

ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

	CLASS II REPORT
Applicant:	TomTom International B.V.
	De Ruijterkade 154, 1011 AC Amsterdam, 1011 AC, The
	Netherlands
Product Name:	GPS Navigation System
Brand Name:	TomTom
Model No.:	4BA53A
Model Difference:	N/A
Report Number:	E2/2018/10100-01
FCC ID	S4L4BA53
IC:	5767A-4BA53
FCC Rule Part:	§15.247, Cat: DTS
IC RSS:	RSS-247 issue 2 Feb 2017
Issue Date:	Feb. 09, 2021
Date of Test:	Nov. 23, 2020 ~ Dec. 23, 2020
Date of EUT Received:	Nov. 23, 2020

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Central RF Lab The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10:2013 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits.

The test results of this report relate only to the tested sample identified in this report.

Approved By:

Jim Chang

Jim Chang / Manager



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Revision History				
Report Number	Revision	Description	Issue Date	Remark
E2/2018/10100	Rev.00	Original.	Feb. 14, 2018	Revised By: Violetta Tang
E2/2018/10100-01	Rev.01	Class II Permissive change	Feb. 09, 2021	Revised By: Yuri Tsai

Note:

1 · Disclaimer

Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.

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GENERAL INFORMATION

1.1 Product description

Product Name:	GPS Navigation System
Brand Name:	TomTom
Model No.:	4BA53A
Model Difference:	N/A
Hardware Version:	N/A
Software Version:	N/A
EUT Series No.:	G52430100029
Class II Permissive change:	PCB layout change in non RF section and a new HVIN 4BA53A is designated for this modification
Power Supply:	3.7Vdc from Rechargeable Li-ion Battery

Wi-Fi 802.11	Frequency Range	Channels	Modulation Technology		
b			DSSS		
g	2412-2462	11	OFDM		
n_HT20			OFDM		
Modulation	type:	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM			
Transistior	n Rate	802.11 b: 1/2/5.5/11 Mbps 802.11 g: 6/9/12/18/24/36/48/54 Mbps 802.11 n_HT20MHz: 6.5 – 72.2 Mbps			

1.2 Antenna Designation

Antenna Type	Supplier	Antenna Part No.	Freq. (MHz)	Peak Antenna Gain (dBi)	Worst An- tenna Gain
PIFA	N/A	N/A	2412-2462	-3	V

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1.3 Test Methodology of Applied Standards

FCC Part 15, Subpart C §15.247 FCC KDB 558074 D01 DTS Meas. Guidance v05r02 FCC KDB 662911 D01 Multiple Transmitter Output v02r01 RSS-247 issue 2 Feb. 2017 RSS-Gen. issue 5, Amendment 1, March 2019 ANSI C63.10:2013

1.4 Test Facility

SGS Taiwan Ltd. Central RF Lab (TAF code 3702) Central RF Lab

FCC Designation number: TW0028

ISED CAB identifier: TW3702

1.5 Special Accessories

There are no special accessories used while test was conducted.

1.6 Equipment Modifications

There was no modification incorporated into the EUT.

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2 SYSTEM TEST CONFIGURATION

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT Exercise

An engineering test mode (software/firmware) that applicant provided was utilized to manipulate the EUT into transmit, selection of the test channel, and modulation scheme.

2.3 Test Procedure

2.3.1 Conducted Emissions

The EUT is a placed on a table which is 0.8 m above ground plane. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz. The CISPR Quasi-Peak and Average detector mode is employed. The two LISNs provide 50uH/50 ohm of coupling impedance for the measuring instrument. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

2.3.2 Radiated Emissions

The EUT is a placed on a turn table. For emissions testing at or below 1 GHz, the table height shall be 0.8 m above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna.

2.4 Measurement Results Explanation Example

2.4.1 Radiated Emission Test Sites For Measurements From 9 kHz To 30 MHz

Radiated emission below 30MHz is measured in a 9m*9m*6m semi-anechoic chamber,

the measurements correspond to those obtained at an open-field test site.

There is a comparison data of both open-field test site and semi-Anechoic chamber,

and the result came out very similar.

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2.5 Configuration of Tested System

Fig. 2-1 Radiated Emission configuration



Fig 2-3 Conduction (AC Power Line) Radiated Emission



Table 2-1 Equipment Used in Tested System

ltem	Equipment	Mfr/Brand	Model/Type No.	Series No.	Data Cable	Power Cord
1	WLAN Test Software	N/A	N/A	N/A	N/A	N/A
2	Notebook	Lenovo	T420	S0012599	N/A	N/A

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SUMMARY OF TEST RESULTS 3

FCC Rules	IC Rules	Description Of Test	Result
§15.207(a)	RSS-Gen §8.8	AC Power Line Conducted Emission	Compliant
§15.247(d) §15.209	RSS-247 §5.5 RSS-Gen §8.9 RSS-Gen §8.10 RSS-Gen §6.13	Radiated Band Edge & Radiated Spurious Emission	Compliant

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DESCRIPTION OF TEST MODES 4

4.1 Operated in 2400 ~ 2483.5MHz Band

11 channels are provided for 802.11b/g/n 20M.

CHANNEL	FREQUENCY (MHz)
1	2412
2	2417
3	2422
4	2427
5	2432
6	2437
7	2442
8	2447
9	2452
10	2457
11	2462

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4.2 The Worst Test Modes and Channel Details

- 1. The EUT has been tested under operating condition.
- aTest program used to control the EUT for staying in continuous transmitting and receiving mode is programmed.
- 3. Investigation has been done on all the possible configurations for searching the worst case.

The gevin UE is pre-scanned among below modes.

Modulation	Transmission Chain			Multiple Transmission Spatial	
🛛 802.11 b	🖂 Ch0	🗆 Ch1	\Box Ch2	\Box Ch3	□ 2TX
🛛 802.11 g	🛛 Ch0	□ Ch1	□ Ch2	\Box Ch3	□ 2TX
🛛 802.11 n	🛛 Ch0	□ Ch1	□ Ch2	\Box Ch3	

4. Therefore, below summary is the modes of test configuration that yield the highest reading and generate the highest emission chosen to carry out the relevantly mandatory test items.

4.3 Radiated Emission Test:

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	ANTENNA PORT
	RADIAT	ED EMISSIO	N TEST (BELOV	V 1 GHz)	
802.11g	1 to 11	6	OFDM	6	Ch0
	RADIAT	ED EMISSIC	N TEST (ABOVE	E 1 GHz)	
802.11b	1 to 11	1, 6, 11	DSSS	1	Ch0
802.11g	1 to 11	1, 6, 11	OFDM	6	Ch0
802.11n 20M	1 to 11	1, 6, 11	OFDM	MCS 0	Ch0

Note:

The field strength of radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for 802.11b/g/n WLAN Transmitter for channel Low, Mid and High, the worst case H position was reported.

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MEASUREMENT UNCERTAINTY

Test Items	Uncertainty
AC Power Line Conducted Emission	+/- 2.586 dB
Peak Output Power	+/- 0.84 dB
6dB Bandwidth	+/- 51.33 Hz
100 KHz Bandwidth Of Frequency Band Edges	+/- 0.84 dB
Peak Power Density	+/- 1.3 dB
Temperature	+/- 0.65 °C
Humidity	+/- 4.6 %
DC / AC Power Source	DC= +/- 0.13%, AC= +/- 0.2%

Radiated Spurious Emission Measurement Uncertainty			
Polarization: Vertical	9kHz~30MHz: +-2.3dB		
	30MHz - 180MHz: +/- 3.37dB		
	180MHz -417MHz: +/- 3.19dB		
	0.417GHz-1GHz: +/- 3.19dB		
	1GHz - 18GHz: +/- 4.04dB		
	18GHz - 40GHz: +/- 4.04dB		
	9kHz~30MHz: +-2.3dB		
	30MHz - 167MHz: +/- 4.22dB		
	167MHz -500MHz: +/- 3.44dB		
Polarization: Horizontal	0.5GHz-1GHz: +/- 3.39dB		
	1GHz - 18GHz: +/- 4.08dB		
	18GHz - 40GHz: +/- 4.08dB		

Note:

- 1. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.
- 2. The conformity assessment statement in this report is based solely on the test results, measurement uncertainty is excluded.

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CONDUCTED EMISSION TEST

6.1 Standard Applicable

Frequency range within 150kHz to 30MHz shall not exceed the Limit table as below.

Frequency range	Limits dB(uV)			
MHz	Quasi-peak	Average		
0.15 to 0.50	66 to 56	56 to 46		
0.50 to 5	56	46		
5 to 30	60	50		
Note				
1.The lower limit shall apply at the transition frequencies				
2.The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50				
MHz.				

6.2 Measurement Equipment Used

Conducted Emission Test Site							
EQUIPMENT MFR MODEL SERIAL LAST CAL DU							
TYPE		NUMBER	NUMBER	CAL.			
	SCHWARZ-						
LISN	BECK Mess-	NSLK8127	974	03/25/2020	03/24/2021		
	Elektronik						
EMI Test Receiver	R&S	ESCI	101342	04/28/2020	04/27/2021		

6.3 EUT Setup

- 1. The conducted emission tests were performed in the test site, using the setup in accordance with the ANSI 63.10:2013.
- 2. The AC/DC Power adaptor of EUT was plug-in LISN. The EUT was placed flushed with the rear of the table.
- 3. The LISN was connected with 120Vac/60Hz power source.

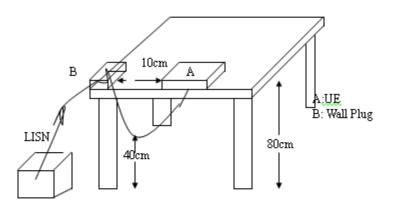
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6.4 Test SET-UP (Block Diagram of Configuration)



6.5 Measurement Procedure

- 1. The EUT was placed on a table which is 0.8m above ground plane.
- 2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 3. Repeat above procedures until all phases of power being supplied by given UE are completed

6.6 Measurement Result

Note: Refer to next page for measurement data and plots. Note2: The * reveals the worst-case results that closet to the limit.

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AC POWER LINE CONDUCTED EMISSION TEST DATA

Report Number Test Mode Power Probe	:E2-2018-101 :WLAN 2.4G :120V/60Hz :L1	100-01	Test Site Test Date Temp./Hu Engineer	e :2020-12 umi. :23.5/64		
80 Level (dBuV) 70 60 50 40 30 20 10 0.15 0.2	0.5		102 102 103 104 104 104 104 104 104 104 104 104 104		20 30	
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS		_
MHz	PK/QP/AV	dBµV	dB	dBµV	dBµV	dB
0.15 0.15 0.20 0.20 2.91 2.91 3.00 3.00 3.41	Average QP Average QP Average QP Average QP Average	14.63 37.12 19.01 32.29 -1.19 14.21 26.44 32.08 28.44	10.22 10.22 10.22 10.22 10.47 10.47 10.47 10.47 10.47	24.85 47.34 29.23 42.51 9.28 24.68 36.91 42.55 38.91	55.98 65.98 53.67 63.67 46.00 56.00 46.00 46.00	-31.13 -18.64 -24.44 -21.16 -36.72 -31.32 -9.09 -13.45 -7.09
3.41	QP	34.70	10.47	45.17	56.00	-10.83
3.48	Average	27.21	10.47	37.68	46.00	-8.32
3.48	QP	33.92	10.47	44.39	56.00	-11.61

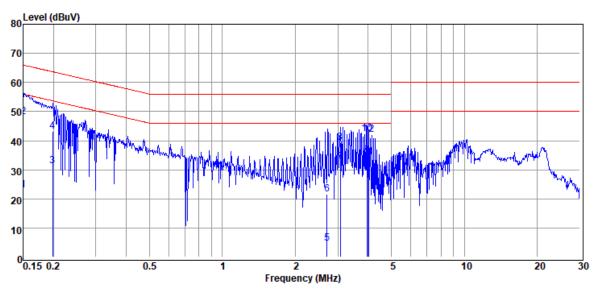
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С



Report Number	:E2-2018-10100-01	Test Site	:Conduction Room
Test Mode	:WLAN 2.4G	Test Date	:2020-12-23
Power	:120V/60Hz	Temp./Humi.	:23.5/64
Probe	:N	Engineer	:Ashton chiu



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS		
MHz	PK/QP/AV	dBµV	dB	dBµV	dBµV	dB
0.15	Average	12.77	10.21	22.98	55.98	-33.00
0.15	QP	38.06	10.21	48.27	65.98	-17.71
0.20	Average	21.03	10.21	31.24	53.66	-22.42
0.20	QP	33.06	10.21	43.27	63.66	-20.39
2.71	Average	-5.64	10.47	4.83	46.00	-41.17
2.71	QP	11.22	10.47	21.69	56.00	-34.31
3.07	Average	22.33	10.47	32.80	46.00	-13.20
3.07	QP	28.90	10.47	39.37	56.00	-16.63
3.95	Average	24.33	10.49	34.82	46.00	-11.18
3.95	QP	31.99	10.49	42.48	56.00	-13.52
4.02	Average	23.80	10.49	34.29	46.00	-11.71
4.02	QP	31.60	10.49	42.09	56.00	-13.91

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7 RADIATED BANDEDGE AND SPURIOUS EMISSION MEASUREMENT

7.1 Standard Applicable

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. In addition, radiated emissions which fall in the restricted bands must also comply with the §15.209 and RSS-Gen §8.9 Table 5 and 6 limit as below. And according to §15.33(a) (1) & RSS-Gen §6.13.2.a for an intentional radiator operates below 10GHz, the frequency range of measurements: to the tenth harmonic of the highest fundamental frequency or to 40GHz, whichever is lower.

Frequency (MHz)	Field strength (microvolts/meter)	Distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Note:

- 1. The lower limit shall apply at the transition frequencies.
- 2. Emission level ($dB\mu V/m$) = 20 log Emission level ($dB\mu V/m$)

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7.2 Measurement Equipment Used:

	966 Chamber							
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.			
Broadband An- tenna	TESEQ	CBL 6112D	35240	09/08/2020	09/07/2021			
Horn Antenna	Schwarzbeck	BBHA9120D	1341	06/22/2020	06/21/2021			
Horn Antenna	Schwarzbeck	BBHA9170	185	07/30/2020	07/29/2021			
Loop Antenna	ETS.LINDGREN	6502	143303	04/28/2020	04/27/2021			
3m Site NSA	SGS	966 chamber D	N/A	07/12/2020	07/11/2021			
Spectrum Analyzer	KEYSIGHT	N9010A	MY54510568	07/08/2020	07/07/2021			
Pre-Amplifier	EMC Instruments	EMC184045B	980135	10/27/2020	10/26/2021			
Pre-Amplifier	EMC Instruments	EMC9135	980234	11/19/2020	11/18/2021			
Pre-Amplifier	EMC Instruments	EMC12630SE	980271	11/19/2020	11/18/2021			
Attenuator	Marvelous	WATT-218FS-10	RF25	11/19/2020	11/18/2021			
High Pass Filter	R&S	F13 HPF 3GHz	RF175	11/19/2020	11/18/2021			
Lowpass Filter	Woken	EWT-56-0019	RF173	11/19/2020	11/18/2021			
Notch Filter	Woken	EWT-54-0038	RF178	11/19/2020	11/18/2021			
Coaxial Cable	Huber Suhner	EMC106-SM- SM-7200	150703	11/19/2020	11/18/2021			
Coaxial Cable	Huber+Suhner	RG 214/U	W21.01	11/19/2020	11/18/2021			
Coaxial Cable	Huber Suhner	SUCOFLEX 104	MY17413/4	11/19/2020	11/18/2021			

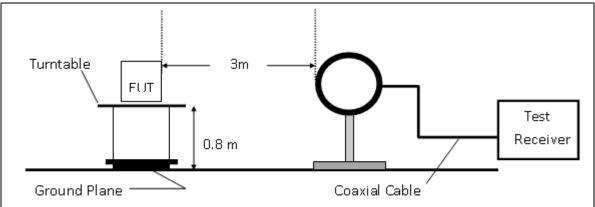
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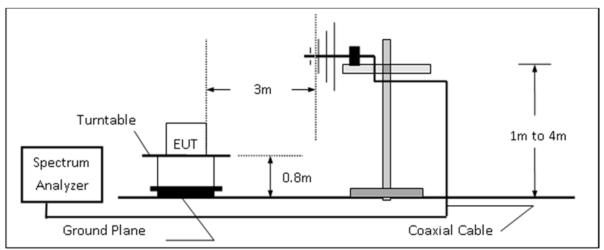


7.3 Test SET-UP

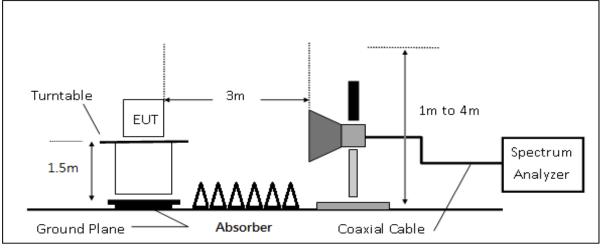




(B) Radiated Emission Test Set-Up, Frequency form 30MHz to 1000MHz



(C) Radiated Emission Test Set-UP Frequency Over 1 GHz



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7.4 Measurement Procedure

- 1. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance .
- 2. The EUT was placed on a turn table with 0.8m for frequency< 1GHz and 1.5m for frequency> 1GHz above ground plane.
- 3. The turn table shall rotate 360 degrees to determine the position of maximum emission level.
- 4. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
- 5. When measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna.
- 6. Set the spectrum analyzer as RBW=120 kHz and VBW=300 kHz for Peak Detector (PK) and Quasipeak (QP) at frequency below 1 GHz.
- 7. Set the spectrum analyzer as RBW=1 MHz, VBW=3 MHz for Peak Detector at frequency above 1 GHz.
- 8. Set the spectrum analyzer as RBW=1 MHz, VBW=10 Hz (Duty cycle > 98%) or VBW ≥ 1/T (Duty cycle < 98%) for Average Detector at frequency above 1 GHz.
- 9. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- 10. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 11. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. On spectrum, change spectrum mode in linear display mode, and reduce VBW = 10Hz if average reading is measured.
- 12. Repeat above procedures until all default test channel measured were complete.

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7.5 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CL - AG

Where FS = *Field Strength*

CL = Cable Attenuation Factor (Cable Loss) AG = Amplifier Gain

AF = Antenna Factor

RA = *Reading Amplitude*

The limit of the emission level is expressed in dBuV/m, which converts 20*log(uV/m)

Actual FS($dB\mu V/m$) = SPA. Reading level($dB\mu V$) + Factor(dB) Factor(dB) = Antenna Factor($dB\mu V/m$) + Cable Loss(dB) – Pre_Amplifier Gain(dB)

7.6 Test Results of Radiated Spurious Emissions form 9 kHz to 30 MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit per 15.31(o) & RSS-GEN §6.13.2 was not reported.

7.7 Measurement Result

Note:

- 1. Refer to next page spectrum analyzer data chart and tabular data sheets.
- 2. Measurements are completed at peak and average level, the mark of average is the highest emission in restricted bands

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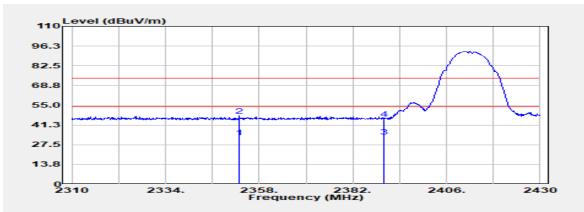
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7.7.1 Radiated Band Edge Measurement Result

Report Number	:E2/2018/10100-01	Test Site	:966 Chamber D
Operation Mode	:802.11b	Test Date	:2020-12-15
Test Frequency	:2412 MHz	Temp./Humi.	:20.2/65
Test Mode	:BE CH LOW	Antenna Pol.	:Vertical
EUT Pol	:H plan	Engineer	:Kailin Lee



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2352.840	Average	40.87	-7.87	33.00	54.00	-21.00
2352.840	Peak	55.42	-7.87	47.55	74.00	-26.45
2390.000	Average	41.37	-7.99	33.38	54.00	-20.62
2390.000	Peak	53.67	-7.99	45.69	74.00	-28.31

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Margin

dB

-19.61 -25.89 -19.54

-27.28

74.00

:966 Chamber D



:E2/2018/10100-01

Report Number

2390.000

Operation Mode	:802.11b			Test Date	:2020-12-15	
Test Frequency	:2412 MHz			Temp./Humi.	:20.2/65	
Test Mode	:BE CH LO\	N		Antenna Pol.	:Horizontal	
EUT Pol	:H plan			Engineer	:Kailin Lee	
110 Level (d	IBuV/m)	1 1 1				
96.3						
82.5				$-\langle \rangle$		
68.8						
55.0					<u>~~</u>	
41.3 27.5			8			
13.8						
0 2310	2334.	2358. Frequency (2382. MHz)	2406.	2430	
Freq.	Detector	Spectrum	Factor	Actual	Limit	I
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	
2389.200	Average	42.35	-7.96	34.39	54.00	
2389.200	Peak	56.08	-7.96	48.11	74.00	
2390.000	Average	42.45	-7.99	34.46	54.00	

Test Site

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54.70

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-7.99

Peak

46.72



13.8

0^L 2450

2470.

Report Number	:E2/2018/10100-01	Test Site	:966 Chamber D
Operation Mode	:802.11b	Test Date	:2020-12-15
Test Frequency	:2462 MHz	Temp./Humi.	:20.2/65
Test Mode	:BE CH HIGH	Antenna Pol.	:Vertical
EUT Pol	:H plan	Engineer	:Kailin Lee
110 Level (dE	3uV/m)		
96.3			
82.5			
68.8			
55.0 /			
27.5			

2490. 2510. Frequency (MHz)

Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.500	Average	40.74	-8.12	32.62	54.00	-21.38
2483.500	Peak	53.30	-8.12	45.18	74.00	-28.82
2499.400	Average	40.76	-7.60	33.16	54.00	-20.84
2499.400	Peak	54.86	-7.60	47.26	74.00	-26.74

2530.

2550

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-26.47

74.00

:966 Chamber D



:E2/2018/10100-01

Report Number

2520.700

Operation Mode Test Frequency Test Mode EUT Pol	:802.11b :2462 MHz :BE CH HIG :H plan	Ή		Test Date Temp./Humi. Antenna Pol. Engineer	:2020-12-15 :20.2/65 :Horizontal :Kailin Lee	
110 Level (d) 96.3 82.5 68.8 55.0 41.3 27.5 13.8 0 2450	BuV/m)	2490. Frequency	2510.	4 4 3 2530.	2550	
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.500 2483.500	Average Peak	40.87 52.71	-8.12 -8.12	32.75 44.59	54.00 74.00	-21.25 -29.41
2520.700	Average	40.59	-7.72	32.87	54.00	-21.13

Test Site

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t (886-2) 2299-3279

55.25

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Peak

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 f (886-2) 2298-0488 www.tw.sgs.com

47.53



:E2/2018/10100-01

Report Number

Operation Mode	:802.11g			Test Date	:2020-12-15	
Test Frequency	:2412 MHz			Temp./Humi.	:20.2/65	
Test Mode	:BE CH LO	W		Antenna Pol.	:Vertical	
EUT Pol	:H plan			Engineer	:Kailin Lee	
110 Level (d	BuV/m)					
96.3 82.5						
68.8					$\overline{}$	
55.0			Mary Mary Mary	and the second s		
41.3						
27.5						
13.8						
0 2310	2334.	2358. Frequenc	2382. cy (MHz)	2406.	2430	
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Leve	l	FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.000	Average	49.31	-7.99	41.32	54.00	-12.68
2390.000	Peak	68.44	-7.99	60.45	74.00	-13.55

Test Site

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:E2/2018/10100-01

Report Number

Operation Mode	:802.11g			Test Date	:2020-12-15	
Test Frequency	:2412 MHz			Temp./Humi.	:20.2/65	
Test Mode	:BE CH LC	W		Antenna Pol.	:Horizontal	
EUT Pol	:H plan			Engineer	:Kailin Lee	
110 Level (d	BuV/m)					
82.5						
68.8						
55.0			A REAL PROPERTY AND A REAL			
41.3		- Abut the and a share the state of the stat				
27.5						
13.8						
0 ^L 2310	2334.	2358. Frequency	2382. (MHz)	2406.	2430	
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.000	Average	54.20	-7.99	46.21	54.00	-7.79
2390.000	Peak	73.80	-7.99	65.82	74.00	-8.18

Test Site

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:966 Chamber D



:E2/2018/10100-01

Report Number

Operation Mode Test Frequency Test Mode EUT Pol	:802.11g :2462 MHz :BE CH HI :H plan			Test Date Temp./Humi. Antenna Pol. Engineer	:2020-12-15 :20.2/65 :Vertical :Kailin Lee	
110 Level (d 96.3 82.5 68.8 55.0 41.3 27.5 13.8 0 2450	1BuV/m)	2490. Frequency	2510. (MHz)	2530.	2550	
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBµV	Factor dB	Actual FS dBµV/m	Limit @3m dBµV/m	Margin dB
2483.500 2483.500	Average Peak	47.54 69.16	-8.12 -8.12	39.42 61.05	54.00 74.00	-14.58 -12.95

Test Site

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:E2/2018/10100-01

Report Number

1	.62/2010/1	0100-01				
Operation Mode	:802.11g			Test Date	:2020-12-15	
Test Frequency	:2462 MHz			Temp./Humi.	:20.2/65	
Test Mode	:BE CH HI	GH		Antenna Pol.	:Horizontal	
EUT Pol	:H plan			Engineer	:Kailin Lee	
110 Level (d 96.3 82.5 68.8 55.0 41.3 27.5 13.8 0 2450	BuV/m)	2490.	2510.	2530.	2550	
2450	2470.	Frequency	2510. (MHz)	2530.	2550	
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.500	Average	49.85	-8.12	41.73	54.00	-12.27
2483.500	Peak	72.19	-8.12	64.07	74.00	-9.93

Test Site

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:E2/2018/10100-01

Report Number

Operation Mode	:802.11n20)		Test Date	:2020-12-15	
Test Frequency	:2412 Mhz			Temp./Humi.	:20.2/65	
Test Mode	:BE CH LO	W		Antenna Pol.	:Vertical	
EUT Pol	:H plan			Engineer	:Kailin Lee	
110 Level (d	BuV/m)					
96.3						
82.5					\rightarrow	
68.8			2 		- Warman	
55.0			A CONTRACT OF T			
41.3						
27.5						
2310	2334.	2358. Frequenc	2382. sy (MHz)	2406.	2430	
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	n dBµV/m	dB
2390.000	Average	52.48	-7.99	44.49	54.00	-9.51
2390.000	Peak	72.64	-7.99	64.65	74.00	-9.35

Test Site

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:E2/2018/10100-01

Report Number

Operation Mode Test Frequency	:802.11n20 :2412 MHz			Test Date Temp./Humi.	:2020-12-15 :20.2/65	
Test Mode	:BE CH LC)VV		Antenna Pol.	:Horizontal	
EUT Pol	:H plan			Engineer	:Kailin Lee	
110 Level (d	BuV/m)					
82.5						
68.8			- 3-		Harris	
55.0			and a second			
41.3		dat the second				
27.5						
13.8						
0L 2310	2334.	2358. Frequency	2382. (MHz)	2406.	2430	
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.000	Average	55.56	-7.99	47.57	54.00	-6.43
2390.000	Peak	75.09	-7.99	67.10	74.00	-6.90

Test Site

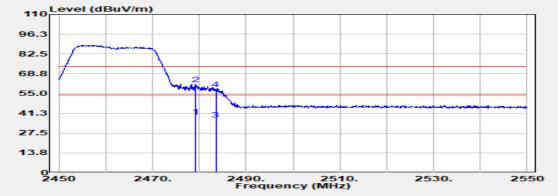
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Report Number	:E2/2018/10100-01	Test Site	:966 Chamber D
Operation Mode	:802.11n20	Test Date	:2020-12-15
Test Frequency	:2462 MHz	Temp./Humi.	:20.2/65
Test Mode	:BE CH HIGH	Antenna Pol.	:Vertical
EUT Pol	:H plan	Engineer	:Kailin Lee



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2479.300	Average	46.93	-8.09	38.83	54.00	-15.17
2479.300	Peak	69.51	-8.09	61.42	74.00	-12.58
2483.500	Average	45.12	-8.12	37.00	54.00	-17.00
2483.500	Peak	66.29	-8.12	58.17	74.00	-15.83

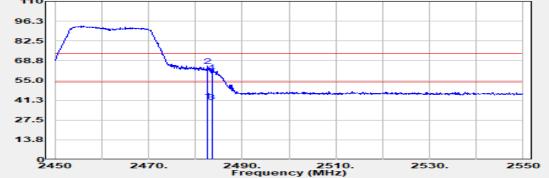
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Report Number	:E2/2018/10100-01	Test Site	:966 Chamber D
Operation Mode	:802.11n20	Test Date	:2020-12-15
Test Frequency	:2462 MHz	Temp./Humi.	:20.2/65
Test Mode	:BE CH HIGH	Antenna Pol.	:Horizontal
EUT Pol	:H plan	Engineer	:Kailin Lee
110 Level (dE	3uV/m)		



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2482.600	Average	49.32	-8.12	41.21	54.00	-12.79
2482.600	Peak	73.48	-8.12	65.36	74.00	-8.64
2483.500	Average	48.49	-8.12	40.37	54.00	-13.63
2483.500	Peak	69.12	-8.12	61.00	74.00	-13.00

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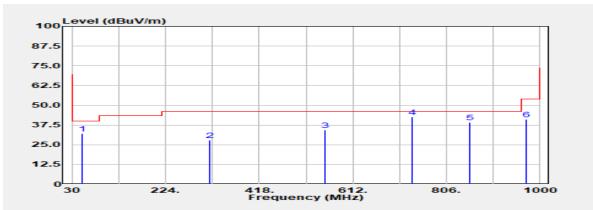
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7.7.2 Below 1GHz Worst-Case Emission:

Report Number	:E2/2018/10100-01	Test Site	:966 Chamber D
Operation Mode	:802.11g	Test Date	:2020-12-17
Test Frequency	:2437 MHz	Temp./Humi.	:20.9/62
Test Mode	:TX CH MID	Antenna Pol.	:Vertical
EUT Pol	:H Plan	Engineer	:Kailin Lee



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
50.370	Peak	49.52	-17.62	31.90	40.00	-8.10
315.180	Peak	43.52	-15.43	28.10	46.00	-17.90
553.800	Peak	44.78	-10.41	34.37	46.00	-11.63
735.190	Peak	50.40	-7.79	42.61	46.00	-3.39
855.470	Peak	45.14	-5.75	39.38	46.00	-6.62
970.900	Peak	45.19	-3.94	41.25	54.00	-12.75

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Report Number	:E2/2018/10100	0-01		Test Site	:966 Chamber D
Operation Mode	:802.11g			Test Date	:2020-12-17
Test Frequency	:2437 MHz			Temp./Humi.	:20.9/62
Test Mode	:TX CH MID			Antenna Pol.	:Horizontal
EUT Pol	:H Plan			Engineer	:Kailin Lee
100 Level (dB	uV/m)		1		
87.5					
75.0					
62.5					
50.0					
37.5		3	1	5	
25.0	2				
12.5					
0 30	224.	418.	612.	806.	1000

418. 612. Frequency (MHz)

Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
48.430	Peak	54.15	-17.64	36.51	40.00	-3.49
244.370	Peak	43.28	-18.34	24.94	46.00	-21.06
428.670	Peak	43.07	-13.02	30.06	46.00	-15.94
605.210	Peak	44.08	-8.71	35.37	46.00	-10.63
771.080	Peak	44.83	-6.56	38.27	46.00	-7.73
961.200	Peak	45.25	-4.87	40.38	54.00	-13.62

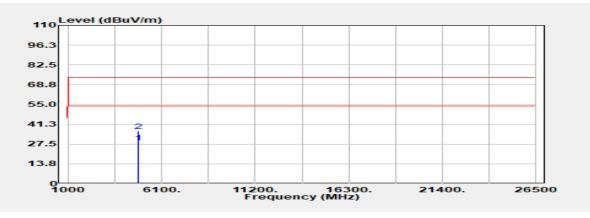
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7.7.3 Above 1GHz Emission:

Report Number	:E2/2018/10100-01	Test Site	:966 Chamber D
Operation Mode	:802.11b	Test Date	:2020-12-15
Test Frequency	:2412 MHz	Temp./Humi.	:20.2/65
Test Mode	:TX CH LOW	Antenna Pol.	:Vertical
EUT Pol	:H plan	Engineer	:Kailin Lee



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.000	Average	31.96	-3.13	28.83	54.00	-25.17
4824.000	Peak	39.68	-3.13	36.55	74.00	-37.45

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·E2/2018/10100-01

Report Number

Operation Mode Test Frequency Test Mode EUT Pol	:E2/2018/1 :802.11b :2412 MHz :TX CH LO :H plan			Test Date Temp./Humi. Antenna Pol. Engineer	:2020-12-15 :20.2/65 :Horizontal :Kailin Lee	
110 Level (d 96.3 82.5 68.8 55.0 41.3 27.5 13.8 0 1000	BuV/m)	11200. Frequenc	16300. y (MHz)	21400.	26500	
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBµV	Factor dB	Actual FS dBµV/m	Limit @3m dBµV/m	Margin dB
4824.000 4824.000	Average Peak	35.13 40.68	-3.13 -3.13	32.00 37.55	<u>б</u> 54.00 74.00	-22.00 -36.45

Test Site

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:966 Chamber D



·E2/2018/10100-01

Report Number

	Operation Mode Test Frequency Test Mode EUT Pol	:E2/2018/16 :802.11b :2437 MHz :TX CH MII :H plan			Test Date Temp./Humi. Antenna Pol. Engineer	:2020-12-15 :20.2/65 :Vertical :Kailin Lee	
	110 Level (d 96.3 82.5 68.8 55.0 41.3 27.5 13.8						
	1000	6100.	11200. Frequence	16300. cy (MHz)	21400.	26500	
	Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
-	MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
	4874.000 4874.000	Average Peak	34.89 39.59	-3.00 -3.00	31.89 36.59	54.00 74.00	-22.11 -37.41

Test Site

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·E2/2018/10100-01

Report Number

•		EZ/2018/1	0100-01				
Oper	ation Mode	:802.11b			Test Date	:2020-12-15	
Test	Frequency	:2437 MHz			Temp./Humi.	:20.2/65	
Test	Mode	:TX CH MI	D		Antenna Pol.	:Horizontal	
EUT	Pol	:H plan			Engineer	:Kailin Lee	
	110 Level (d	BuV/m)					
	96.3						
	82.5						
	68.8						
	55.0						
	41.3	2					
3	27.5						
	13.8						
	9	6100.	11200.	16300.	21400.	26500	
	1000	0100.	Frequence	cy (MHz)	21400.	20300	
	Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
	MHz	PK/QP/AV	dBµV	dB	dBµV/m	n dBµV/m	dB
48	374.000	Average	35.99	-3.00	32.99	54.00	-21.01
48	374.000	Peak	39.77	-3.00	36.77	74.00	-37.23

Test Site

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:E2/2018/10100-01

Report Number

		.EZ/2010/1	0100-01				
0	peration Mode	:802.11b			Test Date	:2020-12-15	
Te	est Frequency	:2462 MHz			Temp./Humi.	:20.2/65	
Te	est Mode	:TX CH HI	GH		Antenna Pol.	:Vertical	
Е	UT Pol	:H plan			Engineer	:Kailin Lee	
	110 Level (d	BuV/m)					
	96.3						
	82.5						
	68.8						
	55.0						
	41.3	2					
	27.5						
	13.8						
	1000	6100.	11200. Frequenc	16300. y (MHz)	21400.	26500	
	Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
	MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
	4924.000	Average	34.38	-3.21	31.17	54.00	-22.83
	4924.000	Peak	38.72	-3.21	35.51	74.00	-38.49

Test Site

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:E2/2018/10100-01

Report Number

	.EZ/2010/1	0100-01		T (D (0000 40 45	
Operation Mode	:802.11b			Test Date	:2020-12-15	
Test Frequency	:2462 MHz			Temp./Humi.	:20.2/65	
Test Mode	:TX CH HIG	GH		Antenna Pol.	:Horizontal	
EUT Pol	:H plan			Engineer	:Kailin Lee	
110 Level (d	BuV/m)					
96.3						
82.5						
68.8						
55.0						
41.3	2					
27.5						
13.8						
9	6100.	11200. Frequency	16300. v (MHz)	21400.	26500	
		requere	, (
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.000	Average	34.61	-3.21	31.40	54.00	-22.60
4924.000	Peak	39.89	-3.21	36.68	74.00	-37.32

Test Site

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:E2/2018/10100-01

Report Number

Operation Mode Test Frequency Test Mode EUT Pol	:802.11g :2412 MHz :TX CH LO :H plan	:		Test Date Temp./Humi. Antenna Pol. Engineer	:2020-12-16 :20.2/65 :Vertical :Kailin Lee	
110 Level (d 96.3 82.5 68.8 55.0 41.3 27.5 13.8 0 000	BuV/m)	11200.	16300.	21400.	26500	
		Frequenc	y (MHz)			
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.000	Average	34.22	-3.13	31.09	54.00	-22.91
4824.000	Peak	39.71	-3.13	36.58	74.00	-37.42

Test Site

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Report Number Operation Mode Test Frequency Test Mode EUT Pol	:E2/2018/1 :802.11g :2412 MHz :TX CH LO :H plan			Test Site Test Date Temp./Humi. Antenna Pol. Engineer	:966 Chamber D :2020-12-16 :20.2/65 :Horizontal :Kailin Lee	
110 Level (d) 96.3 82.5 68.8 55.0 41.3 27.5 13.8 0 0 1000	BuV/m) □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	11200. Frequency	16300. (MHz)	21400.	26500	
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBµV	Factor dB	Actual FS dBµV/m	Limit @3m dBµV/m	Margin dB
4824.000 4824.000	Average Peak	34.08 38.84	-3.13 -3.13	30.96 35.71	54.00 74.00	-23.04 -38.29

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·E2/2018/10100-01

Report Number

Operation Mode Test Frequency Test Mode EUT Pol	:E2/2018/1 :802.11g :2437 MHz :TX CH MII :H plan			Test Date Temp./Humi. Antenna Pol. Engineer	:2020-12-16 :20.2/65 :Vertical :Kailin Lee	
110 Level (d 96.3 82.5 68.8 55.0 41.3 27.5 13.8 0 1000	BuV/m)	11200. Frequenc	16300.	21400.	26500	
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBµV	Factor dB	Actual FS dBµV/m	Limit @3m dBµV/m	Margin dB
4874.000 4874.000	Average Peak	34.37 39.50	-3.00 -3.00	31.37 36.50	54.00 74.00	-22.63 -37.50

Test Site

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·E2/2018/10100-01

Report Number

Operation Mode Test Frequency	:802.11g :2437 MHz	5100-01		Test Date Temp./Humi.	:2020-12-16 :20.2/65	
		`		•		
Test Mode	:TX CH MIE)		Antenna Pol.	:Horizontal	
EUT Pol	:H plan			Engineer	:Kailin Lee	
110 Level (d	BuV/m)	, , ,				
96.3						
82.5						
68.8						
55.0						
41.3	2					
27.5						
1000	6100.	11200. Frequenc	16300. ;y (MHz)	21400.	26500	
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.000	Average	34.17	-3.00	31.17	54.00	-22.83
4874.000	Peak	39.39	-3.00	36.39	74.00	-37.61

Test Site

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:E2/2018/10100-01

Report Number

Operation Mode Test Frequency	:802.11g :2462 MHz			Test Date Temp./Humi.	:2020-12-16 :20.2/65	
Test Mode	:TX CH HIG	GH		Antenna Pol.	:Vertical	
EUT Pol	:H plan			Engineer	:Kailin Lee	
110 Level (d 96.3 82.5 68.8 55.0 41.3 27.5 13.8	BuV/m)					
0 1000	6100.	11200. Frequenc	16300. у (MHz)	21400.	26500	
Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.000 4874.000	Average Peak	34.23 39.88	-3.00 -3.00	31.23 36.88	54.00 74.00	-22.77 -37.12
	, ean	00.00	0.00	00.00		02

Test Site

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·E2/2018/10100-01

Report Number

Operation Made	:EZ/2018/1	0100-01		Toot Data	1000 010 10	
Operation Mode	:802.11g			Test Date	:2020-12-16	
Test Frequency	:2462 MHz			Temp./Humi.	:20.2/65	
Test Mode	:TX CH HIG	GH		Antenna Pol.	:Horizontal	
EUT Pol	:H plan			Engineer	:Kailin Lee	
110 Level (d) 96.3	BuV/m)					
82.5						
68.8						
55.0						
41.3	2					
27.5	1					
13.8						
01000	6100.	11200. Frequency	16300. y (MHz)	21400.	26500	
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.000	Average	33.82	-3.21	30.61	54.00	-23.39
4924.000	Peak	41.14	-3.21	37.93	74.00	-36.07

Test Site

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:E2/2018/10100-01

Report Number

Operation Mode Test Frequency Test Mode EUT Pol	:802.11n20 :2412 MHz :TX CH LO :H plan			Test Date Temp./Humi. Antenna Pol. Engineer	:2020-12-16 :20.9/62 :Vertical :Kailin Lee	
110 Level (d) 96.3 82.5 68.8 55.0 41.3 27.5 13.8 0 1000	BuV/m)	11200. Frequency	16300. / (MHz)	21400.	26500	
Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.000 4824.000	Average Peak	29.22 40.56	-3.13 -3.13	26.09 37.43	54.00 74.00	-27.91 -36.57

Test Site

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·E2/2018/10100-01

Report Number

	:E2/2018/1					
Operation Mode	:802.11n20			Test Date	:2020-12-16	
Test Frequency	:2412 MHz			Temp./Humi.	:20.9/62	
Test Mode	:TX CH LO	W		Antenna Pol.	:Horizontal	
EUT Pol	:H plan			Engineer	:Kailin Lee	
Lovol (d)	Bull(m)					
110 Level (dl	Buv/m)					
96.3						
82.5						
68.8						
55.0						
41.3	2					
27.5	1					
13.8						
1000	6100.	11200. Frequency	16300. (MHz)	21400.	26500	
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.000	Average	29.06	-3.13	25.93	54.00	-28.07
4824.000	Peak	40.83	-3.13	37.70	74.00	-36.30

Test Site

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·E2/2018/10100-01

Report Number

		:EZ/2018/10					
С	peration Mode	:802.11n20			Test Date	:2020-12-16	
Т	est Frequency	:2437 MHz			Temp./Humi.	:20.9/62	
Т	est Mode	:TX CH MI	C		Antenna Pol.	:Vertical	
E	UT Pol	:H plan			Engineer	:Kailin Lee	
	110 Level (d	BuV/m)					
	96.3						
	82.5						
	68.8						
	55.0						
	41.3	2					
	27.5						
	13.8						
	9	6100.	11200.	16300.	21400.	26500	
	1000	0100.	Frequence	cy (MHz)	21400.	20500	
	Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Leve	l	FS	@3m	
_	MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
	4874.000	Average	29.21	-3.00	26.21	54.00	-27.79
	4874.000	Peak	40.48	-3.00	37.48	74.00	-36.52

Test Site

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Report Number Operation Mode Test Frequency Test Mode EUT Pol	:E2/2020/9 :802.11n20 :2437 MHz :TX CH MII :H Plan			Test Site Test Date Temp./Humi. Antenna Pol. Engineer	:966 Chamber D :2020-12-16 :20.9/62 :Horizontal :Kailin Lee	
100 Level (d) 87.5 75.0 62.5 50.0 37.5 25.0 12.5 0 1000	BuV/m)		16300. (MHz)	21400.	26500	
Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.000 4874.000	Average Peak	28.62 39.58	-3.00 -3.00	25.62 36.58	54.00 74.00	-28.38 -37.42

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:966 Chamber D



·E2/2018/10100-01

Report Number

Operation Mode Test Frequency Test Mode EUT Pol	:E2/2018/1 :802.11n20 :2462 MHz :TX CH HI0 :H Plan			Test Date Temp./Humi. Antenna Pol. Engineer	:2020-12-16 :20.9/62 :Vertical :Kailin Lee	
100 Level (d 87.5 75.0 62.5 50.0 37.5 25.0 12.5 0 1000	6100.	11200.	16300.	21400.	26500	
1000	6100.	Frequenc	(MHz)	21400.	26500	
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.000	Average	31.02	-3.21	27.81	54.00	-26.19
4924.000	Peak	42.09	-3.21	38.89	74.00	-35.11

Test Site

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Report Number Operation Mode Test Frequency Test Mode EUT Pol	:E2/2018/1 :802.11n20 :2462 MHz :TX CH HI0 :H Plan			Test Site Test Date Temp./Humi. Antenna Pol. Engineer	:966 Chamber D :2020-12-16 :20.9/62 :Horizontal :Kailin Lee	
100 Level (d 87.5 75.0 62.5 50.0 37.5 25.0 12.5 0 1000	BuV/m)	11200. Frequency	16300. y (MHz)	21400.	26500	
Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.000 4924.000	Average Peak	31.06 41.25	-3.21 -3.21	27.85 38.04	54.00 74.00	-26.15 -35.96

~ End of Report ~

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