

Straubing, August 13, 2001

TEST - REPORT

No. 50530-10431

for

ML-639 (390 MHz)

Remote Control Transmitter

Applicant: ELDAT GmbH

Purpose of testing: To show compliance with

FCC Code of Federal Regulations,
Part 15 Subpart C, Section §15.231

Industry Canada Radio Standards
Specification RSS-210 Issue 2,
Section 6.1 (Category I Equipment)

Note:

The test data of this report relate only to the individual item which has been tested. This report shall not be reproduced except in full extent without the written approval of the testing laboratory.

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10.1.	Test Results	Fehler! Textmarke nicht definiert.

1. Administrative Data

Equipment Under Test (EUT): ML-639 (390 MHz)
Serial number(s): 01
Type of equipment: Remote Control Transmitter
Parts/accessories: ---
FCC-ID: ---

Applicant:
(full address) ELDAT GmbH
Im Gewerbepark 14
15711 Zeesen
Germany

Contract identification: Order no. 204612
Contact person: Mr. Eidam
Manufacturer: ELDAT GmbH

Receipt of EUT: April 6, 2001
Date of test: April 19 to 27, 2001
Note: ---

Responsible for testing: Johann Roidt
Responsible for test report: Johann Roidt (cj)

2. Identification of Test Laboratory

Test Laboratory:
(full address): Senton GmbH EMI/EMC Test Center
Aeussere Fruehlingstrasse 45
D-94315 Straubing
Germany

Contact person: Mr. Johann Roidt
Communication: Telephone (+49) 0 94 21 / 55 22-0
Fax (+49) 0 94 21 / 55 22-99
eMail: Office@senton.de

FCC registration number: 90926
Industry Canada file number: IC 3050

3. Summary of Test Results

The tested sample are in compliance with the requirements set forth in the

Code of Regulations Part 15 Subpart C, Section §15.231 (intentional radiators) of the Federal Communication Commission (FCC)

and the

Radio Standards Specification RSS-210 Issue 2, Section 6.1 for Low Power Licence-Exempt Radiocommunication Devices of Industry Canada.



Johann Roidt
Technical Manager

4. Operation Mode of EUT

- transmitting continuously
- with battery supply 9.0 V DC

5. Configuration of EUT and Peripheral Devices

Configuration of cables of EUT

Not applicable

Configuration of peripheral devices connected to EUT

Not applicable

6. Measuring Methods

6.1. Bandwidth of Emission(FCC §15.231.c / RSS-210 Section 6.1.1.c)

The Bandwidth of Emission is measured with a spectrum analyzer connected to measuring antenna (radiated measurement) or test fixture while EUT is operating in transmit mode with modulation at the appropriate center frequency. To increase received signal level distance to EUT is reduced (appropriate level offset is included).

The spectrum analyzer was set to:

RBW = 10 kHz, VBW = 10 kHz, span = 0.2 MHz, sweep = 20 ms

See figure 1 for the measurement setup.

Test equipment used (see equipment list for details):

02, 55, 67

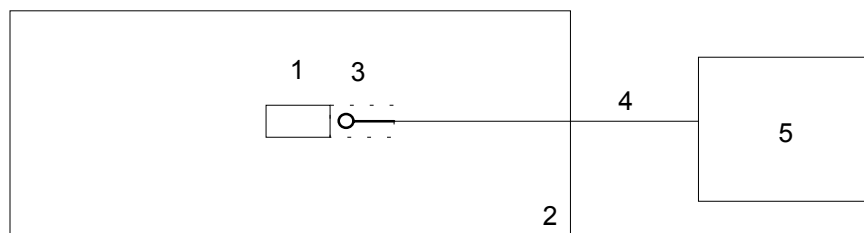


Figure 1: Measurement setup for bandwidth of emission test

1 Transmitter (EUT)
2 Wooden table

3 Test fixture
4 Test cable
5 Spectrum analyzer

6.2. Radiated Emission 30 MHz - 1 GHz (FCC §15.205.a,b, §15.209, §15.231.b / RSS-210 Sections 6.1.1.b, 6.3)

Radiated emissions are measured over the frequency range from 30 MHz to 1 GHz. The bandwidth of the EMI-receiver is set to 120 kHz and the detector-function is set to CISPR quasi-peak.

The test setup is made in accordance with ANSI C63.4-1992.

Measurements are made in both the horizontal and vertical planes of polarization. Preliminary scans are taken in a semi-anechoic room using a spectrum analyzer with the detector function set to peak. Hand-held or body-worn devices are rotated through three orthogonal axes to determine which attitude and configuration produces the highest emission relative to the limit and therefore shall be used for final testing.

All tests are performed at a test-distance of 3 meters.

For final testing an open-area test-site is used. During the tests the EUT is rotated all around and the receiving-antenna is raised and lowered from 1 meter to 4 meters to find the maximum levels of emissions. The cables and equipment is placed and moved within the range of position likely to find their maximum emissions.

See figure 2 for the measurement setup.

Test equipment used (see equipment list for details):

01, 02, 05, 12, 38, 39, 40, 41, 58, 61, 64, 66

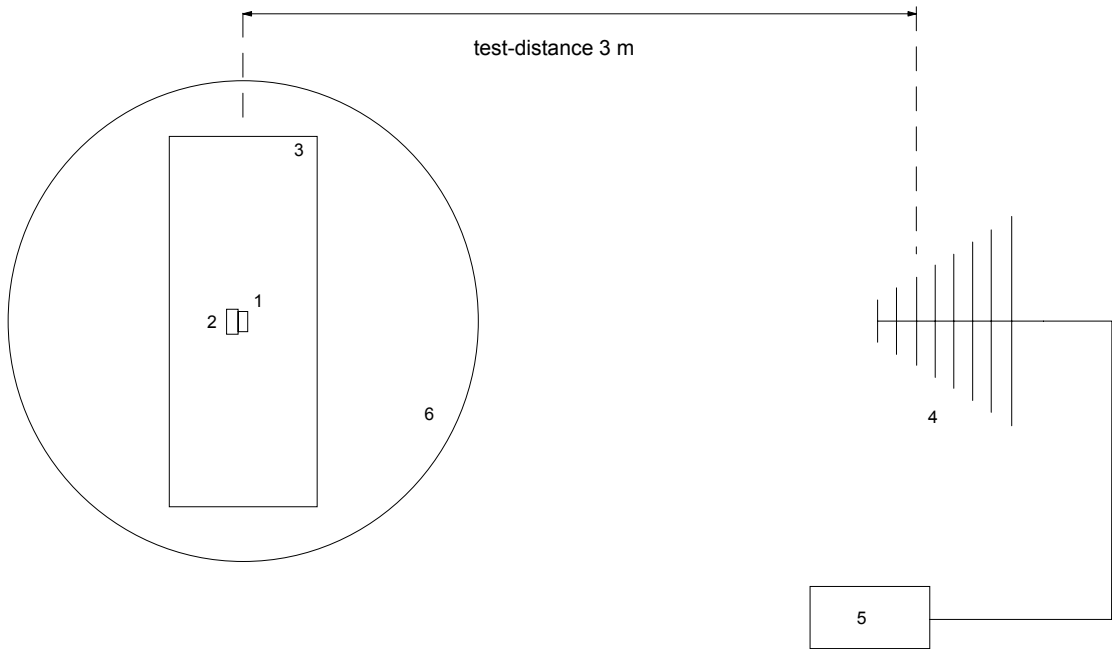


Figure 2: Measurement setup for radiated emission test below 1 GHz

- | | |
|----------------------------------|-----------------------|
| 1 Transmitter (EUT) | 4 Measurement antenna |
| 2 Wooden pedestal (if necessary) | 5 Test receiver |
| 3 Wooden table | 6 Turn table |

6.3. Radiated Emission 1 GHz - 4 GHz (FCC §15.205.a,b, §15.209, §15.231.b / RSS-210 Sections 6.1.1.b, 6.3)

Radiated emissions are measured in the frequency range 1 GHz to 4 GHz. Resolution and video bandwidth of the spectrum analyzer are set to 1 MHz. Hand-held or body-worn devices are rotated through three orthogonal axes to determine which attitude and configuration produces the highest emission relative to the limit and therefore shall be used for final testing.

Additional measurements are performed at critical frequencies with reduced span. EUT is rotated all around and receiving antenna is raised and lowered to find the maximum levels of emission. The cables and equipment are placed and moved within the range of position likely to find their maximum emissions.

All tests are performed in a semi-anechoic chamber with a test-distance of 3 meters.

If possible preamplifiers are used for the whole frequency range. Special care is taken to avoid overload in transmit mode (using appropriate attenuators if necessary).

See figure 3 for the measurement setup.

Test equipment used (see equipment list for details):

02, 13, 14, 16, ,42, 44, 45, 57, 64

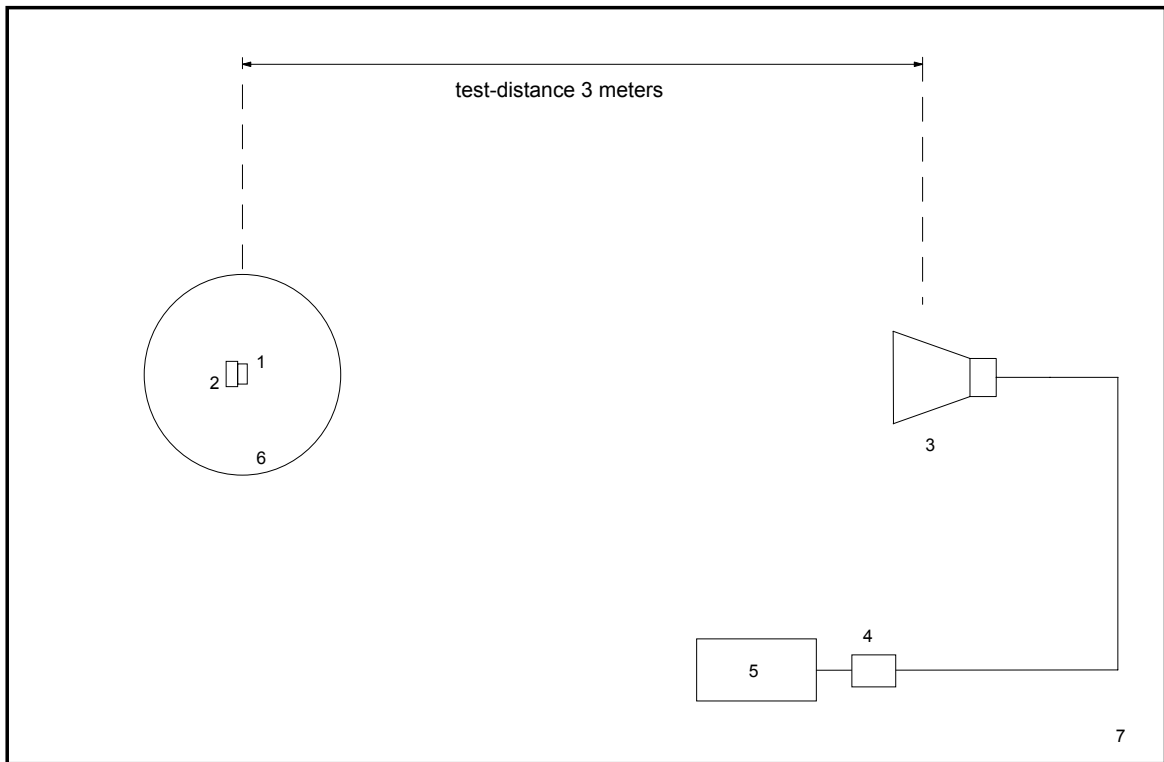


Figure 3: Measurement setup for radiated emission test above 1 GHz

- | | | | |
|---|--------------------------------|---|------------------------------|
| 1 | Transmitter (EUT) | 3 | Measurement antenna |
| 2 | Wooden pedestal (if necessary) | 4 | Preamplifier (if applicable) |
| | | 5 | Spectrum analyzer |
| | | 6 | Turn table |
| | | 7 | Semi anechoic room |

7. Equipment List

To facilitate reference to test equipment used for related tests, each item of test equipment and ancillaries such as cables are identified (numbered) by the Test Laboratory.

No.	Type	Model	Serial Number	Manufacturer
01	Spectrum Analyzer	R 3271	05050023	Advantest
02	EMI Test Receiver	ESMI	839379/013 839587/006	Rohde & Schwarz
03	Test Receiver	ESH 3	880112/032	Rohde & Schwarz
04	Test Receiver	ESHS 10	860043/016	Rohde & Schwarz
05	Test Receiver	ESV	881414/009	Rohde & Schwarz
06	Test Receiver	ESVP	881120/024	Rohde & Schwarz
07	Audio Analyzer	UPA	862954	Rohde & Schwarz
08	Power Meter	NRVS	836856/015	Rohde & Schwarz
09	Power Sensor	NRV-Z52	837901/030	Rohde & Schwarz
10	Power Sensor	NRV-Z4	863828/015	Rohde & Schwarz
11	Preamplifier	ESV-Z3	860907/004	Rohde & Schwarz
12	Preamplifier	R14601		Advantest
13	Preamplifier	ACX/080-3030	32640	CTT
14	Preamplifier	ACO/180-3530	32641	CTT
15	Signal Generator	SMS	872166/039	Rohde & Schwarz
16	Signal Generator	HP 8673 D	2930A00966	Hewlett Packard
17	Waveform Generator	HP 33120 A	US34005375	Hewlett Packard
18	Attenuator 20 dB	4776-20	9503	Narda
19	Attenuator 10 dB	4776-10	9412	Narda
20	Pulse Limiter	ESH 3-Z2	1144	Rohde & Schwarz
21	Pulse Limiter	11947 A	3107A00566	Hewlett Packard
22	V-Network	ESH 3-Z5	862770/018	Rohde & Schwarz
23	V-Network	ESH 3-Z5	894785/005	Rohde & Schwarz
24	V-Network	ESH 3-Z5	830952/025	Rohde & Schwarz
25	V-Network	ESH 3-Z6	830722/010	Rohde & Schwarz
26	V-Network	NSLK 8127	8127152	Schwarzbeck
27	V-Network	NNLA 8119	8119148	Schwarzbeck
28	V-Network	SE 01	01	Senton
29	T-Network	ESH 3-Z4	890602/011	Rohde & Schwarz
30	T-Network	ESH 3-Z4	890602/012	Rohde & Schwarz
31	High Impedance Probe	TK 9416	01	Schwarzbeck
32	High Impedance Probe	TK 9416	02	Schwarzbeck
33	Current Probe	ESH 2-Z1	863366/18	Rohde & Schwarz
34	Current Probe	ESV-Z1	862553/3	Rohde & Schwarz

No.	Type	Model	Serial Number	Manufacturer
35	Absorbing Clamp	MDS 21	80911	Lüthi
36	Absorbing Clamp	MDS 21	79690	Lüthi
37	Loop Antenna	HFH2-Z2	882964/1	Rohde & Schwarz
38	Biconical Antenna	HK 116	842204/001	Rohde & Schwarz
39	Biconical Antenna	HK 116	836239/02	Rohde & Schwarz
40	Log. Periodic Antenna	HL 223	841516/023	Rohde & Schwarz
41	Log. Periodic Antenna	HL 223	834408/12	Rohde & Schwarz
42	Horn Antenna	3115	9508-4553	Emco
43	Horn Antenna	3160-03	9112-1003	Emco
44	Horn Antenna	3160-04	9112-1001	Emco
45	Horn Antenna	3160-05	9112-1001	Emco
46	Horn Antenna	3160-06	9112-1001	Emco
47	Horn Antenna	3160-07	9112-1008	Emco
48	Horn Antenna	3160-08	9112-1002	Emco
49	Horn Antenna	3160-09	9403-1025	Emco
50	Digital multimeter	199	463386	Keithley
51	DC Power Supply	NGSM 32/10	203	Rohde & Schwarz
52	DC Power Supply	NGB	2455	Rohde & Schwarz
53	DC Power Supply	NGA	386	Rohde & Schwarz
54	Temperature Test Chamber	HT4010	07065550	Heraeus
55	Cable	RG214	1309	Senton
56	Cable	200CM_001	1357	Rosenberger
57	Cable	150CM_001	1479	Rosenberger
58	Cable Set EG1	RG214	1189 - 1191	Senton
59	Cable Set Cabine 1	RG214		Senton
60	Cable Set Cabine 2	RG214		Senton
61	Cable Set Cabine 3	RG214		Senton
62	Shielded Room	No. 1	1451	Senton
63	Shielded Room	No. 2	1452	Senton
64	Semi-anechoic Chamber	No. 3	1453	Siemens
65	Shielded Room	No. 4	1454	Euroshield
66	Open Area Test Site	EG 1		Senton
67	Test fixture			Senton

8. Photographs Taken During Testing

Photos No. 8.1 - 8.2

**Test setup for radiated emission pre-test 30 MHz - 1 GHz
(semi anechoic room)**



Photos No. 8.3 - 8.4

**Test setup for radiated emission final test 30 MHz - 1 GHz
(open area test site)**



8.1. List of Measurements According To FCC Part 15 Subpart C

FCC Part 15 Subpart C			
Section(s):	Test	Page(s)	Result
	Transmit mode (TX):		
§15.231.c	Bandwidth of emission		Passed
§15.231.b §15.209 §15.205.a,b	Radiated emission test 9 kHz - 30 MHz	---	Not Applicable (acc. to §15.33)
§15.231.b §15.209 §15.205.a,b	Radiated emission test 30 MHz - 1 GHz		Passed
§15.231.b §15.209 §15.205.a,b	Radiated emission test 1 GHz - 4 GHz		Passed

8.2. List of Measurements According To Industry Canada RSS-210

Industry Canada RSS-210 Issue 2			
Section(s):	Test	Page(s)	Result
	Transmit mode (TX):		
6.1.1.c	Bandwidth		Passed
6.1.1.b 6.3	Radiated emission test 9 kHz - 30 MHz	---	Not Applicable (acc. to 6.3.e)
6.1.1.b 6.3	Radiated emission test 30 MHz - 1 GHz		Passed
6.1.1.b 6.3	Radiated emission test 1 GHz - 4 GHz		Passed

9. Referenced Regulations

All tests were performed with reference to the following regulations and standards:

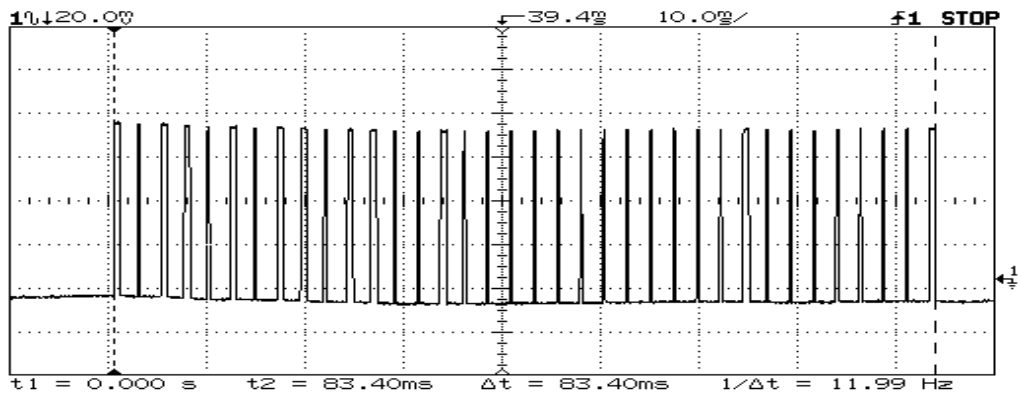
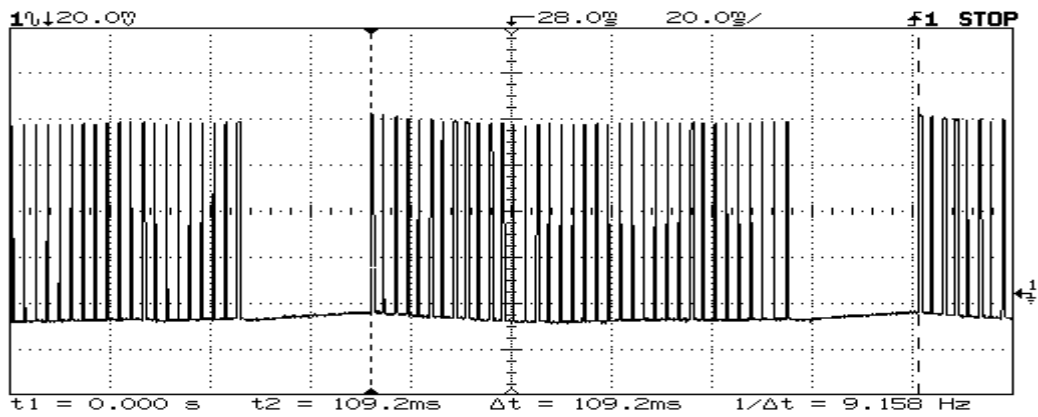
<input checked="" type="checkbox"/>	FCC Part 15 Subpart A	Code of Regulations Part 15 (Radio Frequency Devices), Subpart A (General) of the Federal Communication Commission (FCC)	October 20, 1997
<input type="checkbox"/>	FCC Part 15 Subpart B	Code of Regulations Part 15 (Radio Frequency Devices), Subpart B (Unintentional Radiators) of the Federal Communication Commission (FCC)	October 20, 1997
<input checked="" type="checkbox"/>	FCC Part 15 Subpart C	Code of Regulations Part 15 (Radio Frequency Devices), Subpart C (Intentional Radiators) of the Federal Communication Commission (FCC)	October 20, 1997
<input checked="" type="checkbox"/>	ANSI C63.4	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz - 40 GHz	October, 1992
<input checked="" type="checkbox"/>	RSS-210	Radio Standards Specification RSS-210 Issue 2 for Low Power Licence-Exempt Radiocommunication Devices of Industry Canada	February 24, 1996

10. Test Results

Duty Cycle Test
according to FCC Part 15 Subpart C, §15.231 / ANSI C63.4-1992 (14.10)

Model: ML-639 390 MHz
Type: Remote control transmitter
Serial No.: 1
Applicant: ELDAT GmbH
Test-site: Open area test-site I

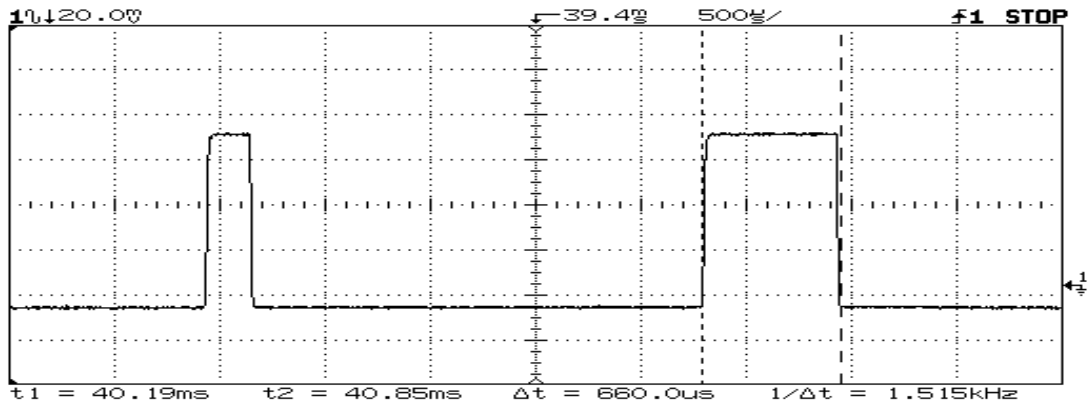
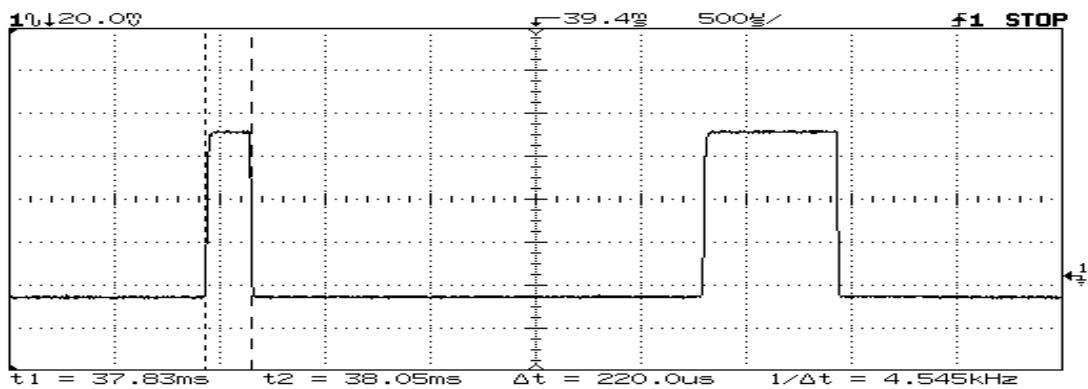
Date of test: 06/28/2001
Operator: T. Eberl
Mode: - transmitting continuously
with battery supply 9 V DC"



Duty Cycle Test (continued)
according to FCC Part 15 Subpart C, §15.231 / ANSI C63.4-1992 (14.10)

Model: ML-639 390 MHz
Type: Remote control transmitter
Serial No.: 1
Applicant: ELDAT GmbH
Test-site: Open area test-site I

Date of test: 06/28/2001
Operator: T. Eberl
Mode: - transmitting continuously
with battery supply 9 V DC"



Duty Cycle Test (continued)
according to FCC Part 15 Subpart C, §15.231 / ANSI C63.4-1992 (I4.10)

Model: ML-639 390 MHz
 Type: Remote control transmitter
 Serial No.: 1
 Applicant: ELDAT GmbH
 Test-site: Open area test-site I

Date of test: 06/28/2001
 Operator: T. Eberl
 Mode: - transmitting continuously
 with battery supply 9 V DC"

(standard mode)

	Number of pulses	T [ms]	Duty Cycle	Duty Cycle Correction [dB]
Pulse Train		109,200	0,145	-16,8
Transmitter ON (long time)	18	0,660		
Transmitter ON (short time)	18	0,220		

(worst case mode)

	Number of pulses	T [ms]	Duty Cycle	Duty Cycle Correction [dB]
Pulse Train		109,200	0,177	-15,0
Transmitter ON (long time)	26	0,660		
Transmitter ON (short time)	10	0,220		

**Radiated Emission 30 MHz - 1 GHz (Final Test)
according to FCC Part 15 Subpart C, §15.231.b**

Model: ML-639 390 MHz
 Type: Remote control transmitter
 Serial No.: 1
 Applicant: ELDAT GmbH
 Test-site: Open area test-site I
 Test distance: 3 meters
 Date of test: #####
 Operator: T. Eberl
 Mode: - transmitting continuously
 with battery supply 9 V DC"

EUT in horizontal position with rear on table

Detector: Peak
 Polarization: horizontal

Frequency [MHz]	Receiver reading [dBµV]	Correction factor [dB]	fieldstrength Peak [dBµV/m]	Limit Peak [dBµV/m]	Duty cycle correction [dB]	fieldstrength Average [dBµV/m]	Limit Average [dBµV/m]	Limit exceeded
390,00	71,3	22,1	93,4	97,9	15,0	78,4	77,9	*
780,00	10,5	31,8	42,3	79,2	15,0	27,3	59,2	

Result: The limits are kept.

**Radiated Emission 30 MHz - 1 GHz (Final Test)
according to FCC Part 15 Subpart C, §15.231.b**

Model: ML-639 390 MHz
 Type: Remote control transmitter
 Serial No.: 1
 Applicant: ELDAT GmbH
 Test-site: Open area test-site I
 Test distance: 3 meters
 Date of test: #####
 Operator: T. Eberl
 Mode: - transmitting continuously
 with battery supply 9 V DC"

EUT in vertical position with antenna to the top

Detector: Peak
 Polarization: vertical

Frequency [MHz]	Receiver reading [dBµV]	Correction factor [dB]	fieldstrengt Peak [dBµV/m]	Limit Peak [dBµV/m]	Duty cycle correction [dB]	feldstreng Average [dBµV/m]	Limit Average [dBµV/m]	Limit exceeded
390,00	66,6	22,1	88,7	99,2	15,0	73,7	79,2	
780,00	3,5	31,8	35,3	79,2	15,0	20,3	59,2	

Result: The limits are kept.

**Radiated Emission 1 GHz - 4 GHz
according to FCC Part 15 Subpart C, §15.231.b**

Model: ML-639 390 MHz
 Type: Remote control transmitter
 Serial No.: 1
 Applicant: ELDAT GmbH
 Test-site: Open area test-site I
 Test distance: 3 meters
 Date of test: 06/28/2001
 Operator: T. Eberl
 Mode: - transmitting continuously
 with battery supply 9 V DC"

- EUT in horizontal position with rear on table

Detector: Peak

Frequency [GHz]	Polarization	Analyzer reading [dBµV]	Antenna-correction [dB]	Cable-correction [dB]	Fieldstrength Peak [dBµV/m]	Limit Peak [dBµV/m]	Duty cycle correction [dB]	Fieldstrength Average [dBµV/m]	Limit Average [dBµV/m]	Limit exceeded
1,1700	vertical	15,0	26,2	0,5	41,7	74,0	15,0	26,7	54,0	
1,5600	vertical	19,8	27,1	0,5	47,4	74,0	15,0	32,4	54,0	
1,9500	vertical	24,0	28,9	0,6	53,4	79,2	15,0	38,4	59,2	
2,3400	vertical	28,0	20,6	0,6	49,2	74,0	15,0	34,2	54,0	
2,7300	vertical	22,4	23,7	0,6	46,7	74,0	15,0	31,7	54,0	
3,1200	vertical	21,7	23,7	0,7	46,1	79,2	15,0	31,1	59,2	
3,5100	vertical	24,5	23,8	0,7	49,0	79,2	15,0	34,0	59,2	
3,9000	horizontal	18,0	23,8	0,8	42,6	74,0	15,0	27,6	54,0	

Note: Frequency error of markers is depending on span of analyzer. Therefore exact frequency values are calculated as harmonics of fundamental frequency.

Result: The limits are kept.

**Radiated Emission 1 GHz - 4 GHz
according to FCC Part 15 Subpart C, §15.231.b**

Model: ML-639 390 MHz
 Type: Remote control transmitter
 Serial No.: 1
 Applicant: ELDAT GmbH
 Test-site: Open area test-site I
 Test distance: 3 meters
 Date of test: 06/28/2001
 Operator: T. Eberl
 Mode: - transmitting continuously
 with battery supply 9 V DC"

- EUT in horizontal position with right hand side on table

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dBµV]	Antenna- correction [dB]	Cable- correction [dB]	Fieldstrength Peak [dBµV/m]	Limit Peak [dBµV/m]	Duty cycle correction [dB]	Fieldstrength Average [dBµV/m]	Limit Average [dBµV/m]	Limit exceeded
1,5600	vertical	21,4	27,1	0,5	49,0	74,0	15,0	34,0	54,0	
1,9500	vertical	22,5	28,9	0,6	51,9	79,2	15,0	36,9	59,2	
2,3400	vertical	28,5	20,6	0,6	49,7	74,0	15,0	34,7	54,0	
2,7300	vertical	18,4	23,7	0,6	42,7	74,0	15,0	27,7	54,0	
3,1200	vertical	19,6	23,7	0,7	44,0	79,2	15,0	29,0	59,2	
3,5100	vertical	28,1	23,8	0,7	52,6	79,2	15,0	37,6	59,2	
3,9000	horizontal	13,2	23,8	0,8	37,8	74,0	15,0	22,8	54,0	

Note: Frequency error of markers is depending on span of analyzer. Therefore exact frequency values are calculated as harmonics of fundamental frequency.

Result: The limits are kept.

**Radiated Emission 1 GHz - 4 GHz
according to FCC Part 15 Subpart C, §15.231.b**

Model: ML-639 390 MHz
 Type: Remote control transmitter
 Serial No.: 1
 Applicant: ELDAT GmbH
 Test-site: Open area test-site I
 Test distance: 3 meters
 Date of test: 06/28/2001
 Operator: T. Eberl
 Mode: - transmitting continuously
 with battery supply 9 V DC"

- EUT in vertical position with antenna to the top

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dBµV]	Antenna- correction [dB]	Cable- correction [dB]	Fieldstrength Peak [dBµV/m]	Limit Peak [dBµV/m]	Duty cycle correction [dB]	Fieldstrength Average [dBµV/m]	Limit Average [dBµV/m]	Limit exceeded
1,5600	vertical		27,1	0,5	27,6	74,0	15,0	12,6	54,0	
1,9500	vertical		28,9	0,6	29,4	79,2	15,0	14,4	59,2	
2,3400	vertical		20,6	0,6	21,2	74,0	15,0	6,2	54,0	
2,7300	vertical		23,7	0,6	24,3	74,0	15,0	9,3	54,0	
3,1200	vertical		23,7	0,7	24,4	79,2	15,0	9,4	59,2	
3,5100	vertical		23,8	0,7	24,5	79,2	15,0	9,5	59,2	
3,9000	vertical		23,8	0,8	24,6	74,0	15,0	9,6	54,0	

Note: Frequency error of markers is depending on span of analyzer. Therefore exact frequency values are calculated as harmonics of fundamental frequency.

Result: The limits are kept.

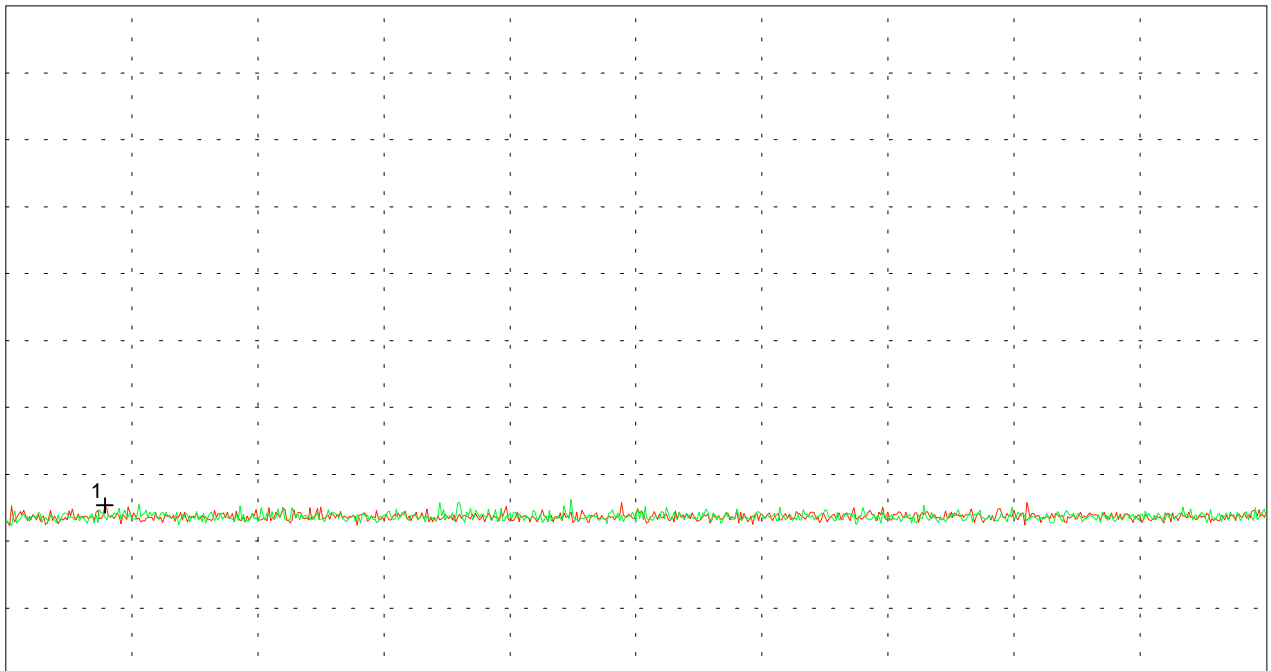
Radiated emission test 30 MHz - 1 GHz acc. to FCC part 15 Subpart C

Model: ML-639	Mode: - transmitting continuously - with battery supply 12.0 V DC - EUT in horizontal position with rear on table (P01) Test distance: 3m PRESCAN - Values without correction Channel A: horizontal polarisation Channel B: vertical polarisation
Serial No.: 01	
Applicant: Eldat GmbH	

Ref.Level 79.5 dBuV
10 dB/Div.

ATT 10 dB

Ref. Offset -27.5 dB



Start 30.000 MHz
RBW 100 kHz

VBW 100 kHz

Stop 300.000 MHz
SWP 60 ms

Multi Marker List			
No. 1	51.200000 MHz	4.84 dBuV	A

Tested by: Thomas Eberl	Project-No.: 50530-10431
Date: 06/27/2001	Page of pages

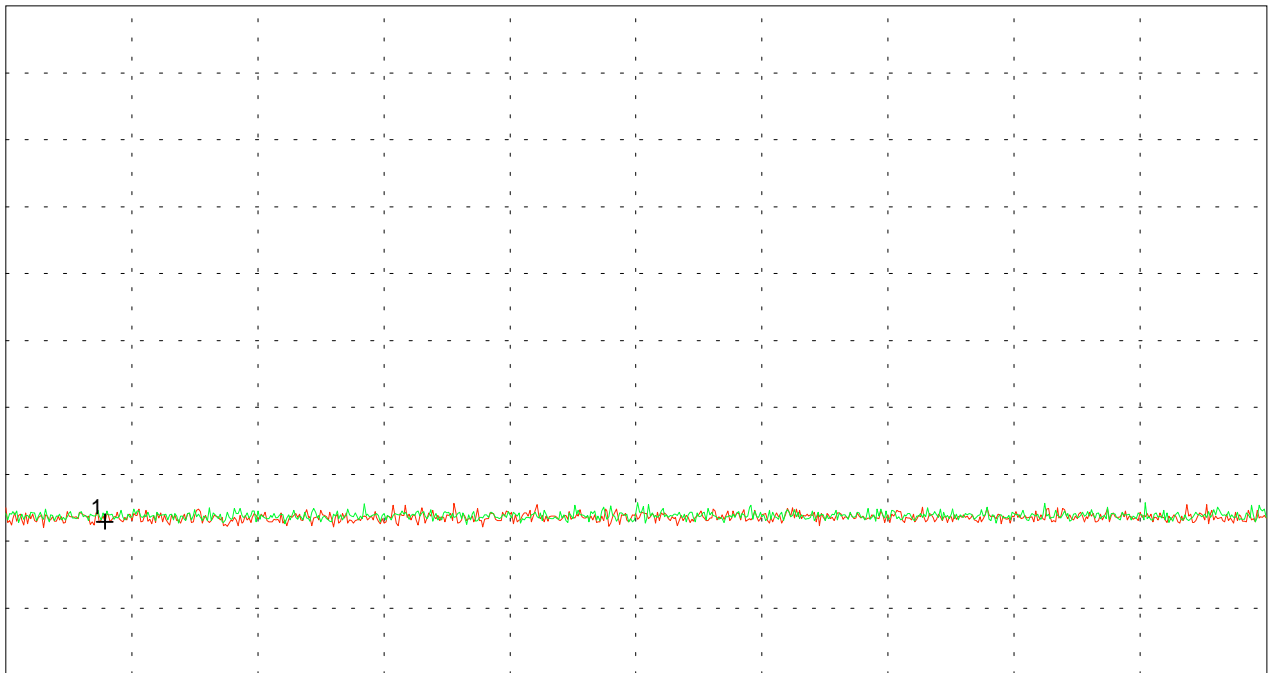
Radiated emission test 30 MHz - 1 GHz acc. to FCC part 15 Subpart C

<p>Model: ML-639</p> <hr/> <p>Serial No.: 01</p> <hr/> <p>Applicant: Eldat GmbH</p> <hr/> <hr/> <hr/> <hr/>	<p>Mode:</p> <ul style="list-style-type: none"> - transmitting continuously - with battery supply 12.0 V DC <p>- EUT in vertical position - antenna to top (P02)</p> <p>Test distance: 3m</p> <p>PRESCAN - Values without correction</p> <p>Channel A: horizontal polarisation Channel B: vertical polarisation</p>
---	---

Ref.Level 79.5 dBuV
10 dB/Div.

ATT 10 dB

Ref. Offset -27.5 dB



Start 30.000 MHz
RBW 100 kHz

VBW 100 kHz

Stop 300.000 MHz
SWP 60 ms

Multi Marker List			
No. 1	51.200000 MHz	2.44 dBuV	A

<p>Tested by: Thomas Eberl</p> <hr/> <p>Date: 06/27/2001</p>	<p>Project-No.: 50530-10431</p> <hr/> <p style="text-align: right;">Page of pages</p>
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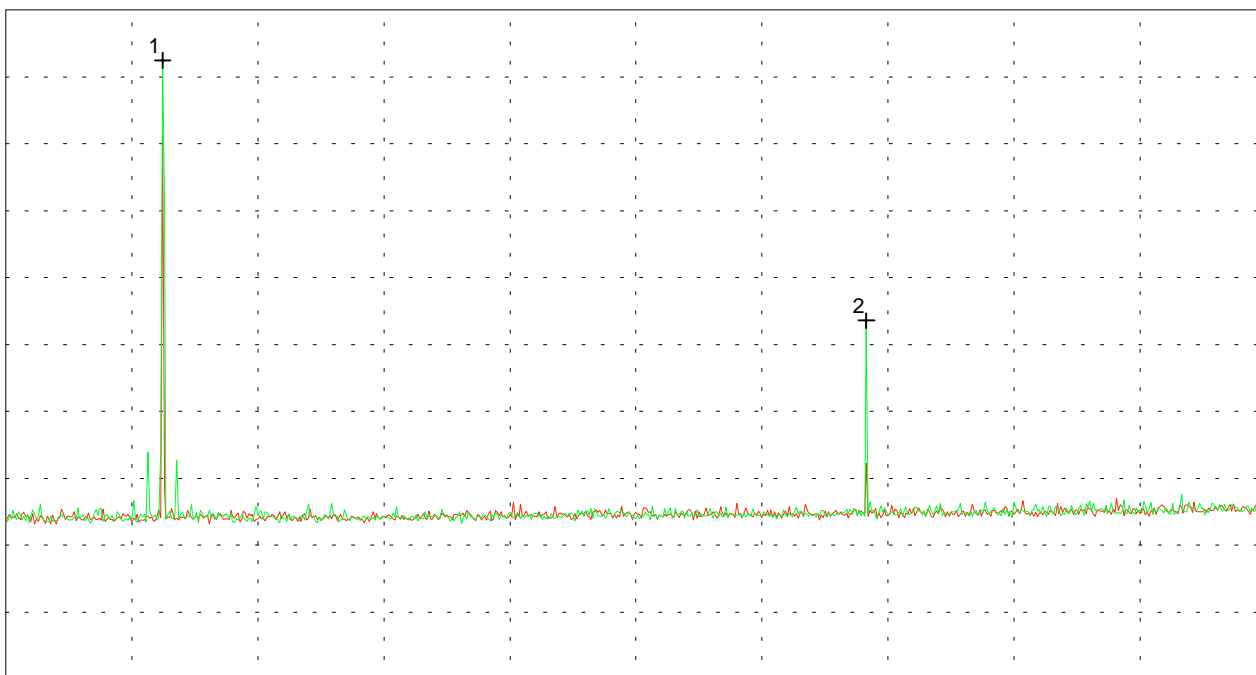
Radiated emission test 30 MHz - 1 GHz acc. to FCC part 15 Subpart C

Model: ML-639	Mode: - transmitting continuously - with battery supply 12.0 V DC
Serial No.: 01	- EUT in vertical position -antenna to top (P02)
Applicant: Eldat GmbH	Test distance: 3m
	PRESCAN - Values without correction
	Channel A: horizontal polarisation Channel B: vertical polarisation

Ref.Level 79.5 dBuV
10 dB/Div.

ATT 10 dB

Ref. Offset -27.5 dB



Start 300.000 MHz
RBW 100 kHz

VBW 100 kHz

Stop 1.000 GHz
SWP 140 ms

Multi Marker List

No. 1	387.000000 MHz	71.97 dBuV	B
No. 2	778.000000 MHz	33.09 dBuV	B

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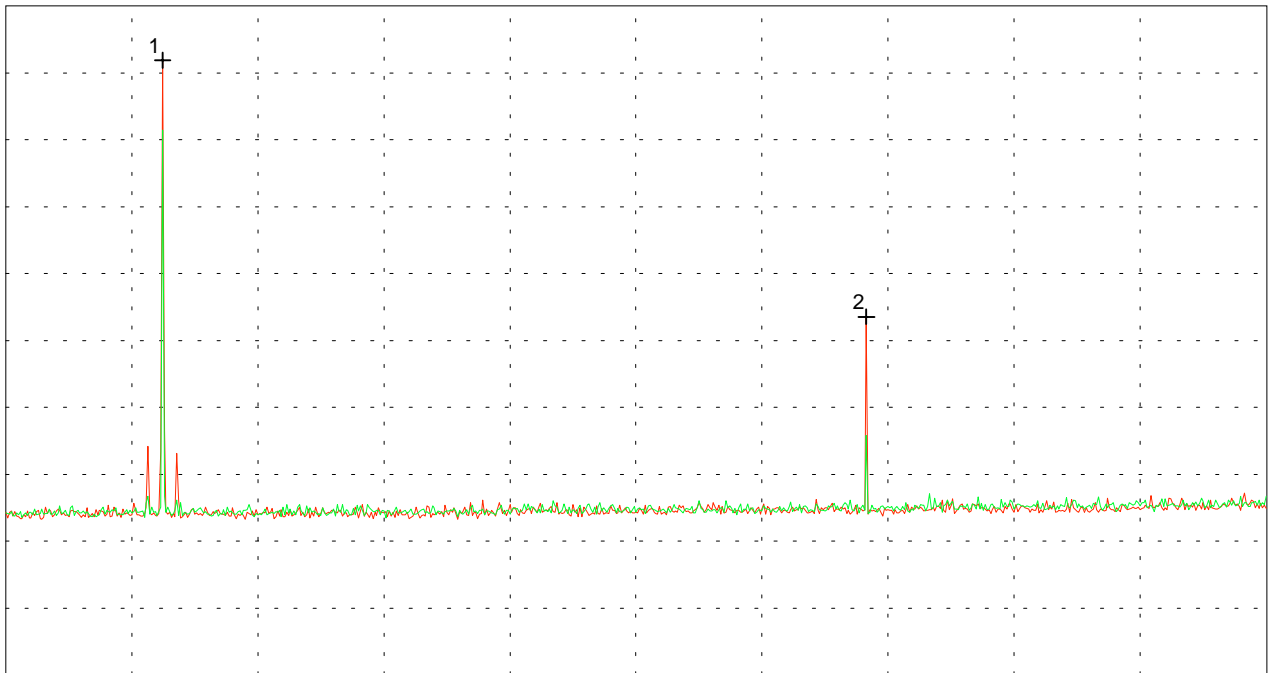
Radiated emission test 30 MHz - 1 GHz acc. to FCC part 15 Subpart C

Model: ML-639	Mode: - transmitting continuously - with battery supply 12.0 V DC
Serial No.: 01	- EUT in horizontal position -rear on table (P01)
Applicant: Eldat GmbH	Test distance: 3m
	PRESCAN - Values without correction
	Channel A: horizontal polarisation Channel B: vertical polarisation

Ref.Level 79.5 dBuV
10 dB/Div.

ATT 10 dB

Ref. Offset -27.5 dB



Start 300.000 MHz
RBW 100 kHz

VBW 100 kHz

Stop 1.000 GHz
SWP 140 ms

Multi Marker List				
No. 1	387.000000 MHz	71.38 dBuV	A	
No. 2	778.000000 MHz	33.06 dBuV	A	

Tested by: Thomas Eberl
Date: 06/27/2001

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Radiated emission test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C

Model:
ML-639

Serial No.:
01

Applicant:
Eldat GmbH

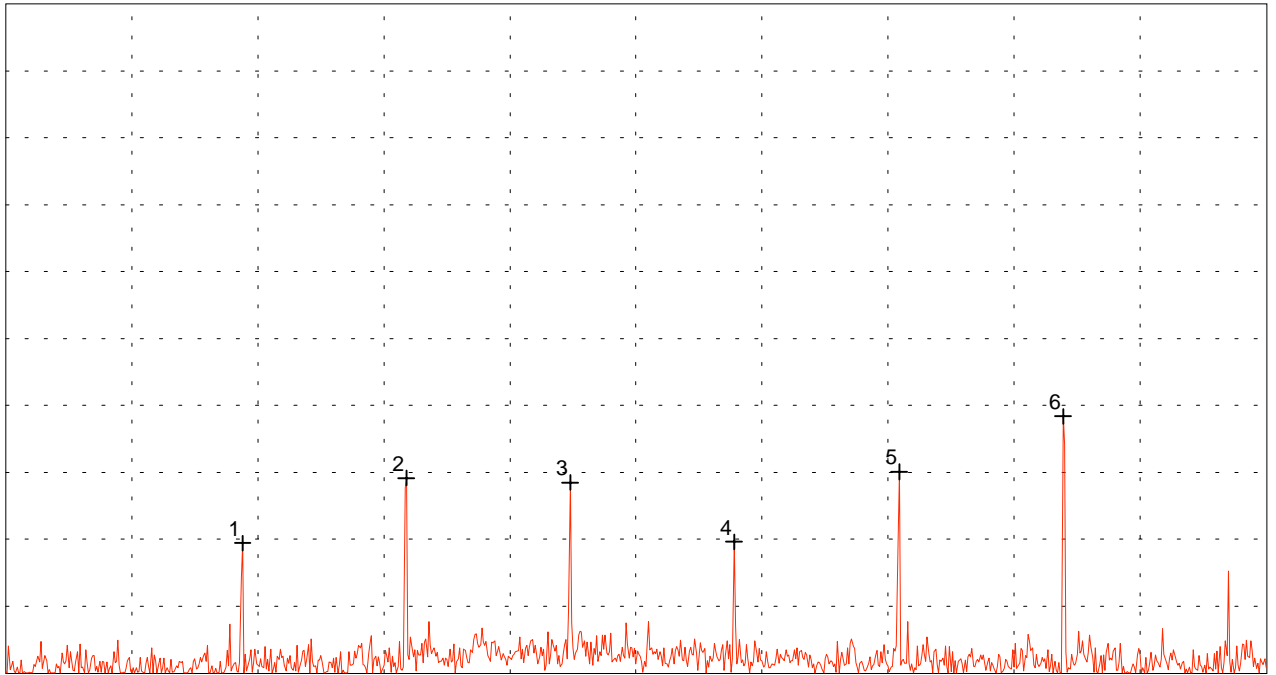
Mode:

- transmitting continuously
- with battery supply 9.0 V DC
- EUT in vertical position-antenna to top (P02)
- Test distance: 3m
- Values without correction
- Antenna: horizontal polarisation

Ref.Level 56.5 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset -30.5 dB



Start 1.000 GHz
RBW 1 MHz

VBW 1 MHz

Stop 4.000 GHz
SWP 20 ms

Multi Marker List

No. 1	1.563333 GHz	16.20 dB μ V
No. 2	1.953333 GHz	21.08 dB μ V
No. 3	2.343333 GHz	20.72 dB μ V
No. 4	2.733333 GHz	16.30 dB μ V
No. 5	3.126667 GHz	21.53 dB μ V
No. 6	3.516667 GHz	25.67 dB μ V

Tested by:
Thomas Eberl

Date:
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Radiated emission test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C

Model:
ML-639

Serial No.:
01

Applicant:
Eldat GmbH

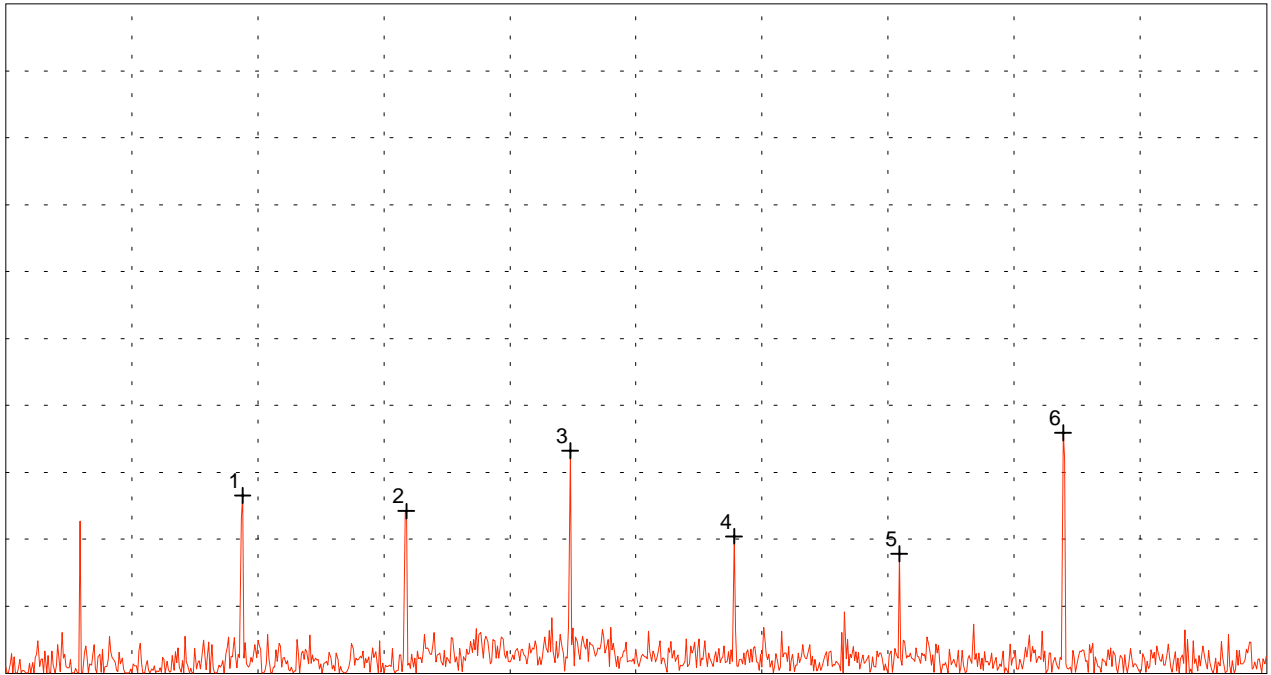
Mode:

- transmitting continuously
- with battery supply 9.0 V DC
- EUT in horizontal position-rear on table (P01)
- Test distance: 3m
- Values without correction
- Antenna: horizontal polarisation

Ref.Level 56.5 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset -30.5 dB



Start 1.000 GHz
RBW 1 MHz

VBW 1 MHz

Stop 4.000 GHz
SWP 20 ms

Multi Marker List

No. 1	1.563333 GHz	19.76 dB μ V
No. 2	1.953333 GHz	18.61 dB μ V
No. 3	2.343333 GHz	23.11 dB μ V
No. 4	2.733333 GHz	16.71 dB μ V
No. 5	3.126667 GHz	15.41 dB μ V
No. 6	3.516667 GHz	24.45 dB μ V

Tested by:
Thomas Eberl

Date:
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Radiated emission test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C

Model:
ML-639

Serial No.:
01

Applicant:
Eldat GmbH

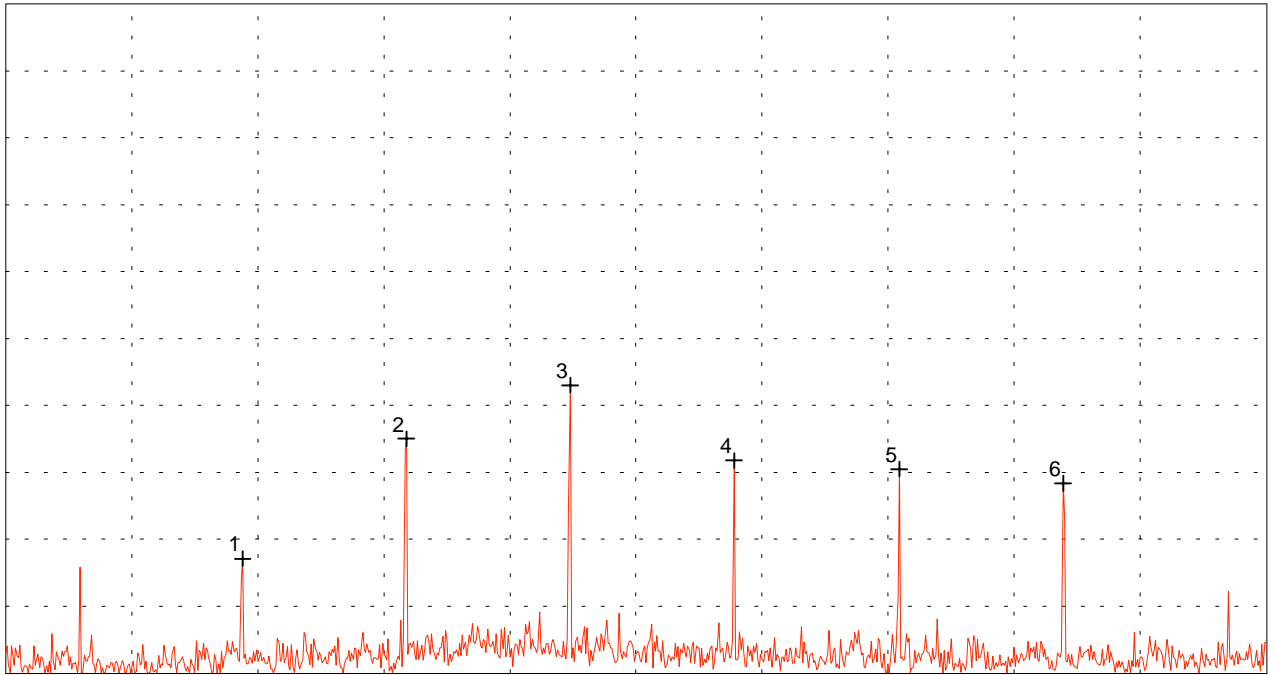
Mode:

- transmitting continuously
- with battery supply 9.0 V DC
- EUT in horizontal position-rear on table (P01)
- Test distance: 3m
- Values without correction
- Antenna: vertical polarisation

Ref.Level 56.5 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset -30.5 dB



Start 1.000 GHz
RBW 1 MHz

VBW 1 MHz

Stop 4.000 GHz
SWP 20 ms

Multi Marker List

No. 1	1.563333 GHz	15.03 dB μ V
No. 2	1.953333 GHz	24.00 dB μ V
No. 3	2.343333 GHz	28.01 dB μ V
No. 4	2.733333 GHz	22.37 dB μ V
No. 5	3.126667 GHz	21.74 dB μ V
No. 6	3.516667 GHz	20.67 dB μ V

Tested by:
Thomas Eberl

Date:
06/28/201

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