

Limited FCC and Industry Canada Testing of the
DAQRI International Limited
Model: DAQRI Compute Pack
In accordance with FCC 47 CFR Part 15B and
ICES-003

Prepared for: DAQRI LLC
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IC: 22854-DQR002001



COMMERCIAL-IN-CONFIDENCE

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RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Project Management	Steven White	22 August 2017	
Authorised Signatory	Matthew Russell	22 August 2017	

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD Product Service document control rules.

ENGINEERING STATEMENT

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate limited compliance with FCC 47 CFR Part 15B and ICES-003. The sample tested was found to comply with the requirements defined in the applied rules.

RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Testing	Graeme Lawler		

FCC Accreditation
90987 Octagon House, Fareham Test Laboratory

Industry Canada Accreditation
IC2932B-1 Octagon House, Fareham Test Laboratory

EXECUTIVE SUMMARY

A sample of this product was tested and found to be in compliance with FCC 47 CFR Part 15B: 2016 and ICES-003: 2016 for the tests detailed in section 1.3.

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1 Report Summary

1.1 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Issue	Description of Change	Date of Issue
1	First Issue	22 August 2017

Table 1

1.2 Introduction

Applicant	DAQRI LLC
Manufacturer	DAQRI International Limited
Model Number(s)	DAQRI Compute Pack
Serial Number(s)	OA565-7DF-94TC48EA8Y
Hardware Version(s)	DCP 2017
Software Version(s)	V16
Number of Samples Tested	1
Test Specification/Issue/Date	FCC 47 CFR Part 15B: 2016 ICES-003: 2016
Order Number	PO-UK3931
Date	06-July-2017
Date of Receipt of EUT	26-July-2017
Start of Test	30-July-2017
Finish of Test	31-July-2017
Name of Engineer(s)	Graeme Lawler
Related Document(s)	ANSI C63.4 (2014)



1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 15B and ICES-003 is shown below.

Section	Specification Clause		Test Description	Result	Comments/Base Standard
	Part 15B	ICES-003			
Configuration: Idle					
2.1	15.109	6.2	Radiated Emissions	Pass	ANSI C63.4

Table 2

Limited testing has been performed on the DAQRI Compute Pack, to verify the effects of the metal outer top plate being changed to plastic.

Full testing having previously been performed and detailed within report RP75936979-05

1.4 Declaration of Build Status

Manufacturer	<u>DAQRI International Limited</u>
Country of origin	<u>USA</u>
UK Agent	<u>DAQRI Labs Limited</u>
Technical Description	<u>DAQRI Compute Pack is a mobile computer that powers a lightweight wearable human-machine interface that connects workers in a variety of industries and environments to real time information and augmented work instruction.</u>
Model No	<u>DAQRI Compute Pack</u>
Part No	<u>870-00163</u>
Serial No	<u></u>
Drawing Number	<u></u>
Build Status	<u>DCP 2017</u>
Software Issue	<u>V16</u>
Hardware Issue	<u>DCP 2017</u>
Highest Internally Generated Frequency	<u></u>
FCC ID	<u>2AEWMDQR002001</u>
Industry Canada ID	<u>22854-DQR002001</u>
Signature	<u>Dave Williams</u>
Date	<u>21 August 2017</u>
D of B S Serial No	<u></u>

Note: This document has been prepared to enable manufacturers with no mechanism for producing their own Declaration of Build Status, to declare the build state of the equipment submitted for test.

No responsibility will be accepted by TÜV SÜD Product Service as to the accuracy of the information declared in this document by the manufacturer.

1.5 Product Information

1.5.1 Technical Description

DAQRI Compute Pack is a mobile computer that powers a lightweight wearable human-machine interface that connects workers in a variety of industries and environments to real time information and augmented work instruction.

1.6 Deviations from the Standard

A restricted set of tests have been performed with the new case to verify previous results. No deviations from the applicable test methods were made during testing.

1.7 EUT Modification Record

The table below details modifications made to the EUT during the test programme. The modifications incorporated during each test are recorded on the appropriate test pages.

Modification State	Description of Modification still fitted to EUT	Modification Fitted By	Date Modification Fitted
Serial Number: OA565-7DF-94TC48EA8Y			
0	As supplied by the customer	Not Applicable	Not Applicable

Table 3

1.8 Test Location

TÜV SÜD Product Service conducted the following tests at our Fareham Test Laboratory.

Test Name	Name of Engineer(s)	Accreditation
Configuration: Idle		
Radiated Emissions	Graeme Lawler	UKAS

Table 4

Office Address:

Octagon House
Concorde Way
Segensworth North
Fareham
Hampshire
PO15 5RL
United Kingdom

2 Test Details

2.1 Radiated Emissions

2.1.1 Specification Reference

FCC 47 CFR Part 15B, Clause 15.109
ICES-003, Clause 6.2

2.1.2 Equipment Under Test and Modification State

DAQRI Compute Pack, S/N: OA565-7DF-94TC48EA8Y - Modification State 0

2.1.3 Date of Test

30-July-2017 to 31-July-2017

2.1.4 Test Method

Idle

The test was performed in accordance with ANSI C63.4, clause 8.

Measurements are reported in dB μ V/m. The following conversion can be applied to convert from dB μ V/m to μ V/m: $10^{\Delta}(\text{Field Strength in dB}\mu\text{V/m}/20)$.

2.1.5 Environmental Conditions

Ambient Temperature	21.3 °C
Relative Humidity	53.0 %

2.1.6 Test Results

Idle

Highest frequency generated or used within the EUT: 5825 MHz
Upper frequency test limit: 30 GHz.

Frequency (MHz)	QP Level (dBuV/m)	QP Limit (dBuV/m)	QP Margin (dBuV/m)	Angle(Deg)	Height(m)	Polarity
159.273	28.2	43.5	-15.3	242	2.36	Horizontal
173.481	37.1	43.5	-6.4	271	1.00	Vertical
183.902	35.1	43.5	-8.4	222	1.00	Vertical
191.722	34.2	43.5	-9.3	47	1.72	Horizontal
192.194	33.9	43.5	-9.6	29	1.00	Horizontal
208.235	38.0	43.5	-5.5	201	1.00	Vertical
211.593	37.2	43.5	-6.3	327	1.00	Vertical
214.477	31.8	43.5	-11.7	242	1.00	Horizontal
230.824	38.9	46.0	-7.1	213	1.00	Vertical
235.231	38.2	46.0	-7.8	316	1.00	Horizontal
767.992	39.9	46.0	-6.1	0	1.00	Horizontal
863.994	38.7	46.0	-7.3	360	1.00	Horizontal

Table 5 - 30 MHz to 1 GHz

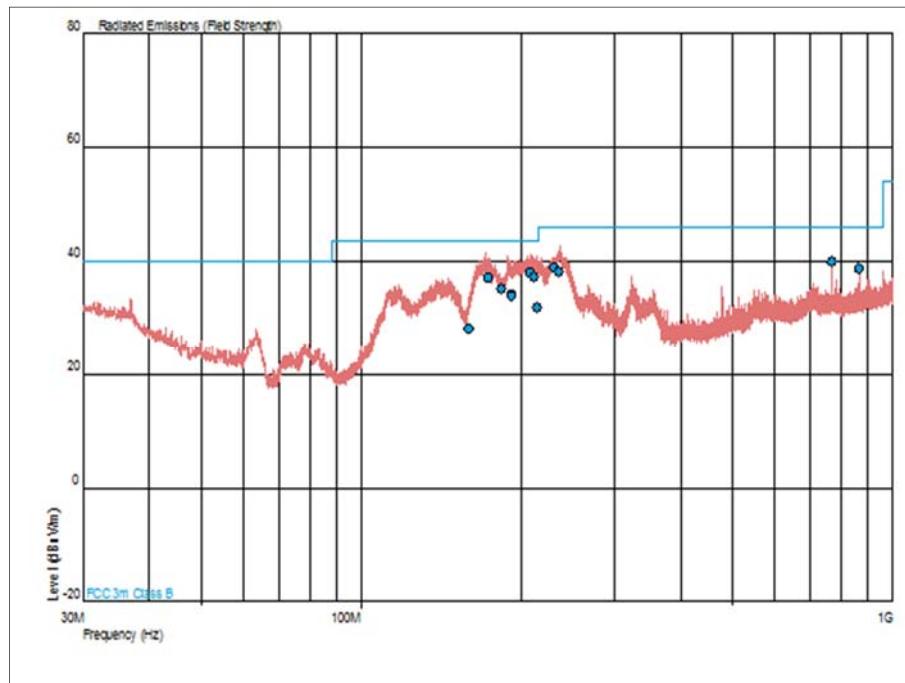


Figure 1 - 30 MHz to 1 GHz - Horizontal and Vertical

FCC 47 CFR Part 15, Limit Clause 15.109

Frequency of Emission (MHz)	Field Strength (μ V/m)
30 to 88	100.0
88 to 216	150.0
216 to 960	200.0
Above 960	500.0

ICES-003, Limit Clause 6.2

Frequency of Emission (MHz)	Quasi-Peak (dB μ V/m)
30 to 88	40.0
88 to 216	43.5
216 to 960	46.0
960 to 1000	54.0

Frequency of Emission (MHz)	Field Strength (dB μ V/m)	
	Linear Average Detector	Peak Detector
Above 1000	54.0	74.0

2.1.7 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 5.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
Antenna (Bilog)	Schaffner	CBL6143	287	24	18-Apr-2018
Screened Room (5)	Rainford	Rainford	1545	36	20-Dec-2017
Turntable Controller	Inn-Co GmbH	CO 1000	1606	-	TU
Hygrometer	Rotronic	A1	2138	12	02-Feb-2018
Digital Multimeter	Iso-tech	IDM-101	2895	12	20-Jul-2018
Comb Generator	Schaffner	RSG1000	3034	-	TU
Cable (N-N, 8m)	Rhophase	NPS-2302-8000-NPS	3248	12	02-May-2018
EMI Test Receiver	Rohde & Schwarz	ESU40	3506	12	12-Nov-2017
Tilt Antenna Mast	maturo GmbH	TAM 4.0-P	3916	-	TU
Mast Controller	maturo GmbH	NCD	3917	-	TU
Cable (Rx, Km-Km 2m)	Scott Cables	KPS-1501-2000-KPS	4526	6	17-Sep-2017

Table 6

TU - Traceability Unscheduled

3 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

Test Name	Measurement Uncertainty
Radiated Emissions	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB

Table 7