EMC TEST REPORT

Product	:	Travel Charger
Trade mark	:	N/A
Model/Type reference	:	BY-01C/CA-46T/CA-43T/CA-27T/CA-28T/ CA-50T
Serial Number	:	N/A
Ratings	:	Input: AC 100-240V, 50/60Hz Output: DC 5V/3A, DC 9V/2.22A, DC 12V/1.5A or DC 5V/3A, DC 9V/2A, DC 12V/1.5A
Report Number	:	EED32M002450
Date of Issue	:	Oct. 15, 2020
Regulations	:	See below

Test Standards	Results
☒ EN 55032: 2015	PASS
☒ EN 61000-3-2: 2014	PASS
☒ EN 61000-3-3: 2013	PASS
☒ EN 55035: 2017	PASS

Prepared for:

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Prepared by:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
Shenzhen, Guangdong, China
TEL: +86-755-3368 3668
FAX: +86-755-3368 3385

Compiled by: Flora zhang Reviewed by: Deng Binbin

Approved by: David Wang Date of Issue: Oct. 15, 2020

David Wang Check No.:4762155113

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(Note: N/A means not applicable)

1. GENERAL INFORMATION

Applicant: ---

Manufacturer:

EMC Directive: 2014/30/EU

Product: Travel Charger

Trade mark: N/A

Model/Type reference: BY-01C/CA-46T/CA-43T/CA-27T/CA-28T/CA-50T

Serial Number: N/A

Report Number: EED32M002450

State of Sample(s): Normal

Sample Received Date: Aug. 16, 2020

Sample tested Date: Aug. 16, 2020 to Sept. 14, 2020

Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.

2. TEST SUMMARY

The Product has been tested according to the following specifications:

EMISSION		
Standard	**Test Item**	**Test**
EN 55032	Conducted disturbance	Yes
EN 55032	Radiated disturbance	Yes
EN 61000-3-2	Harmonic current emission	N/A[1]
EN 61000-3-3	Voltage fluctuations & flicker	Yes

IMMUNITY (EN 55035)		
Standard	**Test Item**	**Test**
IEC 61000-4-2	Electrostatic discharge (ESD)	Yes
IEC 61000-4-3	Radio-frequency electromagnetic field Immunity	Yes
IEC 61000-4-4	Electrical fast transients (EFT)	Yes
IEC 61000-4-5	Surges	Yes
IEC 61000-4-6	Radio-frequency continuous conducted Immunity	Yes
IEC 61000-4-8	Power-frequency magnetic fields Immunity	N/A[2]
IEC 61000-4-11	Voltage dips and interruptions	Yes

Remark:
1. The Product belongs to Class A, and its power is less than 75W, so it deems to fulfil this standard

without testing.

2. The Product doesn't contain any device susceptible to magnetic fields.

3. TEST UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Test item	Value (dB)
Conducted disturbance	3.1
Radiated disturbance (30MHz to 1GHz)	4.9
Radiated disturbance (1GHz to 6GHz)	4.7

4. PRODUCT INFORMATION AND TEST SETUP

4.1 PRODUCT INFORMATION

Ratings: Input: AC 100-240V, 50/60Hz
Output: DC 5V/3A, DC 9V/2.22A, DC 12V/1.5A or DC 5V/3A, DC 9V/2A, DC 12V/1.5A

The highest frequency of the internal sources of the EUT is:

☒ less than 108 MHz, the measurement shall only be made up to 1 GHz.

☐ between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz.

☐ between 500 MHz and 1 GHz, the measurement shall only be made up to 5 GHz.

☐ above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 6 GHz, whichever is less.

Model difference: All models are identical except appearance shape and Model.The test model is CA-43T and the test results are applicable to the others.

4.2 TEST SETUP CONFIGURATION

See test photographs attached in Appendix 1 for the actual connections between Product and support equipment.

4.3 SUPPORT EQUIPMENT

No.	Device Type	Brand	Model	Series No.	Data Cable	Power Cord
1.	---	---	---	---	---	---

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

5. FACILITIES AND ACCREDITATIONS

5.1 TEST FACILITY

All test facilities used to collect the test data are located at Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4, CISPR 16-1-1 and other equivalent standards.

5.2 TEST EQUIPMENT LIST

Instrumentation: The following list contains equipments used at CTI for testing.
The calibrations of the measuring instruments, including any accessories that may effect such calibration, are checked frequently to assure their accuracy. Adjustments are made and correction factors applied in accordance with instructions contained in the manual for the measuring instrument.

Equipment used during the tests:

Shielding Room No. 3 - Conducted disturbance Test				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Due Date**
Receiver	R&S	ESCI	100435	04/27/2021
LISN	R&S	ENV216	100098	03/04/2021
ISN	TESEQ GmbH	ISN T800	30297	01/13/2021

3M Semi-anechoic Chamber (2)- Radiated disturbance Test				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Due Date**
3M Chamber & Accessory Equipment	TDK	SAC-3	---	05/22/2022
TRILOG Broadband Antenna	schwarzbeck	VULB 9163	401	11/17/2020
Multi device Controller	maturo	NCD/070/10711112	---	---
Horn Antenna	ETS-LINGREN	BBHA 9120D	9120D-1869	07/08/2021
Microwave Preamplifier	Agilent	8449B	3008A02425	06/23/2021
Receiver	R&S	ESCI7	100938-003	10/20/2020

Shielding Room No. 2 - Harmonic / Flicker Test (EN 61000-3-2) / (EN 61000-3-3)				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Due Date**
Flicker & Harmonic Tester	California instruments	PACS-1	72492	07/20/2021
Power	California instruments	5001iX-400-413	56258	07/20/2021

Shielding Room No. 1 - ESD Test (IEC 61000-4-2)				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Due Date**
ESD Simulator	TESEQ	NSG437	1182	07/14/2021

3M Full-anechoic Chamber - Radio-frequency electromagnetic field Immunity Test (IEC 61000-4-3)				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Due Date**
3M Chamber & Accessory Equipment	ETS-LINDGREN	FACT-3	3510	05/29/2022
Power Amplifier	AR	150W1000	0322288	01/16/2021
Stacked double Log.-Per. Antenna	schwarzbeck	STLP 9128 E special	9128ES-110	---
Signal Generator	Agilent	E4438C	MY42082153	01/13/2021
Horn Antenna	AR	ATH800M5GA	0342530	---
Power Amplifier	RFLIGHT	NTWPA-106050	18019001	01/13/2021

Shielding Room No. 3 - EFT / Surges Test (IEC 61000-4-4) (IEC 61000-4-5)				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Due Date**
Compact Generator	EM-Test	UCS500M/6B	V0603101093	04/21/2021
Capacitive Clamp	EM-Test	C Clamp HFK	0306-43	01/08/2021
Surge Test Set	3C Test	SG-5010H	EC5531306	03/04/2021

Shielding Room No. 2 - Radio-frequency continuous conducted Immunity Test (IEC 61000-4-6)				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Due Date**
Signal Generator	IFR	2023B	202307/883	01/13/2021
Power Amplifier	AR	75A 250A	320297	01/08/2021
Attenuator	BIRD	75-A-MFN-06	0543	08/05/2021
CDN	EM-Test	CDN M2/M3	0204-01	11/10/2020
EM-Clamp	EM-Test	EM101	35770	04/21/2021

Shielding Room No. 2 –Voltage dips and interruptions Test (IEC 61000-4-11)				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Due Date**
Power	California instruments	5001iX-400-413	56258	07/20/2021
Electronic output switch	California instruments	EOS-1	72616	07/20/2021

5.3 LABORATORY ACCREDITATIONS AND LISTINGS

The measuring equipment utilized to perform the tests documented in this report has been calibrated once a year or in accordance with the manufacturer's recommendations, and is traceable under the ISO/IEC 17025 to international or national standards. Equipment has been calibrated by accredited calibration laboratories.

6. CONDUCTED DISTURBANCE

6.1 LIMITS

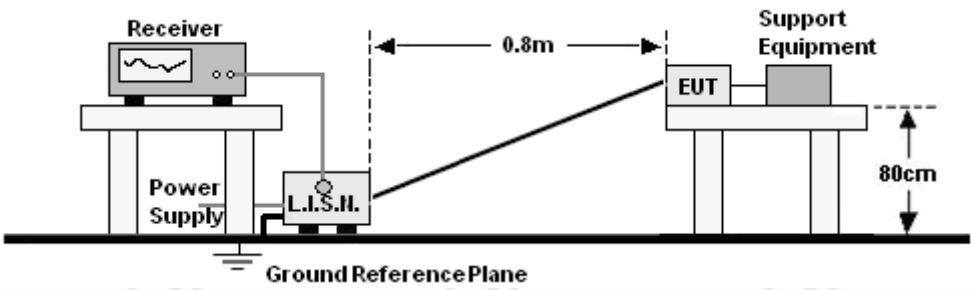
Requirements for conducted emissions from the AC mains power ports of Class B equipment

Frequency range (MHz)	Limits dB(μV)	
	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

NOTE: 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50 MHz.

6.2 BLOCK DIAGRAM OF TEST SETUP

For AC mains power port:



6.3 TEST PROCEDURE

For AC mains power port:

a. The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).

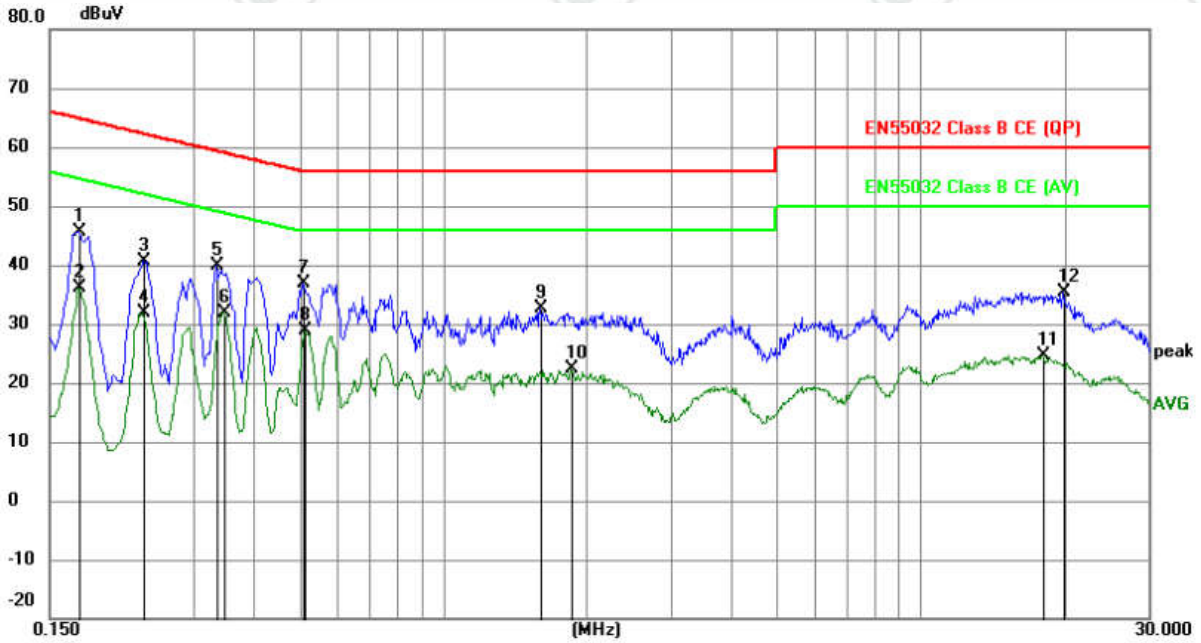
b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak and AVG detector in Max Hold mode. Run the receiver's pre-scan to record the maximum disturbance generated from Product in all power lines in the full band.

c. For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

6.4 GRAPHS AND DATA

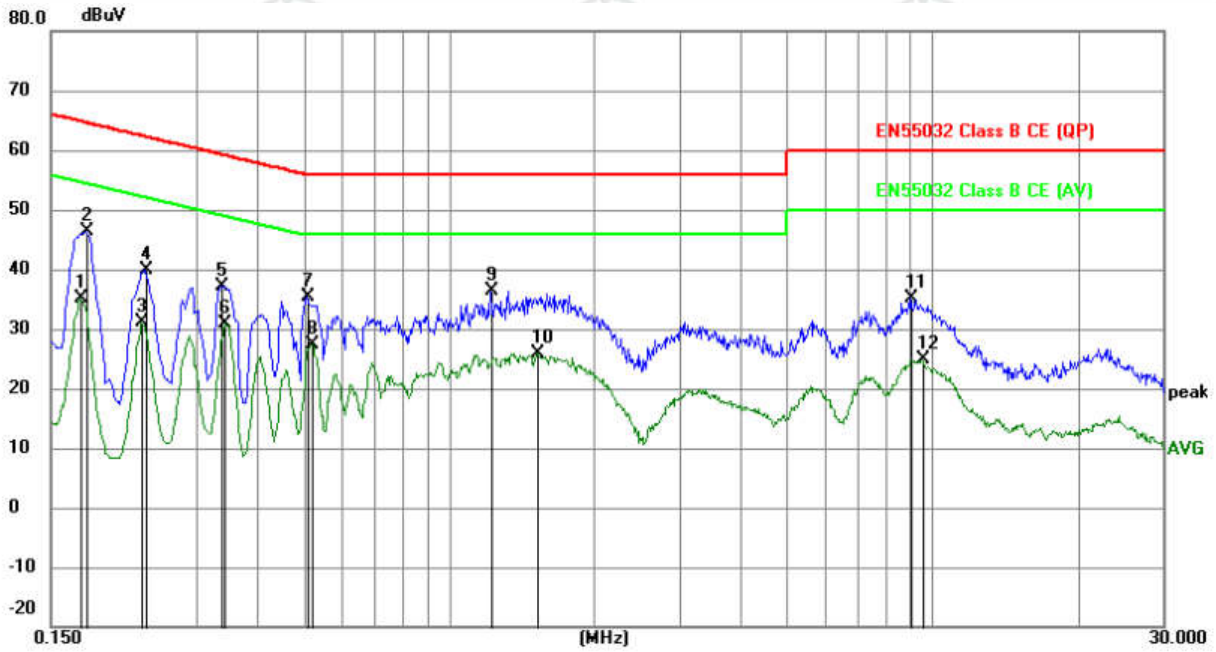
For AC mains power port:

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 120V/60Hz	**Temperature**	:	23℃
Mode	:	Output DC 5V/3A	**Humidity**	:	51%
Phase	:	L1	**Press**	:	101kPa



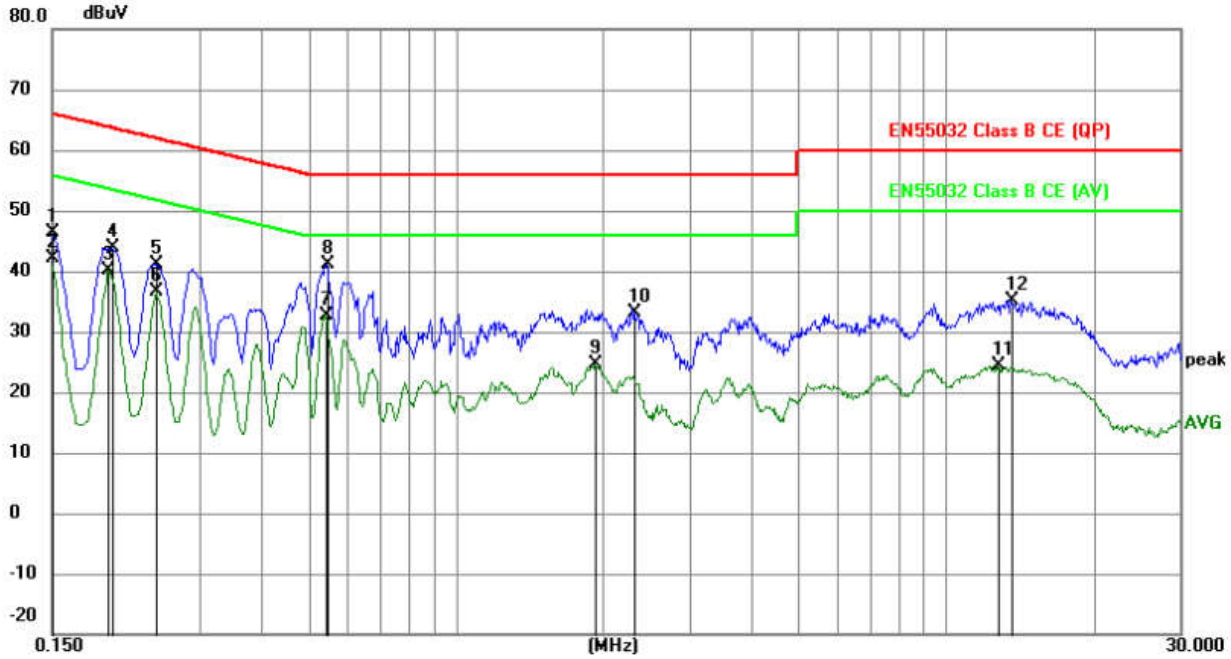
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1725	35.86	9.87	45.73	64.84	-19.11	QP	
2		0.1725	26.30	9.87	36.17	54.84	-18.67	AVG	
3		0.2355	30.65	9.94	40.59	62.25	-21.66	QP	
4		0.2355	21.84	9.94	31.78	52.25	-20.47	AVG	
5		0.3345	29.94	10.04	39.98	59.34	-19.36	QP	
6		0.3480	21.81	10.02	31.83	49.01	-17.18	AVG	
7		0.5100	26.98	9.96	36.94	56.00	-19.06	QP	
8	*	0.5144	18.85	9.97	28.82	46.00	-17.18	AVG	
9		1.5990	22.77	9.81	32.58	56.00	-23.42	QP	
10		1.8555	12.50	9.80	22.30	46.00	-23.70	AVG	
11		18.0015	14.63	9.95	24.58	50.00	-25.42	AVG	
12		19.9095	25.49	9.97	35.46	60.00	-24.54	QP	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 120V/60Hz	**Temperature**	:	23℃
Mode	:	Output DC 5V/3A	**Humidity**	:	51%
Phase	:	N	**Press**	:	101kPa



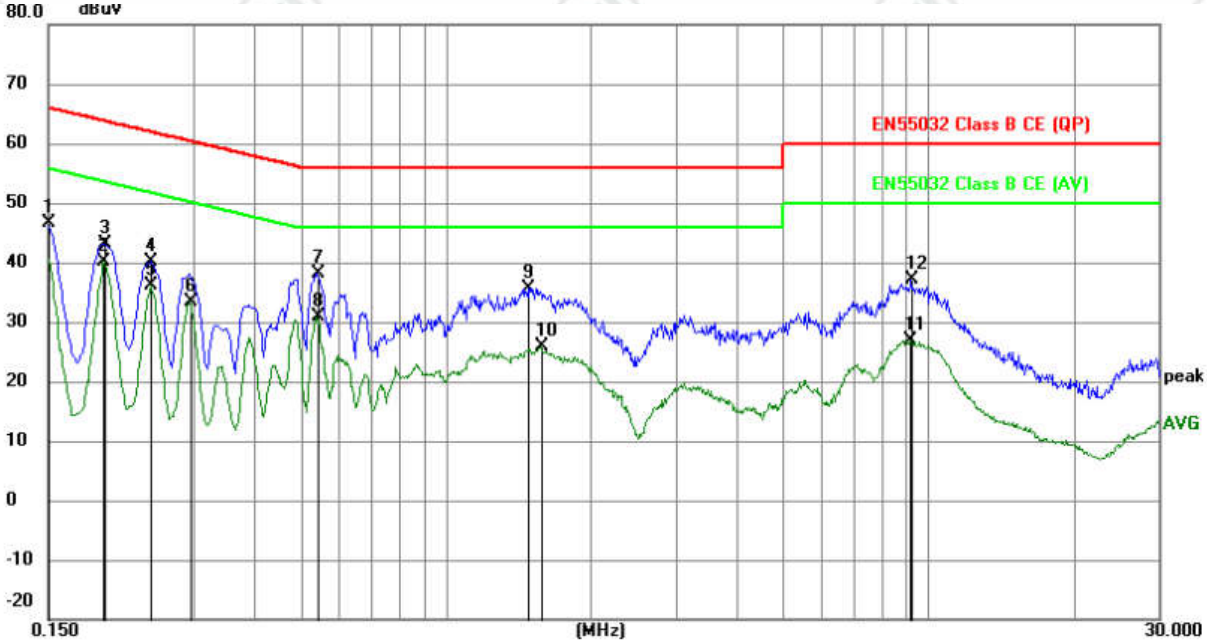
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1725	25.30	9.87	35.17	54.84	-19.67	AVG	
2	*	0.1770	36.45	9.87	46.32	64.63	-18.31	QP	
3		0.2310	21.18	9.93	31.11	52.41	-21.30	AVG	
4		0.2355	29.88	9.94	39.82	62.25	-22.43	QP	
5		0.3390	27.14	10.03	37.17	59.23	-22.06	QP	
6		0.3435	20.76	10.03	30.79	49.12	-18.33	AVG	
7		0.5100	25.36	9.96	35.32	56.00	-20.68	QP	
8		0.5190	17.40	9.97	27.37	46.00	-18.63	AVG	
9		1.2210	26.53	9.82	36.35	56.00	-19.65	QP	
10		1.5225	16.15	9.81	25.96	46.00	-20.04	AVG	
11		9.0195	25.24	9.78	35.02	60.00	-24.98	QP	
12		9.5460	15.07	9.78	24.85	50.00	-25.15	AVG	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 230V/50Hz	**Temperature**	:	23℃
Mode	:	Output DC 5V/3A	**Humidity**	:	51%
Phase	:	L1	**Press**	:	101kPa



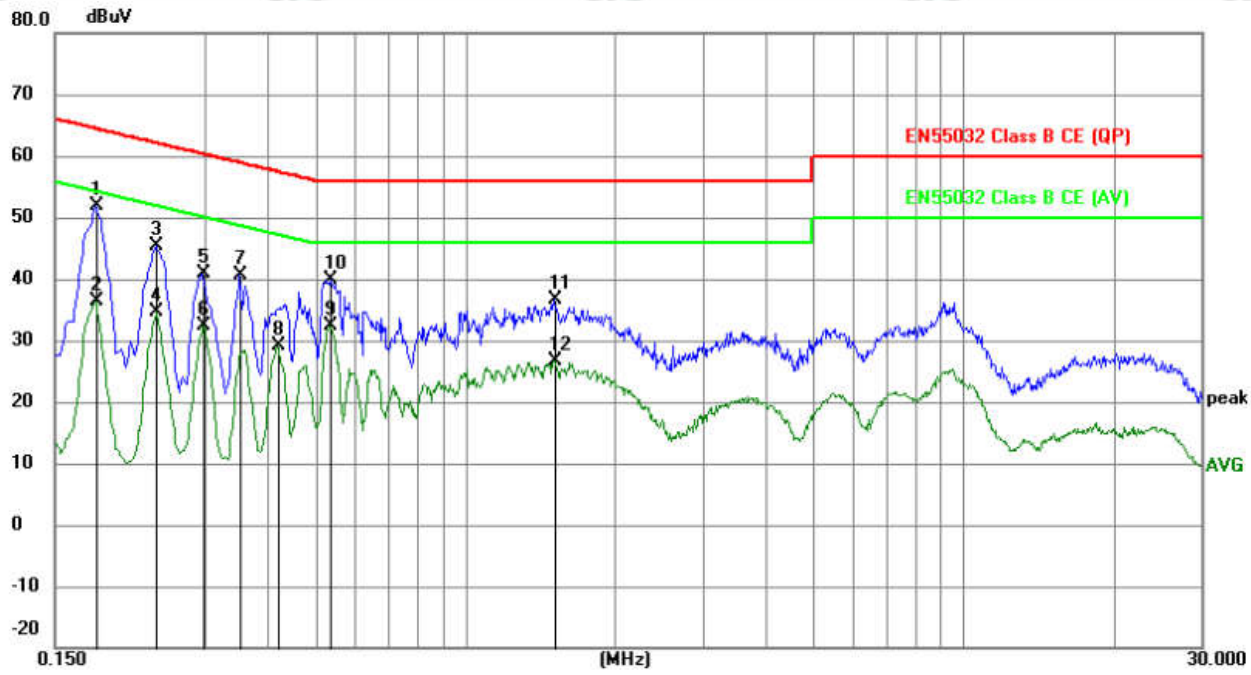
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	36.46	9.87	46.33	66.00	-19.67	QP	
2		0.1500	32.24	9.87	42.11	56.00	-13.89	AVG	
3		0.1949	30.29	9.87	40.16	53.83	-13.67	AVG	
4		0.1995	34.00	9.87	43.87	63.63	-19.76	QP	
5		0.2445	31.15	9.96	41.11	61.94	-20.83	QP	
6		0.2445	26.58	9.96	36.54	51.94	-15.40	AVG	
7	*	0.5415	22.75	10.00	32.75	46.00	-13.25	AVG	
8		0.5460	31.05	10.01	41.06	56.00	-14.94	QP	
9		1.9185	14.78	9.79	24.57	46.00	-21.43	AVG	
10		2.3100	23.24	9.79	33.03	56.00	-22.97	QP	
11		12.7545	14.50	9.86	24.36	50.00	-25.64	AVG	
12		13.6050	25.36	9.89	35.25	60.00	-24.75	QP	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 230V/50Hz	**Temperature**	:	23℃
Mode	:	Output DC 5V/3A	**Humidity**	:	51%
Phase	:	N	**Press**	:	101kPa



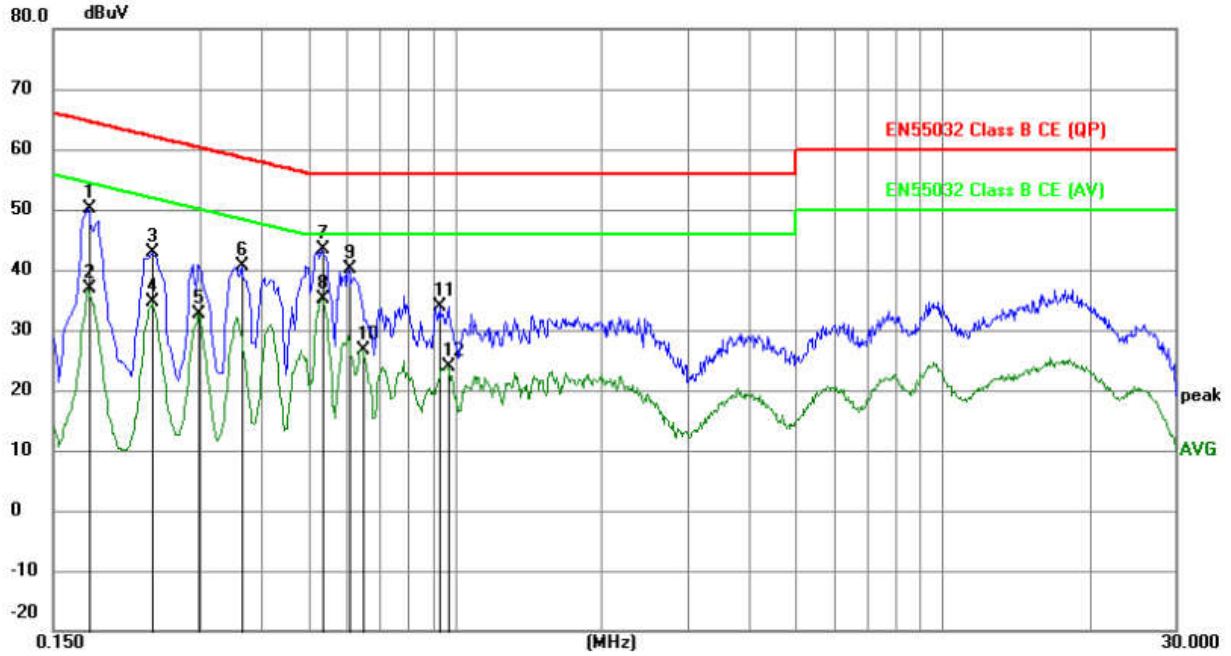
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	36.84	9.87	46.71	66.00	-19.29	QP	
2	*	0.1949	30.16	9.87	40.03	53.83	-13.80	AVG	
3		0.1955	33.21	9.87	43.08	63.80	-20.72	QP	
4		0.2445	30.10	9.96	40.06	61.94	-21.88	QP	
5		0.2445	26.08	9.96	36.04	51.94	-15.90	AVG	
6		0.2940	23.27	10.06	33.33	50.41	-17.08	AVG	
7		0.5415	28.21	10.00	38.21	56.00	-17.79	QP	
8		0.5415	20.86	10.00	30.86	46.00	-15.14	AVG	
9		1.4819	25.93	9.81	35.74	56.00	-20.26	QP	
10		1.5720	15.95	9.81	25.76	46.00	-20.24	AVG	
11		9.1680	17.04	9.78	26.82	50.00	-23.18	AVG	
12		9.2220	27.36	9.78	37.14	60.00	-22.86	QP	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 120V/60Hz	**Temperature**	:	23℃
Mode	:	Output DC 9V/2.22A	**Humidity**	:	51%
Phase	:	L1	**Press**	:	101kPa



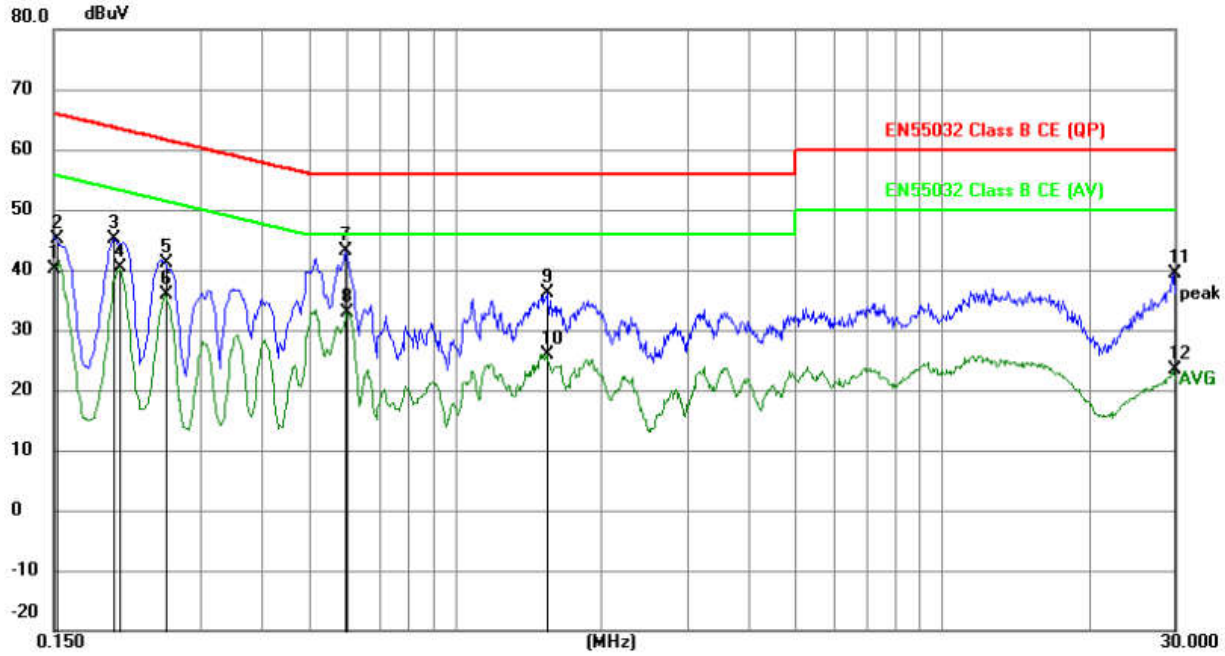
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1815	42.07	9.87	51.94	64.42	-12.48	QP	
2		0.1815	26.53	9.87	36.40	54.42	-18.02	AVG	
3		0.2400	35.48	9.95	45.43	62.10	-16.67	QP	
4		0.2400	24.72	9.95	34.67	52.10	-17.43	AVG	
5		0.2985	30.79	10.07	40.86	60.28	-19.42	QP	
6		0.2985	22.34	10.07	32.41	50.28	-17.87	AVG	
7		0.3525	30.61	10.02	40.63	58.90	-18.27	QP	
8		0.4200	19.06	9.97	29.03	47.45	-18.42	AVG	
9		0.5325	22.37	9.99	32.36	46.00	-13.64	AVG	
10		0.5370	29.95	9.99	39.94	56.00	-16.06	QP	
11		1.5045	26.72	9.81	36.53	56.00	-19.47	QP	
12		1.5135	16.83	9.81	26.64	46.00	-19.36	AVG	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 120V/60Hz	**Temperature**	:	23℃
Mode	:	Output DC 9V/2.22A	**Humidity**	:	51%
Phase	:	N	**Press**	:	101kPa



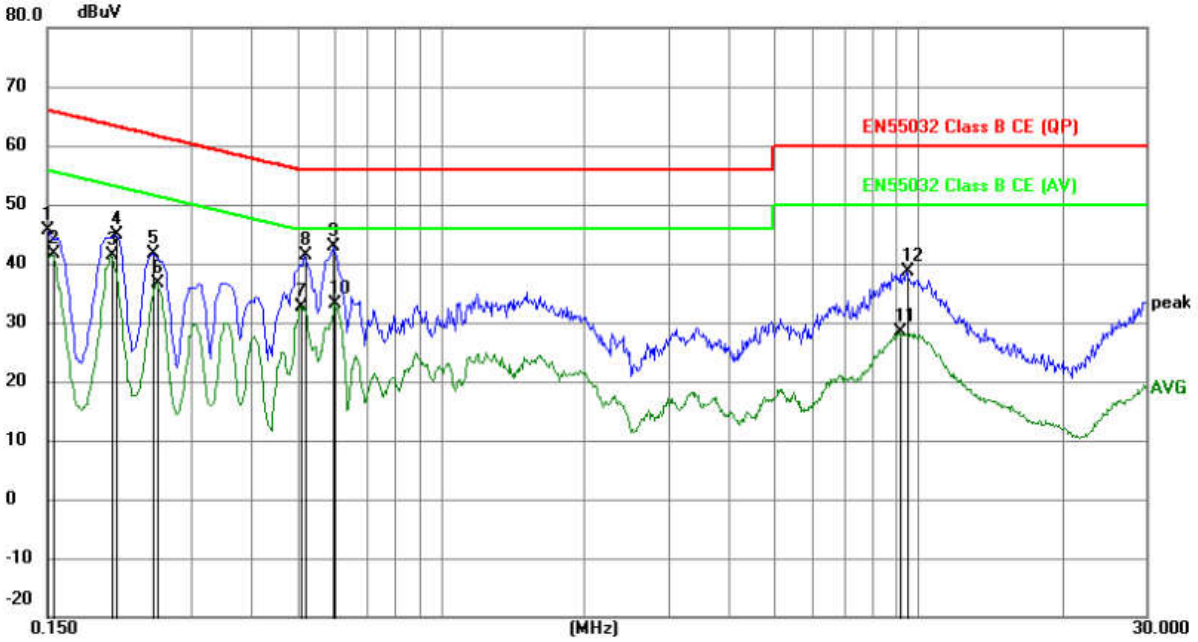
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1770	40.15	9.87	50.02	64.63	-14.61	QP	
2		0.1770	27.05	9.87	36.92	54.63	-17.71	AVG	
3		0.2400	33.02	9.95	42.97	62.10	-19.13	QP	
4		0.2400	24.64	9.95	34.59	52.10	-17.51	AVG	
5		0.2985	22.58	10.07	32.65	50.28	-17.63	AVG	
6		0.3660	30.54	10.00	40.54	58.59	-18.05	QP	
7		0.5325	33.46	9.99	43.45	56.00	-12.55	QP	
8	*	0.5325	25.23	9.99	35.22	46.00	-10.78	AVG	
9		0.6045	30.00	10.06	40.06	56.00	-15.94	QP	
10		0.6450	16.74	9.98	26.72	46.00	-19.28	AVG	
11		0.9285	24.14	9.84	33.98	56.00	-22.02	QP	
12		0.9735	14.12	9.84	23.96	46.00	-22.04	AVG	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 230V/50Hz	**Temperature**	:	23℃
Mode	:	Output DC 9V/2.22A	**Humidity**	:	51%
Phase	:	L1	**Press**	:	101kPa



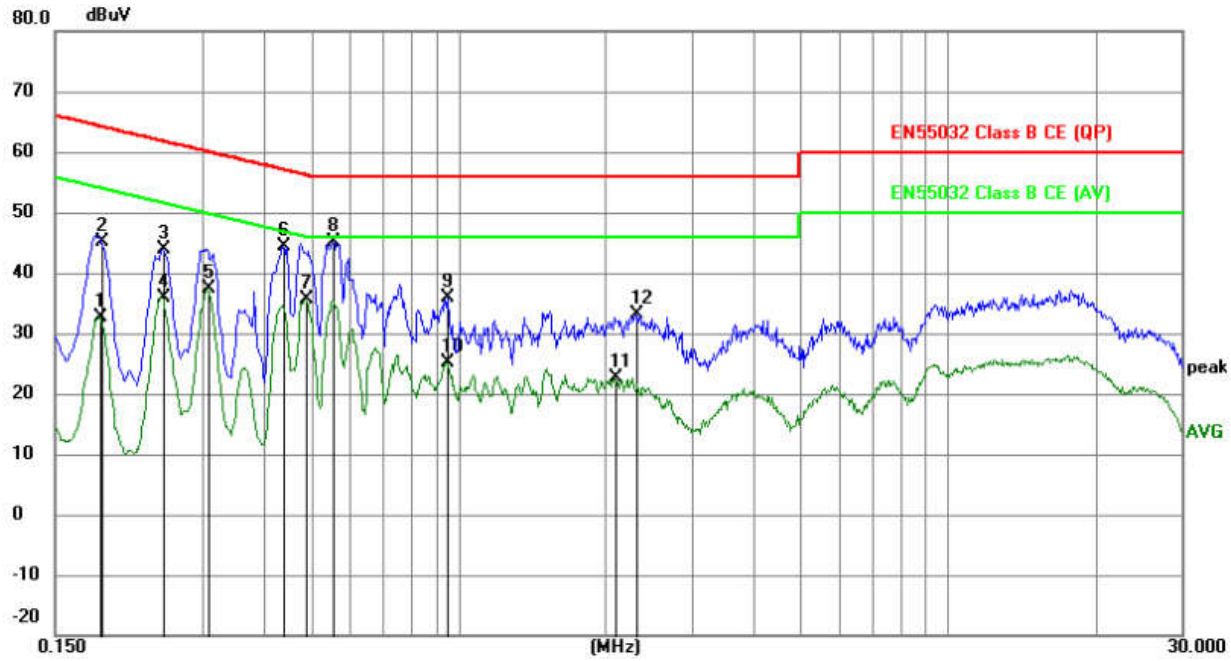
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	30.22	9.87	40.09	56.00	-15.91	AVG	
2		0.1516	35.38	9.87	45.25	65.91	-20.66	QP	
3		0.1995	35.35	9.87	45.22	63.63	-18.41	QP	
4		0.2040	30.60	9.88	40.48	53.45	-12.97	AVG	
5		0.2535	31.19	9.98	41.17	61.64	-20.47	QP	
6		0.2535	25.92	9.98	35.90	51.64	-15.74	AVG	
7	*	0.5955	33.14	10.06	43.20	56.00	-12.80	QP	
8		0.6000	22.82	10.07	32.89	46.00	-13.11	AVG	
9		1.5494	26.32	9.81	36.13	56.00	-19.87	QP	
10		1.5494	16.16	9.81	25.97	46.00	-20.03	AVG	
11		29.9985	29.33	10.03	39.36	60.00	-20.64	QP	
12		29.9985	13.32	10.03	23.35	50.00	-26.65	AVG	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 230V/50Hz	**Temperature**	:	23℃
Mode	:	Output DC 9V/2.22A	**Humidity**	:	51%
Phase	:	N	**Press**	:	101kPa



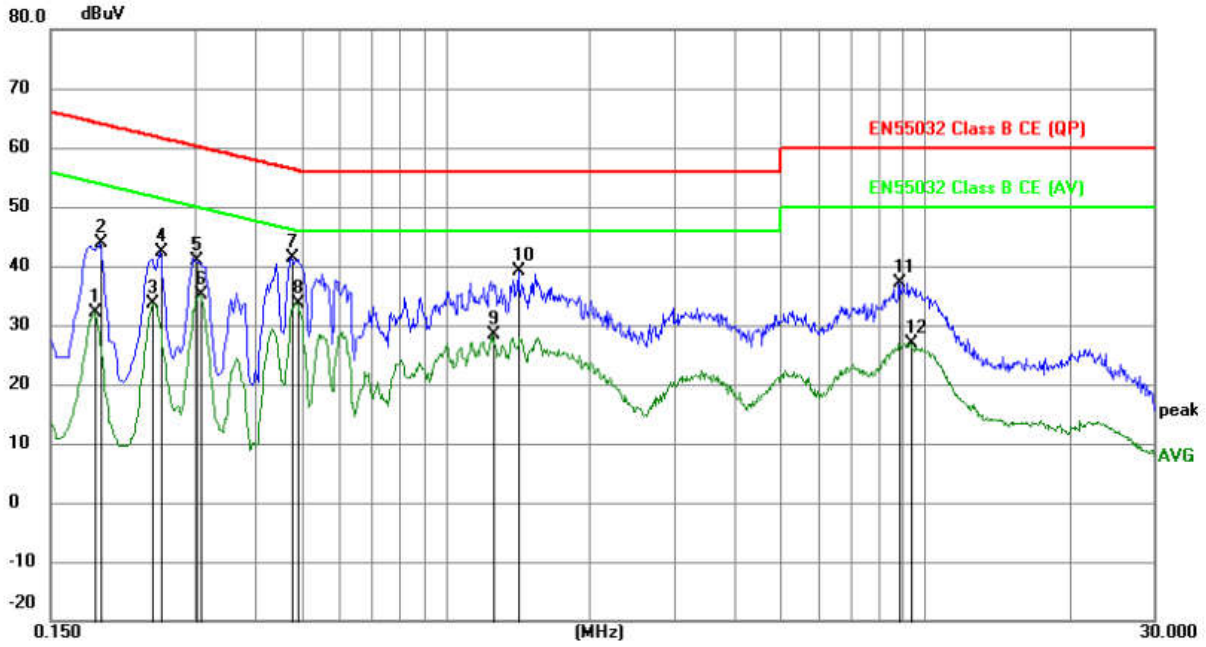
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	35.69	9.87	45.56	66.00	-20.44	QP	
2		0.1545	31.81	9.87	41.68	55.75	-14.07	AVG	
3	*	0.2040	31.39	9.88	41.27	53.45	-12.18	AVG	
4		0.2085	34.87	9.89	44.76	63.26	-18.50	QP	
5		0.2490	31.65	9.97	41.62	61.79	-20.17	QP	
6		0.2535	26.75	9.98	36.73	51.64	-14.91	AVG	
7		0.5100	22.67	9.96	32.63	46.00	-13.37	AVG	
8		0.5190	31.48	9.97	41.45	56.00	-14.55	QP	
9		0.5955	32.72	10.06	42.78	56.00	-13.22	QP	
10		0.6000	23.05	10.07	33.12	46.00	-12.88	AVG	
11		9.1545	18.55	9.78	28.33	50.00	-21.67	AVG	
12		9.4650	28.82	9.78	38.60	60.00	-21.40	QP	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 120V/60Hz	**Temperature**	:	23℃
Mode	:	Output DC 12V/1.5A	**Humidity**	:	51%
Phase	:	L1	**Press**	:	101kPa



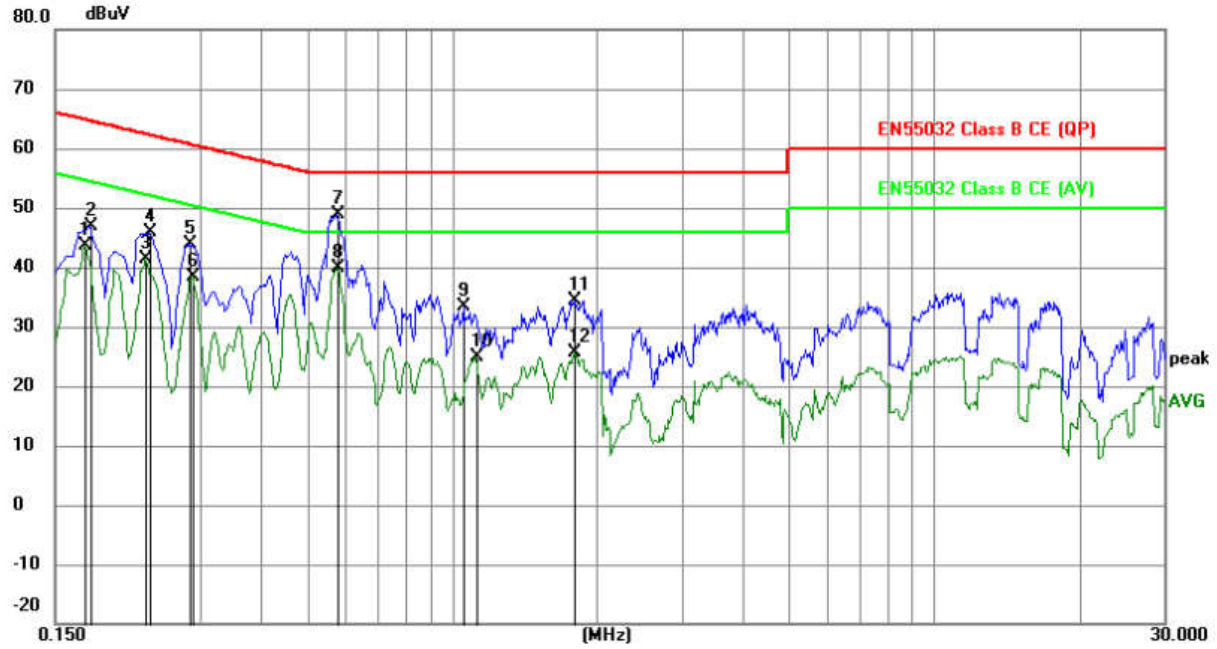
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1860	22.79	9.87	32.66	54.21	-21.55	AVG	
2		0.1864	35.28	9.87	45.15	64.20	-19.05	QP	
3		0.2490	34.02	9.97	43.99	61.79	-17.80	QP	
4		0.2490	26.01	9.97	35.98	51.79	-15.81	AVG	
5		0.3075	27.33	10.06	37.39	50.04	-12.65	AVG	
6		0.4380	34.50	9.96	44.46	57.10	-12.64	QP	
7	*	0.4875	25.67	9.95	35.62	46.21	-10.59	AVG	
8		0.5550	35.07	10.02	45.09	56.00	-10.91	QP	
9		0.9510	26.16	9.84	36.00	56.00	-20.00	QP	
10		0.9510	15.27	9.84	25.11	46.00	-20.89	AVG	
11		2.0940	12.91	9.79	22.70	46.00	-23.30	AVG	
12		2.3055	23.34	9.79	33.13	56.00	-22.87	QP	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 120V/60Hz	**Temperature**	:	23℃
Mode	:	Output DC 12V/1.5A	**Humidity**	:	51%
Phase	:	N	**Press**	:	101kPa



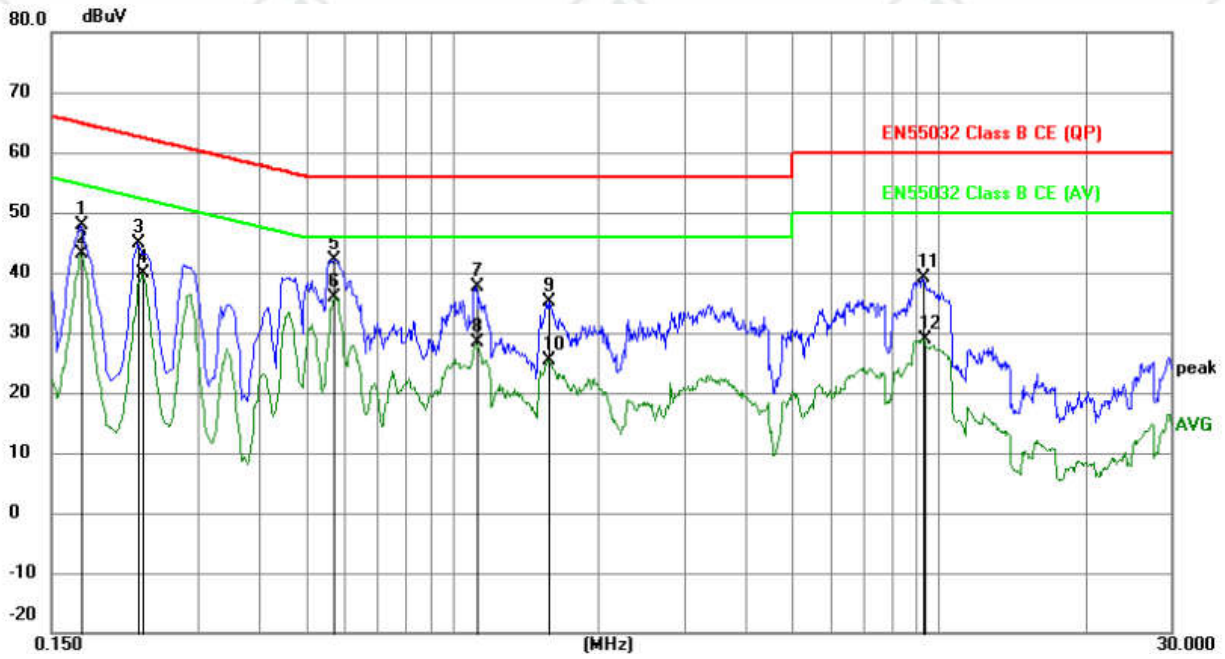
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1860	22.37	9.87	32.24	54.21	-21.97	AVG	
2		0.1905	34.10	9.87	43.97	64.01	-20.04	QP	
3		0.2445	23.71	9.96	33.67	51.94	-18.27	AVG	
4		0.2535	32.29	9.98	42.27	61.64	-19.37	QP	
5		0.3003	30.86	10.07	40.93	60.23	-19.30	QP	
6		0.3075	25.10	10.06	35.16	50.04	-14.88	AVG	
7		0.4785	31.53	9.95	41.48	56.37	-14.89	QP	
8	*	0.4920	23.74	9.95	33.69	46.13	-12.44	AVG	
9		1.2570	18.50	9.82	28.32	46.00	-17.68	AVG	
10		1.4235	29.25	9.81	39.06	56.00	-16.94	QP	
11		8.8620	27.42	9.78	37.20	60.00	-22.80	QP	
12		9.3615	17.15	9.78	26.93	50.00	-23.07	AVG	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 230V/50Hz	**Temperature**	:	23℃
Mode	:	Output DC 12V/1.5A	**Humidity**	:	51%
Phase	:	L1	**Press**	:	101kPa



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1725	33.78	9.87	43.65	54.84	-11.19	AVG	
2		0.1770	37.06	9.87	46.93	64.63	-17.70	QP	
3		0.2310	31.40	9.93	41.33	52.41	-11.08	AVG	
4		0.2355	35.83	9.94	45.77	62.25	-16.48	QP	
5		0.2850	33.73	10.04	43.77	60.67	-16.90	QP	
6		0.2895	28.29	10.05	38.34	50.54	-12.20	AVG	
7		0.5775	38.73	10.04	48.77	56.00	-7.23	QP	
8	*	0.5775	29.89	10.04	39.93	46.00	-6.07	AVG	
9		1.0590	23.56	9.83	33.39	56.00	-22.61	QP	
10		1.1174	14.96	9.83	24.79	46.00	-21.21	AVG	
11		1.7925	24.64	9.80	34.44	56.00	-21.56	QP	
12		1.7925	15.79	9.80	25.59	46.00	-20.41	AVG	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 230V/50Hz	**Temperature**	:	23℃
Mode	:	Output DC 12V/1.5A	**Humidity**	:	51%
Phase	:	N	**Press**	:	101kPa



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1725	38.07	9.87	47.94	64.84	-16.90	QP	
2		0.1725	33.25	9.87	43.12	54.84	-11.72	AVG	
3		0.2265	34.96	9.92	44.88	62.58	-17.70	QP	
4		0.2310	29.84	9.93	39.77	52.41	-12.64	AVG	
5		0.5730	32.18	10.04	42.22	56.00	-13.78	QP	
6	*	0.5730	25.95	10.04	35.99	46.00	-10.01	AVG	
7		1.1220	27.68	9.83	37.51	56.00	-18.49	QP	
8		1.1220	18.44	9.83	28.27	46.00	-17.73	AVG	
9		1.5809	25.41	9.81	35.22	56.00	-20.78	QP	
10		1.5809	15.48	9.81	25.29	46.00	-20.71	AVG	
11		9.2895	29.34	9.78	39.12	60.00	-20.88	QP	
12		9.3344	19.09	9.78	28.87	50.00	-21.13	AVG	

Note:
1. Margin=Measurement-Limit.
2. Measurement=Reading_Level+Correct Factor.
3. Correct Factor=Cable Factor+Lisn Factor.

7. RADIATED DISTURBANCE (RE)

7.1 LIMITS

Requirements for radiated emissions at frequencies up to 1 GHz for Class B equipment

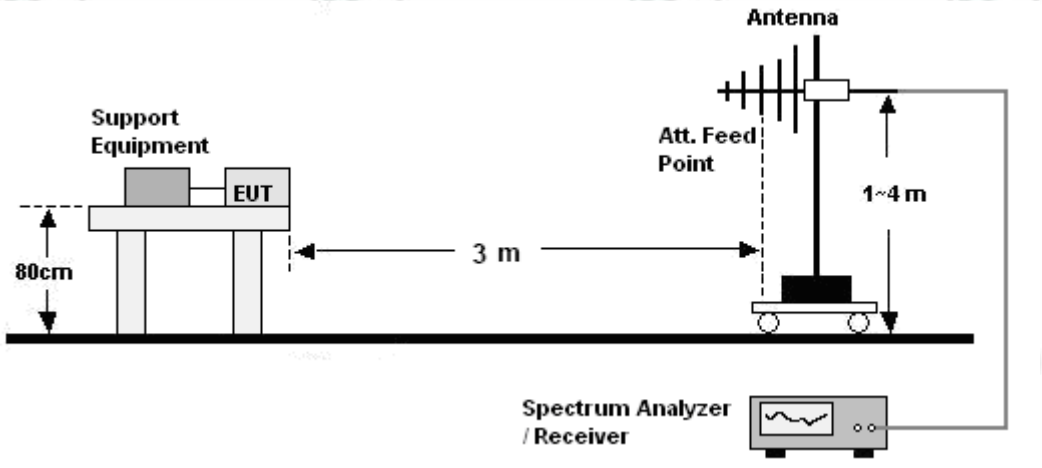
Frequency (MHz)	Quasi-peak limits at 3m dB(μV/m)
30-230	40
230-1000	47

Frequency (GHz)	limit above 1G at 3m dB(μV/m)	
	Average	peak
1-3	50	70
3-6	54	74

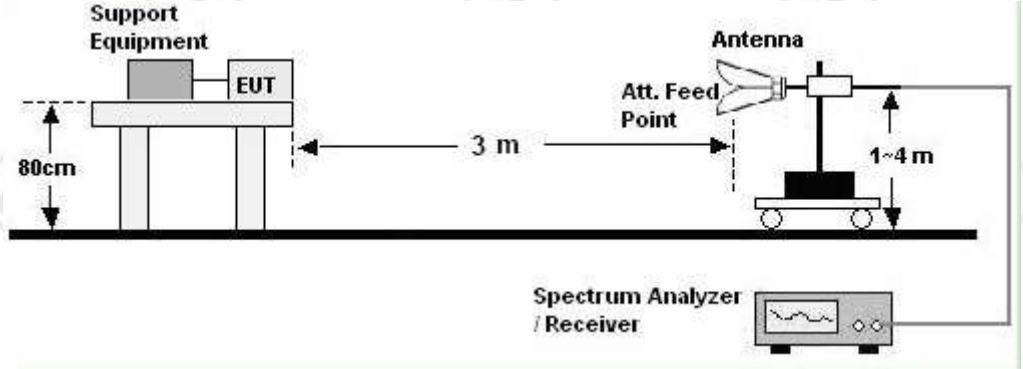
NOTE: The lower limit shall apply at the transition frequencies.

7.2 BLOCK DIAGRAM OF TEST SETUP

30MHz ~ 1GHz:



Above 1GHz:



7.3 TEST PROCEDURE

30MHz ~ 1GHz:

a. The Product was placed on the non-conductive turntable 0.8 m above the ground at a chamber.

b. Set the spectrum analyzer/receiver in Peak detector, Max Hold mode, and 120 kHz RBW. Record the maximum field strength of all the pre-scan process in the full band when the antenna is varied between 1~4 m in both horizontal and vertical, and the turntable is rotated from 0 to 360 degrees.

c. For each frequency whose maximum record was higher or close to limit, measure its QP value: vary the antenna's height and rotate the turntable from 0 to 360 degrees to find the height and degree where Product radiated the maximum emission, then set the test frequency analyzer/receiver to QP Detector and specified bandwidth with Maximum Hold Mode, and record the maximum value.

Above 1GHz:

a. The Product was placed on the non-conductive turntable 0.8 m above the ground at a chamber.

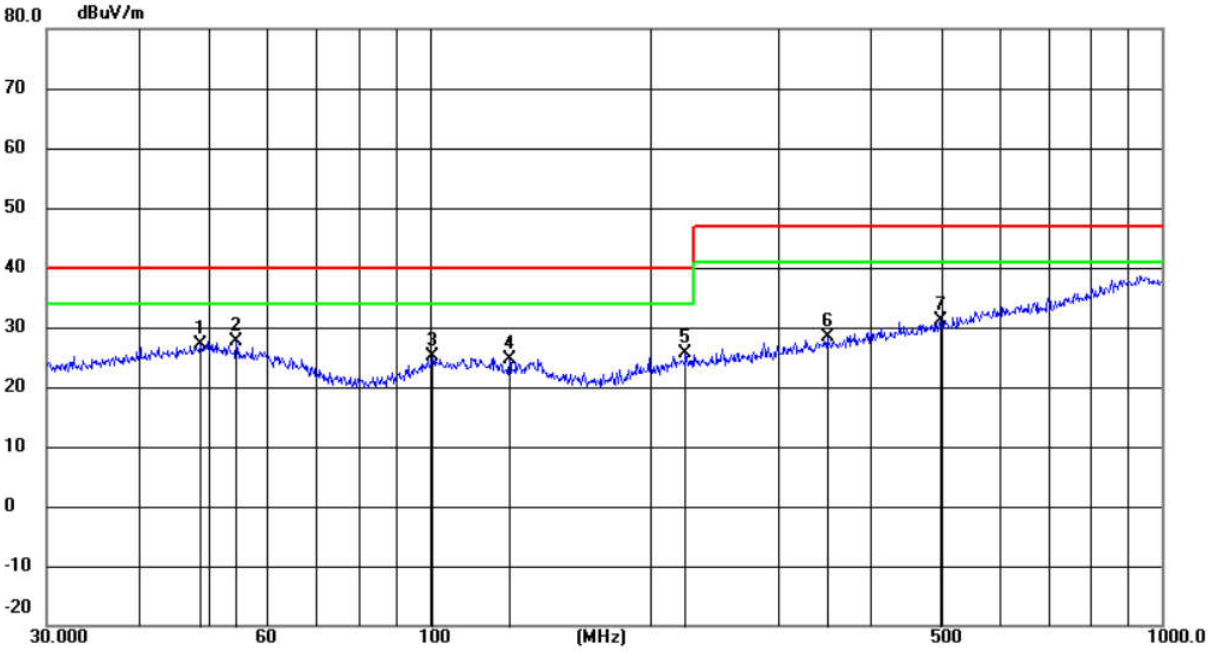
b. Set the spectrum analyzer/receiver in Peak detector, Max Hold mode, and 1MHz RBW. Record the maximum field strength of all the pre-scan process in the full band when the antenna is varied in both horizontal and vertical, and the turntable is rotated from 0 to 360 degrees.

c. For each frequency whose maximum record was higher or close to limit, measure its AV value: rotate the turntable from 0 to 360 degrees to find the degree where Product radiated the maximum emission, then set the test frequency analyzer/receiver to AV value and specified bandwidth with Maximum Hold Mode, and record the maximum value.

7.4 GRAPHS AND DATA

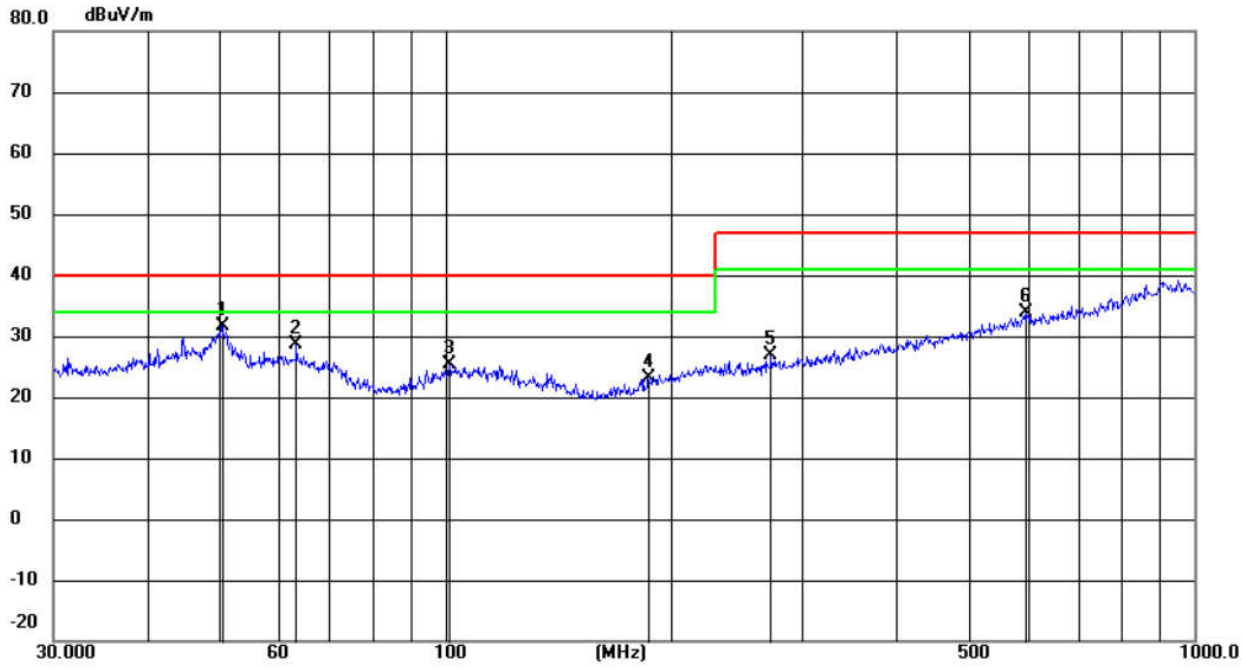
30MHz ~ 1GHz:

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 120V/60Hz	**Temperature**	:	22℃
Mode	:	Output DC 5V/3A	**Humidity**	:	53%
Polarization	:	Horizontal	**Press**	:	101kPa



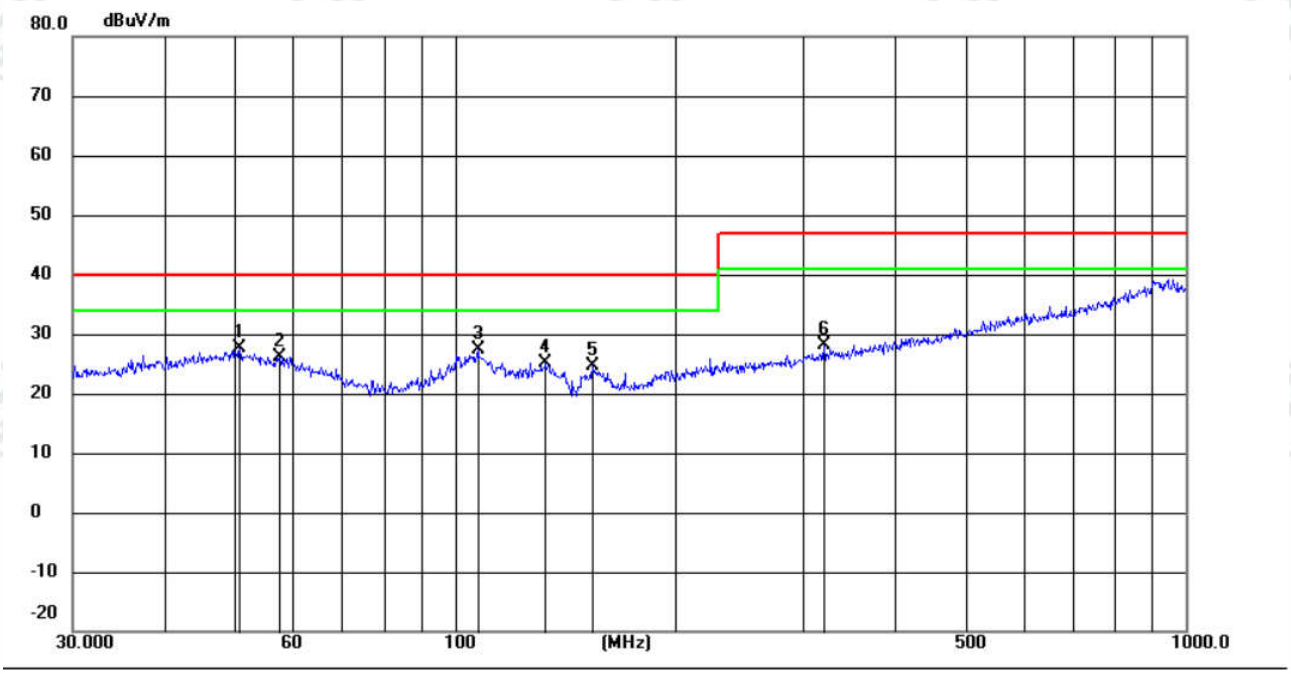
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		48.6719	12.48	14.70	27.18	40.00	-12.82	QP	200	5	
2	*	54.4515	13.62	13.96	27.58	40.00	-12.42	QP	100	330	
3		100.9339	12.45	12.64	25.09	40.00	-14.91	QP	100	124	
4		128.5629	14.76	9.86	24.62	40.00	-15.38	QP	200	5	
5		223.7333	13.27	12.46	25.73	40.00	-14.27	QP	100	56	
6		349.2500	13.00	15.42	28.42	47.00	-18.58	QP	200	5	
7		499.4246	12.79	18.43	31.22	47.00	-15.78	QP	200	5	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 120V/60Hz	**Temperature**	:	22℃
Mode	:	Output DC 5V/3A	**Humidity**	:	53%
Polarization	:	Vertical	**Press**	:	101kPa



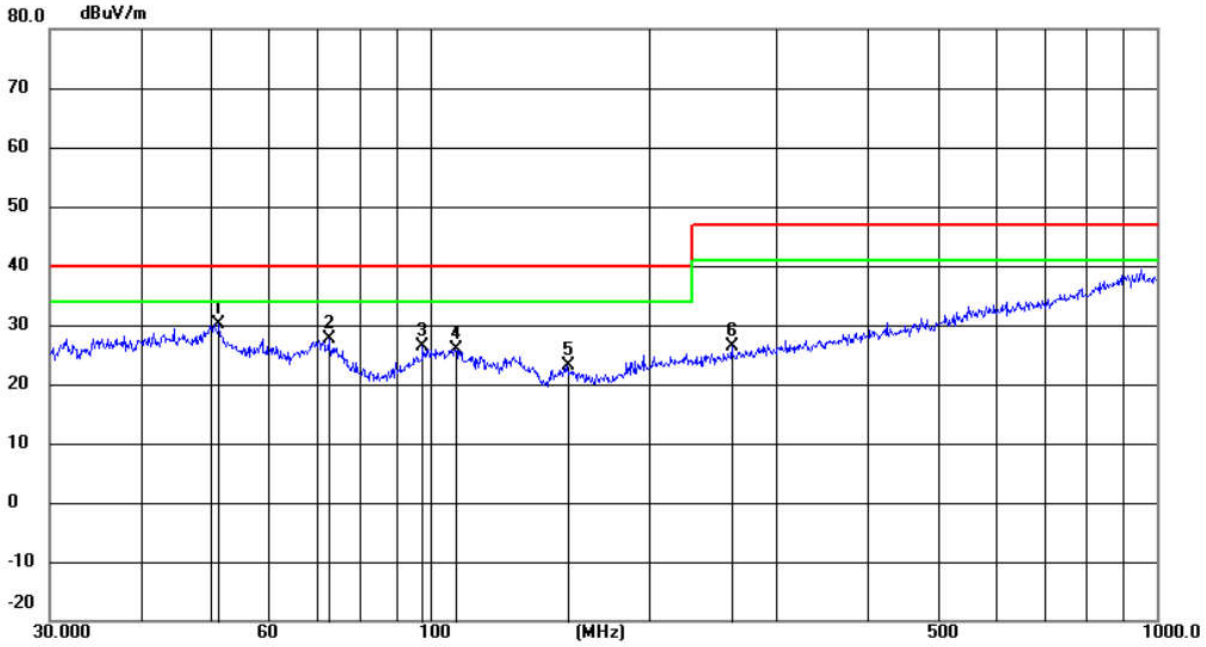
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	50.4089	16.79	14.75	31.54	40.00	-8.46	QP	100	294	
2		63.3132	16.48	12.12	28.60	40.00	-11.40	QP	100	360	
3		101.2885	12.71	12.64	25.35	40.00	-14.65	QP	100	5	
4		186.4409	12.30	10.90	23.20	40.00	-16.80	QP	100	252	
5		272.2776	13.31	13.67	26.98	47.00	-20.02	QP	100	175	
6		595.1329	13.64	20.17	33.81	47.00	-13.19	QP	100	5	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 230V/50Hz	**Temperature**	:	22℃
Mode	:	Output DC 5V/3A	**Humidity**	:	53%
Polarization	:	Horizontal	**Press**	:	101kPa



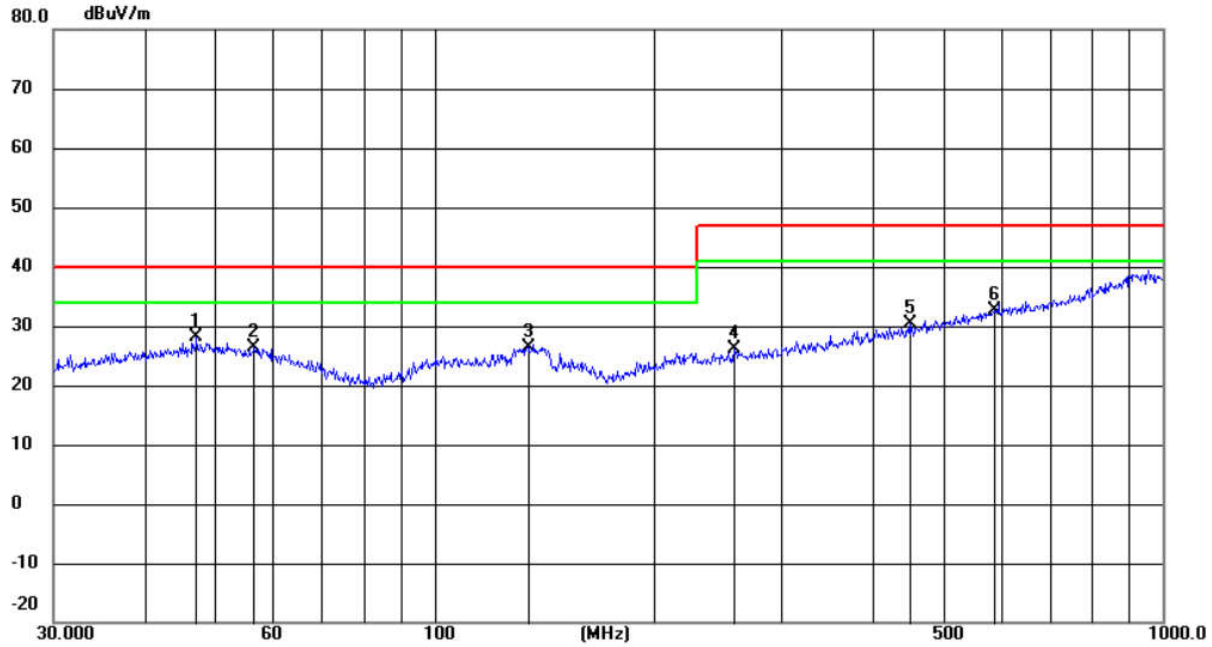
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	50.7636	13.01	14.69	27.70	40.00	-12.30	QP	200	5	
2		57.5939	12.87	13.33	26.20	40.00	-13.80	QP	100	330	
3		107.5100	14.91	12.48	27.39	40.00	-12.61	QP	200	278	
4		133.1510	16.02	9.16	25.18	40.00	-14.82	QP	200	38	
5		154.2785	15.98	8.67	24.65	40.00	-15.35	QP	200	38	
6		319.9369	13.45	14.79	28.24	47.00	-18.76	QP	100	140	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 230V/50Hz	**Temperature**	:	22℃
Mode	:	Output DC 5V/3A	**Humidity**	:	53%
Polarization	:	Vertical	**Press**	:	101kPa



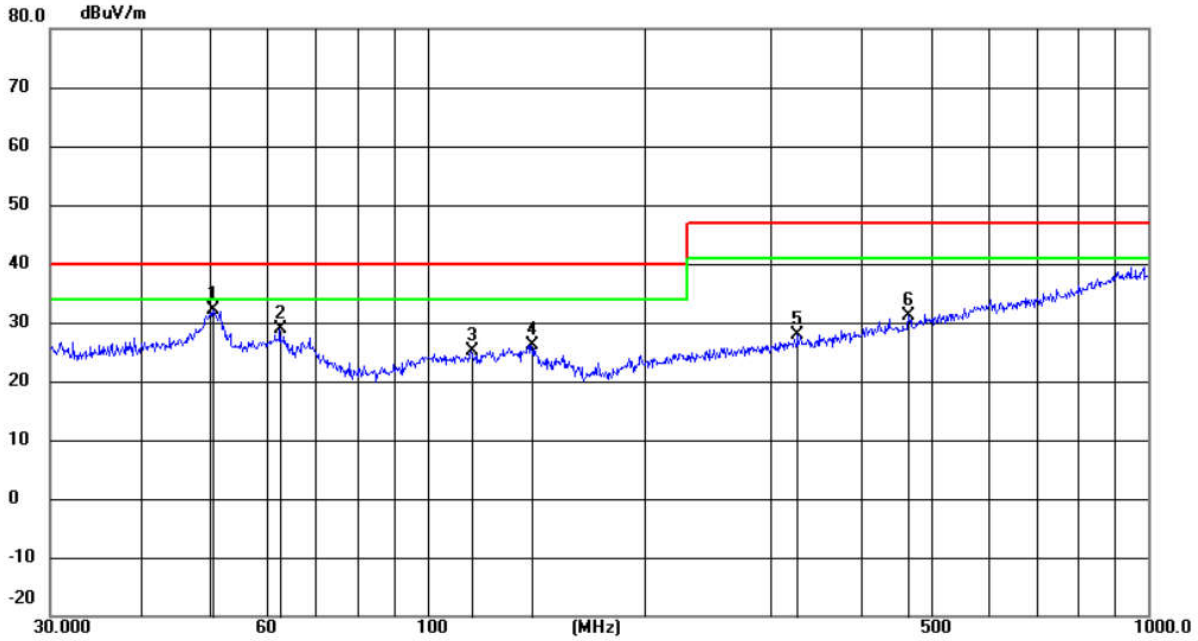
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	51.3005	15.59	14.58	30.17	40.00	-9.83	QP	100	30	
2		72.5916	17.24	10.29	27.53	40.00	-12.47	QP	100	123	
3		97.7983	14.22	12.14	26.36	40.00	-13.64	QP	100	183	
4		108.2667	13.33	12.46	25.79	40.00	-14.21	QP	200	219	
5		154.2786	14.58	8.67	23.25	40.00	-16.75	QP	100	64	
6		260.1444	13.10	13.36	26.46	47.00	-20.54	QP	100	149	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 120V/60Hz	**Temperature**	:	22℃
Mode	:	Output DC 9V/2.22A	**Humidity**	:	53%
Polarization	:	Horizontal	**Press**	:	101kPa



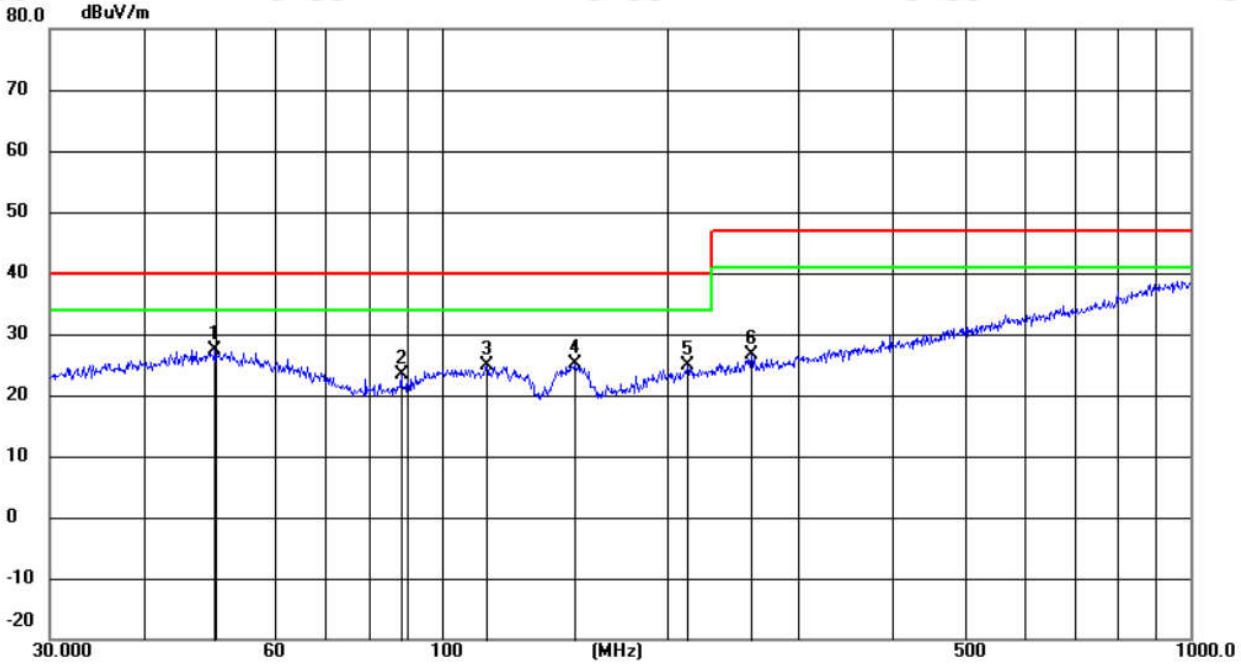
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	47.1598	13.60	14.53	28.13	40.00	-11.87	QP	200	234	
2		56.5929	12.79	13.53	26.32	40.00	-13.68	QP	200	337	
3		134.5591	17.47	9.02	26.49	40.00	-13.51	QP	200	55	
4		258.3264	12.69	13.32	26.01	47.00	-20.99	QP	100	305	
5		449.5558	12.87	17.48	30.35	47.00	-16.65	QP	200	5	
6		588.9050	12.63	20.06	32.69	47.00	-14.31	QP	100	193	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 120V/60Hz	**Temperature**	:	22℃
Mode	:	Output DC 9V/2.22A	**Humidity**	:	53%
Polarization	:	Vertical	**Press**	:	101kPa



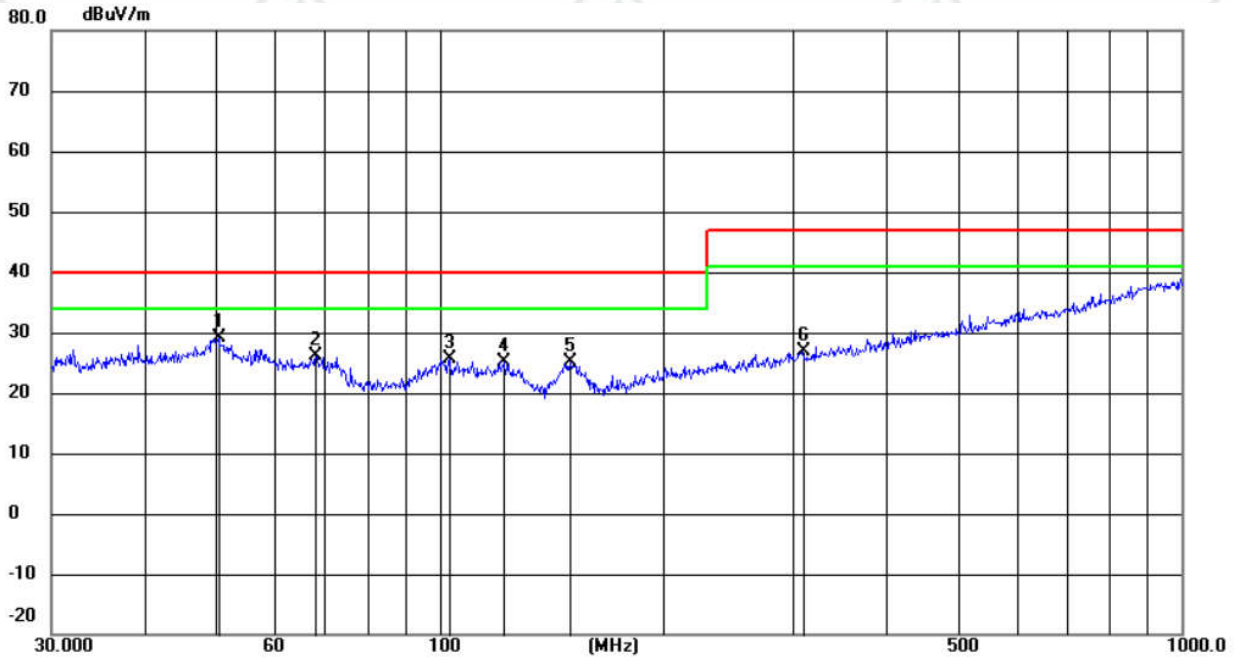
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	50.4089	17.47	14.75	32.22	40.00	-7.78	QP	100	5	
2		62.4314	16.52	12.31	28.83	40.00	-11.17	QP	100	5	
3		114.9169	12.85	12.24	25.09	40.00	-14.91	QP	100	234	
4		139.3613	17.60	8.51	26.11	40.00	-13.89	QP	100	55	
5		326.7395	12.88	14.93	27.81	47.00	-19.19	QP	100	98	
6		465.5994	13.35	17.79	31.14	47.00	-15.86	QP	100	5	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 230V/50Hz	**Temperature**	:	22℃
Mode	:	Output DC 9V/2.22A	**Humidity**	:	53%
Polarization	:	Horizontal	**Press**	:	101kPa



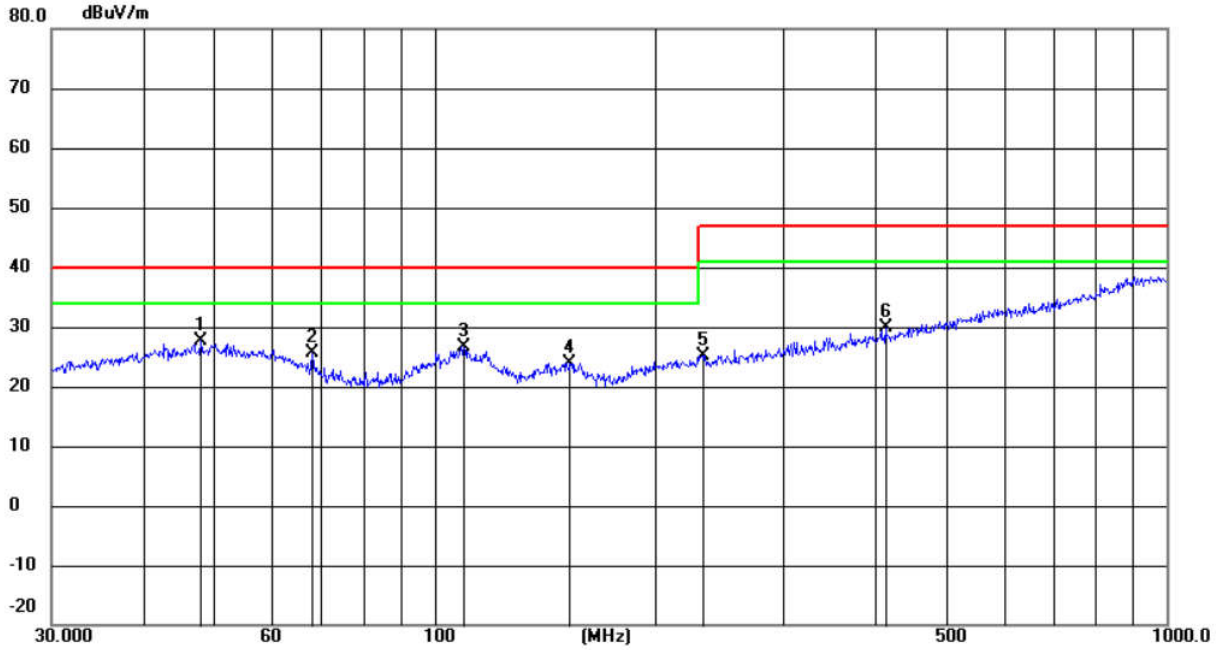
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	49.8814	12.63	14.83	27.46	40.00	-12.54	QP	200	47	
2		88.3421	13.20	10.10	23.30	40.00	-16.70	QP	200	5	
3		114.9168	12.58	12.24	24.82	40.00	-15.18	QP	100	168	
4		150.5377	16.59	8.50	25.09	40.00	-14.91	QP	200	217	
5		213.0151	12.66	12.20	24.86	40.00	-15.14	QP	100	355	
6		259.2338	13.38	13.34	26.72	47.00	-20.28	QP	200	5	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 230V/50Hz	**Temperature**	:	22℃
Mode	:	Output DC 9V/2.22A	**Humidity**	:	53%
Polarization	:	Vertical	**Press**	:	101kPa



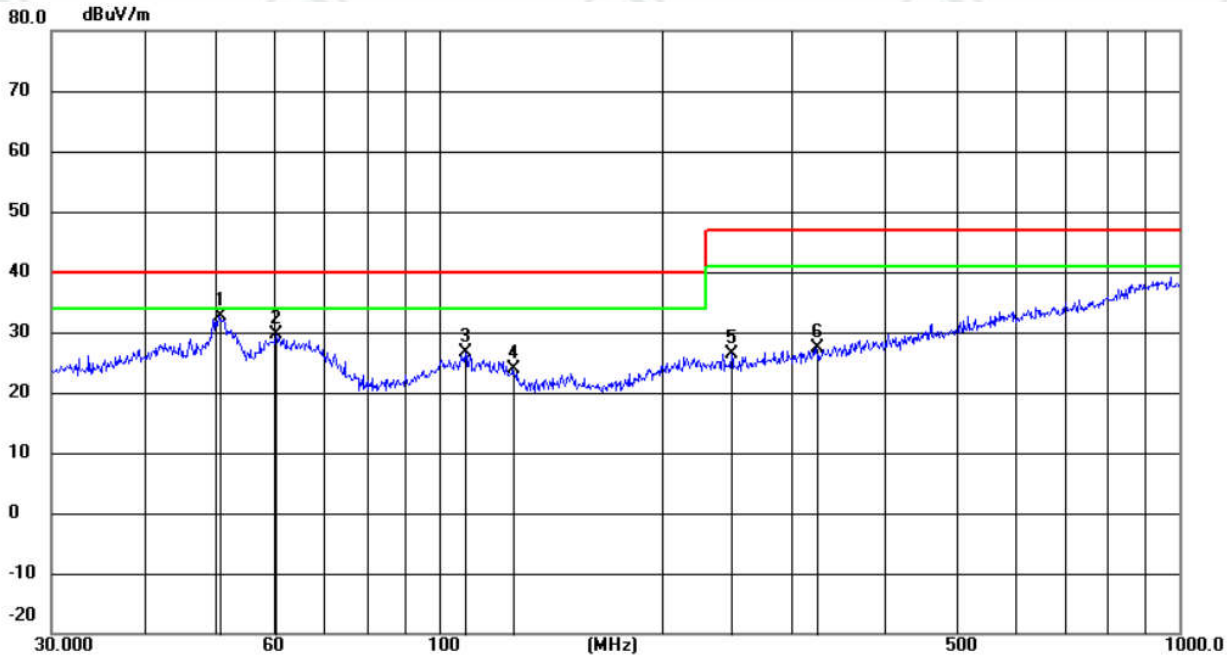
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	50.4089	14.36	14.75	29.11	40.00	-10.89	QP	100	347	
2		68.1514	14.95	11.06	26.01	40.00	-13.99	QP	100	5	
3		103.0800	13.06	12.60	25.66	40.00	-14.34	QP	100	5	
4		122.4040	13.68	11.44	25.12	40.00	-14.88	QP	100	235	
5		150.0108	16.58	8.48	25.06	40.00	-14.94	QP	100	38	
6		308.9126	12.36	14.55	26.91	47.00	-20.09	QP	100	201	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 120V/60Hz	**Temperature**	:	22℃
Mode	:	Output DC 12V/1.5A	**Humidity**	:	53%
Polarization	:	Horizontal	**Press**	:	101kPa



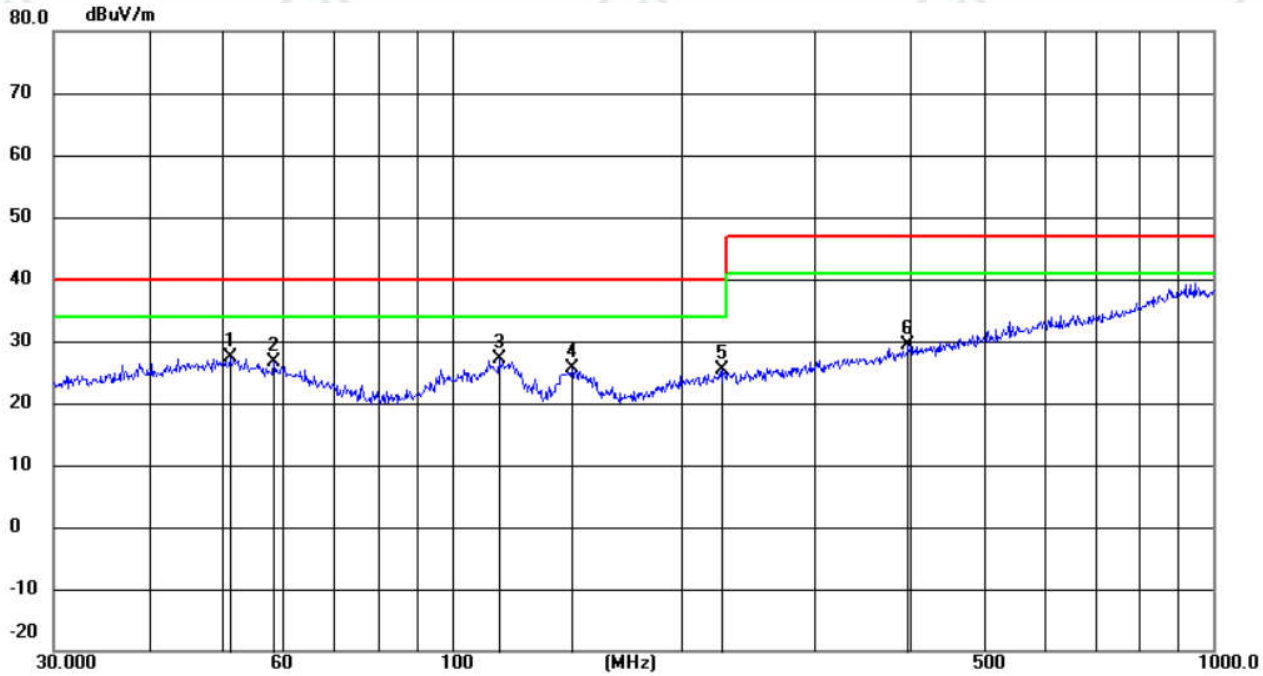
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	47.9940	12.89	14.62	27.51	40.00	-12.49	QP	100	0	
2		68.1514	14.62	11.06	25.68	40.00	-14.32	QP	200	5	
3		109.7959	14.31	12.43	26.74	40.00	-13.26	QP	200	260	
4		153.2003	15.33	8.62	23.95	40.00	-16.05	QP	200	166	
5		232.5318	12.53	12.68	25.21	47.00	-21.79	QP	100	261	
6		413.2706	13.16	16.79	29.95	47.00	-17.05	QP	200	354	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 120V/60Hz	**Temperature**	:	22℃
Mode	:	Output DC 12V/1.5A	**Humidity**	:	53%
Polarization	:	Vertical	**Press**	:	101kPa



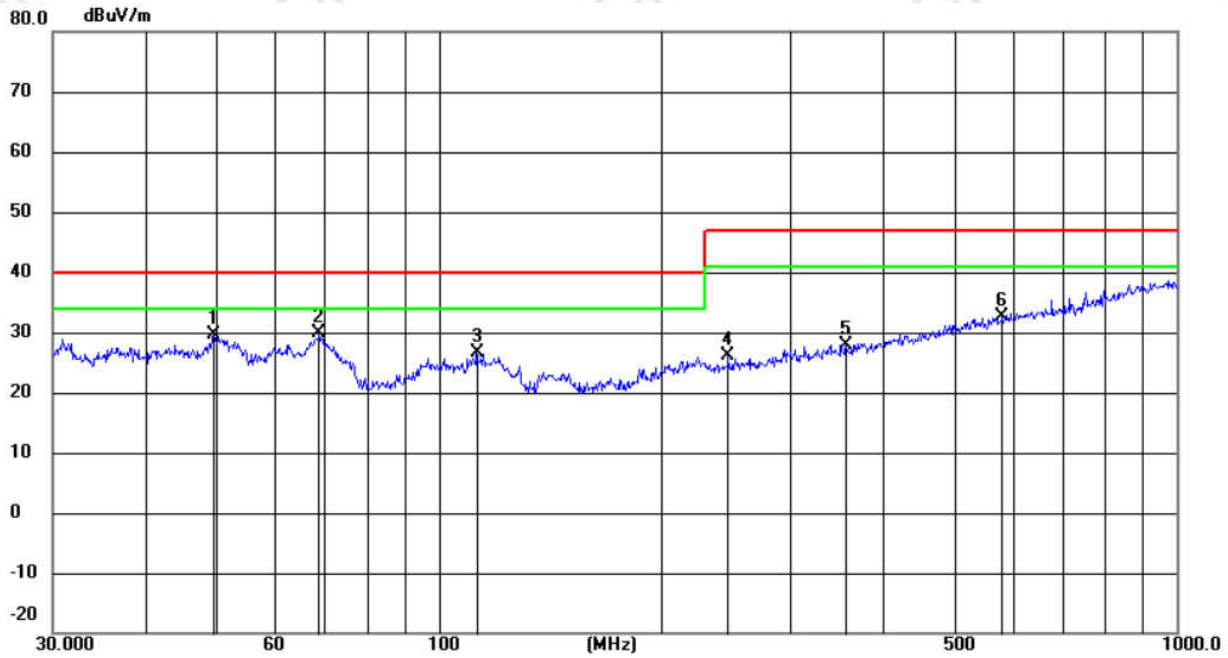
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	50.5860	18.00	14.73	32.73	40.00	-7.27	QP	100	56	
2		60.2801	16.94	12.79	29.73	40.00	-10.27	QP	100	184	
3		108.6470	14.29	12.45	26.74	40.00	-13.26	QP	100	218	
4		125.8864	13.29	10.55	23.84	40.00	-16.16	QP	100	218	
5		248.5519	13.19	13.08	26.27	47.00	-20.73	QP	100	124	
6		323.3204	12.46	14.86	27.32	47.00	-19.68	QP	100	13	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 230V/50Hz	**Temperature**	:	22℃
Mode	:	Output DC 12V/1.5A	**Humidity**	:	53%
Polarization	:	Horizontal	**Press**	:	101kPa



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	51.1209	12.65	14.61	27.26	40.00	-12.74	QP	100	159	
2		58.4074	13.45	13.16	26.61	40.00	-13.39	QP	200	5	
3		115.3205	14.85	12.23	27.08	40.00	-12.92	QP	200	38	
4		143.8295	17.16	8.46	25.62	40.00	-14.38	QP	200	30	
5		226.8936	12.84	12.55	25.39	40.00	-14.61	QP	200	5	
6		397.6334	12.93	16.49	29.42	47.00	-17.58	QP	200	312	

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 230V/50Hz	**Temperature**	:	22℃
Mode	:	Output DC 12V/1.5A	**Humidity**	:	53%
Polarization	:	Vertical	**Press**	:	101kPa



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		49.5328	14.82	14.78	29.60	40.00	-10.40	QP	100	47	
2	*	68.8721	19.06	10.90	29.96	40.00	-10.04	QP	100	5	
3		112.5244	14.24	12.33	26.57	40.00	-13.43	QP	100	158	
4		246.8149	13.15	13.04	26.19	47.00	-20.81	QP	100	64	
5		356.6758	12.30	15.59	27.89	47.00	-19.11	QP	100	5	
6		580.7026	12.63	19.91	32.54	47.00	-14.46	QP	100	13	

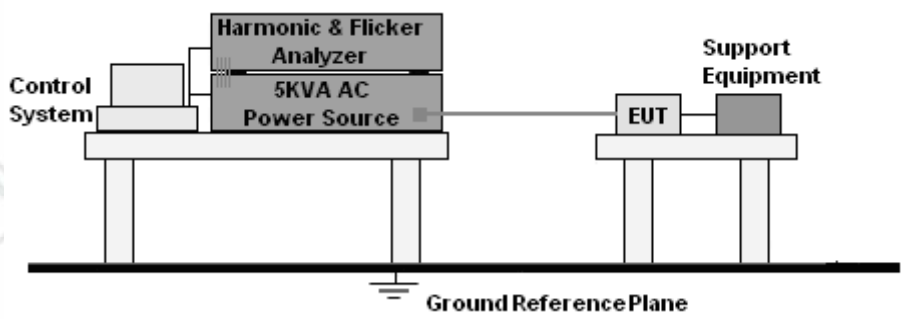
Note:
1. Margin=Measurement-Limit.
2. Measurement=Reading_Level+Correct Factor.
3. Correct Factor=Ant Factor+Cable loss.

8. VOLTAGE FLUCTUATIONS & FLICKER (FLICKER)

8.1 LIMITS

Please refer to EN 61000-3-3: 2013 Clause 5.

8.2 BLOCK DIAGRAM OF TEST SETUP



8.3 TEST PROCEDURE

a. The Product was placed on the top of a non-conductive table above the ground and operated to produce the most unfavorable sequence of voltage changes under normal operating conditions.

b. During the flick test, the measure time shall include that part of whole operation cycle in which the Product produce the most unfavorable sequence of voltage changes. The observation period for short-term flicker indicator is 10 minutes and the observation period for long-term flicker indicator is 2 hours.

8.4 TEST RESULTS

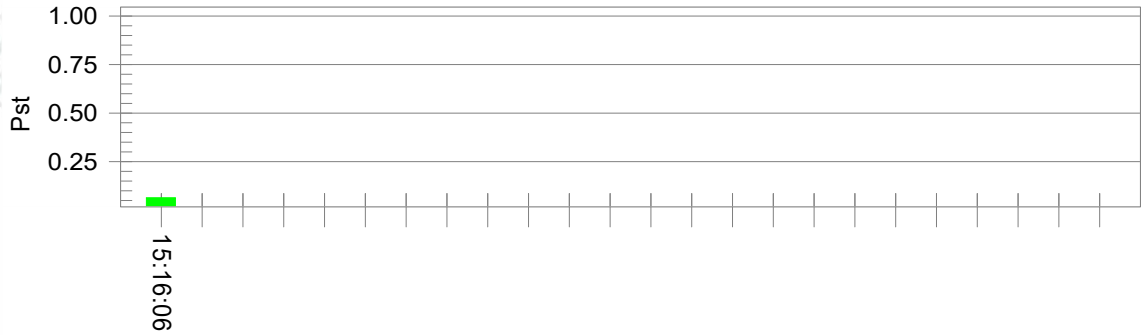
Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 230V/50Hz	**Temperature**	:	23℃
Mode	:	Output DC 9V/2.22A	**Humidity**	:	51%
Press	:	101kPa			

Pass.

Flicker Test Summary

Test Result: Pass **Status: Test Completed**

Pst_i and limit line **European Limits**



Parameter values recorded during the test:

Vrms at the end of test (Volt):	**229.57**			
T-max (mS):	**0**	**Test limit (mS):**	**500.0**	**Pass**
Highest dc (%):	**0.00**	**Test limit (%):**	**3.30**	**Pass**
Highest dmax (%):	**0.00**	**Test limit (%):**	**4.00**	**Pass**
Highest Pst (10 min. period):	**0.064**	**Test limit:**	**1.000**	**Pass**

9. IMMUNITY TEST

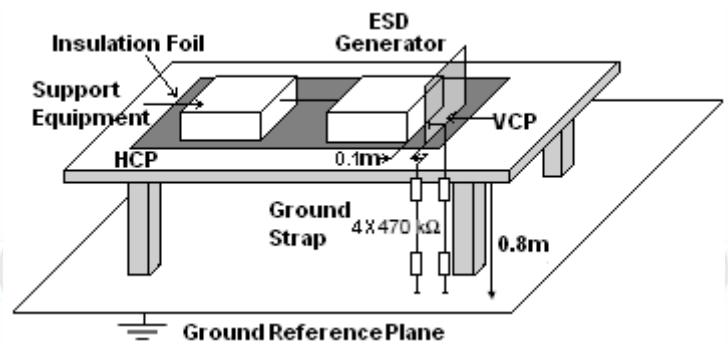
General Performance Criteria	
Product Standard	**EN 55035: 2017 clause 8**
CRITERION A	The equipment shall continue to operate as intended without operator intervention. No degradation of performance, loss of function or change of operating state is allowed below a performance level specified by the manufacturer when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.
CRITERION B	During the application of the disturbance, degradation of performance is allowed. However, no unintended change of actual operating state or stored data is allowed to persist after the test. After the test, the equipment shall continue to operate as intended without operator intervention; no degradation of performance or loss of function is allowed, below a performance level specified by the manufacturer, when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level (or the permissible performance loss), or recovery time, is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.
CRITERION C	Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions. A reboot or re-start operation is allowed. Information stored in non-volatile memory, or protected by a battery backup, shall not be lost.

9.1 ELECTROSTATIC DISCHARGE (ESD)

9.1.1 TEST SPECIFICATION

Basic Standard	:	EN 55035 & IEC 61000-4-2
Test Port	:	Enclosure port
Discharge Impedance	:	330 ohm / 150 pF
Discharge Mode	:	Single Discharge
Discharge Period	:	one second between each discharge

9.1.2 BLOCK DIAGRAM OF TEST SETUP



9.1.3 TEST PROCEDURE

a. Electrostatic discharges were applied only to those points and surfaces of the Product that are accessible to users during normal operation.

b. The test was performed with at least ten single discharges on the pre-selected points in the most sensitive polarity.

c. The time interval between two successive single discharges was at least 1 second.

d. The ESD generator was held perpendicularly to the surface to which the discharge was applied and the return cable was at least 0.2 meters from the Product.

e. Contact discharges were applied to the non-insulating coating, with the pointed tip of the generator penetrating the coating and contacting the conducting substrate.

f. Air discharges were applied with the round discharge tip of the discharge electrode approaching the Product as fast as possible (without causing mechanical damage) to touch the Product. After each discharge, the ESD generator was removed from the Product and re-triggered for a new single discharge. The test was repeated until all discharges were complete.

g. At least ten single discharges (in the most sensitive polarity) were applied to the Horizontal Coupling Plane at points on each side of the Product. The ESD generator was positioned vertically at a distance of 0.1 meters from the Product with the discharge electrode touching the HCP.

h. At least ten single discharges (in the most sensitive polarity) were applied to the center of one vertical edge of the Vertical Coupling Plane in sufficiently different positions that the four faces of the Product were completely illuminated. The VCP (dimensions 0.5m x 0.5m) was placed vertically to and 0.1 meters from the Product.

9.1.4 RESULTS & PERFORMANCE

Product : Travel Charger
Model/Type reference : CA-43T
Power : AC 110V/50Hz
AC 230V/50Hz
Temperature : 23℃
Mode : Output DC 5V/3A
Humidity : 51%
Press : 101kPa

Discharge Method	Discharge Position	Voltage (±kV)	Min. No. of Discharge per polarity (Each Point)	Required Level	Performance Criterion
Contact Discharge	Conductive Surfaces	4	10	B	A
	Indirect Discharge HCP	4	10	B	A
	Indirect Discharge VCP	4	10	B	A
Air Discharge	Slots, Apertures, and Insulating Surfaces	8	10	B	A

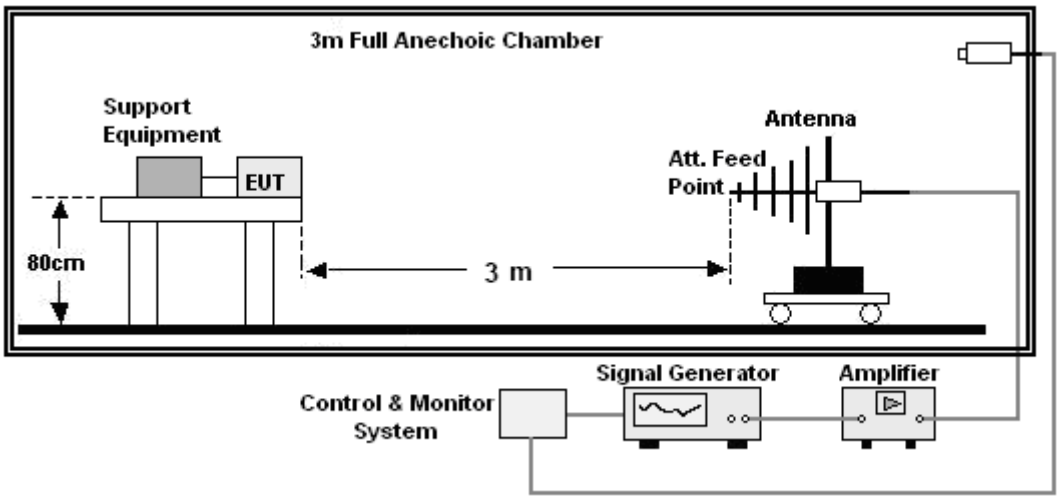
9.2 RADIO-FREQUENCY ELECTROMAGNETIC FIELD IMMUNITY

9.2.1 TEST SPECIFICATION

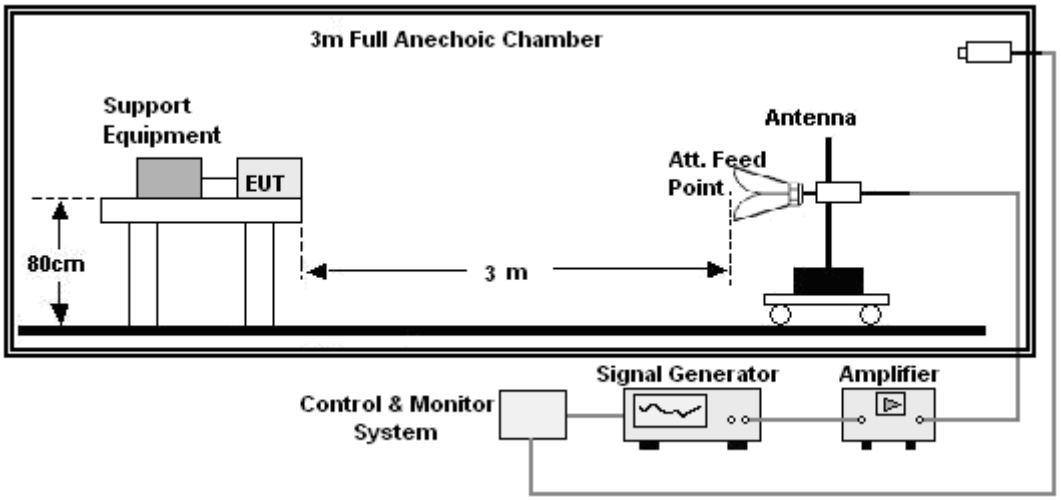
Basic Standard	:	EN 55035 & IEC 61000-4-3
Test Port	:	Enclosure port
Step Size	:	1%
Modulation	:	1kHz, 80% AM
Dwell Time	:	1 second
Polarization	:	Horizontal & Vertical

9.2.2 BLOCK DIAGRAM OF TEST SETUP

80-1000MHz:



1000-6000MHz:



9.2.3 TEST PROCEDURE

a. The testing was performed in a fully-anechoic chamber. The transmit antenna was located at a distance of 3 meters from the Product.

b. The frequency range is swept from 80MHz to 1000MHz, 1800MHz, 2600MHz, 3500MHz, 5000MHz with the signal 80% amplitude modulated with a 1 kHz sine wave. The rate of sweep did not exceed 1.5×10^{-3} decade/s. Where the frequency range is swept incrementally, the step size was 1%.

c. The test was performed with the Product exposed to both vertically and horizontally polarized fields on each of the four sides.

9.2.4 RESULTS & PERFORMANCE

Product : Travel Charger

Model/Type reference : CA-43T

Power : AC 110V/50Hz
AC 230V/50Hz

Temperature : 23℃

Mode : Output DC 9V/2.22A

Humidity : 51%

Press : 101kPa

Frequency (MHz)	Position	Field Strength (V/m)	Required Level	Performance Criterion
80 - 1000	Front, Right, Back, Left	3	A	A
1800	Front, Right, Back, Left	3	A	A
2600	Front, Right, Back, Left	3	A	A
3500	Front, Right, Back, Left	3	A	A
5000	Front, Right, Back, Left	3	A	A

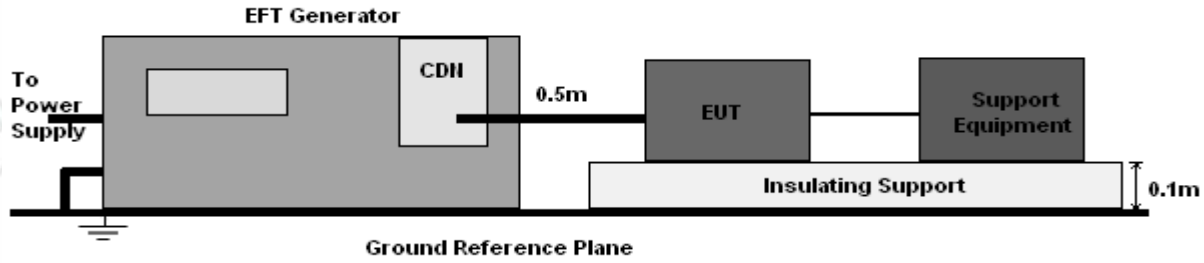
9.3 ELECTRICAL FAST TRANSIENTS (EFT)

9.3.1 TEST SPECIFICATION

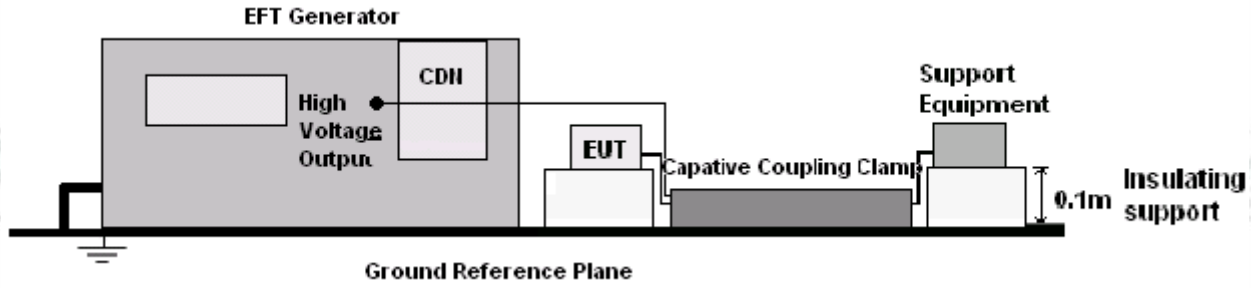
Basic Standard	:	EN 55035 & IEC 61000-4-4
Test Port	:	input AC mains power port & Lan port
Impulse Frequency	:	5 kHz
Impulse Wave-shape	:	5/50 ns
Burst Duration	:	15 ms
Burst Period	:	300 ms
Test Duration	:	2 minute per polarity

9.3.2 BLOCK DIAGRAM OF TEST SETUP

For input AC mains power port:



For input Lan port:



9.3.3 TEST PROCEDURE

a. The Product and support units were located on a non-conductive table above ground reference plane.

b. A 0.5m-long power cord was attached to Product during the test.

9.3.4 RESULTS & PERFORMANCE

Product : Travel Charger

Model/Type reference : CA-43T

Power : AC 110V/60Hz
AC 230V/50Hz

Temperature : 23℃

Mode : Output DC 9V/2.22A

Humidity : 51%

Press : 101kPa

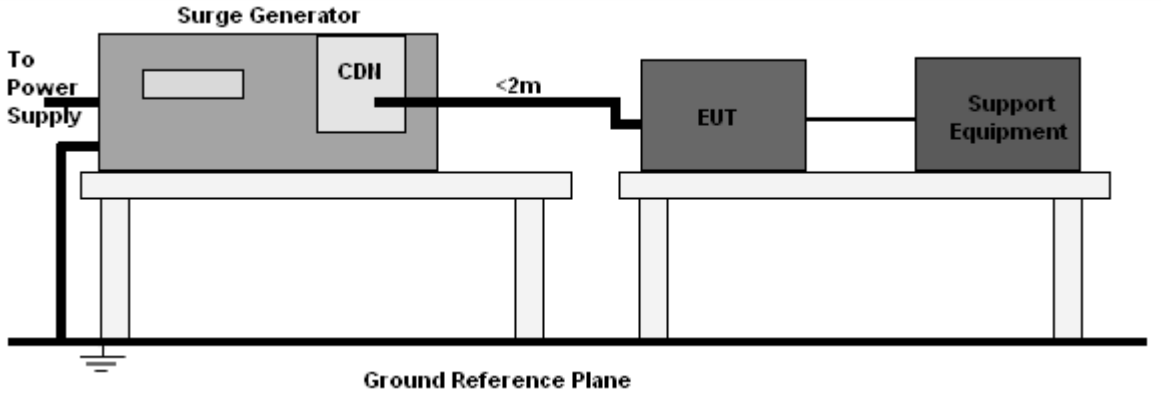
Coupling	Voltage (kV)	Polarity	Required Level	Performance Criterion
L - N	1	±	B	A

9.4 SURGES

9.4.1 TEST SPECIFICATION

Basic Standard	:	EN 55035 & IEC 61000-4-5
Test Port	:	input AC mains power port & Lan port
Wave-Shape	:	Open Circuit Voltage - 1.2 / 50 us Short Circuit Current - 8 / 20 us
Pulse Repetition Rate	:	1 pulse / min.
Test Events	:	Five positive polarity pulses at the 90° phase angel Five negative polarity pulses at the 270° phase angle

9.4.2 BLOCK DIAGRAM OF TEST SETUP



9.4.3 TEST PROCEDURE

a. The surge is to be applied to the Product power supply terminals via the capacitive coupling network. Decoupling networks are required in order to avoid possible adverse effects on equipment not under test that may be powered by the same lines, and to provide sufficient decoupling impedance to the surge wave.

b. The power cord between the Product and the coupling/decoupling networks shall be 2 meters in length (or shorter). Interconnection line between the Product and the coupling/decoupling networks shall be 2 meters in length (or shorter).

9.4.4 RESULTS & PERFORMANCE

Product : Travel Charger
Model/Type reference : CA-43T
Power : AC 110V/50Hz
AC 230V/50Hz
Temperature : 23℃
Mode : Output DC 9V/2.22A
Humidity : 51%
Press : 101kPa

Coupling Line	Voltage (kV)	Polarity	Phase Angle	Required Level	Performance Criterion
L - N	1	+	90°	B	A
L - N	1	-	270°	B	A

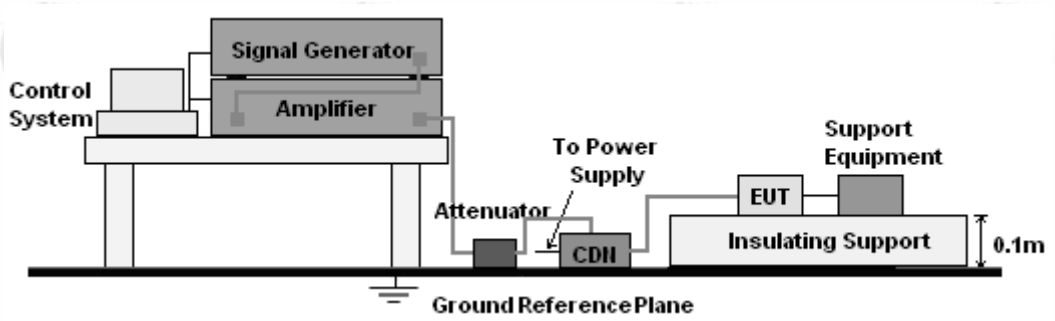
9.5 RADIO-FREQUENCY CONTINUOUS CONDUCTED IMMUNITY

9.5.1 TEST SPECIFICATION

Basic Standard	:	EN 55035 & IEC 61000-4-6
Test Port	:	input AC mains power port & Lan port
Step Size	:	1%
Modulation	:	1kHz, 80% AM
Dwell Time	:	1 second

9.5.2 BLOCK DIAGRAM OF TEST SETUP

For input AC mains power port



9.5.3 TEST PROCEDURE

For input AC mains power port

a. The Product and support units were located at a ground reference plane with the interposition of a 0.1 m thickness insulating support and the CDN was located on GRP directly.

b. The frequency range is swept from 150 kHz to 80MHz, with the signal 80% amplitude modulated with a 1 kHz sine wave. The rate of sweep did not exceed 1.5x 10^{-3} decade/s. Where the frequency range is swept incrementally, the step size was 1% of fundamental.

c. The dwell time at each frequency shall be not less than the time necessary for the Product to be able to respond.

9.5.4 RESULTS & PERFORMANCE

Product : Travel Charger
Model/Type reference : CA-43T
Power : AC 110V/50Hz
AC 230V/50Hz
Temperature : 23℃
Mode : Output DC 9V/2.22A
Humidity : 51%
Press : 101kPa

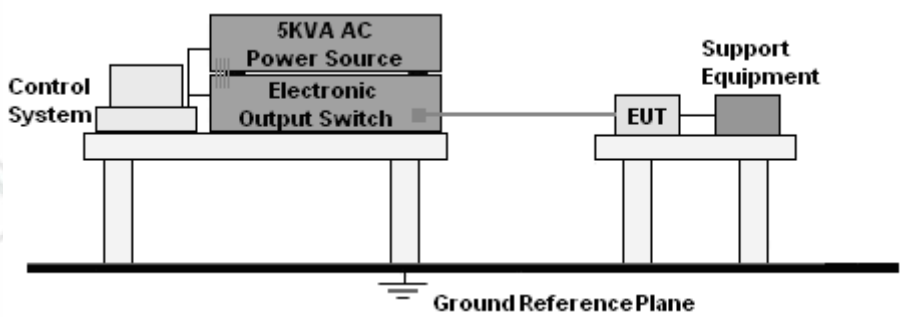
Inject Line	Frequency (MHz)	Voltage Level (V r.m.s.)	Required Level	Performance Criterion
AC mains power port	0.15 to 10	3	A	A
AC mains power port	10 to 30	3 to1	A	A
AC mains power port	30 to 80	1	A	A

9.6 VOLTAGE DIPS AND INTERRUPTIONS

9.6.1 TEST SPECIFICATION

Basic Standard	:	EN 55035 & IEC 61000-4-11
Test Ports	:	AC mains power ports
Phase Angle	:	0°, 180°

9.6.2 BLOCK DIAGRAM OF TEST SETUP



9.6.3 TEST PROCEDURE

a. The Product and support units were located on a non-conductive table above ground floor.

b. Set the parameter of tests and then perform the test software of test simulator.

c. Conditions changes to occur at 0 degree crossover point of the voltage waveform.

9.6.4 RESULTS & PERFORMANCE

Product	:	Travel Charger			
Model/Type reference	:	CA-43T			
Power	:	AC 100V/240V, 50/60Hz	**Temperature**	:	23℃
Mode	:	Output DC 9V/2.22A	**Humidity**	:	51%
Press	:	101kPa			

Voltage Dips:

Test Level % UT	Reduction (%)	Number of cycles		Required Level	Performance criteria
		50Hz	60Hz		
<5	>95	0.5		B	A
70	30	25	30	C	A

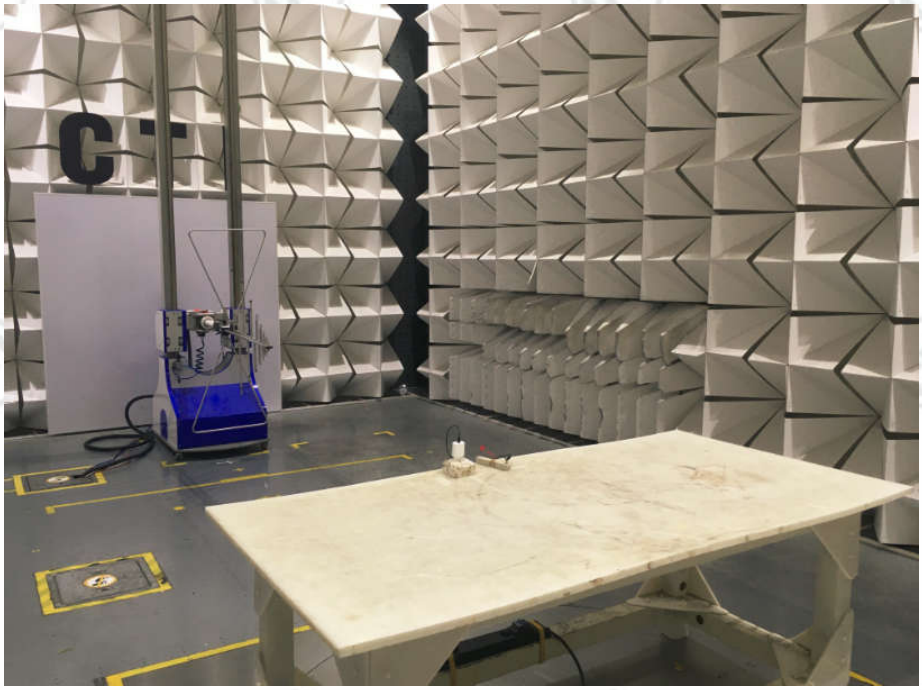
Voltage Interruptions:

Test Level % UT	Reduction (%)	Number of cycles		Required Level	Performance criteria
		50Hz	60Hz		
<5	>95	250		C	B*

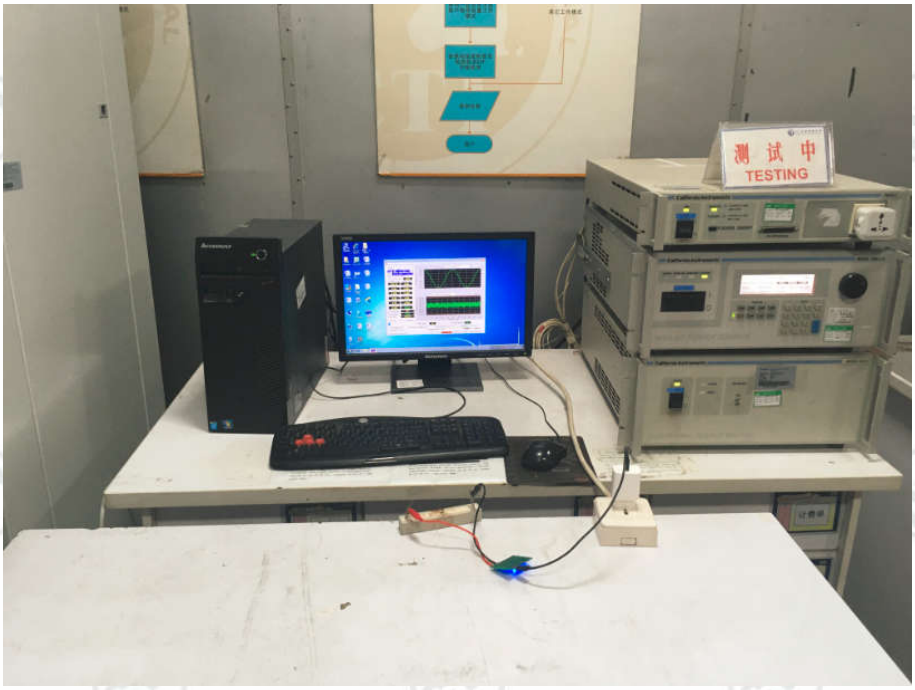
Remark*: During the test, the EUT stop working, after the test, it can reset automatic.

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

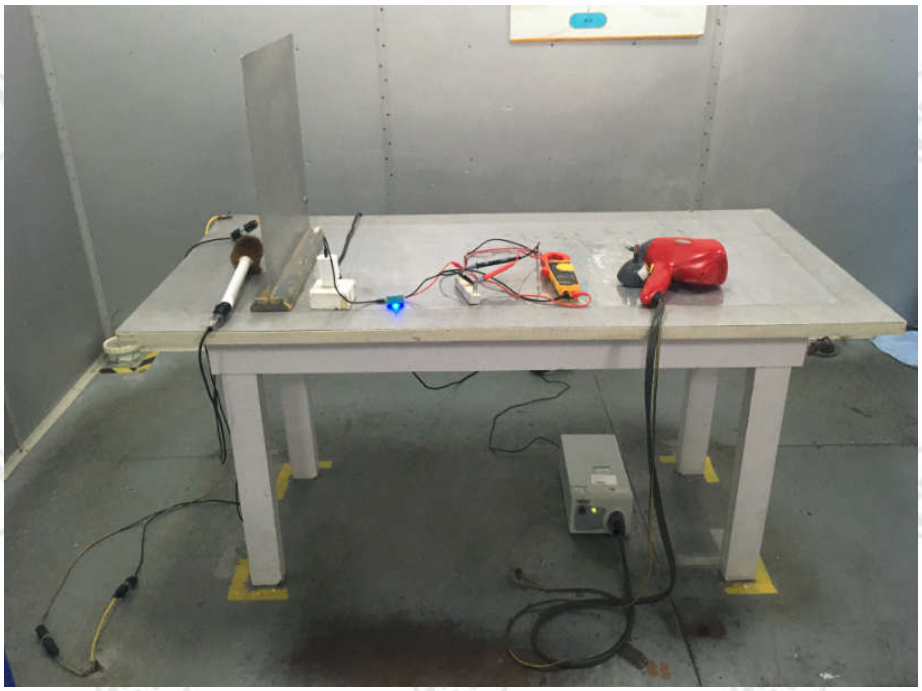
CONDUCTED DISTURBANCE TEST SETUP



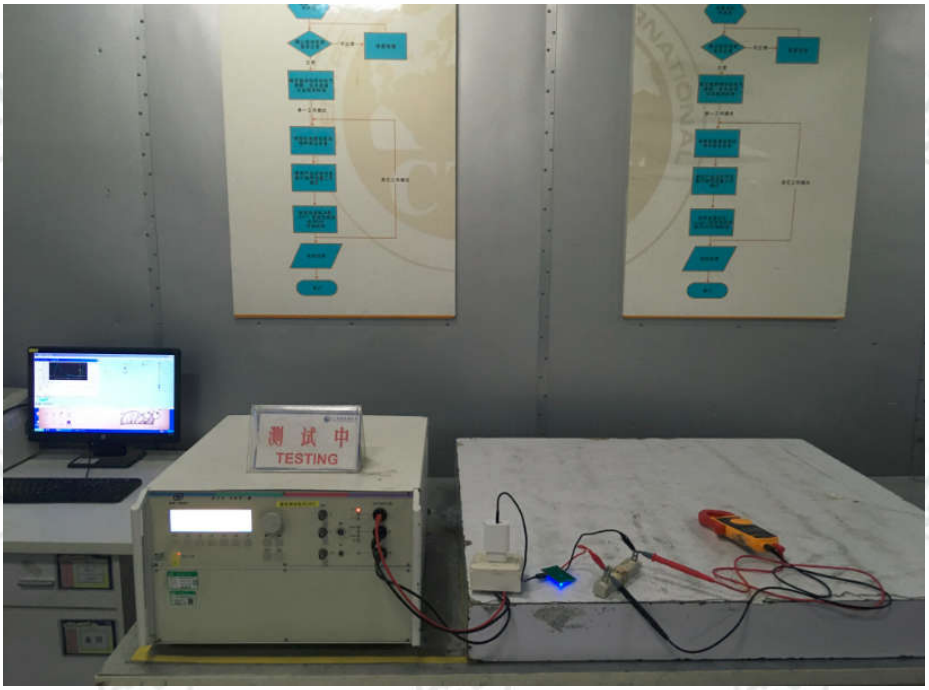
RADIATED DISTURBANCE TEST SETUP



FLICKER TEST SETUP

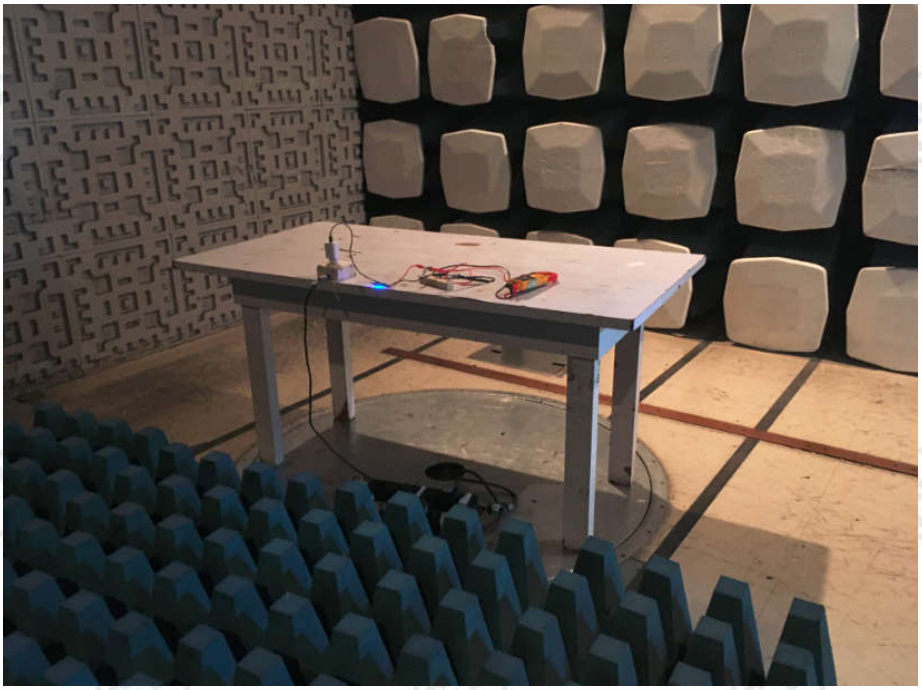


ESD TEST SETUP



EFT TEST SETUP

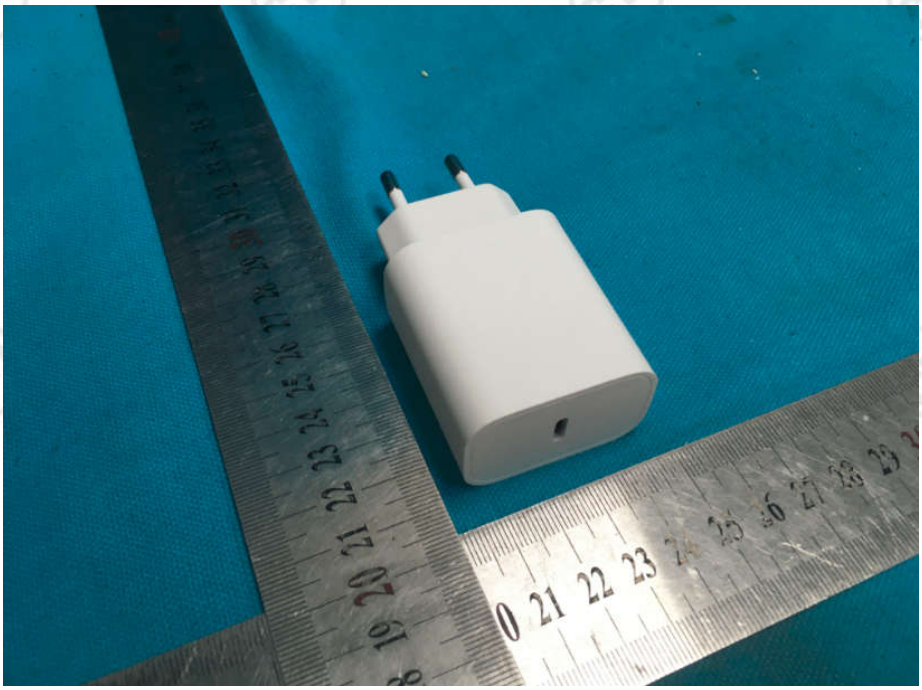
SURGES TEST SETUP



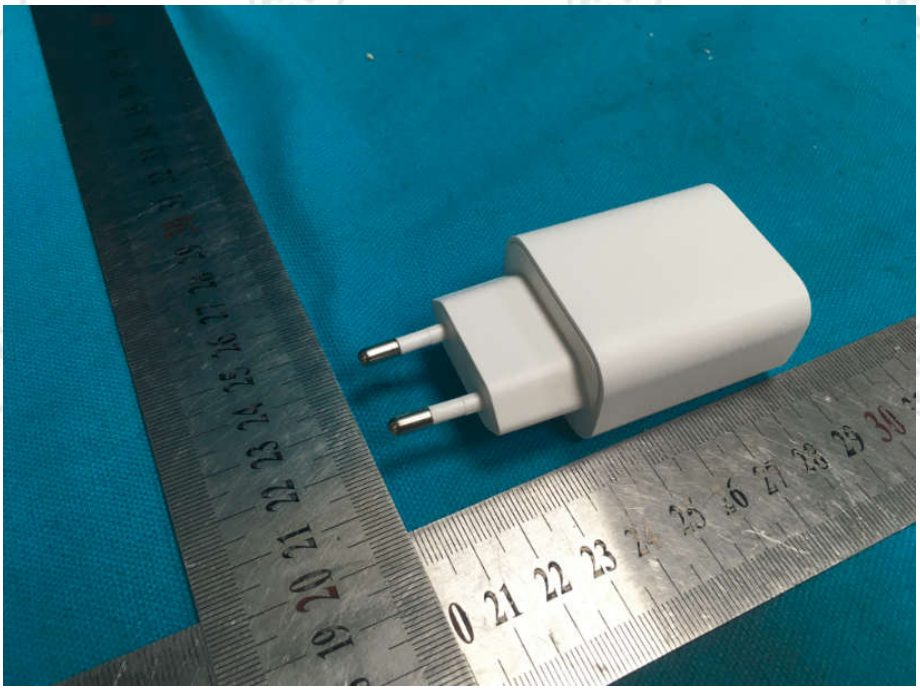
RADIO-FREQUENCY CONTINUOUS CONDUCTED IMMUNITY TEST SETUP-1

VOLTAGE DIPS AND INTERRUPTIONS TEST SETUP

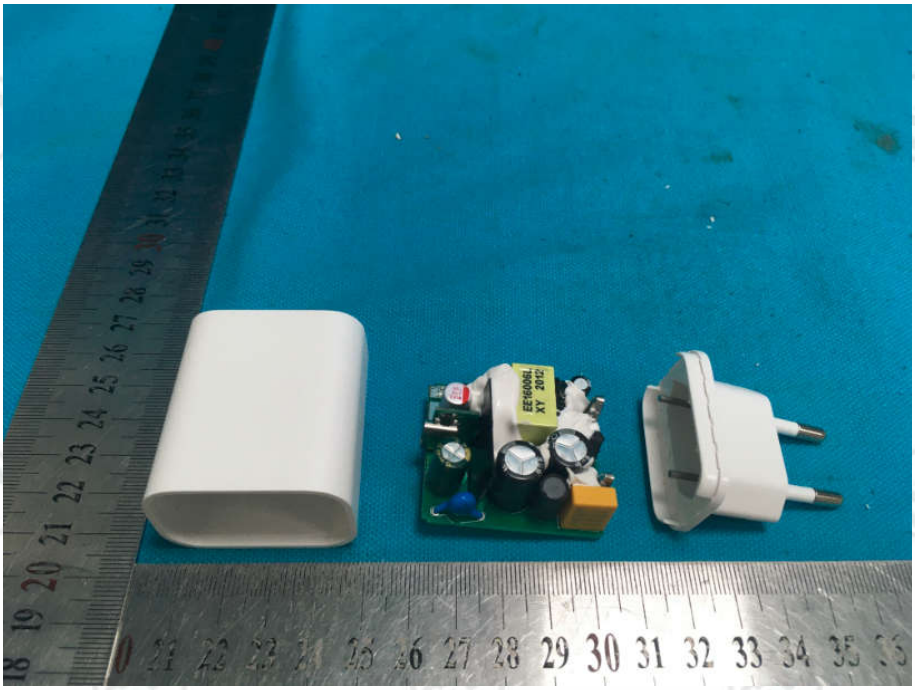
APPENDIX 2 PHOTOGRAPHS OF PRODUCT



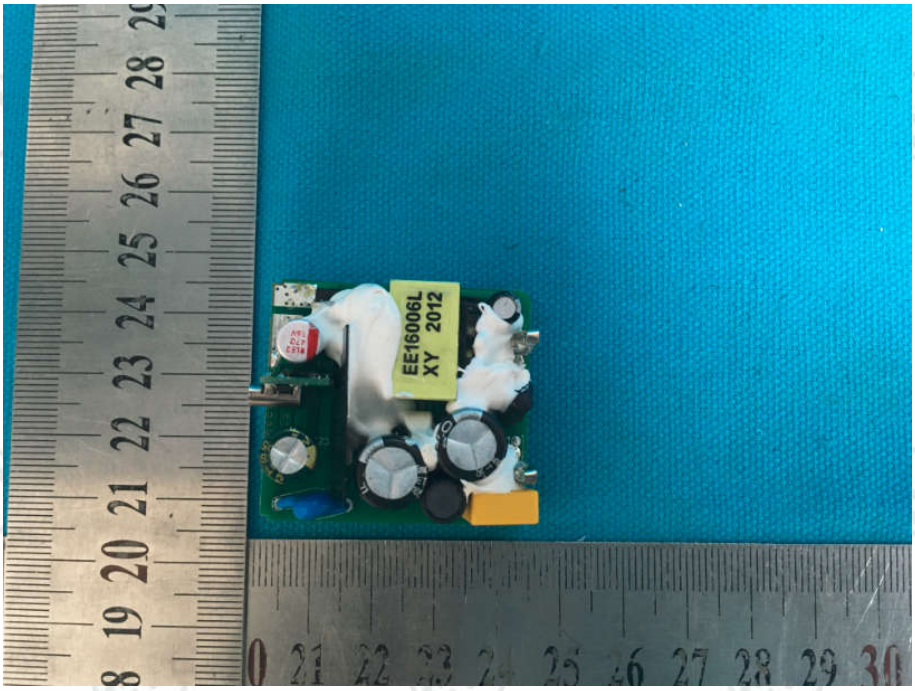
View of Product-1



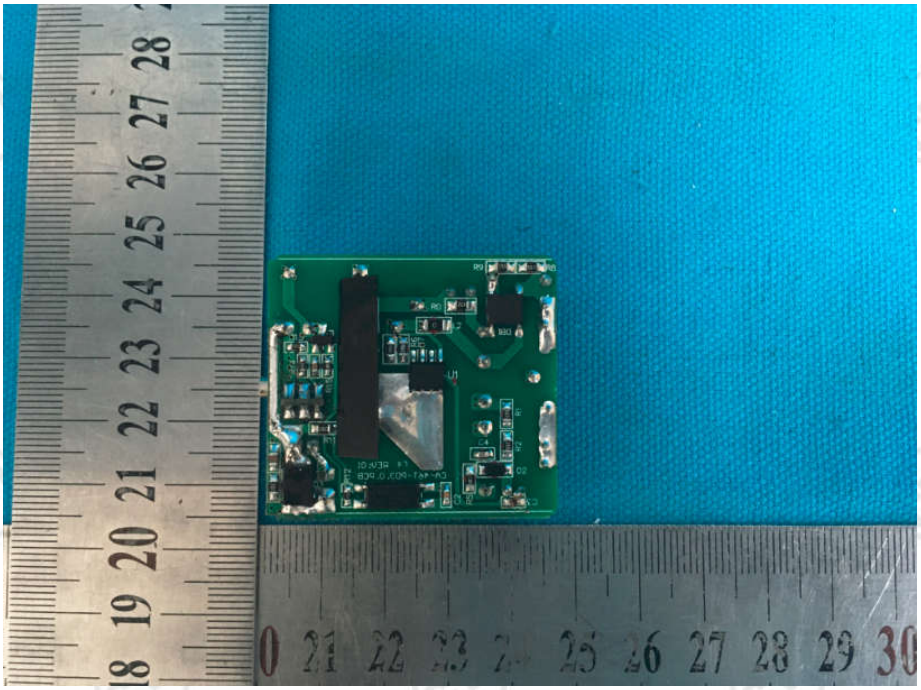
View of Product-2



View of Product-3



View of Product-4



View of Product-5

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*** End of Report ***