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TEST REPORT

KCTL Inc.
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Suwon-si, Gyeonggi-do, 16677, Korea
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KCTL

1. Client

- Name : IDP Corp., Ltd.
- Address : (Guro-Dong, Buycksan digital vally 7)601, 50, Digital-ro33-gil, Guro-gu, Seoul, Korea
- Date of Receipt : 2017-08-16

2. Use of Report : -

3. Name of Product and Model : Card Printer / CP55

4. Manufacturer and Country of Origin : IDP Corp., Ltd. / Korea

5. FCC ID : VU2-CP55

6. Date of Test : 2017-08-28 to 2017-08-30

7. Test Standards : FCC Part 15 Subpart C 15.225

8. Test Results : Refer to the test result in the test report

Affirmation	Tested by Name : Dowon Ahn (Signature)	Technical Manager Name : Changmin Kim (Signature)

2017-09-05

KCTL Inc.

As a test result of the sample which was submitted from the client, this report does not guarantee the whole product quality. This test report should not be used and copied without a written agreement by KCTL Inc.

REPORT REVISION HISTORY

Date	Revision	Page No
2017-09-05	Originally issued	-

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1. Client information

Applicant:	IDP Corp., Ltd.
Address:	(Guro-Dong, Buycksan digital vally 7)601, 50, Digital-ro33-gil, Guro-gu, Seoul, Korea
Telephone number:	82-2-6099-3700
Facsimile number:	82-2-6099-3717
Contact person:	Yongtae Kim / kmyt@idp-corp.com

Manufacturer:	IDP Corp., Ltd.
Address:	(Guro-Dong, Buycksan digital vally 7)601, 50, Digital-ro33-gil, Guro-gu, Seoul, Korea

KCTL

2. Laboratory information

Address

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea

Telephone Number: 82 31 285 0894

Facsimile Number: 82 505 299 8311

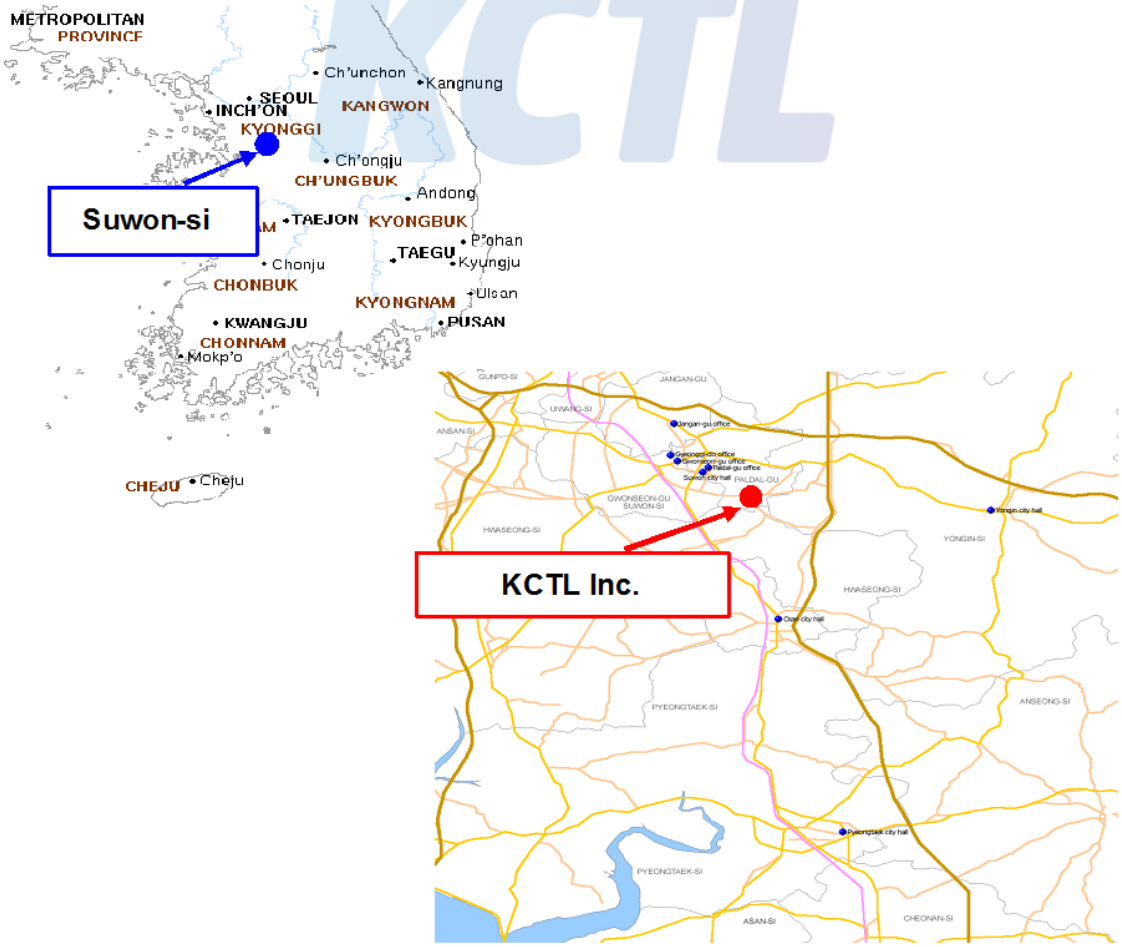
FCC Site Designation No: KR0040, FCC Site Registration No: 687132

VCCI Registration No. : R-3327, G-198, C-3706, T-1849

Industry Canada Registration No. : 8035A

KOLAS NO.: KT231

SITE MAP



3. Description of E.U.T.

3.1 Basic description

Applicant	IDP Corp., Ltd.
Address of Applicant	(Guro-Dong, Buycksan digital vally 7)601, 50, Digital-ro33-gil, Guro-gu, Seoul, Korea
Manufacturer	IDP Corp., Ltd.
Address of Manufacturer	(Guro-Dong, Buycksan digital vally 7)601, 50, Digital-ro33-gil, Guro-gu, Seoul, Korea
Type of equipment	Card Printer
Basic Model	CP55
Variant Model [1)]	CP55-S, CP55-D
Serial number	N/A

[1)] CP55-S(No FLIPPER) and CP55-D(Simplified derivation)

3.2 General description

Frequency Range	13.56 ㎒
Type of Modulation	ASK
The number of channels	1 ch
Type of Antenna	PCB Antenna
Power supply	DC 24 V
Product SW/HW version	smart51_app_1_00_02_SPI.bin / MAIN SCH,CP55,V0.1
Radio SW/HW version	smart51_app_1_00_02_SPI.bin / MAIN SCH,CP55,V0.1
Test SW Version	Cardprinter Firmware Downloader v2.1.0.2
RF power setting in TEST SW	default

Note : The above EUT information was declared by the manufacturer.

3.3 Test frequency

Frequency	13.56 ㎒

4. Summary of test results

4.1 Standards & results

Rule Reference	Parameter	Status
15.203	Antenna Requirement	C
15.225 (a)	In-band Fundamental Emission	C
15.225 (b)	In-band Spurious Emission	C
15.225 (c)	In-band Spurious Emission	C
15.225 (d) 15.209	Out-of–band Spurious Emission	C
15.225 (e)	Frequency Stability Tolerance	C
15.207	Conducted Emissions	C

Note1) : C = complies, NC = Not complies, NT = Not tested, NA = Not Applicable
Note2) : The worst case is Y scheme(Please refer to the “Test setup photos” to check X, Y, Z configuration).

4.2 Uncertainty

Measurement Item	Expanded Uncertainty U = *k*Uc (*k* = 2)	
Radiated Spurious Emissions	30 ㎒ ~ 300 ㎒:	+4.94 ㏈, -5.06 ㏈
		+4.93 ㏈, -5.05 ㏈
	300 ㎒ ~ 1 000 ㎒:	+4.97 ㏈, -5.08 ㏈
		+4.84 ㏈, -4.96 ㏈
	1 ㎓ ~ 25 ㎓:	+6.03 ㏈, -6.05 ㏈
Conducted Emissions	9 ㎑ ~ 150 ㎑:	3.75 ㏈
	150 ㎑ ~ 30 ㎒:	3.36 ㏈

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5. Test results

5.1 Antenna Requirement

5.1.1 Regulation

According to §15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

5.1.2 Result

-Complied

The Loop antenna is permanantely attached on PCB board.

5.2 In-band Fundamental Emission

5.2.1 Regulation

15.225 (a) The field strength of any emission within the band 13.553-13.567 ㎒ shall not exceed 15, 848 microvolts/meter at 30 meters.

5.2.2 Measurement Procedure

Test Procedure The Radiated Electric Field Strength intensity has been measured on semi anechoic chamber with a ground plane and at a distance of 3m.

Frequency : From 9 ㎑ to 30 ㎒ at distance 3m The EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.

Frequency : From 30 ㎒ to 1 ㎓ at distance 3m The measuring antenna height varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.
The measurements were performed for both vertical and horizontal antenna polarization.

Measurements were performed with a QP, PK, and AV detector. The radiated emission measurements were made with the following detector function of the test receiver (below 1 ㎓).

Frequency	9 - 90 ㎑	90 - 110 ㎑	110 - 490 ㎑	490 ㎑ - 30 ㎒	30 ㎒ -1 ㎓
Detecter type	PK/AV	QP	PK/AV	QP	QP
IF bandwidth	200 ㎐	200 ㎐	9 ㎑	9 ㎑	120 ㎑

- Part 15 Section 15.31 (f)(2) (9 ㎑ - 30 ㎒)
[Limit at 3m]=[Limit at 300m]-40 x log(3[m]/300[m])
[Limit at 3m]=[Limit at 30m]-40 x log (3[m]/30[m])

5.2.3 Test Result

- Complied

- Basic model (CP55)

Voltage [v]	Frequency [㎒]	Reading [dBμV]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Correction Factor [dB]	field strength dBμV/m at 3 m	Limit dBμV/m at 3 m	Margin [dB]
QP DATA.									
24.0	13.56	56.90	-0.99	-30.77	19.56	-12.20	44.70	124.00	79.30

- Variant model (CP55-S)

Voltage [v]	Frequency [㎒]	Reading [dBμV]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Correction Factor [dB]	field strength dBμV/m at 3 m	Limit dBμV/m at 3 m	Margin [dB]
QP DATA.									
24.0	13.56	58.70	-0.99	-30.77	19.56	-12.20	46.50	124.00	77.50

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5.3 In-band Spurious Emission

5.3.1 Regulation

15.225 (b) With in the bands 13.410-13.553 ㎒ and 13.567-13.710 ㎒, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.

15.225 (c) With in the bands 13.110-13.410 ㎒ and 13.710-14.010 ㎒, the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.

5.3.2 Test Result

- Complied

Measurement Distance: 3 m

- Basic model (CP55)

Frequency [㎒]	Receiver Bandwidth [㎑]	Reading [dB(㎶)]	Pol. [V/H]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	Limit [dB(㎶/m)]	Result [dB(㎶/m)]	Margin [dB]
QP DATA.										
13.26	9	37.10	H	-0.88	-30.79	19.57	-12.10	25.00	80.50	55.50
13.55	9	43.80	H	-0.99	-30.77	19.56	-12.20	31.60	90.50	58.90
13.57	9	40.90	H	-0.99	-30.77	19.56	-12.20	28.70	90.50	61.80
13.71	9	37.60	V	-0.99	-30.76	19.55	-12.20	25.40	80.50	55.10

- Variant model (CP55-S)

Frequency [㎒]	Receiver Bandwidth [㎑]	Reading [dB(㎶)]	Pol. [V/H]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	Limit [dB(㎶/m)]	Result [dB(㎶/m)]	Margin [dB]
QP DATA.										
13.15	9	36.40	H	-0.87	-30.80	19.57	-12.10	24.30	80.50	56.20
13.55	9	45.50	H	-0.99	-30.77	19.56	-12.20	33.30	90.50	57.20
13.57	9	45.60	H	-0.99	-30.77	19.56	-12.20	33.40	90.50	57.10
13.74	9	36.90	H	-1.00	-30.75	19.55	-12.20	24.70	80.50	55.80

Margin (dB) = Limit - Actual
[Result = Reading + Amp Gain + AF + CL]
1. H = Horizontal, V = Vertical Polarization
2. AF/CL = Antenna Factor and Cable Loss
3. Factor = CL+AF+AG

5.4 Out-of-band Spurious Emission

5.4.1 Regulation

15.225 (d) The Field Strength of any emissions appearing outside of the 13.110-14.010 ㎒ band shall not exceed the general radiated emission limits in 15.209

Frequency (㎒)	Field Strength (㎶/m)	Measurement distance (meters)
0.009-0.490	2400/F(㎑)	300
0.490-1.705	24000/F(㎑)	30
1.705-30.0	30(29.54 dB㎶/m)	30
30.0-88.0	100(40 dB㎶/m)	3
88-216	150(43.5 dB㎶/m)	3
216-960	200 (46 dB㎶/m)	3
Above 960	500 (53.98 dB㎶/m)	3

5.4.2 Measurement Procedure

The spurious emissions from the EUT will be measured on an 10 m Anechoic chamber in the frequency range of 9 ㎑ to 30 ㎒ using a tuned receiver and a shielded loop antenna.
The antenna was positioned 3, 10 or 30 meters horizontally from the EUT.
Measurements haver been made in all three orthogonal axes and the shielded loop antenna was rotated to locate the maximum of the emissions.
In the case where larger measuring distances are required the results will extrapolated based on the values measuring on the closer distances according to Section 15.31 (f) (2) [2].

The final measurement will be performed with an EMI Riceiver set to Quasi Peak detector except for the frequency bands 9 ㎑ to 90 ㎑ and 110 to 490 ㎑ where an average detector will be used according to Section 15.209 (d) [2].

The final lever, expressed in dB㎶/m, is arrived at by taking the reading from the EMI receiver (Level dB㎶) and adding the antenna correction factor and cable loss fator (Factor dB) to it. This result then has to be compared with the relevant FCC limit. The resolution bandwith during the measurement is as follows:
9 ㎑ – 150 ㎑: ResBW: 200 ㎐
150 ㎑ – 30 ㎒: ResBW: 9 ㎑

The preliminary radiated measurements were performed to determine the frequency producing the maximum emissions in an anechoic chamber at a distance of 3 meters.

The EUT was placed on the top of the 0.8 meter height, 1 x 1.5 meter non-metallic table. To find the maximum emission levels, the height of a measuring antenna was changed and the turntable was rotated 360°.
The antenna polarization was also changed from vertical to horizontal. The spectrum was canned from 30 to 1 000 ㎒ using the BILOG antenna. To obain the final measurement data, the EUT was arranged on a turntable situated on a 10 m chamber. The EUT was tested at a distance 3 meters.
Each frequency found during preliminary measurements was re-examined and investigated. The test-receiver system was set up to average, peak, and quasi-peak detector function with specified bandwidth.

5.4.3 Test Result

- Complied

Measurement Distance: 3 m

- Basic model (CP55)

-Below 30 ㎒

Frequency [㎒]	Receiver Bandwidth [㎑]	Reading [dB(㎶)]	Pol. [V/H]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	Limit [dB(㎶/m)]	Result [dB(㎶/m)]	Margin [dB]
QP DATA.										
0.51	9	45.30	V	-0.20	-32.50	19.60	-13.10	32.50	73.60	41.40
19.92	9	36.20	H	-1.18	-30.32	19.30	-12.20	37.70	69.50	45.50

-Above 30 ㎒

Frequency [㎒]	Receiver Bandwidth [㎑]	Reading [dB(㎶)]	Pol. [V/H]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	Limit [dB(㎶/m)]	Result [dB(㎶/m)]	Margin [dB]
QP DATA.										
36.43	120	29.40	V	1.94	-32.52	15.68	-16.22	13.18	40.00	26.82
72.92	120	32.80	V	1.79	-33.15	12.68	-18.68	14.12	40.00	25.88
167.38	120	30.00	H	2.83	-36.24	15.77	-17.64	12.36	43.50	31.14
356.28	120	46.50	H	4.27	-35.38	20.61	-10.50	36.00	46.00	10.00
380.90	120	36.30	H	4.43	-35.61	21.22	-9.96	26.34	46.00	19.66
640.01	120	40.40	H	5.91	-35.36	24.76	-4.69	35.71	46.00	10.29

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- Variant model (CP55-S)

-Below 30 ㎒

Frequency [㎒]	Receiver Bandwidth [㎑]	Reading [dB(㎶)]	Pol. [V/H]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	Limit [dB(㎶/m)]	Result [dB(㎶/m)]	Margin [dB]
QP DATA.										
1.43	9	41.50	V	-0.31	-32.20	19.61	-12.90	28.60	69.50	36.90
27.88	9	38.10	V	-1.38	-29.85	19.03	-12.20	25.90	69.50	43.60

-Above 30 ㎒

Frequency [㎒]	Receiver Bandwidth [㎑]	Reading [dB(㎶)]	Pol. [V/H]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	Limit [dB(㎶/m)]	Result [dB(㎶/m)]	Margin [dB]
QP DATA.										
41.52	120	29.90	V	1.30	-34.31	18.42	-14.59	15.31	40.00	24.69
153.31	120	30.20	H	2.70	-37.55	16.50	-18.35	11.85	43.50	31.65
222.91	120	42.00	H	3.30	-34.28	16.63	-14.35	27.65	46.00	18.35
270.56	120	43.50	H	3.66	-35.10	18.61	-12.83	30.67	46.00	15.33
324.27	120	41.50	H	4.05	-35.37	19.81	-11.51	29.99	46.00	16.01
582.29	120	43.70	V	5.62	-35.42	24.37	-5.43	38.27	46.00	7.73

Margin (dB) = Limit - Actual
[Result = Reading + Amp Gain + AF + CL]
1. H = Horizontal, V = Vertical Polarization
2. AF/CL = Antenna Factor and Cable Loss
3. Factor = CL+AF+AG

5.5 Frequency tolerance

5.5.1 Regulation

15.225 (e) The frequency tolerance of the carrier signal shall be maintained within ±0.01 % of the operating frequency over a temperature variation of −20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85 % to 115 % of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

5.5.2 Test Result

- Complied

- Basic model (CP55)

VOLTAGE [%]	POWER [V]	TEMP [℃]	FREQ [Hz]	FREQ.DEV [Hz]	Deviation [%]
100	24.0	-20	1 356 034 150	34 150	0.002 52
		-10	1 356 033 000	33 000	0.002 43
		0	1 356 028 650	28 650	0.002 11
		10	1 356 026 340	26 340	0.001 94
		20	1 356 020 260	20 260	0.001 49
		25	1 356 019 970	19 970	0.001 47
		30	1 356 018 230	18 230	0.001 34
		40	1 356 017 370	17 370	0.001 28
		50	1 356 017 950	17 950	0.001 32
85	20.4	20	1 356 024 890	24 890	0.001 84
115	27.6	20	1 356 025 180	25 180	0.001 86

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- Variant model (CP55-S)

VOLTAGE [%]	POWER [V]	TEMP [℃]	FREQ [Hz]	FREQ.DEV [Hz]	Deviation [%]
100	24.0	-20	1 356 030 970	30 970	0.002 28
		-10	1 356 027 500	27 500	0.002 03
		0	1 356 031 260	31 260	0.002 31
		10	1 356 030 100	30 100	0.002 22
		20	1 356 028 080	28 080	0.002 07
		25	1 356 027 790	27 790	0.002 05
		30	1 356 025 180	25 180	0.001 86
		40	1 356 023 150	23 150	0.001 71
		50	1 356 020 550	20 550	0.001 52
85	20.4	20	1 356 029 520	29 520	0.002 18
115	27.6	20	1 356 029 810	29 810	0.002 20

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5.6 Conducted Emission

5.6.1 Regulation

According to §15.207(a), for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 ㎑ to 30 ㎒, shall not exceed the limits in the following table, as measured using a 50 μH/50 Ω line impedance stabilization network (LISN).
Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (㎒)	Conducted limit (㏈㎶)	
	Qausi-peak	Average
0.15 – 0.5	66 to 56 *	56 to 46 *
0.5 – 5	56	46
5 – 30	60	50

* Decreases with the logarithm of the frequency.

According to §15.107(a), for unintentional device, except for Class A digital devices, line conducted emission limits are the same as the above table.

5.6.2 Measurement Procedure

1) The EUT was placed on a wooden table of size, 1 m by 1.5 m, raised 80 ㎝ in which is located 40 ㎝ away from the vertical wall and 1.5m away from the side wall of the shielded room.

2) Each current-carrying conductor of the EUT power cord was individually connected through a 50Ω/50μH LISN, which is an input transducer to a Spectrum Analyzer or an EMI/Field Intensity Meter, to the input power source.

3) Exploratory measurements were made to identify the frequency of the emission that had the highest amplitude relative to the limit by operating the EUT in a range of typical modes of operation, cable position, and with a typical system equipment configuration and arrangement. Based on the exploratory tests of the EUT, the one EUT cable configuration and arrangement and mode of operation that had produced the emission with the highest amplitude relative to the limit was selected for the final measurement.

4) The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment is the system) was then performed over the frequency range of 0.15 ㎒ to 30 ㎒.

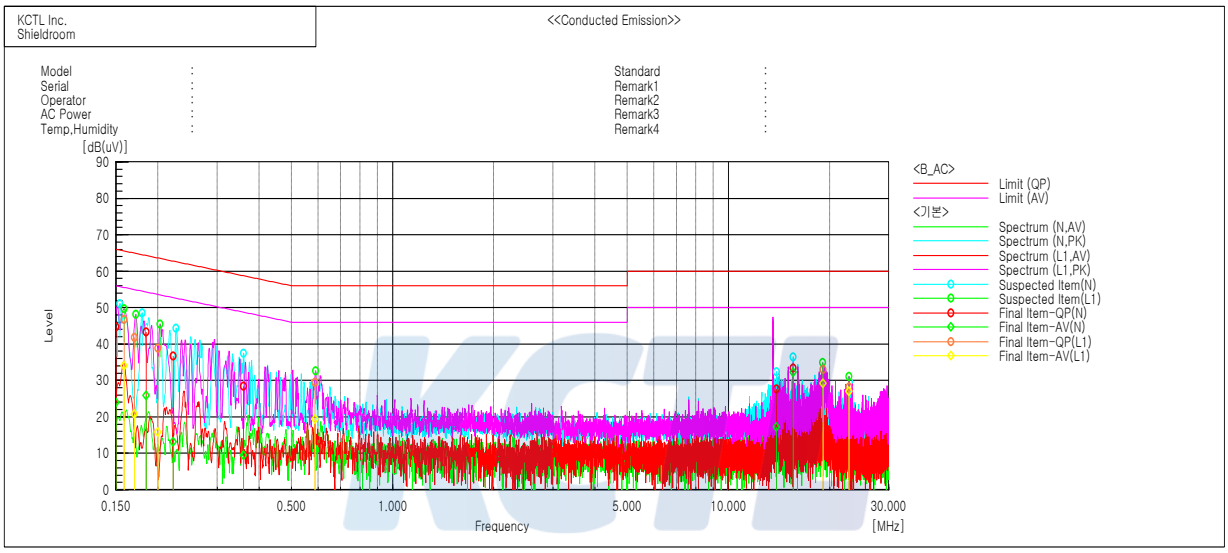
5) The measurements were made with the detector set to PEAK amplitude within a bandwidth of 10 ㎑ or to QUASI-PEAK and AVERAGE within a bandwidth of 9 ㎑. The EUT was in transmitting mode during the measurements.

5.6.3 Test Result

- Complied

Figure 4. The plot of Conducted Emission

- Basic model (CP55)



Final Result

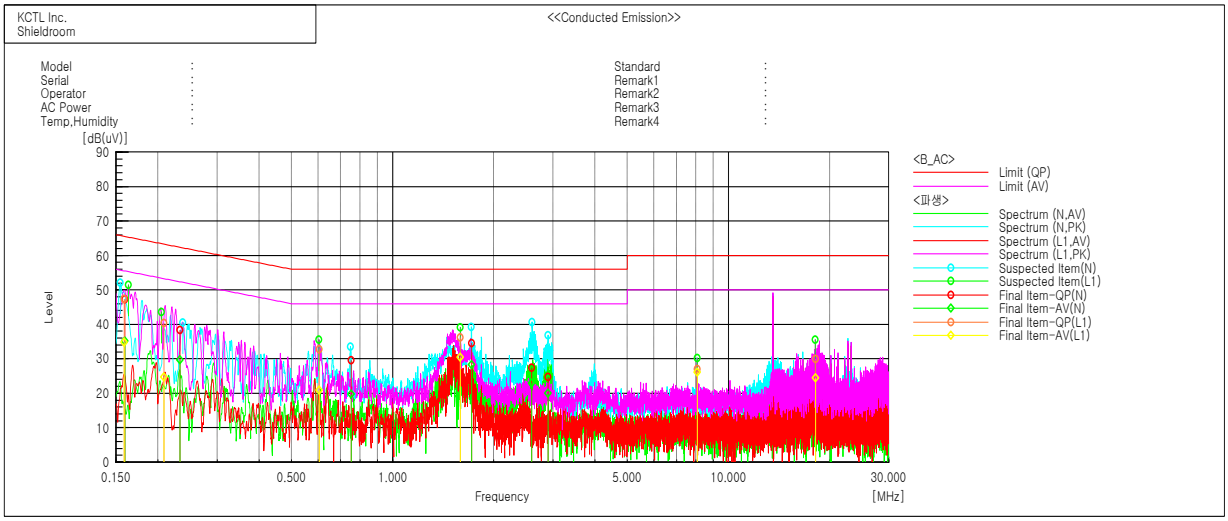
--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.15002	35.0	14.3	9.7	44.7	24.0	66.0	56.0	21.3	32.0
2	0.18431	33.7	16.3	9.6	43.3	25.9	64.3	54.3	21.0	28.4
3	0.22211	27.3	3.8	9.3	36.6	13.1	62.7	52.7	26.1	39.6
4	0.35987	18.6	-0.4	9.8	28.4	9.4	58.7	48.7	30.3	39.3
5	13.89463	17.7	7.2	10.0	27.7	17.2	60.0	50.0	32.3	32.8
6	15.57679	23.4	22.2	10.0	33.4	32.2	60.0	50.0	26.6	17.8

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.15854	36.9	24.1	9.9	46.8	34.0	65.5	55.5	18.7	21.5
2	0.17038	31.7	10.7	10.1	41.8	20.8	64.9	54.9	23.1	34.1
3	0.20002	28.9	5.9	9.9	38.8	15.8	63.6	53.6	24.8	37.8
4	0.58675	19.6	9.4	9.9	29.5	19.3	56.0	46.0	26.5	26.7
5	19.0945	22.9	19.0	10.1	33.0	29.1	60.0	50.0	27.0	20.9
6	22.85668	18.0	16.9	10.1	28.1	27.0	60.0	50.0	31.9	23.0

- Variant model (CP55-S)



Final Result

--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.15938	37.3	25.1	10.0	47.3	35.1	65.5	55.5	18.2	20.4
2	0.23282	28.8	20.2	9.5	38.3	29.7	62.3	52.3	24.0	22.6
3	0.75187	19.7	9.9	9.8	29.5	19.7	56.0	46.0	26.5	26.3
4	1.71849	24.8	18.6	9.7	34.5	28.3	56.0	46.0	21.5	17.7
5	2.59516	17.6	13.2	9.7	27.3	22.9	56.0	46.0	28.7	23.1
6	2.90283	15.0	10.3	9.7	24.7	20.0	56.0	46.0	31.3	26.0

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.15854	37.4	24.8	9.9	47.3	34.7	65.5	55.5	18.2	20.8
2	0.20823	30.5	14.9	9.8	40.3	24.7	63.3	53.3	23.0	28.6
3	0.60489	22.9	11.1	9.8	32.7	20.9	56.0	46.0	23.3	25.1
4	1.59099	26.5	20.8	9.7	36.2	30.5	56.0	46.0	19.8	15.5
5	8.06582	17.0	16.1	10.0	27.0	26.1	60.0	50.0	33.0	23.9
6	18.1449	19.8	14.3	10.1	29.9	24.4	60.0	50.0	30.1	25.6

6. Test equipment used for test

	Equipment Name	Manufacturer	Model No.	Serial No.	Next Cal. Date
■	Spectrum Analyzer	R&S	FSV40	100989	18.01.06
■	DC Power Supply	Agilent	E3632A	MY40017108	18.05.15
■	Cable Assembly	Radiall	2301762000PJ	1724.661	-
■	Temp & Humid Chamber	Daejin Engineering	DJ-THR11000	10041	18.01.31
■	Signal Generator	R & S	SMR40	100007	18.05.15
■	Vector Signal Generator	R&S	SMBV100A	257566	18.01.06
■	Loop Antenna	R&S	HFH2-Z2	100355	18.03.03
■	EMI Test Receiver	R&S	ESCI7	100732	18.08.24
■	Amplifier	SONOMA	310N	344922	18.08.25
■	Turn Table	Innco Systems	DT2000	79	-
■	Cable Assembly	Gigalane	RF-400	-	-
■	Bilog Antenna	SCHWARZBECK	VULB9163	552	18.05.10
■	AMPLIFIER	SONOMA	310N	186280	18.04.06
■	ATTENUATOR	HP	8491A	16861	18.04.06
■	Turn Table	MATURO	-	CO2000-SOFT	-
■	Antenna Mast	Innco Systems	MA4640-XP-ET	-	-
■	EMI Test Receiver	R&S	ESCI7	101408	18.08.24
■	EMI Test Receiver	R&S	ESCI3	100001	18.08.24
■	Two-Line V-Network	R&S	ENV216	101358	18.08.01

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