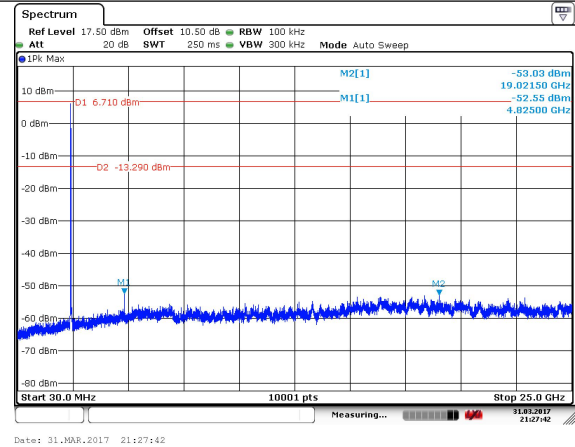
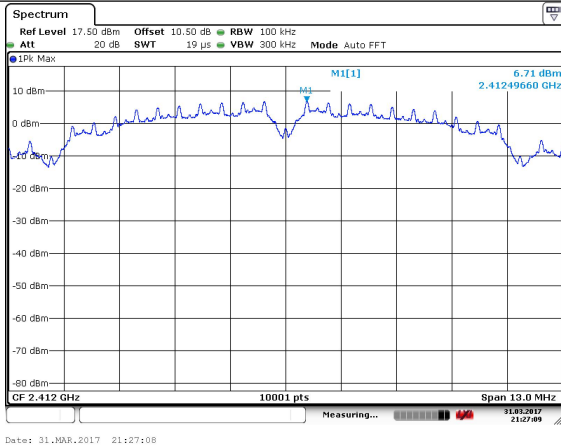


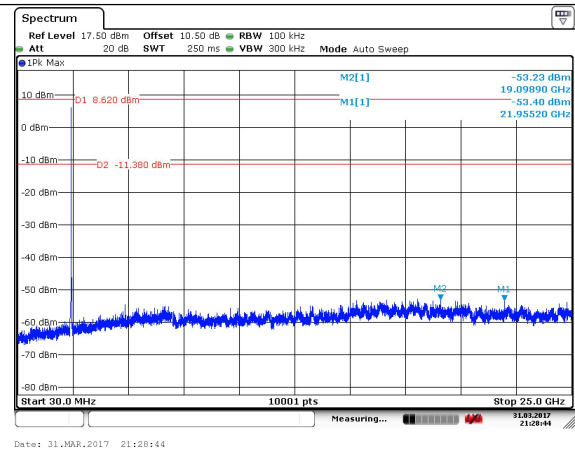
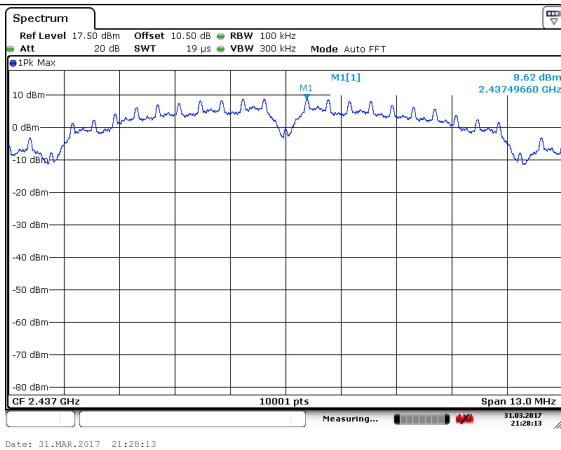
Conducted Out of band emission measurement

802.11b

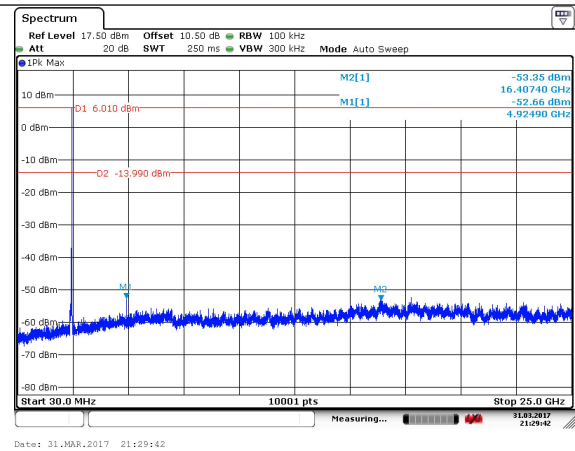
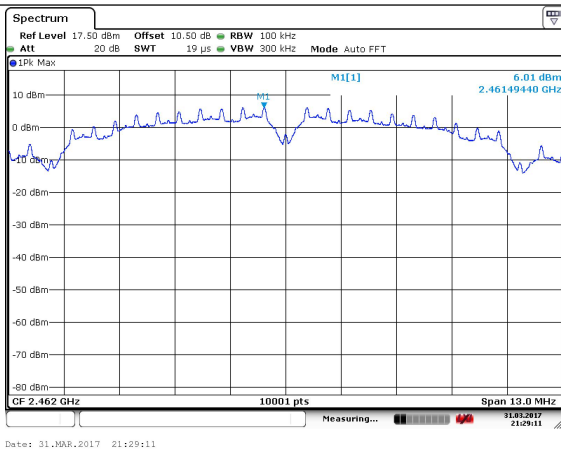
CH1



CH6

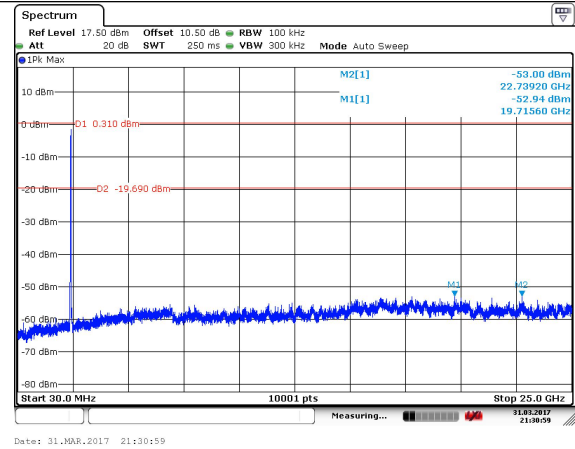
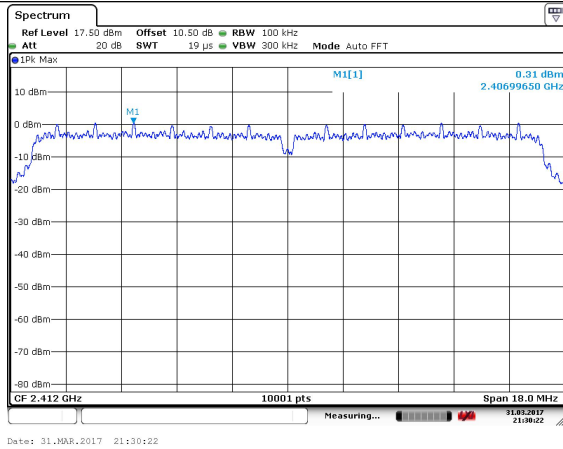


CH11

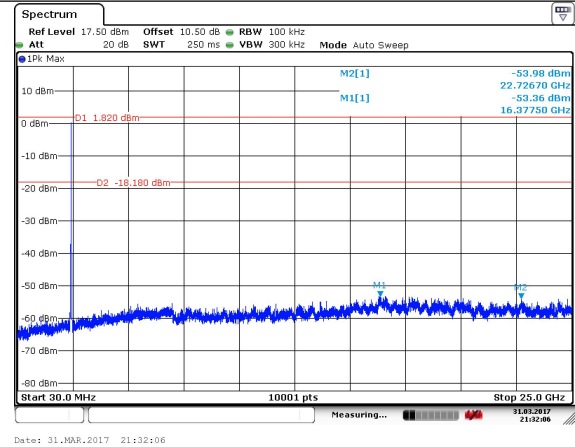
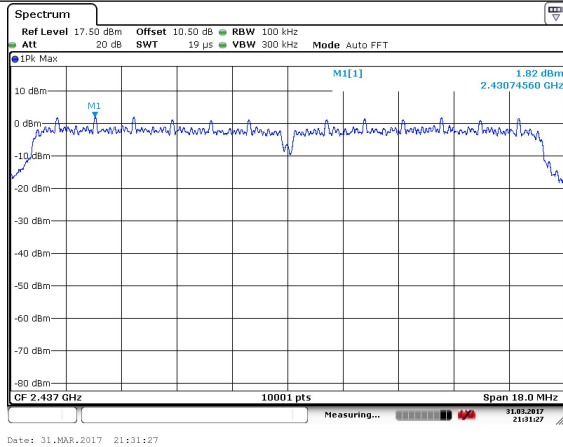


802.11g

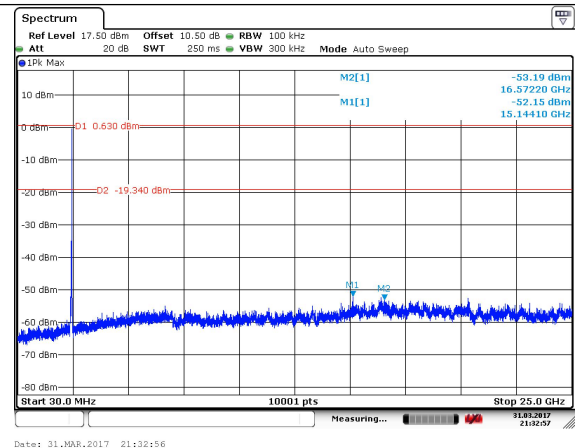
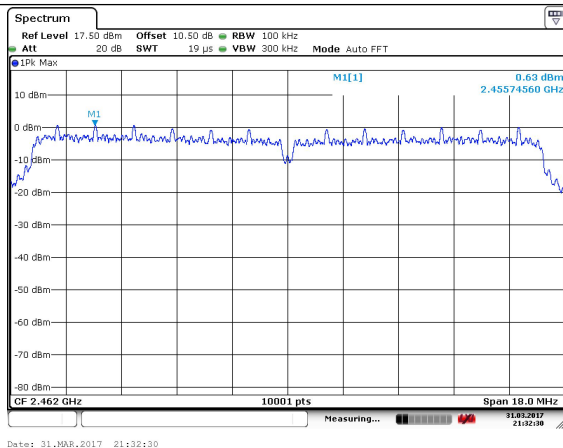
CH1



CH6

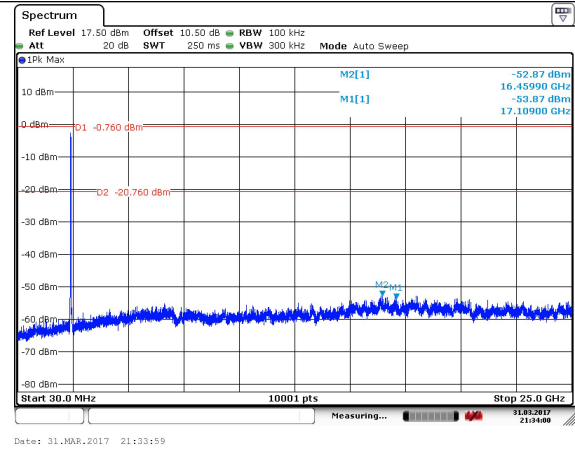
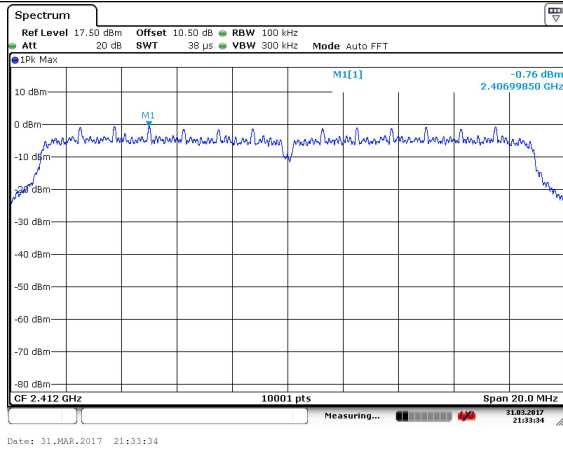


CH11

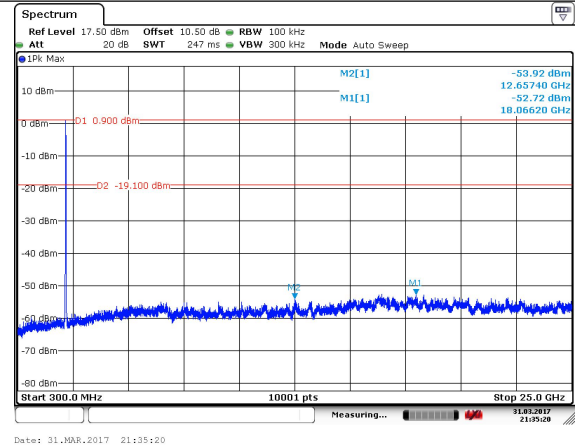
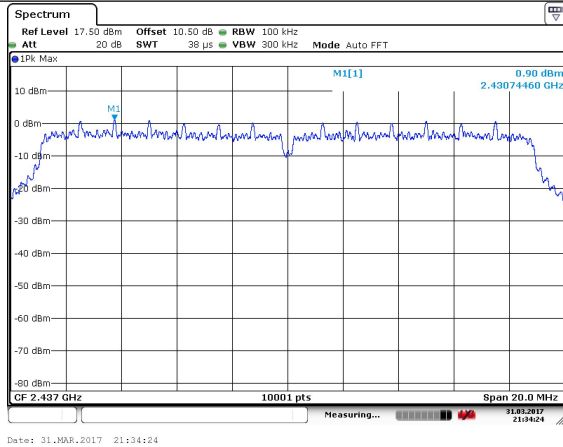


802.11n(20MHz)

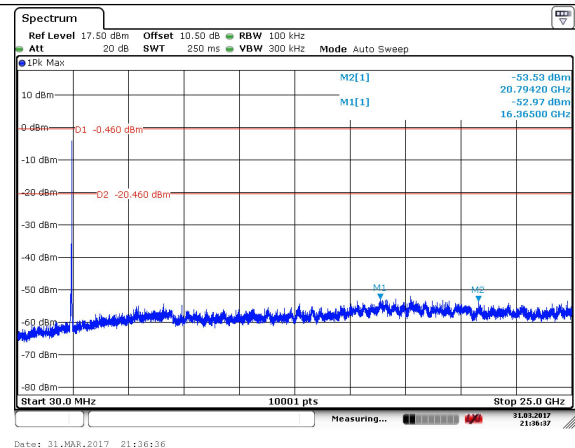
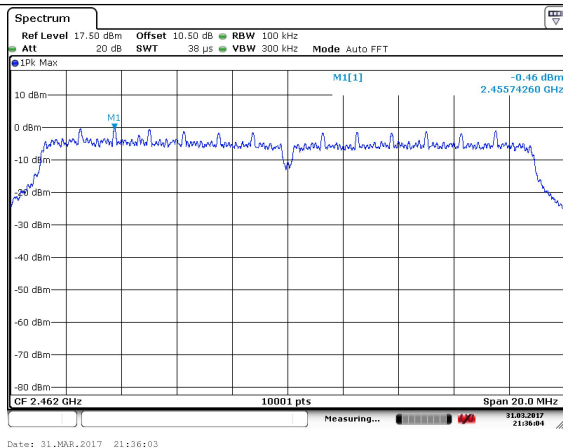
CH1



CH6



CH11



APPENDIX B – TEST DATA OF RADIATED EMISSION

Radiated Emission Band Edge

The worst case attitude: The mobile lay down.

Peak detector: RBW=1MHz,VBW=3MHz,sweep time=200ms;

Average detector: RBW=1MHz,VBW=10Hz,sweep time=auto;

Carrier frequency (MHz): 2412

Channel No.:1

Test Mode: 802.11b

Polarity:Vertical

Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2412	103.57	69.57	N/A	N/A	8.90	25.10
2	2390	59.73	25.73	-14.27	74.00	8.90	25.10

Carrier frequency (MHz): 2412

Channel No.:1

Test Mode: 802.11b

Polarity:Horizontal

Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2412	97.72	63.72	N/A	N/A	8.90	25.10
2	2390	54.08	20.08	-19.92	74.00	8.90	25.10

Carrier frequency (MHz): 2412
Channel No.:1
Test Mode: 802.11b
Polarity:Vertical
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2412	93.06	59.06	N/A	N/A	8.90	25.10
2	2390	54.18	20.18	0.18	54.00	8.90	25.10

Carrier frequency (MHz): 2412
Channel No.:1
Test Mode: 802.11b
Polarity:Horizontal
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2412	89.35	55.35	N/A	N/A	8.90	25.10
2	2390	53.95	19.95	-0.05	54.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11b
Polarity:Vertical
Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	102.06	68.06	N/A	N/A	8.90	25.10
2	2483.5	61.31	27.31	-12.69	74.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11b
Polarity:Horizontal
Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	99.40	65.40	N/A	N/A	8.90	25.10
2	2483.5	56.94	22.94	-17.06	74.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11b
Polarity:Vertical
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	93.85	59.85	N/A	N/A	8.90	25.10
2	2483.5	51.25	17.25	-2.75	54.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11b
Polarity:Horizontal
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	87.61	53.61	N/A	N/A	8.90	25.10
2	2483.5	50.58	16.58	-3.42	54.00	8.90	25.10

Carrier frequency (MHz): 2412
Channel No.:1
Test Mode: 802.11g
Polarity: Vertical
Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2412	106.78	72.78	N/A	N/A	8.90	25.10
2	2390	59.25	25.25	-14.75	74.00	8.90	25.10

Carrier frequency (MHz): 2412
Channel No.:1
Test Mode: 802.11g
Polarity:Horizontal
Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2412	98.01	64.01	N/A	N/A	8.90	25.10
2	2390	53.29	19.29	-20.71	74.00	8.90	25.10

Carrier frequency (MHz): 2412
Channel No.:1
Test Mode: 802.11g
Polarity: Vertical
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2412	94.35	60.35	N/A	N/A	8.90	25.10
2	2390	51.24	17.24	-2.76	54.00	8.90	25.10

Carrier frequency (MHz): 2412
Channel No.:1
Test Mode: 802.11g
Polarity:Horizontal
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2412	89.68	55.68	N/A	N/A	8.90	25.10
2	2390	50.71	16.71	-3.29	54.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11g
Polarity: Vertical
Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	106.85	72.85	N/A	N/A	8.90	25.10
2	2483.5	60.58	26.58	-13.42	74.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11g
Polarity:Horizontal
Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	97.66	63.66	N/A	N/A	8.90	25.10
2	2483.5	53.72	19.72	-20.28	74.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11g
Polarity: Vertical
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	92.27	58.27	N/A	N/A	8.90	25.10
2	2483.5	52.43	18.43	-1.57	54.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11g
Polarity:Horizontal
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	88.97	54.97	N/A	N/A	8.90	25.10
2	2483.5	52.19	18.19	-1.81	54.00	8.90	25.10

Carrier frequency (MHz): 2412
Channel No.:1
Test Mode: 802.11n(HT20)
Polarity: Vertical
Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2412	105.09	71.09	N/A	N/A	8.90	25.10
2	2390	61.96	27.96	-12.04	74.00	8.90	25.10

Carrier frequency (MHz): 2412
Channel No.:1
Test Mode: 802.11n(HT20)
Polarity:Horizontal
Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2412	100.15	66.15	N/A	N/A	8.90	25.10
2	2390	53.93	19.93	-20.07	74.00	8.90	25.10

Carrier frequency (MHz): 2412
Channel No.:1
Test Mode: 802.11n(HT20)
Polarity: Vertical
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2412	95.27	61.27	N/A	N/A	8.90	25.10
2	2390	54.67	20.67	0.67	54.00	8.90	25.10

Carrier frequency (MHz): 2412
Channel No.:1
Test Mode: 802.11n(HT20)
Polarity:Horizontal
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2412	91.30	57.30	N/A	N/A	8.90	25.10
2	2390	53.89	19.89	-0.11	54.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11n(HT20)
Polarity: Vertical
Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	103.23	69.23	N/A	N/A	8.90	25.10
2	2483.5	61.70	27.70	-12.30	74.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11n(HT20)
Polarity:Horizontal
Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	100.61	66.61	N/A	N/A	8.90	25.10
2	2483.5	56.30	22.30	-17.70	74.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11n(HT20)
Polarity: Vertical
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	93.58	59.58	N/A	N/A	8.90	25.10
2	2483.5	52.18	18.18	-1.82	54.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11n(HT20)
Polarity:Horizontal
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	90.41	56.41	N/A	N/A	8.90	25.10
2	2483.5	52.06	18.06	-1.94	54.00	8.90	25.10

Carrier frequency (MHz): 2422
Channel No.:3
Test Mode: 802.11n(HT40)
Polarity: Vertical
Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2422	104.85	70.85	N/A	N/A	8.90	25.10
2	2390	58.02	24.02	-15.98	74.00	8.90	25.10

Carrier frequency (MHz): 2422
Channel No.:3
Test Mode: 802.11n(HT40)
Polarity:Horizontal
Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2422	99.58	65.58	N/A	N/A	8.90	25.10
2	2390	53.76	19.76	-20.24	74.00	8.90	25.10

Carrier frequency (MHz): 2422
Channel No.:3
Test Mode: 802.11n(HT40)
Polarity: Vertical
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2422	95.77	61.77	N/A	N/A	8.90	25.10
2	2390	51.03	17.03	-2.97	54.00	8.90	25.10

Carrier frequency (MHz): 2422
Channel No.:3
Test Mode: 802.11n(HT40)
Polarity:Horizontal
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2422	89.42	55.42	N/A	N/A	8.90	25.10
2	2390	51.02	17.02	-2.98	54.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11n(HT40)
Polarity: Vertical
Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	103.62	69.62	N/A	N/A	8.90	25.10
2	2483.5	60.42	26.42	-13.58	74.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11n(HT40)
Polarity:Horizontal
Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	100.33	66.33	N/A	N/A	8.90	25.10
2	2483.5	55.50	21.50	-18.50	74.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.:11
Test Mode: 802.11n(HT40)
Polarity: Vertical
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	94.36	60.36	N/A	N/A	8.90	25.10
2	2483.5	54.79	20.79	0.79	54.00	8.90	25.10

Carrier frequency (MHz): 2462
Channel No.11
Test Mode: 802.11n(HT40)
Polarity:Horizontal
Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2462	90.17	56.17	N/A	N/A	8.90	25.10
2	2483.5	53.80	19.80	-0.20	54.00	8.90	25.10

For 802.11b

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity
37.77	36.70	17.1	22.60	Vertical
55.27	14.80	7.5	25.30	Vertical
92.20	16.10	11.3	16.20	Vertical
168.01	9.80	10.6	16.40	Horizontal
529.57	21.20	21.8	16.50	Vertical
959.17	29.00	28.7	16.30	Horizontal

For 802.11g

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity
37.77	36.90	17.1	21.80	Vertical
55.27	14.80	7.5	15.80	Vertical
168.01	9.90	10.6	16.00	Horizontal
259.37	12.20	13.8	16.30	Horizontal
523.74	21.10	21.7	15.90	Vertical
945.57	28.60	28.3	16.00	Vertical

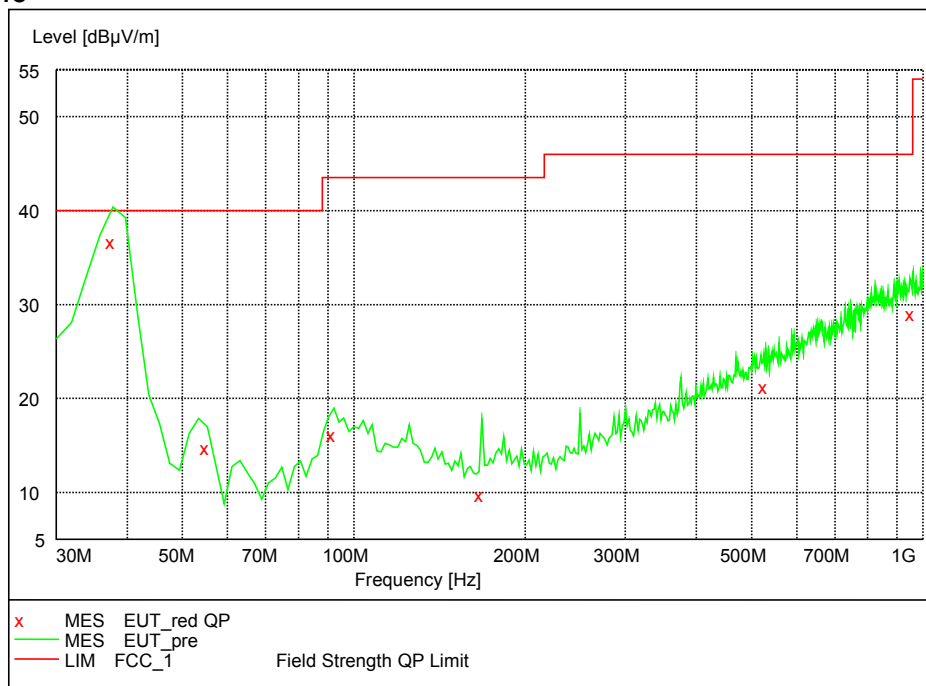
For 802.11n(HT20)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity
37.77	36.70	17.1	22.90	Vertical
53.32	14.90	8.3	19.30	Horizontal
55.27	14.90	7.5	15.00	Vertical
168.01	10.00	10.6	15.50	Vertical
535.41	21.40	21.9	15.90	Vertical
947.51	28.60	28.4	16.10	Vertical

For 802.11n(HT40)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity
37.77	36.90	17.1	20.40	Vertical
53.32	14.90	8.3	18.30	Vertical
55.27	14.90	7.5	18.40	Vertical
86.37	11.50	10.8	17.20	Vertical
475.15	19.90	20.7	17.10	Vertical
935.85	28.50	28.2	15.50	Vertical

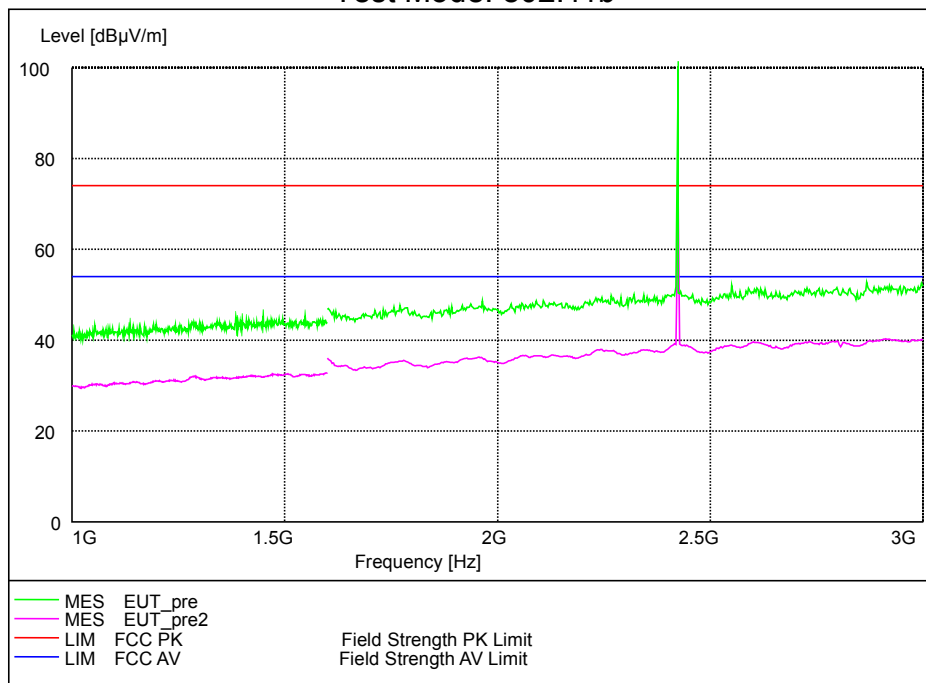
Carrier frequency (MHz): 2437
Channel No.:6



Frequency Range: 30MHz -1GHz

Detector: QP mode

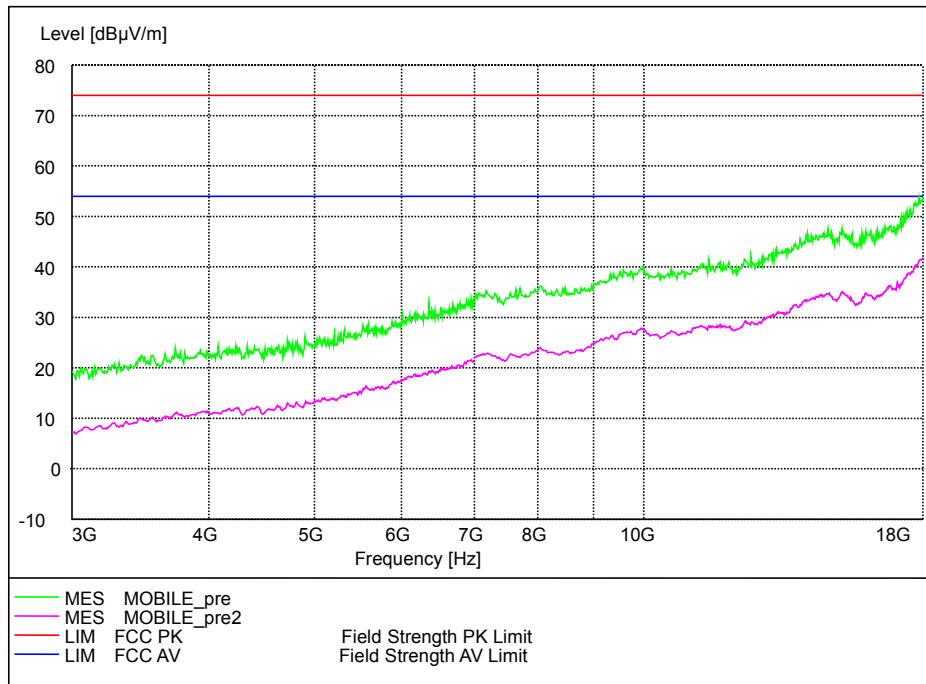
Test Mode: 802.11b



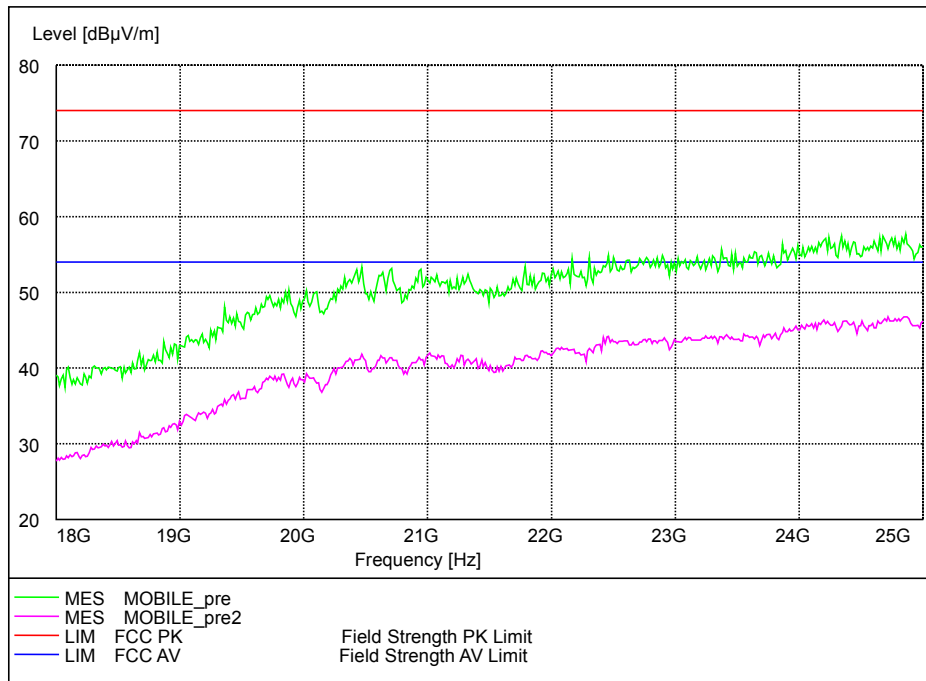
Frequency Range: 1GHz -3GHz

Detector: Av mode and PK mode

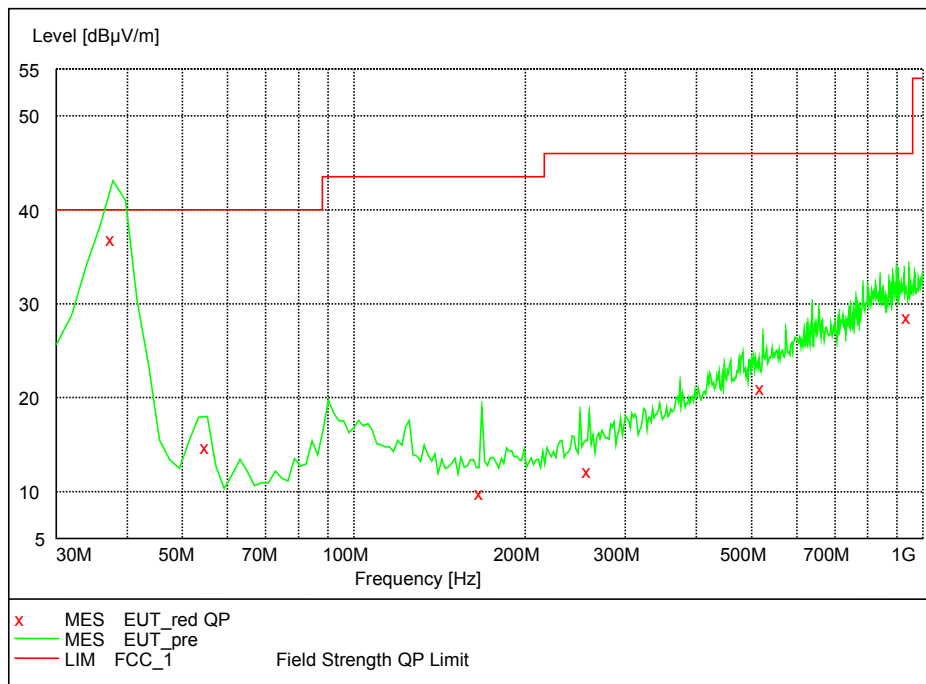
Modulation type: 802.11b



Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11b



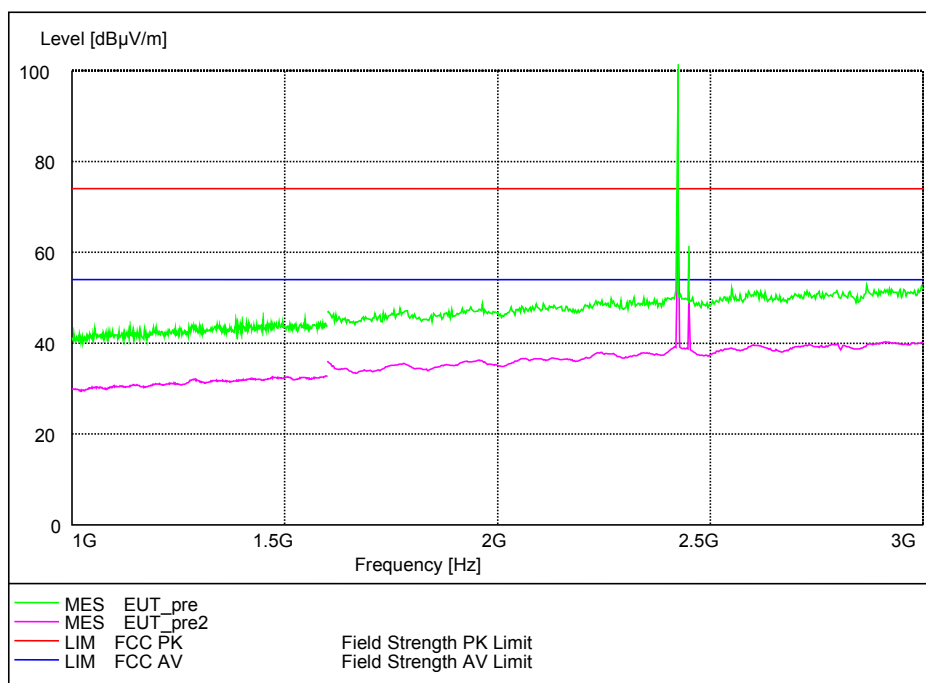
Frequency Range: 18GHz -25GHz
Detector: Av mode and PK mode
Modulation type: 802.11b



Frequency Range: 30MHz -1GHz

Detector: QP mode

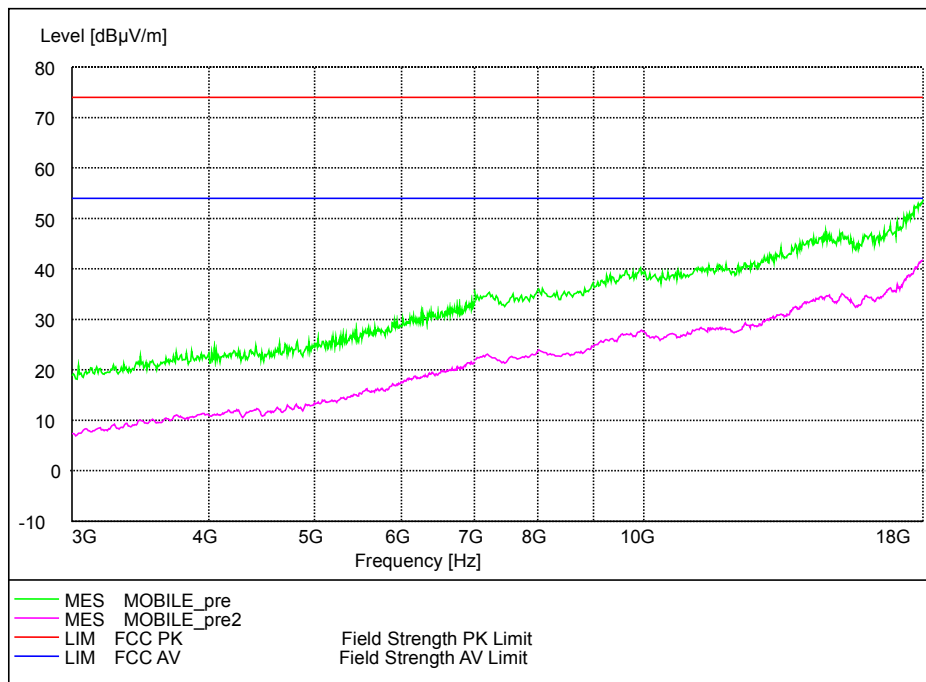
Modulation type: 802.11g



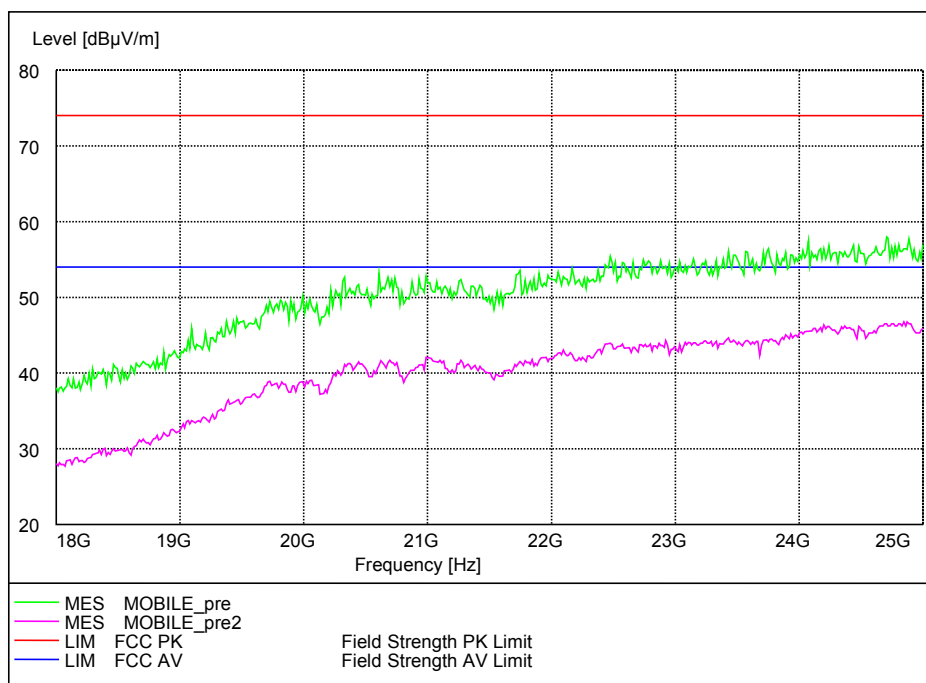
Frequency Range: 1GHz -3GHz

Detector: Av mode and PK mode

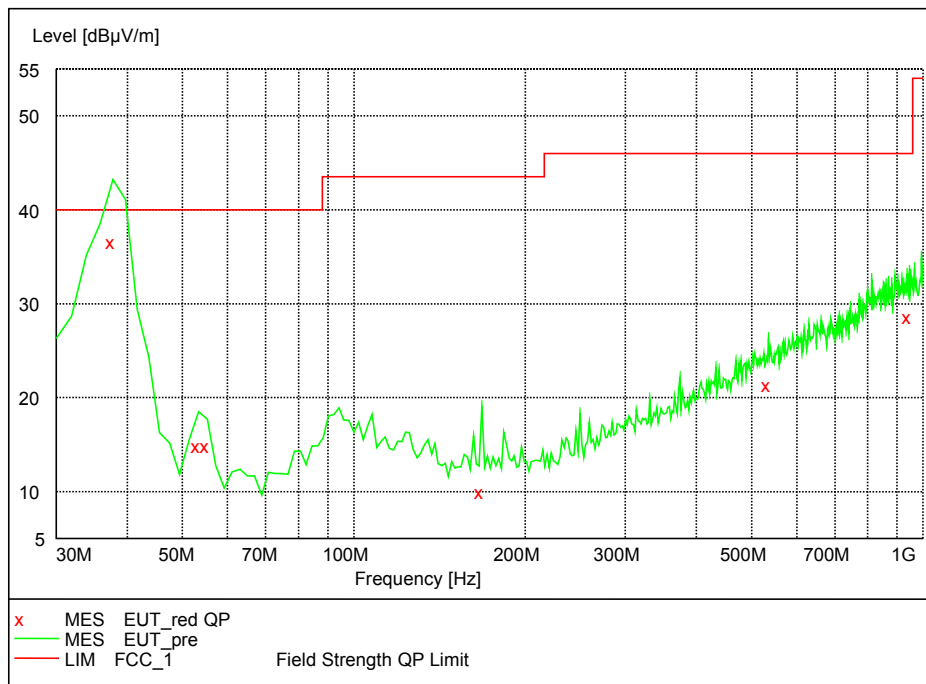
Modulation type: 802.11g



Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11g



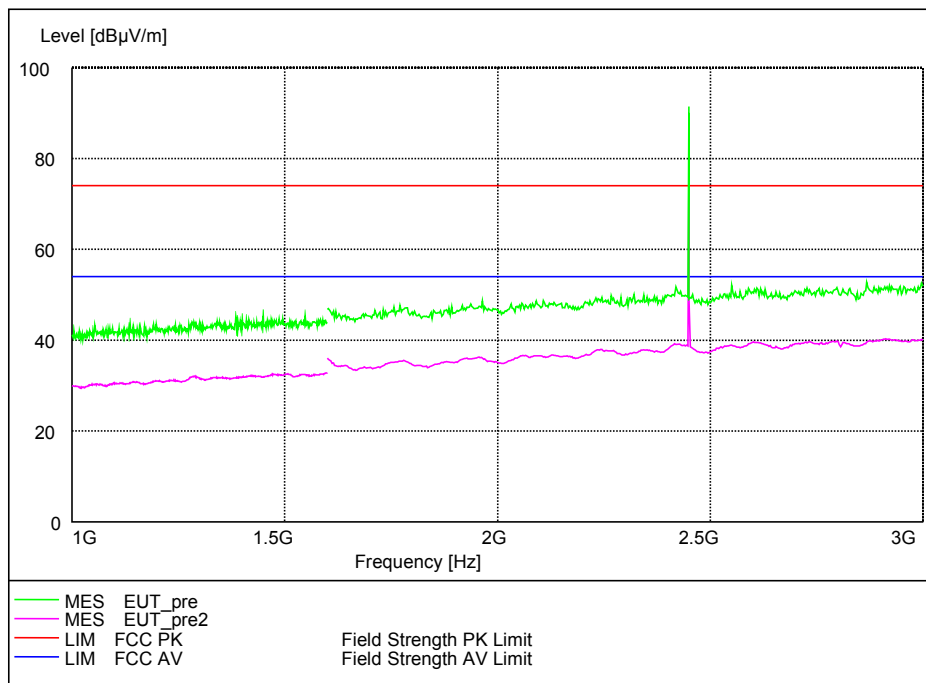
Frequency Range: 18GHz -25GHz
Detector: Av mode and PK mode
Modulation type: 802.11g



Frequency Range: 30MHz -1GHz

Detector: QP mode

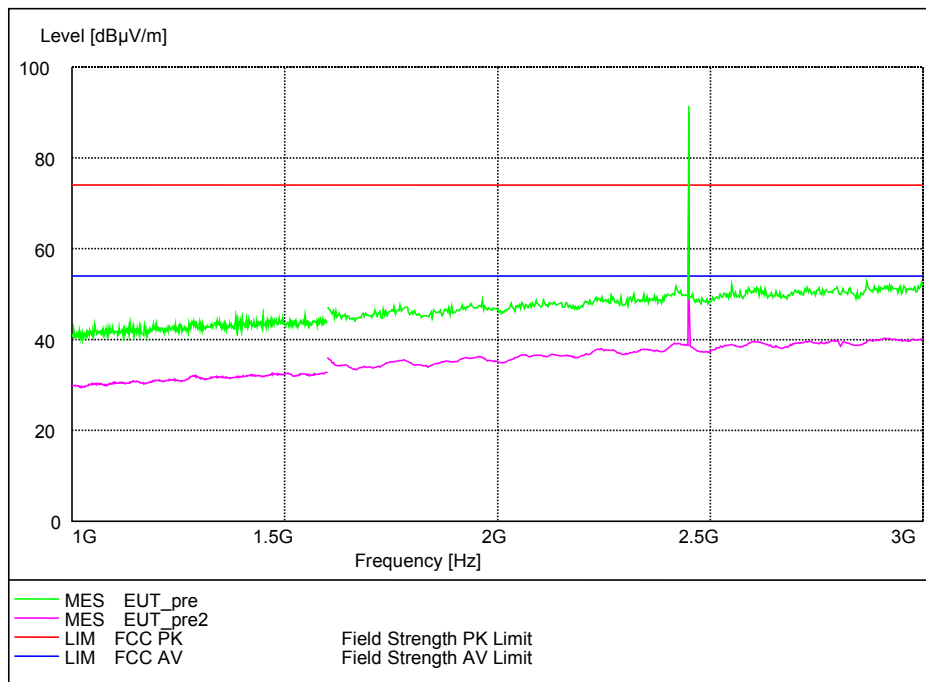
Test Mode: 802.11n(HT20)



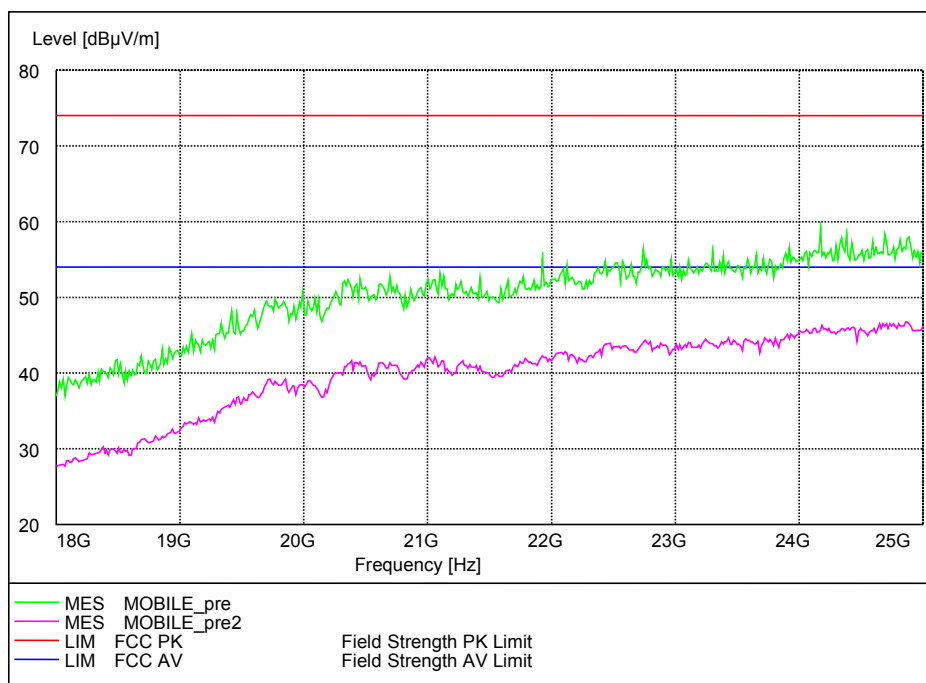
Frequency Range: 1GHz -3GHz

Detector: Av mode and PK mode

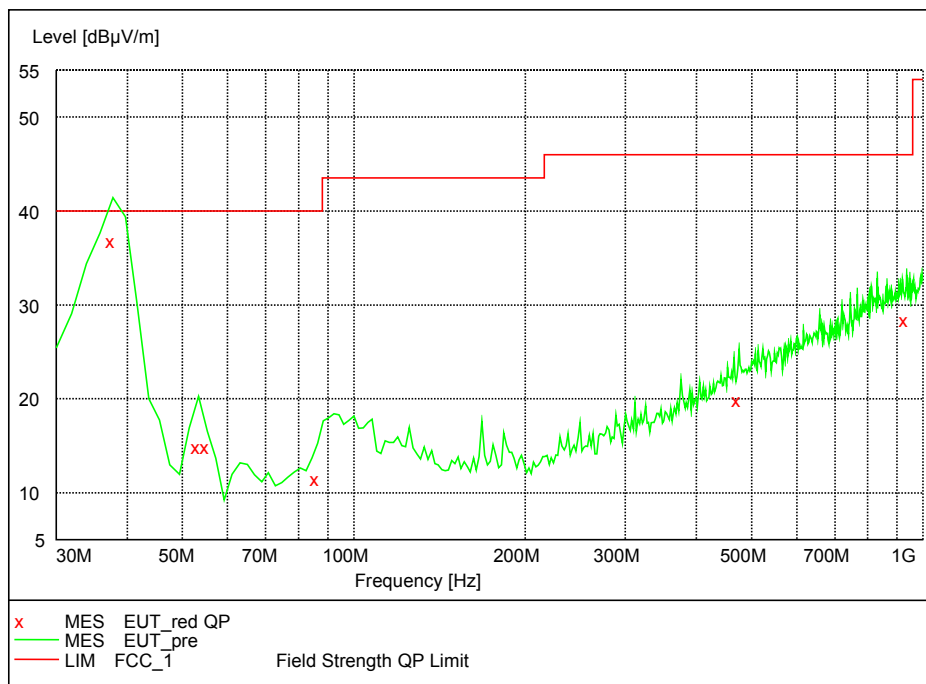
Modulation type: 802.11n(HT20)



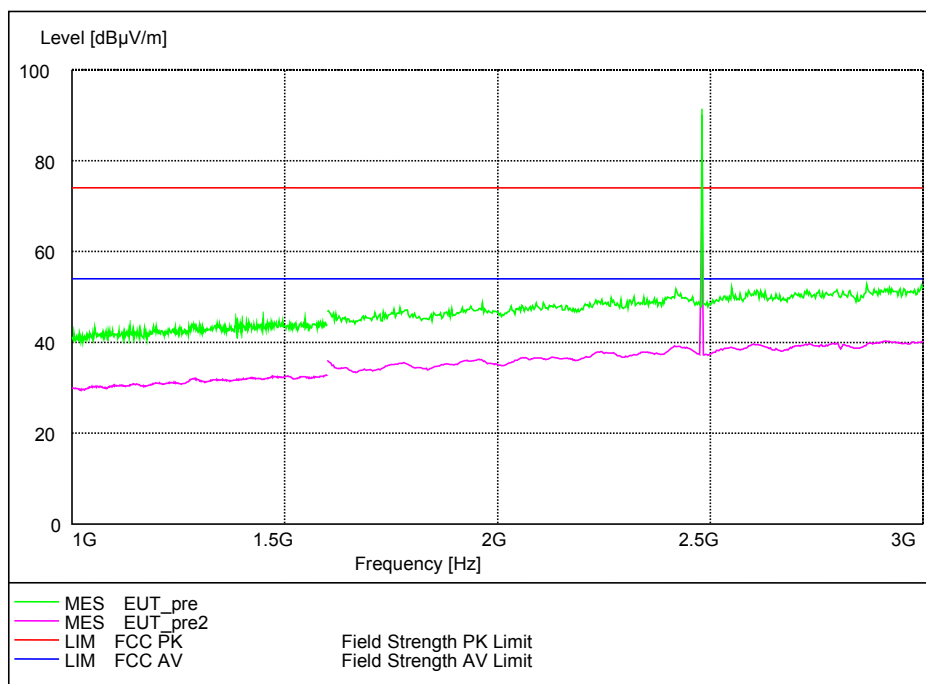
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)



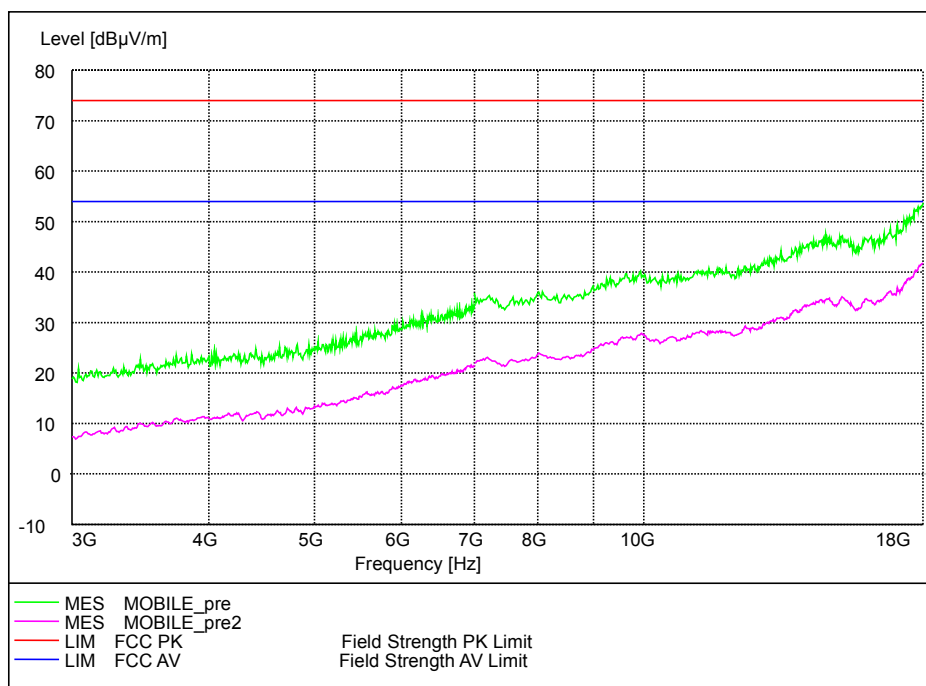
Frequency Range: 18GHz -25GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)



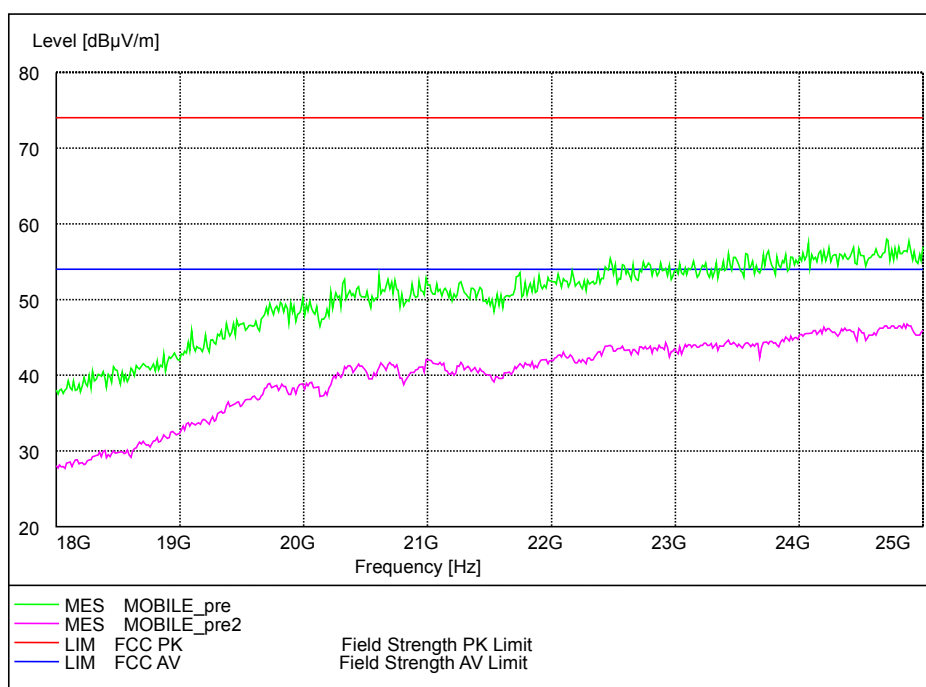
Frequency Range: 30MHz -1GHz
Detector: QP mode
Modulation type: 802.11n(HT40)



Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT40)

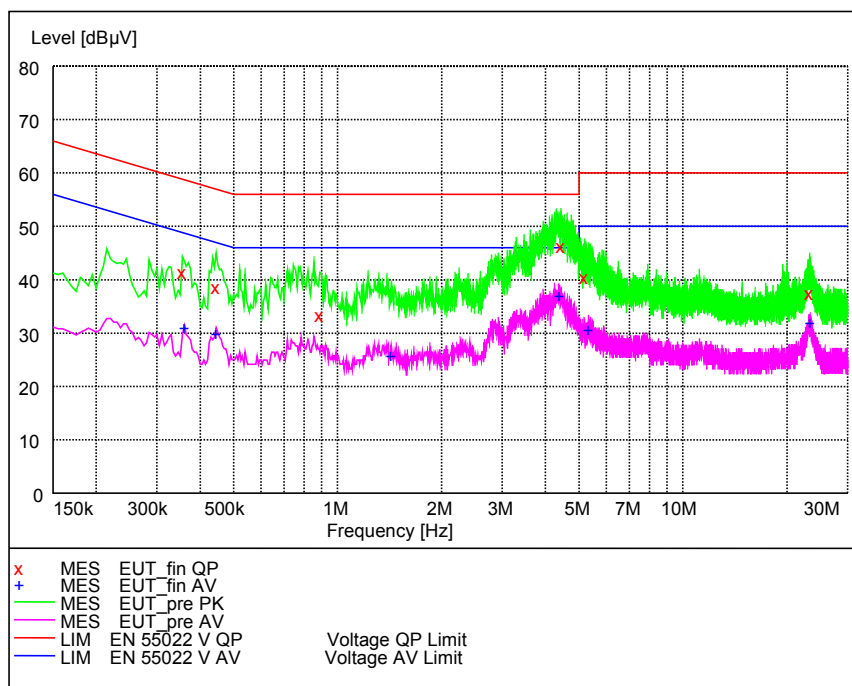


Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT40)



Frequency Range: 18GHz -25GHz
Detector: Av mode and PK mode

AC Power line Conducted Emission



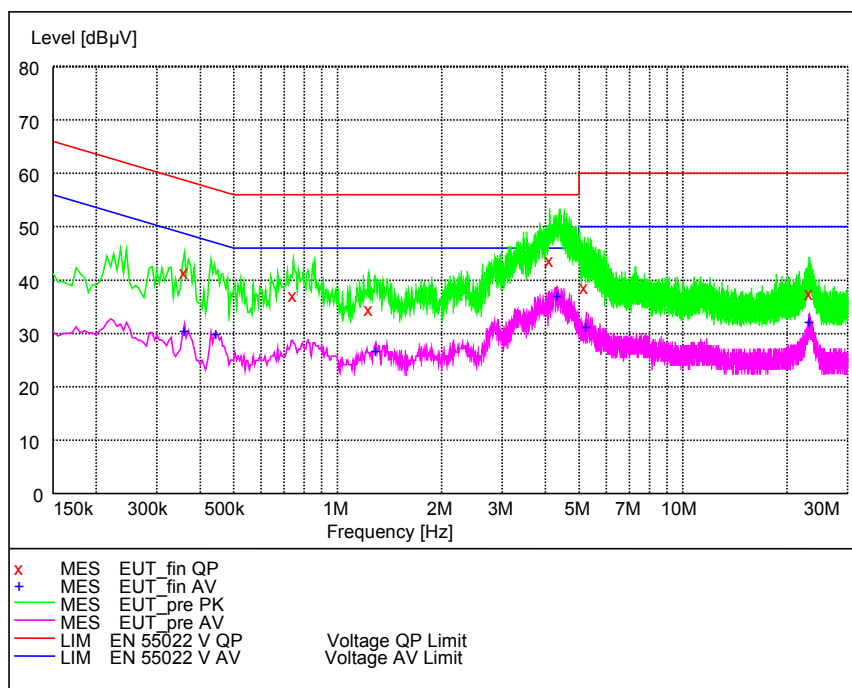
L Line

MEASUREMENT RESULT: "MOBILE_fin QP"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.355000	41.80	29.6	59	17.0	---	---
0.445000	38.90	29.5	57	18.0	---	---
0.890000	33.70	29.5	56	22.3	---	---
4.445000	46.60	29.6	56	9.4	---	---
5.190000	40.80	29.6	60	19.2	---	---
23.255000	37.80	30.9	60	22.2	---	---

MEASUREMENT RESULT: "MOBILE_fin AV"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.360000	31.20	29.5	49	17.6	---	---
0.445000	30.10	29.5	47	16.9	---	---
1.430000	26.00	29.5	46	20.0	---	---
4.395000	37.30	29.6	46	8.7	---	---
5.335000	30.80	29.6	50	19.2	---	---
23.320000	32.20	30.9	50	17.8	---	---



N Line

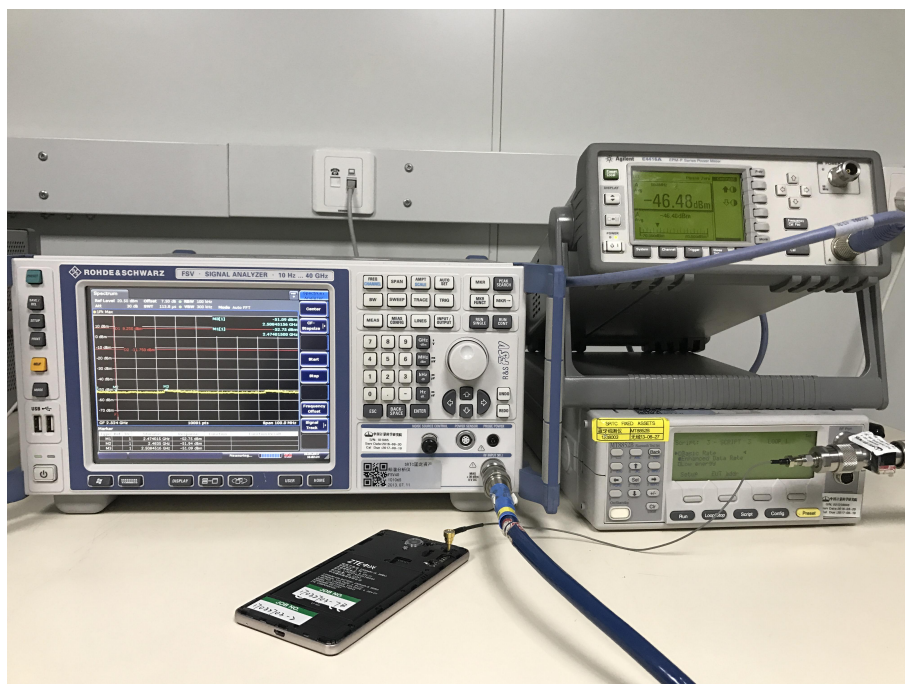
MEASUREMENT RESULT: "MOBILE_fin QP"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.360000	41.70	29.5	59	17.0	---	---
0.745000	37.50	29.4	56	18.5	---	---
1.235000	34.80	29.5	56	21.2	---	---
4.115000	44.00	29.6	56	12.0	---	---
5.195000	39.00	29.6	60	21.0	---	---
23.250000	37.80	30.9	60	22.2	---	---

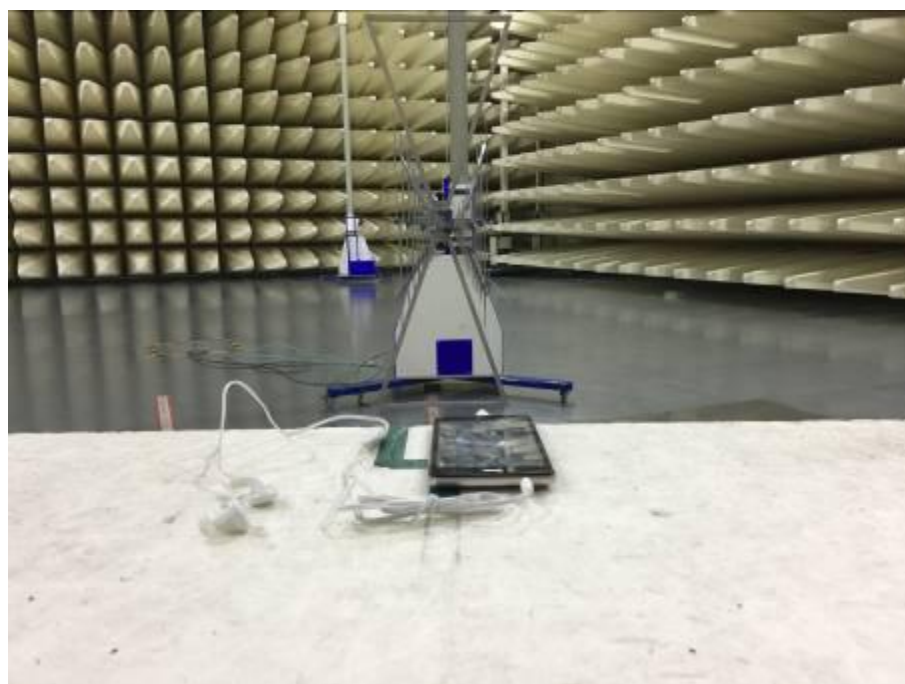
MEASUREMENT RESULT: "MOBILE_fin AV"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.360000	30.80	29.5	49	17.9	---	---
0.445000	30.20	29.5	47	16.8	---	---
1.290000	27.00	29.5	46	19.0	---	---
4.330000	37.20	29.6	46	8.8	---	---
5.260000	31.50	29.6	50	18.5	---	---
23.265000	32.40	30.9	50	17.6	---	---

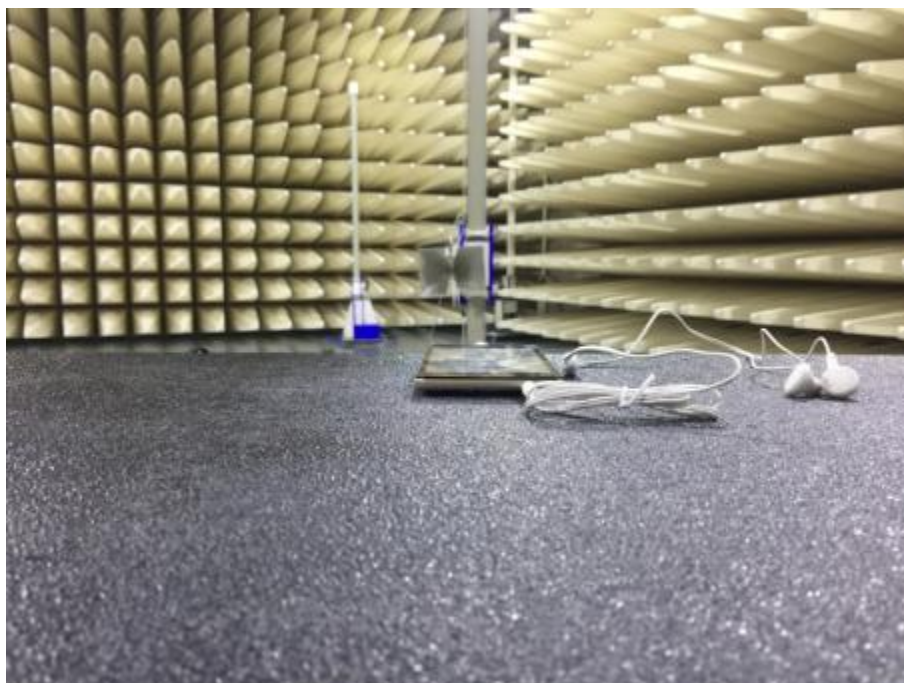
Appendix C Test Setup



Spurious RF Conducted Emissions Test setup



Spurious Radiated Emissions Test setup (30MHz~1GHz)



Spurious Radiated Emissions Test setup (1GHz~25GHz)