Erratum: Hyperfine-resolved 3.4-μm spectroscopy of CH$_3$I with a widely tunable difference frequency generation source and a cavity-enhanced cell: A case study of a local Coriolis interaction between the $v_1 = 1$ and $(v_2, v_6^l) = (1, 2^2)$ states [Phys. Rev. A 83, 012505 (2011)]

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In Table I on the 012505-3, (20, 4) should read as (25, 4).

The fitting in the Analysis section of the original paper contained incorrect procedures. The following sentences should be inserted between the third and fourth sentences of the second paragraph in the right half of page 012505-4:

"Here it is noted that we do not know the absolute transition frequencies, but rather the frequency intervals. Therefore, we have to choose one among six hyperfine components as a reference, and the relative frequencies of the other components are used as the input data for the least-squares fit. In this case, the reference component is infinitely weighted in the fit. To give equal weight to six components, the five intervals of the transition are fit six times by varying the reference component."

Accordingly, the $\frac{49}{2} \rightarrow \frac{47}{2}$ row in Table II should be -5.78 in the recalculated column and 0.10 in the (Measured) $-$ (Recalculated) column, and Table III should be replaced.

The second paragraph in the left half of page 012505-5 should be as follows:

"The value of $(eq\,Q)_{v_1} = 1$ in Table III agrees with that of the previous work [24] within the uncertainties, in which seven v_1 $P(J = 43 - 46, K = 0 - 6)$ transitions were recorded with a spectral resolution of 100 kHz using a 10-GHz tunable 3.39-μm He-Ne laser. The value of W_C is consistent with Ref. [11], and the uncertainty is reduced more than one order of magnitude because of the higher spectral resolution."

Calculated spectra in Figs. 4 and 5 are not required to be replaced even though the hyperfine and Coriolis coupling constants vary from the original values because the variations are much smaller than the frequency scale of Figs. 4 and 5.

TABLE III. Determined molecular constants. The numbers in the parentheses are one standard deviation in the unit of the last digit of the constant.

	This work (MHz)	Previous works (MHz)	Refs.
$(eq\,Q)_{v_1=1}$	$-1936.85(18)$	$-1937.06(3)$	[24]
$(eq\,Q)_{v_2=1,v_6=2}$	$-1951.65(25)$		
W_C	$256.3(14)$	$261(30)$	[11]