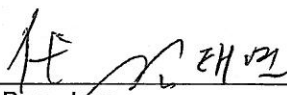




EMC TEST REPORT For FCC

Test Report No. : KES-E1-17T0156-R1
Date of Issue : Aug. 05, 2020
Product name : CCTV CAMERA
Model/Type No. : HCV-6070RN
Variant Model : SCV-6085R
Applicant : Hanwha Techwin Co., Ltd.
Applicant Address : 1204, Changwon-daero, Seongsan-gu Changwon-si,
Gyeongsangnam-do
Manufacturer : Hanwha Techwin (Tianjin) Co., Ltd.
Manufacturer Address : No.11 Weiliu Rd, Micro-Electronic Industrial
Park, TEDA, Tianjin, 300385, People's Republic of China
Equipment authorization : ☐ Declaration of Conformity
☒ Verification
☐ Certification
Date of Receipt : Feb. 03, 2017
Test date : Feb. 14, 2017
Test Results : ☒ In Compliance ☐ Not in Compliance

Tested by


Jin Bae, Lee
EMC Test Engineer

Reviewed by


Dong-Hun, Jang
EMC Technical Manager

This test report is not related to KS Q ISO/IEC 17025 and KOLAS



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Test report No.:
KES-E1-17T0156-R1
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REPORT REVISION HISTORY

Date	Test Report No.	Revision History
Feb. 21, 2017	KES-E1-17T0156	Issued
Aug. 05, 2020	KES-E1-17T0156-R1	Reissue due to the addition of a derived model

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Test report No.:

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1.0 General Product Description

Main Specifications of EUT are:

Video	
Imaging Device	1/2.8" 2M CMOS
Total Pixels	1,945(H) x 1,109(V) 2.16M pixels
Effective Pixels	1,945(H) x 1,097(V) 2.13M pixels
Scanning System	Progressive Scan
Min. Illumination	Color : 0.2Lux (F1.4, 50IRE); 0.11Lux (F1.4, 30IRE) B/W : 0Lux(IR LED on)
S / N Ratio	52dB (AGC off, Weight on)
Video Output	BNC(AHD / TVI / CVI / CVBS Selectable)
Resolution	1920 x 1080
Max. Framerate	30fps @1080p 25fps @1080p
Pan / Tilt / Rotate	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
Lens Type	
Focal Length (Zoom Ratio)	2.8 ~ 12mm (4.3x) varifocal
Max. Aperture Ratio	F1.4
Angular Field of View	H : 103.6 (wide) ~ 52.4 (tele) / V : 53.7 (wide) ~ 18.4 (tele), D : 121.9 (wide) ~ 37.1 (Tele)
Min. Object Distance	0.5m (1.64ft)
Focus Control	Manual
Lens Type	DC Auto Iris
Mount Type	Board-in type
Auto Back Focus(ABF)	-
Operational	
IR LED	
Viewable length	30m (98.43ft)
On Screen Display	Multi-language Support(16) English, Japanese, Spanish, French, Portuguese, Korean, German, Italian, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish
Camera Title	Off / On (Displayed 15 characters)
Day & Night	Auto (ICR) / Color / B/W
Backlight Compensation	Off / User BLC / HLC
Wide Dynamic Range	120dB
Contrast Enhancement	-
Digital Noise Reduction	SSNR4 (Off / On)
Defog	AUTO / MANUAL / OFF
Digital Image Stabilization	Not support
Motion Detection	Off / On(4 zones)
Privacy Masking	Off / On (4zones rectangle)
Gain Control	Off / Low / Middle / High / Very High
White Balance	ATW / Outdoor / Indoor / Manual / AWC (1,800K ~ 10,500K)
LDC (Lens Distortion Correction)	Not support
Electronic Shutter Speed	1sec~ 1/12,000sec
Digital Zoom	Not support
Reverse	Off / H-Rev / V-Rev / HV-Rev
Profile	Basic, Day & Night, Backlight, ITS, Indoor, User
Intelligent Video Analytics	Not support
Alarm	MD output 1
Remote control interface	Coaxial

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Protocol	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP(AHD Coax Protocol)
Video Transmission Distance	500m(5C2V Coaxial Cable)
Environmental	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH * Start up should be done at above -10°C
Ingress Protection	IP66
Vandal Resistance	IK10
Electrical	
Input Voltage/Current	Dual (24VAC±10% & 12VDC±10%)
Power Consumption	Max. 4.2W
Mechanical	
Color / Material	Ivory / Aluminum
Dimension (WxHxD)	106.1* Φ137mm
Weight	716g

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1.1 Test Voltage & Frequency

Unless indicated otherwise on the individual data sheet or test results, the test voltage and frequency was as indicated below.

Voltage ☐ 100 Vac ☐ 120 Vac ☒ 24 Vac ☒ 12 Vdc ☐ PoE
Frequency ☐ 50 Hz ☒ 60 Hz ☐ Hz

1.2 Variant Model Differences

Added a simple variant model for the purpose of the vendor management and a country of origin for the dualization.

1.3 Device Modifications

Not applicable

1.4 Equipment Under Test

Description	Model Number	Serial Number	Manufacturer	Remarks
CCTV CAMERA	HCV-6070RN	-	Hanwha Techwin (Tianjin) Co.,Ltd.	E.U.T

1.5 Support Equipments

Description	Model Number	Serial Number	Manufacturer	Remarks
MONITOR	M1950DM	206KCLH81256	LG Electronics Co., Ltd.	-
MONITOR Adapter	PA-1650-64	OE9FA612314103637	LITE-ON TECHNOLOGY CORPORATION	-
Alarm	-	-	-	-

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1.6 External I/O Cabling

- AC 24 V Mode

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
CCTV CAMERA (E.U.T)	BNC	MONITOR	Component	3.5	S
	2 Pin	Alarm	2 Pin	3.0	U

- DC 12 V Mode

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
CCTV CAMERA (E.U.T)	BNC	MONITOR	Component	3.5	S
	2 Pin	Alarm	2 Pin	3.0	U

* Unshielded = U, Shielded = S

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1.7 EUT Operating Mode(s)

Test mode	operating
AC 24 V, DC 12 V	E.U.T Monitoring

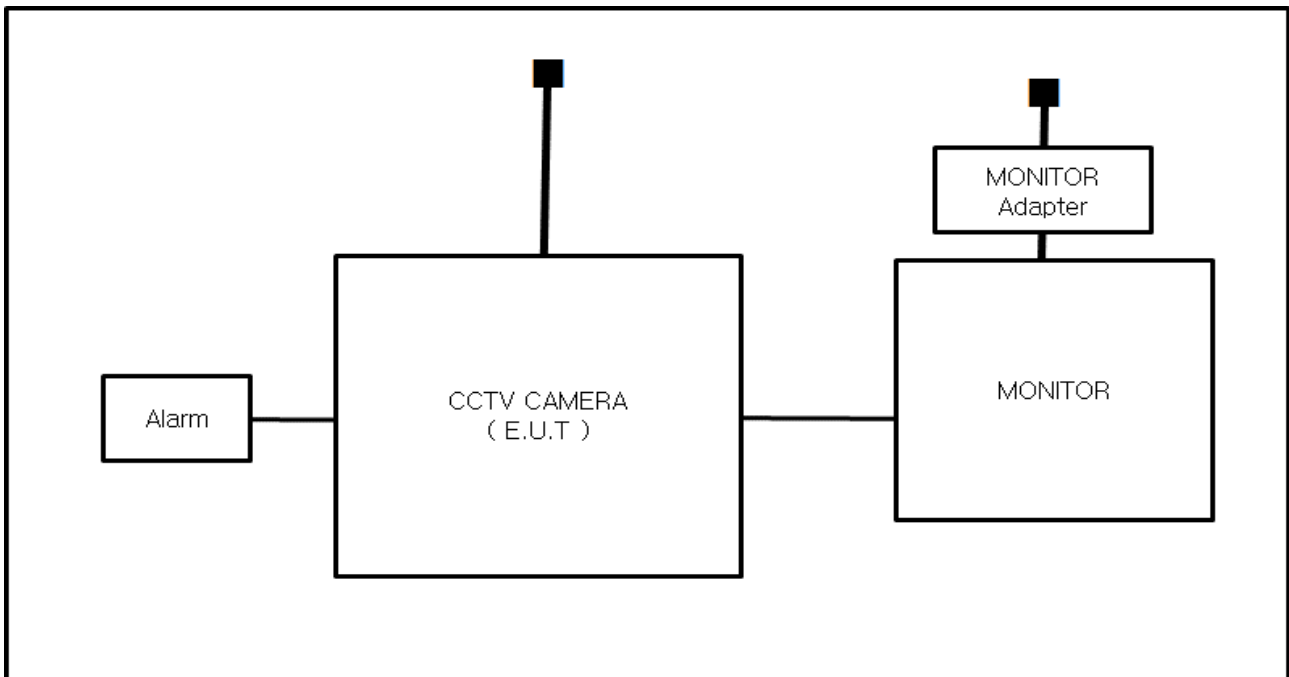
E.U.T Test operating S/W		
Name	Version	Manufacture Company
-	-	-

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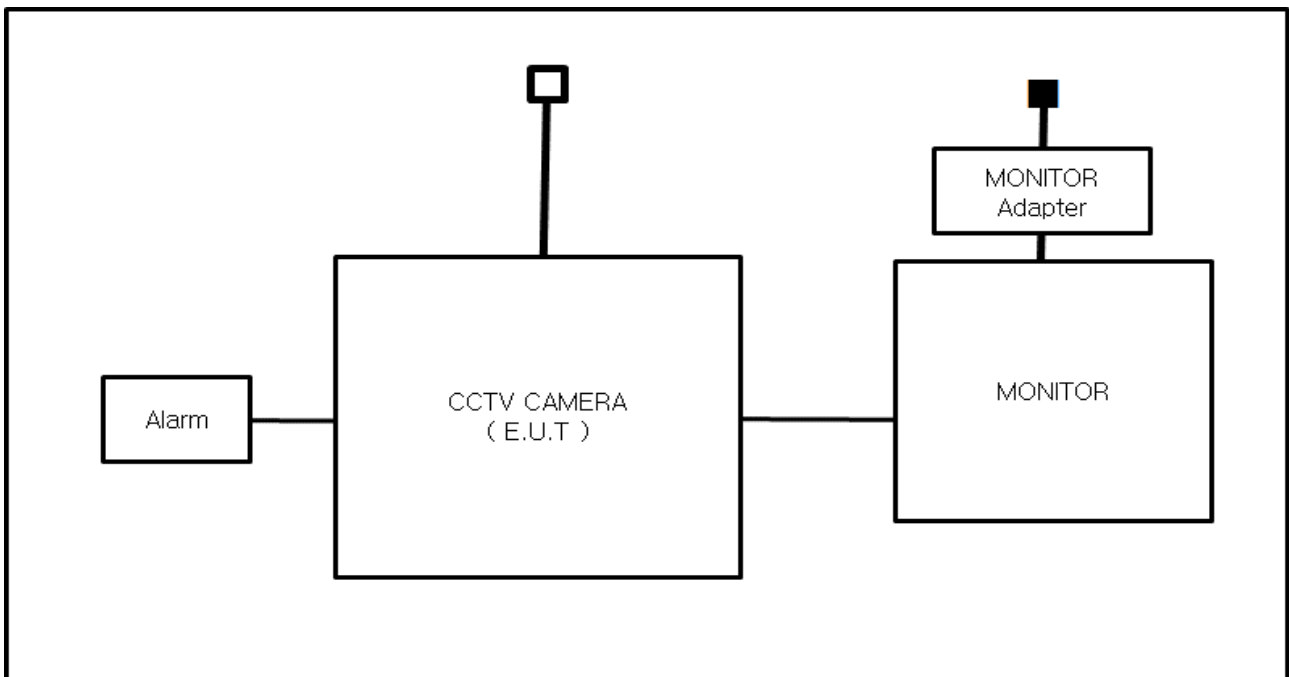
1.8 Configuration

■ AC Main
 □ DC Main

- AC 24 V Mode



- DC 12 V Mode



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1.9 Calibration Details of Equipment Used for Measurement

Test equipment and test accessories are calibrated on regular basis. The maximum time between calibrations is one year or what is recommended by the manufacturer, whichever is less.

1.10 Test Facility

The measurement facility is located at 473-21 Gayeo-ro, Yeosu-si, Gyeonggi-do, 12658, Korea. The sites are constructed in conformance with the requirements of ANSI C63.4:2014 and CISPR 16-1-4:2012

1.11 Laboratory Accreditations and Listings

Country	Agency	Scope of Accreditation	Logo
KOREA	RRA	EMI (3 m & 10 m Semi-Anechoic Chamber , 10 m Open Area and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	 KR0100
International	KOLAS	EMI (3 m & 10 m Semi-Anechoic Chamber , and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	 KT489
USA	FCC	3 m & 10 m Semi-Anechoic Chamber, 10 m Open Area and Conducted test site to perform FCC Part 15/18 measurements.	 KR0100
Canada	ISED	3 m & 10 m Semi-Anechoic Chamber and Conducted test site	 23298-1
JAPAN	VCCI	Mains Ports Conducted Interference Measurement, Telecommunication Ports Conducted Disturbance Measurement and Radiation 10 meter site, Facility for measuring radiated disturbance above 1 GHz	 R-20056, C-20036, T-20040, G-20057
Europe	TÜV SÜD	EMI (3 m & 10 m Semi-Anechoic Chamber , 10 m Open Area and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	 CARAT 001633 0003



2.0 Test Regulations

The emissions tests were performed according to following regulations:

☐ **EMC – Directive 2014/30/EU**

☐ EN 61000-6-3:2011

☐ EN 61000-6-1:2007

☐ EN 61000-6-4:2007 +A1:2011

☐ EN 61000-6-2:2005

☐ EN 55011:2007 +A1:2010

☐ Group 1
☐ Class A

☐ Group 2
☐ Class B

☐ EN 55014-1:2006 +A2:2011

☐ EN 55014-2:1997 +A2:2008

☐ EN 55015:2013

☐ EN 55022:2010

☐ Class A

☐ Class B

☐ EN 55024:2010

☐ EN 50130-4:2011 +A1:2014

☐ EN 61000-3-2:2014

☐ EN 61000-3-3:2013

☐ EN 61326-1:2013



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-
- | | | |
|--|---|----------------------------------|
| ☐ VCCI V-3 / 2015.04 | ☐ Class A | ☐ Class B |
| ☐ AS/NZS CISPR22:2009 +A1:2010 | ☐ Class A | ☐ Class B |
| ☒ 47 CFR Part 15, Subpart B | | |
| ☐ CISPR 22:2009 +A1:2010 | ☐ Class A | ☐ Class B |
| ☒ ANSI C63.4-2014 | ☒ Class A | ☐ Class B |
| ☐ IC Regulation ICES-003 : 2016 | | |
| ☐ CAN/CSA CISPR 22-10 | ☐ Class A | ☐ Class B |
| ☐ ANSI C63.4-2014 | | |
| ☐ MEDICAL – Directive 93/42/EEC | | |
| ☐ EN 60601-1-2 :2007 | | |
| ☐ RE– Directive 2014/53/EU | | |
| ☐ EN 301 489-1 V1.9.2 | | |
| ☐ Equipment for fixed use | | |
| ☐ Equipment for vehicular use | | |
| ☐ Equipment for portable use | | |
| ☐ EN 301 489-3 V1.6.1 | | |
| ☐ EN 301 489-17 V2.2.1 | | |
| ☐ EN 60945:2002 | | |

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2.1 Conducted Emissions at Mains Power Ports

Test Date

Fen. 14, 2017

Test Location

Electro wave Shieldroom

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMI Test Receiver	ESR3	R & S	101783	05, 03, 2017
☒	LISN	ENV216	R & S	101137	02, 03, 2018
☒	LISN	ENV216	R & S	101786	05, 02, 2017
☒	PULSE LIMITER	ESH3-Z2	R & S	101914	12, 13, 2017
☒	Shield Room #3	-	SEMITEC	-	-
☒	EMI Test S/W	EMC32	R & S	9.12.00	-

Test Conditions

Temperature: 22,9 °C
Relative Humidity: 41,3 %

Frequency Range of Measurement

150 kHz to 30 MHz

Instrument Settings

IF Band Width: 9 kHz

Test Results

The requirements are:

- ☒ PASS
☐ NOT PASS
☐ NOT APPLICABLE

Remarks

See Appendix A for test data.



2.2 Radiated Electric Field Emissions(Below 1 GHz)

Test Date

Feb. 14, 2017

Test Location

☐ Open Area Test Site #1 ☒ Open Area Test Site #2

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMI TEST Receiver	ESR3	R & S	101781	05, 03, 2017
☒	Trilog-Broadband ANT	VULB 9163	Schwarzbeck	715	04, 14, 2018
☒	OATS	-	KES	-	-
☒	Antenna Mast	-	DAEIL EMC	-	-
☒	Turn Table	-	DAEIL EMC	-	-
☒	EMI Test S/W	-	-	-	-

Test Conditions

Temperature: 5,1 °C
Relative Humidity: 45,0 %

Frequency Range of Measurement

30 MHz to 1 GHz

Instrument Settings

IF Band Width: 120 kHz

Test Results

The requirements are:

☒ PASS
☐ NOT PASS
☐ NOT APPLICABLE

Remarks

See Appendix A for test data.



2.3 Radiated Electric Field Emissions(Above 1 GHz)

Test Date

Feb. 14, 2017

Test Location

Semi Anechoic Chamber #1

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	Log-Periodic Antenna	STLP 9149	SCHWARZBECK	9149-255	05, 17, 2018
☒	EMI Test Receiver	ESU26	R & S	100551	04, 18, 2017
☒	Preamplifier	SCU 18	R & S	102232	06, 29, 2017
☒	Semi Anechoic Chamber #1	-	KES	-	-
☒	Tilt Antenna Mast	TAM 4.0-E	maturro	18100116	-
☒	Turn Table	DT 2000-1,5T	INN-CO	-	-
☒	EMI Test S/W	N/A	N/A	N/A	-

Test Conditions

Temperature: 25,0 °C

Relative Humidity: 33,8 %

Frequency Range of Measurement

1 GHz to 6 GHz

Instrument Settings

IF Band Width: 1 MHz

Test Results

The requirements are:

- ☒ PASS
☐ NOT PASS
☐ NOT APPLICABLE

Remarks

See Appendix A for test data.

APPENDIX A – TEST DATA

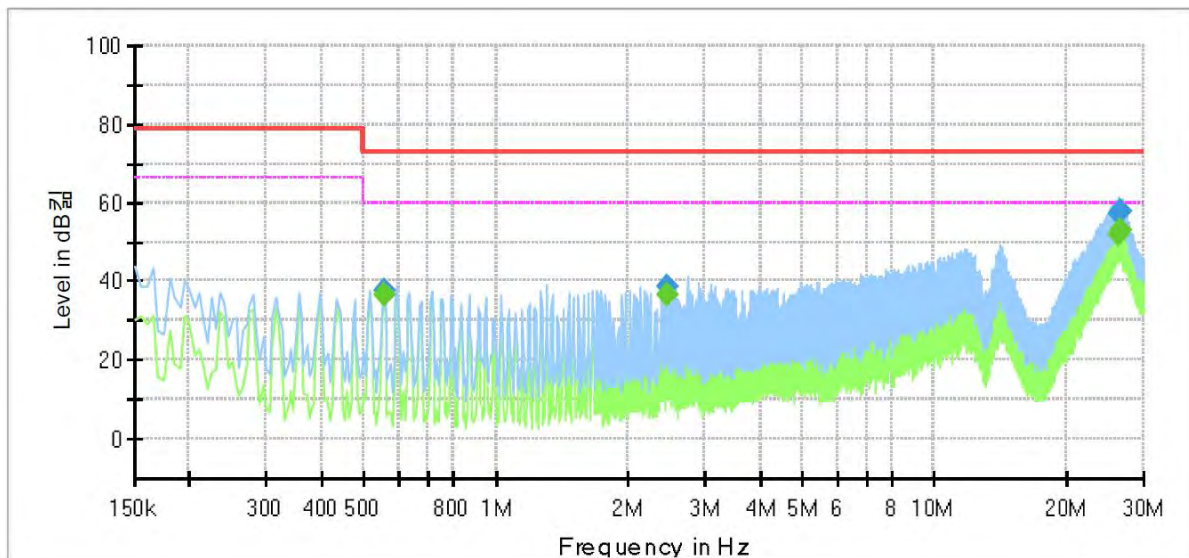
Conducted Emissions at Mains Power Ports

[HOT]

- AC 24 V Mode

Common Information

Test Description:	Conducted Emission
Model No.:	HCV-6070RN
Mode	AC 24 V _ H
Operator Name:	KES



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.555000	---	36.40	60.00	23.60	1000.0	9.000	L1	20.5
0.555000	37.82	---	73.00	35.18	1000.0	9.000	L1	20.5
2.455000	---	36.40	60.00	23.60	1000.0	9.000	L1	19.8
2.455000	38.60	---	73.00	34.40	1000.0	9.000	L1	19.8
26.230000	---	52.12	60.00	7.88	1000.0	9.000	L1	20.3
26.230000	57.33	---	73.00	15.67	1000.0	9.000	L1	20.3
26.545000	---	52.72	60.00	7.28	1000.0	9.000	L1	20.3
26.545000	57.64	---	73.00	15.36	1000.0	9.000	L1	20.3

◆ Calculation

QuasiPeak[dBuV] / CAverage [dBuV] = Reading Value[dBuV] + Corr. [dB]

QuasiPeak / CAverage : The Final Value

Reading Value : Not shown in the table.

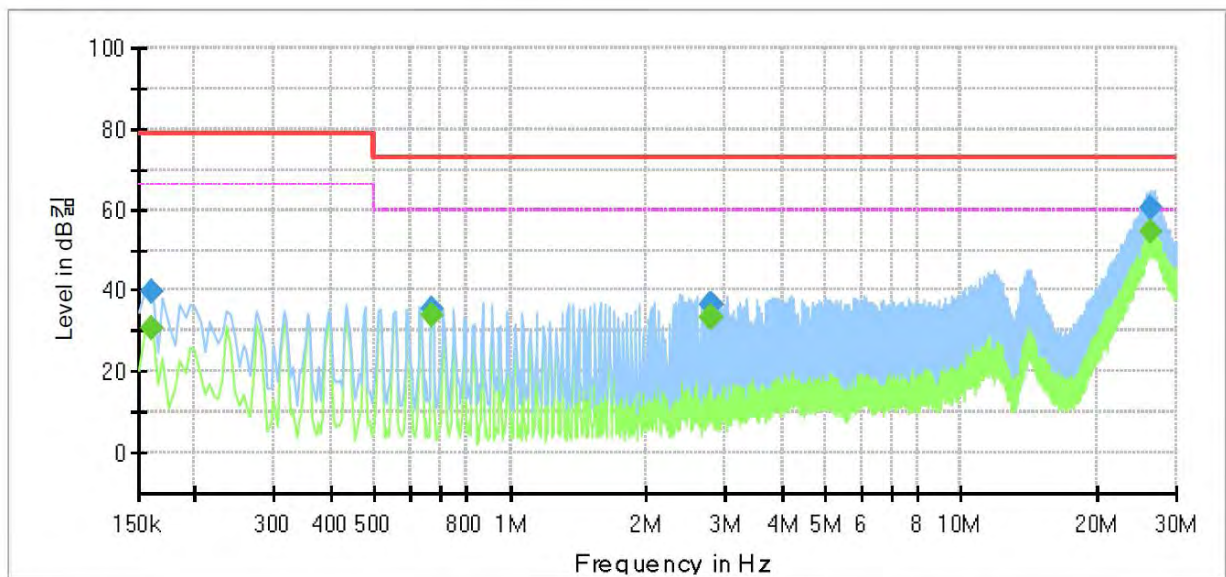
Corr. : Correction values (LISN FACTOR+ Cable Loss)

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[NEUTRAL]

Common Information

Test Description:	Conducted Emission
Model No.:	HCV-6070RN
Mode	AC 24 V _ N
Operator Name:	KES



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.160000	---	30.63	66.00	35.37	1000.0	9.000	N	21.0
0.160000	39.75	---	79.00	39.25	1000.0	9.000	N	21.0
0.670000	---	33.66	60.00	26.34	1000.0	9.000	N	20.4
0.670000	35.34	---	73.00	37.66	1000.0	9.000	N	20.4
2.765000	---	33.59	60.00	26.41	1000.0	9.000	N	19.8
2.765000	36.63	---	73.00	36.37	1000.0	9.000	N	19.8
2.805000	---	33.16	60.00	26.84	1000.0	9.000	N	19.8
2.805000	36.50	---	73.00	36.50	1000.0	9.000	N	19.8
26.450000	---	54.55	60.00	5.45	1000.0	9.000	N	20.3
26.450000	60.25	---	73.00	12.75	1000.0	9.000	N	20.3

◆ Calculation

QuasiPeak[dBuV] / CAverage [dBuV] = Reading Value[dBuV] + Corr. [dB]

QuasiPeak / CAverage : The Final Value

Reading Value : Not shown in the table.

Corr. : Correction values (LISN FACTOR+ Cable Loss)

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Radiated Electric Field Emissions(Below 1 GHz)

- AC 24 V Mode

Frequency	Amplitude	ANT	ANT. Height	Correction Factor		Corrected Amplitude	Applicable Limit	Margin
[MHz]	[dB μ V]	Polar. (H/V)	[m]	ANT. [dB/m]	Cable [dB]	[dB μ V/m]	[dB μ V/m]	[dB]
60.19	19.91	V	1.00	12.59	1.85	34.35	39.00	4.65
148.57	24.72	V	1.26	8.17	3.01	35.90	43.50	7.60
149.81	20.60	H	3.62	8.20	3.02	31.82	43.50	11.68
409.18	13.69	H	3.87	15.73	5.45	34.87	46.40	11.53
409.86	11.30	V	1.88	15.74	5.46	32.50	46.40	13.90
557.70	9.33	H	4.00	18.44	6.52	34.29	46.40	12.11

* H : Horizontal, V : Vertical

◆ Calculation

Corrected Amplitude [dB μ V] = Amplitude[dB μ V] + Correction Factor [dB]

Corrected Amplitude : The Final Value, Amplitude : Reading Value,

Correction Factor : ANT FACTOR + Cable loss

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Test report No.:
KES-E1-17T0156-R1
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- DC 12 V Mode

Frequency	Amplitude	ANT	ANT. Height	Correction Factor		Corrected Amplitude	Applicable Limit	Margin
[MHz]	[dBμV]	Polar. (H/V)	[m]	ANT. [dB/m]	Cable [dB]	[dBμV/m]	[dBμV/m]	[dB]
48.17	13.18	V	1.34	13.64	1.68	28.50	39.00	10.50
68.75	17.51	V	1.29	10.06	1.97	29.54	39.00	9.46
148.58	22.64	V	1.00	8.17	3.01	33.82	43.50	9.68
149.21	20.90	H	3.48	8.19	3.01	32.10	43.50	11.40
223.01	9.72	H	4.00	11.97	3.82	25.51	46.40	20.89
409.23	8.51	H	3.61	15.73	5.46	29.70	46.40	16.70

* H : Horizontal, V : Vertical

◆ Calculation

Corrected Amplitude [dBμV] = Amplitude[dBuV] + Correction Factor [dB]

Corrected Amplitude : The Final Value, Amplitude : Reading Value,

Correction Factor : ANT FACTOR + Cable loss

**KES Co., Ltd.**

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Test report No.:

KES-E1-17T0156-R1

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Radiated Electric Field Emissions(Above 1 GHz)

- AC 24 V Mode

- PK

Frequency	Amplitude	ANT Polar. (H/V)	ANT. Height	Correction Factor			Corrected Amplitude	Applicable Limit	Margin
[MHz]	[dB μ V]		[m]	ANT. [dB /m]	Cable [dB]	AMP [dB]	[dB μ V/m]	[dB μ V/m]	[dB]
1 092.000	79.760	H	3.470	20.960	3.230	43.640	60.310	80.000	19.690
1 093.000	79.560	V	2.610	20.970	3.240	43.640	60.130	80.000	19.870
1 611.000	76.190	H	3.850	23.610	3.880	43.660	60.020	80.000	19.980
1 834.000	60.020	V	3.020	24.750	4.320	43.730	45.360	80.000	34.640
1 932.000	62.850	H	2.870	25.250	4.370	43.760	48.710	80.000	31.290
3 331.000	49.020	V	2.910	30.320	5.800	44.230	40.910	80.000	39.090
3 462.000	44.880	H	3.760	30.530	5.980	44.250	37.140	80.000	42.860

◆ Calculation

Correction Factor [dB] = Ant Factor[dB/m] + Cable Loss [dB] – Preamp Factor [dB]

Corrected Amplitude [dB μ V] = Amplitude[dB μ V] + Correction Factor [dB]

Corrected Amplitude : The Final Value, Amplitude : Reading Value

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- AV

Frequency [MHz]	Amplitude [dBμV]	ANT Polar. (H/V)	ANT. Height [m]	Correction Factor			Corrected Amplitude [dBμV/m]	Applicable Limit [dBμV/m]	Margin [dB]
				ANT. [dB /m]	Cable [dB]	AMP [dB]			
1 082.000	56.730	V	1.290	20.910	3.220	43.640	37.220	60.000	22.780
1 086.000	56.690	H	2.350	20.930	3.230	43.640	37.210	60.000	22.790
1 638.000	48.790	H	3.710	23.750	3.940	43.670	32.810	60.000	27.190
1 835.000	46.670	V	1.660	24.760	4.320	43.730	32.020	60.000	27.980
1 970.000	44.080	H	2.470	25.450	4.390	43.770	30.150	60.000	29.850
3 342.000	42.200	V	2.630	30.340	5.810	44.230	34.120	60.000	25.880
3 463.000	36.090	H	3.790	30.530	5.980	44.250	28.350	60.000	31.650

◆ Calculation

Correction Factor [dB] = Ant Factor[dB/m] + Cable Loss [dB] - Preamp Factor [dB]

Corrected Amplitude [dBμV] = Amplitude[dBuV] + Correction Factor [dB]

Corrected Amplitude : The Final Value, Amplitude : Reading Value

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- DC 12 V Mode

- PK

Frequency [MHz]	Amplitude [dBμV]	ANT Polar. (H/V)	ANT. Height [m]	Correction Factor			Corrected Amplitude [dBμV/m]	Applicable Limit [dBμV/m]	Margin [dB]
				ANT. [dB /m]	Cable [dB]	AMP [dB]			
1 192.000	82.070	H	3.620	21.470	3.370	43.640	63.270	80.000	16.730
1 198.000	82.070	V	1.280	21.500	3.380	43.640	63.310	80.000	16.690
1 603.000	78.370	H	3.490	23.570	3.870	43.660	62.150	80.000	17.850
1 627.000	79.970	V	2.270	23.690	3.920	43.670	63.910	80.000	16.090
3 207.000	48.540	H	3.810	30.120	5.690	44.220	40.130	80.000	39.870
4 074.000	43.090	V	2.910	31.530	6.710	44.220	37.110	80.000	42.890

◆ Calculation

Correction Factor [dB] = Ant Factor[dB/m] + Cable Loss [dB] - Preamp Factor [dB]

Corrected Amplitude [dBuV] = Amplitude[dBuV] + Correction Factor [dB]

Corrected Amplitude : The Final Value, Amplitude : Reading Value

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- AV

Frequency [MHz]	Amplitude [dBμV]	ANT Polar. (H/V)	ANT. Height [m]	Correction Factor			Corrected Amplitude [dBμV/m]	Applicable Limit [dBμV/m]	Margin [dB]
				ANT. [dB /m]	Cable [dB]	AMP [dB]			
1 193.000	56.000	V	1.360	21.480	3.370	43.640	37.210	60.000	22.790
1 199.000	56.610	H	2.410	21.510	3.380	43.640	37.860	60.000	22.140
1 614.000	52.560	H	2.790	23.630	3.890	43.660	36.420	60.000	23.580
1 639.000	53.690	V	2.110	23.760	3.950	43.670	37.730	60.000	22.270
3 236.000	35.630	H	3.780	30.170	5.710	44.220	27.290	60.000	32.710
4 073.000	36.020	V	1.690	31.520	6.700	44.220	30.020	60.000	29.980

◆ Calculation

Correction Factor [dB] = Ant Factor[dB/m] + Cable Loss [dB] - Preamp Factor [dB]

Corrected Amplitude [dBuV] = Amplitude[dBuV] + Correction Factor [dB]

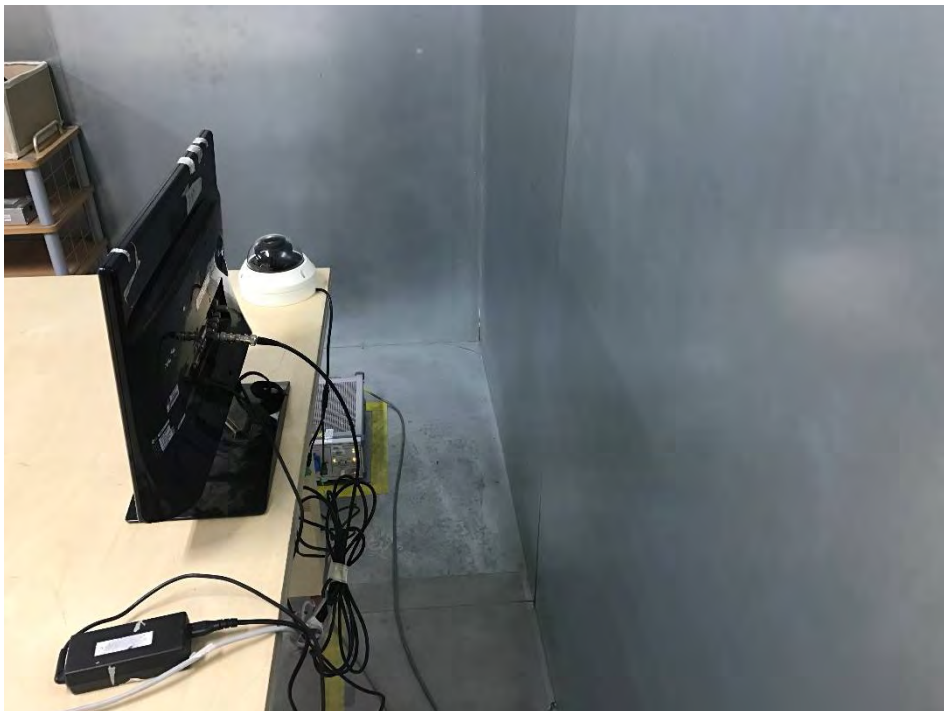
Corrected Amplitude : The Final Value, Amplitude : Reading Value

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Test Setup Photos and Configuration

Conducted Voltage Emissions

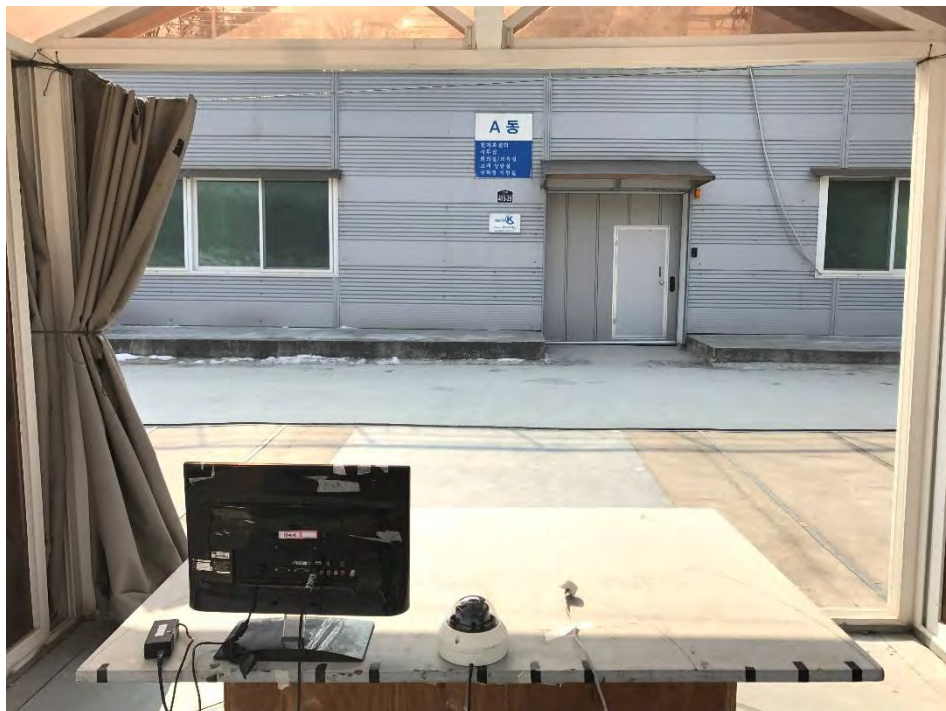
- AC 24 V Mode



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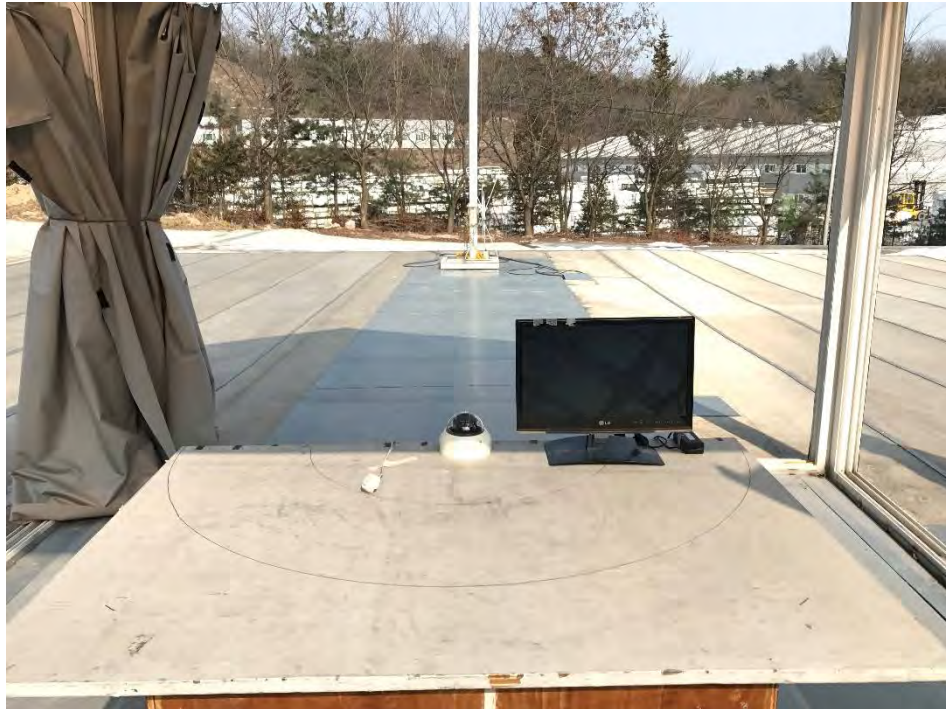
Radiated Electric Field Emissions(Below 1 GHz)

- AC 24 V Mode



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- DC 12 V Mode



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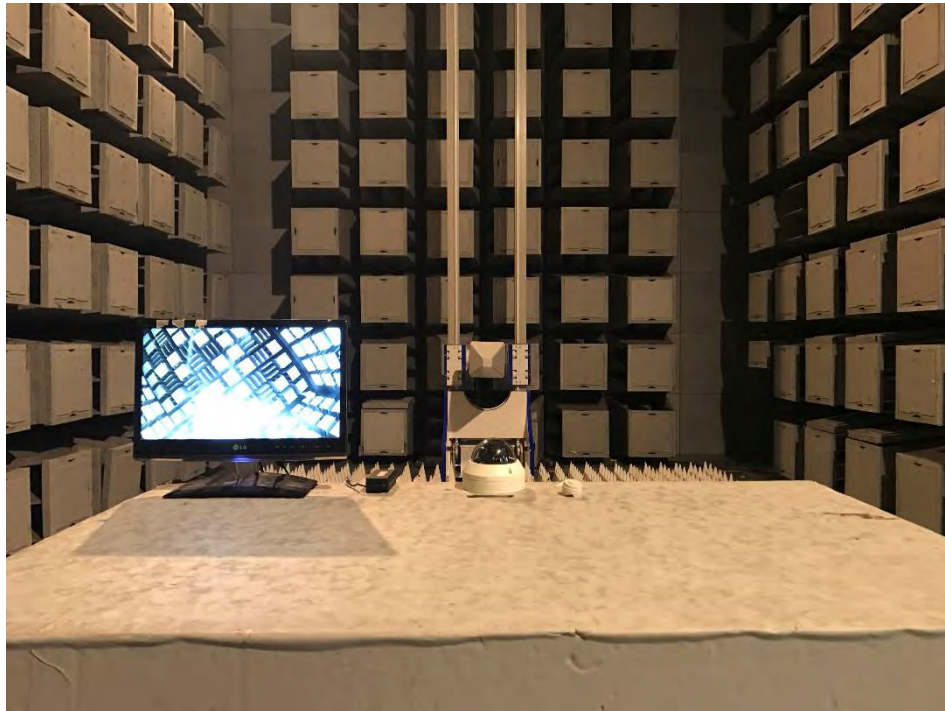
Radiated Electric Field Emissions(Above 1 GHz)

- AC 24 V Mode



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- DC 12 V Mode



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EUT External Photographs

(Top)



(Bottom)



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EUT Internal Photographs

(Internal View)



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EUT Internal View – Board 1

(Top)



(Bottom)



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EUT Internal View – Board 2

(Top)



(Bottom)



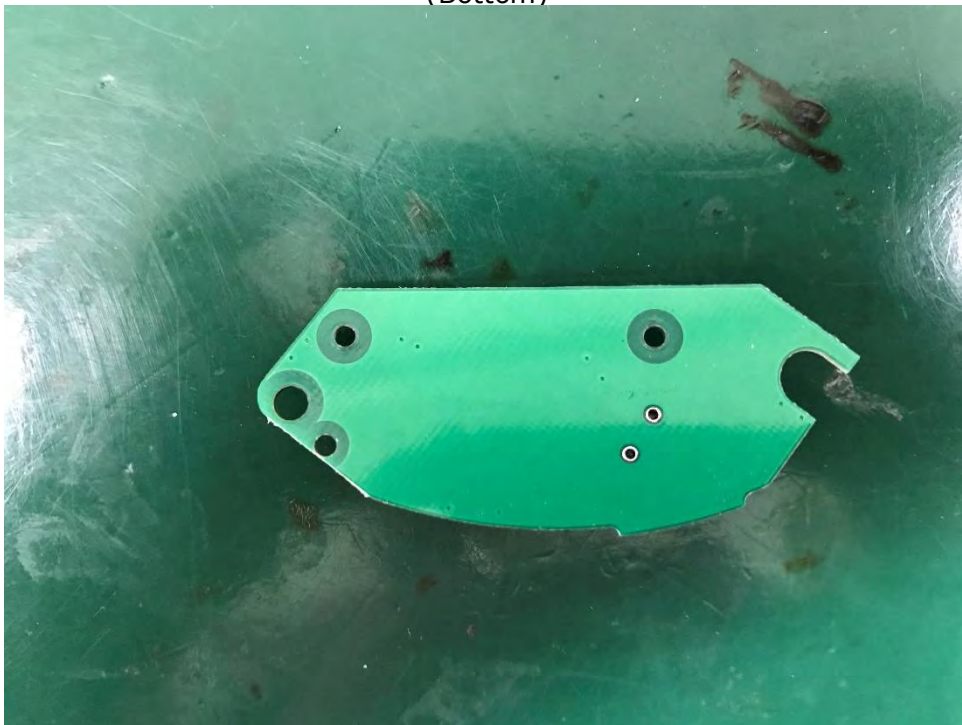
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EUT Internal View – Board 3

(Top)



(Bottom)



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EUT Internal View – Board 4

(Top)



(Bottom)



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Label Photographs



This device complies with part 15 of the FCC Rules. Operation in subject to the following two conditions: (1) This device Sep not cause harmful interference, and (2) this device must accept any interference received, including interference that Sep cause undesired operation.