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GENERAL ELECTRIC COMPANY  
RESEARCH LABORATORY



1 River Road  
SCHENECTADY, N.Y.

January 16, 1929

Mr. C.F. Jenkins  
Jenkins Laboratories  
1519 Connecticut Avenue  
Washington, D.C.

Dear Mr. Jenkins:

I am enclosing a copy of report number  
17 which gives the photometric data we discussed  
at the recent S.M.P.E. convention. The results  
of this test agree with some previous work I have  
done along the same line.

Yours very truly,

FBenford:B

WHJones

*Frank Benford*  
RESEARCH LABORATORY

Report No. 17

Transmission of Light thru Glass and Quartz Rods

December 17, 1928

Frank Benford

At the Lake Placid convention of the A.M.P.E., Mr. C.F. Jenkins and the writer had a discussion as to the relative merits of glass and quartz for light conducting rods, and as to the effect of silver coatings on the rods.

Mr. Jenkins submitted one quartz and two glass rods for transmission test. The comparative values are given below. The rods are 0.185" in diameter and 2.75" long with cut ends.

	Relative Transmission
Quartz, bare	100%
Glass "	58%
Glass, silvered	30%
Quartz, silvered	52% (computed)

According to the test, the glass is only 58% effective against 100% for quartz, and the silver reduces the transmission to 30%. A quartz rod, silvered, would probably show a value of 52% of its original transmission.

Witness:

*B.H. Becker*  
*Jan. 7, 1929*