

FCC TEST REPORT
for
Neets A/S

Touch Panel

Model No. : 313-0003 (Touch Panel-10B), 313-0004 (Touch Panel-10W)

FCC ID: 2AM35-313-0003

Prepared for : Neets A/S
Address : Langballe 4 8700 Horsens Denmark

Prepared by : Shenzhen Accurate Technology Co., Ltd.
Address : 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

Tel: +86-755-26503290
Fax: +86-755-26503396

Report No. : ATE20181496
Date of Test : Aug. 14-Sep. 11, 2018
Date of Report : Sep. 12, 2018

TABLE OF CONTENTS

Description	Page
Test Report Certification	
1. TEST RESULTS SUMMARY	4
2. GENERAL INFORMATION.....	5
2.1. Description of Device (EUT)	5
2.2. Accessory and Auxiliary Equipment	5
2.3. Description of Test Facility	6
2.4. Measurement Uncertainty	6
3. MEASURING DEVICE AND TEST EQUIPMENT	7
3.1. The Equipment Used to Conducted Disturbance Measurement.....	7
3.2. The Equipment Used to Radiated Emission Measurement	7
4. POWER LINE CONDUCTED MEASUREMENT	8
4.1. Block Diagram of Test Setup	8
4.2. Test System Setup	8
4.3. Power Line Conducted Emission Measurement Limits (Class B).....	9
4.4. Configuration of EUT on Measurement.....	9
4.5. Operating Condition of EUT	9
4.6. Measurement Uncertainty	9
4.7. Test Procedure.....	9
4.8. Data Sample	10
4.9. Power Line Conducted Emission Measurement Results	10
5. RADIATED EMISSION MEASUREMENT	15
5.1. Block Diagram of Test.....	15
5.2. Radiated Emission Limit (Class B).....	16
5.3. Configuration of EUT on Measurement.....	16
5.4. Operating Condition of EUT	16
5.5. Test Procedure.....	17
5.6. Data Sample	18
5.7. Radiated Emission Measurement Result.....	18
6. PHOTOGRAPHS	23
6.1. Photo of Power Line Conducted Emission Measurement.....	23
6.2. Photo of Radiated Emission Measurement below 1GHz	23
6.3. Photo of Radiated Emission Measurement above 1GHz	24

Test Report Certification

Applicant : Neets A/S
Manufacturer : SHENZHEN SIBO INDUSTRIAL & DEVELOPMENT CO., LTD
Product : Touch Panel
Model No. : 313-0003 (Touch Panel-10B), 313-0004 (Touch Panel-10W)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart B Class B ANSI C63.4: 2014

The device described above is tested by Shenzhen Accurate Technology Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B Class B limits both radiated and conducted emissions. The measurement results are contained in this test report and Shenzhen Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Accurate Technology Co., Ltd.

Date of Test : Aug. 14-Sep. 11, 2018

Date of Report : Sep. 12, 2018

Test Engineer :



(Frank Lü, Engineer)

Prepared by :



(Steven Yang, Engineer)

Approved & Authorized Signer :



(Sean Liu, Manager)

1. TEST RESULTS SUMMARY

Test Items	Test Standard	Test Results
Power Line Conducted Emission	FCC Part 15 Subpart B	Pass
Radiated Emission	FCC Part 15 Subpart B	Pass

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

Product	:	Touch Panel
Model No.	:	313-0003 (Touch Panel-10B) 313-0004 (Touch Panel-10W) (Note: We hereby state that these models are identical in interior structure, electrical circuits and components, only different in model name, Therefore, only model 313-0003 (Touch Panel-10B) is for tests.)
Maximum working frequency	:	2GHz
Rating	:	POE 48V
Software version	:	Android OS6.0
Hardware version	:	Q8919-NEETS-V1.0
Trade Name	:	Neets
Applicant	:	NEETS A/S
Address	:	Langballe 4 8700 Horsens Denmark
Manufacturer	:	SHENZHEN SIBO INDUSTRIAL & DEVELOPMENT CO., LTD
Address	:	3A/F, Bld.27, Wisdomland Business Park, Guankou No.2 Rd., Nanshan District, Shenzhen, Guangdong, China
Sample Number	:	1801250
Date of sample receiver	:	Aug. 9, 2018

2.2. Accessory and Auxiliary Equipment

POE Power Adapter (provided by manufacturer)	:	Manufacturer: GRT
		Model: GRT-480100
		Input: AC100-240V 0.8A Max 50/60Hz
		Output: 48V 500mA
		SN: 1701031643

2.3. Description of Test Facility

EMC Lab : Recognition of accreditation by Federal Communications Commission (FCC)
The Designation Number is CN1189
The Registration Number is 708358

Listed by Innovation, Science and Economic Development Canada (ISED)
The Registration Number is 5077A-2

Accredited by China National Accreditation Service for Conformity Assessment (CNAS)
The Registration Number is CNAS L3193

Accredited by American Association for Laboratory Accreditation (A2LA)
The Certificate Number is 4297.01

Name of Firm : Shenzhen Accurate Technology Co., Ltd.
Site Location : 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

2.4. Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Power Disturbance Expanded Uncertainty = 2.92 dB, k=2

Radiated emission expanded uncertainty (9kHz-30MHz) = 3.08dB, k=2

Radiated emission expanded uncertainty (30MHz-1000MHz) = 4.42dB, k=2

Radiated emission expanded uncertainty (Above 1GHz) = 4.06dB, k=2

3. MEASURING DEVICE AND TEST EQUIPMENT

3.1.The Equipment Used to Conducted Disturbance Measurement

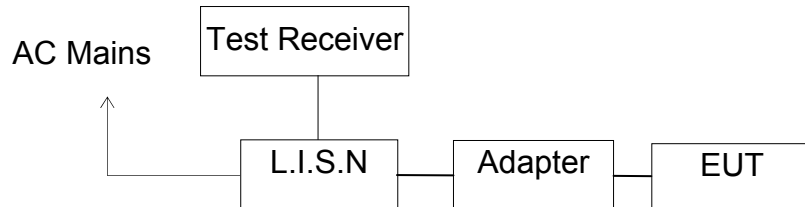
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCS30	100307	Jan.06, 2018	1 Year
5.	L.I.S.N.	Schwarzbeck	NLSK8126	8126431	Jan.06, 2018	1 Year
6.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100305	Jan.06, 2018	1 Year
7.	50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283936	Jan.06, 2018	1 Year
8.	RF Coaxial Cable	SUHNER	N-2m	No.2	Jan.06, 2018	1 Year
9.	Measurement Software: ES-K1 V1.71					

3.2.The Equipment Used to Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Rohde&Schwarz	FSV40	101495	Jan.06, 2018	1 Year
2.	Test Receiver	Rohde& Schwarz	ESR	101817	Jan.06, 2018	1 Year
3.	Bilog Antenna	Schwarzbeck	VULB9163	9163-194	Jan.06, 2018	1 Year
4.	Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan.06, 2018	1 Year
5.	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1067	Jan.06, 2018	1 Year
6.	Pre-Amplifier	Compliance Direction	RSU-M2	38322	Jan.06, 2018	1 Year
7.	Pre-Amplifier	Agilent	8447D	294A10619	Jan.06, 2018	1 Year
8.	50 Coaxial Switch	Anritsu Corp	MP59B	6200237248	Jan.06, 2018	1 Year
9.	RF Coaxial Cable	RESENBERGER	N-12m	No.11	Jan.06, 2018	1 Year
10.	RF Coaxial Cable	RESENBERGER	N-0.5m	No.12	Jan.06, 2018	1 Year
11.	RF Coaxial Cable	SUHNER	N-2m	No.13	Jan.06, 2018	1 Year
12.	RF Coaxial Cable	SUHNER	N-0.5m	No.15	Jan.06, 2018	1 Year
13.	RF Coaxial Cable	SUHNER	N-2m	No.16	Jan.06, 2018	1 Year
14.	RF Coaxial Cable	RESENBERGER	N-6m	No.17	Jan.06, 2018	1 Year
15.	Measurement Software: EZ EMC V1.1.4.2					

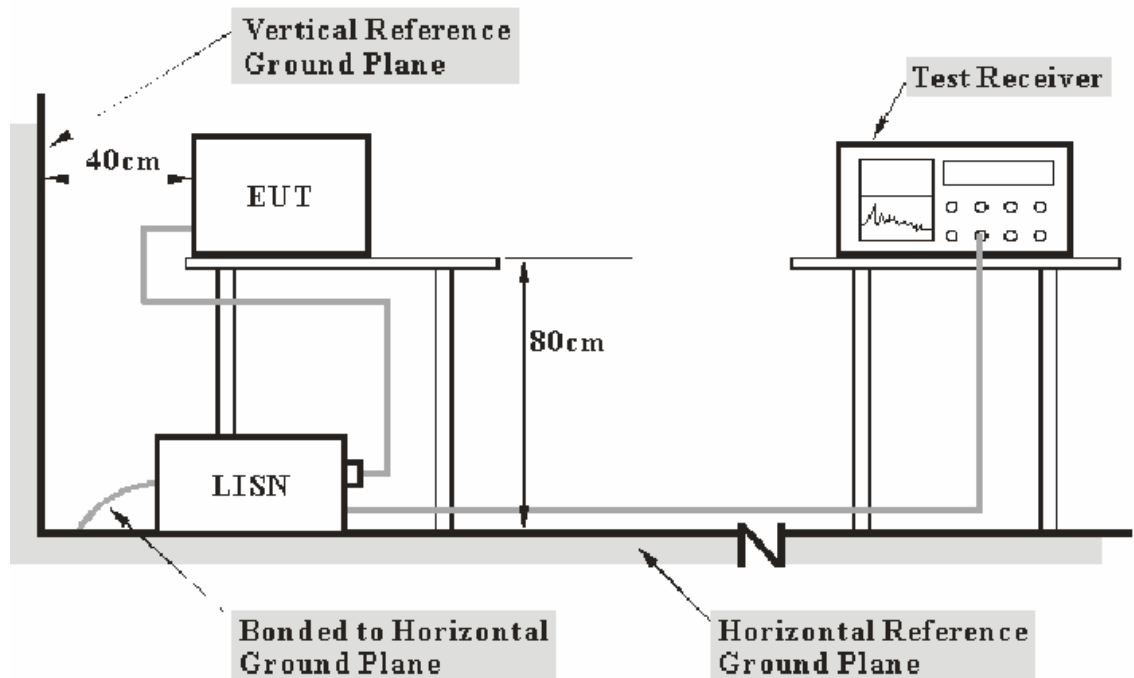
4. POWER LINE CONDUCTED MEASUREMENT

4.1. Block Diagram of Test Setup



(EUT: Touch Panel)

4.2. Test System Setup



- Note:**
1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

4.3. Power Line Conducted Emission Measurement Limits (Class B)

Frequency (MHz)	Limit dB(μ V)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0
NOTE1: The lower limit shall apply at the transition frequencies.		
NOTE2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.		

4.4. Configuration of EUT on Measurement

The equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

4.5. Operating Condition of EUT

4.5.1. Setup the EUT and simulator as shown as Section 4.1.

4.5.2. Turn on the power of all equipment.

4.5.3. Let the EUT work in test mode and measure it.

4.6. Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at ATC is +2.23dB.

4.7. Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2014 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

4.8.Data Sample

Frequency (MHz)	Quasi Peak Level (dB μ V)	Average Level (dB μ V)	Transducer value (dB)	QuasiPeak Result (dB μ V)	Average Result (dB μ V)	Quasi Peak Limit (dB μ V)	Average Limit (dB μ V)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
X.XX	29.4	18.3	11.1	40.5	29.4	56.0	56.0	15.5	16.6	Pass

Transducer value = Insertion loss of LISN + Cable Loss

Result = Quasi-peak Level/Average Level + Transducer value

Limit = Limit stated in standard

Calculation Formula:

Margin = Limit – Reading level value – Transducer value

4.9.Power Line Conducted Emission Measurement Results

Pass.

Test Lab: Shielding room

Test Engineer: Frank

The frequency range from 150kHz to 30MHz is checked.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

Emissions attenuated more than 20 dB below the permissible value are not reported.

All data was recorded in the Quasi-peak and average detection mode.

The spectral diagrams are attached as below.

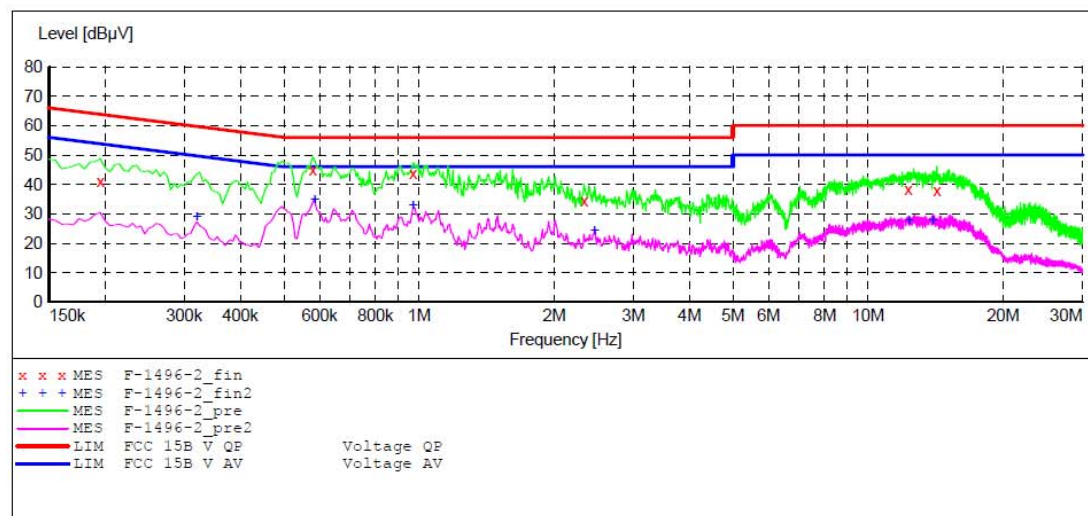
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Touch Panel M/N:313-0003(Touch Panel-10B)
 Manufacturer: Neets A/S
 Operating Condition: Operating
 Test Site: 1#Shielding Room
 Operator: Frank
 Test Specification: L 240V/60Hz
 Comment: Report NO.:ATE20181496
 Start of Test: 8/14/2018 / 11:52:24AM

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
 Average
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "F-1496-2_fin"

8/14/2018 11:55AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.195000	40.90	10.5	64	22.9	QP	L1	GND
0.580000	45.10	10.7	56	10.9	QP	L1	GND
0.970000	43.80	10.8	56	12.2	QP	L1	GND
2.330000	34.20	11.0	56	21.8	QP	L1	GND
12.295000	38.30	11.3	60	21.7	QP	L1	GND
14.230000	37.90	11.4	60	22.1	QP	L1	GND

MEASUREMENT RESULT: "F-1496-2_fin2"

8/14/2018 11:55AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.320000	29.10	10.6	50	20.6	AV	L1	GND
0.585000	34.70	10.7	46	11.3	AV	L1	GND
0.970000	32.90	10.8	46	13.1	AV	L1	GND
2.460000	24.10	11.0	46	21.9	AV	L1	GND
12.325000	27.70	11.3	50	22.3	AV	L1	GND
13.915000	27.80	11.4	50	22.2	AV	L1	GND

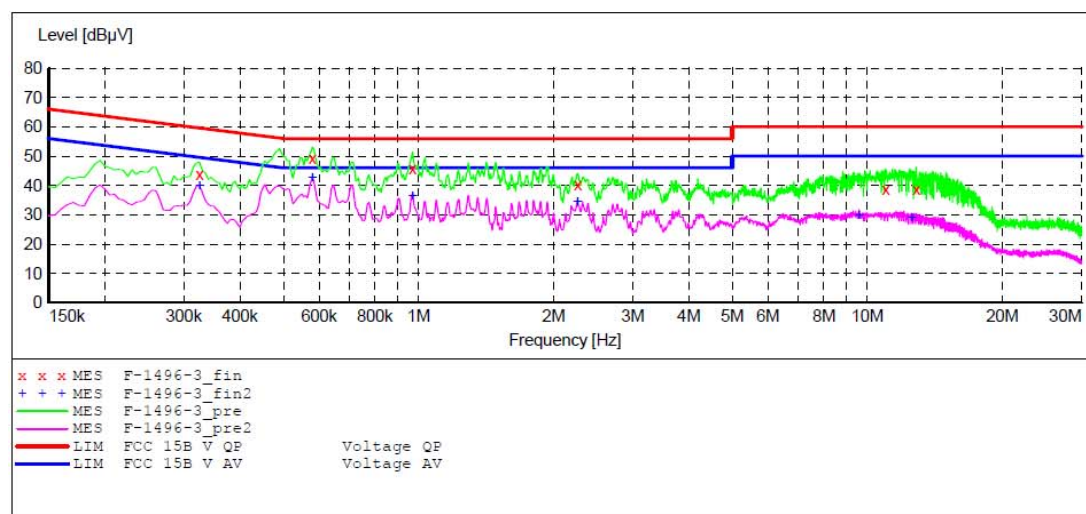
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Touch Panel M/N:313-0003(Touch Panel-10B)
 Manufacturer: Neets A/S
 Operating Condition: Operating
 Test Site: 1#Shielding Room
 Operator: Frank
 Test Specification: N 240V/60Hz
 Comment: Report NO.:ATE20181496
 Start of Test: 8/14/2018 / 11:57:07AM

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
 Average
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "F-1496-3_fin"

8/14/2018 12:00PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.325000	43.90	10.6	60	15.7	QP	N	GND
0.580000	49.30	10.7	56	6.7	QP	N	GND
0.970000	45.60	10.8	56	10.4	QP	N	GND
2.260000	40.20	11.0	56	15.8	QP	N	GND
10.990000	38.70	11.3	60	21.3	QP	N	GND
12.865000	38.70	11.3	60	21.3	QP	N	GND

MEASUREMENT RESULT: "F-1496-3_fin2"

8/14/2018 12:00PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.325000	39.90	10.6	50	9.7	AV	N	GND
0.580000	42.40	10.7	46	3.6	AV	N	GND
0.970000	36.30	10.8	46	9.7	AV	N	GND
2.260000	34.30	11.0	46	11.7	AV	N	GND
9.580000	29.60	11.3	50	20.4	AV	N	GND
12.550000	29.00	11.3	50	21.0	AV	N	GND

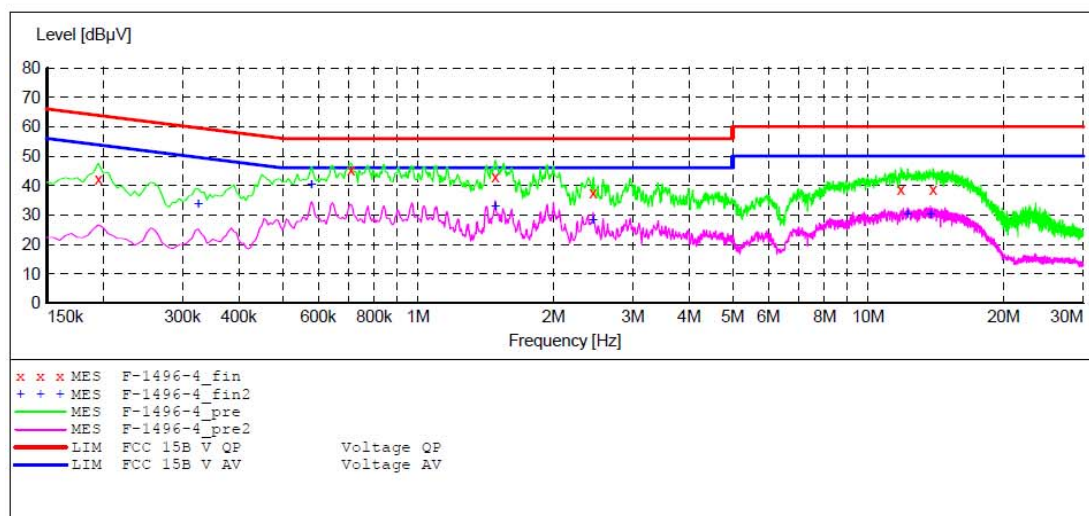
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Touch Panel M/N:313-0003(Touch Panel-10B)
 Manufacturer: Neets A/S
 Operating Condition: Operating
 Test Site: 1#Shielding Room
 Operator: Frank
 Test Specification: N 120V/60Hz
 Comment: Report NO.:ATE20181496
 Start of Test: 8/14/2018 / 2:04:11PM

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
 Average
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "F-1496-4_fin"

8/14/2018 2:09PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.195000	42.30	10.5	64	21.5	QP	N	GND
0.710000	45.40	10.8	56	10.6	QP	N	GND
1.485000	42.90	10.9	56	13.1	QP	N	GND
2.450000	37.50	11.0	56	18.5	QP	N	GND
11.830000	38.70	11.3	60	21.3	QP	N	GND
13.930000	38.80	11.4	60	21.2	QP	N	GND

MEASUREMENT RESULT: "F-1496-4_fin2"

8/14/2018 2:09PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.325000	33.60	10.6	50	16.0	AV	N	GND
0.580000	40.40	10.7	46	5.6	AV	N	GND
1.485000	32.80	10.9	46	13.2	AV	N	GND
2.450000	28.20	11.0	46	17.8	AV	N	GND
12.235000	30.30	11.3	50	19.7	AV	N	GND
13.750000	30.20	11.3	50	19.8	AV	N	GND

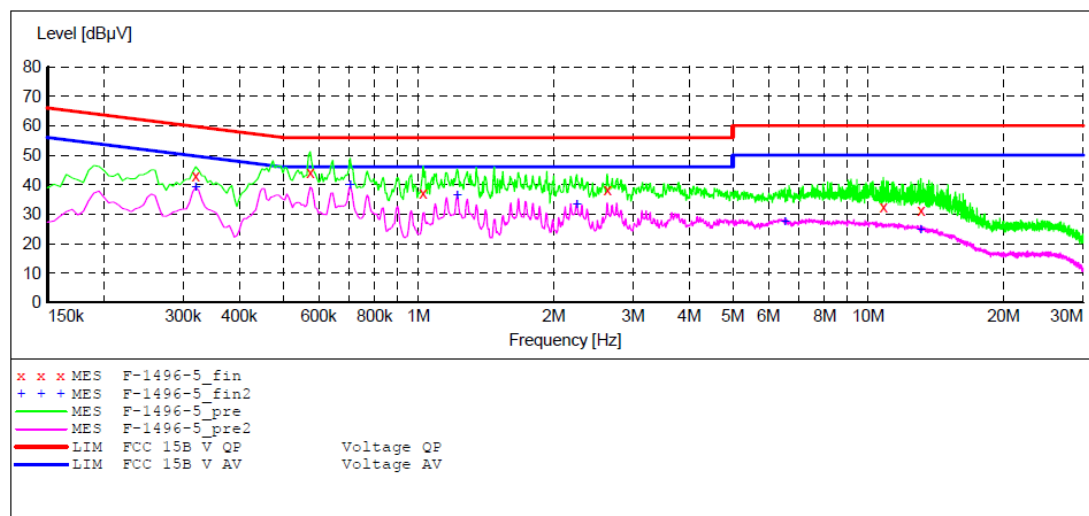
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Touch Panel M/N:313-0003(Touch Panel-10B)
 Manufacturer: Neets A/S
 Operating Condition: Operating
 Test Site: 1#Shielding Room
 Operator: Frank
 Test Specification: L 120V/60Hz
 Comment: Report NO.:ATE20181496
 Start of Test: 8/14/2018 / 2:10:36PM

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
 Average
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "F-1496-5_fin"

8/14/2018 2:14PM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.320000	42.80	10.6	60	16.9	QP	L1	GND
0.575000	44.30	10.7	56	11.7	QP	L1	GND
1.025000	37.30	10.8	56	18.7	QP	L1	GND
2.630000	38.20	11.0	56	17.8	QP	L1	GND
10.810000	32.30	11.3	60	27.7	QP	L1	GND
13.090000	31.20	11.3	60	28.8	QP	L1	GND

MEASUREMENT RESULT: "F-1496-5_fin2"

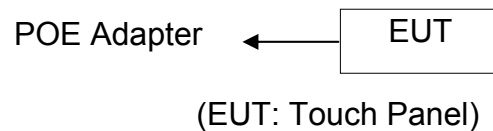
8/14/2018 2:14PM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.320000	39.20	10.6	50	10.5	AV	L1	GND
0.705000	39.70	10.8	46	6.3	AV	L1	GND
1.220000	36.50	10.9	46	9.5	AV	L1	GND
2.250000	33.40	11.0	46	12.6	AV	L1	GND
6.540000	27.20	11.2	50	22.8	AV	L1	GND
13.090000	24.80	11.3	50	25.2	AV	L1	GND

5. RADIATED EMISSION MEASUREMENT

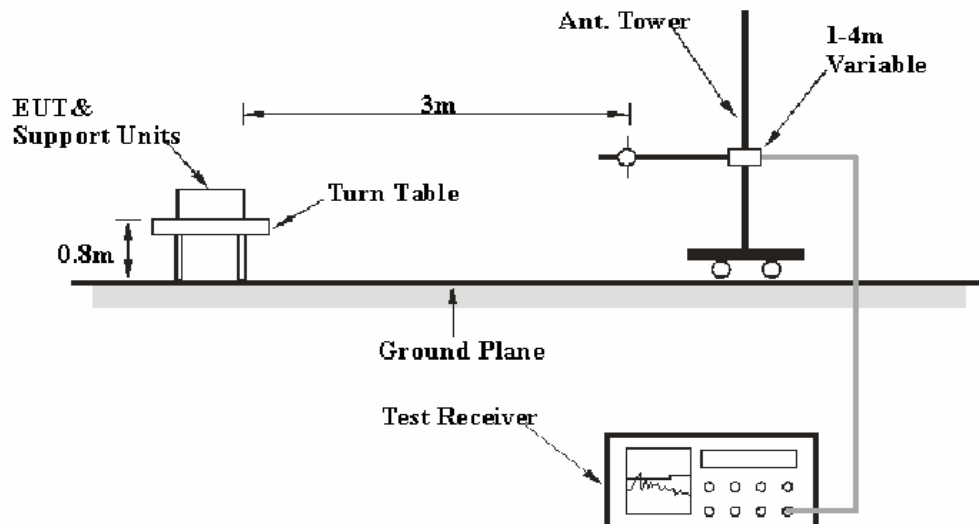
5.1. Block Diagram of Test

5.1.1. Block diagram of connection between the EUT and simulators

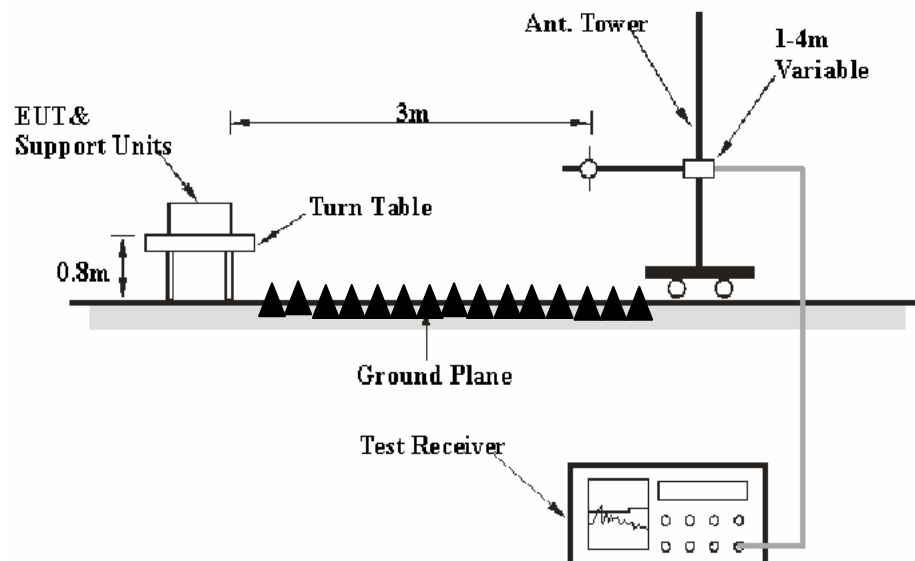


5.1.2. Block diagram of test setup (In chamber)

Below 1GHz:



Above 1GHz:



5.2. Radiated Emission Limit (Class B)

All emanations from a class B device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

Frequency MHz	Distance Meters	Field Strengths Limit	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V/m})$
30-88	3	100	40.0
88-216	3	150	43.5
216-960	3	200	46.0
Above 960	3	500	54.0
Remark: (1) Emission level $\text{dB}(\mu\text{V}) = 20 \log \text{Emission level } \mu\text{V/m}$. (2) The smaller limit shall apply at the cross point between two frequency bands. (3) Distance is the distance in meters between the measuring instrument antenna and the closest point of any part of the device or system.			

5.3. Configuration of EUT on Measurement

The following equipments are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.3.1. Touch Panel (EUT)

Model Number: 313-0003 (Touch Panel-10B)

Manufacturer: SHENZHEN SIBO INDUSTRIAL & DEVELOPMENT CO., LTD

5.4. Operating Condition of EUT

5.4.1. Setup the EUT and simulator as shown as Section 5.1.

5.4.2. Turn on the power of all equipment.

5.4.3. Let the EUT work in test mode and measure it.

5.5. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2014 on radiated emission measurement.

The bandwidth of the EMI test receiver is set at 120kHz.

Note: The EUT highest operating frequency provided by Manufacturer is 2GHz, the radiated emission measurement shall be made up to 10GHz.

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30.
1.705–108	1000.
108–500	2000.
500–1000	5000.
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower.

5.6.Data Sample

Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
X.XX	49.83	-22.03	27.80	43.50	-15.70	QP

Frequency(MHz) = Emission frequency in MHz

Reading(dB μ V) = Uncorrected Analyzer/Receiver reading

Factor (dB/m)= Antenna factor + Cable Loss – Amplifier gain

Result(dB μ V/m) = Reading + Factor

Limit (dB μ V/m)= Limit stated in standard

Margin (dB) = Result(dB μ V/m) - Limit (dB μ V/m)

Calculation Formula:

Margin(dB) = Result (dB μ V/m)–Limit(dB μ V/m)

Result(dB μ V/m)= Reading(dB μ V)+ Factor(dB/m)

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the limit.

5.7.Radiated Emission Measurement Result

Pass.

Test Lab: 3m Anechoic chamber

Test Engineer: Frank

We tested Radiated Emission from 30MHz to 10GHz, the test data of radiated emissions lower than the permissible value 20 dB are not recorded.

The spectral diagrams are attached as below.

Below 1GHz



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: FRANK2018A #409

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Touch Panel

Mode: Operating

Model: 313-0003(Touch Panel-10B)

Manufacturer: NEETS A/S

Polarization: Horizontal

Power Source: POE 48V

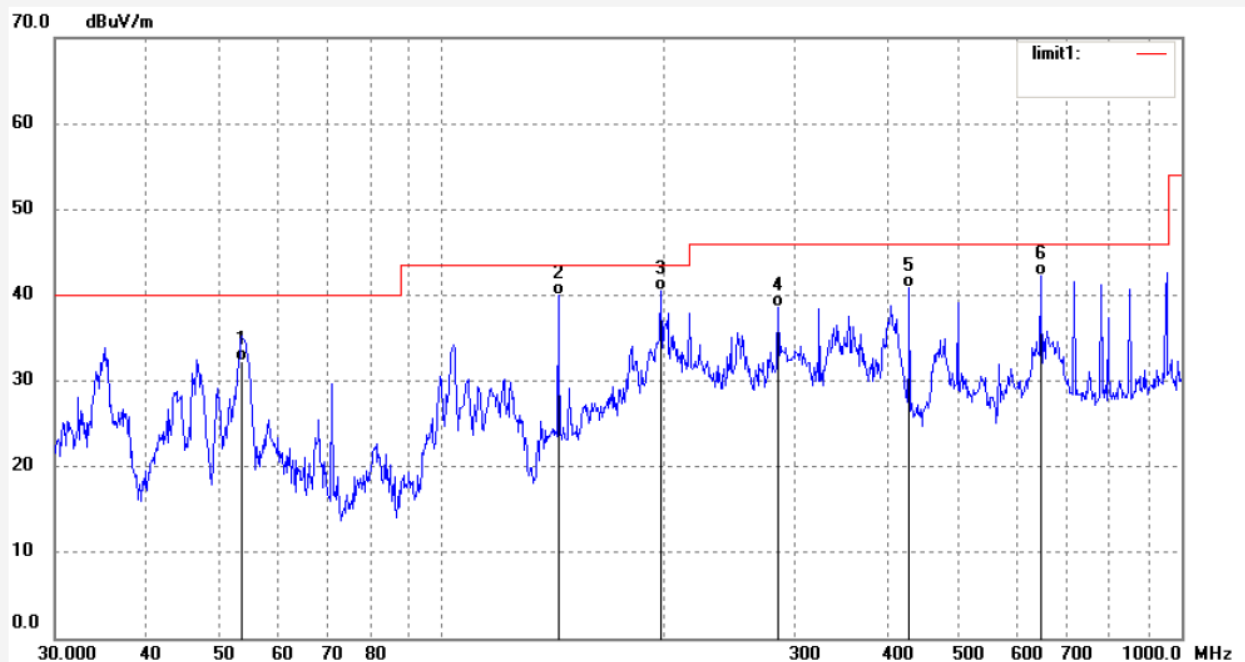
Date: 18/09/11/

Time: 10/30/03

Engineer Signature:

Distance:

Note: Report NO.:ATE20181496



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	53.7558	53.18	-20.87	32.31	40.00	-7.69	QP	200	302	
2	143.7760	62.14	-22.20	39.94	43.50	-3.56	QP	200	215	
3	197.9456	59.37	-18.82	40.55	43.50	-2.95	QP	200	65	
4	285.2610	55.20	-16.59	38.61	46.00	-7.39	QP	200	112	
5	428.7959	54.42	-13.55	40.87	46.00	-5.13	QP	200	189	
6	644.5530	51.30	-8.97	42.33	46.00	-3.67	QP	200	163	

Job No.: FRANK2018A #408

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Touch Panel

Mode: Operating

Model: 313-0003(Touch Panel-10B)

Manufacturer: NEETS A/S

Polarization: Vertical

Power Source: POE 48V

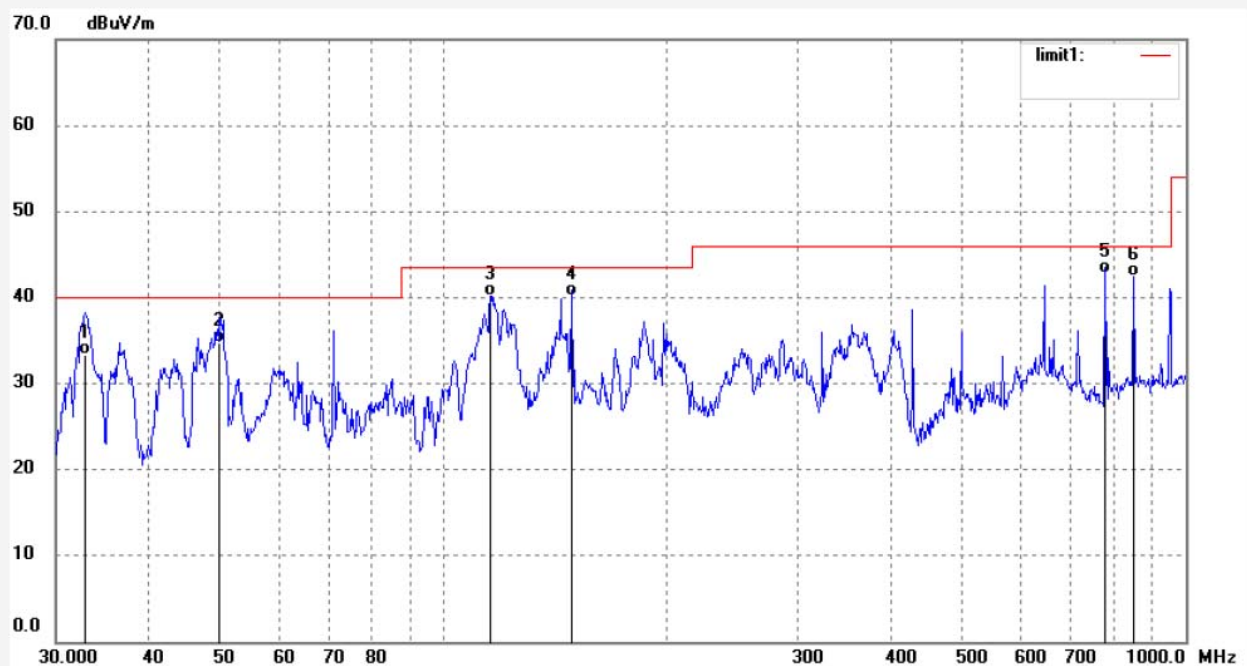
Date: 18/09/11/

Time: 10/29/15

Engineer Signature:

Distance:

Note: Report NO.:ATE20181496

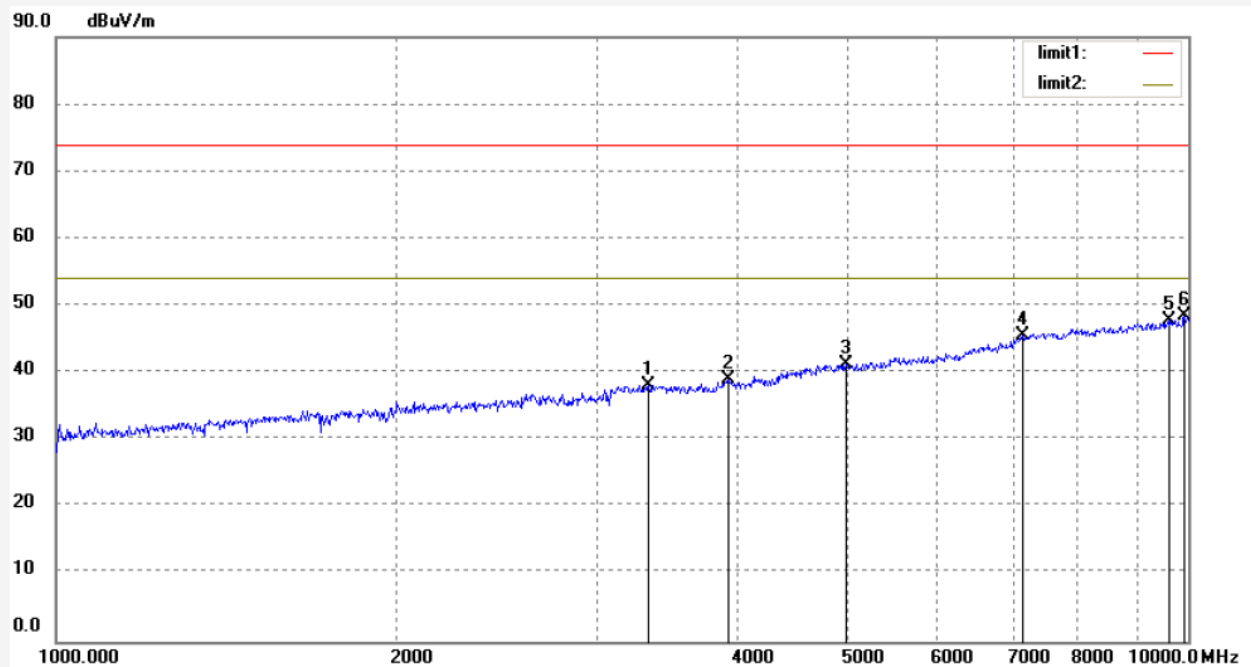


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.8697	50.48	-17.21	33.27	40.00	-6.73	QP	100	103	
2	49.9322	55.45	-20.70	34.75	40.00	-5.25	QP	100	211	
3	115.6320	61.35	-21.21	40.14	43.50	-3.36	QP	100	45	
4	148.9173	62.45	-22.30	40.15	43.50	-3.35	QP	100	87	
5	779.2178	49.02	-6.25	42.77	46.00	-3.23	QP	100	99	
6	850.7603	47.49	-5.04	42.45	46.00	-3.55	QP	100	166	

Job No.: FRANK2018A #410
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Touch Panel
Mode: Operating
Model: 313-0003(Touch Panel-10B)
Manufacturer: NEETS A/S

Polarization: Horizontal
Power Source: POE 48V
Date: 18/09/11/
Time: 10/39/58
Engineer Signature:
Distance:

Note: Report NO.:ATE20181496



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	3339.379	43.12	-5.05	38.07	74.00	-35.93	peak	200	302	
2	3927.888	42.43	-3.46	38.97	74.00	-35.03	peak	250	69	
3	4987.526	42.85	-1.67	41.18	74.00	-32.82	peak	250	56	
4	7144.599	43.46	2.01	45.47	74.00	-28.53	peak	200	152	
5	9635.787	42.40	5.48	47.88	74.00	-26.12	peak	200	269	
6	9930.677	42.94	5.44	48.38	74.00	-25.62	peak	200	210	

Job No.: FRANK2018A #411

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Touch Panel

Mode: Operating

Model: 313-0003(Touch Panel-10B)

Manufacturer: NEETS A/S

Polarization: Vertical

Power Source: POE 48V

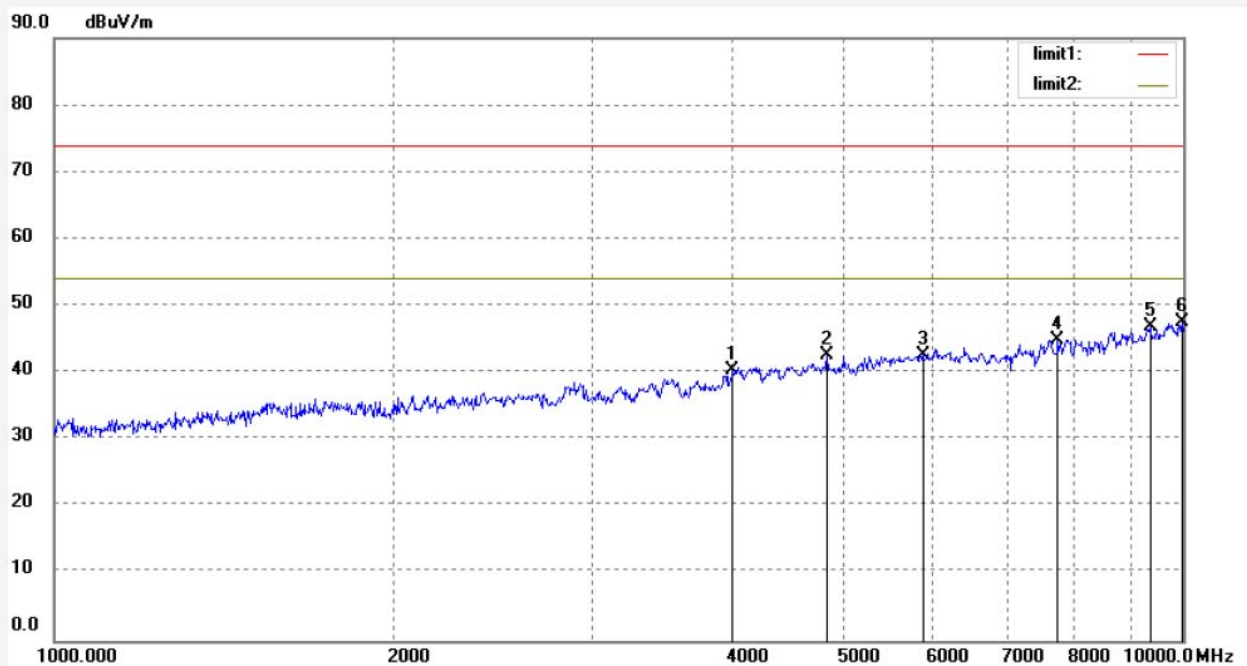
Date: 18/09/11/

Time: 10/41/10

Engineer Signature:

Distance:

Note: Report NO.:ATE20181496



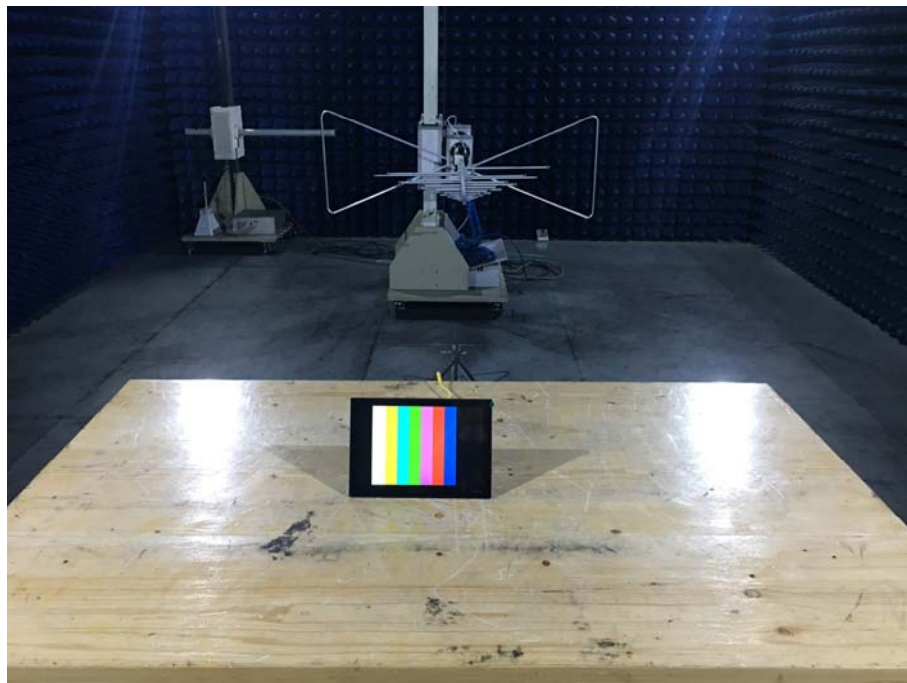
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	3992.165	43.70	-3.32	40.38	74.00	-33.62	peak	100	302	
2	4839.423	44.73	-2.17	42.56	74.00	-31.44	peak	100	156	
3	5880.113	42.85	-0.10	42.75	74.00	-31.25	peak	100	210	
4	7748.624	42.01	2.93	44.94	74.00	-29.06	peak	100	136	
5	9349.655	41.69	5.29	46.98	74.00	-27.02	peak	100	232	
6	9976.839	42.12	5.43	47.55	74.00	-26.45	peak	100	210	

6. PHOTOGRAPHS

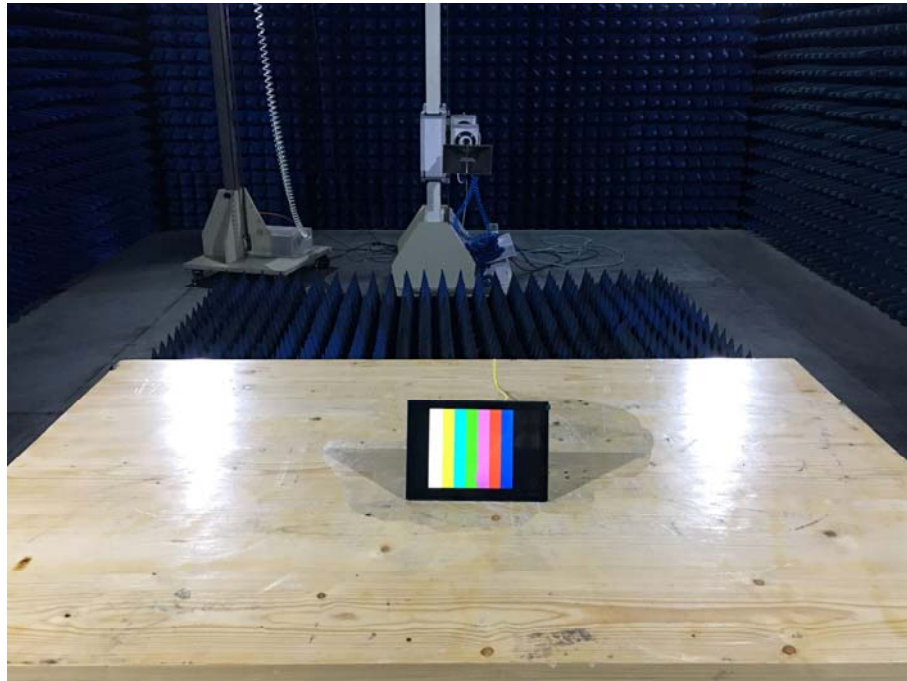
6.1. Photo of Power Line Conducted Emission Measurement



6.2. Photo of Radiated Emission Measurement below 1GHz



6.3.Photo of Radiated Emission Measurement above 1GHz



******* End of Test Report *******