

# TEST REPORT



**DT&C Co., Ltd.**

42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea 17042

Tel : 031-321-2664, Fax : 031-321-1664

1. Report No. : DREFCC2002-0066(1)
2. Client / Applicant
  - Name : Bluebird Inc.
  - Address : 3F, 115, Irwon-ro, Gangnam-gu, Seoul, Republic of Korea (06355)
3. Use of Report : Grant of Certification
4. Product Name / Model Name : Smart POS Payment Terminal / SP500  
(FCC ID : SS4SP500)
5. Test Standard : ANSI C63.4:2014  
FCC Part 15 Subpart B  
(Other Class B digital devices & peripherals)
6. Date of Test : Jan. 24. 2020 ~ Jan. 27. 2020
7. Testing Environment : Temperature (19 ~ 20) °C , Humidity (42 ~ 45) % R.H.
8. Test Result : Refer to the attached Test Result

Affirmation	Tested by	Reviewed by
	Name : ChanGeun Lee 	Name : JunHo Park 

The test results presented in this test report are limited only to the sample supplied by applicant and the use of this test report is inhibited other than its purpose. This test report shall not be reproduced except in full, without the written approval of DT&C Co., Ltd.

**Aug. 24. 2020**

**DT&C Co., Ltd.**

'This test report is not related to KS Q ISO/IEC 17025 and KOLAS accreditation.'

If this report is required to confirmation of authenticity, please contact to [report@dtnc.net](mailto:report@dtnc.net)

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## 1. General Remarks

This report contains the result of tests performed by :

### DT&C Co., Ltd.

42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea 17042

<http://www.dtnc.net>

Tel: +82-31-321-2664 Fax: +82-31-321-1664

## 2. Test Laboratory

DT&C Co., Ltd. has been accredited / filed / authorized by the agencies listed in the following table;

Certificate	Nation	Agency	Code	Remark
Accreditation	Korea	KOLAS	393	ISO/IEC 17025
	South Africa	SABS	0006	ISO/IEC 17025
	Ghana	NCA	NCA agreement 23rd,Oct,2018	-
Site Filing	USA	FCC	KR0034 101842 678747, 596748, 804488, 165783	Accredited  2.948 Listed
	Canada	IC	5740A-3 5740A-4	Registered
	Japan	VCCI	C-1427 R-3385, R-4076, R-4180, R-4496, T-1442, G-10338, G-754, G-10815, G-20051	Registered
Certification	Korea	KC	KR0034	Designation
	Germany	TUV	CARAT 089112 0006 Rev.00	ISO/IEC 17025
	Russia	RMRS	17.10189.296	ISO/IEC 17025

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the "General requirements for the competent of calibration and testing laboratory".

### 3. General Information of EUT

Applicant	Bluebird Inc. 3F, 115, Irwon-ro, Gangnam-gu, Seoul, Republic of Korea (06355)
Manufacturer	Bluebird Inc. 3F, 115, Irwon-ro, Gangnam-gu, Seoul, Republic of Korea (06355)
Factory	Bluebird Inc. (SSang-young IT Twin tower-B 7~8F), 531, Dunchon-daero, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea
Product Name	Smart POS Payment Terminal
Model Name	SP500
Add Model Name	None
Add Model difference	None
FCC ID	SS4SP500
Rated Power	DC 7.26 V
Remarks	* EUT Adapter Model name : KSA29B0500200D5 Manufacturer : Kuantech (Beihai) Co.,Ltd. Input : AC 100-240 V, 50/60 Hz, 0.5 A Output : DC 5 V, 2 A
	* Wireless Frequency WCDMA 850 : Tx (826.4 ~ 846.6) MHz, Rx (871.4 ~ 891.6) MHz WCDMA 1900 : Tx (1,852.4 ~ 1907.6) MHz, Rx (1,932.4 ~ 1987.6) MHz LTE Band 2 : Tx (1,850.7 ~ 1,909.3) MHz, Rx (1,930.7 ~ 1,989.3) MHz LTE Band 4 : Tx (1,710.7 ~ 1,754.3) MHz, Rx (2,110.7 ~ 2,154.3) MHz LTE Band 5 : Tx (824.7 ~ 848.3) MHz, Rx (869.7 ~ 893.3) MHz LTE Band 12 : Tx (699.7 ~ 715.3) MHz, Rx (729.7 ~ 745.3) MHz BT : (2,402 ~ 2,480) MHz WIFI 2.4 G : (2,412 ~ 2,462) MHz WIFI 5 G : (5,180 ~ 5,825) MHz

**Related Submittal(s) / Grant(s)**  
**Original submittal only**

## 4. EUT Operations and Test Configurations

### 4.1 Principle of Configuration Selection

#### Emission :

The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use. For each testing mode different configurations were used, Refer to the individual tests.

### 4.2 EUT Operation Mode

No.	Mode	Description
1	MP4	Continuously outputs images with 1 kHz Tone in the EUT
2	Rear Camera	EUT is shooting video with Rear Camera
3	Printing	EUT is observes the state of continuous printing operation and proceeds the test
4	IC Card	Test by observing the state of reading EUT front IC card continuously
5	Magnetic Card	Proceed with the test by continuously reading Magnetic Card on the EUT
6	Charging	The EUT observes the state of receiving power from the adapter (EUT) and charging
7	Cradle	EUT connects with Cradle and observes charging status
8	PC Link	The EUT is reading, writing, internal storage

### 4.3 Test Configuration Mode

No.	Mode	Description
1	MP4	Portable Equipment
2	Rear Camera	Portable Equipment
3	Printing	Portable Equipment
4	IC Card	Insert IC Card in front of EUT
5	Magnetic Card	Insert Magnetic Card into the side of EUT
6	Charging	Adapter (EUT) connected to EUT Adapter (EUT) is connected to AC Main
7	Cradle	Cradle connected to EUT
8	PC Link	EUT was connected NOTEBOOK by USB cable C type and continuously operated

#### 4.4 Supported Equipment

Used*	Product Type	Manufacturer	Model	Remarks
AE	NOTEBOOK	LG	LG15Z96	607NZUD007502
AE	NOTEBOOK ADAPTOR	Genmao Electronics	LCAP48-WK	N/A
AE	SSD	SAMSUNG	MU-PT250B	S2WKNAAH32059X
AE	Keyboard	DELL	KB216t	N/A
AE	Mouse	LG	SM-9023	N/A
AE	LCD MONITOR	DELL	P2217H	N/A
AE	Headset	SAMSUNG	SHS-150V/M	N/A
AE	Cradle	Bluebird Inc.	1SC-SP50x	N/A
AE	Cradle Adapter	Kuantech (Beihai) Co.Ltd	KSA29B0500200D5	N/A
*Abbreviations: AE - Auxiliary/Associated Equipment, or SIM - Simulator				

#### 4.5 EUT In/Output Port

(MODE 1,2,3)

Name	Type*	Cable Max. >3m	Cable Shielded	Cable Back shell	Remarks
-	-	-	-	-	-
*Abbreviations: AC = AC Power Port                      DC = DC Power Port                      N/E = Non-Electrical I/O = Signal Input or Output Port      GND = Ground TP = Telecommunication Ports					

(MODE 4)

Name	Type*	Cable Max. >3m	Cable Shielded	Cable Back shell	Remarks
Magnetic	I/O	-	-	-	EUT
*Abbreviations: AC = AC Power Port                      DC = DC Power Port                      N/E = Non-Electrical I/O = Signal Input or Output Port      GND = Ground TP = Telecommunication Ports					

## (MODE 5)

Name	Type*	Cable Max. >3m	Cable Shielded	Cable Back shell	Remarks
IC	I/O	-	-	-	EUT
*Abbreviations: AC = AC Power Port                      DC = DC Power Port                      N/E = Non-Electrical I/O = Signal Input or Output Port      GND = Ground TP = Telecommunication Ports					

## (MODE 6)

Name	Type*	Cable Max. >3m	Cable Shielded	Cable Back shell	Remarks
Micro 5 Pin	DC	1.5	Non shield	Plastic	EUT
AC IN	AC	-	-	-	Adapter (EUT)
*Abbreviations: AC = AC Power Port                      DC = DC Power Port                      N/E = Non-Electrical I/O = Signal Input or Output Port      GND = Ground TP = Telecommunication Ports					

## (MODE 7)

Name	Type*	Cable Max. >3m	Cable Shielded	Cable Back shell	Remarks
PIN	DC	-	-	-	EUT
USB(Mouse)	I/O	1.8	Non shield	Plastic	Cradle
USB(Keyboard)	I/O	1.8	Non shield	Plastic	Cradle
LAN	TP	3.0	Non shield	Plastic	External network
DC IN	DC	1.5	Non shield	Plastic	Cradle
AC IN	AC	-	-	-	Cradle Adapter
*Abbreviations: AC = AC Power Port                      DC = DC Power Port                      N/E = Non-Electrical I/O = Signal Input or Output Port      GND = Ground TP = Telecommunication Ports					

(MODE 8)

Name	Type*	Cable Max. >3m	Cable Shielded	Cable Back shell	Remarks
USB	I/O	1.5	Shield	Plastic	EUT
USB(EUT)	I/O	1.3	Non shield	Plastic	NOTEBOOK
USB(MOUSE)	I/O	1.8	Non shield	Plastic	
USB(KEYBOARD)	I/O	1.8	Non shield	Plastic	
USB(SSD)	I/O	1.0	Non shield	Plastic	
HDMI(MONITOR)	I/O	1.8	shield	Plastic	
AUX(Headset)	I/O	1.8	Non shield	Plastic	
DC IN(ADAPTOR)	DC	1.8	Non shield	Plastic	
DC OUT	DC	1.8	Non shield	Plastic	NOTEBOOK
POEWER	AC	-	Non shield	Plastic	ADAPTOR

\*Abbreviations:

AC = AC Power Port

DC = DC Power Port

N/E = Non-Electrical

I/O = Signal Input or Output Port

GND = Ground

TP = Telecommunication Ports

#### 4.6 Test Voltage and Frequency

Case	Voltage (DC/AC-V)	Frequency (Hz)	Phases	Remarks
1	AC 120	60	Single	None
2	DC 7.26	-	-	Battery



## 5. Test Summary

Test Items	Applied Standards	Results
Conducted Disturbance	ANSI C63.4 : 2014	<b>C</b>
Radiated Disturbance	ANSI C63.4 : 2014	<b>C</b>
C=Comply    N/C=Not Comply    N/T=Not Tested    N/A=Not Applicable		
Note 1)		

The data in this test report are traceable to the national or international standards.

-Conducted Disturbance

Frequency [MHz]	Phase	Result [dB $\mu$ V]	Detector	Limit [dB $\mu$ V]	Margin [dB]
0.50891	N	37.74	Cispr - Average	46.00	8.26

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dB $\mu$ V/m]	Detector	Limit [dB $\mu$ V/m]	Margin [dB]
62.131	H	33.81	Quasi - Peak	40.00	6.19

## 6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (°C)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2020-01-27	20	42	100.5
Radiated Disturbance	2020-01-24	19	44	-
	2020-01-27	20	45	

## 7. Test Results : Emission

### 7.1 Conducted Disturbance

ANSI C63.4	Mains terminal disturbance voltage		Result
<p><b>Method:</b> The AMN placed 0,8 m from the boundary of the unit under test and bonded to a ground reference plane. This distance was between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment were at least 0,8 m from the AMN. All power was connected to the system through Artificial Mains Network (AMN). Conducted voltage measurements on mains lines were made at the output of the AMN. The measuring port of the LISN for EUT was connected to spectrum analyzer. Using conducted emission test software, the emissions were scanned with peak detector mode. After scanning over the frequency range, suspected emissions were selected to perform final measurement. When performing final measurement, the receiver was used which has Quasi-Peak detector and CISPR Average detector. For (0.15 ~ 30) MHz frequency range, Quasi-Peak detector with 10 kHz RBW and 30 kHz VBW was used. By varying the configuration of the test sample and the cable routing it was attempted to maximize the emission.</p>			<b>Comply</b>
Fully configured sample scanned over the following frequency range	Frequency range on each side of line	Measurement Point	
		<b>150 kHz to 30 MHz</b>	<b>Mains</b>
EUT mode (Refer to clauses 4)	Test configuration mode	<b>6, 7, 8</b>	
	EUT Operation mode	<b>6, 7, 8</b>	
	Power interface mode	<b>1</b>	
<b>Limits – Class A</b>			
Frequency (MHz)	Limit dB $\mu$ V		
	Quasi-Peak	Average	
0.15 to 0.50	79	66	
0.50 to 30	73	60	
<b>Limits – Class B</b>			
Frequency (MHz)	Limit dB $\mu$ V		
	Quasi-Peak	Average	
0.15 to 0.50	66 to 56	56 to 46	
0.50 to 5	56	46	
5 to 30	60	50	

Measurement Instrument					
Description	Model	Manufacturer	Identifier	Cal. Date	Cal. Due
MEASUREMENT SOFTWARE	EMI-C VER. 2.00.0171	TSJ	N/A	N/A	N/A
EMI TEST RECEIVER	ESR	ROHDE&SCHWARZ	101767	2019.12.17	2020.12.17
TWO-LINE V-NETWORK	ENV216	ROHDE&SCHWARZ	101979	2019.12.06	2020.12.06
LISN	LISN1600	TTI	197204	2019.06.04	2020.06.04
TRANSIENT LIMITER	TL-B0930A	EMCIS	11002	2019.08.30	2020.08.30
50 OHM TERMINATOR	CT-01	TME	N/A	2019.12.16	2020.12.16

Mains terminal disturbance voltage _ Measurement data			
Test configuration mode	6	EUT Operation mode	6
Test voltage (V)	120	Test Frequency (Hz)	60

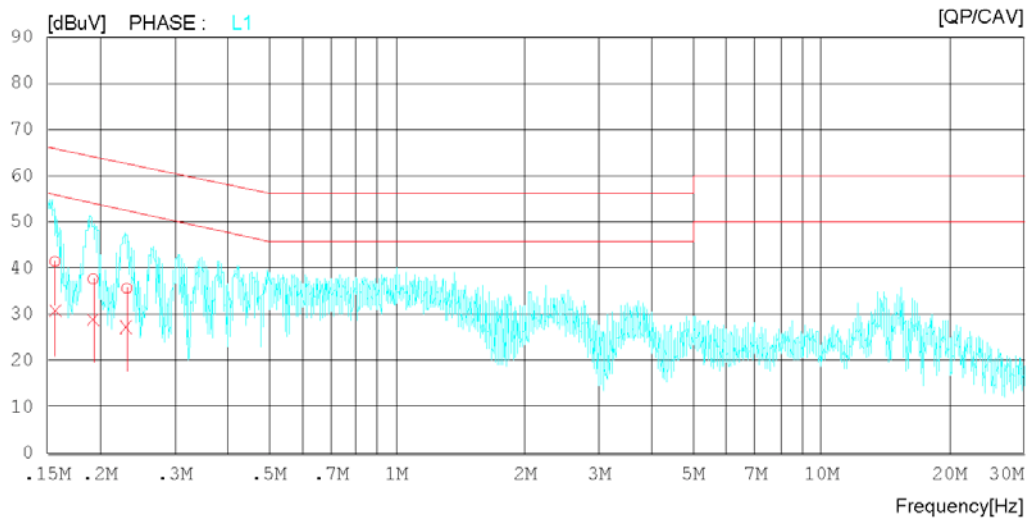
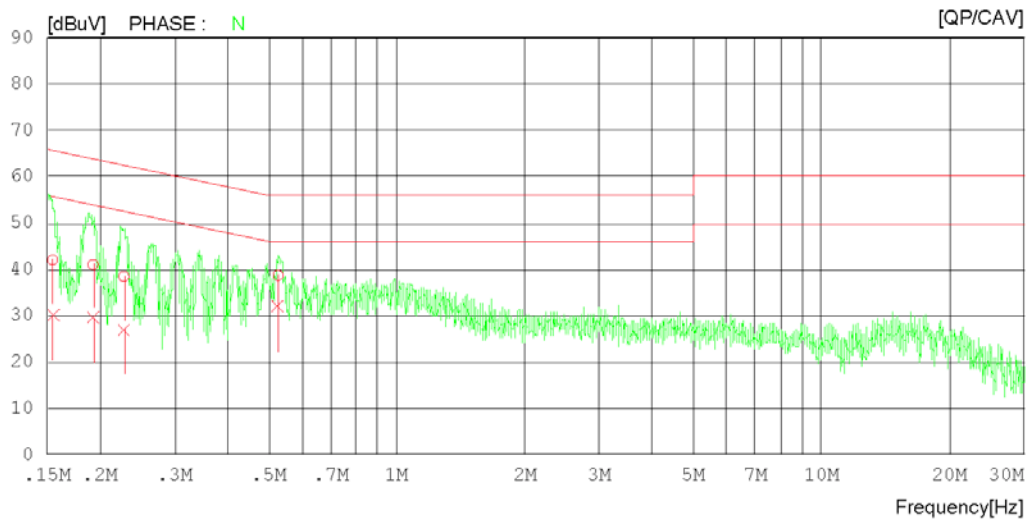
## Results of Conducted Emission

DT&C  
Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply 120 VAC 60 Hz  
 Temp/Humi/Atm 20 °C 42 % R.H. 100.5 kPa  
 Test Condition Charging Mode

Memo

LIMIT : CISPR32\_B QP  
 CISPR32\_B AV



## Results of Conducted Emission

DT&C  
Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply 120 VAC 60 Hz  
 Temp/Humi/Atm 20 'C 42 % R.H. 100.5 kPa  
 Test Condition Charging Mode

Memo

LIMIT : CISPR32\_B QP  
 CISPR32\_B AV

NO	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	CAV [dBuV]		QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	
1	0.15450	22.04	10.09	19.98	42.02	30.07	65.75	55.75	23.73	25.68	N
2	0.19250	20.99	9.54	20.05	41.04	29.59	63.93	53.93	22.89	24.34	N
3	0.22750	18.60	7.00	19.89	38.49	26.89	62.54	52.54	24.05	25.65	N
4	0.52550	18.43	11.72	20.24	38.67	31.96	56.00	46.00	17.33	14.04	N
5	0.15650	21.41	10.63	20.01	41.42	30.64	65.65	55.65	24.23	25.01	L1
6	0.19250	17.66	8.95	20.05	37.71	29.00	63.93	53.93	26.22	24.93	L1
7	0.23103	15.76	7.40	19.88	35.64	27.28	62.41	52.41	26.77	25.13	L1

Mains terminal disturbance voltage _ Measurement data			
Test configuration mode	7	EUT Operation mode	7
Test voltage (V)	120	Test Frequency (Hz)	60

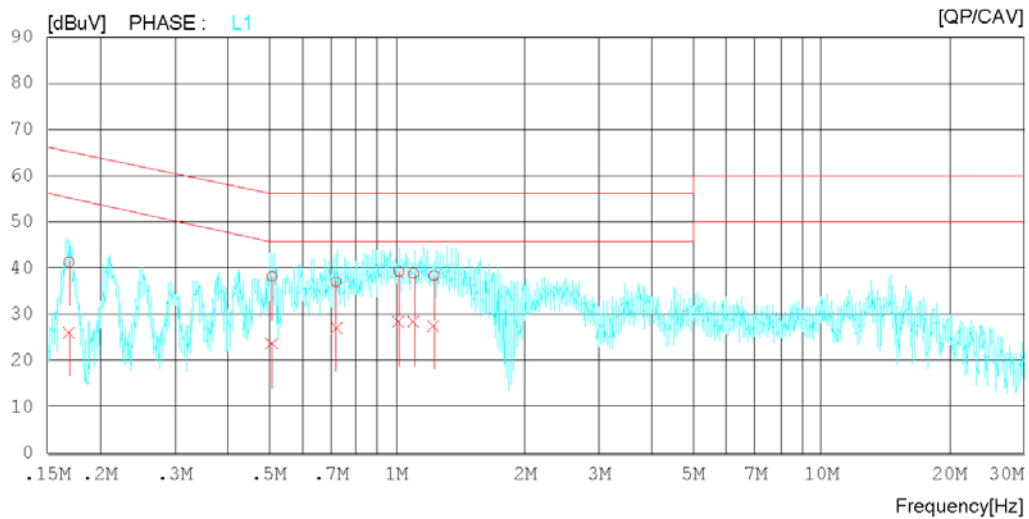
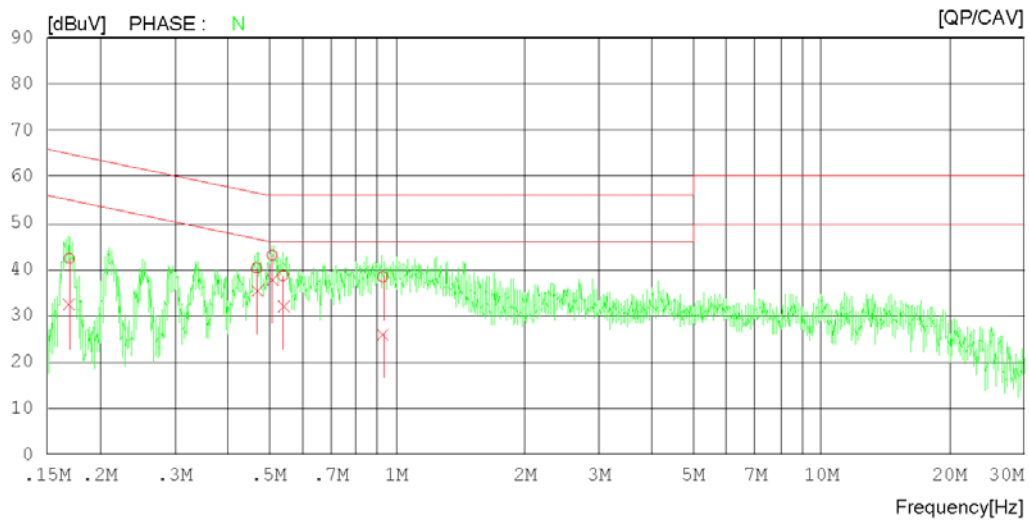
## Results of Conducted Emission

DT&C  
Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply 120 VAC 60 Hz  
 Temp/Humi/Atm 20 °C 42 % R.H. 100.5 kPa  
 Test Condition Cradle Mode

Memo

LIMIT : CISPR32\_B QP  
 CISPR32\_B AV



## Results of Conducted Emission

DT&C  
Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply 120 VAC 60 Hz  
 Temp/Humi/Atm 20 'C 42 % R.H. 100.5 kPa  
 Test Condition Cradle Mode

Memo

LIMIT : CISPR32\_B QP  
 CISPR32\_B AV

NO	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	CAV [dBuV]		QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	
1	0.16905	22.12	12.19	20.20	42.32	32.39	65.01	55.01	22.69	22.62	N
2	0.46750	20.08	15.29	20.22	40.30	35.51	56.56	46.56	16.26	11.05	N
3	0.50891	22.81	17.50	20.24	43.05	37.74	56.00	46.00	12.95	8.26	N
4	0.53910	18.38	12.00	20.24	38.62	32.24	56.00	46.00	17.38	13.76	N
5	0.92611	18.22	5.75	20.14	38.36	25.89	56.00	46.00	17.64	20.11	N
6	0.16910	21.09	5.91	20.20	41.29	26.11	65.00	55.00	23.71	28.89	L1
7	0.50790	17.93	3.31	20.24	38.17	23.55	56.00	46.00	17.83	22.45	L1
8	0.71987	16.90	7.03	20.14	37.04	27.17	56.00	46.00	18.96	18.83	L1
9	1.01187	19.12	8.35	20.13	39.25	28.48	56.00	46.00	16.75	17.52	L1
10	1.09659	18.78	8.22	20.09	38.87	28.31	56.00	46.00	17.13	17.69	L1
11	1.22362	18.35	7.60	20.05	38.40	27.65	56.00	46.00	17.60	18.35	L1

Mains terminal disturbance voltage _ Measurement data			
Test configuration mode	8	EUT Operation mode	8
Test voltage (V)	120	Test Frequency (Hz)	60

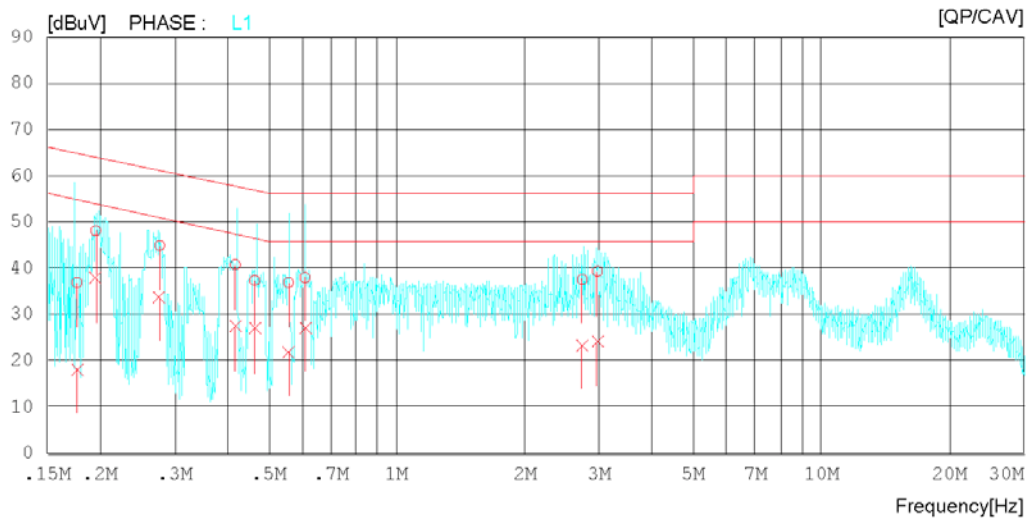
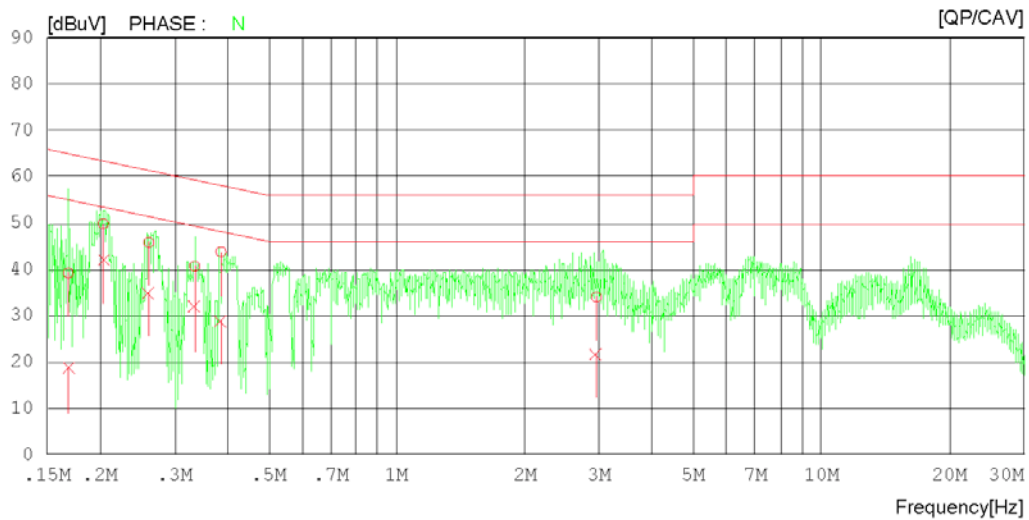
## Results of Conducted Emission

DT&C  
Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply 120 VAC 60 Hz  
 Temp/Humi/Atm 20 °C 42 % R.H. 100.5 kPa  
 Test Condition PC Link Mode

Memo

LIMIT : CISPR32\_B QP  
 CISPR32\_B AV



## Results of Conducted Emission

DT&C  
Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply 120 VAC 60 Hz  
 Temp/Humi/Atm 20 'C 42 % R.H. 100.5 kPa  
 Test Condition PC Link Mode

Memo

LIMIT : CISPR32\_B QP  
 CISPR32\_B AV

NO	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	CAV [dBuV]		QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	
1	0.16839	19.04	-1.56	20.19	39.23	18.63	65.04	55.04	25.81	36.41	N
2	0.20350	29.85	22.18	19.99	49.84	42.17	63.47	53.47	13.63	11.30	N
3	0.26050	25.98	15.10	19.83	45.81	34.93	61.42	51.42	15.61	16.49	N
4	0.33417	20.71	11.94	20.01	40.72	31.95	59.35	49.35	18.63	17.40	N
5	0.38537	23.62	8.74	20.13	43.75	28.87	58.16	48.16	14.41	19.29	N
6	2.95307	13.90	1.60	20.09	33.99	21.69	56.00	46.00	22.01	24.31	N
7	0.17650	16.71	-1.92	20.16	36.87	18.24	64.65	54.65	27.78	36.41	L1
8	0.19550	28.07	17.89	20.03	48.10	37.92	63.80	53.80	15.70	15.88	L1
9	0.27650	25.03	13.81	19.86	44.89	33.67	60.92	50.92	16.03	17.25	L1
10	0.41650	20.58	7.12	20.19	40.77	27.31	57.52	47.52	16.75	20.21	L1
11	0.46279	17.13	6.61	20.22	37.35	26.83	56.64	46.64	19.29	19.81	L1
12	0.55550	16.66	1.62	20.24	36.90	21.86	56.00	46.00	19.10	24.14	L1
13	0.60750	17.77	6.93	20.23	38.00	27.16	56.00	46.00	18.00	18.84	L1
14	2.73529	17.46	3.25	20.10	37.56	23.35	56.00	46.00	18.44	22.65	L1
15	2.97234	19.24	3.97	20.09	39.33	24.06	56.00	46.00	16.67	21.94	L1

### Calculation

N : Neutral phase, L1 : Live phase
C.FACTOR(dB) : Pulse Limiter(dB) + Cable loss(dB) + Insertion loss of LISN(dB)
Result(dBμV) : Reading Value(dBμV) + C.FACTOR(dB)
Margin(dB) : Limit(dBμV) - Result(dBμV)



## 7.2 Radiated Disturbance

ANSI C63.4	Radiated disturbance 30 MHz – XX GHz			Result
<b>Method:</b> Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 10 or 3 meter below 1GHz and 3 meter above 1GHz. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in horizontal and vertical polarities. Final measurements were then performed by rotating the EUT 360° and adjusting the receive antenna height from 1 to 4 m. All frequencies were investigated in both horizontal and vertical antenna polarity, where applicable. For final measurement below 1 GHz frequency range, Quasi-Peak detector with (RBW = 120 kHz Bandwidth) was used. For final measurement above 1 GHz frequency range, Peak detector with (RBW = 1 MHz Bandwidth) and CISPR Average detector with (RBW = 1 MHz Bandwidth) were used.				<b>Comply</b>
<b>EUT mode</b> (Refer to clauses 4)	<b>Test configuration mode</b>		1 ~ 8	
	<b>EUT Operation mode</b>		1 ~ 8	
	<b>Power interface mode</b>		1, 2	
<b>Radiated Disturbance below 1 000 MHz</b>				
<b>Frequency range</b> (MHz)	<b>Quasi-peak limit dB<math>\mu</math>V/m</b>			
	<b>Class A</b>		<b>Class B</b>	
	<b>3 m distance</b>	<b>10 m distance</b>	<b>3 m distance</b>	
30 to 88	49.1	39.1	40	
88 to 216	53.5	43.5	43.5	
216 to 960	56.4	46.4	46	
960 to 1 000	59.5	49.5	54	
According to 15.109(g), as an alternative to the radiated emission limit shown above, digital devices may be shown to comply with the standards(CISPR), Pub. 22 shown as below.				
<b>Frequency range</b> (MHz)	<b>Quasi-peak limit dB<math>\mu</math>V/m</b>			
	<b>Class A (10 m distance)</b>		<b>Class B (10 m distance)</b>	
	30 to 230		30	
230 to 1 000		37		
<b>Radiated Disturbance for above 1 000 MHz at a measurement distance of 3 m</b>				
<b>Frequency range</b> (GHz)	<b>Peak limit dB<math>\mu</math>V/m</b>		<b>Average limit dB<math>\mu</math>V/m</b>	
	<b>Class A</b>	<b>Class B</b>	<b>Class A</b>	<b>Class B</b>
	1 to 40	80	74	60
<b>The test frequency range of Radiated Disturbance measurements are listed below.</b>				
<b>Highest frequency generated or used in the device or on which the device operates or tunes (MHz)</b>			<b>Upper frequency of measurement range (MHz)</b>	
Below 108			1 000	
108 – 500			2 000	
500 – 1 000			5 000	
Above 1 000			5 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower	

Measurement Instrument					
Description	Model	Manufacturer	Identifier	Cal. Date	Cal. Due
MEASUREMENT SOFTWARE	EMI-R VER. 2.00.0177	TSJ	N/A	N/A	N/A
EMI TEST RECEIVER	ESU40	ROHDE&SCHWARZ	100525	2019.12.20	2020.12.20
TRILOG BROAD BAND ANTENNA	VULB9160	SCHWARZBECK	9160-3339	2018.10.22	2020.10.22
6DB ATTENUATOR	8491B	HP	18403	2018.10.22	2020.10.22
LOW NOISE PRE AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2019.02.18	2020.02.18
HORN ANTENNA	3117	ETS-LINDGREN	00152093	2018.03.26	2020.03.26
PRE AMPLIFIER	8449B	H.P	3008A00887	2019.08.26	2020.08.26
HORN ANTENNA WITH PREAMPLIFIER	EM-6969	ELECTRO-METRICS	156	2019.02.13	2021.02.13
	MLA-0618-B03-34	TSJ	1785642	2019.12.31	2020.12.31
HORN ANTENNA WITH PREAMPLIFIER	3116C	ETS-LINDGREN	00213177	2019.12.12	2021.12.12
	JS44-18004000-35-8P	L3 NARDA-MITEQ	2046884	2019.11.04	2020.11.04
(NOTE : THE MEASUREMENT ANTENNAS WERE CALIBRATED IN ACCORDANCE TO THE REQUIREMENTS OF C63.5-2017.)					

Radiated disturbance at (30 ~ 1000) MHz _ Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	Battery	Test Frequency (Hz)	-

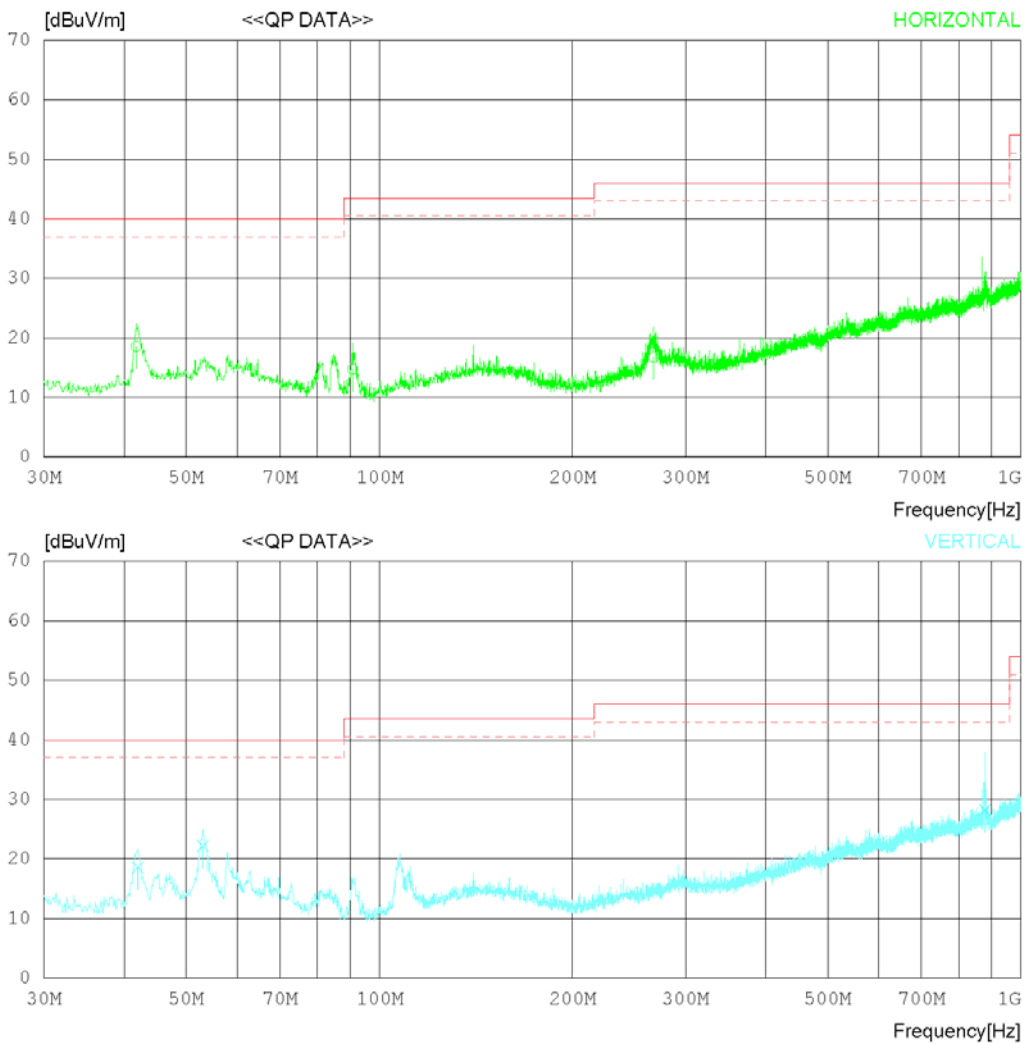
## RADIATED EMISSION

Date 2020-01-24

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 19 °C 44 % R.H.  
 Test Condition MP4 Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m)  
 MARGIN: 3 dB



## RADIATED EMISSION

Date 2020-01-24

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	19 °C 44 %R.H.
Test Condition	MP4 Mode

**Memo**

 LIMIT : FCC Part15 Subpart.B Class B (3m)  
 MARGIN: 3 dB

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	41.761	25.70	17.45	1.22	25.81	18.56	40.00	21.44	109	352
2	90.745	25.60	13.37	1.50	25.72	14.75	43.50	28.75	207	0
3	267.644	21.80	18.56	2.15	25.78	16.73	46.00	29.27	102	356
----- Vertical -----										
4	42.004	25.70	17.50	1.22	25.81	18.61	40.00	21.39	307	0
5	53.038	28.20	18.50	1.29	25.79	22.20	40.00	17.80	196	352
6	879.667	21.40	29.10	3.52	25.80	28.22	46.00	17.78	104	238



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 %R.H.
Test Condition	MP4 Mode

**Memo**

 LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1826.250	46.60	30.51	5.69	34.58	48.22	74.0	25.78	108	215
2	4446.875	41.70	33.89	9.87	34.13	51.33	74.0	22.67	206	358
3	5094.375	42.00	34.11	10.70	34.87	51.94	74.0	22.06	208	31
----- Vertical -----										
4	1822.500	46.80	30.49	5.69	34.59	48.39	74.0	25.61	201	9
5	4954.375	42.60	34.19	10.69	34.80	52.68	74.0	21.32	103	2
6	5948.125	41.40	35.10	11.30	34.99	52.81	74.0	21.19	104	358

Radiated disturbance at (1 ~ 6) GHz _ Average Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	Battery	Test Frequency (Hz)	-

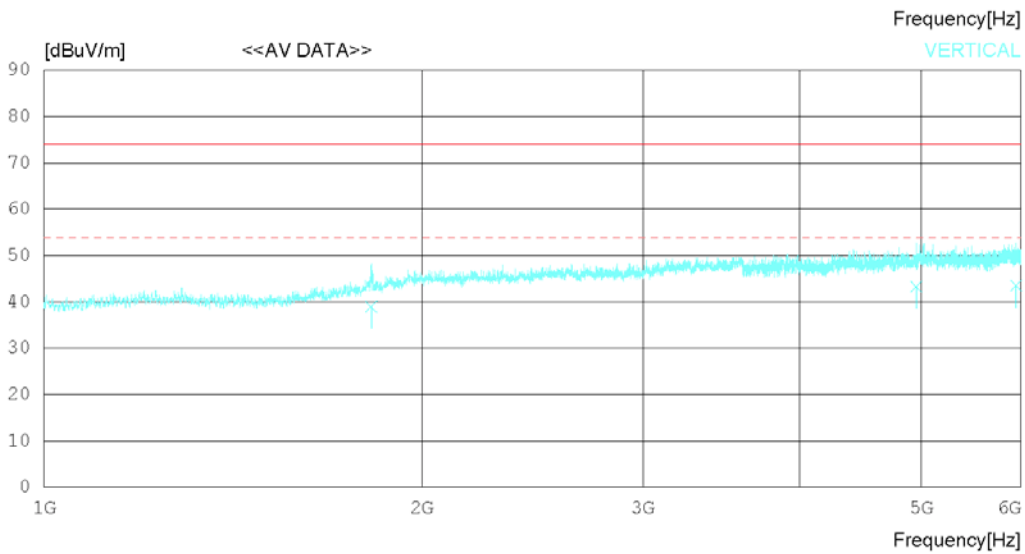
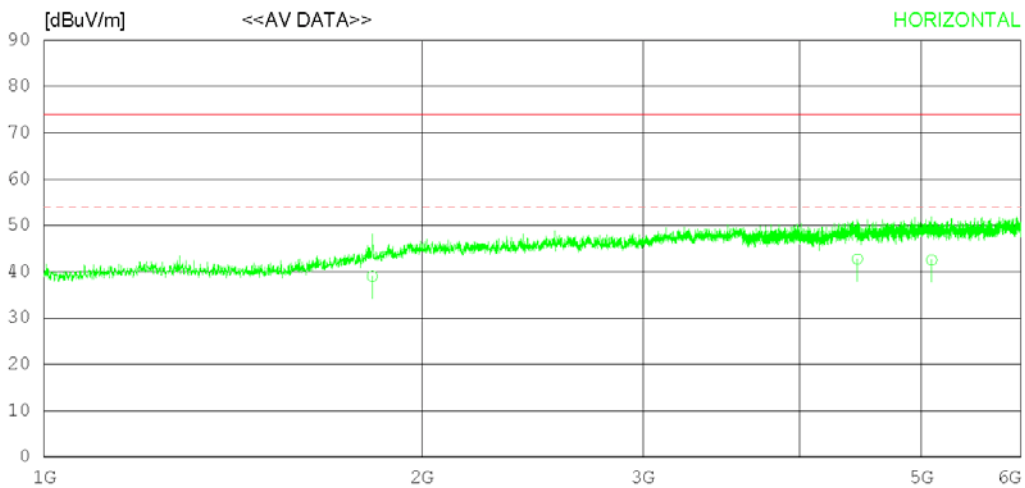
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition MP4 Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 %R.H.
Test Condition	MP4 Mode

**Memo**

 LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1826.117	37.40	30.50	5.69	34.59	39.00	54.00	15.00	109	225
2	4446.936	33.10	33.89	9.87	34.13	42.73	54.00	11.27	204	351
3	5094.455	32.60	34.11	10.70	34.87	42.54	54.00	11.46	207	45
----- Vertical -----										
4	1822.414	37.40	30.49	5.69	34.59	38.99	54.00	15.01	196	0
5	4954.462	33.20	34.19	10.69	34.80	43.28	54.00	10.72	102	0
6	5948.365	32.10	35.10	11.30	34.99	43.51	54.00	10.49	104	351



Radiated disturbance at (6 ~ 18) GHz _ Peak Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	Battery	Test Frequency (Hz)	-

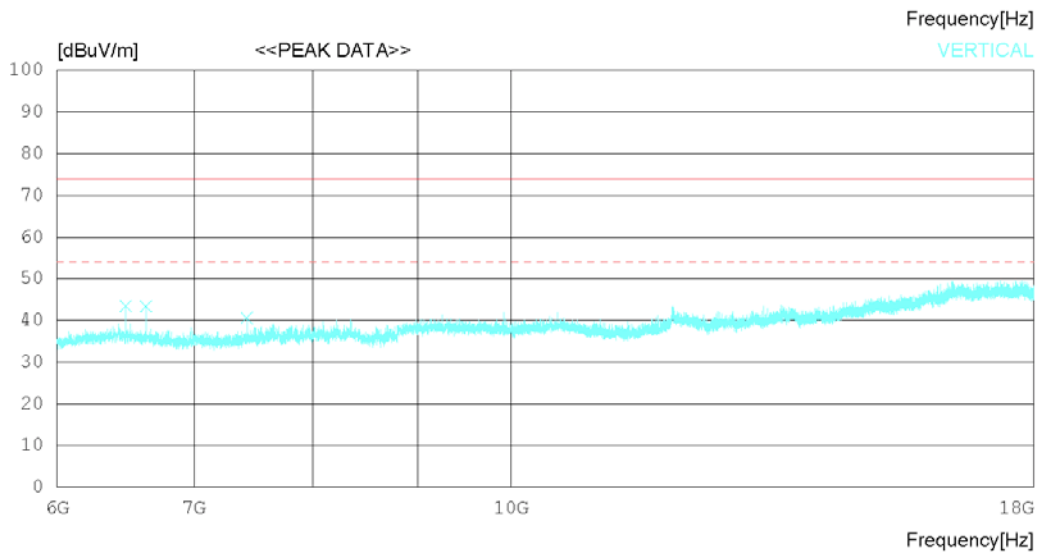
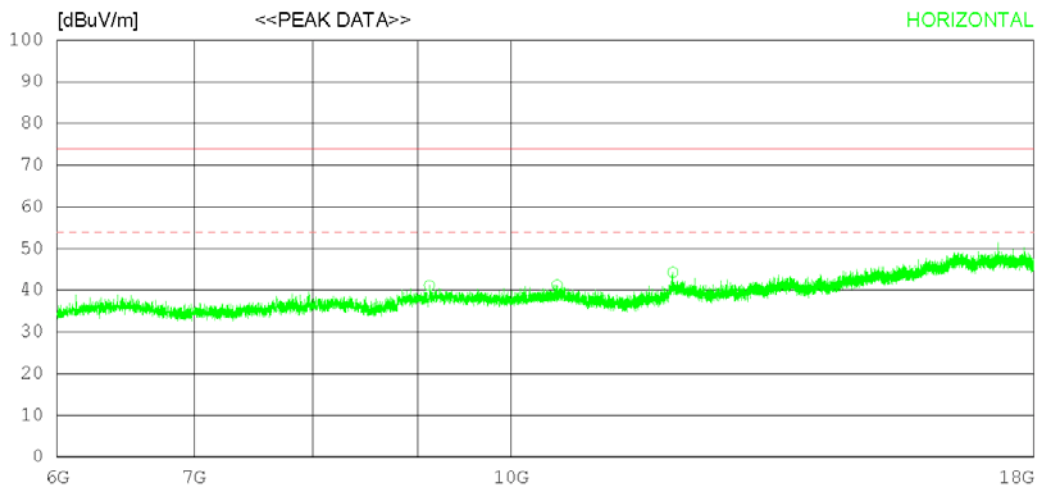
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition MP4 Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 %R.H.
Test Condition	MP4 Mode

**Memo**

 LIMIT : FCC Part15 Subpart B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	9119.250	33.00	32.15	13.61	37.60	41.16	74.0	32.84	208	0
2	10529.250	32.20	32.48	14.68	38.11	41.25	74.0	32.75	102	358
3	11992.500	32.90	33.45	15.66	37.71	44.30	74.0	29.7	106	58
----- Vertical -----										
4	6482.250	39.40	31.59	11.20	38.82	43.37	74.0	30.63	107	131
5	6630.000	39.30	31.55	11.22	38.70	43.37	74.0	30.63	103	332
6	7428.750	35.50	31.39	11.80	38.07	40.62	74.0	33.38	106	310

Radiated disturbance at (6 ~ 18) GHz _ Average Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	Battery	Test Frequency (Hz)	-

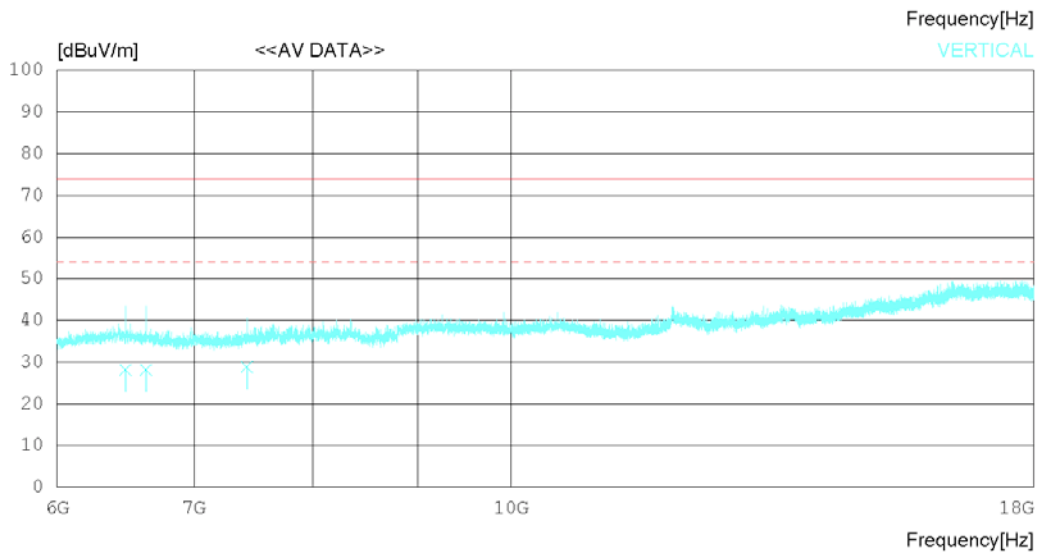
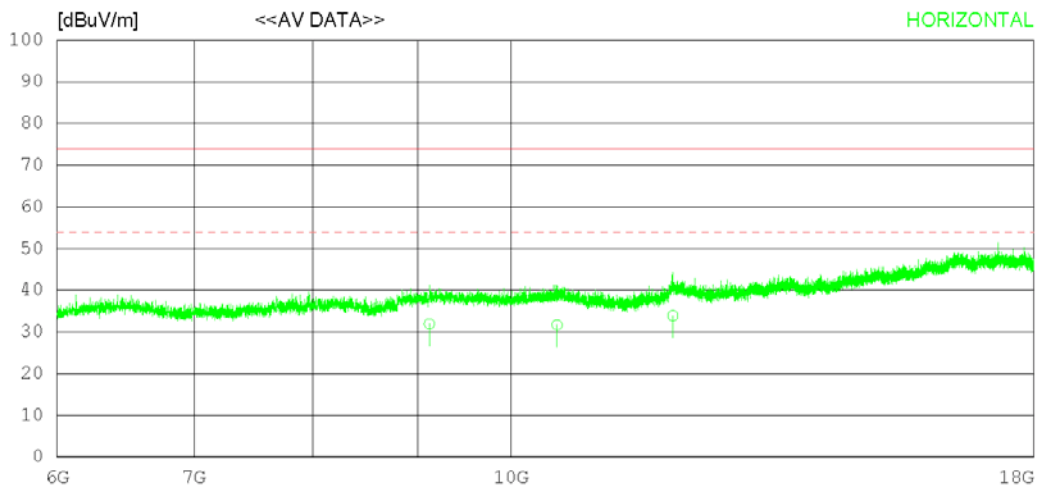
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition MP4 Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 %R.H.
Test Condition	MP4 Mode

**Memo**

 LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	9119.330	23.80	32.15	13.61	37.60	31.96	54.00	22.04	207	0
2	10529.210	22.60	32.48	14.68	38.11	31.65	54.00	22.35	102	352
3	11992.620	22.50	33.45	15.66	37.71	33.90	54.00	20.10	105	69
----- Vertical -----										
4	6482.170	24.20	31.59	11.20	38.82	28.17	54.00	25.83	106	145
5	6630.070	24.10	31.55	11.22	38.70	28.17	54.00	25.83	102	345
6	7428.660	23.70	31.39	11.80	38.07	28.82	54.00	25.18	105	317

Radiated disturbance at (18 ~ 40) GHz _ Peak Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	Battery	Test Frequency (Hz)	-

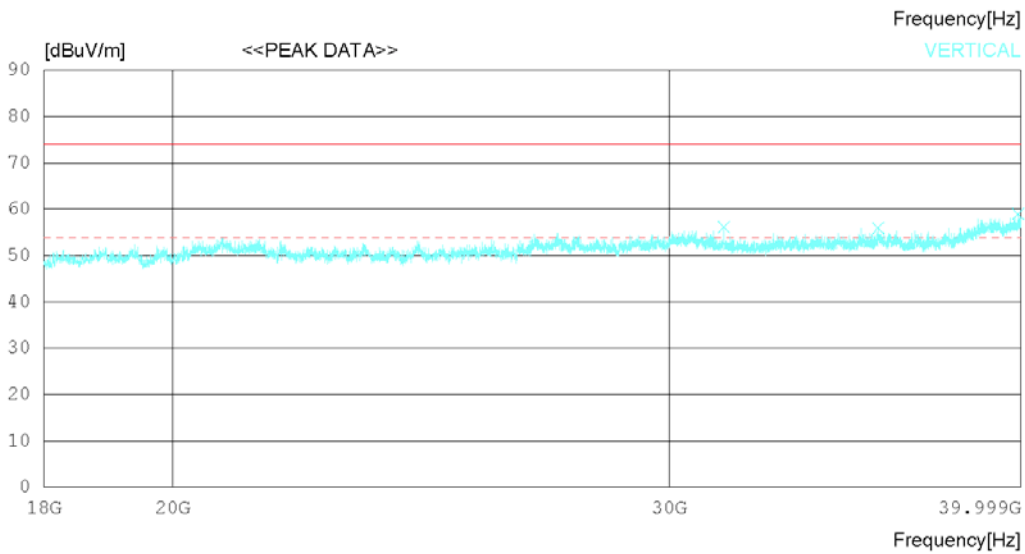
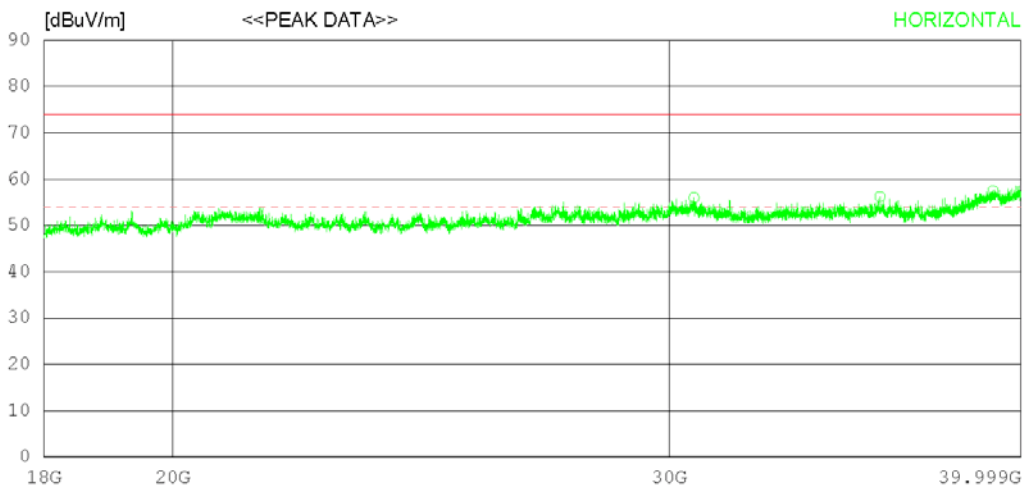
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition MP4 Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 % R.H.
Test Condition	MP4 Mode

**Memo**

 LIMIT : FCC Part15 Subpart B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	30619.75038.60	47.38	22.24	52.23	55.99	74.0	18.01	113	36	
2	35649.50039.00	46.95	24.07	53.81	56.21	74.0	17.79	109	217	
3	39095.25036.40	47.70	25.64	52.25	57.49	74.0	16.51	106	9	
----- Vertical -----										
4	31378.75039.20	46.84	22.38	52.27	56.15	74.0	17.85	103	353	
5	35600.00038.70	47.00	24.07	53.80	55.97	74.0	18.03	104	349	
6	39914.75037.60	49.13	24.44	52.20	58.97	74.0	15.03	106	358	

Radiated disturbance at (18 ~ 40) GHz _ Average Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	Battery	Test Frequency (Hz)	-

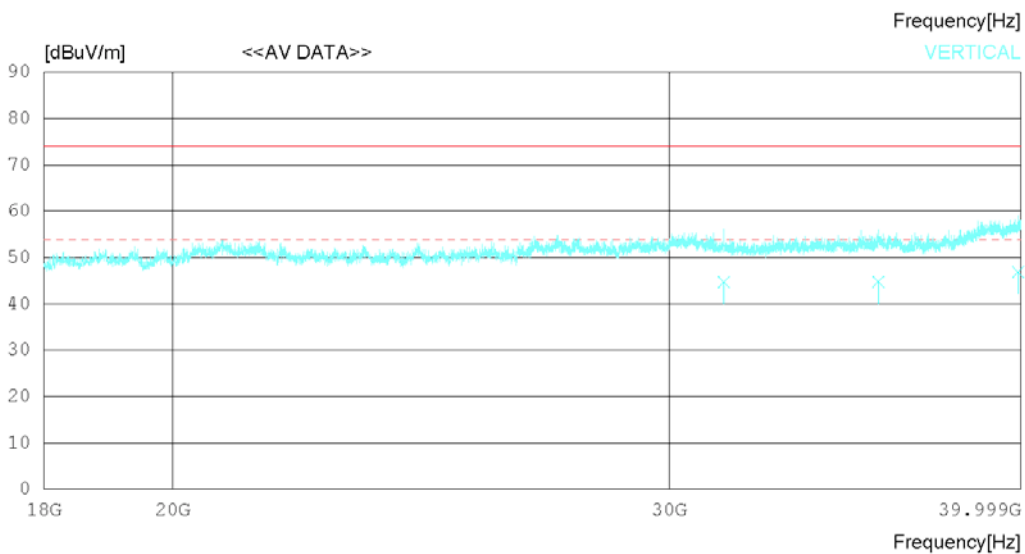
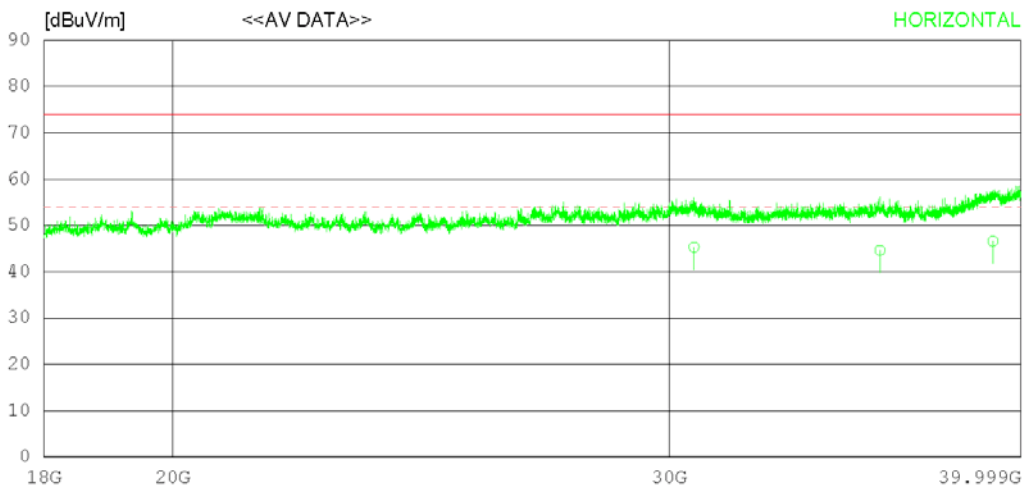
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition MP4 Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 % R.H.
Test Condition	MP4 Mode

**Memo**

 LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	30619.68027.90		47.38	22.24	52.23	45.29	54.00	8.71	112	47
2	35649.46027.40		46.95	24.07	53.81	44.61	54.00	9.39	109	228
3	39095.17025.50		47.70	25.64	52.25	46.59	54.00	7.41	102	0
----- Vertical -----										
4	31378.68027.80		46.84	22.38	52.27	44.75	54.00	9.25	102	356
5	35600.12027.50		47.00	24.07	53.80	44.77	54.00	9.23	104	355
6	39914.65025.50		49.13	24.44	52.20	46.87	54.00	7.13	105	352



Radiated disturbance at (30 ~ 1000) MHz _ Measurement data			
Test configuration mode	2	EUT Operation mode	2
Test voltage (V)	Battery	Test Frequency (Hz)	-

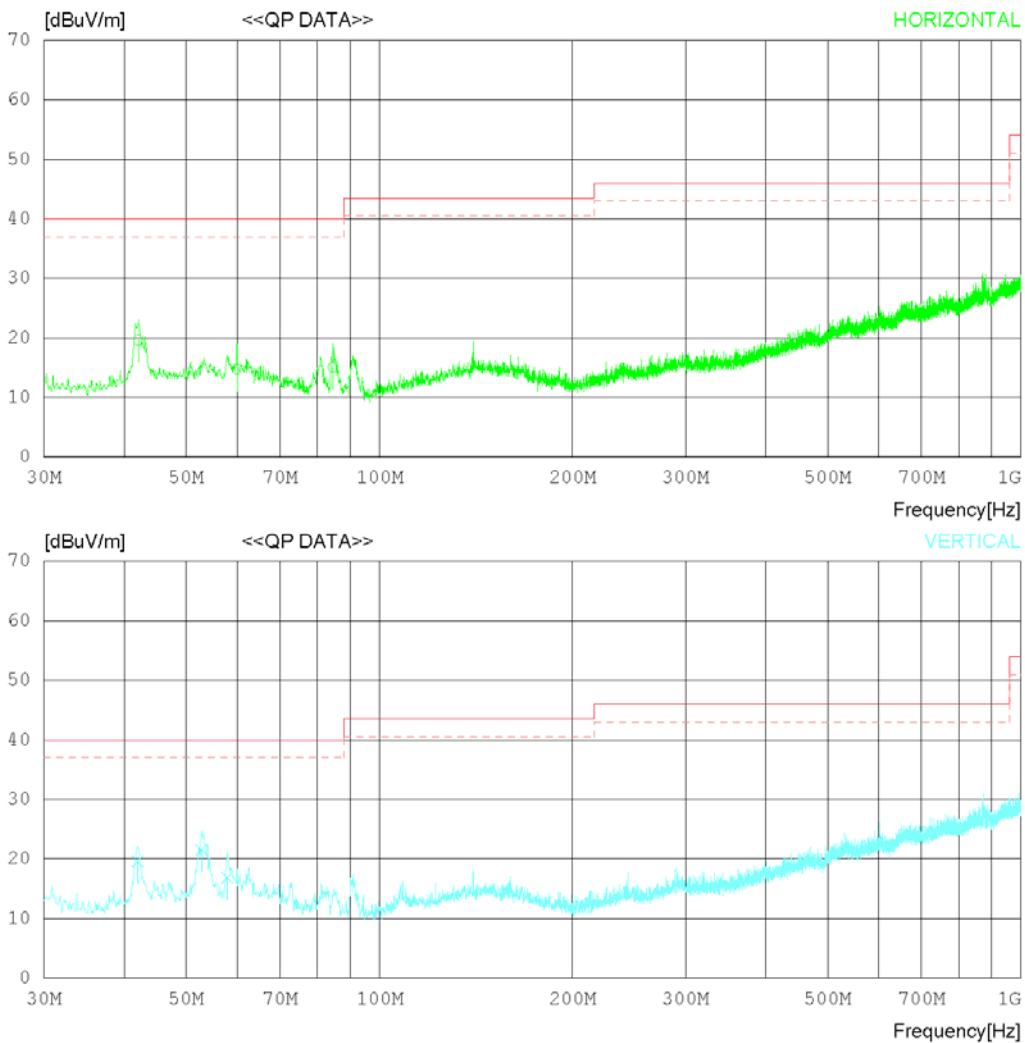
## RADIATED EMISSION

Date 2020-01-24

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 19 °C 44 % R.H.  
 Test Condition Rear Camera Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m)  
 MARGIN: 3 dB



## RADIATED EMISSION

Date 2020-01-24

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 19 °C 44 %R.H.  
 Test Condition Rear Camera Mode

**Memo**

LIMIT : FCC Part15 Subpart.B Class B (3m)  
 MARGIN: 3 dB

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	42.125	26.70	17.51	1.22	25.81	19.62	40.00	20.38	105	306
2	59.949	21.40	17.90	1.29	25.78	14.81	40.00	25.19	104	17
3	84.683	25.70	13.63	1.48	25.73	15.08	40.00	24.92	208	261
----- Vertical -----										
4	42.004	26.70	17.50	1.22	25.81	19.61	40.00	20.39	312	317
5	52.795	27.60	18.48	1.29	25.79	21.58	40.00	18.42	208	268
6	57.888	23.40	17.97	1.29	25.78	16.88	40.00	23.12	109	0

Radiated disturbance at (1 ~ 6) GHz _ Peak Measurement data			
Test configuration mode	2	EUT Operation mode	2
Test voltage (V)	Battery	Test Frequency (Hz)	-

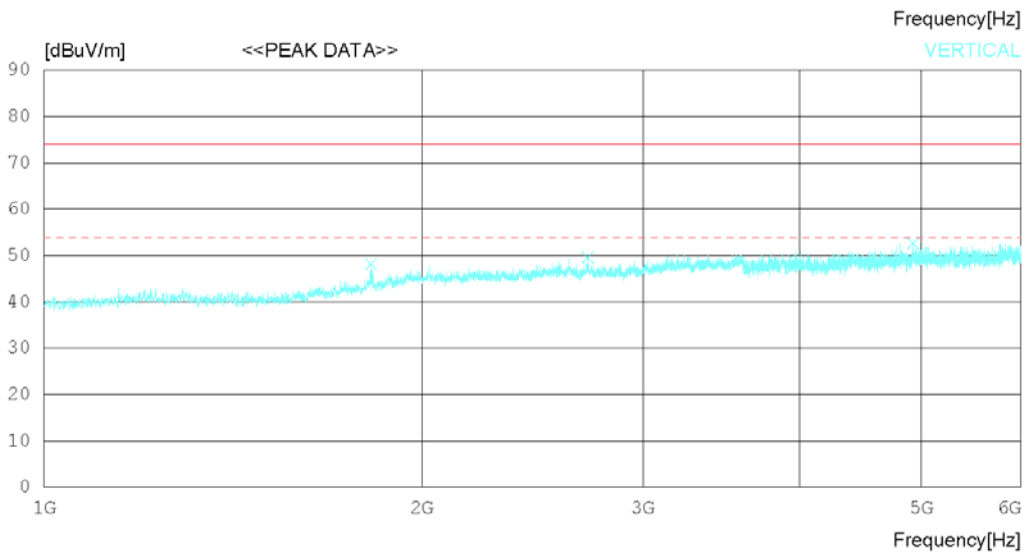
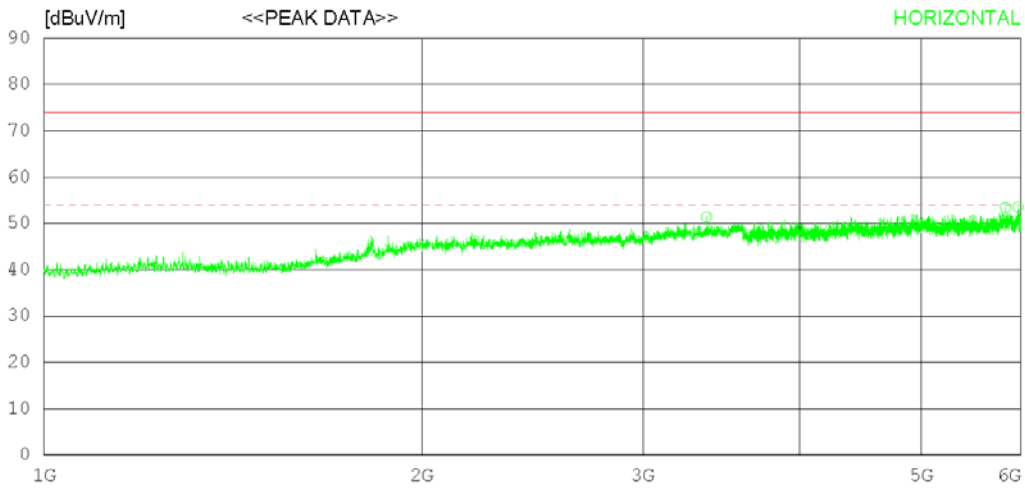
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition Rear Camera Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 %R.H.
Test Condition	Rear Camera Mode

**Memo**

 LIMIT : FCC Part15 Subpart B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	3370.625	45.00	32.80	8.01	34.41	51.40	74.0	22.6	218	358
2	5831.250	42.30	34.83	11.27	34.98	53.42	74.0	20.58	109	314
3	5968.125	42.10	35.10	11.30	35.00	53.50	74.0	20.5	106	166
----- Vertical -----										
4	1821.875	46.50	30.49	5.69	34.59	48.09	74.0	25.91	105	0
5	2711.250	44.80	32.58	7.00	34.76	49.62	74.0	24.38	216	358
6	4921.875	42.60	34.14	10.67	34.76	52.65	74.0	21.35	106	0

Radiated disturbance at (1 ~ 6) GHz _ Average Measurement data			
Test configuration mode	2	EUT Operation mode	2
Test voltage (V)	Battery	Test Frequency (Hz)	-

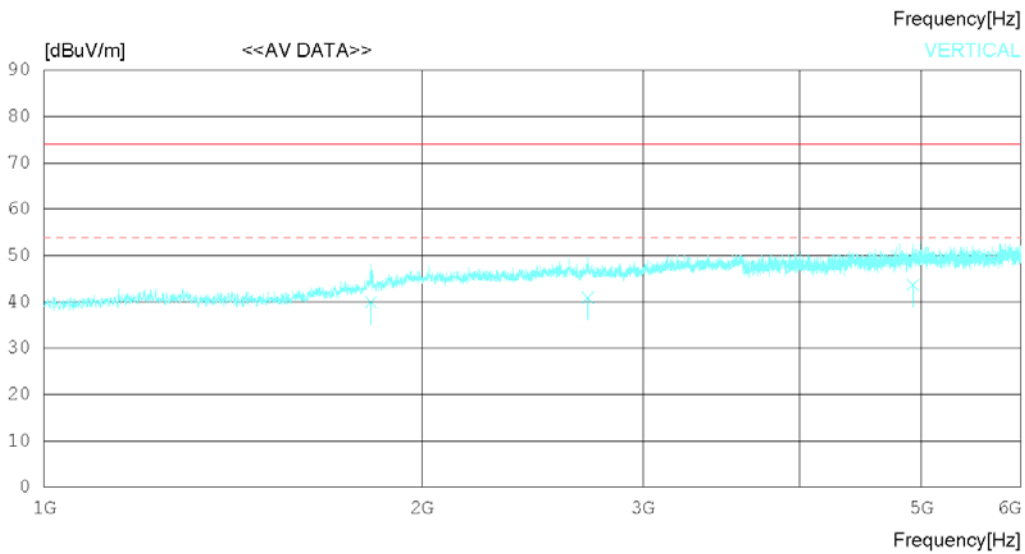
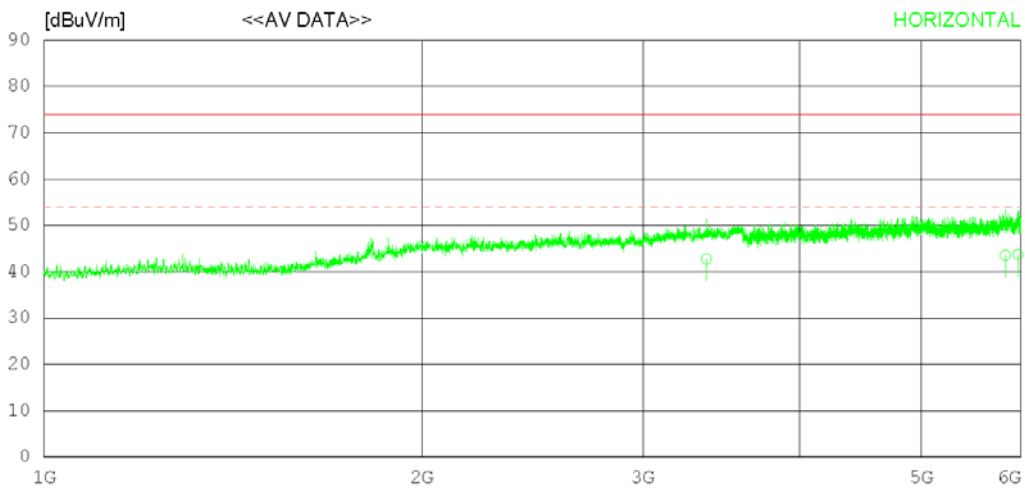
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition Rear Camera Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 %R.H.  
 Test Condition Rear Camera Mode

**Memo**

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	3370.515	36.40	32.80	8.01	34.41	42.80	54.00	11.20	217	351
2	5831.170	32.40	34.82	11.27	34.98	43.51	54.00	10.49	108	329
3	5968.395	32.30	35.10	11.30	35.00	43.70	54.00	10.30	104	147
----- Vertical -----										
4	1821.765	38.30	30.49	5.69	34.59	39.89	54.00	14.11	104	0
5	2711.395	36.10	32.58	7.00	34.76	40.92	54.00	13.08	214	352
6	4921.915	33.60	34.14	10.67	34.76	43.65	54.00	10.35	105	0

Radiated disturbance at (6 ~ 18) GHz _ Peak Measurement data			
Test configuration mode	2	EUT Operation mode	2
Test voltage (V)	Battery	Test Frequency (Hz)	-

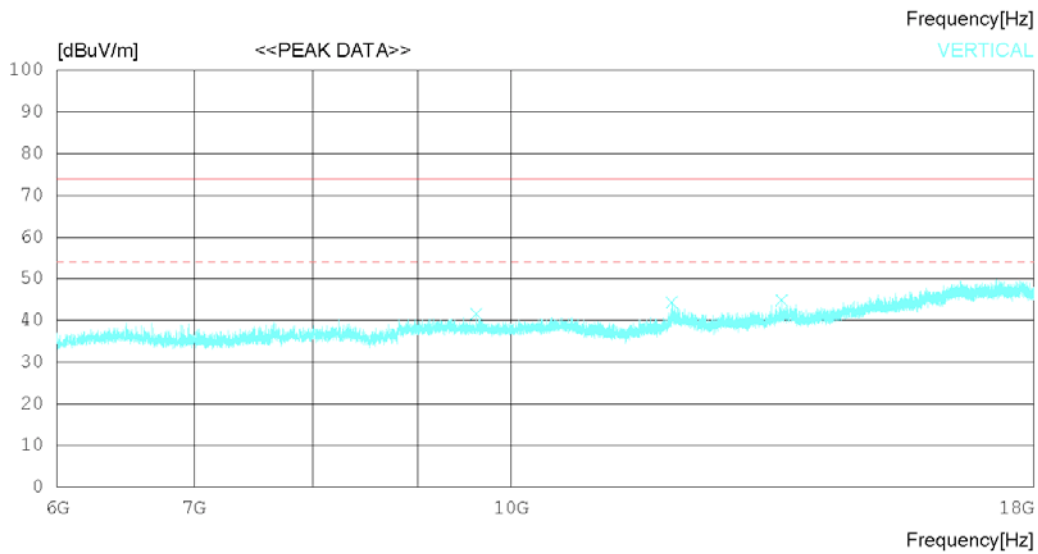
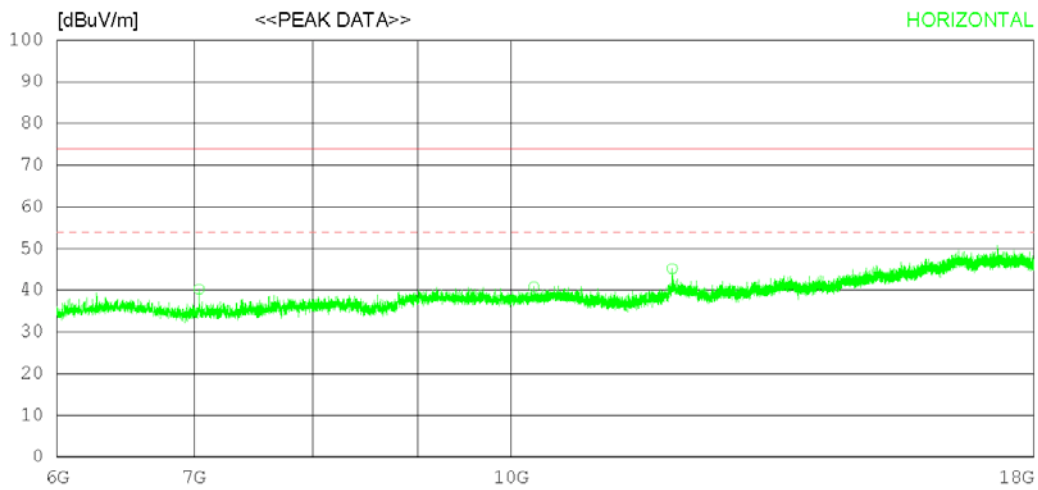
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition Rear Camera Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 %R.H.
Test Condition	Rear Camera Mode

**Memo**

 LIMIT : FCC Part15 Subpart B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	7039.500	35.40	31.44	11.72	38.36	40.20	74.0	33.8	109	71
2	10258.500	31.60	32.51	14.48	37.81	40.78	74.0	33.22	205	358
3	11985.750	33.80	33.45	15.66	37.72	45.19	74.0	28.81	208	67
----- Vertical -----										
4	9614.250	32.60	32.38	14.35	37.81	41.52	74.0	32.48	109	358
5	11978.250	33.00	33.44	15.64	37.73	44.35	74.0	29.65	208	358
6	13550.250	31.30	33.75	17.19	37.41	44.83	74.0	29.17	106	0



Radiated disturbance at (6 ~ 18) GHz _ Average Measurement data			
Test configuration mode	2	EUT Operation mode	2
Test voltage (V)	Battery	Test Frequency (Hz)	-

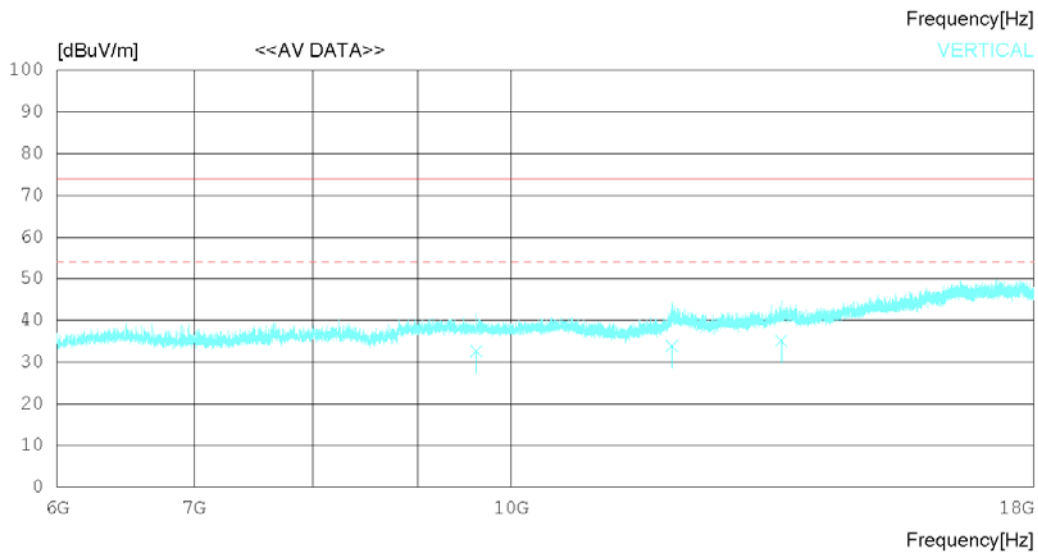
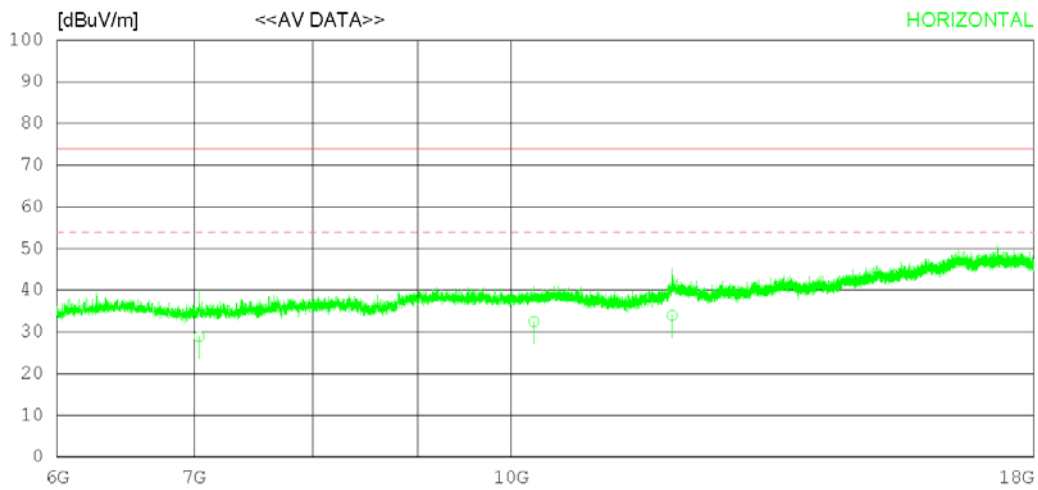
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition Rear Camera Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 %R.H.
Test Condition	Rear Camera Mode

**Memo**

 LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	7039.470	24.10	31.44	11.72	38.36	28.90	54.00	25.10	108	76
2	10258.360	23.30	32.51	14.48	37.81	32.48	54.00	21.52	204	352
3	11985.660	22.60	33.44	15.66	37.72	33.98	54.00	20.02	206	77
----- Vertical -----										
4	9614.380	23.70	32.38	14.34	37.81	32.61	54.00	21.39	106	356
5	11978.180	22.50	33.44	15.64	37.73	33.85	54.00	20.15	207	352
6	13550.110	21.60	33.75	17.19	37.41	35.13	54.00	18.87	105	0

Radiated disturbance at (18 ~ 40) GHz _ Peak Measurement data			
Test configuration mode	2	EUT Operation mode	2
Test voltage (V)	Battery	Test Frequency (Hz)	-

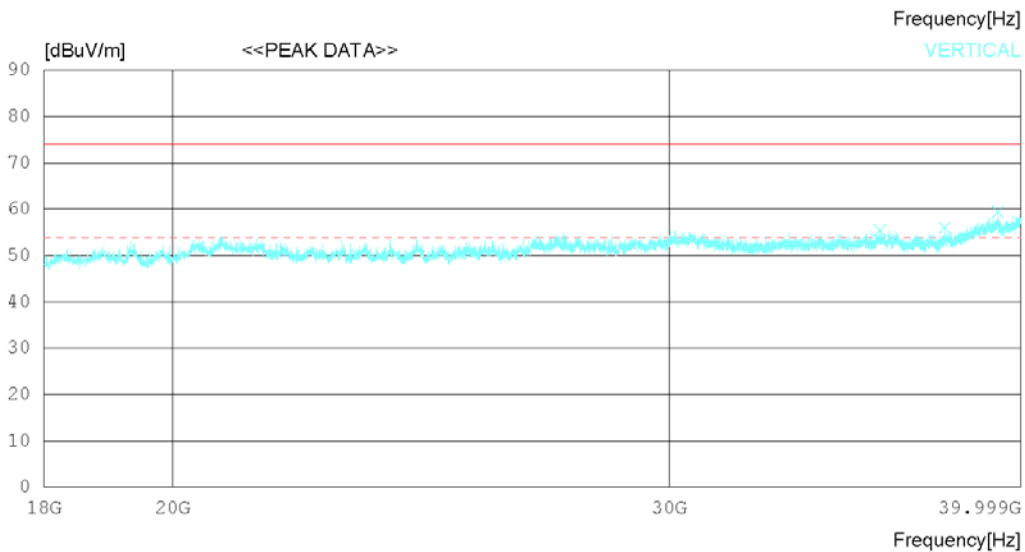
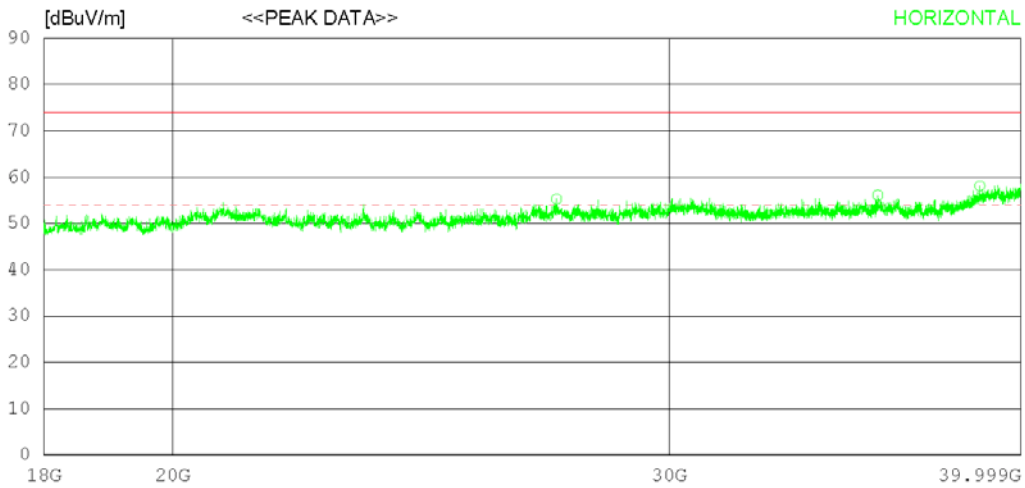
## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 % R.H.
Test Condition	Rear Camera Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 % R.H.
Test Condition	Rear Camera Mode

**Memo**

 LIMIT : FCC Part15 Subpart B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	27366.500	41.20	45.97	21.17	53.06	55.28	74.0	18.72	105	0
2	35586.250	38.80	47.00	24.06	53.80	56.06	74.0	17.94	111	124
3	38680.000	37.80	47.14	25.40	52.27	58.07	74.0	15.93	108	0
----- Vertical -----										
4	35644.000	38.20	46.96	24.07	53.81	55.42	74.0	18.58	109	164
5	37585.500	38.20	46.09	24.41	52.63	56.07	74.0	17.93	103	358
6	39257.500	38.30	47.96	25.40	52.24	59.42	74.0	14.58	106	358

Radiated disturbance at (18 ~ 40) GHz _ Average Measurement data			
Test configuration mode	2	EUT Operation mode	2
Test voltage (V)	Battery	Test Frequency (Hz)	-

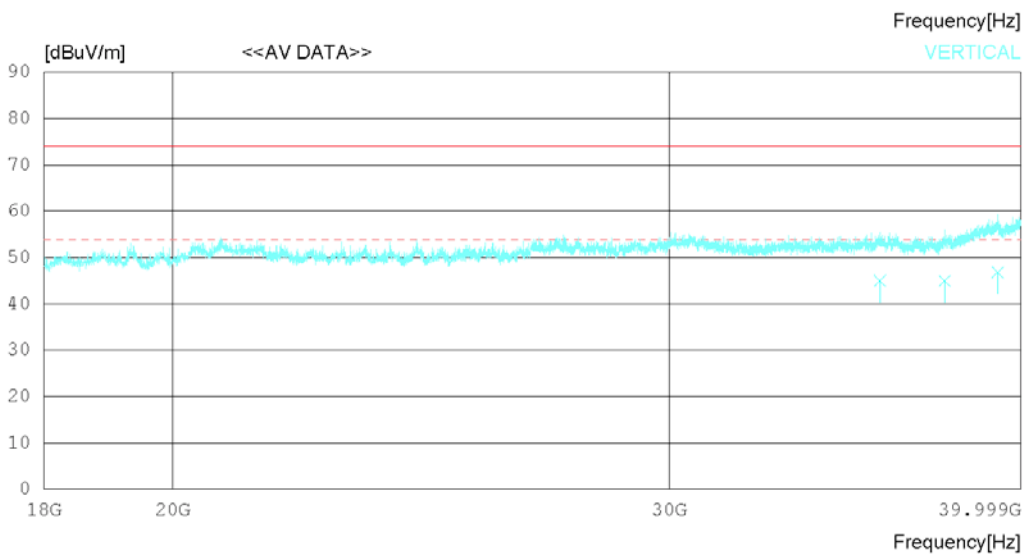
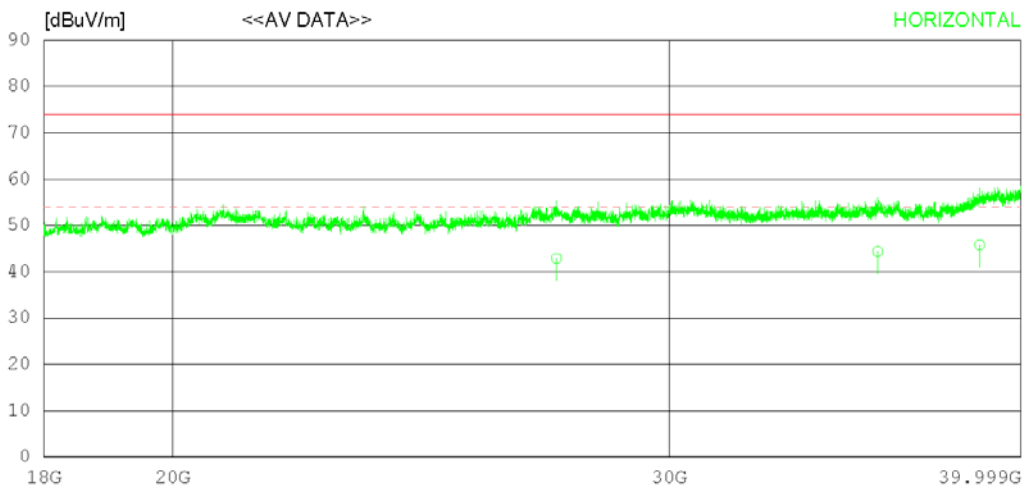
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition Rear Camera Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 % R.H.
Test Condition	Rear Camera Mode

**Memo**

 LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	27366.68028.80		45.97	21.17	53.06	42.88	54.00	11.12	104	0
2	35586.12027.10		47.00	24.06	53.80	44.36	54.00	9.64	109	138
3	38680.08025.50		47.14	25.40	52.27	45.77	54.00	8.23	105	0
----- Vertical -----										
4	35644.12027.80		46.96	24.07	53.81	45.02	54.00	8.98	108	178
5	37585.68027.10		46.09	24.41	52.63	44.97	54.00	9.03	102	355
6	39257.45025.70		47.96	25.40	52.24	46.82	54.00	7.18	105	352

Radiated disturbance at (30 ~ 1000) MHz _ Measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	Battery	Test Frequency (Hz)	-

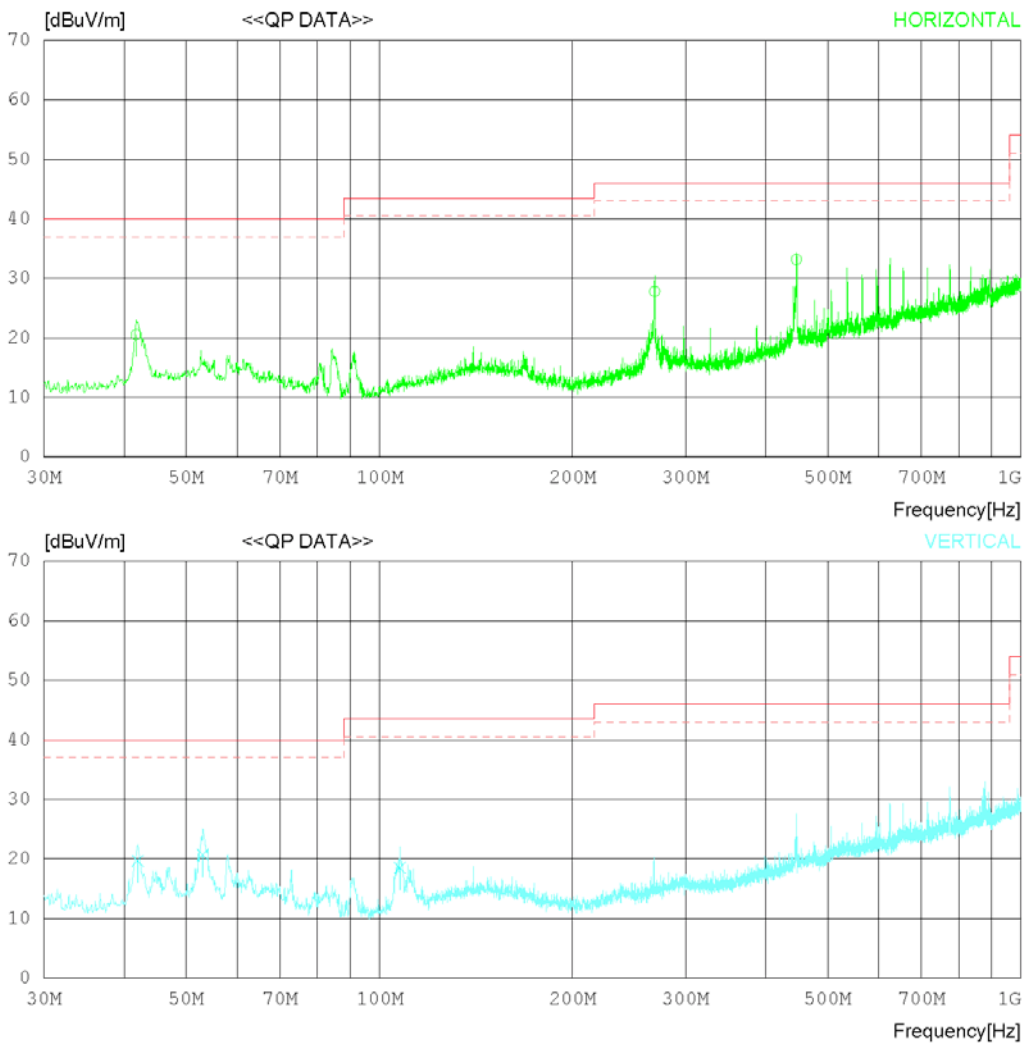
## RADIATED EMISSION

Date 2020-01-24

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 19 °C 44 % R.H.  
 Test Condition Printing Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m)  
 MARGIN: 3 dB



## RADIATED EMISSION

Date 2020-01-24

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	19 °C 44 %R.H.
Test Condition	Printing Mode

**Memo**

 LIMIT : FCC Part15 Subpart.B Class B (3m)  
 MARGIN: 3 dB

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	41.761	27.70	17.45	1.22	25.81	20.56	40.00	19.44	108	352
2	268.493	32.80	18.61	2.15	25.78	27.78	46.00	18.22	104	356
3	446.725	33.20	22.97	2.62	25.64	33.15	46.00	12.85	102	74
----- Vertical -----										
4	42.004	26.80	17.50	1.22	25.81	19.71	40.00	20.29	307	296
5	53.038	26.70	18.50	1.29	25.79	20.70	40.00	19.30	196	352
6	107.599	26.50	16.14	1.61	25.70	18.55	43.50	24.95	102	0



Radiated disturbance at (1 ~ 6) GHz _ Peak Measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	Battery	Test Frequency (Hz)	-

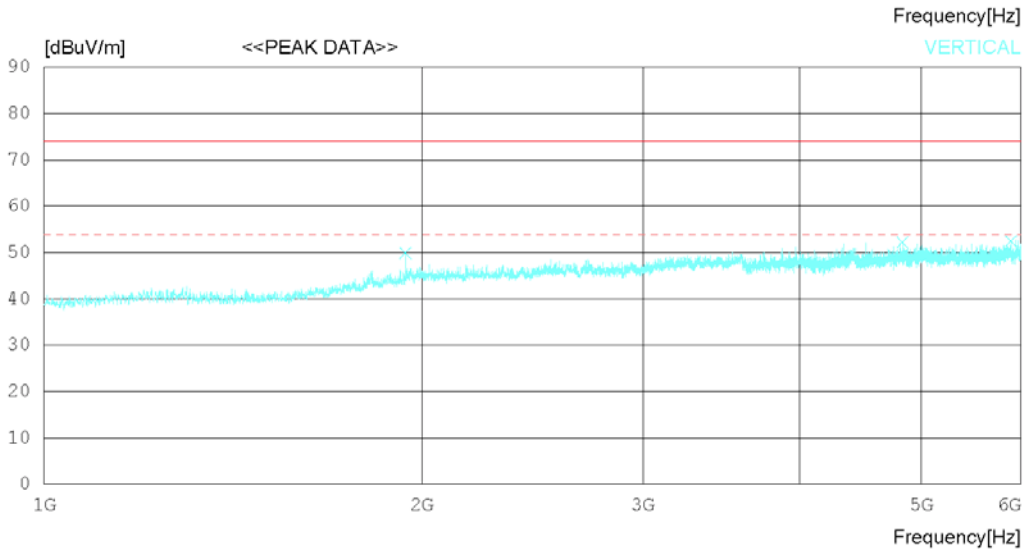
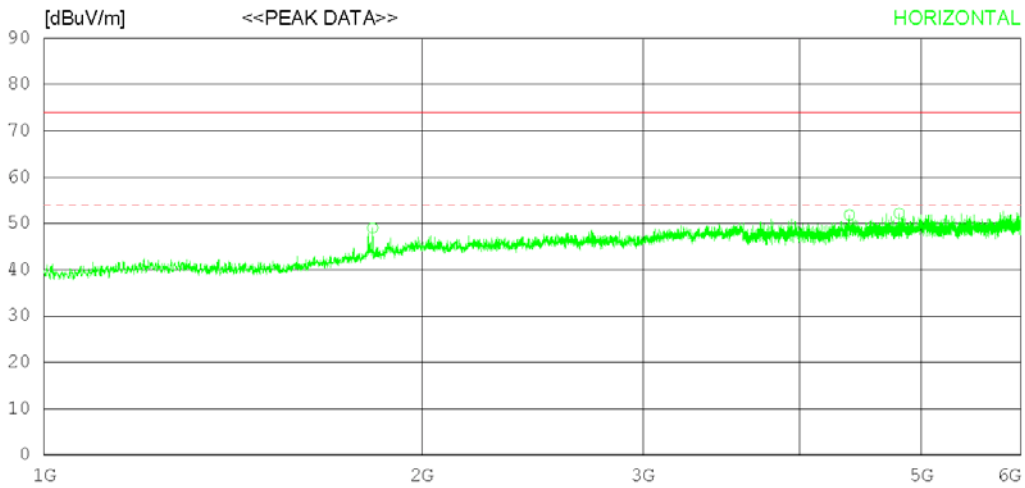
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition Printing Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 %R.H.
Test Condition	Printing Mode

**Memo**

 LIMIT : FCC Part15 Subpart B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1826.875	47.40	30.51	5.70	34.58	49.03	74.0	24.97	206	353
2	4380.625	42.30	33.76	9.77	34.04	51.79	74.0	22.21	109	243
3	4799.375	42.20	34.00	10.56	34.60	52.16	74.0	21.84	115	84
----- Vertical -----										
4	1941.250	46.90	31.43	5.97	34.42	49.88	74.0	24.12	187	0
5	4830.000	42.30	34.00	10.58	34.64	52.24	74.0	21.76	112	117
6	5891.875	41.20	34.98	11.28	34.98	52.48	74.0	21.52	106	0

Radiated disturbance at (1 ~ 6) GHz _ Average Measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	Battery	Test Frequency (Hz)	-

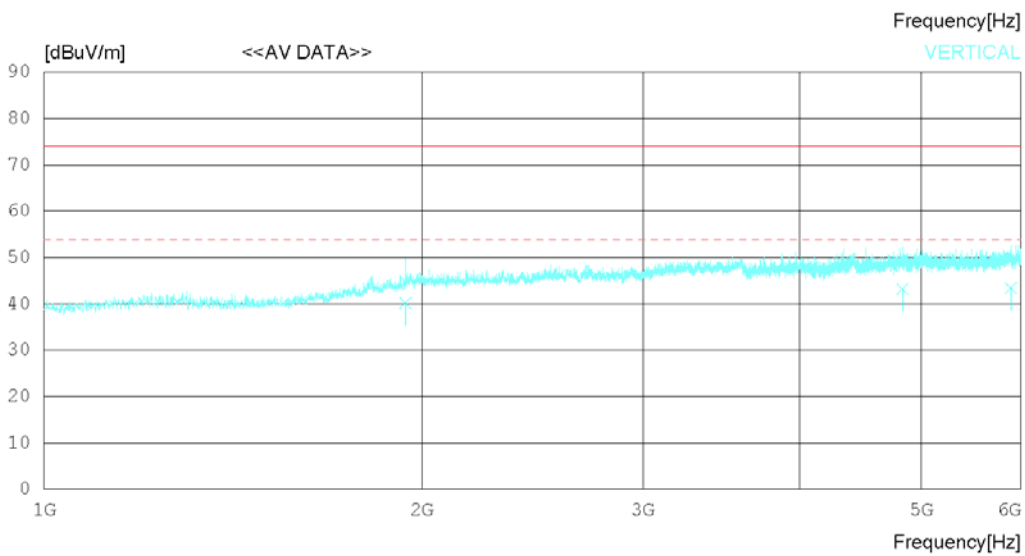
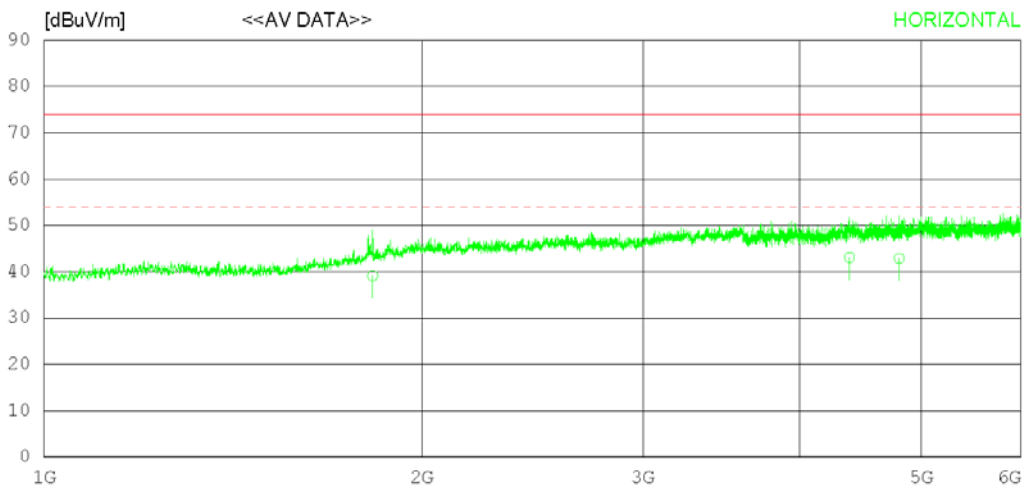
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition Printing Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 %R.H.
Test Condition	Printing Mode

**Memo**

 LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1826.921	37.50	30.51	5.70	34.58	39.13	54.00	14.87	205	351
2	4380.595	33.60	33.76	9.77	34.04	43.09	54.00	10.91	109	256
3	4799.415	32.90	34.00	10.56	34.60	42.86	54.00	11.14	114	96
----- Vertical -----										
4	1941.380	37.20	31.43	5.97	34.42	40.18	54.00	13.82	186	0
5	4830.140	33.20	34.00	10.58	34.64	43.14	54.00	10.86	109	125
6	5891.965	32.10	34.98	11.28	34.98	43.38	54.00	10.62	104	0

Radiated disturbance at (6 ~ 18) GHz _ Peak Measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	Battery	Test Frequency (Hz)	-

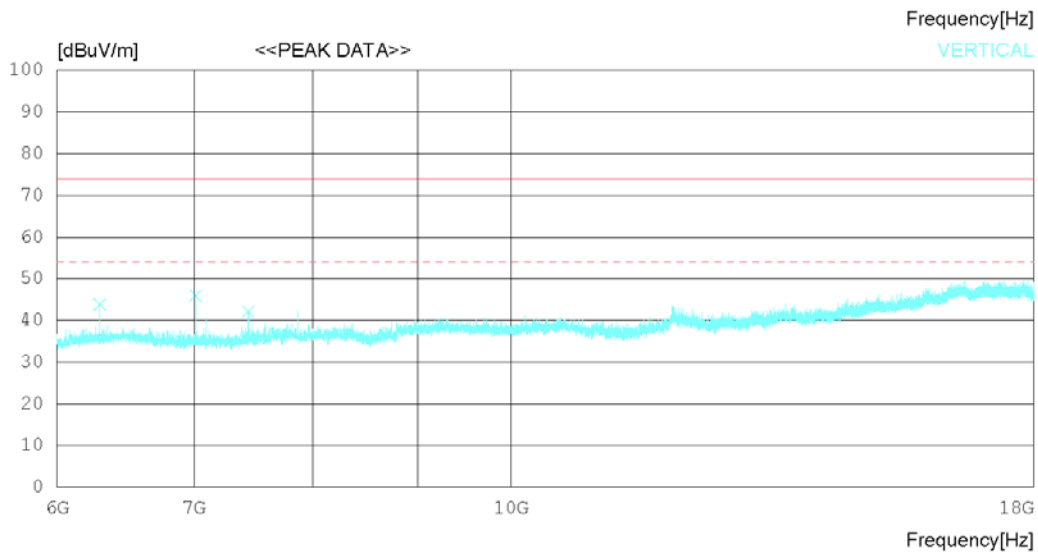
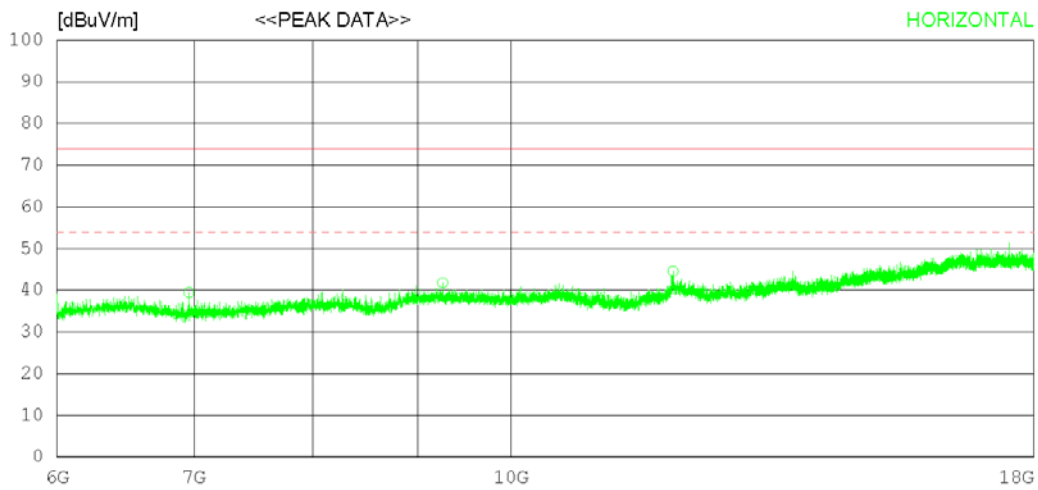
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition Printing Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 %R.H.
Test Condition	Printing Mode

**Memo**

 LIMIT : FCC Part15 Subpart B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	6959.250	34.80	31.46	11.66	38.46	39.46	74.0	34.54	203	112
2	9258.000	33.40	32.22	13.87	37.71	41.78	74.0	32.22	206	52
3	11997.750	33.10	33.46	15.68	37.70	44.54	74.0	29.46	107	69
----- Vertical -----										
4	6294.000	40.30	31.64	10.97	39.06	43.85	74.0	30.15	106	358
5	7012.500	41.10	31.45	11.76	38.39	45.92	74.0	28.08	213	30
6	7439.250	37.00	31.38	11.81	38.06	42.13	74.0	31.87	107	358

Radiated disturbance at (6 ~ 18) GHz _ Average Measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	Battery	Test Frequency (Hz)	-

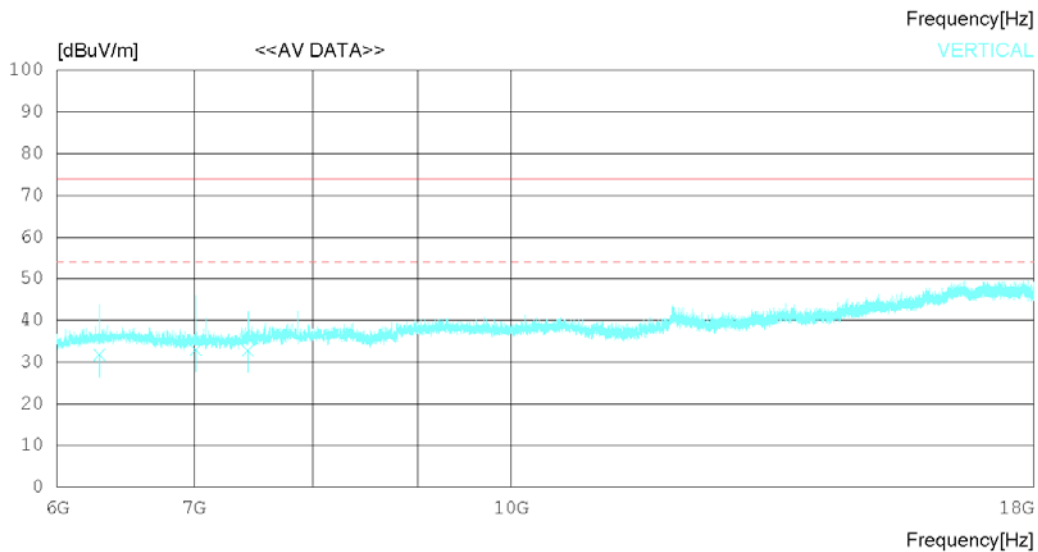
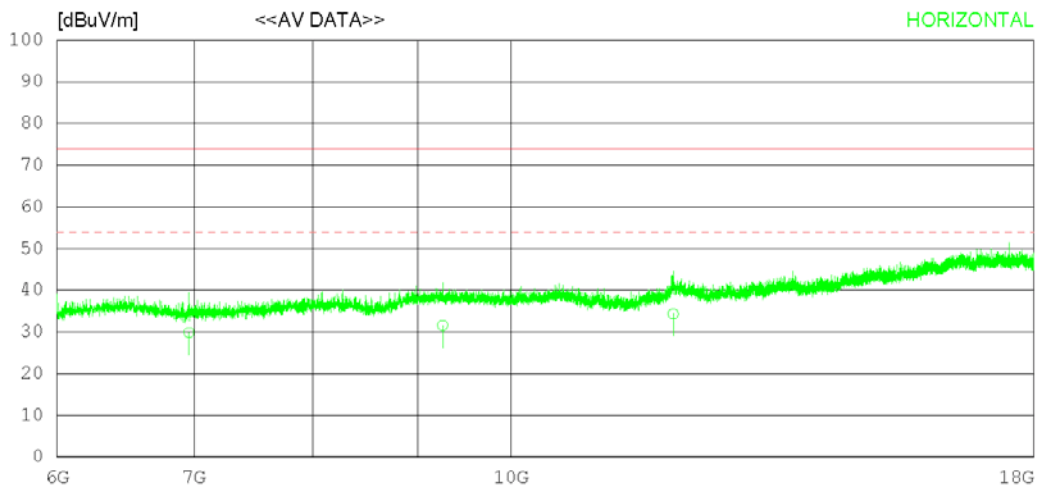
## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 % R.H.
Test Condition	Printing Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 %R.H.
Test Condition	Printing Mode

**Memo**

 LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	6959.380	25.20	31.46	11.66	38.46	29.86	54.00	24.14	201	124
2	9258.020	23.20	32.22	13.87	37.71	31.58	54.00	22.42	204	68
3	11997.660	22.90	33.46	15.68	37.70	34.34	54.00	19.66	105	77
----- Vertical -----										
4	6294.450	28.20	31.64	10.97	39.06	31.75	54.00	22.25	104	356
5	7012.380	28.10	31.45	11.76	38.39	32.92	54.00	21.08	211	25
6	7439.140	27.60	31.38	11.81	38.06	32.73	54.00	21.27	105	352



Radiated disturbance at (18 ~ 40) GHz _ Peak Measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	Battery	Test Frequency (Hz)	-

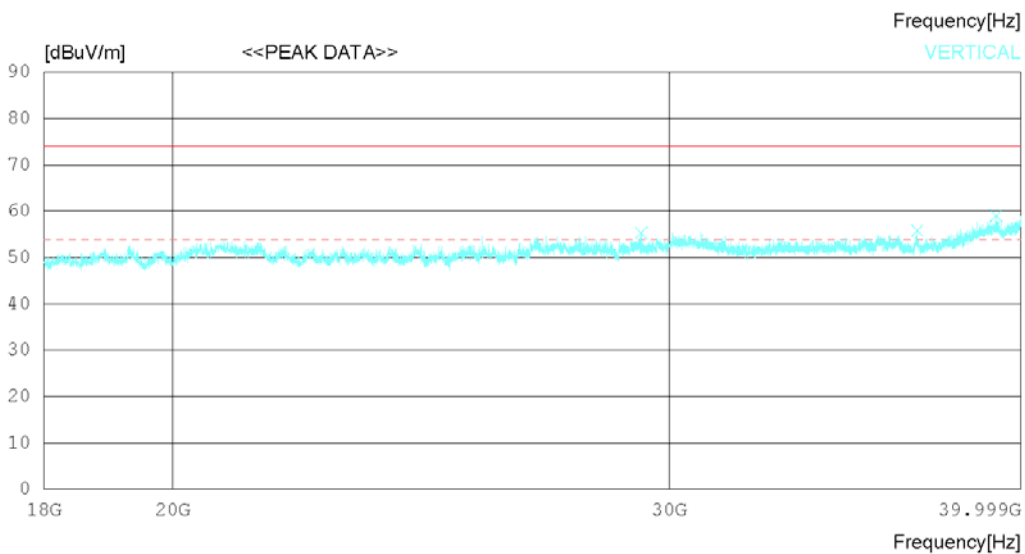
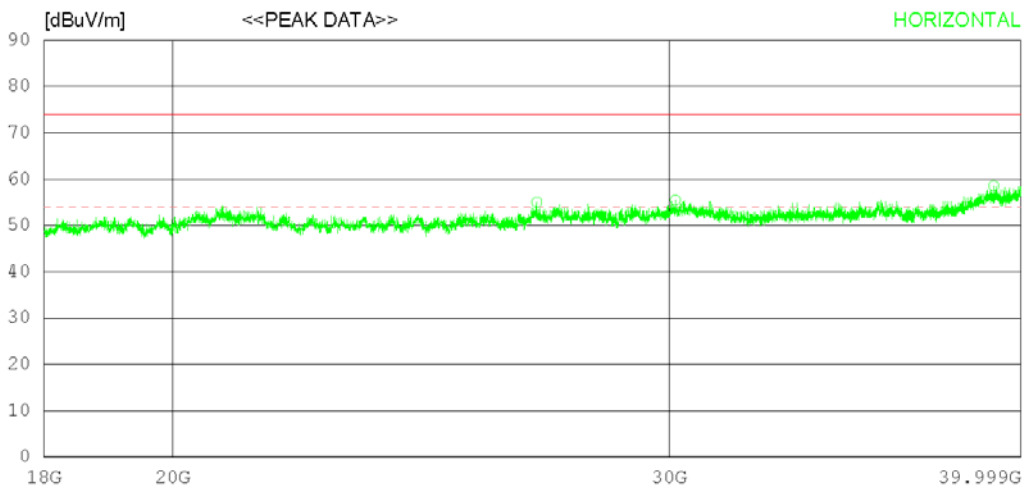
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition Printing Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 % R.H.
Test Condition	Printing Mode

**Memo**

 LIMIT : FCC Part15 Subpart B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	26926.500	41.20	45.90	21.12	53.20	55.02	74.0	18.98	110	76
2	30155.000	38.20	47.50	21.96	52.21	55.45	74.0	18.55	106	11
3	39122.750	37.40	47.75	25.60	52.24	58.51	74.0	15.49	107	113
----- Vertical -----										
4	29327.250	38.60	47.23	21.85	52.42	55.26	74.0	18.74	111	358
5	36749.500	38.70	46.25	24.15	53.30	55.80	74.0	18.2	108	358
6	39199.750	37.90	47.90	25.49	52.24	59.05	74.0	14.95	103	175

Radiated disturbance at (18 ~ 40) GHz _ Average Measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	Battery	Test Frequency (Hz)	-

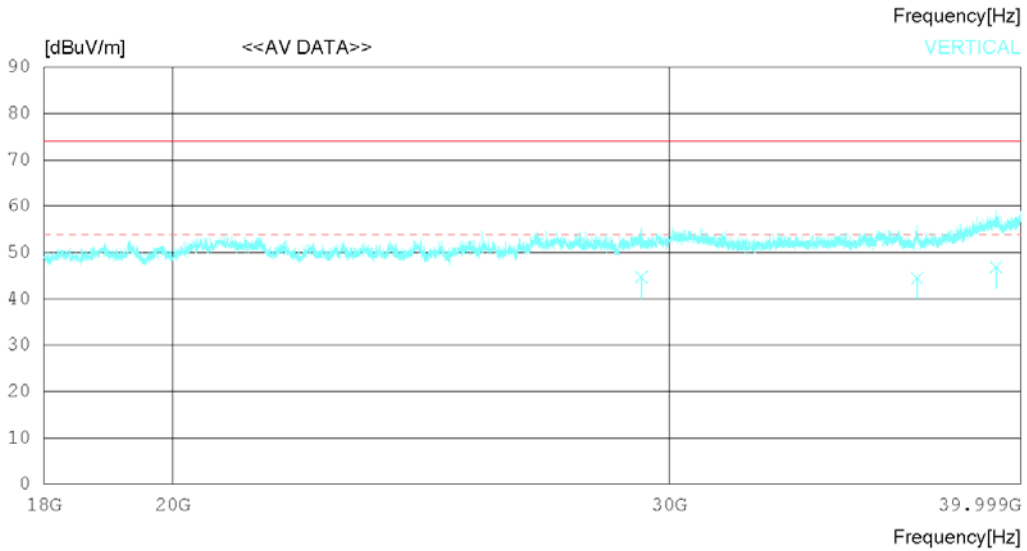
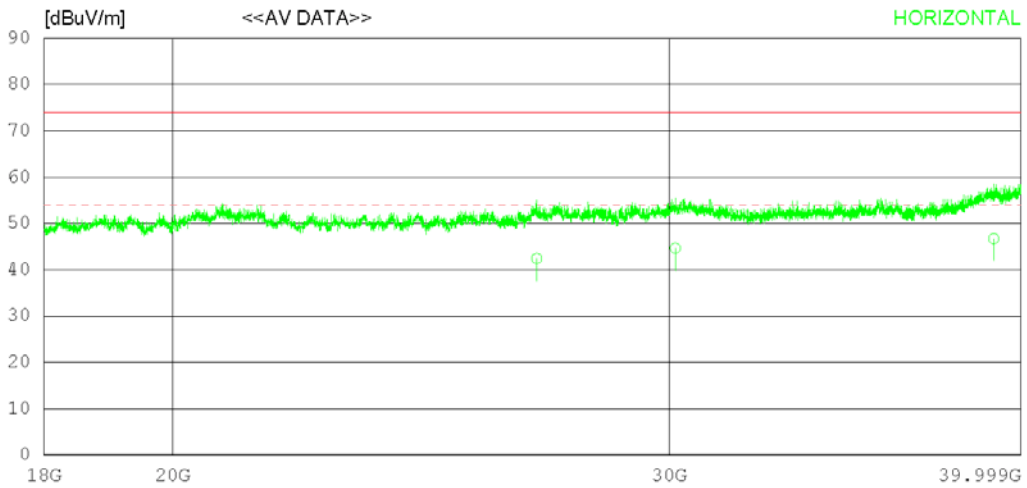
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition Printing Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 % R.H.
Test Condition	Printing Mode

**Memo**

 LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	26926.43028.60	45.90	21.12	53.20	42.42	54.00	11.58	109	82	
2	30155.11027.40	47.50	21.96	52.21	44.65	54.00	9.35	104	0	
3	39122.68025.60	47.75	25.60	52.24	46.71	54.00	7.29	105	132	
----- Vertical -----										
4	29327.19028.10	47.23	21.85	52.42	44.76	54.00	9.24	109	356	
5	36749.43027.40	46.25	24.15	53.30	44.50	54.00	9.50	107	352	
6	39199.67025.70	47.90	25.49	52.24	46.85	54.00	7.15	102	188	

Radiated disturbance at (30 ~ 1000) MHz _ Measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	Battery	Test Frequency (Hz)	-

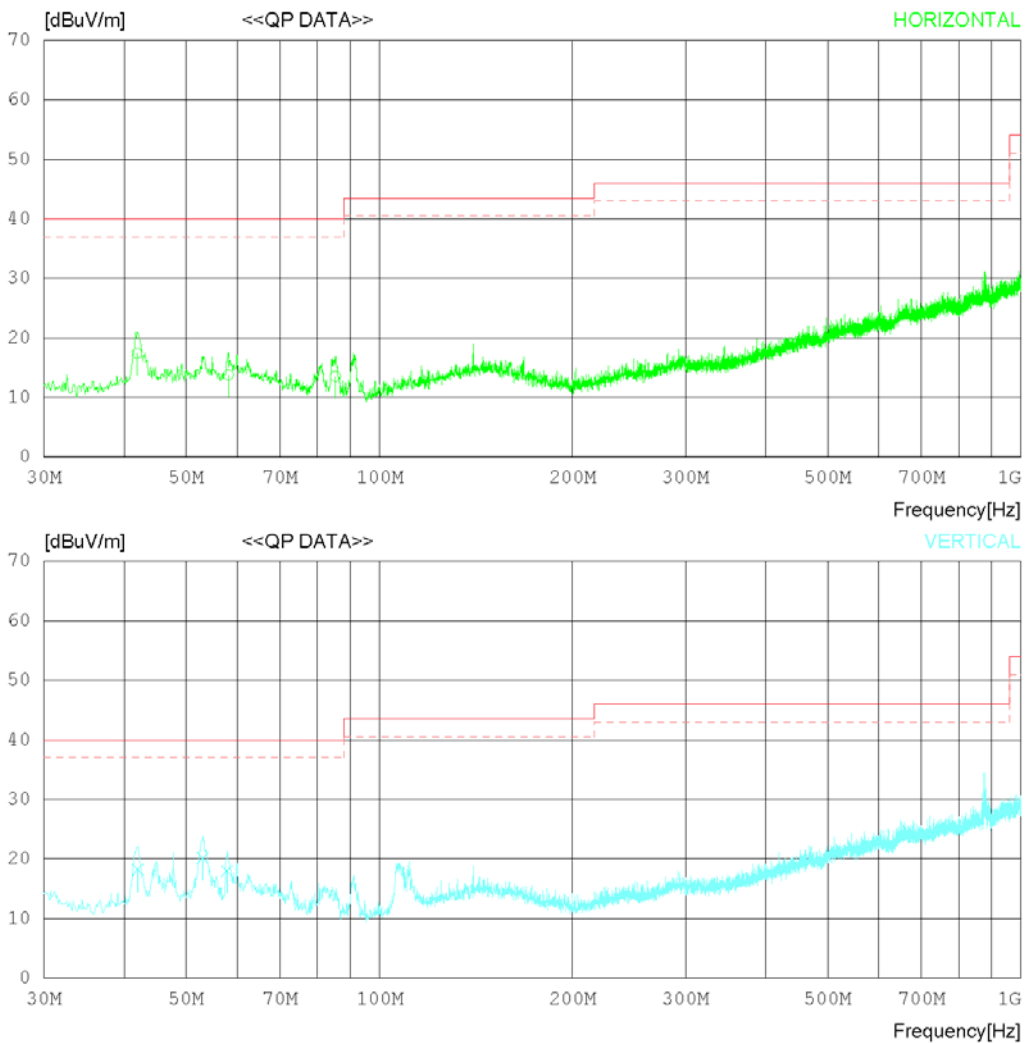
## RADIATED EMISSION

Date 2020-01-24

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 19 °C 44 % R.H.  
 Test Condition IC Card Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m)  
 MARGIN: 3 dB



## RADIATED EMISSION

Date 2020-01-24

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	19 °C 44 %R.H.
Test Condition	IC Card Mode

**Memo**

 LIMIT : FCC Part15 Subpart.B Class B (3m)  
 MARGIN: 3 dB

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	41.883	24.50	17.48	1.22	25.81	17.39	40.00	22.61	107	352
2	58.130	20.30	17.99	1.29	25.78	13.80	40.00	26.20	102	353
3	85.411	24.20	13.56	1.50	25.73	13.53	40.00	26.47	214	0
----- Vertical -----										
4	42.004	25.30	17.50	1.22	25.81	18.21	40.00	21.79	102	0
5	53.038	26.20	18.50	1.29	25.79	20.20	40.00	19.80	104	352
6	57.888	24.50	17.97	1.29	25.78	17.98	40.00	22.02	105	356

Radiated disturbance at (1 ~ 6) GHz _ Peak Measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	Battery	Test Frequency (Hz)	-

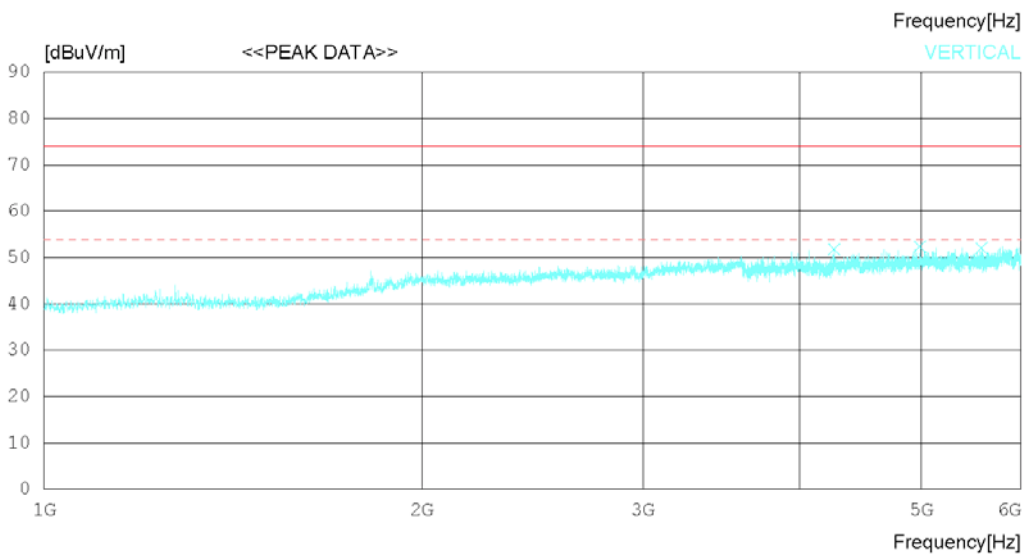
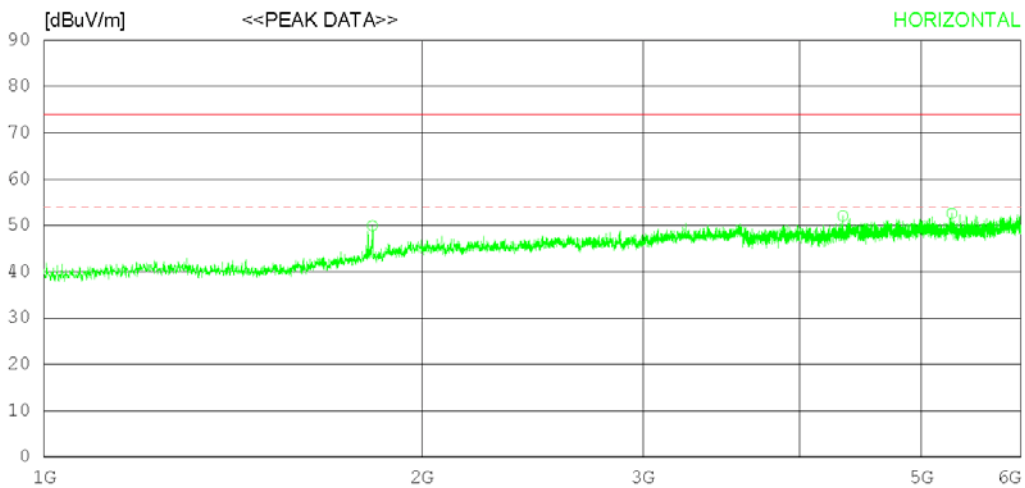
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition IC Card Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 %R.H.
Test Condition	IC Card Mode

**Memo**

 LIMIT : FCC Part15 Subpart B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1826.250	48.30	30.51	5.69	34.58	49.92	74.0	24.08	110	358
2	4329.375	42.70	33.66	9.64	33.97	52.03	74.0	21.97	105	33
3	5286.250	42.40	34.37	10.73	34.90	52.60	74.0	21.4	104	358
----- Vertical -----										
4	4258.750	42.70	33.52	9.44	33.88	51.78	74.0	22.22	117	242
5	4988.125	42.40	34.12	10.71	34.84	52.39	74.0	21.61	103	15
6	5583.750	41.50	34.63	10.86	34.94	52.05	74.0	21.95	106	0



Radiated disturbance at (1 ~ 6) GHz _ Average Measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	Battery	Test Frequency (Hz)	-

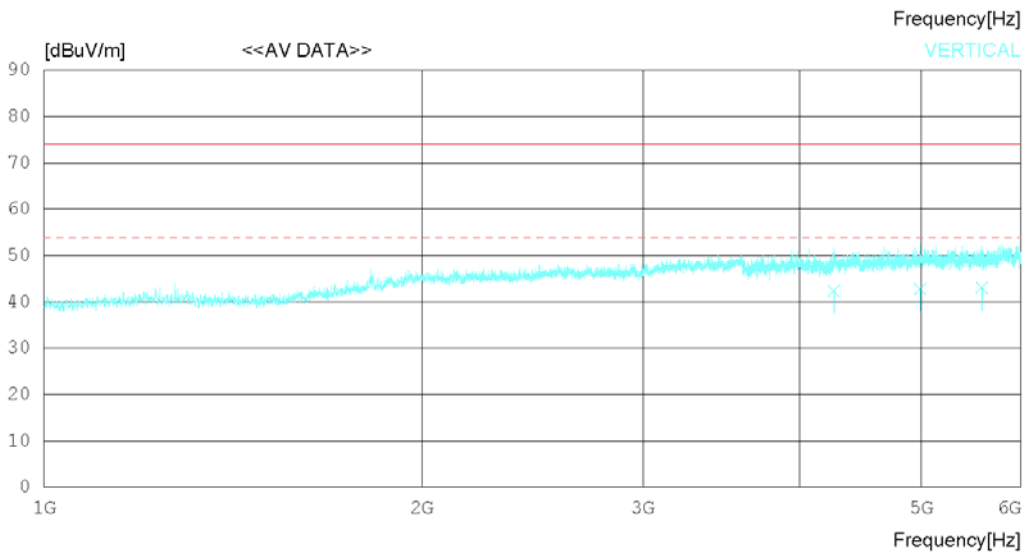
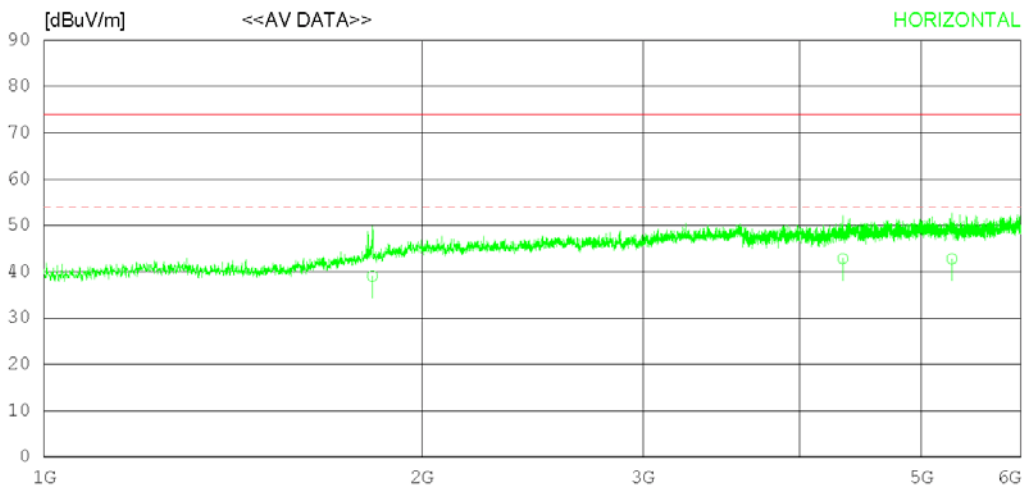
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition IC Card Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 %R.H.  
 Test Condition IC Card Mode

**Memo**

LIMIT : FCC Part15 Subpart B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1826.396	37.40	30.51	5.69	34.58	39.02	54.00	14.98	109	356
2	4329.462	33.50	33.66	9.64	33.97	42.83	54.00	11.17	104	45
3	5286.185	32.60	34.37	10.73	34.90	42.80	54.00	11.20	105	352
----- Vertical -----										
4	4258.640	33.30	33.52	9.44	33.88	42.38	54.00	11.62	115	252
5	4988.285	32.80	34.12	10.71	34.84	42.79	54.00	11.21	104	0
6	5583.690	32.50	34.63	10.86	34.94	43.05	54.00	10.95	105	0

Radiated disturbance at (6 ~ 18) GHz _ Peak Measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	Battery	Test Frequency (Hz)	-

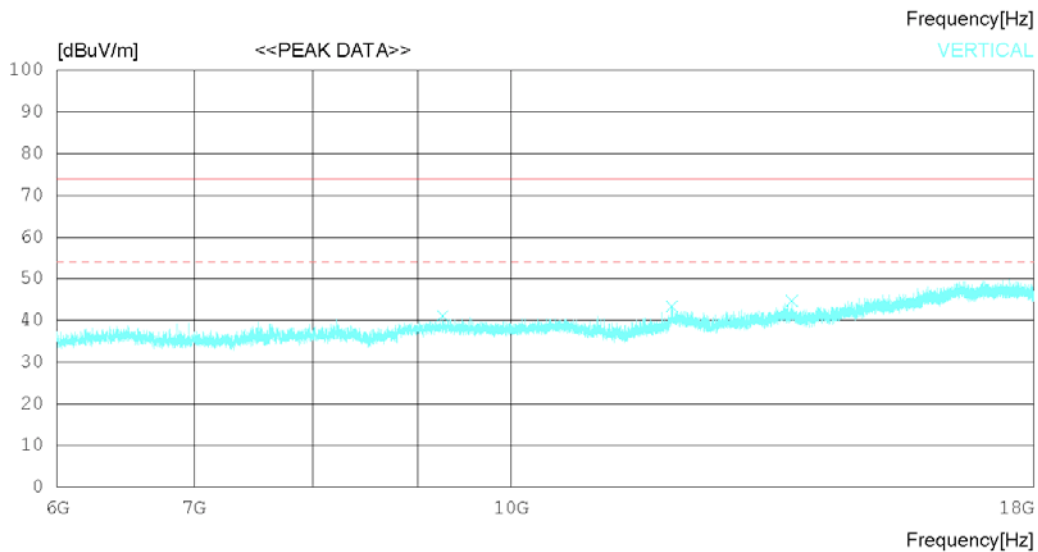
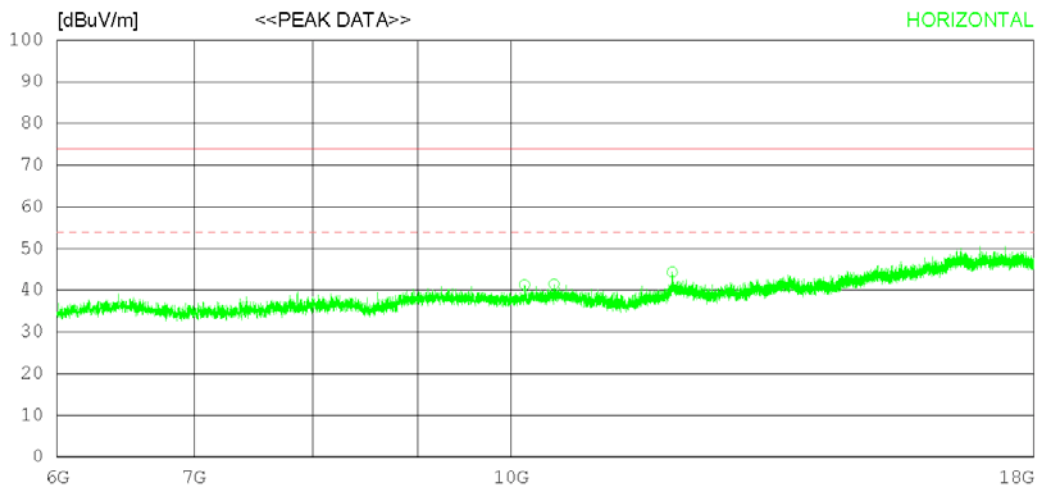
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition IC Card Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 %R.H.
Test Condition	IC Card Mode

**Memo**

 LIMIT : FCC Part15 Subpart B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	10152.000	32.00	32.53	14.45	37.68	41.30	74.0	32.7	109	182
2	10493.250	32.40	32.48	14.65	38.09	41.44	74.0	32.56	108	337
3	11983.500	33.00	33.44	15.64	37.72	44.36	74.0	29.64	206	47
----- Vertical -----										
4	9256.500	32.70	32.22	13.87	37.71	41.08	74.0	32.92	208	145
5	11980.500	32.00	33.44	15.64	37.73	43.35	74.0	30.65	102	358
6	13713.750	31.10	33.81	17.22	37.44	44.69	74.0	29.31	106	0

Radiated disturbance at (6 ~ 18) GHz _ Average Measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	Battery	Test Frequency (Hz)	-

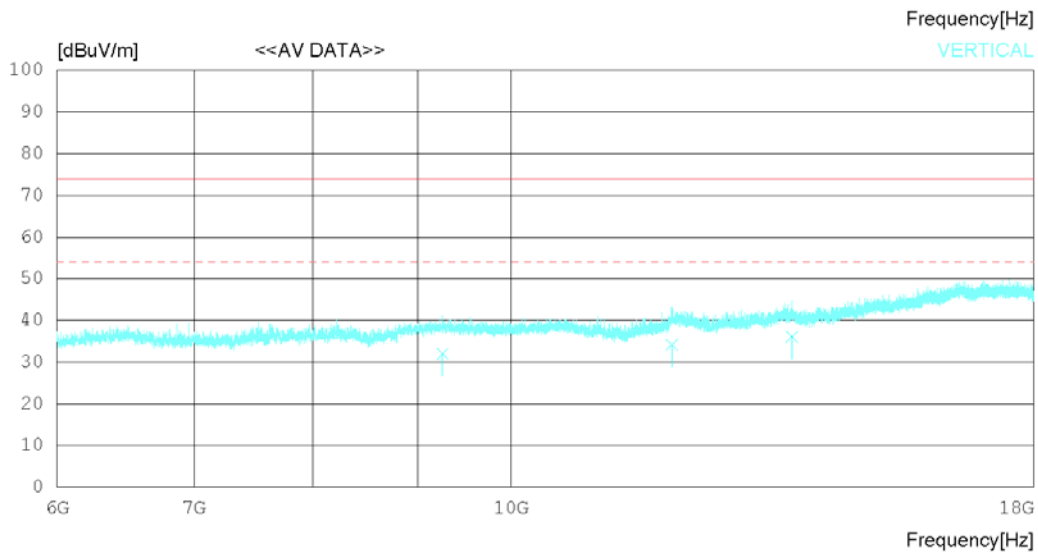
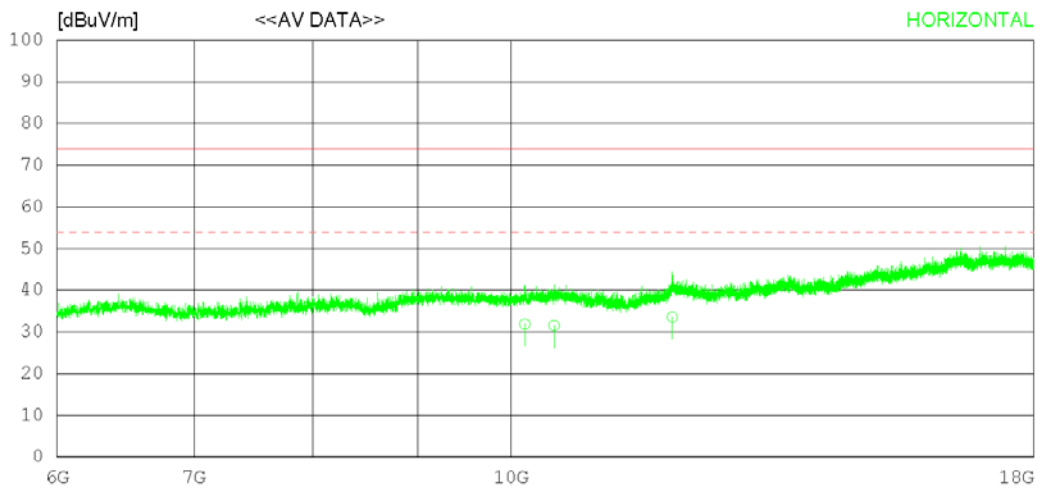
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition IC Card Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 %R.H.
Test Condition	IC Card Mode

**Memo**

 LIMIT : FCC Part15 Subpart B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	10152.21022.60	32.53	14.45	37.68	31.90	54.00	22.10	109	207	
2	10493.11022.50	32.48	14.65	38.09	31.54	54.00	22.46	108	341	
3	11983.35022.20	33.44	15.64	37.72	33.56	54.00	20.44	202	55	
----- Vertical -----										
4	9256.390 23.60	32.22	13.87	37.71	31.98	54.00	22.02	207	355	
5	11980.48022.80	33.44	15.64	37.73	34.15	54.00	19.85	102	352	
6	13713.66022.50	33.81	17.22	37.44	36.09	54.00	17.91	105	0	

Radiated disturbance at (18 ~ 40) GHz _ Peak Measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	Battery	Test Frequency (Hz)	-

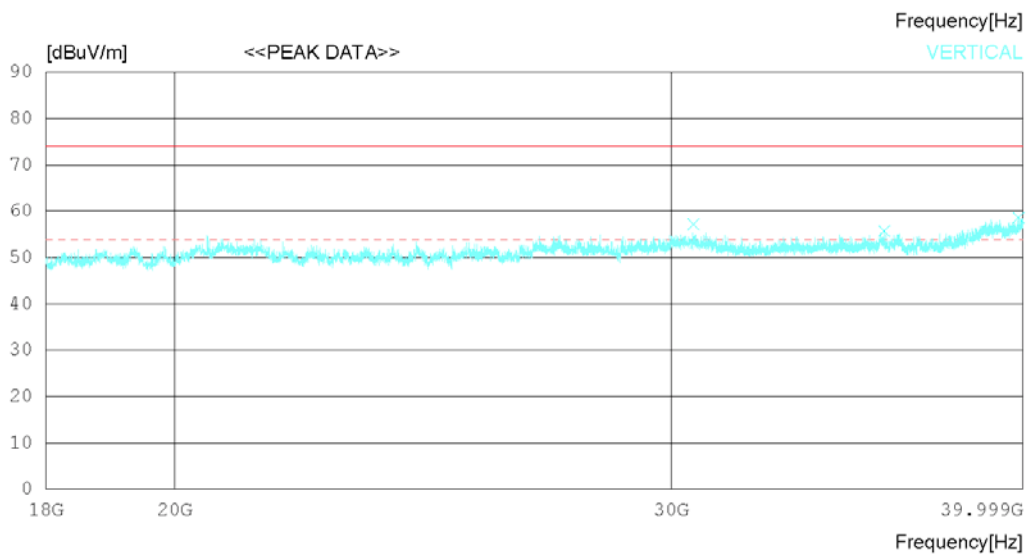
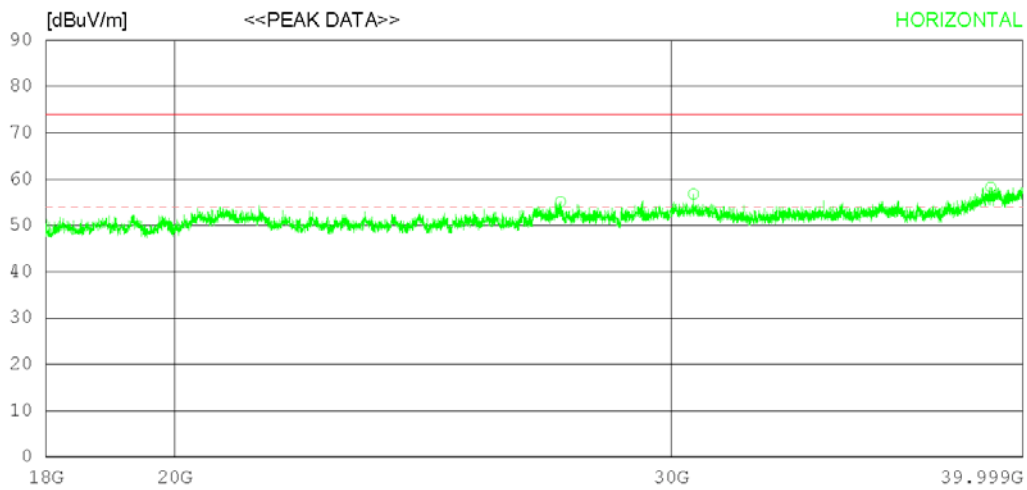
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition IC Card Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition IC Card Mode

**Memo**

LIMIT : FCC Part15 Subpart B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	27407.75041.00	46.00	21.18	53.04	55.14	74.0	18.86	108	204	
2	30556.50039.40	47.40	22.20	52.23	56.77	74.0	17.23	105	320	
3	38960.50037.20	47.56	25.73	52.25	58.24	74.0	15.76	107	0	
----- Vertical -----										
4	30556.50039.80	47.40	22.20	52.23	57.17	74.0	16.83	109	358	
5	35710.00038.60	46.90	24.07	53.83	55.74	74.0	18.26	108	358	
6	39851.50037.30	49.00	24.53	52.21	58.62	74.0	15.38	103	358	



Radiated disturbance at (18 ~ 40) GHz _ Average Measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	Battery	Test Frequency (Hz)	-

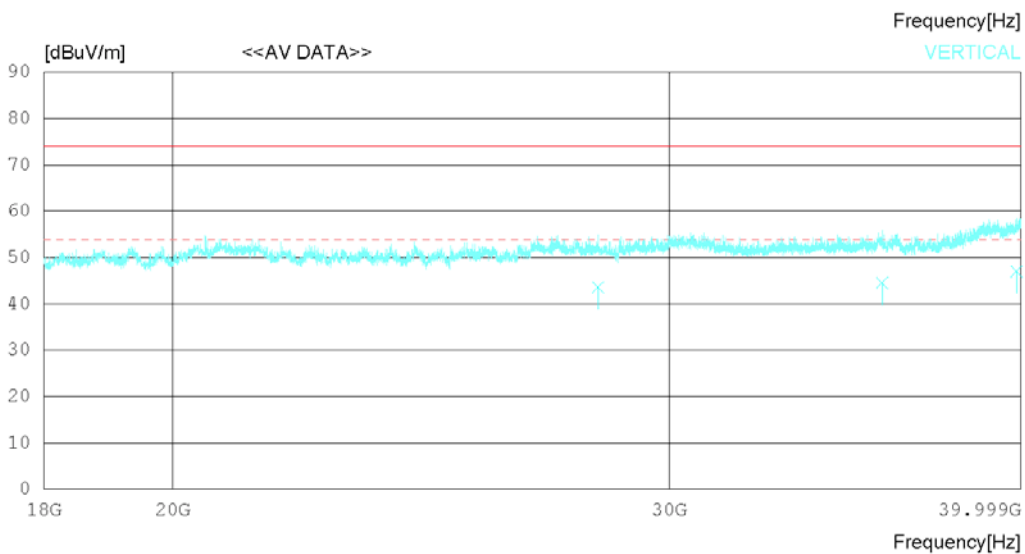
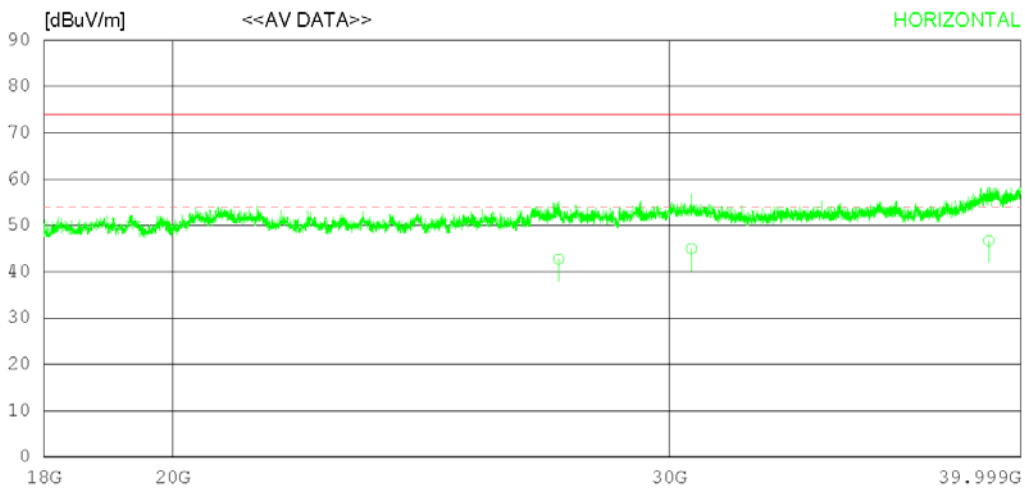
## RADIATED EMISSION

Date 2020-01-27

Order No. DTNC2001-00359  
 Power Supply Battery  
 Temp/Humi 20 °C 45 % R.H.  
 Test Condition IC Card Mode

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2020-01-27

Order No.	DTNC2001-00359
Power Supply	Battery
Temp/Humi	20 °C 45 % R.H.
Test Condition	IC Card Mode

**Memo**

 LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	27407.65028.60	46.00	21.18	53.04	42.74	54.00	11.26	109	209	
2	30556.36027.60	47.40	22.20	52.23	44.97	54.00	9.03	104	333	
3	38960.45025.70	47.56	25.73	52.25	46.74	54.00	7.26	105	0	
----- Vertical -----										
4	28312.38028.50	46.41	21.44	52.75	43.60	54.00	10.40	109	348	
5	35710.12027.40	46.90	24.07	53.83	44.54	54.00	9.46	107	356	
6	39851.47025.70	49.00	24.53	52.21	47.02	54.00	6.98	102	352	