



FCC Radio Test Report

FCC ID: 2AY2VSWEX01

This report concerns: Class II Permissive Change

Project No. : 2102C293A
Equipment : SOL-X SmartWatch
Brand Name : SOL-X
Model Name : SW-EX-01
Applicant : SOL-X Pte. Ltd.
Address : 1 Kim Seng Promenade #14-10 Great World City Singapore 267994
Manufacturer : SOL-X Pte. Ltd.
Address : 1 Kim Seng Promenade #14-10 Great World City Singapore 267994
Factory : Shenzhen Yecon Industry Co., Ltd
Address : Section A of Floor 6 and Floor 1 to Floor 5, No. 101, No. 2 Building,
 District 6th, Cuigang Industrial Zone, Huaide, Fuyong, Bao'an District,
 Shenzhen City, Guangdong Province, P.R. China
Date of Receipt : Nov. 10, 2025
Date of Test : Nov. 10, 2025 ~ Nov. 19, 2025
Issued Date : Dec. 30, 2025
Test Sample : Engineering Sample No.: DG92025111051
Standard(s) : FCC CFR Title 47, Part 15, Subpart C

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc. (Dongguan)

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** assumes no responsibility for the data provided by the customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by **BTL**.

The report must not be used by the client to claim product certification, approval, or endorsement by A2LA or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the ISO/IEC 17025: 2017 requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective. Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

Table of Contents	Page
REVISION HISTORY	4
1 . APPLICABLE STANDARDS	5
2 . SUMMARY OF TEST RESULTS	5
2.1 TEST FACILITY	6
2.2 MEASUREMENT UNCERTAINTY	6
2.3 TEST ENVIRONMENT CONDITIONS	6
3 . GENERAL INFORMATION	7
3.1 GENERAL DESCRIPTION OF EUT	7
3.2 DESCRIPTION OF TEST MODES	9
3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	10
3.4 SUPPORT UNITS	10
4 . RADIATED EMISSION TEST	11
4.1 LIMIT	11
4.2 TEST PROCEDURE	11
4.3 DEVIATION FROM TEST STANDARD	12
4.4 TEST SETUP	12
4.5 EUT OPERATING CONDITIONS	12
4.6 TEST RESULTS - 30 MHZ TO 1000 MHZ	12
5 . MEASUREMENT INSTRUMENTS LIST	13
6 . EUT TEST PHOTO	14
APPENDIX A - RADIATED EMISSION - 30 MHZ TO 1000 MHZ	15

RVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-1-2102C293A	R00	This is a supplementary report to the original test report (BTL-FCCP-1-2102C293) and due to below items: 1. Changed the address of applicant and manufacturer. 2. Changed the factory information. 3. Added the battery (model: HDS723234). So the radiated emissions 30MHz to 1GHz is verified and recorded. The original test results please refer to original report.	Dec. 30, 2025	Valid

Remark: For the original report (BTL-FCCP-1-2102C293), the test data, data evaluation, and equipment configuration contained was accredited by the Authority of A2LA according to the ISO/IEC 17025 quality assessment standard and technical standard(s).

1. APPLICABLE STANDARDS

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standard:

ANSI C63.10-2020

The following reference test guidance is not within the scope of accreditation of A2LA:

KDB 558074 D01 15.247 Meas Guidance v05r02

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC CFR Title 47, Part 15, Subpart C				
Standard(s) Section	Test Item	Test Result	Judgment	Remark
15.207	AC Power Line Conducted Emissions	-----	PASS	Note(3)
15.247(d) 15.205(a) 15.209(a)	Radiated Emission	Appendix A	PASS	Note(3)
15.247 (a)(1)(iii)	Number of Hopping Frequency	-----	PASS	Note(3)
15.247 (a)(1)(iii)	Average Time Of Occupancy	-----	PASS	Note(3)
15.247(a)(1)	Hopping Channel Separation	-----	PASS	Note(3)
15.247(a)(1)	Bandwidth	-----	PASS	Note(3)
15.247(a)(1)	Maximum Output Power	-----	PASS	Note(3)
15.247(d)	Conducted Spurious Emission	-----	PASS	Note(3)
15.203	Antenna Requirement	-----	PASS	Note(2)

Note:

- (1) "N/A" denotes test is not applicable in this test report
- (2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.
- (3) The other test results please refer to the referenced test report No.: BTL-FCCP-1-2102C293.

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3, Jinshagang 1st Road, Dalang, Dongguan, Guangdong People's Republic of China.

BTL's Registration Number for FCC: 747969

BTL's Designation Number for FCC: CN1377

2.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

The BTL measurement uncertainty as below table:

A. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
DGDLCB03 (3m)	CISPR	30MHz ~ 200MHz	V	4.40
		30MHz ~ 200MHz	H	3.62
		200MHz ~ 1,000MHz	V	4.58
		200MHz ~ 1,000MHz	H	3.98

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

2.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By	Test Date
Radiated Emissions -30 MHz to 1000 MHz	25°C	51%	AC 120V/60Hz	Calvin Wen	Nov. 12, 2025

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	SOL-X SmartWatch
Brand Name	SOL-X
Test Model	SW-EX-01
Model Name	SW-EX-01
Model Difference(s)	N/A
Power Source	SmartWatch: 1# Supplied from charging Dock. 2# Supplied from battery. (1) Model: 733234P (2) Model: HDS723234 Charging Dock: DC Voltage supplied from AC adapter. Model: SK12G-0500100Z
Power Rating	SmartWatch: 1# 5.0V --- 1.0A 2# DC 3.7V 850mAh Adapter: I/P: 100-240V ~ 50/60Hz 0.2A Max O/P: 5.0V --- 1.0A Charging Dock Input: 5.0V --- 1.0A
Operation Frequency	2402 MHz ~ 2480 MHz
Modulation Technology	GFSK, $\pi/4$ -DQPSK, 8-DPSK
Bit Rate of Transmitter	1 Mbps, 2 Mbps, 3Mbps

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. Channel List:

Channe	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	27	2429	54	2456
01	2403	28	2430	55	2457
02	2404	29	2431	56	2458
03	2405	30	2432	57	2459
04	2406	31	2433	58	2460
05	2407	32	2434	59	2461
06	2408	33	2435	60	2462
07	2409	34	2436	61	2463
08	2410	35	2437	62	2464
09	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454		
26	2428	53	2455		

3. Table for Filed Antenna:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	sunnyway	MW681	PIFA	LDS	-0.37

Note:

The antenna gain is provided by the manufacturer.

3.2 DESCRIPTION OF TEST MODES

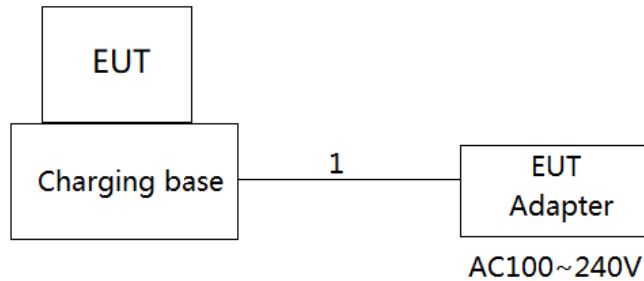
The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description
Mode 1	TX Mode_1Mbps Channel 39

Following mode(s) was (were) found to be the worst case(s) and selected for the final test.

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 1	TX Mode_1Mbps Channel 39

3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.4 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
-	-	-	-	-

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	DC Cable	NO	NO	1.2m

4. RADIATED EMISSION TEST

4.1 LIMIT

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (30 MHz-1000 MHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Note:

- (1) The limit for radiated test was performed according to FCC CFR Title 47, Part 15, Subpart C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).
- (4) The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)
 Margin Level = Measurement Value - Limit Value

4.2 TEST PROCEDURE

- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
(below 1 GHz)
- i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

The following table is the setting of the receiver:

Spectrum Parameters	Setting
Start ~ Stop Frequency	30 MHz~1000 MHz for RBW 100 kHz

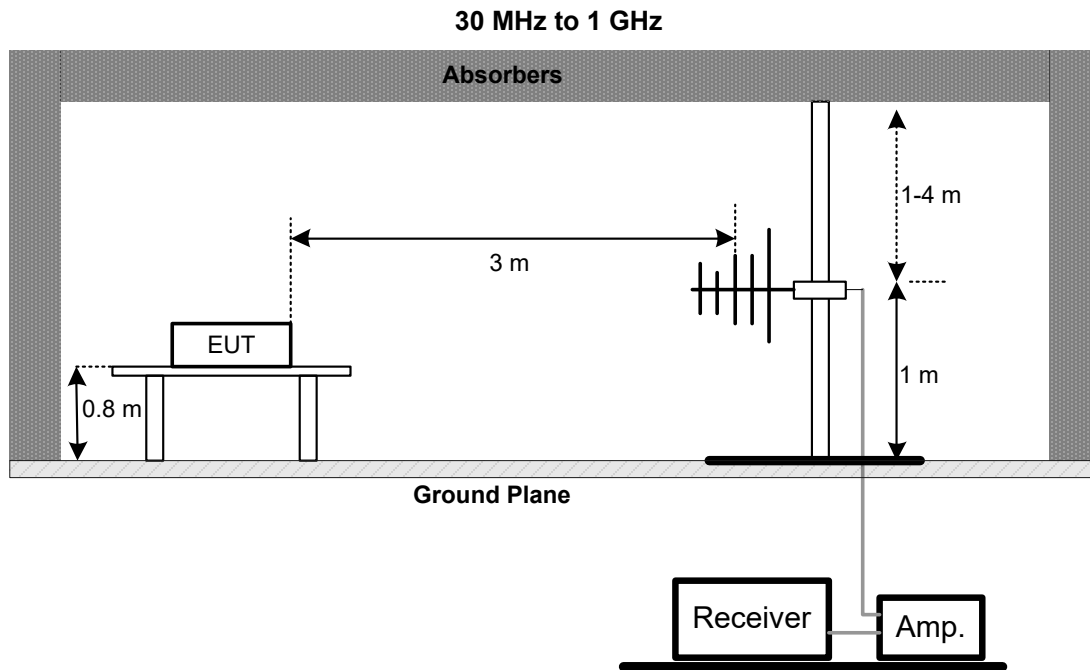
Spectrum Parameters	Setting
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	1 MHz / 3 MHz for PK value 1 MHz / 1/T Hz for AVG value

Spectrum Parameters	Setting
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector

4.3 DEVIATION FROM TEST STANDARD

No deviation

4.4 TEST SETUP



4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

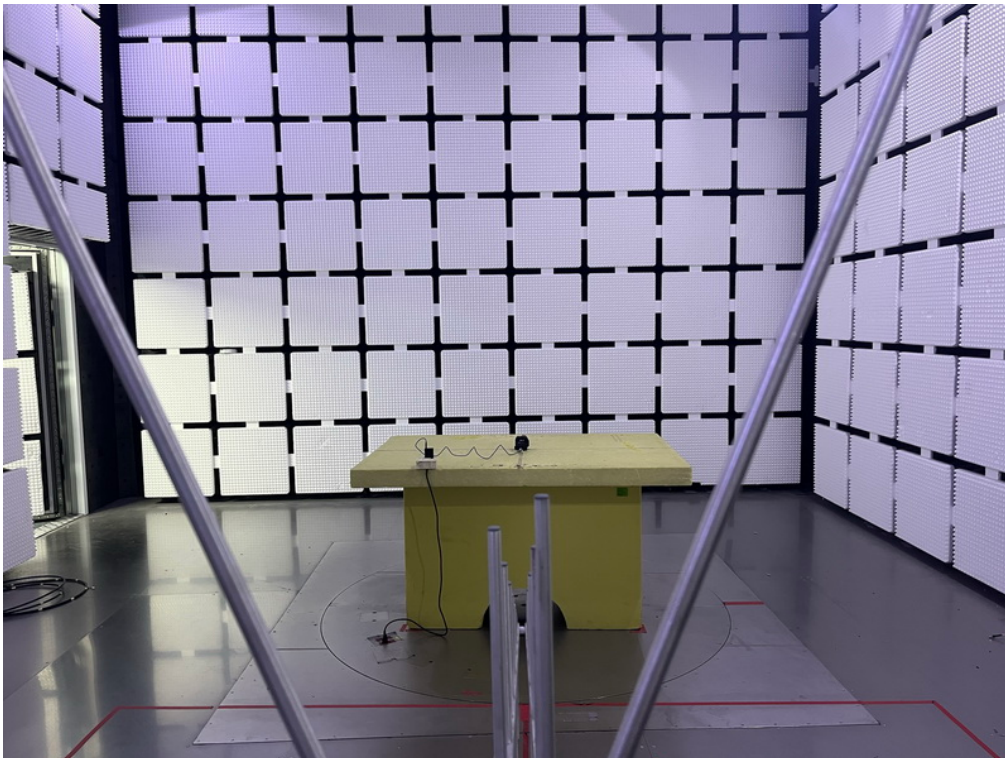
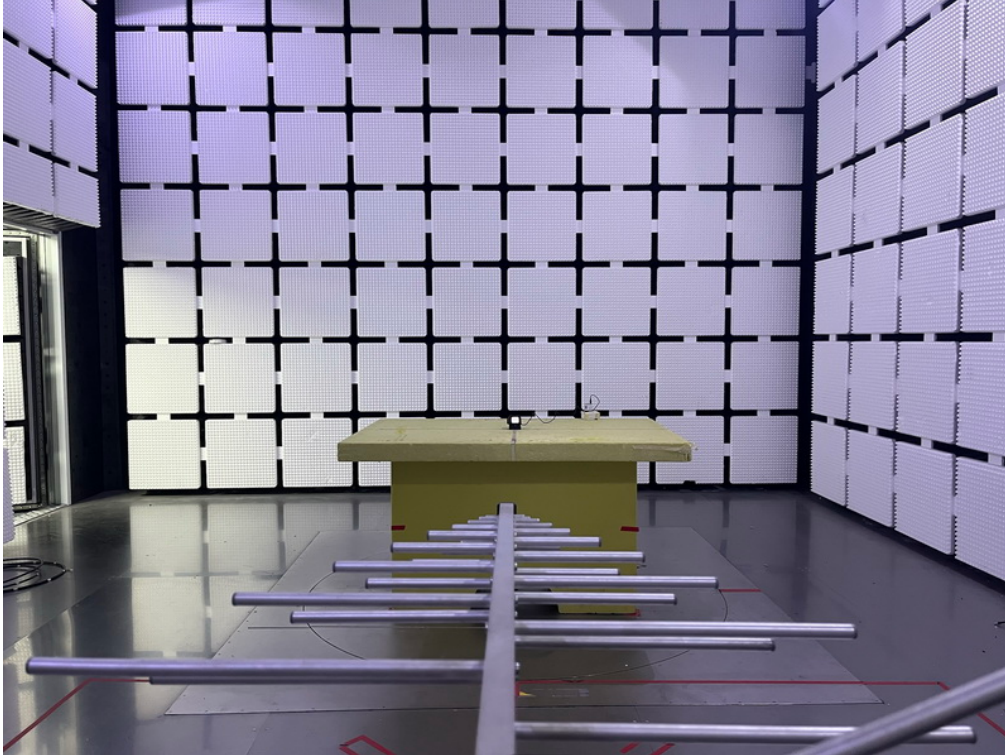
4.6 TEST RESULTS - 30 MHz TO 1000 MHz

Please refer to the APPENDIX A.

5. MEASUREMENT INSTRUMENTS LIST

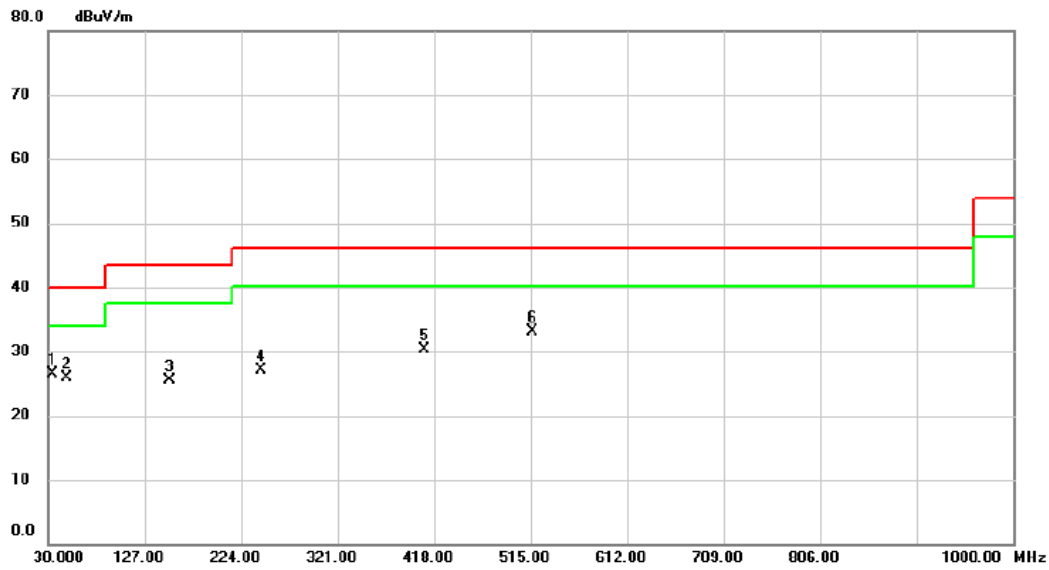
Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	01462	Dec. 14, 2025
2	Attenuator	EMC INSTRUMENT	EMCI-N-6-06	AT-06009	Dec. 14, 2025
3	Preamplifier	EMC INSTRUMENT	EMC001330	980998	May 17, 2026
4	Cable	RegalWay	LMR400-NMNM-12.5m	N/A	Jun. 04, 2026
5	Cable	RegalWay	LMR400-NMNM-3m	N/A	Jun. 04, 2026
6	Cable	RegalWay	LMR400-NMNM-0.5m	N/A	Jun. 04, 2026
7	Receiver	Agilent	N9038A	MY52130039	Jan. 10, 2026
8	Positioning Controller	MF	MF-7802	N/A	N/A
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
10	966 Chamber room	CM	9*6*6	N/A	May 15, 2026

Remark "N/A" denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

6. EUT TEST PHOTO**Radiated Emissions Test Photos****30 MHz to 1000 MHz**

APPENDIX A - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

Test Mode	TX Mode Channel 39 _1Mbps	Polarization	Vertical
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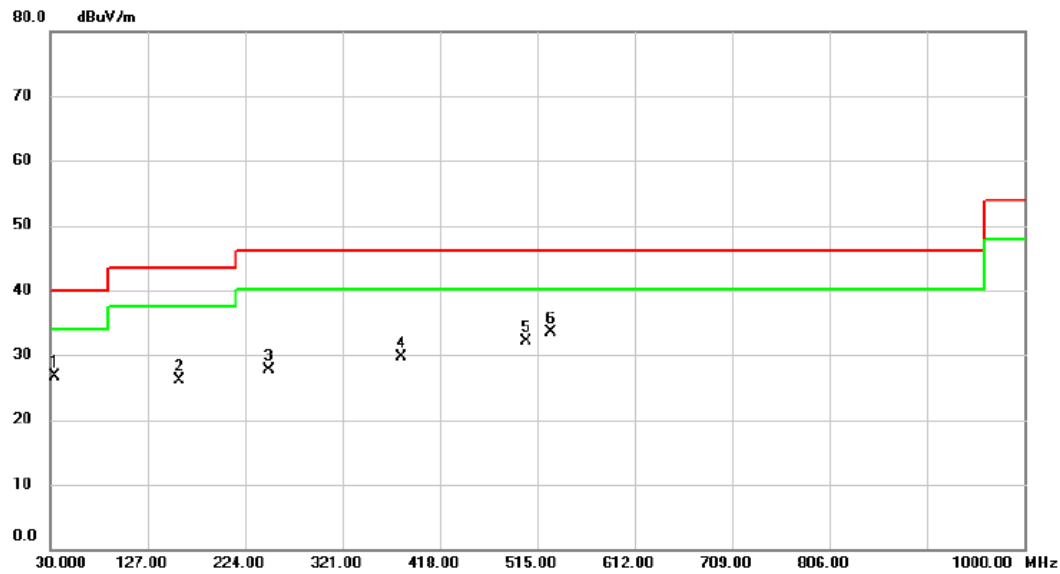


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	33.880	38.82	-12.29	26.53	40.00	-13.47	peak	
2	48.430	37.05	-11.07	25.98	40.00	-14.02	peak	
3	152.220	36.05	-10.61	25.44	43.52	-18.08	peak	
4	243.400	38.89	-11.71	27.18	46.02	-18.84	peak	
5	408.300	37.49	-7.14	30.35	46.02	-15.67	peak	
6 *	516.940	37.99	-4.96	33.03	46.02	-12.99	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	TX Mode Channel 39 _1Mbps	Polarization	Horizontal
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No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		33.880	38.90	-12.29	26.61	40.00	-13.39	peak	
2		158.040	36.56	-10.55	26.01	43.52	-17.51	peak	
3		248.250	39.22	-11.46	27.76	46.02	-18.26	peak	
4		379.200	37.44	-7.78	29.66	46.02	-16.36	peak	
5		504.330	37.20	-5.18	32.02	46.02	-14.00	peak	
6 *		528.580	38.25	-4.77	33.48	46.02	-12.54	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

End of Test Report