

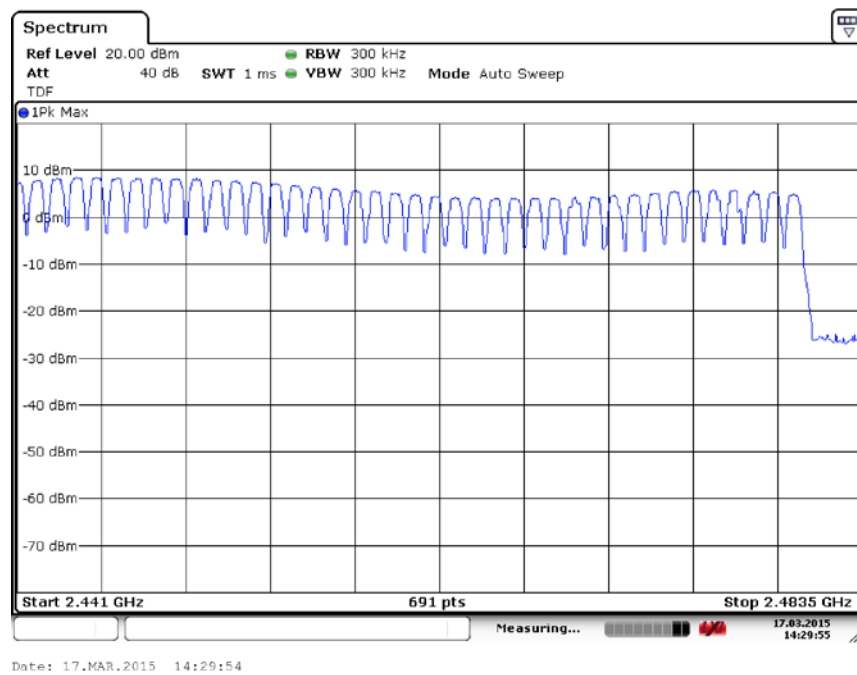


Fig. 103 Hopping channel ch39~78 (GFSK, Ch39)

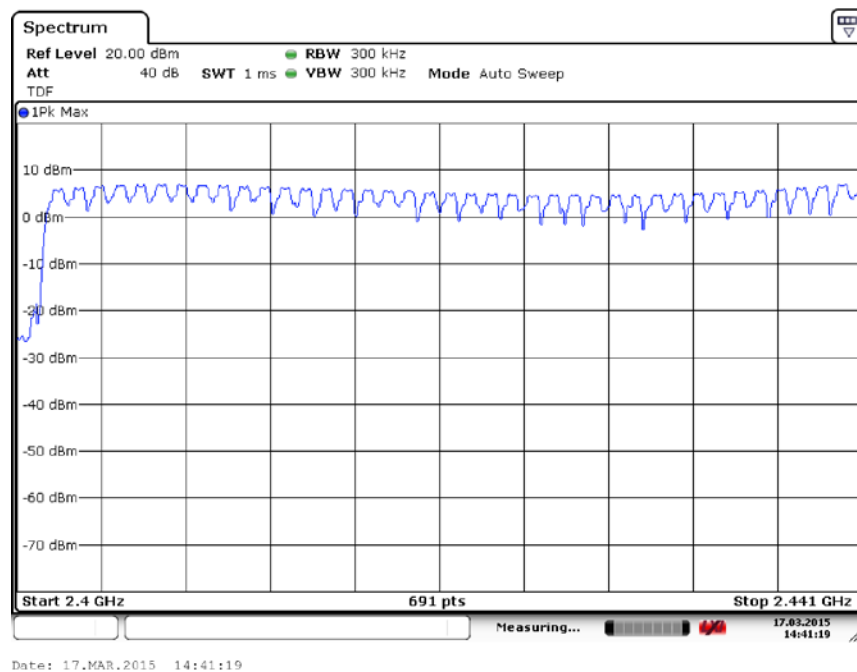


Fig. 104 Hopping channel ch0~39 ($\pi/4$ DQPSK, Ch39)

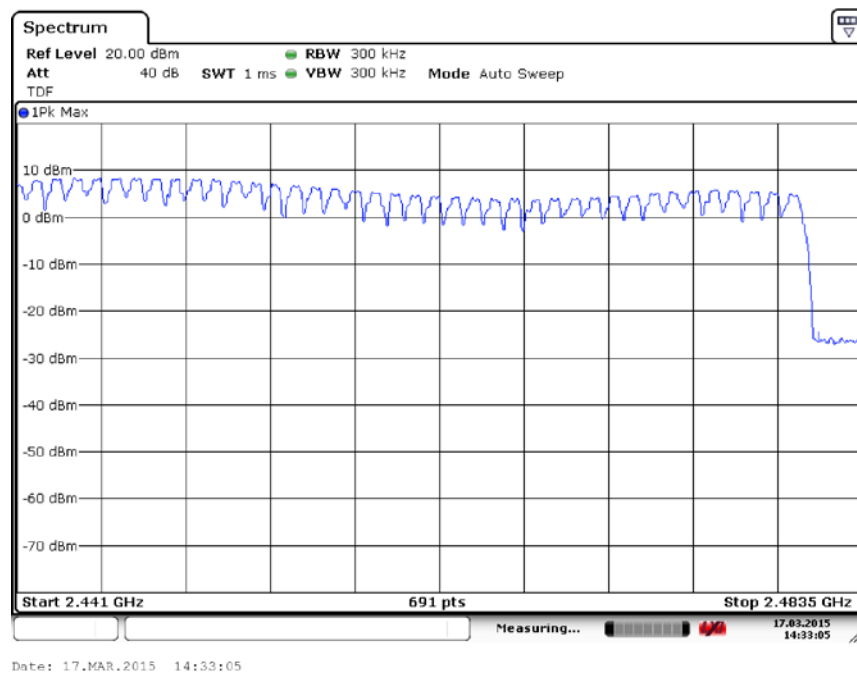


Fig. 105 Hopping channel ch39~78 ($\pi/4$ DQPSK, Ch39)

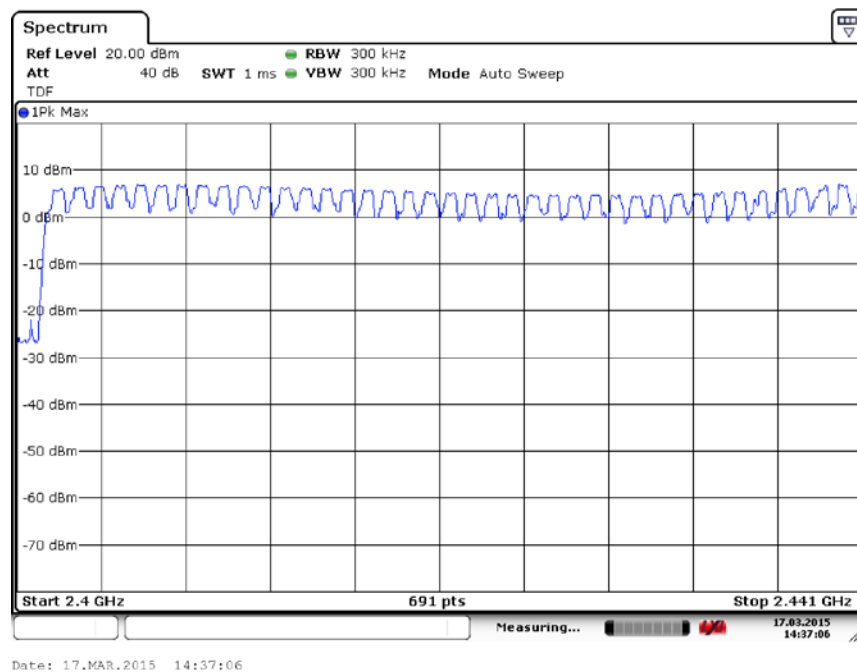


Fig. 106 Hopping channel ch0~39 (8DPSK, Ch39)

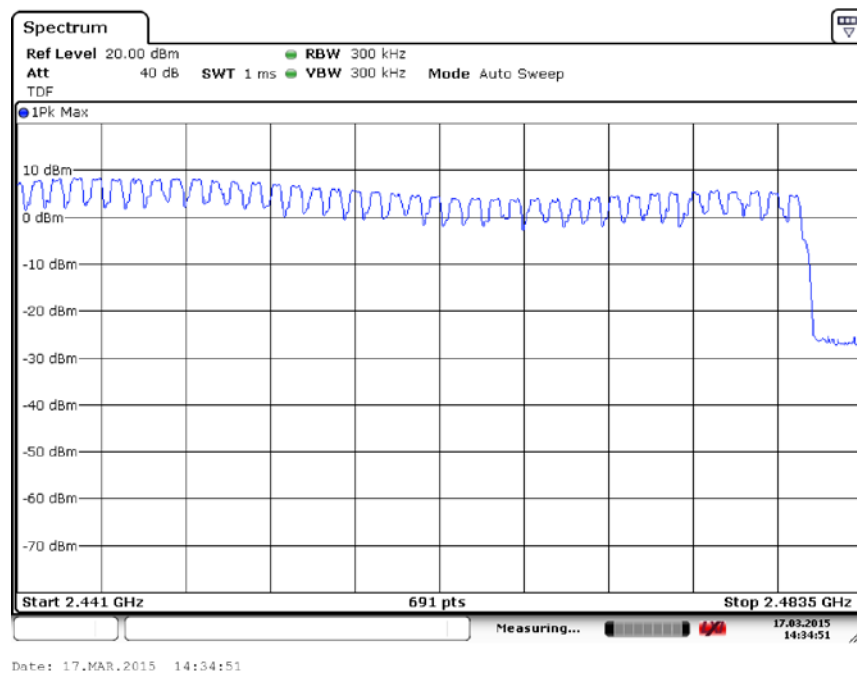


Fig. 107 Hopping channel ch39~78 (8DPSK, Ch39)

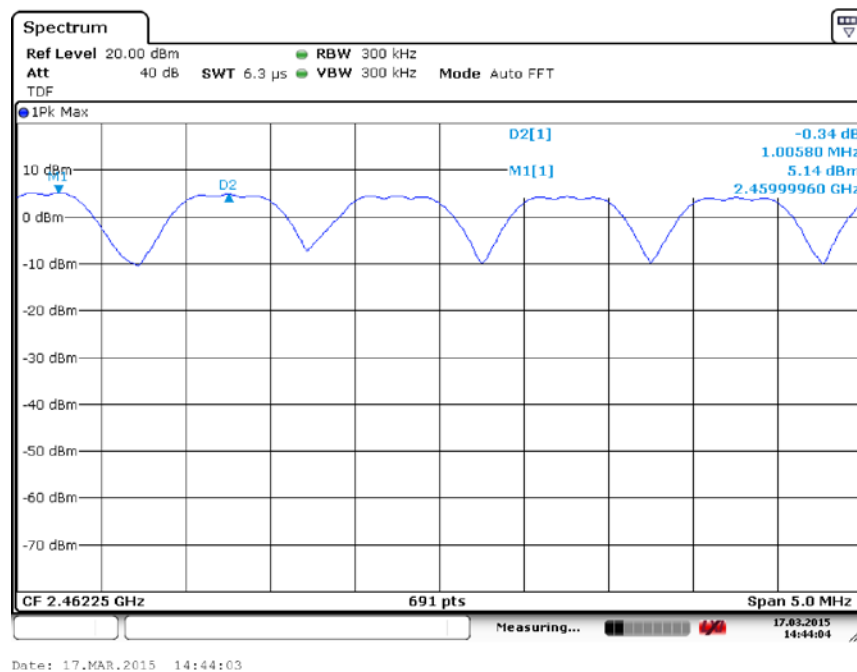


Fig. 108 Carrier Frequency Separation (GFSK, Ch39)

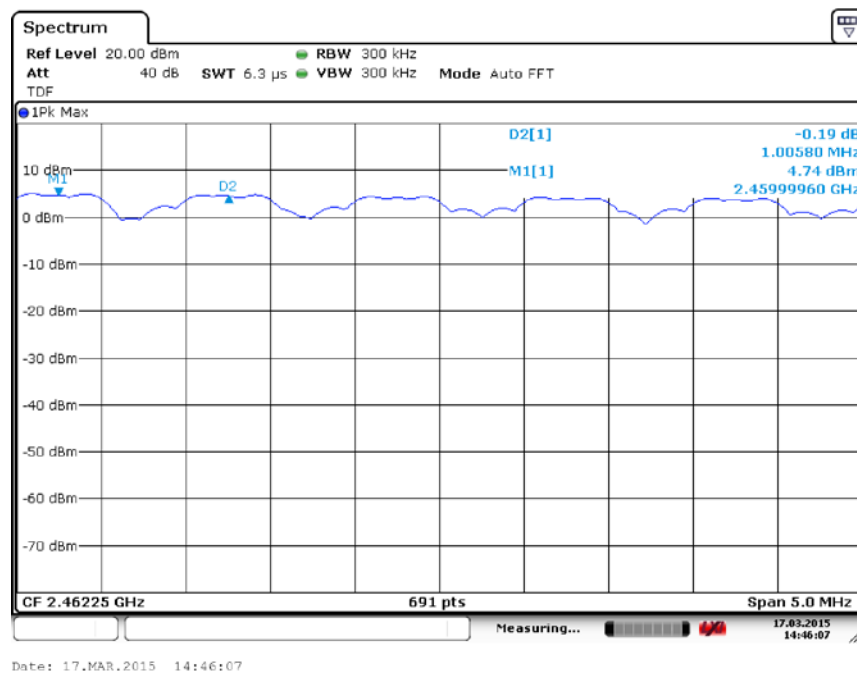


Fig. 109 Carrier Frequency Separation ($\pi/4$ DQPSK, Ch39)

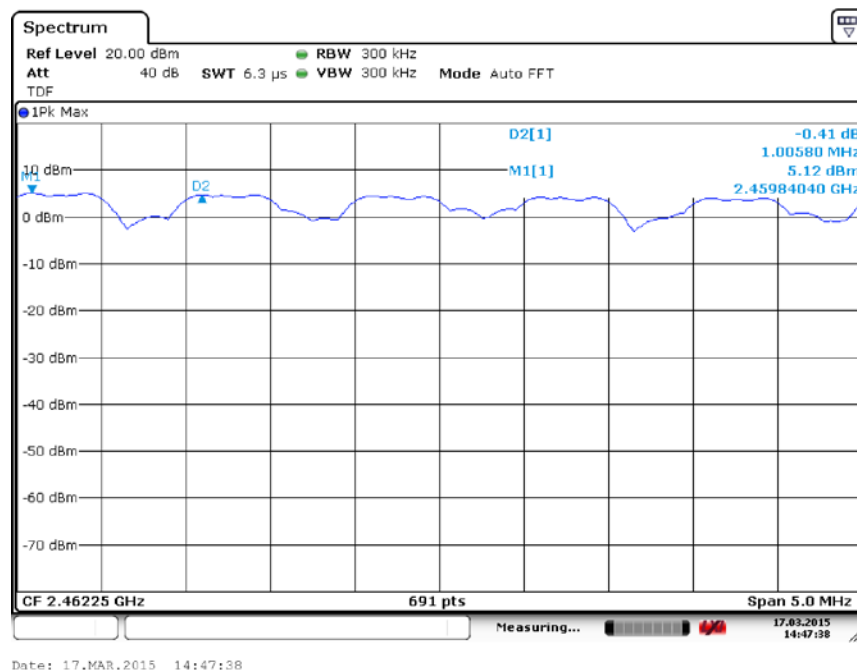


Fig. 110 Carrier Frequency Separation (8DPSK, Ch39)

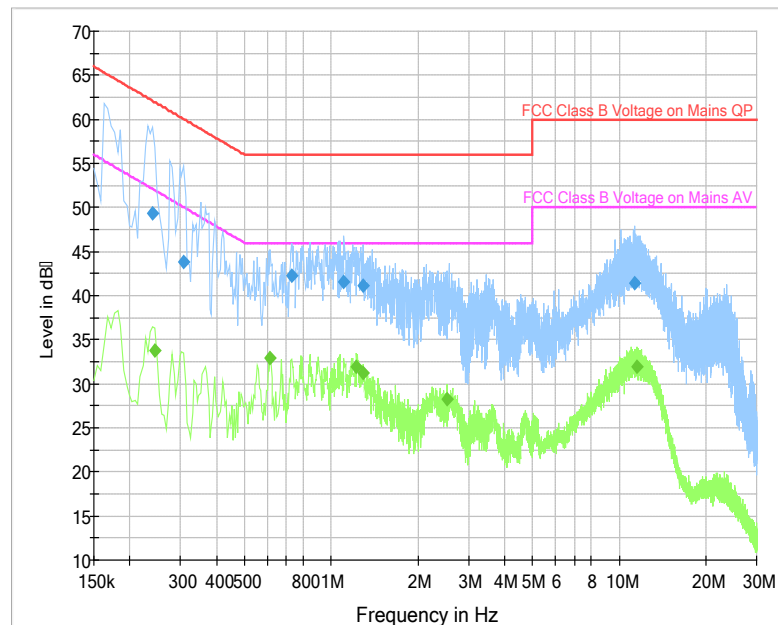


Fig. 111 AC Power line Conducted Emission (Traffic, AE1)

MEASUREMENT RESULT: " QuasiPeak "

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.240000	49.4	2000.0	9.000	On	L1	19.8	12.7	62.1
0.307500	43.9	2000.0	9.000	On	L1	19.8	16.2	60.0
0.730500	42.2	2000.0	9.000	On	L1	19.8	13.8	56.0
1.108500	41.6	2000.0	9.000	On	L1	19.7	14.4	56.0
1.293000	41.2	2000.0	9.000	On	L1	19.6	14.8	56.0
11.310000	41.4	2000.0	9.000	On	L1	19.9	18.6	60.0

MEASUREMENT RESULT: " Average "

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.244500	33.7	2000.0	9.000	On	L1	19.8	18.2	51.9
0.613500	32.9	2000.0	9.000	On	L1	19.8	13.1	46.0
1.225500	32.0	2000.0	9.000	On	L1	19.7	14.0	46.0
1.293000	31.3	2000.0	9.000	On	L1	19.6	14.7	46.0
2.526000	28.2	2000.0	9.000	On	L1	19.6	17.8	46.0
11.557500	32.0	2000.0	9.000	On	L1	19.9	18.0	50.0

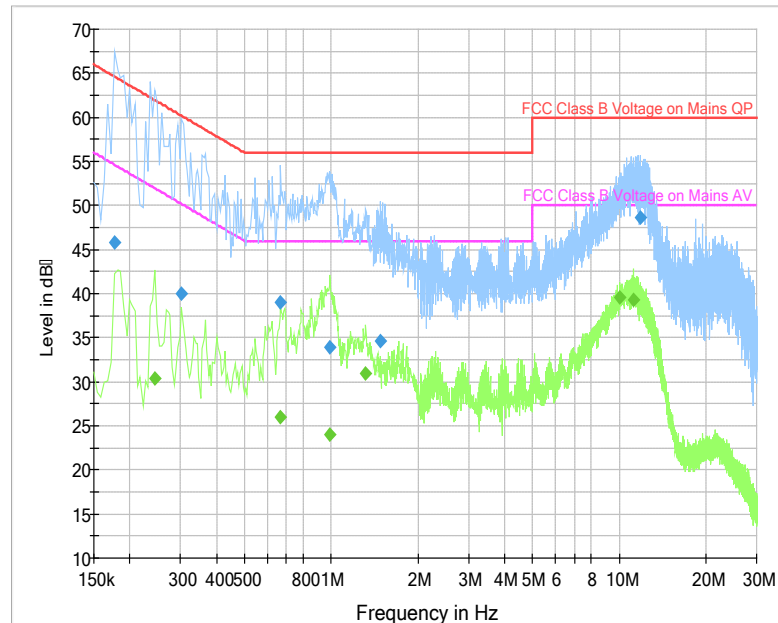


Fig. 112 AC Power line Conducted Emission (Traffic, AE2)

MEASUREMENT RESULT: " QuasiPeak "

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.177000	45.8	2000.0	9.000	On	L1	19.7	18.8	64.6
0.303000	39.9	2000.0	9.000	On	L1	19.8	20.2	60.2
0.667500	39.0	2000.0	9.000	On	L1	19.8	17.0	56.0
0.991500	33.9	2000.0	9.000	On	L1	19.7	22.1	56.0
1.486500	34.6	2000.0	9.000	On	N	19.6	21.4	56.0
11.854500	48.6	2000.0	9.000	On	L1	19.8	11.4	60.0

MEASUREMENT RESULT: " Average "

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.244500	30.3	2000.0	9.000	On	L1	19.8	21.6	51.9
0.667500	26.1	2000.0	9.000	On	L1	19.8	20.0	46.0
0.991500	24.0	2000.0	9.000	On	L1	19.7	22.0	46.0
1.320000	31.0	2000.0	9.000	On	L1	19.6	15.0	46.0
10.077000	39.6	2000.0	9.000	On	L1	19.8	10.4	50.0
11.256000	39.2	2000.0	9.000	On	L1	19.9	10.8	50.0

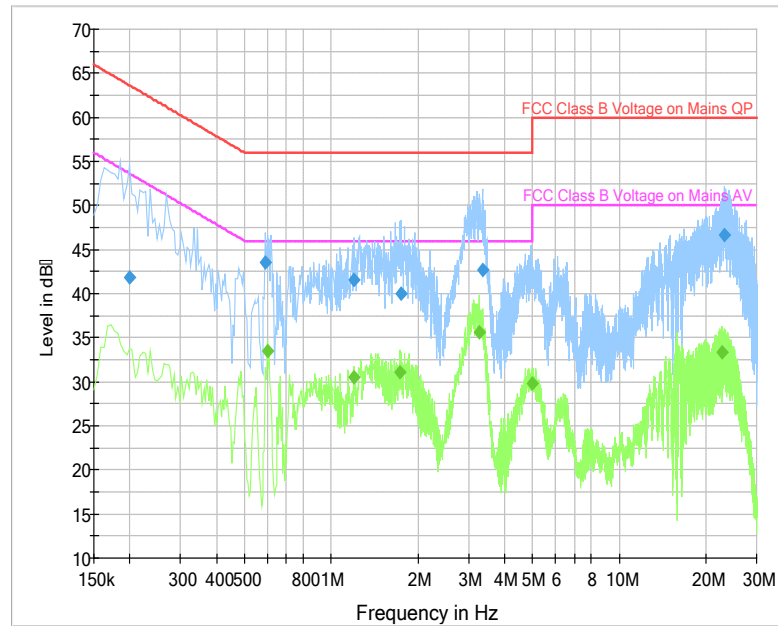


Fig. 113 AC Power line Conducted Emission (Traffic, AE3)

MEASUREMENT RESULT: " QuasiPeak "

Frequency (MHz)	QuasiPeak (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.199500	41.9	2000.0	9.000	On	L1	19.8	21.8	63.6
0.591000	43.5	2000.0	9.000	On	L1	19.8	12.5	56.0
1.203000	41.5	2000.0	9.000	On	L1	19.7	14.5	56.0
1.747500	40.0	2000.0	9.000	On	L1	19.7	16.0	56.0
3.345000	42.7	2000.0	9.000	On	L1	19.7	13.3	56.0
23.217000	46.6	2000.0	9.000	On	L1	20.0	13.4	60.0

MEASUREMENT RESULT: " Average "

Frequency (MHz)	CAverage (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.600000	33.5	2000.0	9.000	On	L1	19.8	12.5	46.0
1.194000	30.5	2000.0	9.000	On	L1	19.7	15.5	46.0
1.738500	31.0	2000.0	9.000	On	L1	19.7	15.0	46.0
3.255000	35.7	2000.0	9.000	On	L1	19.6	10.3	46.0
4.992000	29.8	2000.0	9.000	On	L1	19.6	16.2	46.0
22.717500	33.3	2000.0	9.000	On	L1	20.1	16.7	50.0

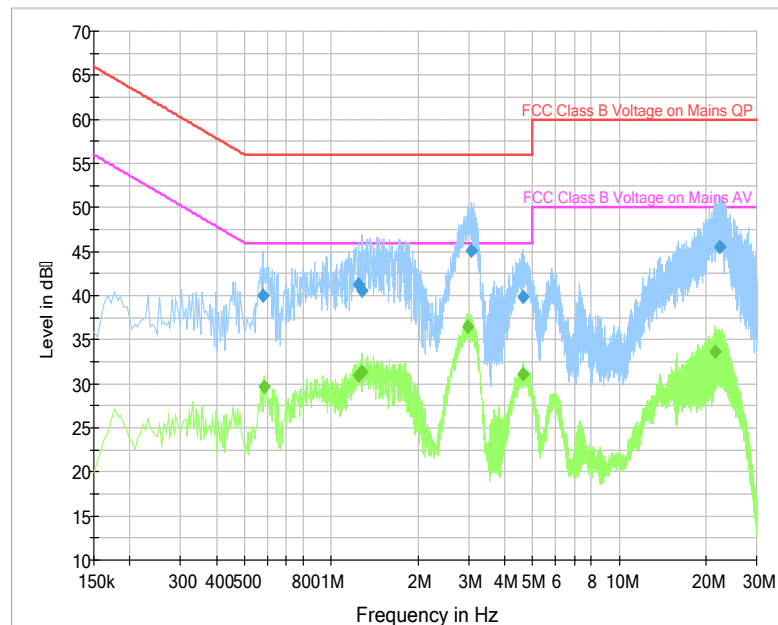


Fig. 114 AC Power line Conducted Emission (Traffic, AE4)

MEASUREMENT RESULT: " QuasiPeak "

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.577500	40.0	2000.0	9.000	On	L1	19.8	16.0	56.0
1.248000	41.3	2000.0	9.000	On	L1	19.7	14.7	56.0
1.284000	40.6	2000.0	9.000	On	L1	19.6	15.4	56.0
3.075000	45.1	2000.0	9.000	On	L1	19.7	10.9	56.0
4.623000	39.8	2000.0	9.000	On	L1	19.6	16.2	56.0
22.267500	45.6	2000.0	9.000	On	L1	20.1	14.4	60.0

MEASUREMENT RESULT: " Average "

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.586500	29.7	2000.0	9.000	On	L1	19.8	16.3	46.0
1.239000	31.0	2000.0	9.000	On	L1	19.7	15.0	46.0
1.284000	31.3	2000.0	9.000	On	L1	19.6	14.7	46.0
2.994000	36.4	2000.0	9.000	On	L1	19.7	9.6	46.0
4.623000	31.1	2000.0	9.000	On	L1	19.6	14.9	46.0
21.574500	33.6	2000.0	9.000	On	L1	20.1	16.4	50.0

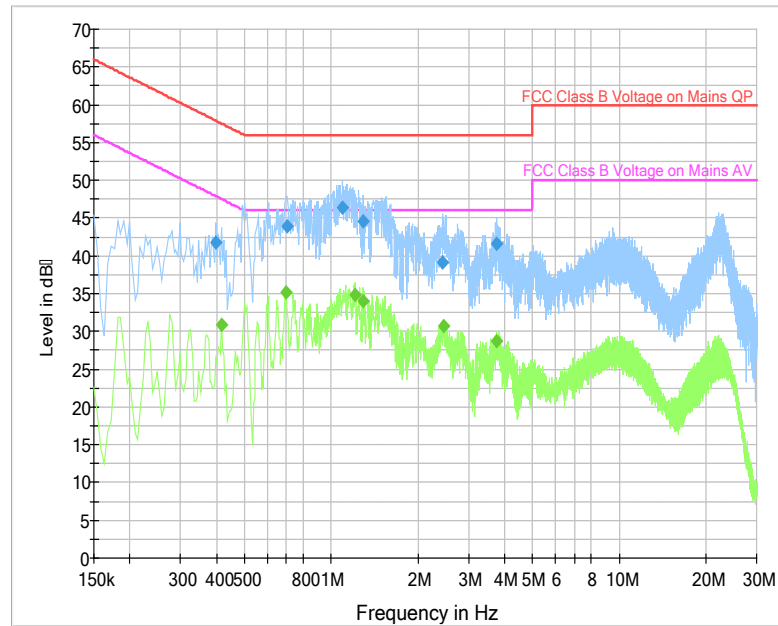


Fig. 115 AC Power line Conducted Emission (Traffic, AE5)

MEASUREMENT RESULT: " QuasiPeak "

Frequency (MHz)	QuasiPeak (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.397500	41.8	2000.0	9.000	On	L1	19.8	16.1	57.9
0.703500	43.9	2000.0	9.000	On	L1	19.8	12.1	56.0
1.095000	46.5	2000.0	9.000	On	L1	19.7	9.5	56.0
1.293000	44.7	2000.0	9.000	On	L1	19.6	11.3	56.0
2.445000	39.1	2000.0	9.000	On	L1	19.6	16.9	56.0
3.768000	41.6	2000.0	9.000	On	L1	19.7	14.4	56.0

MEASUREMENT RESULT: " Average "

Frequency (MHz)	CAverage (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.415500	30.8	2000.0	9.000	On	L1	19.8	16.7	47.5
0.699000	35.2	2000.0	9.000	On	L1	19.8	10.9	46.0
1.207500	34.8	2000.0	9.000	On	L1	19.7	11.2	46.0
1.293000	34.0	2000.0	9.000	On	L1	19.6	12.0	46.0
2.458500	30.8	2000.0	9.000	On	L1	19.6	15.2	46.0
3.763500	28.7	2000.0	9.000	On	L1	19.7	17.3	46.0

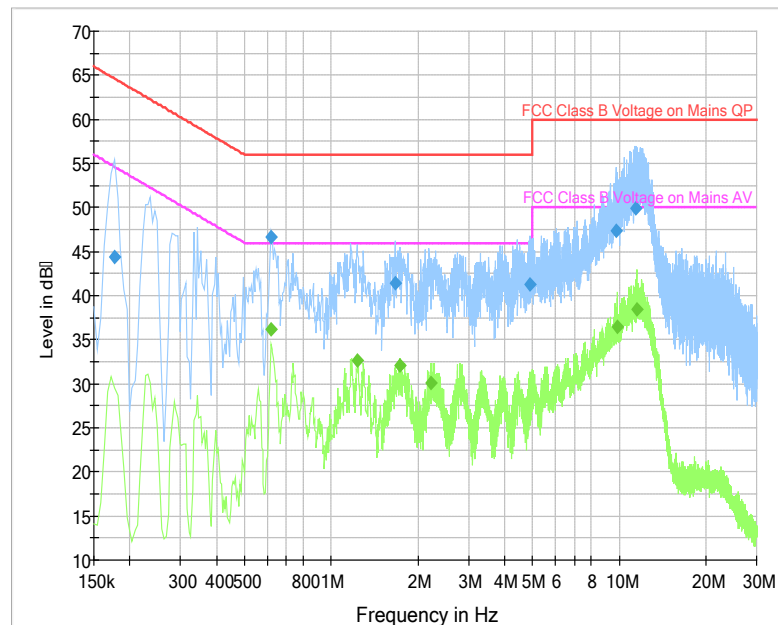


Fig. 116 AC Power line Conducted Emission (Traffic, AE6)

MEASUREMENT RESULT: " QuasiPeak "

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.177000	44.4	2000.0	9.000	On	L1	19.7	20.2	64.6
0.618000	46.6	2000.0	9.000	On	L1	19.8	9.4	56.0
1.666500	41.4	2000.0	9.000	On	L1	19.6	14.6	56.0
4.911000	41.2	2000.0	9.000	On	L1	19.7	14.8	56.0
9.726000	47.3	2000.0	9.000	On	L1	19.8	12.7	60.0
11.467500	49.9	2000.0	9.000	On	L1	19.9	10.1	60.0

MEASUREMENT RESULT: " Average "

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.618000	36.2	2000.0	9.000	On	L1	19.8	9.8	46.0
1.234500	32.6	2000.0	9.000	On	L1	19.7	13.4	46.0
1.734000	32.1	2000.0	9.000	On	L1	19.7	13.9	46.0
2.229000	30.2	2000.0	9.000	On	L1	19.6	15.8	46.0
9.861000	36.5	2000.0	9.000	On	L1	19.8	13.5	50.0
11.476500	38.5	2000.0	9.000	On	L1	19.9	11.5	50.0

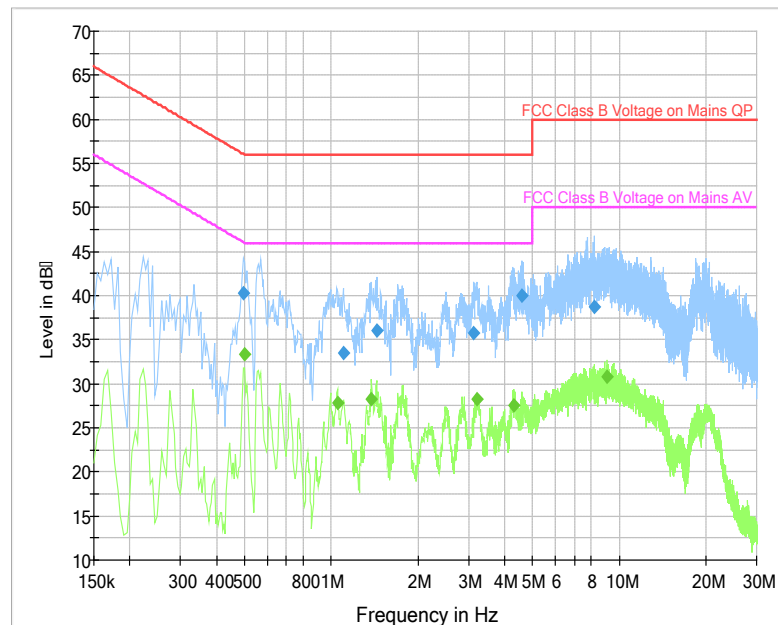


Fig. 117 AC Power line Conducted Emission (Traffic, AE7)

MEASUREMENT RESULT: " QuasiPeak "

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.496500	40.3	2000.0	9.000	On	L1	19.8	15.8	56.1
1.099500	33.4	2000.0	9.000	On	L1	19.7	22.6	56.0
1.441500	36.0	2000.0	9.000	On	L1	19.7	20.0	56.0
3.115500	35.8	2000.0	9.000	On	L1	19.6	20.2	56.0
4.600500	40.1	2000.0	9.000	On	L1	19.6	15.9	56.0
8.227500	38.7	2000.0	9.000	On	L1	19.7	21.3	60.0

MEASUREMENT RESULT: " Average "

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.501000	33.3	2000.0	9.000	On	L1	19.8	12.7	46.0
1.050000	27.8	2000.0	9.000	On	L1	19.7	18.2	46.0
1.383000	28.3	2000.0	9.000	On	L1	19.7	17.7	46.0
3.205500	28.3	2000.0	9.000	On	L1	19.7	17.7	46.0
4.312500	27.5	2000.0	9.000	On	L1	19.6	18.5	46.0
9.105000	30.8	2000.0	9.000	On	L1	19.8	19.2	50.0

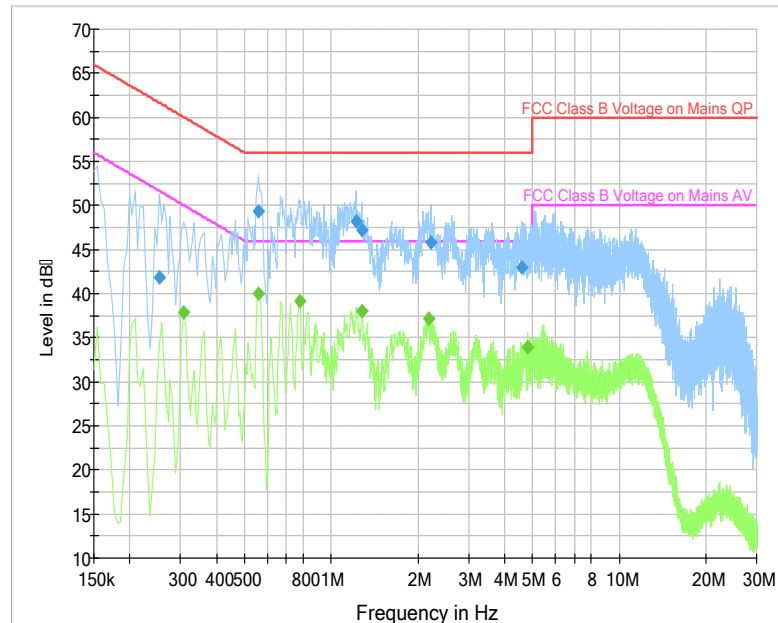


Fig. 118 AC Power line Conducted Emission (Traffic, AE8)

MEASUREMENT RESULT: " QuasiPeak "

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.253500	41.8	2000.0	9.000	On	N	19.8	19.8	61.6
0.559500	49.3	2000.0	9.000	On	L1	19.8	6.7	56.0
1.221000	48.2	2000.0	9.000	On	L1	19.7	7.8	56.0
1.275000	47.2	2000.0	9.000	On	L1	19.7	8.8	56.0
2.224500	45.8	2000.0	9.000	On	L1	19.6	10.2	56.0
4.587000	43.0	2000.0	9.000	On	L1	19.6	13.0	56.0

MEASUREMENT RESULT: " Average "

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.307500	37.9	2000.0	9.000	On	L1	19.8	12.1	50.0
0.559500	40.0	2000.0	9.000	On	L1	19.8	6.0	46.0
0.780000	39.1	2000.0	9.000	On	L1	19.8	6.9	46.0
1.275000	38.0	2000.0	9.000	On	L1	19.7	8.0	46.0
2.184000	37.1	2000.0	9.000	On	L1	19.6	8.9	46.0
4.812000	33.9	2000.0	9.000	On	L1	19.7	12.1	46.0

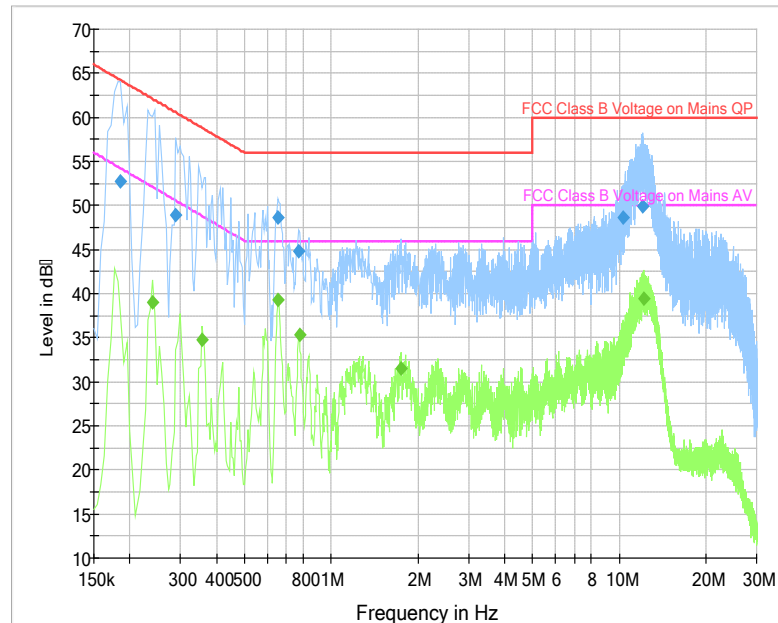


Fig. 119 AC Power line Conducted Emission (Traffic, AE9)

MEASUREMENT RESULT: " QuasiPeak "

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.186000	52.8	2000.0	9.000	On	L1	19.8	11.4	64.2
0.289500	48.9	2000.0	9.000	On	L1	19.8	11.7	60.5
0.654000	48.7	2000.0	9.000	On	L1	19.8	7.3	56.0
0.771000	44.8	2000.0	9.000	On	L1	19.8	11.2	56.0
10.351500	48.7	2000.0	9.000	On	L1	19.8	11.3	60.0
12.111000	50.0	2000.0	9.000	On	L1	19.9	10.0	60.0

MEASUREMENT RESULT: " Average "

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.240000	39.0	2000.0	9.000	On	L1	19.8	13.1	52.1
0.357000	34.8	2000.0	9.000	On	L1	19.8	14.0	48.8
0.654000	39.3	2000.0	9.000	On	L1	19.8	6.7	46.0
0.775500	35.3	2000.0	9.000	On	L1	19.8	10.7	46.0
1.747500	31.5	2000.0	9.000	On	L1	19.7	14.5	46.0
12.196500	39.5	2000.0	9.000	On	L1	19.9	10.5	50.0

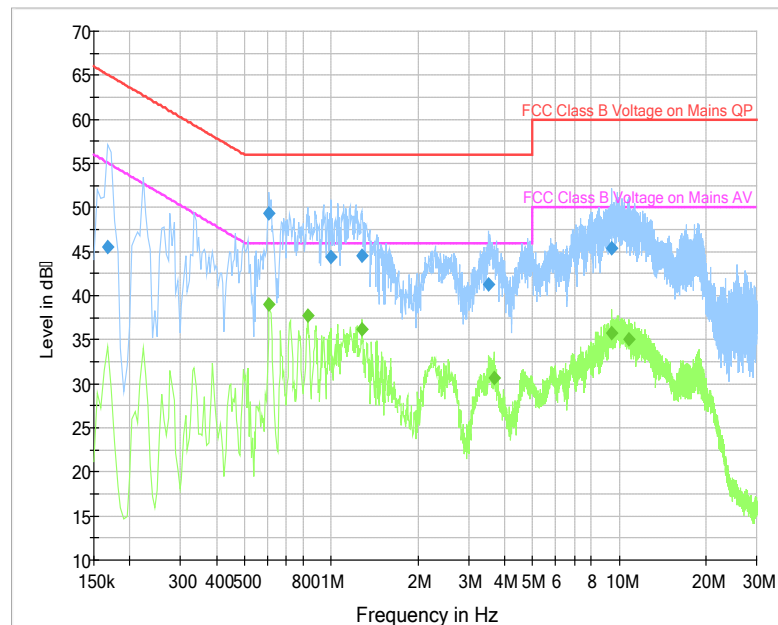


Fig. 120 AC Power line Conducted Emission (Traffic, AE10)

MEASUREMENT RESULT: " QuasiPeak "

Frequency (MHz)	QuasiPeak (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.168000	45.5	2000.0	9.000	On	L1	19.7	19.6	65.1
0.609000	49.4	2000.0	9.000	On	L1	19.8	6.6	56.0
1.000500	44.4	2000.0	9.000	On	N	19.7	11.6	56.0
1.275000	44.5	2000.0	9.000	On	N	19.7	11.5	56.0
3.516000	41.3	2000.0	9.000	On	L1	19.7	14.7	56.0
9.388500	45.4	2000.0	9.000	On	L1	19.8	14.6	60.0

MEASUREMENT RESULT: " Average "

Frequency (MHz)	CAverage (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.609000	39.0	2000.0	9.000	On	N	19.8	7.0	46.0
0.829500	37.7	2000.0	9.000	On	L1	19.8	8.3	46.0
1.279500	36.2	2000.0	9.000	On	L1	19.7	9.8	46.0
3.669000	30.7	2000.0	9.000	On	N	19.7	15.3	46.0
9.447000	35.8	2000.0	9.000	On	L1	19.8	14.2	50.0
10.833000	35.0	2000.0	9.000	On	L1	19.8	15.0	50.0

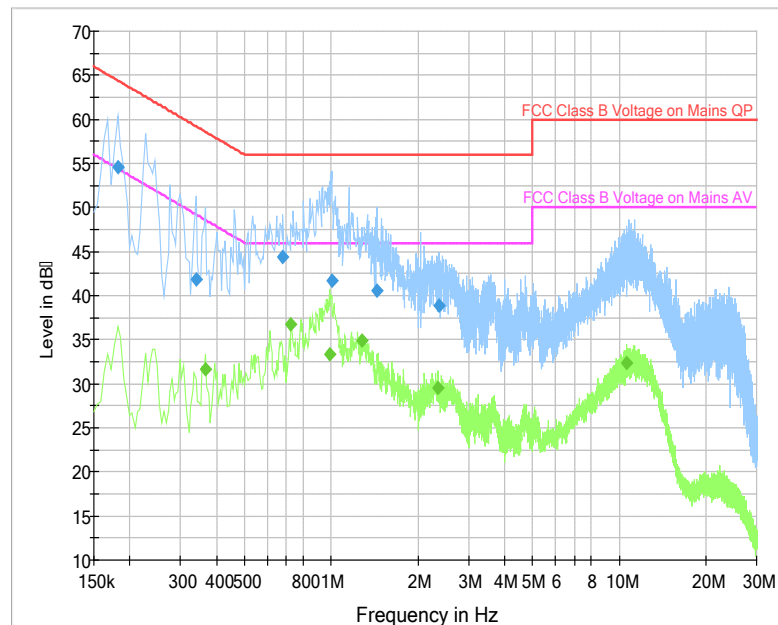


Fig. 121 AC Power line Conducted Emission (Idle, AE1)

MEASUREMENT RESULT: " QuasiPeak "

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.181500	54.6	2000.0	9.000	On	L1	19.7	9.9	64.4
0.339000	41.9	2000.0	9.000	On	L1	19.8	17.4	59.2
0.681000	44.4	2000.0	9.000	On	N	19.8	11.6	56.0
1.005000	41.7	2000.0	9.000	On	L1	19.7	14.3	56.0
1.446000	40.6	2000.0	9.000	On	N	19.7	15.4	56.0
2.364000	38.9	2000.0	9.000	On	L1	19.6	17.1	56.0

MEASUREMENT RESULT: " Average "

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.366000	31.7	2000.0	9.000	On	L1	19.8	16.9	48.6
0.726000	36.8	2000.0	9.000	On	L1	19.8	9.2	46.0
0.987000	33.4	2000.0	9.000	On	L1	19.7	12.6	46.0
1.275000	34.9	2000.0	9.000	On	L1	19.7	11.1	46.0
2.355000	29.5	2000.0	9.000	On	L1	19.6	16.5	46.0
10.630500	32.4	2000.0	9.000	On	L1	19.8	17.6	50.0

ANNEX D: Persons involved in this testing

Test Name	Tester
Maximum Peak Output Power	Xu Ye, Tang Weisheng
Peak Power Spectral Density	Xu Ye, Tang Weisheng
Occupied 6dB Bandwidth	Xu Ye, Tang Weisheng
Band Edges Compliance	Xu Ye, Tang Weisheng
Transmitter Spurious Emission - Conducted	Xu Ye, Tang Weisheng
Transmitter Spurious Emission - Radiated	Xu Ye, Tang Weisheng
AC Powerline Conducted Emission	Xu Ye, Tang Weisheng

ANNEX E: Accreditation Certificate

 
China National Accreditation Service for Conformity Assessment
LABORATORY ACCREDITATION CERTIFICATE
(Registration No. CNAS L0570)
China Academy of Telecommunication Research of MIIT <u>No.52, Huayuan North Road, Haidian District, Beijing, China</u>
<i>is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories(CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence of testing and calibration.</i>
<i>The scope of accreditation is detailed in the attached appendices bearing the same registration number as above. The appendices form an integral part of this certificate.</i>
Date of Issue: 2014-06-20 Date of Expiry: 2017-06-19 Date of Initial Accreditation: 1998-07-03 Date of Update: 2014-06-20

Signed on behalf of China National Accreditation Service for Conformity Assessment
China National Accreditation Service for Conformity Assessment (CNAS) is authorized by Certification and Accreditation Administration of the People's Republic of China (CNCA) to operate the national accreditation schemes for conformity assessment. CNAS is the signatory to International Laboratory Accreditation Cooperation Multilateral Recognition Arrangement (ILAC MRA) and Asia Pacific Laboratory Accreditation Cooperation Multilateral Recognition Arrangement (APLAC MRA).
No.CNAS AL 2 0010037

END OF REPORT