

EMC Technologies Report No. M040411_Cert_Immobiliser

Appendix H – Graphs of EMI Measurement



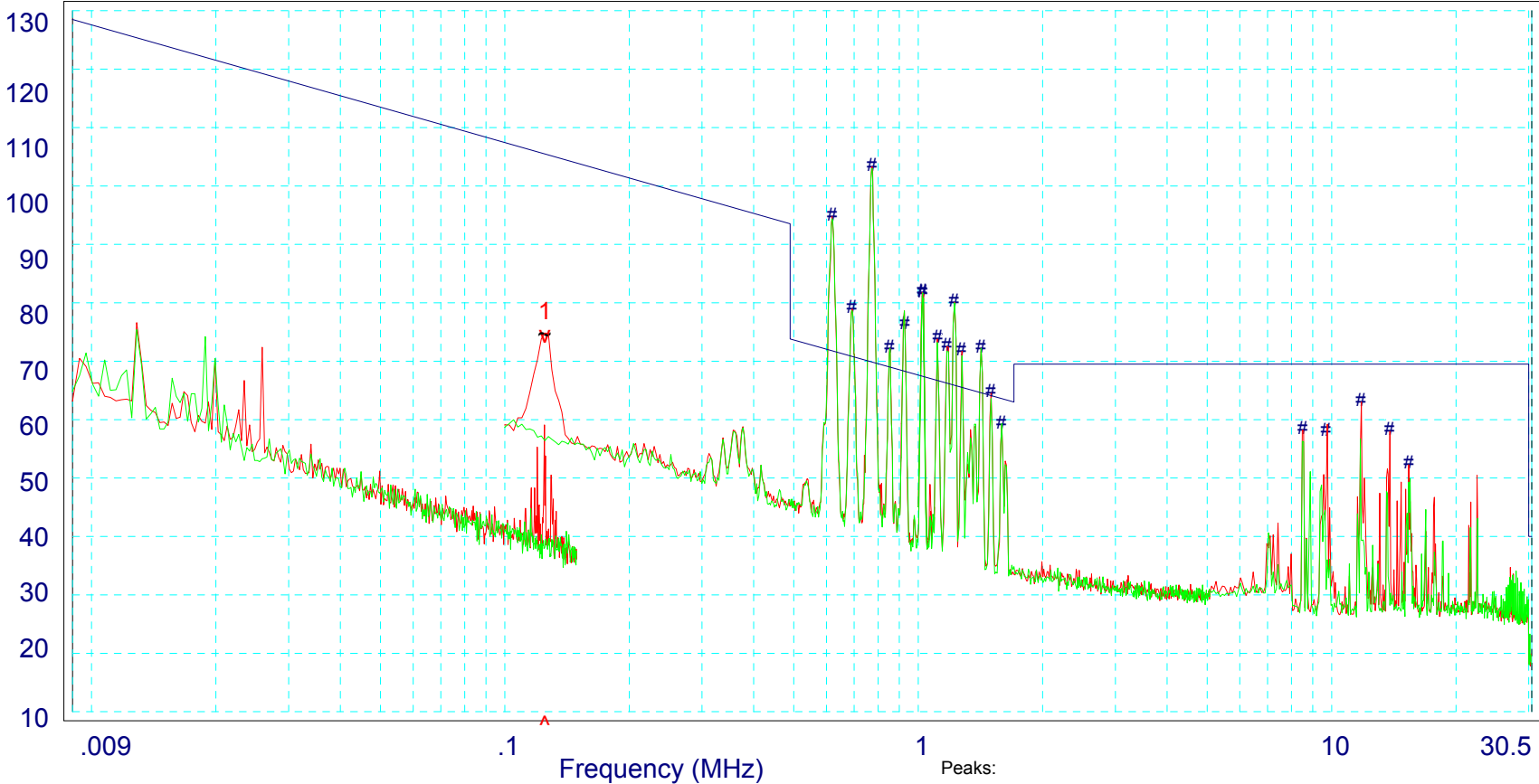
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EMC Technologies Pty. Ltd. - Global Product Certification

Radiated Emissions (dBuV/m)
= Ambient

Job No:m040612 r:\PCF\m040411i_1.PCF
Test Date: 16-06-04

GRAPH No. 1



Robert Bosch (Australia) Pty Ltd
XD Smartra - 125kHz Immobiliser
Old Variant - Tx ON
Antenna Parallel

Limits: FCC15209 FCC PART 15.209 3mtr LMTS
Legend: Ambients Emissions
Ver 5.5 Build 93
radiated emissions site 2 lerderg
t:6502_E c1:C1700804 c2:NONE p:NONE a:NONE
Site ID: OATS1,Lerderg Gorge Rd, Bacchus Marsh, VIC
Test Officer:Chieu Huynh

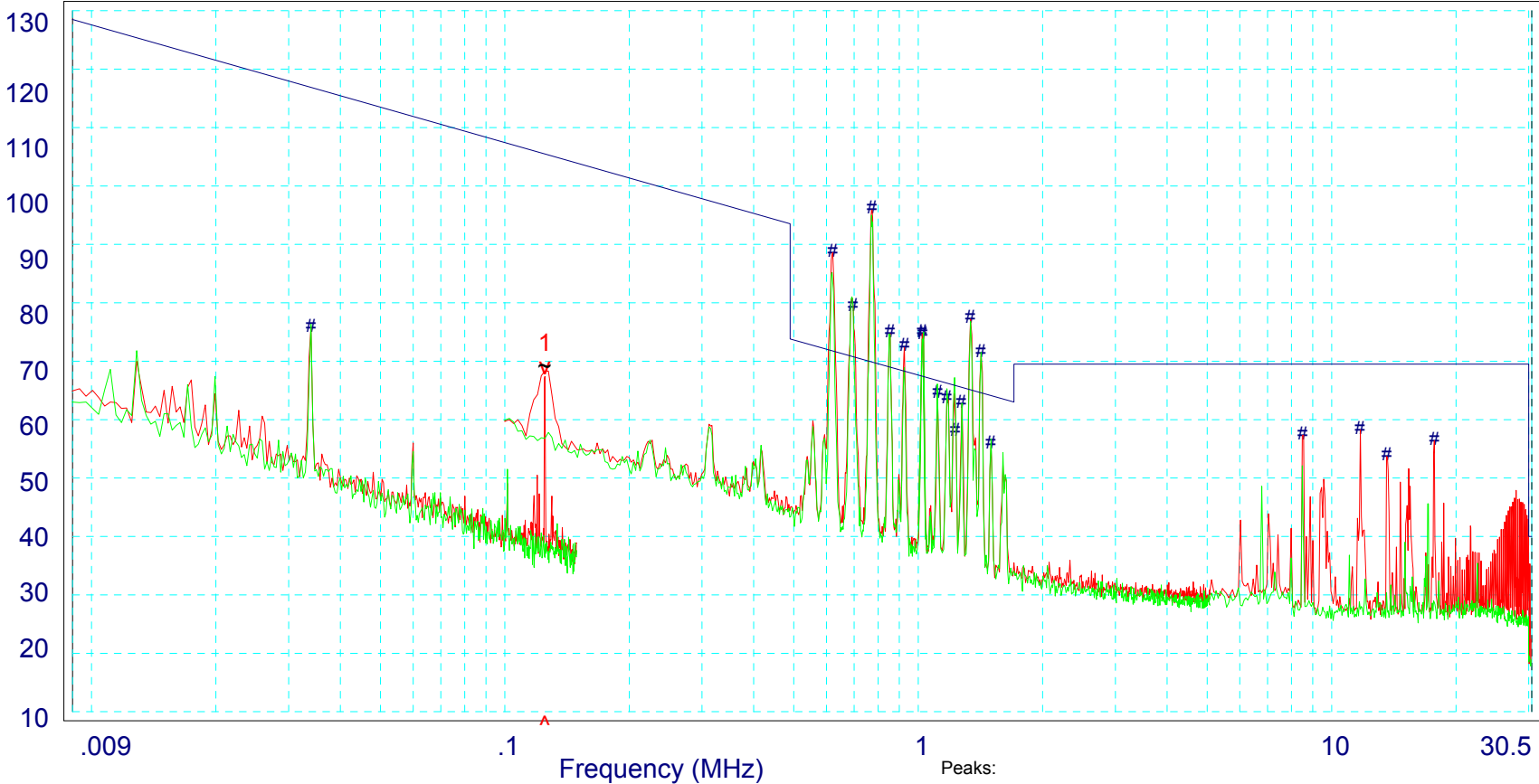
Source: m040411r 28 29 30 18
m040411r 15 16 17 31
Melbourne- 57 Assembly Drv Tullamarine, 3043, Vic, Australia Ph+(613) 9335 3333 Fax+(613) 9338 9260
Sydney---- 16,6 Gladstone Rd Castle Hill, 2154, NSW, Australia Ph+(612) 9899 4599 Fax+(612) 9899 4019

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Radiated Emissions (dBuV/m)
= Ambient

Job No:m040612 r:\PCF\m040411i_2.PCF
Test Date: 16-06-04

GRAPH No. 2



Robert Bosch (Australia) Pty Ltd
XD Smartra - 125kHz Immobiliser
Old Variant - Tx ON
Antenna Perpendicular

Limits: FCC15209 FCC PART 15.209 3mtr LMTS
Legend: Ambients (green line)
 Emissions (red line)
Source: m040411r 1 13 3 4
 m040411r 20 21 22 23
Ver 5.5 Build 93
radiated emissions site 2 lerderberg
t:6502_E c1:C1700804 c2:NONE p:NONE a:NONE
Site ID: OATS1,Lerderberg Gorge Rd, Bacchus Marsh, VIC
Test Officer:Chieu Huynh

No	Freq (MHz)	Peak (dBuV/m)	Qp Val	FCC15209 (dBuV/m)	dL1 (dB)
1	0.125	69.5	69.5	105.5	-36.0

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

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Radiated Emissions (dBuV/m)

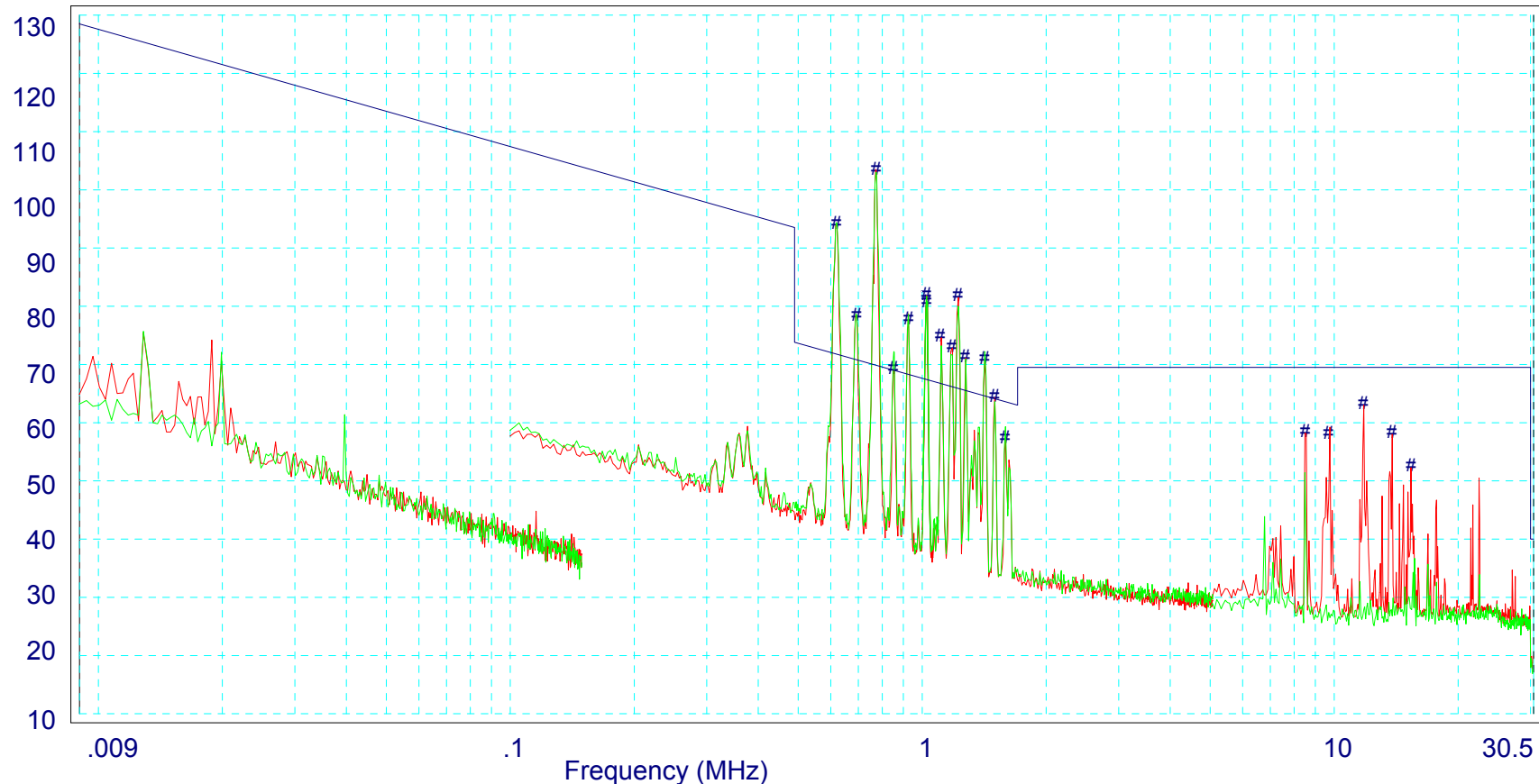
Job No:m040411

r:\PCF\m040411i_3.PCF

Test Date: 8-04-04

GRAPH No. 3

= Ambient



Robert Bosch (Australia) Pty Ltd
XD Smartra - 125kHz Immobiliser
Old Variant - Tx Idle
Antenna Parallel

Limits:
FCC15209 FCC PART 15.209 3mtr LMTS

Legend:
— Ambients
— Emissions

Ver 5.5 Build 93
radiated emissions site 2 lerderg
t:6502_E c1:C1700804 c2:NONE p:NONE a:NONE
Site ID: OATS2,Lerderg Gorge Rd, Bacchus Marsh, VIC
Test Officer:Kevin Hansen

Source:
m040411r 5 29 30 8
m040411r 28 14 7 31

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

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Radiated Emissions (dBuV/m)

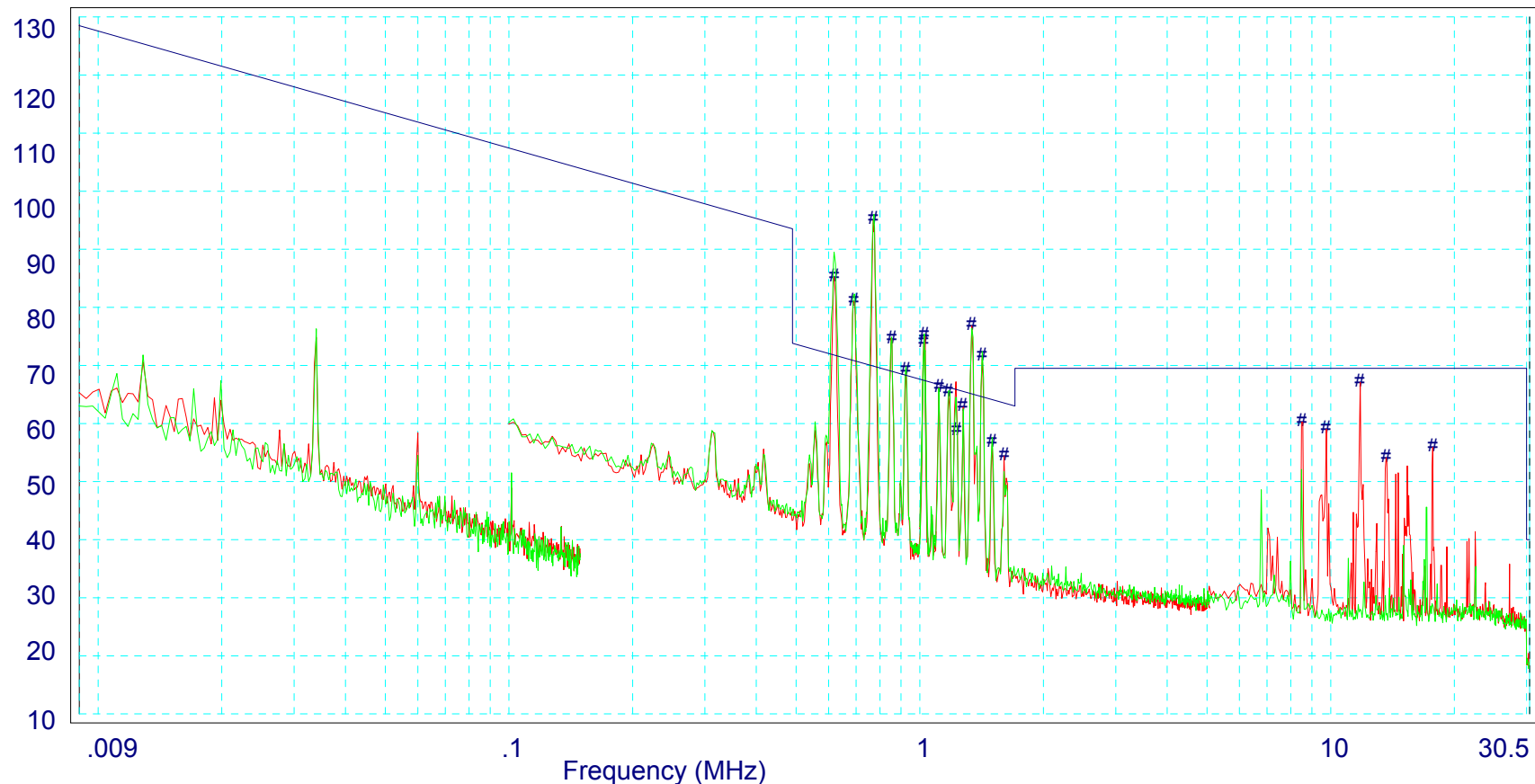
Job No:m040411

r:\PCF\m040411i_4.PCF

Test Date: 8-04-04

GRAPH No. 4

= Ambient



Robert Bosch (Australia) Pty Ltd
XD Smartra - 125kHz Immobiliser
Old Variant - Tx Idle
Antenna Perpendicular

Limits:
FCC15209 FCC PART 15.209 3mtr LMTS

Legend:
— Ambients
— Emissions

Ver 5.5 Build 93
radiated emissions site 2 lerderg
t:6502_E c1:C1700804 c2:NONE p:NONE a:NONE
Site ID: OATS2,Lerderg Gorge Rd, Bacchus Marsh, VIC
Test Officer:Kevin Hansen

Source:
m040411r 1 25 26 4
m040411r 24 13 3 27

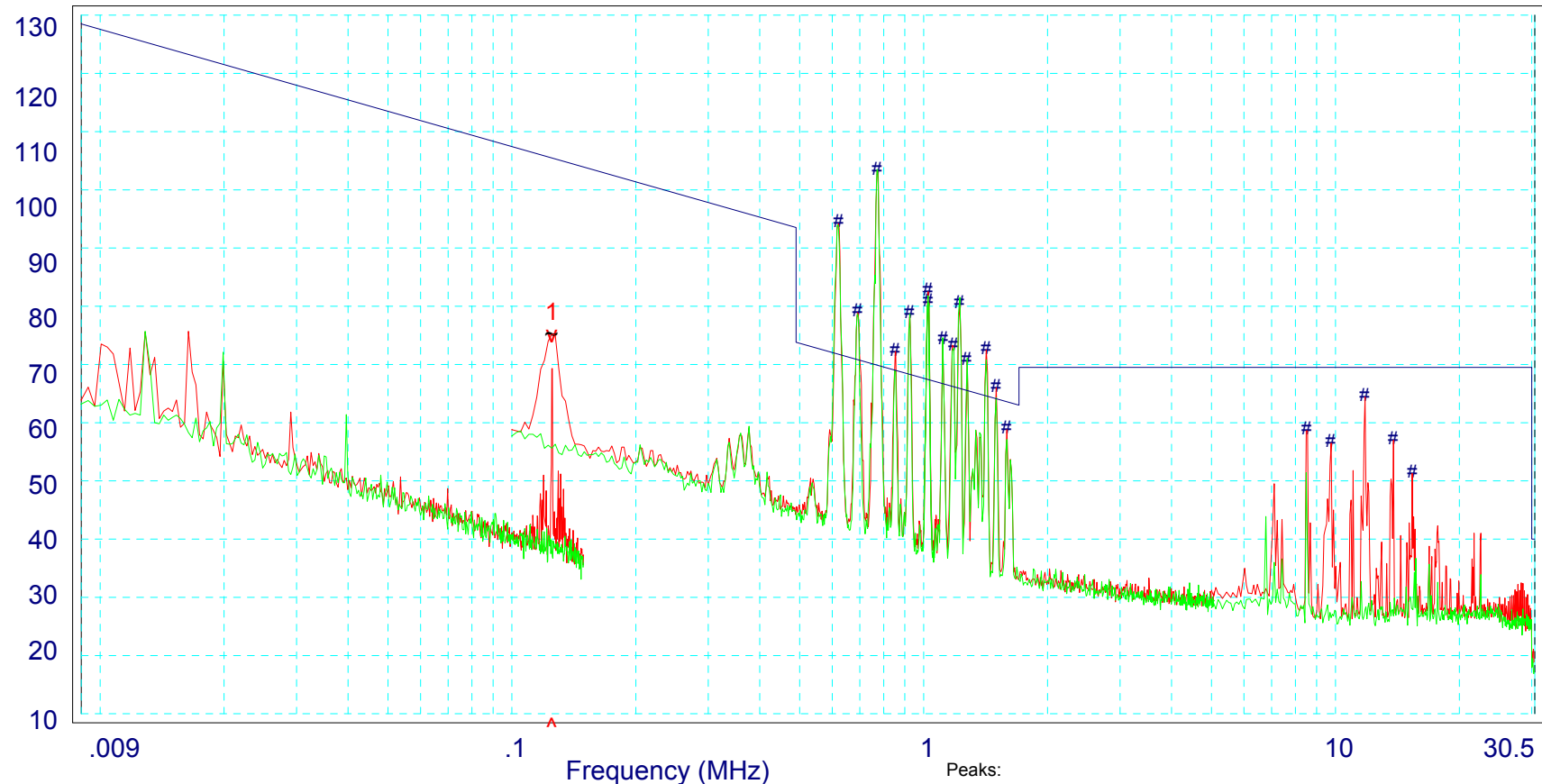
Melbourne- 57 Assembly Drv Tullamarine, 3043, Vic, Australia Ph+(613) 9335 3333 Fax+(613) 9338 9260
Sydney----- 16,6 Gladstone Rd Castle Hill, 2154, NSW, Australia Ph+(612) 9899 4599 Fax+(612) 9899 4019

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Radiated Emissions (dBuV/m)
= Ambient

Job No:m040411 r:\PCF\m040411i_5.PCF
Test Date: 8-04-04

GRAPH No. 5



Robert Bosch (Australia) Pty Ltd
XD Smartra - 125kHz Immobiliser
New Variant - Tx ON
Antenna Parallel

Limits: FCC15209 FCC PART 15.209 3mtr LMTS
Legend: Ambients Emissions
Source: m040411r 5 14 7 8
m040411r 32 33 34 35
Ver 5.5 Build 93
radiated emissions site 2 lerderg
t:6502_E c1:C1700804 c2:NONE p:NONE a:NONE
Site ID: OATS2,Lerderg Gorge Rd, Bacchus Marsh, VIC
Test Officer:Kevin Hansen

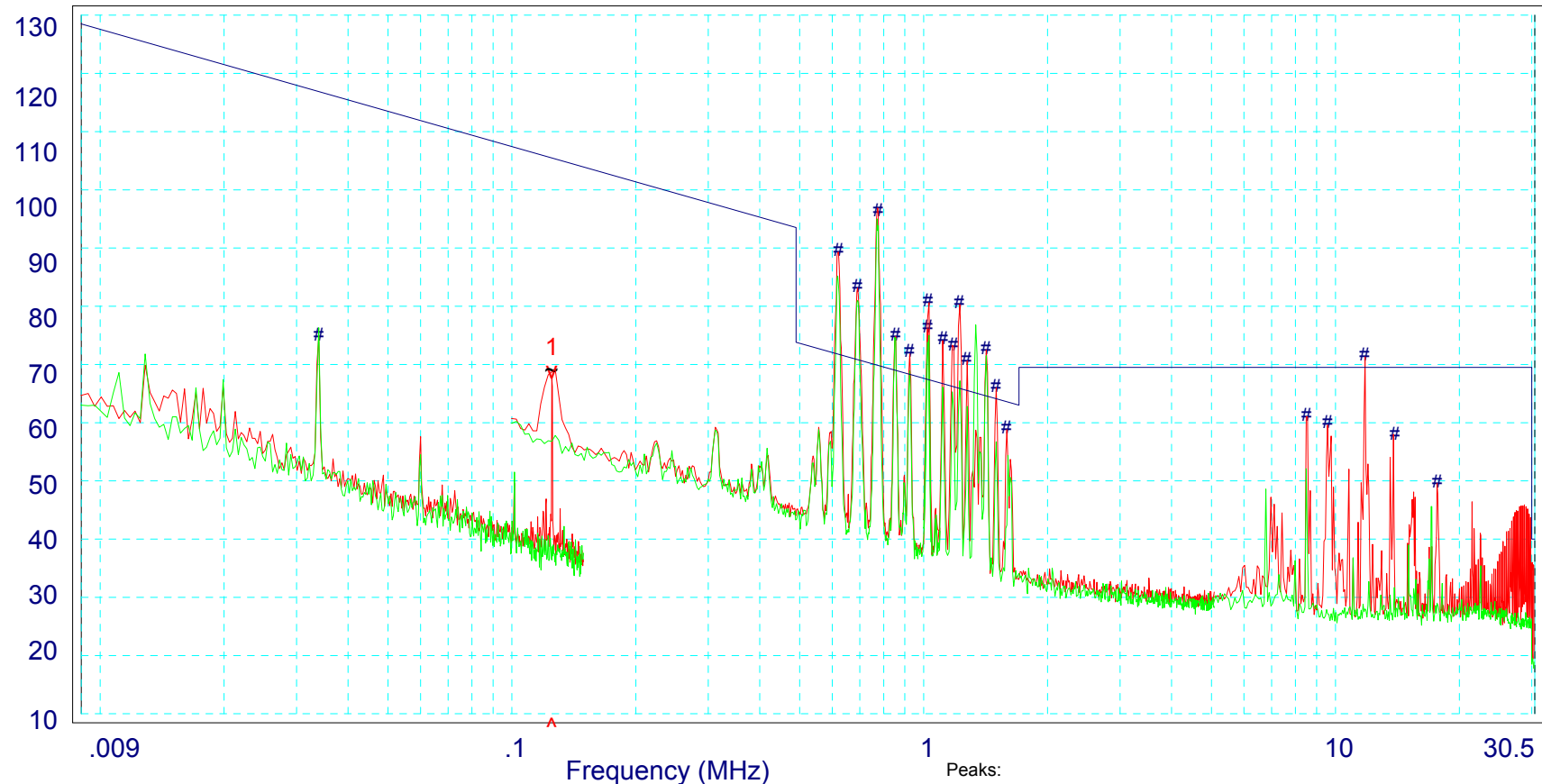
Melbourne- 57 Assembly Drv Tullamarine, 3043, Vic, Australia Ph+(613) 9335 3333 Fax+(613) 9338 9260
Sydney----- 16,6 Gladstone Rd Castle Hill, 2154, NSW, Australia Ph+(612) 9899 4599 Fax+(612) 9899 4019

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Radiated Emissions (dBuV/m)
= Ambient

Job No:m040411 r:\PCF\m040411i_6.PCF
Test Date: 8-04-04

GRAPH No. 6



Robert Bosch (Australia) Pty Ltd
XD Smartra - 125kHz Immobiliser
New Variant - Tx ON
Antenna Perpendicular

Limits: FCC15209 FCC PART 15.209 3mtr LMTS

Ver 5.5 Build 93
radiated emissions site 2 lerderg
t:6502_E c1:C1700804 c2:NONE p:NONE a:NONE
Site ID: OATS2,Lerderg Gorge Rd, Bacchus Marsh, VIC
Test Officer:Kevin Hansen

Source:
m040411r 1 13 3 4
m040411r 36 37 34 39

No	Freq (MHz)	Peak (dBuV/m)	Qp Val	FCC15209 (dBuV/m)	dL1 (dB)
1	0.125	69.3	69.3	105.5	-36.2

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

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Radiated Emissions (dBuV/m)

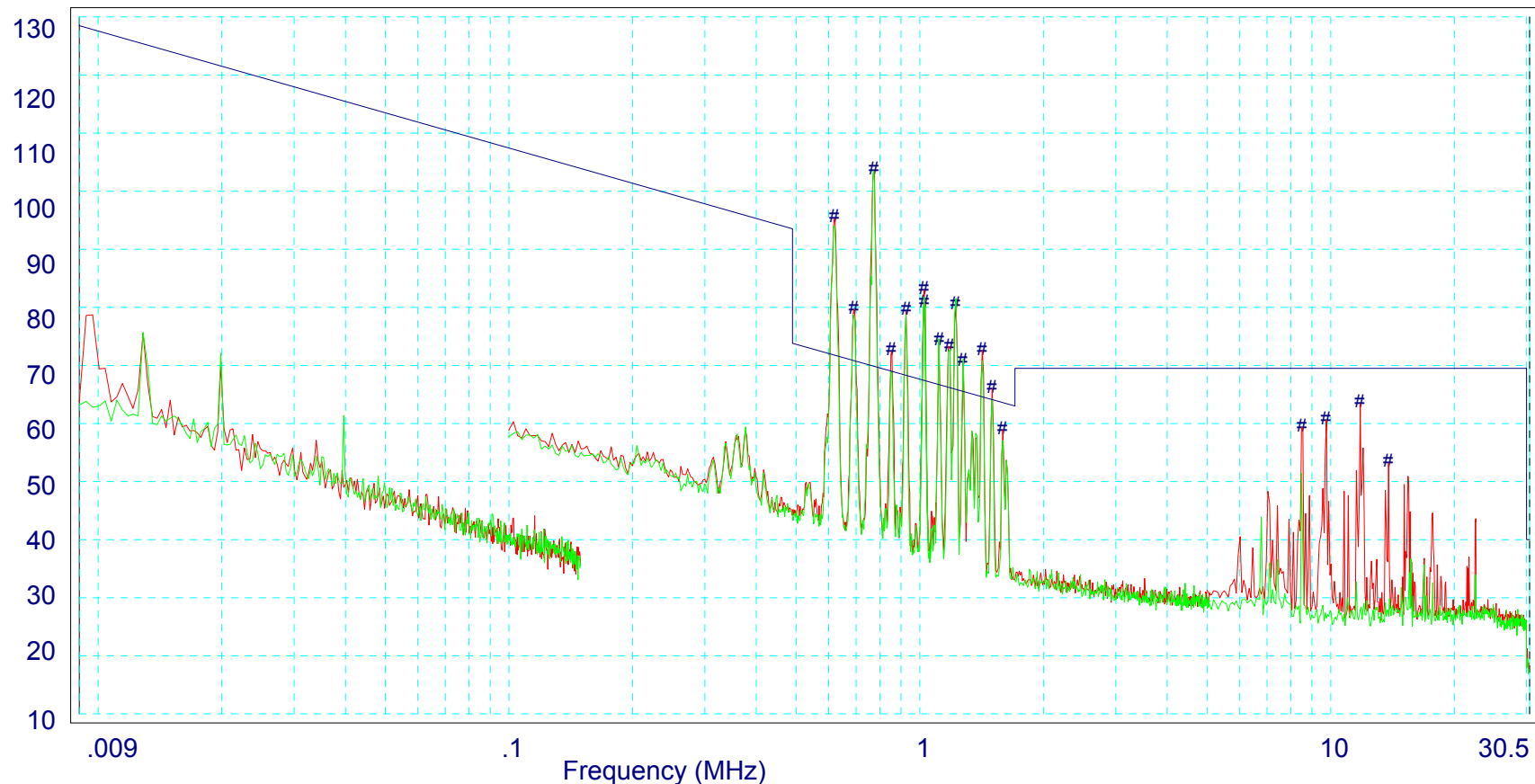
Job No:m040411

r:\PCF\m040411i_7.PCF

Test Date: 8-04-04

GRAPH No. 7

= Ambient



Robert Bosch (Australia) Pty Ltd
XD Smartra - 125kHz Immobiliser
New Variant - Tx Idle
Antenna Parallel

Limits:
FCC15209 FCC PART 15.209 3mtr LMTS

Legend:
— Ambients
— Emissions

Ver 5.5 Build 93
radiated emissions site 2 lerderg
t:6502_E c1:C1700804 c2:NONE p:NONE a:NONE
Site ID: OATS2,Lerderg Gorge Rd, Bacchus Marsh, VIC
Test Officer:Kevin Hansen

Source:
m040411r 5 14 7 8
m040411r 44 45 34 47

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

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Radiated Emissions (dBuV/m)

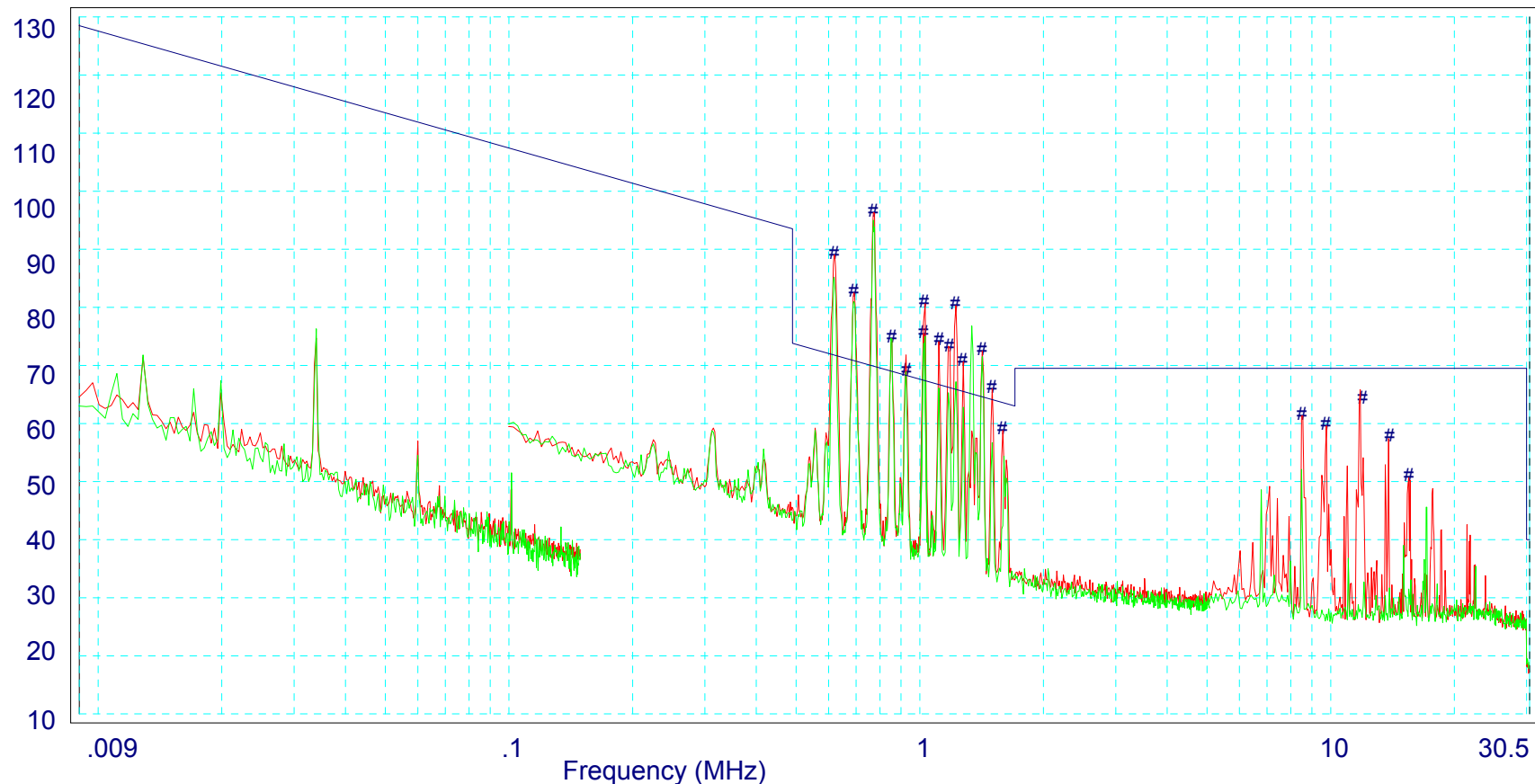
Job No:m040411

r:\PCF\m040411i_8.PCF

Test Date: 8-04-04

GRAPH No. 8

= Ambient



Robert Bosch (Australia) Pty Ltd
XD Smartra - 125kHz Immobiliser
New Variant - Tx Idle
Antenna Perpendicular

Limits:
FCC15209 FCC PART 15.209 3mtr LMTS

Legend:
— Ambients
— Emissions

Ver 5.5 Build 93
radiated emissions site 2 lerderg
t:6502_E c1:C1700804 c2:NONE p:NONE a:NONE
Site ID: OATS2,Lerderg Gorge Rd, Bacchus Marsh, VIC
Test Officer:Kevin Hansen

Source:
m040411r 1 13 3 4
m040411r 40 41 34 43

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