

APPENDIX G
GRAPHS OF EMI MEASUREMENT



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APPENDIX G**GRAPHS OF EMI MEASUREMENTS****CONDUCTED EMI**

Graph 1	Active Line	0.45-30 MHz
Graph 2	Neutral Line	0.45 - 30 MHz

RADIATED EMI

Graph 3:	Vertical Polarisation	30 - 1000 MHz
Graph 4:	Horizontal Polarisation	30 - 1000 MHz

RADIATED EMI

Graph 5:	0.009 - 30 MHz (LOOP ANTENNA)
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OUT of BAND EMISSIONS at the CARRIER SIGNAL FREQUENCY

Graph 6:	(13.52 – 13.6 MHz)
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FCC Class B

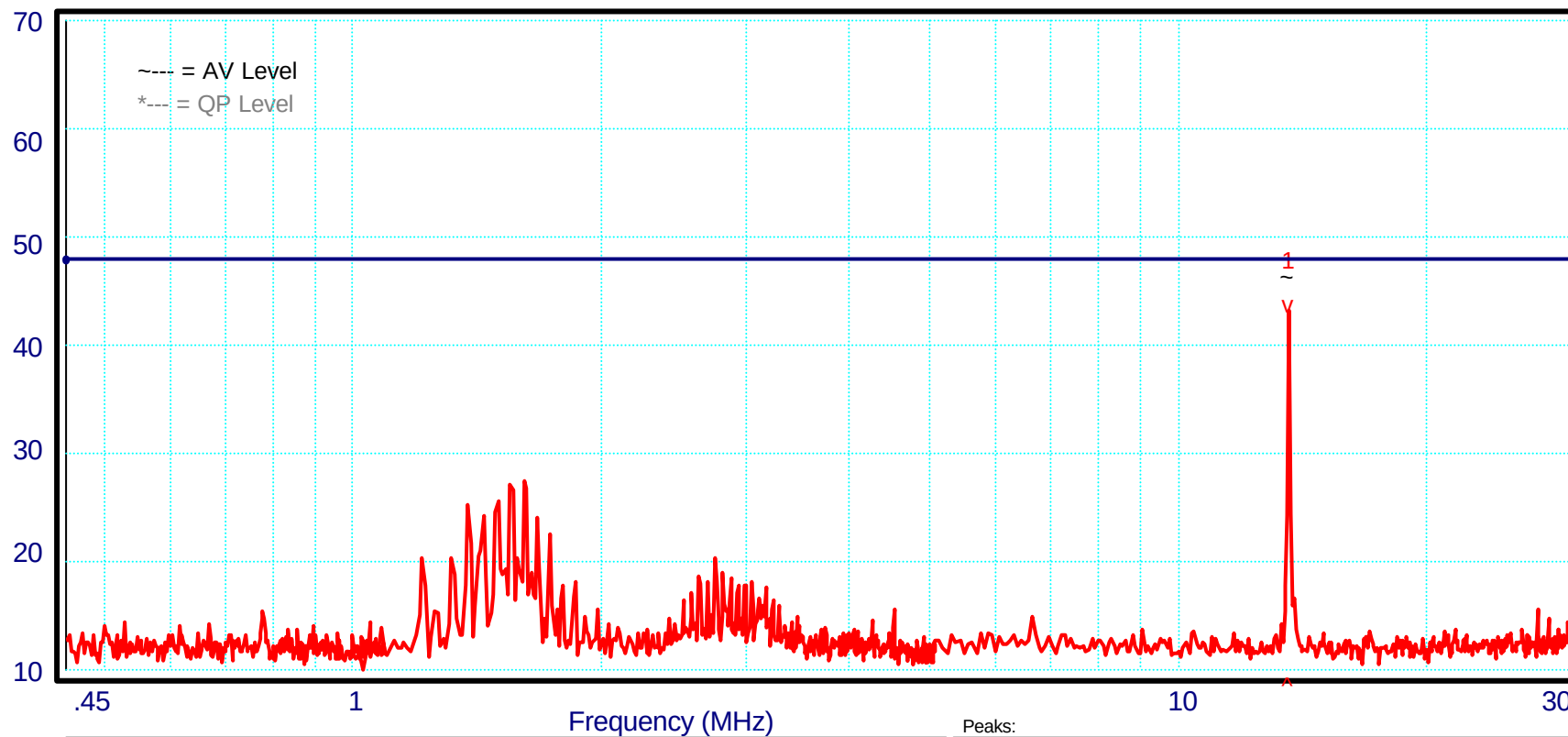
Job No:M020411

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Conducted Emissions dBuV Peak

Test Date: 21/05/02

GRAPH No. 1

TAGSYS
Smarto L122 EAS System

Conducted Emissions - Active Line

Limits:
FCC_BQP FCC CLASS B CONDUCTED QP LIMITSLegend:
___ Active LineVer 5.5 Build 27
conducted lab 1
t:L0220403 c1:C1520902 c2:C1570702 p:NONE a:L0170902
Site ID: Melb Room#1
Test Officer: Chieu HuynhSource:
M020411c 8 9 10Melbourne- 57 Assembly Drv Tullamarine, 3043, Vic, Australia Ph+(613) 9335 3333 Fax+(613) 9335 9260
Sydney---- 16,6 Gladstone Rd Castle Hill, 2154, NSW, Australia Ph+(612) 9899 4599 Fax+(612) 9899 4019

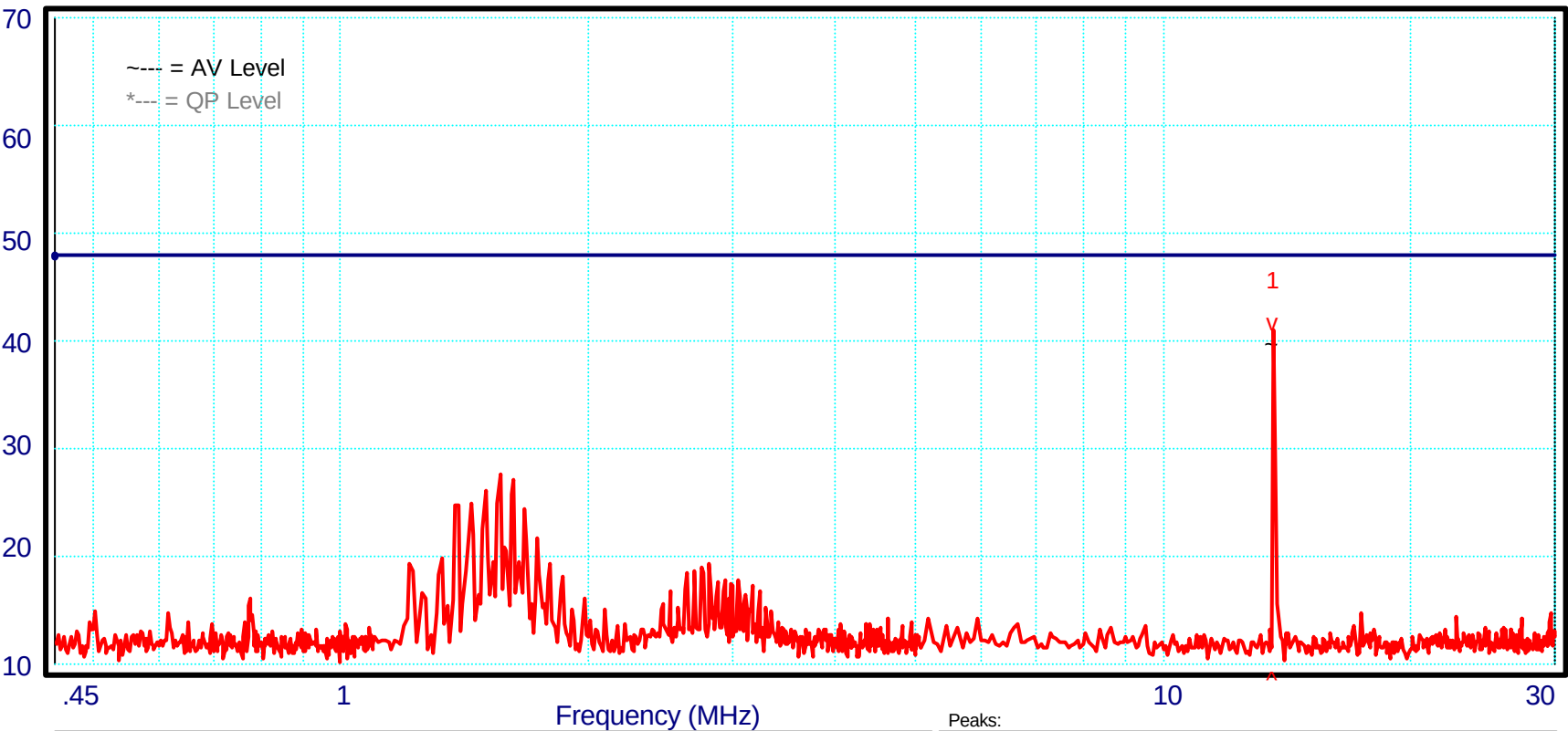
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AS/NZS3548 Job No:M020411

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Conducted Emissions dBuV Peak

Test Date: 21/05/02

GRAPH No. 2



TAGSYS
Smarto L122 EAS System

Conducted Emissions - Neutral Line

Limits:
FCC_BQP FCC CLASS B CONDUCTED QP LIMITS

Legend:
___ Neutral Line

Ver 5.5 Build 27
conducted lab 1
t:L0220403 c1:C1520902 c2:C1570702 p:NONE a:L0170902
Site ID: Melb Room#1
Test Officer: Chieu Huynh

Peaks:

No	Freq (MHz)	Peak (dBuV)	Qp Val (dBuV)	FCC_BQP* (dBuV)	dL1 (dB)	Av Val	dL2
1	13.56	41.2	39.2	48.0	-8.8		

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

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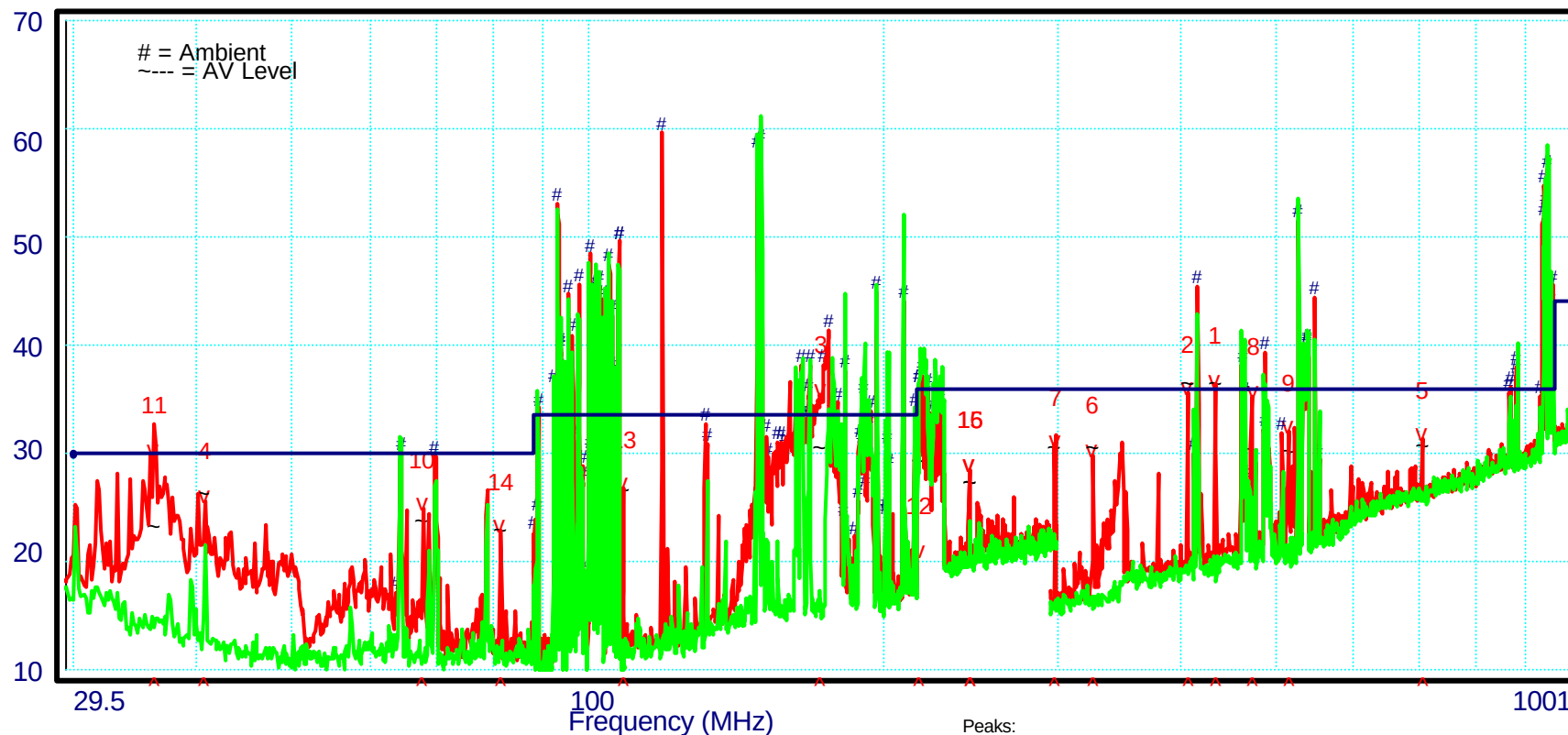
Job No:M020411

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Radiated Emissions dBuV/m Peak

Test Date: 10/05/02

GRAPH No. 3



TAGSYS
Smarto L122 EAS System

Radiated Emissions - Vertical Polarity

Limits:
FCCB-10 FCC CLASS B RAD 10M LIMITS

Legend:
— Vertical Emissions

Ver 5.5 Build 27
radiated emissions site 1 lerderberg
t:A1370702_10M c1:C1310103 c2:NONE p:NONE a:NONE

Site ID: Lerderberg OATS1
Test Officer: Kevin Hansen

Source:
m020411r 1 2 5 6 7 14 15

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

Peaks:

No	Freq (MHz)	Peak (dBuV/m)	Qp Val	FCCB-10 (dBuV/m)	dL1 (dB)
1	433.91	36.4	36.0	36.0	.0
2	406.79	35.6	35.9	36.0	-.1
3	171.99	35.5	30.0	33.5	-3.5
4	40.67	25.6	25.9	30.0	-4.1
5	705.10	31.3	30.2	36.0	-5.8
6	325.43	29.9	30.1	36.0	-5.9
7	298.32	30.7	30.0	36.0	-6.0
8	474.59	35.4	29.9	36.0	-6.1
9	515.28	32.1	29.7	36.0	-6.3
10	67.80	24.9	23.2	30.0	-6.8
11	36.17	30.0	22.8	30.0	-7.2
12	216.96	20.6	28.8	36.0	-7.2
13	108.47	26.8	26.1	33.5	-7.4
14	81.36	22.9	22.5	30.0	-7.5
15	244.08	28.5	26.9	36.0	-9.1
16	14.08	28.5	26.9	36.0	-9.1

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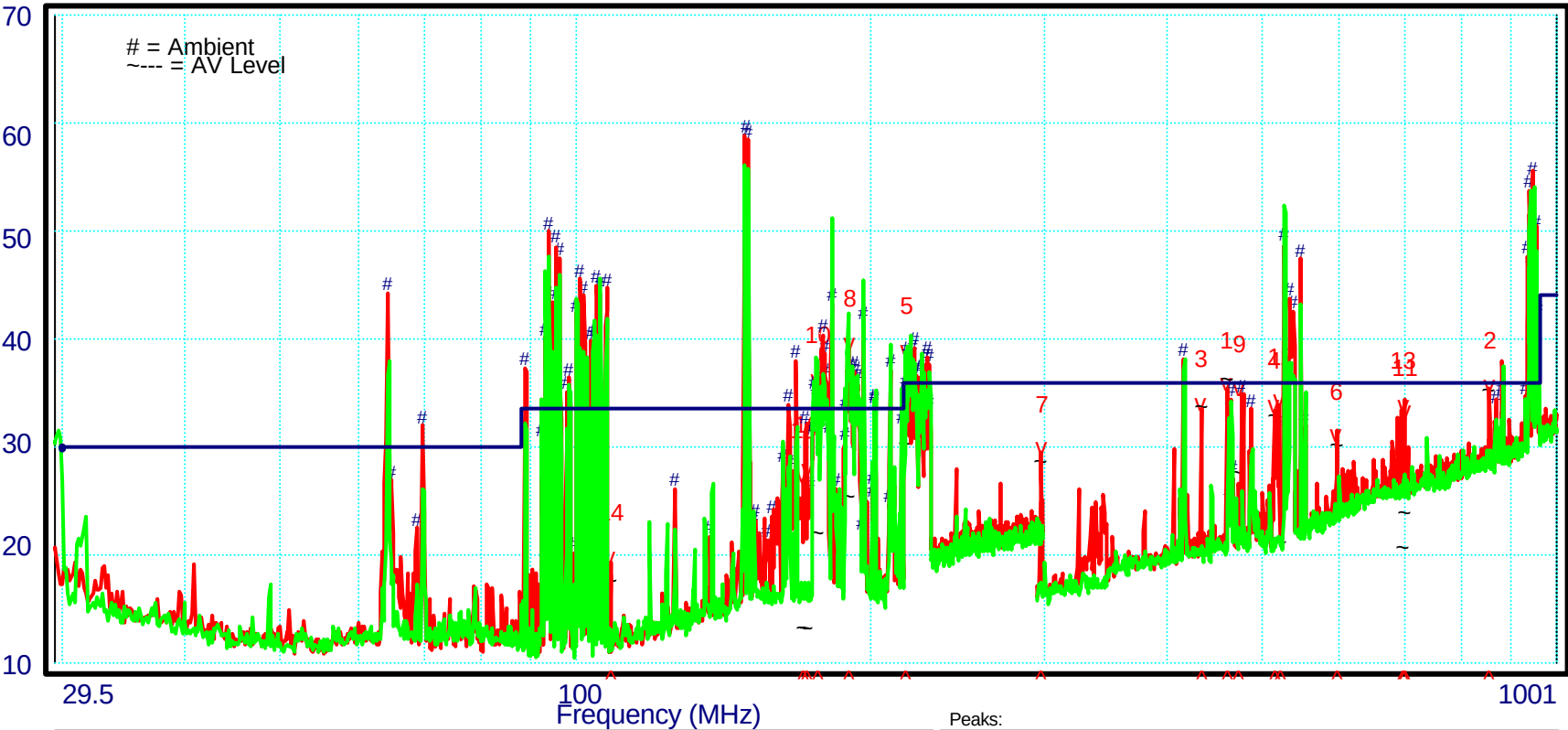
Job No:M020411

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Radiated Emissions dBuV/m Peak

Test Date: 10/05/02

GRAPH No. 4



TAGSYS Smarto L122 EAS System		Peaks:			
Radiated Emissions - Horizontal Polarity		No	Freq	Peak	Qp Val
Limits: FCCB-10			(MHz)	(dBuV/m)	FCCB-10
Legend:					(dBuV/m)
FCC CLASS B RAD 10M LIMITS					dL1
					(dB)
Ver 5.5 Build 27		1	461.04	35.4	35.8
radiated emissions site 1 lerderberg		2	854.26	35.3	34.8
t:A1370702_10M c1:C1310103 c2:NONE p:NONE a:NONE		3	433.90	33.7	33.3
Site ID: Lerderberg OATS1		4	515.25	33.4	32.5
Test Officer: Kevin Hansen		5	216.96	38.6	29.9
Source:		6	596.60	30.7	29.7
m020411r 10 11 12 13 16 17 19		7	298.31	29.5	28.2
Melbourne- 57 Assembly Drv Tullamarine, 3043, Vic, Australia Ph+(613) 9335 3333 Fax+(613) 9335 4019		8	189.84	39.2	25.0
Sydney---- 16,6 Gladstone Rd Castle Hill, 2154, NSW, Australia Ph+(612) 9899 4599 Fax+(612) 9899 4019		9	474.59	35.0	27.1
		10	176.28	35.8	21.6
		11	700.55	32.9	23.4
		12	522.79	33.9	20.8
		13	697.62	33.5	20.3
		14	108.47	19.4	17.2
		15	170.33	27.0	12.7
		16	172.05	27.6	12.7
		17			33.5
		18			33.5
		19			33.5

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FCC Class B

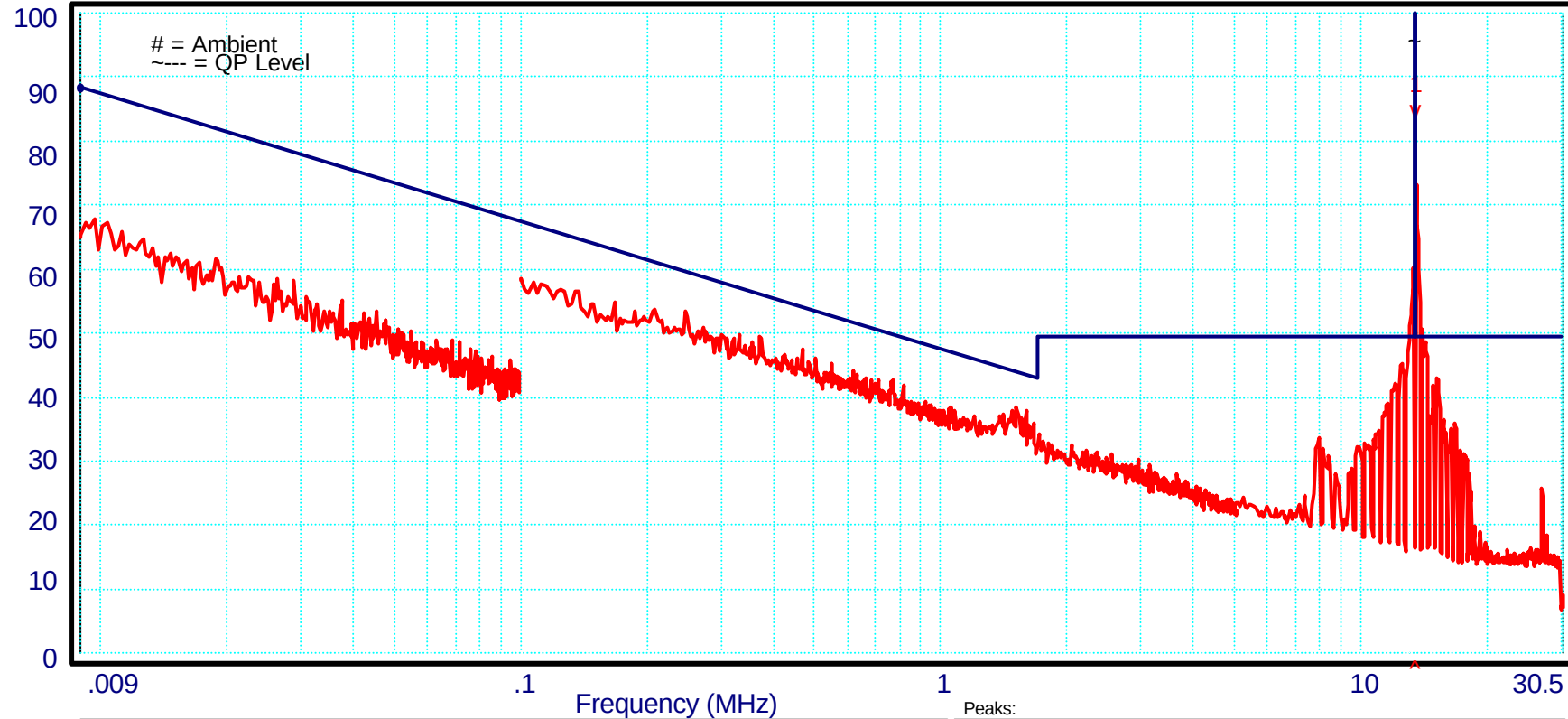
Job No:m011143

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Electric Field Strength dBuV/m Peak

Test Date: 12-12-01

GRAPH No. 5



TAGSYS

Smarto L122 EAS System

Out of band emissions (0.009 - 30 MHz)

Limits:

FCC225SP FCC PART 15.225 3mtr Tx & out of band LMTS FOR 13.5 MHz

Legend:

--- EUT on

Equipment: HP8574B TST 99B
Transducers: 6502_E NOPREAMP
Site ID: Melb Room#1
Test Officer: Chieu Huynh

Source:

Analdata 13 14 15 17

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

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FCC Class B

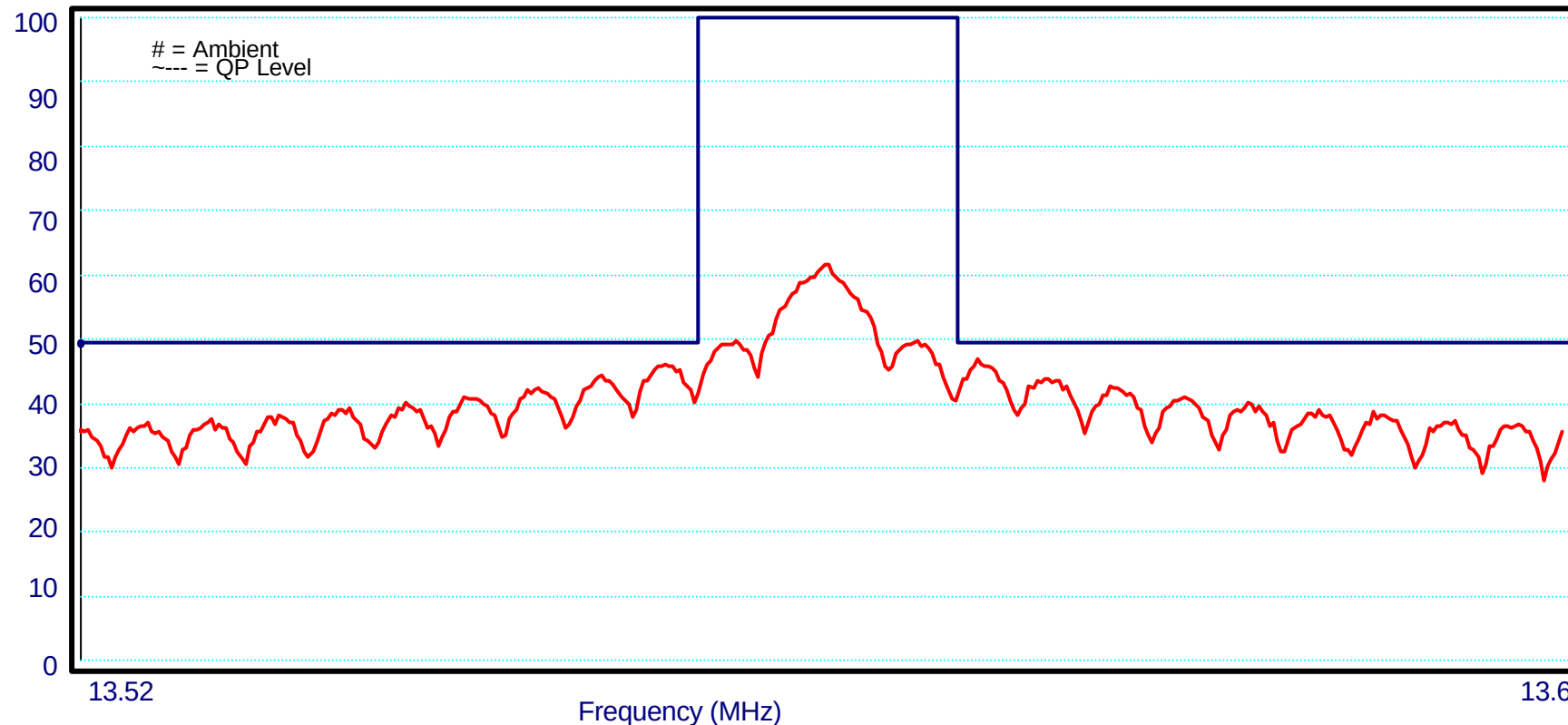
Job No:m011143

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Electric Field Strength dBuV/m Peak

Test Date: 12-12-01

GRAPH No. 6

TAGSYS
Smarto L122 EAS System

Out of band emissions (13.52 - 13.6 MHz)

Limits:
FCC225SP FCC PART 15.225 3mtr Tx & out of band LMTS FOR 13.5 MHz

Legend:

___ EUT on

Equipment: HP8574B TST 99B
Transducers: 6502_E NOPREAMP
Site ID: Melb Room#1
Test Officer: Chieu Huynh

Source:

Analdata 19

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