## RADIO TEST REPORT ETSI EN 300 440 V2.2.1 (2018-07)

Product : Mobile Phone Trade Mark : Blackview Model Name : BV8800 Family Model : N/A Report No. : STR211129004005E

## **Prepared for**

DOKE COMMUNICATION (HK) LIMITED.

RM 1902 EASEY COMM BLDG 253-261 HENNESSY ROAD WANCHAI HK, CHINA

## Prepared by

Shenzhen NTEK Testing Technology Co., Ltd.

 1/F, Building E, Fenda Science Park, Sanwei Community,Xixiang Street Bao'an District, Shenzhen 518126 P.R. China
 Tel. 400-800-6106, 0755-2320 0050, 0755-2320 0090 Website: http://www.ntek.org.cn

## **TEST RESULT CERTIFICATION**

Page 2 of 68

Applicant's name: DOKE COMMUNICATION (HK) LIMITED.
Address
WANCHAI HK, CHINA.
Manufacturer's Name: Shenzhen DOKE Electronic Co.,Ltd.
Address
Product description
Product name: Mobile Phone
Trademark: Blackview
Model and/or type reference :BV8800
Family Model: N/A
Standards ETSI EN 300 440 V2.2.1 (2018-07)
This device described above has been tested by NTEK, and the test results show that the equipment under test (EUT) is in compliance with the of article 3.2 of the Directive 2014/53/EU requirements. And it is applicable only to the tested sample identified in the report. This report shall not be reproduced except in full, without the written approval of NTEK, this document may be altered or revised by NTEK, personnel only, and shall be noted in the revision of the document. Date of Test
Test Result Pass

Testing Engineer

NTEK 北测<sup>®</sup>

Muhri Lee

(Mukzi Lee)

Authorized Signatory :

es

(Alex Li)

Table of Contents Pa	age
1. SUMMARY OF TEST RESULTS	7
1.1 TEST FACILITY	8
1.2 MEASUREMENT UNCERTAINTY	8
2 . GENERAL INFORMATION	9
2.1 GENERAL DESCRIPTION OF EUT	9
2.2 TEST CONDITIONS	10
2.3 DESCRIPTION OF TEST CONDITIONS	11
2.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	12
2.5 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)	13
2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS	14
3 . EQUIVALENT ISOTROPICALLY RADIATED POWER (E.I.R.P.)	15
3.1 APPLICABILITY	15
3.2 LIMITS	15
3.3 GENERAL REQUIREMENTS	15
3.4 TEST PROCEDURES 3.4.1 FOR NON SPREAD SPECTRUM TRANSMITTERS	15 15
3.4.2 FOR ALL OTHER TRANSMITTER BANDWIDTHS	16
3.5 TEST SETUP LAYOUT	16
3.6 EUT OPERATION DURING TEST	16
3.7 TEST RESULT FOR -6 DB BANDWIDTH	17
3.8 TEST RESULT FOR E.I.R.P	18
4 . PERMITTED RANGE OF OPERATING FREQUENCIES	19
4.1 APPLIED PROCEDURES / LIMIT	19
4.2 TEST PROCEDURES	19
4.3 TEST SETUP LAYOUT	19
4.4 EUT OPERATION DURING TEST	19
4.5 TEST RESULTS	20
5 . UNWANTED EMISSIONS IN THE SPURIOUS DOMAIN	23
5.1 APPLIED PROCEDURES / LIMIT	23
5.2 MEASURING INSTRUMENTS AND SETTING	23
5.3 TEST PROCEDURES	23
5.4 TEST SETUP LAYOUT	24

Page 3 of 68

NTEK 北测<sup>®</sup>

NTEK LM® Page 4 of 68

Report No.: STR211129004005E

Table of Contents	Page
5.5 EUT OPERATION DURING TEST	24
5.6 RESULTS OF STANDBY MODE SPURIOUS EMISSIONS	24
5.7 TEST RESULTS	25
6 . DUTY CYCLE	27
6.1 APPLICABILITY AND DESCRIPTION	27
6.2 LIMITS	27
6.4 METHOD OF MEASUREMENT	27
6.5 TEST SETUP	28
6.6 TEST RESULTS	28
7 . SPURIOUS EMISSIONS – RX	29
7.1 APPLIED PROCEDURES / LIMIT	29
7.2 MEASURING INSTRUMENTS AND SETTING	29
7.3 TEST PROCEDURES	29
7.5 TEST SETUP LAYOUT	29
7.6 EUT OPERATION DURING TEST	29
7.7 TEST RESULTS	30
8 . ADJACENT CHANNEL SELECTIVITY	31
8.1 APPLICABILITY	31
8.2 LIMITS	31
8.3 METHODS OF MEASUREMENT	31
8.4 TEST SETUP LAYOUT	32
8.5 TEST RESULTS	32
9 . BLOCKING OR DESENSITIZATION	33
9.1 APPLICABILITY	33
9.2 LIMITS	33
9.3 TEST PROCEDURES	33
8.4 TEST SETUP LAYOUT	34
9.4 TEST RESULTS	35
10 . TEST RESULTS	40
10.1 DUTY CYCLE	40
10.2 -6DB EMISSION BANDWIDTH	48
10.3 OCCUPIED CHANNEL BANDWIDTH	56
10.4 RF OUTPUT POWER	61



Table of Contents	Page
11 . EUT TEST PHOTO	68
SPURIOUS EMISSIONS MEASUREMENT PHOTOS	68
APPENDIX-PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS	



Revision History				
Report No.	Version	Description	Issued Date	
STR211129004005E	Rev.01	Initial issue of report	Dec 29. 2021	
	+			
	+			
	+			
	<u> </u>			
	 		-	

#### **Revision History**

## **1. SUMMARY OF TEST RESULTS**

**NTEK**北测<sup>®</sup>

Test procedures according to the technical standards: ETSI EN 300 440 V2.2.1 (2018-07)

Clause	Description of Test Item	Description of Test Item Remarks			
	Transmitter Parameters				
4.2.2	-6 dB channel bandwidth	Conducted	Pass		
4.2.2	Effective isotropic radiated power	Conducted	Pass		
4.2.3	Permitted range of operation frequencies	Conducted	Pass		
4.2.4	Unwanted emissions in the spurious domain	Radiated	Pass		
4.2.5	Duty cycle	Conducted	Pass		
4.2.6	Additional requirements for FHSS equipment	Conducted	N/A		
Receiver Parameters					
4.3.3	4.3.3 Adjacent channel selectivity(For Receiver		N/A		
	category 1)				
4.3.4	Blocking or desensitization(For Receiver	Conducted	Pass		
	category 1,2,3)				
4.3.5	Spurious emissions(For Receiver category	Radiated	Pass		
	1,2,3)				

Page 7 of 68

Note: The antenna gain provided by customer is used to calculate the EIRP result. NTEK is not responsible for the accuracy of antenna gain parameter

#### 1.1 TEST FACILITY

Shenzhen NTEK Testing Technology Co., Ltd. Add. : 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen 518126 P.R. China FCC Registered No.: 463705 IC Registered No.:9270A-1 CNAS Registration No.:L5516

Page 8 of 68

#### **1.2 MEASUREMENT UNCERTAINTY**

**NTEK** 北测

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	Uncertainty
1	Radio frequency	±1 x 10-7
2	RF power (conducted)	±2,5 dB
3	Radiated emission of transmitter, valid to 26,5 GHz	±6 dB
4	Radiated emission of transmitter, valid between	±8 dB
_	26,5 GHz and 66 GHz	
5	Radiated emission of receiver, valid to 26,5 GHz	±6 dB
6	Radiated emission of receiver, valid between 26,5 GHz and 66 GHz	±8 dB
7	Temperature	<b>±1</b> °C
8	Humidity	±5 %
9	Voltage (DC)	±1 %
10	Voltage (AC, < 10 kHz)	±2 %

NOTE: For radiated emissions above 26,5 GHz it may not be possible to achieve measurement uncertainties complying with the levels specified in this table. In these cases alone it is acceptable to employ the alternative interpretation procedure specified in EN 300440 V2.2.1 clause 5.9.1.

Page 9 of 68

Report No.: STR211129004005E

#### 2. GENERAL INFORMATION 2.1 GENERAL DESCRIPTION OF EUT

NTEK 北测<sup>®</sup>

Equipment	Mobile Phone			
Trade Mark	Blackview			
Model Name	BV8800			
Family Model	N/A			
Model Difference	N/A			
	Operation Frequency: Data Rate:	5745-5825 MHz for 802.11a/n20/ac20; 5755-5795 MHz for 802.11n40/ac40; 5775MHz for 802.11 ac80; 802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS7; 802.11ac(VHT20/ VHT40/VHT80): NSS1, MCS0-MCS9, NSS2		
	Modulation	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM		
Product Description	Channel No.:	5 channels for 802.11a/n20/ac20 in the 5745-5825MHz band ; 2 channels for 802.11 n40/ac40 in the 5755-5795MHz band ; 1 channels for 802.11 ac80 in the 5775MHz band ;		
	Antenna Designation:	PIFA Antenna		
	Antenna Gain(Peak)			
Receiver category	<ul> <li>Category 1: Highly reliable SRD communication media;</li> <li>e.g. serving human life inherent systems (may result in a physical risk to a person).</li> <li>Category 2: Medium reliable SRD communication media</li> <li>e.g. causing inconvenience to persons, which cannot simply be overcome by other means.</li> <li>Category 3: Standard reliable SRD communication media</li> <li>e.g. Inconvenience to persons, which can simply be overcome by other means (e.g. manual).</li> </ul>			
Channel List	Refer to below			
Adapter	Model: QA-0300CE03 Input: AC 100-240V~50/60Hz 0.8A Output: DC 5.0V3.0A or DC 9.0V3.0A or DC 12.0V2.5A or DC 15.0V2.0A or DC 20.0V1.5A			
Battery		30mAh, 32.263Wh		
Rating	DC 3.85V from	battery or DC 5V from Adapter.		
Hardware Version	TE926_MAIN_	PCB_V1.1		
Software Version	BV8800_EEA_	BV8800_EEA_TE926_V1.0		

STER

Note:

- 1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- 2. Channel list:

**NTEK** 北测

Frequency and Channel list for 802.11a/n/ac(20 MHz) band IV (5745-5825MHz):

Page 10 of 68

	802.11a/n/ac( 20 MHz) Carrier Frequency Channel						
	Frequen		Frequen		Frequen		Frequen
Channel	су	Channel	су	Channel	су	Channel	су
	(MHz)		(MHz)		(MHz)		(MHz)
149	5745	153	5765	157	5785	161	5805
165	5825	-	-	-	-	-	-

Frequency and Channel list for 802.11n/ac(40MHz) band IV (5755-5795MHz):

802.11n/ac 40MHz Carrier Frequency Channel					
ChannelFrequency (MHz)ChannelFrequency (MHz)ChannelFrequency (MHz)					
151	5755	159	5795	-	-

Frequency and Channel list for 802.11ac(80MHz) band IV (5775MHz):

802.11ac 80MHz Carrier Frequency Channel		
Channel	Frequency (MHz)	
155	5775	

#### 2.2 TEST CONDITIONS

	Normal Test Conditions	Extreme Test Conditions
Temperature	15°C - 35°C	-10°C ~ 40°C <sub>Note1</sub>
Relative Humidity	20% - 75%	N/A
Power Rating	DC 3.85V	N/A
Test voltage	DC 3.85V	DC 4.2V-DC 3.4V Note2

Note:

(1) The temperature range as declared by the manufacturer; or one of the following specified temperature ranges:

- Temperature category I (General): -20 °C to +40 °C;

- Temperature category II (Portable): -10 °C to +40 °C;

- Temperature category III (Equipment for normal indoor use): 5 °C to +35 °C.

(2) The High Voltage 4.2V and Low Voltage 3.4V was declarated by manufacturer.

## 2.3 DESCRIPTION OF TEST CONDITIONS

NTEK 北测<sup>®</sup>

For Conducted Test					
Pretest Mode Description					
Mode 1	802.11a /n/ ac 20 CH149/ CH157/ CH 165				
Mode 2	802.11n/ ac40 CH 151 / CH 159				
Mode 3	802.11 ac80 CH 155				

Page 11 of 68

For Radiated Test						
Final Test Mode Description						
Mode 1	802.11a /n/ ac 20 CH149/ CH157/ CH 165					
Mode 2	802.11n/ ac40 CH 151 / CH 159					
Mode 3	802.11 ac80 CH 155					



## 2.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

E-1 EUT

#### 2.5 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

**NTEK** 北测<sup>®</sup>

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.

Page 13 of 68

Item	Equipment	Model/Type No.	Series No.	Note
E-1	Mobile Phone	BV8800	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in <sup>r</sup>Length<sup>a</sup> column.
- (3) "YES" means "shielded" or "with ferrite core";"NO" means "unshielded" or "without ferrite core"

## Page 14 of 68

## Report No.: STR211129004005E

## 2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

NTEK 北测<sup>®</sup>

EQUIPMENT TYPE	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
EMI Test Receiver	R&S	ESPI7	101318	2021.04.27	2022.04.26	1 year
Bilog Antenna TESEQ		CBL6111D	31216	2021.03.29	2022.03.28	1 year
Turn Table	EM	SC100 1	60531	N/A	N/A	N/A
Antnna Mast	EM	SC100	N/A	N/A	N/A	N/A
Horn Antenna	EM	EM-AH-10180	2011071402	2021.03.29	2022.03.28	1 year
Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2021.04.27	2022.04.26	1 year
Test Cable (30MHz-1GHz)	N/A	R-01	N/A	2019.08.06	2022.08.05	3 year
Test Cable (1-18GHz)	N/A	R-02	N/A	2019.08.06	2022.08.05	3 year
50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2020.05.11	2023.05.10	3 year
Pre-Amplifier	EMC	EMC051835SE	980246	2021.07.01	2022.06.30	1 year
Spectrum Analyzer	Agilent	E4407B	MY45108040	2021.04.27	2022.04.26	1 year
Filter	TRILTHIC	2400MHz	29	2020.04.07	2023.04.06	3 year
Attenuator	Weinschel	33-10-33	AR4010	2020.04.07	2023.04.06	3 year
Attenuator	Weinschel	24-20-34	BP4485	2020.04.07	2023.04.06	3 year
MXA Signal Analyzer	Agilent	N9020A	MY49100060	2021.07.01	2022.06.30	1 year
ESG VETCTOR SIGNAL GENERAROR	Agilent	E4438C	MY45093347	2021.04.27	2022.04.26	1 year
PSG Analog Signal Generator	Agilent	E8257D	MY51110112	2021.07.01	2022.06.30	1 year
Power Splitter	Mini-Circuits/ USA	ZN2PD-63-S+	SF025101428	2020.04.07	2023.04.06	3 year
Coupler	Mini-Circuits	ZADC-10-63-S +	SF794101410	2020.04.07	2023.04.06	3 year
Directional Coupler	MCLI/USA	CB11-20	0D2L51502	2020.07.17	2023.07.16	3 year
Attenuator	Agilent	8495B	MY42147029	2020.04.13	2023.04.12	3 year
Power Meter	DARE	RPR3006W	15I00041SNO 84	2021.07.01	2022.06.30	1 year
MXG Vector Signal Generator	Agilent	N5182A	MY47070317	2021.04.27	2022.04.26	1 year
Wideband Radio Communication Tester Specifications	R&S	CMW500	148500	2021.04.27	2022.04.26	1 year
temporary antenna connector (Note)	NTS	R001	N/A	N/A	N/A	N/A

Page 15 of 68

## 3. EQUIVALENT ISOTROPICALLY RADIATED POWER (E.I.R.P.)

### 3.1 APPLICABILITY

The equivalent isotropically radiated power requirement shall apply to all transmitters.

#### 3.2 LIMITS

#### Table 2: Maximum radiated peak power (e.i.r.p.)

Frequency Bands	Power	Application	Notes
2 400 MHz to 2 483,5 MHz	10 mW e.i.r.p.	Non-specific short range devices	
2 400 MHz to 2 483,5 MHz	25 mW e.i.r.p.	Radio determination devices	
(a) 2 446 MHz to 2 454 MHz	500 mW e.i.r.p.	Radio Frequency Identification (RFID) devices	See also table 4 and annex D
(b) 2 446 MHz to 2 454 MHz	4 W e.i.r.p.	Radio Frequency Identification (RFID) devices	See also table 4 and annex D
5 725 MHz to 5 875 MHz	25 mW e.i.r.p.	Non-specific short range devices	
9 200 MHz to 9 500 MHz	25 mW e.i.r.p.	Radio determination devices	
9 500 MHz to 9 975 MHz	25 mW e.i.r.p.	Radio determination devices	
10,5 GHz to 10,6 GHz	500 mW e.i.r.p.	Radio determination devices	
13,4 GHz to 14,0 GHz	25 mW e.i.r.p.	Radio determination devices	
17,1 GHz to 17,3 GHz	400 mW e.i.r.p.	Radio determination devices	See annex F
24,00 GHz to 24,25 GHz	100 mW e.i.r.p.	Non-specific short range devices and Radio determination devices	

#### **3.3 GENERAL REQUIREMENTS**

1. To measure e.i.r.p. it is first necessary to determine the appropriate method of measurement: see EN 300440 V2.2.1 clauses 4.2.2.3.1 and 4.2.2.3.2. The -6 dB transmitter bandwidth shall be determined using a 100 kHz measuring bandwidth in order to establish which measurement method is applicable:

Со	Method of measurement	
Non spread spectrum transmitters with a -6 dB bandwidth of up to 20 MHz and spread	Non spread spectrum equipment with a -6 dB bandwidth of 20 MHz or less and a duty cycle above 50 %;	Refer to section 3.4.1
spectrum transmitters with channel bandwidth of up to 1 MHz;	Spread spectrum equipment with a -6 dB channel bandwidth of 1 MHz or less.	
☑ for all other transmitter bandwidths.	☐equipment with a -6 dB bandwidth greater than 20 MHz, and equipment with a duty cycle below 50 %;; ⊠spread spectrum equipment with a channel bandwidth above 1 MHz	Refer to section 3.4.2

2. Measurements shall be performed at normal test conditions.

## **3.4 TEST PROCEDURES**

#### 3.4.1 FOR NON SPREAD SPECTRUM TRANSMITTERS

The measurement shall be repeated at the lowest, the middle, and the highest frequency of the stated frequency range. These frequencies shall be recorded. **Equipment measured as constant envelope modulation equipment** 

Page 16 of 68

For practical reasons, measurements shall be performed only at the highest power level at which the transmitter is intended to operate. The measurement arrangement in figure 2 shall be used. The measurement shall be performed preferably in the absence of modulation.

When it is not possible to measure it in the absence of modulation, this fact shall be stated in test reports.

The transmitter shall be set in continuous transmission mode. If this is not possible, the measurements shall be carried

out in a period shorter than the duration of the transmitted burst. It may be necessary to extend the duration of the burst.

The transmitter shall be connected to an artificial antenna (see clause 5.8.2) and the power delivered to this artificial antenna shall be measured.

The equivalent isotropically radiated power is then calculated from the measured value, the known antenna gain, relative to an isotropic antenna, and if applicable, any losses due to cables and connectors in the measurement system.

#### Equipment measured as non-constant envelope modulation equipment

The measurement shall be performed with test signals D-M2 or D-M3 as appropriate. The transmitter shall be preferably set in continuous transmission mode. If this is not possible, the measurement can be performed in discontinuous mode.

The transmitter shall be connected to an artificial antenna (see clause 5.8.2) and the power delivered to this artificial antenna shall be measured. The measuring instrument shall have a measurement bandwidth not less than sixteen times the channel bandwidth.

The equivalent isotropically radiated power is then calculated from the measured value, the known antenna gain, relative to an isotropic antenna, and if applicable, any losses due to cables and connectors in the measurement system.

## 3.4.2 FOR ALL OTHER TRANSMITTER BANDWIDTHS

#### Step 1:

• using a suitable means, the output of the transmitter shall be coupled to a matched diode detector;

• the output of the diode detector shall be connected to the vertical channel of an oscilloscope;

• the combination of the diode detector and the oscilloscope shall be capable of faithfully

reproducing the envelope peaks and the duty cycle of the transmitter output signal;

• the observed duty cycle of the transmitter (Tx on/(Tx on + Tx off)) shall be noted as x, (0 < x < 1)And recorded.

#### Step 2:

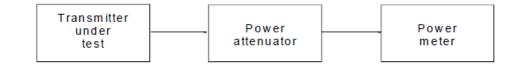
• the average output power of the transmitter shall be determined using a wideband, calibrated RF power meter with a matched thermocouple detector or an equivalent thereof and, where applicable, with an integration period that exceeds the repetition period of the transmitter by a factor 5 or more. The observed value shall be recorded as "A" (in dBm);

• the e.i.r.p. shall be calculated from the above measured power output A, the observed duty cycle x, and the applicable antenna assembly gain "G" in dBi, according to the formula:

 $-P = A + G + 10 \log (1/x);$ 

- P should be EIRP POWER.

## 3.5 TEST SETUP LAYOUT



## 3.6 EUT OPERATION DURING TEST

Where possible, the equipment shall be able to operate in a continuous transmit mode for testing purposes.



### 3.7 TEST RESULT FOR -6 DB BANDWIDTH

EUT :	Mobile Phone	Model Name :	BV8800
Temperature :	26°C	Relative Humidity :	60 %
Pressure :	1012 hPa	Test Voltage :	DC 3.85V (NORMAL)
Test Mode :	Mode 1/2/3		

Test data reference attachment



## 3.8 TEST RESULT FOR E.I.R.P

EUT :	Mobile Phone	Model Name :	BV8800
Temperature :	26C	Relative Humidity :	60 %
Pressure :	1012 hPa	Test Voltage :	DC 3.85V (NORMAL)
Test Mode :	Mode 1/2/3		

Test data reference attachment

## 4. PERMITTED RANGE OF OPERATING FREQUENCIES

#### 4.1 APPLIED PROCEDURES / LIMIT

The Permitted range of operating frequencies shall apply to all transmitters.

Limits: The width of the power spectrum envelope is fH -fL for a given operating frequency. In equipment that allows adjustment or selection of different operating frequencies, the power envelope takes up different positions in the allowed band. The frequency range is determined by the lowest value of fL and the highest value of fH resulting from the adjustment of the equipment to the lowest and highest operating frequencies.

The occupied bandwidth (i.e. the bandwidth in which 99 % of the wanted emission is contained) of the transmitter shall fall within the assigned frequency band.

For all equipment the frequency range shall lie within the frequency band given by section 3.2, table 2. For non-harmonized frequency bands the available frequency range may differ between national administrations.

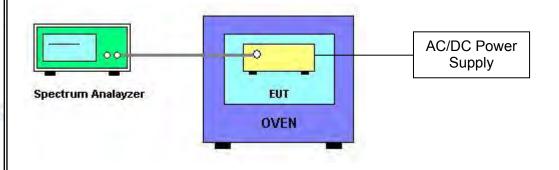
#### **4.2 TEST PROCEDURES**

These measurements shall be performed under both normal and extreme operating conditions except for the occupied bandwidth assessment for which measurement at normal operating conditions is sufficient.

The measurement procedure shall be as follows:

- a) put the spectrum analyser in video averaging mode with a minimum of 50 sweeps selected;
- b) select the lowest operating frequency of the equipment under test and activate the transmitter with modulation applied. The RF emission of the equipment shall be displayed on the spectrum analyser;
- c) using the marker of the spectrum analyser, find the lowest frequency below the operating frequency at which the spectral power density drops below the level given in clause 4.2.3. This frequency shall be recorded in the test report;
- d) select the highest operating frequency of the equipment under test and find the highest frequency at which the spectral power density drops below the value given in clause 4.2.3. This frequency shall be recorded in the test report;
- e) the difference between the frequencies measured in steps c) and d) is the operating frequency range. It shall be recorded in the test report.

## 4.3 TEST SETUP LAYOUT



#### **4.4 EUT OPERATION DURING TEST**

The EUT was programmed to be in continuously transmitting mode.

# NTEK LM<sup>®</sup> Page 20 of 68

Report No.: STR211129004005E

## 4.5 TEST RESULTS

EUT :	Mobile Phone	Model Name :	BV8800
Temperature :	26°C	Relative Humidity :	60 %
Pressure :	1012 hPa	Test Voltage :	DC 3.85V (NORMAL)
Test Mode :	TX		

## 802.11a

Extreme condition			Frequency range ( MHz )		
			F <sub>L</sub> CH149	F <sub>н</sub> CH165	
		V max (V)	4.2	5736.453	5834.843
T min (°C)	-10	V nom (V)	3.85	5735.908	5834.972
		V min (V)	3.4	5736.470	5835.493
		V max (V)	4.2	5736.029	5835.286
T max (°C)	40	V nom (V)	3.85	5735.918	5834.642
		V min (V)	3.4	5735.625	5834.543
T normal (°C)	24	V nom (V)	3.85	5736.387	5834.857
Min. f <sub>L</sub> / Max. f <sub>H</sub> Band Edges				5735.625	5835.493
Indoor Use Limits				<b>F</b> <sub>L</sub> > 5725.0 MHz	<b>F</b> <sub>L</sub> < 5875.0 MHz
	Result			Con	nplies

## 802.11n20

Extreme condition			Frequency	range(MHz)	
			F <sub>L</sub> CH149	F <sub>н</sub> CH165	
		V max (V)	4.2	5736.358	5835.083
T min (°C)	-10	V nom (V)	3.85	5736.367	5834.504
		V min (V)	3.4	5736.490	5834.562
		V max (V)	4.2	5736.273	5835.344
T max (°C)	40	V nom (V)	3.85	5736.306	5834.622
		V min (V)	3.4	5735.732	5834.567
T normal (°C)	24	V nom (V)	3.85	5735.965	5834.526
Min. f	Min. f <sub>L</sub> / Max. f <sub>H</sub> Band Edges			5735.732	5835.344
Indoor Use Limits			<b>F</b> <sub>L</sub> > 5725.0 MHz	<b>F</b> <sub>L</sub> < 5875.0 MHz	
	R	esult		Con	nplies

Report No.: STR211129004005E

802.11n40					
	Extreme condition			Frequency range (MHz )	
'				F <sub>L</sub> CH151	F <sub>н</sub> CH159
		V max (V)	4.2	5737.148	5814.416
T min (°C)	-10	V nom (V)	3.85	5736.519	5814.326
		V min (V)	3.4	5737.053	5814.095
		V max (V)	4.2	5737.179	5814.465
T max (°C)	40	V nom (V)	3.85	5737.448	5813.689
		V min (V)	3.4	5737.084	5813.652
T normal (°C)	24	V nom (V)	3.85	5737.456	5813.505
Min. f	Min. $f_L$ / Max. $f_H$ Band Edges			5736.519	5814.465
Indoor Use Limits			<b>F</b> <sub>L</sub> > 5725.0 MHz	<b>F</b> <sub>L</sub> < 5875.0 MHz	
	R	esult		Con	nplies

Page 21 of 68

## 802.11ac20

Extreme condition				Frequency	range(MHz)	
Extreme condition			F <sub>L</sub> CH149	F <sub>н</sub> CH165		
		V max (V)	4.2	5736.238	5835.475	
T min (°C)	-10	V nom (V)	3.85	5735.615	5835.368	
		V min (V)	3.4	5736.085	5834.900	
		V max (V)	4.2	5735.895	5835.157	
T max (°C)	40	V nom (V)	3.85	5736.190	5834.908	
		V min (V)	3.4	5735.668	5834.691	
T normal (°C)	24	V nom (V)	3.85	5736.347	5834.522	
Min. f <sub>L</sub> / Max. f <sub>H</sub> Band Edges			5735.615	5835.475		
Indoor Use Limits			<b>F</b> <sub>L</sub> > 5725.0 MHz	<b>F</b> ∟ < 5875.0 MHz		
	R	esult		Con	nplies	

Report No.: STR211129004005E

-	- /			Frequency range(MHz)	
t	Extreme condition			F <sub>L</sub> CH151	F <sub>н</sub> CH159
		V max (V)	4.2	5737.410	5814.249
T min (°C)	-10	V nom (V)	3.85	5737.192	5813.702
		V min (V)	3.4	5736.683	5814.472
		V max (V)	4.2	5737.036	5814.312
T max (°C)	40	V nom (V)	3.85	5736.893	5813.798
		V min (V)	3.4	5736.660	5813.796
T normal (°C)	24	V nom (V)	3.85	5737.370	5814.027
Min. $f_L$ / Max. $f_H$ Band Edges			5736.660	5814.472	
Indoor Use Limits			<b>F</b> <sub>L</sub> > 5725.0 MHz	<b>F</b> ∟ < 5875.0 MHz	
	R	lesult		Con	nplies

Page 22 of 68

#### 802.11ac80

Extreme condition			Frequency	range(MHz)	
Extreme condition			F <sub>L</sub> CH155	F <sub>н</sub> CH155	
		V max (V)	4.2	5737.066	5814.322
T min (°C)	-10	V nom (V)	3.85	5737.388	5813.731
		V min (V)	3.4	5737.193	5813.937
		V max (V)	4.2	5737.412	5813.728
T max (°C)	40	V nom (V)	3.85	5737.238	5813.723
		V min (V)	3.4	5736.770	5813.567
T normal (°C)	24	V nom (V)	3.85	5737.127	5814.300
Min. f	Min. f <sub>L</sub> / Max. f <sub>H</sub> Band Edges			5736.770	5814.322
Indoor Use Limits			<b>F</b> <sub>L</sub> > 5725.0 MHz	<b>F</b> ∟ < 5875.0 MHz	
	R	esult		Con	nplies

# NTEK Lin<sup>®</sup> Page 23 of 68

## 5. UNWANTED EMISSIONS IN THE SPURIOUS DOMAIN

#### 5.1 APPLIED PROCEDURES / LIMIT

The unwanted emissions in the spurious domain requirement shall apply to all transmitters.

	47 MHz to 74 MHz		
State	87.5 MHz to 118 MHz	Other frequencies	Frequencies
Sidle	174 MHz to 230 MHz	≤□ 1 000 MHz	> 1 000 MHz
	470 MHz to 862 MHz		
Operating	4 nW /-54dBm	250 nW/-36dBm	1 µW /-30dBm
Standby	2 nW /-57dBm	2 nW /-57dBm	20 nW /-47dBm

#### 5.2 MEASURING INSTRUMENTS AND SETTING

The following table is the setting of the Spectrum Analyzer.

Spectrum Analyzer	Setting
Attenuation	Auto
Start Frequency	30 MHz
Stop Frequency	40GHz
Detector	Positive Peak
Sweep Time	Auto
RB	For frequency 30MHz~1G:100 kHz~120 kHz For frequency above 1G:1MHz

## 5.3 TEST PROCEDURES

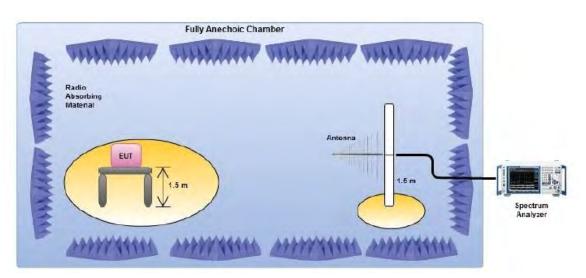
- a. The EUT was placed on the top of the turntable in open test site area.
- b. The test shall be made in the transmitting mode. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- c. This measurement shall be repeated with the transmitter in standby mode where applicable.
- d. For 30~1000MHz spurious emissions measurement, the broad band bi-log receiving antenna was placed 3 meters far away from the turntable. For above 1G, using Horn antenna .
- e. The broadband receiving antenna was fixed on the same height with the EUT to find each suspected emissions of both horizontal and vertical polarization. Each recorded suspected value is indicated as Read Level (Raw).
- f. Replace the EUT by standard antenna and feed the RF port by signal generator.
- g. Adjust the frequency of the signal generator to the suspected emission and slightly rotate the turntable to locate the position with maximum reading.
- h. Adjust the power level of the signal generator to reach the same reading with Read Level (Raw).
- i. The level of the spurious emission is the power level of (8) plus the gain of the standard antenna in dBi and minus the loss of the cable used between the signal generator and the standard antenna.
- j. If the level calculated in (9) is higher than limit by more than 6dB, then lower the RBW of the spectrum analyzer to 30KHz. If the level of this emission does not change by more than 2dB, then it is taken as narrowband emission, otherwise, wideband emission.
- k. The measurement shall be repeated at the lowest and the highest channel of the stated frequency range.

## NTEK 北测

## Report No.: STR211129004005E

## 5.4 TEST SETUP LAYOUT

Radiated Emission Test Set-Up



Page 24 of 68

## **5.5 EUT OPERATION DURING TEST**

The EUT was programmed to be in continuously transmitting mode.

#### 5.6 RESULTS OF STANDBY MODE SPURIOUS EMISSIONS

For the initial investigation on standby mode and receiving mode, no significant differences in spurious emissions were observed between these 2 modes. So test data for standby mode was omitted in this section.

Report No.: STR211129004005E

## 5.7 TEST RESULTS

EUT :	Mobile Phone	Model Name :	BV8800
Temperature :	<b>24</b> ℃	Relative Humidity :	54%
Pressure :	1010 hPa	Test Power :	DC 3.85V (NORMAL)
Test Mode :	TX-802.11a mode		

Page 25 of 68

## Below 1G :

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(H/V)	(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	Туре
V	40.95	-70.08	15.45	-54.63	-36	-18.63	peak
V	69.79	-71.28	9.29	-61.99	-54	-7.99	peak
V	104.20	-81.52	10.36	-71.16	-54	-17.16	peak
V	181.78	-81.40	12.32	-69.08	-54	-15.08	peak
V	271.77	-60.67	12.49	-48.18	-36	-12.18	peak
V	483.35	-90.11	17.18	-72.93	-54	-18.93	peak
Н	44.42	-63.59	13.04	-50.55	-36	-14.55	peak
Н	63.98	-72.95	5.77	-67.18	-54	-13.18	peak
Н	111.14	-79.68	10.57	-69.11	-54	-15.11	peak
Н	179.76	-79.17	12.40	-66.77	-54	-12.77	peak
Н	342.26	-60.36	13.98	-46.38	-36	-10.38	peak
Н	621.44	-88.90	20.66	-68.24	-54	-14.24	peak

### Remark:

Emission Level= Meter Reading+ Factor, Margin= Emission Level- Limit

Page 26 of 68

Report No.: STR211129004005E

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detect
(H/V)	(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	Туре
		ор	eration frequency	/:5755 MHz		-	
V	1197.87	-45.99	2.53	-43.46	-30	-13.46	peak
V	1697.13	-44.77	3.37	-41.40	-30	-11.40	peak
V	2197.60	-52.58	8.69	-43.89	-30	-13.89	peak
V	5758.81	-60.22	9.25	-50.97	-30	-20.97	peak
Н	1696.23	-47.48	3.16	-44.32	-30	-14.32	peak
Н	3823.08	-63.96	8.78	-55.18	-30	-25.18	peak
Н	5759.10	-59.27	9.17	-50.10	-30	-20.10	peak
Н	9383.33	-58.52	14.75	-43.77	-30	-13.77	peak
		ор	eration frequency	/:5785 MHz		<u>.</u>	
V	1198.08	-46.03	1.69	-44.34	-30	-14.34	peak
V	1698.57	-45.01	3.41	-41.60	-30	-11.60	peak
V	2196.81	-50.98	8.22	-42.76	-30	-12.76	peak
V	3884.78	-60.83	8.29	-52.54	-30	-22.54	peak
V	5822.31	-59.50	8.84	-50.66	-30	-20.66	peak
Н	1697.54	-47.36	3.42	-43.94	-30	-13.94	peak
Н	2197.05	-52.16	8.26	-43.90	-30	-13.90	peak
Н	5823.62	-56.61	9.20	-47.41	-30	-17.41	peak
Н	9388.76	-54.01	15.02	-38.99	-30	-8.99	peak
		ор	eration frequency	/:5825 MHz			0
V	1697.07	-46.37	3.76	-42.61	-30	-12.61	peak
V	2196.29	-50.00	9.12	-40.88	-30	-10.88	peak
V	2633.76	-58.32	9.47	-48.85	-30	-18.85	peak
V	5821.11	-60.27	8.73	-51.54	-30	-21.54	peak
V	6169.79	-50.84	11.28	-39.56	-30	-9.56	peak
Н	1697.40	-47.89	3.50	-44.39	-30	-14.39	peak
Н	2197.07	-52.51	9.07	-43.44	-30	-13.44	peak
Н	2633.81	-58.86	9.91	-48.95	-30	-18.95	peak
Н	5820.77	-55.93	8.92	-47.01	-30	-17.01	peak

Emission Level= Meter Reading+ Factor, Margin= Emission Level- Limit

Note: Only the worst case 802.11a mode recorded in the report.

## NTEK 北测

## Report No.: STR211129004005E

## 6. DUTY CYCLE

#### 6.1 APPLICABILITY AND DESCRIPTION

Duty Cycle (DC) shall apply to all transmitting equipment except those which utilize Listen Before Talk (LBT) clause 4.4.2, or Detect And Avoid (DAA), clause 4.4.3. RFID transmitters operating in the 2 446 MHz to 2 454 MHz frequency band that transmit at a maximum radiated peak power level of less than 500 mW e.i.r.p. are also excluded.

Page 27 of 68

Duty cycle is the ratio expressed as a percentage, of the cumulative duration of transmissions  $T_{on_cum}$  within an observation interval  $T_{obs.}$ 

$$DC = \left(\frac{T_{on\_cum}}{T_{obs}}\right)F_{obs}$$

on an observation bandwidth F<sub>obs</sub>.

Unless otherwise specified,  $T_{\mbox{\tiny obs}}$  is 1 hour and the observation bandwidth  $F_{\mbox{\tiny obs}}$  is the operational frequency band

Each transmission consists of an RF emission, or sequence of RF emissions separated by intervals  $< T_{Dis}$ .

#### 6.2 LIMITS

Table 4 defines the maximum duty cycle within a 1 hour period. Table 4: Duty cycle limits

Frequency Band	Duty cycle	Application	Notes
2 400 MHz to 2 483,5 MHz	No Restriction	Generic use	
2 400 MHz to 2 483,5 MHz	No Restriction	Detection, movement and alert	
		applications	
(a) 2 446 MHz to 2 454 MHz	No Restriction	RFID	Limits shown in
			annex D shall apply
(b) 2 446 MHz to 2 454 MHz	≤ 15 %	RFID	Limits shown in
			annex D shall apply
5 725 MHz to 5 875 MHz	No Restriction	Generic use	
9 200 MHz to 9 500 MHz	No Restriction	Radiodetermination:	
		radar, detection, movement and	
		alert applications	
9 500 MHz to 9 975 MHz	No Restriction	Radiodetermination:	
		radar, detection, movement and	
		alert applications	
10,5 GHz to 10,6 GHz	No Restriction	Radiodetermination:	
		radar, detection, movement and	
		alert applications	
13,4 GHz to 14,0 GHz	No Restriction	Radiodetermination:	
		radar, detection, movement and	
		alert applications	
17,1 GHz to 17,3 GHz	DAA or	Radiodetermination:	Limits shown in
	equivalent	GBSAR detecting and movement	annex F shall apply
	techniques	and alert applications	
24,00 GHz to 24,25 GHz	No Restriction	Generic use and for	
		Radiodetermination:	
		radar, detection, movement and	
		alert applications	

For devices with a 100 % duty cycle transmitting an unmodulated carrier most of the time, a time-out shut-off facility shall be implemented in order to improve the efficient use of spectrum. The method of implementation shall be declared by the manufacturer.

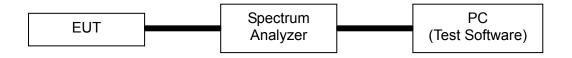
### 6.4 METHOD OF MEASUREMENT

Please refer to EN 300440 V2.2.1 Clause 4.2.5.3.

Page 28 of 68

## Report No.: STR211129004005E

## 6.5 TEST SETUP



## 6.6 TEST RESULTS

EUT:	Mobile Phone	Model Name:	BV8800
Temperature:	26°C	Relative Humidity:	53 %
Pressure:	1012 hPa	Test Voltage:	DC 3.85V (NORMAL)
Test Mode:	Mode 1/2/3		

Test data reference attachment

## 7. SPURIOUS EMISSIONS - RX

#### 7.1 APPLIED PROCEDURES / LIMIT

Clause	Test Item	Frequency(MHz)	Limit
4.3.5.4	Spurious emissions	30-1000	-57dBm
4.3.3.4	(radiated)	Above 1000	-47dBm

#### 7.2 MEASURING INSTRUMENTS AND SETTING

The following table is the setting of the Spectrum Analyzer.

Spectrum Analyzer	Setting
Attenuation	Auto
Start Frequency	30 MHz
Stop Frequency	40GHz
Detector	Positive Peak
Sweep Time	Auto
RB	For frequency 30MHz~1G:100 kHz~120 kHz For frequency above 1G:1MHz

#### 7.3 TEST PROCEDURES

- a. The EUT was placed on the top of the turntable in open test site area.
- b. The test shall be made in the receiving mode. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- c. For 30~1000MHz spurious emissions measurement, the broad band bi-log receiving antenna was placed 3 meters far away from the turntable.For above 1G, using Horn antenna .
- d. The broadband receiving antenna was fixed on the same height with the EUT to find each suspected emissions of both horizontal and vertical polarization. Each recorded suspected value is indicated as Read Level (Raw).
- e. Replace the EUT by standard antenna and feed the RF port by signal generator.
- f. Adjust the frequency of the signal generator to the suspected emission and slightly rotate the turntable to locate the position with maximum reading.
- g. Adjust the power level of the signal generator to reach the same reading with Read Level (Raw).
- h. The level of the spurious emission is the power level of (7) plus the gain of the standard antenna in dBi and minus the loss of the cable used between the signal generator and the standard antenna.
- i. The measurement shall be repeated at the lowest and the highest channel of the stated frequency range.

#### 7.5 TEST SETUP LAYOUT

This test setup layout is the same as that shown in section 5.4.

#### 7.6 EUT OPERATION DURING TEST

The EUT was programmed to be in continuously receiving mode.

Report No.: STR211129004005E

## 7.7 TEST RESULTS

EUT :	Mobile Phone	Model Name :	BV8800
Temperature :	26°C	Relative Humidity :	53 %
Pressure :	1012 hPa	Test Power :	DC 3.85V (NORMAL)
Test Mode :	RX-802.11a mode		

Page 30 of 68

#### Below 1G :

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(H/V)	(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	Туре
V	34.63	-90.94	18.01	-72.93	-57	-15.93	peak
V	51.24	-81.91	9.80	-72.11	-57	-15.11	peak
V	116.60	-80.25	10.66	-69.59	-57	-12.59	peak
V	164.86	-80.36	12.21	-68.15	-57	-11.15	peak
V	234.21	-78.85	11.73	-67.12	-57	-10.12	peak
V	371.04	-80.54	15.47	-65.07	-57	-8.07	peak
Н	49.07	-77.23	9.97	-67.26	-57	-10.26	peak
Н	92.30	-80.65	9.82	-70.83	-57	-13.83	peak
Н	172.53	-81.49	12.87	-68.62	-57	-11.62	peak
Н	199.10	-79.65	12.25	-67.40	-57	-10.40	peak
Н	392.51	-90.12	14.82	-75.30	-57	-18.30	peak
Н	557.90	-89.62	18.37	-71.25	-57	-14.25	peak

#### Remark:

Emission Level= Meter Reading+ Factor, Margin= Emission Level- Limit

#### Above 1G :

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(H/V)	(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	Туре
V	1198.34	-61.79	2.23	-59.56	-47	-12.56	peak
V	1698.37	-62.05	3.79	-58.26	-47	-11.26	peak
V	2198.73	-66.08	8.63	-57.45	-47	-10.45	peak
V	2636.35	-68.53	9.73	-58.80	-47	-11.80	peak
V	8447.90	-76.44	16.61	-59.83	-47	-12.83	peak
Н	1198.05	-58.50	2.06	-56.44	-47	-9.44	peak
Н	1697.09	-57.79	3.34	-54.45	-47	-7.45	peak
Н	2197.65	-63.27	9.09	-54.18	-47	-7.18	peak
Н	3822.35	-70.12	8.99	-61.13	-47	-14.13	peak
Н	10697.55	-80.23	23.45	-56.78	-47	-9.78	peak

#### Remark:

Emission Level= Meter Reading+ Factor, Margin= Emission Level- Limit

## 8. ADJACENT CHANNEL SELECTIVITY

**NTEK** 北测

#### 8.1 APPLICABILITY

This requirement applies to channelized Category 1 receivers..

#### 8.2 LIMITS

The adjacent channel selectivity of the equipment under specified conditions shall not be less than -30 dBm + k.

The correction factor, k, is as follows:

 $k = -20\log f - 10\log BW$ 

Where:

- f is the frequency in GHz;

- BW is the channel bandwidth in MHz.

The factor k is limited within the following:

- -40 dB < k < 0 dB.

## 8.3 METHODS OF MEASUREMENT

This measurement shall be conducted under normal conditions.

Two signal generators A and B shall be connected to the receiver via a combining network to the receiver, either:

a) via a test fixture or a test antenna to the receiver integrated, dedicated or test antenna; or b) directly to the receiver permanent or temporary antenna connector.

The method of coupling to the receiver shall be stated in the test report.

Signal generator A shall be at the nominal frequency of the receiver, with normal modulation of the wanted signal.

Signal generator B shall be unmodulated and shall be adjusted to the adjacent channel centre frequency immediately

above that of the wanted signal.

Initially signal generator B shall be switched off and using signal generator A the level that still gives sufficient

response shall be established. The output level of generator A shall then be increased by 3 dB. Signal generator B is then switched on and adjusted until the wanted criteria are met. This level shall be recorded.

The measurements shall be repeated with signal generator B unmodulated and adjusted to the adjacent channel centre immediately below the wanted signal.

The adjacent channel selectivity shall be recorded for the upper and lower adjacent channels as the level in dBm of the unwanted signal.

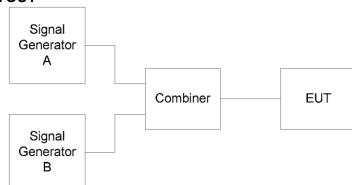
For tagging systems (e.g. RF identification, anti-theft, access control, location and similar systems) signal generator A may be replaced by a physical tag positioned at 70 % of the measured system range in metres.

In this case, the adjacent selectivity shall be recorded as the level in dBm of lowest level of the unwanted signal

(generator B) resulting in a non-read of the tag.

## Report No.: STR211129004005E

## 8.4 TEST SETUP LAYOUT



Page 32 of 68

## 8.5 TEST RESULTS

EUT :	Mobile Phone	Model Name :	BV8800
Temperature :	<b>24</b> ℃	Relative Humidity :	54%
Pressure :	1010 hPa	Test Voltage :	N/A
Test Mode :	N/A		

Not applicable.

Report No.: STR211129004005E

## 9. BLOCKING OR DESENSITIZATION

#### 9.1 APPLICABILITY

This requirement applies to all Category 1, 2, and 3 SRD communication media receivers.

Page 33 of 68

#### 9.2 LIMITS

The blocking level, for any frequency within the specified ranges, shall not be less than the values given in table 6, except at frequencies on which spurious responses are found.

Receiver category	Limit
1	-30 dBm + k
2	-45 dBm + k
3	-60 dBm + k

The correction factor, k, is as follows:

k =□ -20log f -10log BW

Where:

- f is the frequency in GHz;

- BW is the channel bandwidth in MHz.

The factor k is limited within the following:

- -40 dB < k < 0 dB.

## 9.3 TEST PROCEDURES

This measurement shall be conducted under normal conditions.

Two signal generators A and B shall be connected to the receiver via a combining network to the receiver, either:

a) via a test fixture or a test antenna to the receiver integrated, dedicated or test antenna; or

b) directly to the receiver permanent or temporary antenna connector.

The method of coupling to the receiver shall be stated in the test report.

Signal generator A shall be at the nominal frequency of the receiver, with normal modulation of the wanted signal.Signal generator B shall be unmodulated and shall be adjusted to a test frequency at approximately 10 times, 20 times and 50 times of the occupied bandwidth above upper band edge of occupied bandwidth.Initially signal generator B shall be switched off and using signal generator A the level which still gives sufficient response shall be established. The output level of generator A shall then be increased by 3 dB.Signal generator B is then switched on and adjusted until the wanted criteria are met. This level shall be recorded.

The measurement shall be repeated with the test frequency for signal generator B at 10 times, 20 times and 50 times of the occupied bandwidth below the lower band edge of the occupied bandwidth The blocking or desensitization shall be recorded as the level in dBm of lowest level of the unwanted signal(generator B).

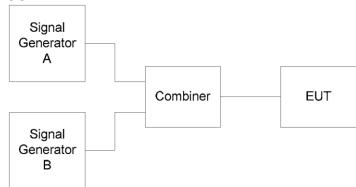
For tagging systems (e.g. RF identification, anti-theft, access control, location and similar systems) signal generator A may be replaced by a physical tag positioned at 70 % of the measured system range in metres. In this case, the blocking or desensitization shall be recorded as the ratio in dB of lowest level of the unwanted signal (generator B) resulting in a non-read of the tag. to the declared sensitivity of the receiver +3 dB.



Page 34 of 68

Report No.: STR211129004005E

## 8.4 TEST SETUP LAYOUT



## 9.4 TEST RESULTS

EUT :	Mobile Phone	Model Name :	BV8800
Temperature :	<b>24</b> ℃	Relative Humidity :	54%
Pressure :	1010 hPa	Test Voltage :	DC 3.85V (NORMAL)
Test Mode :	RX		

#### 802.11a

5745 MHz

#### Flow= 5736.825MHz; Fhigh= 5753.195MHz, occupied bandwidth=16.37MHz

Receiver category	Frequency offset	Test Frequency (MHz)	Measurement Vause(dB) (Generator A)	Measurement Vause(dB) (Generator B)	≧Limit(dB)
	5745 MHz	5745	-64.69	-	-
	10 times lower band edge of the occupied bandwidth	5573.125	-	-29.71	-87.33(Note <sup>1</sup> )
3	20 times lower band edge of the occupied bandwidth	5409.425	-	-35.49	-87.33
	50 times lower band edge of the occupied bandwidth	4918.325	-	-35.53	-87.33
	10 times upper band edge of the occupied bandwidth	5916.895	-	-30.20	-87.33
	20 times upper band edge of the occupied bandwidth	6080.595	-	-35.33	-87.33
	50 times upper band edge of the occupied bandwidth	6571.695	-	-31.00	-87.33

#### Note1:

The limit :

-60 dBm + k

The correction factor, k, is as follows:

k = -20log f -10logBW

k = -27.33

Where:

- f is the frequency in GHz;

- BW is the occupied bandwidth in MHz.

#### Report No.: STR211129004005E

## 802.11a

#### 5825 MHz

#### Flow= 5816.789MHz; Fhigh= 5833.179MHz, occupied bandwidth=16.39MHz

Page 36 of 68

Receiver category	Frequency offset	Test Frequency (MHz)	Measurement Vause(dB) (Generator A)	Measurement Vause(dB) (Generator B)	≧Limit(dB)
	5825 MHz	5825	-65.36	-	-
	10 times lower band edge of the occupied bandwidth	5652.889	-	-30.19	-87.45(Note <sup>1</sup> )
3	20 times lower band edge of the occupied bandwidth	5488.989	-	-34.10	-87.45
	50 times lower band edge of the occupied bandwidth	4997.289	-	-35.25	-87.45
	10 times upper band edge of the occupied bandwidth	5997.079	-	-30.28	-87.45
	20 times upper band edge of the occupied bandwidth	6160.979	-	-34.66	-87.45
	50 times upper band edge of the occupied bandwidth	6652.679	-	-31.09	-87.45

#### Note1:

The limit :

-60 dBm + k

The correction factor, k, is as follows:

k = -20log f -10logBW

k = -27.45

Where:

- f is the frequency in GHz;

- BW is the occupied bandwidth in MHz.

### Report No.: STR211129004005E

### 802.11n40

5755 MHz

#### Flow= 5737.13MHz; Fhigh= 5772.934MHz, occupied bandwidth=35.805MHz

Page 37 of 68

Receiver category	Frequency offset	Test Frequency (MHz)	Measurement Vause(dB) (Generator A)	Measurement Vause(dB) (Generator B)	≧Limit(dB)
	5755 MHz	5755	-65.33	-	-
	10 times lower band edge of the occupied bandwidth	5379.09	-	-29.80	-90.74(Note <sup>1</sup> )
	20 times lower band edge of the occupied bandwidth	5021.05	-	-35.52	-90.74
3	50 times lower band edge of the occupied bandwidth	3946.93	-	-35.01	-90.74
	10 times upper band edge of the occupied bandwidth	6130.974	-	-29.68	-90.74
	20 times upper band edge of the occupied bandwidth	6489.014	-	-34.95	-90.74
	50 times upper band edge of the occupied bandwidth	7563.134	-	-31.63	-90.74

#### Note1:

The limit :

-60 dBm + k

The correction factor, k, is as follows:

k = -20log f -10logBW

k = -30.74

Where:

- f is the frequency in GHz;

- BW is the occupied bandwidth in MHz.

### Page 38 of 68

### Report No.: STR211129004005E

### 802.11n40

### 5795 MHz

#### low= 5777.01MHz; Fhigh= 5812.99MHz, occupied bandwidth=35.98MHz

Receiver category	Frequency offset	Test Frequency (MHz)	Measurement Vause(dB) (Generator A)	Measurement Vause(dB) (Generator B)	≧Limit(dB)
	5795 MHz	5795	-64.91	-	-
	10 times lower band edge of the occupied bandwidth	5417.21	-	-29.13	-90.82(Note <sup>1</sup> )
	20 times lower band edge of the occupied bandwidth	5057.41	-	-33.70	-90.82
3	50 times lower band edge of the occupied bandwidth	3978.01	-	-35.03	-90.82
	10 times upper band edge of the occupied bandwidth	6172.79	-	-29.03	-90.82
	20 times upper band edge of the occupied bandwidth	6532.59	-	-34.98	-90.82
	50 times upper band edge of the occupied bandwidth	7611.99	-	-30.02	-90.82

#### Note1:

The limit :

-60 dBm + k

The correction factor, k, is as follows:

k = -20log f -10logBW

k = -30.82

Where:

- f is the frequency in GHz;

- BW is the occupied bandwidth in MHz.

### Report No.: STR211129004005E

### 802.11ac80

5775 MHz

Flow= 5737.436MHz; Fhigh= 5812.74MHz, occupied bandwidth=75.304MHz

Page 39 of 68

Receiver category	Frequency offset	Test Frequency (MHz)	Measurement Vause(dB) (Generator A)	Measurement Vause(dB) (Generator B)	≧Limit(dB)
	5795 MHz	5775	-65.30	-	-
	10 times lower band edge of the occupied bandwidth	4984.396	-	-28.95	-94.00(Note <sup>1</sup> )
	20 times lower band edge of the occupied bandwidth	4231.356	-	-33.98	-94.00
3	50 times lower band edge of the occupied bandwidth	1972.236	-	-34.35	-94.00
	10 times upper band edge of the occupied bandwidth	6565.780	-	-30.11	-94.00
	20 times upper band edge of the occupied bandwidth	7318.820	-	-34.66	-94.00
	50 times upper band edge of the occupied bandwidth	9577.940	-	-30.11	-94.00

#### Note1:

The limit :

-60 dBm + k

The correction factor, k, is as follows:

 $k = -20\log f - 10\log BW$ 

k = -34.00

Where:

- f is the frequency in GHz;

- BW is the occupied bandwidth in MHz.

### Page 40 of 68

### Report No.: STR211129004005E

### **10. TEST RESULTS**

### 10.1 DUTY CYCLE

Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)
NVNT	802.11a	5745	100	0
NVNT	802.11a	5785	100	0
NVNT	802.11a	5825	100	0
NVNT	802.11ac20	5745	100	0
NVNT	802.11ac20	5785	100	0
NVNT	802.11ac20	5825	100	0
NVNT	802.11ac40	5755	100	0
NVNT	802.11ac40	5795	100	0
NVNT	802.11ac80	5775	100	0
NVNT	802.11n(HT20)	5745	100	0
NVNT	802.11n(HT20)	5785	100	0
NVNT	802.11n(HT20)	5825	100	0
NVNT	802.11n(HT40)	5755	100	0
NVNT	802.11n(HT40)	5795	100	0

### Duty Cycle NVNT 802.11a 5745MHz

1Pk Clrw		_			_				
THE GIVE					M	11[1]			8.93 dBn 56.6000 ms
20 dBm	-	_		-		1			+
10 dBm					M1				
	unbergen demonstration	white gog beer bigs	adwinnterpress	annindumentally	welnementationality	appression and a	matricesation phone	unnationships	at we have the owner
0 dBm									
-10 dBm			-		_	-	_		-
-20 dBm					_			÷	1
-30 dBm	-	-		-			-		
-40 dBm							-		
-50 dBm		_	_	_	_			_	_
-60 dBm					1.00				
CF 5.745 GH	17		_	1001	nte	1			10.0 ms/

# NTEK 北测®

30 dBm

-40 dBm--50 dBm--60 dBm-

CF 5.825 GHz

### Report No.: STR211129004005E

10.0 ms/

Duty Cycle NVNT 802.11a 5785MHz

Page 41 of 68

Spectrum	)	, .,						The state of the
Ref Level 29.73		9.73 dB 🍙 RI 100 ms 🍙 VI						1.
1Pk Clrw								
				M	1[1]			8.30 dBm
20 dBm					0	0	8	9.3000 ms
20 0810			1.1					
10 dBm			_				M	
artisal and a support of the support	un him maler within	-the the twent the art of	till when your Ur you we	prakhatyanat	the providence of the second	who who have been and the	rikburnyamethic	Maringhabaraday
0 dBm			-				1	
			in the second se				1	
-10 dBm			-			-		
-20 dBm		1	-			· · · · · · · · · · · · · · · · · · ·	1	
-30 dBm-				_				
-So ubili			·		1.0.000	·	1	
-40 dBm								
-50 dBm				_				
-60 dBm			-			-		
	_		_					
CF 5.785 GHz			1001	pts			-	10.0 ms/
II.					1	CI I		-
	Dut	y Cycle	NVNT	802.11	a 5825l	MHz		
Spectrum	)							T
Ref Level 29.81	dBm Offset	9.81 dB 🝙 RI	BW 1 MHz					(v
	o de 🗉 swt							
SGL			C. C. Martin M.					
1Pk Clrw	1	1 1	-	M	1[1]			9.65 dBm
			1 - 1	141	1[1]			1.2000 ms
20 dBm-	_		-					1 1 1 1 1 1 1
11								
10 dBm	at the second address of a balance	All har make whether	memoria com oticos		of held alloway	to Hanne that would be	- to the state of the	multipolitickete
and the second	deal) (0)	An officer from the first	n In a shirt of a	and d. man h. at	is half linewist of the	An Inconstruction	All with with an feed	and the state of the
0 dBm		1				1	1	
-10 dBm		1			1	<u></u>	· · · · · · · ·	
-10 upin							1	
-20 dBm-			1	-		1		1
a subject		11 11						

1001 pts

### Report No.: STR211129004005E

Duty Cycle NVNT 802.11ac20 5745MHz

Page 42 of 68

Spectrum								E V
Ref Level 30. Att SGL	01 dBm Offse 40 dB 🖷 SWT	et 10.01 dB 🖷 100 ms 🖷	RBW 1 MHz VBW 3 MHz					
●1Pk Clrw								
				M	1[1]		9	8.08 dBn 93.3000 m
20 dBm					-			
10 dBm							-	M1
	the standing of the standing o	n his manipul proposition	My and a second supervised	matherphonentari	and a second s	all or how we have a second se	normalisticity	Antered a terrestation of
0 dBm						· · · ·		
-10 dBm			-		-	-		
-20 dBm		-	_			-		*
-30 dBm		-						
-40 dBm							-	
-50 dBm								
-60 dBm								
			1	1.00	1.1			101
CF 5.745 GHz	1.5		1001	pts				10.0 ms/
				1	Ţ			
	Dut			12 11 00	20 570			
Spectrum		y Cycle I		JZ. 11au	20 576			
Ref Level 29.	78 dBm Offse	et 9.73 dB 🔳	PRW 1 MH2	_				[ ∀
	40 dB . SWT							
1Pk Clrw				_				
				M	1[1]			8.09 dBn 27.7000 ms
20 dBm					1	1	1	
10 dBm		1	d an incom	10 -		5		10000

1Pk Clrw								
				M	11[1]			8.09 dBn 7.7000 m
20 dBm	-		-		1	1	1	7.7000 m
10 dBm	MI		_					
and an alternative for the second second	Arthon any the strangen a low for	palinguilles phinary	offinially and not	with manufacture and	in historic providence	spalachel workeren	Ana Manusana Martin	a stanty all also way
0 dBm			-			1	11	
-10 dBm	-	-			-			
-20 dBm	_		-	-				
-30 dBm	_		_					
-40 dBm						-		
-50 dBm								
-60 dBm		-	-		-			
CF 5.785 GHz			1001	pts		-		10.0

### Report No.: STR211129004005E

Duty Cycle NVNT 802.11ac20 5825MHz

Page 43 of 68

1Pk Clrw	1			
			M1[1]	8,48 dBr 89,9000 m
20 dBm				
10 dBm				ML
typhownerseproverse	warransanahan mayba wark	A myslow man and mered with the second	American spirate the second of the second second	articles was an analytic and the section of the section of
0 dBm				
10 40-				
-10 dBm				
-20 dBm-				_
-30 dBm				
-40 dBm				
-50 dBm				
-60 dBm				
CF 5.825 GHz		1001 pt	s	10.0 ms/
J				
	Duty Cyc	le NVNT 802	.11ac40 5755MH	Z
				E C
Spectrum				
Ref Level 29.83 d				
Ref Level 29.83 c Att 40	18m Offset 9.83 di 1 dB <b>- SWT</b> 100 m			

	1001 pts		
CF 5.755 GHz	1001 =ta		10.0 ms/
-60 dBm			S
-50 dBm-			
-40 dBm			
			1
-30 dBm			
-20 dBm-			
-10 dBm			
and and the state of the state	helisensensensensensensensensensensensensens	hter the plan mark of a state of the plan a fight from the state	will will place by the
10 dBm			1 Q.

### Report No.: STR211129004005E

### Duty Cycle NVNT 802.11ac40 5795MHz

Page 44 of 68

20 dBm			1 1 -	80.5000 ms
10 dBm				
			NI	
1916zenyartarantarantaranta	alice of the state	here for the state of the second state of the		what give and give and give
-10 dBm				
-20 dBm-				
-30 dBm				
-40 dBm				
-50 dBm-				
-60 dBm				
CF 5.795 GHz	100	1 pts		10.0 ms/
Y		, j	C1000000	444

DGL									
1Pk Clrw				_					
	1.0		-	1	M	1[1]		é	0.38 dBm 9.3000 ms
20 dBm	-						-		
10 dBm	-						-		
o dBm	La matrillita	At all a de ll'ar	Cont Manue of	on sile and set	and to the also bla	ett de la la caracterita	line today a	M1 V	abilitat de alles ta
with the stand of the stand	Makelankus Au	and the second	hadreen middagan	wind milesteradully	a in drad the addition of the	(What Water Office)	Man (Hand Jan H	martiner	which the way of the
-10 dBm									
-20 dBm		-							
-30 dBm									
-40 dBm							-		
-50 dBm	-		-			-	-		
-60 dBm			-		-				
CF 5.775 G	Hz			100:	pts				10.0 ms/
	Y					7			

### Report No.: STR211129004005E

Duty Cycle NVNT 802.11n(HT20) 5745MHz

Page 45 of 68

Spectrum								
Ref Level 30.01 Att	dBm Offset	10.01 dB 👄						
SGL		and the second	1000 m. No.					
1Rm Clrw	1	1	-	T M	1[1]	_		-1.12 dBn
					uff1]		7	3.2000 m
20 dBm					-			
10 dBm		-	-			-		
0 d8m			-			MI		
D qBW 114 11 AL	<mark>տուստուս</mark> ում	. A. M.	LALAN B. Q.A.	A B. C. B. A. H. M. S.	ALLARA D. M.	LINNILLI	<u>Ն Ուհ այի Ուն</u>	LTARL
-10 dBm	-		-		-			
-20 dBm			-					
-30 dBm			-			-		
-40 dBm			_					
-50 dBm	_		1			-		
-60 dBm					1.4		· · · · · · · · · · · · · · · · · · ·	
			100					10.0
CF 5.745 GHz			100	1 pts				10.0 ms/
Spectrum	Duty C	ycle NV	NT 802	2.11n(H	 T20) 57	85MHz		
Ref Level 29.73 Att 4 SGL	dBm Offset +0 dB <b>e SWT</b>	9.73 dB 🐞 R 100 ms 💼 V						
1Pk Clrw								
	-			M	1[1]		3	8.34 dBm 2.0000 ms
20 dBm			1		1	1	1	
10 dBm		MI	-					
an menoral poly and planet	marth and marked and here	northern the mark	ner fallow (regularing)	an adjudy an provinsion	nal provident name	han water and the second	a sail for the surger	Appropriate the
0 dBm					-			

CF 5.785 GHz	0		1001	l pts				10.0 ms/
-60 dBm								
-50 dBm			1	1				
-40 dBm								
-30 dBm		-	1					
-20 dBm								
-10 dBm				_				-
0 dBm							11	
10 aBin-	nation and the provident of the second	wyboursthuman	an farmer and much	and the state of t	alphantantanta	unradulturpeariums	repteringer	homeliperary
10 dBm-		Jx1 ±						

### Report No.: STR211129004005E

Duty Cycle NVNT 802.11n(HT20) 5825MHz

Page 46 of 68

		1	1	M	1[1]			8.74 dBr
				1	1(1)			9.6000 m
20 dBm					-	1		
10 dBm ML								
error and a production of the	white a second state of the second se	and a low of the hole	Anterna Miltheman	whill we share the loss	tomas an	munichleperturbulargatede	flaure and particula	astalleasintespola
0 dBm				_		_		
-10 dBm								
								-
-20 dBm	-	-	-	-			_	
-30 dBm				11				
SO UDIT								
-40 dBm								
En Januari	_					· · · · · · · · · · · · · · · · · · ·		
-50 dBm			1	1		· · · · · ·		
-60 dBm		-	-	_				
CF 5.825 GHz	0		1001	pts				10.0 ms/

					SGL 1Pk Clrw
4.31 dBm 88.5000 ms	1[1]	M		1	IFK CIW
					20 dBm
Ml		_		-	10 dBm
++1/+tenter-patenter-tenter-tenter-ten	wellingerstand water and the second dates	hor of the second south and the second se	ably to have been been been been been been been be	and the second	aytermine the will all a state
					10 dBm
				-	20 dBm
		-		-	30 dBm
					40 dBm
					50 dBm
					60 dBm
10.0 ms/		1001 pts	10		CF 5.755 GHz
		1001 pts	10		

### Report No.: STR211129004005E

Duty Cycle NVNT 802.11n(HT40) 5795MHz

Page 47 of 68

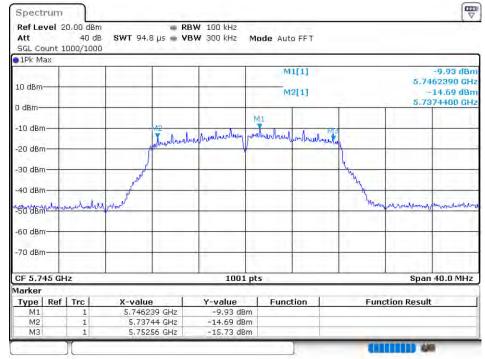
		_		( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )					
1Pk Clrw			- 1	1	M1[1] 3 87.				
20 dBm				-			-	-	
10 dBm		_		-				M1	
duters the state	Antoinplant	andata	up the the second	dwn+qt11/prt.dt	and a supplicity of the	aderic and the state	ha white the state of the	till por the ter	white the second
-10 dBm									
-20 dBm			-						
-30 dBm				-					
-40 dBm			-	-					
-50 dBm		_		-					
-60 dBm		_		-					7
CF 5.795 GH	2			1001	pts			· · · · ·	10.0 ms/

### Page 48 of 68

Report No.: STR211129004005E

0.2 -6DB I	EMISSION BANDWID	ТН				
Conditio	on Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	802.11a	5745	Ant 1	15.12	0.5	Pass
NVNT	802.11a	5785	Ant 1	15.36	0.5	Pass
NVNT	802.11a	5825	Ant 1	15.12	0.5	Pass
NVNT	802.11ac20	5745	Ant 1	15.12	0.5	Pass
NVNT	802.11ac20	5785	Ant 1	17.04	0.5	Pass
NVNT	802.11ac20	5825	Ant 1	15.12	0.5	Pass
NVNT	802.11ac40	5755	Ant 1	35.04	0.5	Pass
NVNT	802.11ac40	5795	Ant 1	35.12	0.5	Pass
NVNT	802.11ac80	5775	Ant 1	68.96	0.5	Pass
NVNT	802.11n(HT20)	5745	Ant 1	15.28	0.5	Pass
NVNT	802.11n(HT20)	5785	Ant 1	15.08	0.5	Pass
NVNT	802.11n(HT20)	5825	Ant 1	15.12	0.5	Pass
NVNT	802.11n(HT40)	5755	Ant 1	35.04	0.5	Pass
NVNT	802.11n(HT40)	5795	Ant 1	35.12	0.5	Pass

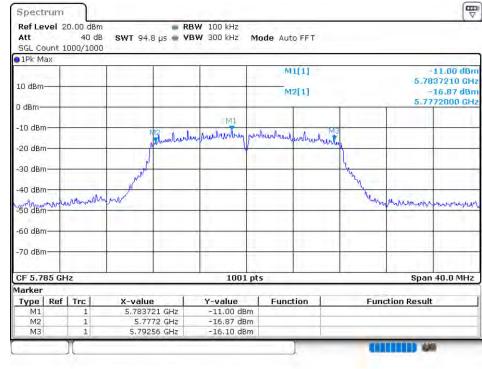
#### EBW NVNT 802.11a 5745MHz Ant1



#### Report No.: STR211129004005E

EBW NVNT 802.11a 5785MHz Ant1

Page 49 of 68



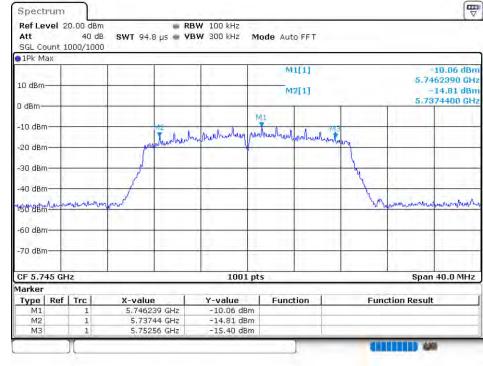
#### EBW NVNT 802.11a 5825MHz Ant1

Att	<b>/el</b> 20.0	40 dB	SWT 94.1		W 100 kHz W 300 kHz	Mode A	uto FFT					
●1Pk Ma	and the second sec				~							
10 dBm-	-					M1[1] M2[1]				-9.27 dBr 5.8262390 GH -13.18 dBr 5.8174400 GH		
0 dBm—	-					Ml				1 Hob dri		
-10 dBm				M2 T Jude	apprentisetting	particultu	A. almal	Ma				
-20 dBm	-	_	1	alment second			der on dauf	untu	-			
-30 dBm			A	-	-	-	-	4	-			
-40 dBm	_		1			-		1				
-50 dBm	umat	mutura	me			_	-	~	monteheliers	nohoroman and the		
-60 dBm	_	_										
-70 dBm	_					1						
CF 5.82	5 GHz				1001	pts			Spar	1 40.0 MHz		
Marker	T T T T											
	Ref   T	rc	X-value		Y-value		nction	Fu	nction Resul	t		
M1		1	5.8262		-9.27 dB							
M2 M3		1		44 GHz 56 GHz	-13.18 dB -15.04 dB							
MJ	T	4	3,032		13.04 00	00.41	1	0		6		

### Report No.: STR211129004005E

#### EBW NVNT 802.11ac20 5745MHz Ant1

Page 50 of 68



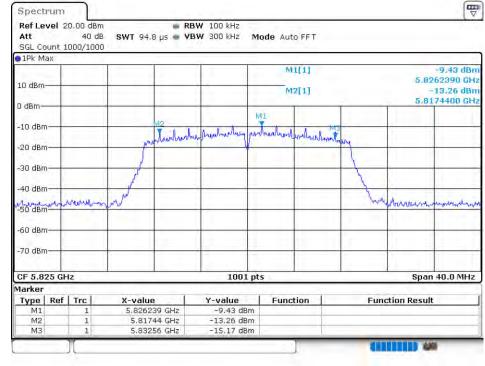
#### EBW NVNT 802.11ac20 5785MHz Ant1

Att SGL Co	unt 1000,	40 dB /1000	SWT 94.	s µs 🖷 Vi	SW 300 kHz	Mo	de Auto	FFT				
🛛 1Pk Ma	X				×			-				
10 dBm-						÷	M1[1] M2[1]			-11,45 df 5,7799650 G -17,26 df 5,7764400 G		
0 dBm-						-	1		1	_		17704400
-10 dBm			M2	MI					845			_
1			3	Muchante	warmining	potentia	whethere	mbuuh	anterie		1	
-20 dBm											1	
-30 dBm	_			-					1	_	-	
			1	1					1,			
-40 dBm		-	5				-			1		
Mentan		Wentuly	which .							Mry	man	Mundon
-50 060												
-60 dBm	-	_			-	_			_		-	
				1							1	
-70 dBm									-		-	
CF 5.78	5 GHz				1001	pts		-			S	pan 40.0 M
Marker	1111											
Type	Ref   Tr		X-value		Y-value		Functi	ion		Fun	ction Re	sult
M1		1	5.7799		-11.45 dB							
M2 M3		1		44 GHz 48 GHz	-17.26 dB							

### Report No.: STR211129004005E

#### EBW NVNT 802.11ac20 5825MHz Ant1

Page 51 of 68



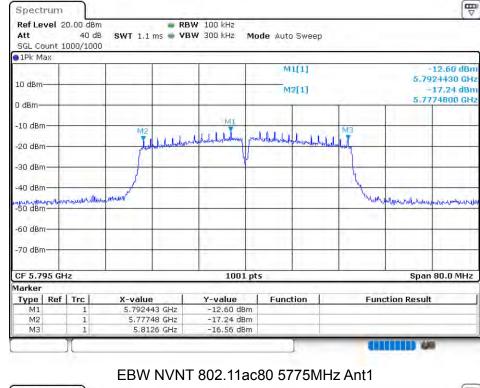
#### EBW NVNT 802.11ac40 5755MHz Ant1

SGL Co	unt 10	40 dB 100/1000	SWT 1,1 ms	100	500 KHZ	Mode Au	ro aweeb				
1Pk Ma	эх										
10 dBm-				-		M1[1] M2[1]			-11.97 dBr 5.7525220 GH -17.73 dBr		
0 dBm-		_		-			1	1	5.7	374800 GH	
-10 dBm	-		M2	_	M1	1.1.1		MB			
-20 dBm		_	Jan Jan Jan	ortunerly	Antheberleiter	pundialisticitati	Madamahily	edul fritz	-		
-30 dBm	-			-	4	(					
-40 dBm	-		1	_	-		-	1			
-SO dBm	un manda	on the second of	Pastured	_			-	Made	rutabeenhe	Untratational	
-60 dBm	-			_	_		-	_		-	
-70 dBm		_		-		-		-		-	
CF 5.75	55 GH2	2		_	1001	pts			Spa	in 80.0 MHz	
Marker	111										
	Ref	Trc	X-value		Y-value		ction	Fu	nction Resu	lt	
M1		1	5.752522 GH		-11.97 dB						
M2	1	1	5.73748 GH 5.77252 GH		-17,73 dB -16,10 dB						

### NTEK 比测<sup>®</sup> Page 52 of 68

### Report No.: STR211129004005E

#### EBW NVNT 802.11ac40 5795MHz Ant1

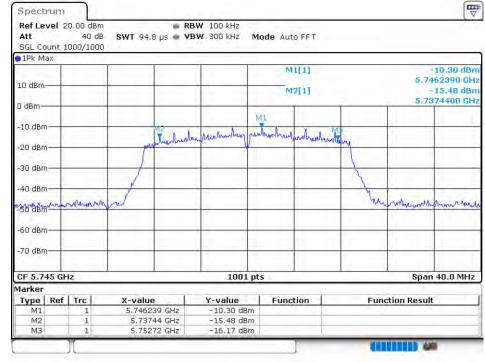


Spectrum						
Ref Level Att SGL Count	40 di		RBW 100 kHz VBW 300 kHz N	<b>1ode</b> Auto FFT		
1Pk Max						
10 dBm				M1[1]		-16.54 dBm 5.772440 GHz -21.04 dBm 5.743640 GHz
0 dBm		-		1	1	5.743040 GHz
-10 dBm			- M1		M3	
-20 dBm		N2 www.unterthattion	add and ball of the	helphabell lung and d	titlattit	
-30 dBm						
-40 dBm			-			
Sordemaking	-unlike general	several and the second			Kandel	1. Halpmarken hadan Andrew Miller House
-60 dBm						
-70 dBm	-					
CF 5.775 G	Hz		1001 pt:	5		Span 160.0 MHz
Marker				- i.e		
Type Ref	Trc 1	X-value 5.77244 GHz	Y-value -16.54 dBm	Function	Fur	nction Result
M1 M2	1	5.74364 GHz	-21.04 dBm			
M3	1	5.8126 GHz	-18.85 dBm			
	)(				1	

### Report No.: STR211129004005E

#### EBW NVNT 802.11n(HT20) 5745MHz Ant1

Page 53 of 68



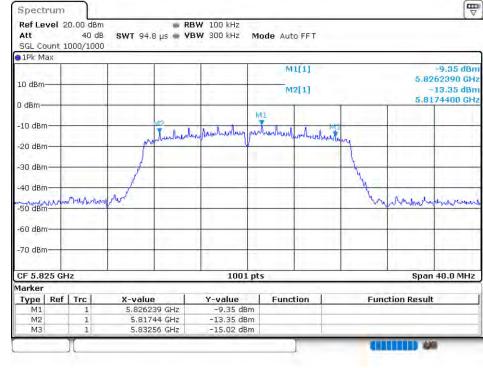
#### EBW NVNT 802.11n(HT20) 5785MHz Ant1

Spectrum	5 F E.L.								
Ref Level 3 Att SGL Count	40 dB	SWT 94.8		3W 100 kHz 3W 300 kHz	Mode	Auto FFT			
●1Pk Max									
10 dBm						M1[1] M2[1]	-10.19 dB/ 5.7862390 GH -14.67 dB/ 5.7774400 GH		
U dBm					M1				
-10 dBm		1	12	1 Andrew		11.	MB		
-20 dBm		Artist	Inertrant	in printer bury	holos and a	nonlinetrial	mentione	1.1	
-20 0600									
-30 dBm		1 J			_	-	1		
1 T		1					N.		
-40 dBm		10105			-		200	and strends	
-50 dBm	Ny Arranger	Mur.	-	-	_	-		manymen	www.wheneburn
-60 dBm									11 - 1
-00 0811				( ) · · · · · · · · · · · · · · · · · ·				1	1
-70 dBm	_	+		-	-	-	-	-	-
CF 5.785 G	Hz			1001	pts			Spar	40.0 MHz
Marker									
Type   Ref	Trc	X-value		Y-value	Ft	nction	Fur	nction Result	
M1	1	5.78623	the second party of the local data	-10.19 dB					
M2	1	5.7774	and the second second	-14.67 dB					
M3	1	5.7925	2 GHZ	~13.45 dB	m				
1	Л					1	0		

### Report No.: STR211129004005E

#### EBW NVNT 802.11n(HT20) 5825MHz Ant1

Page 54 of 68



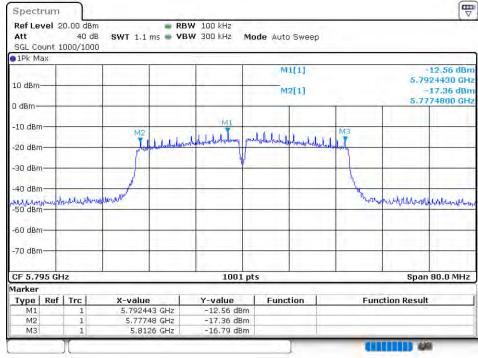
#### EBW NVNT 802.11n(HT40) 5755MHz Ant1

nt 1000/1000					
			M1[1] M2[1]		-11.97 dBr 5.7525220 GH -17.70 dBr
-			1	1 1	5.7374800 GH
		M1			
	M2	A CONTRACT	111.0	EM	
	In the light a lock way	undrahadrahadrahanny peri	Martine bridge have a kind	destable	
		1 V-			
-					
				1. 1	
	1 Martin Contraction of the Cont			1	
unhannum has	deal SM			"Midenia	eloperature included another another
					1.2711.000
-		<del>) : : _</del>			
1		1 1 1 1 1			
GHz		1001 nt	5		Span 80.0 MHz
Ref   Trc	X-value	Y-value	Function	Funct	ion Result
1	5.752522 GHz	-11.97 dBm			
1	5.73748 GHz	-17.70 dBm			
	GHz tef Trc	GHz 1 5.752522 GHz 1 5.73748 GHz	M2         M2         M4         M4<	M1         M1           M2         M1           M2         M1           M3         M2           M4         M4           M4         <	M1         M3           M2         M1           M3         M3           M4         M4           M4         M4           M3         M3           M4         M4           M4         <

### Report No.: STR211129004005E

#### EBW NVNT 802.11n(HT40) 5795MHz Ant1

Page 55 of 68



### Page 56 of 68

### Report No.: STR211129004005E

Condition	Mode	Frequency (MHz)	Center Frequency (MHz)	OBW (MHz)	Lower Limit (MHz)	Upper Limit(MHz)	Verdict
NVNT	802.11a	5745	5745.01	16.37	16	20	Pass
NVNT	802.11a	5785	5784.972	16.398	16	20	Pass
NVNT	802.11a	5825	5824.984	16.39	16	20	Pass
NVNT	802.11ac20	5745	5745.016	17.558	16	20	Pass
NVNT	802.11ac20	5785	5784.974	17.594	16	20	Pass
NVNT	802.11ac20	5825	5824.986	17.578	16	20	Pass
NVNT	802.11ac40	5755	5755.032	35.804	32	40	Pass
NVNT	802.11ac40	5795	5795	35.964	32	40	Pass
NVNT	802.11ac80	5775	5775.088	75.304	64	80	Pass
NVNT	802.11n(HT20)	5745	5745.014	17.554	16	20	Pass
NVNT	802.11n(HT20)	5785	5784.974	17.594	16	20	Pass
NVNT	802.11n(HT20)	5825	5824.984	17.574	16	20	Pass
NVNT	802.11n(HT40)	5755	5755.032	35.804	32	40	Pass
NVNT	802.11n(HT40)	5795	5795	35.98	32	40	Pass
Frequency: 5745.00 MHz		OBW NVNT 802.11a 5745MHz Occupied Channel Bandwidth			OBW (99% Pwr): 16.370 MHz		
20							Edge Edge



5736.825 MHz

Amplitude (dBm)

-20

-40

-60

-80 5725

Frequency: 5785.00 MHz

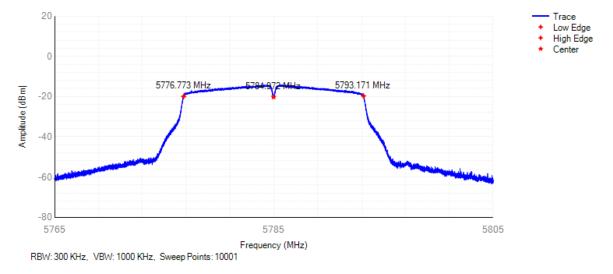
#### OBW NVNT 802.11a 5785MHz

5753.195 MHz

**Occupied Channel Bandwidth** 

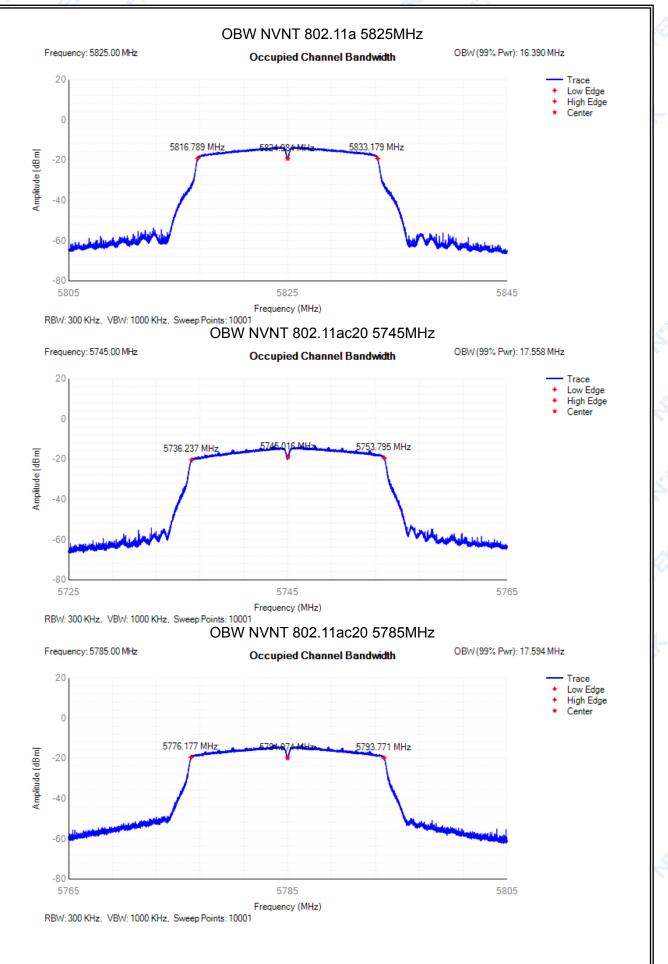
OBW (99% Pwr): 16.398 MHz

5765



# NTEK LM Page 57 of 68

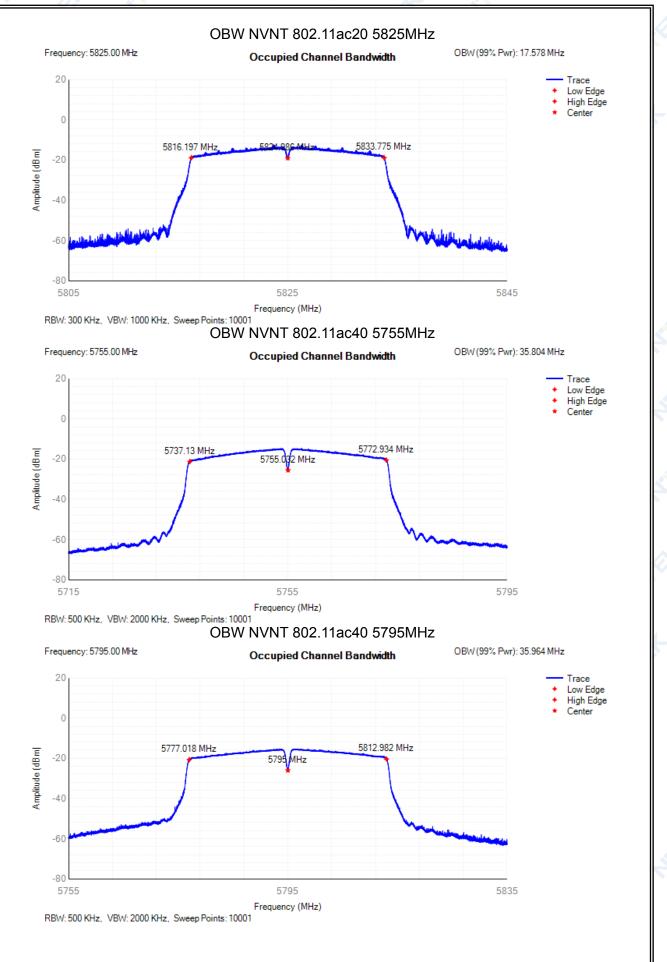
### Report No.: STR211129004005E



<u>K</u>

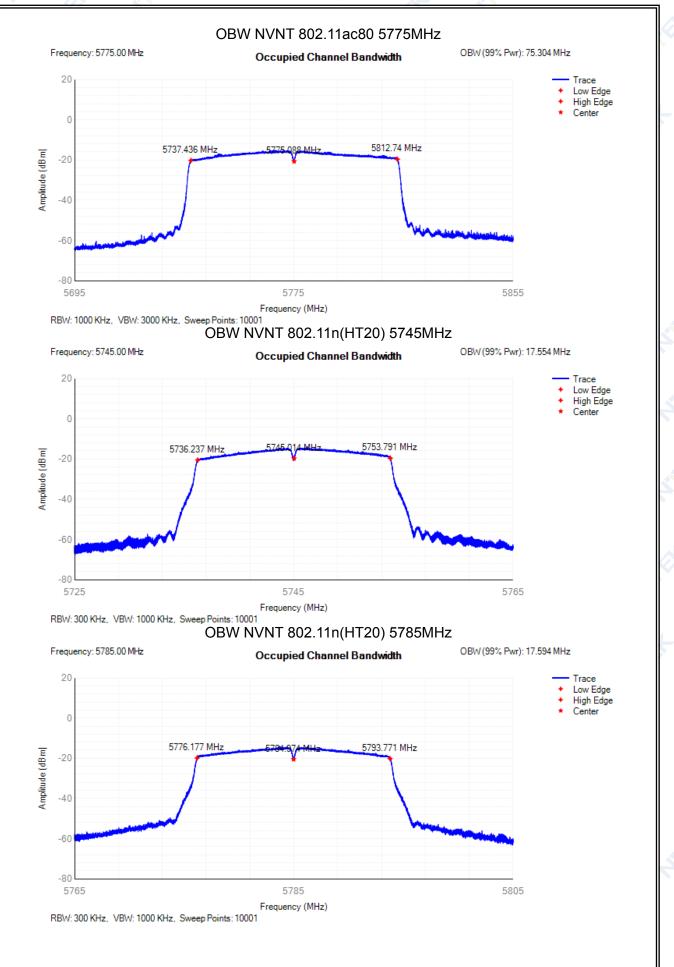
1 × ×

# NTEK LM Page 58 of 68



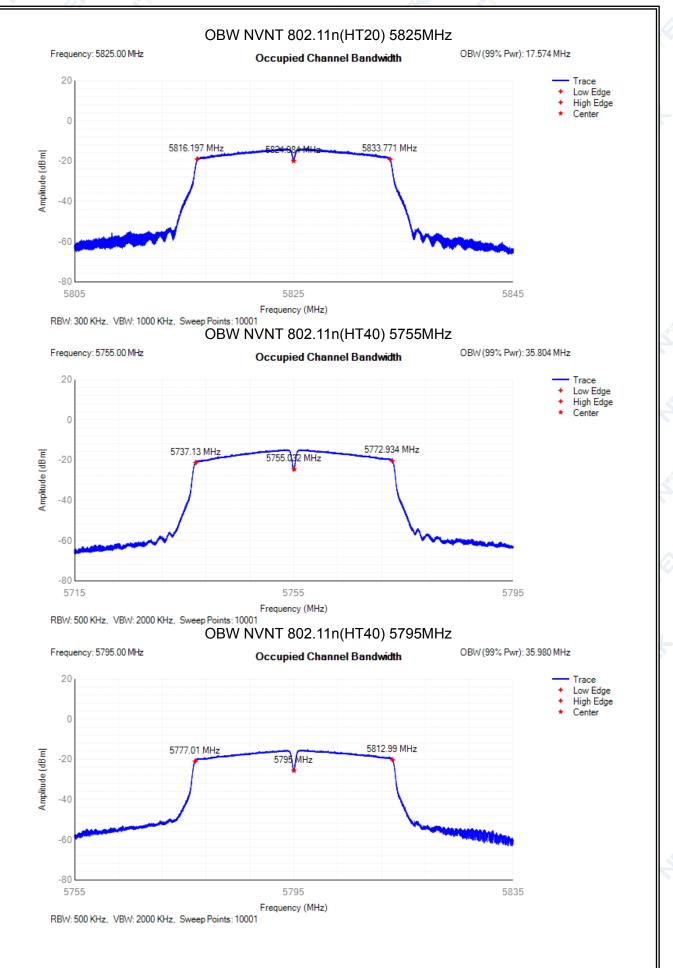
# NTEK LM Page 59 of 68

Report No.: STR211129004005E



### NTEK LM<sup>®</sup> Page 60 of 68

#### Report No.: STR211129004005E



•

Page 61 of 68

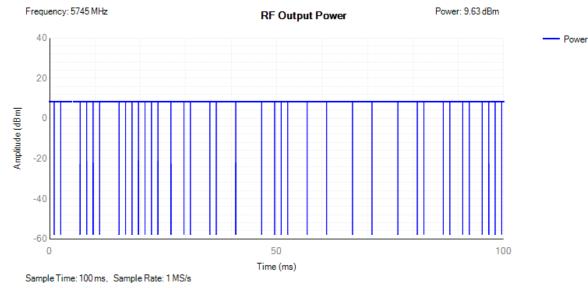
F OUTPUT I	POWER						
Condition	Mode	Frequency (MHz)	Max Burst RMS Power (dBm)	Burst Number	Max EIRP (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5745	8.38	39	9.63	13.98	Pass
NVNT	802.11a	5785	8.27	37	9.52	13.98	Pass
NVNT	802.11a	5825	9.15	33	10.4	13.98	Pass
NVNT	802.11ac20	5745	8.3	47	9.55	13.98	Pass
NVNT	802.11ac20	5785	8.19	65	9.44	13.98	Pass
NVNT	802.11ac20	5825	9.04	63	10.29	13.98	Pass
NVNT	802.11ac40	5755	8.89	141	10.14	13.98	Pass
NVNT	802.11ac40	5795	8.26	142	9.51	13.98	Pass
NVNT	802.11ac80	5775	8.27	253	9.52	13.98	Pass
NVNT	802.11n(HT20)	5745	8.33	66	9.58	13.98	Pass
NVNT	802.11n(HT20)	5785	8.21	52	9.46	13.98	Pass
NVNT	802.11n(HT20)	5825	9.11	48	10.36	13.98	Pass
NVNT	802.11n(HT40)	5755	8.83	135	10.08	13.98	Pass
NVNT	802.11n(HT40)	5795	8.31	142	9.56	13.98	Pass
LVLT	802.11a	5745	8.25	39	9.50	13.98	Pass
LVLT	802.11a	5785	8.21	37	9.46	13.98	Pass
LVLT	802.11a	5825	9.02	33	10.27	13.98	Pass
LVLT	802.11ac20	5745	8.28	47	9.53	13.98	Pass
LVLT	802.11ac20	5785	8.15	65	9.40	13.98	Pass
LVLT	802.11ac20	5825	8.96	63	10.21	13.98	Pass
LVLT	802.11ac40	5755	8.88	141	10.13	13.98	Pass
LVLT	802.11ac40	5795	8.20	142	9.45	13.98	Pass
LVLT	802.11ac80	5775	8.26	253	9.51	13.98	Pass
LVLT	802.11n(HT20)	5745	8.21	66	9.46	13.98	Pass
LVLT	802.11n(HT20)	5785	8.11	52	9.36	13.98	Pass
LVLT	802.11n(HT20)	5825	8.96	48	10.21	13.98	Pass
LVLT	802.11n(HT40)	5755	8.78	135	10.03	13.98	Pass
LVLT	802.11n(HT40)	5795	8.16	142	9.41	13.98	Pass
LVHT	802.11a	5745	8.38	39	9.63	13.98	Pass
LVHT	802.11a	5785	8.18	37	9.43	13.98	Pass
LVHT	802.11a	5825	9.03	33	10.28	13.98	Pass
LVHT	802.11ac20	5745	8.14	47	9.39	13.98	Pass
LVHT	802.11ac20	5785	8.16	65	9.41	13.98	Pass
LVHT	802.11ac20	5825	8.84	63	10.09	13.98	Pass
LVHT	802.11ac40	5755	8.77	141	10.02	13.98	Pass
LVHT	802.11ac40	5795	8.16	142	9.41	13.98	Pass
LVHT	802.11ac80	5775	8.18	253	9.43	13.98	Pass
LVHT	802.11n(HT20)	5745	8.15	66	9.40	13.98	Pass
LVHT	802.11n(HT20)	5785	8.11	52	9.36	13.98	Pass
LVHT	802.11n(HT20)	5825	9.09	48	10.34	13.98	Pass
LVHT	802.11n(HT40)	5755	8.83	135	10.08	13.98	Pass
LVHT	802.11n(HT40)	5795	8.12	142	9.37	13.98	Pass
HVHT	802.11a	5745	8.24	39	9.49	13.98	Pass

# NTEK 北测<sup>®</sup> Page 62 of 68

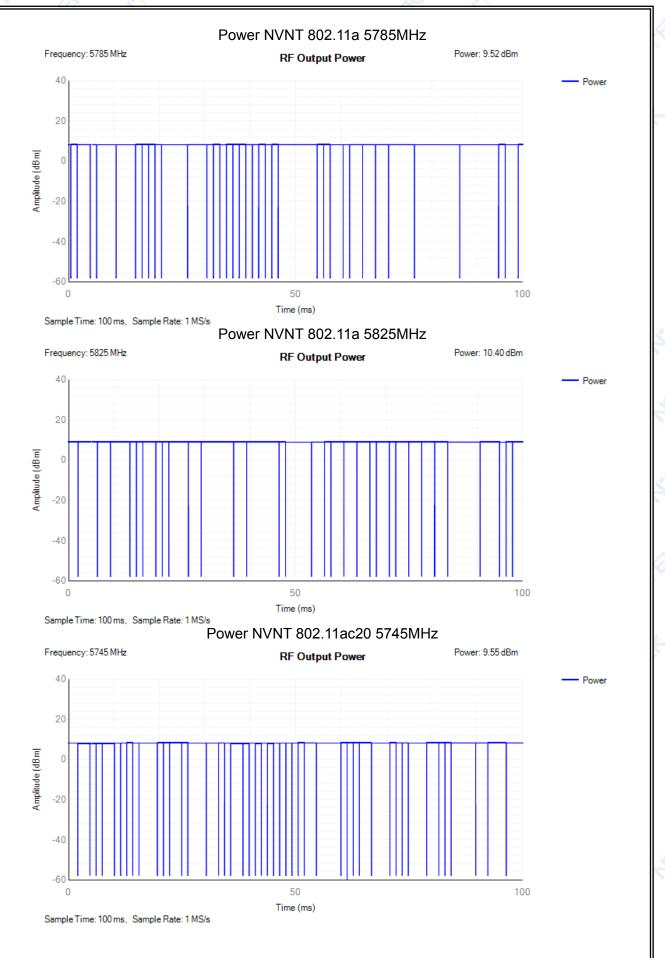
### Report No.: STR211129004005E

	HVHT	802.11a	5785	8.24	37	9.49	13.98	Pass
	HVHT	802.11a	5825	9.14	33	10.39	13.98	Pass
	HVHT	802.11ac20	5745	8.22	47	9.47	13.98	Pass
	HVHT	802.11ac20	5785	8.16	65	9.41	13.98	Pass
	HVHT	802.11ac20	5825	8.86	63	10.11	13.98	Pass
	HVHT	802.11ac40	5755	8.72	141	9.97	13.98	Pass
	HVHT	802.11ac40	5795	8.05	142	9.30	13.98	Pass
	HVHT	802.11ac80	5775	8.17	253	9.42	13.98	Pass
	HVHT	802.11n(HT20)	5745	8.17	66	9.42	13.98	Pass
	HVHT	802.11n(HT20)	5785	8.01	52	9.26	13.98	Pass
	HVHT	802.11n(HT20)	5825	8.94	48	10.19	13.98	Pass
	HVHT	802.11n(HT40)	5755	8.78	135	10.03	13.98	Pass
	HVHT	802.11n(HT40)	5795	8.20	142	9.45	13.98	Pass
	HVLT	802.11a	5745	8.31	39	9.56	13.98	Pass
	HVLT	802.11a	5785	8.19	37	9.44	13.98	Pass
	HVLT	802.11a	5825	9.10	33	10.35	13.98	Pass
	HVLT	802.11ac20	5745	8.15	47	9.40	13.98	Pass
	HVLT	802.11ac20	5785	8.18	65	9.43	13.98	Pass
	HVLT	802.11ac20	5825	8.93	63	10.18	13.98	Pass
	HVLT	802.11ac40	5755	8.82	141	10.07	13.98	Pass
	HVLT	802.11ac40	5795	8.23	142	9.48	13.98	Pass
	HVLT	802.11ac80	5775	8.25	253	9.50	13.98	Pass
	HVLT	802.11n(HT20)	5745	8.23	66	9.48	13.98	Pass
	HVLT	802.11n(HT20)	5785	8.09	52	9.34	13.98	Pass
	HVLT	802.11n(HT20)	5825	9.11	48	10.36	13.98	Pass
	HVLT	802.11n(HT40)	5755	8.67	135	9.92	13.98	Pass
	HVLT	802.11n(HT40)	5795	8.29	142	9.54	13.98	Pass
-								

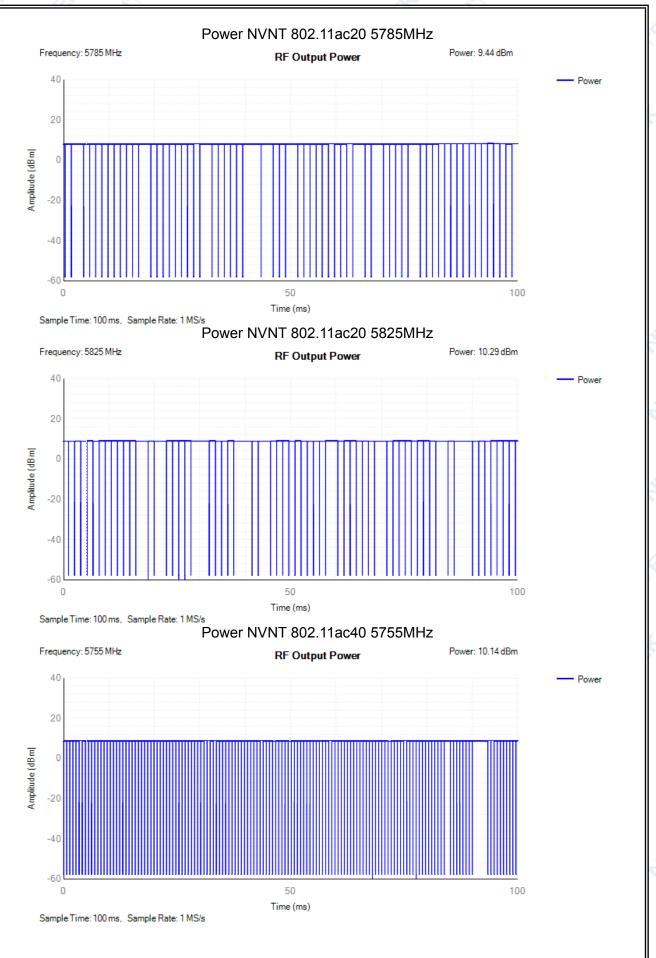
#### Power NVNT 802.11a 5745MHz



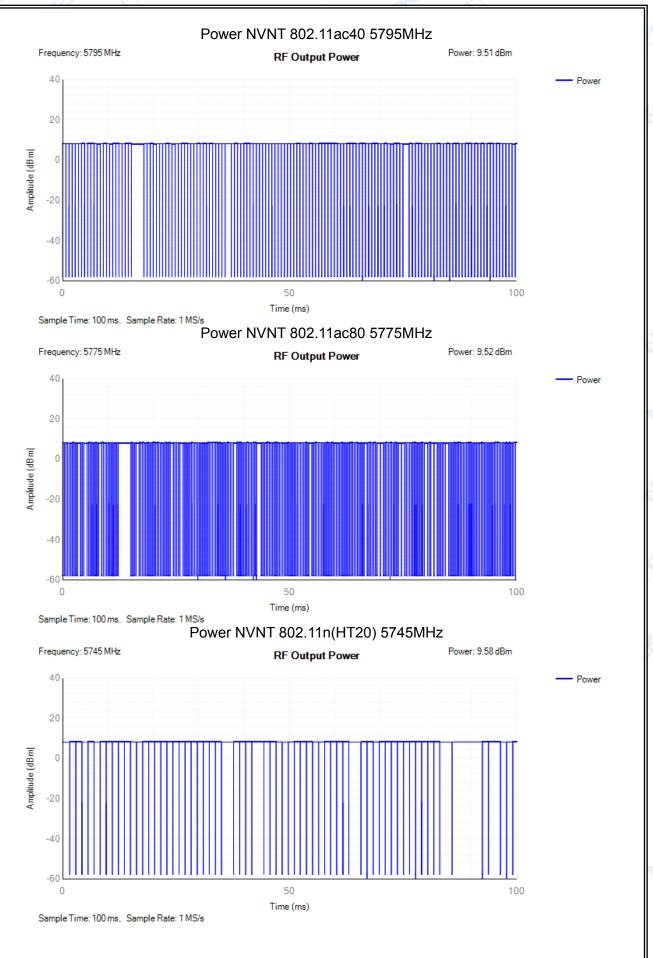
### NTEK LM Page 63 of 68



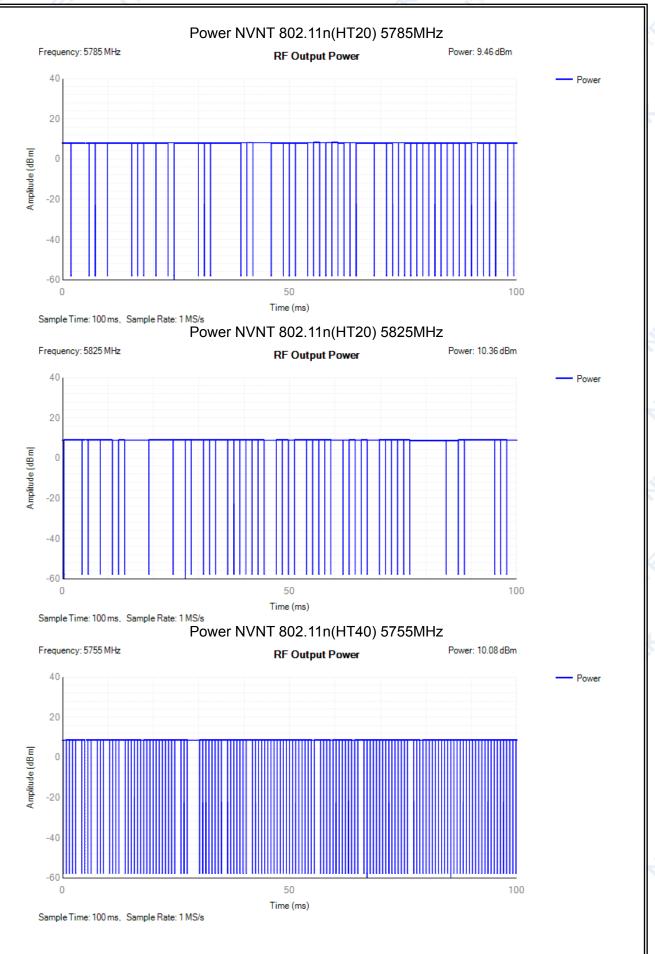
### NTEK LM Page 64 of 68



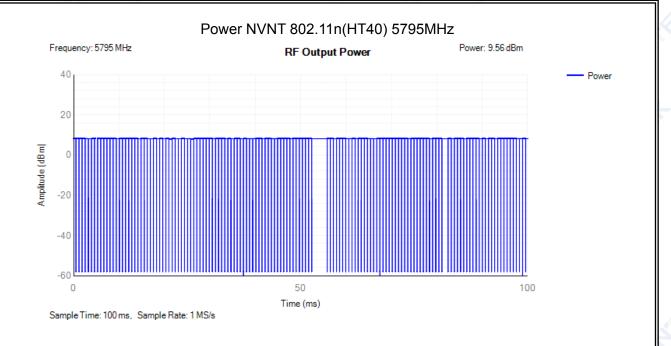
# NTEK LM® Page 65 of 68



### NTEK LM Page 66 of 68



# NTEK LM Page 67 of 68



Page 68 of 68

Report No.: STR211129004005E

### 11. EUT TEST PHOTO

### SPURIOUS EMISSIONS MEASUREMENT PHOTOS





END OF REPORT