

4.7 Operation in Restricted Bands

The EUT is a digital swept frequency hopping transmitter. The EUT hops on discrete frequencies. The discrete frequencies that can be transmitted by the EUT are as follows:

- Pulsed Frequency Table 1 (Firmware Version 9/22/06)

Center frequency 8.2MHz +/- 300KHz

Value CT_8200_300[] = {8500, 8460, 8420, 8390, 8340, 8300, 8260, 8220,
8180, 8140, 8100, 8060, 8020, 7980, 7940, 7900};

Center frequency 8.6MHz +/- 300KHz

Value CT_8600_300[] = {8900, 8860, 8820, 8780, 8740, 8700, 8660, 8620,
8580, 8540, 8500, 8460, 8420, 8390, 8340, 8300};

Center frequency 9.0MHz +/- 300KHz

Value CT_9000_300[] = {9300, 9260, 9220, 9180, 9140, 9100, 9060, 9020,
8980, 8940, 8900, 8860, 8820, 8780, 8740, 8700};

Center frequency 9.2MHz +/- 300KHz

Value CT_9200_300[] = {9500, 9460, 9420, 9380, 9340, 9300, 9260, 9220,
9180, 9140, 9100, 9060, 9020, 8980, 8940, 8900};

Center frequency 9.5MHz +/- 300KHz

Value CT_9500_300[] = {9800, 9760, 9720, 9680, 9640, 9600, 9560, 9520,
9480, 9440, 9400, 9360, 9320, 9280, 9240, 9200};

Multi tag with bins 0-7 center frequency 9.2MHz and bins 8-16 center frequency 8.2MHz each range +/- 300KHz

Value CTMult_9200_8200_300[] = {9500, 9404, 9329, 9243, 9157, 9071, 8986, 8900,
8500, 8414, 8329, 8243, 8157, 8071, 7986, 7900};

- Pulsed Frequency Table 2 (Firmware Version 10/13/06)

Center frequency 8.2MHz +/- 410KHz

Value CT_8200_300[] = {8610, 8555, 8500, 8446, 8391, 8337, 8282, 8227,
8173, 8118, 8063, 8009, 7954, 7899, 7845, 7790};

Center frequency 8.6MHz +/- 430KHz

Value CT_8600_300[] = {9030, 8973, 8915, 8858, 8801, 8743, 8686, 8629,
8571, 8514, 8457, 8399, 8342, 8285, 8227, 8170};

Center frequency 9.0MHz +/- 450KHz

Value CT_9000_300[] = {9450, 9390, 9330, 9270, 9210, 9150, 9090, 9030,
8970, 8910, 8850, 8790, 8730, 8670, 8610, 8550};

Center frequency 9.2MHz +/- 460KHz

Value CT_9200_300[] = {9660, 9599, 9537, 9476, 9415, 9353, 9292, 9231,
9169, 9108, 9047, 8985, 8924, 8863, 8801, 8740};

Center frequency 9.5MHz +/- 480KHz

Value CT_9500_300[] = {9980, 9916, 9852, 9788, 9724, 9660, 9596, 9532,
9468, 9404, 9340, 9276, 9212, 9148, 9084, 9020};

Multi tag with bins 0-7 center frequency 9.2MHz and bins 8-16 center frequency 8.2MHz each range +/- 300KHz

Value CTMult_9200_8200_300[] = {9500, 9404, 9329, 9243, 9157, 9071, 8986, 8900,
8500, 8414, 8329, 8243, 8157, 8071, 7986, 7900};

The restricted frequency bands (per FCC Part 15 Clause 15.205) in the operating frequency band of the EUT are as follows:

8.291 – 8.294 MHz
8.362 – 8.366 MHz
8.37625 – 8.38675 MHz
8.41425 – 8.41475 MHz

The transmitter is not capable of hopping into, or operating, in the restricted frequency bands and therefore complies with the restriction.

5 TEST CONDITIONS AND RESULTS

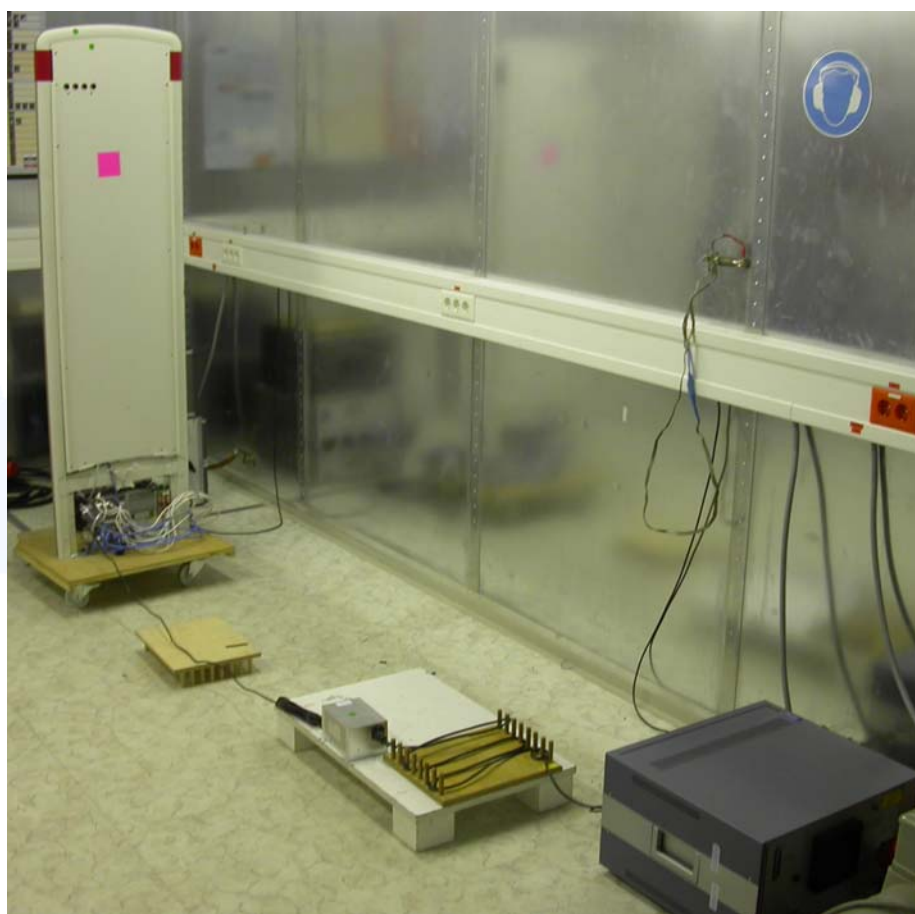
5.1 Conducted emissions

For test instruments and accessories used see section 6 Part A 4.

5.1.1 Description of the test location

Test location: Shielded Room S2

5.1.2 Photo documentation of the test set-up



5.1.3 Description of Measurement

The final level, expressed in dB μ V, is arrived at by taking the reading directly from the EMI receiver. This level is compared directly to the FCC Limit or to the CISPR limit.

To convert between dB μ V and μ V, the following conversions apply:

$$\text{dB}\mu\text{V} = 20(\log \mu\text{V})$$

$$\mu\text{V} = \text{Inverse log}(\text{dB}\mu\text{V}/20)$$

Conducted emissions on the 50 Hz and/or 60 Hz power interface of the EuT are measured in the frequency range of 150 kHz to 30 MHz. The measurements are performed using a receiver, which has CISPR characteristic bandwidth and quasi-peak detection and a Line Impedance Stabilization Network (LISN) with 50 Ω /50 μ H (CISPR 16) characteristics. Table top equipment is placed on a non-conducting table 80 centimeters above the floor and is positioned 40 centimeters from the vertical ground plane (wall) of the screen room. If the minimum limit margin appears to be less than 20 dB with a peak mode measurement, the emissions are remeasured using a tuned receiver with quasi-peak and average detection and recorded on the data sheets.

5.1.4 Test result

Frequency range: 0.15 MHz - 30 MHz

Min. limit margin 1,8 dB at 7.905 MHz

The requirements are **FULFILLED**.

Remarks:

FCC ID: DO4EMRLDUP

Test point N Result: passed
 Operation mode: Continuous sweep mode
 Remarks: Glob Tek PSU / FCC/IC Requirements
 With standard PSU Cable and Ferrite on DC line
 8.2MHz, Tx1 & Tx2: 22
 Date: 18.10.06
 Tested by: Huber Markus

Freq kHz	QP- L dB[µV]	D -Limit QP [dB]	Freq kHz	AV-L dB[µV]	D -Limit AV [dB]
5465	37,1	22,9	5465	33,9	16,1
6610	44,5	15,5	6610	42	8,0
7920	57,1	2,9	6880	40,9	9,1
8420	55,2	4,8	8435	37,3	12,7

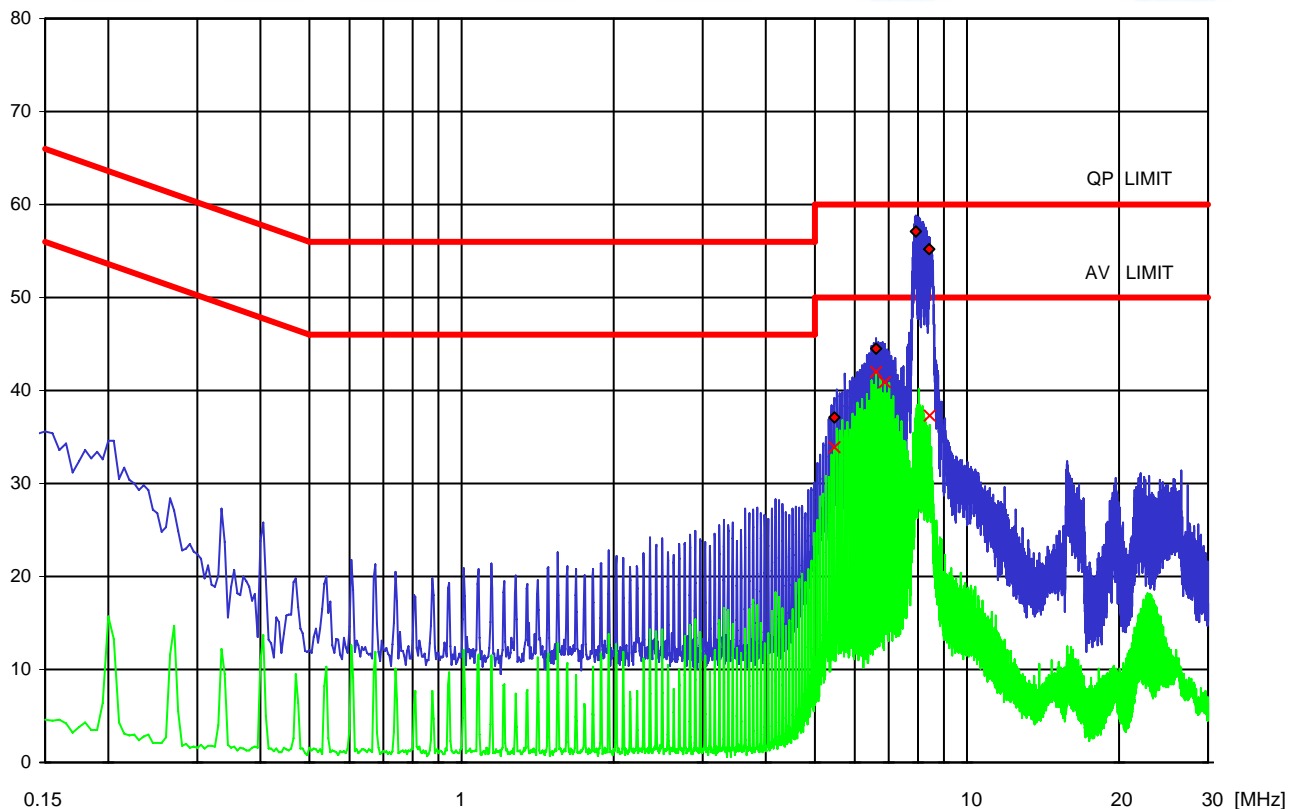
Freq kHz	QP- L dB[µV]	D -Limit QP [dB]	Freq kHz	AV-L dB[µV]	D -Limit AV [dB]

dB [µV]

Legend

PK: AV: —

Detector: QP: ♦ AV: ×



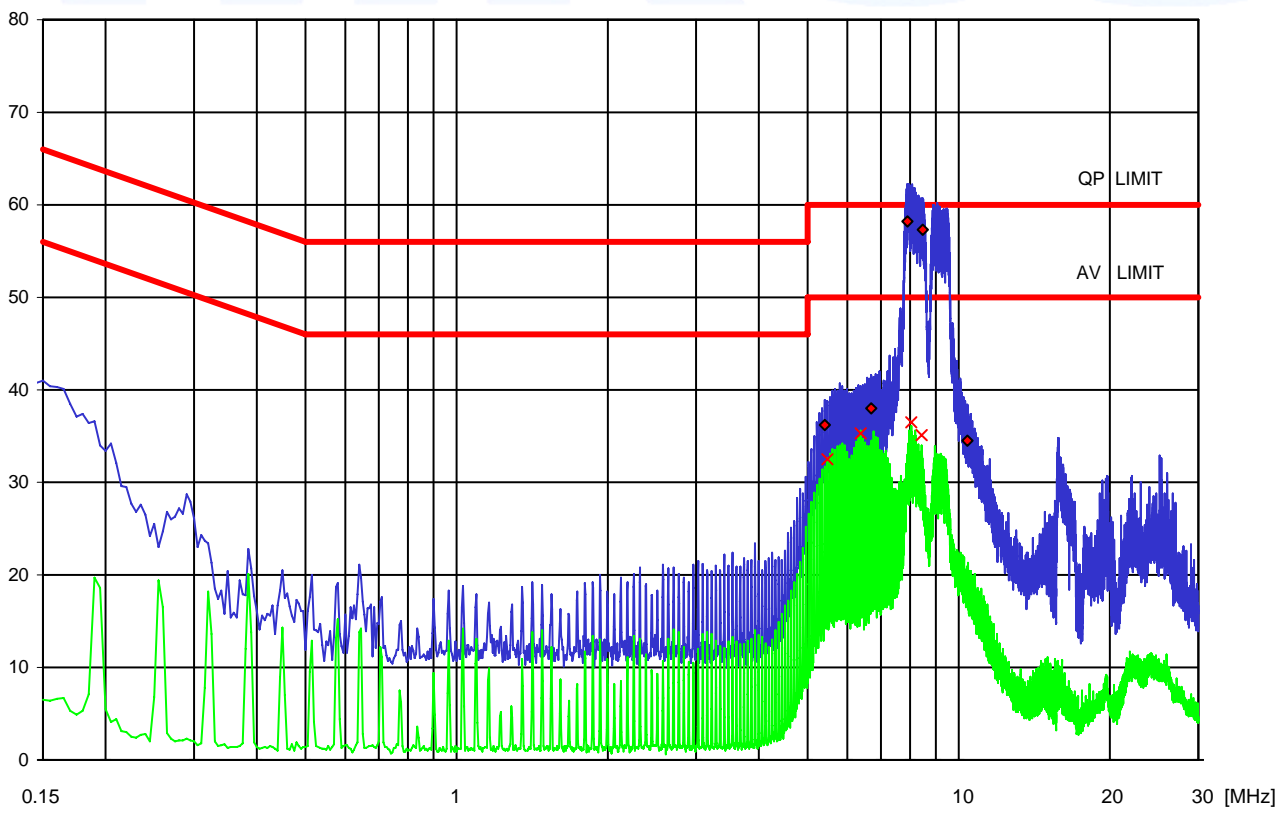
FCC ID: DO4EMRLDUP

Test point: N
 Operation mode: Continuous sweep mode
 Remarks: Glob Tek PSU / FCC/IC Requirements
With standard PSU Cable and Ferrite on DC line
(Multi Tag), Tx1 & Tx2: 22
 Date: 18.10.06
 Tested by: Huber Markus
 Result: passed

Freq kHz	QP- L dB[μ V]	D -Limit QP [dB]	Freq kHz	AV-L dB[μ V]	D -Limit AV [dB]
5410	36,2	23,8	5475	32,5	17,5
6695	38	22,0	6380	35,3	14,7
7905	58,2	1,8	8045	36,5	13,5
8480	57,3	2,7	8435	35,1	14,9
10405	34,5	25,5			

Freq kHz	QP- L dB[μ V]	D -Limit QP [dB]	Freq kHz	AV-L dB[μ V]	D -Limit AV [dB]

dB [μ V] Legend PK: — AV: — Detector: QP: ♦ AV: x



5.2 Field strength of the fundamental wave

For test instruments and accessories used see section 6 Part CPR 1.

5.2.1 Description of the test location

Test location: OATS1

Test distance: 30 metres

5.2.2 Photo documentation of the test set-up



5.2.3 Description of Measurement

The magnetic field strength from the EuT will be measured on an open area test site in the frequency range of 9 kHz to 30 MHz using a tuned receiver and a shielded loop antenna. The set up of the Equipment under test will be in accordance to ANSI C63.4-2003. The antenna was positioned 3, 10 or 30 meters horizontally from the EuT. Measurements have been made in all three orthogonal axes and the shielded loop antenna was rotated to locate the maximum of the emissions. In the case where larger measuring distances are required the results will be extrapolated based on the values measured on the closer distances according to Section 15.31 (f) (2) [2]. The final measurement will be performed with an EMI Receiver set to an average and a peak detector.

The final level, expressed in $\text{dB}\mu\text{V}/\text{m}$, is arrived at by taking the reading from the EMI receiver (Level $\text{dB}\mu\text{V}$) and adding the antenna correction factor and cable loss factor (Factor dB) to it. This result then has to be compared with the relevant FCC limit.

The resolution bandwidth during the measurement was 300 kHz.

5.2.4 Test result

Frequency [MHz]	L: PK [dBµV]	L: AV [dBµV]	L: QP [dBµV]	Correct. [dB]	L: PK [dBµV/m]	L: AV [dBµV/m]	L: QP [dBµV/m]	Limit [dBµV/m]	Delta [dB]
8.2	37.74			20	57.74			60	2.26

Frequency [MHz]	L: PK [dBµV]	L: AV [dBµV]	L: QP [dBµV]	Correct. [dB]	L: PK [dBµV/m]	L: AV [dBµV/m]	L: QP [dBµV/m]	Limit [dBµV/m]	Delta [dB]
8.2 & 9.2	37.70			20	57.70			60	2.3

Limit according to FCC Part 15 Subpart 15.223, 15.35(b)

Frequency (MHz)	Fieldstrength of fundamental – Average Detector	
	(µV/m)	dB (µV/m)
1.705-10.0	100*	40*

Frequency (MHz)	Fieldstrength of fundamental – Peak Detector	
	(µV/m)	dB (µV/m)
1.705-10.0	1000*	60*

* At a test distance of 30 metres

The requirements are **FULFILLED**.

Remarks:

5.3 Spurious emissions (Magnetic field) 9 kHz – 30 MHz

For test instruments and accessories used see section 6 Part SER 1.

5.3.1 Description of the test location

Test location: OATS1

Test distance: 30 metres

5.3.2 Photo documentation of the test set-up



5.3.3 Description of Measurement

The spurious emissions from the EuT will be measured on an open area test site in the frequency range of 9 kHz to 30 MHz using a tuned receiver and a shielded loop antenna. The antenna was positioned 3, 10 or 30 meters horizontally from the EuT. Measurements have been made in all three orthogonal axes and the shielded loop antenna was rotated to locate the maximum of the emissions. In the case where larger measuring distances are required the results will extrapolated based on the values measured on the closer distances according to Section 15.31 (f) (2) [2]. The final measurement will be performed with an EMI Receiver set to Quasi Peak detector except for the frequency bands 9 kHz to 90 kHz and 110 to 490 kHz where an average detector will be used according to Section 15.209 (d) [2].

FCC ID: DO4EMRLDUP

The final level, expressed in dB μ V/m, is arrived at by taking the reading from the EMI receiver (Level dB μ V) and adding the antenna correction factor and cable loss factor (Factor dB) to it. This result then has to be compared with the relevant FCC limit.

The resolution bandwidth during the measurement is as follows:

9 kHz – 150 kHz: ResBW: 200 Hz

150 kHz – 30 MHz: ResBW: 300 kHz

Example:

Frequency (MHz)	Level (dB μ V)	+	Factor (dB)	=	Level (dB μ V/m)	Limit (dB μ V/m)	=	Delta (dB)
1.705	5	+	20	=	25	30	=	5

5.3.4 Test result

Tx Frequency: 8.2 MHz

Frequency [MHz]	L: PK [dB μ V]	L: AV [dB μ V]	L: QP [dB μ V]	Correct. [dB]	L: PK [dB μ V/m]	L: AV [dB μ V/m]	L: QP [dB μ V/m]	Limit [dB μ V/m]	Delta [dB]
0.009 – 30.0				20				40.0	> 20

Tx Frequency: 8.2 & 9.2 MHz (Multi Tag)

Frequency [MHz]	L: PK [dB μ V]	L: AV [dB μ V]	L: QP [dB μ V]	Correct. [dB]	L: PK [dB μ V/m]	L: AV [dB μ V/m]	L: QP [dB μ V/m]	Limit [dB μ V/m]	Delta [dB]
0.009 – 30.0				20				40.0	> 20

Limit according to FCC Part 15 Subpart 15.209(a), Subpart 15.223(a)

Frequency (MHz)	Field strength of spurious emissions		Measurement distance (meters)
	(μ V/m)	dB (μ V/m)	
0.009-0.490	2400/F(kHz)	--	300
0.490-1.705	24000/F (kHz)	--	30
1.705-30.0	100	40	30

The requirements are **FULFILLED**.

Remarks:

5.4 Radiated emissions (electric field) 30 MHz – 1 GHz

For test instruments and accessories used see section 6 Part SER 2.

5.4.1 Description of the test location

Test location: OATS1

Test distance: 3 metres

5.4.2 Photo documentation of the test set-up



5.4.3 Description of Measurement

Spurious emissions from the EuT are measured in the frequency range of 30 MHz to 1000 MHz using a tuned receiver and appropriate broadband linearly polarized antennas. Measurements between 30 MHz and 1000 MHz are made with 120 kHz/6 dB bandwidth and quasi-peak detection. Table top equipment is placed on a 1.0 X 1.5 meter non-conducting table 80 centimetres above the ground plane. Floor standing equipment is placed directly on the turntable/ground plane. The set up of the Equipment under test will be in accordance to ANSI C63.4-2003. The Interface cables that are closer than 40 centimetres to the ground plane are bundled in the center in a serpentine fashion so they are at least 40 centimetres from the ground plane. Cables to simulators/testers (if used in this test) are routed through the center of the table and to a screen room located outside the test area. The antenna was positioned 3, 10 or 30 meters horizontally from the EuT. To locate maximum emissions from the test sample the antenna is varied in height from 1 to 4 meters, measurement scans are made with both horizontal and vertical antenna polarization`s and the EuT are rotated 360 degrees.

The final level, expressed in dBµV/m, is arrived by taking the reading from the EMI receiver (Level dBµV) and adding the correction factors and cable loss factor (Factor dB) to it. This is done automatically in the EMI receiver, where the correction factors are stored. This result then has the FCC or CISPR limit subtracted from it to provide the Delta which gives the tabular data as shown in the data sheets at page.

The resolution bandwidth during the measurement is as follows:
30 MHz – 1000 MHz: ResBW: 120 kHz

Example:

Frequency (MHz)	Level (dBµV)	+	Factor (dB)	=	Level (dBµV/m)	Limit (dBµV/m)	=	Delta (dB)
719	75	+	32.6	=	107.6	110	=	-2.4

5.4.4 Test result

Extract of the critical values:

Tx Frequency: 8.2 MHz

Frequency [MHz]	L: PK [dBµV]	L: AV [dBµV]	L: QP [dBµV]	Correct. [dB]	L: PK [dBµV/m]	L: AV [dBµV/m]	L: QP [dBµV/m]	Limit [dBµV/m]	Delta [dB]
39.68			21.9	15.0			36.9	40.0	-3.1
40.90			19.7	15.0			34.7	40.0	-5.3
47.89			18.1	14.7			32.8	40.0	-7.2
55.55			16.5	14.3			30.8	40.0	-9.2
74.35			25.5	11.6			37.1	40.0	-2.9
115.10			24.9	13.5			38.4	40.0	-5.1

Tx Frequency: 8.2 & 9.2 MHz (Multi Tag)

Frequency [MHz]	L: PK [dBµV]	L: AV [dBµV]	L: QP [dBµV]	Correct. [dB]	L: PK [dBµV/m]	L: AV [dBµV/m]	L: QP [dBµV/m]	Limit [dBµV/m]	Delta [dB]
39.68			16.8	15.0			31.8	40.0	-8.2
42.05			20.1	14.9			35.0	40.0	-5.0
53.37			16.4	14.4			30.8	40.0	-9.2
71.39			22.8	12.0			34.8	40.0	-5.2
72.63			25.3	11.8			37.1	40.0	-2.9
85.02			19.4	10.8			30.2	40.0	-9.8

Limit according to FCC Part 15 Subpart 15.209(a)

Frequency (MHz)	Field strength of spurious emissions		Measurement distance (meters)
	($\mu\text{V/m}$)	dB ($\mu\text{V/m}$)	
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
960-1000	500	54	3

The requirements are **FULFILLED**.

Remarks:

mikes

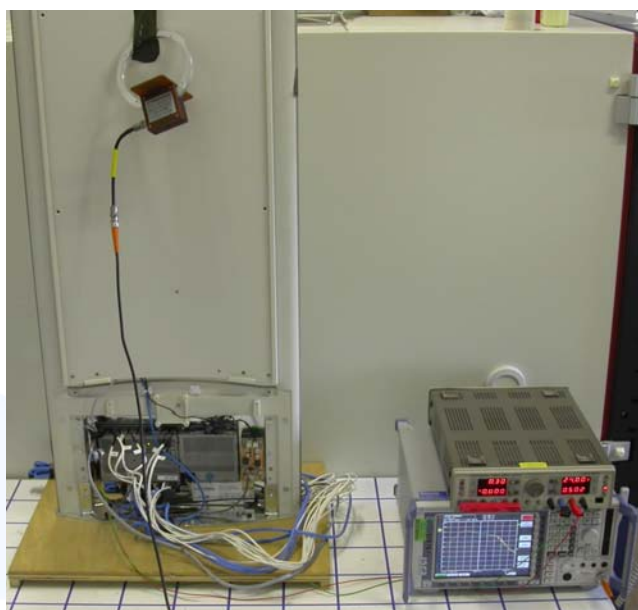
5.5 Emission Bandwidth

For test instruments and accessories used see section 6 Part MB.

5.5.1 Description of the test location

Test location: AREA4

5.5.2 Photo documentation of the test set-up



5.5.3 Test result

Tx Frequency: 8.2 MHz

Fundamental [MHz] See Plot 1	6dB Bandwidth F1	6dB Bandwidth F2	Measured Bandwidth [MHz]
8.2	7.56	8.66	1.10

Tx Frequency: 8.2 & 9.2 MHz (Multi Tag)

Fundamental [MHz] See Plot 2	6dB Bandwidth F1	6dB Bandwidth F2	Measured Bandwidth [MHz]
8.2 & 9.2	7.65	8.62	0.97

5.5.4 Test protocol

Emission Bandwidth
FCC Part 15 Subpart 15.223(a)

Plot 1:

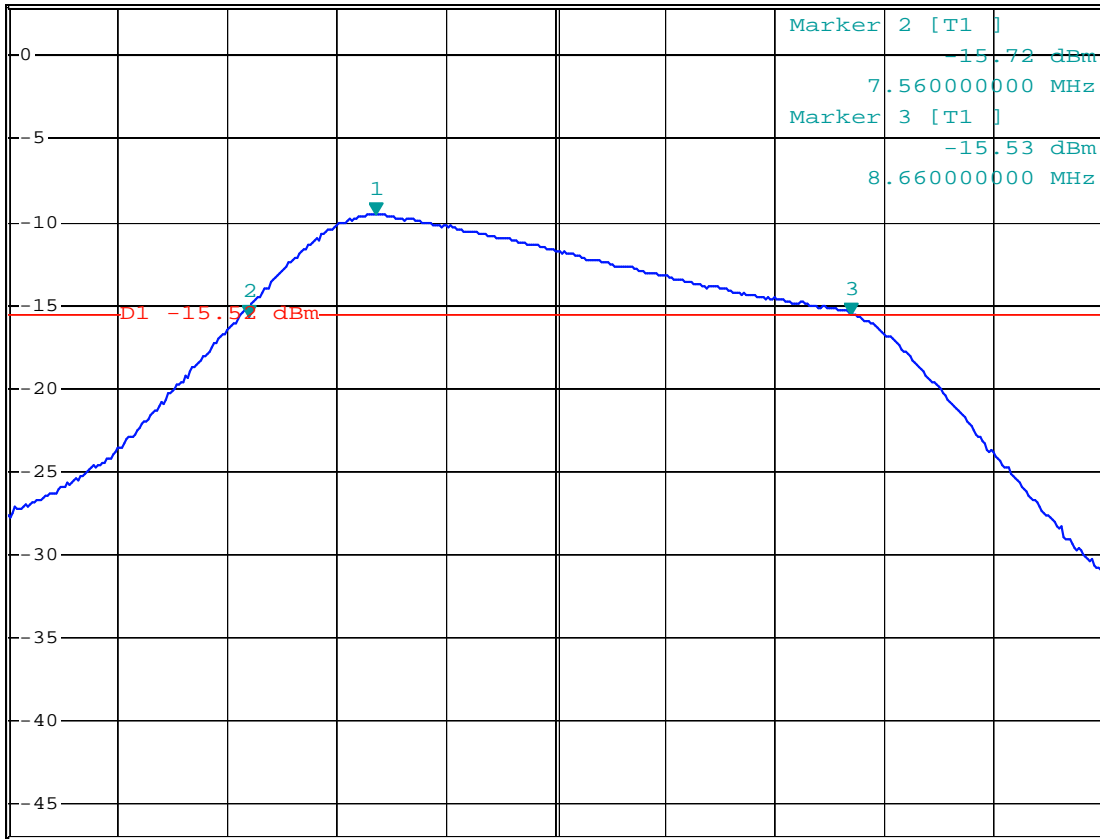


*RBW 300 kHz Marker 1 [T1]
*VBW 300 kHz -9.52 dBm
SWT 2.5 ms 7.792000000 MHz

Ref 3 dBm

Att 40 dB

1 PK
VIEW



Center 8.12 MHz

200 kHz/

Span 2 MHz

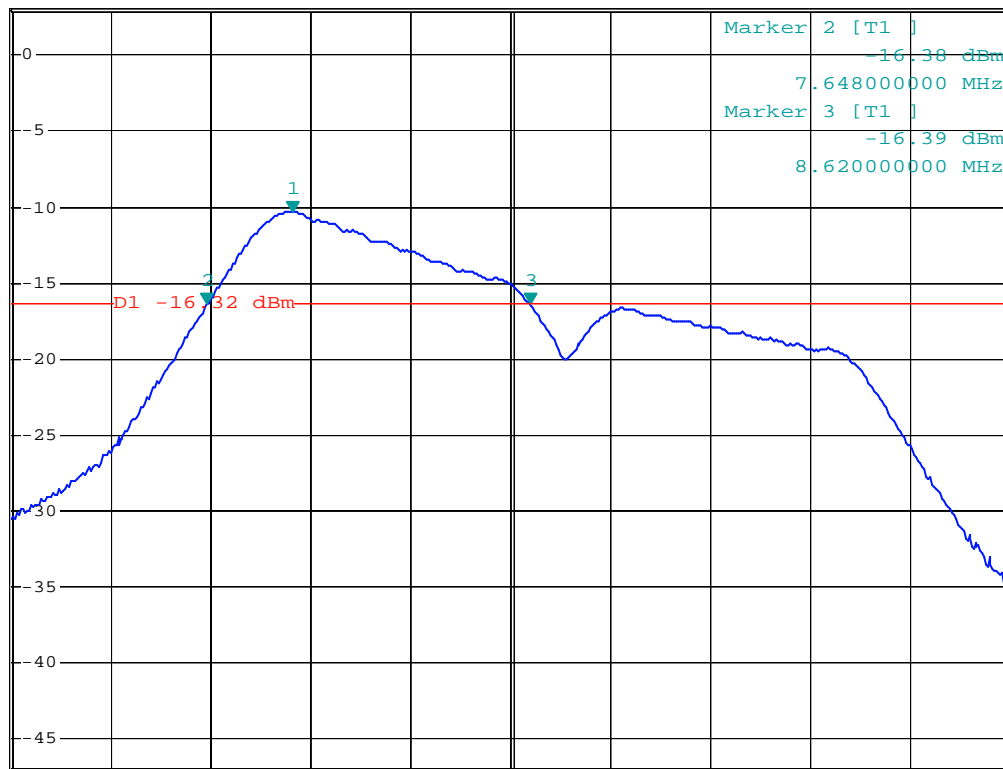
Emission Bandwidth
FCC Part 15 Subpart 15.223(a)

Plot 2:



*RBW 300 kHz Marker 1 [T1]
*VBW 300 kHz -10.32 dBm
Ref 3 dBm Att 40 dB SWT 2.5 ms 7.906000000 MHz

1 PK
VIEW



Center 8.56 MHz 300 kHz/ Span 3 MHz

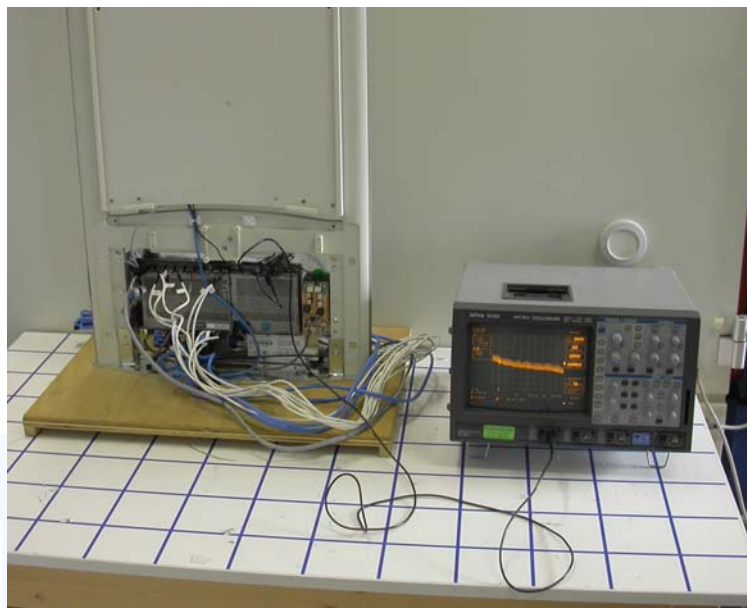
5.6 Correction for Pulse Operation (Duty Cycle)

For test instruments and accessories used see section 6 Part DC.

5.6.1 Description of the test location

Test location: AREA4

5.6.2 Photo documentation of the test set-up



5.6.3 Description of Measurement

The Duty cycle factor, expressed in dB, is arrived by taking the following formula:

$$KE = 20 \log [(t_{iB} * p) / T_w]$$

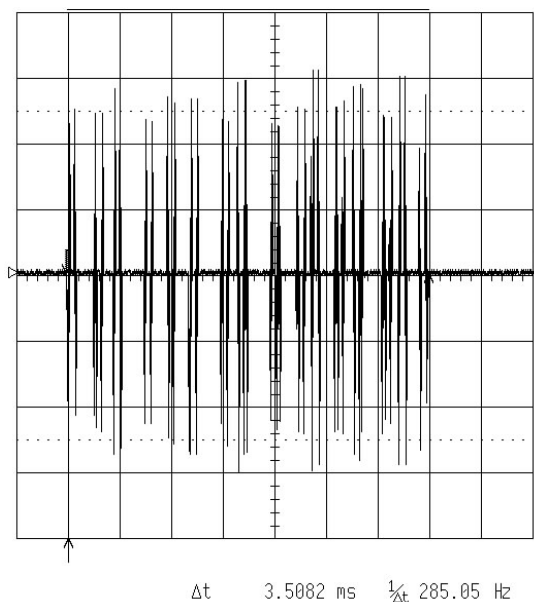
- KE: pulse operation correction factor [dB]
t_{iW} pulse duration for one complete pulse track [msec]
t_{iB} pulse duration for one pulse [µsec]
T_w a period of the pulse track [msec]
p number of pulses in one train

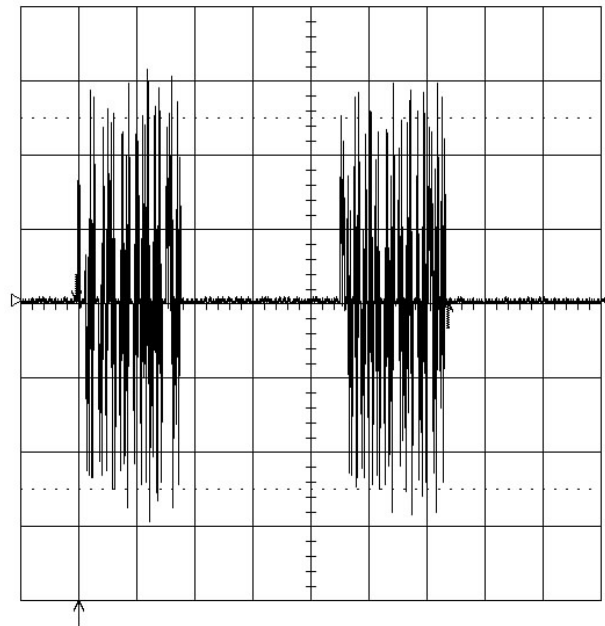
5.6.4 Test result

t_{iw} [msec]	T_w [msec]	t_{ib} [μ sec]	p	KE [dB / %]
3.508	12.800	6.781	64	-29.39 / 3.39

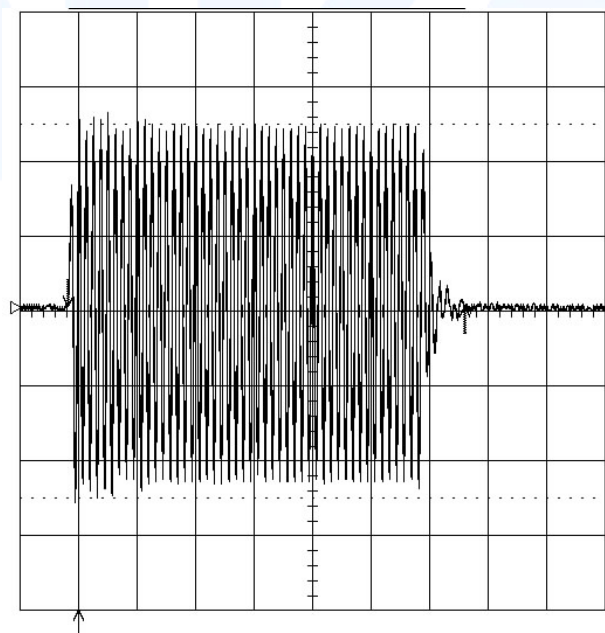
Remarks: For detailed results, please see the test protocol below.

5.6.5 Test protocol





Δt 12.800 ms $\frac{1}{\Delta t}$ 78.125 Hz



Δt 6.781 μ s $\frac{1}{\Delta t}$ 147.47 kHz

6 USED TEST EQUIPMENT AND ACCESSORIES

All test instruments used, in addition to the test accessories, are calibrated and verified regularly.

The calibration intervals and the calibration history will be given out on request.

Test Report No: T31172-00-00HU
 Beginning of Testing: 09 Oktober 2006
 End of Testing: 25 Oktober 2006

Test ID	Model Type	Kind of Equipment	Manufacturer	Equipment No.
A 4	ESHS 30	EMI Test Receiver	Rohde & Schwarz München	02-02/03-05-002
	NNLK 8129	LISN	Schwarzbeck Mess-Elektronik	02-02/20-05-001
	ESH 2 - Z 5	LISN	Rohde & Schwarz München	02-02/20-05-004
	ESH 3 - Z 2	Pulse Limiter	Rohde & Schwarz München	02-02/50-05-001
	N-4000-BNC	RF Cable	mikes-testingpartners gmbh	02-02/50-05-138
	N-1500-N	RF Cable	mikes-testingpartners gmbh	02-02/50-05-140
	SP 103 /3.5-60	Convertor 220V / 110V	mikes-testingpartners gmbh	02-02/50-05-182
CPR 1	FMZB 1516	Magnetic Field Antenna	Schwarzbeck Mess-Elektronik	01-02/24-01-018
	ESCS 30	EMI Test Receiver	Rohde & Schwarz München	02-02/03-05-001
	S10162-B/+11N-50-10-5/+11	RF Cable 33m	Huber + Suhner	02-02/50-05-031
	KK-EF393-21N-16	RF Cable 20m	Huber + Suhner	02-02/50-05-033
	NW-2000-NB	RF Cable	Huber + Suhner	02-02/50-05-113
DC	9350	Storage Oscilloscope	LeCroy Europe GmbH	02-02/13-05-002
MB	FSP 30	Spectrum Analyzer	Rohde & Schwarz München	02-02/11-05-001
SER 1	FMZB 1516	Magnetic Field Antenna	Schwarzbeck Mess-Elektronik	01-02/24-01-018
	ESCS 30	EMI Test Receiver	Rohde & Schwarz München	02-02/03-05-001
	S10162-B/+11N-50-10-5/+11	RF Cable 33m	Huber + Suhner	02-02/50-05-031
	KK-EF393-21N-16	RF Cable 20m	Huber + Suhner	02-02/50-05-033
	NW-2000-NB	RF Cable	Huber + Suhner	02-02/50-05-113
SER 2	ESVS 30	EMI Test Receiver	Rohde & Schwarz München	02-02/03-05-006
	VULB 9168	Trilog-Broadband Antenna	Schwarzbeck Mess-Elektronik	02-02/24-05-005
	S10162-B/+11N-50-10-5/+11	RF Cable 33m	Huber + Suhner	02-02/50-05-031
	KK-EF393-21N-16	RF Cable 20m	Huber + Suhner	02-02/50-05-033
	NW-2000-NB	RF Cable	Huber + Suhner	02-02/50-05-113

7 Constructional dataform for testing

Licence holder:	Checkpoint Systems, Inc.		
Address:	101 Wolf Drive, Thorofare, New Jersey, USA 08086		
Manufacturer:	Checkpoint Systems Dominican Republic		
Address:	Checkpoint Caribbean, Zona Franca Los Alcarrizos, Manzana A. Edif No 1, Apartado Postal No. 182-0, Los Alcarrizos, Santo Domingo, Republica Dominicana		
Type / Model Name:	Short Range Device - Inductive Applications (Electronic Article Surveillance Detection System)		
Product Description:	Emerald PX Electronic Article Surveillance Detection System		
Serial-No.:		Protection class:	

Additional information to the above named model:

Antenna: transmitter:	Type: Loop Antennas (Liberty PX)		
	Length/size: W: 430 mm H: 1450 mm		
receiver:	Type: same as transmitter		
	Length/size: same as transmitter		
Power supply of the transmitter: Type:	nominal voltage:	24	V
	lowest voltage:		V
	highest voltage:		V
	current consumption	2.1	A
	Power supply of the receiver: Type: same as transmitter		
	nominal voltage:		V
	current consumption		A

Ancillary equipment:

Description:	PSU	Type:	Globtek, GT-2S5024D-R	Serial-no.:	
Description:		Type:		Serial-no.:	
Description:		Type:		Serial-no.:	

Extreme temperature range in which the approval test should be performed:

- Category I: General (-20°C to +55°C)
- Category II: Portable (-10°C to +55°C)
- Category III: Equipment for normal indoor use (0°C to +55°C)

Connectable cables:

Name of the cable	Digital	Length/m	shielded	Emerald Ports
DC – Cable (1)	<input type="radio"/> yes <input checked="" type="radio"/> no	5.0	<input checked="" type="radio"/> yes <input type="radio"/> no	J31/J18
IEC 320 Cordset (1)	<input type="radio"/> yes <input checked="" type="radio"/> no	1.83	<input type="radio"/> yes <input checked="" type="radio"/> no	Globtek P/S Inlet
Metal Point Cable (1)	<input checked="" type="radio"/> yes <input type="radio"/> no	2.44	<input checked="" type="radio"/> yes <input type="radio"/> no	J13
Deactivator Interlock cable (3)	<input checked="" type="radio"/> yes <input type="radio"/> no	2.44	<input checked="" type="radio"/> yes <input type="radio"/> no	J6,J7,J11,J54
Pedestal Sync cable (2)	<input checked="" type="radio"/> yes <input type="radio"/> no	2.44	<input checked="" type="radio"/> yes <input type="radio"/> no	J22,J20
Modem cable (1)	<input checked="" type="radio"/> yes <input type="radio"/> no	2.44	<input type="radio"/> yes <input checked="" type="radio"/> no	J51
Badge Board (1)	<input checked="" type="radio"/> yes <input type="radio"/> no	0.67	<input type="radio"/> yes <input checked="" type="radio"/> no	J48

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External Relay (2)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	2.44	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	J44,J45
Inter-Pedestal Network Comm. (2)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	2.44	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	J10,J14
People Counter Sensor Cable (1)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	integral	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	J32
External Counter/Alarm Lights (1)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	2.44	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	J41
Pedestal Alarm Lights (1)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	integral	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	J4
Wi-Fi bridge dc power cable (1)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	0.67	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	J18/J31
Alarm/External Alarm Group Cable (1)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	2.44	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	J9
Wi-Fi bridge to Emerald Ethernet (1)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	0.75	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	J7
Sonalert Alarm cable (1)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Integral	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	J54

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Type designation: PSU, Globtek GT-2S5024D-R			
Name and type designation of individual units comprising the radio equipment: PSU, Globtek GT-2S5024D-R			
Type of equipment:			
<input type="checkbox"/> Radiotelephone equipment	<input type="checkbox"/> Remote-control equipment	<input type="checkbox"/> Radiomaritime equipment	<input type="checkbox"/> LPD
<input type="checkbox"/> One-way radiotelephone equipment	<input checked="" type="checkbox"/> Inductive loop system	<input type="checkbox"/> Inland waterways equipment	<input type="checkbox"/> RLAN
<input type="checkbox"/> Personal paging system	<input type="checkbox"/> Radio-relay system	<input type="checkbox"/> Radionavigation equipm.	<input type="checkbox"/>
<input type="checkbox"/> Satellite earth station	<input type="checkbox"/> CB radiotelephone equipment	<input type="checkbox"/> Antenna	<input type="checkbox"/>
<input type="checkbox"/> Data transmission equipment	<input type="checkbox"/> Movement detector	<input type="checkbox"/> Aeronautical equipment	<input type="checkbox"/>
Technical characteristics:			
	Transmitter-receiver	Transmitter	Receiver
Frequency range	7.4 – 10 MHz		
Maximum no. of channels	1		
Channel spacing			
Class of emission (type of modulation)			
Maximum RF output power			
Maximum effective radiated power (ERP)	60 dBµV/m at 30m		
Output power variable	Yes		
Channel switching frequency range			
Method of frequency generation	<input checked="" type="checkbox"/> Synthesizer	<input type="checkbox"/> Crystal	<input type="checkbox"/> Other
Frequency generation TX			
Frequency generation RX			
IF	1st IF	2nd IF	3rd IF
Integral selective calling			
Audio-frequency interface level at external data socket			
Modes of operation	<input type="checkbox"/> Duplex mode	<input type="checkbox"/> Semi-duplex mode	<input checked="" type="checkbox"/> Simplex mode
Power source	<input checked="" type="checkbox"/> Mains	<input type="checkbox"/> Vehicle-regulated	<input type="checkbox"/> Integral
Antenna socket	<input type="checkbox"/> BNC <input type="checkbox"/> M <input type="checkbox"/> None	<input type="checkbox"/> TNC <input type="checkbox"/> UHF <input checked="" type="checkbox"/> Terminal Block	<input type="checkbox"/> N <input type="checkbox"/> Adapter <input type="checkbox"/>
Test specifications:			
FCC 47 CFR Part 15 (2006-08)		IC RSS 210 v.6 (2005-09)	

Declarations:

- We declare that the above information are correct and the named model was supplied with the maximum configuration to the accredited test laboratory.

Thorpae, M.J. ,date 11/3/06 Greg E Sleet
place of issue Seal and signature of applicant

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