





AIRBORNE SOUND TRANSMISSION LOSS
SOUND CONTROL PTY LTD
SCL200-3A ACOUSTIC LOUVRE

REPORT NUMBER: 4725-1

PREPARED FOR: Sound Control Pty Ltd
61 Links Avenue North
Eagle Farm QLD 4009

Attention: Mr Rajeev Nand
Telephone: 07 3268 4588

DATE ISSUED: 14 November 2011

Report Status	Prepared by: Alex Li	Approved by: Stephen Gauld
Final		

Document R\4725-r1, 10 pages plus attachments

Client:

Sound Control Pty Ltd

Test Specimen:

SCL200-3A

Galvabond Steel with 75 mm glasswool insulation

Frequency - Hz	Sound Reduction Index - dB	
	1/3 Octave	1/1 Octave
100	6.0	5.9
125	6.2	
160	5.5	
200	5.6	6.7
250	6.6	
315	8.4	
400	8.9	10.9
500	11.3	
630	13.6	
800	16.7	19.1
1000	20.1	
1250	22.6	
1600	22.3	21.6
2000	21.0	
2500	21.6	
3150	20.9	18.9
4000	19.3	
5000	17.2	
R _w (C;C _{tr})	17 (-1 ; -4)	

Australian Standards:

Measured according to AS 1191-2002

Rated to AS/NZS ISO 717.1:2004

Test Specimen Dimensions:

1.2 m (H) x 1.8 m (W)

Test Location:

Twin Reverberation Rooms

National Acoustic Laboratories

126 Greville Street, Chatswood NSW

Instrumentation:

Brüel and Kjær Pulse Analyser type 3560C

Brüel and Kjær Cathode Follower type 2660

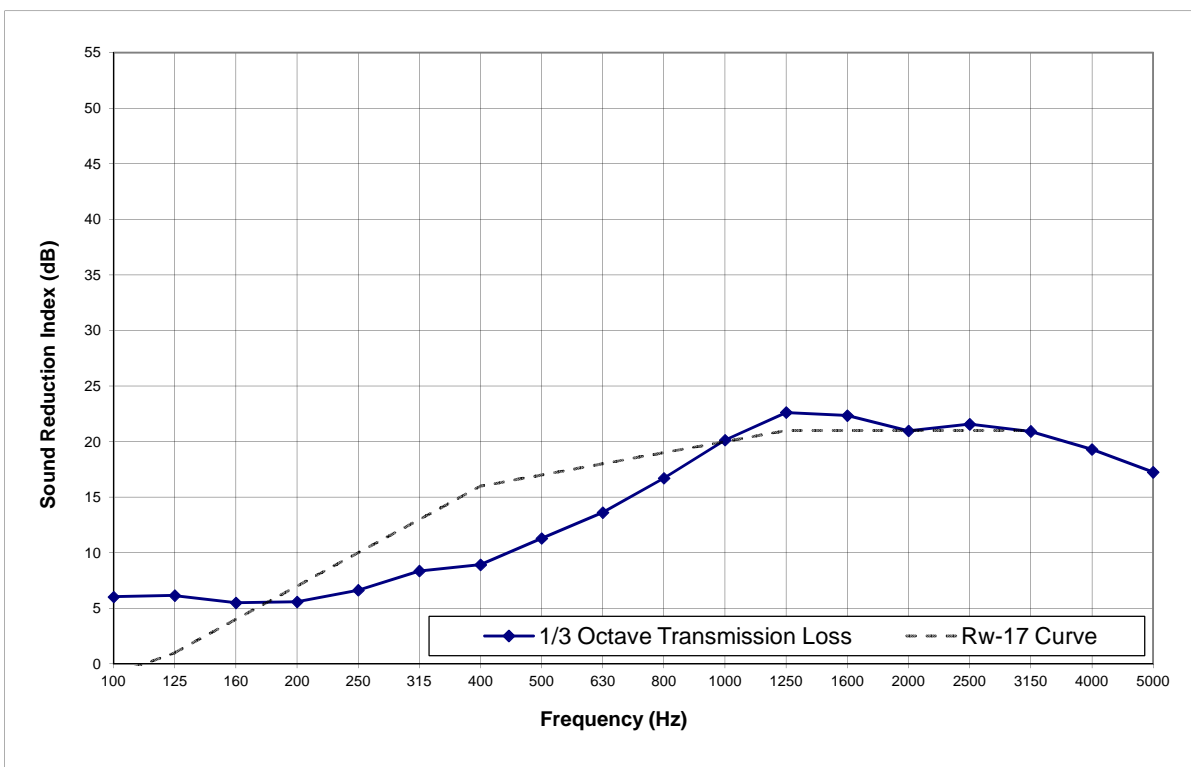
Brüel and Kjær Cathode Follower type 2669

Brüel and Kjær Microphone type 4144 (x2)

Brüel and Kjær Microphone Power Supply type 2804

Brüel and Kjær Sound Level Calibrator type 4231

Yamaha Professional Sound Sources type S500



Date of Test: Monday, 31 October 2011
Project Number: 4725-1

Test Engineer: Alex Li, BE(Mech) Hons
For and on behalf of Day Design Pty Ltd

DAY DESIGN PTY LTD

A.B.N. 73 107 291 494

CONSULTING ACOUSTICAL ENGINEERS



Suite 17, 808 Forest Road
Peakhurst Sydney NSW 2210
Phone: (02) 9584 2639 Fax: (02) 9584 2619
Email: acoustics@daydesign.com.au
www.daydesign.com.au

AIRBORNE SOUND TRANSMISSION LOSS

SOUND CONTROL PTY LTD

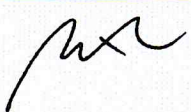
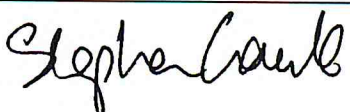
SCL200-4A ACOUSTIC LOUVRE

REPORT NUMBER: 4725-9

PREPARED FOR: Sound Control Pty Ltd
61 Links Avenue North
Eagle Farm QLD 4009

Attention: Mr Rajeev Nand
Telephone: (07) 3268 4588

DATE ISSUED: 22 March 2012

Report Status	Prepared by: Alex Li	Approved by: Stephen Gauld
Final		

Document R\4725-r9.doc, 11 pages plus attachments



- AIRCRAFT, ROAD TRAFFIC AND TRAIN NOISE CONTROL
- ARCHITECTURAL ACOUSTICS • INDUSTRIAL NOISE AND VIBRATION CONTROL
- ENVIRONMENTAL NOISE IMPACT INVESTIGATION AND CONTROL
- OCCUPATIONAL NOISE INVESTIGATIONS • QUIET PRODUCT DEVELOPMENT



Client:
Sound Control Pty Ltd

Test Specimen:

SCL200-4A

Sonata A-Series

Frequency - Hz	Sound Reduction Index - dB	
	1/3 Octave	1/1 Octave
100	6	5
125	5	
160	5	
200	5	6
250	6	
315	7	
400	8	9
500	10	
630	12	
800	14	16
1000	17	
1250	18	
1600	18	17
2000	17	
2500	17	
3150	16	14
4000	14	
5000	13	
R _w (C;C _{tr})	14 (0 ; -2)	

Australian Standards:

Measured according to AS 1191-2002

Rated to AS/NZS ISO 717.1:2004

Test Specimen Dimensions:

1.2 m (H) x 1.8 m (W)

Test Location:

Twin Reverberation Rooms

National Acoustic Laboratories

126 Greville Street, Chatswood NSW

Instrumentation:

Brüel and Kjær Pulse Analyser type 3560C

Brüel and Kjær Cathode Follower type 2660

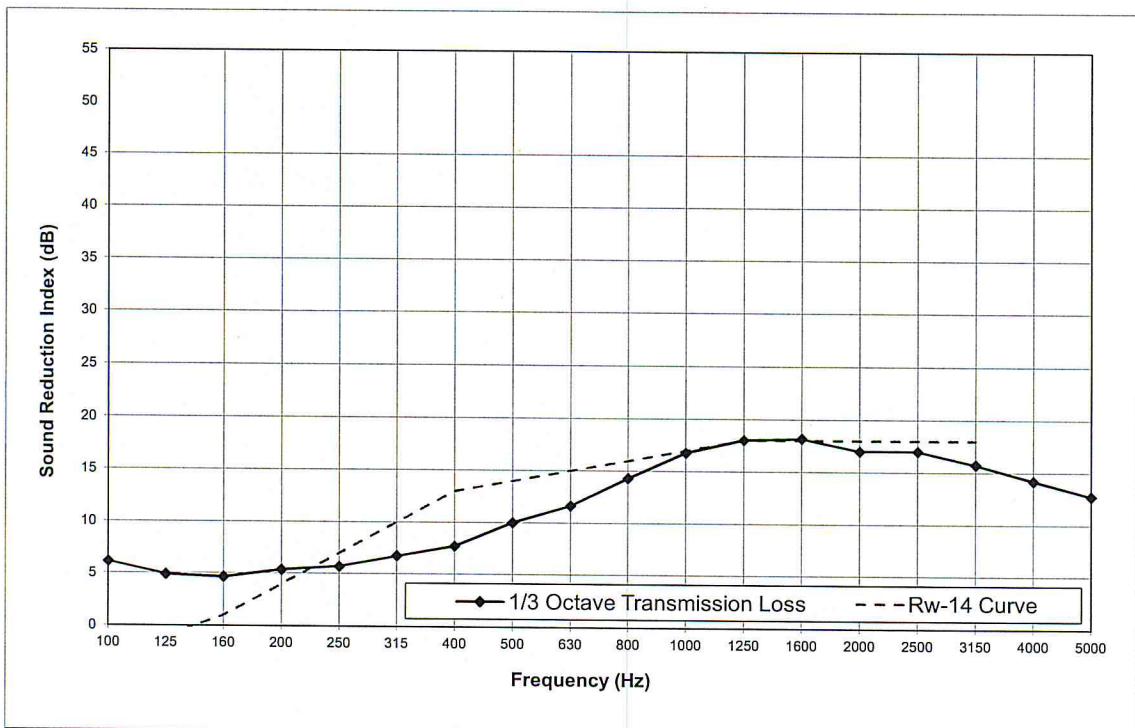
Brüel and Kjær Cathode Follower type 2669

Brüel and Kjær Microphone type 4144 (x2)

Brüel and Kjær Microphone Power Supply type 2804

Brüel and Kjær Sound Level Calibrator type 4231

Yamaha Professional Sound Sources type S500



Date of Test: Monday, 31 October 2011
Project Number: 4725-9

Test Engineer: Alex Li, BE(Mech) Hons
For and on behalf of Day Design Pty Ltd

DAY DESIGN PTY LTD

A.B.N. 73 107 291 494

CONSULTING ACOUSTICAL ENGINEERS



Suite 17, 808 Forest Road
Peakhurst Sydney NSW 2210
Phone: (02) 9584 2639 Fax: (02) 9584 2619
Email: acoustics@daydesign.com.au
www.daydesign.com.au

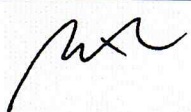

AIRBORNE SOUND TRANSMISSION LOSS SOUND CONTROL PTY LTD SCL400-4A ACOUSTIC LOUVRE

REPORT NUMBER: 4725-4

PREPARED FOR: Sound Control Pty Ltd
61 Links Avenue North
Eagle Farm QLD 4009

Attention: Mr Rajeev Nand
Telephone: (07) 3268 4588

DATE ISSUED: 22 March 2012

Report Status	Prepared by: Alex Li	Approved by: Stephen Gauld
Final		

Document R\4725-r4.doc, 11 pages plus attachments



- AIRCRAFT, ROAD TRAFFIC AND TRAIN NOISE CONTROL
- ARCHITECTURAL ACOUSTICS • INDUSTRIAL NOISE AND VIBRATION CONTROL
- ENVIRONMENTAL NOISE IMPACT INVESTIGATION AND CONTROL
- OCCUPATIONAL NOISE INVESTIGATIONS • QUIET PRODUCT DEVELOPMENT



Client:
Sound Control Pty Ltd

Test Specimen:

SCL400-4A

Sonata A-Series

Frequency - Hz	Sound Reduction Index - dB	
	1/3 Octave	1/1 Octave
100	6	5
125	5	
160	5	
200	8	10
250	10	
315	12	
400	15	17
500	18	
630	21	
800	26	29
1000	31	
1250	34	
1600	37	38
2000	38	
2500	40	
3150	39	37
4000	37	
5000	36	
R _w (C;C _{tr})	22 (-2 ; -6)	

Australian Standards:

Measured according to AS 1191-2002

Rated to AS/NZS ISO 717.1:2004

Test Specimen Dimensions:

1.2 m (H) x 1.8 m (W)

Test Location:

Twin Reverberation Rooms

National Acoustic Laboratories

126 Greville Street, Chatswood NSW

Instrumentation:

Brüel and Kjær Pulse Analyser type 3560C

Brüel and Kjær Cathode Follower type 2660

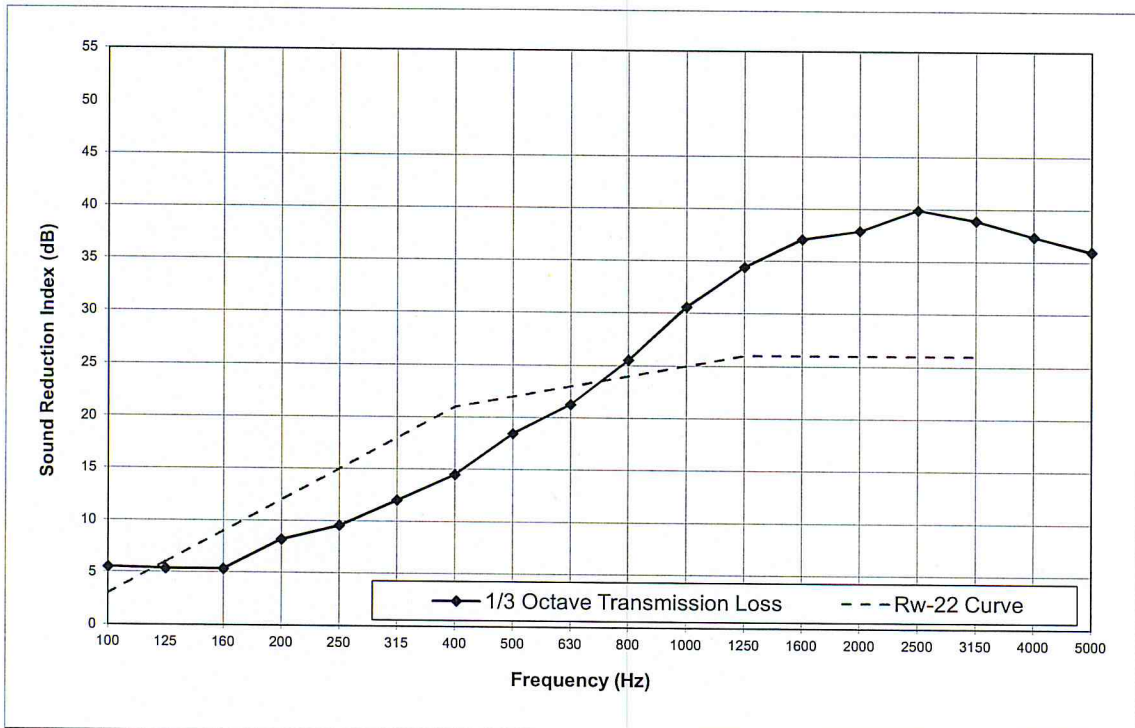
Brüel and Kjær Cathode Follower type 2669

Brüel and Kjær Microphone type 4144 (x2)

Brüel and Kjær Microphone Power Supply type 2804

Brüel and Kjær Sound Level Calibrator type 4231

Yamaha Professional Sound Sources type S500



Date of Test: Monday, 31 October 2011
Project Number: 4725-4

Test Engineer: Alex Li, BE(Mech) Hons
For and on behalf of Day Design Pty Ltd

DAY DESIGN PTY LTD

A.B.N. 73 107 291 494

CONSULTING ACOUSTICAL ENGINEERS



Suite 17, 808 Forest Road
Peakhurst Sydney NSW 2210
Phone: (02) 9584 2639 Fax: (02) 9584 2619
Email: acoustics@daydesign.com.au
www.daydesign.com.au

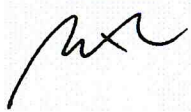

AIRBORNE SOUND TRANSMISSION LOSS SOUND CONTROL PTY LTD SCL400-5A ACOUSTIC LOUVRE

REPORT NUMBER: 4725-7

PREPARED FOR: Sound Control Pty Ltd
61 Links Avenue North
Eagle Farm QLD 4009

Attention: Mr Rajeev Nand
Telephone: (07) 3268 4588

DATE ISSUED: 22 March 2012

Report Status	Prepared by: Alex Li	Approved by: Stephen Gauld
Final		

Document R\4725-r7.doc, 11 pages plus attachments



- AIRCRAFT, ROAD TRAFFIC AND TRAIN NOISE CONTROL
- ARCHITECTURAL ACOUSTICS • INDUSTRIAL NOISE AND VIBRATION CONTROL
- ENVIRONMENTAL NOISE IMPACT INVESTIGATION AND CONTROL
- OCCUPATIONAL NOISE INVESTIGATIONS • QUIET PRODUCT DEVELOPMENT



Client:
Sound Control Pty Ltd

Test Specimen:

SCL400-5A

Sonata A-Series

Frequency - Hz	Sound Reduction Index - dB	
	1/3 Octave	1/1 Octave
100	5	5
125	6	
160	5	
200	7	8
250	8	
315	10	
400	12	14
500	15	
630	18	
800	21	24
1000	25	
1250	27	
1600	29	29
2000	29	
2500	29	
3150	28	27
4000	27	
5000	26	
R _w (C;C _{tr})	20 (-2 ; -5)	

Australian Standards:

Measured according to AS 1191-2002

Rated to AS/NZS ISO 717.1:2004

Test Specimen Dimensions:

1.2 m (H) x 1.8 m (W)

Test Location:

Twin Reverberation Rooms

National Acoustic Laboratories

126 Greville Street, Chatswood NSW

Instrumentation:

Brüel and Kjær Pulse Analyser type 3560C

Brüel and Kjær Cathode Follower type 2660

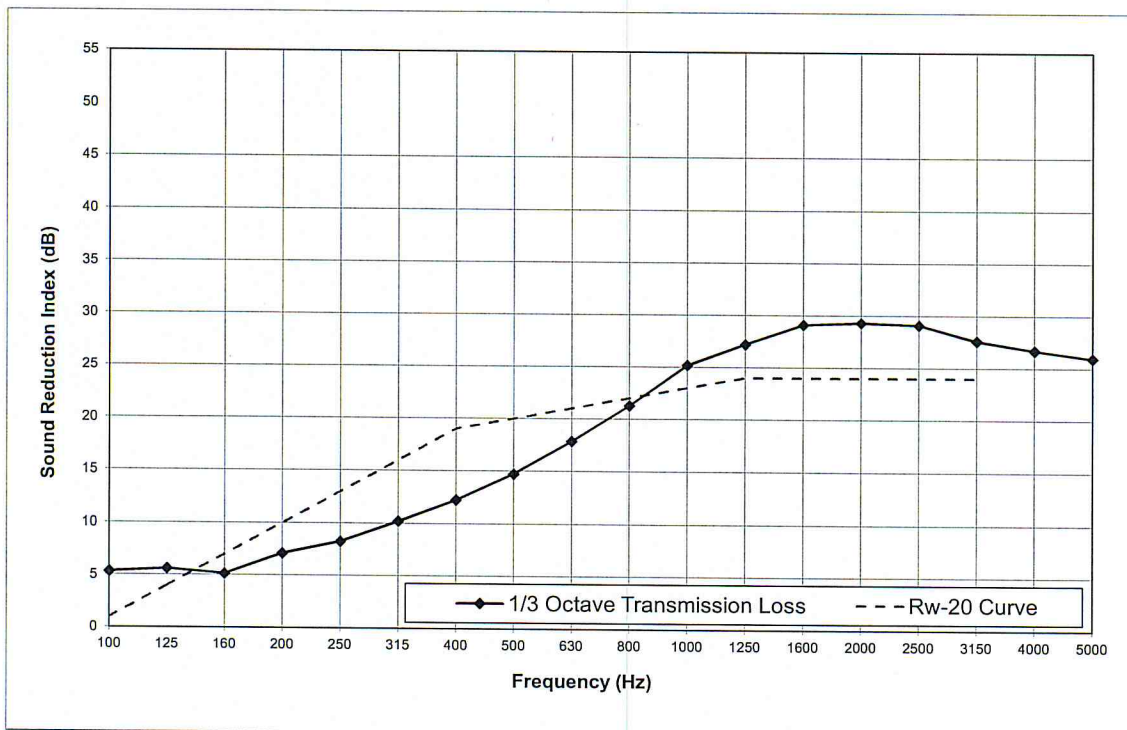
Brüel and Kjær Cathode Follower type 2669

Brüel and Kjær Microphone type 4144 (x2)

Brüel and Kjær Microphone Power Supply type 2804

Brüel and Kjær Sound Level Calibrator type 4231

Yamaha Professional Sound Sources type S500



Date of Test: Monday, 31 October 2011
Project Number: 4725-7

Test Engineer: Alex Li, BE(Mech) Hons
For and on behalf of Day Design Pty Ltd

DAY DESIGN PTY LTD

A.B.N. 73 107 291 494

CONSULTING ACOUSTICAL ENGINEERS



Suite 17, 808 Forest Road
Peakhurst Sydney NSW 2210
Phone: (02) 9584 2639 Fax: (02) 9584 2619
Email: acoustics@daydesign.com.au
www.daydesign.com.au

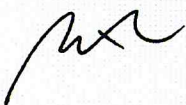

AIRBORNE SOUND TRANSMISSION LOSS SOUND CONTROL PTY LTD SCL600-5A ACOUSTIC LOUVRE

REPORT NUMBER: 4725-3

PREPARED FOR: Sound Control Pty Ltd
61 Links Avenue North
Eagle Farm QLD 4009

Attention: Mr Rajeev Nand
Telephone: (07) 3268 4588

DATE ISSUED: 22 March 2012

Report Status	Prepared by: Alex Li	Approved by: Stephen Gauld
Final		

Document R\4725-r3.doc, 11 pages plus attachments



- AIRCRAFT, ROAD TRAFFIC AND TRAIN NOISE CONTROL
- ARCHITECTURAL ACOUSTICS • INDUSTRIAL NOISE AND VIBRATION CONTROL
- ENVIRONMENTAL NOISE IMPACT INVESTIGATION AND CONTROL
- OCCUPATIONAL NOISE INVESTIGATIONS • QUIET PRODUCT DEVELOPMENT



Client:
Sound Control Pty Ltd

Test Specimen:

SCL600-5A

Sonata A-Series

Frequency - Hz	Sound Reduction Index - dB	
	1/3 Octave	1/1 Octave
100	5	6
125	7	
160	7	
200	10	12
250	12	
315	16	
400	20	22
500	24	
630	28	
800	33	36
1000	38	
1250	42	
1600	46	47
2000	47	
2500	49	
3150	49	48
4000	49	
5000	46	
R _w (C;C _{tr})	25 (-2 ; -7)	

Australian Standards:

Measured according to AS 1191-2002

Rated to AS/NZS ISO 717.1:2004

Test Specimen Dimensions:

1.2 m (H) x 1.8 m (W)

Test Location:

Twin Reverberation Rooms

National Acoustic Laboratories

126 Greville Street, Chatswood NSW

Instrumentation:

Brüel and Kjær Pulse Analyser type 3560C

Brüel and Kjær Cathode Follower type 2660

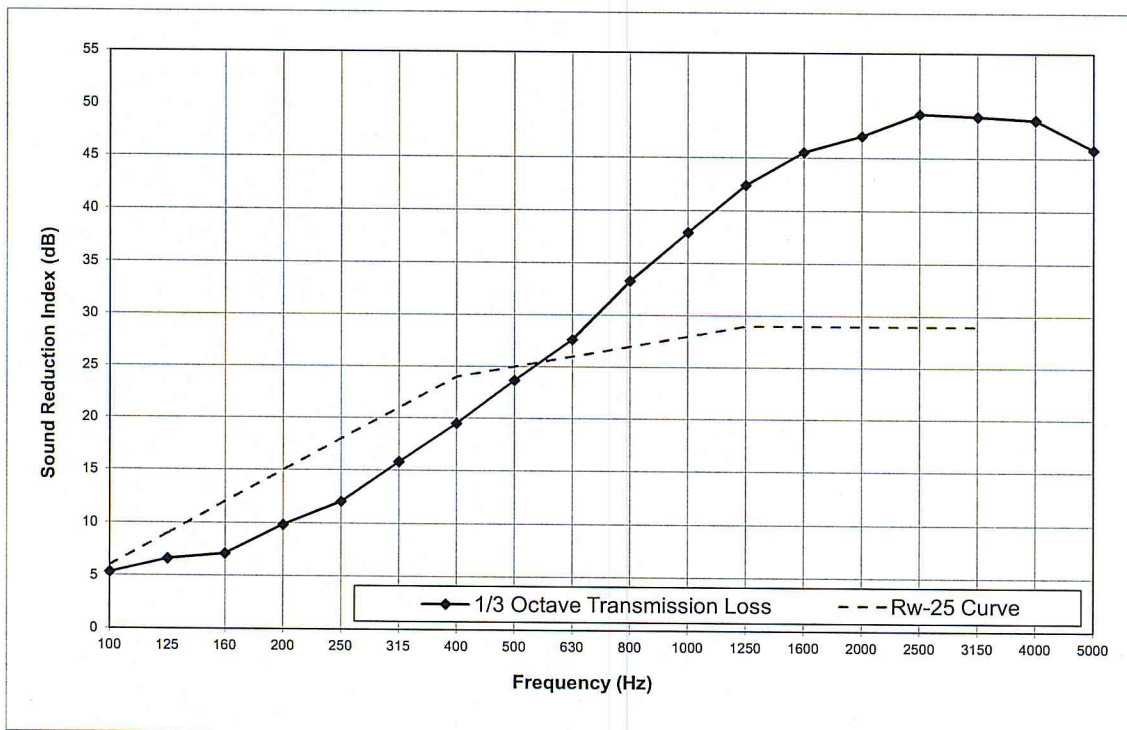
Brüel and Kjær Cathode Follower type 2669

Brüel and Kjær Microphone type 4144 (x2)

Brüel and Kjær Microphone Power Supply type 2804

Brüel and Kjær Sound Level Calibrator type 4231

Yamaha Professional Sound Sources type S500



Date of Test: Monday, 31 October 2011
Project Number: 4725-3

Test Engineer: Alex Li, BE(Mech) Hons
For and on behalf of Day Design Pty Ltd