

#### **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

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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.

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Floyd R. Fleury EMC Manager



## **Emissions Test Conditions: SPURIOUS RADIATED EMISSIONS**

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

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
3482A		Power Sensor	Hewlett Packard	3318A28787	12/00
776B-30		Attenuator 30 dB 5W	Narda		N/A*

Remarks:

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								Notes		Channel 1				Channel 6					Channel 9					Channel 9 w/fully gasketed	ODU chassis										
							v.beta2	Ante Heig		1.2	- 	2 7	1.2	1	- <del>-</del> 5 5	1.5	1.5			÷	12	1 2	1	1.5			1.5	1					$\square$	-	
								EL Rota		0	0 2	300	60	-	285	181	300			303	312	207		2	4	555 66	159						$\square$		
22						rage tion.		GIN	av			Τ			-53		-47			-29	,	-34			-32	-28	ì						Π		
1 25.2(						or ave xplana		MARGIN (dB)	Å	128	-27.6	-27.8	-36.5	128	-24.2	-42.3	-22.1	-34.8	129	-23.9	-40.9	-26	4.22	128	-25.8	-19.1	-38.9						TT		
FCC Part 25.202	TEST DIST: 3 Meters	e	N/A		251	armental V 10Hz f or limit ex		SPEC LIMIT (dBuV/m)	av						99.9	+ +	99.9		1.	100.2		100.2			6 <sup>.</sup> 66	6 66				1					
	DIST	TEST SITE:	BICONICAL:	N/A	άź	or fund s. VBV t plan f		SPEC	ă		99.4	99.4	99.4		6.66	99.9	9.99	6.66	T	100.2	100.2	100.2	4		6.66	6 6 6 6	99.9						Π		
SPEC:	TEST	TEST	BICON	LOG	OTHER	ement ement ee test		m)	av.		37.6	45.1	48.4		46.7	41.1	52.9	48.4	1	71.2 100.2	41.1	66.5 100.2 48.4 100.2			67.5	72.2					1		$\square$		$\square$
			-	_		30 sarr measur onic. S		MAX LEVEL (dBuV/m)	Æ	127.9	71.8		62.9	128.4			_	65.1	128.7	<del></del>		74.2			74.2	_	-	T				T		-	
TESTED BY: J Owen	55	ų				RBW & VBW = 30kHz, Video averageing 30 samples for fundamental RBW & VBW = 1MHz for harmonic peak measurements. VBW 10Hz for average No emissions detectable above 5th harmonic. See test plan for limit explanation.		HORIZONTAL CORRECTION (dBuv) FACTOR	(dB/m)	30.7	3/.6	45.1	48.4	30.7	37.6	41,1	45.1	48.4	30.6	37.6	41.1	45.1	1.01	30.6	37.6	45.1	48.4								
D BY:		) Car K	level			z, Vide for ha ible ab		NTAL	av						<i>о</i> ,		7.8			30		21.4		1	24.7	22.5									
TESTE	<u>j</u>	Globalstar GCK-1410 Car Kit	Transmit at maximum level			= 30kH = 1MHz s detecta		HORIZONT (dBuv)	Ă	96.1	31.4	26.4	14.5	96.7	38.1	13.7	32.6	16.7	96.6	35.2	18.3	29.1 15.3	2.2	95.4	31.7	34.2	6								
S0160	mm Ir	star G	nit at n	pr00		t VBW VBW issions		VERTICAL (dBuv)	av						9.1		7.6			33.6		20.6			29.9	27.1									
	Qualcc	Global	Transr	12-Apr-00		RBW 8 No em		VERTIC/ (dBuv)	þ	97.2	34.Z	24.1	13.3	97.7	36.7	16.5	32.1	14.3	98.1	38.8	14.4	28.3		97.8	36.6 26.6	35.7	12.7								
REPORT No:	CUSTOMER: Qualcomm Inc.	E U T:	EUT MODE:	DATE:	NOTES:			FREQ	(MHz)	1610.73	3221.40	6442.92	8053.65	1616.88	3233.76	4850.64	6467.52	8084.4	1620.57	3241.14	4861.71	6482.28 8102 85		1620.57	3241.14	6482.28	8102.85								

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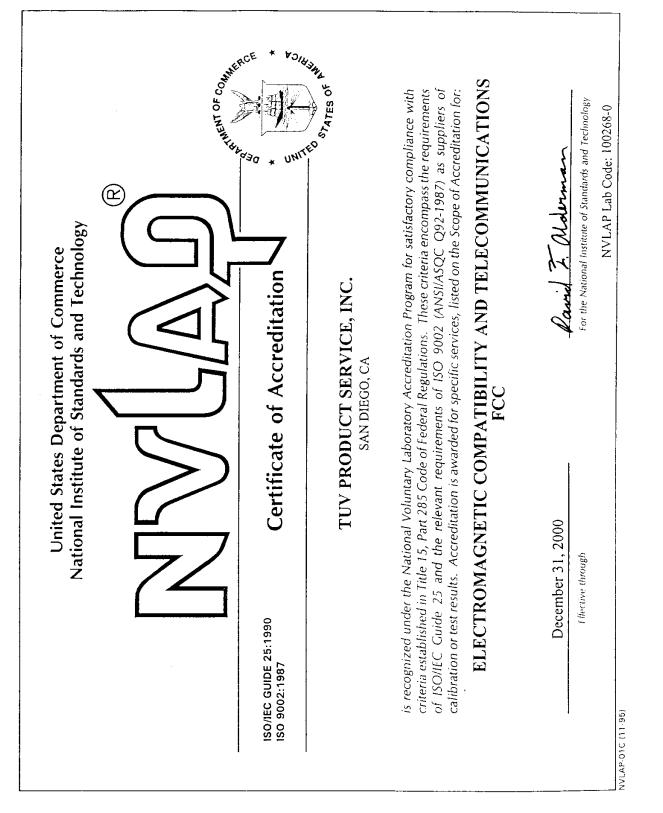


**Testing Facilities** 

Certificates of Approval

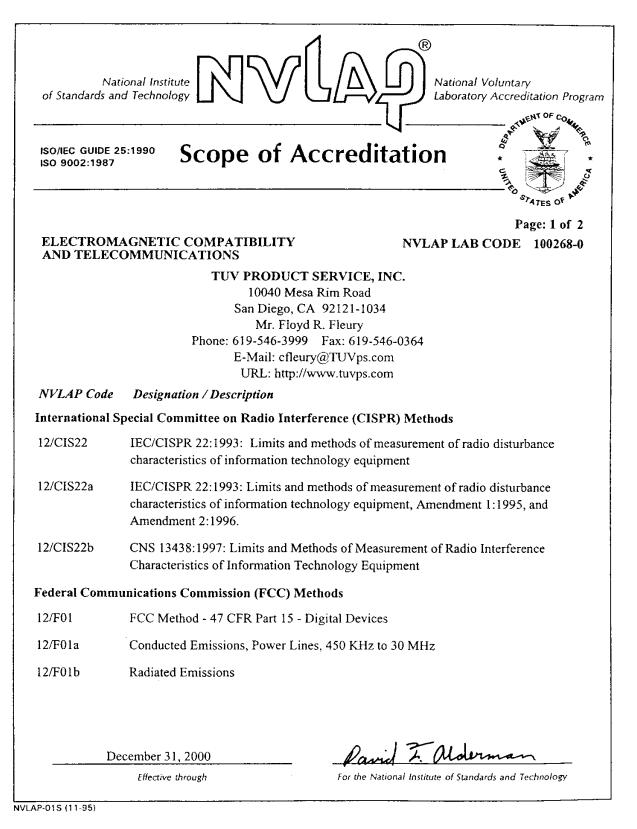
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of Standards and		National Voluntary Laboratory Accreditation Progra
ISO/IEC GUIDE 25 ISO 9002:1987	Scope of Acc	
		ATES OF
ELECTROMA AND TELECO	AGNETIC COMPATIBILITY DMMUNICATIONS	Page: 2 of 2 NVLAP LAB CODE 100268-0
	TUV PRODUCT SER	VICE, INC.
NVLAP Code	Designation / Description	
Australian Stan	dards referred to by clauses in ACA	Fechnical Standards
12/T51	AS/NZS 3548: Electromagnetic Interfe Information Technology Equipment	erence - Limits and Methods of Measurement of
	,	
		0 12011
Da	cember 31, 2000	1. 1 h Malman





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

November 29, 1999

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

NVLAP Lab Code: 100268-0

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,

Pavid I. alderman

David F. Alderman, Acting Chief Laboratory Accreditation Program

Enclosure(s)



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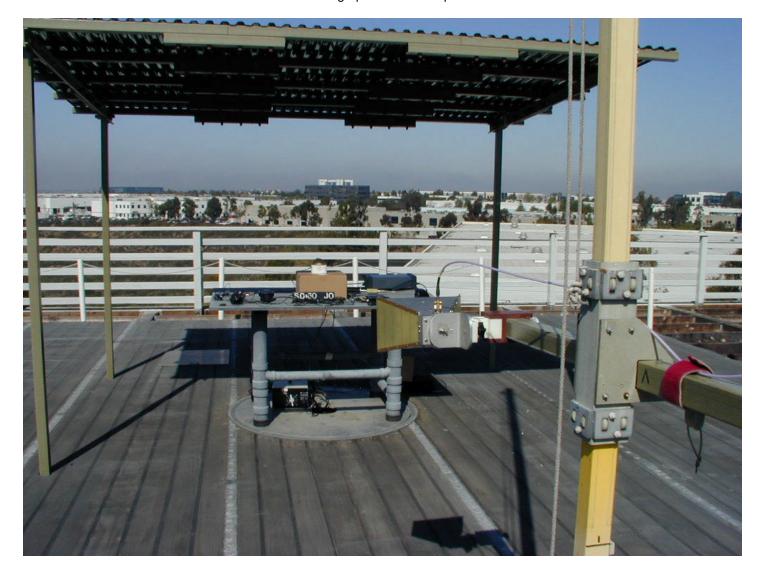


# Photograph of Test Setup 285 S0160 .10

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### Photograph of Test Setup



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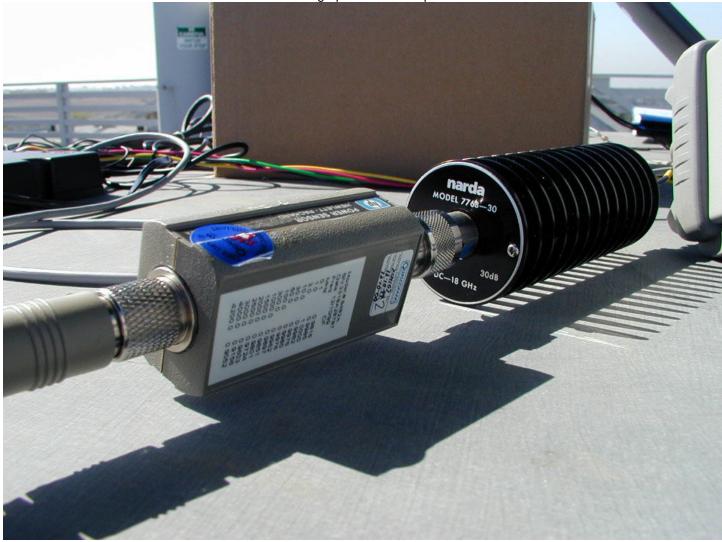
Photograph of Test Setup S0160

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Photograph of Test Setup



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