

Prüfbericht / Test report

Test-Firm-Registration-Number: 90870

FCC (Federal Communications Commission)



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Prüfbericht Nr./ Test report no.:

11/01-0105

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Note:

The test equipments used at pkm are calibrated by an external DKD-calibration laboratory. Calibration documents are available upon request.

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1. CLIENT INFORMATION:

Name: DATECS Ltd.

Address: bul. Tzarigradsko shosse 115A,Fl.4, 1784 SOFIA - BULGARIA

Name of contact: Mr. P. Iliev, Vice President / Mrs. Ludmila Nikolova

Telephone: 00359 2 8165 550 Fax: 00359 2 9741 100

E-mail: pencho@datecs.bg / lusi@datecs.bg

2. EQUIPMENT UNDER TEST:

2.1 Identification of the EUT

Equipment: Scanner

Model: LINEA PRO 4.0

Brand name: -/-

Serial no.:

Manufacturer: DATECS Ltd.

Country of origin: BULGARIA

Rating: Lithium-Ion battery ICP663450M 3.7V 1300mA / 5V DC, powered by USB

2.2 Additional information about the EUT: In course of this test report only the EMC measurements of the Scanner

function are performed (part 15 subpart B, unintentional radiator). The conformity of the Radio part for this product is shown by separate report.



3. TEST SITE

3.1. Shielded room for conducted emission

Measurement of conducted emission from EUT was made in the shielded chamber (Siemens DC-10GHz) that has been found in compliance with Federal Communications Commissions (FCC) requirements of clause 2.948 according to ANSI C63.4-2003 on March 04, 2009.

3.2. Semi-anechoic chamber/OATS for radiated emission

Measurement of radiated emissions from EUT was made in the semi-anechoic chamber that has been found in compliance with Federal Communications Commissions (FCC) requirements of clause 2.948 according to ANSI C63.4-2003 on March 04, 2009.

3.3 Cable input conducted emission

Measurement of cable input conducted emission from EUT was made in the semi-anechoic chamber that has been found in compliance with Federal Communications Commissions (FCC) requirements of clause 2.948 according to ANSI C63.4-2003 on March 04, 2009.

4. CALIBRATIONS OF MEASURING INSTRUMENTS

All measurements were made with instruments calibrated according to the requests of EN/IEC 17025 according to which the test site is accredited. Measurement of radiated emissions was made with instruments conforming to American National Standard Specification, ANSI C63.4-2003. The calibration of measuring instrument, including any accessories that may affect test results, was performed according to the requests of EN/IEC 17025.

5. DESCRIPTION OF THE TEST CONDITIONS

5.1 Conducted emission measurements

5.1.1 Test site

Measurements were made in shielded chamber as described at 3.1 in this report.

5.1.2 Detector function selection and bandwidth

In conducted emissions measurement CISPR quasi-peak- and average-detector were used.

The bandwidth of the detector of instrument is 10 kHz over the frequency range of 150 kHz to 30 MHz, Conducted emission is detected in CCIR quasi-peak- and average-mode.

5.1.3 Unit of measurement

Test results of conducted emission measurement are reported in dBµV.

5.1.4 Frequency range to be scanned

For conducted emission measurements, the spectrum in the range of 150 kHz to 30 MHz was investigated.

5.1.5 Test conditions and configuration of EUT

The EUT was configured and operated in all modes of operation so as to find the maximum conducted emission generated from EUT.

The power was furnished with rated (normal) power, as specified in the owner's manual of EUT. The EUT was placed on a 80 cm high non metallic table.

Each type of accessory provided by manufacturer or typically used and support equipment were connected to the EUT during measurements as for the typical usage and applicable as nearly as practicable.

5.1.6 Measurement uncertainty

Conducted emission measurements: <u>+</u> 1.8dB

The measurement uncertainty describes the overall uncertainty of the given measured value during the operation of the EUT in the above mentioned way.

The measurements uncertainty was calculated in accordance with NAMAS NIS 81: "The treatment of uncertainty in EMC measurement" and "Guide to the Expression of Uncertainty in Measurement (GUM)".

The measurement uncertainty was given with a confidence of 95%.

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5.2 Radiated emissions measurements

5.2.1 Test site

Measurements were made in semi-anechoic chamber as described at 3.2 in this report.

5.2.2 Detector function selection and bandwidth

In radiated emissions measurement, field strength meters that have CISPR quasi-peak and average were used. The bandwidth of the detector of instrument is 120 KHz over frequency range of 30 to 1000 MHz, emissions to be measured are detected in CCIR quasi peak mode.

The bandwidth of the detector of instrument is 1000 KHz for frequencies above 1000 MHz, emissions to be measured are detected in average mode.

5.2.3 Unit of measurement

Test results of radiated emissions measurement are reported in dB(microvolts per meter) at the specific distance. Using the unit of dB μ V on the test instrument, the indication unit can be converted to field strength unit of μ V/m as following method for frequencies 30 MHz – 1000 MHz;

$$F/S = 10^{[(R + CF)/20]}$$

here.

F/S: Field strength in μ V/m R: Meter reading in dB (μ V)

CF: Correction factor (includes cable loss, antenna factor, field deviation)

5.2.4 Antennas

Measurements were made using a calibrated bilog antenna in the range of 30 to 1000 MHz and a calibrated horn antenna above 1000MHz to determine the emission characteristics of the EUT. Measurements were also made for both horizontal and vertical polarization.

The horizontal distance between the receiving antenna and the closest periphery of the EUT is 3 meters.

5.2.5 Frequency range to be scanned

For radiated emissions measurements, the spectrum in the range of 30 to 1000 MHz was investigated and above 1000MHz up to the 5th harmonic of the highest frequency or 40GHZ, whichever is lower.

5.2.6 Test conditions and configuration of EUT

The EUT was configured and operated in all modes of operation so as to find the maximum RF energy generated from EUT.

The power was furnished with rated (normal) Power, as specified in the owner's manual of EUT. The EUT was placed on a 80 cm high non metallic 1m diameter table. The turntable containing the system was rotated and the antenna height was varied 1m to 4 m to find the maximum RF energy generated from EUT.

Each type of accessory provided by manufacturer or typically used and support equipment were connected to the EUT during measurements to the typical usage and applicable as nearly as practicable.

5.2.7 Measurement uncertainty

Radiated emissions measurements, bilog antenna: ± 2.7 dB, horn antenna ± 2.9dB

The measurement uncertainty describes the overall uncertainty of the given measured value during the operation of the EUT in the above mentioned way.

The measurements uncertainty was calculated in accordance with NAMAS NIS 81: "The treatment of uncertainty in EMC measurement" and "Guide to the Expression of Uncertainty in Measurement (GUM)".

The measurement uncertainty was given with a confidence of 95 %.

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5.3 Cable input conducted emission measurements

5.3.1 Test site

Measurements were made in shielded chamber as described at 3.3 in this report.

5.3.2 Detector function selection and bandwidth

In conducted cable input emissions measurement CISPR quasi-peak were used.

The bandwidth of the detector of instrument is 120 KHz over frequency range of 30 MHz to 1000 MHz, Conducted cable input emission is detected in CCIR guasi peak mode.

5.3.3 Unit of measurement

Test results of conducted emission measurement are reported in $dB\mu V$. Using the unit of $dB\mu V$ on the test instrument, indication unit was converted to voltage unit of μV as following method for frequencies 30 MHz – 1000 MHz:

$$U = 10^{[R/20]}$$

here,

U: Voltage of conducted emission in µV

R: Meter reading in dB(µV)

5.3.4 Frequency range to be scanned

For conducted cable input emission measurements, the spectrum in the range of 54 MHz to 804 MHz was investigated.

5.3.5 Test conditions and configuration of EUT

The EUT was configured and operated in all modes of operation so as to find the maximum conducted emission generated from EUT.

The power was furnished with rated (normal) Power, as specified in the owner's manual of EUT. The EUT was placed on a 1 m high non metallic table.

Each type of accessory provided by manufacturer or typically used and support equipment were connected to the EUT during measurements to the typical usage and applicable as nearly as practicable.

5.3.6 Measurement uncertainty

Conducted cable input emission measurements: ± 1.3 dB

The measurement uncertainty describes the overall uncertainty of the given measured value during the operation of the EUT in the above mentioned way.

The measurements uncertainty was calculated in accordance with NAMAS NIS 81: "The treatment of uncertainty in EMC measurement" and "Guide to the Expression of Uncertainty in Measurement (GUM)".

The measurement uncertainty was given with a confidence of 95 %.

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6. MEASURING INSTRUMENTS AND SET-UP

6.1 Conducted emission

6.1.1 Test receiver

Rohde & Schwarz, model ESHS-30 (9 kHz – 30 MHz)

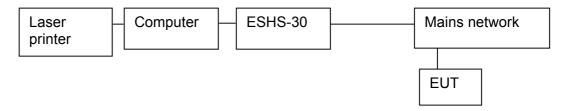
Detector function: quasi peak

IF bandwidth: 10 kHz

6.1.2 Mains network

Rohde & Schwarz, model ESH2-Z5 (9 kHz – 30 MHz)

6.1.3 Measurement setup



6.2 Radiated emission

6.2.1 Test receiver

Rohde & Schwarz, model ESVS-30 (20 MHz – 1000 MHz)

Detector function: quasi peak

IF bandwidth: 120kHz

Rohde & Schwarz, model FSMS26 (above 1000MHz)

Schwarzbeck, Preeamplifier model BBV 9718 1GHz - 18GHz

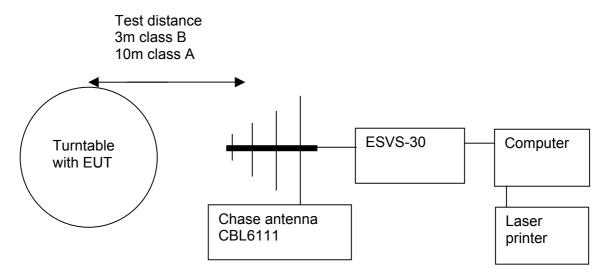
Detector function: average IF bandwidth: 1000kHz

6.2.2 Receiving antenna

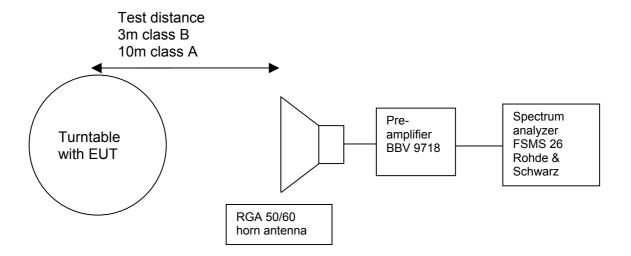
Chase, model CBL6111: bilog antenna (30 MHz – 1000 MHz) Electro Metric RGA 50/60 horn antenna (above 1000MHz)

6.2.3 Measurement setup

30MHz - 1000MHz



above 1000MHz



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6.3 Cable input conducted emission

6.3.1 Test receiver

Rohde & Schwarz, model ESVS-30 (20 MHz - 1000 MHz)

Detector function: quasi peak IF bandwidth: 120 kHz

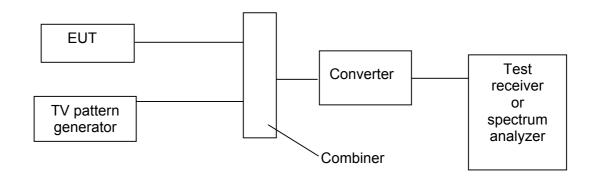
6.3.2 Power divider

Model 50 Ohm-6 dB, Suhner

DC- 2000 MHz

6.3.3 Converter (matching network) 50/75 Ohm Model ZM57, Texscan

6.3.4 Measurement setup





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7. MEASUREMENTS AND RESULTS

7.1 Conducted emission

The EUT is battery operated or powered by USB (5V DC) and has no connection facility to mains power.

7.2 Radiated emission

Tests have been performed with an iPod connected in the modes USB connected to PC (charge mode), Bluetooth connection (printing on Bluetooth printer), card reading and barcode scanning. As the highest frequency generated is less than 1 GHz, frequencies up to 5 GHz have been investigated. The EUT complied with the requirements of section 15.109 (a) class B.

7.3 Cable input conducted emission

As the EUT has no connection facility to an external antenna or cable network, no cable input conducted emission can be measured.

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CONCLUSIONS:

From the measurement data obtained, the tested sample was considered to have **COMPLIED** with the requirements for the relevant clauses of Federal Communications Commission Rules for unintentional radiators (part 15 subpart B)

Zuständiger Laborleiter: Responsible head of laboratory: **pkm** electronic GmbH

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09.02.2011

(Datum/Date)

G. Raithel Dipl.-Ing. (FH)

(Name/Name)

(Unterschrift/Signature)



9. LIST OF USED TEST EQUIPMENT AT PKM

Test place	Kind of equipment	Туре	Manufacturer	pkm-ident no.
Conducted emissions cabin 1 9kHz - 30MHz	EMI test receiver	ESHS-30	Rohde&Schwarz	10571
ONIZ OOMIZ	Line impedance stabilisation network	ESH2-Z5	Rohde&Schwarz	10139
	Shielded room	1 GHz Typ B83102	Siemens	10111
Radiated emissions 30MHz - 1000MHz	EMI test receiver	ESVS-30	Rohde&Schwarz	10572
	EMI test antenna	CBL6111	Chase	10022
	Antenna mast system	AM9104	Schwarzbeck	10099
	AC-linefilter	FV2-10-D	Timonta	10755
	Turntable	DT 310	Deisel	10774
Cable input conducted emissions	TV-test transmitter	VTG700SAT	Grundig	10531
	Spectrum analyzer	HP8562B	Hewlett Packard	10208
	EMI test receiver	ESVS-30	Rohde&Schwarz	10572
	50/75 Ohm converter	ZM57	Texscan	10305
	Power divider	50 Ohm-6dB	Suhner	10421
Interference radiation 1000MHz – 18GHz	Spectrum analyzer (100Hz – 26.5GHz)	FSMS 26	Rohde & Schwarz	10481 / 10482
	Horn antenna (1GHz – 18GHz)	RGA-50/60	Electro Metrics	10018
	Broadband- Preamplifier 1-18 GHz	BBV 9718	Schwarzbeck	11230
	Antenna mast system	AM9104	Schwarzbeck	10099
	AC-linefilter	FV2-10-D	Timonta	10755
	Turntable	DT 310	Deisel	10774
Frequency measurements	Spectrum analyzer (100Hz – 26.5GHz)	FSMS 26	Rohde & Schwarz	10481 / 10482
	Antenna mast system	AM9104	Schwarzbeck	10099
	AC linefilter	FV2-10-D	Timonta	10755
	Turntable	DT 310	Deisel	10774

The test equipments used at pkm are calibrated by an external DKD-calibration laboratory. Calibration documents are available upon request.

10. PHOTOS









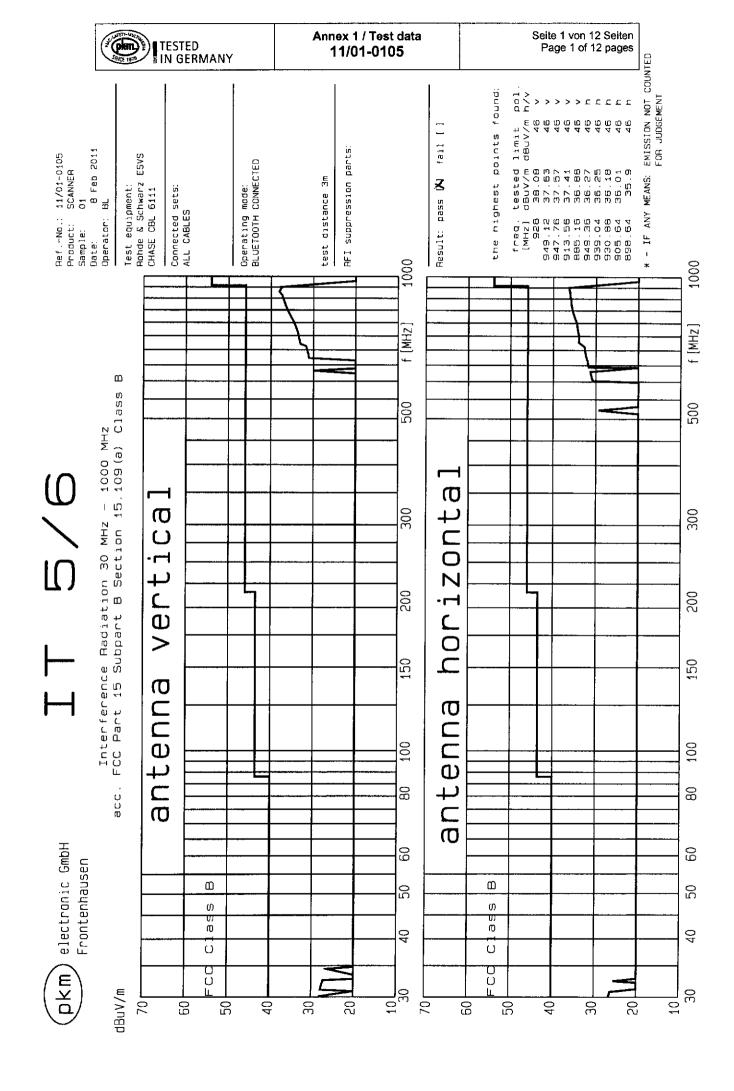








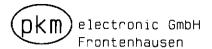
End of test report





Annex 1 / Test data 11/01-0105

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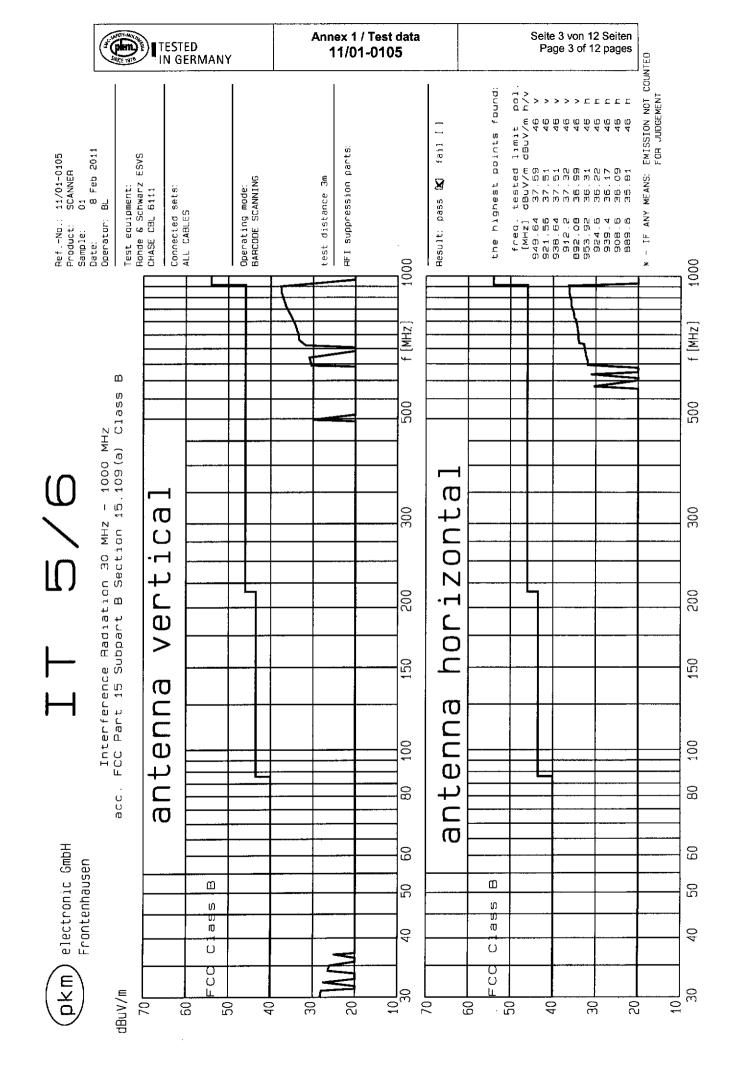
Ref.-No.: 11/01-0105 OPERATION MODE:

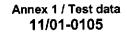
Product : SCANNER BLUETOOTH CONNECTED

Sample : 01

Date : 8 Feb 2011

196 197	HOR. HOR.	FRQ.:	905.64 MHz 930.88 MHz 939.04 MHz 949.36 MHz	LEV.:	36.18 36.25	dBuV/m dBuV/m dBuV/m dBuV/m	Lim.: Lim.:	46 46	dBuV/m dBuV/m
		_				,			,
191	VER.	FRQ.:	850.76 MHz	LEV.:	36.16	dBuV/m	Lim.:	46	dBuV/m
192	VER.	FRQ.:	865.12 MHz			dBuV/m			
193	VER.	FRQ.:	872.4 MHz	LEV.:	36.65	dBuV/m	Lim.:	46	dBuV/m
194	VER.	FRQ.:	885.16 MHz	LEV.:	36.88	dBuV/m	Lim.:	46	dBuV/m
195	VER.	FRQ.:	913.56 MHz	LEV.:	37.41	dBuV/m	Lim.:	46	dBuV/m
196	VER.	FRQ.:	928 MHz	LEV.:	38.08	dBuV/m	Lim.:	46	dBuV/m
197	VER.	FRQ.:	947.76 MHz	LEV.:	37.57	dBuV/m	Lim.:	46	dBuV/m
198	VER.	FRQ.:	949.12 MHz	LEV.:	37.63	dBuV/m	Lim.:	46	dBuV/m





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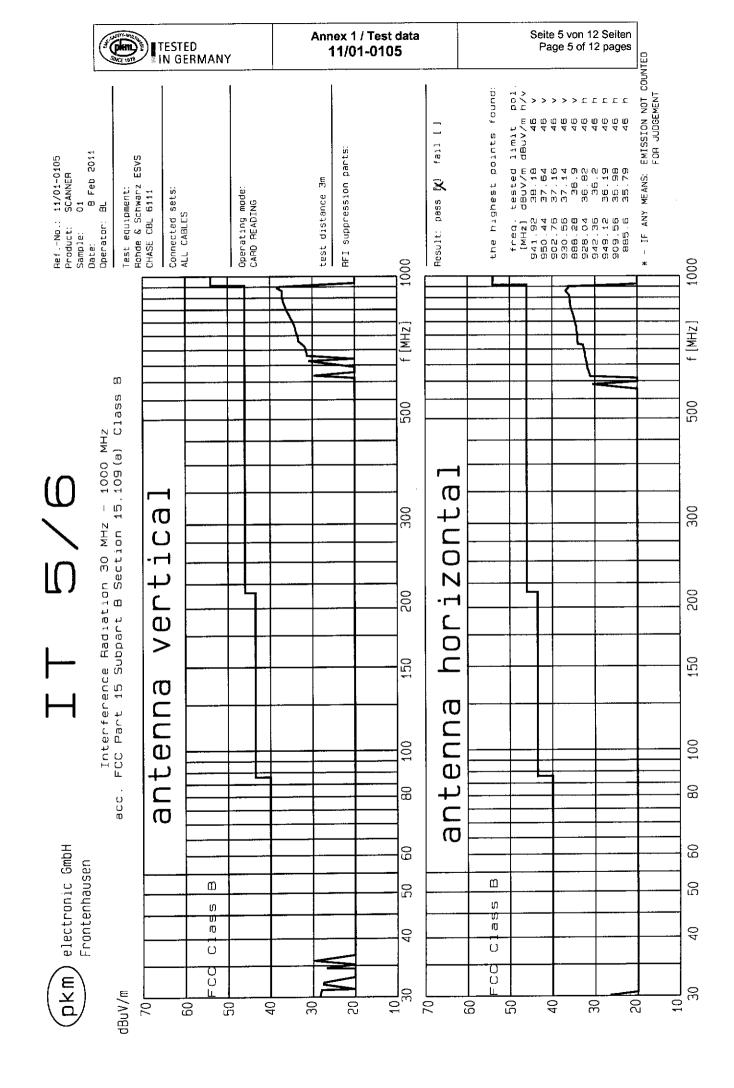


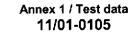
Ref.-No.: 11/01-0105 OPERATION MODE: Product: SCANNER BARCODE SCANNING

Sample : 01

Date : 8 Feb 2011

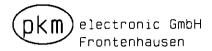
195	HOR.	FRQ.:	908.6 MHz	LEV.:	36.09	dBuV/m	Lim.:	46	dBuV/m
196	HOR.	FRQ.:	924.6 MHz	LEV.:	36.22	dBuV/m	Lim.:	46	dBuV/m
197	HOR.	FRQ.:	939.4 MHz	LEV.:	36.17	dBuV/m	Lim.:	46	dBuV/m
198	HOR.	FRQ.:	953.92 MHz	LEV.:	36.31	dBuV/m	Lim.:	46	dBuV/m
192	VER.	FRQ.:	864.88 MHz	LEV.:	36.54	dBuV/m	Lim.:	46	dBuV/m
193	VER.	FRQ.:	867.52 MHz	LEV.:	36.51	dBuV/m	Lim.:	46	dBuV/m
194	VER.	FRQ.:	892.08 MHz	LEV.:	36.99	dBuV/m	Lim.:	46	dBuV/m
195	VER.	FRQ.:	912.2 MHz	LEV.:	37.32	dBuV/m	Lim.:	46	dBuV/m
196	VER.	FRQ.:	921.56 MHz	LEV.:	37.51	dBuV/m	Lim.:	46	dBuV/m
197	VER.	FRQ.:	938.64 MHz	LEV.:	37.51	dBuV/m	Lim.:	46	dBuV/m
198	VER.	FRO.:	949.64 MHz	LEV.:	37.59	dBuV/m	Lim.:	46	dBuV/m





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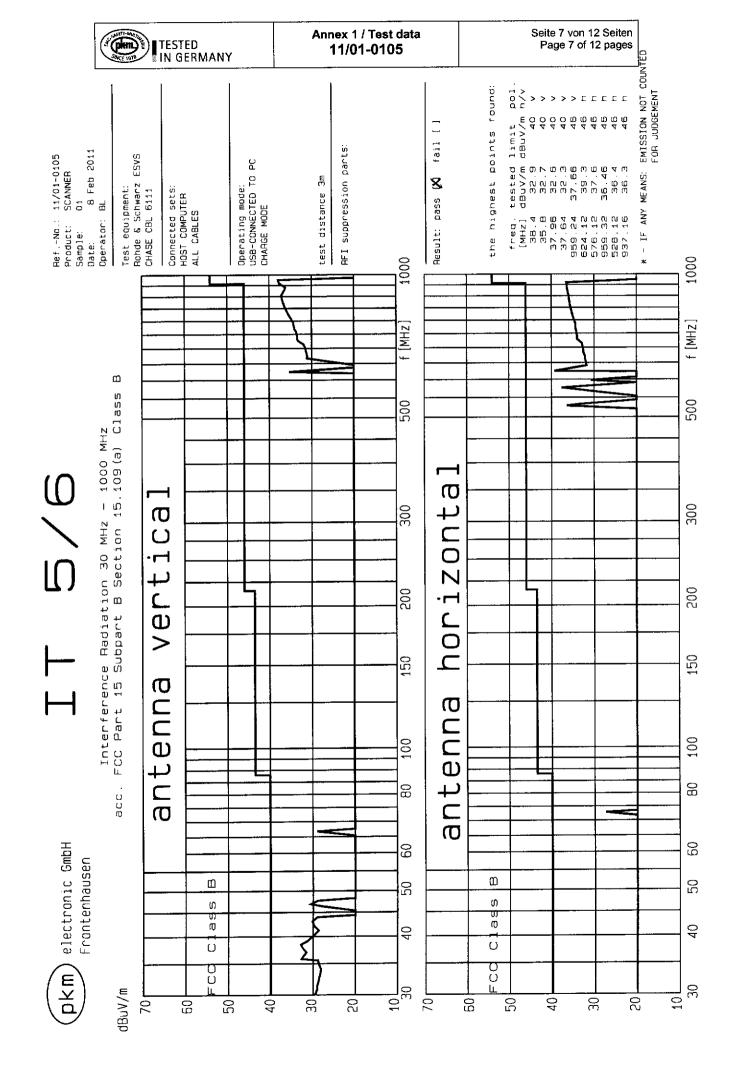


Ref.-No.: 11/01-0105 OPERATION MODE: Product: SCANNER CARD READING

Sample : 01

Date : 8 Feb 2011

196	HOR.	FRQ.:	928.04	\mathtt{MHz}	LEV.:	36.82 dBuV/m	Lim.:	46	dBuV/m
197	HOR.	FRQ.:	942.36	MHz	LEV.:	36.2 dBuV/m	Lim.:	46	dBuV/m
198	HOR.	FRQ.:	949.12	MHz	LEV.:	36.19 dBuV/m	Lim.:	46	dBuV/m
191	VER.	FRQ.:	844.36	MHz	LEV.:	36.03 dBuV/m	Lim.:	46	dBuV/m
192	VER.	FRQ.:	861.44	MHz	LEV.:	36.4 dBuV/m	Lim.:	46	dBuV/m
193	VER.	FRQ.:	884.08	MHz	LEV.:	36.87 dBuV/m	Lim.:	46	dBuV/m
194	VER.	FRQ.:	888.28	MHz	LEV.:	36.9 dBuV/m	Lim.:	46	dBuV/m
195	VER.	FRQ.:	902.76	MHz	LEV.:	37.16 dBuV/m	Lim.:	46	dBuV/m
196	VER.	FRQ.:	930.56	MHz	LEV.:	37.14 dBuV/m	Lim.:	46	dBuV/m
197	VER.	FRQ.:	941.92	MHz	LEV.:	38.18 dBuV/m	Lim.:	46	dBuV/m
198	VER.	FRQ.:	950.44	MHz	LEV.:	37.64 dBuV/m	Lim.:	46	dBuV/m





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Ref.-No.: 11/01-0105 OPERATION MODE:

Product : SCANNER USB-CONNECTED TO PC

Sample : 01 CHARGE MODE

Date : 8 Feb 2011

164 169 174 195 196 197		FRQ.: FRQ.: FRQ.: FRQ.:	528.12 MHz 576.12 MHz 624.12 MHz 914.72 MHz 923.8 MHz 937.16 MHz 959.32 MHz	LEV.: LEV.: LEV.: LEV.:	36.4 dBuV/m 37.6 dBuV/m 39.3 dBuV/m 36.11 dBuV/m 36.22 dBuV/m 36.3 dBuV/m 36.46 dBuV/m	Lim.: Lim.: Lim.: Lim.:	46 46 46 46	dBuV/m dBuV/m dBuV/m dBuV/m dBuV/m
	VER. VER.	FRQ.:	35.8 MHz 37 MHz	LEV.:	32.7 dBuV/m 31.6 dBuV/m	Lim.:	40	dBuV/m dBuV/m
			37.64 MHz		32.3 dBuV/m			dBuV/m
14	VER.		37.96 MHz		32.6 dBuV/m			dBuV/m
15	VER.	FRQ.:	38.4 MHz		32.9 dBuV/m	Lim.:		dBuV/m
16	VER.	FRQ.:	39.04 MHz	LEV.:	31.4 dBuV/m	Lim.:		dBuV/m
21	VER.	FRQ.:	43 MHz	LEV.:	30.2 dBuV/m	Lim.:	40	dBuV/m
26	VER.	FRO.:	46.8 MHz	LEV.:	30.5 dBuV/m	Lim.:	40	dBuV/m
191	VER.	FRQ.:	852.68 MHz	LEV.:	36.3 dBuV/m	Lim.:	46	dBuV/m
192	VER.		858.92 MHz	LEV.:	36.39 dBuV/m	Lim.:	46	dBuV/m
193	VER.	FRQ.:	877.28 MHz	LEV.:	36.8 dBuV/m	Lim.:	46	dBuV/m
194	VER.	FRQ.:	897.88 MHz	LEV.:	37.07 dBuV/m	Lim.:	46	dBuV/m
195	VER.	FRQ.:	901.28 MHz	LEV.:	37.19 dBuV/m	Lim.:	46	dBuV/m
196	VER.	FRQ.:	930.52 MHz	LEV.:	36.31 dBuV/m	Lim.:	46	dBuV/m
197		FRQ.:	939.88 MHz	LEV.:	36.16 dBuV/m	Lim.:	46	dBuV/m
	VER.		959.24 MHz		37.66 dBuV/m			dBuV/m
		-						





Reference No.:	11/01-0105
Product:	Scanner
Sample:	01
Date :	08.02.2011
Operator :	BI
Remarks :	
Operating Mode:	Card reading
Result:	⊠ pass ☐ fail

Test Equipment: Analyzer FSMS 26 Antenna: RGA 50/60 Preamplifier BBV 9718

Remark: All cables connected

Polarisation	Test Frequency	Reading	Corr.	Meas. value	Meas. value	Limit	Limit
Antenna	[GHz]	[dBµV]	[dB]	[dBµV/m]	[µV/m]	[dBµV/m]	[µV/m]
Н	1,010	34,2	-11,0	23,2	14,4	54	500
Н	1,200	33,6	-11,0	22,6	13,5	54	500
Н	1,500	33,9	-9,7	24,2	16,2	54	500
Н	1,800	34,1	-8,4	25,7	19,3	54	500
Н	2,000	33,7	-6,1	27,6	23,4	54	500
		• • •	-			54	500
						54	500
V	1,010	33,1	-11,0	22,1	12,7	54	500
V	1,200	34,2	-11,0	23,2	14,4	54	500
V	1,500	33,9	-9,7	24,2	16,2	54	500
V	1,800	33,2	-8,4	24,8	17,4	54	500
V	2,000	33,6	-6,1	27,5	23,7	54	500
						54	500
						54	500
						54	500
						54	500
***						54	500
						54	500
						54	500
						54	500
						54	500
						54	500
	-					54	500
						54	500
						54	500
						54	500
						54	500





Reference No.:	11/01-0105				
Product:	Scanner				
Sample:	01				
Date :	08.02.2011				
Operator :	Bi				
Remarks :					
Operating Mode:	Barcode scanning				
Result:	🛛 pass 🔲 fail				

Test Equipment: Analyzer FSMS 26 Antenna: RGA 50/60 Preamplifier BBV 9718

Remark: All cables connected

Polarisation	Test Frequency	Reading	Corr.	Meas. value	Meas. value	Limit	Limit
Antenna	[GHz]	[dBµV]	[dB]	[dBµV/m]	[µV/m]	[dBµV/m]	[μV/m]
Н	1,010	34,1	-11,0	23,1	14,3	54	500
Н	1,200	32,6	-11,0	21,6	12,0	54	500
Н	1,500	33,7	-9,7	24,0	15,8	54	500
Н	1,800	34,1	-8,4	25,7	19,3	54	500
Н	2,000	35,6	-6,1	29,5	29,8	54	500
						54	500
						54	500
V	1,010	34,7	-11,0	23,7	15,3	54	500
V	1,200	35,1	-11,0	24,1	16,0	54	500
V	1,500	34,8	-9,7	25,1	17,9	54	500
V	1,800	34,6	-8,4	26,2	20,4	54	500
V	2,000	35,1	-6,1	29,0	28,1	54	500
						54	500
						54	500
						54	500
						54	500
						54	500
		<u> </u>				54	500
						54	500
						54	500
						54	500
						54	500
						54	500
						54	500
						54	500
						54	500
				1	<u> </u>	54	500





Reference No.:	11/01-0105	
Product:	Scanner	
Sample:	01	
Date :	08.02.2011	
Operator :	BI	
Remarks :		
Operating Mode:	*	
Result:	⊠ pass ☐ fail	

Test Equipment: Analyzer FSMS 26 Antenna: RGA 50/60 Preamplifier BBV 9718

Remark: * USB connected to PC / Charge Mode

All cables connected

Polarisation	Test Frequency	Reading	Corr.	Meas, value	Meas. value	Limit	Limit
Antenna	[GHz]	[dBµV]	[dB]	[dBµV/m]	[µV/m]	[dBµV/m]	[µV/m]
H	1,020	34,1	-11,0	23,1	14,3	54	500
Н	1,210	33,7	-11,0	22,7	13,6	54	500
H	1,490	34,2	-9,7	24,5	16,8	54	500
Н	2,000	33,9	-6,1	27,8	24,5	54	500
	, ,					54	500
						54	500
V	1,020	34,2	-11,0	23,2	14,4	54	500
V	1,210	33,9	-11,0	22,9	13,9	54	500
V	1,490	34,3	-9,7	24,6	16,9	54	500
V	2,000	33,6	-6,1	27,5	23,7	54	500
						54	500
						54	500
						54	500
						54	500
						54	500
	****					54	500
		U.M.				54	500
	-					54	500
					****	54	500
		- the				54	500
		***		-		54	500
**						54	500
		·				54	500
						54	500
						54	500
					-	54	500
			<u> </u>			54	500





Reference No.:	11/01-0105					
Product:	Scanner					
Sample:	01					
Date :	08.02.2011					
Operator :	BI					
Remarks :						
Operating Mode:	Bluetooth connected					
Result:	⊠ pass ☐ fail					

Test Equipment: Analyzer FSMS 26 Antenna: RGA 50/60 Preamplifier BBV 9718

Remark: All cables connected

Polarisation	Test Frequency	Reading	Corr.	Meas. value	Meas. value	Limit	Limit
Antenna	[GHz]	[dBµV]	[dB]	[dBµV/m]	[µV/m]	[dBµV/m]	[µV/m]
Н	1,090	33,7	-11,0	22,7	13,6	54	500
Н	1,500	34,1	-9,7	24,4	16,6	54	500
Н	2,000	33,2	-6,1	27,1	22,6	54	500
						54	500
						54	500
V	1,090	34,2	-11,0	23,2	14,5	54	500
V	1,500	33,7	-9,7	24,0	15,8	54	500
V	2,000	33,4	-6,1	27,3	23,2	54	500
						54	500
		-				54	500
						54	500
						54	500
						54	500
						54	500
N-44						54	500
					<u> </u>	54	500
						54	500
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						54	500
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						54	500
						54	500
						54	500
						54	500
						54	500