



SPOT CHECK EVALUATION

FCC ID : LHJ-BL28NARD2
Equipment : BL28NA-RD2
Brand Name : Continental
Model Name : BL28NA-RD2
Applicant : Continental Automotive Systems, Inc.
21440 W Lake Cook Rd., Deer Park, IL 60010, USA
Manufacturer : Continental Automotive Systems, Inc.
21440 W Lake Cook Rd., Deer Park, IL 60010, USA
Standard : 47 CFR Part 2, 22(H), 24(E), 27(L)

The product was received on Oct. 17, 2022 and testing was performed from Oct. 28, 2022 to Oct. 29, 2022. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this spot check data report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)



Table of Contents

History of this test report.....	3
1. Introduction Section	4
2. Difference Section.....	5
3. Spot Check Verification Data Section	6
4. Reference detail Section	7
5. List of Measuring Equipment& Setup Plots	8



1. Introduction Section

Continental. hereby declares that the WWAN GPRS850/1900, WCDMA Band II/IV/V, LTE Band 2/4/5/7/12 hardware and digital circuit of LHJ-BL28NARD2 are identical to LHJ-BL28NARD1.

Therefore the following report of LHJ-BL28NARD1 may be used as reference test data for LHJ-BL28NARD2, along with the spot check verification data following the FCC KDB 484596 D01 v01.

The applicant should take full responsibility that the test data as referenced in this report represent compliance for this FCC ID: LHJ-BL28NARD2.



2. Difference Section

The difference between LHJ-BL28NARD1 and LHJ-BL28NARD2:

Continental. declares that LHJ-BL28NARD2 does not support WWAN LTE Band 13. All WWAN LTE Band 13 components have been deprecated. There is no difference between LHJ-BL28NARD1 and LHJ-BL28NARD2 in terms of WWAN GPRS850/1900, WCDMA Band II/IV/V, LTE Band 2/4/5/7/12.



3. Spot Check Verification Data Section

Conducted power test and radiated spurious emission test against the variant model based on the worst-case condition from the original model was performed in this filing and the verification test results Similar to the original FCC ID. Detail spot check test result can be found in the variant model report, please refer to detail section table in section 4.

Summary of the spot check:

Test Item	Mode	LHJ-BL28NARD1 Worst Result	LHJ-BL28NARD2 Worst Result	Difference (dB)
Average Conducted Power (dBm)	WWAN GSM/GPRS 850	32.54	31.87	0.67
	WWAN GSM/GPRS 1900	29.28	28.98	0.30
	WWAN WCDMA Band II	22.97	22.38	0.59
	WWAN WCDMA Band IV	23.18	22.53	0.65
	WWAN WCDMA Band V	23.15	22.75	0.40
	WWAN LTE Band 2	22.86	22.85	0.01
	WWAN LTE Band 4	23.22	23.15	0.07
	WWAN LTE Band 5	23.26	23.18	0.08
	WWAN LTE Band 7	22.78	22.72	0.06
	WWAN LTE Band 12	23.64	23.56	0.08
Radiated Spurious Emission (Harmonic) (dBuV/m)	WWAN GSM/GPRS 850	-27.40	-30.91	3.51
	WWAN WCDMA Band IV	-26.82	-32.53	5.71
	WWAN LTE Band 7	-8.51	-18.08	9.57
	WWAN LTE Band 12	-24.37	-24.30	0.07



4. Reference detail Section

Rule Part	Equipment Class	Wireless Technology	Frequency Band (MHz)	Reference FCC ID	Reference Title
Part22.24.27	PCE	GSM/WCDMA	GSM850/1900 WCDMA BIII/IV/V	LHJ-BL28NARD1	Part 22.24.27 (FG931416A)
		LTE	LTE B2/B4/B5/B7/B12	LHJ-BL28NARD1	Part 22.24.27 (FG931416B, FG120221-02)



5. List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	May 13, 2022	Oct. 28, 2022~ Oct. 29, 2022	May 12, 2023	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01 N-06	40103 & 07	30MHz~1GHz	Apr. 24, 2022	Oct. 28, 2022~ Oct. 29, 2022	Apr. 23, 2023	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01 N-06	41912 & 05	30MHz~1GHz	Feb. 06, 2022	Oct. 28, 2022~ Oct. 29, 2022	Feb. 05, 2023	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1241	1-18GHz	Jul. 25, 2022	Oct. 28, 2022~ Oct. 29, 2022	Jul. 24, 2023	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1212	1GHz~18GHz	Mar. 10, 2022	Oct. 28, 2022~ Oct. 29, 2022	Mar. 09, 2023	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA9170	00993	18GHz~40GHz	Nov. 30, 2021	Oct. 28, 2022~ Oct. 29, 2022	Nov. 29, 2022	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA917057 6	18GHz~40GHz	May 14, 2022	Oct. 28, 2022~ Oct. 29, 2022	May 13, 2023	Radiation (03CH13-HY)
Amplifier	SONOMA	310N	187282	9kHz~1GHz	Dec. 15, 2021	Oct. 28, 2022~ Oct. 29, 2022	Dec. 14, 2022	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	May 17, 2022	Oct. 28, 2022~ Oct. 29, 2022	May 16, 2023	Radiation (03CH13-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 24, 2021	Oct. 28, 2022~ Oct. 29, 2022	Dec. 23, 2022	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY53270147	1GHz~26.5GHz	Oct. 25, 2022	Oct. 28, 2022~ Oct. 29, 2022	Oct. 24, 2023	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY55370526	10Hz~44GHz	Mar. 18, 2022	Oct. 28, 2022~ Oct. 29, 2022	Mar. 17, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9 kHz~30 MHz	Mar. 10, 2022	Oct. 28, 2022~ Oct. 29, 2022	Mar. 09, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30MHz~18GHz	Feb. 09, 2022	Oct. 28, 2022~ Oct. 29, 2022	Feb. 08, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30MHz~18GHz	Feb. 09, 2022	Oct. 28, 2022~ Oct. 29, 2022	Feb. 08, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	804793/4	30MHz~18GHz	Feb. 09, 2022	Oct. 28, 2022~ Oct. 29, 2022	Feb. 08, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Feb. 21, 2022	Oct. 28, 2022~ Oct. 29, 2022	Feb. 20, 2023	Radiation (03CH13-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Filter	Wainwright	WHKX12-108 0-1200-15000- 60SS	SN3	1.2GHz High Pass Filter	Jun. 30, 2022	Oct. 28, 2022~ Oct. 29, 2022	Jun. 29, 2023	Radiation (03CH13-HY)
Filter	Wainwright	WLK4-1000-1 530-8000-40S S	SN12	1.53GHz Low Pass Filter	Sep. 13, 2022	Oct. 28, 2022~ Oct. 29, 2022	Sep. 12, 2023	Radiation (03CH13-HY)
Filter	Wainwright	WHKX12-270 0-3000-18000- 60SS	SN2	3GHz High Pass Filter	Jul. 12, 2022	Oct. 28, 2022~ Oct. 29, 2022	Jul. 11, 2023	Radiation (03CH13-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Oct. 28, 2022~ Oct. 29, 2022	N/A	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500- B	N/A	1m~4m	N/A	Oct. 28, 2022~ Oct. 29, 2022	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Oct. 28, 2022~ Oct. 29, 2022	N/A	Radiation (03CH13-HY)
Hygrometer	TECPEL	DTM-303B	TP200722	N/A	Mar. 22, 2022	Oct. 28, 2022~ Oct. 29, 2022	Mar. 21, 2023	Radiation (03CH13-HY)

END of this report