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 Report No.:
 TMWK2209003995KS
 Rev.:
 00

#### RF EXPOSURE REPORT

47 CFR Part 2.1093

For

**Hand Free Module** 

Model: HFM201

**Trade Name: Continental** 

Issued to

Continental Automotive Technologies GmbH Siemensstrasse 12 93055 Regensburg Germany

Issued by

Compliance Certification Services Inc.
Wugu Laboratory
No.11, Wugong 6th Rd., Wugu Dist.,
New Taipei City, Taiwan.
Issued Date: January 6, 2023

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### **Revision History**

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	January 6, 2023	Initial Issue	ALL	Allison Chen



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# 1. TEST RESULT CERTIFICATION

APPLICABLE STANDARDS						
STANDARD TEST RESULT						
47 CFR Part 2.1093	Compliance					
Statements of Conformity						
•	Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.					

Approved by:

Sky Zhou

Asst. Section Manager

Compliance Certification Services Inc.



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## 2. EUT SPECIFICATION

EUT	Hand Free Module			
Model	HFM201			
Trade Name	Continental			
Model Discrepancy	N/A			
Frequency band (Operating)	<ul><li>☐ 125 KHz</li><li>☐ Others</li></ul>			
Device category	<ul><li>☐ Portable (&lt;20cm separation)</li><li>☐ Mobile (&gt;20cm separation)</li><li>☐ Others</li></ul>			
Exposure classification	☐ Occupational/Controlled exposure ☐ General Population/Uncontrolled exposure (E=614 V/m, H=1.63 A/m)			
Antenna Specification	Type: Winded wire coil Door antennas: Continental / A2C 98 300 400 / Gain: 0 dBi Interior antennas: Continental / A2C 53 119 236 / Gain: 0 dBi Kazashi: Kazashi / 251 50 5RA0A / Gain: 0 dBi			
Evaluation applied	<ul> <li>         ☐ MPE Evaluation*         ☐ Maximum Permissible Evaluation         ☐ SAR Evaluation         ☐ N/A</li> </ul>			
Received Date	October 3, 2022			
Date of Test	October 21, 2022			
Product version	Product version   PMN:			
EUT Serial number	20744925062038			

#### Remark:

- 1. For more details, please refer to the User's manual of the EUT.
- 2. Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.



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## 3. MEASUREMENT EQUIPMENT USED

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: TW1309

### **Equipment Used for Emissions Measurement**

RF Conducted Test Site									
Equipment	Manufacturer	Model	S/N	Cal Date	Cal Due				
Isotropic Electric & Magnetic Field Probe	Narda	EHP-200AC	180ZX11018	2022-03-10	2023-03-09				
Software			N/A						

#### **MEASUREMENT UNCERTAINTY**

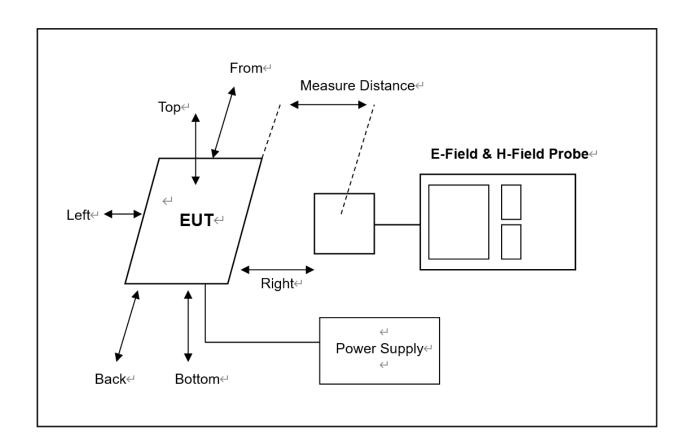
Parameter	Frequency Expanded Uncertainty (dB)		k
Electric Field Strength	9KHz ~300KHz	± 16.14 %	2
	300KHz ~10MHz	± 17.91 %	2
Magnetic Field Strongth	9KHz ~300KHz	± 17.92 %	2
Magnetic Field Strength	300KHz ~10MHz	± 17.58 %	2



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#### **SUPPORT EQUIPMENT**

No.	Device Type	Brand	Model	Series No.
	N/A			





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## 4. MAXIMUM PERMISSIBLE EXPOSURE

## 4.1 Limits for Maximum Permissible Exposure

**Table 1 - Limits for Maximum Permissible Exposure** 

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)				
(A) Limits for Occupational/Controlled Exposure								
0.3-3.0	614	1.63	* 100	6				
3.0-30	1842/f	4.89/f	* 900/f <sup>2</sup>	6				
30-300	61.4	0.163	1.0	6				
300-1,500			f/300	6				
1,500-100,000			5	6				
(E	3) Limits for Gene	ral Population/Und	controlled Exposu	re				
0.3-1.34	614	1.63	* 100	30				
1.34-30	824/f	2.19/f	* 180/f <sup>2</sup>	30				
30-300	27.5	0.073	0.2	30				
300-1,500			f/1500	30				
1,500-100,000			1.0	30				



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## 5. TEST RESULTS

Temperature: 24.1°C Test Date: October 21, 2022

**Humidity:** 56.8% RH **Tested by:** Jack Yang

Operating Frequency (kHz): 125 kHz

E-Field										
Operating Frequency (kHz)	Distance (cm)	Meas Frequ Rar	iency	Probe position Front (V/m)	Probe position Back (V/m)	Probe position Left Side (V/m)	Probe position Right Side (V/m)	Probe position Top (V/m)	Probe position Bottom (V/m)	Limit (V/m)
125	4.5	125	kHz	2.9941	2.8775	4.5612	2.9645	3.3955	6.3110	614

	H-Field									
Operating Frequency (kHz)	Distance (cm)	Measure Frequenc Range	nocition	Probe position Back (A/m)	Probe position Left Side (A/m)	Probe position Right Side (A/m)	Probe position Top (A/m)	Probe position Bottom (A/m)	Limit (A/m)	
125	4.5	125 kH	z 1.3134	0.8729	0.5390	1.3776	1.4232	1.2327	1.63	

#### Remark:

- 1. The measured distance is from the edge of the device to the centre of the measurement probe.
- 2. There are no emissions produced by the device outside of the investigated frequency range.
- 3. For Distance 4.5cm, that is the measurement probe touched directly to the surface of the EUT.

### - End of Test Report -

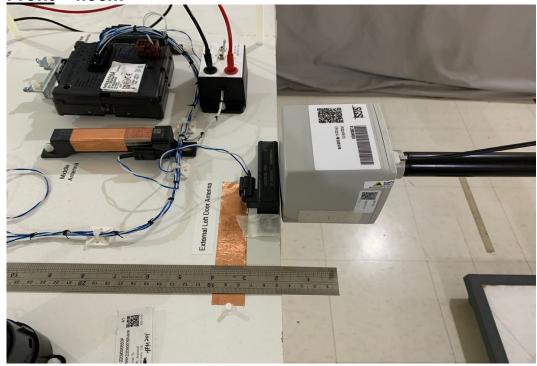


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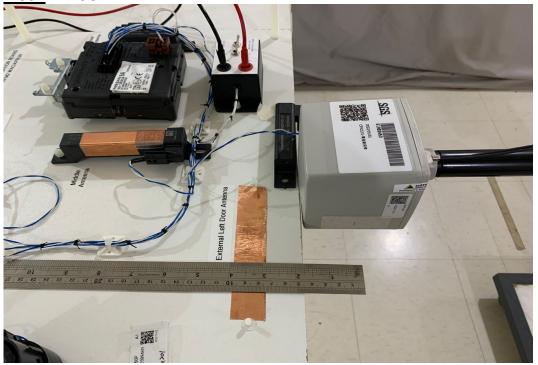
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# 6. PHOTOGRAPHS OF TEST SETUP

Front - 4.5cm



Rear - 4.5cm





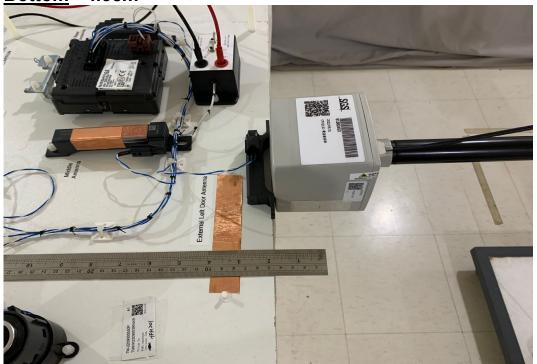
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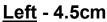
Bottom - 4.5cm

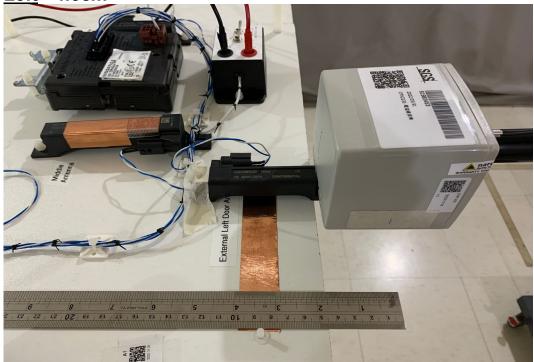




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Right - 4.5cm

