



CERTIFICATION TEST REPORT

Report Number : 4790413022-FR1V2

Applicant : Snap One, LLC
1800 Continental Blvd, Suite 300 Charlotte, NC 28273

Model : C4-HALO-BL

FCC ID : 2AJAC-C4HALO

IC : 7848A-C4HALO

EUT Description : Remote Controller

Test Standard(s) : FCC 47 CFR PART 15 SUBPART C
INDUSTRY CANADA RSS-247 Issue 2
INDUSTRY CANADA RSS-GEN Issue 5

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REPORT REVISION HISTORY

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
V1	2022-12-14	Initial issue	Jaejin Lee
V2	2022-12-24	Updated about the TCB's question	Jaejin Lee

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Snap One, LLC
EUT DESCRIPTION: Remote Controller
MODEL NUMBER: C4-HALO-BL
SERIAL NUMBER: Proto type
DATE TESTED: 2022-06-13 ~ 2022-07-21(Radiated Below 1GHz)
2022-08-08 (AC Power Line test)
2022-11-24 ~ 2022-12-13 (Radiated Above 1GHz)

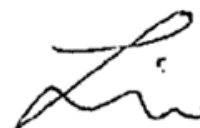
APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Complies
INDUSTRY CANADA RSS-247 Issue 2	Complies
INDUSTRY CANADA RSS-GEN Issue 5	Complies

UL Korea, Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Korea, Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Korea, Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Korea, Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by IAS, any agency of the Federal Government, or any agency of any government.

Approved & Released For
UL Korea, Ltd. By:

Tested By:



Seokhwan Hong
Laboratory Test Engineer
UL Korea, Ltd.

Jaejin Lee
Laboratory Engineer
UL Korea, Ltd.

1.1. INTRODUCTION OF THE CONDUCTED TEST DATA

Please refer to the conducted test data for this EUT from the approved module FCC ID : VPYLBEE5HY1MW, IC : 772C-LBEE5HY1MW, (Report Number: 1802WSU008-U1, DTS WLAN). Because the output power is identical with the approved module. And the applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID and IC.

2. TEST METHODOLOGY

1. FCC CFR 47 Part 2.
2. FCC CFR 47 Part 15.
3. KDB 558074 D01 DTS Meas Guidance v05r02.
4. ANSI C63.10-2013.
5. KDB 484596 D01 Referencing Test Data v01

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea. Line conducted emissions are measured only at the 218 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

218 Maeyeong-ro
<input checked="" type="checkbox"/> Chamber 1
<input checked="" type="checkbox"/> Chamber 2
<input checked="" type="checkbox"/> Chamber 3

UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-637. The full scope of accreditation can be viewed at <https://www.iasonline.org/wp-content/uploads/2017/05/TL-637-cert-New.pdf>.

UL Korea, Ltd. is accredited by National Radio Research Agency, Designation Number KR0161, for all testing performed within the scope of this report.

ISED CABID	ISED Company Number	FCC Registration
KR0161	2324L	644529

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamp Gain (dB)} \\ 28.9 \text{ dBuV/m} &= 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} \end{aligned}$$

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	2.87 dB
Radiated Disturbance, 30 MHz to 1 GHz	4.05 dB
Radiated Disturbance, 1 GHz to 18 GHz	5.06 dB
Radiated Disturbance, 18 GHz to 40 GHz	6.02 dB

Uncertainty figures are valid to a confidence level of 95%.

4.4. DECISION RULE

Decision rule for statement(s) of conformity is based on Procedure 2, Clause 4.4.3 in IEC Guide 115:2021.

5. EQUIPMENT UNDER TEST

5.1. EUT DESCRIPTION

The EUT is a Remote Controller.

This test report addresses the DTS (WLAN) operational mode.

WiFi operating mode

Frequency rage	Mode	ANT 1	ANT 2
2.4GHz (2412 MHz ~ 2462 MHz)	802.11b SISO	TX/RX	TX/RX
	802.11g SISO	TX/RX	TX/RX
	802.11n(HT20) SISO	TX/RX	TX/RX

5.2. DESCRIPTION OF AVAILABLE ANTENNAS

An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

The internal antenna was Permanently attached.

Therefore this E.U.T Complies with the requirement of §15.203.

Frequency	ANT 1 Gain [dBi]	ANT 2 Gain [dBi]
2 412 ~ 2 462	2.70	2.70

The EUT uses ANT 1 and 2 as the same antenna.

5.3. WORST-CASE CONFIGURATION AND MODE

Radiated emission below 1GHz and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

Radiated emission above 1GHz was performed with the EUT set to transmit low/mid/High Channels.

The fundamental of the EUT was investigated in three orthogonal orientations X, Y and Z. It was determined that X orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in X orientation.

5.4. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
N/A	N/A	N/A	N/A	N/A

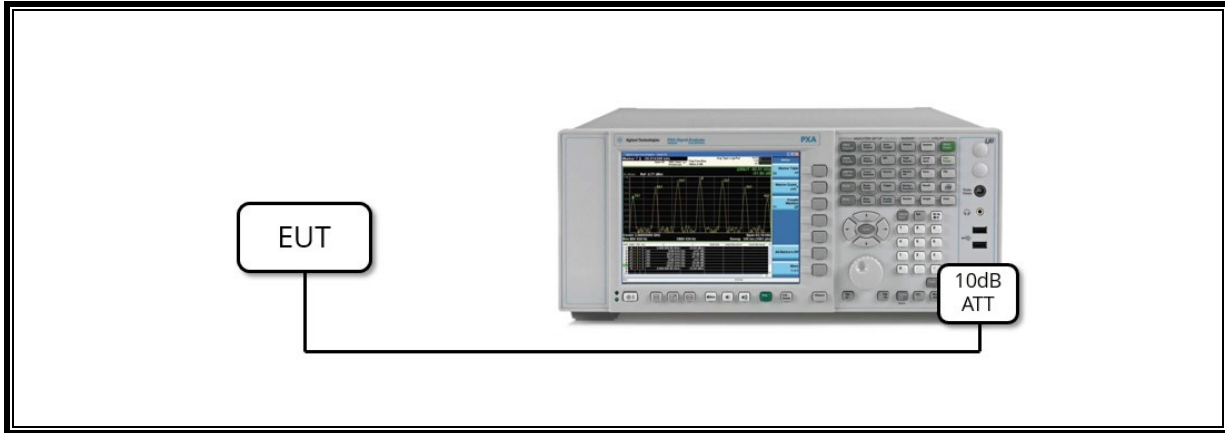
I/O CABLE

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
N/A	N/A	N/A	N/A	N/A	N/A	N/A

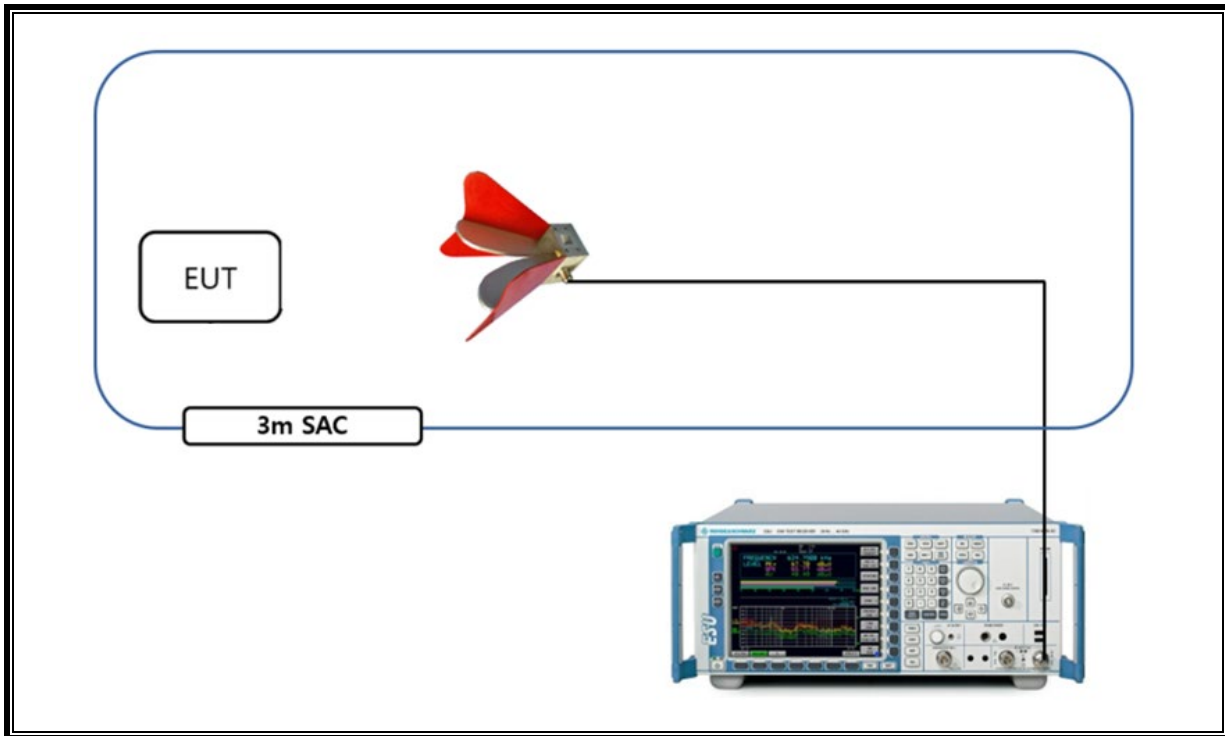
TEST SETUP

The EUT is a stand-alone unit during the tests.
Test software exercised the EUT to enable DTS mode.

SETUP DIAGRAM FOR TESTS (CONDUCTED TEST SETUP)



SETUP DIAGRAM FOR TESTS (RADIATED TEST SETUP)



6. MEASUREMENT METHOD

Out-of-band Emissions in Non-restricted Bands : ANSI C63.10-2013, Section 11.11 Emissions in nonrestricted frequency bands

Out-of-band Emissions in Restricted Bands : ANSI C63.10-2013, Section 11.12 Emissions in restricted frequency bands

AC Power Line Conducted Emission : ANSI C63.10-2013, Section 6.2

7. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment List				
Description	Manufacturer	Model	S/N	Cal Due
*Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	750	2022-08-19
*Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	749	2022-08-13
*Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	845	2022-08-13
Antenna, Horn, 18 GHz	ETS	3115	00167211	2024-08-04
Antenna, Horn, 18 GHz	ETS	3115	00161451	2024-08-21
Antenna, Horn, 18 GHz	ETS	3117	00168724	2024-08-04
Antenna, Horn, 18 GHz	ETS	3117	00168717	2024-08-21
Antenna, Horn, 40 GHz	ETS	3116C	00166155	2024-08-02
Preamplifier	ETS	3116C-PA	00168841	2023-08-04
*Preamplifier, 1000 MHz	Sonoma	310N	341282	2022-08-02
*Preamplifier, 1000 MHz	Sonoma	310N	351741	2022-08-02
*Preamplifier, 1000 MHz	Sonoma	310N	370599	2022-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1876511	2023-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1896138	2023-08-01
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	2029168	2023-08-01
Spectrum Analyzer, 44 GHz	KEYSIGHT	N9030B	MY57143652	2023-01-11
Power Sensor	R&S	NRP-Z91	102681	2023-08-03
10dB ATTENUATOR	MINI-CIRCUITS	BW-K10-2W44+	2117	2023-07-29
Attenuator	PASTERNAK	PE7087-10	A001	2023-08-03
Attenuator	PASTERNAK	PE7087-10	A008	2023-08-03
Attenuator	PASTERNAK	PE7004-10	2	2023-08-01
Attenuator	PASTERNAK	PE7087-10	A009	2023-08-03
EMI Test Receive, 44 GHz	R&S	ESW44	101590	2023-08-01
EMI Test Receive, 40 GHz	R&S	ESU40	100439	2023-08-02
EMI Test Receive, 40 GHz	R&S	ESU40	100457	2023-07-29
**EMI Test Receive, 3 GHz	R&S	ESR3	102592	2023-08-01
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	009	2023-08-02
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	015	2023-08-01
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	020	2023-08-01
High Pass Filter 3GHz	Micro-Tronics	HPM17543	010	2023-08-02
High Pass Filter 3GHz	Micro-Tronics	HPM17543	020	2023-08-01
High Pass Filter 6GHz	Micro-Tronics	HPS17542	009	2023-08-02
High Pass Filter 6GHz	Micro-Tronics	HPS17542	021	2023-08-01
**LISN	R&S	ENV-216	102478	2023-08-03
Antenna, Loop, 9kHz-30MHz	R&S	HFH2-Z2	100418	2023-10-06
UL Software				
Description	Manufacturer	Model	Version	
Radiated software	UL	UL EMC	Ver 9.5	
AC Line Conducted software	R&S	EMC32	Ver 10.60.10	

Note : This equipments (*) were used for radiated test below 1GHz(test date 2022-06-13~07-21).
 This equipments (**) were used for AC Power line test(test date 2022-08-08).

8. SUMMARY TABLE

FCC Part Section	IC Section	Test Description	Test Limit	Test Condition	Test Result
15.247 (b)(3)	RSS-247 5.4(d)	TX conducted output power	< 30 dBm	Conducted	Complies
15.205, 15.209	RSS-GEN 8.9 & 8.10	Radiated Spurious Emission	< 54dBuV/m(Av)	Radiated	Complies
15.207 (a)	RSS-GEN 8.8	AC Power Line Conducted Emission	Section 11	Power Line Conducted	Complies

9. OUTPUT POWER

LIMITS

FCC §15.247 (b) (3)

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Measurements perform using a wideband RF frame average power sensor.

The cable assembly insertion loss and duty cycle correction factor was entered as an offset in the power sensor to allow for direct reading of power.

Output power measurement was performed utilizing the 8.3.2.3 under KDB558074 D01 15.247 Meas Guidance.

ANSI C63.10-2013, Section 11.9.2.3.1 Method AVGPM

9.1.1. TEST RESULTS

- ANT1

Mode	Channel	Frequency [MHz]	Average Power [dBm]	Power Limit [dBm]
802.11b	1	2 412	17.15	30.00
	6	2 437	17.08	
	11	2 462	17.32	
802.11g	1	2 412	11.58	
	6	2 437	15.42	
	11	2 462	11.78	
802.11n HT20	1	2 412	11.23	
	6	2 437	13.34	
	11	2 462	11.22	

- Calculation of Output Power result
 Average Power = Meas. Power + Duty Cycle CF

- ANT2

Mode	Channel	Frequency [MHz]	Average Power [dBm]	Power Limit [dBm]
802.11b	1	2 412	17.12	30.00
	6	2 437	17.04	
	11	2 462	17.25	
802.11g	1	2 412	11.38	
	6	2 437	15.63	
	11	2 462	11.87	
802.11n HT20	1	2 412	11.19	
	6	2 437	13.37	
	11	2 462	11.26	

- Calculation of Output Power result
 Average Power = Meas. Power + Duty Cycle CF

10. RADIATED TEST RESULTS

LIMITS

FCC §15.205 and §15.209

Limits for radiated disturbance of an intentional radiator		
Frequency range (MHz)	Limits (µV/m)	Measurement Distance (m)
0.009 – 0.490	2400 / F (kHz)	300
0.490 – 1.705	24000 / F (kHz)	30
1.705 – 30.0	30	30
30 – 88	100**	3
88 - 216	150**	3
216 – 960	200**	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g. §§ 15.231 and 15.241.

FCC Part 15.205 (a) : Only spurious emissions are permitted in any of the frequency bands listed below :

MHz	MHz	MHz	MHz	GHz	GHz
0.009 ~ 0.110	8.41425 ~ 8.41475	108 ~ 121.94	1300 ~ 1427	4.5 ~ 5.15	14.47 ~ 14.5
0.495 ~ 0.505	12.29 ~ 12.293	123 ~ 138	1435 ~ 1626.5	5.35 ~ 5.46	15.35 ~ 16.2
2.1735 ~ 2.1905	12.51975 ~ 12.52025	149.9 ~ 150.05	1645.5 ~ 1646.5	7.25 ~ 7.75	17.7 ~ 21.4
4.125 ~ 4.128	12.57675 ~ 12.57725	156.52475 ~	1660 ~ 1710	8.025 ~ 8.5	22.01 ~ 23.12
4.17725 ~ 4.17775	13.36 ~ 13.41	156.52525	1718.8 ~ 1722.2	9.0 ~ 9.2	23.6 ~ 24.0
4.20725 ~ 4.20775	16.42 ~ 16.423	156.7 ~ 156.9	2200 ~ 2300	9.3 ~ 9.5	31.2 ~ 31.8
6.215 ~ 6.218	16.69475 ~ 16.69525	162.0125 ~	2310 ~ 2390	10.6 ~ 12.7	36.43 ~ 36.5
6.26775 ~ 6.26825	16.80425 ~ 16.80475	167.17	2483.5 ~ 2500	13.25 ~ 13.4	Above 38.6
6.31175 ~ 6.31225	25.5 ~ 25.67	167.72 ~ 173.2	2655 ~ 2900		
8.291 ~ 8.294	37.5 ~ 38.25	240 ~ 285	3260 ~ 3267		
8.362 ~ 8.366	73 ~ 74.6	322 ~ 335.4	3332 ~ 3339		
8.37625 ~ 8.38675	74.8 ~ 75.2	399.90 ~ 410	3345.8 ~ 3358		
		608 ~ 614	3600 ~ 4400		
		960 ~ 1240			

▪ FCC Part 15.205(b) : The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1 GHz and 150 cm for above 1 GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor for average measurements. (Restricted bandedge, Final detection of spurious harmonic emissions)

Duty cycle factor = $10\log(1/x)$ For this sample:

802.11b mode = 0 dB (duty cycle > 98%);
802.11g mode = 0 dB (duty cycle > 98%);
802.11n(HT20) mode = 0 dB (duty cycle > 98%);

Pre-scans to detect harmonic and spurious emissions, the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 kHz for peak measurements.

The spectrum from 1 GHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.
(From 30MHz to 1GHz, test was performed with the EUT set to transmit at the channel with highest output power)

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

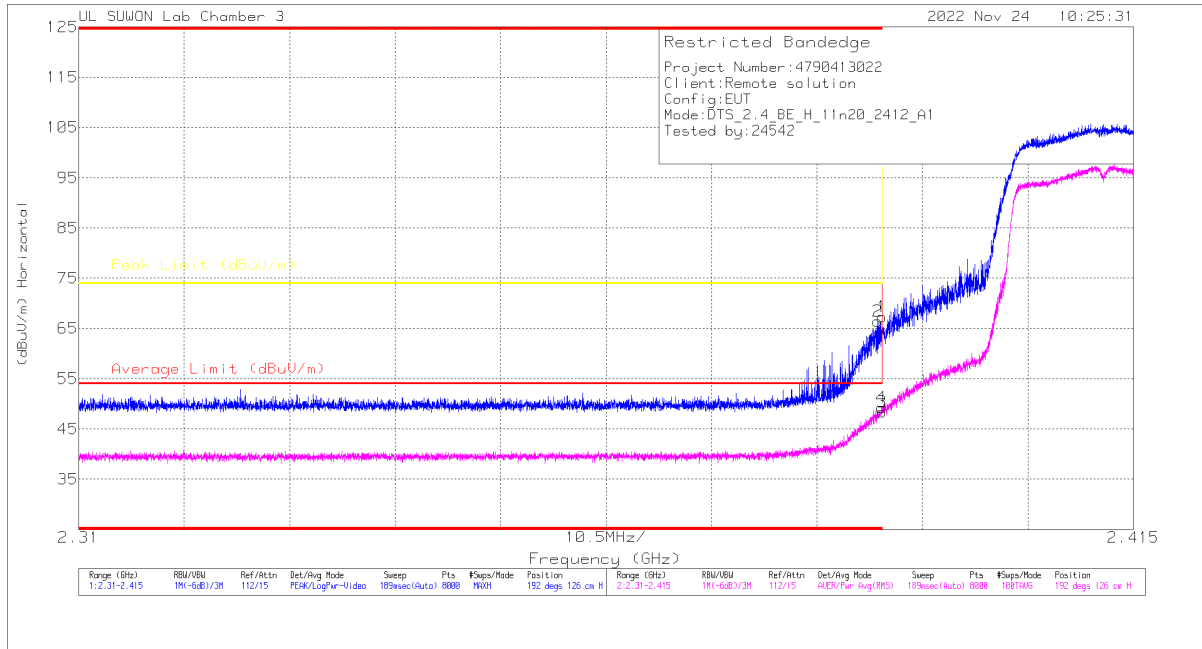
Note : Emission was pre-scanned from 9 kHz to 30 MHz; No emissions were detected which was at least 20dB below the specification limit (consider distance correction factor).
Per FCC part 15.31(o), test results were not reported.

Although these tests were performed other than open-field test site, adequate comparison measurements were confirmed against 30 m open-field test site.
Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the one of tests made in an open field based on KDB 414788.

10.1. TRANSMITTER ABOVE 1 GHz

BANDEDGE (WORST CASE: 802.11n(HT20)_ANT1_1 CHANNEL)

HORIZONTAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	10dB_ATT[dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	59.32	Pk	32.8	-24.8	67.32	-	-	74	-6.68	192	126	H
2	* 2.38955	58.41	Pk	32.8	-24.8	66.41	-	-	74	-7.59	192	126	H
3	* 2.39	40.43	RMS	32.8	-24.8	48.43	54	-5.57	-	-	192	126	H
4	* 2.38992	41.25	RMS	32.8	-24.8	49.25	54	-4.75	-	-	192	126	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 Pk - Peak detector
 RMS - RMS detection

BANDEDGE TEST DATA

802.11b

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result dBuV/m	AV Limit dBuV/m	AV Margin [dB]	PK Limit dBuV/m	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity	
2412	ANT1	* 2.39	47.76	Pk	32.80	-24.80	0.00	55.76	-	-	74.00	-18.24	208	125	H	
		* 2.38986	49.16	Pk	32.80	-24.80	0.00	57.16	-	-	74.00	-16.84	208	125	H	
		* 2.39	36.87	RMS	32.80	-24.80	0.00	44.87	54.00	-9.13	-	-	-	208	125	H
		* 2.38975	37.47	RMS	32.80	-24.80	0.00	45.47	54.00	-8.53	-	-	-	208	125	H
		* 2.39	43.71	Pk	32.80	-24.80	0.00	51.71	-	-	74.00	-22.29	171	269	V	
		* 2.38971	45.66	Pk	32.80	-24.80	0.00	53.66	-	-	74.00	-20.34	171	269	V	
		* 2.39	33.41	RMS	32.80	-24.80	0.00	41.41	54.00	-12.59	-	-	-	171	269	V
		* 2.38972	34.78	RMS	32.80	-24.80	0.00	42.78	54.00	-11.22	-	-	-	171	269	V
2462	ANT1	* 2.4835	49.24	Pk	32.90	-24.70	0.00	57.44	-	-	74.00	-16.56	190	144	H	
		* 2.48369	49.79	Pk	32.90	-24.70	0.00	57.99	-	-	74.00	-16.01	190	144	H	
		* 2.4835	39.15	RMS	32.90	-24.70	0.00	47.35	54.00	-6.65	-	-	-	190	144	H
		* 2.48367	39.48	RMS	32.90	-24.70	0.00	47.68	54.00	-6.32	-	-	-	190	144	H
		* 2.4835	45.23	Pk	32.90	-24.70	0.00	53.43	-	-	74.00	-20.57	168	257	V	
		* 2.48456	46.47	Pk	32.90	-24.70	0.00	54.67	-	-	74.00	-19.33	168	257	V	
		* 2.4835	34.30	RMS	32.90	-24.70	0.00	42.50	54.00	-11.50	-	-	-	168	257	V
		* 2.48367	35.07	RMS	32.90	-24.70	0.00	43.27	54.00	-10.73	-	-	-	168	257	V

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result dBuV/m	AV Limit dBuV/m	AV Margin [dB]	PK Limit dBuV/m	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity	
2412	ANT2	* 2.39	46.99	Pk	32.80	-24.80	0.00	54.99	-	-	74.00	-19.01	17	140	H	
		* 2.38875	48.22	Pk	32.80	-24.80	0.00	56.22	-	-	74.00	-17.78	17	140	H	
		* 2.39	37.01	RMS	32.80	-24.80	0.00	45.01	54.00	-8.99	-	-	-	17	140	H
		* 2.3899	37.48	RMS	32.80	-24.80	0.00	45.48	54.00	-8.52	-	-	-	17	140	H
		* 2.39	43.71	Pk	32.80	-24.80	0.00	51.71	-	-	74.00	-22.29	159	257	V	
		* 2.38942	44.90	Pk	32.80	-24.80	0.00	52.90	-	-	74.00	-21.10	159	257	V	
		* 2.39	32.82	RMS	32.80	-24.80	0.00	40.82	54.00	-13.18	-	-	-	159	257	V
		* 2.38968	33.72	RMS	32.80	-24.80	0.00	41.72	54.00	-12.28	-	-	-	159	257	V
2462	ANT2	* 2.4835	45.45	Pk	32.90	-24.70	0.00	53.65	-	-	74.00	-20.35	156	133	H	
		* 2.48463	47.55	Pk	32.90	-24.70	0.00	55.75	-	-	74.00	-18.25	156	133	H	
		* 2.4835	35.62	RMS	32.90	-24.70	0.00	43.82	54.00	-10.18	-	-	-	156	133	H
		* 2.48385	36.24	RMS	32.90	-24.70	0.00	44.44	54.00	-9.56	-	-	-	156	133	H
		* 2.4835	45.37	Pk	32.90	-24.70	0.00	53.57	-	-	74.00	-20.43	184	262	V	
		* 2.48488	46.09	Pk	32.90	-24.70	0.00	54.29	-	-	74.00	-19.71	184	262	V	
		* 2.4835	34.13	RMS	32.90	-24.70	0.00	42.33	54.00	-11.67	-	-	-	184	262	V
		* 2.48354	34.92	RMS	32.90	-24.70	0.00	43.12	54.00	-10.88	-	-	-	184	262	V

Note1. Pk - Peak detector, RMS - RMS detector

Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

802.11g

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result dBuV/m	AV Limit dBuV/m	AV Margin [dB]	PK Limit dBuV/m	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity	
2412	ANT1	* 2.39	56.94	Pk	32.80	-24.80	0.00	64.94	-	-	74.00	-9.06	215	140	H	
		* 2.38994	58.09	Pk	32.80	-24.80	0.00	66.09	-	-	74.00	-7.91	215	140	H	
		* 2.39	39.85	RMS	32.80	-24.80	0.00	47.85	54.00	-6.15	-	-	-	215	140	H
		* 2.38992	40.83	RMS	32.80	-24.80	0.00	48.83	54.00	-5.17	-	-	-	215	140	H
		* 2.39	54.91	Pk	32.80	-24.80	0.00	62.91	-	-	74.00	-11.09	171	247	V	
		* 2.38971	56.62	Pk	32.80	-24.80	0.00	64.62	-	-	74.00	-9.38	171	247	V	
		* 2.39	38.89	RMS	32.80	-24.80	0.00	46.89	54.00	-7.11	-	-	-	171	247	V
		* 2.38981	39.64	RMS	32.80	-24.80	0.00	47.64	54.00	-6.36	-	-	-	171	247	V
2462	ANT1	* 2.4835	54.18	Pk	32.90	-24.70	0.00	62.38	-	-	74.00	-11.62	193	144	H	
		* 2.48351	54.25	Pk	32.90	-24.70	0.00	62.45	-	-	74.00	-11.55	193	144	H	
		* 2.4835	38.72	RMS	32.90	-24.70	0.00	46.92	54.00	-7.08	-	-	-	193	144	H
		* 2.4839	39.17	RMS	32.90	-24.70	0.00	47.37	54.00	-6.63	-	-	-	193	144	H
		* 2.4835	52.28	Pk	32.90	-24.70	0.00	60.48	-	-	74.00	-13.52	176	291	V	
		* 2.48354	53.27	Pk	32.90	-24.70	0.00	61.47	-	-	74.00	-12.53	176	291	V	
		* 2.4835	36.05	RMS	32.90	-24.70	0.00	44.25	54.00	-9.75	-	-	-	176	291	V
		* 2.48354	37.99	RMS	32.90	-24.70	0.00	46.19	54.00	-7.81	-	-	-	176	291	V

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result dBuV/m	AV Limit dBuV/m	AV Margin [dB]	PK Limit dBuV/m	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity	
2412	ANT2	* 2.39	56.93	Pk	32.80	-24.80	0.00	64.93	-	-	74.00	-9.07	143	124	H	
		* 2.38994	57.32	Pk	32.80	-24.80	0.00	65.32	-	-	74.00	-8.68	143	124	H	
		* 2.39	37.57	RMS	32.80	-24.80	0.00	45.57	54.00	-8.43	-	-	-	143	124	H
		* 2.38943	39.18	RMS	32.80	-24.80	0.00	47.18	54.00	-6.82	-	-	-	143	124	H
		* 2.39	55.02	Pk	32.80	-24.80	0.00	63.02	-	-	74.00	-10.98	190	271	V	
		* 2.38984	55.27	Pk	32.80	-24.80	0.00	63.27	-	-	74.00	-10.73	190	271	V	
		* 2.39	36.62	RMS	32.80	-24.80	0.00	44.62	54.00	-9.38	-	-	-	190	271	V
		* 2.38993	38.41	RMS	32.80	-24.80	0.00	46.41	54.00	-7.59	-	-	-	190	271	V
2462	ANT2	* 2.4835	56.41	Pk	32.90	-24.70	0.00	64.61	-	-	74.00	-9.39	167	133	H	
		* 2.48362	56.58	Pk	32.90	-24.70	0.00	64.78	-	-	74.00	-9.22	167	133	H	
		* 2.4835	37.16	RMS	32.90	-24.70	0.00	45.36	54.00	-8.64	-	-	-	167	133	H
		* 2.48371	39.69	RMS	32.90	-24.70	0.00	47.89	54.00	-6.11	-	-	-	167	133	H
		* 2.4835	50.96	Pk	32.90	-24.70	0.00	59.16	-	-	74.00	-14.84	185	250	V	
		* 2.48372	50.32	Pk	32.90	-24.70	0.00	58.52	-	-	74.00	-15.48	185	250	V	
		* 2.4835	35.10	RMS	32.90	-24.70	0.00	43.30	54.00	-10.70	-	-	-	185	250	V
		* 2.48396	35.54	RMS	32.90	-24.70	0.00	43.74	54.00	-10.26	-	-	-	185	250	V

Note1. Pk - Peak detector, RMS - RMS detector

Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

802.11n(HT20)

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result dBuV/m	AV Limit dBuV/m	AV Margin [dB]	PK Limit dBuV/m	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity	
2412	ANT1	* 2.39	59.32	Pk	32.80	-24.80	0.00	67.32	-	-	74.00	-6.68	192	126	H	
		* 2.38955	58.41	Pk	32.80	-24.80	0.00	66.41	-	-	74.00	-7.59	192	126	H	
		* 2.39	40.43	RMS	32.80	-24.80	0.00	48.43	54.00	-5.57	-	-	-	192	126	H
		* 2.38992	41.25	RMS	32.80	-24.80	0.00	49.25	54.00	-4.75	-	-	-	192	126	H
		* 2.39	50.69	Pk	32.80	-24.80	0.00	58.69	-	-	74.00	-15.31	168	269	V	
		* 2.38971	55.13	Pk	32.80	-24.80	0.00	63.13	-	-	74.00	-10.87	168	269	V	
		* 2.39	37.43	RMS	32.80	-24.80	0.00	45.43	54.00	-8.57	-	-	-	168	269	V
		* 2.38988	38.34	RMS	32.80	-24.80	0.00	46.34	54.00	-7.66	-	-	-	168	269	V
2462	ANT1	* 2.4835	53.00	Pk	32.90	-24.70	0.00	61.20	-	-	74.00	-12.80	214	207	H	
		* 2.48364	57.01	Pk	32.90	-24.70	0.00	65.21	-	-	74.00	-8.79	214	207	H	
		* 2.4835	38.51	RMS	32.90	-24.70	0.00	46.71	54.00	-7.29	-	-	-	214	207	H
		* 2.48355	39.85	RMS	32.90	-24.70	0.00	48.05	54.00	-5.95	-	-	-	214	207	H
		* 2.4835	50.52	Pk	32.90	-24.70	0.00	58.72	-	-	74.00	-15.28	172	233	V	
		* 2.48355	55.11	Pk	32.90	-24.70	0.00	63.31	-	-	74.00	-10.69	172	233	V	
		* 2.4835	35.09	RMS	32.90	-24.70	0.00	43.29	54.00	-10.71	-	-	-	172	233	V
		* 2.48353	36.55	RMS	32.90	-24.70	0.00	44.75	54.00	-9.25	-	-	-	172	233	V

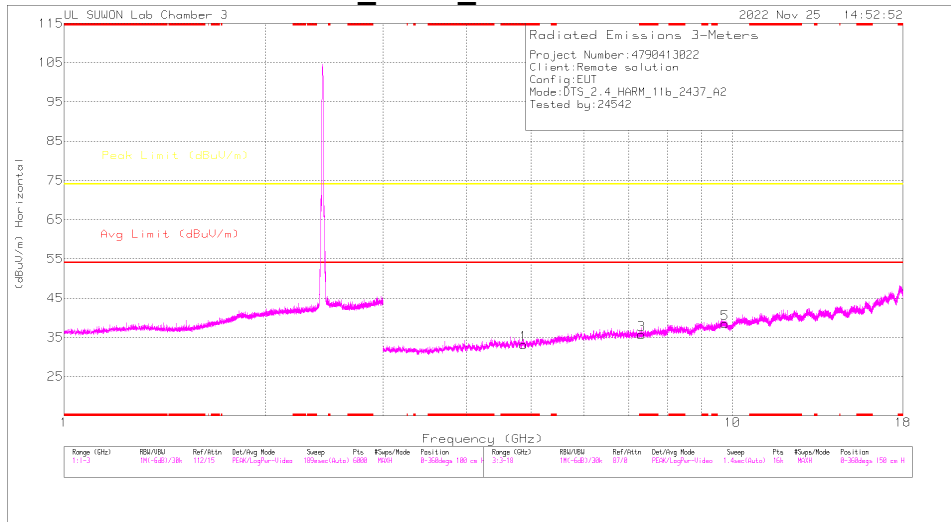
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result dBuV/m	AV Limit dBuV/m	AV Margin [dB]	PK Limit dBuV/m	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity	
2412	ANT2	* 2.39	57.04	Pk	32.80	-24.80	0.00	65.04	-	-	74.00	-8.96	23	141	H	
		* 2.38952	57.96	Pk	32.80	-24.80	0.00	65.96	-	-	74.00	-8.04	23	141	H	
		* 2.39	39.43	RMS	32.80	-24.80	0.00	47.43	54.00	-6.57	-	-	-	23	141	H
		* 2.38952	40.87	RMS	32.80	-24.80	0.00	48.87	54.00	-5.13	-	-	-	23	141	H
		* 2.39	54.18	Pk	32.80	-24.80	0.00	62.18	-	-	74.00	-11.82	185	245	V	
		* 2.38997	55.39	Pk	32.80	-24.80	0.00	63.39	-	-	74.00	-10.61	185	245	V	
		* 2.39	37.60	RMS	32.80	-24.80	0.00	45.60	54.00	-8.40	-	-	-	185	245	V
		* 2.38985	38.31	RMS	32.80	-24.80	0.00	46.31	54.00	-7.69	-	-	-	185	245	V
2462	ANT2	* 2.4835	51.56	Pk	32.90	-24.70	0.00	59.76	-	-	74.00	-14.24	157	157	H	
		* 2.48377	58.44	Pk	32.90	-24.70	0.00	66.64	-	-	74.00	-7.36	157	157	H	
		* 2.4835	37.50	RMS	32.90	-24.70	0.00	45.70	54.00	-8.30	-	-	-	157	157	H
		* 2.48371	39.25	RMS	32.90	-24.70	0.00	47.45	54.00	-6.55	-	-	-	157	157	H
		* 2.4835	49.94	Pk	32.90	-24.70	0.00	58.14	-	-	74.00	-15.86	179	263	V	
		* 2.48358	53.46	Pk	32.90	-24.70	0.00	61.66	-	-	74.00	-12.34	179	263	V	
		* 2.4835	35.46	RMS	32.90	-24.70	0.00	43.66	54.00	-10.34	-	-	-	179	263	V
		* 2.48407	35.97	RMS	32.90	-24.70	0.00	44.17	54.00	-9.83	-	-	-	179	263	V

Note1. Pk - Peak detector, RMS - RMS detector

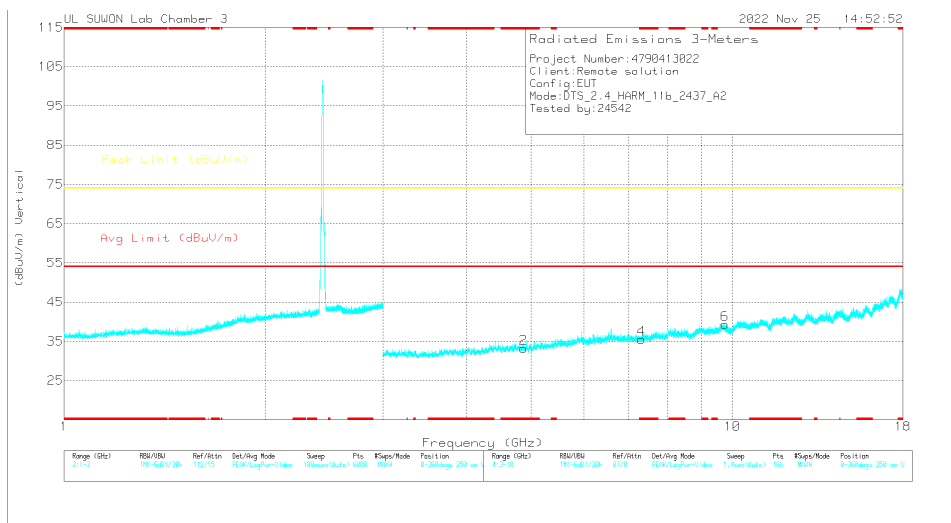
Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

HARMONICS AND SPURIOUS EMISSIONS (WORST CASE)

802.11b_ANT2_CH 6 RESULTS



HORIZONTAL



VERTICAL

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.86998	40.25	PK2	34.6	-30.7	44.15	-	-	74	-29.85	0	100	H
* 4.88344	39.93	PK2	34.7	-30.9	43.73	-	-	74	-30.27	0	100	V
* 7.30288	36.54	PK2	36	-25.3	47.24	-	-	74	-26.76	0	100	H
* 7.3122	35.27	PK2	36	-25.1	46.17	-	-	74	-27.83	0	100	V
9.74017	31.7	PK2	37.5	-21.2	48	-	-	74	-26	0	100	H
9.75073	32.7	PK2	37.5	-21.2	49	-	-	74	-25	0	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK2 - KDB558074 Method: Maximum Peak
 MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS TEST DATA

802.11b

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result dBuV/m	AV Limit dBuV/m	AV Margin [dB]	PK Limit dBuV/m	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2412	ANT1	* 4.81696	39.16	PK2	34.60	-30.20	0.00	43.56	-	-	74.00	-30.44	0	100	H
		* 4.82525	39.55	PK2	34.60	-30.30	0.00	43.85	-	-	74.00	-30.15	0	100	V
		7.228	36.07	PK2	36.00	-25.60	0.00	46.47	-	-	74.00	-27.53	0	100	H
		7.236	35.77	PK2	36.00	-25.60	0.00	46.17	-	-	74.00	-27.83	0	100	V
		9.649	32.61	PK2	37.40	-21.30	0.00	48.71	-	-	74.00	-25.29	0	100	H
		9.638	32.79	PK2	37.40	-21.50	0.00	48.69	-	-	74.00	-25.31	0	100	V
2437	ANT1	* 4.88044	39.52	PK2	34.70	-30.90	0.00	43.32	-	-	74.00	-30.68	0	100	H
		* 4.87219	39.69	PK2	34.60	-30.70	0.00	43.59	-	-	74.00	-30.41	0	100	V
		* 7.31196	35.06	PK2	36.00	-25.10	0.00	45.96	-	-	74.00	-28.04	0	100	H
		* 7.30957	35.34	PK2	36.00	-25.20	0.00	46.14	-	-	74.00	-27.86	0	100	V
		9.747	32.23	PK2	37.50	-21.20	0.00	48.53	-	-	74.00	-25.47	0	100	H
		9.749	32.15	PK2	37.50	-21.10	0.00	48.55	-	-	74.00	-25.45	0	100	V
2462	ANT1	* 4.92637	40.78	PK2	34.70	-30.90	0.00	44.58	-	-	74.00	-29.42	0	100	H
		* 4.92176	39.85	PK2	34.70	-30.90	0.00	43.65	-	-	74.00	-30.35	0	100	V
		* 7.38818	34.84	PK2	36.00	-24.50	0.00	46.34	-	-	74.00	-27.66	0	100	H
		* 7.38818	34.31	PK2	36.00	-24.50	0.00	45.81	-	-	74.00	-28.19	0	100	V
		9.856	31.62	PK2	37.70	-21.40	0.00	47.92	-	-	74.00	-26.08	0	100	H
		9.841	31.28	PK2	37.70	-21.30	0.00	47.68	-	-	74.00	-26.32	0	100	V

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result dBuV/m	AV Limit dBuV/m	AV Margin [dB]	PK Limit dBuV/m	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2412	ANT2	* 4.82421	39.22	PK2	34.60	-30.30	0.00	43.52	-	-	74.00	-30.48	0	100	H
		* 4.8189	38.66	PK2	34.60	-30.20	0.00	43.06	-	-	74.00	-30.94	0	100	V
		7.234	35.79	PK2	36.00	-25.60	0.00	46.19	-	-	74.00	-27.81	0	100	H
		7.238	35.36	PK2	36.00	-25.60	0.00	45.76	-	-	74.00	-28.24	0	100	V
		9.646	32.14	PK2	37.40	-21.40	0.00	48.14	-	-	74.00	-25.86	0	100	H
		9.643	32.16	PK2	37.40	-21.40	0.00	48.16	-	-	74.00	-25.84	0	100	V
2437	ANT2	* 4.86998	40.25	PK2	34.60	-30.70	0.00	44.15	-	-	74.00	-29.85	0	100	H
		* 4.88344	39.93	PK2	34.70	-30.90	0.00	43.73	-	-	74.00	-30.27	0	100	V
		* 7.30288	36.54	PK2	36.00	-25.30	0.00	47.24	-	-	74.00	-26.76	0	100	H
		* 7.3122	35.27	PK2	36.00	-25.10	0.00	46.17	-	-	74.00	-27.83	0	100	V
		9.740	31.70	PK2	37.50	-21.20	0.00	48.00	-	-	74.00	-26.00	0	100	H
		9.751	32.70	PK2	37.50	-21.20	0.00	49.00	-	-	74.00	-25.00	0	100	V
2462	ANT2	* 4.92163	40.26	PK2	34.70	-30.90	0.00	44.06	-	-	74.00	-29.94	0	100	H
		* 7.38819	34.72	PK2	36.00	-24.50	0.00	46.22	-	-	74.00	-27.78	0	100	H
		9.846	32.11	PK2	37.70	-21.30	0.00	48.51	-	-	74.00	-25.49	0	100	H
		* 4.92212	39.59	PK2	34.70	-30.90	0.00	43.39	-	-	74.00	-30.61	0	100	V
		* 7.38969	34.48	PK2	36.00	-24.50	0.00	45.98	-	-	74.00	-28.02	0	100	V
		9.842	31.99	PK2	37.70	-21.40	0.00	48.29	-	-	74.00	-25.71	0	100	V

Note1. PK2 - KDB558074 Method: Maximum Peak / MAV1 - KDB558074 Option 1 Maximum RMS Average
 Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

802.11g

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result dBuV/m	AV Limit dBuV/m	AV Margin [dB]	PK Limit dBuV/m	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2412	ANT1	* 4.82552	39.05	PK2	34.60	-30.30	0.00	43.35	-	-	74.00	-30.65	0	100	H
		* 4.81483	38.67	PK2	34.60	-30.20	0.00	43.07	-	-	74.00	-30.93	0	100	V
		7.231	35.57	PK2	36.00	-25.60	0.00	45.97	-	-	74.00	-28.03	0	100	H
		7.229	35.81	PK2	36.00	-25.60	0.00	46.21	-	-	74.00	-27.79	0	100	V
		9.649	32.33	PK2	37.40	-21.40	0.00	48.33	-	-	74.00	-25.67	0	100	H
		9.658	32.40	PK2	37.40	-21.30	0.00	48.50	-	-	74.00	-25.50	0	100	V
2437	ANT1	* 4.86805	40.11	PK2	34.60	-30.70	0.00	44.01	-	-	74.00	-29.99	0	100	H
		* 4.87415	39.68	PK2	34.60	-30.80	0.00	43.48	-	-	74.00	-30.52	0	100	V
		* 7.3049	35.70	PK2	36.00	-25.30	0.00	46.40	-	-	74.00	-27.60	0	100	H
		* 7.30521	35.38	PK2	36.00	-25.30	0.00	46.08	-	-	74.00	-27.92	0	100	V
		9.742	32.44	PK2	37.50	-21.20	0.00	48.74	-	-	74.00	-25.26	0	100	H
		9.752	32.09	PK2	37.50	-21.20	0.00	48.39	-	-	74.00	-25.61	0	100	V
2462	ANT1	* 4.91607	40.60	PK2	34.70	-31.00	0.00	44.30	-	-	74.00	-29.70	0	100	H
		* 4.93144	40.07	PK2	34.70	-30.90	0.00	43.87	-	-	74.00	-30.13	0	100	V
		* 7.39236	34.78	PK2	36.00	-24.40	0.00	46.38	-	-	74.00	-27.62	0	100	H
		* 7.3762	34.67	PK2	36.00	-24.60	0.00	46.07	-	-	74.00	-27.93	0	100	V
		9.850	31.59	PK2	37.70	-21.30	0.00	47.99	-	-	74.00	-26.01	0	100	H
		9.842	31.32	PK2	37.70	-21.40	0.00	47.62	-	-	74.00	-26.38	0	100	V

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result dBuV/m	AV Limit dBuV/m	AV Margin [dB]	PK Limit dBuV/m	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2412	ANT2	* 4.82674	39.91	PK2	34.60	-30.40	0.00	44.11	-	-	74.00	-29.89	0	100	H
		* 4.82147	39.00	PK2	34.60	-30.30	0.00	43.30	-	-	74.00	-30.70	0	100	V
		7.227	35.72	PK2	36.00	-25.60	0.00	46.12	-	-	74.00	-27.88	0	100	H
		7.238	35.57	PK2	36.00	-25.60	0.00	45.97	-	-	74.00	-28.03	0	100	V
		9.642	32.70	PK2	37.40	-21.40	0.00	48.70	-	-	74.00	-25.30	0	100	H
		9.644	32.31	PK2	37.40	-21.40	0.00	48.31	-	-	74.00	-25.69	0	100	V
2437	ANT2	* 4.87301	39.83	PK2	34.60	-30.80	0.00	43.63	-	-	74.00	-30.37	0	100	H
		* 4.86519	39.61	PK2	34.60	-30.70	0.00	43.51	-	-	74.00	-30.49	0	100	V
		* 7.30133	35.64	PK2	36.00	-25.30	0.00	46.34	-	-	74.00	-27.66	0	100	H
		* 7.31633	35.06	PK2	36.00	-25.00	0.00	46.06	-	-	74.00	-27.94	0	100	V
		9.754	31.88	PK2	37.50	-21.20	0.00	48.18	-	-	74.00	-25.82	0	100	H
		9.745	32.18	PK2	37.50	-21.20	0.00	48.48	-	-	74.00	-25.52	0	100	V
2462	ANT2	* 4.92564	40.05	PK2	34.70	-30.90	0.00	43.85	-	-	74.00	-30.15	0	100	H
		* 4.92486	39.97	PK2	34.70	-30.90	0.00	43.77	-	-	74.00	-30.23	0	100	V
		* 7.38872	34.57	PK2	36.00	-24.50	0.00	46.07	-	-	74.00	-27.93	0	100	H
		* 7.39089	34.55	PK2	36.00	-24.40	0.00	46.15	-	-	74.00	-27.85	0	100	V
		9.855	31.49	PK2	37.70	-21.40	0.00	47.79	-	-	74.00	-26.21	0	100	H
		9.846	31.17	PK2	37.70	-21.30	0.00	47.57	-	-	74.00	-26.43	0	100	V

Note1. PK2 - KDB558074 Method: Maximum Peak / MAV1 - KDB558074 Option 1 Maximum RMS Average

Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

802.11n(HT20)

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result dBuV/m	AV Limit dBuV/m	AV Margin [dB]	PK Limit dBuV/m	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2412	ANT1	* 4.83061	38.79	PK2	34.60	-30.30	0.00	43.09	-	-	74.00	-30.91	0	100	H
		* 4.82004	39.04	PK2	34.60	-30.30	0.00	43.34	-	-	74.00	-30.66	0	100	V
		7.232	36.02	PK2	36.00	-25.60	0.00	46.42	-	-	74.00	-27.58	0	100	H
		7.235	35.49	PK2	36.00	-25.60	0.00	45.89	-	-	74.00	-28.11	0	100	V
		9.645	32.90	PK2	37.40	-21.40	0.00	48.90	-	-	74.00	-25.10	0	100	H
		9.648	32.60	PK2	37.40	-21.40	0.00	48.60	-	-	74.00	-25.40	0	100	V
2437	ANT1	* 4.86486	40.13	PK2	34.60	-30.60	0.00	44.13	-	-	74.00	-29.87	0	100	H
		* 4.85779	39.62	PK2	34.60	-30.60	0.00	43.62	-	-	74.00	-30.38	0	100	V
		* 7.30906	36.16	PK2	36.00	-25.20	0.00	46.96	-	-	74.00	-27.04	0	100	H
		* 7.31897	35.59	PK2	36.00	-25.00	0.00	46.59	-	-	74.00	-27.41	0	100	V
		9.756	32.24	PK2	37.50	-21.20	0.00	48.54	-	-	74.00	-25.46	0	100	H
		9.740	32.62	PK2	37.50	-21.20	0.00	48.92	-	-	74.00	-25.08	0	100	V
2462	ANT1	* 4.92156	40.04	PK2	34.70	-30.90	0.00	43.84	-	-	74.00	-30.16	0	100	H
		* 4.93032	40.02	PK2	34.70	-30.90	0.00	43.82	-	-	74.00	-30.18	0	100	V
		* 7.38978	35.01	PK2	36.00	-24.40	0.00	46.61	-	-	74.00	-27.39	0	100	H
		* 7.38111	34.34	PK2	36.00	-24.50	0.00	45.84	-	-	74.00	-28.16	0	100	V
		9.840	31.85	PK2	37.70	-21.30	0.00	48.25	-	-	74.00	-25.75	0	100	H
		9.839	31.55	PK2	37.70	-21.30	0.00	47.95	-	-	74.00	-26.05	0	100	V

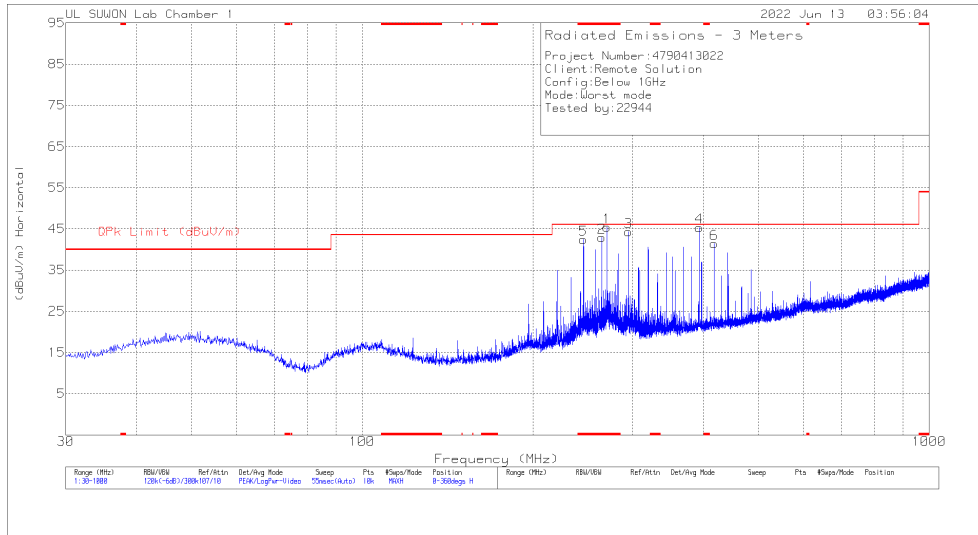
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result dBuV/m	AV Limit dBuV/m	AV Margin [dB]	PK Limit dBuV/m	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2412	ANT2	* 4.81538	39.09	PK2	34.60	-30.20	0.00	43.49	-	-	74.00	-30.51	0	100	H
		* 4.82765	39.32	PK2	34.60	-30.40	0.00	43.52	-	-	74.00	-30.48	0	100	V
		7.230	35.41	PK2	36.00	-25.60	0.00	45.81	-	-	74.00	-28.19	0	100	H
		7.235	35.42	PK2	36.00	-25.60	0.00	45.82	-	-	74.00	-28.18	0	100	V
		9.642	32.32	PK2	37.40	-21.40	0.00	48.32	-	-	74.00	-25.68	0	100	H
		9.650	32.44	PK2	37.40	-21.30	0.00	48.54	-	-	74.00	-25.46	0	100	V
2437	ANT2	* 4.87472	40.44	PK2	34.60	-30.80	0.00	44.24	-	-	74.00	-29.76	360	100	H
		* 4.86542	40.22	PK2	34.60	-30.70	0.00	44.12	-	-	74.00	-29.88	360	100	V
		* 7.30617	36.19	PK2	36.00	-25.30	0.00	46.89	-	-	74.00	-27.11	360	100	H
		* 7.31166	35.75	PK2	36.00	-25.10	0.00	46.65	-	-	74.00	-27.35	360	100	V
		9.744	32.47	PK2	37.50	-21.10	0.00	48.87	-	-	74.00	-25.13	360	100	H
		9.758	31.88	PK2	37.50	-21.20	0.00	48.18	-	-	74.00	-25.82	360	100	V
2462	ANT2	* 4.92344	40.04	PK2	34.70	-30.90	0.00	43.84	-	-	74.00	-30.16	0	100	H
		* 4.92759	40.23	PK2	34.70	-30.90	0.00	44.03	-	-	74.00	-29.97	0	100	V
		* 7.38244	34.68	PK2	36.00	-24.50	0.00	46.18	-	-	74.00	-27.82	0	100	H
		* 7.37811	34.14	PK2	36.00	-24.50	0.00	45.64	-	-	74.00	-28.36	0	100	V
		9.851	31.33	PK2	37.70	-21.30	0.00	47.73	-	-	74.00	-26.27	0	100	H
		9.858	31.64	PK2	37.70	-21.40	0.00	47.94	-	-	74.00	-26.06	0	100	V

Note1. PK2 - KDB558074 Method: Maximum Peak / MAV1 - KDB558074 Option 1 Maximum RMS Average

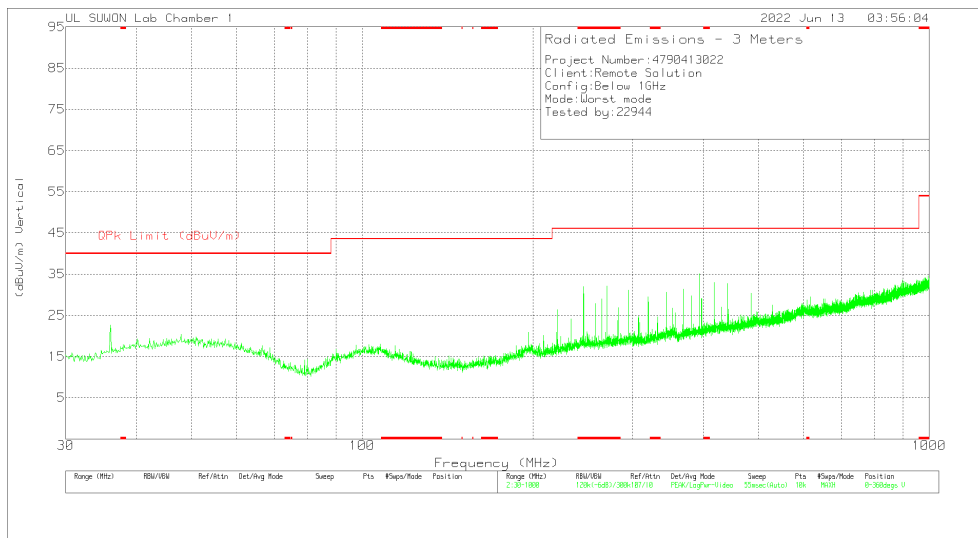
Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

10.2. WORST CASE BELOW 1 GHZ

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)



HORIZONTAL



VERTICAL

Below 1GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G[dB]	Corrected Reading (dBuV/m)	QPK Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 270.269	55.67	Pk	18.6	-28.8	45.47	46.02	-55	0-360	200	H
2	* 264.546	53.22	Pk	18.6	-28.9	42.92	46.02	-3.1	0-360	200	H
3	294.907	53.66	Pk	19.2	-28.6	44.26	46.02	-1.76	0-360	200	H
4	393.168	52.17	Pk	21.3	-28.1	45.37	46.02	-65	0-360	200	H
5	* 245.728	53.05	Pk	18.4	-29	42.45	46.02	-3.57	0-360	200	H
6	417.806	47.53	Pk	21.9	-28	41.43	46.02	-4.59	0-360	200	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

Qp - Quasi-Peak detector

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

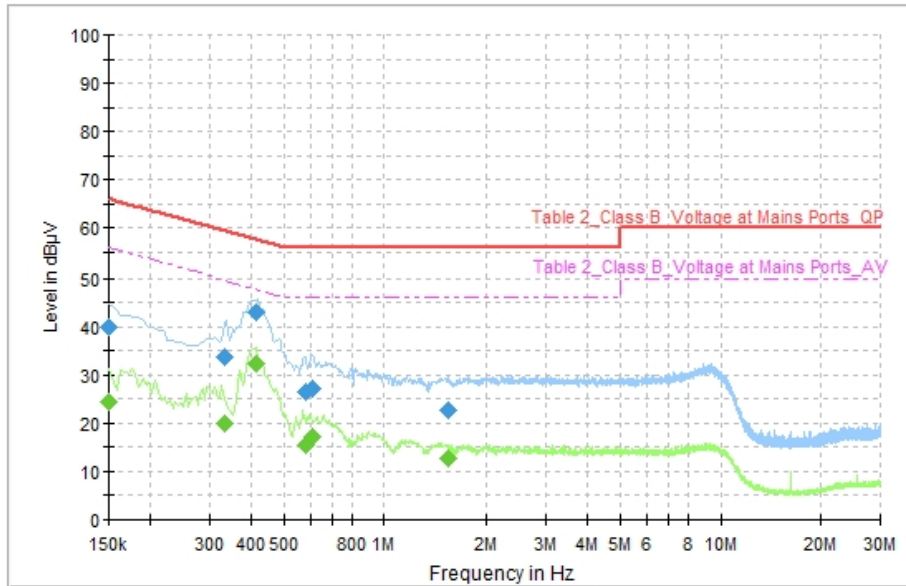
Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

- Please refer to the next page

WORST EMISSIONS

LINE 1 DATA



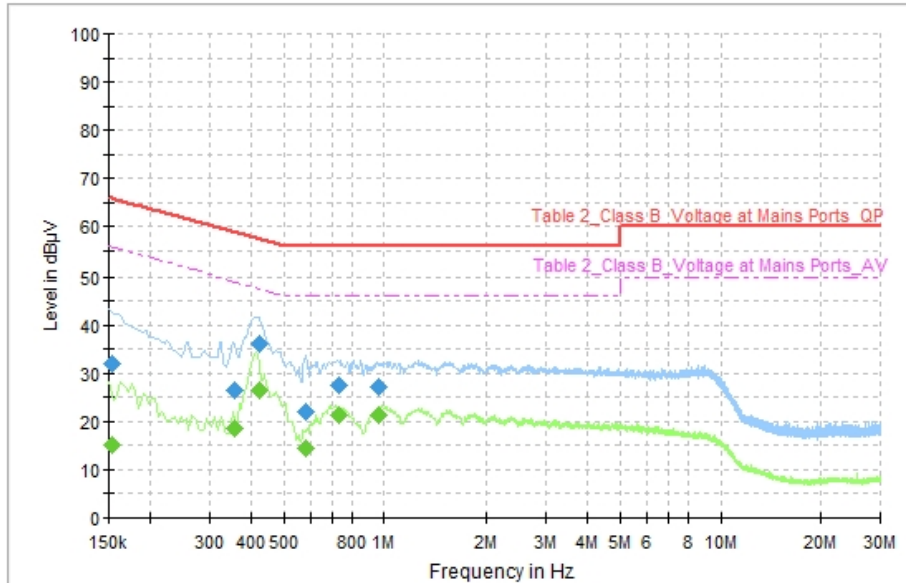
Final Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	39.74	66.00	26.26	L1	ON	9.8
0.334257	33.66	59.35	25.69	L1	ON	9.9
0.412882	42.89	57.59	14.70	L1	ON	10.0
0.579302	26.39	56.00	29.61	L1	ON	10.0
0.610419	27.18	56.00	28.82	L1	ON	10.0
1.532726	22.66	56.00	33.34	L1	ON	9.8

Final Result_CAV

Frequency (MHz)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	24.33	56.00	31.67	L1	ON	9.8
0.334257	20.04	49.35	29.30	L1	ON	9.9
0.412882	32.39	47.59	15.20	L1	ON	10.0
0.579302	15.33	46.00	30.67	L1	ON	10.0
0.610419	17.06	46.00	28.94	L1	ON	10.0
1.532726	12.76	46.00	33.24	L1	ON	9.8

LINE 2 DATA



Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.154279	31.90	65.77	33.87	N	ON	9.9
0.356426	26.43	58.81	32.38	N	ON	9.9
0.421662	36.24	57.42	21.17	N	ON	10.0
0.584691	21.85	56.00	34.15	N	ON	10.0
0.729552	27.39	56.00	28.61	N	ON	10.0
0.958083	27.21	56.00	28.79	N	ON	9.9

Final_Result_CAV

Frequency (MHz)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.154279	15.16	55.77	40.60	N	ON	9.9
0.356426	18.56	48.81	30.25	N	ON	9.9
0.421662	26.41	47.42	21.01	N	ON	10.0
0.584691	14.47	46.00	31.53	N	ON	10.0
0.729552	21.22	46.00	24.78	N	ON	10.0
0.958083	21.32	46.00	24.68	N	ON	9.9

END OF TEST REPORT