

TEST REPORT

ACCORDING TO: FCC 47CFR part 15: 2005, subpart B, Class B

FOR:

Motorola Israel Ltd.

QuadBand GSM/GPRS/EGPRS module

Model:G24EDGE

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1 Applicant information

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Contact name: Mr. Alfred Firouz

2 Equipment under test attributes

Product name: QuadBand GSM/GPRS/EGPRS module
Model: G24EDGE
Serial number: 074SGDB286
Hardware version: FCN5752A
Software release: 0C.13.01D
Receipt date: 5/25/2006

3 Manufacturer information

Client name: Motorola Israel Ltd.
Address: 3 Kremenetski street, P.O.B. 25016, 67899 Tel Aviv, Israel
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E-mail: alfred.firouz@motorola.com
Contact name: Mr. Alfred Firouz

4 Test details

Project ID: 17052
Location: Hermon Laboratories Ltd. P.O.Box 23, Binyamina 30500, Israel
Test started: 5/25/2006
Test completed: 5/29/2006
Test specification: FCC 47CFR part 15: 2005, subpart B, Class B

5 Tests summary

Test	Status
FCC 47 CFR part 15, subpart B	
Section 15.107 Class B, AC power lines conducted emissions	Pass
Section 15.109 Class B, Radiated emissions	Pass

Testing was completed against all relevant requirements of the test standard. The results obtained indicate that the product under test complies in full with the requirements tested.
 The test results relate only to the items tested. Pass / fail decision was based on nominal values.

	Name and Title	Date	Signature
Tested by:	Mr. E. Plotnichenko, test engineer	May 29, 2006	
Reviewed by:	Ms. N. Averin, certification engineer	May 30, 2006	
Approved by:	Mr. M. Nikishin, EMC and radio group leader	May 30, 2006	

6 EUT description

6.1 General information

The EUT is a QuadBand GSM module, powered by DC power supply. Throughout the testing the EUT was installed into an evaluation board.

6.2 Ports and lines

Port type	Port description	Connected		Connector type	Qty.	Cable type	Cable length	Indoor / outdoor
		From	To					
Power	3.8 VDC	EUT	Power supply	Terminal block	1	Unshielded	0.5 m	Indoor
Power	AC power	Power supply	AC mains	IEC 320	1	Unshielded	1.5 m	Indoor
Signal	USB	EUT	Laptop	USB	1	Shielded	1.5 m	Indoor
Signal	RS 232	Evaluation board	Open circuit	D type 9 pin	1	Unshielded	1.5 m	Indoor
Power	16 VDC	Laptop	AC/DC adapter	DC jack	1	Unshielded	1 m	Indoor
Power	AC power	AC/DC adapter	AC mains	2-pole	1	Unshielded	1 m	Indoor
Telecom	Phone	Laptop	Open circuit	RJ 11	1	Unshielded	1.5 m	Indoor
Signal	Mouse	Laptop	Mouse	PS/2	1	Unshielded	1 m	Indoor

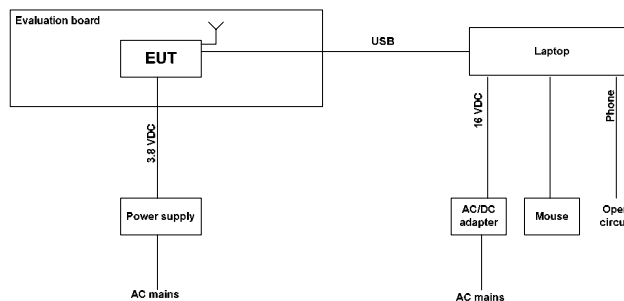
6.3 Auxiliary equipment

Description	Manufacturer	Model number	Serial number
Power supply	Horizon Electronics	DHR3655D	767469
Evaluation board	Motorola	G24eboard	8488899V01P1
Laptop	IBM	600E	5560NZV
AC/DC adapter	IBM	AA20530	J16AW838BYK

6.4 Operating frequencies

Frequency, MHz						
400	NA	NA	NA	NA	NA	NA

6.5 Test configuration



6.6 Changes made in the EUT

No changes were implemented.

Test specification:	Section 15.107 Class B, AC power lines conducted emissions		
Test procedure:	ANSI C63.4, Section 7.2		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/25/2006 9:11:02 PM		
Temperature: 24 °C	Air Pressure: 1010 hPa	Relative Humidity: 40 %	Power Supply: 120 VAC
Remarks:			

7 Emissions tests according to FCC 47CFR part 15 subpart B requirements

7.1 Conducted emissions

7.1.1 General

This test was performed to measure the common mode conducted emissions at the AC power ports. The specification test limits are given in Table 7.1.1.

Table 7.1.1 Limits for conducted emissions

Frequency, MHz	Class B limit, dB(μV)		Class A limit, dB(μV)	
	QP	AVRG	QP	AVRG
0.15 - 0.5	66 - 56*	56 - 46*	79	66
0.5 - 5.0	56	46	73	60
5.0 - 30	60	50	73	60

* - The limit decreases linearly with the logarithm of frequency.

7.1.2 Test procedure

7.1.2.1 The EUT was set up as shown in Figure 7.1.1 and the associated photograph, energized and the EUT performance was checked.

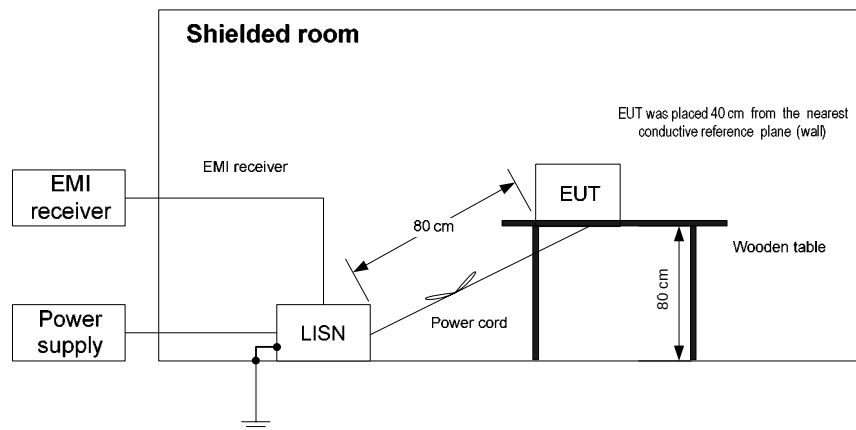
7.1.2.2 The measurements were performed at the AC power terminals with the LISN connected to the EMI receiver in the frequency range referred to in Table 7.1.2. The unused coaxial connector of the LISN was terminated with 50 Ohm.

7.1.2.3 The position of the EUT cables was varied to find the highest emission.

7.1.2.4 The worst test results with respect to the limits were recorded in Table 7.1.2 and shown in the associated plots.

Test specification:	Section 15.107 Class B, AC power lines conducted emissions		
Test procedure:	ANSI C63.4, Section 7.2		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/25/2006 9:11:02 PM		
Temperature: 24 °C	Air Pressure: 1010 hPa	Relative Humidity: 40 %	Power Supply: 120 VAC
Remarks:			

Figure 7.1.1 Setup for conducted emission measurements, table-top EUT



Photograph 7.1.1 Setup for conducted emission measurements



Test specification:	Section 15.107 Class B, AC power lines conducted emissions		
Test procedure:	ANSI C63.4, Section 7.2		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/25/2006 9:11:02 PM		
Temperature: 24 °C	Air Pressure: 1010 hPa	Relative Humidity: 40 %	Power Supply: 120 VAC
Remarks:			

Table 7.1.2 Conducted emission test results

LINE: AC mains
 EUT SET UP: TABLE-TOP
 TEST SITE: SHIELDED ROOM
 DETECTORS USED: PEAK / QUASI-PEAK / AVERAGE
 FREQUENCY RANGE: 150 kHz - 30 MHz
 RESOLUTION BANDWIDTH: 9 kHz

Frequency, MHz	Peak emission, dB(μV)	Quasi-peak			Average			Line ID	Verdict
		Measured emission, dB(μV)	Limit, dB(μV)	Margin, dB*	Measured emission, dB(μV)	Limit, dB(μV)	Margin, dB*		
AC mains input of EUT power supply									
2.786115	36.88	27.49	-28.51	56.00	9.38	46.00	-36.62	L1	Pass
3.074355	37.50	28.57	-27.43	56.00	22.90	46.00	-23.10		
5.199598	38.35	27.63	-32.37	60.00	6.68	50.00	-43.32		
5.960920	40.80	39.95	-20.05	60.00	35.66	50.00	-14.34		
4.998844	32.98	22.51	-33.49	56.00	6.98	46.00	-39.02	L2	Pass
5.914745	40.98	40.43	-19.57	60.00	44.15	50.00	-5.85		
13.579235	35.65	37.91	-22.09	60.00	31.64	50.00	-18.36		
15.630520	37.83	36.00	-24.00	60.00	36.17	50.00	-13.83		
AC mains input of laptop power adapter									
0.211945	61.40	59.87	-3.32	63.19	46.63	53.19	-6.56	L1	Pass
0.316260	49.18	46.42	-13.41	59.83	34.59	49.83	-15.24		
0.335650	47.76	45.04	-14.33	59.37	35.19	49.37	-14.18		
0.420770	41.95	38.86	-18.62	57.48	28.25	47.48	-19.23		
4.853508	37.61	32.00	-24.00	56.00	19.34	46.00	-26.66	L2	Pass
0.211098	60.53	58.40	-4.83	63.23	45.06	53.23	-8.17		
0.223243	59.68	57.62	-5.14	62.76	45.36	52.76	-7.40		
0.315460	46.78	44.68	-15.17	59.85	35.67	49.85	-14.18		
0.421145	42.65	39.15	-18.32	57.47	28.56	47.47	-18.91		
0.559858	37.73	34.41	-21.59	56.00	23.71	46.00	-22.29		
4.920793	38.53	32.93	-23.07	56.00	21.28	46.00	-24.72		

*- Margin = Measured emission - specification limit.

Reference numbers of test equipment used

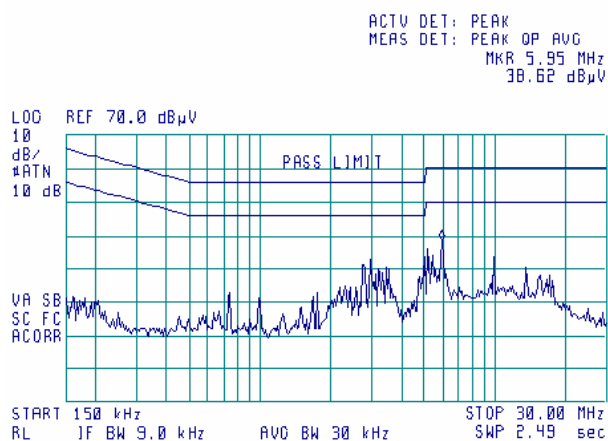
HL 0163	HL 0447	HL 0672	HL 0787	HL 1430	HL 1512	HL 2358	
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Full description is given in Appendix A.

Test specification:	Section 15.107 Class B, AC power lines conducted emissions		
Test procedure:	ANSI C63.4, Section 7.2		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/25/2006 9:11:02 PM		
Temperature: 24 °C	Air Pressure: 1010 hPa	Relative Humidity: 40 %	Power Supply: 120 VAC
Remarks:			

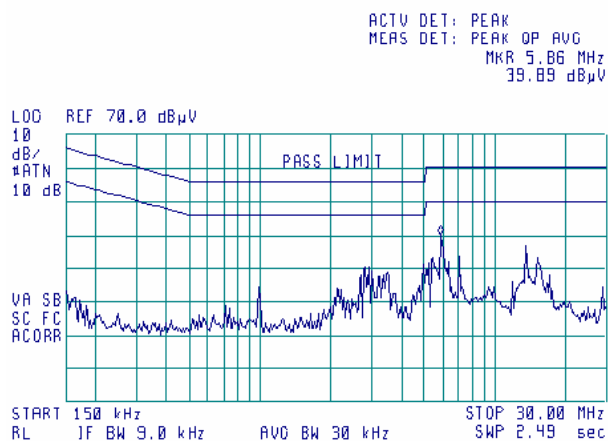
Plot 7.1.1 Conducted emission measurements, AC mains input of EUT power supply

LINE: L1
LIMIT: QUASI-PEAK, AVERAGE
DETECTOR: PEAK



Plot 7.1.2 Conducted emission measurements, AC mains input of EUT power supply

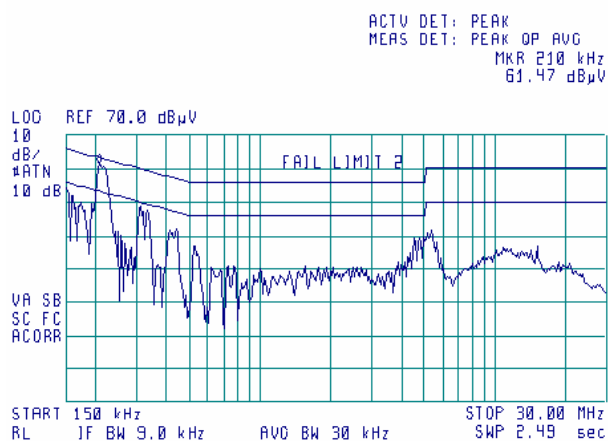
LINE: L2
LIMIT: QUASI-PEAK, AVERAGE
DETECTOR: PEAK



Test specification:	Section 15.107 Class B, AC power lines conducted emissions		
Test procedure:	ANSI C63.4, Section 7.2		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/25/2006 9:11:02 PM		
Temperature: 24 °C	Air Pressure: 1010 hPa	Relative Humidity: 40 %	Power Supply: 120 VAC
Remarks:			

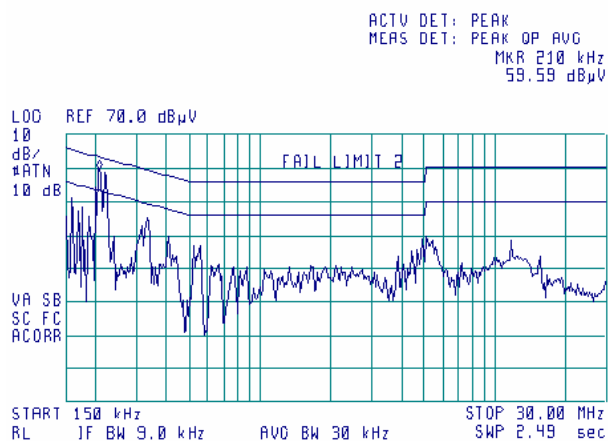
Plot 7.1.3 Conducted emission measurements, AC mains input of laptop power adapter

LINE: L1
LIMIT: QUASI-PEAK, AVERAGE
DETECTOR: PEAK



Plot 7.1.4 Conducted emission measurements, AC mains input of laptop power adapter

LINE: L2
LIMIT: QUASI-PEAK, AVERAGE
DETECTOR: PEAK



Test specification:	Section 15.109 Class B, Radiated emissions		
Test procedure:	ANSI C63.4, Section 8.3		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/25/2006 9:22:31 PM		
Temperature: 24 °C	Air Pressure: 1010 hPa	Relative Humidity: 40 %	Power Supply: 120 VAC
Remarks:			

7.2 Radiated emission measurements

7.2.1 General

This test was performed to measure radiated emissions from the EUT enclosure. The specification test limits are given in Table 7.2.1.

Table 7.2.1 Radiated emission test limits

Frequency, MHz	Class B limit, dB(μV/m)		Class A limit, dB(μV/m)	
	10 m distance	3 m distance	10 m distance	3 m distance
30 - 88	29.5*	40.0	39.0	49.5*
88 - 216	33.0*	43.5	43.5	54.0*
216 - 960	35.5*	46.0	46.4	56.9*
Above 960	43.5*	54.0	49.5	60.0*

* - The limit for a test distance other than specified was calculated using the inverse linear distance extrapolation factor as follows: $\text{Lim}_{S_2} = \text{Lim}_{S_1} + 20 \log(S_1/S_2)$, where S_1 and S_2 – the standard defined and the test distance respectively in meters.

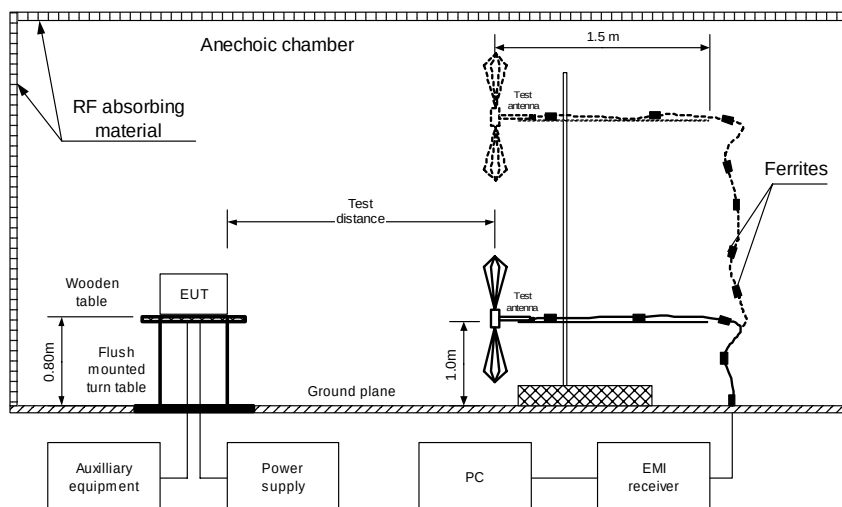
7.2.2 Test procedure

7.2.2.1 The EUT was set up as shown in Figure 7.2.1 and the associated photographs, energized and the EUT performance was checked.

7.2.2.2 The specified frequency range was investigated with the antenna connected to the EMI receiver. To find the highest emission the turntable was rotated 360° and the measuring antenna height was swept from 1 to 4 m in both, vertical and horizontal polarizations. The EUT cables position was varied to maximize emission.

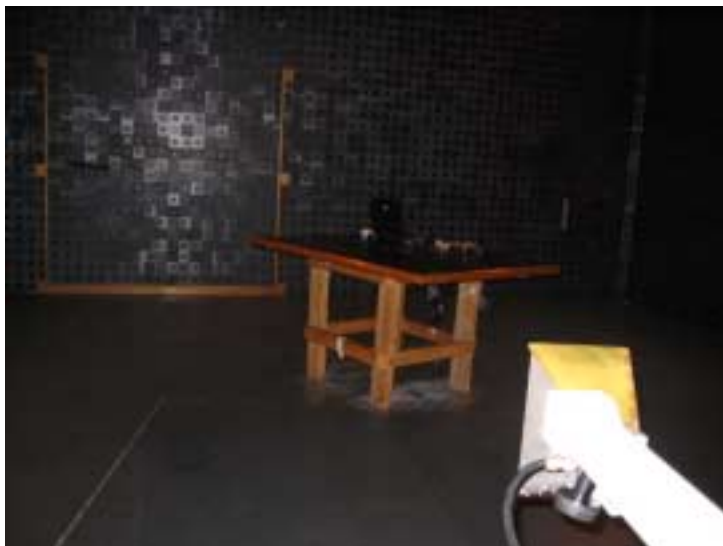
7.2.2.3 The worst test results with respect to the limits were recorded in Table 7.2.2 and shown in the associated plots.

Figure 7.2.1 Setup for radiated emission measurements in anechoic chamber, table-top EUT



Test specification:	Section 15.109 Class B, Radiated emissions		
Test procedure:	ANSI C63.4, Section 8.3		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/25/2006 9:22:31 PM		
Temperature: 24 °C	Air Pressure: 1010 hPa	Relative Humidity: 40 %	Power Supply: 120 VAC
Remarks:			

Photograph 7.2.1 Setup for radiated emission measurements, general view



Photograph 7.2.2 Setup for radiated emission measurements, EUT cabling



Test specification:	Section 15.109 Class B, Radiated emissions		
Test procedure:	ANSI C63.4, Section 8.3		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/25/2006 9:22:31 PM		
Temperature: 24 °C	Air Pressure: 1010 hPa	Relative Humidity: 40 %	Power Supply: 120 VAC
Remarks:			

Table 7.2.2 Radiated emission test results

EUT SET UP: TABLE-TOP
TEST SITE: SEMI ANECHOIC CHAMBER
TEST DISTANCE: 3 m
FREQUENCY RANGE: 30 MHz – 1000 MHz
DETECTORS USED: PEAK / QUASI-PEAK
RESOLUTION BANDWIDTH: 120 kHz

Frequency, MHz	Peak emission, dB(μV/m)	Quasi-peak			Antenna polarization	Antenna height, m	Turn-table position**, degrees	Verdict
		Measured emission, dB(μV/m)	Limit, dB(μV/m)	Margin, dB*				
135.473750	42.40	40.97	43.50	-2.53	Vertical	1.0	234	Pass
169.347500	37.72	36.26	43.50	-7.24	Vertical	1.0	290	
203.212500	38.85	37.91	43.50	-5.59	Vertical	1.0	270	
326.115400	43.04	40.00	46.00	-6.00	Vertical	1.0	22	
356.388750	40.82	27.45	46.00	-18.55	Vertical	1.0	27	
733.375000	36.87	33.06	46.00	-12.94	Vertical	1.0	315	

FREQUENCY RANGE: 1000 MHz – 2900 MHz
DETECTORS USED: PEAK / AVERAGE
RESOLUTION BANDWIDTH: 1000 kHz

Frequency, MHz	Peak emission, dB(μV/m)	Average			Antenna polarization	Antenna height, m	Turn-table position**, degrees	Verdict
		Measured emission, dB(μV/m)	Limit, dB(μV/m)	Margin, dB*				
1065.70000	47.39	25.93	54.00	-28.07	Vertical	1.0	241	Pass
1121.03870	49.45	26.55	54.00	-27.45	Vertical	1.0	255	

*- Margin = Measured emission - specification limit.

** - EUT front panel refers to 0 degrees position of turntable.

Reference numbers of test equipment used

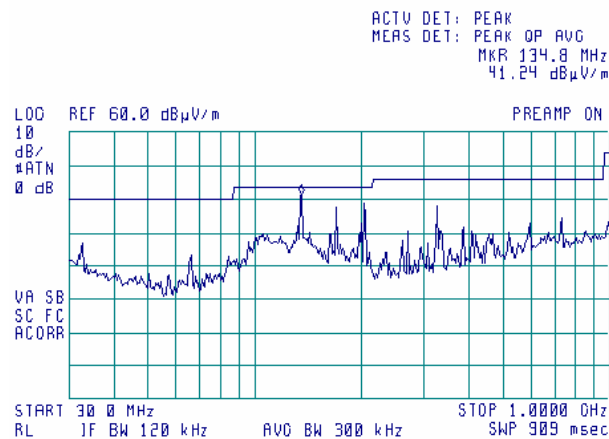
HL 0465	HL 0521	HL 0589	HL 0593	HL 0594	HL 0604	HL 1947	HL 1984
HL 2009							

Full description is given in Appendix A.

Test specification:	Section 15.109 Class B, Radiated emissions		
Test procedure:	ANSI C63.4, Section 8.3		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/25/2006 9:22:31 PM		
Temperature: 24 °C	Air Pressure: 1010 hPa	Relative Humidity: 40 %	Power Supply: 120 VAC
Remarks:			

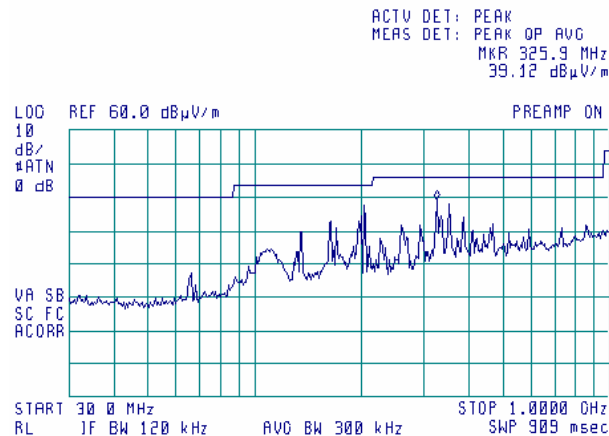
Plot 7.2.1 Radiated emission measurements in 30 - 1000 MHz range, vertical antenna polarization

TEST SITE: Semi anechoic chamber
TEST DISTANCE: 3 m



Plot 7.2.2 Radiated emission measurements in 30 - 1000 MHz range, horizontal antenna polarization

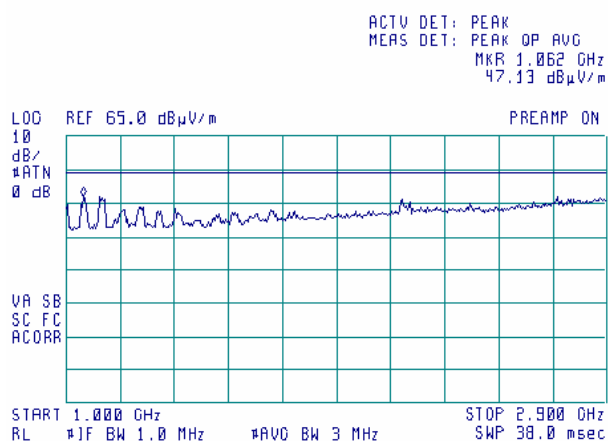
TEST SITE: Semi anechoic chamber
TEST DISTANCE: 3 m



Test specification:	Section 15.109 Class B, Radiated emissions		
Test procedure:	ANSI C63.4, Section 8.3		
Test mode:	Compliance	Verdict:	PASS
Date & Time:	5/25/2006 9:22:31 PM		
Temperature: 24 °C	Air Pressure: 1010 hPa	Relative Humidity: 40 %	Power Supply: 120 VAC
Remarks:			

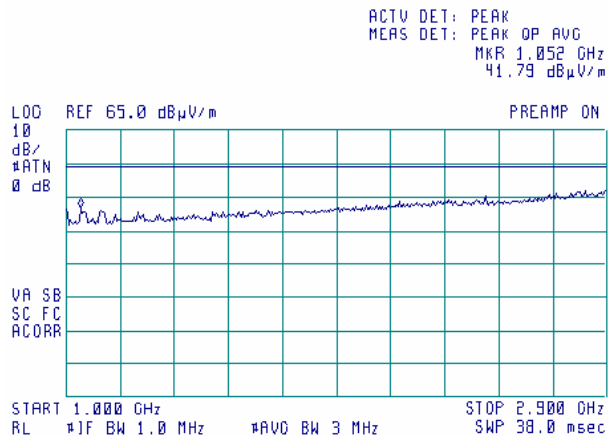
Plot 7.2.3 Radiated emission measurements in 1000 – 2900 MHz range, vertical antenna polarization

TEST SITE: Semi anechoic chamber
TEST DISTANCE: 3 m



Plot 7.2.4 Radiated emission measurements in 1000 – 2900 MHz range, horizontal antenna polarization

TEST SITE: Semi anechoic chamber
TEST DISTANCE: 3 m



8 APPENDIX A Test equipment and ancillaries used for tests

HL No	Description	Manufacturer	Model	Ser. No.	Last Cal.	Due Cal.
0163	LISN FCC/VDE/MIL-STD	Electro-Metrics	ANS 25/2	1314	01-Oct-05	01-Oct-06
0447	LISN, 16/2, 300V RMS	HL	LISN 16 - 1	066	03-Nov-05	03-Nov-06
0465	Anechoic Chamber 9(L) x 6.5(W) x 5.5(H) m	HL	AC - 1	023	11-Nov-05	11-Nov-06
0521	EMI Receiver (Spectrum Analyzer) with RF filter section 9 kHz-6.5 GHz	Hewlett Packard	8546A	3617A 00319, 3448A002 53	26-Sep-05	26-Sep-06
0589	Cable Coaxial, GORE A2P01POL118, 2.3 m	HL	GORE-3	176	02-Dec-05	02-Dec-06
0593	Antenna Mast, 1-4 m Pneumatic	Madgesh	AM-F1	101	02-Feb-06	02-Feb-07
0594	Turn Table for anechoic chamber flush mount d=1.2 m Pneumatic	HL	TT-WDC1	102	26-Jan-06	26-Jan-07
0604	Antenna BiconiLog Log-Periodic/T Bow- TIE 26 - 2000 MHz	EMCO	3141	9611-1011	10-Jan-06	10-Jan-07
0672	Shielded Room 4,6(L) x 4,2(W) x 2,4(H) m	HL	SR - 3	027	11-Nov-05	11-Nov-06
0787	Transient Limiter	Hewlett Packard	11947A	3107A018 77	21-Nov-05	21-Nov-06
1430	EMI Receiver, 9 kHz - 2.9 GHz	Agilent Technologies	8542E	3807A002 62,3705A0 0217	01-Sep-05	01-Sep-06
1512	Cable RF, 8 m	Belden	M17/167 MIL-C-17	1512	11-Sep-05	11-Sep-06
1947	Cable 18GHz, 6.5 m, blue	Rhophase Microwave Limited	NPS- 1803A- 6500-NPS	T4974	17-Oct-05	17-Oct-06
1984	Antenna, Double-Ridged Waveguide Horn, 1-18 GHz, 300 W, N-type	EMC Test Systems	3115	9911-5964	03-Mar-06	03-Mar-07
2009	Cable RF, 8 m	Alpha Wire	RG-214	C-56	02-Dec-05	02-Dec-06
2358	Power Supply, 2 X 0-36VDC / 5A, 5VDC / 5A	Horizon Electronics	DHR3655 D	767469	07-Apr-06	07-Apr-07

9 APPENDIX B Measurement uncertainties

Expanded uncertainty at 95% confidence in Hermon Labs EMC measurements

Test description	Expanded uncertainty
Conducted emissions at mains port with LISN and HP 8542E or HP 8546A receiver	9 kHz to 150 kHz: ± 3.9 dB 150 kHz to 30 MHz: ± 3.8 dB
Radiated emissions at 10 m measuring distance Horizontal polarization Vertical polarization	Biconilog antenna: ± 5.0 dB Biconical antenna: ± 5.0 dB Log periodic antenna: ± 5.1 dB Double ridged horn antenna: ± 5.3 dB Biconilog antenna: ± 5.5 dB Biconical antenna: ± 5.5 dB Log periodic antenna: ± 5.6 dB Double ridged horn antenna: ± 5.8 dB
Radiated emissions at 3 m measuring distance Horizontal polarization Vertical polarization	Biconilog antenna: ± 5.3 dB Biconical antenna: ± 5.0 dB Log periodic antenna: ± 5.3 dB Double ridged horn antenna: ± 5.3 dB Biconilog antenna: ± 6.0 dB Biconical antenna: ± 5.7 dB Log periodic antenna: ± 6.0 dB Double ridged horn antenna: ± 6.0 dB

The test equipment has been calibrated according to its recommended procedures and is within the manufacturer's published limit of error. The standards and instruments used in the calibration system conform to the present requirements of ISO/IEC 17025 (or alternately ANSI/NCSL Z540-1).

The laboratory calibrates its measurement standards by a third party (traceable to NIST, USA) on a regular basis according to equipment manufacturer requirements. The Hermon Labs EMC measurements uncertainty is given in the table above.

Person for contact: Mr. Alex Usoskin, CEO.

10 APPENDIX C Test facility description

Tests were performed at Hermon Laboratories Ltd., which is a fully independent, private, EMC, safety, environmental and telecommunication testing facility. Hermon Laboratories is listed by the Federal Communications Commission (USA) for all parts of Code of Federal Regulations 47 (CFR 47) and by Industry Canada for electromagnetic emissions (file numbers IC 2186-1 for OATS and IC 2186-2 for anechoic chamber), certified by VCCI, Japan (the registration numbers are R-808 for OATS, R-1082 for anechoic chamber, C-845 for conducted emissions site), assessed by TNO Certification EP&S (Netherlands) for a number of EMC, telecommunications, environmental, safety standards, and by AMTAC (UK) for safety of medical devices. The laboratory is accredited by American Association for Laboratory Accreditation (USA) according to ISO/IEC 17025 for electromagnetic compatibility, product safety, telecommunications testing and environmental simulation (for exact scope please refer to Certificate No. 839.01) and approved by Israel Ministry of environmental protection, radiation hazards department (Permit number 1158).

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Person for contact: Mr. Alex Usoskin, CEO.

11 APPENDIX D Specification references

FCC 47CFR part 15: 2005 subpart B	Radio Frequency Devices
ANSI C63.2: 1996	American National Standard for Instrumentation-Electromagnetic Noise and Field Strength, 10 kHz to 40 GHz-Specifications.
ANSI C63.4: 2003	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.

12 APPENDIX E Abbreviations and acronyms

A	ampere
AC	alternating current
AVRG	average (detector)
cm	centimeter
CDN	coupling/ decoupling network
dB	decibel
dBm	decibel referred to one milliwatt
dB(μV)	decibel referred to one microvolt
dB(μV/m)	decibel referred to one microvolt per meter
DC	direct current
EMC	electromagnetic compatibility
EMI	electromagnetic interference
EUT	equipment under test
GHz	gigahertz
GND	ground
H	height
HL	Hermon laboratories
Hz	hertz
ITE	information technology equipment
k	kilo
kHz	kilohertz
kV	kilovolt
L	length
LISN	line impedance stabilization network
m	meter
MHz	megahertz
min	minute
mm	millimeter
ms	millisecond
μs	microsecond
NA	not applicable
NP	normal performance
OATS	open area test site
Ω	Ohm
QP	quasi-peak
PS	power supply
RE	radiated emission
RF	radio frequency
rms	root mean square
s	second
V	volt
W	width

13 APPENDIX F Test equipment correction factors

Correction factor
Line impedance stabilization network
Model LISN 16 - 1
Hermon Laboratories

Frequency, MHz	Correction factor, dB
0.01	5.0
0.02	2.2
0.03	1.1
0.04	0.7
0.05	0.5
0.1	0.2
0.2	0.1
0.4	0.1
0.6	0.1
0.8	0.1
1	0.1
2	0.1
3	0.1
4	0.1
6	0.2
10	0.3
12	0.4
16	0.5
18	0.6
20	0.7
25	0.9
28	1.2
30	1.3

The correction factor in dB is to be added to meter readings of an interference analyzer or a spectrum analyzer.

Correction factor
Line impedance stabilization network
Model ANS-25/2
Electro-Metrics

Frequency, MHz	Correction factor, dB
0.01	4.7
0.02	2.1
0.03	1.1
0.04	0.7
0.05	0.5
0.1	0.2
0.2	0.1
0.4	0.1
0.6	0.1
0.8	0.1
1	0.1
2	0.1
3	0.1
4	0.1
6	0.1
10	0.1
12	0.1
16	0.1
18	0.1
20	0.1
25	0.1
28	0.1
30	0.1

The correction factor in dB is to be added to meter readings of an interference analyzer or a spectrum analyzer.

Antenna factor
Biconilog antenna EMCO, model 3141, serial number 1011

Frequency, MHz	Antenna factor, dB(1/m)	Frequency, MHz	Antenna factor, dB(1/m)	Frequency, MHz	Antenna factor, dB(1/m)
26	7.8	560	19.8	1300	27.0
28	7.8	580	20.6	1320	27.8
30	7.8	600	21.3	1340	28.3
40	7.2	620	21.5	1360	28.2
60	7.1	640	21.2	1380	27.9
70	8.5	660	21.4	1400	27.9
80	9.4	680	21.9	1420	27.9
90	9.8	700	22.2	1440	27.8
100	9.7	720	22.2	1460	27.8
110	9.3	740	22.1	1480	28.0
120	8.8	760	22.3	1500	28.5
130	8.7	780	22.6	1520	28.9
140	9.2	800	22.7	1540	29.6
150	9.8	820	22.9	1560	29.8
160	10.2	840	23.1	1580	29.6
170	10.4	860	23.4	1600	29.5
180	10.4	880	23.8	1620	29.3
190	10.3	900	24.1	1640	29.2
200	10.6	920	24.1	1660	29.4
220	11.6	940	24.0	1680	29.6
240	12.4	960	24.1	1700	29.8
260	12.8	980	24.5	1720	30.3
280	13.7	1000	24.9	1740	30.8
300	14.7	1020	25.0	1760	31.1
320	15.2	1040	25.2	1780	31.0
340	15.4	1060	25.4	1800	30.9
360	16.1	1080	25.6	1820	30.7
380	16.4	1100	25.7	1840	30.6
400	16.6	1120	26.0	1860	30.6
420	16.7	1140	26.4	1880	30.6
440	17.0	1160	27.0	1900	30.6
460	17.7	1180	27.0	1920	30.7
480	18.1	1200	26.7	1940	30.9
500	18.5	1220	26.5	1960	31.2
520	19.1	1240	26.5	1980	31.6
540	19.5	1260	26.5	2000	32.0
		1280	26.6		

Antenna factor in dB(1/m) is to be added to receiver meter reading in dB(μ V) to convert it into field intensity in dB(μ V/m).

Antenna factor
Double-ridged wave guide horn antenna
Model 3115
Serial number: 9911-5964

Frequency, MHz	Antenna factor. dB(1/m)
1000.0	24.5
1500.0	24.8
2000.0	27.6
2500.0	28.7
3000.0	30.8
3500.0	32.9
4000.0	32.7
4500.0	32.0
5000.0	33.6
5500.0	35.3
6000.0	35.7
6500.0	35.8
7000.0	36.2
7500.0	37.2
8000.0	37.2
8500.0	38.1
9000.0	38.6
9500.0	38.3
10000.0	38.4
10500.0	38.3
11000.0	38.8
11500.0	39.9
12000.0	39.6
12500.0	39.5
13000.0	40.5
13500.0	41.1
14000.0	41.5
14500.0	40.8
15000.0	39.5
15500.0	38.1
16000.0	38.1
16500.0	40.1
17000.0	42.6
17500.0	45.4
18000.0	48.7

Antenna factor is to be added to receiver meter reading in dB(μ V) to convert it into field intensity in dB(μ V/m).