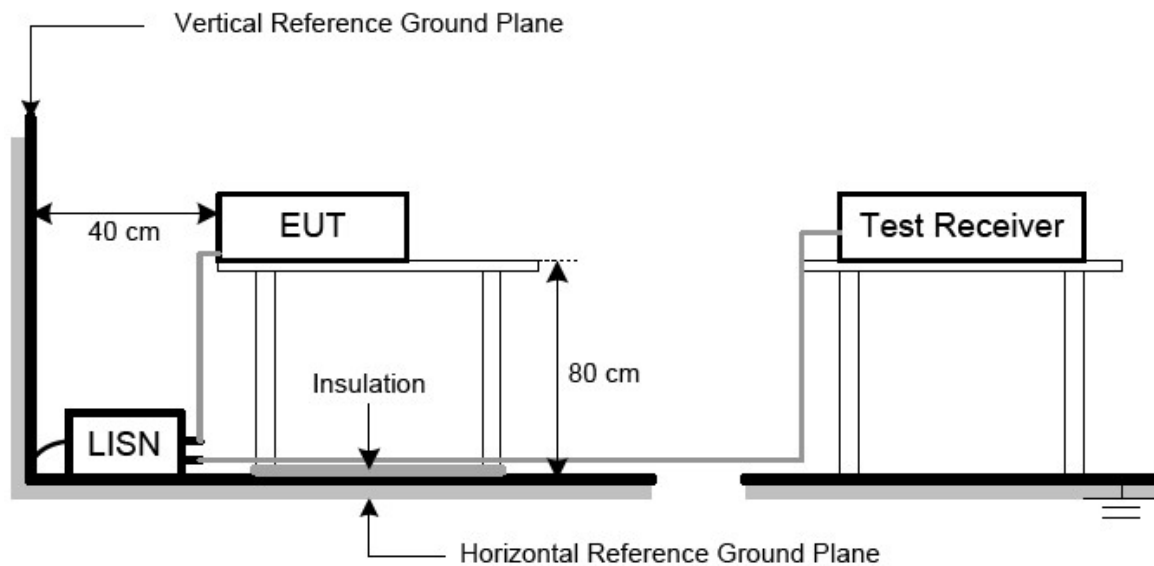
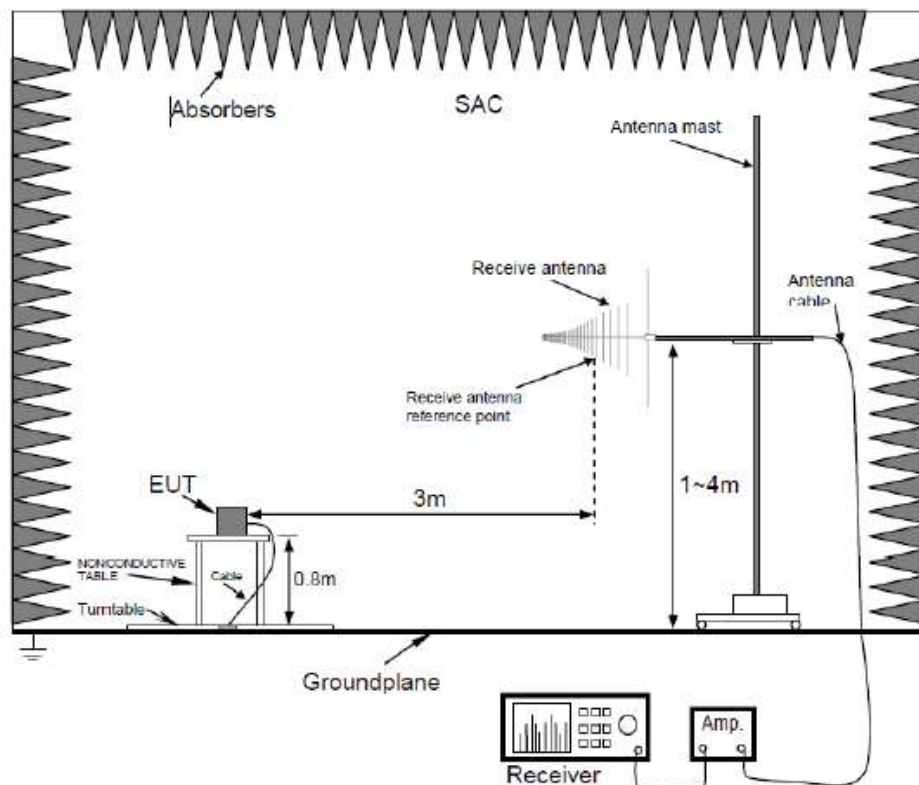


Configuration used for determination 用於特性的配置
EMI 特性 Electro-Magnetic interference characteristics
(1)Conducted Emission



(2)Radiated Emission



Conduction Character (傳導特性)

※Character Condition(特性條件):

1	I/P Voltage(Vac)(輸入電壓)	110
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

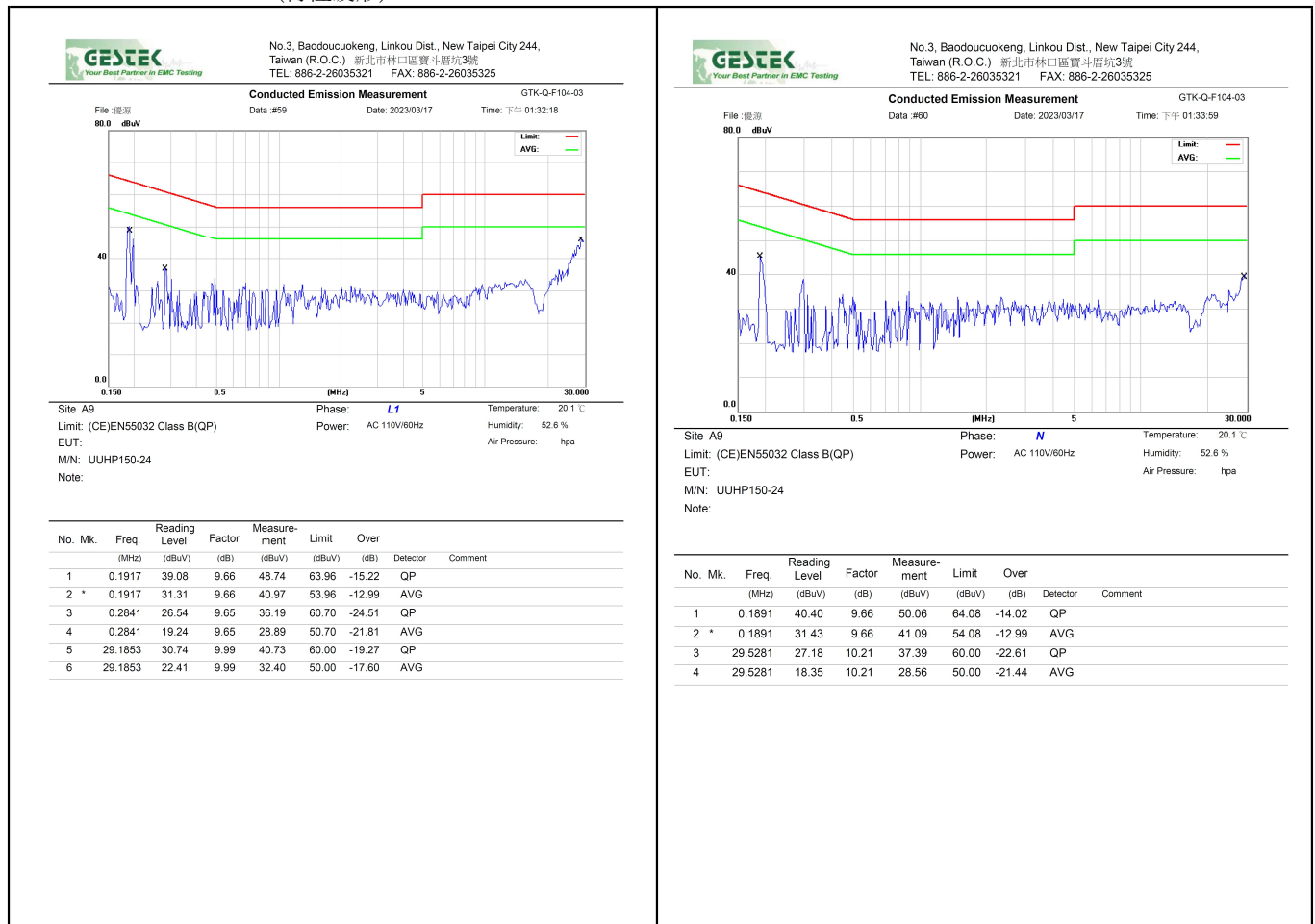
※Character Equipment(特性設備):

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
L line	-15.22dB	-12.99dB
N line	-12.99dB	-14.02dB

※Character Waveform (特性波形):



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

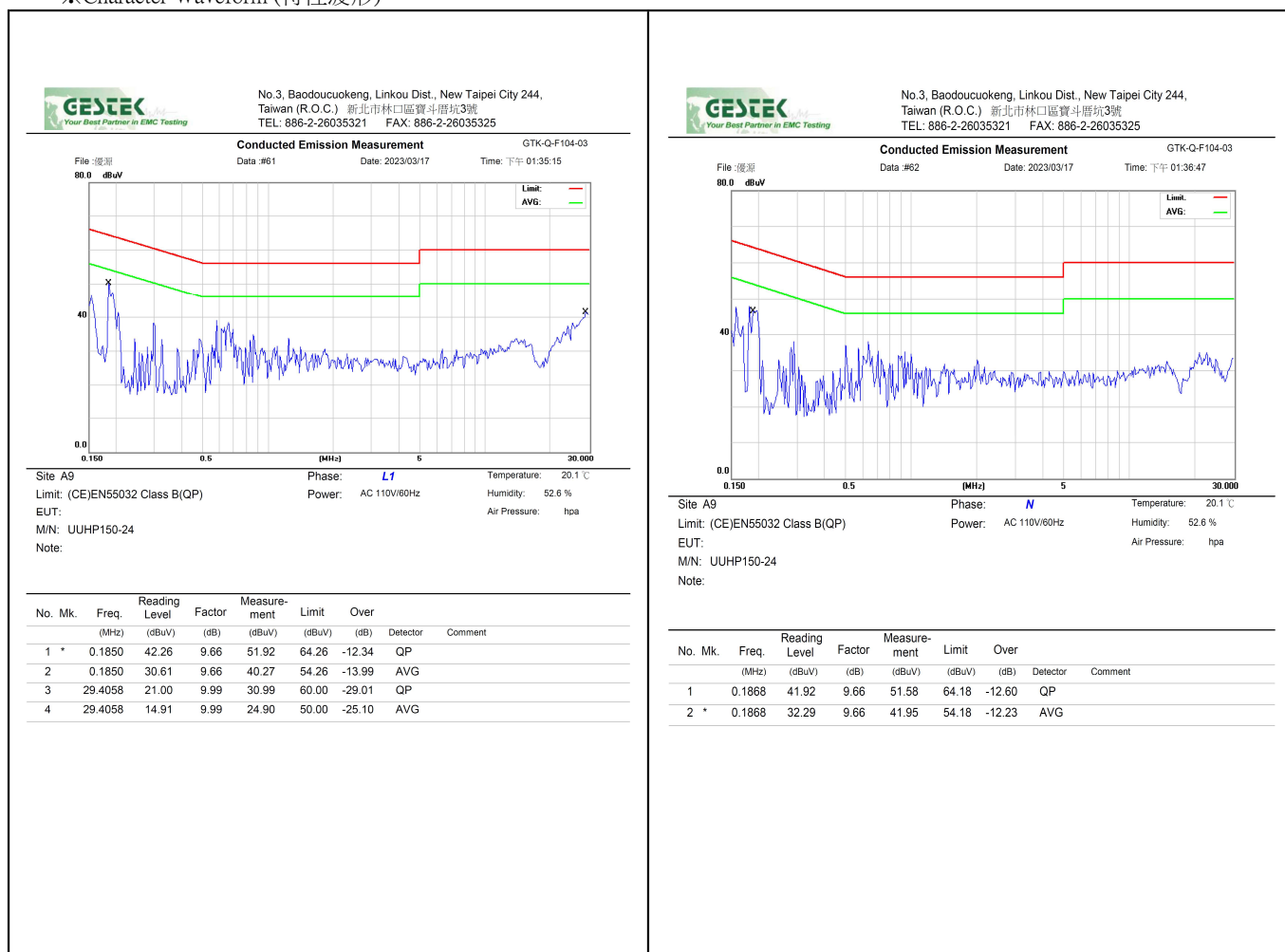
※Character Equipment(特性設備):

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
L line	-12.34dB	-13.99dB
N line	-12.6dB	-12.23dB

※Character Waveform (特性波形):



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

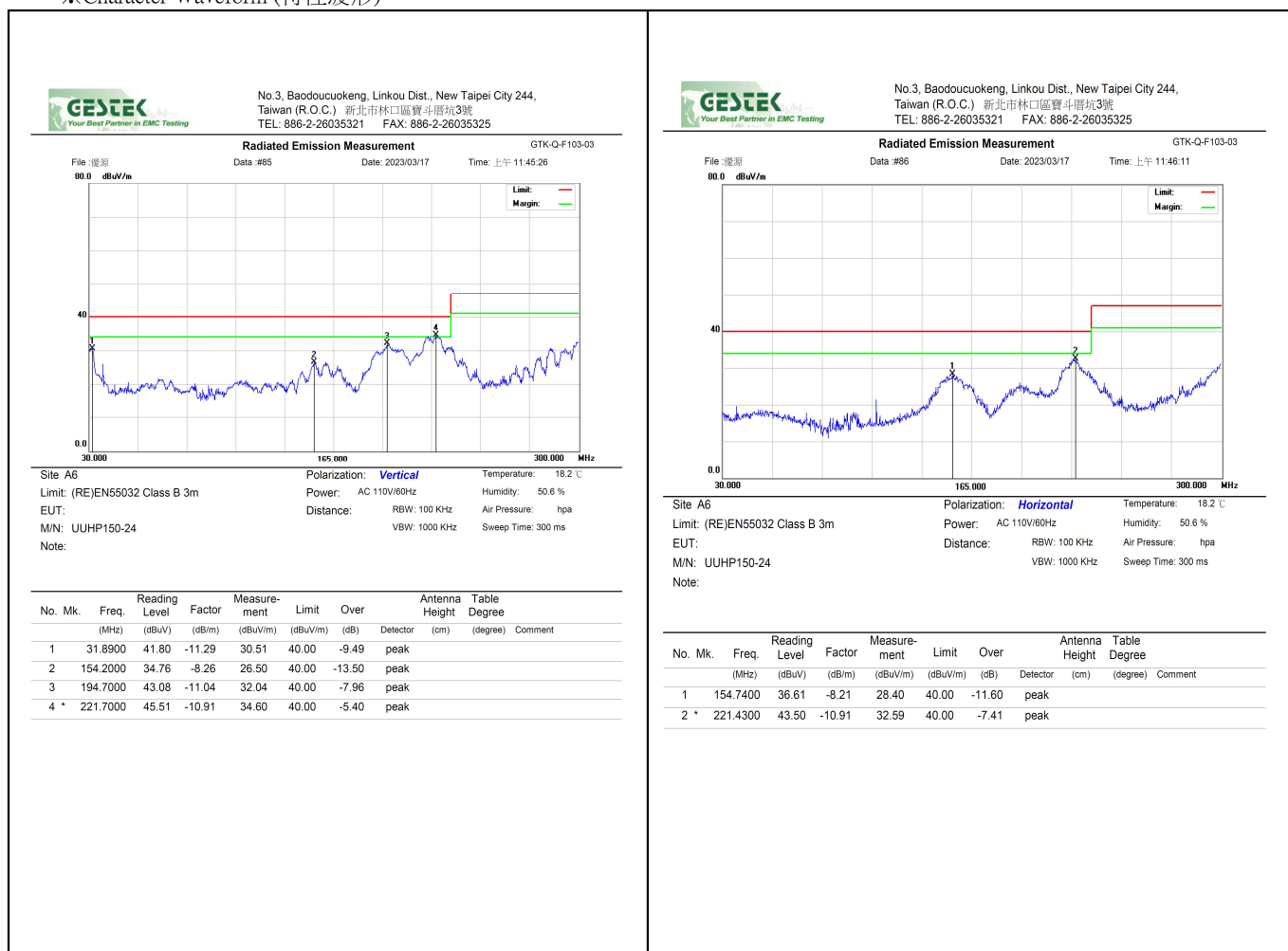
※Character Equipment(特性設備):

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(律安)
2	AC Source(變頻器)	外面實驗室(律安)
3	Character Standard	CISPR32 CLASS B

※Character Data(特性數據):

ITEM	peak	QP
Character Result	V line -5.4dB	
	H line -7.41dB	

※Character Waveform (特性波形):



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

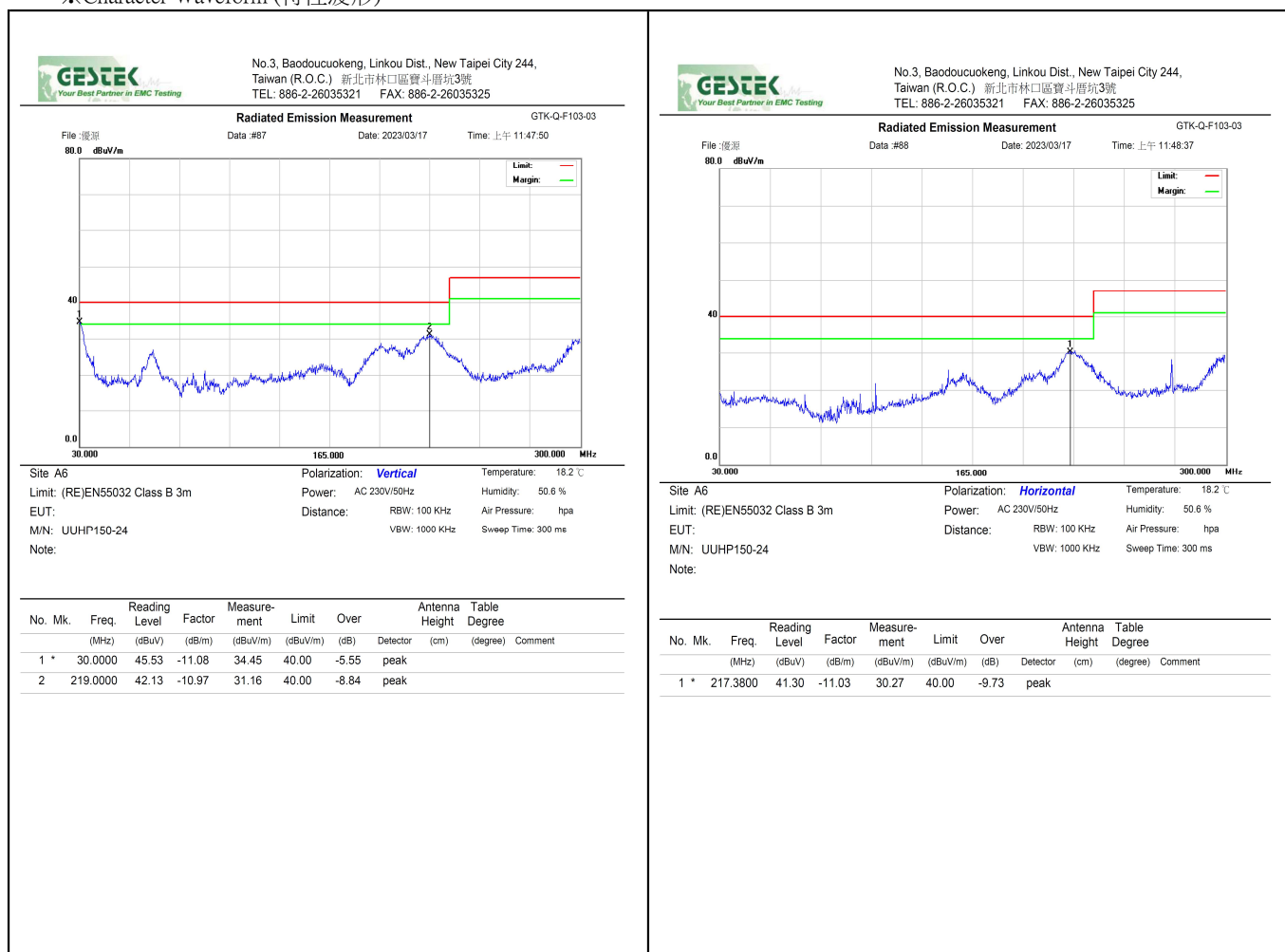
※Character Equipment(特性設備):

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(律安)
2	AC Source(變頻器)	外面實驗室(律安)
3	Character Standard	CISPR32 CLASS B

※Character Data(特性數據):

ITEM	peak	QP
Character Result		
V line	-5.55dB	N/A
H line	-9.73dB	N/A

※Character Waveform (特性波形):



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.	1KV
	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	"+" / "-"	1KV	Criteria B	Criteria A	Pass
N	"+" / "-"	1KV	Criteria B	Criteria A	Pass
L-N	"+" / "-"	1KV	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	N/A	N/A	Pass
Indirect Discharge(VCP Front)	Mini 25/Point	N/A	N/A	N/A	Pass
Indirect Discharge(VCP Left)	Mini 25/Point	N/A	N/A	N/A	Pass
Indirect Discharge(VCP Back)	Mini 25/Point	N/A	N/A	N/A	Pass
Indirect Discharge(VCP Right)	Mini 25/Point	N/A	N/A	N/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

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 $\pm 2KV$; Line to FG $\pm 4KV$	
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 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

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 A	Pass
70		30	25/30	C	Criteria A	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 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