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FCC Test Report

Applicant : Revopoint 3D Technologies Inc.

Office 902, 9/F, Tinno Building, Tongfa South

Address : Rd, Xili Street, Nanshan District, Shenzhen,

518000, China.

Product Name : 3D Scanner

Report Date : Jan. 08, 2024

Shenzhen Anbotek Con Anbotek



ce Laboratory Limited









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TEST REPORT

Applicant : Revopoint 3D Technologies Inc.

Manufacturer : Revopoint 3D Technologies Inc.

Product Name : 3D Scanner

Test Model No. : RANGE 2

Reference Model No. : RANGE Max, RANGE 2 Plus, RANGE 2 Pro, ACUSCAN

Trade Mark : REVOPOINT

Rating(s) : Input: 5V--1A

Test Standard(s) : FCC Part15 Subpart E, Paragraph 15.407

ANSI C63.10: 2020

Test Method(s) : KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with above listed standard(s) requirements. This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Necelpt.	NOV. 24, 2023
	sk Upotek Wipote Will Potek Wipot
Date of Test:	Nov. 24, 2023 to Dec. 12, 2023
	on tek C upotek Anbotek Anb
	Stella Zhu
Prepared By:	Anboy J Cover Anboyen And
	(Stella Zhu)
	7/11/1/2/2
	Idward pan
Approved & Authorized Signer:	potet Anbor A. A. Anbore
Imboten Anbore Anbore A	(Edward Pan)







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Revision History

Report Version		Description	Issued Date			
	Anbore R00 potek An	Original Issue.	Jan. 08, 2024			
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1. General Information

1.1. Client Information

Applicant	: Revopoint 3D Technologies Inc.	~ote
Address	Office 902, 9/F, Tinno Building, Tongfa South Rd, Xili Street, Nanshan District, Shenzhen, 518000, China.	up Vup
Manufacturer	: Revopoint 3D Technologies Inc.	
Address	Office 902, 9/F, Tinno Building, Tongfa South Rd, Xili Street, Nanshan District, Shenzhen, 518000, China.	,
Factory	: Zhejiang Revopoint Optoelectronics Technology Co., Ltd	tek
Address	2F, Building 7, No.1, Weizhong Road, Weitang Street, Jiashan County, Jiaxing city, Zhejiang Province	bote

1.2. Description of Device (EUT)

Product Name	:	3D Scanner
Test Model No.	:	RANGE 2
Reference Model No.	:	RANGE Max, RANGE 2 Plus, RANGE 2 Pro, ACUSCAN (Note: All samples are the same except the model number, so we prepare "RANGE 2" for test only.)
Trade Mark	:	REVOPOINT
Test Power Supply	:	DC 5V from Adapter input AC 120V/60Hz
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Adapter	:	N/A Anbotek Anbotek Anbotek Anbotek
RF Specification		
Operation Frequency	:	802.11a/n(HT20)/ac(VHT20)/ax(HE20): 5180MHz to 5240MHz; 802.11n(HT40)/ac(VHT40)/ax(HE40): 5190MHz to 5230MHz; 802.11ac(VHT80)/ax(HE80): 5210MHz
Number of Channel	:	802.11a/n(HT20)/ac(VHT20)/ax(HE20): 4; 802.11n(HT40)/ac(VHT40)/ax(HE40): 2; 802.11ac(VHT80)/ax(HE80): 1
Modulation Type	:	802.11a: OFDM(BPSK, QPSK, 16QAM, 64QAM); 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM); 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)
Antenna Type	:	FPC Antenna
Antenna Gain(Peak)	:	ANT1/ ANT2: 2.39dBi
Directional antenna gain	:	5.40dBi
Device Type	:	Client device
18. VA		A MOL ALL LANGE AND A MARKET AN

Remark:

- (1) All of the RF specification are provided by customer.
- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual. (3) Only 802.11n(HT20)/ac(VHT20)/ax(HE20)/n(HT40)/ac(VHT40)/ax(HE40)/ac(VHT80)/ax(HE80) support MIMO.









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1.3. Auxiliary Equipment Used During Test

Title Manufacturer		Model No.	Serial No.	
Xiaomi 33W adapter	Xiaomi	MDY-11-EX	SA62212LA04358J	

1.4. Operation channel list

Mode	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz bandwidth	36	5180	40 ^{nbore}	5200 And	ote* 44	5220	48	5240
40MHz bandwidth	38	5190	ote 46	5230	hotek /	Anbotek	ADPOTEK	k Aupote
80MHz bandwidth	42	5210	Yupojek Tupojek	Anborek	Anbotek	Nupotek Pot	ek Anbe	otek / Anto

1.5. Description of Test Modes

Pretest Modes	Descriptions
Anbotek Anbotek TM1 Anbotek Anbotek	Keep the EUT in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.
nbotek Anbotek Anbote Anbotek TM2* Anbote	Keep the EUT in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.
Anbotek TM3 inbotek	Keep the EUT in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.
nootek Anbotek Anbotek TM4k Anbotek Anbotek Anbotek	Keep the EUT in continuously transmitting mode with 802.11ax modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.





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1.6. Measurement Uncertainty

Parameter	Uncertainty
Conducted emissions (AMN 150kHz~30MHz)	3.4dB
Conducted Output Power	0.76dB
Power Spectral Density	0.76dB
Occupied Bandwidth	925Hz
Radiated spurious emissions (above 1GHz)	1G-6GHz: 4.78dB; 6G-18GHz: 4.88dB 18G-40GHz: 5.68dB
Radiated emissions (Below 30MHz)	3.53dB
Radiated spurious emissions (30MHz~1GHz)	Horizontal: 3.92dB; Vertical: 4.52dB

The measurement uncertainty and decision risk evaluated according to AB/WI-RF-F-032. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

1.7. Test Summary

Test Items	Test Modes	Status
Conducted Emission at AC power line	Mode1,2,3,4	potek P A
Duty Cycle	Mode1,2,3,4	nboi P
Maximum conducted output power	Mode1,2,3,4	Ant Prek
Power spectral density	Mode1,2,3,4	Paporek
Emission bandwidth and occupied bandwidth	Mode1,2,3,4	ek Panbo
Band edge emissions (Radiated)	Mode1,2,3,4	otek P An
Undesirable emission limits (below 1GHz)	Mode1,2,3,4	abote P
Undesirable emission limits (above 1GHz)	Mode1,2,3,4	Bek
Note: P: Pass	Anbotek Anbotek	Aupotek

N: N/A, not applicable





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1.8. Description of Test Facility

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

FCC-Registration No.:434132

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 434132.

ISED-Registration No.: 8058A

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.

1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.

1.9. Disclaimer

- 1. The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
- 2. The test report is invalid if there is any evidence and/or falsification.
- 3. The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
- 4. This document may not be altered or revised in any way unless done so by Anbotek and all revisions are duly noted in the revisions section.
- 5. Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- 6. The authenticity of the information provided by the customer is the responsibility of the customer and the laboratory is not responsible for its authenticity.

The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.





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1.10. Test Equipment List

Cond	ucted Emission at A	C power line	Anbe	k spotel	Anbore	An
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	2023-10-12	2024-10-11
2 5016K	Three Phase V- type Artificial Power Network	CYBERTEK	EM5040DT	E215040D T001	2023-07-05	2024-07-04
3	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	2023-10-12	2024-10-11
4	Software Name EZ-EMC	Farad Technology	ANB-03A	N/A	lek / Aupotek	Anborotek

Duty Cycle

Maximum conducted output power

Power spectral density

Emission bandwidth and occupied bandwidth

450		L-01 DV				- LaU'
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1 Ant	DC Power Supply	IVYTECH	IV3605	1804D360 510	2023-10-20	2024-10-19
2	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	101792	2023-05-26	2024-05-25
3	MXA Spectrum Analysis	KEYSIGHT	N9020A	MY505318 23	2023-02-23	2024-02-22
4	Oscilloscope	Tektronix	MDO3012	C020298	2023-10-12	2024-10-11
Angore	MXG RF Vector Signal Generator	Agilent	N5182A	MY474206 47	2023-02-23	2024-10-22

	edge emissions (Ra sirable emission limi		obotek Au	potek Ant	otek Anb	otek Anbotel
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	2023-10-12	2024-10-11
Anbores	EMI Preamplifier	SKET Electronic	LNPA- 0118G-45	SKET-PA- 002	2023-10-12	2024-10-11
3	Double Ridged Horn Antenna	SCHWARZBECK	BBHA 9120D	02555	2022-10-16	2025-10-15
4	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	nbotek / Anbi	orek / Ans
×5	Horn Antenna	A-INFO	LB-180400- KF	J21106062 8	2023-10-12	2024-10-11
nb6tek	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	101792	2023-05-26	2024-05-25
17 ¹⁰⁰	Amplifier	Talent Microwave	TLLA18G40 G-50-30	23022802	2023-05-25	2024-05-24





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Unde	sirable emission limi	ts (below 1GHz)	Anbore	Vun	Anborek	Aupo, Wek
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	2023-10-12	2024-10-11
2	Pre-amplifier	SONOMA	310N N	186860	2023-10-12	2024-10-11
8/9/	Bilog Broadband Antenna	Schwarzbeck	VULB9163	345	2022-10-23	2025-10-22
104°K	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	Anbote.	And
P.500%	Loop Antenna	Schwarzbeck	FMZB1519 B	00053	2023-10-12	2024-10-11





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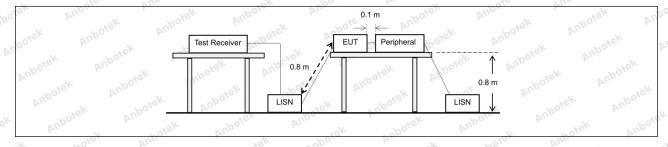
2. Conducted Emission at AC power line

Test Requirement:	47 CFR Part 15.207(a)	ok hotek Anbo	Aug Otek			
And sek abovek	Frequency of emission (MHz)	Conducted limit (dBµV)	poten Anbe			
Aupor Ar.	el anboten Anb	Quasi-peak	Average			
K bojek Anbo	0.15-0.5	66 to 56*	56 to 46*			
Test Limit:	0.5-5	56°	46 300 ter			
otek Anbor Ar	5-30 And And	60 March Anbo	50			
otek Anbotek	*Decreases with the logarithm of the	ne frequency.	Anbo			
Test Method:	d: Refer to ANSI C63.10-2020 section 6.2, standard test method for ac pow					

2.1. EUT Operation

Operating Envi	ronment: Anbote Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek
nbotek Anbotek Anbotek Anbotek Anbotek	1: 802.11a mode: Keep the EUT in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report. 2: 802.11n mode: Keep the EUT in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.
Test mode:	3: 802.11ac mode: Keep the EUT in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report. 4: 802.11ax mode: Keep the EUT in continuously transmitting mode with 802.11ax
	modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

2.2. Test Setup



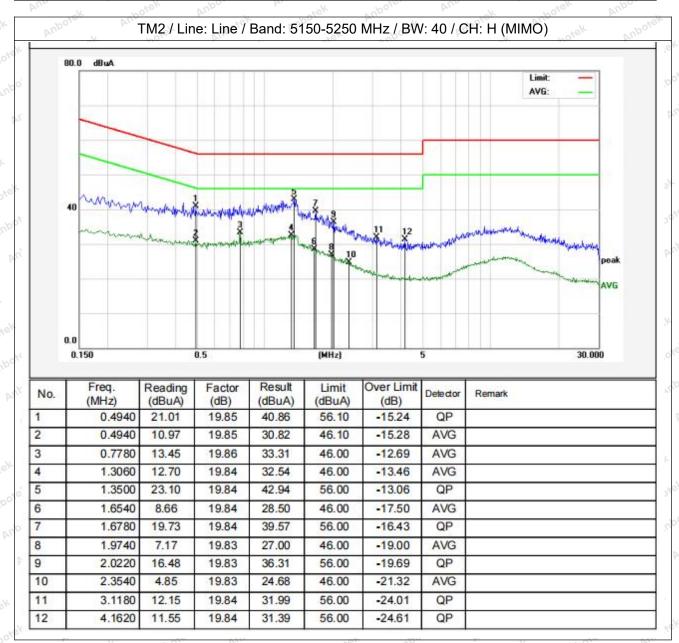




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2.3. Test Data

Temperature: 24.7 °C Humidity: 53.2 % Atmospheric Pressure: 101 kPa

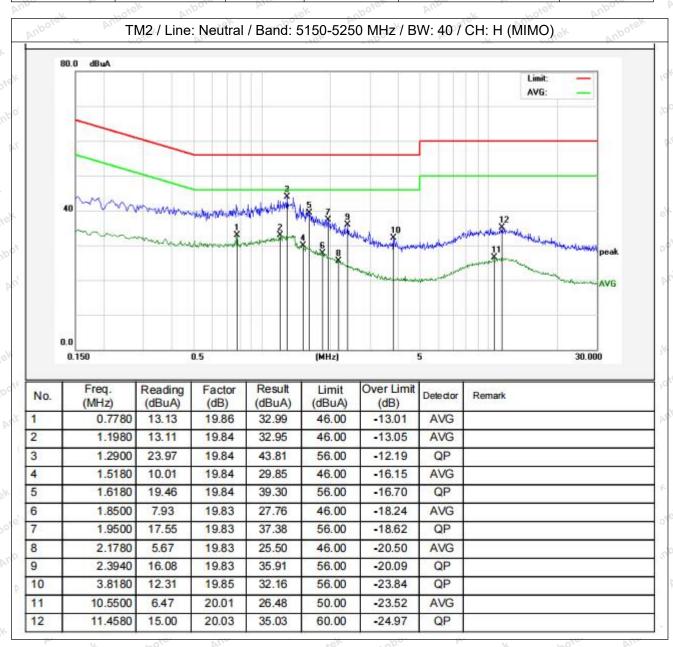






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Temperature: 24.7 °C Humidity: 53.2 % Atmospheric Pressure: 101 kPa



Note: Only record the worst data (802.11n(HT40) MIMO) in the report.





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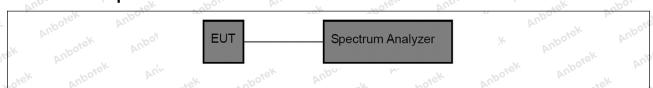
3. Duty Cycle

Test Requirement:	All measurements are to be performed with the EUT transmitting at 100% duty cycle at its maximum power control level; however, if 100% duty cycle cannot be achieved, measurements of duty cycle, x, and maximum-power transmission duration, T, are required for each tested mode of operation.
Test Limit:	No limits, only for report use.
Test Method:	ANSI C63.10-2020 section 12.2 (b)
Anbotek Anbotek	 i) Set the center frequency of the instrument to the center frequency of the transmission. ii) Set RBW >= EBW if possible; otherwise, set RBW to the largest available value.
Procedure:	iii) Set VBW >= RBW. iv) Set detector = peak.
otek Aupotek Aup	v) The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T, where T is defined in item a1) of 12.2, and the number of sweep points across duration T exceeds 100.

3.1. EUT Operation

Operating Envi	conment: And
	1: 802.11a mode: Keep the EUT in continuously transmitting mode with 802.11a
	modulation type. All data rates has been tested and found the data rate @ 6Mbps is
	the worst case. Only the data of worst case is recorded in the report.
.V. more	2: 802.11n mode: Keep the EUT in continuously transmitting mode with 802.11n
	modulation type. All bandwidth and data rates has been tested and found the data
do Asi	rate @ MCS0 is the worst case. Only the data of worst case is recorded in the
	report. And
Test mode:	3: 802.11ac mode: Keep the EUT in continuously transmitting mode with 802.11ac
	modulation type. All bandwidth and data rates has been tested and found the data
	rate @ MCS0 is the worst case. Only the data of worst case is recorded in the
	report.
	4: 802.11ax mode: Keep the EUT in continuously transmitting mode with 802.11ax
	modulation type. All bandwidth and data rates has been tested and found the data
	rate @ MCS0 is the worst case. Only the data of worst case is recorded in the
	report.

3.2. Test Setup



3.3. Test Data

Temperature:	25.3 ° C	Humidity:	47 %	Atmospheric Pressure:	101 kPa
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Please Refer to Appendix for Details.







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4. Maximum conducted output power

Test Requirement:	47 CFR Part 15.407(a)(1)(iv)
Test Limit:	For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
Test Method:	ANSI C63.10-2020, section 12.3
Anbotek Anbotek Anbotek Anbotek	Method SA-2 a) Measure the duty cycle D of the transmitter output signal. b) Set span to encompass the entire 26 dB EBW or 99% OBW of the signal. c) Set RBW = 1 MHz.
	d) Set VBW >= 3 MHz. e) Number of points in sweep >= [2 × span / RBW]. (This gives bin-to-bin spacing <= RBW / 2, so that narrowband signals are not lost between
	frequency bins.) f) Sweep time = auto. g) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
Procedure:	h) Do not use sweep triggering. Allow the sweep to "free run." i) Trace average at least 100 traces in power averaging (rms) mode;
	however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and OFF periods of the transmitter.
	j) Compute power by integrating the spectrum across the 26 dB EBW or 99% OBW of the signal using the instrument's band power measurement function with band limits set equal to the EBW or OBW band edges. If the instrument
Anbotek Anbotel	does not have a band power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 26 dB EBW or 99% OBW of the spectrum
	k) Add [10 log (1 / D)], where D is the duty cycle, to the measured power to compute the average power during the actual transmission times.

4.1. EUT Operation

Operating Envir	conment: And tek opposek Andorek Andorek Andorek Andorek
hotek Anbotek	1: 802.11a mode: Keep the EUT in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report. 2: 802.11n mode: Keep the EUT in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the
Test mode:	report. 3: 802.11ac mode: Keep the EUT in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report. 4: 802.11ax mode: Keep the EUT in continuously transmitting mode with 802.11ax modulation type. All bandwidth and data rates has been tested and found the data



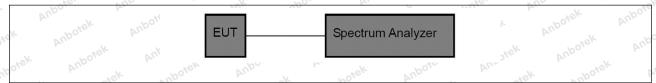




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rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

4.2. Test Setup



4.3. Test Data

Temperatu	ıre:	25.3 °	С	VUpoje	Humidity:	47 %	hotek	Atmospheric I	Pressure:	101 kPa
1.1.1.1			_		,	Tree -		1 111111 - 1 111111		1 4 1 111/0-1

Please Refer to Appendix for Details.





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5. Power spectral density

Test Requirement:	47 CFR Part 15.407(a)(1)(iv)
Anbotek Anbotek	For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.
Test Limit: Anbo	If transmitting antennas of directional gain greater than 6 dBi are used, the
	maximum power spectral density shall be reduced by the amount in dB that
tek Anbore Ar	the directional gain of the antenna exceeds 6 dBi.
Test Method:	ANSI C63.10-2020, section 12.5
iek abotek	a) Create an average power spectrum for the EUT operating mode being
	tested by following the
	instructions in 12.3.2 for measuring maximum conducted output power using
	a spectrum
	analyzer or EMI receiver; that is, select the appropriate test method (SA-1,
k hotek An	SA-2, SA-3, or their
	respective alternatives) and apply it up to, but not including, the step labeled
	"Compute
	power" (This procedure is required even if the maximum conducted output
	power tek
	measurement was performed using the power meter method PM.)
	b) Use the peak search function on the instrument to find the peak of the
	spectrum.
	c) Make the following adjustments to the peak value of the spectrum, if
	applicable:
	1) If method SA-2 or SA-2A was used, then add [10 log (1 / D)], where D is
	the duty
	cycle, to the peak of the spectrum.
	2) If method SA-3A was used and the linear mode was used in step h) of
Procedure:	12.3.2.7, add
	1 dB to the final result to compensate for the difference between linear
	averaging and
	power averaging.
Anbo	d) The result is the PPSD.
tek aboter p	e) The procedure in item a) through item c) requires the use of 1 MHz
	resolution bandwidth to
	satisfy the 1 MHz measurement bandwidth specified by some regulatory
	authorities.This
	requirement also permits use of resolution bandwidths less than 1 MHz
	"provided that the
	measured power is integrated to show the total power over the measuremen
" upoter Aup.	bandwidth" (i.e.,
	1 MHz). If measurements are performed using a reduced resolution
	bandwidth and integrated
	over 1 MHz bandwidth, the following adjustments to the procedures apply:
	1) Set RBW >= 1 / T, where T is defined in 12.2 a).
	2) Set VBW >= [3 × RBW].
	3) Care shall be taken such that the measurements are performed during a
	period of continuous transmission or are corrected upward for duty cycle.







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5.1. EUT Operation

Operating Environment: 1: 802.11a mode: Keep the EUT in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.

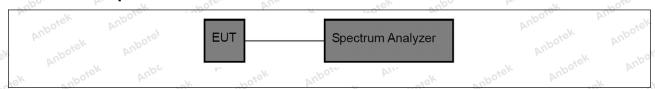
2: 802.11n mode: Keep the EUT in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

Test mode:

3: 802.11ac mode: Keep the EUT in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

4: 802.11ax mode: Keep the EUT in continuously transmitting mode with 802.11ax modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report

5.2. Test Setup



5.3. Test Data

Temperature:	25.3 ° C	Humidity:	47 %	Atmospheric Pressure:	101 kPa
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Please Refer to Appendix for Details.



Hotline



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6. Emission bandwidth and occupied bandwidth

Test Requirement:	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use.
Test Limit:	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use.
Test Method:	ANSI C63.10-2020, section 6.9.3 & 12.4
Anbo	Emission bandwidth:
	a) Set RBW = approximately 1% of the emission bandwidth.
	b) Set the VBW > RBW.
potek Anbo	c) Detector = peak.
	d) Trace mode = max hold.
	e) Measure the maximum width of the emission that is 26 dB down from the
	peak of the emission.
	Compare this with the RBW setting of the instrument. Readjust RBW and
	repeat measurement
	as needed until the RBW/EBW ratio is approximately 1%.
	Lotek Anbore An .ek abotek Ano
	Occupied bandwidth:
	a) The instrument center frequency is set to the nominal EUT channel cente
	frequency. The
	frequency span for the spectrum analyzer shall be between 1.5 times and
	5.0 times the OBW.
	b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to
	5% of the OBW,
	and VBW shall be approximately three times the RBW, unless otherwise
	specified by the
	applicable requirement.
	c) Set the reference level of the instrument as required, keeping the signal
Procedure:	from exceeding the
Procedure.	maximum input mixer level for linear operation. In general, the peak of the
Anbo	spectral envelope
aboten Anb	shall be more than [10 log (OBW/RBW)] below the reference level. Specific
	guidance is given
	in 4.1.5.2. notes And a note A
	d) Step a) through step c) might require iteration to adjust within the
	specified range.
	e) Video averaging is not permitted. Where practical, a sample detection an
upo k	single sweep mode
	shall be used. Otherwise, peak detection and max hold mode (until the trace
Vi. Jek "Upoter	stabilizes) shall be
	used. noote And
	f) Use the 99% power bandwidth function of the instrument (if available) and
	report the measured
	bandwidth.
	g) If the instrument does not have a 99% power bandwidth function, then the
	trace data points are
*ek abotek	recovered and directly summed in linear power terms. The recovered
	amplitude data points,
	beginning at the lowest frequency, are placed in a running sum until 0.5% of
	the total is reached;
	that frequency is recorded as the lower frequency. The process is repeated
	until 99.5% of the







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total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is

the difference between these two frequencies.

h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument

display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may

be reported in addition to the plot(s).

6.1. EUT Operation

Operating Environment:

1: 802.11a mode: Keep the EUT in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.

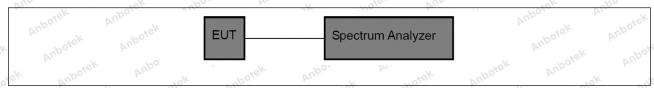
2: 802.11n mode: Keep the EUT in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

Test mode:

3: 802.11ac mode: Keep the EUT in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

4: 802.11ax mode: Keep the EUT in continuously transmitting mode with 802.11ax modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

6.2. Test Setup



6.3. Test Data

Temperature:	25.3 ° C	Humidity:	47 %	Atmospheric Pressure:	101 kPa
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Please Refer to Appendix for Details.







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7. Band edge emissions (Radiated)

Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek	For transmitters operatof the 5.15-5.35 GHz b MHz 0.090-0.110 10.495-0.505 2.1735-2.1905	mand shall not exceed MHz 16.42-16.423 16.69475-		27 dBm/MHz. GHz
ek Anbotek Anbotek Anbotek Anbotek	0.090-0.110 10.495-0.505	16.42-16.423 16.69475-		177.
Potek Aupotek Aupotek Aupotek	10.495-0.505	16.69475-	399.9-410	
otek Anbotek	anborek Anbe	PATER AND ADDRESS OF THE PATER AND ADDRESS OF		4.5-5.15
Yupotek Vupore	2 1735 2 1005	16.69525	608-614	5.35-5.46
-x8'	2.1733-2.1803	16.80425- 16.80475	960-1240	7.25-7.75
vupo, W.	4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
work Aupore	4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
Anbotek Anbo	4.20725-4.20775	73-74.6	1645.5- 1646.5	9.3-9.5
A. Siek	6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
otek Anborek	6.26775-6.26825	108-121.94	1718.8- 1722.2	13.25-13.4
nbotek Anbo	6.31175-6.31225	123-138	2200-2300	14.47-14.5
hotek Anbor	8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
Anbotek Anbote	8.362-8.366	156.52475- 156.52525	2483.5-2500	17.7-21.4
cotek Anbo	8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
And	8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
iek aupore Ar	12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
est Limit:	12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
pole And	12.57675-12.57725	322-335.4	3600-4400	(2)
otek Anbote.	13.36-13.41	AUDO	rek an	OOL BULL
Aup. K Potek	Anbore Arr	tek aboien	And	
ek Anbotek Anbot	¹ Until February 1, 1999 ² Above 38.6			
botek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek	The field strength of er not exceed the limits si 1000 MHz, compliance using measurement ins detector. Above 1000 M 15.209shall be demons emissions. The provision	hown in § 15.209. At with the limits in § 1 strumentation emplo MHz, compliance with strated based on the	frequencies equ 5.209shall be d ying a CISPR qu the emission li average value of	ual to or less that emonstrated uasi-peak imits in § of the measured
ek Anbotek And	Except as provided els intentional radiator sha	ewhere in this subpa	art, the emission	s from an
bote. Wur	following table:		pore. Ans	ek boiek
Anbotek Anbote	Frequency (MHz)	Field strength (microvolts/met		Measurement distance
Aupote. Aur	k spojek Aupo	n. otek	1 160	(meters)
Lotek Anbore	0.009-0.490	2400/F(kHz)		300
And	0.490-1.705	24000/F(kHz)	477	30 John 1









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hotek Anbore Ar			W. Siek
us spotek	1.705-30.0	30	30 And
Anbore And	30-88	100 **	3.ek aboker
Potek Vupor	88-216	150 **	3
Ant sk shotek	216-960	200 **	3 orek Anbo
. Anbore Ans	Above 960	500 Anbolt	3 , or ord
Test Method:	ANSI C63.10-2020, section	n 12.7.4, 12.7.5, 12.7.6	Aupo, W.
-k hotek An	Above 1GHz:	oter Ando	Vupos VIII
Pup.	a. For above 1GHz, the El	JT was placed on the top of a r	otating table 1.5
otek Anbore	meters above the ground a	at a 3 meter fully-anechoic char	nber. The table was
And K hotek		ermine the position of the high	
Vupoje, Vup		ers away from the interference-	
Potek Aupore		top of a variable-height anteni	
Ande ok hot		aried from one meter to four me	
ek Anbores And		aximum value of the field stren	
h. Siek an		of the antenna are set to make t	
potek Anbo		ission, the EUT was arranged t	
tek anbote.		tuned to heights from 1 meter t	
Pupo, W. Siek		MHz, the antenna was tuned to s turned from 0 degrees to 360	
abotek Anbo	maximum reading.	s turried from 0 degrees to 500	degrees to find the
Ar. Stek Anbote.		n was set to Peak Detect Funct	ion and Specified
Anbo	Bandwidth with Maximum		ion and opposited anbove
aboten Anbo	, A	ne EUT in peak mode was 10dE	3 lower than the
arek onb		could be stopped and the pea	
octek Aupo		rise the emissions that did not h	
tek abotek	would be re-tested one by	one using peak or average me	thod as specified
Albo, Ar atek	and then reported in a data		otek Anboie.
Procedure:		est channel, the middle channe	, the Highest
Ar. Tek	channel.	Aupor Ai.	inpoter And
Anbo. L A. Lotel		nents are performed in X, Y, Z a	
k abotek Anbe	0.7	und the X axis positioning whic	h it is the worst
Ar. Stek Anb	case.	e until all fraguencies massavra	d was something
olek Aupo	Remark:	s until all frequencies measure	d was complete.
age abover A	V.	ble Loss+ Antenna Factor- Pre	amn Factor
whoo, wiek	127	GHz, the disturbance above 18	V:
abotek Anbo	V 1-01	ve plots are the highest emission	
Al. atek anboten		e points had been displayed. T	
Anbo, Ar		ne radiator which are attenuated	
s abotek Ando	below the limit need not be		Anbo k hore
VI. Tek	3. As shown in this section	, for frequencies above 1GHz,	the field strength
Pupo. William	limits are based on averag	e limits. However, the peak fiel	d strength of any
tek abotek Ar		the maximum permitted average	
upo. A		under any condition of modula	
Anbotek Anbotek	-10 A 11 -	el is lower than the average lim	it, only the peak
All sek shotek	measurement is shown in		poten Anbu
Aupo, Viek		18GHz were very low and the h	
botek Anbor	nighest point could be four	nd when testing, so only the ab	ove harmonics had



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been displayed.



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7.1. EUT Operation

Operating Environment:

1: 802.11a mode: Keep the EUT in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.

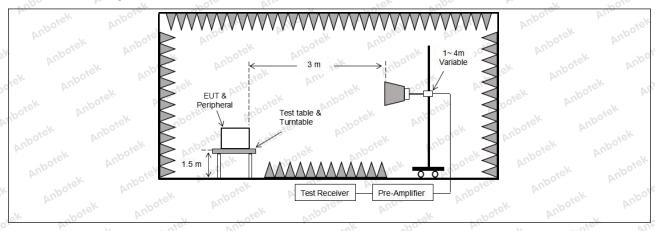
2: 802.11n mode: Keep the EUT in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

Test mode:

3: 802.11ac mode: Keep the EUT in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

4: 802.11ax mode: Keep the EUT in continuously transmitting mode with 802.11ax modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

7.2. Test Setup









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7.3. Test Data

Temperature: 25.3 ° C Humidity: 47 % Atmospheric Pressure: 101 kPa

		TM1/	Band: 5150-52	50 MHz / BW	: 20 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit	Antenna Pol.	Detector
5150.00	36.79	36 15.99 NO	52.78	68.20	15.42 mb	H	Peak
5150.00	38.82 And	15.99	54.81	68.20	-13.39	upose, A Vi	Peak
5150.00	26.78	15.99	42.77	54.00	-11.23	No A	AVG
5150.00	28.78	15.99	44.77	54.00	-9.23	Viek	AVG
		TM1/	Band: 5150-52	50 MHz / BW	: 20 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5250.00	37.29	16.43	53.72	68.20	-14.48	H	otel ^k Peak _{An} t
5250.00	40.11	16.43	56.54	68.20	-11.66	pose A bu	Peak
5250.00	28.54	16.43	44.97	54.00	-9.03	nbo'th	AVG
5250.00	29.51	16.43	45.94	54.00	-8.06	Vek	AVG

Remark:

2. During the test, all antenna chains has been tested, and only worst case (ANT1) data is listed in the report.

		TM2/	Band: 5150-52	250 MHz / BW :	: 20 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5150.00	35.80	15.99	51.79	68.20	-16.41	H ^{dn} A	Peak
5150.00	37.14	15.99	53.13	68.20	-15.07	Voose	Peak
5150.00	26.52	15.99	42.51	54.00	-11.49	H H Note	AVG
5150.00	27.53	15.99	43.52	54.00	-10.48	V V	AVG M
		TM2/	Band: 5150-52	250 MHz / BW :	: 20 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Overlimit (dB)	Antenna Pol.	Detector
5250.00	37.59	16.43	54.02	68.20	-14.18	AND H OK	Peak
5250.00	38.66	16.43	55.09	68.20	-13.11	AVO	Peak
5250.00	27.60	16.43	44.03	54.00	-9.97	r Hupotes	AVG
5250.00	29.00	16.43	45.43	54.00 (b ⁰)	-8.57	v V vo	AVG AND

Remark:

2. During the test, SISO and MIMO modes have been tested, and only worst case (MIMO) data is listed in the report.



^{1.} Result=Reading + Factor

^{1.} Result=Reading + Factor



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), a		46 M	200	1/4	PO, DIII		461
		TM2/	Band: 5150-52	250 MHz / BW	: 40 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5150.00	36.17	15.99	52.16	68.20	-16.04	Hoter	Peak
5150.00	38.04	15.99	54.03	68.20	-14.17	. V botek	Peak
5150.00	26.71	15.99	42.70	54.00	-11.30	, Н	ek AVG _{an} bo
5150.00	28.62	15.99	44.61	54.00	otel -9.39 pol	A Vice	AVG
		TM2/	Band: 5150-52	250 MHz / BW	: 40 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5250.00	37.88	16.43	54.31	68.20	-13.89	~\H,	Peak
5250.00	36.82	16.43	53.25	68.20	-14.95	Voick	Peak
5250.00	27.96	16.43	44.39	54.00	-9.61	A ^{tt}	AVG
5250.00	29.12	16.43	45.55	54.00	-8.45	ick A Vupo.	AVG

Remark:

- 1. Result=Reading + Factor
- 2. During the test, SISO and MIMO modes have been tested, and only worst case (MIMO) data is listed in the report.

		TM3/	Band: 5150-52	250 MHz / BW	: 20 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5150.00	36.60	15.99	52.59	68.20	-15.61	Sk H Wpon	Peak
5150.00	38.31	15.99	54.30	36 68.20 NO	-13.90	V	otell Peak And
5150.00	26.38	15.99	o ^{t©} 42.37 №	54.00	11.63	POTT H	AVG
5150.00	28.47	15.99	44.46	54.00	-9.54	Variote	AVG
		TM3/	Band: 5150-52	250 MHz / BW	: 20 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5250.00	37.70	16.43	54.13	68.20	-14.07	H Ne	Peak
5250.00	37.97	16.43	54.40	68.20	-13.80	VAUL	Peak
5250.00	27.56	16.43	43.99	54.00	-10.01	Nek H No	AVG AVG
5250.00	28.02	16.43 M	44.45	54.00	o ^{ter} -9.55 A ^{nt}	V	AVG

Remark:

- 1. Result=Reading + Factor
- 2. During the test, SISO and MIMO modes have been tested, and only worst case (MIMO) data is listed in the report.





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		TM3/E	Band: 5150-52	250 MHz / BW	: 40 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5150.00	35.70	15.99	51,69	68.20	-16.51	W.Hoter.	Peak
5150.00	36.21	15.99	52.20	68.20	-16.00	Vabotek	Peak
5150.00	25.82	15.99	41.81	54.00	-12.19	H	AVG AVG
5150.00°°	26.62	15.99	42.61	54.00	otel - 11.39 m	A bus	AVG
		TM3/E	Band: 5150-52	250 MHz / BW	40 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5250.00	37.88	16.43	54.31	68.20	-13.89	ANTP	Peak
5250.00	37.07	16.43	53.50	68.20	-14.70	Vaporer	Peak
5250.00	27.38	16.43	43.81	54.00	-10.19	H bot	AVG
5250.00	27.23	16.43	43.66	54.00	-10.34	V	AVG

Remark:

- 1. Result=Reading + Factor
- 2. During the test, SISO and MIMO modes have been tested, and only worst case (MIMO) data is listed in the report.

		TM3/	Band: 5150-52	250 MHz / BW :	: 80 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5150.00	35.91 And	15.99	51.90 NO	68.20	-16.30	botek H Ant	Peak
5150.00	36.20	15.99 M	52.19	68.20	-16.01	Ver	Peak
5150.00	26.33	15.99	42.32	54.00	-11.68	And Hak	AVG
5150.00	26.67	15.99	42.66	54.00	-11.34	AUPS	AVG
		TM3/	Band: 5150-52	250 MHz / BW :	: 80 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5250.00	38.06	16.43	54.49 m	68.20	-13.71	otek H And	Peak
5250.00	37.25	16.43 N	53.68	68.20	-14.52	Water	Peak
5250.00	28,51	16.43	44.94	54.00	-9.06	YUR HA	AVG
5250.00	27.94	16.43	44.37	54.00	-9.63	Aupon ok	AVG

Remark:

- 1. Result=Reading + Factor
- 2. During the test, SISO and MIMO modes have been tested, and only worst case (MIMO) data is listed in the report.



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400-003-0500



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		TM4/E	3and: 5150-52	250 MHz / BW	: 20 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5150.00	36.46	15.99	52.45	68.20	-15.75	"Ho,e	Peak
5150.00	38.14	15.99	54.13	68.20	-14.07	Vabořek	Peak
5150.00	26.68	15.99	42.67	54.00	-11.33	H	AVG NO
5150.00	28.27	15.99	44.26	54.00	otel -9.74 mb	A V	AVG
		TM4/E	3and: 5150-52	250 MHz / BW	20 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5250.00	37.73	16.43	54.16	68.20	-14.04	Anthor	Peak
5250.00	38.00	16.43	54.43	68.20	-13.77	Vabotek	Peak
5250.00	28.19	16.43	44.62	54.00	-9.38	ion H	AVG
5250.00	27.87	16.43	44.30	54.00	31 ^{0k} -9.70 √100	V	AVG

Remark:

- 1. Result=Reading + Factor
- 2. During the test, SISO and MIMO modes have been tested, and only worst case (MIMO) data is listed in the report.

	TM4 / Band: 5150-5250 MHz / BW: 40 / L								
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector		
5150.00	35.55	15.99	51.54	68.20	-16.66	potek H Ant	Peak		
5150.00	35.92	15.99 An	51.91	68.20	-16.29	~o₁e∀	Peak		
5150.00	25.77	15.99	41.76	54.00	12.24	Hok Hok	AVG		
5150.00	26.65	15.99	42.64	54.00	-11.36	Anby	AVG		
		TM4/	Band: 5150-52	250 MHz / BW	: 40 / H				
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector		
5250.00	37.89	16.43	54.32 M	68.20	-13.88	oten H And	Peak		
5250.00	36.70	16.43	53.13	68.20	-15.07	otek P	Peak		
5250.00	27.73	16.43	44.16	54.00	-9.84	H/V	AVG		
5250.00	27.68	16.43	44.11	54.00	-9.89	YUR A PEK	AVG		

Remark:

- 1. Result=Reading + Factor
- 2. During the test, SISO and MIMO modes have been tested, and only worst case (MIMO) data is listed in the report.





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D.1.		TIEL VUD.		Ya	PO, D.		- 18th A1
		TM4/E	Band: 5150-52	250 MHz / BW	: 80 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5150.00	36.42	15.99	52.41	68.20	-15.79	MHOT	Peak
5150.00	37.75	15.99	53.74	68.20	-14.46	· Vupoter	Peak
5150.00	26.07	15.99	42.06	54.00	-11.94	H No	AVG MO
5150.00	26.99	15.99	42.98	54.00	-11.02	V	AVG
		TM4/E	Band: 5150-52	250 MHz / BW	: 80 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5250.00	38.77	16.43	55.20	68.20	-13.00	PULL AND	Peak
5250.00	37.06	16.43	53.49	68.20	-14.71	Kupore	Peak
5250.00	28.65	16.43	45.08	54.00	-8.92	ek H nbot	AVG
5250.00	28.54	16.43	44.97	54.00	-9.03	V	otel AVG An

Remark:

- 1. Result=Reading + Factor
- 2. During the test, SISO and MIMO modes have been tested, and only worst case (MIMO) data is listed in the report.





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8. Undesirable emission limits (below 1GHz)

Test Requirement:	47 CFR Part 15.407(b)(9)) And shotek	Anbor Air						
Anbotek Anbote	Unwanted emissions belo strength limits set forth in	ow 1 GHz must comply with th § 15.209.	ne general field						
	Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the								
	following table:								
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)						
	0.009-0.490	2400/F(kHz)	300						
	0.490-1.705	24000/F(kHz)	30						
	1.705-30.0	30	30						
	30-88	100 **	TOK 30 ANDORS A						
St. Aug.	88-216	150 **	3 nbotok						
	216-960	200 **	3. And						
	Above 960	500	3 Anbore						
Thotel Anbo	100	- NO.	MOTON IN COLON						
Test Method:	ANSI C63.10-2020, section	on 12.7.4, 12.7.5, 12.7.6							
	Below 1GHz:		W. Jek Jpo						
otek Anbo		EUT was placed on the top of	a rotating table 0.8						
Ando		at a 3 meter semi-anechoic							
		to determine the position of t							
		10 meters away from the inte							
	1 0 0	nted on the top of a variable-	o						
		varied from one meter to four							
		maximum value of the field st							
		of the antenna are set to mal							
Ande		nission, the EUT was arrange							
aboten And		s tuned to heights from 1 met							
W.		0MHz, the antenna was tune							
		as turned from 0 degrees to 3							
	maximum reading.	do tarriod from o dogrees to e	oo dogrood to iiid tiid						
		em was set to Peak Detect Fu	nction and Specified						
Procedure:	Bandwidth with Maximum		notion and opecined						
inpoordal or in		the EUT in peak mode was 10	ndB lower than the						
		ig could be stopped and the p							
		wise the emissions that did no							
	V 03	y one using quasi-peak metho							
	then reported in a data sh		ou as specified and						
		vest channel, the middle chan	and the Highest						
tek abote.	7.	vest channel, the middle chan	inei, ine mignesi						
	channel.	monto are performed in V. V.	7 de pasitiónina for						
		ments are performed in X, Y,							
		ound the X axis positioning w	mich it is the worst						
	case.	and the supporter	An-						
		res until all frequencies meas	ured was complete.						
	Remark:		anba						
	345°	ok botek Anbore	Aug Sek Sp.						
	1. Level= Read Level+ Ca	able Loss+ Antenna Factor- F	Preamp Factor						
	1. Level= Read Level+ Ca 2. Scan from 9kHz to 30M	able Loss+ Antenna Factor- F MHz, the disturbance below 3 ove plots are the highest emi	Preamp Factor 0MHz was very low.						







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when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

3. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

Above 1GHz:

- a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case
- i. Repeat above procedures until all frequencies measured was complete. Remark:
- 1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
- 2. Scan from 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
- 4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.







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8.1. EUT Operation

Operating Environment:

1: 802.11a mode: Keep the EUT in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.

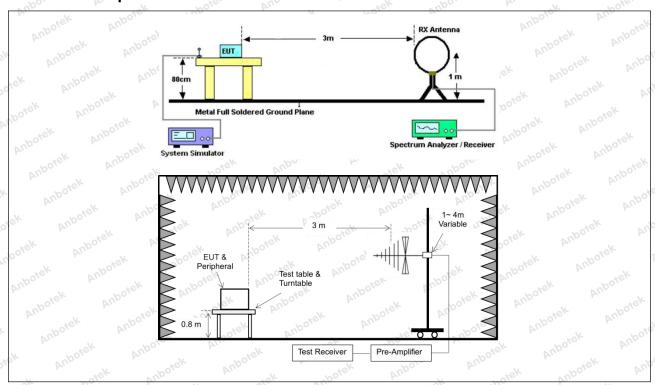
2: 802.11n mode: Keep the EUT in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

Test mode:

3: 802.11ac mode: Keep the EUT in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

4: 802.11ax mode: Keep the EUT in continuously transmitting mode with 802.11ax modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

8.2. Test Setup





www.anbotek.com.cn



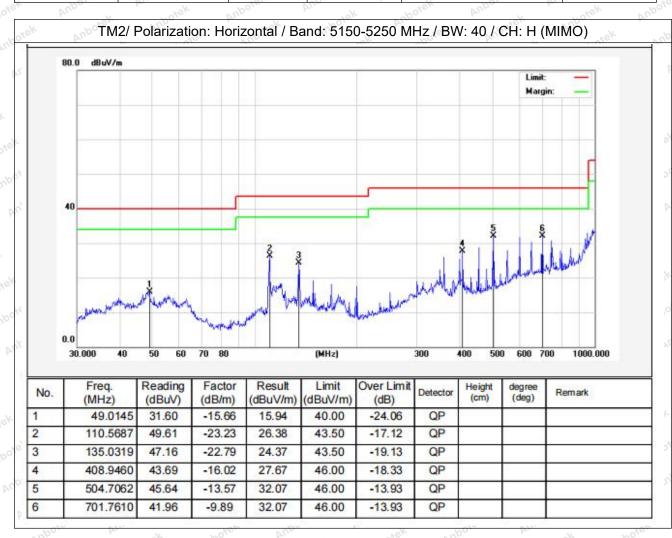


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8.3. Test Data

The test results of 9kHz-30MHz was attenuated more than 20dB below the permissible limits, so the results don't record in the report.

	Temperature:	25.3 ° C	Humidity:	47 %	Atmospheric Pressure:	101 kPa
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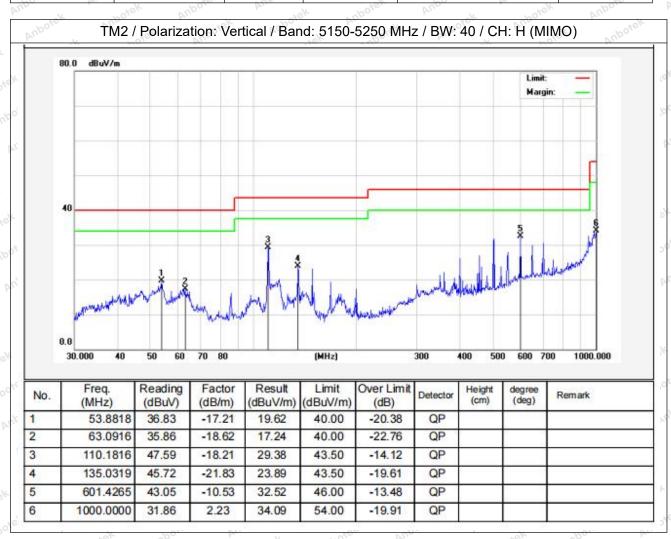






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Temperature: 25.3 ° C Humidity: 47 % Atmospheric Pressure: 101 kPa



Note: Only record the worst data (802.11n(HT40) MIMO) in the report.









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9. Undesirable emission limits (above 1GHz)

Test Requirement:	47 CFR Part 15.407(b)		anbotek Anb	ok Pun
A. Otek Aupore	47 CFR Part 15.407(b)	. M.	by.	upote. Aug
	For transmitters operat			
	of the 5.15-5.35 GHz b	_1001		
r rotek	MHz	MHz	MHz	GHz
	0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
otek Anbote	10.495-0.505	16.69475- 16.69525	608-614	5.35-5.46
	2.1735-2.1905	16.80425- 16.80475	960-1240	7.25-7.75
	4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
	4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
k abotek A	4.20725-4.20775	73-74.6	1645.5- 1646.5	9.3-9.5
	6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
	6.26775-6.26825	108-121.94	1718.8- 1722.2	13.25-13.4
	6.31175-6.31225	123-138	2200-2300	14.47-14.5
	8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
	8.362-8.366	156.52475- 156.52525	2483.5-2500	17.7-21.4
	8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
	8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
itek anbore	12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
est Limit:	12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
	12.57675-12.57725	322-335.4	3600-4400	(2)
	13.36-13.41	V VUDO	stek only	Of Pur
Anbotek Anbo	¹ Until February 1, 1999 ² Above 38.6), this restricted band	shall be 0.490-	0.510 MHz.
	The field strength of en not exceed the limits shadow MHz, compliance using measurement instantant of the starter. Above 1000 Measurement instantant of the starter was a starter of the s	hown in § 15.209. At with the limits in § 1 strumentation employ	frequencies equ 5.209shall be do ing a CISPR qu	ual to or less that emonstrated
	15.209shall be demons emissions. The provision		average value o	of the measured
	15.209shall be demons emissions. The provision Except as provided els intentional radiator sha following table:	strated based on the ons in § 15.35apply to ewhere in this subpa	average value of these measurers, the emission of strength levels	of the measured ements. s from an s specified in the
	15.209shall be demons emissions. The provision Except as provided els intentional radiator sha	strated based on the ons in § 15.35apply to ewhere in this subpa	average value of these measurers, the emission distrength levels	of the measured ements. s from an
	15.209shall be demons emissions. The provision Except as provided els intentional radiator sha following table:	estrated based on the cons in § 15.35apply to ewhere in this subpartional in the field strength	average value of these measured in the emission of strength levels er)	of the measured ements. Is from an specified in the Measurement distance









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ick botek	1.705-30.0	30	30
	30-88	100 **	3 ok abotek
	88-216	150 **	3
	216-960	200 **	ok 3 notek Anborr
anboren Anbo	Above 960	500	3
Test Method:	PU.	section 12.7.4, 12.7.5, 12.7.6	botek Anbote An
Vur.	Above 1GHz:	Solek Aupoles Al	tek abotek Ar
		the EUT was placed on the to	on of a rotating table 1.5
		ound at a 3 meter fully-anech	
		to determine the position of t	
		3 meters away from the interf	
And		on the top of a variable-heigh	
abolen Anbe		nt is varied from one meter to	
bi.		the maximum value of the fie	
Aupo, Air		ions of the antenna are set to	
ak shotek		ed emission, the EUT was arr	
Due Vun		a was tuned to heights from 1	
		ow 30MHz, the antenna was	
no k noiek		le was turned from 0 degrees	
Anbotek Anbo	maximum reading.	ne was turned from 0 degrees	s to 300 degrees to find the
All both		system was set to Peak Dete	et Eupetion and Specified
Anbore Air	Bandwidth with Maxi		ct i unction and Specified
bojek Ant		el of the EUT in peak mode w	ras 10dP lower than the
And		esting could be stopped and	
tek upoje		Otherwise the emissions that o	
, otek		ne by one using peak or aver	
botek Anbe	and then reported in		age method as specified
Procedure:		e lowest channel, the middle	channel the Highest
And And	channel.	e lowest charmer, the middle	chaille, the riighest
botek Anbo	V	surements are performed in 2	X V 7 axis positioning for
And		and found the X axis positioni	
Anbore Ana	case.	and tourid the X axis position	ing willor it is the worst
v solek p	70	edures until all frequencies n	neasured was complete
En Aup	Remark:	cource uniti all frequencies fi	icasured was complete.
stek anboten		el+ Cable Loss+ Antenna Fact	tor- Preamp Factor
po, b, siek		to 40GHz, the disturbance al	
botek Anbo.		n above plots are the highest	
Aur Polek		/ above points had been disp	
Anbor An		rom the radiator which are at	
Lotek anbo	below the limit need		tondated more than 2000
Aug.		ection, for frequencies above	1GHz the field strength
ek anboter A		iverage limits. However, the p	
b. Siek		ceed the maximum permitted	
otek Aupo.		20 dB under any condition of	
ek spotek		ak level is lower than the ave	
Anbore And	measurement is show		rage mint, only the peak
notek Anbore		bove 18GHz were very low a	nd the harmonics were the
Anbe		e found when testing, so only	
Ster Vupo	nignesi point could b	e lourid wrien testing, so only	The above narmonics had







been displayed.



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9.1. EUT Operation

Operating Environment:

1: 802.11a mode: Keep the EUT in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.

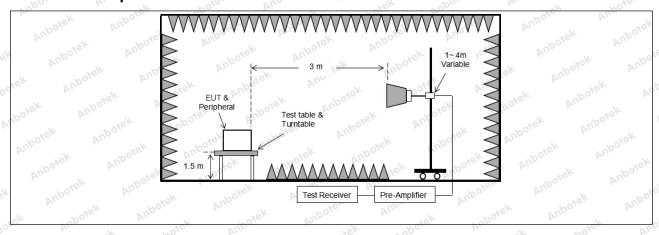
2: 802.11n mode: Keep the EUT in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

Test mode:

3: 802.11ac mode: Keep the EUT in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

4: 802.11ax mode: Keep the EUT in continuously transmitting mode with 802.11ax modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

9.2. Test Setup









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9.3. Test Data

Temperature: 25.3 ° C Humidity: 47 % Atmospheric Pressure: 101 kPa

			TI	M2 / BW: 40	CH: L (MIM	O)		
1/5	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
,0	10380.00	29.52	23.81	53.33	68.20	-14.87	VV	Peak
	15570.00	30.77	28.91	59.68	68.20	-8.52	Wpo. A	Peak
	10380.00	30.57	23.81	54.38	68.20	-13.82	Anbolh	Peak
	15570.00	31.44	28.91	60.35	68.20	-7.85	W.Hoise	Peak
	10380.00	20.22	23.81	44.03	54.00	-9.97	Vaborek	AVG
4	15570.00	20.68	28.91	49.59	54.00	-4.41	V V	ek AVG
o ³	10380.00°	20.52	23.81	44.33	54.00	orek -9.67 Anb	H	AVG
	15570.00	20.77	28.91	49.68	54.00	-4.32	upoten H Ar	AVG

	Vall'	TI	M2 / BW: 40 /	CH: H (MIM	O)	VaV.	·
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
10460.00	29.81	23.80	53.61	68.20	-14.59	ek V oot	Peak bott
15690.00	31.00	30.03	61.03	68.20	otek -7.17Anbo	V	Peak
10460.00	30.41	23.80	54.21	68.20	-13.99	pote, H bu	Peak
15690.00	31.61	30.03	61.64	68.20	-6.56	Hrodn	Peak
10460.00	20.41	23.80	44.21	54.00	-9.79	Nek	AVG
15690.00	20.61	30.03	50.64	54.00	-3.36	Arr V otek	AVG
10460.00	20.43	23.80	44.23	54.00	-9.77	H .	AVG
15690.00	20.56	30.03	50.59	54.00	-3.41	Sk H Vupo,	AVG

Remark:

- 1. Result =Reading + Factor
- 2. During the test, pre-scan the all modulation, only the worst case is recorded in the report.





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APPENDIX I -- TEST SETUP PHOTOGRAPH

Please refer to separated files Appendix I -- Test Setup Photograph_RF

APPENDIX II -- EXTERNAL PHOTOGRAPH

Please refer to separated files Appendix II -- External Photograph

APPENDIX III -- INTERNAL PHOTOGRAPH

Please refer to separated files Appendix III -- Internal Photograph

----- End of Report -----

