

Report No. : FR010205-03AB



FCC RADIO TEST REPORT

FCC ID	:	RAX-AIOS5V
Equipment	:	HEOS 5.X Platform Module
Brand Name		Arcadyan
Model Name	e D	WN9722BAC22-DM (AIOS5.0V)
Applicant		Arcadyan Technology Corporation No.8, Sec.2, Guangfu Rd., Hsinchu, 30071 Taiwan
Manufacturer	:	Arcadyan Technology Corporation No.8, Sec.2, Guangfu Rd., Hsinchu, 30071 Taiwan
Standard	8	47 CFR FCC Part 15.407

The product was received on Aug. 26, 2020, and testing was started from Aug. 28, 2020 and completed on Aug. 31, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

Histo	ry of this test report	3
Sumr	nary of Test Result	4
1	General Description	5
1.1	Information	5
1.2	Applicable Standards	10
1.3	Testing Location Information	10
1.4	Measurement Uncertainty	10
2	Test Configuration of EUT	11
2.1	The Worst Case Measurement Configuration	11
2.2	EUT Operation during Test	11
2.3	Accessories	11
2.4	Support Equipment	12
2.5	Test Setup Diagram	13
3	Transmitter Test Result	16
3.1	AC Power-line Conducted Emissions	16
3.2	Unwanted Emissions	18
4	Test Equipment and Calibration Data	22
Арре	ndix A. Test Results of AC Power-line Conducted Emissions	
Appe	ndix B. Test Results of Unwanted Emissions	

Appendix C. Test Photos

Appendix D. Photographs of EUT



History of this test report

Report No.	Version	Description	Issued Date
FR010205-03AB	01	Initial issue of report	Dec. 03, 2020



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.407(b)	Unwanted Emissions	PASS	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

None

Reviewed by: Sam Chen

Report Producer: Sandy Chuang



1 General Description

1.1 Information

1.1.1 **RF General Information**

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5700	100-140 [11]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5670	102-134 [5]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5610	106-122 [2]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	2
5.15-5.25GHz	802.11n HT20	20	2
5.15-5.25GHz	802.11ac VHT20	20	2
5.15-5.25GHz	802.11n HT40	40	2
5.15-5.25GHz	802.11ac VHT40	40	2
5.15-5.25GHz	802.11ac VHT80	80	2
5.25-5.35GHz	802.11a	20	2
5.25-5.35GHz	802.11n HT20	20	2
5.25-5.35GHz	802.11ac VHT20	20	2
5.25-5.35GHz	802.11n HT40	40	2
5.25-5.35GHz	802.11ac VHT40	40	2
5.25-5.35GHz	802.11ac VHT80	80	2
5.47-5.725GHz	802.11a	20	2
5.47-5.725GHz	802.11n HT20	20	2
5.47-5.725GHz	802.11ac VHT20	20	2
5.47-5.725GHz	802.11n HT40	40	2
5.47-5.725GHz	802.11ac VHT40	40	2
5.47-5.725GHz	802.11ac VHT80	80	2



Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11a	20	2
5.725-5.85GHz	802.11n HT20	20	2
5.725-5.85GHz	802.11ac VHT20	20	2
5.725-5.85GHz	802.11n HT40	40	2
5.725-5.85GHz	802.11ac VHT40	40	2
5.725-5.85GHz	802.11ac VHT80	80	2

Note:

- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

Set	Port	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	1, 2	Airgain	N2420DG3-T2L-PK1-G30U	PIFA Antenna	I-PEX	
2	1, 2	Airgain	N2420DG3-T2L-PK1-G100U	PIFA Antenna	I-PEX	
3	1, 2	Airgain	N2420DG3-T2L-PK1-G600U	PIFA Antenna	I-PEX	
4	1, 2	Airgain	N2425D-T2L-PK1-G30U	PIFA Antenna	I-PEX	
5	1, 2	Airgain	N2425D-T2R-PK1-G150U	PIFA Antenna	I-PEX	
6	1, 2	Airgain	N2425D-T2R-PK1-G30U	PIFA Antenna	I-PEX	
7	1, 2	Airgain	N2425D-T2R-PK1-G500U	PIFA Antenna	I-PEX	
8	1, 2	LITE	503021-0123-0BC	Dipole Antenna	I-PEX	
9	1, 2	LITE	501301-0019-1BC (300mm antenna cable: 510411-5210-24C)	Dipole Antenna	I-PEX	Note 1
10	1, 2	LITE	501301-0019-1BC (500mm antenna cable: 510411-5300-23C)	Dipole Antenna	I-PEX	
11	1, 2	LITE	503021-0003-0BC (200mm antenna cable)	Dipole Antenna	I-PEX	
12	1, 2	LITE	503021-0013-0BC (500mm antenna cable)	Dipole Antenna	I-PEX	
13	1, 2	LITE	501301-0019-1BC (200mm antenna cable: 510411-5310-23C)	Dipole Antenna	I-PEX	
14	1, 2	LITE	503021-0113-0BC (300mm antenna cable)	Dipole Antenna	I-PEX	



		Antenna Gain (dBi)		Cable L	oss (dB)	True Ga	iin (dBi)
Set	Port	WLAN	WLAN	WLAN	WLAN	WLAN	WLAN
		2.4GHz / BT	5GHz	2.4GHz / BT	5GHz	2.4GHz / BT	5GHz
1	1, 2	3.1	3.66	0.105	0.147	2.995	3.513
2	1, 2	3.1	3.66	0.35	0.49	2.75	3.17
3	1, 2	3.1	3.66	2.1	2.94	1	0.72
4	1, 2	1.9	3.5	0.105	0.147	1.795	3.353
5	1, 2	1.9	3.5	0.525	0.735	1.375	2.765
6	1, 2	1.9	3.5	0.105	0.147	1.795	3.353
7	1, 2	1.9	3.5	1.75	2.45	0.15	1.05
8	1, 2	-	-	-	-	2.55	2.35
9	1, 2	3.48	4.29	0.72	1.66	2.76	2.63
10	1, 2	3.48	4.29	1.49	1.7	1.99	2.59
11	1, 2	-	-	-	-	2.52	3.04
12	1, 2	-	-	-	-	1.74	1.68
13	1, 2	-	-	-	-	2.64	2.86
14	1, 2	-	-	-	-	2.35	2.44

Note 1:

Note 2: The above information was declared by manufacturer.

Note 3: The EUT has thirteen sets of antenna, and each set contains two antennas.

<For WLAN 2.4GHz Band>

For IEEE 802.11b/g/n mode <2TX/2RX>:

Port 1 and Port 2 will transmit/receive the same signal simultaneously.

Port 1 and Port 2 can be used as transmitting/receiving antennas.

<For WLAN 5GHz Band>

For IEEE 802.11a/n/ac mode <2TX/2RX>:

Port 1 and Port 2 will transmit/receive the same signal simultaneously.

Port 1 and Port 2 can be used as transmitting/receiving antennas.

<For Bluetooth>

For bluetooth mode <1TX/1RX>:

Only Port 1 can be used as transmitting/receiving antenna.



1.1.3 EUT Operational Condition

EUT Power Type	From host system				
Beamforming Function		With beamforming Without beamforming		Without beamforming	
Weather Band		With 5600~5650MHz		Without 5600~5650MHz	
Function		Outdoor P2M		Indoor P2M	
Function		Fixed P2P	\boxtimes	Client	
TPC Function		With TPC	\boxtimes	Without TPC	

Note: The above information was declared by manufacturer.

1.1.4 Table for Class II Change

This product is an extension of original one reported under Sporton project number: FR010205AB.

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking		
Adding four acts of Dipole enterna	1. AC power-line conducted emissions (Antenna set 11)		
	Based on original output power to measure below test item:		
(Set 11~14)	2. Unwanted Emissions (Antenna set 11)		



1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- FCC KDB 789033 D02 v02r01
- The following reference test guidance is not within the scope of accreditation of TAF.
- FCC KDB 662911 D01 v02r01
- FCC KDB 412172 D01 v01r01
- FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

	Testing Location							
	HWA YA	ADD	:	√o. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)				
		TEL	:	886-3-327-3456 FAX	:	886-3-327-0973		
\boxtimes	JHUBEI	ADD	:	No.8, Lane 724, Bo-ai St., Jhubei C	ity,	HsinChu County 302, Taiwan, R.O.C.		
		TEL	:	886-3-656-9065 FAX		886-3-656-9085		

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
Radiated Below 1GHz	03CH06-CB	Stim Sung	24.2-25°C / 54-58%	Aug. 28, 2020
Radiated above 1GHz	03CH02-CB	Stim Sung	23.8-25.3°C / 55-56%	Aug. 28, 2020
AC Conduction	CO01-CB	Max Lin	21~23°C / 59~60%	Aug. 31, 2020

Test site Designation No. TW0006 with FCC

Test site registered number IC 4086D with Industry Canada.

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.6 dB	Confidence levels of 95%



2 Test Configuration of EUT

2.1 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests			
Tests Item	AC power-line conducted emissions		
Condition AC power-line conducted measurement for line and neutral			
	Normal Link		
Operating Mode	There are two modes, one is WLAN 2.4GHz+Bluetooth, the other is WLAN 5GHz+Bluetooth. After evaluating, WLAN 2.4GHz + Bluetooth has been evaluated to be the worst case at AC power-line conducted emissions test, Consequently, measurement will follow this same test mode		
1	EUT in Z axis_WLAN 2.4GHz + Bluetooth + antenna set 11		

The Worst Case Mode for Following Conformance Tests				
Tests Item	Unwanted Emissions			
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.			
	Normal Link			
Operating Mode < 1GHz	There are two modes, one is WLAN 2.4GHz+Bluetooth, the other is WLAN 5GHz+Bluetooth. After evaluating, WLAN 5GHz + Bluetooth has been evaluated to be the worst case at Emissions in Restricted Frequency Bands test, Consequently, measurement will follow this same test mode			
1	EUT in Z axis_WLAN 5GHz + Bluetooth + antenna set 11			
	СТХ			
Operating Mode > 1GHz	The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found at X axis. So the measurement will follow this same test configuration.			
1	EUT in X axis + antenna set 11			

2.2 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.3 Accessories

N/A



2.4 Support Equipment

For AC Conduction:

Support Equipment					
No.	Equipment	FCC ID			
А	Fixture	Arcadyan	WN9722A-DM Test Jig	N/A	
В	LAN NB	DELL	E6430	N/A	
С	AP Router	ASUS	RP-N53	MSQ-RPN53	
D	AP NB	DELL	E6430	N/A	
Е	Bluetooth Test Set	Anritsu	MT8852B	N/A	

For Radiated (below 1GHz):

Support Equipment						
No. Equipment Brand Name Model Name I						
А	LAN NB	DELL	E4300	N/A		
В	Fixture	Arcadyan	WN9722A-DM Test Jig	N/A		
С	5G NB	DELL	E4300	N/A		
D	Bluetooth Test Set	Anritsu	MT8852B	N/A		
Е	WLAN AP	D-LINK	DIR860L	KA2IR860LA1		
F	NB	DELL	E4300	N/A		

For Radiated (above 1GHz):

Support Equipment							
No.	No. Equipment Brand Name Model Name FCC ID						
А	Notebook	DELL	E4300	N/A			
В	Fixture	Arcadyan	WN9722A-DM Test Jig	N/A			



2.5 Test Setup Diagram













3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit					
Frequency Emission (MHz) Quasi-Peak Average					
0.15-0.5	66 - 56 *	56 - 46 *			
0.5-5	56	46			
5-30 60 50					
Note 1: * Decreases with the logarithm of the frequency.					

3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method

Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.



3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

a. Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level b. Margin = -Limit + Level

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A



3.2 Unwanted Emissions

3.2.1 Transmitter Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit					
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)		
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300		
0.490~1.705 24000/F(kHz)		33.8 - 23	30		
1.705~30.0	30	29	30		
30~88	100	40	3		
88~216	150	43.5	3		
216~960	200	46	3		
Above 960	500	54	3		

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

Un-restricted band emissions above 1GHz Limit				
Operating Band	Limit			
🔀 5.15 - 5.25 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]			
🔀 5.25 - 5.35 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]			
🔀 5.47 - 5.725 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]			
⊠ 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.			
Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of				

Report Version : 01



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linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.2.2 **Measuring Instruments**

Refer a test equipment and calibration data table in this test report.

3.2.3 **Test Procedures**

		Test Method				
•	Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).					
•	The	e average emission levels shall be measured in [duty cycle \geq 98 or duty factor].				
•	For	the transmitter unwanted emissions shall be measured using following options below:				
		Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.				
	•	Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.				
		Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).				
		Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).				
	Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is puts time.					
		Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.				
		Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.				
		Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.				
•	For	radiated measurement.				
	-	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.				
	-	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.				
		Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.				
•	The	any unwanted emissions level shall not exceed the fundamental emission level.				
•	All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported					



3.2.4 Test Setup







3.2.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level

3.2.6 Transmitter Unwanted Emissions (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.2.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix B



Test Equipment and Calibration Data 4

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Feb. 26, 2020	Feb. 25, 2021	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-1 6-2	04083	150kHz ~ 100MHz	Dec. 25, 2019	Dec. 24, 2020	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Feb. 25, 2020	Feb. 24, 2021	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwar z	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 31, 2020	Jan. 30, 2021	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 20, 2020	May 19, 2021	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10.7	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Bilog Antenna with 6 dB attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37878 & AT-N0606	20MHz ~ 2GHz	Aug. 02, 2020	Aug. 01, 2021	Radiation (03CH06-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 13, 2020	Apr. 12, 2021	Radiation (03CH06-CB)
Pre-Amplifier	EMCI	EMC330N	980391	20MHz ~ 3GHz	May 21, 2020	May 20, 2021	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 21, 2019	Oct. 20, 2020	Radiation (03CH06-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 13, 2020	May 12, 2021	Radiation (03CH06-CB)
RF Cable-low	HUBER+SUHN ER	RG402	Low Cable-05+24	30MHz~1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 21, 2020	Apr. 20, 2021	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jul. 13, 2020	Jul. 12, 2021	Radiation (03CH02-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH02-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	May 12, 2020	May 11, 2021	Radiation (03CH02-CB)
High Cable	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH02-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
High Cable	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)

Note: Calibration Interval of instruments listed above is one year.

N.C.R means Non-Calibration required.



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Conducted Emissions at Powerline

Appendix A

Summary										
Mode	Result	Туре	Freq	Level	Limit	Margin	Condition			
			(Hz)	(dBuV)	(dBuV)	(dB)				
Mode 1	Pass	AV	361.5k	41.32	48.70	-7.38	Neutral			













Radiated Emissions below 1GHz

Summary											
Mode	Result	Туре	Freq	Level	Limit	Margin	Condition				
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)					
Mode 1	Pass	PK	43.58M	36.33	40.00	-3.67	Vertical				



Radiated Emissions below 1GHz





Radiated Emissions below 1GHz





Appendix B.2

Summary

Mode	Result	Туре	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.25-5.35GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	AV	5.3528G	52.83	54.00	-1.17	3	Vertical	47	2.66	-


































































































































































AV

5.78G

5.961G

Inf

68.20

96.46

59.71

-Inf

-8.49

87.73

50.68

3

3



70

70

Vertical

Vertical

2.22

2.22

-

33.80

34.16

6.39

6.32

31.46

31.45

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Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.624G	60.76	68.20	-7.44	52.04	3	Horizontal	133	1.03	-	33.88	6.31	31.47
PK	5.779G	102.78	Inf	-Inf	94.05	3	Horizontal	133	1.03	-	33.80	6.39	31.46
AV	5.78G	94.02	Inf	-Inf	85.29	3	Horizontal	133	1.03	-	33.80	6.39	31.46
PK	5.939G	60.16	68.20	-8.04	51.14	3	Horizontal	133	1.03	-	34.14	6.33	31.45



















































































































































































































































































































































































































































