

## APPENDIX I GRAPHS of EMI MEASUREMENTS

### Conducted Emissions:

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 Emissions:

Graph 5:	Loop Antenna	0.009 to 30 MHz
Graph 6:	Carrier	13.55 to 13.57 MHz
Graph 7:	Vertical Polarisation	29 to 1000 MHz
Graph 8:	Horizontal Polarisation	29 to 1000 MHz

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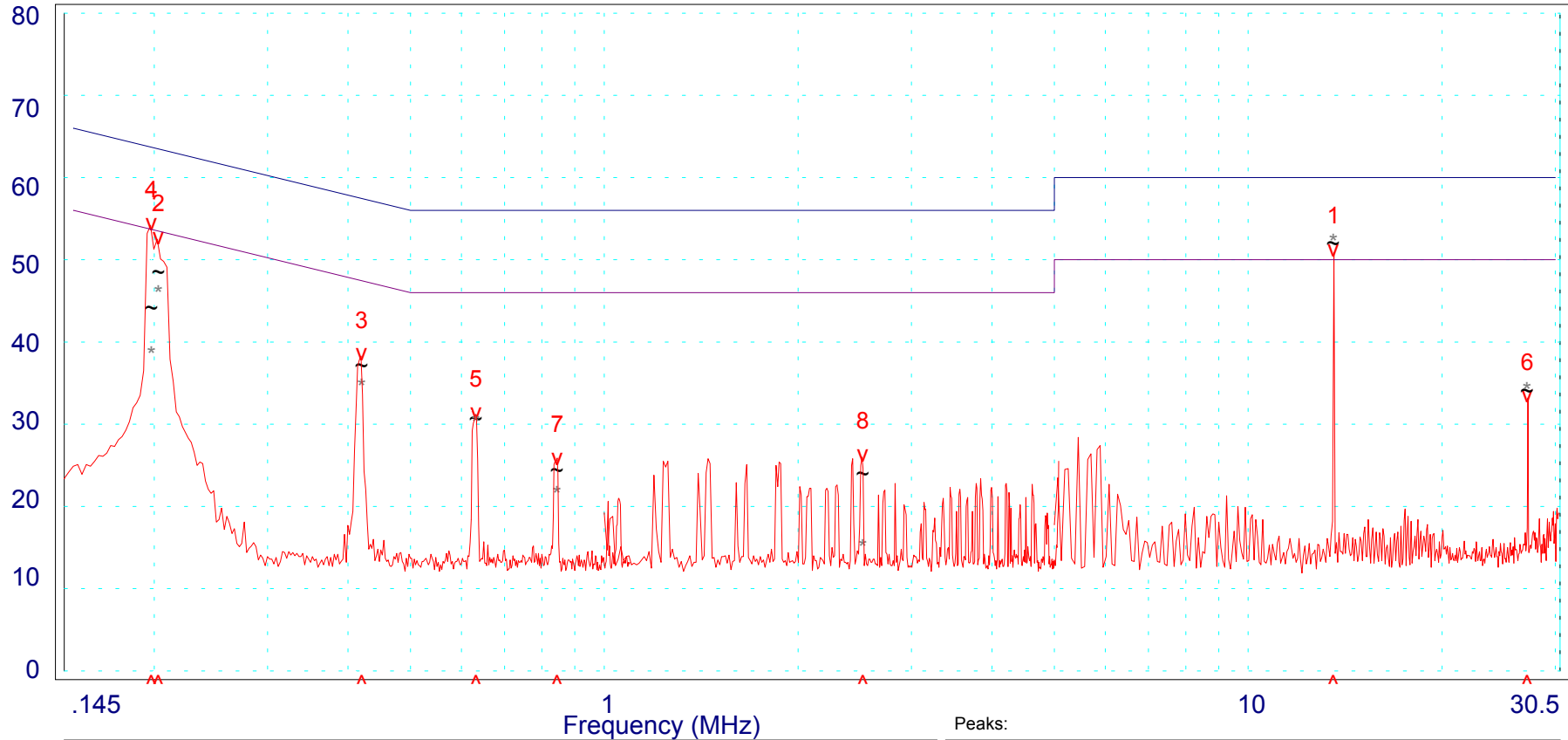
FCC Class B  
Conducted Emissions (dBuV)

Job No:T50316F

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Test Date: 26/5/04

GRAPH No. 1



BQT Solutions Limited  
Smart Card Reader  
Model: MiP5  
Antenna terminals connected to antenna.

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  
 Generic file for any test.  
 t:L0110306 c1:C0020905 c2:NONE p:NONE a:L0030705  
 Site ID: Syd Room#2,  
 Test Officer:Jodie Foyle  
 Source:  
 T50316CX 10 11 12

EMC Technologies (Sydney) 16/6 Gladstone Rd, Castle Hill, NSW, 2153, NSW, Australia  
 Phone +(612) 9899 4599 Fax+(612) 9899 4019

No	Freq (MHz)	Peak (dBuV)	Qp Val (dBuV)	FCCN_BQP (dBuV)	dL1 (dB)	Av Val (dBuV)	FCCN_BAV (dBuV)	dL2 (dB)
1	13.56	50.9	51.6	60.0	-8.4	51.7	50.0	1.7
2	0.203	52.5	48.1	63.5	-15.4	45.4	53.5	-8.1
3	0.420	38.3	36.8	57.4	-20.7	34.1	47.4	-13.3
4	0.198	54.2	43.7	63.7	-20.0	38.0	53.7	-15.7
5	0.632	31.2	30.2	56.0	-25.8	29.7	46.0	-16.3
6	27.12	33.2	33.7	60.0	-26.3	33.6	50.0	-16.4
7	0.845	25.6	24.0	56.0	-32.0	21.0	46.0	-25.0
8	2.520	26.1	23.6	56.0	-32.4	14.5	46.0	-31.5

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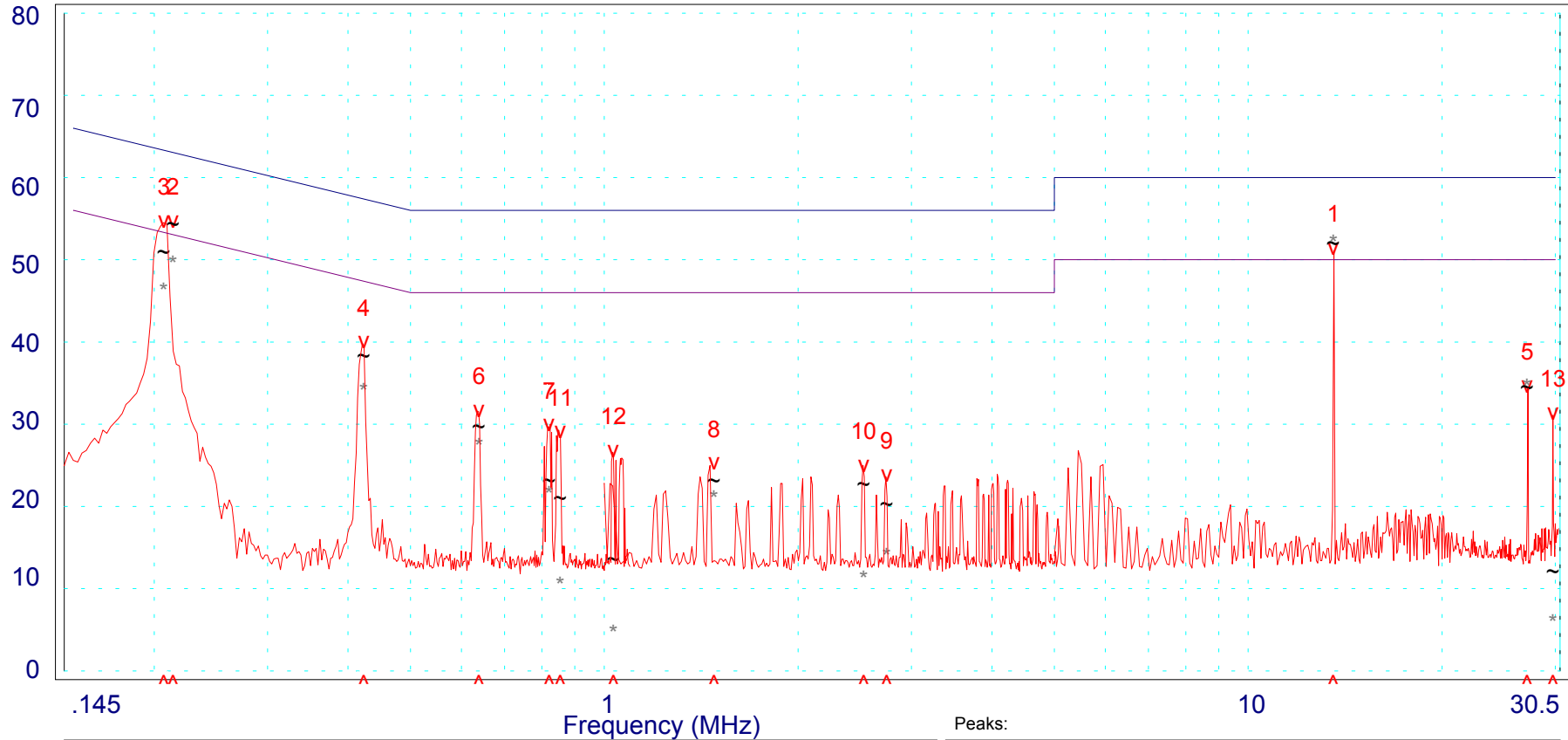
FCC Class B  
Conducted Emissions (dBuV)

Job No:T50316F

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Test Date: 26/5/04

GRAPH No. 2



BQT Solutions Limited  
Smart Card Reader  
Model: MiP5  
Antenna terminals connected to antenna.

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  
Generic file for any test.  
t:L0110306 c1:C0020905 c2:NONE p:NONE a:L0030705  
Site ID: Syd Room#2,  
Test Officer:Jodie Foyle

EMC Technologies (Sydney) 16/6 Gladstone Rd, Castle Hill, NSW, 2153, NSW, Australia  
Phone +(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	51.1	51.6	60.0	-8.4	51.6	50.0	1.6
2	0.214	54.5	54.0	63.0	-9.1	49.0	53.0	-4.0
3	0.207	54.5	50.6	63.3	-12.8	45.7	53.3	-7.6
4	0.423	39.8	37.9	57.4	-19.5	33.5	47.4	-13.9
5	27.12	34.4	34.1	60.0	-25.9	34.1	50.0	-15.9
6	0.639	31.5	29.3	56.0	-26.7	26.9	46.0	-19.1
7	0.821	29.7	22.7	56.0	-33.3	21.0	46.0	-25.0
8	1.481	25.0	22.7	56.0	-33.3	20.5	46.0	-25.5
9	2.745	23.6	19.8	56.0	-36.2	13.5	46.0	-32.5
10	2.528	24.8	22.3	56.0	-33.7	10.7	46.0	-35.3
11	0.854	28.8	20.6	56.0	-35.4	10.0	46.0	-36.0
12	1.033	26.6	13.2	56.0	-42.8	4.1	46.0	-41.9
13	29.74	31.1	11.7	60.0	-48.3	5.4	50.0	-44.6

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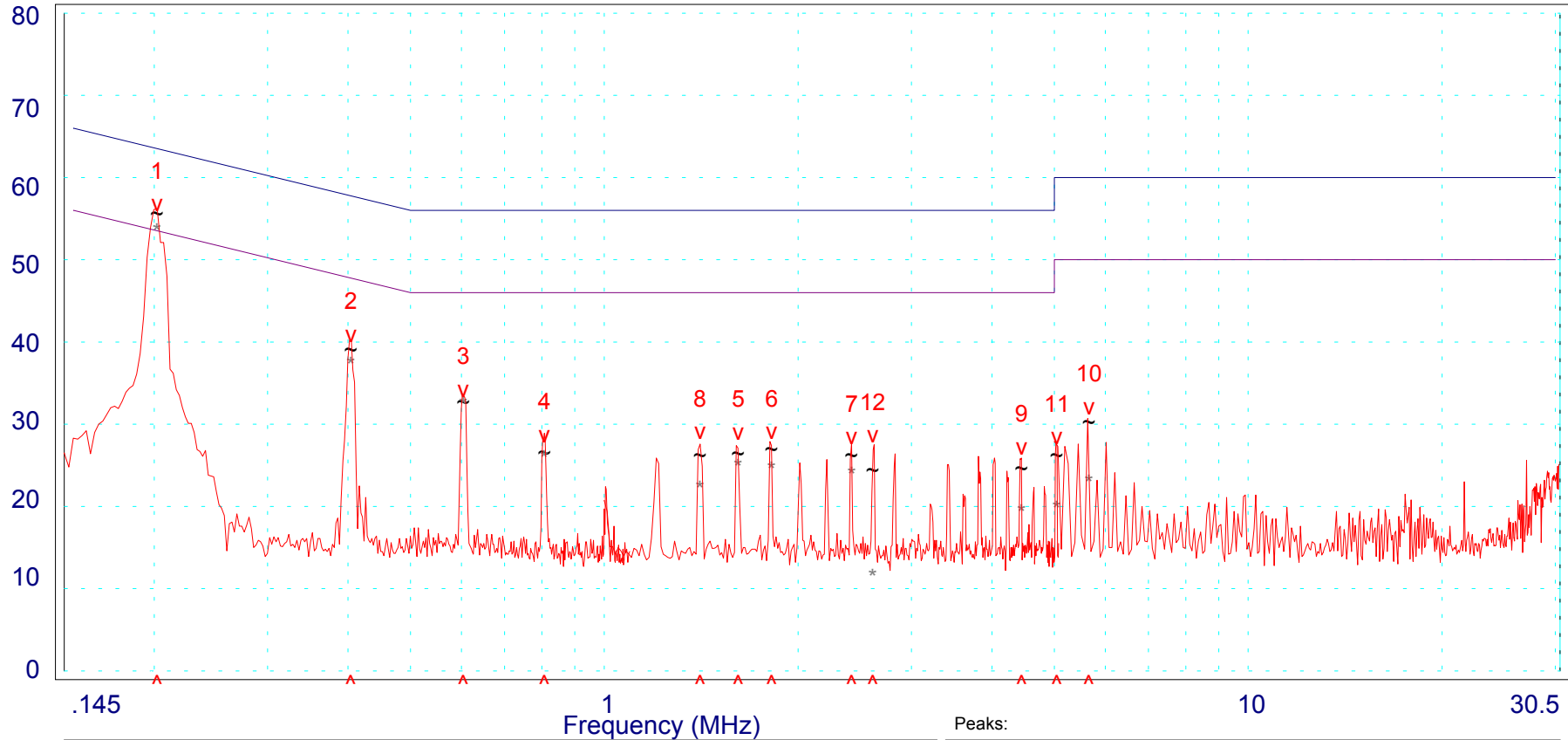
FCC Class B  
Conducted Emissions (dBuV)

Job No:T50316F

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Test Date: 24/5/05

GRAPH No. 3



**BQT Solutions Limited**  
**Smart Card Reader**  
**Model: MiP5**  
**Antenna terminals terminated.**

**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  
 Generic file for any test.  
 t:L0110705 c1:C0020905 c2:NONE p:NONE a:L0030705  
 Site ID: Syd Room#2,  
 Test Officer:Jodie Foyle

**Source:**  
 T50316CX 1 2 3

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 Phone +(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	0.202	56.4	55.2	63.5	-8.3	53.0	53.5	-5
2	0.404	40.5	38.7	57.8	-19.1	36.7	47.8	-11.1
3	0.604	33.9	32.2	56.0	-23.8	31.8	46.0	-14.2
4	0.807	28.4	26.1	56.0	-29.9	25.4	46.0	-20.6
5	1.614	28.7	26.0	56.0	-30.0	24.3	46.0	-21.7
6	1.819	28.7	26.5	56.0	-29.5	24.0	46.0	-22.0
7	2.422	28.1	25.8	56.0	-30.2	23.3	46.0	-22.7
8	1.409	28.7	25.8	56.0	-30.2	21.6	46.0	-24.4
9	4.446	26.9	24.1	56.0	-31.9	18.8	46.0	-27.2
10	5.659	31.7	29.8	60.0	-30.2	22.4	50.0	-27.6
11	5.045	28.1	25.8	60.0	-34.2	19.2	50.0	-30.8
12	2.611	28.3	24.0	56.0	-32.0	10.9	46.0	-35.1

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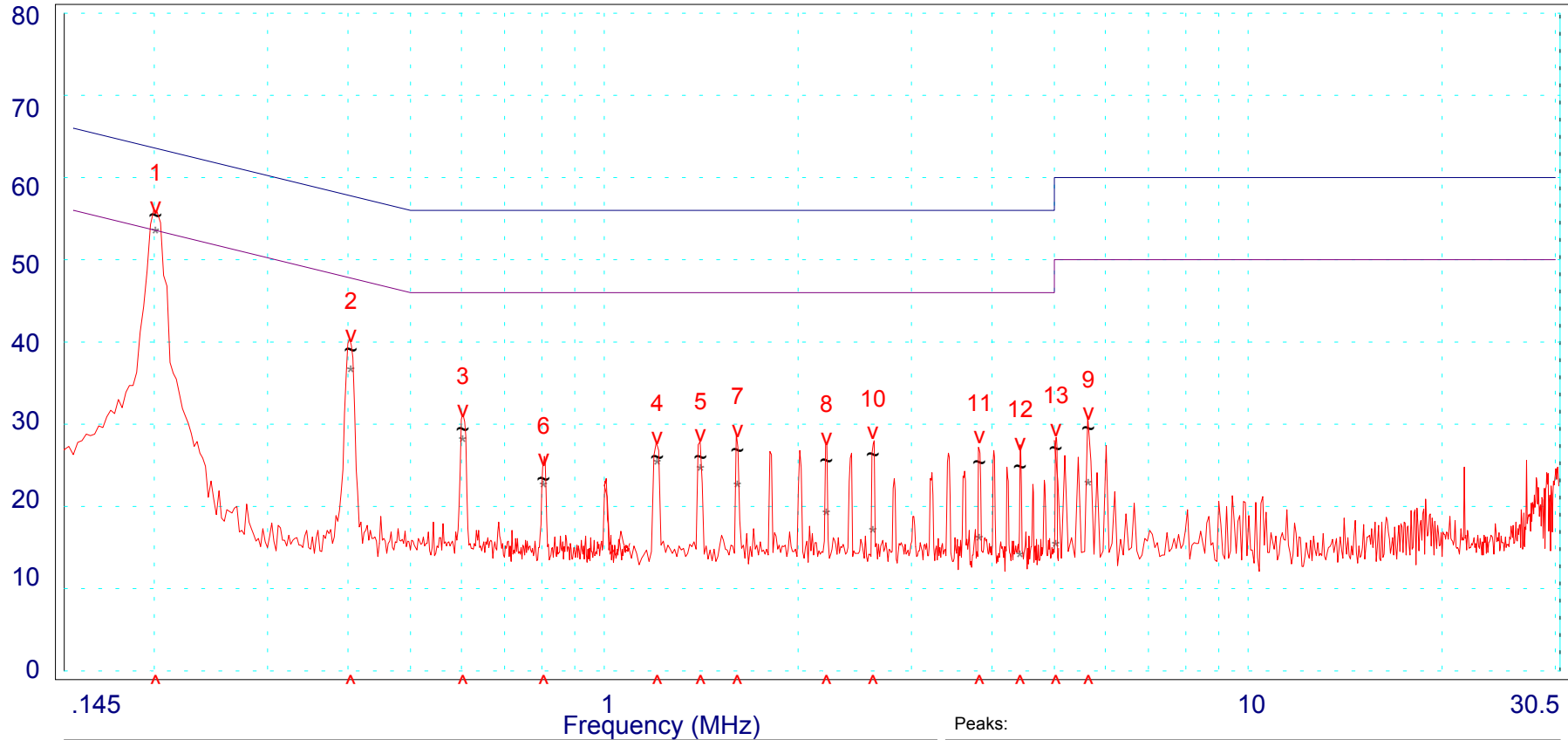
FCC Class B  
Conducted Emissions (dBuV)

Job No:T50316F

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Test Date: 24/5/05

GRAPH No. 4



BQT Solutions Limited  
Smart Card Reader  
Model: MiP5  
Antenna terminals terminated.

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  
Generic file for any test.  
t:L0110705 c1:C0020905 c2:NONE p:NONE a:L0030705  
Site ID: Syd Room#2,  
Test Officer:Jodie Foyle

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Phone +(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	0.201	56.2	55.0	63.6	-8.6	52.5	53.6	-1.1
2	0.404	40.5	38.7	57.8	-19.1	35.7	47.8	-12.1
3	0.603	31.5	28.9	56.0	-27.1	27.2	46.0	-18.8
4	1.209	28.1	25.6	56.0	-30.4	24.4	46.0	-21.6
5	1.411	28.4	25.6	56.0	-30.4	23.7	46.0	-22.3
6	0.805	25.4	22.9	56.0	-33.1	21.6	46.0	-24.4
7	1.610	29.0	26.5	56.0	-29.5	21.6	46.0	-24.4
8	2.214	28.1	25.1	56.0	-30.9	18.3	46.0	-27.7
9	5.647	31.1	29.1	60.0	-30.9	21.9	50.0	-28.1
10	2.614	28.7	25.9	56.0	-30.1	16.1	46.0	-29.9
11	3.824	28.2	25.0	56.0	-31.0	15.2	46.0	-30.8
12	4.424	27.4	24.4	56.0	-31.6	13.1	46.0	-32.9
13	5.029	29.1	26.6	60.0	-33.4	14.4	50.0	-35.6

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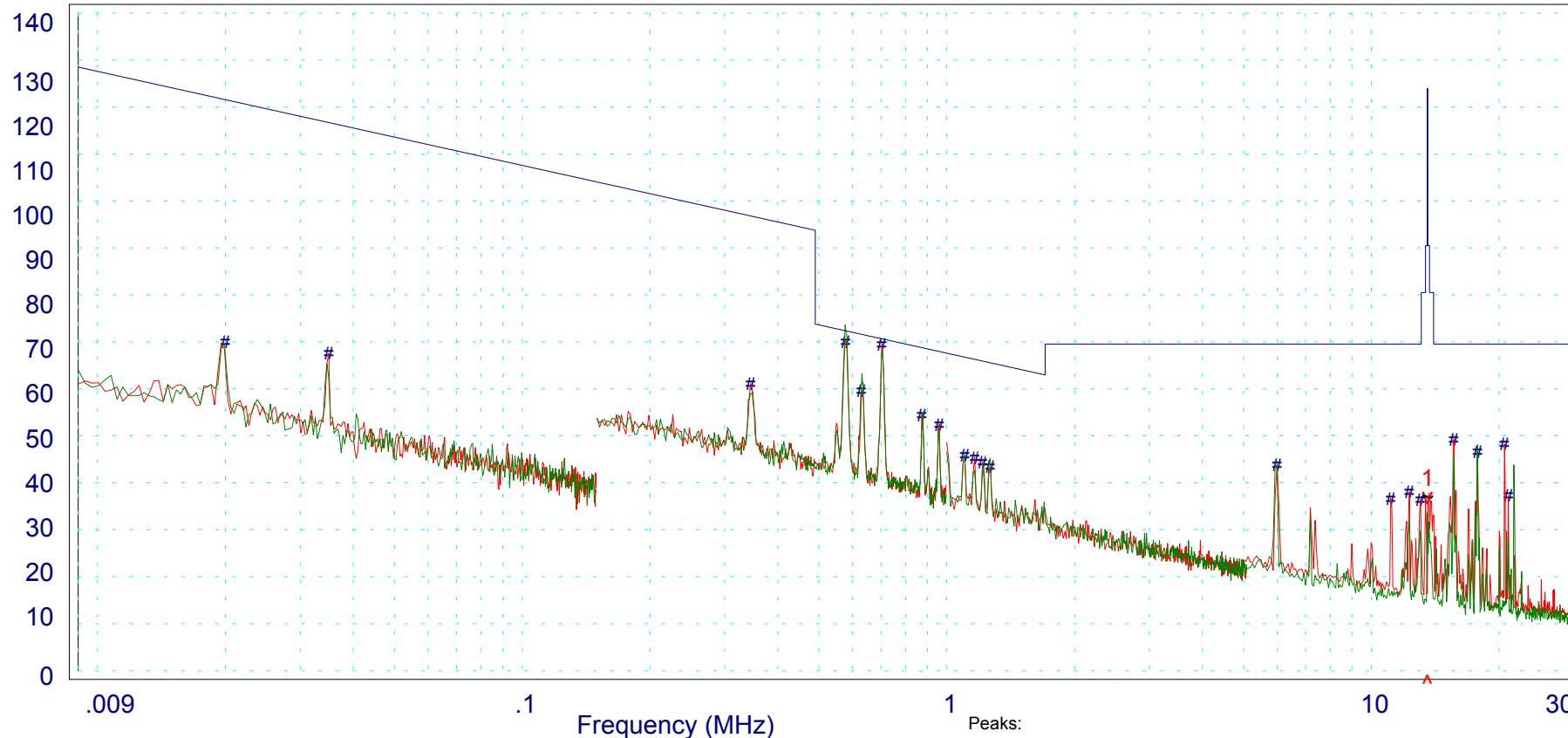
FCC Class B  
Radiated Emissions dBuV/m  
# = Ambient

Job No:T50316F

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Test Date: 24/5/05

GRAPH No. 5



Peaks:

No	Freq (MHz)	Peak	Qp Val	FCC_loop_3dL1 (dB)
1	13.56	37.8	37.7	124.0 -86.3

BQT Solutions Limited  
Smart Card Reader  
Model: MiP5

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:A0081204E c1:C0201105 c2:NONE p:NONE a:NONE  
Site ID: Syd Room#2,  
Test Officer:Jodie Foyle

Source:  
T50316r3 6 7 8 9  
T50316r3 1 2 3 4

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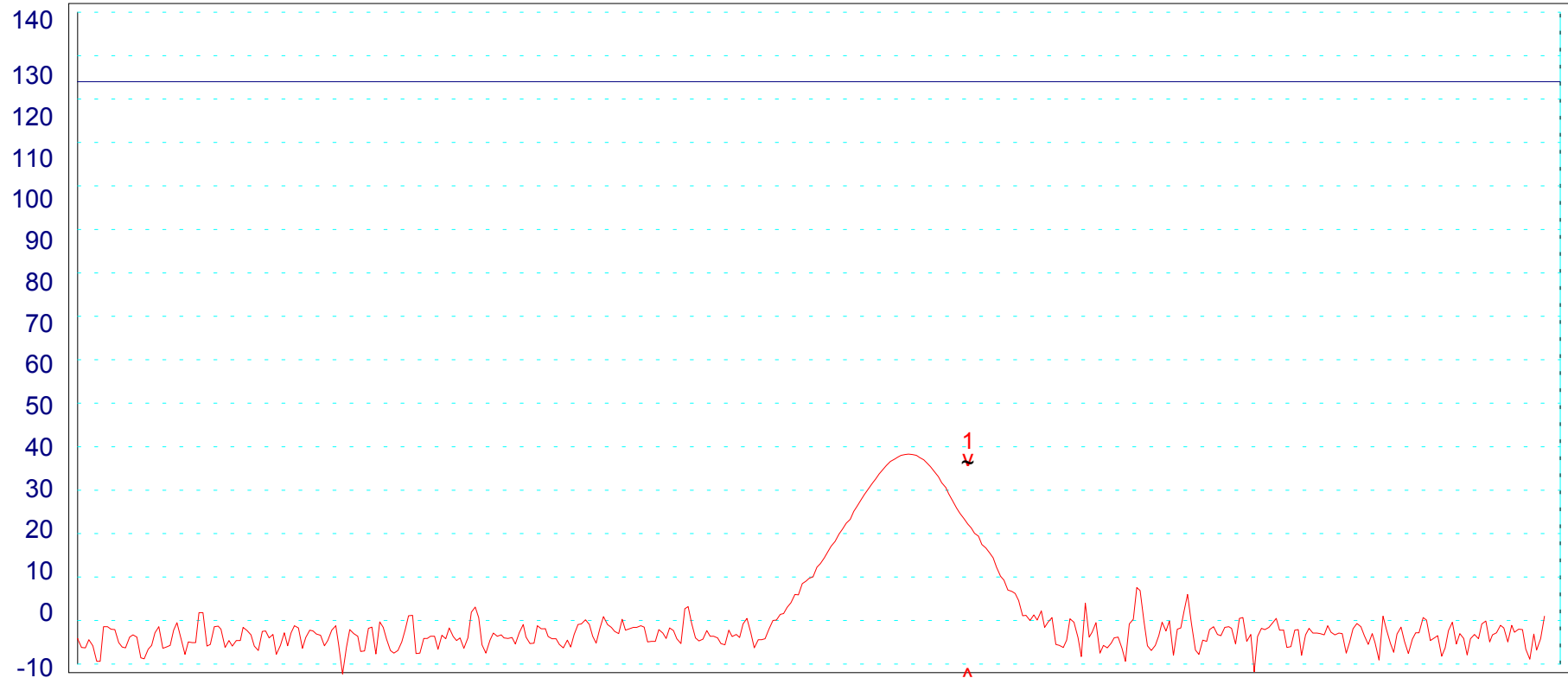
FCC Class B  
Radiated Emissions dBuV/m  
# = Ambient

Job No:T50316F

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Test Date: 24/5/05

GRAPH No. 6



13.554

Frequency (MHz)

13.564

BQT Solutions Limited  
Smart Card Reader  
Model: MiP5

Peaks:

No	Freq (MHz)	Peak	Qp Val	FCC_loop_3dB	L1 (dB)
1	13.56	38.3	37.4	124.0	-86.6

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:A0081204E c1:C0201105 c2:NONE p:NONE a:NONE  
Site ID: Syd Room#2,  
Test Officer:Jodie Foyle

Source:  
T50316r3 5

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# EMC Technologies Pty. Ltd. - Global Product Certification

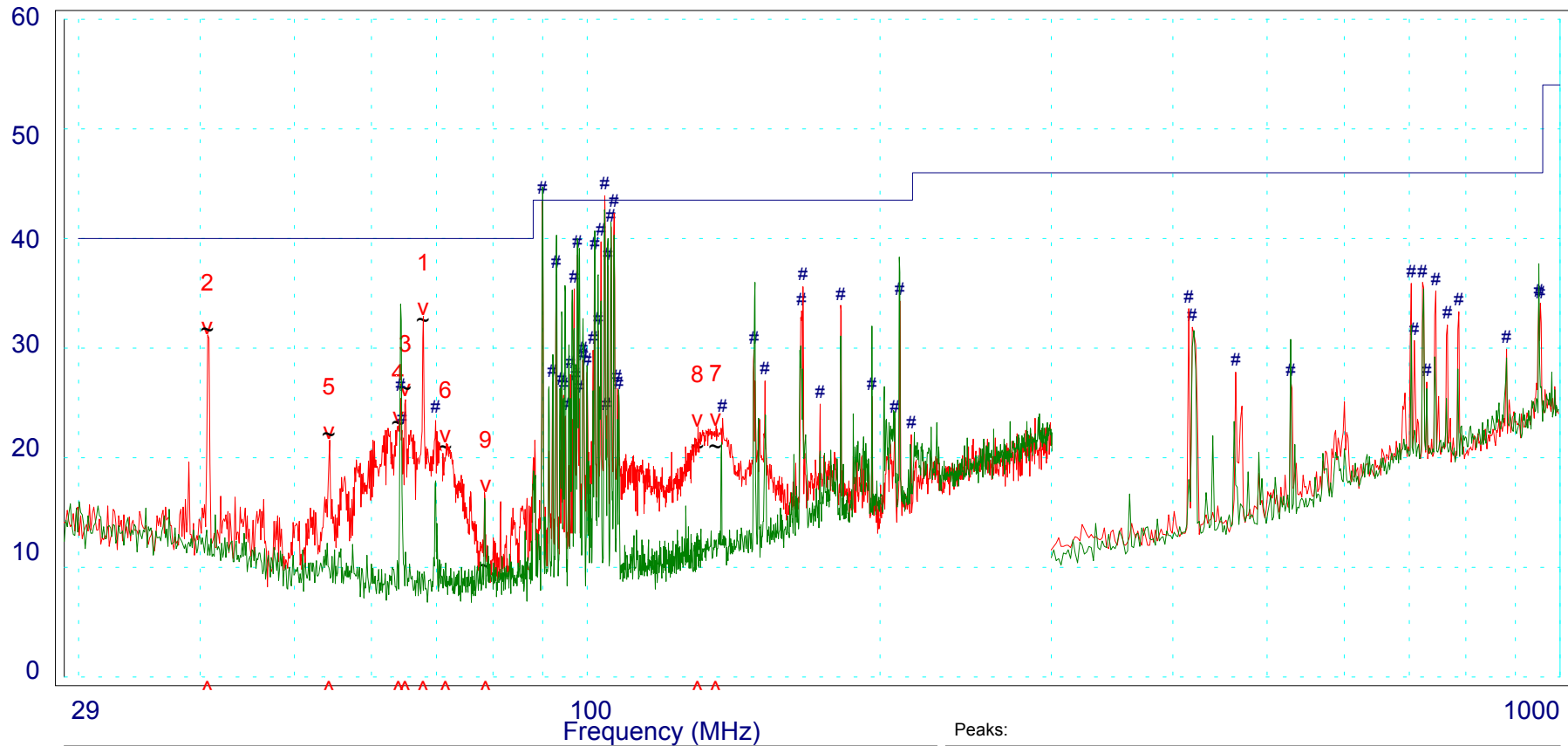
FCC Class B  
Radiated Emissions (dBuV/m)  
# = Ambient

Job No:T50316F

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Test Date: 29/3/05

GRAPH No. 7



BQT Solutions Limited  
Smart Card Reader  
Model: MiP5

Limits: FCC-B3 FCC CLASS B RAD 3M LIMITS  
Legend: Vertical Ambients (green), Vertical Emissions (red)  
Source: Amb0403 1 2 3 4 5 11, T50316r2 1 2 3 4 5 11  
Ver 5.5 Build 107  
Colo Radiated Test Setup  
t:A0690206 c1:C0201105 c2:NONE p:A0961105 a:NONE  
Site ID: OATS#1,1247 Upper Colo Rd. Colo, NSW  
Test Officer: Bruce Holdsworth

Peaks:

No	Freq (MHz)	Peak (dBuV/m)	Qp Val	FCC-B3 (dBuV/m)	dL1 (dB)
1	67.81	33.0	31.7	40.0	-8.3
2	40.68	31.2	30.9	40.0	-9.1
3	64.98	25.6	25.6	40.0	-14.4
4	63.96	23.0	22.3	40.0	-17.7
5	54.25	21.7	21.3	40.0	-18.7
6	71.46	21.3	20.1	40.0	-19.9
7	135.48	22.9	20.2	43.5	-23.3
8	129.75	22.8	20.2	43.5	-23.4
9	78.61	16.8	9.3	40.0	-30.7

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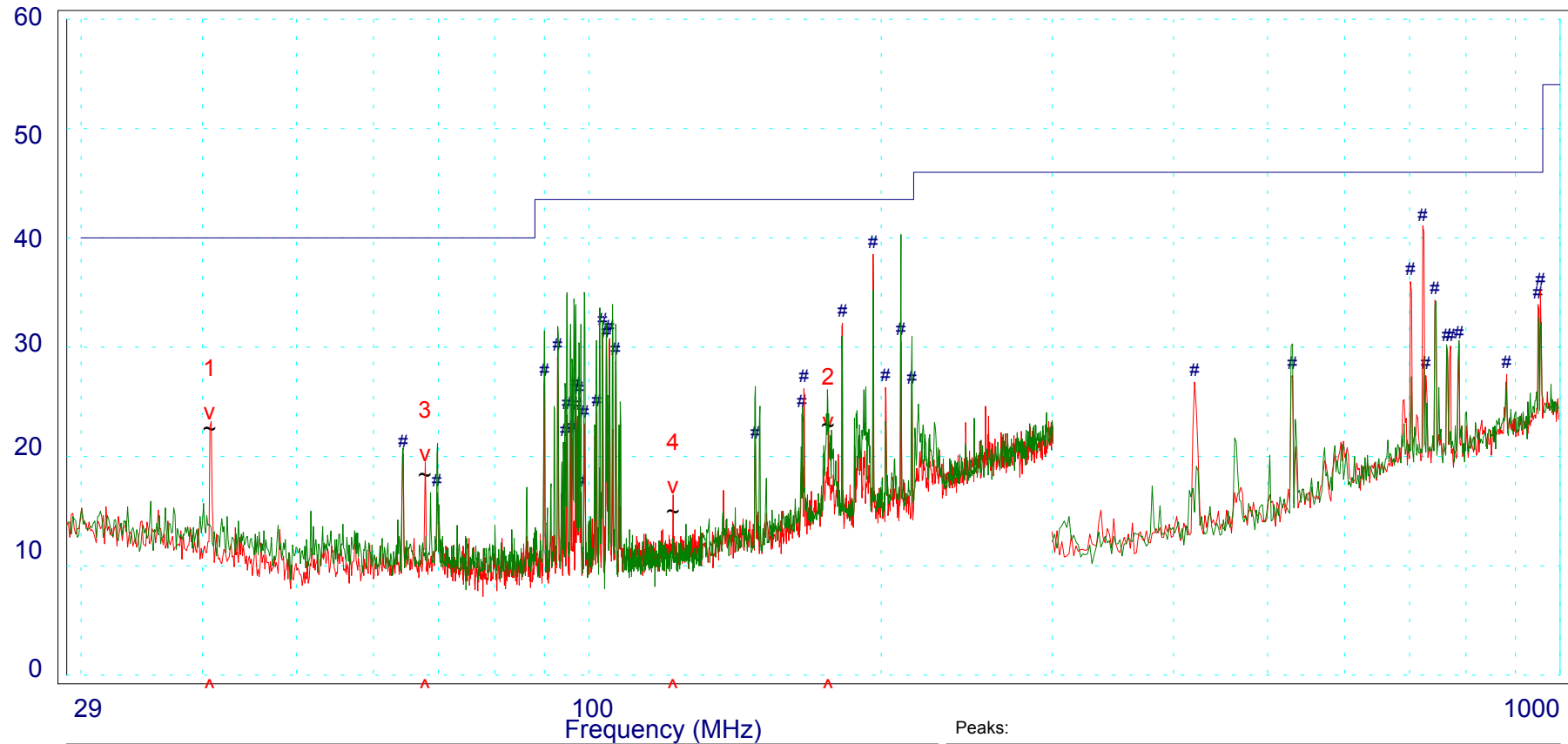
FCC Class B  
Radiated Emissions (dBuV/m)  
# = Ambient

Job No:T50316F

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Test Date: 29/3/05

GRAPH No. 8



BQT Solutions Limited  
Smart Card Reader  
Model: MiP5

No	Freq (MHz)	Peak (dBuV/m)	Qp Val	FCC-B3 (dBuV/m)	dL1 (dB)
1	40.68	23.3	21.7	40.0	-18.3
2	176.28	22.5	22.0	43.5	-21.5
3	67.80	19.5	17.5	40.0	-22.5
4	122.04	16.5	14.1	43.5	-29.4

Limits: FCC-B3 FCC CLASS B RAD 3M LIMITS  
Legend: Horizontal Ambients (green line), Horizontal Emissions (red line)

Ver 5.5 Build 107  
Colo Radiated Test Setup  
t:A0690206 c1:C0201105 c2:NONE p:A0961105 a:NONE  
Site ID: OATS#1,1247 Upper Colo Rd. Colo, NSW  
Test Officer: Bruce Holdsworth

Source:  
V Amb0403 6 7 8 9 10 12  
T50316r2 6 7 8 9 10 12

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Phone +(612) 9899 4599 Fax+(612) 9899 4019