

RADIATED EMISSIONS

DATA

FOR

QUALCOMM, INC. 10300 Campus Point Drive San Diego, CA 92121

Prepared by

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

Report No. 0160-03



Measurement Requirements (CFR 47 Part 2, Paragraph 2.1053 & Part 25, Paragraph 25.202(f)

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

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

Test Equipment Used : Model No.	Prop. No.	Description	Manufacturer	Serial No.	Cal Date
8566B	407/406	Spectrum Analyzer & Display	Hewlett Packard	2349A03116	10/00
AA-190-10.00.0	656	High Frequency Cable	United Microwave Prod.		N/A*
AA-190-30.00.0	664	High Frequency Cable	United Microwave Prod.		N/A*
3115	251	Double Ridge Antenna	EMCO	2495	10/00
FF6549-2	782	High Pass Filter	Sage Laboratories	007	N/A*
AFD3-0208-40-ST	367	Preamplifier	Miteq	155382	N/A*
AFS4-08001800-70-10P-4	368	Preamplifier	Miteq	167	N/A*
EPM-441A		Power Meter	Hewlett Packard	GB37171015	02/01
8482A		Power Sensor	Hewlett Packard	3318A28787	12/00
776B-30		Attenuator 30 dB 5W	Narda		N/A*

Remarks:		

FCC Part 25.202

SPEC

S0160 TESTED BY: J Owen

REPORT No:

TEST DIST: 3 Meters

ΑX

BICONICAL:

TEST SITE:

Globalstar GCK-1410 Car Kit

E U T:

CUSTOMER: Qualcomm Inc.

Transmit at maximum level

EUT MODE:

DATE: NOTES:

Ϋ́

LOG

RBW & VBW = 30kHz, Video averageing 30 samples for fundamental RBW & VBW = 1MHz for harmonic peak measurements. VBW 10Hz for average No emissions delectable above 5th harmonic. See test plan for limit explanation.

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OTHER:



Channel 9 w/fully gasketed ODU chassis Channel 6 Channel Channel Notes Antenna Height 1.5 12 12 1.1 1.2 o 8 8 8 EUT 0 285 181 300 303 312 207 211 2 4 335 66 159 Rotation -47 -28 -53 34 -32 MARGIN (dB) -27.6 -44.2 -27.8 -36.5 128 -25.8 -32.3 -19.1 -38.9 129 -23.9 -40.9 -26 -35.2 -24.2 -42.3 -22.1 -34.8 128 ă SPEC LIMIT (dBuV/m) pk av 99.9 100.2 6.66 6.66 666 100.2 100.2 100.2 100.2 100.2 67.5 99.9 41.1 99.9 72.2 99.9 48.4 99.9 99.4 99.4 99.4 99.4 6 66 6 66 55.2 41.1 71.5 45.1 62.9 48.4 46.7 41.1 52.9 48.4 71.2 41.1 66.5 48.4 HORIZONTAL CORRECTION MAX LEVEL (dBuv) FACTOR (dBuV/m) pk av (dB/m) pk av 37.6 74.2 67.7 80.8 61.1 127.9 71.8 75.7 57.6 77.7 65.1 76.4 76.4 59.4 74.2 65.1 128.4 30.7 37.6 41.1 48.4 30.6 37.6 41.1 45.1 30.6 37.6 41.1 48.4 30.7 37.6 41.1 21.4 22.5 24.7 38.1 13.7 32.6 16.7 31.4 14.1 26.4 14.5 96.7 96.6 35.2 18.3 29.1 15.3 26.4 34.2 VERTICAL (I 33.6 20.6 27.1 ě 36.7 38.8 14.4 14.4 16.7 97.8 36.6 34.2 13.5 13.3 97.7 3233.76 4850.64 6467.52 8084.4 1620.57 3241.14 4861.71 1620.57 3241.14 4861.71 6482.28 8102.85 3221.46 4832.19 6442.92 1616.88 8053.65 6482.28 8102.85 FREQ (MHz)

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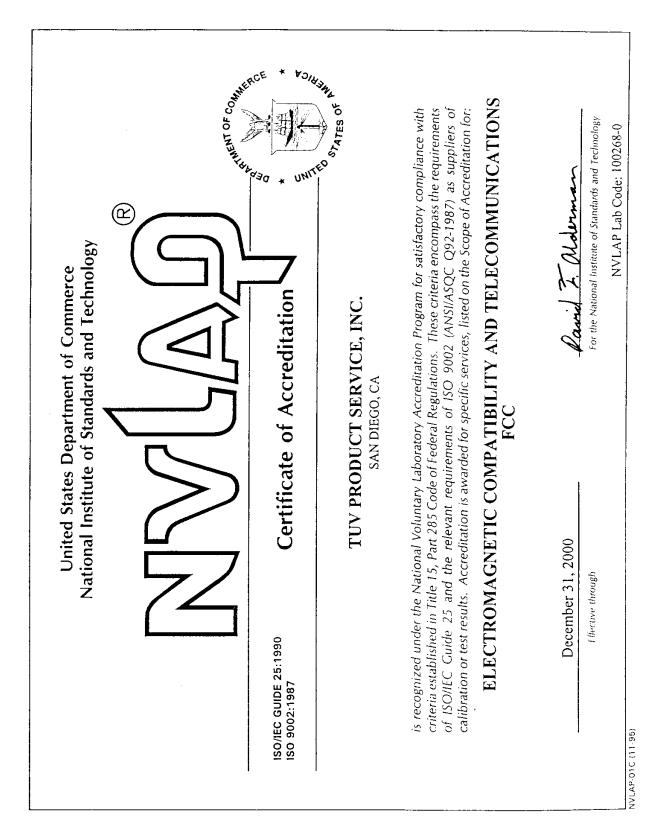
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Testing Facilities

Certificates of Approval





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Rev.No 1.0



National Institute of Standards and Technology National Vo

National Voluntary Laboratory Accreditation Program

ISO/IEC GUIDE 25:1990 ISO 9002:1987

Scope of Accreditation

* UMINES OF ARES OF

Page: 1 of 2

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

NVLAP LAB CODE 100268-0

TUV PRODUCT SERVICE, INC.

10040 Mesa Rim Road San Diego, CA 92121-1034 Mr. Floyd R. Fleury

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

NVLAP Code Designation / Description

International Special Committee on Radio Interference (CISPR) Methods

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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

12/CIS22

CNS 13438:1997: Limits and Methods of Measurement of Radio Interference

Characteristics of Information Technology Equipment

Federal Communications Commission (FCC) Methods

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, 2000

Effective through

- WAR

NVLAP-01S (11-95)



National Institute of Standards and Technology

NV(AP)

National Voluntary Laboratory Accreditation Program

ISO/IEC GUIDE 25:1990 ISO 9002:1987

Scope of Accreditation



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ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

NVLAP LAB CODE 100268-0

TUV PRODUCT SERVICE, INC.

NVLAP Code Designation / Description

Australian Standards referred to by clauses in ACA Technical Standards

12/T51

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

December 31, 2000

Effective through

Ravid I. alderman

For the National Institute of Standards and Technology

NVLAP-01S (11-95)





UNITED STATES DEPARTMENT OF COMMERCE National Institute of Standards and Technology Gaithersburg, Maryland 20899-

NVLAP Lab Code: 100268-0

November 29, 1999

Mr. Floyd R. Fleury TUV Product Service, Inc. 10040 Mesa Rim Road San Diego, CA 92121-1034

Dear Mr. Fleury:

I am pleased to inform you that continuing accreditation for specific test methods in Electromagnetic Compatibility & Telecommunications, FCC is granted to your organization under the National Voluntary Laboratory Accreditation Program (NVLAP). This accreditation is effective until December 31, 2000, provided that your organization continues to comply with accreditation requirements contained in the NVLAP Procedures.

Your Certificate of Accreditation is enclosed along with a statement of your Scope of Accreditation. You may reproduce these documents in their entirety and announce your organization's accreditation status using the NVLAP logo in business publications, the trade press, and other business-oriented literature. Accreditation does not relieve your organization from observing and complying with any applicable existing laws and/or regulations.

We are pleased to have you participate in NVLAP and look forward to your continued association with this program. If you have any questions concerning your NVLAP accreditation, please direct them to Jon Crickenberger, Sr. Program Manager, Laboratory Accreditation Program, National Institute of Standards and Technology, 100 Bureau Dr. Stop 2140, Gaithersburg, MD 20899-2140; (301) 975-4016.

Sincerely,

David F. Alderman, Acting Chief Laboratory Accreditation Program

Pavid F. alderman

Enclosure(s)













Photograph of Test Setup









