

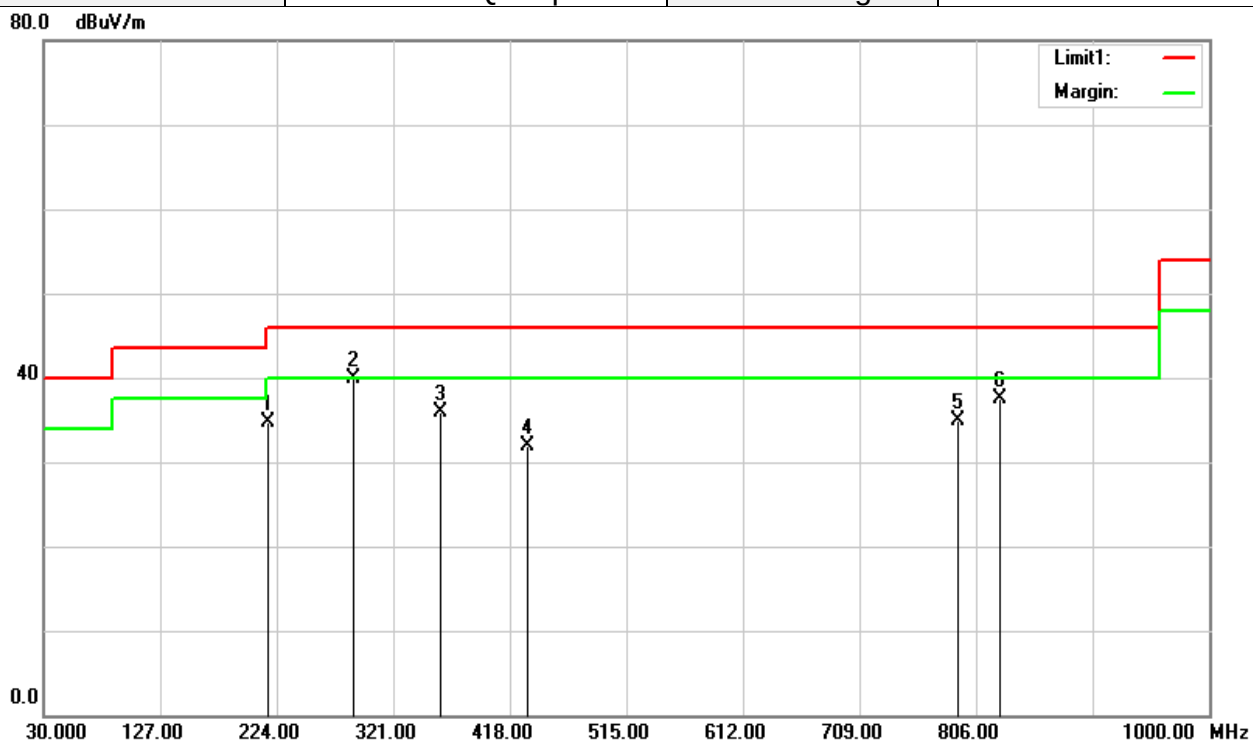
Below 1G Test Data

Test Mode	Mode 1	Temp/Hum	27(°C)/ 53%RH
Test Item	30MHz-1GHz	Test Date	Jan 6, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Qusi-peak	Test Voltage	120Vac / 60Hz



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
120.2100	46.99	-15.50	31.49	43.50	-12.01	peak
216.2400	51.14	-16.69	34.45	46.00	-11.55	peak
432.5500	45.73	-10.72	35.01	46.00	-10.99	peak
600.3600	42.16	-7.75	34.41	46.00	-11.59	peak
719.6700	38.93	-5.62	33.31	46.00	-12.69	peak
934.0400	33.99	-2.65	31.34	46.00	-14.66	peak

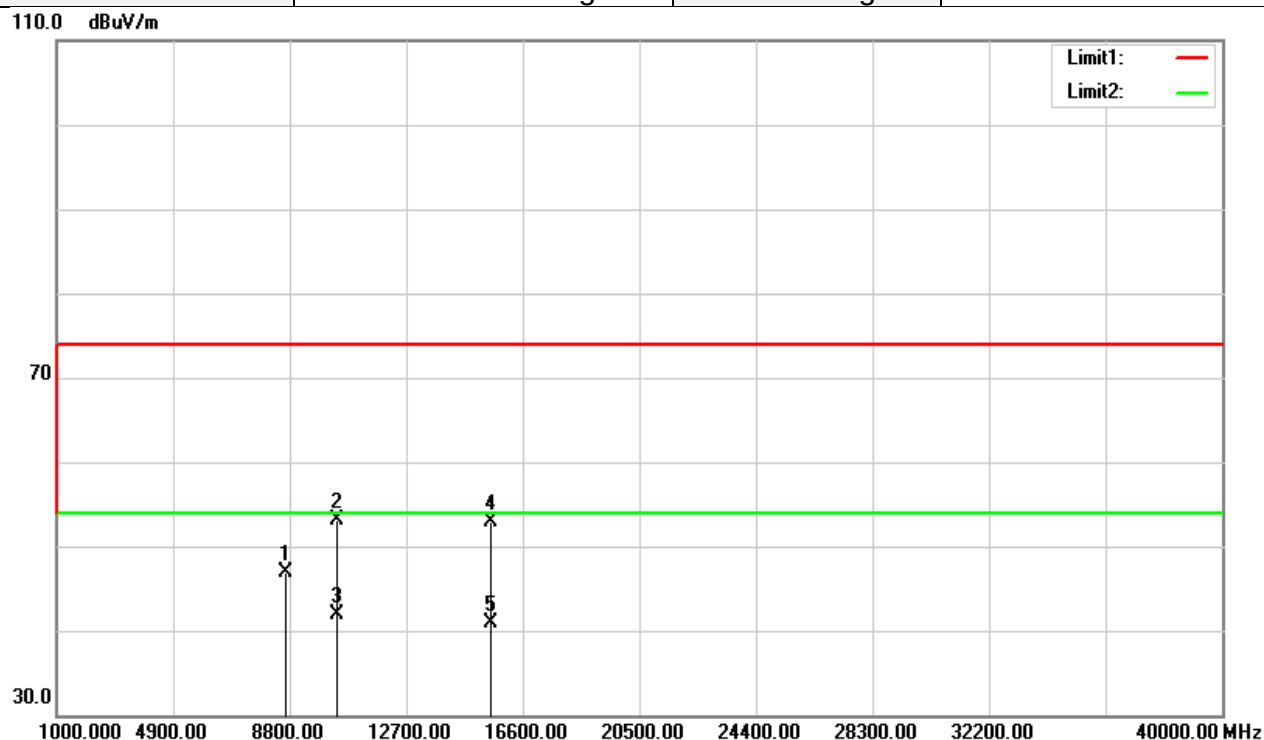
Test Mode	Mode 1	Temp/Hum	27(°C)/ 53%RH
Test Item	30MHz-1GHz	Test Date	Jan 6, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Qusi-peak	Test Voltage	120Vac / 60Hz



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
216.2400	51.40	-16.69	34.71	46.00	-11.29	QP
288.0200	54.39	-14.46	39.93	46.00	-6.07	peak
359.8000	48.53	-12.66	35.87	46.00	-10.13	peak
432.5500	42.65	-10.72	31.93	46.00	-14.07	peak
791.4500	39.51	-4.57	34.94	46.00	-11.06	peak
826.3700	41.70	-4.12	37.58	46.00	-8.42	peak

Above 1G Test Data for UNII-1

Test Mode	IEEE 802.11a Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

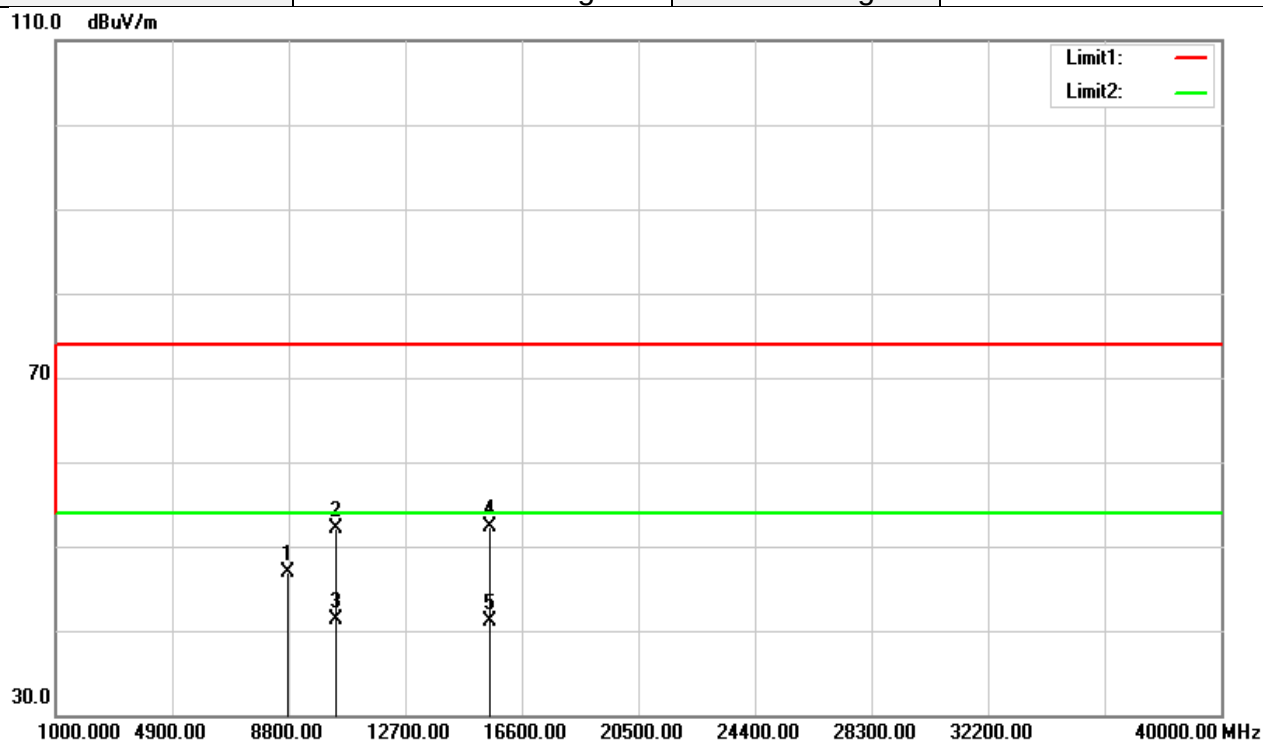


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8660.000	33.28	13.71	46.99	74.00	-27.01	peak
10360.000	36.61	16.52	53.13	74.00	-20.87	peak
10360.000	25.30	16.52	41.82	54.00	-12.18	AVG
15540.000	33.84	19.04	52.88	74.00	-21.12	peak
15540.000	21.89	19.04	40.93	54.00	-13.07	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

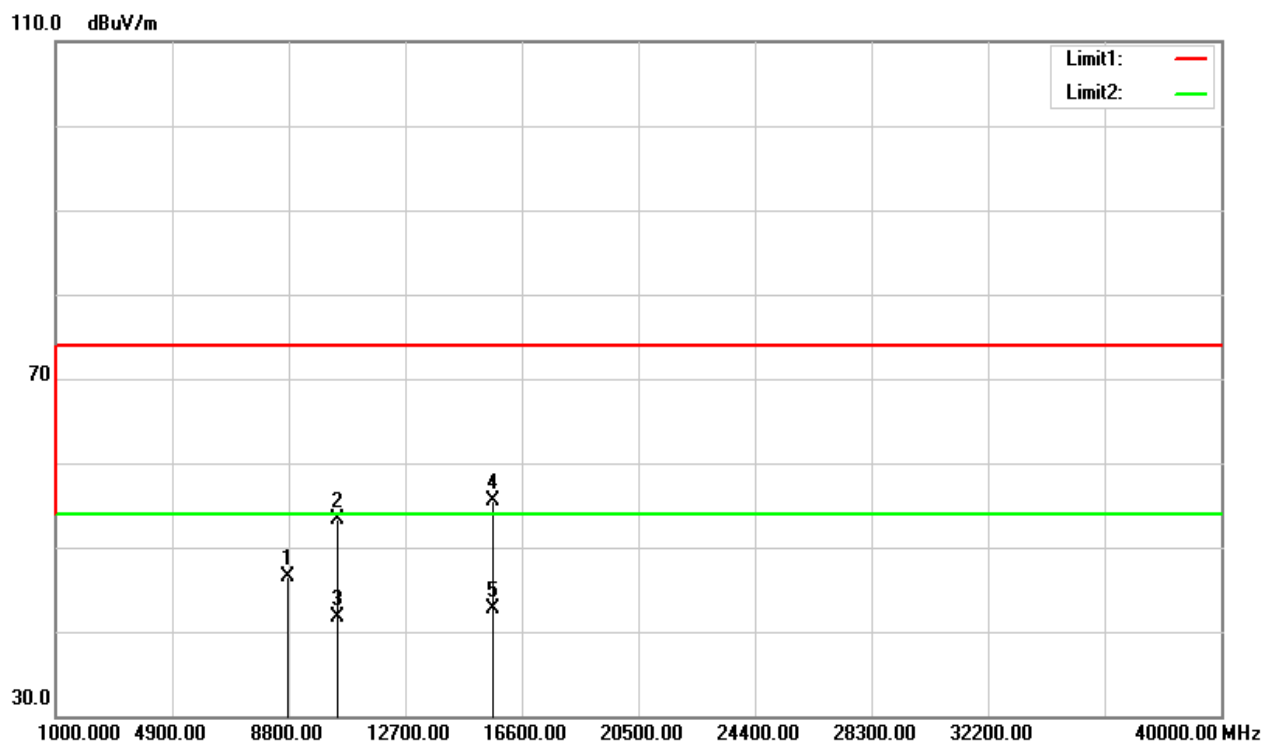


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8780.000	33.21	13.77	46.98	74.00	-27.02	peak
10360.000	35.62	16.52	52.14	74.00	-21.86	peak
10360.000	24.79	16.52	41.31	54.00	-12.69	AVG
15540.000	33.35	19.04	52.39	74.00	-21.61	peak
15540.000	22.14	19.04	41.18	54.00	-12.82	AVG

Remark:

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

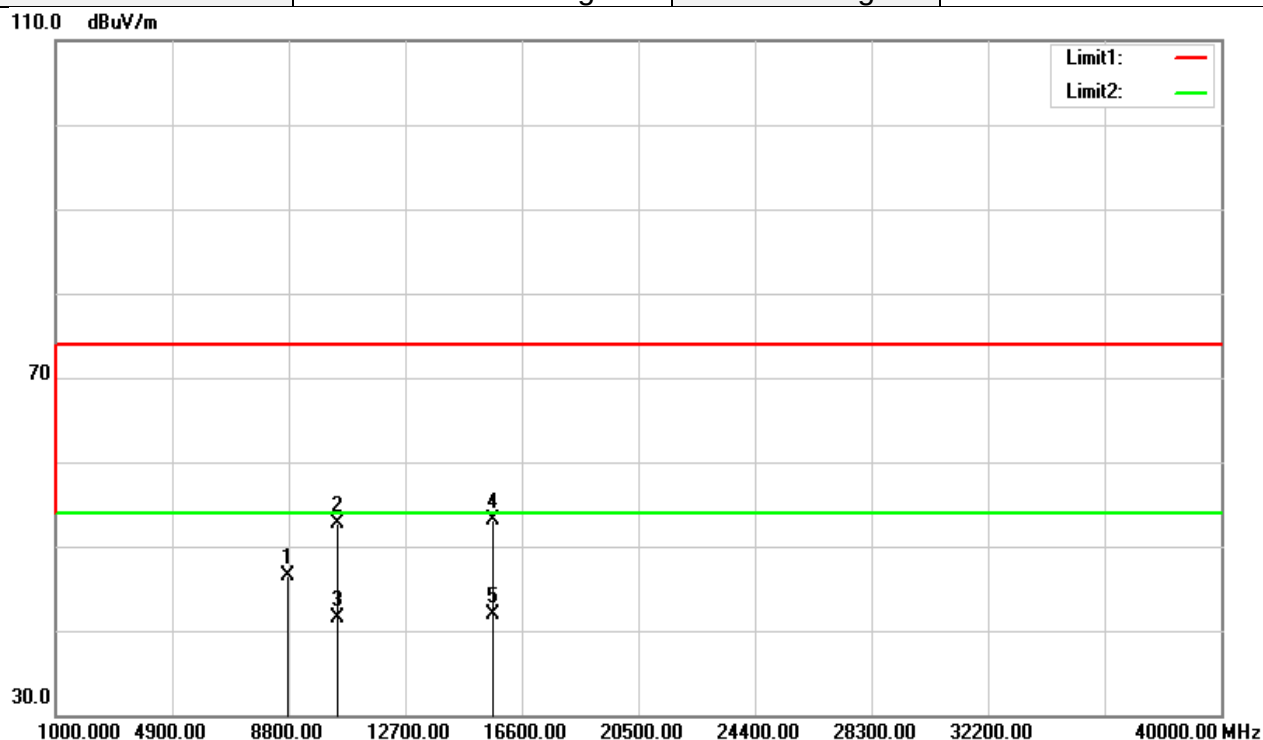


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8770.000	32.79	13.76	46.55	74.00	-27.45	peak
10440.000	36.46	16.89	53.35	74.00	-20.65	peak
10440.000	24.78	16.89	41.67	54.00	-12.33	AVG
15660.000	36.45	19.14	55.59	74.00	-18.41	peak
15660.000	23.55	19.14	42.69	54.00	-11.31	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

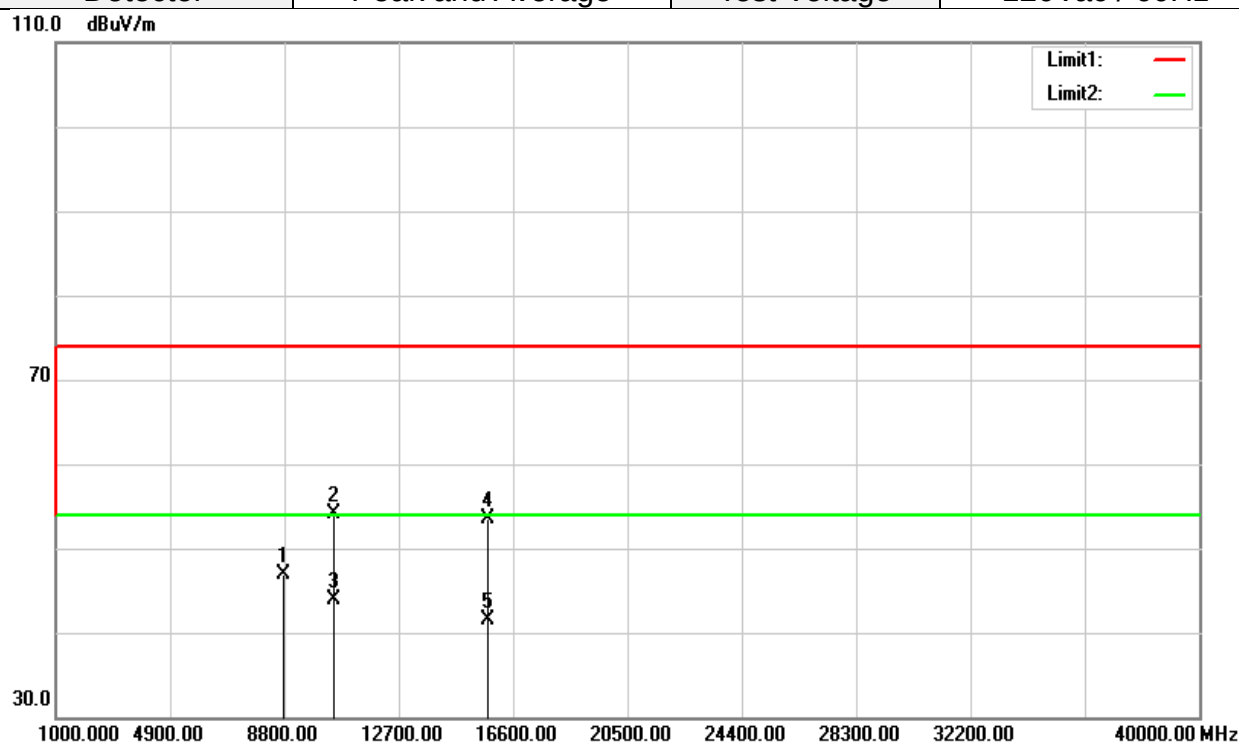


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8780.000	32.79	13.77	46.56	74.00	-27.44	peak
10440.000	35.81	16.89	52.70	74.00	-21.30	peak
10440.000	24.60	16.89	41.49	54.00	-12.51	AVG
15660.000	33.90	19.14	53.04	74.00	-20.96	peak
15660.000	22.73	19.14	41.87	54.00	-12.13	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

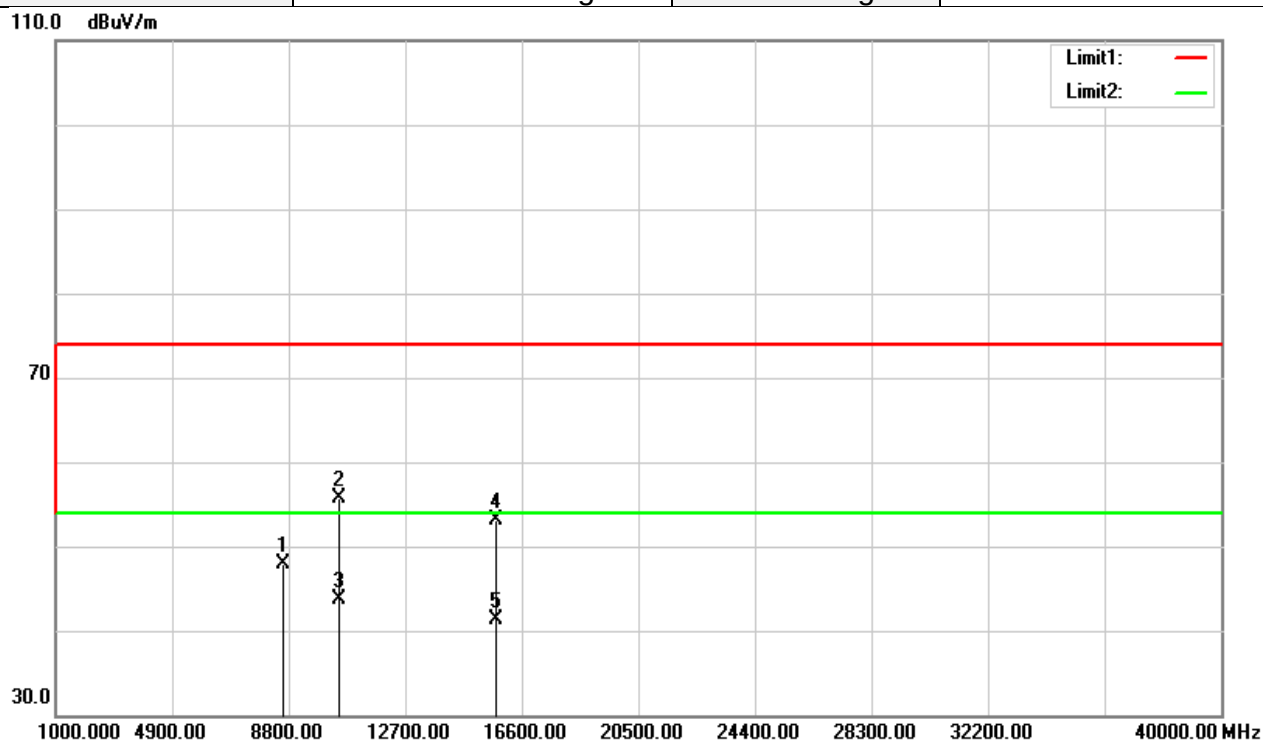


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8750.000	33.14	13.75	46.89	74.00	-27.11	peak
10480.000	37.07	17.07	54.14	74.00	-19.86	peak
10480.000	26.77	17.07	43.84	54.00	-10.16	AVG
15720.000	34.36	19.19	53.55	74.00	-20.45	peak
15720.000	22.35	19.19	41.54	54.00	-12.46	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

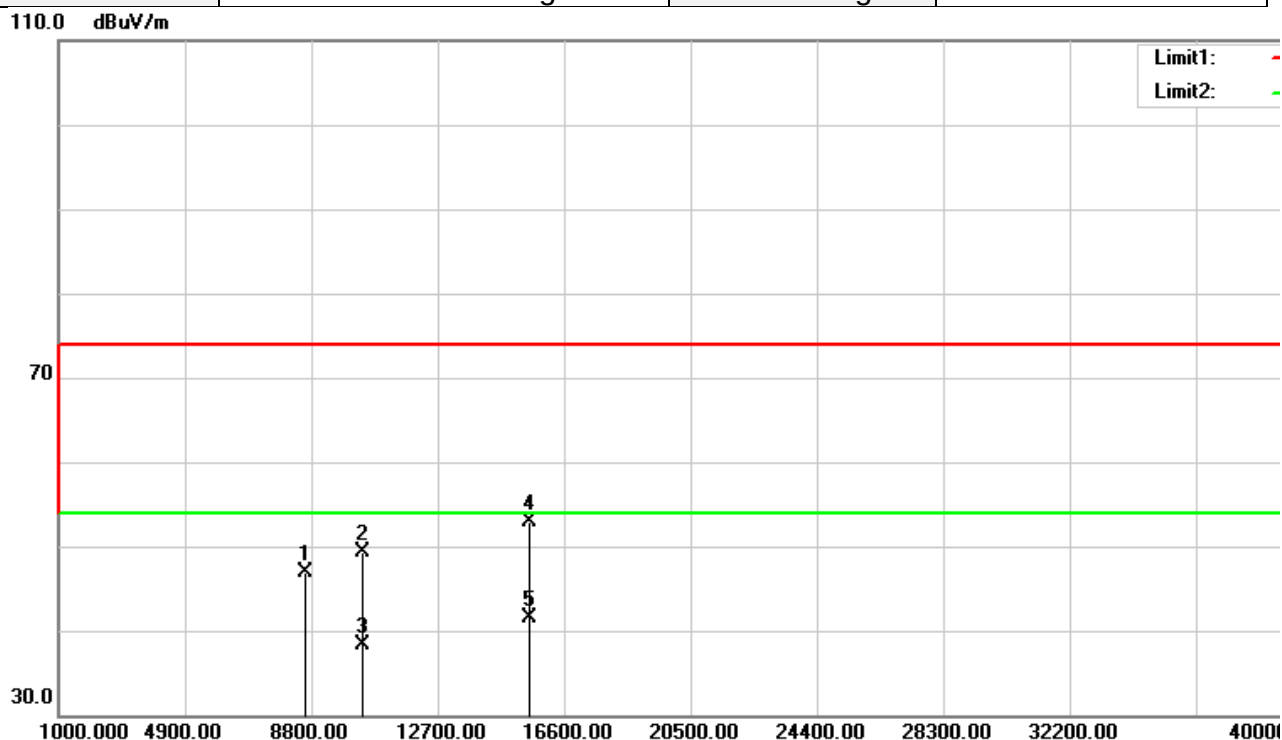


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8620.000	34.26	13.70	47.96	74.00	-26.04	peak
10480.000	38.54	17.07	55.61	74.00	-18.39	peak
10480.000	26.58	17.07	43.65	54.00	-10.35	AVG
15720.000	33.92	19.19	53.11	74.00	-20.89	peak
15720.000	22.09	19.19	41.28	54.00	-12.72	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

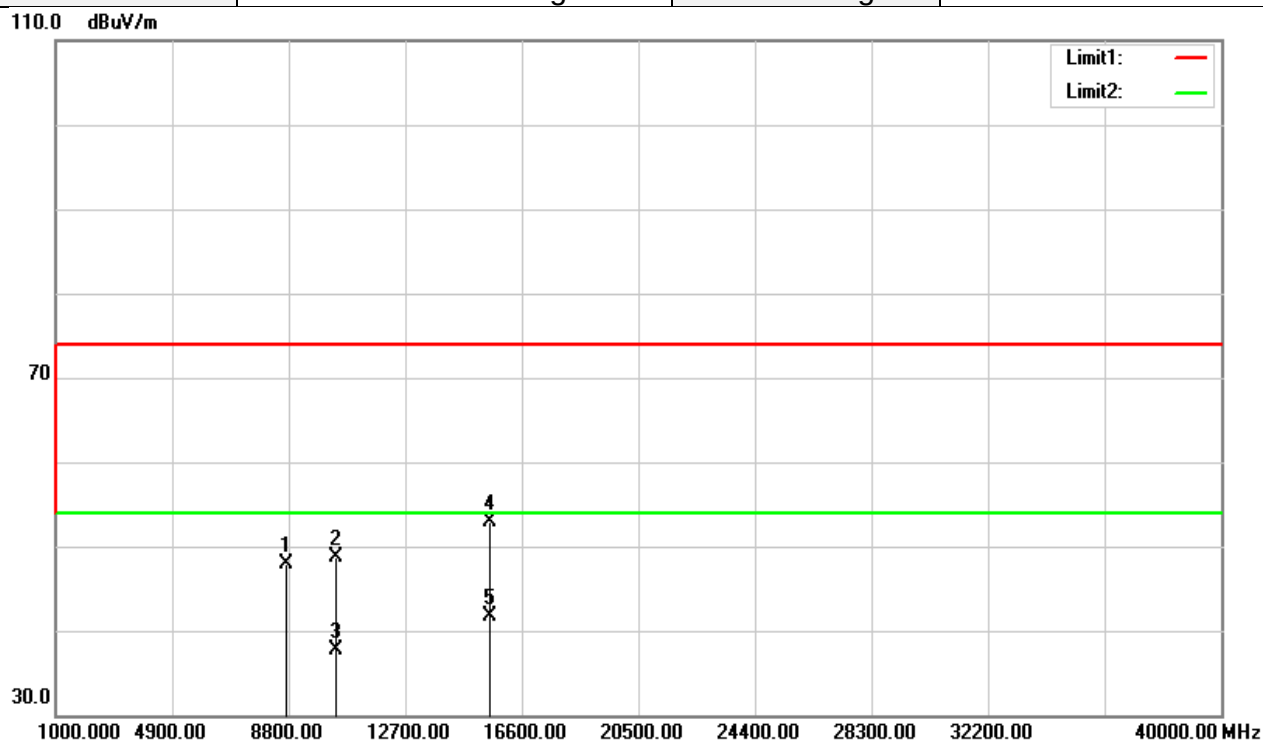


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8610.000	33.25	13.69	46.94	74.00	-27.06	peak
10360.000	32.71	16.52	49.23	74.00	-24.77	peak
10360.000	21.87	16.52	38.39	54.00	-15.61	AVG
15540.000	33.84	19.04	52.88	74.00	-21.12	peak
15540.000	22.52	19.04	41.56	54.00	-12.44	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

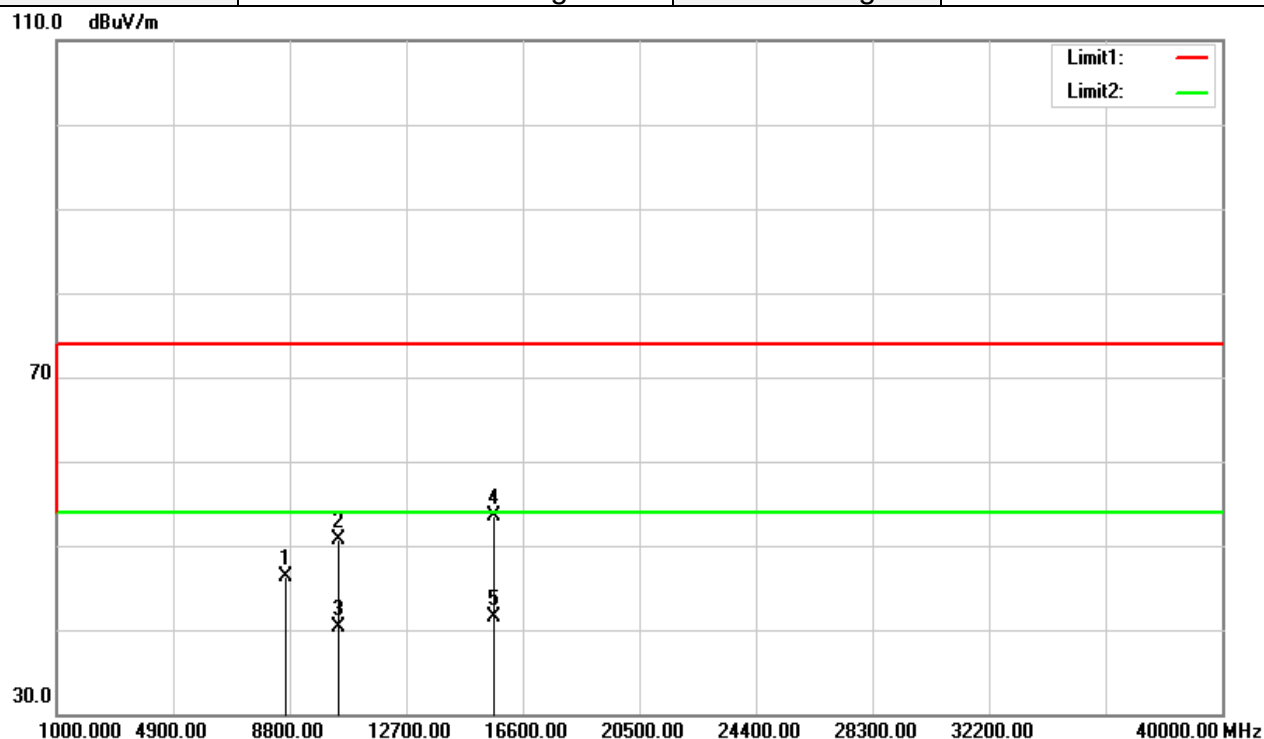


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8720.000	34.21	13.74	47.95	74.00	-26.05	peak
10360.000	32.20	16.52	48.72	74.00	-25.28	peak
10360.000	21.16	16.52	37.68	54.00	-16.32	AVG
15540.000	33.80	19.04	52.84	74.00	-21.16	peak
15540.000	22.67	19.04	41.71	54.00	-12.29	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

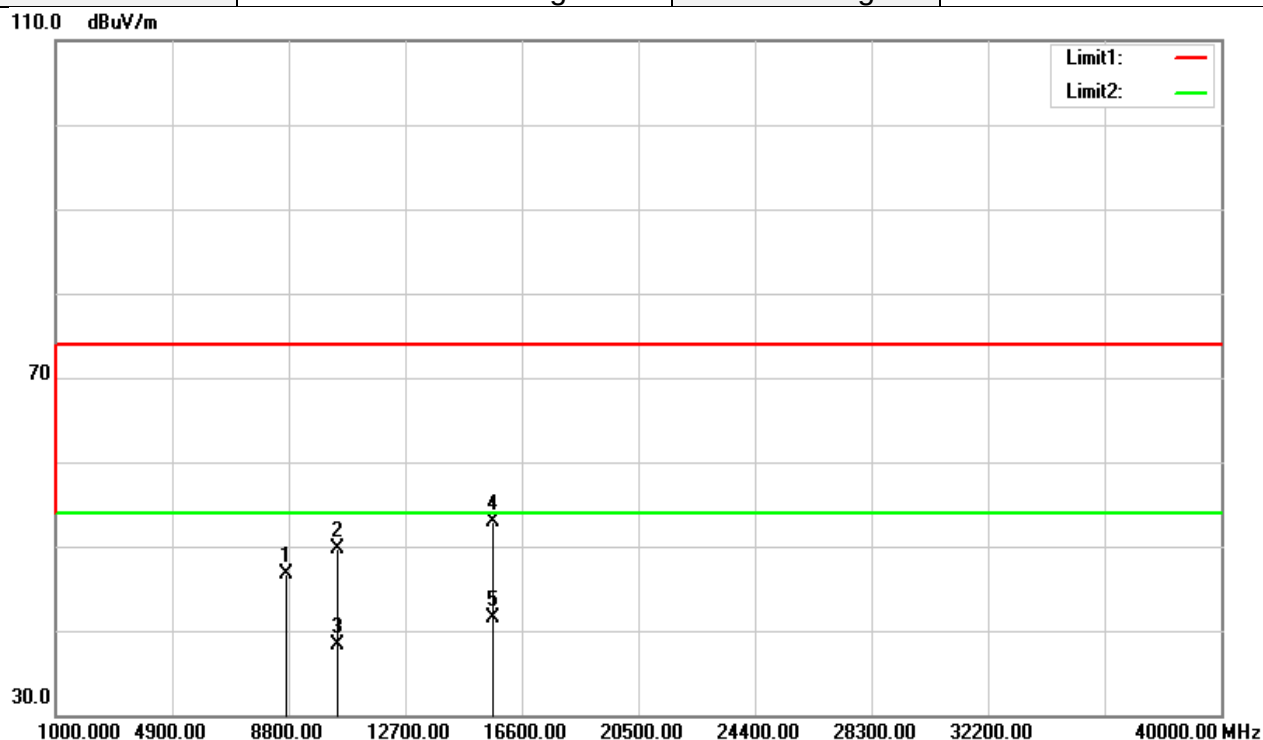


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8680.000	32.53	13.72	46.25	74.00	-27.75	peak
10440.000	33.83	16.89	50.72	74.00	-23.28	peak
10440.000	23.42	16.89	40.31	54.00	-13.69	AVG
15660.000	34.31	19.14	53.45	74.00	-20.55	peak
15660.000	22.28	19.14	41.42	54.00	-12.58	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

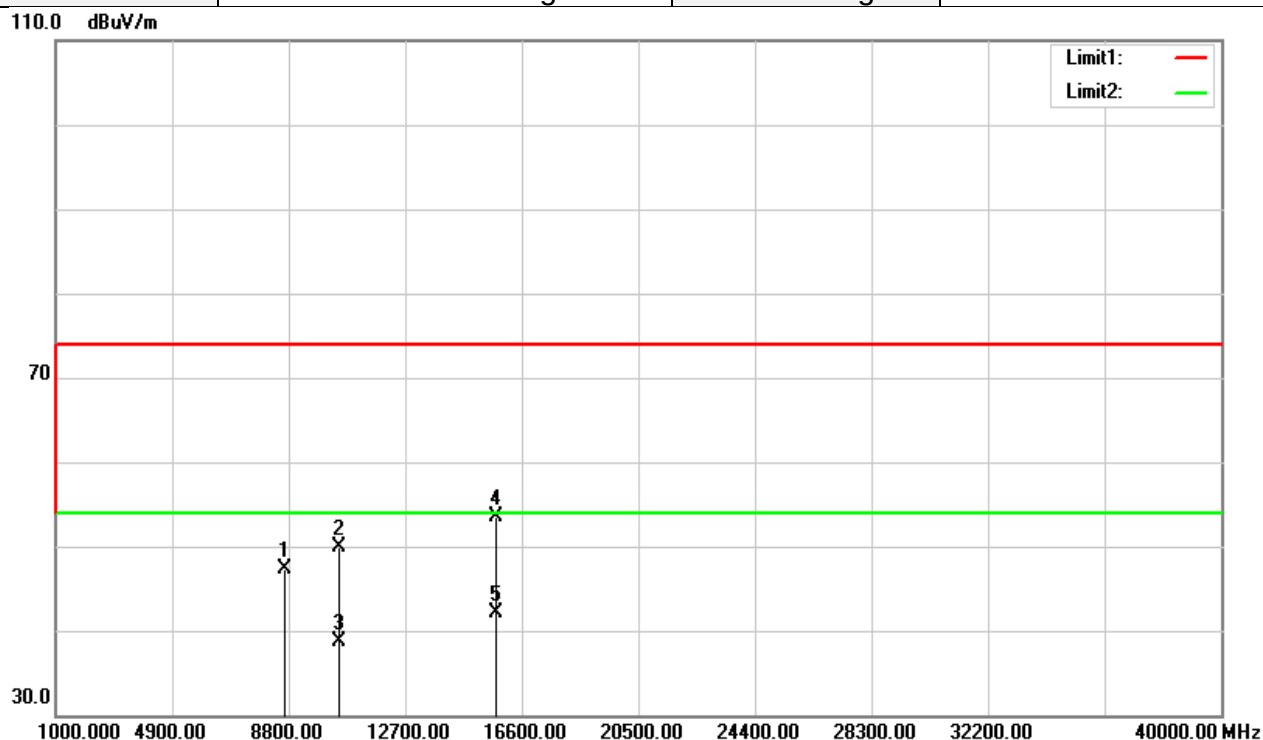


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8720.000	32.89	13.74	46.63	74.00	-27.37	peak
10440.000	32.88	16.89	49.77	74.00	-24.23	peak
10440.000	21.45	16.89	38.34	54.00	-15.66	AVG
15660.000	33.67	19.14	52.81	74.00	-21.19	peak
15660.000	22.35	19.14	41.49	54.00	-12.51	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

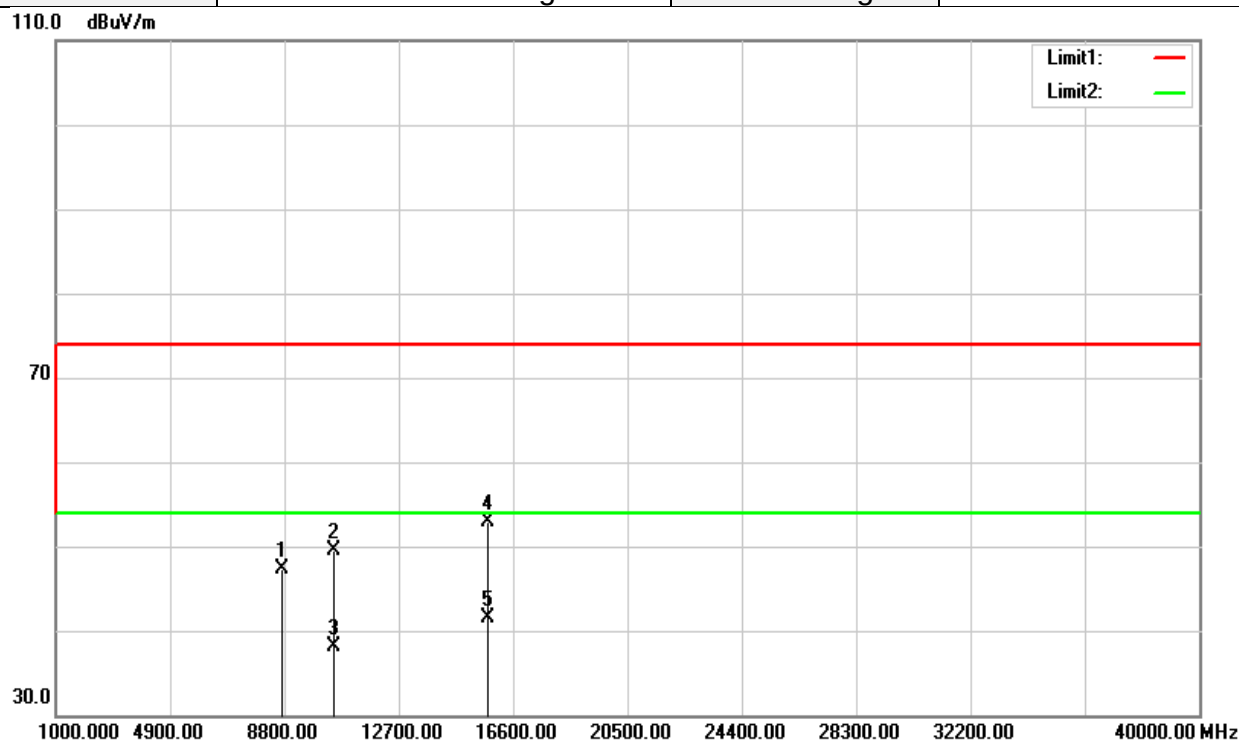


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8680.000	33.64	13.72	47.36	74.00	-26.64	peak
10480.000	32.87	17.07	49.94	74.00	-24.06	peak
10480.000	21.55	17.07	38.62	54.00	-15.38	AVG
15720.000	34.34	19.19	53.53	74.00	-20.47	peak
15720.000	22.99	19.19	42.18	54.00	-11.82	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

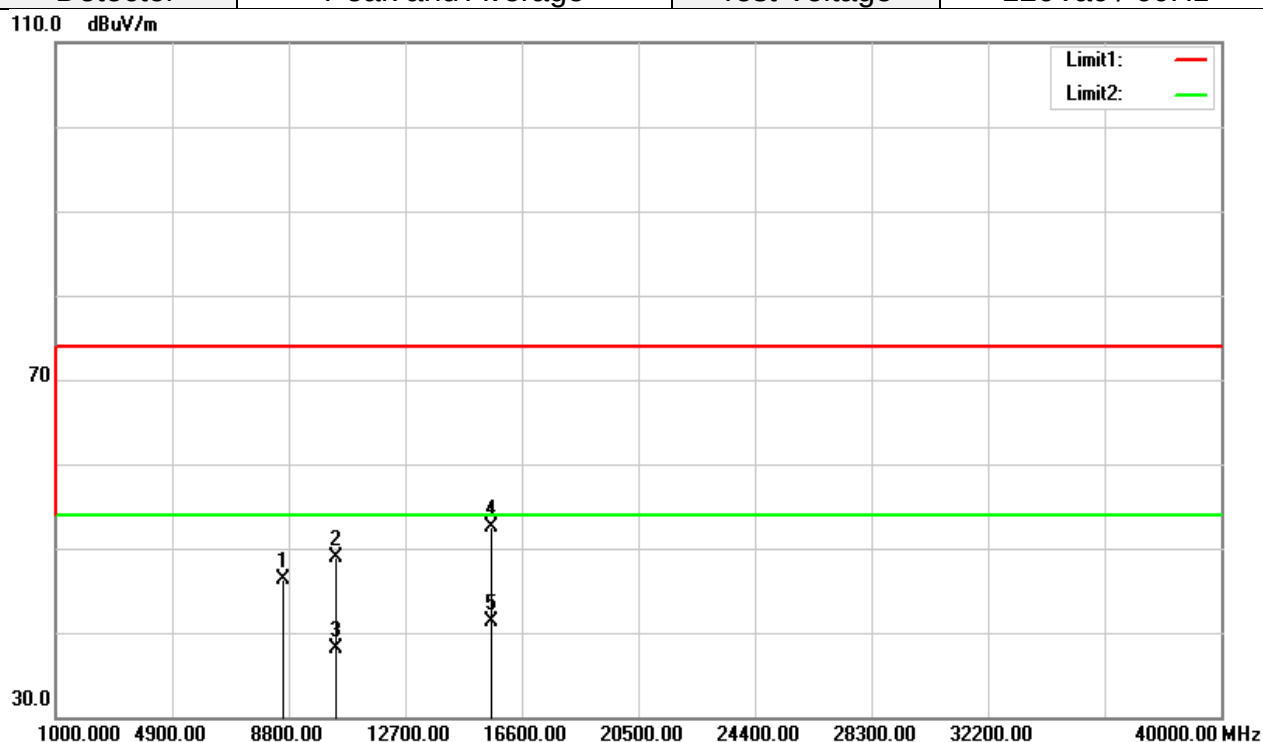


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8710.000	33.57	13.74	47.31	74.00	-26.69	peak
10480.000	32.42	17.07	49.49	74.00	-24.51	peak
10480.000	21.06	17.07	38.13	54.00	-15.87	AVG
15720.000	33.69	19.19	52.88	74.00	-21.12	peak
15720.000	22.40	19.19	41.59	54.00	-12.41	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

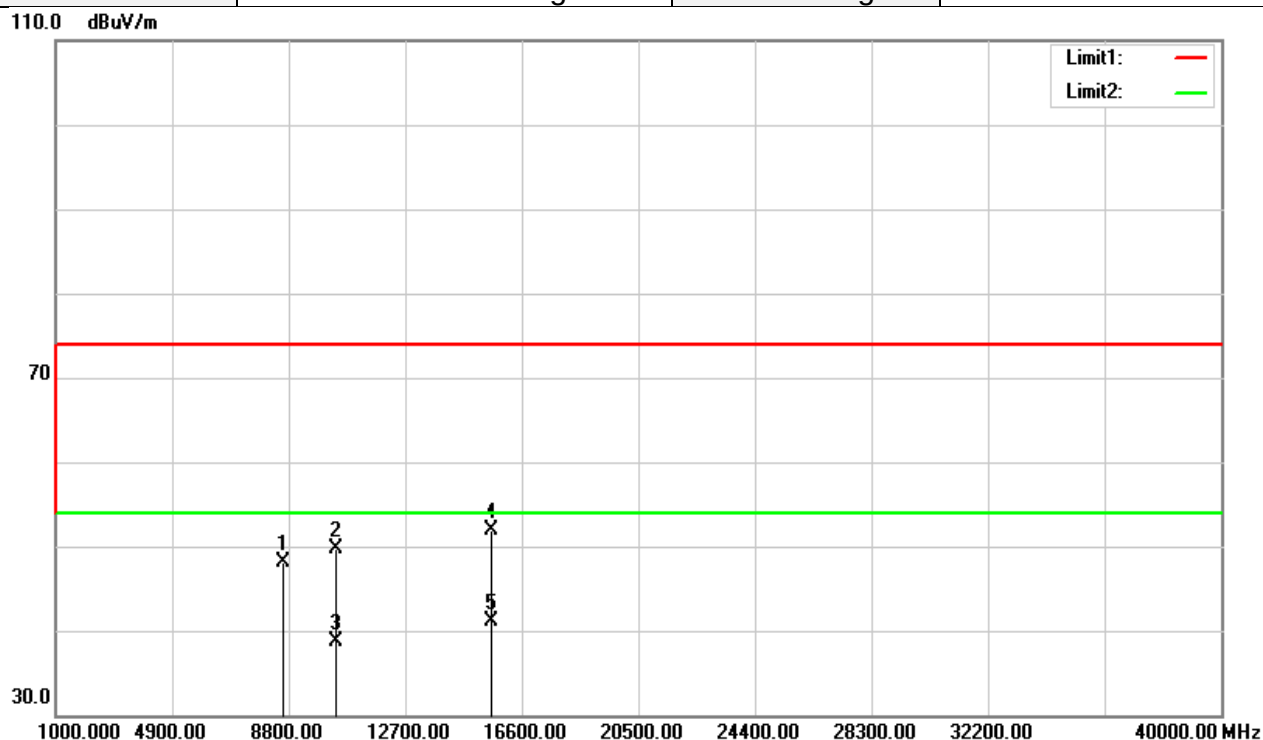


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8630.000	32.53	13.70	46.23	74.00	-27.77	peak
10380.000	32.19	16.62	48.81	74.00	-25.19	peak
10380.000	21.56	16.62	38.18	54.00	-15.82	AVG
15570.000	33.49	19.07	52.56	74.00	-21.44	peak
15570.000	22.22	19.07	41.29	54.00	-12.71	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

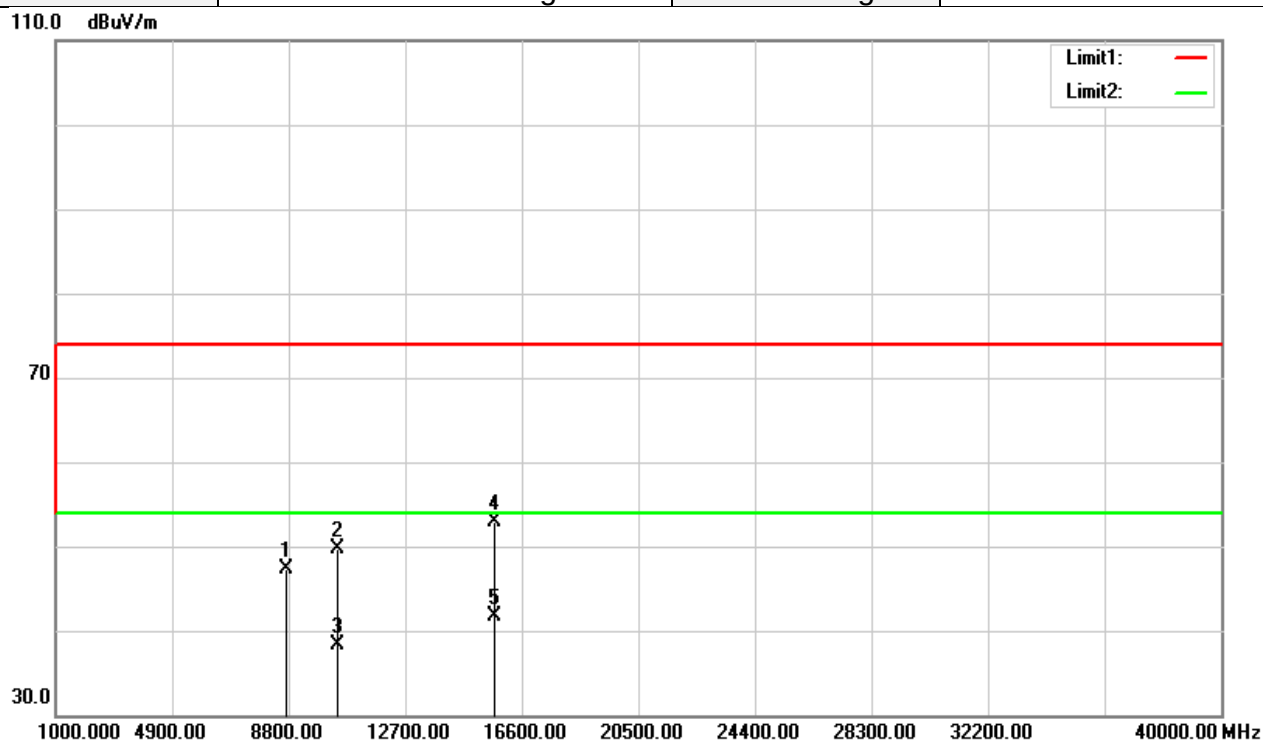


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8640.000	34.32	13.70	48.02	74.00	-25.98	peak
10380.000	33.05	16.62	49.67	74.00	-24.33	peak
10380.000	22.03	16.62	38.65	54.00	-15.35	AVG
15570.000	32.93	19.07	52.00	74.00	-22.00	peak
15570.000	22.01	19.07	41.08	54.00	-12.92	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

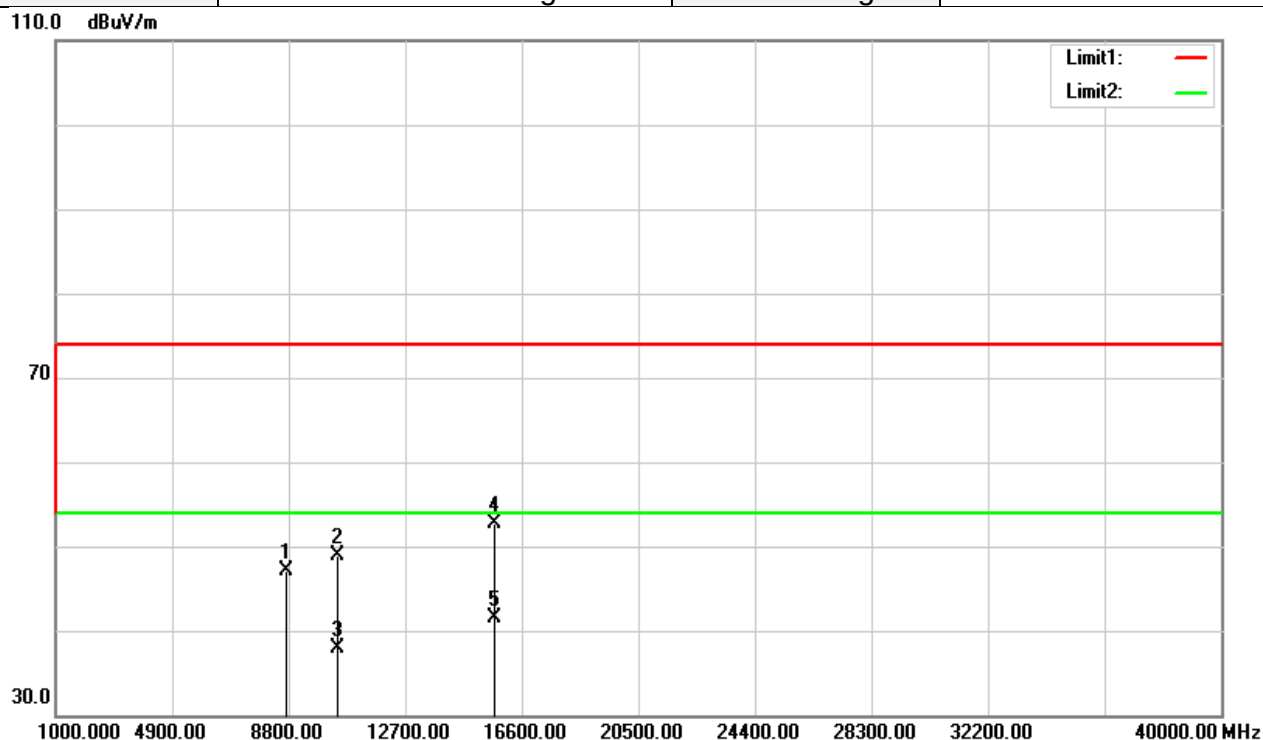


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8720.000	33.61	13.74	47.35	74.00	-26.65	peak
10460.000	32.64	16.98	49.62	74.00	-24.38	peak
10460.000	21.23	16.98	38.21	54.00	-15.79	AVG
15690.000	33.64	19.17	52.81	74.00	-21.19	peak
15690.000	22.55	19.17	41.72	54.00	-12.28	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz



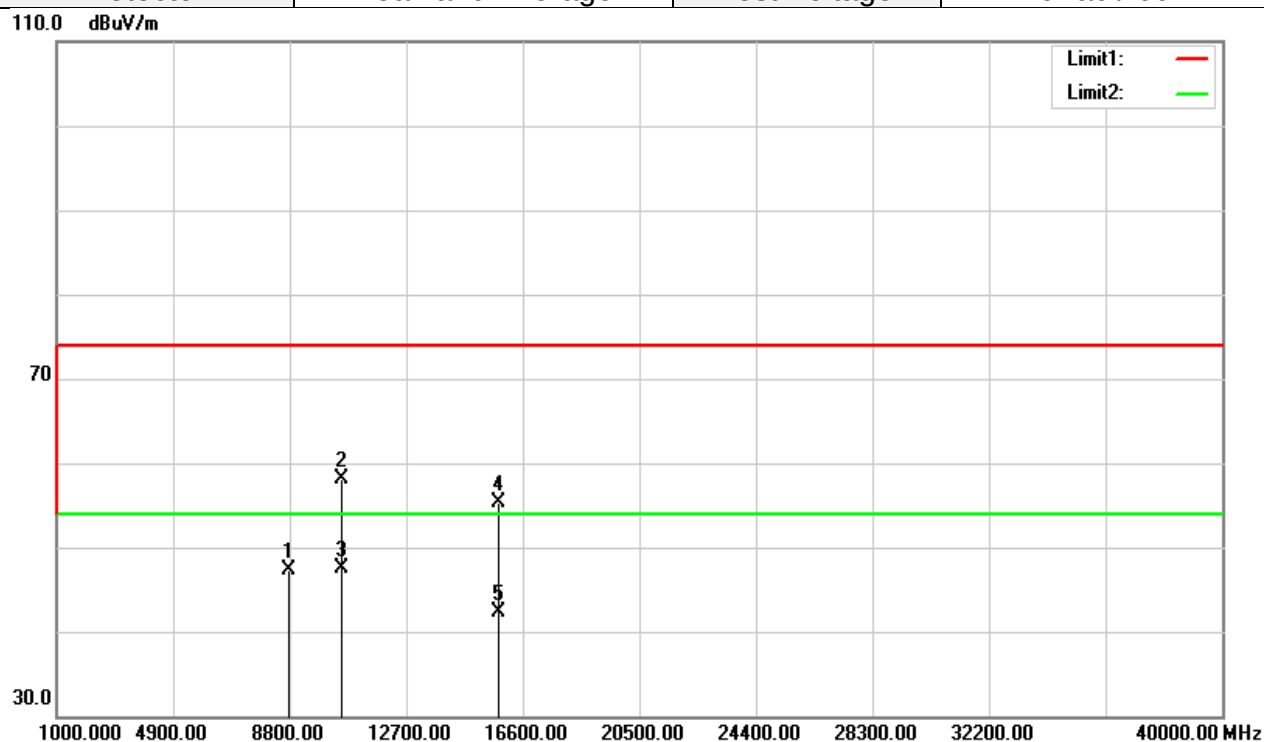
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8710.000	33.37	13.74	47.11	74.00	-26.89	peak
10460.000	31.91	16.98	48.89	74.00	-25.11	peak
10460.000	20.95	16.98	37.93	54.00	-16.07	AVG
15690.000	33.52	19.17	52.69	74.00	-21.31	peak
15690.000	22.25	19.17	41.42	54.00	-12.58	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Above 1G Test Data for UNII-2a

Test Mode	IEEE 802.11a Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

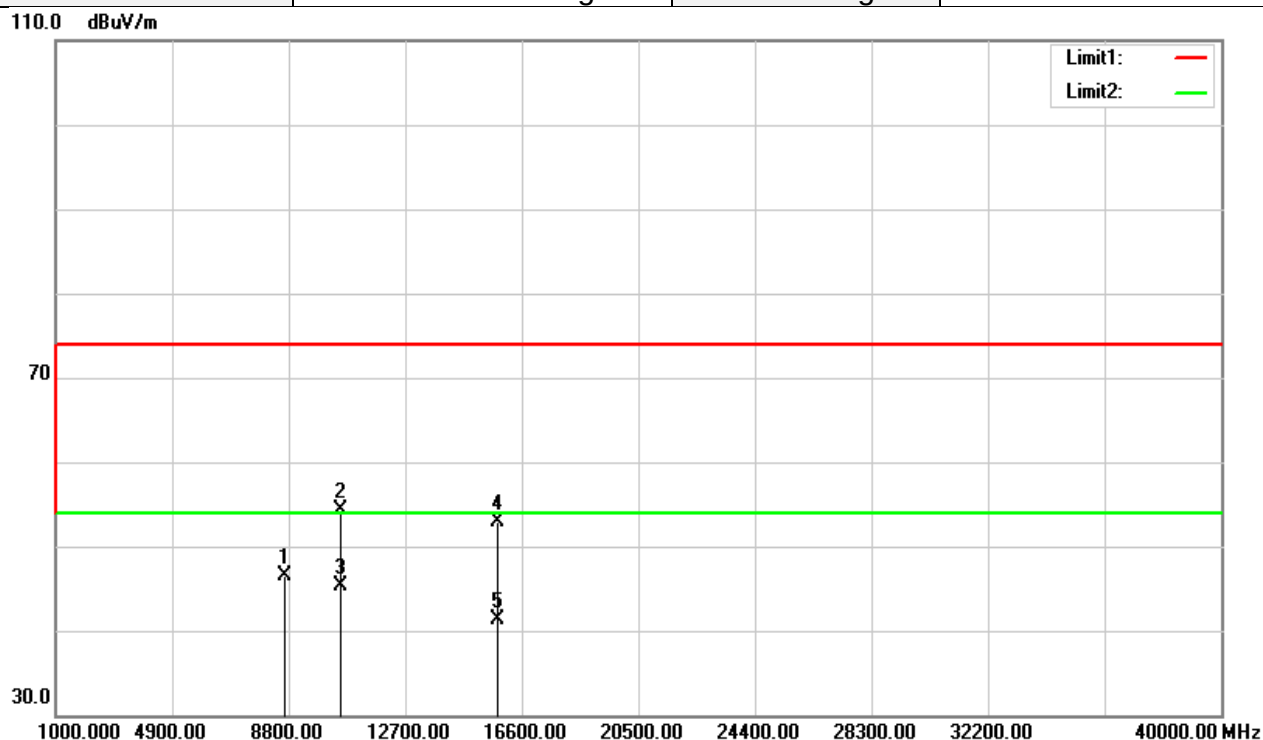


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8760.000	33.61	13.76	47.37	74.00	-26.63	peak
10520.000	40.88	17.14	58.02	74.00	-15.98	peak
10520.000	30.36	17.14	47.50	54.00	-6.50	AVG
15780.000	36.15	19.25	55.40	74.00	-18.60	peak
15780.000	23.14	19.25	42.39	54.00	-11.61	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

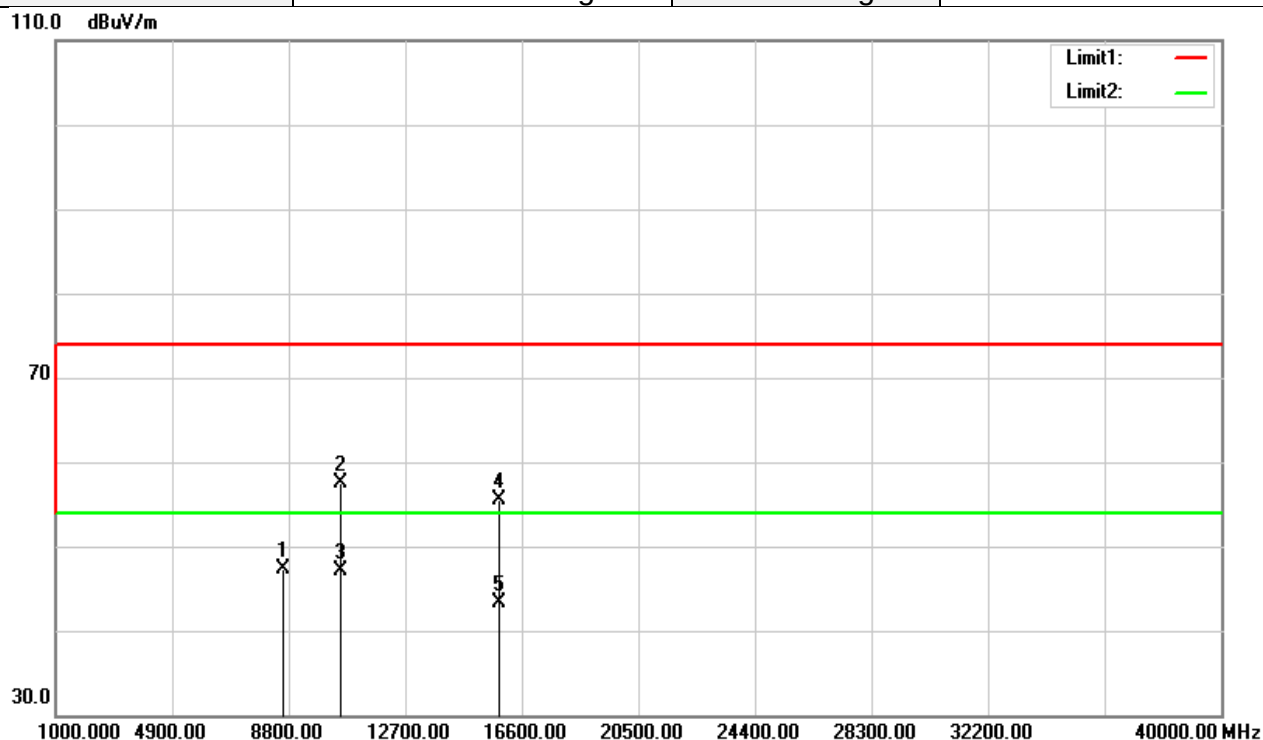


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8690.000	32.85	13.73	46.58	74.00	-27.42	peak
10520.000	37.12	17.14	54.26	74.00	-19.74	peak
10520.000	28.07	17.14	45.21	54.00	-8.79	AVG
15780.000	33.59	19.25	52.84	74.00	-21.16	peak
15780.000	22.14	19.25	41.39	54.00	-12.61	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

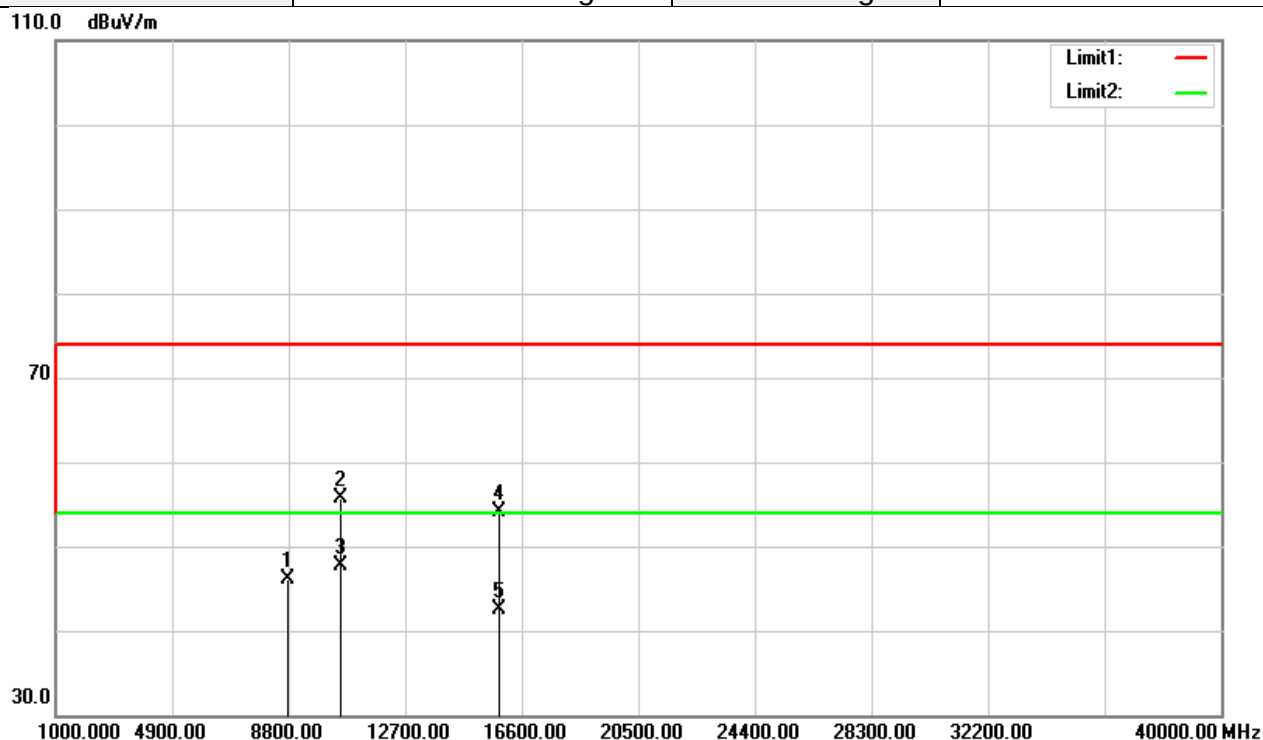


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8620.000	33.62	13.70	47.32	74.00	-26.68	peak
10560.000	40.47	17.11	57.58	74.00	-16.42	peak
10560.000	29.99	17.11	47.10	54.00	-6.90	AVG
15840.000	36.28	19.30	55.58	74.00	-18.42	peak
15840.000	24.09	19.30	43.39	54.00	-10.61	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

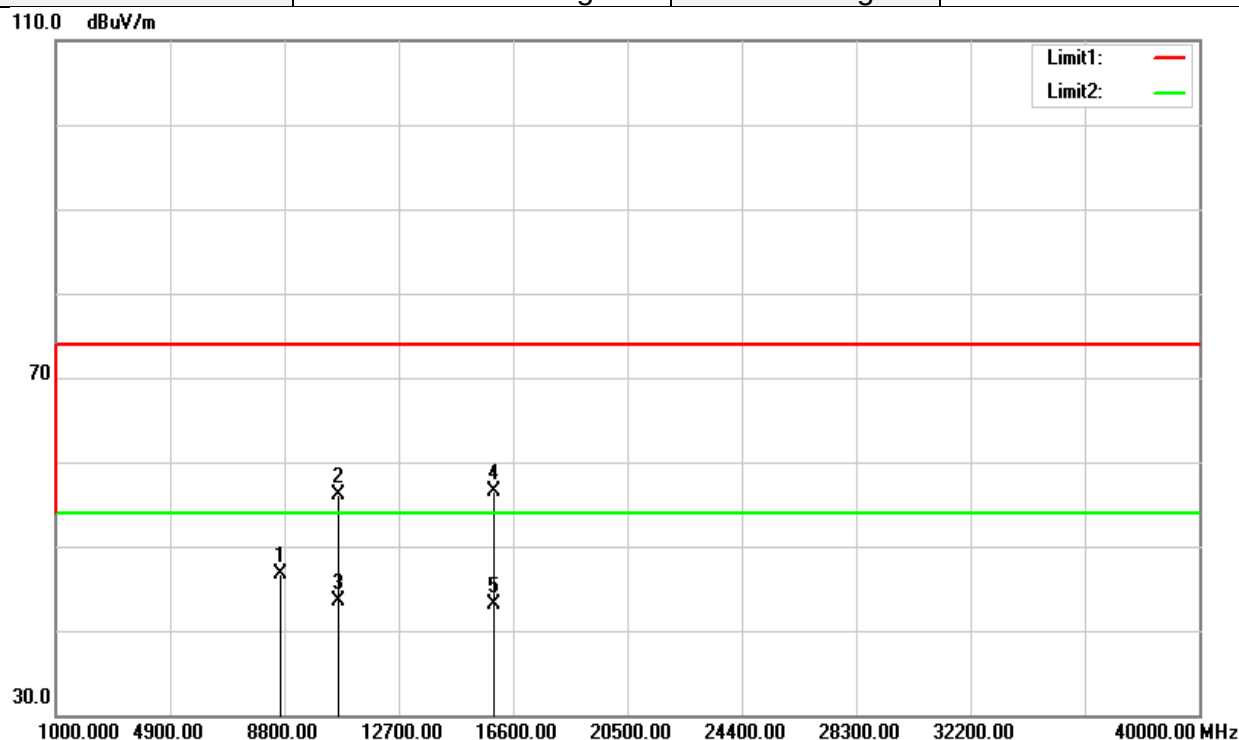


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8760.000	32.38	13.76	46.14	74.00	-27.86	peak
10560.000	38.61	17.11	55.72	74.00	-18.28	peak
10560.000	30.55	17.11	47.66	54.00	-6.34	AVG
15840.000	34.71	19.30	54.01	74.00	-19.99	peak
15840.000	23.28	19.30	42.58	54.00	-11.42	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

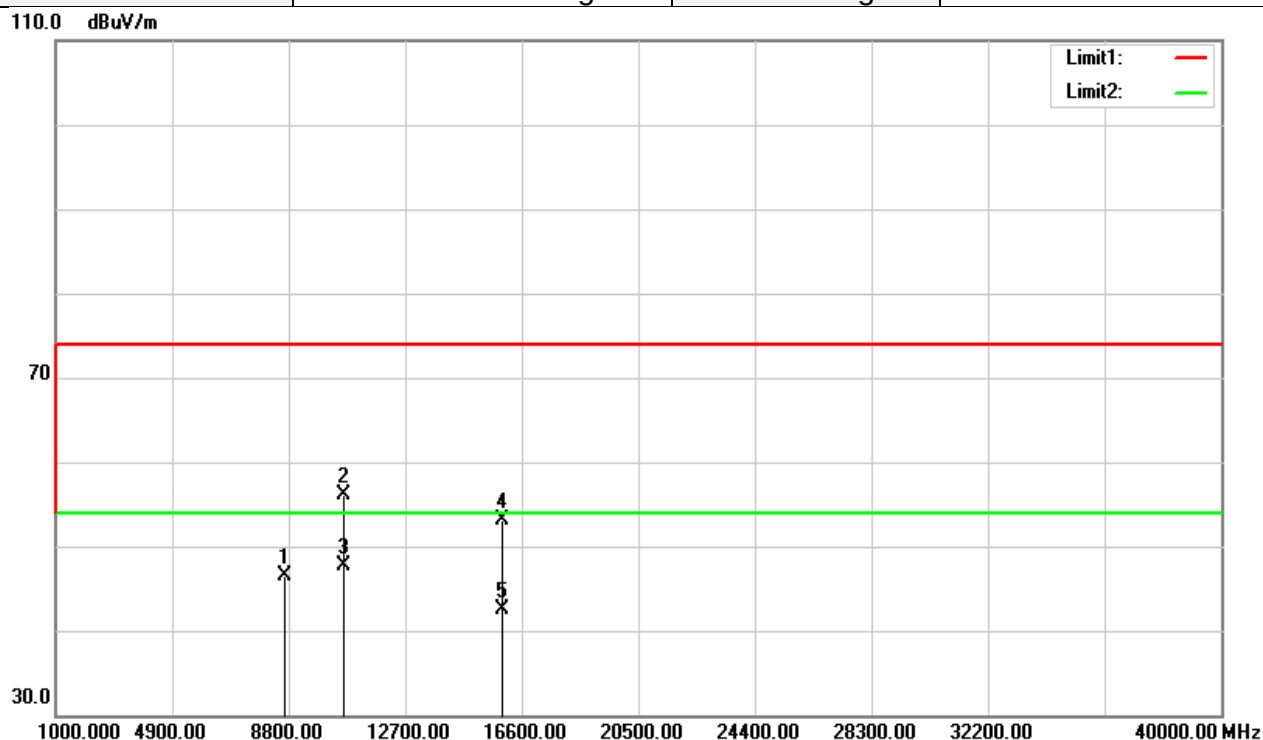


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8650.000	33.01	13.71	46.72	74.00	-27.28	peak
10640.000	39.09	17.04	56.13	74.00	-17.87	peak
10640.000	26.39	17.04	43.43	54.00	-10.57	AVG
15960.000	37.01	19.40	56.41	74.00	-17.59	peak
15960.000	23.75	19.40	43.15	54.00	-10.85	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

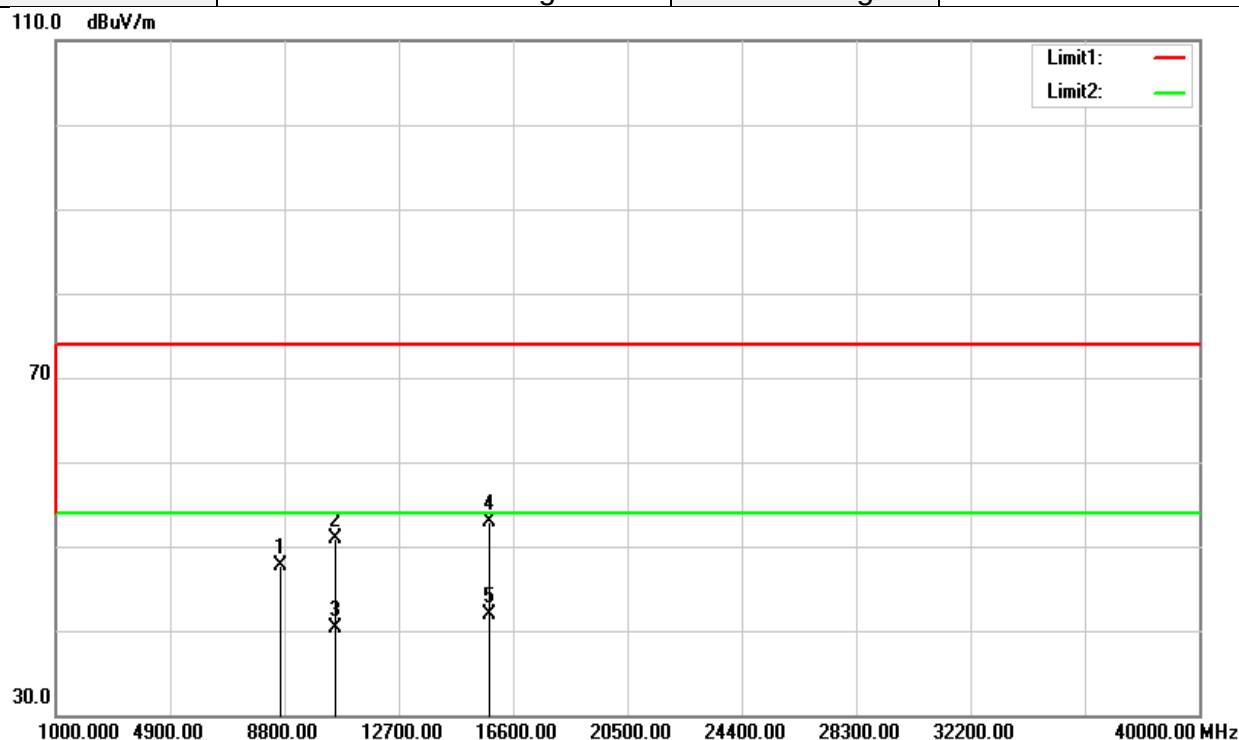


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8690.000	32.71	13.73	46.44	74.00	-27.56	peak
10640.000	38.99	17.04	56.03	74.00	-17.97	peak
10640.000	30.57	17.04	47.61	54.00	-6.39	AVG
15960.000	33.64	19.40	53.04	74.00	-20.96	peak
15960.000	23.10	19.40	42.50	54.00	-11.50	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

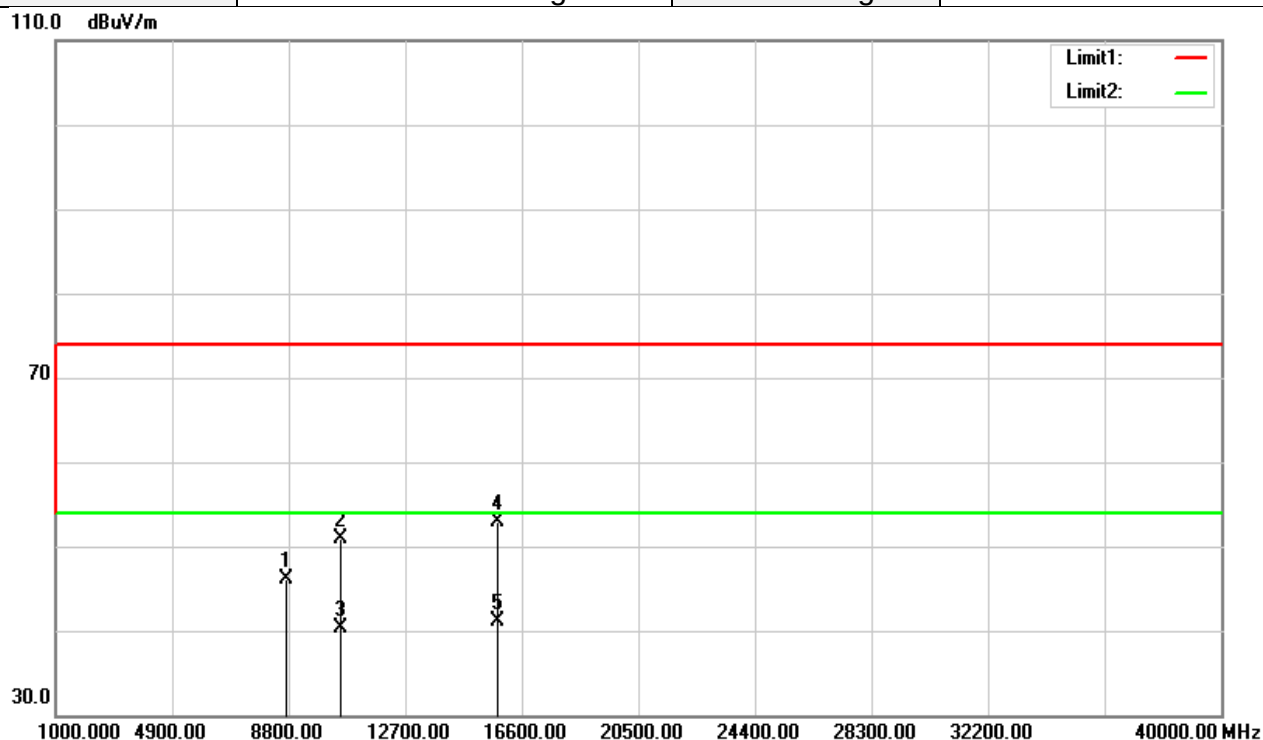


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8690.000	33.93	13.73	47.66	74.00	-26.34	peak
10520.000	33.86	17.14	51.00	74.00	-23.00	peak
10520.000	23.15	17.14	40.29	54.00	-13.71	AVG
15780.000	33.69	19.25	52.94	74.00	-21.06	peak
15780.000	22.57	19.25	41.82	54.00	-12.18	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

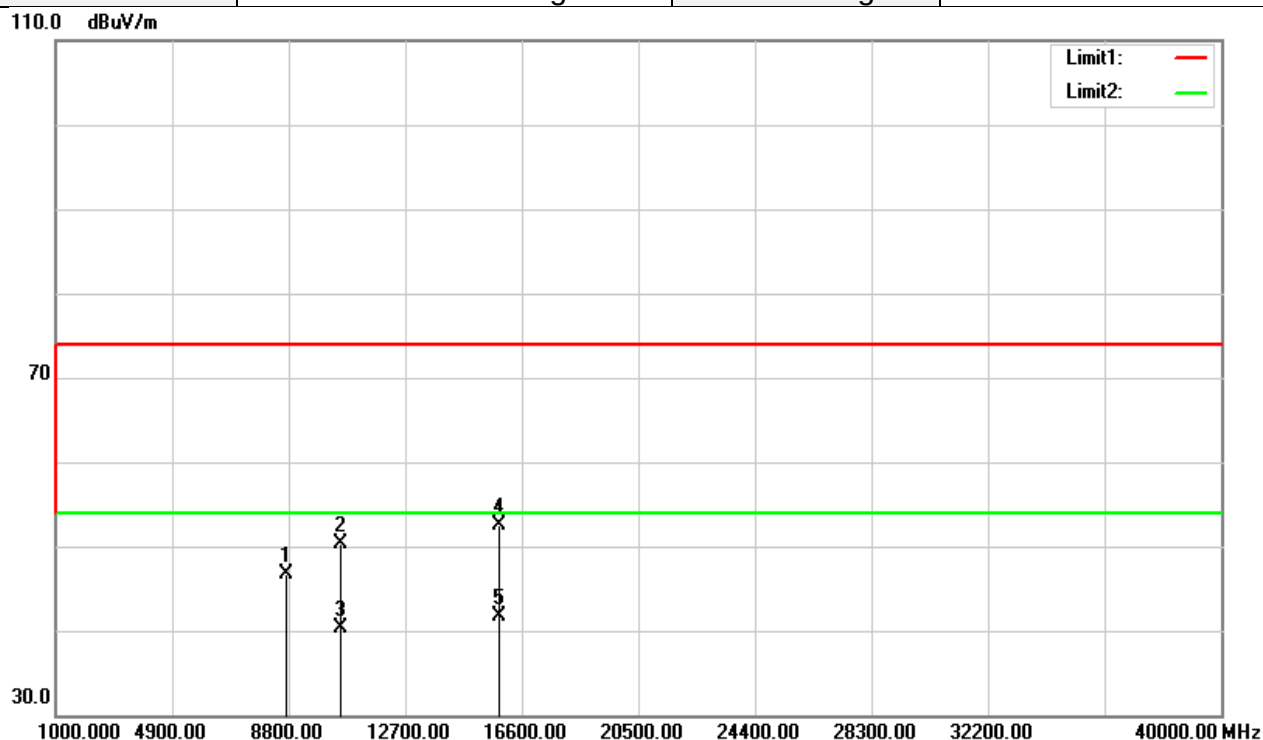


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8730.000	32.33	13.75	46.08	74.00	-27.92	peak
10520.000	33.72	17.14	50.86	74.00	-23.14	peak
10520.000	23.24	17.14	40.38	54.00	-13.62	AVG
15780.000	33.69	19.25	52.94	74.00	-21.06	peak
15780.000	21.92	19.25	41.17	54.00	-12.83	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

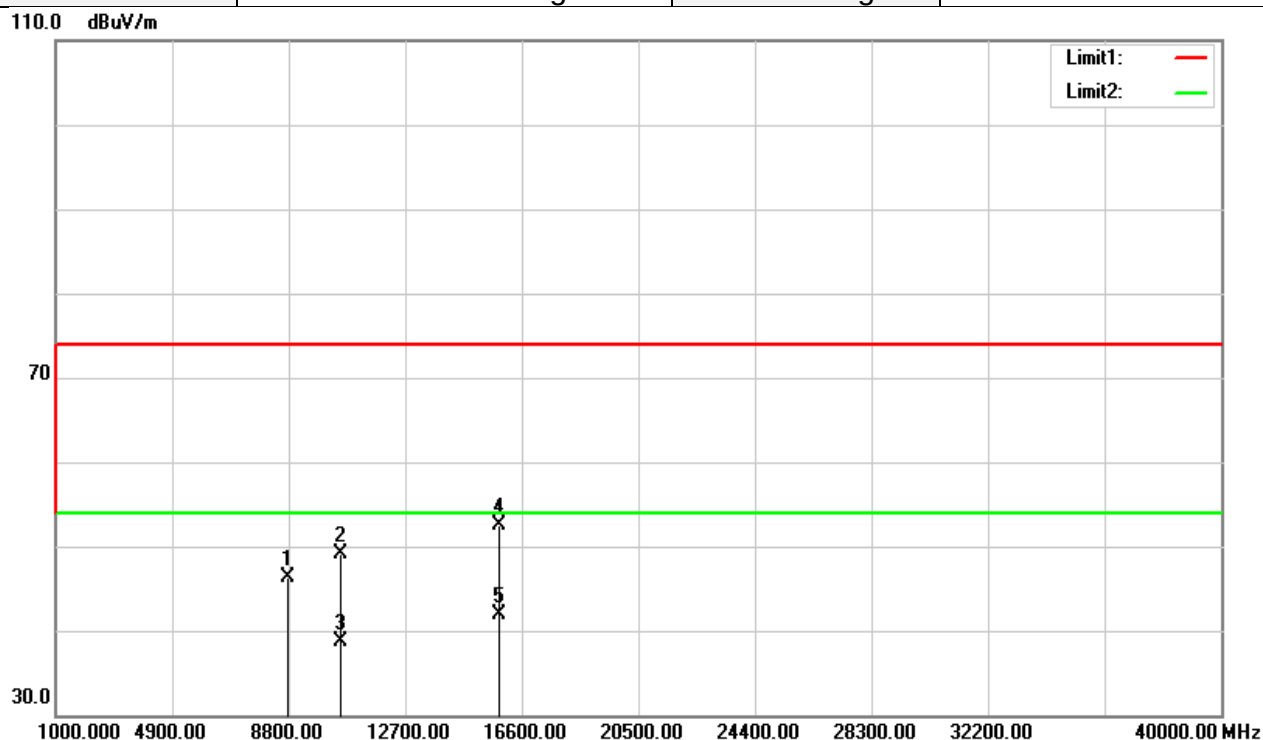


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8740.000	32.97	13.75	46.72	74.00	-27.28	peak
10560.000	33.22	17.11	50.33	74.00	-23.67	peak
10560.000	23.23	17.11	40.34	54.00	-13.66	AVG
15840.000	33.23	19.30	52.53	74.00	-21.47	peak
15840.000	22.41	19.30	41.71	54.00	-12.29	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

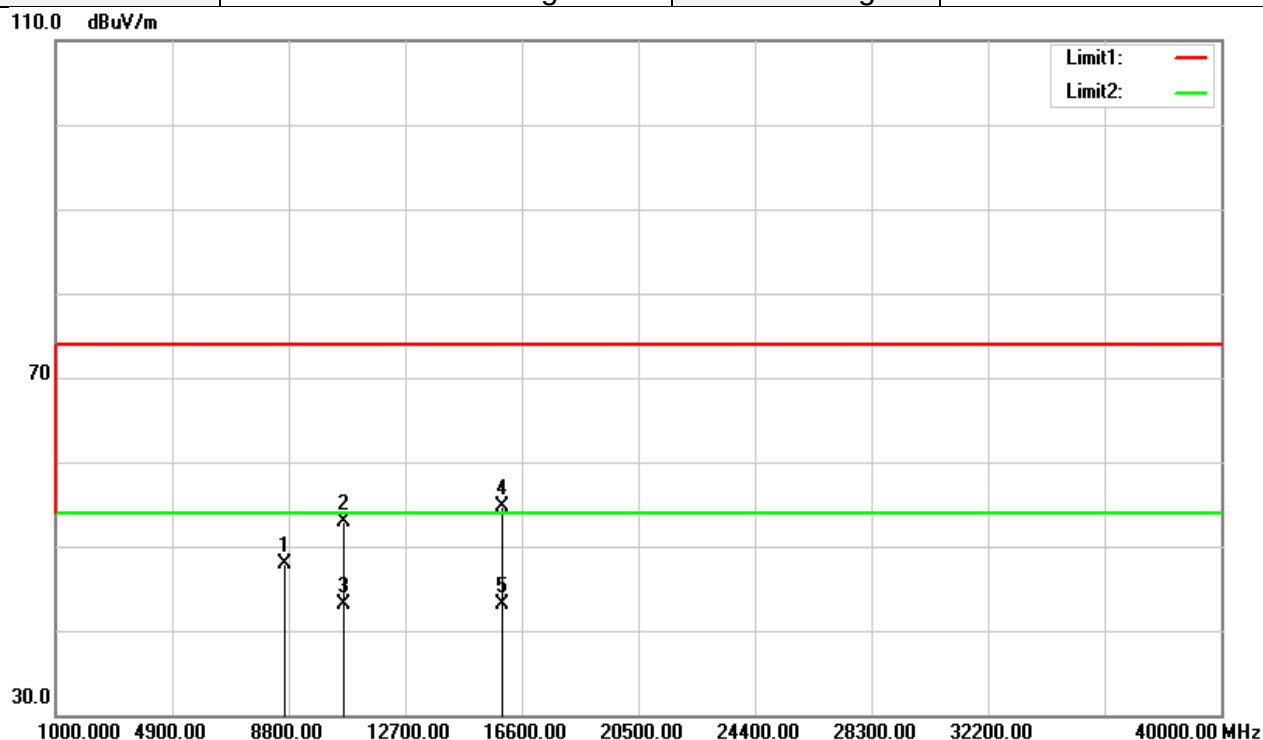


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8750.000	32.60	13.75	46.35	74.00	-27.65	peak
10560.000	31.95	17.11	49.06	74.00	-24.94	peak
10560.000	21.50	17.11	38.61	54.00	-15.39	AVG
15840.000	33.25	19.30	52.55	74.00	-21.45	peak
15840.000	22.57	19.30	41.87	54.00	-12.13	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

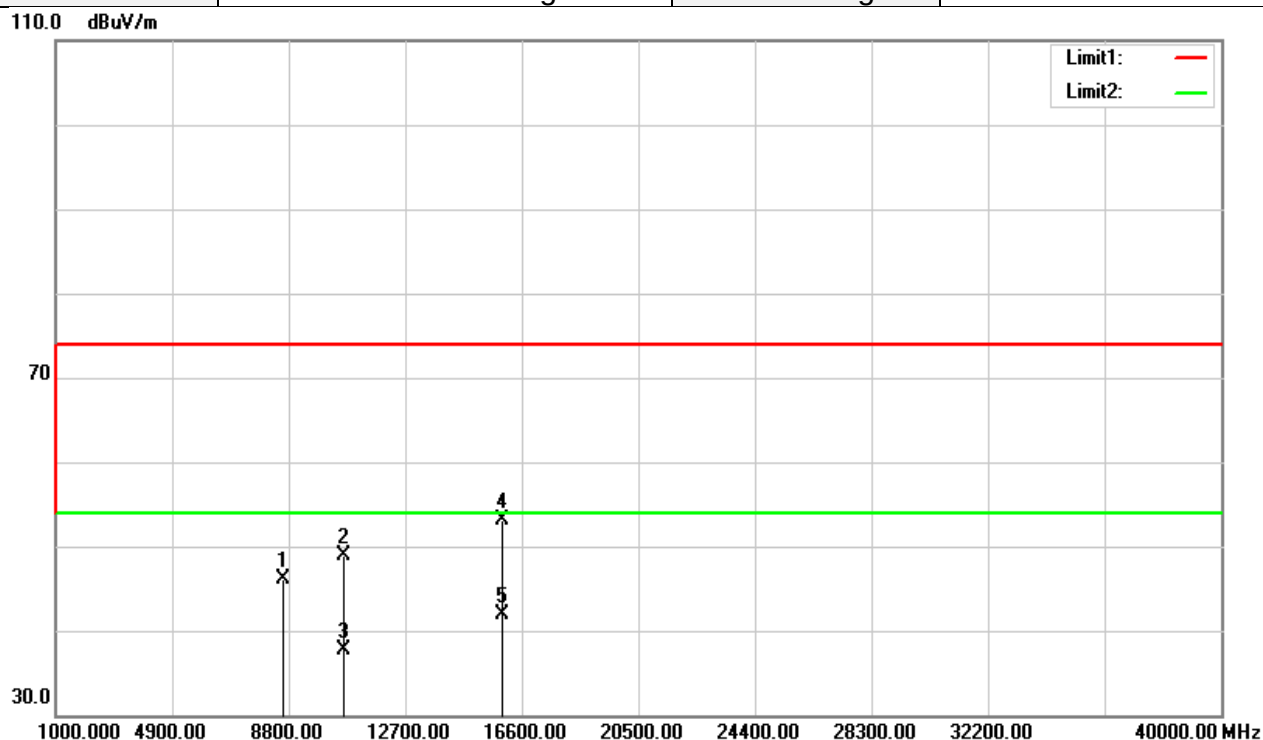


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8650.000	34.25	13.71	47.96	74.00	-26.04	peak
10640.000	35.88	17.04	52.92	74.00	-21.08	peak
10640.000	26.15	17.04	43.19	54.00	-10.81	AVG
15960.000	35.23	19.40	54.63	74.00	-19.37	peak
15960.000	23.62	19.40	43.02	54.00	-10.98	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

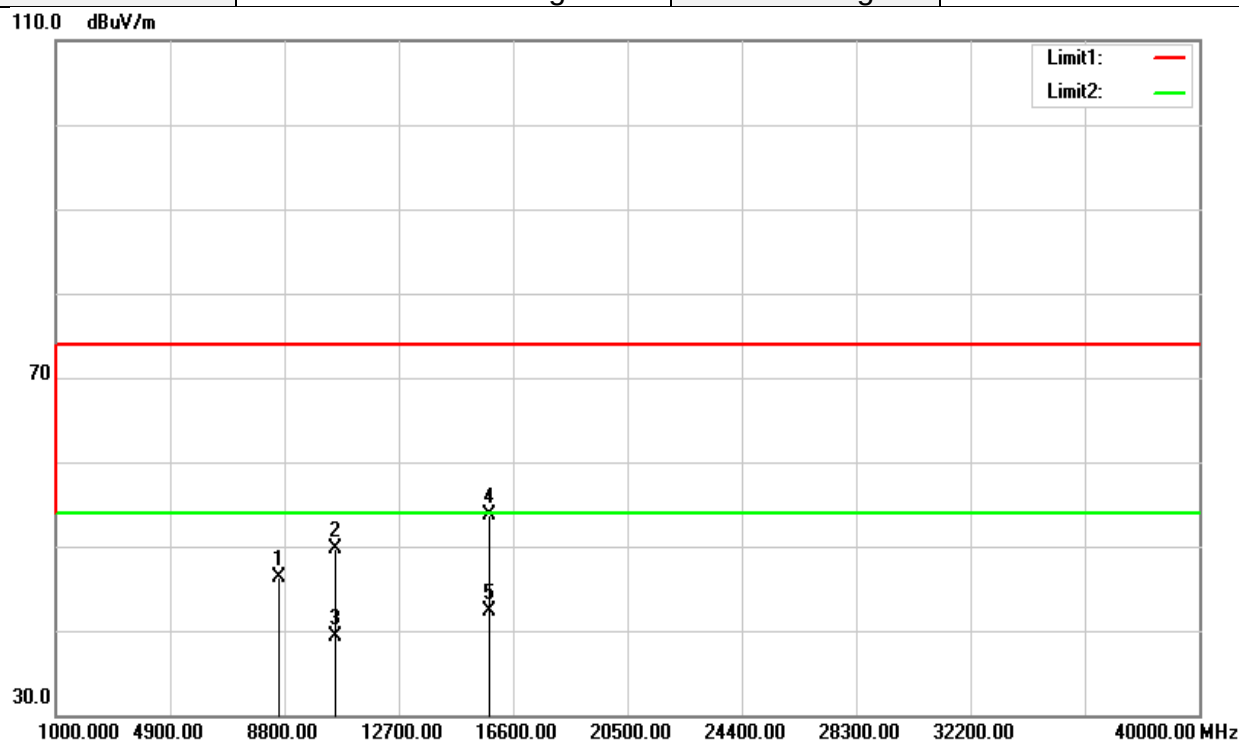


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8610.000	32.38	13.69	46.07	74.00	-27.93	peak
10640.000	31.78	17.04	48.82	74.00	-25.18	peak
10640.000	20.62	17.04	37.66	54.00	-16.34	AVG
15960.000	33.75	19.40	53.15	74.00	-20.85	peak
15960.000	22.52	19.40	41.92	54.00	-12.08	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

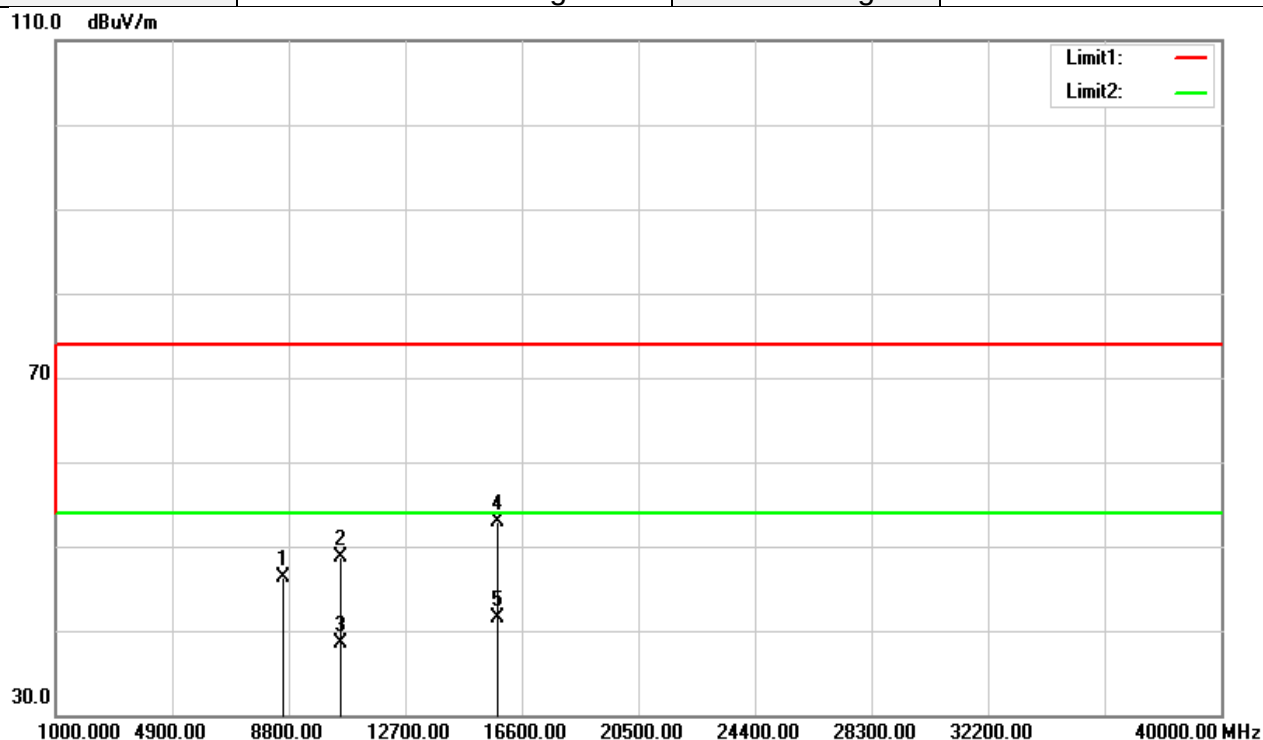


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8610.000	32.52	13.69	46.21	74.00	-27.79	peak
10540.000	32.62	17.13	49.75	74.00	-24.25	peak
10540.000	22.20	17.13	39.33	54.00	-14.67	AVG
15810.000	34.34	19.27	53.61	74.00	-20.39	peak
15810.000	22.94	19.27	42.21	54.00	-11.79	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

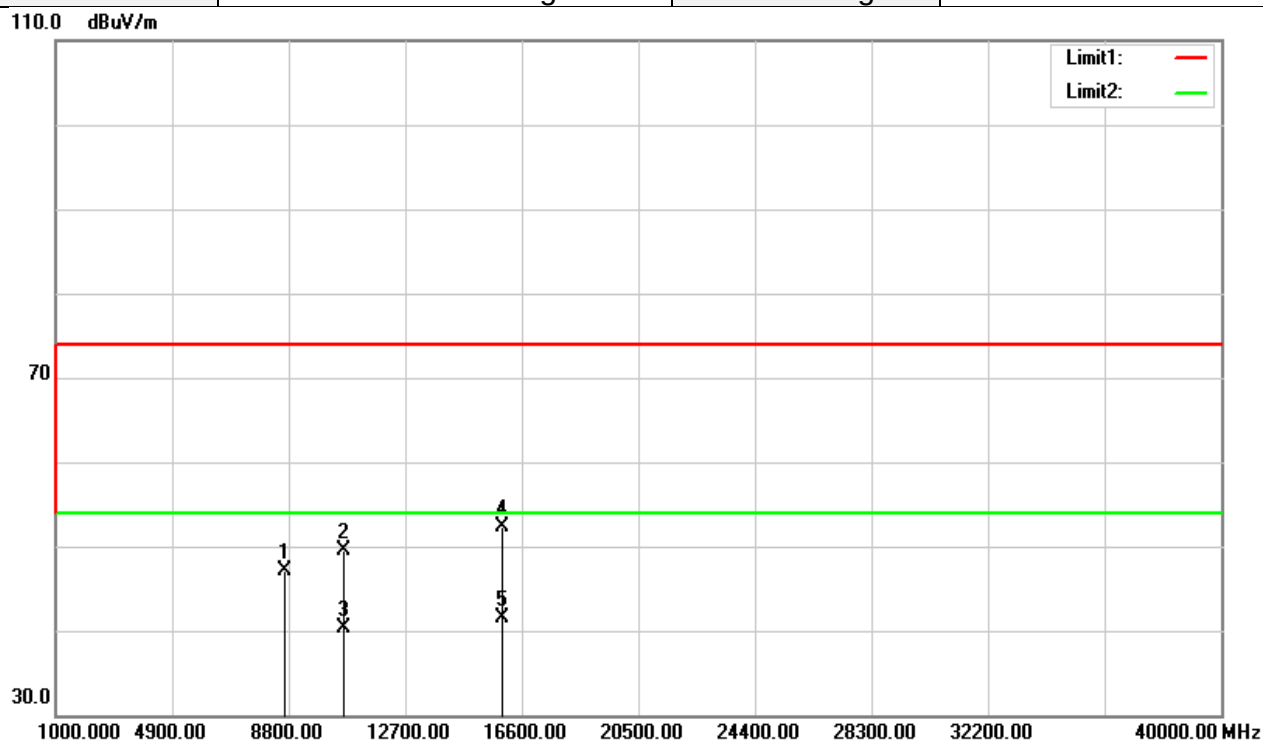


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8630.000	32.65	13.70	46.35	74.00	-27.65	peak
10540.000	31.64	17.13	48.77	74.00	-25.23	peak
10540.000	21.43	17.13	38.56	54.00	-15.44	AVG
15810.000	33.54	19.27	52.81	74.00	-21.19	peak
15810.000	22.16	19.27	41.43	54.00	-12.57	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

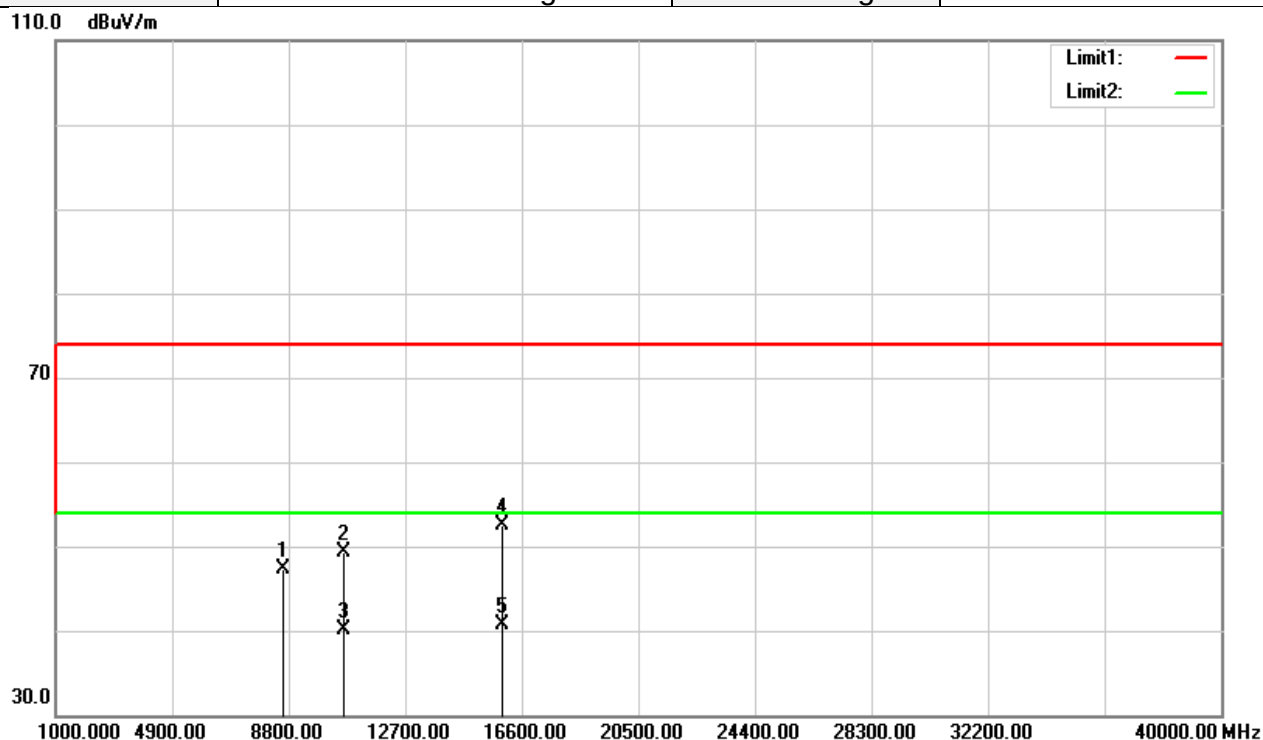


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8660.000	33.46	13.71	47.17	74.00	-26.83	peak
10620.000	32.52	17.06	49.58	74.00	-24.42	peak
10620.000	23.21	17.06	40.27	54.00	-13.73	AVG
15930.000	32.95	19.37	52.32	74.00	-21.68	peak
15930.000	22.14	19.37	41.51	54.00	-12.49	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz



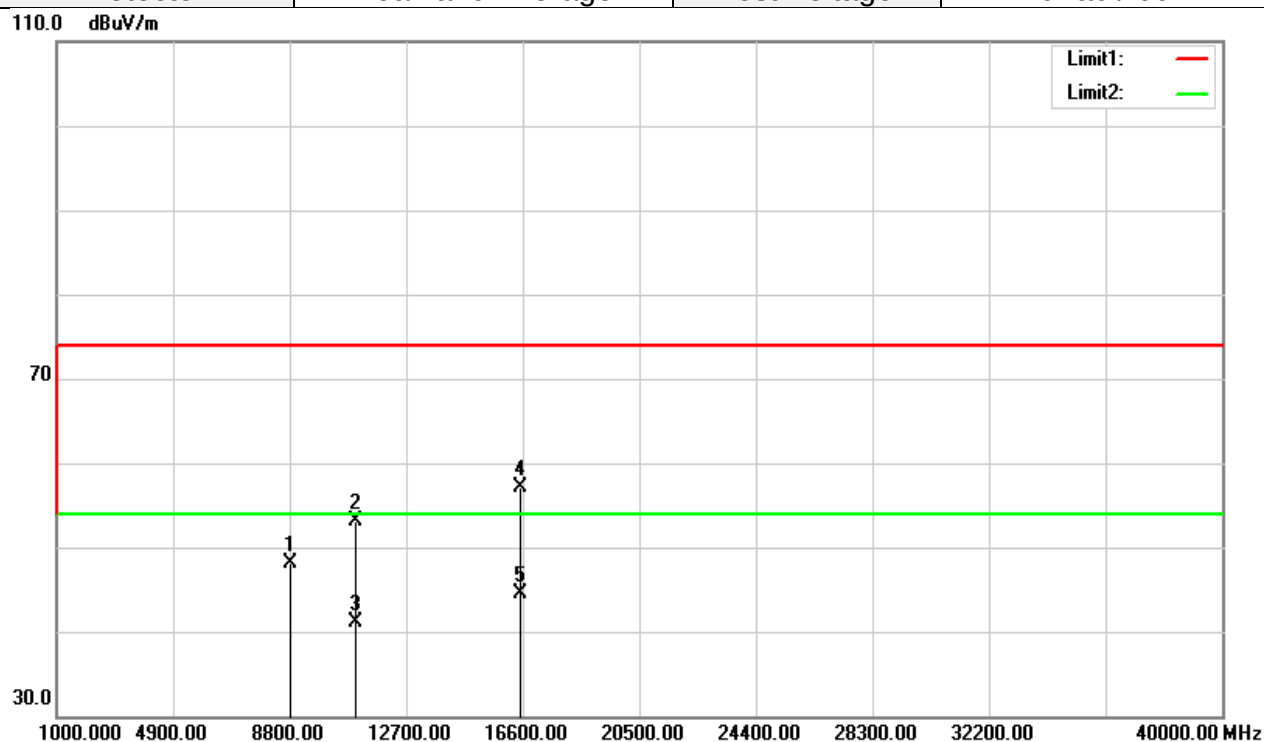
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8610.000	33.71	13.69	47.40	74.00	-26.60	peak
10620.000	32.28	17.06	49.34	74.00	-24.66	peak
10620.000	23.01	17.06	40.07	54.00	-13.93	AVG
15930.000	33.20	19.37	52.57	74.00	-21.43	peak
15930.000	21.42	19.37	40.79	54.00	-13.21	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Above 1G Test Data for UNII-2c

Test Mode	IEEE 802.11a Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

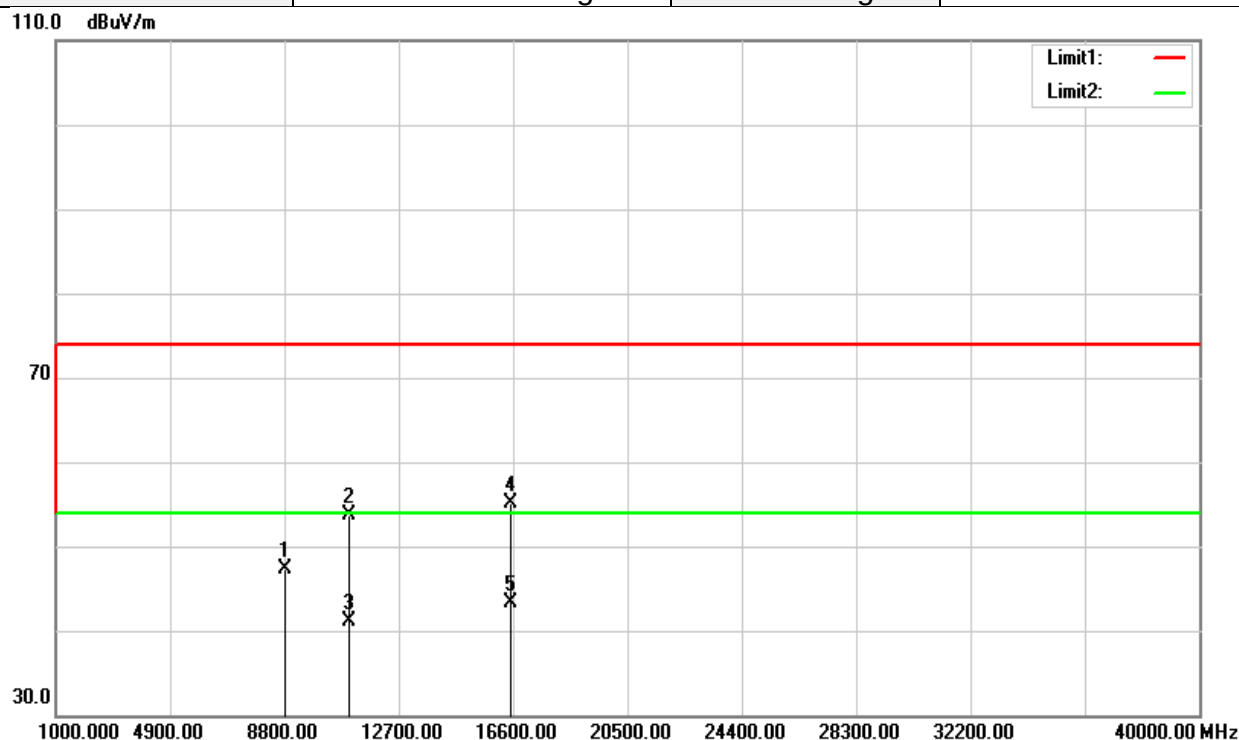


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8810.000	34.41	13.78	48.19	74.00	-25.81	peak
11000.000	36.46	16.73	53.19	74.00	-20.81	peak
11000.000	24.35	16.73	41.08	54.00	-12.92	AVG
16500.000	35.66	21.39	57.05	74.00	-16.95	peak
16500.000	23.18	21.39	44.57	54.00	-9.43	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

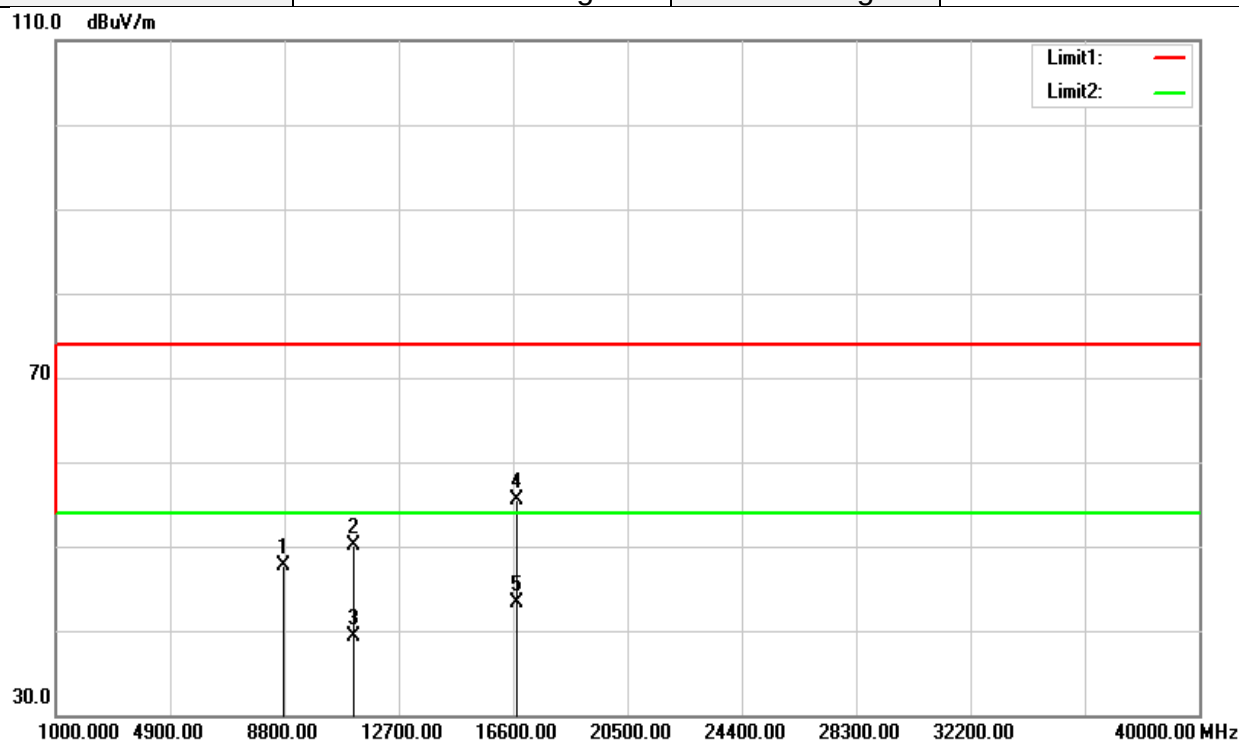


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8820.000	33.46	13.79	47.25	74.00	-26.75	peak
11000.000	36.90	16.73	53.63	74.00	-20.37	peak
11000.000	24.44	16.73	41.17	54.00	-12.83	AVG
16500.000	33.79	21.39	55.18	74.00	-18.82	peak
16500.000	21.91	21.39	43.30	54.00	-10.70	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

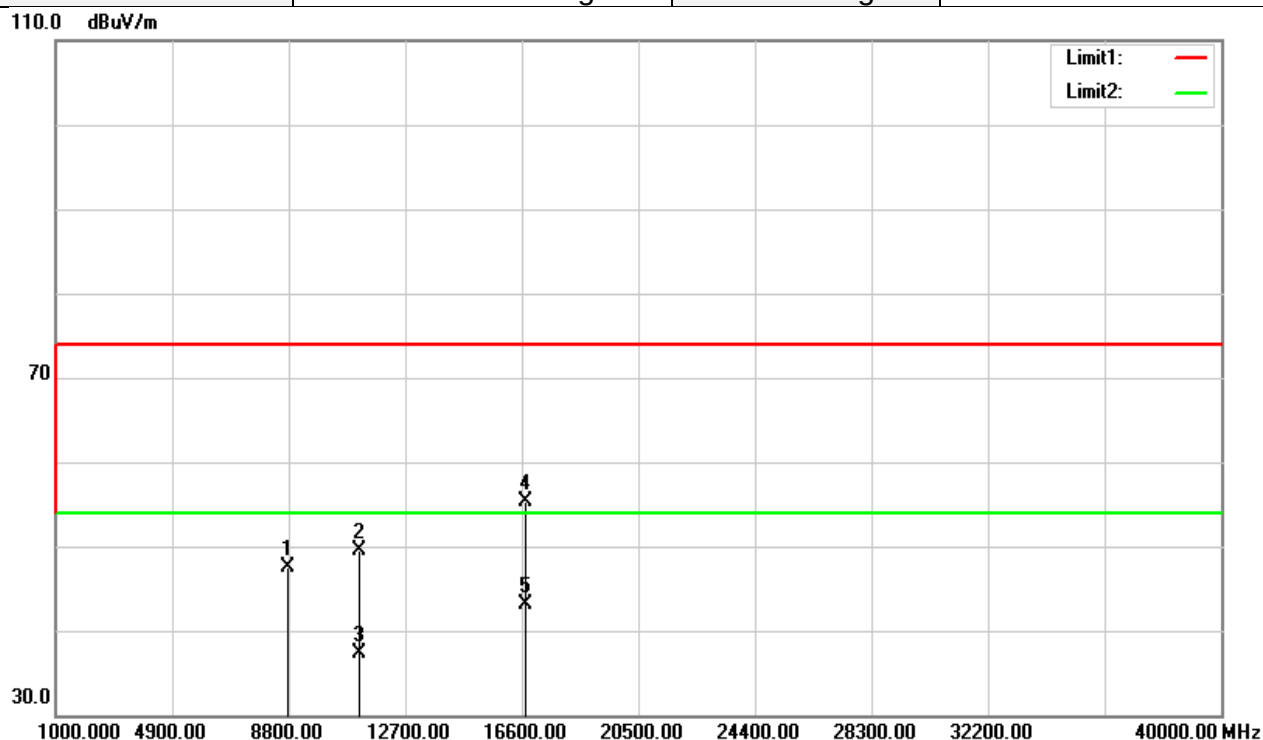


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8760.000	33.86	13.76	47.62	74.00	-26.38	peak
11160.000	33.33	16.75	50.08	74.00	-23.92	peak
11160.000	22.46	16.75	39.21	54.00	-14.79	AVG
16740.000	32.75	22.82	55.57	74.00	-18.43	peak
16740.000	20.57	22.82	43.39	54.00	-10.61	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

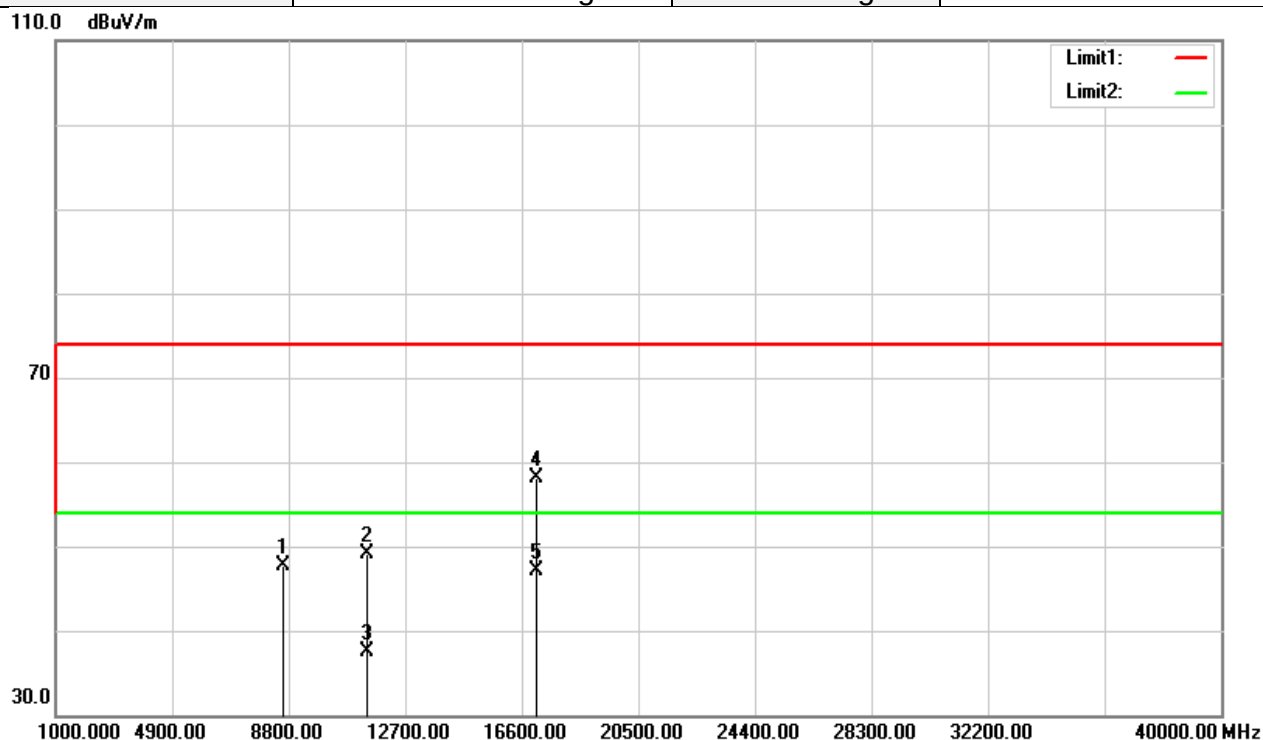


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8750.000	33.75	13.75	47.50	74.00	-26.50	peak
11160.000	32.67	16.75	49.42	74.00	-24.58	peak
11160.000	20.53	16.75	37.28	54.00	-16.72	AVG
16740.000	32.42	22.82	55.24	74.00	-18.76	peak
16740.000	20.27	22.82	43.09	54.00	-10.91	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

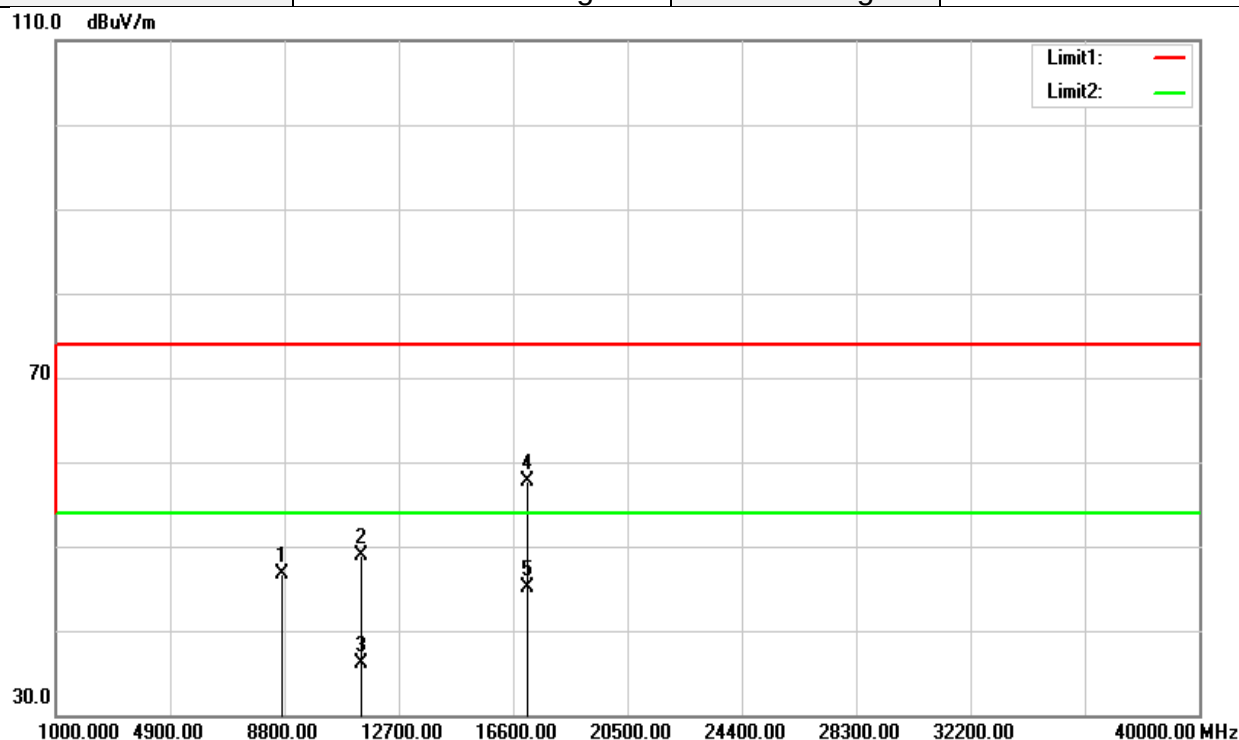


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8630.000	34.08	13.70	47.78	74.00	-26.22	peak
11400.000	32.39	16.77	49.16	74.00	-24.84	peak
11400.000	20.72	16.77	37.49	54.00	-16.51	AVG
17100.000	33.34	24.75	58.09	74.00	-15.91	peak
17100.000	22.26	24.75	47.01	54.00	-6.99	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

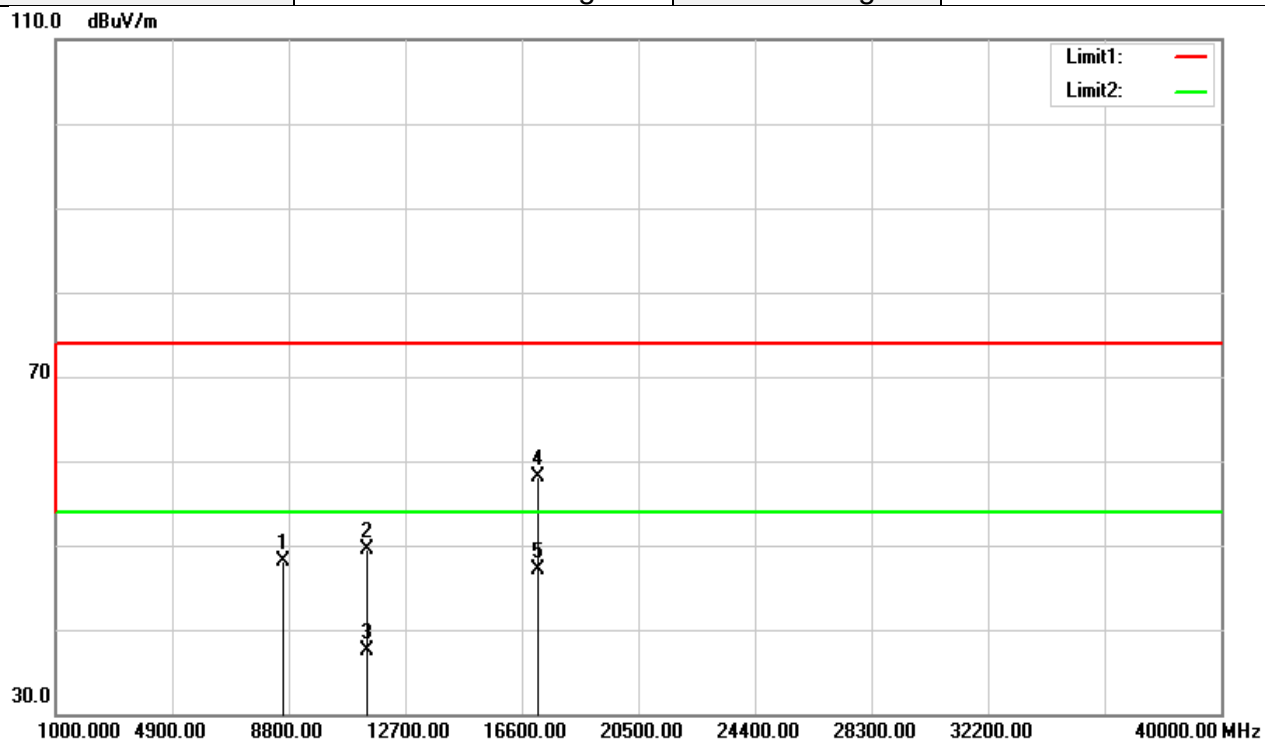


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8720.000	33.04	13.74	46.78	74.00	-27.22	peak
11400.000	32.12	16.77	48.89	74.00	-25.11	peak
11400.000	19.42	16.77	36.19	54.00	-17.81	AVG
17100.000	33.01	24.75	57.76	74.00	-16.24	peak
17100.000	20.32	24.75	45.07	54.00	-8.93	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a Cross CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

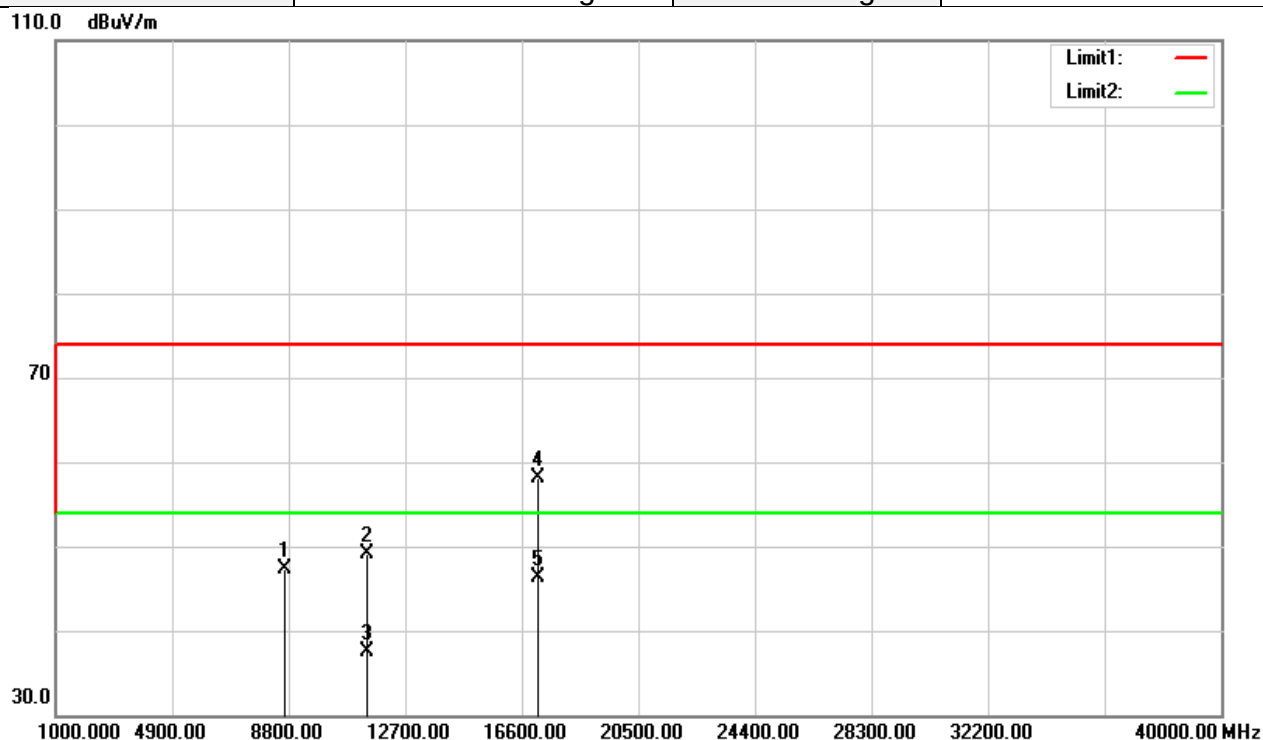


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8610.000	34.45	13.69	48.14	74.00	-25.86	peak
11440.000	32.75	16.77	49.52	74.00	-24.48	peak
11440.000	20.82	16.77	37.59	54.00	-16.41	AVG
17160.000	33.17	24.99	58.16	74.00	-15.84	peak
17160.000	22.09	24.99	47.08	54.00	-6.92	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a Cross CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

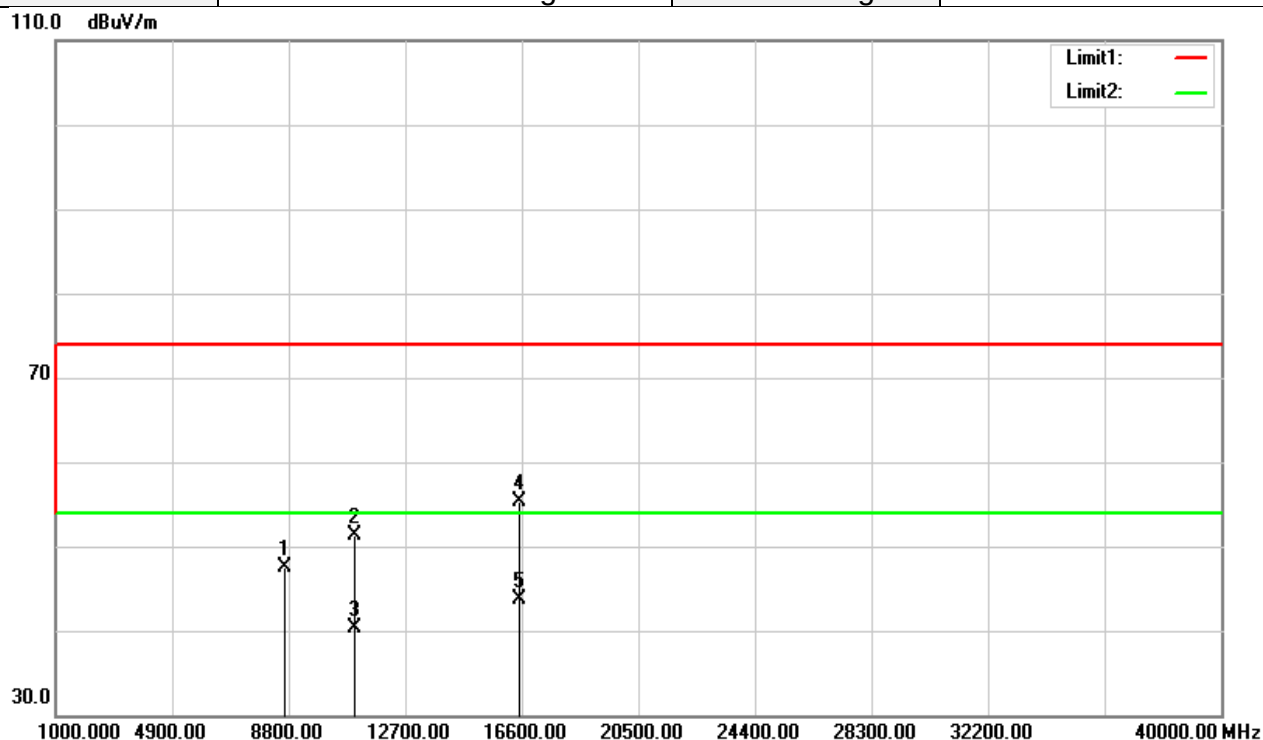


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8690.000	33.58	13.73	47.31	74.00	-26.69	peak
11440.000	32.40	16.77	49.17	74.00	-24.83	peak
11440.000	20.75	16.77	37.52	54.00	-16.48	AVG
17160.000	33.10	24.99	58.09	74.00	-15.91	peak
17160.000	21.39	24.99	46.38	54.00	-7.62	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

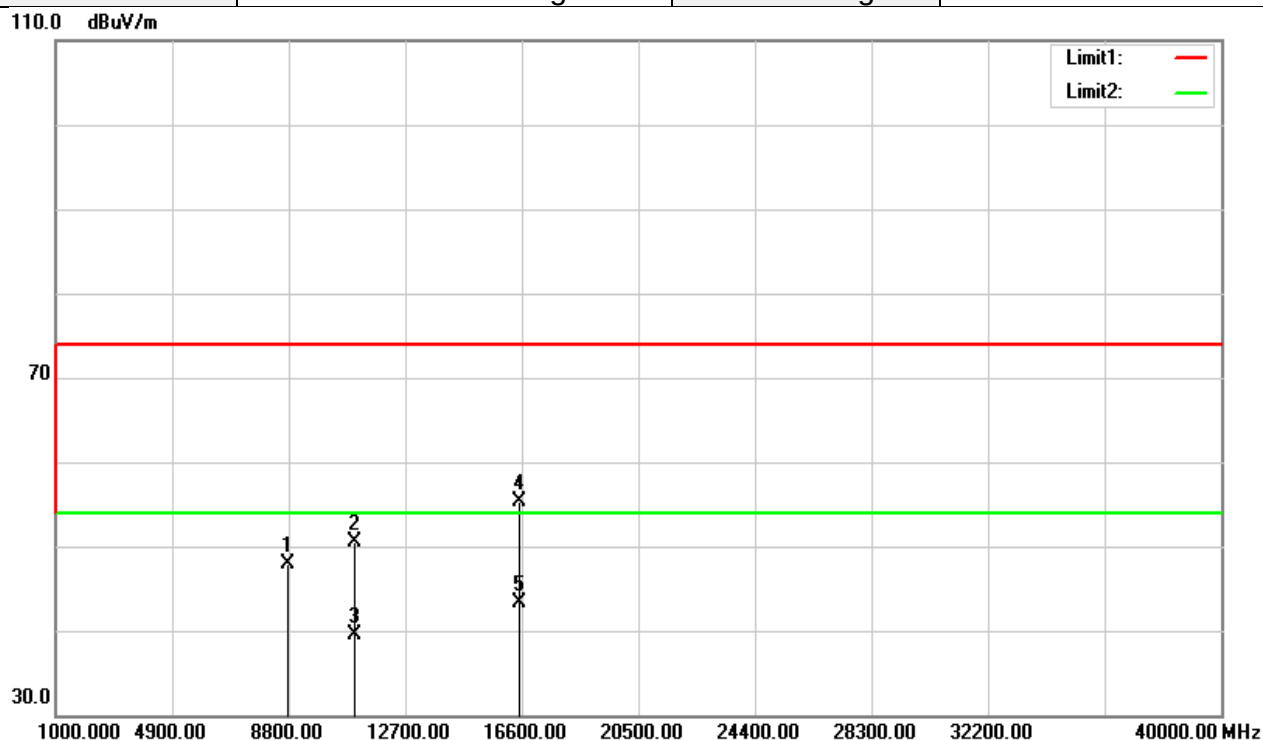


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8650.000	33.87	13.71	47.58	74.00	-26.42	peak
11000.000	34.66	16.73	51.39	74.00	-22.61	peak
11000.000	23.60	16.73	40.33	54.00	-13.67	AVG
16500.000	33.95	21.39	55.34	74.00	-18.66	peak
16500.000	22.28	21.39	43.67	54.00	-10.33	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

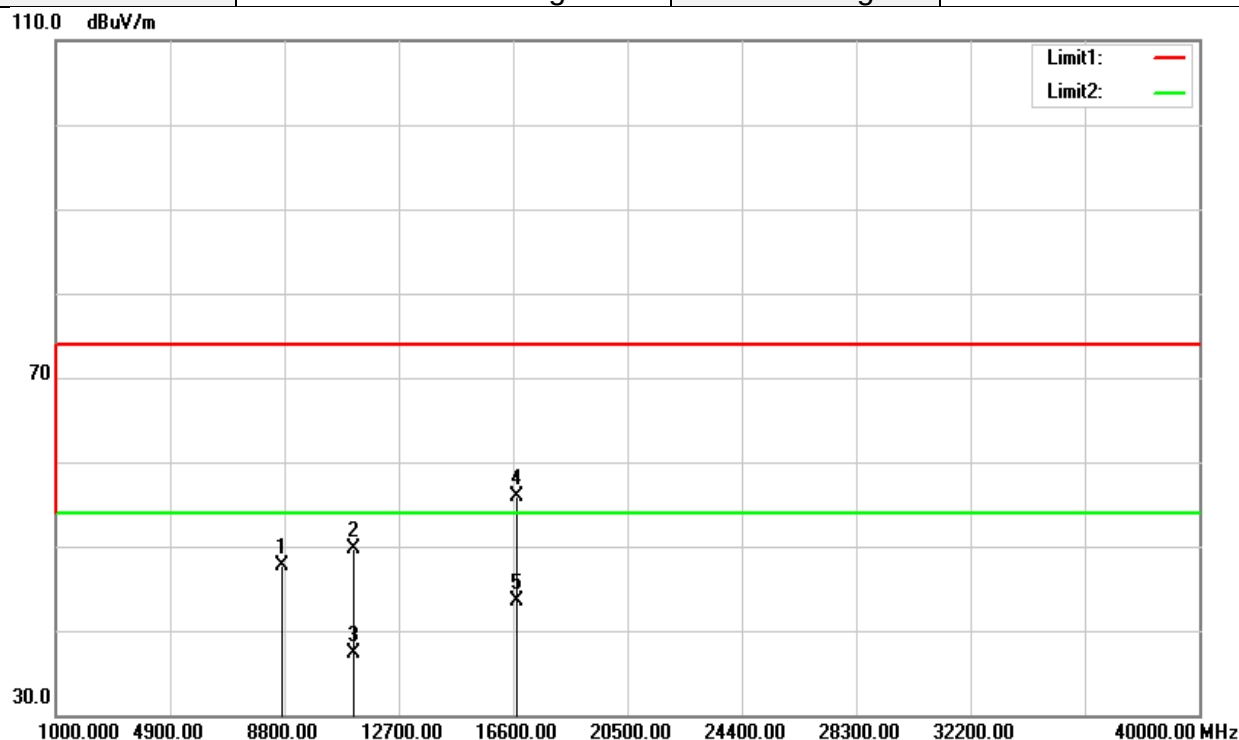


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8760.000	34.20	13.76	47.96	74.00	-26.04	peak
11000.000	33.73	16.73	50.46	74.00	-23.54	peak
11000.000	22.68	16.73	39.41	54.00	-14.59	AVG
16500.000	33.95	21.39	55.34	74.00	-18.66	peak
16500.000	21.93	21.39	43.32	54.00	-10.68	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

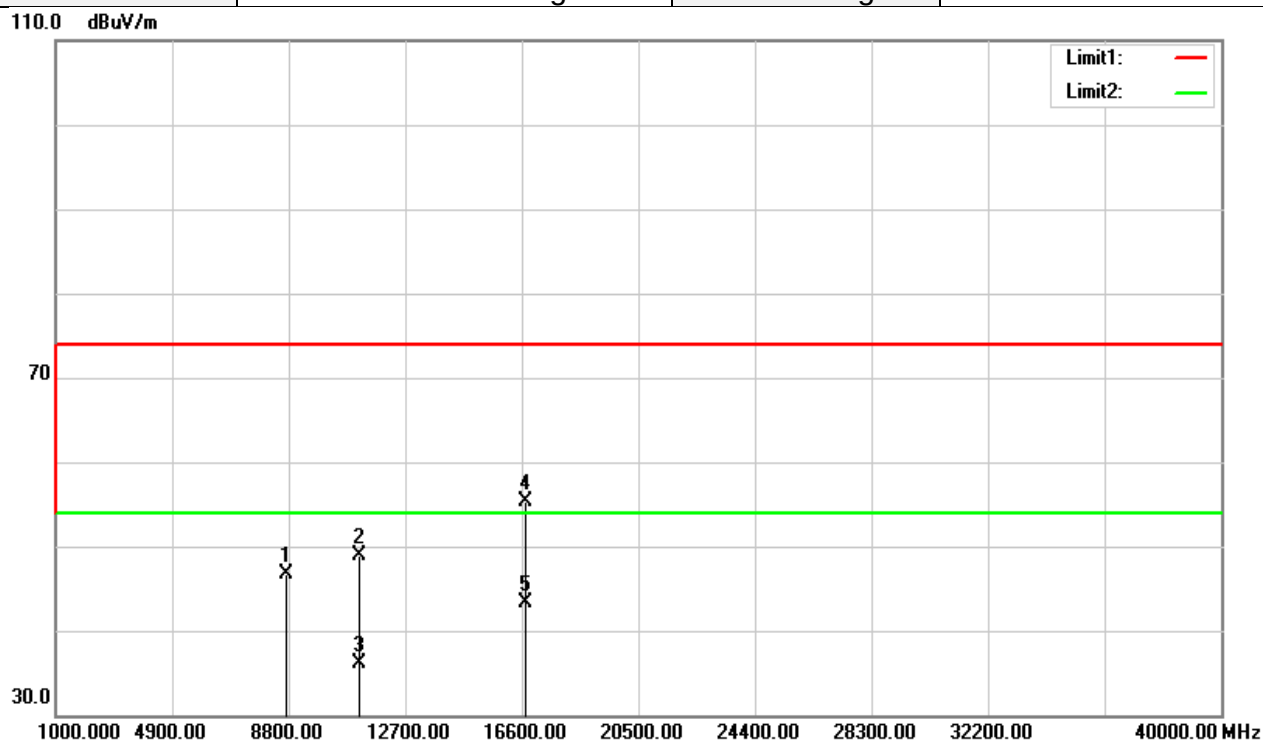


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8730.000	33.86	13.75	47.61	74.00	-26.39	peak
11160.000	33.01	16.75	49.76	74.00	-24.24	peak
11160.000	20.63	16.75	37.38	54.00	-16.62	AVG
16740.000	32.99	22.82	55.81	74.00	-18.19	peak
16740.000	20.76	22.82	43.58	54.00	-10.42	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

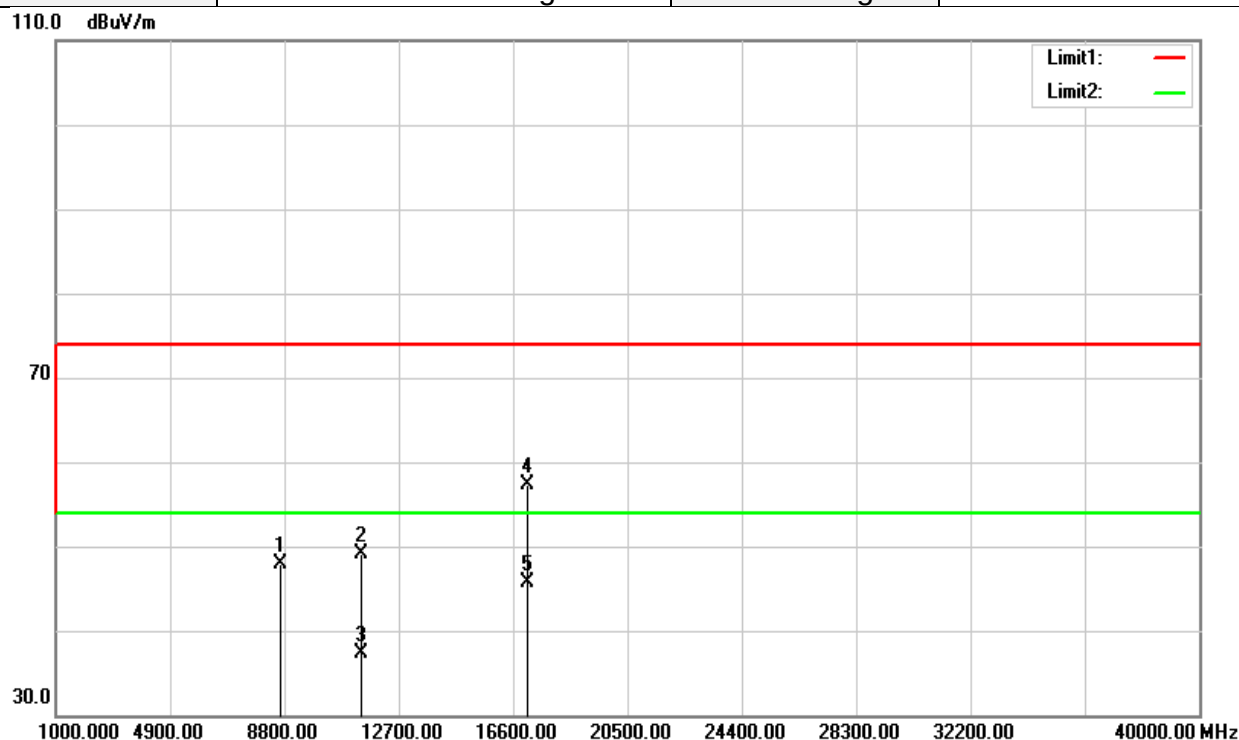


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8740.000	32.97	13.75	46.72	74.00	-27.28	peak
11160.000	32.09	16.75	48.84	74.00	-25.16	peak
11160.000	19.43	16.75	36.18	54.00	-17.82	AVG
16740.000	32.52	22.82	55.34	74.00	-18.66	peak
16740.000	20.45	22.82	43.27	54.00	-10.73	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

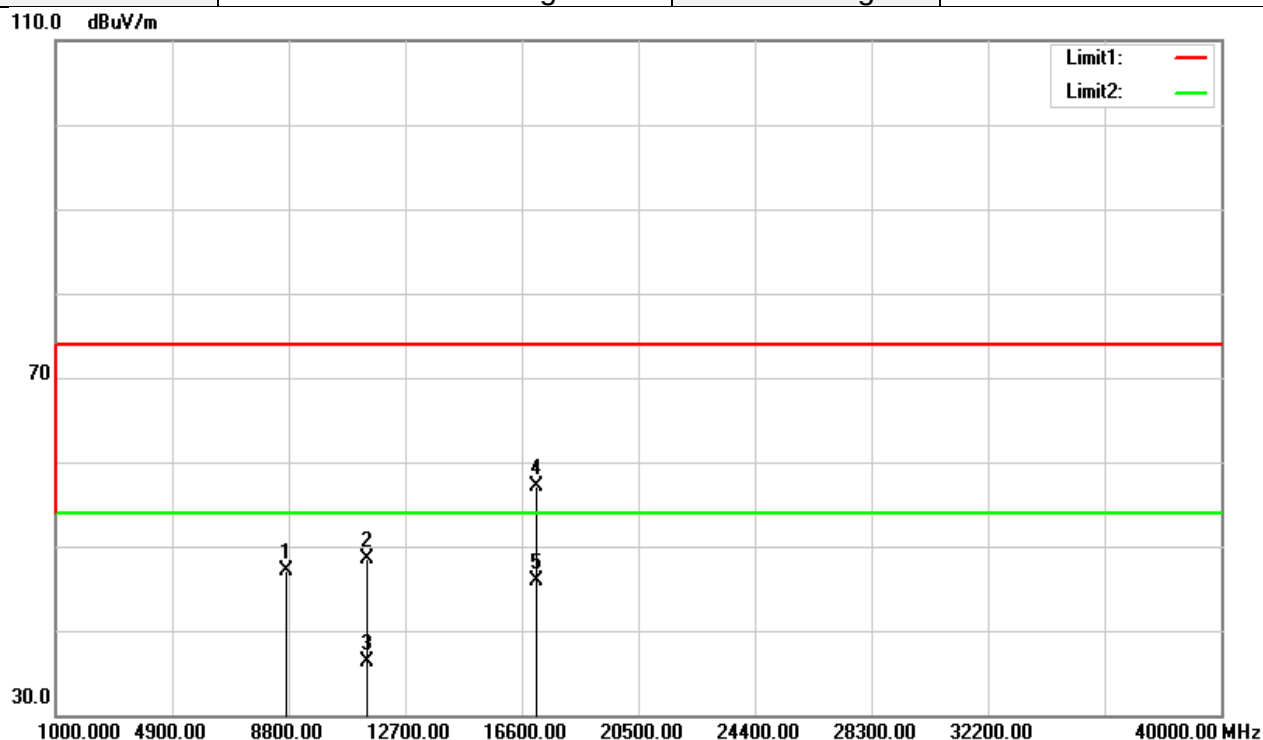


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8690.000	34.11	13.73	47.84	74.00	-26.16	peak
11400.000	32.29	16.77	49.06	74.00	-24.94	peak
11400.000	20.47	16.77	37.24	54.00	-16.76	AVG
17100.000	32.56	24.75	57.31	74.00	-16.69	peak
17100.000	20.98	24.75	45.73	54.00	-8.27	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

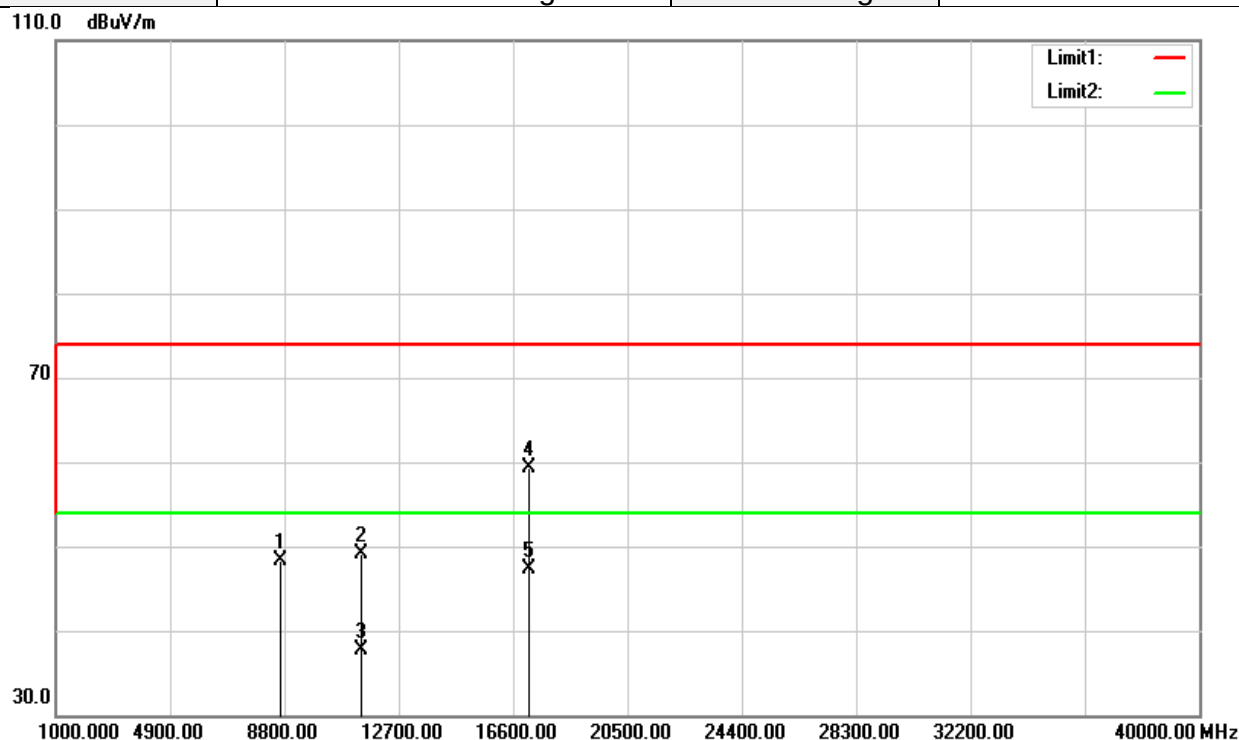


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8740.000	33.26	13.75	47.01	74.00	-26.99	peak
11400.000	31.71	16.77	48.48	74.00	-25.52	peak
11400.000	19.60	16.77	36.37	54.00	-17.63	AVG
17100.000	32.43	24.75	57.18	74.00	-16.82	peak
17100.000	21.11	24.75	45.86	54.00	-8.14	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Cross CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

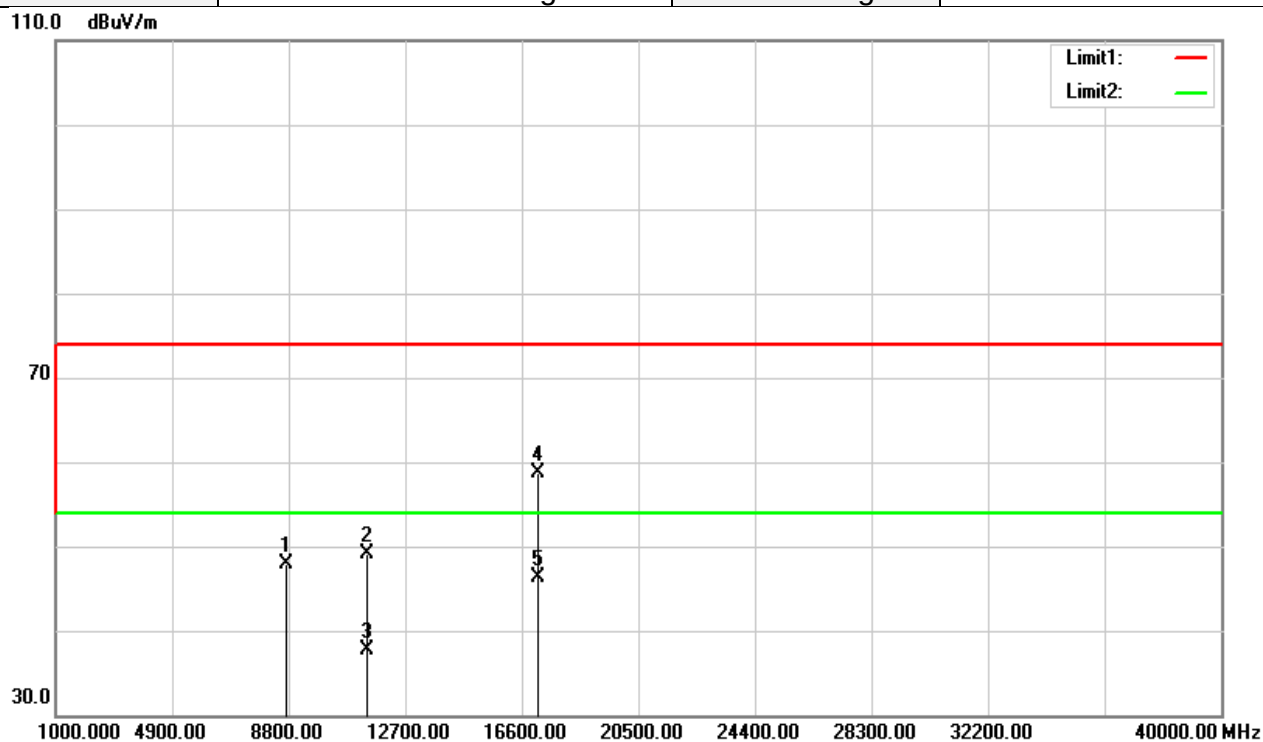


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8680.000	34.54	13.72	48.26	74.00	-25.74	peak
11440.000	32.40	16.77	49.17	74.00	-24.83	peak
11440.000	20.87	16.77	37.64	54.00	-16.36	AVG
17160.000	34.25	24.99	59.24	74.00	-14.76	peak
17160.000	22.32	24.99	47.31	54.00	-6.69	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Cross CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

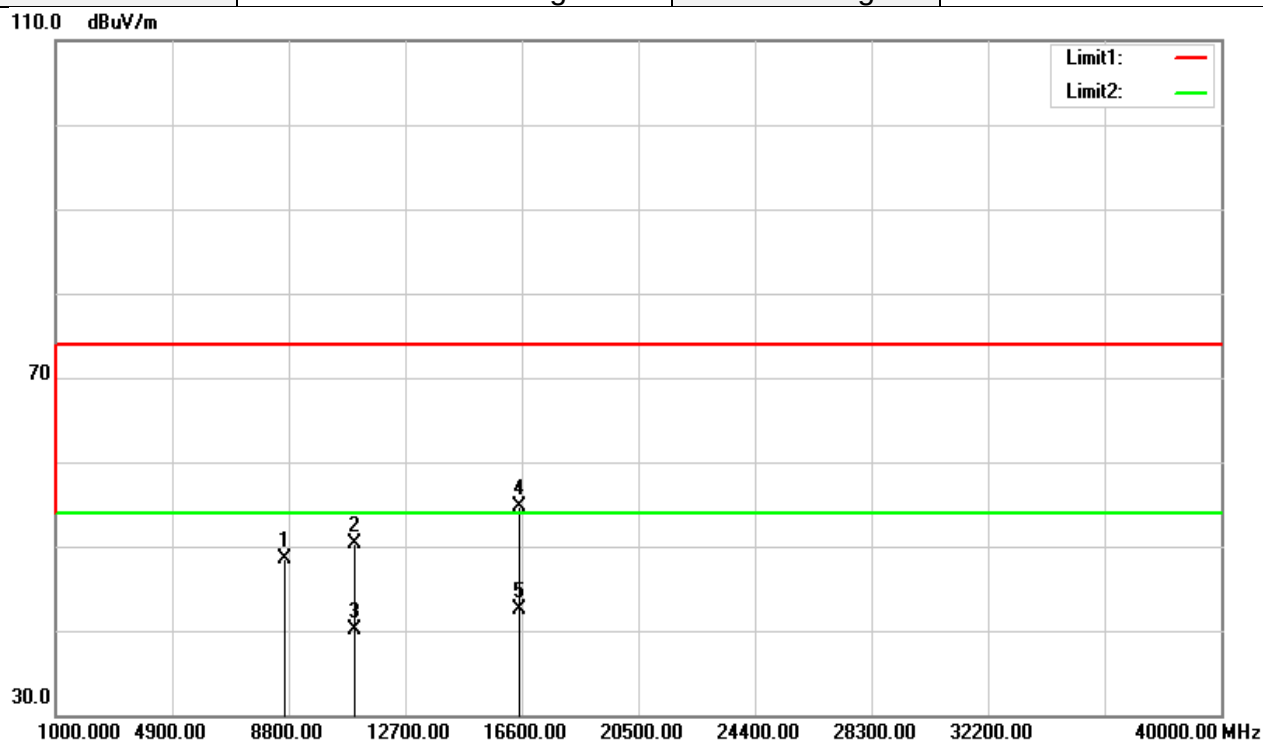


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8710.000	34.09	13.74	47.83	74.00	-26.17	peak
11440.000	32.39	16.77	49.16	74.00	-24.84	peak
11440.000	21.03	16.77	37.80	54.00	-16.20	AVG
17160.000	33.67	24.99	58.66	74.00	-15.34	peak
17160.000	21.40	24.99	46.39	54.00	-7.61	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

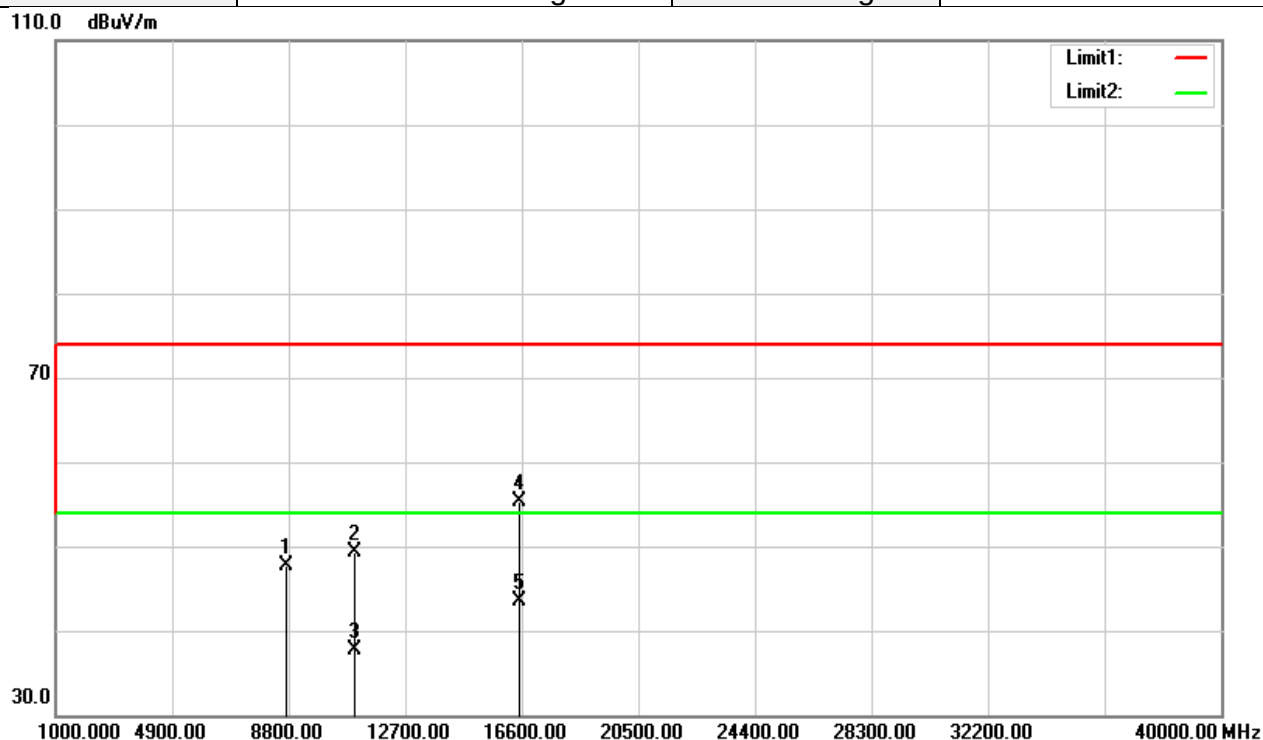


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8660.000	34.72	13.71	48.43	74.00	-25.57	peak
11020.000	33.50	16.73	50.23	74.00	-23.77	peak
11020.000	23.35	16.73	40.08	54.00	-13.92	AVG
16530.000	33.15	21.57	54.72	74.00	-19.28	peak
16530.000	20.84	21.57	42.41	54.00	-11.59	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

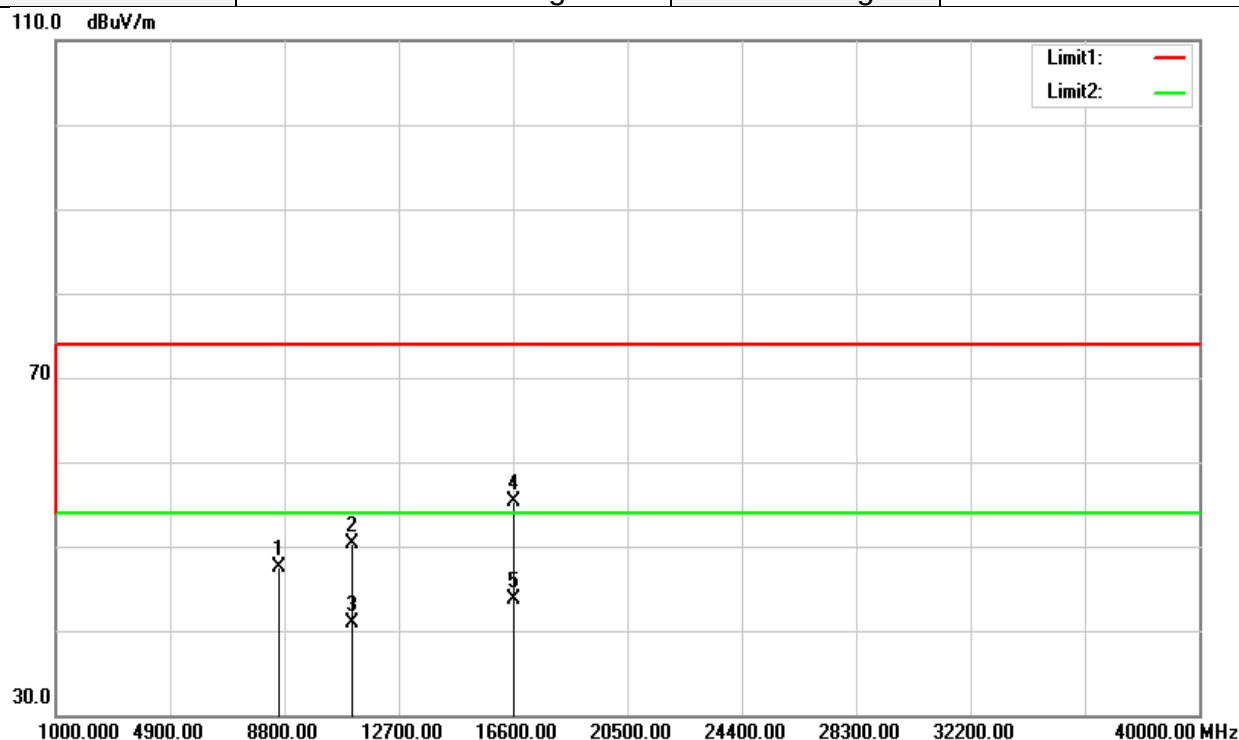


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8710.000	33.87	13.74	47.61	74.00	-26.39	peak
11020.000	32.58	16.73	49.31	74.00	-24.69	peak
11020.000	20.96	16.73	37.69	54.00	-16.31	AVG
16530.000	33.76	21.57	55.33	74.00	-18.67	peak
16530.000	22.00	21.57	43.57	54.00	-10.43	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

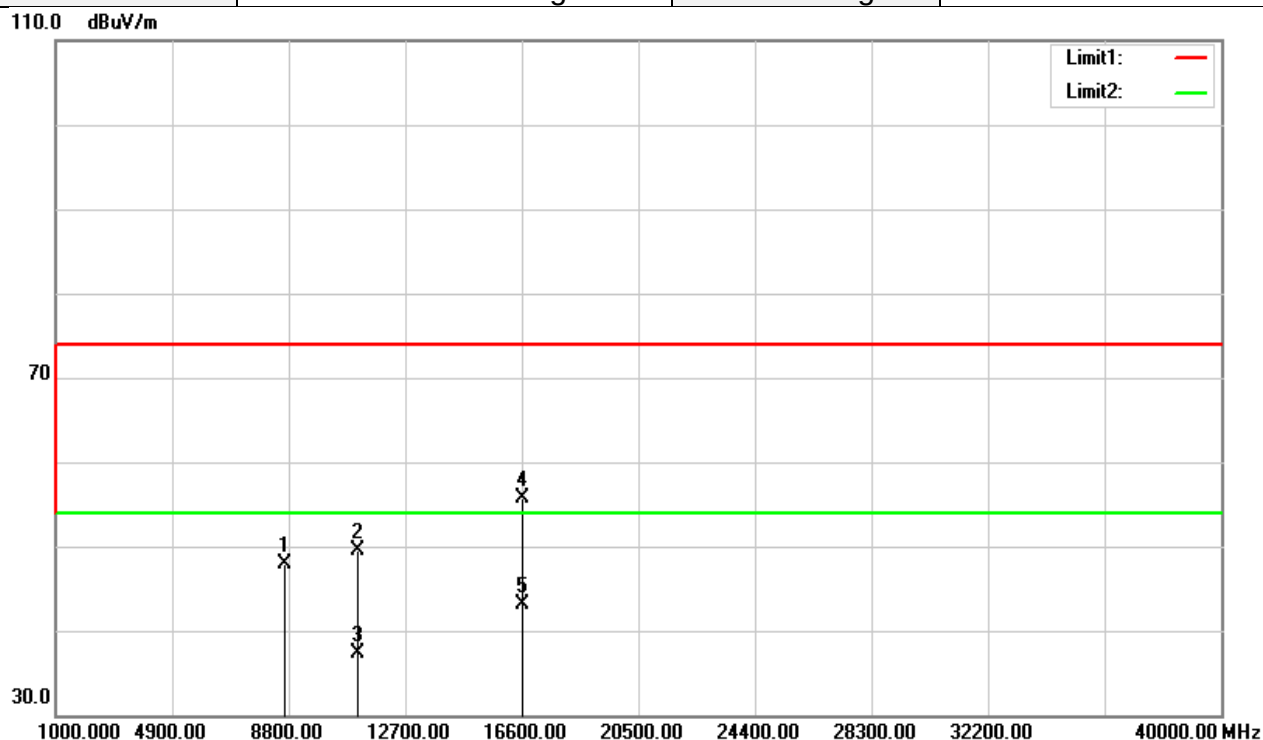


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8640.000	33.76	13.70	47.46	74.00	-26.54	peak
11100.000	33.50	16.74	50.24	74.00	-23.76	peak
11100.000	24.17	16.74	40.91	54.00	-13.09	AVG
16650.000	32.97	22.28	55.25	74.00	-18.75	peak
16650.000	21.44	22.28	43.72	54.00	-10.28	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

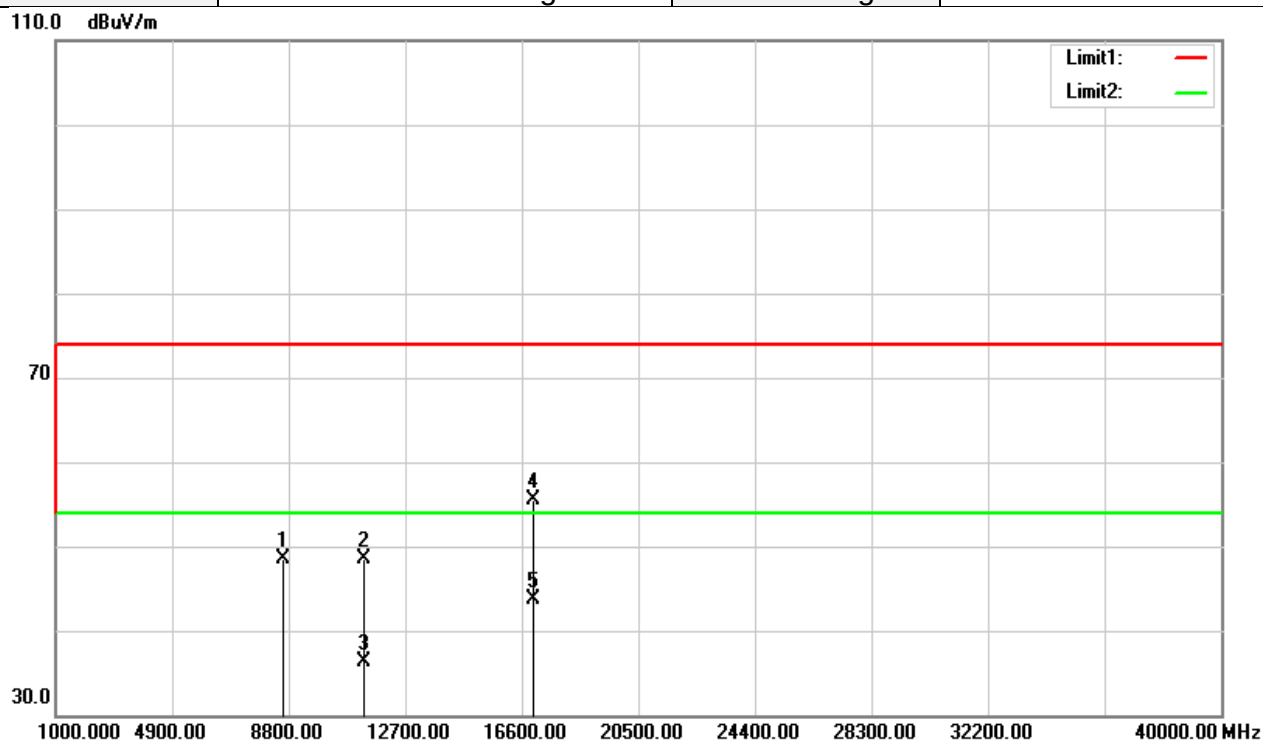


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8650.000	34.14	13.71	47.85	74.00	-26.15	peak
11100.000	32.70	16.74	49.44	74.00	-24.56	peak
11100.000	20.49	16.74	37.23	54.00	-16.77	AVG
16650.000	33.46	22.28	55.74	74.00	-18.26	peak
16650.000	20.84	22.28	43.12	54.00	-10.88	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

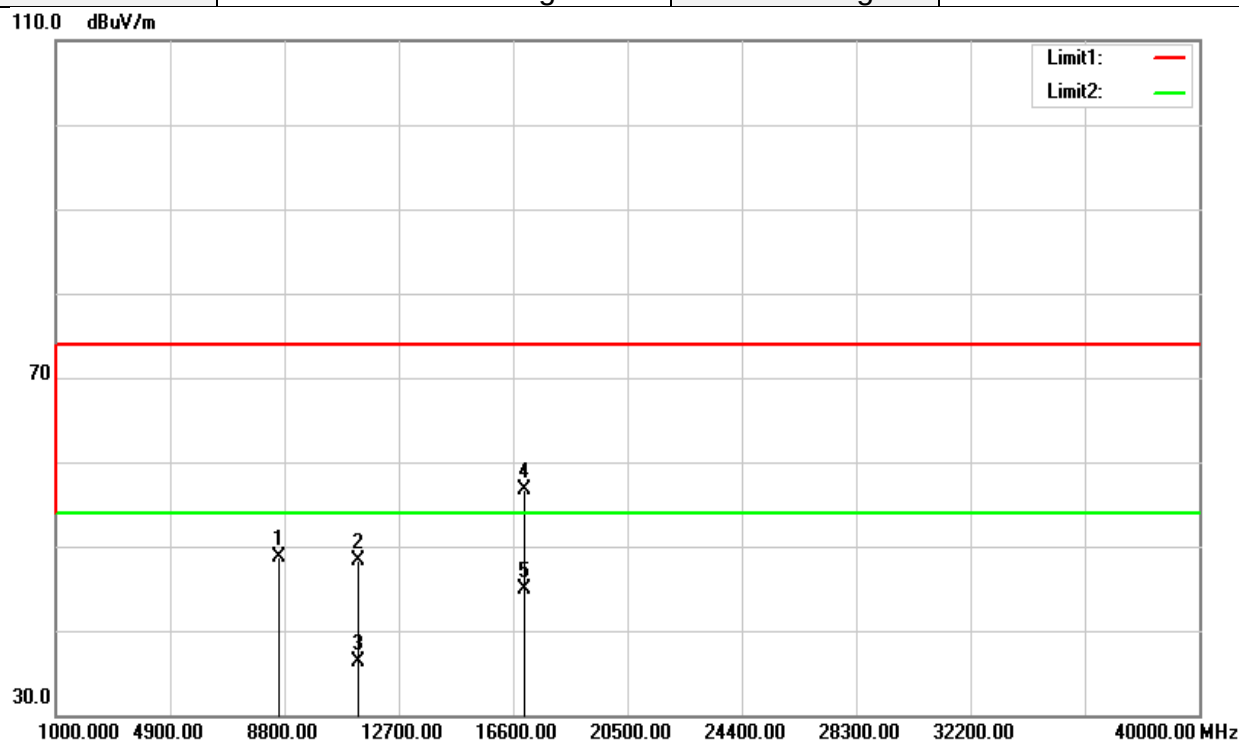


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8630.000	34.81	13.70	48.51	74.00	-25.49	peak
11340.000	31.81	16.76	48.57	74.00	-25.43	peak
11340.000	19.63	16.76	36.39	54.00	-17.61	AVG
17010.000	31.05	24.40	55.45	74.00	-18.55	peak
17010.000	19.26	24.40	43.66	54.00	-10.34	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

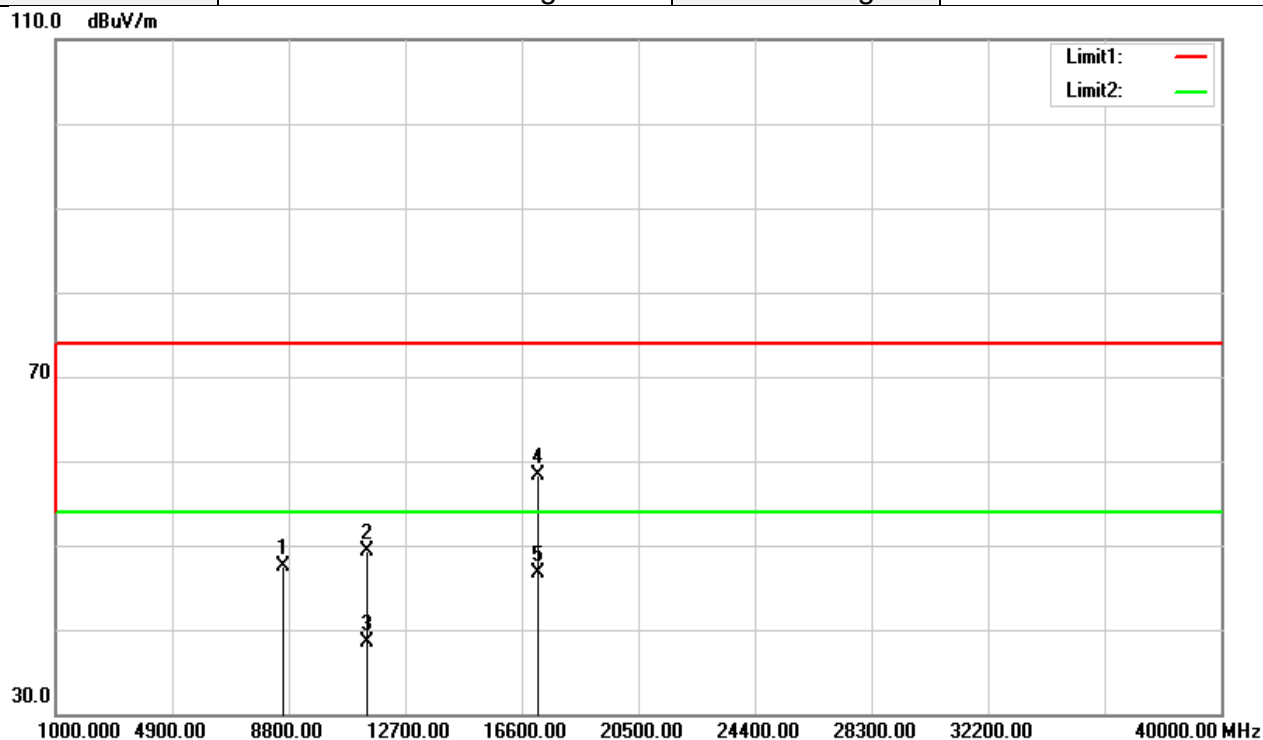


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8630.000	35.09	13.70	48.79	74.00	-25.21	peak
11340.000	31.59	16.76	48.35	74.00	-25.65	peak
11340.000	19.55	16.76	36.31	54.00	-17.69	AVG
17010.000	32.27	24.40	56.67	74.00	-17.33	peak
17010.000	20.42	24.40	44.82	54.00	-9.18	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Cross CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Vertical	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

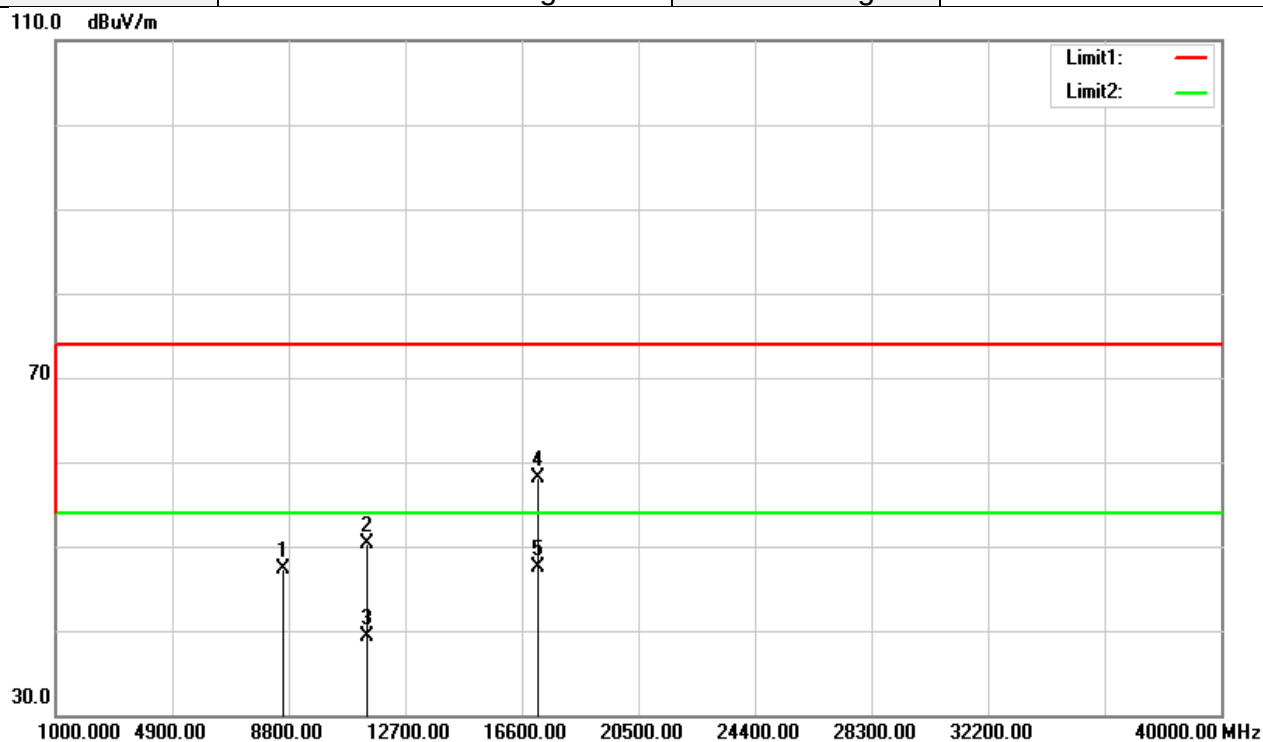


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8620.000	33.83	13.70	47.53	74.00	-26.47	peak
11420.000	32.56	16.77	49.33	74.00	-24.67	peak
11420.000	21.80	16.77	38.57	54.00	-15.43	AVG
17130.000	33.47	24.87	58.34	74.00	-15.66	peak
17130.000	21.83	24.87	46.70	54.00	-7.30	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Cross CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 6, 2017
Polarize	Horizontal	Test Engineer	Kevin Kuo
Detector	Peak and Average	Test Voltage	120Vac / 60Hz



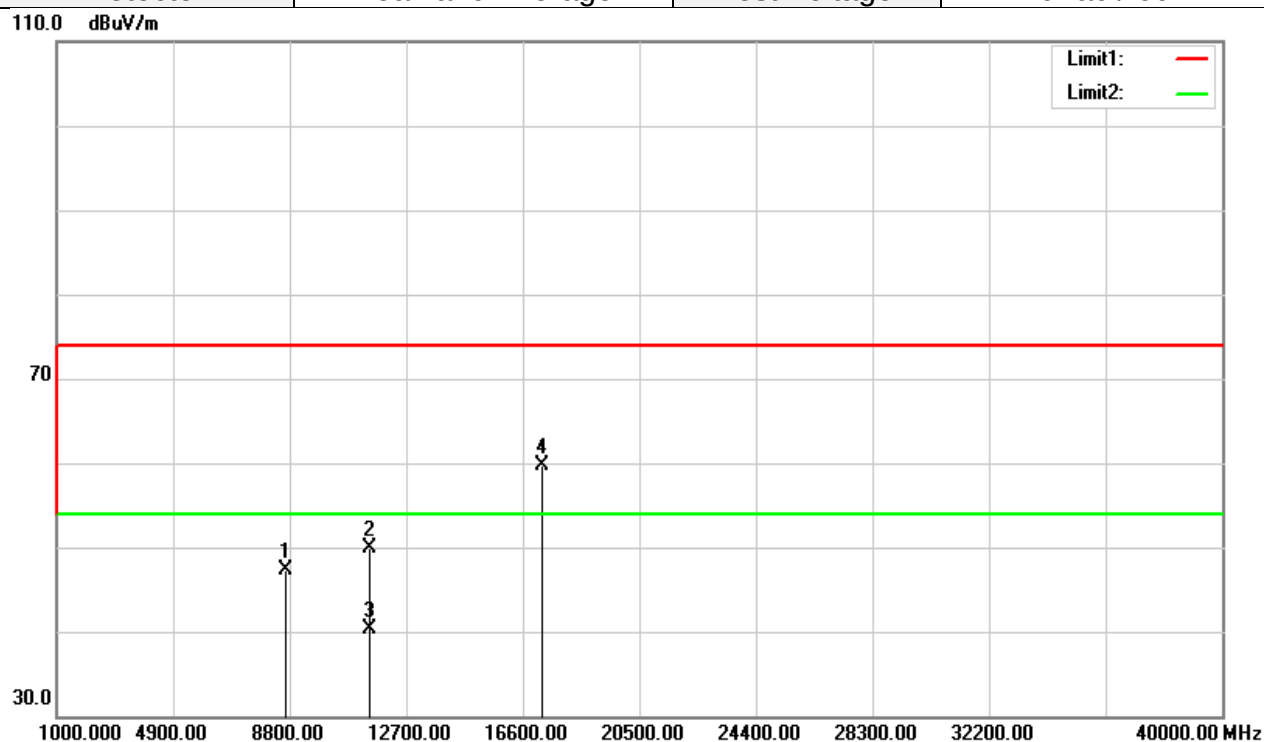
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8610.000	33.64	13.69	47.33	74.00	-26.67	peak
11420.000	33.45	16.77	50.22	74.00	-23.78	peak
11420.000	22.60	16.77	39.37	54.00	-14.63	AVG
17130.000	33.18	24.87	58.05	74.00	-15.95	peak
17130.000	22.70	24.87	47.57	54.00	-6.43	AVG

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Above 1G Test Data for UNII-3

Test Mode	IEEE 802.11a Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

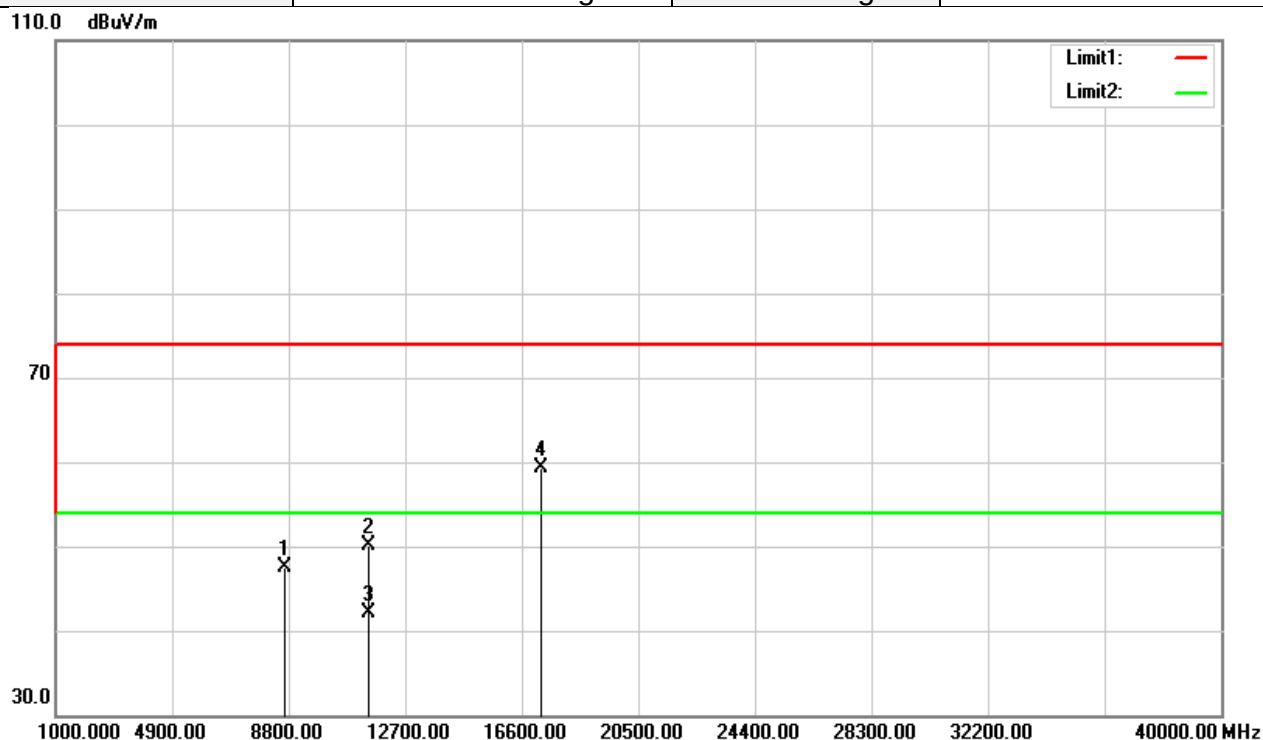


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8664.000	33.55	13.72	47.27	74.00	-26.73	peak
11490.000	33.04	16.78	49.82	74.00	-24.18	peak
11490.000	23.43	16.78	40.21	54.00	-13.79	AVG
17235.000	34.40	25.28	59.68	74.00	-14.32	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

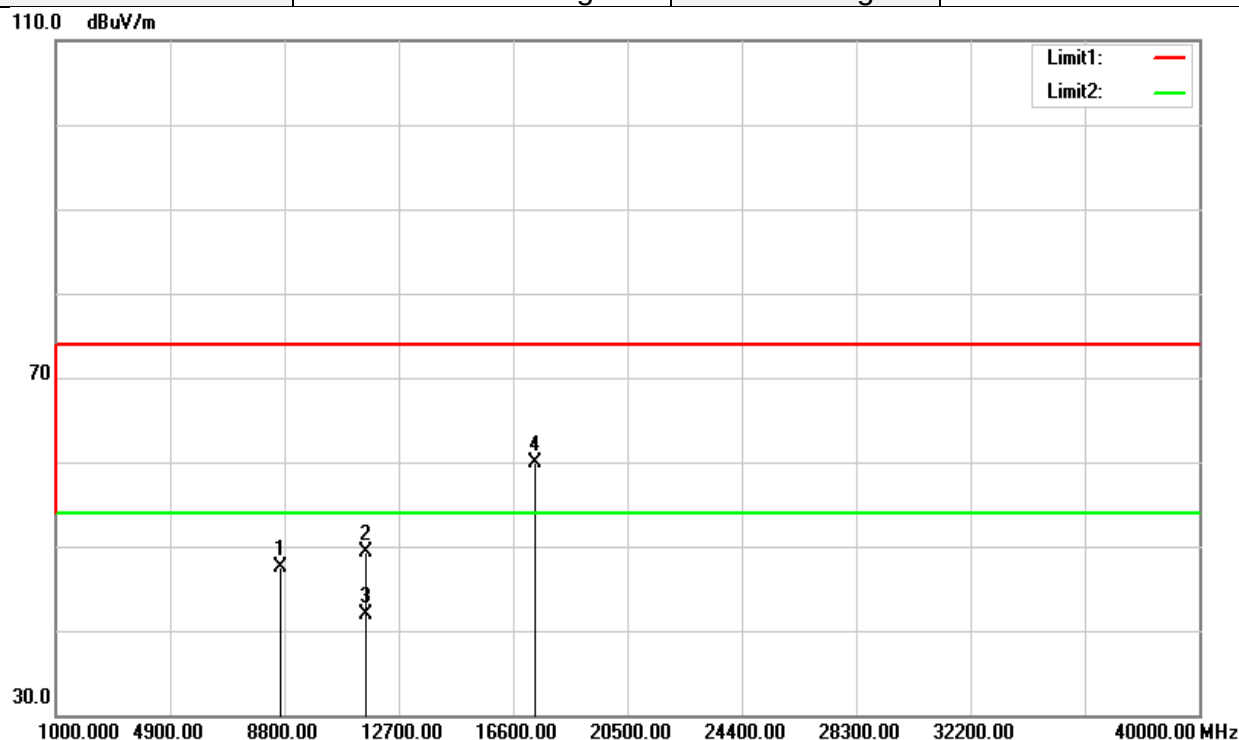


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8664.000	33.82	13.72	47.54	74.00	-26.46	peak
11490.000	33.31	16.78	50.09	74.00	-23.91	peak
11490.000	25.36	16.78	42.14	54.00	-11.86	AVG
17235.000	33.96	25.28	59.24	74.00	-14.76	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

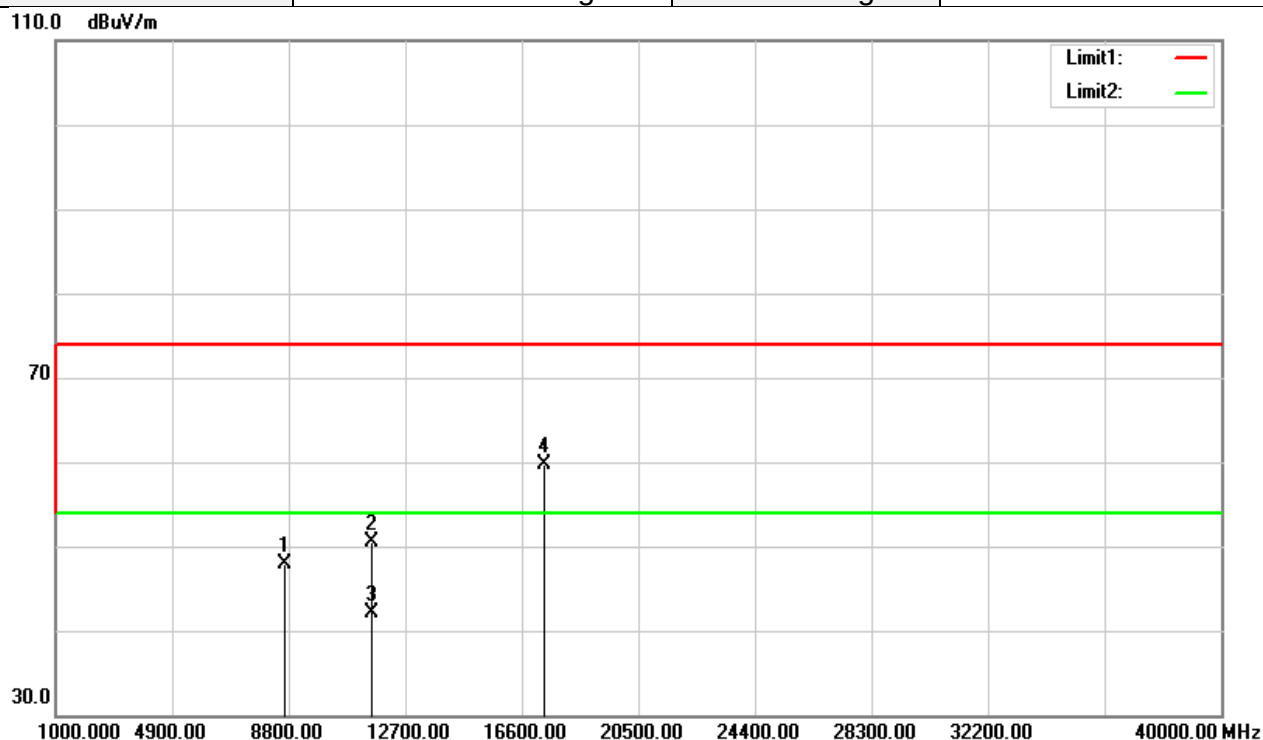


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8695.000	33.85	13.73	47.58	74.00	-26.42	peak
11570.000	32.53	16.84	49.37	74.00	-24.63	peak
11570.000	25.12	16.84	41.96	54.00	-12.04	AVG
17355.000	34.14	25.75	59.89	74.00	-14.11	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

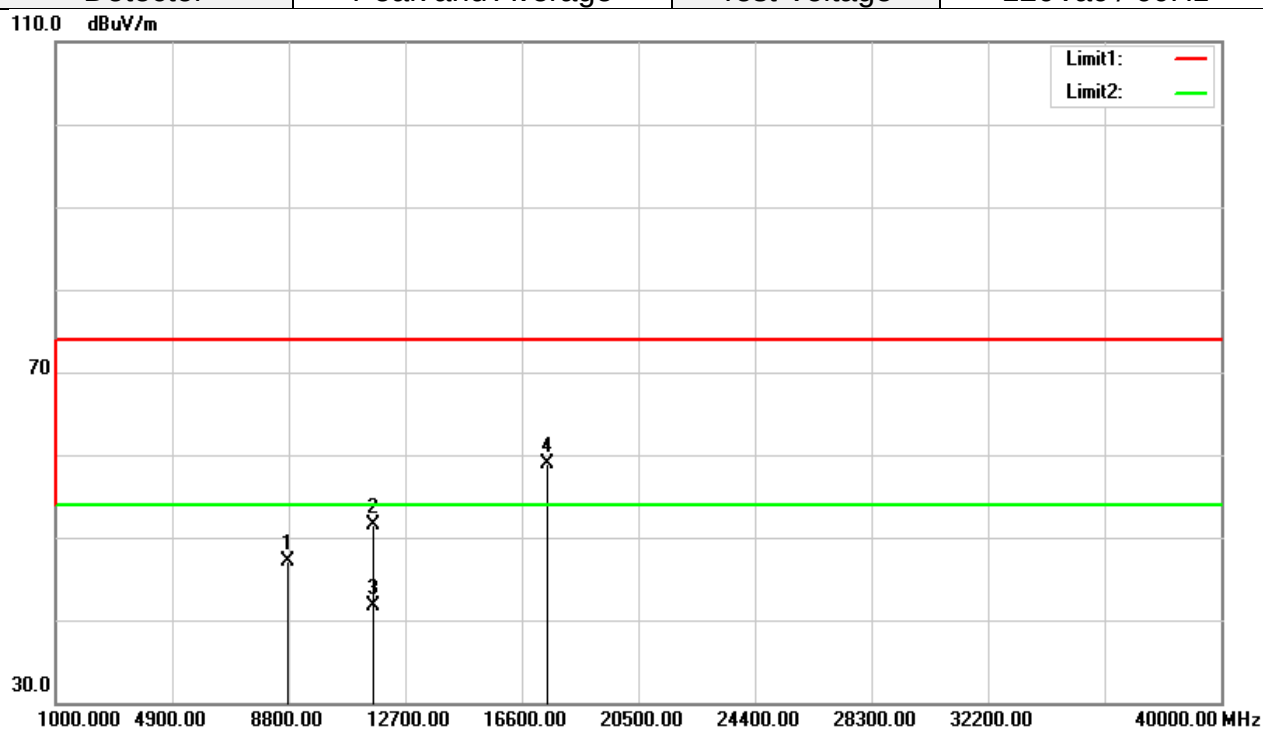


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8695.000	34.08	13.73	47.81	74.00	-26.19	peak
11570.000	33.70	16.84	50.54	74.00	-23.46	peak
11570.000	25.30	16.84	42.14	54.00	-11.86	AVG
17355.000	34.03	25.75	59.78	74.00	-14.22	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

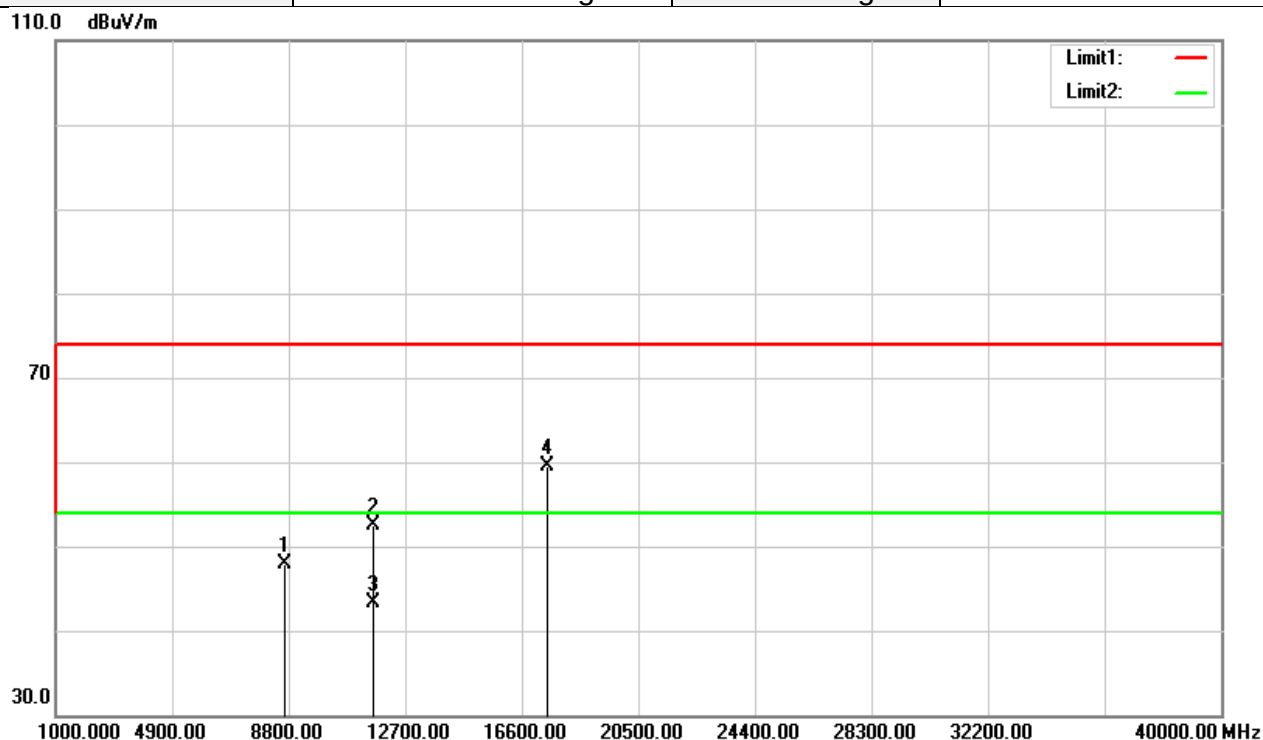


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8756.000	33.39	13.76	47.15	74.00	-26.85	peak
11650.000	34.69	16.91	51.60	74.00	-22.40	peak
11650.000	24.81	16.91	41.72	54.00	-12.28	AVG
17475.000	32.66	26.22	58.88	74.00	-15.12	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11a High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

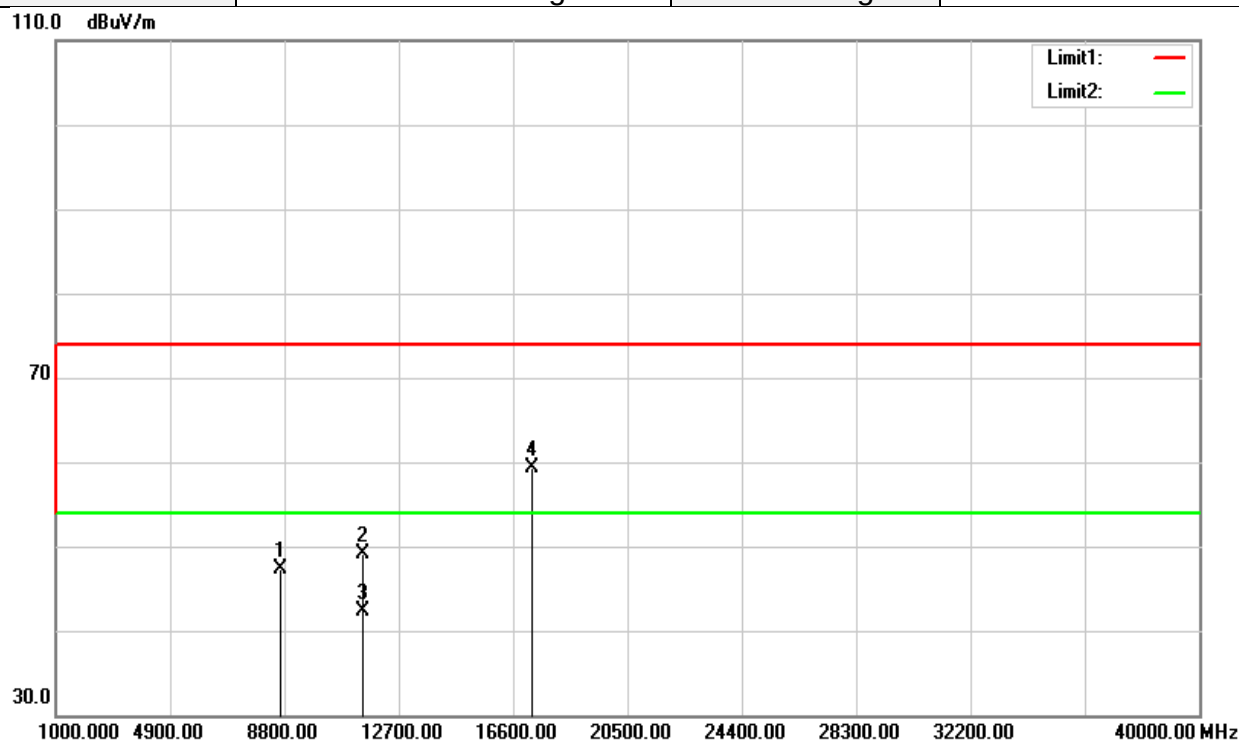


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8645.000	34.10	13.71	47.81	74.00	-26.19	peak
11650.000	35.50	16.91	52.41	74.00	-21.59	peak
11650.000	26.40	16.91	43.31	54.00	-10.69	AVG
17475.000	33.33	26.22	59.55	74.00	-14.45	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

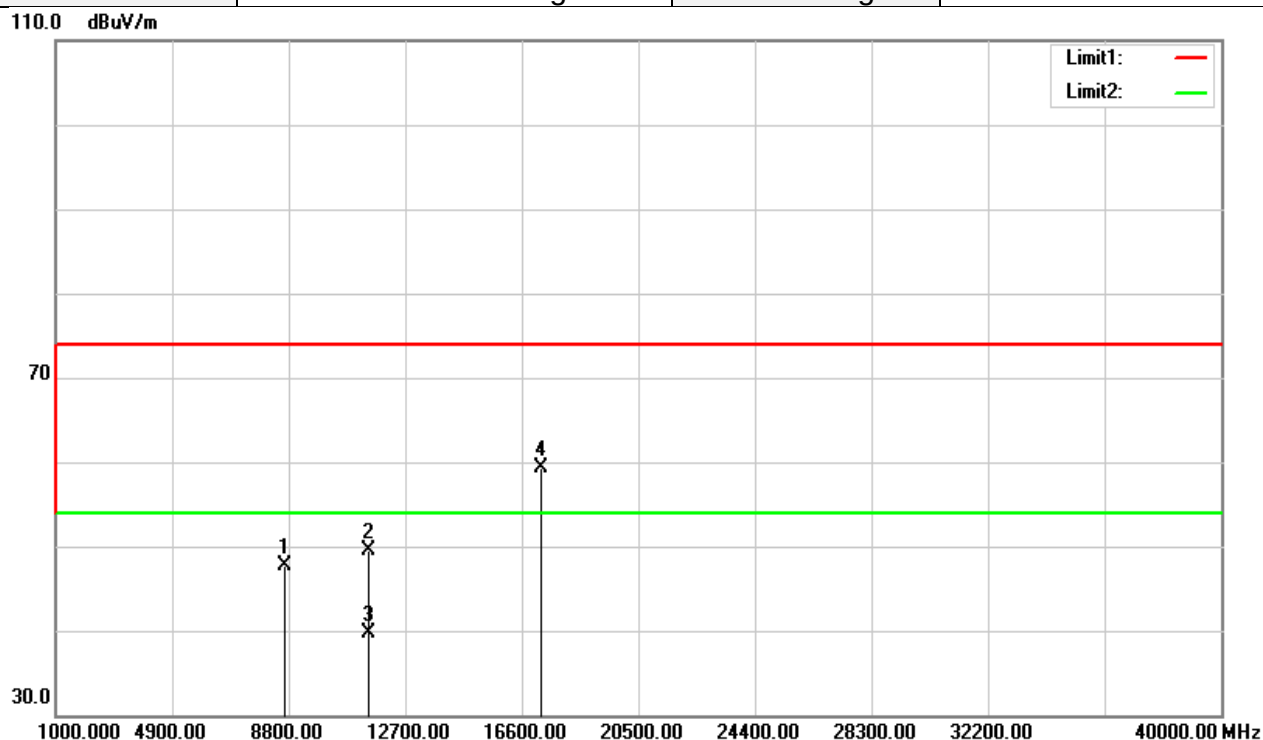


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8655.000	33.62	13.71	47.33	74.00	-26.67	peak
11490.000	32.24	16.78	49.02	74.00	-24.98	peak
11490.000	25.61	16.78	42.39	54.00	-11.61	AVG
17235.000	33.99	25.28	59.27	74.00	-14.73	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

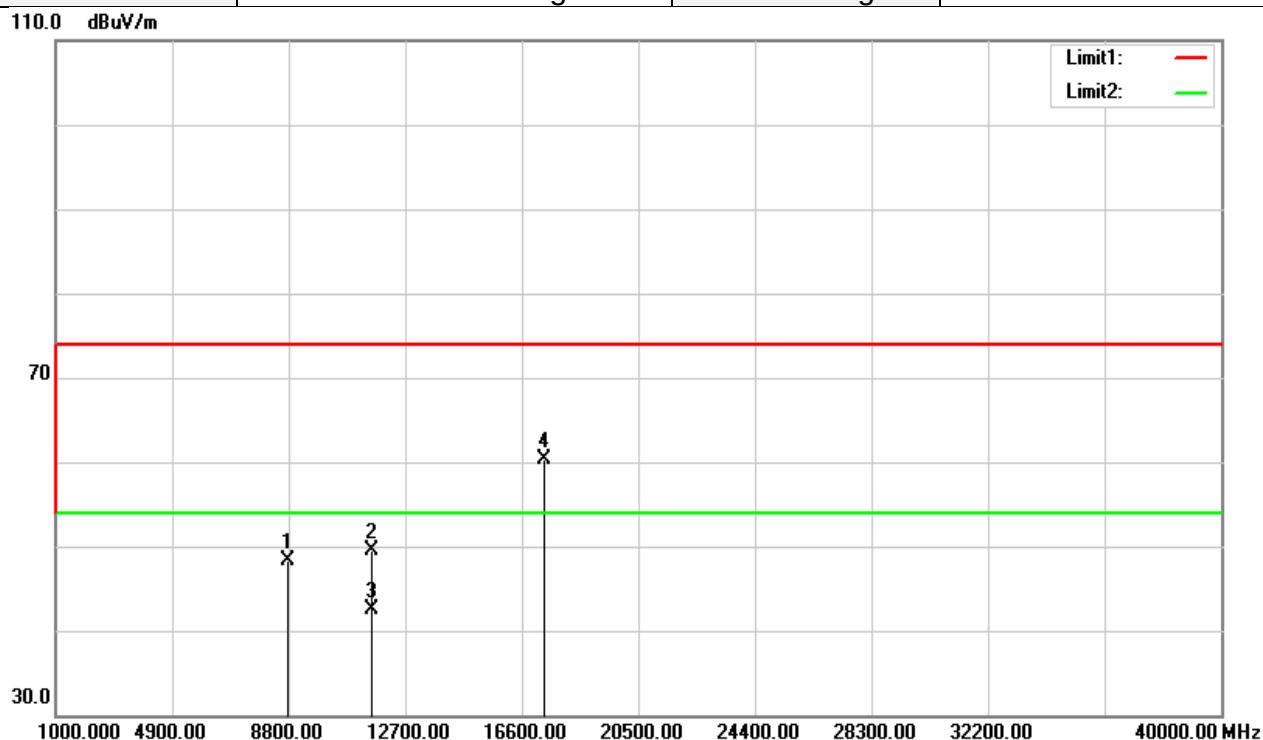


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8655.000	34.07	13.71	47.78	74.00	-26.22	peak
11490.000	32.67	16.78	49.45	74.00	-24.55	peak
11490.000	22.88	16.78	39.66	54.00	-14.34	AVG
17235.000	34.06	25.28	59.34	74.00	-14.66	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

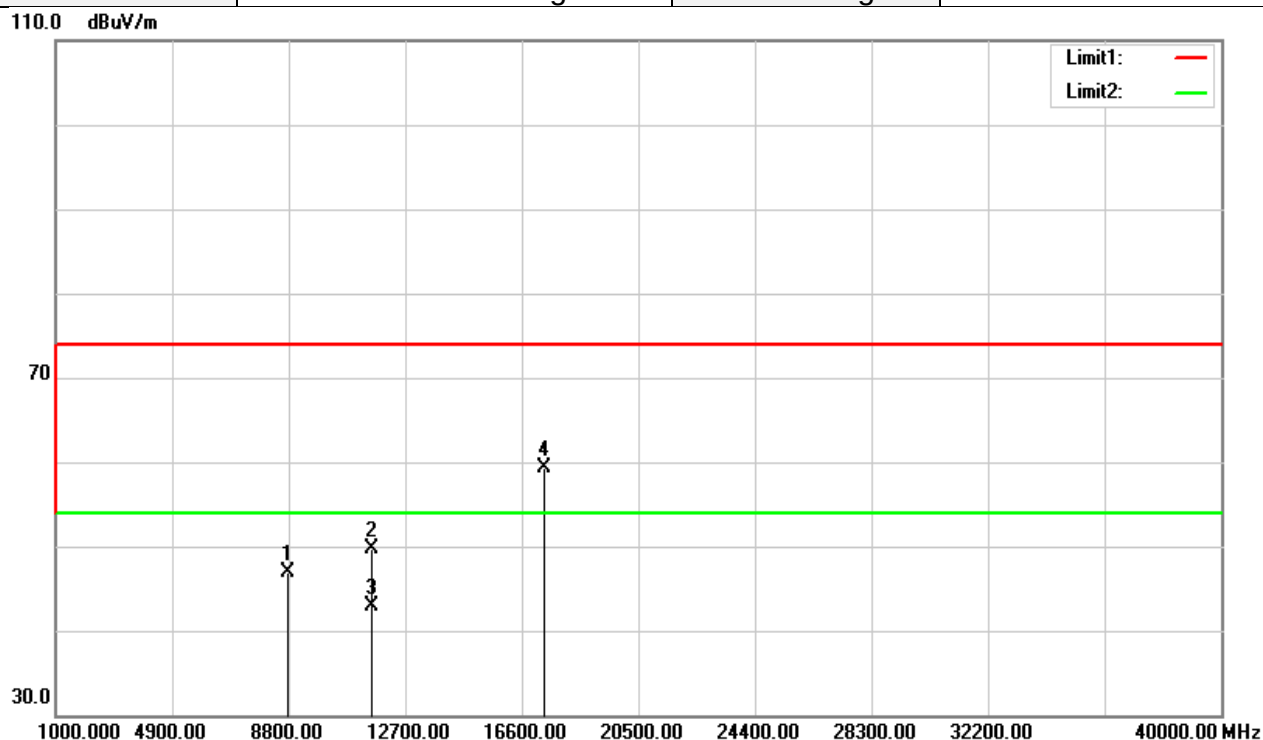


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8775.000	34.60	13.77	48.37	74.00	-25.63	peak
11570.000	32.59	16.84	49.43	74.00	-24.57	peak
11570.000	25.61	16.84	42.45	54.00	-11.55	AVG
17355.000	34.56	25.75	60.31	74.00	-13.69	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

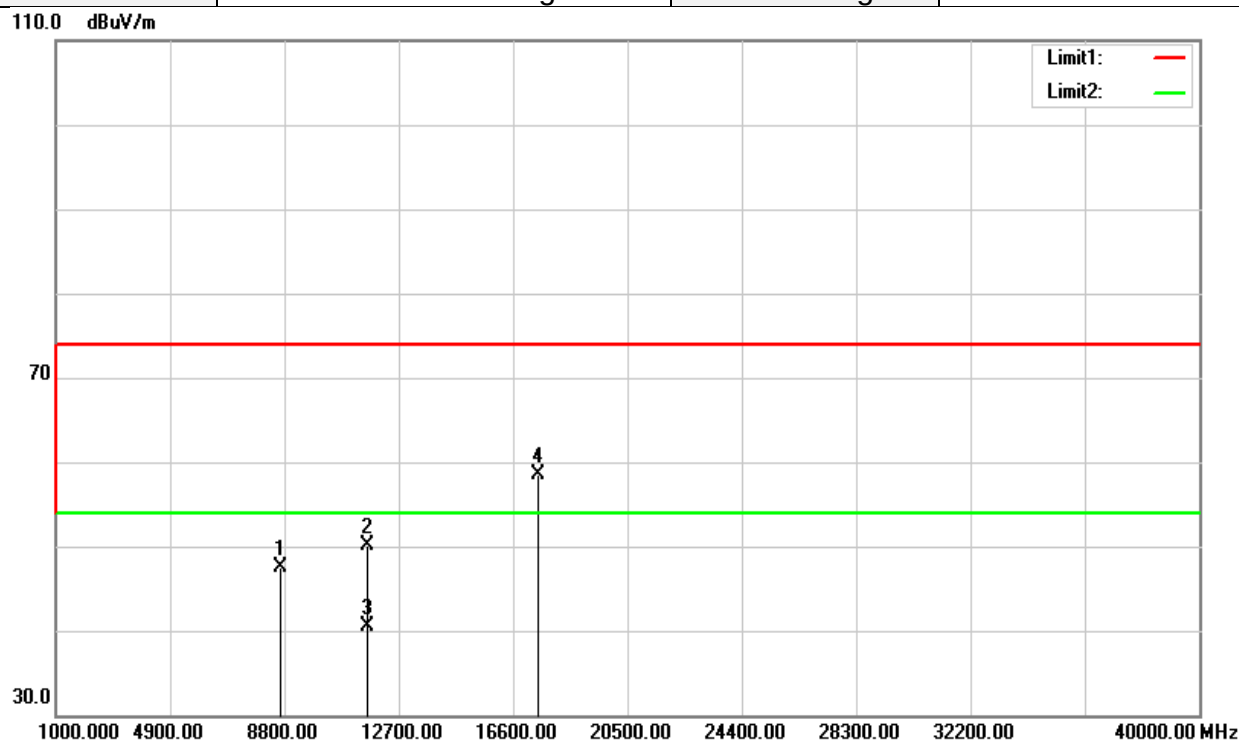


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8775.000	33.17	13.77	46.94	74.00	-27.06	peak
11570.000	32.88	16.84	49.72	74.00	-24.28	peak
11570.000	26.12	16.84	42.96	54.00	-11.04	AVG
17355.000	33.64	25.75	59.39	74.00	-14.61	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

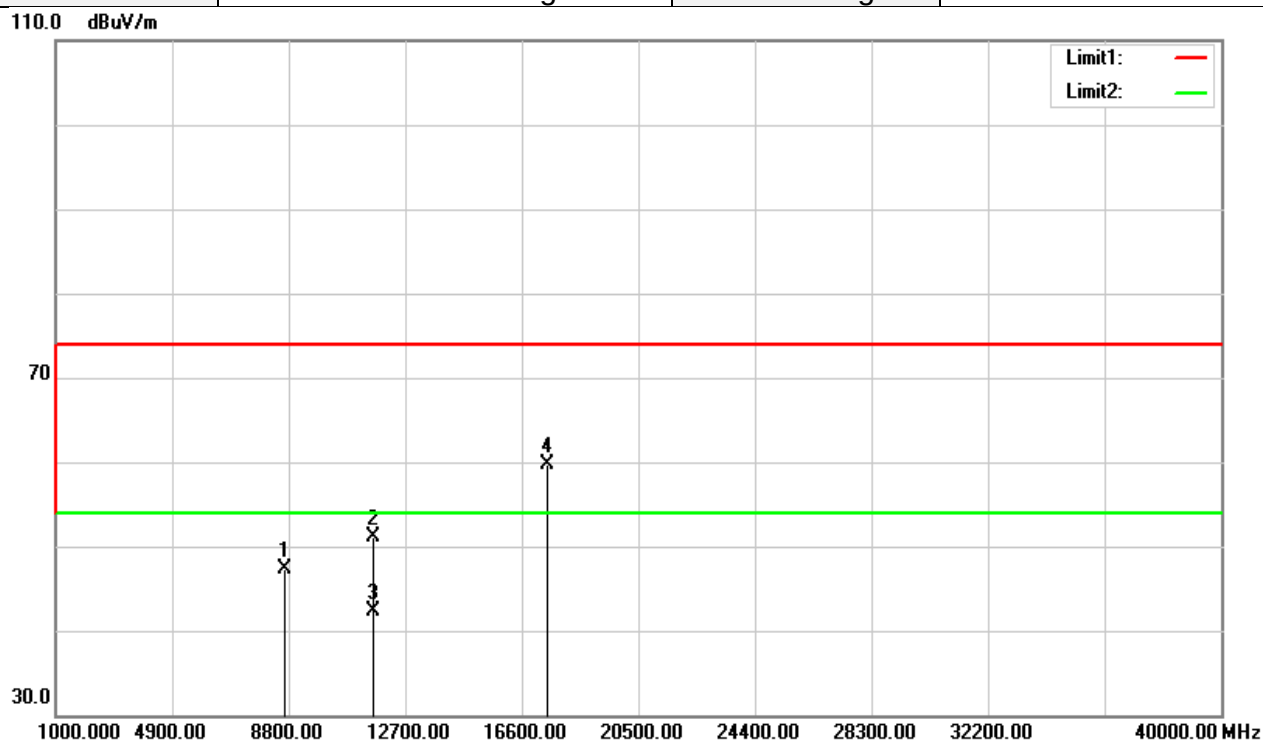


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8645.000	33.82	13.71	47.53	74.00	-26.47	peak
11650.000	33.14	16.91	50.05	74.00	-23.95	peak
11650.000	23.67	16.91	40.58	54.00	-13.42	AVG
17475.000	32.28	26.22	58.50	74.00	-15.50	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

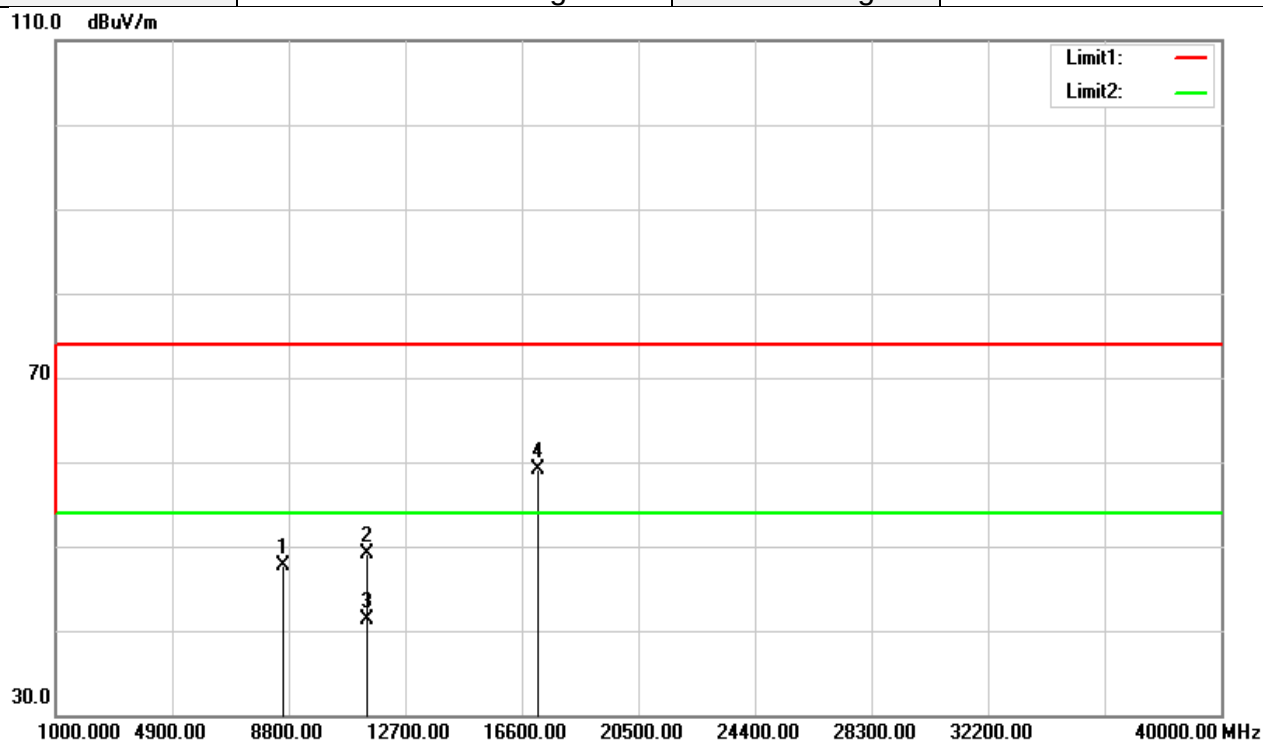


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8645.000	33.53	13.71	47.24	74.00	-26.76	peak
11650.000	34.12	16.91	51.03	74.00	-22.97	peak
11650.000	25.45	16.91	42.36	54.00	-11.64	AVG
17475.000	33.54	26.22	59.76	74.00	-14.24	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

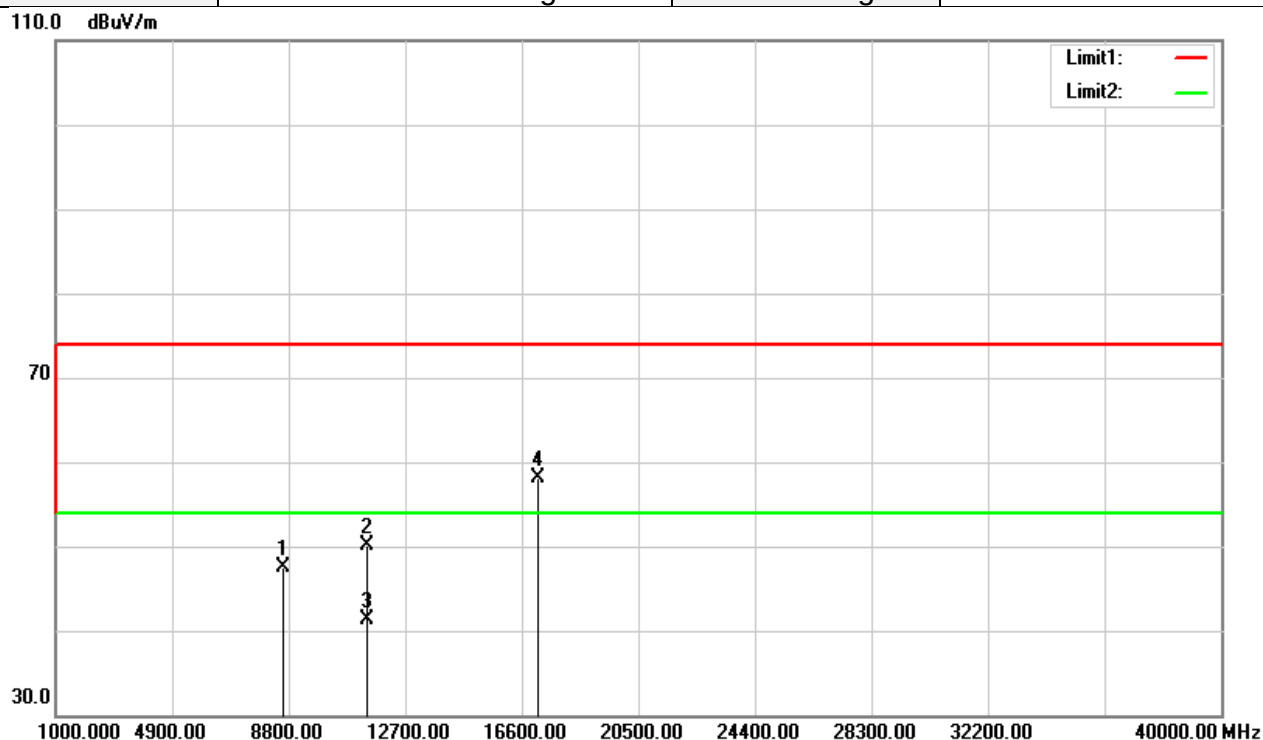


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8633.000	33.93	13.70	47.63	74.00	-26.37	peak
11420.000	32.41	16.77	49.18	74.00	-24.82	peak
11420.000	24.62	16.77	41.39	54.00	-12.61	AVG
17130.000	34.24	24.87	59.11	74.00	-14.89	peak
8633.000	33.93	13.70	47.63	74.00	-26.37	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

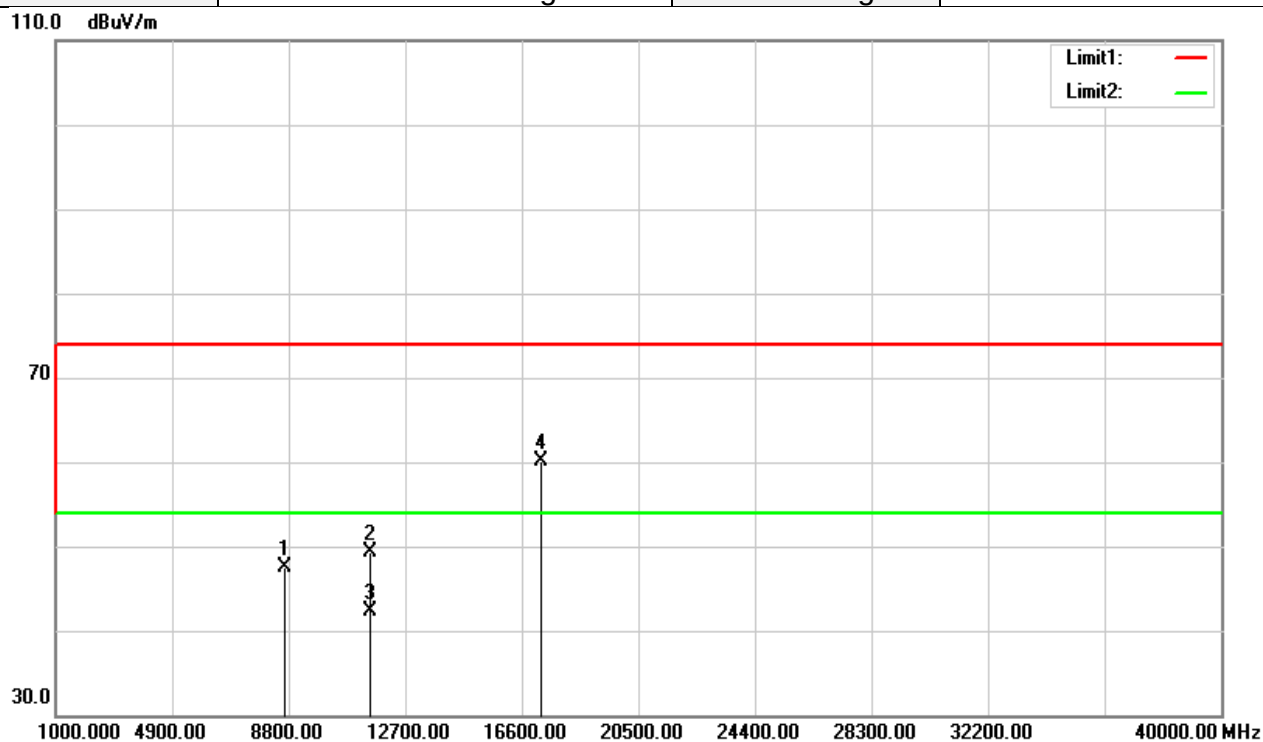


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8633.000	33.87	13.70	47.57	74.00	-26.43	peak
11420.000	33.29	16.77	50.06	74.00	-23.94	peak
11420.000	24.48	16.77	41.25	54.00	-12.75	AVG
17130.000	33.25	24.87	58.12	74.00	-15.88	peak
8633.000	33.87	13.70	47.57	74.00	-26.43	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

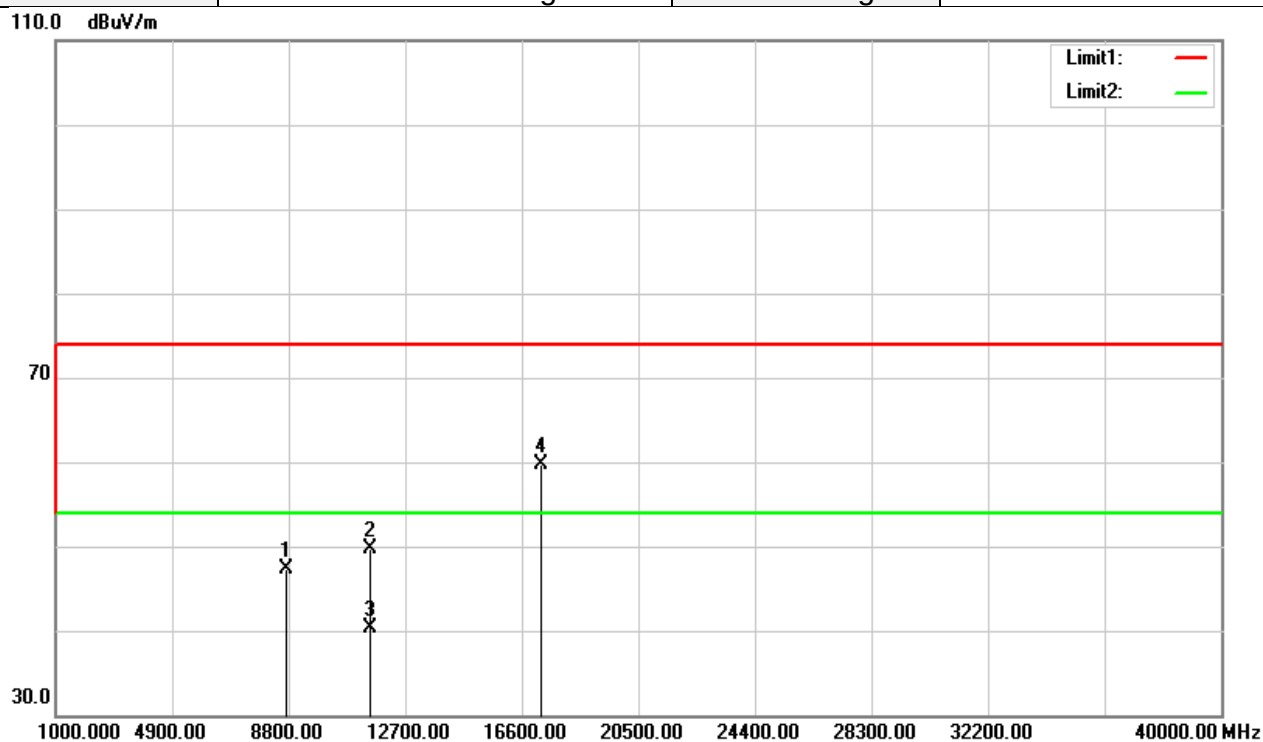


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8695.000	33.86	13.73	47.59	74.00	-26.41	peak
11510.000	32.46	16.79	49.25	74.00	-24.75	peak
11510.000	25.57	16.79	42.36	54.00	-11.64	AVG
17265.000	34.66	25.40	60.06	74.00	-13.94	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Mid CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

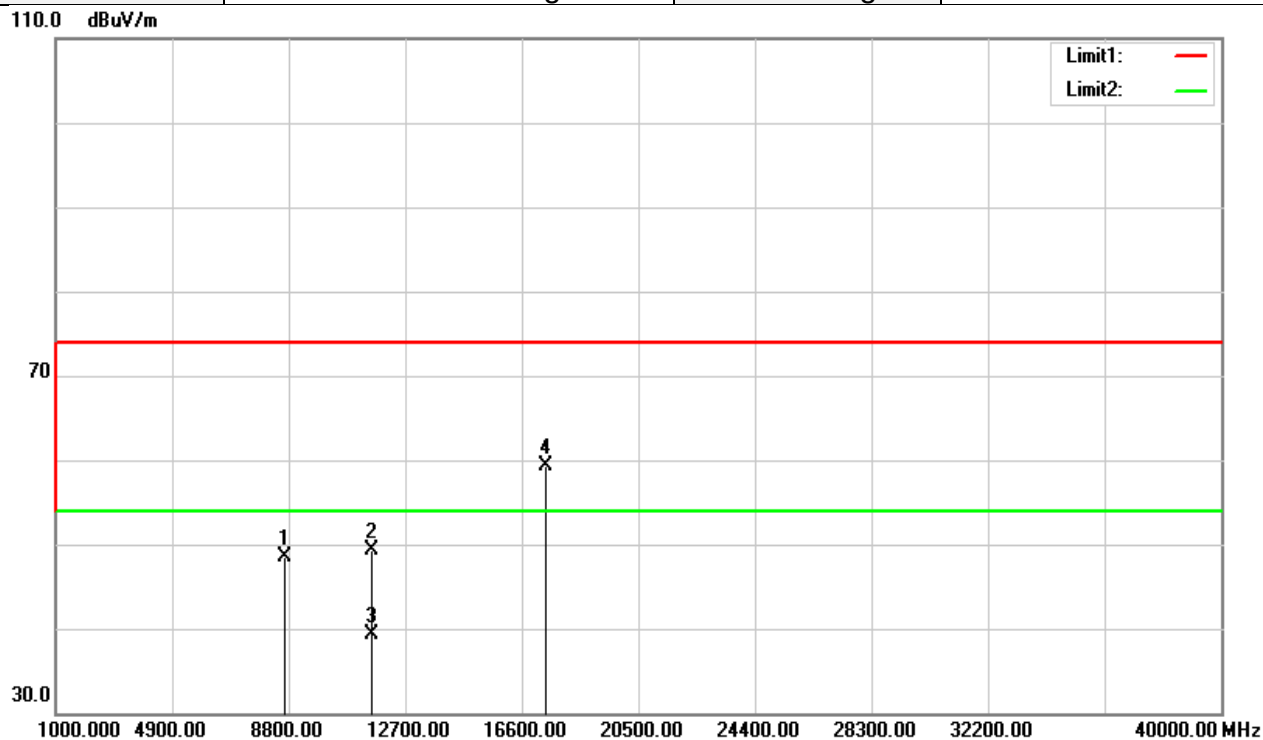


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8698.000	33.64	13.73	47.37	74.00	-26.63	peak
11510.000	32.87	16.79	49.66	74.00	-24.34	peak
11510.000	23.57	16.79	40.36	54.00	-13.64	AVG
17265.000	34.32	25.40	59.72	74.00	-14.28	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Vertical	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

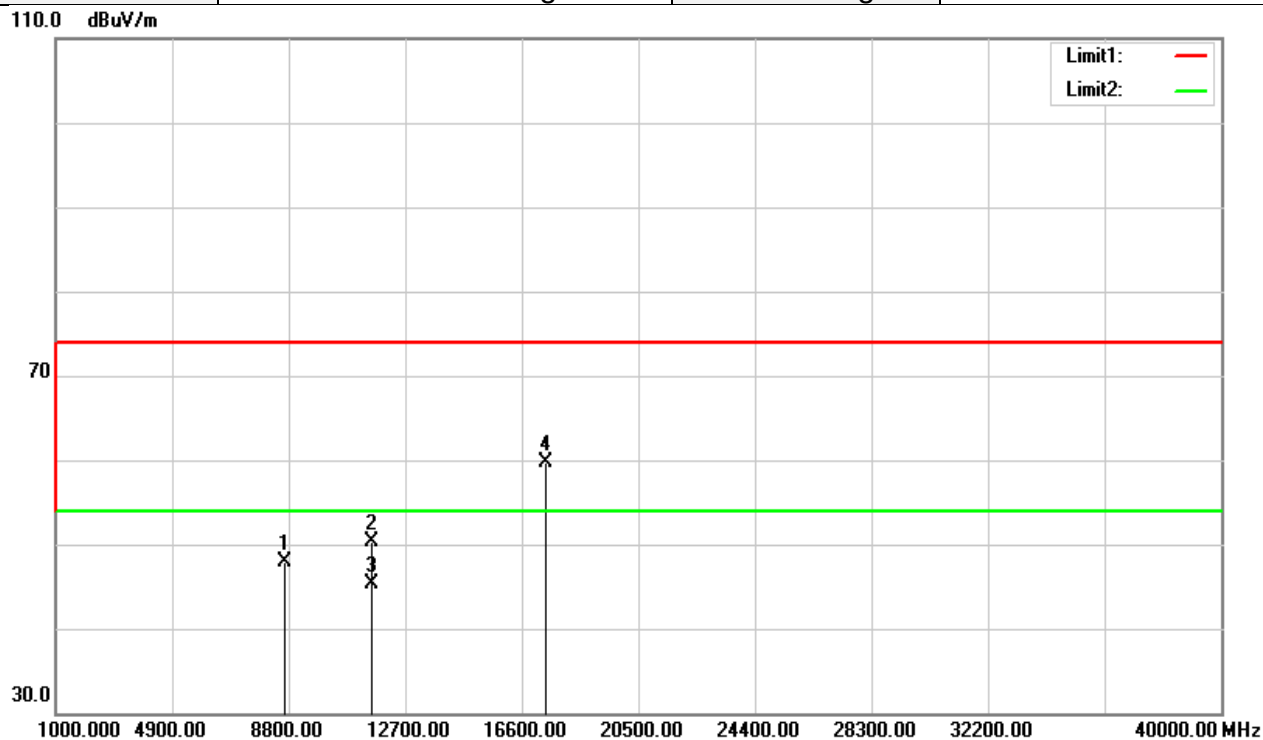


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8679.000	34.72	13.72	48.44	74.00	-25.56	peak
11590.000	32.36	16.86	49.22	74.00	-24.78	peak
11590.000	22.50	16.86	39.36	54.00	-14.64	AVG
17385.000	33.42	25.87	59.29	74.00	-14.71	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	27(°C)/ 53%RH
Test Item	Harmonic	Test Date	Jan 4, 2017
Polarize	Horizontal	Test Engineer	Dennis Li
Detector	Peak and Average	Test Voltage	120Vac / 60Hz



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
8679.000	34.23	13.72	47.95	74.00	-26.05	peak
11590.000	33.46	16.86	50.32	74.00	-23.68	peak
11590.000	28.50	16.86	45.36	54.00	-8.64	AVG
17385.000	33.74	25.87	59.61	74.00	-14.39	peak

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

4.6 FREQUENCY STABILITY

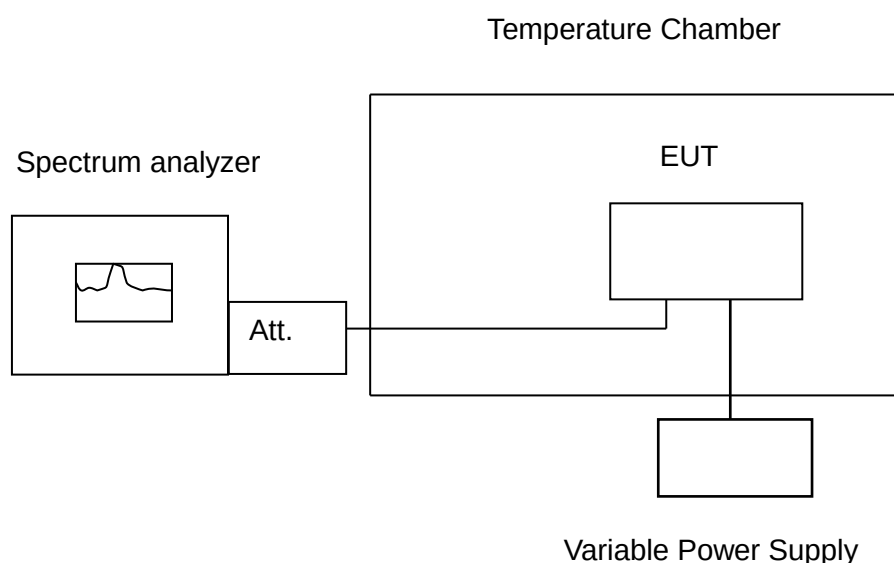
4.6.1 Test Limit

According to §15.407(g) manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the operational description.

4.6.2 Test Procedure

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -20°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

4.6.3 Test Setup



4.6.4 Test Result

Temp. (°C)	Voltage (V)	Measured Frequency	5220		(MHz)	Limit				Result
		Time (min)				20ppm				
Operating Frequency:		0 min	2 min	5 min	10 min	0 min	2 min	5 min	10 min	
50	12	5220.04732	5220.05080	5220.05166	5220.05384	9.0651	9.7318	9.8966	10.3142	
40	12	5220.01042	5220.00781	5220.00955	5220.00955	1.9962	1.4962	1.8295	1.8295	
30	12	5219.98871	5219.98480	5219.98524	5219.98567	-2.1628	-2.9119	-2.8276	-2.7452	
20	12	5219.97656	5219.97656	5219.97656	5219.97656	-4.4904	-4.4904	-4.4904	-4.4904	
10	12	5219.98046	5219.98003	5219.98003	5219.97959	-3.7433	-3.8257	-3.8257	-3.9100	
0	12	5219.99175	5219.99132	5219.99175	5219.99219	-1.5805	-1.6628	-1.5805	-1.4962	
-10	12	5220.00912	5220.00868	5220.00912	5220.00912	1.7471	1.6628	1.7471	1.7471	
-20	12	5220.02865	5220.02952	5220.02996	5220.02909	5.4885	5.6552	5.7395	5.5728	
-30	12	5220.04920	5220.04906	5220.04863	5220.04819	9.4253	9.3985	9.3161	9.2318	
Temp. (°C)	Voltage (V)	Measured Frequency	5220		(MHz)	Limit				Result
		Time (min)				20ppm				
Operating Frequency:		0 min	2 min	5 min	10 min	0 min	2 min	5 min	10 min	
20	10.8	5219.97222	5219.97257	5219.97285	5219.97275	-5.3218	-5.2548	-5.2011	-5.2203	
20	12	5219.97656	5219.97656	5219.97656	5219.97656	-4.4904	-4.4904	-4.4904	-4.4904	
20	13.2	5219.97758	5219.97857	5219.97877	5219.97985	-4.2950	-4.1054	-4.0670	-3.8602	

4.7 DYNAMIC FREQUENCY SELECTION

4.7.1 Test Limit

FCC according to §15.407 (h), KDB 905462 D02 "compliance measurement procedures for unlicensed-national information infrastructure devices operating in the 5250-5350 MHz and 5470-5725 MHz bands incorporating dynamic frequency selection". and KDB 905462 D03 " U-NII client devices without radar detection capability.

Table 1: Applicability of DFS requirements prior to use of a channel

Requirement	Operational Mode		
	Master	Client (without radar detection)	Client(with radar detection)
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	Master Device or Client with Radar Detection	Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

Additional requirements for devices with multiple bandwidth mods	Master Device or Client with Radar Detection	Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.		

Table 3: Interference Threshold values, Master or Client incorporating In-Service

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP $\geq$ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.

Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.

Note 3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

Table 4: DFS Response requirement values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a	$\text{Roundup} \left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

Table 6 – Long Pulse Radar Test Signal

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

Table 7 – Frequency Hopping Radar Test Signal

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

4.7.2 Test Procedure

Overview Of EUT With Respect To §15.407 (H) Requirements

The firmware installed in the EUT during testing was:

Firmware Rev: JEDI.MP2.mt76x2u.wifi.v3.1.0

The EUT operates over the 5250-5350 MHz range as a Client Device that does not have radar detection capability.

The EUT uses one transmitter connected to two 50-ohm coaxial antenna ports via a diversity switch. Only one antenna port is connected to the test system since the EUT has one antenna only.

The Slave device associated with the EUT during these tests does not have radar detection capability.

WLAN traffic is generated by streaming the video file TestFile.mp2 “6 ½ Magic Hours” from the Master to the Slave in full motion video mode using the media player with the V2.61 Codec package.

The EUT utilizes the 802.11a architecture, with a nominal channel bandwidth of 20 MHz.

The rated output power of the Master unit is < 23dBm (EIRP). Therefore the required interference threshold level is -62 dBm. After correction for antenna gain and procedural adjustments, the required conducted threshold at the antenna port is $-62 + 5 = -57\text{dBm}$.

The calibrated conducted DFS Detection Threshold level is set to -57 dBm. The tested level is lower than the required level hence it provides margin to the limit.

Manufacturer’s Statement Regarding Uniform Channel Spreading

The end product implements an automatic channel selection feature at startup such that operation commences on channels distributed across the entire set of allowed 5GHz channels. This feature will ensure uniform spreading is achieved while avoiding non-allowed channels due to prior radar events.

TEST AND MEASUREMENT SYSTEM

System Overview

The measurement system is based on a conducted test method.

The short pulse and long pulse signal generating system utilizes the NTIA software. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

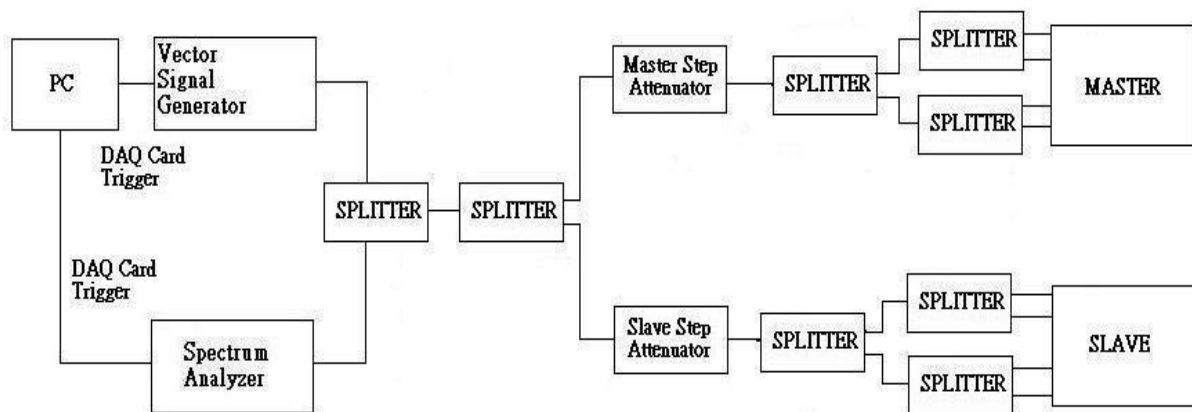
The short pulse types 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time.

The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List. The initial starting point randomized at run-time and each subsequent starting point is incremented by 475. Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Frequency Hopping Radar Waveform Generating Subsystem of FCC 06-96 APPENDIX. The frequency of the signal generator is incremented in 1 MHz steps from FL to FH for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

The signal monitoring equipment consists of a spectrum analyzer set to display 8001 bins on the horizontal axis. The time-domain resolution is 2 msec / bin with a 16 second sweep time, meeting the 10 second short pulse reporting criteria. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection and max hold. The time-domain resolution is 3 msec / bin with a 24 second sweep time, meeting the 22 second long pulse reporting criteria and allowing a minimum of 10 seconds after the end of the long pulse waveform.

Should multiple RF ports be utilized for the Master and/or Slave devices (for example, for diversity or MIMO implementations), 50 ohm termination would be removed from the splitter so that connection can be established between splitter and the Master and/or Slave devices.

Conducted Method System Block Diagram



System Calibration

Connect the spectrum analyzer to the test system in place of the master device. Set the signal generator to CW mode. Adjust the amplitude of the signal generator to yield a measured level of –62 dBm on the spectrum analyzer.

Without changing any of the instrument settings, reconnect the spectrum analyzer to the Common port of the Spectrum Analyzer Combiner/Divider and connect a 50 ohm load to the Master Device port of the test system.

Measure the amplitude and calculate the difference from –62 dBm. Adjust the Reference Level Offset of the spectrum analyzer to this difference. Confirm that the signal is displayed at –62 dBm. Readjust the RBW and VBW to 3 MHz, set the span to 10 MHz, and confirm that the signal is still displayed at –62 dBm.

The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of –62 dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

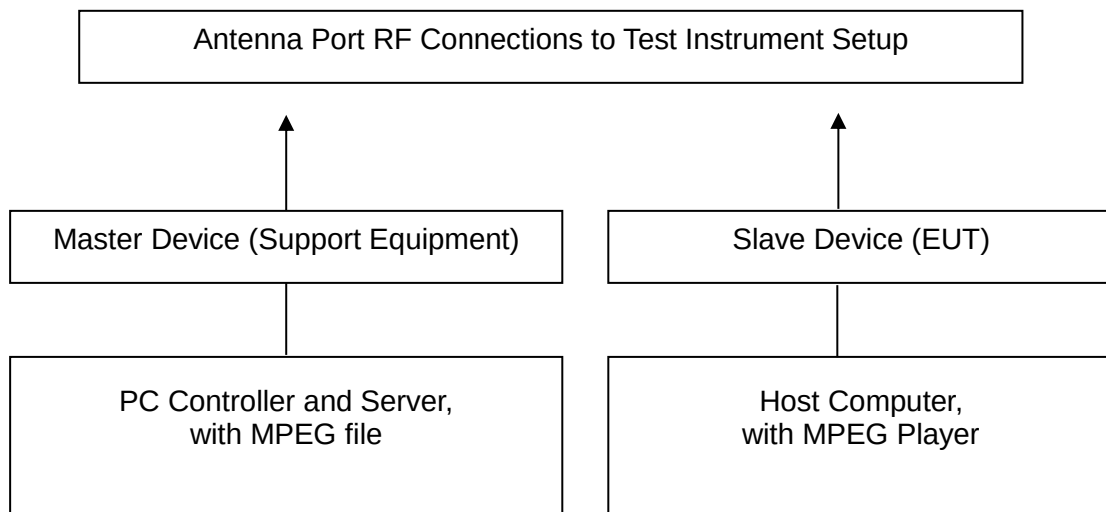
Set the signal generator to produce a radar waveform, trigger a burst manually and measure the level on the spectrum analyzer. Readjust the amplitude of the signal generator as required so that the peak level of the waveform is at a displayed level equal to the required or desired interference detection threshold. Separate signal generator amplitude settings are determined as required for each radar type.

Adjustment Of Displayed Traffic Level

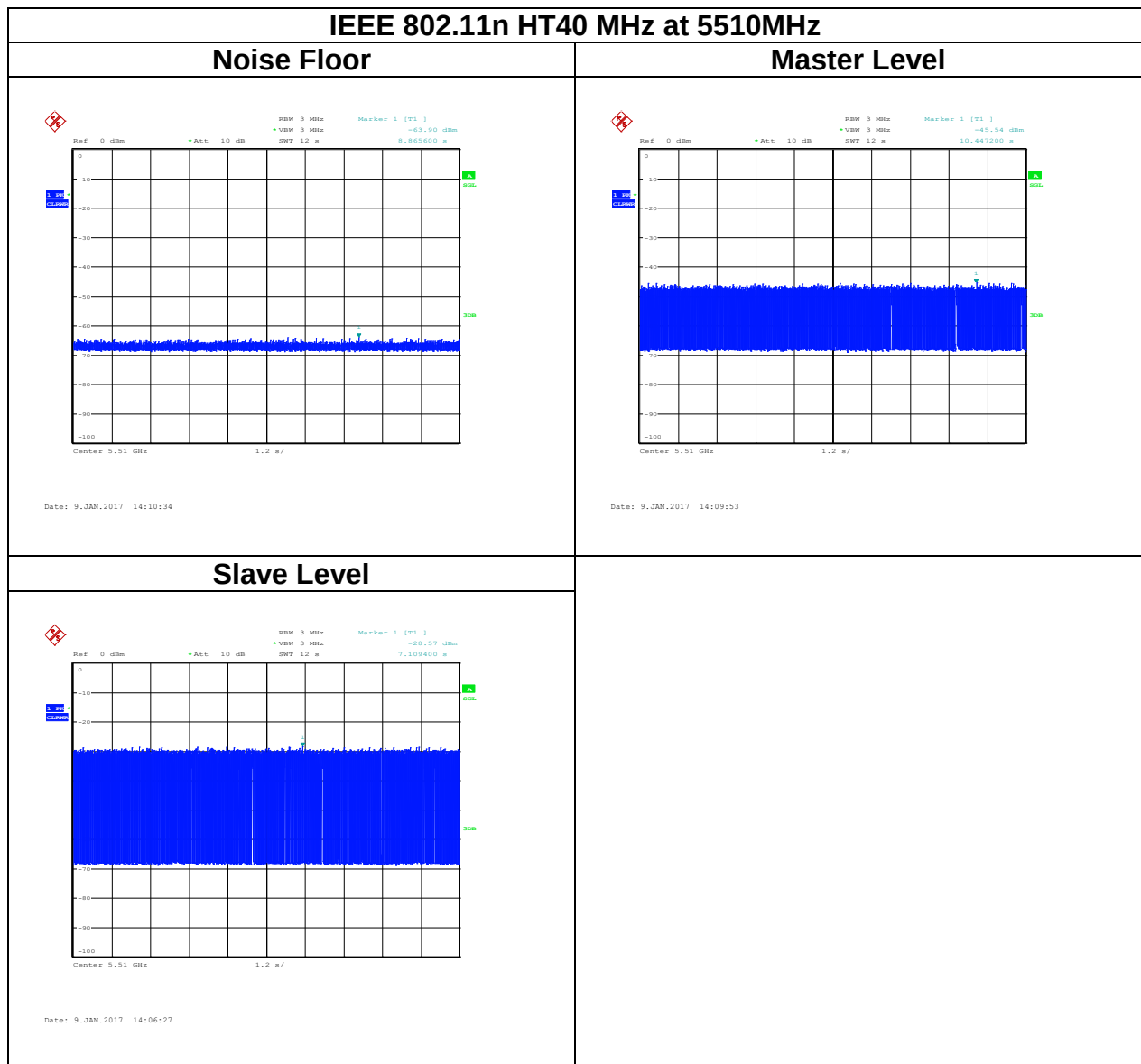
Establish a link between the Master and Slave, adjusting the Link Step Attenuator as needed to provide a suitable received level at the Master and Slave devices. Stream the video test file to generate WLAN traffic. Confirm that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold. Confirm that the displayed traffic is from the Master Device. For Master Device testing confirm that the displayed traffic does not include Slave Device traffic. For Slave Device testing confirm that the displayed traffic does not include Master Device traffic.

If a different setting of the Master Step Attenuator is required to meet the above conditions, perform a new System Calibration for the new Master Step Attenuator setting.

4.7.3 Test Setup



4.7.4 Test Result



Sample of short Pluse Radar Type 0



TEST CHANNEL AND METHOD

All tests were performed at a channel center frequency of 5530 MHz utilizing a conducted test method.

CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME**GENERAL REPORTING NOTES**

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =

(Number of analyzer bins showing transmission) * (dwell time per bin)

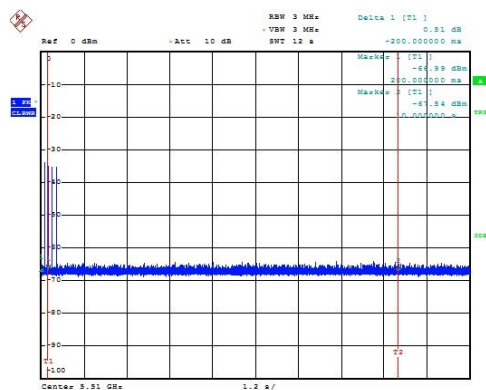
The observation period over which the aggregate time is calculated

Begins at (Reference Marker + 200 msec) and

Ends no earlier than (Reference Marker + 10 sec).

IEEE 802.11n HT 40 MHz at 5510

Type 1_Channel Move Time



Date: 9.JAN.2017 10:52:02

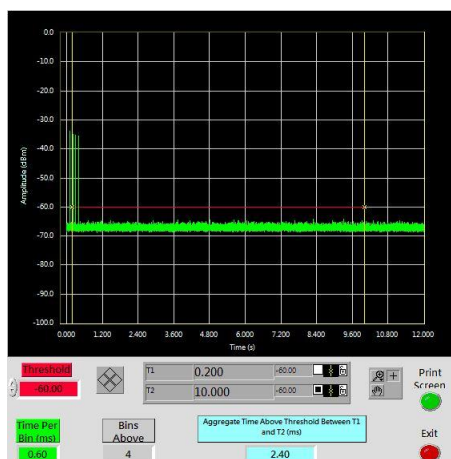
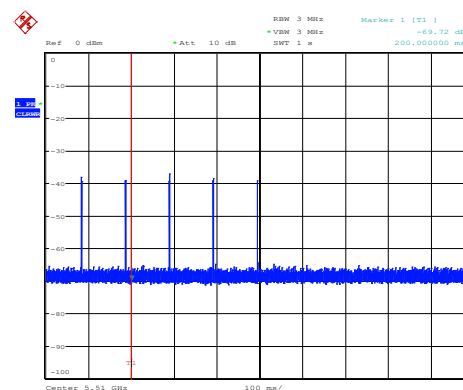
Channel Move Time
(s)

0

Limit
(s)

10

IEEE 802.11n HT 40 MHz at 5510

Type 1_Channel closing transmisssion
timeType 1_Channel closing transmisssion
time-caculate

Date: 9.JAN.2017 14:00:25

Aggregate Transmission Time
(ms)

0

Limit
(ms)

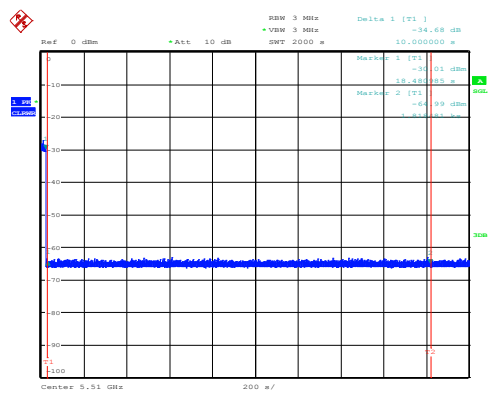
60

Margin
(ms)

12

IEEE 802.11n HT 40 MHz at 5510

Non-Occupancy Period



Remark :

1. No EUT transmissions were observed on the test channel during the 30 minute observation time.