



## **Regulatory and certification documents package**

Regulatory Model Number: [STA015](#)

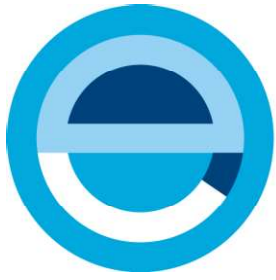
Series Name(s): BarraCuda510 and 515, Nytro510 DCT, IronWolf510, ZP256CM30031, ZP512CM30031, ZP1024CM30031, ZP2048CM30031, ZP256CM30011, ZP512CM30011, ZP1024CM30011, ZP2048CM30011, XP240DC30001, XP480DC30001, XP240DC30011, XP480DC30011, ZP240NM30001, ZP480NM30001, ZP256MC30021, ZP512MC30021

Internal Name: Aspen ([Single sided Board](#))

<u>Date</u>	<u>Comments:</u>
<a href="#">January 25, 2019</a>	<a href="#">Package generated.</a>
<a href="#">March 27, 2019</a>	<a href="#">Updated BSMI DoC, KCC and CE DoC with DCT models.</a>
<a href="#">October 17, 2019</a>	<a href="#">Added BarraCuda 515 to CE DoC, KCC and BSMI</a>

### Contents:

- Australia/New Zealand - RCM mark SDoC (Supplier Declaration of Conformity)
- Australia/New Zealand - CoT (Certificate of Test)
- Canada ICES - CoT (Certificate of Test)
- CB Certificate
- CE DoC (Declaration of Conformity)
- CE CoT (Certificate of Test)
- Korea RRL – Certificate
- Korea - CoT (Certificate of Test)
- UL/cUL safety
- TUV safety
- Taiwan BSMI certificate
- Taiwan CoT (Certificate of Test)

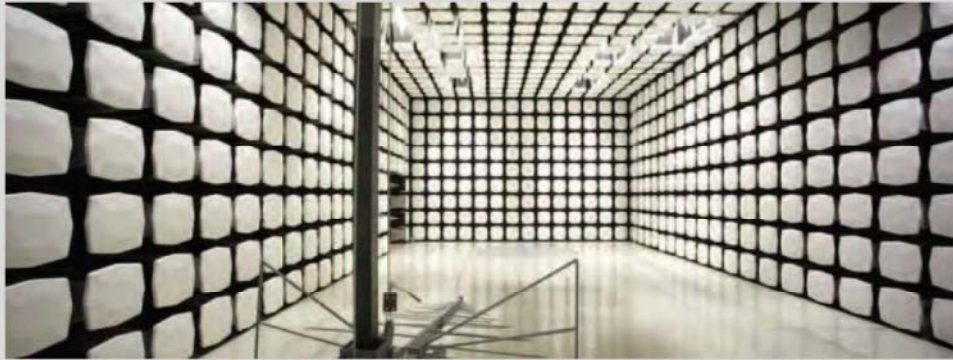


# element

**Seagate Technology LLC**

**STA015**

**Report # SEAG0198**



NVLAP LAB CODE: 200881-0



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# CERTIFICATE OF TEST

**Last Date of Test: November 19, 2018**  
**Seagate Technology LLC**  
**Model: STA015**

## Emissions

### Standards

Specification	Method
AS/NZS CISPR 32:2015 Class B	AS/NZS CISPR 32:2015
EN 55032:2012/AC:2013 Class B	CISPR 32:2015
EN 61000-3-2:2014	IEC 61000-3-2:2014
EN 61000-3-3:2013	IEC 61000-3-3:2013
FCC 15.107:2018 Class B FCC 15.109:2018 Class B FCC 15.109(g):2018 Class B ICES-003:2016 updated April 2017 Class B	ANSI C63.4:2014
VCCI 32-1 Class B	CISPR 32:2015

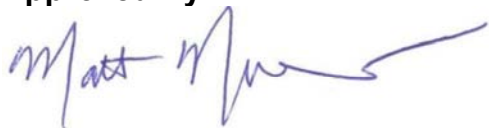
### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	
Harmonic Current Emissions	Yes	Pass	
Voltage Fluctuations and Flicker	Yes	Pass	

### Deviations From Test Standards

None

### Approved By:



Matt Nuernberg, Operations Manager

*Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.*



## Supplier's Declaration of Conformity

Declaration of Conformity as a registered and responsible supplier under the Australian Communications and Media Authority (ACMA) regulatory arrangements for Regulatory Compliance Mark (RCM) and its placement.

Responsible Supplier Name: Seagate Technology Australia Pty Ltd  
Responsible Supplier Number: E806

**Seagate Technology Australia Pty. Limited**  
**Level 7, 91 Phillip St**  
**PARRAMATTA NSW 2150**  
**AUSTRALIA**

Declare under our sole responsibility that the following product(s):

**Seagate M.2 NVMe Solid State Drive**

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**Model: STA015**

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to which this declaration relates is in conformity with the following standard(s):

Title	Test Regulation
<u>Australian/New Zealand Standard</u>	<u>AS/NZS CISPR 32: 2015</u>

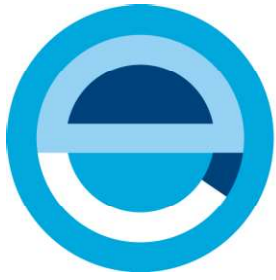
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(Name of the Authorized Person) Sam Zavaglia

(Title of the Authorized Person) Senior Field Applications Engineer

(Date of Issue) 4<sup>th</sup> December 2018

(Signature) 

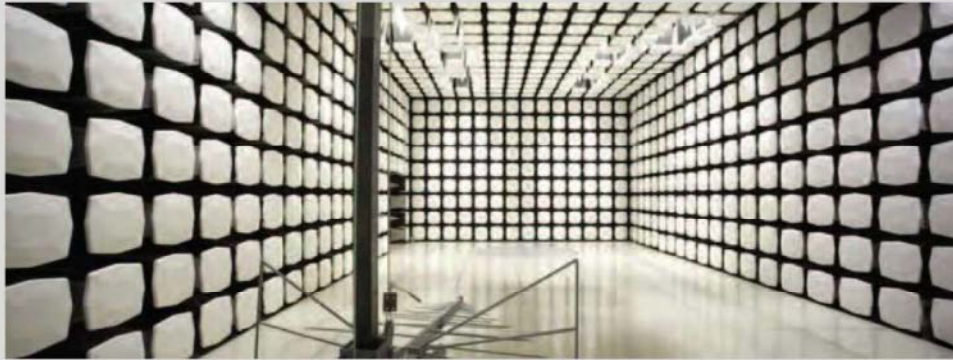


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**Seagate Technology LLC**

**STA015**

**Report # SEAG0198**



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# CERTIFICATE OF TEST

**Last Date of Test: November 19, 2018**  
**Seagate Technology LLC**  
**Model: STA015**

## Emissions

### Standards

Specification	Method
AS/NZS CISPR 32:2015 Class B	AS/NZS CISPR 32:2015
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FCC 15.107:2018 Class B FCC 15.109:2018 Class B FCC 15.109(g):2018 Class B ICES-003:2016 updated April 2017 Class B	ANSI C63.4:2014
VCCI 32-1 Class B	CISPR 32:2015

### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	
Harmonic Current Emissions	Yes	Pass	
Voltage Fluctuations and Flicker	Yes	Pass	

### Deviations From Test Standards

None

**Approved By:**



Matt Nuernberg, Operations Manager

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Ref. Certif. No.

DE 3 - ITAV061

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

### CB TEST CERTIFICATE

Product

Disk drives  
Solid State Drive

Name and address of the applicant

**Seagate Technology LLC**  
1280 Disc Drive  
Shakopee, MN 55379-1863  
USA

Name and address of the manufacturer

Seagate Technology LLC  
1280 Disc Drive, Shakopee, MN 55379-1863, USA

Name and address of the factory

CAL-COMP Electronics (Thailand) Co. Ltd.  
60 Moo, 8 Sethakij Road, Klong Maduea, Kratoom Bean,  
Samuthsakorn 74110, THAILAND  
  
Netronix, Inc.  
No. 945, Boai Street, 30265 Jubei City, Hsinchu, TAIWAN

Ratings and principal characteristics

Rated Input Voltage: +3.3Vdc  
Rated Frequency: dc  
Rated Input Current: STA015: 1.4A  
STA016: 1.2A  
Protection Class: III  
Degree of Protection: IPX0

Trade mark (if any)

Seagate

Customer's Testing Facility (CTF) Stage used

CTF STAGE 2

Model/type Ref.

Regulatory Models: STA015 and STA016

This CB Test Certificate is issued by the National Certification Body

CB 041780 0676 Rev. 00

Date, 2018-12-10



A sample of the product was tested and found to be in conformity with IEC 62368-1:2014

as shown in the Test Report Ref. No. 092-72143766-000 which forms part of this certificate

**Conditions of Acceptability:**

1. Solid state drives are to be supplied by a reliably SELV power supply.
2. Suitable enclosure (fire/mechanical) to be provided/evaluated when drive is installed in the end use product.
3. Proper air flow should be considered in the end use product to limit maximum case temperature to 60°C. Testing was conducted with a 40 CFM fan.

CB 041780 0676 Rev. 00  
Date, 2018-12-10

*William P. Weller*







Ref. Certif. No.

DE 3 - 503165

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CB TEST CERTIFICATE

Product	Disk drives  Solid State Drive
Name and address of the applicant	<b>Seagate Technology LLC</b> 1280 Disc Drive Shakopee, MN 55379-1863 USA
Name and address of the manufacturer	Seagate Technology LLC 1280 Disc Drive, Shakopee, MN 55379-1863, USA
Name and address of the factory	CAL-COMP Electronics (Thailand) Co. Ltd. 60 Moo, 8 Sethakij Road, Klong Maduea, Kratoom Bean, Samuthsakorn 74110, THAILAND  Netronix, Inc. No. 945, Boai Street, 30265 Jubei City, Hsinchu, TAIWAN
Ratings and principal characteristics	Rated Input Voltage: +3.3Vdc Rated Frequency: dc Rated Input Current: STA015: 1.4A STA016: 1.2A Protection Class: III Degree of Protection: IPX0
Trade mark (if any)	Seagate
Customer's Testing Facility (CTF) Stage used	CTF STAGE 2
Model/type Ref.	Regulatory Models: STA015 and STA016

This CB Test Certificate is issued by the National Certification Body

CB 041780 0675 Rev. 00  
Date, 2018-12-10





Ref. Certif. No.

DE 3 - 503165

A sample of the product was tested and found to be in conformity with

IEC 60950-1:2005  
IEC 60950-1:2005/AMD1:2009  
IEC 60950-1:2005/AMD2:2013

as shown in the Test Report Ref. No. which forms part of this certificate

092-72143844-000

**Conditions of Acceptability:**

1. Solid state drives are to be supplied by a reliably SELV power supply.
2. Suitable enclosure (fire/mechanical) to be provided/evaluated when drive is installed in the end use product.
3. Proper air flow should be considered in the end use product to limit maximum case temperature to 60°C. Testing was conducted with a 40 CFM fan.

CB 041780 0675 Rev. 00  
Date, 2018-12-10





## EU Declaration of Conformity

### Product Safety and EMC Compliance

The product(s) meets the requirements of The Electromagnetic Compatibility (EMC) Directive 2014/30/EU by application of the following standards:

<u>EN 55032:2012</u>	Electromagnetic compatibility of multimedia equipment — Emission requirements – class B.
<u>EN55024:2010</u>	Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement
<u>EN61000-3-2:2014</u>	Limits for Harmonic Current Emissions (Equipment Input Current ≤16 Amps Per Phase)
<u>EN61000-3-3:2013</u>	Limitation of Voltage Changes, Voltage Fluctuations and Flicker in Low-Voltage Supply Systems for Equipment with Rated Current ≤16 Amps Per Phase

The product(s) meets the requirements of The Low Voltage Directive (LVD) 2014/35/EU by application of the following standards:

<u>EN 62368-1:2014</u>	Audio/video, information and communication technology equipment - Part 1: Safety requirements (IEC 62368-1:2014, Modified)
<u>EN 60950-1:2006 /A11:2009 /A1:2010 /A12:2011/A2:2013</u>	Information Technology Equipment - Safety- (Second Edition) Part 1: General Requirements

### Product Environmental Compliance, EU/China RoHS Declaration of Conformity

#### Conformity with Harmonized Standards/Technical Specifications:

- Directive 2011/65/EU RoHS “Recast” (RoHS 2) as amended by Directive (EU) 2015/863 and further amended by Directive 2018/739 and Directive 2018/740  
EN 50581:2012
- Management Methods for Controlling Pollution by Electronic Information Products, Ministry of Information Industry Order No. 39 (China RoHS)
- Management Methods for the Restriction of the Use of Hazardous Substances in electrical and Electronic Products, Ministry of Industry and Information Technology Order No. 32 effective July 1, 2016 (China RoHS 2)
- Joint JEDEC/ECA Standard, Definition of “Low-Halogen” for Electronic Products, JS709B

Seagate products rely on the following RoHS 2 exemptions for compliance:

6(a)-I	Lead as an alloying element in steel for machining purposes containing up to 0.35% lead by weight and in batch hot dip galvanized steel components containing up to 0.2% lead by weight
6(b)-II	Lead as an alloying element in aluminum for machining purposes up to 0.4% lead by weight
6c	Copper alloy up to 0.4% lead by weight
7a	Lead in high melting temperature type solders (i.e. lead-based solder alloys containing 85 % by weight or more lead
7(c)-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors (e.g. piezoelectronic devices) or in a glass or ceramic matrix compound

### Due Diligence

For parts and materials in Seagate products procured from external suppliers, we rely on the representations of our suppliers regarding the presence of RoHS 2 substances in these parts and materials. Our supplier contracts require compliance with our chemical substance restrictions, and our suppliers document their compliance with our requirements by providing material content declarations for all parts and materials for Seagate products. Current supplier declarations include disclosure of any substances regulated by RoHS 2 in such parts or materials.

Seagate also has internal systems in place to ensure ongoing compliance and all laws and regulations. These systems include standard operating procedures that ensure that product safety, EMC and environmental compliance requirements are followed and an internal auditing process to ensure compliance with all standard operating procedures.

**Year to Begin Affixing Mark:** 2018

**Manufacturer's Name:** Seagate Technology, LLC  
**Manufacturer's Address:** 10200 South De Anza Blvd.  
**(And Importer)** Cupertino, California 95014-3029 U.S.A.

**European Contact:** Director of Operations  
Seagate Singapore Int'l HQ Pte. Ltd  
Koolhovenlaan 1  
1119 NB Schiphol – Rijk  
The Netherlands

**Type of Equipment:** Solid State Drive  
**Product Name: (Internal):** BarraCuda 510, Nytro 510 DCT, IronWolf 510 **(Aspen Single-sided board)**

**Regulatory Model Number(s): STA015**

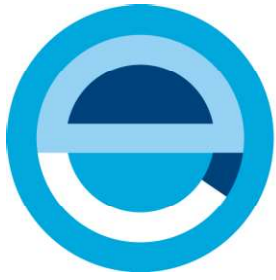
<b>Seagate Models:</b>	<b>BarraCuda510</b>	<b>Nytro 510 DCT</b>	<b>IronWolf 510</b>
	ZP256CM30031	XP240DC30001	ZP240NM30001
	ZP512CM30031	XP480DC30001	ZP480NM30001
	ZP1024CM30031	XP240DC30011	
	ZP2048CM30031	XP480DC30011	<b>BarraCuda 515</b>
	ZP256CM30011		
	ZP512CM30011		ZP256MC30021
	ZP1024CM30011		ZP512MC30021
	ZP2048CM30011		

This product or products are in conformity with the relevant Union harmonization legislation. This declaration of conformity is issued under the sole responsibility of Seagate Technology LLC.

**Date:** September 30, 2019 | 15:20:39 PDT

DocuSigned by:  
*Matt Brown*  
(Signature)  
180C27331AE84C5...

**Matthew C. Brown**  
**Vice President**  
**Operations and Technology**

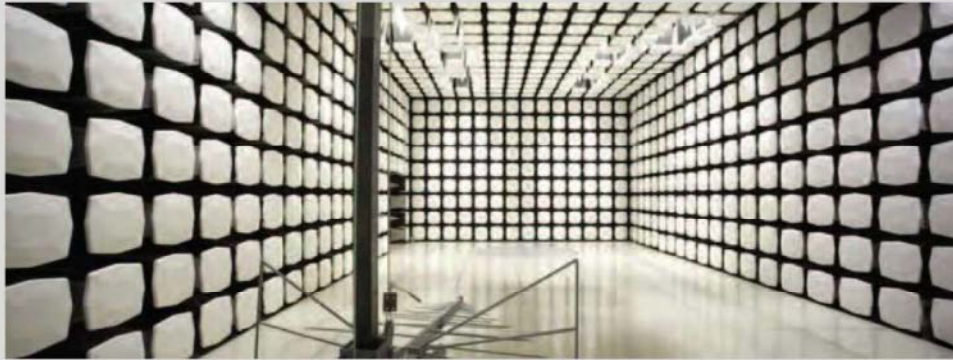


# element

**Seagate Technology LLC**

**STA015**

**Report # SEAG0198**



NVLAP LAB CODE: 200881-0



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# CERTIFICATE OF TEST

**Last Date of Test: November 19, 2018**  
**Seagate Technology LLC**  
**Model: STA015**

## Emissions

### Standards

Specification	Method
AS/NZS CISPR 32:2015 Class B	AS/NZS CISPR 32:2015
EN 55032:2012/AC:2013 Class B	CISPR 32:2015
EN 61000-3-2:2014	IEC 61000-3-2:2014
EN 61000-3-3:2013	IEC 61000-3-3:2013
FCC 15.107:2018 Class B FCC 15.109:2018 Class B FCC 15.109(g):2018 Class B ICES-003:2016 updated April 2017 Class B	ANSI C63.4:2014
VCCI 32-1 Class B	CISPR 32:2015

### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	
Harmonic Current Emissions	Yes	Pass	
Voltage Fluctuations and Flicker	Yes	Pass	

### Deviations From Test Standards

None

### Approved By:



Matt Nuernberg, Operations Manager

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# CERTIFICATE OF TEST



Last Date of Test: November 19, 2018  
Seagate Technology LLC  
Model: STA015

## Immunity

### Standards

Specification	Method
EN 55024:2010	IEC 61000-4-2:2008
	IEC 61000-4-3:2010
	IEC 61000-4-5:2014
	IEC 61000-4-6:2013
	IEC 61000-4-8:2009
	IEC 61000-4-11:2004

### Results

Test Description	Performance Criteria			Comments
	Applied	Standard Specified	Observed Criteria	
Electrostatic Discharge (ESD)	Yes	B	A	
Radiated Immunity	Yes	A	A	
Electrical Fast Transients and Bursts (EFT)	Yes	B	B	
Surge	Yes	B	A	
Conducted Immunity	Yes	A	A	
Magnetic Field Immunity	Yes	A	A	
Voltage Interruptions	Yes	C	C	
Voltage Dips	Yes	B/C	A/C	

Details on the application of the performance criteria, as well as any manufacturer provided performance criteria or acceptable degradation of performance, are all contained within the report.

### Deviations From Test Standards

None

### Approved By:

Matt Nuernberg, Operations Manager

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# 방송통신기자재등의 적합등록 필증

## Registration of Broadcasting and Communication Equipments

상호 또는 성명 Trade Name or Registrant	SEAGATE TECHNOLOGY LLC
기자재명칭(제품명칭) Equipment Name	Solid State Drive
기본모델명 Basic Model Number	STA015
파생모델명 Series Model Number	ZP512CM30031, ZP256MC30021, ZP512MC30021, ZP480NM30001, XP480DC30001, XP240DC30011, XP480DC30011, ZP240NM30001, XP240DC30001, ZP2048CM30011, ZP512CM30011, ZP2048CM30031, ZP1024CM30031, ZP256CM30031, ZP256CM30011, ZP1024CM30011
등록번호 Registration No.	R-R-STX-STA015
제조사/제조(조립)국가 Manufacturer/Country of Origin	SEAGATE TECHNOLOGY LLC / 대만, 태국
등록연월일 Date of Registration	2018-12-03
기타 Others	

위 기자재는 「전파법」 제58조의2 제3항에 따라 등록되었음을 증명합니다.

It is verified that foregoing equipment has been registered under the Clause 3, Article 58-2 of Radio Waves Act.

2019년(Year) 10월(Month) 04일(Day)

국립전파연구원장



Director General of National Radio Research Agency

※ 적합등록 방송통신기자재는 반드시 "적합성평가표시" 를 부착하여 유통하여야 합니다.  
위반시 과태료 처분 및 등록이 취소될 수 있습니다.







Report No. SEAG0198.1

NRRA Notice 2017-71 (2017.12.28) Test Method for Electromagnetic Compatibility

Applicant Information	Applicant:	Seagate Technology LLC	
	Address:	1280 Disc Drive Shakopee, MN 55379	
	Contact Name:	Curt Propson	
Product Information	Equipment Name:	Solid State Device	
	Model Name:	STA015	
	KCC ID Number	R-R-STX-STA015	
	Manufacturer:	Seagate Technology LLC	
	Manufacturer Address:	1280 Disc Drive Shakopee, MN 55379	
	Origin Country:	Taiwan, Thailand	
Date(s) of testing		2018-11-15, 2018-11-16, 2018-11-19	
Equipment Class		<input type="checkbox"/> Class A	<input checked="" type="checkbox"/> Class B
Test Results		<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL
Lab Performing the Tests	Element Materials Technology Brooklyn Park Lab 9349 W Broadway Ave. Brooklyn Park, MN 55445 612-638-5136 888-364-2378		

	
Test Technicians: Andrew Rogstad	Operations Manager: Matt Nuernberg

# CERTIFICATE OF TEST

**Last Date of Test: November 19, 2018**  
**Seagate Technology LLC**  
**Model: STA015**

## Emissions

### Standards

Specification	Method
KN 32 Class B	KN 32

Technical Requirements for Electromagnetic Compatibility: NRRRA Notice 2017-19 (2017.12.28)  
 Test Methods for Electromagnetic Compatibility: NRRRA Notice 2017-71 (2017.12.28)  
 Notice regarding Conformity Evaluation of Broadcasting and Communication Equipment: NRRRA Notice 2017-14 (2017.12.05)

### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	

### Deviations From Test Standards

None

### Approved By:



Matt Nuernberg, Operations Manager

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# CERTIFICATE OF TEST

**Last Date of Test: November 19, 2018**  
**Seagate Technology LLC**  
**Model: STA015**

## Immunity

### Standards

Specification	Method
KN 35	KN 61000-4-2
	KN 61000-4-3
	KN 61000-4-4
	KN 61000-4-5
	KN 61000-4-6
	KN 61000-4-8
	KN 61000-4-11

Technical Requirements for Electromagnetic Compatibility: NRRA Notice 2017-19 (2017.12.28)  
 Test Methods for Electromagnetic Compatibility: NRRA Notice 2017-71 (2017.12.28)  
 Notice regarding Conformity Evaluation of Broadcasting and Communication Equipment: NRRA Notice 2017-14 (2017.12.05)

### Results

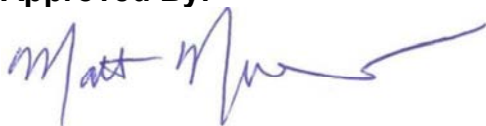
Test Description	Performance Criteria			Comments
	Applied	Standard Specified	Observed Criteria	
Electrostatic Discharge (ESD)	Yes	B	A	
Radiated Immunity	Yes	A	A	
Electrical Fast Transients and Bursts (EFT)	Yes	B	B	
Surge	Yes	B	A	
Conducted Immunity	Yes	A	A	
Magnetic Field Immunity	Yes	A	A	
Voltage Interruptions	Yes	C	C	
Voltage Dips	Yes	B/C	A/A	

Details on the application of the performance criteria, as well as any manufacturer provided performance criteria or acceptable degradation of performance, are all contained within the report.

### Deviations From Test Standards

None

### Approved By:



Matt Nuernberg, Operations Manager

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# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20181212-E145123  
**Report Reference** E145123-A6003-UL  
**Issue Date** 2018-DECEMBER-12

**Issued to:** SEAGATE TECHNOLOGY L L C  
1280 DISC DR  
SHAKOPEE MN 55379-1863

**This certificate confirms that  
representative samples of**

COMPONENT - AUDIO/VIDEO, INFORMATION AND  
COMMUNICATION TECHNOLOGY EQUIPMENT

Solid State Drive  
STA015, STA016

Have been investigated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.


**Standard(s) for Safety:** UL 62368-1 and CAN/CSA C22.2 No. 62368-1-14 Standard for Audio/video, information and communication technology equipment Part 1: Safety requirements.

**Additional Information:** See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.



Bruce Mahrenholz, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20190115-E145123  
**Report Reference** E145123-A55-UL  
**Issue Date** 2019-JANUARY-15

**Issued to:** SEAGATE TECHNOLOGY L L C  
1280 DISC DR  
SHAKOPEE MN 55379-1863

**This certificate confirms that  
representative samples of**

Information Technology Equipment Including Electrical  
Business Equipment – Component;  
Audio/Video, Information and Communication Technology  
Equipment - Component  
Solid State Drive – Model: STA015, STA016

Have been investigated by UL in accordance with the  
component requirements in the Standard(s) indicated on  
this Certificate. UL Recognized components are incomplete  
in certain constructional features or restricted in  
performance capabilities and are intended for installation in  
complete equipment submitted for investigation to UL LLC.


**Standard(s) for Safety:** UL 60950-1, 2nd Edition, 2014-10-14, “Information  
Technology Equipment - Safety - Part 1: General  
Requirements” and CAN/CSA C22.2 No. 60950-1-07, 2nd  
Edition, 2014-10, “Information Technology Equipment -  
Safety - Part 1: General Requirements.”

**Additional Information:** See the UL Online Certifications Directory at  
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified  
and covered under UL’s Follow-Up Services.

Look for the UL Recognized Component Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





Product Service

# CERTIFICATE

No. B 041780 0674 Rev. 00

**Holder of Certificate:** **Seagate Technology LLC**  
1280 Disc Drive  
Shakopee, MN 55379-1863  
USA

**Certification Mark:**



**Product:** **Disk drives**

**Solid State Drive**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

**Test report no.:** 092-72143766-000

**Valid until:** 2023-12-06

**Date,** 2018-12-10 ( William P. Weller )



Product Service

# CERTIFICATE

No. B 041780 0674 Rev. 00

## Model(s):

Regulatory Models: STA015 and STA016

## Parameters:

Rated Input Voltage:	+3.3Vdc
Rated Frequency:	dc
Rated Input Current:	STA015: 1.4A STA016: 1.2A
Protection Class:	III
Degree of Protection:	IPX0

## Conditions of Acceptability:

1. Solid state drives are to be supplied by a reliably SELV power supply.
2. Suitable enclosure (fire/mechanical) to be provided/evaluated when drive is installed in the end use product.
3. Proper air flow should be considered in the end use product to limit maximum case temperature to 60°C. Testing was conducted with a 40 CFM fan.

**Tested according to:** EN 62368-1:2014

**Production Facility(ies):** 096583, 028752



Product Service

# CERTIFICATE

No. B 041780 0673 Rev. 00

**Holder of Certificate:** **Seagate Technology LLC**  
1280 Disc Drive  
Shakopee, MN 55379-1863  
USA

**Certification Mark:**



**Product:** **Disk drives**

**Solid State Drive**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

**Test report no.:** 092-72143844-000

**Valid until:** 2020-12-20

**Date,** 2018-12-10 ( William P. Weller )





Product Service

# CERTIFICATE

No. B 041780 0673 Rev. 00

**Model(s):** Regulatory Models: STA015 and STA016

## Parameters:

Rated Input Voltage:	+3.3Vdc
Rated Frequency:	dc
Rated Input Current:	STA015: 1.4A STA016: 1.2A
Protection Class:	III
Degree of Protection:	IPX0

## Conditions of Acceptability:

1. Solid state drives are to be supplied by a reliably SELV power supply.
2. Suitable enclosure (fire/mechanical) to be provided/evaluated when drive is installed in the end use product.
3. Proper air flow should be considered in the end use product to limit maximum case temperature to 60°C. Testing was conducted with a 40 CFM fan.

**Tested according to:** EN 60950-1:2006/A2:2013

**Production Facility(ies):** 096583, 028752

*William P. Meller*

符合性聲明書  
Declaration of Conformity

報驗義務人代碼 Code of the applicant	編 號 Number
D33027	101420190949

本符合性聲明書應依商品檢驗法規定備齊相關技術文件後始得簽具  
Please check all the related technical documents in accordance with the Commodity Inspection Act before signing the form.

報驗義務人：台灣希捷科技股份有限公司(Seagate Technology Taiwan, Ltd.)

Obligatory Applicant

地址：臺北市松山區復興北路 363 號 14 樓 B 室

Address

電話：886-2-2514-2273

Telephone

商品中 ( 英 ) 文名稱：固態磁碟機 SSD

Commodity Name

商品型式 ( 或型號 )：

Commodity Type ( Model )

STA015: ZP256CM30031, ZP512CM30031, ZP1024CM30031,  
ZP2048CM30031, ZP256CM30011, ZP512CM30011, ZP1024CM30011,  
ZP2048CM30011, XP240DC30001, XP480DC30001, XP240DC30011,  
XP480DC30011, ZP240NM30001, ZP480NM30001, ZP256MC30021,  
ZP512MC30021

符合之檢驗標準及版次：CNS 13438/ Complete 2006 Class B/ Section 5 "Marking of presence" of CNS 15663 2013.7)

Standard(s) and version

試驗報告編號：SEAG0198.2 (EMC)/ ATS/GENV/1056/18/yao and ATS/GENV/240/19/yao (RoHS)

Test Report Number

試驗室名稱及代號：Element Materials Technology (EMC)/ ALS Laboratory Group (RoHS)

Testing laboratory name and designation number

SL2-IN-E-1152R

符合性聲明檢驗標識及識別號碼：

The form of the DoC marking appears like this



D33027  
RoHS

或

or



D33027  
RoHS

茲聲明上述商品符合商品檢驗法符合性聲明之規定，若因違反本聲明書所聲明之內容，願意擔負相關法律責任。

I hereby declare that the listed commodity conforms to Declaration of Conformity requirements stipulated in the Commodity Inspection Act. I agree to take any legal obligations should violations against the Declaration of Conformity occur.

報驗義務人：台灣希捷科技股份有限公司/ **Lai Chun Cheong** ( 簽章 )

Obligatory Applicant The Board Chairman of Seagate Technology Taiwan ( Signature )

中 華 民 國 108 年 10 月 14 日

DATE (year) ( month ) ( day )



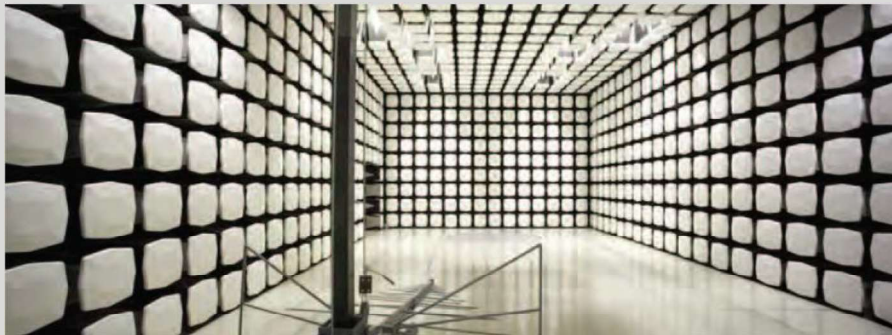
# element

## Seagate Technology LLC

STA015

ZP256CM30031, ZP1024CM30031, ZP2048CM30031, ZP512CM30031,  
ZP512CM30011, ZP1024CM30011, ZP2048CM30011, ZP256CM30011,  
XP240DC30001, XP240DC30011, ZP240NM30001, XP480DC30001,  
XP480DC30011, ZP480NM30001, ZP256MC30021, ZP512MC30021

Report # SEAG0198.2 Rev. 2



NVLAP LAB CODE: 200881-0



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# CERTIFICATE OF TEST

Last Date of Test: November 16, 2018  
Seagate Technology LLC  
Model: STA015

## Emissions

### Standards

Specification	Method
CNS 13438:2006 (Complete) Class B	CNS 13438:2006 (Complete)

### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	

### Deviations From Test Standards

None

### Approved By:

David Schaefer, Department Manager

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## **Regulatory and certification documents package**

Regulatory Model Number: [STA019](#)

Series Name(s): ZP250CM30001, ZP500CM30001, ZP1000CM30001,

Internal Name: E16 Single sided PCB.

<u>Date</u>	<u>Comments:</u>
Sept 18, 2019	Package generated.

### Contents:

- Australia/New Zealand - RCM mark SDoC (Supplier Declaration of Conformity)
- Australia/New Zealand - CoT (Certificate of Test)
- Canada ICES - CoT (Certificate of Test)
- CB Certificate(s)
- CE DoC (Declaration of Conformity)
- CE EMC CoT (Certificate of Test)
- FCC SDoC
- FCC CoT (Certificate of Test)
- Korea RRL – Certificate
- Korea - CoT (Certificate of Test)
- UL/cUL safety
- TUV safety
- Taiwan BSMI certificate
- Taiwan CoT (Certificate of Test)
- VCCI CoT (Certificate of Test)



## Supplier's Declaration of Conformity

Declaration of Conformity as a registered and responsible supplier under the Australian Communications and Media Authority (ACMA) regulatory arrangements for Regulatory Compliance Mark (RCM) and it's placement.

Responsible Supplier Name: Seagate Technology Australia Pty Ltd  
Responsible Supplier Number: E806

**Seagate Technology Australia Pty. Limited**  
**Level 7, 91 Phillip St**  
**PARRAMATTA NSW 2150**  
**AUSTRALIA**

Declare under our sole responsibility that the following product(s):

**Seagate M.2 NVMe Solid State Drive**

---

**Model: STA019**

---

to which this declaration relates is in conformity with the following standard(s):

Title

Test Regulation

**Australian/New Zealand Standard**

---

**AS/NZS CISPR 32: 2015**

---

(Name of the Authorized Person)

**Sam Zavaglia**

---

(Title of the Authorized Person)

**Senior Field Applications Engineer**

---

(Date of Issue)

**29<sup>th</sup> August 2019**

---

(Signature)

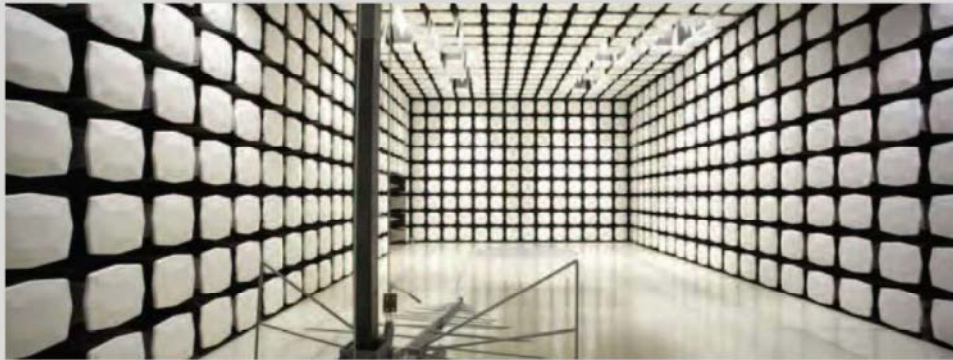


# element

**Seagate Technology LLC**

**Model STA019**

**Report # SEAG0232**



NVLAP LAB CODE: 200881-0



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# CERTIFICATE OF TEST

**Last Date of Test: August 8, 2019**  
**Seagate Technology LLC**  
**Model STA019**

## Emissions

### Standards

Specification	Method
AS/NZS CISPR 32:2015 Class B	AS/NZS CISPR 32:2015
EN 55032:2012/AC:2013 Class B	CISPR 32:2015
EN 61000-3-2:2014	IEC 61000-3-2:2018
EN 61000-3-3:2013	IEC 61000-3-3:2013 +A1:2017
FCC 15.107:2019 Class B FCC 15.109:2019 Class B FCC 15.109(g):2019 Class B ICES-003:2016 updated April 2017 Class B	ANSI C63.4:2014
VCCI 32-1 Class B VCCI-CISPR 32:2016 Class B	CISPR 32:2015

### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	
Harmonic Current Emissions	Yes	Pass	
Voltage Fluctuations and Flicker	Yes	Pass	

### Deviations From Test Standards

None

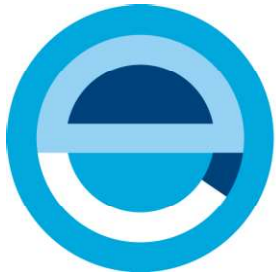
### Approved By:



Matt Nuernberg, Operations Manager

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# element

**Seagate Technology LLC**

**Model STA019**

**Report # SEAG0232**



NVLAP LAB CODE: 200881-0



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# CERTIFICATE OF TEST

**Last Date of Test: August 8, 2019**  
**Seagate Technology LLC**  
**Model STA019**

## Emissions

### Standards

Specification	Method
AS/NZS CISPR 32:2015 Class B	AS/NZS CISPR 32:2015
EN 55032:2012/AC:2013 Class B	CISPR 32:2015
EN 61000-3-2:2014	IEC 61000-3-2:2018
EN 61000-3-3:2013	IEC 61000-3-3:2013 +A1:2017
FCC 15.107:2019 Class B FCC 15.109:2019 Class B FCC 15.109(g):2019 Class B ICES-003:2016 updated April 2017 Class B	ANSI C63.4:2014
VCCI 32-1 Class B VCCI-CISPR 32:2016 Class B	CISPR 32:2015

### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	
Harmonic Current Emissions	Yes	Pass	
Voltage Fluctuations and Flicker	Yes	Pass	

### Deviations From Test Standards

None

### Approved By:



Matt Nuernberg, Operations Manager

*Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.*



Ref. Certif. No.

DE 3 - 503380

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

### CB TEST CERTIFICATE

Product

Name and address of the applicant

Name and address of the manufacturer

Name and address of the factory

Ratings and principal characteristics

Trade mark (if any)

Customer's Testing Facility (CTF) Stage used

Model/type Ref.

A sample of the product was tested and found to be in conformity with

as shown in the Test Report Ref. No. which forms part of this certificate

Disk drives

**Seagate Technology LLC**

1280 Disc Drive  
Shakopee, MN 55379-1863  
USA

Seagate Technology LLC  
1280 Disc Drive, Shakopee, MN 55379-1863, USA

CAL-COMP Electronics (Thailand) Co. Ltd.  
60 Moo, 8 Sethakij Road, Klong Maduea, Kratoom Bean,  
Samuthsakorn 74110, THAILAND

Netronix, Inc.  
No. 945, Boai Street, 30265 Jubei City, Hsinchu, TAIWAN

Rated Input Voltage: +3.3Vdc  
Rated Frequency: dc  
Rated Input Current: STA019 1.2A  
STA020 1.55A  
Protection Class: III  
Degree of Protection: IPX0

Seagate

CTF STAGE 2

STA019 and STA020

IEC 60950-1:2005  
IEC 60950-1:2005/AMD1:2009  
IEC 60950-1:2005/AMD2:2013

092-72152145A-000

This CB Test Certificate is issued by the National Certification Body

CB 041780 0695 Rev. 00  
Date, 2019-09-12

( Adrian Rabago Valenzuela )



Product Service

Page 1 of 1  
TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

## IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

**CB TEST CERTIFICATE**

## Product

Disk drives

## Name and address of the applicant

**Seagate Technology LLC**  
1280 Disc Drive  
Shakopee, MN 55379-1863  
USA

## Name and address of the manufacturer

Seagate Technology LLC  
1280 Disc Drive, Shakopee, MN 55379-1863, USA

## Name and address of the factory

CAL-COMP Electronics (Thailand) Co. Ltd.  
60 Moo, 8 Sethakij Road, Klong Maduea, Kratoom Bean,  
Samuthsakorn 74110, THAILANDNetronix, Inc.  
No. 945, Boai Street, 30265 Jubei City, Hsinchu, TAIWAN

## Ratings and principal characteristics

Rated Input Voltage: +3.3Vdc  
Rated Frequency: dc  
Rated Input Current: STA019 1.2A  
STA020 1.55A  
Protection Class: III  
Degree of Protection: IPX0

## Trade mark (if any)

Seagate

## Customer's Testing Facility (CTF) Stage used

CTF STAGE 2

## Model/type Ref.

STA019 and STA020

A sample of the product was tested and found to be in conformity with as shown in the Test Report Ref. No. which forms part of this certificate

IEC 62368-1:2014  
092-72152145B-000

This CB Test Certificate is issued by the National Certification Body

CB 041780 0696 Rev. 00  
Date, 2019-09-12Page 1 of 1  
TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

Product Service



## EU Declaration of Conformity

### Product Safety and EMC Compliance

The product(s) meets the requirements of The Electromagnetic Compatibility (EMC) Directive 2014/30/EU by application of the following standards:

<u>EN 55032:2012</u>	Electromagnetic compatibility of multimedia equipment — Emission requirements – class B.
<u>EN55024:2010</u>	Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement
<u>EN61000-3-2:2014</u>	Limits for Harmonic Current Emissions (Equipment Input Current $\leq 16$ Amps Per Phase)
<u>EN61000-3-3:2013</u>	Limitation of Voltage Changes, Voltage Fluctuations and Flicker in Low-Voltage Supply Systems for Equipment with Rated Current $\leq 16$ Amps Per Phase

The product(s) meets the requirements of The Low Voltage Directive (LVD) 2014/35/EU by application of the following standards:

<u>EN 62368-1:2014</u>	Audio/video, information and communication technology equipment - Part 1: Safety requirements (IEC 62368-1:2014, Modified)
<u>EN 60950-1:2006 /A11:2009 /A1:2010 /A12:2011/A2:2013</u>	Information Technology Equipment - Safety- (Second Edition) Part 1: General Requirements

### Product Environmental Compliance, EU/China RoHS Declaration of Conformity

#### Conformity with Harmonized Standards/Technical Specifications:

- Directive 2011/65/EU RoHS “Recast” (RoHS 2) as amended by Directive (EU) 2015/863 and further amended by Directive 2018/739 and Directive 2018/740  
EN 50581:2012
- Management Methods for Controlling Pollution by Electronic Information Products, Ministry of Information Industry Order No. 39 (China RoHS)
- Management Methods for the Restriction of the Use of Hazardous Substances in electrical and Electronic Products, Ministry of Industry and Information Technology Order No. 32 effective July 1, 2016 (China RoHS 2)
- Joint JEDEC/ECA Standard, Definition of “Low-Halogen” for Electronic Products, JS709B

Seagate products rely on the following RoHS 2 exemptions for compliance:

6(a)-I	Lead as an alloying element in steel for machining purposes containing up to 0.35% lead by weight and in batch hot dip galvanized steel components containing up to 0.2% lead by weight
6(b)-II	Lead as an alloying element in aluminum for machining purposes up to 0.4% lead by weight
6c	Copper alloy up to 0.4% lead by weight
7a	Lead in high melting temperature type solders (i.e. lead-based solder alloys containing 85 % by weight or more lead
7(c)-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors (e.g. piezoelectronic devices) or in a glass or ceramic matrix compound

### Due Diligence

For parts and materials in Seagate products procured from external suppliers, we rely on the representations of our suppliers regarding the presence of RoHS 2 substances in these parts and materials. Our supplier contracts require compliance with our chemical substance restrictions, and our suppliers document their compliance with our requirements by providing material content declarations for all parts and materials for Seagate products. Current supplier declarations include disclosure of any substances regulated by RoHS 2 in such parts or materials.

Seagate also has internal systems in place to ensure ongoing compliance and all laws and regulations. These systems include standard operating procedures that ensure that product safety, EMC and environmental compliance requirements are followed, and an internal auditing process to ensure compliance with all standard operating procedures.

**Year to Begin Affixing Mark:** 2019

**Manufacturer's Name:** Seagate Technology, LLC  
**Manufacturer's Address:** 10200 South De Anza Blvd.  
**(And Importer)** Cupertino, California 95014-3029 U.S.A.  
**European Contact:** Director of Operations  
Seagate Technology (Netherlands) B.V.  
Tupolevlaan 105,  
1119 PA Schiphol – Rijk,  
The Netherlands

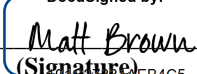
**Type of Equipment:** Solid State Drive  
**Product Name:** BarraCuda 510 SSD

**Regulatory Model Number(s):** STA019

**Seagate Models:** BarraCuda 510 SSD  
ZP250CM30001  
ZP500CM30001  
ZP1000CM30001

This product or products are in conformity with the relevant Union harmonization legislation. This declaration of conformity is issued under the sole responsibility of Seagate Technology LLC.

**Date:** September 30, 2019 | 15:17:41 PDT

DocuSigned by:  
  
(Signature)

**Matthew C. Brown**  
**Vice President**  
**Operations and Technology**

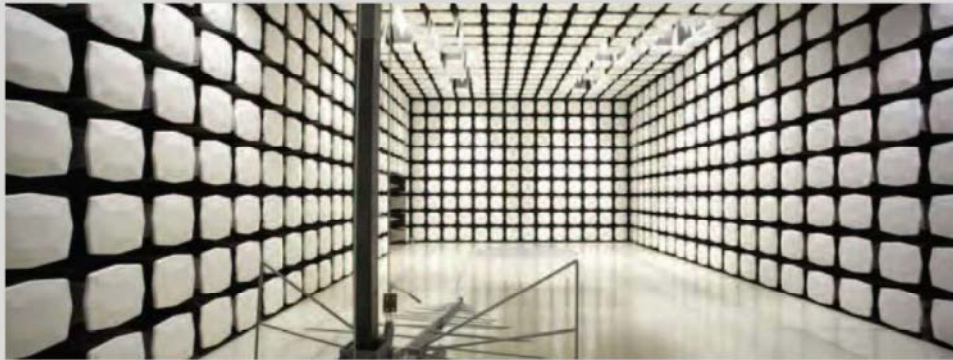


# element

**Seagate Technology LLC**

**Model STA019**

**Report # SEAG0232**



NVLAP LAB CODE: 200881-0



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# CERTIFICATE OF TEST

**Last Date of Test: August 8, 2019**  
**Seagate Technology LLC**  
**Model STA019**

## Emissions

### Standards

Specification	Method
AS/NZS CISPR 32:2015 Class B	AS/NZS CISPR 32:2015
EN 55032:2012/AC:2013 Class B	CISPR 32:2015
EN 61000-3-2:2014	IEC 61000-3-2:2018
EN 61000-3-3:2013	IEC 61000-3-3:2013 +A1:2017
FCC 15.107:2019 Class B FCC 15.109:2019 Class B FCC 15.109(g):2019 Class B ICES-003:2016 updated April 2017 Class B	ANSI C63.4:2014
VCCI 32-1 Class B VCCI-CISPR 32:2016 Class B	CISPR 32:2015

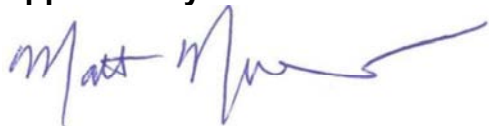
### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	
Harmonic Current Emissions	Yes	Pass	
Voltage Fluctuations and Flicker	Yes	Pass	

### Deviations From Test Standards

None

### Approved By:



Matt Nuernberg, Operations Manager

*Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.*



# CERTIFICATE OF TEST



Last Date of Test: August 8, 2019  
Seagate Technology LLC  
Model STA019

## Immunity

### Standards

Specification	Method
	IEC 61000-4-2:2008
	IEC 61000-4-3:2010
	IEC 61000-4-4:2012
EN 55024:2010	IEC 61000-4-5:2014 +A1:2017
	IEC 61000-4-6:2013
	IEC 61000-4-8:2009
	IEC 61000-4-11:2004 + A1:2017

### Results

Test Description	Performance Criteria			Comments
	Applied	Standard Specified	Observed Criteria	
Electrostatic Discharge (ESD)	Yes	B	A	
Radiated Immunity	Yes	A	A	
Electrical Fast Transients and Bursts (EFT)	Yes	B	B	
Surge	Yes	B	A	
Conducted Immunity	Yes	A	A	
Magnetic Field Immunity	Yes	A	A	
Voltage Interruptions	Yes	C	C	
Voltage Dips	Yes	B/C	A/C	

Details on the application of the performance criteria, as well as any manufacturer provided performance criteria or acceptable degradation of performance, are all contained within the report.

### Deviations From Test Standards

None

### Approved By:

Matt Nuernberg, Operations Manager

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## Declaration of Conformity

Standards to which conformity is declared:

FCC Part 15B

47 CFR FCC Part 15B: 2019 (Class B)  
Information Technology Equipment (ITE) - Limits  
and methods of measurement

**Manufacturer Name:** Seagate Technology LLC  
**Manufacturer Address:** 10200 South DeAnza Boulevard  
**(And Importer)** Cupertino California 95014

**Type of Equipment :** Solid State Device

**Product Model Number :** STA019

Seagate Technology LLC hereby declares that the equipment specified above conforms with the protection requirements of the above named Directive(s) and Standards.

**Location:** Minnesota, USA

A handwritten signature in blue ink, appearing to read 'Gary A. Stigsell'. Below the signature is the word '(Signature)' in a smaller font.

(Signature)

**Certificate Date:** 12 Sept, 2019

Gary A. Stigsell  
(Full Printed Name)  
Sr Project/Program Manager  
(position)  
952-402-2544  
(Phone)

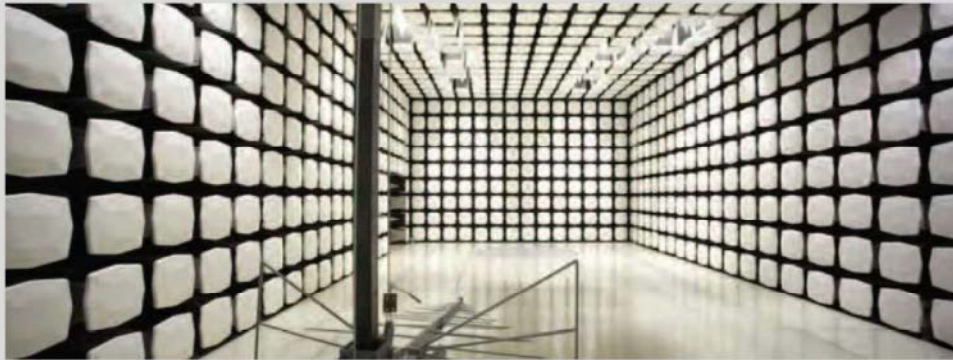


# element

**Seagate Technology LLC**

**Model STA019**

**Report # SEAG0232**



NVLAP LAB CODE: 200881-0



*This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government. This Report shall not be reproduced, except in full without written approval of the laboratory.*

# CERTIFICATE OF TEST

**Last Date of Test: August 8, 2019**  
**Seagate Technology LLC**  
**Model STA019**

## Emissions

### Standards

Specification	Method
AS/NZS CISPR 32:2015 Class B	AS/NZS CISPR 32:2015
EN 55032:2012/AC:2013 Class B	CISPR 32:2015
EN 61000-3-2:2014	IEC 61000-3-2:2018
EN 61000-3-3:2013	IEC 61000-3-3:2013 +A1:2017
FCC 15.107:2019 Class B FCC 15.109:2019 Class B FCC 15.109(g):2019 Class B ICES-003:2016 updated April 2017 Class B	ANSI C63.4:2014
VCCI 32-1 Class B VCCI-CISPR 32:2016 Class B	CISPR 32:2015

### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	
Harmonic Current Emissions	Yes	Pass	
Voltage Fluctuations and Flicker	Yes	Pass	

### Deviations From Test Standards

None

### Approved By:



Matt Nuernberg, Operations Manager

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# 방송통신기자재등의 적합등록 필증

## Registration of Broadcasting and Communication Equipments

상호 또는 성명 <i>Trade Name or Registrant</i>	SEAGATE TECHNOLOGY LLC
기자재명칭(제품명칭) <i>Equipment Name</i>	Solid State Drive
기본모델명 <i>Basic Model Number</i>	STA019
파생모델명 <i>Series Model Number</i>	ZP1000CM30001, ZP500CM30001, ZP250CM30001
등록번호 <i>Registration No.</i>	R-R-STX-STA019
제조사/제조(조립)국가 <i>Manufacturer/Country of Origin</i>	SEAGATE TECHNOLOGY LLC / 태국, 대만
등록연월일 <i>Date of Registration</i>	2019-08-27
기타 <i>Others</i>	

위 기자재는 「전파법」 제58조의2 제3항에 따라 등록되었음을 증명합니다.

It is verified that foregoing equipment has been registered under the Clause 3, Article 58-2 of Radio Waves Act.

2019년(Year) 08월(Month) 27일(Day)

국립전파연구원장



Director General of National Radio Research Agency

※ 적합등록 방송통신기자재는 반드시 "적합성평가표시" 를 부착하여 유통하여야 합니다.  
위반시 과태료 처분 및 등록이 취소될 수 있습니다.



Report No. SEAG0232.1

NRRA Notice 2017-71 (2017.12.28) Test Method for Electromagnetic Compatibility

Applicant Information	Applicant:	Seagate Technology LLC	
	Address:	1280 Disc Drive Shakopee, MN 55379	
	Contact Name:	Curt Propson	
Product Information	Equipment Name:	Solid State Drive	
	Model Name:	STA019	
	KCC ID Number	R-R-STX-STA019	
	Manufacturer:	Seagate Technology LLC	
	Manufacturer Address:	1280 Disc Drive Shakopee, MN 55379	
	Origin Country:	Thailand, Taiwan	
Date(s) of testing		2019-08-06, 2019-08-07, 2019-08-08	
Equipment Class		<input type="checkbox"/> Class A	<input checked="" type="checkbox"/> Class B
Test Results		<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL
Lab Performing the Tests	Element Materials Technology Brooklyn Park Lab 9349 W Broadway Ave. Brooklyn Park, MN 55445 612-638-5136 888-364-2378		

Test Technicians: William Hoffa, Dan Haas, Dustin Sparks	Operations Manager: Matt Nuernberg



# CERTIFICATE OF TEST

**Last Date of Test: August 8, 2019**  
**Seagate Technology LLC**  
**Model: STA019**

## Emissions

### Standards

Specification	Method
KN 32 Class B	KN 32

Technical Requirements for Electromagnetic Compatibility: NRRRA Notice 2017-19 (2017.12.28)  
 Test Methods for Electromagnetic Compatibility: NRRRA Notice 2017-71 (2017.12.28)  
 Notice regarding Conformity Evaluation of Broadcasting and Communication Equipment: NRRRA Notice 2017-14 (2017.12.05)

### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	

### Deviations From Test Standards

None

**Approved By:**

*Matt Nuernberg, Operations Manager*

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# CERTIFICATE OF TEST

**Last Date of Test: August 8, 2018**  
**Seagate Technology LLC**  
**Model: STA019**

## Immunity

### Standards

Specification	Method
KN 35	KN 61000-4-2
	KN 61000-4-3
	KN 61000-4-4
	KN 61000-4-5
	KN 61000-4-6
	KN 61000-4-8
	KN 61000-4-11

Technical Requirements for Electromagnetic Compatibility: NRRA Notice 2017-19 (2017.12.28)  
 Test Methods for Electromagnetic Compatibility: NRRA Notice 2017-71 (2017.12.28)  
 Notice regarding Conformity Evaluation of Broadcasting and Communication Equipment: NRRA Notice 2017-14 (2017.12.05)

### Results

Test Description	Performance Criteria			Comments
	Applied	Standard Specified	Observed Criteria	
Electrostatic Discharge (ESD)	Yes	B	A	
Radiated Immunity	Yes	A	A	
Electrical Fast Transients and Bursts (EFT)	Yes	B	B	
Surge	Yes	B	A	
Conducted Immunity	Yes	A	A	
Magnetic Field Immunity	Yes	A	A	
Voltage Interruptions	Yes	C	C	
Voltage Dips	Yes	B/C	A/C	

Details on the application of the performance criteria, as well as any manufacturer provided performance criteria or acceptable degradation of performance, are all contained within the report.

### Deviations From Test Standards

None

**Approved By:**

Matt Nuernberg, Operations Manager

*Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information.*



# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20190917-E145123  
**Report Reference** E145123-A57-UL  
**Issue Date** 2019-September-17

**Issued to:** SEAGATE TECHNOLOGY L L C  
1280 DISC DR  
SHAKOPEE MN 55379-1863

**This certificate confirms that  
representative samples of**

COMPONENT - INFORMATION TECHNOLOGY EQUIPMENT  
INCLUDING ELECTRICAL BUSINESS EQUIPMENT  
COMPONENT - AUDIO/VIDEO, INFORMATION AND  
COMMUNICATION TECHNOLOGY EQUIPMENT  
Solid State Drive- STA019, STA020

Have been investigated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

**Standard(s) for Safety:** UL 60950-1 and CAN/CSA C22.2 No. 60950-1-07-  
Information Technology Equipment - Safety - Part 1:  
General Requirements

**Additional Information:** See the UL Online Certifications Directory at  
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.



Bruce Mahrenholz, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20190917-E145123  
**Report Reference** E145123-A6005-UL  
**Issue Date** 2019-September-17

**Issued to:** SEAGATE TECHNOLOGY L L C  
1280 DISC DR  
SHAKOPEE MN 55379-1863

**This certificate confirms that  
representative samples of**

COMPONENT - AUDIO/VIDEO, INFORMATION AND  
COMMUNICATION TECHNOLOGY EQUIPMENT  
COMPONENT - INFORMATION TECHNOLOGY  
EQUIPMENT INCLUDING ELECTRICAL BUSINESS  
EQUIPMENT  
Solid State Drive-STA019, STA020

Have been investigated by UL in accordance with the  
component requirements in the Standard(s) indicated on  
this Certificate. UL Recognized components are incomplete  
in certain constructional features or restricted in  
performance capabilities and are intended for installation in  
complete equipment submitted for investigation to UL LLC.

**Standard(s) for Safety:** UL 62368-1 and CAN/CSA C22.2 No. 62368-1-14-  
Audio/video, information and communication technology  
equipment Part 1: Safety requirements

**Additional Information:** See the UL Online Certifications Directory at  
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified  
and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.



Bruce Mahrenholz, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please  
contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



Ad: 07.17

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ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ CERTIFICADO ◆ CERTIFIKAT ◆ CERTIFICATE



Product Service

# CERTIFICATE

No. B 041780 0691 Rev. 00

**Holder of Certificate:** **Seagate Technology LLC**  
1280 Disc Drive  
Shakopee, MN 55379-1863  
USA

**Certification Mark:**



**Product:** **Disk drives**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

**Test report no.:** 092-72123961-200

**Valid until:** 2020-12-20

**Date,** 2019-09-13 ( Adrian Rabago Valenzuela )



Product Service

# CERTIFICATE

No. B 041780 0691 Rev. 00

**Model(s):** **Regulatory Models: STA002, STA018, STA019, STA020, STA021**

## Parameters:

Rated Input Voltage:	+5Vdc, +3.3Vdc
Rated Frequency:	dc
Rated Input Current:	
STA002:	1.10A
STA018:	0.20A
STA019:	1.2A
STA020:	1.55A
STA021:	0.30A
Protection Class:	III
Degree of Protection:	IPX0

## Model Differences:

### Regulatory Model Number STA002:

- \* 1TB, SATA interface, 1024 MB cache
- 512GB, SATA interface, 512 MB cache
- 256GB, SATA interface, 256 MB cache
- 128GB, SATA interface, 256 MB cache (possible future configuration)

### Regulatory Model Number STA018

960GB, SATA interface, 2.5"

### Regulatory Model Number STA019

- \* 1000 GigaByte, NVMe Interface, PCIe Gen 3x4, 512E format
- 500 GigaByte, NVMe Interface, PCIe Gen 3x4, 512E format
- 250 GigaByte, NVMe Interface, PCIe Gen 3x4, 512E format

### Regulatory Model Number STA020

- \* 2000 GigaByte, NVMe Interface, PCIe Gen 4x4, 512E format
- 1000 GigaByte, NVMe Interface, PCIe Gen 4x4, 512E format
- 500 GigaByte, NVMe Interface, PCIe Gen 4x4, 512E format

### Regulatory Model Number STA021

- \* 2000 GigaByte, Serial-ATA interface
- 1000 GigaByte, SATA Interface
- 500 GigaByte, SATA Interface
- 250 GigaByte, SATA Interface

\* = Indicates configuration tested



Product Service

# CERTIFICATE

No. B 041780 0691 Rev. 00

### Conditions of Acceptability:

1. Disc drives are to be supplied by a reliably SELV power supply.
2. Suitable enclosure (fire/mechanical) to be provided/evaluated when disc drive is installed in the end use product.
3. Drives were evaluated at maximum ambient (55°C) determined by Seagate specification. Seagate specification also states, a maximum allowable drive case temperature of 60°C. This specification was exceeded during testing.
4. External fan was part of test fixture to maintain recommended case temperature during testing. Additional cooling is recommended as part of end use configuration to maintain recommended operating case temperature at specific airflow.

**Tested according to:** EN 60950-1:2006/A2:2013

**Production Facility(ies):** 096583, 028752

TÜV SÜD  
 ZERTIFIKAT ◆ CERTIFICATE ◆ 認 證 證 書 ◆ CERTIFICADO ◆ CERTIFIKAT ◆ CERTIFICATE





Product Service

# CERTIFICATE

No. B 041780 0692 Rev. 00

**Model(s):** Regulatory Models: STA002, STA012, STA018, STA019, STA020, STA021

## Parameters:

Rated Input Voltage:	+5Vdc, +3.3Vdc
Rated Frequency:	dc
Rated Input Current:	
STA002, STA012:	1.10A
STA018:	0.20A
STA019:	1.2A
STA020:	1.55A
STA021:	0.30A
Protection Class:	III
Degree of Protection:	IPX0

## Conditions of Acceptability:

- Solid state drives are to be supplied by a reliably SELV power supply.
- Suitable enclosure (fire/mechanical) to be provided/evaluated when drive is installed in the end use product.
- Proper air flow should be considered in the end use product to limit maximum case temperature to 60°C. Testing was conducted with a 40 CFM fan.

**Tested according to:** EN 62368-1:2014/A11:2017

**Production Facility(ies):** 028752, 096583

TÜV SÜD  
 ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ CERTIFICADO ◆ CERTIFIKAT ◆ CERTIFICADO ◆ CERTIFICATE

# 符合性聲明書

## Declaration of Conformity

報驗義務人代碼 Code of the applicant	編號 Number
D33027	091320191508

本符合性聲明書應依商品檢驗法規定備齊相關技術文件後始得簽具  
Please check all the related technical documents in accordance with the Commodity Inspection Act before signing the form.

報驗義務人：台灣希捷科技股份有限公司(Seagate Technology Taiwan, Ltd.)

Obligatory Applicant

地址：臺北市松山區復興北路 363 號 14 樓 B 室  
Address

電話：886-2-2514-2273  
Telephone

商品中 ( 英 ) 文名稱：固態磁碟機 SSD  
Commodity Name

商品型式 ( 或型號 ) : STA019: ZP250CM3001, ZP500CM3001, ZP1000CM3001, ZP256MC30021, ZP512MC30021  
Commodity Type ( Model )

符合之檢驗標準及版次：CNS 13438/ Complete 2006 Class B/ Section 5 "Marking of presence" of CNS 15663 2013.7)

Standard(s) and version

試驗報告編號：SEAG0232.2 (EMC)/ ATS/GENV/288/19/yao  
Test Report Number

試驗室名稱及代號：Element Materials Technology (EMC)/ ALS Laboratory Group (RoHS)  
Testing laboratory name and designation number

SL2-IN-E-1152R

符合性聲明檢驗標識及識別號碼：  
The form of the DoC marking appears like this



或  
or



茲聲明上述商品符合商品檢驗法符合性聲明之規定，若因違反本聲明書所聲明之內容，願意擔負相關法律責任。

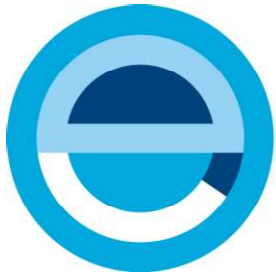
I hereby declare that the listed commodity conforms to Declaration of Conformity requirements stipulated in the Commodity Inspection Act. I agree to take any legal obligations should violations against the Declaration of Conformity occur.

報驗義務人：台灣希捷科技股份有限公司/Lai Chun Cheong ( 簽章 )

Obligatory Applicant The Board Chairman of Seagate Technology Taiwan ( Signature )

中 華 民 國 108 年 09 月 13 日  
DATE (year) ( month ) ( day )





# element

**Seagate Technology LLC**

**Model STA019**

**ZP250CM30001, ZP500CM30001, ZP1000CM30001**

**Report # SEAG0232.2**



NVLAP LAB CODE: 200881-0



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# CERTIFICATE OF TEST

Last Date of Test: August 7, 2019  
Seagate Technology LLC  
Model STA019

## Emissions

### Standards

Specification	Method
CNS 13438:2006 (Complete) Class B	CNS 13438:2006 (Complete)

### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	

### Deviations From Test Standards

None

### Approved By:

Matt Nuernberg, Operations Manager

*Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.*

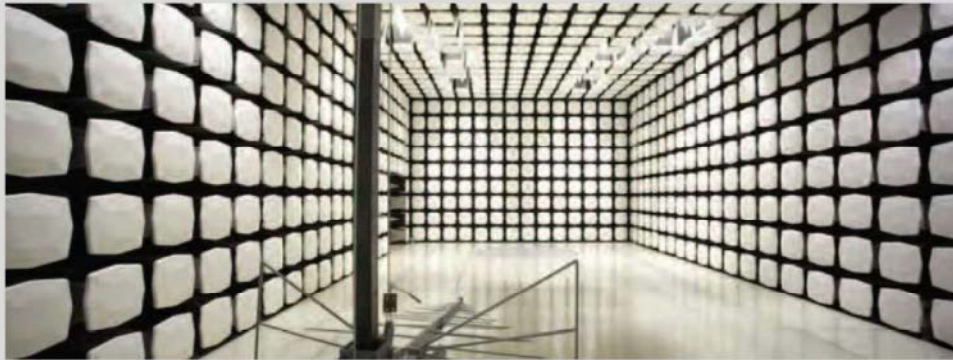


# element

**Seagate Technology LLC**

**Model STA019**

**Report # SEAG0232**



NVLAP LAB CODE: 200881-0



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# CERTIFICATE OF TEST

**Last Date of Test: August 8, 2019**  
**Seagate Technology LLC**  
**Model STA019**

## Emissions

### Standards

Specification	Method
AS/NZS CISPR 32:2015 Class B	AS/NZS CISPR 32:2015
EN 55032:2012/AC:2013 Class B	CISPR 32:2015
EN 61000-3-2:2014	IEC 61000-3-2:2018
EN 61000-3-3:2013	IEC 61000-3-3:2013 +A1:2017
FCC 15.107:2019 Class B FCC 15.109:2019 Class B FCC 15.109(g):2019 Class B ICES-003:2016 updated April 2017 Class B	ANSI C63.4:2014
VCCI 32-1 Class B VCCI-CISPR 32:2016 Class B	CISPR 32:2015

### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	
Harmonic Current Emissions	Yes	Pass	
Voltage Fluctuations and Flicker	Yes	Pass	

### Deviations From Test Standards

None

### Approved By:



Matt Nuernberg, Operations Manager

*Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.*