

TABLE I

No.	Source	Thickness	Colour and Characteristics	Lowest Wave-length Transmitted
1	Zeiss	0.37 cm.	Clear, white and fleckless.	1400 A.U.
2	"	0.55 cm.	" " "	1550 A.U.
3	"	0.58 cm.	" " "	1500 A.U.
4	S. Africa	0.60 cm.	White, fleck across centre, a few starts, not cloudy	1563 A.U.
5	"	0.82 cm.	White, slight flecks, no starts, clear	1563 A.U. (faintly)
6	"	1.07 cm.	White, flecked	1563 A.U. (very ")
7	"	0.65 cm.	White, a few flecks, not cloudy	1550 A.U.
	Recut of 7			
	(a)	0.2 cm.	" " "	1430 A.U.
	(b)	0.4 cm.	" " "	1464 A.U. (faintly)
8	S. Africa	0.89 cm.	White, flecks and starts, fairly clear	1550 A.U.
9	"	0.54 cm.	White, very cloudy, and flecked, no starts	1900 A.U.
10	"	0.70 cm.	White, slightly cloudy, a few starts	1550 A.U.
11	"	0.96 cm.	White, slightly cloudy and flecked	1550 A.U.
12	"	1.21 cm.	Very clear, a few starts and flecks	1550 A.U.
13	"	1.30 cm.	White, slightly cloudy a few flecks and starts	1550 A.U.
14	"	2.09 cm.	White, cloudy, large starts	1900 A.U.
15	"	2.05 cm.	Very white, clear, no starts	1550 A.U.
16	"	2.17 cm.	White, very cloudy, large starts	1550 A.U.
17	"	2.01 cm.	Purplish tint, clear, small starts	1650 A.U.
18	"	2.68 cm.	Slight purplish tint, slightly cloudy, a few large starts	1650 A.U.

The samples of fluorite described in this paper were supplied by the Adam Hilger Co., and the investigation was carried out in the Admiralty Physical Laboratory, South Kensington.

The illustration Plate I shows spectra of the carbon arc radiation transmitted by various types of fluorite (a) transmission to 1900 A.U., (b) to 1656 A.U., (c) to 1550 A.U., (d) to 1464 A.U., (e) the carbon arc through the optical train of the spectrograph only.

SUMMARY

It will be seen from the above table that many of the samples compare favourably with the fluorite supplied by Zeiss for spectro-