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

Product : Mobile Phone Trade Mark : Blackview Model Name : A55 Family Model : N/A Report No. : STR211022001005E

Prepared for

DOKE COMMUNICATION (HK) LIMITED.

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

Prepared by

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TEST RESULT CERTIFICATION

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Applicant's name : DOKE COMMUNICATION (HK) LIMITED. Address : RM 1902 EASEY COMM BLDG 253-261 HENNESSY ROAD WANCHAI HK, CHINA. : Shenzhen DOKE Electronic Co.,Ltd. Address : 801, Building3, 7th Industrial Zone, Yulv Community, Yutang Road,
Guangming District, Shenzhen, China.
Product description
Product name: Mobile Phone
Trademark: Blackview
Model and/or type reference : A55
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:
Date (s) of performance of tests
Date of Issue Nov 15. 2021
Test Result Pass
Testing Engineer : Mukri Lee

Much L

(Mukzi Lee)

Authorized Signatory :

(Alex Li)

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Revision History					
Report No.	Version	Description	Issued Date		
STR211022001005E	Rev.01	Initial issue of report	Nov 15. 2021		

Revision History

1. SUMMARY OF TEST RESULTS

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

Clause	Description of Test Item	Remarks	Results			
	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	Adjacent channel selectivity(For Receiver category 1)	Conducted	N/A			
4.3.4			Pass			
4.3.5	Spurious emissions(For Receiver category 1,2,3)	Radiated	Pass			

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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

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1.2 MEASUREMENT UNCERTAINTY

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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	±8 dB
	GHz and 66 GHz	
7	Temperature	±1 °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.

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2. GENERAL INFORMATION 2.1 GENERAL DESCRIPTION OF EUT

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Equipment	Mobile Phone		
Trade Mark	Blackview		
Model Name	A55		
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 OFDM with	
	Modulation	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 ;	
	Max E.I.R.P Power:	10.18dBm	
	Antenna Designation:		
	Antenna Gain(Peak)	1.73dBi	
Receiver category	 Category 1: Highly reliable SRD communication media; e.g. serving human life inherent systems (may result in a physical risk to a person). Category 2: Medium reliable SRD communication media e.g. causing inconvenience to persons, which cannot simply be overcome by other means. Category 3: Standard reliable SRD communication media e.g. Inconvenience to persons, which can simply be overcome by other means (e.g. manual). 		
Channel List	Refer to below		
Adapter	Model: HJ-0501000N2-EU Input: AC 100-240V~50/60Hz 0.15A Output: DC 5.0V1.0A 5.0W		
Battery	DC 3.87V, 4780mAh, 18.50Wh		
Rating	DC 3.87V from	battery or DC 5V from Adapter.	
Hardware Version	M169_MBA2		
Software Version	A55_EEA_M169_V1.1		

Note:

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

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

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	802.11a/n/ac(20 MHz) Carrier Frequency Channel						
Channel	Frequen cy (MHz)	Channel	Frequen cy (MHz)	Channel	Frequen cy (MHz)	Channel	Frequen cy (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					
Channel Frequency (MHz) Channel Frequency (MHz) Channel (MHz) Channel (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 ~ 35°C _{Note1}
Relative Humidity	20% - 75%	N/A
Power Rating	DC 3.87V	N/A
Test voltage	DC 3.87V	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

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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				

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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



2.5 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

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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.

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Item	Equipment	Model/Type No.	Series No.	Note
E-1	Mobile Phone	A55	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 ^rLength^a column.
- (3) "YES" means "shielded" or "with ferrite core";"NO" means "unshielded" or "without ferrite core"

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2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

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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

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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.U.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 eirp	Non-specific short range devices	1
9 200 MHz to 9 500 MHz	25 mW eirp	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 Lr.p	Radio determination devices	See annex F
24,00 GHz to 24,25 GHz	100 mW e rr p.	Non-specific short range devices and Radio determination devices	2

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:

Col	Condition		
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**

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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:

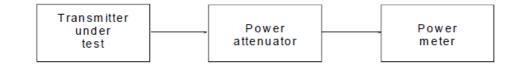
• the average output power of the transmitter shall be determined using a wideband, calibrated RF power meter with a matched thermocouple detector or an equivalent thereof and, where applicable, with an integration period that exceeds the repetition period of the transmitter by a factor 5 or more. The 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 :	A55
Temperature :	26°C	Relative Humidity :	60 %
Pressure :	1012 hPa	Test Voltage :	DC 3.87V (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 :	A55
Temperature :	26C	Relative Humidity :	60 %
Pressure :	1012 hPa	Test Voltage :	DC 3.87V (NORMAL)
Test Mode :	Mode 1/2/3		

Test data reference attachment

4. PERMITTED RANGE OF OPERATING FREQUENCIES

4.1 APPLIED PROCEDURES / LIMIT

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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.

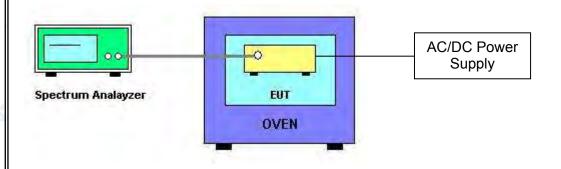
4.2 TEST PROCEDURES

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.

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4.5 TEST RESULTS

EUT :	Mobile Phone	Model Name :	A55
Temperature :	26°C	Relative Humidity :	60 %
Pressure :	1012 hPa	Test Voltage :	DC 3.87V (NORMAL)
Test Mode :	TX		

802.11a

Extreme condition				Frequency range (MHz)		
				F _L CH149	F _н CH165	
		V max (V)	4.2	5735.695	5834.873	
T min (°C)	-10	V nom (V)	3.87	5736.129	5835.276	
		V min (V)	3.4	5735.858	5834.712	
		V max (V)	4.2	5735.725	5834.904	
T max (°C)	40	V nom (V)	3.87	5735.984	5834.698	
		V min (V)	3.4	5736.408	5834.562	
T normal (°C)	24	V nom (V)	3.87	5735.927	5835.269	
Min. f _l	/ Max	. f _H Band Edges	i	5735.695	5835.276	
Indoor Use Limits				F _L > 5725.0 MHz	F _L < 5875.0 MHz	
	Result			Con	nplies	

802.11n20

Extreme condition			Frequency	range(MHz)	
			F _L CH149	F _н CH165	
		V max (V)	4.2	5736.133	5834.572
T min (°C)	-10	V nom (V)	3.87	5735.759	5835.306
		V min (V)	3.4	5736.096	5834.652
		V max (V)	4.2	5736.126	5835.315
T max (°C)	40	V nom (V)	3.87	5736.217	5835.404
		V min (V)	3.4	5735.806	5834.972
T normal (°C)	24	V nom (V)	3.87	5735.524	5834.690
Min. f	/ Max	. f _H Band Edges		5735.524	5835.404
Indoor Use Limits			F _L > 5725.0 MHz	F _L < 5875.0 MHz	
	R	esult		Con	nplies

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802.11n40					
	Extreme condition			Frequency range (MHz)	
'				F _L CH151	F _н CH159
		V max (V)	4.2	5736.983	5814.098
T min (°C)	-10	V nom (V)	3.87	5736.920	5814.005
		V min (V)	3.4	5736.645	5814.481
		V max (V)	4.2	5736.579	5814.283
T max (°C)	40	V nom (V)	3.87	5736.657	5814.318
		V min (V)	3.4	5737.420	5813.635
T normal (°C)	24	V nom (V)	3.87	5736.979	5813.634
Min. f	Min. f _L / Max. f _H Band Edges			5736.579	5814.481
	Indoor Use Limits			F _L > 5725.0 MHz	F _L < 5875.0 MHz
	R	esult		Con	nplies

802.11ac20

Extreme condition				Frequency range (MHz)		
	Extreme condition				F _н CH165	
		V max (V)	4.2	5735.886	5835.062	
T min (°C)	-10	V nom (V)	3.87	5735.767	5835.416	
		V min (V)	3.4	5736.302	5834.745	
		V max (V)	4.2	5735.699	5835.024	
T max (°C)	40	V nom (V)	3.87	5735.812	5835.113	
		V min (V)	V min (V) 3.4 5735.537		5835.369	
T normal (°C)	24	V nom (V)	3.87	5735.750	5834.719	
Min. f _L / Max. f _H Band Edges				5735.537	5835.416	
Indoor Use Limits				F _L > 5725.0 MHz	F ∟ < 5875.0 MHz	
	R	esult		Con	nplies	

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	Extreme condition			Frequency range (MHz)	
r i				F _L CH151	F _н CH159
		V max (V)	4.2	5736.746	5813.574
T min (°C)	-10	V nom (V)	3.87	5737.440	5814.130
		V min (V)	3.4	5737.101	5814.489
		V max (V)	4.2	5736.678	5814.037
T max (°C)	40	V nom (V)	3.87	5737.133	5814.315
		V min (V)	3.4	5736.871	5813.701
T normal (°C)	24	V nom (V)	3.87	5737.437	5813.867
Min. f _L / Max. f _H Band Edges			5736.678	5814.489	
Indoor Use Limits			F _L > 5725.0 MHz	F ∟ < 5875.0 MH:	
	R	lesult		Con	nplies

802.11ac80

Extreme condition			Frequency	range(MHz)	
Extreme condition			F _L CH155	F _н CH155	
		V max (V)	4.2	5737.176	5813.526
T min (°C)	-10	V nom (V)	3.87	5737.193	5814.422
		V min (V)	3.4	5737.357	5813.983
		V max (V)	4.2	5736.517	5814.266
T max (°C)	40	V nom (V)	3.87	5737.004	5813.967
		V min (V)	3.4	5737.122	5814.123
T normal (°C)	24	V nom (V)	3.87	5737.000	5814.282
Min. f	/ Max	. f _H Band Edges	6	5736.517	5814.422
Indoor Use Limits			F _L > 5725.0 MHz	F ∟ < 5875.0 MHz	
	R	esult		Con	nplies

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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
КВ	For frequency above 1G:1MHz

5.3 TEST PROCEDURES

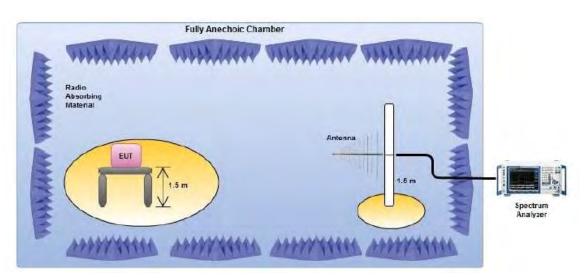
- a. The EUT was placed on the top of the turntable in open test site area.
- b. The test shall be made in the transmitting mode. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- c. This measurement shall be repeated with the transmitter in standby mode where 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.

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5.4 TEST SETUP LAYOUT

Radiated Emission Test Set-Up



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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.

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5.7 TEST RESULTS

EUT :	Mobile Phone	Model Name :	A55
Temperature :	24 ℃	Relative Humidity :	54%
Pressure :	1010 hPa	Test Power :	DC 3.87V (NORMAL)
Test Mode :	TX-802.11a mode		

Below 1G :

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(H/V)	(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	Туре
V	41.49	-70.55	15.52	-55.03	-36	-19.03	peak
V	69.94	-71.50	8.76	-62.74	-54	-8.74	peak
V	105.12	-80.89	11.00	-69.89	-54	-15.89	peak
V	182.11	-80.93	12.25	-68.68	-54	-14.68	peak
V	270.63	-61.09	12.48	-48.61	-36	-12.61	peak
V	483.99	-90.05	16.69	-73.36	-54	-19.36	peak
Н	45.15	-63.10	12.98	-50.12	-36	-14.12	peak
Н	64.54	-73.71	6.28	-67.43	-54	-13.43	peak
Н	111.13	-80.25	10.58	-69.67	-54	-15.67	peak
Н	180.29	-79.27	12.52	-66.75	-54	-12.75	peak
Н	342.07	-60.94	14.46	-46.48	-36	-10.48	peak
Н	620.88	-88.97	20.14	-68.83	-54	-14.83	peak

Remark:

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

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Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detecto
(H/V)	(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	Туре
		ор	eration frequenc	y:5755 MHz		-	
V	1197.56	-45.54	1.81	-43.73	-30	-13.73	peak
V	1697.46	-44.24	3.85	-40.39	-30	-10.39	peak
V	2197.39	-51.78	9.17	-42.61	-30	-12.61	peak
V	5759.98	-60.46	9.37	-51.09	-30	-21.09	peak
Н	1696.21	-47.48	3.76	-43.72	-30	-13.72	peak
Н	3821.87	-64.40	8.61	-55.79	-30	-25.79	peak
Н	5759.81	-59.26	9.09	-50.17	-30	-20.17	peak
Н	9382.25	-58.39	14.16	-44.23	-30	-14.23	peak
		ор	eration frequenc	y:5785 MHz			•
V	1196.73	-45.84	2.63	-43.21	-30	-13.21	peak
V	1698.29	-44.74	3.14	-41.60	-30	-11.60	peak
V	2198.35	-51.13	8.45	-42.68	-30	-12.68	peak
V	3884.58	-60.06	8.00	-52.06	-30	-22.06	peak
V	5822.39	-59.47	8.78	-50.69	-30	-20.69	peak
Н	1696.89	-47.21	3.02	-44.19	-30	-14.19	peak
Н	2198.33	-51.94	9.08	-42.86	-30	-12.86	peak
Н	5823.50	-55.94	9.01	-46.93	-30	-16.93	peak
Н	9387.46	-54.58	14.36	-40.22	-30	-10.22	peak
		ор	eration frequenc	y:5825 MHz			
V	1696.61	-46.50	3.72	-42.78	-30	-12.78	peak
V	2195.97	-50.86	9.11	-41.75	-30	-11.75	peak
V	2633.26	-57.62	9.61	-48.01	-30	-18.01	peak
V	5822.63	-60.12	8.56	-51.56	-30	-21.56	peak
V	6168.57	-50.90	11.41	-39.49	-30	-9.49	peak
Н	1696.32	-47.87	3.01	-44.86	-30	-14.86	peak
Н	2197.09	-52.48	8.89	-43.59	-30	-13.59	peak
Н	2634.87	-58.61	10.19	-48.42	-30	-18.42	peak
Н	5821.77	-56.44	8.74	-47.70	-30	-17.70	peak

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

Note: Only the worst case 802.11ac20 mode recorded in the report.

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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.

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_{obs}.

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.

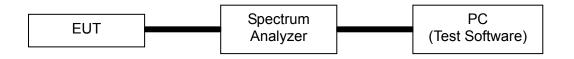
6.4 METHOD OF MEASUREMENT

Please refer to EN 300440 V2.2.1 Clause 4.2.5.3.

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6.5 TEST SETUP



6.6 TEST RESULTS

EUT:	Mobile Phone	Model Name:	A55
Temperature:	26°C	Relative Humidity:	53 %
Pressure:	1012 hPa	Test Voltage:	DC 3.87V (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.

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7.7 TEST RESULTS

EUT :	Mobile Phone	Model Name :	A55
Temperature :	26°C	Relative Humidity :	53 %
Pressure :	1012 hPa	Test Power :	DC 3.87V (NORMAL)
Test Mode :	RX-802.11a mode		

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Below 1G :

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(H/V)	(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	Туре
V	34.28	-91.04	18.44	-72.60	-57	-15.60	peak
V	51.62	-81.70	10.25	-71.45	-57	-14.45	peak
V	115.48	-80.85	10.99	-69.86	-57	-12.86	peak
V	164.81	-80.56	12.06	-68.50	-57	-11.50	peak
V	234.56	-78.91	11.64	-67.27	-57	-10.27	peak
V	370.47	-80.90	14.94	-65.96	-57	-8.96	peak
Н	50.59	-76.61	10.46	-66.15	-57	-9.15	peak
Н	92.56	-80.55	9.79	-70.76	-57	-13.76	peak
Н	172.66	-81.19	12.72	-68.47	-57	-11.47	peak
Н	198.87	-79.65	11.62	-68.03	-57	-11.03	peak
Н	390.86	-90.92	15.54	-75.38	-57	-18.38	peak
Н	556.93	-90.08	18.34	-71.74	-57	-14.74	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	1198.37	-61.42	2.05	-59.37	-47	-12.37	peak
V	1697.91	-61.93	3.53	-58.40	-47	-11.40	peak
V	2197.11	-65.57	8.78	-56.79	-47	-9.79	peak
V	2635.08	-68.40	9.82	-58.58	-47	-11.58	peak
V	8447.27	-76.97	16.69	-60.28	-47	-13.28	peak
Н	1198.48	-58.19	1.86	-56.33	-47	-9.33	peak
Н	1697.33	-58.51	3.58	-54.93	-47	-7.93	peak
Н	2198.05	-62.76	8.86	-53.90	-47	-6.90	peak
Н	3824.03	-69.95	8.23	-61.72	-47	-14.72	peak
Н	10698.28	-79.88	23.05	-56.83	-47	-9.83	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.

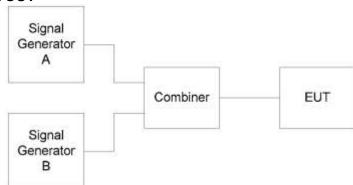
For tagging systems (e.g. RF identification, anti-theft, access control, location and similar systems) signal generator A may be replaced by a physical tag positioned at 70 % of the measured system range in metres.

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.

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8.4 TEST SETUP LAYOUT



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8.5 TEST RESULTS

EUT :	Mobile Phone	Model Name :	A55
Temperature :	24 ℃	Relative Humidity :	54%
Pressure :	1010 hPa	Test Voltage :	N/A
Test Mode :	N/A		

Not applicable.

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9. BLOCKING OR DESENSITIZATION

9.1 APPLICABILITY

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

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).

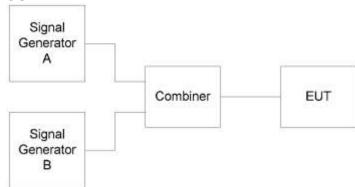
For tagging systems (e.g. RF identification, anti-theft, access control, location and similar systems) signal generator A may be replaced by a physical tag positioned at 70 % of the measured system range in metres. In this case, the blocking or desensitization shall be recorded as the ratio in dB of 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.



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8.4 TEST SETUP LAYOUT



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9.4 TEST RESULTS

EUT :	Mobile Phone	Model Name :	A55
Temperature :	24 ℃	Relative Humidity :	54%
Pressure :	1010 hPa	Test Voltage :	DC 3.87V (NORMAL)
Test Mode :	RX		

802.11a

5745 MHz

Flow= 5736.785MHz; Fhigh= 5753.187MHz, occupied bandwidth=16.402MHz

Receiver category	Frequency offset	Test Frequency (MHz)	Measurement Vause(dB) (Generator A)	Measurement Vause(dB) (Generator B)	≧Limit(dB)
	5745 MHz	5745	-64.69	-	-
3	10 times lower band edge of the occupied bandwidth	5572.765	-	-29.71	-87.33(Note ¹)
	20 times lower band edge of the occupied bandwidth	5408.745	-	-35.49	-87.33
	50 times lower band edge of the occupied bandwidth	4916.685	-	-35.53	-87.33
	10 times upper band edge of the occupied bandwidth	5917.207	-	-30.20	-87.33
	20 times upper band edge of the occupied bandwidth	6081.227	-	-35.33	-87.33
	50 times upper band edge of the occupied bandwidth	6573.287	-	-31.00	-87.33

Note1:

The limit :

-60 dBm + k

The correction factor, k, is as follows:

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

k = -27.33

Where:

- f is the frequency in GHz;

- BW is the occupied bandwidth in MHz.

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802.11a

5825 MHz

Flow= 5816.741MHz; Fhigh= 5833.167MHz, occupied bandwidth=16.426MHz

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	5652.481	-	-30.19	-87.46(Note ¹)
3	20 times lower band edge of the occupied bandwidth	5488.221	-	-34.10	-87.46
	50 times lower band edge of the occupied bandwidth	4995.441	-	-35.25	-87.46
	10 times upper band edge of the occupied bandwidth	5997.427	-	-30.28	-87.46
	20 times upper band edge of the occupied bandwidth	6161.687	-	-34.66	-87.46
	50 times upper band edge of the occupied bandwidth	6654.467	-	-31.09	-87.46

Note1:

The limit :

-60 dBm + k

The correction factor, k, is as follows:

k = -20log f -10logBW

k = -27.46

Where:

- f is the frequency in GHz;

- BW is the occupied bandwidth in MHz.

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802.11n40

5755 MHz

Flow= 5736.93MHz; Fhigh= 5772.982MHz, occupied bandwidth=36.052MHz

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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	5376.41	-	-29.80	-90.77(Note ¹)
	20 times lower band edge of the occupied bandwidth	5015.89	-	-35.52	-90.77
3	50 times lower band edge of the occupied bandwidth	3934.33	-	-35.01	-90.77
	10 times upper band edge of the occupied bandwidth	6133.502	-	-29.68	-90.77
	20 times upper band edge of the occupied bandwidth	6494.022	-	-34.95	-90.77
	50 times upper band edge of the occupied bandwidth	7575.582	-	-31.63	-90.77

Note1:

The limit :

-60 dBm + k

The correction factor, k, is as follows:

k = -20log f -10logBW

k = -30.77

Where:

- f is the frequency in GHz;

- BW is the occupied bandwidth in MHz.

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802.11n40

5795 MHz

Flow= 5777.074MHz; Fhigh= 5812.918MHz, occupied bandwidth=35.844MHz

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	5418.634	-	-29.13	-90.81(Note ¹)
	20 times lower band edge of the occupied bandwidth	5060.194	-	-33.70	-90.81
3	50 times lower band edge of the occupied bandwidth	3984.874	-	-35.03	-90.81
	10 times upper band edge of the occupied bandwidth	6171.358	-	-29.03	-90.81
	20 times upper band edge of the occupied bandwidth	6529.798	-	-34.98	-90.81
	50 times upper band edge of the occupied bandwidth	7605.118	-	-30.02	-90.81

Note1:

The limit :

-60 dBm + k

The correction factor, k, is as follows:

k = -20log f -10logBW

k = -30.81

Where:

- f is the frequency in GHz;

- BW is the occupied bandwidth in MHz.

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802.11ac80

5775 MHz

Flow= 5736.132MHz; Fhigh= 5812.628MHz, occupied bandwidth=75.496MHz

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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	4982.172	-	-28.95	-94.01(Note ¹)
	20 times lower band edge of the occupied bandwidth	4227.212	-	-33.98	-94.01
3	50 times lower band edge of the occupied bandwidth	1962.332	-	-34.35	-94.01
	10 times upper band edge of the occupied bandwidth	6567.588	-	-30.11	-94.01
	20 times upper band edge of the occupied bandwidth	7322.548	-	-34.66	-94.01
	50 times upper band edge of the occupied bandwidth	9587.428	-	-30.11	-94.01

Note1:

The limit :

-60 dBm + k

The correction factor, k, is as follows:

k = -20log f -10logBW

k = -34.01

Where:

- f is the frequency in GHz;

- BW is the occupied bandwidth in MHz.

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Report No.: STR211022001005E

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									
	·			1	ha	(I) I		1	7.32 dBr 38.0000 m
20 dBm									
tü dBm-	_				-		-	Mi	-
Laphyner hele	in mile	- deviating			minersonale	a glorestores	to an heighter	Holmonana	- an Wingon
dBm-				1			-	1	
10 dBm	-		_			_			
20 dBm-	_								
3D dBm	_								_
40 dBm			_					-	-
50 dBm-	_					_	_		-
60 dBm		1.0.00	10.0	1.1.1.1.1		1000		11 101	1.0

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50 dem

60 dBm

CF 5.825 GHz

10.0 ms

Duty Cycle NVNT 802.11a 5785MHz

Spectrum Ref Level 29.73 dBm Offset 9.73 dB = RBW 1 MHz	(mg
Att 40 d6 SWT 100 ms VHW 3 MHz SGL	
1Pk Clrw	
m1[1]	7.70 dBn
20 dBm	53 1000 ms
10 dBm	
and and the second second second second and and a second second second second second second second second second	some way by the providence of the second
1 dBm	
10 dBm-	
10 4251	
20 dBm	
30 dBm	-
40 dBm -	
50 dBm	
60 dBm	
du upin	
GF 5.785 GHz 1001 pts	10.0 ms/
	the second se
Duty Cycle NV/NT 902 11e 5925MU-	
Duty Cycle NVNT 802.11a 5825MHz	
Spectrum	(m)
Ref Level 29.31 dBm Offset 9.81 dB = RBW 1 MHz	
Att 40 dB w SWT 100 ms w VBW 3 MHz SGL	
1Pk Clrw	
mi[i]	7.56 dBr
and box	37.9000 ms
20 0000	
20 UDIN	
10 dBm	
10 dBm	innaf warman - was
10 dBm	anaf warman
10 dBm ที่ทางประชาชาติสารารุณสาราสาราสาราสาราสาราสาราสาราสาราสาราสาร	anaf washing and
10 dBm - M1 Mindo and water agriculture glashipana and part and material and material and an approximate glaship and a star 1 dBm	
10 dBm - 511 Kinal and and a spectral the spectra and an and a second strain when yet as a second bill are spectra 1 dBm - 10 dBm -	
10 dBm - 511 Kinal and and a spectral the spectra and an and a second strain when yet as a second bill are spectra 1 dBm - 10 dBm -	
10 dBm	
10 dBm	

1001 pts

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Report No.: STR211022001005E

Duty Cycle NVNT 802.11ac20 5745MHz

Spectrum					Ψ
Att 40 dB	the state of the same set in a	RBW 1 MHz VBW 3 MHz			
SGL					_
1Pk Clrw					
			60(1)1	7.25	
20 dBm-					3.00-
10 dBm		+			_
the main we do the second second	pulsive and why	benetine or hours reason	-hoursementers	ulighter and hind was a require	in the
0 dBm-	+		_		-
-10 dBm	+ +	+ +			-
-20 dBm	1	+			_
-3D dBm					
40 dBm					_
ALL CENT					
50 d8m					_
-60 dBm-					_
CF 5.745 GHz		1001 pts		10.0 m	
ur o. mount		THE PLA	_	distantia un	/csy
		N /NIT 000 1	4	~ N / I _	
	Duty Cycle N	NVINI OUZ.I	Taczu 576	JNITZ	
Spectrum					Ψ
Ref Level 29,73 dBm	the state of a state of a second				
Att 40 dB	5 📾 SWT 100 ms 📾 '	VBW 3 MHz			
SGL 1Pk Clrw					_
190	T 1	1	mi[1]	0.28	dBr
1.0				35.600	
20 dBm		+			_
10 dBm	101				

- W-			
CF 5.785 GHz	1001 pts		10.0 ms/
-60 dBm			
-50 dBm			
-40 dBm			
-30 dBm-			
-20 dBm			
-10 dBm		* *	
0 dBm			10-10-10-10-10-10-10-10-10-10-10-10-10-1
al month law in a march the approximation	ale upon the and a stranger of the second	in the second second	the superior and any white
10 dBm			

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Duty Cycle NVNT 802.11ac20 5825MHz

1	1	(1)IN	0.26 dBn 34 6000 m
20 dBm			
10 10-	DIT		
10 dBm	nation and the second state of the	adopation to many provide a mark	and benefit and a she was
0 dBm			Contra Local Contra
-10 tiBm-			
-20 dBm	12 T1 (CT T1)		
-30 dBm			
-+0 dBm			
40.06/			
-50 dBm			
-60 dBm			
CF 5.825 GHz		1001 pts	10.0 ms/
GE DIGED GETE		Tuba pra	auto may

spectrum					_				2
Ref Level 3			9.83 dB - F						
SGL	10.000			200 2700					
• 1Pk Clrw	_	_			-	-			
		1.11	1	1		4[1]			2.60 dBm 7.6000 ms
20 dBm									
10 dBm-				-	-		-		
141 10 alterna 11	and the second		ald Trees		-	dear	a starter		at as the
North Contraction of the Contrac	and the state	nitre mitter	Manusika	and a description	anode se di	ABS-ATTENT	CALIFIC THE STATE	A MALANANA MA	MILLAN MARC
-10 dBm-	-		-		-			-	1
-20,dBm	_				_				
-30 dBm			-						
-40 dBm	-								
-50 dBm	-		-		-				-
-60 dBm									
CF 5.755 G	Hz			100	1 pts				10.0 ms/
	T				- Leon		601	ت (1111)	

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Duty Cycle NVNT 802.11ac40 5795MHz

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1PR CIrw	-								
						4[1]		B	2.19 dBm 9.6000 ms
20 dBm					-		-		
10 dBm			-	-	-		-		-
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-10 dBm-	-				_		-		-
-20 dBm									
-30 dBm			-						-
-40 dBm									
-40 OBAI				-					
-50 dBm					-				-
-60 dBm									
-oro main									
CF 5.795	GHz	1		1001	pts	-		-	10.0 ms/
	1					_	808	111111	4

Spectrum							2
Ref Level 29.7 Att SGL		9 73 d8 🖷 RBW 100 ms 🖷 VBV					
• 1Pk Clrw	- 0						
1.1.1.1.1.1.1.1				W#4[1]			1.20 dBm
20 dBm						-	27.0000 uts
10 dBm					_		-
	TAL						
O dBm	www.man.man.	-	Nr martine (AK	planting the	il ministration	hispightmille	unnulautobale
-10 dBm-							
-20 d8m							
30 dBm-			-	-	-		
-40 dBm	_				_		
-50 d8m	_						-
-60 dBm					-		-
CF 5.775 CHz			1001 pts				10.0 ms/
30					-	COLOREDO	4,00

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Duty Cycle NVNT 802.11n(HT20) 5745MHz

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			MILLI1		-1.96 dBr
				1.	40.5000 m
20 dBm-					
10 dBm-					
		MI			
ű dBm	ALALLALA ALA		PERMIT	A B L L L L L L L L L L L L L L L L L L	ALALI TALAL
-10 dBm					
-20 dBm-					
-3D dBm					
1 m m		_			
.40 dBm					
50 dBm					
-60 dBm				1.	
-00 08/0					
CF 5.745 GHz		100	pts		10.0 ms/
M				CREEKE	111 US
CF 5.745 GHz		100:	t pts		10.0

● 1Pk Clrw									
	1			1	M	1(1)		1	6.57 dBm 9.2000 ms
20 dBm									
10 dBm	1			0	0000	-7-5-		-	1
0 dBm	networking	ningen angen an	-Gel - Climite	and a strain of the second str	helengeskiche	paner merende	WALTHIN THE	Manutari Malendon	whenergen)
-10 dBm			-		-		-		-
-20 dBm	-		-				-		+
-30 dBm	_				_				
-40 dBm	-		-						-
-50 dBm									
-60 dBm			-						
CF 5.785 0	Hz			100	l pts				10.0 ms/
	JC							11111) V	

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Duty Cycle NVNT 802.11n(HT20) 5825MHz

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	hna[i]	7.54 dBr
	orter	89.7000 m
20 dBm		
LO dBm		M
	and the second second and the second se	an and a second state of the second second
1 dBm		
10 dBm		
20 dBm		
30. dBm		
40 dBm-		
50 dBm		
201000		
60 dBm		
CF 5.825 GHz	1001 pts	10.0 ms/
Т		CONTRACTOR NO.

SGL 1Pk Cirw									
20 dBm		11.5	2		ht	4[1]	-	2	1.00 dBm 1.600 uts
10 dBm					W1		-	_	
120000 hailes	alter Hapert	antitite the	a the fight of the second	Harrythis Mith		wedentel-plant	-	to the state	Hoppins
-10 dBm-									
-20 dBm			-						
-30 dBm			-						
-40 dBm		-	-						
-SQ dBm	-		-						-
-60 dBm									
CF 5.755	GHz	1		1003	pts				10.0 ms/

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Duty Cycle NVNT 802.11n(HT40) 5795MHz

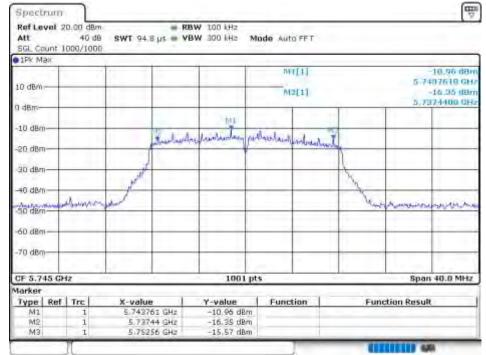
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1PR CIrw									
	1		-	1	'n		2.66 dBn 94.0000.00		
20 dBm					-	1	-		a monte d
t0 dBm			_				-		
1 da. m	-		Makin	and all a	Res Bulle de	adastradate A	A delater to	te dia territori	
MARINIA	Country of	a Middleval	WI SHW	and the second second	auton and the	energy future Au	a tonighter	And San San WA	havabeteed
10 dBm	_								
20,dBm	-	_	-						-
30 dBm									-
40 dBm	_	-	-		-		-		-
S0 dBm	_		_			-			

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1(0.2 -6DB EMI	SSION BANDWID	TH				
	Condition	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	15.16	0.5	Pass
	NVNT	802.11a	5825	Ant 1	15.68	0.5	Pass
	NVNT	802.11ac20	5745	Ant 1	15.12	0.5	Pass
	NVNT	802.11ac20	5785	Ant 1	15.12	0.5	Pass
	NVNT	802.11ac20	5825	Ant 1	15.96	0.5	Pass
	NVNT	802.11ac40	5755	Ant 1	35.12	0.5	Pass
	NVNT	802.11ac40	5795	Ant 1	35.04	0.5	Pass
	NVNT	802.11ac80	5775	Ant 1	75.2	0.5	Pass
	NVNT	802.11n(HT20)	5745	Ant 1	15.68	0.5	Pass
	NVNT	802.11n(HT20)	5785	Ant 1	15.08	0.5	Pass
	NVNT	802.11n(HT20)	5825	Ant 1	16.08	0.5	Pass
	NVNT	802.11n(HT40)	5755	Ant 1	35.12	0.5	Pass
	NVNT	802.11n(HT40)	5795	Ant 1	35.04	0.5	Pass

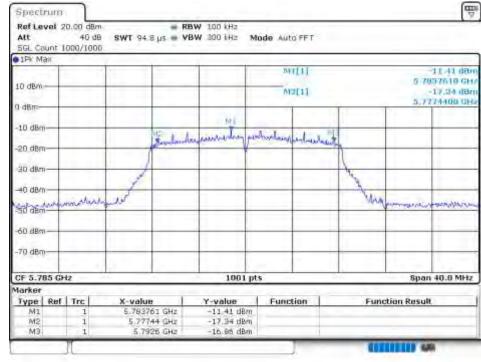




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EBW NVNT 802.11a 5785MHz Ant1

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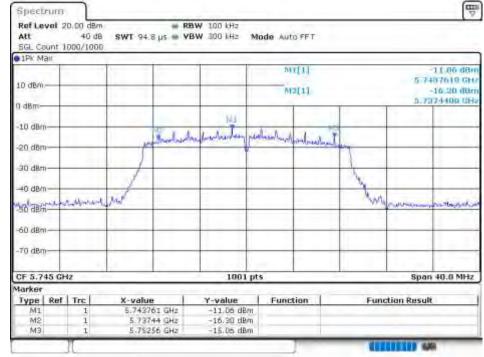
EBW NVNT 802.11a 5825MHz Ant1

Spectrum Ref Level Att	20.00 dB/ 40 d	8 SWT 94.1		AW 100 kHz BW 300 kHz	Mo	de Auto FFT				[9
SGL Count 1Pk Max	1000/100	U	-		_						-
10 dBm		1				MI2[1]				-10.39 di 8237610 C -16,21 di 8168900 C	
0 dBm-					-						-
-10 dBm		1	Included	131	rink	mandentes	al. T		-	-	-
-20 dBm		-		-	-		- MLAN	1			-
30 dBm		Indian		-	-			1			-
-40 dBm	Mayndo	A A A A A A A A A A A A A A A A A A A			-	-		. All	MANALMAN	mound	-
-SD dBm	-	-	-	-	-			-	-	-	-
-60 dBm —	_				-		-		+	-	-
-70 dBm					t			-	1		1
CF 5.825 G	Hz		-	1001	pts	-			Sp	an 40.0 MH	łz
Marker	1000			-	-						
Type Ref	Trc	X-value		Y-value	1	Function		Fu	nction Res	ult	
M1	1	5.8237		-10.39 dB			1				-
M2 M3	1	5.816 5.832	BB GHz 56 GHz	-16 21 dB -14.68 dB		_					
	N					1		1	101109	100	

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EBW NVNT 802.11ac20 5745MHz Ant1



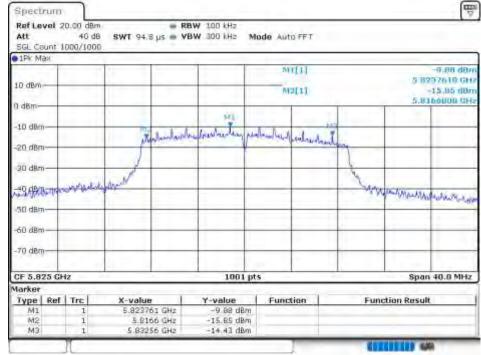
EBW NVNT 802.11ac20 5785MHz Ant1

Spectrum	n 1									5
Ref Level Att SGL Count	40 dt	8 SWT 94.		W 100 kHz W 300 kHz	Mode	Auto FFT				
• 1Pk Max										
10 dBm						MI2[1]			5.76	-10,14 dBy 962790 GH -14,58 (Br 74800 GH
0 dBm-					IMP	-				
-10 dBm-		-	1 1 1	monutering		historday	1 72			-
-20 dBm-		p	a hoursen		-	Activity	PURS ALING			-
30 dBm-		1					13			
20 db/ii		J.								
-+0 dB/m	1	int.		-	-	-		200		-
→0 dBm	abitment	n June		-		_		244	Manufana	hindhawk.
										1
-60 dBm		-		1						
-70 dBm-	_	-			-	_		-	_	-
		1			1				1	1.0
CF 5.785 G	Hż			1001	pts			_	Span	40.0 MHz
Marker										
Type Ref		X-valu		Y-value		unction		Funct	ion Result	t
M1	1		79 GHz	-10.14 dB						
M2 M3	1		48 GHz 26 GHz	-14.58 dB -15.93 dB						-
	M					-	-	1111	11117-04	64
-	30					-				

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EBW NVNT 802.11ac20 5825MHz Ant1



EBW NVNT 802.11ac40 5755MHz Ant1

Ref Level	20.00 dBm	C = 1	= RB	W 100 kH2	_					
Att	40 dB		ns = VB	W 300 kHz	Mod	e Auto Sweep	p			
EGL Count	1000/1000	L	-				-			_
1Pk Max					_					
1						DALTI				-17.07 dB
10 dBm-	mi-				-				5	7525220 GH
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						M2[1]				-10.46 riBr
0 dBm		1 1			-		- 1		,a,	7373900 CH
-10 dBm-		ME	_	7/13	-		-	KH3	-	
		T	1 L dalar	end while have	ender	habite 11	111	7		
-20 dBm		1	- Pit -				and see in the second	per .		-
30 dBm-				V	1					
-30 dem-		1						1		
-+0 dB/m	_	1					_	1		
Janna Meriling	A da di And	La una						Ne.	and a standard and	A comment
-S0 dBm	An Provide The second			-	_		-	14	and the set of the	history
-60 dBm			_	-	-		-			
-70 dBm-		+ +		+ +	-		-		-	
									1.0	
CF 5.755 G	Hz			1001	pts				Spa	an 80.0 MHz
Marker	10 M P	and the second second		in the second second	1	A. Course				_
Type Ret	Trc	X-value	4.1	Y-value	- 1	Function		Fu	nction Resu	alit.
M1	1	5.75252		-13.07 dBr						
M2	1	5.7374		-16.45 dBr						
M3	1	5.772	6 GH2	-17.09 dBa	m			_		
1	1					_		10	1010109	LAGA

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EBW NVNT 802.11ac40 5795MHz Ant1

Alt	20.00 dB 40 d	8 SWT 1.1 ms		100 kH2 300 kHz 1	Aode Auto	Sweep			
1Pk Max	101001100		_						
10 dBm	MIZ[1]				-13.5 5 798566 -18.4 5.777560				
0 dBm							1	1	
-10 dBm-	-	102	_		T		Ma	-	-
-20 dBm		, Lobale	hilmet	helphaling	under Julie Labor	bubb	hald	-	
30 dBm-				*	-				
-40 dB/m	بالرالاست الرياني	approved				_	tra	al Maria Harris	Autoritie
-50 dBm						-			
-60 dBm —							-	-	
-70 dBm-				-	_	-	-	-	
CF 5.795	GHz		-	1001	pts		1.	Span	80.0 MHz
Marker	1000			0.000	12.20	-		and the second s	
Type Re		X-value		Y-value	Funct	ion	Fu	nction Result	
M1 M2 M3	1	5.798836 (5.77756) 5.8126 (Hz	-13.51 dBn -18.45 dBn -18.14 dBn	1				

EBW NVNT 802.11ac80 5775MHz Ant1

Spectrum Ref Level : Att			RBW 100 kH2 VBW 300 kH2 r	Mode Auto FFT	r	1
SGL Count	100/100			-		
1Pk Max						
10 dBm				M2[1]		15,76 dbn 5,778840 GH -10,89 dbn
0 dBm			-		111	5.737400 GH
-10 dBm	_	XIE				
-20 dBm		Jugo Willing	- etter the the	In manual	Lin Ma	
30 dBm						
-i0 dB/m-	_	1				
-sa adding	utally have	Added	-		ting	Parties would a construct
-60 dBm-						
-70 dBm-	-		+ +	-		
CF 5.775 G	Hz	1	1001 pt	15	1	Span 160.0 MHz
Marker		in the second		The French	1 m	
Type Ref	Trt	X-value	Y-value	Function	Fun	ction Result
Mi	1	5.77994 GHz	-15.76 dBm			
M2 M3	i	5.7374 GHz 5.8126 GHz	-19.89 dBm -21.51 dBm	-		
	M			1	KUT	(1111) WA

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Report No.: STR211022001005E

EBW NVNT 802.11n(HT20) 5745MHz Ant1

		40 de 000/100		µs = VE	SW 300 kHz	Mode Aut	OFFT			_
10 dBm							1[1] 2[1]			-11.21 d8/ +97610 CH -17.10 d8/ 36/8800 CH
-10 dBm	-	-	TAP	Incolound	- for the former	the land	andreater	7		
-20 dBm -30 dBm			1					1		
HO dBr	Jun	rine 24 Mi	mal					t.	har man	enner
-60 dBri	-	-		-		-		-		
-70 dBm		z			1001	ats			Spa	n 40.0 MH:
Marker	Ref	Ten	X-value	1	Y-value	Fund	tion 1	-	nction Resu	
M1 M2 M3	Ref	1 1 1	5.743761 5.73688 5.75256	GHz	-11.21 dBm -17.10 dBm -15.05 dBm	-	non	/Fu	icuan Resa	n,

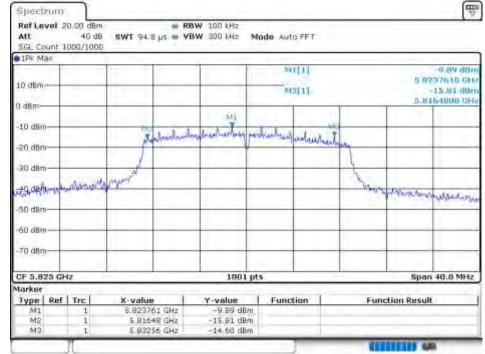
EBW NVNT 802.11n(HT20) 5785MHz Ant1

Spectrum									-
Ref Level 20 Att SGL Count 10	40 dB	SWT 94.		W 100 kHz W 300 kHz	Mode A	wto FFT			
1Pk Max									
10 dBm	_					MT[1]		5.7	-11.17 dBn 962790 GH -15.84 dBn 775200 GH
0 dBm						1	T	417	/ Jacobs GH
-10 dBm-		-			MI		MB	-	-
-20 dBm		1	alashark	uphusheday	handrage	the tennel	mitting		-
30 dBm-		1		-	_	-	1		
-+0 dB/m	4.18	1		-	-	-	£	-	-
-50 dBm	inerel (NV)	2M				-	1	MILANIA MIL	paneto
-60 dBm	_			-		-			-
-70 dBm		-	-	-	-	-		-	-
CF 5.785 GH	z	-		1001	pts	_		Spar	1 40.0 MHz
Marker	1.00			the second second				Sector Sector	
Type Ref	Trc	X-valu		Y-value		nction	FL	inction Resul	t
M1	1		79 GHz	-11.17 dB			_		
M2 M3	1		S2 GHz 26 GHz	-15.84 dB -16.82 dB					
1	1					1	1		6

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EBW NVNT 802.11n(HT20) 5825MHz Ant1

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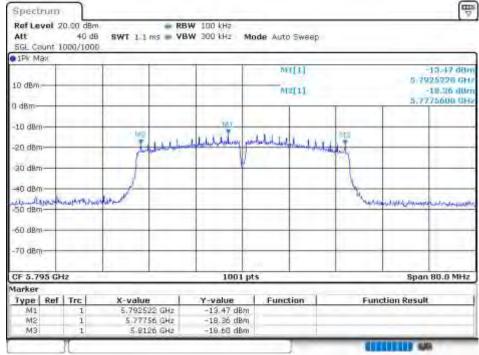
EBW NVNT 802.11n(HT40) 5755MHz Ant1

Spectrum Ref Level 3 Att SGL Count	40 dB	SWT 1-1		₩ 180 kH2 ₩ 380 kHz	Mo	de Auto	Sweep				B
• 1Pk Max			-	0							
10 dBm	_		-	-		MIZ				5 75	10.01 dBn 25220 GH 16.83 dBn
0 dBm					-	-		1	-	5,73	7-1900 CH
-10 dBm-		Ma		141		0.000		MB	-	-	
-20 dBm-		1	dulidad	Sell-beliebeliebelie	Part	hhay	hater	Aller	-		
30 dBm	_			1	<u>/</u>		_		-	-	
HO dBm	Minuilluni	wat						1×	naipel	anaAbu	us Norman
-60 dBm			-		-	-	-		-	_	
-70 dBm								-	-		
CF 5.755 G	Hz		_	1001	pts	5				Span	80.0 MHz
Marker	6	and the second second		- Average and	100	2. 7.				1	
	Trc	X-value		Y-value	1	Functi	an	1	Functio	n Result	
M1	1	5.7525		-13.01 dB			_				
M2 M3	1		48 GHz 26 GHz	-16.83 dB -17.58 dB			-				_
	M					1	-	-	101101	111	8

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EBW NVNT 802.11n(HT40) 5795MHz Ant1

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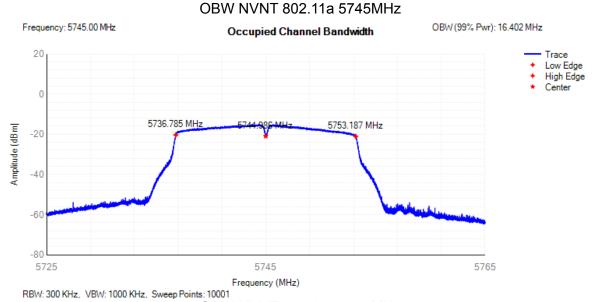
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10.3 OCCUPIED CHANNEL BANDWIDTH

Frequency: 5785.00 MHz

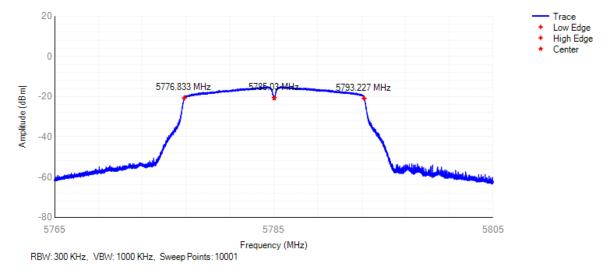
Condition	Mode	Frequency (MHz)	Center Frequency (MHz)	OBW (MHz)	Lower Limit (MHz)	Upper Limit(MHz)	Verdict		
NVNT	802.11a	5745	5744.986	16.402	16	20	Pass		
NVNT	802.11a	5785	5785.03	16.394	16	20	Pass		
NVNT	802.11a	5825	5824.954	16.426	16	20	Pass		
NVNT	802.11ac20	5745	5744.984	17.59	16	20	Pass		
NVNT	802.11ac20	5785	5785.032	17.59	16	20	Pass		
NVNT	802.11ac20	5825	5824.948	17.63	16	20	Pass		
NVNT	802.11ac40	5755	5754.956	36.036	32	40	Pass		
NVNT	802.11ac40	5795	5794.996	35.844	32	40	Pass		
NVNT	802.11ac80	5775	5774.88	75.496	64	80	Pass		
NVNT	802.11n(HT20)	5745	5744.984	17.59	16	20	Pass		
NVNT	802.11n(HT20)	5785	5785.032	17.582	16	20	Pass		
NVNT	802.11n(HT20)	5825	5824.952	17.63	16	20	Pass		
NVNT	802.11n(HT40)	5755	5754.956	36.052	32	40	Pass		
NVNT	802.11n(HT40)	5795	5794.996	35.844	32	40	Pass		



OBW NVNT 802.11a 5785MHz

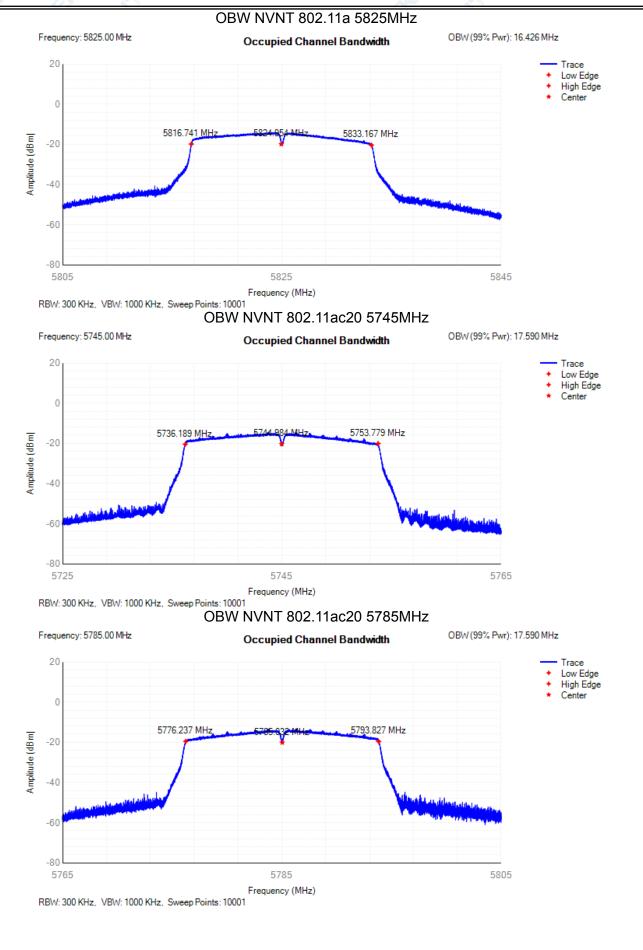
Occupied Channel Bandwidth

OBW (99% Pwr): 16.394 MHz



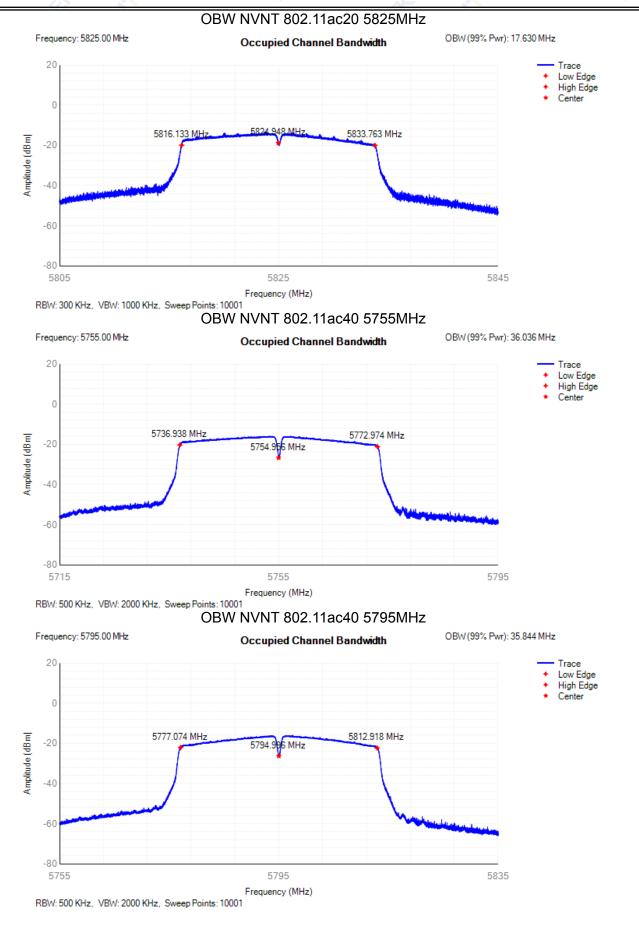
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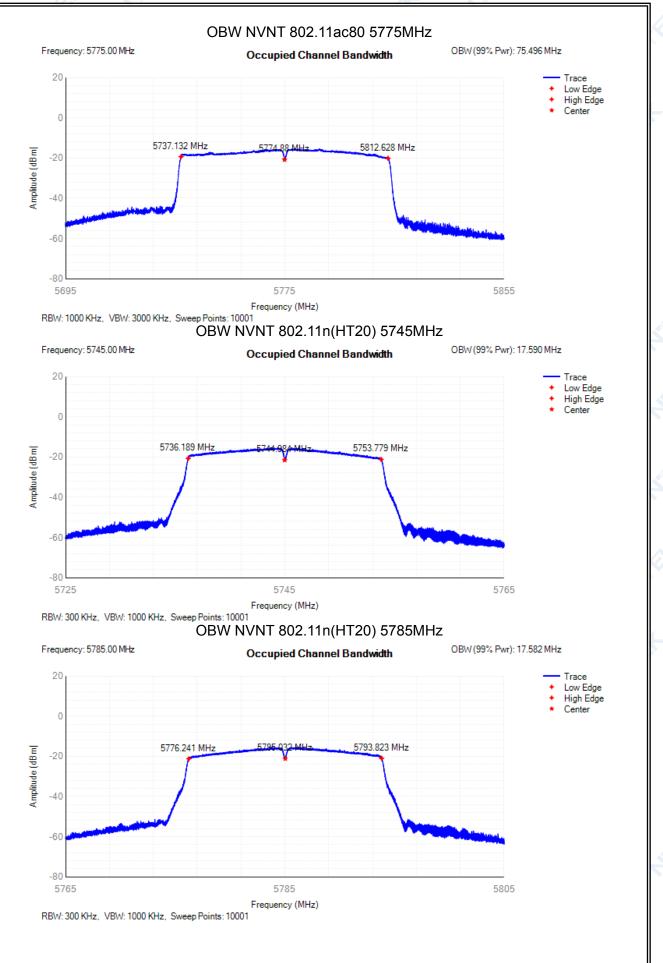
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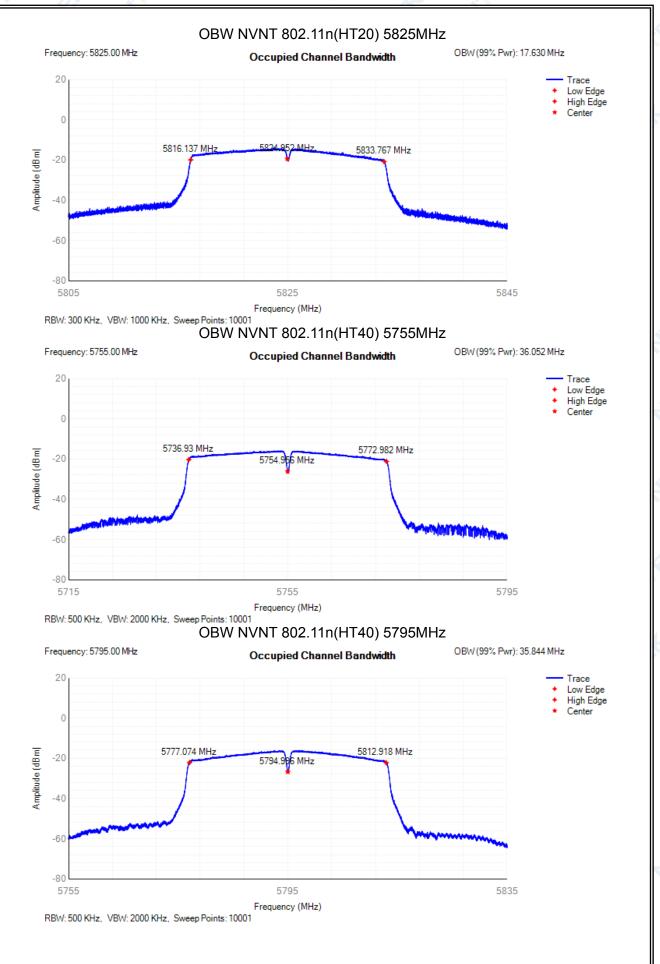
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10.4 RF OUTPUT POWER

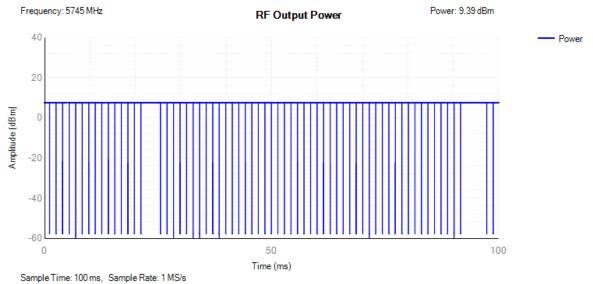
Condition	Mode	Frequency (MHz)	Max Burst RMS Power	Burst Number	Max EIRP (dBm)	Limit (dBm)	Verdic
	000 11-	F7 4 F	(dBm)	05	0.00	40.00	Daaa
NVNT	802.11a	5745	7.66	65	9.39	13.98	Pass
NVNT	802.11a	5785	7.3	68	9.03	13.98	Pass
NVNT	802.11a	5825	8.45	64	10.18	13.98	Pass
NVNT	802.11ac20	5742	7.49	73	9.22	13.98	Pass
NVNT	802.11ac20	5785	8.37	70	10.1	13.98	Pass
NVNT	802.11ac20	5825	8.39	70	10.12	13.98	Pass
NVNT	802.11ac40	5755	8.22	140	9.95	13.98	Pass
NVNT	802.11ac40	5795	7.52	128	9.25	13.98	Pass
NVNT	802.11ac80	5775	8.29	262	10.02	13.98	Pass
NVNT	802.11n(HT20)	5745	7.49	72	9.22	13.98	Pass
NVNT	802.11n(HT20)	5785	7.37	73	9.1	13.98	Pass
NVNT	802.11n(HT20)	5825	8.22	72	9.95	13.98	Pass
NVNT	802.11n(HT40)	5755	8.21	140	9.94	13.98	Pass
NVNT	802.11n(HT40)	5795	7.4	139	9.13	13.98	Pass
LVLT	802.11a	5745	7.51	65	9.24	13.98	Pass
LVLT	802.11a	5785	7.22	68	8.95	13.98	Pass
LVLT	802.11a	5825	8.39	64	10.12	13.98	Pass
LVLT	802.11ac20	5742	7.35	73	9.08	13.98	Pass
LVLT	802.11ac20	5785	8.34	70	10.07	13.98	Pass
LVLT	802.11ac20	5825	8.34	70	10.07	13.98	Pass
LVLT	802.11ac40	5755	8.10	140	9.83	13.98	Pass
LVLT	802.11ac40	5795	7.46	128	9.19	13.98	Pass
LVLT	802.11ac80	5775	8.16	262	9.89	13.98	Pass
LVLT	802.11n(HT20)	5745	7.36	72	9.09	13.98	Pass
LVLT	802.11n(HT20)	5785	7.31	73	9.04	13.98	Pass
LVLT	802.11n(HT20)	5825	8.19	72	9.92	13.98	Pass
LVLT	802.11n(HT40)	5755	8.11	140	9.84	13.98	Pass
LVLT	802.11n(HT40)	5795	7.34	139	9.07	13.98	Pass
LVHT	802.11a	5745	7.65	65	9.38	13.98	Pass
LVHT	802.11a	5785	7.22	68	8.95	13.98	Pass
LVHT	802.11a	5825	8.40	64	10.13	13.98	Pass
LVHT	802.11ac20	5742	7.43	73	9.16	13.98	Pass
LVHT	802.11ac20	5785	8.34	70	10.07	13.98	Pass
LVHT	802.11ac20	5825	8.19	70	9.92	13.98	Pass
LVHT	802.11ac40	5755	8.13	140	9.86	13.98	Pass
LVHT	802.11ac40	5795	7.44	128	9.17	13.98	Pass
LVHT	802.11ac80	5775	8.10	262	9.83	13.98	Pass
LVHT	802.11n(HT20)	5745	7.48	72	9.21	13.98	Pass
LVHT	802.11n(HT20)	5785	7.21	72	8.94	13.98	Pass

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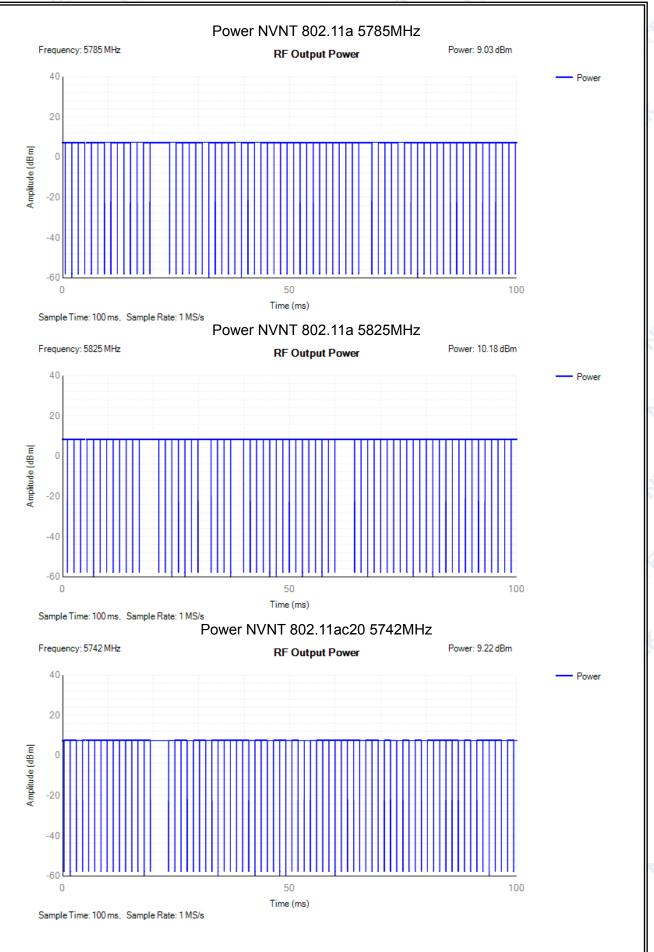
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	LVHT	802.11n(HT20)	5825	8.05	72	9.78	13.98	Pass
	LVHT	802.11n(HT40)	5755	8.01	140	9.74	13.98	Pass
	LVHT	802.11n(HT40)	5795	7.36	139	9.09	13.98	Pass
Ī	HVHT	802.11a	5745	7.61	65	9.34	13.98	Pass
	HVHT	802.11a	5785	7.24	68	8.97	13.98	Pass
	HVHT	802.11a	5825	8.36	64	10.09	13.98	Pass
	HVHT	802.11ac20	5742	7.31	73	9.04	13.98	Pass
	HVHT	802.11ac20	5785	8.22	70	9.95	13.98	Pass
ſ	HVHT	802.11ac20	5825	8.34	70	10.07	13.98	Pass
	HVHT	802.11ac40	5755	8.08	140	9.81	13.98	Pass
	HVHT	802.11ac40	5795	7.51	128	9.24	13.98	Pass
	HVHT	802.11ac80	5775	8.09	262	9.82	13.98	Pass
	HVHT	802.11n(HT20)	5745	7.44	72	9.17	13.98	Pass
	HVHT	802.11n(HT20)	5785	7.25	73	8.98	13.98	Pass
	HVHT	802.11n(HT20)	5825	8.14	72	9.87	13.98	Pass
	HVHT	802.11n(HT40)	5755	8.01	140	9.74	13.98	Pass
	HVHT	802.11n(HT40)	5795	7.38	139	9.11	13.98	Pass
	HVLT	802.11a	5745	7.62	65	9.35	13.98	Pass
	HVLT	802.11a	5785	7.25	68	8.98	13.98	Pass
	HVLT	802.11a	5825	8.44	64	10.17	13.98	Pass
	HVLT	802.11ac20	5742	7.41	73	9.14	13.98	Pass
	HVLT	802.11ac20	5785	8.31	70	10.04	13.98	Pass
	HVLT	802.11ac20	5825	8.26	70	9.99	13.98	Pass
	HVLT	802.11ac40	5755	8.13	140	9.86	13.98	Pass
	HVLT	802.11ac40	5795	7.48	128	9.21	13.98	Pass
	HVLT	802.11ac80	5775	8.19	262	9.92	13.98	Pass
	HVLT	802.11n(HT20)	5745	7.47	72	9.20	13.98	Pass
	HVLT	802.11n(HT20)	5785	7.27	73	9.00	13.98	Pass
	HVLT	802.11n(HT20)	5825	8.19	72	9.92	13.98	Pass
	HVLT	802.11n(HT40)	5755	8.06	140	9.79	13.98	Pass
	HVLT	802.11n(HT40)	5795	7.37	139	9.10	13.98	Pass
-								

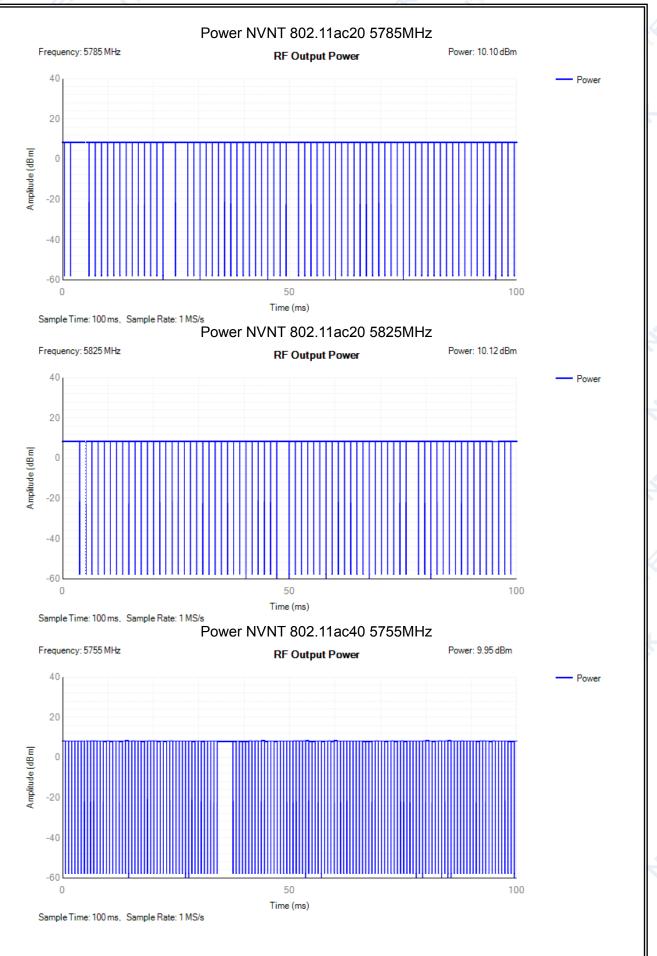
Power NVNT 802.11a 5745MHz



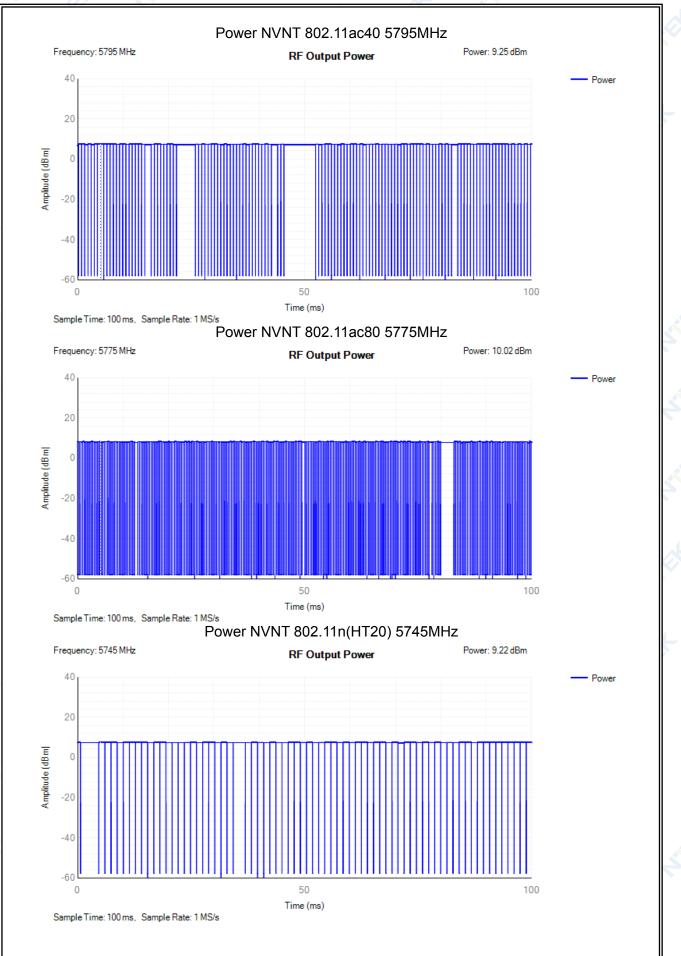
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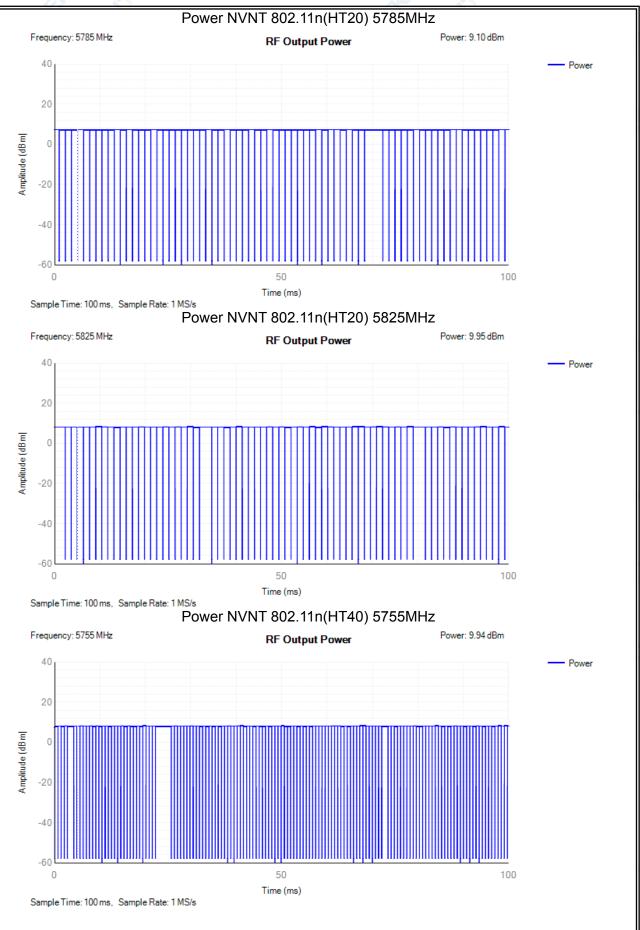


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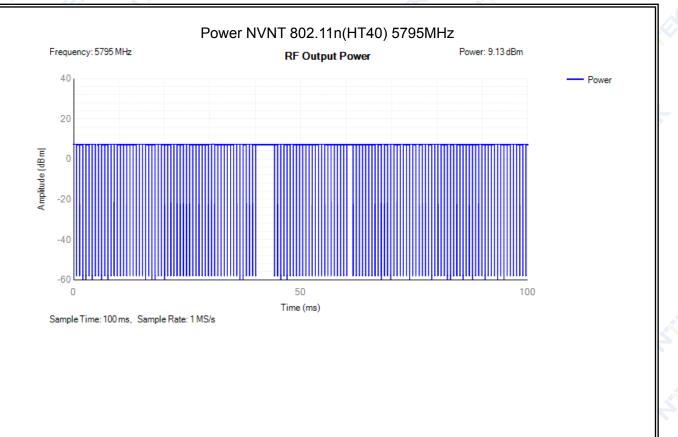


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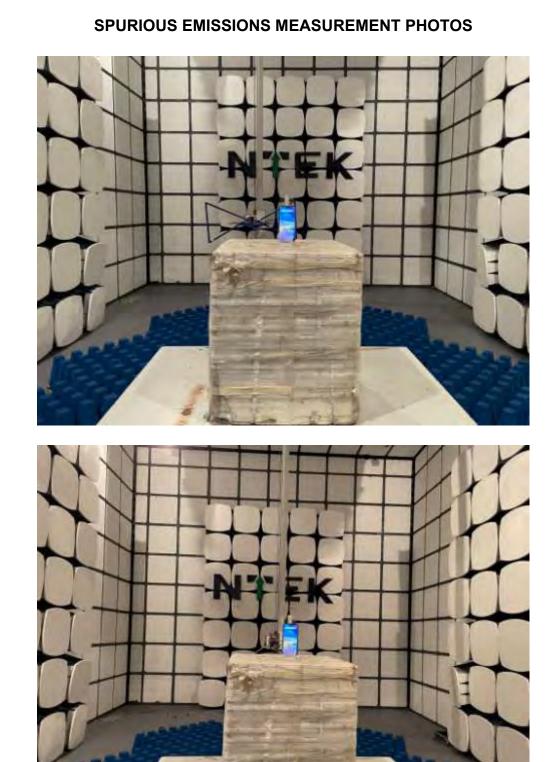
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11. EUT TEST PHOTO



END OF REPORT