

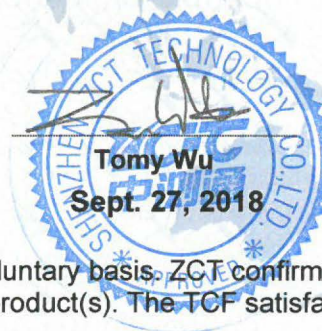


# Verification of Conformity

Certificate No.: 18ZCTE0921001EC

**Applicant** : REITER POLSKA SP.Z.O.O.  
**Address** : UL. WODZIREJOW 5A,02-824 CPT, WARSZAWA, POLAND  
**Manufacturer** :   
**Address** :   
**Product** : Led torch+battery(without ring)  
**Brand Name** : N/A  
**Model No.** : MT01

Requirement	Applied Standards	Document Evidence	Result
EMC Directive	2014/30/EU Electromagnetic Compatibility	Test Report: 18ZCTE0921001ER	Conform
EMC Standards	EN 55015:2013/A1:2015 EN 61547:2009 EN 61000-3-2:2014 EN 61000-3-3:2013		



**Remark:** This Certification of Conformity has been issued on a voluntary basis. ZCT confirms that a Technical Construction File (TCF) is existent for the above listed product(s). The TCF satisfactorily covers the essential requirements of the above listed Directive(s). Other relevant Directives have to be observed in case they are applicable. This Document is only valid for the equipment and configuration described and in conjunction with the TCF detailed above. Whereas the Manufacturer is responsible of the certification of the product(s) and not exempted to perform all the necessary activities before placing the product(s) on the market. The Manufacturer is also responsible of the internal production control to ensure the product(s) are in compliance with the essential requirements of the above mentioned Directive(s). It is recommended that the product bear the CE mark, the notified body number(s) as depicted to the right, only when all the essential requirements have been met, and has been filed with the European Commission. This certificate can be checked for validity at [www.renzhengjiance.com](http://www.renzhengjiance.com)

Shenzhen ZCT Technology Co., Ltd.

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# EMC Test Report

# CE

Product : Led torch+battery(without ring)

Model Number : MT01

Prepared for : REITER POLSKA SP.Z.O.O.  
Address : UL. WODZIREJOW 5A,02-824 CPT, WARSZAWA, POLAND

Prepared By : Shenzhen ZCT Technology Co.,Ltd.  
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Report No. : 18ZCTE0921001ER

Date of Test : Sept. 21, 2018-Sept. 25, 2018

Date of Rep. : Sept. 26, 2018

Prepared by(Engineer):



Reviewer(Quality Manager):



Approved & Authorized Signer(Manager):



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# 1 Test Summary

Test procedures according to the technical standards:

<u>EMC Emission</u>				
Standard	Test Item	Limit	Judgment	Remark
EN 55015:2013/A1:2015	Conducted Emission	/	PASS	
	Magnetic Emission	/	PASS	
	Radiated Emission	/	PASS	
EN61000-3-2:2014	Harmonic Current Emission	Class C	PASS	
EN 61000-3-3:2013	Voltage Fluctuations & Flicker	-----	PASS	
<u>EMC Immunity</u>				
Section EN 61547:2009	Test Item	Performance Criteria	Judgment	Remark
EN 61000-4-2:2009	Electrostatic Discharge	B	PASS	
EN 61000-4-3:2006/A2:2010	RF electromagnetic field	A	PASS	
EN 61000-4-4:2012	Fast transients	B	PASS	
EN 61000-4-5:2014	Surges	B	PASS	
EN 61000-4-6:2014/AC:2015	Injected Current	A	PASS	
EN 61000-4-8:2010	Power Frequency Magnetic Field	A	PASS	
EN 61000-4-11:2004	Volt. Interruptions Volt. Dips	B	PASS	

**NOTE:**

- (1) "N/A" denotes test is not applicable in this Test Report
- (2) Voltage dip: 100% reduction – Performance Criteria **B**  
Voltage dip: 30% reduction – Performance Criteria **C**
- (3) For client's request and manual description, the test will not be executed.



## 1.1 Measurement Uncertainty

The report uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty Multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95% .

No.	Item	Frequency Range	U , Value
1	Power Line Conducted Emission	9KHz~30MHz	1.58 dB
2	MAGNETIC EMISSION MEASUREMENT	9KHz~30MHz	2.00 dB
3	Disturbance Power Emission (Conduction 1)	30MHz~300MHz	3.12 dB
4	Radiated Emission Test	30MHz~1GHz	3.40 dB
5	Radiated Emission Test	1GHz~18GHz	3.30 dB



## 2 Test Facility

Shenzhen ZCT Technology Co., Ltd.  
3/F., Building 5, Hongsheng Industrial Zone, Bao'an Road, Xixiang Street, Bao'an District, Shenzhen, Guangdong, China.

### 2.1 Deviation from standard

None

### 2.2 Abnormalities from standard conditions

None

## 3 General Information

### 3.1 General Description of EUT

Manufacturer:	
Manufacturer Address:	
EUT Name:	Led torch+battery(without ring)
Test Model No:	MT01
Attached No.:	N/A
Brand Name:	N/A
Power Supply Range:	Input: DC 3.4-3.6V
Test Power Supply:	Input: DC 3.4-3.6V

#### 3.1.1 EUT Test Mode

Mode 1	ON
--------	----



## 4 Equipments List for All Test Items

No.	Equipment	Manufacturer	Model No.	S/N	Cal date
1	EMI Test Receiver	R&S	ESCI	100612	2018-05-11
2	EMI Test Receiver	R&S	ESPI	100067	2018-05-11
3	Amplifier	HP	8447D	1937A02415	2018-05-11
4	Single Power Conductor Module	FCC	FCC-LISN-5-50-1-01-CISPR25	07118	2018-05-11
5	TRILOG Broadband Test-Antenna	SCHWARZBECK	VULB9163	9163-387	2018-05-11
6	Horn Antenna	SCHWARZBECK	BBHA9120A	B08000991-0021	2018-05-11
7	High Field Biconical Antenna	ELECTRO-METRICS	EM-6913	169	2018-05-11
8	Log Periodic Antenna	ELECTRO-METRICS	EM-6950	818	2018-05-11
9	Remote Active Vertical Antenna	ELECTRO-METRICS	EM-6892	354	2018-05-11
10	Power Clamp	SCHWARZBECK	MDS-21	3898	2018-05-11
11	Single Power Conductor Module	FCC	FCC-LISN-5-50-1-01-CISPR25	07254	2018-05-11
12	Teo Line Single Phase Module	SCHWARZBECK	NSLK8128	D-69124	2018-05-11
13	Positioning Controller	C&C	CC-C-1F	MF7802155	2018-05-11
14	Electrostatic Discharge Simulator	TESEQ	NSG437	128	2018-05-11
15	Fast Transient Burst Generator	SCHAFFNER	MODULA6150	34587	2018-05-11
16	Fast Transient Noise Simulator	Noiseken	FNS-105AX	31438	2018-05-11
17	Capacitive Coupling Clamp	TESEQ	CDN8014	25115	2018-05-11
18	Color TV Pattern Genenator	PHILIPS	PM5418	TM209966	N/A
19	Power Frequency Magnetic Field Gene	EVERFINE	EMS61000-8K	608085	2018-05-11
20	Triple-Loop Antenna	EVERFINE	LLA-2	607035	2018-05-11
21	10dB attenuator	SCHWARZBECK	MTAIMP-136	R65.90.0009	2018-05-11
22	AC Power Source	California Instrumnets	5001ix-400-N0	HK53570	2018-05-11
23	Power Analyzer	California Instrumnets	PACS-1	X71719	2018-05-11





## 5 Emission Test Results

### 5.1 Mains Terminals Disturbance Voltage Measurement

#### POWER LINE CONDUCTED EMISSION(Frequency Range 9KHz-30MHz)

FREQUENCY (MHz)	(dBuV)	
	Quasi-peak	Average
0.009-0.05	110	--
0.05-0.15	90-80	--
0.15 -0.5	66 - 56 *	56- 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

Detector:

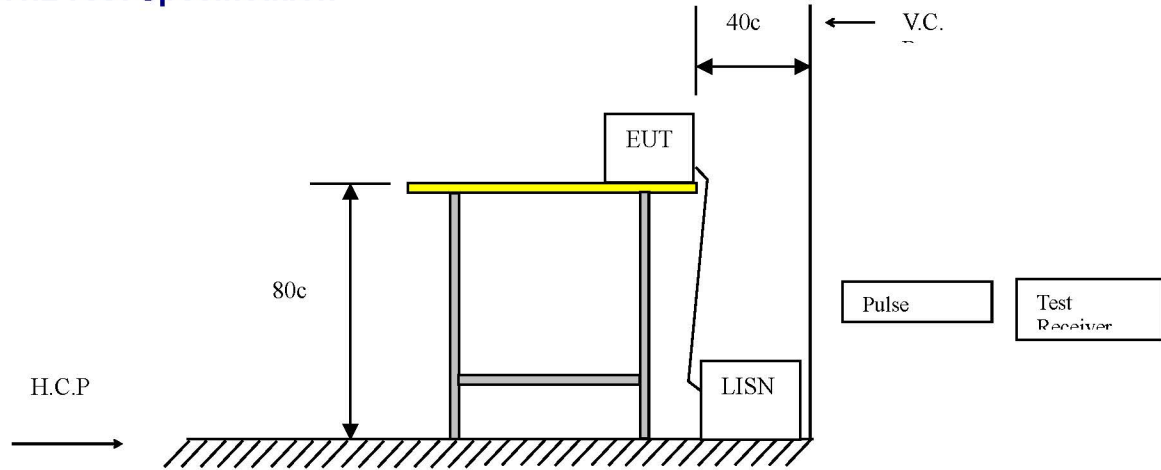
Peak for pre-scan (9kHz Resolution Bandwidth)  
 Quasi-Peak & Average if maximized peak within 6dB of Average Limit

#### 5.1.1 E.U.T. Operation

Temperature:	24°C	Humidity:	55% RH	Atmospheric Pressure:	101	Kpa
Test Mode:	Mode 1			The Worst Mode:	Mode 1	



### 5.1.2 Test Specification

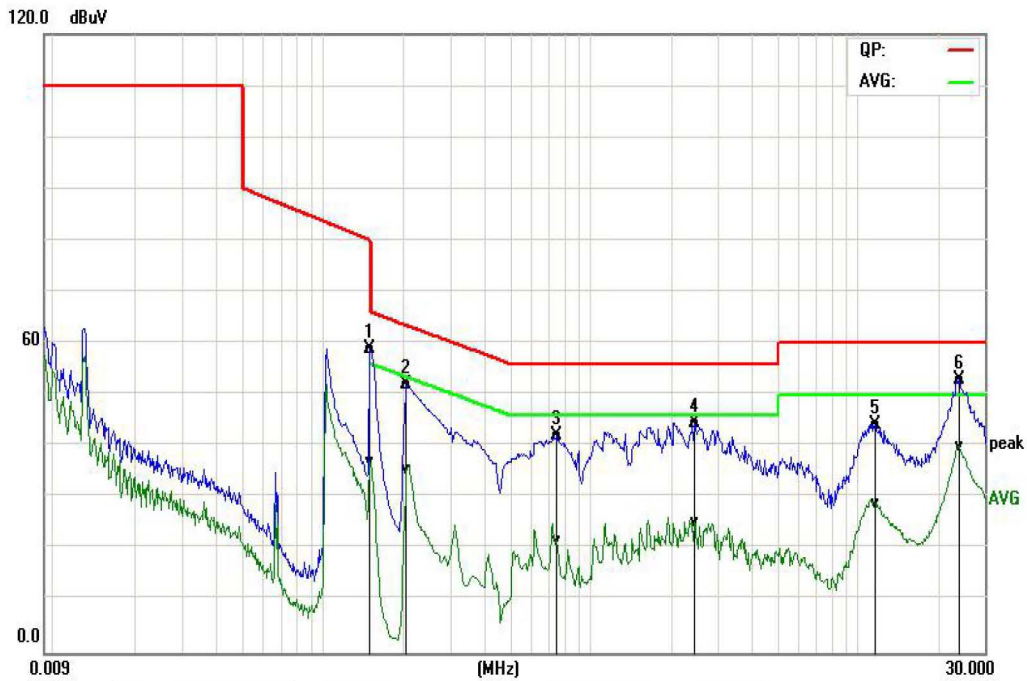


EUT was placed upon a wooden test table 0.8m above the horizontal metal reference plane and 0.4m from the vertical ground plane, and it was connected to an AMN. The closest distance between the boundary of the EUT and the surface of the AMN is 0.8m. All peripherals were connected to another AMN, and placed at a distance of 10cm from each other. A spectrum and receiver was connected to the RF output port of the AMN. Both average and quasi-peak value were detected.

### 5.1.3 Measurement Data



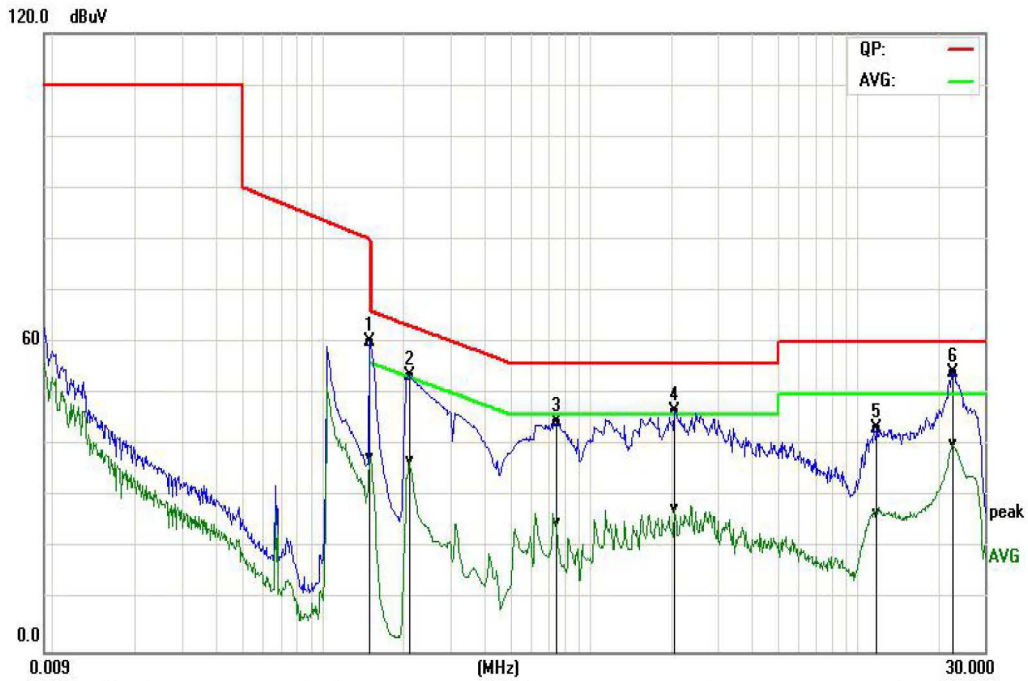
EUT:	Led torch+battery(without ring)	Model No.:	MT01
Temperature:	24 °C	Relative Humidity:	55%
Probe:	L	Test Power:	DC 3.4-3.6V
Standard:	EN55015 Class B Conduction(QP)	Test Result:	Pass
Test Mode:	ON	Test By:	King



No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	QuasiPeak limit (dBuV)	QuasiPeak margin (dB)	Remark
1	0.1500	58.88	0.04	58.92	66.00	-7.08	Pass
2	0.2060	52.03	0.04	52.07	63.37	-11.30	Pass
3	0.7540	42.08	0.06	42.14	56.00	-13.86	Pass
4	2.4660	44.34	0.11	44.45	56.00	-11.55	Pass
5	11.7060	44.13	0.23	44.36	60.00	-15.64	Pass
6*	24.1620	52.67	0.33	53.00	60.00	-7.00	Pass



EUT:	Led torch+battery(without ring)	Model No.:	MT01
Temperature:	24 °C	Relative Humidity:	55%
Probe:	N	Test Power:	DC 3.4-3.6V
Standard:	EN55015 Class B Conduction(QP)	Test Result:	Pass
Test Mode:	ON	Test By:	King



No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	QuasiPeak limit (dBuV)	QuasiPeak margin (dB)	Remark
1*	0.1500	60.07	0.04	60.11	66.00	-5.89	Pass
2	0.2100	53.50	0.04	53.54	63.21	-9.67	Pass
3	0.7500	44.57	0.06	44.63	56.00	-11.37	Pass
4	2.0700	46.44	0.10	46.54	56.00	-9.46	Pass
5	11.8740	42.99	0.23	43.22	60.00	-16.78	Pass
6	22.8620	53.77	0.32	54.09	60.00	-5.91	Pass



## 5.2 MAGNETIC EMISSION MEASUREMENT

Frequency Range: 9kHz to 30MHz

### Limits of Radiated Emission Measurement

Frequency	<input checked="" type="checkbox"/> 2m	<input type="checkbox"/> 3m	<input checked="" type="checkbox"/> 4m
	dB(μA)		
9 KHz~ 70 KHz	88	81	75
70 KHz ~ 150 KHz	88 to 58(2)	81 to 51	75 to 45
150 KHz ~ 3 MHz <sup>(1)</sup>	58 to 22(2)	51 to 15	45 to 9
3 MHz ~ 30 MHz <sup>(1)</sup>	22	15 to 16	9 to 12

(1)The tighter limit applies at the band edges.

(2)The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

Detector:

Peak for pre-scan

Quasi-Peak if maximum peak within 6dB of limit

### 5.2.1 E.U.T. Operation

Temperature:	24.1°C	Humidity:	55% RH	Atmospheric Pressure:	101	Kpa
Test Mode:	Mode 1		The Worst Mode:		Mode 1	

### 5.2.2 Test Specification

EUT was placed upon a wooden test table which was placed in the center of the test antenna, and operating in the mode as mentioned above. A receiver is used to detect the actual value of each frequency which need to be checked. All three field directions were measured in sequence.

### 5.2.3 Measurement Data

An initial pre-scan was performed using the receiver in peak detection mode. The EUT was measured by 3 antenna position and peak emissions from the EUT were detected within 6dB of the class B limit line. The following quasi-peak measurements were performed on the EUT.



EUT:	Led torch+battery(without ring)	Model No.:	MT01
Temperature:	24.1 °C	Relative Humidity:	55%
Probe:	L1	Test Power:	DC 3.4-3.6V
Standard:	EN55015 TRIPLE LOOP	Test Result:	Pass
Test Mode:	ON	Test By:	King



No.	Frequency (MHz)	Reading (dBuA/m)	Correct Factor(dB)	Result (dBuA/m)	Limit (dBuA/m)	Margin (dB)	Remark
1	0.1500	-4.24	45.72	41.48	58.00	-16.52	QP
2	0.3300	-20.07	45.73	25.66	48.53	-22.87	QP
3	0.6660	-25.27	45.65	20.38	40.09	-19.71	QP
4	1.5900	-25.46	45.33	19.87	29.63	-9.76	QP
5*	2.6660	-27.51	44.17	16.66	23.42	-6.76	QP
6	3.6220	-27.52	42.54	15.02	22.00	-6.98	QP



<b>EUT:</b>	Led torch+battery(without ring)	<b>Model No.:</b>	MT01
<b>Temperature:</b>	24.1 °C	<b>Relative Humidity:</b>	55%
<b>Probe:</b>	L2	<b>Test Power:</b>	DC 3.4-3.6V
<b>Standard:</b>	EN55015 TRIPLE LOOP	<b>Test Result:</b>	Pass
<b>Test Mode:</b>	ON	<b>Test By:</b>	King



No.	Frequency (MHz)	Reading (dBuA/m)	Correct Factor(dB)	Result (dBuA/m)	Limit (dBuA/m)	Margin (dB)	Remark
1	0.1500	-5.24	45.72	40.48	58.00	-17.52	QP
2	0.3300	-20.07	45.73	25.66	48.53	-22.87	QP
3	0.7900	-25.62	45.67	20.05	38.03	-17.98	QP
4	1.5900	-26.46	45.33	18.87	29.63	-10.76	QP
5*	2.9420	-27.11	43.70	16.59	22.23	-5.64	QP
6	6.4140	-26.80	39.75	12.95	22.00	-9.05	QP



EUT:	Led torch+battery(without ring)	Model No.:	MT01
Temperature:	24.1 °C	Relative Humidity:	55%
Probe:	L3	Test Power:	DC 3.4-3.6V
Standard:	EN55015 TRIPLE LOOP	Test Result:	Pass
Test Mode:	ON	Test By:	King



No.	Frequency (MHz)	Reading (dBuA/m)	Correct Factor(dB)	Result (dBuA/m)	Limit (dBuA/m)	Margin (dB)	Remark
1	0.1500	-5.24	45.72	40.48	58.00	-17.52	QP
2	0.3540	-19.11	45.74	26.63	47.68	-21.05	QP
3	0.7900	-25.62	45.67	20.05	38.03	-17.98	QP
4	1.5900	-25.46	45.33	19.87	29.63	-9.76	QP
5	1.9380	-37.57	45.31	7.74	27.25	-19.51	QP
6*	9.6980	-24.37	37.05	12.68	22.00	-9.32	QP





### 5.3 Radiated Emission Measurement

Limits of Radiated Emission Measurement (Below 1GHz)

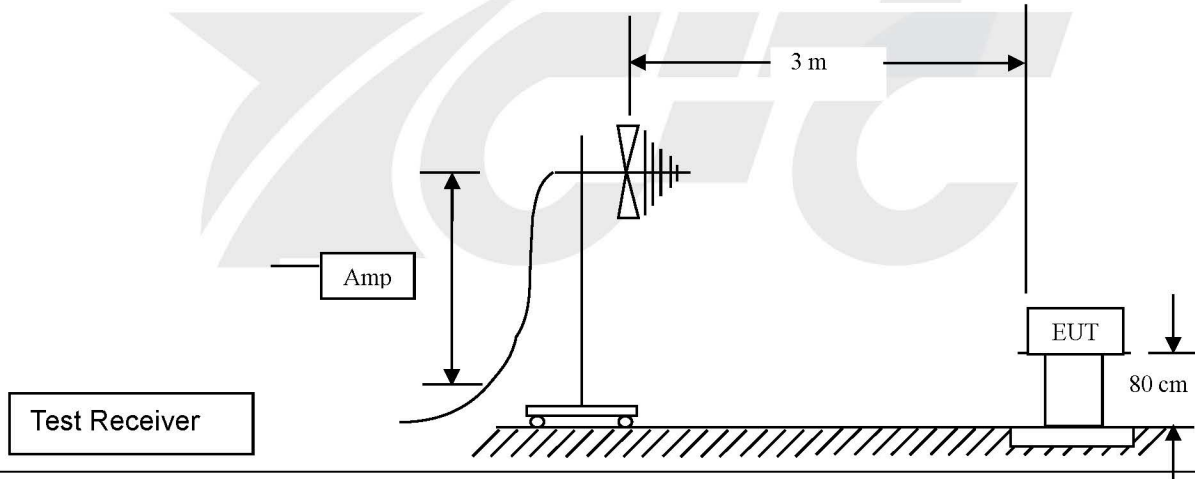
Frequency (MHz)	<input type="checkbox"/> Class A (10m)	<input checked="" type="checkbox"/> Class B (3m)
	Quasi-Peak dB(μV/m)	
30 ~ 230	40.0	
230 ~ 300	47.0	

Detector: Peak for pre-scan (120kHz resolution bandwidth)  
 Quasi-Peak if maximum peak within 6dB of limit

#### 5.3.1 E.U.T. Operation

Temperature:	24.3°C	Humidity:	55% RH	Atmospheric Pressure:	101	Kpa
Test Mode:	Mode 1			The Worst Mode:	Mode 1	

#### 5.3.2 Test Specification



EUT was placed upon a wooden test table which was placed on the turn table 0.8m above the horizontal metal ground plane, and operating in the mode as mentioned above. A receiving antenna was placed 3m away from the EUT. During testing, turn around the turn table and move the antenna from 1m to 4m to find the maximum field-strength reading. All peripherals were placed at a distance of 10cm between each other. Both horizontal and vertical antenna polarities were tested.

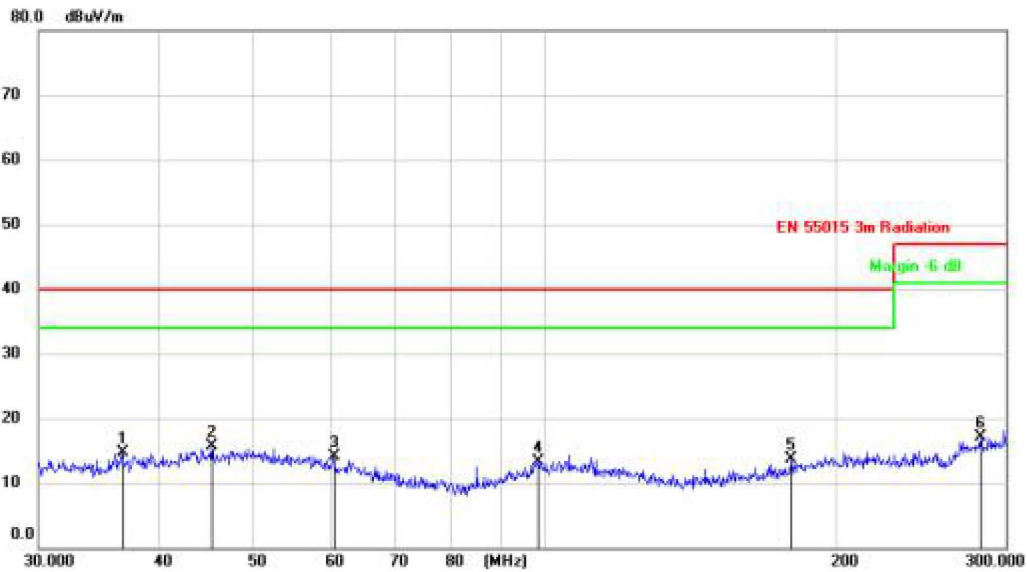


### 5.3.3 Measurement Data

An initial pre-scan was performed in the 3m chamber using the spectrum analyzers in peak detection mode. The EUT was measured by Biology antenna with 2 orthogonal polarities and peak emissions from the EUT were detected within 6dB of the class B limit line.

The following quasi-peak measurements were performed on the EUT.

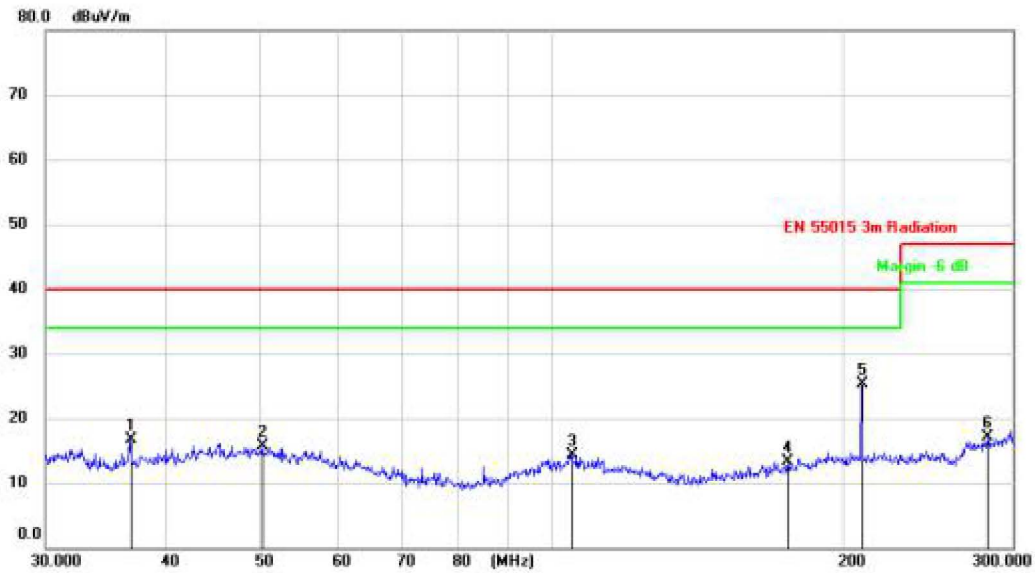
EUT:	Led torch+battery(without ring)	Model No.:	MT01
Temperature:	24.3°C	Relative Humidity:	55%
Distance:	3m	Test Power:	DC 3.4-3.6V
Polarization:	Horizontal	Test Result:	Pass
Standard:	(RE)EN55015 class B 3m	Test By:	King



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	36.5697	25.16	-10.40	14.76	40.00	-25.24	QP
2	45.3024	25.40	-9.70	15.70	40.00	-24.30	QP
3	60.5510	25.48	-11.31	14.17	40.00	-25.83	QP
4*	98.4286	24.97	-11.70	13.27	40.00	-26.73	QP
5	179.9372	28.53	-14.79	13.74	40.00	-26.26	QP
6	282.5668	26.16	-9.11	17.05	47.00	-29.95	QP



EUT:	Led torch+battery(without ring)	Model No.:	MT01
Temperature:	24.3°C	Relative Humidity:	55%
Distance:	3m	Test Power:	DC 3.4-3.6V
Polarization:	Vertical	Test Result:	Pass
Standard:	(RE)EN55015 class B 3m	Test By:	King



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	36.6540	27.85	-11.07	16.78	40.00	-23.22	QP
2	50.2483	25.35	-9.70	15.65	40.00	-24.35	QP
3	104.7421	25.84	-11.44	14.40	40.00	-25.60	QP
4*	175.4370	25.40	-12.07	13.33	40.00	-26.67	QP
5	208.9880	35.73	-10.42	25.31	40.00	-14.69	QP
6	282.5668	25.16	-8.11	17.05	47.00	-29.95	QP



### 5.4 Harmonics

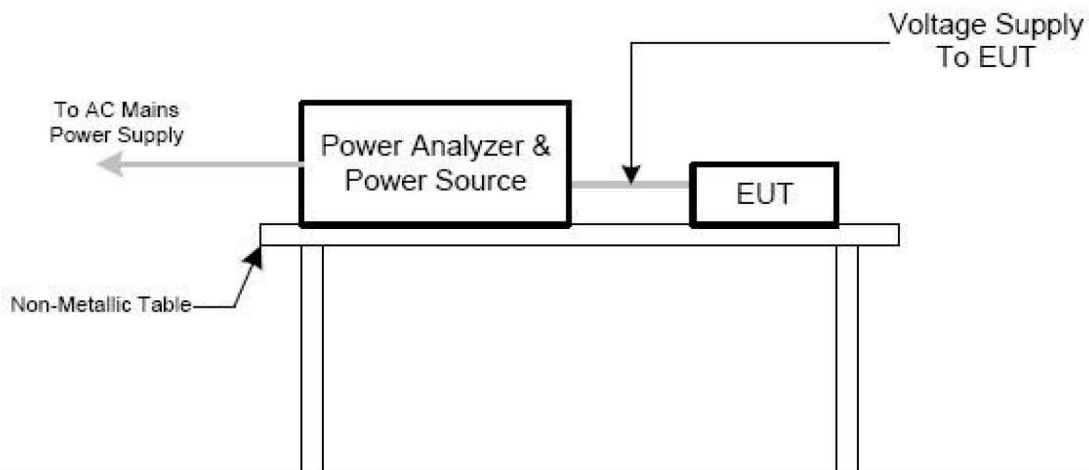
Frequency Range: 100Hz to 2kHz

Test Requirement: EN 61000-3-2

#### 5.4.1 E.U.T. Operation

Temperature:	24.5°C	Humidity:	55% RH	Atmospheric Pressure:	101	Kpa
Test Mode:	Mode 1			The Worst Mode:	Mode 1	

#### 5.4.2 Test specification



EUT operated in the mode as mentioned above, and connected to Harmonic/Flicker measuring equipment which was connected to an AC power source. Measurement was performed after EUT operating in static state for 10 seconds. Each order harmonics found to meet the relevant limits.

#### 5.4.3 Measurement Data

PASS



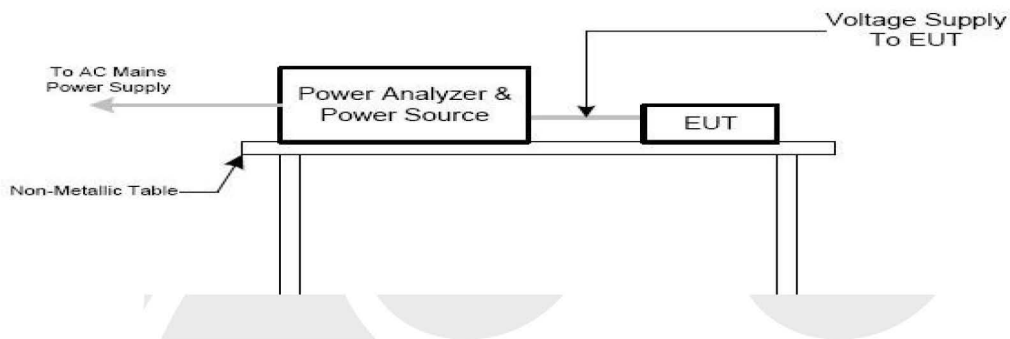
### 5.5 Voltage changes, voltage fluctuations and flicker

Test Requirement: EN 61000-3-3

#### 5.5.1 E.U.T. Operation

Temperature:	24.5°C	Humidity:	55% RH	Atmospheric Pressure:	101	Kpa
Test Mode:	Mode 1			The Worst Mode:	Mode 1	

#### 5.5.2 Test specification



EUT was operated in the mode as mentioned above, and connected to Harmonic/Flicker measuring equipment which was connected to an AC power source.

#### 5.5.3 Measurement Data

PASS



## 6 Immunity Test Results

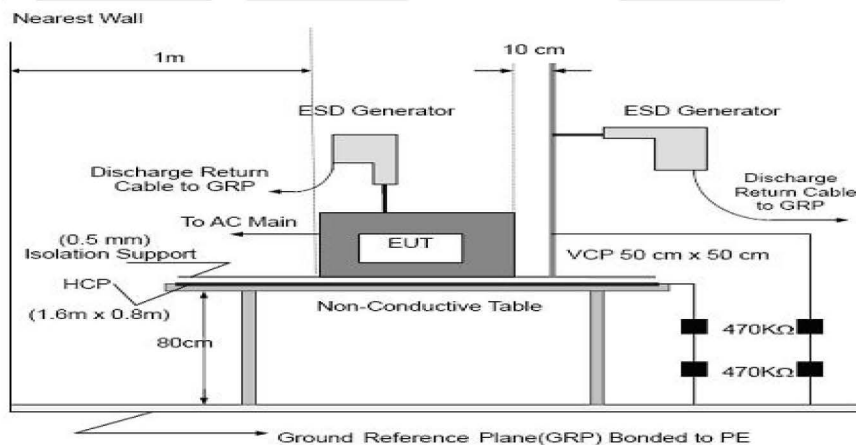
### 6.1 Electrostatic discharge immunity test

Acceptable Performance Criterion:	B
Discharge Impedance:	330 Ω / 150 pF
Discharge Voltage:	Air Discharge: ±8 kV
	Contact Discharge: ±4 kV
	VCP, HCP: ±4 kV
Polarity:	Positive & Negative
Minimum discharge Interval:	1 second

#### 6.1.1 E.U.T. Operation

Temperature:	24.1°C	Humidity:	56% RH	Atmospheric Pressure:	101	Kpa
Test Mode:	Mode 1			The Worst Mode:	Mode 1	

#### 6.1.2 Test specification



EUT was operated in the mode as mentioned above. Both contact and air discharge was executed. Contact discharge to the conductive surfaces and to coupling planes; air discharge at insulating surfaces. Each test point shall be subjected to 10 discharges at least (For each voltage and polarity).



### 6.1.3 Measurement Data

#### Test Record

Electrostatic Discharge Test Results																		
EUT: <u>Led torch+battery(without ring)</u>										Test Date: <u>Sept. 21, 2018</u>				<input type="checkbox"/> IEC61000-4-2 <input checked="" type="checkbox"/> EN61000-4-2 <input type="checkbox"/> other:				
M/N: <u>MT01</u>										Test Result: <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail								
Test Voltage: <u>Input: DC 3.4-3.6V</u>										Temp: <u>24.1</u> °C				Humi: <u>56</u> %				
										Atmospheric Pressure: <u>101</u> Kpa								
Operating Mode		ON																
Discharge times		Contact discharge: minimum <u>10</u> times (+/--respectively) at each point, Air discharge: minimum <u>10</u> times (+/- respectively) at each point.																
Discharge Mode	Air Discharge								Contact Discharge								Performance Criterion	Result
	4		8		10		15		2		4		6		8			
Test Location	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
HCP											A	A						
VCP											A	A						
Gap			B	B														
Shell			B	B														
Screw											B	B						
Note: "P" means Pass , Horizontal Coupling Plane(HCP) and Vertical Coupling plane(VCP).																		



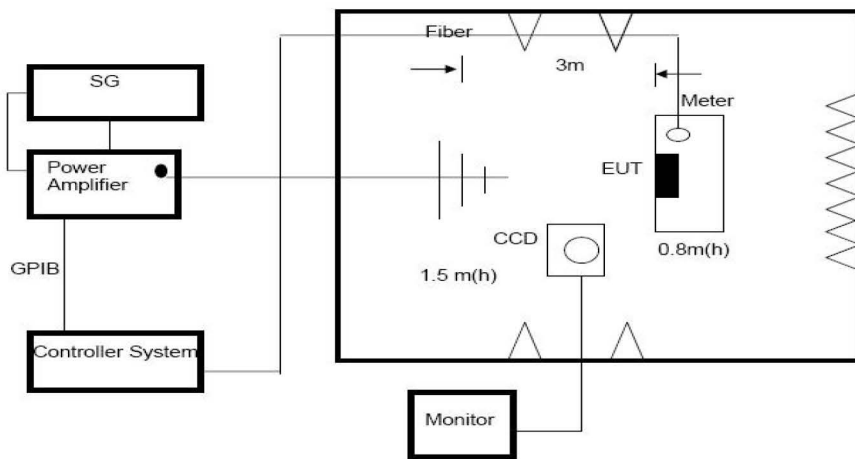
## 6.2 RF field strength immunity test

Acceptable Performance Criterion:	A
Test Level	3 V/m
Test Distance	3 m
Frequency Range	80MHz~1000MHz
Polarity:	Horizontal & Vertical

### 6.2.1 E.U.T. Operation

Temperature:	24.2°C	Humidity:	55% RH	Atmospheric Pressure:	101	Kpa
Test Mode:	Mode 1			The Worst Mode:	Mode 1	

### 6.2.2 Test specification



Test was executed in a fully Anechoic chamber. An antenna was used to transmit interference signal. EUT was placed upon a wooden table above the reference ground 0.8m, and was positioned so that the four sides of the EUT shall be exposed to the electromagnetic field in a sequence. In each position the performance of the EUT was investigated. A camera was used to monitor the loss of function or degradation of performance of the EUT.





### 6.2.3 Measurement Data

#### Test Record

Radiated Frequency Field Strength Susceptibility Results					
EUT: <u>Led torch+battery(without ring)</u>		Test Date: <u>Sept. 24, 2018</u>		<input type="checkbox"/> IEC61000-4-3 <input checked="" type="checkbox"/> EN61000-4-3 <input type="checkbox"/> other:	
M/N: <u>MT01</u>		Test Result: <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail			
Test Voltage: <u>Input: DC 3.4-3.6V</u>		Temp: <u>24.2</u> °C Humi: <u>55</u> %			
		Atmospheric Pressure: <u>101</u> Kpa			
Test Port	Input Port				
Operating Mode	Mode 1				
Test Level	<u>3</u> V/m(r.m.s) ( unmodulated )			Criteria on	
Frequency Range(MHz)	Antenna polarity	Modulation	EUT position	Result	
80~1000	Horizontal	1KHz, 80% AM	Front	Pass	
			Rear	Pass	
			Left	Pass	
			Right	Pass	
80~1000	Vertical	1KHz, 80% AM	Front	Pass	
			Rear	Pass	
			Left	Pass	
			Right	Pass	



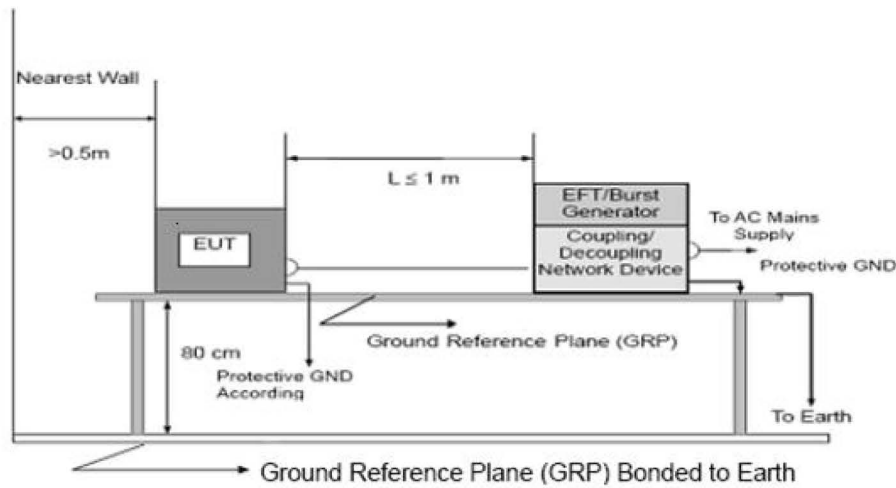
### 6.3 Electrical fast transient/burst immunity test

Acceptable Performance Criterion:	B
Test Level:	0.5, 1.0, kV on AC Line
Repetition Frequency:	5 kHz
Burst Duration:	300 ms
Test Duration:	1 minutes for each level & polarity

#### 6.3.1 E.U.T. Operation

Temperature:	24.5°C	Humidity:	54% RH	Atmospheric Pressure:	101	Kpa
Test Mode:	Mode 1		The Worst Mode:	Mode 1		

#### 6.3.2 Test specification



EUT was placed on a metal ground reference plane and was insulated from it by a wooden support which is 0.1m thick. The ground reference plane is connected to the protective earth. The test generator and the coupling/decoupling network were placed directly on, and bonded to the ground reference plane.



### 6.3.3 Measurement Data

Mode	(X) AC Power Line		( ) DC Power Line		( ) Signal/Control Line	
Test Level	1KV		0.5KV		0.5KV	
Port(s)	Polarity	Results	Polarity	Results	Polarity	Results
Line (L)	P	A	P		P	
	N	A	N		N	
Neutral (N)	P	A	P		P	
	N	A	N		N	
Line + Neutral (L+N)	P	A	P		P	
	N	A	N		N	
Ground (PE)	P	A	P		P	
	N	A	N		N	
Line + Ground (L+PE)	P	A	P		P	
	N	A	N		N	
Neutral + Ground (N+PE)	P	A	P		P	
	N	A	N		N	
Line + Neutral+ Ground(L+N+PE)	P	A	P		P	
	N	A	N		N	
Signal/Control Line	P		P		P	
	N		N		N	
Criteria	<b>B</b>		<b>B</b>		<b>B</b>	
Result	<b>A</b>		<b>N/A</b>		<b>N/A</b>	
Judgment	<b>PASS</b>		<b>N/A</b>		<b>N/A</b>	

Note:

- 1) P/N denotes the Positive/Negative polarity of the output voltage.
- 2) N/A - denotes test is not applicable in this test report
- 3) Criteria A: There was no change operated with initial operating during the test.
- 4) Criteria B: The EUT function loss during the test, but self-recoverable after the test.
- 5) Criteria C: The system shut down during the test.



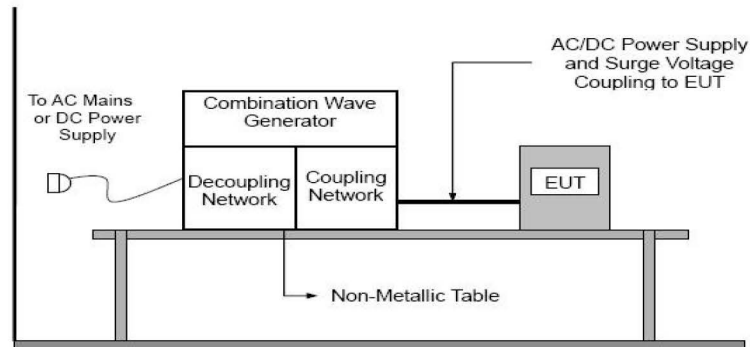
### 6.4 Surge immunity test

Acceptable Performance Criterion:	B
Test Level:	0.5, 1kV Line to Neutral
	0.5, 1, 2kV Line, Neutral to Earth
Polarity:	Positive & Negative
Generator source impedance:	2 Ω & 12 Ω
Trigger Mode:	Internal
No. of surges:	5 positive & 5 negative at 90°, 270°.

#### 6.4.1 E.U.T. Operation

Temperature:	24.2°C	Humidity:	56% RH	Atmospheric Pressure:	101	Kpa
Test Mode:	Mode 1		The Worst Mode:	Mode 1		

#### 6.4.2 Test specification



EUT was placed on a wooden table which is 0.8m above the ground and operated in the mode as mentioned above. The power cord between the EUT and the coupling/decoupling network was bundled so as to make it less than 2 m in length.



### 6.4.3 Measurement Data

Wave Form EUT Ports Tested	1.2/50(8/20)Ti/Th us						Criteria	Judgment
	Polarity	Phase	Voltage					
			0.5kV	1kV	1.5kV	2kV		
L - N	+/-	0°					B	PASS
	+/-	90°	A					
	+/-	180°						
	+/-	270°	A					
L - PE	+/-	0°					B	PASS
	+/-	90°	A					
	+/-	180°						
	+/-	270°	A					
N - PE	+/-	0°					B	PASS
	+/-	90°	A					
	+/-	180°						
	+/-	270°	A					
Signal Line (N/A)	+/-	0°					N/A	N/A
	+/-	90°						
	+/-	180°						
	+/-	270°						

Note:

- 1) +/- denotes the Positive/Negative polarity of the output voltage.
- 2) Polarity and Numbers of Impulses: 5 Pst / Ngt at each tested mode
- 3) N/A - denotes test is not applicable in this Test Report
- 4) All voltages of the lower levels shall be satisfied



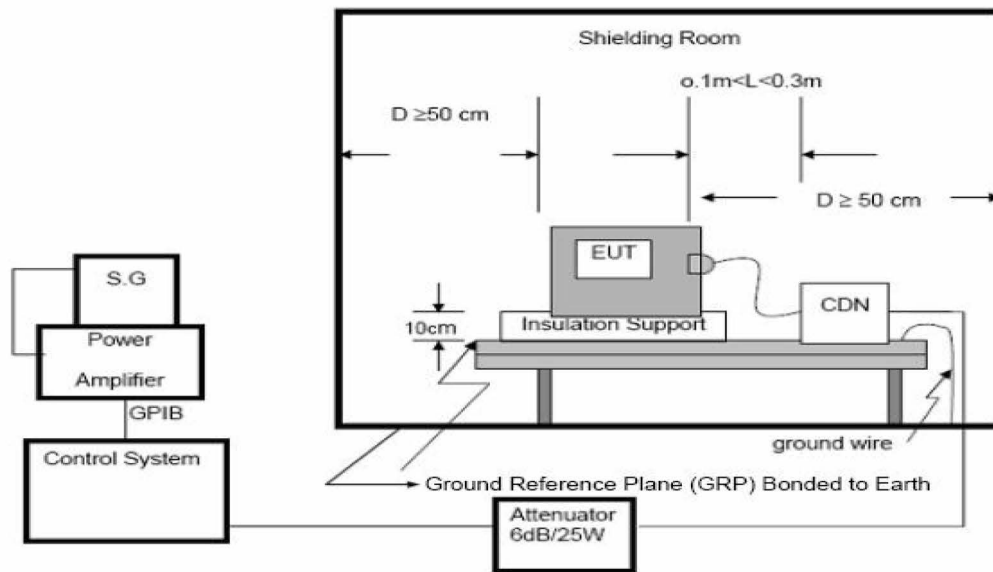
### 6.5 Conducted disturbance immunity Test

Acceptable Performance Criterion:	A
Test Level	3 V
Frequency Range	0.150MHz~80MHz

#### 6.5.1 E.U.T. Operation

Temperature:	24.2°C	Humidity:	55% RH	Atmospheric Pressure:	101	Kpa
Test Mode:	Mode 1			The Worst Mode:	Mode 1	

#### 6.5.2 Test specification



The equipment to be tested was placed on an insulating support of 0,1m height above a ground reference Plane. The minimum distance between the EUT and all other conductive structures, except the ground reference plane is more than 0.5m. All relevant cables were provided with the appropriate coupling and decoupling devices at a distance between 0.1m and 0.3m from the projected geometry of the EUT.



### 6.5.3 Measurement Data

Test Ports (Mode)	Freq. Range (MHz)	Field Strength	Perform. Criteria	Results	Judgment
Input/ Output AC. Power Port	0.15 ---80	3V(rms) AM Modulated 1000Hz, 80%	<b>A</b>	<b>A</b>	<b>PASS</b>
Input/ Output DC. Power Port	0.15 --- 80		<b>A</b>	<b>N/A</b>	<b>N/A</b>
Signal Line ( N/A )	0.15 --- 80		<b>A</b>	<b>N/A</b>	<b>N/A</b>

Note:

- 1) N/A - denotes test is not applicable in this Test Report.



## 6.6 Power frequency magnetic field immunity test

Acceptable Performance Criterion:	A
Test Level:	1 A/m
Coil Orientation:	X & Y & Z
Test Duration:	5 Minutes for each orientation

### 6.6.1 E.U.T. Operation

Operating Environment:

Temperature:	24°C	Humidity:	56% RH	Atmospheric Pressure:	101	Kpa
EUT Operation:	Normal					

### 6.6.2 Test specification

The equipment is configured and connected to satisfy its functional requirements. It was placed on the ground reference plane with the interposition of a 0.1 m thickness wooden support and was placed in the center of the induction coil. All cables (include power cord and signal line) were exposed to the magnetic field for at least 1m of their length.





### 6.6.3 Measurement Data

#### Test Record

Power Frequency Magnetic Field Immunity Test Results				
EUT: <u>Led torch+battery(without ring)</u>		Test Date: <u>Sept. 24, 2018</u>		
M/N: <u>MT01</u>		Test Result: <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail		
Test Voltage: <u>Input: DC 3.4-3.6V</u>		Temp: <u>24</u> °C , Humi: <u>56</u> %		
		Atmospheric Pressure: <u>101</u> Kpa		
Operating Mode	Normal			
Test Level	Test Duration	Coil Orientation	Criterion	Result
<u>1</u> A/m	<u>5</u> minus	X	A	Pass
<u>1</u> A/m	<u>5</u> minus	Y	A	Pass
<u>1</u> A/m	<u>5</u> minus	Z	A	Pass
Notes: None				



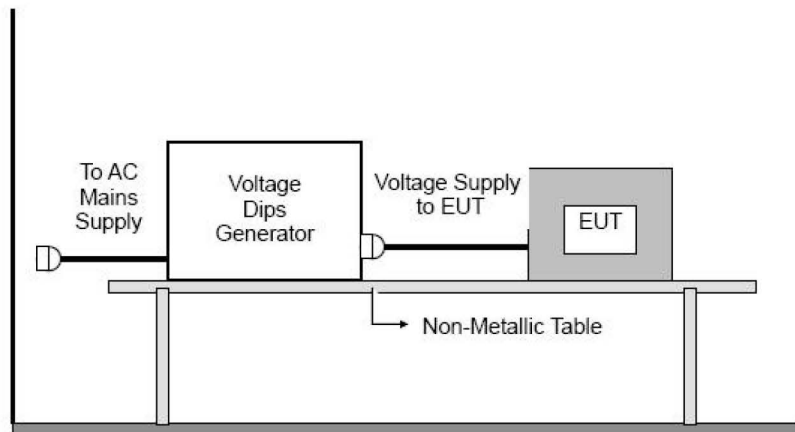
### 6.7 Voltage dips and interruptions immunity test

Acceptable Performance Criterion:	B & C
Test Level:	<5% of $U_T$ (Supply Voltage) for 0.5 and 250 Periods
	70 % of $U_T$ (Supply Voltage) for 25 Periods
No. of Dips / Interruptions:	3 per Level

#### 6.7.1 E.U.T. Operation

Temperature:	24°C	Humidity:	56% RH	Atmospheric Pressure:	101	Kpa
Test Mode:	Mode 1			The Worst Mode:	Mode 1	

#### 6.7.2 Test specification



EUT connected to the test generator with the shortest power supply cable as specified by the EUT manufacturer. The rated voltage of the EUT was used as the basis for voltage test level specification. After each group of tests, a full functional check was performed.



### 6.7.3 Measurement Data

<u>Voltage Reduction</u>	<b>Periods</b>	<b>Perform Criteria</b>	<b>Results</b>	<b>Judgment</b>
Voltage dip > 95%	0.5	<b>B</b>	<b>A</b>	<b>PASS</b>
Voltage dip 30%	25	<b>C</b>	<b>A</b>	<b>PASS</b>



## 7 APPENDIX-Photographs of EUT Constructional Details

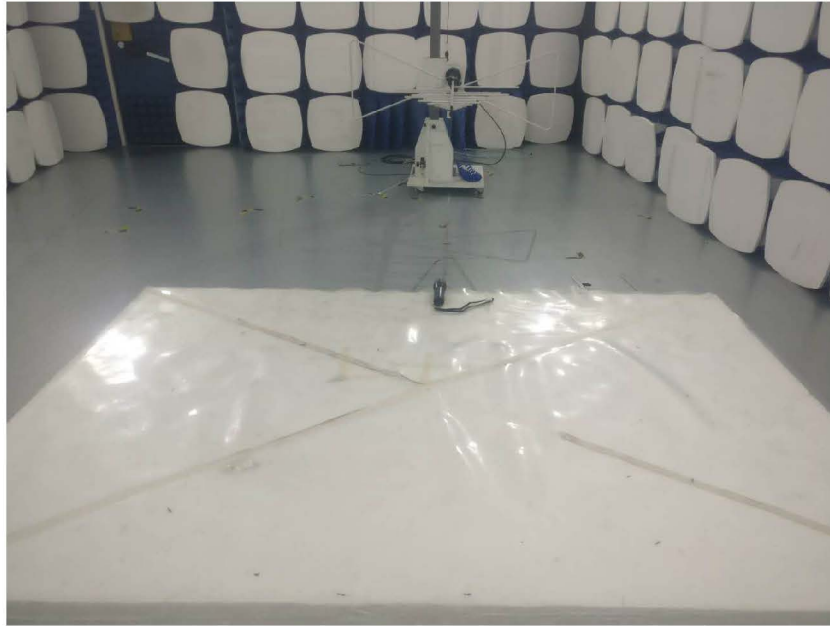


Photo 1



Photo 2





Photo 3



Photo 4





Photo 5



Photo 6





Photo 7



Photo 8

\*\*\*\*End of Report\*\*\*\*



**Test Report  
(SVHC)**

No.: NGBHL24000735703

Date: Mar 25, 2024

Page 1 of 21

Client Name: REITER POLSKA SP.Z O.O

Client Address: EUGENIUSZA ROMERA 4B, 02-784 WARSAW, POLAND

Sample Description: LED TORCH

The above sample(s) and information were provided by the client.

SGS No.: NBHL2402002418SD

Sample Receiving Date: Feb 21, 2024

Testing Period: Feb 21, 2024 ~ Mar 25, 2024

Test Requested: As requested by client, SVHC screening is performed according to:

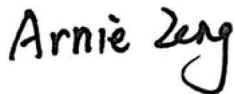
- (i) Two hundred and forty (240) substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemicals Agency (ECHA) on and before Jan 23, 2024 regarding Regulation (EC) No 1907/2006 concerning the REACH.
- (ii) Two (2) substances in the Public Consultation List of potential Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) on and before Mar 1, 2024 regarding Regulation (EC) No 1907/2006 concerning the REACH.
- (iii) One (1) potential Substances of Very High Concern (SVHC) in the notification of WTO on Jun 1, 2021.
- (iv) Six (6) potential Substances of Very High Concern (SVHC) in the Intention List published by European Chemicals Agency (ECHA) regarding Regulation (EC) No 1907/2006 concerning the REACH.
- (v) For Confirmation Sample, selected test(s) as requested by client.

Testing Performed: Follow selected test(s) as requested by client.

**Summary:**

<p>According to the ruling of the Court of Justice of the European Union on the definition of an article under REACH, and the specified scope and evaluation screening, the test results of SVHC are ≤ 0.1% (w/w) in the articles of the submitted sample.</p>	<p>Pass</p>
--	-------------

Signed for and on behalf of  
SGS-CSTC Standards Technical Services Co., Ltd. Ningbo Branch



Arnie\_Zeng  
Approved Signatory



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# Test Report (SVHC)

No.: NGBHL24000735703

Date: Mar 25, 2024

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## Remark :

1. The chemical analysis of specified SVHC is performed by means of currently available analytical techniques against the following SVHC related documents published by ECHA:  
<http://echa.europa.eu/web/guest/candidate-list-table>  
These lists are under evaluation by ECHA and may subject to change in the future.

### 2. REACH obligation:

#### 2.1 Concerning article(s):

##### Communication:

Article 33 of Regulation (EC) No 1907/2006 requires supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance in the Candidate List.

##### Notification:

In accordance with Regulation (EC) No 1907/2006, any EU producer or importer of articles shall notify ECHA, in accordance with paragraph 4 of Article 7, if a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1) of the Regulation, if (a) the substance in the Candidate List is present in those articles in quantities totaling over one tonne per producer or importer per year; and (b) the substance in the Candidate List is present in those articles above a concentration of 0.1% weight by weight (w/w).

Companies supplying articles containing substances of very high concern (SVHCs) on the Candidate List in a concentration above 0.1% weight by weight (w/w) on the EU market must comply with the Waste Framework Directive 2008/98/EC requirement and submit SCIP notifications on these articles to ECHA, as from 5 January 2021.

#### 2.2 Concerning material(s):

Test results in this report are based on the tested sample. This report refers to testing result of tested sample submitted as homogenous material(s). In case such material is being used to compose an article, the results indicated in this report may not represent SVHC concentration in such article. If this report refers to testing result of composite material group by equal weight proportion, the material in each composite test group may come from more than one article.

If the sample is a substance or mixture, and it directly exports to EU, client has the obligation to comply with the supply chain communication obligation under Article 31 of Regulation (EC) No. 1907/2006 and the conditions of Authorization of substance of very high concern included in the Annex XIV of the Regulation (EC) No. 1907/2006.

#### 2.3 Concerning substance and preparation:

If a SVHC is found over 0.1% (w/w) and/or the specific concentration limit which is set in Regulation (EC) No 1272/2008 and its amendments, client is suggested to prepare a Safety Data Sheet (SDS) against the SVHC to comply with the supply chain communication obligation under Regulation (EC) No 1907/2006, in which:

- a substance that is classified as hazardous under the CLP Regulation (EC) No 1272/2008.
- a mixture that is classified as hazardous under the CLP Regulation (EC) No 1272/2008, when it contains a substance with concentration equal to, or greater than the classification limit as set in Regulation (EC) No. 1272/2008; or
- a mixture is not classified as hazardous under the CLP Regulation (EC) No 1272/2008, but contains either:



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- (a) a substance posing human health or environmental hazards in an individual concentration of  $\geq 1\%$  by weight for mixtures that are solid or liquids (i.e., non-gaseous mixtures) or  $\geq 0.2\%$  by volume for gaseous mixtures; or
- (b) a substance that is PBT, or vPvB in an individual concentration of  $\geq 0.1\%$  by weight for mixtures that are solid or liquids (i.e., non-gaseous mixtures); or
- (c) a substance on the SVHC candidate list (for reasons other than those listed above), in an individual concentration of  $\geq 0.1\%$  by weight for non-gaseous mixtures; or
- (d) a substance for which there are Europe-wide workplace exposure limits

3. If a SVHC is found over the reporting limit, client is suggested to identify the composite component which contains the SVHC and the exact concentration of the SVHC by requesting further quantitative analysis from the laboratory.

**Test Sample:**

Photo of Submitted Sample



NGB24-0007357

SGS authenticate the photo on original report only

**Sample Description:**

Test Part ID	Material Description	Test Part ID	Material Description
A1	Black rubber lump	A2	Black metal lump
A3	Red plastic ring	A4	Black metal ring
A5	Transparent rubber ring	A6	Transparent plastic lump
A7	Golden metal button	A8	White plastic shell
A9	Silvery metal spring	A10	Silvery metal button
A11	Black plastic bracket	A12	Silvery metal piece



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**Test Report  
(SVHC)**

No.: NGBHL24000735703

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Test Part ID	Material Description	Test Part ID	Material Description
A13	Black plastic bracket	A14	White plastic button
A15	Beige plastic bracket	A16	Silvery metal piece
A17	Silvery metal spring	A18	Black metal lump
A19	Black metal shell	A21	Black rubber ring
A23	Red rubber jacket	A24	White led light
A26	Black rubber jacket	A27	White plastic piece
A28	Silvery metal bracket	A29	Black plastic lump
A30	Black fiber rope	A20	Black rubber ring (Improve sample submitted by 2024.3.15)
A22	Green PCB body (Improve sample submitted by 2024.3.15)	A25	Black PCB body (Improve sample submitted by 2024.3.15)

**Testing Group:**

Test Result ID	Description	Test Part ID	SGS Sample ID
001	Composites group1 (confirmation test)	A1+A3+A5+A6+A8+A11+A13+A14+A15+A20+A21+A22+A23+A24+A25+A26+A27+A29+A30	NGB24-0007357-0002
002	Metal group	A2+A4+A7+A9+A10+A12+A16+A17+A18+A19+A28	NGB24-0007357-0003
003	Composites group2 (Improve sample submitted by 2024.3.15)	A20+A22+A25	NGB24-0007357-0004

**Confirmation Sample:**

Test Result ID	Description	Test Part ID	SGS Sample ID
001 - A1	Black rubber lump	A1	NGB24-0007357-0001.C001
001 - A3	Red plastic ring	A3	NGB24-0007357-0001.C003
001 - A5	Transparent rubber ring	A5	NGB24-0007357-0001.C005
001 - A6	Transparent plastic lump	A6	NGB24-0007357-0001.C006
001 - A8	White plastic shell	A8	NGB24-0007357-0001.C008
001 - A11	Black plastic bracket	A11	NGB24-0007357-0001.C011
001 - A13	Black plastic bracket	A13	NGB24-0007357-0001.C013
001 - A14	White plastic button	A14	NGB24-0007357-0001.C014
001 - A15	Beige plastic bracket	A15	NGB24-0007357-0001.C015



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Test Result ID	Description	Test Part ID	SGS Sample ID
001 - A21	Black rubber ring	A21	NGB24-0007357-0001.C021
001 - A23	Red rubber jacket	A23	NGB24-0007357-0001.C023
001 - A24	White led light	A24	NGB24-0007357-0001.C024
001 - A26	Black rubber jacket	A26	NGB24-0007357-0001.C026
001 - A27	White plastic piece	A27	NGB24-0007357-0001.C027
001 - A29	Black plastic lump	A29	NGB24-0007357-0001.C029
001 - A30	Black fiber rope	A30	NGB24-0007357-0001.C030

**Test Method:**

With reference to SGS In-House method, analysis was performed by ICP-OES, UV-VIS, GC-MS, HPLC-DAD/MS and Colorimetric Method.



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**Test Results: (Substances in the Candidate List of SVHC)**

Batch	Substance Name	CAS No.	001 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	see below confirmation test result	0.100
I	Dibutyl phthalate (DBP)	84-74-2	see below confirmation test result	0.100
VIII	Lead cyanamidate*	20837-86-9	NA <sup>^</sup>	0.010
VIII	Lead dinitrate*	10099-74-8	NA <sup>^</sup>	0.010
VIII	Lead monoxide*	1317-36-8	NA <sup>^</sup>	0.010
VIII	Lead oxide sulfate*	12036-76-9	NA <sup>^</sup>	0.010
VIII	Lead tetroxide (orange lead)*	1314-41-6	NA <sup>^</sup>	0.010
VIII	Lead titanium trioxide*	12060-00-3	NA <sup>^</sup>	0.010
VIII	Lead titanium zirconium oxide*	12626-81-2	0.051	0.010
VIII	Pyrochlore, antimony lead yellow*	8012-00-8	0.024	0.010
VIII	Sulfurous acid, lead salt, dibasic*	62229-08-7	NA <sup>^</sup>	0.010
VIII	Tetralead trioxide sulphate*	12202-17-4	NA <sup>^</sup>	0.010
VIII	Trilead bis(carbonate)dihydroxide (basic lead carbonate)*	1319-46-6	NA <sup>^</sup>	0.010
X	Lead di(acetate)*	301-04-2	NA <sup>^</sup>	0.010
XIX	Lead	7439-92-1	see below confirmation test result	0.010
-	Other tested SVHC in Candidate list	-	ND	-

**Test Results: (Potential SVHC)**

Batch	Substance Name	CAS No.	001 Concentration (%)	RL (%)
/	All tested Potential SVHC	-	ND	-

**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A1 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005

**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A3 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005



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**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A5 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005

**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A6 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005

**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A8 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005

**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A11 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005

**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A13 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005

**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A14 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005



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**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A15 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005

**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A21 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005

**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A23 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005

**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A24 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	0.020	0.005

**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A26 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005

**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A27 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005

**Confirmation Test Result:**



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Batch	Substance Name	CAS No.	001 - A29 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005

**Confirmation Test Result:**

Batch	Substance Name	CAS No.	001 - A30 Concentration (%)	RL (%)
I	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	ND	0.050
I	Dibutyl phthalate (DBP)	84-74-2	ND	0.050
XIX	Lead	7439-92-1	ND	0.005

**Test Results: (Substances in the Candidate List of SVHC)**

Batch	Substance Name	CAS No.	002 Concentration (%)	RL (%)
I	Diarsenic pentaoxide*	1303-28-2	0.020	0.010
XIX	Lead	7439-92-1	0.014	0.010
-	Other tested SVHC in Candidate list	-	ND	-

**Test Results: (Substances in the Candidate List of SVHC)**

Batch	Substance Name	CAS No.	003 Concentration (%)	RL (%)
-	All tested SVHC in Candidate list	-	ND	-

**Test Results: (Potential SVHC)**

Batch	Substance Name	CAS No.	003 Concentration (%)	RL (%)
/	All tested Potential SVHC	-	ND	-

**Notes:**

- (1) The table above only shows detected SVHC, and SVHC that below RL are not reported. Please refer to Appendix for the full list of tested SVHC.
- (2) RL = Reporting Limit (Test data will be shown if it ≥ RL. RL is not regulatory limit.)  
ND = Not detected (lower than RL), ND is denoted on the SVHC substance.
- (3) \* The test result is based on the calculation of selected element(s) and to the worst-case scenario.  
\*\* The test result is based on the calculation of selected marker(s) and to the worst-case scenario.  
Calculated concentration of boric compounds are based on water extractive boron detected by ICP-OES.  
Calculated concentration of Barium diboron tetraoxide is based on water extractive boron and barium detected by ICP-OES.  
RL = 0.01% is evaluated for element (i.e. cobalt, arsenic, lead, chromium (VI), aluminum, zirconium, boron, strontium, zinc, antimony, titanium, barium and cadmium respectively), except molybdenum  
RL=0.001%, boron RL=0.005% (only for Lead bis(tetrafluoroborate), Orthoboric acid, sodium salt, Barium



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diboron tetraoxide), chromium (VI) RL=0.005% (only for Pentazinc chromate octahydroxide), fluorine RL=0.060%.

- (4) § The substance is proposed for the identification as SVHC only where it contains Michler's ketone (CAS Number: 90-94-8) or Michler's base (CAS Number: 101-61-1)  $\geq 0.1\%$  (w/w).
- (5) Composite test has been performed in equal proportion for the components/material per client requested. And the result is calculated using the minimum sample weight.
- (6) In consideration of the analysis requirement and the limit of sample volume, the screening test for the article is based on components / material enough to test.
- (7) / = Potential SVHC
- (8) NA^ = Upon further test verification on the specific detected elements or substances of SVHC and also information provided from client, the possibility that the elements or substances content originate from SVHC is very unlikely, even though their presence cannot be exclude entirely. It may be assumed that the detected elements or substances have a non-SVHC source.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019.



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## Appendix

### Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
I	1	4,4'-Diaminodiphenylmethane(MDA)	101-77-9	0.100
I	2	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	0.100
I	3	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	0.100
I	4	Anthracene	120-12-7	0.100
I	5	Benzyl butyl phthalate (BBP)	85-68-7	0.100
I	6	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	0.100
I	7	Bis(tributyltin)oxide (TBTO)	56-35-9	0.100
I	8	Cobalt dichloride*	7646-79-9	0.010
I	9	Diarsenic pentaoxide*	1303-28-2	0.010
I	10	Diarsenic trioxide*	1327-53-3	0.010
I	11	Dibutyl phthalate (DBP)	84-74-2	0.100
I	12	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified ( $\alpha$ -HBCDD, $\beta$ -HBCDD, $\gamma$ -HBCDD)	-	0.100
I	13	Lead hydrogen arsenate*	7784-40-9	0.010
I	14	Sodium dichromate*	10588-01-9 /7789-12-0	0.010
I	15	Triethyl arsenate*	15606-95-8	0.010
II	16	2,4-Dinitrotoluene	121-14-2	0.100
II	17	Acrylamide	79-06-1	0.100
II	18	Anthracene oil**	90640-80-5	0.100
II	19	Anthracene oil, anthracene paste**	90640-81-6	0.100
II	20	Anthracene oil, anthracene paste, anthracene fraction**	91995-15-2	0.100
II	21	Anthracene oil, anthracene paste, distn. Lights**	91995-17-4	0.100
II	22	Anthracene oil, anthracene-low**	90640-82-7	0.100
II	23	Diisobutyl phthalate	84-69-5	0.100
II	24	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)*	12656-85-8	0.010
II	25	Lead chromate*	7758-97-6	0.010
II	26	Lead sulphochromate yellow (C.I. Pigment Yellow 34)*	1344-37-2	0.010
II	27	Pitch, coal tar, high temp. **	65996-93-2	0.100
II	28	Tris(2-chloroethyl)phosphate	115-96-8	0.100
III	29	Ammonium dichromate*	7789-09-5	0.010
III	30	Boric acid*	-	0.010
III	31	Disodium tetraborate, anhydrous*	12179-04-3 /1303-96-4 /1330-43-4	0.010
III	32	Potassium chromate*	7789-00-6	0.010
III	33	Potassium dichromate*	7778-50-9	0.010
III	34	Sodium chromate*	7775-11-3	0.010
III	35	Tetraboron disodium heptaoxide, hydrate*	12267-73-1	0.010



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Batch	No.	Substance Name	CAS No.	RL (%)
III	36	Trichloroethylene	79-01-6	0.100
IV	37	2-Ethoxyethanol	110-80-5	0.100
IV	38	2-Methoxyethanol	109-86-4	0.100
IV	39	Chromic acid, Oligomers of chromic acid and dichromic acid, Dichromic acid*	-	0.010
IV	40	Chromium trioxide*	1333-82-0	0.010
IV	41	Cobalt(II) carbonate*	513-79-1	0.010
IV	42	Cobalt(II) diacetate*	71-48-7	0.010
IV	43	Cobalt(II) dinitrate*	10141-05-6	0.010
IV	44	Cobalt(II) sulphate*	10124-43-3	0.010
V	45	1,2,3-trichloropropane	96-18-4	0.100
V	46	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	0.100
V	47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	0.100
V	48	1-methyl-2-pyrrolidone	872-50-4	0.100
V	49	2-ethoxyethyl acetate	111-15-9	0.100
V	50	Hydrazine	302-01-2 /7803-57-8	0.100
V	51	strontium chromate*	7789-06-2	0.010
VI	52	1,2-Dichloroethane	107-06-2	0.100
VI	53	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	0.100
VI	54	2-Methoxyaniline; o-Anisidine	90-04-0	0.100
VI	55	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	0.100
VI	56	Aluminosilicate Refractory Ceramic Fibres*	-	0.010
VI	57	Arsenic acid*	7778-39-4	0.010
VI	58	Bis(2-methoxyethyl) ether	111-96-6	0.100
VI	59	Bis(2-methoxyethyl) phthalate	117-82-8	0.100
VI	60	Calcium arsenate*	7778-44-1	0.010
VI	61	Dichromium tris(chromate)*	24613-89-6	0.010
VI	62	Formaldehyde, oligomeric reaction products with aniline	25214-70-4	0.100
VI	63	Lead diazide, Lead azide*	13424-46-9	0.010
VI	64	Lead dipicrate*	6477-64-1	0.010
VI	65	Lead styphnate*	15245-44-0	0.010
VI	66	N,N-dimethylacetamide	127-19-5	0.100
VI	67	Pentazinc chromate octahydroxide*	49663-84-5	0.010
VI	68	Phenolphthalein	77-09-8	0.100
VI	69	Potassium hydroxyoctaoxodizincatedichromate*	11103-86-9	0.010
VI	70	Trilead diarsenate*	3687-31-8	0.010
VI	71	Zirconia Aluminosilicate Refractory Ceramic Fibres*	-	0.010
VII	72	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)§	2580-56-5	0.100



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Batch	No.	Substance Name	CAS No.	RL (%)
VII	73	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) §	548-62-9	0.100
VII	74	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	0.100
VII	75	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	0.100
VII	76	4,4'-bis(dimethylamino) benzophenone (Michler's Ketone)	90-94-8	0.100
VII	77	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol§	561-41-1	0.100
VII	78	Diboron trioxide*	1303-86-2	0.010
VII	79	Formamide	75-12-7	0.100
VII	80	Lead(II) bis(methanesulfonate)*	17570-76-2	0.010
VII	81	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	0.100
VII	82	TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	2451-62-9	0.100
VII	83	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) §	6786-83-0	0.100
VII	84	β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	59653-74-6	0.100
VIII	85	[Phthalato(2-)]dioxotrilead*	69011-06-9	0.010
VIII	86	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	0.100
VIII	87	1,2-Diethoxyethane	629-14-1	0.100
VIII	88	1-Bromopropane	106-94-5	0.100
VIII	89	3-Ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	0.100
VIII	90	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	-	0.100
VIII	91	4,4'-Methylenedi-o-toluidine	838-88-0	0.100
VIII	92	4,4'-Oxydianiline and its salts	101-80-4	0.100
VIII	93	4-Aminoazobenzene	60-09-3	0.100
VIII	94	4-Methyl-m-phenylenediamine	95-80-7	0.100
VIII	95	4-Nonylphenol, branched and linear	-	0.100
VIII	96	6-Methoxy-m-toluidine	120-71-8	0.100
VIII	97	Acetic acid, lead salt, basic*	51404-69-4	0.010
VIII	98	Biphenyl-4-ylamine	92-67-1	0.100
VIII	99	Decabromodiphenyl ether (DecaBDE)	1163-19-5	0.100
VIII	100	Cyclohexane-1,2-dicarboxylic anhydride, cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride	-	0.100
VIII	101	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	0.100



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Batch	No.	Substance Name	CAS No.	RL (%)
VIII	102	Dibutyltin dichloride (DBTC)	683-18-1	0.100
VIII	103	Diethyl sulphate	64-67-5	0.100
VIII	104	Diisopentylphthalate	605-50-5	0.100
VIII	105	Dimethyl sulphate	77-78-1	0.100
VIII	106	Dinoseb	88-85-7	0.100
VIII	107	Dioxobis(stearato)trilead*	12578-12-0	0.010
VIII	108	Fatty acids, C16-18, lead salts*	91031-62-8	0.010
VIII	109	Furan	110-00-9	0.100
VIII	110	Henicosaflluoroundecanoic acid	2058-94-8	0.100
VIII	111	Heptacosaflluorotetradecanoic acid	376-06-7	0.100
VIII	112	Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	-	0.100
VIII	113	Lead bis(tetrafluoroborate)*	13814-96-5	0.010
VIII	114	Lead cyanamidate*	20837-86-9	0.010
VIII	115	Lead dinitrate*	10099-74-8	0.010
VIII	116	Lead monoxide*	1317-36-8	0.010
VIII	117	Lead oxide sulfate*	12036-76-9	0.010
VIII	118	Lead tetroxide (orange lead)*	1314-41-6	0.010
VIII	119	Lead titanium trioxide*	12060-00-3	0.010
VIII	120	Lead titanium zirconium oxide*	12626-81-2	0.010
VIII	121	Methoxyacetic acid	625-45-6	0.100
VIII	122	Methyloxirane (Propylene oxide)	75-56-9	0.100
VIII	123	N,N-Dimethylformamide	68-12-2	0.100
VIII	124	N-Methylacetamide	79-16-3	0.100
VIII	125	N-Pentyl-isopentylphthalate	776297-69-9	0.100
VIII	126	o-Aminoazotoluene	97-56-3	0.100
VIII	127	o-Toluidine	95-53-4	0.100
VIII	128	Pentacosaflluorotridecanoic acid	72629-94-8	0.100
VIII	129	Pentalead tetraoxide sulphate*	12065-90-6	0.010
VIII	130	Pyrochlore, antimony lead yellow*	8012-00-8	0.010
VIII	131	Silicic acid, barium salt, lead-doped*	68784-75-8	0.010
VIII	132	Silicic acid, lead salt*	11120-22-2	0.010
VIII	133	Sulfurous acid, lead salt, dibasic*	62229-08-7	0.010
VIII	134	Tetraethyllead*	78-00-2	0.010
VIII	135	Tetralead trioxide sulphate*	12202-17-4	0.010
VIII	136	Tricosaflluorododecanoic acid	307-55-1	0.100
VIII	137	Trilead bis(carbonate)dihydroxide (basic lead carbonate)*	1319-46-6	0.010
VIII	138	Trilead dioxide phosphonate*	12141-20-7	0.010
IX	139	4-Nonylphenol, branched and linear, ethoxylated	-	0.100
IX	140	Ammonium pentadecafluorooctanoate (APFO)**	3825-26-1	0.100
IX	141	Cadmium oxide*	1306-19-0	0.010
IX	142	Cadmium	7440-43-9	0.010
IX	143	Dipentyl phthalate (DPP)	131-18-0	0.100



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Batch	No.	Substance Name	CAS No.	RL (%)
IX	144	Pentadecafluorooctanoic acid (PFOA)	335-67-1	0.100
X	145	Cadmium sulphide*	1306-23-6	0.010
X	146	Dihexyl phthalate	84-75-3	0.100
X	147	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	0.100
X	148	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	0.100
X	149	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	0.100
X	150	Lead di(acetate)*	301-04-2	0.010
X	151	Trixylyl phosphate	25155-23-1	0.100
XI	152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	0.100
XI	153	Cadmium chloride*	10108-64-2	0.010
XI	154	Sodium perborate; perboric acid, sodium salt*	-	0.010
XI	155	Sodium peroxometaborate*	7632-04-4	0.010
XII	156	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	0.100
XII	157	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	0.100
XII	158	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	0.100
XII	159	Cadmium fluoride*	7790-79-6	0.010
XII	160	Cadmium sulphate*	10124-36-4 /31119-53-6	0.010
XII	161	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate & 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE & MOTE)	-	0.100
XIII	162	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate	-	0.100
XIII	163	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual isomers of [1] and [2] or any combination thereof]	-	0.100
XIV	164	1,3-propanesultone	1120-71-4	0.100
XIV	165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	0.100
XIV	166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	0.100



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Batch	No.	Substance Name	CAS No.	RL (%)
XIV	167	Nitrobenzene	98-95-3	0.100
XIV	168	Perfluorononan-1-oic-acid and its sodium and ammonium salts	-	0.100
XV	169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	0.100
XVI	170	4,4'-isopropylidenediphenol (bisphenol A)	80-05-7	0.100
XVI	171	4-Heptylphenol, branched and linear	-	0.100
XVI	172	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	-	0.100
XVI	173	p-(1,1-dimethylpropyl)phenol	80-46-6	0.100
XVII	174	Perfluorohexane-1-sulphonic acid and its salts	-	0.100
XVIII	175	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"™) [covering any of its individual anti- and syn-isomers or any combination thereof]	-	0.100
XVIII	176	Benz[a]anthracene	56-55-3	0.100
XVIII	177	Cadmium nitrate*	10325-94-7	0.010
XVIII	178	Cadmium carbonate*	513-78-0	0.010
XVIII	179	Cadmium hydroxide*	21041-95-2	0.010
XVIII	180	Chrysene	218-01-9	0.100
XVIII	181	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with ≥0.1% w/w 4-heptylphenol, branched and linear]	-	0.100
XIX	182	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA)	552-30-7	0.100
XIX	183	Benzo[ghi]perylene	191-24-2	0.100
XIX	184	Decamethylcyclotetrasiloxane (D5)	541-02-6	0.100
XIX	185	Dicyclohexyl phthalate (DCHP)	84-61-7	0.100
XIX	186	Disodium octaborate*	12008-41-2	0.010
XIX	187	Dodecamethylcyclotetrasiloxane (D6)	540-97-6	0.100
XIX	188	Ethylenediamine (EDA)	107-15-3	0.100
XIX	189	Lead	7439-92-1	0.010
XIX	190	Octamethylcyclotetrasiloxane (D4)	556-67-2	0.100
XIX	191	Terphenyl, hydrogenated	61788-32-7	0.100
XX	192	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one (3-benzylidene camphor)	15087-24-8	0.100
XX	193	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	0.100
XX	194	Benzo[k]fluoranthene	207-08-9	0.100
XX	195	Fluoranthene	206-44-0	0.100
XX	196	Phenanthrene	85-01-8	0.100
XX	197	Pyrene	129-00-0	0.100
XXI	198	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)	-	0.100
XXI	199	2-methoxyethyl acetate	110-49-6	0.100



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Batch	No.	Substance Name	CAS No.	RL (%)
XXI	200	4-tert-butylphenol (PTBP)	98-54-4	0.100
XXI	201	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	-	0.100
XXII	202	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	0.100
XXII	203	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	0.100
XXII	204	Diisohexyl phthalate	71850-09-4	0.100
XXII	205	Perfluorobutane sulfonic acid (PFBS) and its salts	-	0.100
XXIII	206	1-vinylimidazole	1072-63-5	0.100
XXIII	207	2-methylimidazole	693-98-1	0.100
XXIII	208	Butyl 4-hydroxybenzoate	94-26-8	0.100
XXIII	209	Dibutylbis(pentane-2,4-dionato-O,O')tin**	22673-19-4	0.100
XXIV	210	bis(2-(2-methoxyethoxy)ethyl) ether	143-24-8	0.100
XXIV	211	Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety**	-	0.100
XXV	212	1,4-Dioxane	123-91-1	0.100
XXV	213	2,2-bis(bromomethyl)propane-1,3-diol (BMP); 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA); 2,3-dibromo-1-propanol (2,3-DBPA)	-	0.100
XXV	214	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers	-	0.100
XXV	215	4,4'-(1-methylpropylidene)bisphenol; (bisphenol B)	77-40-7	0.100
XXV	216	Glutaral	111-30-8	0.100
XXV	217	Medium-chain chlorinated paraffins (MCCP) [UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17]	-	0.100
XXV	218	Orthoboric acid, sodium salt*	13840-56-7	0.005
XXV	219	Phenol, alkylation products (mainly in para position) with C12-rich branched or linear alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	-	0.100
XXVI	220	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)	-	0.100
XXVI	221	6,6'-di-tert-butyl-2,2'-methylene-di-p-cresol (DBMC)	119-47-1	0.100



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**Test Report  
(SVHC)**

No.: NGBHL24000735703

Date: Mar 25, 2024

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Batch	No.	Substance Name	CAS No.	RL (%)
XXVI	222	S-(tricyclo[5.2.1.0'2,6]deca-3-en-8(or 9)-yl) O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	255881-94-8	0.100
XXVI	223	Tris(2-methoxyethoxy)vinylsilane	1067-53-4	0.100
XXVII	224	N-(hydroxymethyl)acrylamide	924-42-5	0.100
XXVIII	225	1,1'-[ethane-1,2-diylbis(oxy)]bis[2,4,6-tribromobenzene]	37853-59-1	0.100
XXVIII	226	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	79-94-7	0.100
XXVIII	227	4,4'-sulphonyldiphenol	80-09-1	0.100
XXVIII	228	Barium diboron tetraoxide*	13701-59-2	0.005
XXVIII	229	Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof	-	0.100
XXVIII	230	Isobutyl 4-hydroxybenzoate	4247-02-3	0.100
XXVIII	231	Melamine	108-78-1	0.100
XXVIII	232	Perfluoroheptanoic acid and its salts	-	0.100
XXVIII	233	reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine*	-	0.060
XXIX	234	Bis(4-chlorophenyl) sulphone	80-07-9	0.100
XXIX	235	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	0.100
XXX	236	2,4,6-tri-tert-butylphenol	732-26-3	0.100
XXX	237	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)	3147-75-9	0.100
XXX	238	2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one	119344-86-4	0.100
XXX	239	Bumetizole (UV-326)	3896-11-5	0.100
XXX	240	Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol	-	0.100
/	241	Bis(α,α-dimethylbenzyl) peroxide	80-43-3	0.100
/	242	Triphenyl phosphate	115-86-6	0.100
/	243	Resorcinol	108-46-3	0.100
/	244	Octamethyltrisiloxane	107-51-7	0.100
/	245	1,1,1,3,5,5,5-heptamethyl-3-[(trimethylsilyl)oxy]trisiloxane	17928-28-8	0.100
/	246	1,1,1,3,5,5,5-heptamethyltrisiloxane	1873-88-7	0.100
/	247	Decamethyltetrasiloxane	141-62-8	0.100
/	248	Dodecamethylpentasiloxane	141-63-9	0.100
/	249	Hexamethyldisiloxane	107-46-0	0.100



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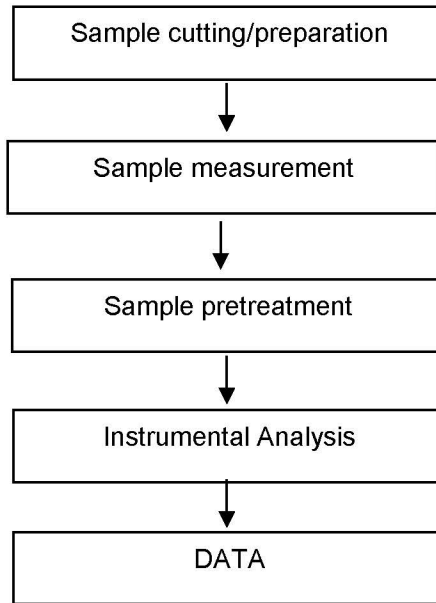
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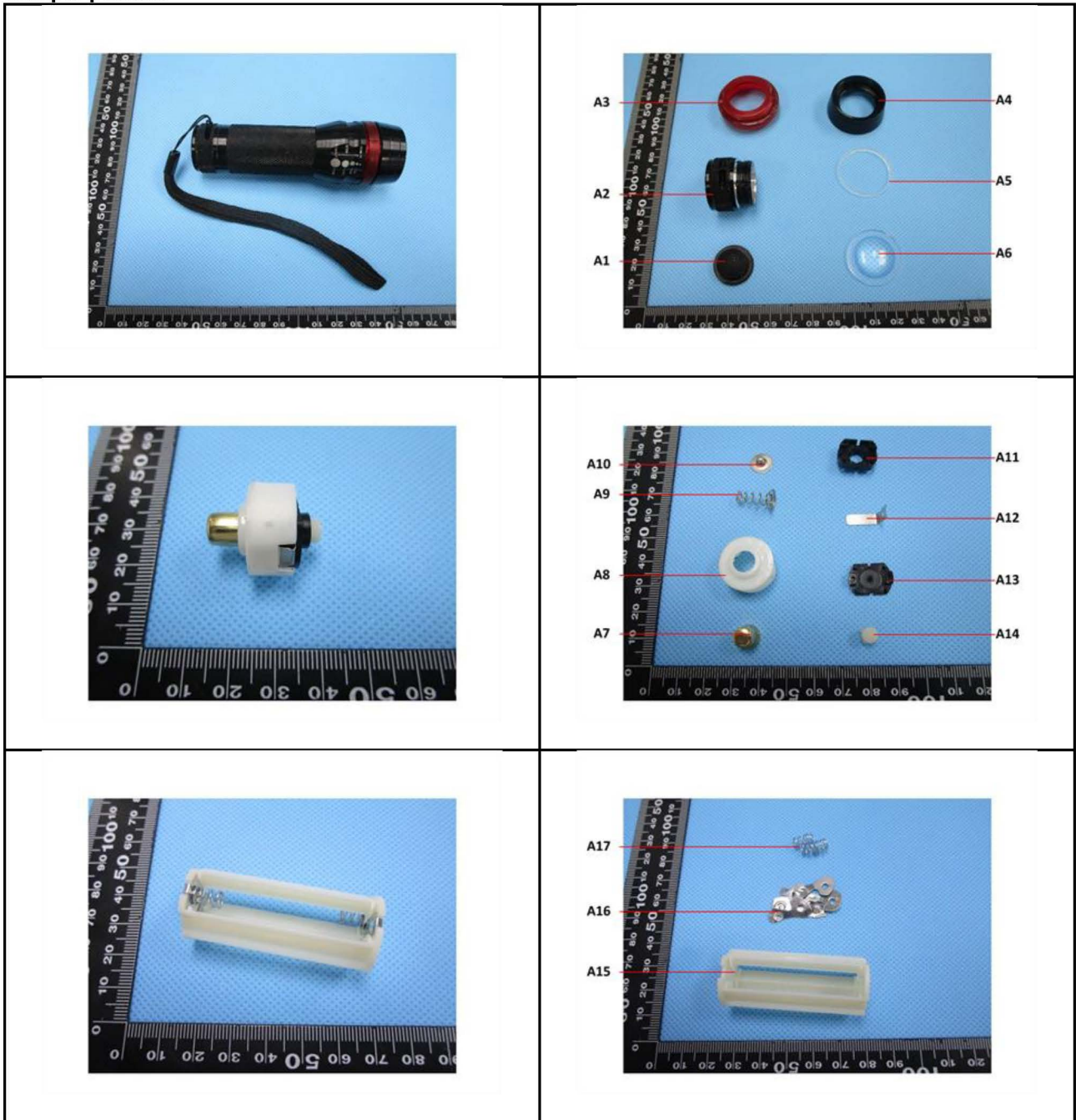
### Testing Flow Chart



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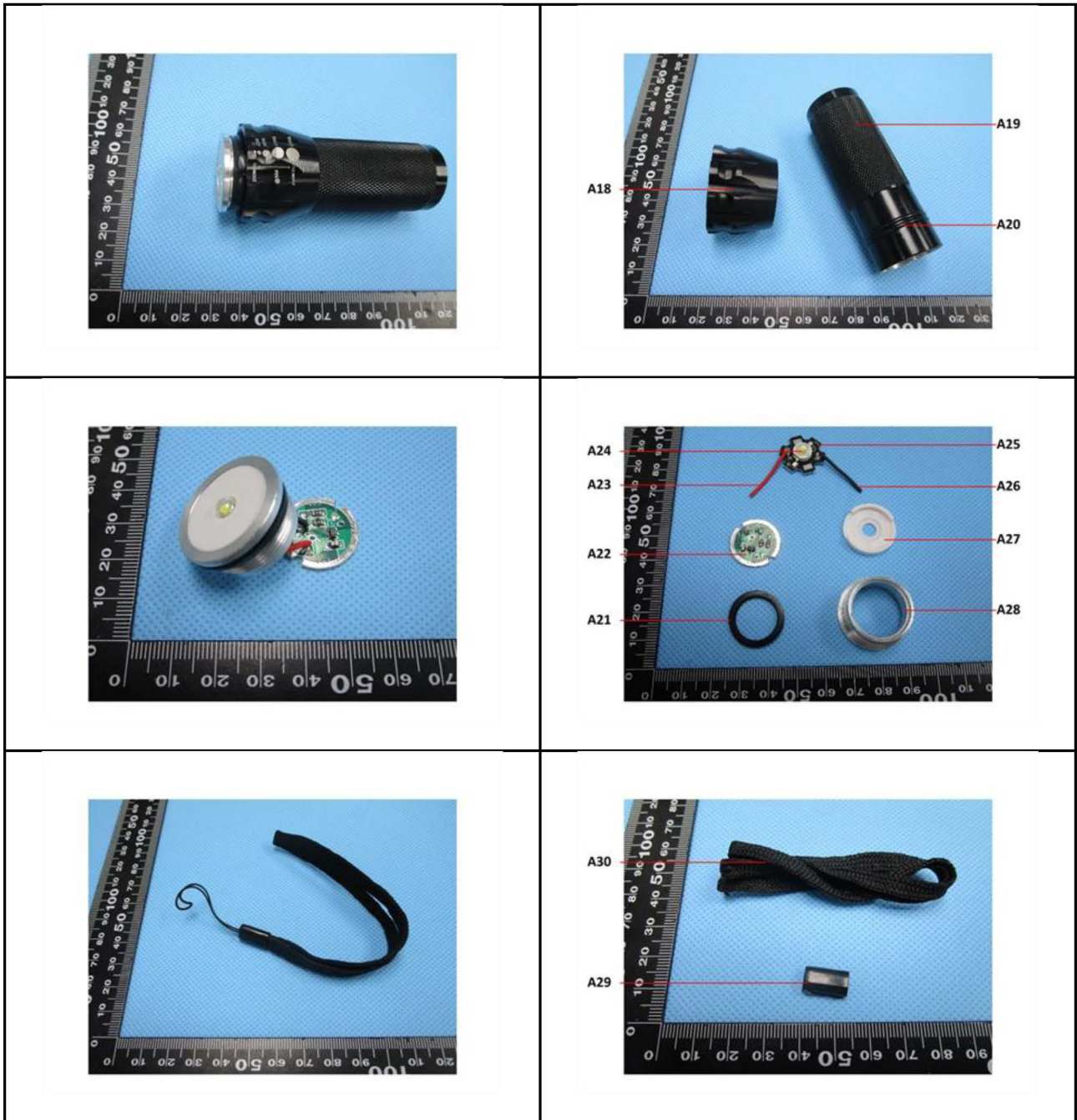
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