

MTR Corporation Limited

HONG KONG SECTION OF GUANGZHOU -
SHENZHEN - HONG KONG EXPRESS RAIL LINK
(No. EP-349/2009)

Baseline Monitoring Report (Part 5) Rev 1

Certified by: *Glenn Frommer*
Position: Environmental Team Leader
Date: 17 FEB 2010

Our ref KMY/AFK/JOC/FY/bl/T264090/22.01/L-0028

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Your ref

MTR Corporation Ltd.,
8/F MTR Fo Tan Railway House,
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17 February 2010
By Post and email

Attn : Dr. Glenn Frommer

Dear Sir

Express Rail Link
Consultancy Agreement No. C806
Independent Environmental Checker (IEC)
Environmental Permit No.: EP-349/2009
Condition 2.42 – Baseline Monitoring Report (Part 5) Revision 1

We refer to the Baseline Monitoring Report (Part 5) rev 1 received on 11 February 2010 via email. Pursuant to Condition 2.42 of the Environmental Permit, I hereby verify the Baseline Monitoring Report Part (Part 5) rev 1.

Yours faithfully,
for MOTT MACDONALD HONG KONG LIMITED



Dr. Anne Kerr
Independent Environmental Checker (IEC)

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EXECUTIVE SUMMARY

The environmental baseline monitoring for the Hong Kong Section of Guangzhou-Shenzhen-Hong Kong Express Rail Link, hereinafter referred to “the XRL” was conducted at 1 noise monitoring location in the vicinity of Works Area V2 (Figure 1). Noise measurements were taken in terms of Leq with L10 and L90 as reference.

Part 5 of the Baseline Monitoring Report covers noise monitoring results at Man Cheong Street Refuse Collection Point (the location of CN 30 in EM&A Manual was re-located as no access was obtained from Man King Building) which was conducted between 18 August 2009 and 31 August 2009 under *Kowloon Southern Link – Contract KDB 200*. Construction of KSL was substantially completed during the time period. In this report, the measured noise levels on weekdays were presented separately from general holidays and Sundays for easy of reference. It was noted from the monitoring results that ambient noise level for daytime at CN 30 was ranged from 61 to 69 dB(A). The average daytime baseline noise levels at CN 30 (64 dB(A)) was below the Limit Level for of 75 dB(A) for residential premises.

To supplement the noise monitoring results conducted in August 2009, supplementary baseline noise monitoring was conducted starting from 15/1/2010 to 1/2/2010. As revealed from the supplementary baseline monitoring results, the average daytime baseline noise levels at CN 30 was 63 dB(A) and below the Limit Level for of 75 dB(A) for residential premises.

1. INTRODUCTION

1.1 Background

Further to the Government's decision made in April 2008, MTR Corporation (MTR) commenced to plan and design the Hong Kong Section of Guangzhou-Shenzhen-Hong Kong Express Rail Link (hereinafter referred to "the XRL" or "the Project"), which is a committed cross boundary transport infrastructure project.

The XRL will provide high speed rail services between Hong Kong and Guangzhou, and a connection to the national high-speed passenger rail network serving major mainland cities outside of Guangdong province. The Hong Kong section of the XRL is about 26km from new terminus located in West Kowloon (i.e. West Kowloon Terminus (WKT)) to the boundary at Huang gang. Along the railway corridor, there will be a total of eight ventilation buildings/ emergency access point (EAP), stabling sidings and a maintenance facility at Shek Kong (SSS) and an Emergency Rescue Station (ERS) next to SSS serving the operation of the XRL.

1.2 Purpose of the report

In accordance with the Environmental Monitoring and Audit (EM&A) Manual, environmental baseline monitoring was carried out for noise. This Baseline Monitoring Report (Part 5) contains noise monitoring findings at CN 30 (Roof floor of Man Cheong Street Refuse Collection Point¹) in the vicinity of Works Area V2 (Figure 1). The purpose of this report is to summarize the findings of this baseline monitoring and to establish the compliance levels for the subsequent environmental impact monitoring during construction stage.

¹ The monitoring location in EM&A Manual, Man King Building, was relocated to Man Cheong Street Refuse Collection Point as no access from Man King Building was provided.

2. AIR QUALITY

There is no air quality monitoring station falling within Works Area V2. As such, no reporting of air quality monitoring results was included in this report.

3. AIRBORNE CONSTRUCTION NOISE

3.1 Monitoring Methodology

Consecutive noise measurements were started from 15/1/2010 to 1/2/2010 to establish the ambient noise levels at representative nearest sensitive receiver. Continuous 5 minute A-weighted noise levels were recorded throughout the daytime, evening and night-time on weekdays (Monday to Saturday) and also on Sundays.

As referred to the Technical Memorandum (TM) issued under the NCO, sound level meter in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications shall be used for carrying out the noise monitoring. For the noise monitoring conducted in August 2009, the noise monitoring was conducted using Continuous Noise Monitoring System (CNMS). The specification of the sound level meter used is shown in Table 3.1 below. For the supplementary baseline noise monitoring in January 2010, Rion NL 18 sound level meter, which comply with the above-mentioned specifications, was used.

Equipment/ Components	General Requirements
Sound-level meter with data logger (B&K 2238 F)	• Be suitable for outdoor use • Comply with IEC 651:1979 (Type 1), 804:1985 (Type 1) and 1672/EN61672 Class 1 requirements

Table 3.1: Specification of sound level meter used in the continuous noise monitoring conducted in August 2009

There should not be any construction activities in the vicinity of the monitoring stations during the baseline monitoring. Any non-project related construction activities in the vicinity of the monitoring stations during the baseline monitoring should be noted and the source and location of such activities should be recorded.

3.2 Monitoring Frequency

For the noise monitoring conducted in August 2009, the noise parameters are presented in $Leq_{(30 \text{ min})}$ for daytime (between 0700 and 1900 hours of normal

weekdays) and Leq (15 min) for other time periods.

The supplementary baseline monitoring was measured daily for a continuous period at a minimum logging interval of 30 minutes for daytime (between 0700 and 1900 hours of normal weekdays) and 15 minutes (as three consecutive Leq, (5 minutes) readings) for evening time (between 1900 and 2300 hours of normal weekdays), general holidays including Sundays (between 0700 and 2300 hours) and night-time (between 2300 and 0700 of all days). The Leq, L10 and L90 were recorded at the specified interval.

3.3 Monitoring location

Noise monitoring was carried out during 18/8/2009 to 31/8/2009 at Man Cheong Street Refuse Collection Point located in the vicinity of Works Area V2. Given that no access was obtained from Man King Building (location specified in the EM&A Manual), the monitoring location was re-located to the Man Cheong Street Refuse Collection Point. The original and alternative monitoring locations are shown in Figure 2. In addition, supplementary baseline monitoring was conducted in January 2010 at the same location. The monitoring location and period are summarized in the table below:

Monitoring Station ID	Noise Monitoring Location	Monitoring period
CM2 (Refer to EM&A Report of <i>Kowloon Southern Link – Contract KDB 200</i>)	Rooftop of Man Cheong Street Refuse Collection Point	18/8/2009 to 31/8/2009 ¹
CN30		15/1/2010 to 1/2/2010 ²

¹ Construction of Kowloon Southern Link was substantially completed during the period.

² No noise monitoring was conducted on 21/1 (1900-2300 and 2300-0700), 22/1 to 24/1 and 25/1 (0700-1900) due to rainfall

Table 3.2: Information of Noise Monitoring Stations

3.4 Calibration Requirements

With reference to the Monthly EM&A Report for *Kowloon Southern Link – Contract KDB 200*, the sound level meter of CNMS was calibrated against a portable acoustic calibrator once every 2 weeks. The portable acoustic calibrator was traceable to international reference source. Calibration records were stored for further reference. Full annual calibration is required every year and the full set of noise monitoring system was sent back to the manufacturer (or other approved agency). Temporary replacement would be required to maintain uninterrupted noise measurements.

For the supplementary noise monitoring in January 2010, Rion sound level meter which complied with the International Electrotechnical Commission Publication 651:1979 (Type 1) and 804:1985 (Type 1), specification as referred to in the Technical Memoranda to the NCO were used for the baseline monitoring. The Rion NL 18 sound level meters and Rion NC 73 calibrator are verified by the certified laboratory or manufacturer to ensure they perform to the same level of accuracy as stated in the manufacturer's specifications. Calibration certificates of the sound level meters and calibrator are attached in Appendix C.

Immediately prior to and following each noise measurement the accuracy of the sound level meter should be checked using an acoustic calibrator (Rion NC 73) generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the difference between calibration levels obtained before and after the noise measurement is less than 1.0 dB.

3.5 Action and Limit Levels

The Action and Limit Levels defined in the EM&A Manual for airborne construction noise is presented below for reference.

Time Period	Action	Limit
0700-1900 hours on normal weekdays	When one documented complaint is received	75 dB(A) for residential premises
		70 dB(A) for school and 65 dB(A) during examination period

Table 3.3: Action and Limit Levels for Airborne Construction Noise

3.6 Monitoring Results

Noise monitoring was conducted in August 2009 (18/8/2009 – 31/8/2009) and supplementary baseline noise monitoring was conducted in January 2010 from 15/1/2010 to 1/2/2010 at CN 30. The weather condition was generally fine with occasional rainfall events during the monitoring period. Measurements were taken from building façade for the both baseline monitoring conducted. The major noise sources at respective monitoring locations are summarized at the table below:

Monitoring location ID	Monitoring location	Major noise source
CM 2 (Refer to EM&A Report of <i>Kowloon Southern Link – Contract KDB 200</i>)	Man Cheong Street Refuse Collection Point	Traffic noise (Note: Construction of KSL was substantially completed in the area)
CN 30 (For supplementary monitoring conducted in January 2010)	Same location as above	Traffic noise

Table 3.4: Major noise source at noise monitoring locations

Noise monitoring results conducted in August 2009 are summarised in Table 3.5. To supplement the results, the supplementary baseline monitoring results conducted in January 2010 (15/1/2010 to 1/2/2010) are summarized in Table 3.6.

The data of noise monitoring conducted in August 2009 is attached in Appendix A. The supplementary baseline noise monitoring results in January 2010 is attached in Appendix B.

Period	$L_{eq(30min)}$ – dB(A) (Range)	$L_{10(30min)}$ – dB(A) (Range)	$L_{90(30min)}$ – dB(A) (Range)
0700 – 1900 (Daytime, Normal weekday)	64 (61-69)	65 (62-72)	62 (58-65)
Period	$L_{eq(15min)}$ – dB(A) (Range)	$L_{10(15min)}$ – dB(A) (Range)	$L_{90(15min)}$ – dB(A) (Range)
0700 – 2300 (General Holiday including Sunday)	62 (58-67)	63 (59-69)	60 (56-63)
1900 – 2300 (Evening, Normal weekday)	61 (58-64)	62 (59-67)	58 (56-61)
2300 – 0700 (Night-time, all days)	58 (54-64)	59 (55-66)	56 (53-62)

Table 3.5: Noise monitoring results conducted between 18/8/2009 and 31/8/2009

Period	L_{eq}(30min) – dB(A) (Range)	L₁₀(30min) – dB(A) (Range)	L₉₀(30min) – dB(A) (Range)
0700 – 1900 (Daytime, Normal weekday)	63 (58-69)	64 (59-71)	61 (56-66)
Period	L_{eq}(5min) – dB(A) (Range)	L₁₀(5min) – dB(A) (Range)	L₉₀(5min) – dB(A) (Range)
0700 – 2300 (General Holiday including Sunday)	61 (55-69)	63 (56-70)	60 (53-64)
1900 – 2300 (Evening, Normal weekday)	59 (56-67)	61 (57-73)	57 (54-60)
2300 – 0700 (Night-time, all days)	56 (47-68)	57 (49-69)	54 (45-62)

Table 3.6: Results of supplementary baseline noise monitoring conducted between 15/1/2010 and 1/2/2010

As revealed from the monitoring results conducted in August 2009, ambient noise levels for daytime (0700-1900) during normal weekdays at Man Cheong Street Refuse Collection Point range from 61-69 dB(A). The daytime baseline noise level at CN 30 (64 dB(A)) was below the Limit Level for of 75 dB(A) for residential premises.

The supplementary baseline monitoring results (measured between 15/1/2010 and 1/2/2010) revealed that the ambient baseline noise levels for daytime (0700-1900) during normal weekdays at the CN30 range from 58-69 dB(A). The daytime baseline noise level at CN 30 (63 dB(A)) was below the Limit Level for of 75 dB(A) for residential premises.

4. CONCLUSION

4.1 Air

There is no air quality monitoring station falling within Works Area V2. As such, no reporting of air quality monitoring results was included in this report.

4.2 Airborne Construction Noise

Noise monitoring were carried at Man Cheong Street Refuse Collection Point (CN 30) from 18/8/2009 to 31/8/2009. As revealed from the baseline monitoring results conducted in August 2009, ambient baseline noise levels for daytime (0700-1900) during normal weekdays at the CN30 range from 61-69 dB(A). The daytime baseline noise level at CN 30 (64 dB(A)) was below the Limit Level for of 75 dB(A) for residential premises.

To supplement the baseline data collected in August 2009, supplementary baseline monitoring was conducted in January 2010. The monitoring results (measured between 15/1/2010 and 1/2/2010) revealed that the ambient baseline noise levels for daytime (0700-1900) during normal weekdays at the CN30 range from 58-69 dB(A). The daytime baseline noise level at CN 30 (63 dB(A)) was below the Limit Level for of 75 dB(A) for residential premises.

Appendix A

Noise Monitoring Data (18 Aug 2009 to 31 Aug 2009)

Date and time	Leq	L10	L90
18-Aug-2009 07:00	62.9	63.4	61.8
18-Aug-2009 07:30	63.1	63.8	62.1
18-Aug-2009 08:00	64.3	65.1	62.8
18-Aug-2009 08:30	64.2	65.4	62.8
18-Aug-2009 09:00	64.4	65.5	62.8
18-Aug-2009 09:30	64.4	65.4	62.9
18-Aug-2009 10:00	66.1	67.6	64.0
18-Aug-2009 10:30	65.3	66.9	63.3
18-Aug-2009 11:00	65.0	66.1	63.3
18-Aug-2009 11:30	64.3	65.4	62.8
18-Aug-2009 12:00	64.7	66.0	62.9
18-Aug-2009 12:30	64.7	66.1	62.9
18-Aug-2009 13:00	64.5	65.3	63.3
18-Aug-2009 13:30	66.0	67.1	64.6
18-Aug-2009 14:00	65.0	65.8	63.5
18-Aug-2009 14:30	64.9	66.4	62.6
18-Aug-2009 15:00	65.0	67.1	62.0
18-Aug-2009 15:30	62.3	64.1	59.7
18-Aug-2009 16:00	62.4	63.9	59.8
18-Aug-2009 16:30	63.1	65.2	60.3
18-Aug-2009 17:00	62.7	64.4	60.3
18-Aug-2009 17:30	61.7	63.9	58.8
18-Aug-2009 18:00	61.0	62.5	58.8
18-Aug-2009 18:30	61.8	63.0	59.3
18-Aug-2009 19:00	60.9	62.4	58.5
18-Aug-2009 19:15	62.5	64.3	60.3
18-Aug-2009 19:30	62.1	63.4	58.9
18-Aug-2009 19:45	61.3	62.6	58.3
18-Aug-2009 20:00	62.1	64.1	58.3
18-Aug-2009 20:15	59.8	61.0	58.0
18-Aug-2009 20:30	60.7	62.2	58.3
18-Aug-2009 20:45	60.0	61.2	58.2
18-Aug-2009 21:00	61.3	62.7	59.5
18-Aug-2009 21:15	63.5	65.5	59.8
18-Aug-2009 21:30	61.6	62.4	58.2
18-Aug-2009 21:45	60.1	61.0	57.3
18-Aug-2009 22:00	59.6	60.7	56.8
18-Aug-2009 22:15	59.7	61.4	57.3
18-Aug-2009 22:30	59.6	61.1	57.2
18-Aug-2009 22:45	59.1	60.2	57.0

Date and time	Leq	L10	L90
18-Aug-2009 23:00	58.6	59.9	57.0
18-Aug-2009 23:15	58.1	59.1	56.4
18-Aug-2009 23:30	58.3	60.1	55.8
18-Aug-2009 23:45	57.1	58.7	55.2
19-Aug-2009 00:00	57.8	58.9	55.2
19-Aug-2009 00:15	56.9	58.5	54.8
19-Aug-2009 00:30	56.3	57.9	54.5
19-Aug-2009 00:45	56.3	57.9	54.3
19-Aug-2009 01:00	55.6	57.0	54.0
19-Aug-2009 01:15	55.6	57.2	53.5
19-Aug-2009 01:30	55.0	56.2	53.5
19-Aug-2009 01:45	56.4	57.7	53.7
19-Aug-2009 02:00	55.1	56.3	53.7
19-Aug-2009 02:15	56.4	56.7	53.5
19-Aug-2009 02:30	55.0	56.3	53.5
19-Aug-2009 02:45	55.1	56.8	53.3
19-Aug-2009 03:00	56.4	58.7	53.4
19-Aug-2009 03:15	55.5	56.9	53.5
19-Aug-2009 03:30	55.4	56.4	53.9
19-Aug-2009 03:45	55.4	56.4	54.2
19-Aug-2009 04:00	55.8	56.8	54.0
19-Aug-2009 04:15	55.3	56.9	53.5
19-Aug-2009 04:30	55.4	57.2	53.0
19-Aug-2009 04:45	54.9	56.7	53.0
19-Aug-2009 05:00	55.0	56.0	53.5
19-Aug-2009 05:15	55.9	57.2	54.2
19-Aug-2009 05:30	57.1	59.0	54.5
19-Aug-2009 05:45	57.9	59.9	54.7
19-Aug-2009 06:00	57.6	59.5	55.0
19-Aug-2009 06:15	58.3	60.4	56.2
19-Aug-2009 06:30	62.9	63.3	62.2
19-Aug-2009 06:45	63.1	63.9	62.0
19-Aug-2009 07:00	63.0	63.6	62.0
19-Aug-2009 07:30	63.3	64.2	62.3
19-Aug-2009 08:00	64.6	65.6	63.0
19-Aug-2009 08:30	64.3	64.8	63.0
19-Aug-2009 09:00	64.3	65.2	63.0
19-Aug-2009 09:30	64.2	65.2	63.0
19-Aug-2009 10:00	65.5	67.2	63.5
19-Aug-2009 10:30	64.8	65.8	63.3

Date and time	Leq	L10	L90
19-Aug-2009 11:00	64.8	66.2	63.1
19-Aug-2009 11:30	64.3	65.6	62.7
19-Aug-2009 12:00	65.0	66.2	63.4
19-Aug-2009 12:30	64.8	66.1	62.9
19-Aug-2009 13:00	64.4	65.6	63.0
19-Aug-2009 13:30	64.5	65.4	63.2
19-Aug-2009 14:00	65.0	66.2	63.4
19-Aug-2009 14:30	64.0	65.1	62.5
19-Aug-2009 15:00	62.1	63.6	59.6
19-Aug-2009 15:30	61.9	62.9	59.6
19-Aug-2009 16:00	62.3	63.7	60.1
19-Aug-2009 16:30	62.7	64.2	60.4
19-Aug-2009 17:00	62.8	64.6	60.1
19-Aug-2009 17:30	62.1	63.5	59.5
19-Aug-2009 18:00	62.6	64.5	60.1
19-Aug-2009 18:30	62.1	63.4	59.7
19-Aug-2009 19:00	61.8	63.6	59.3
19-Aug-2009 19:15	62.5	64.4	59.3
19-Aug-2009 19:30	62.2	63.8	59.3
19-Aug-2009 19:45	61.6	62.8	58.7
19-Aug-2009 20:00	62.7	63.5	60.0
19-Aug-2009 20:15	60.6	62.0	58.5
19-Aug-2009 20:30	61.3	62.9	58.7
19-Aug-2009 20:45	59.4	60.9	57.5
19-Aug-2009 21:00	60.2	61.2	58.2
19-Aug-2009 21:15	60.9	63.0	57.4
19-Aug-2009 21:30	60.4	61.6	57.4
19-Aug-2009 21:45	59.5	61.5	57.2
19-Aug-2009 22:00	59.3	60.8	57.2
19-Aug-2009 22:15	59.2	60.5	57.2
19-Aug-2009 22:30	59.1	60.9	57.0
19-Aug-2009 22:45	59.2	61.0	57.0
19-Aug-2009 23:00	58.2	59.2	56.7
19-Aug-2009 23:15	59.3	61.7	56.5
19-Aug-2009 23:30	58.1	59.8	55.5
19-Aug-2009 23:45	57.7	59.0	55.5
20-Aug-2009 00:00	56.9	58.2	55.2
20-Aug-2009 00:15	56.8	58.2	55.0
20-Aug-2009 00:30	55.9	57.3	54.2
20-Aug-2009 00:45	56.1	57.6	54.3

Date and time	Leq	L10	L90
20-Aug-2009 01:00	56.6	57.9	54.7
20-Aug-2009 01:15	55.7	56.7	54.2
20-Aug-2009 01:30	55.6	56.7	54.2
20-Aug-2009 01:45	55.6	56.7	54.0
20-Aug-2009 02:00	55.4	56.2	53.7
20-Aug-2009 02:15	56.2	56.7	54.2
20-Aug-2009 02:30	55.2	56.5	53.8
20-Aug-2009 02:45	55.2	56.5	53.7
20-Aug-2009 03:00	55.0	56.0	53.5
20-Aug-2009 03:15	55.3	56.7	53.2
20-Aug-2009 03:30	57.3	59.5	53.5
20-Aug-2009 03:45	57.3	59.8	53.9
20-Aug-2009 04:00	56.0	57.9	53.5
20-Aug-2009 04:15	54.9	56.2	53.5
20-Aug-2009 04:30	55.0	56.2	53.5
20-Aug-2009 04:45	55.3	56.0	53.5
20-Aug-2009 05:00	55.0	56.2	53.3
20-Aug-2009 05:15	55.4	56.7	53.5
20-Aug-2009 05:30	55.3	56.2	53.9
20-Aug-2009 05:45	56.7	58.0	54.7
20-Aug-2009 06:00	56.9	58.5	54.7
20-Aug-2009 06:15	58.3	60.5	56.0
20-Aug-2009 06:30	62.7	63.2	62.0
20-Aug-2009 06:45	62.7	63.3	61.8
20-Aug-2009 07:00	62.9	63.4	62.0
20-Aug-2009 07:30	63.3	63.8	62.1
20-Aug-2009 08:00	64.0	64.8	62.6
20-Aug-2009 08:30	64.4	65.2	63.2
20-Aug-2009 09:00	64.1	64.7	62.9
20-Aug-2009 09:30	64.0	65.0	62.7
20-Aug-2009 10:00	66.3	69.0	63.4
20-Aug-2009 10:30	65.3	66.1	64.0
20-Aug-2009 11:00	65.5	66.7	63.8
20-Aug-2009 11:30	66.5	66.0	63.6
20-Aug-2009 12:00	64.7	65.5	63.7
20-Aug-2009 12:30	64.7	65.7	63.1
20-Aug-2009 13:00	64.7	65.5	63.2
20-Aug-2009 13:30	64.5	65.6	63.1
20-Aug-2009 14:00	64.5	65.3	63.3
20-Aug-2009 14:30	63.7	64.6	62.4

Date and time	Leq	L10	L90
20-Aug-2009 15:00	62.0	63.3	59.5
20-Aug-2009 15:30	62.6	64.6	59.7
20-Aug-2009 16:00	63.5	65.1	60.6
20-Aug-2009 16:30	62.7	64.7	60.2
20-Aug-2009 17:00	62.1	63.5	60.0
20-Aug-2009 17:30	61.4	63.2	59.1
20-Aug-2009 18:00	61.8	63.6	58.9
20-Aug-2009 18:30	61.1	62.5	58.7
20-Aug-2009 19:00	60.4	61.7	58.5
20-Aug-2009 19:15	60.2	61.4	58.2
20-Aug-2009 19:30	60.2	61.7	58.5
20-Aug-2009 19:45	59.8	60.5	58.5
20-Aug-2009 20:00	59.8	60.7	58.2
20-Aug-2009 20:15	59.2	60.2	57.5
20-Aug-2009 20:30	58.8	59.8	57.0
20-Aug-2009 20:45	60.0	60.2	57.5
20-Aug-2009 21:00	59.4	60.3	57.8
20-Aug-2009 21:15	60.9	62.2	57.7
20-Aug-2009 21:30	59.0	60.4	57.0
20-Aug-2009 21:45	58.9	60.3	57.2
20-Aug-2009 22:00	58.8	60.4	56.8
20-Aug-2009 22:15	59.1	61.1	56.8
20-Aug-2009 22:30	58.7	60.1	57.0
20-Aug-2009 22:45	59.3	60.5	57.2
20-Aug-2009 23:00	58.9	60.2	56.8
20-Aug-2009 23:15	58.5	59.9	56.2
20-Aug-2009 23:30	58.1	59.5	55.8
20-Aug-2009 23:45	57.1	58.3	55.3
21-Aug-2009 00:00	57.0	58.3	55.2
21-Aug-2009 00:15	56.6	57.7	54.8
21-Aug-2009 00:30	56.9	58.1	54.7
21-Aug-2009 00:45	56.7	58.4	54.5
21-Aug-2009 01:00	55.9	57.0	54.0
21-Aug-2009 01:15	55.5	56.3	54.0
21-Aug-2009 01:30	56.1	57.5	54.2
21-Aug-2009 01:45	55.3	56.5	54.0
21-Aug-2009 02:00	55.4	56.5	54.2
21-Aug-2009 02:15	55.2	56.5	53.8
21-Aug-2009 02:30	55.3	56.2	54.0
21-Aug-2009 02:45	55.3	56.3	53.8

Date and time	Leq	L10	L90
21-Aug-2009 03:00	55.0	56.0	53.8
21-Aug-2009 03:15	55.0	56.0	53.7
21-Aug-2009 03:30	56.1	58.4	53.7
21-Aug-2009 03:45	56.9	59.8	53.8
21-Aug-2009 04:00	55.2	56.3	53.5
21-Aug-2009 04:15	55.2	56.3	53.7
21-Aug-2009 04:30	54.9	56.1	53.5
21-Aug-2009 04:45	54.7	55.7	53.5
21-Aug-2009 05:00	55.9	57.2	53.7
21-Aug-2009 05:15	57.0	56.0	53.7
21-Aug-2009 05:30	55.3	56.5	53.7
21-Aug-2009 05:45	57.0	58.2	54.8
21-Aug-2009 06:00	58.4	60.5	55.5
21-Aug-2009 06:15	58.6	60.5	56.2
21-Aug-2009 06:30	63.0	63.5	62.2
21-Aug-2009 06:45	62.9	63.7	62.0
21-Aug-2009 07:00	63.1	63.7	62.1
21-Aug-2009 07:30	63.2	63.8	62.2
21-Aug-2009 08:00	64.1	65.0	62.9
21-Aug-2009 08:30	64.0	64.8	62.9
21-Aug-2009 09:00	64.2	65.1	62.9
21-Aug-2009 09:30	64.7	65.7	63.1
21-Aug-2009 10:00	66.4	67.1	63.4
21-Aug-2009 10:30	65.3	66.6	63.3
21-Aug-2009 11:00	64.9	66.0	63.1
21-Aug-2009 11:30	64.2	65.5	62.8
21-Aug-2009 12:00	64.4	66.0	62.5
21-Aug-2009 12:30	64.0	65.0	62.4
21-Aug-2009 13:00	65.1	66.4	63.0
21-Aug-2009 13:30	64.3	65.6	62.6
21-Aug-2009 14:00	64.8	66.0	62.9
21-Aug-2009 14:30	64.9	66.2	63.4
21-Aug-2009 15:00	62.4	64.5	59.8
21-Aug-2009 15:30	63.0	64.2	59.3
21-Aug-2009 16:00	62.0	63.7	59.6
21-Aug-2009 16:30	62.3	64.1	59.6
21-Aug-2009 17:00	62.8	65.1	60.2
21-Aug-2009 17:30	61.4	63.0	59.3
21-Aug-2009 18:00	61.6	63.1	59.4
21-Aug-2009 18:30	61.0	62.3	58.5

Date and time	Leq	L10	L90
21-Aug-2009 19:00	60.3	61.5	57.8
21-Aug-2009 19:15	60.7	62.2	58.7
21-Aug-2009 19:30	62.7	61.7	59.0
21-Aug-2009 19:45	60.9	61.8	58.5
21-Aug-2009 20:00	60.4	61.5	58.7
21-Aug-2009 20:15	60.6	61.7	58.3
21-Aug-2009 20:30	59.6	60.5	57.5
21-Aug-2009 20:45	60.9	62.3	58.2
21-Aug-2009 21:00	61.5	63.2	59.0
21-Aug-2009 21:15	59.4	60.9	57.2
21-Aug-2009 21:30	59.2	60.3	57.0
21-Aug-2009 21:45	59.6	61.1	57.0
21-Aug-2009 22:00	59.3	60.7	57.4
21-Aug-2009 22:15	59.5	60.7	57.7
21-Aug-2009 22:30	59.6	60.7	57.7
21-Aug-2009 22:45	59.7	60.8	57.2
21-Aug-2009 23:00	59.0	59.9	56.7
21-Aug-2009 23:15	58.1	59.3	56.0
21-Aug-2009 23:30	58.2	59.7	56.3
21-Aug-2009 23:45	57.9	59.2	56.0
22-Aug-2009 00:00	57.6	58.8	55.8
22-Aug-2009 00:15	57.3	58.7	55.4
22-Aug-2009 00:30	56.9	58.2	55.0
22-Aug-2009 00:45	57.4	59.0	55.2
22-Aug-2009 01:00	56.8	58.5	54.7
22-Aug-2009 01:15	57.6	60.0	54.7
22-Aug-2009 01:30	55.8	57.2	54.3
22-Aug-2009 01:45	56.6	58.2	54.5
22-Aug-2009 02:00	55.7	56.9	54.2
22-Aug-2009 02:15	56.5	58.2	54.5
22-Aug-2009 02:30	56.9	58.3	54.5
22-Aug-2009 02:45	56.7	58.6	54.3
22-Aug-2009 03:00	56.9	59.3	54.2
22-Aug-2009 03:15	55.7	57.2	54.0
22-Aug-2009 03:30	55.6	56.5	54.0
22-Aug-2009 03:45	56.0	56.5	54.5
22-Aug-2009 04:00	55.5	57.1	53.7
22-Aug-2009 04:15	57.3	59.9	54.0
22-Aug-2009 04:30	55.2	56.2	53.7
22-Aug-2009 04:45	55.4	56.5	53.5

Date and time	Leq	L10	L90
22-Aug-2009 05:00	55.7	57.3	53.7
22-Aug-2009 05:15	55.5	56.7	53.5
22-Aug-2009 05:30	55.7	56.7	53.8
22-Aug-2009 05:45	57.0	58.3	54.8
22-Aug-2009 06:00	57.7	59.2	55.0
22-Aug-2009 06:15	58.9	60.5	56.4
22-Aug-2009 06:30	62.6	63.0	62.0
22-Aug-2009 06:45	63.1	63.8	62.0
22-Aug-2009 07:00	63.3	63.8	62.1
22-Aug-2009 07:30	63.7	64.3	62.4
22-Aug-2009 08:00	64.4	65.3	62.8
22-Aug-2009 08:30	64.0	64.7	62.8
22-Aug-2009 09:00	64.6	65.6	63.1
22-Aug-2009 09:30	64.3	65.1	63.0
22-Aug-2009 10:00	64.8	66.1	62.8
22-Aug-2009 10:30	65.1	66.3	63.3
22-Aug-2009 11:00	64.5	65.4	63.3
22-Aug-2009 11:30	64.9	66.1	63.0
22-Aug-2009 12:00	64.5	65.2	62.7
22-Aug-2009 12:30	64.6	65.6	62.8
22-Aug-2009 13:00	64.2	65.3	62.8
22-Aug-2009 13:30	64.3	65.2	62.8
22-Aug-2009 14:00	64.7	65.8	63.1
22-Aug-2009 14:30	64.4	65.1	62.3
22-Aug-2009 15:00	62.2	64.0	59.1
22-Aug-2009 15:30	62.4	64.8	58.9
22-Aug-2009 16:00	62.4	64.8	58.6
22-Aug-2009 16:30	62.1	64.2	58.9
22-Aug-2009 17:00	61.3	62.8	59.0
22-Aug-2009 17:30	61.0	62.2	58.6
22-Aug-2009 18:00	62.8	63.7	60.1
22-Aug-2009 18:30	60.6	62.6	58.0
22-Aug-2009 19:00	60.7	62.6	57.8
22-Aug-2009 19:15	62.1	63.8	57.8
22-Aug-2009 19:30	62.5	65.6	57.8
22-Aug-2009 19:45	61.3	63.0	57.7
22-Aug-2009 20:00	60.3	62.9	57.3
22-Aug-2009 20:15	61.0	63.2	57.5
22-Aug-2009 20:30	60.7	62.2	57.8
22-Aug-2009 20:45	60.6	62.2	57.3

Date and time	Leq	L10	L90
22-Aug-2009 21:00	60.3	62.3	57.0
22-Aug-2009 21:15	59.0	60.7	56.9
22-Aug-2009 21:30	59.2	60.9	56.5
22-Aug-2009 21:45	58.7	59.8	56.8
22-Aug-2009 22:00	59.7	61.6	56.7
22-Aug-2009 22:15	59.0	60.8	56.8
22-Aug-2009 22:30	59.6	61.1	57.0
22-Aug-2009 22:45	58.8	60.3	56.5
22-Aug-2009 23:00	59.7	61.3	56.2
22-Aug-2009 23:15	59.0	60.8	56.3
22-Aug-2009 23:30	57.6	58.9	55.8
22-Aug-2009 23:45	57.9	59.4	55.5
23-Aug-2009 00:00	57.8	58.4	55.5
23-Aug-2009 00:15	56.7	57.8	55.0
23-Aug-2009 00:30	57.3	59.0	55.3
23-Aug-2009 00:45	56.7	58.2	54.8
23-Aug-2009 01:00	56.5	57.8	54.7
23-Aug-2009 01:15	56.7	58.4	54.7
23-Aug-2009 01:30	56.4	57.7	54.5
23-Aug-2009 01:45	57.0	58.6	54.7
23-Aug-2009 02:00	57.1	58.5	54.8
23-Aug-2009 02:15	56.4	58.0	54.5
23-Aug-2009 02:30	56.4	58.1	54.2
23-Aug-2009 02:45	55.9	57.2	54.0
23-Aug-2009 03:00	56.0	57.6	54.0
23-Aug-2009 03:15	55.9	57.2	54.0
23-Aug-2009 03:30	55.9	57.4	53.8
23-Aug-2009 03:45	55.8	57.5	54.0
23-Aug-2009 04:00	56.2	58.1	53.8
23-Aug-2009 04:15	56.6	58.2	53.7
23-Aug-2009 04:30	55.8	56.7	53.7
23-Aug-2009 04:45	56.4	57.0	55.0
23-Aug-2009 05:00	57.3	60.0	54.0
23-Aug-2009 05:15	59.0	62.8	53.8
23-Aug-2009 05:30	58.3	61.3	53.7
23-Aug-2009 05:45	58.2	60.2	54.8
23-Aug-2009 06:00	57.7	59.6	55.2
23-Aug-2009 06:15	58.5	61.0	56.2
23-Aug-2009 06:30	62.7	63.2	62.0
23-Aug-2009 06:45	63.0	63.7	62.0

Date and time	Leq	L10	L90
23-Aug-2009 07:00	63.1	63.7	62.0
23-Aug-2009 07:15	62.9	63.5	62.0
23-Aug-2009 07:30	63.7	64.0	62.2
23-Aug-2009 07:45	63.3	64.1	62.2
23-Aug-2009 08:00	63.5	64.4	62.2
23-Aug-2009 08:15	63.2	63.7	62.0
23-Aug-2009 08:30	63.2	63.8	62.2
23-Aug-2009 08:45	63.6	64.2	62.0
23-Aug-2009 09:00	63.0	63.7	62.0
23-Aug-2009 09:15	63.8	64.4	62.3
23-Aug-2009 09:30	63.1	63.8	62.0
23-Aug-2009 09:45	63.3	64.2	62.0
23-Aug-2009 10:00	63.2	63.9	62.2
23-Aug-2009 10:15	63.6	64.2	62.3
23-Aug-2009 10:30	63.3	63.9	62.3
23-Aug-2009 10:45	63.2	64.0	62.0
23-Aug-2009 11:00	63.4	64.3	62.3
23-Aug-2009 11:15	63.4	64.1	62.2
23-Aug-2009 11:30	63.4	64.0	62.5
23-Aug-2009 11:45	63.3	63.8	62.3
23-Aug-2009 12:00	63.3	63.8	62.3
23-Aug-2009 12:15	63.6	64.5	62.7
23-Aug-2009 12:30	63.1	63.5	62.5
23-Aug-2009 12:45	63.5	64.0	62.5
23-Aug-2009 13:00	63.4	63.8	62.2
23-Aug-2009 13:15	63.5	64.0	62.5
23-Aug-2009 13:30	63.6	64.2	62.7
23-Aug-2009 13:45	63.7	64.3	62.5
23-Aug-2009 14:00	64.3	65.4	62.3
23-Aug-2009 14:15	63.2	63.8	62.0
23-Aug-2009 14:30	62.8	63.3	62.0
23-Aug-2009 14:45	63.0	64.2	61.0
23-Aug-2009 15:00	61.4	63.9	57.9
23-Aug-2009 15:15	61.0	62.9	58.2
23-Aug-2009 15:30	60.0	61.4	58.2
23-Aug-2009 15:45	59.9	61.4	57.9
23-Aug-2009 16:00	60.1	61.9	57.3
23-Aug-2009 16:15	60.2	61.8	57.7
23-Aug-2009 16:30	59.4	60.6	57.2
23-Aug-2009 16:45	63.7	67.6	58.1

Date and time	Leq	L10	L90
23-Aug-2009 17:00	61.1	63.3	57.7
23-Aug-2009 17:15	60.5	61.6	58.2
23-Aug-2009 17:30	59.9	61.9	57.3
23-Aug-2009 17:45	60.4	61.7	57.7
23-Aug-2009 18:00	60.8	62.1	58.7
23-Aug-2009 18:15	60.2	62.1	57.7
23-Aug-2009 18:30	60.6	62.7	57.7
23-Aug-2009 18:45	59.2	60.8	57.0
23-Aug-2009 19:00	59.7	60.9	57.3
23-Aug-2009 19:15	60.1	62.3	57.7
23-Aug-2009 19:30	60.0	60.8	57.2
23-Aug-2009 19:45	59.3	61.3	56.7
23-Aug-2009 20:00	62.0	63.8	57.6
23-Aug-2009 20:15	60.7	62.7	57.7
23-Aug-2009 20:30	61.5	63.7	58.0
23-Aug-2009 20:45	60.8	62.9	57.7
23-Aug-2009 21:00	60.2	62.2	57.7
23-Aug-2009 21:15	60.6	62.5	57.8
23-Aug-2009 21:30	59.8	60.8	57.8
23-Aug-2009 21:45	62.5	66.5	57.4
23-Aug-2009 22:00	59.1	60.8	57.0
23-Aug-2009 22:15	58.6	60.6	56.2
23-Aug-2009 22:30	57.9	59.5	56.2
23-Aug-2009 22:45	57.7	58.8	55.7
23-Aug-2009 23:00	57.9	59.2	55.8
23-Aug-2009 23:15	58.4	59.9	55.5
23-Aug-2009 23:30	57.3	58.6	55.0
23-Aug-2009 23:45	59.4	62.2	55.3
24-Aug-2009 00:00	59.2	61.4	55.2
24-Aug-2009 00:15	59.7	62.7	55.2
24-Aug-2009 00:30	57.8	59.8	54.9
24-Aug-2009 00:45	56.0	57.7	54.0
24-Aug-2009 01:00	55.5	56.9	53.7
24-Aug-2009 01:15	55.1	56.7	53.3
24-Aug-2009 01:30	57.6	59.9	53.7
24-Aug-2009 01:45	55.3	56.7	53.7
24-Aug-2009 02:00	55.3	56.5	53.3
24-Aug-2009 02:15	55.0	56.6	53.3
24-Aug-2009 02:30	54.9	55.8	53.5
24-Aug-2009 02:45	54.2	54.7	53.2

Date and time	Leq	L10	L90
24-Aug-2009 03:00	54.3	55.2	53.2
24-Aug-2009 03:15	54.6	55.7	53.0
24-Aug-2009 03:30	54.2	54.8	53.2
24-Aug-2009 03:45	55.0	55.3	53.2
24-Aug-2009 04:00	54.7	55.4	53.2
24-Aug-2009 04:15	54.0	54.7	53.2
24-Aug-2009 04:30	54.2	55.3	53.0
24-Aug-2009 04:45	55.1	54.9	53.0
24-Aug-2009 05:00	55.7	56.5	53.2
24-Aug-2009 05:15	55.6	57.7	53.5
24-Aug-2009 05:30	55.7	57.4	53.3
24-Aug-2009 05:45	57.0	58.7	53.7
24-Aug-2009 06:00	56.7	58.3	54.0
24-Aug-2009 06:15	59.1	60.9	55.6
24-Aug-2009 06:30	62.5	63.2	61.7
24-Aug-2009 06:45	62.5	62.8	61.5
24-Aug-2009 07:00	62.8	63.4	61.7
24-Aug-2009 07:30	63.9	65.4	61.9
24-Aug-2009 08:00	64.3	65.5	62.7
24-Aug-2009 08:30	64.7	65.9	63.0
24-Aug-2009 09:00	64.6	65.7	63.1
24-Aug-2009 09:30	65.4	66.5	63.3
24-Aug-2009 10:00	64.9	66.4	63.0
24-Aug-2009 10:30	65.0	66.4	63.3
24-Aug-2009 11:00	66.4	66.4	63.9
24-Aug-2009 11:30	64.6	66.0	62.8
24-Aug-2009 12:00	63.9	64.8	62.7
24-Aug-2009 12:30	64.6	65.6	62.9
24-Aug-2009 13:00	64.3	65.1	62.9
24-Aug-2009 13:30	64.7	65.8	62.9
24-Aug-2009 14:00	64.4	65.5	62.9
24-Aug-2009 14:30	64.3	65.4	62.4
24-Aug-2009 15:00	62.6	63.9	59.5
24-Aug-2009 15:30	62.3	64.0	59.7
24-Aug-2009 16:00	62.6	64.6	59.7
24-Aug-2009 16:30	62.8	64.3	59.5
24-Aug-2009 17:00	61.6	63.9	58.7
24-Aug-2009 17:30	61.3	63.5	58.3
24-Aug-2009 18:00	61.8	63.9	58.3
24-Aug-2009 18:30	61.6	64.2	58.1

Date and time	Leq	L10	L90
24-Aug-2009 19:00	60.1	61.7	57.7
24-Aug-2009 19:15	61.8	64.2	58.2
24-Aug-2009 19:30	62.6	65.8	58.7
24-Aug-2009 19:45	61.6	62.8	58.3
24-Aug-2009 20:00	60.6	62.4	57.8
24-Aug-2009 20:15	59.9	61.4	57.7
24-Aug-2009 20:30	60.8	60.9	57.7
24-Aug-2009 20:45	59.1	60.4	57.3
24-Aug-2009 21:00	59.4	60.5	57.2
24-Aug-2009 21:15	60.1	61.3	57.4
24-Aug-2009 21:30	63.3	64.7	60.5
24-Aug-2009 21:45	61.5	62.3	60.2
24-Aug-2009 22:00	61.5	62.7	60.0
24-Aug-2009 22:15	61.2	61.8	59.8
24-Aug-2009 22:30	63.3	64.8	59.7
24-Aug-2009 22:45	58.4	59.9	56.2
24-Aug-2009 23:00	57.9	59.0	56.0
24-Aug-2009 23:15	57.6	58.8	55.8
24-Aug-2009 23:30	57.9	59.0	55.7
24-Aug-2009 23:45	57.9	59.4	55.5
25-Aug-2009 00:00	57.8	58.7	55.4
25-Aug-2009 00:15	57.0	58.4	54.8
25-Aug-2009 00:30	56.0	57.9	54.3
25-Aug-2009 00:45	56.0	57.2	54.3
25-Aug-2009 01:00	56.7	58.9	54.0
25-Aug-2009 01:15	58.2	61.2	53.7
25-Aug-2009 01:30	57.7	60.5	53.7
25-Aug-2009 01:45	57.7	60.8	53.5
25-Aug-2009 02:00	55.6	56.5	53.5
25-Aug-2009 02:15	55.8	57.6	53.5
25-Aug-2009 02:30	54.7	55.8	53.0
25-Aug-2009 02:45	54.8	56.1	53.2
25-Aug-2009 03:00	54.9	56.0	53.2
25-Aug-2009 03:15	55.3	56.7	53.2
25-Aug-2009 03:30	54.8	56.1	53.2
25-Aug-2009 03:45	54.1	55.0	53.0
25-Aug-2009 04:00	55.8	57.5	53.8
25-Aug-2009 04:15	54.0	54.7	53.0
25-Aug-2009 04:30	54.7	55.2	53.0
25-Aug-2009 04:45	54.3	55.5	53.0

Date and time	Leq	L10	L90
25-Aug-2009 05:00	56.1	58.3	53.3
25-Aug-2009 05:15	56.2	58.3	53.2
25-Aug-2009 05:30	55.4	57.4	53.0
25-Aug-2009 05:45	58.6	59.1	54.0
25-Aug-2009 06:00	56.8	58.5	54.7
25-Aug-2009 06:15	57.4	60.1	55.0
25-Aug-2009 06:30	62.4	63.0	61.5
25-Aug-2009 06:45	62.4	63.0	61.5
25-Aug-2009 07:00	62.5	63.2	61.6
25-Aug-2009 07:30	63.8	65.2	62.0
25-Aug-2009 08:00	64.9	66.8	62.7
25-Aug-2009 08:30	64.2	65.3	62.7
25-Aug-2009 09:00	64.5	65.7	62.8
25-Aug-2009 09:30	65.1	66.7	63.3
25-Aug-2009 10:00	64.9	66.5	63.0
25-Aug-2009 10:30	64.4	65.7	62.8
25-Aug-2009 11:00	64.9	65.8	62.8
25-Aug-2009 11:30	65.0	66.4	62.9
25-Aug-2009 12:00	64.3	66.0	62.5
25-Aug-2009 12:30	64.2	65.6	62.7
25-Aug-2009 13:00	67.7	66.1	63.0
25-Aug-2009 13:30	64.9	66.5	63.0
25-Aug-2009 14:00	64.4	65.7	62.6
25-Aug-2009 14:30	64.8	66.4	62.8
25-Aug-2009 15:00	62.7	64.5	60.1
25-Aug-2009 15:30	61.9	63.7	59.4
25-Aug-2009 16:00	62.0	63.8	59.3
25-Aug-2009 16:30	69.0	71.6	63.6
25-Aug-2009 17:00	67.1	70.2	60.7
25-Aug-2009 17:30	61.6	63.6	58.8
25-Aug-2009 18:00	62.5	64.8	58.8
25-Aug-2009 18:30	60.7	62.6	58.2
25-Aug-2009 19:00	60.3	61.2	57.8
25-Aug-2009 19:15	61.4	64.3	57.5
25-Aug-2009 19:30	61.2	63.1	58.2
25-Aug-2009 19:45	61.2	63.2	58.2
25-Aug-2009 20:00	60.9	62.4	58.5
25-Aug-2009 20:15	60.2	61.6	57.8
25-Aug-2009 20:30	59.8	60.9	57.5
25-Aug-2009 20:45	59.7	61.1	57.8

Date and time	Leq	L10	L90
25-Aug-2009 21:00	59.7	61.2	57.8
25-Aug-2009 21:15	59.1	60.4	57.2
25-Aug-2009 21:30	60.6	62.1	57.0
25-Aug-2009 21:45	58.9	60.0	56.5
25-Aug-2009 22:00	59.5	60.9	57.2
25-Aug-2009 22:15	59.4	60.7	57.2
25-Aug-2009 22:30	60.2	62.1	57.0
25-Aug-2009 22:45	58.1	59.4	56.7
25-Aug-2009 23:00	58.1	59.2	56.3
25-Aug-2009 23:15	57.7	58.7	55.5
25-Aug-2009 23:30	56.9	58.1	55.2
25-Aug-2009 23:45	56.9	58.0	55.0
26-Aug-2009 00:00	57.6	58.7	55.2
26-Aug-2009 00:15	56.6	58.0	54.8
26-Aug-2009 00:30	56.2	57.4	54.7
26-Aug-2009 00:45	56.6	57.0	54.3
26-Aug-2009 01:00	55.3	56.3	54.0
26-Aug-2009 01:15	55.7	57.2	53.5
26-Aug-2009 01:30	55.4	56.7	53.8
26-Aug-2009 01:45	57.1	57.4	54.0
26-Aug-2009 02:00	55.1	56.0	53.5
26-Aug-2009 02:15	54.6	55.3	53.5
26-Aug-2009 02:30	54.6	55.7	53.5
26-Aug-2009 02:45	55.0	56.0	53.5
26-Aug-2009 03:00	54.8	55.6	53.5
26-Aug-2009 03:15	54.9	55.7	53.3
26-Aug-2009 03:30	54.7	55.7	53.5
26-Aug-2009 03:45	54.8	55.4	53.2
26-Aug-2009 04:00	54.5	55.5	53.3
26-Aug-2009 04:15	54.8	55.7	53.5
26-Aug-2009 04:30	54.7	55.5	53.3
26-Aug-2009 04:45	56.2	56.9	53.3
26-Aug-2009 05:00	54.7	55.3	53.3
26-Aug-2009 05:15	55.0	56.3	53.3
26-Aug-2009 05:30	59.1	63.3	53.5
26-Aug-2009 05:45	58.2	60.3	54.2
26-Aug-2009 06:00	57.4	59.2	54.3
26-Aug-2009 06:15	58.4	60.3	55.5
26-Aug-2009 06:30	62.8	63.7	61.7
26-Aug-2009 06:45	62.6	63.2	61.8

Date and time	Leq	L10	L90
26-Aug-2009 07:00	63.0	63.6	62.0
26-Aug-2009 07:30	63.3	63.9	62.1
26-Aug-2009 08:00	64.3	65.5	62.6
26-Aug-2009 08:30	64.3	64.8	62.9
26-Aug-2009 09:00	64.5	65.7	62.9
26-Aug-2009 09:30	64.0	65.1	62.6
26-Aug-2009 10:00	64.4	65.8	62.6
26-Aug-2009 10:30	64.5	65.1	62.7
26-Aug-2009 11:00	64.7	65.9	63.2
26-Aug-2009 11:30	64.6	66.4	62.6
26-Aug-2009 12:00	64.7	66.4	62.5
26-Aug-2009 12:30	64.3	65.4	63.1
26-Aug-2009 13:00	64.1	65.5	62.5
26-Aug-2009 13:30	64.0	65.1	62.5
26-Aug-2009 14:00	64.2	65.6	62.1
26-Aug-2009 14:30	64.4	66.1	62.4
26-Aug-2009 15:00	60.8	62.1	58.6
26-Aug-2009 15:30	63.9	66.3	59.7
26-Aug-2009 16:00	62.8	65.2	59.2
26-Aug-2009 16:30	63.1	65.3	59.3
26-Aug-2009 17:00	62.8	65.3	59.2
26-Aug-2009 17:30	62.0	63.6	59.8
26-Aug-2009 18:00	63.5	65.4	59.9
26-Aug-2009 18:30	61.5	63.2	58.7
26-Aug-2009 19:00	60.4	62.0	57.8
26-Aug-2009 19:15	60.7	62.3	57.5
26-Aug-2009 19:30	60.8	62.2	57.7
26-Aug-2009 19:45	61.5	63.0	57.8
26-Aug-2009 20:00	60.7	61.5	58.4
26-Aug-2009 20:15	59.6	60.5	58.0
26-Aug-2009 20:30	59.6	61.3	57.0
26-Aug-2009 20:45	59.2	60.2	57.0
26-Aug-2009 21:00	59.5	61.1	57.3
26-Aug-2009 21:15	59.3	60.9	57.0
26-Aug-2009 21:30	61.9	62.4	57.3
26-Aug-2009 21:45	60.8	61.9	57.3
26-Aug-2009 22:00	59.7	61.2	57.7
26-Aug-2009 22:15	59.8	61.5	57.5
26-Aug-2009 22:30	59.8	62.0	56.9
26-Aug-2009 22:45	59.4	61.2	56.3

Date and time	Leq	L10	L90
26-Aug-2009 23:00	58.8	60.8	56.2
26-Aug-2009 23:15	57.6	58.2	55.7
26-Aug-2009 23:30	57.7	59.0	55.7
26-Aug-2009 23:45	57.5	58.9	55.5
27-Aug-2009 00:00	57.8	59.2	56.0
27-Aug-2009 00:15	57.1	58.0	55.5
27-Aug-2009 00:30	58.0	59.7	55.7
27-Aug-2009 00:45	57.0	58.0	55.0
27-Aug-2009 01:00	56.4	57.7	54.8
27-Aug-2009 01:15	55.6	56.8	54.0
27-Aug-2009 01:30	55.5	56.7	53.7
27-Aug-2009 01:45	55.5	56.8	53.8
27-Aug-2009 02:00	55.6	56.7	54.0
27-Aug-2009 02:15	55.2	56.8	53.5
27-Aug-2009 02:30	55.7	57.4	54.0
27-Aug-2009 02:45	55.5	56.6	53.8
27-Aug-2009 03:00	60.1	58.3	54.4
27-Aug-2009 03:15	57.2	59.5	54.2
27-Aug-2009 03:30	56.4	58.2	53.7
27-Aug-2009 03:45	55.5	56.9	53.5
27-Aug-2009 04:00	55.9	57.6	53.5
27-Aug-2009 04:15	57.3	60.1	53.5
27-Aug-2009 04:30	55.5	57.4	53.5
27-Aug-2009 04:45	55.0	56.4	53.3
27-Aug-2009 05:00	55.8	57.5	53.5
27-Aug-2009 05:15	55.9	57.2	53.5
27-Aug-2009 05:30	55.6	56.8	53.5
27-Aug-2009 05:45	57.3	59.2	54.2
27-Aug-2009 06:00	57.3	58.9	55.2
27-Aug-2009 06:15	58.3	60.7	55.5
27-Aug-2009 06:30	62.8	63.5	61.7
27-Aug-2009 06:45	63.0	63.7	61.8
27-Aug-2009 07:00	62.9	63.6	62.0
27-Aug-2009 07:30	63.0	63.7	61.9
27-Aug-2009 08:00	64.0	65.5	62.6
27-Aug-2009 08:30	64.1	65.0	62.8
27-Aug-2009 09:00	64.2	65.2	62.7
27-Aug-2009 09:30	65.0	65.8	63.0
27-Aug-2009 10:00	64.8	65.7	63.1
27-Aug-2009 10:30	64.7	65.5	63.1

Date and time	Leq	L10	L90
27-Aug-2009 11:00	65.2	66.6	63.3
27-Aug-2009 11:30	64.5	65.7	63.1
27-Aug-2009 12:00	64.0	64.8	62.6
27-Aug-2009 12:30	64.3	65.5	62.7
27-Aug-2009 13:00	66.1	67.7	63.1
27-Aug-2009 13:30	65.5	67.0	63.3
27-Aug-2009 14:00	63.8	64.7	62.7
27-Aug-2009 14:30	65.4	65.9	63.4
27-Aug-2009 15:00	63.8	64.9	62.0
27-Aug-2009 15:30	64.8	66.3	62.0
27-Aug-2009 16:00	64.1	65.3	62.3
27-Aug-2009 16:30	61.5	62.5	60.0
27-Aug-2009 17:00	63.5	64.6	61.6
27-Aug-2009 17:30	61.7	63.2	58.7
27-Aug-2009 18:00	61.3	62.9	58.6
27-Aug-2009 18:30	61.8	64.0	59.1
27-Aug-2009 19:00	62.1	64.0	59.8
27-Aug-2009 19:15	61.0	62.0	59.2
27-Aug-2009 19:30	61.1	62.5	58.9
27-Aug-2009 19:45	63.0	64.9	58.2
27-Aug-2009 20:00	59.9	60.9	58.2
27-Aug-2009 20:15	59.8	60.8	58.0
27-Aug-2009 20:30	60.5	62.1	57.7
27-Aug-2009 20:45	59.7	60.7	57.8
27-Aug-2009 21:00	60.2	62.3	57.7
27-Aug-2009 21:15	60.1	62.1	57.3
27-Aug-2009 21:30	59.7	61.0	57.5
27-Aug-2009 21:45	59.4	60.7	57.9
27-Aug-2009 22:00	59.0	60.1	57.0
27-Aug-2009 22:15	58.7	59.5	56.8
27-Aug-2009 22:30	60.4	61.5	58.7
27-Aug-2009 22:45	59.7	61.2	57.6
27-Aug-2009 23:00	57.8	58.7	56.5
27-Aug-2009 23:15	57.8	59.0	56.2
27-Aug-2009 23:30	57.4	58.7	55.8
27-Aug-2009 23:45	57.8	58.6	55.7
28-Aug-2009 00:00	56.5	57.5	55.2
28-Aug-2009 00:15	56.9	58.4	55.0
28-Aug-2009 00:30	56.2	57.5	54.7
28-Aug-2009 00:45	56.4	57.7	54.7

Date and time	Leq	L10	L90
28-Aug-2009 01:00	56.6	58.3	54.7
28-Aug-2009 01:15	55.7	56.8	54.2
28-Aug-2009 01:30	55.2	56.2	54.0
28-Aug-2009 01:45	55.5	56.8	53.8
28-Aug-2009 02:00	56.3	57.2	54.0
28-Aug-2009 02:15	55.7	57.0	54.2
28-Aug-2009 02:30	55.7	57.3	54.0
28-Aug-2009 02:45	58.5	61.0	54.0
28-Aug-2009 03:00	56.9	58.8	54.0
28-Aug-2009 03:15	56.6	58.2	53.5
28-Aug-2009 03:30	59.7	63.4	53.7
28-Aug-2009 03:45	56.3	58.0	53.7
28-Aug-2009 04:00	55.7	56.7	53.7
28-Aug-2009 04:15	55.3	56.4	53.7
28-Aug-2009 04:30	56.4	58.2	53.8
28-Aug-2009 04:45	56.7	58.5	54.0
28-Aug-2009 05:00	55.3	56.4	53.5
28-Aug-2009 05:15	55.0	56.0	53.3
28-Aug-2009 05:30	55.9	57.4	54.0
28-Aug-2009 05:45	55.8	57.0	54.2
28-Aug-2009 06:00	56.9	58.2	55.0
28-Aug-2009 06:15	60.3	61.4	58.8
28-Aug-2009 06:30	62.9	63.5	61.8
28-Aug-2009 06:45	62.8	63.2	61.8
28-Aug-2009 07:00	63.1	63.8	62.0
28-Aug-2009 07:30	63.3	63.8	62.3
28-Aug-2009 08:00	63.8	64.5	62.7
28-Aug-2009 08:30	64.6	65.5	63.3
28-Aug-2009 09:00	65.0	66.3	63.3
28-Aug-2009 09:30	64.4	65.6	62.9
28-Aug-2009 10:00	64.5	65.4	63.0
28-Aug-2009 10:30	64.9	65.9	63.4
28-Aug-2009 11:00	65.8	67.6	63.5
28-Aug-2009 11:30	64.3	65.4	62.8
28-Aug-2009 12:00	64.1	65.0	62.6
28-Aug-2009 12:30	64.2	65.2	62.7
28-Aug-2009 13:00	65.0	66.0	62.9
28-Aug-2009 13:30	65.8	67.4	63.3
28-Aug-2009 14:00	65.0	66.0	63.2
28-Aug-2009 14:30	64.5	65.7	62.6

Date and time	Leq	L10	L90
28-Aug-2009 15:00	62.5	64.0	60.0
28-Aug-2009 15:30	62.7	63.8	59.9
28-Aug-2009 16:00	61.4	62.8	58.8
28-Aug-2009 16:30	62.4	64.4	59.2
28-Aug-2009 17:00	61.0	62.4	58.8
28-Aug-2009 17:30	62.0	64.2	59.1
28-Aug-2009 18:00	61.6	63.3	59.1
28-Aug-2009 18:30	62.5	64.6	59.1
28-Aug-2009 19:00	60.5	62.1	58.2
28-Aug-2009 19:15	61.2	62.5	59.3
28-Aug-2009 19:30	59.7	60.7	58.0
28-Aug-2009 19:45	59.9	60.9	58.2
28-Aug-2009 20:00	60.2	61.2	58.2
28-Aug-2009 20:15	59.8	60.7	58.3
28-Aug-2009 20:30	61.1	62.5	58.2
28-Aug-2009 20:45	59.1	60.0	57.5
28-Aug-2009 21:00	59.0	60.0	57.5
28-Aug-2009 21:15	59.5	60.3	57.8
28-Aug-2009 21:30	59.1	60.2	57.7
28-Aug-2009 21:45	60.2	61.5	58.2
28-Aug-2009 22:00	58.8	60.2	57.2
28-Aug-2009 22:15	59.9	61.5	57.4
28-Aug-2009 22:30	59.9	61.1	57.2
28-Aug-2009 22:45	58.5	59.7	56.7
28-Aug-2009 23:00	58.3	59.3	56.8
28-Aug-2009 23:15	58.1	58.8	56.3
28-Aug-2009 23:30	58.1	59.4	56.2
28-Aug-2009 23:45	57.6	59.1	55.8
29-Aug-2009 00:00	57.6	58.5	55.8
29-Aug-2009 00:15	57.0	58.0	55.3
29-Aug-2009 00:30	56.5	57.7	55.2
29-Aug-2009 00:45	56.6	57.8	54.7
29-Aug-2009 01:00	56.2	57.2	54.7
29-Aug-2009 01:15	56.3	57.6	54.5
29-Aug-2009 01:30	57.3	59.8	54.3
29-Aug-2009 01:45	56.2	57.1	54.3
29-Aug-2009 02:00	55.8	57.2	54.5
29-Aug-2009 02:15	55.7	56.7	54.5
29-Aug-2009 02:30	55.4	56.2	54.5
29-Aug-2009 02:45	56.8	59.0	54.3

Date and time	Leq	L10	L90
29-Aug-2009 03:00	55.7	56.6	54.2
29-Aug-2009 03:15	55.4	56.4	54.0
29-Aug-2009 03:30	55.3	56.4	54.0
29-Aug-2009 03:45	54.9	55.7	53.8
29-Aug-2009 04:00	56.1	56.9	53.8
29-Aug-2009 04:15	56.9	59.0	54.0
29-Aug-2009 04:30	60.1	63.9	54.0
29-Aug-2009 04:45	54.9	55.7	53.5
29-Aug-2009 05:00	55.1	56.1	53.5
29-Aug-2009 05:15	55.3	56.3	53.7
29-Aug-2009 05:30	55.6	57.0	53.7
29-Aug-2009 05:45	56.9	58.2	54.7
29-Aug-2009 06:00	56.8	58.0	55.0
29-Aug-2009 06:15	60.3	61.6	59.0
29-Aug-2009 06:30	62.6	63.0	61.5
29-Aug-2009 06:45	62.8	63.5	62.0
29-Aug-2009 07:00	63.2	63.9	62.2
29-Aug-2009 07:30	63.3	64.0	62.3
29-Aug-2009 08:00	64.4	65.5	63.0
29-Aug-2009 08:30	64.6	65.8	63.0
29-Aug-2009 09:00	64.5	65.2	63.4
29-Aug-2009 09:30	64.6	65.8	63.1
29-Aug-2009 10:00	65.5	66.6	63.4
29-Aug-2009 10:30	65.0	66.5	63.4
29-Aug-2009 11:00	65.2	66.6	63.0
29-Aug-2009 11:30	64.8	65.8	62.9
29-Aug-2009 12:00	64.6	66.0	62.8
29-Aug-2009 12:30	63.9	65.2	62.4
29-Aug-2009 13:00	65.2	66.4	63.1
29-Aug-2009 13:30	64.9	66.4	63.1
29-Aug-2009 14:00	65.5	67.1	63.3
29-Aug-2009 14:30	65.3	66.7	63.1
29-Aug-2009 15:00	64.0	66.1	60.3
29-Aug-2009 15:30	62.0	63.8	59.4
29-Aug-2009 16:00	62.2	64.1	59.5
29-Aug-2009 16:30	65.3	67.7	59.9
29-Aug-2009 17:00	63.1	65.2	60.0
29-Aug-2009 17:30	61.5	63.0	59.5
29-Aug-2009 18:00	61.1	63.0	58.3
29-Aug-2009 18:30	60.6	62.4	58.0

Date and time	Leq	L10	L90
29-Aug-2009 19:00	60.3	62.3	57.5
29-Aug-2009 19:15	61.7	64.3	57.3
29-Aug-2009 19:30	61.2	62.8	57.8
29-Aug-2009 19:45	60.5	62.4	58.3
29-Aug-2009 20:00	64.0	67.2	58.3
29-Aug-2009 20:15	61.0	63.2	57.7
29-Aug-2009 20:30	62.1	64.0	57.5
29-Aug-2009 20:45	59.6	60.7	57.0
29-Aug-2009 21:00	59.4	61.1	56.8
29-Aug-2009 21:15	58.6	60.3	56.7
29-Aug-2009 21:30	59.1	60.1	56.9
29-Aug-2009 21:45	59.0	60.6	56.5
29-Aug-2009 22:00	59.5	61.5	56.8
29-Aug-2009 22:15	60.0	62.3	57.0
29-Aug-2009 22:30	58.6	60.0	56.3
29-Aug-2009 22:45	58.2	59.6	56.5
29-Aug-2009 23:00	57.4	58.7	56.0
29-Aug-2009 23:15	57.7	59.1	55.8
29-Aug-2009 23:30	57.7	59.2	55.5
29-Aug-2009 23:45	57.2	58.5	55.5
30-Aug-2009 00:00	56.7	58.2	54.8
30-Aug-2009 00:15	57.1	58.9	54.7
30-Aug-2009 00:30	56.0	57.4	54.5
30-Aug-2009 00:45	56.4	58.0	54.2
30-Aug-2009 01:00	56.9	57.6	54.2
30-Aug-2009 01:15	55.4	56.7	53.8
30-Aug-2009 01:30	55.2	56.5	53.7
30-Aug-2009 01:45	55.8	57.6	53.7
30-Aug-2009 02:00	56.8	59.2	53.8
30-Aug-2009 02:15	56.2	57.2	54.2
30-Aug-2009 02:30	55.0	56.0	53.5
30-Aug-2009 02:45	55.6	56.8	53.8
30-Aug-2009 03:00	55.8	57.2	53.7
30-Aug-2009 03:15	55.2	56.3	53.8
30-Aug-2009 03:30	55.5	56.7	53.7
30-Aug-2009 03:45	55.2	56.5	53.5
30-Aug-2009 04:00	55.5	56.8	53.8
30-Aug-2009 04:15	55.8	57.2	53.8
30-Aug-2009 04:30	55.4	56.7	53.5
30-Aug-2009 04:45	55.6	56.8	53.8

Date and time	Leq	L10	L90
30-Aug-2009 05:00	55.1	56.0	53.7
30-Aug-2009 05:15	57.7	56.8	53.8
30-Aug-2009 05:30	56.0	57.4	53.9
30-Aug-2009 05:45	58.0	60.4	54.7
30-Aug-2009 06:00	59.9	63.3	55.2
30-Aug-2009 06:15	60.7	62.4	58.9
30-Aug-2009 06:30	63.9	65.7	62.0
30-Aug-2009 06:45	63.0	64.1	62.0
30-Aug-2009 07:00	63.1	63.5	62.0
30-Aug-2009 07:15	62.8	63.6	61.7
30-Aug-2009 07:30	63.4	63.7	61.8
30-Aug-2009 07:45	63.4	64.0	62.2
30-Aug-2009 08:00	62.8	63.5	62.0
30-Aug-2009 08:15	62.7	63.2	61.8
30-Aug-2009 08:30	63.3	63.7	61.8
30-Aug-2009 08:45	62.9	63.5	62.0
30-Aug-2009 09:00	63.7	64.9	62.2
30-Aug-2009 09:15	63.4	64.2	62.2
30-Aug-2009 09:30	63.3	64.6	62.0
30-Aug-2009 09:45	64.1	66.0	62.2
30-Aug-2009 10:00	64.1	65.9	62.0
30-Aug-2009 10:15	63.8	64.8	62.0
30-Aug-2009 10:30	63.6	64.7	62.0
30-Aug-2009 10:45	65.3	68.7	62.3
30-Aug-2009 11:00	63.7	64.3	62.3
30-Aug-2009 11:15	63.0	63.3	62.0
30-Aug-2009 11:30	62.9	63.3	62.2
30-Aug-2009 11:45	63.1	63.7	62.0
30-Aug-2009 12:00	62.9	63.2	62.0
30-Aug-2009 12:15	63.3	64.2	62.0
30-Aug-2009 12:30	63.4	64.2	62.2
30-Aug-2009 12:45	63.4	64.2	62.0
30-Aug-2009 13:00	63.3	63.4	62.0
30-Aug-2009 13:15	64.5	65.1	62.7
30-Aug-2009 13:30	63.9	64.6	62.5
30-Aug-2009 13:45	63.2	64.0	62.0
30-Aug-2009 14:00	63.0	63.7	62.0
30-Aug-2009 14:15	62.9	63.6	61.7
30-Aug-2009 14:30	63.6	64.9	62.2
30-Aug-2009 14:45	62.4	64.0	59.7

Date and time	Leq	L10	L90
30-Aug-2009 15:00	61.1	62.3	57.3
30-Aug-2009 15:15	59.7	61.5	56.8
30-Aug-2009 15:30	60.6	62.6	57.0
30-Aug-2009 15:45	59.2	60.8	57.2
30-Aug-2009 16:00	59.7	61.8	56.7
30-Aug-2009 16:15	58.8	60.0	56.7
30-Aug-2009 16:30	61.7	64.7	57.0
30-Aug-2009 16:45	61.9	63.7	57.7
30-Aug-2009 17:00	60.1	60.7	57.2
30-Aug-2009 17:15	59.6	61.5	56.9
30-Aug-2009 17:30	61.2	64.0	58.0
30-Aug-2009 17:45	58.6	59.8	56.8
30-Aug-2009 18:00	60.6	63.5	57.2
30-Aug-2009 18:15	60.8	62.9	57.7
30-Aug-2009 18:30	60	62.9	57.7
30-Aug-2009 18:45	60	61.9	57.7
30-Aug-2009 19:00	66.5	61.9	57.7
30-Aug-2009 19:15	61.1	63	57.8
30-Aug-2009 19:30	60.4	62	57.2
30-Aug-2009 19:45	59.3	61	57.2
30-Aug-2009 20:00	59.3	60.2	57.3
30-Aug-2009 20:15	59.9	61.4	56.9
30-Aug-2009 20:30	59.3	60.7	57.2
30-Aug-2009 20:45	58.6	59.7	56.5
30-Aug-2009 21:00	59.1	60.9	56.7
30-Aug-2009 21:15	59.8	60	56.5
30-Aug-2009 21:30	59	60.4	57.4
30-Aug-2009 21:45	58.4	59.5	56.7
30-Aug-2009 22:00	58.5	60	56.5
30-Aug-2009 22:15	58.4	60.1	56.2
30-Aug-2009 22:30	59.7	61.9	56.3
30-Aug-2009 22:45	59.6	61.9	56.5
30-Aug-2009 23:00	57.3	58.5	55.8
30-Aug-2009 23:15	57.5	58.7	55.3
30-Aug-2009 23:30	57.3	58.7	55.3
30-Aug-2009 23:45	57.1	58	55.0
31-Aug-2009 00:00	57.0	58.4	54.8
31-Aug-2009 00:15	56.8	58.4	54.7
31-Aug-2009 00:30	58.2	61.0	54.7
31-Aug-2009 00:45	56.1	57.2	54.5

Date and time	Leq	L10	L90
31-Aug-2009 01:00	56.2	57.7	54.0
31-Aug-2009 01:15	55.2	56.7	53.8
31-Aug-2009 01:30	55.7	57.4	53.7
31-Aug-2009 01:45	58.6	62.5	54.2
31-Aug-2009 02:00	57.6	60.0	54.6
31-Aug-2009 02:15	55.7	57.1	53.5
31-Aug-2009 02:30	55.8	57.3	53.5
31-Aug-2009 02:45	56.0	57.1	53.5
31-Aug-2009 03:00	56.0	57.7	53.5
31-Aug-2009 03:15	56.0	57.9	53.5
31-Aug-2009 03:30	55.3	56.4	53.5
31-Aug-2009 03:45	54.5	55.4	53.3
31-Aug-2009 04:00	54.4	55.0	53.5
31-Aug-2009 04:15	54.7	55.8	53.5
31-Aug-2009 04:30	54.7	55.5	53.5
31-Aug-2009 04:45	54.8	55.4	53.5
31-Aug-2009 05:00	55.2	56.1	53.5
31-Aug-2009 05:15	55.1	56.1	53.7
31-Aug-2009 05:30	55.7	56.0	53.7
31-Aug-2009 05:45	56.2	57.7	54.5
31-Aug-2009 06:00	57.0	58.6	55.0
31-Aug-2009 06:15	60.3	61.2	59.1
31-Aug-2009 06:30	62.6	63.2	61.5
31-Aug-2009 06:45	62.9	63.5	62.0
31-Aug-2009 07:00	62.9	63.7	61.8
31-Aug-2009 07:30	63.4	63.9	62.1
31-Aug-2009 08:00	64.6	65.7	62.4
31-Aug-2009 08:30	64.0	65.1	62.5
31-Aug-2009 09:00	64.6	66.2	62.8
31-Aug-2009 09:30	64.7	66.5	62.6
31-Aug-2009 10:00	64.0	65.3	62.6
31-Aug-2009 10:30	64.2	65.2	62.5
31-Aug-2009 11:00	65.5	65.6	62.5
31-Aug-2009 11:30	64.0	65.1	62.5
31-Aug-2009 12:00	64.1	65.4	62.4
31-Aug-2009 12:30	63.8	64.8	62.4
31-Aug-2009 13:00	63.8	64.6	62.3
31-Aug-2009 13:30	64.1	64.7	62.8
31-Aug-2009 14:00	64.3	65.4	62.9
31-Aug-2009 14:30	63.5	64.4	61.7

Date and time	Leq	L10	L90
31-Aug-2009 15:00	62.6	64.7	59.3
31-Aug-2009 15:30	61.8	63.6	59.4
31-Aug-2009 16:00	64.7	66.6	61.0
31-Aug-2009 16:30	62.1	63.6	59.3
31-Aug-2009 17:00	61.6	63.2	59.2
31-Aug-2009 17:30	62.3	63.9	59.6
31-Aug-2009 18:00	61.5	62.9	59.3
31-Aug-2009 18:30	60.7	62.2	58.3
31-Aug-2009 19:00	61.0	61.7	58.5
31-Aug-2009 19:15	60.9	62.1	58.0
31-Aug-2009 19:30	63.1	65.3	58.4
31-Aug-2009 19:45	63.0	65.6	59.7
31-Aug-2009 20:00	60.5	61.7	58.8
31-Aug-2009 20:15	59.9	60.7	58.0
31-Aug-2009 20:30	62.3	63.5	58.0
31-Aug-2009 20:45	60.1	61.8	57.5
31-Aug-2009 21:00	63.1	64.2	61.0
31-Aug-2009 21:15	61.4	63.2	59.0
31-Aug-2009 21:30	60.8	63.5	57.5
31-Aug-2009 21:45	60.8	63.4	57.7
31-Aug-2009 22:00	60.2	62.9	57.2
31-Aug-2009 22:15	60.2	62.5	56.8
31-Aug-2009 22:30	58.9	60.5	56.7
31-Aug-2009 22:45	59.7	62.5	56.3
31-Aug-2009 23:00	59.8	62.5	56.3
31-Aug-2009 23:15	57.8	58.7	55.5
31-Aug-2009 23:30	61.2	64.9	55.7
31-Aug-2009 23:45	60.6	64.4	55.7

Appendix B

Supplementary Baseline Noise Monitoring Data (15 Jan 2010 to 1 Feb 2010)

Supplementary Baseline Noise Monitoring Result

Location: CN 30 Man Cheong Street Refuse Collection Point

Baseline monitoring period: 15/1/2010-1/2/2010

Parameter: Leq

Time Slot Averaged Baselines

1)Weekdays Daytime Noise Level, dB(A)

Time slot	Leq, 30 min	L10	L90
07:00-07:30	62.4	63.4	61.2
07:30-08:00	62.6	63.5	61.5
08:00-08:30	63.4	64.6	62.0
08:30-09:00	63.5	64.4	62.0
09:00-09:30	63.0	64.0	61.9
09:30-10:00	63.3	64.6	61.8
10:00-10:30	63.4	65.0	61.8
10:30-11:00	63.4	64.6	61.9
11:00-11:30	66.1	67.5	63.6
11:30-12:00	63.1	64.2	61.6
12:00-12:30	62.7	63.9	61.2
12:30-13:00	63.9	65.5	61.9
13:00-13:30	63.9	64.8	62.0
13:30-14:00	63.7	64.9	61.9
14:00-14:30	63.0	64.1	61.8
14:30-15:00	62.9	63.9	61.3
15:00-15:30	61.6	63.3	59.0
15:30-16:00	60.8	62.4	58.7
16:00-16:30	62.3	63.6	59.0
16:30-17:00	62.0	63.5	59.3
17:00-17:30	61.6	63.2	59.2
17:30-18:00	61.1	62.6	58.9
18:00-18:30	60.2	61.4	58.4
18:30-19:00	59.7	61.0	58.1
Average	62.9	64.1	61.1

2) Weekdays Evening Noise Level, dB(A)

Time Slot	Leq, 5min	L10	L90
19:00-19:15	60.2	62.2	58.0
	61.3	64.5	57.7
	59.5	61.0	57.7
19:15-19:30	59.4	60.7	57.6
	60.0	61.5	57.4
	59.7	61.4	57.6
19:30-19:45	60.1	62.2	57.7
	60.0	61.4	57.8
	60.5	62.3	57.5
19:45-20:00	60.7	62.9	57.5
	59.8	61.7	57.4
	59.6	60.8	57.2
20:00-20:15	59.4	61.1	57.2
	59.7	61.0	57.1
	59.6	61.1	57.2
20:15-20:30	59.2	60.8	57.0
	59.5	61.8	57.1
	58.9	60.3	56.9
20:30-20:45	58.6	60.0	56.7
	58.9	60.7	56.6
	58.3	59.7	56.4
20:45-21:00	58.8	60.5	56.5
	58.5	59.7	56.4
	59.7	62.4	56.9
21:00-21:15	58.4	59.7	56.8
	60.0	62.6	57.1
	59.6	61.7	57.2
21:15-21:30	59.3	60.8	57.2
	59.2	60.9	57.1
	59.8	61.5	56.9
21:30-21:45	60.3	62.8	56.5
	60.2	61.8	57.1
	60.5	62.4	57.0
21:45-22:00	59.5	61.5	56.8

Time Slot	Leq, 5min	L10	L90
	58.3	59.8	56.3
	58.8	60.2	56.3
22:00-22:15	59.2	60.9	56.7
	58.8	60.2	56.5
	58.9	60.5	56.3
22:15-22:30	58.8	60.7	56.1
	58.2	59.6	56.4
	58.3	59.8	56.4
22:30-22:45	58.8	60.5	56.4
	58.2	59.9	56.2
	58.5	60.5	56.0
22:45-23:00	58.1	59.4	56.3
	58.0	59.4	56.3
	58.4	59.6	56.2
Average	59.4	61.2	56.9

3) General Holidays (including Sundays) (0700-2300) Noise Level, dB(A)

Time Slot	Leq, 5min	L10	L90
0700-07:15	61.4	62.6	60.3
	62.4	65.0	60.3
	61.2	62.0	60.3
07:15-07:30	61.9	62.4	60.7
	61.4	62.2	60.7
	61.2	62.0	60.4
07:30-07:45	61.3	62.2	60.6
	61.6	62.3	60.8
	62.4	62.8	60.7
07:45-08:00	61.6	62.5	60.6
	61.5	62.3	60.5
	62.4	62.4	60.8
08:00-08:15	62.9	63.3	61.0
	64.1	64.5	61.2
	62.4	63.6	61.0
08:15-08:30	63.3	65.0	61.1

Time Slot	Leq, 5min	L10	L90
	63.2	65.5	61.1
	62.4	64.0	60.8
08:30-08:45	62.2	62.8	60.8
	62.9	64.8	60.9
	62.3	63.6	61.1
08:45-09:00	62.1	63.4	60.7
	61.7	62.5	60.8
	61.7	62.5	60.7
09:00-09:15	61.4	62.1	60.7
	62.1	63.1	60.9
	61.6	62.5	60.8
09:15-09:30	61.6	62.3	60.6
	62.1	63.6	60.7
	61.9	62.8	60.8
09:30-09:45	62.2	63.4	61.1
	63.2	65.4	60.7
	62.5	64.6	60.6
09:45-10:00	63.0	65.9	60.6
	62.5	63.4	60.5
	62.9	64.8	60.7
10:00-10:15	62.7	64.0	60.5
	61.6	62.4	60.5
	62.1	62.9	60.6
10:15-10:30	62.0	62.9	60.4
	61.4	62.1	60.3
	61.9	62.7	60.6
10:30-10:45	61.4	62.0	60.6
	61.3	62.0	60.6
	62.2	63.7	60.8
10:45-11:00	61.6	62.4	60.8
	61.8	63.1	60.7
	63.3	64.0	61.2
11:00-11:15	63.5	63.8	61.2
	62.6	63.8	61.0
	65.5	67.3	63.1
11:15-11:30	67.0	67.2	62.2

Time Slot	Leq, 5min	L10	L90
	65.3	66.1	62.3
	63.8	66.5	61.1
11:30-11:45	62.0	62.7	60.9
	62.9	64.6	60.9
	62.2	63.2	61.2
11:45-12:00	62.2	63.3	61.0
	62.5	63.7	61.1
	63.1	64.0	61.1
12:00-12:15	61.9	62.7	60.9
	61.8	62.4	60.9
	61.6	62.4	60.9
12:15-12:30	61.5	62.3	60.7
	61.8	62.9	60.7
	61.4	62.2	60.5
12:30-12:45	65.6	69.4	62.7
	63.3	67.0	60.7
	62.7	64.0	61.2
12:45-13:00	62.0	62.7	61.0
	62.5	63.3	61.0
	63.3	64.3	61.6
13:00-13:15	62.9	64.0	61.3
	63.3	64.9	61.4
	63.2	64.3	61.4
13:15-13:30	62.6	63.8	61.3
	62.9	64.0	61.3
	62.4	63.4	61.2
13:30-13:45	63.0	63.7	61.6
	63.8	65.1	61.8
	62.7	63.7	61.5
13:45-14:00	62.4	63.2	61.1
	62.2	63.2	61.2
	62.7	63.5	61.3
14:00-14:15	63.0	64.2	61.1
	62.5	63.9	60.9
	62.4	63.4	60.9
14:15-14:30	62.3	63.4	60.9

Time Slot	Leq, 5min	L10	L90
	61.8	62.5	61.0
	62.8	63.8	61.3
14:30-14:45	62.4	63.2	61.3
	62.5	63.6	61.3
	62.2	63.0	61.3
14:45-15:00	62.3	63.2	61.2
	63.4	65.8	59.9
	59.2	61.4	57.0
15:00-15:15	58.7	60.0	57.1
	60.3	63.1	57.1
	59.0	60.2	57.3
15:15-15:30	59.6	60.9	57.8
	59.1	59.6	56.8
	58.9	60.3	57.5
15:30-15:45	59.1	60.6	57.3
	59.2	60.4	57.0
	59.1	60.7	57.1
15:45-16:00	60.3	61.9	57.3
	59.6	61.5	57.4
	59.8	61.5	57.7
16:00-16:15	59.3	61.1	57.6
	59.8	61.3	57.7
	58.7	59.9	57.2
16:15-16:30	59.7	60.9	57.8
	60.7	61.1	57.6
	64.8	65.0	58.2
16:30-16:45	59.4	60.7	57.9
	59.5	60.6	58.1
	59.9	60.9	57.7
16:45-17:00	60.4	61.6	58.3
	59.9	61.4	58.2
	60.0	61.5	58.2
17:00-17:15	60.1	61.4	58.5
	59.7	61.2	57.9
	59.8	61.4	58.1
17:15-17:30	59.2	60.6	57.8

Time Slot	Leq, 5min	L10	L90
	59.7	61.0	57.8
	59.2	60.6	57.7
17:30-17:45	62.0	64.0	57.8
	59.2	60.5	57.2
	60.3	62.0	57.7
17:45-18:00	59.6	60.0	57.7
	59.6	60.1	57.3
	59.0	60.1	57.5
18:00-18:15	58.9	60.1	57.3
	58.8	60.0	56.8
	59.1	60.2	57.0
18:15-18:30	58.6	60.0	57.0
	58.8	59.9	57.2
	58.8	60.1	57.0
18:30-18:45	60.0	61.8	57.5
	59.9	61.8	57.5
	59.3	61.0	57.2
18:45-19:00	62.3	60.8	57.3
	58.9	60.3	57.5
	59.7	61.0	58.0
19:00-19:15	59.3	60.3	58.0
	59.4	60.6	58.0
	59.5	60.9	57.3
19:15-19:30	59.9	62.1	57.4
	59.1	60.4	57.2
	60.2	62.4	57.6
19:30-19:45	62.0	63.3	57.4
	59.7	61.7	56.7
	60.1	63.0	57.5
19:45-20:00	60.7	64.1	57.2
	58.6	60.1	56.7
	58.1	59.5	56.3
20:00-20:15	58.3	59.6	56.6
	60.0	63.3	56.6
	59.2	60.9	57.3
20:15-20:30	58.5	60.3	56.7

Time Slot	Leq, 5min	L10	L90
	59.3	60.6	57.0
	59.7	62.0	57.0
20:30-20:45	59.1	61.3	56.5
	58.6	59.9	57.0
	59.4	60.7	56.6
20:45-21:00	57.9	59.1	56.0
	58.0	59.7	55.7
	60.2	62.7	56.6
21:00-21:15	58.4	59.9	56.6
	57.6	58.7	56.3
	62.2	65.3	56.2
21:15-21:30	59.6	61.0	57.6
	60.9	62.4	57.6
	59.2	60.4	57.9
21:30-21:45	60.0	62.2	56.9
	59.4	60.6	56.3
	59.1	61.3	56.4
21:45-22:00	62.3	65.5	56.6
	59.4	60.4	56.7
	59.2	61.3	56.9
22:00-22:15	59.2	61.0	57.2
	59.8	62.2	57.1
	59.4	61.5	57.2
22:15-22:30	58.6	60.0	56.8
	58.9	60.4	56.9
	60.3	61.7	56.8
22:30-22:45	58.6	59.8	56.9
	58.9	60.3	56.1
	57.6	58.9	55.9
22:45-23:00	57.8	59.0	56.3
	58.1	59.6	56.1
	60.6	61.0	56.0
Average	61.4	62.7	59.5

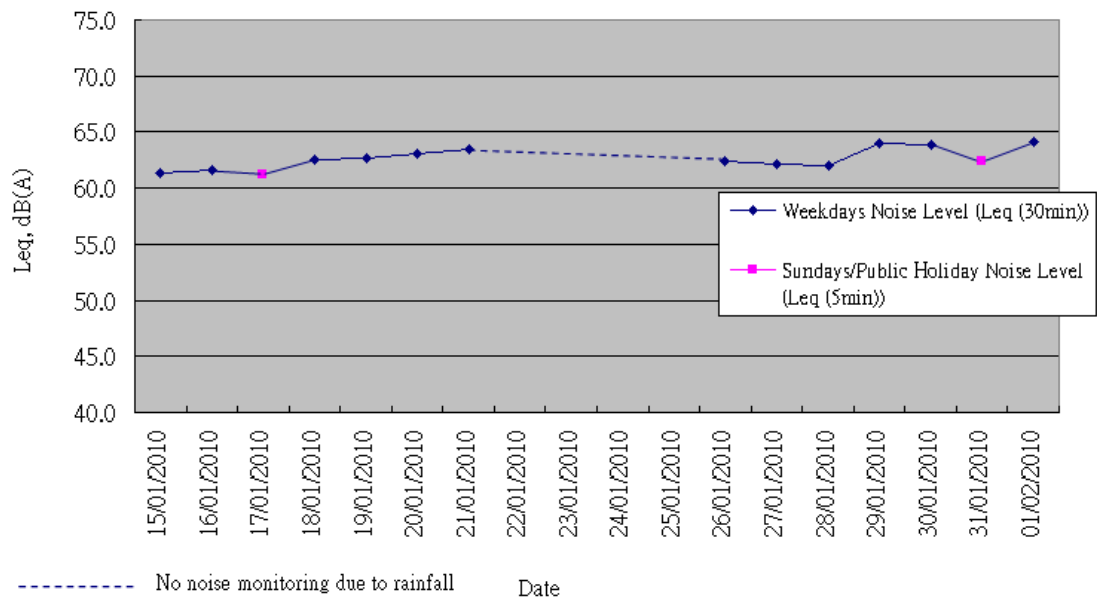
4) Night-time (for all days) Noise Level, dB(A)

Time Slot	Leq, 5min	L10	L90
23:00-23:15	57.8	59.1	56.0
	57.8	59.1	56.0
	58.2	59.6	56.0
23:15-23:30	57.6	58.9	55.7
	57.5	58.8	55.8
	57.6	59.1	55.7
23:30-23:45	56.9	58.4	54.9
	56.8	58.3	54.7
	56.7	58.3	54.7
23:45-00:00	56.3	57.9	54.4
	56.5	58.1	54.5
	56.5	57.9	54.6
00:00-00:15	56.7	58.2	54.8
	56.4	58.0	54.1
	56.2	57.8	53.8
00:15-00:30	55.8	57.3	53.9
	55.8	57.4	53.7
	55.4	57.0	53.3
00:30-00:45	55.0	56.7	52.9
	55.1	56.8	52.7
	55.0	56.7	52.7
00:45:01:00	54.7	56.3	52.3
	54.6	56.6	52.0
	54.4	56.3	51.9
01:00-01:15	53.7	55.6	51.3
	54.0	55.5	51.7
	53.9	55.8	51.5
01:15-01:30	54.2	55.8	51.2
	53.8	56.1	51.1
	53.3	55.1	51.0
01:30-01:45	53.1	54.8	50.6
	52.8	54.5	50.2
	52.7	54.4	50.2
01:45-02:00	53.7	55.1	50.3

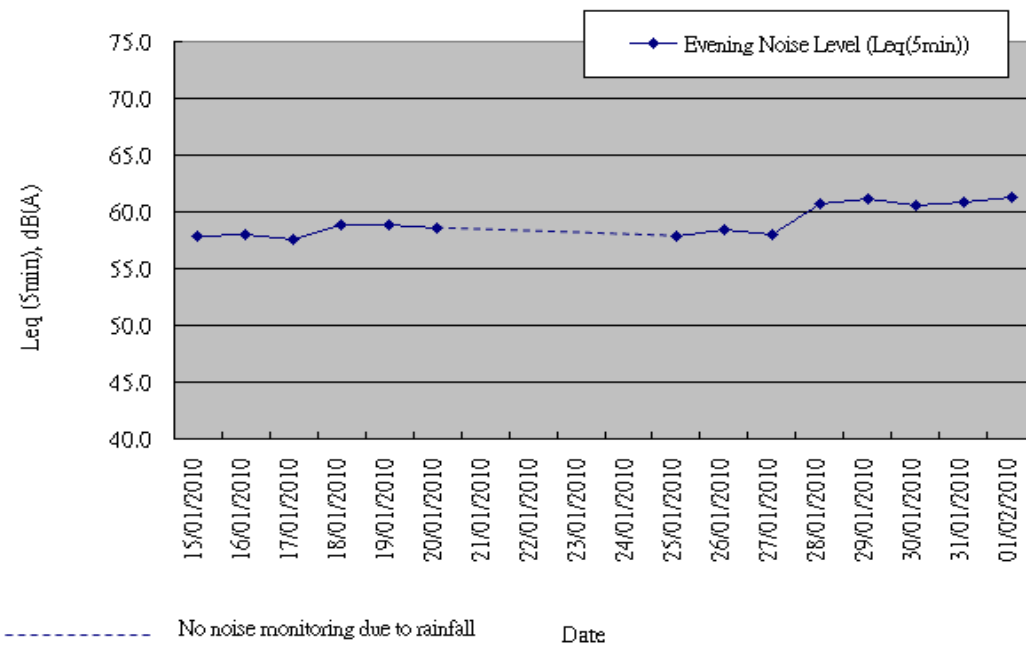
Time Slot	Leq, 5min	L10	L90
	52.8	54.8	50.2
	52.5	54.5	50.0
02:00-02:15	52.3	54.0	50.1
	52.3	53.7	49.6
	52.6	54.3	49.7
02:15-02:30	52.2	53.9	49.7
	51.9	53.6	49.5
	52.1	53.8	49.6
02:30-02:45	52.2	54.1	49.6
	51.9	53.9	49.3
	52.0	53.8	49.4
02:45-03:00	51.5	53.5	48.9
	51.6	53.3	48.9
	51.7	53.5	49.0
03:00-03:15	51.6	53.3	48.8
	51.7	53.3	48.8
	51.4	53.4	48.7
03:15-03:30	51.5	53.5	48.8
	51.3	53.2	48.7
	51.4	53.4	48.9
03:30-03:45	51.5	53.3	48.9
	51.5	53.5	48.6
	52.1	54.2	49.0
03:45-04:00	51.7	53.9	48.7
	51.4	53.3	48.7
	51.4	53.5	48.6
04:00-04:15	51.2	53.3	48.5
	51.4	53.4	48.8
	51.5	53.4	48.8
04:15-04:30	51.1	52.7	48.6
	51.5	53.3	48.6
	51.8	53.9	48.9
04:30-04:45	51.4	53.5	48.7
	51.5	53.4	49.0
	51.5	53.5	48.7
04:45-05:00	51.7	53.6	48.8

Time Slot	Leq, 5min	L10	L90
	51.4	53.2	49.2
	51.7	53.5	49.2
05:00-05:15	51.5	53.4	48.7
	51.9	54.0	49.1
	52.6	54.5	50.0
05:15-05:30	52.9	54.8	50.5
	52.8	54.6	50.3
	52.8	54.6	50.1
05:30-05:45	52.0	53.8	49.7
	52.6	54.6	50.1
	52.4	54.1	50.2
05:45-06:00	55.0	55.0	50.6
	53.3	55.1	50.8
	54.2	55.4	51.0
06:00-06:15	57.0	58.8	52.9
	59.6	62.4	53.9
	60.5	64.0	54.9
06:15-06:30	59.1	61.1	55.6
	58.8	60.3	55.9
	61.8	62.8	59.4
06:30-06:45	62.0	62.8	60.6
	62.1	62.8	60.5
	63.0	63.3	60.7
06:45-07:00	62.8	63.6	60.9
	62.8	63.4	60.9
	62.7	63.9	60.9
Average	55.9	57.4	53.5

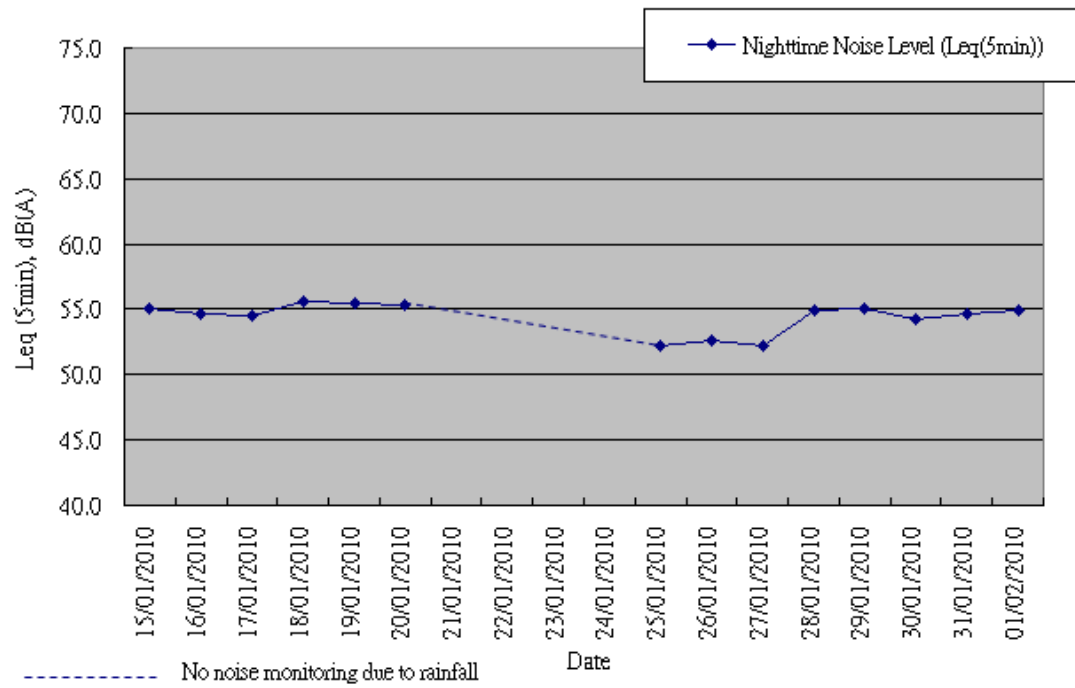
Average Leq at CN30 during Daytime (0700-1900)



Average Leq(5min) at CN30 during Evening (1900-2300) for all days

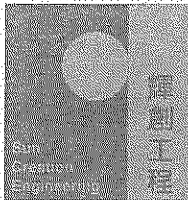


Average Leq(5min) at CN30 during Nighttime (2300-0700) for all days



Appendix C

Calibration Certificates for Monitoring Equipments



輝創工程有限公司

Sun Creation Engineering Limited Calibration and Testing Laboratory

Certificate No. : C093598

Certificate of Calibration

This is to certify that the equipment

Description : Sound Level Calibrator

Manufacturer : Rion

Model No. : NC-73

Serial No. : 10786708

*has been calibrated for the specific items and ranges.
The results are shown in the Calibration Report No. C093598.*

The equipment is supplied by

Co. Name : Envirotech Services Co.

*Address : Shop 6, G/F., Casio Mansion, 209 Shaaukeiwan Road,
Hong Kong*

Send to: Winnie RO		Ref:
Received by:	Date:	
Action taken:		
By:	Date:	Action:

Date Received by ERM
IC-370
Login Ref

Date of Issue : 10 July 2009

Certified by : H C Chan

The test equipment used for calibration are traceable to the National Standards as specified in this report.
This report shall not be reproduced except in full and with prior written approval from this laboratory.

Calibration and Testing Laboratory of Sun Creation Engineering Limited

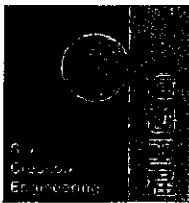
c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

Tel: 2927 2606

Fax: 2744 8986

E-mail: callab@suncreation.com

Website: www.suncreation.com



輝創工程有限公司

Sun Creation Engineering Limited Calibration and Testing Laboratory

Report No. : C093598

Calibration Report

ITEM TESTED

DESCRIPTION : Sound Level Calibrator
MANUFACTURER : Rion
MODEL NO. : NC-73
SERIAL NO. : 10786708

TEST CONDITIONS

AMBIENT TEMPERATURE : $(23 \pm 2)^{\circ}\text{C}$
LINE VOLTAGE : ---

RELATIVE HUMIDITY : $(55 \pm 20)\%$

TEST SPECIFICATIONS

Calibration check

DATE OF TEST : 9 July 2009

JOB NO. : IC09-1664

TEST RESULTS

The results apply to the particular unit-under-test only.
All results are within manufacturer's specification.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Rohde & Schwarz Laboratory, Germany
- Fluke Everett Service Center, USA
- Agilent Technologies, USA

Tested by :

K/C Lee

Date : 10 July 2009

The test equipment used for calibration are traceable to the National Standards as specified in this report.
This report shall not be reproduced except in full and with prior written approval from this laboratory.

Calibration and Testing Laboratory of Sun Creation Engineering Limited

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

Tel: 2927 2606

Fax: 2744 8986

E-mail: callab@suncreation.com

Website: www.suncreation.com

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Calibration Report

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours before the commencement of the test.
2. The results presented are the mean of 3 measurements at each calibration point.
3. Test equipment :

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
TST150A	Measuring Amplifier	C080751
CL129	Universal Counter	C093121
CL281	Multifunction Acoustic Calibrator	DC090052

4. Test procedure : MA100N.

5. Results :

5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Spec. (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	93.9	± 0.5	± 0.2

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (Hz)	Mfr's Spec. (Hz)	Uncertainty of Measured Value (Hz)
1	0.991 6	1 kHz $\pm 2\%$	± 0.1

Remark : - The uncertainties are for a confidence probability of not less than 95 %.

Note :

The values given in this Calibration Report only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.



輝創工程有限公司

Sun Creation Engineering Limited Calibration and Testing Laboratory

Certificate No. : C093473

Certificate of Calibration

This is to certify that the equipment

Description : Precision Integrating Sound Level Meter

Manufacturer : Rion

Model No. : NL-18

Serial No. : 00360030

*has been calibrated for the specific items and ranges.
The results are shown in the Calibration Report No. C093473.*

The equipment is supplied by

Co. Name : Envirotech Services Co.

*Address : Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,
Hong Kong*

Date of Issue : 6 July 2009

Certified by : 
H C Chan

The test equipment used for calibration are traceable to the National Standards as specified in this report.
This report shall not be reproduced except in full and with prior written approval from this laboratory.

Calibration and Testing Laboratory of Sun Creation Engineering Limited

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

Tel: 2927 2606

Fax: 2744 8986

E-mail: callab@suncreation.com

Website: www.suncreation.com



輝創工程有限公司

Sun Creation Engineering Limited Calibration and Testing Laboratory

Report No. : C093473

Calibration Report

ITEM TESTED

DESCRIPTION : Precision Integrating Sound Level Meter
MANUFACTURER : Rion
MODEL NO. : NL-18
SERIAL NO. : 00360030

TEST CONDITIONS

AMBIENT TEMPERATURE : $(23 \pm 2)^{\circ}\text{C}$ RELATIVE HUMIDITY : $(55 \pm 20)\%$
LINE VOLTAGE : ---

TEST SPECIFICATIONS

Calibration check

DATE OF TEST : 3 July 2009

JOB NO. : IC09-1664

TEST RESULTS

The results apply to the particular unit-under-test only.
All results are within manufacturer's specification.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Rohde & Schwarz Laboratory, Germany
- Fluke Everett Service Center, USA
- Agilent Technologies, USA

Tested by :

K/C Lee

Date : 6 July 2009

The test equipment used for calibration are traceable to the National Standards as specified in this report.
This report shall not be reproduced except in full and with prior written approval from this laboratory.

Calibration and Testing Laboratory of Sun Creation Engineering Limited

c/o 4/F. Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

Tel: 2927 2606

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E-mail: callab@suncreation.com

Website: www.suncreation.com

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Calibration Report

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
2. Self-calibration using the internal standard (After Adjustment) was performed before the test 6.1.2 - 6.4.
3. The results presented are the mean of 3 measurements at each calibration point.
4. Test equipment :

Equipment ID	Description	Certificate No.
CL280	40 MHz Arbitrary Waveform Generator	C090024
CL281	Multifunction Acoustic Calibrator	DC090052

5. Test procedure : MA101N.

6. Results :

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading (dB)		IEC 651 Type 1 Spec. (dB)
Range (dB)	Mode	Weight	Response	Level (dB)	Freq. (kHz)	Before Adjustment	After Adjustment	
50 - 110	LA	A	Fast	94.00	1	93.3	94.1	± 0.7

6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Mode	Weight	Response	Level (dB)	Freq. (kHz)	
60 - 120	LA	A	Fast	94.00	1	94.2 (Ref.)
				104.00		104.2
				114.00		114.2

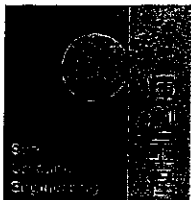
IEC 651 Type 1 Spec. : ± 0.4 dB per 10 dB step and ± 0.7 dB for overall different.

6.2 Time Weighting

6.2.1 Continuous Signal

UUT Setting				Applied Value		UUT Reading (dB)	IEC 651 Type 1 Spec. (dB)
Range (dB)	Mode	Weight	Response	Level (dB)	Freq. (kHz)		
50 - 110	LA	A	Fast	94.00	1	94.1	Ref.
			Slow			94.0	± 0.1

The test equipment used for calibration are traceable to the National Standards as specified in this report.
This report shall not be reproduced except in full and with prior written approval from this laboratory.



Calibration Report

6.2.2 Tone Burst Signal (2 kHz)

UUT Setting				Applied Value		UUT	IEC 651 Type 1
Range (dB)	Mode	Weight	Response	Level (dB)	Burst Duration	Reading (dB)	Spec. (dB)
50 -110	LA	A	Fast	106.00	Continuous	106.0	Ref.
	LAmx				200 ms	105.0	-1.0 ± 1.0
	LA	Slow			Continuous	106.0	Ref.
	LAmx				500 ms	102.4	-4.1 ± 1.0

6.3 Frequency Weighting

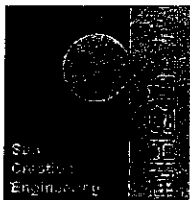
6.3.1 A-Weighting

UUT Setting				Applied Value		UUT	IEC 651 Type 1
Range (dB)	Mode	Weight	Response	Level (dB)	Freq.	Reading (dB)	Spec. (dB)
40 - 100	LA	A	Fast	94.00	31.5 Hz	54.7	-39.4 ± 1.5
					63 Hz	68.0	-26.2 ± 1.5
					125 Hz	78.0	-16.1 ± 1.0
					250 Hz	85.4	-8.6 ± 1.0
					500 Hz	90.8	-3.2 ± 1.0
					1 kHz	94.1	Ref.
					2 kHz	95.3	+1.2 ± 1.0
					4 kHz	94.9	+1.0 ± 1.0
					8 kHz	91.7	-1.1 (+1.5 ; -3.0)

6.3.2 C-Weighting

UUT Setting				Applied Value		UUT	IEC 651 Type 1
Range (dB)	Mode	Weight	Response	Level (dB)	Freq.	Reading (dB)	Spec. (dB)
40 - 100	LC	C	Fast	94.00	31.5 Hz	91.4	-3.0 ± 1.5
					63 Hz	93.6	-0.8 ± 1.5
					125 Hz	94.1	-0.2 ± 1.0
					250 Hz	94.2	0.0 ± 1.0
					500 Hz	94.2	0.0 ± 1.0
					1 kHz	94.1	Ref.
					2 kHz	93.9	-0.2 ± 1.0
					4 kHz	93.1	-0.8 ± 1.0
					8 kHz	89.8	-3.0 (+1.5 ; -3.0)

The test equipment used for calibration are traceable to the National Standards as specified in this report.
This report shall not be reproduced except in full and with prior written approval from this laboratory.



Calibration Report

6.4 Time Averaging

UUT Setting				Applied Value					UUT	IEC 60804
Range (dB)	Mode	Freq. Weight	Integrating Time	Freq. (kHz)	Burst Duration (ms)	Burst Duty Factor	Burst Level (dB)	Equivalent Level (dB)	Reading (dB)	Type 1 Spec. (dB)
50 - 110	LAeq	A	10 sec.	4	1	1/10	110.0	100	100.2	± 0.5
			1/10 ²			90		90.2	± 0.5	
			60 sec.			1/10 ³		80	79.8	± 1.0
			5 min.			1/10 ⁴		70	70.2	± 1.0

Remarks : - Mfr's Spec. : IEC 651 Type 1 & IEC 60804 Type 1

- Uncertainties of Applied Value : 94 dB : 31.5Hz - 125 Hz : ± 0.35 dB
250 Hz - 500 Hz : ± 0.30 dB
1 kHz : ± 0.20 dB
2 kHz - 4 kHz : ± 0.35 dB
8 kHz : ± 0.45 dB
104 dB : 1 kHz : ± 0.10 dB (Ref. 94 dB)
114 dB : 1 kHz : ± 0.10 dB (Ref. 94 dB)
Burst equivalent level : ± 0.2 dB (Ref. 110 dB continuous sound level)

- The uncertainties are for a confidence probability of not less than 95 %.

Note :

The values given in this Calibration Report only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

Appendix D

Figures

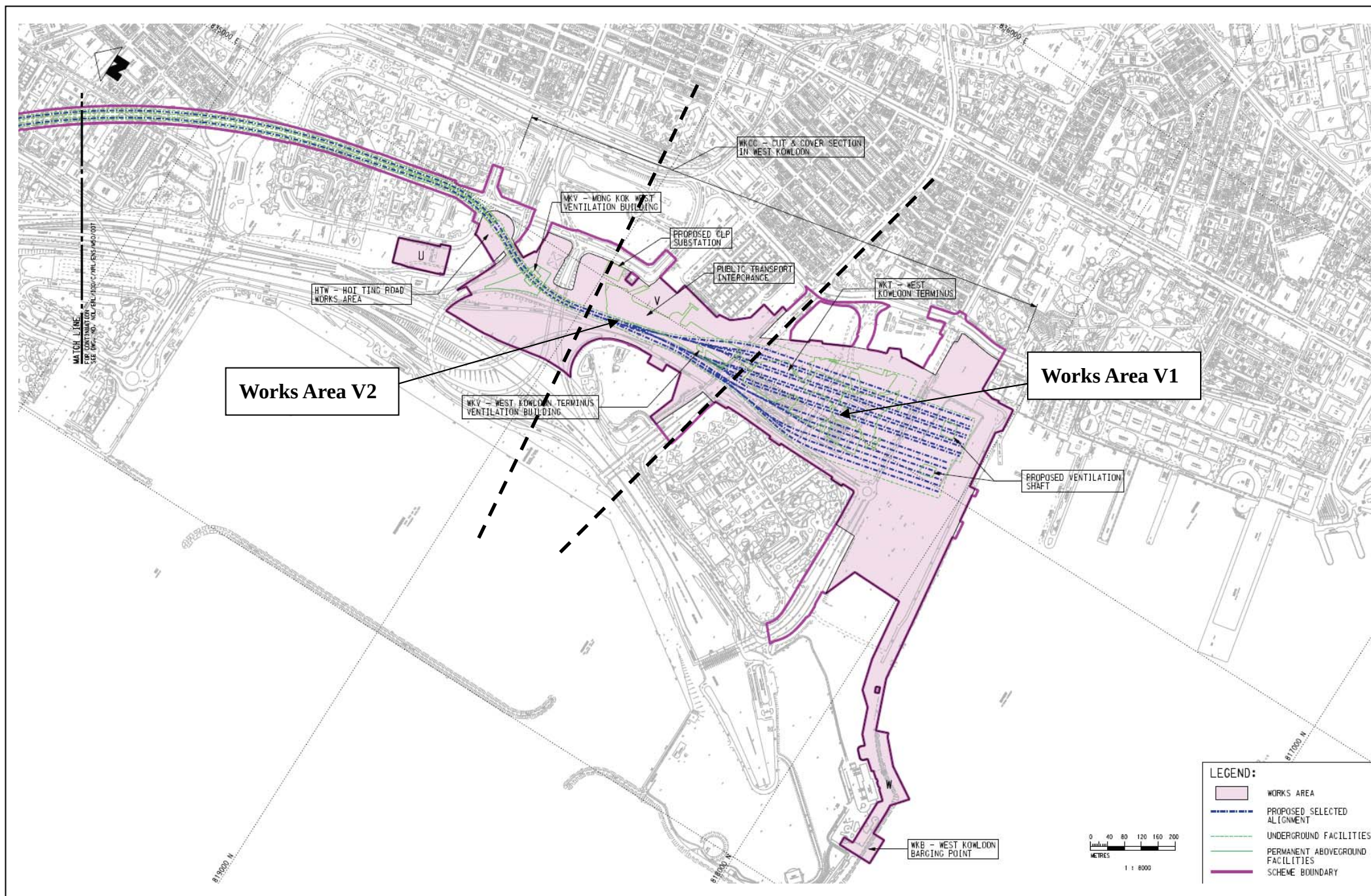


Figure 1 – Works Area

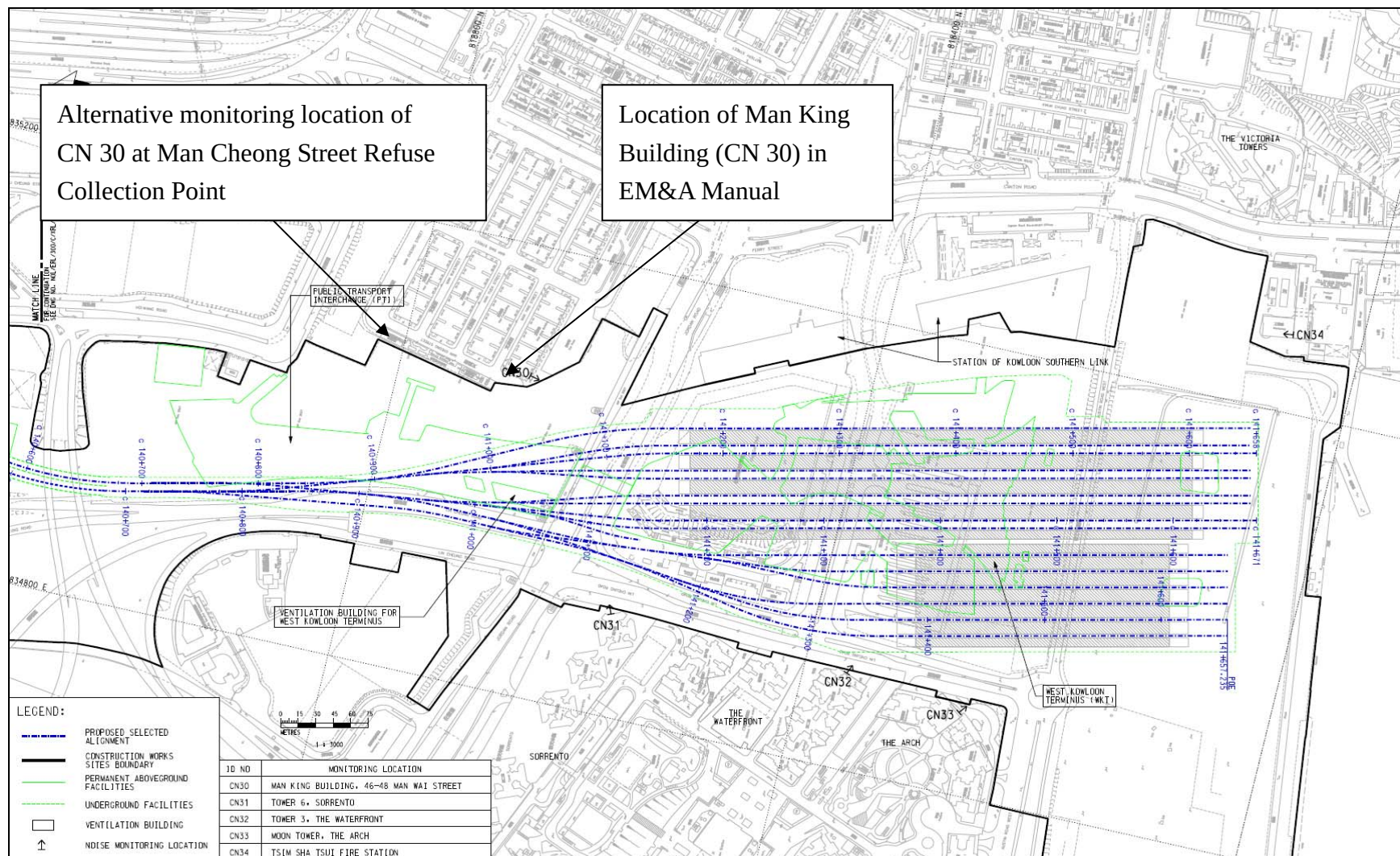


Figure 2 – Alternative Monitoring Location