TABLE I

Measurement of anomalous dispersion effect for hk0 reflections of ephedrine hydrochloride. α_1 and α_2 are the two possible values of the phase, and the one which agrees with the phase calculated from the structure is shown in heavy type. The tick mark indicates those reflections for which the correct phase angle is the one which is closer to the phase α_A of the chlorines. The reflections for which the columns beyond the fourth are left vacant are those for which θ is indeterminate, since $F_A'' = 0$.

h k l	$\frac{\Delta\sqrt{I}}{\sqrt{I}}$	$\Delta F = \frac{\Delta\sqrt{I}}{\sqrt{I}} \cdot F_c$	$2F_A''$	θ	α_A	α_1	$\alpha_2 = \pi - \alpha_1$	α from structure	Validity of hypothesis
1 1 0	−0·055	−0·086	−2·02	62	180	**28**	152	61	√
2 1 0	−0·052	−1·487	−2·76	57	180	33	**147**	158	√
3 1 0	−0·012	−0·466	−1·88	76	180	14	**166**	174	√
4 1 0	−0·010	−0·146	0·0	..	..	..	..	..	..
5 1 0	0·103	1·380	2·02	47	0	53	**127**	113	×
6 1 0	0·0	0·0	2·76	90	0	**0**	180	11	√
7 1 0	0·005	0·028	1·88	89	0	**1**	179	4	√
8 1 0	0·0	0·0	0·0	..	..	..	..	..	..
9 1 0	0·064	0·608	−2·02	108	180	342	**198**	225	√
10 1 0	−0·046	−0·409	−2·76	82	180	8	**172**	168	√
11 1 0	0·0	0·0	−1·88	90	180	0	**180**	175	√
12 1 0	−0·016	−0·027	0	..	..	..	..	..	..
0 2 0	0·0	0·0	−2·76	90	180	0	**180**	174	√
1 2 0	−0·025	−0·505	−1·88	74	180	16	**164**	153	√
2 2 0	0·0	0·0	0·0	..	..	..	..	..	..
3 2 0	0·270	1·701	2·02	32	0	58	**122**	116	×
4 2 0	−0·068	−1·292	2·76	118	0	**332**	208	324	√
5 2 0	−0·094	−0·686	1·88	111	0	**339**	209	325	√
6 2 0	0·0	0·0	0·0	..	..	..	..	..	..
7 2 0	−0·067	−0·0549	−2·02	74	180	16	**164**	163	√
8 2 0	0·0	0·0	−2·76	90	180	0	**180**	172	√
9 2 0	0·023	0·276	−1·88	99	180	351	**189**	220	√
10 2 0	−0·038	−0·251	0·0	..	..	..	..	..	..
11 2 0	−0·035	−0·200	2·02	95	0	**355**	195	351	√
12 2 0	0·071	0·511	2·76	79	0	**11**	169	27	√
1 3 0	−0·024	−0·451	2·02	103	0	**347**	193	349	√
2 3 0	0·009	0·156	2·76	87	0	**3**	177	15	√
3 3 0	0·026	0·354	1·88	79	0	**11**	169	10	√
4 3 0	−0·025	−0·315	0·0	..	..	..	..	..	..
5 3 0	0·035	0·371	−2·02	101	180	349	**191**	194	√
6 3 0	0·135	1·053	−2·76	112	180	338	**202**	242	×
7 3 0	−0·060	−0·378	−1·88	78	180	12	**168**	140	√
8 3 0	−0·040	−0·484	0·0	..	..	..	..	..	..
9 3 0	−0·026	−0·086	2·02	92	0	358	**182**	146	×
10 3 0	−0·058	−0·551	2·76	101	0	**349**	191	329	√
11 3 0	0·046	0·179	1·88	85	0	**5**	175	18	√
0 4 0	0·046	0·497	2·76	80	0	**10**	170	22	√
1 4 0	0·007	0·063	1·88	88	0	**2**	178	7	√
2 4 0	−0·012	−0·046	0·0	..	..	..	..	..	..
3 4 0	0·218	0·523	−2·02	105	180	**345**	195	280	×
4 4 0	0·043	0·383	−2·76	98	180	352	**188**	179	√
5 4 0	0·023	0·255	−1·88	98	180	352	**188**	202	√
6 4 0	..	..	0	..	..	..	..	..	..
7 4 0	−0·270	−1·701	2·02	148	0	**302**	238	273	×
8 4 0	0·024	0·250	2·76	85	0	**5**	175	26	√
1 5 0	−0·136	−1·006	−2·02	60	180	30	**150**	124	√
2 5 0	−0·055	−0·798	−2·76	73	180	17	**163**	179	√
3 5 0	−0·122	−0·598	−1·88	71	180	19	**161**	153	√
4 5 0	−0·066	−0·277	0	..	..	..	..	..	..
0 6 0	−0·025	−0·228	−2·76	85	180	5	**175**	161	√