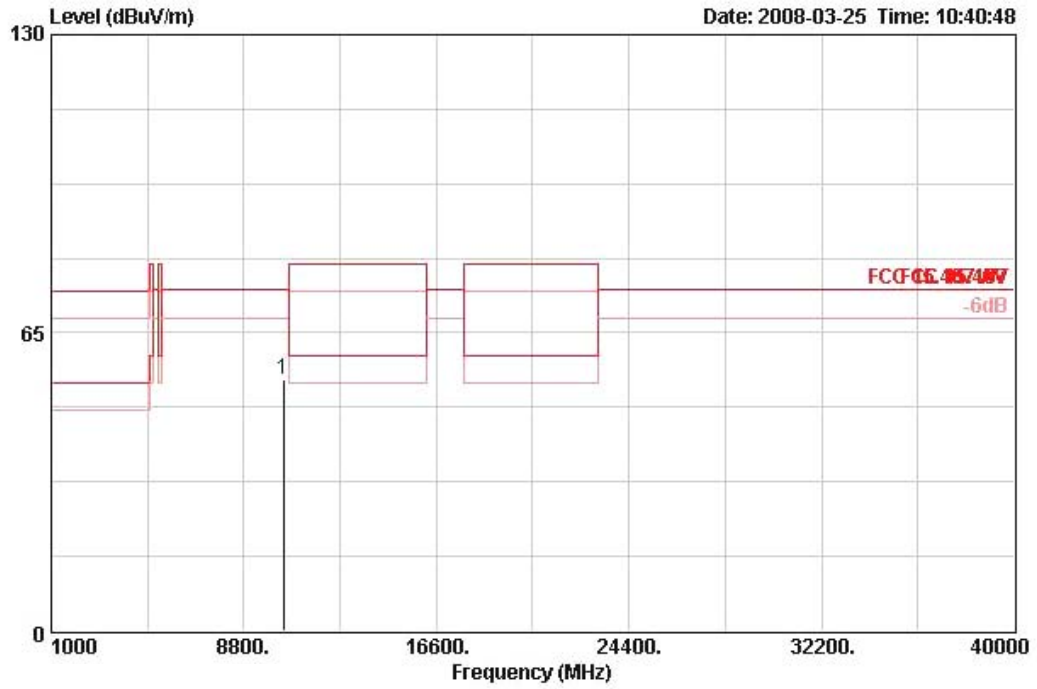


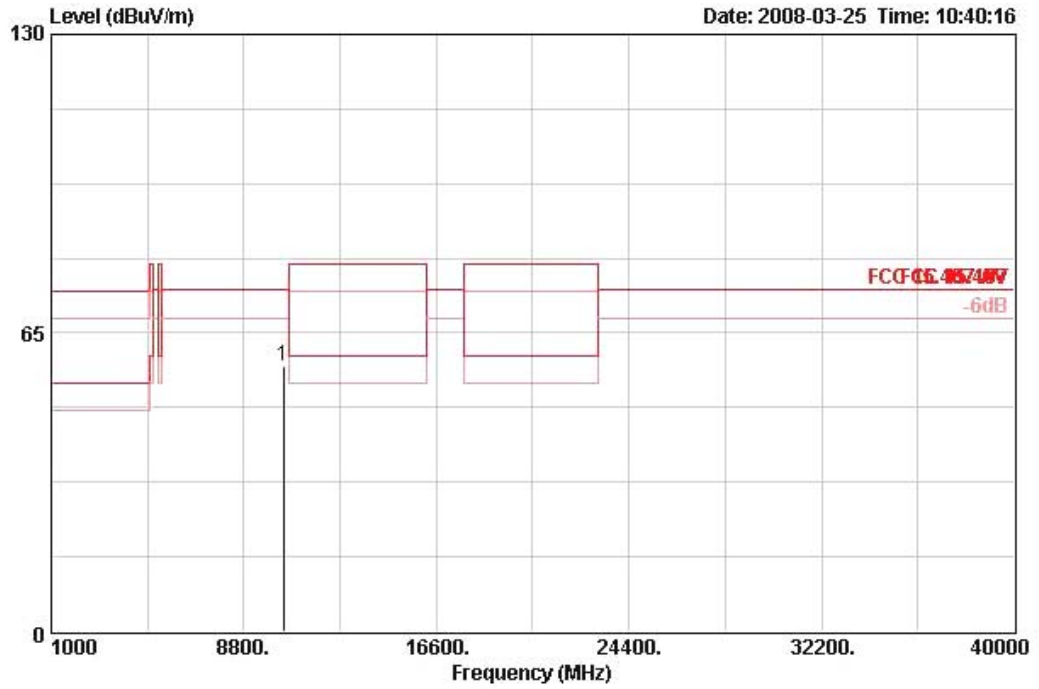
Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 40 / Ant. 7

Horizontal



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10398.740	54.92	-19.38	74.30	42.24	38.38	9.36	35.05	PEAK	100	361	HORIZONTAL

Vertical

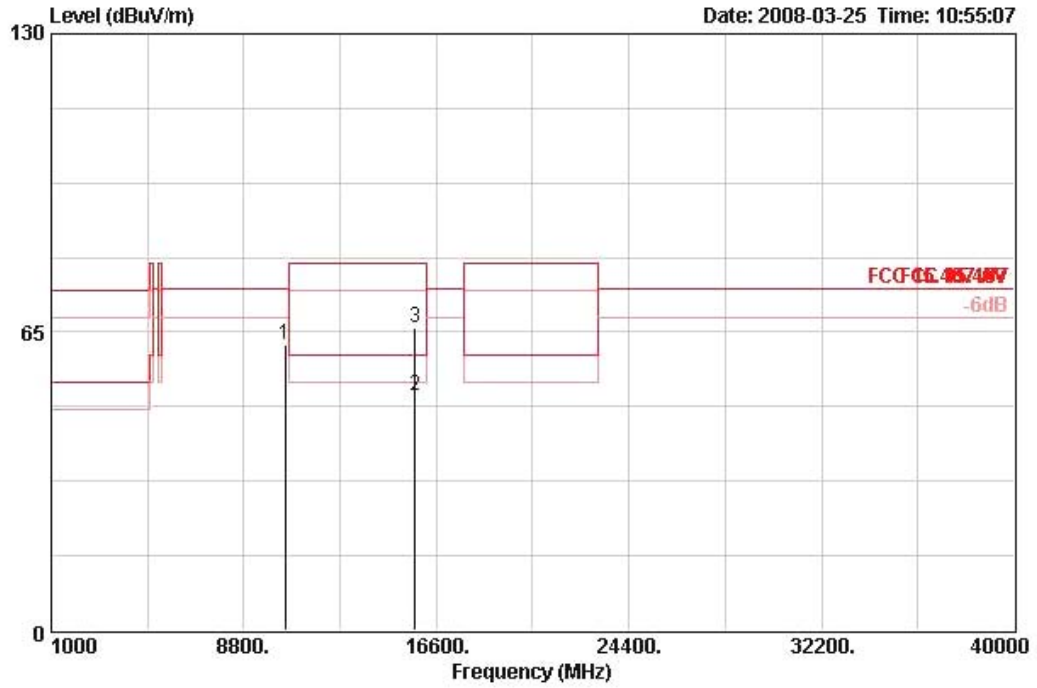


	Ereq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10398.980	57.67	-16.63	74.30	44.99	38.38	9.36	35.05	PEAK	134	266	VERTICAL



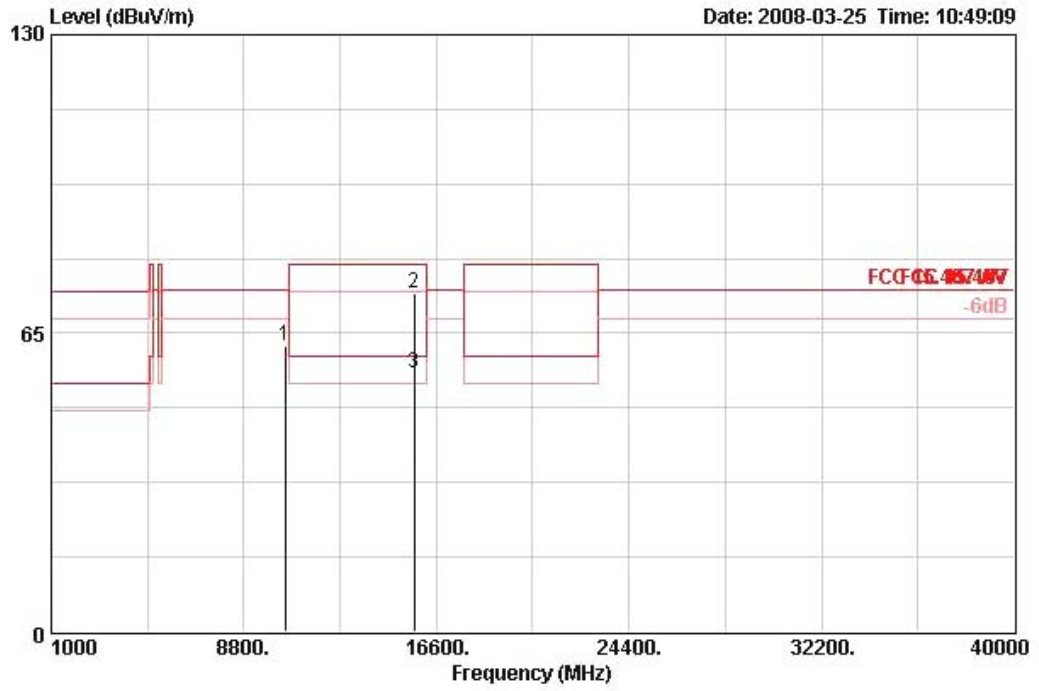
Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 48 / Ant. 7

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10486.160	62.19	-12.11	74.30	49.35	38.40	9.41	34.96	PERK	129	112	HORIZONTAL
2	15721.240	50.96	-9.04	60.00	37.31	37.48	11.51	35.35	AVERAGE	120	157	HORIZONTAL
3	15724.040	66.09	-13.91	80.00	52.44	37.48	11.51	35.35	PERK	120	157	HORIZONTAL

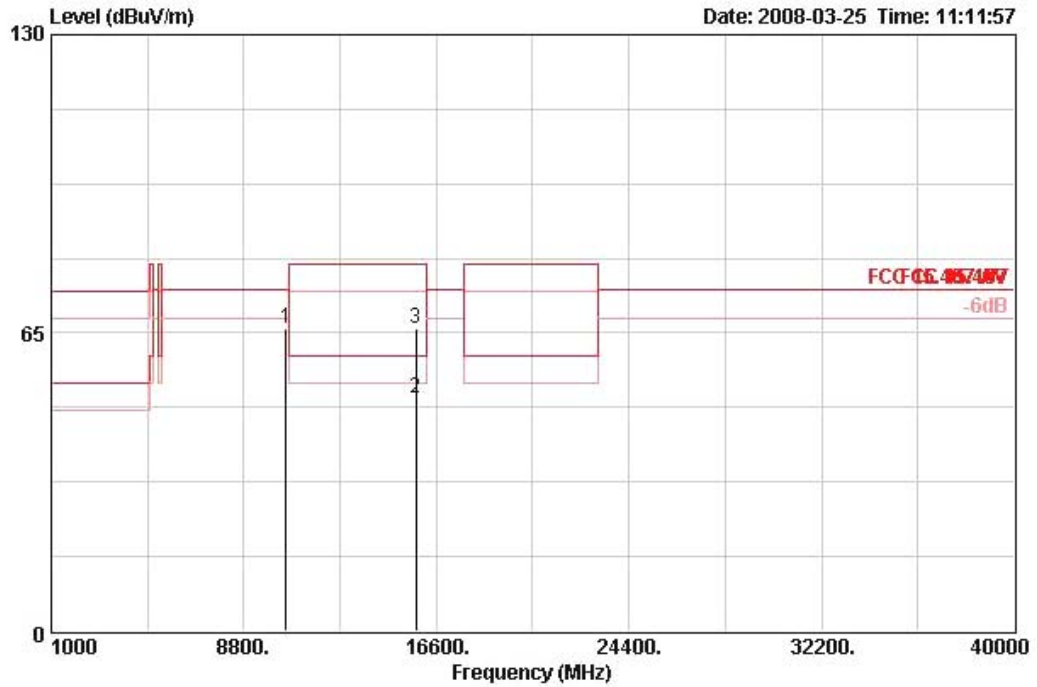
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	10475.160	62.40	-11.90	74.30	49.56	38.39	9.41	34.96	PEAK	135	107	VERTICAL
2 @	15715.560	73.58	-6.42	80.00	59.94	37.48	11.51	35.35	PEAK	122	154	VERTICAL
3 @	15718.400	56.37	-3.63	60.00	42.72	37.48	11.51	35.35	AVERAGE	122	154	VERTICAL

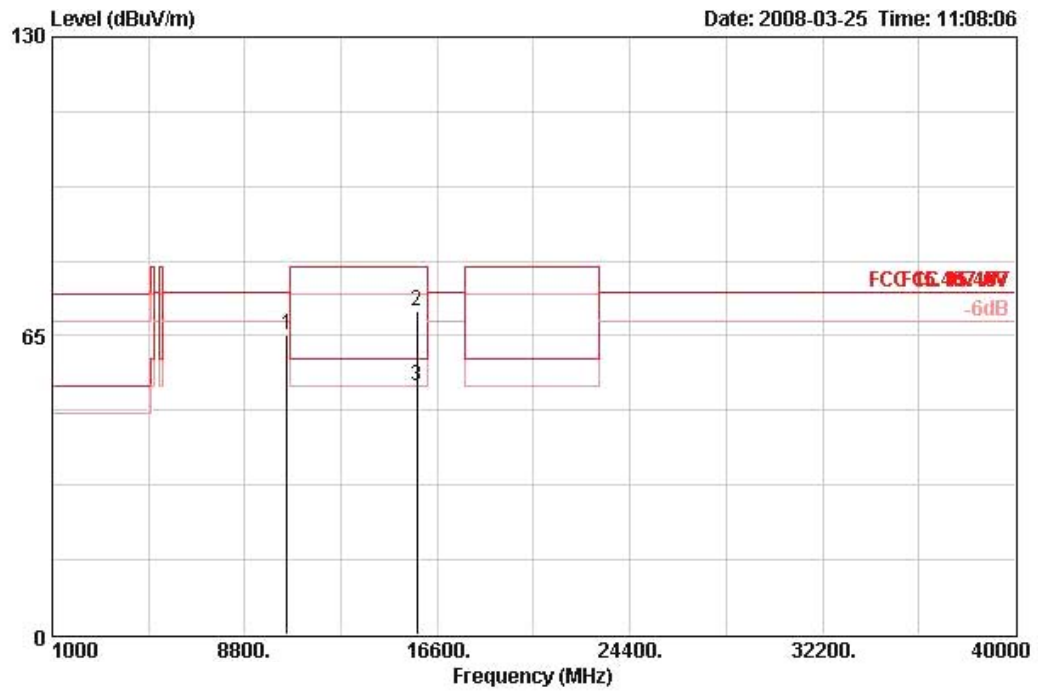
Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 52 / Ant. 7

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10515.360	65.78	-8.52	74.30	52.88	38.40	9.43	34.93	PEAK	132	94	HORIZONTAL
2	15782.080	50.56	-9.44	60.00	37.02	37.41	11.51	35.37	AVERAGE	122	151	HORIZONTAL
3	15787.720	65.84	-14.16	80.00	52.30	37.41	11.51	35.37	PEAK	122	151	HORIZONTAL

Vertical

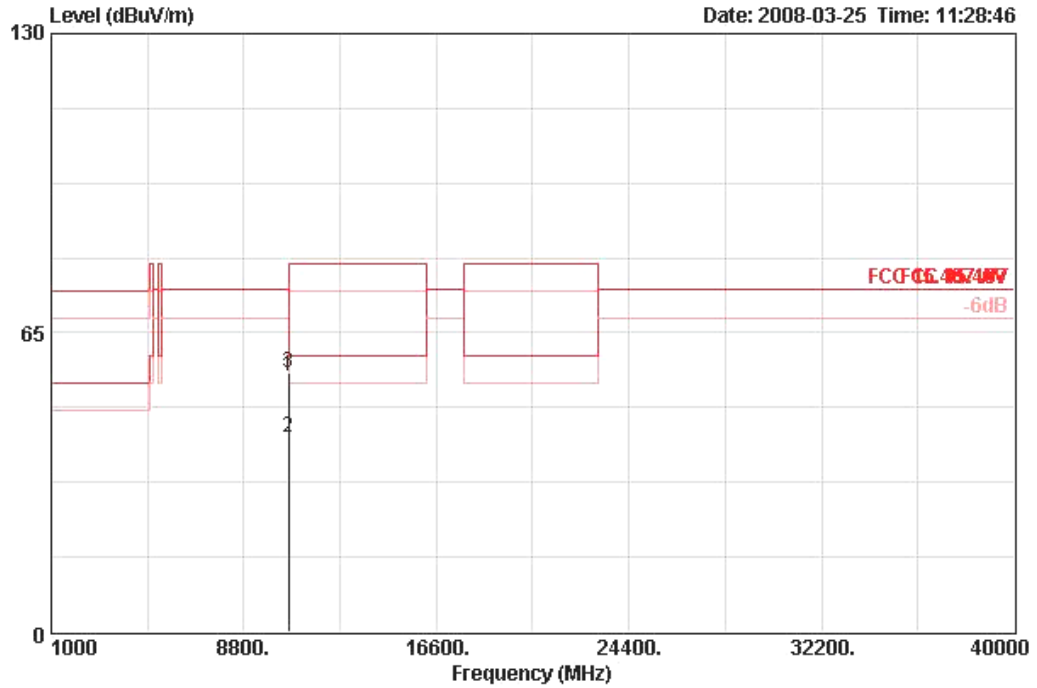


	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10515.480	65.13	-9.17	74.30	52.23	38.40	9.43	34.93	PEAK	120	108	VERTICAL
2	15777.720	70.22	-9.78	80.00	56.66	37.42	11.51	35.37	PEAK	134	116	VERTICAL
3	15782.160	54.25	-5.75	60.00	40.71	37.41	11.51	35.37	AVERAGE	134	116	VERTICAL



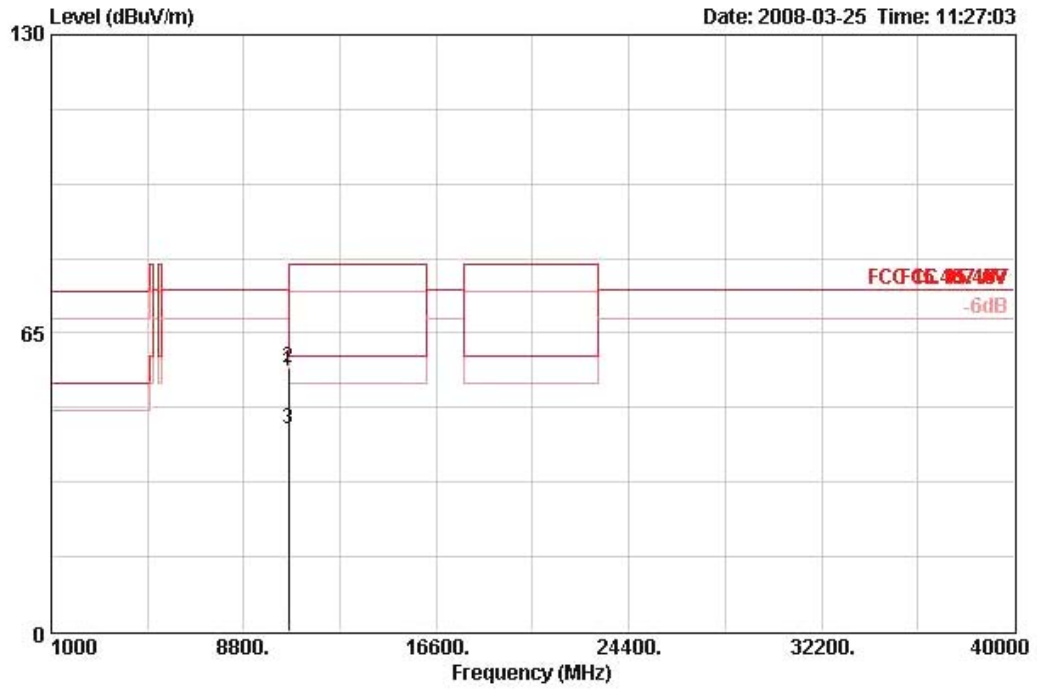
Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 60 / Ant. 7

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10595.600	55.63	-18.67	74.30	42.68	38.38	9.47	34.90	PEAK	115	360	HORIZONTAL
2	10605.400	42.38	-17.62	60.00	29.40	38.38	9.48	34.89	AVERAGE	115	360	HORIZONTAL
3	10606.320	56.14	-23.86	80.00	43.17	38.38	9.48	34.89	PEAK	115	360	HORIZONTAL

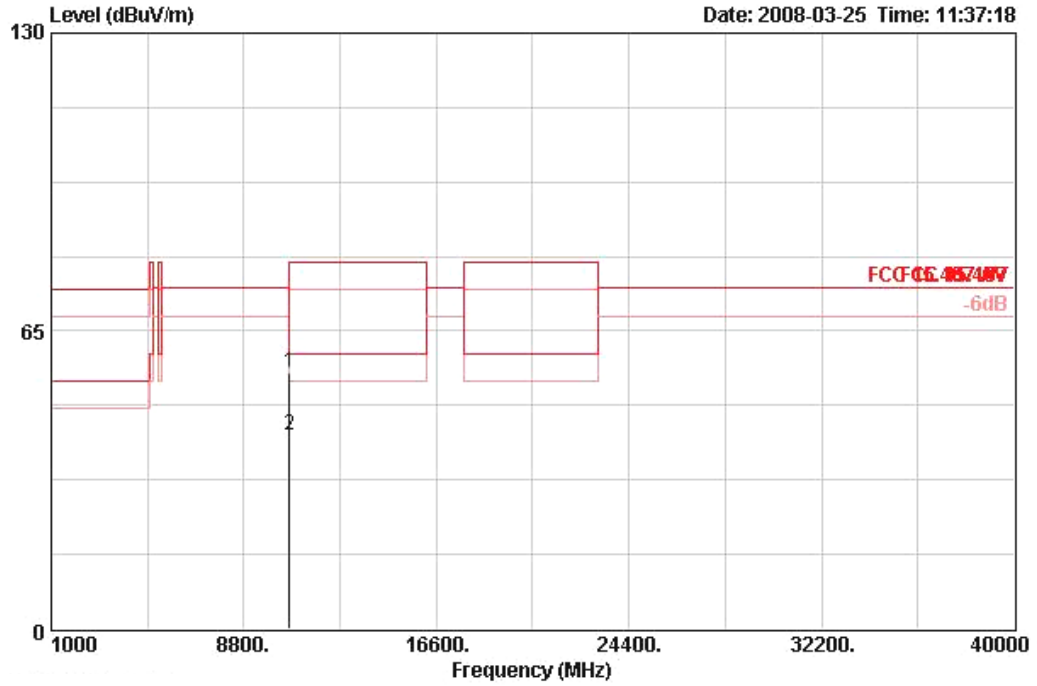
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10598.920	56.73	-17.57	74.30	43.78	38.38	9.47	34.90	PEAK	123	41	VERTICAL
2	10603.360	57.53	-22.47	80.00	44.56	38.38	9.48	34.89	PEAK	123	41	VERTICAL
3	10604.120	43.90	-16.10	60.00	30.93	38.38	9.48	34.89	AVERAGE	123	41	VERTICAL

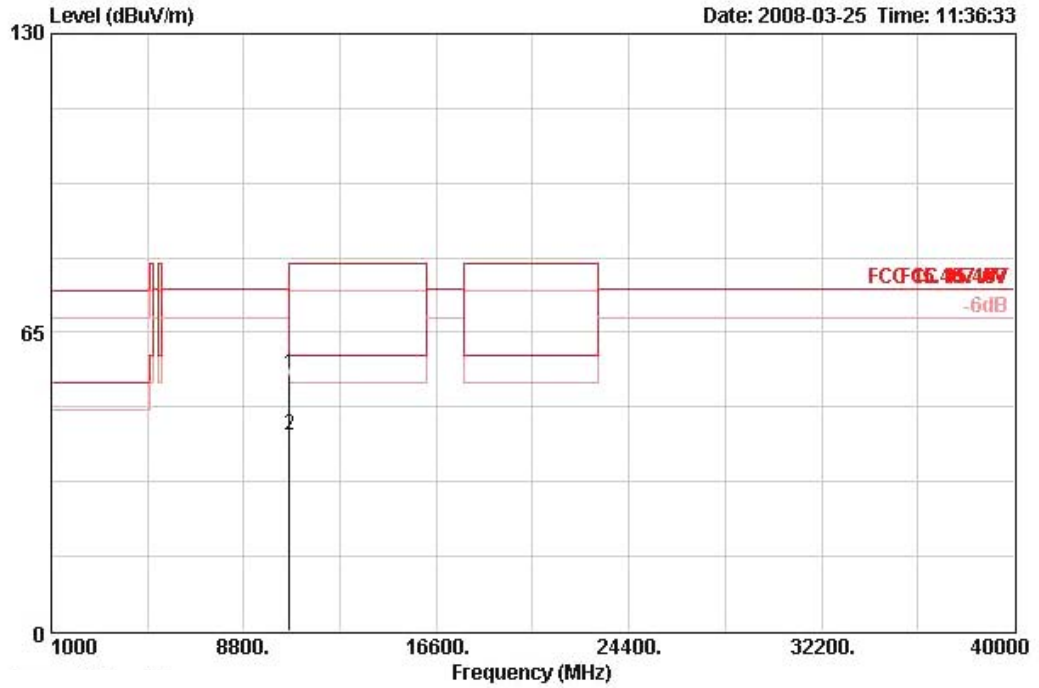
Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 64 / Ant. 7

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10631.080	55.80	-24.20	80.00	42.81	38.37	9.50	34.88	PEAK	100	127	HORIZONTAL
2	10633.880	42.29	-17.71	60.00	29.30	38.37	9.50	34.88	AVERAGE	100	127	HORIZONTAL

Vertical

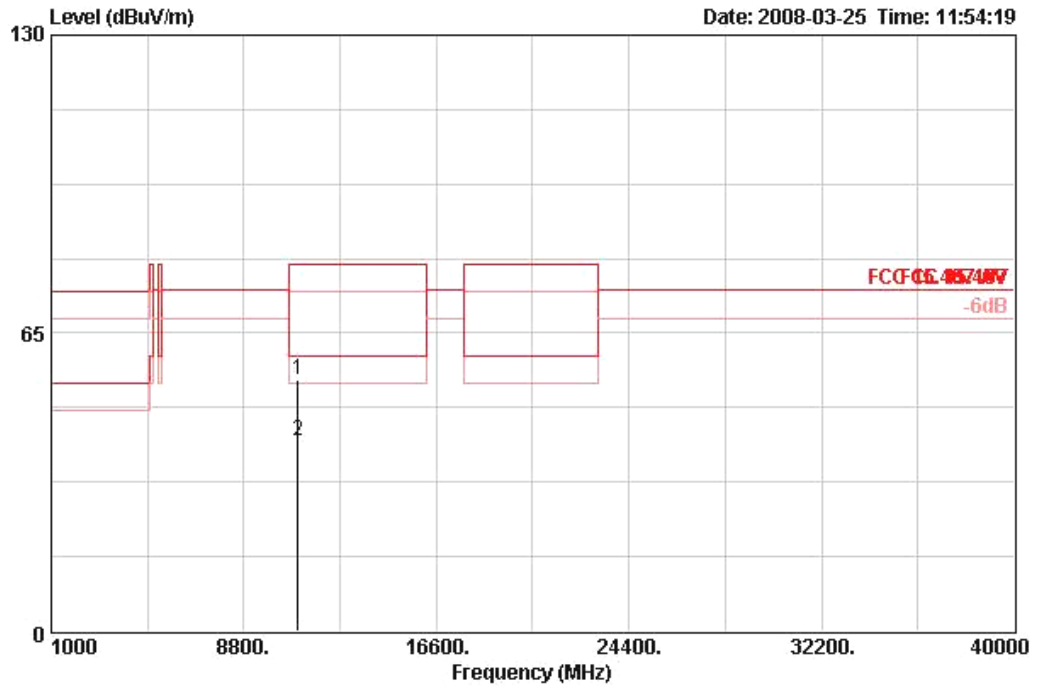


	Freq	Level	Over Limit	Limit Line	Read Antenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10642.320	56.04	-23.96	80.00	43.05	38.37	9.50	34.88	PEAK	100	0	VERTICAL
2	10645.560	42.41	-17.59	60.00	29.42	38.37	9.50	34.88	AVERAGE	100	11	VERTICAL



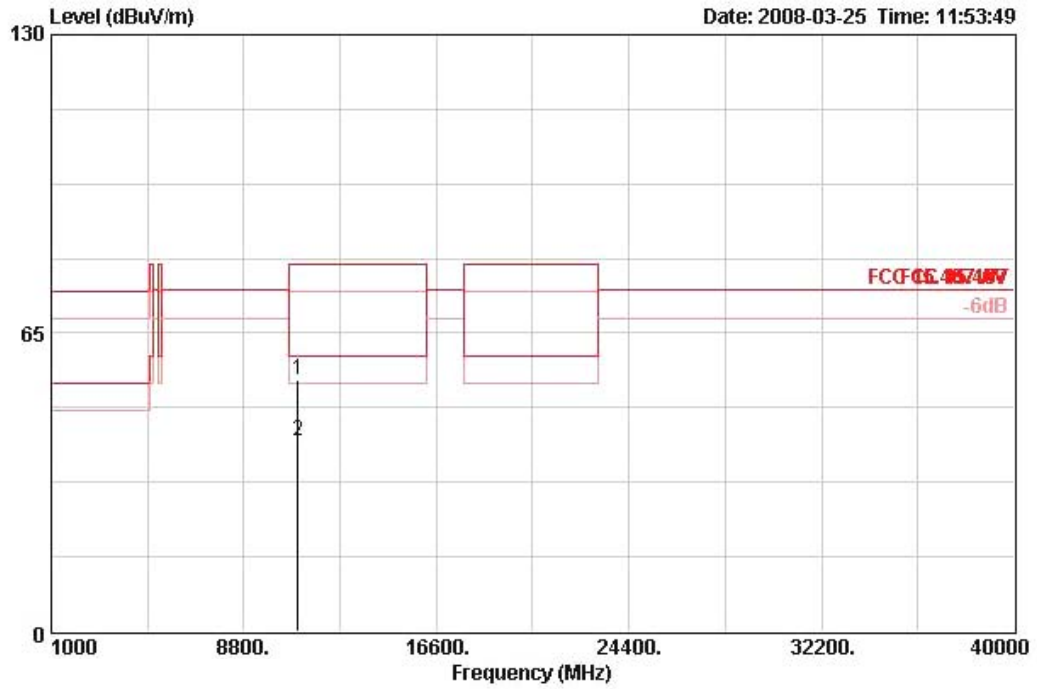
Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 100 / Ant. 7

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10998.470	54.68	-25.32	80.00	41.45	38.30	9.69	34.76	PEAK	100	179	HORIZONTAL
2 @	11001.310	41.64	-18.36	60.00	28.41	38.30	9.69	34.76	AVERAGE	100	179	HORIZONTAL

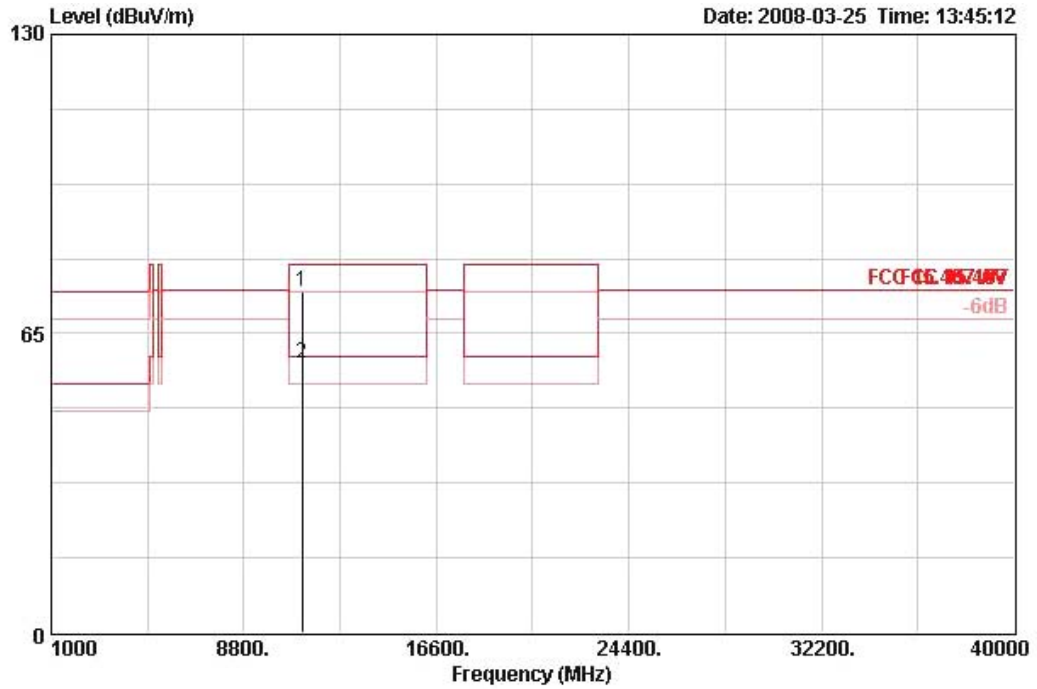
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10998.780	54.72	-25.28	80.00	41.48	38.30	9.69	34.76	PEAK	100	0	VERTICAL
2	11001.280	41.64	-18.36	60.00	28.40	38.30	9.69	34.76	AVERAGE	100	0	VERTICAL

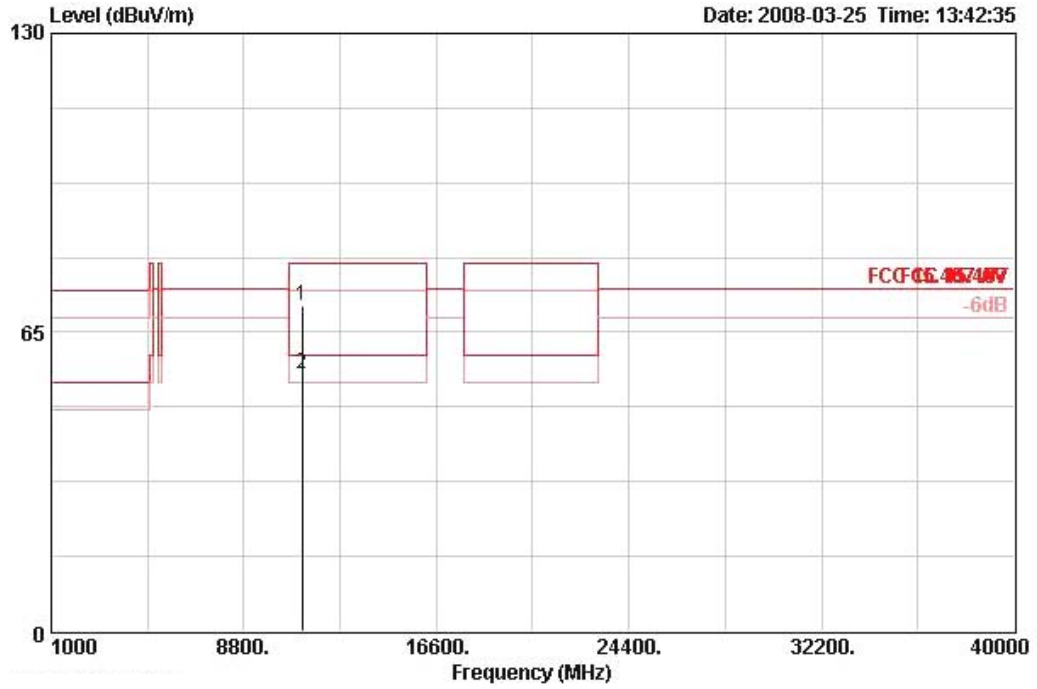
Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 116 / Ant. 7

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	11156.000	74.17	-5.83	80.00	60.83	38.45	9.72	34.83	PEAK	140	104	HORIZONTAL
2	11156.800	58.55	-1.45	60.00	45.21	38.45	9.72	34.83	AVERAGE	140	104	HORIZONTAL

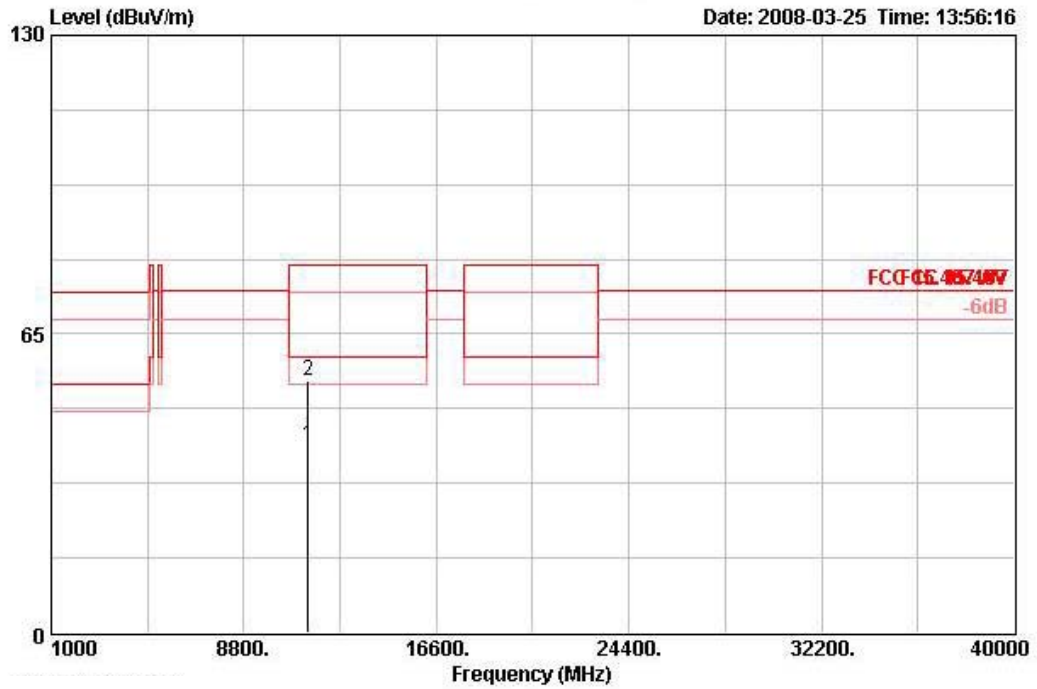
Vertical



	Ereq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 ☺	11155.400	70.81	-9.19	80.00	57.47	38.45	9.72	34.83	PEAK	100	114	VERTICAL
2 ☺	11156.600	55.75	-4.25	60.00	42.41	38.45	9.72	34.83	AVERAGE	100	114	VERTICAL

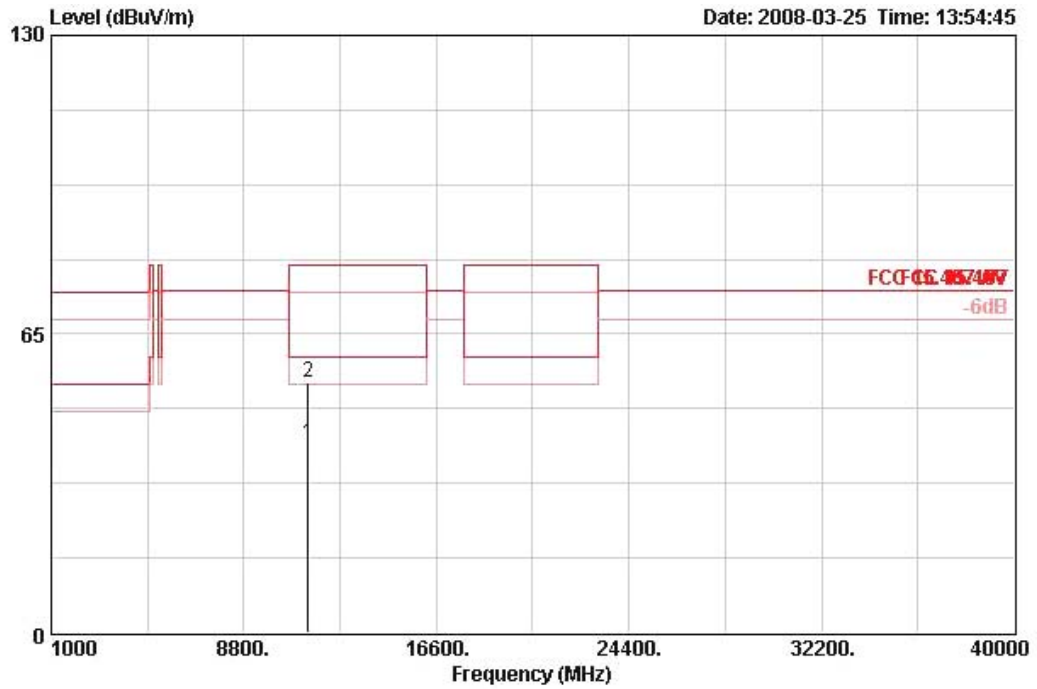
Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 140 / Ant. 7

Horizontal



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	11397.600	40.76	-19.24	60.00	27.25	38.70	9.76	34.95	AVERAGE	100	360	HORIZONTAL
2	11398.910	54.90	-25.10	80.00	41.39	38.70	9.76	34.95	PEAK	100	360	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	11397.760	40.95	-19.05	60.00	27.44	38.70	9.76	34.95	AVERAGE	100	0	VERTICAL
2	11400.510	54.40	-25.60	80.00	40.89	38.70	9.76	34.95	PEAK	100	0	VERTICAL

Note:

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.

The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade from 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1.5m]) (dB);

Limit line = specific limits (dBUV) + distance extrapolation factor [6 dB].

4.7. Band Edge Emissions Measurement

4.7.1. Limit

For transmitters operating in the 5.15-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.470-5.725 GHz band: all emissions outside of the 5.470-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.725-5.825 GHz band: all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17 dBm/MHz (78.3dBuV/m at 3m); for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). In addition, in case the emission falls 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 (micovolts/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

4.7.2. Measuring Instruments and Setting

Please refer to section 5 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
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1 MHz / 1 MHz for Peak

4.7.3. Test Procedures

11. The test procedure is the same as section 4.6.3, only the frequency range investigated is limited to 100MHz around bandedges.
12. In case the emission is fail due to the used RB/VB is too wide, marker-delta method of FCC Public Notice DA00-705 will be followed.

4.7.4. Test Setup Layout

This test setup layout is the same as that shown in section 4.6.4.

4.7.5. Test Deviation

There is no deviation with the original standard.

4.7.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.7.7. Test Result of Band Edge and Fundamental Emissions

Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 36, 52, 60, 64 / Ant. 1

Channel 36

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	5149.000	79.57	-0.43	80.00	39.35	33.67	6.54	0.00	PEAK	116	310	VERTICAL
2 !	5150.000	59.22	-0.78	60.00	19.01	33.67	6.54	0.00	AVERAGE	116	310	VERTICAL
3	5178.200	112.57			72.28	33.73	6.55	0.00	AVERAGE	116	310	VERTICAL
4	5181.000	124.51			84.22	33.73	6.55	0.00	PEAK	116	310	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

Channel 52

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	5150.000	59.28	-0.72	60.00	19.07	33.67	6.54	0.00	AVERAGE	114	233	VERTICAL
2 !	5150.000	77.08	-2.92	80.00	36.87	33.67	6.54	0.00	PEAK	114	233	VERTICAL
3	5196.800	118.12			77.79	33.76	6.57	0.00	AVERAGE	114	233	VERTICAL
4 @	5198.800	130.07			89.74	33.76	6.57	0.00	PEAK	114	233	VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

Channel 60

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	5301.400	117.79			77.23	33.94	6.62	0.00	AVERAGE	123	313	VERTICAL
2	5301.600	129.54			88.98	33.94	6.62	0.00	PEAK	123	313	VERTICAL
3 !	5350.000	59.74	-0.26	60.00	19.07	34.03	6.64	0.00	AVERAGE	123	313	VERTICAL
4 !	5350.000	76.42	-3.58	80.00	35.75	34.03	6.64	0.00	PEAK	123	313	VERTICAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

Channel 64

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	5315.200	114.76			74.17	33.97	6.62	0.00	AVERAGE	117	313	VERTICAL
2	5316.600	126.70			86.11	33.97	6.62	0.00	PEAK	117	313	VERTICAL
3 !	5350.000	59.62	-0.38	60.00	18.95	34.03	6.64	0.00	AVERAGE	117	313	VERTICAL
4 !	5351.000	78.84	-1.16	80.00	38.17	34.03	6.64	0.00	PEAK	117	313	VERTICAL

Item 1, 2 are the fundamental frequency at 5320 MHz.



Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 100, 140 / Ant. 1

Channel 100

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	5460.000	69.56	-10.44	80.00	28.66	34.21	6.69	0.00	PEAK	129	221	VERTICAL
2 !	5460.000	57.76	-2.24	60.00	16.86	34.21	6.69	0.00	AVERAGE	129	221	VERTICAL
3 !	5470.000	73.38	-0.92	74.30	32.45	34.24	6.69	0.00	PEAK	129	221	VERTICAL
4	5499.000	124.93			83.93	34.30	6.70	0.00	PEAK	129	221	VERTICAL
5	5503.400	112.97			71.95	34.30	6.71	0.00	AVERAGE	129	221	VERTICAL

Item 4, 5 are the fundamental frequency at 5500 MHz.

Channel 140

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	5694.600	122.10			80.96	34.34	6.81	0.00	PEAK	114	315	VERTICAL
2	5696.800	110.22			69.07	34.34	6.81	0.00	AVERAGE	114	315	VERTICAL
3 !	5725.000	74.04	-0.26	74.30	32.87	34.34	6.82	0.00	PEAK	114	315	VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.

Item 3, 4 are the fundamental frequency at 5290 MHz.

Note:

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

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

The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1.5m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 36, 52, 60, 64 / Ant. 5

Channel 36

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	5149.600	79.54	-0.46	80.00	39.33	33.67	6.54	0.00	PEAK	131	189	VERTICAL
2 @	5150.000	59.50	-0.50	60.00	19.28	33.67	6.54	0.00	AVERAGE	131	189	VERTICAL
3 @	5174.400	108.65			68.37	33.73	6.55	0.00	AVERAGE	131	189	VERTICAL
4 @	5178.600	120.66			80.37	33.73	6.55	0.00	PEAK	131	189	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

Channel 52

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	5146.400	72.12	-7.88	80.00	31.91	33.67	6.54	0.00	PEAK	141	189	VERTICAL
2 @	5150.000	57.82	-2.18	60.00	17.60	33.67	6.54	0.00	AVERAGE	141	189	VERTICAL
3 @	5196.000	108.83			68.50	33.76	6.57	0.00	AVERAGE	141	189	VERTICAL
4 @	5198.800	120.14			79.81	33.76	6.57	0.00	PEAK	141	189	VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

Channel 60

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	5301.600	122.19			81.63	33.94	6.62	0.00	PEAK	145	184	VERTICAL
2 @	5302.400	111.10			70.54	33.94	6.62	0.00	AVERAGE	145	184	VERTICAL
3 @	5350.000	59.37	-0.63	60.00	18.70	34.03	6.64	0.00	AVERAGE	145	184	VERTICAL
4 @	5350.000	72.77	-7.23	80.00	32.10	34.03	6.64	0.00	PEAK	145	184	VERTICAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

Channel 64

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	5318.600	108.30			67.71	33.97	6.62	0.00	AVERAGE	141	189	VERTICAL
2 @	5323.000	119.78			79.18	33.97	6.63	0.00	PEAK	141	189	VERTICAL
3 @	5350.000	59.74	-0.26	60.00	19.07	34.03	6.64	0.00	AVERAGE	141	189	VERTICAL
4 @	5353.000	77.26	-2.74	80.00	36.59	34.03	6.64	0.00	PEAK	141	189	VERTICAL

Item 1, 2 are the fundamental frequency at 5320 MHz.



Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 100, 140 / Ant. 5

Channel 100

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	5460.000	69.69	-10.31	80.00	28.79	34.21	6.69	0.00	PEAK	136	191	VERTICAL
2 @	5460.000	58.05	-1.95	60.00	17.15	34.21	6.69	0.00	AVERAGE	136	191	VERTICAL
3 @	5469.800	74.09	-0.21	74.30	33.17	34.24	6.69	0.00	PEAK	136	191	VERTICAL
4 @	5504.000	109.10			68.08	34.30	6.71	0.00	AVERAGE	136	191	VERTICAL
5 @	5505.600	121.78			80.77	34.30	6.71	0.00	PEAK	136	191	VERTICAL

Item 4, 5 are the fundamental frequency at 5500 MHz.

Channel 140

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	5695.400	112.94			71.79	34.34	6.81	0.00	PEAK	123	251	VERTICAL
2 @	5697.800	101.79			60.64	34.34	6.81	0.00	AVERAGE	123	251	VERTICAL
3 @	5725.000	73.75	-0.55	74.30	32.58	34.34	6.82	0.00	PEAK	123	251	VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.

Item 3, 4 are the fundamental frequency at 5290 MHz.

Note:

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

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

The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1.5m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 36, 52, 60, 64 / Ant. 6

Channel 36

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Table Pos	Ant Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1 !	5148.000	77.73	-2.27	80.00	40.24	33.04	0.00	4.44	PEAK	360	100	VERTICAL
2 !	5150.000	58.26	-1.74	60.00	20.77	33.04	0.00	4.44	AVERAGE	360	100	VERTICAL
3 ☉	5177.400	115.75			78.22	33.09	0.00	4.43	AVERAGE	360	100	VERTICAL
4 ☉	5178.200	128.12			90.59	33.09	0.00	4.43	PEAK	360	100	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

Channel 52

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Table Pos	Ant Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1 !	5150.000	59.48	-0.52	60.00	21.99	33.04	0.00	4.44	AVERAGE	360	100	VERTICAL
2 !	5150.000	77.40	-2.60	80.00	39.92	33.04	0.00	4.44	PEAK	360	100	VERTICAL
3 ☉	5197.600	133.41			95.87	33.12	0.00	4.43	PEAK	360	100	VERTICAL
4 ☉	5198.200	120.34			82.79	33.12	0.00	4.43	AVERAGE	360	100	VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

Channel 60

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Table Pos	Ant Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1 ☉	5297.600	119.85			82.17	33.28	0.00	4.40	AVERAGE	360	100	VERTICAL
2 ☉	5302.400	131.30			93.63	33.28	0.00	4.40	PEAK	360	100	VERTICAL
3 !	5350.000	59.03	-0.97	60.00	21.29	33.36	0.00	4.38	AVERAGE	360	100	VERTICAL
4 !	5350.000	78.93	-1.07	80.00	41.19	33.36	0.00	4.38	PEAK	360	100	VERTICAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

Channel 64

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Table Pos	Ant Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1 ☉	5322.600	128.87			91.17	33.31	0.00	4.39	PEAK	0	100	VERTICAL
2 ☉	5323.600	115.59			77.89	33.31	0.00	4.39	AVERAGE	0	100	VERTICAL
3 !	5350.000	58.30	-1.70	60.00	20.56	33.36	0.00	4.38	AVERAGE	0	100	VERTICAL
4 !	5350.200	79.10	-0.90	80.00	41.36	33.36	0.00	4.38	PEAK	0	100	VERTICAL

Item 1, 2 are the fundamental frequency at 5320 MHz.

Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 100, 140 / Ant. 6

Channel 100

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Table Pos	Ant Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1	5459.800	68.09	-11.91	80.00	30.22	33.52	0.00	4.35	PEAK	0	100	VERTICAL
2 !	5460.000	56.30	-3.70	60.00	18.43	33.52	0.00	4.35	AVERAGE	0	100	VERTICAL
3 !	5469.880	72.99	-1.31	74.30	35.09	33.55	0.00	4.35	PEAK	0	100	VERTICAL
4 ☉	5500.800	124.93			86.99	33.60	0.00	4.35	PEAK	0	100	VERTICAL
5 ☉	5501.600	111.87			73.93	33.60	0.00	4.35	AVERAGE	0	100	VERTICAL

Item 4, 5 are the fundamental frequency at 5500 MHz.

Channel 140

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Table Pos	Ant Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1 ☉	5696.400	109.09			70.53	34.17	0.00	4.39	AVERAGE	0	100	VERTICAL
2 ☉	5703.000	121.89			83.27	34.22	0.00	4.39	PEAK	0	100	VERTICAL
3 !	5725.000	73.60	-0.70	74.30	34.93	34.27	0.00	4.40	PEAK	0	100	VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.

Item 3, 4 are the fundamental frequency at 5290 MHz.

Note:

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

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

The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1.5m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 36, 52, 60, 64 / Ant. 7

Channel 36

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	5149.400	79.84	-0.16	80.00	39.63	33.67	6.54	0.00	PEAK	100	267	VERTICAL
2 !	5150.000	59.27	-0.73	60.00	19.05	33.67	6.54	0.00	AVERAGE	100	267	VERTICAL
3 @	5182.200	123.54			83.26	33.73	6.55	0.00	PEAK	100	267	VERTICAL
4	5183.000	111.19			70.90	33.73	6.55	0.00	AVERAGE	100	267	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

Channel 52

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	5150.000	58.58	-1.42	60.00	18.37	33.67	6.54	0.00	AVERAGE	100	257	VERTICAL
2 @	5150.000	75.02	-4.98	80.00	34.81	33.67	6.54	0.00	PEAK	100	257	VERTICAL
3 @	5203.000	126.11			85.78	33.76	6.57	0.00	PEAK	100	257	VERTICAL
4 @	5204.000	113.23			72.90	33.76	6.57	0.00	AVERAGE	100	257	VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

Channel 60

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	5302.000	115.81			75.25	33.94	6.62	0.00	AVERAGE	128	70	VERTICAL
2 @	5302.800	128.74			88.19	33.94	6.62	0.00	PEAK	128	70	VERTICAL
3 @	5350.000	59.70	-0.30	60.00	19.03	34.03	6.64	0.00	AVERAGE	128	70	VERTICAL
4 @	5350.000	77.03	-2.97	80.00	36.36	34.03	6.64	0.00	PEAK	128	70	VERTICAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

Channel 64

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	5322.400	112.60			72.00	33.97	6.63	0.00	AVERAGE	125	87	VERTICAL
2 @	5323.600	125.29			84.69	33.97	6.63	0.00	PEAK	125	87	VERTICAL
3 @	5350.000	59.19	-0.81	60.00	18.52	34.03	6.64	0.00	AVERAGE	125	87	VERTICAL
4 @	5350.000	77.47	-2.53	80.00	36.80	34.03	6.64	0.00	PEAK	125	87	VERTICAL

Item 1, 2 are the fundamental frequency at 5320 MHz.

Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 100, 140 / Ant. 7

Channel 100

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 ☺	5460.000	57.35	-2.65	60.00	16.45	34.21	6.69	0.00	AVERAGE	107	74	VERTICAL
2 ☺	5460.000	68.14	-11.86	80.00	27.24	34.21	6.69	0.00	PEAK	107	74	VERTICAL
3 ☺	5469.000	72.32	-1.98	74.30	31.39	34.24	6.69	0.00	PEAK	107	74	VERTICAL
4 ☺	5498.800	123.00			82.00	34.30	6.70	0.00	PEAK	107	74	VERTICAL
5 ☺	5505.200	110.98			69.96	34.30	6.71	0.00	AVERAGE	107	74	VERTICAL

Item 4, 5 are the fundamental frequency at 5500 MHz.

Channel 140

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 ☺	5697.400	108.16			67.02	34.34	6.81	0.00	AVERAGE	126	78	VERTICAL
2 ☺	5697.800	122.48			81.33	34.34	6.81	0.00	PEAK	126	78	VERTICAL
3 ☺	5725.200	73.43	-0.87	74.30	32.27	34.34	6.82	0.00	PEAK	126	78	VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.

Item 3, 4 are the fundamental frequency at 5290 MHz.

Note:

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

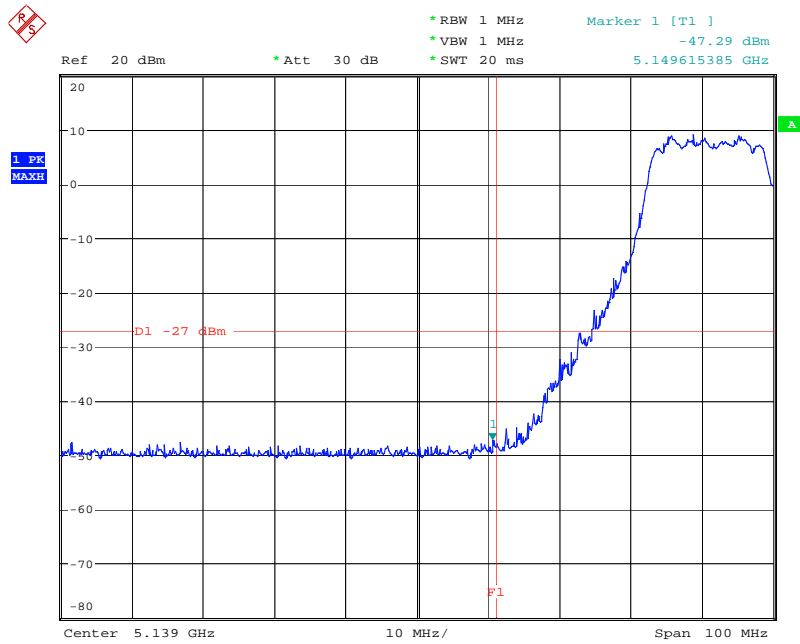
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1.5m]) (dB);

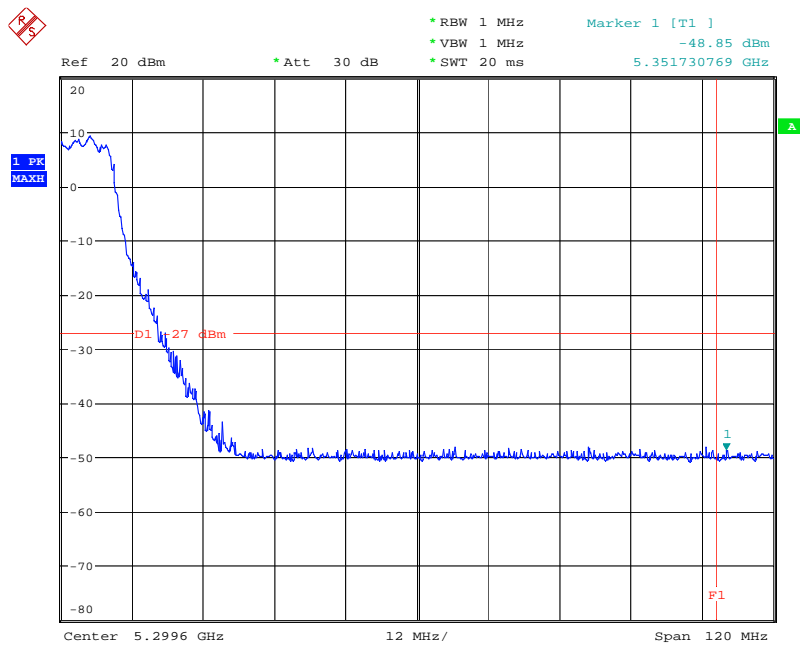
Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

EIRP Emission in Band on Configuration IEEE 802.11a Ant. 1 / 5180 MHz



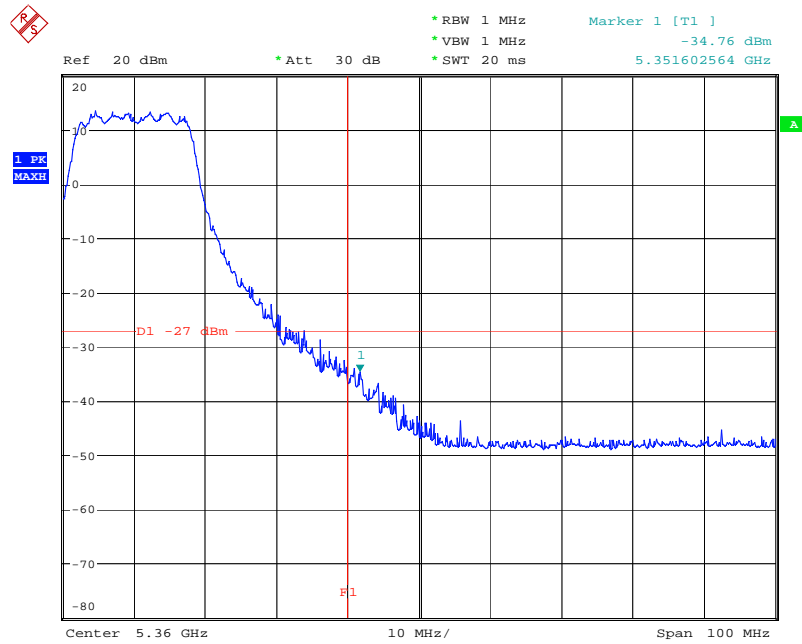
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 1 / 5240 MHz



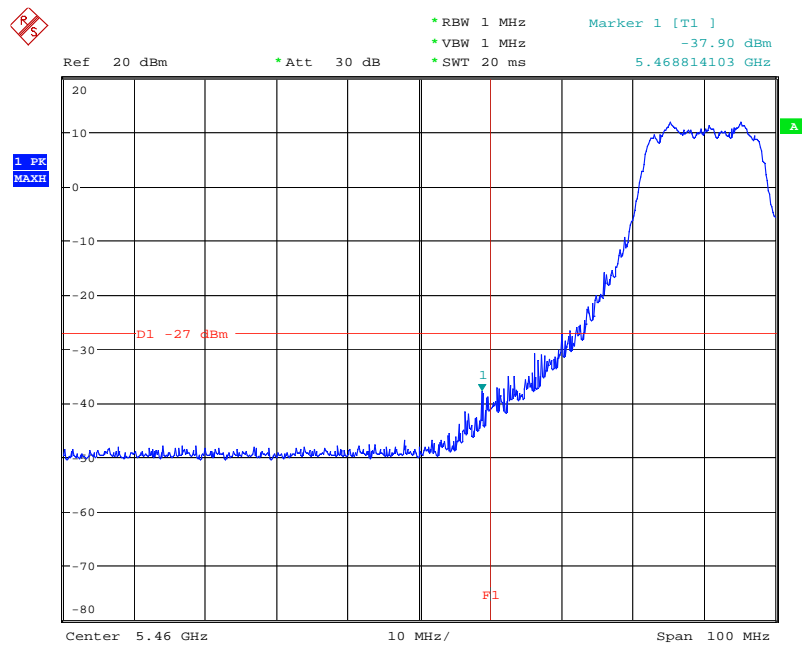
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 1 / 5320 MHz



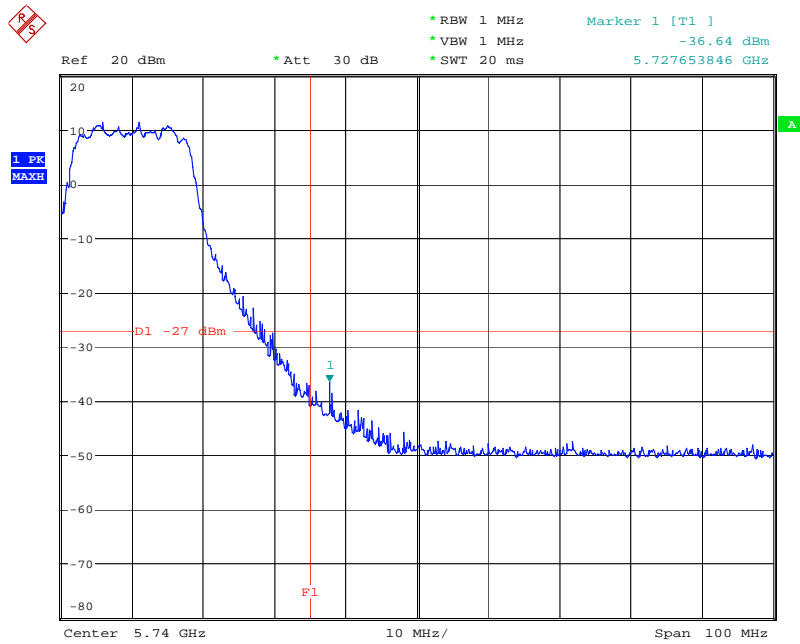
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 1 / 5500 MHz



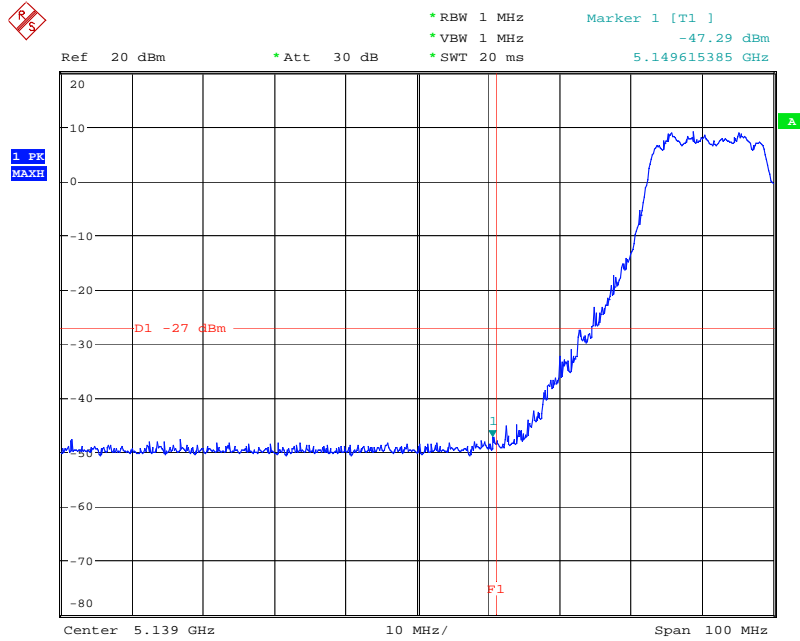
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 1 / 5700 MHz



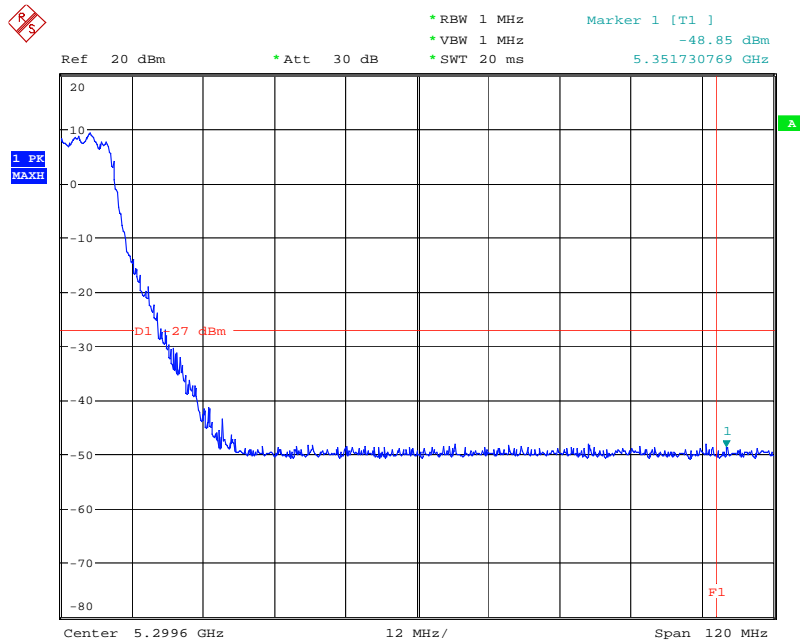
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 5 / 5180 MHz



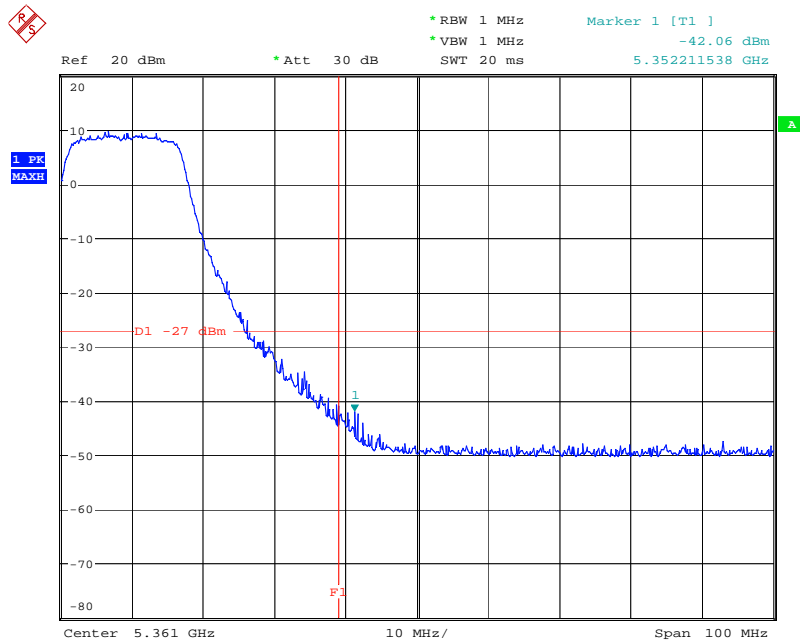
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 5 / 5240 MHz



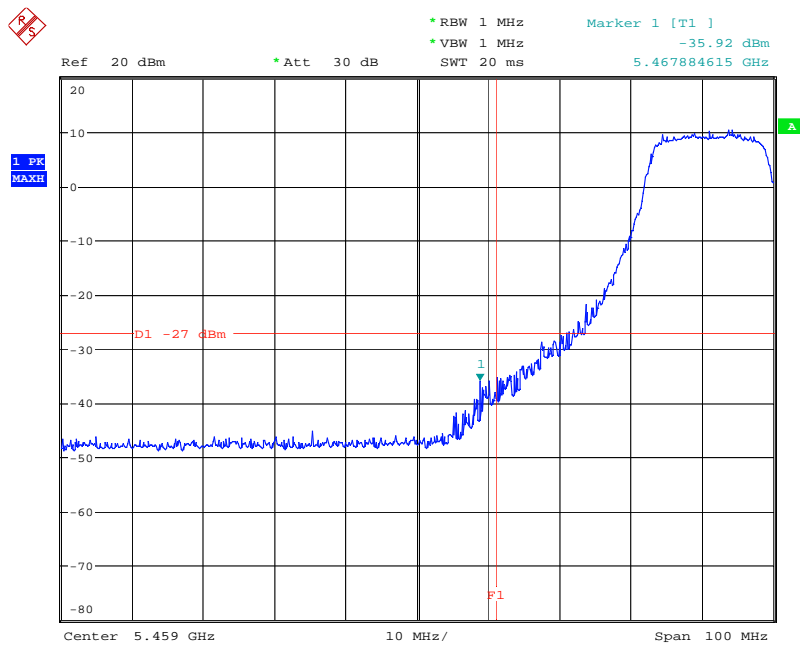
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 5 / 5320 MHz



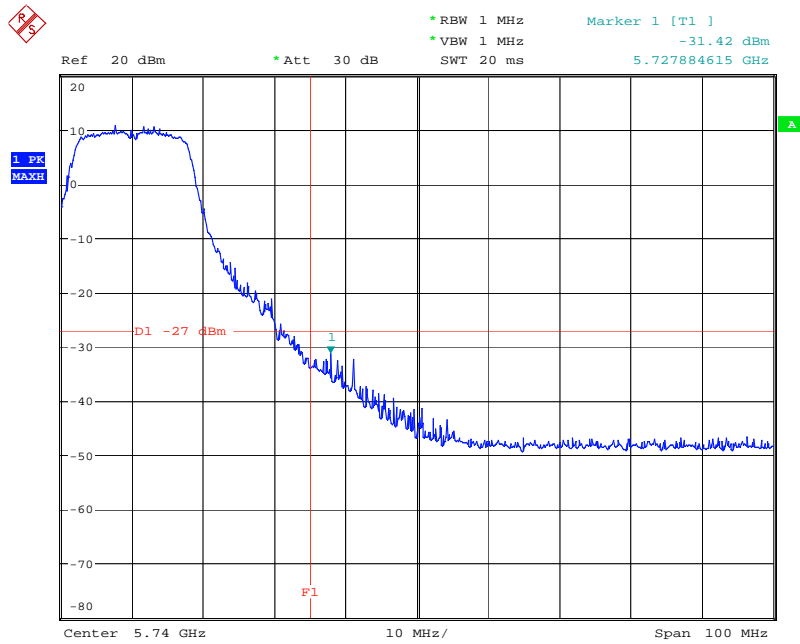
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 5 / 5500 MHz



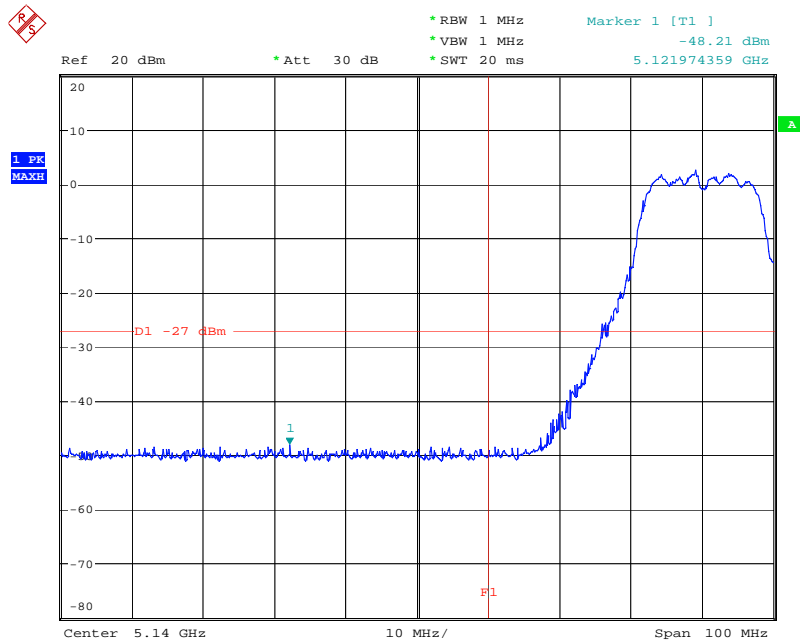
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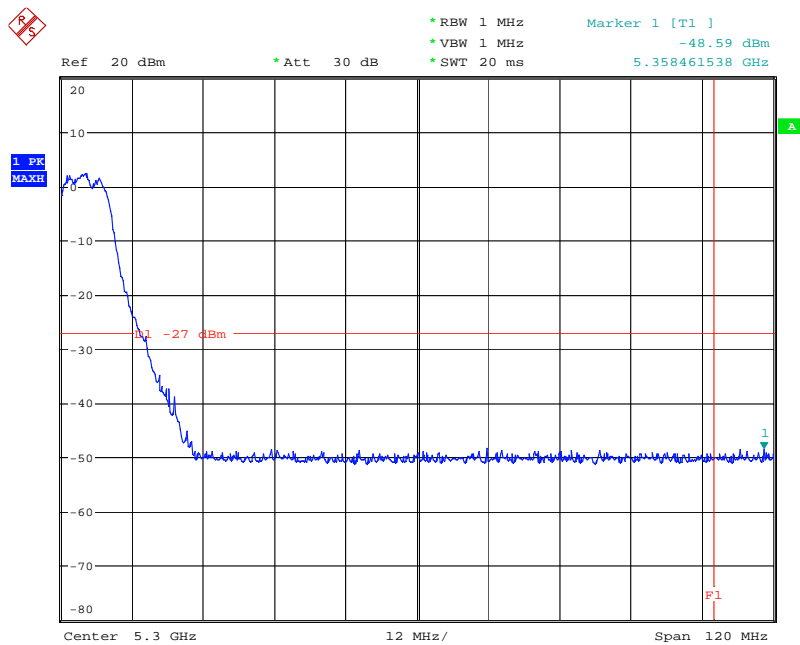
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 6 / 5180 MHz



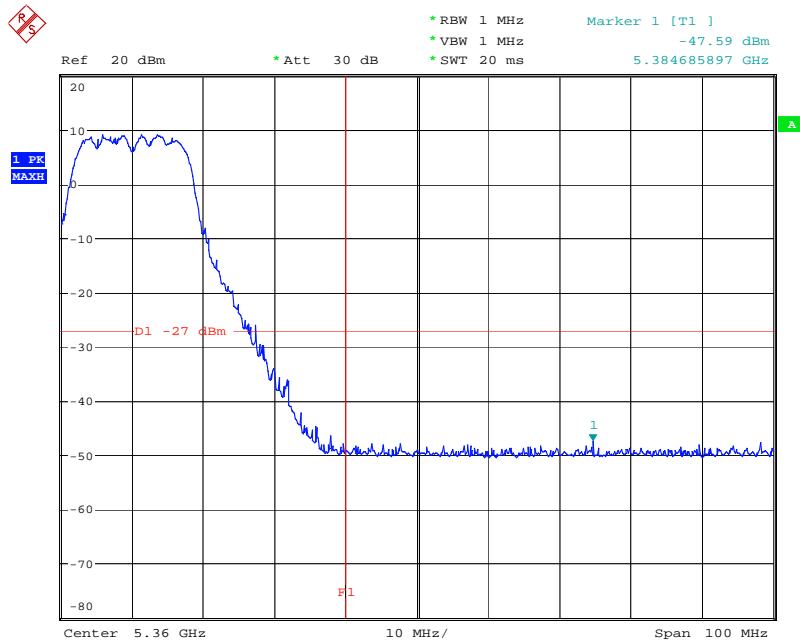
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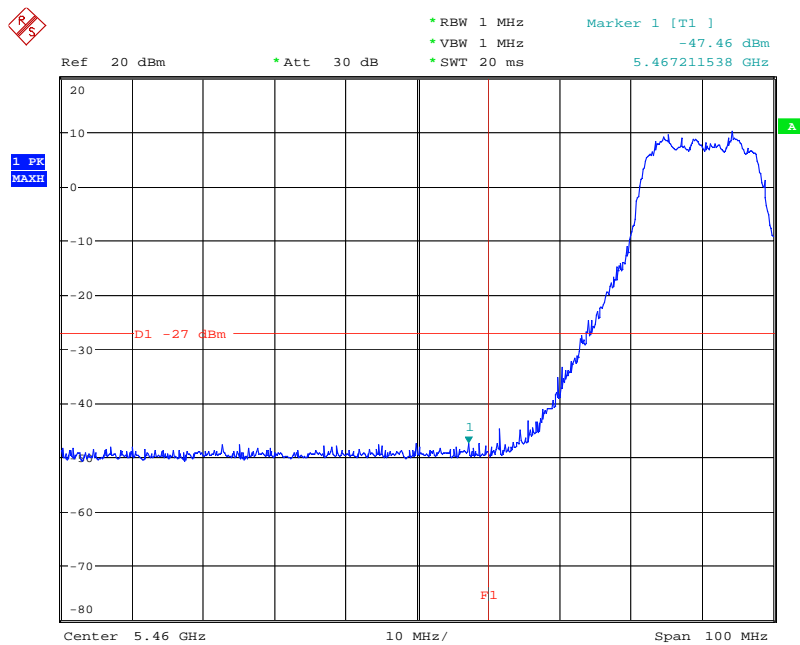
Date: 25.MAR.2008 15:07:12

EIRP Emission in Band on Configuration IEEE 802.11a Ant. 6 / 5320 MHz



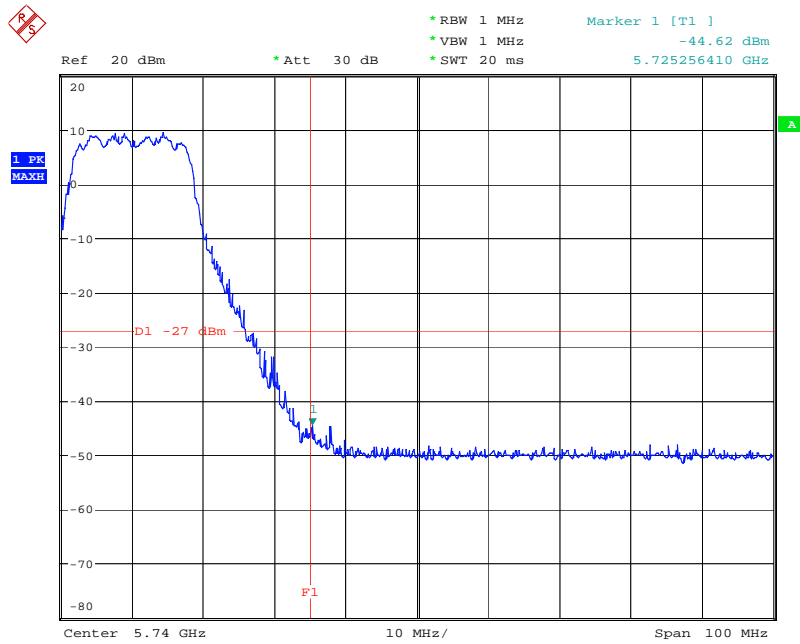
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 6 / 5500 MHz



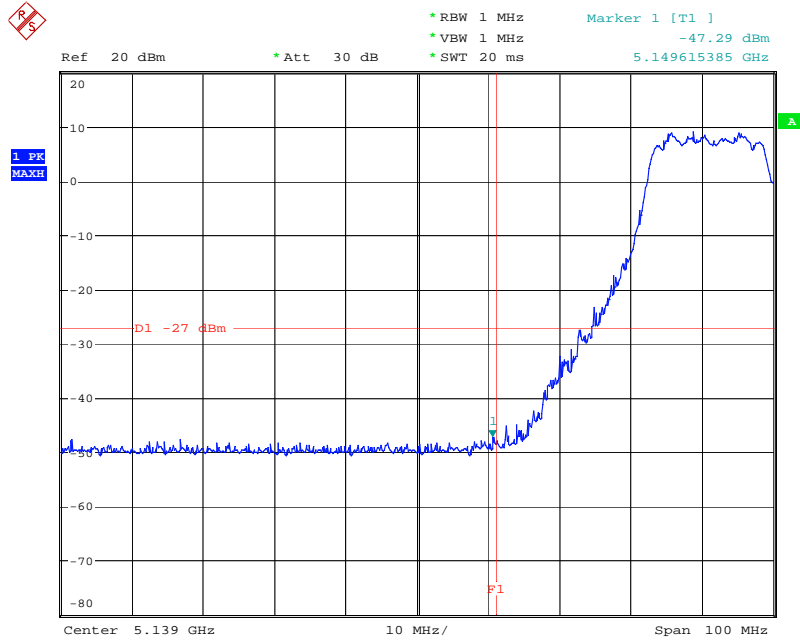
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 6 / 5700 MHz



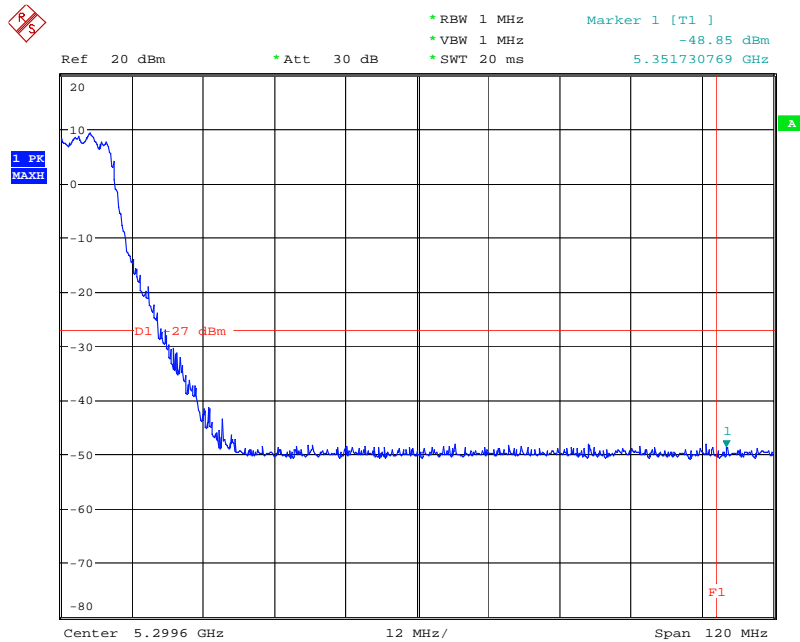
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 7 / 5180 MHz



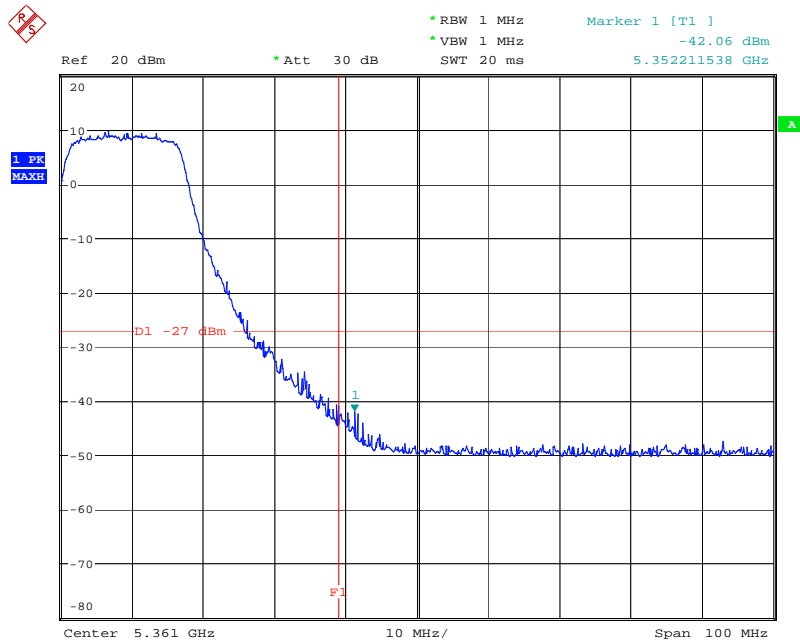
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 7 / 5240 MHz



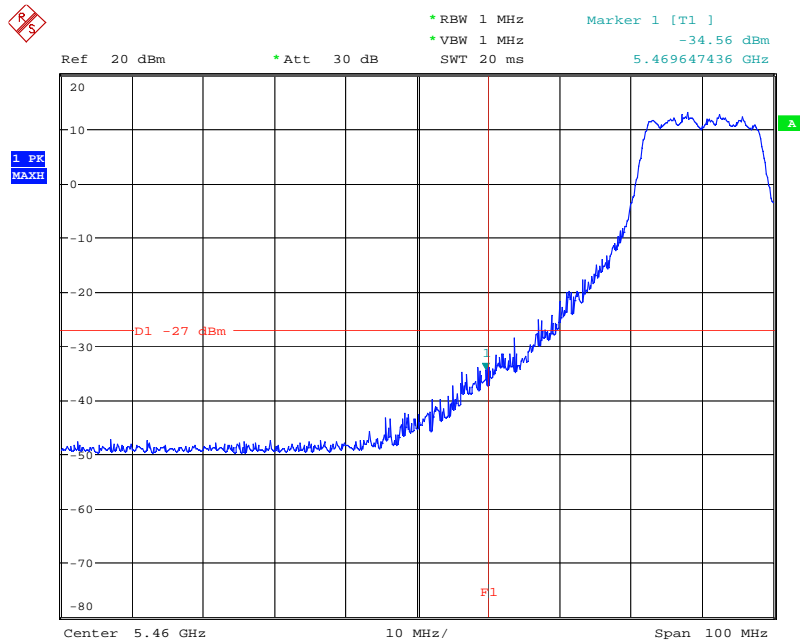
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 7 / 5320 MHz



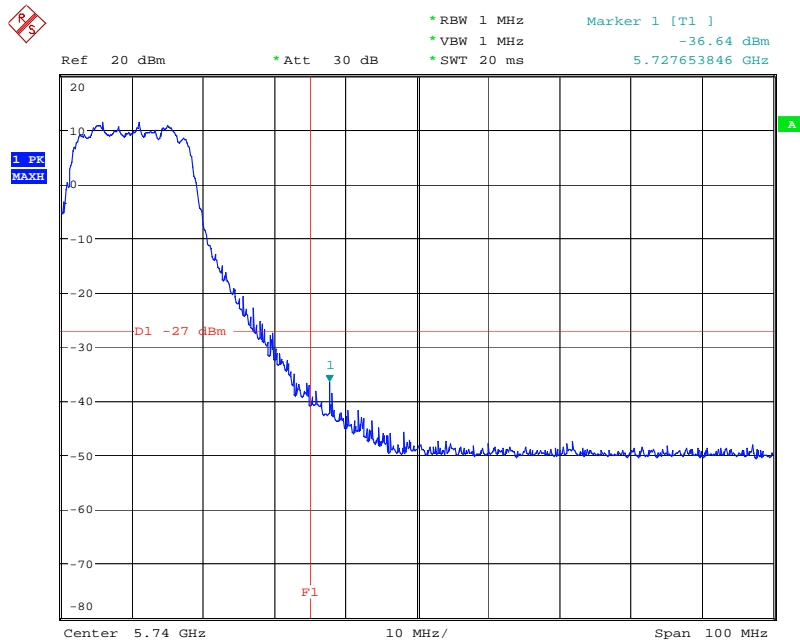
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EIRP Emission in Band on Configuration IEEE 802.11a Ant. 7 / 5500 MHz



Date: 26.MAR.2008 17:52:13

EIRP Emission in Band on Configuration IEEE 802.11a Ant. 7 / 5700 MHz



Date: 20.MAR.2008 20:15:54

4.8. Frequency Stability Measurement

4.8.1. Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emissions is maintained within the band of operation under all conditions of normal operation as specified in the user's manual or $\pm 20\text{ppm}$ (IEEE 802.11a specification).

4.8.2. Measuring Instruments and Setting

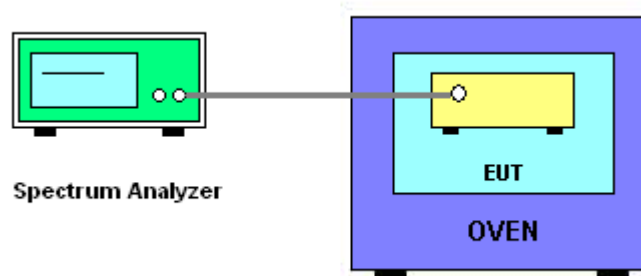
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RB	10 kHz
VB	10 kHz
Sweep Time	Auto

4.8.3. Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. EUT have transmitted absence of modulation signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
5. f_c is declaring of channel frequency. Then the frequency error formula is $(f_c - f)/f_c \times 10^6$ ppm and the limit is less than $\pm 20\text{ppm}$ (IEEE 802.11a specification).
6. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
7. Extreme temperature rule is $-30^\circ\text{C} \sim 50^\circ\text{C}$.
8. Measuring multiple antennas, the connector is required to link with spectrum analyzer. through a combiner.

4.8.4. Test Setup Layout



4.8.5. Test Deviation

There is no deviation with the original standard.

4.8.6. EUT Operation during Test

The EUT was programmed to be in continuously un-modulation transmitting mode.

4.8.7. Test Result of Frequency Stability

For Antenna 1

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)	
	5200 MHz	5260 MHz
(V)	5200.0451	5260.014150
126.50	5200.0322	5260.023700
110.00	5200.0211	5260.022000
93.50		
Max. Deviation (MHz)	0.045100	0.023700
Max. Deviation (ppm)	8.67	4.51

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)	
	5200 MHz	5260 MHz
(°C)	5200.0512	5260.054400
-30	5200.0412	5260.052100
-20	5200.0315	5260.043200
-10	5200.0211	5260.000000
0	5200.0101	5259.996800
10	5200.0001	5259.967900
20	5199.9981	5259.966500
30	5199.9885	5259.956900
40	5199.9648	5259.951900
50		
Max. Deviation (MHz)	0.051160	0.054400
Max. Deviation (ppm)	9.85	10.34

For Antenna 5

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)	
	5200 MHz	5260 MHz
(V)		
126.50	5200.0451	5260.014150
110.00	5200.0322	5260.023700
93.50	5200.0211	5260.022000
Max. Deviation (MHz)	0.045100	0.023700
Max. Deviation (ppm)	8.67	4.51

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)	
	5200 MHz	5260 MHz
(°C)		
-30	5200.0512	5260.054400
-20	5200.0412	5260.052100
-10	5200.0315	5260.043200
0	5200.0211	5260.000000
10	5200.0101	5259.996800
20	5200.0001	5259.967900
30	5199.9981	5259.966500
40	5199.9885	5259.956900
50	5199.9648	5259.951900
Max. Deviation (MHz)	0.051160	0.054400
Max. Deviation (ppm)	9.85	10.34

For Antenna 6

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)	
	5200 MHz	5260 MHz
(V)		
126.50	5200.0451	5260.014150
110.00	5200.0322	5260.023700
93.50	5200.0211	5260.022000
Max. Deviation (MHz)	0.045100	0.023700
Max. Deviation (ppm)	8.67	4.51

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)	
	5200 MHz	5260 MHz
(°C)		
-30	5200.0275	5260.027400
-20	5200.0269	5260.027800
-10	5200.0254	5260.024000
0	5200.0153	5260.017700
10	5200.0043	5260.002400
20	5199.9984	5259.990800
30	5199.9778	5259.975900
40	5199.9674	5259.965300
50	5199.9668	5259.967700
Max. Deviation (MHz)	0.033200	0.034700
Max. Deviation (ppm)	6.38	6.60

For Antenna 7

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)	
	5200 MHz	5260 MHz
(V)		
126.50	5200.0451	5260.014150
110.00	5200.0322	5260.023700
93.50	5200.0211	5260.022000
Max. Deviation (MHz)	0.045100	0.023700
Max. Deviation (ppm)	8.67	4.51

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)	
	5200 MHz	5260 MHz
(°C)		
-30	5200.0512	5260.054400
-20	5200.0412	5260.052100
-10	5200.0315	5260.043200
0	5200.0211	5260.000000
10	5200.0101	5259.996800
20	5200.0001	5259.967900
30	5199.9981	5259.966500
40	5199.9885	5259.956900
50	5199.9648	5259.951900
Max. Deviation (MHz)	0.051160	0.054400
Max. Deviation (ppm)	9.85	10.34

4.9. Antenna Requirements

4.9.1. 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.

4.9.2. Antenna Connector Construction

Please refer to section 3.3 in this test report; antenna connector complied with the requirements.

5. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	R&S	ESCS 30	100174	9kHz – 2.75GHz	Mar. 03, 2008	Conduction (CO04-HY)
LISN	MessTec	NNB-2/16Z	99079	9kHz – 30MHz	Mar. 31, 2008	Conduction (CO04-HY)
LISN (Support Unit)	EMCO	3810/2NM	9703-1839	9kHz – 30MHz	Mar. 22, 2008	Conduction (CO04-HY)
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9kHz – 30MHz	Apr. 20, 2007	Conduction (CO04-HY)
ISN	SCHAFFNER	ISN T400	21653	9kHz – 30MHz	Mar. 27, 2008	Conduction (CO04-HY)
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	N/A	Conduction (CO04-HY)
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30 MHz - 1 GHz 3m	Jun. 14, 2007	Radiation (03CH03-HY)
Amplifier	SCHAFFNER	COA9231A	18667	9 kHz - 2 GHz	Jan. 14, 2008	Radiation (03CH03-HY)
Amplifier	Agilent	8449B	3008A02116	1 GHz - 26.5 GHz	Jun. 07, 2007	Radiation (03CH03-HY)
Amplifier	MITEQ	AMF-6F-260400	9121372	26.5 GHz - 40 GHz	Jan. 22, 2007*	Radiation (03CH03-HY)
Spectrum Analyzer	R&S	FSP40	100305	9 kHz - 40 GHz	Sep. 27, 2007	Radiation (03CH03-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz - 30 MHz	May 23, 2006*	Radiation (03CH03-HY)
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30 MHz – 1 GHz	Jul. 21, 2007	Radiation (03CH03-HY)
Horn Antenna	EMCO	3115	6741	1GHz ~ 18GHz	May 04, 2007	Radiation (03CH03-HY)
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15 GHz - 40 GHz	Jan.18, 2008	Radiation (03CH03-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	30 MHz - 1 GHz	Dec. 03, 2007	Radiation (03CH03-HY)
RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	1 GHz - 40 GHz	Dec. 03, 2007	Radiation (03CH03-HY)
Turn Table	HD	DS 420	420/650/00	0 – 360 degree	N/A	Radiation (03CH03-HY)
Antenna Mast	HD	MA 240	240/560/00	1 m - 4 m	N/A	Radiation (03CH03-HY)
Spectrum Analyzer	R&S	FSP30	100023	9kHz ~ 30GHz	Jan. 10, 2008	Conducted (TH01-HY)
Power Meter	R&S	NRVS	100444	DC ~ 40GHz	Jun. 27, 2007	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z51	100458	DC ~ 30GHz	Jun. 27, 2007	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z32	100057	30MHz ~ 6GHz	Jun. 27, 2007	Conducted (TH01-HY)
AC Power Source	HPC	HPA-500W	HPA-9100024	AC 0 ~ 300V	May 04, 2007*	Conducted (TH01-HY)
DC Power Source	G.W.	GPC-6030D	C671845	DC 1V ~ 60V	Mar. 13, 2008	Conducted (TH01-HY)
Temp. and Humidity Chamber	KSON	THS-C3L	612	N/A	Oct. 01, 2007	Conducted (TH01-HY)
RF CABLE-1m	Jye Bao	RG142	CB034-1m	20MHz ~ 7GHz	Dec. 01, 2007	Conducted (TH01-HY)
RF CABLE-2m	Jye Bao	RG142	CB035-2m	20MHz ~ 1GHz	Dec. 01, 2007	Conducted (TH01-HY)
Vector Signal Generator	R&S	SMU200A	102098	100kHz ~ 6GHz	Nov. 14, 2007	Conducted (TH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Mar. 10, 2008	Conducted (TH01-HY)

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

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

6. 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

7. TAF CERTIFICATE OF ACCREDITATION



Certificate No. : L1190-070110

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



Jay-San Chen
President, Taiwan Accreditation Foundation
Date : January 10, 2007

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