

## **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)

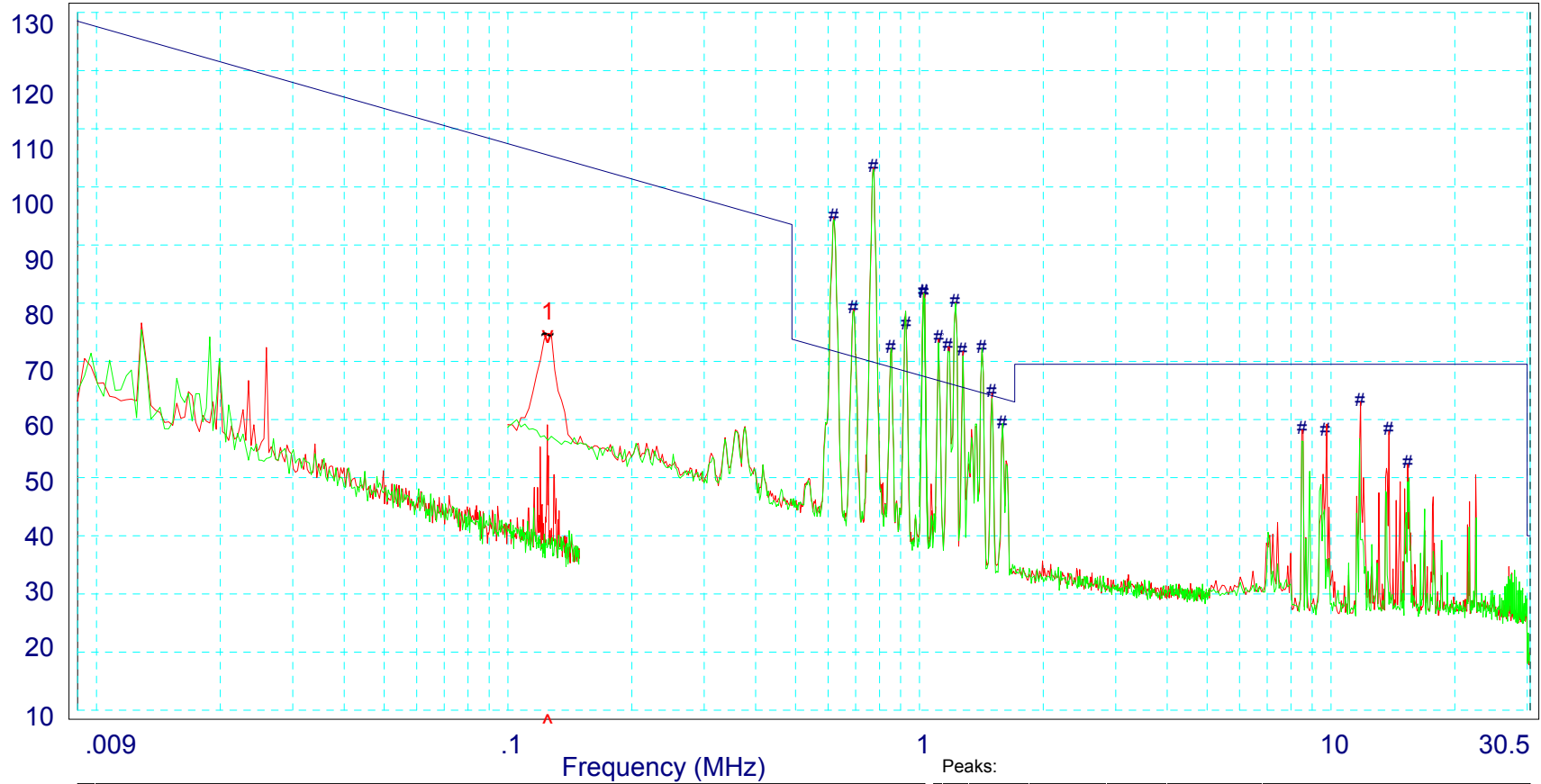
Job No:m040612

r:\PCF\m040411i\_1.PCF

Test Date: 16-06-04

GRAPH No. 1

# = Ambient



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

No	Freq (MHz)	Peak (dBuV/m)	Qp Val	FCC15209 (dBuV/m)	dL1 (dB)
1	0.125	74.9	74.9	105.5	-30.6

Limits: FCC15209 FCC PART 15.209 3mtr LMTS  
 Legend: Ambients (green line), Emissions (red line)  
 Source: m040411r 28 29 30 18, m040411r 15 16 17 31  
 Ver 5.5 Build 93  
 radiated emissions site 2 lerderderg  
 t:6502\_E c1:C1700804 c2:NONE p:NONE a:NONE  
 Site ID: OATS1,Lerderderg Gorge Rd, Bacchus Marsh, VIC  
 Test Officer:Chieu Huynh

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 Sydney---- 16,6 Gladstone Rd Castle Hill, 2154, NSW, Australia Ph+(612) 9899 4599 Fax+(612) 9899 4019

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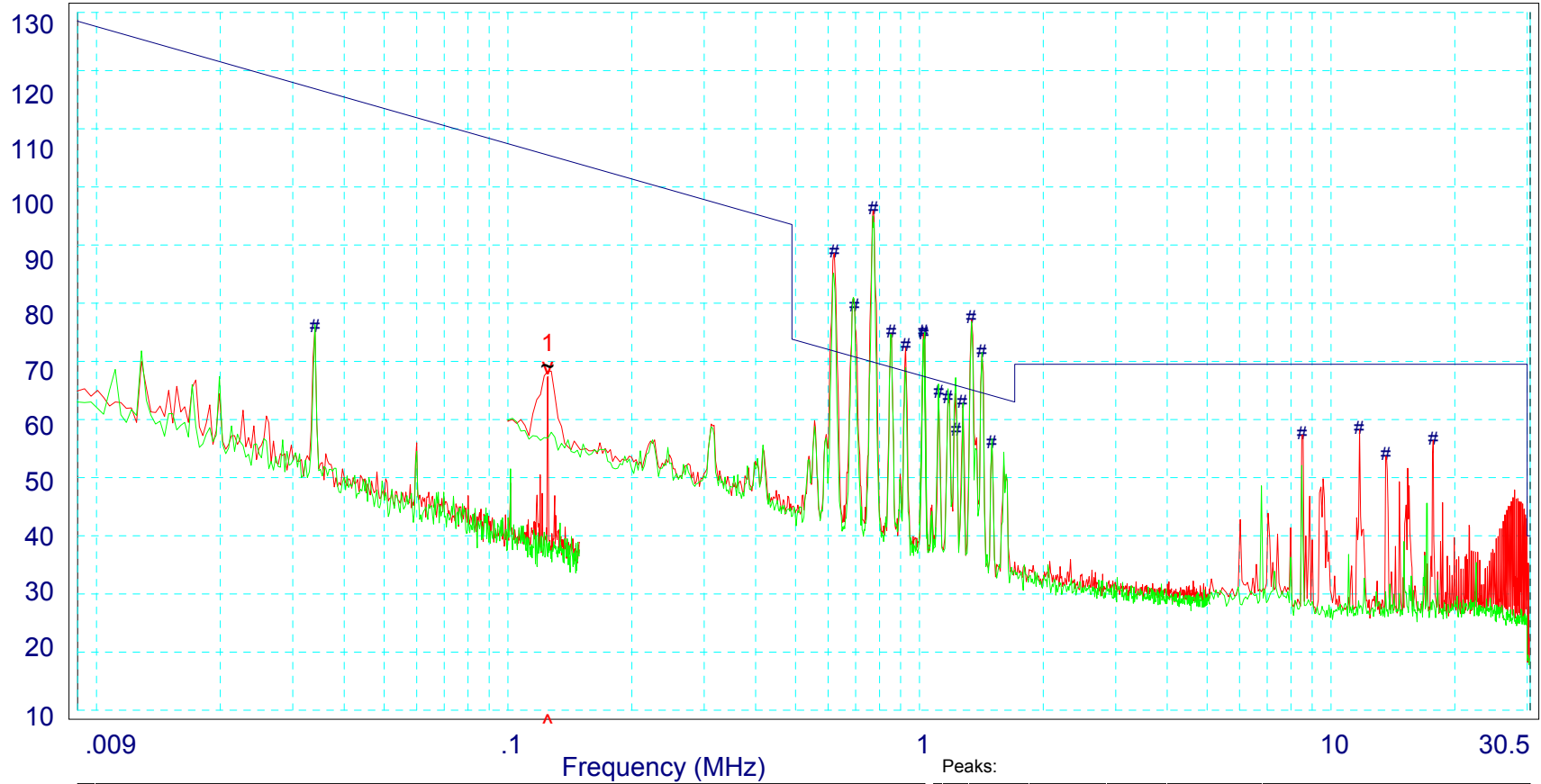
Radiated Emissions (dBuV/m)  
# = Ambient

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

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

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 lerderderg  
 t:6502\_E c1:C1700804 c2:NONE p:NONE a:NONE  
 Site ID: OATS1,Lerderderg Gorge Rd, Bacchus Marsh, VIC  
 Test Officer:Chieu Huynh

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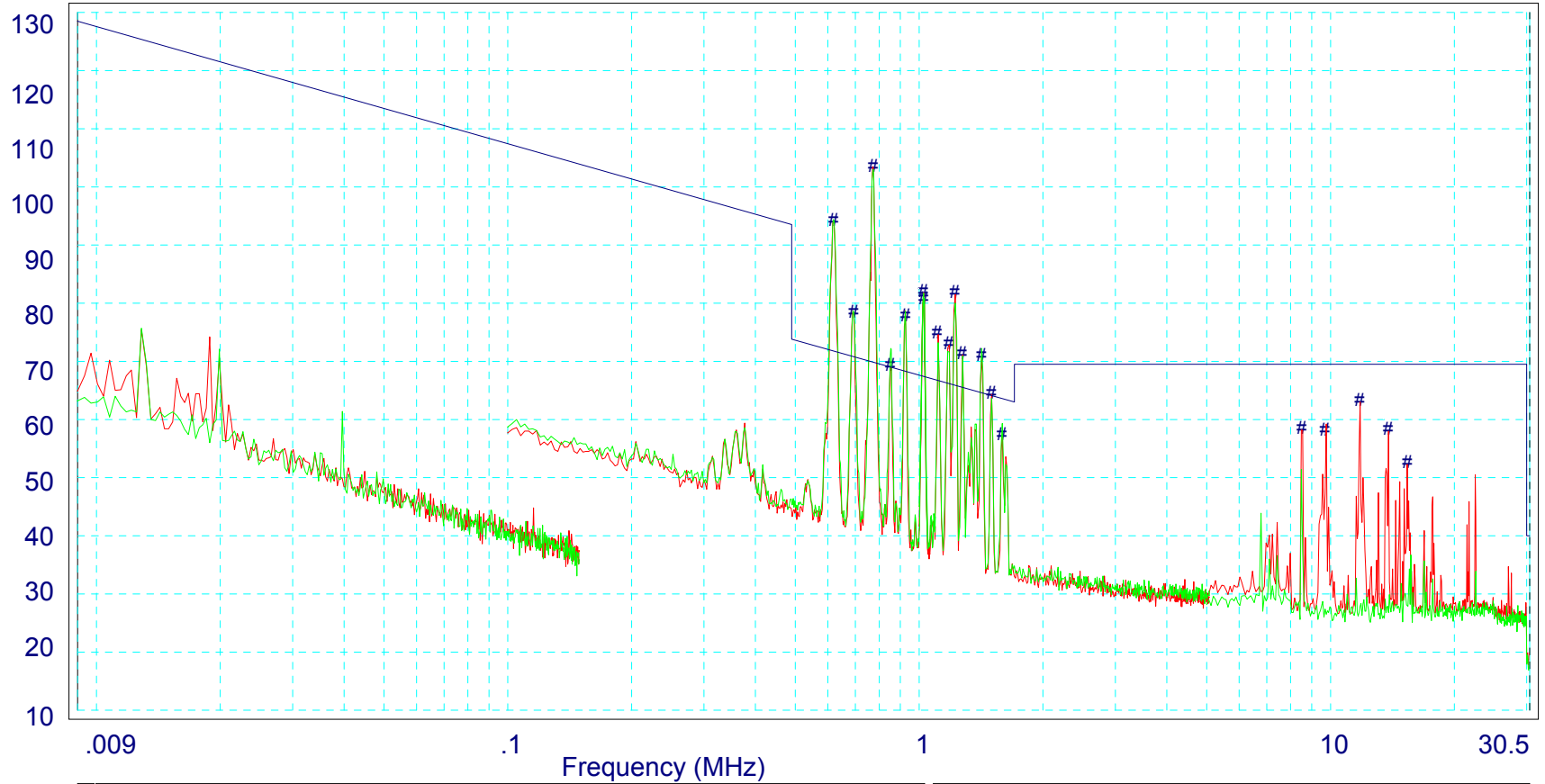
Radiated Emissions (dBuV/m)  
# = Ambient

Job No:m040411

r:\PCF\m040411j\_3.PCF

Test Date: 8-04-04

GRAPH No. 3



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

Limits: FCC15209 FCC PART 15.209 3mtr LMST  
 Legend: Ambients (green line), Emissions (red line)  
 Source: m040411r 5 29 30 8, m040411r 28 14 7 31  
 Ver 5.5 Build 93  
 radiated emissions site 2 lerderberg  
 t:6502\_E c1:C1700804 c2:NONE p:NONE a:NONE  
 Site ID: OATS2,Lerderberg Gorge Rd, Bacchus Marsh, VIC  
 Test Officer:Kevin Hansen

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Radiated Emissions (dBuV/m)

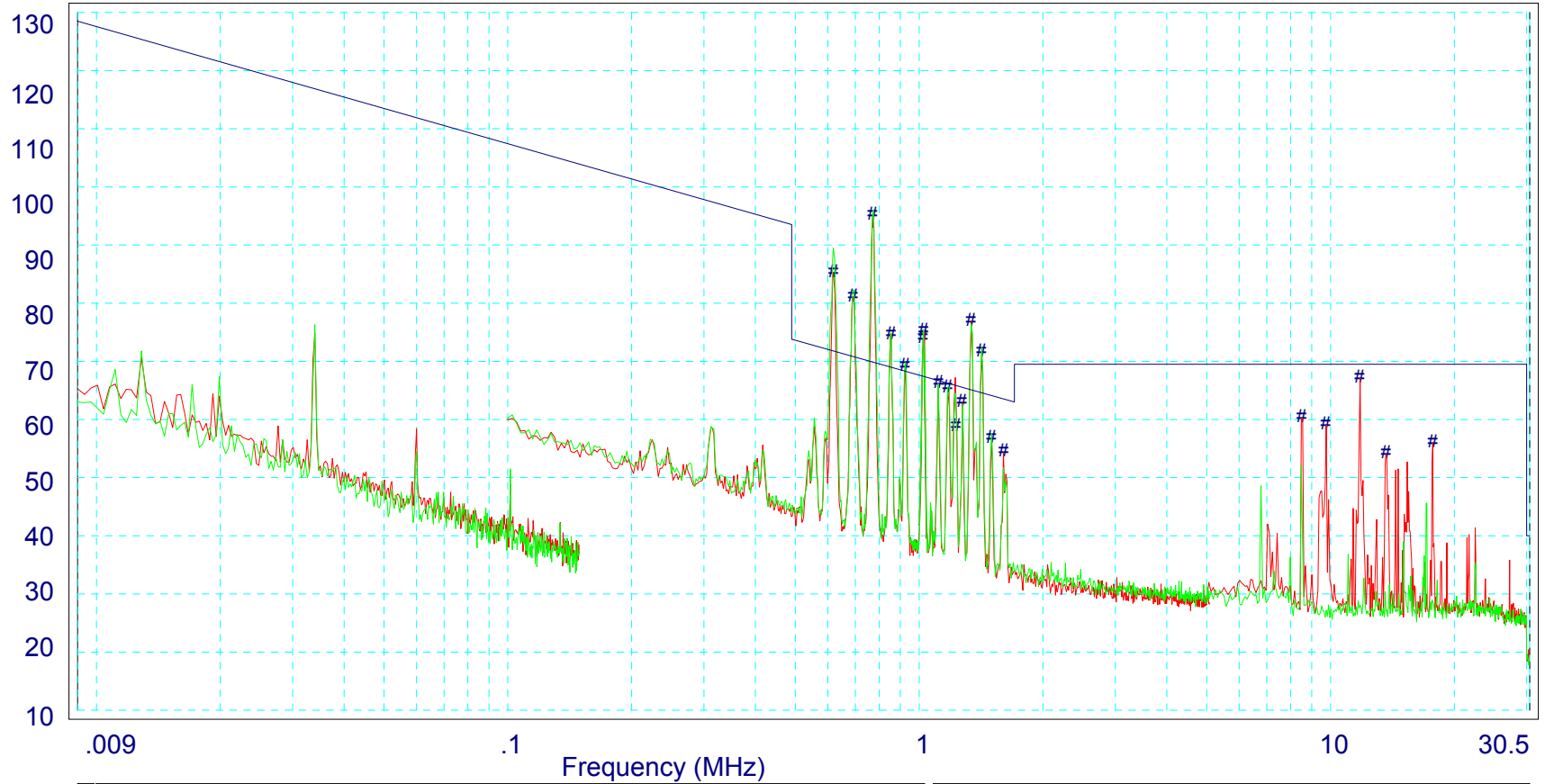
Job No:m040411

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 LMST  
 Legend: Ambients (green line), Emissions (red line)  
 Source: m040411r 1 25 26 4  
 m040411r 24 13 3 27  
 Ver 5.5 Build 93  
 radiated emissions site 2 lerderberg  
 t:6502\_E c1:C1700804 c2:NONE p:NONE a:NONE  
 Site ID: OATS2,Lerderberg Gorge Rd, Bacchus Marsh, VIC  
 Test Officer:Kevin Hansen

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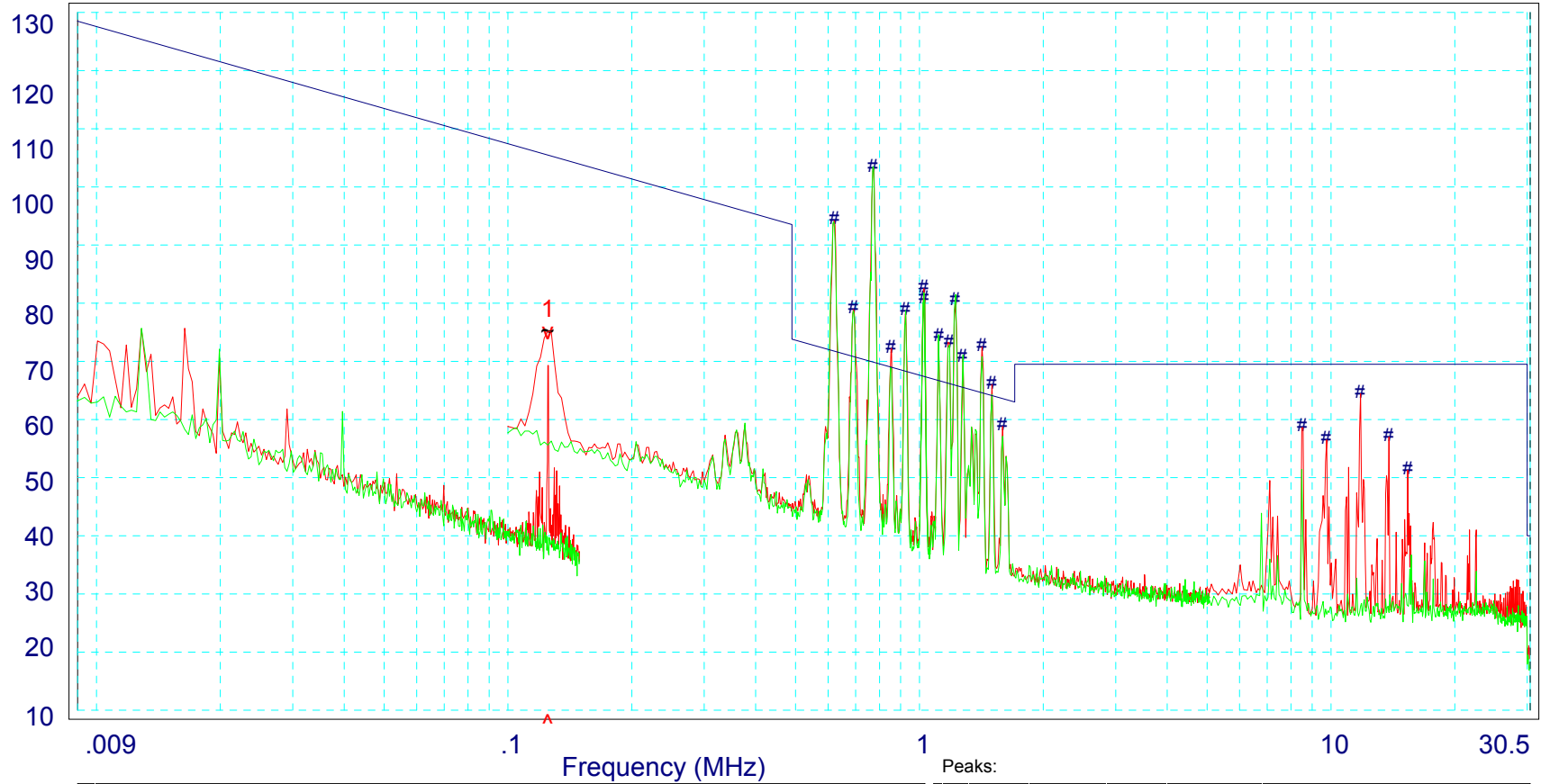
Radiated Emissions (dBuV/m)  
# = Ambient

Job No:m040411

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Test Date: 8-04-04

GRAPH No. 5



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

No	Freq (MHz)	Peak (dBuV/m)	Qp Val	FCC15209 (dBuV/m)	dL1 (dB)
1	0.125	75.4	75.4	105.5	-30.1

Limits: FCC15209 FCC PART 15.209 3mtr LMTS  
Legend: Ambients (green line), Emissions (red line)  
Ver 5.5 Build 93  
radiated emissions site 2 lerderderg  
t:6502\_E c1:C1700804 c2:NONE p:NONE a:NONE  
Site ID: OATS2,Lerderderg Gorge Rd, Bacchus Marsh, VIC  
Test Officer:Kevin Hansen

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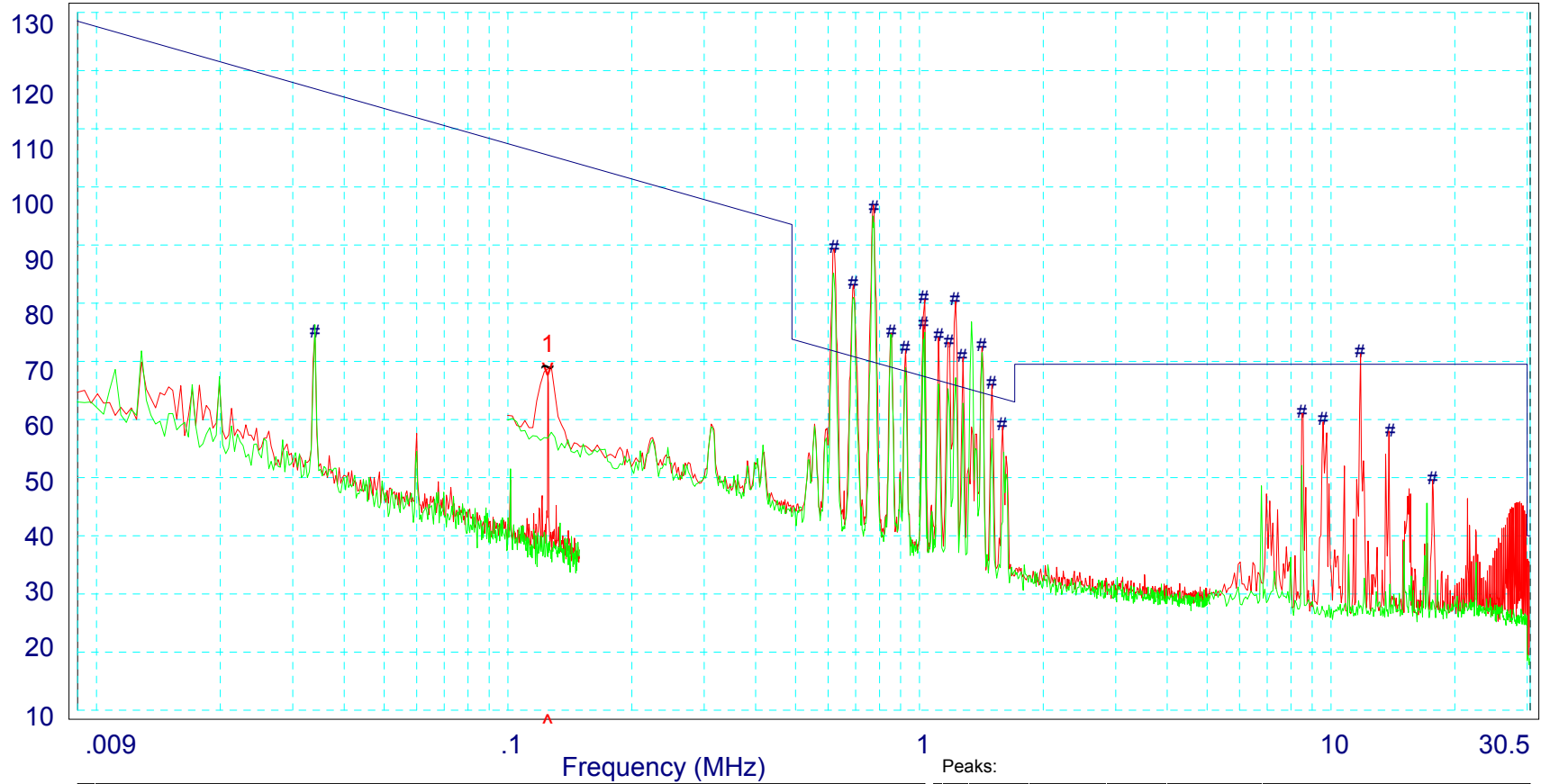
Radiated Emissions (dBuV/m)  
# = Ambient

Job No:m040411

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Test Date: 8-04-04

GRAPH No. 6



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

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

Limits: FCC15209 FCC PART 15.209 3mtr LMTS  
 Legend: — Ambients, — Emissions  
 Ver 5.5 Build 93  
 radiated emissions site 2 lerderberg  
 t:6502\_E c1:C1700804 c2:NONE p:NONE a:NONE  
 Site ID: OATS2,Lerderberg Gorge Rd, Bacchus Marsh, VIC  
 Test Officer:Kevin Hansen  
 Source: m040411r 1 13 3 4, m040411r 36 37 34 39

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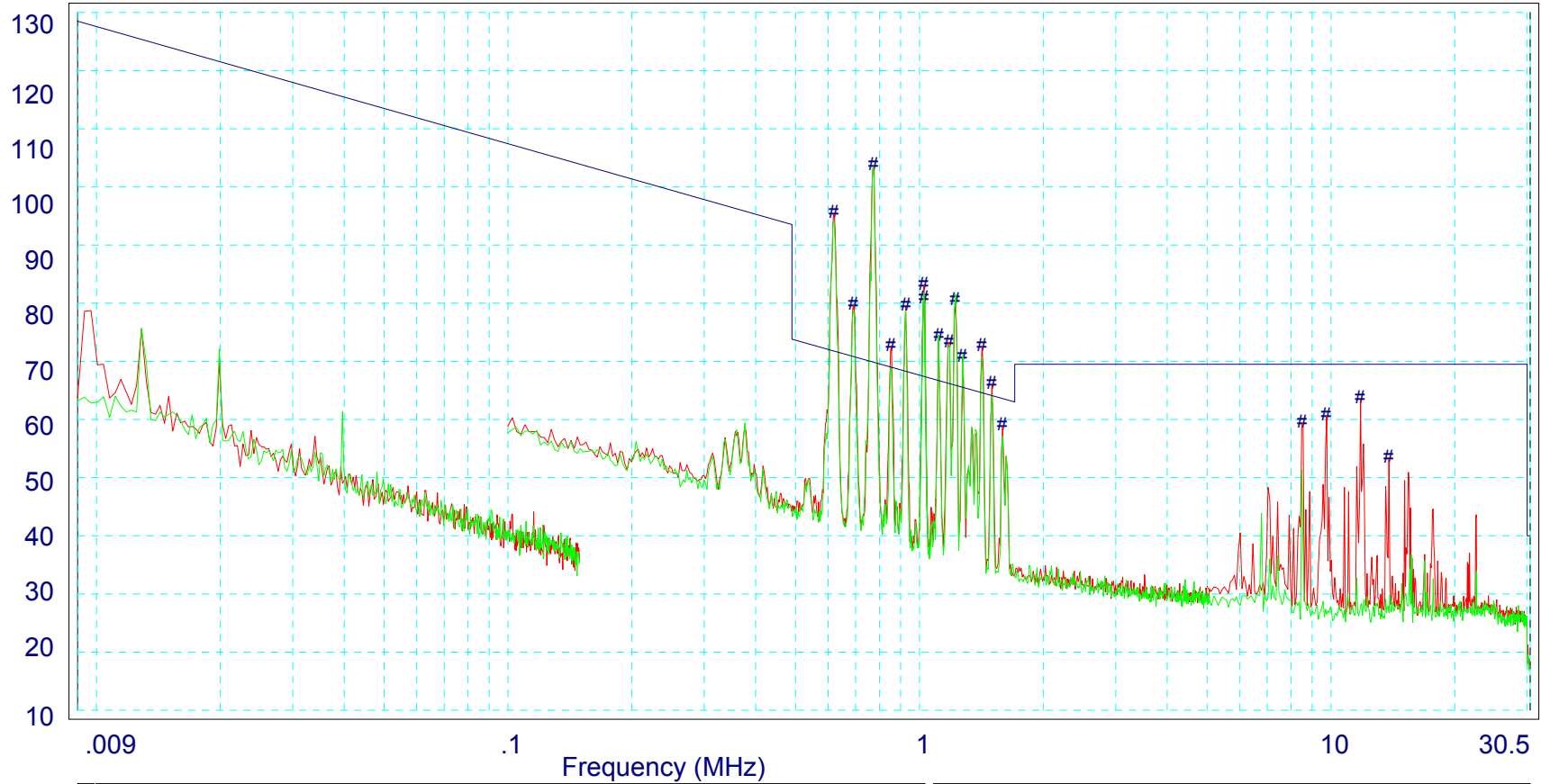
Radiated Emissions (dBuV/m)  
# = Ambient

Job No:m040411

r:\PCF\m040411i\_7.PCF

Test Date: 8-04-04

GRAPH No. 7



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 (green line), Emissions (red line)  
Ver 5.5 Build 93  
radiated emissions site 2 lerderderg  
t:6502\_E c1:C1700804 c2:NONE p:NONE a:NONE  
Site ID: OATS2,Lerderderg Gorge Rd, Bacchus Marsh, VIC  
Test Officer:Kevin Hansen  
Source: m040411r 5 14 7 8  
m040411r 44 45 34 47

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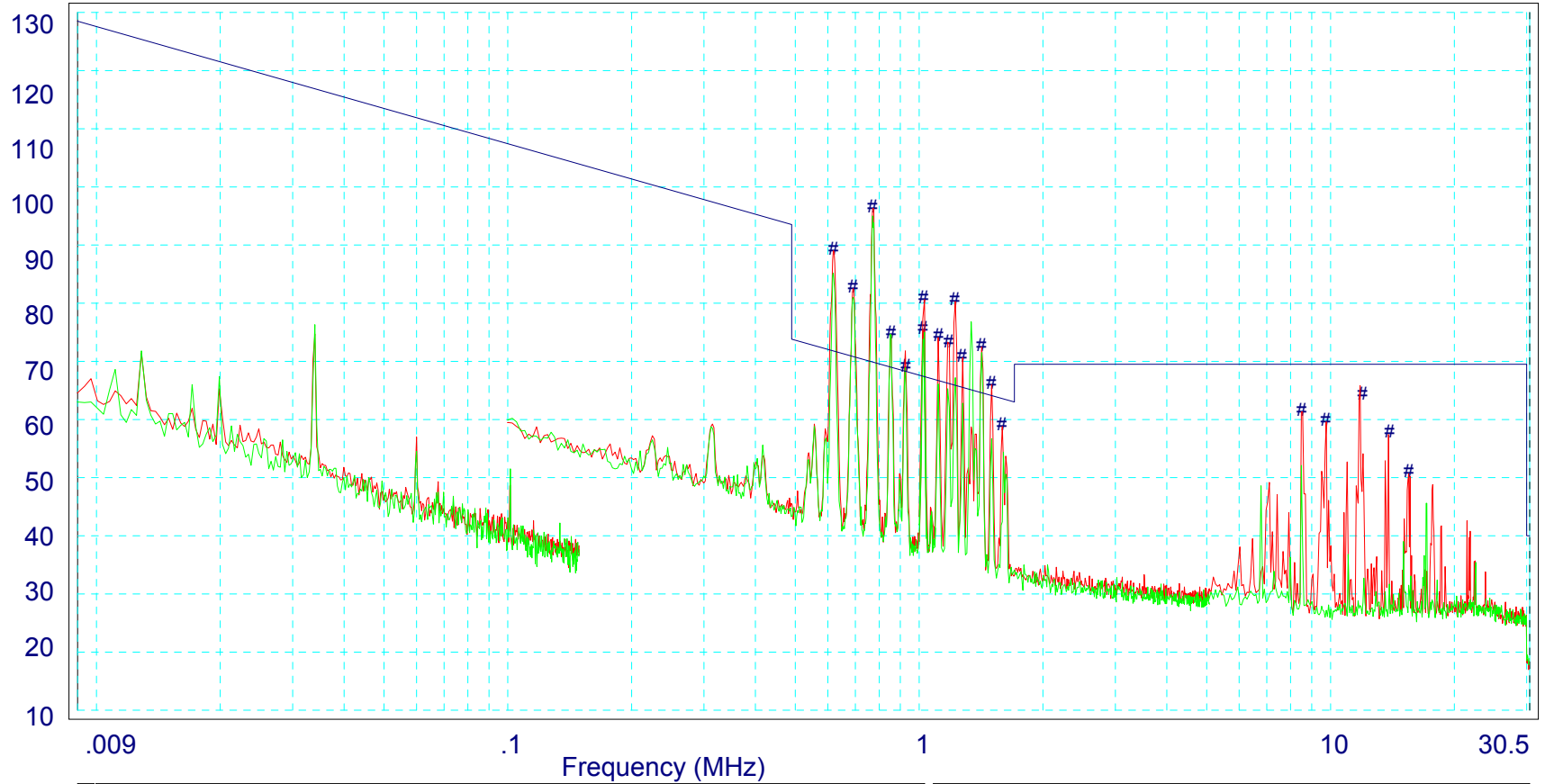
Radiated Emissions (dBuV/m)  
# = Ambient

Job No:m040411

r:\PCF\m040411j\_8.PCF

Test Date: 8-04-04

GRAPH No. 8



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 (green), — Emissions (red)  
Source: m040411r 1 13 3 4 (green), m040411r 40 41 34 43 (red)  
Ver 5.5 Build 93  
radiated emissions site 2 lerderberg  
t:6502\_E c1:C1700804 c2:NONE p:NONE a:NONE  
Site ID: OATS2,Lerderberg Gorge Rd, Bacchus Marsh, VIC  
Test Officer:Kevin Hansen

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