



中国民用航空总局

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182

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---

**A**

**36.1**

(a)

(1)

8618

19000

610

(2)

- (10) B B36.5 (d)
- (11) 2002 3 21
- 16 I 7 4 4.4
- (g)
- (h)
- (1) H H36.305  
J J36.305
- (2) J J36.305
- (3) H36.305 J J36.305 H
- (4) H H36.305 J  
J36.305 ( )
- (5)

[2007 4 15 ]

**36.2**

- (a) 21 21.17 5  
5
- (b) 21 21.101 21.93  
5  
5

- (c)
- (1)
- (2)
- (3)
- [2007 4 15 ]

---

**36.3**

**36.5**

**36.6**

(a)

(b)

(1)

(c)

(2)

(c)

(1)

(IEC)

(i) IEC

179

1973

(ii) IEC

225

1966

(iii) IEC

651

1979

(iv) IEC

561

1976

(v) IEC

804

1985

(vi) IEC

61094-3

3

1.0

1995

(vii) IEC

61094-4

4

1.0 1995

(viii) IEC

61260

1.0 1995

(ix) IEC

61265

1.0

1995

(x) IEC

60942

2.0

1997

(2)

(SAE)

(i) SAE ARP866A

1975 3 15

(3)

1993 7

2002 3 21

7

16 I

[2007 4 15 ]

**36.7**

(a)



---

(CCAR-21)

(b)

(1)

A

(2)

B

B36.7

B36.8

B

B36.5

(c)

(b)

(1)

B

B36.6

(2)

(i)

(ii)

(d)

(b)

(1)

2

(i)

(A)

3EPNdB

(B)

(ii)

B  
3EPNdB

B36.6

( )

(iii)

(2)

2

(i)

(ii)

(e)

(b)

(1) [ ]

(2)

(3) [ ]

(4)

(f)

[2007 4 15 ]

**36.9**

(CCAR-21)

---

(a)  
36.501  
(b)

(1) 36.501  
(2) 36.501

**36.11**

(CCAR-21)

H 3175 7,000  
J  
(a)  
(1) H B C  
3175 7,000  
J  
J B C  
(2) H D H H36.305  
J D  
J J36.305  
(b) 36.805 (c) H H36.305 (a)(1)  
H36.305 (b)  
J  
J J36.305 (a)  
(c)  
[2007 4 15 ]

**B**

**36.101**

A

[2007 4 15 ]

**36.103**

(a) B B36.8 A  
(

---

)							
(b)		2006	1	1			
B	B36.5(c)						
(c)		2006	1	1			
B	B36.5(d)				2006	1	1
							36.7
(f)							
[2007	4	15		]			

					CCAR-36				CCAR-36
								B	
									2002
3	21				16	I	2	7	4
[2007	4	15		]					
					<b>C</b>				<b>]</b>
[2007	4	15		]					
					<b>D</b>				<b>]</b>
					<b>E</b>				<b>]</b>

**F 章 螺旋桨小飞机和螺旋桨通勤类飞机**

**36.501**

- (a)
  - (1)
  - (2) [ ]
  - (3)
    - (i) (a)(3)(ii)
      - F
      - G
    - (ii)
      - (A) (B)
      - (C) (D) F

---

G (E)  
(b) 1988 11 17  
F B C

F D

(c) 1988 11 17  
G B C

G D

## G 章 [备用]

## H 章 直升机

**36.801**

H B

3175 7,000

J

J B

[2007 4 15 ]

**36.803**

H A 36.801 H C  
36.801 J  
J A J C

**36.805**

(a) 36.11 (b)

H D

J D

(b) (d)(2)

H

H36.305

J

J J36.305

(c) [ ]

(d)

(1) (d)(2)

H

---

H

(2)

(i)

(ii)

(iii)

(iv)

(v)

H

## I~N 章 [备用]

## O 章 文件、使用限制和资料

### 36.1501

(a)

( )

(b)

### 36.1581

(a)

36.1583

(1)

B

(2)

G

(3)

H

J

(b)

36.1581 (a)

(c)

(d)

---

(e)

F

G

(f)

(CCAR-27)

27.25 (a)

(CCAR-29) 29.25 (a)

(g)

(d) (e) (f)

**36.1583**

(a)

(b)

36.1581

(CCAR-36)

[2007 4 15 ]

---

**36**

**A 36.101**

**A36.1**

**A36.2**

**A36.3**

**A36.4**

**A36.5**

**A36.6**

**A36.7**

**A36.8**

**A36.9**

**A36.1**

A36.1.1 36.101 36.803  
EPNL

A36.1.2

A36.1.3

A36.1.4 16 I 2002 3  
21 7 2

**A36.2**

A36.2.1

A36.2.1.1

A36.2.2

A36.2.2.1

---

80°

A36.2.2.2

(a)  
(b) 10 (33 ) -10°C  
35°C 14°F 95°F 20 95

(c) 10 33  
8kHz 12dB/100  
(1) ±0.5°C ±0.9°F

A36.2.2.3

(2) PNLT 400Hz  
(d) 10 (33 ) 3150Hz  
PNLTM ±0.5dB/100 ±1.6dB/1000  
A36.2.2.3

10 33 PNLTM

(e) 10 33 22 / 12  
13 / 7 30 10dB  
10 10dB 28 / 15  
18 / 10

(f)

(g) 30

A36.2.2.3 A36.2.2.2(c) A36.2.2.2(d)  
10 33 30  
100 3150Hz ±0.5dB/100  
±1.6dB/1000 PNLTM

A36.2.2.4

A36.2.3

A36.2.3.1

A36.2.3.2 PNLT 10dB

A36.2.3.3 A36.9



---

**A36.3**

A36.3.1

A36.3

A36.3.1.1

/

A36.3.1.2

A36.3.1.3

IEC61094-3

IEC61094-4

0°

90°

A36.3.1.4

0

A36.3.1.5

/

A36.3.1.6

20

10

1

/

dB

1V

dB

20μPa

dB  
93.98dB

A36.3.1.7

dB

20μPa

10

10

A36.3.1.8

dB

A36.3.1.9

dB

A36.3.1.10

dB

A36.3.1.11

Hz

A36.3.1.12

dB

A36.3.1.13

dB

A36.3.1.14

dB

A36.3.1.15

dB

---

A36.3.1.16

dB

A36.3.2

A36.3.2.1

- (a) 23°C 73.4°F
- (b) 101.325
- (c) 50%

A36.3.3

A36.4

A36.3.3.1

- (a) ( A36.3.4)
- (b) ( A36.3.5)
- (c)
- (d) ( A36.3.7)
- (e) ( A36.3.8)

A36.3.6

A36.3.3.2

28kHz  
12.5kHz  
50dB

A36.3.4

A36.3.4.1

50Hz 10kHz  
±1.5dB

A36.3.5

A36.3.5.1

A36.3.5.2 A36.3.5.4

A36.3.9

A36.3.5.2

1.2 4

A36-1

A36.3.5.3

50Hz 5kHz  
±1.0dB

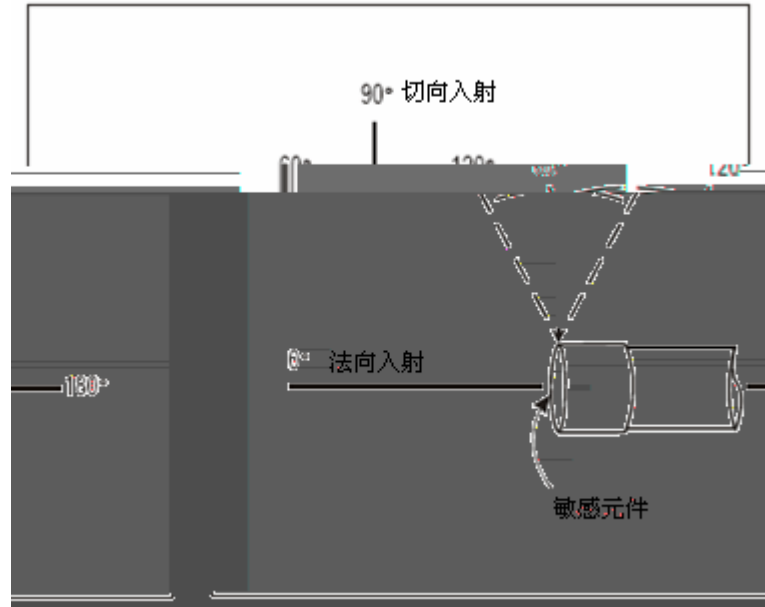
6.3kHz 8kHz 10kHz ±2.0dB

A36.3.5.4

50Hz 10kHz  
30° 60° 90° 120° 150° 0°

A36-1

A36-1



A36-1

传声器系统法向入射时的自由场灵敏度级与特定声入射角的自由场灵敏度级之间的最大差值 (dB)

中心频率 (kHz)	声入射角 (度)					
	30	60	90	120	150	
0.05 to 1.6	0.5	0.5	1.0	1.0	1.0	
2.0	0.5	0.5	1.0	1.0	1.0	
2.5	0.5	0.5	1.0	1.5	1.5	
3.15	0.5	1.0	1.5	2.0	2.0	
4.0	0.5	1.0	2.0	2.5	2.5	
5.0	0.5	1.5	2.5	3.0	3.0	
6.3	1.0	2.0	3.0	4.0	4.0	
8.0	1.5	2.5	4.0	5.5	5.5	
10.0	2.0	3.5	5.5	6.5	7.5	

A36-1

A36.3.6

A36.3.6.1

/

A36.3.6.2 A36.3.6.9

A36.3.6.2

A36.3.9

(a)

800Hz

10kHz

800Hz

20dB

---

A36.3.6.3								5dB
50Hz	10kHz							10kHz 11.2kHz
	±1.5dB							
	10kHz	±0.3dB						A36.3.9.5
A36.3.6.4								5dB 1kHz
		±0.5dB						
A36.3.6.5								
			50dB	50Hz 1kHz 10kHz				±0.5dB
1				IEC 61265				
2								
A36.3.6.6								5dB
	30dB							
A36.3.6.7								50dB
								10dB 1dB 10dB
								49dB
A36.3.6.8		40dB	1dB					
A36.3.6.9								
A36.3.7								
A36.3.7.1			A36.3.7.2	A36.3.7.7				
A36.3.7.2								
(a)	24						50Hz 10kHz	
(b)								
(c)				500±5				A36.3.7.4
(d)								
	5ms							
(e)		50Hz	12kHz					
A36.3.7.3		50Hz	10kHz					
		IEC 61260	2					
		IEC 61260						
A36.3.7.4								
							0.5 1 1.5 2	

---

0.5 1  
 0.5 -4±1dB  
 1 -1.75±0.75dB  
 1.5 -1±0.5dB  
 2 0.5±0.5dB  
 0.5 1  
 -6.5±1dB -7.5dB 1  
 2  
 A36.3.7.5

$$L_s(i,k) = 10 \log \left[ 0.60653 \cdot 10^{0.1L_{s,i,k-1}} + 0.39347 \cdot 10^{0.1L_{s,i,k}} \right]$$

$$L_s(i,k) = 10 \log \left[ 0.13 \cdot 10^{0.1L_{s,i,k-3}} + 0.21 \cdot 10^{0.1L_{s,i,k-2}} + 0.27 \cdot 10^{0.1L_{s,i,k-1}} + 0.39 \cdot 10^{0.1L_{s,i,k}} \right]$$

$L_s(i,k)$   $k$   $i$   $L(i,k)$   $k=1$   $0.5$   
 $L_s[i,(k-1=0)]$   $0dB$   
 $k=4$   
 $L_s(i,k)$   $k$   $i$   $L(i,k)$   $0.5$   
 1.0 6 0.5  
 2.5  
 0.5  
 0.5  
 A36.3.7.6 0.75  
 0.5 2  
 1.25  
 A36.3.7.7 0.1dB

A36.3.8  
 A36.3.8.1

IEC 60942 1L

A36.3.9  
 A36.3.9.1  
 A36.3.9.2 A36.3.9.10

A36.3.9.2

---

90					
A36.3.9.3			$\pm 30^\circ$		A36-1 0.5
A36.3.9.4				30	
			10kHz		
0.75dB					
A36.3.9.5					50Hz
10kHz			5dB		
	6				
			0.2dB		
A36.3.9.6					
	6				0.1dB
A36.3.9.7					
				6	
				0.2dB	
A36.3.9.8					
					0.5dB
	0.5dB				0.5dB
A36.3.9.9					
10					
A36.3.9.10		50Hz	10kHz		
					A36.3.9.3
				$30^\circ$	
					6
					0.4dB
A36.3.10					
A36.3.10.1					
10					
			PNL		A36.4.1.3(a)
	PNL	20dB			
A36.3.10.2	10dB	( A36.4.5.1)			
	A36.3.10.1				3dB

---

<b>A36.4</b>			
A36.4.1			
A36.4.1.1		(EPNL)	EPNdB
	EPNL		
		PNL	
A36.4.1.2			
EPNL		0.5	24
A36.4.1.3			
		EPNL	
	5		
(a)	A36.4.2.1(a)	24	
		PNL(k)	
(b)			
$C(k)$			
(c)	0.5		
PNLT(k)			
		PNLT $k$	PNL $k$
			$C k$
			PNLTM
(d)	$D$		
(e)	EPNL		
		EPNL	PNLTM
		$D$	
A36.4.2			
A36.4.2.1		PNL(k)	SPL(i,k)
(a)	A36.4.7		50Hz 10kHz
	SPL(i,k)	$n(i,k)$	
(b)			$n(i,k)$
		$N k$	$n k$
		$0.15 \sum_{i=1}^{24} n(i,k)$	$n k$
		$0.85 n k$	$0.15 \sum_{i=1}^{24} n(i,k)$
(c)	$n(k)$ 24	$n(i,k)$	$N(k)$
			$N(k)$
		PNL $k$	PNL(k)
		40.0	$\frac{10}{\log 2} \log N k$
	PNL(k)		

A36.4.3

A36.4.3.1

$C(k)$

(a) A36.3.9 80Hz

$s_{3,k}$   
 $s_{4,k}$  SPL  $4,k$  SPL  $3,k$   
 $g$   
 $g$   
 $s_{i,k}$  SPL  $i,k$  SPL  $i-1,k$   
 $g$   
 $g$   
 $s_{24,k}$  SPL  $24,k$  SPL  $23,k$

(b) 5  $s(i,k)$

$|s_{i,k}| |s_{i,k} - s_{i-1,k}| 5$

(c)

(1)  $s(i,k)$   $s(i-1,k)$   
 SPL( $i,k$ )

(2)  $s(i,k)$   $s(i-1,k)$   
 SPL( $i-1,k$ )

(3)

(d) SPL  $i,k$

(1) SPL  $i,k$  SPL  $i,k$

(2) 1 23

SPL  $i,k$   $\frac{1}{2}$  SPL  $i-1,k$  SPL  $i-1,k$

(3) ( $i=24$ )

SPL SPL  $23,k$   $s_{23,k}$

(e) 25  $s_{i,k}$

$s_{3,k}$   $s_{4,k}$   
 $s_{4,k}$  SPL  $4,k$  SPL  $3,k$   
 $g$   
 $g$   
 $s_{i,k}$  SPL  $i,k$  SPL  $i-1,k$   
 $g$   
 $g$   
 $s_{24,k}$  SPL  $24,k$  SPL  $23,k$   
 $s_{25,k}$   $s_{24,k}$

(f)  $i-3-23$



$$\bar{s}_{i,k} = \frac{1}{3} s_{i,k} + s_{i-1,k} + s_{i-2,k}$$

(g) 3 24

SPL  $i,k$

SPL  $3,k$  SPL  $3,k$

SPL  $4,k$  SPL  $3,k$   $\bar{s}_{3,k}$

g

g

SPL  $i,k$  SPL  $i-1,k$   $\bar{s}_{i-1,k}$

g

g

SPL  $24,k$  SPL  $23,k$   $\bar{s}_{23,k}$

(h)

$F(i,k)$

$F_{i,k}$  SPL  $i,k$  SPL  $i,k$

1.5

(i)

$F(i,k)$  A36-2

3 24

(j)

$C(k)$

$C(k)$

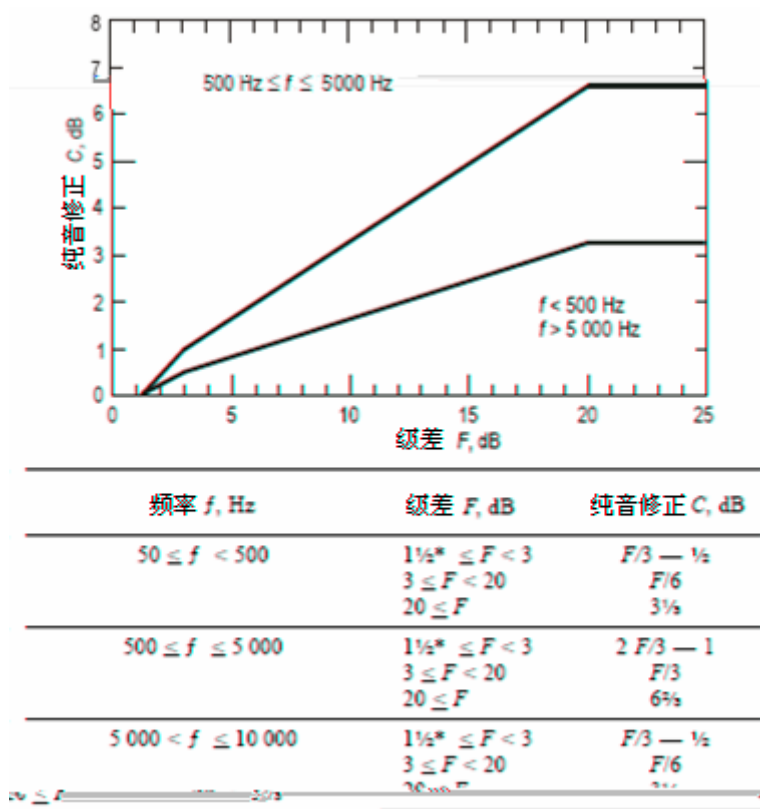
PNL( $k$ )

PNLT  $k$  PNL  $k$   $C k$

$k$

$i$

SPL  $i,k$



A36-2

A36.4.3.2

EPNL

- (a)
- (b)

A36.4.4

A36.4.4.1

PNLTM

A36.4.3

PNLT( $k$ )

0.5

1 A36-2

2

PNLTM

PNLM

A36.4.4.2

PNLTM

500

PNLTM

$C(k)$

PNLTM

$C(k)$

$C(k)$

PNLTM

5



A36-2

A36.4.5

A36.4.5.1

$$D = 10 \log \frac{1}{T} \int_{t(1)}^{t(2)} \text{anti log} \frac{\text{PNLT}}{10} dt \quad \text{PNLTM}$$

$T$  PNLTM PNLT  $t(1)$  PNLT PNLTM-10  
 $t(2)$  PNLT PNLTM-10

A36.4.5.2

PNLT SPL

$$D = 10 \log \frac{1}{T} \int_{k=0}^{d/t} \text{anti log} \frac{\text{PNLT } k}{10} dt \quad \text{PNLTM}$$

$t$  PNLT(k)  $d$  0.5  
 PNLT(k) PNLTM-10

A36.4.5.3

(a)  $\Delta t$  0.5

(b)

A36.4.5.4

A36.4.5.2  $D$   $T$   $\Delta t$

$T=10$   $\Delta t$  0.5

$D$

$$D = 10 \log \int_{k=0}^{2d} \text{anti log} \frac{\text{PNLT } k}{10} dt \quad \text{PNLTM } 13$$

$d$  PNLTM-10

A36.4.5.5

A36.4.5.2 PNLTM-10 PNLT(k)

PNLTK(k)

A36.4.6

PNLTM EPNL EPNL  
PNLTM D PNLTK D  
PNLTK EPNL PNLTK D  
PNLTK D A36.4.2 A36.4.3 A36.4.4 A36.4.5

A36.4.7

A36.4.7.1 SPL A36-3 A36-3

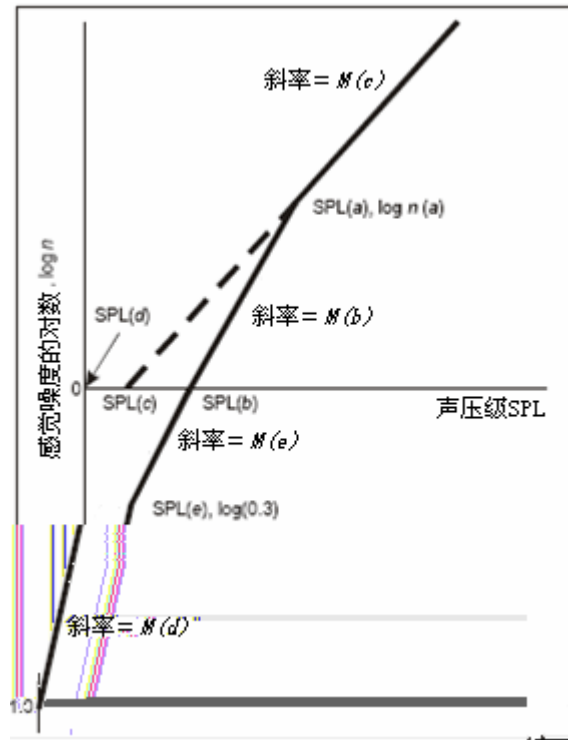
A36.4.7.2

- (a)  $M(b)$   $M(c)$   $M(d)$   $M(e)$
- (b) SPL  $SPL(b)$   $SPL(c)$
- (c)  $SPL(a)$   $\log n(a)$   $SPL(d)$   $\log n = -1.0$   $SPL(e)$   $\log n = \log(0.3)$

A36.4.7.3

- (a) SPL  $SPL a$   
 $n$   $\text{antilog } M c$  SPL  $SPL c$
- (b) SPL  $b$   $SPL < SPL a$   
 $n$   $\text{antilog } M b$  SPL  $SPL b$
- (c) SPL  $e$   $SPL < SPL b$   
 $n$   $0.3 \text{antilog } M e$  SPL  $SPL e$
- (d) SPL  $d$   $SPL < SPL e$   
 $n$   $0.1 \text{antilog } M d$  SPL  $SPL d$

A36.4.7.4 A36-3



A36-3

频带 (i)	f Hz	SPL (a)	SPL (b)	SPL (c)	SPL (d)	SPL (e)	M(b)	M(c)	M(d)	M(e)
1	50	91.0	64	52	49	55	0.043478	0.030103	0.079520	0.058098
2	63	85.9	60	51	44	51	0.040570	↑	0.068160	-
3	80	82.3	56	48	38	46	0.036831	↑	-	0.052188
4	100	79.0	53	47	34	42	-	-	0.059640	0.047534
5	125	79.8	51	46	30	39	0.035336	-	0.053013	0.043573
6	160	76.0	48	45	27	36	0.033333	-	↑	-
7	200	74.0	46	43	24	33	-	-	-	0.040221
8	250	74.9	44	42	21	30	0.032051	↓	↑	0.037349
9	315	94.6	42	41	18	27	0.030675	0.030103	↑	0.034859
10	400	∞	40	40	16	25	0.030103	↑	↑	↑
11	500	↑	40	40	16	25	↑	↑	↑	↑
12	630	↑	40	40	16	25	↑	↑	↑	↑
13	800	↑	40	40	16	25	↑	↑	↑	↑
14	1 000	↑	40	40	16	25	↓	不适用	0.053013	↓
15	1 250	↑	38	38	15	23	0.030103	↑	0.059640	0.034859
16	1 600	↑	34	34	12	21	0.029960	↑	0.053013	0.040221
17	2 000	↑	32	32	9	18	↑	↑	-	0.037349
18	2 500	↑	30	30	5	15	↑	↑	0.047712	0.034859
19	3 150	↑	29	29	4	14	↑	↑	-	↑
20	4 000	↑	29	29	5	14	↓	↓	0.053013	↓
21	5 000	↑	30	30	6	15	↓	↓	-	0.034859
22	6 300	∞	31	31	10	17	0.029960	0.029960	0.068160	0.037349
23	8 000	44.3	37	34	17	23	0.042285	-	0.079520	-
24	10 000	50.7	41	37	23	29	-	-	0.059640	0.043573

A36-3

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**A36.5**

A36.5.1

A36.5.1.1

A36.5.1.2

A36.5.1.3

A36.5.2

A36.5.2.1

A36.3

A36.5.2.2

A36.5.2.3

A36.2

(a)

(b)

(c)

A36.5.2.4

A36.5.2.5

(a)

(b)

(c)

(d)

(e)

APU

(f)

(g)

/ /

(h)

(1)

(2)

(i)

(j)

A36.5.3

A36.5.3.1

B

A36.5.4

A36.5.4.1

EPNL

90%

(a)  
 (b) (a)  
 90%  
 A36.5.4.2  
 ±1.5EPNdB  
 90%  
 A36.5.4.3 A36.5.4.1 EPNL

**A36.6**

antilog		10
$C(k)$	dB	$k$ PNL( $k$ )
$d$		$t(1)$ $t(2)$ 0.5
$D$	dB	PNLTM
EPNL	EPNdB	PNL EPNdB dB
$EPNL_r$	EPNdB	
$f(i)$	Hz	$i$
$F(i,k)$	dB	dB $k$ $i$
$h$	dB	PNLTM
$H$		
$i$		24 50 10000Hz
$k$		
log		10
$\log n(a)$		$\log n$ SPL $\log n$
$M(b)$ $M(c)$		$\log n$ SPL $\log n$

$n$		
$n(i,k)$		$k$ $i$
$n(k)$		$k$ 24 $n(i)$
$N(k)$		$k$ 24 $n(i,k)$
$p(b)$ $p(c)$		SPL $\log n$
PNL	PNdB	PNdB dB
PNL( $k$ )	PNdB	$k$ 24 SPL( $i,k$ ) PNdB dB
PNLM	PNdB	PNL( $k$ ) PNdB dB
PNLT	TPNdB	PNL TPNdB dB
PNLT( $k$ )	TPNdB	$k$ PNL( $k$ ) TPNdB dB
PNLTM	TPNdB	PNLT( $k$ ) TPNdB dB
PNLT <sub><math>r</math></sub>	TPNdB	
$s(i,k)$	dB	$k$ $i$
$s$ $i,k$	dB	
$s$ $i,k$	dB	$k$ $i$
$\bar{s}$ $i,k$	dB	
SPL	dB 20 $\mu$ Pa	
SPL( $a$ )	dB 20 $\mu$ Pa	SPL $\log n$ SPL
SPL( $b$ ) SPL( $c$ )	dB 20 $\mu$ Pa	SPL $\log n$ SPL
SPL( $i,k$ )	dB 20 $\mu$ Pa	$k$ $i$
SPL $i,k$	dB 20 $\mu$ Pa	$k$ $i$
SPL( $i$ )	dB	PNLTM $i$



---

	20 $\mu$ Pa	
SPL( $i$ ) <sub>r</sub>	dB 20 $\mu$ Pa	PNLTM $i$
SPL $i,k$	dB 20 $\mu$ Pa	$k$ $i$

		EPNL
$\Delta_3$	EPNdB	EPNL

**A36.7**

A36.7.1

A36.7.2

A36.7.2

A36.7.2(a)

$$i = 10^{2.05 \log f_0 / 1000 - 6.33 \cdot 10^{-3} - 1.45325}$$

$$10^{\log f_0 - 4.6833 \cdot 10^{-3} - 2.4215}$$

$$\sqrt{\frac{1010}{f_0}} 10^{\log H - 1.97274664 - 2.288074 \cdot 10^{-2}}$$

$$10^{9.589 \cdot 10^{-5} - 2 - 3.0 \cdot 10^{-7} - 3}$$

$\eta(\delta)$       A36-4       $f_0$       A36-5  
 $\alpha(i)$                       dB/1000  
 $\theta$   
 $H$

A36.7.2(b)

$$i = 10^{2.05 \log f_0 / 1000 - 1.1394 \cdot 10^{-3} - 1.916984}$$

$$10^{\log f_0 - 8.42994 \cdot 10^{-3} - 2.755624}$$

$$\sqrt{\frac{1010}{f_0}} 10^{\log H - 1.328924 - 3.179768 \cdot 10^{-2}}$$

$$10^{2.173716 \cdot 10^{-4} - 2 - 1.7496 \cdot 10^{-6} - 3}$$

$\eta(\delta)$       A36-4       $f_0$       A36-5  
 $\alpha(i)$                       dB/100  
 $\theta$   
 $H$

A36.7.3      A36-4                      A36.7.2

$\delta$	$\eta(\delta)$	$\delta$	$\eta(\delta)$
0.00	0.000	2.50	0.450
0.25	0.315	2.80	0.400
0.50	0.700	3.00	0.370
0.60	0.840	3.30	0.330
0.70	0.930	3.60	0.300
0.80	0.975	4.15	0.260
0.90	0.996	4.45	0.245
1.00	1.000	4.80	0.230
1.10	0.970	5.25	0.220
1.20	0.900	5.70	0.210
1.30	0.840	6.05	0.205
1.50	0.750	6.50	0.200
1.70	0.670	7.00	0.200
2.00	0.570	10.00	0.200
2.30	0.495		

必要时用二次插值

A36-4

三分之一倍频程 中心频率 (Hz)	$f_0$ (Hz)	三分之一倍频程 中心频率 (Hz)	$f_0$ (Hz)
50	50	800	800
63	63	1 000	1 000
80	80	1 250	1 250
100	100	1 600	1 600
125	125	2 000	2 000
160	160	2 500	2 500
200	200	3 150	3 150
250	250	4 000	4 000
315	315	5 000	4 500
400	400	6 300	5 600
500	500	8 000	7 100
630	630	10 000	9 000

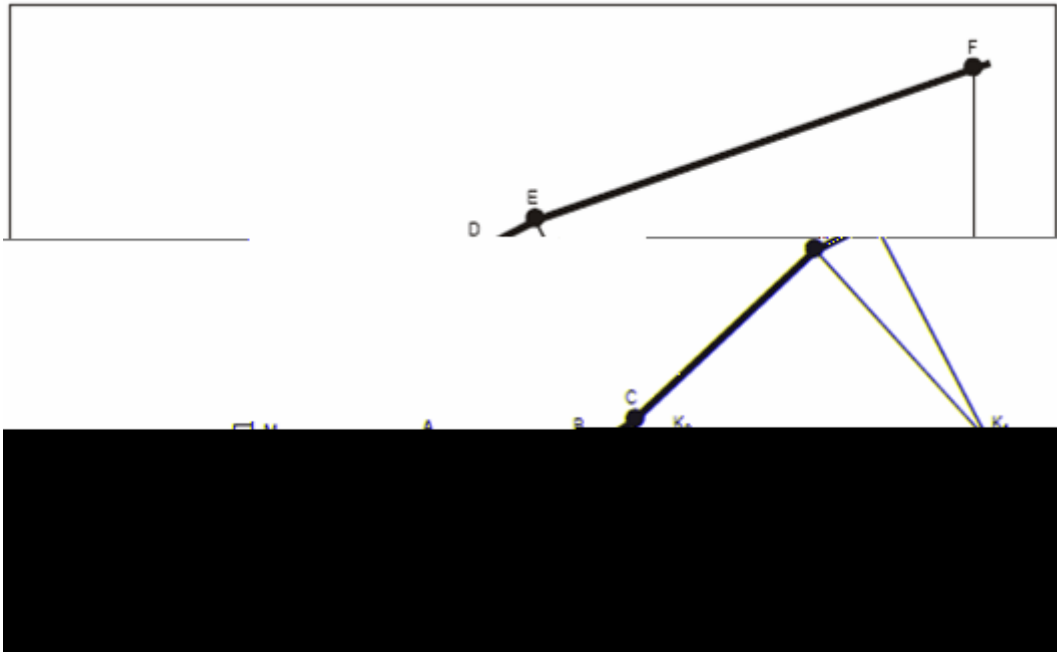
A36-4  $f_0$

A36.8

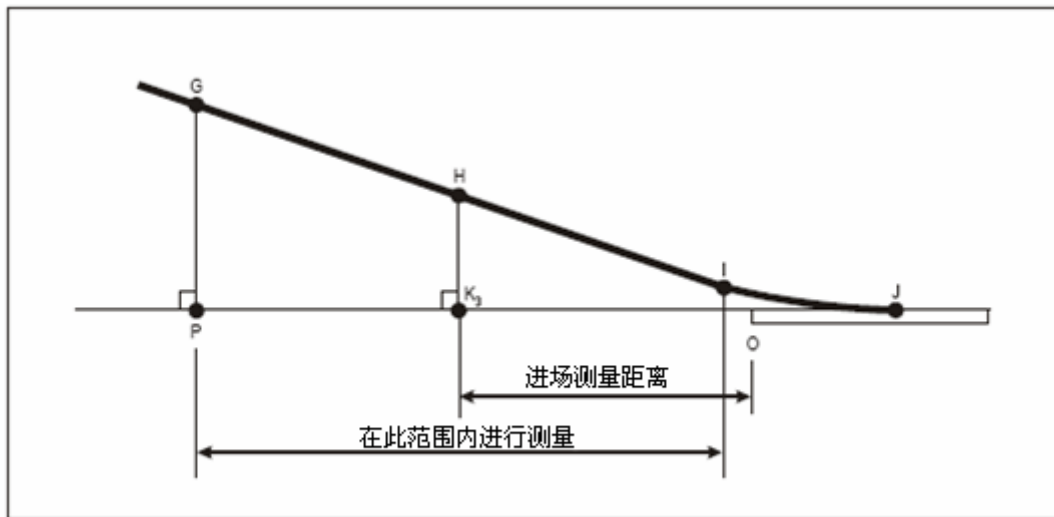
A36.9

A36.9.1





A36-4



A36-5

A36.9.3

A36.9.3.1

PNLTM

EPNL

A36.9.3.2 PNL PNLT

(a) A36-6

EPNL

A36-6

(1) XY

EPNL

$X_r Y_r$

(2) Q

K

PNLTM

$Q_r$

$K_r$

QK

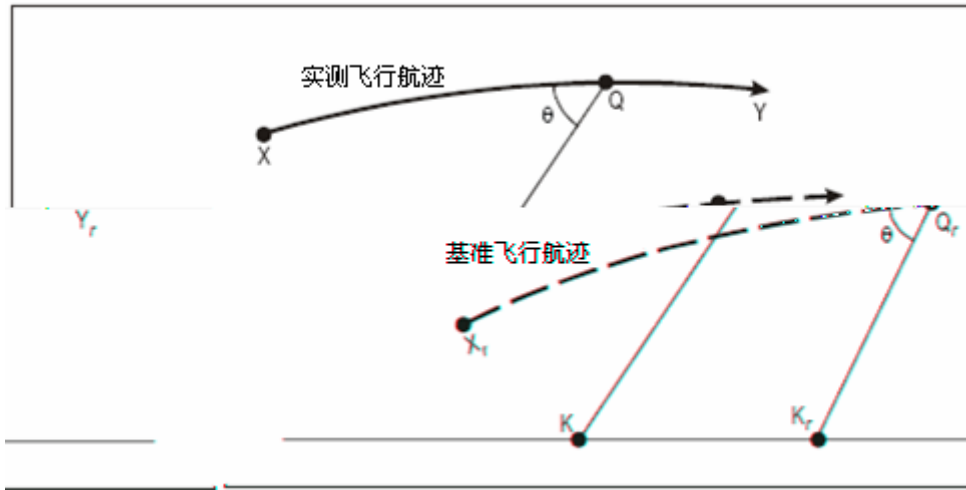
$Q_r K_r$

$Q_r$

QK

$Q_r K_r$

$\theta$



A36-6

(b) A36-7(a) (b) (b)(1) (2)

EPNL

(1) A36-7(a) XY

EPNL

A36-7(b) X<sub>r</sub>Y<sub>r</sub>

(2) Q K PNLTM

Q<sub>r</sub>

K<sub>r</sub>

K<sub>r</sub>

QK

Q<sub>r</sub>K<sub>r</sub>

K<sub>r</sub>

Q<sub>r</sub>

QK

Q<sub>r</sub>K<sub>r</sub>

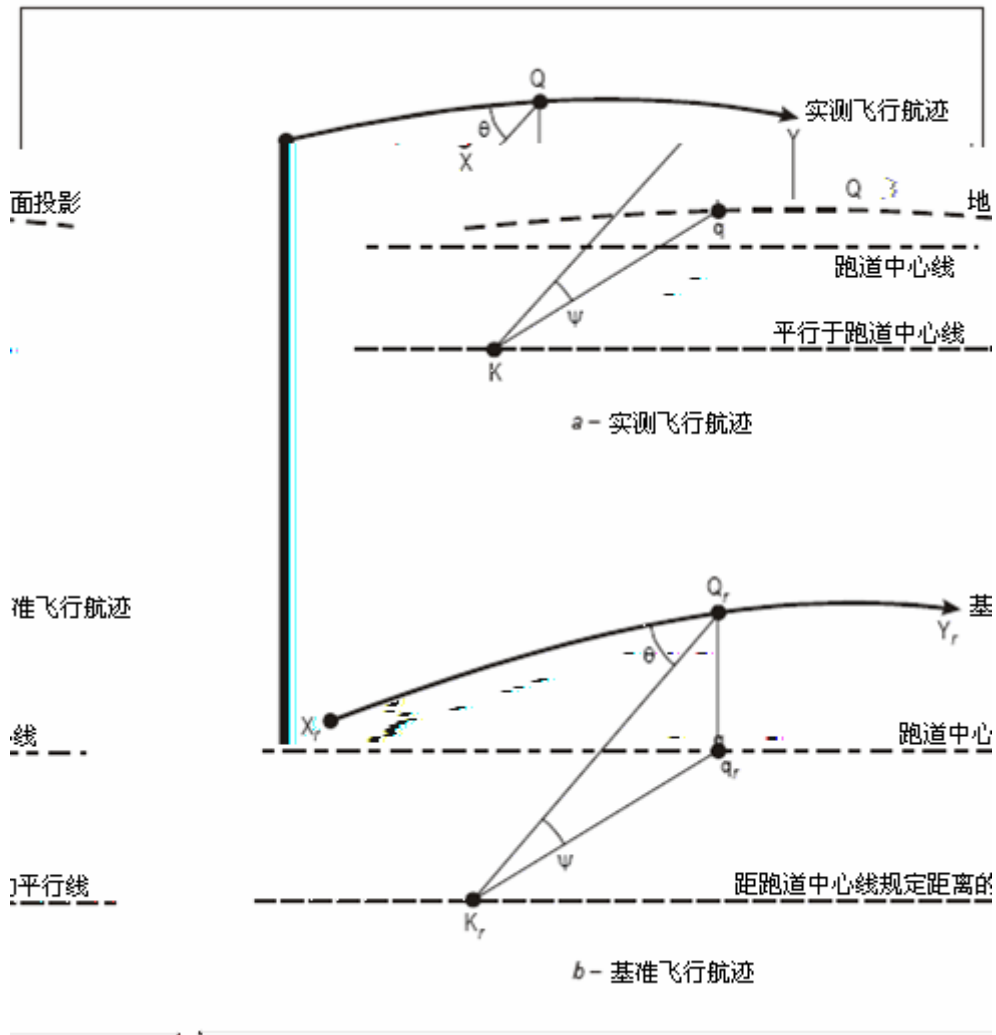
(i)

$\theta$

(ii)

$\psi$

$\psi$



A36-7

A36.9.3.2.1 PNL PNLTM K PNL  
 SPL(i) SPL(i)<sub>r</sub>

A36.9.3.2.1(a)

$$SPL_{i_r} - SPL_i = 0.001 [i - i_0] QK - 0.001 [i_0 - QK] Q_r K_r = 20 \log(QK/Q_r K_r)$$

$$(1) 0.001[\alpha(i) - \alpha(i_0)] QK \quad \alpha(i) - \alpha(i_0)$$

A36.7

$$(2) 0.001\alpha(i_0)(QK - Q_r K_r)$$

$$(3) 20 \log(QK/Q_r K_r)$$

$$(4) QK - Q_r K_r \quad \alpha(i) - \alpha(i_0) \quad \text{dB}/1000$$

A36.9.3.2.1(b)

$$SPL_{i_r} - SPL_i = 0.01 [i - i_0] QK - 0.01 [i_0 - QK] Q_r K_r = 20 \log(QK/Q_r K_r)$$

$$(1) 0.01[\alpha(i) - \alpha(i_0)] QK \quad \alpha(i) - \alpha(i_0)$$

A36.7

(2)  $0.001\alpha(i)_0(QK-Q_rK_r)$

(3)  $20\log(QK/Q_rK_r)$

(4)  $QK \quad Q_rK_r \quad \alpha(i) \quad \alpha(i)_0 \quad \text{dB}/100$

A36.9.3.2.1.1 PNLT

(a)  $SPL(i)_r \quad PNLT_r$

(b)  $\Delta_1$

$PNLT_r \quad PNLTM$

A36.9.3.2.1.2  $\Delta_1$  EPNL

A36.9.3.2.2 PNLTM 2dB PNLT

A36.9.3.2.1

PNLT PNLTM

EPNL

A36.9.3.3

A36.9.3.3.1

/

/

EPNL

A36.9.3.3.2 A36-6

$2 \quad 7.5\log QK/Q_rK_r \quad 10\log V/V_r$

$\Delta_2$  EPNL

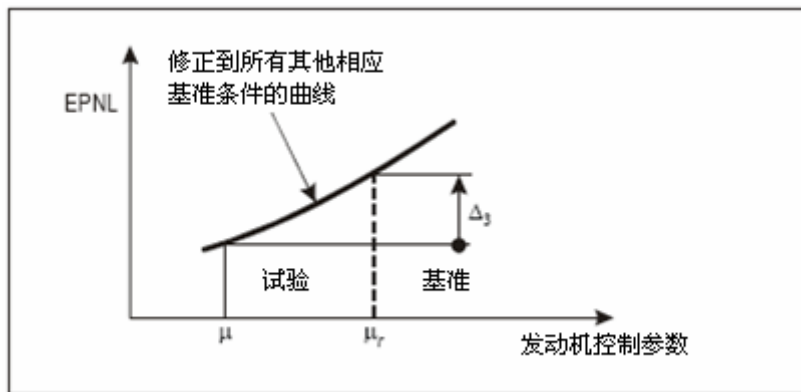
A36.9.3.4

A36.9.3.4.1

A36-8

EPNL  $\mu$  EPNL

B36.7(b)(7)  $\mu_r$



A36-8

A36.9.3.4.2  $\mu_r$  EPNL  $\mu$  EPNL  $\Delta_3$

EPNL

A36.9.3.5



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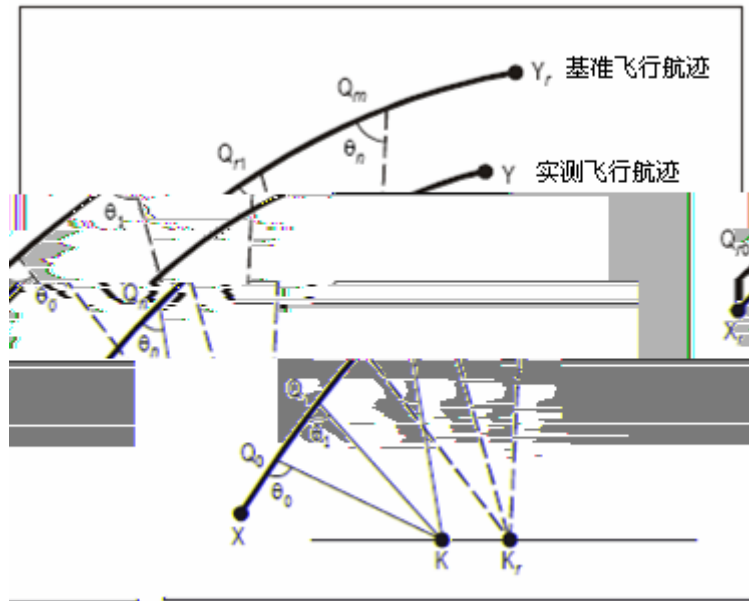
A36.9.3.5.1

B36.4(b)

(a)

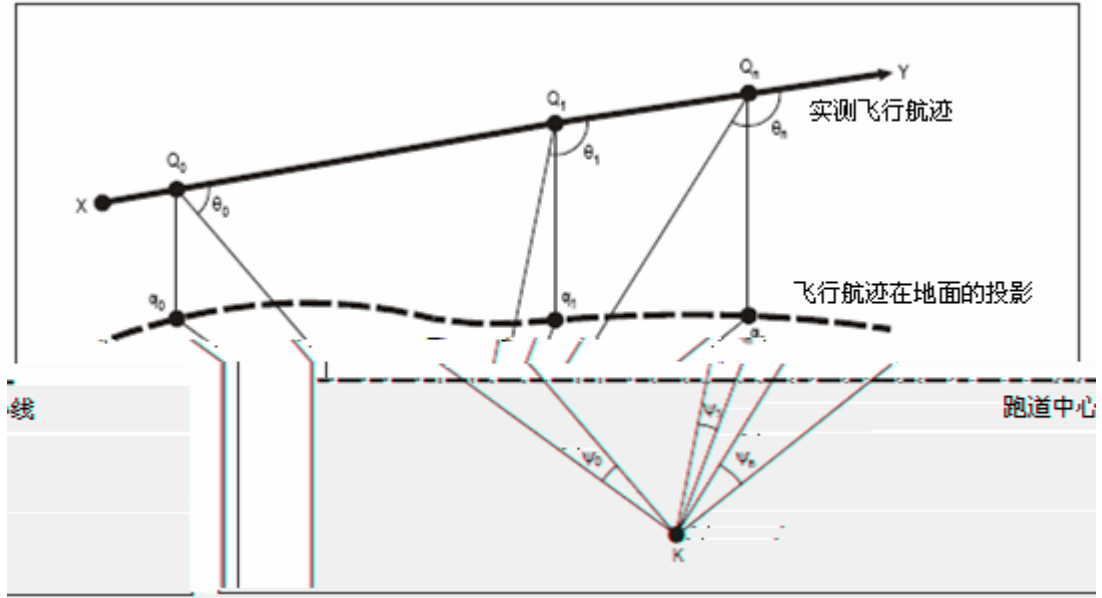
A36-9(a)

(b)

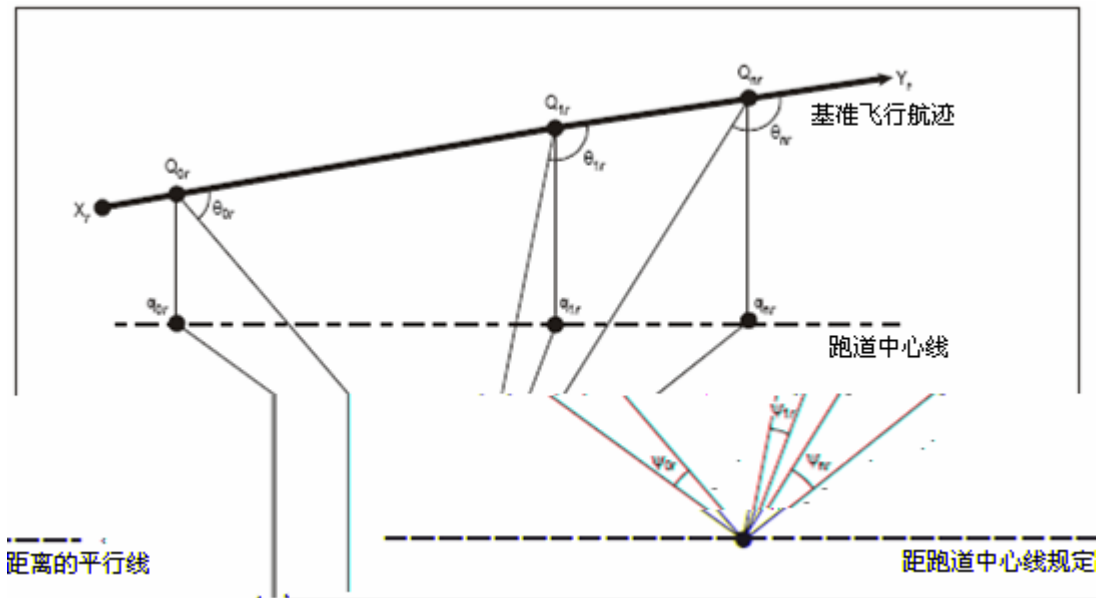


A36-10

(b) A36-11(a) (b) (b)(1) (2)  
 EPNL  
 (1) A36-11(a) XY EPNL  
 A36-11(b) X<sub>r</sub>Y<sub>r</sub>  
 (2) Q<sub>0</sub> Q<sub>1</sub> Q<sub>n</sub> t<sub>0</sub> t<sub>1</sub> t<sub>n</sub>  
 Q<sub>1</sub> t<sub>1</sub> K SPL(i)<sub>1</sub>  
 Q<sub>r1</sub> t<sub>r1</sub> K<sub>r</sub> SPL(i)<sub>r1</sub>  
 Q<sub>1</sub>K Q<sub>r1</sub>K<sub>r</sub> Q<sub>r0</sub> Q<sub>m</sub>  
 Q<sub>0</sub> Q<sub>n</sub> Q<sub>r0</sub> Q<sub>m</sub>  
 10dB PNLTr A36.9.4.2.2 A36.9.4.2.3 K<sub>r</sub>  
 K<sub>r</sub> Q<sub>r1</sub>  
 (i) Q<sub>1</sub>K Q<sub>r1</sub>K<sub>r</sub> θ<sub>1</sub>  
 (ii) ψ<sub>1</sub> ψ<sub>r1</sub>  
 K<sub>r</sub> ψ<sub>1</sub> ψ<sub>r1</sub> A36.9.4.2(b)(2)(i)  
 ψ



A36-11(a)



A36-11(b)

A36.9.4.2.1 A36.9.4.2(a)(2) (b)(2)  $t_{r1}$   $t_1$   $Q_{r1}K_r > Q_1K$   
 (1)  $V_r$   $Q_{r1}Q_{r0}$   $V$   $Q_1Q_0$

(2)  $Q_{r1}K_r - Q_1K$   
 A36.9.4.2(a)(2) (b)(2)

A36.9.4.2.2  
 SPL( $i$ )<sub>1</sub> A36.9.3.2.1 SPL( $i$ )<sub>r1</sub> PNL<sub>r1</sub>  
 A36.4.2 PNL<sub>r</sub>  $t_0$   $t_n$

A36.9.4.2.3                      PNL<sub>r1</sub>                      A36.4.3                      SPL(i)<sub>r</sub>  
    C<sub>1</sub>                      PNL<sub>r1</sub>                      PNL<sub>r1</sub>  
   t<sub>0</sub>    t<sub>n</sub>                      PNL<sub>r</sub>  
 A36.9.4.3  
 A36.9.4.3.1                      0.5                      PNL<sub>r</sub>                      PNL<sub>r</sub>  
 PNL<sub>r1</sub>                      t<sub>r1</sub>                      A36.4.5.1  
    EPNL<sub>r</sub>  
 A36.9.4.4  
 A36.9.4.4.1                      A36.9.3.4                      Δ<sub>3</sub>

A36.9.5

A	
B	
C	
D	
E	
F	
G	
H	
I	
J	
K	
K <sub>r</sub>	
K <sub>1</sub>	
K <sub>2</sub>	
K <sub>3</sub>	
M	
O	
P	
Q	K                      PNL <sub>r</sub> A36.9.3.2
Q <sub>r</sub>	K                      PNL <sub>r</sub> A36.9.3.2
V	
V <sub>r</sub>	

A36.9.6

AB		
AK		
AM		

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QK		Q K
Q <sub>r</sub> K <sub>r</sub>		Q <sub>r</sub> K <sub>r</sub>
K <sub>3</sub> H		
OK <sub>3</sub>		
OP		

[2007 4 15 ]

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**B 36.103**

**B36.1**

**B36.2**

**B36.3**

**B36.4**

**B36.5**

**B36.6**

**B36.7**

**B36.8**

**B36.1**

(a) A

(b) 7 2 16 I 2002 3 21

**B36.2**

A

EPNdB

**B36.3**

B36.6

B36.5

(a)

(1) 1476 3 450

648 0.35

300 985

(1427 ) +100 -50 (+328 -164

(2) 2133 2007 4 15 650

B36.3(a)(1)

(b) 21325 6500

(c)				300	984		2000	6562
	120	394					3°	
<b>B36.4</b>								
(a)								
(b)								
						±10	33	
<b>B36.5</b>								
	B36.6					A		
(a)								36.7(c)
(b)								
(1)				272000		600000		108EPNdB
	272000	600000			5EPNdB		34000	75000
		93EPNdB						
(2)				272000		600000		108EPNdB
	272000	600000			2EPNdB			
	34000	75000		102EPNdB				
(c)								
(1)								
(i)						385000	850000	
	106EPNdB	385000	850000					4EPNdB
		20247	44673		89EPNdB			
(ii)						385000	850000	
	104EPNdB	385000	850000					4EPNdB
		28675	63177		89EPNdB			
(iii)						385000	850000	
	101EPNdB	385000	850000					4EPNdB
		48195	106250		89EPNdB			
(2)						400000	882000	
	103EPN	400000	882000					2.56EPNdB
		35018	77200		94EPNdB			
(3)						280000	617300	
	105EPNdB	280000	617300					2.33EPNdB
		35018	77200		98EPNdB			
(d)								
16	I	2002	3	21	7	4	4.4	3

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3.4

**B36.6**

36.7(c)(1) 36.7(d)(1)(ii)

- (a) 3EPNdB
- (b) 2EPNdB
- (c)

**B36.7**

- (a)
  - (1) 36.3
  - (2)
  - (3) (b) (c)
  - (4)
  - (5)
    - (i) 1013.25 2116
    - (ii) 25°C 77°F 10°C
    - (iii) 70
    - (iv)
    - (v)

- (b)
  - (1) B36.7(a)(5)

- (i) 2
- (A) —214 700
- (B) —305 1000
- (ii) 2
- (A) —210 689
- (B) —260 853
- (C) —300 984

- (2) (b)(1)
- (i) 4
- (ii)
- (3) 2007 4 15 (b)(2)

- (4) V<sub>2</sub> 19 V<sub>2</sub> 10 V<sub>2</sub> 37 V<sub>2</sub> 20



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(5)

APU

(6)

36.1581 (d)

(7)

N1 EPR

(c)

(1)

3°

(2)

V<sub>REF</sub> 19

V<sub>REF</sub> 10

V<sub>REF</sub>

(3)

(4)

(c)(3)

36.1581 (d)

(5)

A A36.5.2.5

**B36.8**

(a)

(b)

EPNL

EPNdB

A

(c)

A

A36.9

(d)

EPNL

2EPNdB

1EPNdB

EPNL

EPNL

2EPNdB

(e)

3°±0.5°

(f)

16EPNdB

8EPNdB

8EPNdB

4EPNdB

B36.5

(g)

2EPNdB

10dB

±3

10dB

±5.5

±3

---

[2007 4 15 ]

**C-E**

[2007 4 15 ]

**F 1988 11 17**

**A**

**F36.1**

**B**

**F36.101**

**F36.103**

**F36.105**

**F36.107**

**F36.109**

**F36.111**

**C**

**F36.201**

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**F36.203**

**D**

**F36.301**

**A 部分 总则**

**F36.1**

36.1            36.501 (b)

**B 部分 噪声测量**

**F36.101**

(a)

75°

(b)

(1)

(2)                    90%        30%

(3)            10 (33 )                    5°C(41°F)        30°C 86°F

(4)                    1.83        (1 )

(4)            10 (33 )                    19 /        10 /

7 /        4 /                    ±15°

1.83        1

(5)

(6)

(7)                    F36.103

**F36.103**

(a)                    F36.105

(b)

(c)                    F36.105

(d)

(rms)

---

**F36.105**

(a)

(b)

(IEC)

179

36.6

(c) 45 11200

IEC 179 (1973 )

(d)

800 11200

20dB

ÄMÇ Ä Ö À é — "INONçEE) ÓH q= |ÎAña ™N k ) !W W # HQHWBÄô @I <D'k Ä1978) Ž• Ä9≠ |• Ä=Ž Ÿ ÿ \_ \_ A<0.

1 800

(f)

(g)

11 / 6 /

**F36.107**

(a)

1.2 (4 )

(b)  
4

(c)

10dB(A)

**F36.109**

(a)

(5)

(6)

(g)

**F36.111**

(a)

300 <sup>10</sup>/<sub>30</sub> 985 <sup>30</sup>/<sub>1000</sub> ±10°

(b)

(1)

(2)

**C 部分 数据修正**

**F36.201**

(a) 20°±5°C 68±9°F 40

25°C 77°F 70

(b)

(c)

5dB(A)

(c)

$$\Delta dB = 49.6 - 201 \log_{10} \left\{ (3500 - D_{15}) \frac{R/c}{V_y} 15 \right\}$$

D<sub>15</sub>— 15 50 ( )

R/C— ( / )

V<sub>y</sub>—

(d) 15 50

610 2000 825 2700

**F36.203**

(a) (A) 90

(b) ±1.5dB(A) 90

---

**D**

**F36.301**

(a)		<b>B</b>	<b>C</b>			
(b)		600	1320		68dB(A)	600
	1320		1500	3300	1dB/75	1dB/165
		1500	3300		80dB(A)	
	80dB(A)					

**G 1988 11 17**

**A**

**G36.1**

**B**

**G36.101**

**G36.103**

**G36.105**

**G36.107**

**G36.109**

**G36.111**

**C**

**G36.201**

**G36.203**

---

**D**

**G36.301**

**A 部分 总则**

**G36.1**

36.1            36.501 (c)

**B 部分 噪声测量**

**G36.101**

(a)

75°

(b)

(1)

(2)

2.2°C    35°C            36°F    95°F

(3)

20    95            ( )

(4)

19    /            10                    9    /            5                    30

(5)

(6)

1.83            1.2    4            10    33  
(1    )

(c)

(d)

G36.103

**G36.103**

(a)

G36.105

(b)

(c)

G36.105

(d)

(rms)

**G36.105**

(a)

---

(b) (IEC) 651 36.6  
561

IEC 651 I  
(c) 45 11200

IEC 651  
(d)

800 11200  
20dB

(e) IEC 651 A

(f) A

A36.3.8 A36.3.9

(g) 9 / (5 )

**G36.107**

(a) 12.7  
7  
40 2.5

3/4

(b)

10dB

(c)

10dB(A)

**G36.109**

(a)

(b) G36.105

(c)

(d) G36.101

(1)

(2)

(e)



---

(f)

(g)

(1) ( )

(2)

(3)

(4)

(5) (rpm)

$\pm 1$

(6) G36.201

**G36.111**

(a) 2500 (8200 )

$\pm 10^\circ$   $\pm 20$

$V_y \pm 9$  / 5

(b)

(1) 1013.25 (1013.25 )

(2) 15°C 59°F

(3) 70

(4)

(c)

(1)

(i) 15 50

(ii)

(iii)

(iv) ( )

)

(2)

(i)

(ii) ( )

(iii)  $V_y$

(iv)

---

**C 部分 数据修正**

**G36.201**

(a)

- (1)
- (2)
- (3)
- (4)

(b)

G1

15°C 59°F 70

(c)

- (1) 0.70 0.014
- (2) 0.70 0.80
- 0.007
- (3) 0.80 0.005
- 0.80
- 0.008

(d)

(1)

$$\Delta(M) = (H_T \alpha - 0.7 H_R) / 304.8$$

$H_T$

$H_R$

$\alpha$

500

(SAE)

ARP866A

36.6

(2)

$\Delta(1)$

G1

$$\Delta(1) = 221 \log(H_T/H_R)$$

$H_T$

$H_R$

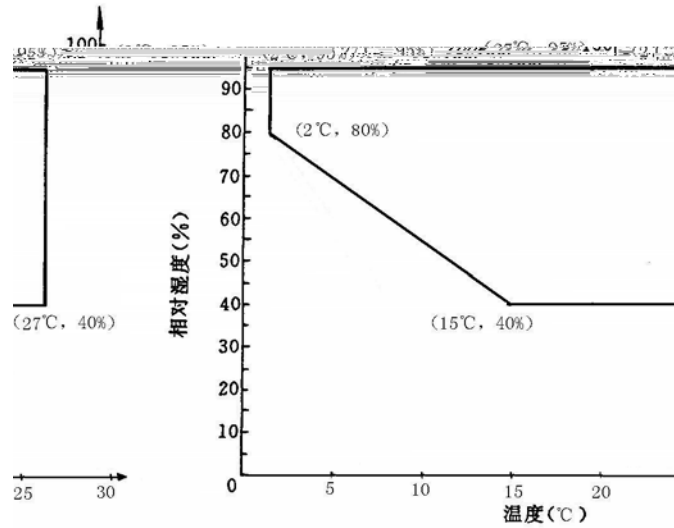
G1

$$\Delta(1) = 201 \log(H_T/H_R)$$

(3)

$\Delta(2)$

$$\Delta(2) = k \log(M_R/M_T)$$



G1

$M_T$   $M_R$   $k$   $k$   $M_T$   $M_R$   $K$   $M_R$   
 dB(A)  
 150  $M_T$   $M_R$   $k$   $M_T$   $M_R$   $K$   $M_R$   
 (4)

$\Delta(3) \quad 171 \log(P_R/P_T)$   
 $P_T \quad P_R$

**G36.203**

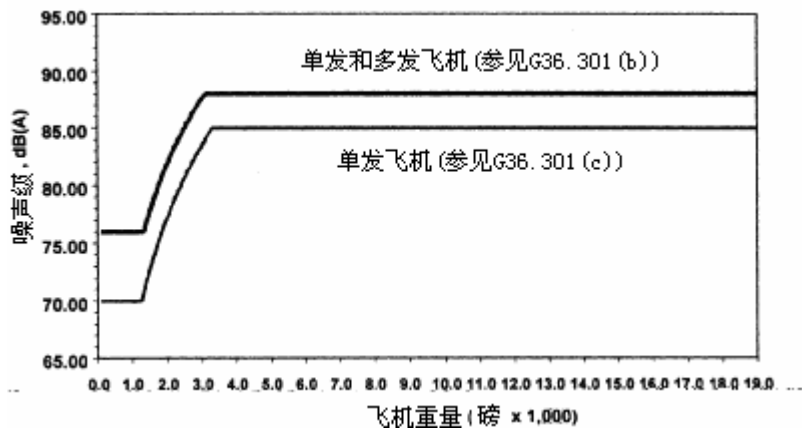
- (a) 6  $(L_{Amax})$  90
- (b)  $\pm 1.5 \text{dB(A)}$  90

**D 部分 噪声限制**

**G36.301**

- (a) B C
- (b) 2007 4 15  
 600 (1320 ) 76dB(A) 600 (1320 )  
 88dB(A) 8618 (19000 ) G2  
 9.83dB(A)
- (c) 2007 4 15

(1257 ) 570 (1257 ) 70dB(A) 570  
 85dB(A) 8618 (19000 ) G2 10.75dB(A)



G2  
 [2007 4 15 ]

H H

15

---

**H36.107**

**H36.109**

**H36.111**

**H36.113**

**C                    36.803**

**H36.201            EPNdB**

**H36.203**

**H36.205**

**D                    36.805**

**H36.301**

**H36.303**

**H36.305**

**A**

**H36.1**

36.1

(a)        H  
36.801

(b)        36.803  
(EPNL)

(c)        36.805

**H36.3**

(a)

- (1) 1,013.25 (2116 )
- (2) 25°C(77°F)
- (3) 70
- (4)

(b) 10dB

(c)

- (1) H1
- (2) ( 20 65 )
- 500 1640 )  $\beta$   $\beta$  (
- $V_y$   $\beta$  Cr A
- ) ( Ir )

(d)  $D_r$  ( H2)

- $D_r$  A 150 492 0.9V<sub>H</sub>
- 0.9V<sub>NE</sub> 0.45V<sub>H</sub> 120 / 0.45V<sub>H</sub> 65 0.45V<sub>NE</sub> 120 0.45V<sub>NE</sub> 65
- 10dB RPM
- A  $J_r$

(e)  $V_H$  1,013.25  
(2116 ) 25°C 77  $V_{NE}$

$V_H$   $V_{NE}$

(f)

- (1) H3
- (i) E (EK)
- $E_r K_r$  (PNLTM)10dB
- rpm 6°
- (ii)  $\beta$  AH A K K
- $\beta$  5.5° 6.5°
- (2) H 6° 10dB
- E K

**H36.5**

A	( )

---

C	
Cr	
D	
Dr	
E	
Er	
F	A
Fr	A
G	A
Gr	A
H	A
Hr	A
I	
Ir	
J	
Jr	
K	
Kr	
L	A PNLTM
Lr	A PNLTM
M	A PNLTM
Mr	A PNLTM
N	A PNLTM
Nr	A PNLTM
S	

AF		A
AG		A
AH		A

AL			L	A
ALr			Lr	A
AM			M	A
AMr			Mr	A
AN			N	A
ANr			Nr	A
CI				C A
			I	
DJ		D		A
		J		
EK		E		A
		K		

**B 36.801**

**H36.101**

(a)

(b)

(1)

(2)

150 492

(3)

6

20

(4)

(5)

PNLTM10dB

( )

(i)

( )

80°

(ii)

(6)

(i)

(ii)

+5% -10%

(7)

6°±0.5°

H36.107

(8)



---

	(i)							
	(ii)			90%		105		
	(c)							
	(1)							
	(2)			10		33		
		-10°C~35°C	14°F~95°F	( )			10	33
	(3)			10				
				8			12dB/100	
		20%~95%	( )					
	(4)		10		19	/	10	
		9	/	5	10dB			30
	(5)			( )				
	(6)							10
						(		
	)							
	(7)					30		
	(d)							
	(1)						A	
EPNdB	(2)			(				
	(3)							
					PNLTM	10dB		
	(4)						H36.205	
<b>H36.103</b>								
(a)		H36.101		H36.205	(b)			
		36						
(b)						(		
)								
(1)		V <sub>y</sub> ±9	/	5		±9	/	5
		10dB						
(2)							20	65
(3)				500	1640			
(4)		10dB					25°C	

---

---

$\pm 9$  / 5 25°C

(5) 10dB  
 $\pm 1.0$   
(6) 10dB  $\pm 10^\circ$   $\pm 20$  65  
(7)  
 $V_y$

**H36.105**

(a) H36.101 H36.205 (c)  
36  
(b)  
(1)  
(2)  $150 \pm 9$  492  $\pm 30$   
(3) 10dB  $\pm 10^\circ$   $\pm 20$  65  
(c)  
(1)  $0.9V_H$   $0.9V_{NE}$   $0.45V_H$  120  
 $0.45V_H$  65  $0.45V_{NE}$  120  $0.45V_{NE}$  65 ,  
(2) 10dB  
 $\pm 1.0$   
(3) PNLTM 10dB  
(d)  $\pm 9$  / 5

**H36.107**

(a) H36.101 H36.205 (d)  
36  
(b) ( )  
(1)  $6^\circ \pm 0.5^\circ$   
(2)  $120 \pm 10$  394  $\pm 33$   
(3) 10dB  $\pm 10^\circ$   $\pm 20$  65  
(4)  $V_y$   
(5) 10dB  
 $\pm 1.0$   
(6)  
(c)  $\pm 9$  /  $\pm 5$

---

**H36.109**

A A36.3

**H36.111**

(a)

(b)

(1) H36.109

(2)

(3)

(4)

(5)

(i)

(ii)

(iii)

(iv)

(v) ( / )

(vi)

(vii) ( )

(6)

H36.3

(c)

(1)

H36.3

H36.205

(2)

$-7.5\text{Log}(AL / ALr)$       4.0EPNdB,      EPNL      2.0EPNdB  
 $\Delta_1( H36.205(f)(1))$        $\Delta_2( H36.205(g)(1)(i))$   
2.0EPNdB

(i)

(ii)

(iii) H36.205

(iv)

H36.205

(3) 10dB

A36.3.10.1

3dB

(d)

(1)

90%

EPNL

---

90%

(2)  
 $\pm 1.5 \text{EPNdB}$   
(3)

90%

(4)

$V_H$   $V_y$

**H36.113**

(a)

H36.3 (a)

(b)  
SAE ARP866A

50Hz 10kHz

A36.7

(c)

(1)

•°\$ (i)

EPNL

5 a)

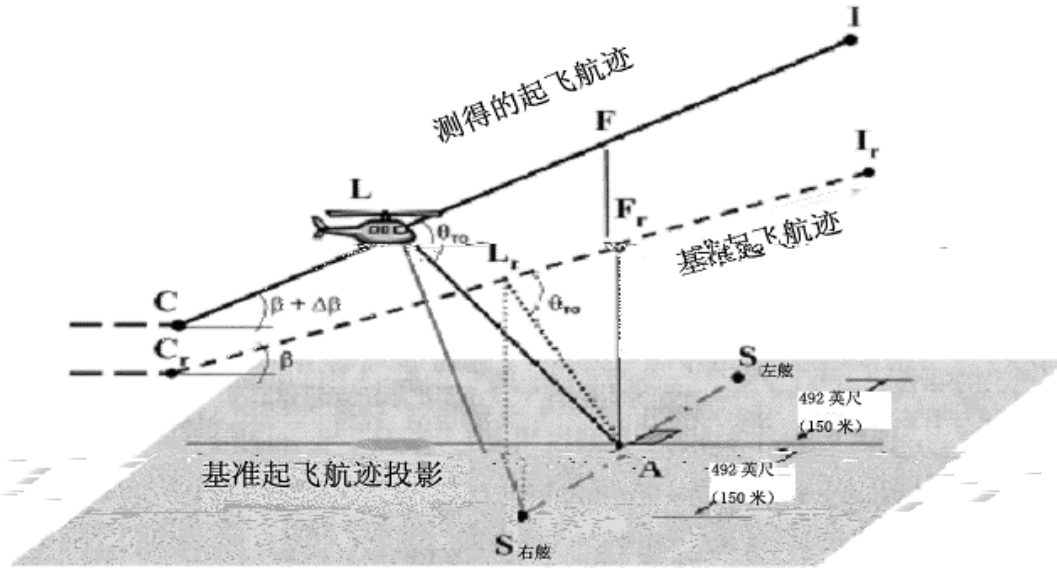
---

**H36.203**

- (a) H36.305  
EPNL
- (b) EPNdB H36.111 (d) 6  
EPNdB 90%

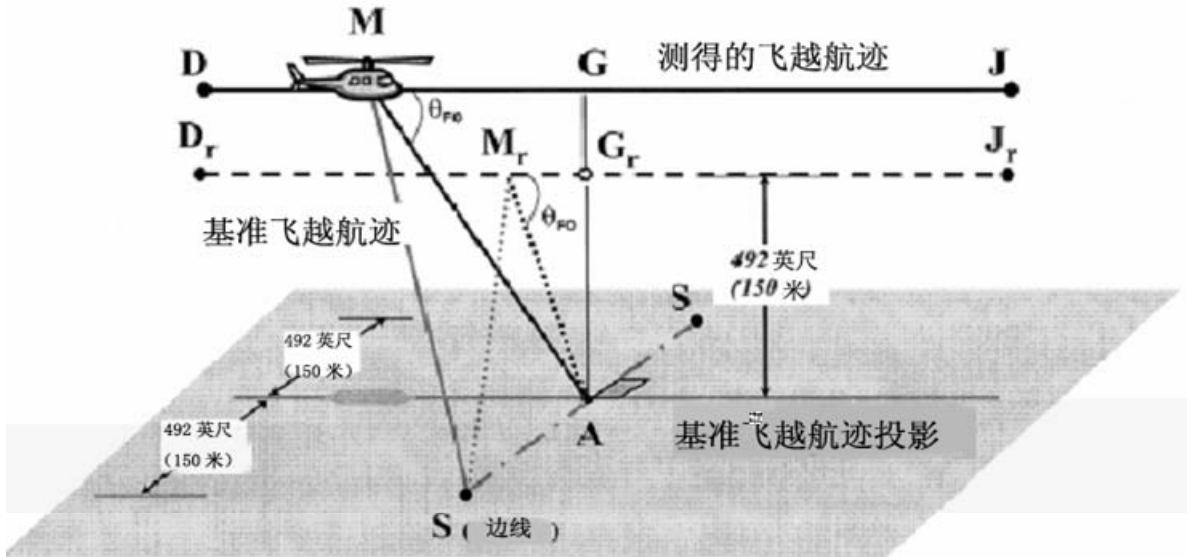
**H36.205**

- (a) H36.305
  - (1) EPNL
    - (i)
    - (ii)
  - (2) EPNL
    - (i) PNLTM
    - (ii) PNLTM PNLTM SPL
      - (A)
      - (B)
      - (C) SPL
  - (iii) PNLTM PNLTM PNLTM PNLTM EPNL PNLTM EPNL
  - (iv) PNLTM
- (b)
  - (1) H1
    - (i) H36.3 (c)
    - (ii)
  - (2) 20 65  $V_y \pm 9$  /  $\pm 5$   
C



H1

- (3) H1 L A PNLTM  
 L<sub>r</sub> AL AL<sub>r</sub>
- (c)  
 (1) H2 H36.3 (d)  
 ±9 / ±5



H2

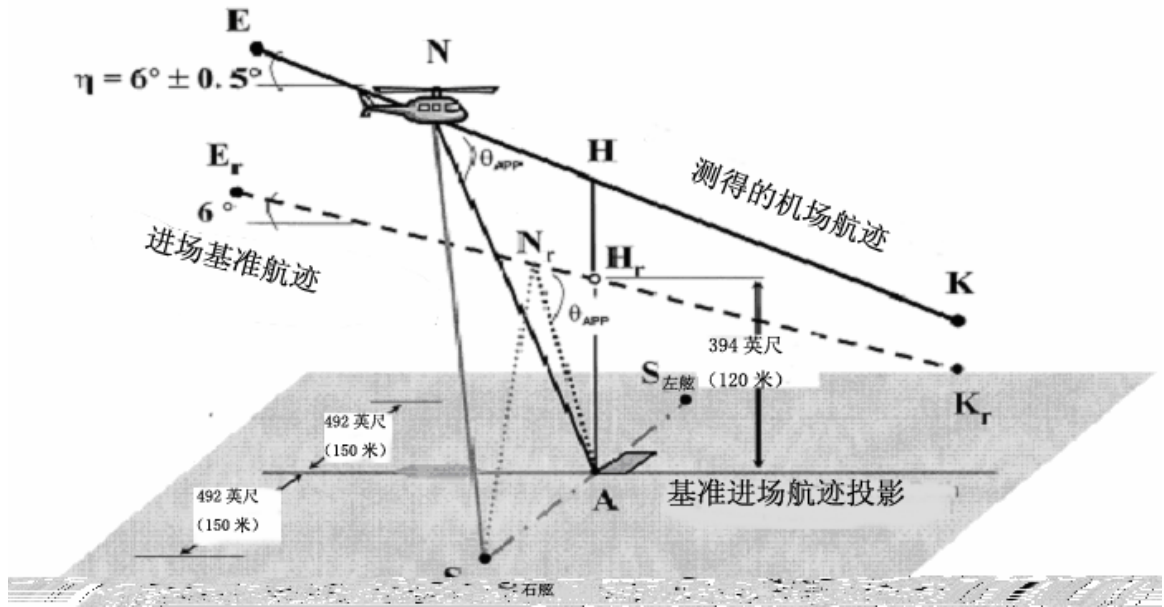
- (2) H2 DJ PNLTM 10dB  
 AG AG

(d) 进场剖面

(1) H3

(2) 10dB 6°(±0.5°) H

6°



H3

(3) H3

---

(f) PNLT  
(25°C (77°F) 70%)

(1) H1 A L PNLTM

SPL(i)

(i) 1

$$SPL(i)_r = SPL(i) + C[\alpha(i) - \alpha(i)_o]AL + C\alpha(i)_o (AL - AL_r) + 20 \log (AL/AL_r)$$

SPL(i) SPL(i)r

$\alpha(i)$   $\alpha(i)_o$  i

AL 0.001 0.01 C i

ALr

(ii) 2 SPL(i)r PNLT

$\Delta_1 = PNLT - PNLTM$

EPNL

(2)

(i) (f)(1)

H2 SPL(i)r

$$SPL(i)_r = SPL(i) + C[\alpha(i) - \alpha(i)_o]AM + C\alpha(i)_o (AM - AM_r) + 20 \log (AM/AM_r)$$

AM AM\_r

(ii) (f)(1)(ii)

(3)

(i) (f)(1)

H3 SPL(i)r

$$SPL(i)_r = SPL(i) + C[\alpha(i) - \alpha(i)_o]AN + C\alpha(i)_o (AN - AN_r) + 20 \log (AN/AN_r)$$

AN AN\_r

(ii) (f)(1)(ii)

(4)

(i) (f)(1)

SPL(i)r H3

$$SPL(i)_r = SPL(i) + C[\alpha(i) - \alpha(i)_o]SX + C\alpha(i)_o (SX - SX_r) + 20 \log (SX/SX_r)$$

S X X\_r

X=L X\_r=L\_r

X=M X\_r=M\_r

X=N X\_r=N\_r

(ii) (f)(1)(ii)

(g)

(1)



(i) H1  
 $\Delta 2 = -7.5 \log (AL/AL_r) + 10 \log (V/ V_r)$

A

EPNL

AL

AL<sub>r</sub>

EPNL

(ii)  
 $\Delta 2 = -7.5 \log (AM/AM_r) + 10 \log (V/ V_r)$

AM

A

AM<sub>r</sub>

A

(iii) H3

$\Delta 2 = -7.5 \log (AN/AN_r) + 10 \log (V/ V_r)$

AN

A

AN<sub>r</sub>

A

(iv)

$\Delta 2 = -7.5 \log (SX/SX_r) + 10 \log (V/ V_r)$

S

X

X<sub>r</sub>

X = L

X<sub>r</sub> = L<sub>r</sub>

X = M

X<sub>r</sub> = M<sub>r</sub>

X = N

X<sub>r</sub> = N<sub>r</sub>

(2)

θ

ψ

ψ

**D**

**36.805**

---

(ii)  
2EPNdB  
2EPNdB  
(2)  
(i) 80000 176370 109EPNdB  
3.01EPNdB 89EPNdB  
(ii) 80000 176370 108EPNdB  
3.01EPNdB 88EPNdB  
(iii) 80000 176370 110EPNdB  
3.01EPNdB 90EPNdB  
(b) H36.11 (b)  
H36.203 (a)

(1) 4EPNdB  
(2) 3EPNdB  
(3)  
[2007 4 15 ]

I [ ]

J

3175 (7,000 )

H

A

J36.1

J36.3

J36.5 [ ]

---

**B**                      **36.801**

**J36.101**

**J36.103**    [    ]

**J36.105**

**J36.107**    [    ]

**J36.109**

**J36.111**

**J36.113**    [    ]

**C**                      **36.803**

**J36.201**        **SELdB**

**J36.203**

**J36.205**

**D**                      **36.805**

---

**J36.301**

**J36.303** [ ]

**J36.305**

**A**

**J36.1**

36.1 H 3175  
7,000  
(a) H  
36.801  
(b) 36.803  
(SEL)  
(c) 36.805

**J36.3**

(a)  
(1) 76 2116  
(2) 25°C 77°F  
(3) 70  
(4)  
(b) A 10dB  
(c) 150 492  
 $0.9V_{NE}$   $0.45V_{H+120}$  /  $0.45V_{H+65}$   $0.45V_{NE+120}$  /  $0.45V_{NE+65}$   
10dB  
RPM  
(1)  $V_H$   
1,013.25 (2,116)  $V_H$  ) 25°C  
 $V_H$   $V_{NE}$   
(2)  $V_{NE}$   
(d)

**J36.5** [ ]

---

**B 36.801**

**J36.101**

(a) 总则

(b)

(1)

(2) A 10dB

( )

80°

(c)

(1)

(2) 2 °C 35°C 36°F 95°F ( ) 20 95 ( )

8kHz

10dB/100 (30.5dB/1000 )

(3) 19 / (10 ) 9 / (5 )

30

(4) 1.2 4 10 33

(5)

(6) 2000 6560

(d)

(1) J36.109 (b)

(SEL)

(2)

J36.205

(3) J36.3

**J36.103 [ ]**

**J36.105**

(a)

(b)

(1)

(2) 150±15 492 ±50

---

(3)  $\pm 10^\circ$   
(c)  
(1) J36.3 (c)  
(i) 25°C 77°F MAT (V<sub>R</sub>) (V<sub>T</sub>)  
c (1135.6)

$$L_{AE} = L_{AMAX} + \Delta A$$

$\Delta A$

$$\Delta A = 10 \log_{10}(T)$$

T (t<sub>2</sub>-t<sub>1</sub>)/2 L<sub>AMAX</sub> (P<sub>0</sub>) A ( )  
dB

(c)

(1) (d)

(2)

(3) (d)

(4) A36.3.9

(d)

(1) A

“ ”

SEL

(i) SEL

804

36.6

1

(ii) (e) (f)

(d)(1)(i)

( )

A36.3.6

IEC

/  
561

36.6

(iii) IEC 651

36.6

(iv) 45 11500 A  
IEC 651 1 IV V

36.6

(v)

(e)

(e)

(1)

A A36.3.6

(2)

(i)

( )

(ii)

0.5dB

SEL

(iii)

(f)

(1)

1.2 4



(2) 10dB

(3) 15dB(A)

(4) A ( ) SEL A (L<sub>AMAX</sub>) 10dB  
SEL ( )  
dB(A) (L<sub>AMAX</sub>)  
J36.111 (b)

**J36.111**

- (a)
- (b)
- (1) J36.109
- (2)
- (3)
- (4)
- (5)
  - (i)
  - (ii)
  - (iii)
  - (iv)
  - (v)
  - (vi) V<sub>H</sub> V<sub>NE</sub> ( )
  - (vii)
  - (viii)
  - (ix)
  - (x)
  - (xi) ( )
- )
- (6) J36.205  
J36.105

**J36.113** [ ]



---

C

**36.803**

**J36.201**

**SELdB**

J36.109 (b)

dB(A)

(SEL)

SEL

J36.109

**J36.203**

(a)

J36.305

SEL

J36.205

SELdB(A)

(b)

1.5dB(A)

90%

6

(c)

90%

J36.111

**J36.205**

(a)

B

J36.3

(b)(c)

(b)

$$\Delta J_1 = 12.5 \log_{10}(H_T/150) \text{dB}$$

$\Delta J_1$  dB

SEL

$H_T$

12.5

(c)

$$\Delta J_3 = 10 \log_{10}(V_{RA}/V_R) \text{dB}$$

$\Delta J_3$  dB

SEL

$V_R$

J36.3 (c)

$V_{RA}$

J36.105 (c)

(d)

J36.105 (c)

(e)

(f)

(g)

J36.105

SEL

2.0dB(A)

(h)

J36.111

---

**D**

**36.805**

**J36.301**

B C

D

**J36.303** [ ]

**J36.305**

J36.101

( )  
(a)

3175 7000

788 1737 82dB(SEL) 3.0dB

$$L_{AE}(\text{limit})=82+3.0[\log_{10}(\text{MTOW}/788)/\log_{10}(2)]\text{dB}$$

MTOW

(b) IEC 804

1985

[2007 4 15 ]

---

20

Y12E Y8F-600 ARJ21-700

(CCAR-36) 2002 3

1 22

FAA  
(CCAR-36)

FAR36

ICAO  
27

ICAO

7

FAA

16 I 3

FAR36

ICAO

16 4 7

FAR36 23 28

(CCAR-36)

(一)

(二)

[2007 4 15 ]

(三)

“ ”

(四)

16 I

FAR36 6

Amdt.36-23

2002.03.01

Amdt.36-24

2002.08.07

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Amdt.36-25	2004.07.02
Amdt.36-26	2005.08.04
Amdt.36-27	2005.09.06
Amdt.36-28	2006.02.03

**CCAR-36**

A

				FAR	
36.1					
(a)(1)		√		36-24	
(f)(1)		√		36-24	
(f) (9)	√			36-26	
(f) (10)	√			36-26	
(f) (11)	√			36-26	
(h) (5)	√			36-25	
36.2	√			36-24	
36.6				36-26	
(c) (1) (vi)	√				
(x)	√				
(c)(3)					
36.7				36-26	
(e)(4)	√				
(f)	√				
36.11		√		36-25	

B

				FAR	
36.101		√		36-24	

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				FAR	
36.801		√		36-25	

O

				FAR	
36.1581		√		36-24	
(a) (2)		√		36-25	
(a) (3)					

				FAR	
A		√		36-24 36-26	A B
B		√		36-24 36-26	C
C		√		36-26	C
G		√		36-27 36-28	
H		√		36-25	
J		√		36-25	