TABLE I

Dye	Solvent	Concentration [M]	Peak Power Out[a] for 5 J Input (KW)	Number of Shots[b] to 50% Decline of Initial Peak Power	λ_{max}, Untuned (nm)
I	ethanol	7.5×10^{-4}	2.7	7×10^{3}	460
II	ethanol	7.5×10^{-4}	4.1	5×10^{3}	480
III	p-dioxane	7.5×10^{-4}	3.8	3×10^{5}	481

[a] Fresh solution.
[b] 500-ml solution.

applications. Most flashlamps would have to be replaced by or before that time.

Since dye (III), 7-diethylamino-4-trifluoromethylcoumarin, is, as far as we know, not commercially available, we give here a brief description of the synthesis procedure we used. The reaction is based on the Pechmann [6] condensation of β-ketonic esters with monohydric phenols.

6 g of *m*-diethylamino phenol and 8 g of ethyltrifluoroacetoacetate were refluxed in 30 ml of ethanol for 15 h with 6 g of anhydrous zinc chloride as a condensing agent. The resultant reaction product was stirred into 1.5 l of water, acidified with 20 ml of concentrated HCl. After 12 h the precipitated solid was collected on a glass-fritted filter and washed with water several times. This crude product was purified by vacuum sublimation and finally recrystallized from absolute methanol. The yield is 49 percent. The material consists of feathery, yellow-green crystals with MP 79–81°C. Analysis: Calculated: C 59 percent, H 4.9 percent, N 4.9 percent, F 20 percent; Found: C 58.9 percent, H 4.8 percent, N 4.9 percent, F 18 percent.

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Correction to "Intracavity Breakdown in CO and CO_2 Lasers"

S. D. ROCKWOOD, G. H. CANAVAN, AND W. A. PROCTOR

In the above paper,[1] on page 155, the abscissas of Figs. 1 and 2 are incorrectly labeled. They should read, t_g (s), and not t_p as stated. In application to breakdown measurements the conversion from t_g to t_p is made by shifting the threshold curves in Figs. 1 and 2 horizontally to the right by the scale factor ln (N/n_0) equal to the number of electron exponentiations required to attain breakdown. Since optical attenuation on the order of 4 percent/cm occurs through electron free–free absorption at $N_e \approx 2 \times 10^{16}/\text{p}\cdot\text{cm}^{-3}\text{atm}^{-1}$ for 10.6-μ radiation and $N_e \approx 10^{16}/\text{p}\cdot\text{cm}^{-3}\text{atm}^{-1}$ for 5.0-μ radiation, scale factors of 5 and 7 are suggested for CO_2 and CO lasers, respectively. These numbers assume an initial electron density $n_0 = 10^{13}$ cm^{-3} and a gas pressure, $p = 1$-atm at standard temperature. Using these factors the threshold fluence for short pulses becomes $\text{ft}_p \approx 5$ J/cm^2 for CO_2 lasers and $\text{ft}_p \approx 28$ J/cm^2 for CO lasers. The CW threshold fluxes remain unchanged.

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S. D. Rockwood is with the Los Alamos Scientific Laboratory, University of California, Los Alamos, N. Mex. 87544.
G. H. Canavan and W. A. Proctor are with the Air Force Weapons Laboratory, Kirtland AFB, N. Mex. 87117.

[1] S. D. Rockwood, G. H. Canavan, and W. A. Proctor, *IEEE J. Quantum Electron.*, vol. QE-9, pp. 154–157, Jan. 1973.