

APPENDIX K OF TEST REPORT T60822_F

GRAPHS OF EMI MEASUREMENT

FCC ID: QVL-BT900A
Manufacturer: BQT Solutions (Australia) Pty Ltd
Test Sample: Contactless Smart Card Reader
Model: BT900-WG
Serial Number: None

Date: 4th September 2006

Melbourne

57 Assembly Drive
Tullamarine Vic 3043
Tel: +61 3 9335 3333
Fax: +61 3 9338 9260

Sydney

Unit 3/87 Station Road
Seven Hills NSW 2147
Tel: +61 2 9624 2777
Fax: +61 2 9838 4050

Brisbane

1/15 Success Street
Acacia Ridge Qld 4110
Tel: +61 7 3875 2455
Fax: +61 7 3875 2466

Auckland (NZ)

47 MacKelvie Street
Grey Lynn Auckland
Tel: +64 9 360 0862
Fax: +64 9 360 0861

APPENDIX K**GRAPHS OF EMI MEASUREMENT****CONDUCTED**

Graph 1:	Active Line	0.145 to 30.5 MHz
Graph 2:	Neutral Line	0.145 to 30.5 MHz
Graph 3:	Active Line	0.145 to 30.5 MHz
Graph 4:	Neutral Line	0.145 to 30.5 MHz

RADIATED EMI

Graph 5:	Magnetic Loop Antenna	9 kHz to 30 MHz
Graph 6:	Carrier 13.56 MHz	13.552 to 13.568 MHz
Graph 7:	Vertical Antenna Polarisation	30 to 1000 MHz
Graph 8:	Horizontal Antenna Polarisation	30 to 1000 MHz

EMC Technologies Pty. Ltd. - Global Product Certification

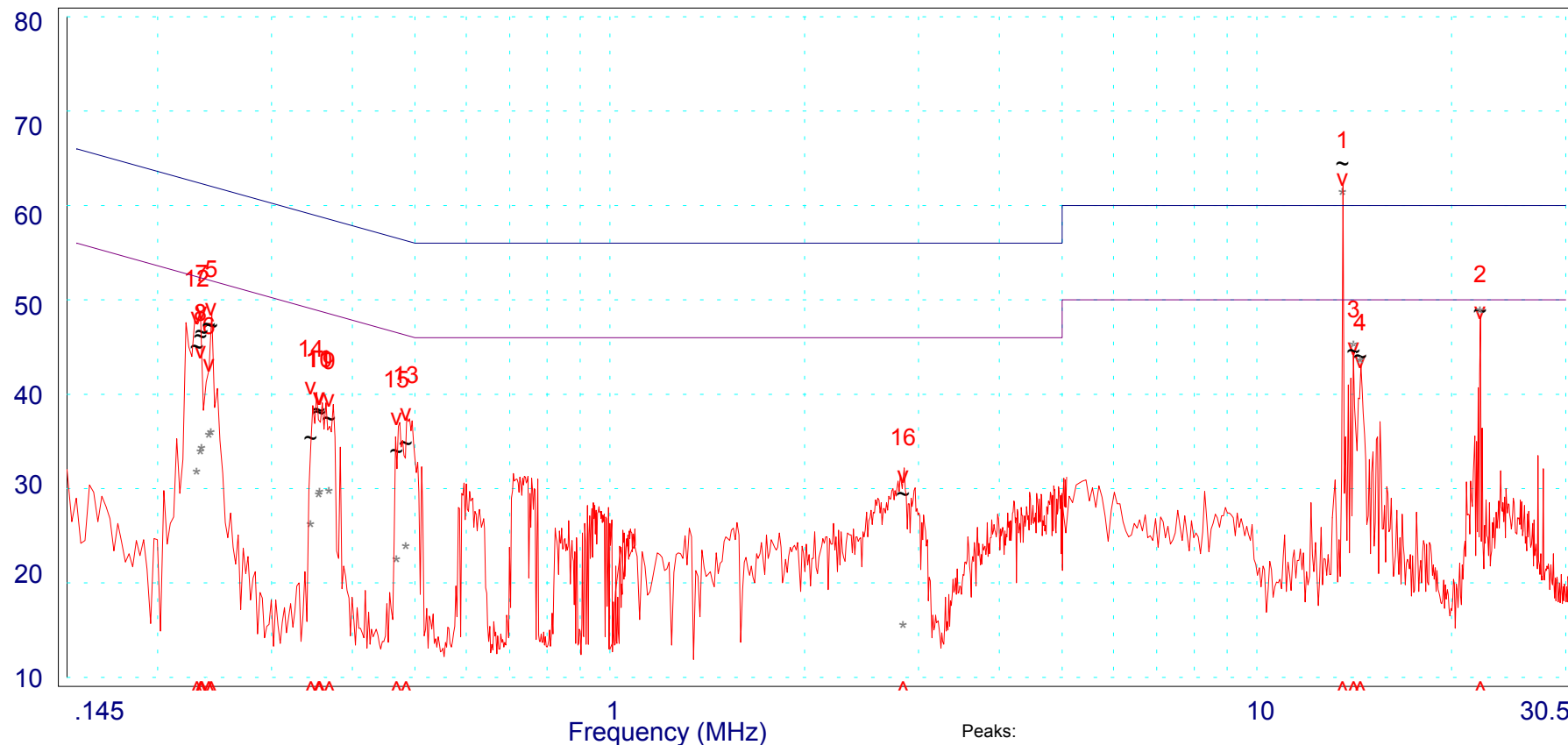
FCC Class B
Conducted Emissions (dBuV)

Job No:T60822

p:\PCF\T60822_1.PCF

Test Date: 23-08-2006

GRAPH No. 1



BQT Solutions (Australia) Pty Ltd
Contactless smart card reader
Model No: BT900-WG
Tested on 120VAC 60Hz

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 107

Source:

t:L0110107 c1:C0080906 c2:NONE p:NONE a:L0100407
Site ID: Syd Room#1,3/87 Station Rd, Seven Hills, NSW
Test Officer:Kumar Thambiah

EMC Technologies (Sydney) 3/87 Station Rd, Seven Hills, NSW, 2147, NSW, Australia
Phone +(612) 9624 2777 Fax+(612) 9838 4050

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	62.3	63.8	60.0	3.8	60.3	50.0	10.3
2	22.12	48.1	48.2	60.0	-11.8	47.7	50.0	-2.3
3	14.10	44.4	43.9	60.0	-16.1	44.1	50.0	-5.9
4	14.44	43.0	43.3	60.0	-16.7	42.4	50.0	-7.6
5	0.242	48.6	46.6	62.0	-15.4	34.8	52.0	-17.2
6	0.240	42.6	46.7	62.1	-15.4	34.5	52.1	-17.6
7	0.234	48.2	46.0	62.3	-16.3	33.1	52.3	-19.2
8	0.233	44.0	45.5	62.3	-16.8	32.8	52.3	-19.5
9	0.368	38.9	36.8	58.5	-21.8	28.6	48.5	-19.9
10	0.356	39.1	37.4	58.8	-21.4	28.5	48.8	-20.3
11	0.355	39.1	37.7	58.8	-21.2	28.2	48.8	-20.6
12	0.230	47.6	44.4	62.4	-18.0	30.6	52.4	-21.8
13	0.484	37.4	34.2	56.3	-22.1	22.7	46.3	-23.6
14	0.345	40.2	34.7	59.1	-24.4	25.1	49.1	-24.0
15	0.468	37.0	33.4	56.5	-23.2	21.4	46.5	-25.1
16	2.840	30.8	28.7	56.0	-27.3	14.4	46.0	-31.6

EMC Technologies Pty. Ltd. - Global Product Certification

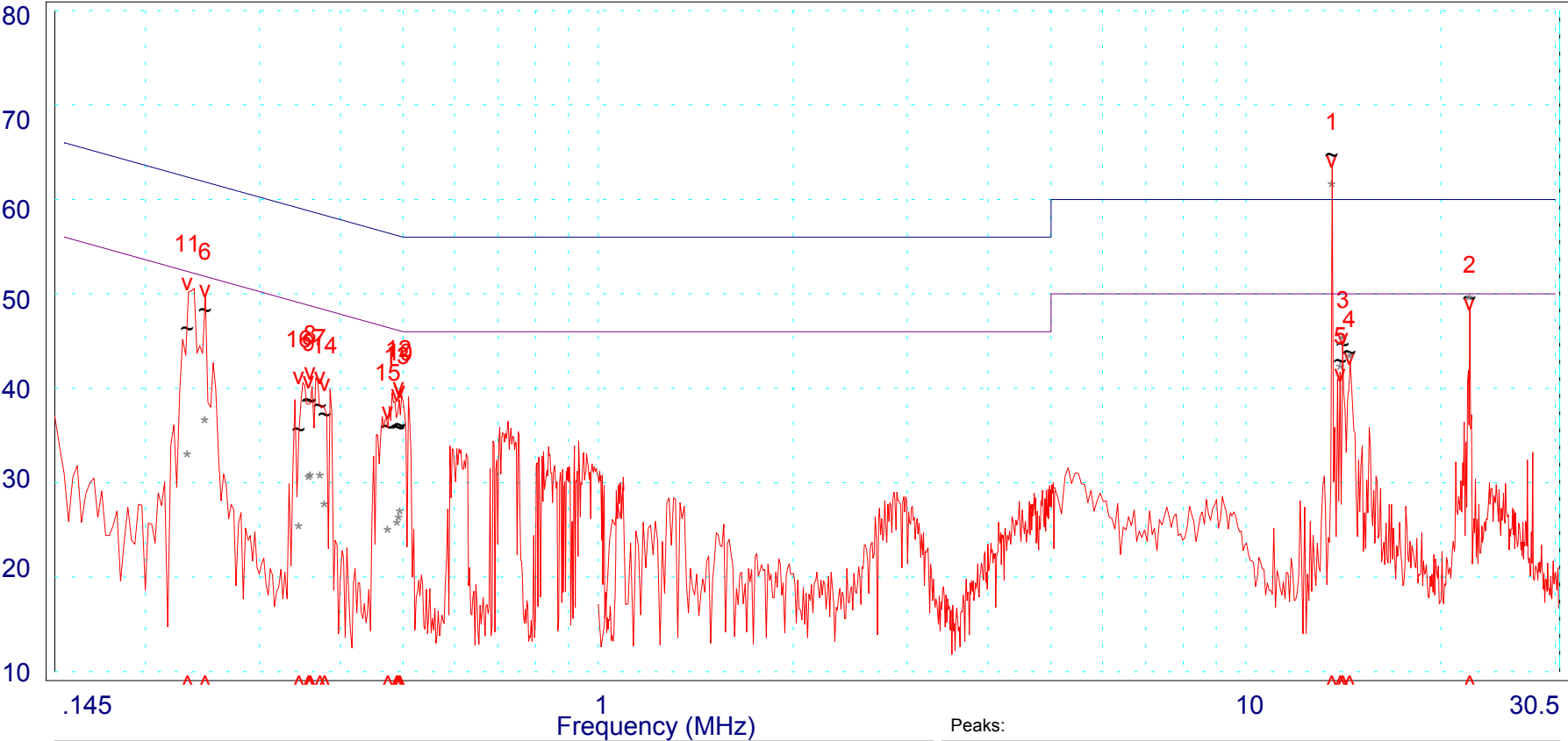
FCC Class B
Conducted Emissions (dBuV)

Job No:T60822

p:\PCF\T60822_2.PCF

Test Date: 23-08-2006

GRAPH No. 2



BQT Solutions (Australia) Pty Ltd
Contactless smart card reader
Model No: BT900-WG
Tested on 120VAC 60Hz

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 107

Source:
t:L0110107 c1:C0080906 c2:NONE p:NONE a:L0100407
Site ID: Syd Room#1,3/87 Station Rd, Seven Hills, NSW
Test Officer:Kumar Thambiah

EMC Technologies (Sydney) 3/87 Station Rd, Seven Hills, NSW, 2147, NSW, Australia
Phone +(612) 9624 2777 Fax+(612) 9838 4050

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	63.6	64.0	60.0	4.0	60.5	50.0	10.5
2	22.12	48.5	48.9	60.0	-11.1	48.5	50.0	-1.5
3	14.10	44.8	44.0	60.0	-16.0	44.2	50.0	-5.8
4	14.44	42.7	43.2	60.0	-16.8	42.3	50.0	-7.7
5	13.98	41.0	42.2	60.0	-17.8	41.1	50.0	-8.9
6	0.247	49.8	47.7	61.9	-14.2	35.5	51.9	-16.4
7	0.372	40.7	37.5	58.5	-20.9	29.6	48.5	-18.9
8	0.359	41.1	38.1	58.8	-20.7	29.6	48.8	-19.2
9	0.357	40.2	38.1	58.8	-20.7	29.4	48.8	-19.4
10	0.494	39.2	35.5	56.1	-20.6	25.8	46.1	-20.3
11	0.232	50.7	45.7	62.4	-16.7	31.9	52.4	-20.5
12	0.492	39.5	35.2	56.1	-21.0	25.2	46.1	-20.9
13	0.489	38.8	35.3	56.2	-20.9	24.6	46.2	-21.6
14	0.378	39.9	36.6	58.3	-21.7	26.6	48.3	-21.7
15	0.473	37.0	35.3	56.5	-21.2	23.9	46.5	-22.6
16	0.345	40.6	35.1	59.1	-24.0	24.2	49.1	-24.9

EMC Technologies Pty. Ltd. - Global Product Certification

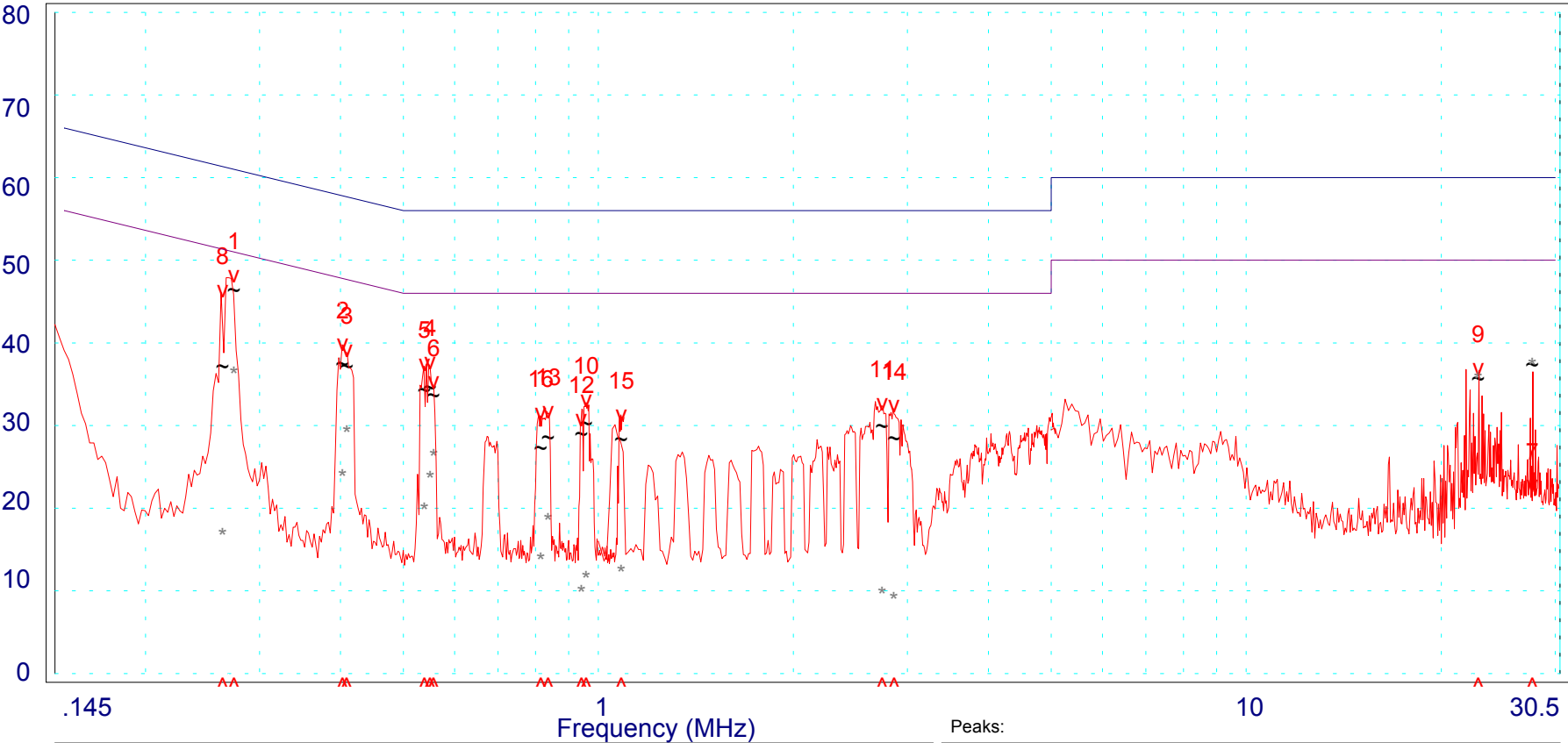
FCC Class B
Conducted Emissions (dBuV)

Job No:T60822

p:\PCF\T60822_3.PCF

Test Date: 11-09-2006

GRAPH No. 3



BQT Solutions (Australia) Pty Ltd
Contactless smart card reader
Model No: BT900-WG
Mode: Antenna Terminated Power Source: 120VAC 60Hz

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 107

Source:
T60822c1 1 2 3

t:L0360107 c1:C0020906 c2:NONE p:NONE a:L0030707
Site ID: Syd Room#3,3/87 Station Rd, Seven Hills, NSW
Test Officer:Joel Mulig

EMC Technologies (Sydney) 3/87 Station Rd, Seven Hills, NSW, 2147, NSW, Australia
Phone +(612) 9624 2777 Fax+(612) 9838 4050

No	Freq (MHz)	Peak (dBuV)	Qp Val (dBuV)	FCCN_BQP dL1 (dB)	Av Val (dBuV)	FCCN_BAV dL2 (dB)
1	0.274	47.9	46.0	61.0	-15.0	35.7
2	0.403	39.6	37.1	57.8	-20.7	23.2
3	0.409	38.9	36.7	57.7	-21.0	28.5
4	0.550	37.4	34.2	56.0	-21.8	23.0
5	0.539	37.2	33.8	56.0	-22.2	19.2
6	0.557	35.0	33.2	56.0	-22.8	25.7
7	27.65	22.5	36.9	60.0	-23.1	36.7
8	0.263	46.1	36.7	61.3	-24.6	16.1
9	22.81	36.7	35.2	60.0	-24.8	35.0
10	0.958	32.8	29.9	56.0	-26.2	10.9
11	2.743	32.4	29.5	56.0	-26.5	9.0
12	0.942	30.5	28.5	56.0	-27.5	9.2
13	0.837	31.4	28.1	56.0	-27.9	17.9
14	2.861	32.1	28.1	56.0	-28.0	8.4
15	1.085	31.0	27.9	56.0	-28.1	11.7
16	0.815	31.2	26.8	56.0	-29.2	13.2

EMC Technologies Pty. Ltd. - Global Product Certification

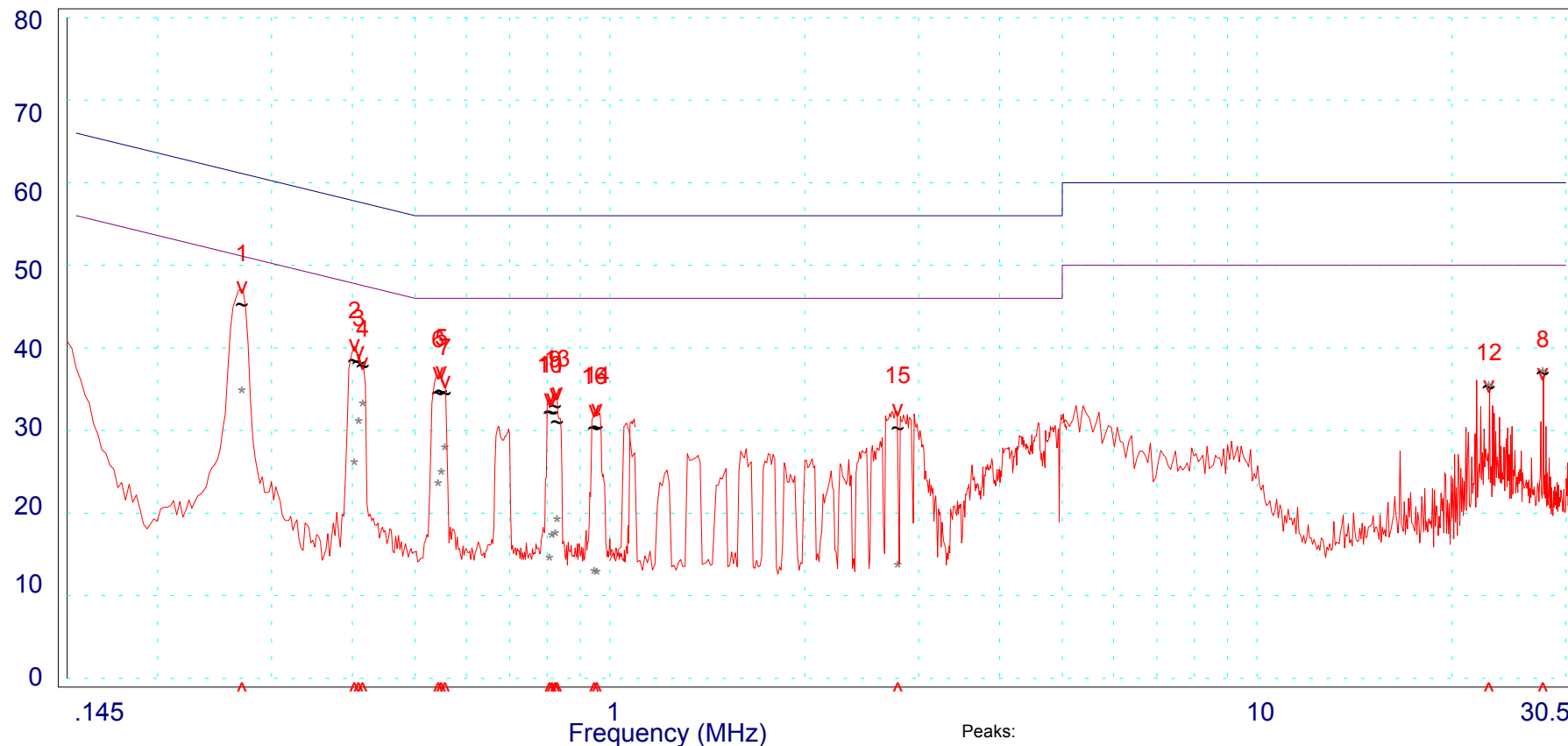
FCC Class B
Conducted Emissions (dBuV)

Job No:T60822

p:\PCF\T60822_4.PCF

Test Date: 11-09-2006

GRAPH No. 4



BQT Solutions (Australia) Pty Ltd

Contactless smart card reader

Model No: BT900-WG

Mode: Antenna Terminated Power Source: 120VAC 60Hz

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 107

Source:

t:L0360107 c1:C0020906 c2:NONE p:NONE a:L0030707

T60822c1 4 5 6

Site ID: Syd Room#3,3/87 Station Rd, Seven Hills, NSW

Test Officer:Joel Mulig

EMC Technologies (Sydney) 3/87 Station Rd, Seven Hills, NSW, 2147, NSW, Australia
Phone +(612) 9624 2777 Fax+(612) 9838 4050

Peaks:

No	Freq (MHz)	Peak (dBuV)	Qp Val (dBuV)	FCCN_BQPdL1 (dB)	Av Val (dBuV)	FCCN_BAVdL2 (dB)
1	0.270	47.1	44.8	61.1	-16.3	33.9
2	0.403	40.1	38.0	57.8	-19.8	25.2
3	0.409	39.2	37.8	57.7	-19.9	30.1
4	0.415	37.9	37.3	57.5	-20.2	32.3
5	0.549	36.9	34.3	56.0	-21.7	24.0
6	0.543	36.7	34.1	56.0	-21.9	22.6
7	0.556	35.7	34.1	56.0	-21.9	27.0
8	27.65	36.6	36.5	60.0	-23.5	36.2
9	0.823	34.2	32.5	56.0	-23.5	16.6
10	0.807	33.6	31.8	56.0	-24.2	13.6
11	0.814	33.6	31.8	56.0	-24.2	16.3
12	22.81	35.1	34.8	60.0	-25.3	34.5
13	0.829	34.3	30.6	56.0	-25.4	18.3
14	0.955	32.3	30.0	56.0	-26.0	11.9
15	2.784	32.3	29.9	56.0	-26.2	12.7
16	0.946	32.2	29.8	56.0	-26.2	12.0

EMC Technologies Pty. Ltd. - Global Product Certification

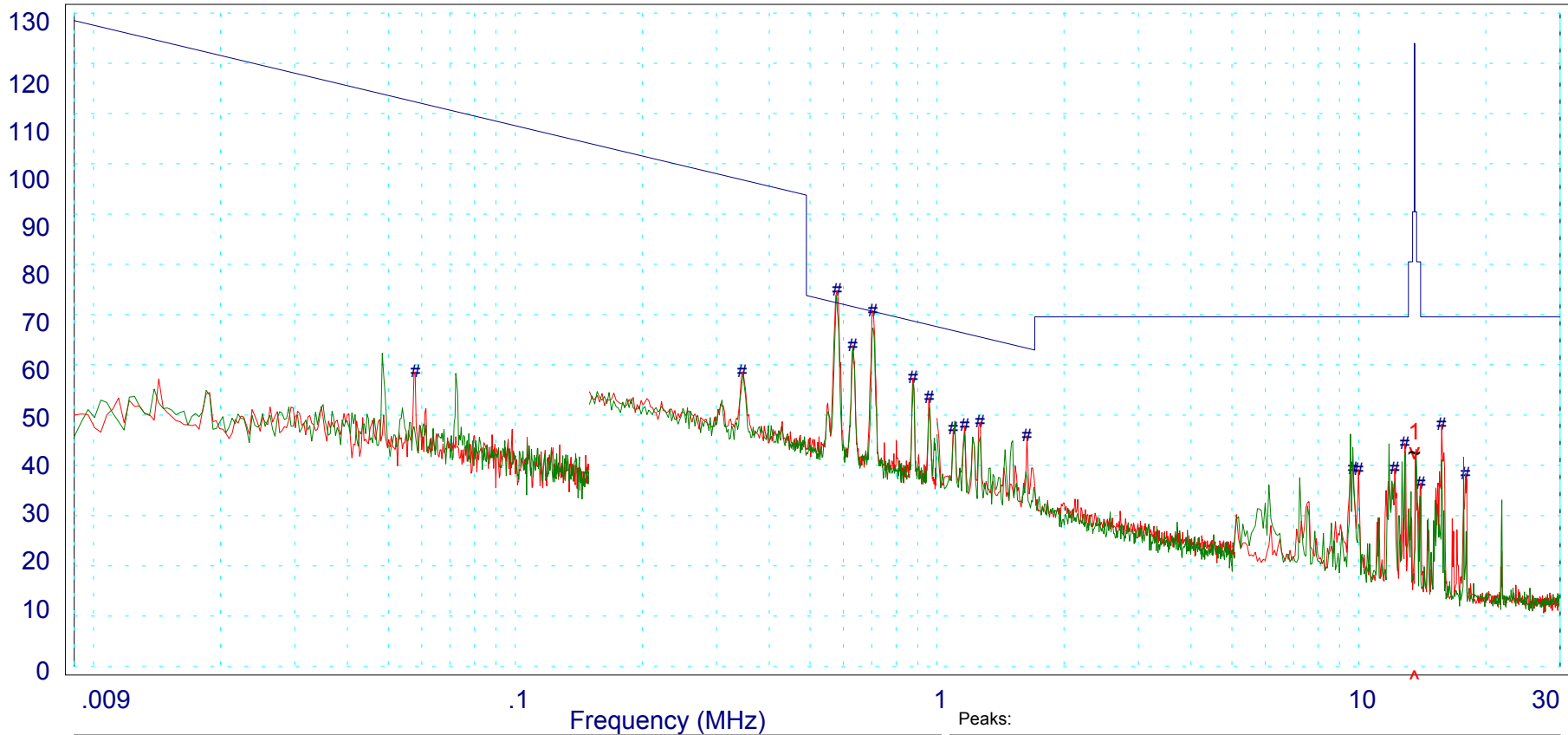
FCC Class B
Radiated Emissions (dBuV/m)
= Ambient

Job No:T60822

C:\plotting\PCF\T60822f_5.PCF

Test Date: 14-08-06

GRAPH No. 5



BQT Solutions (Australia) Pty Ltd
Contactless Smartcard Reader
Model: BT900-WG

Limits:
FCC_loop_3mFcc Pt15 Subpart C Section 15.209(a) 3Metre Limits

Legend:
— Ambients
— Emissions

Ver 5.5 Build 107
Colo Radiated Test Setup Active Loop
t:A0080408E c1:C0201206 c2:NONE p:NONE a:NONE
Site ID: OATS#1,1247 Upper Colo Rd. Colo, NSW
Test Officer: Bruce Holdsworth

Source:
rtsVAMBe 1 2 3 4
T60822r2 1 2 3 4

EMC Technologies (Sydney) 3/87 Station Rd, Seven Hills, NSW, 2147, NSW, Australia
Phone +(612) 9624 2777 Fax+(612) 9838 4050

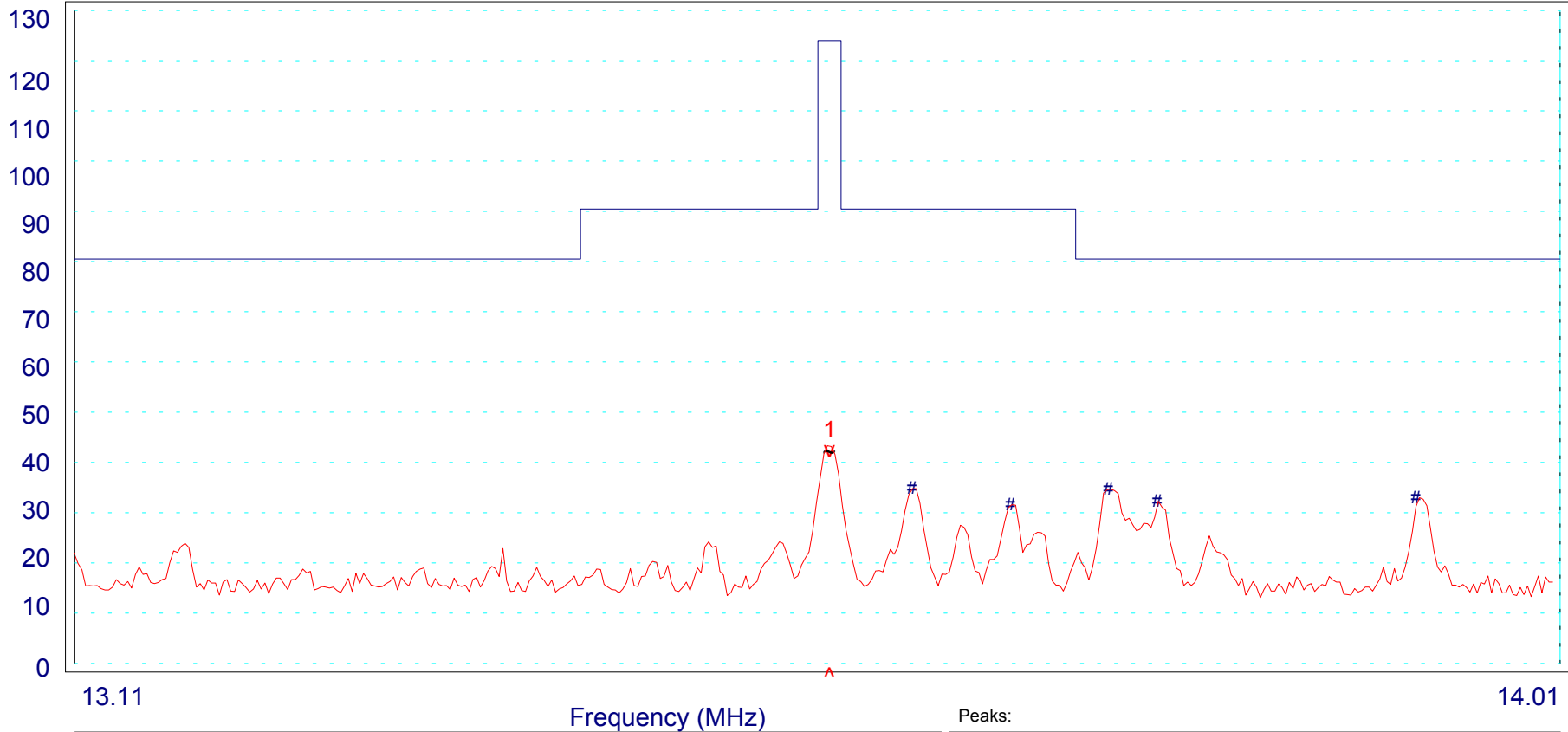
EMC Technologies Pty. Ltd. - Global Product Certification

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

Job No:T60822

C:\plotting\PCF\T60822f_6.PCF
Test Date: 14-08-06

GRAPH No. 6



BQT Solutions (Australia) Pty Ltd
Contactless Smartcard Reader
Model: BT900-WG

Peaks:					
No	Freq (MHz)	Peak (dBuV/m)	Qp Val (dB)	FCC_loop_3dL1 (dBuV/m)	3dL1 (dB)
1	13.56	43.2	42.7	124.0	-81.3

Limits:
FCC_loop_3mFcc Pt15 Subpart C Section 15.209(a) 3Metre Limits

Legend:
Carrier

Ver 5.5 Build 107
Colo Radiated Test Setup Active Loop
t:A0080408E c1:C0201206 c2:NONE p:NONE a:NONE
Site ID: OATS#1,1247 Upper Colo Rd. Colo, NSW
Test Officer: Bruce Holdsworth

Source:
T60822r2 5

EMC Technologies (Sydney) 3/87 Station Rd, Seven Hills, NSW, 2147, NSW, Australia
Phone +(612) 9624 2777 Fax+(612) 9838 4050

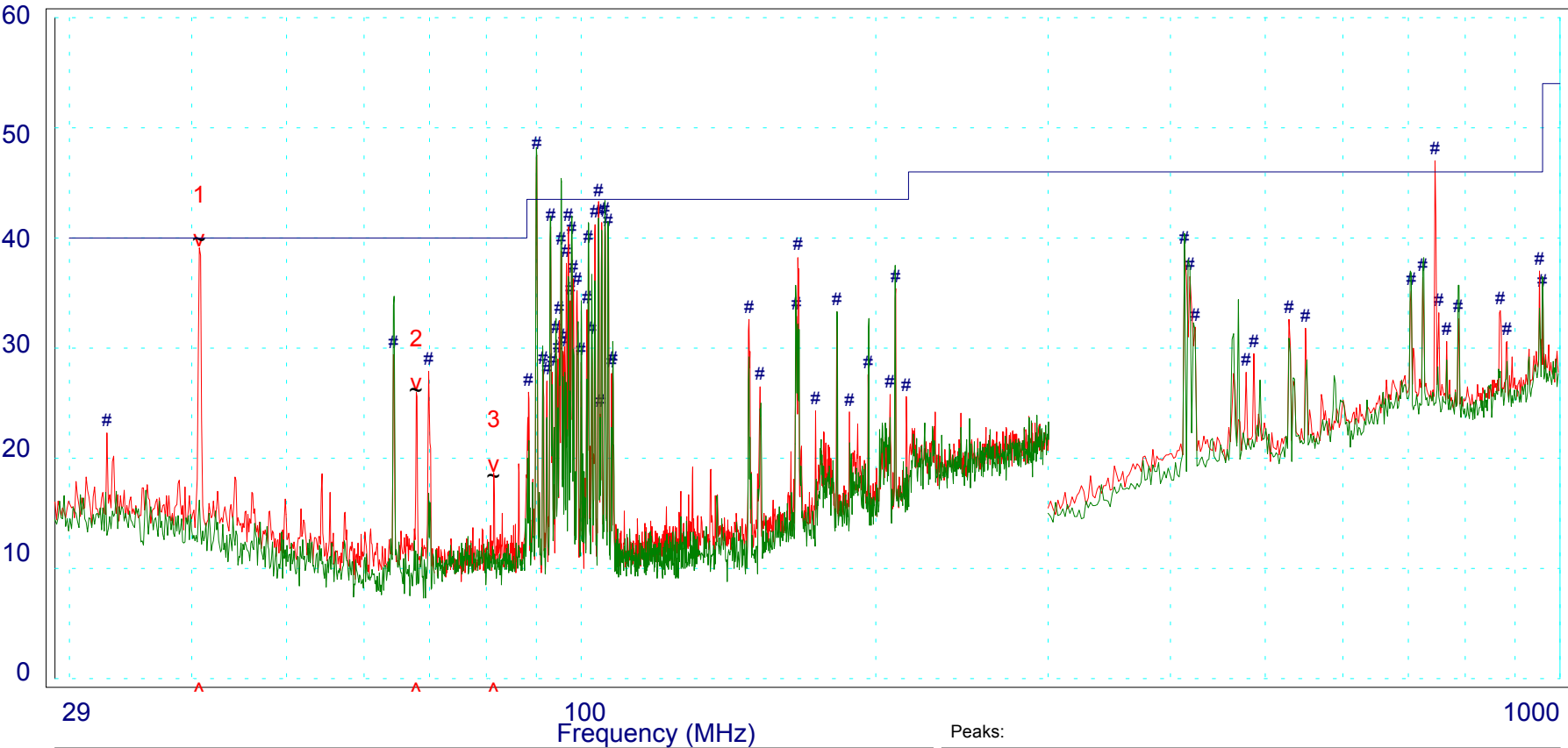
EMC Technologies Pty. Ltd. - Global Product Certification

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

Job No:T60822

C:\plotting\PCF\T60822f_7.PCF
Test Date: 17-08-06

GRAPH No. 7



BQT Solutions (Australia) Pty Ltd
Contactless Smartcard Reader
Model: BT900-WG

Peaks:

No	Freq (MHz)	Peak (dBuV/m)	Qp Val	FCC-B3 (dBuV/m)	dL1 (dB)
1	40.69	39.1	39.1	40.0	-.9
2	67.81	26.0	25.4	40.0	-14.6
3	81.37	18.7	17.6	40.0	-22.4

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

Legend:
— Vertical Ambients
— Vertical Emissions

Ver 5.5 Build 107
Colo Radiated Test Setup
t:A0690207 c1:C0200207 c2:NONE p:A0960906 a:NONE
Site ID: OATS#1,1247 Upper Colo Rd. Colo, NSW
Test Officer: Bruce Holdsworth

Source:
V Amb1108 1 2 3 4 5 11
T60822r4 1 2 3 4 5 11

EMC Technologies (Sydney) 3/87 Station Rd, Seven Hills, NSW, 2147, NSW, Australia
Phone +(612) 9624 2777 Fax+(612) 9838 4050

EMC Technologies Pty. Ltd. - Global Product Certification

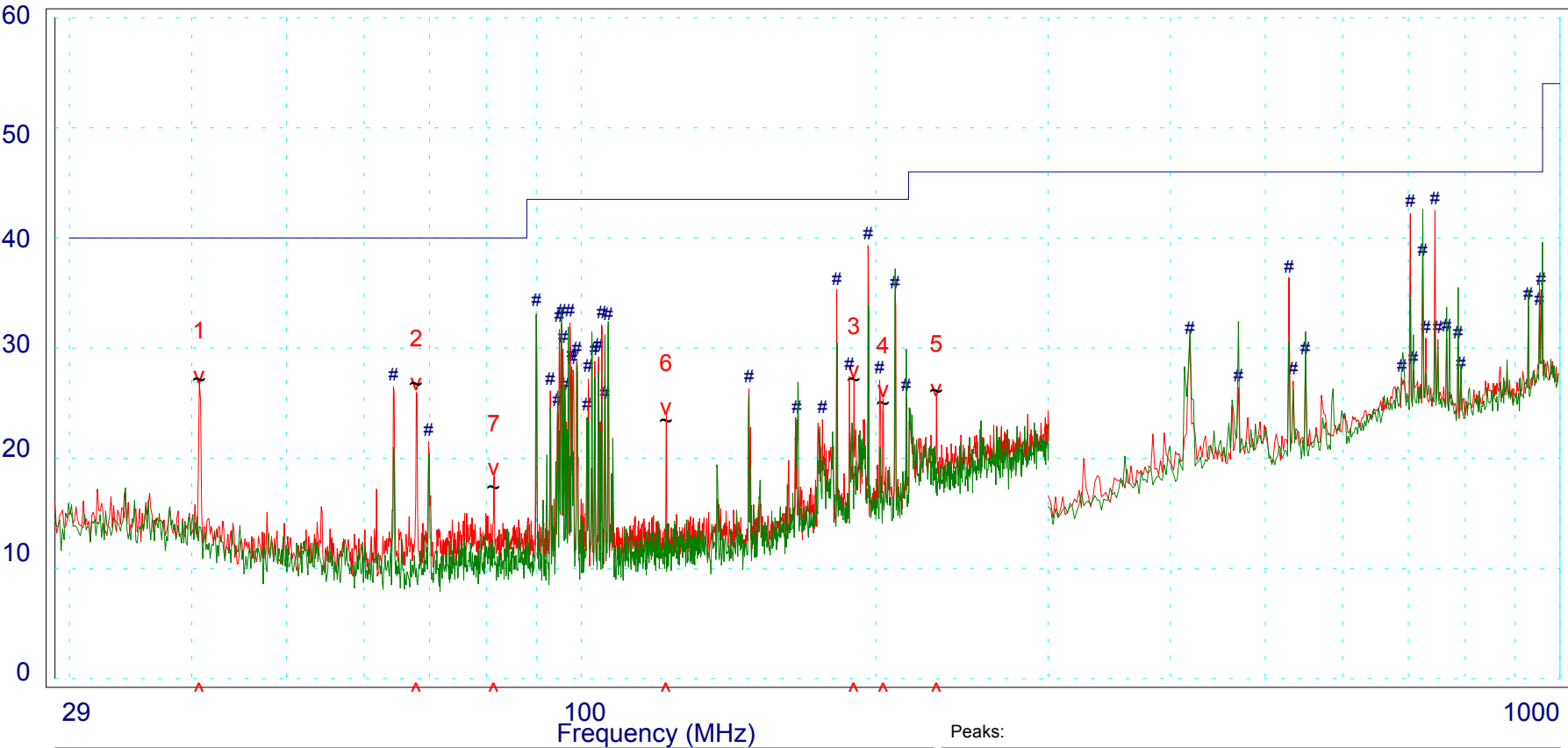
FCC Class B
Radiated Emissions (dBuV/m)
= Ambient

Job No:T60822

C:\plotting\PCF\T60822f_8.PCF

Test Date: 17-08-06

GRAPH No. 8



BQT Solutions (Australia) Pty Ltd
Contactless Smartcard Reader
Model: BT900-WG

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

Legend:
— Horizontal Ambients
— Horizontal Emissions

Ver 5.5 Build 107
Colo Radiated Test Setup
t:A0690207 c1:C0200207 c2:NONE p:A0960906 a:NONE
Site ID: OATS#1,1247 Upper Colo Rd. Colo, NSW
Test Officer: Bruce Holdsworth

EMC Technologies (Sydney) 3/87 Station Rd, Seven Hills, NSW, 2147, NSW, Australia
Phone +(612) 9624 2777 Fax+(612) 9838 4050

Peaks:					
No	Freq (MHz)	Peak (dBuV/m)	Qp Val	FCC-B3 (dBuV/m)	dL1 (dB)
1	40.69	26.8	26.3	40.0	-13.7
2	67.81	26.0	25.9	40.0	-14.1
3	189.84	27.2	26.3	43.5	-17.2
4	203.41	25.4	24.2	43.5	-19.4
5	230.53	25.6	25.3	46.0	-20.7
6	122.05	23.9	22.6	43.5	-20.9
7	81.37	18.4	16.5	40.0	-23.5