APPENDIX 2 Type Test Certification Test Result Sheet

Grid-tied Inverter Details:

Manufacturer	Samil Power Co., Ltd.
Address	No.6 Xuefengshan Road, Suqian High-tech Industrial Development Zone, Jiangsu Province, P. R. China
Postal code	223800
Country	P. R. China
Phone	+86-510-83593132

Test house Details	Samil Power Co., Ltd.
Date of test	2015/05/18
Signature	

山亿新能源股份有限公司
SAMIL POWER CO., LTD.

Type reference	Max AC power	Nominal AC power
SolarLake 25000TL-PM	25000W	25000W
SolarLake 30000TL-PM	30000W	30000W

Test Results:

Power Quality

Harmonic current emissions as per EN 61000-3-12 Class A									
Harmonic		2nd	3rd	5th	7th	9th	11th	13th	15th ... 39th
EN 61000-3-12 Limit [A]		1.08	2.30	1.14	0.77	0.40	0.33	0.21	0.15 x (15/n)
Test Values [A] (at rated power)	L1	0.039	0.084	0.600	0.627	0.050	0.150	0.012	0.022
	L2	0.041	0.136	0.429	0.613	0.026	0.111	0.015	0.029
	L3	0.051	0.045	0.390	0.671	0.030	0.133	0.023	0.012

Voltage fluctuations and flicker as per EN 61000-3-11				
	Starting	Stopping	Running (at rated power)	
EN 61000-3-11 Limit	4%	4%	P_{st} = 1.0	P_{lt} = 0.65
Test Value	0.6%	0.6%	0.064	0.064

Power Factor			
Protection Limit	0.95 lag – 0.95 lead at three voltage levels		
Test level (AC voltage)	210 V	230 V	250 V
Test value (at rated power)	0.999	0.999	0.999

Grid Monitoring

Under / Over Voltage Test					
		Under Voltage		Over Voltage	
Parameter		Voltage	Time	Voltage	Time
Protection limit		207 V	0.5 s	253 V	0.5 s
Actual setting		207 V	---	253 V	---
Trip value	L1	208.0 V	0.48 s	252.5 V	0.49 s
	L2	207.2 V	0.48 s	252.0 V	0.48 s
	L3	207.1 V	0.49 s	251.8 V	0.49 s

Under / Over Frequency Test				
	Under Frequency		Over Frequency	
Parameter	Frequency	Time	Frequency	Time
Protection limit	48 Hz	0.5 s	50.5 Hz	0.5 s
Actual setting	48 Hz	---	50.5 Hz	---
Trip value	48 Hz	0.49 s	50.5 Hz	0.46 s

LoM Test			
Method used	Frequency Shift		
Output Power %	10%	50%	100%
Trip Setting	---	---	---
Trip Value	0.34 s	0.31 s	0.41 s

Fault Level Contribution

Fault Level Contribution	
Device	Max Short Circuit Current
SolarLake 25000TL-PM	53
SolarLake 30000TL-PM	62

Comments

These tests have been carried out with specifications and parameters set to meet the requirements of CER/06/190. It is hereby declared by the manufacturer that all units shipped to Ireland will have identical parameter settings and that these parameters cannot be changed by a user, installer or by any person other than the manufacturer.