

RADIATED EMISSIONS

DATA

FOR

KYOCERA WIRELESS CORPORATION 10300 Campus Point Drive San Diego, CA 92121

Prepared by

TÜV PRODUCT SERVICE 10040 Mesa Rim Road San Diego, CA 92121-2912



Measurement Requirements (CFR 47 Part 2, Paragraph 2.1053; Part 22 Paragraph 22.917(b)(2) and Part 24, Paragraph 24.238

The measurements which follow were performed by TÜV Product Service. To the best of my knowledge these tests were conducted in accordance with the procedures outlined in Part 2 of the Commission's Rules and Regulations. The data presented below demonstrates compliance with the appropriate technical standards.

Floyd R. Fleury EMC Manager

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Emissions Test Conditions: SPURIOUS RADIATED EMISSIONS

Roof (small open area test site)

The Spurious Radiated Emissions measurements were performed using the following equipment:

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Test	Eau	IDIT	ient	use	:a:

Model No.	Prop. No.	Description	Manufacturer	Serial No.	Cal Date
85660B	407	Spectrum Analyzer & Display	Hewlett Packard	2311A02209	02/02
3146	244	Antenna	EMCO	1063	02/02
3115	453	Double Ridge Antenna	EMCO	9412-4363	10/01
FF6549-2	781/777	High Pass Filter	Sage Laboratories	007	N/A*
FF6549-1	732/787	900 MHz HPF	Sage	006	N/A*
AFD3-0208-40-ST	367	Preamplifier	Miteq	155382	N/A*
AFS4-08001800-70-10P-4	368	Preamplifier	Miteq	167	N/A*

Remarks: (*) Verified



FCC Part 2, Paragraph 2.1053; Part 22, Paragraph 22.917(b)(2) and Part 24, Paragraph 24.238 QCP 3035 Tri-Mode Cellular Phone

Operating Mode: FM Transmit; CDMA 800 Transmit; PCS Transmit

FCC Part 22.917 (6)(2)

TEST DIST: 3 Meters

SPEC:

REPORT No: SC103138 TESTED BY: A. Laudani

CUSTOMER: Kyrocera

BICONICAL: N/A

244

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TEST SITE:

QCP 3035 Tri-Mode Cellular Phone

CDMA 800 Transmit

EUT MODE:

Apr. 5, 2001

NOTES:

453

OTHER:



signal vertical, noise floor horizontal noise floor signal vertical, noise floor horizontal noise floor noise floor Notes Antenna Height EUT Rotatio 38.3 44 8 4 ş MARGIN (dB) 123.2 -44.1 -43.3 123.5 -42.5 -42.6 -46.1 SPEC LIMIT (dBuV/m) pk av 8 8 8 8 84.4 84.4 84.4 123.5 41.9 41.9 41.8 41.8 38.3 40.3 HORIZONTAL CORRECTION MAX LEVEL (4Buv) FACTOR (4Buv/m) pk av (4B/m) pk av 84.3 84.3 26.3 123.7 Duty Cycle= 100%
Cable 1-732, Cable 2.787
SA 407 RBW 1 MHz, VBW 1 MHz – 10 MHz Span
Above Fundamental, added highpass filter 777 123.2 40.3 41.1 38.3 31.5 26.3 31.6 35.5 26.5 31.8 35.7 85.3 6.3 5.1 85.3 6.3 5.1 84.3 0.4 6.1 9.9 96.9 8.7 5.6 VERTICAL (dBuv) 97.4 97 10.1 96.9 8.7 5.6 97 10.1 5.9 6.8 836.49 1661.19 2497.68 848.31 1692.62 2544.93 1649.4 FREQ (MHz) 824.7

FCC Par 22.917(6)(2)

SPEC:

REPORT No: SC103138 TESTED BY: A. Laudani

TEST DIST: 3 Meters

BICONICAL: N/A

244

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Apr. 5, 2001 FM Transmit

NOTES:

EUT MODE:

TEST SITE:

QCP 3035 Tri-Mode Cellular Phone

CUSTOMER: Kyrocera

453



noise floor Notes Antenna Height EUT 360 Rotatio 38.3 MARGIN (dB) 124.7 -41.5 -44.5 124.8 -45.9 -46.1 SPEC LIMIT (dBuV/m) pk av 42.9 42.9 84.4 39.9 39.9 84.4 40.0 40.0 84.4 38.5 84.4 38.3 84.4 40.0 84.4 84.4 84.4 84.4 47.7 VERTICAL HORIZONTAL CORRECTION MAX LEVEL (dBuv) (dBuv) FACTOR (dBuV/m) pk av (db/m) pk av 124.8 38.5 38.3 40.0 Duty Cycle= 100%
Cable 1-722, Cable 2-787
SA 407 RBW 100 kHz, VBW 100 kHz
Above Fundamental, added highpass filter 777 35.8 39.4 88.3 88.3 10.5 10.5 1.7 1.7 0.1 0.1 85.4 2.8 -0.3 -0.4 85.4 -0.3 98.9 16.2 6.3 1.3 98.3 6.7 2.5 0.6 98.3 6.7 2.5 0.6 824.04 1648.08 836.49 1672.98 2509.47 3345.9 848.97 1697.94

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FCC Pari 2 4. 2 38

REPORT No: SC103138 TESTED BY: A. Laudani WY SPEC:

QCP 3035 Tri-Mode Cellular Phone

CUSTOMER: Kyrocera

PCS Transmit

Apr. 5, 2001

NOTES:

TEST DIST: 3 Meters

TEST SITE: 3
BICONICAL: N/A

244

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noise floor Notes Antenna Height EUT 300 360 Rotatio 59.4 121.7 -22.8 61.6 -27.4 57 58.3 64.7 MARGIN (dB) 121.4 -17.9 -26.1 SPEC LIMIT (dBuV/m) pk av 84.4 84.4 84.4 84.4 84.4 121.4 66.5 66.5 58.3 58.3 61.6 57.0 121.7 61.6 57.0 86.7 20.9 12.7 86.7 20.9 12.7 92.5 15.6 14.1 10.5 88.8 13.2 10.2 88.3 13.1 10.5 VERTICAL (dBuv) 88.8 13.2 10.2 88.3 13.1 1851.25 FREQ (MHz) 1880 3760 5640

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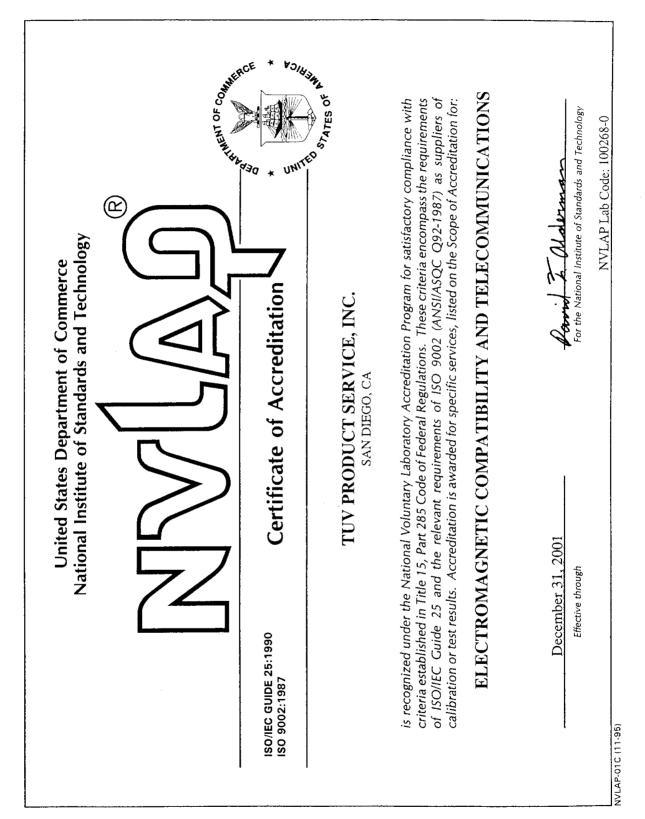
Rev.No 1.0



Testing Facilities

Certificates of Approval





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National Institute of Standards and Technology

National Voluntary Laboratory Accreditation Program

ISO/IEC GUIDE 25:1990 ISO 9002:1987

Scope of Accreditation



Page: 1 of 3

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

NVLAP LAB CODE 100268-0

TUV PRODUCT SERVICE, INC.

10040 Mesa Rim Road San Diego, CA 92121-1034 Mr. R. Barry Wallen

Phone: 619-546-3999 Fax: 619-546-0364 E-Mail: bwallen@TUVps.com URL: http://www.tuvps.com

NVLAP Code Designation / Description

Emissions Test Methods:

12/CIS22 IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance

characteristics of information technology equipment

12/CIS22a IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance

characteristics of information technology equipment, Amendment 1:1995, and

Amendment 2:1996.

12/CIS22b CNS 13438:1997: Limits and Methods of Measurement of Radio Interference

Characteristics of Information Technology Equipment

12/F01 FCC Method - 47 CFR Part 15 - Digital Devices

12/F01a Conducted Emissions, Power Lines, 450 KHz to 30 MHz

12/F01b Radiated Emissions

December 31, 2001

Effective through

Pavid L. alderman

For the National Institute of Standards and Technology

NVLAP-01S (11-95)



National Institute of Standards and Technology



National Voluntary Laboratory Accreditation Program

ISO/IEC GUIDE 25:1990 ISO 9002:1987

Scope of Accreditation



Page: 2 of 3

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

NVLAP LAB CODE 100268-0

TUV PRODUCT SERVICE, INC.

NVLAP Code

Designation / Description

12/T51

AS/NZS 3548: Electromagnetic Interference - Limits and Methods of Measurement of

Information Technology Equipment

MIL-STD-462: Conducted Emissions:

12/A01

MIL-STD-462 Method CE01

12/A04

MIL-STD-462 Method CE02

12/A06

MIL-STD-462 Method CE03

12/A08

MIL-STD-462 Method CE04

12/A10

MIL-STD-462 Method CE06

12/A12

MIL-STD-462 Method CE07

MIL-STD-462 : Conducted Susceptibility:

12/B01

MIL-STD-462 Method CS01

12/B02

MIL-STD-462 Method CS02

12/B04

MIL-STD-462 Method CS03/CS04/CS05/CS08

12/B05

MIL-STD-462 Method CS06

December 31, 2001

Effective through

Pavid F. Moletina

For the National Institute of Standards and Technology

NVLAP-01S (11-95)



National Institute of Standards and Technology

National Voluntary Laboratory Accreditation Program

ISO/IEC GUIDE 25:1990 ISO 9002:1987

Scope of Accreditation

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Page: 3 of 3

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

NVLAP LAB CODE 100268-0

TUV PRODUCT SERVICE, INC.

NVLAP Code

Designation / Description

12/B06

MIL-STD-462 Method CS07

12/B07

MIL-STD-462 Method CS09

MIL-STD-462: Radiated Emissions:

12/D01

MIL-STD-462 Method RE01

12/D02

MIL-STD-462 Method RE02

12/D03

MIL-STD-462 Method RE03

MIL-STD-462: Radiated Susceptibility:

12/E01

MIL-STD-462 Method RS01

12/E02

MIL-STD-462 Method RS02

12/E03

MIL-STD-462 Method RS03 (Consult laboratory for field strengths available)

12/E04

MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing

(Consult laboratory for field strengths available)

December 31, 2001

Effective through

Pavid L. Molerman

For the National Institute of Standards and Technology

NVLAP-01S (11-95)



Photograph of Test Setup

