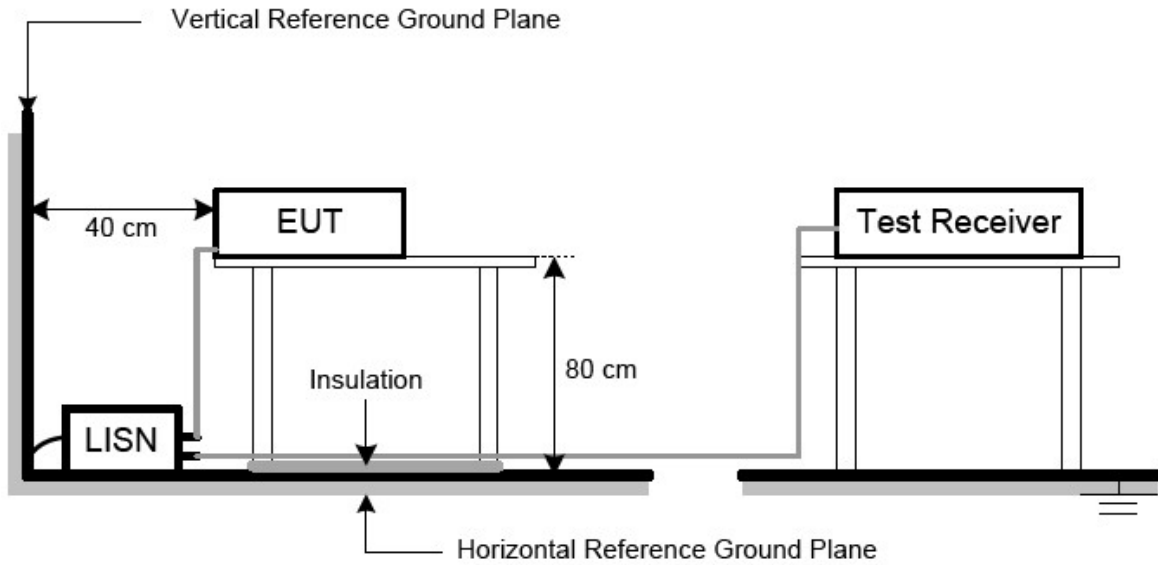
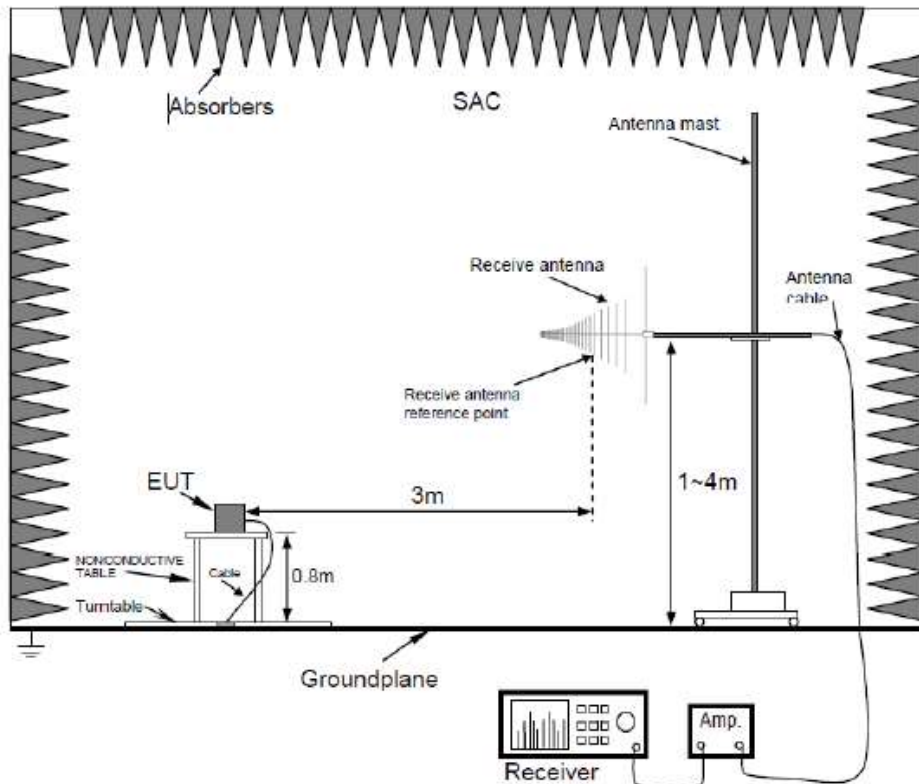


Configuration used for determination 用於特性的配置  
 EMI 特性 Electro-Magnetic interference characteristics  
 (1)Conducted Emission



(2)Radiated Emission



Conduction Character (傳導特性)

※Character Condition(特性條件):

1	I/P Voltage(Vac)(輸入電壓)	100Vac
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	-9.84dB
	N line	-10.67dB

※Character Waveform (特性波形):

Conducted Emission Measurement  
Data #139 Date: 2024/05/02 Time: 下午 02:13:19

Site A9  
Limit: (CE)EN55032 Class B(QP)  
EUT:  
M/N: UOHC3240-1210  
Note:

No.	Mk.	Freq. (MHz)	Reading Level (dBμV)	Factor (dB)	Measurement (dBμV)	Limit (dBμV)	Over (dB)	Detector	Comment
1		0.1904	41.79	9.66	51.45	64.02	-12.57	QP	
2		0.1904	39.34	9.66	49.00	54.02	-5.02	AVG	
3		0.2551	40.68	9.66	50.34	61.59	-11.25	QP	
4		0.2551	37.63	9.66	47.29	51.59	-4.30	AVG	
5		0.9522	35.30	9.70	45.00	56.00	-11.00	QP	
6		0.9522	30.26	9.70	39.96	46.00	-6.04	AVG	
7		1.0838	35.76	9.70	45.46	56.00	-10.54	QP	
8		1.0838	32.58	9.70	42.28	46.00	-3.72	AVG	
9		1.2765	36.47	9.69	46.16	56.00	-9.84	QP	
10	*	1.2765	33.18	9.69	42.87	46.00	-3.13	AVG	

\*Maximum data x:Over limit :over margin  
Receiver: ESC530 S/N:100393 Spectrum Analyzer: SWIPAD GTK-E-A407-01(2024.02.17) Test Result: Pass  
L.I.S.N: ENV216/100108(2024.03.06) Cable2: Engineer Signature: Eric Tsai  
File: 測試Data #139 Page: 1

Conducted Emission Measurement  
Data #140 Date: 2024/05/02 Time: 下午 02:14:38

Site A9  
Limit: (CE)EN55032 Class B(QP)  
EUT:  
M/N: UOHC3240-1210  
Note:

No.	Mk.	Freq. (MHz)	Reading Level (dBμV)	Factor (dB)	Measurement (dBμV)	Limit (dBμV)	Over (dB)	Detector	Comment
1		0.1890	40.90	9.66	50.56	64.08	-13.52	QP	
2		0.1890	38.30	9.66	47.96	54.08	-6.12	AVG	
3		0.2564	40.03	9.66	49.69	61.55	-11.86	QP	
4		0.2564	37.01	9.66	46.67	51.55	-4.88	AVG	
5		1.2740	35.64	9.69	45.33	56.00	-10.67	QP	
6	*	1.2740	32.71	9.69	42.40	46.00	-3.60	AVG	
7		2.2900	34.98	9.68	44.66	56.00	-11.34	QP	
8		2.2900	22.68	9.68	32.36	46.00	-13.64	AVG	
9		2.4365	35.63	9.68	45.31	56.00	-10.69	QP	
10		2.4365	20.68	9.68	30.36	46.00	-15.64	AVG	

\*Maximum data x:Over limit :over margin  
Receiver: ESC530 S/N:100393 Spectrum Analyzer: SWIPAD GTK-E-A407-01(2024.02.17) Test Result: Pass  
L.I.S.N: ENV216/100108(2024.03.06) Cable2: Engineer Signature: Eric Tsai  
File: 測試Data #140 Page: 1

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	-10.35dB	-4.78dB
	N line	-13.05dB	-7.09dB

※Character Waveform (特性波形):

**Conducted Emission Measurement**    GTK-Q-F104-03  
 Data #141    Date: 2024/05/02    Time: 02:16:41  
 Site A9    Phase: **L1**    Temperature: 25 °C  
 Limit: (CE)EN55032 Class B(QP)    Power: AC 230V/50Hz    Humidity: 64 %  
 EUT:  
 MN: UOHC3240-1210  
 Note:

No.	Mk.	Freq. (MHz)	Reading Level (dBµV)	Factor (dB)	Measurement (dBµV)	Limit (dBµV)	Over (dB)	Detector	Comment
1		0.6303	30.95	9.65	40.60	56.00	-15.40	QP	
2		0.6303	24.42	9.65	34.07	46.00	-11.93	AVG	
3		1.2772	35.96	9.69	45.65	56.00	-10.35	QP	
4	*	1.2772	31.53	9.69	41.22	46.00	-4.78	AVG	
5		1.9812	32.99	9.68	42.67	56.00	-13.33	QP	
6		1.9812	22.79	9.68	32.47	46.00	-13.53	AVG	
7		2.8799	31.79	9.71	41.50	56.00	-14.50	QP	
8		2.8799	19.60	9.71	29.31	46.00	-16.69	AVG	

\*Maximum data    x:Over limit    !:over margin    •Reference Only  
 Receiver: ESCS30 S/N:100393    Spectrum Analyzer:  
 L.I.S.N.: ENV216/100108/2024.03.06)    SW/PAD:GTK-E-A407-01(2024.02.17)    Test Result: **Pass**  
 Cable1:GTK-E-A154-01(2024.01.02)    Cable2:    Engineer Signature: Eric Tsai  
 File: 電源Data #141    Page: 1

**Conducted Emission Measurement**    GTK-Q-F104-03  
 Data #142    Date: 2024/05/02    Time: 02:18:25  
 Site A9    Phase: **N**    Temperature: 25 °C  
 Limit: (CE)EN55032 Class B(QP)    Power: AC 230V/50Hz    Humidity: 64 %  
 EUT:  
 MN: UOHC3240-1210  
 Note:

No.	Mk.	Freq. (MHz)	Reading Level (dBµV)	Factor (dB)	Measurement (dBµV)	Limit (dBµV)	Over (dB)	Detector	Comment
1		1.2732	33.26	9.69	42.95	56.00	-13.05	QP	
2	*	1.2732	29.12	9.69	38.81	46.00	-7.19	AVG	
3		2.1211	34.77	9.68	44.45	56.00	-11.55	QP	
4		2.1211	19.44	9.68	29.12	46.00	-16.88	AVG	
5		2.4538	35.69	9.68	45.37	56.00	-10.63	QP	
6		2.4538	19.87	9.68	29.55	46.00	-16.45	AVG	
7		2.6124	35.39	9.71	45.10	56.00	-10.90	QP	
8		2.6124	21.26	9.71	30.97	46.00	-15.03	AVG	

\*Maximum data    x:Over limit    !:over margin    •Reference Only  
 Receiver: ESCS30 S/N:100393    Spectrum Analyzer:  
 L.I.S.N.: ENV216/100108/2024.03.06)    SW/PAD:GTK-E-A407-01(2024.02.17)    Test Result: **Pass**  
 Cable1:GTK-E-A154-01(2024.01.02)    Cable2:    Engineer Signature: Eric Tsai  
 File: 電源Data #142    Page: 1

Radiation Character (輻射特性)

※Character Condition(特性條件):

1	I/P Voltage(Vac)(輸入電壓)	100Vac
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	-1.95dB	-5.07dB
	H line	-16.21dB	N/A

※Character Waveform (特性波形):

**Radiated Emission Measurement** (Vertical)

Site A6  
Limit: (RE)EN55032 Class B 3m  
EUT:  
M/N: UOHC3240-2410  
Note:

No. Mk.	Freq. (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measurement (dBμV/m)	Limit (dBμV/m)	Over (dB)	Antenna Height (cm)	Table Degree (degree)	Comment
1	32.9700	44.07	-10.83	33.24	40.00	-6.76	peak		
2 *	40.2600	47.62	-9.57	38.05	40.00	-1.95	peak		
3 !	40.2600	44.50	-9.57	34.93	40.00	-5.07	QP		
4	100.4700	47.08	-13.17	33.91	40.00	-6.09	peak		

**Radiated Emission Measurement** (Horizontal)

Site A6  
Limit: (RE)EN55032 Class B 3m  
EUT:  
M/N: UOHC3240-2410  
Note:

No. Mk.	Freq. (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measurement (dBμV/m)	Limit (dBμV/m)	Over (dB)	Antenna Height (cm)	Table Degree (degree)	Comment
1	143.4000	31.82	-8.72	23.10	40.00	-16.90	peak		
2 *	213.6000	34.77	-10.98	23.79	40.00	-16.21	peak		

\*Maximum data x:Over limit l:over margin      •Reference Only

Receiver: ESCS30 S/N:      Spectrum Analyzer: FSV      Amplifier: 8447D/2944A08610(2024.03.06)

Antenna: VULB9168/251 10m(2023.07.04)      SW/PAD:GTK-E-A342-01(2024.04.03)      Test Result: **Pass**

Cable1:GTK-E-A344-01(2024.04.03)      Cable2:GTK-E-A346-01(2024.04.03)      Engineer Signature: Eric Tsai

File: \\Data #366      Page: 1

\*Maximum data x:Over limit l:over margin      •Reference Only

Receiver: ESCS30 S/N:      Spectrum Analyzer: FSV      Amplifier: 8447D/2944A08610(2024.03.06)

Antenna: VULB9168/251 10m(2023.07.04)      SW/PAD:GTK-E-A342-01(2024.04.03)      Test Result: **Pass**

Cable1:GTK-E-A344-01(2024.04.03)      Cable2:GTK-E-A346-01(2024.04.03)      Engineer Signature: Eric Tsai

File: \\Data #367      Page: 1

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	-1.83dB	-7.29dB
	H line	-17.21dB	N/A

※Character Waveform (特性波形):

Site A6  
Limit: (RE)EN55032 Class B 3m  
EUT:  
M/N: UOHC3240-2410  
Note:

No. Mk.	Freq. (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measurement (dBuV/m)	Limit (dB)	Over (dB)	Antenna Height (cm)	Table Degree (degree)	Comment
1 !	41.8800	46.25	-9.31	36.94	40.00	-3.06			peak
2	41.8800	39.60	-9.31	30.29	40.00	-9.71			QP
3 *	79.9500	51.76	-13.59	38.17	40.00	-1.83			peak
4	79.9500	46.30	-13.59	32.71	40.00	-7.29			QP
5 !	86.1600	49.16	-14.75	34.41	40.00	-5.59			peak

\*:Maximum data x:Over limit l:over margin ●Reference Only  
Receiver: ESCS30 S/N: Spectrum Analyzer: FSV Amplifier: 8447D2944A08610(2024.03.06)  
Antenna: VULB9168/251 10m(2023.07.04) SW/PAD:GTK-E-A342-01(2024.04.03) Test Result: Pass  
Cable1:GTK-E-A344-01(2024.04.03) Cable2:GTK-E-A346-01(2024.04.03) Engineer Signature: Eric Tsai  
File : 測試Data #368 Page: 1

Site A6  
Limit: (RE)EN55032 Class B 3m  
EUT:  
M/N: UOHC3240-2410  
Note:

No. Mk.	Freq. (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measurement (dBuV/m)	Limit (dB)	Over (dB)	Antenna Height (cm)	Table Degree (degree)	Comment
1 *	151.5000	31.12	-8.33	22.79	40.00	-17.21			peak

\*:Maximum data x:Over limit l:over margin ●Reference Only  
Receiver: ESCS30 S/N: Spectrum Analyzer: FSV Amplifier: 8447D2944A08610(2024.03.06)  
Antenna: VULB9168/251 10m(2023.07.04) SW/PAD:GTK-E-A342-01(2024.04.03) Test Result: Pass  
Cable1:GTK-E-A344-01(2024.04.03) Cable2:GTK-E-A346-01(2024.04.03) Engineer Signature: Eric Tsai  
File : 測試Data #369 Page: 1

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/230Vac	
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/230Vac		
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			
Indirect Discharge(VCP Front)	Mini 25/Point	N/A			
Indirect Discharge(VCP Left)	Mini 25/Point	N/A			
Indirect Discharge(VCP Back)	Mini 25/Point	N/A			
Indirect Discharge(VCP Right)	Mini 25/Point	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/230Vac	
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 : $\geq 95\%$ ; 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 C	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 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