

Appendix D. Spot Check Evaluation

1. Introduction Section

This report referenced from the FCC ID: IHDT56WA1
(DTS, DSS and U-NII)

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID (FCC ID: IHDT56WA3).

2. Difference Section

The WLAN (DTS, U-NII) and Bluetooth SAR measurement results from the original filling can be found in SAR test report FCC ID: IHDT56WA1, Sporton Report No: FA720310 or appendix E.

The WLAN antennas and surrounding circuitry is the same between these two devices, and tune up power targets are identical for WLAN operations; Therefore SAR data for WLAN form the original filling was used for this model and spot checks for WLAN were performed to ensure that the SAR measurements for both devices are the same, for details of similarity and difference between these two devices which can be found in the Operating Description.

The product specification is outlined in the following table:

FCC ID			IHDT56WA1	IHDT56WA3
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		B2/B4/B5	B2/B5
CDMA	1xRTT/1xEv-Do(Rev.0)/ 1xEv-Do(Rev.A)		BC0/BC1/BC10	N/A
LTE (FDD/TDD)	QPSK 16QAM		B2/B4/B5/B7/B12/B13/ B17/B25/B26/B30/B66/ B38/B41	B5/B7/B38/B41
Wi-Fi	11b/11g/11n(HT20)		2412-2462	
	11a/11n(HT20)/11n(HT40)		5180-5240 5260-5320 5500-5720 5745-5825	
Bluetooth	BR/EDR/LE		2402-2480 MHz	
NFC	ASK		13.56 MHz	

3. Spot Check Verification Data Section

<Head SAR>

Band	Mode	Test Position	Gap (mm)	Ch.	Freq. (MHz)	Original Model(FCC ID: IHDT56WA1)					Spot Check Model (FCC ID: IHDT56WA3)					Deviation
						Average Power (dBm)	Tune-Up Limit (dBm)	Duty Cycle %	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Average Power (dBm)	Tune-Up Limit (dBm)	Duty Cycle %	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	
WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	1	2412	15.92	16.00	97.63	1.240	1.292	15.80	16.00	97.63	1.150	1.233	-4.6%
WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	54	5270	15.31	15.50	85.14	0.949	1.165	15.33	15.50	85.14	0.895	1.094	-6.1%
WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	134	5670	15.46	15.50	85.14	1.080	1.281	15.34	15.50	85.14	0.907	1.106	-13.7%
WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	151	5755	15.31	15.50	85.14	1.060	1.301	15.41	15.50	85.14	0.992	1.190	-8.5%

<Hotspot SAR>

Band	Mode	Test Position	Gap (mm)	Ch.	Freq. (MHz)	Original Model(FCC ID: IHDT56WA1)					Spot Check Model (FCC ID: IHDT56WA3)					Deviation	
						Average Power (dBm)	Tune-Up Limit (dBm)	Duty Cycle %	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Measured 1g SAR (W/kg)		Reported 1g SAR (W/kg)
WLAN2.4GHz	802.11b 1Mbps	Back	10mm	6	2437	18.63	19.00	97.63	0.361	0.403	18.50	19.00	1.122	97.63	0.318	0.365	-9.4%
WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	46	5230	20.08	20.50	85.14	0.364	0.471	20.32	20.50	1.042	85.14	0.342	0.419	-11.0%
WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	159	5795	18.50	19.00	85.14	0.226	0.298	18.40	19.00	1.148	85.14	0.208	0.281	-5.7%

<Product specific SAR>

Band	Mode	Test Position	Gap (mm)	Ch.	Freq. (MHz)	Original Model(FCC ID: IHDT56WA1)					Spot Check Model (FCC ID: IHDT56WA3)					Deviation	
						Average Power (dBm)	Tune-Up Limit (dBm)	Duty Cycle %	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Measured 1g SAR (W/kg)		Reported 1g SAR (W/kg)
WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	54	5270	19.66	19.70	85.14	1.910	2.265	19.14	19.70	1.138	85.14	1.530	2.045	-9.7%
WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	110	5550	18.87	19.20	85.14	2.180	2.764	18.80	19.20	1.096	85.14	1.837	2.367	-14.4%

<Body-Worn SAR>

Band	Mode	Test Position	Gap (mm)	Ch.	Freq. (MHz)	Original Model(FCC ID: IHDT56WA1)					Spot Check Model (FCC ID: IHDT56WA3)					Deviation	
						Average Power (dBm)	Tune-Up Limit (dBm)	Duty Cycle %	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Measured 1g SAR (W/kg)		Reported 1g SAR (W/kg)
WLAN2.4GHz	802.11b 1Mbps	Back	10mm	6	2437	18.63	19.00	97.63	0.361	0.403	18.50	19.00	1.122	97.63	0.318	0.365	-9.4%
WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	54	5270	19.66	19.70	85.14	0.437	0.518	19.24	19.70	1.112	85.14	0.327	0.427	-17.6%
WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	142	5710	18.30	19.20	85.14	0.373	0.539	18.35	19.20	1.216	85.14	0.314	0.449	-16.7%
WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	159	5795	18.50	19.00	85.14	0.226	0.298	18.40	19.00	1.148	85.14	0.208	0.281	-5.7%
Bluetooth	1Mbps	Back	10mm	39	2441	11.96	12.00	76.60	0.060	0.066	11.96	12.00	1.009	76.60	0.059	0.065	-1.5%

Note: The spot check verification shows SAR performance of IHDT56WA1 represents the performance of IHDT56WA3.

4. Reference detail Section

Rule Part	Frequency Band (MHz)	Wireless Technology	Reference FCC ID	Reference Report Title	Reference Report No.	Reference Report Sections
15C	2402~2480	Bluetooth	IHDT56WA1	FCC SAR Test Report	FA720310	Sections related to Bluetooth test data
15C	2412~2462	Wi-Fi	IHDT56WA1	FCC SAR Test Report	FA720310	Sections related to WiFi test data
15E	5180~5240 5260~5320 5500~5720 5745~5825	Wi-Fi	IHDT56WA1	FCC SAR Test Report	FA720310	Sections related to WiFi test data