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

Measurement Requirements (CFR 47 Part 2, Paragraph 2.1053 & Part 22, Paragraph 22.917, 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

TÜV PRODUCT SERVICE 10040 Mesa Rim Road San Diego, CA 92121-2912 Phone 858 546 3999 FAX 858 546 0364

Emissions Test Conditions: SPURIOUS RADIATED EMISSIONS

Roof (small open area test site)

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	720/721	Spectrum Analyzer & Display	Hewlett Packard	2311A02209	03/01
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*
FF6549-1	778	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

TÜV PRODUCT SERVICE 10040 Mesa Rim Road San Diego, CA 92121-2912 Phone 858 546 3999 FAX 858 546 0364

REPORT No: S0153 TESTED BY: J Owen SPEC: FCC Part 22.917

CUSTOMER: Qualcomm TEST DIST: 3 Meters

E U T: QCP-2035 TEST SITE: 3

EUT MODE: Tx mode - CDMA BICONICAL: N/A

DATE: 13-Apr-00 LOG: 244

NOTES: OTHER: 251

RBW & VBW = 30kHz, Video averaging 30 samples for fundamental

RBW & VBW = 1MHz for harmonic peak measurements. VBW 10Hz for average

v.beta2

FREQ (MHz)	VERTICAL (dBuv) pk	av	HORIZONTAL (dBuv) pk	av	CORRECTION FACTOR (dB/m)	MAX LEVEL (dBuV/m) pk	av	SPEC LIMIT (dBuV/m) pk	av	MARGIN (dB) pk	av	EUT Rotatio	Antenna Height	Notes
824.7	99.7		92.8		26.3	**126.0**				126		140	1.5	Channel 1013
1649.4	7.8				30.6	**38.4**	**30.6**	82.3	82	-43.9	-52			
2474.1	13		13.7		33.6	**47.3**	**33.6**	82.3	82	-35	-49	358	1.5	
3298.8			8.3		37.5	**45.8**	**37.5**	82.3	82	-36.5	-45	319	1.5	
4123.5					41.9	**41.9**	**41.9**	82.3	82	-40.4	-40			Ambient
4948.2					41.1	**41.1**	**41.1**	82.3	82	-41.2	-41			Ambient
5772.9					44.4	**44.4**	**44.4**	82.3	82	-37.9	-38			Ambient
6597.6					44.7	**44.7**	**44.7**	82.3	82	-37.6	-38			Ambient
7422.3					46.0	**46.0**	**46.0**	82.3	82	-36.3	-36			Ambient
8247					48.4	**48.4**	**48.4**	82.3	82	-33.9	-34			Ambient
836.4	99.9		87.7		26.3	**126.2**				126.2		180	1.5	Channel 383
1672.8	9.6				30.5	**40.1**	**30.5**	82.3	82	-42.2	-52	198	1	
2509.2	13.1		14.6		36.4	**51.0**	**36.4**	82.3	82	-31.3	-46	203	1.5	
3345.6	7		7.8		37.5	**45.3**	**37.5**	82.3	82	-37	-45	253	1.5	
4182					41.9	**41.9**	**41.9**	82.3	82	-40.4	-40			Ambient
5018.4	15.7		8		42.7	**58.4**	**42.7**	82.3	82	-23.9	-40	186	1	
5854.8					44.4	**44.4**	**44.4**	82.3	82	-37.9	-38			Ambient
6691.2					44.7	**44.7**	**44.7**	82.3	82	-37.6	-38			Ambient
7527.6					47.6	**47.6**	**47.6**	82.3	82	-34.7	-35			Ambient
8364					48.3	**48.3**	**48.3**	82.3	82	-34	-34			Ambient
848.31	99.7		93.4		26.3	**126.0**				126		180	1.5	Channel 777
1696.62	7.8				30.5	**38.3**	**30.5**	82.3	82	-44	-52	9	1	
2544.93	15.6		15.9		36.4	**52.3**	**36.4**	82.3	82	-30	-46	227	1.5	
3393.24	13.1		12.9		37.5	**50.6**	**37.5**	82.3	82	-31.7	-45	146	1.3	
4241.55					41.9	**41.9**	**41.9**	82.3	82	-40.4	-40			Ambient
5089.86	22.6		9.4		42.7	**65.3**	**42.7**	82.3	82	-17	-40	208	1	
5938.17	8.5				44.3	**52.8**	**44.3**	82.3	82	-29.5	-38			
6786.48					44.6	**44.6**	**44.6**	82.3	82	-37.7	-38			Ambient
7634.79			9.3		47.6	**56.9**	**47.6**	82.3	82	-25.4	-35	190	1	
8483.1					48.3	**48.3**	**48.3**	82.3	82	-34	-34			Ambient

REPORT No: S0153 TESTED BY: J Owen SPEC: FCC Part 24.238

CUSTOMER: Qualcomm TEST DIST: 3 Meters

E U T: QCP-2035 TEST SITE: 3

EUT MODE: Tx mode - PCS BICONICAL: N/A

DATE: 14-Apr-00 LOG: 244

NOTES: OTHER: 251

RBW & VBW = 30kHz, Video averaging 30 samples for fundamental

RBW & VBW = 1MHz for harmonic peak measurements. VBW 10Hz for average

v.beta2

FREQ (MHz)	VERTICAL (dBuv) pk	av	HORIZONTAL (dBuv) pk	av	CORRECTION FACTOR (dB/m)	MAX LEVEL (dBuV/m) pk	av	SPEC LIMIT (dBuV/m) pk	av	MARGIN (dB) pk	av	EUT Rotatio	Antenna Height	Notes
1851.25	83.6		91.1		33.0	**124.1**				124.1		311	2	Channel 25
3702.5	19.1		22.1		39.1	**61.2**	**39.1**	82.3	82	-21.1	-43	283	1.5	
5553.75	17.8		14.2		44.4	**62.2**	**44.4**	82.3	82	-20.1	-38	225	1	
7405					46.0	**46.0**	**46.0**	82.3	82	-36.3	-36			Ambient
9256.25					51.2	**51.2**	**51.2**	82.3	82	-31.1	-31			Ambient
11107.5					51.7	**51.7**	**51.7**	82.3	82	-30.6	-31			Ambient
12958.75					54.2	**54.2**	**54.2**	82.3	82	-28.1	-28			Ambient
14810					56.0	**56.0**	**56.0**	82.3	82	-26.3	-26			Ambient
16661.25					55.8	**55.8**	**55.8**	82.3	82	-26.5	-27			Ambient
18512.5					#REF!	**#REF!**	**####**	82.3	82	#REF!	####			Ambient
1880	75.6		91.3		33.2	**124.5**				124.5		18	1	Channel 600
3760	20.9		15		39.1	**60.0**	**39.1**	82.3	82	-22.3	-43	332	2	
5640	10.1		15		44.4	**59.4**	**44.4**	82.3	82	-22.9	-38	300	1.5	
7520	8.4				47.6	**56.0**	**47.6**	82.3	82	-26.3	-35	323	1.5	
9400					51.3	**51.3**	**51.3**	82.3	82	-31	-31			Ambient
11280					51.7	**51.7**	**51.7**	82.3	82	-30.6	-31			Ambient
13160					53.5	**53.5**	**53.5**	82.3	82	-28.8	-29			Ambient
15040					58.6	**58.6**	**58.6**	82.3	82	-23.7	-24			Ambient
16920					55.8	**55.8**	**55.8**	82.3	82	-26.5	-27			Ambient
18800					#REF!	**#REF!**	**####**	82.3	82	#REF!	####			Ambient
1908.75	88		91.3		33.3	**124.6**				124.6		59	1.5	Channel 1175
3817.5	21.8		21.8		39.1	**60.9**	**39.1**	82.3	82	-21.4	-43	72	1	
5726.25	21.5		23.5		44.4	**67.9**	**44.4**	82.3	82	-14.4	-38	25	1	
7635	18.7		17.8		47.6	**66.3**	**47.6**	82.3	82	-16	-35	91	2.5	
9543.75			13.1		49.5	**62.6**	**49.5**	82.3	82	-19.7	-33	75	1	
11452.5					51.7	**51.7**	**51.7**	82.3	82	-30.6	-31			Ambient
13361.25					53.5	**53.5**	**53.5**	82.3	82	-28.8	-29			Ambient
15270					58.6	**58.6**	**58.6**	82.3	82	-23.7	-24			Ambient
17178.75					56.5	**56.5**	**56.5**	82.3	82	-25.8	-26	190	1	Ambient
19087.5					#REF!	**#REF!**	**####**	82.3	82	#REF!	####			Ambient

REPORT No: S0153 TESTED BY: J Owen SPEC: FCC Part 22.917

CUSTOMER: Qualcomm TEST DIST: 3 Meters

E U T: QCP-2035 TEST SITE: 3

EUT MODE: Tx mode - FM BICONICAL: N/A

DATE: 13-Apr-00 LOG: 244

NOTES: OTHER: 251

RBW & VBW = 1MHz for harmonic peak measurements. VBW 10Hz for average

v.beta2

FREQ (MHz)	VERTICAL (dBuv) pk	av	HORIZONTAL (dBuv) pk	av	CORRECTION FACTOR (dB/m)	MAX LEVEL (dBuV/m) pk	av	SPEC LIMIT (dBuV/m) pk	av	MARGIN (dB) pk	av	EUT Rotatio	Antenna Height	Notes
824.04	100.9		89.4		26.3	**127.2**	**26.3**			127.2	26.3	180	1.5	Channel 991
1648.08	9				30.6	**39.6**	**30.6**	83.2	83	-43.6	-53	120	1.3	
2472.12	10.8		15.2		33.6	**48.8**	**33.6**	83.2	83	-34.4	-50	120	1.2	
3296.16	2.3		6		37.5	**43.5**	**37.5**	83.2	83	-39.7	-46	11	1.1	
4120.2					41.9	**41.9**	**41.9**	83.2	83	-41.3	-41			Ambient
4944.24	3		1.8		41.1	**44.1**	**41.1**	83.2	83	-39.1	-42	54	1.5	
5768.28					44.4	**44.4**	**44.4**	83.2	83	-38.8	-39			Ambient
6592.32	6.3				44.7	**51.0**	**44.7**	83.2	83	-32.2	-39			
7416.36	8.5		8.6		46.0	**54.6**	**46.0**	83.2	83	-28.6	-37	160	1.5	
8240.4					48.4	**48.4**	**48.4**	83.2	83	-34.8	-35			Ambient
836.4	101		91		26.3	**127.3**	**26.3**			127.3	26.3	180	1.5	Channel 383
1672.8	9				30.5	**39.5**	**30.5**	83.2	83	-43.7	-53			
2509.2	14.9		15.4		36.4	**51.8**	**36.4**	83.2	83	-31.4	-47	356	1.3	
3345.6	8.9		7.9		37.5	**46.4**	**37.5**	83.2	83	-36.8	-46	30	1.2	
4182					41.9	**41.9**	**41.9**	83.2	83	-41.3	-41			Ambient
5018.4	18.2		5.3		42.7	**60.9**	**42.7**	83.2	83	-22.3	-41	340	1	
5854.8					44.4	**44.4**	**44.4**	83.2	83	-38.8	-39			Ambient
6691.2					44.7	**44.7**	**44.7**	83.2	83	-38.5	-39			Ambient
7527.6	12.5		10.3		47.6	**60.1**	**47.6**	83.2	83	-23.1	-36	30	2	
8364					48.3	**48.3**	**48.3**	83.2	83	-34.9	-35			Ambient
848.97	100.9		88.9		26.3	**127.2**	**26.3**			127.2	26.3	180	1.5	Channel 799
1697.94	10.1		6.3		30.5	**40.6**	**30.5**	83.2	83	-42.6	-53	344	1	
2546.91	16.8		17		36.4	**53.4**	**36.4**	83.2	83	-29.8	-47	356	1.5	
3395.88	10.9		9.2		37.5	**48.4**	**37.5**	83.2	83	-34.8	-46	51	1	
4244.85					41.9	**41.9**	**41.9**	83.2	83	-41.3	-41			Ambient
5093.82	22.5		15.1		42.7	**65.2**	**42.7**	83.2	83	-18	-41	320	1	
5942.79	8.6		8.7		44.3	**53.0**	**44.3**	83.2	83	-30.2	-39	311	1	
6791.76	8.6		7.8		44.6	**53.2**	**44.6**	83.2	83	-30	-39	351	1	
7640.73	8.6		11.5		47.6	**59.1**	**47.6**	83.2	83	-24.1	-36	285	1	
8489.7	6				48.3	**54.3**	**48.3**	83.2	83	-28.9	-35	302	1	

Testing Facilities

Certificates of Approval

TÜV PRODUCT SERVICE 10040 Mesa Rim Road San Diego, CA 92121-2912 Phone 858 546 3999 FAX 858 546 0364

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation

DEPARTMENT OF COMMERCE ★ UNITED STATES OF AMERICA ★

TUV PRODUCT SERVICE, INC.
SAN DIEGO, CA

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation for:

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS
FCC

December 31, 2000
Effective through

David F. Alderman
For the National Institute of Standards and Technology

NVLAP Lab Code: 100268-0

NVLAP-01C (11-95)

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National Institute of Standards and Technology — NVLAP® — National Voluntary Laboratory Accreditation Program

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Scope of Accreditation

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	
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
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
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For the National Institute of Standards and Technology

NVLAP-01S (11-95)

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ISO 9002:1987

Scope of Accreditation

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

David F. Alderman
For the National Institute of Standards and Technology

NVLAP-01S (11-95)

TÜV PRODUCT SERVICE 10040 Mesa Rim Road San Diego, CA 92121-2912 Phone 858 546 3999 FAX 858 546 0364

TÜV PRODUCT SERVICE

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,

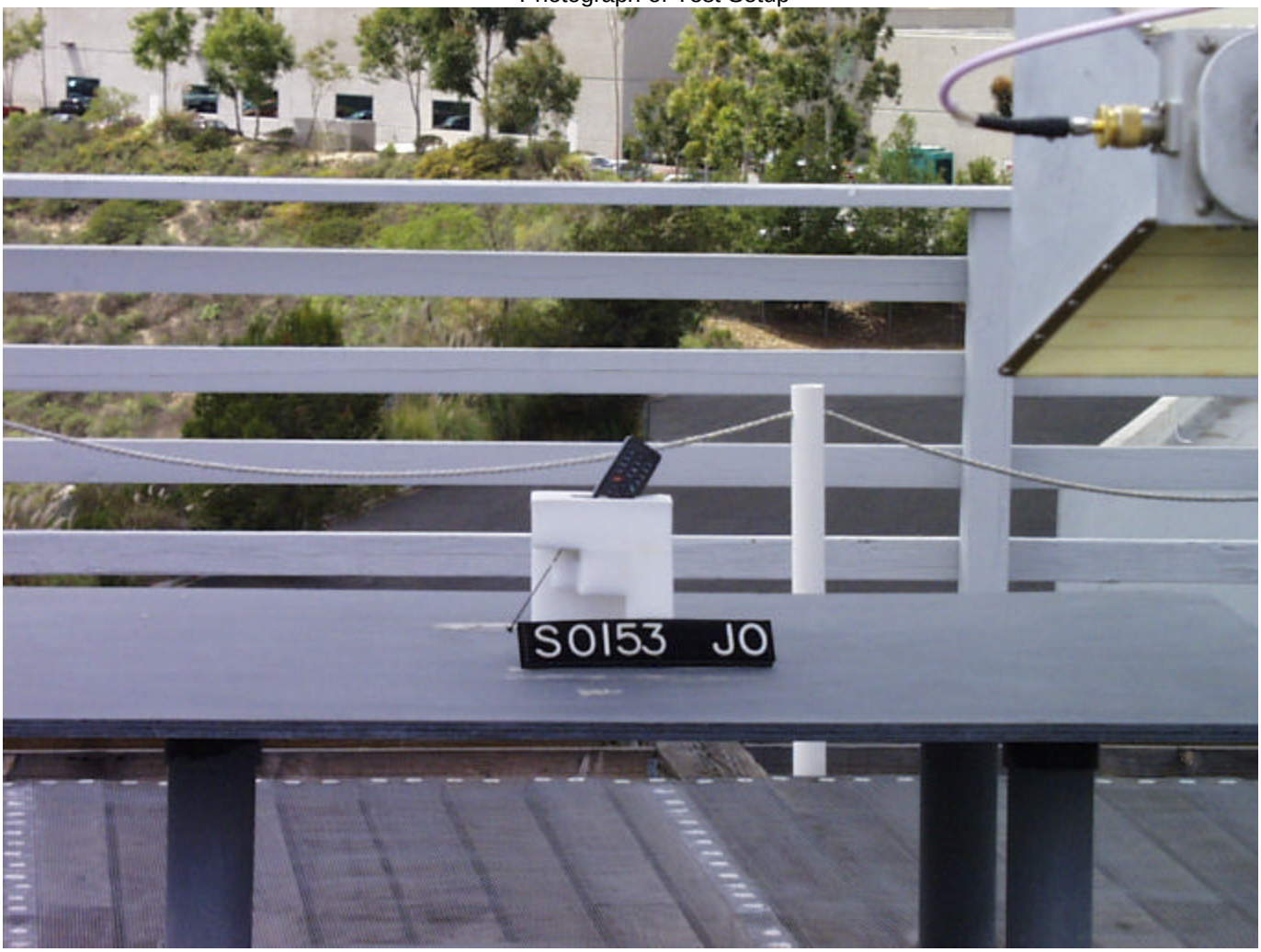
David F. Alderman

David F. Alderman, Acting Chief
Laboratory Accreditation Program

Enclosure(s)

NIST

Photograph of Test Setup



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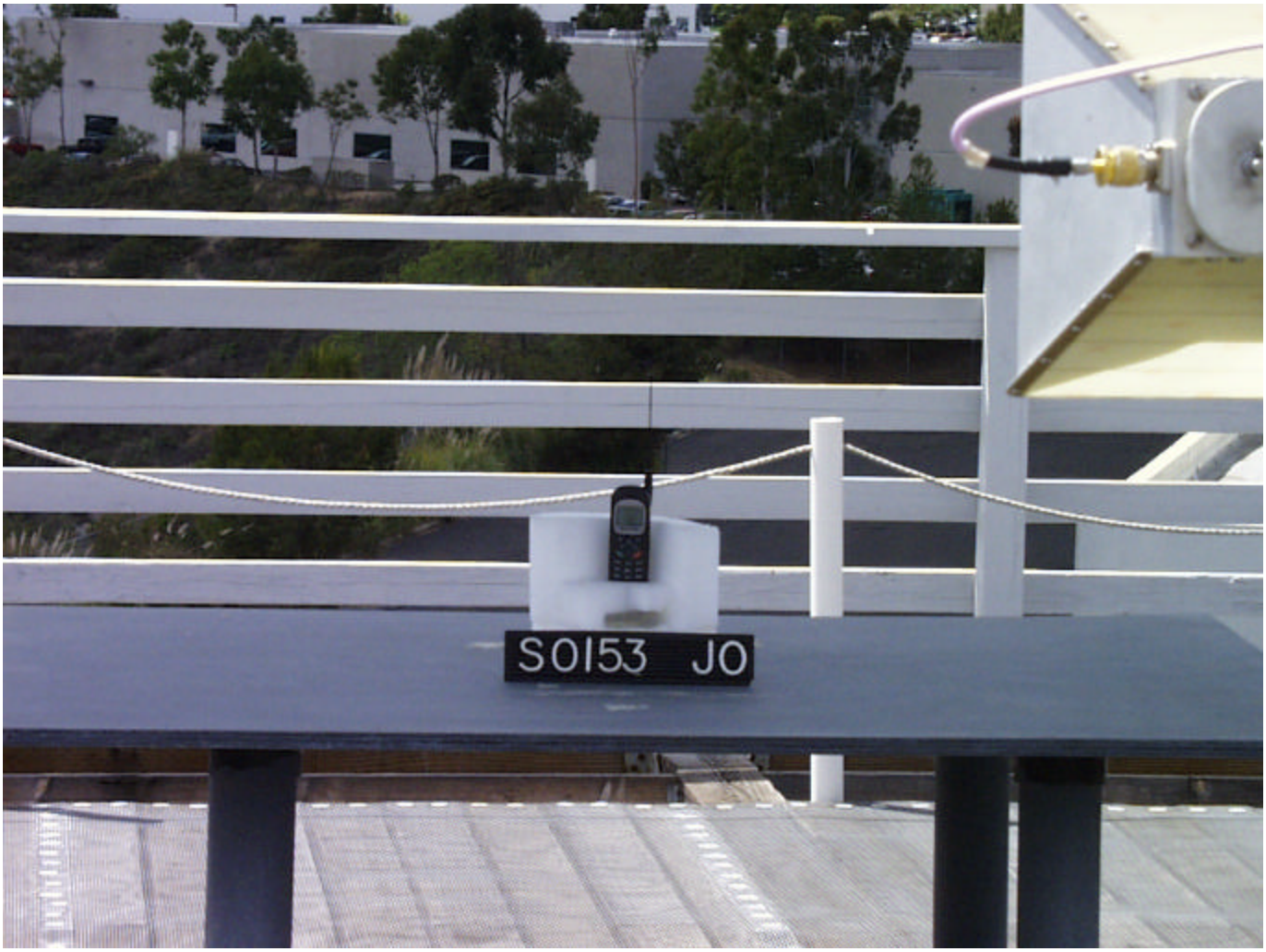
Photograph of Test Setup

TÜV PRODUCT SERVICE 10040 Mesa Rim Road San Diego, CA 92121-2912 Phone 858 546 3999 FAX 858 546 0364

Photograph of Test Setup



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