



EMC Technologies Pty Ltd

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**APPENDIX G
OF
TEST REPORT T31109_F**

Graphs of EMI Measurements

FCC ID: Q47-CID1B
Manufacturer: ERG Ltd
Test Sample: Card Interface Device (CID1B)
Model: 18186
Serial No: 03222860

Date: 13th November 2003

Graphs of EMI Measurements

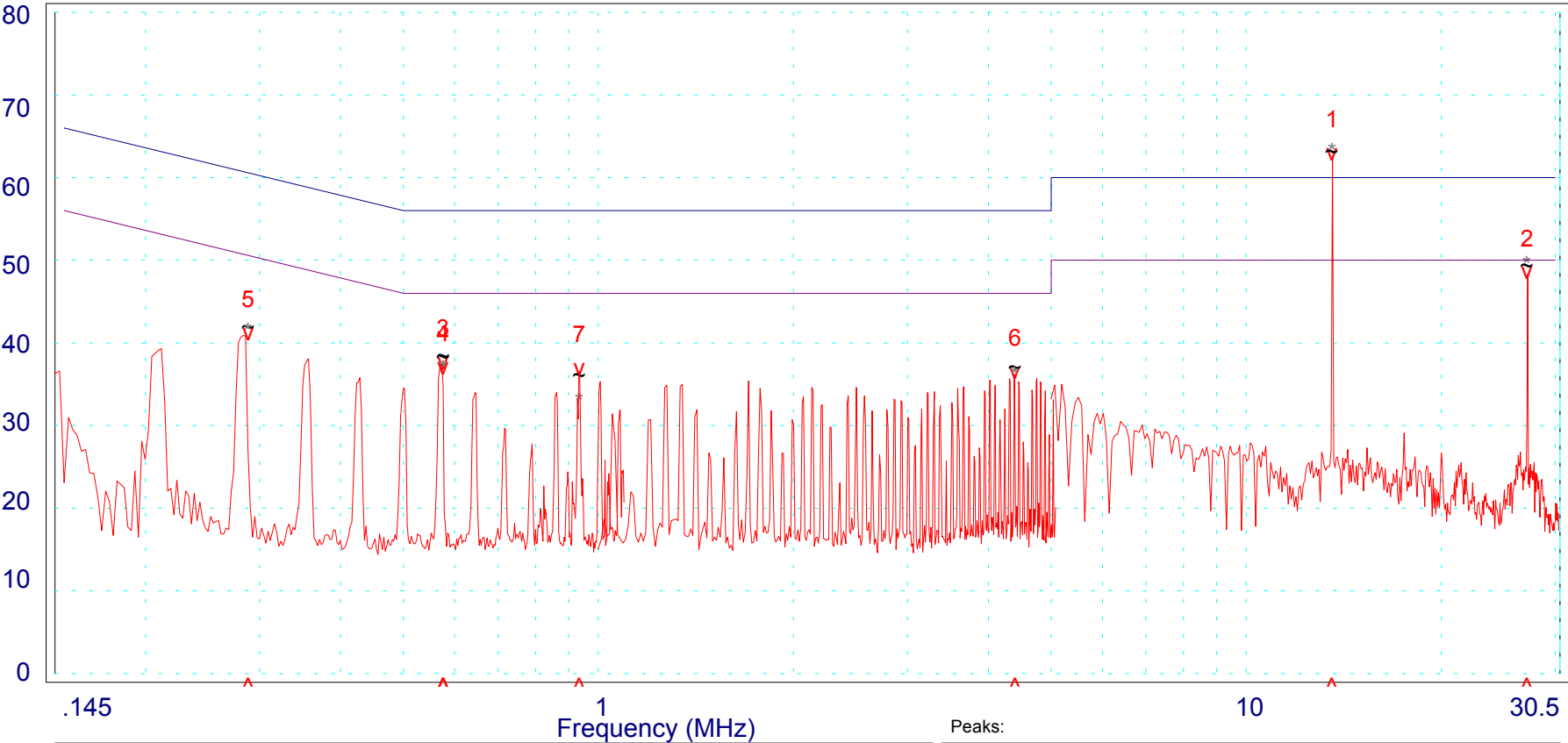
- Graph 1: Conducted Emissions, Active 0.15 MHz to 30 MHz, EUT Transmitting
- Graph 2: Conducted Emissions, Neutral 0.15 MHz to 30 MHz, EUT Transmitting
- Graph 3: Emissions, 0.009 MHz to 30 MHz, EUT Transmitting
- Graph 4: Carrier Zoom, EUT Transmitting
- Graph 5: Vertical Emissions, 29 MHz to 1000 MHz, EUT Transmitting
- Graph 6: Horizontal Emissions, 29 MHz to 1000 MHz, EUT Transmitting

EMC Technologies Pty. Ltd. - Global Product Certification

FCC Class B
Conducted Emissions (dBuV)

Job No:T31109

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Test Date: 07-11-2003
GRAPH No. 1



ERG Transit Group
Card Interface Device
Model No: 18186

Limits:
FCCN_BQP FCC CLASS B QP CONDUCTED LIMITS (CISPR)
FCCN_BAV FCC CLASS B AV CONDUCTED LIMITS (CISPR)

Legend:
Active Line

Ver 5.5 Build 74

Source:
t:L0111003 c1:C0020904 c2:p:NONE a:L0100304
Site ID: Syd Room#2,16/6 Gladstone Rd. Castle Hill, NSW
Test Officer:Kumar Thambiah

Melbourne- 57 Assembly Drv Tullamarine, 3043, Vic, Australia Ph+(613) 9335 3333 Fax+(613) 9338 9260
Sydney---- 16,6 Gladstone Rd Castle Hill, 2154, NSW, Australia Ph+(612) 9899 4599 Fax+(612) 9899 4019

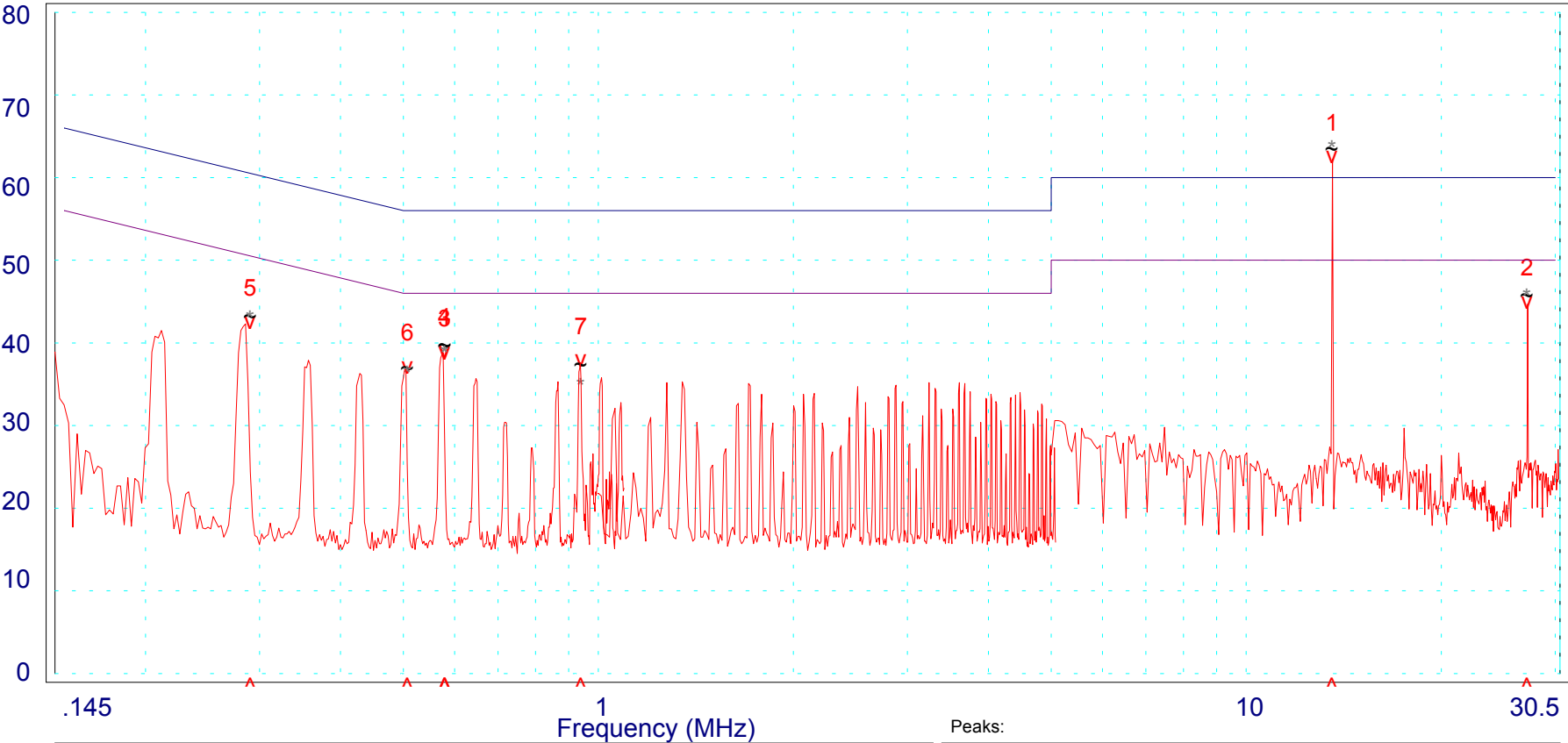
Peaks:								
No	Freq (MHz)	Peak (dBuV)	Qp Val (dBuV)	FCCN_BQP (dBuV)	dL1 (dB)	Av Val (dBuV)	FCCN_BAV (dBuV)	dL2 (dB)
1	13.56	62.6	62.7	60.0	2.7	62.7	50.0	12.7
2	27.12	48.3	48.9	60.0	-11.1	49.0	50.0	-1.0
3	0.576	37.4	37.9	56.0	-18.1	36.4	46.0	-9.6
4	0.576	36.8	38.0	56.0	-18.0	36.4	46.0	-9.6
5	0.288	40.9	41.5	60.6	-19.1	41.0	50.6	-9.6
6	4.394	36.2	36.6	56.0	-19.4	35.7	46.0	-10.3
7	0.934	36.6	35.6	56.0	-20.4	32.5	46.0	-13.5

EMC Technologies Pty. Ltd. - Global Product Certification

FCC Class B
Conducted Emissions (dBuV)

Job No:T31109

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Test Date: 07-11-2003
GRAPH No. 2



ERG Transit Group
Card Interface Device
Model No: 18186

Limits:
FCCN_BQP FCC CLASS B QP CONDUCTED LIMITS (CISPR)
FCCN_BAV FCC CLASS B AV CONDUCTED LIMITS (CISPR)

Legend:
— Neutral Line

Ver 5.5 Build 74

Source:
t:L0111003 c1:C0020904 c2: p:NONE a:L0100304
Site ID: Syd Room#2,16/6 Gladstone Rd. Castle Hill, NSW
Test Officer:Kumar Thambiah

Melbourne- 57 Assembly Drv Tullamarine, 3043, Vic, Australia Ph+(613) 9335 3333 Fax+(613) 9338 9260
Sydney---- 16,6 Gladstone Rd Castle Hill, 2154, NSW, Australia Ph+(612) 9899 4599 Fax+(612) 9899 4019

Peaks:								
No	Freq (MHz)	Peak (dBuV)	Qp Val	FCCN_BQP (dBuV)	dL1 (dB)	Av Val (dBuV)	FCCN_BAV (dBuV)	dL2 (dB)
1	13.56	62.2	63.0	60.0	3.0	63.0	50.0	13.0
2	27.12	44.7	45.3	60.0	-14.7	45.1	50.0	-4.9
3	0.579	38.6	39.3	56.0	-16.7	38.2	46.0	-7.8
4	0.579	38.8	39.3	56.0	-16.7	38.2	46.0	-7.8
5	0.290	42.3	42.8	60.5	-17.7	42.5	50.5	-8.0
6	0.507	36.8	36.5	56.0	-19.5	35.8	46.0	-10.2
7	0.939	37.6	36.9	56.0	-19.1	34.3	46.0	-11.7

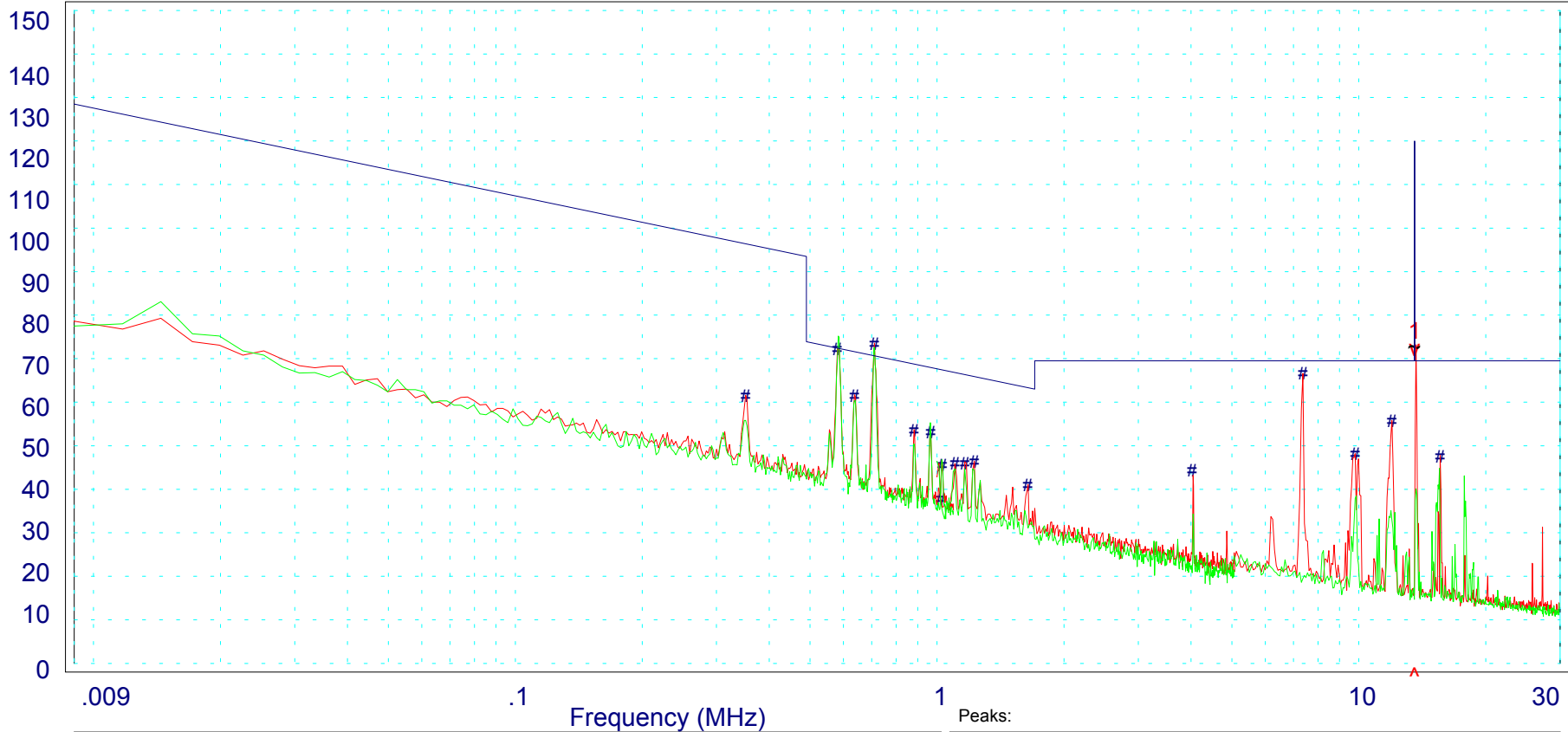
EMC Technologies Pty. Ltd. - Global Product Certification

FCC Class B
Radiated Emissions (dBuV)
= Ambient

Job No:T31109

Test Date: 12-11-03

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GRAPH No. 3



ERG Transit Group
Card Interface Device
Model No: 18186

Limits:
FCC_loop_3mFCC Pt15 3 METRE LIMITS FOR LOOP ANTENNA

Legend:
— Ambients
— Emissions

Ver 5.5 Build 70
Colo Radiated Test Setup Active Loop
t:A0081204E c1:C0200904 c2:NONE p:NONE a:NONE
Site ID: OATS#1,1247 Upper Colo Rd. Colo, NSW
Test Officer: Bruce Holdsworth

Melbourne- 57 Assembly Drv Tullamarine, 3043, Vic, Australia Ph+(613) 9335 3333 Fax+(613) 9338 9260
Sydney---- 16,6 Gladstone Rd Castle Hill, 2154, NSW, Australia Ph+(612) 9899 4599 Fax+(612) 9899 4019

Peaks:					
No	Freq (MHz)	Peak (dBuV)	Qp Val	FCC_loop_3dL1 (dBuV)	3dL1 (dB)
1	13.56	73.5	73.5	120.0	-46.5

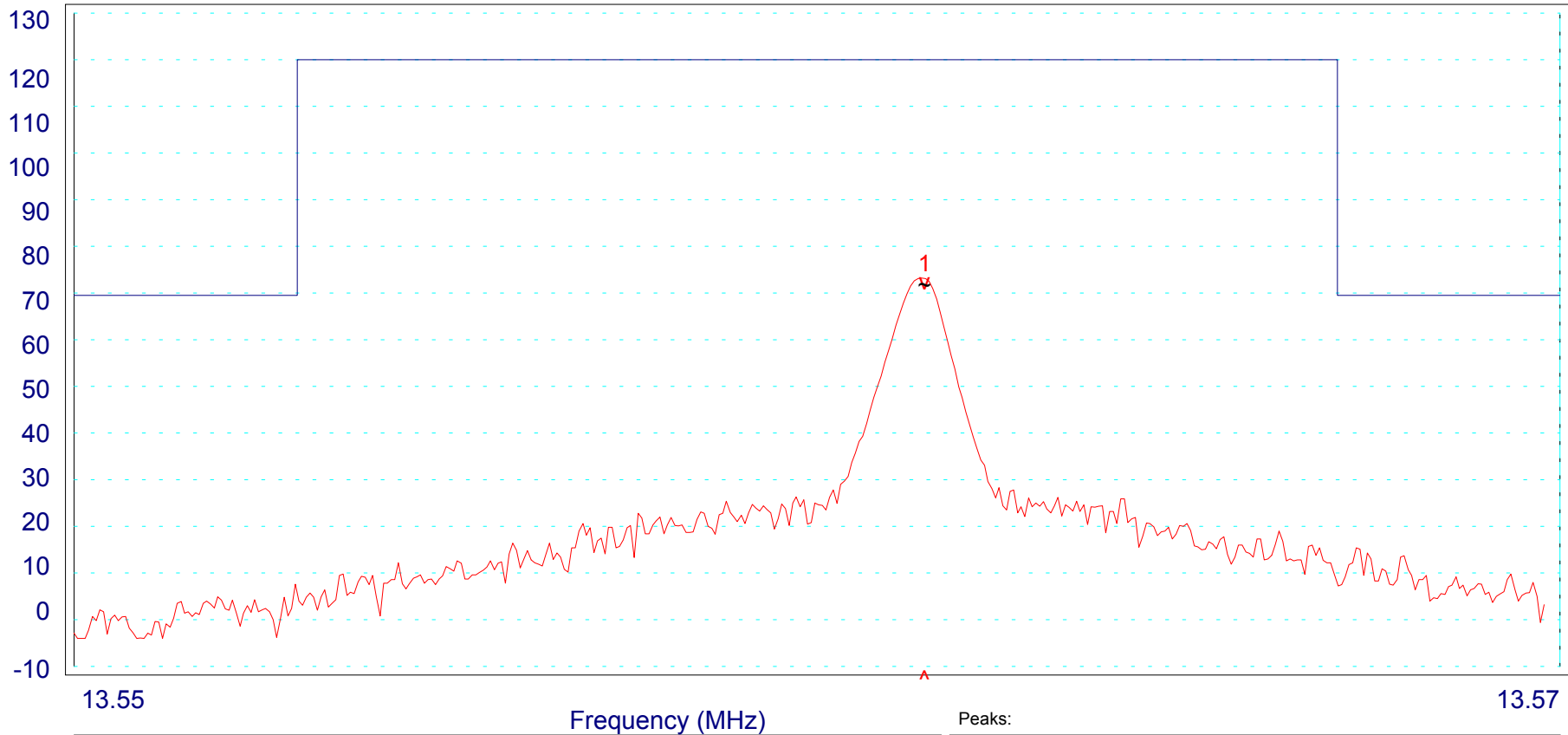
EMC Technologies Pty. Ltd. - Global Product Certification

FCC Class B
Radiated Emissions (dBuV)
= Ambient

Job No:T31109

Test Date: 12-11-03

C:\reports\pcf\T31109_4.PCF
GRAPH No. 4



ERG Transit Group
Card Interface Device
Model No: 18186

Limits:
FCC_loop_3mFCC Pt15 3 METRE LIMITS FOR LOOP ANTENNA

Legend:
Carrier

Ver 5.5 Build 70
Colo Radiated Test Setup Active Loop
t:A0081204E c1:C0200904 c2:NONE p:NONE a:NONE
Site ID: OATS#1,1247 Upper Colo Rd. Colo, NSW
Test Officer: Bruce Holdsworth

Source:
T31109r1 5

Melbourne- 57 Assembly Drv Tullamarine, 3043, Vic, Australia Ph+(613) 9335 3333 Fax+(613) 9338 9260
Sydney---- 16,6 Gladstone Rd Castle Hill, 2154, NSW, Australia Ph+(612) 9899 4599 Fax+(612) 9899 4019

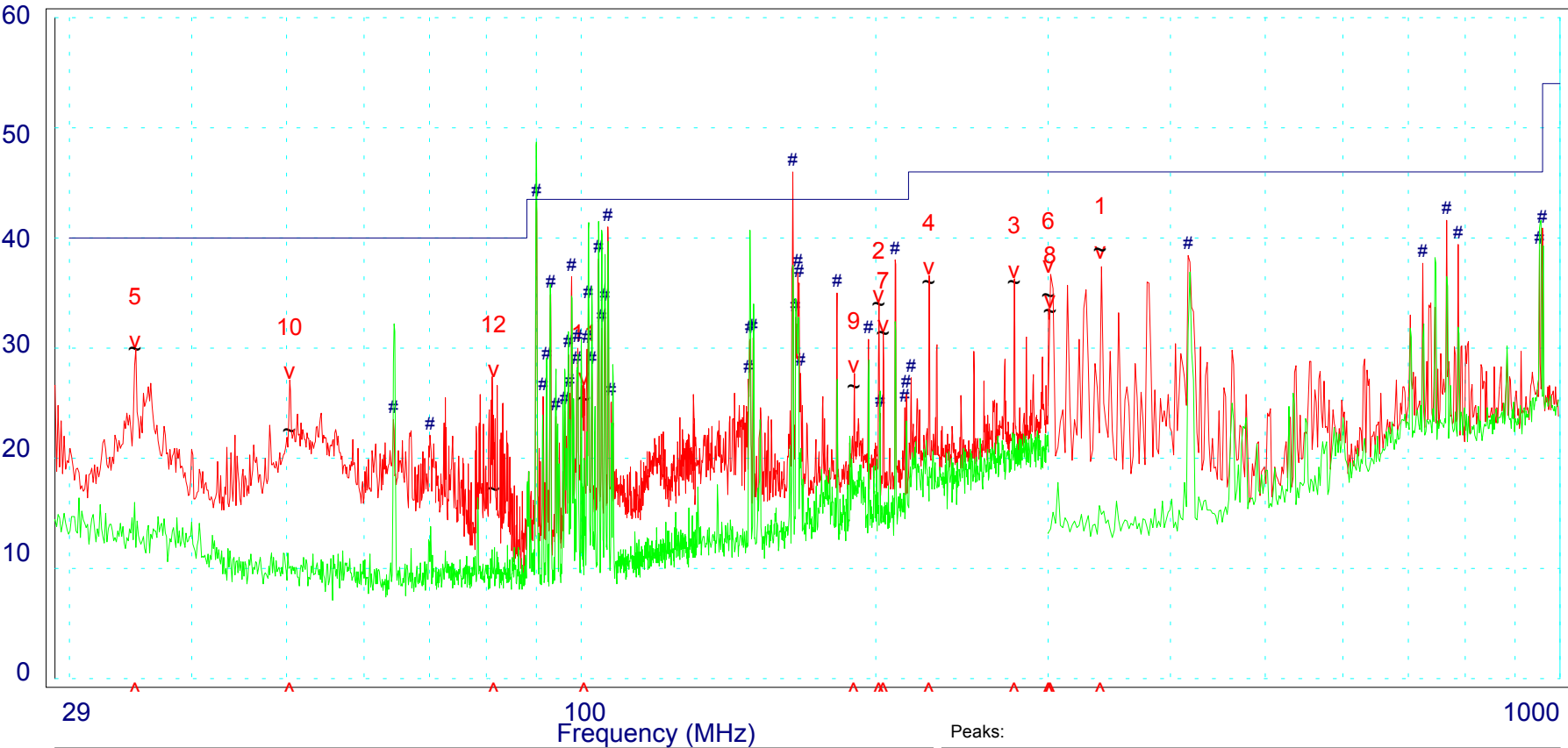
EMC Technologies Pty. Ltd. - Global Product Certification

FCC Class B
Radiated Emissions (dBuV/m)
= Ambient

Job No:T31109

Test Date: 10-11-03

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GRAPH No. 5



ERG Transit Group
Card Interface Device
Model No: 18186

Limits:
FCC-B3 FCC CLASS B RAD 3M LIMITS

Legend:
— Vertical Ambients
— Vertical Emissions

Ver 5.5 Build 70
Colo Radiated Test Setup
t:A0690304 c1:C0200904 c2:NONE p:A0961103 a:NONE
Site ID: OATS#1,1247 Upper Colo Rd. Colo, NSW
Test Officer: Bruce Holdsworth

Melbourne- 57 Assembly Drv Tullamarine, 3043, Vic, Australia Ph+(613) 9335 3333 Fax+(613) 9338 9260
Sydney---- 16,6 Gladstone Rd Castle Hill, 2154, NSW, Australia Ph+(612) 9899 4599 Fax+(612) 9899 4019

Peaks:					
No	Freq (MHz)	Peak (dBuV/m)	Qp Val	FCC-B3 (dBuV/m)	dL1 (dB)
1	339.03	38.1	38.1	46.0	-7.9
2	201.34	34.0	33.2	43.5	-10.3
3	276.84	36.3	35.2	46.0	-10.8
4	226.55	36.6	35.2	46.0	-10.8
5	34.99	29.9	29.1	40.0	-10.9
6	300.14	36.7	34.0	46.0	-12.0
7	203.42	31.4	30.5	43.5	-13.0
8	301.21	33.6	32.5	46.0	-13.5
9	189.86	27.7	25.7	43.5	-17.8
10	50.33	27.1	21.7	40.0	-18.3
11	100.66	26.5	24.6	43.5	-18.9
12	81.34	27.3	16.4	40.0	-23.6

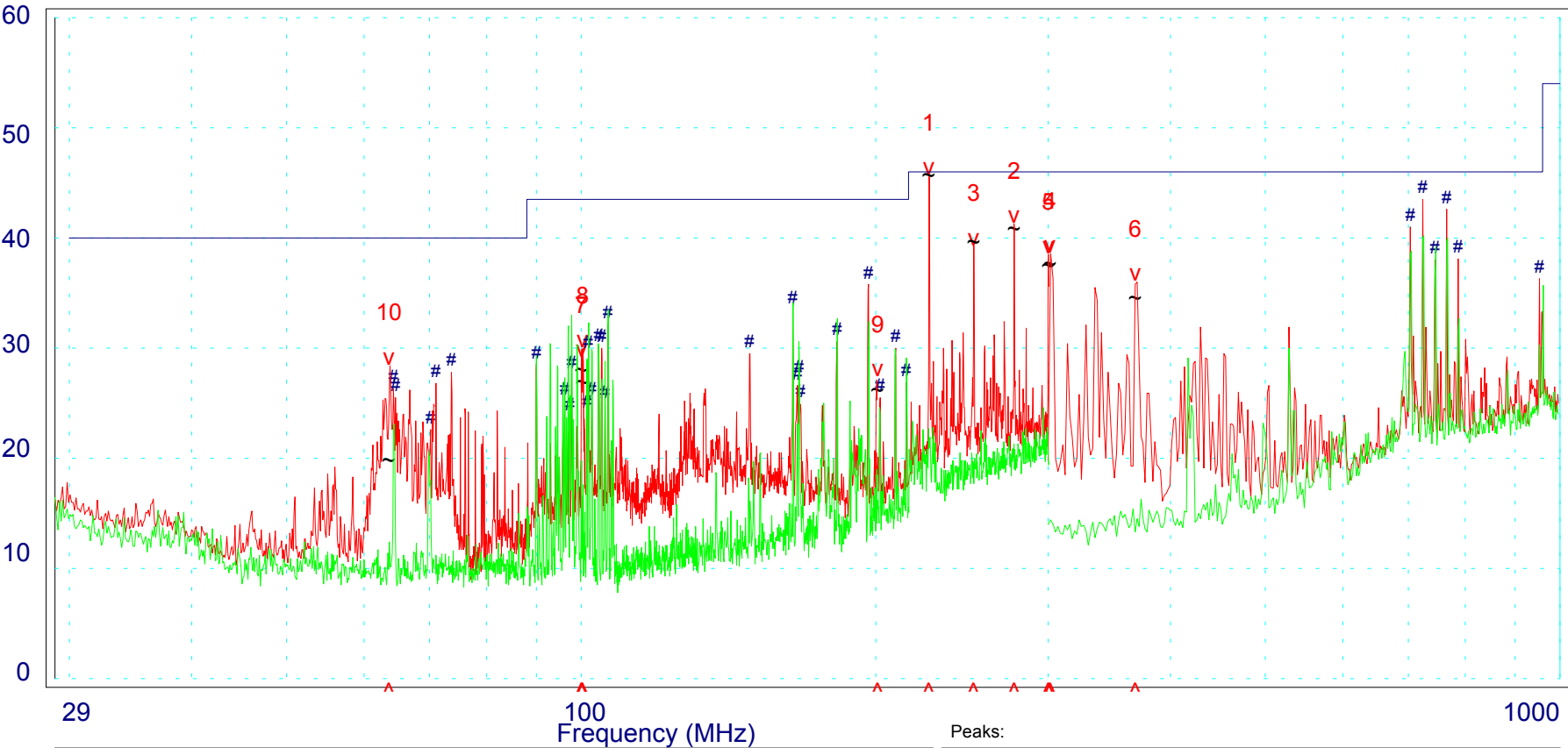
EMC Technologies Pty. Ltd. - Global Product Certification

FCC Class B
Radiated Emissions (dBuV/m)
= Ambient

Job No:T31109

Test Date: 10-11-03

C:\reports\pcf\T31109_6.PCF
GRAPH No. 6



ERG Transit Group
Card Interface Device
Model No: 18186

Limits: FCC-B3 FCC CLASS B RAD 3M LIMITS

Legend:
— Horizontal Ambients
— Horizontal Emissions

Source:
V Amb 1710 6 7 8 9 10 12
T31109r 6 7 8 9 14 13

Ver 5.5 Build 70
Colo Radiated Test Setup
t:A0690304 c1:C0200904 c2:NONE p:A0961103 a:NONE
Site ID: OATS#1,1247 Upper Colo Rd. Colo, NSW
Test Officer: Bruce Holdsworth

Melbourne- 57 Assembly Drv Tullamarine, 3043, Vic, Australia Ph+(613) 9335 3333 Fax+(613) 9338 9260
Sydney---- 16,6 Gladstone Rd Castle Hill, 2154, NSW, Australia Ph+(612) 9899 4599 Fax+(612) 9899 4019

Peaks:					
No	Freq (MHz)	Peak (dBuV/m)	Qp Val	FCC-B3 (dBuV/m)	dL1 (dB)
1	226.47	45.6	44.9	46.0	-1.1
2	276.81	41.3	40.0	46.0	-6.0
3	251.65	39.3	38.8	46.0	-7.2
4	301.22	38.6	36.8	46.0	-9.2
5	300.16	38.5	36.7	46.0	-9.3
6	368.10	36.1	33.7	46.0	-12.3
7	100.08	29.1	27.2	43.5	-16.3
8	100.30	30.0	26.1	43.5	-17.4
9	200.80	27.3	25.4	43.5	-18.1
10	63.60	28.4	19.0	40.0	-21.0