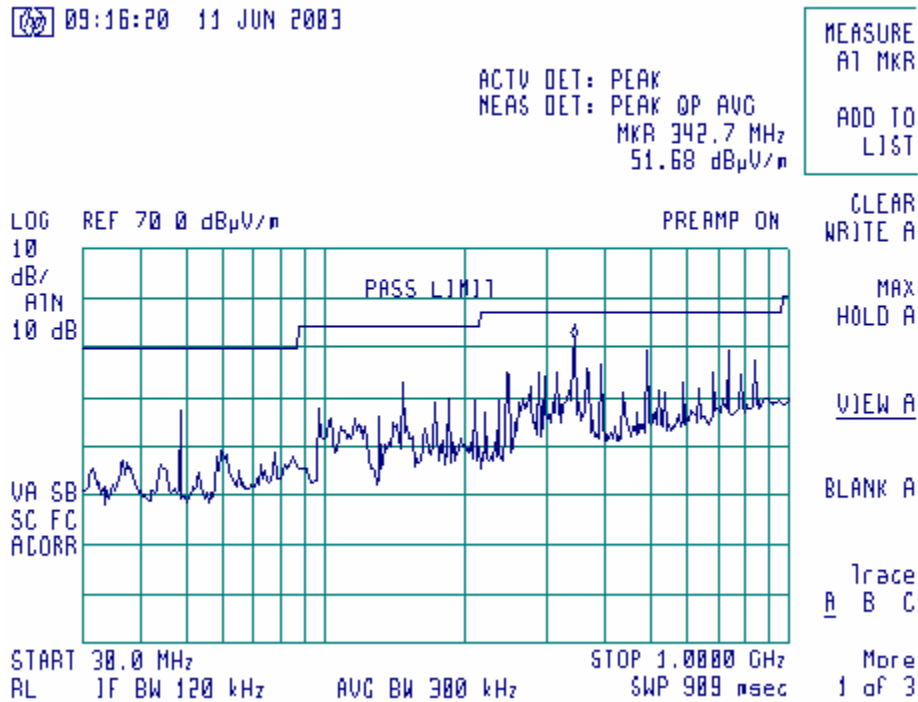


Radiated Emission – Digital section testing 15.109

Title Preliminary test
 Job Number 15491
 Test Name RE FCC class A D=3m
 EUT Model Number MobileAccess 410,430 and 1000 RIU-BU-RHU
 Site Description Anechoic Chamber
 Operator Name Feldman M
 Customer Name MobileAccess Networks
 Notes t-23 C H-48 % HL 521; 604; 465

09:16:20 11 JUN 2003



Signal	Freq (MHz)	QP Amp (dBuV/m)	QP - Lim1 (dB)	Corrections (dB)
1	49.154126	36.33	-13.17	7.15
2	147.456362	40.88	-13.12	10.83
3	172.049463	39.48	-14.52	11.67
4	245.772064	45.57	-11.43	14.11
5	294.923087	49.38	-7.62	16.22
6	340.702238	50.39	-6.61	17.35
7	366.911055	45.67	-11.33	18.20
8	491.519016	49.97	-7.03	20.61
9	540.670183	49.07	-7.93	21.98
10	688.128118	46.37	-10.63	24.80
11	737.276839	49.83	-7.17	25.06
12	835.579079	47.55	-9.45	26.32
13	880.008202	58.31	1.31	27.16

Title For test report
 Job Number 15491
 Test Name RE FCC class A D=3m
 EUT Model Number MobileAccess 1000 RIU-BU-RHU
 Site Description Anechoic Chamber
 Operator Name Feldman M
 Customer Name MobileAccess Networks
 Notes t-23 C H-48 % HL 521; 604; 465; 1984; 1947

10:10:29 11 JUN 2003

ACTV DET: PEAK
 MEAS DET: PEAK OP AVG
 MKR 1.370 GHz
 41.92 dBuV/m

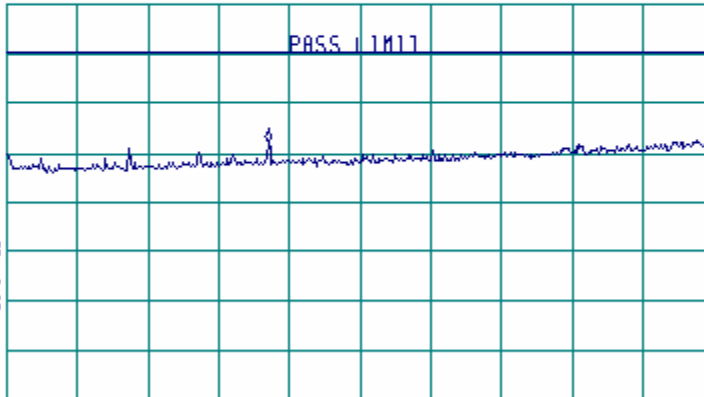
MEASURE
 AT MKR
 ADD TO
 LIST

LOG REF 70.0 dBuV/m
 10
 dB/
 #ATTN
 0 dB

PREAMP ON

CLEAR
 WRITE A
 MAX
 HOLD A

VA SB
 SC FC
 ACORR



VIEW A
 BLANK A

Trace
 A B C

START 1.000 GHz STOP 2.000 GHz
 #1F BW 1.0 MHz #AVG BW 3 MHz SWP 20.0 nsec

More
 1 of 3

Signal	Freq (MHz)	Avg Amp (dBuV/m)	Avg - Lim1 (dB)	Comments	Corrections (dB)
1	1376.350000	36.27	-23.73	H pol. Az-313 h-1m	29.51

Title For test report
 Job Number 15491
 Test Name RE FCC class A D=10m
 EUT Model Number MobileAccess 1000 RIU-BU-RHU
 Site Description OATS
 Operator Name Feldman M
 Customer Name MobileAccess Networks
 Notes t-23 C H-44 % HL 1430; 784; 813; 1552

Signal	Freq (MHz)	QP Amp (dBuV/m)	QP - Lim1 (dB)	Comments	Corrections (dB)
1	49.156600	34.40	-4.60	V pol.Az-173 h-1m	10.21
2	245.770000	39.26	-7.14	V pol.Az-286 h-1m	14.34
3	294.920000	38.30	-8.10	V pol.Az-116 h-1m	15.66
4	340.700000	37.20	-9.20	H pol.Az-308 h-1.4	17.16
5	491.510000	43.50	-2.90	H pol.Az-189 h-1.4	21.98
6	540.670000	41.84	-4.56	H pol.Az-328 h-1.5	22.82
7	737.270000	43.52	-2.88	H pol.Az-251 h-1.5	26.70

Title For test report
 Job Number 15491
 Test Name RE EN 55022 class A D=10m
 EUT Model Number MobileAccess 1000 RIU-BU-RHU
 Site Description OATS
 Operator Name Feldman M
 Customer Name MobileAccess Networks
 Notes t-23 C H-44 % HL 1430; 784; 813; 1552

Signal	Freq (MHz)	QP Amp (dBuV/m)	QP - Lim1 (dB)	Comments	Corrections (dB)
1	49.156600	34.40	-5.60	V pol.Az-173 h-1m	10.21
2	245.770000	39.26	-7.74	V pol.Az-286 h-1m	14.34
3	294.920000	38.30	-8.70	V pol.Az-116 h-1m	15.66
4	340.700000	37.20	-9.80	H pol.Az-308 h-1.4	17.16
5	491.510000	43.50	-3.50	H pol.Az-189 h-1.4	21.98
6	540.670000	41.84	-5.16	H pol.Az-328 h-1.5	22.82
7	737.270000	43.52	-3.48	H pol.Az-251 h-1.5	26.70

Conducted Emission in AC line – section testing 15.107

Title For test report
 Job Number 15491
 Test Name CE FCC class A 120V AC
 EUT Model Number MobileAccess **1000 - RIU**
 Site Description Shielded room 1
 Operator Name Feldman M
 Customer Name MobileAccess Networks
 Notes t-23 C H-48 % HL 521; 163; 580; 591
 Switching Power Supply Model No: SPV45E-111
 110 VAC PHASE

11:46:20 11 JUN 2003 PH

ACTV DET: PEAK
 MEAS DET: PEAK OP AVG
 MKR 200 kHz
 52.10 dB μ V

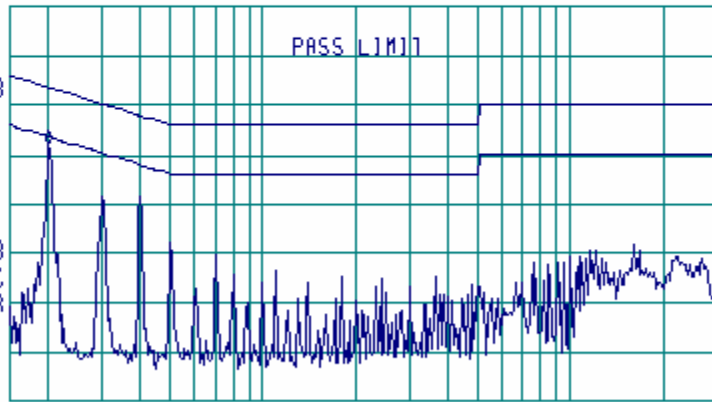
MEASURE
 AT MKR
 ADD TO
 LIST

LOG REF 80 0 dB μ V

10
 dB/
 RTN
 10 dB

VA SB
 SC FC
 ACORR

START 150 kHz
 RL 1F BW 9.0 kHz
 AVG BW 30 kHz
 STOP 30.00 MHz
 SWP 2.49 sec



CLEAR
 WRITE A

MAX
 HOLD A

VIEW A

BLANK A

Trace
 A B C

More
 1 of 3

Signal	Freq (MHz)	QP Amp (dB μ V)	QP - Lim1 (dB)	Avg Amp (dB μ V)	Avg - Lim2 (dB)	Corrections (dB)
1	0.202232	52.06	-11.51	42.38	-11.19	10.19

Title For test report
 Job Number 15491
 Test Name CE FCC class A 120V AC
 EUT Model Number MobileAccess **1000 - RIU**
 Site Description Shielded room 1
 Operator Name Feldman M
 Customer Name MobileAccess Networks
 Notes t-23 C H-48 % HL 521; 163; 580; 591
 Switching Power Supply Model No: SPV45E-111
 110 VAC Neutral

11:43:00 11 JUN 2003 M

ACTV DET: PEAK
 MEAS DET: PEAK QP AVG
 MKR 200 kHz
 47.25 dB μ V

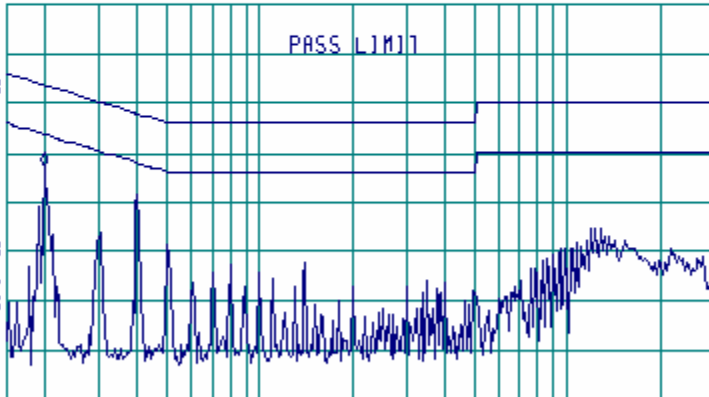
MEASURE
 AT MKR
 ADD TO
 LIST

LOG REF 80 0 dB μ V

10
 dB/
 ATN
 10 dB

VA SB
 SC FC
 ACORR

START 150 kHz STOP 30.00 MHz
 RL 1F BW 9.0 kHz AVG BW 30 kHz SWP 2.49 sec



CLEAR
 WRITE A
 MAX
 HOLD A

VIEW A
 BLANK A

Trace
 A B C
 More
 1 of 3

Signal	Freq (MHz)	QP Amp (dBuV)	QP - Lim1 (dB)	Avg Amp (dBuV)	Avg - Lim2 (dB)	Corrections (dB)
1	0.201932	52.23	-11.35	43.58	-10.00	10.19
2	0.403929	42.29	-15.51	38.63	-9.17	10.19

Title For test report
 Job Number 15491
 Test Name CE FCC class A 120V AC
 EUT Model Number MobileAccess **1000 - BU**
 Site Description Shielded room 1
 Operator Name Feldman M
 Customer Name MobileAccess Networks
 Notes t-23 C H-48 % HL 521; 163; 580; 591
 Switching Power Supply Model No: SPV45E-111
 110 VAC Neutral

11:52:43 11 JUN 2003 PH

ACTV DET: PEAK
 MEAS DET: PEAK QP AVG
 MKR 200 kHz
 40.59 dB μ V

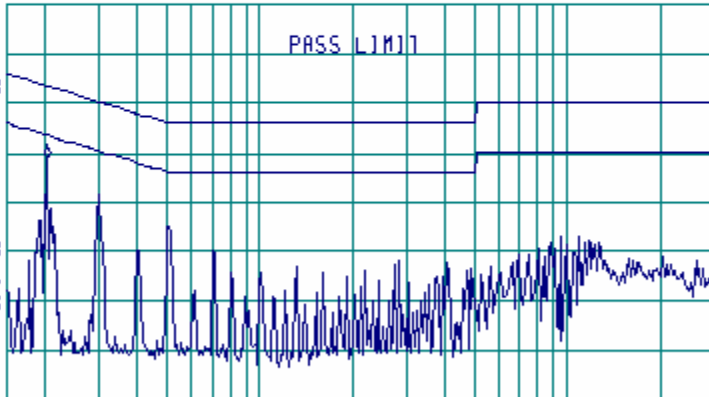
MEASURE
 AT MKR
 ADD TO
 LIST

LOG REF 80 0 dB μ V

10
 dB/
 RTN
 10 dB

VA SB
 SC FC
 ACORR

START 150 kHz STOP 30.00 MHz
 A 1F BW 9.0 kHz AVG BW 30 kHz SWP 2.49 sec



CLEAR
 WRITE A
 MAX
 HOLD A
 VIEW A
 BLANK A
 Trace
 A B C
 More
 1 of 3

Signal	Freq (MHz)	QP Amp (dB μ V)	QP - Lim1 (dB)	Avg Amp (dB μ V)	Avg - Lim2 (dB)	Corrections (dB)
1	0.203362	50.68	-12.84	41.24	-12.28	10.19
2	0.508977	35.98	-20.02	33.01	-12.99	10.19

Title For test report
 Job Number 15491
 Test Name CE FCC class A 120V AC
 EUT Model Number MobileAccess **1000 - BU**
 Site Description Shielded room 1
 Operator Name Feldman M
 Customer Name MobileAccess Networks
 Notes t-23 C H-48 % HL 521; 163; 580; 591
 Switching Power Supply Model No: SPV45E-111
 110 VAC PHASE

11:55:19 11 JUN 2003 M

ACTV DET: PEAK
 MEAS DET: PEAK OP AVG
 MKR 200 kHz
 50.59 dB μ V

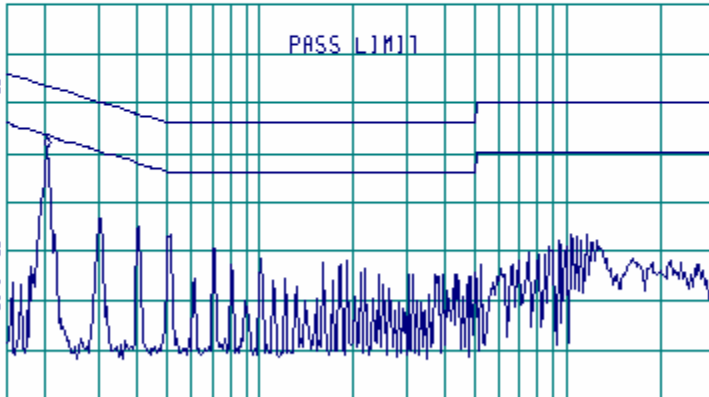
MEASURE
 AT MKR
 ADD TO
 LIST

LOG REF 80 0 dB μ V

10
 dB/
 ATN
 10 dB

VA SB
 SC FC
 ACORR

START 150 kHz
 AL 1F BW 9.0 kHz
 AVG BW 30 kHz
 STOP 30.00 MHz
 SWP 2.49 sec



CLEAR
 WRITE A
 MAX
 HOLD A

VIEW A
 BLANK A

Trace
 A B C
 More
 1 of 3

Title For test report
 Job Number 15491
 Test Name CE FCC class A 120V AC
 EUT Model Number MobileAccess **1000 - RHU**
 Site Description Shielded room 1
 Operator Name Feldman M
 Customer Name MobileAccess Networks
 Notes t-23 C H-48 % HL 521; 163; 580; 591
 Switching Power Supply Model No: SPV45E-111
 110 VAC Neutral

12:00:34 11 JUN 2003 PH

ACTV DET: PEAK
 MEAS DET: PEAK QP AVG
 MKR 200 kHz
 40.33 dB μ V

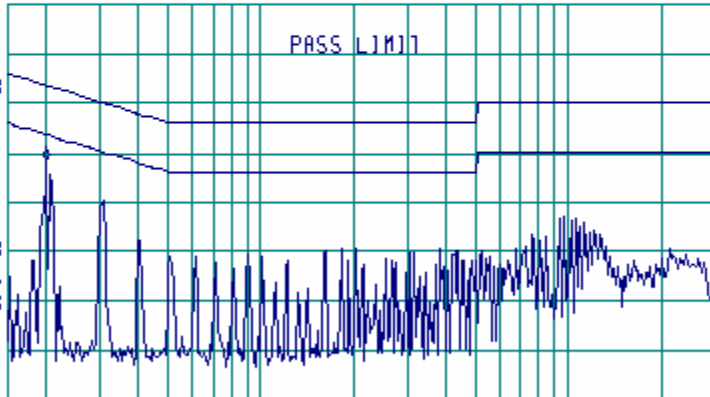
MEASURE
 AT MKR
 ADD TO
 LIST

LOG REF 80 0 dB μ V

10
 dB/
 ATN
 10 dB

VA SB
 SC FC
 ACORR

START 150 kHz STOP 30.00 MHz
 RL 1F BW 9.0 kHz AVG BW 30 kHz SWP 2.49 sec



CLEAR
 WRITE A

MAX
 HOLD A

VIEW A

BLANK A

Trace
 A B C

More
 1 of 3

Signal	Freq (MHz)	QP Amp (dB μ V)	QP - Lim1 (dB)	Avg Amp (dB μ V)	Avg - Lim2 (dB)	Corrections (dB)
1	0.204484	50.31	-13.17	41.82	-11.66	10.19
2	0.307455	45.17	-14.88	36.45	-13.60	10.19
3	10.668096	35.76	-24.24	26.41	-23.59	10.61

Title For test report
 Job Number 15491
 Test Name CE FCC class A 120V AC
 EUT Model Number MobileAccess **1000 - RHU**
 Site Description Shielded room 1
 Operator Name Feldman M
 Customer Name MobileAccess Networks
 Notes t-23 C H-48 % HL 521; 163; 580; 591
 Switching Power Supply Model No: SPV45E-111
 110 VAC PHASE

12:03:06 11 JUN 2003 N

ACTV DET: PEAK
 MEAS DET: PEAK OP AVG
 MKR 200 kHz
 49.53 dB μ V

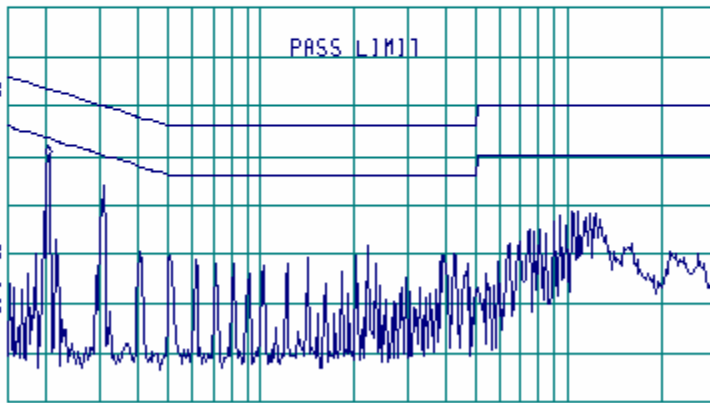
MEASURE
 AT MKR
 ADD TO
 LIST

LOG REF 80 0 dB μ V

10
 dB/
 ATN
 10 dB

VA SB
 SC FC
 ACORR

START 150 kHz STOP 30.00 MHz
 RL 11F BW 9.0 kHz AVG BW 30 kHz SWP 2.49 sec



CLEAR
 WRITE A

MAX
 HOLD A

VIEW A

BLANK A

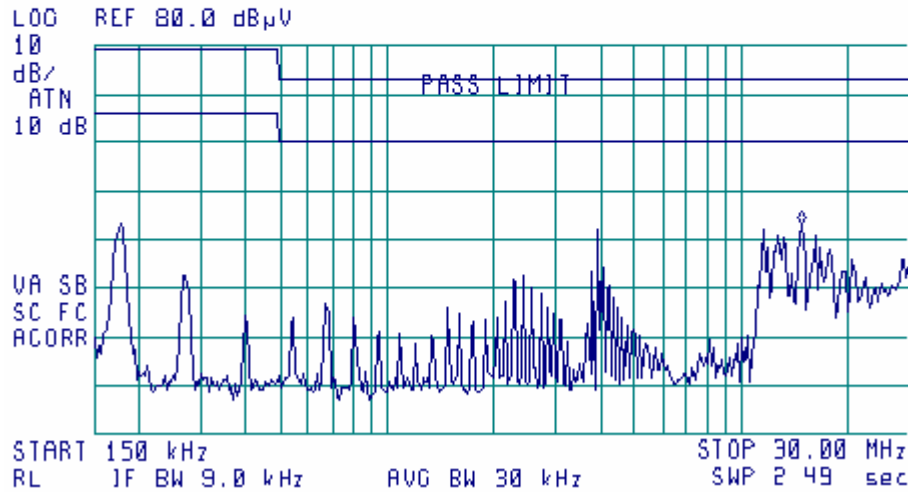
Trace
 A B C

More
 1 of 3

Job Number 15491
 Test Name CE EN 55022 class A power line
 EUT Model Number MobileAccess **1000 - BU**
 Site Description Shielded room 2
 Test equipment 1430; 447; 1502; 1510; 787
 Operator Name E.Pitt
 Customer Name FoxCom
 Note 110 VAC PHASE
 PS mode: JWS150-48/A

16:39:03 JUN 17, 2003

ACTV DET: PEAK
 MEAS DET: PEAK QP AVG
 MKR 14.76 MHz
 43.17 dBµV

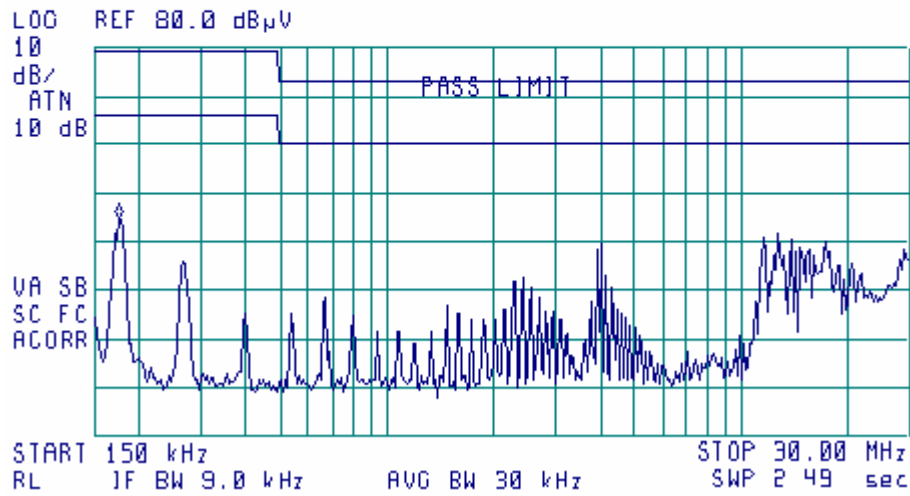


Freq (MHz)	QP Amp (dBµV)	Limit QP (dBµV)	QP - Lim1 (dB)	Avg Amp (dBµV)	Limit Avg (dBµV)	Avg - Lim2 (dB)
0.179298	44.30	79.00	-34.70	38.57	66.00	-27.43
0.270009	32.94	79.00	-46.06	32.64	66.00	-33.36
3.922105	43.16	73.00	-29.84	42.69	60.00	-17.31
4.056128	35.65	73.00	-37.35	35.18	60.00	-24.82
14.526203	39.95	73.00	-33.05	39.07	60.00	-20.93
14.819285	42.58	73.00	-30.42	36.34	60.00	-23.66

Job Number 15491
 Test Name CE EN 55022 class A power line
 EUT Model Number MobileAccess **1000 - BU**
 Site Description Shielded room 2
 Test equipment 1430; 447; 1502; 1510; 787
 Operator Name E.Pitt
 Customer Name FoxCom
 Note 110 VAC Neutral
 PS mode: JWS150-48/A

16:49:44 JUN 17, 2003

ACTV DET: PEAK
 MEAS DET: PEAK OP AVG
 MKR 100 kHz
 44 04 dB μ V

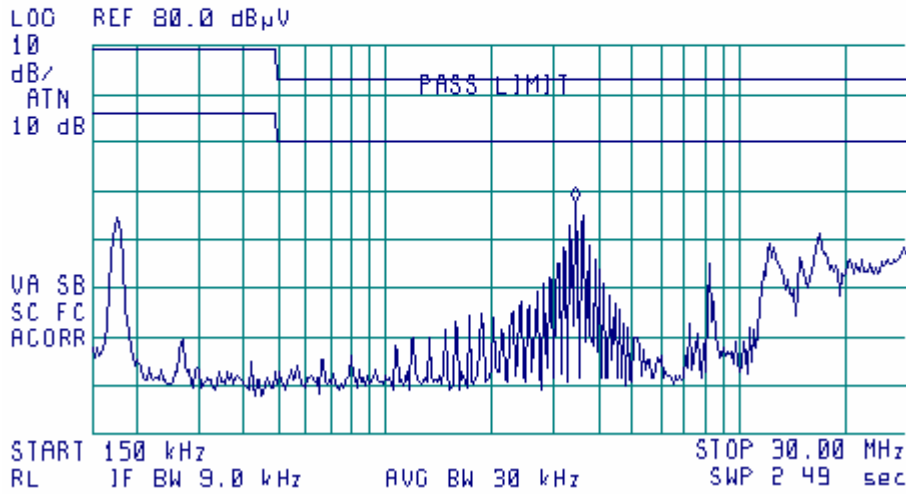


Freq (MHz)	QP Amp (dBuV)	Limit QP (dBuV)	QP - Lim1 (dB)	Avg Amp (dBuV)	Limit Avg (dBuV)	Avg - Lim2 (dB)
3.905065	38.37	73.00	-34.63	38.27	60.00	-21.73
4.040291	39.95	73.00	-33.05	39.25	60.00	-20.75
11.615066	39.79	73.00	-33.21	33.61	60.00	-26.39
12.664814	43.78	73.00	-29.22	38.48	60.00	-21.52
13.956074	39.72	73.00	-33.28	37.40	60.00	-22.60
14.222474	39.06	73.00	-33.94	37.86	60.00	-22.14

Job Number 15491
 Test Name CE EN 55022 class A power line
 EUT Model Number MobileAccess 1000 - RHU
 Site Description Shielded room 2
 Test equipment 1430; 447; 1502; 1510; 787
 Operator Name E.Pitt
 Customer Name FoxCom
 Note 110 VAC Neutral
 PS mode: JWS150-48/A

16:56:29 JUN 17, 2003

ACTV DET: PEAK
 MEAS DET: PEAK OP AVG
 MKR 3.47 MHz
 4B 11 dBµV

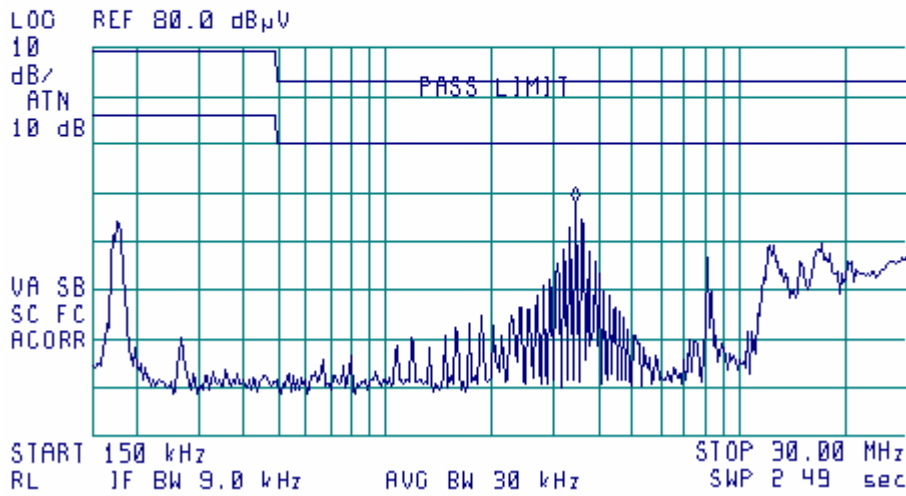


Freq (MHz)	QP Amp (dBµV)	Limit QP (dBµV)	QP - Lim1 (dB)	Avg Amp (dBµV)	Limit Avg (dBµV)	Avg - Lim2 (dB)
3.365350	43.08	73.00	-29.92	42.87	60.00	-17.13
3.499960	48.45	73.00	-24.55	48.33	60.00	-11.67
3.635045	44.77	73.00	-28.23	43.96	60.00	-16.04
8.181075	35.85	73.00	-37.15	35.26	60.00	-24.74
12.114445	38.69	73.00	-34.31	38.10	60.00	-21.90
12.249468	39.94	73.00	-33.06	39.43	60.00	-20.57

Job Number 15491
 Test Name CE EN 55022 class A power line
 EUT Model Number MobileAccess **1000 - RHU**
 Site Description Shielded room 2
 Test equipment 1430; 447; 1502; 1510; 787
 Operator Name E.Pitt
 Customer Name FoxCom
 Note 110 VAC Phase
 PS mode: JWS150-48/A

17:20:38 JUN 17, 2003

ACTV DET: PEAK
 MEAS DET: PEAK OP AVG
 MKR 3.47 MHz
 4B 32 dBµV

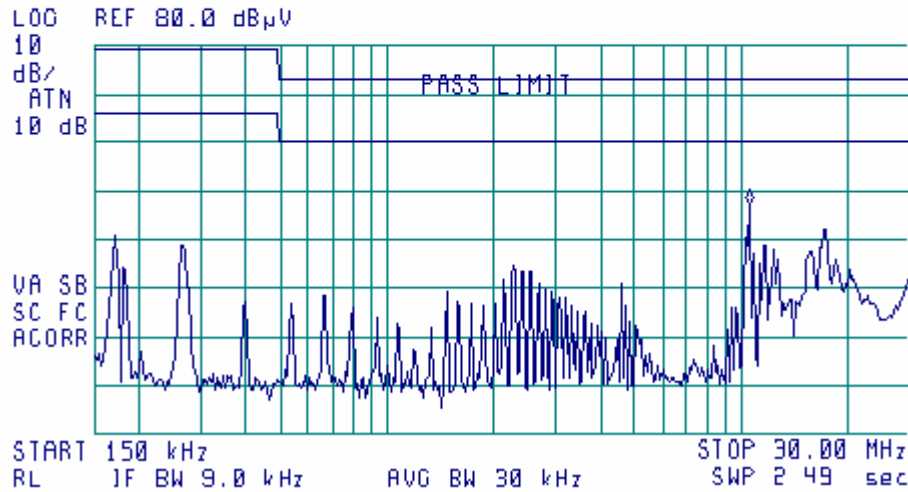


Freq (MHz)	QP Amp (dBuV)	Limit QP (dBuV)	QP - Lim1 (dB)	Avg Amp (dBuV)	Limit Avg (dBuV)	Avg - Lim2 (dB)
3.364120	43.24	73.00	-29.76	43.03	60.00	-16.97
3.498683	48.56	73.00	-24.44	48.40	60.00	-11.60
3.633128	44.61	73.00	-28.39	43.81	60.00	-16.19
8.109983	36.58	73.00	-36.42	36.35	60.00	-23.65
12.514833	39.49	73.00	-33.51	39.25	60.00	-20.75
16.820860	39.55	73.00	-33.45	38.90	60.00	-21.10

Job Number 15491
 Test Name CE EN 55022 class A power line
 EUT Model Number MobileAccess **1000 - RIU**
 Site Description Shielded room 2
 Operator Name E.Pitt
 Customer Name FoxCom
 Note 110 VAC Phase
 PS mode: JWS150-48/A

17:26:06 JUN 17, 2003

ACTV DET: PEAK
 MEAS DET: PEAK OP AVG
 MKR 10.40 MHz
 47.13 dBµV

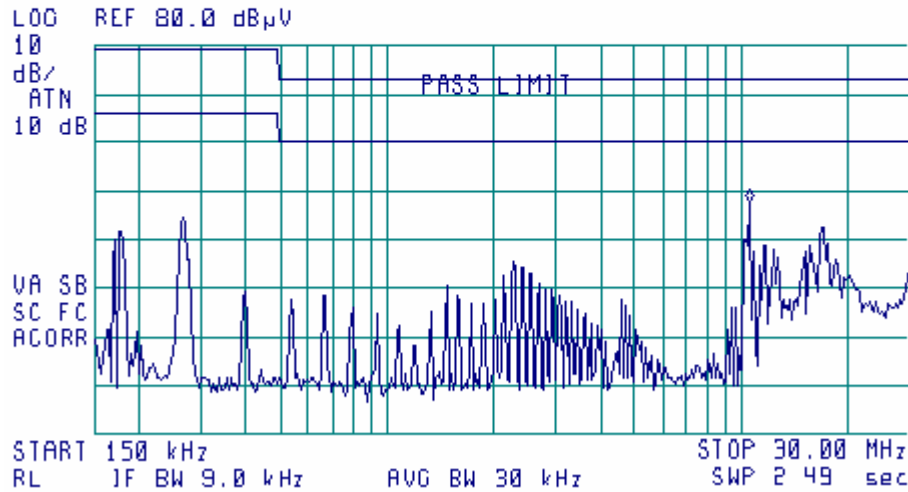


Freq (MHz)	QP Amp (dBuV)	Limit QP (dBuV)	QP - Lim1 (dB)	Avg Amp (dBuV)	Limit Avg (dBuV)	Avg - Lim2 (dB)
0.268210	39.29	79.00	-39.71	39.20	66.00	-26.80
2.286970	35.30	73.00	-37.70	35.17	60.00	-24.83
2.421750	34.66	73.00	-38.34	34.43	60.00	-25.57
2.690360	31.58	73.00	-41.42	31.40	60.00	-28.60
10.481768	38.69	73.00	-34.31	38.06	60.00	-21.94
10.525803	46.11	73.00	-26.89	43.61	60.00	-16.39

Job Number 15491
 Test Name CE EN 55022 class A power line
 EUT Model Number MobileAccess **1000 - RIU**
 Site Description Shielded room 2
 Operator Name E.Pitt
 Customer Name FoxCom
 Note 110 VAC Neutral
 PS mode: JWS150-48/A

17:35:34 JUN 17, 2003

ACTV DET: PEAK
 MEAS DET: PEAK OP AVG
 MKR 10.40 MHz
 47.53 dBµV



Freq (MHz)	QP Amp (dBuV)	Limit QP (dBuV)	QP - Lim1 (dB)	Avg Amp (dBuV)	Limit Avg (dBuV)	Avg - Lim2 (dB)
0.269135	44.66	79.00	-34.34	44.60	66.00	-21.40
2.287275	35.65	73.00	-37.35	35.51	60.00	-24.49
10.253440	39.96	73.00	-33.04	37.94	60.00	-22.06
10.517835	46.87	73.00	-26.13	46.74	60.00	-13.26
16.525065	38.36	73.00	-34.64	35.23	60.00	-24.77
16.796520	43.04	73.00	-29.96	41.79	60.00	-18.21