

TEST REPORT

REPORT NO: ISSUED DATE

JS2015-003106-CIS 15 DEC 2015

CUSTOMER & COMPANY ADDRESS

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PROJECT TITLE	CO2 INCUBATOR	EMC TESTING	
PRODUCT CATEGORY	LABORATORY EQUIPMENT		
PRODUCT DESCRIPTION	CO2 INCUBATOR		
REGULATORY MODEL NUMBER	CCL - NNNX - N - X - XX CLM - NNNX - N - X - XX		
TEST STANDARDS	EN 61326-1 : 2013 EN 61000-3-2:2006+A1:2009+A2:2009 EN 61000-3-3:2008 CISPR11:2009+A1:2010 EN 61000-4-2:2009 EN 61000-4-3:2006+A1:2008+A2:2010 EN 61000-4-4:2004 + A1:2010 EN 61000-4-5:2006 EN 61000-4-6:2009 EN 61000-4-8: 2010 EN 61000-4-11:2004		

TEST LABORATORY & ADDRESS

UL INTERNATIONAL-SINGAPORE PTE LTD 20 KIAN TECK LANE SINGAPORE 627854

SINGLAS REGISTRATION	LA-2009-0450-E	FCC REGISTRATION	600804
VCCI REGISTRATION	그림	 G-846 (RE ≥1GHz) T-2147 (CE-TELEC) 	OM)
	* C-4304 (CL-INAINO)) 9 1-2147 (OL-12220)	Olvi)

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RECEIPT OF EUTs	20 NOV 2015	TEST PERIOD	23 – 29 NOV 2015

PREPARED BY	APPROVED BY		
	Qt.		
RONE ESPINOSA EMC ENGINEER	DAMIEN ONG SAC-SINGLAS Signatory		

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The results reported herein have been performed in accordance with the laboratory's terms of accreditation under the Singapore Accreditation Council-Singapore Laboratory Accreditation Scheme.





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STATEMENT OF TEST RESULTS (EMISSION)

ELECTROMAGNETIC INTERFERENCE TEST

Test	Standard	Class	Model No.	Serial No.	Pass / Fail
Harmonic Current Emission	EN 61000-3- 2:2006+A1:2009+A2:2009	CLASS A	CCL-240T-8-P-UV	2015-104356	PASS
Voltage Fluctuations & Flicker Emission	EN 61000-3-3:2008	N/A	CCL-240T-8-P-UV	2015-104356	PASS
Radiated Emission	CISPR11:2009+A1:2010	CLASS B	CCL-240T-8-P-UV	2015-104356	PASS
Conducted Emission	CISPR11:2009+A1:2010	CLASS B	CCL-240T-8-P-UV	2015-104356	PASS

The EUT complies with the requirements of the above test standards

MEASUREMENT UNCERTAINTY (EMISSION)

The uncertainty of the harmonics measurement at a confidence level of approximately 95% is 7.1%.

The uncertainty of the flickers measurement at a confidence level of approximately 95% is 7.66%.

The uncertainty of the radiated measurement at a confidence level of approximately 95% with a coverage factor of 2 in the range 30 MHz to 1 GHz is \pm 4.2dB.

The uncertainty of the radiated measurement at a confidence level of approximately 95% with a coverage factor of 2 in the range 1 GHz to 18 GHz is \pm 5.22dB.

The uncertainty of the conducted measurement at a confidence level of approximately 95% with a coverage factor of 2 in the range 150 kHz to 30 kHz is ± 2.94 dB.



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STATEMENT OF TEST RESULTS (IMMUNITY) ELECTROMAGNETIC SUSCEPTIBILTY TEST

Test Standard Criterion Model No. Serial No. Pass / Fail Electrostatic В EN 61000-4-2:2009 CCL-240T-8-P-UV **PASS** 2015-104356 Discharge Radiated EN 61000-4-3:2006 Α CCL-240T-8-P-UV 2015-104356 **PASS Immunity** +A1:2008+A2:2010 Electrical EN 61000-4-4:2004 Fast В CCL-240T-8-P-UV 2015-104356 **PASS** + A1:2010 Transients Surge EN 61000-4-5:2006 В CCL-240T-8-P-UV 2015-104356 PASS **Immunity** Conducted EN 61000-4-6:2009 A CCL-240T-8-P-UV 2015-104356 **PASS** Immunity Magnetic A EN 61000-4-8: 2010 CCL-240T-8-P-UV 2015-104356 **PASS Immunity** 0% Half Cycle Voltage 0% 1 Cycle Dips/Interrupts EN 61000-4-11:2004 В CCL-240T-8-P-UV 2015-104356 **PASS Immunity** 70% 25/30Cycles C

The EUT complies with the requirements of the above test standards. For more information on the performance and the specific pass / fail criteria, refer to the test details section later in this report.

MEASUREMENT UNCERTAINTY (IMMUNITY)

For each of the immunity tests listed in the above table, it was demonstrated that the tests meets the specified requirements in the standard, estimated at the level of twice the standard deviation (corresponding in the case of normal distribution to a confidence level of 95%).

