



## **Appendix 1 Part 2** **Noise monitoring data**

### **Introduction:**

The NMT for Cairo Airport was erected and commissioned May 2008, and is now in full operation. Some data obtained by this monitoring terminal is displayed below. This data includes average noise results per month inside the airport and around residential areas, and is represented by graphs.

### **Sound Pressure Level (Total)**

MONTH	SOUND PRESSURE LEVEL "SPL"(dB)					
	Electrical Hospital	El Ahly Club	International Garden	Engineering Company	El Salam School	El Ahly bank El Mokatom
May-08	65.82	63.75	62.78	62.84	No data	61.86
Jun-08	65.4	63.5	62.6	62.6	No data	61.60
Jul-08	66.7	64.23	63.14	62.61	No data	62.55
Aug-08	66.91	63.8	62.83	62.77	60.09	62.04
Sep-08	67.4	64.25	63.45	63.1	52.5	63.28
Oct-08	66.82	64.2	63.81	62.72	No data	63.3
Nov-08	66.51	61.35	63.64	63.05	No data	62.10
Dec-08	66.18	63.08	63.55	63.12	62.55	62.05
Jan-09	65.41	No data	62.77	64.21	61.97	61.48
Feb-09	64.15	62.08	62.6	64.11	61.55	61.25
Mar-09	65.61	62.74	63.04	64.9	62.91	61.8
Apr-09	68.15	63.43	63.41	65.09	63.36	62.01

Table (1) Measurements Outside Airport

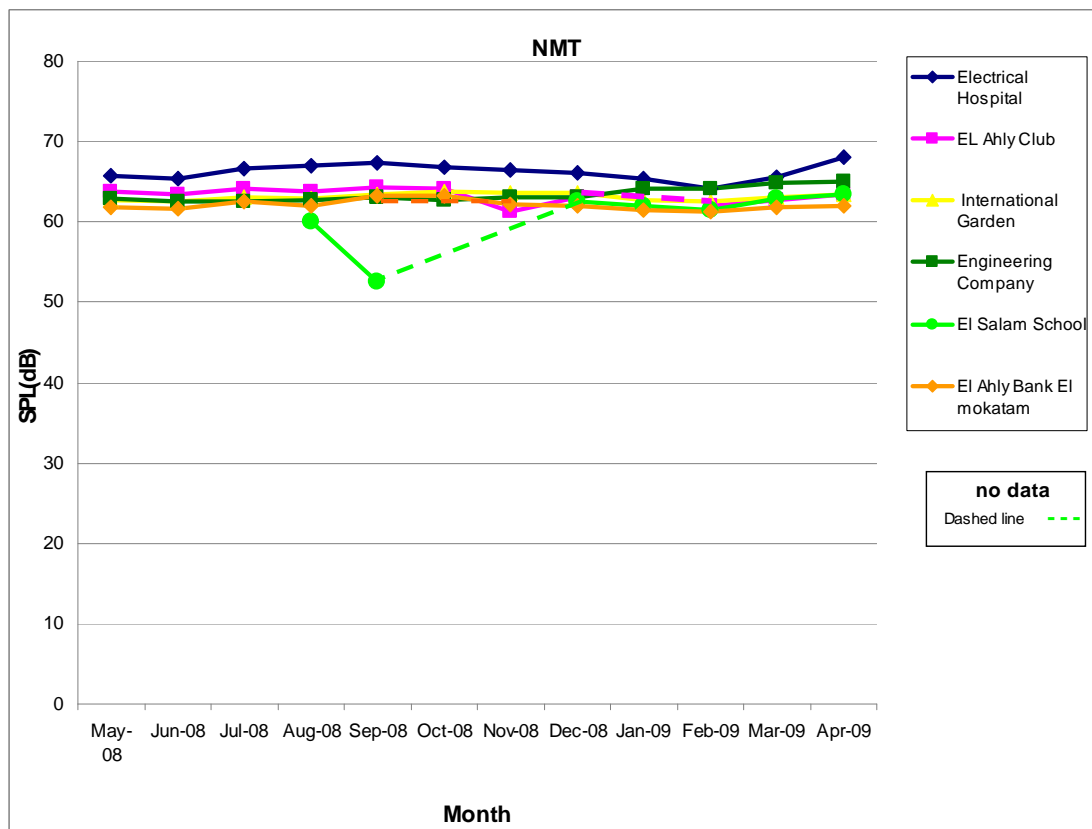


Fig (1) Graph represents measurements SPL (dB) Per Month outside Airport

**Comment:**

- There is a noise drop in El-Salam School point during the last week of September 08 which reduces the average noise level at this month.
- No data means that there are unmeasured values for many points due to a technical problem in the noise monitoring terminal.



Month	SOUND PRESSURE LEVEL "SPL"(dB)				
	Runway 05 R	Runway 23L	Tarmac Area	Runway 23R	Runway 05L
May-08	59.49	54.19	73.33	59.57	No data
Jun-08	61.5	55.9	73	60.8	No data
Jul-08	65.37	65.17	73.42	65.37	No data
Aug-08	66.29	56.75	74.05	66.39	65.54
Sep-08	65.9	56.34	73.85	66.71	65.05
Oct-08	65	56.12	65.1	66.96	65.59
Nov-08	No data	55.25	55.5	66.95	65.72
Dec-08	No data	56.24	67.71	63.72	63.72
Jan-09	No data	55.05	77.13	63.43	62.58
Feb-09	No data	53.61	78.76	63.46	61.62
Mar-09	No data	54.29	78.3	62.87	60.87
Apr-09	No data	52.68	78.08	73.67	63.8

Table (2) Measurements Inside Airport

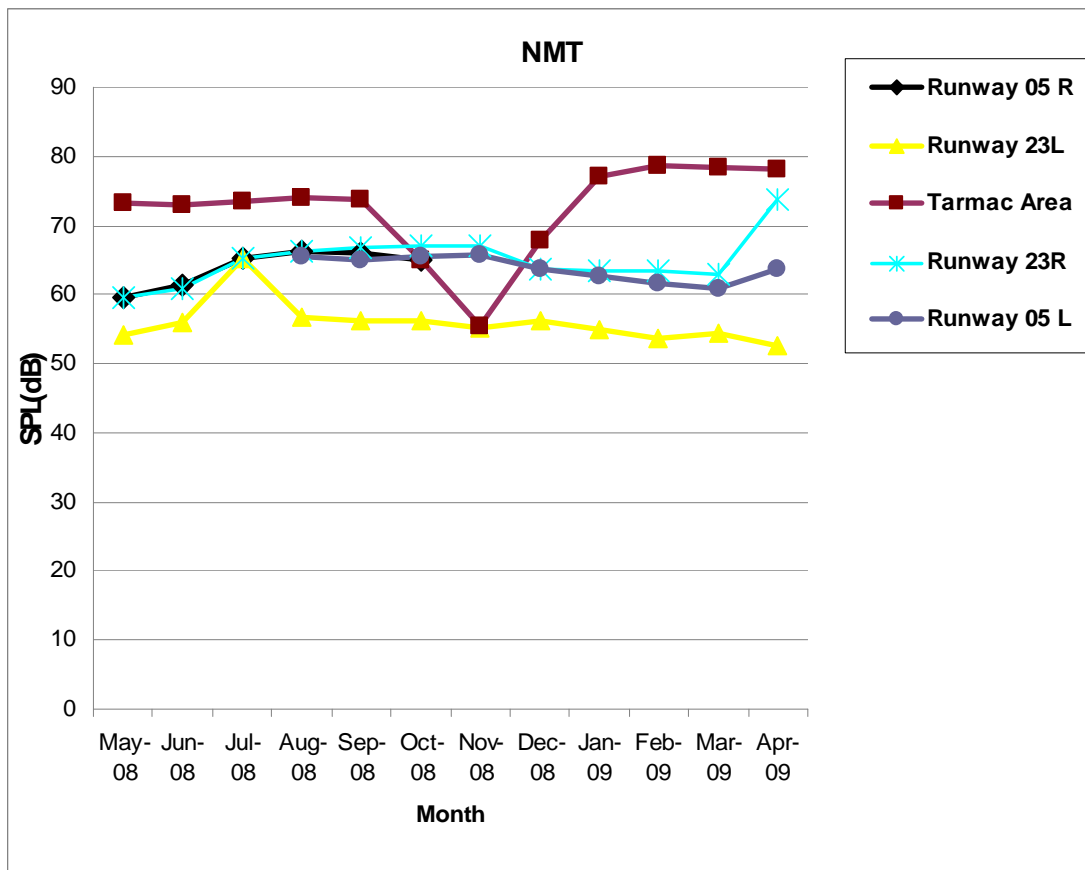


Fig (2) Graph represents measurements SPL (dB) Per Month inside Airport



**Comment:**

- There are certain noise distributions during November 2008 at the Tarmac area which decreased during night hours related to the day hours.

**Electrical Hospital**

Due to the critical nature of the electrical hospital, it has been chosen as an example.

Table (3) Measurements SPL (dB) per Day for April 2009

Day	SPL/Day	Day	SPL/day
1	66.5	16	67.2
2	67.0	17	66.6
3	65.3	18	67.6
4	63.7	19	69.1
5	67.2	20	68.4
6	66.1	21	69.0
7	67.2	22	67.5
8	68.2	23	69.0
9	69.5	24	67.7
10	68.1	25	68.5
11	69.4	26	70.4
12	69.3	27	68.7
13	70.1	28	68.7
14	67.3	29	67.9
15	66.5	30	69.5

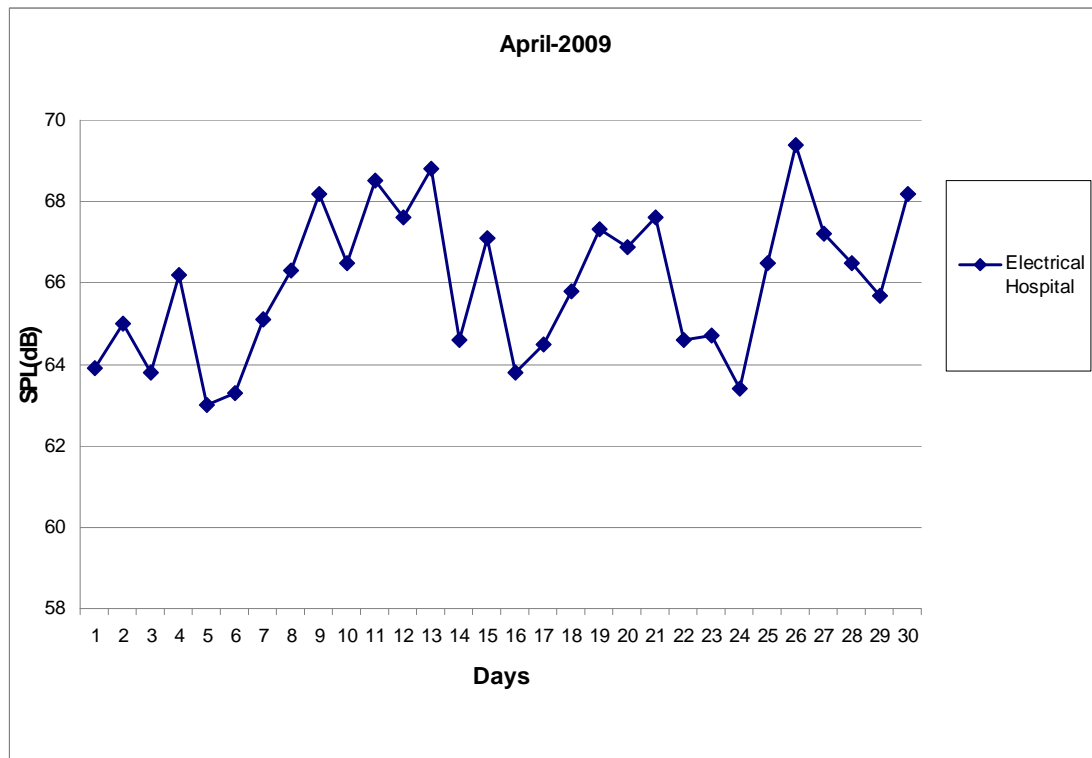


Fig (3) Graph represents measurements SPL (dB) Per Day for April 2009

**26<sup>th</sup> April as case study**

We take 26<sup>th</sup> April 2009 as case study because it recorded highest measurements.

Table (4) Measurements SPL (dB) per Hour for 26<sup>th</sup> April 2009

Hour	SPL/Hour	Hour	SPL/Hour
00	71.4	12	74.6
01	65.2	13	74.1
02	67.9	14	72.6
03	67.1	15	71.7
04	69.3	16	75.2
05	62.7	17	72.0
06	67.4	18	68.9
07	73.4	19	69.0
08	73.7	20	68.7
09	73.8	21	67.1



Hour	SPL/Hour	Hour	SPL/Hour
10	75.1	22	68.0
11	75.2	23	66.1

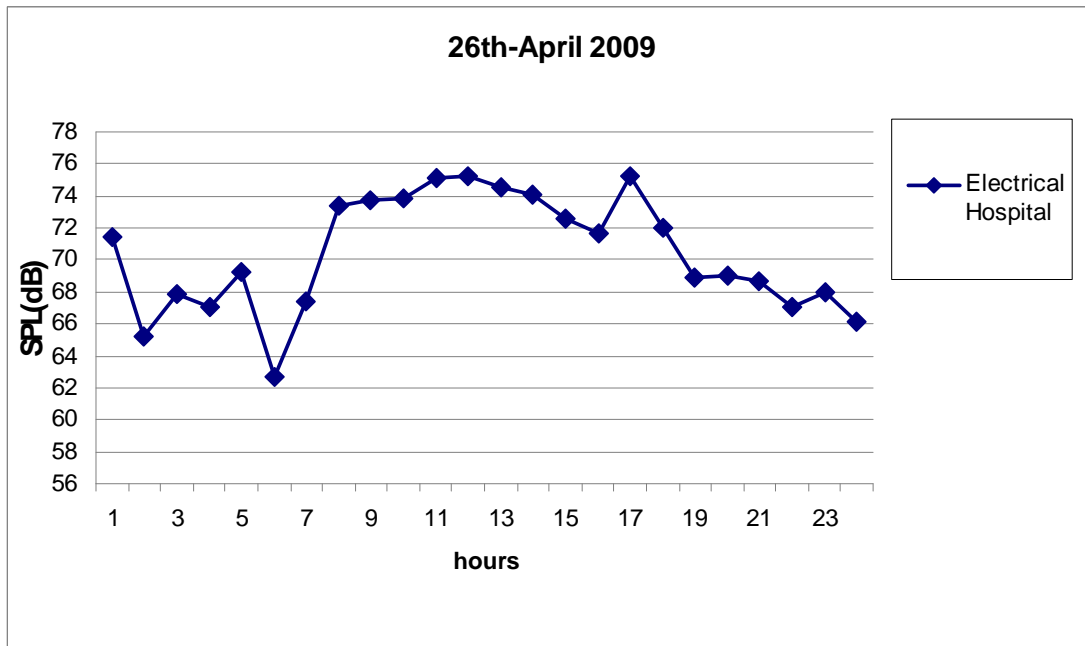


Fig (4) Graph represents measurements SPL (dB) Per Hour for 26<sup>th</sup> April 2009

### Sound Pressure Level (Event)

Table (5) Measurements Outside Airport

MONTH	SOUND PRESSURE LEVEL "SPL"(dB)					
	Electrical Hospital	El Ahly Club	International Garden	Engineering Company	El Salam School	El Ahly bank El Mokatom
May-08	63.9	59	55.2	56.2	No data	52.6
Jun-08	64.1	58.9	55.1	55.8	No data	52.2
Jul-08	65.6	59.7	55.9	56.2	No data	53
Aug-08	65.4	59.7	55.8	56.2	53.9	52.6
Sep-08	65.1	59.7	56.1	56.3	53.6	51.7



MONTH	SOUND PRESSURE LEVEL "SPL"(dB)					
	Electrical Hospital	El Ahly Club	International Garden	Engineering Company	El Salam School	El Ahly bank El Mokatom
Oct-08	65.31	54.24	56.48	56.22	No data	55.71
Nov-08	64.26	58.76	55.36	56.48	No data	53.39
Dec-08	63.32	58.11	55.27	56.8	56.85	52.84
Jan-09	62	No data	53.9	57.9	54.7	51.8
Feb-09	59.8	55.5	53.7	57.4	55	51.8
Mar-09	62.5	65.8	54.3	59	56.2	53.1
Apr-09	66.3	58.3	54.9	59.5	57.8	52.7

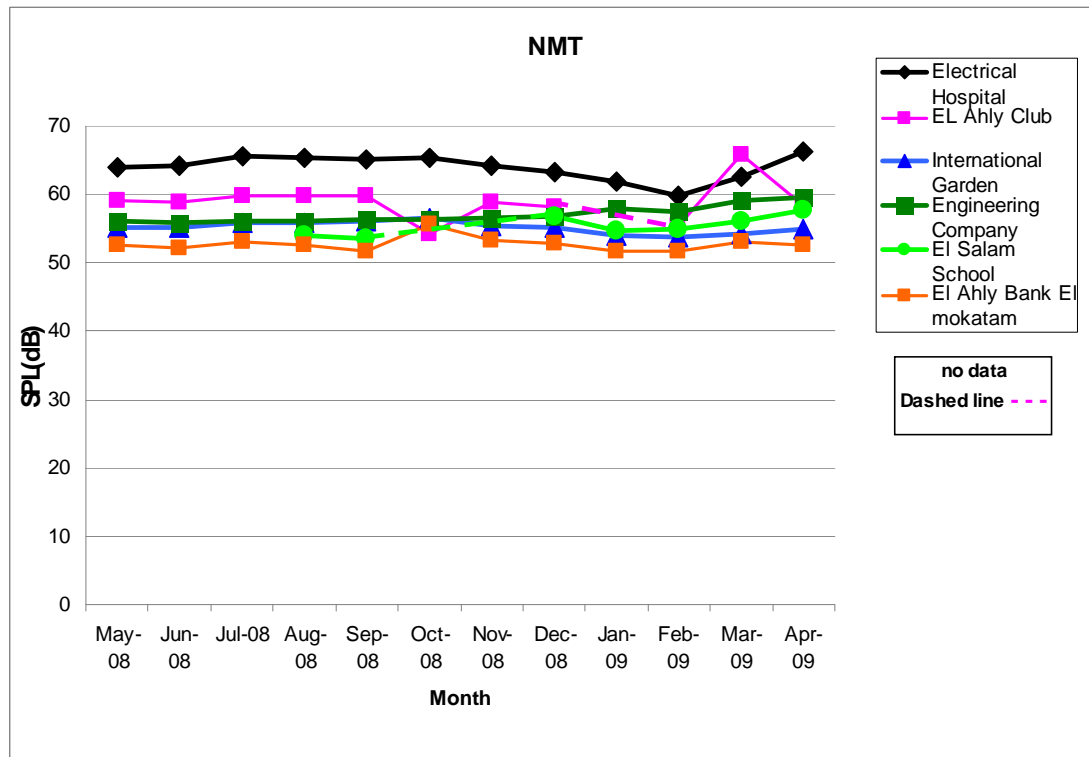


Fig (5) Graph represents measurements SPL (dB) Per Month outside Airport  
 Table (6) Measurements Inside Airport



Month	SOUND PRESSURE LEVEL "SPL"(dB)				
	Runway 05 R	Runway 23L	Tarmac Area	Runway 23R	Runway 05L
May-08	58.5	55.4	66	59	No data
Jun-08	60.7	56.7	65.6	60.6	No data
Jul-08	65	57.3	66.5	65.1	No data
Aug-08	65.87	57.9	67.1	66.5	65.0
Sep-08	65.4	57	66.8	65.9	64.7
Oct-08	66.04	56.72	66.82	66.05	64.76
Nov-08	No data	56.07	67.21	66.37	64.77
Dec-08	No data	55.8	66.53	63.06	61.46
Jan-09	No data	54.5	66.9	61.1	60.3
Feb-09	No data	53.3	66.4	60.4	58.6
Mar-09	No data	53.6	66.1	59.5	57.5
Apr-09	No data	52.6	68.8	64.8	72.1

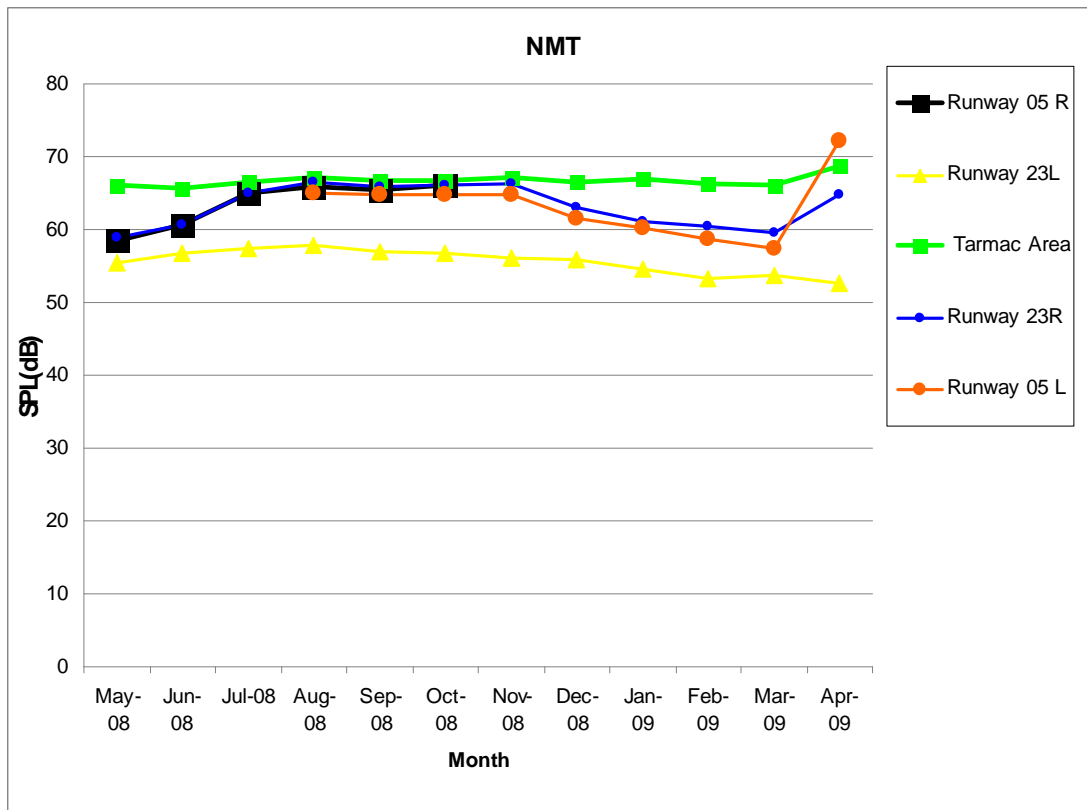


Fig (6) Graph represents measurements SPL (dB) Per Month inside Airport



**Electrical Hospital**

We take Electrical Hospital during April-2009 as case study because it is the critical region of measurements and the average measurement for April recorded the highest value.

Table (7) Measurements SPL (dB) per Day for April 2009

Day	SPL/Day	Day	SPL/day
1	63.9	16	63.8
2	65.0	17	64.5
3	63.8	18	65.8
4	66.2	19	67.3
5	65.7	20	66.9
6	63.3	21	67.6
7	65.1	22	64.6
8	66.3	23	67.5
9	68.2	24	66.2
10	66.5	25	66.5
11	68.5	26	69.4
12	67.6	27	67.2
13	68.8	28	66.5
14	64.6	29	65.7
15	67.1	30	68.2

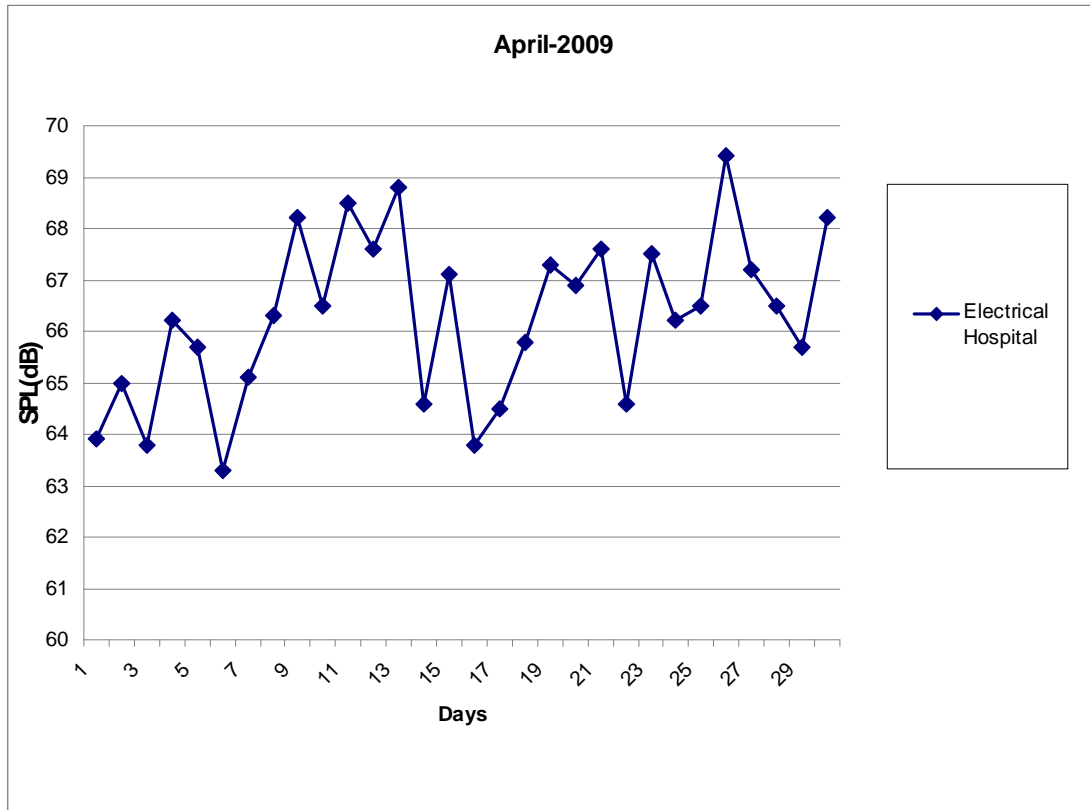


Fig (7) Graph represents measurements SPL (dB) Per Day for April 2009

**26<sup>th</sup> April as case study**

We take 26<sup>th</sup> April 2009 as case study because it record highest measurement.

Table (8) Measurements SPL (dB) per Hour for 26<sup>th</sup> April 2009

Hour	SPL/Hour	Hour	SPL/Hour
00	71.1	12	74.4
01	63.8	13	73.3
02	67.2	14	71.6
03	66.3	15	70.1
04	68.7	16	75.0
05	60.0	17	70.4
06	66.1	18	65.6
07	72.2	19	68.2
08	73.2	20	67.9
09	73.7	21	65.8
10	75.1	22	67.0
11	75.2	23	64.7

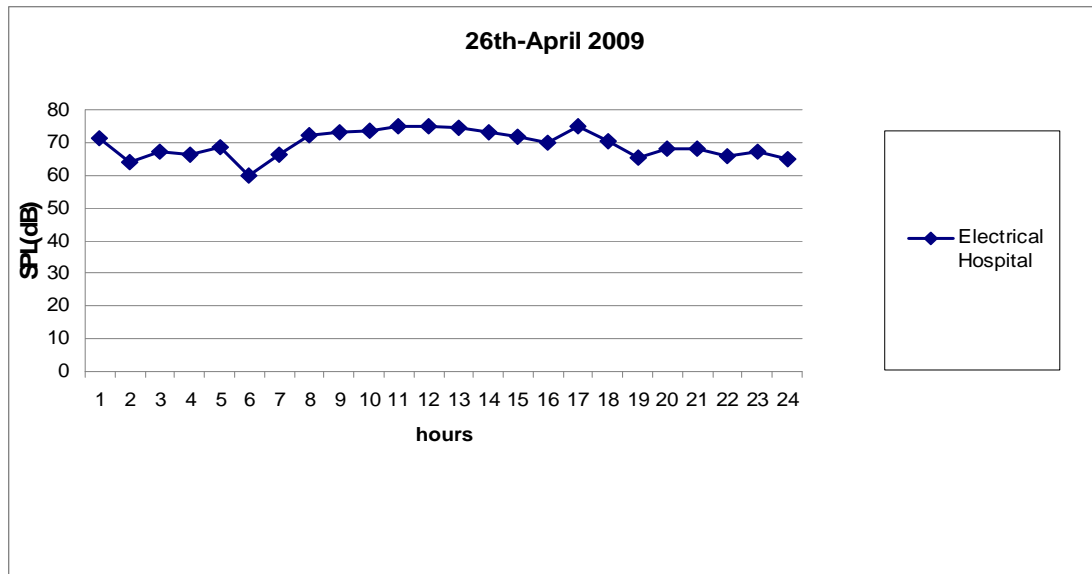


Fig (8) Graph represents measurements SPL (dB) Per Hour for 26<sup>th</sup> April 2009