Performance Report #03500
MDS #76
October 26, 1955

Microphone Data Sheet

1.	Type Number	PK-35
2.	PI Number	MI-12035
3.	Name of Microphone	Close talking Velocity Microphone
4.	Application	Public Address & Announce Systems in noisy locations.
5.	Output Impedance	200 ohms and 15,000 ohms
6.	Load Impedance	150-250 ohms and Hi Impedance amplifier input
7.	Frequency Response	8916502
8.	Directional Characteristics	About Vertical Axis 8916503 About Horizontal Axis 8916504
9.	Effective Output Level @ 1000 cps	200 ohms -63 dbm* distant source -58 dbm* 1/2" to source High Impedance -65 db below 1v. distant source -60 db below 1v. 1/2" to source

*(10 d/cm^2 Sound Pressure)

10.	RETMA Sensitivity Rating	-155 db distant source -150 db 1/2" distance to source
11.	Output Voltage (open circuit)	200 ohms 66uv/d/cm^2 distant source, 117 uv/d/cm^2 1/2" distance to source High Impedance 570uv/d/cm^2 distant source, 1020uv/d/cm^2 1/2" distance to source
12.	Hum Pick-up*	200 ohms -108 dbm High Impedance -94 db (rel. to 1v.)

*(1mg. Hum Field)

13.	Photographs	80281, 80282
14.	Means of external connection	25 ft. cable (no plug)
15.	Type of cable	2 conductor shielded (PS 794)
16.	Weight	13 ounces less cable

Microphone Data Sheet (continued)

17.	Overall Dimensions	5 1/8" X 1 29/32" X 1 3/8"
18.	Mounting Information	Thread - Stand thread 5/8 - 27 Swivel - Approximately 85°
19.	Drawing Reference	166237-503
20.	Instruction Book Number	IB-24885-1

COMMENTS

Ribbon Flutter due to breath puffs is nonexistant. Breath noise is far below any ribbon microphone known. Stand noise is extremely low due to the high ribbon damping.

The noise discrimination of this microphone is due to a combination of the "proximity effect" (8916502) which in the voice range averages 5 or 6 db and the directional discrimination (8916503 and 8916504) which is between 4 and 5 db. The total random noise discrimination is therefore about 10 db.

Talk tests indicate remarkably effective noise discrimination. The quality of reproduction is excellent in that there is no detectable distortion though there is a noticeable lack of the higher frequencies.

The reduced high frequency response does not appear to affect intelligibility however, and does contribute to the excellent noise reduction at higher frequencies.

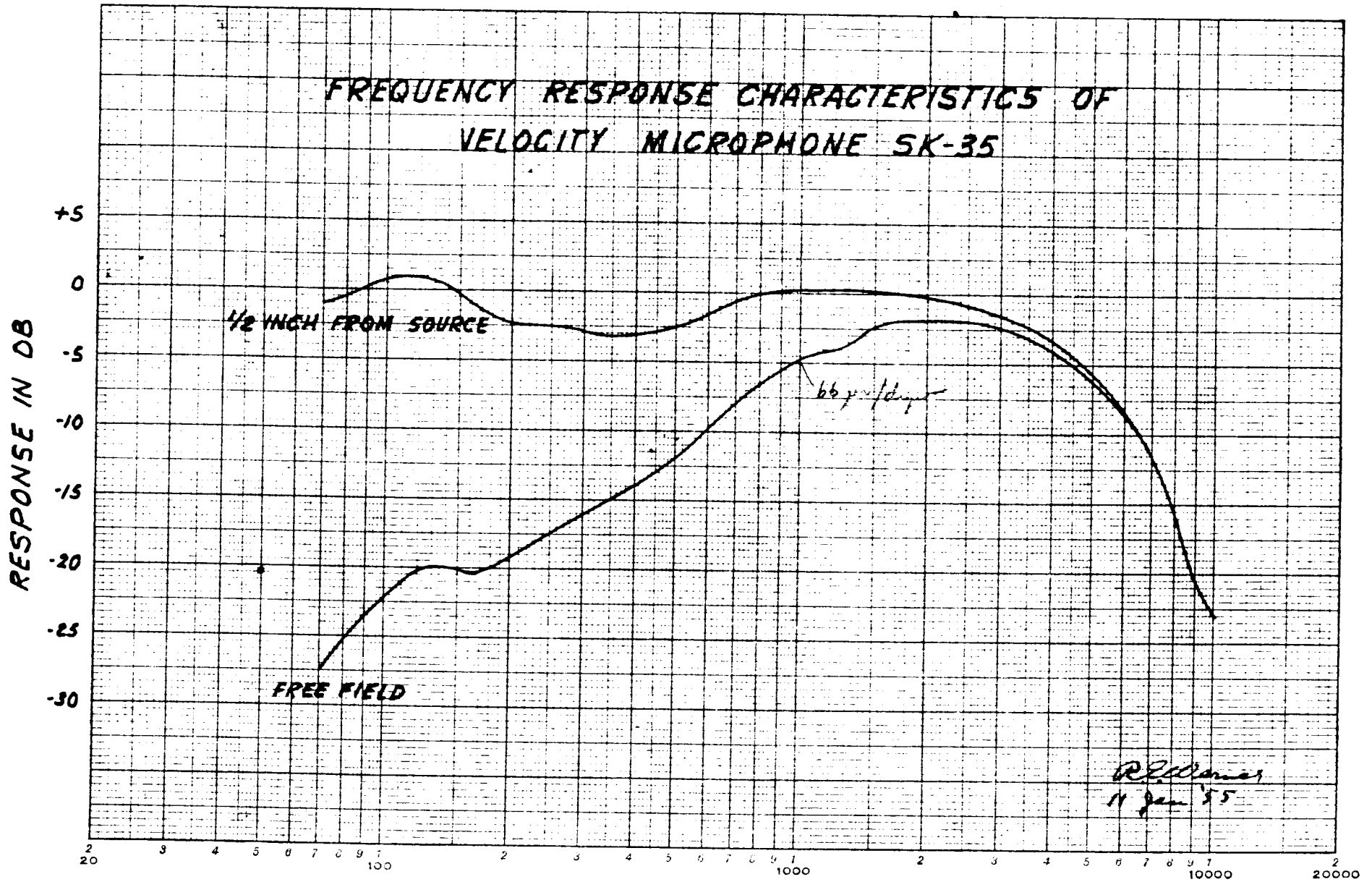
There is no directly competitive microphone.

Data Sheet Prepared by: R. A. Werner

Data Sheet Approved by: H. M. Wagstaff

8916502

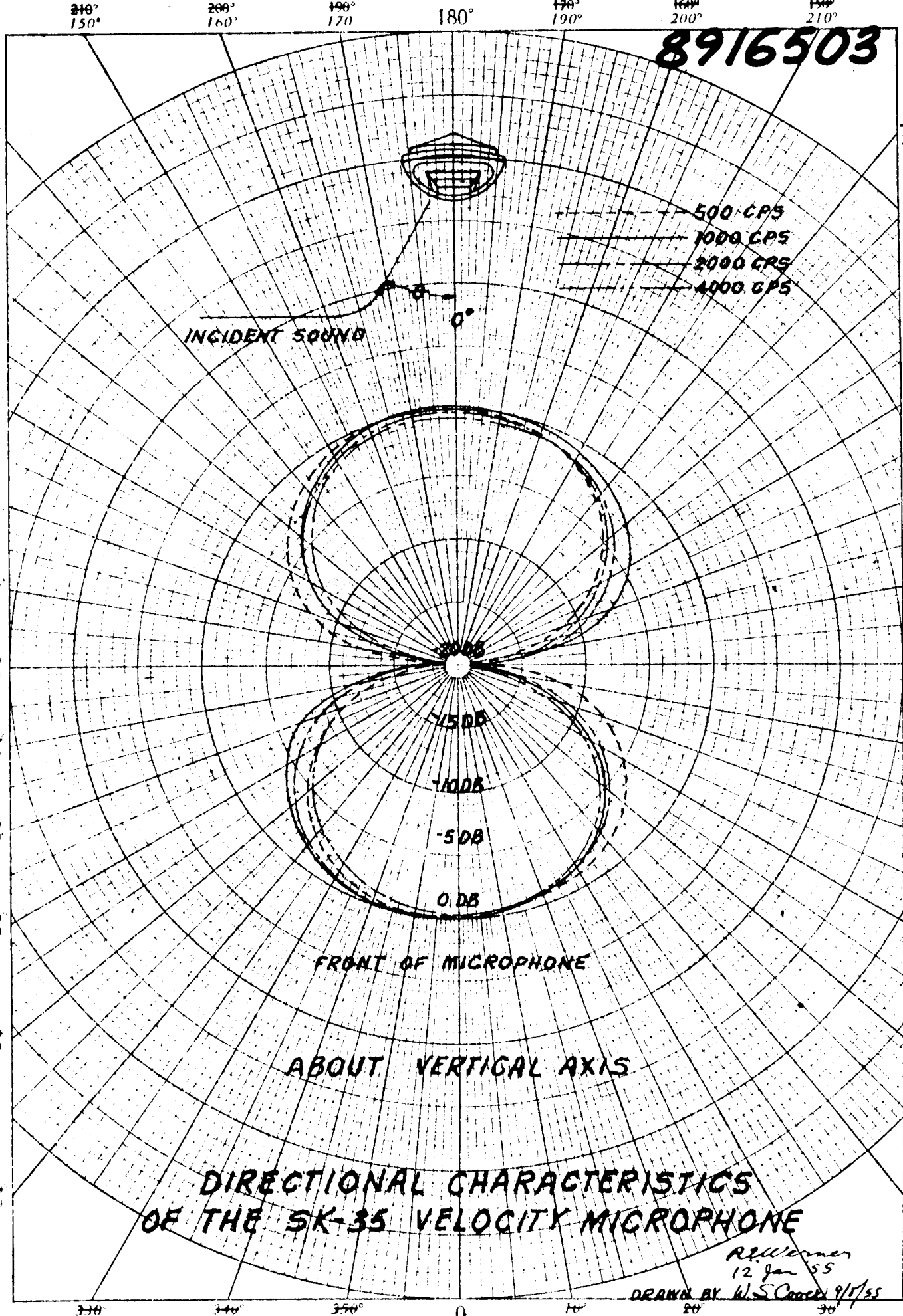
FREQUENCY RESPONSE CHARACTERISTICS OF VELOCITY MICROPHONE SK-35



DRAWN BY W.S Cover 9/7/55

8916502

8916503

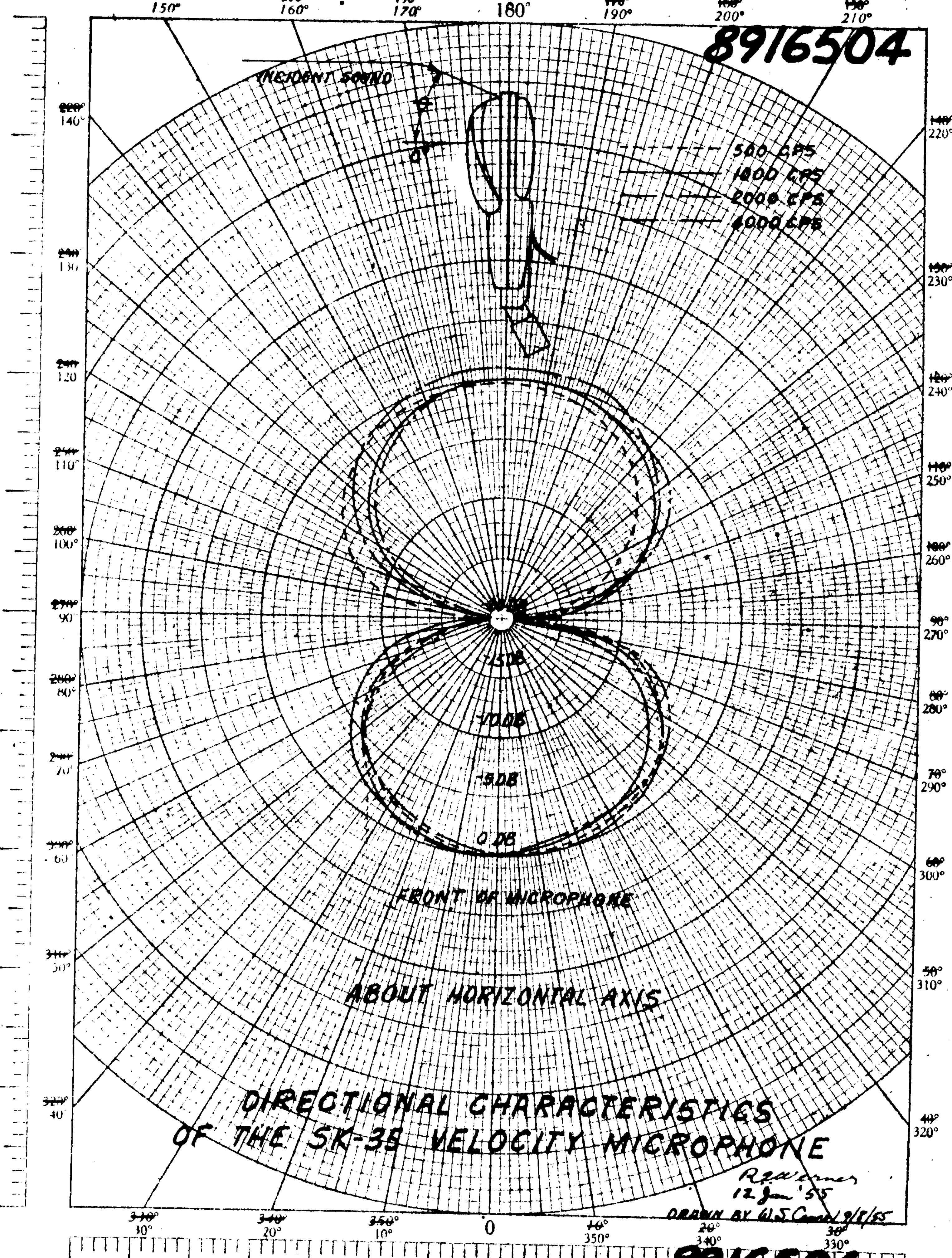


ABOUT VERTICAL AXIS

DIRECTIONAL CHARACTERISTICS OF THE SK-35 VELOCITY MICROPHONE

R.W. Warner
12 Jan 55

DRAWN BY W.S. Cooper 9/15/55



8916504
INCIDENT SOUND
0°
500 CPS
1000 CPS
2000 CPS
4000 CPS
-15DB
-10DB
-5DB
0 DB
FRONT OF MICROPHONE
ABOUT HORIZONTAL AXIS
DIRECTIONAL CHARACTERISTICS
OF THE SK-35 VELOCITY MICROPHONE
12 Jan '55
DRAWN BY W.S. Cassel 9/8/55
150°
160°
170°
180°
190°
200°
210°
140°
130
120
110°
100°
90°
80°
70°
60
50°
40°
220°
230°
240°
250°
260°
270°
280°
290°
300°
310°
320°
30°
20°
10°
0
350°
340°
330°