TEST REPORT

DAkkS Deutsche Akkreditierungsstelle D-PL-12162-01-01

Testing laboratory:
SK Tech Co., Ltd.
88, Geulgaeul-ro, 81beon-gil,
Wabu-eup, Namyangju-si,
Gyeonggi-do, Korea
TEL: +82-31-576-2204
FAX: +82-31-576-2205

Test Report Number: SKT-ECE-170007
Date of issue: February 27, 2017

Applicant:	**Brigade Electronics Group PLC** Brigade House, The Mills Trading Estate, Station Road, South Darenth, Kent, DA4 9BD, United Kingdom
Manufacturer:	**Brigade Electronics Group PLC** Brigade House, The Mills Trading Estate, Station Road, South Darenth, Kent, DA4 9BD, United Kingdom
Product:	BackEye Vehicle CCTV
Model:	**BE-820C** (please see P5 for all the model numbers)
Project number:	SKTEU17-0034
EUT received:	January 17, 2017

Applied standards:

EN 61000-6-3:2007+A1:2011

EN 61000-6-2:2005
IEC 61000-4-2:2008
IEC 61000-4-3:2006+A1:2007+A2:2010
IEC 61000-4-4:2012
IEC 61000-4-6:2013
IEC 61000-4-8:2009

Remarks to the standards: None

The above equipment has been tested by SK Tech Co., Ltd., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product or system, which was tested.

D.Y. La / **Testing Engineer**

J.S. Yoon / **Technical Manager**

Revision History of Test Report

Rev.	Revisions	Effect page	Approved by	Date
-	Initial issue	All	J. S. Yoon	Feb. 27, 2017

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1 Summary of test results

Please refer to the specific reference standards (identified by date of publication and/or edition number or version number) on the cover page (P1). The cited version applied, unless otherwise specified in this test report.

EMISSION [EN 61000-6-3:2007+A1:2011]			
Standard	Test	Result	Remarks
EN 61000-6-3	Conducted emissions at AC mains port	N/A	
	Discontinuous disturbance (click noise)	N/A	
	Conducted emissions at DC mains port	PASS	Meets the requirements
	Conducted emissions at telecommunication port	N/A	
	Radiated emissions below 1 GHz	PASS	Meets the requirements
	Radiated emissions above 1 GHz	PASS	Meets the requirements
IEC 61000-3-2	Harmonic current emissions	N/A	
IEC 61000-3-3	Voltage fluctuations & flicker	N/A	

IMMUNITY [EN 61000-6-2:2005]			
Standard	Test	Test parameters and severity levels	Result
IEC 61000-4-2	Electrostatic discharge (ESD)	±4 kV Contact discharges ±2 kV; ±4 kV & ±8 kV Air discharges	PASS
IEC 61000-4-3	Radiated immunity (RS)	10 V/m (80 MHz to 1000 MHz) 3 V/m (1.4 GHz to 2.0 GHz) 1 V/m (2.0 GHz to 2.7 GHz) AM 80 %, 1 kHz, sinusoidal	PASS
IEC 61000-4-4	EFT/Burst on AC power ports and DC power ports, signal ports	±2 kV: AC power ports ±2 kV: DC power ports ±1 kV: signal ports	PASS
IEC 61000-4-5	Surge immunity on AC power ports and DC power ports, signal ports	±1 kV: AC power ports (L-L) ±2 kV: AC power ports (L-G) ±0.5 kV: DC power ports (L-L & L-G) ±1 kV: signal ports (L-G)	N/A
IEC 61000-4-6	Injected current (CS) on AC power ports and DC power ports, signal ports	10 V 150 kHz to 80 MHz AM 80 %, 1 kHz, sinusoidal	PASS
IEC 61000-4-8	Power frequency magnetic field	30 A/m	PASS
IEC 61000-4-11	Voltage dips and interruptions	100 % reduction 1 cycle 60 % reduction, 10/12 cycles 30 % reduction, 25/30 cycles 100 % reduction, 250/300 cycles	N/A

Note: *The EUT is operated from the battery installed in vehicles, and therefore the test suites related to AC Mains port were not applicable.*

2 Description of equipment under test (EUT)

Product:	BackEye Vehicle CCTV
Model:	**BE-820C**
Serial number:	None (prototype)

Model differences:

Model name	Difference	Tested (checked)
BE-820C	fully tested model that was provided by the applicant	☒
BE-820C(XXX)	listed without the tests by the applicant requests	
BE-822C	listed without the tests by the applicant requests	
BE-822C(XXX)	listed without the tests by the applicant requests	

Note: *All the differences were compared with the test sample. The tested model BE-820C was used for PAL, Mirror image and the variant model BE-822C was used for PAL, Normal image. Where (XXX) represented other associated variant.*

Technical data:

Rated voltage	DC 12 V (powered from the lead-acid battery installed in a vehicle)
Rated frequency	-
Voltage during the Test	DC 12 V (Note)
Frequency during the Test	-
AC power input cord type	-

Note: The EUT was powered from Rear view monitor that was connected to the battery

I/O port	Type	Q'ty	Remark
DC power input and Video output	4-Pin DIN	1	

Internal Clock Frequency	-

Note: *The information on the internal clock frequency mentioned above was supplied by the applicant.*

Modification of EUT during the compliance testing: none