

Certificate of Calibration

Customer

Name : Mahidol University Faculty of Dentistry Certificate No : 21-ACT-287
Address : No. 6, Yothi Road, Ratchathewi District, Bangkok 10400 Request No : Req-2021-1024

Unit Under Calibration Details

Calibration Parameter : Sound Level Meter Microphone Class : 2
Manufacturer : DIGICON Microphone model : -
Model : DS-325 Microphone S/N : -
Serial Number : 070307665 Instrument Status : Used
ID : - Resolution : 0.1 dB

Calibration Environment and Details

Temperature : 23°C \pm 3°C
Humidity : 55 %RH \pm 15 %RH
Barometric Pressure : 1010 hPa \pm 10 hPa
Received Date : 2 August 2021
Calibrated Date : 5 August 2021
Calibration Procedure : In-house method CP-ACT-01 based on BS EN 61672-3:2013
Location of Calibration : LAB 1 Acoustic

Reference Standard : Multi frequency sound calibrator, Manufacturer: Quest Technologies, Model: Quest-cal, S/N: EFA000234
Which was calibrated on 14 June 2021, Calibration Certificate No. : 948321 EFA000234
Timer, Manufacturer: EXTECH, Model: -, S/N: 05-ACT Which was calibrated on 31 Mar 2021,
Calibration Certificate No. : 21E1063

Traceability : This certificate provides traceability of measurement to recognized national standard, and to the realization of the international System of Units (SI). TSI, USA. , A2LA Accreditation No. 1326.01, TPA, Thailand, TISI Accreditation No. 0008

Note : The reported uncertainty is based on standard uncertainty multiplied by the Coverage Factor $k=2$, providing a level of confidence approximately 95 %.

Calibrated By : *me*
Mr. Noppadon Luangart
Service Calibration Engineer

Approved By : *ภาวิณี*
Mr. Pacit Mathavorn
Calibration Engineer Supervisor
Issue Date : 5 August 2021

Certificate No : 21-ACT-287

Request No : Req-2021-1024

Range and Linearity Test

Calibration Results : Without Adjustment

UUC Setting	STD REF	Without Adjustment		Adjustment		Uncertainty (+ dB)	Acceptance limit (± dB)
		UUC (dB)	ERR (dB)	UUC (dB)	ERR (dB)		
FAST / A / 32 - 80							
Calibrator Setting	(dB)	(dB)	(dB)	(dB)	(dB)	(+ dB)	(± dB)
1000 Hz 74 dB	74.00	74.4	+0.40	-	-	± 0.3	1.1
1000 Hz 84 dB	84.00	OL	NA	-	-	± 0.3	
1000 Hz 94 dB	94.00	OL	NA	-	-	± 0.3	
1000 Hz 104 dB	104.00	OL	NA	-	-	± 0.3	
1000 Hz 114 dB	114.00	OL	NA	-	-	± 0.3	
1000 Hz 120 dB	120.00	OL	NA	-	-	± 0.3	

UUC Setting	STD REF	Without Adjustment		Adjustment		Uncertainty (+ dB)	Acceptance limit (± dB)
		UUC (dB)	ERR (dB)	UUC (dB)	ERR (dB)		
FAST / A / 50-100							
Calibrator Setting	(dB)	(dB)	(dB)	(dB)	(dB)	(+ dB)	(± dB)
1000 Hz 74 dB	74.00	74.4	+0.40	-	-	± 0.3	1.1
1000 Hz 84 dB	84.00	84.3	+0.30	-	-	± 0.3	
1000 Hz 94 dB	94.00	94.3	+0.30	-	-	± 0.3	
1000 Hz 104 dB	104.00	OL	NA	-	-	± 0.3	
1000 Hz 114 dB	114.00	OL	NA	-	-	± 0.3	
1000 Hz 120 dB	120.00	OL	NA	-	-	± 0.3	

UUC Setting	STD REF	Without Adjustment		Adjustment		Uncertainty (+ dB)	Acceptance limit (± dB)
		UUC (dB)	ERR (dB)	UUC (dB)	ERR (dB)		
FAST / A / 80-130							
Calibrator Setting	(dB)	(dB)	(dB)	(dB)	(dB)	(+ dB)	(± dB)
1000 Hz 74 dB	74.00	UR	NA	-	-	± 0.3	1.1
1000 Hz 84 dB	84.00	84.2	+0.20	-	-	± 0.3	
1000 Hz 94 dB	94.00	94.2	+0.20	-	-	± 0.3	
1000 Hz 104 dB	104.00	104.2	+0.20	-	-	± 0.3	
1000 Hz 114 dB	114.00	114.2	+0.20	-	-	± 0.3	
1000 Hz 120 dB	120.00	120.3	+0.30	-	-	± 0.3	