



RF TEST REPORT

Report No.: SET2021-09176

Product Name: Dash Cam

FCC ID: NCI-M360-D700-1

Model No. : Mobile360 D700

Dates of Testing: 08/01/2020 —06/21/2021

Applicant: VIA Technologies, Inc

Address: 8F, 535 Zhongzheng Rd. Xindian Dist. New Taipei City, Taiwan

Issued by: CCIC Southern Testing Co., Ltd.

Lab Location: Electronic Testing Building, No. 43 Shahe Road, Xili Street,
Nanshan District, Shenzhen, Guangdong, China.

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Test Report

Product Name.....: Dash Cam

Brand Name.....: VIA

Trade Name.....: VIA

Applicant.....: VIA Technologies, Inc

Applicant Address.....: 8F, 535 Zhongzheng Rd. Xindian Dist. New Taipei City,
Taiwan

Manufacturer.....: VIA Technologies, Inc

Manufacturer Address.....: 8F, 535 Zhongzheng Rd. Xindian Dist. New Taipei City,
Taiwan

Test Standards.....: 47 CFR Part 15 Subpart C
ANSI C63.10-2013

Test Result.....: PASS

Tested by: *Vincent*
2021.07.19

Vincent, Test Engineer

Reviewed by: *Chris You*
2021.07.19

Chris You, Senior Engineer

Approved by: *Shuangwen Zhang*
2021.07.19

Shuangwen Zhang, Manager

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Change History		
Issue	Date	Reason for change
1.0	2021.07.19	First edition

1. General Information

1.1. EUT Description

EUT Type	Dash Cam
Hardware Version	RA
Software Version	V2.1.0
EUT supports Radios application	WLAN2.4GHz 802.11b/g/n (HT20)
Frequency Range	802.11b/g/n-20MHz: 2.412GHz - 2.462GHz
Channel Number	802.11b/g/n-20MHz: 11
Bit Rate of Transmitter	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n : up to 72.2 Mbps
Modulation Type	DSSS (802.11b), OFDM (802.11g/n)
MIMO	Not support
Antenna Type	Internal
Antenna Gain	2.8dBi

Note 1: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

Note 2: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

1.2. Test Standards and Results

The objective of the report is to perform testing according to FCC Certification:

This C2PC Report was based on original FCC ID: NCI-M360-D700-1, The device was change the ANT, and open LTE Band 71 via the software. Below are the test item

No.	Section in CFR 47	Description	Result
1	15.209 15.205 15.247(d)	Radiated Band Edges and Spurious Emission	PASS

The tests of Conducted Emission and Radiated Emission were performed according to the method of measurements prescribed in ANSI C63.10-2013.

These RF tests were performed according to the method of measurements prescribed in KDB558074 D01 v05r02.

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

For 20MHz bandwidth systems, use Channel 1~ Channel 11

Channel No.	Frequency	Channel No.	Frequency	Channel No.	Frequency
1	2412MHz	5	2432MHz	9	2452MHz
2	2417MHz	6	2437MHz	10	2457MHz
3	2422MHz	7	2442MHz	11	2462MHz
4	2427MHz	8	2447MHz		

1.3. Table for Supporting Units

No.	Equipment	Brand Name	Model Name	Manufacturer	Serial No.	Note
1	Notebook	DELL	PP11L	DELL	H5914A03	FCC DOC

1.4. Facilities and Accreditations

1.4.1. Facilities

CNAS-Lab Code: L1659

CCIC-SET is a third party testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

FCC-Registration No.: CN1283

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until April 19th, 2023.

ISED Registration: 11185A-1

CAB identifier: CN0064

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A-1 on Aug. 04, 2016, valid time is until April 19th, 2023.

A2LA Code: 5721.01

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

1.4.2. Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15 °C - 35 °C
Relative Humidity (%):	30% -60%
Atmospheric Pressure (kPa):	86KPa-106KPa

2. Test Requirements

2.1. Radiated Band Edge and Spurious Emission

2.1.1. Limit of Radiated Band Edges and Spurious Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

Note: Wireless charger configuration was evaluated.

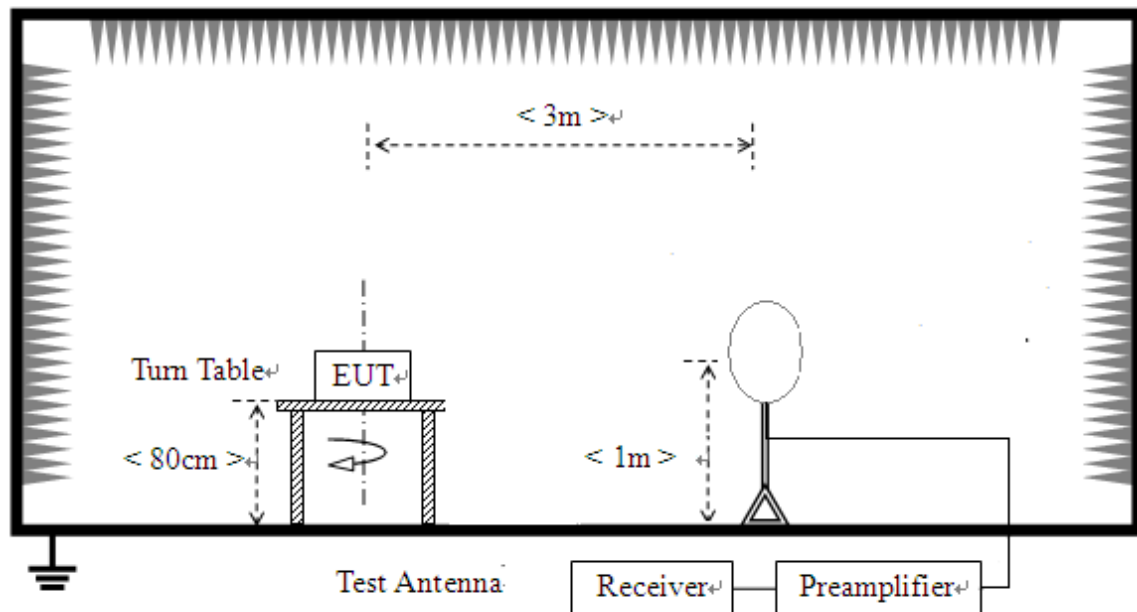
Frequency (MHz)	Field Strength ($\mu\text{V}/\text{m}$)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

2.1.2. Measuring Instruments

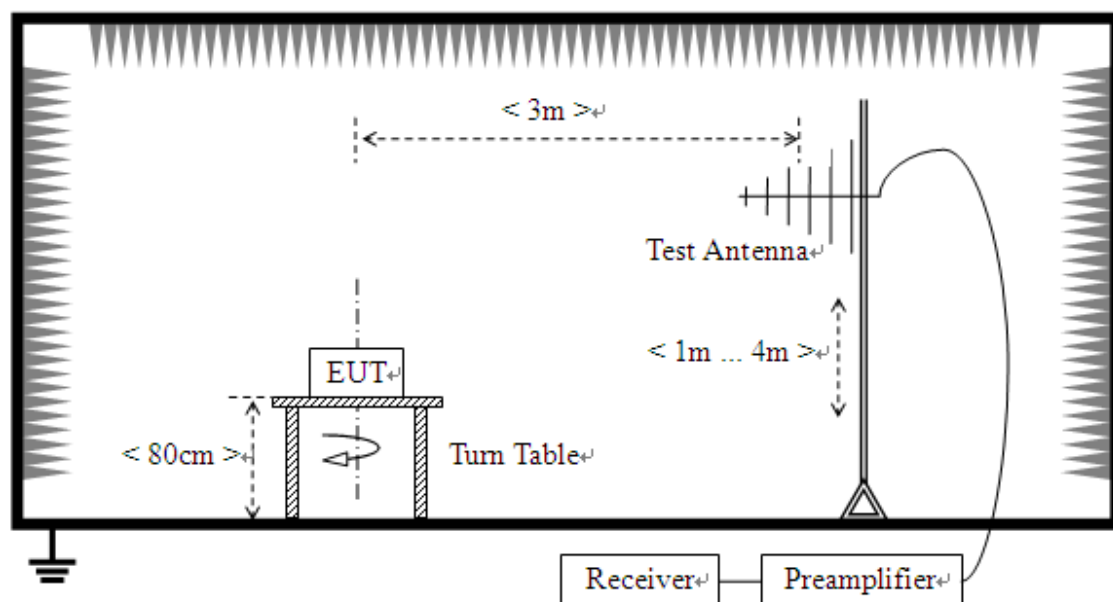
The measuring equipment is listed in the section 3 of this test report.

2.1.3. Test Setup

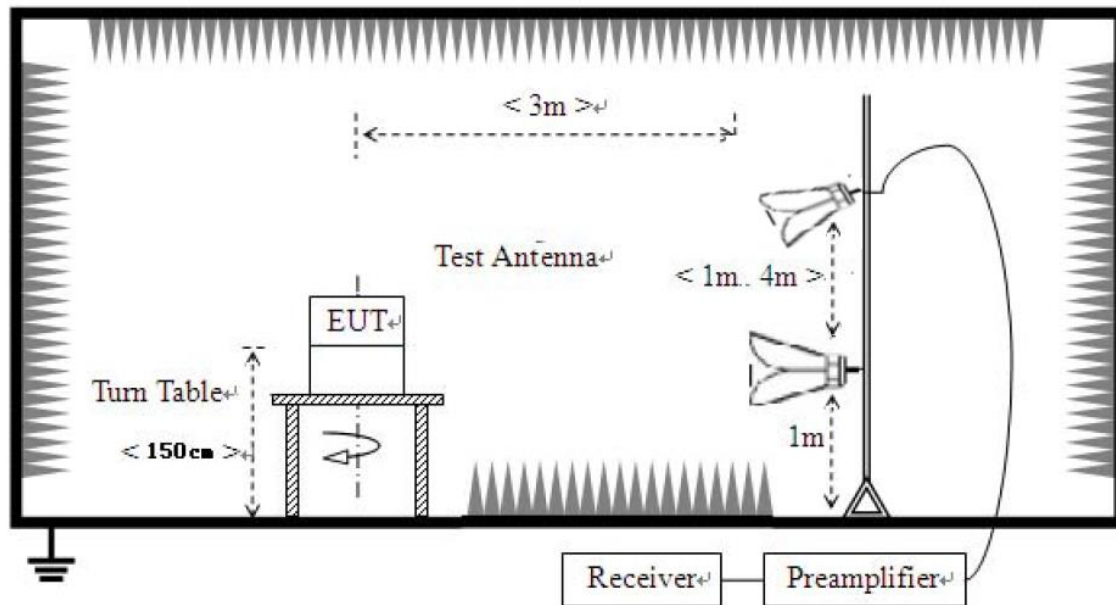
For radiated emissions from 9 KHz to 30 MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.1.4. Test Procedures

1. The EUT was placed on the top of a rotating table 0.8m for below 1GHz/1.5m for above 1GHz above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. Height of receiving antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported.
Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

7. For the radiated emission test above 1GHz:

Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.

NOTE:

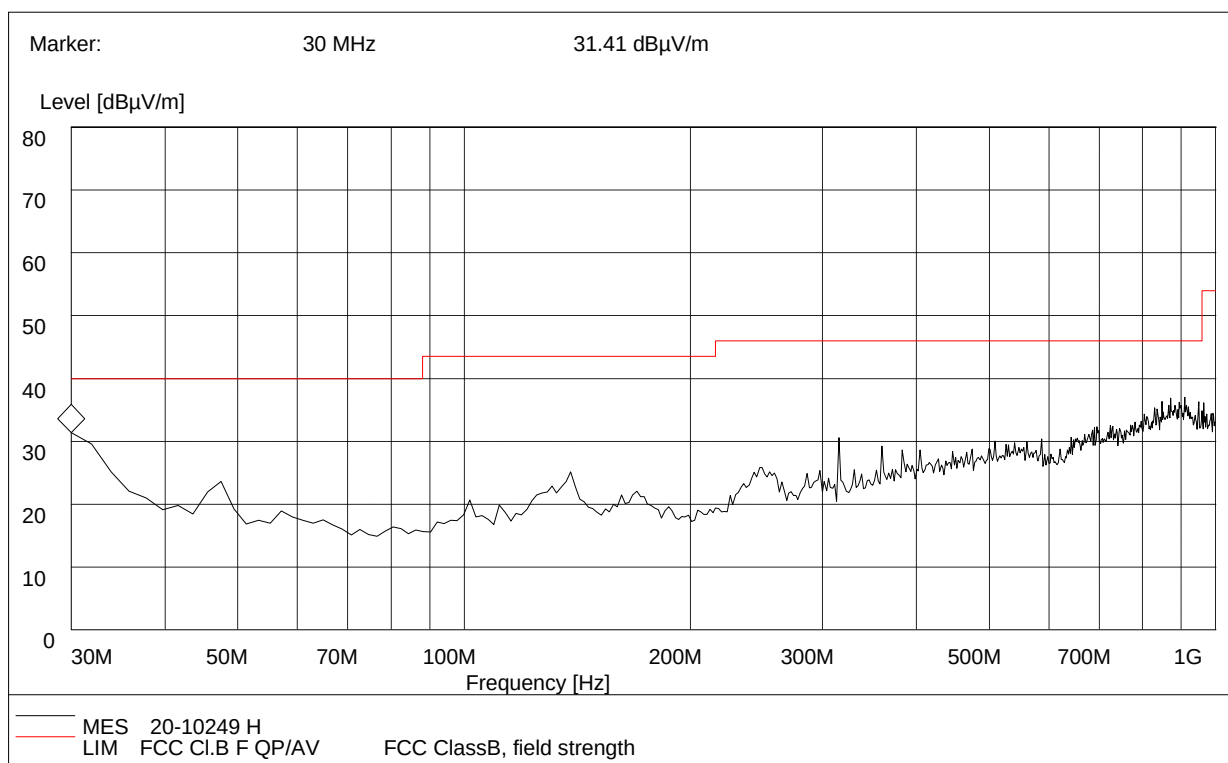
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
4. All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

2.1.5. Test Results of Radiated Band Edge and Spurious Emission

For 9 kHz to 30MHz

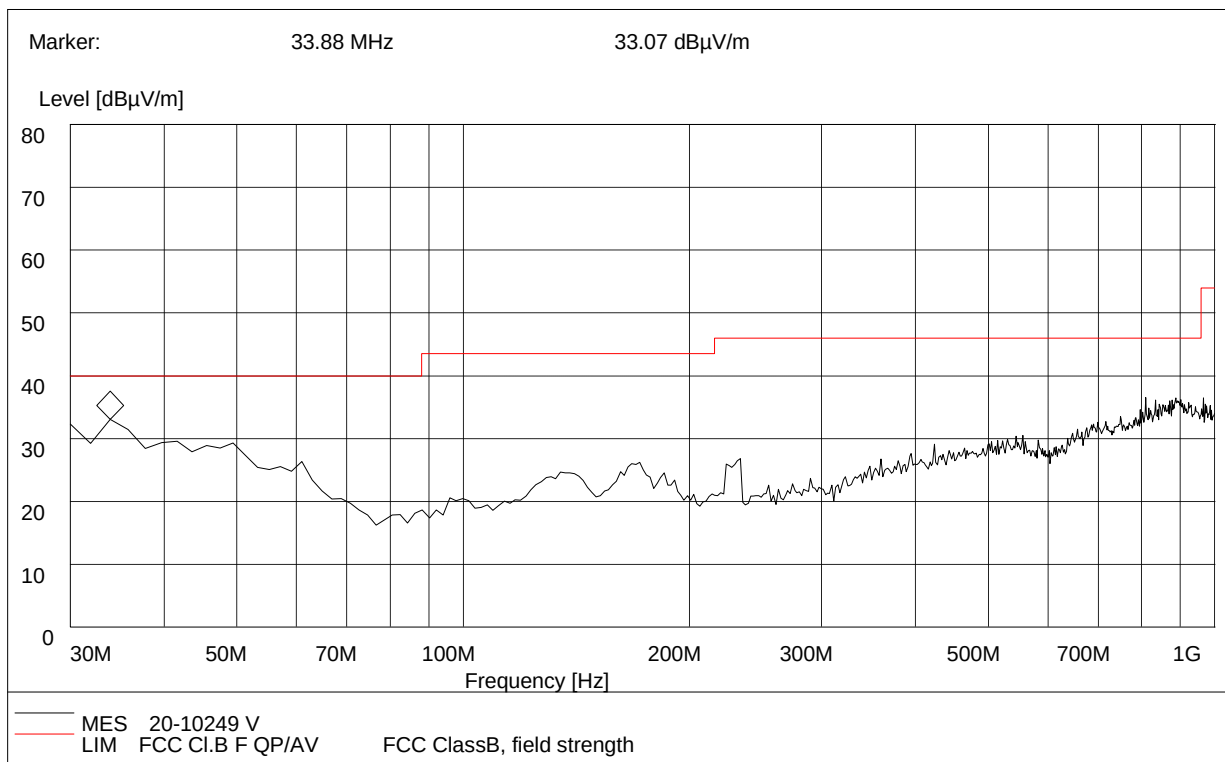
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

For 30MHz to 1000 MHz



30MHz to 1GHz, Antenna Horizontal

Frequency (MHz)	QuasiPeak (dB μ V/m)	Bandwidth (kHz)	Corr. Factor (dB/m)	Antenna height (cm)	Limit (dB μ V/m)	Margin	Antenna	Verdict
30.000000	28.88	120.000	17.9	100.0	40.0	11.12	Horizontal	Pass
33.440000	26.71	120.000	17.9	100.0	40.0	13.29	Horizontal	Pass
41.220000	23.76	120.000	10.8	100.0	40.0	16.24	Horizontal	Pass
135.460000	25.42	120.000	12.9	100.0	43.5	18.08	Horizontal	Pass
883.540000	35.35	120.000	24.8	100.0	46.0	10.65	Horizontal	Pass
900.850000	36.27	120.000	24.8	100.0	46.0	9.73	Horizontal	Pass



30MHz to 1GHz, Antenna Vertical

Frequency (MHz)	QuasiPeak (dB μ V/m)	Bandwidth (kHz)	Corr. Factor (dB μ V/m)	Antenna height (cm)	Limit (dB μ V/m)	Margin	Antenna	Verdict
30.000000	32.55	120.000	17.9	100.0	40.0	7.45	Vertical	Pass
33.440000	32.43	120.000	17.9	100.0	40.0	7.57	Vertical	Pass
41.250000	28.25	120.000	10.8	100.0	40.0	11.75	Vertical	Pass
174.200000	28.38	120.000	11.8	100.0	43.5	15.12	Vertical	Pass
889.240000	34.28	120.000	24.8	100.0	46.0	11.72	Vertical	Pass
900.330000	35.69	120.000	24.8	100.0	46.0	10.31	Vertical	Pass

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. Margin value = Limit value - Emission Level
4. The other emission levels were very low against the limit.

For 1GHz to 25 GHz
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11b_2412MHz)

No.	Fre. (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	2390.00	51.41	PK	74.00	-22.59	1.80	120.00	50.11	5.20	28.60	32.50	1.30
2	2390.00	37.93	AV	54.00	-16.07	1.80	120.00	36.63	5.20	28.60	32.50	1.30
3	4824.00	48.65	PK	74.00	-25.35	1.80	120.00	42.25	7.40	30.40	31.40	6.40
4	4824.00	36.51	AV	54.00	-17.49	1.80	120.00	30.11	7.40	30.40	31.40	6.40
5	7236.00	52.33	PK	74.00	-21.67	1.80	120.00	41.83	11.50	31.20	32.20	10.50
6	7236.00	39.94	AV	54.00	-14.06	1.80	120.00	29.44	11.50	31.20	32.20	10.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11b_2412MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	2390.00	46.59	PK	74.00	-27.41	1.60	200.00	45.29	5.20	28.60	32.50	1.30
2	2390.00	36.10	AV	54.00	-17.90	1.60	200.00	34.80	5.20	28.60	32.50	1.30
3	4824.00	49.65	PK	74.00	-24.35	1.60	200.00	43.25	7.40	30.40	31.40	6.40
4	4824.00	37.32	AV	54.00	-16.68	1.60	200.00	30.92	7.40	30.40	31.40	6.40
5	7236.00	51.26	PK	74.00	-22.74	1.60	200.00	40.76	11.50	31.20	32.20	10.50
6	7236.00	39.62	AV	54.00	-14.38	1.60	200.00	29.12	11.50	31.20	32.20	10.50

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11b_2437MHz)

No.	Fre. (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	4874.00	50.65	PK	74.00	-23.35	1.70	120.00	44.25	6.70	30.40	31.30	6.40
2	4874.00	38.60	AV	54.00	-15.40	1.70	120.00	32.20	6.70	30.40	31.30	6.40
3	7311.00	51.87	PK	74.00	-22.13	1.70	120.00	41.07	11.80	31.20	32.20	10.80
4	7311.00	40.55	AV	54.00	-13.45	1.70	120.00	29.75	11.80	31.20	32.20	10.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11b_2437MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	4874.00	48.65	PK	74.00	-25.35	1.60	320.00	42.25	6.70	30.40	31.30	6.40
2	4874.00	36.47	AV	54.00	-17.53	1.60	320.00	30.07	6.70	30.40	31.30	6.40
3	7311.00	52.06	PK	74.00	-21.94	1.60	320.00	41.26	11.80	31.20	32.20	10.80
4	7311.00	40.11	AV	54.00	-13.89	1.60	320.00	29.31	11.80	31.20	32.20	10.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11b_2462MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	2483.50	48.57	PK	74.00	-25.43	1.60	280.00	46.97	5.30	28.70	32.40	1.60
2	2483.50	36.29	AV	54.00	-17.71	1.60	280.00	34.69	5.30	28.70	32.40	1.60
3	4924.00	49.36	PK	74.00	-24.64	1.60	280.00	43.66	6.70	30.50	31.50	5.70
4	4924.00	36.97	AV	54.00	-17.03	1.60	280.00	31.27	6.70	30.50	31.50	5.70
5	7386.00	51.58	PK	74.00	-22.42	1.60	280.00	40.78	11.80	31.20	32.20	10.80
6	7386.00	39.63	AV	54.00	-14.37	1.60	280.00	28.83	11.80	31.20	32.20	10.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11b_2462MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	2483.50	48.95	PK	74.00	-25.05	1.70	120.00	47.35	5.30	28.70	32.40	1.60
2	2483.50	36.50	AV	54.00	-17.50	1.70	120.00	34.90	5.30	28.70	32.40	1.60
3	4924.00	50.36	PK	74.00	-23.64	1.70	120.00	44.66	6.70	30.50	31.50	5.70
4	4924.00	38.00	AV	54.00	-16.00	1.70	120.00	32.30	6.70	30.50	31.50	5.70
5	7386.00	51.84	PK	74.00	-22.16	1.70	120.00	41.04	11.80	31.20	32.20	10.80
6	7386.00	39.06	AV	54.00	-14.94	1.70	120.00	28.26	11.80	31.20	32.20	10.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11g_2412MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	2390.00	48.65	PK	74.00	-25.35	1.50	300.00	47.35	5.20	28.60	32.50	1.30
2	2390.00	36.38	AV	54.00	-17.62	1.50	300.00	35.08	5.20	28.60	32.50	1.30
3	4824.00	47.65	PK	74.00	-26.35	1.50	300.00	41.25	7.40	30.40	31.40	6.40
4	4824.00	35.28	AV	54.00	-18.72	1.50	300.00	28.88	7.40	30.40	31.40	6.40
5	7236.00	50.95	PK	74.00	-23.05	1.50	300.00	40.45	11.50	31.20	32.20	10.50
6	7236.00	38.96	AV	54.00	-15.04	1.50	300.00	28.46	11.50	31.20	32.20	10.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11g_2412MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	2390.00	48.95	PK	74.00	-25.05	1.70	260.00	47.65	5.20	28.60	32.50	1.30
2	2390.00	37.98	AV	54.00	-16.02	1.70	260.00	36.68	5.20	28.60	32.50	1.30
3	4824.00	49.33	PK	74.00	-24.67	1.70	260.00	42.93	7.40	30.40	31.40	6.40
4	4824.00	38.27	AV	54.00	-15.73	1.70	260.00	31.87	7.40	30.40	31.40	6.40
5	7236.00	50.84	PK	74.00	-23.16	1.70	260.00	40.64	11.50	31.20	32.20	10.20
6	7236.00	40.65	AV	54.00	-13.35	1.70	260.00	30.45	11.50	31.20	32.20	10.20

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11g_2437MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	4874.00	49.68	PK	74.00	-24.32	1.70	190.00	43.88	6.70	30.40	31.30	5.80
2	4874.00	38.36	AV	54.00	-15.64	1.70	190.00	32.56	6.70	30.40	31.30	5.80
3	7311.00	51.29	PK	74.00	-22.71	1.70	190.00	40.49	11.80	31.20	32.20	10.80
4	7311.00	41.30	AV	54.00	-12.70	1.70	190.00	30.50	11.80	31.20	32.20	10.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11g_2437MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	4874.00	48.57	PK	74.00	-25.43	1.50	250.00	42.77	6.70	30.40	31.30	5.80
2	4874.00	38.50	AV	54.00	-15.50	1.50	250.00	32.70	6.70	30.40	31.30	5.80
3	7311.00	52.06	PK	74.00	-21.94	1.50	250.00	41.26	11.80	31.20	32.20	10.80
4	7311.00	41.94	AV	54.00	-12.06	1.50	250.00	31.14	11.80	31.20	32.20	10.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11g_2462MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	2483.50	59.65	PK	74.00	-14.35	1.70	300.00	58.05	5.30	28.70	32.40	1.60
2	2483.50	46.91	AV	54.00	-7.09	1.70	300.00	45.31	5.30	28.70	32.40	1.60
3	4924.00	51.62	PK	74.00	-22.38	1.70	300.00	45.92	6.70	30.50	31.50	5.70
4	4924.00	41.37	AV	54.00	-12.63	1.70	300.00	35.67	6.70	30.50	31.50	5.70
5	7386.00	52.03	PK	74.00	-21.97	1.70	300.00	41.23	11.80	31.20	32.20	10.80
6	7386.00	41.58	AV	54.00	-12.42	1.70	300.00	30.78	11.80	31.20	32.20	10.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11g_2462MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	2483.50	62.25	PK	74.00	-11.75	1.60	120.00	60.65	5.30	28.70	32.40	1.60
2	2483.50	49.87	AV	54.00	-4.13	1.60	120.00	48.27	5.30	28.70	32.40	1.60
3	4924.00	49.65	PK	74.00	-24.35	1.60	120.00	43.95	6.70	30.50	31.50	5.70
4	4924.00	37.38	AV	54.00	-16.62	1.60	120.00	31.68	6.70	30.50	31.50	5.70
5	7386.00	52.06	PK	74.00	-21.94	1.60	120.00	41.26	11.80	31.20	32.20	10.80
6	7386.00	42.86	AV	54.00	-11.14	1.60	120.00	32.06	11.80	31.20	32.20	10.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_2412MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	2390.00	48.95	PK	74.00	-25.05	1.60	160.00	47.65	5.20	28.60	32.50	1.30
2	2390.00	37.74	AV	54.00	-16.26	1.60	160.00	36.44	5.20	28.60	32.50	1.30
3	4824.00	47.66	PK	74.00	-26.34	1.60	160.00	41.26	7.40	30.40	31.40	6.40
4	4824.00	35.67	AV	54.00	-18.33	1.60	160.00	29.27	7.40	30.40	31.40	6.40
5	7236.00	51.29	PK	74.00	-22.71	1.60	160.00	40.79	11.50	31.20	32.20	10.50
6	7236.00	40.28	AV	54.00	-13.72	1.60	160.00	29.78	11.50	31.20	32.20	10.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_2412MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	2390.00	49.65	PK	74.00	-24.35	1.70	200.00	48.35	5.20	28.60	32.50	1.30
2	2390.00	37.27	AV	54.00	-16.73	1.70	200.00	35.97	5.20	28.60	32.50	1.30
3	4824.00	51.62	PK	74.00	-22.38	1.70	200.00	45.22	7.40	30.40	31.40	6.40
4	4824.00	41.27	AV	54.00	-12.73	1.70	200.00	34.87	7.40	30.40	31.40	6.40
5	7236.00	50.62	PK	74.00	-23.38	1.70	200.00	40.12	11.50	31.20	32.20	10.50
6	7236.00	40.59	AV	54.00	-13.41	1.70	200.00	30.09	11.50	31.20	32.20	10.50

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_2437MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	4874.00	47.95	PK	74.00	-26.05	1.60	260.00	42.15	6.70	30.40	31.30	5.80
2	4874.00	36.70	AV	54.00	-17.30	1.60	260.00	30.90	6.70	30.40	31.30	5.80
3	7311.00	50.62	PK	74.00	-23.38	1.60	260.00	39.82	11.80	31.20	32.20	10.80
4	7311.00	39.30	AV	54.00	-14.70	1.60	260.00	28.50	11.80	31.20	32.20	10.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_2437MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	4874.00	48.65	PK	74.00	-25.35	2.00	300.00	42.25	6.70	31.20	31.50	6.40
2	4874.00	38.38	AV	54.00	-15.62	2.00	300.00	31.98	6.70	31.20	31.50	6.40
3	7311.00	51.84	PK	74.00	-22.16	2.00	300.00	41.04	11.80	31.20	32.20	10.80
4	7311.00	40.65	AV	54.00	-13.35	2.00	300.00	29.85	11.80	31.20	32.20	10.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_2462MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	2483.50	54.65	PK	74.00	-19.35	1.50	260.00	53.05	5.30	28.70	32.40	1.60
2	2483.50	40.36	AV	54.00	-13.64	1.50	260.00	38.76	5.30	28.70	32.40	1.60
3	4924.00	50.33	PK	74.00	-23.67	1.50	260.00	44.63	6.70	30.50	31.50	5.70
4	4924.00	38.96	AV	54.00	-15.04	1.50	260.00	33.26	6.70	30.50	31.50	5.70
5	7386.00	52.09	PK	74.00	-21.91	1.50	260.00	41.29	11.80	31.20	32.20	10.80
6	7386.00	42.11	AV	54.00	-11.89	1.50	260.00	31.31	11.80	31.20	32.20	10.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_2462MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Cab. Loss (dB)	Ant. Factor (dB)	Pre. Amp. (dB)	Cor. Factor (dB/m)
1	2483.50	62.32	PK	74.00	-11.68	1.60	300.00	60.72	5.30	28.70	32.40	1.60
2	2483.50	49.37	AV	54.00	-4.63	1.60	300.00	47.77	5.30	28.70	32.40	1.60
3	4924.00	49.85	PK	74.00	-24.15	1.60	300.00	44.15	6.70	30.50	31.50	5.70
4	4924.00	38.29	AV	54.00	-15.71	1.60	300.00	32.59	6.70	30.50	31.50	5.70
5	7386.00	51.62	PK	74.00	-22.38	1.60	300.00	40.82	11.80	31.20	32.20	10.80
6	7386.00	40.80	AV	54.00	-13.20	1.60	300.00	30.00	11.80	31.20	32.20	10.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
- Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level - Limit value

3. List of measuring equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI TEST RECEIVER	KEYSIGHT	N9038A	A141202036	2020.09.21	2021.09.20
2	Power Meter	R&S	NRP-Z31	102872	2021.04.26	2022.04.25
3	TURNTABLE	ETS	2088	2149	N/A	N/A
4	ANTENNA MAST	ETS	2075	2346	N/A	N/A
5	EMI TEST Software	R&S	ESK1	N/A	N/A	N/A
6	Horn antenna (18GHz~26.5GHz)	AR	AT4003A	325306	2020.09.16	2022.09.15
7	Amplifier 30M~1GHz	MILMEGA	80RF1000-10 004	A140101634	2021.01.26	2022.01.25
8	Amplifier 1G~18GHz	MILMEGA	AS0104R-800 /400	A160302517	2021.01.26	2022.01.25
9	High pass filter	Compliance Direction systems	BSU-6	34202	2020.11.10	2021.11.09
10	Horn Antenna	R&S	HF906	A0304225	2019.04.17	2022.04.16
11	Horn Antenna	R&S	ESIB7	A0501375	2020.06.24	2022.06.22
12	ULTRA-BROADBAND ANTENNA	SCHWARZBECK	VULB9160	A0805560	2019.05.24	2022.05.23
13	Passive Loop Antenna	R&S	HFH2-Z2	100047	2019.04.26	2022.04.25
14	Temperature chamber	TABAI	PS-232	A8708054	2020.10.30	2021.10.29
15	Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2021.04.26	2022.04.25
16	Power Supply	R&S	ESIB26	A0304218	2021.01.04	2022.01.03
17	LISN	ROHDE&SCHWARZ	ENV216	A140701847	2020.09.22	2021.09.21
18	Test software	ECIT	Eagle	V2.0	N/A	N/A

4. Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013. All the measurement uncertainty value were shown with a coverage $K=2$ to indicate 95% level of confidence . The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Emission Measurement (150KHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	2.8dB
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Uncertainty of Radiated Emission Measurement (30MHz~1GHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	3.91dB
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Uncertainty of Radiated Emission Measurement (1GHz~18GHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	4.5dB
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Uncertainty of Radiated Emission Measurement (18GHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	4.9dB
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****END OF REPORT****