

FCC TITLE 47 PART 15 SUBPART C

Test Report

922 MHz Operation

Client: Micro-X Limited

Address: A14, 6 MAB Eastern Promenade, Tonsley, South Australia, 5042

Report No.: 0619MIC_AR0900_FCC15Cb

Test Date(s): 8th March – 27th March 2024

Project No.: MIC231016-B

Equipment Name: Argus X-Ray Camera

Equipment Model No(s): AR0900

Equipment FCC ID: 1. 2BGYBAR0900-REC (Tablet Fixture)
2. 2BGYBAR0900-CAM (Camera)

Equipment Description: X-Ray Camera

Result: The sample tested **COMPLIED** with the applicable requirements of the standard.
(Refer to Compliance Summary page for clarifications).

Tested by: Steven Garnham
Test Engineer



Approved by: Richard Turner
Assessment Engineer



Date of Issue: 7th November 2024

Results appearing herein relate only to the sample(s) tested.

This report is issued errors and omissions exempt and is subject to withdrawal at Austest Laboratories discretion.

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



TABLE OF CONTENTS

1	REPORT REVISION HISTORY	3
2	REFERENCES.....	3
3	COMPLIANCE SUMMARY	4
4	CONDITIONS FOR COMPLIANCE	4
5	EQUIPMENT UNDER TEST INFORMATION	5
6	TEST SETUP AND EUT CONFIGURATION	6
7	TEST SPECIFICATIONS	7
8	ANTENNA REQUIREMENT, §15.203	8
9	RESTRICTED BANDS OF OPERATION, §15.205	8
10	DUTY CYCLE.....	9
11	DTS BANDWIDTH, §15.247(a).....	10
12	MAXIMUM PEAK CONDUCTED OUTPUT POWER, §15.247(b)(3).....	11
13	POWER SPECTRAL DENSITY, §15.247(e)	13
14	OCCUPIED BANDWIDTH, 99%: §2.1049.....	14
15	CONDUCTED SPURIOUS EMISSIONS, OUT OF BAND, §15.247(d)	15
16	RADIATED EMISSIONS §15.209, RESTRICTED BANDS	20
	APPENDIX A – PHOTOGRAPHIC RECORD OF EUT	35
	APPENDIX B – EUT TEST SETUP PHOTOGRAPHS.....	41

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.
 Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
 2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



1 REPORT REVISION HISTORY

Date	Report Number	Changes
5 th August 2024	0619MIC_AR0900_FCC15C	Original Report.
23 rd October 2024	0619MIC_AR0900_FCC15Ca	Worst-case testing configuration added to Section 6.1.
7 th November 2024	0619MIC_AR0900_FCC15Cb	Band Edge plots added (pages 18-19). Extrapolation comments and/or data added (pages 22, 24, 25, 26 & 27). Limit line corrections at 16 MHz in plots (pages 26 & 28). Appendix A (antenna label photo) removed. Appendix C (antenna datasheet) removed.

2 REFERENCES

Document		Issue/ Amended
FCC Title 47	FCC Title 47 Part 15 – Radio Frequency Devices	Current as of March 2024
ANSI C63.10	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	2013
558074 D01	Guidance for compliance measurements on digital transmission system, frequency hopping spread spectrum system, and hybrid system devices operating under Section 15.247 of the FCC rules	v05r02 April 2, 2019
ANSI C63.4	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz	2014
ANSI C63.4a	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz; Amendment 1-Test Site Validation	2017
Client's Radiation Safety Plan	Radiation Safety Plan, MB1592	Ver. 1.0
Argus-1.0 Operator Manual	MICRO-X ARGUS256-01	Ver. 0.1 Draft

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.
 Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
 2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



3 COMPLIANCE SUMMARY

DISCLAIMER: Austest Laboratories makes no claim regarding the consistency of production versions of the EUT. The results in this report apply only to the sample tested, as described in Section 5 of this report.

FCC Part 15, Subpart C – Intentional Radiators		Result	Notes
15.203	Antenna Requirement	N.A.	(iii)
15.205	Restricted Bands of Operation	Complied	-
15.207	Conducted Limits	N.A.	(i)
15.209	Radiated Emission Limits, General Requirements	Complied	-
15.247	Operation within the Bands 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz	Complied	(iv)
15.247(a)(1)	Channel Separation, Frequency Hopping Systems	N.A.	(ii)
15.247(a)(1)(iii)	Number of Hopping Channels	N.A.	(ii)
15.247(a)(1)(iii)	Time of Occupancy	N.A.	(ii)
15.247(a)(2)	Digital Modulation – 6 dB Bandwidth ($\geq 500\text{kHz}$)	Complied	-
15.247(b)(3)	Maximum Peak Conducted Output Power: (1 Watt)	Complied	-
15.247(d)	Out of Band Emissions (non-restricted)– 100kHz BW: ($\geq -20\text{dBc}$)	Complied	-
15.247(e)	Digital Modulation – Power Spectral Density: ($< 8\text{dBm}/3\text{kHz}$)	Complied	
15.247(i)	Maximum Permissible Exposure (MPE)	Complied	-
2.1049	99% Bandwidth	Noted	-

Notes

- (i) Not applicable as the EUT Camera and Tablet Fixture were battery powered.
- (ii) The EUT was assessed as DTS equipment.
- (iii) The EUT will only be operated by qualified personnel in a controlled environment.
- (iv) The EUT operated on 922.0 MHz and transmit power settings as per section 4 of this report were used.

4 CONDITIONS FOR COMPLIANCE

The final power settings in the supplied software, to meet the FCC15.247 limits were:

Tablet Fixture: #5 (20 dBm software indication)

Camera: #6 (21 dBm software indication)

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.
 Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
 2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



5 EQUIPMENT UNDER TEST INFORMATION

5.1 EUT Summary

Name:	Argus X-ray Camera
Model No(s):	AR0900
Serial No(s):	Not Supplied
Power Supply Rating:	Camera: Li-ION 24VDC (2 x 12 V) Model BT-70791JP) Tablet Fixture: Internal battery Plus Doodle Labs Radio Module with 4 x 3 V Lithium batteries, CR123A
Intentional radio frequencies (fundamental) and highest internal frequency sources:	Camera: 922 MHz radio Camera: 1200 MHz L LPDDR Ram clock Tablet Fixture: 922 MHz radio Tablet: 5825 MHz Wi-Fi operation Tablet: Intel Core I5-1135G7 processor operating up to 4.2 GHz

5.2 EUT Description

The EUT was a portable device that takes and stores X-ray images and consisted of the following:

The Argus Camera and the User End System.

The supplied user End System consisted of a GeTac Ruggedised Tablet (FCC ID: QYLAX201NG) with an attached Ruggedised Radio Module (i.e., the Tablet Fixture). The Tablet contained the Argus Software which provided control of the Argus Camera, either via a 922 MHz wireless or direct cable connection.

Reference to Control Tablet in the rest of this report refers to both the Tablet and Fixture.

The manufacturer stated that both units contained the same Doodle Labs radio module with two identical antennas fitted to each.

Both the Camera unit and Tablet contained a Wi-Fi module that operated in the 2.4 GHz and 5 GHz bands.

The client advised the following:

- The camera unit Wi-Fi module is not intended to be used in this model. As supplied, the Wi-Fi module was not powered. The client advised this follows current production guidelines.
- The client advised that all wireless functions within the Tablet were disabled with only the Tablet Fixture transmitting at 922 MHz.

5.3 EUT Operating Mode(s)

Mode #	Description
1	X-Ray Camera transmitting on 922 MHz.
2	Control Tablet transmitting on 922 MHz.

Note: These tests were to assess the 922 MHz radio functions. The Argus Camera was not producing X-Rays during any of the tests. Refer to the FCC 15B Emissions report for assessment of the EUT during operation to produce X-Rays.

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
 2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



6 TEST SETUP AND EUT CONFIGURATION

6.1 EUT Configurations

For radiated emissions the Control Tablet was connected to the Camera via the Ethernet cable to allow assessment of the individual RF performance so that either the Tablet or the Camera was operating at any one time.

The end user Control Tablet contained proprietary test software that enabled setting of various parameters on both the Camera and Tablet. Preliminary tests were conducted to establish the settings to produce maximum permitted EIRP output from both antennas.

Final testing was performed with those settings.

The transmit duty cycle was measured as 98.9%.

Fully charged / new batteries were installed at the commencement of each test for the respective EUT.

Camera:

Although the Camera was a portable device, the manufacturer stated that because of its weight and construction it can only be operated sitting on its base with the fixed handle and 920MHz antennas facing upwards, in the vertical position.

Tablet:

The Tablet was considered as a portable device and was initially assessed in all orientation with the worst-case being sitting on its base plate with the antennas in the vertical position and the screen facing the operator.

Refer to the photographs in Appendix B for the EUT worst-case test setup and physical configuration.

6.2 Supporting Equipment

Equipment	Brand & Model
Proprietary control test software	Micro-X

6.3 Cables

EUT Port	Cable	Length (m)	Source/Load
Cable Comms Port (Argus Camera)	Supplied shielded Ethernet with Mil type 4 pin circular connectors	25	Cable Comms Port on Tablet

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.
Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



7 TEST SPECIFICATIONS

7.1 Test Facility

Testing was performed at Austest Laboratories located at 46 Glenola Farm Lane in Yarramalong Valley, New South Wales, Australia.

Radiated emissions testing was performed at an Open Area Test Site (OATS) (ME 83) compliant with ANSI C63.4:2014 and ANSI C63.4a:2017. Where some ambient signals may exceed the continuous disturbance limit, the possibility of missing an emission during testing was eliminated by performing pre-scans in a shielded enclosure prior to the final OATS measurements.

For testing below 30MHz, measurements were performed over the normal OATS ground plane and over a non-conductive ground plane as per ANSI C63.10, clause 5.2.

7.2 Accreditations and Listings

Test facilities at Austest Laboratories are accredited by A2LA, Certificate Number 2765.02. The tests reported herein have been performed in accordance with its terms of accreditation.

Austest Laboratories Yarramalong and Castle Hill test facilities are accredited with the FCC under the ACMA-FCC APEC-TEL MRA. Designation Number AU0003 / Registration number 520620.

7.3 Deviations from Standards and/or Accreditations

No deviations to the standard or Austest accreditation was required.

7.4 Test Witnesses

None.

7.5 Test Equipment

All critical items are maintained on a scheduled calibration recall program or verified with equipment maintained on a scheduled calibration program. Emission measurements are traceable to Australian National standards or international equivalents.

ID	Brand/Model	Description	Calibration Due
72	HP8574B	Spectrum Analyser / EMI Rx	21/12/2025
83	OATS 1 / FSOATS 1	3m/10m Open Area Test Site NSA, Svswr compliant	Verified
225	EMCO EM6876	Loop Antenna	29/06/2024
730	Wainwright	WHKS1350-5SS HP Filter	verified
813	RE1200A	RF Preamp	16/06/2024
1101	AH Systems SAS-200/571	DRG Horn 1-18GHz	03/05/2024
1132	AH Systems SAS-200/574	DRG Horn 18-40GHz	03/05/2024
1241	Com-Power PAM-118A	RF Preamp	20/05/2024
1385	FSP40	Spectrum analyser 38GHz	16/02/2025

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



ID	Brand/Model	Description	Calibration Due
1541	MCL	10dB-1W Attenuator	15/02/2026
1591	Ametek CBL6141B	Bilog Antenna	16/10/2025
-	HP85869C	Test Software	Verified
-	Rohde & Schwarz	RS Commander Capture Software	Verified
-	Huber & Suhner	Coax cables	14/04/2024

7.6 Measurement Uncertainty

Measurement uncertainty U_{Lab} was calculated for a 95% level of confidence and based on a coverage factor of $k=2$.

Emissions Tests

Measurement	Uncertainty	
	U_{Cispr}	U_{Lab}
RF Frequency	-	± 5 part in 10^{10}
RF power conducted	-	± 1.3 dB
RF Level conducted (6dB BW, 99% OBW)	-	± 1.2 dB
Radiated Emissions – 30 MHz to 1000 MHz	6.3 dB	± 4.7 dB
Radiated Emissions – 1 GHz to 6 GHz	5.2 dB	± 4.9 dB
Radiated Emissions – 6 GHz to 18 GHz	5.5 dB	± 5.3 dB

7.7 Test Criteria

The EUT was considered to have passed an emissions test if emissions were less than the relevant limit.

8 ANTENNA REQUIREMENT, §15.203

The requirement of this Section was not applicable, since the EUT will only be operated by qualified personnel in a controlled environment.

Refer to Appendix C for antenna specifications.

9 RESTRICTED BANDS OF OPERATION, §15.205

The EUT complied with the requirements of this Section since it did not operate within the FCC section 15.205 listed Restricted Bands of Operation.

Out of band emissions falling within the Restricted Bands of Operation were below limits specified in FCC section 15.209.

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
 2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



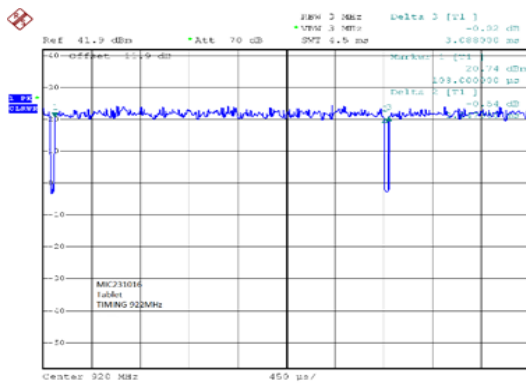
10 DUTY CYCLE

Test Date:	21st March 2024	Temperature:	25°C	Humidity:	55%
Test Officer:	Steven Garnham				
Test Location:	Austest Laboratories (Yarramalong)				

The EUT was configured and operated as per sect 6.1 of this report.

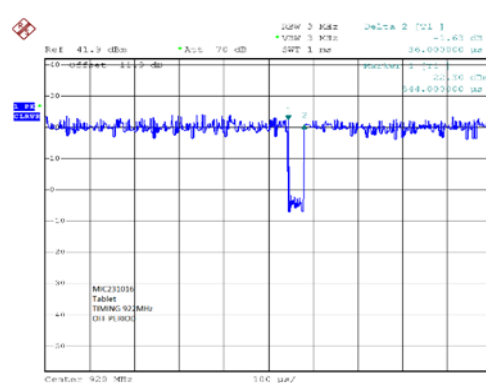
A conducted RF measurement was performed on both outputs from the Tablet Fixture and the Camera, refer to ANSI C63.10 clause 11.6. All outputs produced identical duty cycle results.

Unit	Channel Frequency MHz	Duty Cycle to be >98%			
		Total Period mS	Tx on Period mS	Tx Off Period mS	Measured Duty Cycle %
Tablet Fixture	922.0	3.088	3.0528	0.036	98.9
Camera	922.0	3.088	3.0528	0.036	98.9



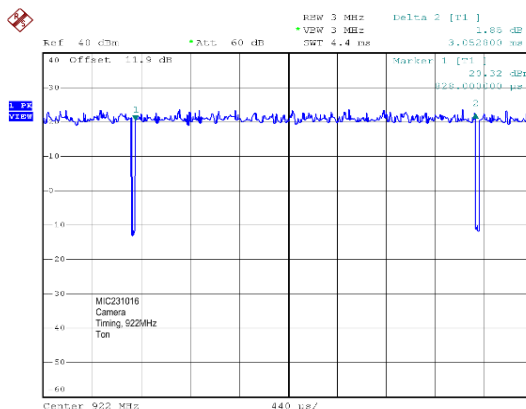
Date: 7.MAR.2024 14:34:31

Tablet Fixture Duty Cycle Ton, O/P 1 & 2



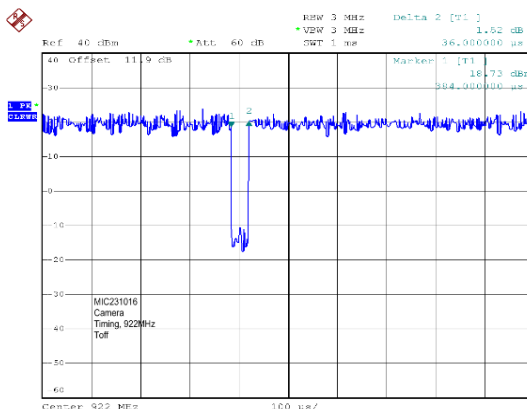
Date: 7.MAR.2024 14:37:18

Tablet Fixture Duty Cycle Toff, O/P 1 & 2



Date: 21.MAR.2024 14:17:10

Camera Duty Cycle Ton, O/P 1 & 2



Date: 21.MAR.2024 14:25:38

Camera Duty Cycle Toff, O/P 1 & 2

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



11 DTS BANDWIDTH, \$15.247(a)

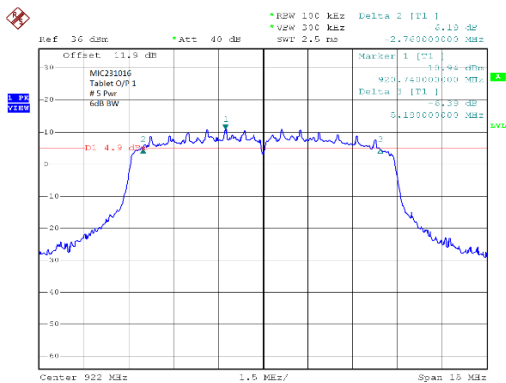
Test Date:	18 th March 2024 (Tablet Fixture)	Temperature:	22°C	Humidity:	80%
	21 st March 2024 (Camera)		24°C		57%
Test Officer:	Steven Garnham				
Test Location:	Austest Laboratories (Yarramalong)				

The EUT was configured and operated as per sect 6.1 of this report.

Measurements were individually performed on both the Control Tablet and the Camera.

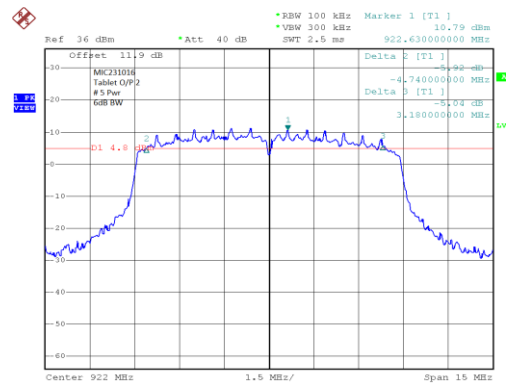
The 6 dB bandwidth was calculated using the analyser n dB down marker function.

Unit	Channel Frequency MHz	6 dB Bandwidth (kHz) (limit >500kHz)	
		Antenna Port 1	Antenna Port 2
Tablet Fixture	922.0	7.95 MHz	7.92 MHz
Camera	922.0	7.86 MHz	7.92 MHz



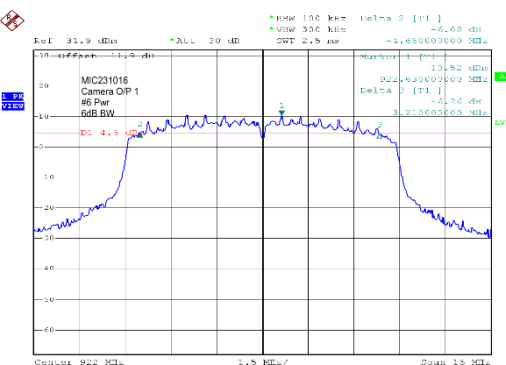
Date: 18.MAR.2024 13:38:32

Tablet Fixture 6dB BW at O/P 1



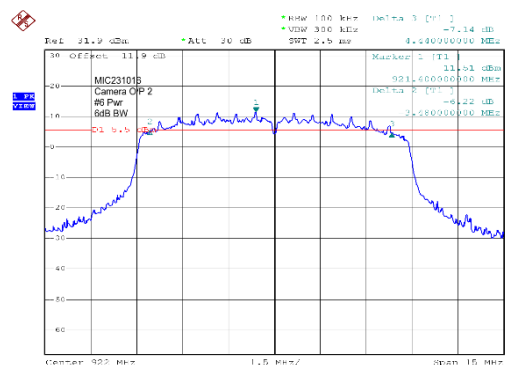
Date: 18.MAR.2024 13:36:08

Tablet Fixture 6dB BW at O/P 2



Date: 21.MAR.2024 12:26:53

Camera 6dB BW at O/P 1



Date: 21.MAR.2024 12:21:47

Camera 6dB BW at O/P 2

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
 2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



12 MAXIMUM PEAK CONDUCTED OUTPUT POWER, §15.247(b)(3)

Test Date:	18 th March 2024 (Tablet Fixture)	Temperature:	22°C	Humidity:	80%
	21 st March 2024 (Camera)		24°C		57%
Test Officer:	Steven Garnham				
Test Location:	Austest Laboratories (Yarramalong)				

The EUT was configured and operated as per sect 6.1 of this report.

A conducted RF measurement was performed at each antenna port, refer to ANSI C63.10 clause 11.3 and applying the procedure detailed in ANSI C63.10, Clause 11.9.1.1 RBW ≥ DTS Bandwidth.

To determine the maximum total allowed conducted power O/P per port, with 2 antenna ports: refer to ANSI C63.10:2013 clause 14.2.

The power was measured directly from the marker results, the 10 dB pad and cable loss used for the conducted measurements were compensated for.

Unit	Channel Frequency MHz	Peak Conducted Power				Combined O/P PWR		Limit		Margin *dB
		OP1		OP2						
		dBm	W	dBm	W	dBm	W	dBm	W	
Tablet Fixture	922.0	25.65	0.3673	25.71	0.3724	28.7	0.7397	30.0	1.00	-1.3
Camera	922.0	26.5	0.4415	26.6	0.4605	29.6	0.912	30.0	1.00	-0.4

*A negative margin indicates the margin below the limit.

*Result was within the Laboratory's measurement uncertainty.

Note :- FCC 15.247(b) (3) (4) specifies that the conducted limit of 1 Watt requires that the antenna system has no greater than 6dBi gain.

ANSI C63.10 clause 14.4.3.1 a) specifies that for a system utilising 2 antennas, the highest correlated directional gain must be accounted for.

The Correlated Direction gain = $G_{ANT} + 10\log(N_{ANT})$ dBi.

Therefore, using the supplied antenna gain = 2.15 dBi and 2 antennas.

The correlated directional antenna gain is 2.15 dBi + 3.01 dB = 5.16 dBi.

Since correlated directional gain is less than 6 dBi, the 1 Watt conducted output power limit remains.

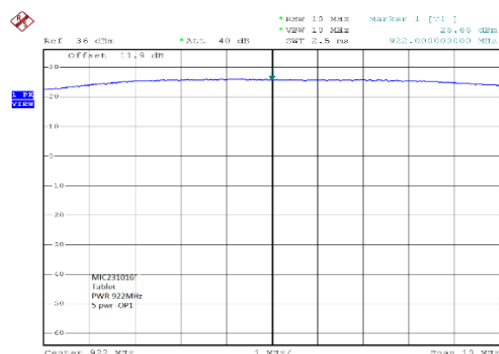
This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

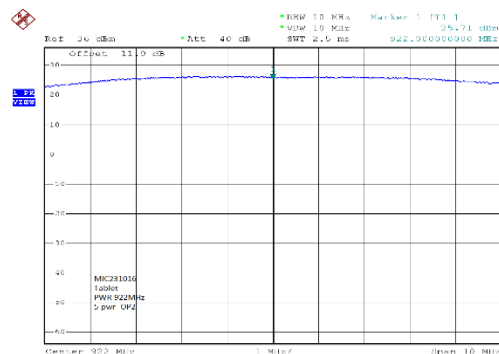
Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
 2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990





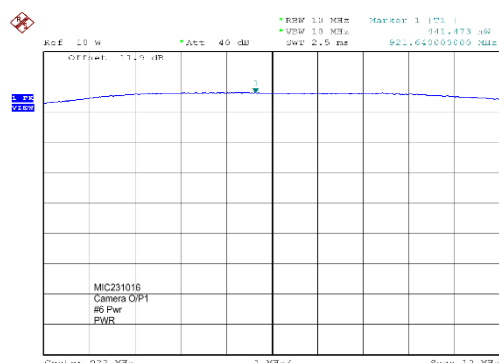
Date: 18.MAR.2024 14:03:08

Tablet Fixture O/P 1 -Pwr Setting # 5



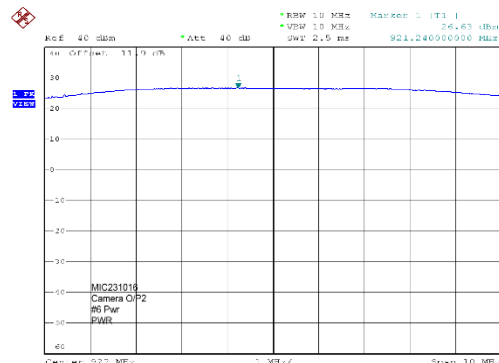
Date: 18.MAR.2024 14:06:04

Tablet Fixture O/P2-Pwr Setting # 5



Date: 21.MAR.2024 11:22:24

Camera O/P 1 Pwr Setting #6



Date: 21.MAR.2024 10:48:55

Camera O/P2 Pwr Setting #6

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



13 POWER SPECTRAL DENSITY, §15.247(e)

Test Date:	18 th March 2024 (Tablet Fixture)	Temperature:	22°C	Humidity:	80%
	21 st March 2024 (Camera)		24°C		57%
Test Officer:	Steven Garnham				
Test Location:	Austest Laboratories (Yarramalong)				

The EUT was configured and operated as per sect 6.1 of this report.

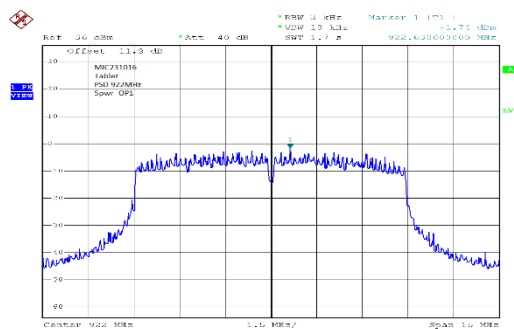
A conducted PSD measurement was performed at each antenna port, Refer to FCC 15.247 (e).

To determine the maximum total conducted PSD O/P, with 2 antenna ports: refer to C63.10:2013 clause 14.3.2.3.

The power was measured directly from the marker results, the 10dB pad and cable loss used for the conducted measurements were compensated for and the result was corrected for two outputs as per C63.10 clause 14.3.2.3.

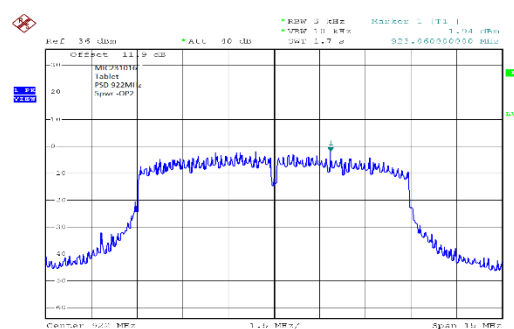
Unit	Channel Frequency MHz	Measured Peak Conducted PSD Per Output Port dBm/3 kHz		Multiple Antenna Correction Using 10logNant dB	Corrected PSD dBm/3 kHz		Limit dBm/3 kHz	Worst Margin * dB
		OP1	OP2		OP1	OP2		
Tablet Fixture	922.0	-1.74	-1.94	3.01	1.27	1.07	8.0	-6.73
Camera	922.0	-1.12	-1.87	3.01	1.81	1.14	8.0	-6.19

*A negative margin indicates the margin below the limit.



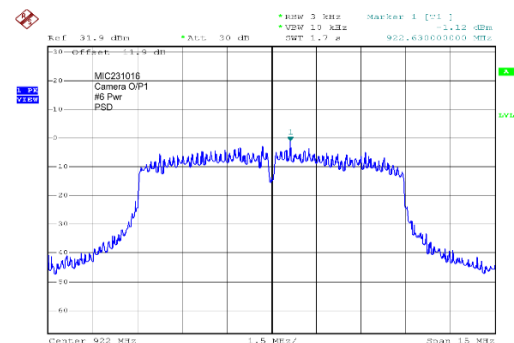
Date: 10.MAR.2024 14:14:53

Tablet Fixture PSD OP1



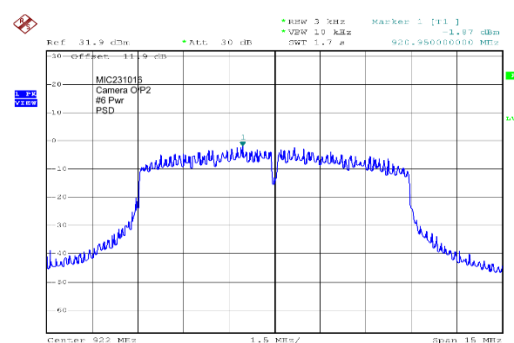
Date: 16.MAR.2024 14:10:19

Tablet Fixture PSD OP2



Date: 21.MAR.2024 12:32:19

Camera PSD OP1



Date: 21.MAR.2024 12:57:16

Camera PSD OP2

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



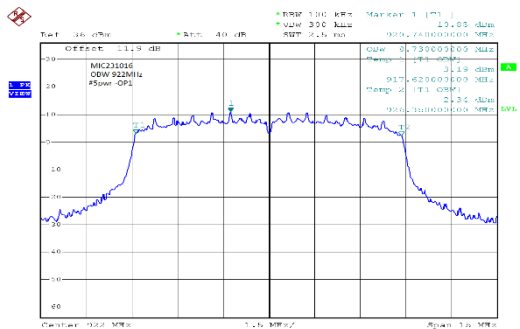
14 OCCUPIED BANDWIDTH, 99%: \$2.1049

Test Date:	18 th March 2024 (Tablet Fixture)	Temperature:	22°C	Humidity:	80%
	21 st March 2024 (Camera)		24°C		57%
Test Officer:	Steven Garnham				
Test Location:	Austest Laboratories (Yarramalong)				

Measurements were performed on each antenna port by applying the procedure detailed in ANSI C63.10 Clause 6.9.3, Occupied bandwidth -power bandwidth (99%) measurement procedure.

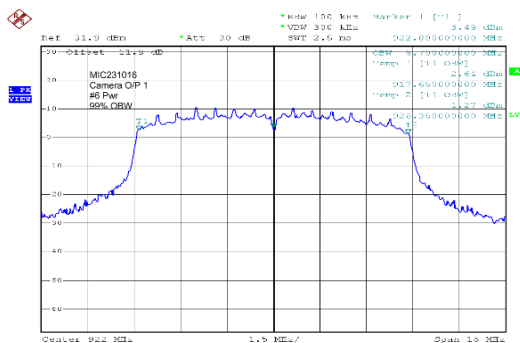
The result was obtained directly from the markers and the instruments 99% measurement function, the 10dB pad and cable loss used for the conducted measurements were compensated for.

Unit	Channel Frequency (MHz)	99% Power BW (MHz)	F _{LOW} (MHz)	F _{HIGH} (MHz)	Band Edges (MHz) Low / High	Δ Frequency Band Edge Closest (MHz)
Tablet Fixture-OP1	922.0	8.73	917.620	926.350	902.0 / 928.0	-1.650
Tablet Fixture-OP2	922.0	8.73	917.620	926.350	902.0 / 928.0	-1.650
Camera-OP1	922.0	8.70	917.650	926.350	902.0 / 928.0	-1.650
Camera-OP2	922.0	8.67	917.650	926.320	902.0 / 928.0	-1.680



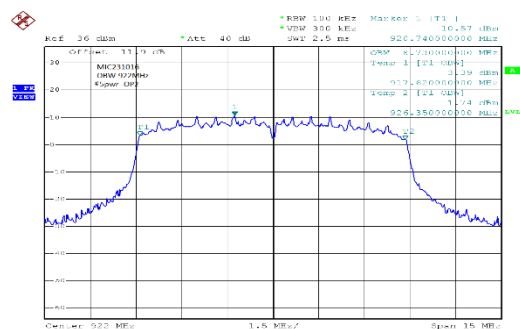
Date: 10.MAR.2024 10:50:44

Tablet Fixture OP1 - 99% OBW



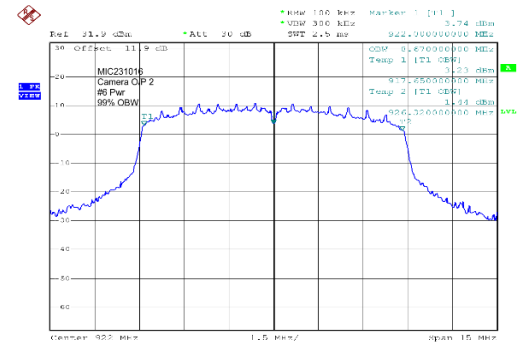
Date: 21.MAR.2024 12:30:28

Camera OP1 - 99% OBW



Date: 10.MAR.2024 10:48:24

Tablet Fixture OP2 - 99% OBW



Date: 21.MAR.2024 12:39:35

Camera OP2 - 99% OBW

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.
 Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
 2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



15 CONDUCTED SPURIOUS EMISSIONS, OUT OF BAND, §15.247(d)

Test Date:	19 th March 2024 (Tablet Fixture)	Temperature:	25°C	Humidity:	71%
	21 st March 2024 (Camera)		24°C		57%
Test Officer:	Steven Garnham				
Test Location:	Austest Laboratories (Yarramalong)				

The EUT was configured and operated as per sect 6.1 of this report.

Measurements were performed on each antenna port by applying the procedure detailed in ANSI C63.10 Clause 11.11.1 (a).

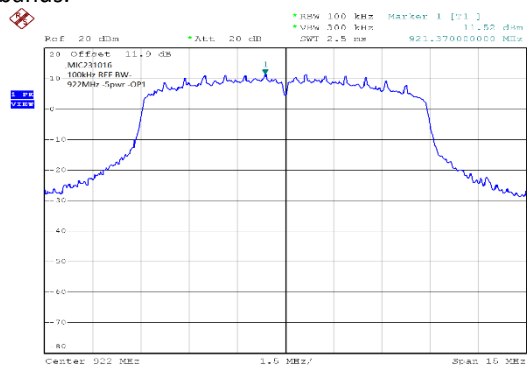
The analyser RBW was set to 100 kHz, VBW to 300 kHz, Peak Detector max hold.

Refer to ANSI C63.10:2013, 14.3.3 relating to multiple outputs.

The result was obtained directly from the marker, the 10 dB pad and cable loss used for the conducted measurements were compensated for.

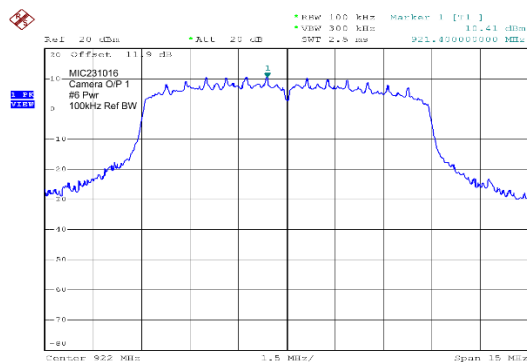
15.1 Reference in-band levels of the Fundamental

The following measurements were made with a 100 kHz RBW to determine the limit for emissions in the non-restricted bands.



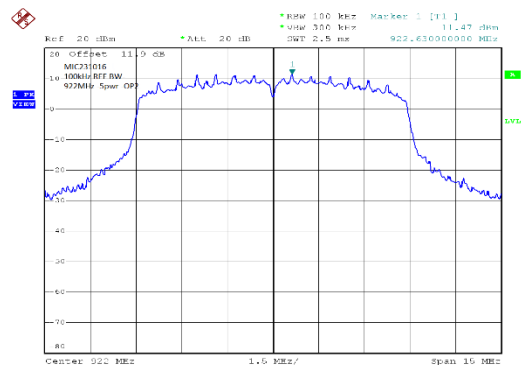
Date: 19.MAR.2024 06:17:51

Tablet Fixture OP1



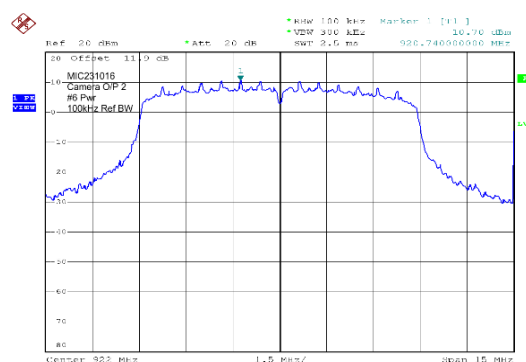
Date: 21.MAR.2024 13:52:17

Camera OP1



Date: 19.MAR.2024 06:27:32

Tablet Fixture OP2



Date: 21.MAR.2024 14:00:42

Camera OP2

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



15.2 Measured Non-restricted Bands: 9kHz to 40 GHz.

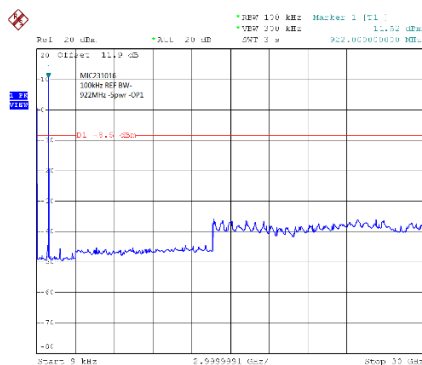
Camera:- The highest intentional fundamental frequency in the Camera unit was 922 MHz. In accordance with FCC Title 47 section 15.33 (a) (1), the frequency range for measurement was 9 kHz to 9.22 GHz

Tablet:- The highest intentional fundamental frequency used was 5825 MHz (Tablet unit Wi-Fi function). in accordance with FCC Title 47 section 15.33 (a) (1), the frequency range for measurement was 9 kHz to 40 GHz.

By default, measured frequency range for both units was 9 kHz to 40 GHz.

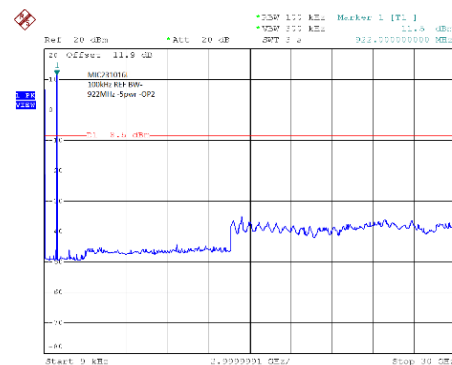
All measured non-fundamental emission levels in the non-restricted bands were greater than 20 dB below the in-band -20 dBc reference level.

Unit	Channel Frequency MHz	In-Band Reference level, 100kHz BW		-20dBc Reference limit	
		OP1 dBm	OP2 dBm	OP1 dBm	OP2 dBm
Tablet Fixture	922.0	11.52	11.47	-8.48	-8.53
Camera	922.0	10.41	10.70	-9.59	-9.30



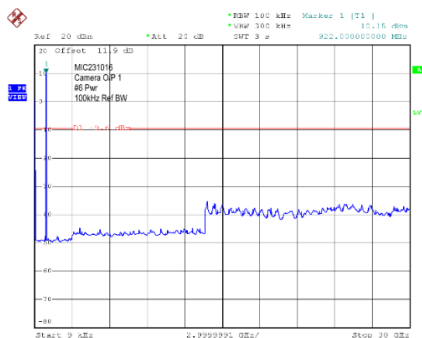
Date: 19.MAR.2024 06:26:53

Tablet Fixture OP1 – 9 kHz to 30 GHz



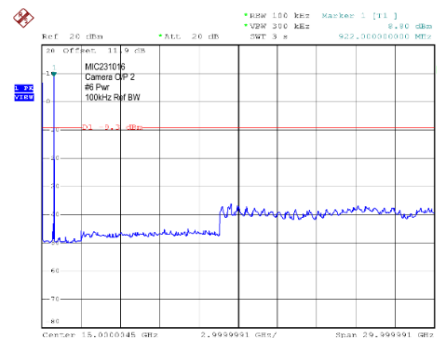
Date: 19.MAR.2024 06:32:40

Tablet Fixture OP2 – 9 kHz to 30 GHz



Date: 21.MAR.2024 13:56:40

Camera OP1 – 9 kHz to 30 GHz



Date: 21.MAR.2024 14:06:12

Camera OP2 – 9 kHz to 30 GHz

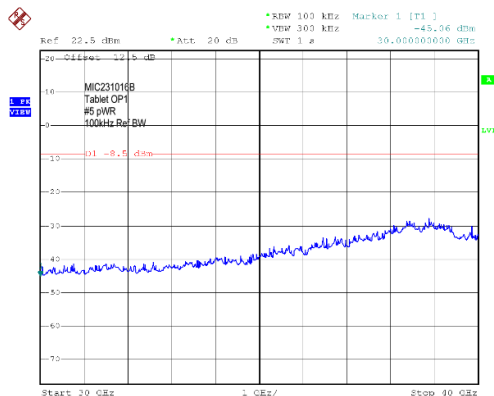
This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

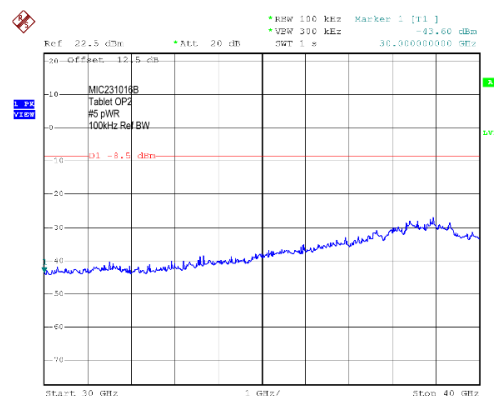
Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990





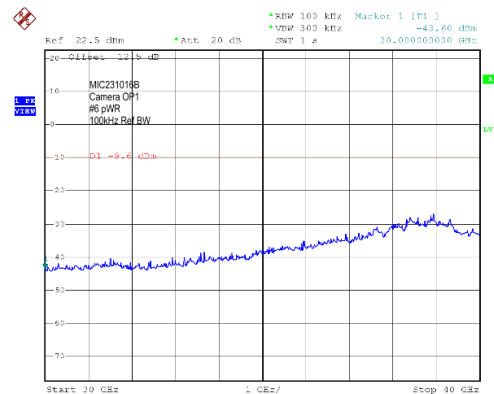
Date: 19.MAR.2024 15:15:24

Tablet Fixture OP1 – 30 GHz to 40 GHz



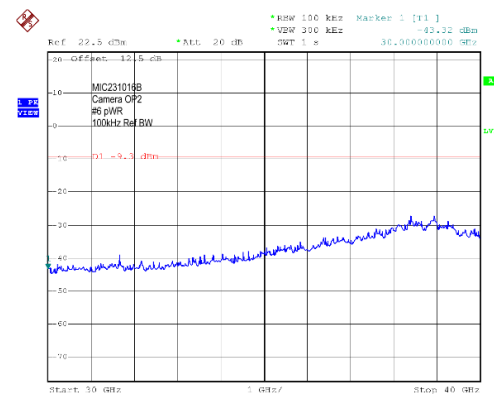
Date: 19.MAR.2024 15:22:05

Tablet Fixture OP2 – 30 GHz to 40 GHz



Date: 21.MAR.2024 15:47:25

Camera OP1 – 30 GHz to 40 GHz



Date: 21.MAR.2024 15:55:29

Camera OP2 – 30 GHz to 40 GHz

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

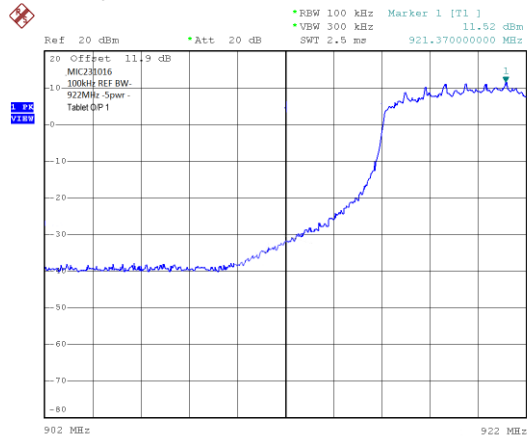
Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



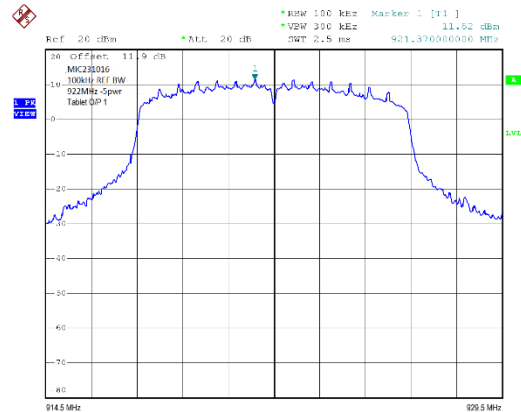
Band Edges: 902 MHz – 928 MHz

Tablet O/P 1:



Date: 19.MAR.2024

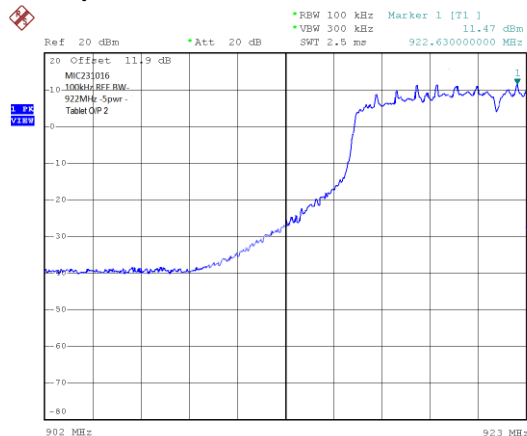
Tablet Fixture OP1, Lower Edge- 902 MHz



Date: 19.MAR.2024 06:17:51

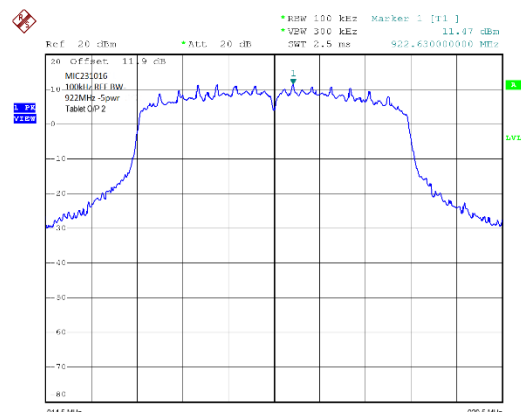
Tablet Fixture OP1, Upper Edge-928 MHz

Tablet O/P 2:



Date: 19.MAR.2024

Tablet Fixture OP2, Lower Edge – 902 MHz



Date: 19.MAR.2024 06:27:32

Tablet Fixture OP2, Upper Edge – 928 MHz

This document shall not be reproduced in any form except in full.

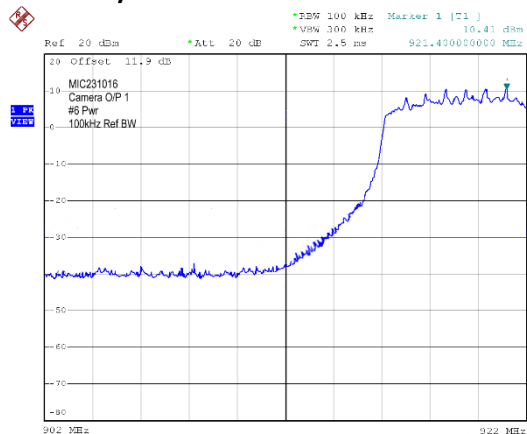
This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990

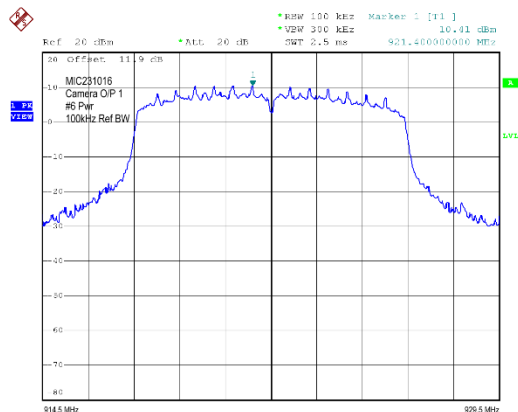


Camera O/P 1:



Date: 21.MAR.2024

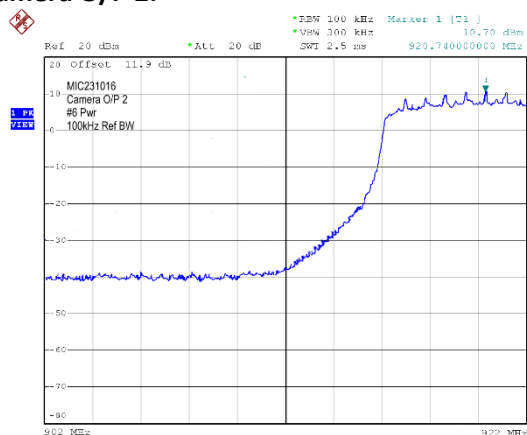
Camera OP1, Lower Band Edge – 902 MHz



Date: 21.MAR.2024 13:52:17

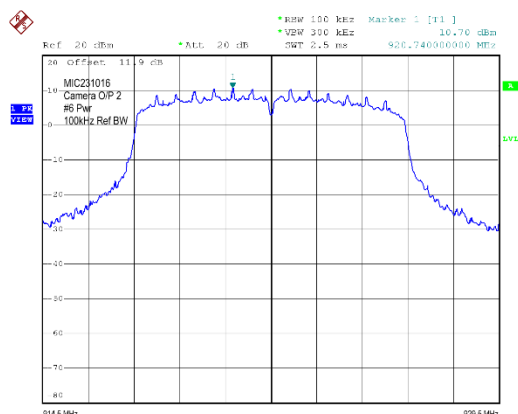
Camera OP1, Upper Band Edge – 928 MHz

Camera O/P 2:



Date: 21.MAR.2024

Camera OP2, Lower Band Edge – 902 MHz



Date: 21.MAR.2024 14:00:42

Camera OP2, Upper Band Edge – 928 MHz

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.
 Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
 2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



16 RADIATED EMISSIONS §15.209, RESTRICTED BANDS

16.1 EUT Operating Mode

- Refer to Section 6.1 of this report.

16.2 Test Method

- Measurements were performed in accordance with ANSI C63.10, KDB 558074. Peak measurements were performed using a Peak Detector; Average measurements were performed with an average detector; video averaging was not employed.
- The measuring receiver BW settings were:

Frequency Range	Antenna	Measurement	Detector	RBW	VBW
0.15 to 30 MHz	60 cm Loop	Pre-scan	Peak	9 kHz	30 kHz
		Final Quasi-Peak	Quasi-Peak	9 kHz	-
30 to 1000 MHz	Hybrid (Bicon/log)	Pre-scan Peak	Peak	120 kHz	300 kHz
		Final Quasi-Peak	Quasi-Peak	120 kHz	-
Above 1000 MHz	Double-ridged guide horn	Pre-scan Peak	Peak	1 MHz	3 MHz
		Pre-scan Average	Average	1 MHz	3 MHz
		Final Peak	Peak	1 MHz	3 MHz
		Final Average	Average	1 MHz	3 MHz

- The EUT was setup on a non-conductive turntable:- :-
 - For measurement below 1 GHz at a height of 0.8 m above the OATS conductive ground plane and at the indicated test distance away from the measuring antenna.
 - For measurements above 1 GHz at a height of 1.5 m above the OATS conductive ground plane with RF absorber placed between the test table and measuring antenna.
- To maximise emissions, the EUT was rotated through 360° and the measuring antenna height adjusted between 1m to 4m in the following antenna orientations:-
 - Loop antenna (9 kHz to 30 MHz) over a non-metallic ground plane, – Coaxial, Coplanar and also horizontal (parallel to ground) orientations, at a fixed height above ground of 1 m to the lowest height of the loop antenna (C63.10:2013 section 6.4.6).
 - Bilog antenna (30 MHz to 1G Hz) - Both vertical and horizontal polarizations.
 - Horn antenna (above 1 GHz) - Both vertical and horizontal polarizations.
- The maximised emission level was measured and the above repeated for all measurement frequencies.
- Average level measurements were not made where the peak level did not exceed the average limit.
- Linearity of the measuring system was checked, reducing gain when required.
- Test distances: Where the actual test distance used was different to that specified, then the test data results shown in any tables were extrapolated to the required distance using the formula specified within ANSI C63.10:2013. For simplicity, the test data plots have the limit lines adjusted to reflect any different test distance giving a visual indication of the relative margins.
- Ambient Emissions:** Measurements were performed at an Open Area Test Site (OATS), where some ambient signals may exceed the limit. The possibility of missing an emission during testing was removed by performing pre-scans in a shielded enclosure prior to the final OATS measurements. The ambient emissions are indicated as a '1' or 'A' on the scans, refer to the notes after the graphs.

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



16.3 Example Calculation

The final field strength levels were obtained from the measurement equipment software which automatically applied all the stored calibration factors. The calibration / correction factors were applied as follows:

Calculation	Example	
$E = V + AF + L_{cbl} - G_{pre}$	$V = 40.0 \text{ dB}\mu\text{V}$ $AF = 12.0 \text{ dB/m}$	$L_{cbl} = 2.9 \text{ dB}$ $G_{pre} = 22.5 \text{ dB}$ $E = 40 + 12 + 2.9 - 22.5$ $= 32.4 \text{ dB}\mu\text{V/m}$

Where

- E = Radiated Electric Field Strength in dB μ V/m,
- V = EMI Receiver measured signal input voltage in dB μ V,
- AF = Antenna Factor of the measuring antenna in dB/m,
- L_{cbl} = Total cable insertion loss in dB and
- G_{pre} = Preamplifier gain in dB.

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.
 Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
 2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



16.4 Test Results

Camera:- The highest intentional fundamental frequency in the Camera unit was 922 MHz. In accordance with FCC Title 47 section 15.33 (a) (1), the frequency range for measurement was 9 kHz to 9.22 GHz.

Tablet:- The highest intentional fundamental frequency used was 5825 MHz (Tablet unit Wi-Fi function). in accordance with FCC Title 47 section 15.33 (a) (1), the frequency range for measurement was 9 kHz to 40 GHz.

By default, measured frequency range, for both units, was 9 kHz to 40 GHz.

16.4.1 Radiated Emissions: 9 kHz to 150 kHz at 10 m distance.

Test Date:	26 th March 2024	Temperature:	26°C
Test Officer:	Steven Garnham	Humidity:	71%
Test Location:	Austest Laboratories (Yarramalong, NSW)		

Measured data extrapolated to distance defined by limits (300 m for 9-490 kHz and 30 m for 490 kHz – 30 MHz).

Measurements were performed both on an OATS ground plane and finally also over a non-conductive ground plane as specified in ANSI C63.10:2013, clause 5.2.

Prescan results were used to identify the orientation that produced the highest measured emissions in the three antenna positions, Coaxial, Coplanar and Parallel.

Notes:

1. A '1' label on the plot indicates an ambient emission and was not from the EUT.
2. The limit line is indicative only for a relative difference to measured data. Refer to tabulated data for extrapolated limit/distance results.
3. A negative margin indicates that the margin is below the limit.

CONTROL TABLE:-

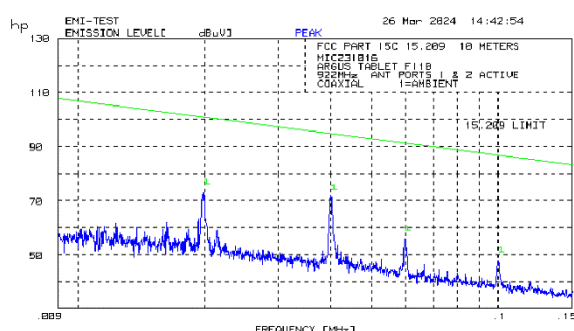
Frequency (MHz)	Antenna Polarity	Quasi-Peak / Linear Avg (dBμV/m)				
		Measured at 10 m	Extrapolation Factor (40 dB/Dec.) 10 m – 300 m	Extrapolated Results to 300 m	300 m Limit at 9 kHz	Margin
0.009 – 0.150	All	~60 dBμV (Pk noise floor at 9 kHz)	-59.1 dB	0.9 dBμV (Pk noise at 9 kHz)	48.5 dBμV	> -40 dB

This document shall not be reproduced in any form except in full.

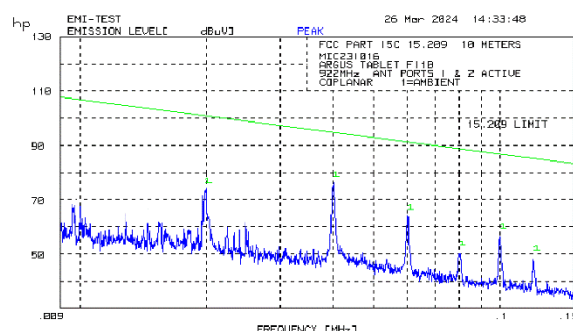
This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.
 Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
 2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990

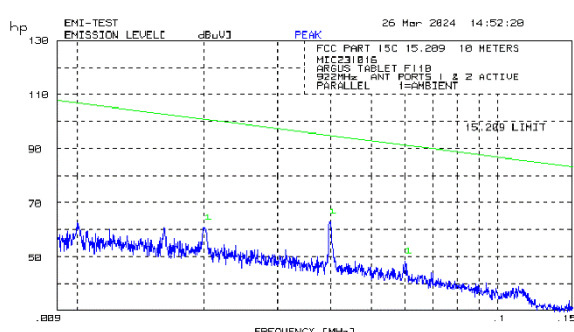




Control Tablet Coaxial



Control Tablet Coplanar



Control Tablet Parallel

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

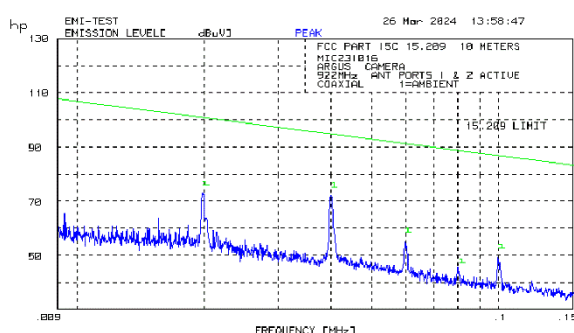
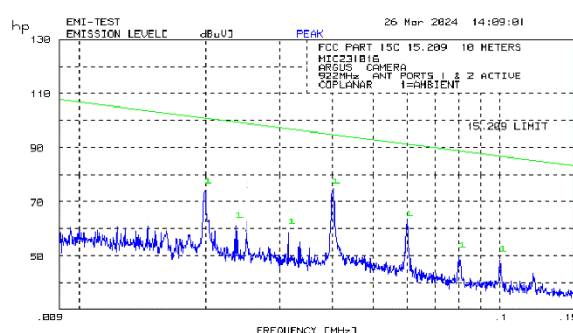
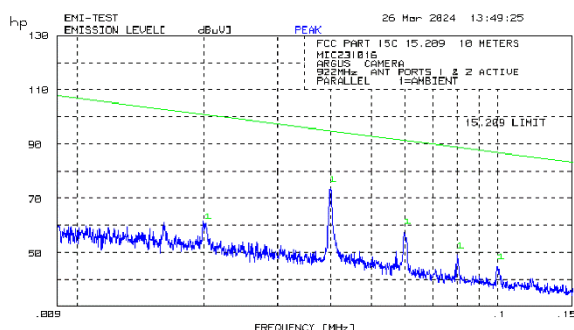
Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



CAMERA:-

Frequency (MHz)	Antenna Polarity	Quasi-Peak / Linear Avg (dBμV/m)				
		Measured at 10 m	Extrapolation Factor (40 dB/Dec.) 10 m – 300 m	Extrapolated Results to 300 m	300 m Limit at 9 kHz	Margin
0.009 – 0.150	All	~60 dBμV (Pk noise floor at 9 kHz)	-59.1 dB	0.9 dBμV (Pk noise at 9 kHz)	48.5 dBμV	> -40 dB


Camera Coaxial

Camera Coplanar

Camera Parallel

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990


16.4.2 Radiated Emissions: 150 kHz to 30 MHz at 3 m distance.

Measured data extrapolated to distance defined by limits (300 m for 9-490 kHz and 30 m for 490 kHz – 30 MHz). Refer to FCC15.209 and ANSI C63.10:2013, clause 6.4 and Table 5.

Measurements were performed both on an OATS ground plane and finally also over a non-conductive ground plane as specified in ANSI C63.10:2013, clause 5.2.

Prescan results were used to identify the orientation that produced the highest measured emissions in the three antenna positions, Coaxial, Coplanar and Parallel.

Notes:

1. A '1' label on the plot indicates an ambient emission and was not from the EUT.
2. The limit line is indicative only for a relative difference to measured data. Refer to tabulated data for extrapolated limit/distance results.
3. A negative margin indicates that the margin is below the limit.

CONTROL TABLE:-

Frequency (MHz)	Antenna Polarity	Peak / Linear Avg (dBμV/m)				
		Measured at 3 m	Extrapolation Factor (40 dB/Dec.) 3 m – 300 m	Extrapolated Results to 300 m	300 m Limit at 150 kHz	Margin
0.150 – 0.490	All	~50 dBμV (Pk noise floor at 150 kHz)	-80 dB	-30 dBμV (Pk noise at 150 kHz)	24.1 dBμV	> -40 dB

Frequency (MHz)	Antenna Polarity	Peak / Quasi-Peak (dBμV/m)				
		Measured at 3 m	Extrapolation Factor (40 dB/Dec.) 3 m – 30 m	Extrapolated Results to 30 m	30 m Limit at 490 kHz	Margin
0.490 – 1.705	All	~40 dBμV (Pk noise floor at 490 kHz)	-40 dB	-0 dBμV (Pk noise at 490 kHz)	33.8 dBμV	-33.8 dB

Frequency (MHz)	Antenna Polarity	Peak / Quasi-Peak (dBμV/m)				
		Measured at 3 m	Extrapolation Factor (40 dB/Dec.) 3 m – 30 m	Extrapolated Results to 30 m	30 m Limit at 1.705 MHz	Margin
1.705 – 16.0	All	~36 dBμV (Pk noise floor at 1.705 MHz)	-40 dB	-4.0 dBμV (Pk noise at 1.705 MHz)	29.5 dBμV	-33.5 dB

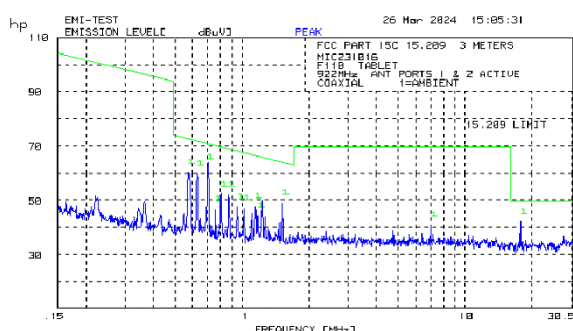
This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

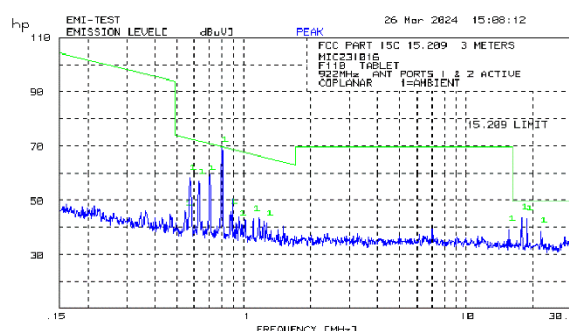
Accredited for compliance with ISO / IEC 17025.
 Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
 2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



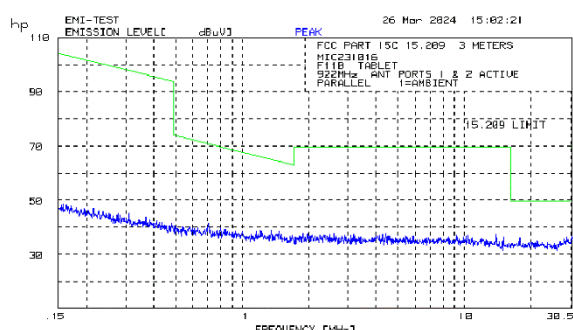
Frequency (MHz)	Antenna Polarity	Peak / Quasi-Peak (dBμV/m)				
		Measured at 3 m	Extrapolation Factor (20 dB/Dec.) 3 m – 30 m	Extrapolated Results to 30 m	30 m Limit at 16.0 MHz	Margin
16.0 – 30.0	All	~34 dBμV (Pk noise floor at 16.0 MHz)	-20 dB	14 dBμV (Pk noise at 16.0 MHz)	29.5 dBμV	-15.5 dB



Control Tablet Coaxial



Control Tablet Coplanar



Control Tablet Parallel

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



CAMERA:-

Frequency (MHz)	Antenna Polarity	Peak / Linear Avg (dBμV/m)				
		Measured at 3 m	Extrapolation Factor (40 dB/Dec.) 3 m – 300 m	Extrapolated Results to 300 m	300 m Limit at 150 kHz	Margin
0.150 – 0.490	All	~50 dBμV (Pk noise floor at 150 kHz)	-80 dB	-30 dBμV (Pk noise at 150 kHz)	24.1 dBμV	> -40 dB

Frequency (MHz)	Antenna Polarity	Peak / Quasi-Peak (dBμV/m)				
		Measured at 3 m	Extrapolation Factor (40 dB/Dec.) 3 m – 30 m	Extrapolated Results to 30 m	30 m Limit at 490 kHz	Margin
0.490 – 1.705	All	~50 dBμV (Pk noise floor at 490 kHz)	-40 dB	-10 dBμV (Pk noise at 490 kHz)	33.8 dBμV	-23.8 dB

Frequency (MHz)	Antenna Polarity	Peak / Quasi-Peak (dBμV/m)				
		Measured at 3 m	Extrapolation Factor (40 dB/Dec.) 3 m – 30 m	Extrapolated Results to 30 m	30 m Limit at 1.705 MHz	Margin
1.705 – 16.0	All	~36 dBμV (Pk noise floor at 1.705 MHz)	-40 dB	-4.0 dBμV (Pk noise at 1.705 MHz)	29.5 dBμV	-33.5 dB

Frequency (MHz)	Antenna Polarity	Peak / Quasi-Peak (dBμV/m)				
		Measured at 3 m	Extrapolation Factor (20 dB/Dec.) 3 m – 30 m	Extrapolated Results to 30 m	30 m Limit at 16.0 MHz	Margin
16.0 – 30.0	All	~34 dBμV (Pk noise floor at 16.0 MHz)	-20 dB	14 dBμV (Pk noise at 16.0 MHz)	29.5 dBμV	-15.5 dB

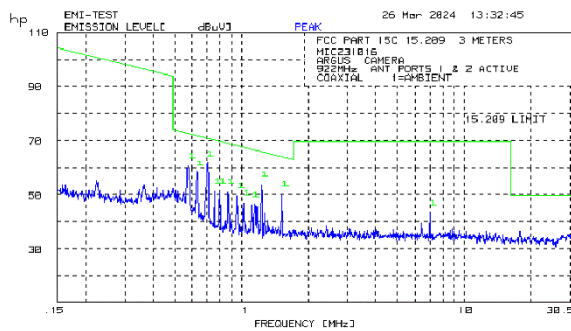
This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

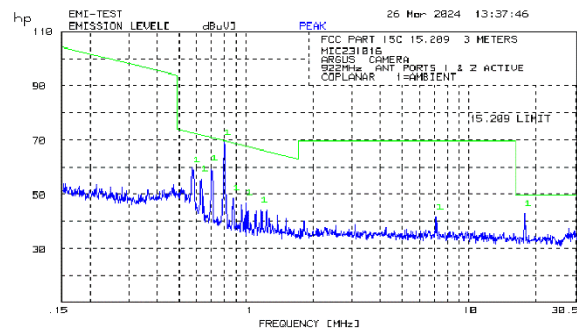
Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990

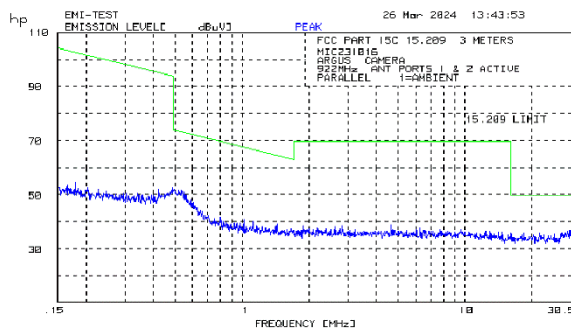




Camera Coaxial



Camera Coplanar



Camera Parallel

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



16.4.3 Radiated Emissions: 30 MHz to 1000 MHz at 3 m distance.

Test Date:	26 th March 2024	Temperature:	23°C
Test Officer:	Steven Garnham	Humidity:	73%
Test Location:	Austest Laboratories (Yarramalong, NSW)		

The highest EUT emissions, 30 MHz to 1 GHz, are tabulated below with reference to the limits of FCC 15.209:

CONTROL TABLE:-

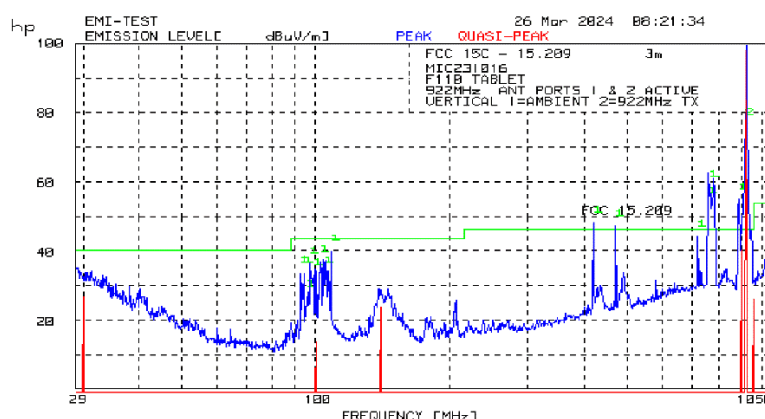
Channel MHz	Unwanted Frequency *MHz	Antenna Pol.	QP Level (dBμV/m)	QP Limit (dBμV/m)	QP Pass Margin (dB)
922.0	900.0	Vertical	40.0	46.0	-6.0
922.0	30.1	Vertical	26.7	40.0	-13.3
922.0	900.0	Horizontal	29.8	46.0	-16.2

A negative margin indicates the margin below the limit.

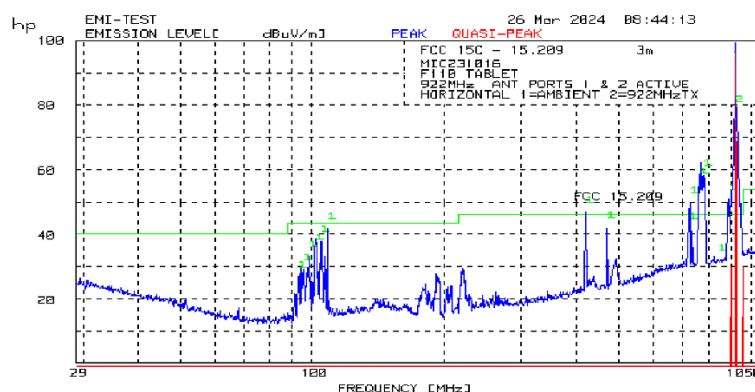
*These emission frequencies were not within a Restricted Band nominated within FCC 15.205 but have been included for reference.

Note: A Green "1" on the plot indicates an ambient emission and was not from the EUT.

:A Green "2" label on the plot indicates an intentional transmitter emission at 922.0 MHz.



Control Tablet Vertical Polarity



The 6 highest EUT emissions, 30 MHz to 1 GHz, are tabulated below with reference to the limits of FCC 15.209:

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



CAMERA:-

Channel MHz	Unwanted Frequency *MHz	Antenna Pol.	QP Level (dB μ V/m)	QP Limit (dB μ V/m)	QP Pass Margin ** (dB)
922.0	437.8	Vertical	45.5	46.0	-0.5
922.0	900.0	Vertical	44.9	46.0	-1.1
922.0	188.5	Vertical	41.1	43.5	-2.4
922.0	505.3	Vertical	43.4	46.0	-2.6
922.0	440.9	Horizontal	42.2	46.0	-3.8
922.0	178.0	Vertical	39.6	43.5	-3.9

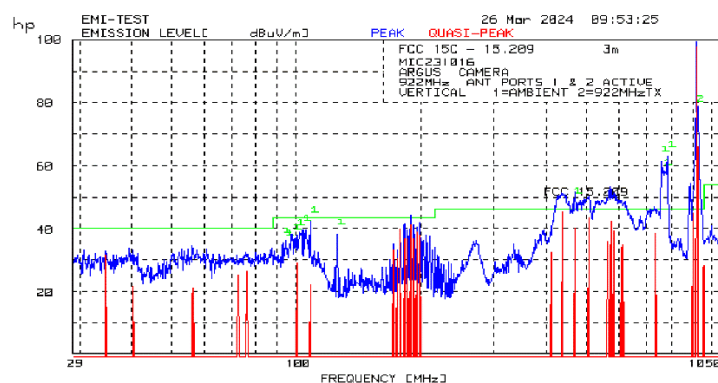
A negative margin indicates the margin below the limit.

*These emission frequencies were not within a Restricted Band nominated within FCC 15.205 but have been included for reference.

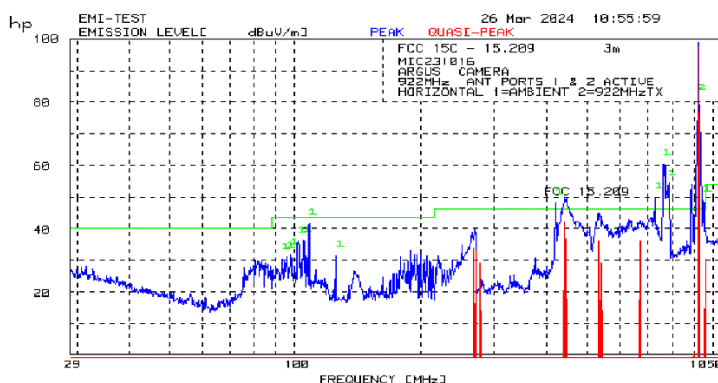
**Results were within the Laboratory's measurement uncertainty.

Note: A Green "1" on the plot indicates an ambient emission and was not from the EUT.

:A Green "2" label on the plot indicates an intentional transmitter emission at 922.0 MHz.



Camera Vertical Polarity



Camera Horizontal Polarity

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories

2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



TEST LABORATORY
CERT #2765.02

16.4.4 Radiated Emissions: 1 GHz to 18 GHz at 3 m distance.

Test Date:	27 th March 2024	Temperature:	22°C
Test Officer:	Steven Garnham	Humidity:	79%
Test Location:	Austest Laboratories (Yarramalong, NSW)		

The highest measured EUT radiated emissions above 1 GHz are tabulated below with reference to the limits of FCC 15.209.

CONTROL TABLE:-

Channel MHz	Unwanted Frequency MHz	Antenna Pol.	Pk Level dBμV/m	Pk Limit dBμV/m	Margin dB	Avg Level dBμV/m	Avg Limit dBμV/m	Margin dB
922.0	*1844.0	Vertical	38.6	74.0	>-20	31.4	54.0	>-20

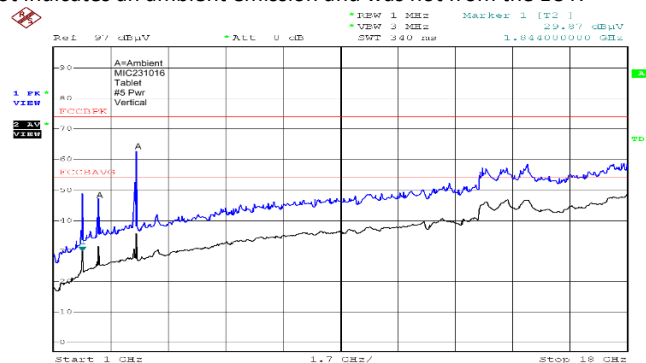
A negative margin indicates the margin below the limit.

* Emission was not within a Restricted Band but included for reference.

All other measured Pk emission levels were greater than 15 dB below the Pk limits.

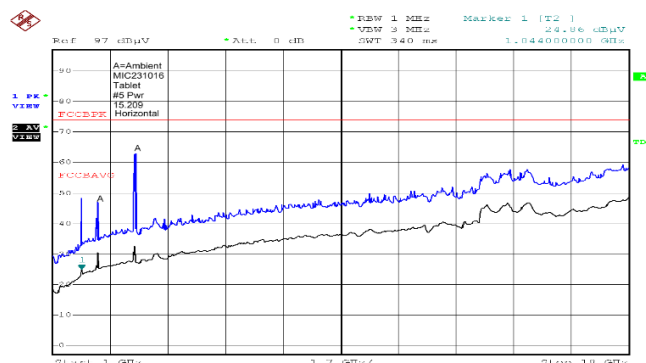
All other measured Average emission levels were greater than 10 dB below the Average limits.

Note: An 'A' label on the plot indicates an ambient emission and was not from the EUT.



Date: 27.MAR.2024 07:33:47

Control Tablet Vertical Polarity



Date: 27.MAR.2024 07:32:03

Control Tablet Horizontal Polarity

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.
 Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
 2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



CAMERA:-

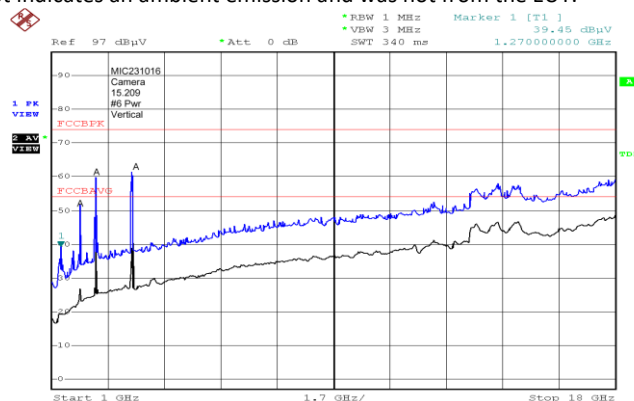
Channel MHz	Unwanted Frequency MHz	Antenna Pol.	Pk Level dBμV/m	Pk Limit dBμV/m	Margin dB	Avg Level dBμV/m	Avg Limit dBμV/m	Margin dB
922.0	1270.0	Vertical	48.5	74.0	-20	28.8	54.0	>-20

A negative margin indicates the margin below the limit.

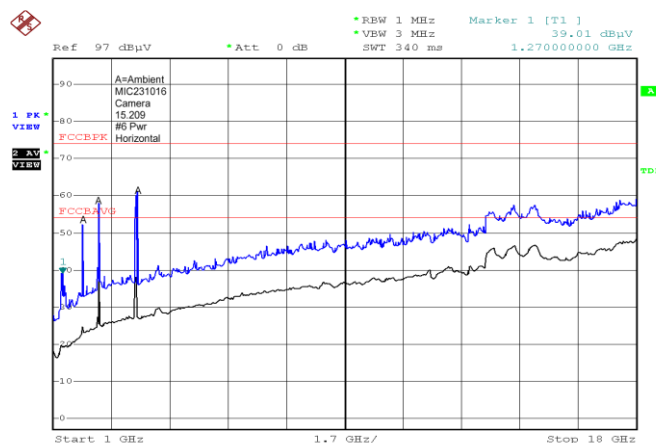
All other measured Pk emission levels were greater than 15 dB below the Pk limits.

All other measured Average emission levels were greater than 10 dB below the Average limits.

Note: An 'A' label on the plot indicates an ambient emission and was not from the EUT.



Date: 27.MAR.2024 08:15:15

Camera Vertical Polarity


Date: 27.MAR.2024 08:13:33

Camera Horizontal Polarity

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
 2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



16.4.5 Radiated Disturbances: 18 GHz to 40 GHz at 1 m distance.

Test Date:	27 th March 2024	Temperature:	24°C
Test Officer:	Steven Garnham	Humidity:	62%
Test Location:	Austest Laboratories (Yarramalong, NSW)		

Measured field strength levels performed at a 1 meter distance were extrapolated to a 3 meter distance using the extrapolation factor of 20 dB/decade.

There were no measured radiated spurious emissions above the system noise floor.

CONTROL TABLE:-

Channel MHz	Unwanted Frequency MHz	Antenna Pol.	Pk Level dBμV/m	Pk Limit dBμV/m	Margin dB	Avg Level dBμV/m	Avg Limit dBμV/m	Margin dB
-	-	-	-	74.0	-	-	54.0	-
All measured out of band emissions were greater than 20 dB below the limits specified in FCC 15.209.								
-	-	-	-	-	-	-	-	-

CAMERA:-

Channel MHz	Unwanted Frequency MHz	Antenna Pol.	Pk Level dBμV/m	Pk Limit dBμV/m	Margin dB	Avg Level dBμV/m	Avg Limit dBμV/m	Margin dB
-	-	-	-	74.0	-	-	54.0	-
All measured out of band emissions were greater than 20 dB below the limits specified in FCC 15.209.								
-	-	-	-	-	-	-	-	-

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990



END OF REPORT BODY

This document shall not be reproduced in any form except in full.

This report is issued within the scope of A2LA accreditation #2765.02.

Accredited for compliance with ISO / IEC 17025.

Approval Specialists Pty Ltd (ACN: 094 656 354) Trading as Austest Laboratories
2/9 Packard Avenue, Castle Hill NSW 2154 Australia Ph: +612 9680 9990

