EMC TEST REPORT

For

Dongguan Excel Jointure Acrylic Products LTD.

Promotion materials,Innovative display material,Creative props,CYN- AI point prop

Test Model: 9711AFGX

Prepared for	:	Dongguan Excel Jointure Acrylic Products LTD.
Address	:	Shang Keng Industrial District, Chang Ping Town Dongguan Guangdong Province, PRC
Prepared by	:	Shenzhen AOCE Electronic Technology Service Co., Ltd
Address	:	Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China
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Date of receipt of test sample	:	June 12, 2025
Number of tested samples	:	1
Serial number	:	Prototype
Date of Test	:	June 12, 2025~June 19, 2025
Date of Report	:	June 19, 2025

EMC TEST REPORT
ETSI EN 301 489-3 V2.3.2 (2023-01)

Report Reference No.	**:**	**AOC250617102E**
Date Of Issue.....	:	June 19, 2025
Testing Laboratory Name	**:**	**Shenzhen AOCE Electronic Technology Service Co., Ltd**
Address.....	:	Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China
Testing Location/ Procedure	:	Full application of Harmonised standards ■ Partial application of Harmonised standards □ Other standard testing method □
Applicant's Name.....	**:**	**Dongguan Excel Jointure Acrylic Products LTD.**
Address.....	:	Shang Keng Industrial District, Chang Ping Town Dongguan Guangdong Province, PRC
Test Specification		
Standard.....	:	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-3 V2.3.2 (2023-01) EN 55032:2015+A1:2020 EN 55035: 2017+A11:2020
Test Report Form No.	:	AOCEMC-1.0
TRF Originator.....	:	Shenzhen AOCE Electronic Technology Service Co., Ltd
Master TRF	:	Dated 2017-09

Test Item Description.....	**:**	**Promotion materials,Innovative display material,Creative props,CYN- AI point prop**
Trade Mark.....	:	HONOR
Test Model	:	9711AFGX
Ratings	:	N/A
Result ……..... :		**Positive**

Compiled by:	**Supervised by:**	**Approved by:**
Johnson Wang/ Administrators	Joey Liu/ Technique principal	Murry Yu/ Manager

EMC -- TEST REPORT

Test Report No. : AOC250617102E	June 19, 2025 Date of issue

Test Model.....	:	9711AFGX
EUT.....	:	Promotion materials,Innovative display material,Creative props,CYN- AI point prop
Applicant.....	**:**	**Dongguan Excel Jointure Acrylic Products LTD.**
Address.....	:	Shang Keng Industrial District, Chang Ping Town Dongguan Guangdong Province, PRC
Telephone.....	:	/
Fax.....	:	/
Manufacturer.....	**:**	**Dongguan Excel Jointure Acrylic Products LTD.**
Address.....	:	Shang Keng Industrial District, Chang Ping Town Dongguan Guangdong Province, PRC
Telephone.....	:	/
Fax.....	:	/
Factory.....	**:**	**Dongguan Excel Jointure Acrylic Products LTD.**
Address.....	:	Shang Keng Industrial District, Chang Ping Town Dongguan Guangdong Province, PRC
Telephone.....	:	/
Fax.....	:	/

Test Result	**Positive**

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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Test Report Description Page

1. GENERAL INFORMATION

1.1. Product Description for Equipment Under Test (EUT)

EUT	:	Promotion materials,Innovative display material,Creative props,CYN- AI point prop
Test Model	:	9711AFGX
Hardware version	:	/
Software version	:	/
Operating Frequency	:	13.56MHz
Modulation Type	:	ASK
Antenna Description	:	Loop Antenna

1.2. Objective

ETSI EN 301 489-1	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU and the essential requirements of article 6 of Directive 2014/30/EU
ETSI EN 301 489-3	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU

1.3. Related Submittal(s)/Grant(s)

No Related Submittals.

1.4. Test Methodology

All measurements contained in this report were conducted with ETSI EN 301 489-1 V2.2.3 (2019-11), ETSI EN 301 489-3 V2.3.2 (2023-01).

1.5. Support Equipment List

Manufacturer	Description	Model	Serial Number	Certificate
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1.6. External I/O

I/O Port Description	Quantity	Cable
/	/	/

1.7. List Of Measuring Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	X-series USB Peak and Average Power Sensor Aglient	Agilent	U2021XA	MY54080022	May 18, 2025	May 17, 2026
2	4 CH. Simultaneous Sampling 14 Bits 2MS/s	Agilent	U2531A	MY54080016	May 18, 2025	May 17, 2026
3	Test Software	Ascentest	AT890-SW	20160630	May 18, 2025	May 17, 2026
4	RF Control Unit	Ascentest	AT890-RFB	N/A	May 18, 2025	May 17, 2026
5	ESA-E SERIES SPECTRUM ANALYZER	Agilent	E4407B	MY41440754	May 18, 2025	May 17, 2026
6	MXA Signal Analyzer	Agilent	N9020A	MY49100040	May 18, 2025	May 17, 2026
7	SPECTRUM ANALYZER	R&S	FSP	100503	May 18, 2025	May 17, 2026
8	MXG Vector Signal Generator	Agilent	N5182A	MY47071151	May 18, 2025	May 17, 2026
9	ESG VECTOR SIGNAL GENERATOR	Agilent	E4438C	MY42081396	May 18, 2025	May 17, 2026
10	PSG Analog Signal Generator	Agilent	E8257D	MY4520521	May 18, 2025	May 17, 2026
11	Universal Radio Communication Tester	R&S	CMU 200	105788	May 18, 2025	May 17, 2026
12	WIDEBAND RADIO COMMUNICATION TESTER	R&S	CMW 500	103818	May 18, 2025	May 17, 2026
13	RF Control Unit	Tonscend	JS0806-1	N/A	May 18, 2025	May 17, 2026
14	DC Power Supply	Agilent	E3642A	N/A	May 18, 2025	May 17, 2026
15	LTE Test Software	Tonscend	JS1120-1	N/A	May 18, 2025	May 17, 2026
16	Temperature & Humidity Chamber	GUANGZHOU GOGNWEN	GDS-100	70932	May 18, 2025	May 17, 2026
17	DC Source	CHROMA	62012P-80-60	34782951	May 18, 2025	May 17, 2026
18	RF Filter	Micro-Tronics	BRC50718	S/N-017	May 18, 2025	May 17, 2026
19	RF Filter	Micro-Tronics	BRC50719	S/N-011	May 18, 2025	May 17, 2026
20	RF Filter	Micro-Tronics	BRC50720	S/N-011	May 18, 2025	May 17, 2026
21	RF Filter	Micro-Tronics	BRC50721	S/N-013	May 18, 2025	May 17, 2026
22	RF Filter	Micro-Tronics	BRM50702	S/N-195	May 18, 2025	May 17, 2026
23	Splitter/Combiner	Micro-Tronics	PS2-15	CB11-20	May 18, 2025	May 17, 2026
24	Splitter/Combiner	Micro-Tronics	CB11-20	N/A	May 18, 2025	May 17, 2026
25	Attenuator	Micro-Tronics	PAS-8-10	S/N23466	May 18, 2025	May 17, 2026
26	Exposure Level Tester	Narda	ELT-400	N-0713	May 18, 2025	May 17, 2026
27	B-Field Probe	Narda	ELT-400	M-1154	May 18, 2025	May 17, 2026
28	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	May 18, 2025	May 17, 2026
29	Positioning Controller	MF	MF-7082	/	May 18, 2025	May 17, 2026
30	EMI Test Software	AUDIX	E3	N/A	May 18, 2025	May 17, 2026
31	EMI Test Receiver	R&S	ESR 7	101181	May 18, 2025	May 17, 2026
32	AMPLIFIER	QuieTek	QTK-A2525G	CHM10809065	May 18, 2025	May 17, 2026
33	Active Loop Antenna	SCHWARZBECK	FMZB 1519B	00005	May 18, 2025	May 17, 2026
34	By-log Antenna	SCHWARZBECK	VULB9163	9163-470	May 18, 2025	May 17, 2026
35	Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1925	May 18, 2025	May 17, 2026
36	Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	791	May 18, 2025	May 17, 2026
37	Broadband Preamplifier	SCHWARZBECK	BBV 9719	9719-025	May 18, 2025	May 17, 2026
38	RF Cable-R03m	Jye Bao	RG142	CB021	May 18, 2025	May 17, 2026
39	RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	May 18, 2025	May 17, 2026

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
40	Artificial Mains	R&S	ENV216	101288	May 18, 2025	May 17, 2026
41	Power Analyzer Test System	Voltech	PM6000	200009711AFGX053	May 18, 2025	May 17, 2026
42	ESD Simulator	SCHLODER	SESD 230	604035	May 18, 2025	May 17, 2026
43	RF POWER AMPLIFIER	OPHIR	5225R	1052	May 18, 2025	May 17, 2026
44	RF POWER AMPLIFIER	OPHIR	5273F	1019	May 18, 2025	May 17, 2026
45	Stacked Broadband Log Periodic Antenna	SCHWARZBECK	STLP 9128	9128ES-145	May 18, 2025	May 17, 2026
46	Stacked Mikrowellen Log.-Per Antenna	SCHWARZBECK	STLP 9149	9149-482	May 18, 2025	May 17, 2026
47	Electric field probe	Narda S.TS./PMM	EP601	611WX80208	May 18, 2025	May 17, 2026
48	Power Meter	Agilent	E4419B	MY45104493	May 18, 2025	May 17, 2026
49	Power Sensor	Agilent	E9301H	MY41495234	May 18, 2025	May 17, 2026
50	Power Sensor	Agilent	E4412A	MY41500229	May 18, 2025	May 17, 2026
51	Sound Level meter	BK Precision	735	73500873100	May 18, 2025	May 17, 2026
52	Audio Analyzer	R&S	UPV	1146.2003K0	May 18, 2025	May 17, 2026
53	Mouse Simulation	Bruel & Kjaer	4227	A0304216	May 18, 2025	May 17, 2026
54	Ear Simulation and supply	Bruel & Kjaer	2669.4182.5935	A0305284	May 18, 2025	May 17, 2026
55	Acoustical Calibrators	Bruel & Kjaer	4231	A0304215	May 18, 2025	May 17, 2026
56	Immunity Simulative Generator	EM TEST	UCS500-M4	0101-34	May 18, 2025	May 17, 2026
57	Simulator	FRANKONIA	CIT-10	A126A1195	May 18, 2025	May 17, 2026
58	CDN	FRANKONIA	CDN-M2	5100100100	May 18, 2025	May 17, 2026
59	CDN	FRANKONIA	CDN-M3	0900-11	May 18, 2025	May 17, 2026
60	Attenuator	FRANKONIA	ATT6	0010222A	May 18, 2025	May 17, 2026
61	Infuse tongs	EM TEST	EM-Clamp	0513A031201	May 18, 2025	May 17, 2026
62	Voltage dips and up generator	3CTEST	VDG-1105G	EC0171014	May 18, 2025	May 17, 2026

1.9. Measurement Uncertainty

Item	MU	Remark
Uncertainty for Power point Conducted Emissions Test	2.42dB	
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.54dB	Polarize: V
	4.1dB	Polarize: H
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	2.08dB	Polarize: H
	2.56dB	Polarize: V
Uncertainty for radio frequency	0.01ppm	
Uncertainty for conducted RF Power	0.65dB	
Uncertainty for temperature	0.2℃	
Uncertainty for humidity	1%	
Uncertainty for DC and low frequency voltages	0.06%	

1.10. Description Of Test Modes

There was 2 test Modes. TM1 to TM2 were shown below:
TM1 : Operate in wireless mode;
TM2 : Idle mode

***Note:
1. All test modes were tested, but we only recorded the worst case in this report.

2. SUMMARY OF TEST RESULTS

Rule	Description of Test Items	Result
§7.1	Reference to clause 8.4 of ETSI EN 301 489-1 Conducted Emission (AC mains input/output port)	N/A*
§7.1	Reference to clause 8.3 of ETSI EN 301 489-1 Conducted Emission (DC power input/output port)	N/A*
§7.1	Reference to clause 8.7 of ETSI EN 301 489-1 Conducted Emission (Wired network port)	N/A*
§7.1	Reference to clause 8.2 of ETSI EN 301 489-1 Radiated Emission (Enclosure of ancillary equipment)	Compliant
§7.1	Reference to clause 8.5 of ETSI EN 301 489-1 Harmonic current emissions (AC mains input port)	N/A*
§7.1	Reference to clause 8.6 of ETSI EN 301 489-1 Voltage fluctuations and flicker (AC mains input port)	N/A*
§7.2	Reference to clause 9.3 of ETSI EN 301 489-1 Electrostatic discharge (Enclosure port) (EN 61000-4-2)	Compliant
§7.2	Reference to clause 9.2 of ETSI EN 301 489-1 RF electromagnetic field (80MHz to 6000MHz) (Enclosure port) (EN 61000-4-3)	Compliant
§7.2	Reference to clause 9.4 of ETSI EN 301 489-1 Fast transients common mode (signal, wired network and control ports, DC and AC power ports) (EN 61000-4-4)	N/A*
§7.2	Reference to clause 9.8 of ETSI EN 301 489-1 Surges, line to line and line to ground (AC mains power input ports, wired network ports) (EN 61000-4-5)	N/A*
§7.2	Reference to clause 9.5 of ETSI EN 301 489-1 RF common mode 0.15MHz to 80MHz (signal, wired network and control ports, DC and AC power ports) (EN 61000-4-6)	N/A*
§7.2	Reference to clause 9.6 of ETSI EN 301 489-1 Transients and surges in the vehicular environment (ISO 7637-2)	N/A*
§7.2	Reference to clause 9.7 of ETSI EN 301 489-1 Voltage dips and interruptions (AC mains power input ports) (EN 61000-4-11)	N/A*

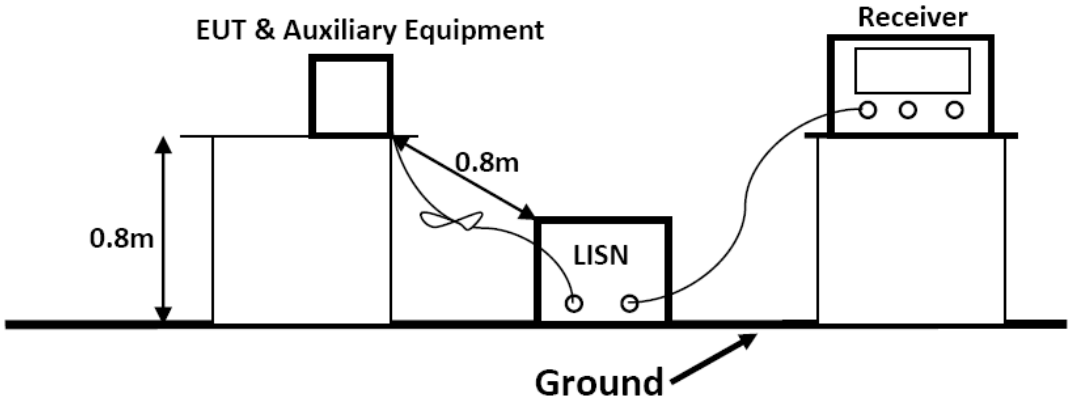
3. LINE CONDUCTED EMISSION

3.1. Conducted Emission Limit

Relevant Standard(s): ETSI EN 301 489-1 V2.2.3 (2019-11) / EN 55032: 2015 Class B

Limits for Line Conducted Emission		
Frequency (MHz)	Limit (dBμV)	
	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.		

3.2. Test Configuration



The setup of EUT is according with per ETSI EN 301 489-1 measurement procedure. The specification used was with the ETSI EN 301 489-1 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.
The spacing between the peripherals was 10 cm.

The EUT received charging power from the Adapter which received power through a LISN supplying power of AC 230V/50Hz.

3.3. EMI Test Receiver Setup

During the conducted emission test, the EMI test receiver was set with the following configurations:

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	150KHz ~ 30MHz
(IF)RBW	9kHz

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

3.4. Test Procedure

Power on the EUT, the EUT begins to work. Make sure the EUT operates normally during the test.

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

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

3.5. Test Data

N/A.(Not applicable)

4. RADIATED DISTURBANCE

4.1. Radiated Emission Limit

Relevant Standard(s): ETSI EN 301 489-1 V2.2.3 (2019-11) / EN 55032: 2015 Class B

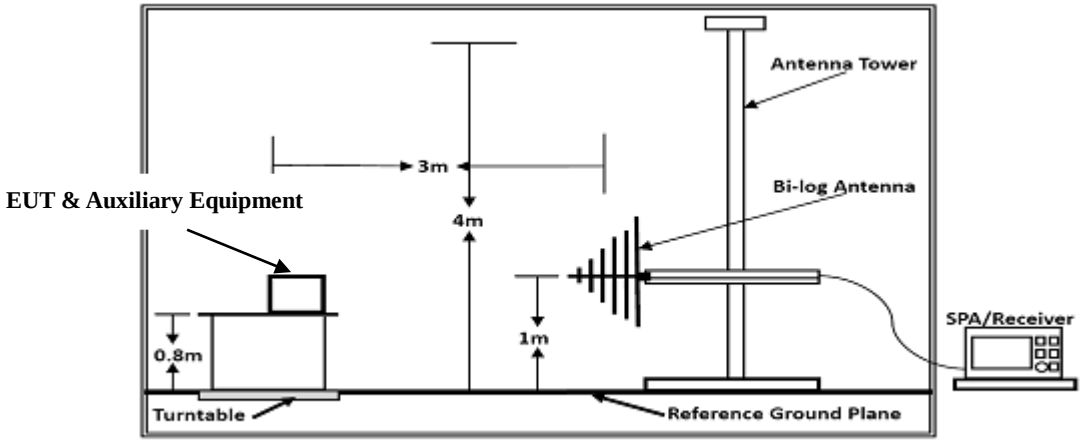
Limits for Radiated Disturbance Below 1GHz		
Frequency (MHz)	Distance (Meters)	Field Strengths Limit (dBμV/m)
30 ~ 230	3	40
230 ~ 1000	3	47
***Note: (1) The smaller limit shall apply at the combination point between two frequency bands. (2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT.		

Limits for Radiated Disturbance Above 1GHz			
Frequency (MHz)	Distance (Meters)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)
1000 ~ 3000	3	70	50
3000 ~ 6000	3	74	54
***Note: The lower limit applies at the transition frequency.			

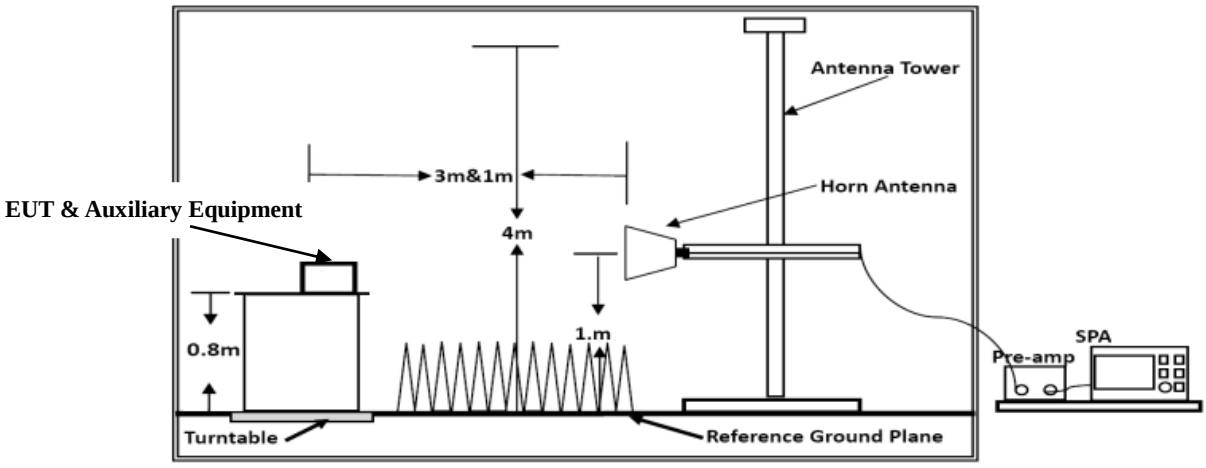
Limits for Radiated Disturbance Below 1GHz (For FM Receivers)			
Frequency (MHz)	Distance (Meters)	Class B Limit (dBμV/m)	
		Fundamental	Harmonics
30 ~ 230	3	60	52
230 ~ 300	3		52
300 ~ 1000	3		56
***Note: These relaxed limits apply only to emissions at the fundamental and harmonic frequencies of the LO. Signals at all other frequencies shall be compliant with the limits given in above Table.			

Limits for Radiated Disturbance Above 1GHz (For FM Receivers)			
1000 ~ 3000	3	70	50
3000 ~ 6000	3	74	54
***Note: The lower limit applies at the transition frequency.			

4.2. Test Configuration



Below 1GHz



Above 1GHz

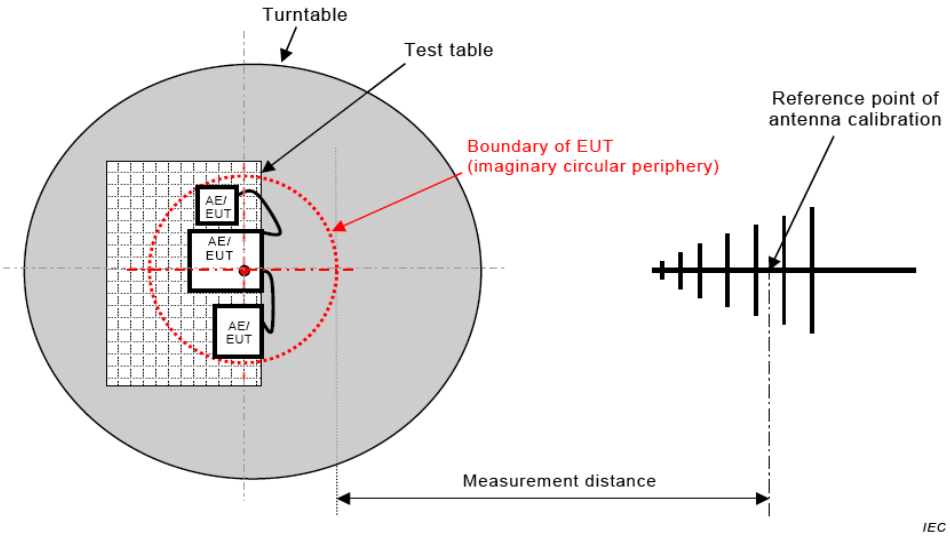


Figure C.1 – Measurement distance

Test Setup for FM Receiver

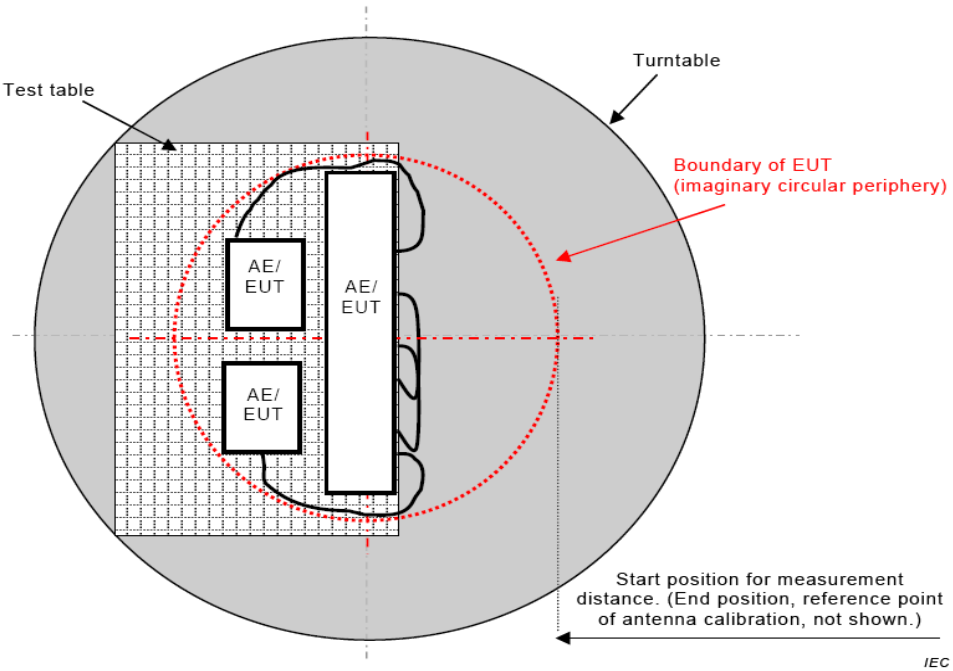


Figure C.2 – Boundary of EUT, Local AE and associated cabling

Test Setup for FM Receiver

4.3. Test Procedure

1) Sequence of testing 30 MHz to 1 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
--- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.
--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
--- Auxiliary equipment and cables were positioned to simulate normal operation conditions
--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
--- The measurement distance is 3 meter.
--- The EUT was set into operation.

Pre-measurement:

--- The turntable rotates from 0° to 315° using 45° steps.
--- The antenna is polarized vertical and horizontal.
--- The antenna height changes from 1 to 4 meter.
--- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

Final measurement:

--- The final measurement will be performed with minimum the six highest peaks.
--- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position (± 45°) and antenna movement between 1 and 4 meter.
--- The final measurement will be done with QP detector with an EMI receiver.
--- The final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre-measurement with marked maximum final measurements and the limit will be stored.

2) Sequence of testing 1 GHz to 6 GHz

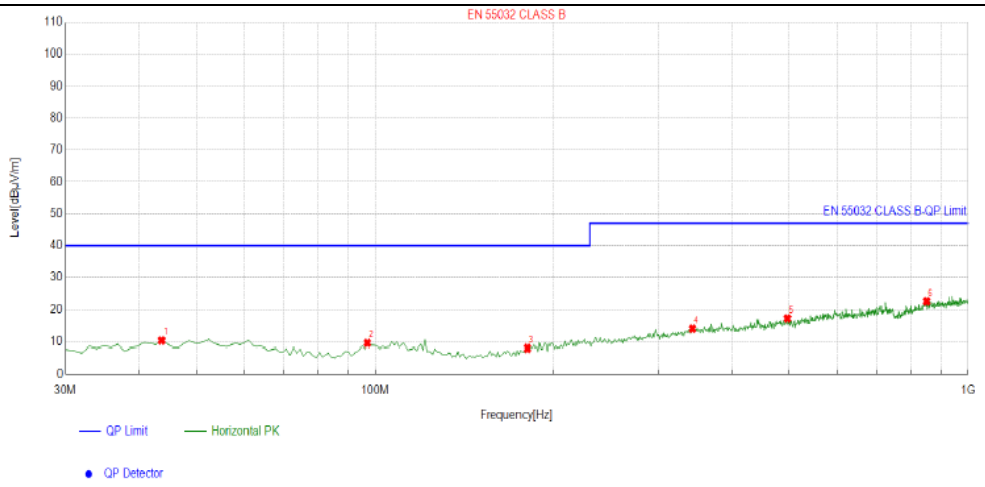
Setup:
--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
--- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.
--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
--- Auxiliary equipment and cables were positioned to simulate normal operation conditions
--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
--- The measurement distance is 3 meter.
--- The EUT was set into operation.
Pre-measurement:
--- The turntable rotates from 0° to 315° using 45° steps.
--- The antenna is polarized vertical and horizontal.
--- The antenna height scan range is 1 meter to 4 meter.
--- At each turntable position and antenna polarization the analyzer sweeps with peak detection to find the maximum of all emissions.
Final measurement:
--- The final measurement will be performed with minimum the six highest peaks.
--- According to the maximum antenna and turntable positions of pre-measurement the software maximize the peaks by changing turntable position (± 45°) and antenna movement between 1 and 4 meter. This procedure is repeated for both antenna polarizations.
--- The final measurement will be done in the position (turntable, EUT-table and antenna polarization) causing the highest emissions with Peak and Average detector.
--- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre-measurement with marked maximum final measurements and the limit will be stored.

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	30MHz~1000MHz / RBW 100kHz for QP

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	6000 MHz
RBW / VBW	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average

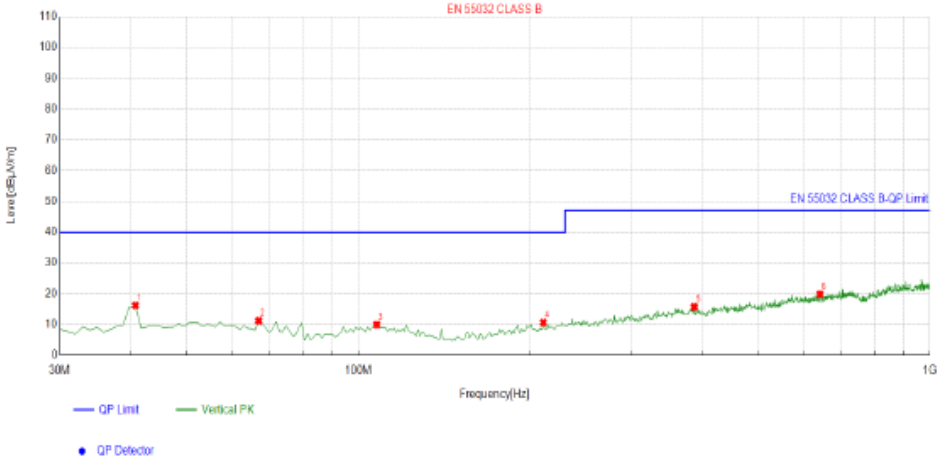
4.4. Test Data

The worst test mode of the EUT was TM1, and its test data was showed as the follow:



Suspected List

Suspected List									
NO.	Freq. [MHz]	Factor [dB]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	43.5936	-13.30	23.60	10.30	40.00	29.70	100	149	Horizontal
2	96.9970	-14.95	24.51	9.56	40.00	30.44	100	193	Horizontal
3	180.5005	-16.33	24.35	8.02	40.00	31.98	100	116	Horizontal
4	342.6527	-10.22	24.19	13.97	47.00	33.03	100	42	Horizontal
5	496.0661	-7.90	25.07	17.17	47.00	29.83	100	345	Horizontal
6	851.4414	-1.53	24.08	22.55	47.00	24.45	100	31	Horizontal

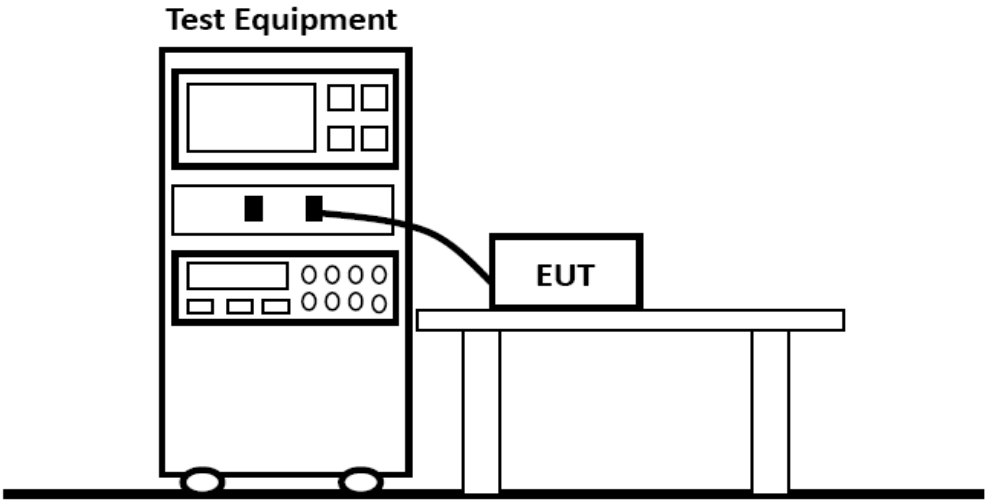


Suspected List

Suspected List									
NO.	Freq. [MHz]	Factor [dB]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	40.6807	-13.83	29.99	16.16	40.00	23.84	100	355	Vertical
2	66.8969	-16.17	27.38	11.21	40.00	28.79	100	22	Vertical
3	107.6777	-14.18	24.08	9.90	40.00	30.10	100	52	Vertical
4	210.6006	-14.88	25.53	10.65	40.00	29.35	100	334	Vertical
5	387.3173	-9.31	24.99	15.68	47.00	31.32	100	0	Vertical
6	642.6827	-5.04	24.86	19.82	47.00	27.18	100	74	Vertical

5. HARMONIC CURRENT EMISSIONS

5.1. Test Configuration



5.2. Test Standard

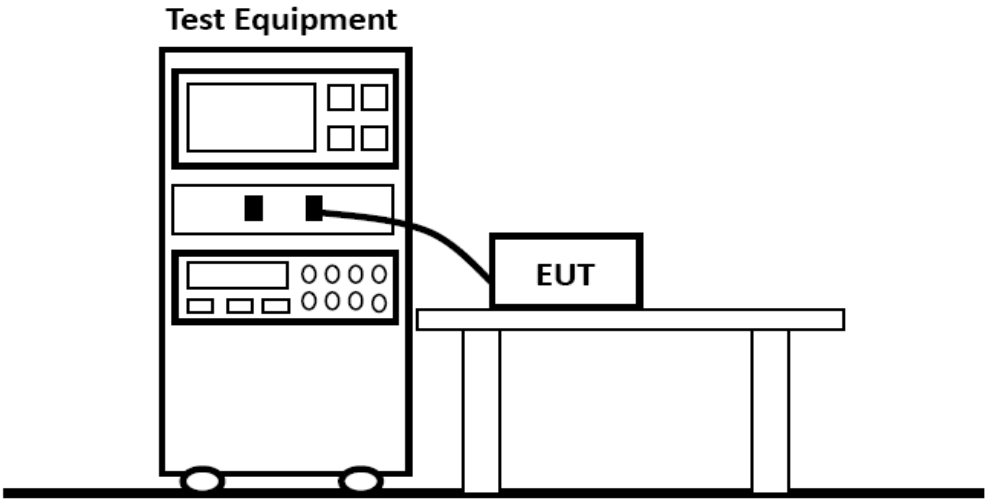
According to ETSI EN 301 489-1 V2.2.3 (2019-11) & EN 61000-3-2: 2014

5.3. Test Data

N/A.(Not applicable)

6. VOLTAGE FLUCTUATION AND FLICKER

6.1. Test Configuration



6.2. Test Standard

According to ETSI EN 301 489-1 V2.2.3 (2019-11) & EN 61000-3-3: 2013

6.3. Test Data

N/A.(Not applicable)

7. GENERAL PERFORMANCE CRITERIA FOR IMMUNITY TEST

7.1. Performance criteria for Continuous phenomena applied to Transmitter (CT)

For equipment of type II or type III that requires a communication link that is maintained during the test, it shall be verified by appropriate means supplied by the manufacturer that the communication link is maintained during each individual exposure in the test sequence.
Where the EUT is a transmitter, tests shall be repeated with the EUT in standby mode to ensure that any unintentional transmission does not occur.

7.2. Performance criteria for Transient phenomena applied to Transmitter (TT)

For equipment of type II or type III that requires a communication link that is maintained during the test, this shall be verified by appropriate means supplied by the manufacturer during each individual exposure in the test sequence. Where the EUT is a transmitter, tests shall be repeated with the EUT in standby mode to ensure that any unintentional transmission does not occur.

7.3. Performance criteria for Continuous phenomena applied to Receiver (CR)

For equipment of type II or III that requires a communication link that is maintained during the test, it shall be verified by appropriate means supplied by the manufacturer that the communication link is maintained during each individual exposure in the test sequence. Where the EUT is a transceiver, under no circumstances shall the transmitter operate unintentionally during the test.

7.4. Performance criteria for Transient phenomena applied to Receiver (TR)

For equipment of type II or type III that requires a communication link that is maintained during the test, this shall be verified by appropriate means supplied by the manufacturer during each individual exposure in the test sequence. Where the EUT is a transceiver, under no circumstances shall the transmitter operate unintentionally during the test.

Performance criteria for ETSI EN 301 489-3 V2.3.2 (2023-01)

Criteria	During test	After test
A	Shall operate as intended. (see note 1). Shall be no loss of function. Shall be no unintentional transmissions.	Shall operate as intended. Shall be no degradation of performance (see note 3). Shall be no loss of function. Shall be no loss of stored data or user programmable functions.
B	May show loss of function (one or more). May show degradation of performance (see note 2). Shall be no unintentional transmissions.	Functions shall be self-recoverable. Shall operate as intended after recovering. Shall be no degradation of performance (see note 3). Shall be no loss of stored data or user programmable functions.
C	May be loss of function (one or more).	Functions shall be recoverable by the operator. Shall operate as intended after recovering. Shall be no degradation of performance (see note 3).

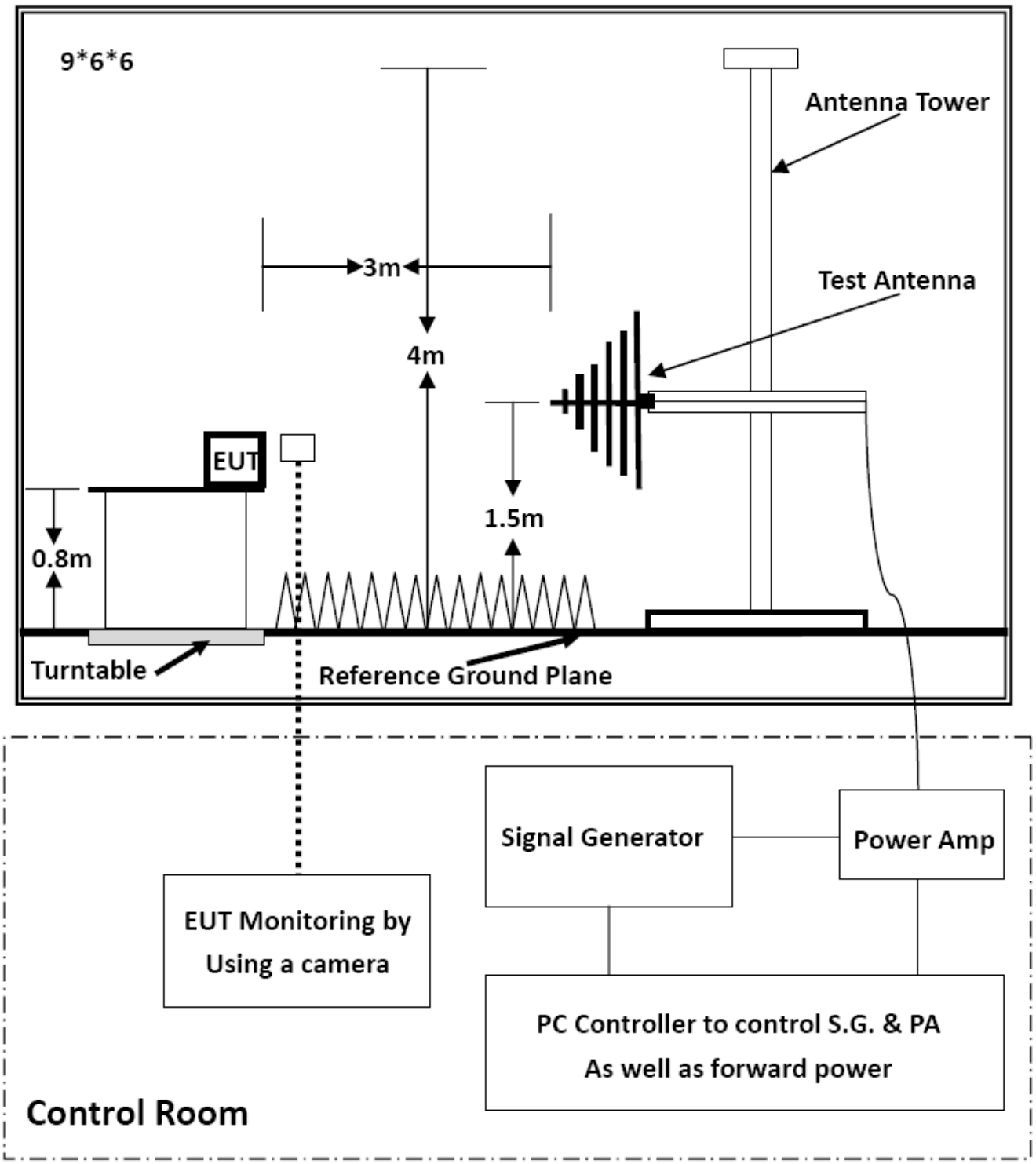
NOTE 1: Operate as intended during the test allows a level of degradation not below a minimum performance level specified by the manufacturer for the use of the apparatus as intended. In some cases the specified minimum performance level may be replaced by a permissible degradation of performance. If the minimum performance level or the permissible performance degradation is not specified by the manufacturer then either of these may be derived from the product description and documentation (including leaflets and advertising) and what the user may reasonably expect from the apparatus if used as intended.

NOTE 2: Degradation of performance during the test is understood as a degradation to a level not below a minimum performance level specified by the manufacturer for the use of the apparatus as intended. In some cases the specified minimum performance level may be replaced by a permissible degradation of performance. If the minimum performance level or the permissible performance degradation is not specified by the manufacturer then either of these may be derived from the product description and documentation (including leaflets and advertising) and what the user may reasonably expect from the apparatus if used as intended.

NOTE 3: No degradation of performance after the test is understood as no degradation below a minimum performance level specified by the manufacturer for the use of the apparatus as intended. In some cases the specified minimum performance level may be replaced by a permissible degradation of performance. After the test no change of actual operating data or user retrievable data is allowed. If the minimum performance level or the permissible performance degradation is not specified by the manufacturer then either of these may be derived from the product description and documentation (including leaflets and advertising) and what the user may reasonably expect from the apparatus if used as intended.

8. RF ELECTROMAGNETIC FIELD (80 MHz - 6000 MHz)

8.1. Test Configuration



8.2. Test Standard

ETSI EN 301 489-1, ETSI EN 301 489-3/ (EN 61000-4-3: 2006+A2: 2010)

Test level 2 at 3V/m.

8.3. Severity Level

Level	Field Strength (V/m)
1	1
2	3
3	10
X	Special
Performance Criterion: **A**	

8.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. EUT is set 3 meter away from the transmitting antenna which is mounted on an antenna tower. Both horizontal and vertical polarization of the antenna are set on test. Each of the four sides of EUT must be faced this transmitting antenna and measured individually. In order to judge the EUT performance, a CCD camera is used to monitor EUT screen. All the scanning conditions are as follows:

Condition of Test	Remark
Fielded Strength	3 V/m (Severity Level 2)
Radiated Signal	Unmodulated
Scanning Frequency	80-6000MHz
Dwell time of radiated	0.0015 decade/s
Waiting Time	3 Sec.

8.5. Test Result

Test Model	Promotion materials,Innovative display material,Creative props,CYN- AI point prop	**Test Engineer**	Jason Luo
Environmental Conditions	23.5℃, 53.2% RH	**Test Voltage**	AC 230V/50Hz

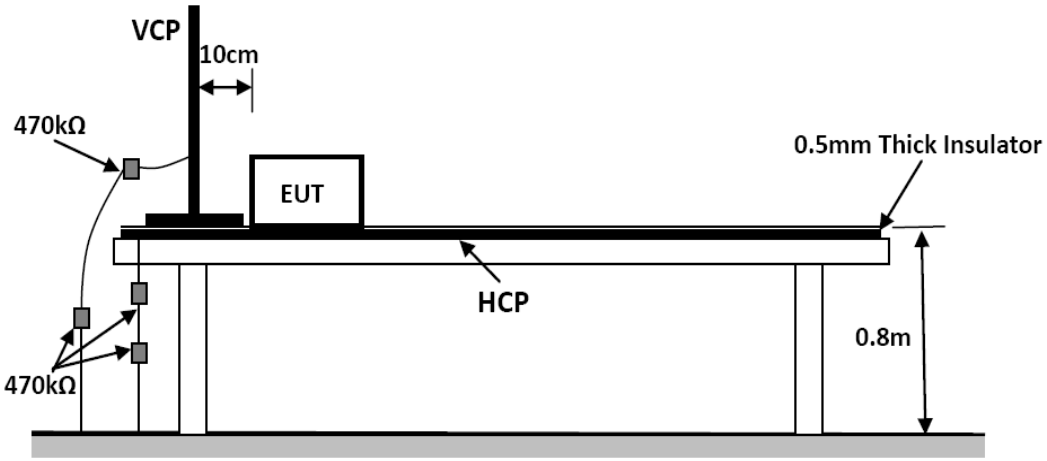
Wireless Test Result:

EUT Working Mode	Antenna Polarity	Frequency (MHz)	Fielded Strength (V/m)	Observation	Position	Conclusion
Operating Mode	Vertical	80-6000	3	CT, CR	Front, Right, Left, Back	Pass
	Horizontal	80-6000	3	CT, CR	Front, Right, Left, Back	Pass
Idle	Vertical	80-6000	3	See Note	Front, Right, Left, Back	Pass
	Horizontal	80-6000	3	See Note	Front, Right, Left, Back	Pass

9. ELECTROSTATIC DISCHARGE

Please refer to ETSI EN 301 489-1 and EN 61000-4-2.

9.1. Test Configuration



EN 61000-4-2 specifies that a tabletop EUT shall be placed on a non-conducting table which is 80 centimeters above a ground reference plane and that floor mounted equipment shall be placed on a insulating support approximately 10 centimeters above a ground plane. During the tests, the EUT is positioned over a ground reference plane in conformance with this requirement.

For tabletop equipment, a 1.5 by 1.0-meter metal sheet (HCP) is placed on the table and connected to the ground plane via a metal strap with two 470 k Ohms resistors in series. The EUT and attached cables are isolated from this metal sheet by 0.5-millimeter thick insulating material. A Vertical Coupling Plane (VCP) grounded on the ground plane through the same configuration as in the HCP is used.

9.2. Test Procedure

ETSI EN 301 489-1 V2.2.3 (2019-11) / EN 61000-4-2: 2009
Test level 3 for Air Discharge at ±8 kV
Test level 2 for Contact Discharge at ±4 kV

9.2.1. Air Discharge

This test is done on a non-conductive surface. The round discharge tip of the discharge electrode shall be approached as fast as possible to touch the EUT. After each discharge, the discharge electrode shall be removed from the EUT. The generator is then re-triggered for a new single discharge and repeated 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

9.2.2. Contact Discharge

All the procedure shall be same as Section 9.2.1. except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

9.2.3. Indirect Discharge For Horizontal Coupling Plane

At least 10 single discharges (in the most sensitive polarity) shall be applied at the front edge of each HCP opposite the center point of each unit (if applicable) of the EUT and 0.1m from the front of the EUT. The long axis of the discharge electrode shall be in the plane of the HCP and perpendicular to its front edge during the discharge.

9.2.4. Indirect Discharge For Vertical Coupling Plane

At least 10 single discharges (in the most sensitive polarity) shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

9.3. Test Data

PASS.

Electrostatic Discharge Test Results

Standard	☐ IEC 61000-4-2 ☑ EN 61000-4-2		
Applicant	Dongguan Excel Jointure Acrylic Products LTD.		
EUT	Promotion materials,Innovative display material,Creative props,CYN- AI point prop	**Temperature**	23.5℃
M/N	9711AFGX	**Humidity**	53.1％
Criterion	B	**Pressure**	1021mbar
Test Mode	TM1-TM2		
Test Engineer	Jason Luo		

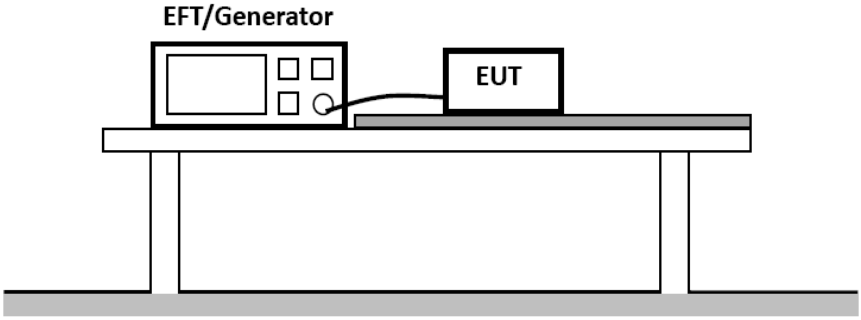
TEST RESULT OF WPC

Test Voltage	Coupling	Observation	Result (Pass/Fail)
±2KV, ±4kV	Contact Discharge	CT, CR	Pass
±2KV, ±4kV, ±8kV	Air Discharge	CT, CR	Pass
±2KV, ±4kV	Indirect Discharge HCP	CT, CR	Pass
±2KV, ±4kV	Indirect Discharge VCP	CT, CR	Pass

Note: The EUT performance complied with performance criteria for CT&CR to MS Function and there is no any degradation of performance and function.

10. ELECTRICAL FAST TRANSIENT IMMUNITY

10.1. Test Configuration



10.2. Test Standard

ETSI EN 301 489-1 V2.2.3 (2019-11)/ EN61000-4-4: 2012
Test level 2 at 1 kV

Test Level		
Open Circuit Output Test Voltage ±10%		
Level	On Power Supply Lines	On I/O (Input/Output) Signal data and control lines
1	0.5 kV	0.25 kV
2	1 kV	0.5 kV
3	2 kV	1 kV
4	4 kV	2 kV
X	Special	Special
Performance Criterion: B		

10.3. Test Procedure

The EUT is put on the table, which is 0.8 meter high above the ground. This reference ground plane shall project beyond the EUT by at least 0.1m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane beneath the EUT, shall be more than 0.5m.

10.3.1.For input and output AC power ports:
The EUT is connected to the power mains by using a coupling device, which couples the EFT interference signal to AC power lines. Both polarities of the test voltage should be applied during compliance test and the duration of the test is 2 minutes.

10.3.2.For signal lines and control lines ports: No I/O ports. It's unnecessary to test.

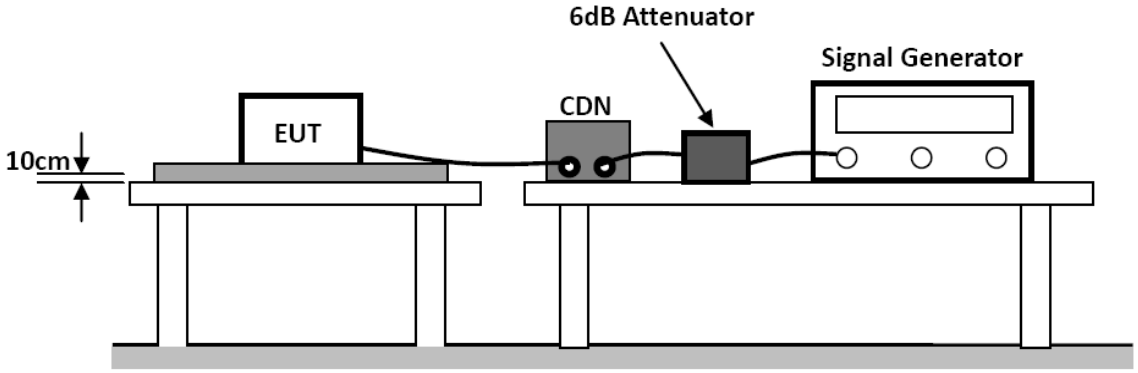
10.3.3.For DC output line ports: It's unnecessary to test.

10.4. Test Data

N/A.(Not applicable)

11. RF COMMON MODE

11.1. Test Configuration



11.2. Test Standard

ETSI EN 301 489-1 V2.2.3 (2019-11)/ EN 61000-4-6: 2014
Test level 2 at 3 V (r.m.s.), 0.15 MHz ~ 80 MHz,
Modulation type: AM
Modulation depth: 80%
Modulation signal: 1 kHz

Test Level	
Level	Voltage Level (r.m.s..) (V)
1	1
2	3
3	10
X	Special
Performance Criterion: A	

11.3. Test Procedure

11.3.1. Let the EUT work in test mode and test it.

11.3.2. The EUT are placed on an insulating support 0.1m high above a ground reference plane. CDN (coupling and decoupling device) is placed on the ground plane about 0.3m from EUT. Cables between CDN and EUT are as short as possible, and their height above the ground reference plane shall be between 30 and 50mm (where possible).

11.3.3. The disturbance signal described below is injected to EUT through CDN.

11.3.4. The EUT operates within its operational mode(s) under intended climatic conditions after power on.

11.3.5. The frequency range is swept from 150kHz to 80MHz using 3V signal level, and with the disturbance signal 80% amplitude modulated with a 1kHz sine wave.

11.3.6. The rate of sweep shall not exceed 1.5*10-3 decades/s. Where the frequency is swept incrementally, the step size shall not exceed 1% of the start and thereafter 1% of the preceding frequency value.

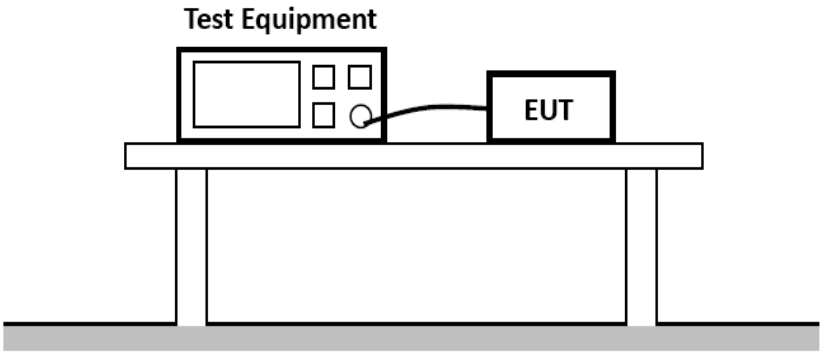
11.3.7. Recording the EUT operating situation during compliance testing and decide the EUT immunity criterion.

11.4. Test Data

N/A.(Not applicable)

12. SURGES, LINE TO LINE AND LINE TO GROUND

12.1. Test Configuration



12.2. Test Standard

ETSI EN 301 489-1 V2.2.3 (2019-11) / EN 61000-4-5: 2014
L-N: Test level 2 at 1 kV
L-PE, N-PE Test Level 3 at 2kV

Test Level		
Open Circuit Output Test Voltage ±10%		
Level	On Power Supply Lines	On I/O (Input/Output) Signal data and control lines
1	0.5 kV	0.25 kV
2	1 kV	0.5 kV
3	2 kV	1 kV
4	4 kV	2 kV
X	Special	Special
Performance Criterion: B		

12.3. Test Procedure

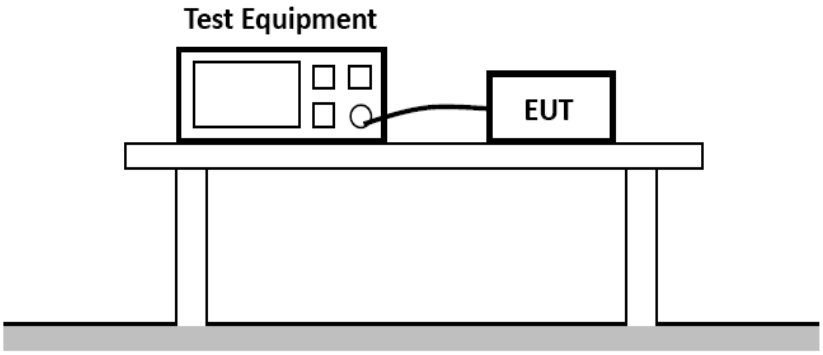
12.3.1. For line to line coupling mode, provide a 0.5 kV 1.2/50us voltage surge (at open-circuit condition).
12.3.2. At least 5 positive and 5 negative (polarity) tests with a maximum 1/min repetition rate are conducted during test.
12.3.3. Different phase angles are done individually.
12.3.4. Record the EUT operating situation during compliance test and decide the EUT immunity criterion for above each test.

12.4. Test Data

N/A.(Not applicable)

13. VOLTAGE DIPS/INTERRUPTIONS IMMUNITY TEST

13.1. Test Configuration



13.2. Test Standard

ETSI EN 301 489-1 V2.2.3 (2019-11)/ EN 61000-4-11: 2004
Test levels and Performance Criterion

Test Level		
Voltage Reduction $\%U_T$	Voltage Dips $\%U_T$	Duration (in Period)
100	0	0.5
100	0	1
30	70	5
Voltage Reduction $\%U_T$	Voltage Dips $\%U_T$	Duration (in Period)
100	0	250
Performance Criterion: B&C		

13.3. Test Procedure

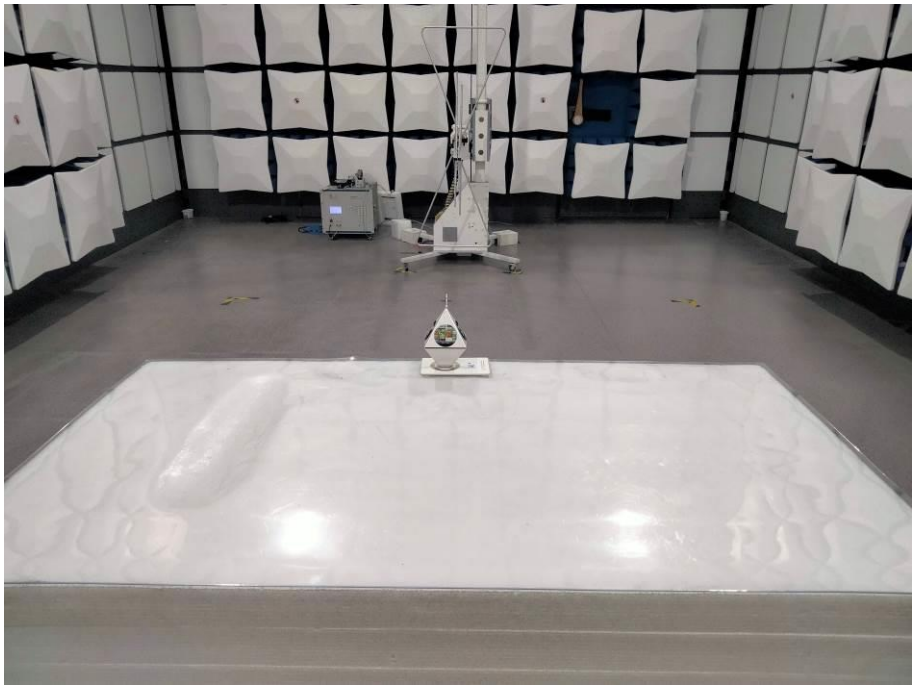
13.3.1. The interruption is introduced at selected phase angles with specified duration.

13.3.2. Record any degradation of performance.

13.4. Test Data

N/A.(Not applicable)

14. Test Setup PHOTOGRAPHS



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