'C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ2
 : Tx 11n CH01

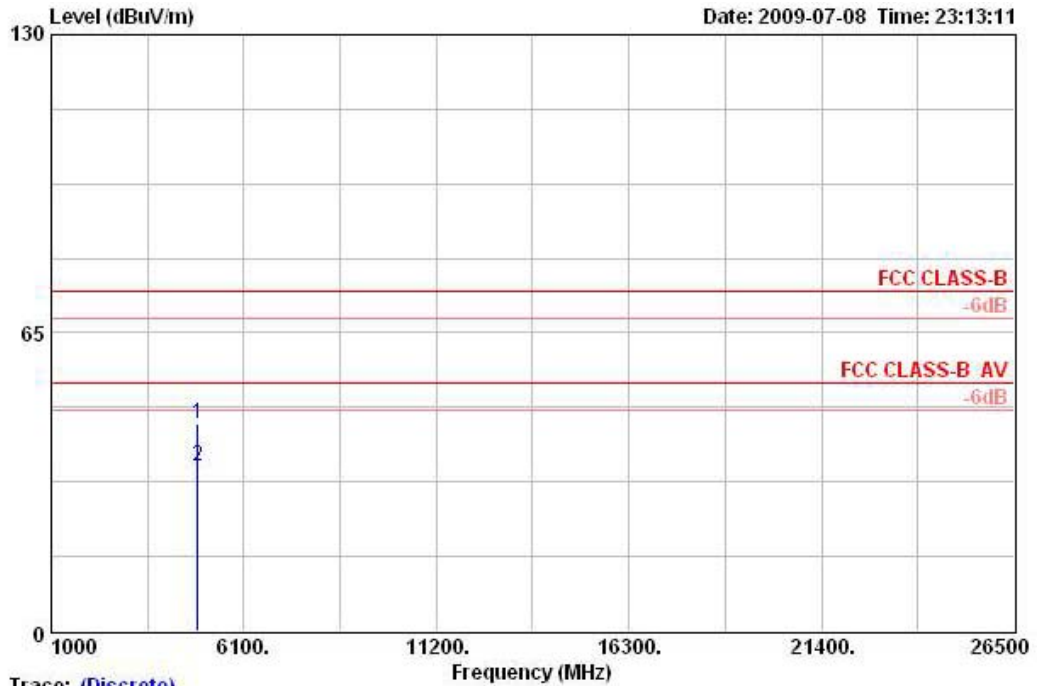
	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
	MHz	dBuV/m	Limit	Line	Level	Factor	Factor	Loss			Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4824.170	36.55	-17.45	54.00	31.97	33.39	35.20	6.39	AVERAGE	HORIZONTAL	0	100
2	4826.380	49.02	-24.98	74.00	44.45	33.39	35.20	6.39	PEAK	HORIZONTAL	0	100

Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11n CH 6 (Ant. 2) MCS0



Trace: (Discrete)
 Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 VERTICAL 0cm 0deg
 eut : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 °C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ2
 : Tx 11n CH06

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4874.020	38.19	-15.81	54.00	33.35	33.48	35.20	6.56	AVERAGE	VERTICAL	87	100
2	4874.020	46.67	-27.33	74.00	41.83	33.48	35.20	6.56	PEAK	VERTICAL	87	100

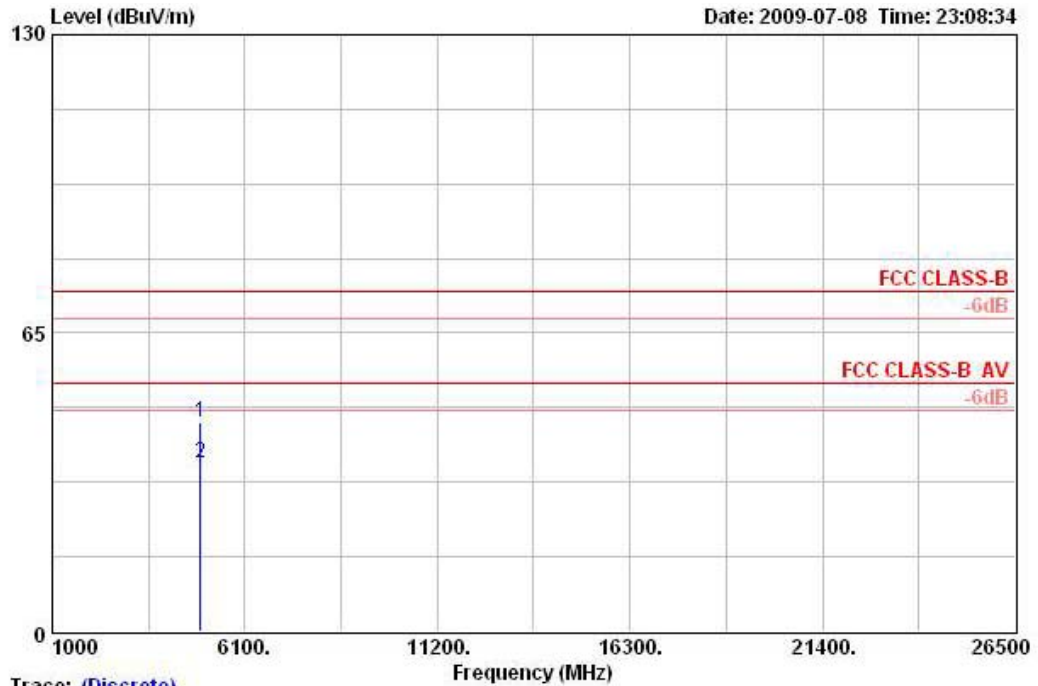


Trace: (Discrete)

Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 HORIZONTAL 0cm 0deg
 Ant : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 'C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ2
 : Tx 11n CH06

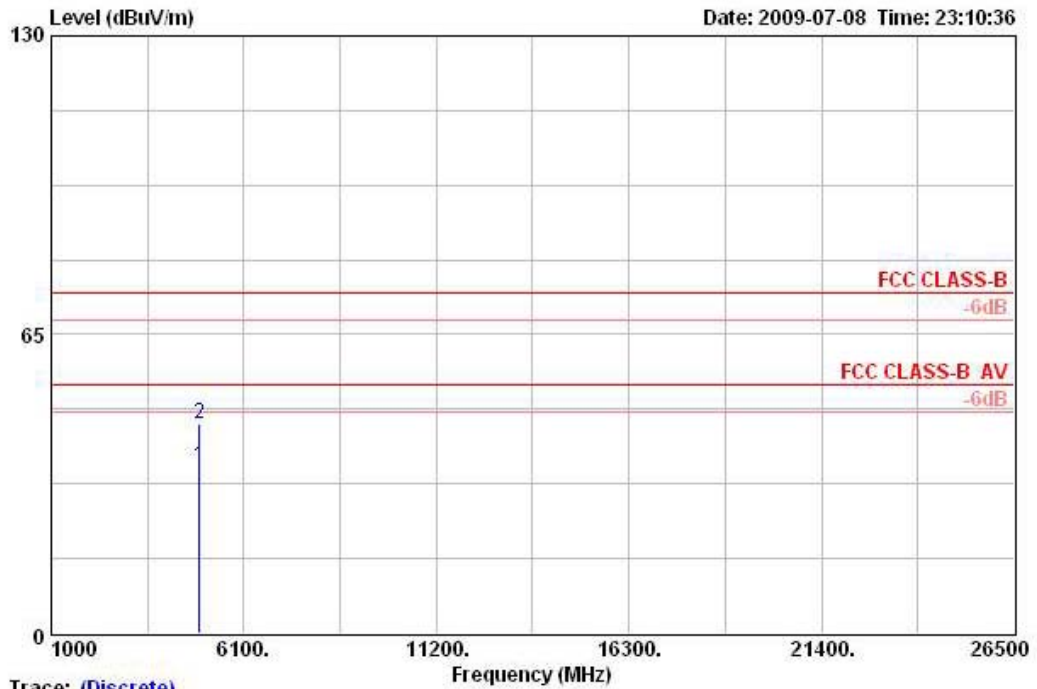
	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
	MHz	dBuV/m	dB	dBuV/m	Level	Factor	Factor	Loss			Pos	Pos
					dBuV	dB/m	dB	dB			deg	cm
1	4873.840	45.17	-28.83	74.00	40.33	33.48	35.20	6.56	PEAK	HORIZONTAL	247	100
2	4874.010	36.07	-17.93	54.00	31.23	33.48	35.20	6.56	AVERAGE	HORIZONTAL	247	100

Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11n CH 11 (Ant. 2) MCS0



Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 VERTICAL 0cm 0deg
 eut : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 °C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ2
 : Tx 11n CH11

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB			deg	cm
1	4923.940	45.66	-28.34	74.00	40.55	33.58	35.20	6.73	PERK	VERTICAL	87	100
2	4924.030	36.78	-17.22	54.00	31.68	33.58	35.20	6.73	AVERAGE	VERTICAL	87	8960



Trace: (Discrete)
 Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18CHORN ANT:20070301 HORIZONTAL 0cm 0deg
 Ant : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 °C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ2
 : Tx 11n CH11

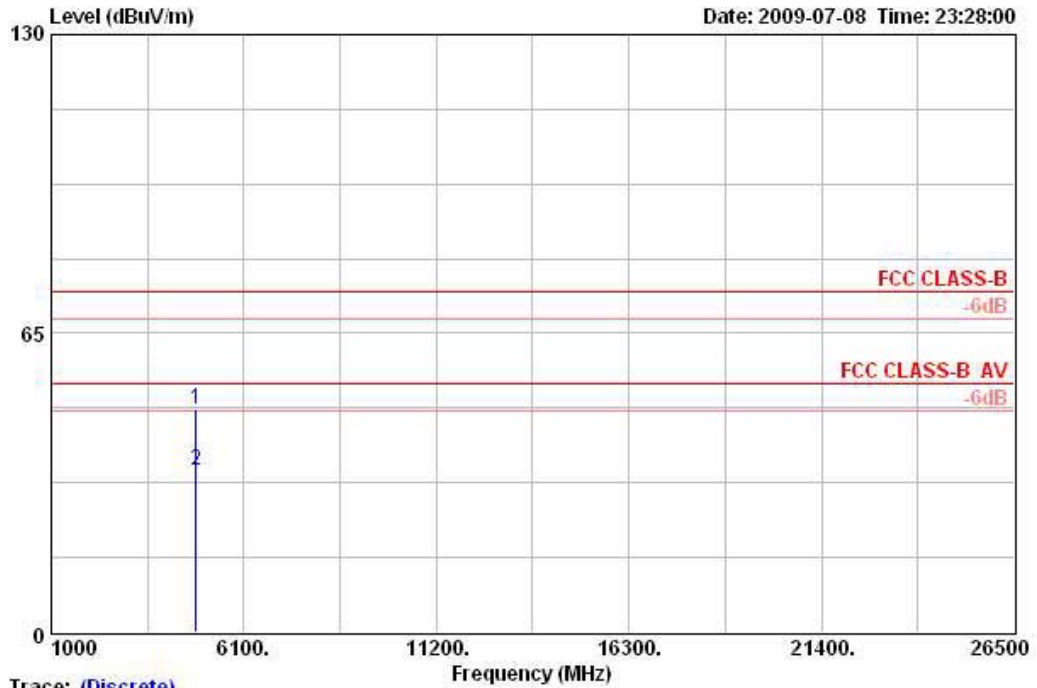
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4924.080	36.37	-17.63	54.00	31.26	33.58	35.20	6.73	AVERAGE	HORIZONTAL	126	100
2	4924.080	45.70	-28.30	74.00	40.59	33.58	35.20	6.73	PEAK	HORIZONTAL	126	100

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBUV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

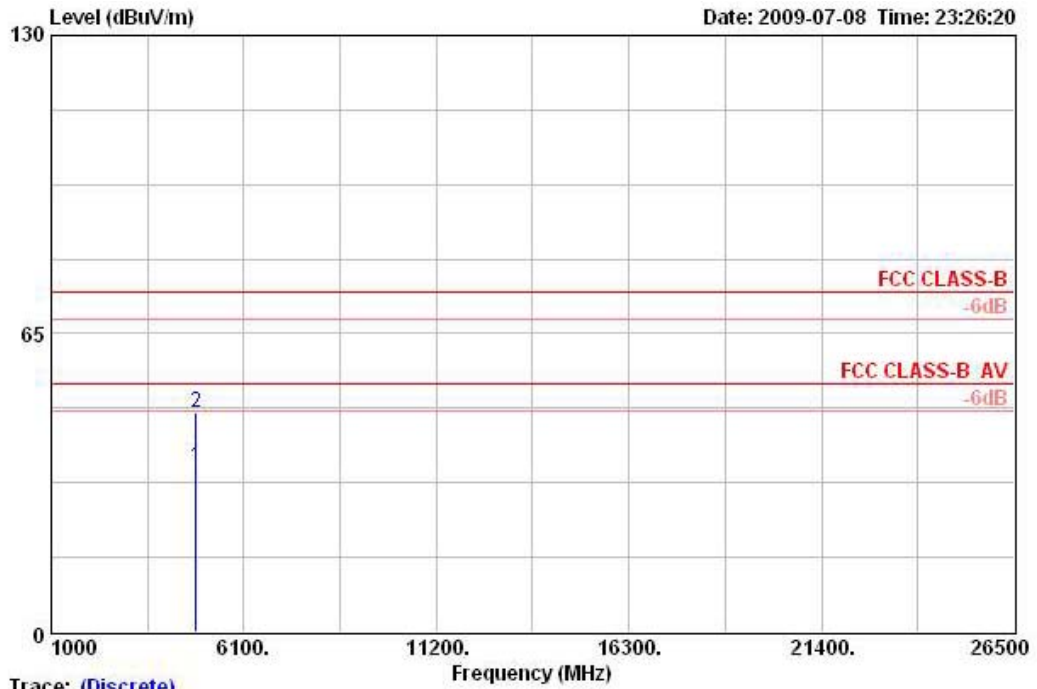
Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11n CH 1 (Ant.1 +Ant.2) MCS8



Trace: (Discrete)

Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 VERTICAL 0cm 0deg
 eut : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 'C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ1+ WJ2
 : Tx 11n CH01

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4824.380	48.62	-25.38	74.00	44.04	33.39	35.20	6.39	PEAK	VERTICAL	0	100
2	4826.400	35.09	-18.91	54.00	30.51	33.39	35.20	6.39	AVERAGE	VERTICAL	0	100

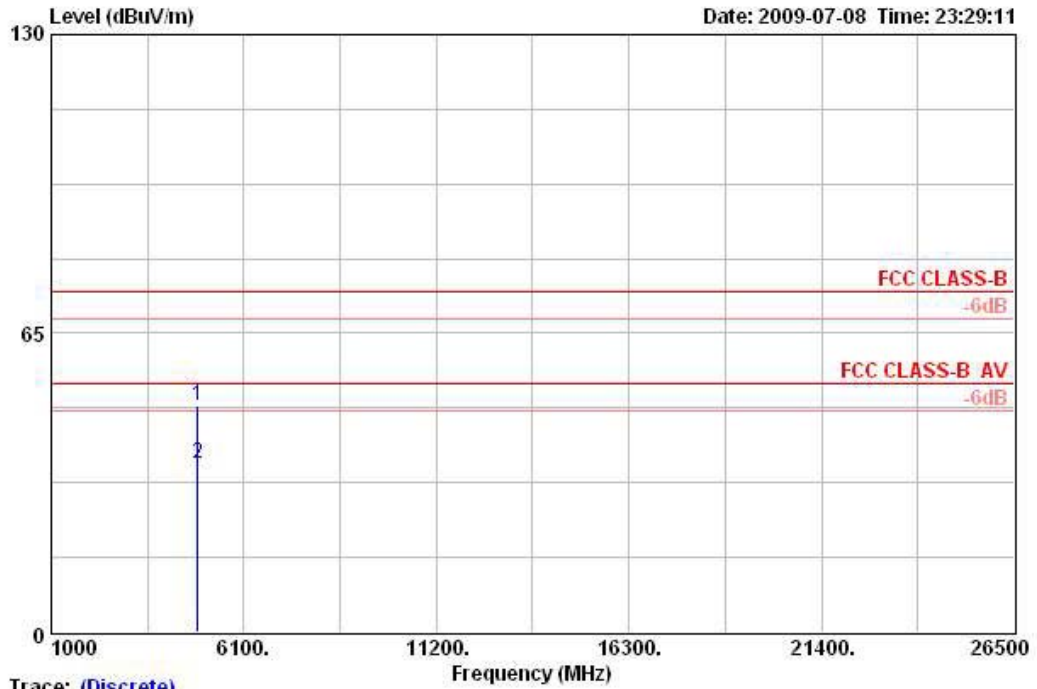


Trace: (Discrete)

Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 HORIZONTAL 0cm 0deg
 Antenna : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 °C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ1+ WJ2
 : Tx 11n CH01

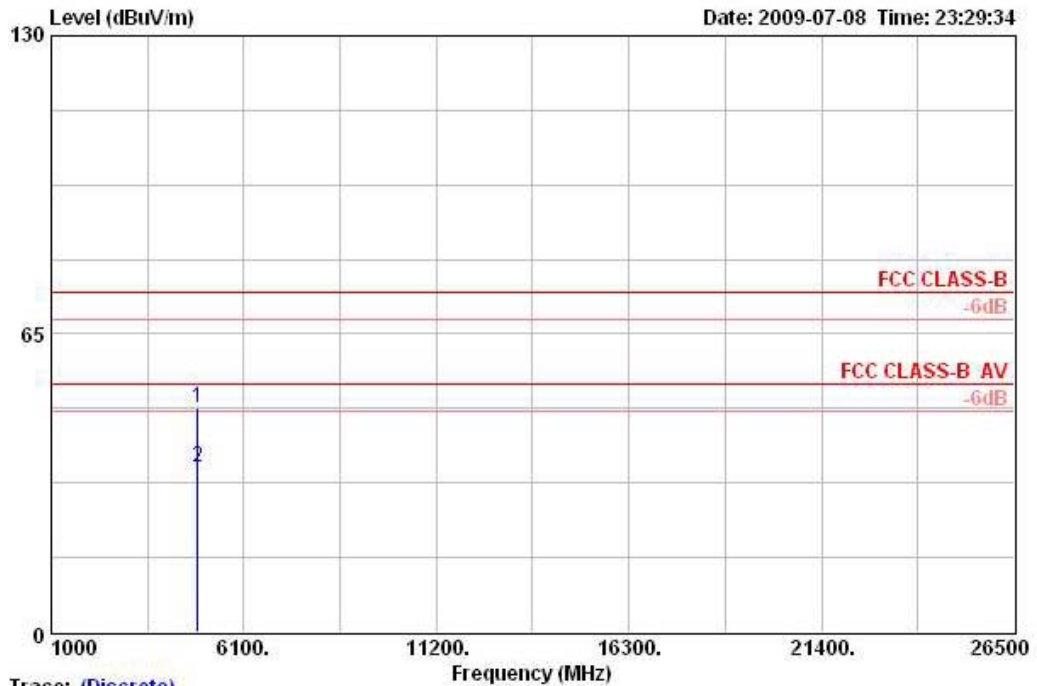
	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
	MHz	dBuV/m	Limit	Line	Level	Factor	Factor	Loss			Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4824.370	36.03	-17.97	54.00	31.45	33.39	35.20	6.39	AVERAGE	HORIZONTAL	0	100
2	4825.220	47.75	-26.25	74.00	43.17	33.39	35.20	6.39	PEAK	HORIZONTAL	0	100

Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11n CH 6 (Ant.1 +Ant.2) MCS8



Trace: (Discrete)
 Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 VERTICAL 0cm 0deg
 eut : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 °C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ1+ WJ2
 : Tx 11n CH06

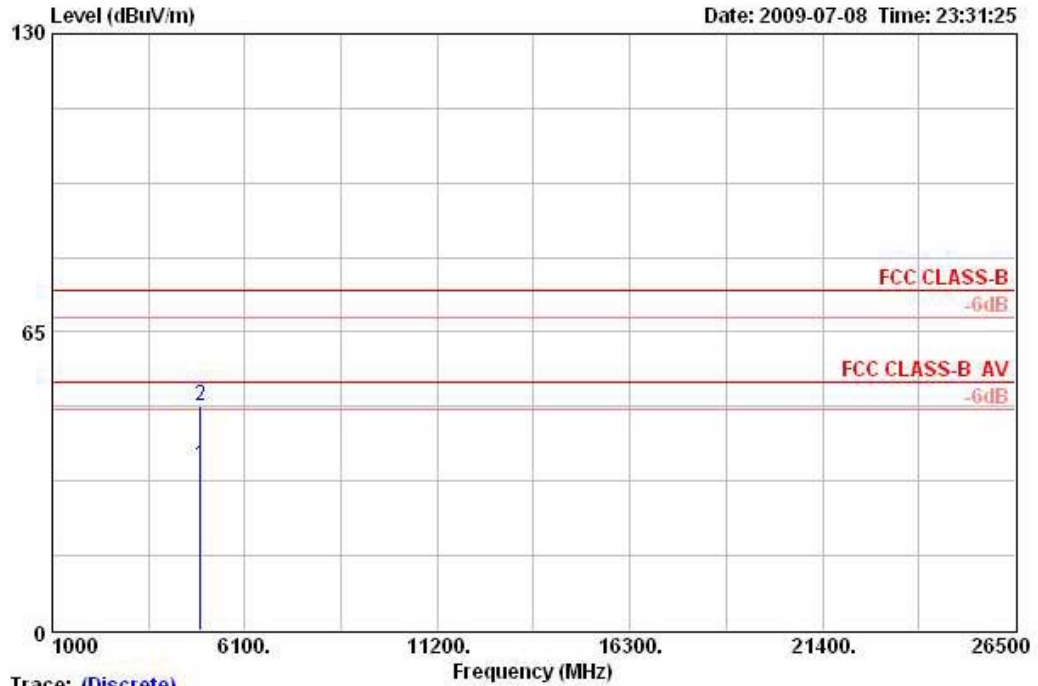
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4871.810	49.36	-24.64	74.00	44.52	33.48	35.20	6.56	PEAK	VERTICAL	360	100
2	4872.330	36.77	-17.23	54.00	31.92	33.48	35.20	6.56	AVERAGE	VERTICAL	360	100



Trace: (Discrete)
 Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 HORIZONTAL 0cm 0deg
 Ant : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 °C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ1+ WJ2
 : Tx 11n CH06

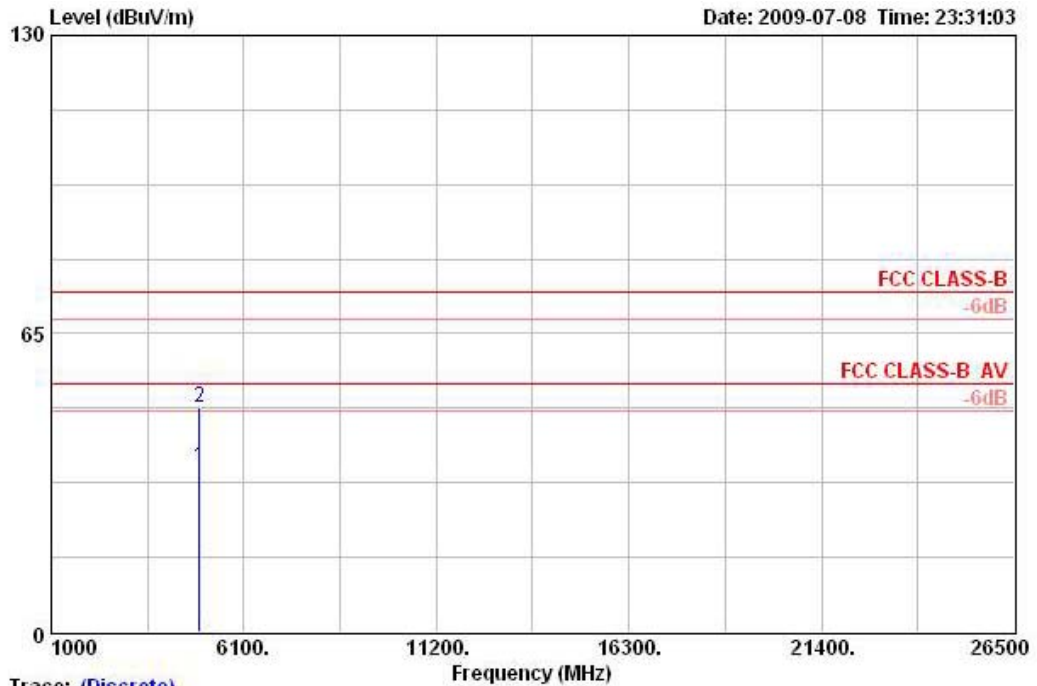
	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
	MHz	dBuV/m	dB	dBuV/m	Level	Factor	Factor	Loss			Pos	Pos
					dBuV	dB/m	dB	dB			deg	cm
1	4872.640	48.73	-25.27	74.00	43.89	33.48	35.20	6.56	PEAK	HORIZONTAL	360	100
2	4874.220	36.10	-17.90	54.00	31.26	33.48	35.20	6.56	AVERAGE	HORIZONTAL	360	100

Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11n CH 11 (Ant.1 +Ant.2) MCS8



Trace: (Discrete)
 Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 VERTICAL 0cm 0deg
 eut : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 'C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ1+ WJ2
 : Tx 11n CH11

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
	MHz	dBUV/m	Limit	Line	Level	Factor	Factor	Loss			Pos	Pos
			dB	dBUV/m	dBUV	dB/m	dB	dB			deg	cm
1	4923.190	35.87	-18.13	54.00	30.76	33.58	35.20	6.73	AVERAGE	VERTICAL	0	100
2	4926.170	48.79	-25.21	74.00	43.68	33.58	35.20	6.73	PEAK	VERTICAL	0	100



Trace: (Discrete)

Site : 03CH03-CB
 Condition : FCC CLASS-B 3m 18GHORN ANT:20070301 HORIZONTAL 0cm 0deg
 Ant : TG587n V2
 power : 110V 60Hz
 Engineer : Beck
 Temp : 25.6 °C
 Relative Humidity : 56%
 Atmosphere : 98.6 Kpa
 memo : WJ1+ WJ2
 : Tx 11n CH11

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			Pos	Pos
											deg	cm
1	4922.740	35.94	-18.06	54.00	30.84	33.58	35.20	6.73	AVERAGE	HORIZONTAL	0	100
2	4926.170	48.79	-25.21	74.00	43.68	33.58	35.20	6.73	PEAK	HORIZONTAL	0	100

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

3.7 Photographs of Radiated Emission Test Configuration

- For radiated emissions 9kHz~30MHz

FRONT VIEW

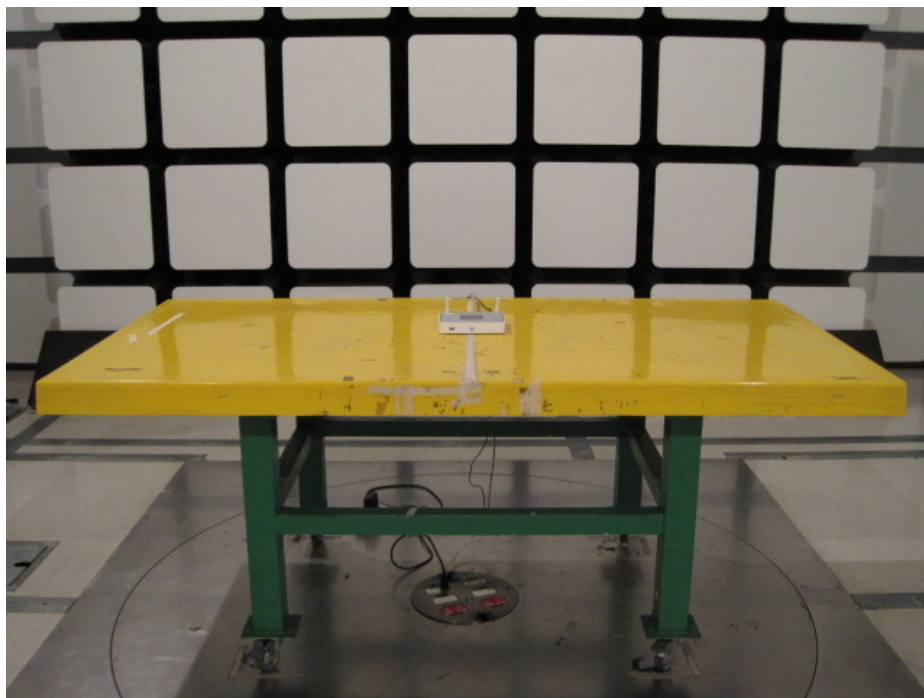


REAR VIEW

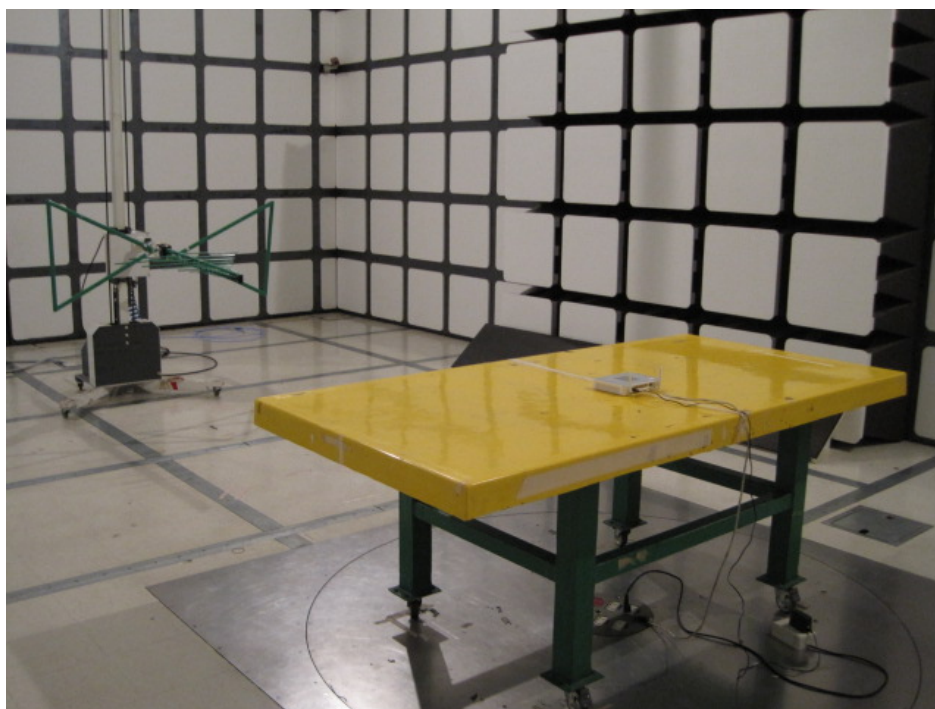


- Frequency Range from 30MHz~1000MHz

FRONT VIEW

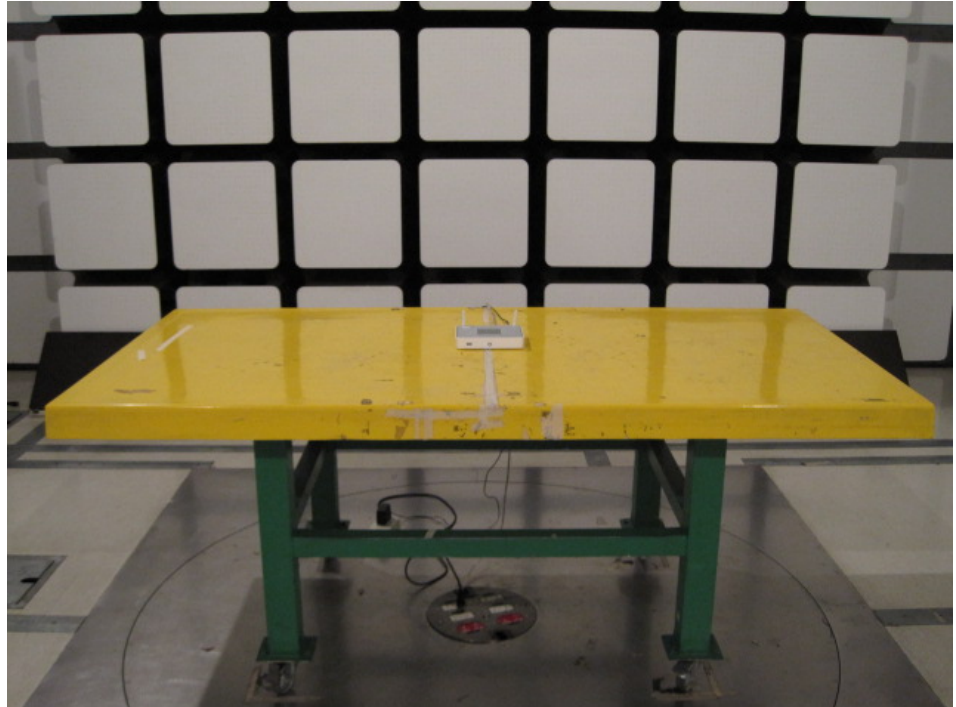


REAR VIEW

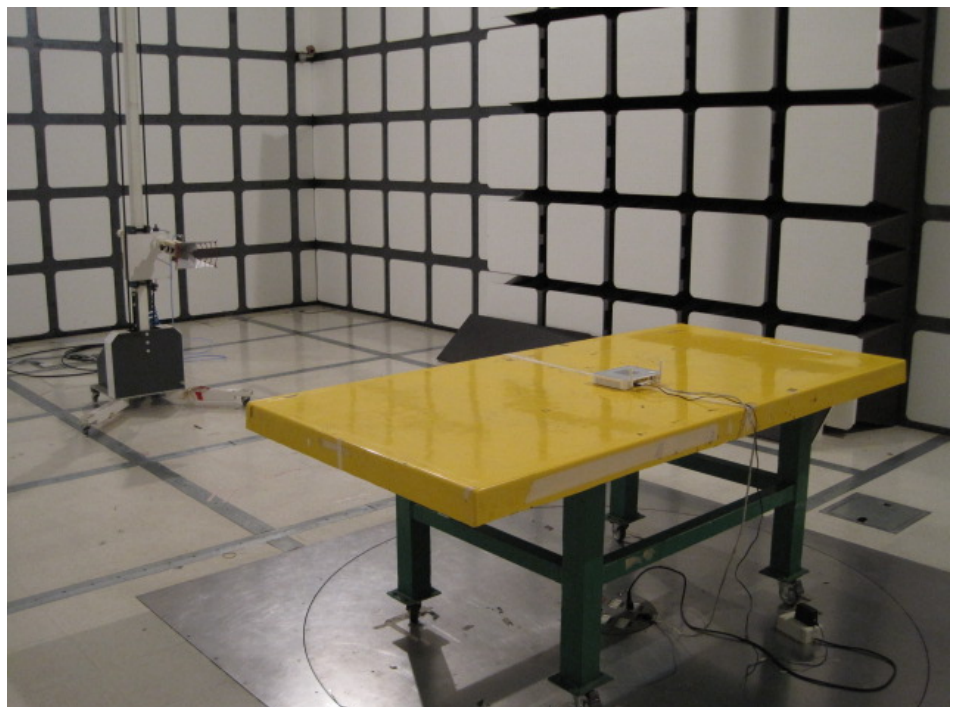


- The photographs show the configuration that generates the maximum emission.
- Frequency Range above 1000MHz

FRONT VIEW



REAR VIEW



3.8 Band Edge and Fundamental Emissions Measurement

3.8.1 Limit

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

3.8.2 Measuring Instruments and Setting

Please refer to section 4 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	100 MHz
Preamp	ON
Filter type	6dB
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1MHz / 1MHz for Peak

3.8.3 Test Procedures

1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 m to 4 m) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.

6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High – Low scan is not required in this case.

3.8.4 Test Setup Layout

This test setup layout is the same as that shown in section 3.5.4.

3.8.5 Test Deviation

There is no deviation with the original standard.

3.8.6 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

3.8.7 Test Result of Band Edge and Fundamental Emissions

Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11b CH 1, 6, 11 (Ant.1)

Channel 1

	Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant		
	MHz	dBuV/m	Line	Limit	Level	Loss	Factor	Factor	Pos	Pos	Remark	Pol/Phase
			dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 !	2375.200	52.48	54.00	-1.52	21.60	2.75	0.00	28.13	336	100	AVERAGE	VERTICAL
2	2375.600	61.61	74.00	-12.39	30.73	2.75	0.00	28.13	336	100	PEAK	VERTICAL
3 @	2409.200	104.30	54.00			2.77	0.00	28.21	336	100	AVERAGE	VERTICAL
4 over	2409.400	107.72	74.00			2.77	0.00	28.21	336	100	PEAK	VERTICAL

An item 3 and 4 are Fundamental Emissions.

Channel 6

	Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant		
	MHz	dBuV/m	Line	Limit	Level	Loss	Factor	Factor	Pos	Pos	Remark	Pol/Phase
			dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	2390.000	46.44	54.00	-7.56	15.51	2.76	0.00	28.17	313	100	AVERAGE	VERTICAL
2	2390.000	55.69	74.00	-18.31	24.76	2.76	0.00	28.17	313	100	PEAK	VERTICAL
3 @	2434.400	104.78	54.00			2.78	0.00	28.29	313	100	AVERAGE	VERTICAL
4 over	2440.800	109.05	74.00			2.78	0.00	28.29	313	100	PEAK	VERTICAL
5	2483.500	45.25	54.00	-8.75	14.07	2.81	0.00	28.37	313	100	AVERAGE	VERTICAL
6	2485.500	56.95	74.00	-17.05	25.73	2.81	0.00	28.41	313	100	PEAK	VERTICAL

An item 3 and 4 are Fundamental Emissions.

Channel 11

	Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant		
	MHz	dBuV/m	Line	Limit	Level	Loss	Factor	Factor	Pos	Pos	Remark	Pol/Phase
			dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 over	2458.400	106.49	74.00			2.80	0.00	28.33	314	100	PEAK	VERTICAL
2 @	2458.800	102.62	54.00			2.80	0.00	28.33	314	100	AVERAGE	VERTICAL
3	2483.500	47.83	54.00	-6.17	16.65	2.81	0.00	28.37	314	100	AVERAGE	VERTICAL
4	2483.500	58.52	74.00	-15.48	27.34	2.81	0.00	28.37	314	100	PEAK	VERTICAL

An item 1 and 2 are Fundamental Emissions.

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11b CH 1, 6, 11 (Ant.2)

Channel 1

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	dB/m	deg	cm	deg	
1 !	2374.800	52.73	-1.27	54.00	22.80	27.89	2.04	0.00	28.17	319	100	216	VERTICAL
2	2375.200	60.98	-13.02	74.00	31.05	27.89	2.04	0.00	28.17	319	100	216	VERTICAL
3 @	2415.200	105.75			75.85	27.84	2.05	0.00	28.25	319	100	216	VERTICAL
4 over	2415.600	110.39			80.49	27.84	2.07	0.00	28.25	319	100	216	VERTICAL

An item 3 and 4 are Fundamental Emissions.

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm	deg	
1 !	2390.000	49.61	54.00	-4.39	18.68	2.76	0.00	28.17	319	100	216	VERTICAL
2	2390.000	59.12	74.00	-14.88	28.19	2.76	0.00	28.17	319	100	216	VERTICAL
3 over	2433.400	111.46	74.00			2.78	0.00	28.25	319	100	216	VERTICAL
4 @	2434.400	106.97	54.00			2.78	0.00	28.29	319	100	216	VERTICAL
5	2483.500	45.77	54.00	-8.23	14.59	2.81	0.00	28.37	319	100	216	VERTICAL
6	2483.500	56.86	74.00	-17.14	25.67	2.81	0.00	28.37	319	100	216	VERTICAL

An item 3 and 4 are Fundamental Emissions.

Channel 11

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm	deg	
1 over	2464.400	109.38	74.00			2.80	0.00	28.33	322	100	216	VERTICAL
2 @	2464.800	105.09	54.00			2.80	0.00	28.33	322	100	216	VERTICAL
3 !	2483.500	48.68	54.00	-5.32	17.50	2.81	0.00	28.37	322	100	216	VERTICAL
4	2487.100	59.87	74.00	-14.13	28.65	2.81	0.00	28.41	322	100	216	VERTICAL

An item 1 and 2 are Fundamental Emissions.

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11g CH 1, 6, 11 (Ant.1)

Channel 1

	Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm	Remark	Pol/Phase
1 !	2389.800	71.60	74.00	-2.40	40.67	2.76	0.00	28.17	12	100	PEAK	VERTICAL
2 !	2390.000	53.24	54.00	-0.76	22.30	2.76	0.00	28.17	12	100	AVERAGE	VERTICAL
3 over	2417.400	110.24	74.00			2.77	0.00	28.25	12	100	PEAK	VERTICAL
4 B	2419.400	100.20	54.00			2.77	0.00	28.25	12	100	AVERAGE	VERTICAL

An item 3 and 4 are Fundamental Emission

Channel 6

	Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm	Remark	Pol/Phase
1	2390.000	56.51	74.00	-17.49	25.58	2.76	0.00	28.17	314	100	PEAK	VERTICAL
2	2390.000	47.75	54.00	-6.25	16.82	2.76	0.00	28.17	314	100	AVERAGE	VERTICAL
3 B	2432.800	100.95	54.00			2.78	0.00	28.25	314	100	AVERAGE	VERTICAL
4 over	2441.200	112.19	74.00			2.78	0.00	28.29	314	100	PEAK	VERTICAL
5	2483.500	45.80	54.00	-8.20	14.62	2.81	0.00	28.37	314	100	AVERAGE	VERTICAL
6	2483.500	55.20	74.00	-18.80	24.02	2.81	0.00	28.37	314	100	PEAK	VERTICAL

An item 3 and 4 are Fundamental Emissions.

Channel 11

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable		Table	Ant	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	Remark	Pos	Pos	
									Pol/Phase	deg	cm	
1 over	2465.800	91.64			60.52	28.22	0.00	2.91	AVERAGE	30	100	HORIZONTAL
2 over	2467.000	101.78			70.63	28.22	0.00	2.93	PEAK	30	100	HORIZONTAL
3 !	2483.500	49.50	-4.50	54.00	18.32	28.26	0.00	2.93	AVERAGE	30	100	HORIZONTAL
4	2483.500	64.11	-9.89	74.00	32.93	28.26	0.00	2.93	PEAK	30	100	HORIZONTAL

An item 1 and 2 are Fundamental Emissions.

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11g CH 1, 6, 11 (Ant.2)

Channel 1

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Antenna Remark	Table Pos	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	deg	
1 !	2390.000	53.92	-0.08	54.00	24.00	27.87	2.05	0.00	AVERAGE	100	149	VERTICAL	
2 !	2390.000	72.61	-1.39	74.00	42.69	27.87	2.05	0.00	PEAK	100	149	VERTICAL	
3 over	2414.800	113.76			83.87	27.84	2.05	0.00	PEAK	100	149	VERTICAL	
4 over	2415.400	102.97			73.07	27.84	2.07	0.00	AVERAGE	100	149	VERTICAL	

An item 3 and 4 are Fundamental Emissions.

Channel 6

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Table Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm	deg		
1	2389.400	63.66	74.00	-10.34	32.73	2.76	0.00	28.17	321	100	PEAK	VERTICAL	
2 !	2390.000	52.27	54.00	-1.73	21.34	2.76	0.00	28.17	321	100	AVERAGE	VERTICAL	
3 over	2433.000	113.90	74.00			2.78	0.00	28.25	321	100	PEAK	VERTICAL	
4 @	2433.000	103.57	54.00			2.78	0.00	28.25	321	100	AVERAGE	VERTICAL	
5	2483.500	47.06	54.00	-6.94	15.88	2.81	0.00	28.37	321	100	AVERAGE	VERTICAL	
6	2485.100	58.44	74.00	-15.56	27.22	2.81	0.00	28.41	321	100	PEAK	VERTICAL	

An item 3 and 4 are Fundamental Emissions.

Channel 11

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Table Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm	deg		
1 over	2464.400	112.57	74.00			2.80	0.00	28.33	323	100	PEAK	VERTICAL	
2 @	2465.000	101.63	54.00			2.80	0.00	28.33	323	100	AVERAGE	VERTICAL	
3 !	2483.500	53.01	54.00	-0.99	21.83	2.81	0.00	28.37	323	100	AVERAGE	VERTICAL	
4 !	2483.700	72.18	74.00	-1.82	41.00	2.81	0.00	28.37	323	100	PEAK	VERTICAL	

An item 1 and 2 are Fundamental Emissions.

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11n CH 1, 6, 11 (Ant.1)

Channel 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	2390.000	53.50	-0.50	54.00	22.56	28.05	0.00	2.88	AVERAGE	VERTICAL	206	100
2 !	2390.000	69.23	-4.77	74.00	38.30	28.05	0.00	2.88	PEAK	VERTICAL	206	100
3 over	2410.600	108.76			77.79	28.09	0.00	2.88	PEAK	VERTICAL	206	100
4 @	2415.000	98.07			67.10	28.09	0.00	2.88	AVERAGE	VERTICAL	206	100

An item 3 and 4 are Fundamental Emissions.

Channel 6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	2390.000	47.59	-6.41	54.00	16.66	28.05	0.00	2.88	AVERAGE	VERTICAL	142	100
2	2390.000	58.19	-15.81	74.00	27.26	28.05	0.00	2.88	PEAK	VERTICAL	142	100
3 @	2432.600	100.35			69.32	28.13	0.00	2.90	AVERAGE	VERTICAL	142	100
4 over	2433.400	109.76			78.73	28.13	0.00	2.90	PEAK	VERTICAL	142	100
5	2483.500	55.41	-18.59	74.00	24.23	28.26	0.00	2.93	PEAK	VERTICAL	142	100
6	2483.500	45.68	-8.32	54.00	14.50	28.26	0.00	2.93	AVERAGE	VERTICAL	142	100

An item 3 and 4 are Fundamental Emissions.

Channel 11

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 @	2458.000	98.11			66.99	28.22	0.00	2.91	AVERAGE	VERTICAL	258	100
2 over	2465.600	106.61			75.48	28.22	0.00	2.91	PEAK	VERTICAL	258	100
3 !	2483.500	53.39	-0.61	54.00	22.21	28.26	0.00	2.93	AVERAGE	VERTICAL	258	100
4 !	2483.500	70.18	-3.82	74.00	39.00	28.26	0.00	2.93	PEAK	VERTICAL	258	100

An item 1 and 2 are Fundamental Emissions.

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11n CH 1, 6, 11 (Ant.2)

Channel 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	2389.800	72.94	-1.06	74.00	42.01	28.05	0.00	2.88	PEAK	VERTICAL	150	100
2 !	2390.000	53.45	-0.55	54.00	22.52	28.05	0.00	2.88	AVERAGE	VERTICAL	150	100
3 over	2410.200	111.06			80.08	28.09	0.00	2.88	PEAK	VERTICAL	150	100
4 @	2415.000	100.06			69.09	28.09	0.00	2.88	AVERAGE	VERTICAL	150	100

An item 3 and 4 are Fundamental Emissions.

Channel 6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	2390.000	51.07	-2.93	54.00	20.14	28.05	0.00	2.88	AVERAGE	VERTICAL	151	100
2	2390.000	62.35	-11.65	74.00	31.42	28.05	0.00	2.88	PEAK	VERTICAL	151	100
3 over	2432.400	113.07			82.04	28.13	0.00	2.90	PEAK	VERTICAL	151	100
4 @	2440.000	102.46			71.39	28.18	0.00	2.90	AVERAGE	VERTICAL	151	100
5	2483.500	57.27	-16.73	74.00	26.08	28.26	0.00	2.93	PEAK	VERTICAL	151	100
6	2483.500	47.63	-6.37	54.00	16.44	28.26	0.00	2.93	AVERAGE	VERTICAL	151	100

An item 3 and 4 are Fundamental Emissions.

Channel 11

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 over	2457.600	110.05			78.92	28.22	0.00	2.91	PEAK	VERTICAL	323	100
2 @	2458.000	99.94			68.82	28.22	0.00	2.91	AVERAGE	VERTICAL	323	100
3 !	2483.500	52.81	-1.19	54.00	21.63	28.26	0.00	2.93	AVERAGE	VERTICAL	323	100
4 !	2483.500	71.97	-2.03	74.00	40.79	28.26	0.00	2.93	PEAK	VERTICAL	323	100

An item 1 and 2 are Fundamental Emissions.

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test date	Jul. 08, 2009	Test Site No.	03CH03-CB
Temperature	25.6°C	Humidity	56%
Test Engineer	Beck Wu	Configuration	802.11n CH 1, 6, 11 (Ant.1+Ant.2)

Channel 1

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	2389.800	52.59	-1.41	54.00	21.66	28.05	0.00	2.88	AVERAGE	VERTICAL	155	100
2	2390.000	67.71	-6.29	74.00	36.78	28.05	0.00	2.88	PEAK	VERTICAL	155	100
3 over	2414.000	111.34			80.37	28.09	0.00	2.88	PEAK	VERTICAL	155	100
4 @	2419.200	100.78			69.80	28.09	0.00	2.90	AVERAGE	VERTICAL	155	100

An item 3 and 4 are Fundamental Emissions.

Channel 6

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	2390.000	48.79	-5.21	54.00	17.86	28.05	0.00	2.88	AVERAGE	VERTICAL	153	100
2	2390.000	61.23	-12.77	74.00	30.30	28.05	0.00	2.88	PEAK	VERTICAL	153	100
3 over	2430.400	112.89			81.86	28.13	0.00	2.90	PEAK	VERTICAL	153	100
4 @	2441.400	99.75			68.66	28.18	0.00	2.91	AVERAGE	VERTICAL	153	100
5	2483.500	55.15	-18.85	74.00	23.97	28.26	0.00	2.93	PEAK	VERTICAL	153	100
6	2483.500	46.20	-7.80	54.00	15.01	28.26	0.00	2.93	AVERAGE	VERTICAL	153	100

An item 3 and 4 are Fundamental Emissions.

Channel 11

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 over	2456.600	108.24			77.11	28.22	0.00	2.91	PEAK	VERTICAL	278	100
2 @	2458.200	100.12			69.00	28.22	0.00	2.91	AVERAGE	VERTICAL	278	100
3 !	2483.500	51.20	-2.80	54.00	20.01	28.26	0.00	2.93	AVERAGE	VERTICAL	278	100
4	2483.500	65.55	-8.45	74.00	34.37	28.26	0.00	2.93	PEAK	VERTICAL	278	100

An item 1 and 2 are Fundamental Emissions.

Note:

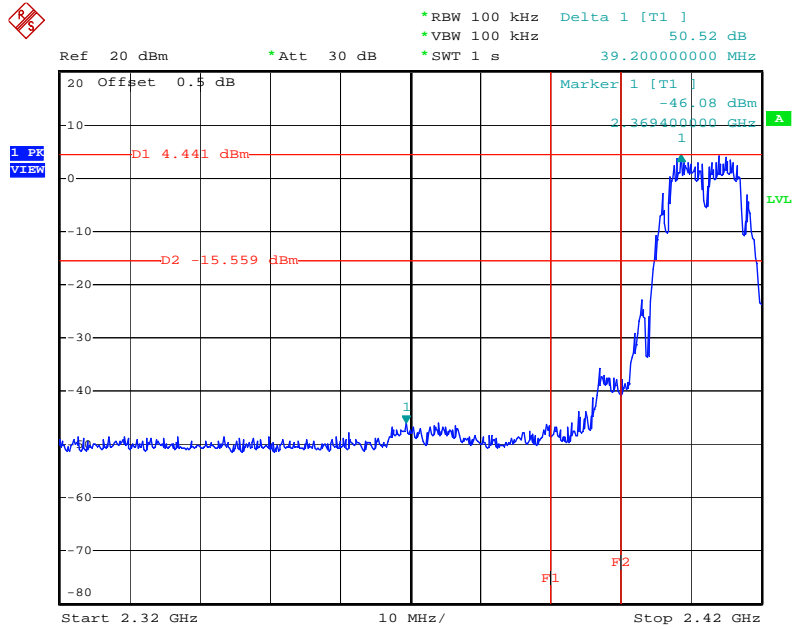
Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

For Emission not in Restricted Band

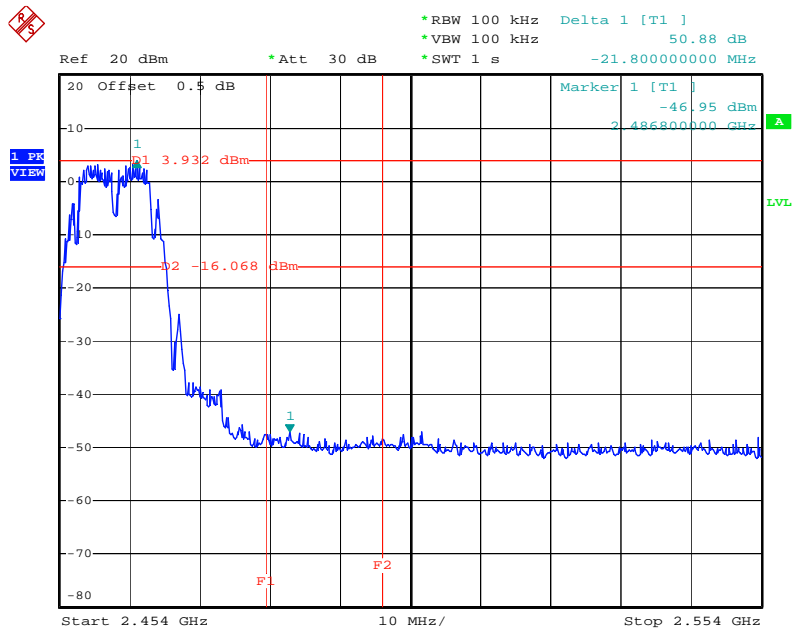
< Ant.1>

Low Band Edge Plot on Configuration IEEE 802.11b / 2412 MHz



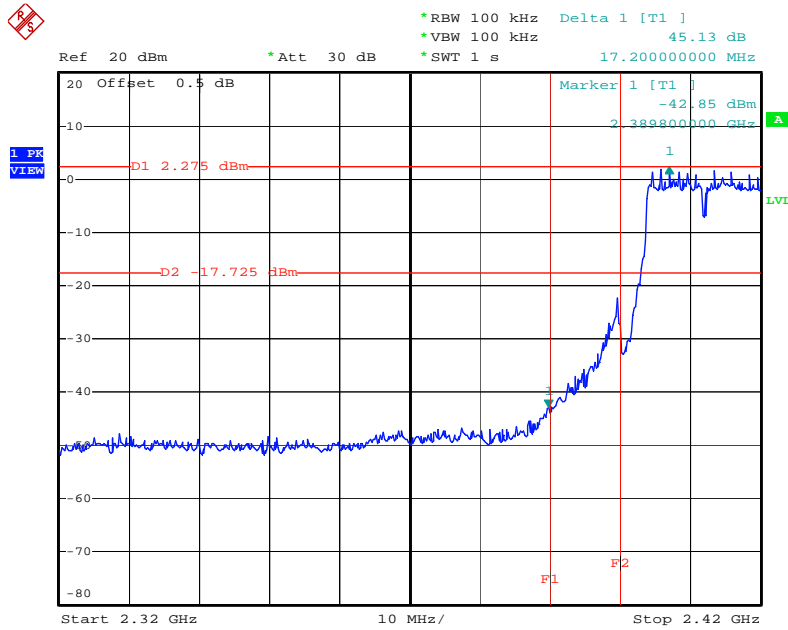
Date: 6.AUG.2009 17:53:12

High Band Edge Plot on Configuration IEEE 802.11b / 2462 MHz



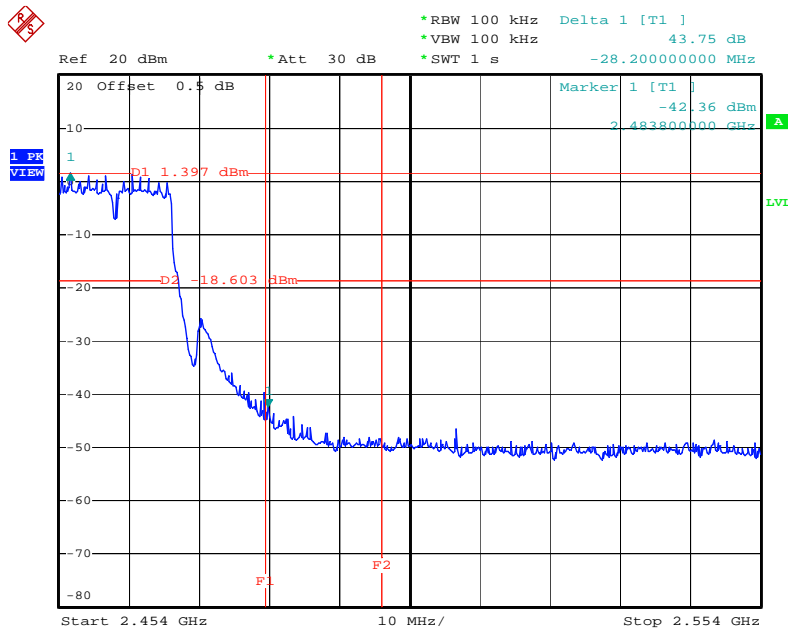
Date: 6.AUG.2009 17:58:20

Low Band Edge Plot on Configuration IEEE 802.11g / 2412 MHz



Date: 6.AUG.2009 18:30:03

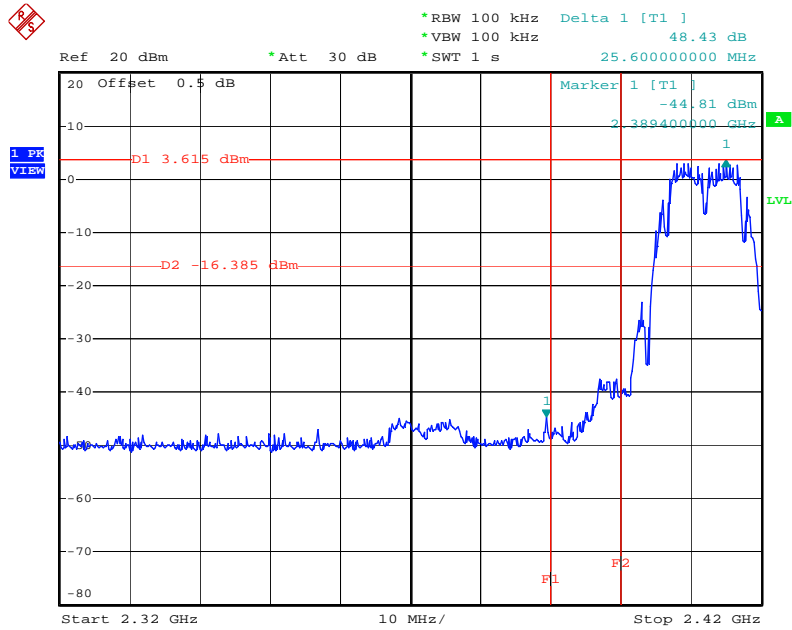
High Band Edge Plot on Configuration IEEE 802.11g / 2462 MHz



Date: 7.AUG.2009 00:47:40

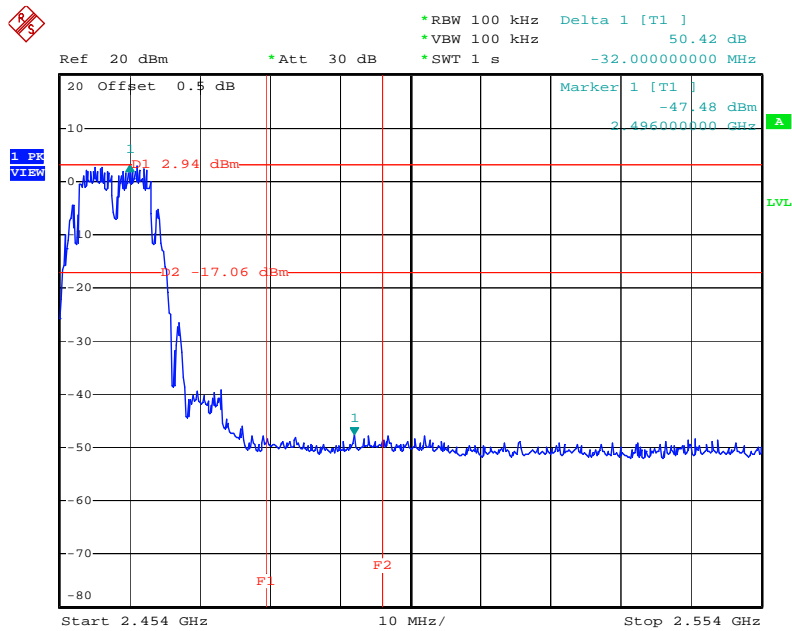
< Ant.2>

Low Band Edge Plot on Configuration IEEE 802.11b / 2412 MHz



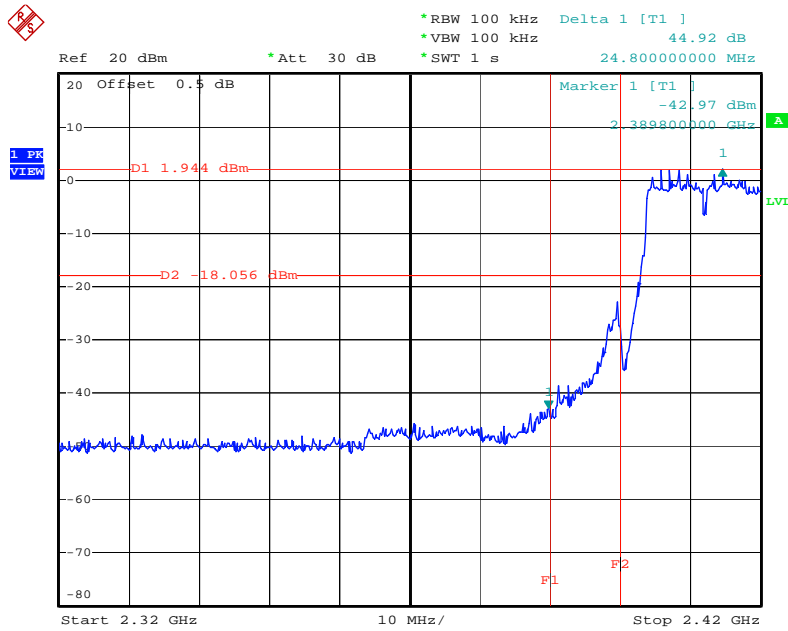
Date: 7.AUG.2009 00:37:30

High Band Edge Plot on Configuration IEEE 802.11b / 2462 MHz



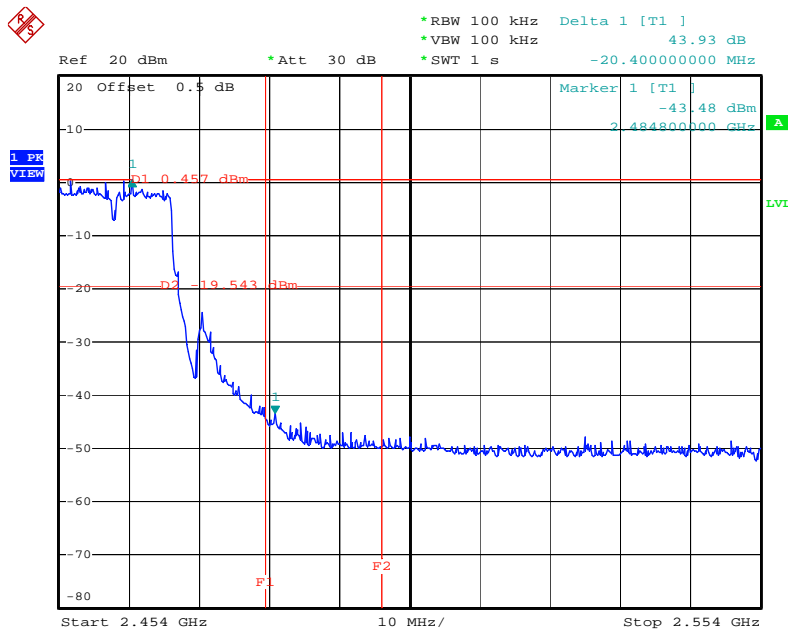
Date: 6.AUG.2009 18:49:56

Low Band Edge Plot on Configuration IEEE 802.11g / 2412 MHz



Date: 6.AUG.2009 18:40:04

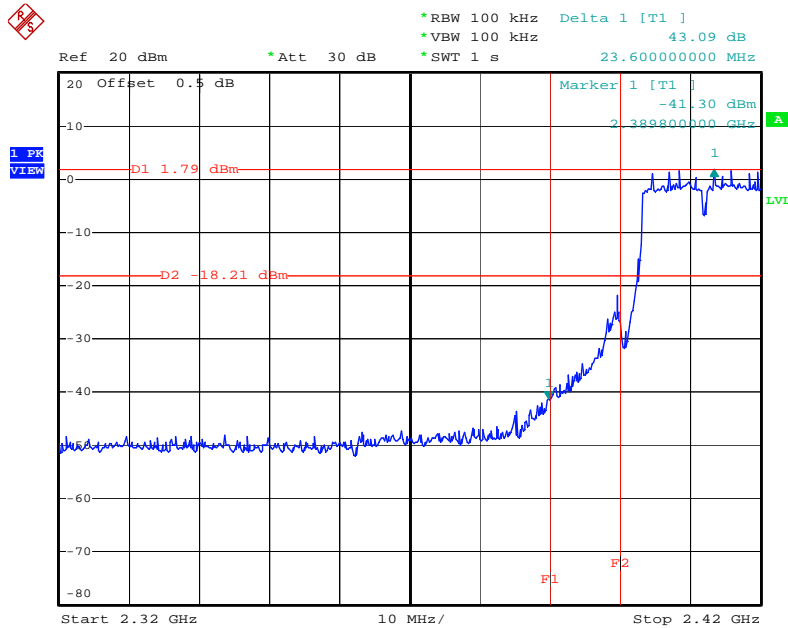
High Band Edge Plot on Configuration IEEE 802.11g / 2462 MHz



Date: 7.AUG.2009 00:42:15

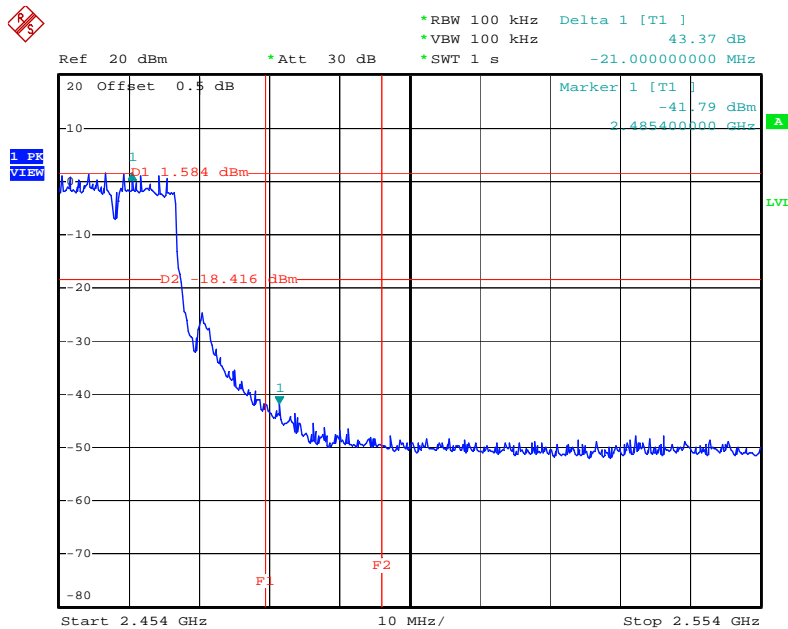
< MCS0 - Ant. 1 >

Low Band Edge Plot on Configuration IEEE 802.11n / 2412 MHz



Date: 6.AUG.2009 18:18:34

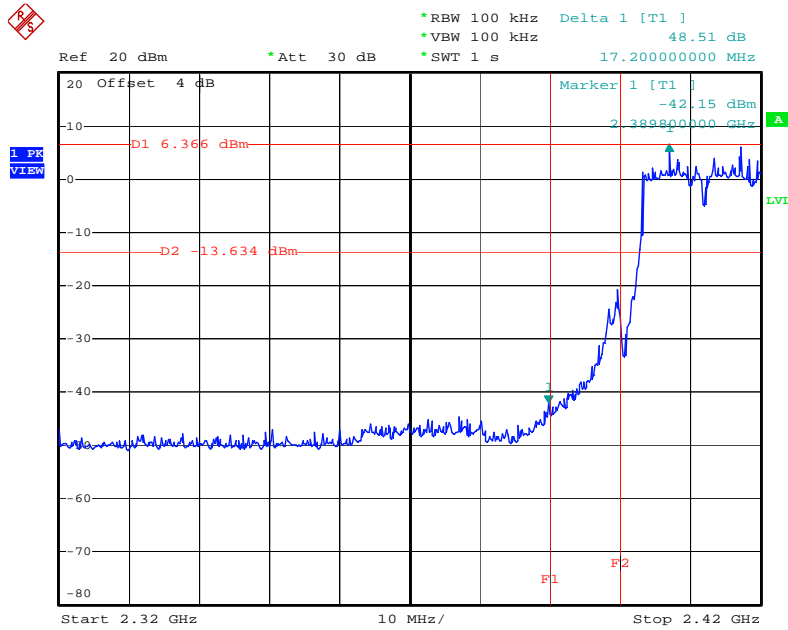
High Band Edge Plot on Configuration IEEE 802.11n / 2462 MHz



Date: 6.AUG.2009 18:04:01

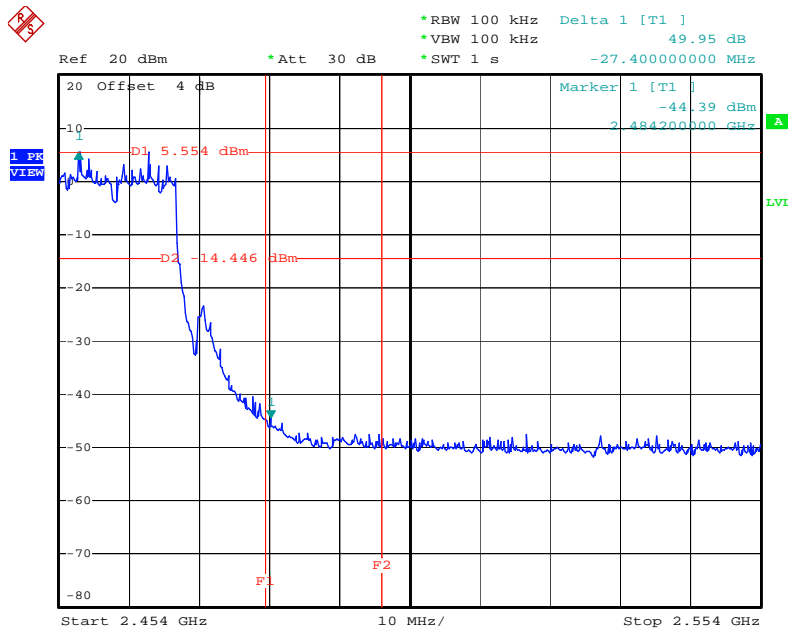
< MCS8 - Ant.1 + Ant.2 >

Low Band Edge Plot on Configuration IEEE 802.11n / 2412 MHz



Date: 6.AUG.2009 19:51:33

High Band Edge Plot on Configuration IEEE 802.11n / 2462 MHz



Date: 6.AUG.2009 19:33:47

3.9 Antenna Requirements

3.9.1 Limit

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

3.9.2 Antenna Connector Construction

Please refer to section 2.3 in this test report; antenna connector complied with the requirements.

4 LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Test Receiver	R&S	ESCS 30	100377	9kHz ~ 2.75GHz	Mar. 27,2008	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Apr. 11,2008	Conduction (CO01-CB)
V- LISN	Schwarzbeck	NSLK 8127	8127-478	9K ~ 30MHz	Sep. 05, 2008	Conduction (CO01-CB)

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

Radiated Emissions (9kHz~above 1GHz)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
BILOG ANTENNA	Schaffner	CBL6112D	22021	20MHz ~ 2GHz	Oct. 25, 2008	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz~18GHz	Nov. 17, 2008	Radiation (03CH01-CB)
Horn Antenna	SCHWARZBEAK	BBHA 9170	9170250	15GHz ~ 40GHz	Nov. 24 .2008	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Nov. 17, 2008	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jun. 04, 2009	Radiation (03CH01-CB)
Pre-Amplifier	WM	TF-130N-R1	923365	26.5GHz ~ 40GHz	Nov. 17, 2008	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSP	100304	9kHz ~ 40GHz	Nov. 25, 2008	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS 30	100355	9KHz ~ 2.75GHz	Mar. 25, 2009	Radiation (03CH01-CB)
Turn Table	INN CO	CO 2000	N/A	0 ~ 360 degree	N/A	Radiation (03CH01-CB)
Antenna Mast	INN CO	CO2000	N/A	1 m - 4 m	N/A	Radiation (03CH01-CB)

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

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Loop Antenna	TESEQ	HLA6120	24155	9KHz ~ 30MHz	Jan. 18, 2008*	Radiation (10CH01-CB)

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

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum analyzer	R&S	FSU26	100015	20Hz~26.5GHz	Oct. 29, 2008	Conducted (TH01-CB)
Temp. and Humidity Chamber	-	TTH-D3SP	TBN-931011	-30°~100°	Apr. 28.2009	Conducted (TH01-CB)
Signal Generator	R&S	SMR40	100302	10MHz-40GHz	Nov. 10, 2008	Conducted (TH01-CB)
Power Meter	R&S	Nrvd	100966	-	Mar. 05.2009	Conducted (TH01-CB)
Peak Power Sensor	R&S	NRV-Z32	836953/066	2W, 30M ~ 6GHz	Mar. 11, 2009	Conducted (TH01-CB)
Average Power Senso	R&S	NRP-Z91	100665	9KHz ~ 6GHz	Oct. 02, 2008	Conducted (TH01-CB)
RF Power Divider	HP	11636A	00306	2GHz ~ 18GHz	N/A	Conducted (TH01-CB)
RF Power Splitter	Anaren	44100	1839	2GHz ~ 18GHz	N/A	Conducted (TH01-CB)
RF Power Splitter	Anaren	42100	17930	2GHz ~ 18GHz	N/A	Conducted (TH01-CB)
Vector signal generator	R&S	SMU200A	102782	10MHz-40GHz	Jan. 04, 2009	Conducted (TH01-CB)
Horn Antenna	COM-POWER	AH-118	071187	1GHz – 18GHz	May. 14, 2009	Conducted (TH01-CB)

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

5 TEST LOCATION

SHIJR	ADD : 6Fl., No. 106, Sec. 1, Shintai 5th Rd., Shijr City, Taipei, Taiwan 221, R.O.C. TEL : 886-2-2696-2468 FAX : 886-2-2696-2255
HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL : 886-3-327-3456 FAX : 886-3-318-0055
LINKOU	ADD : No. 30-2, Dingfu Tsuen, Linkou Shiang, Taipei, Taiwan 244, R.O.C TEL : 886-2-2601-1640 FAX : 886-2-2601-1695
DUNGHU	ADD : No. 3, Lane 238, Kangle St., Neihu Chiu, Taipei, Taiwan 114, R.O.C. TEL : 886-2-2631-4739 FAX : 886-2-2631-9740
JUNGHE	ADD : 7Fl., No. 758, Jungjeng Rd., Junghe City, Taipei, Taiwan 235, R.O.C. TEL : 886-2-8227-2020 FAX : 886-2-8227-2626
NEIHU	ADD : 4Fl., No. 339, Hsin Hu 2 nd Rd., Taipei 114, Taiwan, R.O.C. TEL : 886-2-2794-8886 FAX : 886-2-2794-9777
JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085

6 TAF CERTIFICATE OF ACCREDITATION



Certificate No. : L1190-090318

財團法人全國認證基金會
Taiwan Accreditation Foundation

Certificate of Accreditation

This is to certify that

Sporton International Inc.

EMC & Wireless Communications Laboratory

No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien,
Taiwan, R.O.C.

is accredited in respect of laboratory

- Accreditation Criteria** : ISO/IEC 17025:2005
- Accreditation Number** : 1190
- Originally Accredited** : December 15, 2003
- Effective Period** : January 10, 2007 to January 09, 2010
- Accredited Scope** : Testing Field, see described in the Appendix
- Specific Accreditation Program** : Accreditation Program for Designated Testing Laboratory for Commodities Inspection
Accreditation Program for Telecommunication Equipment Testing Laboratory
Accreditation Program for BSMI Mutual Recognition Arrangement with Foreign Authorities

Jay-San Chen
President, Taiwan Accreditation Foundation
Date : March 18, 2009

P1, total 19 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix

APPENDIX A. ssrom value and curpower value

{Administrator}=>env list
_WL_VERSION=4.174.64.12

S/W: CPE_QUAL_R830_CANT-8_20081201135858.bli
{Administrator}=>: debug exec cmd="wl* curpower" and then Ctrl+Q

Current channel: 1
User Target: 31.75 dBm
Regulatory Local Max: 63.0 dBm
Regulatory Local Constraint: 0.0 dB
Antgain used in Channel Max: No, channel is Conducted
Hardware Power Control: HW PWRCTL Off
Regulatory Channel Max: 19.0 dBm
SROM antgain: 2G: 3.0 dB, 5G: 0.0 dB

Min of Reg & Local Limits:

CCK: 19.0 19.0 19.0 19.0
OFDM: 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0

Last B phy CCK est. power: 0.0 dBm
Last B phy OFDM est. power: 0.0 dBm

Srom limit B/G:

CCK: 18.0 18.0 18.0 18.0
OFDM: 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0

Last B phy target power:

CCK: 16.50 16.50 16.50 16.50
OFDM: 16.50 16.50 16.50 16.50 16.50 16.50 16.50 16.50

Current channel: 11

User Target: 31.75 dBm

Regulatory Local Max: 63.0 dBm

Regulatory Local Constraint: 0.0 dB

Antgain used in Channel Max: No, channel is Conducted

Hardware Power Control: HW PWRCTL Off

Regulatory Channel Max: 19.0 dBm

SROM antgain: 2G: 3.0 dB, 5G: 0.0 dB

Min of Reg & Local Limits:

CCK: 19.0 19.0 19.0 19.0
OFDM: 16.50 16.50 16.50 16.50 16.50 16.50 16.50 16.50

Last B phy CCK est. power: 0.0 dBm

Last B phy OFDM est. power: 0.0 dBm

Srom limit B/G:

CCK: 18.0 18.0 18.0 18.0
OFDM: 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0

Last B phy target power:

CCK: 16.50 16.50 16.50 16.50
OFDM: 15.0 15.0 15.0 15.0 15.0 15.0 15.0 15.0

Since TG587n v2 S/W: CPE_QUAL_R830_CANT-8_20081201135858.bli cannot show SROM value.
The following SROM comes from TMM by S/W: CPE_QUAL_R830_CANT-7_20090311024001.bli.

{admin}=>:debug exec cmd="wld ssrom"

Wombo srom selector : 00000002

Contents:

```
/* 000 */ 0x3001 0x0000 0x04bc 0x14e4 0x432c 0x8000 0x0002 0x0000
/* 008 */ 0x1730 0x1800 0x0000 0x0000 0xffff 0xffff 0xffff 0xffff
/* 016 */ 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff
/* 024 */ 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff
/* 032 */ 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff
/* 040 */ 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff
/* 048 */ 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff
/* 056 */ 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff
/* 064 */ 0x5372 0x1207 0x0200 0x0000 0x0400 0x0000 0x0000 0x0000
/* 072 */ 0x0000 0x0000 0x0000 0xffff 0xffff 0xffff 0x0303 0x0303
/* 080 */ 0xffff 0x0033 0xffff 0xffff 0xffff 0xffff 0xffff 0x0301
/* 088 */ 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff
/* 096 */ 0x2048 0xfec3 0x14c0 0xfb17 0xffff 0xffff 0xffff 0xffff
/* 104 */ 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff
/* 112 */ 0x2048 0xfeca 0x1497 0xfb22 0xffff 0xffff 0xffff 0xffff
/* 120 */ 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff
/* 128 */ 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff
/* 136 */ 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff
/* 144 */ 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff
/* 152 */ 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff
/* 160 */ 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
/* 168 */ 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
/* 176 */ 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
/* 184 */ 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
/* 192 */ 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
/* 200 */ 0x0000 0x0000 0x0000 0x0000 0x0000 0xffff 0xffff 0xffff
/* 208 */ 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff 0xffff
/* 216 */ 0xffff 0xffff 0xffff 0xc408
```