

ANNEX 7 TO TEST REPORT # EMCC-010133AF, 2002-07-19

AC POWER LINE CONDUCTED EMISSIONS PLOTS

EQUIPMENT UNDER TEST:

Trade Name:	ILR [®]
Model:	i-Port3
Serial No:	143
Equipment Category:	902-928 MHz Frequency Hopping Spread Spectrum Transceiver
Manufacturer:	IDENrEC SOLUTIONS AG
Address:	Millenium Park 2 A-6890 Lustenau Austria
Phone:	+43-5577-87 387-0
Fax:	+43-5577-87 387-15
E-mail:	r.gantner@identecsolutions.at

RELEVANT STANDARD: 47 CFR Part 15.247

CONTENTS

Page

1	RX/TX Mode, Line L1	2
2	RX/TX Mode; Line N	3
3	RX Mode; Line L1	4
4	RX Mode; Line N	5
5	TX Test Mode (Hopping); Line L1	6
6	TX Test Mode (Hopping); Line N	7
7	AC Adapter Emissions (Without Load); Line L1	8
8	Ambient Emissions; Line L1	9
9	Transducer Check	10

TEST OF IDENTEC SOLUTIONS ILR® TRANSCEIVER MODEL I-PORT3 TO 47 CFR PART 15.247

1 RX/TX MODE, LINE L1

EMCC DR.RASEK CONDUCTED EMISSIONS TEST

17. Jul 02 12:43

EUT: i-Port3
Manuf: identec solutions
Op Cond: process running (reading tag)
Operator: Doering
Test Spec: FCC Part 15.207
Comment: Line L1
with AC Adapter HUP24-12B2 (powered with 115V / 60 Hz)

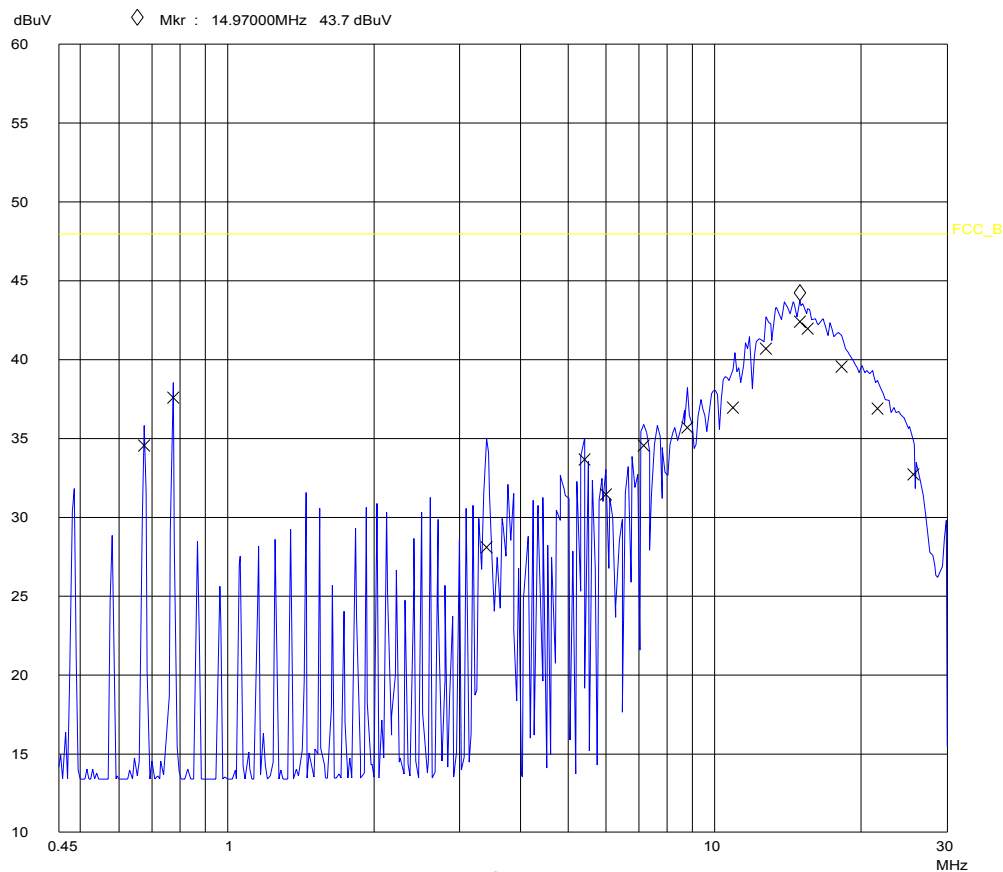
Scan Settings (1 Range)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
450k	30M	5k	10k	PK	100ms	AUTO	LN OFF	30dB

Final Measurement: x QP

Meas Time: 1 s
Subranges: 25
Acc Margin: 15dB

Transducer No.	Start	Stop	Name
1	10k	30M	LIMITER



TEST OF IDENTEC SOLUTIONS ILR® TRANSCEIVER MODEL I-PORT3 TO 47 CFR PART 15.247

2 RX/TX MODE; LINE N

EMCC DR.RASEK CONDUCTED EMISSIONS TEST

17. Jul 02 12:21

EUT: i-Port3
Manuf: identec solutions
Op Cond: process running (reading tag)
Operator: Doering
Test Spec: FCC Part 15.207
Comment: Line N
with AC Adapter HUP24-12B2 (powered with 115V / 60 Hz)

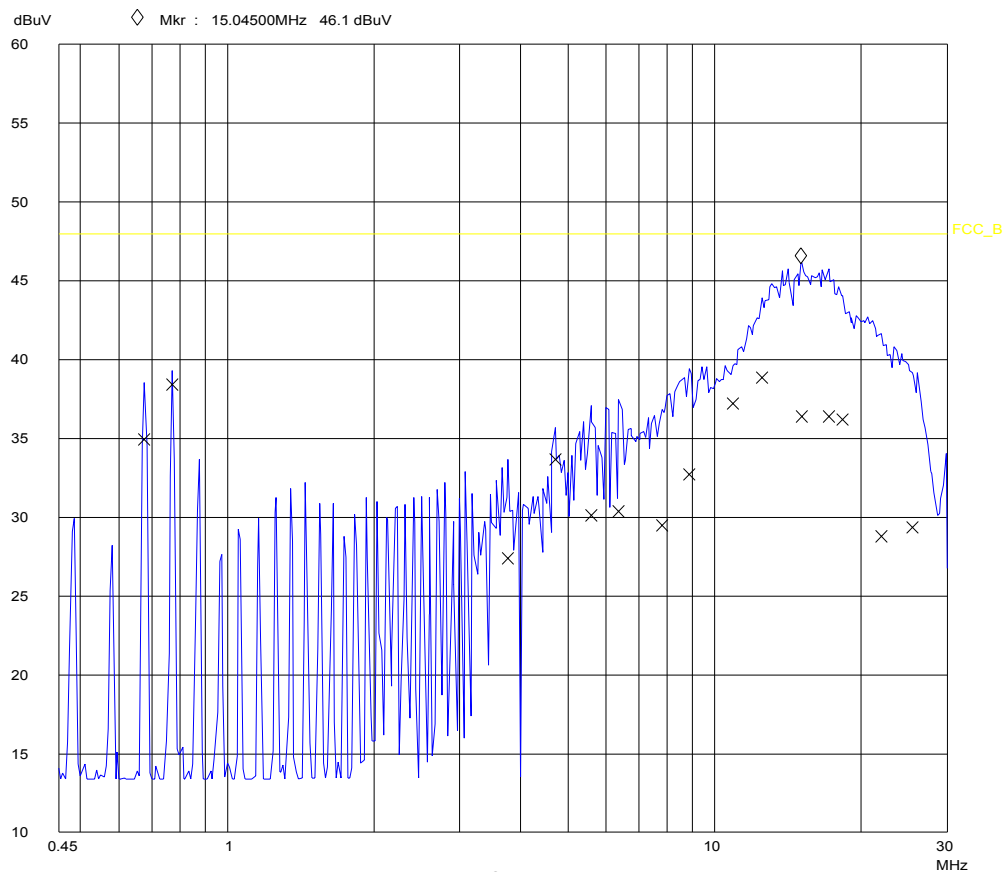
Scan Settings (1 Range)

Frequencies				Receiver Settings			
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp
450k	30M	5k	10k	PK	100ms	AUTO	LN OFF

Final Measurement: x QP

Meas Time: 1 s
Subranges: 25
Acc Margin: 15dB

Transducer No.	Start	Stop	Name
1	10k	30M	LIMITER



TEST OF IDENTEC SOLUTIONS ILR® TRANSCEIVER MODEL I-PORT3 TO 47 CFR PART 15.247

3 RX MODE; LINE L1

EMCC DR.RASEK CONDUCTED EMISSIONS TEST

17. Jul 02 13:32

EUT: i-Port3
Manuf: identec solutions
Op Cond: receiving
Operator: Doering
Test Spec: FCC Part 15.107
Comment: Line L1
with AC Adapter HUP24-12B2 (powered with 115V / 60 Hz)

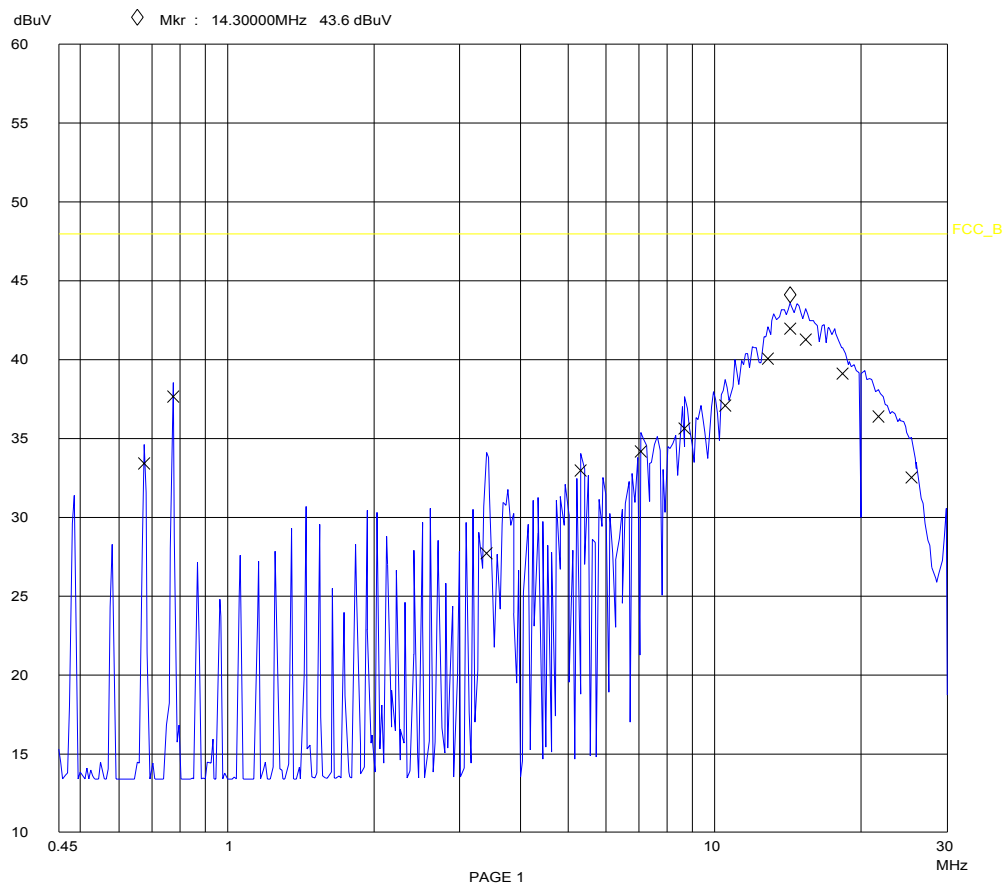
Scan Settings (1 Range)

Frequencies				Receiver Settings			
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp OpRge
450k	30M	5k	10k	PK	100ms	AUTO	LN OFF 30dB

Final Measurement: x QP

Meas Time: 1 s
Subranges: 25
Acc Margin: 15dB

Transducer No.	Start	Stop	Name
1	10k	30M	LIMITER



TEST OF IDENTEC SOLUTIONS ILR® TRANSCEIVER MODEL I-PORT3 TO 47 CFR PART 15.247

4 RX MODE; LINE N

EMCC DR.RASEK CONDUCTED EMISSIONS TEST

17. Jul 02 13:46

EUT: i-Port3
Manuf: identec solutions
Op Cond: receiving
Operator: Doering
Test Spec: FCC Part 15.107
Comment: Line N
with AC Adapter HUP24-12B2 (powered with 115V / 60 Hz)

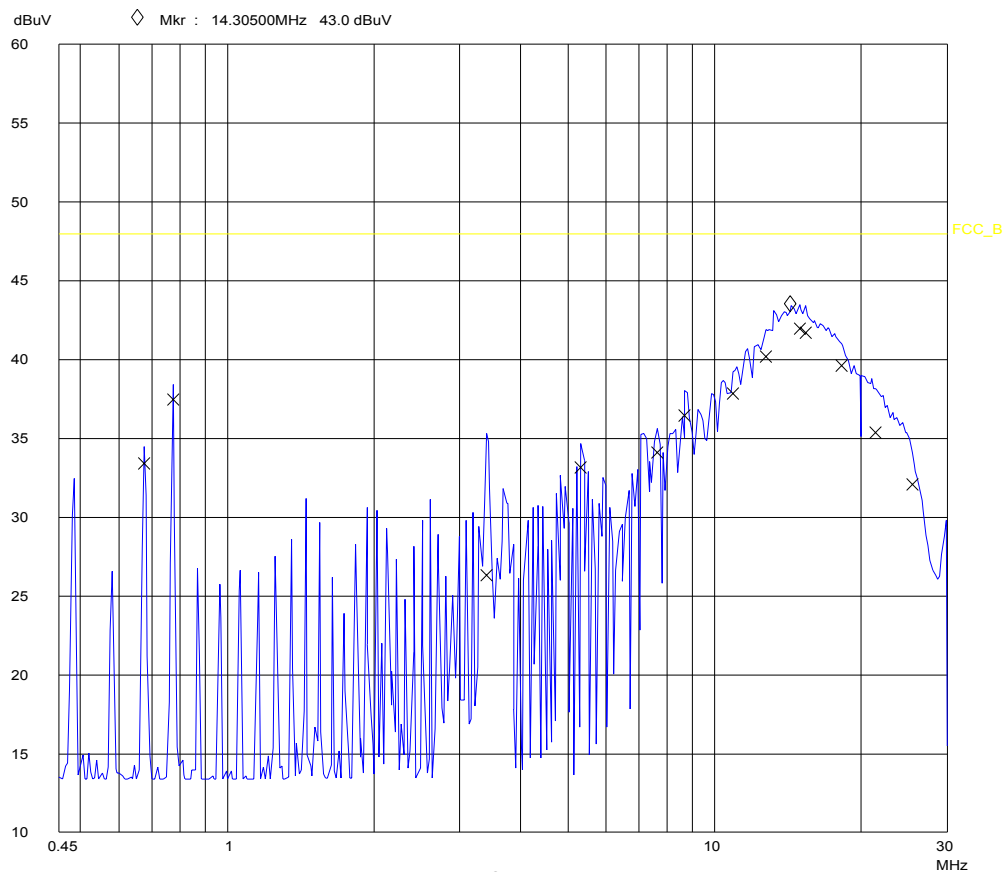
Scan Settings (1 Range)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
450k	30M	5k	10k	PK	100ms	AUTO	LN OFF	30dB

Final Measurement: x QP

Meas Time: 1 s
Subranges: 25
Acc Margin: 15dB

Transducer No.	Start	Stop	Name
1	10k	30M	LIMITER



TEST OF IDENTEC SOLUTIONS ILR® TRANSCEIVER MODEL I-PORT3 TO 47 CFR PART 15.247

5 TX TEST MODE (HOPPING); LINE L1

EMCC DR.RASEK CONDUCTED EMISSIONS TEST

17. Jul 02 13:59

EUT: i-Port3
Manuf: identec solutions
Op Cond: TEST MODE (hopping); ext. host disconn.
Operator: Doering
Test Spec: FCC Part 15.207
Comment: Line L1
with AC Adapter HUP24-12B2 (powered with 115V / 60 Hz)

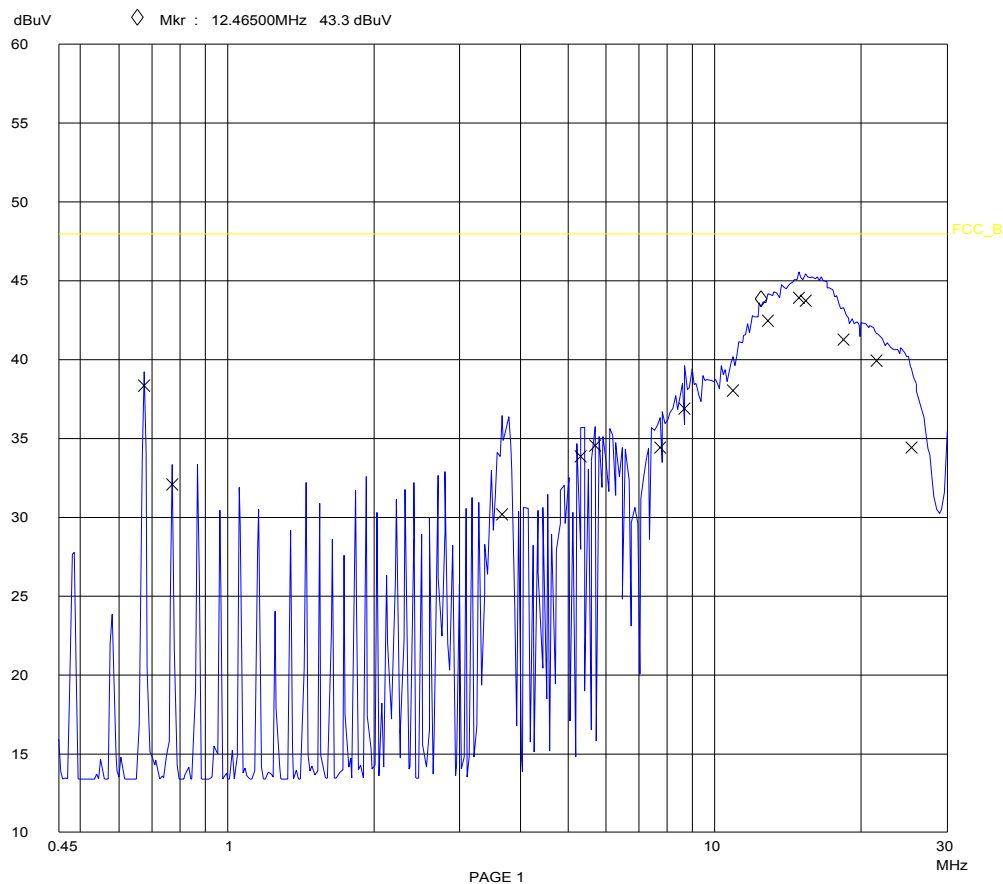
Scan Settings (1 Range)

Frequencies				Receiver Settings			
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp OpRge
450k	30M	5k	10k	PK	100ms	AUTO	LN OFF 30dB

Final Measurement: x QP

Meas Time: 1 s
Subranges: 25
Acc Margin: 15dB

Transducer No.	Start	Stop	Name
1	10k	30M	LIMITER



TEST OF IDENTEC SOLUTIONS ILR® TRANSCEIVER MODEL I-PORT3 TO 47 CFR PART 15.247

6 TX TEST MODE (HOPPING); LINE N

EMCC DR.RASEK CONDUCTED EMISSIONS TEST

17. Jul 02 14:36

EUT: i-Port3
Manuf: identec solutions
Op Cond: TEST MODE (hopping); ext. host disconn.
Operator: Doering
Test Spec: FCC Part 15.207
Comment: Line N
with AC Adapter HUP14-12B2 (powered with 115V / 60 Hz)

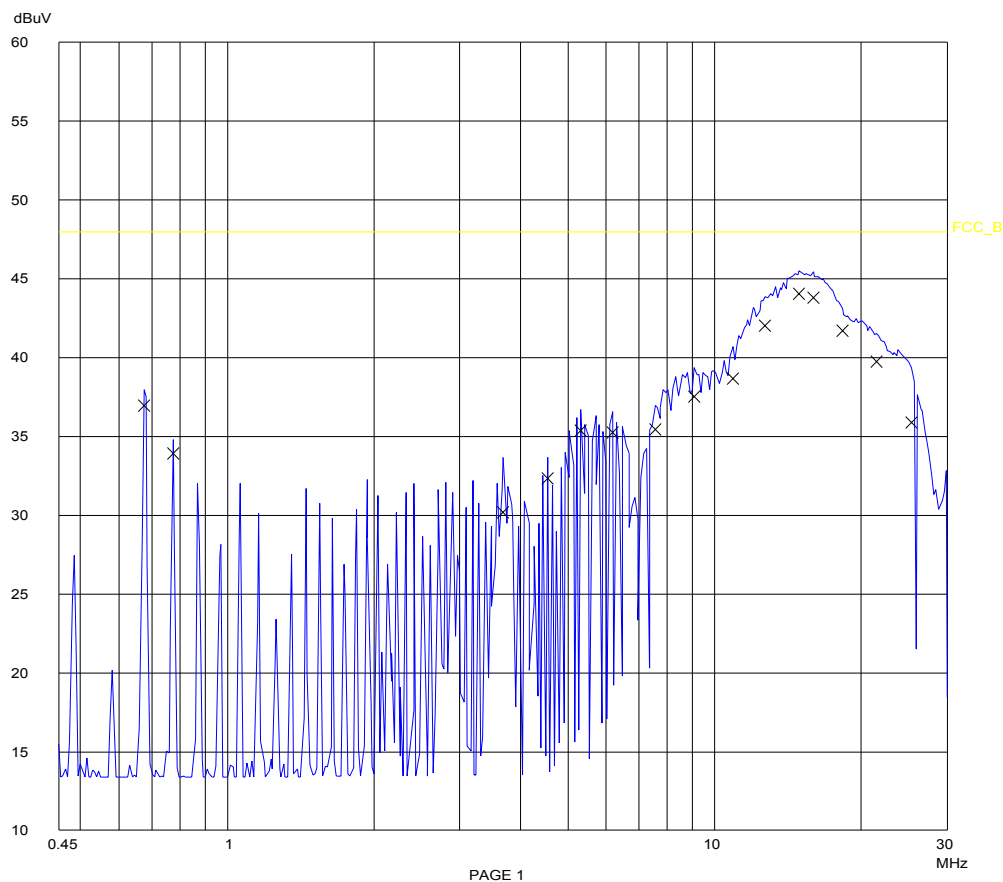
Scan Settings (1 Range)

----- Frequencies ----- Receiver Settings -----
Start Stop Step IF BW Detector M-Time Atten Preamp OpRge
450k 30M 5k 10k PK 100ms AUTO LN OFF 30dB

Final Measurement: x QP

Meas Time: 1 s
Subranges: 25
Acc Margin: 15dB

Transducer No. Start Stop Name
1 10k 30M LIMITER



TEST OF IDENTEC SOLUTIONS ILR[®] TRANSCEIVER MODEL I-PORT3 TO 47 CFR PART 15.247

7 AC ADAPTER EMISSIONS (WITHOUT LOAD); LINE L1

EMCC DR.RASEK CONDUCTED EMISSIONS TEST

17. Jul 02 15:24

EUT: i-Port3
Manuf: identec solutions
Op Cond: EUT off (+Line disconnected)
Operator: Doering
Test Spec: FCC Part 15.107
Comment: Line L1; AC Adapter emissions
with AC Adapter HUP24-12B2 (powered with 115V / 60 Hz)

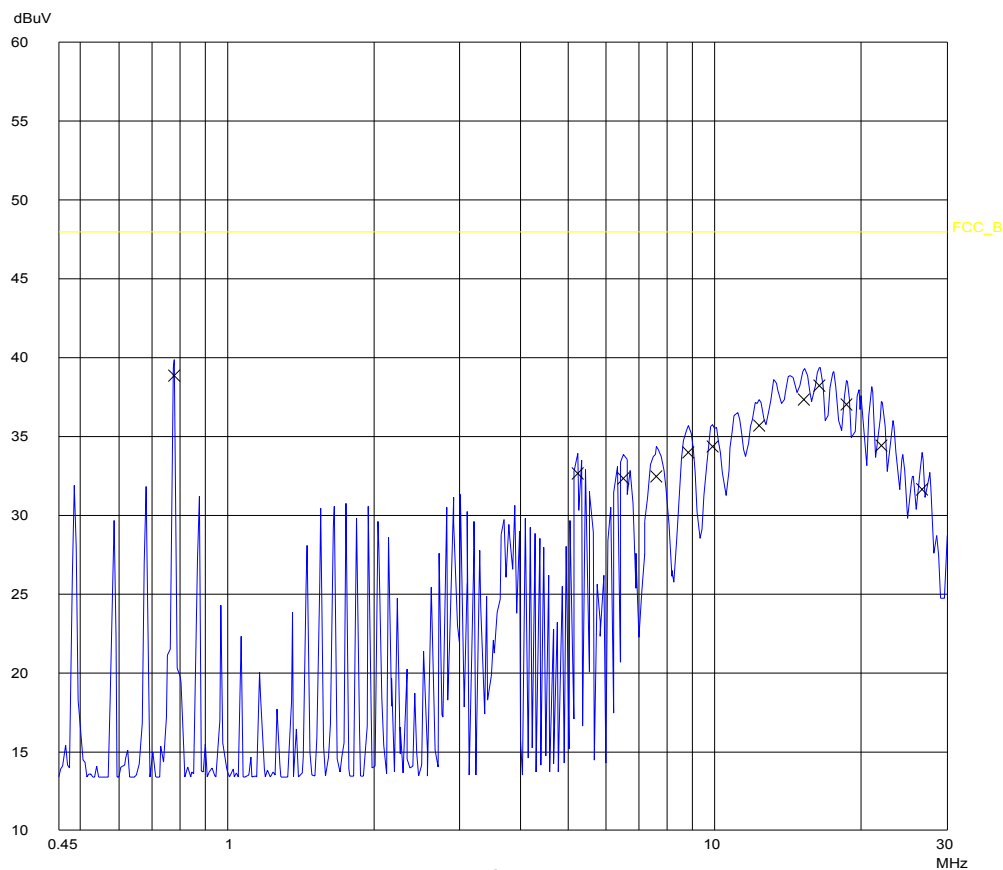
Scan Settings (1 Range)

Frequencies				Receiver Settings			
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp
450k	30M	5k	10k	PK	100ms	AUTO	LN OFF

Final Measurement: x QP

Meas Time: 1 s
Subranges: 25
Acc Margin: 15dB

Transducer No.	Start	Stop	Name
1	10k	30M	LIMITER



TEST OF IDENTEC SOLUTIONS ILR® TRANSCEIVER MODEL I-PORT3 TO 47 CFR PART 15.247

8 AMBIENT EMISSIONS; LINE L1

EMCC DR.RASEK CONDUCTED EMISSIONS TEST

17. Jul 02 15:43

EUT: i-Port3
Manuf: identec solutions
Op Cond: Ambient Noise (60 Hz generator)
Operator: Doering
Test Spec: FCC Part 15.107
Comment: Line L1
LFP6

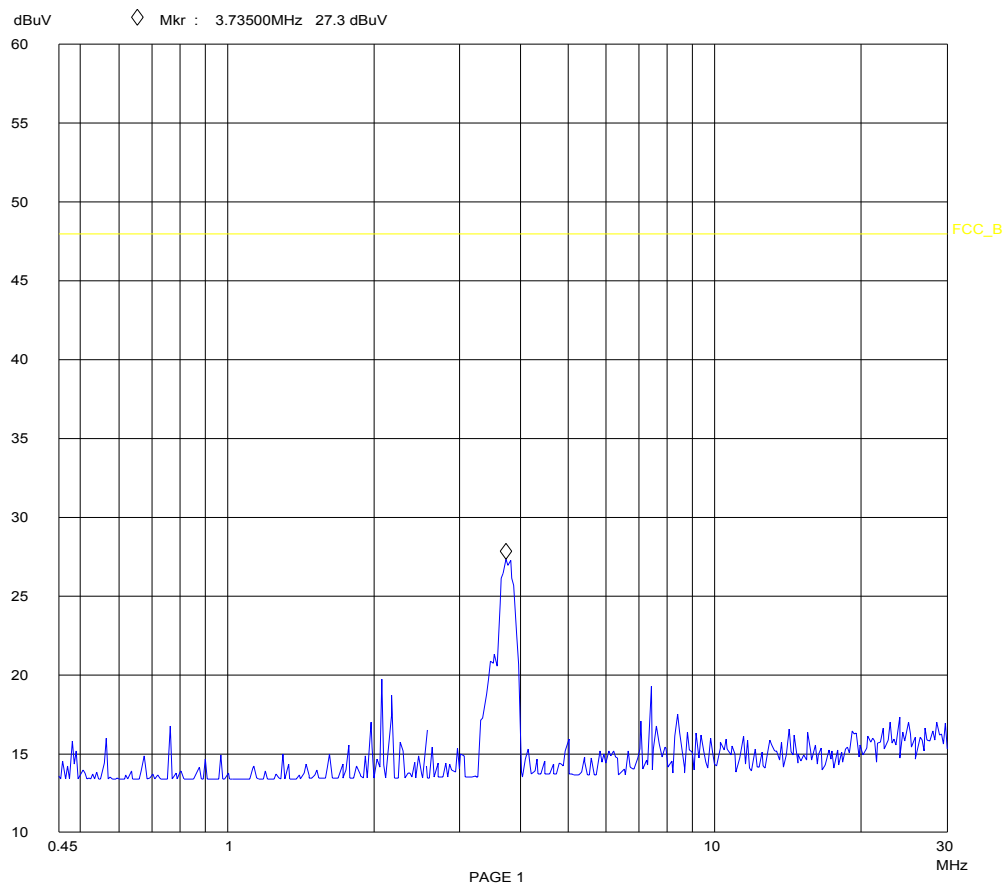
Scan Settings (1 Range)

Frequencies				Receiver Settings			
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp
450k	30M	5k	10k	PK	100ms	AUTO	LN OFF

Final Measurement: x QP

Meas Time: 1 s
Subranges: 25
Acc Margin: 15dB

Transducer No.	Start	Stop	Name
1	10k	30M	LIMITER



TEST OF IDENTEC SOLUTIONS ILR® TRANSCEIVER MODEL I-PORT3 TO 47 CFR PART 15.247

9 TRANSDUCER CHECK

EMCC DR.RASEK CONDUCTED EMISSIONS TEST

17. Jul 02 16:07

EUT: i-Port3
 Manuf: identec solutions
 Op Cond: check transducer + cable
 Operator: Doering
 Test Spec: FCC Part 15.107
 Comment: ESS 843513/012; Limiter 844.165/033

Scan Settings (1 Range)

Frequencies			Receiver Settings				
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp OpRge
450k	30M	5k	10k	PK	1ms	AUTO	LN OFF 30dB

Final Measurement: x QP

Meas Time: 1 s
 Subranges: 25
 Acc Margin: 15dB

Transducer No.	Start	Stop	Name
1	10k	30M	LIMITER

