

Report Number: TRA-066786-47-19A
Issue: A

Report on the Radio Testing of a
Pektron Group Ltd
Parrot Infotainment System
With Respect to Specifications
FCC 47CFR Subpart E
TO SATISFY PERMISSIVE CHANGE REQUIREMENTS OF
KDB 178919 D01 Permissive Change Policy V06

TEST DATE: 2026-02-02 to 2026-02-06

Tested by: S Garwell
Radio Test Engineer

Written by:

S Garwell
Radio Test Engineer

Approved by:

J Charters
Lab Manager

Date: 2026-02-18

Disclaimers:

- [1] THIS DOCUMENT MAY BE REPRODUCED ONLY IN ITS ENTIRETY AND WITHOUT CHANGE
[2] THE RESULTS CONTAINED IN THIS DOCUMENT RELATE ONLY TO THE ITEM(S) TESTED

RF930 Rev. 11

1 Revision Record

<i>Issue</i>	<i>Issue Date</i>	<i>Revision History</i>
A	2026-02-18	Original

2 Summary

Test Report Number:	TRA-066786-47-19A
Works Order Number:	TRA-066786-08
Purpose of Test:	Class II Permissive Change Testing of Radio Frequency Equipment per the Relevant Authorisation Requirements of Chapter 47 of CFR (Code of Federal Regulations) Part 2, Subpart J
Test Specification:	47CFR15 Subpart E
Equipment Under Test (EUT):	Parrot Infotainment System
FCC Identifier:	AQO018
EUT Serial Number:	SA-0854G01/27
Manufacturer:	Pektron Group Ltd
Address:	Alfreton Road Derby Derbyshire DE21 4AP United Kingdom
Client Contact:	Richard Jones ☎ 01332832424 ext 382 ✉ rjones@pektron.co.uk
Order Number:	PROJ-00001040
Test Date:	2026-02-02 to 2026-02-06
Tested By:	S Garwell Element

2.1 Test Summary

Test Method and Description		Applicable to this equipment		Result / Note
		FCC 47 CFR		
Restricted frequency bands		15.205	☒	Pass
AC power line conducted emissions		15.207	☐	Note 1
6 dB bandwidth		15.407 (e)	☐	Note 2
Occupied bandwidth (99% bandwidth)		N/A	☐	Note 2
Output power	Conducted	15.407 (a)	☒	Pass
	PSD		☐	
	RPE		☐	
Unwanted / Undesirable emissions		15.407 (b)	☐	Note 2
Pulsed operation correction		15.35 (c)	☐	Note 2
TPC and DFS		15.407 (h)	☐	Note 2
U-NII detection bandwidth		15.407 (h) (2)	☐	Note 2
CAC		15.407 (h) (2) (ii)	☐	Note 2
In-service monitoring		15.407 (h) (2) (iii) & 15.407 (h) (2) (iv)	☐	Note 2
Statistical performance check		-	☐	Note 2

Specific notes:

1. The EUT is a battery powered device.
2. Limited testing was performed to check carrier power / & transmitter radiated spurious emissions only, as requested by the client, to support permissive change requirements of 178919 D01 V06.

General notes:

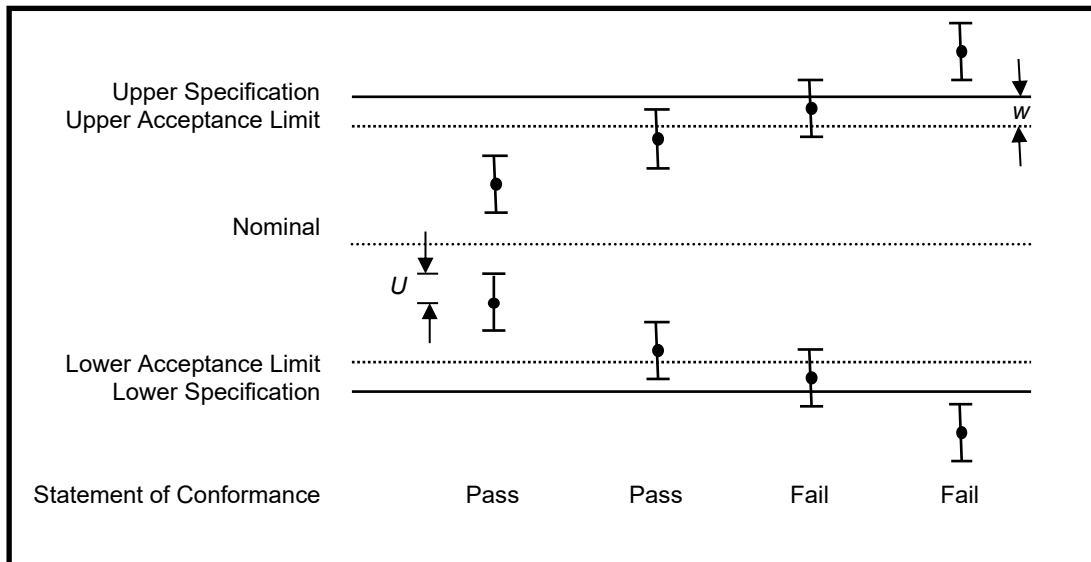
The results contained in this report relate only to the items tested, in the condition at time of test, and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

The apparatus was set-up and exercised using the configurations, modes of operation and arrangements defined in this report only. Any modifications made are identified in Section 8 of this report.

Particular operating modes, apparatus monitoring methods and performance criteria required by the standards tested to have been performed except where identified in Section 5.2 of this test report (Deviations from Test Standards).

The decision rule for compliance is not inherent within this specification and compliance is based on the customer requesting an acceptance rule based on applying a guard band equal to the laboratories 95 % expanded measurement uncertainty for each test.

Graphical Representation of a Pass / Fail Binary Statement When Applying a Guard Band



● = Measured value

U = 95 % expanded measurement uncertainty

w = guard band equal to the laboratories 95 % expanded measurement uncertainty for each test

3 Contents

1	Revision Record	2
2	Summary	3
2.1	Test Summary	4
3	Contents	6
4	Introduction	7
5	Test Specifications	8
5.1	Normative References	8
5.2	Deviations from Test Standards	8
6	Glossary of Terms	9
7	Equipment under Test	10
7.1	EUT Identification	10
7.2	System Equipment	10
7.3	EUT Mode of Operation	10
7.3.1	Transmission	10
7.4	EUT Radio Frequency Parameters	10
7.4.1	General	10
7.4.2	Antennas	10
7.4.3	Product specific declarations	11
7.5	EUT Description	11
8	Modifications	12
9	EUT Test Setup	13
9.1	Block Diagram	13
9.2	General Set-up Photographs	13
9.3	Measurement software	15
10	General Technical Parameters	16
10.1	Normal Conditions	16
10.2	Varying Test Conditions	16
11	Radiated emissions	17
11.1	Definitions	17
11.2	Test Parameters	17
11.3	Test Method	18
11.4	Test Equipment	19
11.5	Test Results	20
12	Maximum conducted output power	25
12.1	Definition	25
12.2	Test Parameters	25
12.3	Test Method	27
12.4	Test Equipment	27
12.5	Test Results	27
13	Measurement Uncertainty	28

4 Introduction

This report TRA-066786-47-19A presents the results of the Radio testing on a Pektron Group Ltd, Parrot Infotainment System to specification 47CFR15 Radio Frequency Devices.

The testing was carried out for Pektron Group Ltd by Element, at the address detailed below.



Element Skelmersdale
Unit 1
Pendle Place
Skelmersdale
West Lancashire
WN8 9PN
UK



Element Surrey Hills
Unit 15 B
Henley Business Park
Pirbright Road
Normandy
Guildford
GU3 2DX
UK

This report details the configuration of the equipment, the test methods used and any relevant modifications where appropriate.

All test and measurement equipment under the control of the laboratory and requiring calibration is subject to an established programme and procedures to control and maintain measurement standards. The quality management system meets the principles of ISO 9001, and has quality control procedures for monitoring the validity of tests undertaken. Records and sufficient detail are retained to establish an audit trail of calibration records relating to its test results for a defined period. Under control of the established calibration programme, key quantities or values of the test & measurement instrumentation are within specification and comply with the relevant traceable internationally recognised and appropriate standard specifications, which are ISO/IEC 17025:2017 accredited calibrated as such where these properties have a significant effect on results. Participation in inter-laboratory comparisons and proficiency testing ensures satisfactory correlation of results conform to Elements own procedures, as well as statistical techniques for analysis of test data providing the appropriate confidence in measurements.

Throughout this report EUT denotes equipment under test.

FCC Site Listing:

The test laboratory is accredited for the above sites under the following US-UK MRA, Designation numbers.

Element Surrey Hills	UK2027
Element Skelmersdale	UK2020

The test site requirements of ANSI C63.4-2014 + C63.4a-2017 are met up to 1 GHz.

The test site S_{VSWR} requirements of CISPR 16-1-4:2019 are met over the frequency range 1 GHz to 18 GHz.

5 Test Specifications

5.1 *Normative References*

- FCC 47 CFR Ch. I – Part 15 – Radio Frequency Devices
- FCC KDB Publication 905462 D02 v02 – Compliance measurement procedures for unlicensed-national information infrastructure devices operating in the 5250-5350 MHz and 5470-5725 MHz bands incorporating dynamic frequency selection
- ANSI C63.10-2020 – American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
- ANSI C63.4-2014 – 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
- KDB Publication 178919 D01 V06, October 2016 – Permissive change policy

5.2 *Deviations from Test Standards*

Limited testing was performed to check carrier power / & transmitter radiated spurious emissions only, as requested by the client, to support permissive change requirements of 178919 D01 V06.

6 Glossary of Terms

§	denotes a section reference from the standard, not this document
AC	Alternating Current
ANSI	American National Standards Institute
BW	bandwidth
C	Celsius
CAC	Channel Availability Check
CFR	Code of Federal Regulations
CW	Continuous Wave
dB	decibel
dBm	dB relative to 1 milliwatt
DC	Direct Current
DFS	Dynamic Frequency Selection
DSSS	Direct Sequence Spread Spectrum
EIRP	Equivalent Isotropically Radiated Power
ERP	Effective Radiated Power
EUT	Equipment Under Test
FCC	Federal Communications Commission
FHSS	Frequency Hopping Spread Spectrum
Hz	hertz
IC	Industry Canada (now ISED)
ISED	Innovation, Science and Economic Development Canada
ITU	International Telecommunication Union
LBT	Listen Before Talk
LE-LAN	Licence-Exempt Local Area Network
m	metre
max	maximum
MIMO	Multiple Input and Multiple Output
min	minimum
MRA	Mutual Recognition Agreement
N/A	Not Applicable
PCB	Printed Circuit Board
PDF	Portable Document Format
Pt-mpt	Point-to-multipoint
Pt-pt	Point-to-point
PSD	Power Spectral Density
RF	Radio Frequency
RH	Relative Humidity
RMS	Root Mean Square
Rx	receiver
s	second
SVSWR	Site Voltage Standing Wave Ratio
TPC	Transmitter Power Control
Tx	transmitter
UKAS	United Kingdom Accreditation Service
U-NII	Unlicensed-National Information Infrastructure
V	volt
W	watt
Ω	ohm

7 Equipment under Test

7.1 EUT Identification

- Name: Parrot Infotainment System
- Serial Number: SA-0854G01/27
- Model Number: A-0854G01
- Software Revision: Not Stated
- Build Level / Revision Number: Not Stated

7.2 System Equipment

Equipment listed below forms part of the overall test setup and is required for equipment functionality and/or monitoring during testing. The compliance levels achieved in this report relate only to the EUT and not items given in the following list.

- The EUT was programmed via a laptop that was disconnected and removed during test.

7.3 EUT Mode of Operation

7.3.1 Transmission

The EUT was programmed using a test laptop running TerraTerm client software, commands were sent to the EUT to setup the frequency / power / packet type and enable transmission.

7.4 EUT Radio Frequency Parameters

7.4.1 General

Frequencies of Test:	5180 MHz & 5500 MHz
Modulation type:	OFDM
Occupied channel bandwidth(s):	20 MHz
Channel spacing:	20 MHz
Power setting:	8 dBm
Nominal Supply Voltage:	12 Vdc
Duty cycle:	>98% for test

7.4.2 Antennas

Type:	TE Connectivity 2108792-5
Frequency Range:	5150 MHz – 5875 MHz
Impedance:	50 ohms unbalanced
VSWR:	<2.1:1
Gain:	3.5 dBi (Peak)
Polarisation:	Linear
Connector Type:	MHF-TYPE PLUG
Length:	40.0 mm x 10.0 mm x 0.12 mm
Weight:	<0.9g
Environmental Limits:	-40 to +85°C
Mounting:	Adhesive Tape

7.4.3 Product specific declarations

Multiple antenna configuration(s), e.g. MIMO:	Single
Fixed pt-pt operations (yes/no):	No

7.5 EUT Description

The equipment under test (EUT) is an Infotainment system with integrated Wi-Fi, Bluetooth radio. This test report covers the testing of the 5 GHz RLAN only.

Note: the EUT was tested outside of its enclosure.

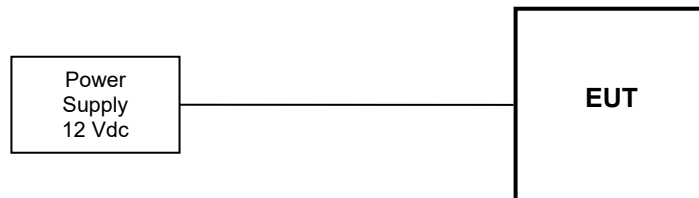
8 Modifications

No modifications were performed during this assessment.

9 EUT Test Setup

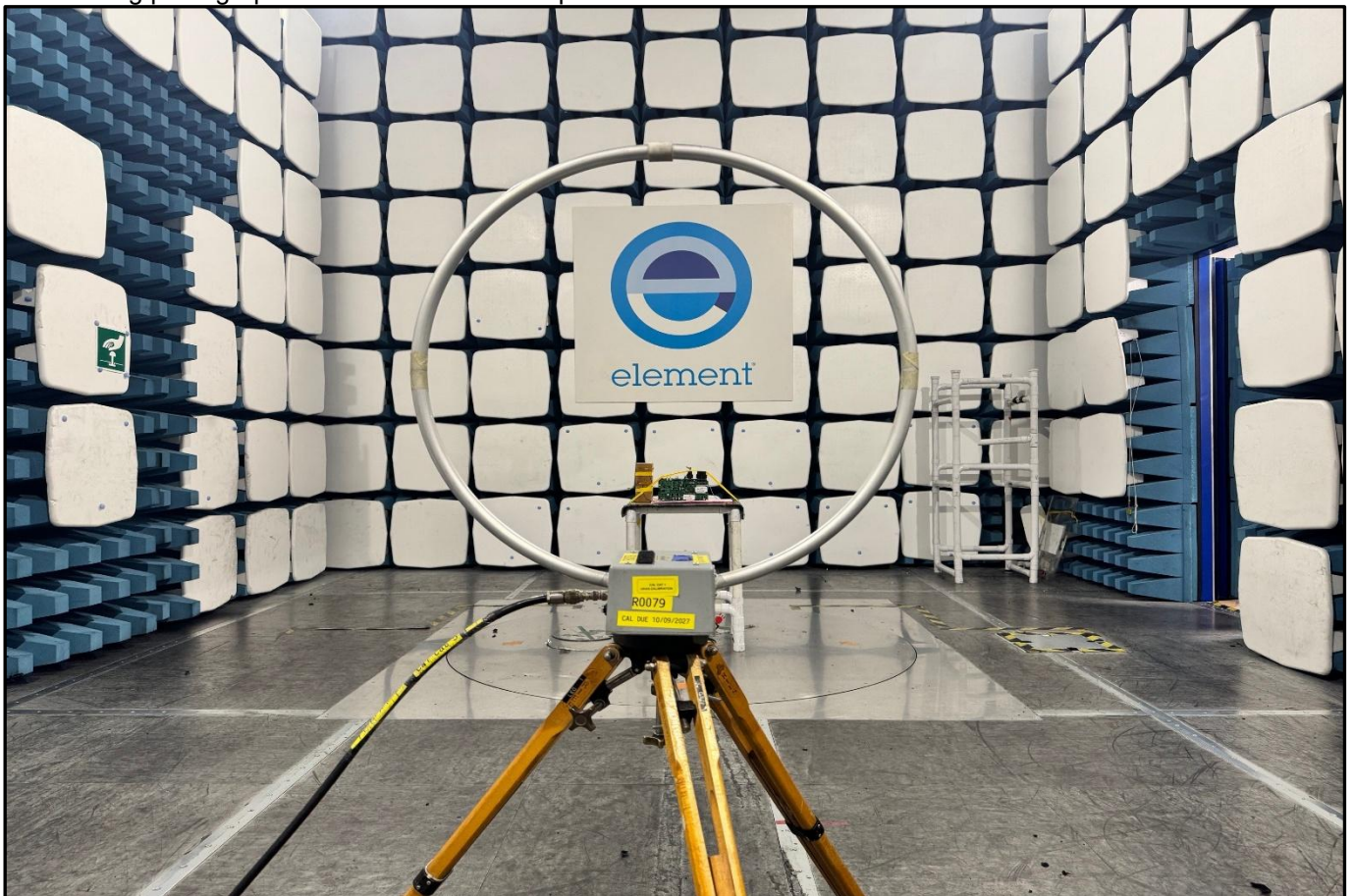
9.1 Block Diagram

The following diagram shows basic EUT interconnections:

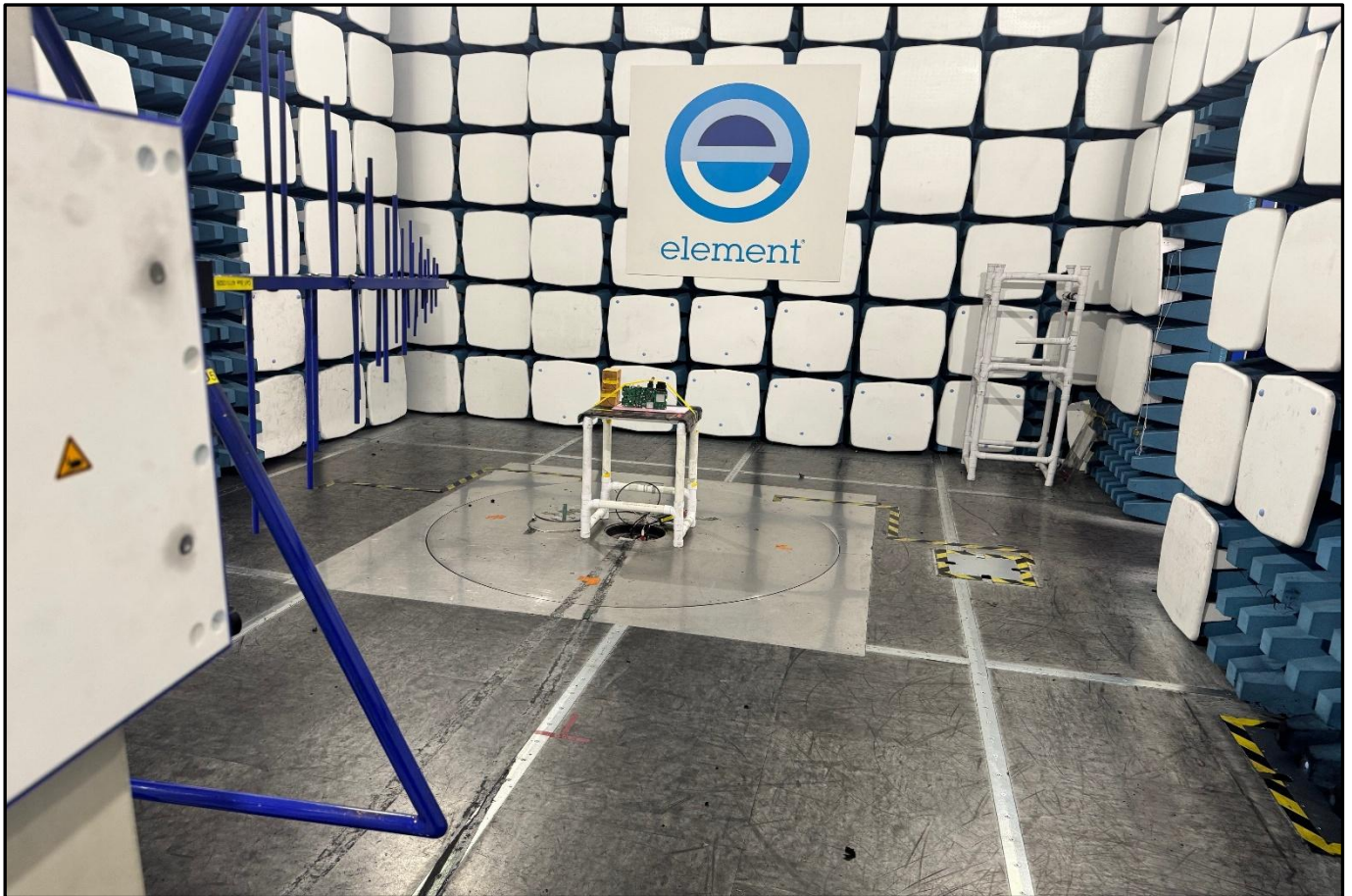


9.2 General Set-up Photographs

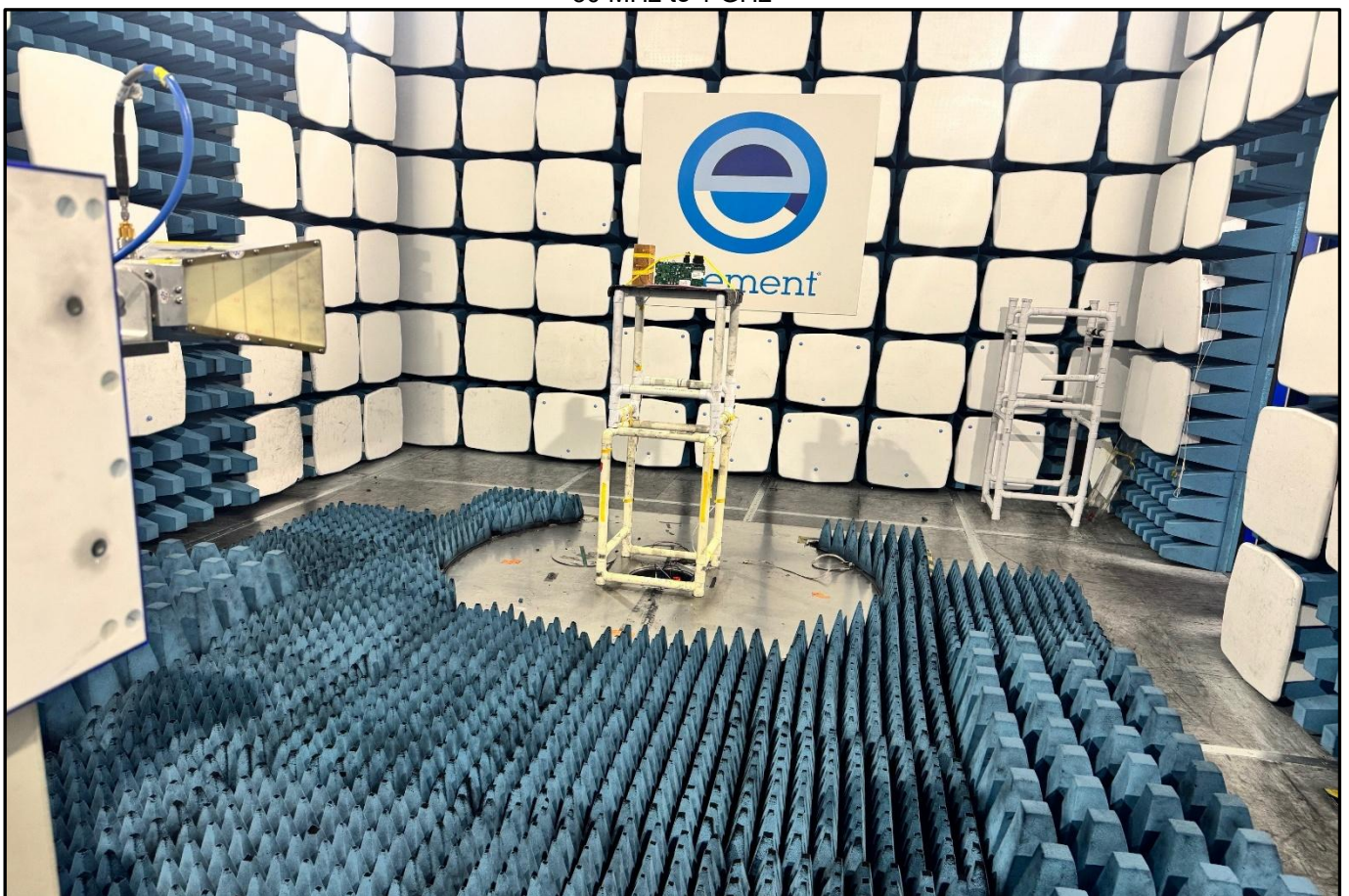
The following photographs show basic EUT set-up:



9 kHz to 30 MHz



30 MHz to 1 GHz



Above 1 GHz

9.3 Measurement software

Where applicable, the following software was used to perform measurements contained within this report.

Element Emissions R5 (See Note)

Note:

The version of the Element software used is recorded in the results sheets contained within this report.

10 General Technical Parameters

10.1 Normal Conditions

The EUT was tested under the normal environmental conditions of the test laboratory, except where otherwise stated. The normal power source applied was 12 Vdc from an external power supply (representing a battery).

10.2 Varying Test Conditions

There are no specific frequency stability requirements for the type of device. The results contained in this report demonstrate that the occupied bandwidth is contained within the authorised band.

Variation of supply voltage is required to ensure stability of the declared output power. During carrier power testing the following variations were made:

	<i>Category</i>	<i>Nominal</i>	<i>Variation</i>
☐	Mains		85% and 115%
☒	Battery	New battery	N/A

11 Radiated emissions

11.1 Definitions

Spurious emissions

Emissions on a frequency or frequencies, which are outside the necessary bandwidth and the level of which may be reduced without affecting the corresponding transmission of information. Spurious emissions include harmonic emissions, parasitic emissions, intermodulation products and frequency conversion products, but exclude out-of-band emissions.

Restricted bands

A frequency band in which intentional radiators are permitted to radiate only spurious emissions but not fundamental signals.

11.2 Test Parameters

Test Location:	Element Skelmersdale
Test Chamber:	REF940
Test Standard and Clause:	ANSI C63.10-2020, Clause 6.5 and 6.6
EUT Frequencies Measured:	5180 MHz & 5500 MHz
EUT Channel Bandwidths:	20 MHz
Deviations From Standard:	None
Measurement BW:	30 MHz to 1 GHz: 120 kHz Above 1 GHz: 1 MHz
Measurement Detector:	Up to 1 GHz: quasi-peak; Above 1 GHz: RMS average and Peak

Environmental Conditions (Normal Environment)

Temperature: 22 °C	+15 °C to +35 °C (as declared)
Humidity: 36 %RH	20%RH to 75%RH (as declared)
Supply: 12 Vdc	

Test Limits

Unwanted emissions that fall within the restricted frequency bands shall comply with the limits specified:

General Field Strength Limits for License-Exempt Transmitters at Frequencies Above 30 MHz

<i>Frequency (MHz)</i>	<i>Field Strength (μV/m at 3m)</i>
30-88	100
88-216	150
216-960	200
Above 960	500

11.3 Test Method

With the EUT setup as per section 9 of this report and connected as per Figure i, the emissions from the EUT were measured on a spectrum analyzer / EMI receiver.

Radiated electromagnetic emissions from the EUT are checked first by preview scans. Preview scans for all spectrum and modulation characteristics are checked, using a peak detector and where applicable worst-case determined for function, operation, orientation, etc. for both vertical and horizontal polarisations. Pre-scan plots are shown with a peak detector and 100kHz RBW.

If the EUT connects to auxiliary equipment and is table or floor standing, the configurations prescribed in ANSI C63.10 are followed. Alternatively, a layout closest to normal use (as declared by the provider) is employed, (see EUT setup photographs for more detail).

Emissions between 30 MHz and 1 GHz are measured using calibrated broadband antennas. Emissions above 1 GHz are characterized using standard gain horn antennas. Pre-amplifiers and filters are used where required. Care is taken to ensure that test receiver resolution bandwidth, video bandwidth and detector type(s) meet the regulatory requirements.

For both horizontal and vertical polarizations, the EUT is then rotated through 360 degrees in azimuth until the highest emission is detected. At the previously determined azimuth the test antenna is raised and lowered from 1 to 4 m in height until a maximum emission level is detected, this maximum value is recorded.

Power values measured on the test receiver / analyzer are converted to field strength, FS, in dBμV/m at the regulatory distance, using:

$$FS = PR + CL + AF - PA + DC - CF$$

$$\text{Factor} = CL + AF - PA$$

Where,

PR is the power recorded on the receiver / spectrum analyzer in dBμV;

CL is the cable loss in dB;

AF is the test antenna factor in dB/m;

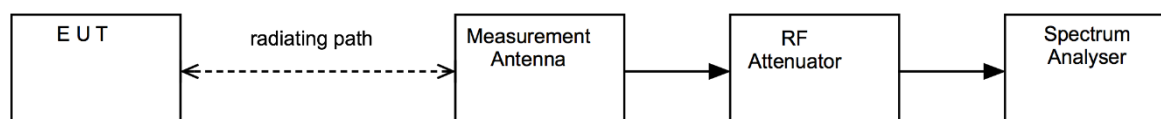
PA is the pre-amplifier gain in dB (where used);

DC is the duty correction factor in dB (where used, e.g. where average detector on pulsed harmonic understates the power);

CF is the distance factor in dB (where measurement distance different to limit distance);

This field strength value is then compared with the regulatory limit.

Figure i Test Setup

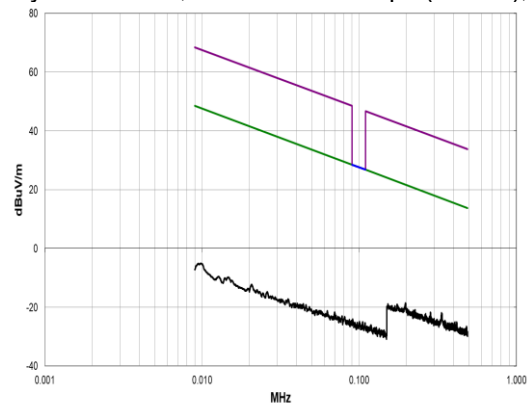


11.4 Test Equipment

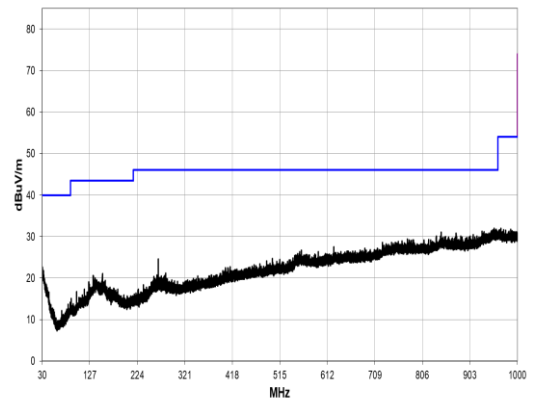
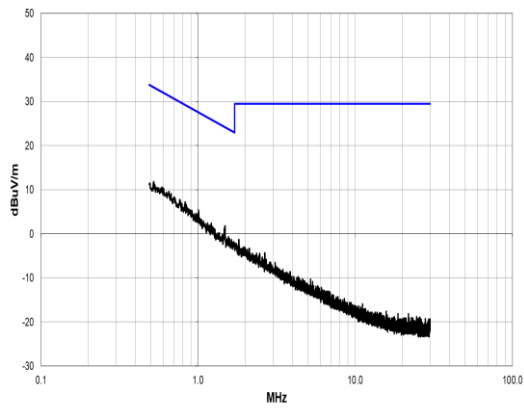
Equipment Type	Manufacturer	Equipment Description	Element No	Due For Calibration
EMI Receiver	R&S	ESR26	U489	2026-11-19
Spectrum Analyser	R&S	FSU50	U544	2026-12-22
Loop Antenna	EMCO	6502	R0079	2028-09-10
Bilog	Chase	CBL611/B	U573	2026-11-04
PreAmp	Watkins Johnson	6201-69	U372	2026-03-17
Horn Antenna	EMCO	3115	L138	2026-06-11
500 MHz -18 GHz Pre Amp	COM-POWER	PAM-118A	U1016	2026-06-20
Horn Antenna	A Info Inc	LB-180400-25-C-KF	REF2246	2026-10-08
Pre-Amp (18 - 40 GHz)	Com-Power	PAM-840A	REF2390	2026-10-27
3.1 GHz High Pass Filter	MiniCircuits	VHF-3100+	U718	2026-02-19
High Pass Filter	Atlantic Microwave	AFH-07000	U558	2026-02-17
Radio Chamber - PP	Rainford EMC	ATS	REF940	2028-01-19
Radiated Test Software	Element	Emissions R5	REF9000	Cal Not Required

11.5 Test Results

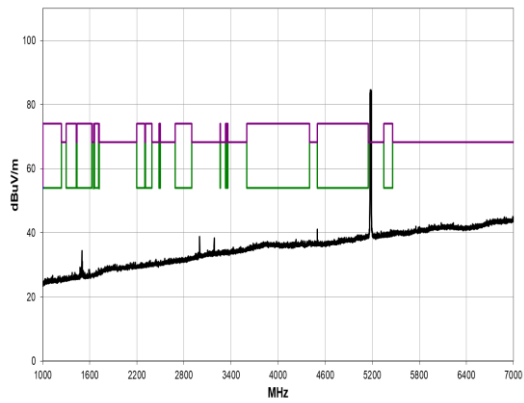
802.11n; Frequency: 5180 MHz; Data Rate: 6 Mbps (OFDM); Power Setting: 8



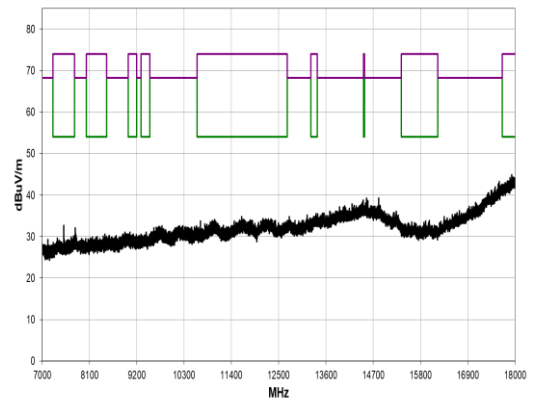
9 kHz to 490 kHz



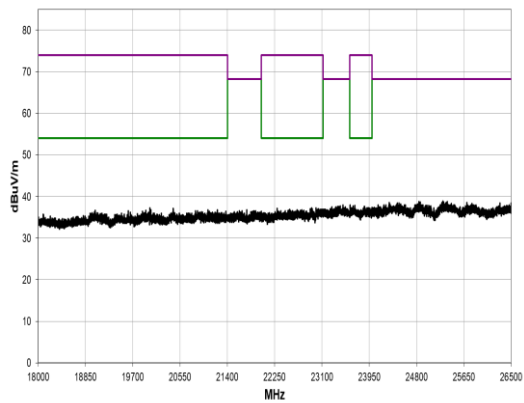
490 kHz to 30 MHz



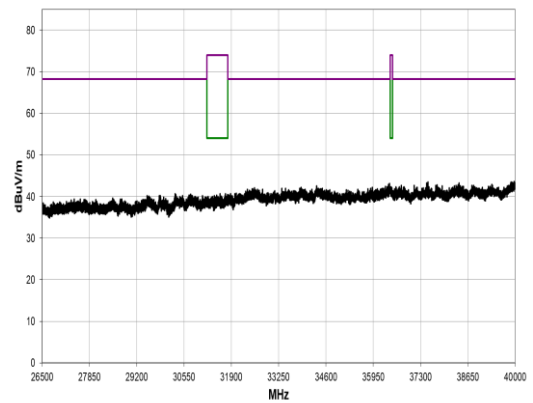
30 MHz to 1 GHz



1 GHz to 7 GHz



7 GHz to 18 GHz



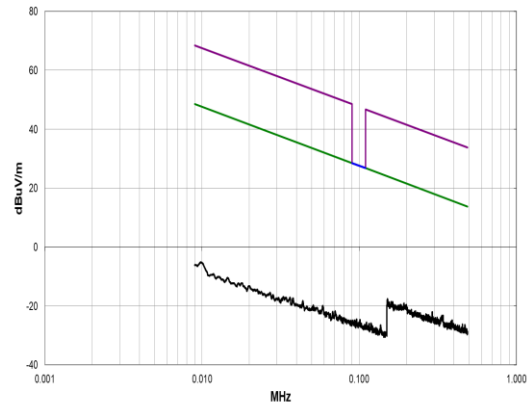
18 GHz to 26.5 GHz

26.5 GHz to 40 GHz

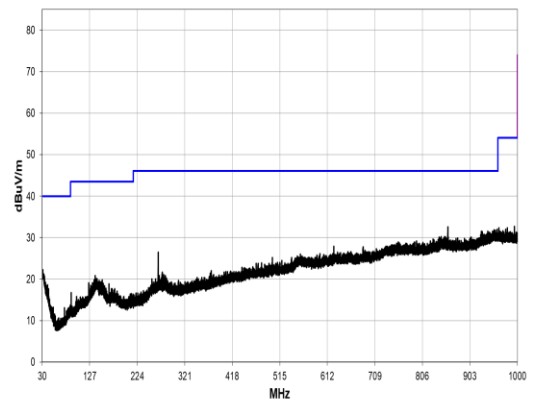
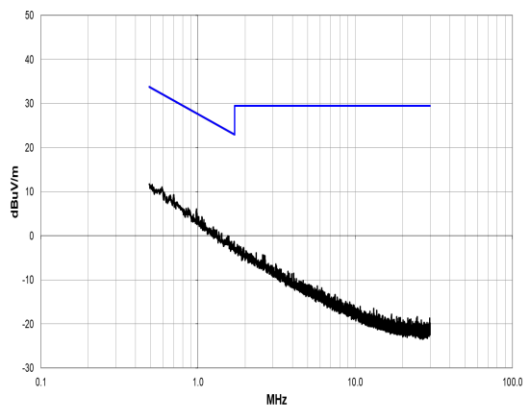
Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)
4499.959	52.8	-3.6	1.18	56.0	3.0	0.0	Horz	PK	0.0	49.2	68.2	-19.0
4499.959	50.4	-3.6	1.5	137.9	3.0	0.0	Vert	PK	0.0	46.8	68.2	-21.4
1500.067	55.0	-12.4	1.5	181.0	3.0	0.0	Horz	PK	0.0	42.6	74.0	-31.4
1500.316	53.7	-12.4	1.5	278.1	3.0	0.0	Vert	PK	0.0	41.3	74.0	-32.7

Note: peak emissions are below average limits, only peak emissions recorded.

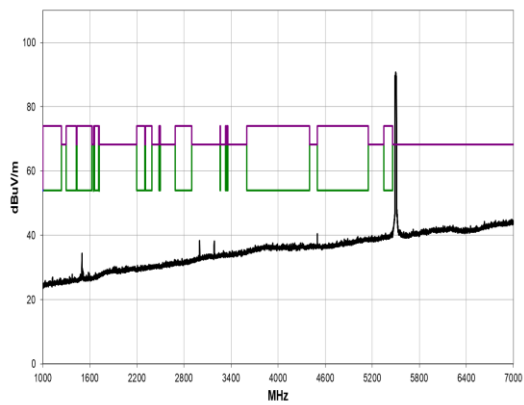
802.11n; Frequency: 5500 MHz; Data Rate: 6 Mbps (OFDM); Power Setting: 8



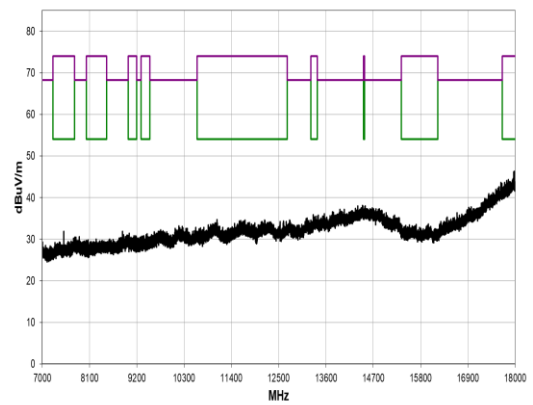
9 kHz to 490 kHz



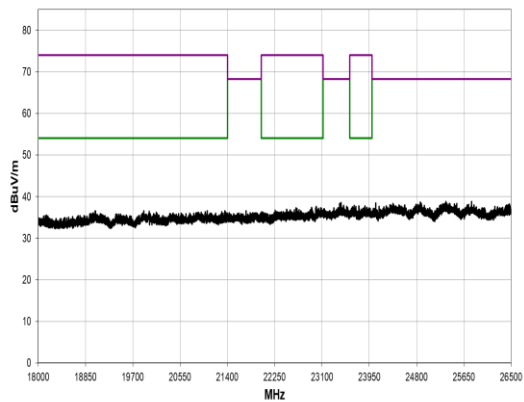
490 kHz to 30 MHz



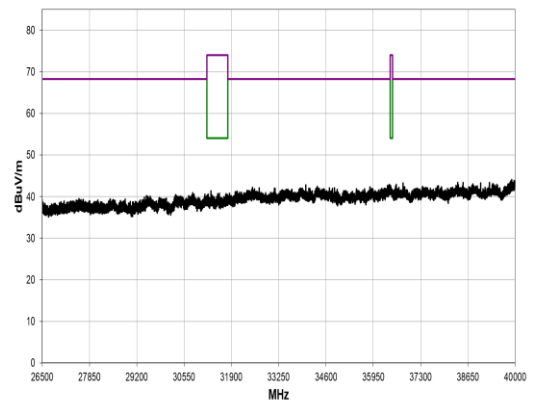
30 MHz to 1 GHz



1 GHz to 7 GHz



7 GHz to 18 GHz



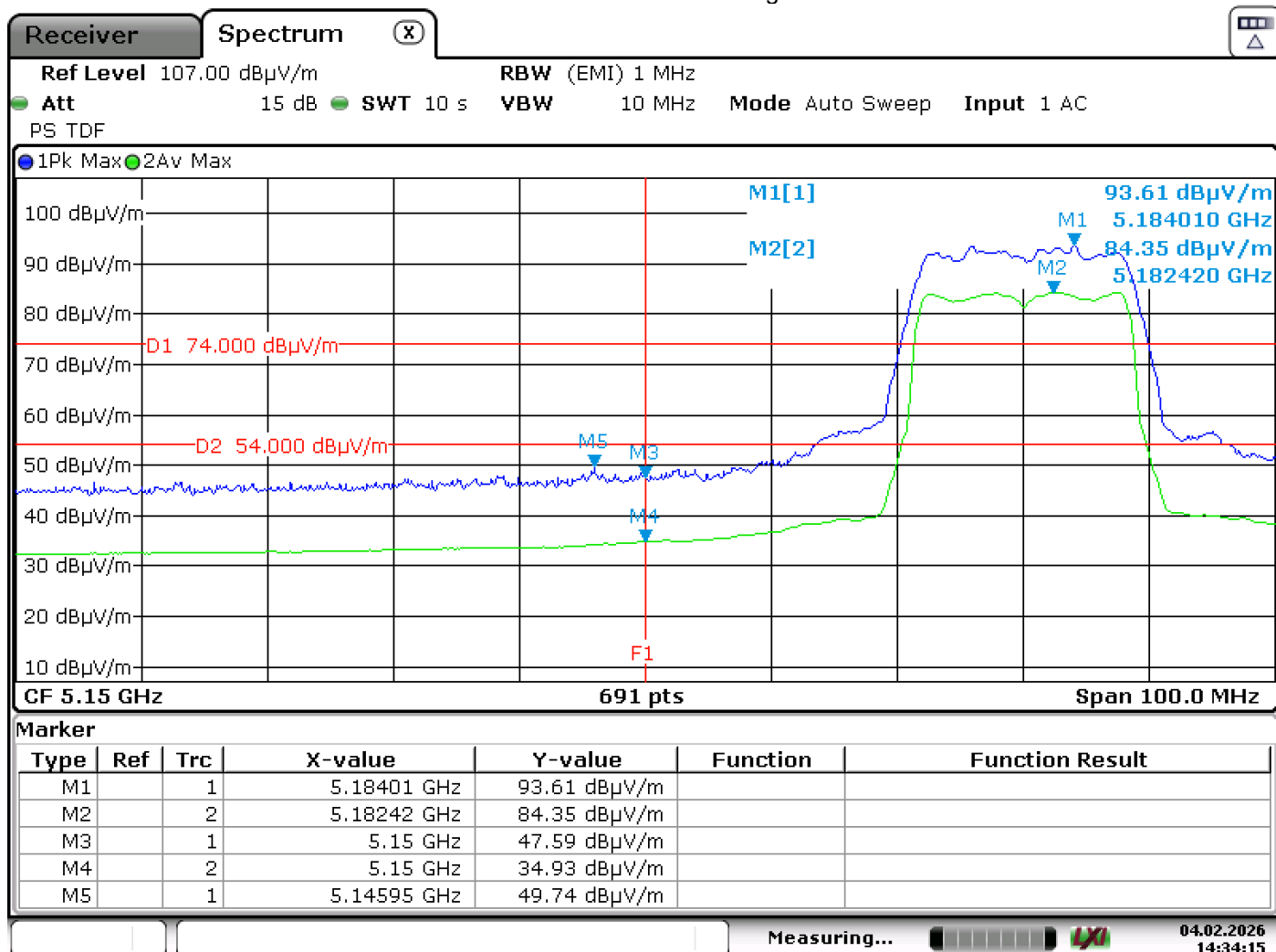
18 GHz to 26.5 GHz

26.5 GHz to 40 GHz

Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)
4499.709	52.7	-3.6	1.07	52.0	3.0	0.0	Horz	PK	0.0	49.1	68.2	-19.1
4500.324	51.0	-3.6	1.5	304.0	3.0	0.0	Vert	PK	0.0	47.4	74.0	-26.6
1499.950	54.9	-12.4	1.5	265.0	3.0	0.0	Vert	PK	0.0	42.5	74.0	-31.5
1499.859	53.5	-12.4	1.5	321.0	3.0	0.0	Horz	PK	0.0	41.1	74.0	-32.9

Note: peak emissions are below average limits, only peak emissions recorded.

Lower Radiated Band Edge



Date: 4.FEB.2026 14:34:15

12 Maximum conducted output power

12.1 Definition

The maximum conducted output power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level.

12.2 Test Parameters

Test Location:	Element Skelmersdale
Test Chamber:	Radio Laboratory
Test Standard and Clause:	ANSI C63.10-2020, Clause 12.4
EUT Frequencies Measured:	5180 MHz & 5500 MHz
EUT Channel Bandwidths:	20 MHz
EUT Duty Cycle:	100 %
Deviations From Standard:	None
Measurement BW:	N/A – Wideband power meter
Measurement Span:	N/A – Wideband power meter
Measurement Points:	N/A – Wideband power meter
Measurement Detector:	RMS

Environmental Conditions (Normal Environment)

Temperature: 22 °C	+15 °C to +35 °C (as declared)
Humidity: 36 % RH	20 % RH to 75 % RH (as declared)

Test Limits

5.150 - 5.250 GHz Band:

47 CFR 15.407:

For outdoor and indoor access points, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

For client devices, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW.

For outdoor and indoor access points and client devices, 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.

For fixed point-to-point access points, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required for each 1 dB of antenna gain in excess of 23 dBi.

RSS-247:

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or $1.76 + 10 \log_{10} B$, dBm, whichever is less.

Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less.

Where B is the 99% emission bandwidth in MHz.

5.250 - 5.350 GHz band:

47 CFR 15.407:

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log_{10} B$. 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.

Where B is the 26 dB emission bandwidth in MHz.

RSS-247:

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or $1.76 + 10 \log_{10} B$, dBm, whichever is less.

Devices shall implement TPC in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

Devices, other than devices installed in vehicles, shall comply with the following:

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever is less.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever is less.

Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

Where B is the 99% emission bandwidth in MHz

5.470 - 5.725 GHz band:

47 CFR 15.407:

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log_{10} B$. 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.

Where B is the 26 dB emission bandwidth in MHz.

RSS-247:

Note that devices shall not be capable of transmitting in the 5.600 - 5.650 GHz band unless the DFS measurement procedures specified in ETSI EN 301 893 are used."

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever is less.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever is less.

Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

Where B is the 99% emission bandwidth in MHz.

5.725 - 5.850 GHz Band:

47 CFR 15.407:

The maximum conducted output power shall not exceed 1 W. 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.

Fixed point-to-point U-NII devices operating in this band may employ antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power.

RSS-247:

In the frequency band 5.725 - 5.850 GHz the maximum conducted output power shall not exceed 1 W. 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.

5.850 - 5.895 GHz band:

47 CFR 15.407:

For an indoor access point, the maximum e.i.r.p. over the frequency band of operation must not exceed 36 dBm. Indoor access points operating on a channel that spans the 5.725 - 5.850 GHz and 5.850 - 5.895 GHz bands must not exceed an e.i.r.p. of 36 dBm.

For client devices operating under the control of an indoor access point, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm. Client devices operating on a channel that spans the 5.725 - 5.850 GHz and 5.850 - 5.895 GHz bands must not exceed an e.i.r.p. of 30 dBm.

For a subordinate device operating under the control of an indoor access point, the maximum e.i.r.p. over the frequency band of operation must not exceed 36 dBm.

RSS-247:

For fixed outdoor access points, the maximum e.i.r.p. shall not exceed 4 W (36 dBm).

For fixed outdoor client devices, the maximum e.i.r.p. shall not exceed 1 W (30 dBm).

For indoor access points, the maximum e.i.r.p. shall not exceed 4 W (36 dBm).

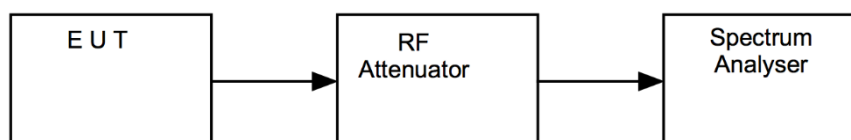
For indoor subordinate devices, the maximum e.i.r.p. shall not exceed 4 W (36 dBm).

For indoor client devices, the maximum e.i.r.p. shall not exceed 1 W (30 dBm).

12.3 Test Method

The EUT was setup as per section 9 of this report and, as per the test set-up diagram below, the analyser was used to measure each antenna output in turn, having taken account of all path losses. The resolution bandwidth of the spectrum analyser was set between 1 and 5 % of the EUT occupied bandwidth and the analyser band power function used to calculate the average power. The results were summed as in the tables below.

The measurements were performed with EUT set at its maximum duty. All modulation schemes, data rates and power settings were used to observe the worst case configuration in each bandwidth.

Test Set-up Diagram**12.4 Test Equipment**

Type of Equipment	Maker/Supplier	Model Number	Element Number	Calibration Due Date
Power Meter	ETS Lindgren	7002-006	REF2279	2026-05-15
10dB Attenuator	Mini Circuits	40 GHz BW-K10 2W44	U787	2026-07-23

12.5 Test Results

Modulation: 802.11a; Data Rate: 6 Mbps (OFDM); Power setting: 8			
Frequency (MHz)	Maximum peak conducted output power		Result
	(dBm)	(W)	
5180	2.05	0.00160	Pass
5500	3.01	0.00200	Pass

13 Measurement Uncertainty

Radio Testing – General Uncertainty Schedule

All statements of uncertainty are expanded standard uncertainty using a coverage factor of 1.96 to give a 95 % confidence where no required test level exists.

Test/Measurement	Budget Number	MU
Conducted RF Power, Power Spectral Density, Adjacent Channel Power and Spurious emissions		
Absolute RF power (via antenna connector) Sampling Power Meter to 8 GHz	MU4001	0.9 dB
Carrier Power and PSD - Spectrum Analysers	MU4004	1.7 dB
Adjacent Channel Power	MU4002	1.9 dB
Transmitter conducted spurious emissions (Including emissions due to intermodulation)	MU4041	0.9 dB
Conducted power and spurious emissions 40 GHz to 50 GHz	MU4042	2.4 dB
Conducted power and spurious emissions 50 GHz to 75 GHz	MU4043	2.5 dB
Conducted power and spurious emissions 75 GHz to 110 GHz	MU4044	2.4 dB
Radiated RF Power and Spurious emissions ERP and EIRP		
Effective Radiated Power Reverb Chamber	MU4020	3.7 dB
Effective Radiated Power	MU4021	4.7 dB
TRP Emissions 30 MHz to 1 GHz using CBL6111 or CBL6112 Bilog Antenna	MU4046	5.3 dB
TRP Emissions 1 GHz to 18 GHz using HL050 Log Periodic Antenna	MU4047	5.1 dB
TRP Emissions 18 GHz to 26.5 GHz using Standard Gain Horn	MU4048	2.7 dB
TRP Emissions 26.5 GHz to 40 GHz using Standard Gain Horn	MU4049	2.7 dB
In-band (3450-3980 MHz) TRP using CATR_ASH_B2	MU4051	4.1 dB
Cellular Radiated Spurious Emissions in a SAC 30 MHz to 180 MHz	MU4052	6.3 dB
Cellular Radiated Spurious Emissions in a SAC 180 MHz to 18 GHz	MU4052	3.6 dB
Cellular Radiated Spurious Emissions in a FAR 30 MHz to 180 MHz	MU4052	5.4 dB
Cellular Radiated Spurious Emissions in a FAR 180 MHz to 18 GHz	MU4052	3.0 dB
Spurious Emissions Electric and Magnetic Field		
Radiated Spurious Emissions 30 MHz to 1 GHz (Including emissions due to intermodulation)	MU4037	4.7 dB
Radiated Spurious Emissions 1-18 GHz (Including emissions due to intermodulation)	MU4032	4.5 dB
E Field Emissions 18 GHz to 26 GHz	MU4024	3.2 dB
E Field Emissions 26 GHz to 40 GHz	MU4025	3.3 dB
E Field Emissions 40 GHz to 50 GHz	MU4026	3.5 dB
E Field Emissions 50 GHz to 75 GHz	MU4027	3.6 dB
E Field Emissions 75 GHz to 110 GHz	MU4028	3.6 dB
Radiated Magnetic Field Emissions	MU4031	2.3 dB

Test/Measurement	Budget Number	MU
Frequency Measurements		
Frequency Deviation	MU4022	3.7 kHz
Frequency error using CMTA test set	MU4023	113.441 Hz
Frequency error using GPS locked frequency source	MU4045	0.0413 ppm
Bandwidth/Spectral Mask Measurements		
Channel Bandwidth	MU4005	3.87%
Transmitter Mask Amplitude	MU4039	1.3 dB
Transmitter Mask Frequency	MU4040	2.59%
Time Domain Measurements		
Transmission Time	MU4038	4.40%
Dynamic Frequency Selection (DFS) Parameters		
DFS Analyser - Measurement Time	MU4006	678.984 µs
DFS Generator - Frequency Error	MU4007	91.650 Hz
DFS Threshold Conducted	MU4008	1.3 dB
DFS Threshold Radiated	MU4009	3.2 dB
Receiver Parameters		
EN 300 328 Receiver Blocking	MU4010	1.1 dB
EN 301 893 Receiver Blocking	MU4011	1.1 dB
EN 303 340 Adjacent Channel Selectivity	MU4012	1.1 dB
EN 303 340 Overloading	MU4013	1.1 dB
EN 303 340 Receiver Blocking	MU4014	1.1 dB
EN 303 340 Receiver Sensitivity	MU4015	0.9 dB
EN 303 372-1 Image Rejection	MU4016	1.4 dB
EN 303 372-1 Receiver Blocking	MU4017	1.1 dB
EN 303 372-2 Adjacent Channel Selectivity	MU4018	1.1 dB
EN 303 372-2 Dynamic Range	MU4019	0.9 dB
Receiver Blocking Talk Mode Conducted	MU4033	1.2 dB
Receiver Blocking Talk Mode- radiated	MU4034	3.4 dB
Rx Blocking, listen mode, blocking level	MU4035	3.2 dB
Rx Blocking, listen mode, radiated Threshold Measurement	MU4036	3.4 dB
Adjacent Sub Band Selectivity	MU4003	4.2 dB

Test/Measurement	Budget Number	MU
Rohde & Schwarz TS8997		
Carrier frequency	MU4050	5.2 ppm
RF Output Power	MU4050	1.0 dB
Peak Power	MU4050	0.8 dB
Power Spectral Density	MU4050	1.0 dB
Occupied Channel Bandwidth	MU4050	2.08 %
Transmitter unwanted emissions in-band	MU4050	0.9 dB
Transmitter unwanted emissions in the spurious domain 30 MHz to 1 GHz	MU4050	0.6 dB
Transmitter unwanted emissions in the spurious domain 1 GHz to 12.75 GHz	MU4050	1.8 dB
Receiver Spurious emission 30 MHz to 1 GHz	MU4050	0.6 dB
Receiver Spurious emission 1 GHz to 12.75 GHz	MU4050	1.8 dB
Duty Cycle	MU4050	0.02 %
Tx Sequence	MU4050	0.02 %
Tx Gap	MU4050	0.02 %
Medium Utilisation	MU4050	0.1 %
Accumulated Transmit Time	MU4050	0.01 %
Minimum Frequency Occupation Time	MU4050	0.01 %
Hopping Frequency Separation	MU4050	0.6 %
Receiver blocking (for bit streams)	MU4050	3.0 dB
Channel Access Mechanism / Adaptivity / DFS / Contention Based Protocol	MU4050	1.8 dB