

5.8. Conducted Emission

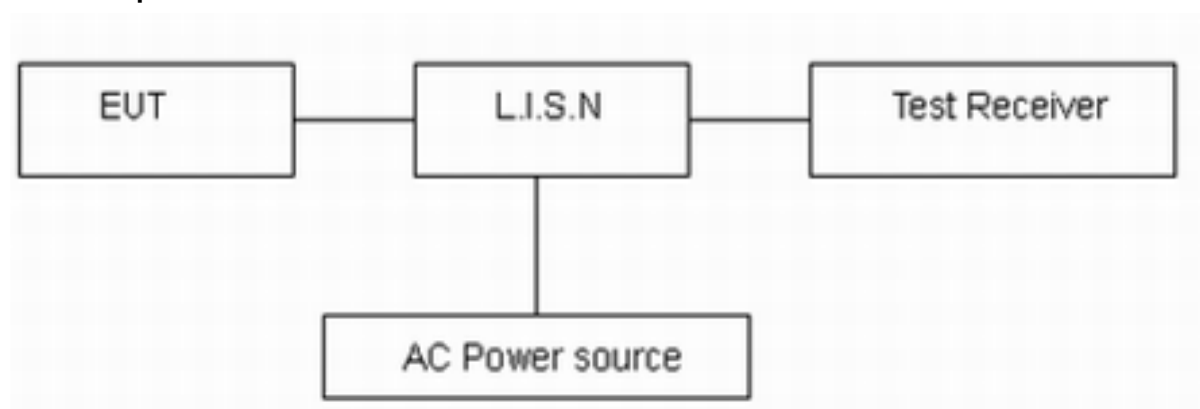
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

The EUT is placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10-2013. Connect the AC power line of the EUT to the L.I.S.N. Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9 kHz, VBW is set to 30kHz. The measurement result should include both L line and N line. The test is in transmitting mode.

Test Setup



Note: AC Power source is used to change the voltage 110V/60Hz.

Limits

Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46 *
0.5 - 5	56	46
5 - 30	60	50

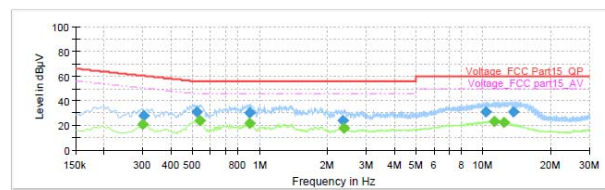
*: Decreases with the logarithm of the frequency.

Measurement Uncertainty

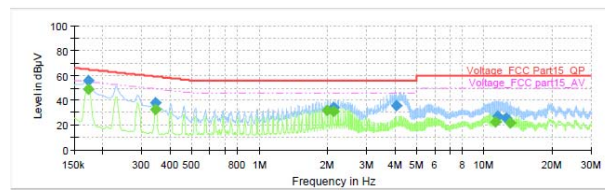
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 2.69$ dB.

**Test Results:**

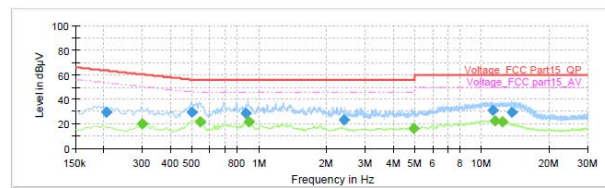
Following plots, Blue trace uses the peak detection and Green trace uses the average detection.

802.11b, Channel No.: 1**L Line**

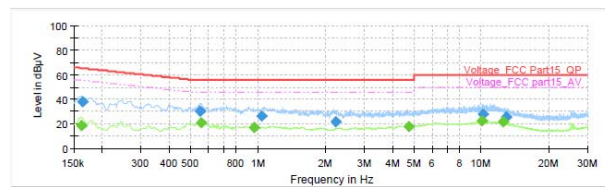
Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.298500	---	20.62	50.28	29.66	1000.0	9.000	L1	ON	19.2
0.300750	27.64	---	60.22	32.58	1000.0	9.000	L1	ON	19.2
0.521250	30.95	---	56.00	25.05	1000.0	9.000	L1	ON	19.2
0.539250	---	23.66	46.00	22.34	1000.0	9.000	L1	ON	19.2
0.901500	---	21.57	46.00	24.43	1000.0	9.000	L1	ON	19.2
0.901500	30.59	---	56.00	25.42	1000.0	9.000	L1	ON	19.2
2.352750	24.23	---	56.00	31.77	1000.0	9.000	L1	ON	19.0
2.386500	---	17.62	46.00	28.38	1000.0	9.000	L1	ON	19.0
10.279500	31.16	---	60.00	28.84	1000.0	9.000	L1	ON	19.4
11.238000	---	23.20	50.00	26.80	1000.0	9.000	L1	ON	19.4
12.435000	---	22.57	50.00	27.43	1000.0	9.000	L1	ON	19.4
13.706250	31.15	---	60.00	28.85	1000.0	9.000	L1	ON	19.5

N Line

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.172500	---	48.71	54.84	6.13	1000.0	9.000	N	ON	19.2
0.172500	56.03	---	64.84	8.81	1000.0	9.000	N	ON	19.2
0.343500	---	32.76	49.12	16.35	1000.0	9.000	N	ON	19.2
0.345750	38.33	---	59.06	20.74	1000.0	9.000	N	ON	19.2
2.008500	---	32.13	46.00	13.87	1000.0	9.000	N	ON	19.1
2.123250	---	31.11	46.00	14.89	1000.0	9.000	N	ON	19.1
2.123500	34.00	---	56.00	22.00	1000.0	9.000	N	ON	19.1
4.076250	35.36	---	56.00	20.64	1000.0	9.000	N	ON	19.1
11.249250	---	22.20	50.00	27.80	1000.0	9.000	N	ON	19.4
11.483250	26.79	---	60.00	33.21	1000.0	9.000	N	ON	19.4
12.516000	25.53	---	60.00	34.47	1000.0	9.000	N	ON	19.4
13.087500	---	21.88	50.00	28.12	1000.0	9.000	N	ON	19.5

802.11b, Channel No.: 6**L Line**

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.206250	29.49	---	63.36	33.87	1000.0	9.000	L1	ON	19.2
0.298500	---	20.00	50.28	30.28	1000.0	9.000	L1	ON	19.2
0.498750	29.64	---	56.02	26.38	1000.0	9.000	L1	ON	19.2
0.541500	---	21.53	46.00	24.47	1000.0	9.000	L1	ON	19.2
0.874500	28.44	---	56.00	27.56	1000.0	9.000	L1	ON	19.2
0.897000	---	21.34	46.00	24.66	1000.0	9.000	L1	ON	19.2
2.295500	23.09	---	56.00	32.91	1000.0	9.000	L1	ON	19.0
4.933500	---	16.33	46.00	29.67	1000.0	9.000	L1	ON	19.1
11.177250	31.15	---	60.00	28.85	1000.0	9.000	L1	ON	19.4
11.469750	---	22.39	50.00	27.61	1000.0	9.000	L1	ON	19.4
12.378750	---	21.84	50.00	28.16	1000.0	9.000	L1	ON	19.4
13.668000	29.84	---	60.00	30.16	1000.0	9.000	L1	ON	19.5

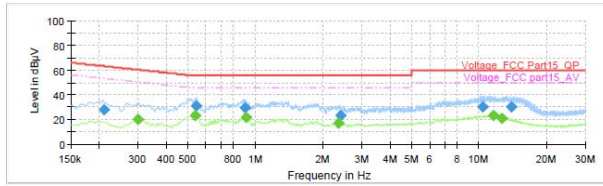
N Line

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.161250	---	18.51	55.40	36.89	1000.0	9.000	N	ON	19.1
0.163500	38.19	---	65.28	27.09	1000.0	9.000	N	ON	19.1
0.548250	29.91	---	56.00	26.09	1000.0	9.000	N	ON	19.3
0.557250	---	21.13	46.00	24.87	1000.0	9.000	N	ON	19.3
0.962250	---	17.12	46.00	28.88	1000.0	9.000	N	ON	19.2
1.038750	26.29	---	56.00	29.71	1000.0	9.000	N	ON	19.2
2.231250	21.37	---	56.00	34.63	1000.0	9.000	N	ON	19.1
4.758000	---	17.72	46.00	28.28	1000.0	9.000	N	ON	19.1
10.061250	---	22.58	50.00	27.42	1000.0	9.000	N	ON	19.4
10.153500	27.68	---	60.00	32.32	1000.0	9.000	N	ON	19.4
12.486750	---	21.70	50.00	28.30	1000.0	9.000	N	ON	19.4
12.878250	25.58	---	60.00	34.42	1000.0	9.000	N	ON	19.5



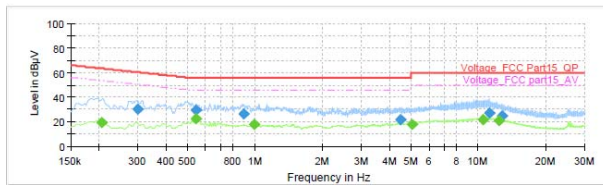
802.11b, Channel No.: 11

L Line



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.210750	27.61	---	63.18	35.57	1000.0	9.000	L1	ON	19.2
0.298500	---	19.82	50.28	30.46	1000.0	9.000	L1	ON	19.2
0.539250	---	23.55	46.00	22.45	1000.0	9.000	L1	ON	19.2
0.543750	30.88	---	56.00	25.12	1000.0	9.000	L1	ON	19.2
0.903750	29.08	---	56.00	26.92	1000.0	9.000	L1	ON	19.2
0.906000	---	21.79	46.00	24.21	1000.0	9.000	L1	ON	19.2
2.352750	---	16.78	46.00	29.22	1000.0	9.000	L1	ON	19.0
2.404500	23.54	---	56.00	32.46	1000.0	9.000	L1	ON	19.0
10.421250	30.46	---	60.00	29.54	1000.0	9.000	L1	ON	19.4
11.555250	---	22.90	50.00	27.10	1000.0	9.000	L1	ON	19.4
12.619500	---	20.96	50.00	29.04	1000.0	9.000	L1	ON	19.5
13.915500	30.44	---	60.00	29.56	1000.0	9.000	L1	ON	19.5

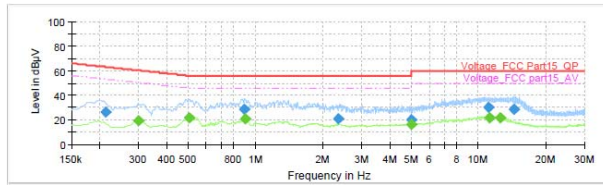
N Line



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.206250	---	19.37	53.36	33.98	1000.0	9.000	N	ON	19.2
0.298500	30.60	---	60.28	29.69	1000.0	9.000	N	ON	19.2
0.543750	29.75	---	56.00	26.25	1000.0	9.000	N	ON	19.2
0.546000	---	22.64	46.00	23.36	1000.0	9.000	N	ON	19.2
0.890250	26.72	---	56.00	29.28	1000.0	9.000	N	ON	19.2
0.906000	---	17.94	46.00	28.06	1000.0	9.000	N	ON	19.2
4.461000	21.48	---	56.00	34.52	1000.0	9.000	N	ON	19.1
5.043750	---	17.75	50.00	32.25	1000.0	9.000	N	ON	19.1
10.522250	---	22.03	50.00	27.97	1000.0	9.000	N	ON	19.4
11.166000	26.76	---	60.00	33.24	1000.0	9.000	N	ON	19.4
12.421500	---	21.22	50.00	28.78	1000.0	9.000	N	ON	19.4
12.788250	24.61	---	60.00	35.39	1000.0	9.000	N	ON	19.5

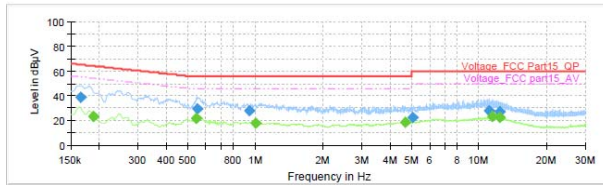
802.11g, Channel No.: 1

L Line



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.213000	26.65	---	63.09	36.44	1000.0	9.000	L1	ON	19.2
0.298500	---	19.71	50.28	30.58	1000.0	9.000	L1	ON	19.2
0.505500	---	21.49	46.00	24.51	1000.0	9.000	L1	ON	19.2
0.894750	28.73	---	56.00	27.27	1000.0	9.000	L1	ON	19.2
0.897000	---	20.94	46.00	25.06	1000.0	9.000	L1	ON	19.2
2.350500	21.17	---	56.00	34.83	1000.0	9.000	L1	ON	19.0
5.003250	20.22	---	60.00	39.78	1000.0	9.000	L1	ON	19.1
5.007750	---	16.26	50.00	33.74	1000.0	9.000	L1	ON	19.1
11.125500	30.42	---	60.00	29.58	1000.0	9.000	L1	ON	19.4
11.274000	---	21.99	50.00	28.01	1000.0	9.000	L1	ON	19.4
12.480000	---	21.36	50.00	28.64	1000.0	9.000	L1	ON	19.4
14.385750	28.60	---	60.00	31.40	1000.0	9.000	L1	ON	19.5

N Line

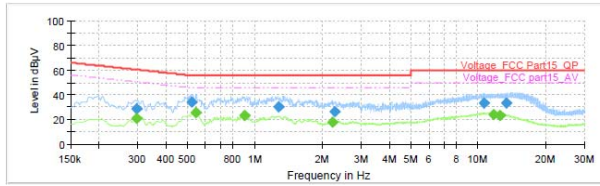


Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.165750	38.85	---	65.17	26.32	1000.0	9.000	N	ON	19.2
0.188250	---	23.04	54.11	31.07	1000.0	9.000	N	ON	19.2
0.543750	---	22.04	46.00	23.96	1000.0	9.000	N	ON	19.2
0.550500	29.45	---	56.00	26.55	1000.0	9.000	N	ON	19.3
0.942000	27.96	---	56.00	28.04	1000.0	9.000	N	ON	19.2
1.000500	---	17.94	46.00	28.06	1000.0	9.000	N	ON	19.2
4.701750	---	18.26	46.00	27.74	1000.0	9.000	N	ON	19.1
5.095000	22.60	---	60.00	37.40	1000.0	9.000	N	ON	19.1
11.148000	27.90	---	60.00	32.10	1000.0	9.000	N	ON	19.4
11.467500	---	23.02	50.00	26.98	1000.0	9.000	N	ON	19.4
12.396750	---	22.65	50.00	27.35	1000.0	9.000	N	ON	19.4
12.439500	26.75	---	60.00	33.25	1000.0	9.000	N	ON	19.4



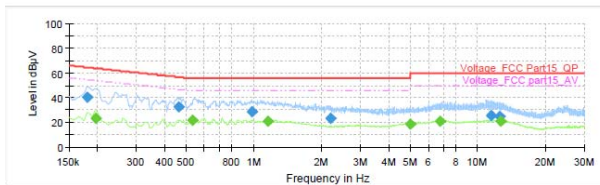
802.11g, Channel No.: 6

L Line



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.294000	---	20.66	50.41	29.75	1000.0	9.000	L1	ON	19.2
0.296250	28.95	---	60.35	31.39	1000.0	9.000	L1	ON	19.2
0.521250	34.36	---	56.00	21.64	1000.0	9.000	L1	ON	19.2
0.546000	---	25.47	46.00	20.53	1000.0	9.000	L1	ON	19.2
0.899250	---	23.03	46.00	22.98	1000.0	9.000	L1	ON	19.2
1.272750	30.07	---	56.00	25.93	1000.0	9.000	L1	ON	19.2
2.240250	---	18.11	46.00	27.89	1000.0	9.000	L1	ON	19.1
2.274000	26.07	---	56.00	29.93	1000.0	9.000	L1	ON	19.1
10.572000	32.96	---	60.00	27.04	1000.0	9.000	L1	ON	19.4
11.694750	---	24.17	50.00	25.83	1000.0	9.000	L1	ON	19.4
12.531750	---	23.30	50.00	26.70	1000.0	9.000	L1	ON	19.4
13.431750	33.25	---	60.00	26.75	1000.0	9.000	L1	ON	19.5

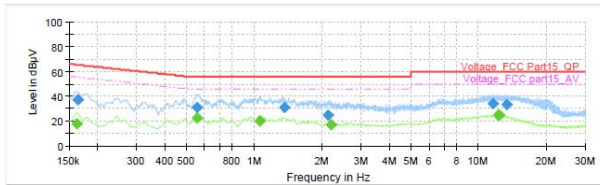
N Line



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.181500	40.61	---	64.42	23.80	1000.0	9.000	N	ON	19.2
0.197250	---	23.38	53.73	30.34	1000.0	9.000	N	ON	19.2
0.460500	32.42	---	56.68	24.26	1000.0	9.000	N	ON	19.2
0.534750	---	21.84	46.00	24.16	1000.0	9.000	N	ON	19.2
0.982500	29.04	---	56.00	26.96	1000.0	9.000	N	ON	19.2
1.153500	---	21.03	46.00	24.97	1000.0	9.000	N	ON	19.2
2.204250	23.31	---	56.00	32.69	1000.0	9.000	N	ON	19.1
4.980750	---	18.28	46.00	27.72	1000.0	9.000	N	ON	19.1
6.825750	---	21.19	50.00	28.81	1000.0	9.000	N	ON	19.1
11.595750	25.21	---	60.00	34.79	1000.0	9.000	N	ON	19.4
12.475500	24.84	---	60.00	35.16	1000.0	9.000	N	ON	19.4
12.642000	---	20.91	50.00	29.09	1000.0	9.000	N	ON	19.4

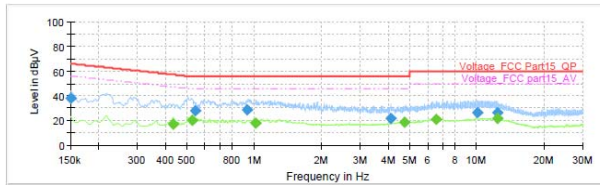
802.11g, Channel No.: 11

L Line



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.161250	---	17.85	55.40	37.55	1000.0	9.000	L1	ON	19.1
0.163500	36.89	---	65.28	28.39	1000.0	9.000	L1	ON	19.1
0.555000	31.13	---	56.00	24.87	1000.0	9.000	L1	ON	19.3
0.557250	---	22.77	46.00	23.23	1000.0	9.000	L1	ON	19.3
1.056750	---	20.05	46.00	25.95	1000.0	9.000	L1	ON	19.2
1.358250	30.94	---	56.00	25.06	1000.0	9.000	L1	ON	19.2
2.139000	24.78	---	56.00	31.22	1000.0	9.000	L1	ON	19.1
2.215500	---	16.97	46.00	29.03	1000.0	9.000	L1	ON	19.1
11.580000	34.29	---	60.00	25.71	1000.0	9.000	L1	ON	19.4
12.275250	---	24.85	50.00	25.15	1000.0	9.000	L1	ON	19.4
12.374250	---	24.49	50.00	25.51	1000.0	9.000	L1	ON	19.4
13.350750	33.63	---	60.00	26.37	1000.0	9.000	L1	ON	19.5

N Line

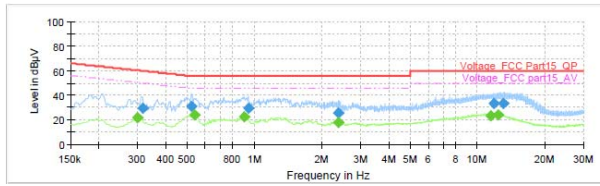


Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	38.23	---	56.00	17.77	1000.0	9.000	N	ON	19.1
0.431250	---	17.09	47.23	30.14	1000.0	9.000	N	ON	19.2
0.528000	---	19.86	46.00	26.14	1000.0	9.000	N	ON	19.2
0.541500	27.99	---	56.00	28.01	1000.0	9.000	N	ON	19.2
0.930750	28.84	---	56.00	27.16	1000.0	9.000	N	ON	19.2
1.016250	---	17.60	46.00	28.40	1000.0	9.000	N	ON	19.2
4.092000	21.84	---	56.00	34.16	1000.0	9.000	N	ON	19.1
4.717500	---	18.75	46.00	27.25	1000.0	9.000	N	ON	19.1
6.580000	---	21.11	50.00	28.89	1000.0	9.000	N	ON	19.1
10.011750	26.43	---	60.00	33.57	1000.0	9.000	N	ON	19.4
12.423750	---	21.50	50.00	28.50	1000.0	9.000	N	ON	19.4
12.430500	26.10	---	60.00	33.90	1000.0	9.000	N	ON	19.4



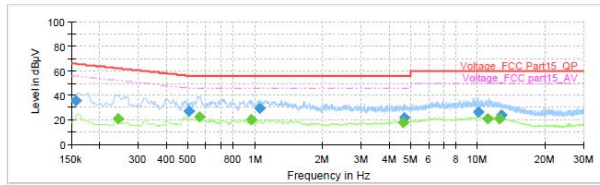
802.11n(HT20), Channel No.: 1

L Line



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.298500	---	21.50	50.28	28.78	1000.0	9.000	L1	ON	19.2
0.314250	29.07	---	59.86	30.78	1000.0	9.000	L1	ON	19.2
0.521250	31.39	---	56.00	24.61	1000.0	9.000	L1	ON	19.2
0.539250	---	24.36	46.00	21.64	1000.0	9.000	L1	ON	19.2
0.899250	---	22.75	46.00	23.25	1000.0	9.000	L1	ON	19.2
0.939750	29.40	---	56.00	26.60	1000.0	9.000	L1	ON	19.2
2.386500	---	17.67	46.00	28.33	1000.0	9.000	L1	ON	19.0
2.389750	25.23	---	56.00	30.77	1000.0	9.000	L1	ON	19.0
11.510250	---	23.30	50.00	26.70	1000.0	9.000	L1	ON	19.4
11.523000	33.24	---	60.00	26.76	1000.0	9.000	L1	ON	19.4
12.428250	---	23.76	50.00	26.24	1000.0	9.000	L1	ON	19.4
13.141500	33.00	---	60.00	27.00	1000.0	9.000	L1	ON	19.5

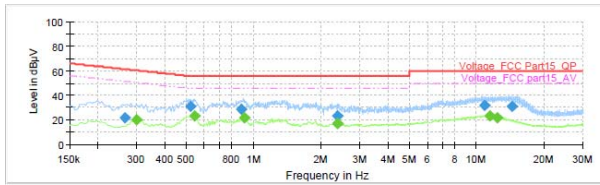
N Line



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.156750	35.89	---	65.63	29.74	1000.0	9.000	N	ON	19.1
0.242250	---	21.04	52.02	30.98	1000.0	9.000	N	ON	19.1
0.505500	27.14	---	56.00	28.86	1000.0	9.000	N	ON	19.2
0.561750	---	22.41	46.00	23.59	1000.0	9.000	N	ON	19.3
0.962250	---	20.07	46.00	25.93	1000.0	9.000	N	ON	19.2
1.050000	29.24	---	56.00	26.76	1000.0	9.000	N	ON	19.2
4.656750	---	18.21	46.00	27.79	1000.0	9.000	N	ON	19.1
4.704000	21.79	---	56.00	34.21	1000.0	9.000	N	ON	19.1
10.027500	26.41	---	60.00	33.59	1000.0	9.000	N	ON	19.4
11.049000	---	21.31	50.00	28.69	1000.0	9.000	N	ON	19.4
12.475500	---	20.67	50.00	29.33	1000.0	9.000	N	ON	19.4
12.862500	24.34	---	60.00	35.66	1000.0	9.000	N	ON	19.5

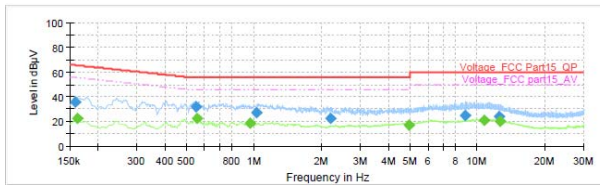
802.11n(HT20), Channel No.: 6

L Line



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.264750	21.38	---	61.28	39.90	1000.0	9.000	L1	ON	19.1
0.298500	---	20.37	50.28	29.92	1000.0	9.000	L1	ON	19.2
0.523500	30.80	---	56.00	25.20	1000.0	9.000	L1	ON	19.2
0.541500	---	23.57	46.00	22.43	1000.0	9.000	L1	ON	19.2
0.876750	28.90	---	56.00	27.10	1000.0	9.000	L1	ON	19.2
0.906000	---	22.00	46.00	24.00	1000.0	9.000	L1	ON	19.2
2.379750	23.53	---	56.00	32.47	1000.0	9.000	L1	ON	19.0
2.388750	---	17.34	46.00	28.66	1000.0	9.000	L1	ON	19.0
10.893750	31.40	---	60.00	28.60	1000.0	9.000	L1	ON	19.4
11.445000	---	23.17	50.00	26.83	1000.0	9.000	L1	ON	19.4
12.354000	---	22.06	50.00	27.94	1000.0	9.000	L1	ON	19.4
14.376750	31.32	---	60.00	28.68	1000.0	9.000	L1	ON	19.5

N Line

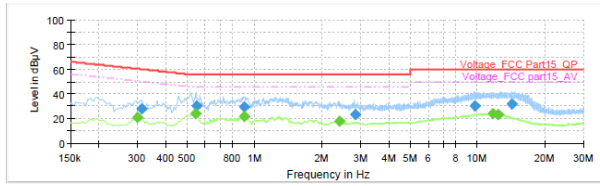


Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.159000	35.53	---	65.52	29.99	1000.0	9.000	N	ON	19.1
0.161250	---	22.85	55.40	32.54	1000.0	9.000	N	ON	19.1
0.552750	31.49	---	56.00	24.51	1000.0	9.000	N	ON	19.3
0.555000	---	22.24	46.00	23.76	1000.0	9.000	N	ON	19.3
0.960000	---	18.60	46.00	27.40	1000.0	9.000	N	ON	19.2
1.025250	26.91	---	56.00	29.09	1000.0	9.000	N	ON	19.2
2.206500	22.16	---	56.00	33.84	1000.0	9.000	N	ON	19.1
4.940250	---	17.24	46.00	28.76	1000.0	9.000	N	ON	19.1
8.862000	25.07	---	60.00	34.93	1000.0	9.000	N	ON	19.3
10.747500	---	21.15	50.00	28.85	1000.0	9.000	N	ON	19.4
12.473250	24.19	---	60.00	35.81	1000.0	9.000	N	ON	19.4
12.718500	---	20.05	50.00	29.95	1000.0	9.000	N	ON	19.5



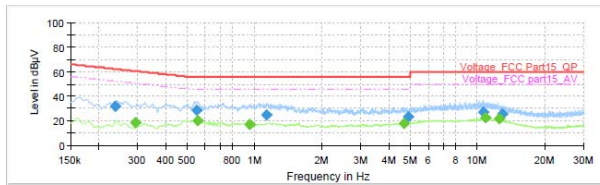
802.11n(HT20), Channel No.: 11

L Line



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.298500	---	21.05	50.28	29.24	1000.0	9.000	L1	ON	19.2
0.312000	28.28	---	59.92	31.64	1000.0	9.000	L1	ON	19.2
0.541500	---	23.90	46.00	22.10	1000.0	9.000	L1	ON	19.2
0.548250	30.34	---	56.00	25.66	1000.0	9.000	L1	ON	19.3
0.897000	29.66	---	56.00	26.34	1000.0	9.000	L1	ON	19.2
0.903750	---	22.02	46.00	23.98	1000.0	9.000	L1	ON	19.2
2.404500	---	17.92	46.00	28.08	1000.0	9.000	L1	ON	19.0
2.819500	22.88	---	56.00	33.12	1000.0	9.000	L1	ON	19.0
3.710250	30.54	---	60.00	29.46	1000.0	9.000	L1	ON	19.4
11.728500	---	23.79	50.00	26.21	1000.0	9.000	L1	ON	19.4
12.432750	---	23.14	50.00	26.86	1000.0	9.000	L1	ON	19.4
14.291250	32.05	---	60.00	27.95	1000.0	9.000	L1	ON	19.5

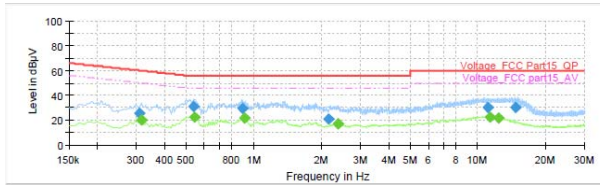
N Line



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.237750	31.64	---	62.17	30.53	1000.0	9.000	N	ON	19.1
0.291750	---	18.53	50.47	31.94	1000.0	9.000	N	ON	19.2
0.548250	28.88	---	56.00	27.12	1000.0	9.000	N	ON	19.3
0.555000	---	20.54	46.00	25.46	1000.0	9.000	N	ON	19.3
0.951000	---	17.23	46.00	28.77	1000.0	9.000	N	ON	19.2
1.133250	24.76	---	56.00	31.24	1000.0	9.000	N	ON	19.2
4.661250	---	18.12	46.00	27.88	1000.0	9.000	N	ON	19.1
4.895250	23.14	---	56.00	32.86	1000.0	9.000	N	ON	19.1
10.644000	27.14	---	60.00	32.86	1000.0	9.000	N	ON	19.4
10.844250	---	22.82	50.00	27.18	1000.0	9.000	N	ON	19.4
12.513750	---	21.38	50.00	28.62	1000.0	9.000	N	ON	19.4
12.900750	25.42	---	60.00	34.58	1000.0	9.000	N	ON	19.5

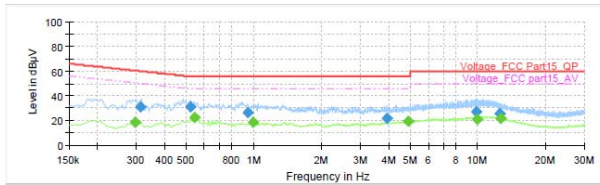
802.11n(HT40), Channel No.: 3

L Line



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.309750	25.95	---	59.98	34.03	1000.0	9.000	L1	ON	19.2
0.314250	---	19.92	49.86	29.94	1000.0	9.000	L1	ON	19.2
0.537000	30.71	---	56.00	25.29	1000.0	9.000	L1	ON	19.2
0.541500	---	22.84	46.00	23.16	1000.0	9.000	L1	ON	19.2
0.890250	29.21	---	56.00	26.79	1000.0	9.000	L1	ON	19.2
0.906000	---	21.68	46.00	24.32	1000.0	9.000	L1	ON	19.2
2.161500	20.65	---	56.00	35.35	1000.0	9.000	L1	ON	19.1
2.386500	---	17.02	46.00	28.98	1000.0	9.000	L1	ON	19.0
11.044500	30.43	---	60.00	29.57	1000.0	9.000	L1	ON	19.4
11.379750	---	22.66	50.00	27.34	1000.0	9.000	L1	ON	19.4
12.368750	---	21.48	50.00	28.52	1000.0	9.000	L1	ON	19.4
14.707500	29.89	---	60.00	30.11	1000.0	9.000	L1	ON	19.5

N Line

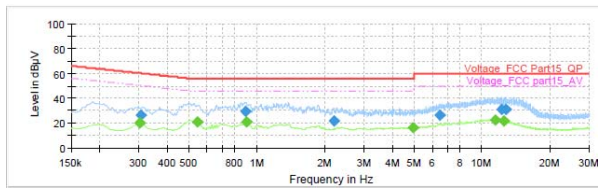


Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.294000	---	18.70	50.41	31.71	1000.0	9.000	N	ON	19.2
0.312000	30.81	---	59.92	29.11	1000.0	9.000	N	ON	19.2
0.521250	30.83	---	56.00	25.17	1000.0	9.000	N	ON	19.2
0.546000	---	22.19	46.00	23.81	1000.0	9.000	N	ON	19.2
0.935250	26.42	---	56.00	29.58	1000.0	9.000	N	ON	19.2
0.933750	---	18.30	46.00	27.70	1000.0	9.000	N	ON	19.2
3.936750	22.02	---	56.00	33.98	1000.0	9.000	N	ON	19.0
4.890750	---	19.10	46.00	26.90	1000.0	9.000	N	ON	19.1
9.894750	26.83	---	60.00	33.17	1000.0	9.000	N	ON	19.4
10.005000	---	21.12	50.00	28.88	1000.0	9.000	N	ON	19.4
12.468750	25.89	---	60.00	34.11	1000.0	9.000	N	ON	19.4
12.588000	---	21.41	50.00	28.59	1000.0	9.000	N	ON	19.4



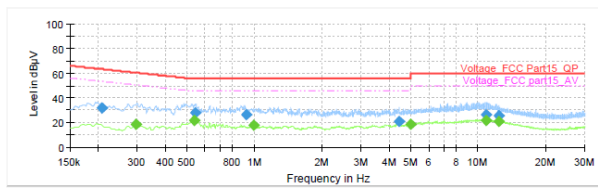
802.11n(HT40), Channel No.: 6

L Line



Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.300750	---	19.86	50.22	30.36	1000.0	9.000	L1	ON	19.2
0.305250	26.70	---	60.10	33.40	1000.0	9.000	L1	ON	19.2
0.546000	---	21.24	46.00	24.76	1000.0	9.000	L1	ON	19.2
0.888000	29.39	---	56.00	26.61	1000.0	9.000	L1	ON	19.2
0.897000	---	21.21	46.00	24.79	1000.0	9.000	L1	ON	19.2
2.195250	22.01	---	56.00	33.99	1000.0	9.000	L1	ON	19.1
4.949250	---	16.35	46.00	29.65	1000.0	9.000	L1	ON	19.1
6.474750	26.01	---	60.00	33.99	1000.0	9.000	L1	ON	19.1
11.487500	---	22.37	50.00	27.63	1000.0	9.000	L1	ON	19.4
12.279750	31.35	---	60.00	28.65	1000.0	9.000	L1	ON	19.4
12.491250	---	21.52	50.00	28.48	1000.0	9.000	L1	ON	19.4
12.772500	31.18	---	60.00	28.82	1000.0	9.000	L1	ON	19.5

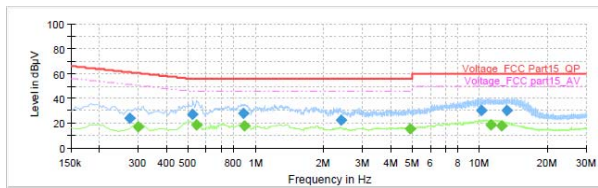
N Line



Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.208500	31.43	---	63.27	31.84	1000.0	9.000	N	ON	19.2
0.296250	---	18.55	50.35	31.80	1000.0	9.000	N	ON	19.2
0.539250	---	21.62	46.00	24.38	1000.0	9.000	N	ON	19.2
0.543750	28.14	---	56.00	27.86	1000.0	9.000	N	ON	19.2
0.924000	26.56	---	56.00	29.44	1000.0	9.000	N	ON	19.2
0.996000	---	17.49	46.00	28.51	1000.0	9.000	N	ON	19.2
4.418250	21.29	---	56.00	34.71	1000.0	9.000	N	ON	19.1
4.996500	---	18.24	46.00	27.76	1000.0	9.000	N	ON	19.1
10.896000	---	21.88	50.00	28.12	1000.0	9.000	N	ON	19.4
10.905000	26.65	---	60.00	33.35	1000.0	9.000	N	ON	19.4
12.342750	25.30	---	60.00	34.70	1000.0	9.000	N	ON	19.4
12.405750	---	21.15	50.00	28.85	1000.0	9.000	N	ON	19.4

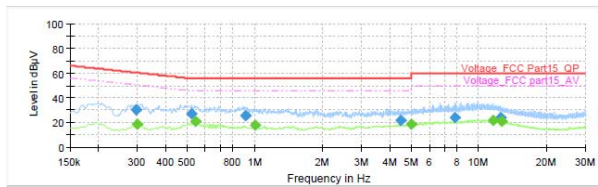
802.11n(HT40), Channel No.: 9

L Line



Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.273750	24.14	---	61.00	36.87	1000.0	9.000	L1	ON	19.1
0.298500	---	17.39	50.28	32.89	1000.0	9.000	L1	ON	19.2
0.523500	27.51	---	56.00	28.49	1000.0	9.000	L1	ON	19.2
0.546000	---	18.49	46.00	27.51	1000.0	9.000	L1	ON	19.2
0.881250	28.09	---	56.00	27.91	1000.0	9.000	L1	ON	19.2
0.894750	---	17.56	46.00	28.44	1000.0	9.000	L1	ON	19.2
2.393250	22.42	---	56.00	33.58	1000.0	9.000	L1	ON	19.0
4.868250	---	15.18	46.00	30.83	1000.0	9.000	L1	ON	19.1
10.153500	30.28	---	60.00	29.72	1000.0	9.000	L1	ON	19.4
11.181750	---	18.77	50.00	31.23	1000.0	9.000	L1	ON	19.4
12.480000	---	18.12	50.00	31.88	1000.0	9.000	L1	ON	19.4
13.229250	29.93	---	60.00	30.07	1000.0	9.000	L1	ON	19.5

N Line



Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.296250	30.15	---	60.35	30.20	1000.0	9.000	N	ON	19.2
0.298500	---	18.53	50.28	31.75	1000.0	9.000	N	ON	19.2
0.519000	26.91	---	56.00	29.09	1000.0	9.000	N	ON	19.2
0.541500	---	21.19	46.00	24.81	1000.0	9.000	N	ON	19.2
0.908250	25.65	---	56.00	30.35	1000.0	9.000	N	ON	19.2
1.002750	---	17.81	46.00	28.19	1000.0	9.000	N	ON	19.2
4.483500	21.34	---	56.00	34.66	1000.0	9.000	N	ON	19.1
5.005500	---	18.51	50.00	31.49	1000.0	9.000	N	ON	19.1
7.809000	23.85	---	60.00	36.15	1000.0	9.000	N	ON	19.2
11.613750	---	21.91	50.00	28.09	1000.0	9.000	N	ON	19.4
12.473250	23.75	---	60.00	36.25	1000.0	9.000	N	ON	19.4
12.718500	---	20.81	50.00	29.19	1000.0	9.000	N	ON	19.5

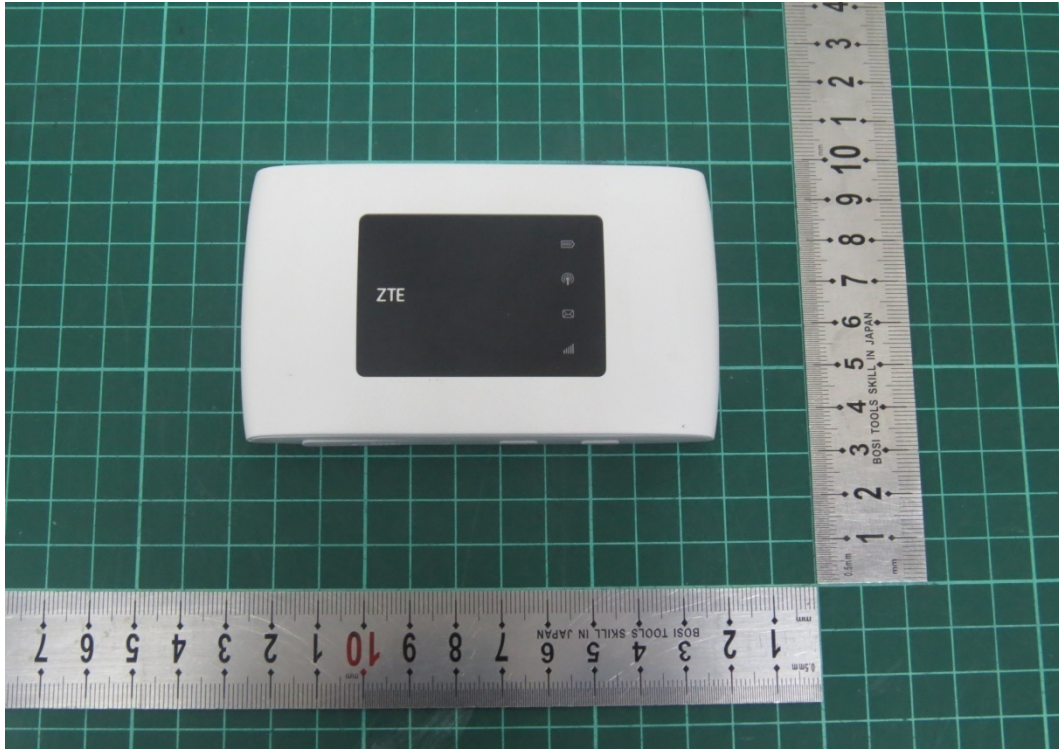
6. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Time
Spectrum Analyzer	R&S	FSV30	100815	2016-12-16	2017-12-15
EMI Test Receiver	R&S	ESCI	100948	2017-05-20	2018-05-19
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-201	2014-12-06	2017-12-05
Double Ridged Waveguide Horn Antenna	R&S	HF907	100126	2014-12-06	2017-12-05
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2017-02-18	2020-02-17
Standard Gain Horn	ETS-Lindgren	3160-09	00102644	2015-01-30	2018-01-29
EMI Test Receiver	R&S	ESCS30	100138	2016-12-16	2017-12-15
LISN	R&S	ENV216	101171	2016-12-16	2019-12-15
Spectrum Analyzer	Agilent	N9010A	MY47191109	2017-05-20	2018-05-19
RF Cable	Agilent	SMA 15cm	0001	2017-02-06	2017-08-05

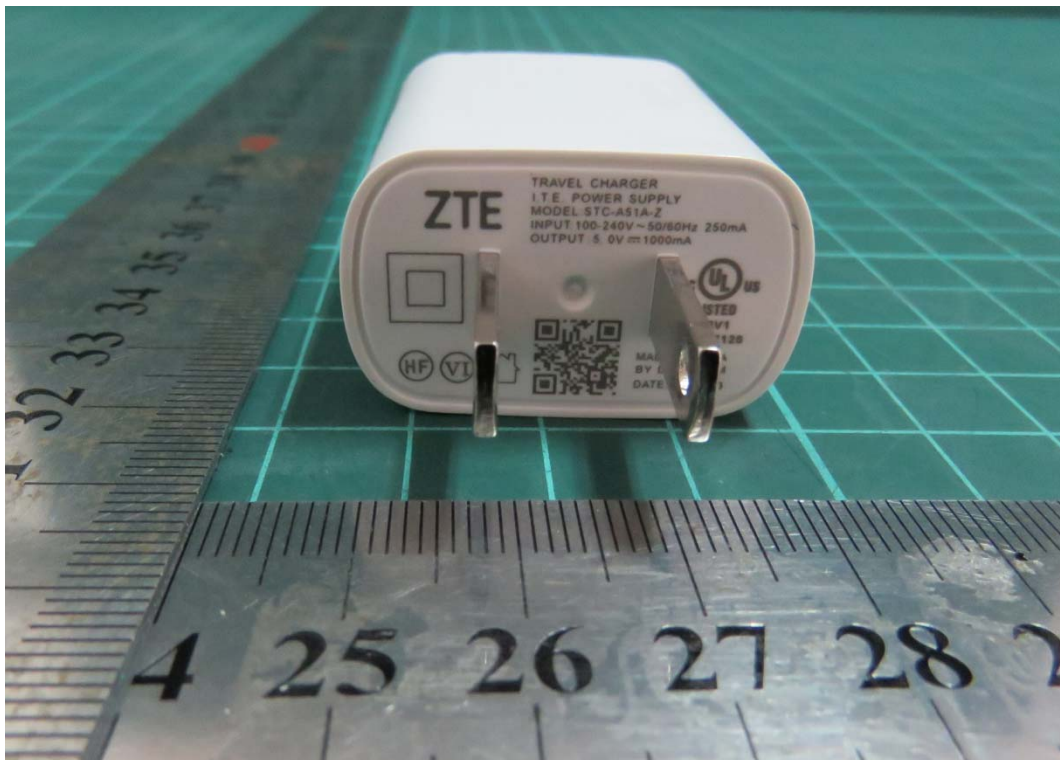
*****END OF REPORT *****

ANNEX A: EUT Appearance and Test Setup

A.1 EUT Appearance



a: EUT



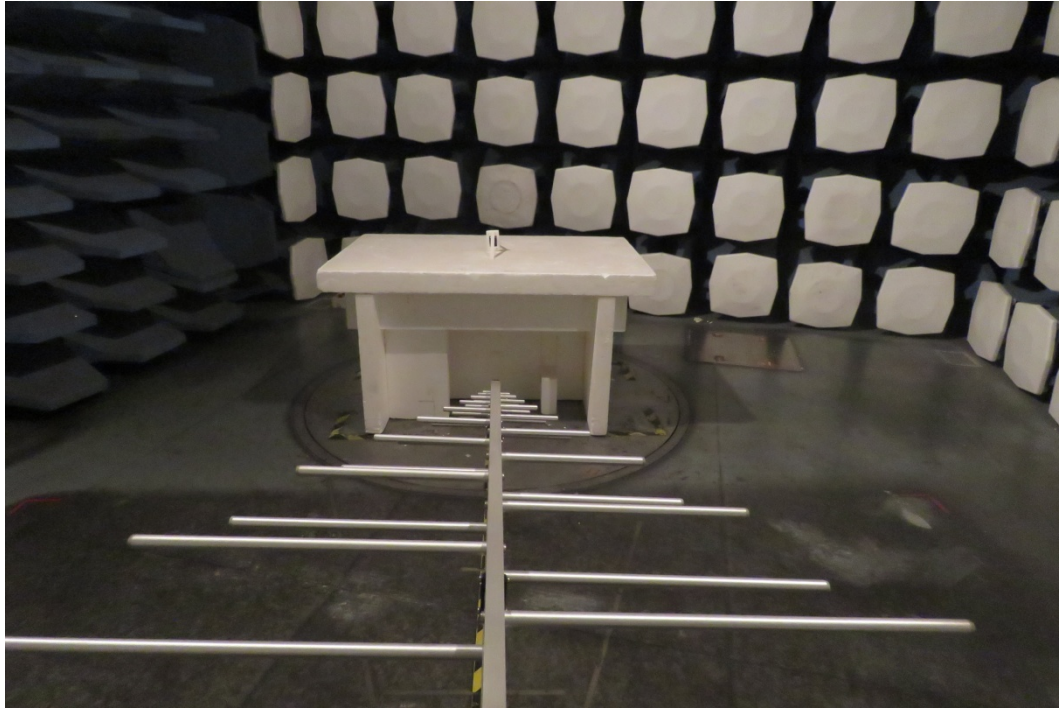
b: Adapter



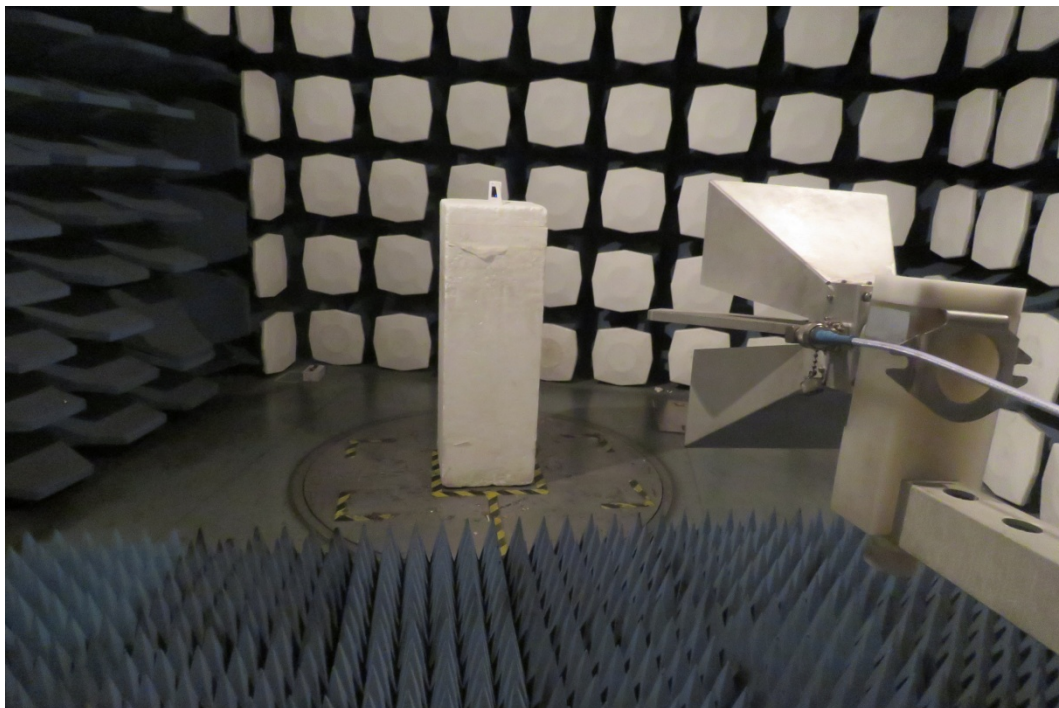
c: USB Cable

Picture 1 EUT

A.2 Test Setup



30M Hz-1GHz



Above 1GHz

Picture 2 Radiated Emission Test Setup



Picture 3 Conducted Emission Test Setup