FCC RF Test Report

APPLICANT : Bullitt Group EQUIPMENT : Mobile Phone

BRAND NAME : CAT MODEL NAME : B35

FCC ID : ZL5B35EPA

STANDARD : 47 CFR Part 15 Subpart C §15.247 CLASSIFICATION : (DTS) Digital Transmission System

This is a data re-used report which is only valid together with the original test report. We, Sporton International (Kunshan) Inc., 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 report apply exclusively to the tested model / sample. Without written approval of Sporton International (Kunshan) Inc., the test report shall not be reproduced except in full.

Reviewed by: Jason Jia / Supervisor

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Approved by: James Huang / Manager

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Sporton International (Kunshan) Inc.

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Report Version : Rev. 02

Cert #5145.02

Report No.: FR9D1021-02C

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REVISION HISTORY

VERSION	DESCRIPTION	ISSUED DATE		
Rev. 01	Initial issue of report	Feb. 28, 2020		
	Add the test site information.			
Rev. 02	Add the test setup photo.	Mar. 02, 2020		
	Revise the applicant information.			
	Rev. 01	Rev. 01 Initial issue of report Add the test site information. Rev. 02 Add the test setup photo.		

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1 General Description

1.1 Applicant

Bullitt Group

One Valpy, Valpy Street, Reading, Berkshire, England RG1 1AR

1.2 Manufacturer

Bullitt Group

One Valpy, Valpy Street, Reading, Berkshire, England RG1 1AR

1.3 Product Feature of Equipment Under Test

Product Feature					
Equipment	Mobile Phone				
Brand Name	CAT				
Model Name	B35				
FCC ID	ZL5B35EPA				
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/ HSPA+(16QAM uplink is not supported)/LTE/GNSS WLAN 2.4GHz 802.11b/g/n HT20/HT40 Bluetooth BR/EDR/LE FM Receiver				
HW Version	MP_NZ				
SW Version	LTE_0208120.0_B35_53				
EUT Stage	Identical Prototype				

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Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification				
Tx/Rx Channel Frequency Range	2412 MHz ~ 2462 MHz			
Antenna Type / Gain	PIFA Antenna type with gain 0.50 dBi			
Type of Modulation	802.11b: DSSS (DBPSK / DQPSK / CCK)			
Type of Modulation	802.11g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM)			

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

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1.6 Testing Location

Sporton International (Kunshan) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

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Test Firm	Sporton International (Kunshan) Inc.				
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China				
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	FAX: +86-512-57900958				
	Sporton Sito No	ECC Designation No.	FCC Test Firm		
Test Site No.	Sporton Site No.	FCC Designation No.	Registration No.		
	03CH05-KS	CN1257	314309		

1.7 Test Software

Item	Site	Manufacture	Name	Version	
1.	03CH05-KS	AUDIX	E3	6.2009-8-24al	

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1.8 Re-use of Measured Data

1.6.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: B35, FCC ID: ZL5B35EPA) is electrically identical to the reference device (Model: B35, FCC ID: ZL5B35E) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

1.6.2 Difference Section

For details concerning the similarity with respect to component placement, mechanical/electrical design etc., please refer to the Product Equality Declaration.

The re-used RF data includes the following bands provided in Appendix B (Sporton RF Report No. FR840307-04C for the reference device Model: B35, FCC ID: ZL5B35E).

1.6.3 Reference detail Section:

Equipment Class	Reference FCC ID	Folder Test	Report Title/Section	
			RSE retest due to the	
	ZL5B35E		spot check data is	
Dec (DD/EDD)		Dor#15C/ED940207.04A)	15.22dB worse than	
DSS (BR/EDR)		Part15C(FR840307-04A)	original, all the other	
			test items are	
			applicable.	
DTS (BLE)	ZL5B35E	Part15C(FR840307-04B)	All sections applicable	
DTS (WLAN)	ZL5B35E	Part15C(FR840307-04C)	All sections applicable	

1.6.4 Spot Check Verification Data Section

In order to confirm hardware similarity of the subject device with the reference device, spot check measurements were performed on the subject device for the following test items, the test result were consistent with FCC ID: ZL5B35E.

Assertions concerning the similarity of these devices are based on representations by the applicant. The applicant accepts full responsibility for the validity of the similarity claim, and for the determination that verification test data are sufficient to support it.

Test Item	Mode	ZL5B35E Worst Result	ZL5B35EPA Worst Result	Difference (dB)	
Radiated	BT (BR/EDR)	43.57	58.79	15.22	
Spurious Emission	BT (LE)	39.1	43.49	4.39	
(dBuV/m)	11b, 2.4GHz	53.08	50.81	-2.27	

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2 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	Keysight	N9038A	MY572901 51	3Hz~8.5GHz;M ax 30dBm	Jul. 18, 2019	Feb. 14, 2020	Jul. 17, 2020	Radiation (03CH05-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY551502 44	10Hz-44G,MAX 30dB	Apr. 16, 2019	Feb. 14, 2020	Apr. 15, 2020	Radiation (03CH05-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 10, 2019	Feb. 14, 2020	Nov. 09, 2020	Radiation (03CH05-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	May 30, 2019	Feb. 14, 2020	May 29, 2020	Radiation (03CH05-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75959	1GHz~18GHz	Jan. 26, 2020	Feb. 14, 2020	Jan. 25, 2021	Radiation (03CH05-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 08, 2020	Feb. 14, 2020	Jan. 07, 2021	Radiation (03CH05-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Aug. 06, 2019	Feb. 14, 2020	Aug. 05, 2020	Radiation (03CH05-KS)
Amplifier	MITEQ	TTA1840-35- HG	2014749	18~40GHz	Jan. 14, 2020	Feb. 14, 2020	Jan. 13, 2021	Radiation (03CH05-KS)
high gain Amplifier	MITEQ	AMF-7D-0010 1800-30-10P	2025788	1Ghz-18Ghz	Aug. 17, 2019	Feb. 14, 2020	Aug. 16, 2020	Radiation (03CH05-KS)
Amplifier	Keysight	83017A	MY532703 16	500MHz~26.5G Hz	Oct. 18, 2019	Feb. 14, 2020	Oct. 17, 2020	Radiation (03CH05-KS)
AC Power Source	Chroma	61601	F1040900 04	N/A	NCR	Feb. 14, 2020	NCR	Radiation (03CH05-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Feb. 14, 2020	NCR	Radiation (03CH05-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Feb. 14, 2020	NCR	Radiation (03CH05-KS)

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NCR: No Calibration Required

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Appendix B. Reference Report

Please refer to Sporton report number FR840307-04C which is issued separately.

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