TEST REPORT

FCC ID: 2AG87NM-DB-2M Product: Wi-Fi® Radio Transceiver Model No.: NM-DB-2M Additional Model No.: N/A Trade Mark: N/A Report No.: TCT200616E047 Issued Date: Aug. 06, 2020

Issued for:

Doodle Labs (SG) Pte Ltd

150 Kampong Ampat, KA Center, Suite 05-03, Singapore, 368324 Singapore

Issued By:

Shenzhen Tongce Testing Lab. 1B/F., Building 1, Yibaolai Industrial Park, Qiaotou, Fuyong, Baoan District, Shenzhen, Guangdong, China TEL: +86-755-27673339

FAX: +86-755-27673332

This test report was based on TCT200410E018; Only change antenna.

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I. Test Certification

Product:	Wi-Fi® Radio Transceiver	
Model No.:	NM-DB-2M	
Additional Model No.:	N/A	
Trade Mark:	N/A	
Applicant:	Doodle Labs (SG) Pte Ltd	
Address:	150 Kampong Ampat, KA Center, Suite 05-03, Singapore, 368324 Singapore	K
Manufacturer:	Doodle Labs (SG) Pte Ltd	
Address:	150 Kampong Ampat, KA Center, Suite 05-03, Singapore, 368324 Singapore	
Date of Test:	Apr. 12, 2020 – Aug. 05, 2020	
Applicable Standards:	FCC CFR Title 47 Part 15 Subpart E Section 15.407: 2016 KDB662911 D01 Multiple Transmitter Output v02r01r01 KDB789033 D02 General U-NII Test Procedures New Rules v02r01r01	K

The above equipment has been tested by Shenzhen Tongce Testing Lab. and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

 Tested By:
 Image: Mark
 Date:
 Aug. 05, 2020

 Brews Xu
 Brews Xu
 Date:
 Aug. 06, 2020

 Beryl Zhao
 Beryl Zhao
 Date:
 Aug. 06, 2020

 Approved By:
 JomSin
 Date:
 Aug. 06, 2020

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2. Test Result Summary

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Report No.: 101200010E047	Report	No.:	TCT200616E047
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Requirement	CFR 47 Section	Result	
Antenna requirement	§15.203	PASS	
AC Power Line Conducted Emission	§15.207	PASS	
Maximum Conducted Output Power	§15.407(a)	PASS	(c ⁴)
6dB Emission Bandwidth	§15.407(a)	PASS	
26dB Emission Bandwidth& 99% Occupied Bandwidth	§15.407(a)	PASS	
Power Spectral Density	§15.407(a)	PASS	
Restricted Bands around fundamental frequency	§15.407(a)	PASS	
Radiated Emission	§15.407(a)	PASS	
Frequency Stability	§15.407(g)	PASS	

Note:

- 1. PASS: Test item meets the requirement.
- 2. Fail: Test item does not meet the requirement.
- 3. N/A: Test case does not apply to the test object.
- 4. The test result judgment is decided by the limit of test standard.



3. EUT Description

Product:	Wi-Fi® Radio Transceiver	5
Model No.:	NM-DB-2M	
Additional Model No.:	N/A	
Trade Mark:	N/A	
Operation Frequency:	Band 1: 5180 MHz -5240 MHz Band 3: 5745 MHz -5825 MHz	
Channel Bandwidth:	802.11a: 20MHz 802.11n: 20MHz, 40MHz	
Modulation Technology:	Orthogonal Frequency Division Multiplexing(OFDM)	
Modulation Type	256QAM, 64QAM, 16QAM, BPSK, QPSK	
EUT Type:	Indoor access point device	
Antenna Type:	paper presents antenna	
Antenna Gain:	Band1: 3.2dBi, Band3: 4.2dBi	
Power Supply:	DC 3.3V	

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

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Test Frequency each of channel

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			G
20N	1Hz		40MHz
Channel	Frequency	Channel	Frequency
36	5180	38	5190
40	5200	46	5230
48	5240		

Band 3

Band 1

20MHz			40MHz
Channel	Frequency	Channel	Frequency
149	5745	151	5755
157	5785	159	5795
165	5825		

Note:

In section 15.31(*m*), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Operating Environment:		
Temperature:	25.0 °C	
Humidity:	56 % RH	
Atmospheric Pressure:	1010 mbar	
Fest Mode:		
Engineering mode:	Keep the EUT in continuo by select channel and mo value of duty cycle is 100	dulations(The
During the test, each emission was m vorking, investigated all operating mo considered typical configuration to ob cables, rotating the turntable, varying	odes, rotated about all 3 axis (X tain worst position, manipulatin	, Y & Z) and g interconnecting
vorking, investigated all operating mo considered typical configuration to ob cables, rotating the turntable, varying and vertical polarizations. The emissi ollowing pages. We have verified the construction and vere carried out with the EUT in trans	odes, rotated about all 3 axis (X tain worst position, manipulatin antenna height from 1m to 4m ons worst-case are shown in Te	, Y & Z) and g interconnecting in both horizontal est Results of the Il the test modes
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vorking, investigated all operating mo considered typical configuration to ob- cables, rotating the turntable, varying and vertical polarizations. The emissi- ollowing pages. We have verified the construction and vere carried out with the EUT in trans- eport and defined as follows: Per-scan all kind of data rate in low vas worst case. Mode 802.11a(SISO)	bdes, rotated about all 3 axis (X tain worst position, manipulatin antenna height from 1m to 4m ons worst-case are shown in Te d function in typical operation. A smitting operation, which was sh rest channel, and found the fo Data rate 6 Mbps	, Y & Z) and g interconnecting in both horizontal est Results of the II the test modes nown in this test Collow list which it
vorking, investigated all operating mo considered typical configuration to ob- cables, rotating the turntable, varying and vertical polarizations. The emissi- ollowing pages. We have verified the construction and vere carried out with the EUT in trans- eport and defined as follows: Per-scan all kind of data rate in low vas worst case. Mode 802.11a(SISO) 802.11n(HT20) (MIMO)	bdes, rotated about all 3 axis (X tain worst position, manipulatin antenna height from 1m to 4m ons worst-case are shown in Te d function in typical operation. A smitting operation, which was sh rest channel, and found the fo Data rate 6 Mbps 6.5 Mbps	, Y & Z) and g interconnecting in both horizontal est Results of the II the test modes nown in this test Collow list which it
vorking, investigated all operating mo considered typical configuration to ob- cables, rotating the turntable, varying and vertical polarizations. The emissi- ollowing pages. We have verified the construction and vere carried out with the EUT in trans- eport and defined as follows: Per-scan all kind of data rate in low vas worst case. Mode 802.11a(SISO) 802.11n(HT20) (MIMO) 802.11n(HT40) (MIMO)	bdes, rotated about all 3 axis (X tain worst position, manipulatin antenna height from 1m to 4m ons worst-case are shown in Te d function in typical operation. A smitting operation, which was sh rest channel, and found the fo Data rate 6 Mbps 6.5 Mbps	, Y & Z) and g interconnecting in both horizontal est Results of the II the test modes nown in this test Collow list which it Collow list which it

4.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
Laptop	ThinkPad T430	PO1908049	1	Lenovo
AC Adapter	92P1154	11S92P1154Z1ZD XP7CL957	1	Lenovo

Setting level of test tool

802	.11a	802.11	n (HT20)	802.11r	n(HT40)
Frequency (MHz)	Setting level	Frequency (MHz)	Setting level	Frequency (MHz)	Setting level
5180	17	5180	8	5190	8
5200	17	5200	8	5230	8
5240	18	5240	9		
5745	20	5745	20		
5785	20	5785	20	~	
5825	20	5825	20		



5. Facilities and Accreditations

5.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

• FCC - Registration No.: 645098

Shenzhen Tongce Testing Lab

The 3m Semi-anechoic chamber has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

 IC - Registration No.: 10668A-1 The 3m Semi-anechoic chamber of Shenzhen TCT Testing Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing

5.2. Location

Shenzhen Tongce Testing Lab

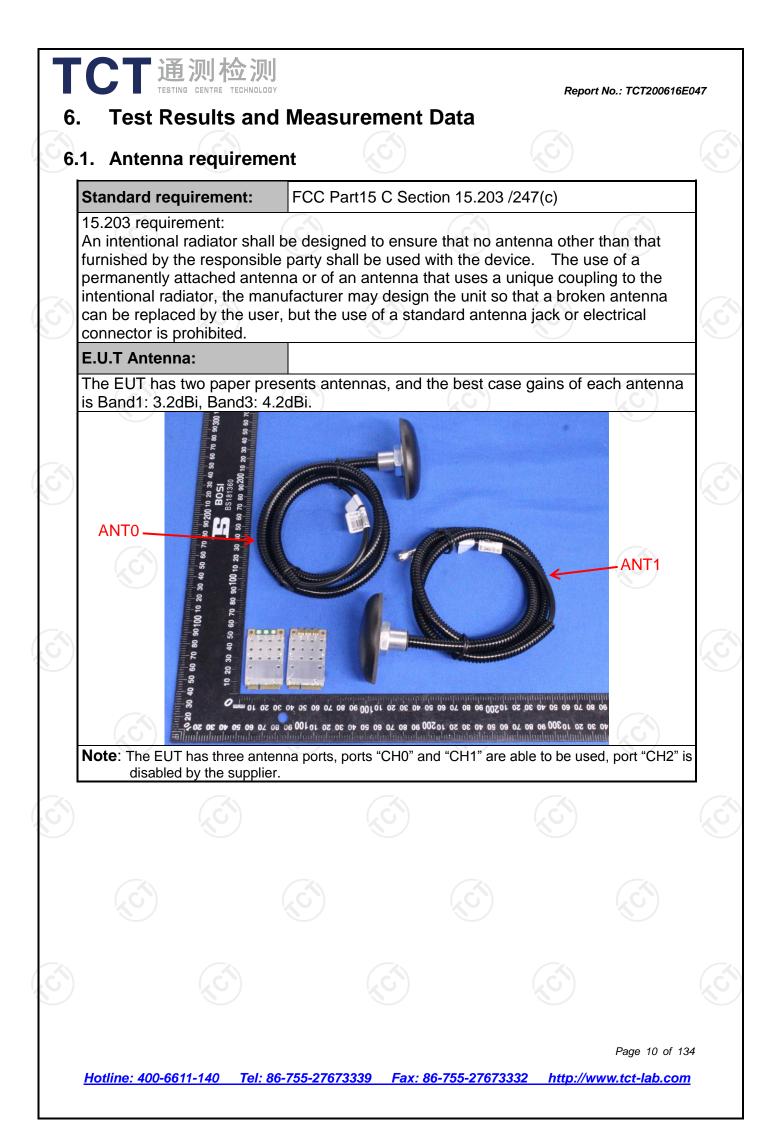
Address: 1B/F., Building 1, Yibaolai Industrial Park, Qiaotou, Fuyong, Baoan District, Shenzhen, Guangdong, China

TEL: +86-755-27673339

5.3. Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	MU	
1	Conducted Emission	±2.56dB	
2	RF power, conducted	±0.12dB	
3	Spurious emissions, conducted	±0.11dB	
4	All emissions, radiated(<1G)	±3.92dB	1
5	All emissions, radiated(>1G)	±4.28dB	
6	Temperature	±0.1°C	
7	Humidity	±1.0%	C.



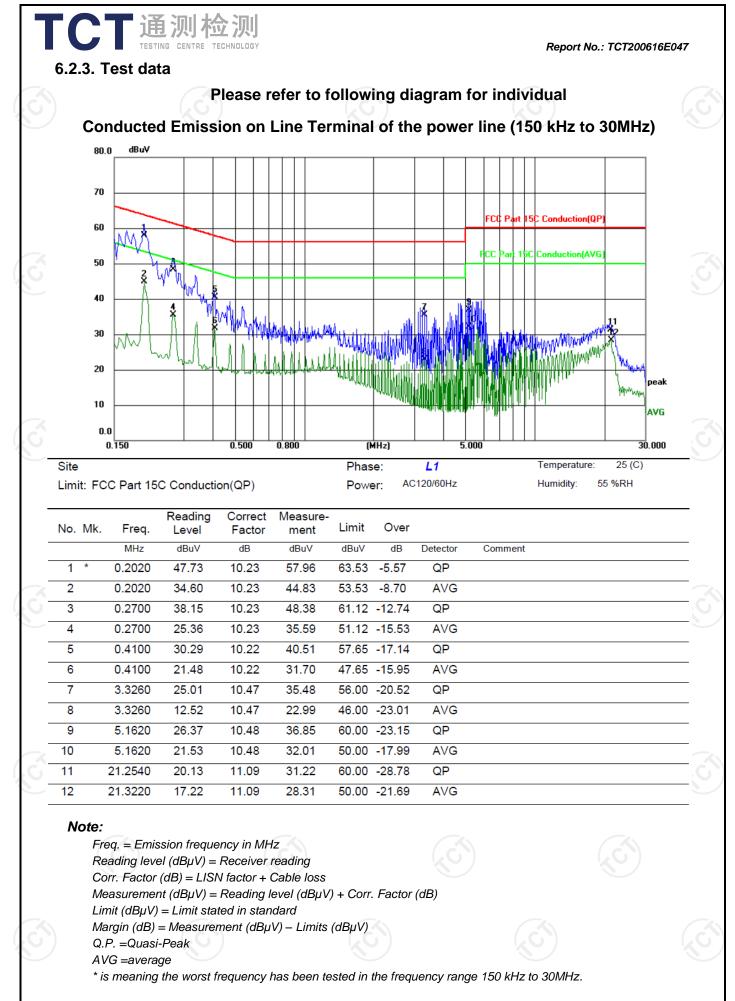
2. Conducted Emissi 2.1. Test Specification	on		
Fest Requirement:	FCC Part15 C Section	15.207	
Fest Method:	ANSI C63.10:2013	$\langle \mathcal{C} \rangle$	$\left(\mathcal{C}^{\prime}\right)$
Frequency Range:	150 kHz to 30 MHz		
Receiver setup:	RBW=9 kHz, VBW=30) kHz, Sweep time	=auto
.imits:	Frequency range (MHz) 0.15-0.5 0.5-5 5-30	Limit (c Quasi-peak 66 to 56* 56 60	dBuV) Average 56 to 46* 46 50
ſest Setup:	40cm E.U.T AC powe Test table/Insulation plane Remark: E.U.T: Equipment Under Test LISN: Line Impedence Stabilization N Test table height=0.8m	EMI Receiver	— AC power
Fest Mode:	Tx Mode		
	 The E.U.T and simple power through a line (L.I.S.N.). This pre- impedance for the noise of the n	e impedance stab ovides a 50ohm neasuring equipme ces are also conne	ilization network /50uH coupling ent. ected to the main a 50ohm/50uH hination. (Please
Test Procedure:	 refer to the block photographs). 3. Both sides of A.C. conducted interfere emission, the relative the interface cables ANSI C63.10: 2013 	diagram of the line are checke nce. In order to fir e positions of equi s must be chang	d for maximum nd the maximum ipment and all of ed according to

6.2.2. Test Instruments

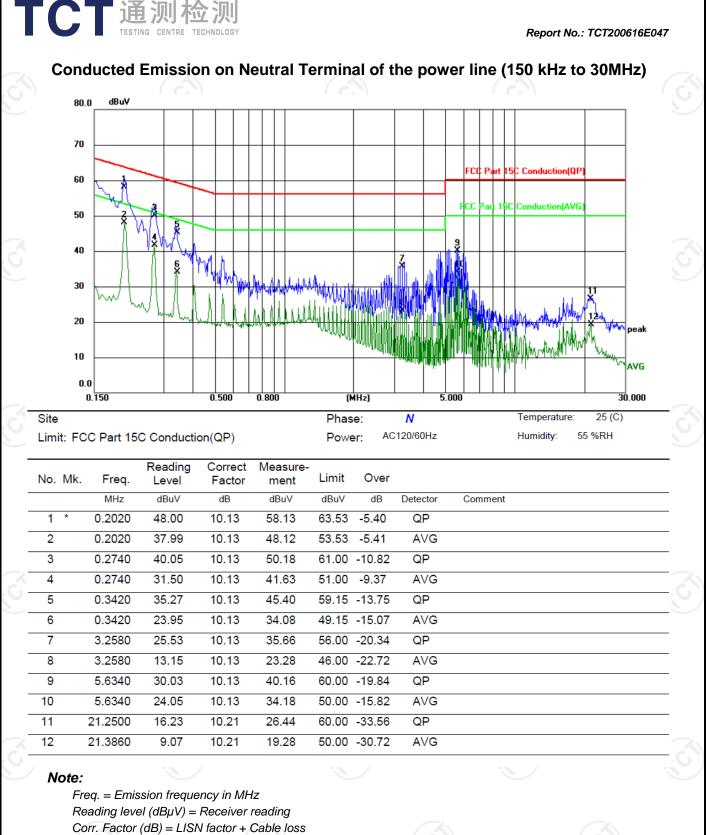
Conducted Emission Shielding Room Test Site (843)							
Equipment	Manufacturer	Model	Serial Number	Calibration Due			
Test Receiver	R&S	ESPI	101402	Jul. 27, 2021			
LISN	Schwarzbeck	NSLK 8126	8126453	Sep. 11, 2020			
Coax cable (9KHz-30MHz)	тст	CE-05	N/A	Sep. 08, 2020			
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A			

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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Measurement $(dB\mu V) = Reading level (dB\mu V) + Corr. Factor (dB)$

 $Limit (dB\mu V) = Limit stated in standard$

Margin (dB) = Measurement (dB μ V) – Limits (dB μ V)

Q.P. =Quasi-Peak

AVG =average

* is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.

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3.1. Test Specification							
Test Requirement:	FCC Part15 E Section 2.1046	on 15.407(a)& Part 2 J Section					
Fest Method:	KDB789033 D02 Ge	KDB662911 D01 Multiple Transmitter Output v02r01r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section E					
	Frequency Band (MHz)	Limit					
	5180 - 5240	30dBm(1W)					
Limit:	5260 - 5320	24dBm(250mW) or 11 dBm + 10 log B, B is the 26 dB emission bandwidth in megahertz					
	5470 - 5725	24dBm(250mW) or 11 dBm + 10 log B, B is the 26 dB emission bandwidth in megahertz					
	5745 - 5825	30dBm(1W)					
Test Setup:	Power meter	EUT					
Test Mode:	Transmitting mode w	vith modulation					
Test Procedure:	KDB789033 D02 Rules v02r01 Set 2. The RF output of I meter by RF cabl compensated to t 3. Set to the maximu EUT transmit cor	EUT was connected to the power le and attenuator. The path loss was the results for each measurement. Im power setting and enable the ntinuously. ducted output power and record the					
Test Result:	PASS						
Remark:	+10log(1/x) X is duty	ower= measurement power / cycle=1, so 10log(1/1)=0 ower= measurement power					

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6.3.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Sep. 11, 2020
Power Meter	Agilent	E4418B	GB43312526	Sep. 08, 2020
Power Sensor	Agilent	E9301A	MY41497725	Sep. 08, 2020
4 Ch. Simultaneous Sampling 14 Bits 2 MS/s	Agilent	U2531A	N/A	Sep. 08, 2020
Combiner Box	Ascentest	AT890-RFB	N/A	Sep. 08, 2020

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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6.3.3. Test Data

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Mode Test channel	Test channel	Maximur Ou	Limit	Result		
	Ant0	Ant1	Total	(dBm)	rtoount	
11a	CH36	17.41	16.93	/	30	PASS
11a	CH40	17.07	16.60	/	30	PASS
11a	CH48	17.24	17.47	1	30	PASS
11n(HT20)	CH36	17.85	17.15	20.52	30	PASS
11n(HT20)	CH40	17.50	17.08	20.31	30	PASS
11n(HT20)	CH48	17.89	17.32	20.62	30	PASS
11n(HT40)	CH38	17.54	17.20	20.38	30	PASS
11n(HT40)	CH46	17.44	17.69	20.58	30	PASS

Refer to KDB 662911 D01 Multiple Transmitter Output v02r01:

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \le 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths \geq 40 MHz for any NANT;

Array Gain = $5 \log(N_{ANT}/N_{SS}) dB \text{ or } 3 dB$, whichever is less, for 20-MHz channel widths with $N_{ANT} \ge 5$. Directional gain = $G_{ant} + Array Gain = 3.2dBi$, so limit of conducted output power is 1W(30dBm)

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Maximum Conducted (Average) Limit Output Power (dBm) Mode Test channel Result (dBm) Ant0 Ant1 Total CH149 19.55 19.23 PASS 11a 1 30 11a CH157 20.02 19.93 1 30 PASS 11a CH165 18.85 18.99 / 30 PASS 11n(HT20) CH149 19.27 22.23 PASS 19.17 30 11n(HT20) CH157 19.43 19.69 22.57 30 PASS PASS 11n(HT20) CH165 18.89 18.93 21.92 30 PASS 11n(HT40) CH151 17.97 17.98 20.99 30 11n(HT40) CH159 18.74 21.42 30 PASS 18.06

Refer to KDB 662911 D01 Multiple Transmitter Output v02r01:

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \le 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths \geq 40 MHz for any NANT;

Array Gain = $5 \log(N_{ANT}/N_{SS}) dB$ or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \ge 5$. Directional gain = $G_{ant} + Array Gain = 4.2dBi$, so limit of conducted output power is 1W(30dBm)

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Configuration Band 3 (5745 - 5825 MHz) / Antenna 0+Antenna 1

4. 6dB Emission Band	dwidth
6.4.1. Test Specification	
Test Requirement:	FCC CFR47 Part 15 Section 15.407(e)& Part 2 J Section 2.1049
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C
Limit:	>500kHz
Test Setup:	Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C Set to the maximum power setting and enable the EUT transmit continuously. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth must be greater than 500 kHz. Measure and record the results in the test report.
Test Result:	PASS

6.4.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Sep. 11, 2020
4 Ch. Simultaneous Sampling 14 Bits 2 MS/s	Agilent	U2531A	N/A	Sep. 08, 2020
Combiner Box	Ascentest	AT890-RFB	N/A	Sep. 08, 2020

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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6.5. 26dB Bandwidth and 99% Occupied Bandwidth

6.5.1. Test Specific	cation
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Test Requirement:	47 CFR Part 15C Section 15.407 (a)& Part 2 J Section 2.1049
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section D
Limit:	No restriction limits
Test Setup:	
Test Mode:	Spectrum Analyzer Eur Transmitting mode with modulation Image: Constraint of the second sec
Test Procedure:	 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section D Set to the maximum power setting and enable the EUT transmit continuously. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 1% to 5% of the OBW. Set the Video bandwidth (VBW) = 3 *RBW. In order to make an accurate measurement. Measure and record the results in the test report.
Test Result:	PASS

6.5.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Sep. 11, 2020
4 Ch. Simultaneous Sampling 14 Bits 2 MS/s	Agilent	U2531A	N/A	Sep. 08, 2020
Combiner Box	Ascentest	AT890-RFB	N/A	Sep. 08, 2020

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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6.6. Power Spectral Density

5.6.1. Test Specification		
Test Requirement:	FCC Part15 E Section 15.	.407 (a)
Test Method:		Transmitter Output v02r01r01 UNII Test Procedures New
Limit:	≤17.00dBm/MHz for Band ≤11.00dBm/MHz for Band ≤30.00dBm/500KHz for B	
Test Setup:		
	Spectrum Analyzer	EUT
Test Mode:	Transmitting mode with m	odulation
Test Procedure:	view the entire emission b 1. Set RBW = 510 kHz/1 f time = Auto, Detector = RI 2. Allow the sweeps to con 3. Use the peak marker fur maximum amplitude level 4. The E.I.R.P spectral de method. At a test site that procedures of ANSI C63.4	MHz, VBW \geq 3*RBW, Sweep MS. ntinue until the trace stabilizes. unction to determine the
Test Result:	PASS	

6.6.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Sep. 11, 2020
4 Ch. Simultaneous Sampling 14 Bits 2 MS/s	Agilent	U2531A	N/A	Sep. 08, 2020
Combiner Box	Ascentest	AT890-RFB	N/A	Sep. 08, 2020

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

6.6.3. Test data

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Mada	Test shannel	Power Spectral Density			Limit	Deault
Mode Test channel	Ant0	Ant1	Total	(dBm/MHz)	Result	
11a	CH36	6.33	5.87	/	17.0	PASS
11a	CH40	6.02	5.55	/	17.0	PASS
11a	CH48	6.24	6.51	1	17.0	PASS
11n(HT20)	CH36	6.24	5.61	8.95	16.79	PASS
11n(HT20)	CH40	5.98	5.71	8.86	16.79	PASS
11n(HT20)	CH48	6.47	6.03	9.27	16.79	PASS
11n(HT40)	CH38	3.02	2.89	5.97	16.79	PASS
11n(HT40)	CH46	3.10	3.59	6.36	16.79	PASS

Refer to KDB 662911 D01 Multiple Transmitter Output v02r01:

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(NANT/Nss) dB.

Directional gain = Gant + Array Gain = 6.21dBi, so limit of power spectral density in MIMO mode is 17- (6.21-6) =16.79.

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Configuration Band 3 (5745-5825MHz) / Antenna 0+Antenna 1
Power Spectral Density

1	Mode	Test channel	Pow	LIMIT	Result	2			
			Ant0	Ant1	Total	(dBm/500K Hz)	Result	Ě	
	11a	CH52	5.63	5.30	/	30.0	PASS		
	11a	CH60	6.08	5.96	1	30.0	PASS		
	11a	CH64	4.91	5.09	/	30.0	PASS		
	11n(HT20)	CH52	5.02	4.91	7.98	28.79	PASS		
	11n(HT20)	CH60	5.22	5.34	8.29	28.79	PASS		
	11n(HT20)	CH64	4.63	4.92	7.79	28.79	PASS		
	11n(HT40)	CH54	0.58	1.10	3.86	28.79	PASS	1	
	11n(HT40)	CH62	0.90	1.69	4.32	28.79	PASS	1	
L					/			4	

Refer to KDB 662911 D01 Multiple Transmitter Output v02r01:

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(NANT/Nss) dB.

Directional gain = Gant + Array Gain = 7.21dBi, so limit of power spectral density in MIMO mode is 30- (7.21-6) =28.79.

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<u>н с.</u>



Report No.: TCT200616E047 6.7. Band edge 6.7.1. Test Specification FCC CFR47 Part 15E Section 15.407 **Test Requirement:** ANSI C63.10 2013 Test Method: In un-restricted band: For Band 1&2A&2C: -27dBm/MHz For Band 3: Frequency Limit Frequency Limit (MHz) (dBm/MHz) (MHz) (dBm/MHz) -27 5850~5855 27~15.6 < 5650 5650~5700 -27~10 5855~5875 15.6~10 Limit: 5700~5720 10~15.6 5875~5925 10~-27 5720~5725 15.6~27 > 5925 -27 $E[dB\mu V/m] = EIRP[dBm] + 95.2$ @3m In restricted band: Detector Limit@3m Peak 74dBuV/m AVG 54dBµV/m Antenna Toy EUT **Test Setup:** m Antonna Test Receiver Test Mode: Transmitting mode with modulation 1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. 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. The antenna height is varied from one meter to four **Test Procedure:** 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 rota table was turned from 0 degrees to 360 degrees to find the

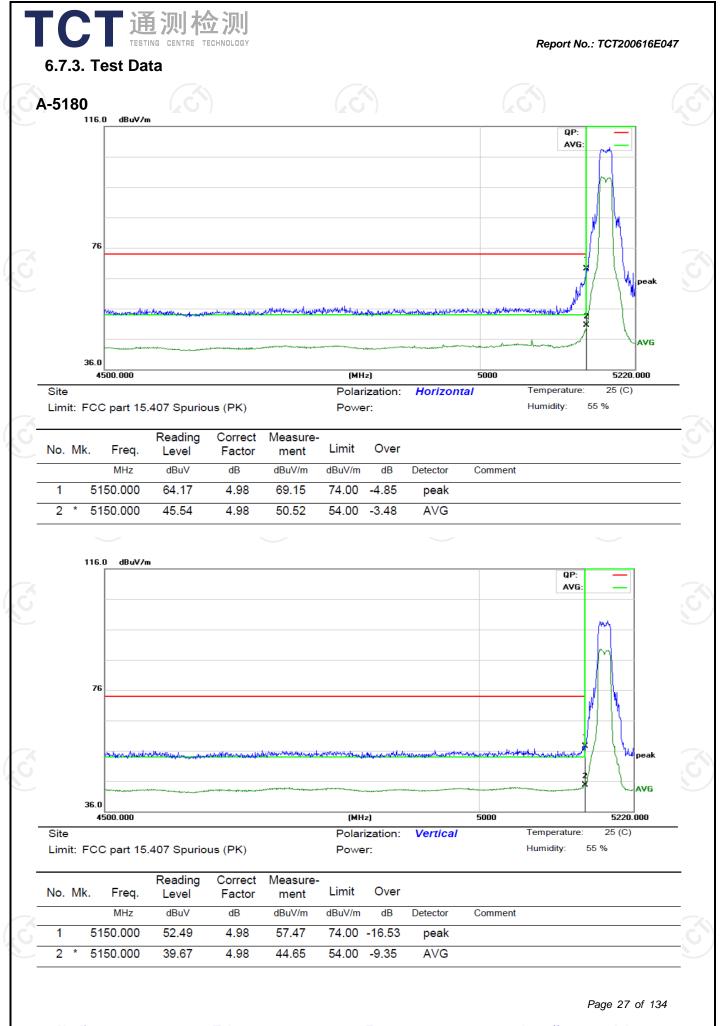
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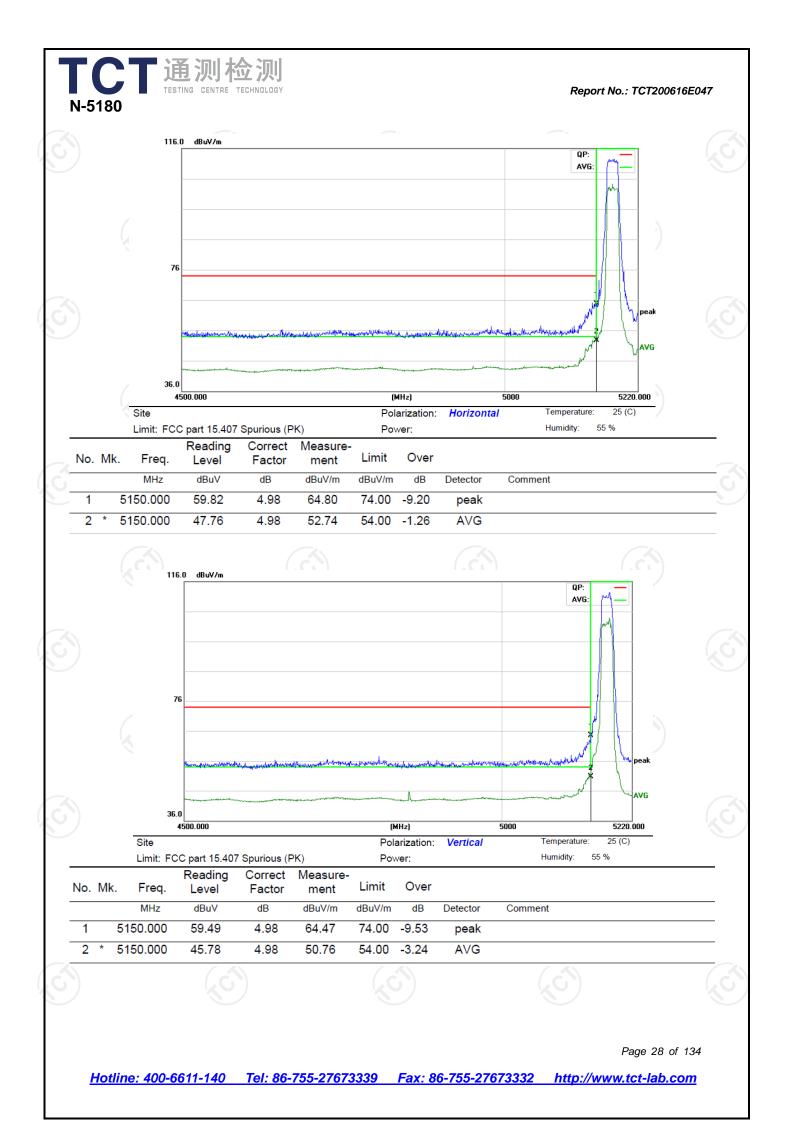
3	CT ii	ING CENTRE TECHNOI	 <i>Report No.: TCT200616E0.</i> maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasipeak or average method as specified and then reported in a data sheet. 					
т	est Result:		PASS					

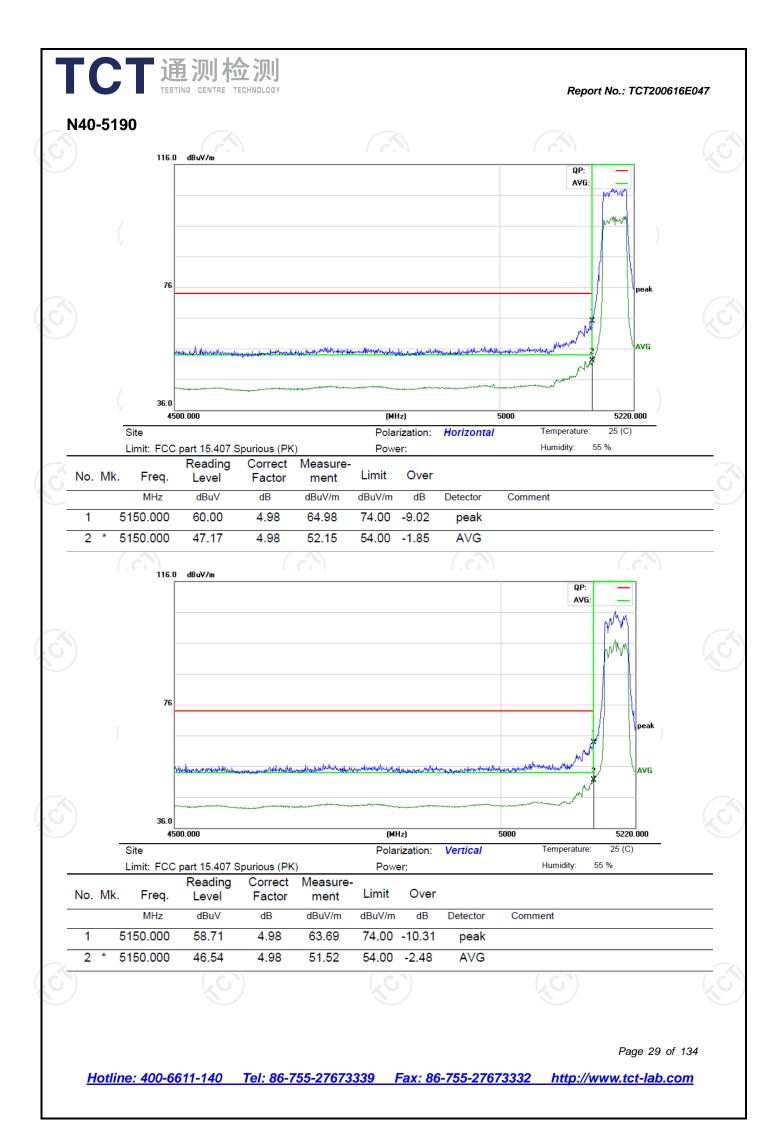
6.7.2. Test Instruments

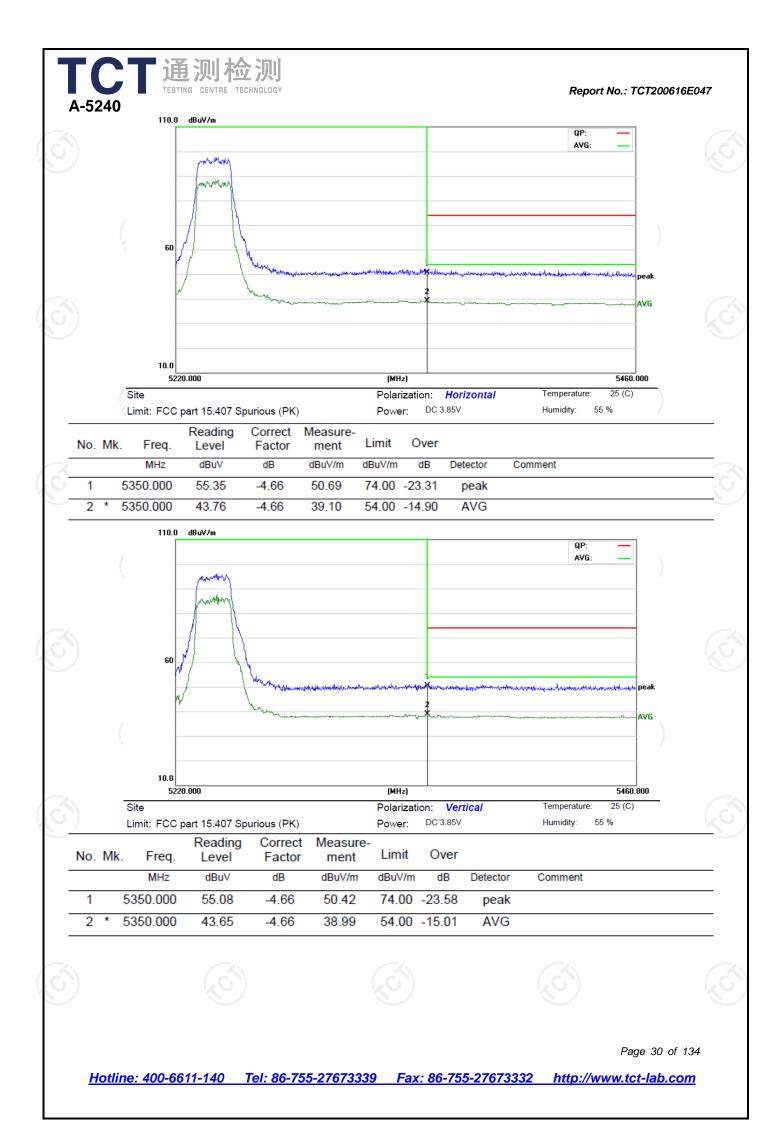
Radiated Emission Test Site (966)						
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due		
Test Receiver	ROHDE&SCHW ARZ	ESIB7	100197	Jul. 27, 2021		
Spectrum Analyzer	ROHDE&SCHW ARZ	FSQ40	200061	Sep. 11, 2020		
Spectrum Analyzer	Agilent	N9020A	MY49100619	Sep. 11, 2020		
Pre-amplifier	EM Electronics Corporation CO.,LTD	EM30265	07032613	Sep. 08, 2020		
Pre-amplifier	HP	8447D	2727A05017	Sep. 08, 2020		
Loop antenna	ZHINAN	ZN30900A	12024	Oct. 27, 2020		
Broadband Antenna	Schwarzbeck	VULB9163	340	Sep. 06, 2020		
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Sep. 06, 2020		
Horn Antenna	A-INFO	LB-180400-KF	J211020657	Sep. 06, 2020		
Coax cable (9KHz-40GHz)	тст	RE-high-02	N/A	Sep. 08, 2020		
Coax cable (9KHz-40GHz)	тст	RE-high-04	N/A	Sep. 08, 2020		
Antenna Mast	Keleto	CC-A-4M	N/A	N/A		
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A		

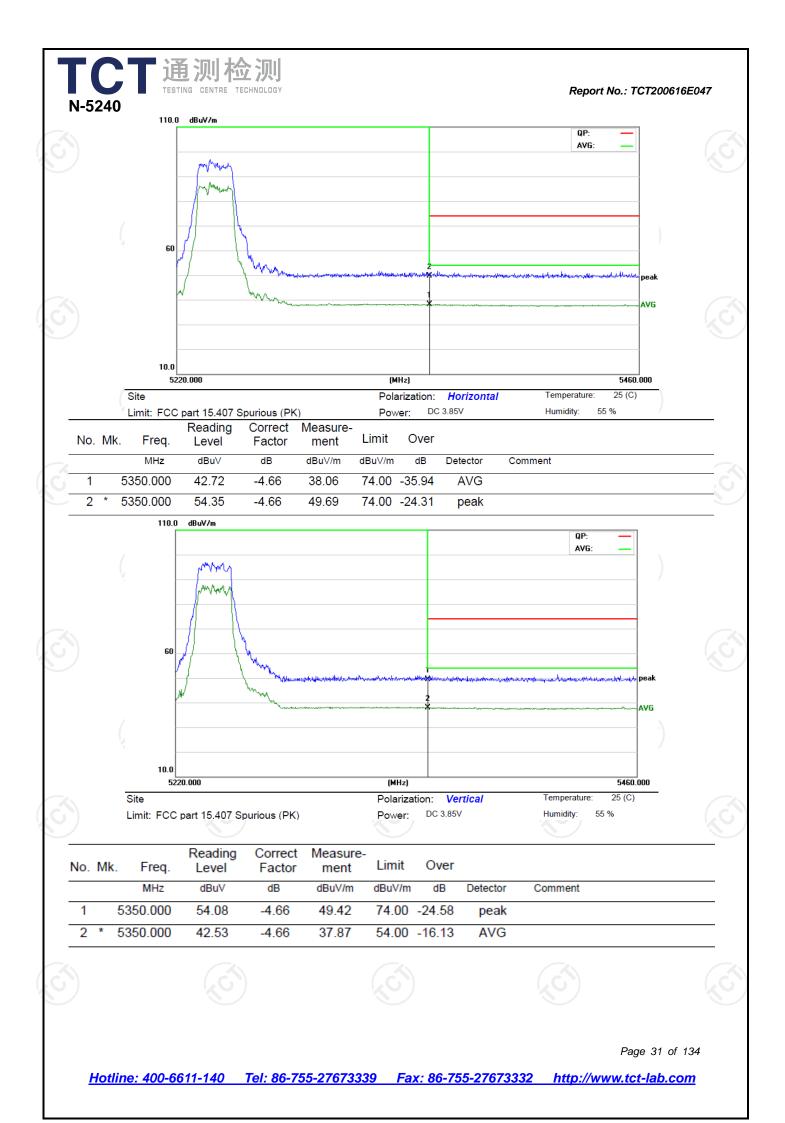
Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

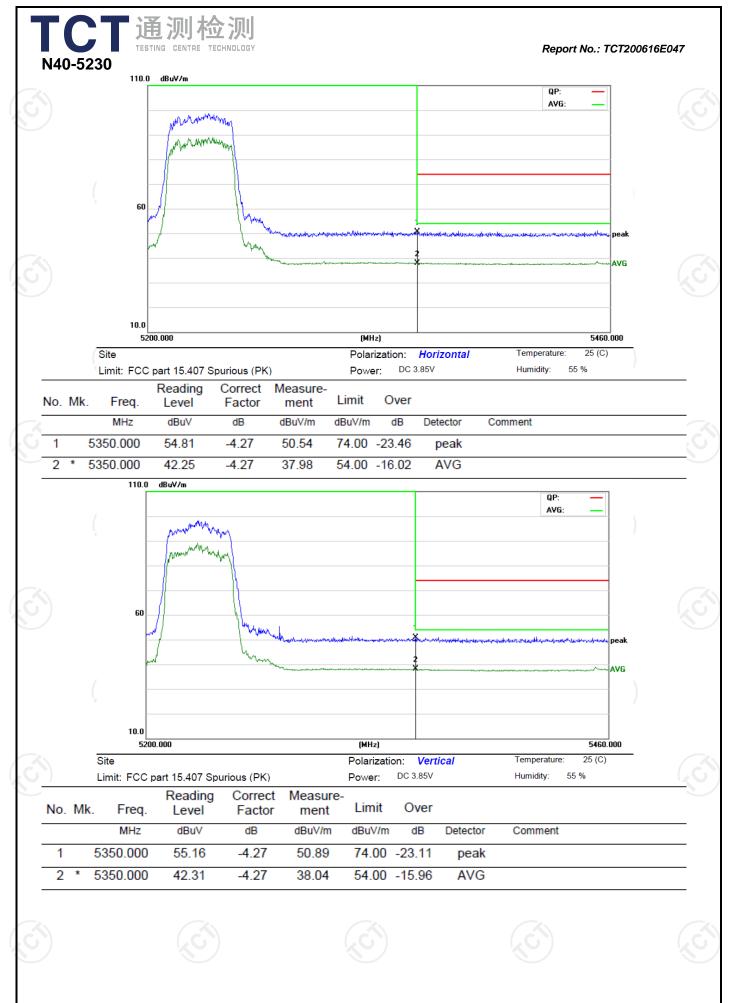




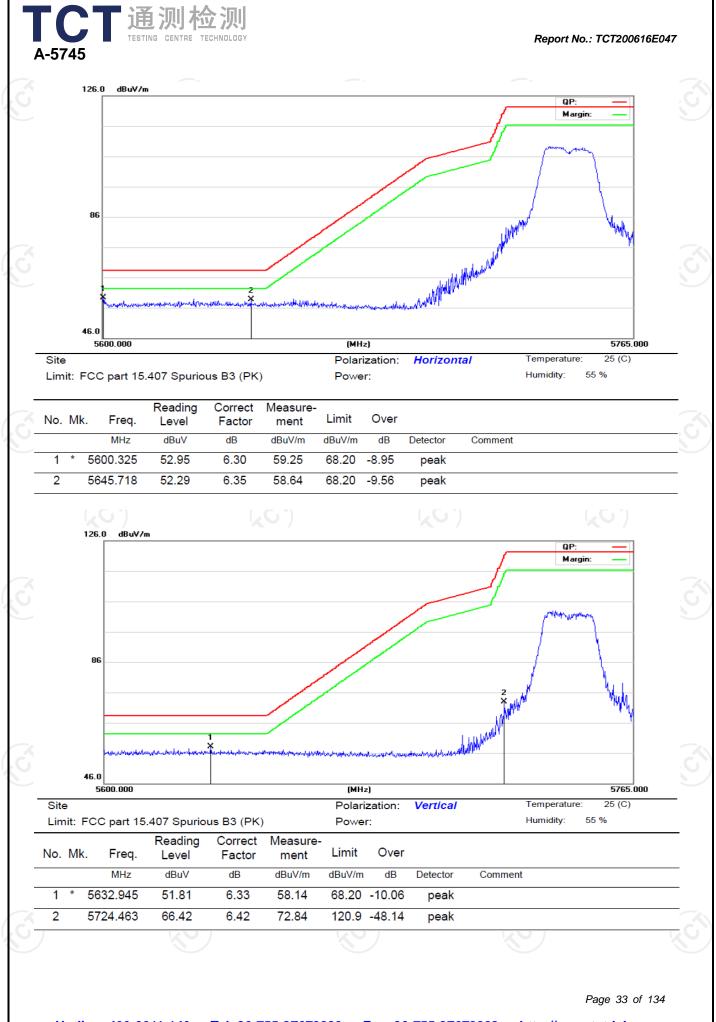


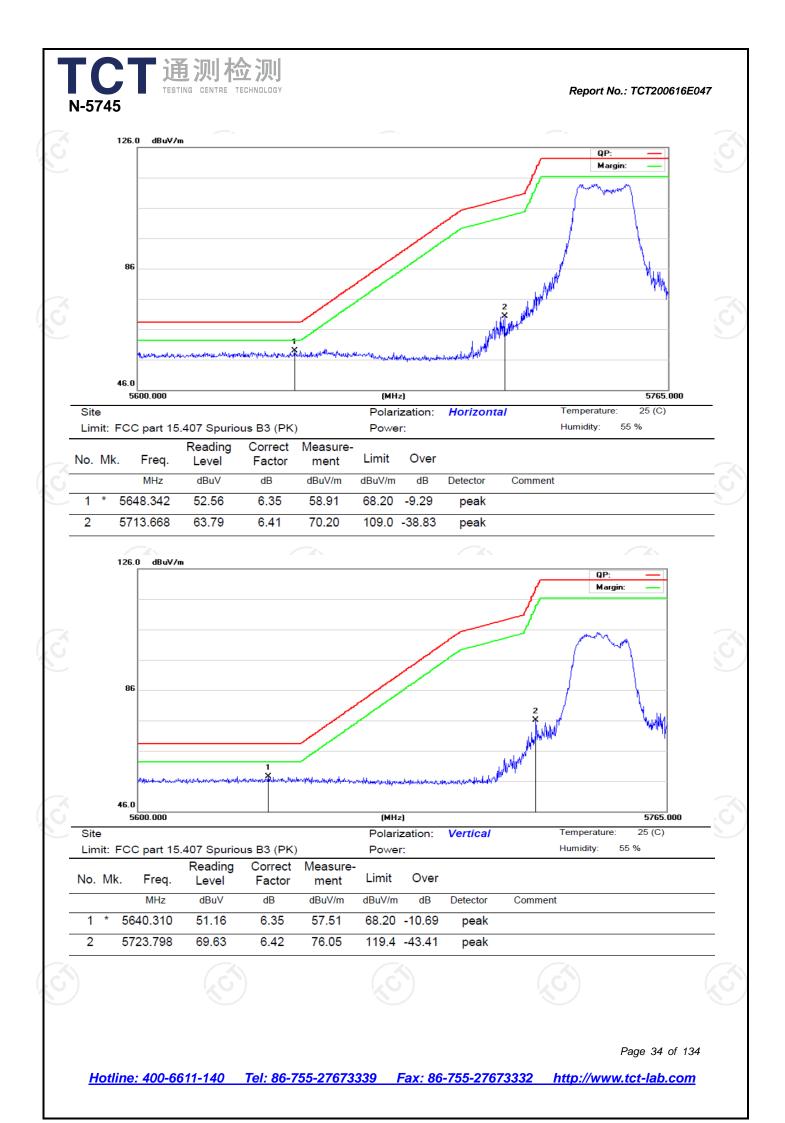


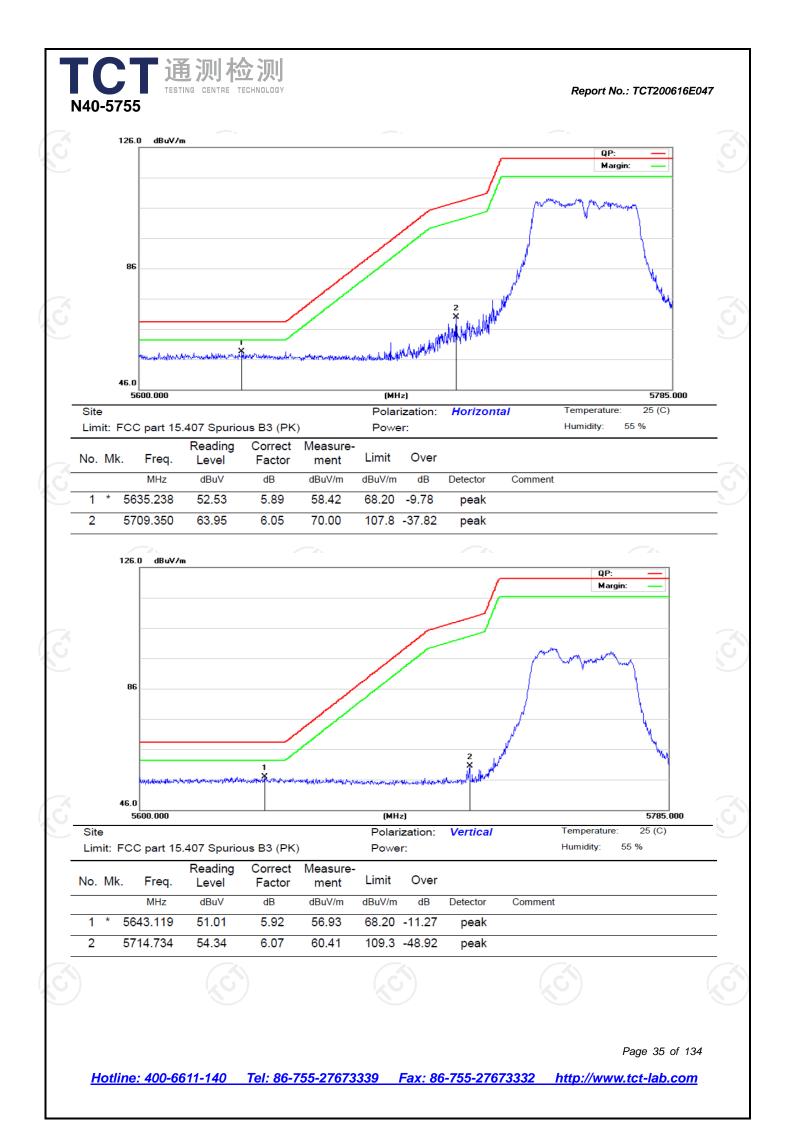


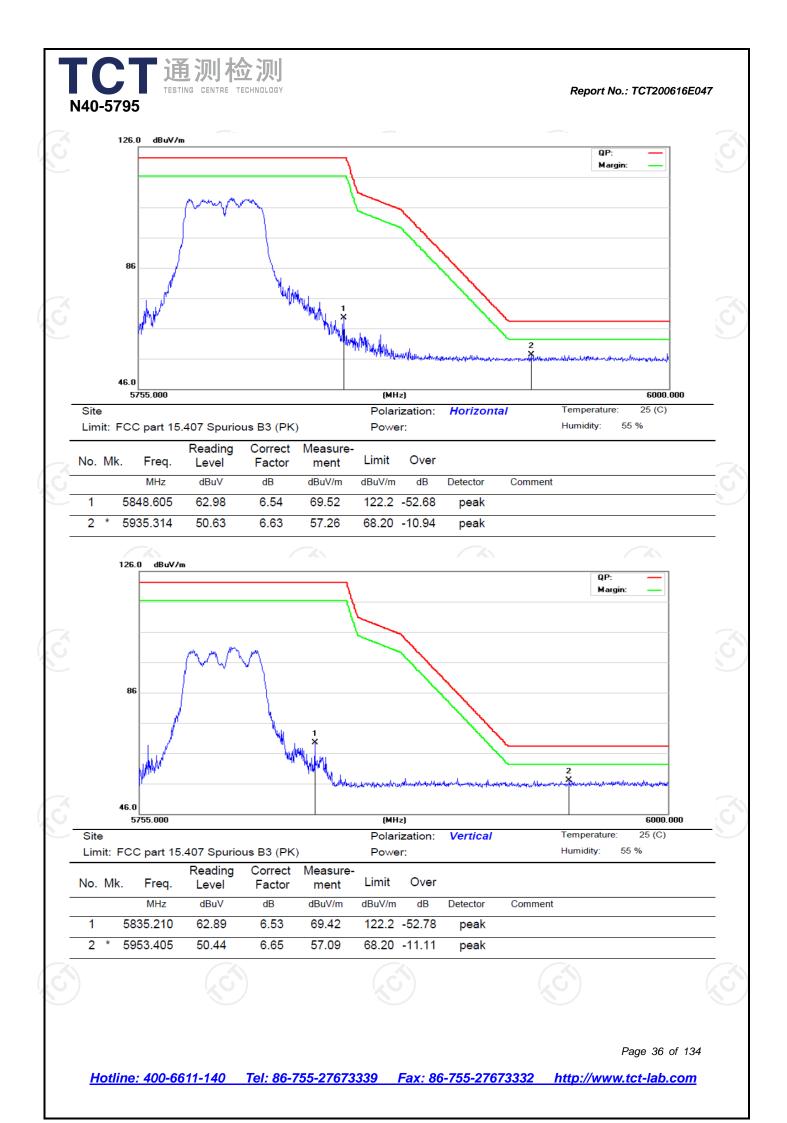


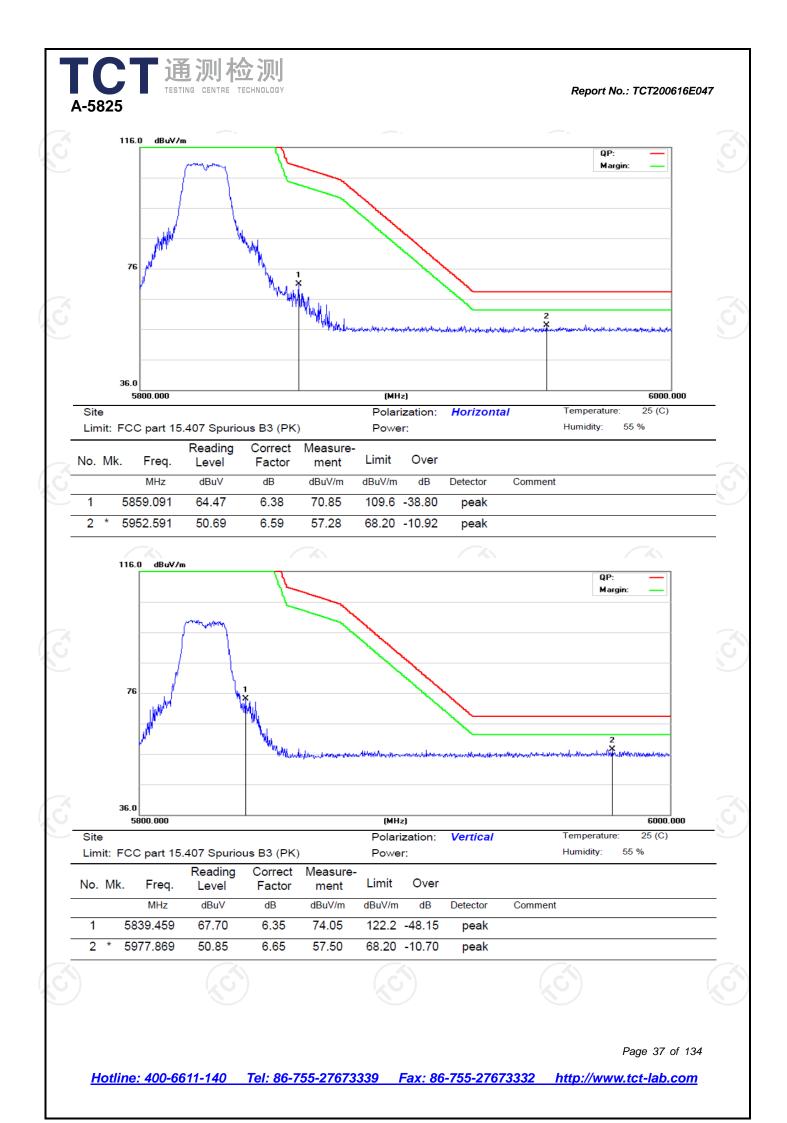
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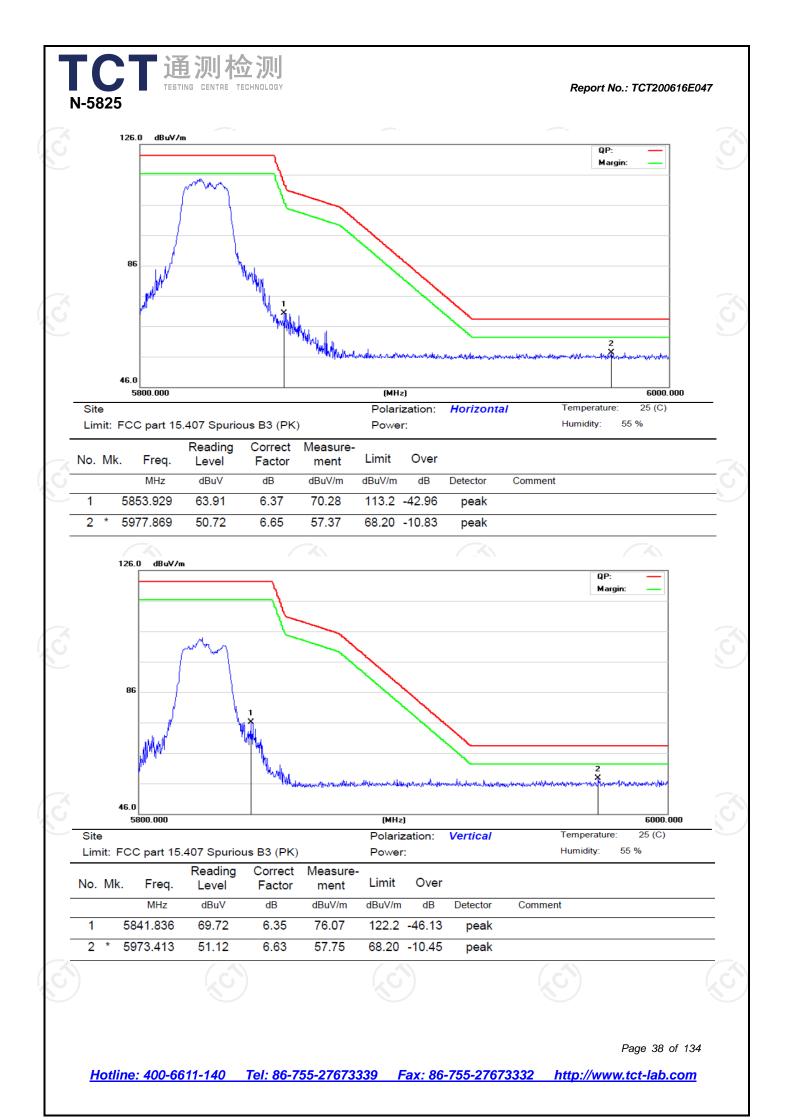












6.7.4. Unwanted Emissions

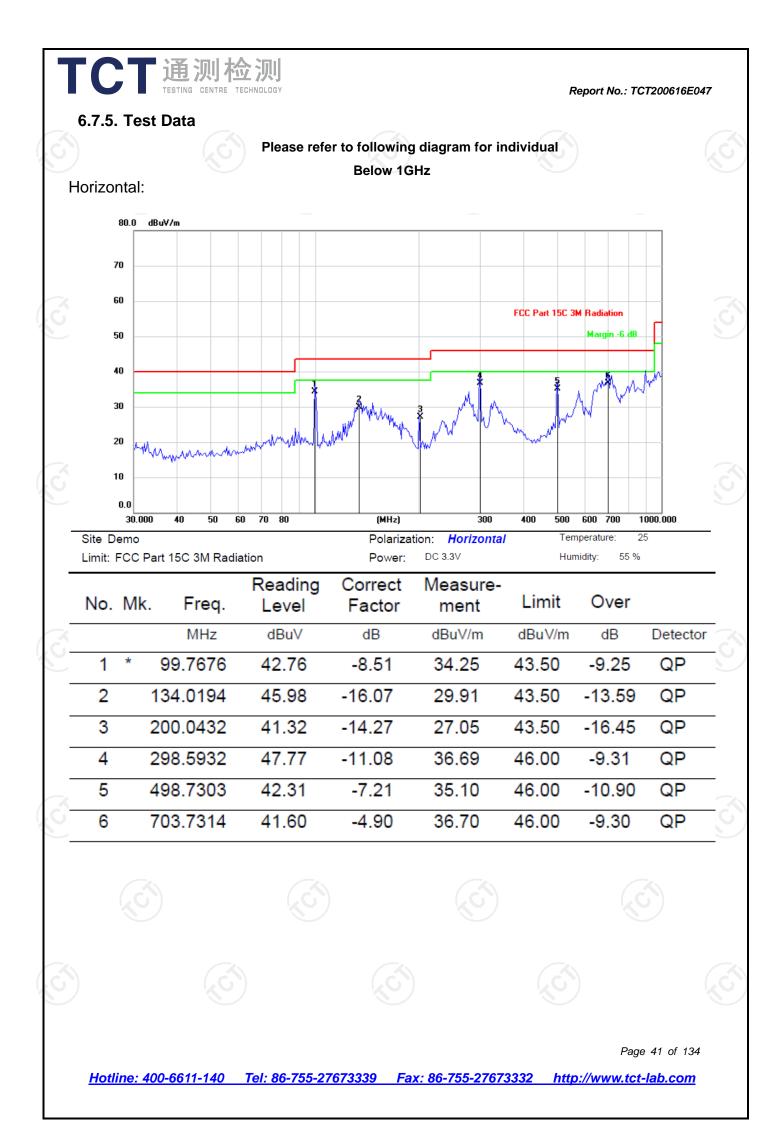
Report No.: TCT200616E047

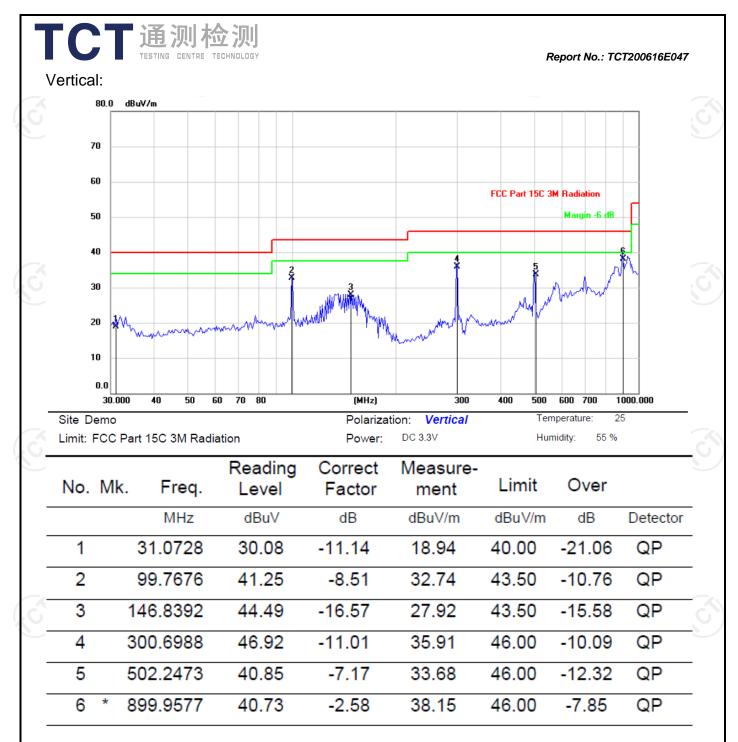
6.7.4.1. Test Specification

FCC CFR47 Part 15 Section 15.407 & 15.209 & 15.205					
KDB 789033	D02 v02r	01			
9kHz to 40G	Hz				
3 m					
Horizontal &	Vertical				
Transmitting	mode with	h modulat	tion		
Frequency	Detector	RBW	VBW	Remark	
9kHz- 150kHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value	
150kHz- 30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value	
30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value	
Above 16Hz	Peak	1MHz	3MHz	Peak Value	
	Peak	1MHz	10Hz	Average Value	
Frequency 0.009-0.490 0.490-1.705 1.705-30 30-88 88-216 216-960 Above 960		Field Strengt (microvolts/n 2400/F(KHz) 24000/F(KH: 30 100 150 200 500	h neter) z)	54dBµV/m Measurement Distance (meters) 300 30 30 30 3 3 3 3 3 3 3	
For radiated emissions below 30MHz Distance = 3m Computer Pre -Amplifier Computer Pre -Amplifier Receiver Ground Plane					
	9kHz to 40G 3 m Horizontal & Transmitting Frequency 9kHz-150kHz 150kHz-30MHz 30MHz-1GHz Above 1GHz Unwanted spectric for table, In restricted I Frequency 0.009-0.490 0.490-1.705 1.705-30 30-88 88-216 216-960 Above 960	9kHz to 40GHz 3 m Horizontal & Vertical Transmitting mode with Frequency Detector 9kHz-150kHz Quasi-peak 30MHz-1GHz Quasi-peak 30MHz-1GHz Quasi-peak Above 1GHz Peak Peak Unwanted spurious emper FCC Part15.205 sl general field strength below table, In restricted bands: Frequency Above 1G Above 1G Frequency 0.009-0.490 0.490-1.705 1.705-30 30-88 88-216 216-960 Above 960	3 m Horizontal & Vertical Transmitting mode with modulat Frequency Detector RBW 9kHz-150kHz Quasi-peak 200Hz 150kHz- Quasi-peak 9kHz 30MHz-1GHz Quasi-peak 120KHz Above 1GHz Peak 1MHz Peak 1MHz Peak 1MHz Unwanted spurious emissions f per FCC Part15.205 shall comp general field strength limits set below table, In restricted bands: Frequency Detect Above 1G Pea Above 1G Pea Above 1G Pea Above 1G AVC Frequency Field Strength 0.009-0.490 2400/F(KHz) 0.490-1.705 24000/F(KHz) 0.490-1.705 24000/F(KHz) 1.705-30 30 1.705-30 30 1	9kHz to 40GHz 3 m Horizontal & Vertical Transmitting mode with modulation	

TESTING CENTRE TECHNOL	Report No.: TCT200616E0
	EUT Antenna Tower EUT Antenna 4m 4m 4m 7um 0.8m 1m 1m 4m 1m 1m 4m 4m 1m 4m 4m 4m 4m 4m 4m 4m 4m 4m 4
	Above 1GHz
	ADOVE TORIZ
	 1. The EUT was placed on the top of a rotating table 0.8 meters above the groundat a 3 meter camber. The table was rotated 360 degrees todetermine the position of the highest radiation. 2. The EUT was set 3 meters away from the
Test Procedure:	 interference-receiving antenna, whichwas mounted on the top of a variable-height antenna tower. 3. The antenna height 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 thenthe antenna was tuned to heights from 1 meter to 4 meters and the rotatablewas turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect
	 Function and SpecifiedBandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limitspecified, then testing could be stopped and the peak values of the EUT wouldbe reported. Otherwise the emissions that did not have 10dB margin would bere-tested one by one using peak, quasi-peak or average method as specified andthen reported in a data sheet.
Test results:	PASS

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Note: 1. The low frequency, which started from 9KHz~30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported

2. Measurements were conducted in all three channels (high, middle, low) and all modulation (802.11a, 802.11n(HT20), 802.11n(HT40), and the worst case Mode (Lowest channel in band 1 and 11a) was submitted only.

3.Measurement (dBµV) = Reading level + Correction Factor , correction Factor= Antenna Factor + Cable loss – Pre-amplifier.

	TESTING	CENTRE TECH	NOLOGY				Rep	ort No.: TCT20	00616E047
			Ν	Iodulation 1	Type: Band	1			
					: 5180MHz	1			
rogueneu	Ant Dol	Peak	A) (reading	Correction	Emissio	on Level	Doold limit	A)/limit	Morain
requency (MHz)	Ant. Pol. H/V	reading	AV reading (dBuV)	Factor	Peak	AV	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margir (dB)
、 ,		(dBµV)	(ubuv)	(dB/m)	(dBµV/m)	(dBµV/m)	· · /		、 ,
10360	Н	41.47		8.02	49.49		68.2	54	-4.51
15540	H	40.51	-774-	9.87	50.38		74	54	-3.62
(Н								
10360	V	40.87		8.02	48.89		68.2	54	-5.11
15540	V	41.31		9.87	51.18		74	54	-2.82
	V								
			1		: 5200MHz	<u> </u>		1	
requency	Ant. Pol.	Peak	AV reading	Correction		on Level	Peak limit	AV limit	Margir
(MHz)	H/V	reading (dBµV)	(dBµV)	Factor (dB/m)	Peak (dBµV/m)	AV (dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)
10400	Н	40.36		7.97	48.33	(ubµ v/m)	68.2	54	-5.67
15600		40.30		9.83	40.33 51.59		74	54	-2.41
	GH		1.6			G			-2.41
1									
10400	V	41.41		7.97	49.38		68.2	54	-4.62
15600	V	40.36		9.83	50.19		74	54	-3.81
	V								
	•			11a CH48	: 5240MHz			1 1	
		Peak		Correction		on Level	De als liss it		N /
requency (MHz)	Ant. Pol. H/V	reading	AV reading (dBµV)	Factor	Peak	AV	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margir (dB)
· · /		(dBµV)	(ubµv)	(dB/m)	(dBµV/m)	(dBµV/m)	,		. ,
10480	Н	40.36		7.97	48.33		68.2	54	-5.67
15720	Н	41.76		9.83	51.59		74	54	-2.41
	Сн							1.4	
10480	V	41.41		7.97	49.38		68.2	54	-4.62
15720	V	40.36		9.83	50.19		74	54	-3.81
	V								
		Deal	11		136: 5180M		[1	
requency	Ant. Pol.	Peak reading	AV reading	Correction Factor	Peak	on Level AV	Peak limit		Margir
(MHz)	H/V	(dBµV)	(dBµV)	(dB/m)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)
10360	Н	41.38		8.02	49.40		68.2	54	-4.60
15540	H	40.45		9.87	50.32		74	54	-3.68
	H H					<u>~</u>			
		L		1	1		1		
10360	V	40.62		8.02	48.64		68.2	54	-5.36
15540	V	41.98		9.87	51.85		74	54	-2.15
	V			(
			11	n(HT20) CH	140: 5200M	Hz		· ·	
Toqueseu	Ant Dal	Peak		Correction		on Level	Dook limit	AV limit	Morain
requency (MHz)	Ant. Pol. H/V	reading	AV reading (dBµV)	Factor	Peak	AV	Peak limit (dBµV/m)	(dBµV/m)	Margir (dB)
、 ,		(dBµV)		(dB/m)	(dBµV/m)	(dBµV/m)	· · /	,	. ,
10400	H	40.36		7.97	48.22		68.2	54	-5.78
15600	<u>GH</u>	41.76	- 17 6	9.83	51.36	<u>, G</u>	74	54	-2.64
	H								
40.405		44.6-	1		40.00		6 6 6	· · · ·	
10400	V	41.25		7.97	49.22		68.2	54	-4.78
15600	V	40.22		9.83	50.05		74	54	-3.95
	V								(

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	TESTING				Emissia		Repo	ort No.: TCT20	0616E047
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
10480	Н	40.36		7.97	48.33		68.2	54	-5.67
15720	Н	41.76		9.83	51.59		74	54	-2.41
	Н								
10480	V	41.19		7.97	49.16		68.2	54	-4.84
15720	V	40.31		9.83	50.14		74	54	-3.86
	v								
			11	n(HT40) CF	138: 5190M	lHz			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	on Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
10380	Н	39.41		7.75	47.16		68.2	54	-6.84
15570	Н	40.62		9.87	50.49		74	54	-3.51
	H								
							•		
10380	V	40.33	X	7.75	48.08	<u> </u>	68.2	54	-5.92
15570	V	39.17		9.87	49.04		74	54	-4.96
	V								
			11	n(HT40) CH	146: 5230M	lHz			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	on Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
10460	Н	42.31		7.97	50.28		68.2	54	-3.72
15690	Н	41.18		9.83	51.01		74	54	-2.99
/	H		7 (
	(U')					χŪ')			
10460	V	41.82		7.97	49.79		68.2	54	-4.21
15690	V	40.79		9.83	50.62		74	54	-3.38
	V			1					

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier

2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)

- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 40GHz.
- 5. Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

					Type: Band				
			11a	(HT20) CH	149: 5745N	ЛНz			
Frequer (MHz)		Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
11490) H	40.28		8.09	48.37		74	54	-5.63
17235		39.51		9.67	49.18		68.2	54	-4.82
	Н				(
	Ke /		K				•	K	
11490) V	41.22		8.09	49.31		74	54	-4.69
17235	5 V	40.36		9.67	50.03		68.2	54	-3.97
	V								
					\sim	•			
			11a	(HT20) CH	157: 5785N	/Hz			
Frequer (MHz)		Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
11570	ЭН	40.55		8.10	48.65		74	54	-5.35
17355	5 C H	39.52	 6	9.65	49.17	<u> </u>	68.2	54	-4.83
	Н								
					I.		•		
11570) V	41.08		8.10	49.18		74	54	-4.82
17355	5 V	39.83		9.65	49.48		68.2	54	-4.52
	V	(((
						•			
			11a	(HT20) CH	161: 5825N	/IHz			
Frequer (MHz)		Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
11650		40.41	L.O	8.12	48.53		74	54	-5.47
17475		39.52		9.62	49.14		68.2	54	-4.86
	Н								
								,	
11650		41.4		8.12	49.52		74	54	-4.48
17475		40.52		9.62	50.14		68.2	54	-3.86
	V			0	/				
			110		151: 5745N	147			
		Peak		Correction	Fmissic	on Level			
requer (MHz)		reading (dBµV)	AV reading (dBµV)	Factor (dB/m)	Peak (dBµV/m)	AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
11510) Н	40.62		8.09	48.71		74	54	-5.29
17265		39.51		9.67	49.18		68.2	54	-4.82
	Н								
\sim					-				
11510) V	41.12		8.09	49.21		74	54	-4.79
11010									

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Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

9.67

49.46

68.2

54

-4.54

17265

V

V

39.79

TC	TESTING	测检 CENTRE TECHI	须り Nology				Rep	ort No.: TCT20	00616E047
	-	-	11n	(HT20) CH	157: 5785N	/IHz	-		
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
11570	Н	40.47		8.10	48.57		74	54	-5.43
17355	Н	38.76		9.65	48.41		68.2	54	-5.59
	Н								
11570	V	40.82	<u> </u>	8.10	48.92	<u> </u>	74	54	-5.08
17355	V	40.53		9.65	50.18		68.2	54	-3.82
	V								
10 A									
			11n		165: 5825N				
Frequency	Ant. Pol.	Peak	AV reading	Correction		on Level	Peak limit	AV limit	Margin
(MHz)	H/V	reading (dBµV)	(dBµV)	(dB/m)	Peak (dBµV/m)	AV (dBµV/m)	(dBµV/m)	(dBµV/m)	(dĔ)
11650	Н	40.31		8.12	48.43		74	54	-5.57
17475	Н	38.67	-7- ()	9.62	48.29		68.2	54	-5.71
()	,GН		C		(\mathcal{O})
					-, 1		1		
11650	V	40.73		8.12	48.85		74	54	-4.10
17475	V	40.17		9.62	49.79		68.2	54	-5.66
	V								
<u>,) </u>		(C_{1})		(1)			$(\Box G^{*})$		
	1		11n	· /	151: 5755N		1		
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Peak (dBµV/m)	on Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
11510	Н	40.53		8.09	48.62		74	54	-5.38
17265	с ^о н	38.91	L _k O	9.67	48.58	<u> </u>	68.2	54	-5.42
	Н								
							-		
11510	V	40.04		8.09	48.13		74	54	-5.87
11510 17265	V V	40.04 39.48		8.09 9.67	48.13 49.15		74 68.2	54 54	-5.87 -4.85
	-								
17265	V	39.48		9.67	49.15		68.2	54	-4.85
17265	V	39.48		9.67 (HT40) CH	49.15 159: 5795N	 /Hz	68.2	54	-4.85
17265	V	39.48		9.67 (HT40) CH	49.15 159: 5795N		68.2	54	-4.85
17265 Frequency	V V Ant. Pol.	39.48 Peak reading	 11n AV reading	9.67 (HT40) CH Correction Factor	49.15 159: 5795M Emissic Peak	 /IHz on Level AV	68.2 Peak limit	54 AV limit	-4.85 Margin
17265 Frequency (MHz)	V V Ant. Pol. H/V	39.48 Peak reading (dBµV)	 11n AV reading (dBµV)	9.67 (HT40) CH Correction Factor (dB/m)	49.15 159: 5795M Emissic Peak (dBµV/m)	 IHz on Level AV (dBµV/m)	68.2 Peak limit (dBµV/m)	54 AV limit (dBµV/m)	-4.85 Margin (dB)
17265 Frequency (MHz) 11590	V V Ant. Pol. H/V	39.48 Peak reading (dBµV) 39.51	 11n AV reading (dBµV) 	9.67 (HT40) CH Correction Factor (dB/m) 8.10	49.15 159: 5795M Emissic Peak (dBµV/m) 47.61	 IHz on Level AV (dBµV/m) 	68.2 Peak limit (dBμV/m) 74	54 AV limit (dBµV/m) 54	-4.85 Margin (dB) -6.39
17265 Frequency (MHz) 11590 17385	V V Ant. Pol. H/V H H	39.48 Peak reading (dBµV) 39.51 38.63	 11n AV reading (dBµV) 	9.67 (HT40) CH Correction Factor (dB/m) 8.10 9.65	49.15 159: 5795M Emissic Peak (dBµV/m) 47.61 48.28	 /Hz on Level AV (dBµV/m) 	68.2 Peak limit (dBµV/m) 74 68.2	54 AV limit (dBµV/m) 54 54	-4.85 Margin (dB) -6.39 -5.72

Note:

V

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier

2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)

3. The emission levels of other frequencies are very lower than the limit and not show in test report.

- 4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 40GHz.
- 5. Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

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Remark:	Pre-scan was performed at An the worst case was found. Only 0 was shown in this report.	
		Page 47 of 134
Hotline: 400-6611-140 Tel: 8	<u>6-755-27673339 Fax: 86-755-27673;</u>	3 <u>32 http://www.tct-lab.com</u>

6.8. Frequency Stability Measurement

6.8.1. Test Specification

TCT通测检测 TESTING CENTRE TECHNOLOGY

Test Requirement:	FCC Part15 Section 15.407(g) &Part2 J Section 2.1055
Test Method:	ANSI C63.10: 2013
Limit:	The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 45 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.
Test Setup:	Spectrum Analyzer EUT EUT AC/DC Power supply
Test Procedure:	The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage. b. Turn the EUT on and couple its output to a spectrum analyzer. c. Turn the EUT off and set the chamber to the highest temperature specified. d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize. e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature. f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.
Test Result:	PASS
Remark:	Pre-scan was performed at Antenna 0 and Antenna 1, the worst case was found. Only the test data of Antenna 0 was shown in this report.
(E)	

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Test plots as follows:

Test mode:	802.11r	(HT20)	Freque	ency(MHz):	5180
Temperature (°C)	(°C) Voltage(VDC)		irement hcy(MHz)	Delta Frequency(H	Hz) Result
45		5180	.0095	9500	PASS
35		5180	.0061	6200	PASS
25	3.3V	5179	5179.9876 -12400		PASS
15	3.3V	5179	.9984	-1600	PASS
5		5180	.0039	3900	PASS
0		5180	.0043	4300	PASS
)	3.0	5179	.9832	-16800	PASS
20	3.3	5180	.0037	3700	PASS
	3.6	5179	.9824	-17600	PASS

Test mode:	802.11n(HT20)	Freque	ency(MHz):		5200	
Temperature (°C)	Voltage(VDC)	Measu		Delta		Result	
	5 ()	Frequen	2 \	Frequency(H	HZ)		
45		5200.	.0092	9200		PASS	
35		5200.	0086	8600	5)	PASS	
25	3.3V	5200.	0079	7900		PASS	0
15	3.3V	5200.	.0043	4300		PASS PASS	
5		5199.	.9981	-1900			
0		5199.	.9877	-12300		PASS	
	3.0	5199.	.9958 -4200			PASS	
20	3.3	5200.	.0030	3000		PASS	
 	3.6	5200.	0054	5400		PASS	
				C			(

Test mode:	802.11n	(HT20)	Freque	ency(MHz):	5240
Temperature (°C)	Voltage(VDC)		irement icy(MHz)	Delta Frequency(H	z) Result
45			.0041	4100	PASS
35		5240	.0028	2800	PASS
25	2.21/	5240	.0025	2500	PASS
15	3.3V	5239	.9992	-800	PASS
5		5239	.9984	-1600	PASS
0		5239	.9978	-2200	PASS
	3.0	5240	.0036	3600	PASS
20	3.3	5240	.0011	1100	PASS
	3.6	5239.9984		-1600	PASS
	(c				

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Test mode:	802.11n(HT20)	Freque	ency(MHz):		5745
Temperature (°C)	Voltage(VDC)		rement cy(MHz)	Delta Frequency(H	lz)	Result
45		5745	.0012	1200		PASS
35		5745	.0014	1400		PASS
25	3.3V	5744	.9960	-4000		PASS
15	3.30	5744	.9957	-4300		PASS
5		5745	.0033	3300		PASS
0		5745	.0041	4100		PASS
	3.0	5745	.0076	7600		PASS
20	3.3	5745	.0071	7100)	PASS
	3.6	5745	.0021	2100		PASS

Test mode:		802.11n(H	IT20)	Freque	ency(MHz):		5785	
Temperature (°C)	Volt	age(VDC)	Measu		Delta		Result	
, ,		3 ()	Frequen		Frequency(I	HZ)		
45			5785.	.0083	8300		PASS	
35			5785.	.0030	3000	~	PASS	/
25		3.3V	5785.	.0028	2800	G`)	PASS	
15		3.3V	5785.	.0007	700		PASS	1
5			5785.	.0026	2600		PASS	
0			5785.	.0043	4300		PASS	
(G)		3.0	5785.	0057	5700		PASS	
20		3.3	5785.	0024	2400		PASS	
		3.6	5784.	.9975	-2500		PASS	

Test mode:	802.11n(HT20)	Freque	ency(MHz):	5825
Temperature (°C)	Voltage(VDC)		rement cy(MHz)	Delta Frequency(H	Hz) Result
45		5824	.9812	-18800	PASS
35		5825	.0083	8300	PASS
25	3.3V	5824	.9951	-4900	PASS
15	3.30	5824	.9986	-1400	PASS
5		5825	.0013	1300	PASS
0		5825	.0049	4900	PASS
	3.0	5825	.0042	4200	PASS
20	3.3	5824	.9987	-1300	PASS
	3.6	5825	.0024	2400	PASS

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	则检测 CENTRE TECHNOLOGY				Report No.: TCT200616E04
Test mode:	802.11n	(HT40)	Freque	ency(MHz):	5190
Temperature (°C)	Voltage(VDC)		rement icy(MHz)	Delta Frequency(H	z) Result
45		5190	.0128	12800	PASS
35		5190	.0113	11300	PASS
25	2.21/	5190	.0102	10200	PASS
15	3.3V	5190	.0035	3500	PASS
5		5190	.0063	6300	PASS
0		5190	.0079	7900	PASS
	3.0	5189	.9910	-9000	PASS
20	3.3	5189	.9979	-2100	PASS
r	3.6	5190	.0043	4300	PASS

	Test mode:		802.11n(ŀ	IT40)	Freque	ency(MHz):		5230	
	Temperature (°C)	Vc	ltage(VDC)	Measu	rement	Delta		Result	
		vc	mage(VDO)	Frequen	cy(MHz)	Frequency(I	Hz)	Result	
	45			5230.	.0129	12900		PASS	
-	35			5230.	.0123	12300	~	PASS	
Ċ	25		3.3V	5230.	0098	9800	G`)	PASS	
	15		3.3V	5229.	.9987	-1300		PASS	
	5			5229.	9982	-1800		PASS	
	0			5230.	.0053	5300		PASS	
	(G)		3.0	5230.	.0041	4100		PASS	
	20		3.3	5230.	0026	2600		PASS	
			3.6	5229.	9979	-2100		PASS	

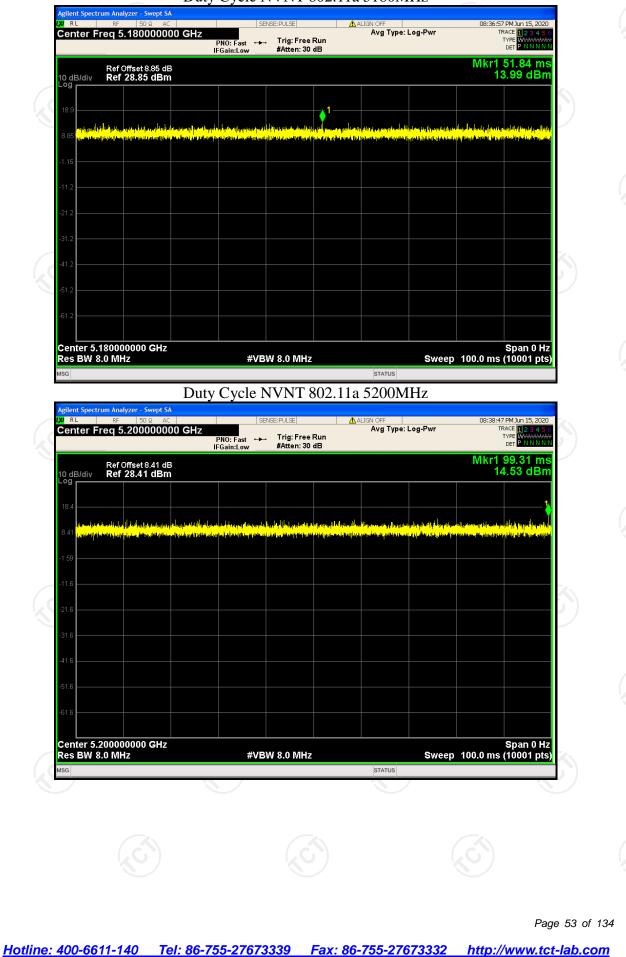
Test mode:	802.11n(H	HT40)	Freque	ency(MHz):		5755
Temperature (°C)	Voltage(VDC)	Measu Frequen	rement cy(MHz)	Delta Frequency(I	⊣z)	Result
45		5755.	.0274	27400		PASS
35		5755.	.0120	12000		PASS
25	3.3V	5755	.0119	11900		PASS
15	3.30	5755.	.0097	9700		PASS
5		5755.	.0034	3400		PASS
0		5755.	.0072	7200	N	PASS
9	3.0	5755.	.0045	4500	(0)	PASS
20	3.3	5755.	.0031	3100		PASS
	3.6	5755.	.0064	6400		PASS

Test mode:	802.11n(HT40) Freque	ency(MHz):	5795
emperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45		5794.9803	-19700	PASS
35		5794.9844	-15600	PASS
25	3.3V	5795.0046	4600	PASS
15		5795.0031	3100	PASS
5 0		5795.0028 5795.0067	2800 6700	PASS PASS
0	3.0	5795.0050	5000	PASS
20	3.3	5794.9982	-1800	PASS
	3.6	5795.0085	8500	PASS
				Page 51 of 13

Report No.: TCT200616E047 **Appendix A: Test Result of Conducted Test** ANT 0 **Test Report Duty Cycle** Condition Mode Frequency (MHz) Duty Cycle (%) Correction Factor (dB) 5180 **NVNT** 802.11a 100 0 **NVNT** 802.11a 5200 100 0 NVNT 802.11a 5240 100 0 **NVNT** 802.11a 5745 100 0 NVNT 5785 100 802.11a 0 NVNT 100 802.11a 5825 0 **NVNT** 802.11n(HT20) 5180 100 0 NVNT 802.11n(HT20) 5200 100 0 NVNT 802.11n(HT20) 5240 100 0 NVNT 802.11n(HT20) 5745 100 0 NVNT 802.11n(HT20) 5785 100 0 NVNT 802.11n(HT20) 100 5825 0 NVNT 802.11n(HT40) 5190 100 0 NVNT 100 802.11n(HT40) 5230 0 NVNT 802.11n(HT40) 100 5755 0 **NVNT** 802.11n(HT40) 100 5795 0 Page 52 of 134 Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

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Duty Cycle NVNT 802.11a 5180MHz



Center Freq 5.240000000 G	HZ PNO: Fast ↔ IFGain:Low	ENSE:PULSE Trig: Free Run #Atten: 30 dB	ALIGN OFF	: Log-Pwr	08:40:08 PM Jun 15 TRACE 1 2 TYPE WWW DET P N	3 4 5 6
Ref Offset 8.66 dB 10 dB/div Ref 28.66 dBm	II GUIMEGN				Mkr1 97.56 15.15 c	ms Bm
Log						1
	ي المعلول المعرفة معلم المراجع المراجع المعرفة. مراجع المعلم المعرفة محمد الماريج وملوم الماريج	ling a start of and produces and the same is deal and a start of a start of the same is a st	a land a later of the state of	en handere eller en dette stere an det stere personen at polisiere	nin da minera da de la decamita da da Mante Dela productor da porte da productor	
-1.34						
-11.3						
-21.3						
-31.3						
41.3						
-61.3						
Center 5.240000000 GHz					Span	0.147
Res BW 8.0 MHz	#VE	3W 8.0 MHz	STATUS	Sweep	100.0 ms (10001	
<hr/>	PNO: Fast ↔ IFGain:Low					
Ref Offset 9.58 dB 10 dB/div Ref 29.58 dBm					Mkr1 70.27 16.36	7 ms
Ref Offset 9.58 dB 10 dB/div Ref 29.58 dBm				11	Mkr1 70.23	7 ms
10 dB/div Ref 29.58 dBm	IFGain:Low	#Atten: 30 dB	Next Field & each Syland Source for	1	Mkr1 70.27 16.36	7 ms dBm
10 dB/div Ref 29.58 dBm	IFGain:Low	#Atten: 30 dB	n ner († 1949) se se se plan er son se va Sin († 1949) se se ser sen se	1 In the second state	Mkr1 70.27 16.36	7 ms dBm
10 dB/div Ref 29.58 dBm	IFGain:Low	#Atten: 30 dB	gant (1 dag sen dag sen dag sen dag sen (1 dag sen dag sen dag sen dag sen dag sen (1 dag sen dag sen dag sen da	1	Mkr1 70.27 16.36	7 ms dBm
10 dB/div Ref 29.58 dBm 19.6	IFGain:Low	#Atten: 30 dB	ghang Talah yang Salam yang Salam Alah yang Salam yang Sa	1 1 1 дени и соста радо 1 дени и соста радова 1	Mkr1 70.27 16.36	7 ms dBm
10 dB/div Ref 29.58 dBm	IFGain:Low	#Atten: 30 dB	Nord T fill y en plandyn yn yn Nord Ynwb yn yn gwlegolwene y Arch		Mkr1 70.27 16.36	7 ms dBm
10 dB/div Ref 29.58 dBm 19.6	IFGain:Low	#Atten: 30 dB	Name of the first state of the f		Mkr1 70.27 16.36	7 ms dBm
10 dB/div Ref 29.58 dBm 19.6	IFGain:Low	#Atten: 30 dB	po esta in del po esceptible en pous esta acción po esta independente esta acción por esta acción de la construcción de la construcción por esta acción de la construcción de la construcción de la construcción por esta acción de la construcción de la construcción de la construcción de la construcción por esta acción de la construcción de la co		Mkr1 70.27 16.36	7 ms dBm
10 dB/div Ref 29.58 dBm 19.6 19.6 19.6 19.6 -0.42 - -10.4 - -30.4 - -50.4 - -60.4 - -50.4 - -50.4 - -50.4 - -50.4 - -50.4 - -50.4 - -50.4 - -50.4 - -50.4 -	IFGain:Low	#Atten: 30 dB	Next File Provide a second secon		Mkr1 70.27 16.36 of the defendance of the first of the fi	7 ms dBm wdyta Mayed
10 dB/div Ref 29.58 dBm 19.6	IFGain:Low	#Atten: 30 dB			Mkr1 70.27 16.36 of an disk tradition of a stress in the stress of a stress of a stress of a stress in the stress of a stress of a stress of a stress of a stress in the stress of a s	7 ms dBm wdyta Mayed
10 dB/div Ref 29.58 dBm 19.6	IFGain:Low	#Atten: 30 dB			Mkr1 70.27 16.36 of the defendance of the first of the fi	7 ms dBm wdyta Mayed

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	trum Analyzer - Swept SA RF 50 Ω AC Freq 5.785000000 GH	PNO: Fast ++-	SE:PULSE	ALIGN OFF Avg Type: Lo		4:44 PM Jun 15, 2020 TRACE 1 2 3 4 5 6	
		IFGain:Low	Trig: Free Run #Atten: 30 dB		Mkr	TYPE WWWWWWW DET P NNNNN	
10 dB/div	Ref Offset 9.76 dB Ref 29.76 dBm					16.61 dBm	
19.8				• • 1		k	
9.76 9.76	و المراجعة المراجعة والمراجعة ول المراجع والمراجعة والمراجعة والمراجعة والمراجعة والمراجعة والمراجعة والمراجعة منابع المراجع والمراجع	innen itan kina kangan tahun kangan kangan Tahun tahun kangan kangan kangan kangan kangan kangan kangan kangan Tahun tahun kangan ka	n a frimer (Side) an fried yn der ddan da New John Staffer y gweelly Ure an feitig Câferrei	ar fyllian yn ar fyny a'r ffine y farfar yn af fyn y farfa Mae yn y mae'n a far yn ar yn ar yn ar ar fafar yn y gan ar fefnan far y far y Mae yn yn gan yn gan yn gan yn gan ar fefnan yn gan yn	a la casa da angla da angla da para da Direce da bardar para da da da para da p	n henrik (henrik kennikan henrikan) Henrik (henrikan en bergine alere	
-0.24							
-10.2							
-20.2							
-30.2							
-40.2							
-60.2							
Center 5	.785000000 GHz					Span 0 Hz	
Res BW	8.0 MHz	#VBV	V 8.0 MHz	STATUS	Sweep 100.0 n	is (10001 pts)	
	D	uty Cycle N	VNT 802.		Hz		
LXI RL	trum Analyzer - Swept SA RF 50 Ω AC Freq 5.825000000 GH	SEN:	SE:PULSE	ALIGN OFF		6:44 PM Jun 15, 2020 TRACE 1 2 3 4 5 6 TYPE WWWWWW	
		PNO: Fast 🔸	Trig: Free Run #Atten: 30 dB			1 17.43 ms	
10 dB/div	Ref Offset 9.19 dB Ref 29.19 dBm					15.59 dBm	
19.2	1						
الانتظام 9.19 - 9.19	n hi pin den fan de gener de sternen gener gener de gener de gener de gener Gener gener gener de sterne de sterne gener gener gener gener de gener de gener Gener gener gener de sterne de gener g	an de la parte de la parte La parte de la p La parte de la p	an hada sha data yan sa Mabila ka ku yan haren yan madan kuton yan sa sa sa sa	n hy feith a finise kontan her an her hielden genaamter festering te performation genaamter festering	an deletina e della julia di la deserva della di sedi della di sedi della di sedi della di sedi della di sedi In terre della della della della di sedi d	l a bate la ser de la ana anti-fait (a la ba 1979 - Carlos Roug V. C. e valor dina ():	
-0.81							
-10.8							
10.0							
-20.8							
-20.8							
-20.8							
-20.8 -30.8 -40.8							
-20.8 -30.8 -40.8 -50.8	825000000 GHz					Span 0 Hz	
-20.8 -30.8 -40.8 -50.8 -60.8	.825000000 GHz 8.0 MHz	#VBM	V 8.0 MHz	STATUS	Sweep 100.0 n	Span 0 Hz ns (10001 pts)	
-20.8 -30.8 -40.8 -50.8 -60.8 Center 5 Res BW	.825000000 GHz 8.0 MHz	#VBW	/ 8.0 MHz	STATUS	Sweep 100.0 n	Span 0 Hz is (10001 pts)	
-20.8	.825000000 GHz 8.0 MHz	#VBW	/ 8.0 MHz	STATUS	Sweep 100.0 n	Span 0 Hz ns (10001 pts)	
-20.8	.825000000 GHz 8.0 MHz	#VBM	/ 8.0 MHz	STATUS	Sweep 100.0 n	Span 0 Hz hs (10001 pts)	

Center Freq 5.180000000	GHz SENSE:PULSE	ALIGN OFF Avg Type: Log-Pwr	04:32:47 PM Jul 14, 2020 TRACE 12 3 4 5 6 TVDE UNIVERSIDATE
	PNO: Fast ↔ Trig: Free Run IFGain:Low #Atten: 30 dB		TYPE WWWWWW DET PININNN Mkr1 80.44 ms
Ref Offset 8.95 dB 10 dB/div Ref 28.95 dBm			14.57 dBm
19.0			1 K
8.95 An and a the sheet of the ball of the section	la de prime de la feral e proces de la terra de la mais de la construir de proceder por la de la feral de proce Novempor por prime por construir de la construir	edatar (hiring and die die state en familie in gebeu werden die angeweren gebeuren gebeuren gebeuren. Angeweren gebeuren gebeuren gebeuren gebeuren gebeuren.	endin besternen bilan men alternation bilangen b. Hannen bilangen bilang
-1.05			
-11.1			
-21.1			
-31.1			
-41.1			X
-51.1			
-61.1			
Center 5.180000000 GHz Res BW 8.0 MHz	#VBW 8.0 MHz	Swe	Span 0 Hz ep 100.0 ms (10001 pts)
MSG			
Agilent Spectrum Analyzer - Swept SA	y Cycle NVNT 802.11n		
X RL RF 50 Ω AC Center Freq 5.200000000 C C C C	PNO: Fast +++ Trig: Free Run	ALIGN OFF Avg Type: Log-Pwr	03:51:39 PM Jul 14, 2020 TRACE 1 2 3 4 5 6 TYPE WWWWWW DET P N N N N N
	IFGain:Low#Atten: 30 dB		
Ref Offset 8.51 dB			Mkr1 86.62 ms 14.06 dBm
10 dB/div Ref 28.51 dB Log			Mkr1 86.62 ms 14.06 dBm
Log 18.5		յունես էսու էս ուներությունների էներեն իվրա նրատի խն	Mkr1 86.62 ms 14.06 dBm
Log 18.5 8.51	la gjer bir sladan sta da bar staturni de staturna tekstor. Kad sa sa jalans na predapasti svena staturna na kanga sladan staturna kanga sina.		Mkr1 86.62 ms 14.06 dBm
Log 18.5 8.51 - Alexandro Marketon and Alexandro 8.51 - Alexandro Marketon and Alexandro Marketon -1.49			14.06 dBm
Log 18.5 8.51			14.06 dBm
Log 18.5 8.51			14.06 dBm
Log 18:5 8:51 -1:49 -1:5 -21:5			14.06 dBm
Log 18.5 8.51 -1.49 -1.49 -21.5 -31.5			14.06 dBm
Log 18.5 0.51 19.7 -1.49 -1.5 -21.5 -41.5			14.06 dBm
Log 18.5 -1.49 -1.49 -1.5 -21.5 -31.5 -41.5 -61.5			
Log 18.5 6.51 -1.49 -1.49 -1.5 -31.5 -51.5			14.06 dBm
Log 18.5 4.5 -1.49 -1.49 -1.5 -21.5 -31.5 -41.5 -51.5 -51.5 -61.5 Center 5.200000000 GHz Res BW 8.0 MHz			14.06 dBm
Log 18.5 4.5 -1.49 -1.49 -1.5 -21.5 -31.5 -41.5 -51.5 -51.5 -61.5 Center 5.200000000 GHz Res BW 8.0 MHz			14.06 dBm
Log 18.5 4.5 -1.49 -1.49 -1.5 -21.5 -31.5 -41.5 -51.5 -51.5 -61.5 Center 5.200000000 GHz Res BW 8.0 MHz			14.06 dBm

通测检测 TESTING CENTRE TECHNOLOGY

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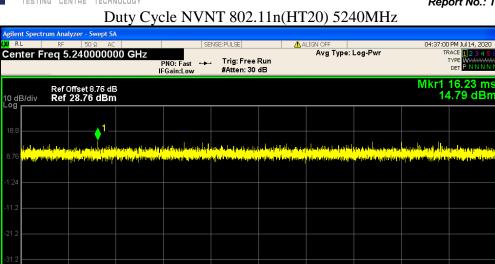
a RL

10 dB/div

Center 5.240000000 GHz Res BW 8.0 MHz

Report No.: TCT200616E047

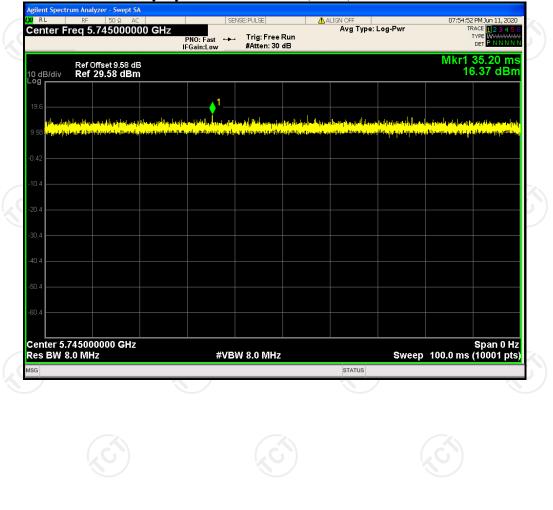
Span 0 Hz Sweep 100.0 ms (10001 pts)



Duty Cycle NVNT 802.11n(HT20) 5745MHz

STATUS

#VBW 8.0 MHz



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Center Freq 5.785000000 GHz	SENSE:PULSE PNO: Fast →→ Trig: Free Run IFGain:Low #Atten: 30 dB	ALIGN OFF Avg Type: Log-Pwr	08:02:45 PM Jun 11, 2020 TRACE 1 2 3 4 5 6 TYPE DET P N N N N N
Ref Offset 9.76 dB 10 dB/div Ref 29.76 dBm			Mkr1 7.410 ms 15.56 dBm
19.8			
Alpha party list in the grad of the product of the product of the second s	n film alle het geste senten het film film geste skrivet og sente film som en sente som en som en som en som e I het senten som en s	en franklike af Blanner de Bjerk an ferdik franklike i sterrike River i en franklike i sterrige og som fikker som er sterrige i sterrige i sterrige i sterrige i sterrige i ster	alilaid dagt gabalan san deng ilat ibu karatalan kalan San deng gabalan san daga yang dengan pada karat pada karat
-0.24			
-10.2			
-20.2			
-30.2			
-50.2			
-60.2			
Center 5.785000000 GHz	4)/D/4/ 0.0 MUL-		Span 0 Hz
Res BW 8.0 MHz	#VBW 8.0 MHz	STATUS	100.0 ms (10001 pts)
Agilent Spectrum Analyzer - Swept SA	Cycle NVNT 802.11n(HT20) 5825MHz	
Center Freq 5.825000000 GHz	SENSE:PULSE PNO: Fast →→ Trig: Free Run IFGain:Low #Atten: 30 dB	ALIGN OFF Avg Type: Log-Pwr	08:05:42 PM Jun 11, 2020 TRACE 1 2 3 4 5 6 TYPE WWWWWW DET P N N N N N
Ref Offset 9.19 dB 10 dB/div Ref 29.19 dBm	II Gam.Low III Koni to KL		Mkr1 4.580 ms 15.56 dBm
Log 19.2			
ad discourse to a feature discrimination of section and section and	naz filozof degen bet blev en filozofik en de en gen te i ten benere hen er el ser stal Na gen skyn den kan men date proversige benere en en en en de genere seget date.	ki je na najvistelju svije je na najvine stolike polet je do najviste na dobro na svije to svo najvine ponov je ka je najvine pod konstru do konstru	had a tha bhi pha na di pha an si han a an ta' Sha dha ann an an an ta' tha an si han an ta'
-0.81			
-10.8			
-20.8			
-40.8			
-50.8			
-60.8			
Center 5.825000000 GHz			Span 0 Hz
Res BW 8.0 MHz	#VBW 8.0 MHz	Sweep ·	100.0 ms (10001 pts)

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		SENSE:PULSE	ALIO	SN OFF Avg Type: Log-P		:48 PM Jul 14, 2020
Center Freq 5.19000000		⊷⊷ Trig: Free R #Atten: 30 d		Avg Type. Log-P		
Ref Offset 8.55 dB 10 dB/div Ref 28.55 dBm						1 51.66 ms 10.30 dBm
18.6			<u>_1</u>			K
8.55 00/00/10/00/10/10/10/10/00/10/00/10/10/	<mark>n ya ku </mark>	l ^{ev} an Mal <mark>er produktioner (</mark>		(<mark> 11] epoklet (</mark> 11) des Mettige	a <mark>l talah yang dari dari dari dari dari dari dari dari</mark>	a <mark>ll'y s^hadray y di lan</mark>
-1.45	en gelekken han men jik, alkelet son och det k	^d ig in histoite, espendin etmologisti (enderstand Universited in a	ne se la la companya de la companya La companya de la com	in an a fha faith an	h Annaigheanta sealann da na annaich
-11.5						
-21.5						
-31.5						
-61.5						
Center 5.190000000 GHz						Span 0 Hz
Res BW 8.0 MHz	#1	VBW 8.0 MHz		STATUS	Sweep 100.0 m	s (10001 pts)
Agilent Spectrum Analyzer - Swept SA	ity Cycle NV	/NT 802.1	1n(HT4	0) 5230N	1Hz	
0 RL RF 50 Ω AC Center Freq 5.230000000) GHz PNO: Fast	SENSE:PULSE		SN OFF Avg Type: Log-P		:53 PM Jul 14, 2020 TRACE 1 2 3 4 5 6 TYPE WWWWWW
Ref Offset 8.99 dB	IFGain:Low	#Atten: 30 d	В			1 18.99 ms
10 dB/div Ref 28.99 dBm						10.74 dbm
19.0						
8.99 1	and the second	the second s		1997 - 19	and the second	
a filing a filter for an an garring for an garring to all year of the property of the second se	and the second	the second s		1997 - 19	and the second	
(in a provide state of the sta	and the second	the second s		1997 - 19	and the second	
	and the second	the second s		1997 - 19	and the second	
-1.01 -1.01 -1.01 -1.0	and the second	the second s		1997 - 19	and the second	
-1.01 -1	and the second	the second s		1997 - 19	and the second	
-1.01 -1	and the second	the second s		1997 - 19	and the second	
-1.01		the second s			and the second	Span 0 Hz
-1.01 -1.01 -1.01 <td></td> <td></td> <td></td> <td></td> <td></td> <td>Span 0 Hz</td>						Span 0 Hz
-1.01						Span 0 Hz
-1.01						Span 0 Hz

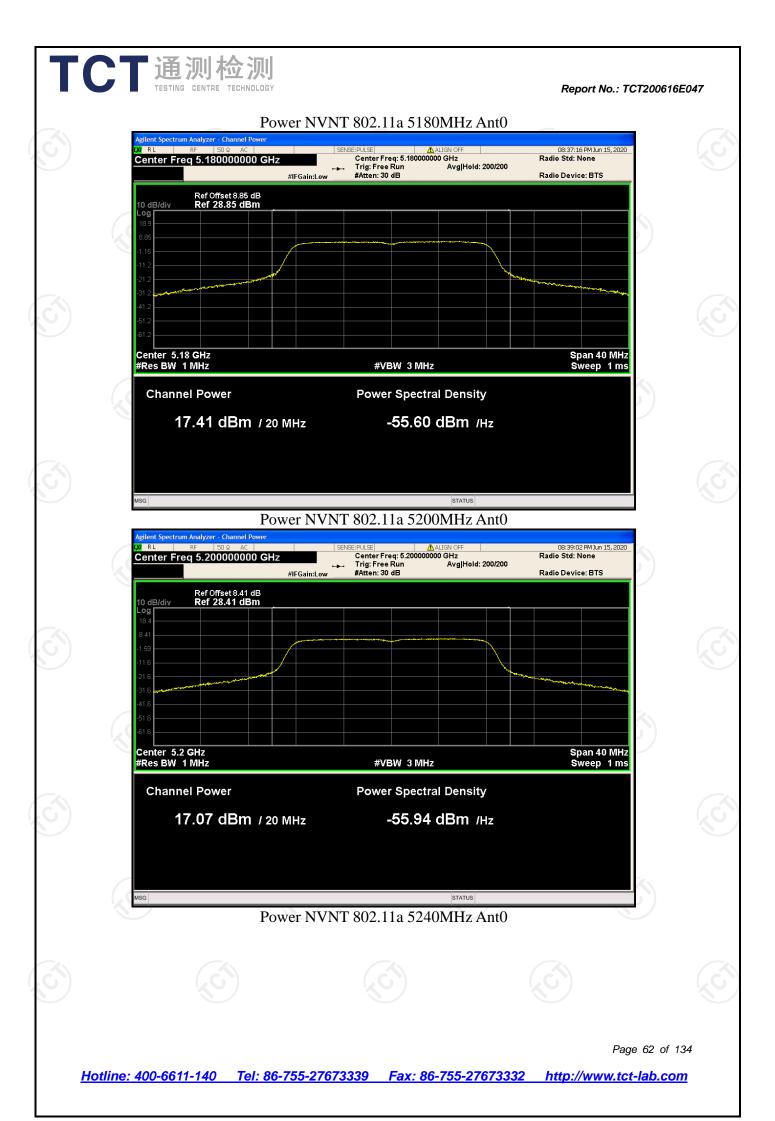
	〕〕 uty Cycle NVNT 802.	11n(HT40) 5755MH	Report No.: TCT200 Z
Agilent Spectrum Analyzer - Swept SA Δ RL RF 50 Ω AC Center Freq 5.75500000 50 Ω AC	00 GHz PN0: Fast ↔ Trig: Free		08:37:32 PM.Jun 11, 2020 TRACE 1 2 3 4 5 6 TYPE WHANNANH DET P. N.N.N.N.N
Ref Offset 8.93 dB	IFGain:Low #Atten: 30	38	Mkr1 60.07 ms 10.55 dBm
	adala da fali anti falita presi tura na kontenen ta fungena angiana un	1 adal Warasan Bashara Universita itati di antika kana kwama kwa	ni interdired 1946 energiared interdisting and the solution
-1.07	na na mana ang kana na mana na Na na mata mana na mana Na mana mana na	a lagra ga tanan periodo que a que a que en que en que en que en que en que	ng tang pang pang pang pang pang pang pang p
-11.1			
-21.1			
-41.1			
-51.1			
-61.1			
Center 5.755000000 GHz Res BW 8.0 MHz	#VBW 8.0 MHz	Swee	Span 0 Hz p 100.0 ms (10001 pts)
MSG	uty Cycle NVNT 802.	status 11n(HT40) 5795MH	z
Agilent Spectrum Analyzer - Swept SA [X] RL RF 50 Ω AC Center Freq 5.795000000	SENSE:PULSE	ALIGN OFF	08:44:14 PM Jun 11, 2020 TRACE 12 3 4 5 6
	PNO: Fast 🔸 Trig: Free IFGain:Low #Atten: 30	Run	TYPE WWWWWW DET P NNNNN Mkr1 59.82 ms
Ref Offset 9.11 dB 10 dB/div Ref 29.11 dBm Log			9.30 dBm
19.1		1	
de la presenta de la construction de la factoria de la construction de la construction de la construction de la	llerig i Anna hei saya na fara la la falil hei karina inda narifi Anna fina kara hawa karifi na kara na ya na na hara na na karifi na falil hei karifi na	n den en de la filme per print de la print de la filme de la deservation de la deservation de la deservation de La deservation de la d	A DECEMBER OF
-10.9			
-20.9			
-30.9			
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Center 5.7950000000 GHz			Span 0 Hz
Res BW 8.0 MHz	#VBW 8.0 MHz	SWEE	ep 100.0 ms (10001 pts)

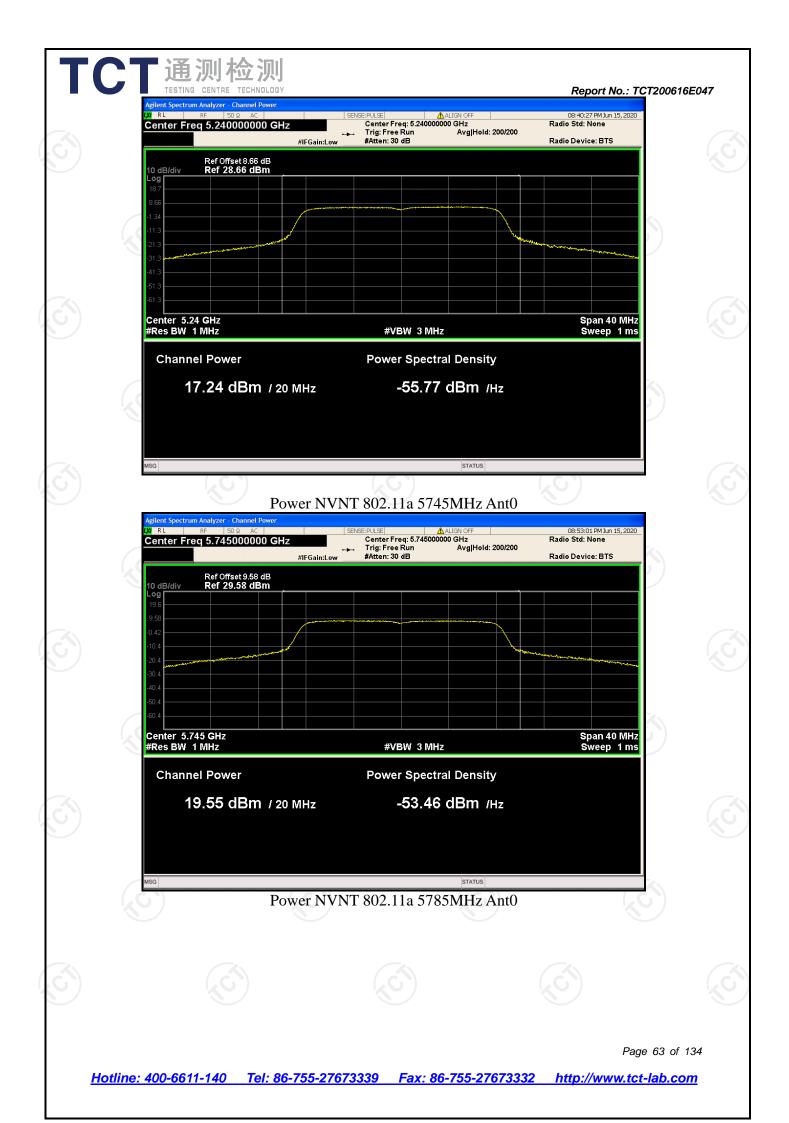
Report No.: TCT200616E047	Report	No.:	TCT200616E047
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Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5180	Ant0	17.41	0	17.41	30	Pass
NVNT	802.11a	5200	Ant0	17.07	0	17.07	30	Pass
NVNT 🔍	802.11a	5240	Ant0	17.24	0	17.24	30	Pass
NVNT	802.11a	5745	Ant0	19.55	0	19.55	30	Pass
NVNT	802.11a	5785	Ant0	20.02	0	20.02	30	Pass
NVNT	802.11a	5825	Ant0	18.85	0	18.85	30	Pass
NVNT	802.11n(HT20)	5180	Ant0	17.85	0	17.85	30	Pass
NVNT	802.11n(HT20)	5200	Ant0	17.50	0	17.50	30	Pass
NVNT	802.11n(HT20)	5240	Ant0	17.89	0	17.89	30	Pass
NVNT	802.11n(HT20)	5745	Ant0	19.27	0	19.27	30	Pass
NVNT	802.11n(HT20)	5785	Ant0	19.43	0	19.43	30	Pass
NVNT	802.11n(HT20)	5825	Ant0	18.89	0	18.89	30	Pass
NVNT 🔍	802.11n(HT40)	5190	Ant0	17.54	0	17.54	30	Pass
NVNT	802.11n(HT40)	5230	Ant0	17.44	0	17.44	30	Pass
NVNT	802.11n(HT40)	5755	Ant0	17.97	0	17.97	30	Pass
NVNT	802.11n(HT40)	5795	Ant0	18.06	0	18.06	30	Pass

TCT 通测检测 TESTING CENTRE TECHNOLOGY

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通 次 检 次 TESTING CENTRE TECHNOLOGY Agilent Spectrum Analyzer - Channel Power ス RL RF SD & AC Center Freq 5.785000000 GHz	SENSE:PULSE ▲ ALIGN OFF Center Freq: 5.78500000 GHz → Trig: Free Run Avg Hold: 200/200	Report No.: TCT20061	6E047
Ref Offset 9.76 dB	FGain:Low #Atten: 30 dB	Radio Device: BTS	
10 dB/div Ref 29.76 dBm			
9.76			
-10.2 -20.2			
-40.2			
-60.2			
Center 5.785 GHz #Res BW 1 MHz	#VBW 3 MHz	Span 40 MHz Sweep 1 ms	
Channel Power	Power Spectral Density		
20.02 dBm / 20 мі	нг - 52.99 dBm /нг		
No.			
^{MSG} Powe	status r NVNT 802.11a 5825MHz Ant0	(.G.)	
Agilent Spectrum Analyzer - Channel Power UM RL RF 50 Q AC		08:57:09 PM Jun 15, 2020	
Center Freq 5.825000000 GHz	Center Freq: 5.825000000 GHz Trig: Free Run Avg Hold: 200/200 FGain:Low #Atten: 30 dB	Radio Std: None Radio Device: BTS	
Ref Offset 9.19 dB 10 dB/div Ref 29.19 dBm			
Log 19.2 9.19			
-0.81			
-20.8 -30.8		and a second and a second a s	
-40.8			
-60.8 Center 5.825 GHz		Span 40 MHz	
#Res BW 1 MHz	#VBW 3 MHz	Sweep 1 ms	
Channel Power	Power Spectral Density		
18.85 dBm / 20 мі	нz -54.16 dBm /нz		
MSG	STATUS		
	VNT 802.11n(HT20) 5180MHz A	.nt0	
			101
		Page 64 of	134

	通测检测 TESTING CENTRE TECHNOLOGY Agilent Spectrum Analyzer - Channel Power R RL RF 50 & AC Center Freq 5.1800000000 GHz	SENSE:PULSE ▲ ALIGN OFF Center Freq: 5.180000000 GHz → Trig: Free Run Avg Hold: 200/20		E047
)	Ref Offset 8.95 dB	FGain:Low#Atten: 30 dB	Radio Device: BTS	
	10 dB/div Ref 28.95 dBm			
	8.95			
No.	-11.1 -21.1			
	-41.1			
	-61.1			
)	Center 5.18 GHz #Res BW 1 MHz	#VBW 3 MHz	Span 40 MHz Sweep 1 ms	
	Channel Power	Power Spectral Density		
C	17.85 dBm / 20 мі	нг -55.16 dBm /нг		
No.			2)	
	MSG			
)	Agilent Spectrum Analyzer - Channel Power	VNT 802.11n(HT20) 5200MHz A		
	₩ RL RF 50 Ω AC Center Freq 5.200000000 GHz	SENSE:PULSE ▲ ALIGN OFF Center Freq: 5.20000000 GHz → Trig: Free Run Avg Hold: 200/20 FGain:Low #Atten: 30 dB	04:34:37 PM Jul 14, 2020 Radio Std: None 0 Radio Device: BTS	
C	Ref Offset 8.51 dB	FGain:Low #Atten: 30 dB	Radio Device. D13	
N.	10 dB/div Ref 28.51 dBm			
	8.51 -1.49			
	-11.5		Martine and a second and a	
/	-41.5			
	-61.5			
6	Center 5.2 GHz #Res BW 1 MHz	#VBW 3 MHz	Span 40 MHz Sweep 1 ms	
	Channel Power	Power Spectral Density		
	17.50 dBm / 20 мі	нг -55.51 dBm /нг		
)				
7				
	MSG Dower N		AntO	
	Fowerin	VINT 802.1111(11120) 32401v1112 P		
			Page 65 of a	134
	400-6611-140 Tel: 86-75	55-27673339 Fax: 86-755-27673	_	