MOTOROLA SOLUTIONS

SAMM 826

CERTIFICATE 2518.05

DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 4 of 4

Motorola Solutions Inc.
EME Test Laboratory
Motorola Solutions Malaysia Sdn Bhd
Plot 2A, Medan Bayan Lepas,
Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia.

Date of Report: 01/30/2023
Report Revision: I

Responsible Engineer:	Saw Sun Hock (EME Engineer)
Report Author:	Kin Kting Lee (EME Technician)
Date/s Tested:	8/24/2022-8/30/2022, 9/4/2022-9/13/2022, 11/13/2022 – 11/25/2022
Manufacturer:	Motorola Solutions Inc.
DUT Description:	Handheld Portable – WAVE PTX TWO WAY RADIO
Test TX mode(s):	LTE, WCDMA, WLAN, BT / BT LE
Max. Power output:	Refer table 3 (Part 1 of 4)
Nominal Power output:	Refer table 3 (Part 1 of 4)
Tx Frequency Bands:	Refer table 3 (Part 1 of 4)
Signaling type:	QPSK, 16QAM, 64QAM, QPSK, DSSS, OFDM, SC-FDMA, RMC/AMR 12.2Kbps, HSDPA, HSUPA
Model(s) Tested:	HK2183A [HKUN4243A]
Model(s) Certified:	HK2183A [HKUN4243A], HK2184A [HKUN4245A]
Serial Number(s):	642QYQ0178, 642QYQ0141, 642QYU0102 and 642QYU0031
Firmware Version:	TAURUS_BASE_D00.00.02_APP_D00.01.63
Classification:	General Population / Uncontrolled Environment
Applicant Name:	Motorola Solutions Inc.
Applicant Address:	8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322
FCC ID:	AZ489FT7166
FCC Test Firm Registration Number:	823256
IC:	109U-89FT7166
ISED Test Site registration:	24843

The test results clearly demonstrate compliance with General Population / Uncontrolled RF Exposure limits of 1.6 W/kg averaged over 1 gram per the requirements of FCC 47 CFR § 2.1093 and RSS-102 (Issue 5)

Based on the information and the testing results provided herein, the undersigned certifies that when used as stated in the operating instructions supplied, said product complies with the national and international reference standards and guidelines listed in section 4.0 of this report (no deviation from standard methods). This report shall not be reproduced without written approval from an officially designated representative of the Motorola Solutions Inc EME Laboratory.
I attest to the accuracy of the data and assume full responsibility for the completeness of these measurements. This reporting format is consistent with the suggested guidelines of the TIA TSB-150 December 2004. The results and statements contained in this report pertain only to the device(s) evaluated.

Saw Sun Hock (Approval Signatory)
Approval Date: 01/30/2023

Part 4 of 4

1.0 System Validation for LTE

The SAR measurement system was validated according to procedures in KDB 865664. The validation status summary Table is below.

Table 1

Dates	Probe Calibration Point		Probe SN	Measured Tissue Parameters		Validation		
				σ	ϵ_r	Sensitivity	Linearity	Isotropy
CW								
06/23/2022	Head	750	7519	0.86	43.60	Pass	Pass	Pass
06/25/2022		1800		1.38	39.60	Pass	Pass	Pass
06/25/2022		1900		1.38	39.60	Pass	Pass	Pass
06/27/2022		2600		1.90	39.70	Pass	Pass	Pass
LTE								
06/23/2022	Head	750 (1 RB)	7519	0.86	43.60	Pass	Pass	Pass
06/23/2022		750 (50% RB)		0.86	43.60	Pass	Pass	Pass
06/25/2022		1800 (1 RB)		1.38	39.60	Pass	Pass	Pass
06/25/2022		1800 (50% RB)		1.38	39.60	Pass	Pass	Pass
06/25/2022		1900 (1 RB)		1.44	39.50	Pass	Pass	Pass
06/25/2022		1900 (50% RB)		1.44	39.50	Pass	Pass	Pass
06/27/2022		2600 (1 RB)		1.90	39.70	Pass	Pass	Pass
06/27/2022		2600 (50% RB)		1.90	39.70	Pass	Pass	Pass

2.0 System Verification for LTE

System verification checks were conducted each day during the SAR assessment. The results are normalized to 1W. Appendix D includes DASY plots with the largest deviation from the qualified source SAR target for each dipole. The Table below summarizes the daily system check results used for the SAR assessment.

Table 2

Probe Serial #	Tissue Type	Dipole Kit / Serial #	Reference SAR @ 1W (W/kg)	System Check Results Measured (W/kg)	System Check Test Results when normalized to 1W (W/kg)	Tested Date
7519	IEEE/IEC Head	SPEAG D750V3 / 1098	8.54 ± 10%	2.13	8.52	08/24/2022#
				2.16	8.64	08/25/2022
				2.30	9.08	11/15/2022#
		SPEAG D1800V2 / 2d120	38.70 ± 10%	8.76	35.04	08/25/2022#
				9.77	39.08	08/26/2022#
				9.15	36.60	08/27/2022
		SPEAG D1800V2 / 2d119	38.50 ± 10%	10.0	40.0	11/16/2022#
				1.22	38.61	11/24/2022
		SPEAG D1900V2 / 5d065	40.50 ± 10%	10.30	41.20	08/27/2022
		SPEAG D2450V2 / 782	54.40 ± 10%	1.61	50.95	11/16/2022#
		SPEAG D2600V2 / 1011	57.30 ± 10%	13.90	55.60	0828/2022
				15.00	60.00	08/29/2022

Note: # denotes that the system verification check covers next testing day (within 24 hours)

3.0 Equivalent Tissue Test Results for LTE

Simulated tissue prepared for SAR measurements are measured daily and within 24 hours of SAR testing to verify that the tissue is within +/- 5% of target parameters for each tested channel. The table below summarizes the measured tissue parameters used for the SAR assessment.

Table 3

Frequency (MHz)	Tissue Type	Conductivity Target (S/m)	Dielectric Constant Target	Conductivity Meas. (S/m)	Dielectric Constant Meas.	Tested Date
708	IEEE/IEC Head	0.89 (0.84-0.93)	42.1 (40-44.2)	0.86	42.8	08/24/2022#
				0.85	43.4	11/15/2022
750		0.89 (0.85-0.93)	41.9 (39.8-44)	0.84	42.7	08/24/2022#
				0.86	40.4	08/25/2022
				0.86	43.3	11/15/2022
782		0.89 (0.85-0.94)	41.7 (39.7-43.8)	0.88	42.6	08/24/2022#
				0.87	40.3	08/25/2022
				0.87	43.2	11/15/2022#
832		0.89 (0.84-0.93)	42 (39.9-44.1)	0.90	42.4	08/24/2022#
				0.89	40.2	08/25/2022
				0.89	43.0	11/15/2022#
837		0.9 (0.86-0.95)	41.5 (39.4-43.6)	0.40	42.4	08/24/2022#
				0.89	40.2	08/25/2022
				0.89	43.0	11/15/2022#
1720		1.35 (1.29-1.42)	40.1 (38.1-42.1)	1.30	41.9	08/26/2022
				1.29	41.9	11/16/2022

Note: # denotes that the tissue date covers next testing day (within 24 hours)

Table 3 (Continued)

Frequency (MHz)	Tissue Type	Conductivity Target (S/m)	Dielectric Constant Target	Conductivity Meas. (S/m)	Dielectric Constant Meas.	Tested Date
1733	IEEE/IEC Head	1.36 (1.29-1.43)	40.1 (38.1-42.1)	1.30	41.9	08/25/2022#
				1.30	41.9	08/26/2022
				1.30	41.9	11/16/2022
				1.30	40.5	11/24/2022#
1745		1.37 (1.3-1.44)	40.1 (38.1-42.1)	1.30	38.5	08/27/2022
				1.30	41.9	11/16/2022
1770		1.38 (1.31-1.45)	40.1 (38.1-42.1)	1.32	38.5	08/27/2022
1800		1.40 (1.33-1.47)	40.0 (38-42)	1.34	41.7	08/25/2022#
				1.34	41.7	08/26/2022#
				1.34	41.8	08/27/2022
				1.33	41.8	11/16/2022
				1.34	40.4	11/24/2022
1860		1.40 (1.33-1.47)	40.0 (38-42)	1.38	41.7	08/26/2022#
				1.36	38.4	08/27/2022
				1.37	41.7	11/16/2022
				1.38	40.3	11/24/2022
1880		1.40 (1.33-1.47)	40.0 (38-42)	1.38	38.3	08/27/2022
1883		1.40 (1.33-1.47)	40.0 (38-42)	1.38	38.3	08/27/2022
1900		1.40 (1.33-1.47)	40.0 (38-42)	1.39	38.3	08/26/2022#
				1.40	41.7	08/27/2022
1905		1.40 (1.33-1.47)	40.0 (38-42)	1.39	38.3	08/27/2022
2450		1.80 (1.71-1.89)	39.2 (35.3-43.1)	1.76	40.4	11/16/2022
2506		1.86 (1.77-1.95)	39.1 (35.2-43)	1.80	40.5	08/28/2022
				1.80	40.3	11/16/2022#
2510		1.86 (1.77-1.96)	39.1 (35.2-43)	1.80	40.5	08/28/2022
				1.80	40.3	11/16/2022
2535		1.89 (1.8-1.99)	39.1 (35.2-43)	1.82	40.4	08/28/2022
				1.83	40.3	11/16/2022
2560		1.92 (1.82-2.01)	39.1 (35.1-43)	1.84	40.4	08/28/2022
2593		1.95 (1.85-2.05)	39 (35.1-42.9)	1.83	40.3	08/28/2022
2600		1.96 (1.86-2.06)	39 (35.1-42.9)	1.87	40.3	08/28/2022
				1.90	37.5	08/29/2022
2680		2.05 (1.95-2.15)	38.9 (35-42.8)	1.96	37.4	08/29/2022

Note: # denotes that the tissue date covers next testing day (within 24 hours)

4.0 DUT Test Data for LTE

SAR test reduction is apply using the following criteria according to KDB 941225 D05:

a. Per Section 5.2.1, SAR is required for QPSK 1RB allocation for the largest bandwidth
   - The required channel and RB offset combination with the highest maximum output power is required for SAR.
   - When the reported SAR ≤0.8 W/kg, testing of the remaining required test channels are not required. Otherwise, SAR is required for the remaining required test channels using the RB offset configuration with highest output power for that channel.
   - When the reported SAR for a required test channel is > 1.45 W/kg, SAR is required for all RB offset configuration for that channel.
b. Per Section 5.2.2, SAR is required for QPSK 50% RB allocation using the largest bandwidth following the same procedures outline in Section 5.2.1.
c. Per Section 5.2.3, QPSK SAR is not required for 100% allocation when the highest maximum output power for the 100% allocation is less than the highest maximum output power of the 1RB and 50%RB allocation and the reported for the 1RB and 50% RB allocation is <0.8 W/kg.
d. Per Section 5.2.4, SAR test is required for higher modulation when the highest maximum output power for the configuration in higher order modulation is >1/2 dB higher than same configuration in QPSK or when the reported SAR for the QPSK configuration is >1.45 W/kg.

4.1 SAR assessment for LTE band 2 (1850-1910 MHz)

Output Power Data

These power measurements were used to determine the necessary modes for SAR testing according to KDB 941225.

Table 4

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					18700	18900	19100	
Frequency (MHz)					1860.00	1880.00	1900.00	
2	20	QPSK	1	0	23.24	23.52	23.67	24.50
			1	49	23.56	23.57	**23.81**	
			1	99	23.39	23.34	23.61	
			50	0	22.59	22.73	**22.73**	23.50
			50	25	22.66	22.69	22.74	
			50	50	22.58	22.38	22.69	
			100	0	22.63	22.57	22.66	23.50
		16QAM	1	0	22.87	22.59	23.00	23.50
			1	49	23.08	23.00	22.54	
			1	99	22.82	22.21	22.52	
			50	0	21.71	21.80	21.64	22.50
			50	25	21.69	21.68	21.69	
			50	50	21.62	21.45	21.68	
			100	0	21.70	21.56	21.75	22.50
Channel					18675	18900	19125	Max Tune-Up Power (dBm)
Frequency (MHz)					1857.50	1880.00	1902.50	
2	15	QPSK	1	0	23.32	23.66	23.65	24.50
			1	37	24.01	24.01	23.91	
			1	74	23.53	23.47	23.65	
			36	0	22.62	22.79	22.76	23.50
			36	19	22.59	22.72	22.81	
			36	39	22.52	22.53	22.81	
			75	0	22.66	22.58	22.78	23.50
		16QAM	1	0	22.83	23.04	22.86	23.50
			1	37	23.46	23.50	23.15	
			1	74	22.93	22.98	22.73	
			36	0	21.69	21.76	21.71	22.50
			36	19	21.68	21.80	21.89	
			36	39	21.64	21.53	21.88	
			75	0	21.68	21.68	21.77	22.50

Table 4 (Continued)

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					18650	18900	19150	
Frequency (MHz)					1855.00	1880.00	1905.00	
2	10	QPSK	1	0	23.83	23.83	23.78	24.50
			1	24	23.82	23.61	23.64	
			1	49	23.46	23.62	23.74	
			25	0	22.63	22.84	22.93	23.50
			25	12	22.58	22.74	23.08	
			25	25	22.65	22.57	22.96	
			50	0	22.67	22.59	22.82	23.50
		16QAM	1	0	22.89	23.23	22.68	23.50
			1	24	23.06	23.27	23.07	
			1	49	22.94	22.81	22.78	
			25	0	21.69	21.95	22.15	22.50
			25	12	21.84	21.93	22.39	
			25	25	21.67	21.64	22.20	
			50	0	21.71	21.73	21.82	22.50
Channel					18625	18900	19175	Max Tune-Up Power (dBm)
Frequency (MHz)					1852.50	1880.00	1907.50	
2	5.0	QPSK	1	0	23.40	23.73	23.79	24.50
			1	12	23.83	23.68	24.29	
			1	24	23.61	23.58	23.74	
			12	0	22.55	22.69	22.85	23.50
			12	6	22.61	22.68	22.95	
			12	13	22.66	22.80	22.69	
			25	0	22.58	22.88	22.96	23.50
		16QAM	1	0	22.00	23.02	22.80	23.50
			1	12	22.43	23.17	22.55	
			1	24	22.15	22.91	22.71	
			12	0	21.72	21.59	21.82	22.50
			12	6	21.36	21.77	22.09	
			12	13	21.49	21.80	21.85	
			25	0	21.82	21.89	22.07	22.50
Channel					18615	18900	19185	Max Tune-Up Power (dBm)
Frequency (MHz)					1851.50	1880.00	1908.50	
2	3.0	QPSK	1	0	23.59	23.56	24.15	24.50
			1	7	23.71	23.60	24.22	
			1	14	23.28	23.55	24.02	
			8	0	22.45	22.68	22.98	23.50
			8	3	22.48	22.75	22.82	
			8	7	22.47	22.58	22.77	
			15	0	22.47	22.71	22.89	23.50
		16QAM	1	0	22.74	23.00	22.94	24.50
			1	7	22.85	23.01	22.99	
			1	14	22.78	22.81	22.87	
			8	0	21.62	21.72	22.14	23.50
			8	3	21.73	21.80	22.05	
			8	7	21.55	21.91	22.17	
			15	0	21.55	21.84	22.10	23.50

Table 4 (Continued)

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					18607	18900	19193	
Frequency (MHz)					1850.70	1880.00	1909.30	
2	1.4	QPSK	1	0	23.34	23.78	23.88	24.50
			1	2	23.33	24.12	23.84	
			1	5	23.27	24.07	23.81	
			3	0	23.24	23.67	23.76	24.50
			3	1	23.27	23.66	23.86	
			3	3	23.26	23.73	23.66	
			6	0	22.49	22.73	22.82	23.50
		16QAM	1	0	23.16	22.80	22.91	23.50
			1	2	22.79	22.88	23.40	
			1	5	22.87	22.72	23.21	
			3	0	22.27	22.74	22.98	23.50
			3	1	22.25	22.95	22.80	
			3	3	22.21	23.13	22.97	
			6	0	21.57	21.53	21.82	22.50

Assessments at the Body

Table below presents the data of the body assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 5

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 20MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	1900.0000	0.240	-0.33	0.383	**0.484**	DAN-AB-220827-01#
HKAN4005A	PMNN4578A	PMLN8439A	None	1900.0000	0.240	-0.41	0.318	0.409	DAN-AB-220827-02#
50%RB, 20MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	1900.0000	0.187	-0.37	0.290	0.377	DAN-AB-220827-03#
HKAN4005A	PMNN4578A	PMLN8439A	None	1900.0000	0.187	-0.29	0.262	0.334	DAN-AB-220827-04#

Assessments at the Face

Table below presents the data of the Face assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 6

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 20MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	1900.0000	0.24	-0.10	0.236	**0.315**	DAN-FACE-220826-18
50%RB, 20MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	1900.0000	0.187	-0.25	0.126	0.248	DAN-FACE-220826-19

Additional Assessments for ISED Canada

As per ISED Notice 2016-DRS001, additional tests were required for the low, mid and high frequency channels for the configuration with the highest SAR value. The SAR results are in Tables below. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 7

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
Body (1RB, 20MHz BW)									
HKAN4005A	PMNN4578A	PMLN7128A	None	1860.0000	0.227	-0.32	0.345	0.460	BAD-AB-220827-14
				1880.0000	0.228	0.18	0.367	0.452	BAD-AB-220827-15
				1900.0000	0.240	-0.33	0.383	**0.484**	DAN-AB-220827-01#
Face (1RB, 20MHz BW)									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	1860.0000	0.227	-0.15	0.247	0.317	DAN-FACE-220827-16
				1880.0000	0.228	-0.24	0.247	**0.322**	DAN-FACE-220827-17
				1900.0000	0.24	-0.10	0.263	0.315	DAN-FACE-220826-18

4.2 SAR assessment for LTE Band 4 (1710-1755MHz)

Output Power Data

These power measurements were used to determine the necessary modes for SAR testing according to KDB 941225.

Table 8

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel						**20175**		
Frequency (MHz)						**1732.50**		
4	20	QPSK	1	0		24.11		24.50
			1	49		**24.37**		
			1	99		24.08		
			50	0		22.99		23.50
			50	25		**23.05**		
			50	50		22.97		
			100	0		22.97		23.50
		16QAM	1	0		22.95		23.50
			1	49		23.25		
			1	99		22.76		
			50	0		22.10		22.50
			50	25		22.16		
			50	50		22.01		
			100	0		22.10		22.50
Channel					**20025**	**20175**	**20325**	**Max Tune-Up Power (dBm)**
Frequency (MHz)					**1717.50**	**1732.50**	**1747.50**	
4	15	QPSK	1	0	24.01	23.94	24.02	24.50
			1	37	24.41	24.42	24.32	
			1	74	24.08	23.86	24.01	
			36	0	22.99	23.10	23.08	23.50
			36	19	23.21	23.09	23.04	
			36	39	22.10	22.01	22.98	
			75	0	23.00	23.07	22.99	23.50
		16QAM	1	0	23.33	23.47	23.25	23.50
			1	37	23.22	23.28	23.11	
			1	74	23.39	23.27	22.91	
			36	0	22.07	22.29	22.15	22.50
			36	19	22.19	22.15	22.11	
			36	39	22.11	22.08	22.05	
			75	0	22.09	22.16	22.15	22.50

Table 8 (Continued)

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					20000	20175	20350	
Frequency (MHz)					1715.00	1732.50	1750.00	
4	10	QPSK	1	0	24.04	23.86	24.02	24.50
			1	24	24.21	24.10	23.98	
			1	49	24.41	23.87	24.15	
			25	0	23.19	23.22	23.06	23.50
			25	12	23.24	23.17	23.07	
			25	25	23.15	23.14	23.07	
			50	0	23.13	23.11	23.09	23.50
		16QAM	1	0	23.16	23.28	23.06	23.50
			1	24	23.31	23.16	23.16	
			1	49	23.29	23.44	22.95	
			25	0	22.20	22.17	22.18	22.50
			25	12	22.24	22.09	22.29	
			25	25	22.14	22.18	22.19	
			50	0	22.18	22.16	22.17	22.50
Channel					19975	20175	20375	Max Tune-Up Power (dBm)
Frequency (MHz)					1712.50	1732.50	1752.50	
4	5.0	QPSK	1	0	23.94	24.00	23.97	24.50
			1	12	24.29	24.07	24.23	
			1	24	24.14	23.91	24.17	
			12	0	23.08	23.06	23.13	23.50
			12	6	23.01	23.11	23.15	
			12	13	22.98	23.03	23.14	
			25	0	23.02	23.02	23.16	23.50
		16QAM	1	0	22.68	23.34	23.09	23.50
			1	12	22.82	23.50	22.96	
			1	24	22.51	23.32	22.99	
			12	0	22.14	22.04	22.16	22.50
			12	6	22.08	22.09	22.19	
			12	13	22.07	21.93	22.19	
			25	0	22.30	22.00	22.26	22.50
Channel					19965	20175	20385	Max Tune-Up Power (dBm)
Frequency (MHz)					1711.50	1732.50	1753.50	
4	3.0	QPSK	1	0	24.07	24.21	24.01	24.50
			1	7	24.06	24.50	24.09	
			1	14	24.11	24.25	23.96	
			8	0	23.09	23.19	22.95	23.50
			8	3	23.13	23.10	23.08	
			8	7	23.08	23.05	23.08	
			15	0	23.23	23.07	23.06	23.50
		16QAM	1	0	23.32	23.49	23.01	23.50
			1	7	23.43	23.41	23.12	
			1	14	23.19	23.18	23.15	
			8	0	22.12	22.02	22.35	22.50
			8	3	22.07	21.97	22.39	
			8	7	22.03	21.92	22.39	
			15	0	22.10	22.01	22.27	22.50

Table 8 (Continued)

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					19957	20175	20393	
Frequency (MHz)					1710.70	1732.50	1754.30	
4	1.4	QPSK	1	0	23.91	23.92	24.20	24.50
			1	2	23.91	23.94	24.28	
			1	5	23.90	23.90	24.35	
			3	0	23.92	24.06	24.07	24.50
			3	1	23.97	24.09	24.02	
			3	3	23.92	24.07	23.98	
			6	0	23.13	23.00	23.01	23.50
		16QAM	1	0	23.46	23.11	22.91	23.50
			1	2	23.50	23.14	23.31	
			1	5	23.49	23.12	23.31	
			3	0	23.10	23.30	23.14	23.50
			3	1	23.03	23.34	23.18	
			3	3	23.00	23.29	23.17	
			6	0	22.28	22.34	22.29	22.50

Assessments at the Body

Table below presents the data of the body assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 9

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 20MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	1732.5000	0.273	-017	0.221	0.237	DAN-AB-220826-01#
HKAN4005A	PMNN4578A	PMLN8439A	None	1732.5000	0.164	-0.38	0.286	**0.477**	SAN(ZIQ)-AB-221116-07
50%RB, 20MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	1732.5000	0.201	-0.16	0.191	0.220	DAN-AB-220826-03#
HKAN4005A	PMNN4578A	PMLN8439A	None	1732.5000	0.201	-0.14	0.187	0.214	DAN-AB-220826-04#

Assessments at the Face

Table below presents the data of the Face assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 10

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 20MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	1732.5000	0.164	0.02	0.166	**0.253**	IRA-FACE-221125-02#
50%RB, 20MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	1732.5000	0.201	0.04	0.164	0.182	DAN-FACE-220826-15

Additional Assessments for ISED Canada

LTE Band 4 only has one channel; no additional tests were required for low, mid and high frequency channels as per ISED Notice 2016-DRS001.

4.3 SAR assessment for LTE Band 5 (824-849MHz)

Output Power Data

These power measurements were used to determine the necessary modes for SAR testing according to KDB 941225.

Table 11

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel						**20525**		
Frequency (MHz)						**836.50**		
5	10	QPSK	1	0		23.74		24.50
			1	24		**24.17**		
			1	49		23.67		
			25	0		**22.84**		23.50
			25	12		22.78		
			25	25		22.66		
			50	0		22.75		23.50
		16QAM	1	0		22.94		23.50
			1	24		23.35		
			1	49		22.47		
			25	0		21.55		22.50
			25	12		21.83		
			25	25		21.66		
			50	0		21.71		22.50
Channel					**20425**	**20525**	**20625**	**Max Tune-Up Power (dBm)**
Frequency (MHz)					**826.50**	**836.50**	**846.50**	
5	5.0	QPSK	1	0	23.77	23.84	23.58	24.50
			1	12	24.01	23.89	23.96	
			1	24	23.88	23.63	23.85	
			12	0	22.81	22.75	22.69	23.50
			12	6	22.85	22.85	22.91	
			12	13	22.87	22.68	22.88	
			25	0	22.77	22.76	22.70	23.50
		16QAM	1	0	22.67	22.62	22.56	23.50
			1	12	22.81	22.76	23.03	
			1	24	22.45	22.56	22.66	
			12	0	21.74	21.72	21.61	22.50
			12	6	21.80	21.60	21.81	
			12	13	21.81	21.63	21.81	
			25	0	21.87	21.74	21.64	22.50

Table 11 (Continued)

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					20415	20525	20635	
Frequency (MHz)					825.50	836.50	847.50	
5	3.0	QPSK	1	0	23.72	23.81	23.86	24.50
			1	7	24.02	23.99	23.88	
			1	14	23.88	23.75	23.72	
			8	0	22.83	22.88	22.82	23.50
			8	3	22.91	22.93	22.77	
			8	7	22.88	22.99	22.90	
			15	0	22.87	22.89	22.99	23.50
		16QAM	1	0	23.16	22.62	23.28	23.50
			1	7	23.45	22.69	23.43	
			1	14	22.95	22.53	23.09	
			8	0	21.69	21.71	21.91	22.50
			8	3	21.67	21.65	21.98	
			8	7	21.72	21.74	22.06	
			15	0	21.61	21.89	22.00	22.50
Channel					20407	20525	20643	Max Tune-Up Power (dBm)
Frequency (MHz)					824.70	836.50	848.30	
5	1.4	QPSK	1	0	23.94	23.83	23.78	24.50
			1	2	23.94	23.94	23.85	
			1	5	23.95	23.90	23.83	
			3	0	23.90	23.87	23.94	24.50
			3	1	23.91	23.91	23.96	
			3	3	23.80	23.86	23.92	
			6	0	22.90	22.93	22.98	23.50
		16QAM	1	0	23.13	23.36	22.94	23.50
			1	2	23.38	23.20	23.04	
			1	5	23.29	23.22	23.01	
			3	0	23.29	23.25	23.07	23.50
			3	1	23.37	23.29	23.09	
			3	3	23.29	23.36	23.03	
			6	0	22.01	21.97	21.98	22.50

Assessments at the Body

Table below presents the data of the body assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 12

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 10MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	836.5000	0.261	-0.29	0.251	0.396	DAN-AB-220825-06#
HKAN4005A	PMNN4578A	PMLN8439A	None	836.5000	0.244	-0.20	0.416	**0.448**	IRA-AB-221115-05
50%RB, 10MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	836.5000	0.192	-0.32	0.283	0.354	DAN-AB-220825-08#
HKAN4005A	PMNN4578A	PMLN8439A	None	836.5000	0.192	-0.28	0.312	0.387	DAN-AB-220825-09#

Assessments at the Face

Table below presents the data of the Face assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 13

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 10MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	836.5000	0.244	-0.04	0.292	**0.303**	IRA-FACE-220116-03#
50%RB, 10MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	836.5000	0.192	0.20	0.142	0.223	IRA-FACE-220825-18

Additional Assessments for ISED Canada

LTE Band 5 only has one channel; no additional tests were required for low, mid and high frequency channels as per ISED Notice 2016-DRS001.

4.4 SAR assessment for LTE Band 7 (2500-2570MHz)

Output Power Data

These power measurements were used to determine the necessary modes for SAR testing according to KDB 941225.

Table 14

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					20850	21100	21350	
Frequency (MHz)					2510.00	2535.00	2560.00	
7	20	QPSK	1	0	23.19	23.49	23.77	24.00
			1	49	23.80	**23.96**	23.95	
			1	99	23.27	23.65	23.46	
			50	0	22.46	22.49	**22.57**	23.00
			50	25	22.45	22.49	22.54	
			50	50	22.37	22.43	22.56	
			100	0	22.44	22.46	22.46	23.00
		16QAM	1	0	22.21	22.55	22.58	23.00
			1	49	22.95	22.63	23.00	
			1	99	22.27	22.39	22.53	
			50	0	21.55	21.58	21.56	22.00
			50	25	21.65	21.66	21.64	
			50	50	21.51	21.43	21.59	
			100	0	21.57	21.57	21.56	22.00
Channel					20825	21100	21375	Max Tune-Up Power (dBm)
Frequency (MHz)					2507.50	2535.00	2562.50	
7	15	QPSK	1	0	23.36	23.36	23.49	24.00
			1	37	23.76	23.96	23.58	
			1	74	23.39	23.48	23.52	
			36	0	22.34	22.51	22.50	23.00
			36	19	22.36	22.45	22.57	
			36	39	22.37	22.56	22.50	
			75	0	22.32	22.47	22.52	23.00
		16QAM	1	0	22.79	22.59	22.77	23.00
			1	37	22.77	22.66	22.99	
			1	74	22.50	21.94	22.71	
			36	0	21.33	21.48	21.60	22.00
			36	19	21.46	21.51	21.58	
			36	39	21.40	21.44	21.38	
			75	0	21.34	21.45	21.48	22.00

Table 14 (Continued)

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					20800	21100	21400	
Frequency (MHz)					2505.00	2535.00	2565.00	
7	10	QPSK	1	0	23.37	23.59	23.78	24.00
			1	24	23.74	23.87	23.77	
			1	49	23.50	23.55	23.62	
			25	0	22.35	22.51	22.51	23.00
			25	12	22.42	22.56	22.58	
			25	25	22.38	22.47	22.50	
			50	0	22.50	22.49	22.63	23.00
		16QAM	1	0	22.58	22.86	22.59	23.00
			1	24	22.94	22.92	22.72	
			1	49	22.69	22.93	21.99	
			25	0	21.41	21.74	21.72	22.00
			25	12	21.29	21.86	21.75	
			25	25	21.44	21.69	21.48	
			50	0	21.51	21.60	21.55	22.00
Channel					20775	21100	21425	Max Tune-Up Power (dBm)
Frequency (MHz)					2502.50	2535.00	2567.50	
7	5.0	QPSK	1	0	23.14	23.52	23.43	24.00
			1	12	23.28	23.77	23.64	
			1	24	23.04	23.62	23.46	
			12	0	22.35	22.46	22.50	23.00
			12	6	22.36	22.50	22.49	
			12	13	22.30	22.43	22.37	
			25	0	22.29	22.43	22.47	23.00
		16QAM	1	0	22.20	22.17	22.05	23.00
			1	12	22.38	22.42	22.43	
			1	24	22.21	22.19	22.00	
			12	0	21.13	21.56	21.50	22.00
			12	6	21.23	21.61	21.51	
			12	13	21.08	21.51	21.39	
			25	0	21.22	21.58	21.55	22.00

Assessments at the Body

Table below presents the data of the body assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 15

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 20MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	2535.0000	0.248	0.04	0.186	0.188	BAD-AB-220828-11
HKAN4005A	PMNN4578A	PMLN8439A	None	2535.0000	0.187	0.03	0.213	**0.287**	DAN-AB-221116-19
50%RB, 20MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	2560.0000	0.181	0.05	0.136	0.150	BAD-AB-220828-13
HKAN4005A	PMNN4578A	PMLN8439A	None	2560.0000	0.181	-0.11	0.121	0.136	BAD-AB-220828-14

Assessments at the Face

Table below presents the data of the Face assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 16

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 20MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	25350000	0.248	0.29	0.201	**0.203**	IRA-FACE-220828-18
50%RB, 20MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	2560.0000	0.181	0.22	0.149	0.164	IRA-FACE-220828-19

Additional Assessments for ISED Canada

As per ISED Notice 2016-DRS001, additional tests were required for the low, mid and high frequency channels for the configuration with the highest SAR value. The SAR results are in Tables below. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 17

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
Body (1RB, 20MHz BW)									
HKAN4005A	PMNN4578A	PMLN7128A	None	2510.0000	0.240	-0.28	0.168	0.188	BAD-AB-220828-15
				2535.0000	0.187	0.03	0.213	**0.287**	DAN-AB-221116-19
				2560.0000	0.248	-0.38	0.149	0.165	BAD-AB-220828-16
Face (1RB, 20MHz BW)									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	2510.0000	0.185	-0.34	0.196	**0.288**	DAN-FACE-221116-20
				2535.0000	0.248	0.29	0.201	0.203	IRA-FACE-220828-18
				2560.0000	0.248	-0.08	0.178	0.183	IRA-FACE-220828-21

4.5 SAR assessment for LTE Band 12 (699-716MHz)

Output Power Data

These power measurements were used to determine the necessary modes for SAR testing according to KDB 941225.

Table 18

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel						23095		
Frequency (MHz)						707.50		
12	10	QPSK	1	0		23.49		24.00
			1	24		**23.74**		
			1	49		23.49		
			25	0		**22.88**		23.00
			25	12		22.85		
			25	25		22.65		
			50	0		22.80		23.00
		16QAM	1	0		22.79		23.00
			1	24		22.96		
			1	49		22.67		
			25	0		21.74		22.00
			25	12		21.92		
			25	25		21.72		
			50	0		21.63		22.00
Channel					**23035**	**23095**	**23155**	**Max Tune-Up Power (dBm)**
Frequency (MHz)					**701.50**	**707.50**	**713.50**	
12	5.0	QPSK	1	0	23.52	23.70	23.54	24.00
			1	12	24.00	23.89	23.94	
			1	24	23.71	23.62	23.83	
			12	0	22.65	22.91	22.68	23.00
			12	6	22.75	22.94	22.84	
			12	13	22.68	22.73	22.91	
			25	0	22.68	22.82	22.82	23.00
		16QAM	1	0	22.05	22.62	22.29	23.00
			1	12	22.65	22.10	22.66	
			1	24	22.82	22.30	22.79	
			12	0	21.67	21.75	21.58	22.00
			12	6	21.77	21.68	21.65	
			12	13	21.70	21.62	21.71	
			25	0	21.98	21.85	21.82	22.00

Table 18 (Continued)

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					23025	23095	23165	
Frequency (MHz)					700.50	707.50	714.50	
12	3.0	QPSK	1	0	23.62	23.86	23.75	24.00
			1	7	23.59	23.81	23.94	
			1	14	23.71	23.65	23.94	
			8	0	22.72	22.91	22.81	23.00
			8	3	22.69	22.85	22.88	
			8	7	22.71	22.86	22.93	
			15	0	22.77	22.93	22.80	23.00
		16QAM	1	0	22.99	22.50	22.77	23.00
			1	7	23.00	22.34	22.95	
			1	14	23.00	22.06	22.81	
			8	0	21.90	21.81	21.72	22.00
			8	3	21.90	21.76	21.65	
			8	7	22.00	21.74	21.68	
			15	0	21.66	21.73	21.68	22.00
Channel					23017	23095	23173	Max Tune-Up Power (dBm)
Frequency (MHz)					699.70	707.50	715.30	
12	1.4	QPSK	1	0	23.56	23.81	23.81	24.00
			1	2	23.56	23.89	23.83	
			1	5	23.56	23.72	23.81	
			3	0	23.75	23.86	23.75	24.00
			3	1	23.74	23.84	23.87	
			3	3	23.73	23.74	23.83	
			6	0	22.68	22.71	22.83	23.00
		16QAM	1	0	22.70	22.95	22.90	23.00
			1	2	22.89	22.85	22.90	
			1	5	22.88	22.75	22.87	
			3	0	22.85	22.85	22.79	23.00
			3	1	22.62	22.93	22.80	
			3	3	22.48	22.53	22.25	
			6	0	21.93	21.95	21.98	22.00

Assessments at the Body

Table below presents the data of the body assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 19

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 10MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	707.5000	0.236	-0.34	0.344	**0.396**	DAN-AB-220824-13
HKAN4005A	PMNN4578A	PMLN8439A	None	707.5000	0.236	-0.41	0.332	0.388	DAN-AB-220824-14
50%RB, 10MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	707.5000	0.194	-0.01	0.282	0.290	DAN-AB-220824-15
HKAN4005A	PMNN4578A	PMLN8439A	None	707.5000	0.194	-0.27	0.302	0.330	DAN-AB-220824-16

Assessments at the Face

Table below presents the data of the Face assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 20

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 10MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	707.5000	0.246	-0.14	0.258	**0.272**	IRA-FACE-220115-06
50%RB, 10MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	707.5000	0.194	0.16	0.192	0.197	IRA-FACE-220825-11#

Additional Assessments for ISED Canada

LTE Band 12 only has one channel; no additional tests were required for low, mid and high frequency channels as per ISED Notice 2016-DRS001.

4.6 SAR assessment for LTE Band 13 (777-787MHz)

Output Power Data

These power measurements were used to determine the necessary modes for SAR testing according to KDB 941225.

Table 21

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel						**23230**		
Frequency (MHz)						**782.00**		
13	10	QPSK	1	0		23.80		24.50
			1	24		23.73		
			1	49		**23.91**		
			25	0		**22.94**		23.50
			25	12		22.77		
			25	25		22.72		
			50	0		22.86		23.50
		16QAM	1	0		23.11		23.50
			1	24		22.96		
			1	49		22.91		
			25	0		21.94		22.50
			25	12		21.84		
			25	25		21.55		
			50	0		21.62		22.50
Channel						**23230**		**Max Tune-Up Power (dBm)**
Frequency (MHz)						**782.00**		
13	5.0	QPSK	1	0		23.64		24.50
			1	12		24.06		
			1	24		23.55		
			12	0		22.75		23.50
			12	6		22.78		
			12	13		22.67		
			25	0		22.68		23.50
		16QAM	1	0		22.29		23.50
			1	12		22.55		
			1	24		22.09		
			12	0		21.62		22.50
			12	6		21.66		
			12	13		21.65		
			25	0		21.71		22.50

Assessments at the Body

Table below presents the data of the body assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 22

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 10MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	782.0000	0.249	-0.25	0.438	0.530	DAN-AB-220824-17
HKAN4005A	PMNN4578A	PMLN8439A	None	782.0000	0.216	-0.12	0.517	**0.617**	IRA-AB-220115-02
50%RB, 10MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	782.0000	0.196	-0.18	0.351	0.416	DAN-AB-220824-19
HKAN4005A	PMNN4578A	PMLN8439A	None	782.0000	0.196	-0.26	0.325	0.393	DAN-AB-220825-01#

Assessments at the Face

Table below presents the data of the Face assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 23

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 10MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	782.0000	0.216	0.20	0.312	**0.362**	IRA-FACE-220116-01#
50%RB, 10MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	782.0000	0.196	0.16	0.212	0.241	IRA-FACE-220825-14

Additional Assessments for ISED Canada

LTE Band 13 only has one channel; no additional tests were required for low, mid and high frequency channels as per ISED Notice 2016-DRS001.

4.7 SAR assessment for LTE Band 17 (704-716MHz)

Band 17 is contained within band 12 (699-716 MHz), with same maximum output Power (including tune-up tolerance). Thus, band 12 SAR covers band 17.

Output Power Data

These power measurements were used to determine the necessary modes for SAR testing according to KDB 941225.

Table 24

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel						23790		
Frequency (MHz)						710.00		
17	10	QPSK	1	0		23.82		24.00
			1	24		23.27		
			1	49		23.57		
			25	0		22.97		23.00
			25	12		22.98		
			25	25		22.77		
			50	0		22.91		23.00
		16QAM	1	0		22.56		23.00
			1	24		22.90		
			1	49		22.75		
			25	0		21.84		22.00
			25	12		21.90		
			25	25		21.68		
			50	0		21.73		22.00
Channel						23790		Max Tune-Up Power (dBm)
Frequency (MHz)						710.00		
17	5.0	QPSK	1	0		23.78		24.00
			1	12		23.72		
			1	24		23.91		
			12	0		22.88		23.00
			12	6		22.90		
			12	13		22.79		
			25	0		22.82		23.00
		16QAM	1	0		22.41		23.00
			1	12		22.71		
			1	24		22.56		
			12	0		21.79		22.00
			12	6		21.80		
			12	13		21.71		
			25	0		21.90		22.00

.

4.8 SAR assessment for LTE Band 25 (1850-1915MHz)

Output Power Data

These power measurements were used to determine the necessary modes for SAR testing according to KDB 941225.

Table 25

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					**26140**	**26365**	**26590**	
Frequency (MHz)					**1860.00**	**1882.50**	**1905.00**	
25	20	QPSK	1	0	23.65	23.66	23.73	24.00
			1	49	**23.93**	23.85	23.84	
			1	99	23.50	23.86	23.81	
			50	0	22.61	22.73	**22.84**	23.00
			50	25	22.68	22.79	22.80	
			50	50	22.51	22.71	22.73	
			100	0	22.67	22.68	22.69	23.00
		16QAM	1	0	23.11	22.72	23.38	24.00
			1	49	23.25	23.00	23.83	
			1	99	22.48	22.65	23.28	
			50	0	21.70	21.69	21.69	23.00
			50	25	21.78	21.82	21.87	
			50	50	21.70	21.74	21.81	
			100	0	21.70	21.73	21.74	23.00
Channel					**26115**	**26365**	**26615**	**Max Tune-Up Power (dBm)**
Frequency (MHz)					**1857.50**	**1882.50**	**1907.50**	
25	15	QPSK	1	0	23.48	23.50	23.58	24.00
			1	37	23.72	23.94	23.85	
			1	74	23.36	23.45	23.56	
			36	0	22.66	22.71	22.73	23.00
			36	19	22.63	22.70	22.76	
			36	39	22.52	22.61	22.74	
			75	0	22.55	22.58	22.70	23.00
		16QAM	1	0	22.94	23.36	22.91	24.00
			1	37	23.48	23.94	22.93	
			1	74	22.74	23.29	22.56	
			36	0	21.69	21.75	21.66	23.00
			36	19	21.66	21.84	21.70	
			36	39	21.44	21.74	21.68	
			75	0	21.71	21.72	21.66	23.00

Table 25 (Continued)

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					26090	26365	26640	
Frequency (MHz)					1855.00	1882.50	1910.00	
25	10	QPSK	1	0	23.62	23.71	23.61	24.00
			1	24	23.80	23.90	24.00	
			1	49	23.52	23.59	23.89	
			25	0	22.71	22.77	22.82	23.00
			25	12	22.86	22.76	22.93	
			25	25	22.46	22.62	22.74	
			50	0	22.67	22.65	22.81	23.00
		16QAM	1	0	22.94	22.94	22.87	23.00
			1	24	22.48	22.64	22.97	
			1	49	22.90	23.00	22.53	
			25	0	21.66	21.81	21.96	22.00
			25	12	21.68	21.98	22.00	
			25	25	21.44	21.84	21.95	
			50	0	21.69	21.77	21.71	22.00
Channel					26065	26365	26665	Max Tune-Up Power (dBm)
Frequency (MHz)					1852.50	1882.50	1912.50	
25	5.0	QPSK	1	0	23.77	23.63	23.79	24.00
			1	12	23.88	23.95	23.84	
			1	24	23.73	23.76	23.69	
			12	0	22.77	22.75	22.90	23.00
			12	6	22.65	22.78	22.89	
			12	13	22.63	22.69	22.70	
			25	0	22.71	22.72	22.88	23.00
		16QAM	1	0	21.94	22.51	22.65	23.00
			1	12	22.66	22.63	22.73	
			1	24	22.31	23.00	22.55	
			12	0	21.78	21.50	21.84	22.00
			12	6	21.63	21.84	21.72	
			12	13	21.64	21.75	21.68	
			25	0	21.74	21.75	21.88	22.00
Channel					26055	26365	26675	Max Tune-Up Power (dBm)
Frequency (MHz)					1851.50	1882.50	1913.50	
25	3.0	QPSK	1	0	23.76	23.90	23.82	24.00
			1	7	23.84	23.63	23.66	
			1	14	23.86	23.94	23.72	
			8	0	22.84	22.75	22.74	23.00
			8	3	22.64	22.82	22.69	
			8	7	22.63	22.72	22.67	
			15	0	22.86	22.80	22.74	23.00
		16QAM	1	0	22.90	22.57	22.92	23.00
			1	7	22.99	22.78	22.73	
			1	14	22.82	22.83	22.39	
			8	0	21.47	21.60	21.86	22.00
			8	3	21.42	21.57	21.88	
			8	7	21.60	21.99	21.96	
			15	0	21.58	21.72	21.79	22.00

Table 25 (Continued)

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					26047	26365	26683	
Frequency (MHz)					1850.70	1882.50	1914.50	
25	1.4	QPSK	1	0	23.88	23.62	23.72	24.00
			1	2	23.93	23.61	23.64	
			1	5	23.81	23.51	23.70	
			3	0	23.65	23.58	23.75	24.00
			3	1	23.76	23.60	23.58	
			3	3	23.66	23.81	23.51	
			6	0	22.59	22.79	22.65	23.00
		16QAM	1	0	22.81	22.34	22.59	23.00
			1	2	22.84	22.73	22.61	
			1	5	22.80	22.63	22.47	
			3	0	22.54	22.80	22.78	23.00
			3	1	22.47	22.83	22.81	
			3	3	22.52	22.76	22.57	
			6	0	21.50	21.46	21.71	22.00

Assessments at the Body

Table below presents the data of the body assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 26

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 20MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	1860.0000	0.227	-0.24	0.398	**0.466**	IRA-AB-221124-04
HKAN4005A	PMNN4578A	PMLN8439A	None	1860.0000	0.247	-0.01	0.346	0.352	IRA-AB-220826-12
50%RB, 20MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	1905.0000	0.192	-0.08	0.243	0.256	BAD-AB-220827-07
HKAN4005A	PMNN4578A	PMLN8439A	None	1905.0000	0.192	-0.16	0.232	0.249	BAD-AB-220827-08

Assessments at the Face

Table below presents the data of the Face assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 27

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 20MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	1860.0000	0.227	-0.03	0.313	**0.349**	SAN(ZIQ)-FACE-221116-13
50%RB, 20MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	1905.0000	0.192	0.10	0.175	0.181	BAD-FACE-220827-11

Additional Assessments for ISED Canada

As per ISED Notice 2016-DRS001, additional tests were required for the low, mid and high frequency channels for the configuration with the highest SAR value. The SAR results are in Tables below. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 28

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
Body (1RB, 20MHz BW)									
HKAN4005A	PMNN4578A	PMLN7128A	None	1860.0000	0.227	-0.24	0.398	**0.466**	IRA-AB-221124-04
				1882.5000	0.243	-0.11	0.327	0.347	BAD-AB-220827-09
				1905.0000	0.242	0.07	0.333	0.346	BAD-AB-220827-10
Face (1RB, 20MHz BW)									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	1860.0000	0.227	-0.03	0.313	**0.349**	SAN(ZIQ)-FACE-221116-13
				1882.5000	0.243	0.20	0.226	0.234	BAD-FACE-220827-12
				1905.0000	0.242	0.05	0.216	0.227	BAD-FACE-220827-13

4.9 SAR assessment for LTE Band 26 (814-849MHz)

Output Power Data

These power measurements were used to determine the necessary modes for SAR testing according to KDB 941225.

Table 29

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel						26865		
Frequency (MHz)						831.50		
26	15	QPSK	1	0		23.59		24.00
			1	37		**23.99**		
			1	74		23.43		
			36	0		**22.59**		23.00
			36	19		22.52		
			36	39		22.38		
			75	0		22.38		23.00
		16QAM	1	0		22.90		23.00
			1	37		22.86		
			1	74		22.15		
			36	0		21.45		22.00
			36	19		21.47		
			36	39		21.34		
			75	0		21.53		22.00
Channel					26740	26865	26990	Max Tune-Up Power (dBm)
Frequency (MHz)					819.00	831.50	844.00	
26	10	QPSK	1	0	23.72	23.60	23.59	24.00
			1	24	23.67	23.94	23.77	
			1	49	23.68	23.53	23.48	
			25	0	22.80	22.58	22.54	23.00
			25	12	22.90	22.68	22.55	
			25	25	22.71	22.49	22.48	
			50	0	22.81	22.59	22.50	23.00
		16QAM	1	0	22.94	22.89	22.37	23.00
			1	24	22.74	22.74	22.53	
			1	49	22.94	22.97	22.03	
			25	0	21.77	21.45	21.33	22.00
			25	12	21.89	21.53	21.62	
			25	25	21.79	21.54	21.43	
			50	0	21.75	21.43	21.56	22.00

Table 29 (Continued)

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					26715	26865	27015	
Frequency (MHz)					816.50	831.50	846.50	
26	5.0	QPSK	1	0	23.65	23.43	23.45	24.00
			1	12	23.56	23.66	23.60	
			1	24	23.64	23.48	23.48	
			12	0	22.57	22.57	22.58	23.00
			12	6	22.72	22.51	22.49	
			12	13	22.61	22.39	22.38	
			25	0	22.64	22.43	22.60	23.00
		16QAM	1	0	22.05	22.39	22.04	23.00
			1	12	22.61	22.94	22.08	
			1	24	22.33	22.68	21.63	
			12	0	21.52	21.43	21.50	22.00
			12	6	21.66	21.45	21.24	
			12	13	21.45	21.38	21.48	
			25	0	21.74	21.40	21.49	22.00
Channel					26705	26865	27025	Max Tune-Up Power (dBm)
Frequency (MHz)					815.50	831.50	847.50	
26	3.0	QPSK	1	0	23.67	23.68	23.68	24.00
			1	7	23.76	23.75	23.84	
			1	14	23.79	23.51	23.45	
			8	0	22.74	22.61	22.62	23.00
			8	3	22.86	22.67	22.56	
			8	7	22.83	22.57	22.53	
			15	0	22.84	22.54	22.51	23.00
		16QAM	1	0	22.80	21.86	22.55	23.00
			1	7	22.95	21.88	22.22	
			1	14	22.96	21.76	21.99	
			8	0	21.74	21.92	21.42	22.00
			8	3	21.66	21.99	21.37	
			8	7	21.65	21.86	21.33	
			15	0	21.74	21.44	21.41	22.00
Channel					26697	26865	27033	Max Tune-Up Power (dBm)
Frequency (MHz)					814.70	831.50	848.30	
26	1.4	QPSK	1	0	23.75	23.72	23.46	24.00
			1	2	23.61	23.97	23.50	
			1	5	23.70	23.89	23.49	
			3	0	23.66	23.68	23.72	24.00
			3	1	23.79	23.71	23.73	
			3	3	23.73	23.59	23.65	
			6	0	22.82	22.72	22.65	23.00
		16QAM	1	0	22.66	22.88	22.83	23.00
			1	2	22.74	22.93	22.93	
			1	5	22.49	22.74	22.85	
			3	0	22.69	22.66	22.54	23.00
			3	1	22.72	22.62	22.56	
			3	3	22.67	22.52	22.51	
			6	0	21.50	21.67	21.37	22.00

Assessments at the Body

Table below presents the data of the body assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 30

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 15MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	831.5000	0.250	-0.21	0.314	0.331	DAN-AB-220825-02#
HKAN4005A	PMNN4578A	PMLN8439A	None	831.5000	0.250	-0.28	0.354	**0.379**	DAN-AB-220825-03#
50%RB, 15MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	831.5000	0.181	-0.29	0.267	0.314	DAN-AB-220825-04#
HKAN4005A	PMNN4578A	PMLN8439A	None	831.5000	0.181	-0.26	0.277	0.323	DAN-AB-220825-05#

Assessments at the Face

Table below presents the data of the Face assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 31

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 15MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	831.5000	0.244	-0.20	0.321	**0.346**	IRA-FACE-220116-02#
50%RB, 15MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	831.5000	0.181	0.31	0.199	0.219	IRA-FACE-220825-16

Additional Assessments for ISED Canada

LTE Band 26 only has one channel; no additional tests were required for low, mid and high frequency channels as per ISED Notice 2016-DRS001.

4.10 SAR assessment for LTE Band 41 (2496-2690MHz)

Output Power Data

These power measurements were used to determine the necessary modes for SAR testing according to KDB 941225.

Table 32

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)					Max Tune-Up Power (dBm)
Channel					39750	40235	40620	41005	41490	
Frequency (MHz)					2506.00	2554.50	2593.00	2631.50	2680.00	
41	20	QPSK	1	0	22.81	23.39	23.79	23.80	23.56	24.00
			1	49	23.43	23.96	**23.97**	23.93	23.81	
			1	99	23.15	23.41	23.76	23.52	23.18	
			50	0	22.34	22.61	22.79	22.69	22.63	23.00
			50	25	22.46	22.70	**22.91**	22.80	22.59	
			50	50	22.38	22.65	22.76	22.78	22.43	
			100	0	22.35	22.61	22.82	22.63	22.59	23.00
		16QAM	1	0	22.58	22.32	22.54	22.81	22.09	23.00
			1	49	22.84	22.51	22.80	23.00	22.42	
			1	99	22.73	22.25	22.44	22.04	21.74	
			50	0	21.47	21.64	21.97	21.81	21.65	22.00
			50	25	21.59	21.73	21.82	21.98	21.61	
			50	50	21.43	21.67	21.77	21.86	21.45	
			100	0	21.39	21.60	21.70	21.79	21.55	22.00
Channel					39725	40210	40620	41030	41515	Max Tune-Up Power (dBm)
Frequency (MHz)					2503.50	2552.00	2593.00	2634.00	2682.50	
41	15	QPSK	1	0	23.05	23.64	23.71	23.54	23.55	24.00
			1	37	23.42	23.91	23.73	23.91	23.81	
			1	74	23.37	23.60	23.62	23.70	23.31	
			36	0	22.35	22.56	22.77	22.64	22.52	23.00
			36	19	22.44	22.71	22.76	22.84	22.56	
			36	39	22.31	22.56	22.67	22.66	22.38	
			75	0	22.31	22.58	22.72	22.69	22.49	23.00
		16QAM	1	0	22.16	22.58	22.70	22.77	22.68	23.00
			1	37	22.68	22.63	22.82	22.84	22.79	
			1	74	22.43	22.51	22.47	22.53	22.54	
			36	0	21.33	21.62	21.64	21.75	21.67	22.00
			36	19	21.36	21.70	21.63	21.84	21.72	
			36	39	21.25	21.51	21.56	21.76	21.55	
			75	0	21.28	21.65	21.81	21.79	21.55	22.00

Table 32 (Continued)

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)					Max Tune-Up Power (dBm)
Channel					39700	40185	40620	41055	41540	
Frequency (MHz)					2501.00	2549.50	2593.00	2636.50	2685.00	
41	10	QPSK	1	0	23.34	23.49	23.80	23.77	23.41	24.00
			1	24	23.42	23.67	23.63	23.72	23.77	
			1	49	23.39	23.51	23.79	23.73	23.29	
			25	0	22.48	22.65	22.75	22.77	22.52	23.00
			25	12	22.60	22.72	22.75	22.90	22.62	
			25	25	22.44	22.64	22.74	22.72	22.44	
			50	0	22.45	22.58	22.83	22.85	22.55	23.00
		16QAM	1	0	22.59	22.72	22.89	22.83	22.39	23.00
			1	24	22.60	22.73	22.83	23.00	22.55	
			1	49	22.43	22.50	22.40	22.74	22.20	
			25	0	21.39	21.74	21.93	21.94	21.66	22.00
			25	12	21.58	21.69	21.81	21.94	21.73	
			25	25	21.34	21.55	21.97	21.88	21.60	
			50	0	21.29	21.63	21.76	21.78	21.49	22.00
Channel					39675	40160	40620	41080	41565	Max Tune-Up Power (dBm)
Frequency (MHz)					2498.50	2547.00	2593.00	2639.00	2687.50	
41	5.0	QPSK	1	0	23.33	23.49	23.66	23.56	23.30	24.00
			1	12	23.68	23.63	23.80	23.80	23.57	
			1	24	23.46	23.39	23.40	23.46	23.23	
			12	0	22.43	22.55	22.72	22.58	22.45	23.00
			12	6	22.50	22.60	22.78	22.73	22.49	
			12	13	22.43	22.59	22.70	22.65	22.36	
			25	0	22.43	22.60	22.78	22.68	22.50	23.00
		16QAM	1	0	22.16	22.87	22.87	22.81	22.79	23.00
			1	12	22.74	22.74	22.71	22.99	22.93	
			1	24	22.52	22.88	22.90	22.51	22.59	
			12	0	21.38	21.57	21.64	21.58	21.55	22.00
			12	6	21.42	21.43	21.60	21.82	21.49	
			12	13	21.45	21.42	21.51	21.55	21.35	
			25	0	21.49	21.44	21.82	21.74	21.38	22.00

Assessments at the Body

Table below presents the data of the body assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 33

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 20MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	2593.0000	0.250	0.18	0.082	**0.082**	DAN-AB-220828-03
HKAN4005A	PMNN4578A	PMLN8439A	None	2593.0000	0.250	0.02	0.073	0.073	DAN-AB-220828-04
50%RB, 20MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	2593.0000	0.195	-0.26	0.062	0.067	DAN-AB-220828-05
HKAN4005A	PMNN4578A	PMLN8439A	None	2593.0000	0.195	-0.22	0.055	0.059	DAN-AB-220828-06

Assessments at the Face

Table below presents the data of the Face assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 34

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 20MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	2593.0000	0.250	-0.31	0.088	**0.095**	BAD-FACE-220828-08
50%RB, 20MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	2593.0000	0.195	-0.30	0.067	0.073	BAD-FACE-220828-09

Additional Assessments for ISED Canada

As per ISED Notice 2016-DRS001, additional tests were required for the low, mid and high frequency channels for the configuration with the highest SAR value. The SAR results are in Tables below. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 35

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
Body (1RB, 20MHz BW)									
HKAN4005A	PMNN4578A	PMLN7128A	None	2506.0000	0.187	0.00	0.142	**0.191**	DAN-AB-221117-01#
				2593.0000	0.250	0.18	0.082	0.082	DAN-AB-220828-03
				2680.0000	0.240	-0.29	0.089	0.099	IRA-AB-220829-02
Face (1RB, 20MHz BW)									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	2506.0000	0.187	0.23	0.128	**0.172**	DAN-FACE-221117-02#
				2593.0000	0.250	-0.31	0.088	0.095	BAD-FACE-220828-08
				2680.0000	0.240	-0.18	0.092	0.100	IRA-FACE-220829-03

4.11 SAR assessment for LTE Band 66 (1710-1780MHz)

Output Power Data

These power measurements were used to determine the necessary modes for SAR testing according to KDB 941225.

Table 36

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					**132072**	**132322**	**132572**	
Frequency (MHz)					**1720.00**	**1745.00**	**1770.00**	
66	20	QPSK	1	0	23.87	23.17	23.17	24.00
			1	49	**23.96**	23.42	23.50	
			1	99	23.88	23.02	22.90	
			50	0	22.67	22.14	22.24	23.00
			50	25	**22.76**	21.84	21.62	
			50	50	22.70	21.83	22.06	
			100	0	22.71	21.84	21.80	23.00
		16QAM	1	0	22.70	22.91	22.69	2300
			1	49	22.71	22.95	23.00	
			1	99	23.00	23.00	22.26	
			50	0	21.66	20.83	21.57	22.00
			50	25	21.89	20.77	20.70	
			50	50	21.76	20.52	20.50	
			100	0	21.71	20.83	20.50	22.00
Channel					**132047**	**132322**	**132597**	**Max Tune-Up Power (dBm)**
Frequency (MHz)					**1717.50**	**1745.00**	**1772.50**	
66	15	QPSK	1	0	23.70	23.71	23.37	24.00
			1	37	23.83	23.52	23.47	
			1	74	23.69	23.50	23.28	
			36	0	22.64	22.79	22.51	23.00
			36	19	22.67	22.61	22.53	
			36	39	22.72	22.38	22.30	
			75	0	22.61	22.59	22.41	23.00
		16QAM	1	0	22.99	23.00	22.60	23.00
			1	37	22.93	23.00	22.61	
			1	74	22.89	22.75	22.19	
			36	0	21.52	21.77	21.33	22.00
			36	19	21.64	21.50	21.44	
			36	39	21.60	21.47	21.29	
			75	0	21.66	21.70	21.41	22.00

Table 36 (Continued)

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					132022	132322	132622	
Frequency (MHz)					1715.00	1745.00	1775.00	
66	10	QPSK	1	0	23.67	23.85	23.51	24.00
			1	24	23.68	22.97	22.88	
			1	49	23.68	23.58	23.36	
			25	0	22.74	22.72	22.41	23.00
			25	12	22.78	22.65	22.54	
			25	25	22.76	22.60	22.44	
			50	0	22.73	22.61	22.41	23.00
		16QAM	1	0	23.00	22.72	22.67	23.00
			1	24	21.97	22.69	23.00	
			1	49	22.94	22.20	23.00	
			25	0	21.85	21.85	21.34	22.00
			25	12	21.91	21.70	21.57	
			25	25	21.87	21.52	21.46	
			50	0	21.84	21.61	21.34	22.00
Channel					131997	132322	132647	Max Tune-Up Power (dBm)
Frequency (MHz)					1712.50	1745.00	1777.50	
66	5.0	QPSK	1	0	23.56	23.54	23.64	24.00
			1	12	23.97	23.75	23.88	
			1	24	23.66	23.65	23.65	
			12	0	22.86	22.67	22.55	23.00
			12	6	22.74	22.62	22.61	
			12	13	22.63	22.59	22.52	
			25	0	22.74	22.57	22.48	23.00
		16QAM	1	0	22.48	22.94	22.12	23.00
			1	12	22.54	22.99	22.46	
			1	24	22.21	22.86	22.18	
			12	0	21.83	21.40	21.28	22.00
			12	6	21.83	21.36	21.39	
			12	13	21.70	21.34	21.40	
			25	0	21.86	21.48	21.35	22.00
Channel					131987	132322	132657	Max Tune-Up Power (dBm)
Frequency (MHz)					1711.50	1745.00	1778.50	
66	3.0	QPSK	1	0	23.88	23.72	23.61	24.00
			1	7	23.76	23.75	23.81	
			1	14	23.78	23.61	23.61	
			8	0	22.82	22.68	22.54	23.00
			8	3	22.86	22.66	22.59	
			8	7	22.83	22.60	22.62	
			15	0	22.84	22.64	22.58	23.00
		16QAM	1	0	23.00	23.00	22.15	23.00
			1	7	22.45	22.95	22.28	
			1	14	22.91	22.18	22.24	
			8	0	21.23	21.94	21.44	22.00
			8	3	21.62	21.93	21.50	
			8	7	21.33	21.85	21.39	
			15	0	21.39	21.60	21.47	22.00

Table 36 (Continued)

Band	BW (MHz)	Modulation	RB Size	RB Offset	Measured power (dBm)			Max Tune-Up Power (dBm)
Channel					131979	132322	132655	
Frequency (MHz)					1710.70	1745.00	1779.30	
66	1.4	QPSK	1	0	23.60	23.68	23.35	24.00
			1	2	23.68	23.89	23.44	
			1	5	23.77	23.80	23.42	
			3	0	23.68	23.57	23.58	24.00
			3	1	23.72	23.61	23.42	
			3	3	23.72	23.59	23.50	
			6	0	22.80	22.65	22.57	23.00
		16QAM	1	0	22.89	22.79	23.00	23.00
			1	2	22.98	22.80	23.00	
			1	5	22.86	22.73	22.84	
			3	0	22.87	22.53	22.15	23.00
			3	1	22.98	22.56	22.35	
			3	3	22.87	22.36	22.16	
			6	0	21.92	21.41	21.39	22.00

Assessments at the Body

Table below presents the data of the body assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 37

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 20MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	1720.0000	0.248	-0.16	0.232	0.244	IRA-AB-220826-06
HKAN4005A	PMNN4578A	PMLN8439A	None	1720.0000	0.248	-0.12	0.242	**0.252**	IRA-AB-220826-08
50%RB, 20MHz BW									
HKAN4005A	PMNN4578A	PMLN7128A	None	1720.0000	0.188	-0.04	0.198	0.212	IRA-AB-220826-09
HKAN4005A	PMNN4578A	PMLN8439A	None	1720.0000	0.188	-0.19	0.190	0.210	IRA-AB-220826-10

Assessments at the Face

Table below presents the data of the Face assessment. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 38

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
1RB, 20MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	1720.0000	0.172	0.42	0.222	**0.324**	SAN(ZIQ)-FACE-221116-12
50%RB, 20MHz BW									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	1720.0000	0.188	-0.29	0.146	0.185	DAN-FACE-220826-17

Additional Assessments for ISED Canada

As per ISED Notice 2016-DRS001, additional tests were required for the low, mid and high frequency channels for the configuration with the highest SAR value. The SAR results are in Tables below. SAR plot is included in Appendix D for the highest configuration (bolded).

Table 39

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)	Run#
Body									
HKAN4005A	PMNN4578A	PMLN7128A	None	1720.0000	0.248	-0.12	0.242	0.252	IRA-AB-220826-08
				1745.0000	0.176	0.41	0.365	**0.521**	SAN(ZIQ)-AB-221116-08
				1770.0000	0.224	-0.11	0.295	0.339	DAN-AB-220827-20
Face									
HKAN4005A	PMNN4578A	Radio @ front 2.5cm	None	1720.0000	0.172	0.42	0.222	**0.324**	SAN(ZIQ)-FACE-221116-12
				1745.0000	0.219	-0.07	0.123	0.226	DAN-FACE-220827-21
				1770.0000	0.224	-0.11	0.113	0.205	DAN-FACE-220827-22

5.0 Variability Assessment

Per the guidelines in KDB 865664 SAR variability assessment is not required because SAR results are below 0.8W/kg (General population).