Spot Check Evaluation

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Testing Laboratory
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TABLE OF CONTENTS

History of this test report

Version	Description	Issued Date
01	Initial issue of report	Nov. 05, 2018

1. Introduction Section

The original model (FCC ID: IHDT56XP1) and the variant model (FCC ID: IHDT56XP2) has identical PCB layout, antenna, SW implementation for GSM/WCDMA/LTE. Based on their similarity, the FCC Part 22, 24, 27 (equipment class: PCS) test data issued test data of IHDT56XP2 references the test data of IHDT56XP1.

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID (FCC ID: IHDT56XP2).

2. Difference Section

The original model (FCC ID: IHDT56XP1) and the variant model (FCC ID: IHDT56XP2) has identical PCB layout, antenna, SW implementation for GSM/WCDMA/LTE. Based on their similarity, the FCC Part 22, 24, 27 (equipment class: PCS) test data issued test data of IHDT56XP2 references the test data of IHDT56XP1

Cellular transmitter RF components are different in IHDT56XP2, to support capability for different cellular bands.

The product specification is outlined in the following table:

FCC ID			IHDT56XP1	IHDT56XP2
Wireless Tech	**Mode**		**Frequency (MHz)**	
GSM	GSM Voice GPRS (GMSK) EDGE (8PSK)	Multi-Slot Class 12 DTM: No	850/1900	850/1900
UMTS	AMR/RCM12.2Kbps HSDPA/HSUPA/DC-HSDPA		B5/B4/B2	B5/B4/B2
CDMA2000	QPSK 8PSK		BC0/BC1/BC10	N/A
LTE (FDD)	QPSK 16QAM		B2/4/5/7/12/13/17/25/26/38/41/66	B2/4/5/7/12/17/66
Wi-Fi	11b/11g/11n(HT20)		2412-2462	
	11a/11n(HT20)/11n(HT40)		5180-5240 5260-5320 5500-5700 5745-5825 *5600-5650 notched	
Bluetooth	V4.2 LE		2402-2480 MHz	

3. Spot Check Verification Data Section

Summary of the spot check:

Test Item	Mode	IHDT56XP1 Worst Result	IHDT56XP2 Worst Result	Difference (dB)
Average Conducted Power (dBm)	GSM 850	33.33	33.20	0.13
	EDGE 850	26.83	26.93	-0.1
	GSM 1900	29.80	29.82	-0.02
	EDGE 1900	25.92	25.90	0.02
	UMTS B2 (RMC 12.2Kbps)	23.10	23.16	-0.06
	UMTS B4 (RMC 12.2Kbps)	23.15	22.91	0.24
	UMTS B5 (RMC 12.2Kbps)	23.26	23.45	-0.19
	LTE B2 (FDD - QPSK)	22.46	23.10	-0.64
	LTE B4 (FDD - QPSK)	22.95	23.30	-0.35
	LTE B5 (FDD - QPSK)	23.19	23.40	-0.21
	LTE B7 (FDD - QPSK)	23.14	23.42	-0.28
	LTE B12 (FDD - QPSK)	23.32	23.42	-0.1
	LTE B17 (FDD - QPSK)	23.20	23.32	-0.12
	LTE 66 (FDD - QPSK)	22.92	23.09	-0.17
	IMEI of test sample	355569090014734 355569090014213	355570090015416 355570090015424	
	Test date	2018/09/21~2018/10/06	2018/09/28	

Conclusion:

Radiated spurious emission test against the variant model for non-cellular part based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.

Based on the spot check test result (power levels measured are within 1dB, and are compliance with the limits), the test data from the original model is representative for the variant model.

4. Reference detail Section

Rule Part	Equipment Class	Wireless Technology	Band	Reference FCC ID	Type Grant/Permissive Change	Reference Report Title	Reference Application	Reference Report Sections
Part 22.24.27	PCS	GSM/WCDMA	GSM 850/1900 WCDMA B2/4/5	IHDT56XP1	Original Grant	FCC RF Test Report	IHDT56XP2	Part 22.24.27 (FG890804A)
		LTE	B2/4/5/7/12/17/66	IHDT56XP1	Original Grant	FCC RF Test Report	IHDT56XP2	Part 22.24.27 (FG890804C)

End of this report