



TEST REPORT

Eurofins KCTL Co.,Ltd. 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea TEL: 82-70-4904-0113 FAX: 82-505-299-8311 www.kctl.co.kr	Report No.: KR26-SRF0122 Page(1) of (6)	KCTL
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1. Client

- Name : Ettifos Co.
- Address : 405, 41, Beolmal-ro 50beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, South Korea
- Date of Receipt : 2026-04-10

2. Use of Report : Certification

3. Name of Product / Model : ESAC OBU / ETF-SAC-OC5N01

4. Manufacturer / Country of Origin : Ettifos Co. / Korea

5. FCC ID : 2BHJLETF-SAC-OC5N01

6. Date of Test : 2026-06-01 to 2026-06-08

7. Location of Test : ☒ Permanent Testing Lab ☐ On Site Testing
 (Address: 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea)

8. Test method used : 47 CRF Part 1.1310

9. Test Result : Refer to the test result in the test report

Affirmation	Tested by Name : Sunghyun Yoon (Signature)	Technical Manager Name : Kwonse Kim (Signature)
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2026-06-08

Eurofins KCTL Co.,Ltd.

As a test result of the sample which was submitted from the client, this report does not guarantee the whole product quality. This test report should not be used and copied without a written agreement by Eurofins KCTL Co.,Ltd.

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REPORT REVISION HISTORY

Date	Revision	Page No
2026-06-08	Originally issued	-

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General remarks for test reports

Statement concerning the uncertainty of the measurement systems used for the tests

(may be required by the product standard or client)

☐ Internal procedure used for type testing through which traceability of the measuring uncertainty has been established:

Procedure number, issue date and title:

Calculations leading to the reported values are on file with the testing laboratory that conducted the testing.

☒ Statement not required by the standard or client used for type testing

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1. General information

Client : Ettifos Co.
 Address : 405, 41, Beolmal-ro 50beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, South Korea
 Manufacturer : Ettifos Co.
 Address : 405, 41, Beolmal-ro 50beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, South Korea
 Laboratory : Eurofins KCTL Co.,Ltd.
 Address : 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea
 Accreditations : FCC Site Designation No: KR0040, FCC Site Registration No: 687132
 VCCI Registration No. : R-20080, G-20078, C-20059, T-20056
 CAB Identifier: KR0040
 ISED Number: 8035A
 KOLAS No.: KT231

2. Device information

Equipment under test : ESAC OBU
 Model : ETF-SAC-OC5N01
 Modulation technique : C-V2X : 16QAM
 Power source : DC 12 V, 24 V
 Antenna specification : Antenna 1 : Dipole Array Antenna
 : Antenna 2 : Dipole Array Antenna
 Antenna gain : Antenna 1 : 2.51 dBi
 : Antenna 2 : 3.45 dBi
 Frequency range : C-V2X : 5 905 MHz ~ 5 925 MHz
 Bandwidth : C-V2X : 20 MHz
 Software version : V0.1.1
 Hardware version : V1.0
 Test device serial No. : SAN-ETF261001
 Operation Temperature : -40 °C ~ 70 °C

2.1. Frequency/channel operations

This device contains the following capabilities:
 C-V2X

Ch.	Frequency (MHz)
183	5 915

Table 2.1-1. 20M BW

3. RF Exposure

3.1 Regulation

This document is prepared to show compliance with the RF Exposure requirements as required in §1.1310 of the FCC rules and Regulations.

The limit for Maximum Permissible Exposure (MPE), specified in FCC §1.1310, is listed in Table 1-1. According to FCC §1.1310: the criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified in §1.1307(b).

Table 1 – Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength [V/m]	Magnetic Field Strength [A/m]	Power Density [mW/cm ²]	Averaging Time [minute]
(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 ²	6
30 ~ 300	61.4	0.163	1.0	6
300 ~ 1 500	/	/	f/300	6
1 500 ~ 15 000	/	/	5	6
(B) Limits for General Population / Uncontrolled Exposure				
0.3 ~ 1.34	614	1.63	*100	30
1.34 ~ 30	824/f	2.19/f	*180/f ²	30
30 ~ 300	27.5	0.073	0.2	30
300 ~ 1 500	/	/	f/1 500	30
1 500 ~ 15 000	/	/	1.0	30

f=frequency in MHz, *= plane-wave equivalent power density

3.2 MPE (Maximum Permissible Exposure) Prediction

Predication of MPE limit at a given distance: Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2} \quad (\Rightarrow R = \sqrt{\frac{PG}{4\pi S}})$$

S = power density [mW/cm²]

P = Power input to antenna [mW]

G = Power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna [cm]

3.1. Test results

Calculation Result of RF exposure

Maximum tune-up tolerance

Mode	Frequency Range [MHz]	Max Tune-up Power [dBm]	Ant Gain [dBi]	Distance [cm]	Power density [mW/cm²]	Limit [mW/cm²]
C-V2X	5 905 - 5 925	22.00	3.45	20.00	0.069 780	1.00

Note:

1. EUT operates as 2TX SISO, and Max Tune-up Power per ANT is the same, and the MPE value was calculated based on ANT 2 with a higher Antenna Gain value.

End of test report