

2016

2016

“ ”

,

2016

,

2016

.....	1
.....	5
.....	5
.....	8
.....	9
.....	10
.....	12
.....	13
.....	17
.....	21
.....	21
.....	22
.....	23
.....	25
.....	25
.....	28
.....	31
.....	33

“ ”

.....	33
.....	35
.....	36
.....	43
“ ”	
.....	43
.....	46
.....	48
.....	54
.....	57
.....	59
.....	65

1

1

3D

“ ”

“ ” “

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4.0

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0431-81213767 88938720

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6

12396

12396

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2

3

4

5

1 1

12396

6

3

2

1

4

0431-88913439 88975139

1

1

2

3

“ ”

4

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1

2

3

4

3

0431-88956092

1

6

3

4

2000

5

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2

1

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3

4

2

3

0431-88972663 81213099

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1

2

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4

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3

0431-88955461

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1

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2 “ ”

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3

4

5 2025

2

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3

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4

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“ PPP ” ()

2

2

1

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3

0431-88975471

2015-2020

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1

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3

1

2

3

30%

4

5

6

1

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3

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5

3

1

2

3

0431-88955415

4

5

6

0431-88955472 88955365

1

1

2

3

2

1

2

3

3

3

45

4

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3

0431-89359118

1

1

2

3

4

5

6

7

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35

1 1

2

3

3

4

5

6

3

0431-89359656

1

1

2

3

4

2

1

3

2

3

4

5

3

0431-88976967

1

1 “ “ + ’ ”

1

2

“ + ”

“ + ”

“ ”

“ + ”

“ + ”

“ + ”

2

2

1

1

2

2

3

2

1

50

2 2014

100

;

3

0431-88973273

1

2

1

,

1

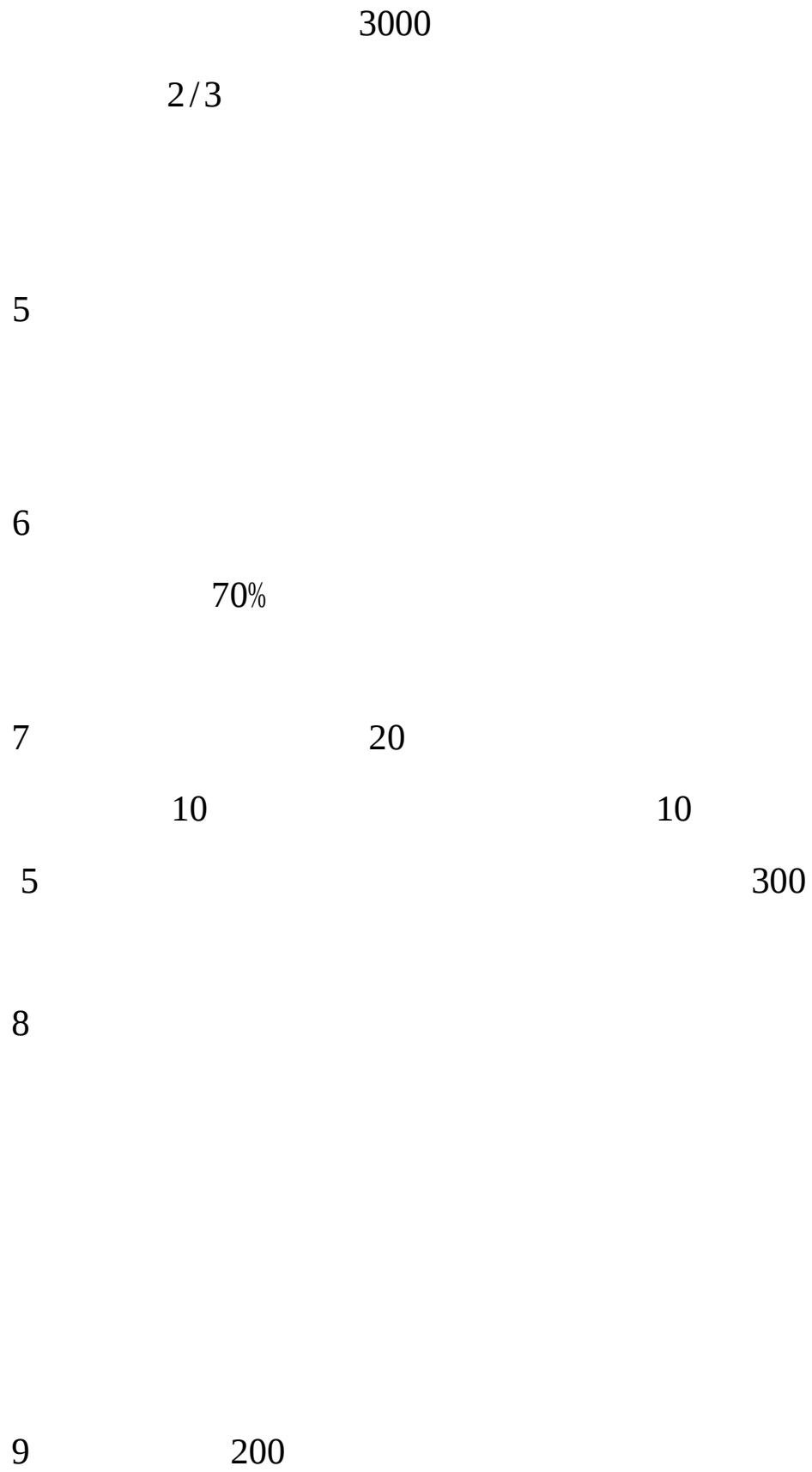
2

3

,

4

100



10

3

1

2

3

“

”

1

7

4

0431-88979697

1

1

2

3

4

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2014 16

3

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2

3

4

5

R&D

2%

6

7

8

4

0431-88975596

3

0431-88975413

4

0431-88972482 88955405

5

0431-88550905

1

1

2

3

4

2

3

1

2

3

4

5

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4

1

0431-89634220

0431-88975596

0431-88975413

0431-88955405

2

0431-88550905

2016

1

1

1

3D

2

“ + ”

3

4

3D

2

1

2

3

4

5

6

7

3

1

3

3

3

2

3

4

5

6

7

8

9

4

1

2

3

4

2

1

2

3

4

5

6

3

1

0431-88973493

2

0431-88975596

3

0431-889754413

4

0431-88935899 89359765

5

0431-88550905

1

1

2

3

4

2

3

30%

4

1

2

3

2000

4

5

1

6

5

3

0431-88975413

4

0431-88935899

5

0431-88550905

1

1

2

3

4

2

[2013]66

3

1

[2013]66

2

5000

3

4

1

0431-88973493

2

0431-88975596

3

0431-88975413

4

0431-88972482 88955405

5

0431-88550905

“ ”

1

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1

2

“ + ”

3

4

2

1

2

3

4

6

7

3

1

2

3

4

4

5

6

7

8

2

1

2

3

500

4

1000

3

1

0431-88973493

2

0431-88975596

3

0431-88975413

4

0431-88972482

5

0431-88550905

1

“

”

“

”

“

”

2

1

2

2013

3

4

60%

3

6

7

“

”

3

1

2

2015

2016 3

3

1

[2013]67

3

2

3

4

4

1

0431-88973493

2

0431-88975596

3

0431-88975413

4

0431-88972482

	50-100	/	800-1000	/
	50-300	/	100-300	/
			50-100	/
50-100	/		50-1000	/
		500-1000	/	
50-100	/		50-150	/
		50-100	/	

2

1

2

50%

3

1 1 2

2 3

1 1

62

57

3 1

2

1

2 1 “

”

4

5

1

2

3

4

2

5

3646

1101

6

2015 8 15

——2015 9 30

2015 8 15

——2015 10 15

1

2

3

4

5

6

2

1

<http://kjt.jl.gov.cn>

2

<http://www.jlkjxm.com>

3

0431-88975536

4

0431-89101521 89101522 89101523

5

1244

0431-81818191

0431-81818192

j l spps@163.com

2016

1

1

1

1

2

1

1

2

$976 \pm 1 \text{ nm}$

3

$\leq 1 \text{ nm}$

4

0.01 nm/

5 $\geq 500 \text{ W}$

6 1

2

1

2

1

10

2 820 900 nm

3 $\leq 10^\circ$

4 $\geq 1 \text{ W}$

5 $\geq 10 \text{ W}$

6 1

3

1

2 5

2 5

2		
1		1
2	$2 \sim 5 \mu\text{m}$	
3	$\geq 100 \text{ W}$	
4	$\leq 10 \text{ dB}$	
5	$M^2: 1.5$	
6		1
	4	
1		

2		
1		1
2	$3.0 \sim 4.3 \mu\text{m}$	
3	$\geq 2 \text{ W}$	
4	$\leq 10 \text{ ns}$	
5	$\geq 200 \text{ kHz}$	
6		1
	5	
1		

CO₂ NO₂ SO₂

2

1

1

2

CO₂ NO₂ SO₂

3

50 10000 ppm

4

≤ 5 s

5

1

6

1

2

1

1

2

0.5 nm

3

1 Hz

4

X Y ± 0.5 m

5

1

2

1	ABS		
1			
	ABS		
		ABS	
	ABS		
2			
1	ABS		
2		$\geq 180 \text{ J/m}$	$\geq 53 \text{ MPa}$
	$\geq 82 \text{ MPa}$	$\geq 2400 \text{ MPa}$	
3	$\geq 65\%$	$\geq 88\%$	
4		1	
	2		
1			

2				
1				
2	0.3 g/cm ³	≥ 2 MPa	≤ 0.065	
W/(m · K)				
3	350			
4	450	/5 min		
5		1		
3				
1				
2				
1				
1000				
2		ISO 1485	ε	

500%

5

240

10 MPa

200%

6

20%

7

1

4

1

2

1

2

$\geq 280\text{ }^{\circ}\text{C}$

3

$\geq 90\text{ MPa}$

$\geq$

30%

4

$\leq 300\text{ Pa}\cdot\text{s}$

5

$\geq 1200\text{ MPa}$

$\geq 100\text{ MPa}$

6

1

5

1

2			
1			
2	5cN/dtex	40cN/dtex,	
1.5 g/cm ³			
3	300		≥ 85%
4		2000	
≥ 90%			
5		3 × 10 ⁹ rad	
≥ 90%			
6		1	
6			
1			
2			
1			

2		400 MPa	20 MPa
3		1000 MPa	
50 MPa			
4		1	
7			
1			
		PC	PBT
2			
1	3		
1			
2	PC	≥ 52 MPa	≥ 75 MPa
	1.8 MPa	≥ 100	
3	PBT	≥ 110 MPa	≥ 170
MPa	1.8 MPa	≥ 175	
4			UL94-V0
5		1	
3	“	+	”
	“	+	”

1

1

2

1

2

100

5000

3

GIS

4

10

5

50

6

1

1

2

1

2

1

1

10

2

3 5000

4 1

5

6 1

3

1

2

1

1

2 10

1000

3 1.5

3000

4

5

6

7

1

4

1

2

1

1

4

2

1

3

1

4

1

5

1

6

2

5

1

2

1

1

PB

2

1 Gbps

3

128

4

3

3

5

1

2

6

1

“

”

“

”

2

1

1

2

2

1 10%

95%

2

30-50

3 200

3

2

1

1

2

3

4

2

1 1

2 1
3 2-3
4 3-5
5 2-3
3

3

1

1

2

3

2

1

500

2

5-8

3

1-2

7.5

/

$\leq 3\%$

110-120

2400)

$\leq 5\%$

MR

23%

;

3

4

1

1

2

2

1

3-5

2

1-2

4500-5000 /

126	2650	)
23%		
3		
5		
1		
1		
2		
2		
1	20	5000
2	10	
3		1-2
	5000 /	18-20
126-128	2700	)
	335	3%
3		

5

1

1

1

2

3

4

2

1 500

200

2

170%

3

50 kg

4 30

1-2

5 500

100

3

2

1

1

2

3

4

2

1

500

20

2

500

18-24

500 kg

2-3

3

5

4

2-3

3

3

1

1

2

3

4

5

2

1

5		
6		1-2
3		
		1
	4	
1		
1		
2		
3		
4		
5		
2		
1		
400		
2		2-3
3		30

4

2-3

10%

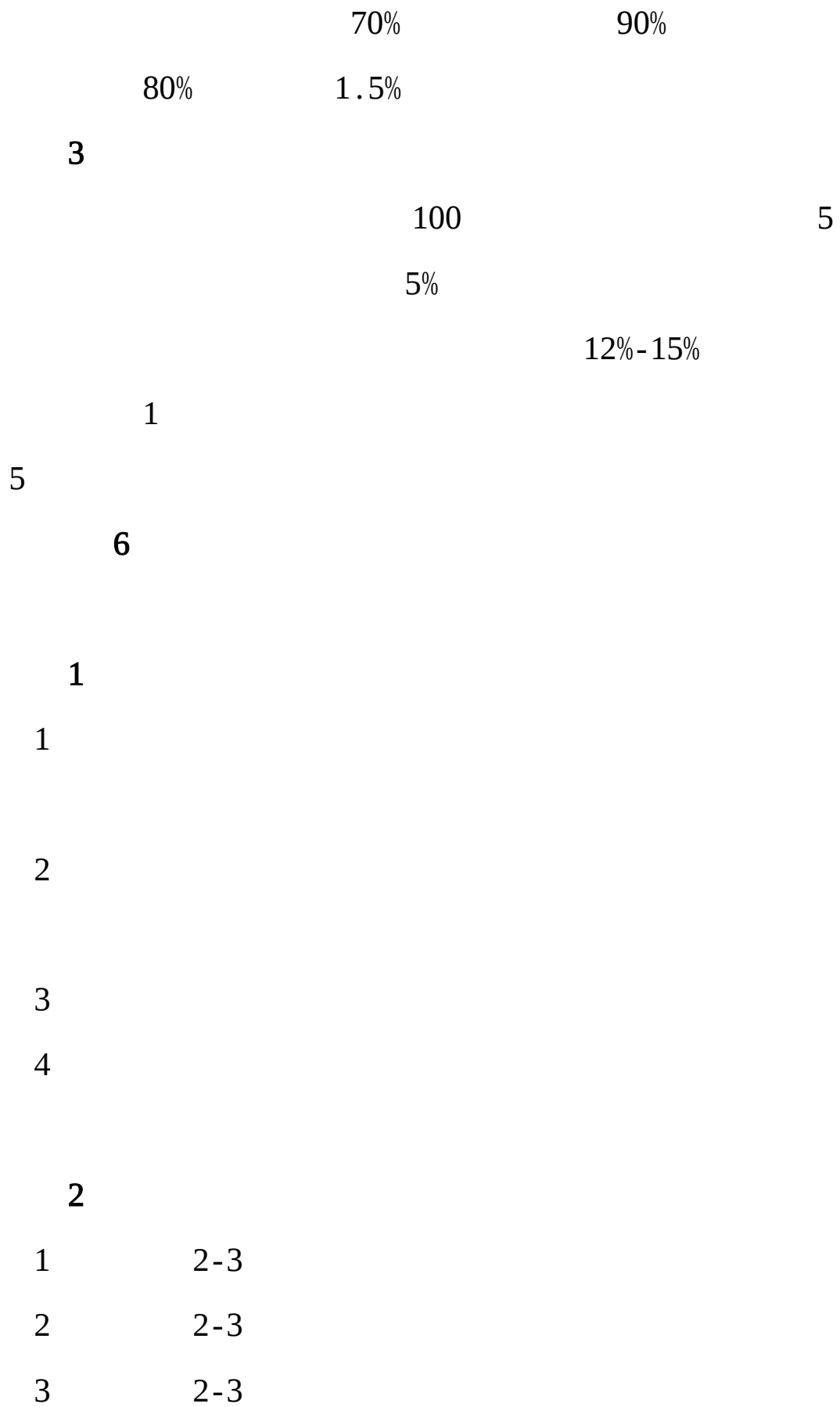
20%

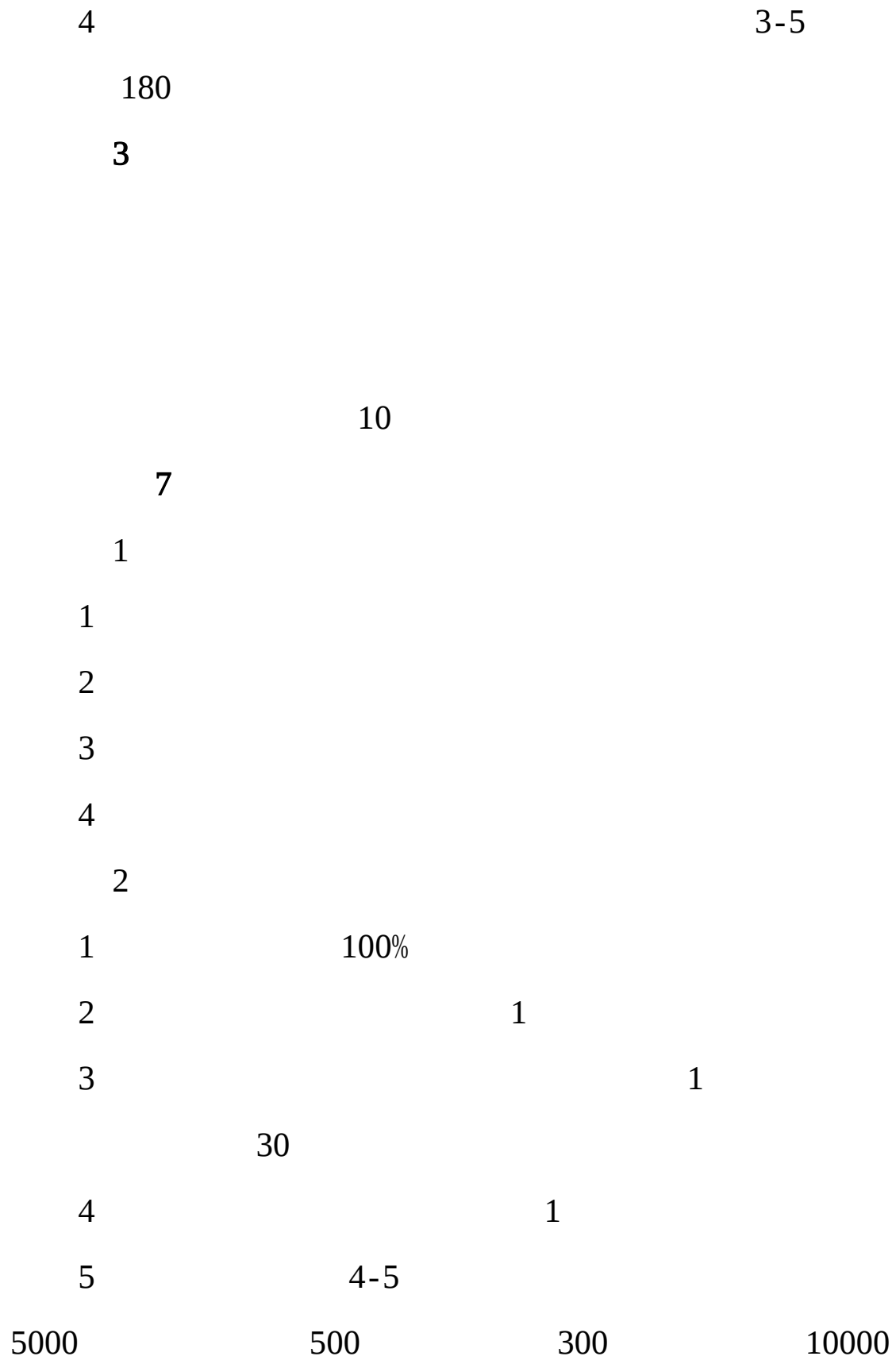
5

10%

15%

3





3

1

8

1

1

7 8 9

2

3

4

2

1

2

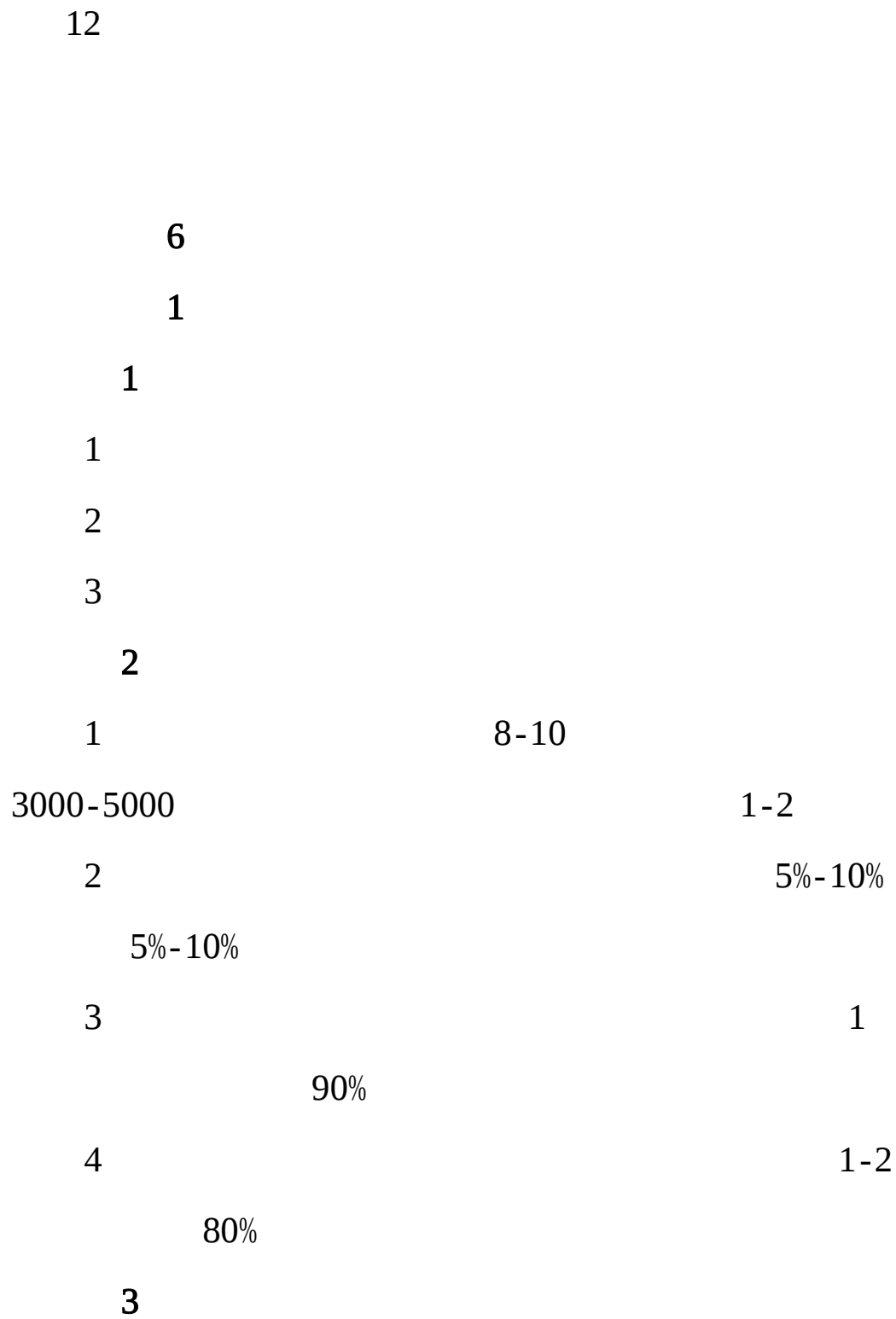
2-3

3

4

2-3

3



2

1

1

2

3

2

1

2-3

2

2

3

100

4

100

3

3

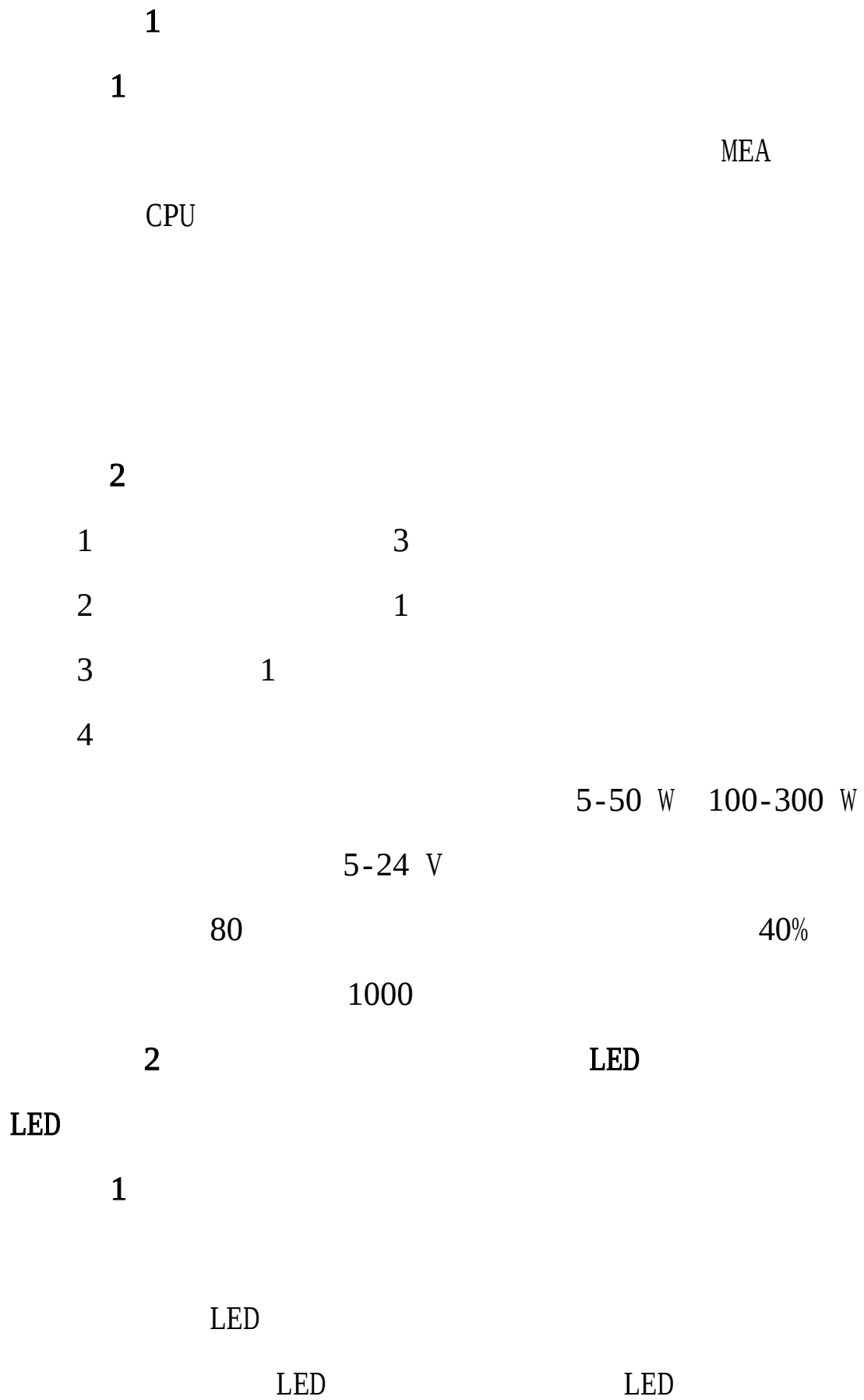
1

1

2
3
2
1 30-40
2 1
70%
3
1 90%
4 1-2
5 50
3
1

2.	1	8%-12%
3.		
90%		
4.	60	
10		
3		
5		
1		
1		
2		
3		
2		
1	80	
2	>11.32 g	>1.86 g
>16.43%		
3		1
>50%		
4	1-2	8

	10	>70%	
5			1
3			
	7		
1.			70
2.			70
3.			60
1.	“	”	70
2.			60
3.			70
8			



2

1

3

2

1

3

1

500 m² ;

4

LED

300 nm-1000 nm

LED

20 cm

500 μmol/(m² · s)

100 lm/W

0-160

5

3

1

2

1

3

2

1

3

1

4

			50 mg/m ³	
			100%	
	4	-		
1				
				-
				-
2				
1		3		
2		1		
3		1		
4				
			10 min	
			1 min	
5				
1				

40%

7

1

2

1

3

2

1

3

1

4

10%

5%

20%

10%

9

1

1

PVC

2

1

3

2

1

3

1

4

$$E_0 \leq 0.2 \text{ mg/l}$$

$$\geq 30 \text{ MPa}$$

$$\geq 5000 \text{ MPa}$$

24h

$$\leq 0.1\%$$

$$\leq 0.01 \text{ mm}$$

$$\geq 12 \text{ W/m}^2$$

$$\leq 0.88 \text{ g/cm}^3$$

2

1

75%

2

1

3

2

1

3

1

4

$$U \quad 0.2 \text{ W/m}^2 \cdot \text{K} \leq K \leq 0.7 \text{ W/m}^2 \cdot \text{K} \\ \leq 1.0 \text{ W/m}^2 \cdot \text{K}$$

3

1

2

1

3

2

1

3

1

4

C15 C30

100 mm/h

$\leq 1\%$

1-15 mm/s

$\geq 30\%$

	C15	C30	5 mm	50
mm	≥ 2	h	≥ 4	mm/s
$\geq 20\%$		$\geq 30\%$		D50

	:C15	C30	pH	≤ 8	$\geq$
30%					

4

1

2

1

3

2

1

3

1

4

≤ 1200	kg/m	$\geq MU10.0$
-------------	------	---------------

D50	$\geq 30\%$
-----	-------------

	$\leq 1000 \text{ kg/m}$	$\geq \text{MU}5.0$
D50	$\geq 30\%$	
	$\geq 30 \text{ MPa}$	$\leq 14\%$
	$\geq 30\%$	
5		
1		
2		
1	3	
2	1	
3	1	
4		
	10	
	$n_{50} \quad 0.6 \quad /h$	
		0.5
$\text{W/m}^2\text{K}$		
6		

1

—

2

1

3

2

1

3

1

4

1

5

1

7 EPS

1

EPS

2

1

3

2

1

3

1

500 m²

4

15
50
8
8
10
1

2

1 3

5000

3 1

11

1

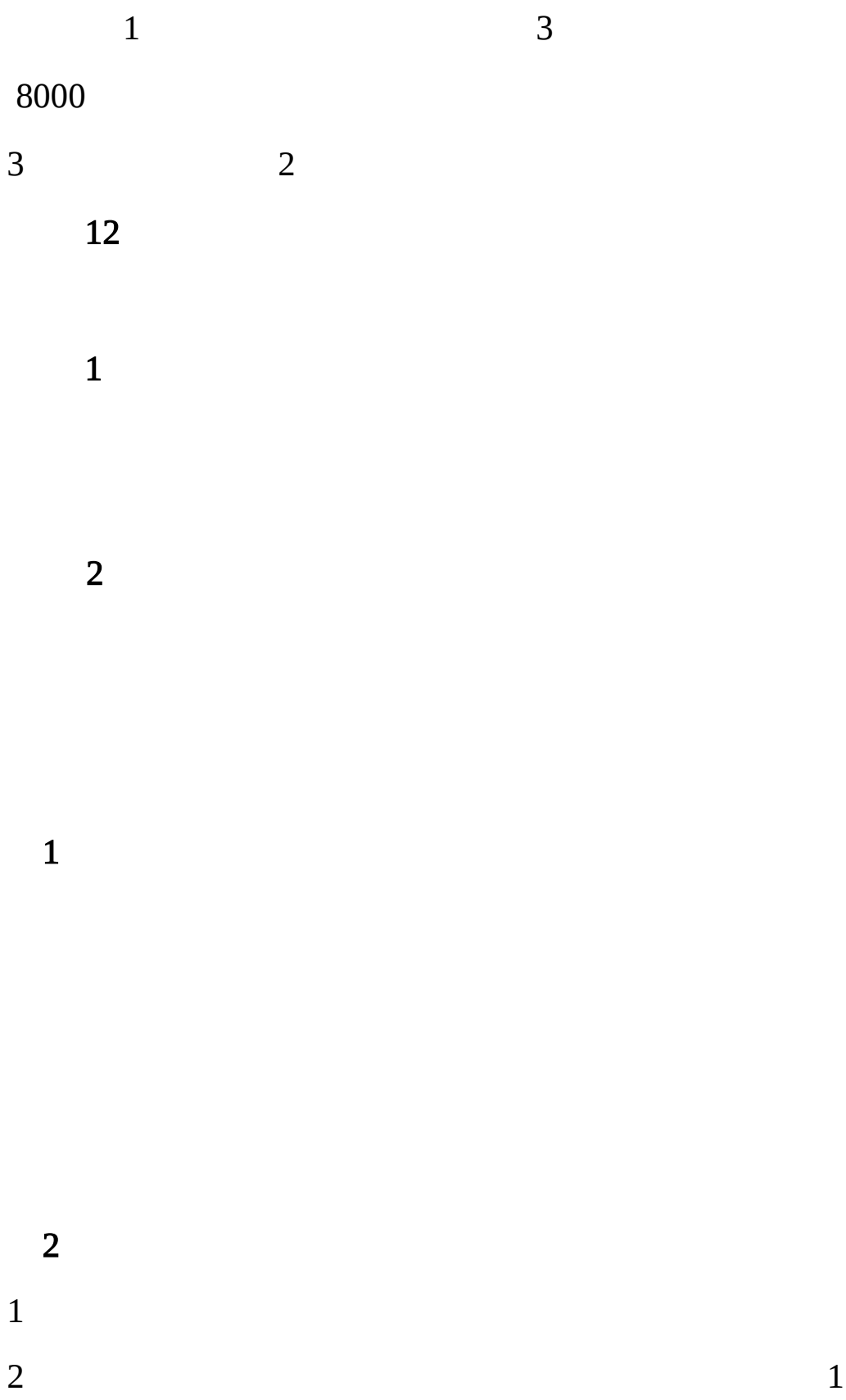
2

1

2

1

2



3	2	
2		
1		
2		
3		
4		
3		
1	1-4	
		0431-89634220
2	5-7	
		0431-88975596
3	8-9	
		0431-88975413
4	10-12	
		0431-88972482
5		0431-88550905