교정성적서

CALIBRATION CERTIFICATE

성 적 서 번 호: 130802Y033

(Certificate No)

관 리 번 호: 9QE5-B51303 경기도 화성시 동탄면 영천로 133

(Control No) Tel:031-379-5114, Fax:031-379-5115





페이지 (1)/(총 16)

1. 의 뢰 자 (Client)

: (주)씨티케이 기 관 명 (Name)

: 경기 용인시 처인구 호동 386-1 소 (Address)

2. 측 정 기 (Calibration Subject)

기 기 명 (Description) : TWO-LINE V-NETWORK

제작회사 및 형식 (Manufacture & Model Name) : ROHDE & SCHWARZ / ENV216

기기번호 (Serial Number): 101235

(인정항목: 40618 전원 임피던스 안정화 회로망 (Line impedance stabilization networks; LISN, CDN, ISN, etc.))

3. 교정일자 (Date of Calibration) : 2013. 08. 02

4. 교정환경 (Environment Conditions)

도 (Temperature) : (23.1 ± 0.3) °C 습도(Humidity) $: (48 \pm 2) \% R.H.$

: ■ 고정표준실(Perm. Lab.) □ 이동교정(Mobile Lab.) 교정장소 (Location) □ 현장교정(On Site Calibration)

5. 측정표준의 소급성 (Traceability)

교정방법 및 소급성 서술 (Calibration method and /or brief description):

상기 기기는 전원 임피던스 안정화 회로망의 교정절차서(SICT-T100-40618), EMC 수신기의 교정절차서 (SICT-T100-40614) 및 CISPR 16-1-2 을 참조하여 국가측정표준기관으로부터 측정의 소급성이 확보된 아래의 표준장비를 이용하여 교정되었음.

교정에 사용된 표준장비 명세 (List of used standards/specifications)

기기명 Description	제작회사 및 형식 Manufacture and Model	기기번호 Serial Number	차기교정예정일자 The due date of next Cal.	교정기관 Calibration Lab.
TYPE N CALIBRATION KIT		3217A12335	2014. 07. 03	AGILENT
IMPEDANCE GAIN PHASE ANALYZER	H.P / 4194A	2830J03332	2014. 05. 27	SICT
S-PARAMETER NETWORK ANALYZER	AGILENT / 8753ES-006	MY40001021	2013. 09. 11	SICT

6. 교정결과 (Calibration Results) 교정결과 참조 (Refer attached file) 7. 측정불확도 (Measurement Uncertainty) 교정결과 참조 (Refer attached file)

확 인 (Affirmation) 작성자 (Measurements performed by)

연락처 (Tel No.) : 031-379-5126

성 명 (Name) : 변성종

승인자 (Approved by)

위 (Title) : 기술책임자(정)

명 (Name) : 김길식

위 성적서는 국제시험기관인정협력체(International Laboratory Accreditation Cooperation) 상호인정협정(Mutual Recognition Arrangement) 에 서명한 한국인정기구(KOLAS)로부터 공인받은 분야의 교정결과입니다.

(The above calibration certificate is the accredited calibration items by Korea Laboratory Accreditation Scheme, which signed the ILAC-MRA)

한국인정기구 인정

Accredited by KOLAS, Republic of Korea

교정기술원㈜ 대표이사

㈜ 이 성적서는 측정기의 정밀정확도에 영향을 미치는 요소(과부하,온도,습도 등)의 급격한 변화가 발생한 경우에는 두 (Note) If any significant instability or other adverse factor(overload, temperature, humidity etc.) manifests itself before, during or after calibration, it is likely to affect the validity of the calibration.

CALIBRATION RESULTS

1	.	lm	ped	lan	се
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Local mode			
Measured Point	Frequency	Measured Value	Measurement Uncertainty
			(C.L. : Approx. 95 %, $k = 2$)
N – GND	0.009 MHz	6.1 Ω	0.5 Ω
Single phase	$0.015~\mathrm{MHz}$	6.2 ♀	0.5 Ω
150 kHz High Pass Off	$0.020~\mathrm{MHz}$	7.1 Ω	0.5 Ω
	$0.025~\mathrm{MHz}$	8.2 Ω	0.6 Ω
	$0.030~\mathrm{MHz}$	9.4 Ω	0.7 Ω
	0.040 MHz	11.8 Ω	0.4 Ω
	$0.050~\mathrm{MHz}$	14.2 Ω	0.5 Ω
	$0.060~\mathrm{MHz}$	16.5 Ω	0.6 Ω
	$0.070~\mathrm{MHz}$	18.7 Ω	0.7 Ω
	$0.080~\mathrm{MHz}$	20.8 Ω	0.7 Ω
	$0.090~\mathrm{MHz}$	22.8 Ω	0.8 Ω
	0.100 MHz	24.6 Ω	0.9 Ω
	$0.150~\mathrm{MHz}$	31.9 Ω	0.6 Ω
	0.170 MHz	33.9 ♀	0.6 Ω
	0.200 MHz	36.8 ♀	0.7 Ω
	$0.250~\mathrm{MHz}$	40.0 Ω	0.7 Ω
	0.300 MHz	42.1 Ω	0.8 Ω
	0.350 MHz	43.6 Ω	0.8 Ω
	0.400 MHz	44.7 Ω	0.8 Ω
	0.500 MHz	46.1 Ω	0.8 Ω
	0.600 MHz	46.9 Ω	0.8 Ω
	0.700 MHz	47.4 Ω	0.8 Ω
	0.800 MHz	47.8 Ω	0.9 Ω
	0.900 MHz	48.0 Ω	0.9 Ω
	1.000 MHz	48.2 Ω	0.9 Ω
	1.200 MHz	48.4 Ω	0.9 Ω
	1.500 MHz	48.6 Ω	0.9 Ω
	2.000 MHz	48.8 Ω	0.9 Ω
	2.500 MHz	48.9 Ω	0.9 Ω
	3.000 MHz	48.9 Ω	0.9 Ω
	4.000 MHz	49.0 Ω	0.9 Ω
	5.000 MHz	49.1 Ω	0.9 Ω
	7.000 MHz	49.1 Ω	0.9 Ω
	10.00 MHz	49.3 Ω	0.9 Ω
	15.00 MHz	49.3 Ω	1.8 Ω
	20.00 MHz	48.9 Ω	1.8 Ω
	30.00 MHz	48.5 Ω	1.7 Ω

CALIBRATION RESULTS

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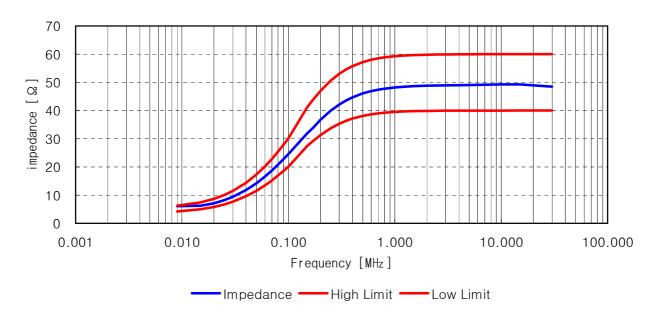
1. Impedance

Local mode			
Measured Point	Frequency	Measured Value	Measurement Uncertainty
			(C.L. : Approx. 95 %, $k = 2$)
L1 - GND	0.009 MHz	6.1 Ω	0.5 Ω
Single phase	0.015 MHz	6.2 Ω	0.5 Ω
150 kHz High Pass Off	0.020 MHz	7.1 Ω	0.5 Ω
	0.025 MHz	8.2 Ω	0.6 Ω
	0.030 MHz	9.4 Ω	0.7 Ω
	0.040 MHz	11.8 Ω	0.4 Ω
	0.050 MHz	14.2 Ω	0.5 Ω
	0.060 MHz	16.5 Ω	0.6 Ω
	0.070 MHz	18.7 Ω	0.7 Ω
	0.080 MHz	20.8 Ω	0.7 Ω
	0.090 MHz	22.8 Ω	0.8 Ω
	0.100 MHz	24.6 Ω	0.9 Ω
	0.150 MHz	31.9 Ω	0.6 Ω
	0.170 MHz	33.9 Ω	0.6 Ω
	0.200 MHz	36.8 ♀	0.7 Ω
	$0.250~\mathrm{MHz}$	40.0 Ω	0.7 Ω
	0.300 MHz	42.2 Ω	0.8 Ω
	$0.350\ MHz$	43.7 Ω	0.8 Ω
	0.400 MHz	44.8 Ω	0.8 Ω
	$0.500~\mathrm{MHz}$	46.2 Ω	0.8 Ω
	0.600 MHz	47.0 Ω	0.8 Ω
	0.700 MHz	47.5 Ω	0.8 Ω
	0.800 MHz	47.9 Ω	0.9 Ω
	0.900 MHz	48.1 Ω	0.9 Ω
	1.000 MHz	48.3 Ω	0.9 Ω
	1.200 MHz	48.5 Ω	0.9 Ω
	1.500 MHz	48.8 Ω	0.9 Ω
	2.000 MHz	48.9 Ω	0.9 Ω
	2.500 MHz	49.0 Ω	0.9 Ω
	3.000 MHz	49.1 Ω	0.9 Ω
	4.000 MHz	49.1 Ω	0.9 Ω
	5.000 MHz	49.2 Ω	0.9 Ω
	7.000 MHz	49.2 Ω	0.9 Ω
	10.00 MHz	49.2 Ω	0.9 Ω
	15.00 MHz	49.0 Ω	1.8 Ω
	20.00 MHz	46.0 Ω 47.0 Ω	1.7 Ω
	30.00 MHz	47.0 Ω	1.7 Ω

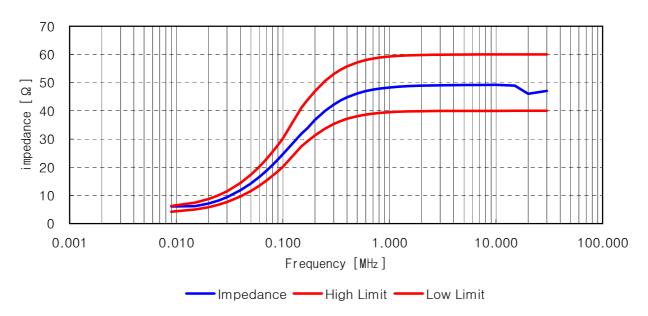
CALIBRATION RESULTS

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Local mode, Impedance test, 1P, N - GND



Local mode, Impedance test, 1P, L1 - GND



CALIBRATION RESULTS

2.	Phase

2. Phase Local mode			
Measured Point	Frequency	Measured Value	Measurement Uncertainty
	, ,		(C.L. : Approx. 95 %, $k = 2$)
N - GND	$0.009~\mathrm{MHz}$	27.1 °	2.1 °
Single phase	$0.015~\mathrm{MHz}$	34.6 °	2.1 °
150 kHz High Pass Off	$0.020~\mathrm{MHz}$	42.6 °	2.1 °
	$0.025~\mathrm{MHz}$	47.8 °	2.1 °
	$0.030~\mathrm{MHz}$	51.1 °	2.1 °
	$0.040~\mathrm{MHz}$	54.4 °	1.8 °
	$0.050~\mathrm{MHz}$	55.5 °	1.8 °
	$0.060~\mathrm{MHz}$	55.3 °	1.8 °
	$0.070~\mathrm{MHz}$	54.5 °	1.8 °
	$0.080~\mathrm{MHz}$	53.3 °	1.8 °
	$0.090~\mathrm{MHz}$	51.9 °	1.8 °
	$0.100~\mathrm{MHz}$	50.4 °	1.8 °
	$0.150~\mathrm{MHz}$	42.8 °	1.6 °
	$0.170~\mathrm{MHz}$	40.2 °	1.6 °
	$0.200\ MHz$	36.3 °	1.6 °
	$0.250~\mathrm{MHz}$	31.2 °	1.6 °
	$0.300~\mathrm{MHz}$	27.2 °	1.6 °
	$0.350~\mathrm{MHz}$	24.0 °	1.6 °
	$0.400~\mathrm{MHz}$	21.4 °	1.6 °
	$0.500~\mathrm{MHz}$	17.6 °	1.6 °
	$0.600~\mathrm{MHz}$	14.9 °	1.6 °
	$0.700~\mathrm{MHz}$	13.0 °	1.6 °
	$0.800~\mathrm{MHz}$	11.5 °	1.6 °
	$0.900~\mathrm{MHz}$	10.3 °	1.6 °
	1.000 MHz	9.3 °	1.6 °
	$1.200~\mathrm{MHz}$	7.9 °	1.6 °
	1.500 MHz	6.5 °	1.6 °
	$2.000~\mathrm{MHz}$	5.1 °	1.6 °
	$2.500~\mathrm{MHz}$	4.2 °	1.6 °
	$3.000~\mathrm{MHz}$	3.7 °	1.6 °
	$4.000~\mathrm{MHz}$	3.1 °	2.1 °
	5.000 MHz	2.9 °	2.1 °
	7.000 MHz	2.7 °	2.1 °
	10.00 MHz	2.7 °	2.1 °
	15.00 MHz	3.0 °	2.6 °
	20.00 MHz	2.5 °	2.6 °
	30.00 MHz	3.8 °	2.6 °

CALIBRATION RESULTS

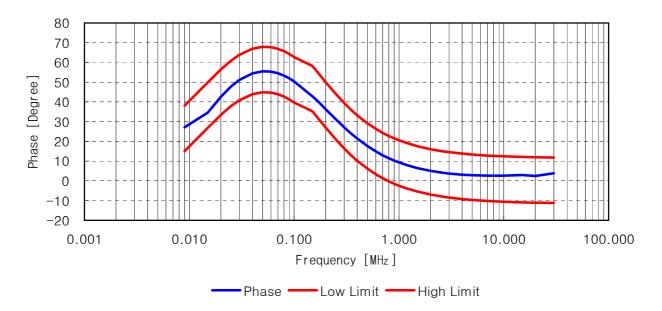
성적서번호: 130802Y033 교 정 일 자: 2013. 08. 02 모 델: ENV216 차기교정예정일자: 2014. 08. 02

2. Phase

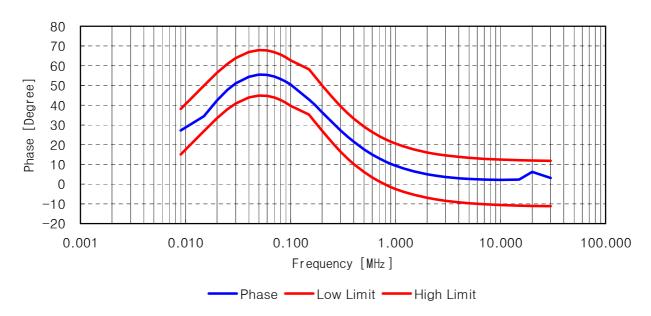
Local mode			
Measured Point	Frequency	Measured Value	Measurement Uncertainty
	, ,		(C.L.: Approx. 95 %, $k = 2$)
L1 – GND	$0.009~\mathrm{MHz}$	27.2 °	2.1 °
Single phase	$0.015~\mathrm{MHz}$	34.4 °	2.1 °
150 kHz High Pass Off	$0.020~\mathrm{MHz}$	42.5 °	2.1 °
	$0.025~\mathrm{MHz}$	47.7 °	2.1 °
	0.030 MHz	51.0 °	2.1 °
	0.040 MHz	54.4 °	1.8 °
	0.050 MHz	55.5 °	1.8 °
	0.060 MHz	55.3 °	1.8 °
	0.070 MHz	54.5 °	1.8 °
	0.080 MHz	53.4 °	1.8 °
	0.090 MHz	52.0 °	1.8 °
	0.100 MHz	50.5 °	1.8 °
	0.150 MHz	42.9 °	1.6 °
	0.170 MHz	40.3 °	1.6 °
	0.200 MHz	36.4 °	1.6 °
	0.250 MHz	31.3 °	1.6 °
	0.300 MHz	27.2 °	1.6 °
	0.350 MHz	24.0 °	1.6 °
	0.400 MHz	21.5 °	1.6 °
	0.500 MHz	17.7 °	1.6 °
	0.600 MHz	15.0 °	1.6 °
	0.700 MHz	13.0 °	1.6 °
	0.800 MHz	11.5 °	1.6 °
	0.900 MHz	10.3 °	1.6 °
	1.000 MHz	9.3 °	1.6 °
	1.200 MHz	7.9 °	1.6 °
	1.500 MHz	6.4 °	1.6 °
	2.000 MHz	5.0 °	1.6 °
	2.500 MHz	4.1 °	1.6 °
	3.000 MHz	3.6 °	1.6 °
	4.000 MHz	2.9 °	2.1 °
	5.000 MHz	2.6 °	2.1 °
	7.000 MHz	2.3 °	2.1 °
	10.00 MHz	2.1 °	2.1 °
	15.00 MHz	2.3 °	2.6 °
	20.00 MHz	6.2 °	2.6 °
	30.00 MHz	3.1 °	2.6 °

CALIBRATION RESULTS

Local mode, Phase test, 1P, N - GND



Local mode, Phase test, 1P, L1 - GND



CALIBRATION RESULTS

3.	Insertion	loss

<u>Гиа вила пал.</u>	Managered Value	Manager Harrison
Frequency	Measured value	Measurement Uncertainty
		(C.L. : Approx. 95 %, $k = 2$)
0.009 MHz	10.1 dB	0.7 dB
		0.7 dB
0.080 MHz		0.7 dB
0.090 MHz		0.7 dB
0.100 MHz	9.8 dB	0.7 dB
0.150 MHz	9.7 dB	0.7 dB
0.170 MHz	9.7 dB	0.7 dB
0.200 MHz	9.7 dB	0.7 dB
0.250 MHz	9.7 dB	0.7 dB
0.300 MHz	9.7 dB	0.7 dB
0.350 MHz	9.7 dB	0.7 dB
0.400 MHz	9.7 dB	0.7 dB
0.500 MHz	9.7 dB	0.7 dB
0.600 MHz	9.7 dB	0.7 dB
0.700 MHz	9.7 dB	0.7 dB
$0.800~\mathrm{MHz}$	9.7 dB	0.7 dB
$0.900~\mathrm{MHz}$	9.7 dB	0.7 dB
1.000 MHz	9.7 dB	0.7 dB
1.200 MHz	9.7 dB	0.7 dB
1.500 MHz	9.7 dB	0.7 dB
2.000 MHz	9.7 dB	0.7 dB
2.500 MHz		0.7 dB
		0.7 dB
30.00 MHz	9.7 dB	0.7 dB
	0.090 MHz 0.100 MHz 0.150 MHz 0.150 MHz 0.170 MHz 0.200 MHz 0.250 MHz 0.350 MHz 0.350 MHz 0.400 MHz 0.500 MHz 0.600 MHz 0.700 MHz 0.800 MHz 1.000 MHz 1.000 MHz 1.200 MHz 1.500 MHz	0.009 MHz 0.015 MHz 10.2 dB 0.020 MHz 10.2 dB 0.025 MHz 10.1 dB 0.030 MHz 10.1 dB 0.040 MHz 0.050 MHz 0.060 MHz 0.070 MHz 0.080 MHz 0.090 MHz 0.100 MHz 0.100 MHz 0.100 MHz 0.250 MHz 0.200 MHz 0.250 MHz 0.350 MHz 0.350 MHz 0.350 MHz 0.350 MHz 0.350 MHz 0.350 MHz 0.400 MHz 0.500 MHz 0.600 MHz 0.700 MHz 0.70

CALIBRATION RESULTS

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3. Insertion loss			
Local mode	- Fraguenov	Magazrad Valua	Massurament Uncertainty
Measured Point	Frequency	Measured Value	Measurement Uncertainty
			(C.L. : Approx. 95 %, $k = 2$)
L1 - RF OUTPUT	0.009 MHz	10.1 dB	0.7 dB
Single phase	0.015 MHz	10.2 dB	0.7 dB
150 kHz High Pass Off	0.020 MHz	10.2 dB	0.7 dB
	$0.025~\mathrm{MHz}$	10.1 dB	0.7 dB
	0.030 MHz	10.1 dB	0.7 dB
	0.040 MHz	10.0 dB	0.7 dB
	0.050 MHz	9.9 dB	0.7 dB
	0.060 MHz	9.9 dB	0.7 dB
	0.070 MHz	9.8 dB	0.7 dB
	0.080 MHz	9.8 dB	0.7 dB
	0.090 MHz	9.8 dB	0.7 dB
	0.100 MHz	9.8 dB	0.7 dB
	0.150 MHz	9.7 dB	0.7 dB
	0.170 MHz	9.7 dB	0.7 dB
	0.200 MHz	9.7 dB	0.7 dB
	0.250 MHz	9.7 dB	0.7 dB
	0.300 MHz	9.7 dB	0.7 dB
	0.350 MHz	9.7 dB	0.7 dB
	0.400 MHz	9.7 dB	0.7 dB
	0.500 MHz	9.7 dB	0.7 dB
	0.600 MHz	9.7 dB	0.7 dB
	0.700 MHz	9.7 dB	0.7 dB
	0.800 MHz	9.7 dB	0.7 dB
	0.900 MHz	9.7 dB	0.7 dB
	1.000 MHz	9.7 dB	0.7 dB
	1.200 MHz	9.7 dB	0.7 dB
	1.500 MHz	9.7 dB	0.7 dB
	2.000 MHz	9.7 dB	0.7 dB
	2.500 MHz	9.7 dB	0.7 dB
	3.000 MHz	9.6 dB	0.7 dB
	4.000 MHz	9.6 dB	0.7 dB
	5.000 MHz	9.5 dB	0.7 dB
	7.000 MHz	9.5 dB	0.7 dB
	10.00 MHz	9.5 dB	0.7 dB
	15.00 MHz	9.7 dB	0.7 dB

9.8 dB

9.6 dB

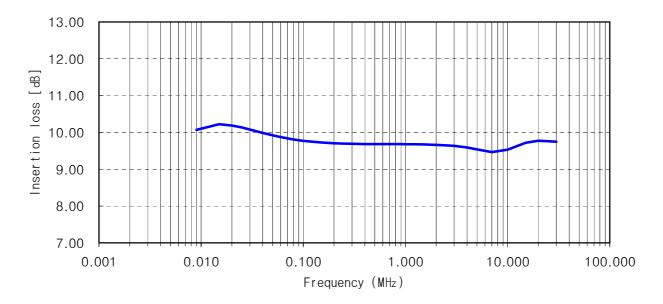
0.7 dB 0.7 dB

20.00 MHz

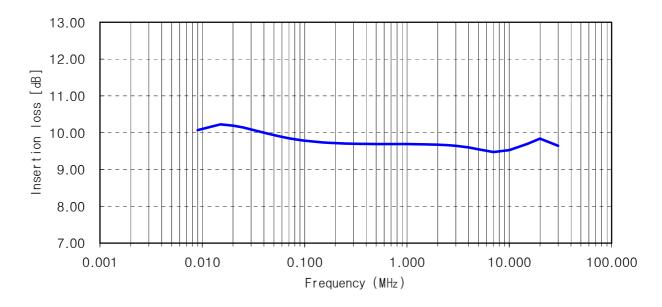
30.00 MHz

CALIBRATION RESULTS

Local mode, Insertion loss test, 1P, N - RF OUTPUT



Local mode, Insertion loss test, 1P, L1 - RF OUTPUT



CALIBRATION RESULTS

3.	Insertion loss
- 1	ocal mode

Local mode			
Measured Point	Frequency	Measured Value	Measurement Uncertainty
			(C.L. : Approx. 95 %, $k = 2$)
N – RF OUTPUT	0.009 MHz	81 dB	0.9 dB
Single phase	$0.015~\mathrm{MHz}$	79 dB	0.9 dB
150 kHz High Pass On	0.020 MHz	80 dB	0.9 dB
	$0.025~\mathrm{MHz}$	83 dB	0.9 dB
	0.030 MHz	84 dB	0.9 dB
	0.040 MHz	80 dB	0.9 dB
	0.050 MHz	69 dB	0.9 dB
	0.060 MHz	60 dB	0.9 dB
	0.070 MHz	52 dB	0.9 dB
	0.080 MHz	45 dB	0.9 dB
	0.090 MHz	38 dB	0.7 dB
	0.100 MHz	32 dB	0.7 dB
	0.150 MHz	9.9 dB	0.7 dB
	0.170 MHz	9.9 dB	0.7 dB
	0.200 MHz	9.9 dB	0.7 dB
	0.250 MHz	9.8 dB	0.7 dB
	0.300 MHz	9.9 dB	0.7 dB
	0.350 MHz	10.0 dB	0.7 dB
	0.400 MHz	10.1 dB	0.7 dB
	0.500 MHz	10.1 dB	0.7 dB
	0.600 MHz	10.0 dB	0.7 dB
	0.700 MHz	10.0 dB	0.7 dB
	0.800 MHz	9.9 dB	0.7 dB
	0.900 MHz	9.9 dB	0.7 dB
	1.000 MHz	9.9 dB	0.7 dB
	1.200 MHz	9.8 dB	0.7 dB
	1.500 MHz	9.8 dB	0.7 dB
	2.000 MHz	9.7 dB	0.7 dB
	2.500 MHz	9.7 dB	0.7 dB
	3.000 MHz	9.7 dB	0.7 dB
	4.000 MHz	9.6 dB	0.7 dB
	5.000 MHz	9.6 dB	0.7 dB
	7.000 MHz	9.5 dB	0.7 dB
	10.000 MHz	9.6 dB	0.7 dB
	15.000 MHz	9.8 dB	0.7 dB
	20.000 MHz	9.8 dB	0.7 dB
	30.000~MHz	9.8 dB	0.7 dB

CALIBRATION RESULTS

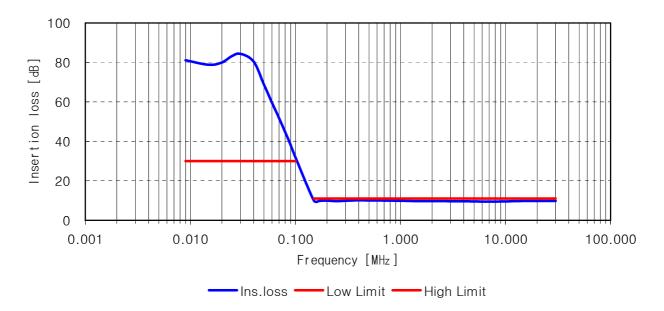
3.	Insertion	loss
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3. Insertion loss			
Local mode Measured Point	Fraguanay	Measured Value	Magaurament Uncertainty
weasured Form	Frequency	weasured value	Measurement Uncertainty (C.L.: Approx. 95 %, $k = 2$)
			(C.L. Approx. 95 %, K – 2)
L1 - RF OUTPUT	0.009 MHz	80 dB	0.9 dB
Single phase	0.015 MHz	79 dB	0.9 dB
150 kHz High Pass On	0.020 MHz	81 dB	0.9 dB
100 KHZ 1 HgH 1 433 CH	0.025 MHz	83 dB	0.9 dB
	0.030 MHz	83 dB	0.9 dB
	0.040 MHz	79 dB	0.9 dB
	0.050 MHz	69 dB	0.9 dB
	0.060 MHz	60 dB	0.9 dB
	0.070 MHz	52 dB	0.9 dB
	0.080 MHz	45 dB	0.9 dB
	0.090 MHz	38 dB	0.7 dB
	0.100 MHz	32 dB	0.7 dB
	0.150 MHz	9.9 dB	0.7 dB
	0.170 MHz	9.9 dB	0.7 dB
	0.200 MHz	9.9 dB	0.7 dB
	0.250 MHz	9.8 dB	0.7 dB
	0.300 MHz	9.9 dB	0.7 dB
	0.350 MHz	10.1 dB	0.7 dB
	0.400 MHz	10.1 dB	0.7 dB
	0.500 MHz	10.1 dB	0.7 dB
	0.600 MHz	10.1 dB	0.7 dB
	0.700 MHz	10.0 dB	0.7 dB
	0.800 MHz	10.0 dB	0.7 dB
	0.900 MHz	9.9 dB	0.7 dB
	1.000 MHz	9.9 dB	0.7 dB
	1.200 MHz	9.8 dB	0.7 dB
	1.500 MHz	9.8 dB	0.7 dB
	2.000 MHz	9.7 dB	0.7 dB
	2.500 MHz	9.7 dB	0.7 dB
	3.000 MHz	9.7 dB	0.7 dB
	4.000 MHz	9.6 dB	0.7 dB
	5.000 MHz	9.6 dB	0.7 dB
	7.000 MHz	9.5 dB	0.7 dB
	10.000 MHz	9.6 dB	0.7 dB
	15.000 MHz	9.8 dB	0.7 dB
	20.000 MHz	9.9 dB	0.7 dB
	30.000 MHz	9.7 dB	0.7 dB

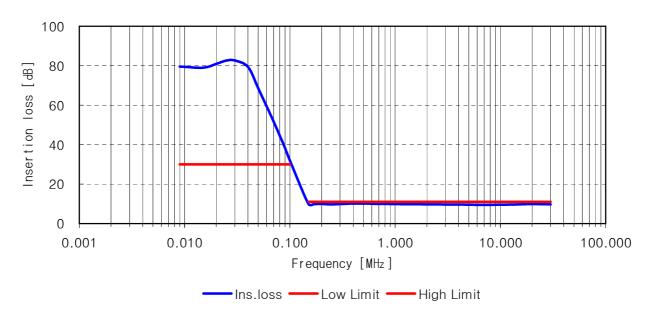
CALIBRATION RESULTS

성적서번호: 130802Y033 교 정 일 자: 2013. 08. 02 모 델: ENV216 차기교정예정일자: 2014. 08. 02

Local mode, Insertion loss test, 1P, N-RF OUTPUT, 150 kHz HP



Local mode, Insertion loss test, 1P, L1 - RF OUTPUT, 150 kHz HP



CALIBRATION RESULTS

성적서번호: 130802Y033 교 정 일 자: 2013. 08. 02 모 델: ENV216 차기교정예정일자: 2014. 08. 02

4. Reflection test

Local mode			
Measured Point	Frequency	Measured Value	Measurement Uncertainty
		[format : VSWR]	(C.L. : Approx. 95 %, $k = 2$)
N	0.030 MHz	1.15	0.06
Single phase	0.040 MHz	1.14	0.06
150 kHz High Pass Off	0.050 MHz	1.13	0.06
	0.060 MHz	1.13	0.06
	0.070 MHz	1.12	0.06
	0.080 MHz	1.11	0.06
	0.090 MHz	1.11	0.06
	0.100 MHz	1.10	0.06
	0.150 MHz	1.08	0.06
	0.170 MHz	1.08	0.06
	0.200 MHz	1.07	0.06
	0.250 MHz	1.06	0.06
	0.300 MHz	1.06	0.06
	0.350 MHz	1.05	0.06
	0.400 MHz	1.05	0.06
	0.500 MHz	1.05	0.06
	0.600 MHz	1.05	0.06
	0.700 MHz	1.04	0.06
	0.800 MHz	1.04	0.06
	0.900 MHz	1.04	0.06
	1.000 MHz	1.04	0.06
	1.200 MHz	1.04	0.06
	1.500 MHz	1.04	0.06
	2.000 MHz	1.04	0.06
	2.500 MHz	1.04	0.06
	3.000 MHz	1.04	0.06
	4.000 MHz	1.04	0.06
	5.000 MHz	1.05	0.06
	7.000 MHz	1.05	0.06
	10.000 MHz	1.06	0.06
	15.000 MHz	1.07	0.06
	20.000 MHz	1.08	0.06
	30.000 MHz	1.10	0.06

CALIBRATION RESULTS

성적서번호: 130802Y033 교 정 일 자: 2013. 08. 02 모 델: ENV216 차기교정예정일자: 2014. 08. 02

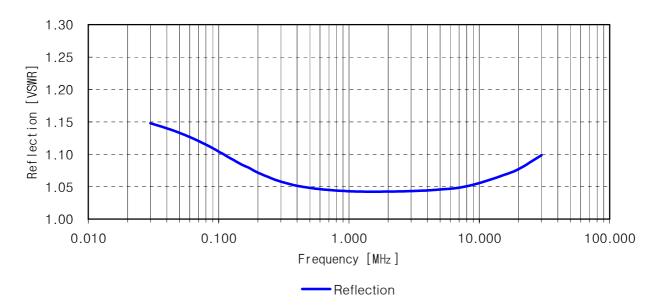
4. Reflection test

Local mode			
Measured Point	Frequency	Measured Value	Measurement Uncertainty
		[format : VSWR]	(C.L. : Approx. 95 %, $k = 2$)
L1	0.030 MHz	1.15	0.06
Single phase	0.040 MHz	1.14	0.06
150 kHz High Pass Off	0.050 MHz	1.13	0.06
	0.060 MHz	1.13	0.06
	0.070 MHz	1.12	0.06
	0.080 MHz	1.11	0.06
	0.090 MHz	1.11	0.06
	0.100 MHz	1.10	0.06
	0.150 MHz	1.08	0.06
	0.170 MHz	1.08	0.06
	0.200 MHz	1.07	0.06
	0.250 MHz	1.06	0.06
	0.300 MHz	1.06	0.06
	$0.350\ MHz$	1.05	0.06
	0.400 MHz	1.05	0.06
	0.500 MHz	1.05	0.06
	0.600 MHz	1.05	0.06
	0.700 MHz	1.04	0.06
	0.800 MHz	1.04	0.06
	0.900 MHz	1.04	0.06
	1.000 MHz	1.04	0.06
	1.200 MHz	1.04	0.06
	1.500 MHz	1.04	0.06
	2.000 MHz	1.04	0.06
	2.500 MHz	1.04	0.06
	3.000 MHz	1.04	0.06
	4.000 MHz	1.04	0.06
	5.000 MHz	1.04	0.06
	7.000 MHz	1.05	0.06
	10.000 MHz	1.05	0.06
	15.000 MHz	1.06	0.06
	20.000 MHz	1.08	0.06
	30.000 MHz	1.09	0.06

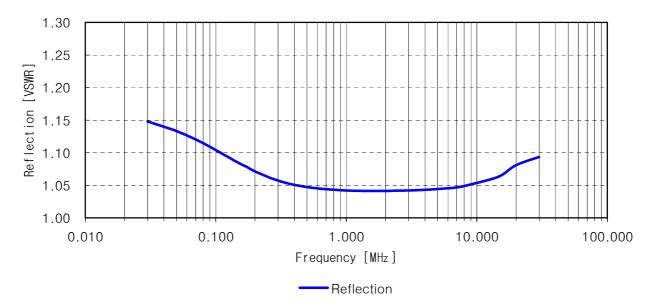
CALIBRATION RESULTS

성적서번호: 130802Y033 교 정 일 자: 2013. 08. 02 모 델: ENV216 차기교정예정일자: 2014. 08. 02

Local mode, Reflection test, 1P, N, 150 kHz HP off



Local mode, Reflection test, 1P, L1, 150 kHz HP off



끝.