TEST RECORD

LDB 0001

Executions

1	2	3	4	5

Serial number

Measuring conditions (if not otherwise stated)

ambient temperature : 20-25° C
nominal supply voltage
operating position : horizontal

1. Mechanical data

1.1 Tape speed

measured at rated mains voltage, adjusted with half a 7" reel to 0 % deviation

tape speed	tolerance %	beginning of tape %	end of tape %
3 3/4 ips	± 0.8		
7 1/2 ips	± 0.8		

1.2 Wow and flutter

(vertical operating position)

measured with EMT 420, weighted 7" reel, LGS 26 DIN 45 507

tape speed	max.value %	beginning of tape %	end of tape %
3 3/4 ips	± 0.13		
7 1/2 ips	± 0.1		

1.3 Wind and rewind time

measured with 7" reel LGS 26 (720 m)

	rated value sec.	actual value sec.
▶▶	< 120	
◀◀	< 120	

2. Test of the recording pre-amplifier

2.1 Input sensitivity

input	rated value	actual value left-hand	actual value right-hand
micro	0.7mV±2db		
diode	2.3mV±2db		
line	100mV±2db		

2.2 Head phone output

Output voltage measured across 400 Ω, f = 1 kHz

rated value	actual value left-hand	actual value right-hand
> 1V		

3103 216 00181

2.3 Monitor, loudspeaker amplifier

	rated value	actual value
distortion factor at 1.0 W output	k = < 2%	
frequency response 40 ÷ 15000 Hz	within a range of 4db	
signal to noise ratio — with 20 kHz low-pass filter	> 70 db	
signal to noise ratio — weighted +)	> 70 db	

3. Checking of the playback characteristic

3.1 Sensitivity, output voltage, amplifier only

measured at 7 1/2 ips, f = 1 kHz
distortion factor
for Us = 3.1 V

rated value	actual value left-hand	actual value right-hand
<1%		

3.2 Frequency response with DIN test tape

7 1/2 ips

frequency Hz	tolerance	output voltage left-hand	output voltage right-hand
40	acc. to DIN 45 511, professional standard		
63			
125			
250			
500			
1 k			
2 k			
4 k			
6.3 k			
8 k			
10 k			
12.5 k			
14 k			
16 k			
18 k			

Frequency Hz	tolerance	output voltage left-hand	output voltage right-hand
40	acc. to DIN 45 511, professional standard		
63			
125			
250			
500			
1 k			
2 k			
4 k			
6.3 k			
8 k			
10 k			
12.5 k			
14 k			
16 k			

3 3/4 ips

3.3 Signal to noise ratio (acc. to DIN 45 405) with respect to full level (part 1 of the test tape)

		rated value	actual value left-hand	actual value right-hand
7 1/2 ips	with 20 kHz low-pass filter	56 db		
	weighted +)	50 db		
3 3/4 ips	with 20 kHz low-pass filter	56 db		
	weighted +)	56 db		

4. Checking of the overall response characteristic and the oscillator

4.1 Recording current

(recording current with 1 kHz set to)

tape speed	left-hand	right-hand
7 1/2 ips		
3 3/4 ips		

4.2 Bias set to

tape speed	left-hand	right-hand
7 1/2 ips		
3 3/4 ips		

4.3 Overall frequency response

measured with LGS 26 test tape quality, manufacturer: BASF

	frequency Hz	tolerance	output voltage left-hand	output voltage right-hand
7 1/2 ips, absorption circuit of 19 kHz short-circuited	40			
	63			
	125			
	250			
	1 k			
	4 k			
	8 k			
	10 k			
	12,5 k			
	14 k			
	16 k			
	18 k			
3 3/4 ips	40	acc. to DIN 45 511 professional standard		
	63			
	125			
	250			
	1 k			
	4 k			
	6.3 k			
	8 k			
	10 k			
	12.5 k			
	15 k			

4.4 Distortion factor

measured: f = 1 kHz
tape flux 32 mM/mm

tape speed	rated value	actual value left-hand	actual value right-hand
7 1/2 ips	< 3%		
3 3/4 ips	<3%		

4.5 Signal to noise ratio

Measured with self-erased tape, with respect to full level recording (32 mM/mm)

tape speed		rated value	actual value left-hand	actual value right-hand
7 1/2 ips	w.20 kHz low-pass	>54 db		
	weighted +)	>56 db		
3 3/4 ips	w.20 kHz low-pass	>52 db		
	weighted +)	>52 db		

4.6 Cross talk

measured in position STEREO, f = 1 kHz

rated value	left → right	right → left
>50 db		

4.7 Erasing frequency

f = _____ kHz

4.8 Erase attenuation (erased reference level recording)

with respect to 1 kHz full level (32 mM/mm)

tape speed	rated value	actual value left-hand	actual value right-hand
7 1/2 ips	>70 db		
3 3/4 ips	>70 db		

5. Checking of the Functions

5.1 Playback

5.2 Pause

5.3 Remote control

5.4 Trick

5.5 Cueing

+) R.M.S. Voltage