



EMC Technologies Pty Ltd

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**APPENDIX K
OF
TEST REPORT T70719_F**

GRAPHS OF EMI MEASUREMENT

FCC ID: TVN-MDOCR
Manufacturer: Magellan Technology
Test Sample: Document Tray Reader
Model: MDOCR-2505
Serial Number: Prototype

Date: 30th July 2007

APPENDIX K**GRAPHS OF EMI MEASUREMENT****Conducted EMI:**

Graph 1:	Active Line	0.145 to 30.5 MHz	tested with antenna connected
Graph 2:	Neutral Line	0.145 to 30.5 MHz	tested with antenna connected
Graph 3:	Active Line	0.145 to 30.5 MHz	tested with dummy load antenna
Graph 4:	Neutral Line	0.145 to 30.5 MHz	tested with dummy load antenna

Radiated EMI:

Graph 5:	Ambient Emissions	0.009 to 30 MHz
Graph 6:	Carrier Emissions	13.11 to 14.01 MHz
Graph 7:	Vertical Polarisation	29 to 1000 MHz
Graph 8:	Horizontal Polarisation	29 to 1000 MHz

EMC Technologies Pty. Ltd. - Global Product Certification

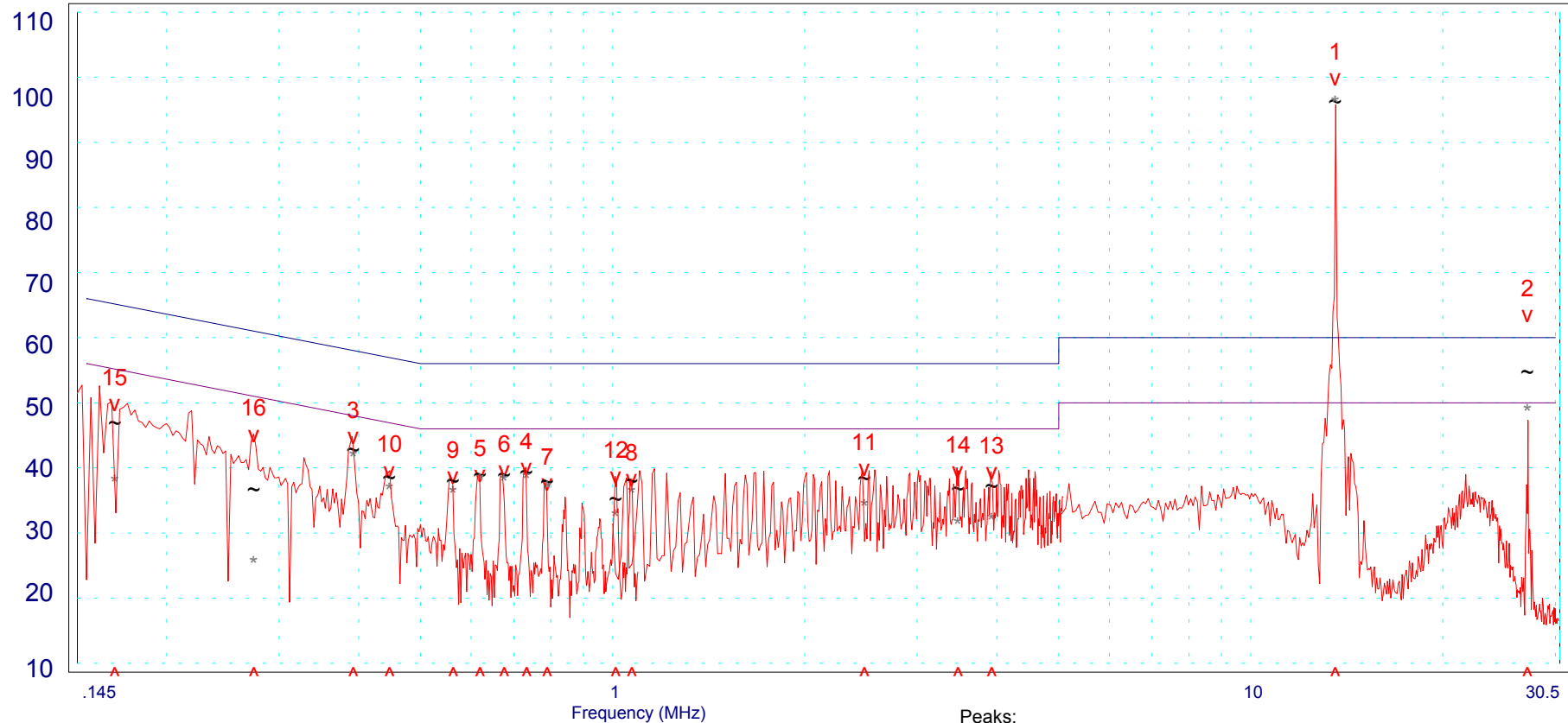
FCC Class B
Conducted Emissions (dBuV)

Job No:T70719

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Test Date: 17-07-2007

GRAPH No. 1



Magellan Technology
Document Tray Reader
Model: MDOCR-2505
Tested with antenna connected

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 156
Source:
t:L0111207 c1:C0100907 c2:NONE p:NONE a:L0100508
Site ID: Syd Room#2,3/87 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 (dBuV)	BQRdL1 (dB)	Av Val (dBuV)	FCCN_BAVdL2 (dBuV)	AVdL2 (dB)
1	13.56	100.0	96.1	60.0	36.1	95.8	50.0	45.8
2	27.12	63.5	54.7	60.0	-5.3	48.5	50.0	-1.5
3	0.392	44.8	42.7	58.0	-15.3	41.4	48.0	-6.6
4	0.733	40.1	39.2	56.0	-16.8	38.1	46.0	-7.9
5	0.620	39.0	38.9	56.0	-17.1	37.8	46.0	-8.2
6	0.676	39.7	38.9	56.0	-17.2	37.7	46.0	-8.3
7	0.790	37.7	37.9	56.0	-18.1	36.6	46.0	-9.4
8	1.071	38.3	38.0	56.0	-18.0	35.9	46.0	-10.1
9	0.562	38.8	37.9	56.0	-18.1	35.8	46.0	-10.2
10	0.447	39.6	38.5	56.0	-18.5	36.4	46.0	-10.5
11	2.479	39.9	38.3	56.0	-17.7	33.9	46.0	-12.1
12	1.011	38.7	35.2	56.0	-20.8	32.2	46.0	-13.8
13	3.924	39.4	37.2	56.0	-18.8	31.7	46.0	-14.3
14	3.476	39.6	36.8	56.0	-19.2	31.1	46.0	-14.9
15	0.166	49.9	46.9	65.2	-18.3	37.5	55.2	-17.7
16	0.274	45.2	36.6	61.0	-24.4	25.1	51.0	-25.9

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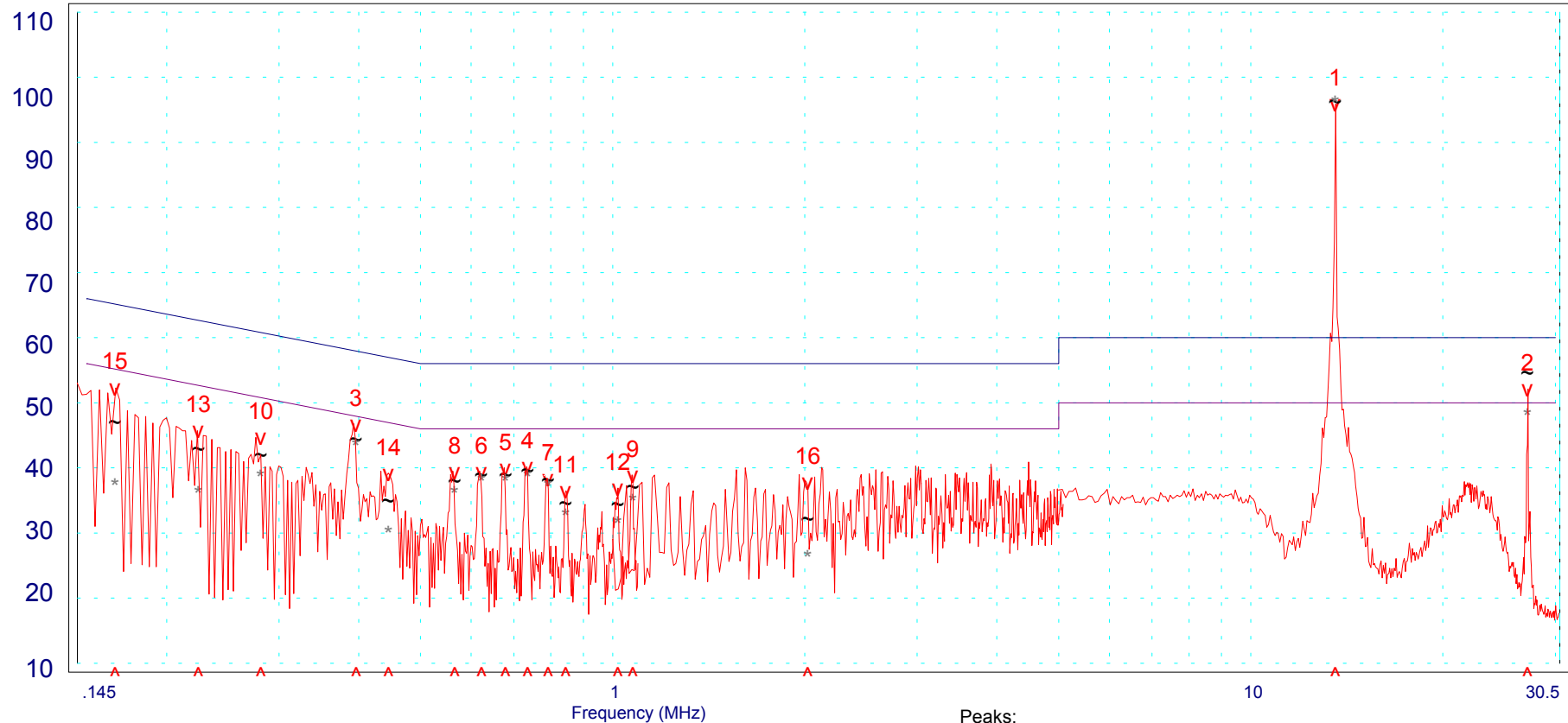
FCC Class B
Conducted Emissions (dBuV)

Job No:T70719

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Test Date: 17-07-2007

GRAPH No. 2



Magellan Technology
Document Tray Reader
Model: MDOCR-2505
Tested with antenna connected

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 156
Source:
t:L0111207 c1:C0100907 c2:NONE p:NONE a:L0100508
Site ID: Syd Room#2,3/87 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 (dBuV)	BQRdL1 (dB)	Av Val (dBuV)	FCCN_BAVdL2 (dBuV)	AVdL2 (dB)
1	13.56	95.9	96.2	60.0	36.2	95.8	50.0	45.8
2	27.12	52.1	54.5	60.0	-5.5	47.8	50.0	-2.2
3	0.396	46.8	44.4	57.9	-13.5	43.1	47.9	-4.8
4	0.736	40.2	39.5	56.0	-16.5	38.3	46.0	-7.7
5	0.679	40.0	38.9	56.0	-17.1	37.7	46.0	-8.3
6	0.623	39.5	38.9	56.0	-17.2	37.7	46.0	-8.3
7	0.792	38.4	38.2	56.0	-17.9	36.9	46.0	-9.1
8	0.565	39.5	37.9	56.0	-18.1	35.8	46.0	-10.2
9	1.075	38.9	37.1	56.0	-18.9	34.7	46.0	-11.3
10	0.281	44.7	41.9	60.8	-18.9	38.4	50.8	-12.4
11	0.844	36.5	34.6	56.0	-21.5	32.4	46.0	-13.6
12	1.019	36.9	34.4	56.0	-21.6	31.2	46.0	-14.8
13	0.224	45.7	42.9	62.7	-19.8	35.9	52.7	-16.8
14	0.445	39.2	34.9	57.0	-22.0	29.7	47.0	-17.3
15	0.166	52.3	47.0	65.2	-18.2	37.0	55.2	-18.2
16	2.021	37.8	32.2	56.0	-23.8	26.1	46.0	-19.9

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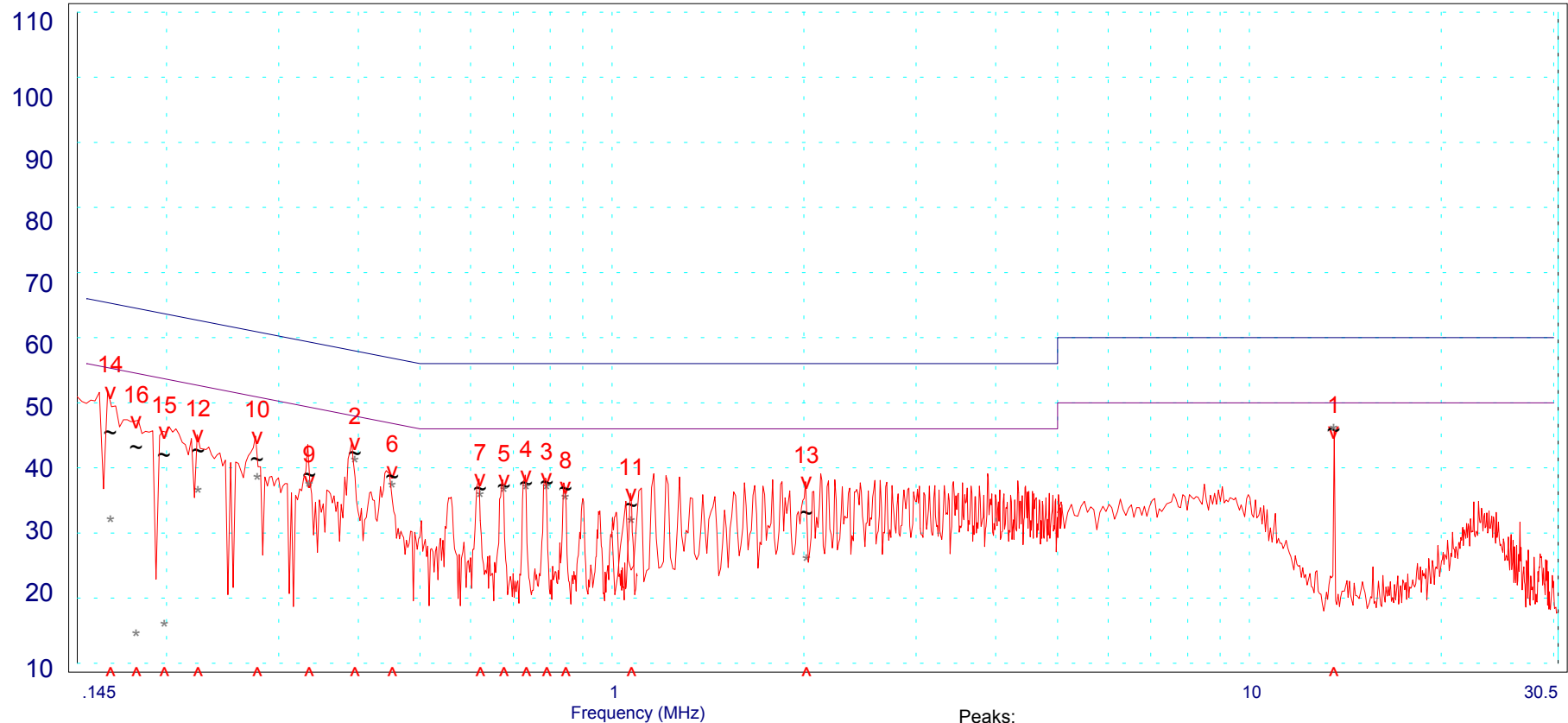
FCC Class B
Conducted Emissions (dBuV)

Job No:T70719

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Test Date: 17-07-2007

GRAPH No. 3



Magellan Technology
Document Tray Reader
Model: MDOCR-2505
Tested with dummy load 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 156
Source:
t:L0111207 c1:C0100907 c2:NONE p:NONE a:L0100508 \T70719C 9 10 11
Site ID: Syd Room#2,3/87 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_BQP (dBuV)	RdL1 (dB)	Av Val (dBuV)	FCCN_BAV (dBuV)	dL2 (dB)
1	13.56	45.7	45.7	60.0	-14.3	45.4	50.0	-4.6
2	0.395	43.9	42.3	58.0	-15.7	40.5	48.0	-7.5
3	0.790	38.4	37.7	56.0	-18.4	36.4	46.0	-9.6
4	0.734	38.9	37.5	56.0	-18.5	36.3	46.0	-9.7
5	0.677	38.2	37.2	56.0	-18.8	36.0	46.0	-10.0
6	0.452	39.6	38.6	56.8	-18.2	36.6	46.8	-10.2
7	0.621	38.3	36.8	56.0	-19.2	35.1	46.0	-10.9
8	0.846	37.2	36.8	56.0	-19.2	34.8	46.0	-11.2
9	0.335	38.1	39.0	59.3	-20.4	36.8	49.3	-12.5
10	0.278	44.9	41.3	60.9	-19.6	37.8	50.9	-13.1
11	1.072	36.1	34.3	56.0	-21.7	31.2	46.0	-14.8
12	0.224	45.1	42.5	62.7	-20.1	35.8	52.7	-16.9
13	2.018	37.9	33.0	56.0	-23.0	25.3	46.0	-20.7
14	0.163	51.8	45.4	65.3	-19.9	31.3	55.3	-24.0
15	0.199	45.6	42.0	63.7	-21.7	15.2	53.7	-38.5
16	0.179	47.2	43.2	64.5	-21.3	13.8	54.5	-40.7

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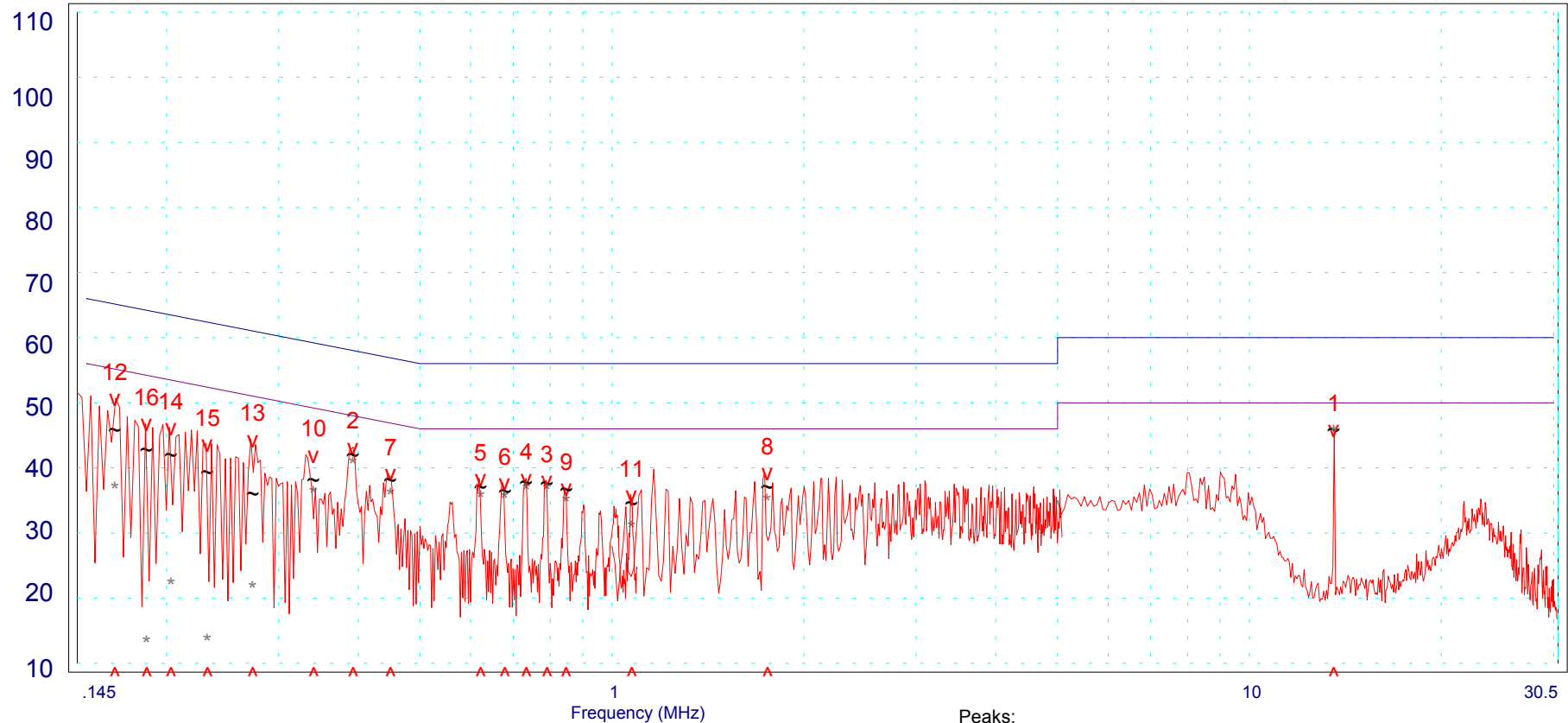
FCC Class B
Conducted Emissions (dBuV)

Job No:T70719

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Test Date: 17-07-2007

GRAPH No. 4



Magellan Technology
Document Tray Reader
Model: MDOCR-2505
Tested with dummy load 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 156
Source:
t:L0111207 c1:C0100907 c2:NONE p:NONE a:L0100508
Site ID: Syd Room#2,3/87 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_BQP (dBuV)	RdL1 (dB)	Av Val (dBuV)	FCCN_BAV (dBuV)	dL2 (dB)
1	13.56	45.9	45.7	60.0	-14.3	45.3	50.0	-4.7
2	0.392	43.2	42.0	58.0	-16.1	40.4	48.0	-7.6
3	0.791	38.1	37.6	56.0	-18.4	36.3	46.0	-9.7
4	0.734	38.4	37.8	56.0	-18.2	36.3	46.0	-9.7
5	0.622	38.4	37.0	56.0	-19.0	35.1	46.0	-10.9
6	0.679	37.7	36.3	56.0	-19.7	35.0	46.0	-11.0
7	0.449	39.1	38.1	56.9	-18.7	35.5	46.9	-11.4
8	1.752	39.3	37.1	56.0	-18.9	34.7	46.0	-11.3
9	0.848	37.0	36.6	56.0	-19.4	34.5	46.0	-11.5
10	0.340	42.0	38.1	59.2	-21.1	35.9	49.2	-13.3
11	1.074	35.9	34.6	56.0	-21.4	30.5	46.0	-15.5
12	0.166	50.7	45.8	65.2	-19.4	36.5	55.2	-18.7
13	0.273	44.4	36.0	61.0	-25.0	21.2	51.0	-29.8
14	0.203	46.2	42.0	63.5	-21.5	21.8	53.5	-31.7
15	0.232	43.7	39.2	62.4	-23.2	13.1	52.4	-39.3
16	0.186	46.8	42.7	64.2	-21.5	12.9	54.2	-41.3

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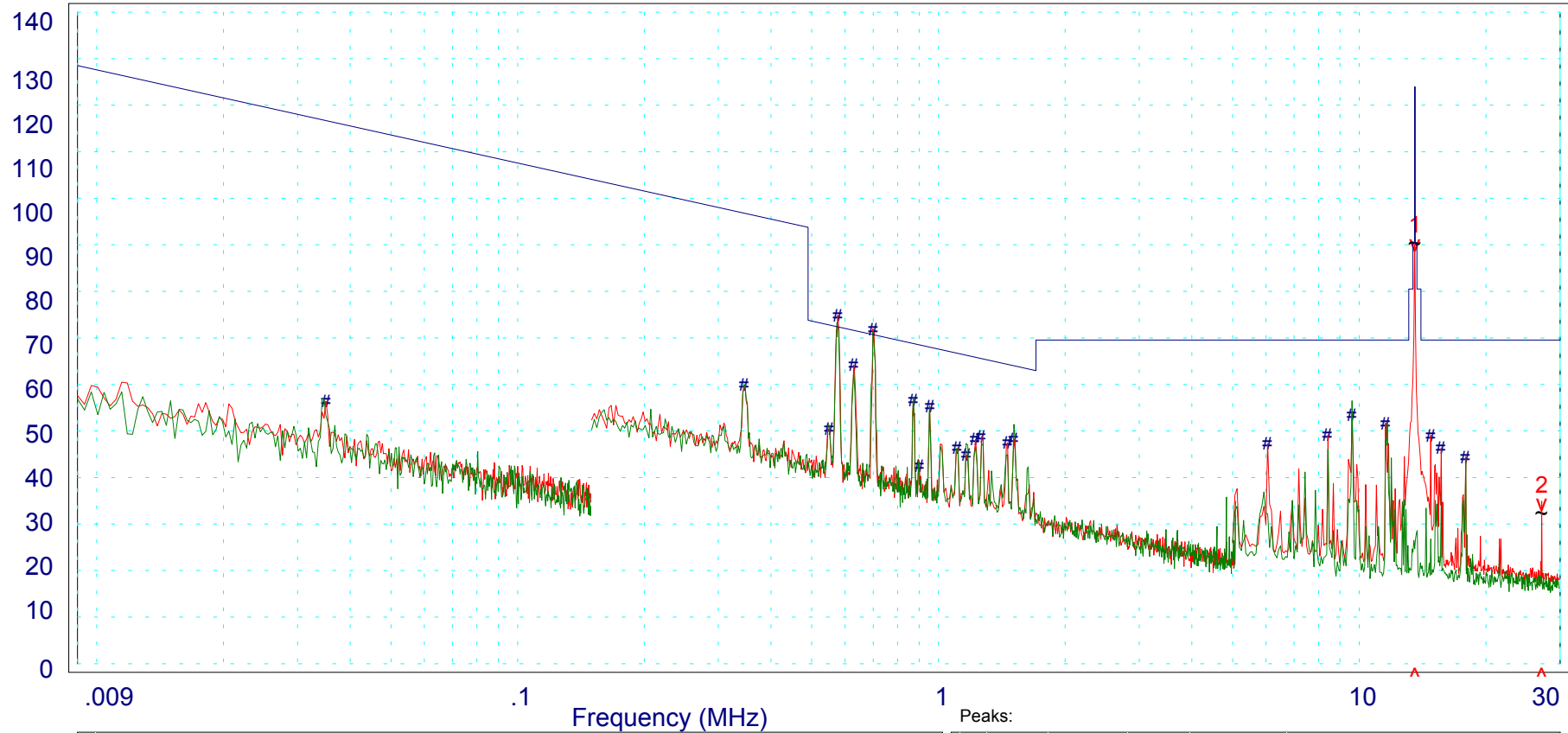
FCC Class B
Radiated Emissions (dBuV/m)
= Ambient

Job No:T70719

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Test Date: 12-07-07

GRAPH No. 5



Magellan
Document Tray Reader
Model: MDOC R-2505

Peaks:

No	Freq (MHz)	Peak (dBuV/m)	Qp Val	FCC_loop_3dL1 (dBuV/m)	3dL1 (dB)
1	13.56	91.1	91.1	124.0	-32.9
2	27.12	35.3	33.1	69.5	-36.4

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:C0200208 c2:NONE p:NONE a:NONE
Site ID: OATS#1,1247 Upper Colo Rd. Colo, NSW
Test Officer: Bruce Holdsworth

Source:
T70719r5 7 8 9 10
T70719r5 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:T70719

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Test Date: 12-07-07

GRAPH No. 6



13.11

Frequency (MHz)

14.01

Magellan
Document Tray Reader
Model: MDOC R-2505

Peaks:

No	Freq (MHz)	Peak (dBuV/m)	Qp Val	FCC_loop_3dL1 (dBuV/m)	3dL1 (dB)
1	13.56	90.1	89.7	124.0	-34.3

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:C0200208 c2:NONE p:NONE a:NONE
Site ID: OATS#1,1247 Upper Colo Rd. Colo, NSW
Test Officer: Bruce Holdsworth

Source: T70719r5 6

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

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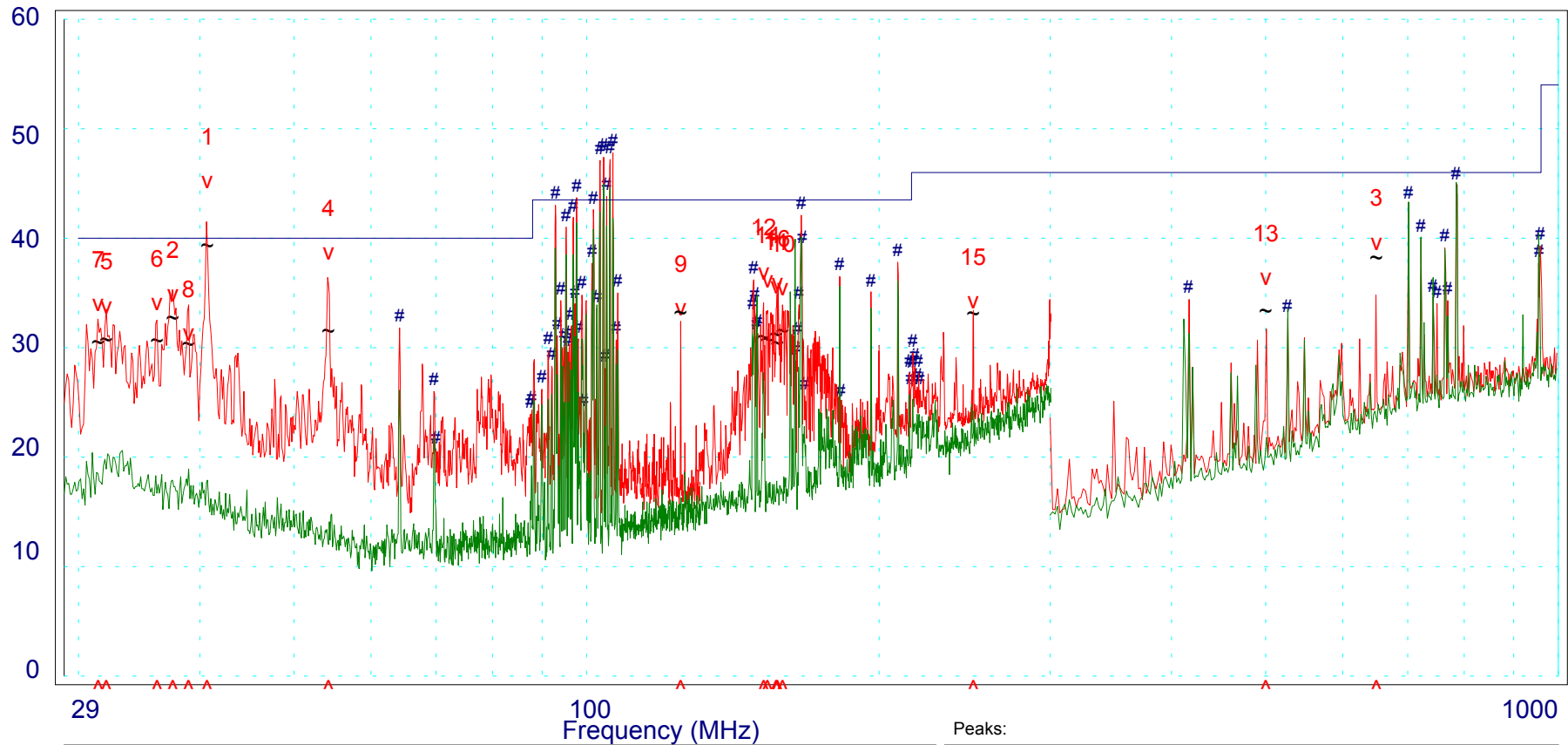
FCC Class B
Radiated Emissions (dBuV/m)
= Ambient

Job No:T70719

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Test Date: 12-07-07

GRAPH No. 7



Magellan
Document Tray Reader
Model: MDOC R-2505

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

Legend:
— Vertical Ambients (green)
— Vertical Emissions (red)

Source:
Vamb1207 1 2 3 4 5 11
T70719r1 1 2 3 4 5 11

Ver 5.5 Build 107
Colo Radiated Test Setup
t:A0690208 c1:C0200308 c2:NONE p:A0961007 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	40.69	44.5	38.5	40.0	-1.5
2	37.52	34.1	31.9	40.0	-8.1
3	650.01	38.9	37.4	46.0	-8.6
4	54.24	37.9	30.7	40.0	-9.3
5	32.05	33.0	29.9	40.0	-10.1
6	36.13	33.3	29.8	40.0	-10.2
7	31.43	33.3	29.7	40.0	-10.3
8	38.93	30.6	29.5	40.0	-10.5
9	125.00	32.9	32.3	43.5	-11.2
10	159.15	34.7	30.7	43.5	-12.8
11	156.73	34.8	30.4	43.5	-13.1
12	152.14	36.2	30.2	43.5	-13.3
13	500.00	35.6	32.5	46.0	-13.5
14	153.54	35.4	29.9	43.5	-13.6
15	250.00	33.5	32.3	46.0	-13.7
16	157.19	35.2	29.6	43.5	-13.9

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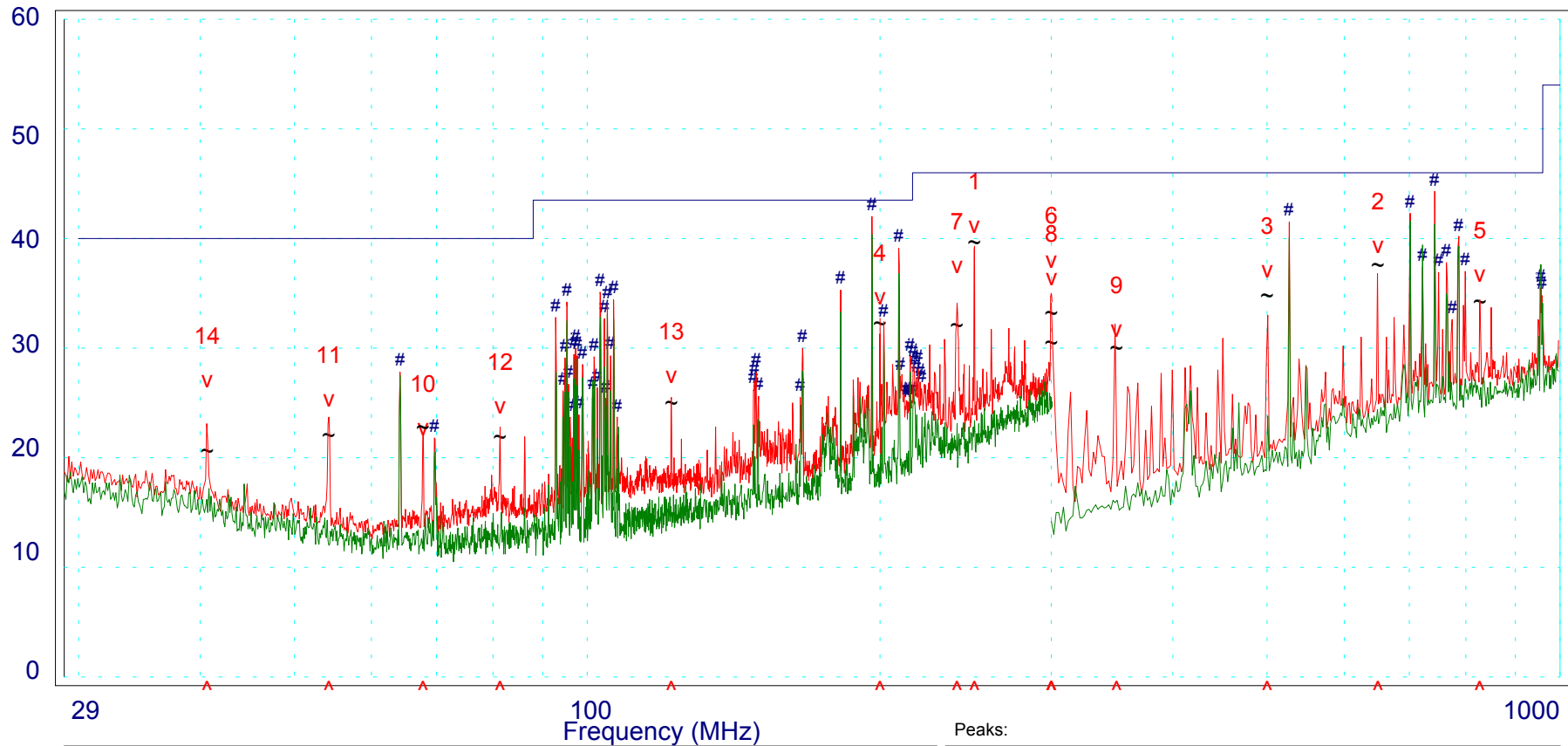
FCC Class B
Radiated Emissions (dBuV/m)
= Ambient

Job No:T70719

C:\plotting\PCF\T70719_4.PCF

Test Date: 12-07-07

GRAPH No. 8



Magellan
Document Tray Reader
Model: MDOC R-2505

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:A0690208 c1:C0200308 c2:NONE p:A0961007 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	250.00	40.4	38.8	46.0	-7.2
2	650.00	38.6	36.8	46.0	-9.2
3	499.99	36.4	34.0	46.0	-12.0
4	200.00	33.9	31.5	43.5	-12.1
5	827.15	36.0	33.4	46.0	-12.6
6	300.00	37.3	32.4	46.0	-13.6
7	239.98	36.7	31.3	46.0	-14.7
8	300.08	35.6	29.7	46.0	-16.3
9	350.01	30.9	29.2	46.0	-16.8
10	67.79	21.9	21.9	40.0	-18.1
11	54.24	24.6	21.2	40.0	-18.8
12	81.36	23.9	21.0	40.0	-19.0
13	122.04	26.7	24.2	43.5	-19.4
14	40.67	26.3	19.8	40.0	-20.2