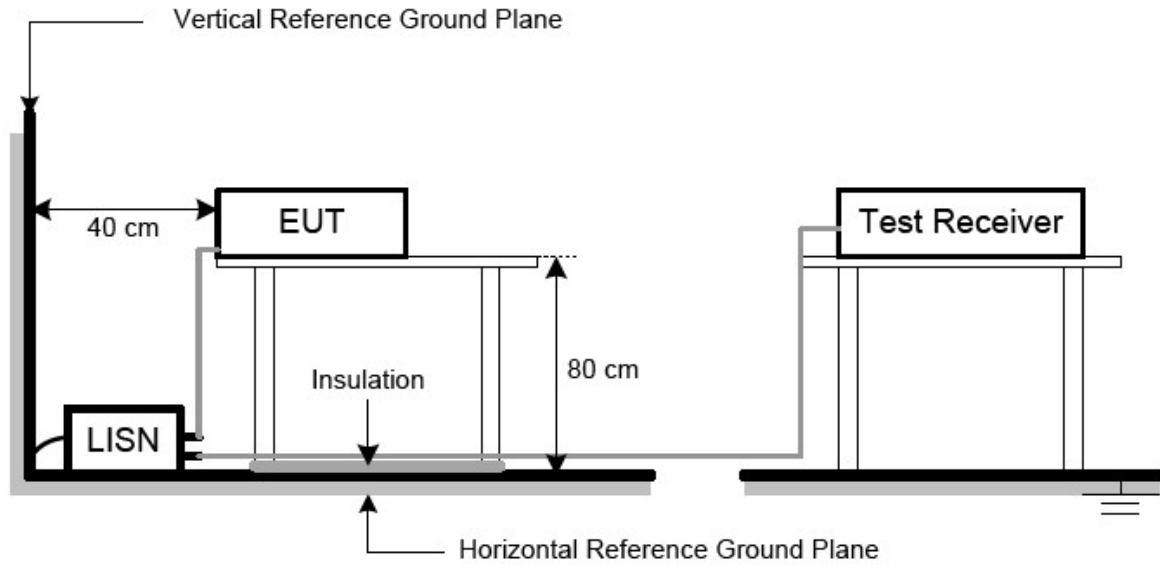
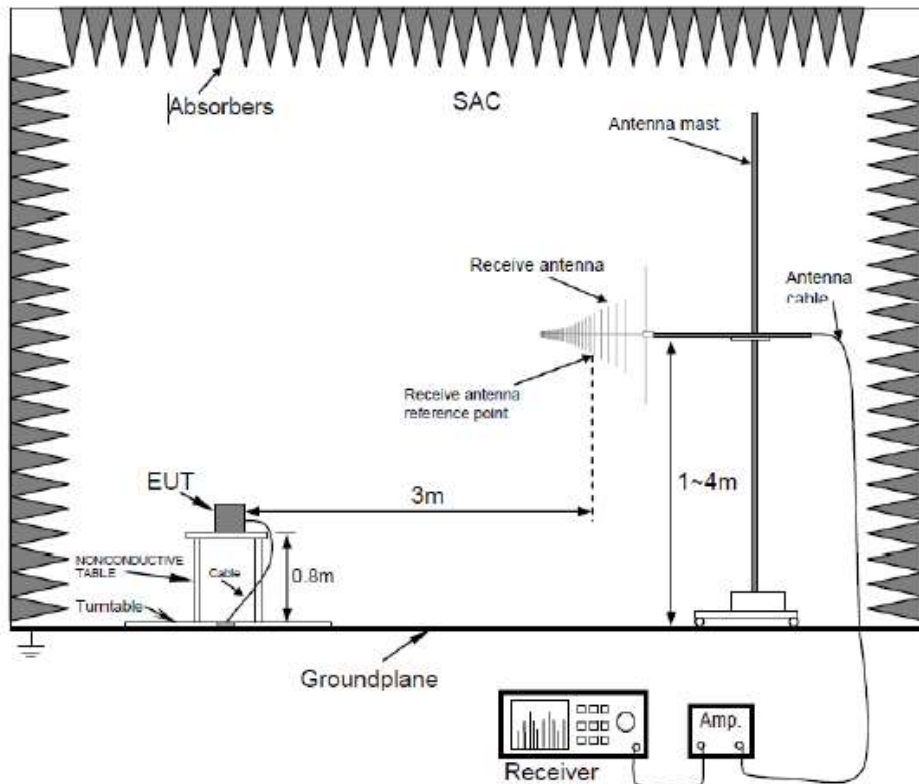


Configuration used for determination 用於特性的配置  
 EMI 特性 Electro-Magnetic interference characteristics  
 (1)Conducted Emission



(2)Radiated Emission



Conduction Character (傳導特性)

※Character Condition(特性條件):

1	I/P Voltage(Vac)(輸入電壓)	110Vac
2	I/P Frequency(Hz)(輸入頻率)	60Hz
3	Output Load(輸出負載)	Full Load
4	Ambient Temp.(°C)(環境溫度)	25°C
5	Sample Size(取樣數)	1PCS

※Character Equipment(特性設備):

ITEM	Equipment Item(設備)	Model No. / Manufacturer(製造商和型號)
1	頻普接收儀	KH3931
2	AC Source(變頻器)	ALL POWER/APG-1005N
3	Character Standard	EN55032 CLASS B

※Character Data(特性數據):

ITEM		QP	AV
Character Result	L line	-4.66dB	-12.57dB
	N line	-4.84dB	-12.92dB

※Character Waveform (特性波形):

**Conducted Emission Measurement**      GTK-Q-F104-02  
 File: 源源      Data: #156      Date: 2018/10/24      Time: 下午 01:13:25  
 80.0 dBuV

Site A9      Phase: **L1**      Temperature: 26 °C  
 Limit: CISPR22 Class B Conduction(QP)      Power: AC 110V/60Hz      Humidity: 57 %  
 EUT: POWER      Air Pressure: 983 hpa  
 MIN: UOHC 3150-2406  
 Note: FULL LOAD sample1

No. Mk.	Freq. MHz	Reading Level dBuV	Factor dB	Measurement dBuV	Limit dB	Over dB	Detector	Comment
1	0.1929	41.59	9.75	51.34	63.91	-12.57	QP	
2 *	0.1929	39.50	9.75	49.25	53.91	-4.66	AVG	
3	4.9570	32.05	10.22	42.27	56.00	-13.73	QP	
4	4.9570	29.65	10.22	39.87	46.00	-6.13	AVG	

**Conducted Emission Measurement**      GTK-Q-F104-02  
 File: 源源      Data: #157      Date: 2018/10/24      Time: 下午 01:14:28  
 80.0 dBuV

Site A9      Phase: **N**      Temperature: 26 °C  
 Limit: CISPR22 Class B Conduction(QP)      Power: AC 110V/60Hz      Humidity: 57 %  
 EUT: POWER      Air Pressure: 983 hpa  
 MIN: UOHC 3150-2406  
 Note: FULL LOAD sample1

No. Mk.	Freq. MHz	Reading Level dBuV	Factor dB	Measurement dBuV	Limit dB	Over dB	Detector	Comment
1	0.1932	41.22	9.76	50.98	63.90	-12.92	QP	
2 *	0.1932	39.30	9.76	49.06	53.90	-4.84	AVG	
3	5.7398	26.08	10.28	36.36	60.00	-23.64	QP	
4	5.7398	19.18	10.28	29.46	50.00	-20.54	AVG	

Conduction Character (傳導特性)

※Character Condition(特性條件) :

1	I/P Voltage(Vac)(輸入電壓)	230Vac
2	I/P Frequency(Hz)(輸入頻率)	50Hz
3	Output Load(輸出負載)	Full Load
4	Ambient Temp.(°C)(環境溫度)	25°C
5	Sample Size(取樣數)	1PCS

※Character Equipment(特性設備) :

ITEM	Equipment Item(設備)	Model No. / Manufacturer(製造商和型號)
1	頻普接收儀	KH3931
2	AC Source(變頻器)	ALL POWER/APG-1005N
3	Character Standard	EN55032 CLASS B

※Character Data(特性數據) :

ITEM	QP	AV
Character Result	L line	-4.4dB
	N line	-4.53dB

※Character Waveform (特性波形) :

Conducted Emission Measurement  
File: 源源 Data: #155 Date: 2018/10/24 Time: 下午 01:12:10  
Site A9 Phase: Lf Temperature: 26 °C  
Limit: CISPR22 Class B Conduction(QP) Power: AC 230V/50Hz Humidity: 57 %  
EUT: POWER  
M/N: UOHC 3150-2406 Air Pressure: 983 hpa  
Note: FULL LOAD sample1

No. Mk.	Freq. (MHz)	Reading Level (dBuV)	Factor (dB)	Measurement (dBuV)	Limit (dB)	Over (dB)	Detector	Comment
1	0.1925	40.64	9.75	50.39	63.93	-13.54	QP	
2 *	0.1925	39.78	9.75	49.53	53.93	-4.40	AVG	
3	4.2525	27.25	10.17	37.42	56.00	-18.58	QP	
4	4.2525	26.64	10.17	36.81	46.00	-9.19	AVG	

Conducted Emission Measurement  
File: 源源 Data: #154 Date: 2018/10/24 Time: 下午 01:10:59  
Site A9 Phase: N Temperature: 26 °C  
Limit: CISPR22 Class B Conduction(QP) Power: AC 230V/50Hz Humidity: 57 %  
EUT: POWER  
M/N: UOHC 3150-2406 Air Pressure: 983 hpa  
Note: FULL LOAD sample1

No. Mk.	Freq. (MHz)	Reading Level (dBuV)	Factor (dB)	Measurement (dBuV)	Limit (dB)	Over (dB)	Detector	Comment
1	0.1536	33.24	9.76	43.00	65.80	-22.80	QP	
2	0.1536	14.79	9.76	24.55	55.80	-31.25	AVG	
3	0.1935	40.56	9.75	50.31	63.88	-13.57	QP	
4 *	0.1935	39.60	9.75	49.35	53.88	-4.53	AVG	

Radiation Character (輻射特性)

※Character Condition(特性條件):

1	I/P Voltage(Vac)(輸入電壓)	110Vac
2	I/P Frequency(Hz)(輸入頻率)	60Hz
3	Output Load(輸出負載)	Full Load
4	Ambient Temp.(°C)(環境溫度)	25°C
5	Sample Size(取樣數)	1PCS

※Character Equipment(特性設備):

ITEM	Equipment Item(設備)	Model No. / Manufacturer(製造商和型號)
1	頻普接收儀	外面實驗室
2	AC Source(變頻器)	外面實驗室
3	Character Standard	CISPR32 CLASS B

※Character Data(特性數據):

ITEM		peak	QP
Character Result	V line	-1.97dB	-8.14dB
	H line	-4.75dB	-8.11dB

※Character Waveform (特性波形):

**Radiated Emission Measurement**  
 File: 源源 Data: #193 Date: 2018/10/24 Time: 上午 11:26:26  
 Site A6  
 Limit: CISPR32 ClassB 3M Radiation  
 EUT: POWER  
 M/N: UOHC 3150-2406  
 Note: FULL SYSTEM sample 1

No. Mk.	Freq. MHz	Reading Level dBuV	Factor dB	Measurement dBuV/m	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	60.5100	46.58	-9.42	37.16	40.00	-2.84	peak		
2	60.5100	42.50	-9.42	33.08	40.00	-6.92	QP		
3	67.8000	48.09	-10.69	37.40	40.00	-2.60	peak		
4	67.8000	43.30	-10.69	32.61	40.00	-7.39	QP		
5 *	86.4300	52.47	-14.44	38.03	40.00	-1.97	peak		
6	86.4300	46.30	-14.44	31.86	40.00	-8.14	QP		

**Radiated Emission Measurement**  
 File: 源源 Data: #194 Date: 2018/10/24 Time: 上午 11:29:41  
 Site A6  
 Limit: CISPR32 ClassB 3M Radiation  
 EUT: POWER  
 M/N: UOHC 3150-2406  
 Note: FULL SYSTEM sample 1

No. Mk.	Freq. MHz	Reading Level dBuV	Factor dB	Measurement dBuV/m	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1 *	131.7900	45.06	-9.81	35.25	40.00	-4.75	peak		
2	131.7900	41.70	-9.81	31.89	40.00	-8.11	QP		

Radiation Character (輻射特性)

※Character Condition(特性條件):

1	I/P Voltage(Vac)(輸入電壓)	230Vac
2	I/P Frequency(Hz)(輸入頻率)	50Hz
3	Output Load(輸出負載)	Full Load
4	Ambient Temp.(°C)(環境溫度)	25°C
5	Sample Size(取樣數)	1PCS

※Character Equipment(特性設備):

ITEM	Equipment Item(設備)	Model No. / Manufacturer(製造商和型號)
1	頻普接收儀	外面實驗室
2	AC Source(變頻器)	外面實驗室
3	Character Standard	CISPR32 CLASS B

※Character Data(特性數據):

ITEM		peak	QP
Character Result	V line	-1.48dB	-6.32dB
	H line	-4.5dB	-7.71dB

※Character Waveform (特性波形):

Site A6  
Limit: CISPR32 ClassB 3M Radiation  
EUT: POWER  
M/N: UOHC 3150-2406  
Note: FULL SYSTEM sample 1

No. Mk.	Freq. MHz	Reading Level dBuV	Factor dB	Measurement dBuV/m	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	66.1800	47.99	-10.41	37.58	40.00	-2.42	peak			
2	66.1800	44.20	-10.41	33.79	40.00	-6.21	QP			
3	71.7992	45.20	-11.52	33.68	40.00	-6.32	QP			
4	72.1200	50.12	-11.60	38.52	40.00	-1.48	peak			
5	86.4300	51.57	-14.44	37.13	40.00	-2.87	peak			
6	86.4300	45.70	-14.44	31.26	40.00	-8.74	QP			
7	137.1900	43.53	-9.20	34.33	40.00	-5.67	peak			
8	189.5700	45.50	-10.41	35.09	40.00	-4.91	peak			
9	189.5700	41.00	-10.41	30.59	40.00	-9.41	QP			

Site A6  
Limit: CISPR32 ClassB 3M Radiation  
EUT: POWER  
M/N: UOHC 3150-2406  
Note: FULL SYSTEM sample 1

No. Mk.	Freq. MHz	Reading Level dBuV	Factor dB	Measurement dBuV/m	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	138.8100	44.51	-9.01	35.50	40.00	-4.50	peak			
2	138.8100	41.30	-9.01	32.29	40.00	-7.71	QP			

EFT Character (電子脈衝群干擾特性)

※Character Condition(特性條件) :

1	I/P Voltage(Vac)(輸入電壓)	100Vac/230Vac
2	I/P Frequency(Hz)(輸入頻率)	50Hz / 60Hz
3	Output Load(輸出負載)	Full Load
4	Ambient Temp.(°C)(環境溫度)	25°C
5	Sample Size(取樣數)	1PCS

※Character Equipment(特性設備) :

ITEM	Equipment Item(設備)	Model No. / Manufacturer(製造商和型號)
1	BEST EMC SOLUTION	EMCSOSIN / EFT-S4
2	AC Source(變頻器)	ALL POWER/APG-1005N

※Character Standard(特性標準) :

1	Character Standard	IEC 61000-4-4
EFT Character		
Spec.	2KV	
O/P	Full Load	
I/P	100Vac/60Hz & 230Vac/50Hz	
Burst	15ms/300ms	
Character Duration	1 min	
Pulse Rate:	5KHz/100KHz	

※Character Data(特性數據) 產品類別: Class I

Power Line	Pulse Polarity	Character Voltage (KV)	Required Criteria	Complied To Criteria(A,B,C)	Judgement
L	"+" / "-"	2KV	Criteria B	Criteria A	PASS
N	"+" / "-"	2KV	Criteria B	Criteria A	PASS
L-N	"+" / "-"	2KV	Criteria B	Criteria A	PASS
PE	"+" / "-"	2KV	Criteria B	Criteria A	PASS
L-PE	"+" / "-"	2KV	Criteria B	Criteria A	PASS
N-PE	"+" / "-"	2KV	Criteria B	Criteria A	PASS
L-N-PE	"+" / "-"	2KV	Criteria B	Criteria A	PASS

※Character Performance & Result :

- Criteria A: The apparatus continues to operate as intended. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance.
- Criteria B: The apparatus continues to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.
- Criteria C: Temporary loss of function is allowed, provided the function self recoverable or can be restored by the operation of controls

ESD Character (靜電干擾特性)

※Character Condition(特性條件) :

1	I/P Voltage(Vac)(輸入電壓)	100Vac/230Vac
2	I/P Frequency(Hz)(輸入頻率)	50Hz / 60Hz
3	Output Load(輸出負載)	Full Load
4	Ambient Temp.(°C)(環境溫度)	25°C
5	Sample Size(取樣數)	1PCS

※Character Equipment(特性設備) :

ITEM	Equipment Item(設備)	Model No. / Manufacturer(製造商和型號)
1	EMC-PARTNER	PRIMA /ESD61002TB
2	AC Source(變頻器)	ALL POWER/APG-1005N

※Character Standard(特性標準) :

1	Character Standard	IEC 61000-4-2:2001
ESD Character		
Spec.	Air: ±15.0KV	Contact: ±8.0KV
O/P	Full Load	
I/P	100Vac/60Hz & 230Vac/50Hz	
Description of Observation:	NO Abnormal Issue	
Performance Criterion:	Manufacturer (According to Standard/Manufacturer)	

※Character Data(特性數據) :

Item	Amount of Discharge	Voltage	Required Criteria	Complied To Criteria(A,B,C)	Judgement
Air Discharge	Mini 10/Point	±15.0KV	Criteria B	Criteria A	PASS
Contact Discharge	Mini 25/Point	±8.0KV	Criteria B	Criteria A	PASS
Indirect Discharge(HCP)	Mini 25/Point	N/A	N/A	N/A	N/A
Indirect Discharge(VCP Front)	Mini 25/Point	N/A	N/A	N/A	N/A
Indirect Discharge(VCP Left)	Mini 25/Point	N/A	N/A	N/A	N/A
Indirect Discharge(VCP Back)	Mini 25/Point	N/A	N/A	N/A	N/A
Indirect Discharge(VCP Right)	Mini 25/Point	N/A	N/A	N/A	N/A

※Character Performance & Result :

- Criteria A: The apparatus continues to operate as intended. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance.
- Criteria B: The apparatus continues to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.
- Criteria C: Temporary loss of function is allowed, provided the function self recoverable or can be restored by the operation of controls

Light Surge Character (雷擊特性)

※Character Condition(特性條件) :

1	I/P Voltage(Vac)(輸入電壓)	100Vac/230Vac
2	I/P Frequency(Hz)(輸入頻率)	50Hz / 60Hz
3	Output Load(輸出負載)	Full Load
4	Ambient Temp.(°C)(環境溫度)	25°C
5	Sample Size(取樣數)	1PCS

※Character Equipment(特性設備) :

ITEM	Equipment Item(設備)	Model No. / Manufacturer(製造商和型號)
1	EMC-PARTNER	Prima/ SUG61005TAX
2	AC Source(變頻器)	ALL POWER/APG-1005N

※Character Standard(特性標準) :

1	Character Standard	IEC 61000-4-5:1995+ A1:2001
SURGE Character		
Spec.	Line to Line ±2KV ; Line to FG ±4KV	
O/P	Full load	
I/P	100Vac/60Hz & 230Vac/50Hz	
REP.RATE	60 sec	
Description of Observation:	NO Abnormal Issue	
Performance Criterion:	Manufacturer (According to Standard/Manufacturer)	

※Character Data(特性數據) 產品類別: Class I

Character Point	Character Voltage (KV)	Polarity	Phase Angle				Required Criteria	Complied To Criteria(A,B,C)	Judgement
			0°	90°	180°	270°			
L-N	2KV	+	OK	OK	OK	OK	Criteria B	Criteria A	PASS
		-	OK	OK	OK	OK	Criteria B	Criteria A	PASS
L-GND	4KV	+	OK	OK	OK	OK	Criteria B	Criteria A	PASS
		-	OK	OK	OK	OK	Criteria B	Criteria A	PASS
N-GND	4KV	+	OK	OK	OK	OK	Criteria B	Criteria A	PASS
		-	OK	OK	OK	OK	Criteria B	Criteria A	PASS
L,N-GND	4KV	+	OK	OK	OK	OK	Criteria B	Criteria A	PASS
		-	OK	OK	OK	OK	Criteria B	Criteria A	PASS

Class II Type : Character L-N Only.

※Character Performance & Result :

- Criteria A: The apparatus continues to operate as intended. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance.
- Criteria B: The apparatus continues to operate as intended after te test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, whe the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.
- Criteria C: Temporary loss of function is allowed, provided the function self recoverable or can be restored by the operation of controls



DIPS Character(周波跌落特性)

※Character Condition(特性條件):

1	I/P Voltage(Vac)(輸入電壓)	100~230Vac
2	I/P Frequency(Hz)(輸入頻率)	50Hz/60Hz
3	Output load(輸出負載)	Full load
4	Ambient Temp.(°C)(環境溫度)	25°C
5	Sample Size(取樣數)	1PCS
6		

※Character Parameters(特性參數):

DIPS Character	
Condition :	According EN61000-4-11 ( full load and high line )
	Voltage Dips 100% Redaction 10ms/20ms ; 60% Redaction 200ms/240ms ; 30% Redaction 500 ms/600ms Voltage Interruption : ≥95% ; Redaction 5000ms/6000ms

※Character Data(特性數據):

Character Level	% UT	Reduction (%)	Duration (Periods)	Perform Criteria	Results	Judgement
0		100	0.5/1	B	Criteria A	PASS
40		60	10/12	B	Criteria B	PASS
70		30	25/30	C	Criteria B	PASS
0		100	250/300	C	Criteria B	PASS

※Character Performance & Result :

- Criteria A:** The apparatus continues to operate as intended. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance.
- Criteria B:** The apparatus continues to operate as intended after te test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, whe the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.
- Criteria C:** Temporary loss of function is allowed, provided the function self recoverable or can be restored by the operation of controls