

Z.U.O. "EKO - SOFT"  
Łódź ul. Rogozińskiego 17/7  
tel. 042 648 71 85

HAŁAS PRZEMYSŁOWY i DROGOWY  
PROGRAM SON2 WERSJA 3.2

Właściciel licencji: Zielony Szlak  
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Licencja nr UD/09140/S12/08 z dnia 13.03.2008

DANE WEJSCIOWE  
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Rodzaj obliczeń: Poziom hałasu równoważnego

1. Nazwa projektu: Siłownia wiatrowa msc. Pilitowo Dz Nr 93/2 i 94/2 - 800 kW - 101,3 dB - h=60m
2. Temperatura powietrza [st C.] = 10
3. Wilgotność względna powietrza [%] = 70
4. Tło akustyczne dB(A):  
Pora dnia : 0  
Pora nocy : 0
5. Rodzaj gruntu : grunt porowaty, wskaźnik gruntu G = 1

6. Punktowe źródła hałasu

Lp	Symbol	Współrzędne źródła			Rodzaj źródła	LAW	tD	tN	Do
		x	y	z					
		m	m	m		dB (A)	h	h	dB
1	W 1	205.9	358.0	60.0	wszekier.	101.3	8.000	1.000	

LAW - poziom mocy akustycznej źródła nominalny

tD - czas pracy źródła w przedziale 8 kolejnych najmniej korzystnych godzin dnia

tN - czas pracy źródła w przedziale 1 najmniej korzystnej godziny nocy

LAeq , noc

0	10	20	30	40
50	60	70	80	90
100	110	120	130	140
150	160	170	180	190
200	210	220	230	240
250	260	270	280	290
300	310	320	330	340
350	360	370	380	390
400	410	420	430	440
450	460	470	480	490
500	510	520	530	540
550	560	570	580	590
600	610	620	630	640
650	660	670	680	690
700	710	720	730	740
750	760	770	780	790
800	810	820	830	840
850	860	870	880	890
900				

	0	10	20	30	40
600	34.5	34.7	34.9	35.1	35.3
	35.4	35.6	35.8	35.9	36.1
	36.2	36.3	36.4	36.6	36.7
	36.7	36.8	36.9	36.9	37.0
	37.0	37.0	37.0	36.9	36.9
	36.8	36.8	36.7	36.6	36.5
	36.3	36.2	36.1	35.9	35.8
	35.6	35.5	35.3	35.1	34.9
	34.8	34.6	34.4	34.2	34.0
	33.8	33.6	33.4	33.3	33.1
	32.9	32.7	32.5	32.3	32.1
	32.0	31.8	31.6	31.4	31.2
	31.1	30.9	30.7	30.6	30.4
	30.2	30.1	29.9	29.7	29.6
	29.4	29.3	29.1	29.0	28.8
	28.7	28.5	28.4	28.2	28.1
	27.9	27.8	27.6	27.5	27.4
	27.2	27.1	27.0	26.8	26.7
	26.6				
590	34.8	34.9	35.1	35.3	35.5
	35.7	35.9	36.0	36.2	36.4
	36.5	36.6	36.8	36.9	37.0
	37.1	37.2	37.2	37.3	37.3
	37.3	37.3	37.3	37.3	37.2
	37.2	37.1	37.0	36.9	36.8
	36.7	36.5	36.4	36.2	36.1
	35.9	35.7	35.5	35.4	35.2
	35.0	34.8	34.6	34.4	34.2
	34.0	33.8	33.6	33.4	33.2
	33.0	32.8	32.7	32.5	32.3
	32.1	31.9	31.7	31.5	31.4
	31.2	31.0	30.8	30.7	30.5
	30.3	30.1	30.0	29.8	29.7
	29.5	29.3	29.2	29.0	28.9
	28.7	28.6	28.4	28.3	28.1
	28.0	27.8	27.7	27.6	27.4
	27.3	27.1	27.0	26.9	26.7
	26.6				
580	35.0	35.2	35.4	35.6	35.8

	36.0	36.1	36.3	36.5	36.7
	36.8	37.0	37.1	37.2	37.4
	37.5	37.5	37.6	37.7	37.7
	37.7	37.7	37.7	37.7	37.6
	37.6	37.5	37.4	37.3	37.1
	37.0	36.9	36.7	36.5	36.4
	36.2	36.0	35.8	35.6	35.4
	35.2	35.0	34.8	34.6	34.4
	34.2	34.0	33.8	33.6	33.4
	33.2	33.0	32.8	32.6	32.4
	32.2	32.0	31.8	31.6	31.5
	31.3	31.1	30.9	30.7	30.6
	30.4	30.2	30.1	29.9	29.7
	29.6	29.4	29.2	29.1	28.9
	28.8	28.6	28.5	28.3	28.2
	28.0	27.9	27.7	27.6	27.5
	27.3	27.2	27.1	26.9	26.8
	26.7				
570	35.2	35.4	35.6	35.8	36.0
	36.2	36.4	36.6	36.8	37.0
	37.2	37.3	37.5	37.6	37.7
	37.8	37.9	38.0	38.1	38.1
	38.1	38.1	38.1	38.1	38.0
	37.9	37.9	37.8	37.6	37.5
	37.3	37.2	37.0	36.8	36.7
	36.5	36.3	36.1	35.9	35.6
	35.4	35.2	35.0	34.8	34.6
	34.4	34.2	34.0	33.7	33.5
	33.3	33.1	32.9	32.7	32.5
	32.3	32.1	31.9	31.8	31.6
	31.4	31.2	31.0	30.8	30.7
	30.5	30.3	30.1	30.0	29.8
	29.6	29.5	29.3	29.2	29.0
	28.8	28.7	28.5	28.4	28.2
	28.1	27.9	27.8	27.7	27.5
	27.4	27.2	27.1	27.0	26.8
	26.7				
560	35.4	35.6	35.8	36.1	36.3
	36.5	36.7	36.9	37.1	37.3
	37.5	37.7	37.8	38.0	38.1
	38.2	38.3	38.4	38.5	38.5
	38.6	38.6	38.5	38.5	38.4
	38.4	38.3	38.1	38.0	37.9
	37.7	37.5	37.3	37.2	37.0
	36.7	36.5	36.3	36.1	35.9
	35.7	35.4	35.2	35.0	34.8
	34.6	34.3	34.1	33.9	33.7
	33.5	33.3	33.1	32.9	32.7
	32.5	32.3	32.1	31.9	31.7
	31.5	31.3	31.1	30.9	30.7
	30.6	30.4	30.2	30.0	29.9
	29.7	29.5	29.4	29.2	29.1
	28.9	28.7	28.6	28.4	28.3
	28.1	28.0	27.8	27.7	27.6
	27.4	27.3	27.1	27.0	26.9
	26.7				
550	35.6	35.9	36.1	36.3	36.6
	36.8	37.0	37.2	37.4	37.6
	37.8	38.0	38.2	38.4	38.5
	38.6	38.8	38.9	38.9	39.0
	39.0	39.0	39.0	38.9	38.9

	38.8	38.7	38.5	38.4	38.2
	38.1	37.9	37.7	37.5	37.3
	37.0	36.8	36.6	36.4	36.1
	35.9	35.7	35.4	35.2	35.0
	34.7	34.5	34.3	34.1	33.8
	33.6	33.4	33.2	33.0	32.8
	32.6	32.4	32.2	32.0	31.8
	31.6	31.4	31.2	31.0	30.8
	30.6	30.5	30.3	30.1	29.9
	29.8	29.6	29.4	29.3	29.1
	29.0	28.8	28.6	28.5	28.3
	28.2	28.0	27.9	27.7	27.6
	27.5	27.3	27.2	27.0	26.9
	26.8				
540	35.8	36.1	36.3	36.6	36.8
	37.1	37.3	37.5	37.8	38.0
	38.2	38.4	38.6	38.8	38.9
	39.1	39.2	39.3	39.4	39.4
	39.5	39.5	39.4	39.4	39.3
	39.2	39.1	39.0	38.8	38.6
	38.4	38.2	38.0	37.8	37.6
	37.3	37.1	36.9	36.6	36.4
	36.1	35.9	35.6	35.4	35.2
	34.9	34.7	34.5	34.2	34.0
	33.8	33.5	33.3	33.1	32.9
	32.7	32.5	32.3	32.1	31.9
	31.7	31.5	31.3	31.1	30.9
	30.7	30.5	30.4	30.2	30.0
	29.8	29.7	29.5	29.3	29.2
	29.0	28.9	28.7	28.5	28.4
	28.2	28.1	27.9	27.8	27.6
	27.5	27.4	27.2	27.1	26.9
	26.8				
530	36.1	36.3	36.6	36.8	37.1
	37.3	37.6	37.8	38.1	38.3
	38.6	38.8	39.0	39.2	39.4
	39.5	39.7	39.8	39.9	39.9
	40.0	40.0	39.9	39.9	39.8
	39.7	39.5	39.4	39.2	39.0
	38.8	38.6	38.4	38.1	37.9
	37.6	37.4	37.1	36.9	36.6
	36.4	36.1	35.8	35.6	35.3
	35.1	34.9	34.6	34.4	34.1
	33.9	33.7	33.4	33.2	33.0
	32.8	32.6	32.4	32.2	32.0
	31.8	31.6	31.4	31.2	31.0
	30.8	30.6	30.4	30.2	30.1
	29.9	29.7	29.6	29.4	29.2
	29.1	28.9	28.7	28.6	28.4
	28.3	28.1	28.0	27.8	27.7
	27.5	27.4	27.3	27.1	27.0
	26.8				
520	36.3	36.5	36.8	37.1	37.3
	37.6	37.9	38.2	38.4	38.7
	38.9	39.2	39.4	39.6	39.8
	40.0	40.1	40.3	40.4	40.4
	40.5	40.5	40.4	40.4	40.3
	40.2	40.0	39.8	39.7	39.4
	39.2	39.0	38.7	38.5	38.2
	37.9	37.7	37.4	37.1	36.9
	36.6	36.3	36.0	35.8	35.5

	35.3	35.0	34.8	34.5	34.3
	34.0	33.8	33.6	33.3	33.1
	32.9	32.7	32.5	32.3	32.0
	31.8	31.6	31.4	31.2	31.1
	30.9	30.7	30.5	30.3	30.1
	30.0	29.8	29.6	29.4	29.3
	29.1	29.0	28.8	28.6	28.5
	28.3	28.2	28.0	27.9	27.7
	27.6	27.4	27.3	27.2	27.0
	26.9				
510	36.5	36.8	37.0	37.3	37.6
	37.9	38.2	38.5	38.8	39.0
	39.3	39.6	39.8	40.1	40.3
	40.5	40.6	40.8	40.9	41.0
	41.0	41.0	41.0	40.9	40.8
	40.7	40.5	40.3	40.1	39.9
	39.6	39.4	39.1	38.8	38.5
	38.2	38.0	37.7	37.4	37.1
	36.8	36.5	36.2	36.0	35.7
	35.4	35.2	34.9	34.7	34.4
	34.2	33.9	33.7	33.5	33.2
	33.0	32.8	32.6	32.3	32.1
	31.9	31.7	31.5	31.3	31.1
	30.9	30.7	30.6	30.4	30.2
	30.0	29.8	29.7	29.5	29.3
	29.2	29.0	28.8	28.7	28.5
	28.4	28.2	28.1	27.9	27.8
	27.6	27.5	27.3	27.2	27.0
	26.9				
500	36.7	37.0	37.3	37.6	37.9
	38.2	38.5	38.8	39.1	39.4
	39.7	40.0	40.3	40.5	40.8
	41.0	41.2	41.3	41.5	41.5
	41.6	41.6	41.6	41.5	41.4
	41.2	41.0	40.8	40.6	40.3
	40.0	39.8	39.5	39.2	38.9
	38.5	38.2	37.9	37.6	37.3
	37.0	36.7	36.4	36.2	35.9
	35.6	35.3	35.1	34.8	34.5
	34.3	34.0	33.8	33.6	33.3
	33.1	32.9	32.6	32.4	32.2
	32.0	31.8	31.6	31.4	31.2
	31.0	30.8	30.6	30.4	30.2
	30.1	29.9	29.7	29.5	29.4
	29.2	29.0	28.9	28.7	28.6
	28.4	28.2	28.1	27.9	27.8
	27.6	27.5	27.4	27.2	27.1
	26.9				
490	36.9	37.2	37.5	37.8	38.1
	38.5	38.8	39.1	39.4	39.8
	40.1	40.4	40.7	41.0	41.3
	41.5	41.7	41.9	42.1	42.2
	42.2	42.2	42.2	42.1	41.9
	41.8	41.6	41.3	41.1	40.8
	40.5	40.2	39.8	39.5	39.2
	38.8	38.5	38.2	37.9	37.6
	37.2	36.9	36.6	36.3	36.0
	35.8	35.5	35.2	34.9	34.7
	34.4	34.2	33.9	33.7	33.4
	33.2	33.0	32.7	32.5	32.3
	32.1	31.9	31.7	31.5	31.3

	31.1	30.9	30.7	30.5	30.3
	30.1	29.9	29.8	29.6	29.4
	29.2	29.1	28.9	28.8	28.6
	28.4	28.3	28.1	28.0	27.8
	27.7	27.5	27.4	27.2	27.1
	27.0				
480	37.1	37.4	37.7	38.1	38.4
	38.7	39.1	39.4	39.8	40.1
	40.5	40.8	41.2	41.5	41.8
	42.1	42.3	42.5	42.7	42.8
	42.9	42.9	42.8	42.7	42.6
	42.4	42.1	41.9	41.6	41.2
	40.9	40.6	40.2	39.9	39.5
	39.1	38.8	38.5	38.1	37.8
	37.4	37.1	36.8	36.5	36.2
	35.9	35.6	35.3	35.1	34.8
	34.5	34.3	34.0	33.8	33.5
	33.3	33.0	32.8	32.6	32.4
	32.1	31.9	31.7	31.5	31.3
	31.1	30.9	30.7	30.5	30.3
	30.2	30.0	29.8	29.6	29.5
	29.3	29.1	29.0	28.8	28.6
	28.5	28.3	28.2	28.0	27.9
	27.7	27.6	27.4	27.3	27.1
	27.0				
470	37.3	37.6	37.9	38.3	38.6
	39.0	39.4	39.8	40.1	40.5
	40.9	41.3	41.7	42.0	42.3
	42.7	42.9	43.2	43.4	43.5
	43.6	43.6	43.5	43.4	43.2
	43.0	42.7	42.4	42.1	41.7
	41.3	41.0	40.6	40.2	39.8
	39.4	39.1	38.7	38.3	38.0
	37.6	37.3	37.0	36.7	36.4
	36.0	35.7	35.5	35.2	34.9
	34.6	34.4	34.1	33.8	33.6
	33.4	33.1	32.9	32.6	32.4
	32.2	32.0	31.8	31.6	31.4
	31.2	31.0	30.8	30.6	30.4
	30.2	30.0	29.8	29.7	29.5
	29.3	29.2	29.0	28.8	28.7
	28.5	28.3	28.2	28.0	27.9
	27.7	27.6	27.4	27.3	27.2
	27.0				
460	37.4	37.8	38.1	38.5	38.9
	39.3	39.7	40.1	40.5	40.9
	41.3	41.7	42.1	42.5	42.9
	43.3	43.6	43.9	44.1	44.2
	44.3	44.3	44.3	44.1	43.9
	43.6	43.3	43.0	42.6	42.2
	41.8	41.4	41.0	40.5	40.1
	39.7	39.3	38.9	38.6	38.2
	37.8	37.5	37.1	36.8	36.5
	36.2	35.9	35.6	35.3	35.0
	34.7	34.5	34.2	33.9	33.7
	33.4	33.2	32.9	32.7	32.5
	32.3	32.0	31.8	31.6	31.4
	31.2	31.0	30.8	30.6	30.4
	30.2	30.1	29.9	29.7	29.5
	29.4	29.2	29.0	28.9	28.7
	28.5	28.4	28.2	28.1	27.9

	27.8	27.6	27.5	27.3	27.2
	27.0				
450	37.6	38.0	38.3	38.7	39.1
	39.5	39.9	40.4	40.8	41.2
	41.7	42.2	42.6	43.1	43.5
	43.9	44.3	44.6	44.9	45.0
	45.1	45.2	45.1	44.9	44.7
	44.3	44.0	43.6	43.1	42.7
	42.2	41.8	41.3	40.9	40.4
	40.0	39.6	39.2	38.8	38.4
	38.0	37.7	37.3	37.0	36.6
	36.3	36.0	35.7	35.4	35.1
	34.8	34.5	34.3	34.0	33.7
	33.5	33.3	33.0	32.8	32.5
	32.3	32.1	31.9	31.7	31.5
	31.3	31.1	30.9	30.7	30.5
	30.3	30.1	29.9	29.7	29.6
	29.4	29.2	29.0	28.9	28.7
	28.6	28.4	28.2	28.1	27.9
	27.8	27.6	27.5	27.3	27.2
	27.1				
440	37.7	38.1	38.5	38.9	39.3
	39.7	40.2	40.6	41.1	41.6
	42.1	42.6	43.1	43.6	44.1
	44.6	45.0	45.4	45.7	45.9
	46.0	46.0	45.9	45.7	45.4
	45.1	44.6	44.2	43.7	43.2
	42.7	42.2	41.7	41.2	40.7
	40.3	39.8	39.4	39.0	38.6
	38.2	37.8	37.4	37.1	36.8
	36.4	36.1	35.8	35.5	35.2
	34.9	34.6	34.3	34.1	33.8
	33.6	33.3	33.1	32.8	32.6
	32.4	32.1	31.9	31.7	31.5
	31.3	31.1	30.9	30.7	30.5
	30.3	30.1	29.9	29.8	29.6
	29.4	29.2	29.1	28.9	28.7
	28.6	28.4	28.3	28.1	28.0
	27.8	27.7	27.5	27.4	27.2
	27.1				
430	37.9	38.3	38.7	39.1	39.5
	40.0	40.4	40.9	41.4	41.9
	42.5	43.0	43.6	44.1	44.7
	45.2	45.7	46.2	46.5	46.8
	47.0	47.0	46.8	46.6	46.3
	45.8	45.3	44.8	44.2	43.7
	43.1	42.6	42.0	41.5	41.0
	40.5	40.1	39.6	39.2	38.7
	38.3	38.0	37.6	37.2	36.9
	36.5	36.2	35.9	35.6	35.3
	35.0	34.7	34.4	34.1	33.9
	33.6	33.4	33.1	32.9	32.6
	32.4	32.2	32.0	31.8	31.5
	31.3	31.1	30.9	30.7	30.5
	30.3	30.2	30.0	29.8	29.6
	29.4	29.3	29.1	28.9	28.8
	28.6	28.4	28.3	28.1	28.0
	27.8	27.7	27.5	27.4	27.2
	27.1				
420	38.0	38.4	38.8	39.3	39.7
	40.2	40.7	41.2	41.7	42.3

	42.8	43.4	44.0	44.7	45.3
	45.9	46.5	47.0	47.5	47.8
	48.0	48.0	47.8	47.5	47.1
	46.6	46.0	45.4	44.8	44.1
	43.5	42.9	42.4	41.8	41.3
	40.7	40.3	39.8	39.3	38.9
	38.5	38.1	37.7	37.3	37.0
	36.6	36.3	36.0	35.6	35.3
	35.0	34.7	34.5	34.2	33.9
	33.7	33.4	33.2	32.9	32.7
	32.5	32.2	32.0	31.8	31.6
	31.4	31.2	31.0	30.8	30.6
	30.4	30.2	30.0	29.8	29.6
	29.5	29.3	29.1	28.9	28.8
	28.6	28.5	28.3	28.1	28.0
	27.8	27.7	27.5	27.4	27.2
	27.1				
410	38.1	38.5	39.0	39.4	39.9
	40.3	40.9	41.4	42.0	42.5
	43.2	43.8	44.5	45.2	45.9
	46.6	47.2	47.9	48.4	48.8
	49.0	49.0	48.9	48.5	48.0
	47.4	46.7	46.0	45.3	44.6
	43.9	43.3	42.6	42.1	41.5
	41.0	40.4	39.9	39.5	39.0
	38.6	38.2	37.8	37.4	37.1
	36.7	36.4	36.0	35.7	35.4
	35.1	34.8	34.5	34.2	34.0
	33.7	33.5	33.2	33.0	32.7
	32.5	32.3	32.0	31.8	31.6
	31.4	31.2	31.0	30.8	30.6
	30.4	30.2	30.0	29.8	29.7
	29.5	29.3	29.1	29.0	28.8
	28.6	28.5	28.3	28.2	28.0
	27.9	27.7	27.6	27.4	27.3
	27.1				
400	38.2	38.6	39.1	39.5	40.0
	40.5	41.0	41.6	42.2	42.8
	43.4	44.1	44.9	45.6	46.4
	47.2	48.0	48.7	49.4	49.9
	50.1	50.2	49.9	49.5	48.8
	48.1	47.3	46.5	45.8	45.0
	44.3	43.6	42.9	42.3	41.7
	41.1	40.6	40.1	39.6	39.1
	38.7	38.3	37.9	37.5	37.1
	36.8	36.4	36.1	35.8	35.4
	35.1	34.8	34.6	34.3	34.0
	33.7	33.5	33.2	33.0	32.7
	32.5	32.3	32.1	31.8	31.6
	31.4	31.2	31.0	30.8	30.6
	30.4	30.2	30.0	29.9	29.7
	29.5	29.3	29.1	29.0	28.8
	28.6	28.5	28.3	28.2	28.0
	27.9	27.7	27.6	27.4	27.3
	27.1				
390	38.3	38.7	39.2	39.6	40.1
	40.6	41.2	41.7	42.4	43.0
	43.7	44.4	45.2	46.0	46.9
	47.7	48.6	49.5	50.3	50.9
	51.3	51.3	51.0	50.4	49.6
	48.8	47.9	47.0	46.2	45.3



	44.6	43.8	43.1	42.5	41.8
	41.3	40.7	40.2	39.7	39.2
	38.8	38.4	38.0	37.6	37.2
	36.8	36.5	36.1	35.8	35.5
	35.2	34.9	34.6	34.3	34.0
	33.8	33.5	33.3	33.0	32.8
	32.5	32.3	32.1	31.9	31.6
	31.4	31.2	31.0	30.8	30.6
	30.4	30.2	30.0	29.9	29.7
	29.5	29.3	29.2	29.0	28.8
	28.7	28.5	28.3	28.2	28.0
	27.9	27.7	27.6	27.4	27.3
	27.1				
380	38.3	38.8	39.2	39.7	40.2
	40.7	41.3	41.9	42.5	43.2
	43.9	44.6	45.4	46.3	47.2
	48.2	49.2	50.2	51.1	51.9
	52.4	52.5	52.0	51.3	50.4
	49.4	48.4	47.4	46.5	45.6
	44.8	44.0	43.3	42.6	42.0
	41.4	40.8	40.3	39.8	39.3
	38.9	38.4	38.0	37.6	37.2
	36.9	36.5	36.2	35.8	35.5
	35.2	34.9	34.6	34.3	34.1
	33.8	33.5	33.3	33.0	32.8
	32.6	32.3	32.1	31.9	31.7
	31.4	31.2	31.0	30.8	30.6
	30.4	30.2	30.1	29.9	29.7
	29.5	29.3	29.2	29.0	28.8
	28.7	28.5	28.3	28.2	28.0
	27.9	27.7	27.6	27.4	27.3
	27.1				
370	38.4	38.8	39.3	39.7	40.2
	40.8	41.3	41.9	42.6	43.3
	44.0	44.8	45.6	46.5	47.5
	48.5	49.6	50.7	51.7	52.7
	53.5	53.5	52.9	51.9	50.9
	49.8	48.7	47.7	46.7	45.8
	44.9	44.1	43.4	42.7	42.1
	41.4	40.9	40.3	39.8	39.3
	38.9	38.5	38.0	37.6	37.3
	36.9	36.5	36.2	35.9	35.5
	35.2	34.9	34.6	34.3	34.1
	33.8	33.5	33.3	33.0	32.8
	32.6	32.3	32.1	31.9	31.7
	31.4	31.2	31.0	30.8	30.6
	30.4	30.3	30.1	29.9	29.7
	29.5	29.3	29.2	29.0	28.8
	28.7	28.5	28.3	28.2	28.0
	27.9	27.7	27.6	27.4	27.3
	27.1				
360	38.4	38.8	39.3	39.8	40.3
	40.8	41.4	42.0	42.6	43.3
	44.0	44.8	45.7	46.6	47.6
	48.6	49.7	50.9	52.0	53.2
	54.2	54.4	53.4	52.2	51.1
	49.9	48.8	47.8	46.8	45.8
	45.0	44.2	43.4	42.7	42.1
	41.5	40.9	40.4	39.8	39.4
	38.9	38.5	38.0	37.6	37.3
	36.9	36.5	36.2	35.9	35.5

	35.2	34.9	34.6	34.4	34.1
	33.8	33.5	33.3	33.0	32.8
	32.6	32.3	32.1	31.9	31.7
	31.5	31.2	31.0	30.8	30.6
	30.4	30.3	30.1	29.9	29.7
	29.5	29.3	29.2	29.0	28.8
	28.7	28.5	28.4	28.2	28.0
	27.9	27.7	27.6	27.4	27.3
	27.1				
350	38.4	38.8	39.3	39.8	40.3
	40.8	41.4	42.0	42.6	43.3
	44.0	44.8	45.7	46.6	47.5
	48.6	49.7	50.8	51.9	53.0
	53.8	53.9	53.1	52.1	51.0
	49.9	48.8	47.7	46.7	45.8
	45.0	44.2	43.4	42.7	42.1
	41.5	40.9	40.4	39.8	39.4
	38.9	38.5	38.0	37.6	37.3
	36.9	36.5	36.2	35.9	35.5
	35.2	34.9	34.6	34.4	34.1
	33.8	33.5	33.3	33.0	32.8
	32.6	32.3	32.1	31.9	31.7
	31.5	31.2	31.0	30.8	30.6
	30.4	30.3	30.1	29.9	29.7
	29.5	29.3	29.2	29.0	28.8
	28.7	28.5	28.3	28.2	28.0
	27.9	27.7	27.6	27.4	27.3
	27.1				
340	38.4	38.8	39.2	39.7	40.2
	40.7	41.3	41.9	42.5	43.2
	43.9	44.7	45.5	46.4	47.3
	48.3	49.4	50.4	51.4	52.3
	52.8	52.9	52.4	51.6	50.6
	49.5	48.5	47.5	46.6	45.7
	44.8	44.1	43.3	42.6	42.0
	41.4	40.8	40.3	39.8	39.3
	38.9	38.4	38.0	37.6	37.2
	36.9	36.5	36.2	35.8	35.5
	35.2	34.9	34.6	34.3	34.1
	33.8	33.5	33.3	33.0	32.8
	32.6	32.3	32.1	31.9	31.7
	31.4	31.2	31.0	30.8	30.6
	30.4	30.2	30.1	29.9	29.7
	29.5	29.3	29.2	29.0	28.8
	28.7	28.5	28.3	28.2	28.0
	27.9	27.7	27.6	27.4	27.3
	27.1				
330	38.3	38.7	39.2	39.7	40.1
	40.7	41.2	41.8	42.4	43.1
	43.8	44.5	45.3	46.1	47.0
	47.9	48.9	49.8	50.6	51.3
	51.7	51.8	51.4	50.8	49.9
	49.0	48.1	47.2	46.3	45.4
	44.6	43.9	43.2	42.5	41.9
	41.3	40.8	40.2	39.7	39.3
	38.8	38.4	38.0	37.6	37.2
	36.8	36.5	36.1	35.8	35.5
	35.2	34.9	34.6	34.3	34.0
	33.8	33.5	33.3	33.0	32.8
	32.5	32.3	32.1	31.9	31.6
	31.4	31.2	31.0	30.8	30.6

	30.4	30.2	30.1	29.9	29.7
	29.5	29.3	29.2	29.0	28.8
	28.7	28.5	28.3	28.2	28.0
	27.9	27.7	27.6	27.4	27.3
	27.1				
320	38.2	38.7	39.1	39.6	40.0
	40.6	41.1	41.7	42.2	42.9
	43.5	44.3	45.0	45.8	46.6
	47.4	48.2	49.0	49.7	50.3
	50.6	50.6	50.4	49.8	49.2
	48.4	47.6	46.7	45.9	45.1
	44.4	43.7	43.0	42.4	41.8
	41.2	40.6	40.1	39.6	39.2
	38.7	38.3	37.9	37.5	37.1
	36.8	36.4	36.1	35.8	35.5
	35.2	34.9	34.6	34.3	34.0
	33.8	33.5	33.2	33.0	32.8
	32.5	32.3	32.1	31.8	31.6
	31.4	31.2	31.0	30.8	30.6
	30.4	30.2	30.0	29.9	29.7
	29.5	29.3	29.2	29.0	28.8
	28.7	28.5	28.3	28.2	28.0
	27.9	27.7	27.6	27.4	27.3
	27.1				
310	38.2	38.6	39.0	39.4	39.9
	40.4	40.9	41.5	42.0	42.6
	43.3	43.9	44.6	45.3	46.1
	46.8	47.5	48.2	48.8	49.2
	49.5	49.5	49.3	48.9	48.3
	47.7	46.9	46.2	45.5	44.8
	44.1	43.4	42.8	42.1	41.6
	41.0	40.5	40.0	39.5	39.1
	38.6	38.2	37.8	37.5	37.1
	36.7	36.4	36.0	35.7	35.4
	35.1	34.8	34.5	34.3	34.0
	33.7	33.5	33.2	33.0	32.7
	32.5	32.3	32.0	31.8	31.6
	31.4	31.2	31.0	30.8	30.6
	30.4	30.2	30.0	29.8	29.7
	29.5	29.3	29.1	29.0	28.8
	28.6	28.5	28.3	28.2	28.0
	27.9	27.7	27.6	27.4	27.3
	27.1				
300	38.1	38.5	38.9	39.3	39.8
	40.2	40.7	41.3	41.8	42.4
	43.0	43.6	44.2	44.9	45.5
	46.2	46.8	47.4	47.8	48.2
	48.4	48.4	48.2	47.9	47.4
	46.9	46.3	45.6	45.0	44.3
	43.7	43.1	42.5	41.9	41.4
	40.8	40.3	39.9	39.4	39.0
	38.5	38.1	37.7	37.4	37.0
	36.7	36.3	36.0	35.7	35.4
	35.1	34.8	34.5	34.2	33.9
	33.7	33.4	33.2	32.9	32.7
	32.5	32.2	32.0	31.8	31.6
	31.4	31.2	31.0	30.8	30.6
	30.4	30.2	30.0	29.8	29.6
	29.5	29.3	29.1	29.0	28.8
	28.6	28.5	28.3	28.2	28.0
	27.8	27.7	27.5	27.4	27.3

290	27.1				
	37.9	38.3	38.7	39.2	39.6
	40.1	40.5	41.0	41.5	42.1
	42.6	43.2	43.8	44.4	44.9
	45.5	46.0	46.5	46.9	47.2
	47.4	47.4	47.2	47.0	46.6
	46.1	45.6	45.0	44.5	43.9
	43.3	42.7	42.2	41.6	41.1
	40.6	40.1	39.7	39.2	38.8
	38.4	38.0	37.6	37.3	36.9
	36.6	36.2	35.9	35.6	35.3
	35.0	34.7	34.4	34.2	33.9
	33.6	33.4	33.1	32.9	32.7
	32.4	32.2	32.0	31.8	31.6
	31.3	31.1	30.9	30.7	30.5
	30.4	30.2	30.0	29.8	29.6
	29.4	29.3	29.1	28.9	28.8
	28.6	28.4	28.3	28.1	28.0
	27.8	27.7	27.5	27.4	27.2
	27.1				
280	37.8	38.2	38.6	39.0	39.4
	39.8	40.3	40.8	41.2	41.7
	42.2	42.8	43.3	43.8	44.3
	44.8	45.3	45.7	46.0	46.3
	46.4	46.4	46.3	46.1	45.8
	45.4	44.9	44.4	43.9	43.4
	42.9	42.3	41.8	41.3	40.8
	40.4	39.9	39.5	39.1	38.6
	38.3	37.9	37.5	37.1	36.8
	36.5	36.1	35.8	35.5	35.2
	34.9	34.6	34.4	34.1	33.8
	33.6	33.3	33.1	32.8	32.6
	32.4	32.2	31.9	31.7	31.5
	31.3	31.1	30.9	30.7	30.5
	30.3	30.1	30.0	29.8	29.6
	29.4	29.3	29.1	28.9	28.8
	28.6	28.4	28.3	28.1	28.0
	27.8	27.7	27.5	27.4	27.2
	27.1				
270	37.7	38.0	38.4	38.8	39.2
	39.6	40.0	40.5	40.9	41.4
	41.9	42.3	42.8	43.3	43.7
	44.2	44.6	44.9	45.2	45.4
	45.5	45.5	45.4	45.2	45.0
	44.6	44.2	43.8	43.4	42.9
	42.4	41.9	41.5	41.0	40.6
	40.1	39.7	39.3	38.9	38.5
	38.1	37.7	37.4	37.0	36.7
	36.4	36.0	35.7	35.4	35.1
	34.8	34.6	34.3	34.0	33.8
	33.5	33.3	33.0	32.8	32.6
	32.3	32.1	31.9	31.7	31.5
	31.3	31.1	30.9	30.7	30.5
	30.3	30.1	29.9	29.7	29.6
	29.4	29.2	29.1	28.9	28.7
	28.6	28.4	28.3	28.1	27.9
	27.8	27.6	27.5	27.4	27.2
	27.1				
260	37.5	37.8	38.2	38.6	39.0
	39.4	39.8	40.2	40.6	41.0
	41.5	41.9	42.3	42.7	43.1

	43.5	43.9	44.2	44.4	44.6
	44.6	44.7	44.6	44.4	44.2
	43.9	43.6	43.2	42.8	42.4
	42.0	41.5	41.1	40.7	40.3
	39.8	39.4	39.0	38.7	38.3
	37.9	37.6	37.2	36.9	36.5
	36.2	35.9	35.6	35.3	35.0
	34.8	34.5	34.2	34.0	33.7
	33.5	33.2	33.0	32.7	32.5
	32.3	32.1	31.9	31.6	31.4
	31.2	31.0	30.8	30.6	30.4
	30.3	30.1	29.9	29.7	29.5
	29.4	29.2	29.0	28.9	28.7
	28.5	28.4	28.2	28.1	27.9
	27.8	27.6	27.5	27.3	27.2
	27.0				
250	37.3	37.7	38.0	38.4	38.7
	39.1	39.5	39.9	40.3	40.7
	41.1	41.5	41.8	42.2	42.6
	42.9	43.2	43.5	43.7	43.8
	43.9	43.9	43.8	43.7	43.5
	43.2	43.0	42.6	42.3	41.9
	41.5	41.1	40.7	40.3	39.9
	39.6	39.2	38.8	38.4	38.1
	37.7	37.4	37.1	36.7	36.4
	36.1	35.8	35.5	35.2	34.9
	34.7	34.4	34.1	33.9	33.6
	33.4	33.1	32.9	32.7	32.5
	32.2	32.0	31.8	31.6	31.4
	31.2	31.0	30.8	30.6	30.4
	30.2	30.0	29.9	29.7	29.5
	29.3	29.2	29.0	28.8	28.7
	28.5	28.4	28.2	28.0	27.9
	27.7	27.6	27.5	27.3	27.2
	27.0				
240	37.1	37.5	37.8	38.1	38.5
	38.8	39.2	39.6	39.9	40.3
	40.7	41.0	41.4	41.7	42.0
	42.3	42.6	42.8	43.0	43.1
	43.1	43.1	43.1	43.0	42.8
	42.6	42.4	42.1	41.8	41.4
	41.1	40.7	40.4	40.0	39.6
	39.3	38.9	38.6	38.2	37.9
	37.5	37.2	36.9	36.6	36.3
	36.0	35.7	35.4	35.1	34.8
	34.6	34.3	34.0	33.8	33.5
	33.3	33.1	32.8	32.6	32.4
	32.2	32.0	31.7	31.5	31.3
	31.1	30.9	30.7	30.6	30.4
	30.2	30.0	29.8	29.6	29.5
	29.3	29.1	29.0	28.8	28.6
	28.5	28.3	28.2	28.0	27.9
	27.7	27.6	27.4	27.3	27.1
	27.0				
230	37.0	37.3	37.6	37.9	38.2
	38.6	38.9	39.2	39.6	39.9
	40.3	40.6	40.9	41.2	41.5
	41.7	42.0	42.2	42.3	42.4
	42.5	42.5	42.4	42.3	42.2
	42.0	41.8	41.5	41.3	41.0
	40.6	40.3	40.0	39.6	39.3

	39.0	38.6	38.3	38.0	37.6
	37.3	37.0	36.7	36.4	36.1
	35.8	35.5	35.3	35.0	34.7
	34.5	34.2	33.9	33.7	33.5
	33.2	33.0	32.8	32.5	32.3
	32.1	31.9	31.7	31.5	31.3
	31.1	30.9	30.7	30.5	30.3
	30.1	30.0	29.8	29.6	29.4
	29.3	29.1	28.9	28.8	28.6
	28.5	28.3	28.1	28.0	27.8
	27.7	27.5	27.4	27.3	27.1
	27.0				
220	36.8	37.1	37.4	37.7	38.0
	38.3	38.6	38.9	39.2	39.6
	39.9	40.2	40.4	40.7	41.0
	41.2	41.4	41.6	41.7	41.8
	41.8	41.8	41.8	41.7	41.6
	41.4	41.2	41.0	40.8	40.5
	40.2	39.9	39.6	39.3	39.0
	38.7	38.4	38.0	37.7	37.4
	37.1	36.8	36.5	36.2	35.9
	35.7	35.4	35.1	34.8	34.6
	34.3	34.1	33.8	33.6	33.4
	33.1	32.9	32.7	32.5	32.2
	32.0	31.8	31.6	31.4	31.2
	31.0	30.8	30.6	30.5	30.3
	30.1	29.9	29.7	29.6	29.4
	29.2	29.1	28.9	28.7	28.6
	28.4	28.3	28.1	28.0	27.8
	27.7	27.5	27.4	27.2	27.1
	27.0				
210	36.6	36.8	37.1	37.4	37.7
	38.0	38.3	38.6	38.9	39.2
	39.5	39.7	40.0	40.2	40.5
	40.7	40.9	41.0	41.1	41.2
	41.2	41.2	41.2	41.1	41.0
	40.9	40.7	40.5	40.3	40.0
	39.8	39.5	39.2	38.9	38.7
	38.4	38.1	37.8	37.5	37.2
	36.9	36.6	36.3	36.0	35.8
	35.5	35.2	35.0	34.7	34.5
	34.2	34.0	33.7	33.5	33.3
	33.0	32.8	32.6	32.4	32.2
	32.0	31.7	31.5	31.3	31.1
	31.0	30.8	30.6	30.4	30.2
	30.0	29.9	29.7	29.5	29.3
	29.2	29.0	28.9	28.7	28.5
	28.4	28.2	28.1	27.9	27.8
	27.6	27.5	27.3	27.2	27.1
	26.9				
200	36.3	36.6	36.9	37.2	37.5
	37.7	38.0	38.3	38.6	38.8
	39.1	39.3	39.6	39.8	40.0
	40.2	40.3	40.5	40.6	40.6
	40.7	40.7	40.7	40.6	40.5
	40.4	40.2	40.0	39.8	39.6
	39.4	39.1	38.9	38.6	38.3
	38.1	37.8	37.5	37.2	36.9
	36.7	36.4	36.1	35.9	35.6
	35.3	35.1	34.8	34.6	34.3
	34.1	33.8	33.6	33.4	33.2

	32.9	32.7	32.5	32.3	32.1
	31.9	31.7	31.5	31.3	31.1
	30.9	30.7	30.5	30.3	30.2
	30.0	29.8	29.6	29.5	29.3
	29.1	29.0	28.8	28.7	28.5
	28.3	28.2	28.0	27.9	27.7
	27.6	27.5	27.3	27.2	27.0
	26.9				
190	36.1	36.4	36.7	36.9	37.2
	37.5	37.7	38.0	38.2	38.5
	38.7	38.9	39.2	39.4	39.5
	39.7	39.8	40.0	40.1	40.1
	40.2	40.2	40.1	40.1	40.0
	39.9	39.7	39.6	39.4	39.2
	39.0	38.7	38.5	38.3	38.0
	37.8	37.5	37.2	37.0	36.7
	36.4	36.2	35.9	35.7	35.4
	35.2	34.9	34.7	34.4	34.2
	34.0	33.7	33.5	33.3	33.0
	32.8	32.6	32.4	32.2	32.0
	31.8	31.6	31.4	31.2	31.0
	30.8	30.6	30.5	30.3	30.1
	29.9	29.8	29.6	29.4	29.2
	29.1	28.9	28.8	28.6	28.5
	28.3	28.1	28.0	27.8	27.7
	27.6	27.4	27.3	27.1	27.0
	26.9				
180	35.9	36.2	36.4	36.7	36.9
	37.2	37.4	37.7	37.9	38.1
	38.3	38.5	38.7	38.9	39.1
	39.3	39.4	39.5	39.6	39.6
	39.7	39.7	39.6	39.6	39.5
	39.4	39.3	39.1	39.0	38.8
	38.6	38.4	38.2	37.9	37.7
	37.5	37.2	37.0	36.7	36.5
	36.2	36.0	35.7	35.5	35.2
	35.0	34.8	34.5	34.3	34.0
	33.8	33.6	33.4	33.2	32.9
	32.7	32.5	32.3	32.1	31.9
	31.7	31.5	31.3	31.1	30.9
	30.8	30.6	30.4	30.2	30.0
	29.9	29.7	29.5	29.4	29.2
	29.0	28.9	28.7	28.6	28.4
	28.3	28.1	28.0	27.8	27.7
	27.5	27.4	27.2	27.1	27.0
	26.8				
170	35.7	35.9	36.2	36.4	36.7
	36.9	37.1	37.3	37.6	37.8
	38.0	38.2	38.4	38.5	38.7
	38.8	38.9	39.0	39.1	39.2
	39.2	39.2	39.2	39.1	39.0
	39.0	38.8	38.7	38.6	38.4
	38.2	38.0	37.8	37.6	37.4
	37.2	36.9	36.7	36.5	36.2
	36.0	35.8	35.5	35.3	35.0
	34.8	34.6	34.4	34.1	33.9
	33.7	33.5	33.2	33.0	32.8
	32.6	32.4	32.2	32.0	31.8
	31.6	31.4	31.2	31.0	30.9
	30.7	30.5	30.3	30.1	30.0
	29.8	29.6	29.5	29.3	29.1

	29.0	28.8	28.7	28.5	28.4
	28.2	28.1	27.9	27.8	27.6
	27.5	27.3	27.2	27.1	26.9
	26.8				
160	35.5	35.7	35.9	36.2	36.4
	36.6	36.8	37.0	37.2	37.4
	37.6	37.8	38.0	38.1	38.3
	38.4	38.5	38.6	38.7	38.7
	38.7	38.7	38.7	38.7	38.6
	38.5	38.4	38.3	38.2	38.0
	37.8	37.7	37.5	37.3	37.1
	36.9	36.7	36.4	36.2	36.0
	35.8	35.5	35.3	35.1	34.9
	34.6	34.4	34.2	34.0	33.8
	33.5	33.3	33.1	32.9	32.7
	32.5	32.3	32.1	31.9	31.7
	31.5	31.3	31.1	31.0	30.8
	30.6	30.4	30.2	30.1	29.9
	29.7	29.6	29.4	29.2	29.1
	28.9	28.8	28.6	28.5	28.3
	28.2	28.0	27.9	27.7	27.6
	27.4	27.3	27.2	27.0	26.9
	26.8				
150	35.3	35.5	35.7	35.9	36.1
	36.3	36.5	36.7	36.9	37.1
	37.3	37.5	37.6	37.8	37.9
	38.0	38.1	38.2	38.2	38.3
	38.3	38.3	38.3	38.2	38.2
	38.1	38.0	37.9	37.8	37.6
	37.5	37.3	37.1	37.0	36.8
	36.6	36.4	36.2	36.0	35.7
	35.5	35.3	35.1	34.9	34.7
	34.5	34.2	34.0	33.8	33.6
	33.4	33.2	33.0	32.8	32.6
	32.4	32.2	32.0	31.8	31.6
	31.4	31.2	31.1	30.9	30.7
	30.5	30.3	30.2	30.0	29.8
	29.7	29.5	29.3	29.2	29.0
	28.9	28.7	28.6	28.4	28.3
	28.1	28.0	27.8	27.7	27.5
	27.4	27.3	27.1	27.0	26.8
	26.7				
140	35.1	35.3	35.5	35.7	35.9
	36.1	36.3	36.4	36.6	36.8
	37.0	37.1	37.3	37.4	37.5
	37.6	37.7	37.8	37.8	37.9
	37.9	37.9	37.9	37.8	37.8
	37.7	37.6	37.5	37.4	37.3
	37.1	37.0	36.8	36.7	36.5
	36.3	36.1	35.9	35.7	35.5
	35.3	35.1	34.9	34.7	34.5
	34.3	34.1	33.9	33.7	33.4
	33.2	33.0	32.8	32.6	32.5
	32.3	32.1	31.9	31.7	31.5
	31.3	31.1	31.0	30.8	30.6
	30.4	30.3	30.1	29.9	29.8
	29.6	29.4	29.3	29.1	29.0
	28.8	28.7	28.5	28.4	28.2
	28.1	27.9	27.8	27.6	27.5
	27.3	27.2	27.1	26.9	26.8
	26.7				



130	34.8	35.0	35.2	35.4	35.6
	35.8	36.0	36.2	36.3	36.5
	36.6	36.8	36.9	37.0	37.1
	37.2	37.3	37.4	37.4	37.5
	37.5	37.5	37.5	37.4	37.4
	37.3	37.3	37.2	37.1	36.9
	36.8	36.7	36.5	36.3	36.2
	36.0	35.8	35.6	35.5	35.3
	35.1	34.9	34.7	34.5	34.3
	34.1	33.9	33.7	33.5	33.3
	33.1	32.9	32.7	32.5	32.3
	32.1	31.9	31.8	31.6	31.4
	31.2	31.0	30.9	30.7	30.5
	30.3	30.2	30.0	29.8	29.7
	29.5	29.4	29.2	29.0	28.9
	28.7	28.6	28.4	28.3	28.1
	28.0	27.9	27.7	27.6	27.4
	27.3	27.2	27.0	26.9	26.8
	26.6				
120	34.6	34.8	35.0	35.2	35.4
	35.5	35.7	35.9	36.0	36.2
	36.3	36.5	36.6	36.7	36.8
	36.9	37.0	37.0	37.1	37.1
	37.1	37.1	37.1	37.1	37.0
	37.0	36.9	36.8	36.7	36.6
	36.5	36.3	36.2	36.1	35.9
	35.7	35.6	35.4	35.2	35.0
	34.8	34.7	34.5	34.3	34.1
	33.9	33.7	33.5	33.3	33.1
	32.9	32.8	32.6	32.4	32.2
	32.0	31.8	31.6	31.5	31.3
	31.1	30.9	30.8	30.6	30.4
	30.3	30.1	29.9	29.8	29.6
	29.4	29.3	29.1	29.0	28.8
	28.7	28.5	28.4	28.2	28.1
	27.9	27.8	27.7	27.5	27.4
	27.3	27.1	27.0	26.9	26.7
	26.6				
110	34.4	34.6	34.8	34.9	35.1
	35.3	35.4	35.6	35.7	35.9
	36.0	36.1	36.3	36.4	36.5
	36.5	36.6	36.7	36.7	36.7
	36.8	36.8	36.7	36.7	36.7
	36.6	36.5	36.5	36.4	36.3
	36.2	36.0	35.9	35.8	35.6
	35.5	35.3	35.1	35.0	34.8
	34.6	34.4	34.3	34.1	33.9
	33.7	33.5	33.3	33.2	33.0
	32.8	32.6	32.4	32.2	32.1
	31.9	31.7	31.5	31.4	31.2
	31.0	30.8	30.7	30.5	30.3
	30.2	30.0	29.8	29.7	29.5
	29.4	29.2	29.1	28.9	28.8
	28.6	28.5	28.3	28.2	28.0
	27.9	27.7	27.6	27.5	27.3
	27.2	27.1	26.9	26.8	26.7
	26.5				
100	34.2	34.4	34.5	34.7	34.9
	35.0	35.2	35.3	35.4	35.6
	35.7	35.8	35.9	36.0	36.1
	36.2	36.3	36.3	36.4	36.4

	36.4	36.4	36.4	36.4	36.3
	36.3	36.2	36.1	36.0	36.0
	35.8	35.7	35.6	35.5	35.3
	35.2	35.0	34.9	34.7	34.6
	34.4	34.2	34.0	33.9	33.7
	33.5	33.3	33.2	33.0	32.8
	32.6	32.5	32.3	32.1	31.9
	31.8	31.6	31.4	31.2	31.1
	30.9	30.7	30.6	30.4	30.2
	30.1	29.9	29.8	29.6	29.4
	29.3	29.1	29.0	28.8	28.7
	28.5	28.4	28.3	28.1	28.0
	27.8	27.7	27.6	27.4	27.3
	27.1	27.0	26.9	26.8	26.6
	26.5				
90	34.0	34.1	34.3	34.5	34.6
	34.8	34.9	35.0	35.2	35.3
	35.4	35.5	35.6	35.7	35.8
	35.9	35.9	36.0	36.0	36.0
	36.1	36.1	36.1	36.0	36.0
	35.9	35.9	35.8	35.7	35.6
	35.5	35.4	35.3	35.2	35.1
	34.9	34.8	34.6	34.5	34.3
	34.2	34.0	33.8	33.7	33.5
	33.3	33.2	33.0	32.8	32.6
	32.5	32.3	32.1	32.0	31.8
	31.6	31.5	31.3	31.1	31.0
	30.8	30.6	30.5	30.3	30.1
	30.0	29.8	29.7	29.5	29.4
	29.2	29.1	28.9	28.8	28.6
	28.5	28.3	28.2	28.0	27.9
	27.8	27.6	27.5	27.4	27.2
	27.1	27.0	26.8	26.7	26.6
	26.5				
80	33.8	33.9	34.1	34.2	34.4
	34.5	34.6	34.8	34.9	35.0
	35.1	35.2	35.3	35.4	35.5
	35.6	35.6	35.7	35.7	35.7
	35.7	35.7	35.7	35.7	35.7
	35.6	35.6	35.5	35.4	35.3
	35.3	35.1	35.0	34.9	34.8
	34.7	34.5	34.4	34.2	34.1
	33.9	33.8	33.6	33.5	33.3
	33.1	33.0	32.8	32.7	32.5
	32.3	32.2	32.0	31.8	31.7
	31.5	31.3	31.2	31.0	30.8
	30.7	30.5	30.4	30.2	30.0
	29.9	29.7	29.6	29.4	29.3
	29.1	29.0	28.8	28.7	28.5
	28.4	28.3	28.1	28.0	27.8
	27.7	27.6	27.4	27.3	27.2
	27.0	26.9	26.8	26.7	26.5
	26.4				
70	33.6	33.7	33.8	34.0	34.1
	34.3	34.4	34.5	34.6	34.7
	34.9	34.9	35.0	35.1	35.2
	35.3	35.3	35.4	35.4	35.4
	35.4	35.4	35.4	35.4	35.4
	35.3	35.3	35.2	35.1	35.1
	35.0	34.9	34.8	34.7	34.5
	34.4	34.3	34.2	34.0	33.9

	33.7	33.6	33.4	33.3	33.1
	33.0	32.8	32.6	32.5	32.3
	32.2	32.0	31.8	31.7	31.5
	31.4	31.2	31.0	30.9	30.7
	30.6	30.4	30.2	30.1	29.9
	29.8	29.6	29.5	29.3	29.2
	29.0	28.9	28.8	28.6	28.5
	28.3	28.2	28.0	27.9	27.8
	27.6	27.5	27.4	27.2	27.1
	27.0	26.9	26.7	26.6	26.5
	26.4				
60	33.3	33.5	33.6	33.8	33.9
	34.0	34.1	34.3	34.4	34.5
	34.6	34.7	34.8	34.8	34.9
	35.0	35.0	35.0	35.1	35.1
	35.1	35.1	35.1	35.1	35.1
	35.0	35.0	34.9	34.8	34.8
	34.7	34.6	34.5	34.4	34.3
	34.2	34.0	33.9	33.8	33.6
	33.5	33.4	33.2	33.1	32.9
	32.8	32.6	32.5	32.3	32.2
	32.0	31.8	31.7	31.5	31.4
	31.2	31.1	30.9	30.8	30.6
	30.4	30.3	30.1	30.0	29.8
	29.7	29.5	29.4	29.2	29.1
	29.0	28.8	28.7	28.5	28.4
	28.3	28.1	28.0	27.8	27.7
	27.6	27.4	27.3	27.2	27.1
	26.9	26.8	26.7	26.5	26.4
	26.3				
50	33.1	33.3	33.4	33.5	33.7
	33.8	33.9	34.0	34.1	34.2
	34.3	34.4	34.5	34.6	34.6
	34.7	34.7	34.8	34.8	34.8
	34.8	34.8	34.8	34.8	34.8
	34.7	34.7	34.6	34.6	34.5
	34.4	34.3	34.2	34.1	34.0
	33.9	33.8	33.7	33.6	33.4
	33.3	33.2	33.0	32.9	32.7
	32.6	32.4	32.3	32.1	32.0
	31.8	31.7	31.5	31.4	31.2
	31.1	30.9	30.8	30.6	30.5
	30.3	30.2	30.0	29.9	29.7
	29.6	29.4	29.3	29.2	29.0
	28.9	28.7	28.6	28.4	28.3
	28.2	28.0	27.9	27.8	27.6
	27.5	27.4	27.2	27.1	27.0
	26.9	26.7	26.6	26.5	26.4
	26.2				
40	32.9	33.1	33.2	33.3	33.4
	33.5	33.7	33.8	33.9	34.0
	34.1	34.1	34.2	34.3	34.3
	34.4	34.4	34.5	34.5	34.5
	34.5	34.5	34.5	34.5	34.5
	34.4	34.4	34.3	34.3	34.2
	34.1	34.1	34.0	33.9	33.8
	33.7	33.6	33.5	33.3	33.2
	33.1	33.0	32.8	32.7	32.5
	32.4	32.3	32.1	32.0	31.8
	31.7	31.5	31.4	31.2	31.1
	30.9	30.8	30.7	30.5	30.4

	30.2	30.1	29.9	29.8	29.6
	29.5	29.3	29.2	29.1	28.9
	28.8	28.6	28.5	28.4	28.2
	28.1	28.0	27.8	27.7	27.6
	27.4	27.3	27.2	27.1	26.9
	26.8	26.7	26.6	26.4	26.3
	26.2				
30	32.7	32.9	33.0	33.1	33.2
	33.3	33.4	33.5	33.6	33.7
	33.8	33.9	33.9	34.0	34.1
	34.1	34.2	34.2	34.2	34.2
	34.2	34.2	34.2	34.2	34.2
	34.2	34.1	34.1	34.0	34.0
	33.9	33.8	33.7	33.6	33.5
	33.4	33.3	33.2	33.1	33.0
	32.9	32.7	32.6	32.5	32.4
	32.2	32.1	31.9	31.8	31.7
	31.5	31.4	31.2	31.1	31.0
	30.8	30.7	30.5	30.4	30.2
	30.1	29.9	29.8	29.7	29.5
	29.4	29.2	29.1	29.0	28.8
	28.7	28.6	28.4	28.3	28.2
	28.0	27.9	27.8	27.6	27.5
	27.4	27.2	27.1	27.0	26.9
	26.7	26.6	26.5	26.4	26.3
	26.1				
20	32.5	32.6	32.8	32.9	33.0
	33.1	33.2	33.3	33.4	33.5
	33.5	33.6	33.7	33.8	33.8
	33.9	33.9	33.9	33.9	34.0
	34.0	34.0	34.0	34.0	33.9
	33.9	33.9	33.8	33.8	33.7
	33.6	33.6	33.5	33.4	33.3
	33.2	33.1	33.0	32.9	32.8
	32.7	32.5	32.4	32.3	32.2
	32.0	31.9	31.8	31.6	31.5
	31.4	31.2	31.1	31.0	30.8
	30.7	30.5	30.4	30.3	30.1
	30.0	29.8	29.7	29.6	29.4
	29.3	29.1	29.0	28.9	28.7
	28.6	28.5	28.3	28.2	28.1
	27.9	27.8	27.7	27.6	27.4
	27.3	27.2	27.0	26.9	26.8
	26.7	26.6	26.4	26.3	26.2
	26.1				
10	32.3	32.4	32.6	32.7	32.8
	32.9	33.0	33.1	33.1	33.2
	33.3	33.4	33.4	33.5	33.5
	33.6	33.6	33.7	33.7	33.7
	33.7	33.7	33.7	33.7	33.7
	33.6	33.6	33.6	33.5	33.4
	33.4	33.3	33.2	33.2	33.1
	33.0	32.9	32.8	32.7	32.6
	32.5	32.3	32.2	32.1	32.0
	31.9	31.7	31.6	31.5	31.3
	31.2	31.1	30.9	30.8	30.7
	30.5	30.4	30.3	30.1	30.0
	29.9	29.7	29.6	29.4	29.3
	29.2	29.0	28.9	28.8	28.6
	28.5	28.4	28.2	28.1	28.0
	27.9	27.7	27.6	27.5	27.3

	27.2	27.1	27.0	26.9	26.7
	26.6	26.5	26.4	26.3	26.1
	26.0				
0	32.1	32.2	32.3	32.5	32.6
	32.7	32.7	32.8	32.9	33.0
	33.1	33.1	33.2	33.2	33.3
	33.3	33.4	33.4	33.4	33.4
	33.4	33.4	33.4	33.4	33.4
	33.4	33.3	33.3	33.3	33.2
	33.1	33.1	33.0	32.9	32.8
	32.8	32.7	32.6	32.5	32.4
	32.3	32.2	32.0	31.9	31.8
	31.7	31.6	31.4	31.3	31.2
	31.1	30.9	30.8	30.7	30.5
	30.4	30.3	30.1	30.0	29.9
	29.7	29.6	29.5	29.3	29.2
	29.1	28.9	28.8	28.7	28.5
	28.4	28.3	28.2	28.0	27.9
	27.8	27.6	27.5	27.4	27.3
	27.2	27.0	26.9	26.8	26.7
	26.5	26.4	26.3	26.2	26.1
	26.0				

P1	( x = 143 ,y = 190 ,z = 4.0 ):	44.5	dB
P2	( x = 44 ,y = 480 ,z = 4.0 ):	43.4	dB
P3	( x = 187 ,y = 534 ,z = 4.0 ):	44.6	dB
P4	( x = 498 ,y = 500 ,z = 4.0 ):	39.3	dB
P5	( x = 653 ,y = 278 ,z = 4.0 ):	36.2	dB

LAeq , noc: wartość największa poza terenem zakładu występuje w punkcie (210,360,1.5) i wynosi 54.4 dB(A)

Tłumienie przez grunt wg wzoru 9 PN-ISO 9613.

Koniec obliczeń