TABLE III

Total Fractional Solid Angle Data for 5X5 Array of 12.76 liter Bottles of U(92.6)NH

Symmetry	No. of Units	Cylinder Separation, cm: Center to Center	Cylinder Separation, cm: Edge to Edge	h	λ	σ	q	Ω_f: $E_q(b)$	Ω_f: Figure V.D.1-3	$(q\,\Omega_f)$: $E_q(b)$	$(q\,\Omega_f)$: Figure V.D.1-3
1	4	25.21	11.56	18.384	8.23	0.85	.866	.112	.08	.389	.277
2	4	35.65	22.0	28.824	8.23	1.61	.750	.067	.05	.201	.150
3	8	56.37	42.72	49.544	8.23	3.13	.433	.033	.026	.114	.090
									$\sum(q_i\,\Omega_{f_i})$	.704	.517

TABLE IV

Comparison of Array Calculation Methods for 410 g U/l, U(92.6)NH Solution in 5.375" O.D., 12.76 Liter Polyethylene Bottles

Square Arrays: Array	Square Arrays: Number*	Solid Angle $\sum(q_i\,\Omega_{fi})$: Charts	Solid Angle $\sum(q_i\,\Omega_{fi})$: Eq(a)	Solid Angle k_a: Charts	Solid Angle k_a: Eq(a)	Interset k_{eff}	GEM-III k_{eff}	Density Analogue Number**
3 x 3	9	.4934	.755	.8911	1.2148	0.8787	.9883	8.5
5 x 5	25	.517	.704	.9131	1.1345	0.9209		28.7
6 x 6	36	.4784	.6452	.8777	1.0541	0.9235	.9451	41.7
9 x 9	81	.560	.678	.9560	1.0974	(50 limit)		82.0

* Critical number determined by experiment.
** Number of units calculated to be critical by this method.