



TEST REPORT

Reference No...... : WTS19S01002189W V1
FCC ID : 2ADCSSP8096
Applicant..... : Inforce Computing, Inc.
Address..... : 48820 Kato Road, #600B, Fremont, CA94538, USA
Manufacturer : The same as above
Address..... : The same as above
Product..... : Solstice Pod Gen3
Model(s)..... : SP8096
Brand Name..... : SP8096
Standards : FCC PART15 SUBPART B: 2017
Date of Receipt sample : 2019-01-10
Date of Test : 2019-01-11 to 2019-01-16
Date of Issue..... : 2019-01-25
Test Result..... : Pass

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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2 Laboratories Introduction

Waltek Services (Shenzhen) Co., Ltd is a professional third-party testing and certification laboratory with multi-year product testing and certification experience, established strictly in accordance with ISO/IEC 17025 requirements, and accredited by ILAC (International Laboratory Accreditation Cooperation) member. A2LA (American Association for Laboratory Accreditation, the certification number is 4243.01) of USA, CNAS (China National Accreditation Service for Conformity Assessment, the registration number is L3110) of China. Meanwhile, Waltek has got recognition as registration and accreditation laboratory from EMSD (Electrical and Mechanical Services Department), and American Energy star, FCC (The Federal Communications Commission), CEC (California energy efficiency), ISED (Innovation, Science and Economic Development Canada). It's the strategic partner and data recognition laboratory of international authoritative organizations, such as Intertek (ETL-SEMKO), TÜV Rheinland, TÜV SÜD, etc.



Waltek Services (Shenzhen) Co., Ltd is one of the largest and the most comprehensive third party testing laboratory in China. Our test capability covered four large fields: safety test. Electro Magnetic Compatibility (EMC), and energy performance, wireless radio. As a professional, comprehensive, justice international test organization, we still keep the scientific and rigorous work attitude to help each client satisfy the international standards and assist their product enter into globe market smoothly.

**Test Facility:****A. Accreditations for Conformity Assessment (International)**

Country/Region	Scope Covered By	Scope	Note
USA	ISO/IEC 17025	FCC ID \ DOC \ VOC	1
Canada		IC ID \ VOC	2
Japan		MIC-T \ MIC-R	-
Europe		EMCD \ RED	-
Taiwan		NCC	-
Hong Kong		OFCA	-
Australia		RCM	-
India		WPC	-
Thailand		NTC	-
Singapore		IDA	-
Note:			
1. FCC Designation No.: CN1201. Test Firm Registration No.: 523476.			
2. ISED Canada Registration No.: 7760A			

B. TCBs and Notify Bodies Recognized Testing Laboratory.

Recognized Testing Laboratory of ...	Notify body number
TUV Rheinland	Optional.
Intertek	
TUV SUD	
SGS	
Phoenix Testlab GmbH	0700
Element Materials Technology Warwick Ltd	0891
Timco Engineering, Inc.	1177
Eurofins Product Service GmbH	0681



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4 Revision History

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTS19S01002 189W	2019-01-10	2019-01-11 to 2019-01-16	2019-01-17	original	-	Replaced
WTS19S01002 189W V1	2019-01-10	2019-01-11 to 2019-01-16	2019-01-25	Version 1	Updated	Vaild



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5 General Information

5.1 General Description of E.U.T.

Product: Solstice Pod Gen3
Model(s): SP8096
Model Description: N/A

5.2 Details of E.U.T.

Ratings: Battery DC 12V 2.5A

5.3 Standards Applicable for Testing

The tests were performed according to following standards:

FCC PART 15, SUBPART B Electronic Code of Federal Regulations- Unintentional Radiators

5.4 Subcontracted

Whether parts of tests for the product have been subcontracted to other labs:

☐ Yes ☒ No

If Yes, list the related test items and lab information:

Test Lab: N/A

Lab address: N/A

Test items: N/A

5.5 Abnormalities from Standard Conditions

None.

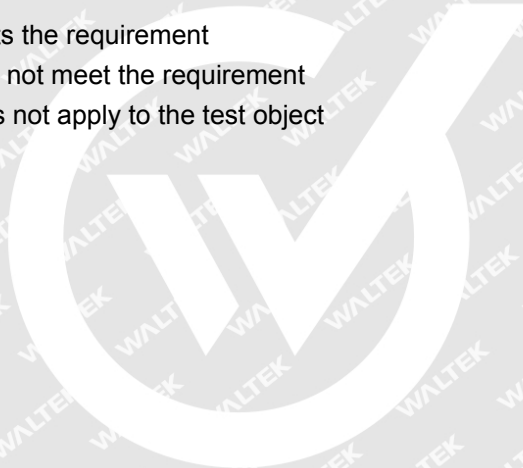


6 Test Summary

Test Items	Test Requirement	Test Method	Test Result
Power Line Conducted Emission (150kHz to 30MHz)	FCC PART 15, SUBPART B	ANSI C63.4: 2014	N/A
Radiated Emission 30MHz to 1GHz)	FCC PART 15, SUBPART B	ANSI C63.4: 2014	Pass
Radiated Emission (Above 1GHz)	FCC PART 15, SUBPART B	ANSI C63.4: 2014	Pass

Remark:

Pass Test item meets the requirement
Fail Test item does not meet the requirement
N/A Test case does not apply to the test object



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7 Equipment Used during Test

7.1 Equipment List

Conducted Emissions Test Site 1#						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1.	EMI Test Receiver	R&S	ESCI	100947	2018-09-12	2019-09-11
2.	LISN	R&S	ENV216	101215	2018-09-12	2019-09-11
3.	Cable	Top	TYPE16(3.5M)	-	2018-09-12	2019-09-11
Conducted Emissions Test Site 2#						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1.	EMI Test Receiver	R&S	ESCI	101155	2018-09-12	2019-09-11
2.	LISN	SCHWARZBECK	NSLK 8128	8128-289	2018-09-12	2019-09-11
3.	Limiter	York	MTS-IMP-136	261115-001-0024	2018-09-12	2019-09-11
4.	Cable	LARGE	RF300	-	2018-09-12	2019-09-11
3m Semi-anechoic Chamber for Radiation Emissions Test site 1#						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	Spectrum Analyzer	R&S	FSP	100091	2018-04-29	2019-04-28
2	Active Loop Antenna	Beijing Dazhi	ZN30900A	-	2018-04-09	2019-04-08
3	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	2018-04-09	2019-04-08
4	Coaxial Cable (below 1GHz)	Top	TYPE16(13M)	-	2018-09-12	2019-09-11
5	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	2018-04-09	2019-04-08
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9170	335	2018-04-09	2019-04-08
7	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	2018-04-13	2019-04-12
8	Coaxial Cable (above 1GHz)	Top	1GHz-25GHz	EW02014-7	2018-04-13	2019-04-12
9	Coaxial Cable (above 1GHz)	Top	25GHz-40GHz	EW02014-8	2018-04-13	2019-04-12
10	Smart Antenna	SCHWARZBECK	HA08	-	2018-04-09	2019-04-08
11	Signal Generator	R&S	SMR20	100046	2018-09-12	2019-09-11

**3m Semi-anechoic Chamber for Radiation Emissions Test site 2#**

Item	Equipment	Manufacturer	Model No.	Serial No	Last Calibration Date	Calibration Due Date
1	Test Receiver	R&S	ESCI	101296	2018-04-13	2019-04-12
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	2018-04-09	2019-04-08
3	Amplifier	Compliance pirection systems inc	PAP-0203	22024	2018-04-13	2019-04-12
4	Amplifier	Compliance pirection systems inc	PAP-0204	22025	2018-04-13	2019-04-12
5	Cable	HUBER+SUHNER	CBL2	525178	2018-04-13	2019-04-12

7.2 Description of Support Units

Equipment	Manufacturer	Model No.	Series No.
NOTEBOOK	Acer	A1465	C17KTQDNF5N7
TV (1)	KONKA	TV3655	KTV50221235
TV (2)	KONKA	TV3656	KTV50221236
Mouse	LOGIC	LBUNMS16	1645029050
Earphone	YUNJI	K7 Power	-
U disk	Kingston	2659	-

7.3 Measurement Uncertainty

Test Item	Frequency Range	Uncertainty	Note
Conduction Emission	150kHz~30MHz	±3.64dB	(1)
Radiation Emission	30MHz~1000MHz	±5.08dB	(1)
	1GHz~18GHz	±4.99dB	(1)
	18GHz~30GHz	±4.69dB	(1)
Confidence interval: 95%. Confidence factor:k=2			



8 Emission Test Results

8.1 Radiation Emission, 30MHz to 1000MHz

Test Requirement : FCC PART 15, SUBPART B

Test Method : ANSI C63.4: 2014

Test Result : Pass

Frequency Range : 30MHz to 1000MHz

Class. : Class A

Limit..... :

Frequency (MHz)	Distance (Meter)	Limit (dBμV/m)
		Quasi-peak
30 to 88	3	49.5
88 to 216	3	54
216 to 960	3	56
960 to 1000	3	59.5

8.1.1 E.U.T. Operation

Operating Environment:

Temperature : 22.5°C

Humidity : 52.6%RH

Atmospheric Pressure : 101.2kPa

EUT Operation:

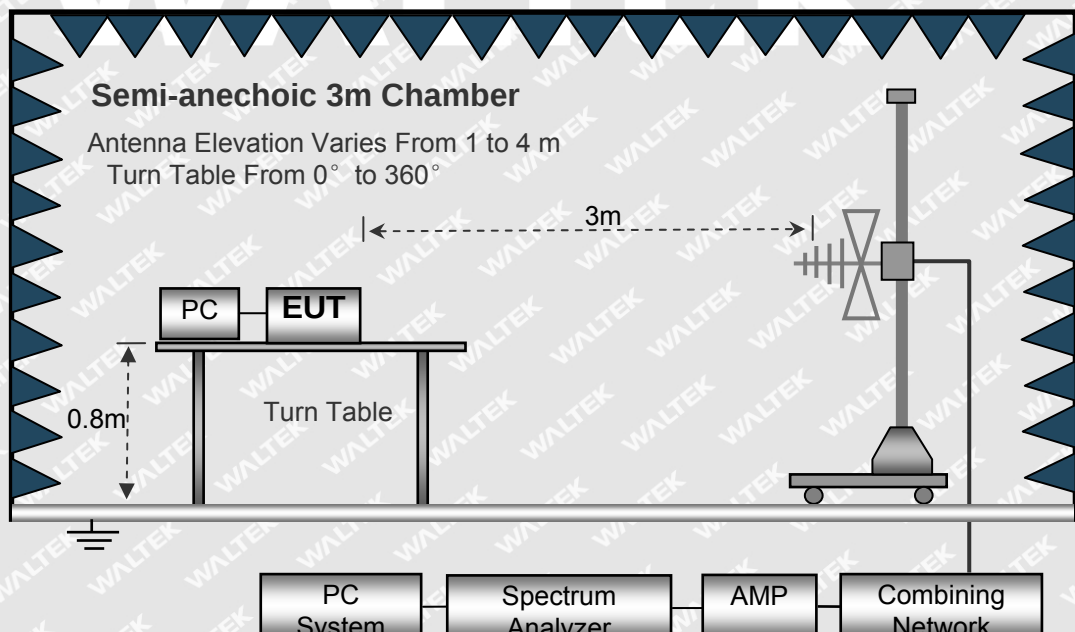
Input Voltage..... : DC 12V by battery

Operating Mode : Working mode

Remark : NA

8.1.2 Block Diagram of Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4: 2014.



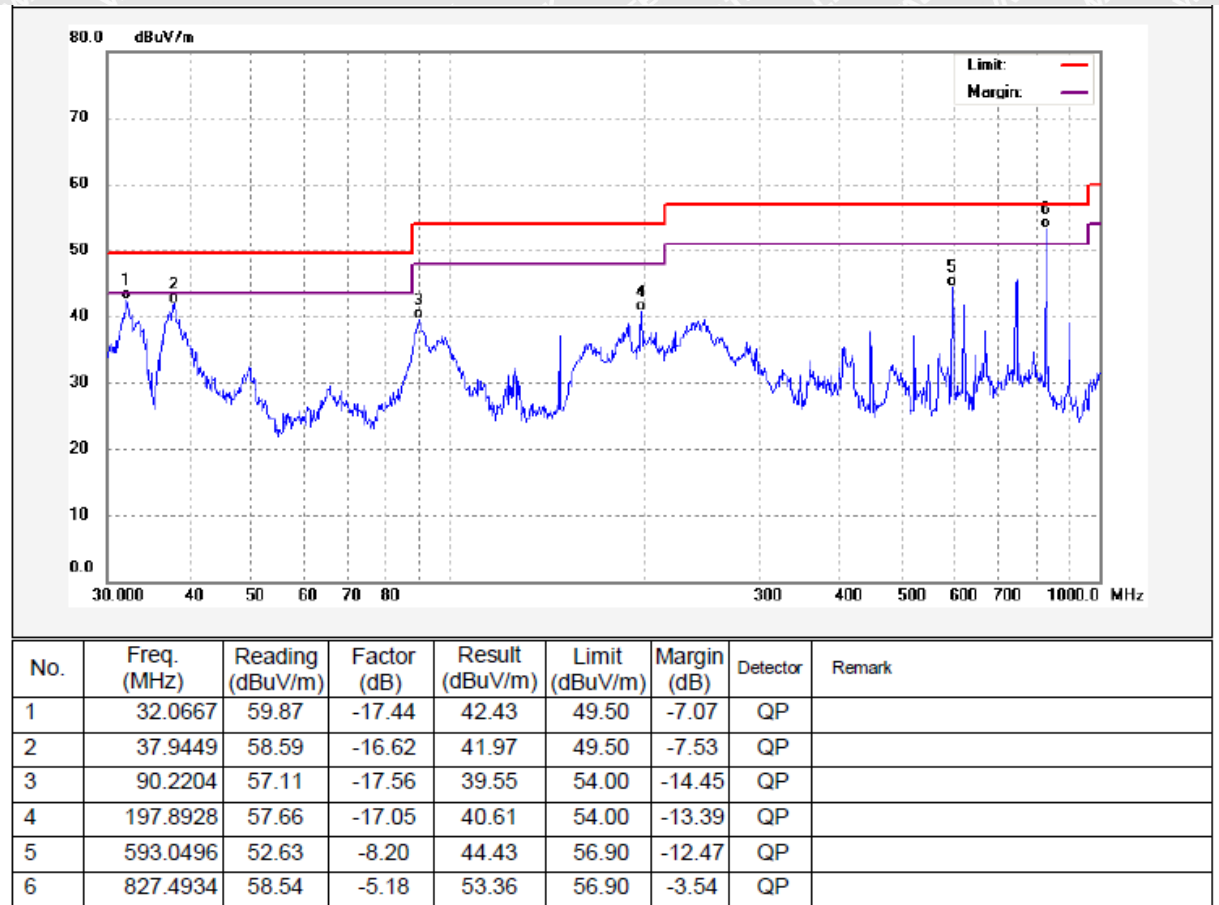


8.1.3 Measurement Data

The maximised peak emissions from the EUT was scanned and measured for both the Antenna Vertical Polarization and Antenna Horizontal Polarization. Quasi-peak measurements were performed if peak emissions were within 6dB of the Quasi-peak limit line.

8.1.4 Radiated Emission Test Data, 30MHz to 1000MHz

Antenna Polarization: Vertical

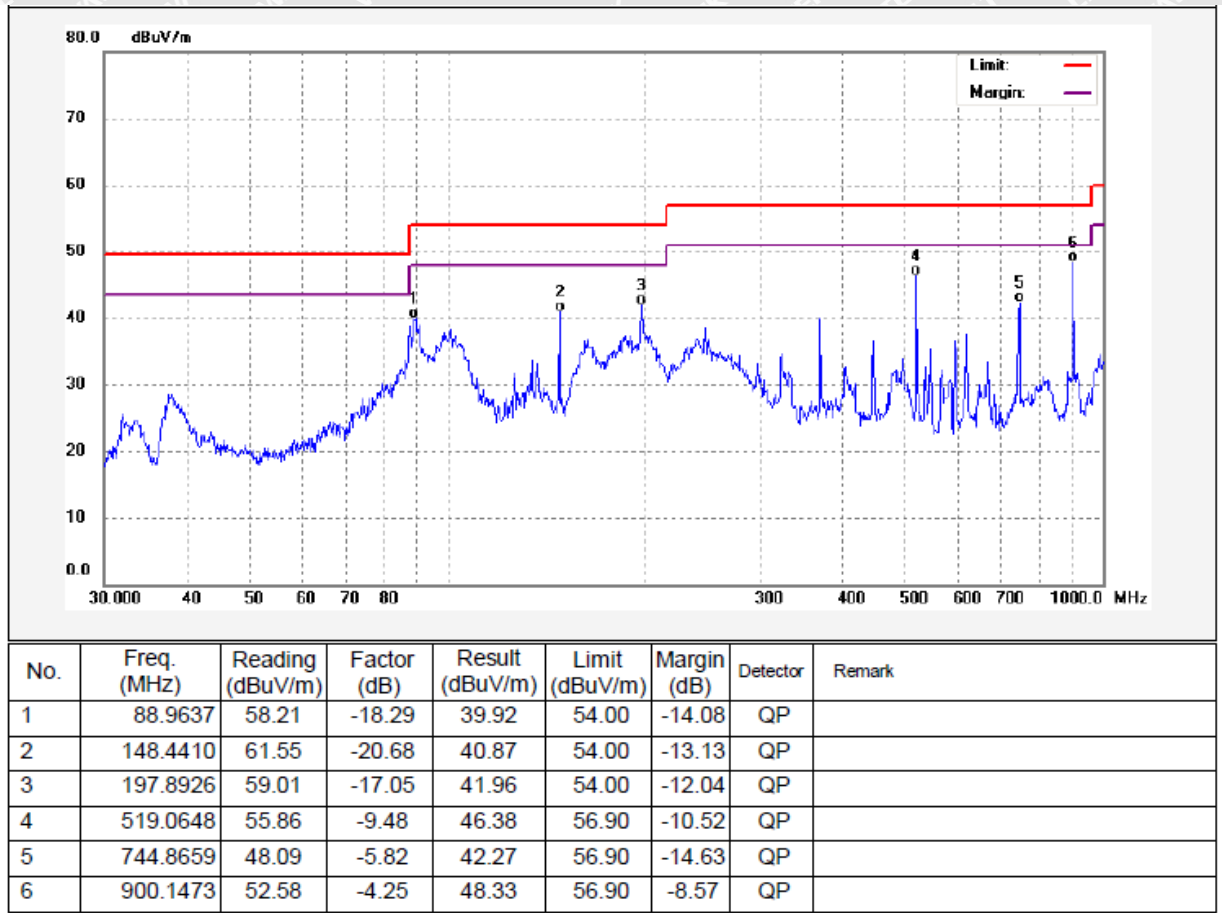


Factor= antenna factor + cable loss - preamplifier factor

Result = Reading + Factor



Antenna Polarization: Horizontal



Factor= antenna factor + cable loss - preamplifier factor

Result = Reading + Factor



8.2 Radiation Emission, Above 1000MHz

Test Requirement : FCC PART 15, SUBPART B
 Test Method : ANSI C63.4: 2014
 Test Result : Pass
 Frequency Range : 1GHz~30GHz
 Class. : Class A
 Limit. :

Frequency Range (MHz)	Distance (Meter)	Average Limit dB(uV/m)	Peak Limit (dBuV/m)
Above 1GHz	3	59	79

8.2.1 E.U.T. Operation

Operating Environment:

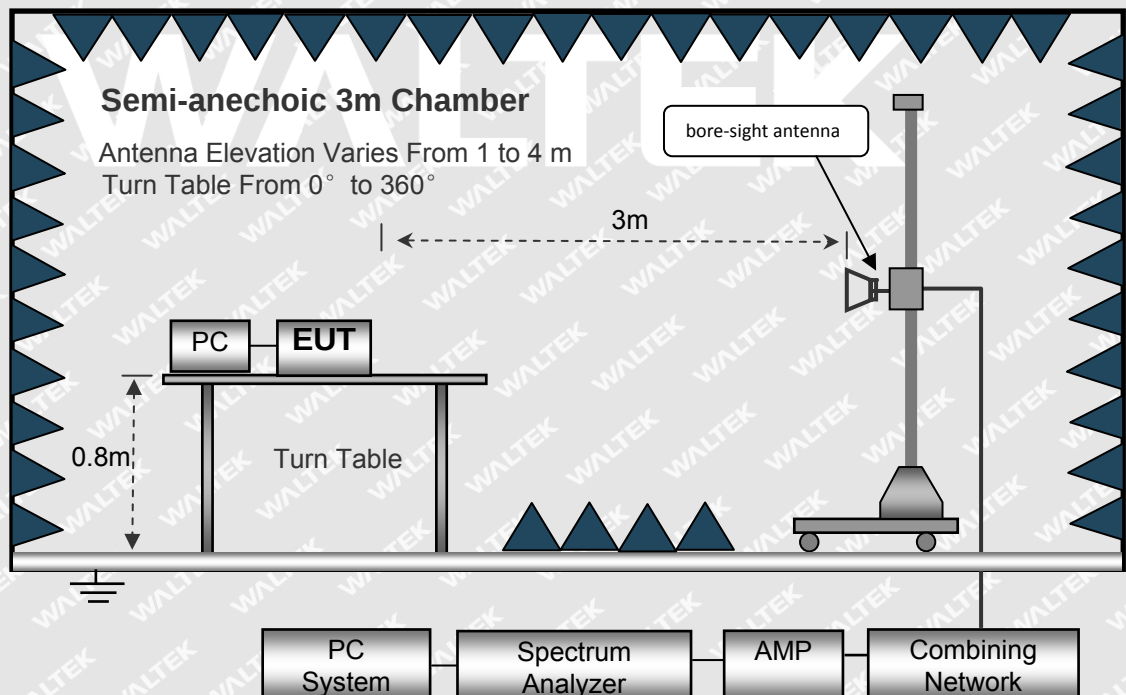
Temperature : 22.4°C
 Humidity : 52.3%RH
 Atmospheric Pressure : 101.3kPa

EUT Operation:

Input Voltage : DC 12V by battery
 Operating Mode : Working mode
 Remark : NA

8.2.2 Block Diagram of Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4:2014.





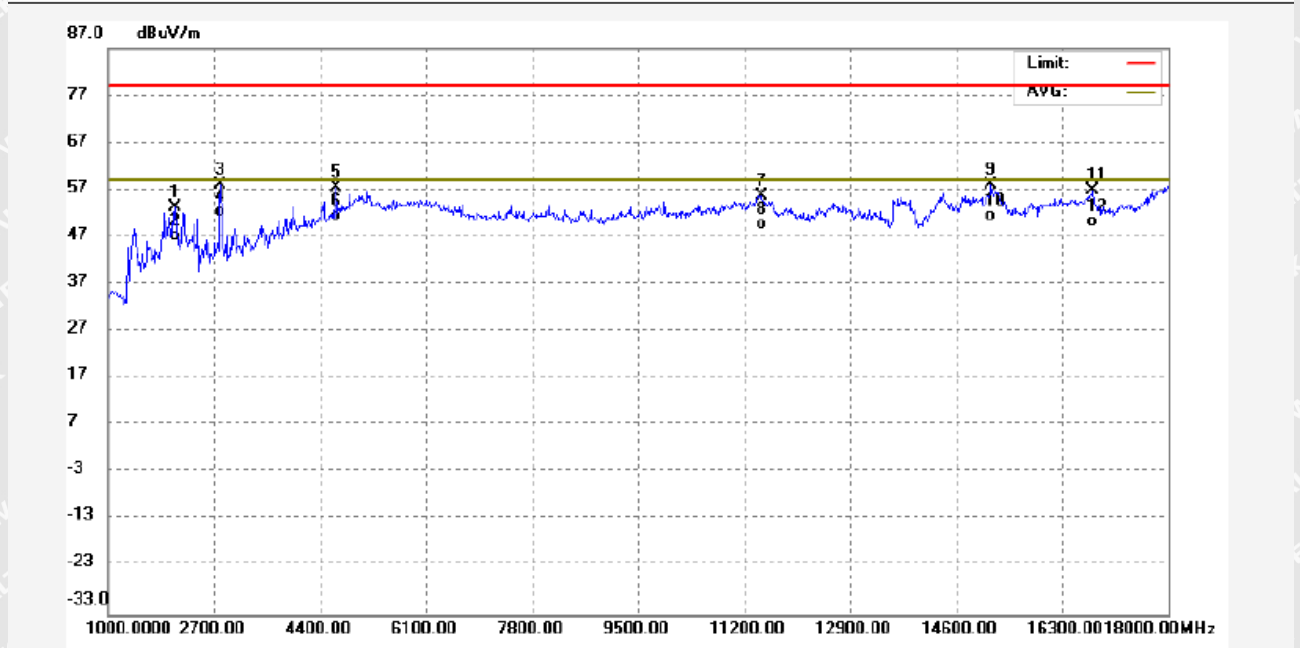
8.2.3 Measurement Data

The maximised peak emissions from the EUT was scanned and measured for both the Antenna Vertical Polarization and Antenna Horizontal Polarization. Average measurements were performed if peak emissions were within 6dB of the average limit line

8.2.4 Radiated Emission Test Data, Above 1000MHz

Antenna Polarization: Vertical

1-18GHz



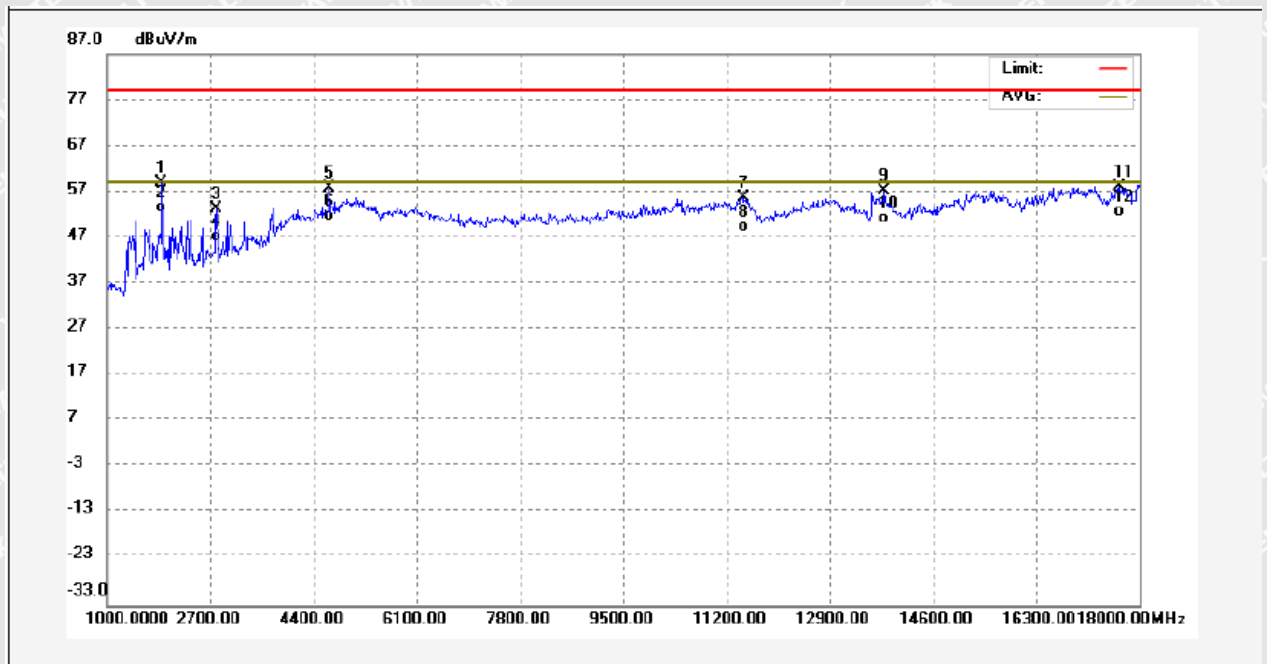
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	2071.000	64.74	-11.48	53.26	79.00	-25.74	peak	
2	2071.000	58.74	-11.48	47.26	59.00	-11.74	AVG	
3	2802.000	68.39	-10.23	58.16	79.00	-20.84	peak	
4	2802.000	62.56	-10.23	52.33	59.00	-6.67	AVG	
5	4655.000	56.17	1.22	57.39	79.00	-21.61	peak	
6	4655.000	50.14	1.22	51.36	59.00	-7.64	AVG	
7	11472.000	48.68	6.96	55.64	79.00	-23.36	peak	
8	11472.000	42.59	6.96	49.55	59.00	-9.45	AVG	
9	15161.000	47.93	10.05	57.98	79.00	-21.02	peak	
10	15161.000	41.29	10.05	51.34	59.00	-7.66	AVG	
11	16793.000	45.96	10.82	56.78	79.00	-22.22	peak	
12	16793.000	39.46	10.82	50.28	59.00	-8.72	AVG	

Factor= antenna factor + cable loss - preamplifier factor

Result = Reading + Factor



Antenna Polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	1901.000	69.95	-10.90	59.05	79.00	-19.95	peak	
2	1901.000	64.52	-10.90	53.62	59.00	-5.38	AVG	
3	2802.000	62.74	-9.36	53.38	79.00	-25.62	peak	
4	2802.000	56.69	-9.36	47.33	59.00	-11.67	AVG	
5	4655.000	55.70	1.96	57.66	79.00	-21.34	peak	
6	4655.000	49.68	1.96	51.64	59.00	-7.36	AVG	
7	11472.000	48.82	6.96	55.78	79.00	-23.22	peak	
8	11472.000	42.41	6.96	49.37	59.00	-9.63	AVG	
9	13801.000	48.78	8.25	57.03	79.00	-21.97	peak	
10	13801.000	42.99	8.25	51.24	59.00	-7.76	AVG	
11	17660.000	44.13	13.99	58.12	79.00	-20.88	peak	
12	17660.000	38.57	13.99	52.56	59.00	-6.44	AVG	

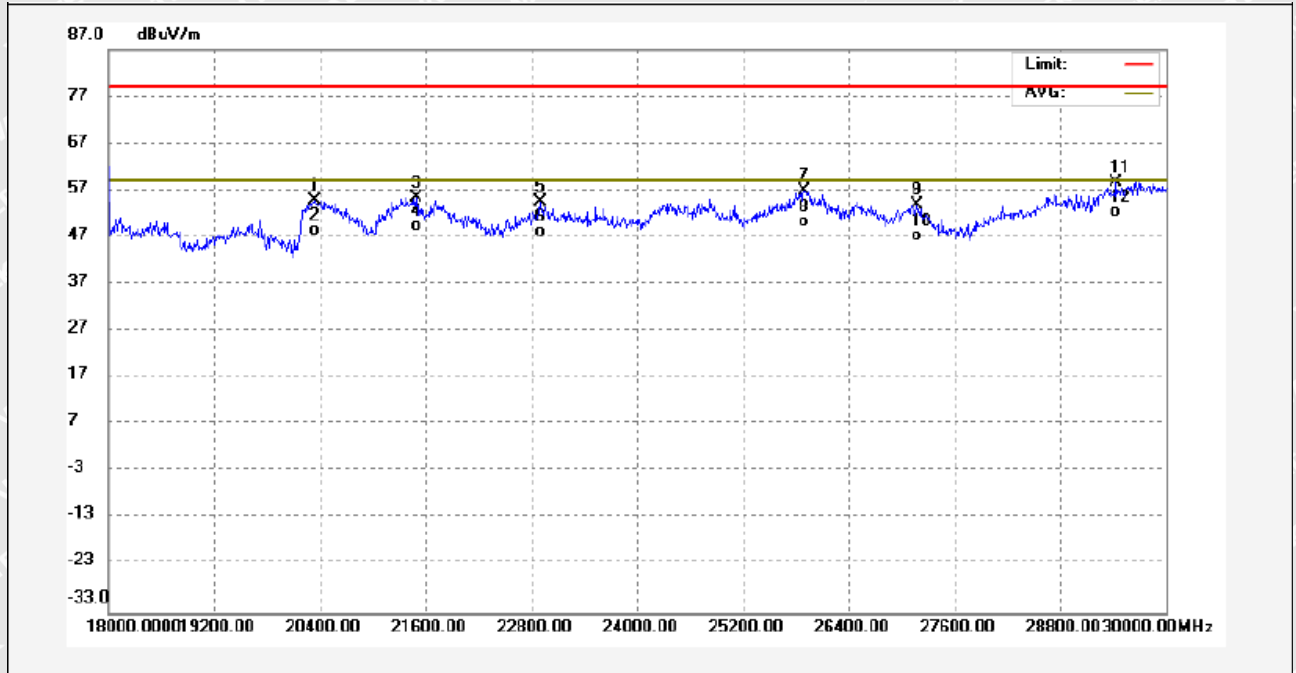
Factor= antenna factor + cable loss - preamplifier factor

Result = Reading + Factor



Antenna Polarization: Vertical

18G-30GHz



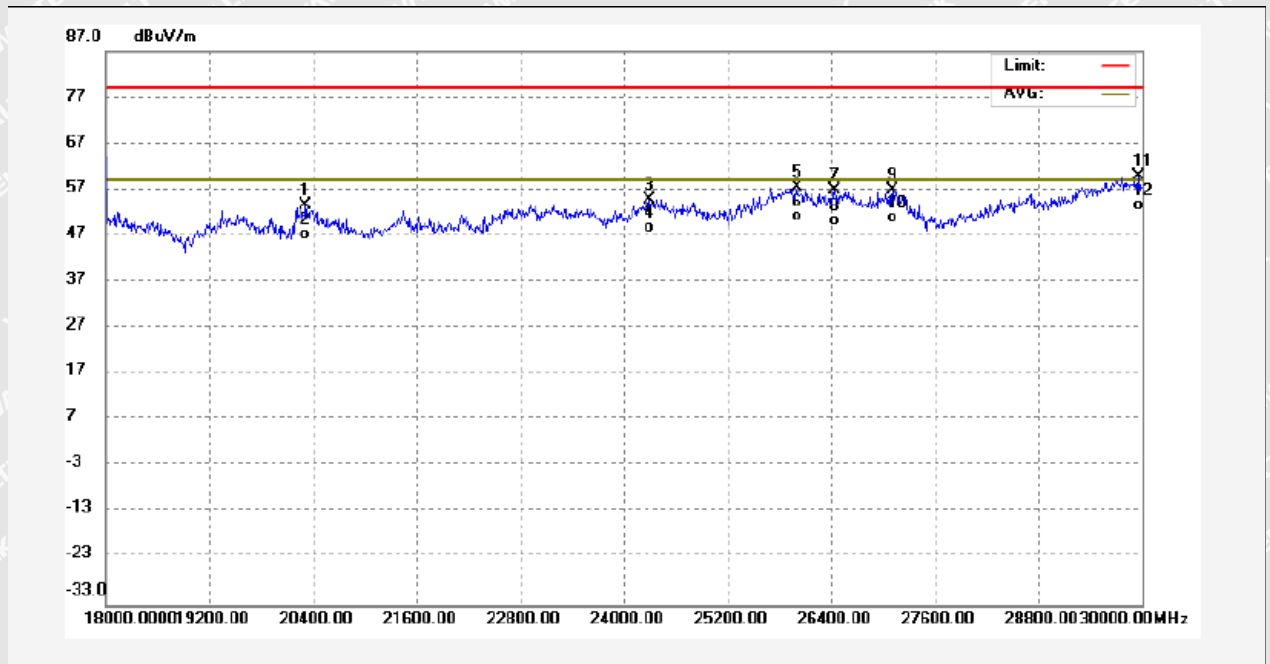
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	20340.000	54.88	0.00	54.88	79.00	-24.12	peak	
2	20340.000	48.36	0.00	48.36	59.00	-10.64	AVG	
3	21492.000	55.34	0.00	55.34	79.00	-23.66	peak	
4	21492.000	49.35	0.00	49.35	59.00	-9.65	AVG	
5	22896.000	54.34	0.00	54.34	79.00	-24.66	peak	
6	22896.000	48.27	0.00	48.27	59.00	-10.73	AVG	
7	25896.000	56.74	0.00	56.74	79.00	-22.26	peak	
8	25896.000	50.18	0.00	50.18	59.00	-8.82	AVG	
9	27168.000	53.84	0.00	53.84	79.00	-25.16	peak	
10	27168.000	47.35	0.00	47.35	59.00	-11.65	AVG	
11	29436.000	58.76	0.00	58.76	79.00	-20.24	peak	
12	29436.000	52.37	0.00	52.37	59.00	-6.63	AVG	

Factor= antenna factor + cable loss - preamplifier factor

Result = Reading + Factor



Antenna Polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	20316.000	53.69	0.00	53.69	79.00	-25.31	peak	
2	20316.000	47.35	0.00	47.35	59.00	-11.65	AVG	
3	24288.000	54.70	0.00	54.70	79.00	-24.30	peak	
4	24288.000	48.63	0.00	48.63	59.00	-10.37	AVG	
5	26004.000	57.40	0.00	57.40	79.00	-21.60	peak	
6	26004.000	51.30	0.00	51.30	59.00	-7.70	AVG	
7	26436.000	56.93	0.00	56.93	79.00	-22.07	peak	
8	26436.000	50.34	0.00	50.34	59.00	-8.66	AVG	
9	27108.000	56.91	0.00	56.91	79.00	-22.09	peak	
10	27108.000	50.82	0.00	50.82	59.00	-8.18	AVG	
11	29964.000	59.90	0.00	59.90	79.00	-19.10	peak	
12	29964.000	53.62	0.00	53.62	59.00	-5.38	AVG	

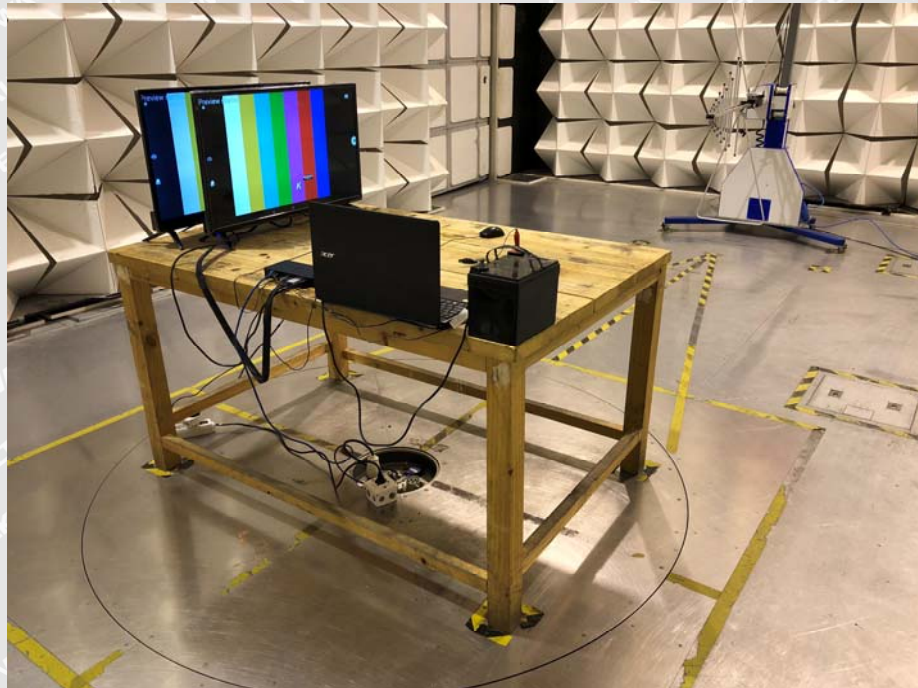
Factor= antenna factor + cable loss - preamplifier factor

Result = Reading + Factor



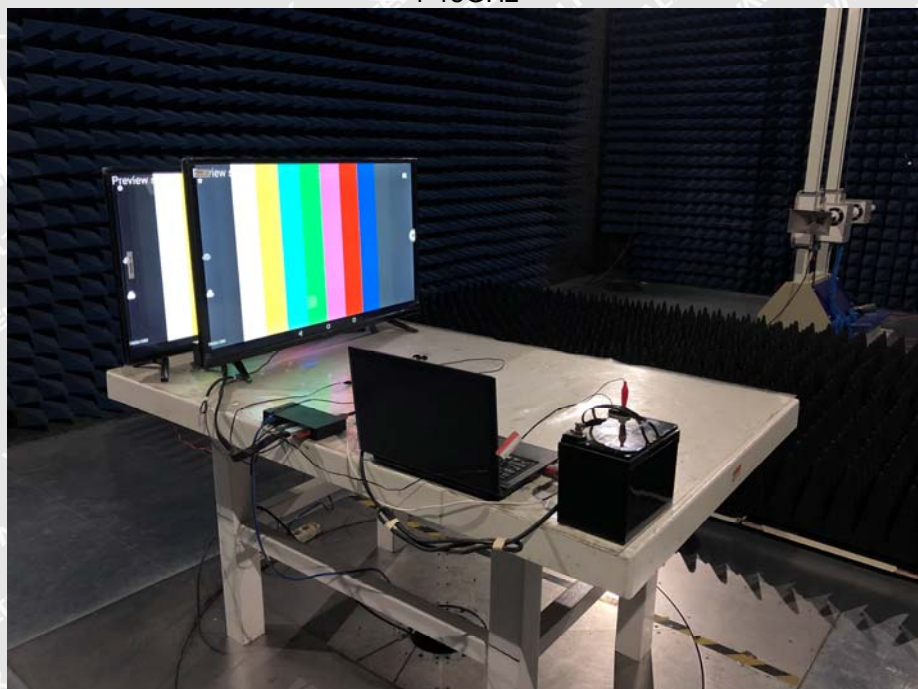
9 Photographs – Test Setup

9.1 Photograph – Radiated Emission Test Setup for 30~1000MHz at Test Site 2#



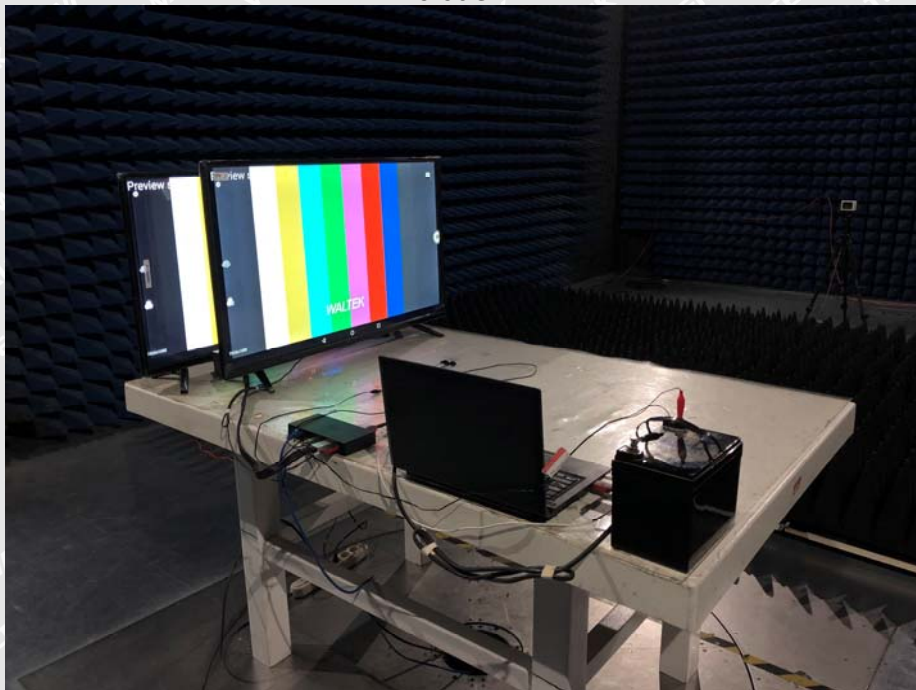
9.2 Photograph – Radiated Emission Test Setup for Above 1GHz at Test Site 1#

1-18GHz





18-30GHz



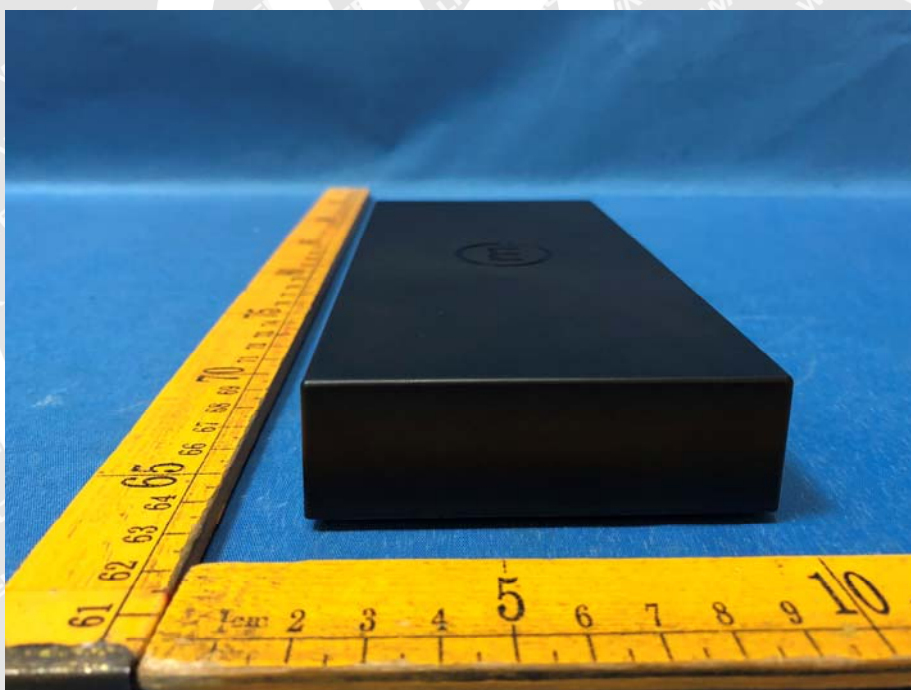
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10 Photographs –Constructional Details

10.1 EUT – External View Model SP8096





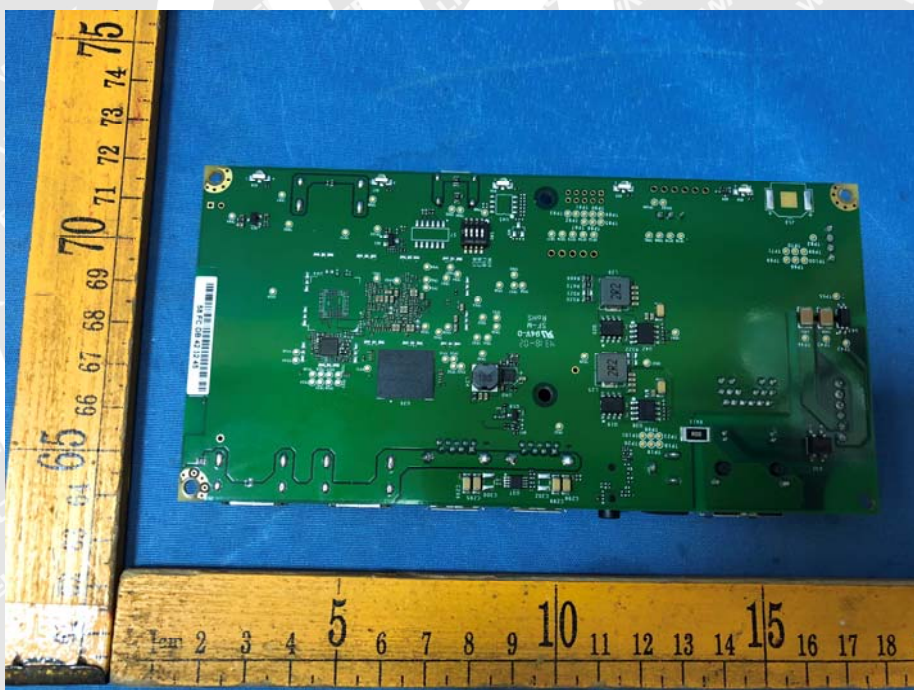
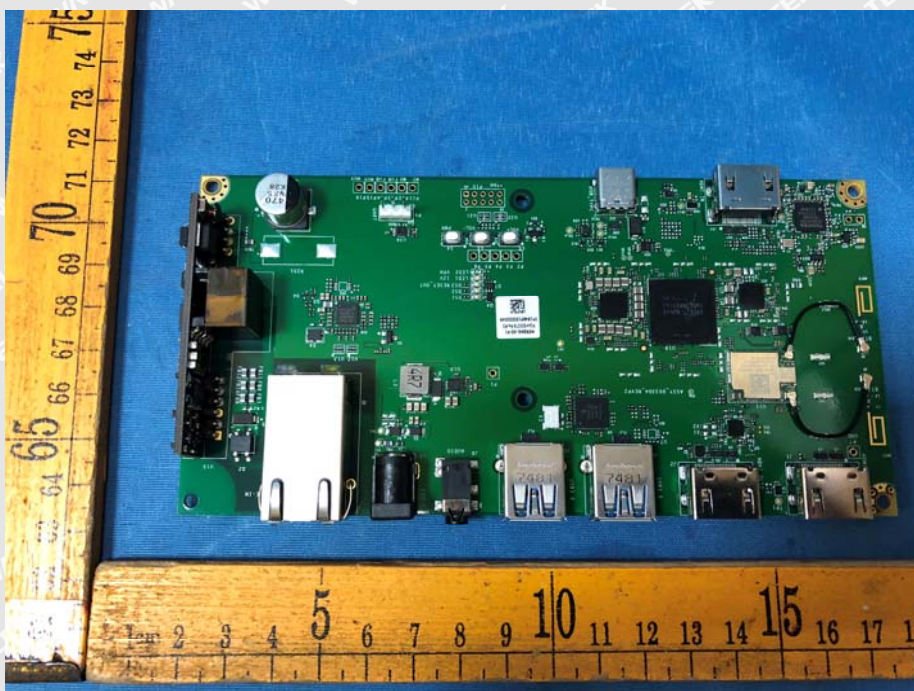


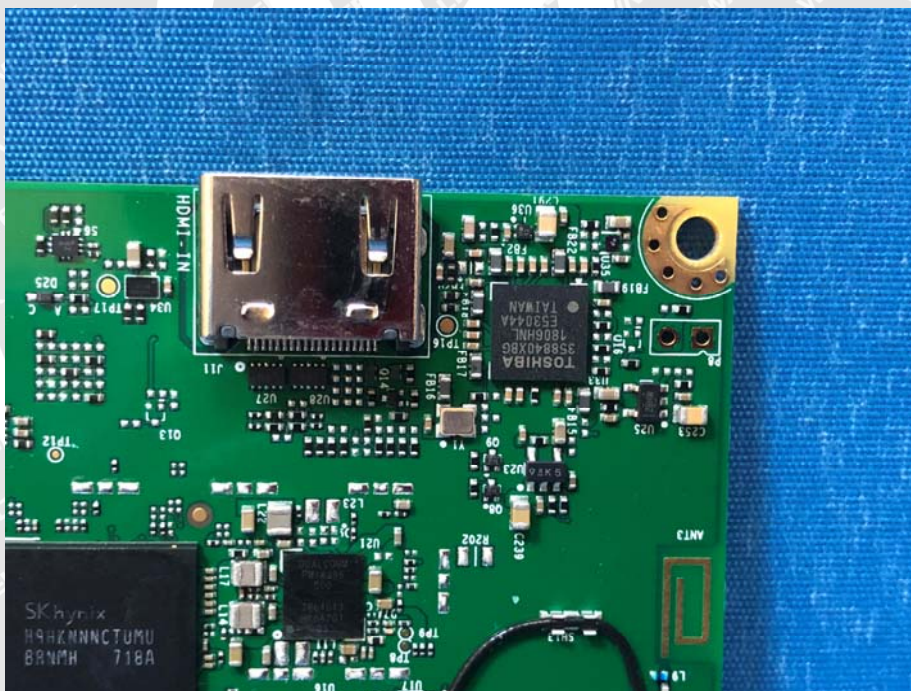
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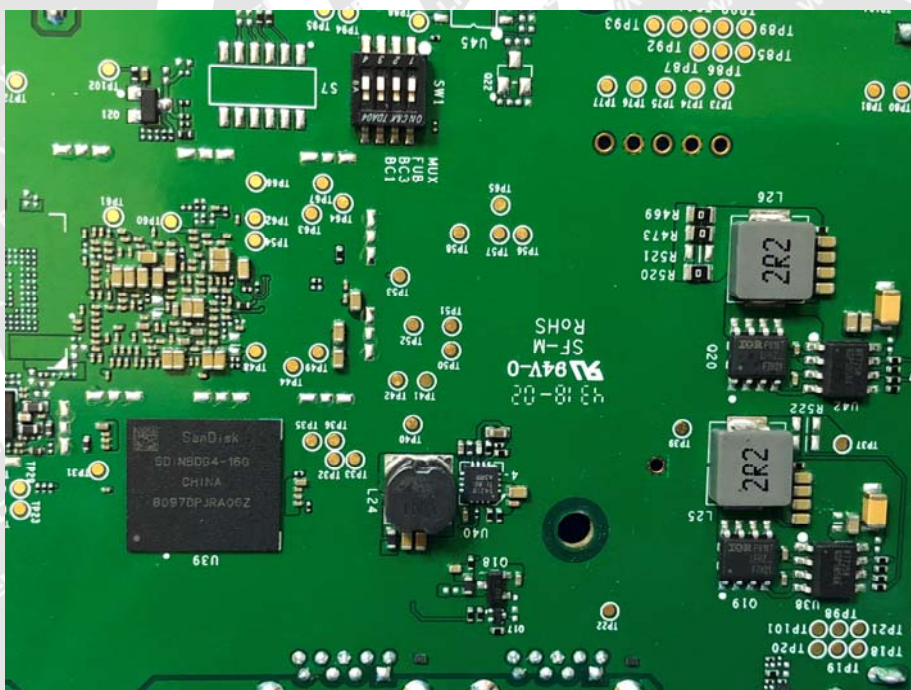
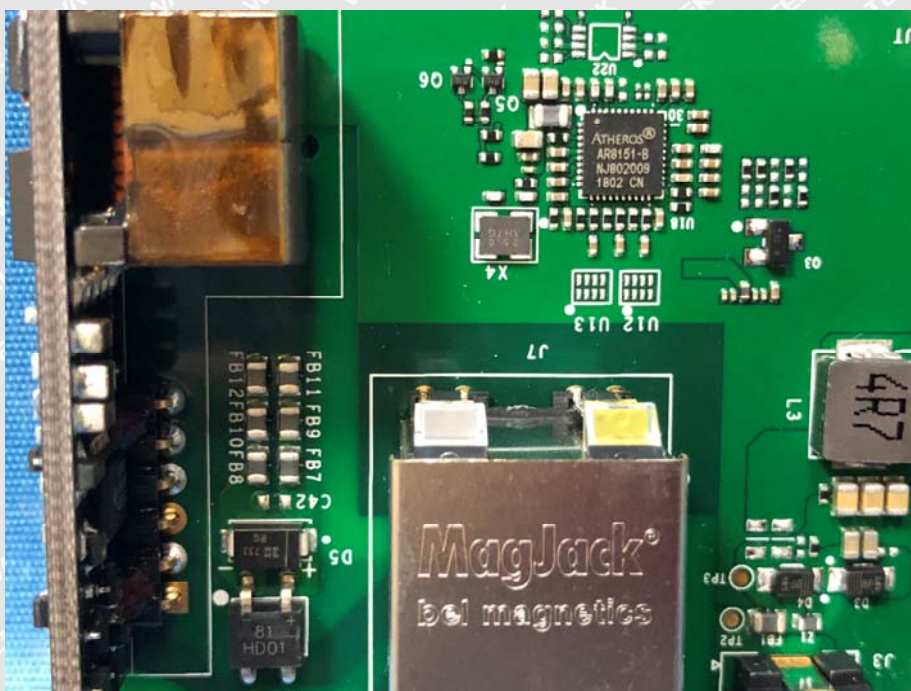


10.2 EUT – Internal View Model SP8096









=====End of Report=====