

LDB23

Download and data processing
software

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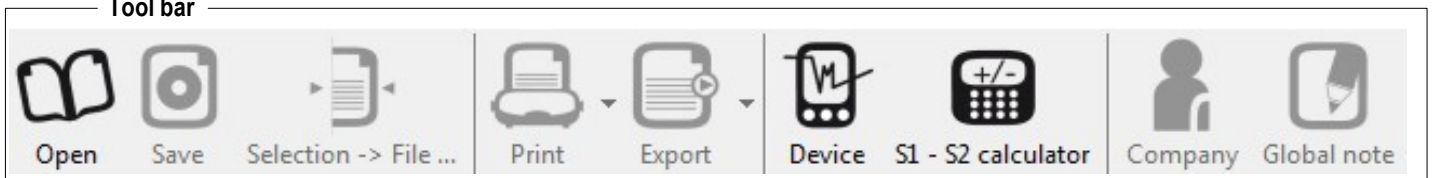
IV – Software presentation

Open the software by double clicking on **LDB23** icon.
The **LDB23** home window is open with its toolbar :



IV 1 – Meaning and functions of the buttons in the toolbar

Tool bar



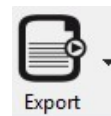
Open

Open a file



Print

Print a graph



Export

Export data



Save

Save a graph



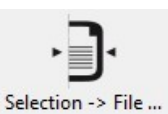
Device

Connect an instrument



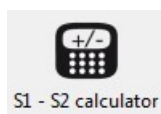
Company

Enter the name of the company



Selection -> File ...

Save a selection as a new file



S1 - S2 calculator

Display calculator



Global note

Add a general comment to the statement

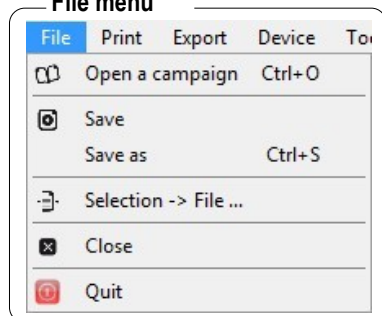
Only **Open a file**, **Connect an instrument** and **calculator** buttons are active when opening the software.

IV 2 – Meaning and function buttons on the menu bar

Menu bar

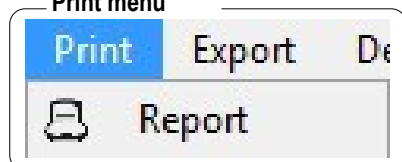
File Print Export Device Tools Windows Help

File menu



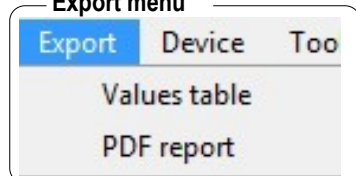
- **Open a campaign:** allows to select the campaign saved on the computer, *.L23 format
- **Save / Save as...** : allows to save the open file.
- **Selection → File...** : allows to save a selection (zoom) of the open file
- **Close** : closes the current report.
- **Quit** : exits software.

Print menu



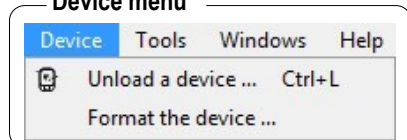
- **Report** : print a report according the user's configuration.

Export menu



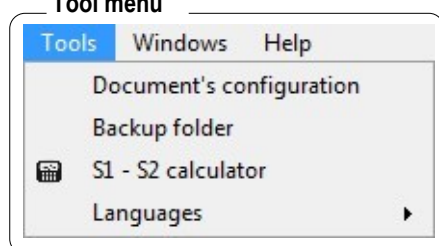
- **Values table** : export table values in .txt format.
- **Pdf report** : export the report in .pdf format.

Device menu



- **Unload a device:** allows to open the unload device window..
- **Format the device** : allows to erase all data of the device.

Tool menu



- **Documents configuration** : allows to fill in header and footer of documents that will be print or export.
- **Backup folder** : allows to modify location of saved documents
- **S1 + S2 calculator** : allows to sum or subtract levels expressed in decibels.
- **Languages** : allows to select the language of the user interface : English or French.

I – Introduction

Provided with the sound level meter of the DB300 range, LDB23 is a configuration, recovery dataprocessing software. Easy handling, it requires a small learning and allows an immediate dataprocessing.

Main functions :

- Visualisation and results of measurement modes.
- Formatting and editing of measurement report.
- Data recovery and creation of text file.
- Zoom function for more precise study of a period.

II – Software installation

1. Please take necessary rights. Otherwise, contact the administrator.
2. Insert the CD-ROM. The installation program starts automatically.

Note : *If setup does not start automatically, go to desktop or Windows Explorer and double-click on LDB200.*

3. Follow the instructions on the screen.

Note: *Depending on software installed on the computer (in particular NET Framework), the waiting time can be significant – Wait. For a few moment.*

4. Restart computer.

It is strongly recommended that you restart the computer after installation. Remember to save and close all other programs in use before clicking Finish.

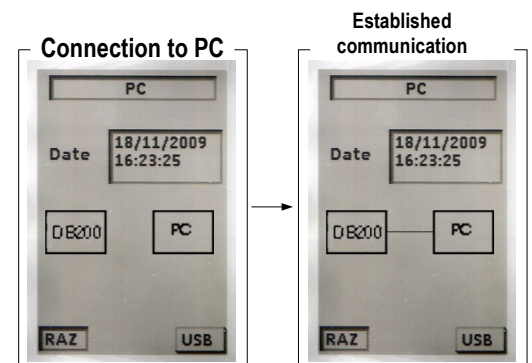
5. Software is now installed, LDB23 icon is displayed on the desktop.

III – Driver installation

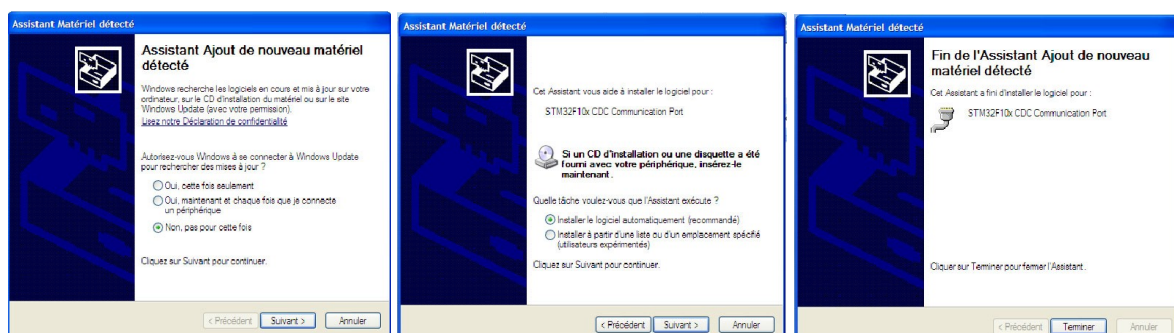
1. Connect the instrument to the computer through the provided USB cable.
2. Press “screen” key then go to “ PC “.
3. Press “ OK “ key.

The computer detects the **LDB23** software and proposes to install specific USB driver from « **Hardware Wizard** » of Windows.

4. Follow usual instructions on the screen to install a driver.



Examples: Hardware Wizard




LDB23 can now convey with the sound level meter instrument and receive files of measurement. See « **Established communication** » figure.

V – Connect the sound level meter

V1 - Transfer – delete files

1. Connect the instrument to USB cable connected to the PC.

2. Press « **Screen** » key then go to « **PC** »

3. Press « **OK** » key and click on  icon.

4. Connection window appears. See "**Connection**" screen.

5. Perform the connection by selecting the USB port corresponding to the serial number of the device. Ex : / F : \ 12010006

6. When connection is established, the user can :

- Transfer data of **DB300** instrument by clicking on "**Unload this device**" button.
- **Delete measurement datasets of the instrument** by clicking on "**Clear device**".

The "**Established connection**" window also gives informations about the remaining memory and about the number of performed datasets

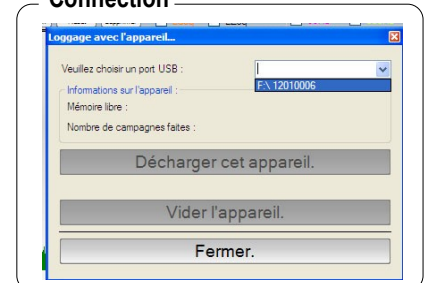
During downloading of the instrument, files are present for information in the directory as shown opposite :

- Select the files to transfer

In case of file name already attributed, a modification window appears and asks :

- To overwrite the file already present in your computer
 - To rename the file to transfer
- Write the new name of the file then press on "**Rename**" button or directly press "**Overwrite**" button.

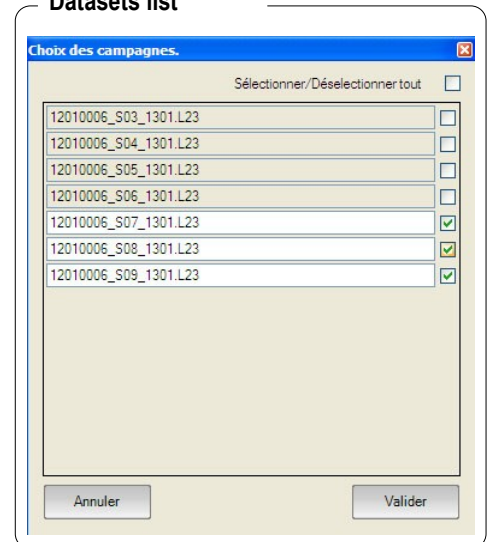
Connection



Established connection



Datasets list



Transferred files are shown for information in the directory as opposite :

- Close the window or double-click on a file to open it.

For files of sound level meter DB200 only

5. Once registration is completed, the operator can :

- Erase the memory of the instrument.
- Disconnect the instrument.
- Close the window.



V2- Files : format – location – tree structure

- **Format** : file has the following format :

Ex : 12010006_S09_1201.L23

Serial number of the instrument _ number of the file in the memory _ date (day month)_ software extension

When a new file is created from a **selection/zoom**, it takes the same name of the initial file with a “s” at the beginning :

Ex : s_12010006_S09_1201.L23

- **Location – tree structure** : When installing software, a tree structure is created in your hard disk (C:).

Saving folders and files have the following tree structure (ex : Windows XP:

C:\Documents and Settings\All Users\Documents\KIMO Instruments\LDB23

- **Export folder** : directory in which are classified the exported files in *.txt and *.pdf formats, it means table of values and reports
- **Dataset folder** : directory in which are classified measurement files. A sub-directory ha“**Example**” contains an example of a measurement file.

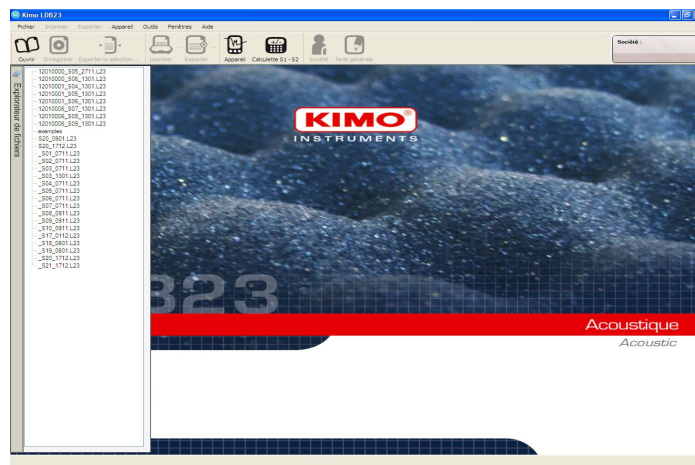


VI – Open a file

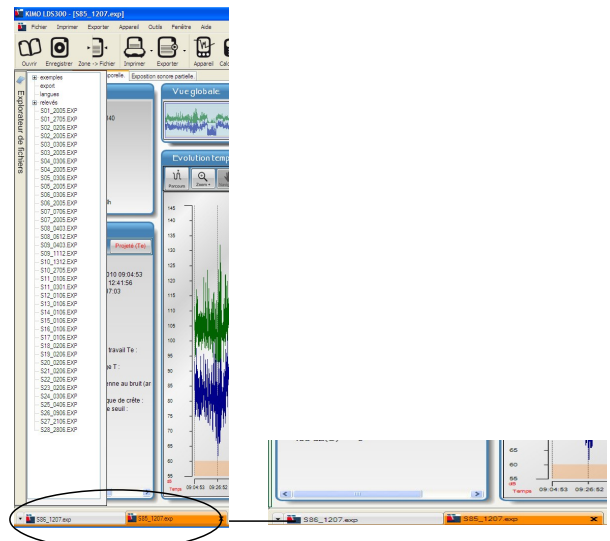
Several possibilities allow files opening :

From the browser software that is accessible on the left side of the screen :

- Double-click on a file to open it.



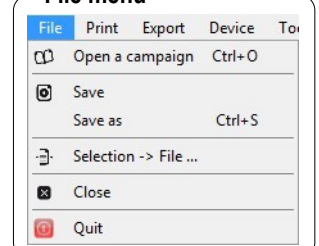
It's possible, from the explorer, to open multiple files. They are marked by tabs at the bottom of the screen. The choice of displaying screen or closing file is done through these tabs.



Finally, it is possible to open a file with the button "Open" or go to File> Open a campaign



File menu



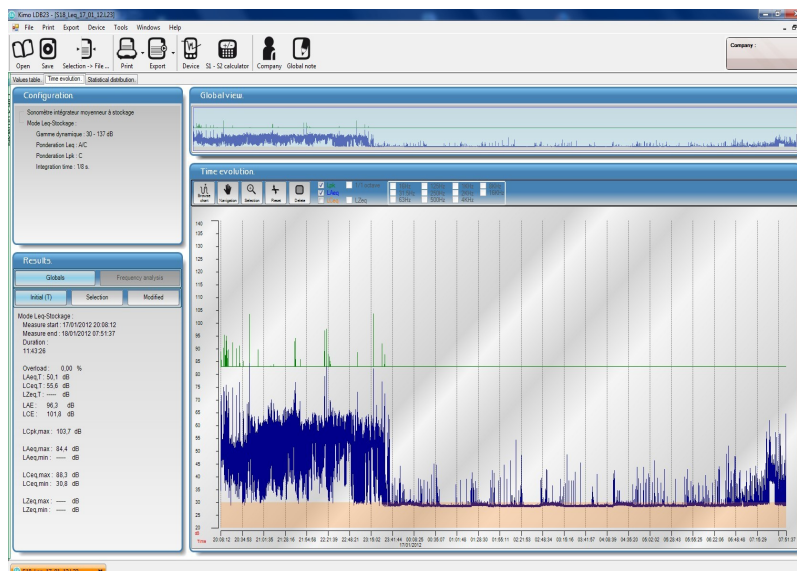
VII1-2 Time evolution tab

"Time evolution" tab is divided into 4 parts :

- configuration
- results
- overview
- time evolution

"Configuration" part gives information about :

- measurement mode : integrator avereger with storage sound level meter
- dynamic range : 30-137 or 20-137dB
- type of weighting for Leq : A/C or A/C/1/1 oct
- type of weighting for Lpk : C or Z
- elementary logging time



"Results" part gives information about the integrator avereger with storage and with or without frequency analysis sound level mode.

General results of the **initial** file :

- date and time of the measurement start
- date and time of the measurement end
- measurement duration in hh:mm:ss
- LAeq, T value
- LCEq, T value
- LZeq, T (only with frequency analysis) value
- LAE value
- LCE value
- LCpk max value
- LAeq maximum and minimum values : LAeqmax and LAeq, min
- LCEq maximum and minimum values : LCEq,max and LCEq, min
- LZeq maximum and minimum values : LZeq,max and LZeq, min (only with frequency analysis)

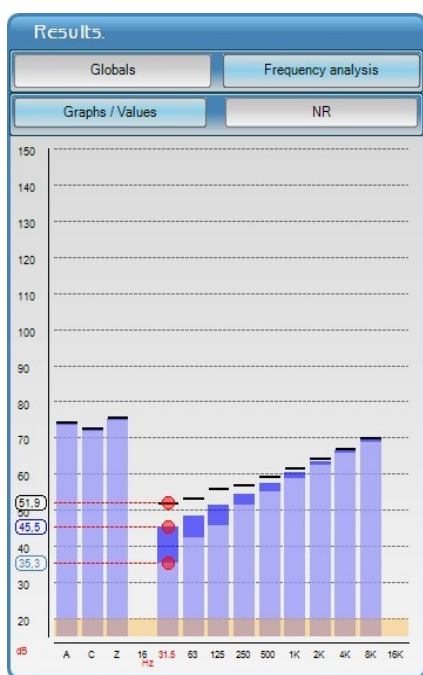
Results

Results		
Globals	Frequency analysis	
Initial (T)	Selection	Modified
Mode Leq-Stockage : Measure start : 17/01/2012 20:08:12 Measure end : 18/01/2012 07:51:37 Duration : 11:43:26		
Overload : 0,00 % LAeq,T : 50,1 dB LCEq,T : 55,6 dB LZeq,T : ---- dB LAE : 96,3 dB LCE : 101,8 dB		
LCpk,max : 103,7 dB		
LAeq,max : 84,4 dB LAeq,min : ---- dB		
LCEq,max : 88,3 dB LCEq,min : 30,8 dB		
LZeq,max : ---- dB LZeq,min : ---- dB		

Frequency analysis

Accessible by activating "Frequency analysis" tab, press the "Graph/Values" tab to get to the visualization of the spectral representation of the analysis or of the values table.

Note : When selecting an area with the "Selection" icon, the spectral representation of the analysis or the values table corresponds to this selection.



Spectral representation

Results.			
Globals		Frequency analysis	
Graphs / Values		NR	
	Leq (dB)	Max (dB)	Min (dB)
A	73,8	74,2	73,4
C	72,2	72,6	71,8
Z	75,2	75,6	74,7
Hz			
16	----	----	----
31,5	45,5	51,9	35,3
63	48,5	53,3	42,5
125	51,5	55,9	45,8
250	54,4	56,9	51,3
500	57,4	59,4	55,2
1K	60,4	61,7	58,9
2K	63,3	64,3	62,4
4K	66,4	67,1	65,7
8K	69,4	70,0	68,8
16K	----	----	----

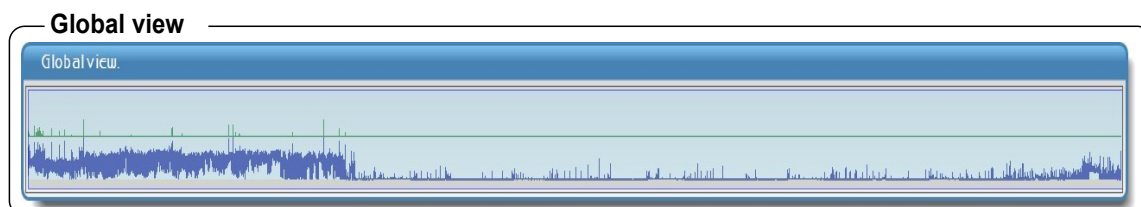
Values table

Black dashes represent the maximum levels of the L_Xeq and blue bars the minimum levels of the L_Xeq in each frequency bands from 31,5Hz to 8kHz.-16kHz






When moving the mouse on the graph, values are indicated on the ordinate axis.

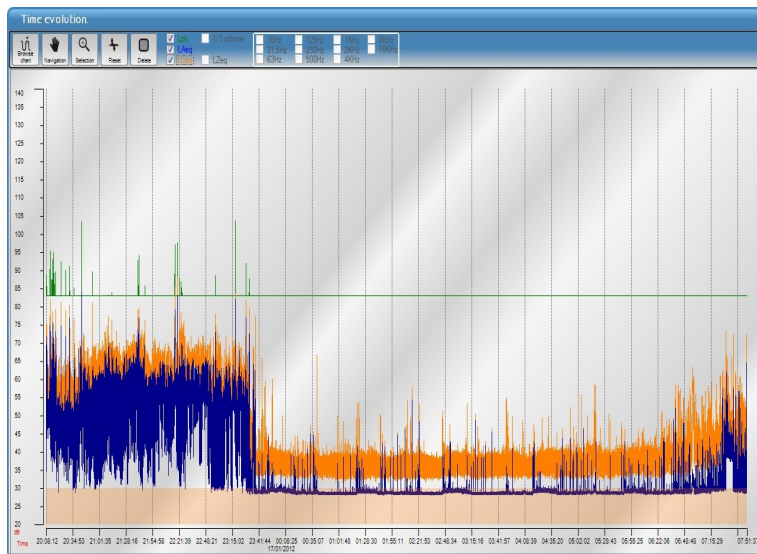
All these values are indicated in the table that can be printed or linked to pdf report.

Global view of the measurement dataset



Time evolution : this part shows the measurement dataset graph. Several actions are possible :

-  Allows to browse the graph and to point accurately the corresponding values.
-  Allows to browse the graph from the zoom/selection function
-  Allows to make a zoom/selection on a part of the graph
-  Allows to reset the graph from the zoom/selection function
-  Allows to delete areas (artefacts) in the graph that will be not counted in the calculations.

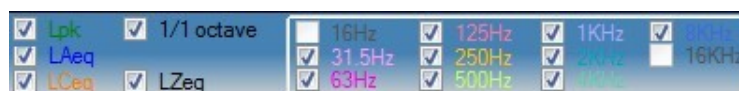


Red arrows ▼ indicate that an overload has occurred.

- Right-click on the arrow to know the noise level reached for this overload.

VII1-2a Selection of curves to display

It is possible to display **LAeq** curve and/or **LCeq** curve and/or **Lpk** curve and/or **LXeq** curves of the analysis by octave bands.



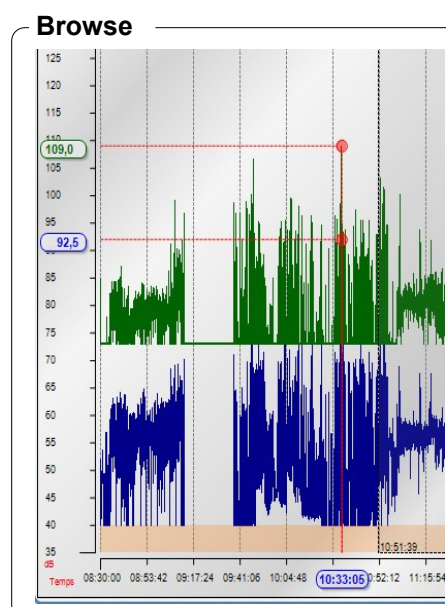
Tick the corresponding box to the curve to display, 1/1 for all the LXeq curves.

VII1-2b Browse the graph

- Click on "**Browse**" button.
- Click on the graph to the desired location
- Stay clicked and drag the mouse on the graph to browse all the graph.

Values expressed in dB are at left of the graph, the plots give a good correspondance between the values of the curves (LAeq-LCeq-LZeq-LCpk).

To quit this function, click on "**Browse**" or "**Reset**" buttons.



VII1-2c Use the Zoom/Selection function

The software allows to display some very accurate areas of the graph :

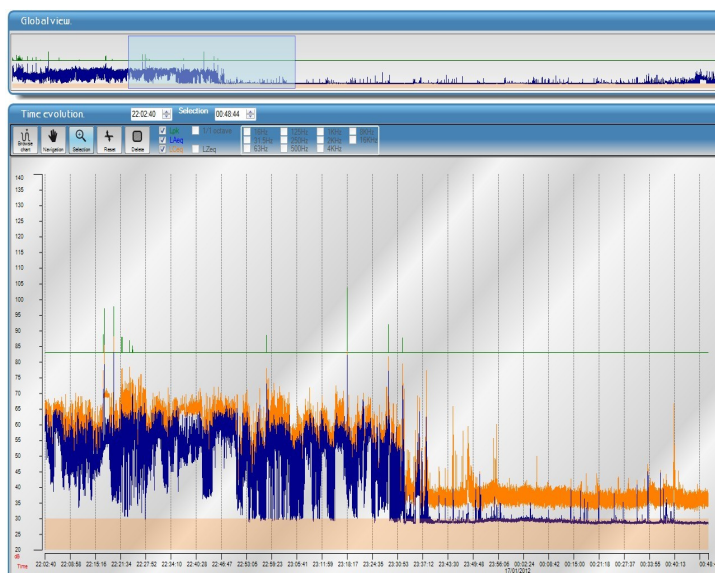
For that, use the **"Selection"** icon.

- Click on the required place at the beginning of the zoom and stay clicked.
- Drag the mouse until the end of the zoomed period.
- Release the mouse button.
- Move laterally the graph with the hand if necessary.

The global view allows to always have a view of the whole dataset.

The blue area indicates the displayed period.

To back to the global graph, click on **"Reset"** icon.

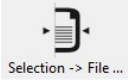


NOTE The graph is about the selection and results of the selection are displayed by activating the **"Selection"** tab in the **"Results"** part.

VII1-2d Save the selection

"Selection" function allows to choose an accurate part of the graph for analysis. It is possible to save this part as a new file and save it in the specified directory.

After selecting the area :

- Click on **"Selection → File"** button  in the tool bar.
- Save the file in the specified directory.

Note : the default name of this new file is the name of the initial file beginning with a "s" :

EX : s_12010006_S09_1701.L23

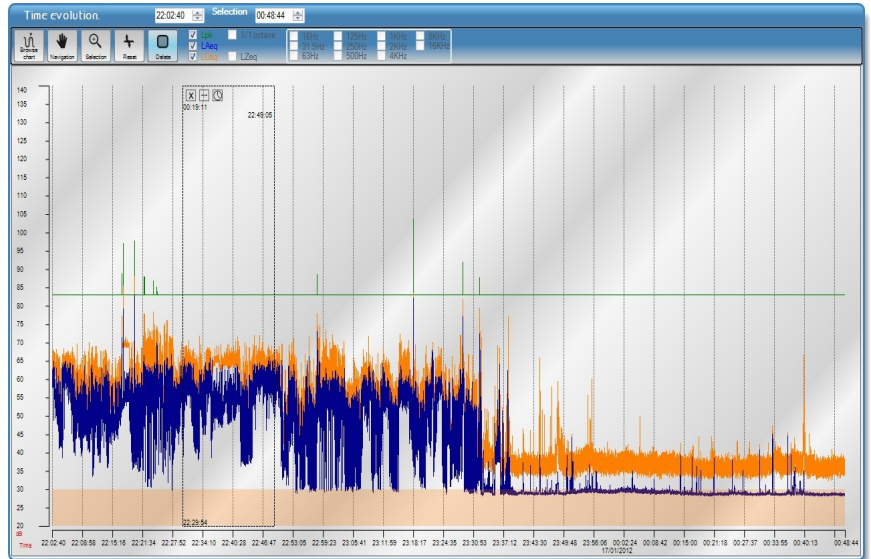
VII-2e Use the Delete function

This function can be used to delete a part of the measurement.

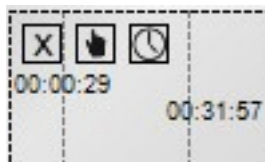
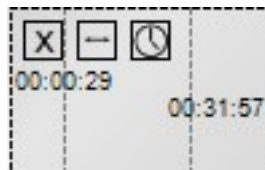
For example : to eliminate an unwanted start or end of measurement or a detected measurement artefact.

To delete an area :

- Click on **"Delete"** button.
- Click on the required place at the beginning of the area.
- Stay clicked.
- Drag the mouse until the end of the area.
- Release the mouse button.

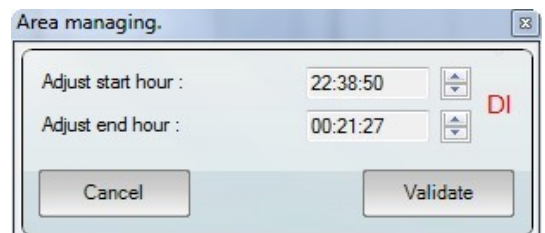


- **To adjust the area**, go to the right side on the area and drag the mouse (double arrow cursor must be activated).
- To move the area, click on the double arrow of the top left of the area : an hand appears. Click on the area and drag it to the required place.
- **To cancel**, click on the cross on the top left of the area.



Adjust the area duration according to a start time and an end time.

- Click on **"Clock"** icon on the top left of the area. A window of area managing appears. Indicated times are the ones of the concerned area.
- Adjust times with the arrows.
- Click on **"Validate"** button.

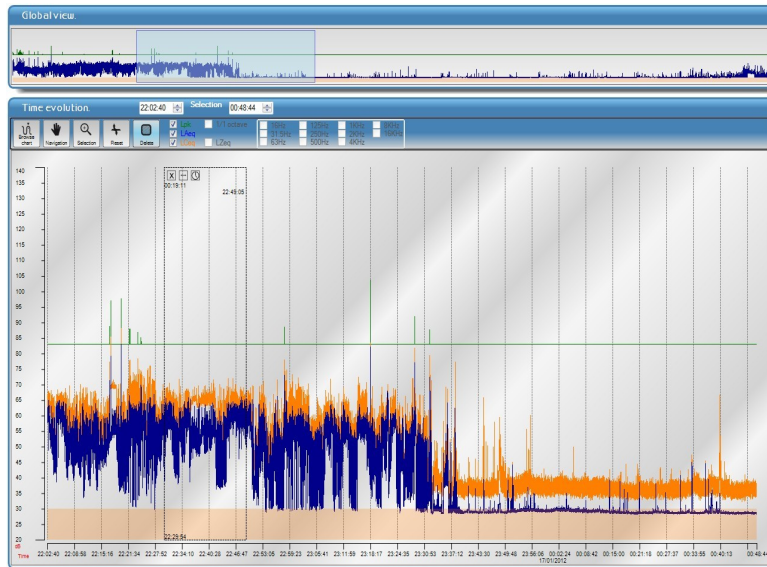


VII1-2f Results with the Zoom/Selection function

For each file, results appear in the "Result" part. This part has 3 buttons allowing the calculation and the displaying of initial file results, of a file selection and results after a modification (deletion of one or several areas).

Example :

- Selection in the initial file, blue area in the global view
- Deleted area in the selection, frame with time reference and duration



Different results are accessible :

- Results of the initial file not modified
- Results of the file selection
- Results of the initial file or the file selection modified (with the deleted area)

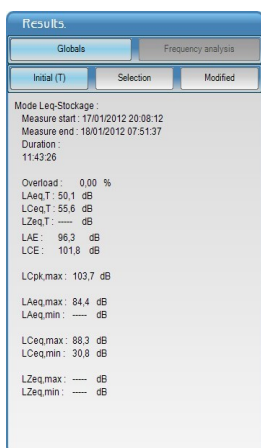
Click on the "Initial", "Selection" and "Modified" buttons to see the corresponding results. The active button turns light blue.

Results are presented alone or simultaneously and with different colors for comparison.

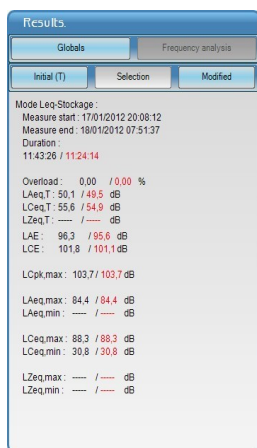
Initial (T) : results of the initial file without any modification

Selection : results of a selection (zoom) of the initial file without any modification

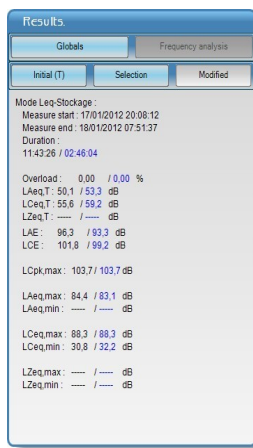
Modified : results of the initial file or of the selection of modified measurement. For example after deletion of one or several areas.



Initial



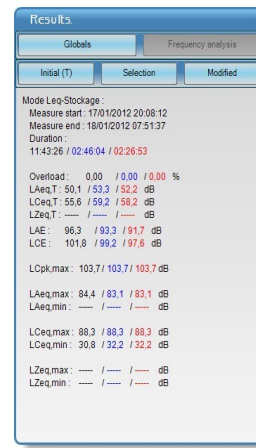
**Initial modified
Results in rouge**



**Initial and
Selection
Results in black and
blue**



**Selection and
modified selection
Results in blue and
red**



**Initial and Selection and
modified selection
Results in black, blue
and red**

VII1-3 Frequency analysis by octave bands from (16Hz) 31.5Hz to 8kHz (16kHz)

In order to make easier the processing of the pollution caused by the different noise sources, it is sometimes necessary to perform a frequency analysis.

The analysis of the results is made on the complete file or on the modified or not selection.

VII1-3a Global results

- Click on "Frequency analysis" tab then on "Graphs /Values".

Blue bars represent the spectral distribution of the **LXeq** and the **LAeq, LCeq and LZeq** values. Black dashes indicate the maximum levels of the **LXeq** and light blue bars the minimum levels of the **LXeq** in each frequency band from (16Hz) 31.5Hz to 8kHz (16kHz) and for the A, C and Z weightings.

- Values of the graph appear when the mouse goes through the graph (values appear on the ordinate axis).

- Click on "Graphs/values" again.

The table displays all the values of the spectre : **LAeq, LCeq, LZeq** and **LXeq** on the total duration of the measurement and minimum (**Min**) and maximum (**Max**) values.



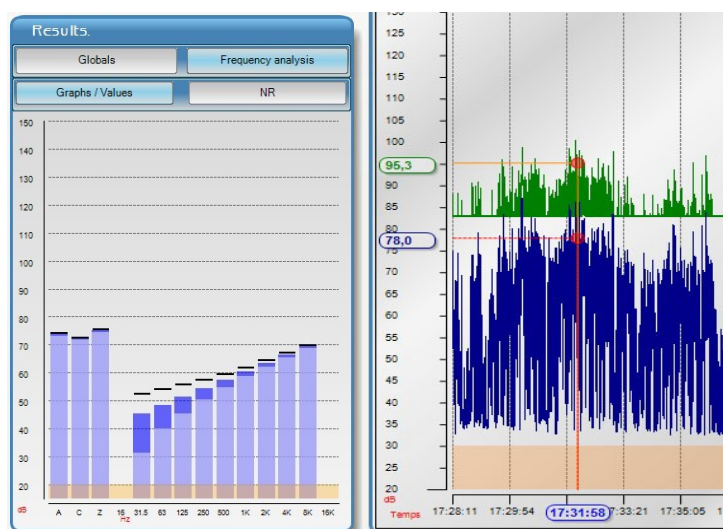
To visualize and read the spectre values for each duration of logging time, for example each second :

- Click on "Browse" button in the tool bar in time evolution part.
- Click on the time evolution graph at the desired location.
- Stay clicked and drag the mouse on the graph to browse the whole graph.

Expressed values in dB are written on the axis of the graph. The spectre for each duration of logging time is displayed on the table and changes according to the position of the mouse on the graph.

- Press "Graphs/Values" to read the corresponding values that also change according to the position of the mouse on the graph.

To quit this function, click on "Browse" or "Reset" buttons.



VII1-3b Noise of equipment : NR criteria of comfort

The sound level meter operating as frequency analyzer, it allows the determination of noise level with reference to the network of evaluation curves, called NR (Noise Rating) curves as per NF S 30-010 standard. This mode is used for the measurement of the noise level of equipments and machines.

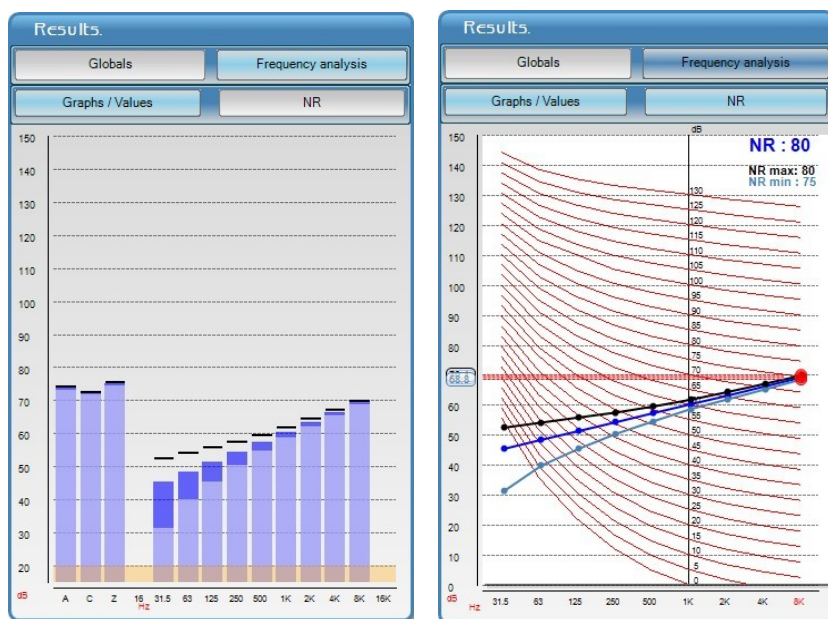
Proceed as follows :

- Click on **"Frequency analysis"** tab then on **"Graphs/Values"** (graph visualization).
- Click on **"NR"** tab.

The graph shows the network of NR curves as per the NF S 30-010 standard and the curve of the noise spectre from 31.5Hz to 8kHz in dark blue.

Maximum and minimum values of the frequency analysis are also shown as two black and light blue curves. They determine by comparison with the curves of the network some limit values of NR comfort criteria on the measurement duration.

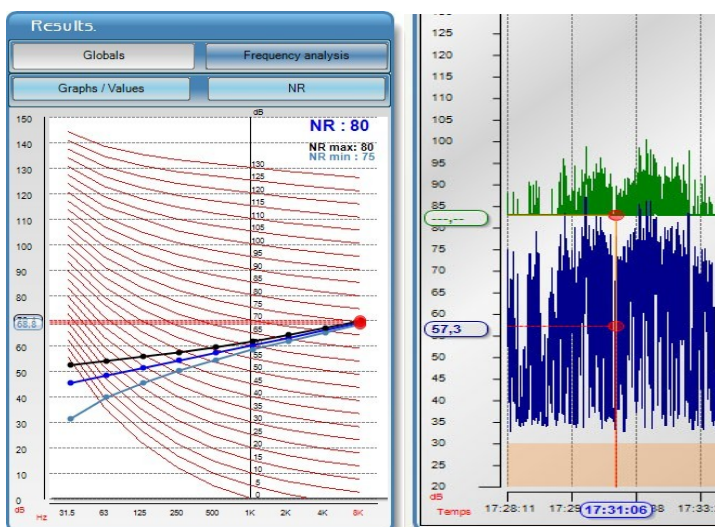
- Read the values of NR comfort criteria at the top of the window : **NR - NR max - NR min**
The spread of the results gives information about the coherence of the achieved result.



To visualize and read values of the NR comfort criteria for each duration of logging time, for example each second :

- Click on **"Browse"** button in the tool bar in time evolution part.
- Click on the time evolution graph at the desired location.
- Stay clicked and drag the mouse on the graph to browse the whole graph.

To quit this function, click on **"Browse"** or **"Reset"** buttons.



VII1-4 Statistical distribution tab

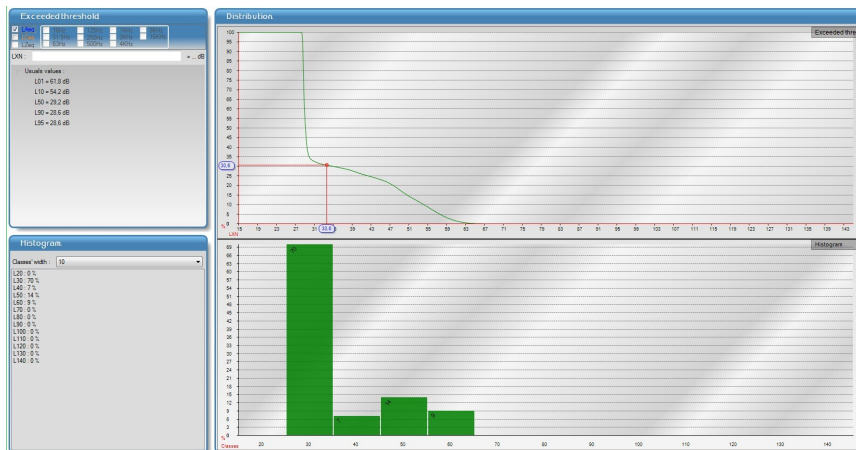
The "**Statistical distribution tab**" is divided into 3 parts :

- Fractile indexes
- The histogram
- The distribution

When noise level is not stable, it can be characterized by **statistical indexes** or **fractile indexes**. These are statistically calculated from time evolution of the sound level measured in situ. These levels correspond to level of A-weighted acoustic pressure which is exceeded for N% of the considered time interval.

LDB23 software gives sound level for L01, L10, L50, L90 and L95.

It is also possible to get the sound level for N % by writing the desired percentage in the text box situated near LAN.



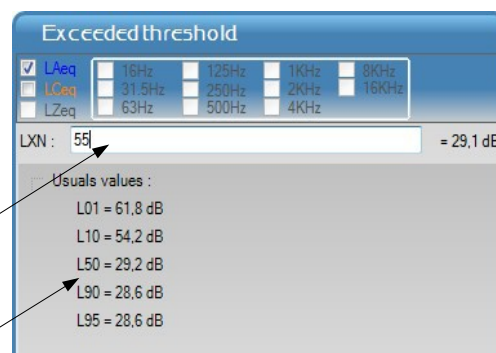
Fractile indexes

It is possible to select a weighting or a filter by octave bands not to limit to statistical analysis :

- Weightings : A - C or Z
- Filters : from (16Hz) 31.5Hz to 8kHz (16kHz)

Text area

Fractile indexes

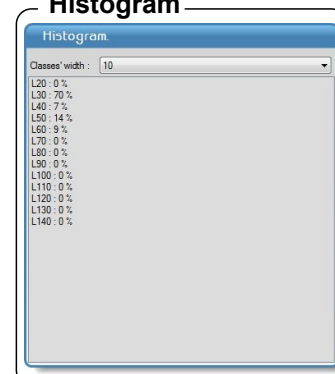


In the "**Distribution**" part of statistics distribution, the mouse cursor automatically moves to a point on the curve and displays in abscissa the sound pressure level exceeded and in ordinate the corresponding statistic distribution expressed as a percentage.

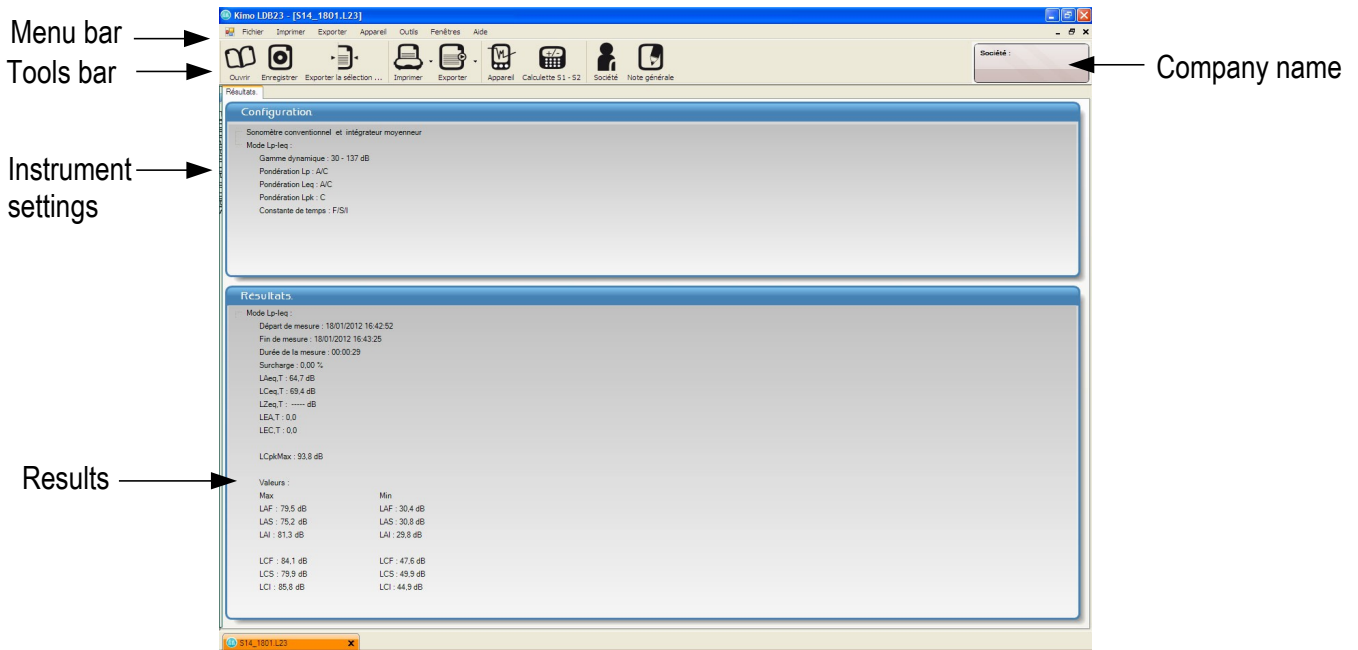
The **histogram** represents, on the duration of the measurement dataset, the percentage where sound pressure reached a class width of dB (4 widths of different classes are available : L5, L10, L15 et L20).

Example : 48% of the measured values have sound level range from 46 to 55 dB.

Histogram



VII2 – Description of L-Leq and S1+S2 files



VII2-1 S1+S2 files

The files have only one tab and mentions the configuration of the sound level meter during measurement dataset :

- Measurement mode
- Leq weighting type : A, C or Z
- Measurement duration

It also presents the obtained results :

- LAeq S1
- LAeq S2
- LAeq S1+S2



VII2-2 L-Leq files

files have only one tab and mentions the configuration of the sound level meter during measurement dataset :

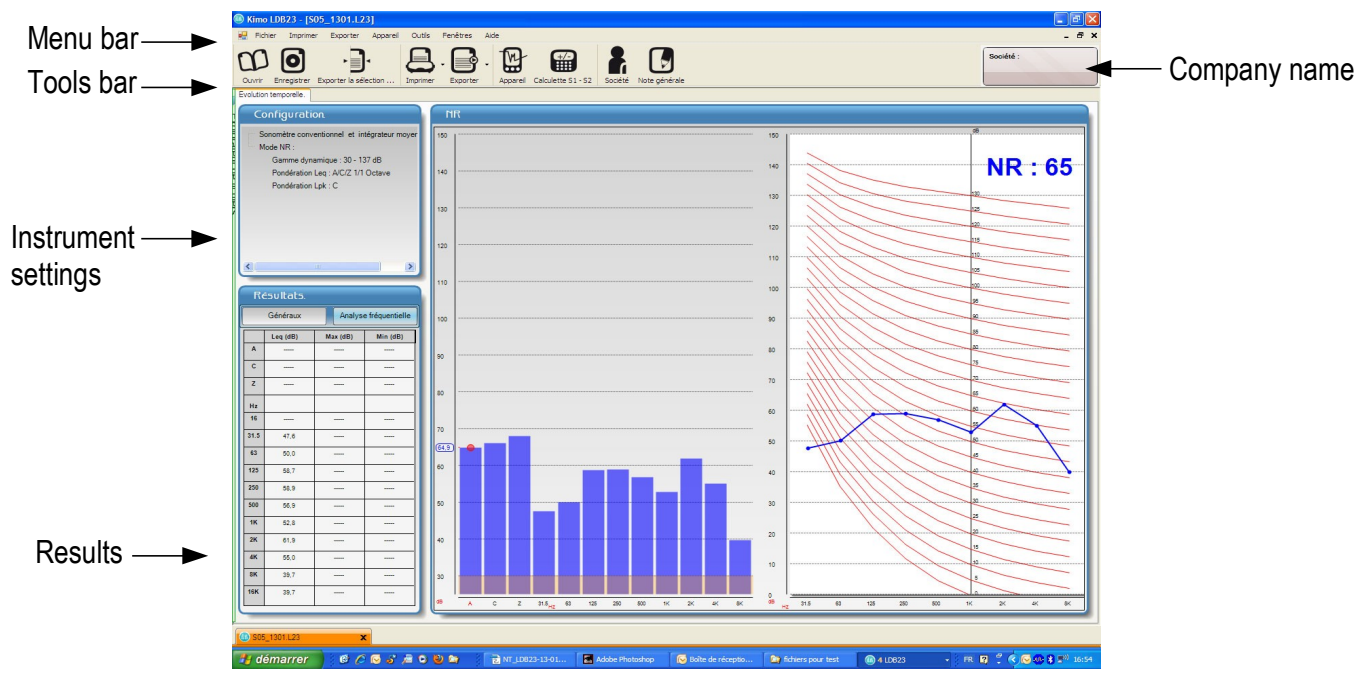
- Date and time of beginning and end of the measurement dataset
- Measurement duration
- Dynamic range
- Weighting type for Lp and Leq : A, C
- Weighting type for Lpk : C or Z
- Time constant for Lp : F, S or I

It also shows obtained results (example):

- Overload
- LAeq, T
- LLeq, T
- LCpk max
- LEA, T
- LEC, T
- LCF max
- LCS max
- LCI max
- LAF max
- LAS max
- LAI max
- LAF min
- LAS min
- LAI min
- LCF min
- LCS min
- LCI min



VII3 – Description of NR files



VII3-1 NR files

Files have one tab : **"Time evolution"** and give the sound level meter configuration :

- Dynamic range : 30-137dB
- Weightings and filters for Leq : A, C, Z, 1/1 octave
- Weighting fo Lpk : C or Z

Main results are displayed by clicking on **"Global"** button :

- Date and time of beginning and end of the measurement dataset
- Measurement duration in hh :mm :ss
- overload
- LAeq, T value
- LCeq, T value
- LZeq, T value

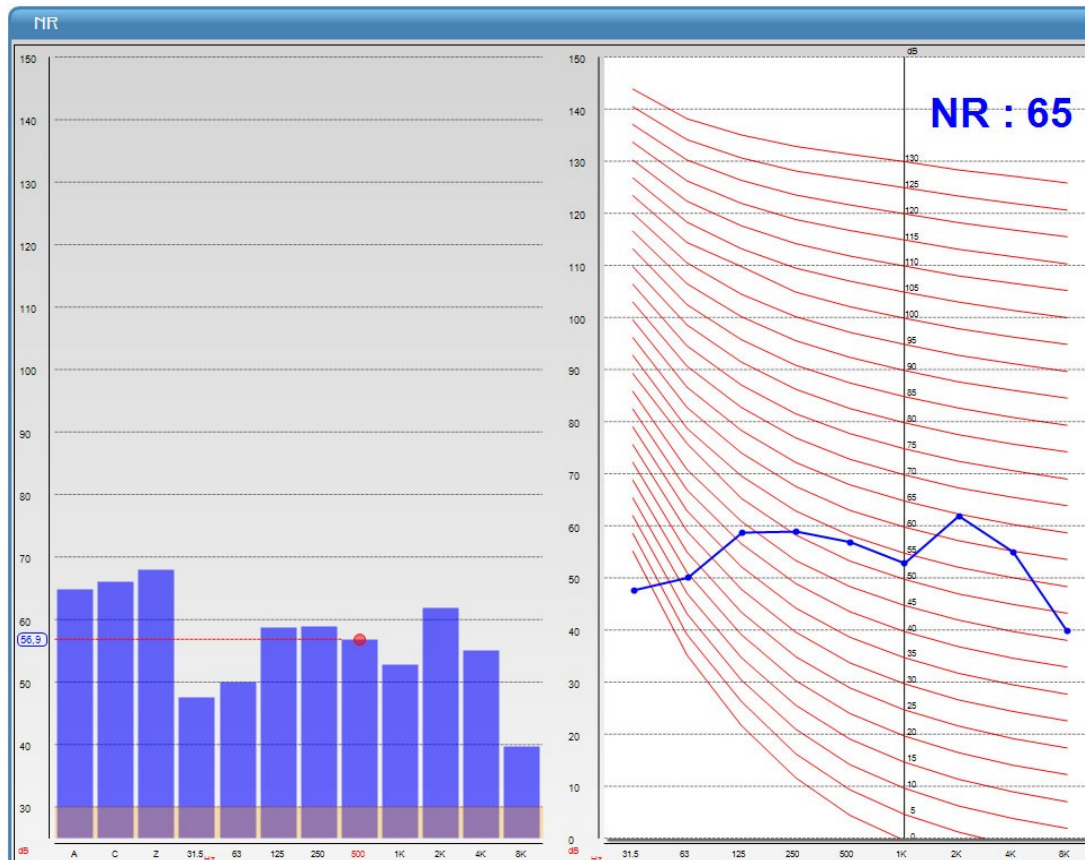
Results of the frequency analysis from 31.5Hz to 8kHz are displayed by clicking on **"Frequency analysis"** button.

Résultats.	
Généraux	Analyse fréquentielle
Mode NR :	
Départ de mesure : 13/01/2012 10:20:03	
Fin de mesure : 13/01/2012 10:20:15	
Durée de la mesure : 00:00:07	
Surcharge : 0,02 %	
LCpk, max : 85,0 dB	
LAeq,T : 64,9 dB	
LCeq,T : 66,0 dB	
LZeq,T : 67,9 dB	

Résultats.			
	Leq (dB)	Max (dB)	Min (dB)
A	64,9	---	---
C	66,0	---	---
Z	67,9	---	---
Hz	---	---	---
16	---	---	---
31.5	47,6	---	---
63	50,0	---	---
125	58,7	---	---
250	58,9	---	---
500	56,9	---	---
1K	52,8	---	---
2K	61,9	---	---
4K	55,0	---	---
8K	39,7	---	---
16K	39,7	---	---

VII3-2 NR part

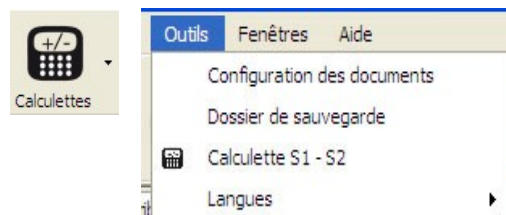
It shows in large format the frequency analysis of the measurement and its position in relation to NR curves of noise evolution.



Reminder : the criterion defined by the evaluation curves is only applicable for the relatively stable noise. The curve defining the NR index is curve immediately above all the representative points of the frequency spectre by octave bands. In the case where the noise is not stable or has some clear sounds, the index has to take into account the corrective terms as defined in the NF S 31-010 standard.

VII4 – Use the calculator

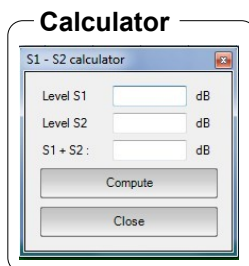
A calculator is accessible at the software launching. It allows to determine the level of a sound source from two or to calculate the level of two sound sources.



Calculate the level of two sound sources

To calculate two sound sources :

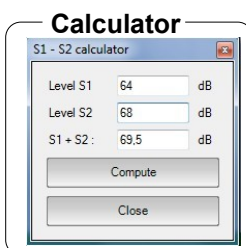
- Enter S1 level
- Enter S2 level
- Click on **"Calculate"** button.



Calculate the sound level of one source

To calculate a sound source (S1 or S2) :

- Enter S1 or S2 level
- Enter S1 + S2 level
- Click on **"Calculate"** button.



VII5 – Exporting or printing of reports

LDB23 software allows to export or print results obtained as a dataset report. Before doing these exportations or printing, some adjustments have to be done.

VII5-1 – Documents settings

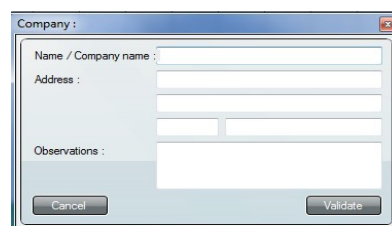
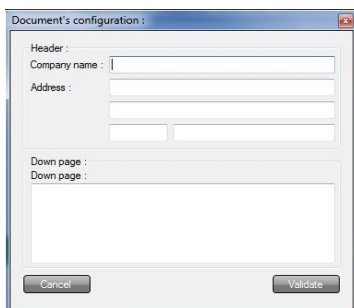
On this dataset report, it is possible to fill in :

- Your contact informations in the **"Document configuration"** frame.
- Contact informations of the client in the **"Society"** frame.

Here is the procedure :

- Click on **"Tool"** then **"Document configuration"**, the following window opens :
- Fill in the fields.

- Click on **"Company"** button, the following window opens :
- Fill in the fields.



It is possible to insert a general comment :

- Click on **"Global note"** and fill in the general comment frame.

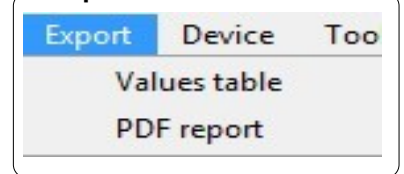


VII5-2 – Exportation


The exportation concerns :

- Table of values **.txt** file, easily readable by a spreadsheet
- A measurement report in **.pdf** format of all or a part of elements that constitute the treatment of the original file.


Exportation

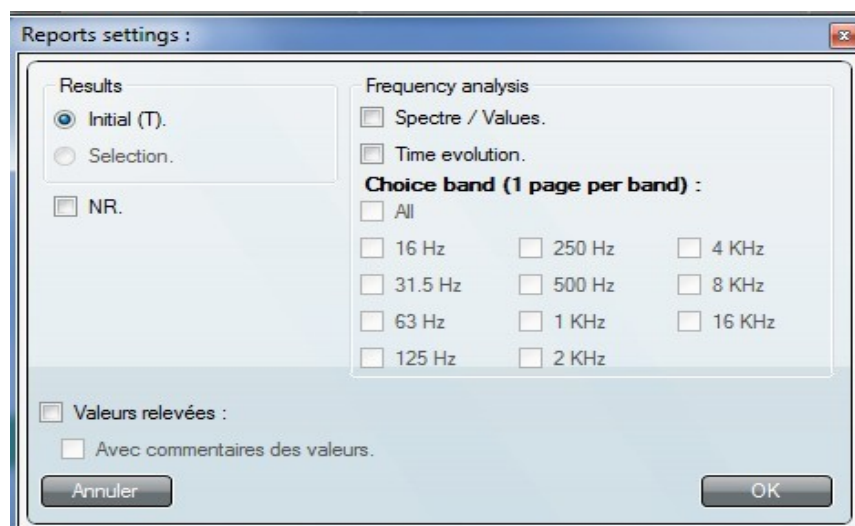



Export the table of values :

- Click on the arrow of the exportation button  and select **"Table of values"** mode.
- Validate and save the file in the directory **"Export"**.
- View the report to control it.

Export the measurement report in pdf format :

- Click on the arrow of the exportation button  and select **"PDF report"** mode.
- Choose the desired configuration in the frame **"Report configuration"**.
- Validate and save the file in the directory **"Export"**.
- View the report to control it.

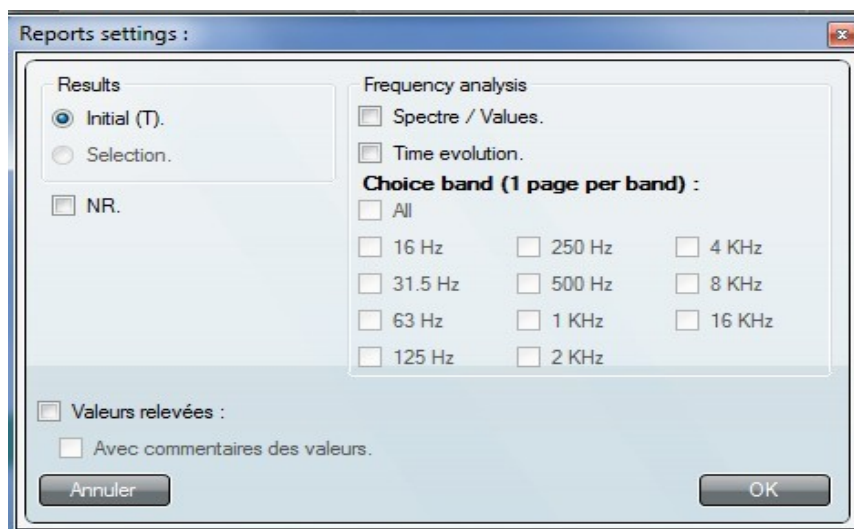


One click on the  icon directly concerns the exportation of report in pdf format.

VII5-2a – Report configuration

Before print or export a report, the window below appears :

- Select the required configuration ticking the boxes.



Initial (T) : results of the initial file without any modification

Selection : results of a selection (zoom) of the initial file without any modification

Modified : results of the initial file or of the selection of modified measurement. For example after deletion of one or several areas.

Results :

- **Initial** : results of the initial with possible modifications (deletion of areas)
- **Selection** : results of a selection (zoom) of the initial file calculated with the possible modifications (deletion of areas)
- **NR** : about files with frequency analysis – gives information on the report with the NR evaluation index for the noise equipment



Frequency analysis : reserved for a a frequency analysis by octave bands

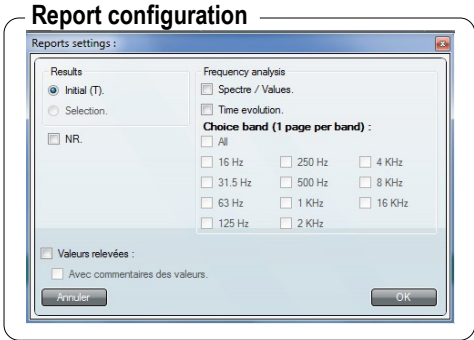
- **Spectre/Values** : gives information on the report the spectre and the values of frequency analysis
- **Band selection (1 page by band)**
 "All" ticked, a page representing the time evolution of the Leq **for each filter by octave band** is exported (total 8 pages)
 « X kHz » ticked(s), only the time evolution of the selected filters are exported

Values : if it is selected, printing will be about all the values of the measurement dataset, (often several dozen of pages !!!! CAUTION !).

VII5-3 – Printing

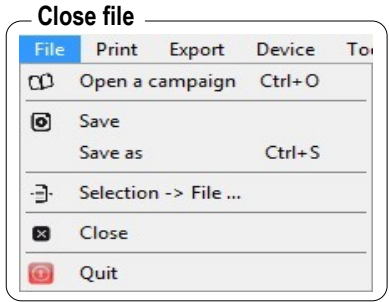
Printing concerns the measurement report of all or a part of elements that constitute the treatment of the original file.

- Click on the "Printing" button. 
 - Tick the box "Values" (if necessary) to include values in the printing and the box "With comments" to include comments.
 - Click on "Validate".
- Printing window opens.*
- Select the printer then click on "Print".
- The "Aperçu avant impression" window opens.*
- launch printing by clicking on the icon "Printer" of the overview. 



VII6 – Close file

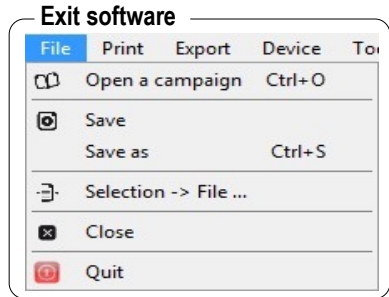
- To close the file :
- Click on **File**.
 - Click on **Close**.



 When file is closed, software back to the home page.

VII7 – Exit software

- To exit software :
- Click on **File**.
 - Click on **Exit**.



Description of the different parts parties, first page :

Informations about the company in which are performed the measurement

Global features about the measurement instrument. *Date and certificate to fill in manually*

Graph of the time evolution

Global result of the measurement dataset

502_2803-appareil12006.LEQ

CABINET DE CONTROLE
 ZA des ASTRONAUTES
 18 rue Marcel DANGLADE
 31800 TOULOUSE

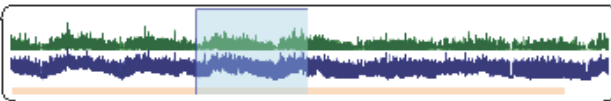
LDB200
 15/04/2010

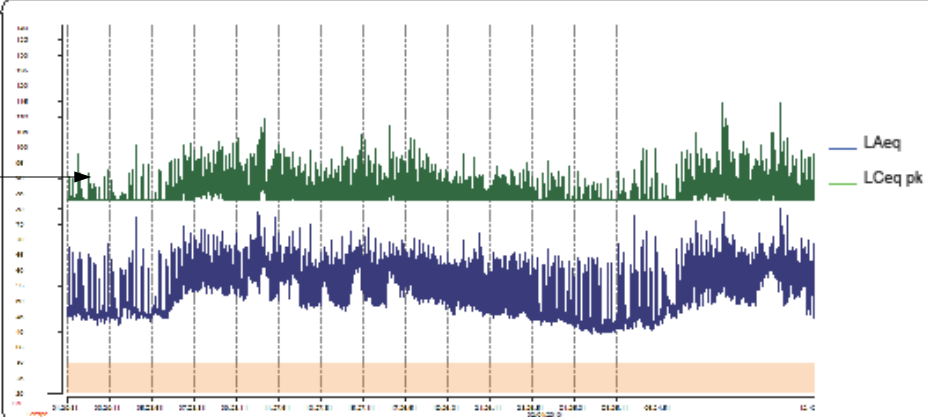
Rapport de campagne

Société :
 MOKI
 ZI
 4 avenue jean MONNET
 31240 SAINT JEAN

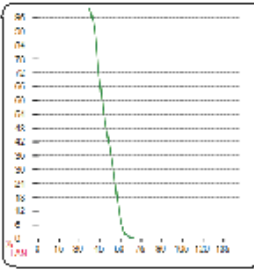
Appareil :
 DB200 n°: 12006
 Microphone AME10 n°: 12018
 NF EN 61672 classe 2
 Date de vérification : 29/03/2010
 Date de certificat :
 Numéro de certificat :

Configuration :
 Mode : Leq - Stockage
 Départ de mesure : 29/03/2010 16:37:51
 Fin de mesure : 06/04/2010 10:04:11
 Durée de la mesure : 7J 17:26:20
 Pondération Leq : A
 Pondération Lpk : C
 Durée d'intégration : 10 s

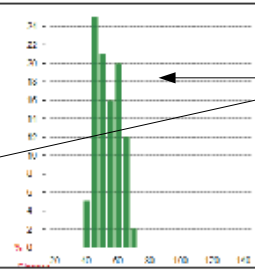




Résultats sélection :
 Départ de mesure : 01/04/2010 01:29:35
 Fin de mesure : 02/04/2010 12:42:49
 Durée de la mesure : 1J 11:13:20
 LAeq max : 80,2 dB
 LAeq min : 39,1 dB
 LAeq,T : 59,8 dB
 LAE,T : 110,8 dB
 LCpk max : 114,9 dB
 % Surcharge : 0,00
 L40 = 55,5 dB
 L01 = 69,9 dB
 L10 = 63,7 dB
 L50 = 52,4 dB
 L90 = 44,2 dB
 L95 = 42,6 dB



C20 = 0 %	C85 = 0 %
C25 = 0 %	C90 = 0 %
C30 = 0 %	C95 = 0 %
C35 = 0 %	C100 = 0 %
C40 = 5 %	C105 = 0 %
C45 = 25 %	C110 = 0 %
C50 = 21 %	C115 = 0 %
C55 = 16 %	C120 = 0 %
C60 = 20 %	C125 = 0 %
C65 = 12 %	C130 = 0 %
C70 = 2 %	C135 = 0 %
C75 = 0 %	C140 = 0 %
C80 = 0 %	



Observations :
 FILIALE DU GOUPE FGK

Commentaire général :
 ATTENTION - mesures effectuées avec vent de NORD portant

Document non diffusable sans autorisation écrite

Header

Measurement setting

Standardized results

Observations :
ex : measurement conditions

Footer

Report examples :

KIMO	test notice.123																																																													
LDB23	Rapport de campagne																																																													
19/01/2012																																																														
Analyse fréquentielle : Evolution temporelle																																																														
Analyse fréquentielle : Résultats																																																														
	<table border="1"> <thead> <tr> <th>Fréq. (Hz)</th> <th>Leq (dB)</th> <th>Max (dB)</th> <th>Min (dB)</th> </tr> </thead> <tbody> <tr><td>8</td><td>84,9</td><td>87,1</td><td>82,9</td></tr> <tr><td>16</td><td>85,4</td><td>87,1</td><td>83,8</td></tr> <tr><td>31,5</td><td>79,6</td><td>82,1</td><td>80,1</td></tr> <tr><td>63</td><td>---</td><td>---</td><td>---</td></tr> <tr><td>125</td><td>81,7</td><td>79,6</td><td>83,8</td></tr> <tr><td>250</td><td>46,1</td><td>79,6</td><td>30,1</td></tr> <tr><td>500</td><td>81,7</td><td>79,6</td><td>81,8</td></tr> <tr><td>1000</td><td>85,9</td><td>88,7</td><td>83,0</td></tr> <tr><td>2000</td><td>85,1</td><td>89,0</td><td>---</td></tr> <tr><td>4000</td><td>86,0</td><td>89,0</td><td>---</td></tr> <tr><td>8000</td><td>81,0</td><td>83,0</td><td>---</td></tr> <tr><td>16000</td><td>42,3</td><td>83,0</td><td>---</td></tr> <tr><td>31500</td><td>30,0</td><td>83,0</td><td>---</td></tr> <tr><td>63000</td><td>---</td><td>---</td><td>---</td></tr> </tbody> </table>		Fréq. (Hz)	Leq (dB)	Max (dB)	Min (dB)	8	84,9	87,1	82,9	16	85,4	87,1	83,8	31,5	79,6	82,1	80,1	63	---	---	---	125	81,7	79,6	83,8	250	46,1	79,6	30,1	500	81,7	79,6	81,8	1000	85,9	88,7	83,0	2000	85,1	89,0	---	4000	86,0	89,0	---	8000	81,0	83,0	---	16000	42,3	83,0	---	31500	30,0	83,0	---	63000	---	---	---
Fréq. (Hz)	Leq (dB)	Max (dB)	Min (dB)																																																											
8	84,9	87,1	82,9																																																											
16	85,4	87,1	83,8																																																											
31,5	79,6	82,1	80,1																																																											
63	---	---	---																																																											
125	81,7	79,6	83,8																																																											
250	46,1	79,6	30,1																																																											
500	81,7	79,6	81,8																																																											
1000	85,9	88,7	83,0																																																											
2000	85,1	89,0	---																																																											
4000	86,0	89,0	---																																																											
8000	81,0	83,0	---																																																											
16000	42,3	83,0	---																																																											
31500	30,0	83,0	---																																																											
63000	---	---	---																																																											
Observations :																																																														
Commentaire général :																																																														

KIMO	test notice.123	LABORATOIRE D'ENVIRONNEMENT
LDB23	Rapport de campagne	27 rue du GENERAL LECLERC
19/01/2012		13800 AIX EN PROVENCE
Critere de confort : NR		
Service :		Local :
Activité :		Equipement :
Mesure :		
Descriptif / conditions :		
Mode :	Leq 18 s	
Durée d'intégration :		
Résultats :		
Pondération	Leq (dB)	
A	64,5	
C	59,4	
Z (LIN)	71,8	
Filtres (Hz)		
16	---	
31,5	51,7	
63	49,2	
125	57,7	
250	65,5	
500	66,1	
1000	56,3	
2000	49,3	
4000	42,3	
8000	33,0	
16000	---	
NR	65	
Observations :		
VENT		
Commentaire général :		
Document non diffusable sans autorisation écrite		

KIMO	S14_1801.L23	LABORATOIRE D'ENVIRONNEMENT														
LDB23	Rapport de campagne	27 rue du GENERAL LECLERC														
19/01/2012		13800 AIX EN PROVENCE														
Société :	Appareil :	Configuration :														
MOKI	DB300	Mode : Lp-Leq														
ZA du CHAMPS PINSON	Microphone AME10															
31850 SAINT JEAN	NF EN 61672	Départ de mesure : 19/01/2012 16:42:52														
	classe 2	Fin de mesure : 19/01/2012 16:43:25														
	Date de vérification : 19/01/2012	Durée de la mesure : 00:00:29														
	Numéro de certificat :															
Caractéristiques globales d'un environnement sonore																
<table border="0"> <tr> <td>LAF max : 79,5 dB</td> <td>LCF max : 84,1 dB</td> </tr> <tr> <td>LAF min : 30,4 dB</td> <td>LCF min : 47,6 dB</td> </tr> <tr> <td>LAS max : 79,2 dB</td> <td>LCS max : 79,9 dB</td> </tr> <tr> <td>LAS min : 30,8 dB</td> <td>LCS min : 49,9 dB</td> </tr> <tr> <td>LAI max : 81,3 dB</td> <td>LCI max : 85,8 dB</td> </tr> <tr> <td>LAI min : 20,8 dB</td> <td>LCI min : 44,9 dB</td> </tr> <tr> <td>LAeq, T : 64,7 dB</td> <td>LCeq, T : 69,4 dB</td> </tr> </table>			LAF max : 79,5 dB	LCF max : 84,1 dB	LAF min : 30,4 dB	LCF min : 47,6 dB	LAS max : 79,2 dB	LCS max : 79,9 dB	LAS min : 30,8 dB	LCS min : 49,9 dB	LAI max : 81,3 dB	LCI max : 85,8 dB	LAI min : 20,8 dB	LCI min : 44,9 dB	LAeq, T : 64,7 dB	LCeq, T : 69,4 dB
LAF max : 79,5 dB	LCF max : 84,1 dB															
LAF min : 30,4 dB	LCF min : 47,6 dB															
LAS max : 79,2 dB	LCS max : 79,9 dB															
LAS min : 30,8 dB	LCS min : 49,9 dB															
LAI max : 81,3 dB	LCI max : 85,8 dB															
LAI min : 20,8 dB	LCI min : 44,9 dB															
LAeq, T : 64,7 dB	LCeq, T : 69,4 dB															
LCPk max : 93,8 dB																
Surcharge : 0,00 %																
Observations / Descriptif / Schéma :																
Commentaire général :																
Document non diffusable sans autorisation écrite																

Report example :

KIMO		SFA_1801L23		LABORATOIRE D'ENVIRONNEMENT	
LDB23		Rapport de campagne		27 rue du GENERAL LECLERC	
18/01/2012				13800 AIX EN PROVENCE	
Société : MOKI ZA du CHAMPS PINGON 31600 SAINT JEAN		Appareil : DB300 n° : 12010006 Microphone AME10 n° : 12010004 NF EN 61072 classe 2 Date de vérification : 18/01/2012 Date de certificat : Numéro de certificat :		Configuration : Mode : Lp-Leq Départ de mesure : 18/01/2012 16:42:52 Fin de mesure : 18/01/2012 16:43:25 Durée de la mesure : 00:00:29 Pondération Lp-Leq : A/C Pondération Lpk : C Constante de temps Lp : FSI Départ / Arrêt	
Caractéristiques globales d'un environnement sonore					
Résultats : LAF max : 79,5 dB LCF max : 84,1 dB LAF min : 30,4 dB LCF min : 47,6 dB LAS max : 75,2 dB LCS max : 79,9 dB LAS min : 30,8 dB LCS min : 49,0 dB LAI max : 81,3 dB LCI max : 85,8 dB LAI min : 20,8 dB LCI min : 44,0 dB LAeq, T : 64,7 dB LReq, T : 69,4 dB Lkpk max : 93,8 dB Surcharge : 0,00 %					
Observations / Descriptif / Schéma :					
Commentaire général :					
Document non diffusable sans autorisation écrite					

www.kimo.fr

EXPORT DEPARTMENT
Boulevard de Beaubourg - Emerainville - BP 48
77312 MARNE LA VALLEE CEDEX 2
Tel : + 33.1.60.06.69.25 - Fax : + 33.1.60.06.69.29

