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CLASS II PERMISSIVE CHANGE

TEST REPORT FOR A 916.55 MHz TRANSCEIVER

Applicant:	Trimble Navigation Ltd. 645 N. Mary Avenue Sunnyvale, CA 94086
Model:	"BoB"
FCC ID:	JUP-7486-CIRAA
Original Grant:	9 May 2000
Operating Frequency:	916.55 MHz Fixed
Rule Part:	15.249
Used For:	Short range GPS data distribution
Power Source:	Internal rechargeable batteries
Test Location:	Compliance Consulting Services 951F Monterey Road Morgan Hill, CA 95087

All tests were performed by Compliance Certification Services, Morgan Hill, CA. The Trimble low power transceiver meets all emissions requirements in FCC Part 15.

THOMAS N. COKENIAS

7 April 2001

EXHIBITS

EXHIBIT A: Product Photographs

EXHIBIT B: Label Drawing

EXHIBIT C: User Manual

EXHIBIT D: Theory of Operation (Confidentiality Requested)

EXHIBIT E: Report of Measurements

EXHIBIT F: Schematics (Confidentiality Requested)

EXHIBIT G: Block Diagram (Confidentiality Requested)

EXHIBIT A: Product Photographs

- refer to separate attachments

EXHIBIT B: Label Drawing

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EXHIBIT C: User Manual

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EXHIBIT D: Theory of Operation (Confidentiality Requested)

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EXHIBIT E: Report of Measurements

TEST PROCEDURES

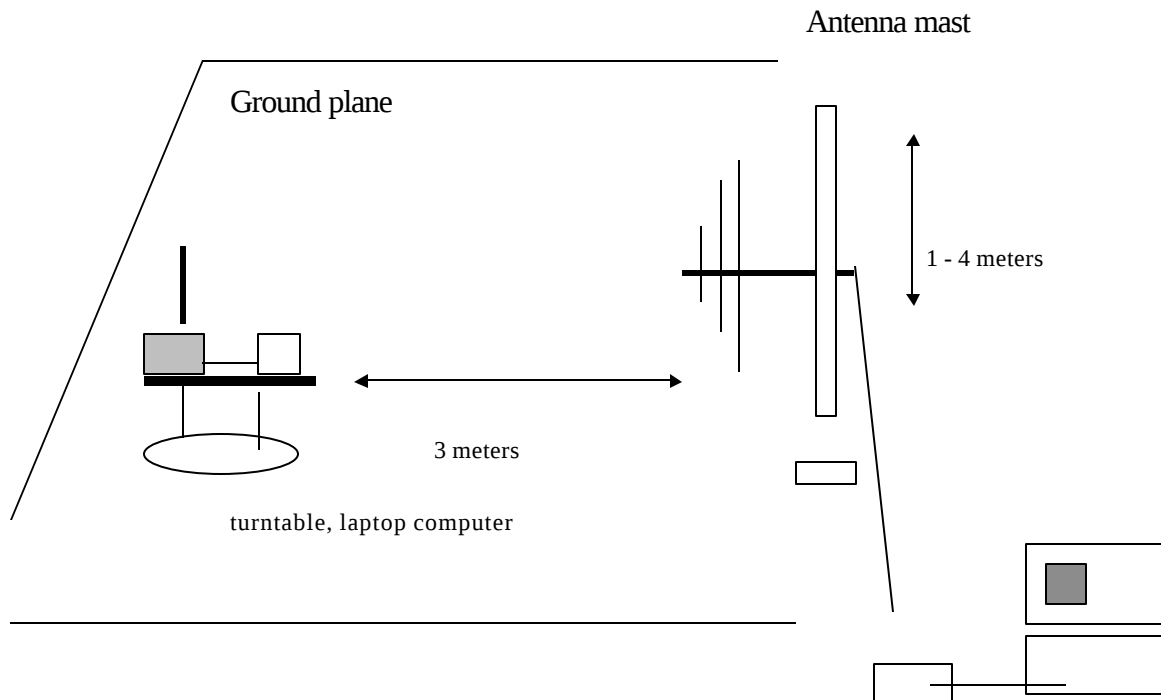
Radiated Emissions

Test Requirement: 15.205, 15.249

Measurement Equipment Used:

HP 8593EM Spectrum Analyzer
HP 8447 Preamplifier, .1 - 1300 MHz
HP 8449 Preamplifier, 1-26.5 GHz
Chase Bilog Antenna, 30 - 2000 MHz
150' low loss coax (site A standard)
EMCO 3115 Double Ridged Horn antenna, 1 - 18 GHz
16 ft Flexco low loss cable (0.85 dB/ft at 26.5 GHz)

Test Set-up, 30 - 2000 MHz



Test Set-Up, 2000 - 9160 MHz

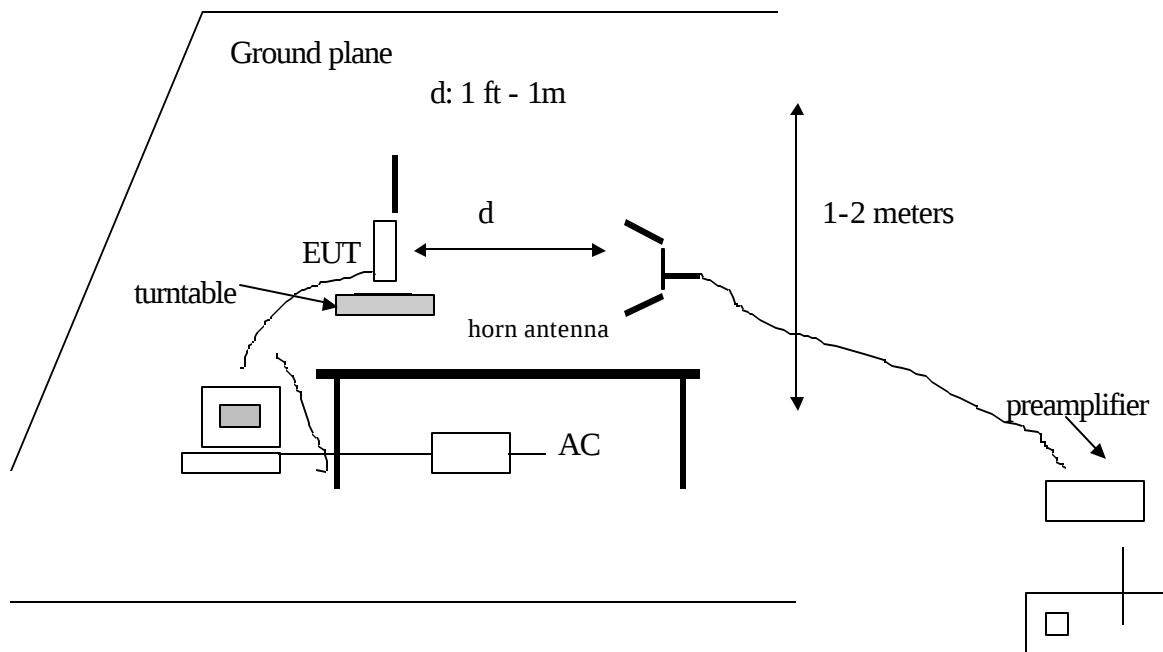


Fig. 1

spectrum analyzer

1. The EUT was placed on a wooden table resting on a turntable on the open air test site. The search antenna was placed 3m from the EUT. The EUT antenna was mounted vertically as per normal installation.
2. The turntable was slowly rotated to locate the direction of maximum emission at each emission falling in the restricted bands of 15.205.

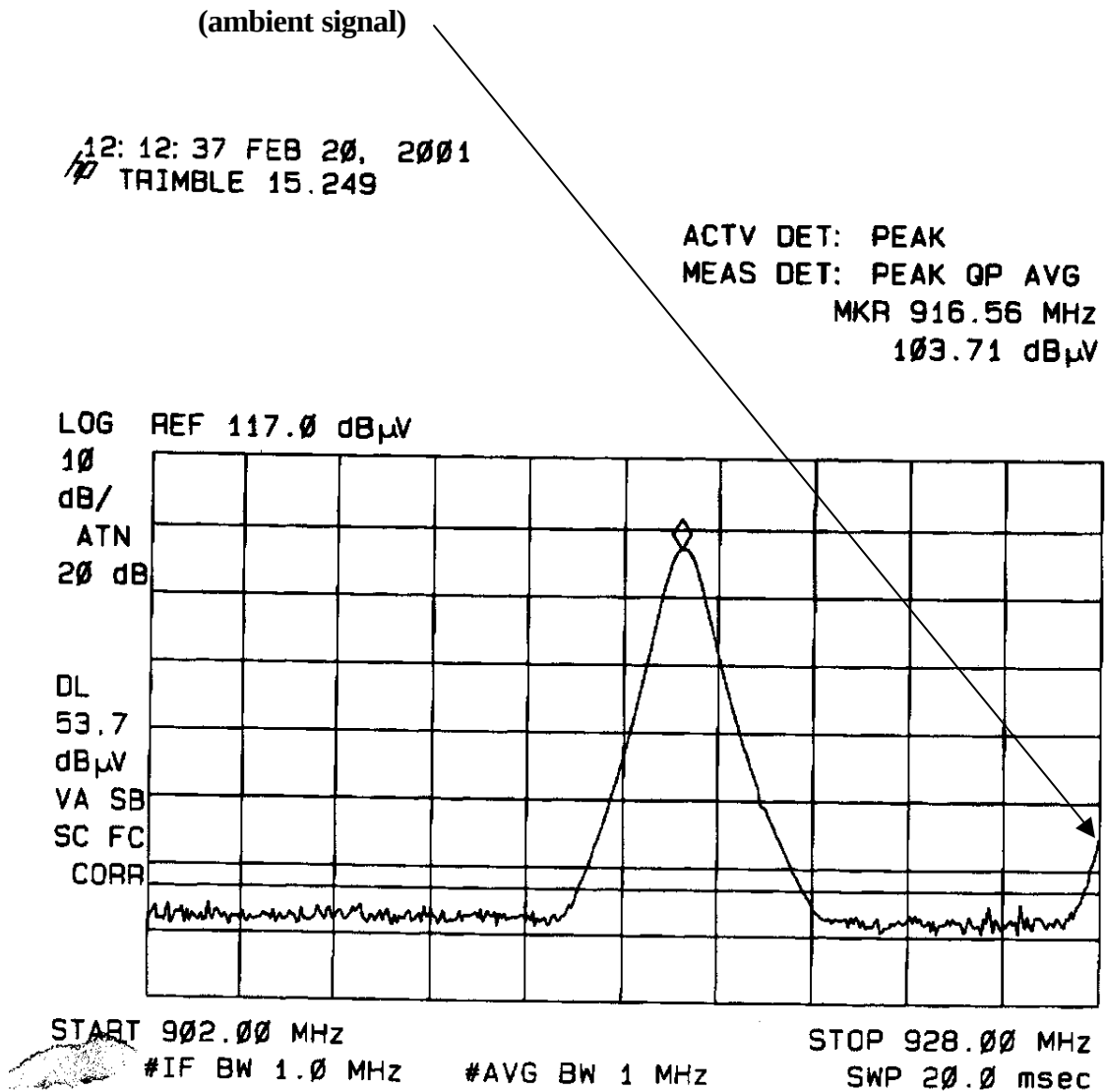
3. Once maximum direction was determined, the search antenna was raised and lowered in both vertical and horizontal polarizations. The maximum readings so obtained are recorded in the data listed below.

Test Results: Refer to separate .xls for fundamental frequency and harmonic frequency emissions.



All emissions outside 902-928 MHz band were below 15.209 emissions limits.

Out of Band Emissions, 50 dB below Carrier



AC Line Conducted Emissions

Test Requirement: 15.207

Measurement Equipment Used:

Rohde & Schwarz EMI Receiver ESHS-20

Fischer Custom Communication LISN, FCC-LISN-50/250-25-2

Test Set-up

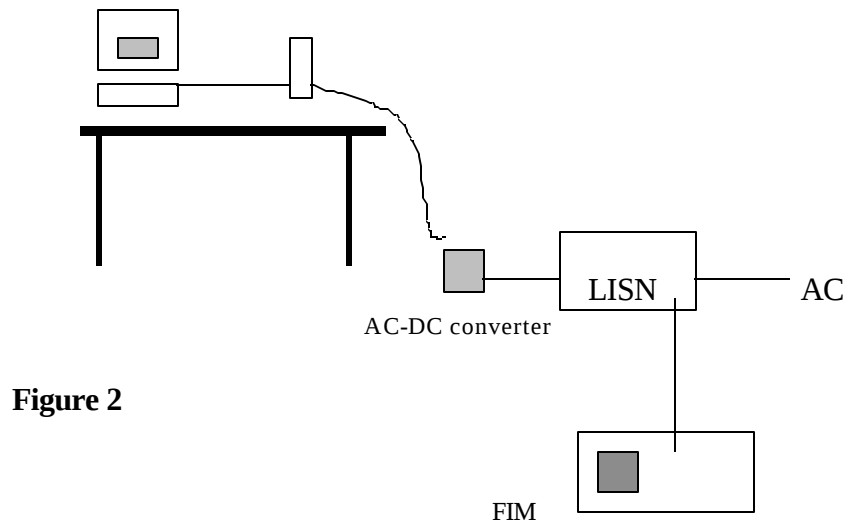


Figure 2

Test Procedure

1. The EUT was placed on a wooden table 40 cm from a vertical ground plane and approximately 80 cm above the horizontal ground plane on the floor. The EUT was set to transmit in a normal hopping mode.
2. Line conducted data was recorded for both NEUTRAL and HOT lines.

Test Results

Refer to attached graph.

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9 April 2001

EXHIBIT F: Schematics (Confidentiality Requested)

- refer to separate attachments

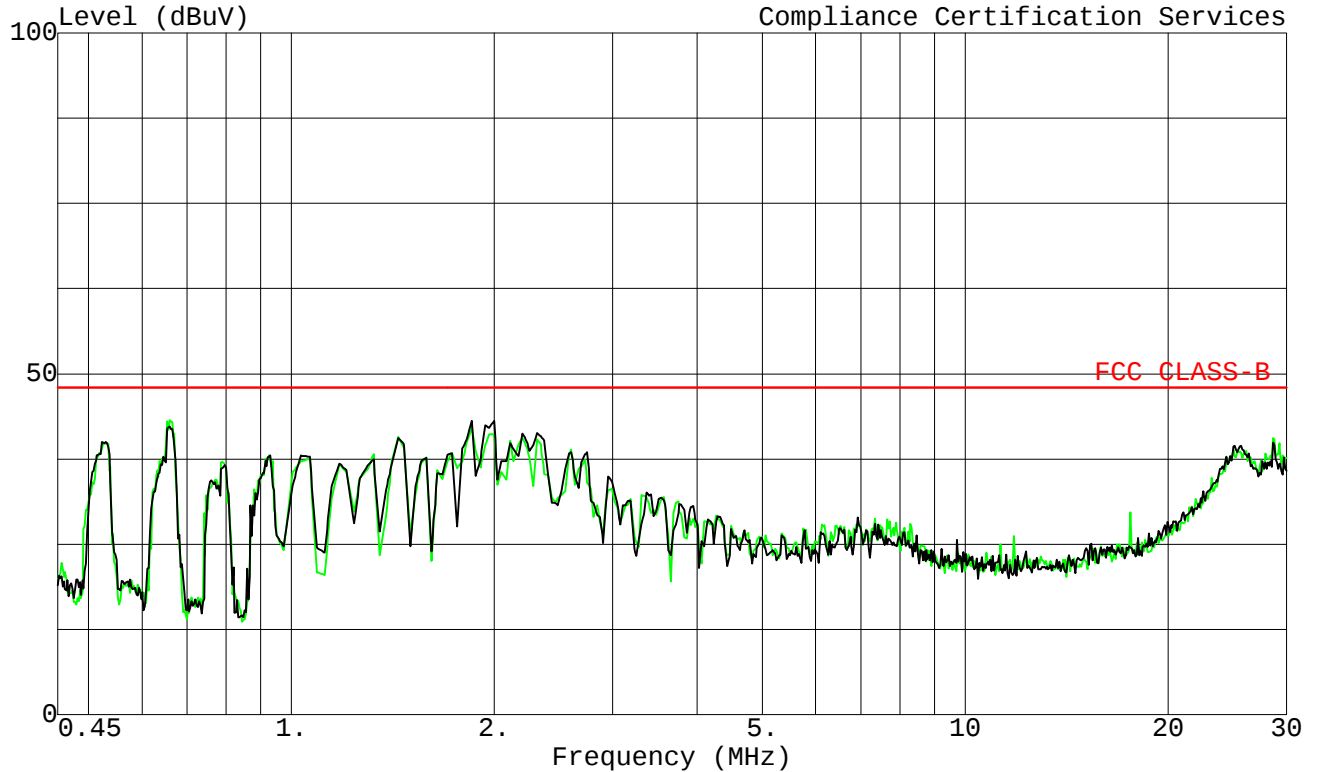
EXHIBIT G: Block Diagram (Confidentiality Requested)

- refer to separate attachment

COMPLIANCE ENGINEERING SERVICES, INC.													
Harmonic Emissions										2/20/01			
15.249(a)										Jesse Saldivar			
										A site (1.0 Meter)			
Trimble													
(BOB)													
f o= 916.2 MHz													
F(MHz)	READING		AF	CL	AMP	DIST	HPF	TOTAL		LIMIT		MARGIN	
	(dBuV)		(dB)	(dB)	(dB)	(dB)	(dB)	(dBuV/m)		(dBuV/m)		(dB)	
	Pk	Avg						Pk	Avg	Pk	Avg	Pk	Avg
2794	51.9	46.8	29	3.62	-32.1	-15.5	1	37.92	32.82	74	54	-36.08	-21.18
3665	44.29		31.8	5.03	-32.1	-15.5	1	34.52			54		-19.48
4582	43.42		32	5.63	-32.1	-15.5	1	34.45			54		-19.55
5498	44.27		31.2	6.03	-32.1	-15.5	1	34.9			54		-19.1
6414	43.79		34	6.63	-32.1	-15.5	1	37.82			54		-16.18
7330	48		37	7.03	-32.1	-15.5	1	45.43			54		-8.57
8246	48.69		37.1	8.04	-32.1	-15.5	1	47.23			54		-6.77
9162	45.54		38	8.44	-32.1	-15.5	1	45.38			54		-8.62
NOTE: ALL READINGS ARE VERTICAL													
DIST: Correction to extrapolate reading to 3m specification distance										ANALYZER SETTINGS			
										Res bw		Avg. bw	
1.5ft measurement distance: -15.56 dB										PEAK(PK):		1MHz	1MHz
										AVERAGE(Avg):		1MHz	10Hz
AF: Antenna Factor													
AMP: Pre-amp gain													
CL: Cable loss													
HPF: High pass filter insertion loss (1.802GHz)													
FSY (S/N: 001)													

Data#: 7 File#: 01UTRIMB.EMI

Date: 02-20-2001 Time: 19:09:11
Compliance Certification Services



Trace: 3

Ref Trace:

Project No. : 01UTrimb
Report No. : 010220LC
Test Engr : Jesse Saldivar
Company : Trimble Navigation LTD.
EUT Description : 916.55MHz Fixed Short Range GPS data
 : Distribution radio
Model : BoB FCC ID: JUP-4786-CIRAA
EUT Config. : EUT/Laptop
Type of Test : FCC 15.249
Mode of Operation: TX
 : PEAK: L1(Black), L2(Green)
 : 115VAC, 60Hz