and

$$\Theta_n(w, z) = \sum_{m=0}^{\infty} (z/w)^{n+2m} I_{n+2m}(z),$$

where $I_n(z)$ is the modified Bessel function of the first kind of order n, for the following ranges: $w = 0.1(0.1)1$, $z = 0.1(0.1)1$ for Y_1, Y_2, Θ_0, Θ_1; $w = 1(1)z$, $z = 2(1)20$ for Y_1, Y_2; $w = 2(1)20$, $z = 1(1)w$ for Θ_0, Θ_1.

Lommel's functions of two variables are usually represented by the symbols $U_n(w, z)$ and $V_n(w, z)$; these are related to the above functions by the formulas $Y_n(w, z) = i^{-n}U_n(iw, iz)$ and $\Theta_n(w, z) = i^{-n}V_n(iw, iz)$.

Tables of U_n and V_n have been calculated by Dekanosidze [1] and Boersma [2].

Y. L. L.

1. E. N. DEKANOSIDZE, *Tablitŝy ŝilindricheskikh funkŝiĭ ot dvukh peremennykh* (*Tables of cylinder functions*), Acad. Sci. USSR, Moscow, 1956. (See *MTAC*, v. 12, 1958, pp. 239–240, RMT **107**.) English translation published by Pergamon Press, New York, 1960. (See *Math. Comp.*, v. 16, 1962, p. 383, RMT **36**.)

2. J. BOERSMA, "On the computation of Lommel's functions of two variables," *Math. Comp.*, v. 16, 1962, pp. 232–238.

97[L, M].—RORY THOMPSON, *Table of* $I_n(b) = (2/\pi) \int_0^\infty ((\sin x)/x)^n \cos bx\, dx$, ms. of 26 computer sheets deposited in the UMT file.

The integral in the title is tabulated to 8D for $n = 3(1)100$, $b = 0(0.1)9$. Previous tables [1], [2] have been limited to the case $b = 0$. The method used in computing the present tables has been described by the author in [3].

In a marginal handwritten note the author notes 12 rounding errors detected by a comparison with the earlier tables, which extended to 10D. The presence of other rounding errors in this table is alluded to by the author; some of these are obvious among the early entries.

Apparently no attempt was made to edit the computer output constituting this table; for example, the fact that $I_n(b) = 0$ for $b \geqq n$ could have been used to reduce the number of entries shown for $n \leqq 8$. Furthermore, the obvious rounding errors referred to could have been removed in an improved copy.

Despite these flaws, this table is a valuable extension of the earlier, related tables.

A FORTRAN listing of the program used in the calculations is included.

J. W. W.

1. K. HARUMI, S. KATSURA & J. W. WRENCH, JR., "Values of $(2/\pi) \int_0^\infty ((\sin t)/t)^n\, dt$," *Math. Comp.*, v. 14, 1960, p. 379.

2. R. G. MEDHURST & J. H. ROBERTS, "Evaluation of the integral $I_n(b) = (2/\pi) \int_0^\infty ((\sin x)/x)^n \cos (bx)\, dx$," *Math. Comp.*, v. 19, 1965, pp. 113–117.

3. RORY THOMPSON, "Evaluation of $I_n(b) = (2/\pi) \int_0^\infty ((\sin x)/x)^n \cos (bx)\, dx$ and of similar integrals", *Math. Comp.*, v. 20, 1966, pp. 330–332.

98[L, M].—SHIGETOSHI KATSURA, YUJI INOUE, SEIJI HAMASHITA & J. E. KILPATRICK, *Tables of Integrals of Threefold and Fourfold Products of Associated Legendre Functions*, The Technology Reports of the Tôhoku University, v. 30, 1965, pp. 93–164.

These extensive tables list the values, to accuracies varying from 11 to 15 signifi-