



Number of TX :	2	Ant. :	2
Test Mode :	802.11b	Temperature :	24~26°C
Test Band :	2.4GHz High	Relative Humidity :	50~53%
Test Channel :	11	Test Engineer :	Sam Zheng

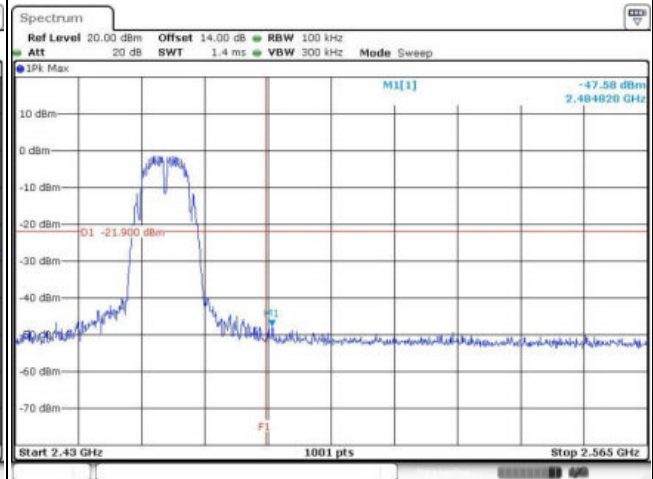
WLAN 802.11b Channel 11

100kHz PSD reference Level



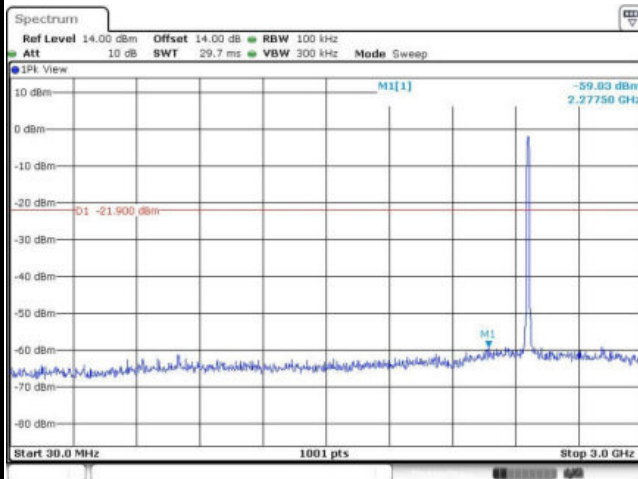
Date: 26-SEP-2016 10:55:37

High Channel Plot



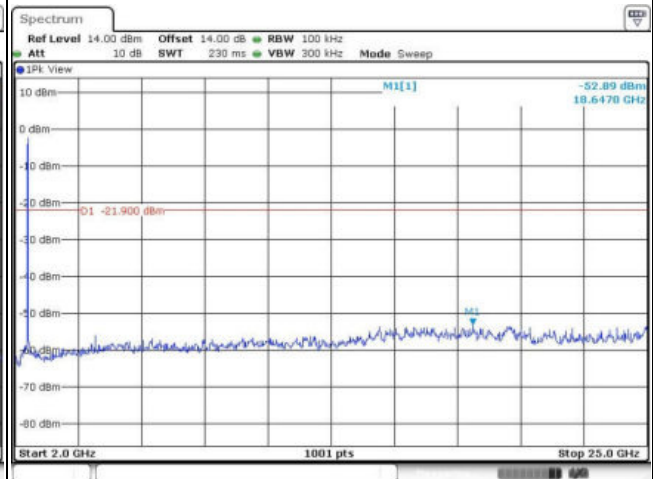
Date: 26-SEP-2016 10:55:56

Spurious Emission 30MHz~3GHz



Date: 26-SEP-2016 10:57:08

Spurious Emission 2GHz~25GHz



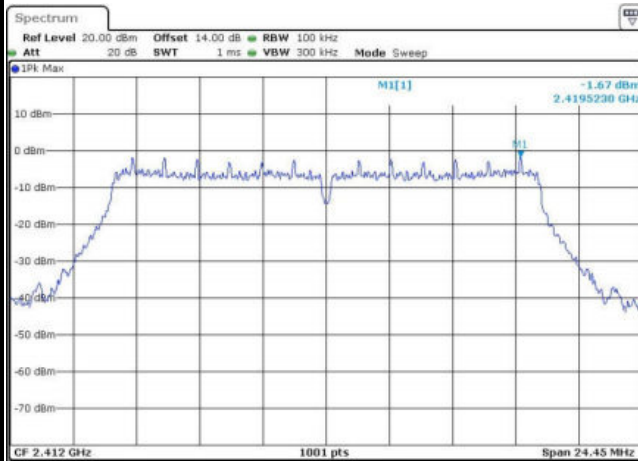
Date: 26-SEP-2016 10:56:39



Number of TX :	2	Ant. :	2
Test Mode :	802.11g	Temperature :	24~26°C
Test Band :	2.4GHz Low	Relative Humidity :	50~53%
Test Channel :	01	Test Engineer :	Sam Zheng

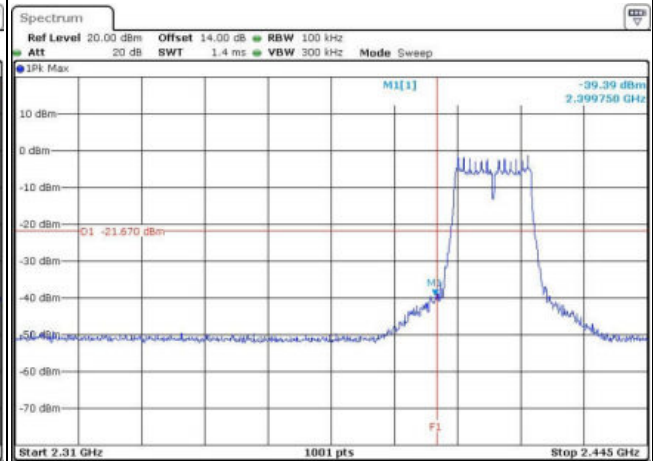
WLAN 802.11g Channel 01

100kHz PSD reference Level



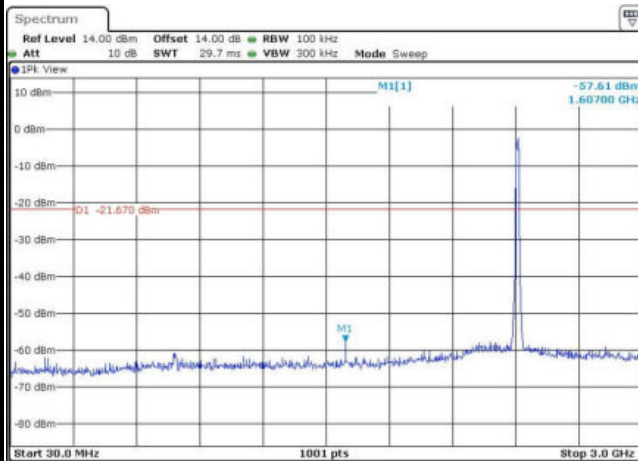
Date: 27-SEP-2016 02:07:31

Low Channel Plot



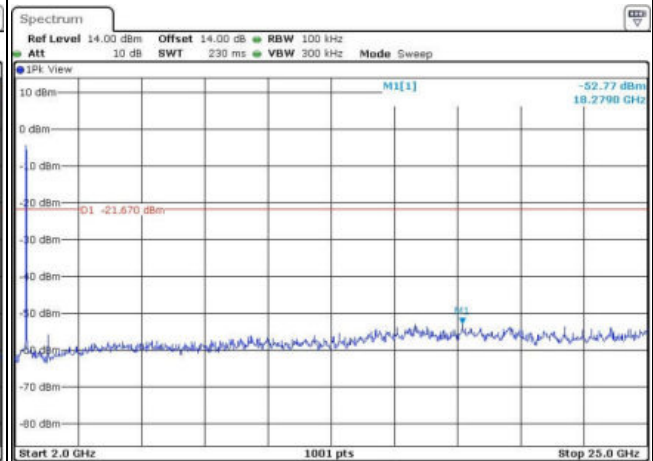
Date: 27-SEP-2016 02:09:29

Spurious Emission 30MHz~3GHz



Date: 27-SEP-2016 02:13:25

Spurious Emission 2GHz~25GHz



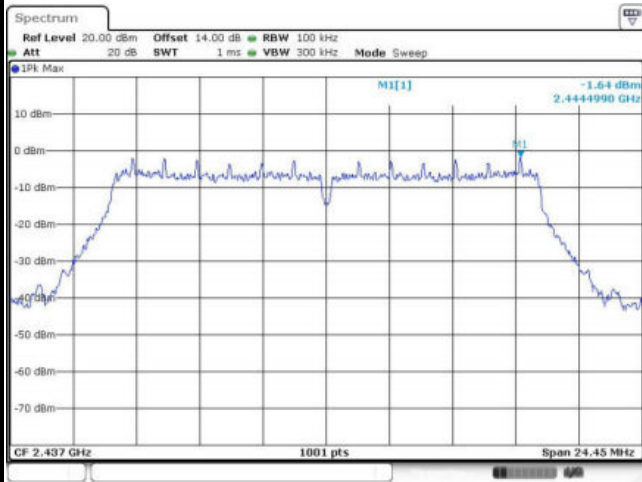
Date: 27-SEP-2016 02:13:34



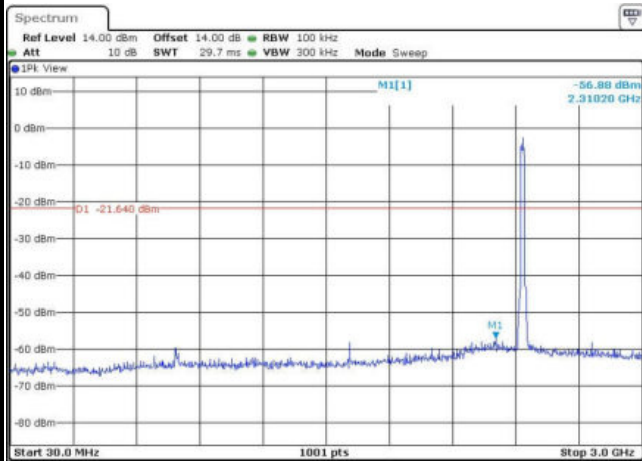
Number of TX :	2	Ant. :	2
Test Mode :	802.11g	Temperature :	24~26°C
Test Band :	2.4GHz Mid	Relative Humidity :	50~53%
Test Channel :	06	Test Engineer :	Sam Zheng

WLAN 802.11g Channel 06

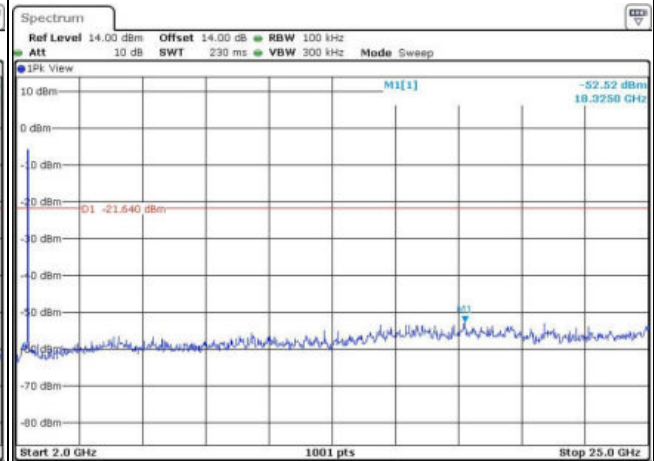
100kHz PSD reference Level



Spurious Emission 30MHz~3GHz



Spurious Emission 2GHz~25GHz

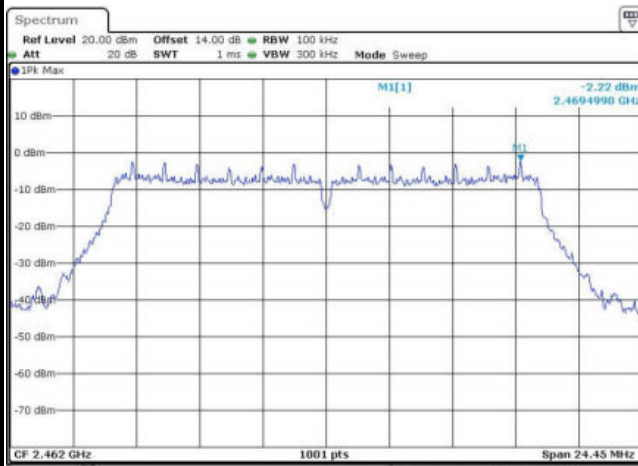




Number of TX :	2	Ant. :	2
Test Mode :	802.11g	Temperature :	24~26°C
Test Band :	2.4GHz High	Relative Humidity :	50~53%
Test Channel :	11	Test Engineer :	Sam Zheng

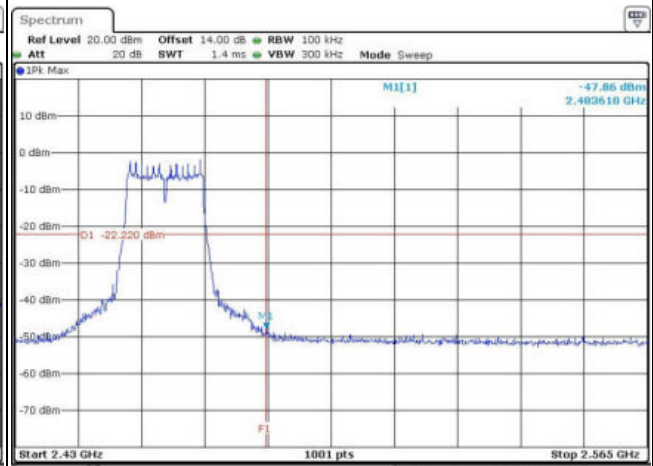
WLAN 802.11g Channel 11

100kHz PSD reference Level



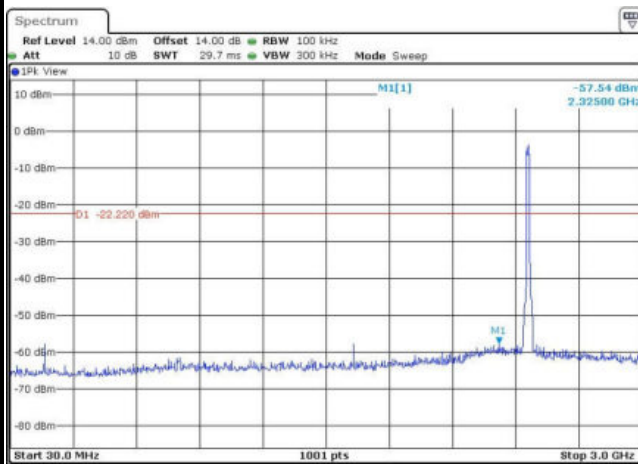
Date: 27_SEP.2016 02:22:30

High Channel Plot



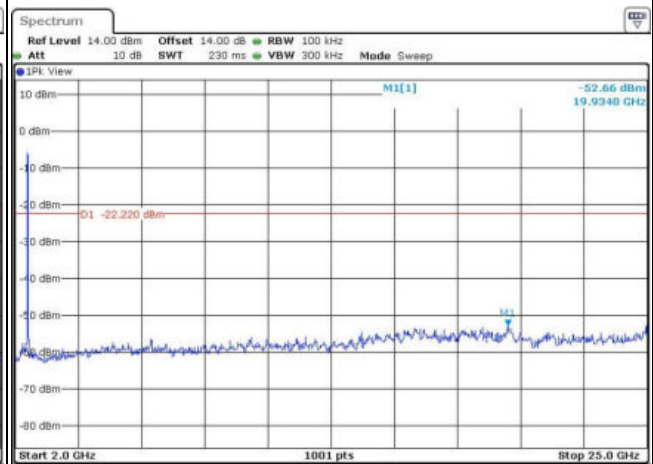
Date: 27_SEP.2016 02:23:41

Spurious Emission 30MHz~3GHz



Date: 27_SEP.2016 02:24:53

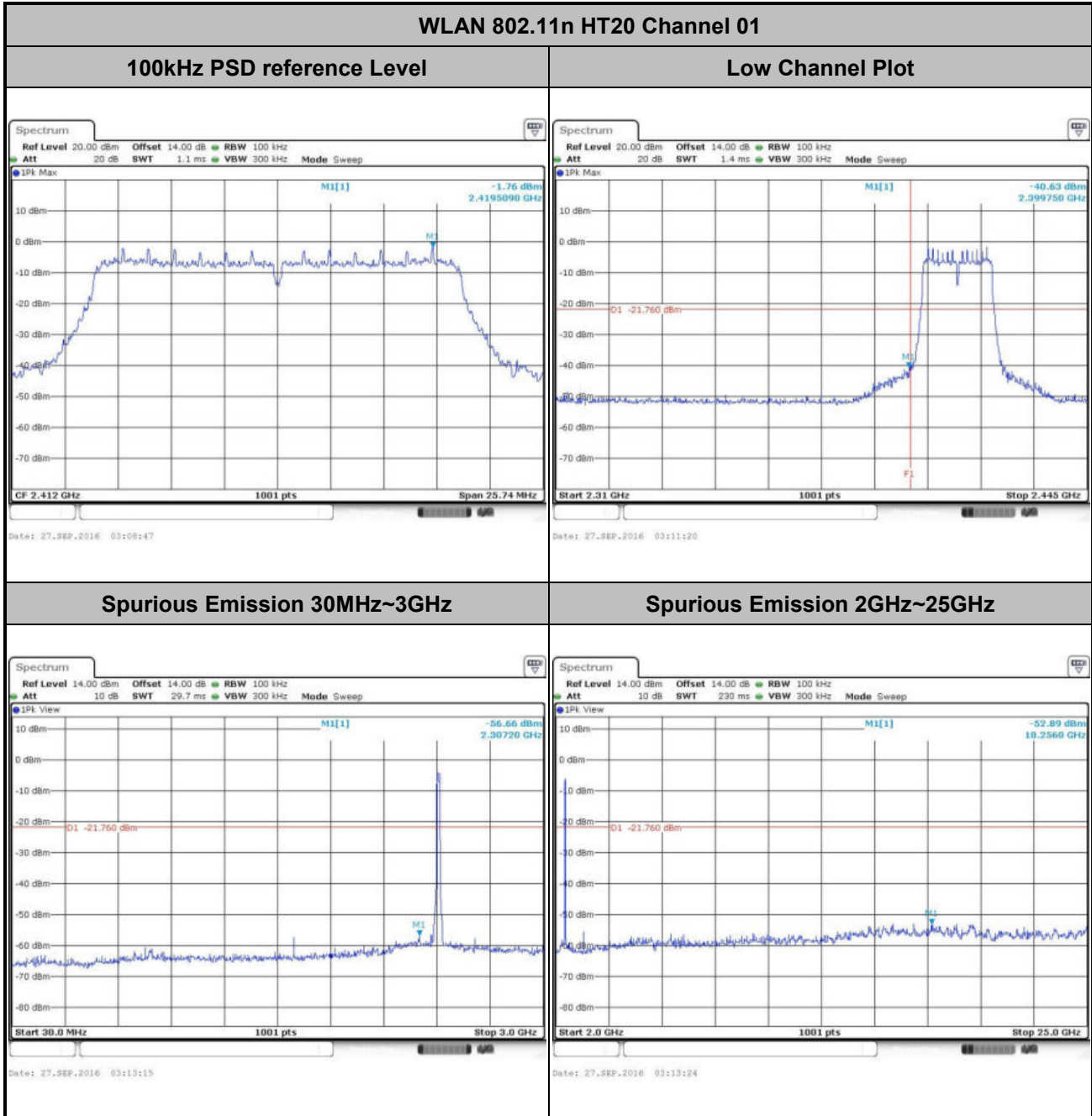
Spurious Emission 2GHz~25GHz



Date: 27_SEP.2016 02:25:02



Number of TX :	2	Ant. :	2
Test Mode :	802.11n HT20	Temperature :	24~26°C
Test Band :	2.4GHz Low	Relative Humidity :	50~53%
Test Channel :	01	Test Engineer :	Sam Zheng

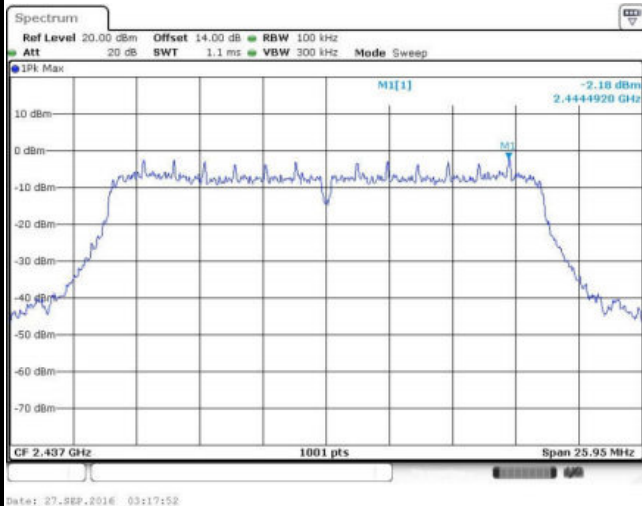




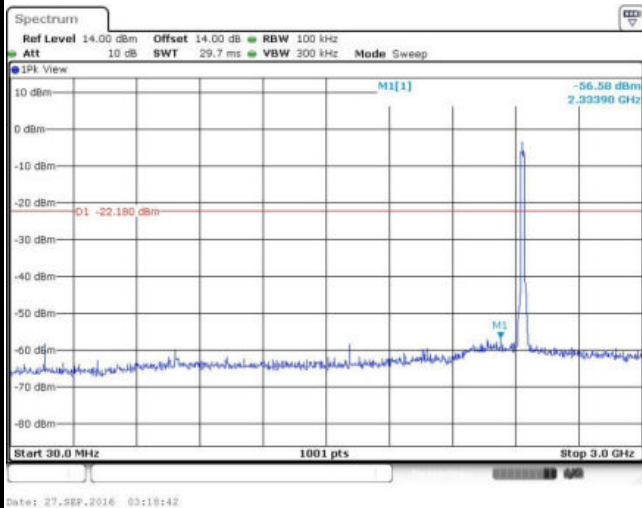
Number of TX :	2	Ant. :	2
Test Mode :	802.11n HT20	Temperature :	24~26°C
Test Band :	2.4GHz Mid	Relative Humidity :	50~53%
Test Channel :	06	Test Engineer :	Sam Zheng

WLAN 802.11n HT20 Channel 06

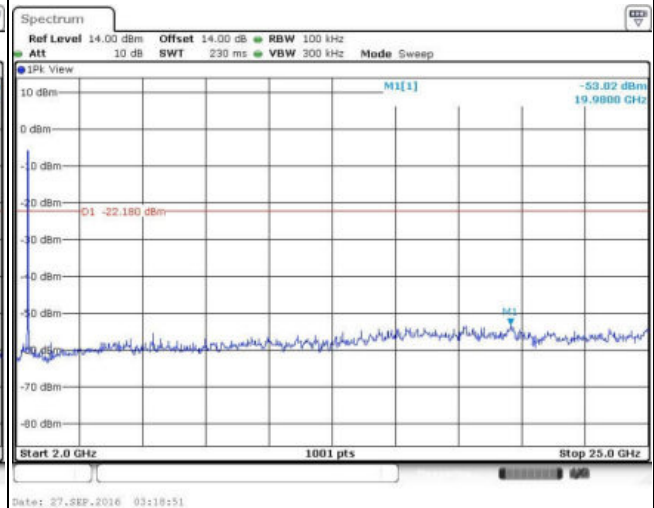
100kHz PSD reference Level



Spurious Emission 30MHz~3GHz



Spurious Emission 2GHz~25GHz

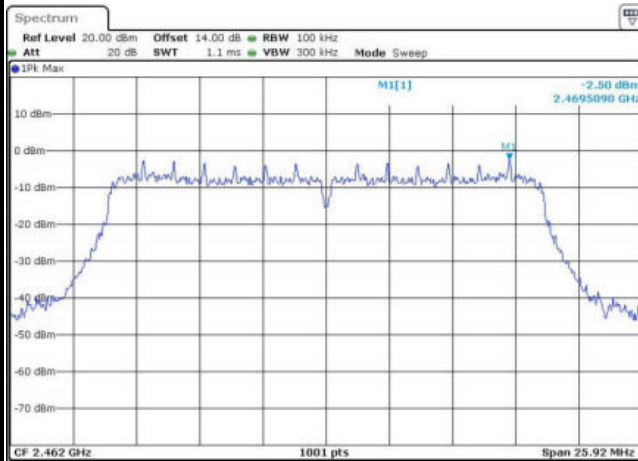




Number of TX :	2	Ant. :	2
Test Mode :	802.11n HT20	Temperature :	24~26°C
Test Band :	2.4GHz High	Relative Humidity :	50~53%
Test Channel :	11	Test Engineer :	Sam Zheng

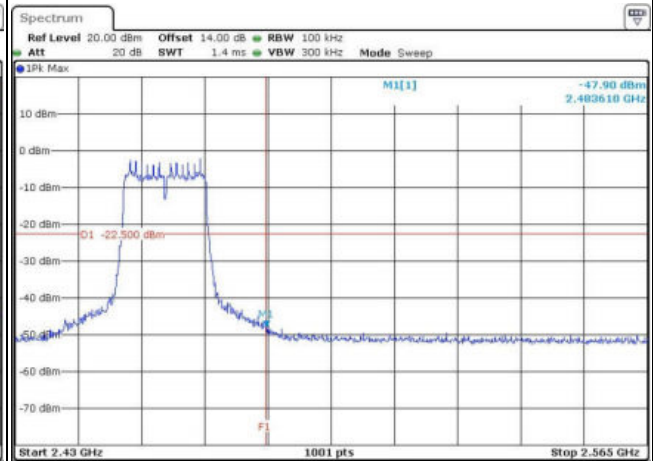
WLAN 802.11n HT20 Channel 11

100kHz PSD reference Level



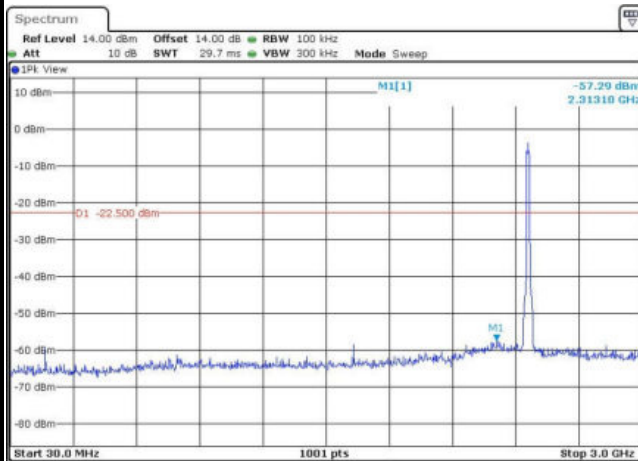
Date: 27-SEP-2016 03:24:09

High Channel Plot



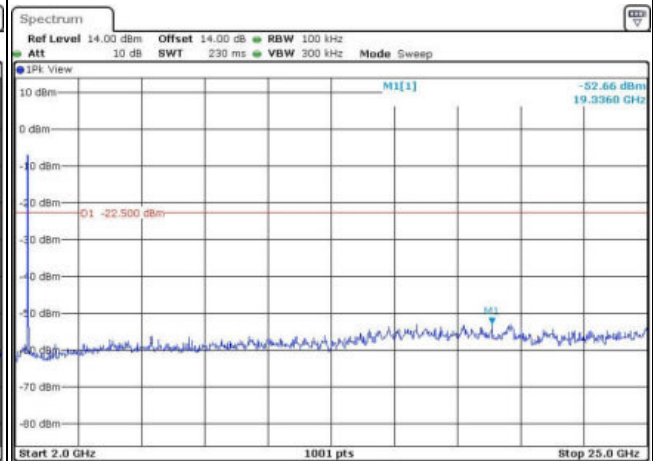
Date: 27-SEP-2016 03:25:05

Spurious Emission 30MHz~3GHz



Date: 27-SEP-2016 03:27:56

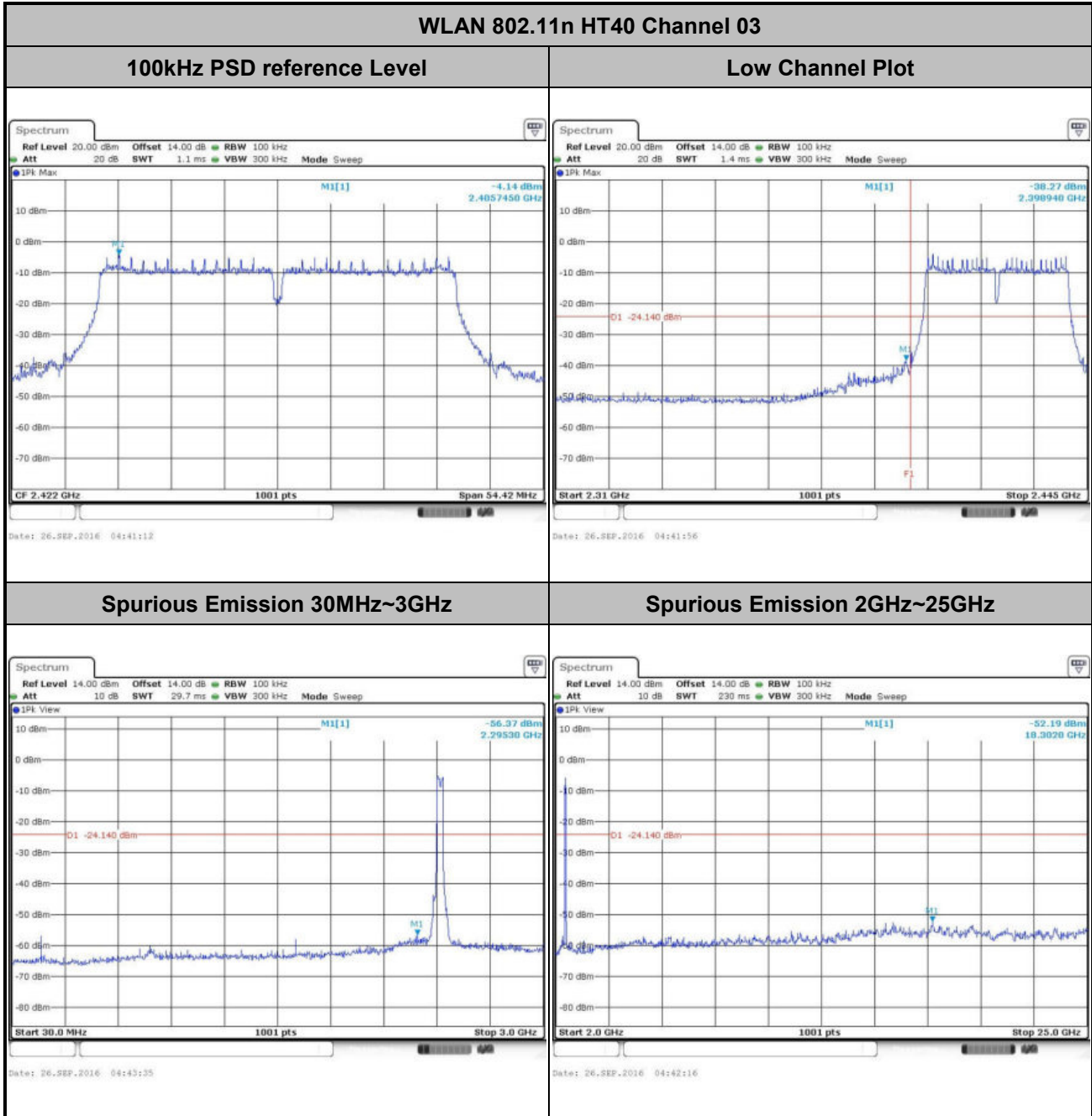
Spurious Emission 2GHz~25GHz



Date: 27-SEP-2016 03:28:05



Number of TX :	2	Ant. :	2
Test Mode :	802.11n HT40	Temperature :	24~26°C
Test Band :	2.4GHz Low	Relative Humidity :	50~53%
Test Channel :	03	Test Engineer :	Sam Zheng

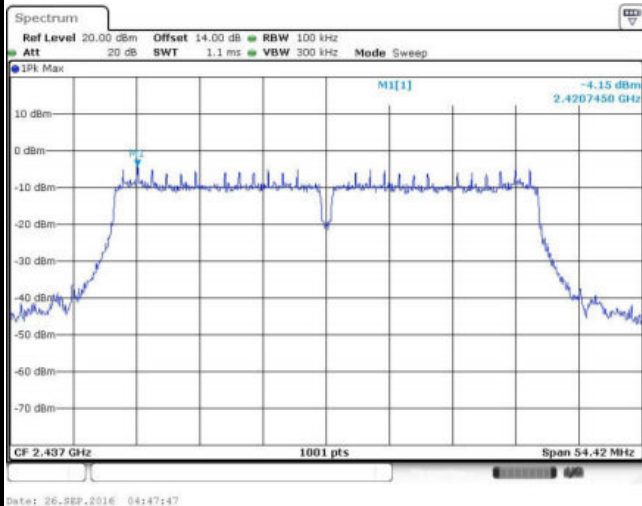




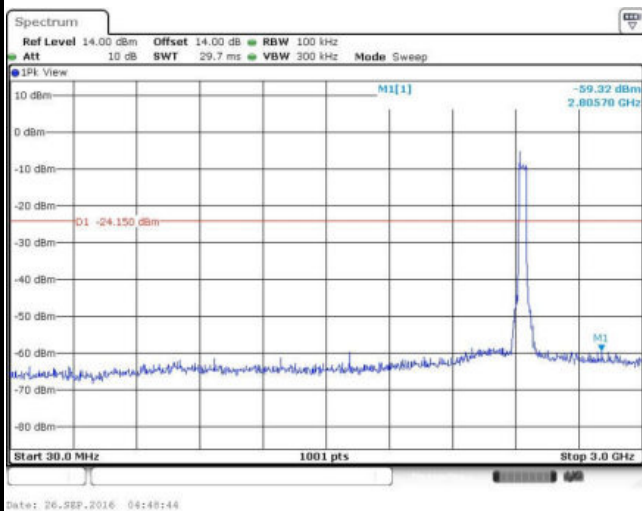
Number of TX :	2	Ant. :	2
Test Mode :	802.11n HT40	Temperature :	24~26°C
Test Band :	2.4GHz Mid	Relative Humidity :	50~53%
Test Channel :	06	Test Engineer :	Sam Zheng

WLAN 802.11n HT40 Channel 06

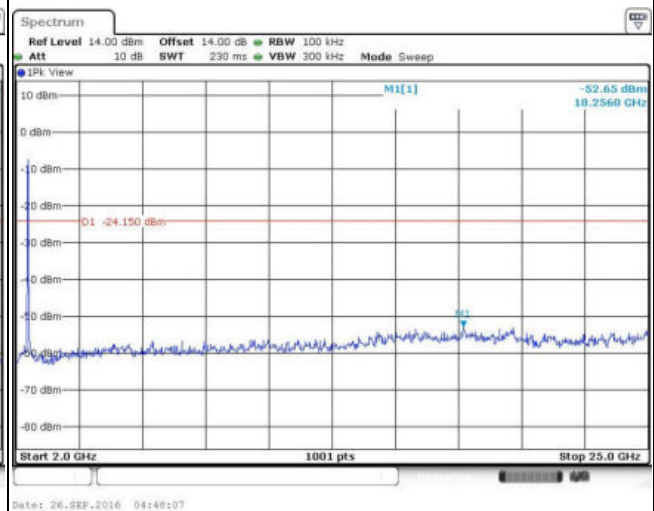
100kHz PSD reference Level



Spurious Emission 30MHz~3GHz

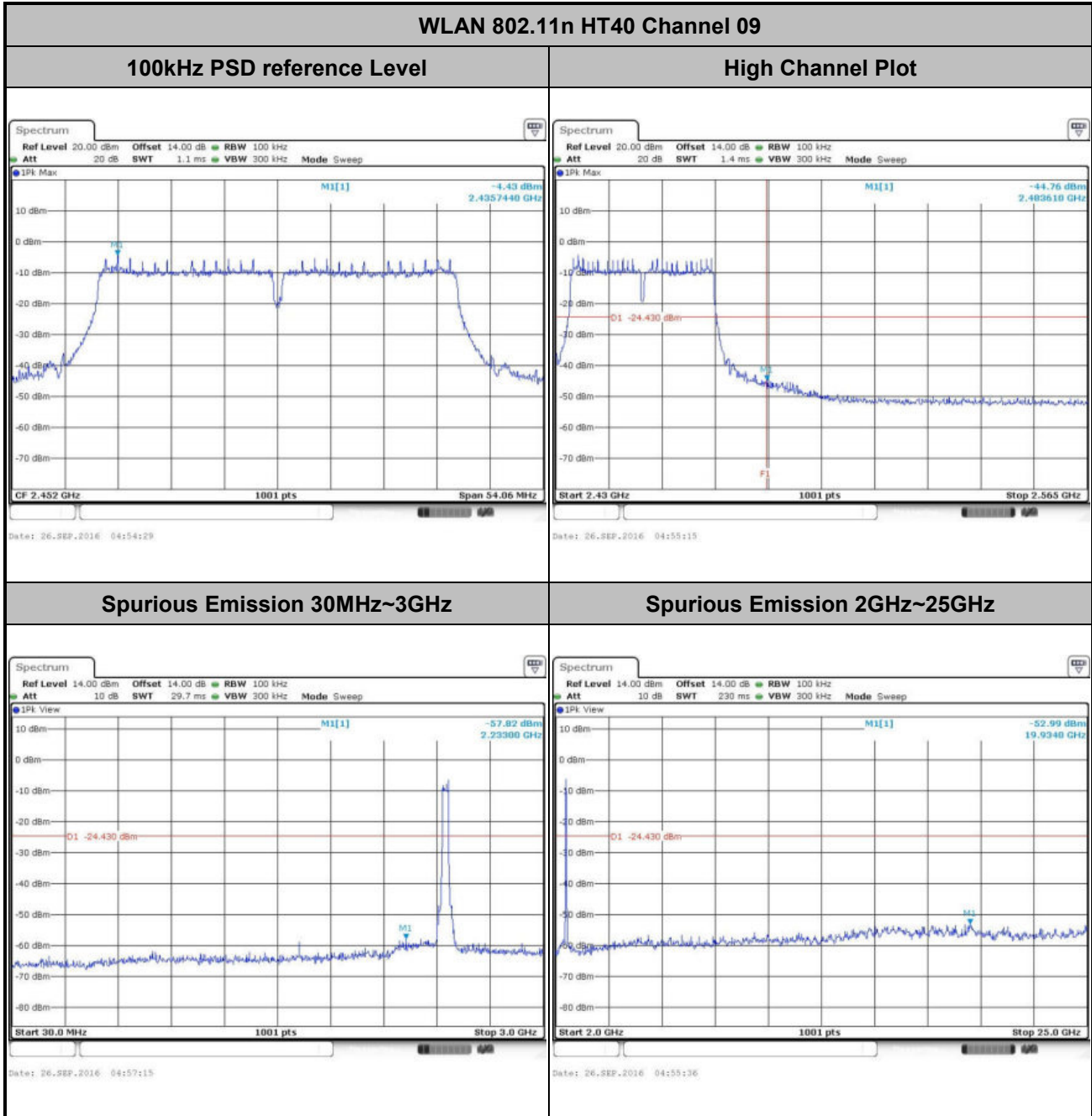


Spurious Emission 2GHz~25GHz





Number of TX :	2	Ant. :	2
Test Mode :	802.11n HT40	Temperature :	24~26°C
Test Band :	2.4GHz High	Relative Humidity :	50~53%
Test Channel :	09	Test Engineer :	Sam Zheng





3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 Limit of Radiated band edge and Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.5.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

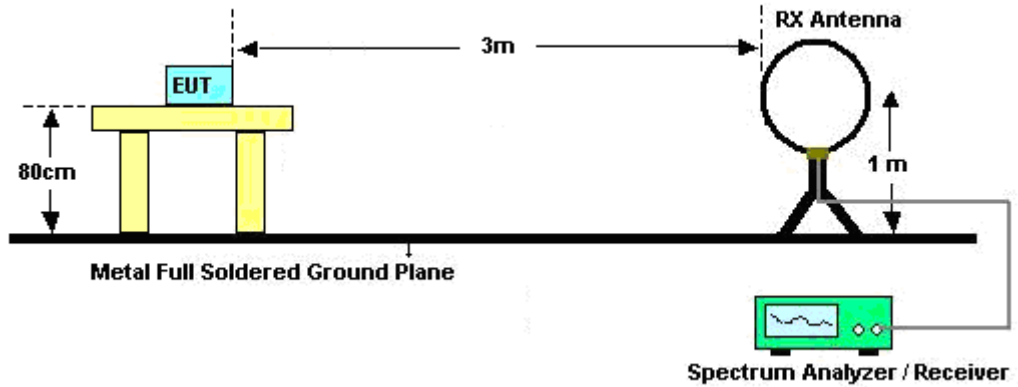


3.5.3 Test Procedures

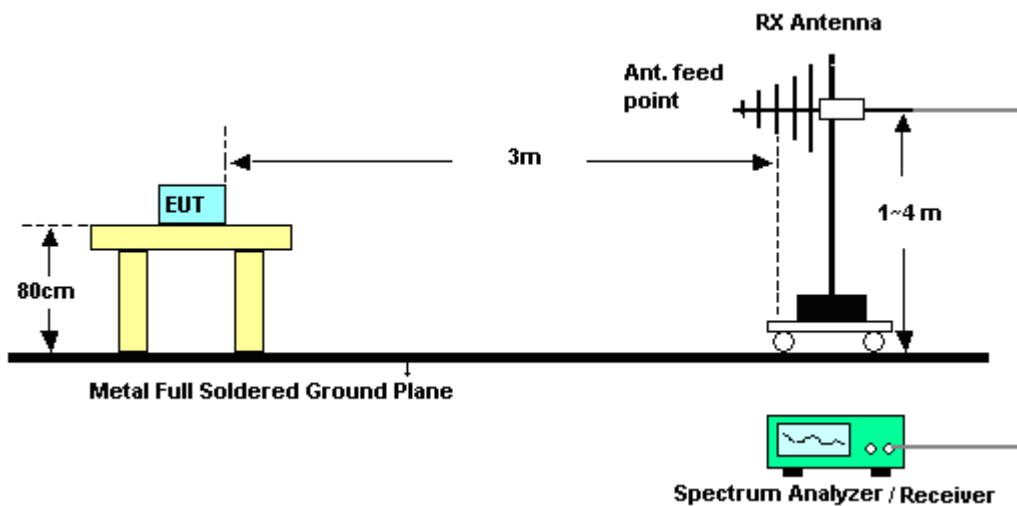
1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r05.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=100 kHz for $f < 1$ GHz; VBW \geq RBW; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement.
For average measurement:
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.5.4 Test Setup

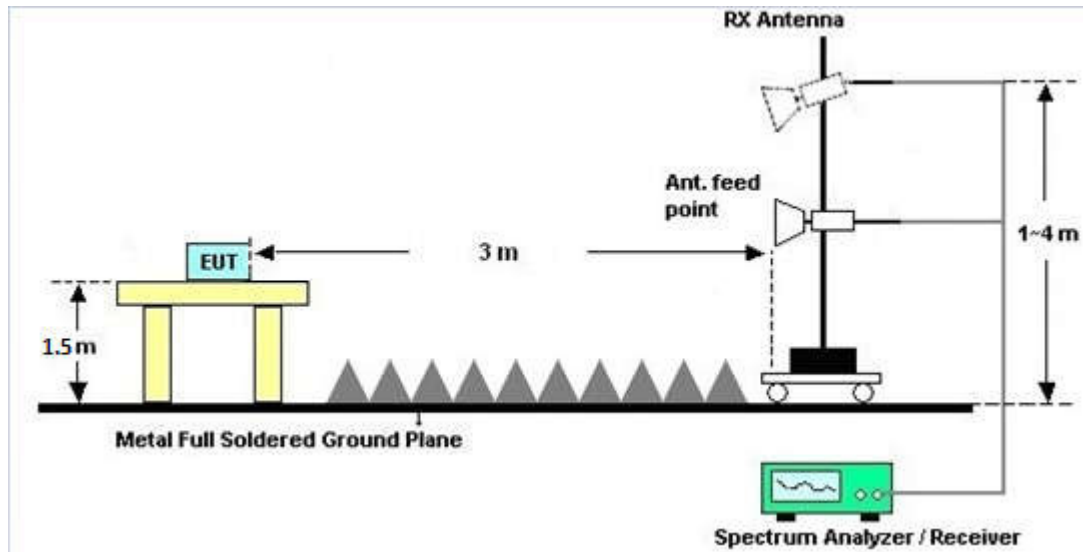
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.5.5 Test Results of Radiated Spurious Emissions (9kHz ~ 30MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B.

3.5.7 Duty Cycle

Please refer to Appendix C.

3.5.8 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix B.



3.6 Antenna Requirements

3.6.1 Standard Applicable

If directional gain of transmitting Antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the Antenna exceeds 6 dBi. 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 FCC rule.

3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used

3.6.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = $G_{ANT} + \text{Array Gain}$, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = $10 \log(N_{ANT}/N_{SS}=1)$ dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 Multiple Transmitter Output v02r01.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain "DG" is calculated as following table.

			DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
	Ant 1 (dBi)	Ant 2 (dBi)				
2.4 GHz	3.80	3.80	3.80	6.81	0.00	0.81

$Power\ Limit\ Reduction = DG(Power) - 6dBi, (min = 0)$

$PSD\ Limit\ Reduction = DG(PSD) - 6dBi, (min = 0)$



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	9kHz~40GHz	May 07, 2016	Sep. 23, 2016~ Sep. 27, 2016	May 06, 2017	Conducted (TH01-SZ)
Pulse Power Senor	Anritsu	MA2411B	1207253	30MHz~40GHz	Jan. 12, 2016	Sep. 23, 2016~ Sep. 27, 2016	Jan. 11, 2017	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1218010	50MHz Bandwidth	Jan. 12, 2016	Sep. 23, 2016~ Sep. 27, 2016	Jan. 11, 2017	Conducted (TH01-SZ)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY544500 83	20Hz~8.4GHz	May 07, 2016	Oct. 13, 2016	May 06, 2017	Radiation (03CH02-SZ)
Spectrum Analyzer	R&S	FSV40	101041	10kHz~40GHz; Max 30dBm	Oct. 11, 2016	Oct. 13, 2016	Oct. 10, 2017	Radiation (03CH02-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	May 07, 2016	Oct. 13, 2016	May 06, 2017	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz~2GHz	May 21, 2016	Oct. 13, 2016	May 20, 2017	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-128 5	1GHz~18GHz	Jan. 11, 2016	Oct. 13, 2016	Jan. 10, 2017	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18GHz~40GHz	Aug. 10, 2016	Oct. 13, 2016	Aug. 09, 2017	Radiation (03CH02-SZ)
Amplifier	HP	8447F	3113A046 22	9kHz~1300MHz / 30 dB	Jul. 16, 2016	Oct. 13, 2016	Jul. 15, 2017	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY532701 04	0.5GHz~26.5G Hz	Oct. 11, 2016	Oct. 13, 2016	Oct. 10, 2017	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	AMF-7D-0010 1800-30-10P- R	1707137	1GHz~18GHz	Oct. 11, 2016	Oct. 13, 2016	Oct. 10, 2017	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35- HG	1871923	18GHz~40GHz	Jul. 16, 2016	Oct. 13, 2016	Jul. 15, 2017	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	616010002 470	N/A	NCR	Oct. 13, 2016	NCR	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Oct. 13, 2016	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Oct. 13, 2016	NCR	Radiation (03CH02-SZ)

NCR: No Calibration Required



5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0dB
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Uncertainty of Radiated Emission Measurement (1GHz ~ 18GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.1dB
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Uncertainty of Radiated Emission Measurement (18GHz ~ 40GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.1dB
---	-------



Appendix A. Conducted Test Results

Test Engineer:	Sam Zheng	Temperature:	24~26	°C
Test Date:	2016/9/23~2016/9/27	Relative Humidity:	50~53	%

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band											
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail	
					Ant 1	Ant 2	Ant 1	Ant 2			
11b	1Mbps	1	1	2412	12.29	12.29	10.03	10.01	0.50	Pass	
11b	1Mbps	1	6	2437	12.29	12.29	9.51	10.03	0.50	Pass	
11b	1Mbps	1	11	2462	12.29	12.29	10.03	10.03	0.50	Pass	
11g	6Mbps	1	1	2412	17.83	17.83	16.30	16.30	0.50	Pass	
11g	6Mbps	1	6	2437	17.83	17.88	16.30	16.30	0.50	Pass	
11g	6Mbps	1	11	2462	17.88	17.88	16.30	16.30	0.50	Pass	
HT20	MCS0	1	1	2412	18.43	18.43	17.04	17.06	0.50	Pass	
HT20	MCS0	1	6	2437	18.43	18.43	17.08	17.28	0.50	Pass	
HT20	MCS0	1	11	2462	18.43	18.43	17.06	17.28	0.50	Pass	
HT40	MCS0	1	3	2422	36.86	36.66	36.28	36.28	0.50	Pass	
HT40	MCS0	1	6	2437	36.76	36.76	36.00	36.00	0.50	Pass	
HT40	MCS0	1	9	2452	36.76	36.76	36.28	36.04	0.50	Pass	
11b	1Mbps	2	1	2412	12.34	12.99	9.97	9.51	0.50	Pass	
11b	1Mbps	2	6	2437	12.34	13.04	10.07	10.07	0.50	Pass	
11b	1Mbps	2	11	2462	12.29	13.04	10.03	10.03	0.50	Pass	
11g	6Mbps	2	1	2412	17.93	17.93	16.30	16.30	0.50	Pass	
11g	6Mbps	2	6	2437	17.93	17.83	16.30	16.30	0.50	Pass	
11g	6Mbps	2	11	2462	17.93	17.88	16.30	16.30	0.50	Pass	
HT20	MCS0	2	1	2412	18.48	18.43	17.08	17.16	0.50	Pass	
HT20	MCS0	2	6	2437	18.43	18.43	17.06	17.30	0.50	Pass	
HT20	MCS0	2	11	2462	18.43	18.43	17.04	17.28	0.50	Pass	
HT40	MCS0	2	3	2422	36.76	36.76	35.96	36.28	0.50	Pass	
HT40	MCS0	2	6	2437	36.86	36.76	36.24	36.28	0.50	Pass	
HT40	MCS0	2	9	2452	36.86	36.86	36.04	36.04	0.50	Pass	

TEST RESULTS DATA
Peak Output Power

2.4GHz Band																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	1	1	2412	15.28	13.74		30.00	30.00	3.80	3.80	19.08	17.54	36.00	36.00	Pass
11b	1Mbps	1	6	2437	15.59	13.66		30.00	30.00	3.80	3.80	19.39	17.46	36.00	36.00	Pass
11b	1Mbps	1	11	2462	16.68	13.48		30.00	30.00	3.80	3.80	20.48	17.28	36.00	36.00	Pass
11g	6Mbps	1	1	2412	21.27	19.84		30.00	30.00	3.80	3.80	25.07	23.64	36.00	36.00	Pass
11g	6Mbps	1	6	2437	21.31	19.58		30.00	30.00	3.80	3.80	25.11	23.38	36.00	36.00	Pass
11g	6Mbps	1	11	2462	21.24	19.29		30.00	30.00	3.80	3.80	25.04	23.09	36.00	36.00	Pass
HT20	MCS0	1	1	2412	21.13	19.57		30.00	30.00	3.80	3.80	24.93	23.37	36.00	36.00	Pass
HT20	MCS0	1	6	2437	21.22	19.35		30.00	30.00	3.80	3.80	25.02	23.15	36.00	36.00	Pass
HT20	MCS0	1	11	2462	21.06	18.91		30.00	30.00	3.80	3.80	24.86	22.71	36.00	36.00	Pass
HT40	MCS0	1	3	2422	18.54	16.76		30.00	30.00	3.80	3.80	22.34	20.56	36.00	36.00	Pass
HT40	MCS0	1	6	2437	18.46	16.38		30.00	30.00	3.80	3.80	22.26	20.18	36.00	36.00	Pass
HT40	MCS0	1	9	2452	18.37	16.24		30.00	30.00	3.80	3.80	22.17	20.04	36.00	36.00	Pass
11b	1Mbps	2	1	2412	15.22	14.16	17.73	30.00		3.80		21.53		36.00		Pass
11b	1Mbps	2	6	2437	15.46	14.02	17.81	30.00		3.80		21.61		36.00		Pass
11b	1Mbps	2	11	2462	15.61	13.81	17.81	30.00		3.80		21.61		36.00		Pass
11g	6Mbps	2	1	2412	20.89	19.57	23.29	30.00		3.80		27.09		36.00		Pass
11g	6Mbps	2	6	2437	20.77	19.34	23.12	30.00		3.80		26.92		36.00		Pass
11g	6Mbps	2	11	2462	20.63	19.10	22.94	30.00		3.80		26.74		36.00		Pass
HT20	MCS0	2	1	2412	20.56	19.44	23.05	30.00		3.80		26.85		36.00		Pass
HT20	MCS0	2	6	2437	20.65	19.29	23.03	30.00		3.80		26.83		36.00		Pass
HT20	MCS0	2	11	2462	20.59	18.91	22.84	30.00		3.80		26.64		36.00		Pass
HT40	MCS0	2	3	2422	18.25	16.74	20.57	30.00		3.80		24.37		36.00		Pass
HT40	MCS0	2	6	2437	18.06	16.40	20.32	30.00		3.80		24.12		36.00		Pass
HT40	MCS0	2	9	2452	17.95	16.11	20.14	30.00		3.80		23.94		36.00		Pass

Note: Measured power (dBm) has offset with cable loss.

TEST RESULTS DATA
Average Output Power

2.4GHz Band									
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)		
					Ant 1	Ant 2	Ant 1	Ant 2	SUM
11b	1Mbps	1	1	2412	0.10	0.13	11.79	10.28	
11b	1Mbps	1	6	2437	0.10	0.13	12.02	10.21	
11b	1Mbps	1	11	2462	0.10	0.13	12.20	10.05	
11g	6Mbps	1	1	2412	0.56	0.56	12.11	10.62	
11g	6Mbps	1	6	2437	0.56	0.56	12.18	10.37	
11g	6Mbps	1	11	2462	0.56	0.56	12.14	10.03	
HT20	MCS0	1	1	2412	0.60	0.60	11.58	9.99	
HT20	MCS0	1	6	2437	0.60	0.60	11.61	9.76	
HT20	MCS0	1	11	2462	0.60	0.60	11.55	9.55	
HT40	MCS0	1	3	2422	1.13	1.10	8.89	7.14	
HT40	MCS0	1	6	2437	1.13	1.10	8.81	6.88	
HT40	MCS0	1	9	2452	1.13	1.10	8.69	6.58	
11b	1Mbps	2	1	2412	0.11	0.10	11.70	10.65	14.21
11b	1Mbps	2	6	2437	0.11	0.10	11.94	10.52	14.30
11b	1Mbps	2	11	2462	0.11	0.10	12.06	10.32	14.28
11g	6Mbps	2	1	2412	0.61	0.56	11.81	10.32	14.14
11g	6Mbps	2	6	2437	0.61	0.56	11.66	10.15	13.98
11g	6Mbps	2	11	2462	0.61	0.56	11.58	9.90	13.83
HT20	MCS0	2	1	2412	0.65	0.60	11.07	9.94	13.55
HT20	MCS0	2	6	2437	0.65	0.60	11.13	9.77	13.51
HT20	MCS0	2	11	2462	0.65	0.60	11.01	9.46	13.31
HT40	MCS0	2	3	2422	1.16	1.15	8.70	7.20	11.03
HT40	MCS0	2	6	2437	1.16	1.15	8.61	6.93	10.86
HT40	MCS0	2	9	2452	1.16	1.15	8.43	6.69	10.66

Note: Measured power (dBm) has offset with cable loss.

TEST RESULTS DATA
Peak Power Spectral Density

2.4GHz Band												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Ant 1	Ant 2	Worse + 3.01	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	1	1	2412	-14.96	-17.52	-	3.80	3.80	8.00	8.00	Pass
11b	1Mbps	1	6	2437	-16.62	-17.86	-	3.80	3.80	8.00	8.00	Pass
11b	1Mbps	1	11	2462	-16.05	-17.80	-	3.80	3.80	8.00	8.00	Pass
11g	6Mbps	1	1	2412	-16.07	-16.69	-	3.80	3.80	8.00	8.00	Pass
11g	6Mbps	1	6	2437	-14.90	-17.44	-	3.80	3.80	8.00	8.00	Pass
11g	6Mbps	1	11	2462	-14.29	-17.80	-	3.80	3.80	8.00	8.00	Pass
HT20	MCS0	1	1	2412	-15.87	-17.21	-	3.80	3.80	8.00	8.00	Pass
HT20	MCS0	1	6	2437	-15.88	-18.50	-	3.80	3.80	8.00	8.00	Pass
HT20	MCS0	1	11	2462	-15.37	-18.47	-	3.80	3.80	8.00	8.00	Pass
HT40	MCS0	1	3	2422	-18.55	-19.90	-	3.80	3.80	8.00	8.00	Pass
HT40	MCS0	1	6	2437	-18.80	-19.61	-	3.80	3.80	8.00	8.00	Pass
HT40	MCS0	1	9	2452	-19.05	-20.54	-	3.80	3.80	8.00	8.00	Pass
11b	1Mbps	2	1	2412	-15.70	-17.38	-12.69	6.81		7.19		Pass
11b	1Mbps	2	6	2437	-15.20	-17.38	-12.19	6.81		7.19		Pass
11b	1Mbps	2	11	2462	-15.46	-18.54	-12.45	6.81		7.19		Pass
11g	6Mbps	2	1	2412	-15.28	-17.11	-12.27	6.81		7.19		Pass
11g	6Mbps	2	6	2437	-16.35	-18.43	-13.34	6.81		7.19		Pass
11g	6Mbps	2	11	2462	-15.84	-18.28	-12.83	6.81		7.19		Pass
HT20	MCS0	2	1	2412	-16.80	-17.81	-13.79	6.81		7.19		Pass
HT20	MCS0	2	6	2437	-15.69	-18.37	-12.68	6.81		7.19		Pass
HT20	MCS0	2	11	2462	-15.80	-17.49	-12.79	6.81		7.19		Pass
HT40	MCS0	2	3	2422	-19.16	-20.86	-16.15	6.81		7.19		Pass
HT40	MCS0	2	6	2437	-17.67	-21.44	-14.66	6.81		7.19		Pass
HT40	MCS0	2	9	2452	-19.01	-20.73	-16.00	6.81		7.19		Pass

Measured power density (dBm) has offset with cable loss.



Appendix B. Radiated Spurious Emission

15C 2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2362.5	48.49	-25.51	74	42.69	32.56	6.48	33.24	151	261	P	H
		2364.18	35.89	-18.11	54	30.09	32.56	6.48	33.24	151	261	A	H
	*	2412	96.34	-	-	90.37	32.61	6.55	33.19	151	261	P	H
	*	2412	94.39	-	-	88.42	32.61	6.55	33.19	151	261	A	H
		2389.59	66.31	-7.69	74	60.41	32.6	6.51	33.21	160	352	P	V
		2390	44.64	-9.36	54	38.7	32.6	6.55	33.21	160	352	A	V
	*	2412	107.45	-	-	101.48	32.61	6.55	33.19	160	352	P	V
	*	2412	105.64	-	-	99.67	32.61	6.55	33.19	160	352	A	V
802.11b CH 06 2437MHz		2359.42	48.13	-25.87	74	42.33	32.56	6.48	33.24	172	271	P	H
		2359.98	36.32	-17.68	54	30.52	32.56	6.48	33.24	172	271	A	H
	*	2437	98.83	-	-	92.74	32.65	6.59	33.15	172	271	P	H
	*	2437	96.73	-	-	90.64	32.65	6.59	33.15	172	271	A	H
		2488.59	46.87	-27.13	74	40.61	32.7	6.66	33.1	172	271	P	H
		2484.39	36.55	-17.45	54	30.33	32.68	6.66	33.12	172	271	A	H
		2389.1	59.67	-14.33	74	53.77	32.6	6.51	33.21	151	319	P	V
		2389.52	40.58	-13.42	54	34.68	32.6	6.51	33.21	151	319	A	V
	*	2437	108.63	-	-	102.54	32.65	6.59	33.15	151	319	P	V
	*	2437	106.67	-	-	100.58	32.65	6.59	33.15	151	319	A	V
		2494.33	58.79	-15.21	74	52.49	32.7	6.7	33.1	151	319	P	V
	2494.05	41.7	-12.3	54	35.4	32.7	6.7	33.1	151	319	A	V	



802.11b CH 11 2462MHz	*	2462	97.15	-	-	90.99	32.67	6.63	33.14	152	316	P	H
	*	2462	95.6	-	-	89.44	32.67	6.63	33.14	152	316	A	H
		2486.48	52.7	-21.3	74	46.48	32.68	6.66	33.12	152	316	P	H
		2484.12	36.46	-17.54	54	30.24	32.68	6.66	33.12	152	316	A	H
	*	2462	107.85	-	-	101.69	32.67	6.63	33.14	151	301	P	V
	*	2462	106.03	-	-	99.87	32.67	6.63	33.14	151	301	A	V
		2486.48	64.6	-9.4	74	58.38	32.68	6.66	33.12	151	301	P	V
		2483.52	43.29	-10.71	54	37.07	32.68	6.66	33.12	151	301	A	V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. 												



15C 2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		4824	49.87	-24.13	74	62.57	34.4	9.5	56.6	150	360	P	H
CH 01		4824	49.66	-24.34	74	62.36	34.4	9.5	56.6	150	360	P	V
2412MHz													
802.11b		4874	47.56	-26.44	74	60.48	34.43	9.56	56.91	150	360	P	H
CH 06		7311	47.34	-26.66	74	57.46	36.22	11.66	58	174	100	P	H
2437MHz		4874	50.87	-23.13	74	63.79	34.43	9.56	56.91	150	360	P	V
		7311	48.06	-25.94	74	58.18	36.22	11.66	58	174	100	P	V
802.11b		4924	47.46	-26.54	74	59.47	34.46	9.61	56.08	150	347	P	H
CH 11		7386	47.96	-26.04	74	58.03	36.26	11.68	58.01	150	274	P	H
2462MHz		4924	49.53	-24.47	74	61.54	34.46	9.61	56.08	150	347	P	V
		7386	47.98	-26.02	74	58.05	36.26	11.68	58.01	150	274	P	V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. 												



15C 2.4GHz 2400~2483.5MHz
WIFI 802.11g (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11g CH 01 2412MHz		2389.38	49.45	-24.55	74	43.55	32.6	6.51	33.21	226	270	P	H
		2389.905	38.68	-15.32	54	32.74	32.6	6.55	33.21	226	270	A	H
	*	2412	99.08	-	-	93.11	32.61	6.55	33.19	226	270	P	H
	*	2412	93.28	-	-	87.31	32.61	6.55	33.19	226	270	A	H
		2389.8	62.48	-11.52	74	56.54	32.6	6.55	33.21	150	297	P	V
		2389.8	49.86	-4.14	54	43.92	32.6	6.55	33.21	150	297	A	V
	*	2412	108.42	-	-	102.45	32.61	6.55	33.19	150	297	P	V
	*	2412	102.58	-	-	96.61	32.61	6.55	33.19	150	297	A	V
802.11g CH 06 2437MHz		2351.3	46.67	-27.33	74	40.91	32.54	6.48	33.26	150	270	P	H
		2384.76	37.16	-16.84	54	31.3	32.58	6.51	33.23	150	270	A	H
	*	2437	99.54	-	-	93.45	32.65	6.59	33.15	150	270	P	H
	*	2437	93.06	-	-	86.97	32.65	6.59	33.15	150	270	A	H
		2486.49	45.74	-28.26	74	39.52	32.68	6.66	33.12	150	270	P	H
		2485.51	36.56	-17.44	54	30.34	32.68	6.66	33.12	150	270	A	H
		2364.6	51.81	-22.19	74	46.01	32.56	6.48	33.24	176	318	P	V
		2384.76	42.8	-11.2	54	36.94	32.58	6.51	33.23	176	318	A	V
	*	2437	109.64	-	-	103.55	32.65	6.59	33.15	176	318	P	V
	*	2437	103.29	-	-	97.2	32.65	6.59	33.15	176	318	A	V
		2492.16	51.04	-22.96	74	44.74	32.7	6.7	33.1	176	318	P	V
		2489.36	41.97	-12.03	54	35.71	32.7	6.66	33.1	176	318	A	V



802.11g CH 11 2462MHz	*	2462	99.05	-	-	92.89	32.67	6.63	33.14	151	316	P	H
	*	2462	91.81	-	-	85.65	32.67	6.63	33.14	151	316	A	H
		2484.4	53.83	-20.17	74	47.61	32.68	6.66	33.12	151	316	P	H
		2483.56	40.77	-13.23	54	34.55	32.68	6.66	33.12	151	316	A	H
	*	2462	108.62	-	-	102.46	32.67	6.63	33.14	151	302	P	V
	*	2462	101.88	-	-	95.72	32.67	6.63	33.14	151	302	A	V
		2484.8	62.23	-11.77	74	56.01	32.68	6.66	33.12	151	302	P	V
		2483.52	49.27	-4.73	54	43.05	32.68	6.66	33.12	151	302	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**15C 2.4GHz 2400~2483.5MHz
WIFI 802.11g (Harmonic @ 3m)**

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11g CH 01 2412MHz		4824	47.04	-26.96	74	59.74	34.4	9.5	56.6	150	360	P	H
		4824	55.45	-18.55	74	68.15	34.4	9.5	56.6	150	360	P	V
		4824	49.63	-4.37	54	62.33	34.4	9.5	56.6	150	360	A	V
802.11g CH 06 2437MHz		4874	46.43	-27.57	74	59.35	34.43	9.56	56.91	150	360	P	H
		7311	48.86	-25.14	74	58.98	36.22	11.66	58	174	100	P	H
		4874	56.6	-17.4	74	69.52	34.43	9.56	56.91	150	360	P	V
		4874	49.29	-4.71	54	62.21	34.43	9.56	56.91	150	360	A	V
		7311	50.56	-23.44	74	60.68	36.22	11.66	58	150	360	P	V
802.11g CH 11 2462MHz		4924	46.66	-27.34	74	58.67	34.46	9.61	56.08	150	347	P	H
		7386	47.25	-26.75	74	57.32	36.26	11.68	58.01	150	274	P	H
		4924	57.7	-16.3	74	69.71	34.46	9.61	56.08	150	360	P	V
		4924	49.84	-4.16	54	61.85	34.46	9.61	56.08	150	360	A	V
		7386	50.71	-23.29	74	60.78	36.26	11.68	58.01	150	350	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**15C 2.4GHz 2400~2483.5MHz
WIFI 802.11n HT20 (Band Edge @ 3m)**

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 01 2412MHz		2388.645	51.29	-22.71	74	45.39	32.6	6.51	33.21	227	271	P	H
		2390	39.98	-14.02	54	34.04	32.6	6.55	33.21	227	271	A	H
	*	2412	99.26	-	-	93.29	32.61	6.55	33.19	227	271	P	H
	*	2412	92.77	-	-	86.8	32.61	6.55	33.19	227	271	A	H
		2388.33	61.76	-12.24	74	55.86	32.6	6.51	33.21	150	307	P	V
		2389.8	49.31	-4.69	54	43.37	32.6	6.55	33.21	150	307	A	V
	*	2412	107.55	-	-	101.58	32.61	6.55	33.19	150	307	P	V
	*	2412	101.08	-	-	95.11	32.61	6.55	33.19	150	307	A	V
802.11n HT20 CH 06 2437MHz		2346.54	46.68	-27.32	74	40.92	32.54	6.48	33.26	215	272	P	H
		2384.9	37.16	-16.84	54	31.3	32.58	6.51	33.23	215	272	A	H
	*	2437	99.05	-	-	92.96	32.65	6.59	33.15	215	272	P	H
	*	2437	91.58	-	-	85.49	32.65	6.59	33.15	215	272	A	H
		2491.18	46.67	-27.33	74	40.37	32.7	6.7	33.1	215	272	P	H
		2489.01	36.78	-17.22	54	30.52	32.7	6.66	33.1	215	272	A	H
		2383.08	51.57	-22.43	74	45.71	32.58	6.51	33.23	170	318	P	V
		2385.46	42.95	-11.05	54	37.09	32.58	6.51	33.23	170	318	A	V
	*	2437	108.86	-	-	102.77	32.65	6.59	33.15	170	318	P	V
	*	2437	102.82	-	-	96.73	32.65	6.59	33.15	170	318	A	V
		2492.09	51.21	-22.79	74	44.91	32.7	6.7	33.1	170	318	P	V
	2488.87	41.87	-12.13	54	35.61	32.7	6.66	33.1	170	318	A	V	



802.11n HT20 CH 11 2462MHz	*	2462	98.9	-	-	92.74	32.67	6.63	33.14	199	298	P	H
	*	2462	92.68	-	-	86.52	32.67	6.63	33.14	199	298	A	H
		2484.72	60.16	-13.84	74	53.94	32.68	6.66	33.12	199	298	P	H
		2483.52	43.01	-10.99	54	36.79	32.68	6.66	33.12	199	298	A	H
	*	2462	107.09	-	-	100.93	32.67	6.63	33.14	156	308	P	V
	*	2462	101.13	-	-	94.97	32.67	6.63	33.14	156	308	A	V
		2484.56	61	-13	74	54.78	32.68	6.66	33.12	156	308	P	V
		2483.56	49.44	-4.56	54	43.22	32.68	6.66	33.12	156	308	A	V

Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												
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15C 2.4GHz 2400~2483.5MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 01 2412MHz		4824	45.64	-28.36	74	58.34	34.4	9.5	56.6	150	360	P	H
		4824	46.36	-27.64	74	59.06	34.4	9.5	56.6	150	360	P	V
802.11n HT20 CH 06 2437MHz		4874	45.98	-28.02	74	58.9	34.43	9.56	56.91	150	360	P	H
		7311	48.57	-25.43	74	58.69	36.22	11.66	58	174	100	P	H
		4874	49.21	-24.79	74	62.13	34.43	9.56	56.91	150	360	P	V
		7311	47.65	-26.35	74	57.77	36.22	11.66	58	174	100	P	V
802.11n HT20 CH 11 2462MHz		4924	46.45	-27.55	74	58.46	34.46	9.61	56.08	150	347	P	H
		7386	47.85	-26.15	74	57.92	36.26	11.68	58.01	150	274	P	H
		4924	49.1	-24.9	74	61.11	34.46	9.61	56.08	150	347	P	V
		7386	47.51	-26.49	74	57.58	36.26	11.68	58.01	150	274	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**15C 2.4GHz 2400~2483.5MHz
WIFI 802.11n HT40 (Band Edge @ 3m)**

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 03 2422MHz		2387.42	48.32	-25.68	74	42.42	32.6	6.51	33.21	250	314	P	H
		2385.6	38.45	-15.55	54	32.55	32.6	6.51	33.21	250	314	A	H
	*	2422	90.56	-	-	84.51	32.63	6.59	33.17	250	314	P	H
	*	2422	84.62	-	-	78.57	32.63	6.59	33.17	250	314	A	H
		2489.43	46.71	-27.29	74	40.45	32.7	6.66	33.1	250	314	P	H
		2484.6	37.73	-16.27	54	31.51	32.68	6.66	33.12	250	314	A	H
		2387	58.56	-15.44	74	52.66	32.6	6.51	33.21	150	325	P	V
		2389.52	49.06	-4.94	54	43.16	32.6	6.51	33.21	150	325	A	V
	*	2422	102.11	-	-	96.06	32.63	6.59	33.17	150	325	P	V
	*	2422	96.42	-	-	90.37	32.63	6.59	33.17	150	325	A	V
		2497.69	50.28	-23.72	74	43.98	32.7	6.7	33.1	150	325	P	V
		2484.39	41.24	-12.76	54	35.02	32.68	6.66	33.12	150	325	A	V
802.11n HT40 CH 06 2437MHz		2331.98	46.56	-27.44	74	40.87	32.53	6.44	33.28	247	312	P	H
		2358.86	37.36	-16.64	54	31.56	32.56	6.48	33.24	247	312	A	H
	*	2437	90.01	-	-	83.92	32.65	6.59	33.15	247	312	P	H
	*	2437	84.38	-	-	78.29	32.65	6.59	33.15	247	312	A	H
		2487.05	46.43	-27.57	74	40.21	32.68	6.66	33.12	247	312	P	H
		2484.81	37.87	-16.13	54	31.65	32.68	6.66	33.12	247	312	A	H
		2389.52	52.36	-21.64	74	46.46	32.6	6.51	33.21	216	307	P	V
		2389.38	42.91	-11.09	54	37.01	32.6	6.51	33.21	216	307	A	V
	*	2437	102.14	-	-	96.05	32.65	6.59	33.15	216	307	P	V
	*	2437	96.41	-	-	90.32	32.65	6.59	33.15	216	307	A	V
		2483.55	53.91	-20.09	74	47.69	32.68	6.66	33.12	216	307	P	V
		2484.25	43.74	-10.26	54	37.52	32.68	6.66	33.12	216	307	A	V



802.11n HT40 CH 09 2452MHz		2363.62	47.16	-26.84	74	41.36	32.56	6.48	33.24	245	313	P	H
		2366.56	37.66	-16.34	54	31.83	32.56	6.51	33.24	245	313	A	H
	*	2452	91.39	-	-	85.26	32.65	6.63	33.15	245	313	P	H
	*	2452	85.15	-	-	79.02	32.65	6.63	33.15	245	313	A	H
		2484.04	50.7	-23.3	74	44.48	32.68	6.66	33.12	245	313	P	H
		2483.62	39.21	-14.79	54	32.99	32.68	6.66	33.12	245	313	A	H
		2386.72	50.17	-23.83	74	44.27	32.6	6.51	33.21	158	327	P	V
		2385.74	41.07	-12.93	54	35.17	32.6	6.51	33.21	158	327	A	V
	*	2452	101.58	-	-	95.45	32.65	6.63	33.15	158	327	P	V
	*	2452	95.23	-	-	89.1	32.65	6.63	33.15	158	327	A	V
		2484.39	63.1	-10.9	74	56.88	32.68	6.66	33.12	158	327	P	V
		2484.81	50.3	-3.7	54	44.08	32.68	6.66	33.12	158	327	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**15C 2.4GHz 2400~2483.5MHz
WIFI 802.11n HT40 (Harmonic @ 3m)**

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n		4844	46.01	-27.99	74	58.65	34.41	9.53	56.58	150	360	P	H
HT40		7266	48.3	-25.7	74	58.71	36.21	11.65	58.27	200	360	P	H
CH 03		4844	50.6	-23.4	74	63.24	34.41	9.53	56.58	150	360	P	V
2422MHz		7266	48.57	-25.43	74	58.98	36.21	11.65	58.27	200	360	P	V
802.11n		4874	45.53	-28.47	74	58.45	34.43	9.56	56.91	150	163	P	H
HT40		7311	48.41	-25.59	74	58.53	36.22	11.66	58	150	360	P	H
CH 06		4874	49.68	-24.32	74	62.6	34.43	9.56	56.91	150	163	P	V
2437MHz		7311	48.09	-25.91	74	58.21	36.22	11.66	58	150	360	P	V
802.11n		4904	45.57	-28.43	74	57.88	34.45	9.59	56.35	150	360	P	H
HT40		7356	49.38	-24.62	74	59.44	36.24	11.66	57.96	150	320	P	H
CH 09		4904	50.93	-23.07	74	63.24	34.45	9.59	56.35	150	360	P	V
2452MHz		7356	48.35	-25.65	74	58.41	36.24	11.66	57.96	150	320	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15C Emission below 1GHz

2.4GHz WIFI 802.11n HT40 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11n HT40 LF		30	26.63	-13.37	40	30.51	26.6	1.22	31.7	-	-	P	H
		527.61	30.56	-15.44	46	35.4	23.42	3.14	31.4	-	-	P	H
		579.99	30.69	-15.31	46	34.56	24.34	3.25	31.46	-	-	P	H
		676.99	31.69	-14.31	46	33.75	25.95	3.49	31.5	-	-	P	H
		725.49	32.28	-13.72	46	33.43	26.75	3.6	31.5	-	-	P	H
		773.02	35.12	-10.88	46	35.71	27.18	3.73	31.5	100	0	P	H
		31.94	26.7	-13.3	40	31.29	25.84	1.22	31.65	-	-	P	V
		214.3	29.74	-13.76	43.5	43.08	15.65	2.18	31.17	-	-	P	V
		593.57	32.48	-13.52	46	36.23	24.45	3.29	31.49	-	-	P	V
		676.99	33.57	-12.43	46	35.63	25.95	3.49	31.5	100	0	P	V
		773.02	32.39	-13.61	46	32.98	27.18	3.73	31.5	-	-	P	V
	984.48	32.35	-21.65	54	30.45	29.25	4.15	31.5	-	-	P	V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Note symbol

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency per 15.209(c).
!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

- Level(dBμV/m) =
Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
- Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

- Level(dBμV/m)
= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)
= 55.45 (dBμV/m)
- Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 55.45(dBμV/m) – 74(dBμV/m)
= -18.55(dB)

For Average Limit @ 2390MHz:

- Level(dBμV/m)
= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
= 43.54 (dBμV/m)
- Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 43.54(dBμV/m) – 54(dBμV/m)
= -10.46(dB)

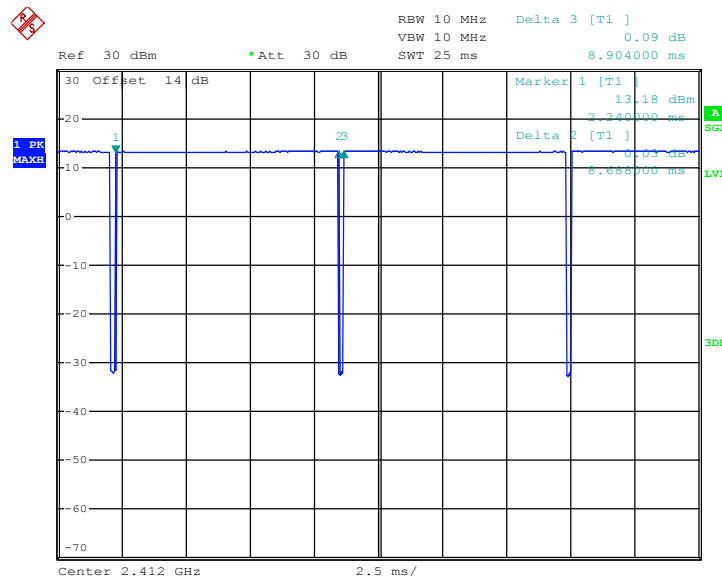
Both peak and average measured complies with the limit line, so test result is “PASS”.



Appendix C. Duty Cycle Plots

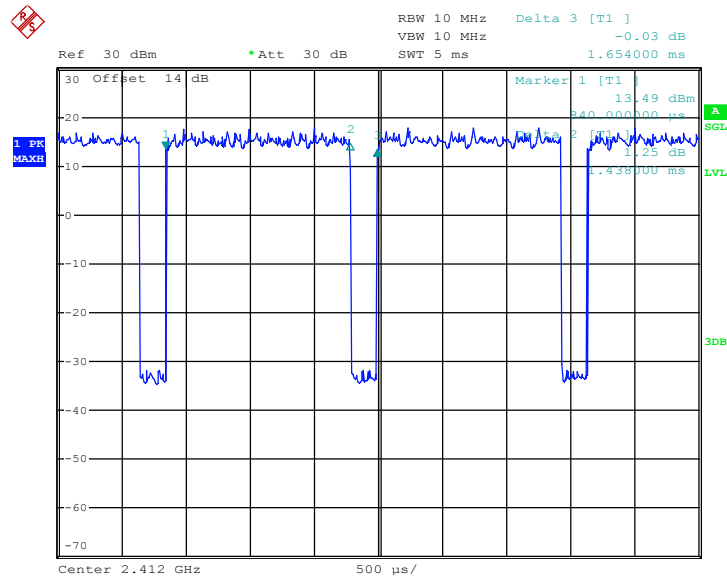
Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
1+2	802.11b	97.57	8.69	0.12	300Hz
1+2	802.11g	86.94	1.44	0.70	1kHz
1+2	802.11n HT20	86.19	1.35	0.74	1kHz
1+2	802.11n HT40	76.54	0.67	1.49	3kHz

802.11b Antenna 1+2

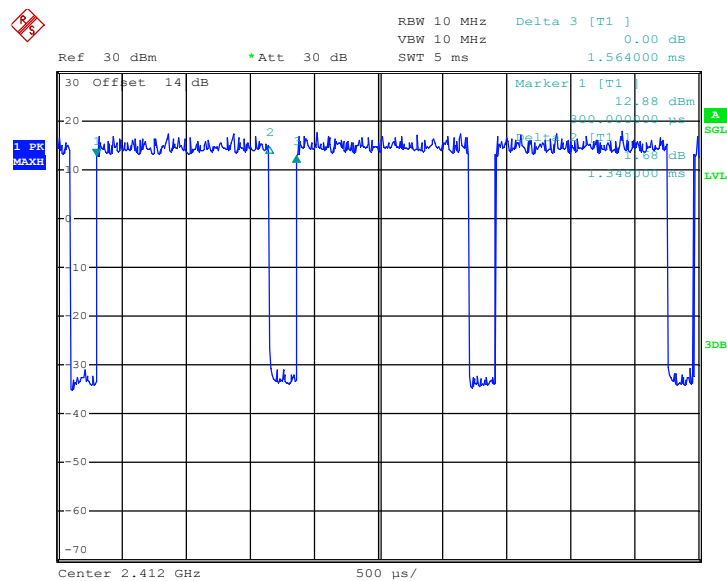




802.11g Antenna 1+2



802.11n HT20 Antenna 1+2





802.11n HT40 Antenna 1+2

