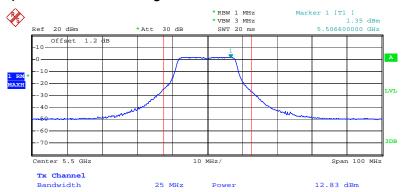


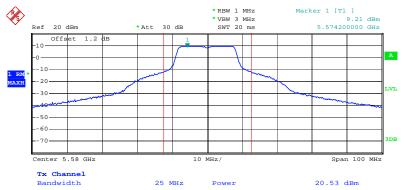


Conducted Output Power Plot on Configuration IEEE 802.11a Ant. A / 5500 MHz



Date: 25.MAR.2009 11:23:05

Conducted Output Power Plot on Configuration IEEE 802.11a Ant. A / 5580 MHz



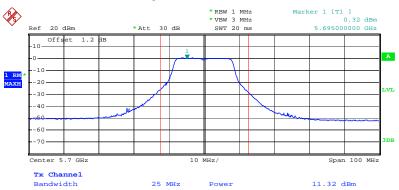
Date: 25.MAR.2009 11:25:40

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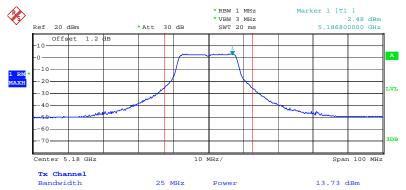


Conducted Output Power Plot on Configuration IEEE 802.11a Ant. A / 5700 MHz



Date: 29.APR.2009 10:12:05

Conducted Output Power Plot on Configuration IEEE 802.11a Ant. B / 5180 MHz



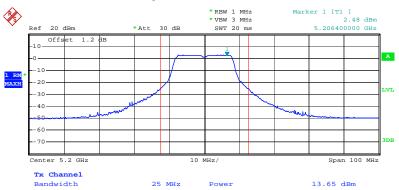
Date: 25.MAR.2009 10:52:42

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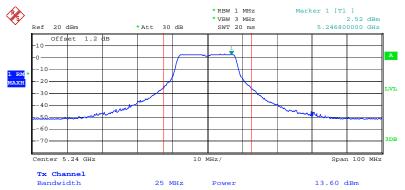


Conducted Output Power Plot on Configuration IEEE 802.11a Ant. B / 5200 MHz



Date: 25.MAR.2009 10:54:50

Conducted Output Power Plot on Configuration IEEE 802.11a Ant. B / 5240 MHz



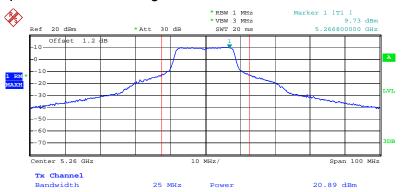
Date: 25.MAR.2009 10:57:19

Report Format Version: 01 Page No. : 60 of 168 FCC ID: TV7R52N Issued Date : May. 04, 2009



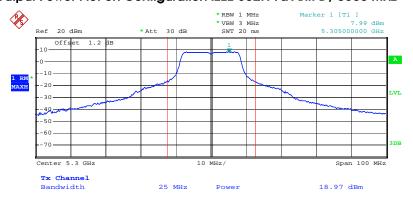


Conducted Output Power Plot on Configuration IEEE 802.11a Ant. B / 5260 MHz



Date: 25.MAR.2009 11:05:43

Conducted Output Power Plot on Configuration IEEE 802.11a Ant. B / 5300 MHz



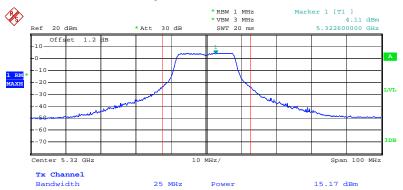
Date: 29.APR.2009 10:04:37

Report Format Version: 01 Page No. : 61 of 168 FCC ID: TV7R52N Issued Date : May. 04, 2009



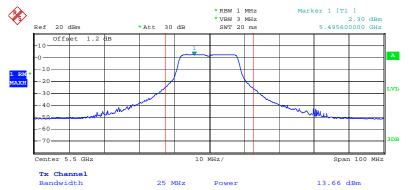


Conducted Output Power Plot on Configuration IEEE 802.11a Ant. B / 5320 MHz



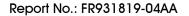
Date: 29.APR.2009 10:05:32

Conducted Output Power Plot on Configuration IEEE 802.11a Ant. B / 5500 MHz



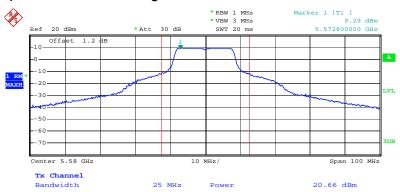
Date: 25.MAR.2009 11:22:01

Report Format Version: 01 Page No. : 62 of 168
FCC ID: TV7R52N Issued Date : May. 04, 2009



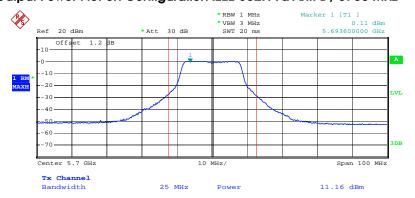


Conducted Output Power Plot on Configuration IEEE 802.11a Ant. B / 5580 MHz



Date: 25.MAR.2009 11:26:23

Conducted Output Power Plot on Configuration IEEE 802.11a Ant. B / 5700 MHz



Date: 29.APR.2009 10:10:24

Report Format Version: 01 Page No. : 63 of 168 FCC ID: TV7R52N Issued Date : May. 04, 2009

Report No.: FR931819-04AA

4.4. Power Spectral Density Measurement

4.4.1. Limit

The power spectral density is defined as the highest level of power in dBm per MHz generated by the transmitter within the power envelope. The following table is power spectral density limits and decrease power density limit rule refer to section 4.3.1.

Frequency Range	Power Spectral Density limit (dBm/MHz)
5.15~5.25 GHz	4
5.25-5.35 GHz	11
5470-5725	11

4.4.2. Measuring Instruments and Setting

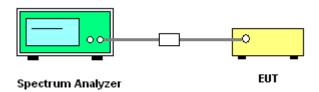
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RB	1000 kHz
VB	3000 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

4.4.3. Test Procedures

- 1. The transmitter output (antenna port) was connected to the spectrum analyzer.
- 2. Set RBW of spectrum analyzer to 1000kHz and VBW to 3000kHz. Set Detector to Peak, Trace to Max Hold. Mark the frequency with maximum peak power as the center of the display of the spectrum.
- Measuring multiple antennas, the connector is required to link with spectrum analyzer through a combiner.

4.4.4. Test Setup Layout



4.4.5. Test Deviation

There is no deviation with the original standard.

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Report No.: FR931819-04AA

4.4.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.4.7. Test Result of Power Spectral Density

Temperature	24°C	Humidity	56%
Test Engineer	Allen Liu	Configurations	Draft n

Configuration Draft n MCS0 20MHz Ant. A + Ant. B

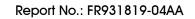
Channel	Frequency	Power Density (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	3.14	4.00	Complies
40	5200 MHz	3.34	4.00	Complies
48	5240 MHz	2.83	4.00	Complies
52	5260 MHz	10.12	11.00	Complies
60	5300 MHz	6.36	11.00	Complies
64	5320 MHz	3.34	11.00	Complies
100	5500 MHz	1.05	11.00	Complies
116	5580 MHz	9.52	11.00	Complies
140	5700 MHz	0.63	11.00	Complies

Configuration Draft n MCSO 40MHz Ant. A + Ant. B

Channel	Frequency	Power Density (dBm)	Max. Limit (dBm)	Result
38	5190 MHz	-2.25	4.00	Complies
46	5230 MHz	-0.30	4.00	Complies
54	5270 MHz	3.85	11.00	Complies
62	5310 MHz	-1.83	11.00	Complies
102	5510MHz	-3.22	11.00	Complies
110	5550 MHz	3.45	11.00	Complies
134	5670 MHz	-0.15	11.00	Complies

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Temperature	24°C	Humidity	56%
Test Engineer	Allen Liu	Configurations	802.11a

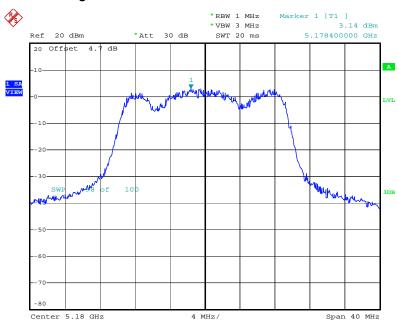
Configuration IEEE 802.11a Ant. A + Ant. B

Channel	Frequency	Power Density (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	3.36	4.00	Complies
40	5200 MHz	3.29	4.00	Complies
48	5240 MHz	3.86	4.00	Complies
52	5260 MHz	10.42	11.00	Complies
60	5300 MHz	8.45	11.00	Complies
64	5320 MHz	4.26	11.00	Complies
100	5500 MHz	2.98	11.00	Complies
116	5580 MHz	9.58	11.00	Complies
140	5700 MHz	-1.58	11.00	Complies



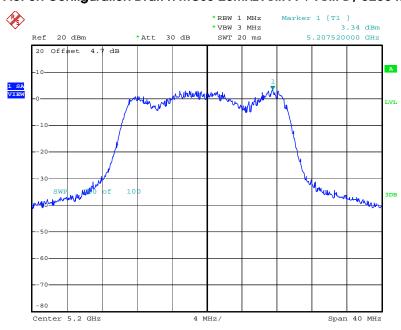


Power Density Plot on Configuration Draft n MCSO 20MHz Ant. A + Ant. B / 5180 MHz



Date: 26.MAR.2009 13:24:31

Power Density Plot on Configuration Draft n MCS0 20MHz Ant. A + Ant. B / 5200 MHz



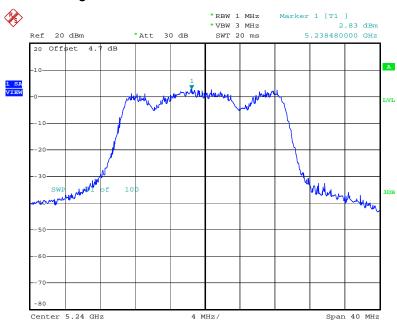
Date: 26.MAR.2009 13:23:48

Report Format Version: 01 Page No. : 67 of 168 FCC ID: TV7R52N Issued Date : May. 04, 2009



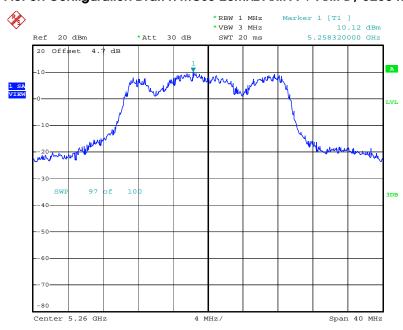


Power Density Plot on Configuration Draft n MCSO 20MHz Ant. A + Ant. B / 5240 MHz



Date: 26.MAR.2009 13:23:02

Power Density Plot on Configuration Draft n MCS0 20MHz Ant. A + Ant. B / 5260 MHz



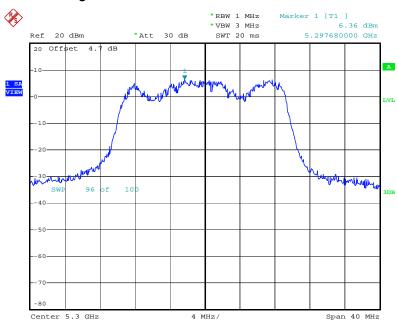
Date: 26.MAR.2009 13:22:13

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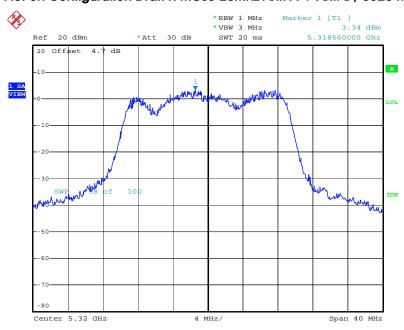


Power Density Plot on Configuration Draft n MCSO 20MHz Ant. A + Ant. B / 5300 MHz



Date: 26.MAR.2009 13:21:23

Power Density Plot on Configuration Draft n MCS0 20MHz Ant. A + Ant. B / 5320 MHz



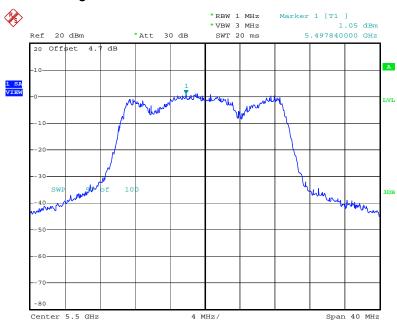
Date: 26.MAR.2009 13:20:38

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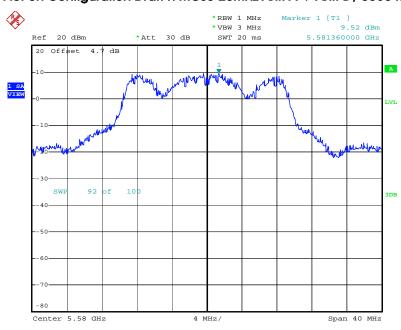


Power Density Plot on Configuration Draft n MCSO 20MHz Ant. A + Ant. B / 5500 MHz



Date: 26.MAR.2009 13:19:27

Power Density Plot on Configuration Draft n MCS0 20MHz Ant. A + Ant. B / 5580 MHz



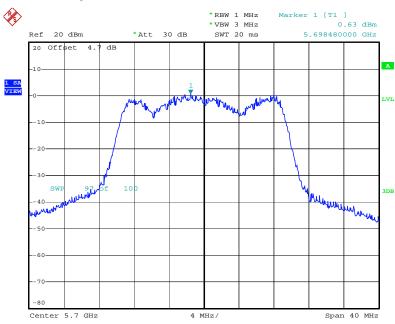
Date: 26.MAR.2009 13:18:32

Report Format Version: 01 Page No. : 70 of 168 FCC ID: TV7R52N Issued Date : May. 04, 2009



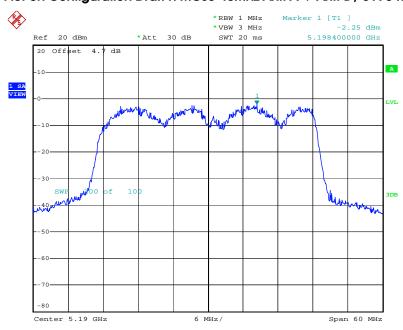


Power Density Plot on Configuration Draft n MCSO 20MHz Ant. A + Ant. B / 5700 MHz



Date: 26.MAR.2009 14:56:36

Power Density Plot on Configuration Draft n MCSO 40MHz Ant. A + Ant. B / 5190 MHz



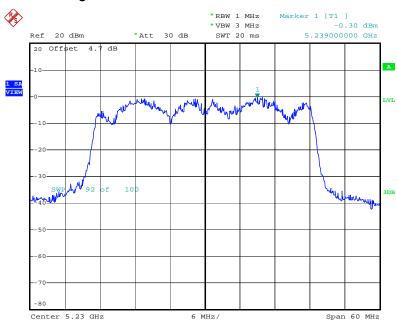
Date: 29.APR.2009 10:24:41

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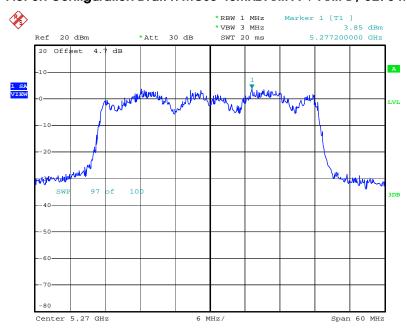


Power Density Plot on Configuration Draft n MCSO 40MHz Ant. A + Ant. B / 5230 MHz



Date: 26.MAR.2009 13:30:18

Power Density Plot on Configuration Draft n MCS0 40MHz Ant. A + Ant. B / 5270 MHz



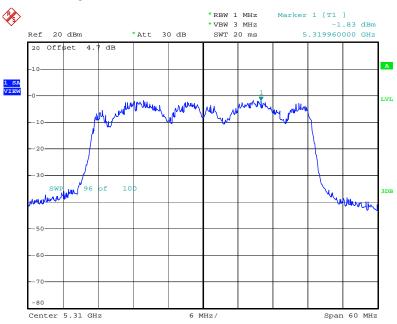
Date: 26.MAR.2009 13:31:14

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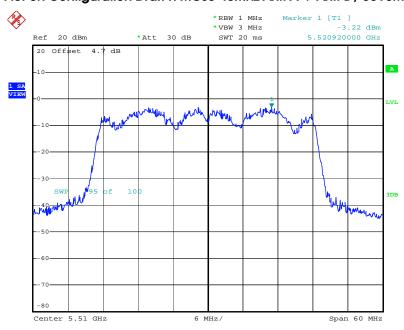


Power Density Plot on Configuration Draft n MCSO 40MHz Ant. A + Ant. B / 5310 MHz



Date: 26.MAR.2009 13:32:19

Power Density Plot on Configuration Draft n MCS0 40MHz Ant. A + Ant. B / 5510MHz



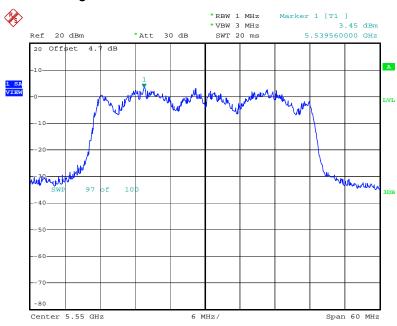
Date: 26.MAR.2009 13:34:19

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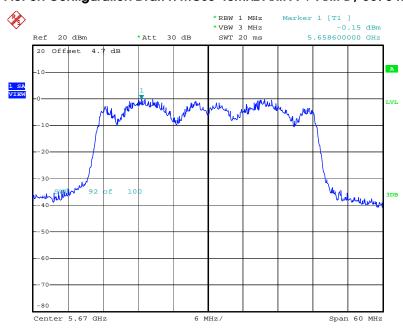


Power Density Plot on Configuration Draft n MCSO 40MHz Ant. A + Ant. B / 5550 MHz



Date: 26.MAR.2009 13:35:06

Power Density Plot on Configuration Draft n MCS0 40MHz Ant. A + Ant. B / 5670 MHz



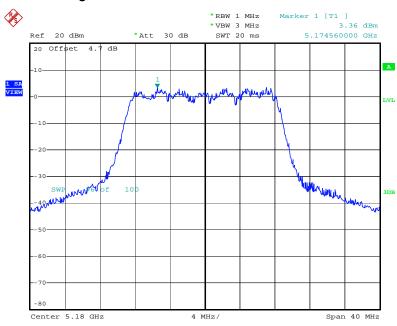
Date: 26.MAR.2009 13:35:52

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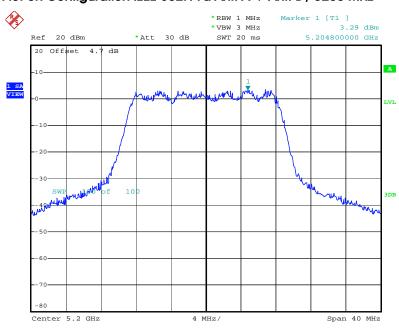


Power Density Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5180 MHz



Date: 26.MAR.2009 13:04:11

Power Density Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5200~MHz



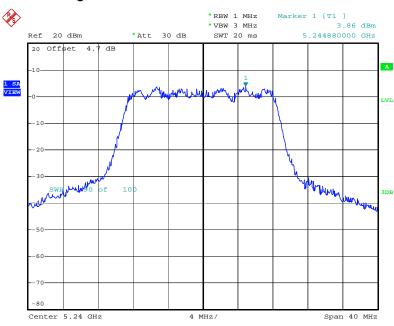
Date: 26.MAR.2009 13:05:51

Report Format Version: 01 Page No. : 75 of 168 FCC ID: TV7R52N Issued Date : May. 04, 2009



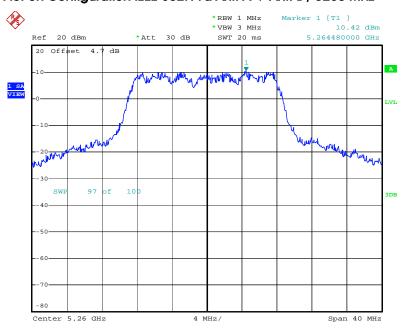


Power Density Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5240 MHz



Date: 26.MAR.2009 13:10:15

Power Density Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5260 MHz



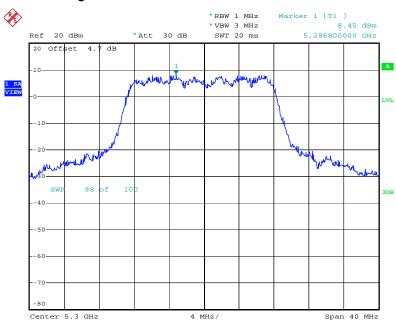
Date: 26.MAR.2009 13:08:25

Report Format Version: 01 Page No. : 76 of 168 FCC ID: TV7R52N Issued Date : May. 04, 2009



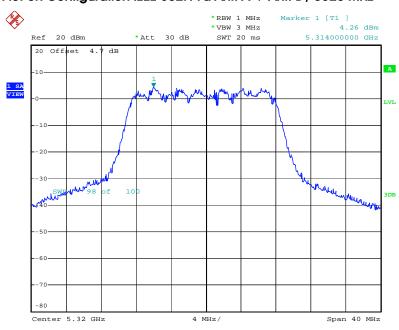


Power Density Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5300 MHz



Date: 29.APR.2009 10:49:13

Power Density Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5320 MHz



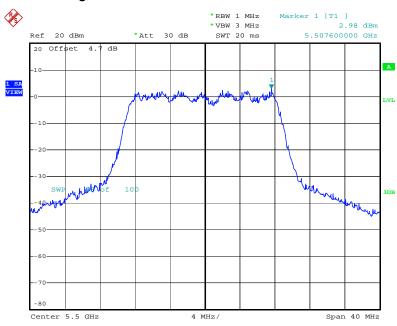
Date: 29.APR.2009 10:50:51

Report Format Version: 01 Page No. : 77 of 168 FCC ID: TV7R52N Issued Date : May. 04, 2009



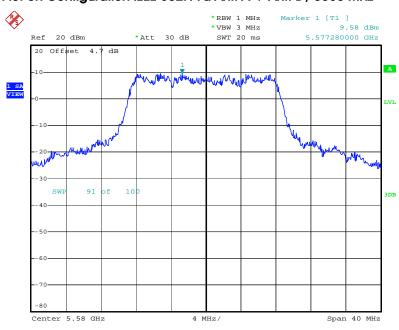


Power Density Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5500 MHz



Date: 26.MAR.2009 13:14:18

Power Density Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5580~MHz



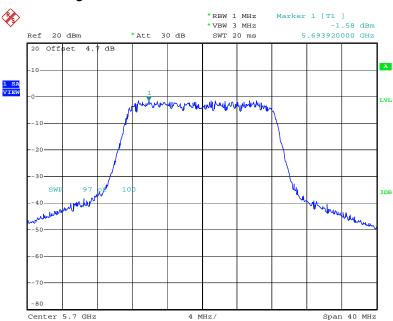
Date: 26.MAR.2009 13:15:24

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Power Density Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5700 MHz



Date: 29.APR.2009 10:32:06

Report No.: FR931819-04AA

4.5. Peak Excursion Measurement

4.5.1. Limit

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

4.5.2. 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	Encompass the entire emissions bandwidth (EBW) of the signal
RB	1000 kHz (Peak Trace) / 1000 kHz (Average Trace)
VB	3000 kHz (Peak Trace) / 300 kHz (Average Trace)
Detector	Peak (Peak Trace) / Sample (Average Trace)
Trace	Max Hold
Sweep Time	60s

4.5.3. Test Procedures

- 1. The transmitter output (antenna port) was connected to the spectrum analyzer.
- 2. Set the spectrum analyzer span to view the entire emissions bandwidth. The largest difference between the following two traces (Peak Trace and Average Trace) must be ≤ 13 dB for all frequencies across the emissions bandwidth. Submit a plot.
- 3. Peak Trace: Set RBW = 1 MHz, VBW \geq 3 MHz with peak detector and max-hold settings.
- 4. Average Trace: Method #3—video averaging with max hold--and sum power across the band. Set span to encompass the entire emissions bandwidth (EBW) of the signal. Set sweep trigger to "free run". Set RBW = 1 MHz. Set VBW ≥ 1/T (Draft n VBW = 300kHz ≥ 1/4µs). Use sample detector mode if bin width (i.e., span/number of points in spectrum) < 0.5 RBW. Otherwise use peak detector mode. Set max hold. Allow max hold to run for 60 seconds.</p>
- 5. Measuring multiple antennas, the connector is required to link with Power Meter through a combiner.

4.5.4. Test Setup Layout



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4.5.5. Test Deviation

There is no deviation with the original standard.

4.5.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.5.7. Test Result of Peak Excursion

Temperature	24°C	Humidity	56%
Test Engineer	Allen Liu	Configurations	Draft n

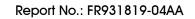
Configuration Draft n MCSO 20MHz Ant. A + Ant. B

Sormadian Francis Lown E. 7 and B.				
Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
36	5180 MHz	5.53	13	Complies
40	5200 MHz	5.75	13	Complies
48	5240 MHz	6.30	13	Complies
52	5260 MHz	5.77	13	Complies
60	5300 MHz	5.83	13	Complies
64	5320 MHz	5.08	13	Complies
100	5500 MHz	5.47	13	Complies
116	5580 MHz	5.94	13	Complies
140	5700 MHz	5.68	13	Complies

Configuration Draft n MCSO 40MHz Ant. A + Ant. B

Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
38	5190 MHz	5.22	13	Complies
46	5230 MHz	5.67	13	Complies
54	5270 MHz	5.33	13	Complies
62	5310 MHz	5.56	13	Complies
102	5510MHz	5.67	13	Complies
110	5550 MHz	5.91	13	Complies
134	5670 MHz	5.41	13	Complies

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Temperature	24°C	Humidity	56%
Test Engineer	Allen Liu	Configurations	802.11a

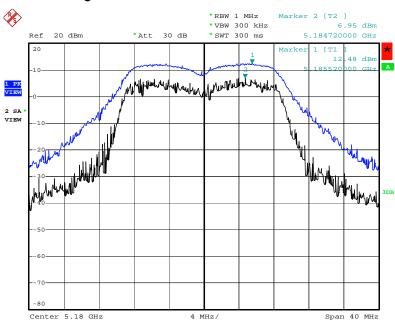
Configuration IEEE 802.11a Ant. A + Ant. B

Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
36	5180 MHz	4.71	13	Complies
40	5200 MHz	4.94	13	Complies
48	5240 MHz	5.31	13	Complies
52	5260 MHz	4.11	13	Complies
60	5300 MHz	5.11	13	Complies
64	5320 MHz	5.28	13	Complies
100	5500 MHz	4.98	13	Complies
116	5580 MHz	4.90	13	Complies
140	5700 MHz	5.19	13	Complies



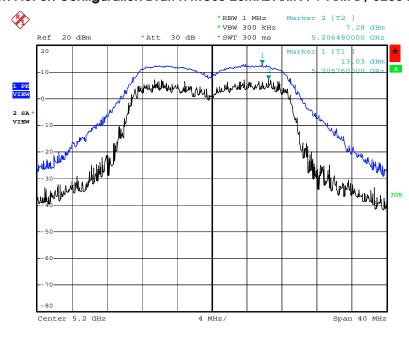


Peak Excursion Plot on Configuration Draft n MCS0 20MHz Ant. A + Ant. B / 5180 MHz



Date: 26.MAR.2009 13:24:43

Peak Excursion Plot on Configuration Draft n MCS0 20MHz Ant. A + Ant. B / 5200 MHz



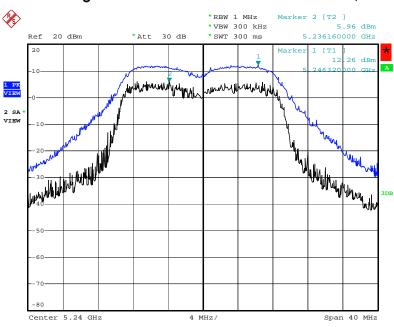
Date: 26.MAR.2009 13:24:00

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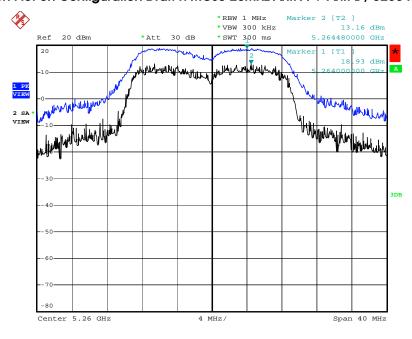


Peak Excursion Plot on Configuration Draft n MCS0 20MHz Ant. A + Ant. B / 5240 MHz



Date: 26.MAR.2009 13:23:14

Peak Excursion Plot on Configuration Draft n MCS0 20MHz Ant. A + Ant. B / 5260 MHz

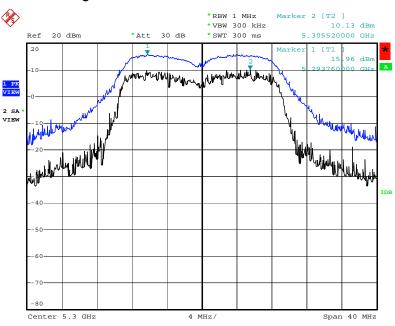


Date: 26.MAR.2009 13:22:25



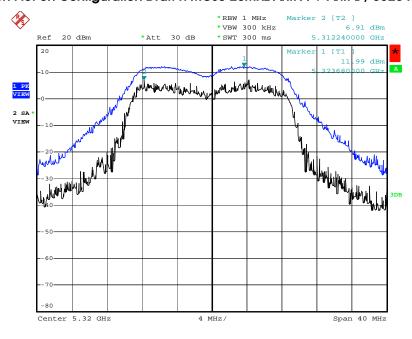


Peak Excursion Plot on Configuration Draft n MCS0 20MHz Ant. A + Ant. B / 5300 MHz



Date: 26.MAR.2009 13:21:35

Peak Excursion Plot on Configuration Draft n MCSO 20MHz Ant. A + Ant. B / 5320 MHz



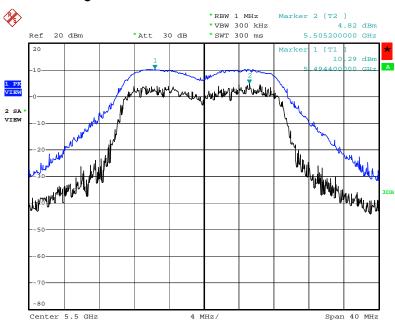
Date: 26.MAR.2009 13:20:50

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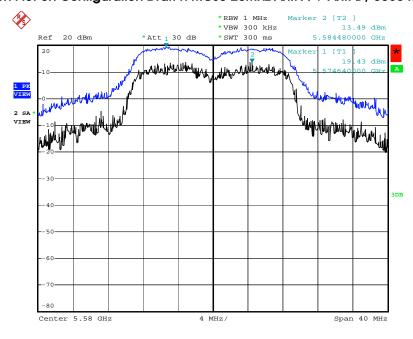


Peak Excursion Plot on Configuration Draft n MCS0 20MHz Ant. A + Ant. B / 5500 MHz



Date: 26.MAR.2009 13:19:40

Peak Excursion Plot on Configuration Draft n MCS0 20MHz Ant. A + Ant. B / 5580 MHz

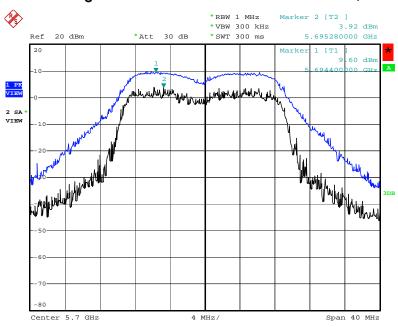


Date: 26.MAR.2009 13:18:45



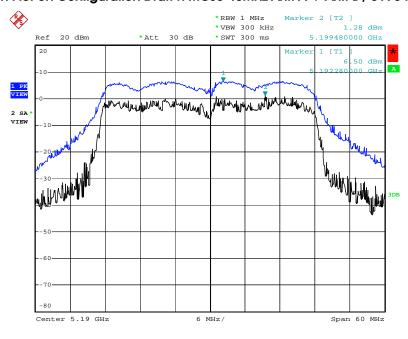


Peak Excursion Plot on Configuration Draft n MCS0 20MHz Ant. A + Ant. B / 5700 MHz



Date: 26.MAR.2009 14:56:49

Peak Excursion Plot on Configuration Draft n MCSO 40MHz Ant. A + Ant. B / 5190 MHz

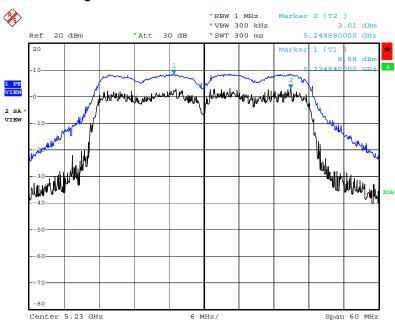


Date: 29.APR.2009 10:24:53



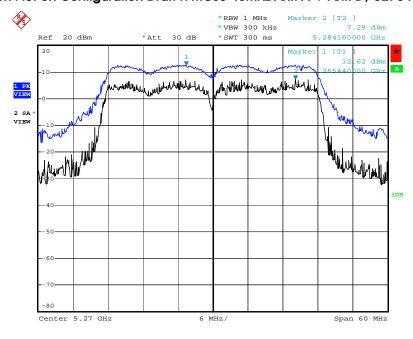


Peak Excursion Plot on Configuration Draft n MCS0 40MHz Ant. A + Ant. B / 5230 MHz



Date: 26.MAR.2009 13:30:30

Peak Excursion Plot on Configuration Draft n MCS0 40MHz Ant. A + Ant. B / 5270 MHz

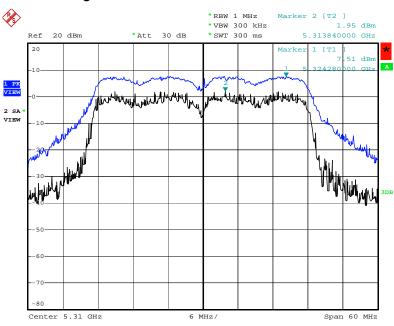


Date: 26.MAR.2009 13:31:26



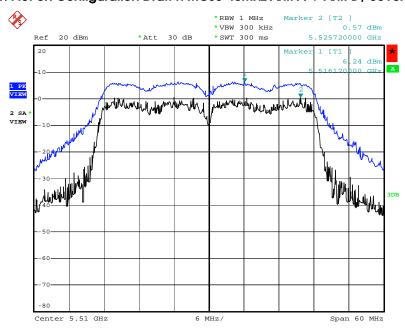


Peak Excursion Plot on Configuration Draft n MCS0 40MHz Ant. A + Ant. B / 5310 MHz



Date: 26.MAR.2009 13:32:31

Peak Excursion Plot on Configuration Draft n MCS0 40MHz Ant. A + Ant. B / 5510MHz



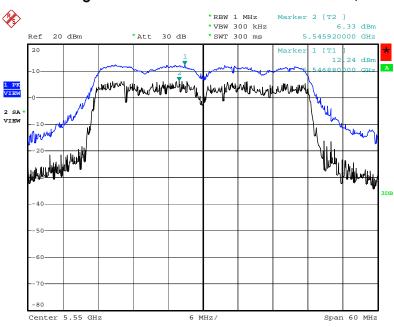
Date: 26.MAR.2009 13:34:31

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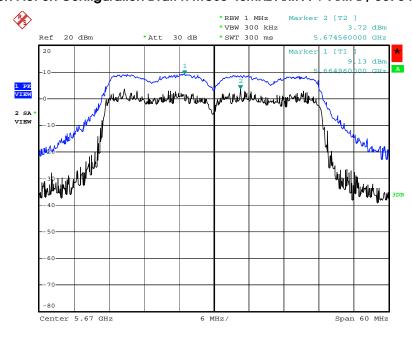


Peak Excursion Plot on Configuration Draft n MCS0 40MHz Ant. A + Ant. B / 5550 MHz



Date: 26.MAR.2009 13:35:18

Peak Excursion Plot on Configuration Draft n MCS0 40MHz Ant. A + Ant. B / 5670 MHz



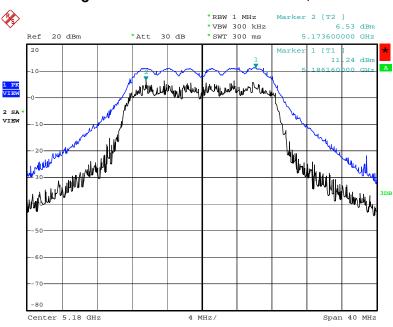
Date: 26.MAR.2009 13:36:04

Report Format Version: 01 Page No. : 90 of 168 FCC ID: TV7R52N Issued Date : May. 04, 2009



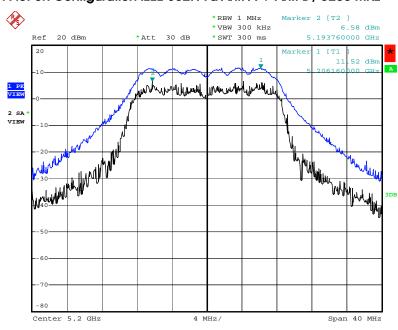


Peak Excursion Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5180 MHz



Date: 26.MAR.2009 13:04:23

Peak Excursion Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5200 MHz



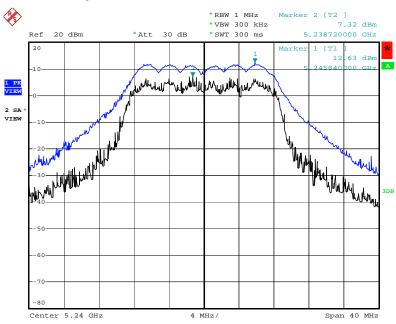
Date: 26.MAR.2009 13:06:03

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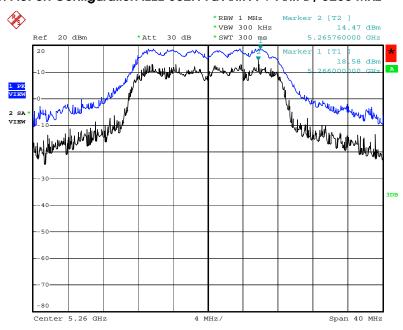


Peak Excursion Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5240 MHz



Date: 26.MAR.2009 13:10:27

Peak Excursion Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5260 MHz



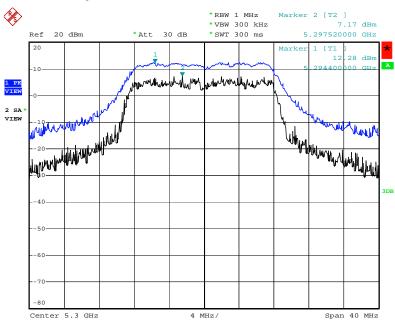
Date: 26.MAR.2009 13:08:37

Report Format Version: 01 Page No. : 92 of 168 FCC ID: TV7R52N Issued Date : May. 04, 2009



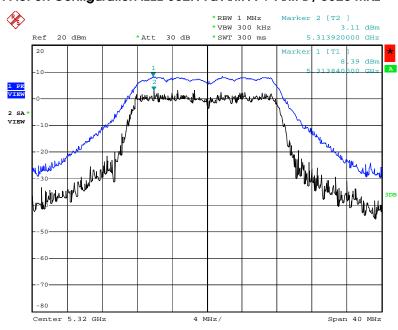


Peak Excursion Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5300 MHz



Date: 29.APR.2009 10:29:51

Peak Excursion Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5320 MHz

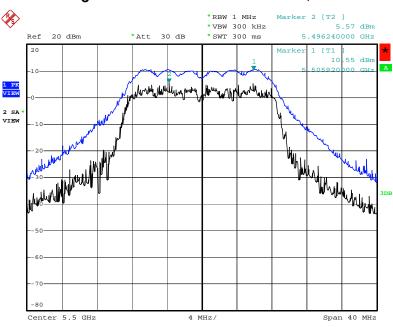


Date: 29.APR.2009 10:30:47



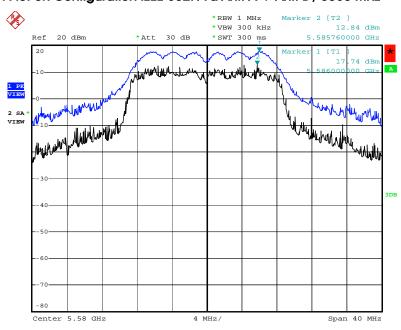


Peak Excursion Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5500 MHz



Date: 26.MAR.2009 13:14:31

Peak Excursion Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5580 MHz



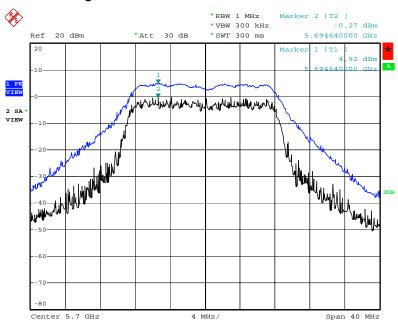
Date: 26.MAR.2009 13:15:37

Report Format Version: 01 Page No. : 94 of 168 FCC ID: TV7R52N Issued Date : May. 04, 2009





Peak Excursion Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5700 MHz



Date: 29.APR.2009 10:32:19

Report No.: FR931819-04AA

4.6. Radiated Emissions Measurement

4.6.1. 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 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	Field Strength	Measurement Distance
(MHz)	(micorvolts/meter)	(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

4.6.2. Measuring Instruments and Setting

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

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	40 GHz
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1000KHz / 1000KHz for peak

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

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4.6.3. Test Procedures

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.

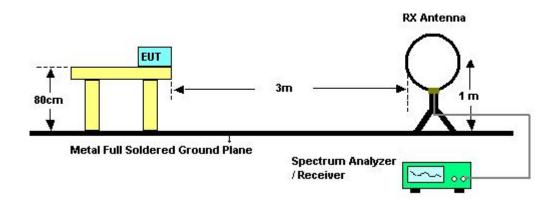
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of 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.

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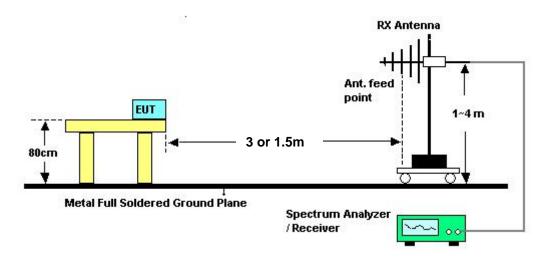


4.6.4. Test Setup Layout

For radiated emissions below 30MHz



For radiated emissions above 30MHz



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].

4.6.5. Test Deviation

There is no deviation with the original standard.

4.6.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

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4.6.7. Results of Radiated Emissions (9kHz~30MHz)

Temperature	25.6°C	Humidity	56%
Test Engineer	Allen Liu	Configurations	Normal Link

Freq.	Level	Over Limit	Limit Line	Remark
(MHz)	(dBuV)	(dB)	(dBuV)	
-	-	-	-	See Note

Note:

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

Distance extrapolation factor = 40 log (specific distance / test distance) (dB);

 $\label{limit} \mbox{Limit line} = \mbox{specific limits (dBuV)} + \mbox{distance extrapolation factor}.$

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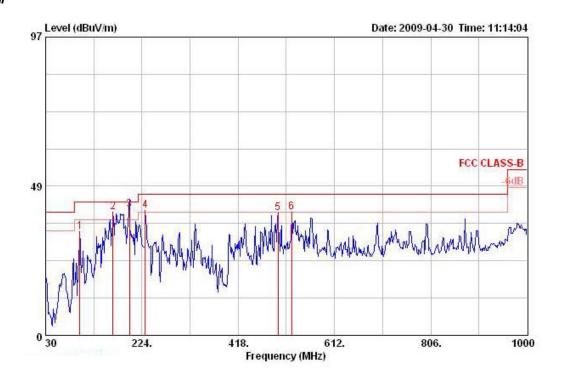




4.6.8. Results of Radiated Emissions (30MHz~1GHz)

Temperature	25.6℃	Humidity	56%
Test Engineer	Allen Liu	Configurations	Normal Link

Horizontal

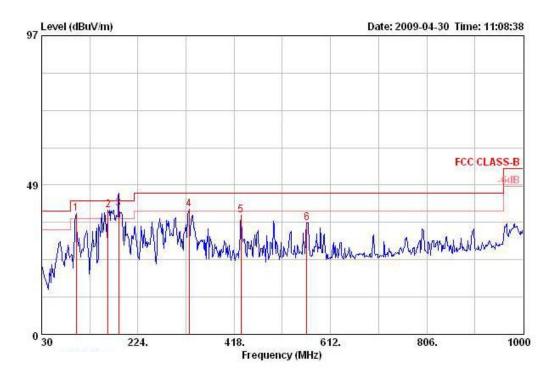


			Over	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dВ			deg	cm
1	98.870	33.83	-9.67	43.50	49.47	10.79	27.61	1.18	Peak	HORIZONTAL	0	100
2 !	165.800	40.16	-3.34	43.50	53.44	12.47	27.27	1.53	Peak	HORIZONTAL	0	100
3 @	199.125	40.85	-2.65	43.50	57.00	9.25	27.10	1.70	QP	HORIZONTAL	312	100
4 !	230.790	40.68	-5.32	46.00	54.56	11.34	27.04	1.82	Peak	HORIZONTAL	0	100
5	498.510	39.68	-6.32	46.00	47.47	17.60	28.09	2.70	Peak	HORI ZONTAL	0	100
6 !	525.670	40.14	-5.86	46.00	47.57	17.92	28.10	2.75	Peak	HORIZONTAL	0	100

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	Freq	Level	Over Limit				Preamp Factor		Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	e <u> </u>		deg	cm
1!	99.840	39.13	-4.37	43.50	54.54	10.99	27.60	1.20	Peak	VERTICAL	0	400
2 !	163.860	40.35	-3.15	43.50	53.79	12.32	27.28	1.52	Peak	VERTICAL	0	400
3 @	185.270	40.78	-2.72	43.50	54.21	12.12	27.17	1.63	QP	VERTICAL	128	100
4 !	326.820	40.65	-5.35	46.00	51.49	14.09	27.09	2.15	Peak	VERTICAL	0	400
5	431.580	38.76	-7.24	46.00	47.47	16.56	27.76	2.49	Peak	VERTICAL	0	400
6	564.470	36.09	-9.91	46.00	43.00	18.36	28.10	2.83	Peak	VERTICAL	0	400

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.

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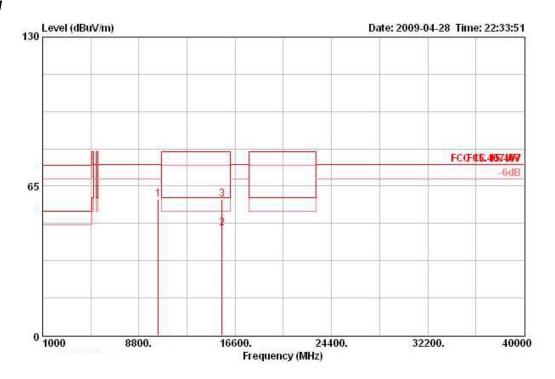




4.6.9. Results for Radiated Emissions (1GHz~40GHz)

Temperature	25.6°C	Humidity	56%
Tost Engineer	Allen Liu	Configurations	Draft n MCS0 20MHz Ch 36 /
Test Engineer	Alleri Liu	Configurations	Ant. A + Ant. B

Horizontal



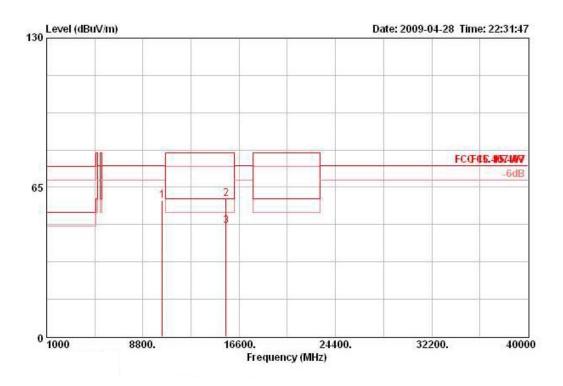
			Over	Limit	Read	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	9		deg	cm
1 @	10360.020	59.10	-15.20	74.30	44.43	39.76	35.31	10.22	PEAK	HORIZONTAL	0	100
2 @	15540.010	46.84	-13.16	60.00	32.60	38.14	35.59	11.69	AVERAGE	HORI ZONTAL	360	100
3 @	15540.010	59.29	-20.71	80.00	45.05	38.14	35.59	11.69	PERK	HORI ZONTAL	360	100

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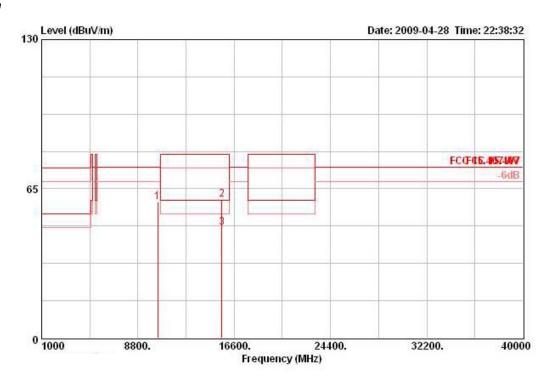


				Over	Limit	Read	Antenna	Preamp	Cable			Table	Ant
		Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB	9		deg	cm
1	L @	10359.980	59.22	-15.08	74.30	44.54	39.76	35.31	10.22	PEAK	VERTICAL	360	100
2	: e	15540.000	59.86	-20.14	80.00	45.62	38.14	35.59	11.69	PEAK	VERTICAL	0	100
3	· @	15540.010	48.05	-11.95	60.00	33.81	38.14	35.59	11.69	AVERAGE	VERTICAL	0	100





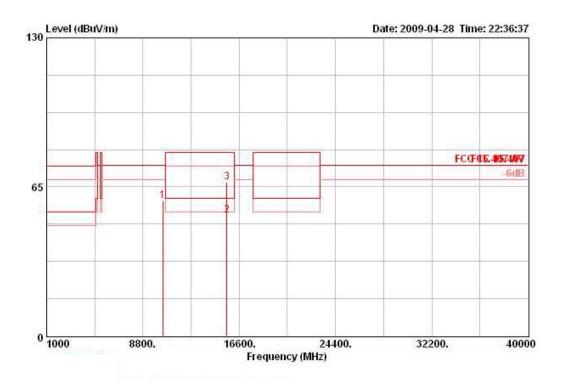
Temperature	25.6°C	Humidity	56%
Test Engineer	Allon Liu	Configurations	Draft n MCS0 20MHz Ch 40 /
Test Engineer	Allen Liu	Configurations	Ant. A + Ant. B



			Over	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 @	10400.010	59.29	-15.01	74.30	44.48	39.82	35.28	10.27	PEAK	HORI ZONTAL	360	100
2 @	15600.000	60.35	-19.65	80.00	46.15	38.03	35.58	11.75	PEAK	HORI ZONTAL	0	100
3 @	15600.010	48.31	-11.69	60.00	34.10	38.03	35.58	11.75	AVERAGE	HORI ZONTAL	0	100





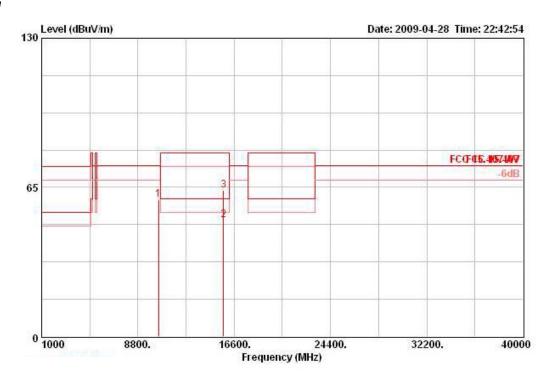


			Over	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	Mkz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-		deg	cm
1 @	10400.010	58.88	-15.42	74.30	44.07	39.82	35.28	10.27	PEAK	VERTICAL	360	100
2 @	15600.010	52.59	-7.41	60.00	38.39	38.03	35.58	11.75	AVERAGE	VERTICAL	278	100
3 @	15600.020	66.93	-13.07	80.00	52.72	38.03	35.58	11.75	PERK	VERTICAL	278	100





Temperature	25.6℃	Humidity	56%
Test Engineer	Allen Liu	Configurations	Draft n MCS0 20MHz Ch 48 /
lesi Engineei	Alleri Liu	Comigurations	Ant. A + Ant. B

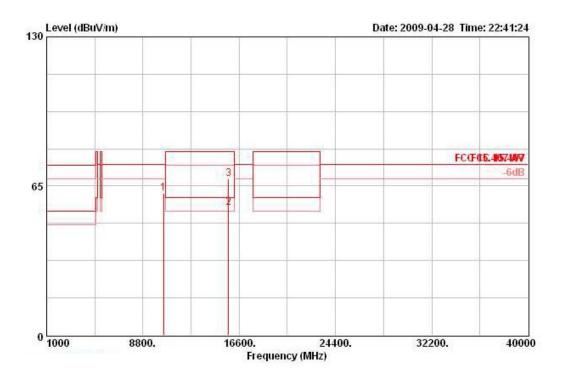


			Over	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	<u>ав</u>	dB	ď.		deg	cm
10	10480.000	59.60	-14.70	74.30	44.49	39.97	35.21	10.35	PEAK	HORIZONTAL	360	100
2 @	15719.980	50.81	-9.19	60.00	36.69	37.84	35.56	11.83	AVERAGE	HORI ZONTAL	0	100
3 @	15720.020	63.87	-16.13	80.00	49.75	37.84	35.56	11.83	PEAK	HORI ZONTAL	0	100





1 @ 2 @ 3 @



		0ver	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	<u>ав</u>	dВ	9		deg	cm
10480.020	61.87	-12.43	74.30	46.77	39.97	35.21	10.35	PEAK	VERTICAL	0	100
15719.980	55.42	-4.58	60.00	41.31	37.84	35.56	11.83	AVERAGE	VERTICAL	158	100
15720.010	67.97	-12.03	80.00	53.85	37.84	35.56	11.83	PERK	VERTICAL	158	100

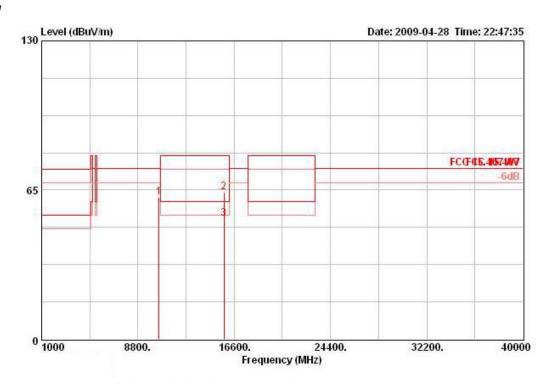
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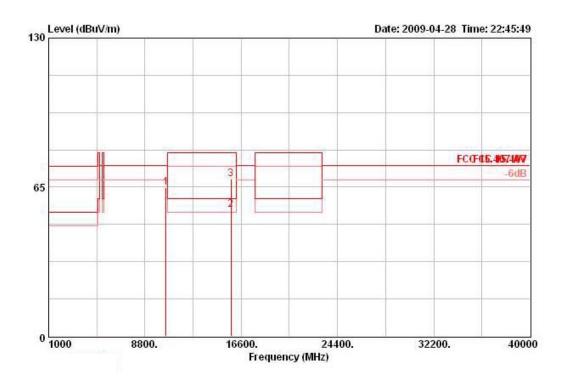
Temperature	25.6°C	Humidity	56%
Toot Engineer	Allen Liu	Configurations	Draft n MCS0 20MHz Ch 52 /
Test Engineer	Alleri Liu	Configurations	Ant. A + Ant. B



			Over	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB	1		deg	cm
1 @	10519.990	61.97	-12.33	74.30	46.80	39.98	35.19	10.37	PEAK	HORIZONTAL	0	100
2 @	15780.000	64.05	-15.95	80.00	49.94	37.76	35.54	11.89	PEAK	HORI ZONTAL	360	100
3 6	15780 000	52 51	-7 49	60 00	38 40	37 76	35 54	11 89	BURRACE	HORT ZONTAL	360	100





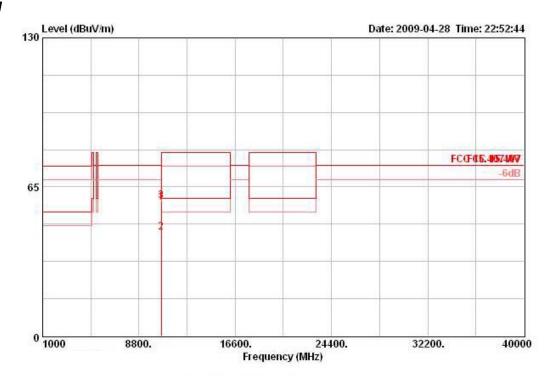


				0ver	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
		Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	9		deg	cm
1	е	10520.010	64.90	-9.40	74.30	49.74	39.98	35.19	10.37	PEAK	VERTICAL	0	100
2	e	15779.990	55.34	-4.66	60.00	41.23	37.76	35.54	11.89	AVERAGE	VERTICAL	220	100
3	e	15780.000	68.38	-11.62	80.00	54.28	37.76	35.54	11.89	PERK	VERTICAL	220	100





Temperature	25.6°C	Humidity	56%
Test Engineer	Allen Liu	Configurations	Draft n MCS0 20MHz Ch 60 /
Test Engineer	Alleri Liu	Configurations	Ant. A + Ant. B



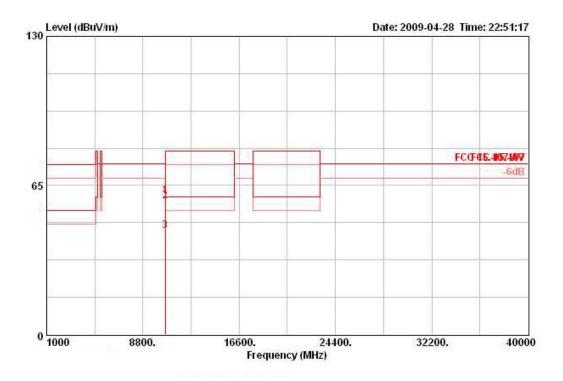
			Over	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	<u>— ав</u>	-	-	deg	cm
1 @	10599.990	58.14	-16.16	74.30	43.01	39.90	35.12	10.36	PEAK	HORIZONTAL	0	100
2 @	10600.000	45.30	-14.70	60.00	30.16	39.90	35.12	10.36	AVERAGE	HORI ZONTAL	0	100
3 6	10600 020	58 77	-21 23	80 00	43 63	39 90	35 12	10 36	DEDE	HORT ZONTAL	0	100

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			Over	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	9		deg	cm
1	10599.840	60.35	-19.65	80.00	45.22	39.90	35.12	10.36	PEAK	VERTICAL	360	100
2	10600.000	58.19	-21.81	80.00	43.06	39.90	35.12	10.36	PEAK	VERTICAL	360	100
3 @	10600.010	45.31	-14.69	60.00	30.18	39.90	35.12	10.36	AVERAGE	VERTICAL	360	100

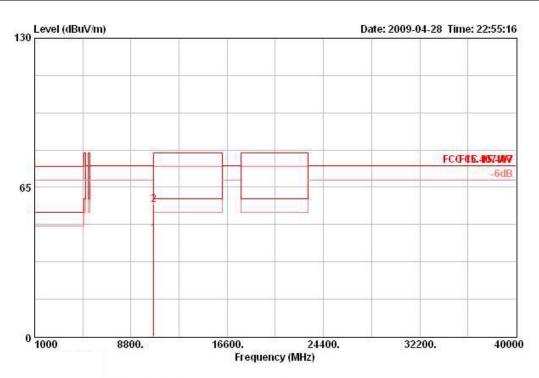
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Temperature	25.6°C	Humidity	56%
Test Engineer	Allen Liu	Configurations	Draft n MCS0 20MHz Ch 64 /
Test Engineer	Alleri Liu	Configurations	Ant. A + Ant. B



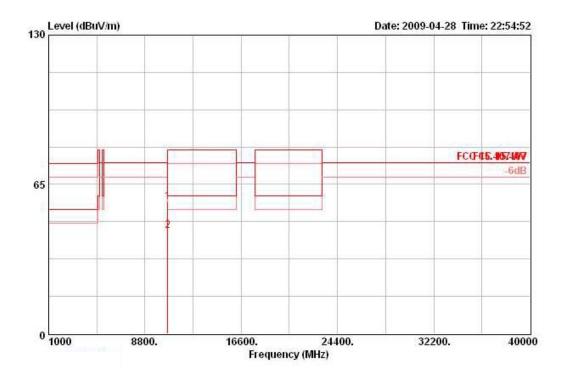
			Over	Limit	Read	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	фВ	dB	E.		deg	cm
1 @	10640.010	44.75	-15.25	60.00	29.63	39.86	35.09	10.35	AVERAGE	HORIZONTAL	360	100
2 @	10640.010	57.57	-22.43	80.00	42.45	39.86	35.09	10.35	PEAK	HORI ZONTAL	360	100

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			Over	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-		deg	cm
1 @	10639.980	57.49	-22.51	80.00	42.37	39.86	35.09	10.35	PEAK	VERTICAL	360	100
2 @	10640.000	44.90	-15.10	60.00	29.78	39.86	35.09	10.35	AVERAGE	VERTICAL	360	100

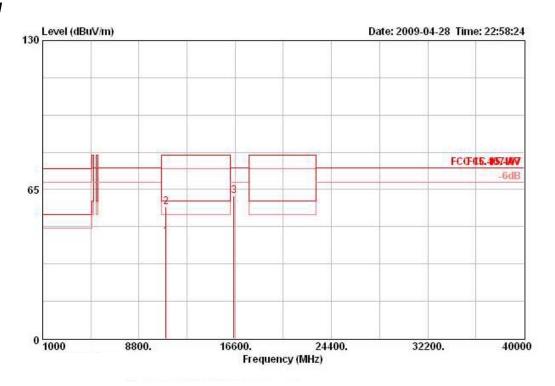
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Temperature	25.6°C	Humidity	56%
Test Engineer	Allen Liu	Configurations	Draft n MCS0 20MHz Ch 100 /
Test Engineer	Allen Liu	Configurations	Ant. A + Ant. B



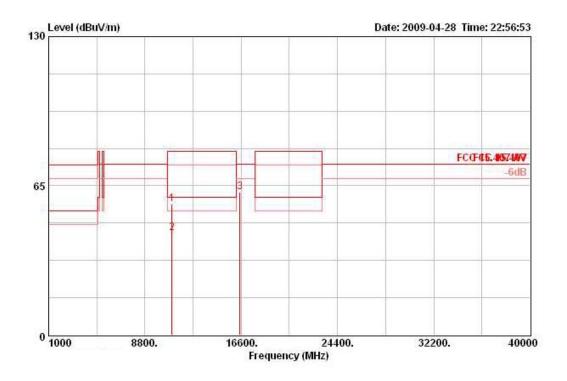
			Over	er Limit ReadAntenna Preamp Cab			Cable			Table	Ant	
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 @	10999.980	44.33	-15.67	60.00	29.35	39.50	34.80	10.28	AVERAGE	HORIZONTAL	250	100
2 @	10999.990	57.56	-22.44	80.00	42.58	39.50	34.80	10.28	PEAK	HORI ZONTAL	250	100
3 @	16500.000	62.23	-12.07	74.30	46.63	38.20	35.20	12.60	PEAK	HORI ZONTAL	167	100

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			Over	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	9		deg	cm
1 @	11000.000	56.93	-23.07	80.00	41.95	39.50	34.80	10.28	PEAK	VERTICAL	0	100
2 @	11000.010	44.53	-15.47	60.00	29.55	39.50	34.80	10.28	AVERAGE	VERTICAL	0	100
3 @	16500.010	62.12	-12.18	74.30	46.52	38.20	35.20	12.60	PEAK	VERTICAL	263	100

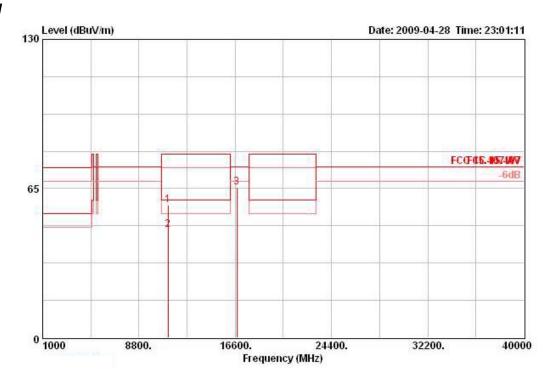
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Temperature	25.6°C	Humidity	56%
Test Engineer	Allen Liu	Configurations	Draft n MCS0 20MHz Ch 116 /
lesi Engineei	Allericia	Corniguidnons	Ant. A + Ant. B



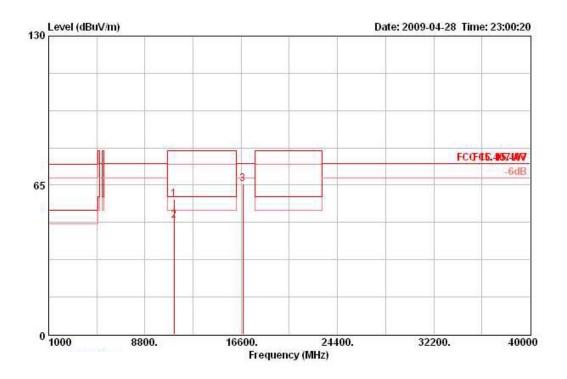
			Over	Limit	Read	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-		deg	cm
1 @	11159.990	57.72	-22.28	80.00	42.65	39.50	34.90	10.48	PEAK	HORIZONTAL	134	100
2 @	11160.000	47.00	-13.00	60.00	31.93	39.50	34.90	10.48	AVERAGE	HORI ZONTAL	134	100
3 6	16739 990	65 71	-8 59	74 30	49 23	39 02	35 01	12 47	DEBK	HORT ZONTAL	234	100

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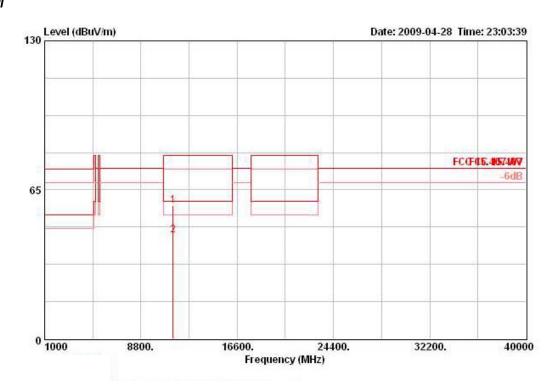
			Over	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	Mtz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-		deg	cm
1 @	11159.990	58.75	-21.25	80.00	43.68	39.50	34.90	10.48	PEAK	VERTICAL	130	100
2 @	11160.020	49.47	-10.53	60.00	34.39	39.50	34.90	10.48	AVERAGE	VERTICAL	130	100
3 @	16739.990	65.46	-8.84	74.30	48.97	39.02	35.01	12.47	PERK	VERTICAL	200	100

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Temperature	25.6℃	Humidity	56%
Toot Engineer	Allen Liu	Configurations	Draft n MCS0 20MHz Ch 140 /
Test Engineer	Allen Liu	Configurations	Ant. A + Ant. B



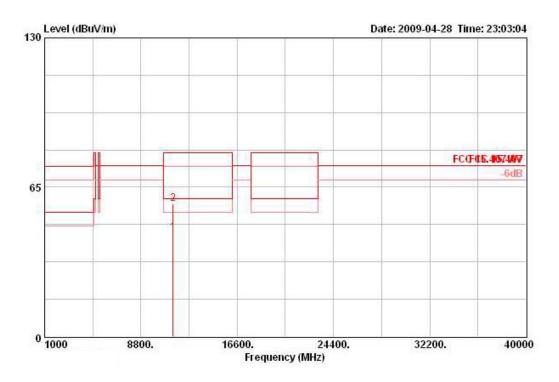
			Over	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	- dB	dB	-		deg	cm
1 @	11400.000	58.03	-21.97	80.00	42.77	39.50	35.04	10.80	PEAK	HORIZONTAL	20	100
2 @	11400 020	45 31	-14 69	60 00	30 05	39 50	35 04	10 80	AVERAGE	HORTZONTAL	20	100

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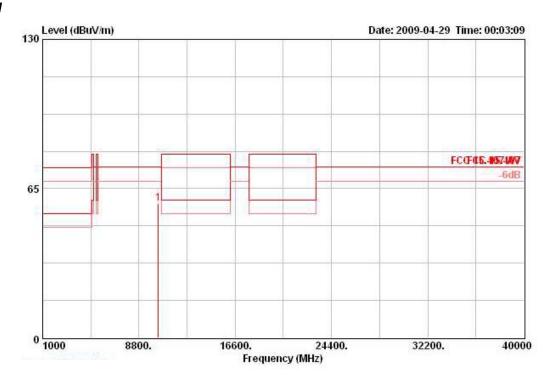


	Freq	Level	Over Limit				Preamp Factor		Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dВ	-	127	deg	cm
1 @	11399.990	45.31	-14.69	60.00	30.05	39.50	35.04	10.80	AVERAGE	VERTICAL	112	100
2 @	11399.990	57.94	-22.06	80.00	42.68	39.50	35.04	10.80	PEAK	VERTICAL	112	100





Temperature	25.6°C	Humidity	56%
Toot Engineer	Allen Liu	Configurations	Draft n MCS0 40MHz Ch 38 /
Test Engineer	Allen Liu	Configurations	Ant. A + Ant. B



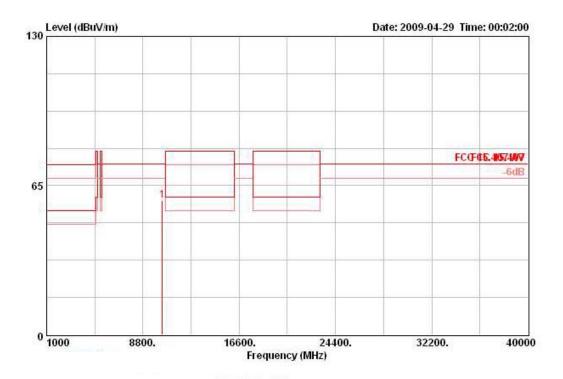
			0ver	Limit	Readi	teadAntenna Preamp (Cable			Ant
	Freq	Level	Limit	imit Line		Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	9		deg	cm
1.0	10382 400	58.66	-15.64	74 30	43.96	39.76	35.31	10.25	PEAK	HORT ZONTAL	0	100

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			Over	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-		deg	cm
1 @	10388.400	58.60	-15.70	74.30	43.85	39.79	35.29	10.25	PEAK	VERTICAL	360	100

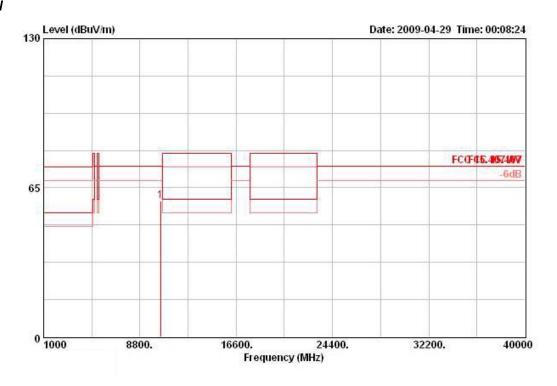
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Temperature	25.6°C	Humidity	56%
Test Engineer	Allen Liu	Configurations	Draft n MCS0 40MHz Ch 46 /
	Allen Liu	Comigurations	Ant. A + Ant. B



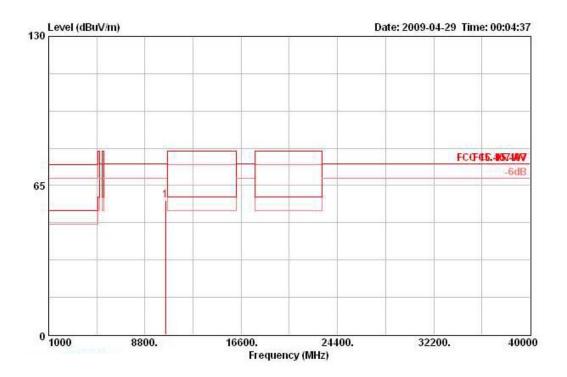
			Over	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	oss Remark	Pol/Phase	Pos deg	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB				cm
1 @	10462.400	59.25	-15.05	74.30	44.44	39.82	35.28	10.27	PEAK	HORIZONTAL	0	100

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	Freq	Level	Limit				Preamp Factor		Remark	Pol/Phase	Pos	Pos
	Mz	z dBuV/m dl	dB	dB dBuV/m	dBuV	dB/m	dB dB	9		deg	cm	
10	10459.400	58.64	-15.66	74.30	43.89	39.79	35.29	10.25	PEAK	VERTICAL	360	100

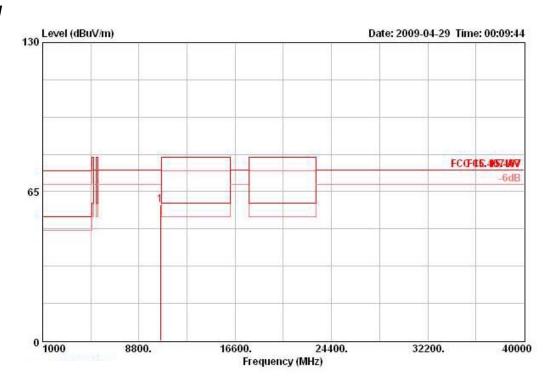
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Temperature	25.6°C Humidity		56%
Test Engineer	Allen Liu	Configurations	Draft n MCS0 40MHz Ch 54 /
	Alleri Liu	Configurations	Ant. A + Ant. B



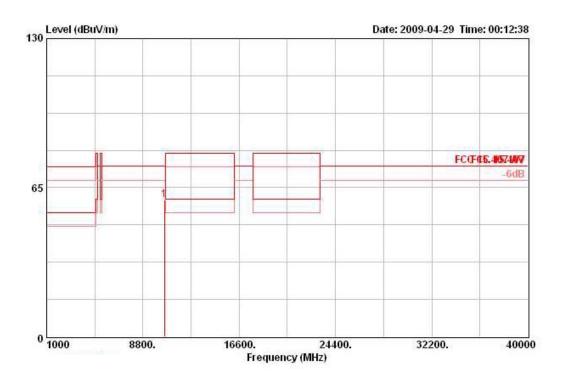
			Over	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB			deg	cm
10	10541.200	59.31	-14.99	74.30	44.16	39.95	35.16	10.36	PEAK	HORI ZONTAL	360	100

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				Limit						Pol/Phase	Pos	Pos
	Freq	Level	Limit	Line	Level	Factor	Factor	Loss	Remark			
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 @	10541.000	59.56	-14.74	74.30	44.41	39.97	35.17	10.37	PEAK	VERTICAL	0	100

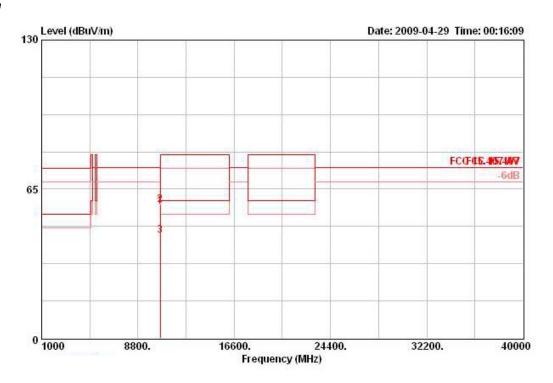
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Temperature	25.6°C Humidity		56%
Test Engineer	Allen Liu	Configurations	Draft n MCS0 40MHz Ch 62 /
	Allen Liu	Configurations	Ant. A + Ant. B



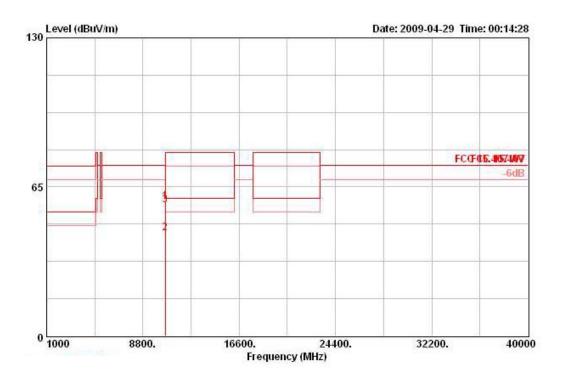
			Over	Limit	Read	Antenna	Preamp	Cable	ss Remark		Table Pos deg	Pos
	Freq	Level	Level Limit BuV/m dB d	Line	Level	Factor	Factor	Loss		Pol/Phase		
	MHz	dBuV/m		dBuV/m	dBuV	dB/m	dB	dB dB				
1 @	10597.400	57.49	-16.81	74.30	42.35	39.90	35.12	10.36	PEAK	HORIZONTAL	360	100
2 @	10620.010	58.06	-21.94	80.00	42.93	39.88	35.10	10.35	PEAK	HORI ZONTAL	360	100
3 @	10620.020	44.95	-15.05	60.00	29.82	39.88	35.10	10.35	AVERAGE	HORI ZONTAL	360	100

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			0ver	Limit	Readi	Antenna	Preamp	Cable			Table	Ant
	Freq	Level	Limit	Line	Level 1	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
	MHz	Mz dBuV/m di		dBuV/m dBuV		dB/m	dB	dB dB			deg	cm
1 @	10596.300	58.59	-15.71	74.30	43.45	39.91	35.13	10.36	PEAK	VERTICAL	0	100
2 @	10620.010	44.77	-15.23	60.00	29.64	39.88	35.10	10.35	AVERAGE	VERTICAL	0	100
3 @	10620.020	57.08	-22.92	80.00	41.95	39.88	35.10	10.35	PEAK	VERTICAL	0	100