Table 1. Vibrational and rotational quantum numbers for the $^{23}Na^{39}K$ ($\Omega = 0$) window levels originally observed in Refs. 26, 43, 47 and 48 and the $^{23}Na^{39}K$ ($\Omega = 2$) and $^{23}Na^{41}K$ ($\Omega = 0$) window levels observed in the present work. The window levels are described by the designation $1(b)^3\Pi_\Omega(v_b, J) \sim 2(A)^1\Sigma^+(v_A, J)$. In each case, either the mostly singlet or the mostly triplet component can be used as the intermediate level for the PFOODR pumping scheme.

	v_b	J	v_A	$E[2(A)^1\Sigma^+(v_A, J)]$ (cm^{-1})	$E[1(b)^3\Pi_\Omega(v_b, J)]$ (cm^{-1})
$^{23}Na^{39}K_{(\Omega=0)}$	15	15	15	13357.7611	13351.4733
	17	19	18	13588.9916	13581.1934
	17	20	18	13591.5445	13584.5832
	17	21	18	13594.2465	13588.0666
	17	22	18	13597.1458	13591.6785
	17	23	18	13600.2787	13595.3385
	17	24	18	13603.7105	13598.9842
	17	25	18	13602.6203	13607.4623
	17	26	18	13606.1947	13611.5606
	15	27	15		13398.1146
	17	27	18	13609.7689	13615.9743
	17	28	18	13613.3714	13620.6541
	17	29	18	13617.0075	13625.5911
	12	38	11	13134.1810	13129.4355
	18	45	20	13833.7110	13838.2101
	22	87	28		14720.2382
$^{23}Na^{39}K_{(\Omega=2)}$	20	32	23	13992.5759	13992.3681
	17	45	19	13762.8343	13762.6179
$^{23}Na^{41}K_{(\Omega=0)}$	18	47	20	13832.7456	13832.9655

Table 2. Measured $^{23}Na^{39}K$ $3^3\Pi_{\Omega=0}$, $^{23}Na^{39}K$ $3^3\Pi_{\Omega=2}$, and $^{23}Na^{41}K$ $3^3\Pi_{\Omega=0}$ ro-vibrational level energies, along with ground state and intermediate state levels and PUMP and PROBE laser frequencies for each $^{23}Na^{39}K$ $3^3\Pi_{\Omega=0}(v, J) \leftarrow 1(b)^3\Pi_{\Omega=0}(v_b, J_b) \leftarrow 1(X)^1\Sigma^+(v_X, J_X)$, $^{23}Na^{39}K$ $3^3\Pi_{\Omega=2}(v, J) \leftarrow 1(b)^3\Pi_{\Omega=2}(v_b, J_b) \leftarrow 1(X)^1\Sigma^+(v_X, J_X)$, and $^{23}Na^{41}K$ $3^3\Pi_{\Omega=0}(v, J) \leftarrow 1(b)^3\Pi_{\Omega=0}(v_b, J_b) \leftarrow 1(X)^1\Sigma^+(v_X, J_X)$ PFOODR transition studied in this work. Measured $^{23}Na^{39}K$ $3^3\Pi_{\Omega=0}(v, J)$ level energies are compared to those calculated using the $^{23}Na^{39}K$ $3^3\Pi_{\Omega=0}$ IPA potential reported in Table 5 of this work. Measured $^{23}Na^{41}K$ $3^3\Pi_{\Omega=0}(v, J)$ level energies are compared to those calculated using the mass adjusted outer well Dunham coefficients reported in Table 4.

$^{23}Na^{39}K$ $3^3\Pi_{\Omega=0}$ Data

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
6	25	17, 26	0, 25	123.5164	13488.0442	11359.2230	24970.7836	24970.667	0.1166
6	27	17, 26	0, 25	123.5164	13488.0442	11363.1280	24974.6886	24974.597	0.0916
6	46	18, 45	0, 46	266.2096	13572.0030	11188.1992	25026.4118	25026.478	-0.0662
7	14	15, 15	0, 14	81.7995	13269.6738	11645.8359	24997.3092	24997.296	0.0132
7	14	15, 15	0, 14	81.7995	13269.6738	11645.8358	24997.3091	24997.296	0.0131
7	14	15, 15	0, 16	87.6831	13263.7902	11645.8353	24997.3086	24997.296	0.0126
7	16	15, 15	0, 14	81.7995	13269.6738	11648.1232	24999.5965	24999.600	-0.0035
7	16	15, 15	0, 14	81.7995	13269.6738	11648.1245	24999.5978	24999.600	-0.0022
7	16	15, 15	0, 16	87.6831	13263.7902	11648.1237	24999.5970	24999.600	-0.0030
7	25	17, 26	0, 25	123.5164	13488.0442	11401.9815	25013.5421	25013.629	-0.0870
7	27	17, 26	0, 25	123.5164	13488.0442	11405.8883	25017.4489	25017.556	-0.1071
7	46	18, 45	0, 46	266.2096	13572.0030	11230.8867	25069.0993	25069.408	-0.3087
8	14	15, 15	0, 14	81.7995	13269.6738	11688.5802	25040.0535	25040.037	0.0165
8	14	15, 15	0, 14	81.7995	13269.6738	11688.5814	25040.0547	25040.037	0.0177
8	14	15, 15	0, 16	87.6831	13263.7902	11688.5802	25040.0535	25040.037	0.0165
8	16	15, 15	0, 14	81.7995	13269.6738	11690.8739	25042.3472	25042.340	0.0072
8	16	15, 15	0, 14	81.7995	13269.6738	11690.8727	25042.3460	25042.340	0.0059
8	16	15, 15	0, 16	87.6831	13263.7902	11690.8735	25042.3468	25042.340	0.0068
8	25	17, 26	0, 25	123.5164	13488.0442	11444.7090	25056.2696	25056.355	-0.0854
8	27	17, 26	0, 25	123.5164	13488.0442	11448.6207	25060.1813	25060.280	-0.0987
8	44	18, 45	0, 46	266.2096	13572.0030	11266.9737	25105.1863	25105.412	-0.2257
8	46	18, 45	0, 46	266.2096	13572.0030	11273.6466	25111.8592	25112.094	-0.2348
9	14	15, 15	0, 14	81.7995	13269.6738	11731.2464	25082.7197	25082.696	0.0236
9	14	15, 15	0, 14	81.7995	13269.6738	11731.2475	25082.7208	25082.696	0.0248
9	14	15, 15	0, 14	81.7995	13269.6738	11731.2478	25082.7211	25082.696	0.0251
9	14	15, 15	0, 14	81.7995	13269.6738	11731.2439	25082.7172	25082.696	0.0211
9	16	15, 15	0, 14	81.7995	13269.6738	11733.5377	25085.0110	25084.994	0.0170
9	16	15, 15	0, 14	81.7995	13269.6738	11733.5389	25085.0122	25084.994	0.0182
9	25	17, 26	0, 25	123.5164	13488.0442	11487.4006	25098.9612	25098.985	-0.0238

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
9	27	17, 26	0, 25	123.5164	13488.0442	11491.3132	25102.8738	25102.902	-0.0282
9	44	18, 45	0, 46	266.2096	13572.0030	11309.6617	25147.8743	25147.964	-0.0897
9	46	18, 45	0, 46	266.2096	13572.0030	11316.3320	25154.5446	25154.636	-0.0914
9	46	18, 45	0, 46	266.2096	13572.0030	11316.3318	25154.5444	25154.636	-0.0916
10	14	15, 15	0, 14	81.7995	13269.6738	11773.8141	25125.2874	25125.284	0.0034
10	16	15, 15	0, 14	81.7995	13269.6738	11776.0922	25127.5655	25127.580	-0.0145
10	25	17, 26	0, 25	123.5164	13488.0442	11529.9801	25141.5407	25141.553	-0.0124
10	27	17, 26	0, 25	123.5164	13488.0442	11533.8887	25145.4493	25145.465	-0.0157
10	27	17, 26	0, 25	123.5164	13488.0442	11533.8918	25145.4524	25145.465	-0.0127
10	27	17, 26	0, 25	123.5164	13488.0442	11533.8904	25145.4510	25145.465	-0.0140
10	27	17, 28	0, 27	133.5534	13487.1007	11524.8106	25145.4647	25145.465	-0.0003
10	44	18, 45	0, 46	266.2096	13572.0030	11352.2526	25190.4652	25190.458	0.0072
10	46	18, 45	0, 46	266.2096	13572.0030	11358.9227	25197.1353	25197.119	0.0163
11	14	15, 15	0, 14	81.7995	13269.6738	11816.2003	25167.6736	25167.717	-0.0434
11	14	15, 15	0, 14	81.7995	13269.6738	11816.2005	25167.6738	25167.717	-0.0432
11	14	15, 15	0, 16	87.6831	13263.7902	11816.2001	25167.6734	25167.717	-0.0436
11	16	15, 15	0, 14	81.7995	13269.6738	11818.4943	25169.9676	25170.013	-0.0454
11	16	15, 15	0, 16	87.6831	13263.7902	11818.4951	25169.9684	25170.013	-0.0446
11	25	17, 26	0, 25	123.5164	13488.0442	11572.3861	25183.9467	25183.988	-0.0413
11	25	17, 26	0, 25	123.5164	13488.0442	11572.3896	25183.9502	25183.988	-0.0378
11	25	17, 26	0, 25	123.5164	13488.0442	11572.3876	25183.9482	25183.988	-0.0398
11	27	17, 26	0, 25	123.5164	13488.0442	11576.3029	25187.8635	25187.900	-0.0365
11	37	12, 38	0, 37	194.9907	12934.4448	12082.3871	25211.8226	25211.828	-0.0055
11	37	12, 38	0, 37	194.9907	12934.4448	12082.3916	25211.8271	25211.828	-0.0009
11	37	12, 38	0, 37	194.9907	12934.4448	12082.3866	25211.8221	25211.828	-0.0059
11	39	12, 38	0, 37	194.9907	12934.4448	12088.0573	25217.4928	25217.481	0.0118
11	44	18, 45	0, 46	266.2096	13572.0030	11394.6881	25232.9007	25232.869	0.0317
11	46	18, 45	0, 46	266.2096	13572.0030	11401.3705	25239.5831	25239.524	0.0591
12	14	15, 15	0, 14	81.7995	13269.6738	11858.3377	25209.8110	25209.860	-0.0490
12	16	15, 15	0, 14	81.7995	13269.6738	11860.6373	25212.1106	25212.162	-0.0514
12	25	17, 26	0, 25	123.5164	13488.0442	11614.5557	25226.1163	25226.165	-0.0487
12	25	17, 26	0, 25	123.5164	13488.0442	11614.5598	25226.1204	25226.165	-0.0446
12	27	17, 26	0, 25	123.5164	13488.0442	11618.4777	25230.0383	25230.085	-0.0467
12	27	17, 26	0, 25	123.5164	13488.0442	11618.4806	25230.0412	25230.085	-0.0438
12	37	12, 38	0, 37	194.9907	12934.4448	12124.5985	25254.0340	25254.046	-0.0120
12	39	12, 38	0, 37	194.9907	12934.4448	12130.2725	25259.7080	25259.705	0.0030
12	44	18, 45	0, 46	266.2096	13572.0030	11436.9303	25275.1429	25275.104	0.0389
12	46	18, 45	0, 46	266.2096	13572.0030	11443.6189	25281.8315	25281.763	0.0685
13	14	15, 15	0, 14	81.7995	13269.6738	11900.0750	25251.5483	25251.550	-0.0017
13	14	15, 15	0, 14	81.7995	13269.6738	11900.0771	25251.5504	25251.550	0.0004

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
13	14	15, 15	0, 16	87.6831	13263.7902	11900.0729	25251.5462	25251.550	-0.0038
13	16	15, 15	0, 14	81.7995	13269.6738	11902.3946	25253.8679	25253.865	0.0029
13	16	15, 15	0, 14	81.7995	13269.6738	11902.3916	25253.8649	25253.865	-0.0001
13	16	15, 15	0, 16	87.6831	13263.7902	11902.3884	25253.8617	25253.865	-0.0034
13	16	15, 15	0, 16	87.6831	13263.7902	11902.3913	25253.8646	25253.865	-0.0004
13	25	17, 26	0, 25	123.5164	13488.0442	11656.3697	25267.9303	25267.942	-0.0117
13	25	17, 26	0, 25	123.5164	13488.0442	11656.3646	25267.9252	25267.942	-0.0168
13	25	17, 26	0, 25	123.5164	13488.0442	11656.3667	25267.9273	25267.942	-0.0147
13	27	17, 26	0, 25	123.5164	13488.0442	11660.3024	25271.8630	25271.879	-0.0160
13	27	17, 26	0, 25	123.5164	13488.0442	11660.3019	25271.8625	25271.879	-0.0165
13	27	17, 26	0, 27	133.5534	13478.0078	11660.3094	25271.8706	25271.879	-0.0084
13	37	12, 38	0, 37	194.9907	12934.4448	12166.5076	25295.9431	25295.927	0.0161
13	39	12, 38	0, 37	194.9907	12934.4448	12172.1938	25301.6293	25301.602	0.0273
13	44	18, 45	0, 46	266.2096	13572.0030	11478.9759	25317.1885	25317.043	0.1455
13	46	18, 45	0, 46	266.2096	13572.0030	11485.6376	25323.8502	25323.717	0.1331
13	46	18, 45	0, 46	266.2096	13572.0030	11485.6298	25323.8424	25323.717	0.1254
13	46	18, 45	0, 46	266.2096	13572.0030	11485.6356	25323.8482	25323.717	0.1312
14	14	15, 15	0, 14	81.7995	13269.6738	11922.7404	25274.2137	25273.742	0.4717
14	14	15, 15	0, 16	87.6831	13263.7902	11922.7390	25274.2123	25273.742	0.4703
14	14	15, 15	0, 16	87.6831	13263.7902	11922.7385	25274.2118	25273.742	0.4698
14	16	15, 15	0, 14	81.7995	13269.6738	11927.1895	25278.6628	25278.266	0.3968
14	16	15, 15	0, 16	87.6831	13263.7902	11927.1878	25278.6611	25278.266	0.3951
14	16	15, 15	0, 16	87.6831	13263.7902	11927.1873	25278.6606	25278.266	0.3946
14	16	15, 15	0, 16	87.6831	13263.7902	11927.1883	25278.6616	25278.266	0.3956
14	21	17, 22	0, 21	105.7026	13485.9854	11700.6225	25292.3105	25292.089	0.2215
14	22	17, 21	0, 20	101.7207	13486.3459	11707.3949	25295.4615	25295.273	0.1885
14	22	17, 21	0, 22	109.8732	13478.1874	11707.3892	25295.4498	25295.273	0.1768
14	22	17, 23	0, 22	109.8732	13485.4653	11700.1052	25295.4437	25295.273	0.1707
14	22	17, 23	0, 22	109.8732	13485.4653	11700.1008	25295.4393	25295.273	0.1663
14	22	17, 23	0, 24	118.7802	13476.5547	11700.1010	25295.4359	25295.273	0.1629
14	23	17, 22	0, 23	114.2325	13477.4460	11707.0578	25298.7363	25298.586	0.1503
14	23	17, 22	0, 23	114.2325	13477.4460	11707.0614	25298.7399	25298.586	0.1539
14	23	17, 24	0, 25	123.5164	13475.4716	11699.7350	25298.7230	25298.586	0.1370
14	23	17, 24	0, 25	123.5164	13475.4716	11699.7426	25298.7306	25298.586	0.1446
14	23	17, 24	0, 25	123.5164	13475.4716	11699.7475	25298.7355	25298.586	0.1495
14	24	17, 23	0, 22	109.8732	13485.4653	11706.7965	25302.1350	25302.015	0.1200
14	24	17, 23	0, 22	109.8732	13485.4653	11706.7900	25302.1285	25302.015	0.1135
14	24	17, 23	0, 22	109.8732	13485.4653	11706.7965	25302.1350	25302.015	0.1200
14	24	17, 25	0, 24	118.7802	13488.6821	11694.6774	25302.1397	25302.015	0.1247
14	24	17, 25	0, 24	118.7802	13488.6821	11694.6798	25302.1421	25302.015	0.1271

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
14	24	17, 25	0, 26	128.4408	13479.0254	11694.6725	25302.1387	25302.015	0.1237
14	25	17, 24	0, 23	114.2325	13484.7517	11706.6524	25305.6366	25305.520	0.1166
14	25	17, 24	0, 25	123.5164	13475.4716	11706.6423	25305.6303	25305.520	0.1103
14	25	17, 26	0, 25	123.5164	13488.0442	11694.0769	25305.6375	25305.520	0.1175
14	25	17, 26	0, 25	123.5164	13488.0442	11694.0760	25305.6366	25305.520	0.1166
14	25	17, 26	0, 25	123.5164	13488.0442	11694.0718	25305.6324	25305.520	0.1124
14	25	17, 26	0, 27	133.5534	13478.0078	11694.0763	25305.6375	25305.520	0.1175
14	26	17, 25	0, 24	118.7802	13488.6821	11701.6635	25309.1258	25308.985	0.1408
14	26	17, 25	0, 24	118.7802	13488.6821	11701.6662	25309.1285	25308.985	0.1435
14	26	17, 25	0, 24	118.7802	13488.6821	11701.6652	25309.1275	25308.985	0.1425
14	26	17, 25	0, 24	118.7802	13488.6821	11701.6610	25309.1233	25308.985	0.1383
14	26	17, 25	0, 26	128.4408	13479.0254	11701.6589	25309.1251	25308.985	0.1401
14	27	17, 26	0, 25	123.5164	13488.0442	11700.6981	25312.2587	25312.101	0.1577
14	27	17, 26	0, 25	123.5164	13488.0442	11700.7004	25312.2610	25312.101	0.1600
14	27	17, 26	0, 25	123.5164	13488.0442	11700.6997	25312.2603	25312.101	0.1593
14	27	17, 28	0, 27	133.5534	13487.1007	11691.6245	25312.2786	25312.101	0.1776
14	27	17, 28	0, 29	144.3422	13476.3037	11691.6250	25312.2709	25312.101	0.1699
14	28	17, 27	0, 26	128.4408	13487.5335	11698.8713	25314.8456	25314.702	0.1436
14	28	17, 27	0, 26	128.4408	13487.5335	11698.8715	25314.8458	25314.702	0.1438
14	28	17, 27	0, 26	128.4408	13487.5335	11698.8696	25314.8439	25314.702	0.1419
14	28	17, 27	0, 28	138.8539	13477.1090	11698.8698	25314.8327	25314.702	0.1307
14	28	17, 29	0, 28	138.8539	13486.7372	11689.2681	25314.8592	25314.702	0.1572
14	29	17, 28	0, 27	133.5534	13487.1007	11696.5392	25317.1933	25317.076	0.1173
14	29	17, 28	0, 27	133.5534	13487.1007	11696.5404	25317.1945	25317.076	0.1185
14	29	17, 28	0, 29	144.3422	13476.3037	11696.5403	25317.1862	25317.076	0.1102
14	37	12, 38	0, 37	194.9907	12934.4448	12207.9308	25337.3663	25337.295	0.0713
14	37	12, 38	0, 37	194.9907	12934.4448	12207.9309	25337.3664	25337.295	0.0714
14	37	12, 38	0, 37	194.9907	12934.4448	12207.9275	25337.3630	25337.295	0.0680
14	37	12, 38	0, 37	194.9907	12934.4448	12207.9294	25337.3649	25337.295	0.0699
14	37	12, 38	0, 37	194.9907	12934.4448	12207.9291	25337.3646	25337.295	0.0696
14	39	12, 38	0, 37	194.9907	12934.4448	12213.6542	25343.0897	25343.015	0.0747
14	46	18, 45	0, 46	266.2096	13572.0030	11527.1824	25365.3950	25365.254	0.1410
15	14	15, 15	0, 14	81.7995	13269.6738	11941.3020	25292.7753	25292.749	0.0263
15	14	15, 15	0, 14	81.7995	13269.6738	11941.3018	25292.7751	25292.749	0.0261
15	14	15, 15	0, 16	87.6831	13263.7902	11941.2979	25292.7712	25292.749	0.0222
15	14	15, 15	0, 16	87.6831	13263.7902	11941.2992	25292.7725	25292.749	0.0235
15	16	15, 15	0, 14	81.7995	13269.6738	11943.6483	25295.1216	25295.099	0.0226
15	16	15, 15	0, 14	81.7995	13269.6738	11943.6458	25295.1191	25295.099	0.0201
15	16	15, 15	0, 16	87.6831	13263.7902	11943.6450	25295.1183	25295.099	0.0193
15	18	17, 19	0, 20	101.7207	13479.4727	11716.5892	25297.7826	25297.753	0.0295

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
15	20	17, 19	0, 20	101.7207	13479.4727	11719.5473	25300.7407	25300.715	0.0257
15	20	17, 21	0, 20	101.7207	13486.3459	11712.6764	25300.7430	25300.715	0.0280
15	20	17, 21	0, 20	101.7207	13486.3459	11712.6763	25300.7429	25300.715	0.0279
15	21	17, 20	0, 19	97.9277	13486.6555	11717.7657	25302.3489	25302.315	0.0339
15	21	17, 20	0, 19	97.9277	13486.6555	11717.7657	25302.3489	25302.315	0.0340
15	21	17, 22	0, 21	105.7026	13485.9854	11710.6586	25302.3466	25302.315	0.0316
15	21	17, 22	0, 23	114.2325	13477.4460	11710.6586	25302.3371	25302.315	0.0221
15	21	17, 22	0, 23	114.2325	13477.4460	11710.6616	25302.3401	25302.315	0.0251
15	22	17, 21	0, 20	101.7207	13486.3459	11715.9565	25304.0231	25303.998	0.0251
15	22	17, 23	0, 22	109.8732	13485.4653	11708.6658	25304.0043	25303.998	0.0063
15	22	17, 23	0, 22	109.8732	13485.4653	11708.6741	25304.0126	25303.998	0.0146
15	22	17, 23	0, 24	118.7802	13476.5547	11708.6799	25304.0148	25303.998	0.0168
15	22	17, 23	0, 24	118.7802	13476.5547	11708.6824	25304.0173	25303.998	0.0193
15	23	17, 22	0, 21	105.7026	13485.9854	11714.1211	25305.8091	25305.770	0.0391
15	23	17, 22	0, 23	114.2325	13477.4460	11714.1205	25305.7990	25305.770	0.0290
15	23	17, 24	0, 25	123.5164	13475.4716	11706.8081	25305.7961	25305.770	0.0261
15	23	17, 24	0, 25	123.5164	13475.4716	11706.8004	25305.7884	25305.770	0.0184
15	23	17, 24	0, 25	123.5164	13475.4716	11706.8040	25305.7920	25305.770	0.0220
15	24	17, 23	0, 22	109.8732	13485.4653	11712.4202	25307.7587	25307.646	0.1127
15	24	17, 23	0, 22	109.8732	13485.4653	11712.4279	25307.7664	25307.646	0.1204
15	24	17, 23	0, 24	118.7802	13476.5547	11712.4359	25307.7708	25307.646	0.1248
15	24	17, 25	0, 24	118.7802	13488.6821	11700.3053	25307.7676	25307.646	0.1216
15	24	17, 25	0, 24	118.7802	13488.6821	11700.3064	25307.7687	25307.646	0.1227
15	25	17, 24	0, 25	123.5164	13475.4716	11710.5008	25309.4888	25309.664	-0.1752
15	25	17, 24	0, 25	123.5164	13475.4716	11710.5029	25309.4909	25309.664	-0.1731
15	25	17, 24	0, 25	123.5164	13475.4716	11710.5040	25309.4920	25309.664	-0.1720
15	25	17, 24	0, 25	123.5164	13475.4716	11710.5054	25309.4934	25309.664	-0.1706
15	25	17, 24	0, 25	123.5164	13475.4716	11710.5077	25309.4957	25309.664	-0.1683
15	26	17, 25	0, 24	118.7802	13488.6821	11704.3051	25311.7674	25311.940	-0.1726
15	26	17, 25	0, 24	118.7802	13488.6821	11704.2981	25311.7604	25311.940	-0.1796
15	26	17, 25	0, 26	128.4408	13479.0254	11704.2926	25311.7588	25311.940	-0.1812
15	26	17, 27	0, 26	128.4408	13487.5335	11695.7962	25311.7705	25311.940	-0.1695
15	26	17, 27	0, 28	138.8539	13477.1090	11695.7962	25311.7591	25311.940	-0.1809
15	27	17, 26	0, 25	123.5164	13488.0442	11702.9889	25314.5495	25314.782	-0.2325
15	27	17, 26	0, 25	123.5164	13488.0442	11702.9894	25314.5500	25314.782	-0.2320
15	27	17, 26	0, 27	133.5534	13478.0078	11702.9888	25314.5500	25314.782	-0.2320
15	27	17, 28	0, 27	133.5534	13487.1007	11693.9085	25314.5626	25314.782	-0.2194
15	27	17, 28	0, 27	133.5534	13487.1007	11693.9090	25314.5631	25314.782	-0.2190
15	28	17, 27	0, 26	128.4408	13487.5335	11702.1347	25318.1090	25318.358	-0.2490
15	28	17, 27	0, 26	128.4408	13487.5335	11702.1306	25318.1049	25318.358	-0.2531

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
15	28	17, 27	0, 28	138.8539	13477.1090	11702.1320	25318.0949	25318.358	-0.2631
15	28	17, 29	0, 28	138.8539	13486.7372	11692.5272	25318.1183	25318.358	-0.2397
15	28	17, 29	0, 28	138.8539	13486.7372	11692.5267	25318.1178	25318.358	-0.2402
15	37	12, 38	0, 37	194.9907	12934.4448	12231.2682	25360.7037	25361.027	-0.3233
15	37	12, 38	0, 37	194.9907	12934.4448	12231.2668	25360.7023	25361.027	-0.3247
15	37	12, 38	0, 37	194.9907	12934.4448	12231.2646	25360.7001	25361.027	-0.3269
15	37	12, 38	0, 37	194.9907	12934.4448	12231.2668	25360.7023	25361.027	-0.3247
15	37	12, 38	0, 39	209.5189	12919.9178	12231.2664	25360.7031	25361.027	-0.3239
15	39	12, 38	0, 37	194.9907	12934.4448	12242.3449	25371.7804	25372.113	-0.3326
15	39	12, 38	0, 37	194.9907	12934.4448	12242.3440	25371.7795	25372.113	-0.3335
15	39	12, 38	0, 37	194.9907	12934.4448	12242.3409	25371.7764	25372.113	-0.3366
15	39	12, 38	0, 37	194.9907	12934.4448	12242.3451	25371.7806	25372.113	-0.3324
15	39	12, 38	0, 39	209.5189	12919.9178	12242.3419	25371.7786	25372.113	-0.3344
15	44	18, 45	0, 46	266.2096	13572.0030	11560.7156	25398.9282	25398.737	0.1912
15	44	18, 45	0, 46	266.2096	13572.0030	11560.7166	25398.9292	25398.737	0.1922
15	46	18, 45	0, 46	266.2096	13572.0030	11567.9496	25406.1622	25405.961	0.2012
16	14	15, 15	0, 14	81.7995	13269.6738	11980.7564	25332.2297	25332.145	0.0846
16	14	15, 15	0, 14	81.7995	13269.6738	11980.7504	25332.2237	25332.145	0.0786
16	14	15, 15	0, 16	87.6831	13263.7902	11980.7502	25332.2235	25332.145	0.0784
16	16	15, 15	0, 14	81.7995	13269.6738	11983.2174	25334.6907	25334.615	0.0757
16	16	15, 15	0, 14	81.7995	13269.6738	11983.2132	25334.6865	25334.615	0.0715
16	16	15, 15	0, 16	87.6831	13263.7902	11983.2155	25334.6888	25334.615	0.0738
16	16	15, 15	0, 16	87.6831	13263.7902	11983.2140	25334.6873	25334.615	0.0723
16	25	17, 26	0, 25	123.5164	13488.0442	11737.8766	25349.4372	25349.388	0.0492
16	25	17, 26	0, 27	133.5534	13478.0078	11737.8791	25349.4403	25349.388	0.0523
16	27	17, 26	0, 25	123.5164	13488.0442	11741.9615	25353.5221	25353.472	0.0501
16	27	17, 26	0, 25	123.5164	13488.0442	11741.9603	25353.5209	25353.472	0.0489
16	27	17, 26	0, 27	133.5534	13478.0078	11741.9615	25353.5227	25353.472	0.0507
16	37	12, 38	0, 37	194.9907	12934.4448	12248.8403	25378.2758	25378.240	0.0358
16	37	12, 38	0, 37	194.9907	12934.4448	12248.8397	25378.2752	25378.240	0.0351
16	39	12, 38	0, 37	194.9907	12934.4448	12254.7180	25384.1535	25384.106	0.0475
16	44	18, 45	0, 46	266.2096	13572.0030	11564.7424	25402.9550	25403.568	-0.6130
16	46	18, 45	0, 46	266.2096	13572.0030	11577.5825	25415.7951	25416.242	-0.4469
17	14	15, 15	0, 14	81.7995	13269.6738	12006.1731	25357.6464	25357.242	0.4044
17	14	15, 15	0, 14	81.7995	13269.6738	12006.1655	25357.6388	25357.242	0.3968
17	14	15, 15	0, 16	87.6831	13263.7902	12006.1661	25357.6394	25357.242	0.3974
17	14	15, 15	0, 16	87.6831	13263.7902	12006.1676	25357.6409	25357.242	0.3989
17	16	15, 15	0, 14	81.7995	13269.6738	12009.9635	25361.4368	25361.117	0.3198
17	16	15, 15	0, 16	87.6831	13263.7902	12009.9656	25361.4389	25361.117	0.3219
17	16	15, 15	0, 16	87.6831	13263.7902	12009.9617	25361.4350	25361.117	0.3180

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
17	25	17, 26	0, 25	123.5164	13488.0442	11771.4735	25383.0341	25383.037	-0.0029
17	25	17, 26	0, 25	123.5164	13488.0442	11771.4798	25383.0404	25383.037	0.0034
17	25	17, 26	0, 25	123.5164	13488.0442	11771.4779	25383.0385	25383.037	0.0015
17	25	17, 26	0, 27	133.5534	13478.0078	11771.4770	25383.0382	25383.037	0.0012
17	27	17, 26	0, 25	123.5164	13488.0442	11776.8859	25388.4465	25388.472	-0.0255
17	27	17, 26	0, 25	123.5164	13488.0442	11776.8855	25388.4461	25388.472	-0.0259
17	27	17, 26	0, 25	123.5164	13488.0442	11776.8801	25388.4407	25388.472	-0.0313
17	27	17, 26	0, 27	133.5534	13478.0078	11776.8841	25388.4453	25388.472	-0.0267
17	28	15, 27	0, 26	128.4408	13269.6738	11993.0681	25391.1827	25391.214	-0.0313
17	28	15, 27	0, 26	128.4408	13269.6738	11993.0654	25391.1800	25391.214	-0.0340
17	28	15, 27	0, 26	128.4408	13269.6738	11993.0675	25391.1821	25391.214	-0.0319
17	37	12, 38	0, 37	194.9907	12934.4448	12287.4863	25416.9218	25416.918	0.0038
17	39	12, 38	0, 37	194.9907	12934.4448	12293.6501	25423.0856	25423.065	0.0206
17	44	18, 45	0, 46	266.2096	13572.0030	11601.2914	25439.5040	25439.424	0.0800
17	46	18, 45	0, 46	266.2096	13572.0030	11608.2910	25446.5036	25446.402	0.1016
18	14	15, 15	0, 14	81.7995	13269.6738	12025.3646	25376.8379	25376.682	0.1559
18	14	15, 15	0, 14	81.7995	13269.6738	12025.3640	25376.8373	25376.682	0.1552
18	14	15, 15	0, 16	87.6831	13263.7902	12025.3579	25376.8312	25376.682	0.1491
18	16	15, 15	0, 14	81.7995	13269.6738	12028.1608	25379.6341	25379.479	0.1551
18	16	15, 15	0, 14	81.7995	13269.6738	12028.1595	25379.6328	25379.479	0.1538
18	16	15, 15	0, 16	87.6831	13263.7902	12028.1564	25379.6297	25379.479	0.1507
18	25	17, 26	0, 25	123.5164	13488.0442	11786.5723	25398.1329	25398.105	0.0279
18	25	17, 26	0, 25	123.5164	13488.0442	11786.5743	25398.1349	25398.105	0.0299
18	25	17, 26	0, 25	123.5164	13488.0442	11786.5747	25398.1353	25398.105	0.0303
18	25	17, 26	0, 27	133.5534	13478.0078	11786.5747	25398.1359	25398.105	0.0309
18	27	17, 26	0, 25	123.5164	13488.0442	11792.3373	25403.8979	25403.959	-0.0611
18	27	17, 26	0, 25	123.5164	13488.0442	11792.3371	25403.8977	25403.959	-0.0613
18	27	17, 26	0, 25	123.5164	13488.0442	11792.3379	25403.8985	25403.959	-0.0605
18	27	17, 26	0, 27	133.5534	13478.0078	11792.3386	25403.8998	25403.959	-0.0592
18	37	12, 38	0, 37	194.9907	12934.4448	12312.9514	25442.3869	25442.940	-0.5531
18	39	12, 38	0, 37	194.9907	12934.4448	12321.9613	25451.3968	25451.949	-0.5522
18	44	18, 45	0, 46	266.2096	13572.0030	11635.5360	25473.7486	25474.076	-0.3274
18	46	18, 45	0, 46	266.2096	13572.0030	11644.0788	25482.2914	25482.499	-0.2076
19	14	15, 15	0, 14	81.7995	13269.6738	12059.6857	25411.1590	25411.117	0.0420
19	16	15, 15	0, 14	81.7995	13269.6738	12062.3970	25413.8703	25413.844	0.0263
19	16	15, 15	0, 16	87.6831	13263.7902	12062.3978	25413.8711	25413.844	0.0270
19	25	17, 26	0, 25	123.5164	13488.0442	11818.6142	25430.1748	25430.202	-0.0272
19	25	17, 26	0, 25	123.5164	13488.0442	11818.6196	25430.1802	25430.202	-0.0218
19	25	17, 26	0, 25	123.5164	13488.0442	11818.6185	25430.1791	25430.202	-0.0229
19	25	17, 26	0, 25	123.5164	13488.0442	11818.6143	25430.1749	25430.202	-0.0271

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
19	25	17, 26	0, 27	133.5534	13478.0078	11818.6175	25430.1787	25430.202	-0.0233
19	26	15, 27	0, 26	128.4408	13269.6738	12034.2831	25432.3977	25432.430	-0.0323
19	26	15, 27	0, 26	128.4408	13269.6738	12034.2799	25432.3945	25432.430	-0.0355
19	27	17, 26	0, 25	123.5164	13488.0442	11823.1503	25434.7109	25434.742	-0.0311
19	27	17, 26	0, 25	123.5164	13488.0442	11823.1452	25434.7058	25434.742	-0.0362
19	27	17, 26	0, 25	123.5164	13488.0442	11823.1509	25434.7115	25434.742	-0.0305
19	27	17, 26	0, 27	133.5534	13478.0078	11823.1495	25434.7107	25434.742	-0.0313
19	28	15, 27	0, 26	128.4408	13269.6738	12038.9860	25437.1006	25437.139	-0.0384
19	28	15, 27	0, 26	128.4408	13269.6738	12038.9813	25437.0959	25437.139	-0.0431
19	37	12, 38	0, 37	194.9907	12934.4448	12333.5802	25463.0157	25463.153	-0.1373
19	37	12, 38	0, 37	194.9907	12934.4448	12333.5821	25463.0176	25463.153	-0.1354
19	39	12, 38	0, 37	194.9907	12934.4448	12340.7370	25470.1725	25470.390	-0.2175
19	39	12, 38	0, 37	194.9907	12934.4448	12340.7398	25470.1753	25470.390	-0.2147
19	39	12, 38	0, 37	194.9907	12934.4448	12340.7374	25470.1729	25470.390	-0.2171
19	44	18, 45	0, 46	266.2096	13572.0030	11653.4236	25491.6362	25492.263	-0.6268
19	46	18, 45	0, 46	266.2096	13572.0030	11663.6095	25501.8221	25502.622	-0.7999
20	25	17, 24	0, 25	123.5164	13475.4716	11863.1574	25462.1454	25462.242	-0.0966
20	25	17, 26	0, 25	123.5164	13488.0442	11850.5915	25462.1521	25462.242	-0.0900
20	25	17, 26	0, 25	123.5164	13488.0442	11850.5856	25462.1462	25462.242	-0.0958
20	25	17, 26	0, 25	123.5164	13488.0442	11850.5892	25462.1498	25462.242	-0.0922
20	25	17, 26	0, 27	133.5534	13478.0078	11850.5895	25462.1507	25462.242	-0.0913
20	26	15, 27	0, 26	128.4408	13269.6738	12066.4891	25464.6037	25464.713	-0.1093
20	26	15, 27	0, 26	128.4408	13269.6738	12066.4890	25464.6036	25464.713	-0.1094
20	27	17, 26	0, 25	123.5164	13488.0442	11855.5786	25467.1392	25467.262	-0.1228
20	27	17, 26	0, 25	123.5164	13488.0442	11855.5783	25467.1389	25467.262	-0.1231
20	27	17, 26	0, 25	123.5164	13488.0442	11855.5758	25467.1364	25467.262	-0.1256
20	27	17, 26	0, 25	123.5164	13488.0442	11855.5814	25467.1420	25467.262	-0.1200
20	27	17, 26	0, 27	133.5534	13478.0078	11855.5770	25467.1382	25467.262	-0.1238
20	28	15, 27	0, 26	128.4408	13269.6738	12071.6376	25469.7522	25469.888	-0.1358
20	37	12, 38	0, 37	194.9907	12934.4448	12367.1021	25496.5376	25496.725	-0.1874
20	39	12, 38	0, 37	194.9907	12934.4448	12373.8313	25503.2668	25503.449	-0.1822
20	44	18, 45	0, 46	266.2096	13572.0030	11683.2095	25521.4221	25521.592	-0.1699
20	46	18, 45	0, 46	266.2096	13572.0030	11691.0864	25529.2990	25529.482	-0.1830
21	14	15, 15	0, 14	81.7995	13269.6738	12117.5657	25469.0390	25468.839	0.2000
21	16	15, 15	0, 14	81.7995	13269.6738	12120.4829	25471.9562	25471.790	0.1662
21	25	17, 26	0, 25	123.5164	13488.0442	11878.4643	25490.0249	25490.057	-0.0321
21	25	17, 26	0, 25	123.5164	13488.0442	11878.4705	25490.0311	25490.057	-0.0259
21	25	17, 26	0, 25	123.5164	13488.0442	11878.4665	25490.0271	25490.057	-0.0299
21	25	17, 26	0, 27	133.5534	13478.0078	11878.4656	25490.0268	25490.057	-0.0302
21	26	15, 27	0, 26	128.4408	13269.6738	12094.4305	25492.5451	25492.600	-0.0549

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
21	26	15, 27	0, 26	128.4408	13269.6738	12094.4281	25492.5427	25492.600	-0.0573
21	27	17, 26	0, 25	123.5164	13488.0442	11883.6079	25495.1685	25495.247	-0.0785
21	27	17, 26	0, 25	123.5164	13488.0442	11883.6051	25495.1657	25495.247	-0.0813
21	27	17, 26	0, 25	123.5164	13488.0442	11883.6023	25495.1629	25495.247	-0.0841
21	27	17, 26	0, 27	133.5534	13478.0078	11883.6035	25495.1647	25495.247	-0.0823
21	28	15, 27	0, 26	128.4408	13269.6738	12099.7701	25497.8847	25497.997	-0.1123
21	28	15, 27	0, 26	128.4408	13269.6738	12099.7719	25497.8865	25497.997	-0.1105
21	37	12, 38	0, 37	194.9907	12934.4448	12397.3465	25526.7820	25527.101	-0.3190
21	39	12, 38	0, 37	194.9907	12934.4448	12404.7323	25534.1678	25534.511	-0.3432
21	44	18, 45	0, 46	266.2096	13572.0030	11715.6504	25553.8630	25554.195	-0.3320
21	44	18, 45	0, 46	266.2096	13572.0030	11715.6519	25553.8645	25554.195	-0.3305
21	46	18, 45	0, 46	266.2096	13572.0030	11723.9454	25562.1580	25562.473	-0.3150
22	14	15, 15	0, 14	81.7995	13269.6738	12149.8092	25501.2825	25501.041	0.2414
22	16	15, 15	0, 14	81.7995	13269.6738	12152.5786	25504.0519	25503.841	0.2109
22	27	17, 26	0, 25	123.5164	13488.0442	11914.2183	25525.7789	25525.762	0.0169
22	27	17, 26	0, 25	123.5164	13488.0442	11914.2217	25525.7823	25525.762	0.0203
22	27	17, 26	0, 27	133.5534	13478.0078	11914.2176	25525.7788	25525.762	0.0168
22	37	12, 38	0, 37	194.9907	12934.4448	12426.1400	25555.5755	25555.828	-0.2525
22	44	18, 45	0, 46	266.2096	13572.0030	11744.5580	25582.7706	25583.187	-0.4164
22	46	18, 45	0, 46	266.2096	13572.0030	11753.2647	25591.4773	25591.929	-0.4517
22	88	22, 87	4, 86	1232.1940	13488.0442	11130.0748	25850.3130	25849.636	0.6770
22	88	22, 87	4, 86	1232.1940	13488.0442	11130.0775	25850.3157	25849.636	0.6797
22	88	22, 87	4, 86	1232.1940	13488.0442	11130.0751	25850.3133	25849.636	0.6773
22	88	22, 87	4, 88	1263.5860	13456.6522	11130.0776	25850.3158	25849.636	0.6798
23	25	17, 24	0, 25	123.5164	13475.4716	11954.8821	25553.8701	25553.718	0.1521
23	25	17, 26	0, 25	123.5164	13488.0442	11942.3153	25553.8759	25553.718	0.1579
23	25	17, 26	0, 25	123.5164	13488.0442	11942.3131	25553.8737	25553.718	0.1557
23	25	17, 26	0, 25	123.5164	13488.0442	11942.3128	25553.8734	25553.718	0.1554
23	25	17, 26	0, 27	133.5534	13478.0078	11942.3103	25553.8715	25553.718	0.1535
23	27	17, 26	0, 25	123.5164	13488.0442	11947.0685	25558.6291	25558.515	0.1141
23	27	17, 28	0, 27	133.5534	13487.1007	11937.9845	25558.6386	25558.515	0.1236
23	37	12, 38	0, 37	194.9907	12934.4448	12458.1712	25587.6067	25587.719	-0.1123
23	39	12, 38	0, 37	194.9907	12934.4448	12465.0291	25594.4646	25594.626	-0.1614
23	46	18, 45	0, 46	266.2096	13572.0030	11783.3038	25621.5164	25621.841	-0.3246
23	86	22, 87	4, 86	1232.1940	13488.0442	11146.1375	25866.3757	25866.641	-0.2653
23	86	22, 87	4, 86	1232.1940	13488.0442	11146.1338	25866.3720	25866.641	-0.2690
23	86	22, 87	4, 86	1232.1940	13488.0442	11146.1346	25866.3728	25866.641	-0.2682
23	86	22, 87	4, 86	1232.1940	13488.0442	11146.1336	25866.3718	25866.641	-0.2692
23	86	22, 87	4, 88	1263.5860	13456.6479	11146.1383	25866.3722	25866.641	-0.2688
23	88	22, 87	4, 86	1232.1940	13488.0442	11162.0532	25882.2914	25882.237	0.0544

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
23	88	22, 87	4, 86	1232.1940	13488.0442	11162.0519	25882.2901	25882.237	0.0531
23	88	22, 87	4, 86	1232.1940	13488.0442	11162.0527	25882.2909	25882.237	0.0539
23	88	22, 87	4, 88	1263.5860	13456.6522	11162.0536	25882.2918	25882.237	0.0548
24	14	15, 15	0, 14	81.7995	13269.6738	12214.5391	25566.0124	25565.685	0.3274
24	14	15, 15	0, 14	81.7995	13269.6738	12214.5400	25566.0133	25565.685	0.3283
24	14	15, 15	0, 16	87.6831	13263.7902	12214.5391	25566.0124	25565.685	0.3273
24	25	17, 26	0, 25	123.5164	13488.0442	11974.5003	25586.0609	25585.893	0.1679
24	27	17, 26	0, 25	123.5164	13488.0442	11979.3301	25590.8907	25590.751	0.1397
24	27	17, 26	0, 25	123.5164	13488.0442	11979.3287	25590.8893	25590.751	0.1382
24	37	12, 38	0, 37	194.9907	12934.4448	12490.8618	25620.2973	25620.332	-0.0347
24	39	12, 38	0, 37	194.9907	12934.4448	12497.7686	25627.2041	25627.273	-0.0689
24	44	18, 45	0, 46	266.2096	13572.0030	11807.7110	25645.9236	25646.072	-0.1484
24	46	18, 45	0, 46	266.2096	13572.0030	11815.7741	25653.9867	25654.173	-0.1863
25	14	15, 15	0, 14	81.7995	13269.6738	12247.2489	25598.7222	25598.473	0.2492
25	14	15, 15	0, 16	87.6831	13263.7902	12247.2507	25598.7240	25598.473	0.2510
25	16	15, 15	0, 14	81.7995	13269.6738	12250.0095	25601.4828	25601.260	0.2228
25	16	15, 15	0, 16	87.6831	13263.7902	12250.0108	25601.4841	25601.260	0.2241
25	25	17, 26	0, 25	123.5164	13488.0442	12006.8153	25618.3759	25618.287	0.0889
25	27	17, 26	0, 25	123.5164	13488.0442	12011.5698	25623.1304	25623.072	0.0584
25	37	12, 38	0, 37	194.9907	12934.4448	12522.9596	25652.3951	25652.478	-0.0829
25	39	12, 38	0, 37	194.9907	12934.4448	12529.9139	25659.3494	25659.447	-0.0976
25	44	18, 45	0, 46	266.2096	13572.0030	11840.0722	25678.2848	25678.405	-0.1202
25	46	18, 45	0, 46	266.2096	13572.0030	11848.2355	25686.4481	25686.583	-0.1349
25	88	22, 87	4, 86	1232.1940	13488.0442	11215.9061	25936.1443	25936.231	-0.0867
25	88	22, 87	4, 86	1232.1940	13488.0442	11215.9058	25936.1440	25936.231	-0.0870
25	88	22, 87	4, 88	1263.5860	13456.6522	11215.9055	25936.1437	25936.231	-0.0873
26	14	15, 15	0, 14	81.7995	13269.6738	12280.8491	25632.3224	25631.980	0.3423
26	16	15, 15	0, 14	81.7995	13269.6738	12283.5739	25635.0472	25634.739	0.3082
26	25	17, 26	0, 25	123.5164	13488.0442	12040.1011	25651.6617	25651.537	0.1247
26	25	17, 26	0, 25	123.5164	13488.0442	12040.1023	25651.6629	25651.537	0.1259
26	25	17, 26	0, 25	123.5164	13488.0442	12040.1074	25651.6680	25651.537	0.1310
26	25	17, 26	0, 25	123.5164	13488.0442	12040.1044	25651.6650	25651.537	0.1280
26	27	17, 26	0, 25	123.5164	13488.0442	12044.7605	25656.3211	25656.242	0.0791
26	27	17, 26	0, 25	123.5164	13488.0442	12044.7620	25656.3226	25656.242	0.0806
26	37	12, 38	0, 37	194.9907	12934.4448	12555.5249	25684.9604	25685.097	-0.1367
26	39	12, 38	0, 37	194.9907	12934.4448	12562.3440	25691.7795	25691.945	-0.1655
26	44	18, 45	0, 46	266.2096	13572.0030	11872.2294	25710.4420	25710.650	-0.2080
26	46	18, 45	0, 46	266.2096	13572.0030	11880.3381	25718.5507	25718.768	-0.2173
26	86	22, 87	4, 86	1232.1940	13488.0442	11232.1056	25952.3438	25952.382	-0.0382
26	86	22, 87	4, 88	1263.5860	13456.6522	11232.1037	25952.3419	25952.382	-0.0401

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
26	88	22, 87	4, 86	1232.1940	13488.0442	11247.0370	25967.2752	25967.222	0.0532
26	88	22, 87	4, 88	1263.5860	13456.6522	11247.0359	25967.2741	25967.222	0.0521
27	14	15, 15	0, 14	81.7995	13269.6738	12314.4608	25665.9341	25665.550	0.3841
27	16	15, 15	0, 14	81.7995	13269.6738	12317.1940	25668.6673	25668.304	0.3633
27	25	17, 24	0, 25	123.5164	13475.4716	12086.2800	25685.2680	25685.057	0.2110
27	25	17, 26	0, 25	123.5164	13488.0442	12073.7079	25685.2685	25685.057	0.2114
27	25	17, 26	0, 25	123.5164	13488.0442	12073.7117	25685.2723	25685.057	0.2153
27	25	17, 26	0, 25	123.5164	13488.0442	12073.7118	25685.2724	25685.057	0.2154
27	25	17, 26	0, 25	123.5164	13488.0442	12073.7111	25685.2717	25685.057	0.2147
27	27	17, 26	0, 25	123.5164	13488.0442	12078.3624	25689.9230	25689.743	0.1800
27	27	17, 26	0, 25	123.5164	13488.0442	12078.3618	25689.9224	25689.743	0.1794
27	27	17, 28	0, 27	133.5534	13487.1007	12069.2799	25689.9340	25689.743	0.1910
27	37	12, 38	0, 37	194.9907	12934.4448	12588.8897	25718.3252	25718.364	-0.0388
27	37	12, 38	0, 37	194.9907	12934.4448	12588.8898	25718.3253	25718.364	-0.0387
27	37	12, 38	0, 37	194.9907	12934.4448	12588.8908	25718.3263	25718.364	-0.0377
27	37	12, 38	0, 37	194.9907	12934.4448	12588.8913	25718.3268	25718.364	-0.0372
27	37	12, 38	0, 37	194.9907	12934.4448	12588.8937	25718.3292	25718.364	-0.0348
27	39	12, 38	0, 37	194.9907	12934.4448	12595.5970	25725.0325	25725.122	-0.0895
27	39	12, 38	0, 37	194.9907	12934.4448	12595.5970	25725.0325	25725.122	-0.0895
27	44	18, 45	0, 46	266.2096	13572.0030	11905.1324	25743.3450	25743.534	-0.1890
27	46	18, 45	0, 46	266.2096	13572.0030	11913.0710	25751.2836	25751.509	-0.2254
28	14	15, 15	0, 14	81.7995	13269.6738	12347.8967	25699.3700	25699.180	0.1899
28	16	15, 15	0, 14	81.7995	13269.6738	12350.6136	25702.0869	25701.914	0.1729
28	25	17, 26	0, 25	123.5164	13488.0442	12107.1139	25718.6745	25718.563	0.1115
28	25	17, 26	0, 25	123.5164	13488.0442	12107.1116	25718.6722	25718.563	0.1092
28	25	17, 26	0, 25	123.5164	13488.0442	12107.1128	25718.6734	25718.563	0.1104
28	25	17, 26	0, 25	123.5164	13488.0442	12107.1141	25718.6747	25718.563	0.1117
28	27	17, 26	0, 25	123.5164	13488.0442	12111.7625	25723.3231	25723.228	0.0951
28	37	12, 38	0, 37	194.9907	12934.4448	12622.3285	25751.7640	25751.746	0.0180
28	39	12, 38	0, 37	194.9907	12934.4448	12629.0415	25758.4770	25758.478	-0.0010
28	44	18, 45	0, 46	266.2096	13572.0030	11938.5098	25776.7224	25776.784	-0.0616
28	46	18, 45	0, 46	266.2096	13572.0030	11946.3676	25784.5802	25784.693	-0.1128
28	88	22, 87	4, 86	1232.1940	13488.0442	11307.6087	26027.8469	26027.996	-0.1491
28	88	22, 87	4, 88	1263.5860	13456.6522	11307.6101	26027.8483	26027.996	-0.1477
29	16	15, 15	0, 14	81.7995	13269.6738	12384.3226	25735.7959	25735.774	0.0219
29	16	15, 15	0, 14	81.7995	13269.6738	12384.3398	25735.8131	25735.774	0.0391
29	16	15, 15	0, 14	81.7995	13269.6738	12384.3252	25735.7985	25735.774	0.0245
29	16	15, 15	0, 16	87.6831	13263.7902	12384.3224	25735.7957	25735.774	0.0216
29	25	17, 26	0, 25	123.5164	13488.0442	12140.5827	25752.1433	25752.243	-0.0997
29	46	18, 45	0, 46	266.2096	13572.0030	11979.5847	25817.7973	25817.904	-0.1067

	v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
	29	86	22, 87	4, 86	1232.1940	13488.0442	11323.8879	26044.1261	26044.131	-0.0049
	29	88	22, 87	4, 86	1232.1940	13488.0442	11338.4656	26058.7038	26058.721	-0.0172
	29	88	22, 87	4, 86	1232.1940	13488.0442	11338.4642	26058.7024	26058.721	-0.0186
	30	14	15, 15	0, 14	81.7995	13269.6738	12415.8779	25767.3512	25767.133	0.2182
	30	14	15, 15	0, 16	87.6831	13263.7902	12415.8789	25767.3522	25767.133	0.2191
	30	16	15, 15	0, 14	81.7995	13269.6738	12418.5183	25769.9916	25769.814	0.1776
	30	16	15, 15	0, 16	87.6831	13263.7902	12418.5223	25769.9956	25769.814	0.1816
	30	25	17, 26	0, 25	123.5164	13488.0442	12174.5366	25786.0972	25786.135	-0.0378
	30	25	17, 26	0, 25	123.5164	13488.0442	12174.5362	25786.0968	25786.135	-0.0382
	30	25	17, 26	0, 25	123.5164	13488.0442	12174.5389	25786.0995	25786.135	-0.0355
	30	27	17, 26	0, 25	123.5164	13488.0442	12179.0513	25790.6119	25790.704	-0.0921
	30	27	17, 26	0, 25	123.5164	13488.0442	12179.0534	25790.6140	25790.704	-0.0900
	30	39	12, 38	0, 37	194.9907	12934.4448	12695.4817	25824.9172	25825.295	-0.3778
	30	44	18, 45	0, 46	266.2096	13572.0030	12004.7437	25842.9563	25843.325	-0.3687
	30	44	18, 45	0, 46	266.2096	13572.0030	12004.7478	25842.9604	25843.325	-0.3646
	30	46	18, 45	0, 46	266.2096	13572.0030	12012.5699	25850.7825	25851.130	-0.3476
	31	14	15, 15	0, 14	81.7995	13269.6738	12449.8732	25801.3465	25801.214	0.1325
	31	16	15, 15	0, 14	81.7995	13269.6738	12452.5381	25804.0114	25803.876	0.1354
	31	25	17, 26	0, 25	123.5164	13488.0442	12208.6129	25820.1735	25820.084	0.0895
	31	27	17, 26	0, 25	123.5164	13488.0442	12213.1184	25824.6790	25824.620	0.0590
	31	37	12, 38	0, 37	194.9907	12934.4448	12722.7066	25852.1421	25852.361	-0.2189
	31	39	12, 38	0, 37	194.9907	12934.4448	12729.1990	25858.6345	25858.915	-0.2805
	31	44	18, 45	0, 46	266.2096	13572.0030	12038.1199	25876.3325	25876.761	-0.4285
	31	46	18, 45	0, 46	266.2096	13572.0030	12045.7985	25884.0111	25884.483	-0.4719
	31	86	22, 87	4, 86	1232.1940	13488.0442	11386.3729	26106.6111	26106.577	0.0341
	31	86	22, 87	4, 86	1232.1940	13488.0442	11386.3729	26106.6111	26106.577	0.0341
	31	86	22, 87	4, 88	1263.5860	13456.6522	11386.3741	26106.6123	26106.577	0.0353
	31	86	22, 87	4, 88	1263.5860	13456.6522	11386.3729	26106.6111	26106.577	0.0341
	31	86	22, 87	4, 88	1263.5860	13456.6522	11386.3719	26106.6101	26106.577	0.0331
	31	88	22, 87	4, 86	1232.1940	13488.0442	11400.8851	26121.1233	26120.957	0.1663
	31	88	22, 87	4, 86	1232.1940	13488.0442	11400.8877	26121.1259	26120.957	0.1689
	31	88	22, 87	4, 86	1232.1940	13488.0442	11400.8882	26121.1264	26120.957	0.1694
	31	88	22, 87	4, 86	1232.1940	13488.0442	11400.8879	26121.1261	26120.957	0.1691
*	32	25	17, 26	0, 25	123.5164	13488.0442	12241.5881	25853.1487	25854.007	-0.8583
*	32	25	17, 26	0, 25	123.5164	13488.0442	12241.5876	25853.1482	25854.007	-0.8588
*	32	25	17, 26	0, 25	123.5164	13488.0442	12241.5874	25853.1480	25854.007	-0.8590
*	32	27	17, 26	0, 25	123.5164	13488.0442	12246.0527	25857.6133	25858.509	-0.8957
*	32	27	17, 26	0, 25	123.5164	13488.0442	12246.0538	25857.6144	25858.509	-0.8946
	32	37	12, 38	0, 37	194.9907	12934.4448	12756.4450	25885.8805	25886.044	-0.1635
	32	39	12, 38	0, 37	194.9907	12934.4448	12762.9597	25892.3952	25892.548	-0.1528

	v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
	32	44	18, 45	0, 46	266.2096	13572.0030	12071.8072	25910.0198	25910.247	-0.2272
	32	44	18, 45‡	0, 46	266.2096	13567.5007	12076.3095	25910.0198	25910.247	-0.2272
	32	46	18, 45	0, 46	266.2096	13572.0030	12079.3968	25917.6094	25917.899	-0.2896
	32	86	22, 87	4, 86	1232.1940	13488.0442	11417.4697	26137.7079	26137.666	0.0419
*	33	25	17, 26	0, 25	123.5164	13488.0442	12279.3730	25890.9336	25887.906	3.0276
*	33	27	17, 26	0, 25	123.5164	13488.0442	12284.0848	25895.6454	25892.369	3.2764
*	33	44	18, 45	0, 44	249.0876	13589.1225	12104.5009	25942.7110	25943.674	-0.9630
*	33	44	18, 45	0, 46	266.2096	13572.0030	12104.5028	25942.7154	25943.674	-0.9586
*	33	44	18, 45	0, 46	266.2096	13572.0030	12104.5001	25942.7127	25943.674	-0.9613
	34	14	15, 15	0, 14	81.7995	13269.6738	12552.1521	25903.6254	25903.383	0.2424
	34	14	15, 15	0, 16	87.6831	13263.7902	12552.1531	25903.6264	25903.383	0.2434
	34	16	15, 15	0, 14	81.7995	13269.6738	12554.5117	25905.9850	25905.976	0.0090
	34	16	15, 15	0, 14	81.7995	13269.6738	12554.5099	25905.9832	25905.976	0.0072
	34	16	15, 15	0, 16	87.6831	13263.7902	12554.5132	25905.9865	25905.976	0.0105
	34	25	17, 26	0, 25	123.5164	13488.0442	12310.6245	25922.1851	25921.768	0.4171
	34	27	17, 26	0, 25	123.5164	13488.0442	12315.1636	25926.7242	25926.188	0.5362
*	34	44	18, 45	0, 44	249.0876	13589.1225	12140.3795	25978.5896	25977.010	1.5796
*	34	44	18, 45	0, 46	266.2096	13572.0030	12140.3792	25978.5918	25977.010	1.5818
*	34	44	18, 45	0, 46	266.2096	13572.0030	12140.3805	25978.5931	25977.010	1.5831
*	34	46	18, 45	0, 46	266.2096	13572.0030	12147.9304	25986.1430	25984.532	1.6110
*	34	46	18, 45	0, 46	266.2096	13572.0030	12147.9282	25986.1408	25984.532	1.6088
*	34	46	18, 45	0, 46	266.2096	13572.0030	12147.9323	25986.1449	25984.532	1.6129
	35	14	15, 15	0, 14	81.7995	13269.6738	12585.2775	25936.7508	25937.307	-0.5563
	35	14	15, 15	0, 14	81.7995	13269.6738	12585.2768	25936.7501	25937.307	-0.5569
	35	14	15, 15	0, 14	81.7995	13269.6738	12585.2726	25936.7459	25937.307	-0.5611
	35	14	15, 15	0, 16	87.6831	13263.7902	12585.2759	25936.7492	25937.307	-0.5578
	35	16	15, 15	0, 14	81.7995	13269.6738	12587.8149	25939.2882	25939.879	-0.5908
	35	16	15, 15	0, 16	87.6831	13263.7902	12587.8145	25939.2878	25939.879	-0.5912
	35	25	17, 26	0, 25	123.5164	13488.0442	12343.3162	25954.8768	25955.532	-0.6552
	35	27	17, 26	0, 25	123.5164	13488.0442	12347.7170	25959.2776	25959.913	-0.6354
	35	44	18, 45	0, 46	266.2096	13572.0030	12172.4951	26010.7077	26010.246	0.4617
	35	44	18, 45	0, 46	266.2096	13572.0030	12172.4933	26010.7059	26010.246	0.4598
	35	46	18, 45	0, 46	266.2096	13572.0030	12180.1167	26018.3293	26017.692	0.6373
	35	86	22, 87	4, 88	1263.5860	13456.6522	11510.8002	26231.0384	26230.755	0.2834
	36	14	15, 15	0, 14	81.7995	13269.6738	12619.3096	25970.7829	25971.085	-0.3021
	36	14	15, 15	0, 14	81.7995	13269.6738	12619.3164	25970.7897	25971.085	-0.2953
	36	16	15, 15	0, 14	81.7995	13269.6738	12621.7673	25973.2406	25973.633	-0.3924
*	36	25	17, 26	0, 25	123.5164	13488.0442	12376.7339	25988.2945	25989.145	-0.8505
*	36	25	17, 26	0, 25	123.5164	13488.0442	12376.7312	25988.2918	25989.145	-0.8532
*	36	27	17, 26	0, 25	123.5164	13488.0442	12380.9753	25992.5359	25993.485	-0.9491

	v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
*	36	27	17, 26	0, 25	123.5164	13488.0442	12380.9727	25992.5333	25993.485	-0.9517
*	36	27	17, 26	0, 25	123.5164	13488.0442	12380.9738	25992.5344	25993.485	-0.9506
*	36	27	17, 26	0, 25	123.5164	13488.0442	12380.9717	25992.5323	25993.485	-0.9527
*	36	27	17, 26	0, 25	123.5164	13488.0442	12380.9724	25992.5330	25993.485	-0.9520
	36	44	18, 45	0, 46	266.2096	13572.0030	12204.3437	26042.5563	26043.339	-0.7827
	36	44	18, 45	0, 46	266.2096	13572.0030	12204.3470	26042.5596	26043.339	-0.7794
	36	46	18, 45	0, 46	266.2096	13572.0030	12211.9253	26050.1379	26050.709	-0.5711
	36	46	18, 45	0, 46	266.2096	13572.0030	12211.9238	26050.1364	26050.709	-0.5726
	37	14	15, 15	0, 14	81.7995	13269.6738	12653.6618	26005.1351	26004.686	0.4491
	37	16	15, 15	0, 14	81.7995	13269.6738	12656.1044	26007.5777	26007.209	0.3687
	37	16	15, 15	0, 14	81.7995	13269.6738	12656.1006	26007.5739	26007.209	0.3649
*	37	25	17, 26	0, 25	123.5164	13488.0442	12411.5687	26023.1293	26022.570	0.5593
*	37	27	17, 26	0, 25	123.5164	13488.0442	12416.9662	26028.5268	26026.869	1.6578
*	37	46	18, 45	0, 44	249.0876	13589.1225	12243.4751	26081.6852	26083.529	-1.8438
*	37	46	18, 45	0, 46	266.2096	13572.0030	12243.4703	26081.6829	26083.529	-1.8461
*	37	46	18, 45	0, 46	266.2096	13572.0030	12243.4739	26081.6865	26083.529	-1.8425
*	37	46	18, 45	0, 46	266.2096	13572.0030	12243.4808	26081.6934	26083.529	-1.8356
	38	25	17, 26	0, 25	123.5164	13488.0442	12444.7768	26056.3374	26055.780	0.5574
	38	27	17, 26	0, 25	123.5164	13488.0442	12448.8975	26060.4581	26060.035	0.4231
	38	27	17, 26	0, 25	123.5164	13488.0442	12448.8962	26060.4568	26060.035	0.4218
*	38	44	18, 45	0, 44	249.0876	13589.1225	12272.1619	26110.3720	26108.888	1.4840
*	38	44	18, 45	0, 46	266.2096	13572.0030	12272.1684	26110.3810	26108.888	1.4930
*	38	44	18, 45	0, 46	266.2096	13572.0030	12272.1670	26110.3796	26108.888	1.4916
	39	44	18, 45	0, 46	266.2096	13572.0030	12302.9721	26141.1847	26141.277	-0.0923
	39	46	18, 45	0, 46	266.2096	13572.0030	12310.0783	26148.2909	26148.418	-0.1271
	39	46	18, 45	0, 46	266.2096	13572.0030	12310.0795	26148.2921	26148.418	-0.1260
	40	27	17, 26	0, 25	123.5164	13488.0442	12514.5695	26126.1301	26125.583	0.5471
	40	44	18, 45	0, 46	266.2096	13572.0030	12335.6164	26173.8290	26173.377	0.4520
	40	44	18, 45	0, 46	266.2096	13572.0030	12335.6150	26173.8276	26173.377	0.4506
	40	44	18, 45	0, 46	266.2096	13572.0030	12335.6165	26173.8291	26173.377	0.4521
*	41	46	18, 45	0, 44	249.0876	13589.1225	12374.6949	26212.9050	26212.145	0.7600
*	41	46	18, 45	0, 46	266.2096	13572.0030	12374.6990	26212.9116	26212.145	0.7666
*	41	46	18, 45	0, 46	266.2096	13572.0030	12374.7016	26212.9142	26212.145	0.7692
*	42	25	17, 26	0, 25	123.5164	13488.0442	12576.8875	26188.4481	26185.820	2.6281
*	42	25	17, 26	0, 25	123.5164	13488.0442	12576.8842	26188.4448	26185.820	2.6248
*	42	27	17, 26	0, 25	123.5164	13488.0442	12581.1136	26192.6742	26189.892	2.7822
*	42	27	17, 26	0, 25	123.5164	13488.0442	12581.1159	26192.6765	26189.892	2.7845
	43	16	15, 15	0, 14	81.7995	13269.6738	12851.3670	26202.8403	26203.119	-0.2787
	43	16	15, 15	0, 16	87.6831	13263.7902	12851.3719	26202.8452	26203.119	-0.2738
	43	16	15, 15	0, 16	87.6831	13263.7902	12851.3725	26202.8458	26203.119	-0.2732

	v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
	43	25	17, 26	0, 25	123.5164	13488.0442	12606.3755	26217.9361	26217.507	0.4291
	43	25	17, 26	0, 25	123.5164	13488.0442	12606.3713	26217.9319	26217.507	0.4249
	43	27	17, 26	0, 25	123.5164	13488.0442	12610.6199	26222.1805	26221.531	0.6495
	43	27	17, 26	0, 25	123.5164	13488.0442	12610.6247	26222.1853	26221.531	0.6543
	43	27	17, 26	0, 27	133.5534	13478.0078	12610.6198	26222.1810	26221.531	0.6500
*	44	14	15, 15	0, 14	81.7995	13269.6738	12877.9426	26229.4159	26232.271	-2.8551
*	44	14	15, 15	0, 16	87.6831	13263.7902	12877.9442	26229.4175	26232.271	-2.8535
*	44	14	15, 15	0, 16	87.6831	13263.7902	12877.9436	26229.4169	26232.271	-2.8541
*	44	14	15, 15	0, 16	87.6831	13263.7902	12877.9435	26229.4168	26232.271	-2.8542
*	44	14	15, 15	0, 16	87.6831	13263.7902	12877.9463	26229.4196	26232.271	-2.8514
*	44	16	15, 15	0, 16	87.6831	13263.7902	12880.3660	26231.8393	26234.607	-2.7677
*	44	16	15, 15	0, 14	81.7995	13269.6738	12880.3616	26231.8349	26234.607	-2.7721
*	44	16	15, 15	0, 16	87.6831	13263.7902	12880.3631	26231.8364	26234.607	-2.7706
*	44	16	15, 15	0, 16	87.6831	13263.7902	12880.3637	26231.8370	26234.607	-2.7700
*	44	25	17, 26	0, 25	123.5164	13488.0442	12635.1081	26246.6687	26248.824	-2.1553
*	44	25	17, 26	0, 25	123.5164	13488.0442	12635.1133	26246.6739	26248.824	-2.1500
*	44	25	17, 26	0, 27	133.5534	13478.0078	12635.1077	26246.6689	26248.824	-2.1551
*	44	27	17, 26	0, 25	123.5164	13488.0442	12639.3038	26250.8644	26252.800	-1.9356
*	44	27	17, 26	0, 25	123.5164	13488.0442	12639.3043	26250.8649	26252.800	-1.9351
*	44	27	17, 26	0, 27	133.5534	13478.0078	12639.2991	26250.8603	26252.800	-1.9397
*	44	46	18, 45	0, 44	249.0876	13589.1225	12468.2946	26306.5047	26305.136	1.3687
*	44	46	18, 45	0, 46	266.2096	13572.0030	12468.2888	26306.5014	26305.136	1.3654
*	44	46	18, 45	0, 46	266.2096	13572.0030	12468.2961	26306.5087	26305.136	1.3727
*	45	25	17, 26	0, 25	123.5164	13488.0442	12673.3308	26284.8914	26279.752	5.1394
*	45	27	17, 26	0, 25	123.5164	13488.0442	12678.2765	26289.8371	26283.680	6.1571
*	45	46	18, 45	0, 44	249.0876	13589.1225	12495.8704	26334.0805	26335.358	-1.2775
*	45	46	18, 45	0, 44	249.0876	13589.1225	12495.8740	26334.0841	26335.358	-1.2739
*	45	46	18, 45	0, 44	249.0876	13589.1225	12495.8722	26334.0823	26335.358	-1.2757
*	45	46	18, 45	0, 46	266.2096	13572.0030	12495.8719	26334.0845	26335.358	-1.2735
*	45	46	18, 45	0, 46	266.2096	13572.0030	12495.8765	26334.0891	26335.358	-1.2689
*	45	46	18, 45	0, 46	266.2096	13572.0030	12495.8724	26334.0850	26335.358	-1.2730
	46	16	15, 15	0, 16	87.6831	13263.7902	12945.2651	26296.7384	26296.401	0.3374
	46	25	17, 26	0, 25	123.5164	13488.0442	12699.1797	26310.7403	26310.270	0.4703
	46	27	17, 26	0, 25	123.5164	13488.0442	12703.2020	26314.7626	26314.148	0.6146
	47	14	15, 15	0, 14	81.7995	13269.6738	12973.1782	26324.6515	26324.420	0.2315
	47	14	15, 15	0, 14	81.7995	13269.6738	12973.1770	26324.6503	26324.420	0.2303
	47	16	15, 15	0, 14	81.7995	13269.6738	12975.3273	26326.8006	26326.670	0.1306
	47	25	17, 26	0, 25	123.5164	13488.0442	12728.4557	26340.0163	26340.355	-0.3387
	47	25	17, 26	0, 25	123.5164	13488.0442	12728.4555	26340.0161	26340.355	-0.3389
	47	27	17, 26	0, 25	123.5164	13488.0442	12732.1981	26343.7587	26344.183	-0.4243

	v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from IPA curve (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
	48	14	15, 15	0, 14	81.7995	13269.6738	13003.0506	26354.5239	26354.268	0.2559
	48	14	15, 15	0, 14	81.7995	13269.6738	13003.0538	26354.5271	26354.268	0.2591
	48	16	15, 15	0, 14	81.7995	13269.6738	13005.1509	26356.6242	26356.488	0.1362
	48	16	15, 15	0, 14	81.7995	13269.6738	13005.1508	26356.6241	26356.488	0.1361
	48	16	15, 15	0, 14	81.7995	13269.6738	13005.1502	26356.6235	26356.488	0.1355
	48	16	15, 15	0, 16	87.6831	13263.7902	13005.1580	26356.6313	26356.488	0.1433
	48	25	17, 26	0, 25	123.5164	13488.0442	12757.8380	26369.3986	26369.982	-0.5834
	48	26	15, 27	0, 26	128.4408	13269.6738	12973.0382	26371.1528	26371.834	-0.6812
	48	26	17, 27	0, 26	128.4408	13269.6738	12973.0388	26371.1534	26371.834	-0.6806
	48	27	17, 26	0, 25	123.5164	13488.0442	12761.4296	26372.9902	26373.755	-0.7648
	48	27	17, 26	0, 27	133.5534	13478.0078	12761.4264	26372.9876	26373.755	-0.7674
	49	25	17, 26	0, 25	123.5164	13488.0442	12787.6116	26399.1722	26399.108	0.0642
	49	27	17, 26	0, 25	123.5164	13488.0442	12791.3372	26402.8978	26402.825	0.0727
	49	27	17, 26	0, 27	133.5534	13478.0078	12791.3332	26402.8944	26402.825	0.0693
*	49	44	18, 45	0, 44	249.0876	13589.1225	12604.1944	26442.4045	26445.366	-2.9615
*	49	44	18, 45	0, 46	266.2096	13572.0030	12604.1933	26442.4059	26445.366	-2.9601
*	49	44	18, 45	0, 46	266.2096	13572.0030	12604.1899	26442.4025	26445.366	-2.9635
*	49	46	18, 45	0, 44	249.0876	13589.1225	12610.4712	26448.6813	26451.631	-2.9497
*	49	46	18, 45	0, 46	266.2096	13572.0030	12610.4693	26448.6819	26451.631	-2.9491
	50	25	17, 26	0, 27	133.5534	13478.0078	12815.9610	26427.5222	26427.680	-0.1578
	50	27	17, 26	0, 27	133.5534	13478.0078	12819.4315	26430.9927	26431.336	-0.3433
	51	25	17, 26	0, 27	133.5534	13478.0078	12843.7560	26455.3172	26455.634	-0.3168
	51	27	17, 26	0, 27	133.5534	13478.0078	12847.1678	26458.7290	26459.224	-0.4950
	53	16	15, 15	0, 16	87.6831	13263.7902	13146.0671	26497.5404	26497.046	0.4944
	53	16	15, 15	0, 16	87.6831	13263.7902	13146.0675	26497.5408	26497.046	0.4948
	53	16	15, 15	0, 16	87.6831	13263.7902	13146.0681	26497.5414	26497.046	0.4954
	53	16	15, 15	0, 16	87.6831	13263.7902	13146.0668	26497.5401	26497.046	0.4941
	53	16	15, 15	0, 16	87.6831	13263.7902	13146.0678	26497.5411	26497.046	0.4951
	53	25	17, 26	0, 27	133.5534	13478.0078	12897.7538	26509.3150	26509.368	-0.0530
	53	27	17, 26	0, 27	133.5534	13478.0078	12901.0396	26512.6008	26512.807	-0.2063

$^{23}Na^{39}K$ $3^3\Pi_{\Omega=2}$ Data

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})
10	44	17, 45	0, 44	249.0876	13513.5303	11438.0968	25200.7147
10	44	17, 45	0, 46	266.2096	13496.4074	11438.1084	25200.7254
10	46	17, 45	0, 44	249.0876	13513.5303	11444.9477	25207.5656
10	46	17, 45	0, 46	266.2096	13496.4074	11444.9554	25207.5724
15	44	17, 45	0, 44	249.0876	13513.5303	11646.8235	25409.4414
15	44	17, 45	0, 44	249.0876	13513.5303	11646.8268	25409.4447
15	44	17, 45	0, 44	249.0876	13513.5303	11646.8257	25409.4436
15	44	17, 45	0, 44	249.0876	13513.5303	11646.8323	25409.4502
15	44	17, 45	0, 46	266.2096	13496.4074	11646.8253	25409.4423
15	46	17, 45	0, 44	249.0876	13513.5303	11654.1261	25416.7440
15	46	17, 45	0, 44	249.0876	13513.5303	11654.1277	25416.7456
15	46	17, 45	0, 44	249.0876	13513.5303	11654.1261	25416.7440
15	46	17, 45	0, 44	249.0876	13513.5303	11654.1267	25416.7446
15	46	17, 45	0, 44	249.0876	13513.5303	11654.1247	25416.7426
15	46	17, 45	0, 44	249.0876	13513.5303	11654.1254	25416.7433
15	46	17, 45	0, 44	249.0876	13513.5303	11654.1332	25416.7511
15	46	17, 45	0, 46	266.2096	13496.4074	11654.1274	25416.7444
15	46	17, 45	0, 46	266.2096	13496.4074	11654.1183	25416.7353
15	46	17, 45	0, 46	266.2096	13496.4074	11654.1186	25416.7356
16	44	17, 45	0, 44	249.0876	13513.5303	11654.7273	25417.3452
16	44	17, 45	0, 44	249.0876	13513.5303	11654.7288	25417.3467
16	44	17, 45	0, 46	266.2096	13496.4074	11654.7259	25417.3429
24	44	17, 45	0, 44	249.0876	13513.5303	11893.7893	25656.4072
24	46	17, 45	0, 44	249.0876	13513.5303	11902.1105	25664.7284
25	31	20, 32	1, 31	278.4595	13713.9086	11650.1749	25642.5430
25	33	20, 32	1, 31	278.4595	13713.9086	11656.2784	25648.6465
25	33	20, 32	1, 31	278.4595	13713.9086	11656.2787	25648.6468
25	33	20, 32	1, 31	278.4595	13713.9086	11656.2774	25648.6455
25	44	17, 45	0, 44	249.0876	13513.5303	11926.1384	25688.7563
25	44	17, 45	0, 44	249.0876	13513.5303	11926.1389	25688.7568
25	46	17, 45	0, 44	249.0876	13513.5303	11934.5615	25697.1794
25	46	17, 45	0, 44	249.0876	13513.5303	11934.5669	25697.1848
25	46	17, 45	0, 44	249.0876	13513.5303	11934.5623	25697.1802
25	46	17, 45	0, 44	249.0876	13513.5303	11934.5587	25697.1766
25	46	17, 45	0, 44	249.0876	13513.5303	11934.5599	25697.1778
25	46	17, 45	0, 44	249.0876	13513.5303	11934.5607	25697.1786
25	46	17, 45	0, 44	249.0876	13513.5303	11934.5621	25697.1800

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})
26	31	20, 32	1, 31	278.4595	13713.9086	11683.0082	25675.3763
26	33	20, 32	1, 31	278.4595	13713.9086	11688.9687	25681.3368
26	44	17, 45	0, 44	249.0876	13513.5303	11958.1670	25720.7849
26	44	17, 45	0, 44	249.0876	13513.5303	11958.1666	25720.7845
26	44	17, 45	0, 44	249.0876	13513.5303	11958.1723	25720.7902
26	46	17, 45	0, 44	249.0876	13513.5303	11966.5594	25729.1773
26	46	17, 45	0, 44	249.0876	13513.5303	11966.5629	25729.1808
27	44	17, 45	0, 44	249.0876	13513.5303	11990.9000	25753.5179
27	46	17, 45	0, 44	249.0876	13513.5303	11999.1151	25761.7330
31	44	17, 45	0, 44	249.0876	13513.5303	12123.4473	25886.0652
31	46	17, 45	0, 44	249.0876	13513.5303	12131.3980	25894.0159
35	44	17, 45	0, 44	249.0876	13513.5303	12257.5399	26020.1578
35	46	17, 45	0, 44	249.0876	13513.5303	12265.4027	26028.0206
35	46	17, 45	0, 44	249.0876	13513.5303	12265.4021	26028.0200
36	44	17, 45	0, 44	249.0876	13513.5303	12289.2893	26051.9072
36	46	17, 45	0, 44	249.0876	13513.5303	12297.1204	26059.7383
36	46	17, 45	0, 44	249.0876	13513.5303	12297.1173	26059.7352
36	46	17, 45	0, 44	249.0876	13513.5303	12297.1180	26059.7359
39	44	17, 45	0, 44	249.0876	13513.5303	12387.3441	26149.9620
39	46	17, 45	0, 44	249.0876	13513.5303	12394.7223	26157.3402
40	44	17, 45	0, 44	249.0876	13513.5303	12419.8006	26182.4185
40	44	17, 45	0, 44	249.0876	13513.5303	12419.8007	26182.4186
43	31	20, 32	1, 31	278.4595	13713.9086	12246.3103	26238.6784
43	31	20, 32	1, 31	278.4595	13713.9086	12246.3095	26238.6776
43	31	20, 32	1, 31	278.4595	13713.9086	12246.2760	26238.6441
43	31	20, 32	1, 31	278.4595	13713.9086	12246.3119	26238.6800
43	31	20, 32	1, 33	290.6890	13701.6791	12246.3192	26238.6873
43	33	20, 32	1, 31	278.4595	13713.9086	12251.7080	26244.0761
43	33	20, 32	1, 33	290.6890	13701.6791	12251.7125	26244.0806
50	31	20, 32	1, 31	278.4595	13713.9086	12452.2210	26444.5891
50	31	20, 32	1, 33	290.6890	13701.6791	12452.2298	26444.5979
50	33	20, 32	1, 31	278.4595	13713.9086	12456.7137	26449.0818
50	33	20, 32	1, 33	290.6890	13701.6791	12456.7228	26449.0909
51	31	20, 32	1, 31	278.4595	13713.9086	12479.6206	26471.9887
51	31	20, 32	1, 31	278.4595	13713.9086	12479.6194	26471.9875
51	31	20, 32	1, 31	278.4595	13713.9086	12479.5544	26471.9225
51	31	20, 32	1, 33	290.6890	13701.6791	12479.6215	26471.9896
51	31	20, 32	1, 33	290.6890	13701.6791	12479.6315	26471.9996
51	33	20, 32	1, 31	278.4595	13713.9086	12483.9490	26476.3171
51	33	20, 32	1, 33	290.6890	13701.6791	12483.9597	26476.3278

$^{23}Na^{41}K$ $3^3\Pi_{\Omega=0}$ Data

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[3^3\Pi(v, J)]$ measured value (cm^{-1})	$E[3^3\Pi(v, J)]$ calculated from Dunham Expansion (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
12	46	18, 47	0, 46	261.9682	13570.9973	11442.6822	25275.6477	25275.5478	0.0999
12	46	18, 47	1, 46	382.9267	13450.0388	11442.6807	25275.6462	25275.5478	0.0984
12	46	18, 47	1, 46	382.9267	13450.0388	11442.6843	25275.6498	25275.5478	0.1019
12	46	18, 47	1, 48	400.3809	13432.5846	11442.6806	25275.6461	25275.5478	0.0982
12	48	18, 47	0, 46	261.9682	13570.9973	11449.4834	25282.4489	25282.40457	0.0443
12	48	18, 47	0, 48	279.5074	13553.4581	11449.4874	25282.4529	25282.40457	0.0484
12	48	18, 47	0, 48	279.5074	13553.4581	11449.4874	25282.4529	25282.40457	0.0484
12	48	18, 47	1, 46	382.9267	13450.0388	11449.4840	25282.4495	25282.40457	0.0449
12	48	18, 47	1, 48	400.3809	13432.5846	11449.4823	25282.4478	25282.40457	0.0432
13	46	18, 47	0, 46	261.9682	13570.9973	11484.3092	25317.2747	25317.30741	-0.0327
13	46	18, 47	0, 48	279.5074	13553.4581	11484.3103	25317.2758	25317.30741	-0.0316
13	46	18, 47	1, 46	382.9267	13450.0388	11484.3103	25317.2758	25317.30741	-0.0316
13	46	18, 47	1, 48	400.3809	13432.5846	11484.3073	25317.2728	25317.30741	-0.0347
13	48	18, 47	0, 46	261.9682	13570.9973	11491.1509	25324.1164	25324.1826	-0.0662
13	48	18, 47	1, 48	400.3809	13432.5846	11491.1451	25324.1106	25324.1826	-0.0720

* These lines are strongly affected by non-adiabatic coupling and thus were excluded from the IPA fit. A complete analysis of the $4^3\Pi$ and $3^3\Pi$ states, including non-adiabatic coupling effects, is in progress and will be presented in a future publication.[57]

‡ This PFOODR transition was recorded using the mostly singlet component of the $1(b)^3\Pi_\Omega(v_b = 18,\ J = 45) \sim 2(A)^1\Sigma^+(v_A = 20,\ J = 45)$ window level.

Table 3. T_v, B_v, D_v, A_v, and b_F values for various vibrational levels of the NaK $3^3\Pi$ state (all values are in cm^{-1}). T_v, B_v, and D_v values are obtained from fits of the energies of the various $3^3\Pi_{\Omega=0}$ rotational levels of a given vibrational state to the function $E(v, J) = T_v + B_v J(J+1) - D_v [J(J+1)]^2$ (and thus represent constants for the Ω=0 fine structure component). Values of the spin–orbit interaction constant A_v are obtained from measured energy separations between ro-vibrational level $\Omega = 0$ and $\Omega = 2$ fine structure components [see Eq. (8)]. These values, along with the hyperfine splittings of the $3^3\Pi_{\Omega=0}$ level energies, are then used to obtain the values of the Fermi contact constant, b_F, as a function of v.

v	T_v	B_v	D_v	A_v	b_F
6	24946.82	0.0369	3.4×10^{-8}		
7	24989.55	0.0370	7.7×10^{-8}		
8	25032.31	0.0369	5.0×10^{-8}		
9	25074.96	0.0370	8.1×10^{-8}		
10	25117.51	0.0370	9.7×10^{-8}	3.997 ± 0.007	$(6.67 \pm 0.24) \times 10^{-3}$
11	25159.89	0.0371	1.0×10^{-7}		
12	25202.01	0.0372	1.1×10^{-7}		
13	25243.72	0.0373	1.1×10^{-7}		
14	25258.72	0.0726		3.308 ± 0.029	$(8.83 \pm 0.08) \times 10^{-3}$
15	25284.49	0.0382		4.049 ± 0.006	$(7.72 \pm 0.12) \times 10^{-3}$
16	25324.52	0.0380			
17	25341.31	0.0740			
18	25369.37	0.0345			
19	25405.36	0.0386			
20	25431.36	0.0484	1.4×10^{-6}		
21	25458.60	0.0491	5.0×10^{-7}		
22	25491.11	0.0463	5.7×10^{-8}		
23	25524.88	0.0445	1.6×10^{-7}		
24	25556.36	0.0460	3.8×10^{-7}	3.355 ± 0.016	$(8.52 \pm 0.18) \times 10^{-3}$
25	25589.16	0.0452	1.1×10^{-7}	3.428 ± 0.007	$(9.25 \pm 0.14) \times 10^{-3}$
26	25622.92	0.0443	3.5×10^{-8}	3.443 ± 0.011	$(9.29 \pm 0.12) \times 10^{-3}$
27	25656.72	0.0440	1.2×10^{-7}	3.262 ± 0.013	$(9.13 \pm 0.13) \times 10^{-3}$
28	25690.17	0.0439	1.0×10^{-7}		
29	25723.91	0.0437	1.2×10^{-7}		
30	25758.44	0.0425	1.1×10^{-7}		
31	25792.51	0.0425	6.8×10^{-8}	3.151 ± 0.014	$(9.86 \pm 0.10) \times 10^{-3}$
32	25826.58	0.0423	1.0×10^{-7}		
33	25862.49	0.0438			
34	25894.54	0.0425			
35	25927.76	0.0424	2.4×10^{-7}	2.923 ± 0.014	$(9.68 \pm 0.17) \times 10^{-3}$
36	25962.23	0.0406		3.044 ± 0.005	$(1.002 \pm 0.020) \times 10^{-2}$
37	25996.87	0.0394			
38	26031.07	0.0389			
39	26063.87	0.0391		2.771 ± 0.010	$(1.032 \pm 0.025) \times 10^{-2}$
40	26096.88	0.0389		2.625 ± 0.007	$(1.014 \pm 0.025) \times 10^{-2}$
43	26191.98	0.0400		2.554 ± 0.005	$(1.039 \pm 0.021) \times 10^{-2}$
46	26286.61	0.0372			
47	26317.30	0.0350			
48	26347.43	0.0388			
49	26376.34	0.0351			
50	26406.24	0.0327		2.174 ± 0.175	$(1.139 \pm 0.081) \times 10^{-2}$
51	26434.40	0.0322		2.027 ± 0.133	$(1.118 \pm 0.070) \times 10^{-2}$
53	26489.01	0.0314	3.1×10^{-7}		

Table 4. Molecular constants (Dunham coefficients) for the outer well of the NaK $3^3\Pi_0$ state obtained in this work compared to the theoretical result of Refs. 52 and 53, the experimental IPA potential (this work), and the experimental result of Ref. 31. Note: All values are given in cm^{-1} except for the equilibrium internuclear separation, R_e, which is given in Å. More digits are reported for the Dunham coefficients than are statistically significant in order that the coefficients can reproduce experimental energies within measurement uncertainties. In the Dunham fit, the value of Y_{02} was held fixed to the weighted average of the $-D_v$ values determined for each of the outer well ($v = 6 - 13$) vibrational states.

	Dunham Coefficients (outer well) (this work)	IPA (this work)	Theory[52,53]	Experiment[31]
R_e	5.52 ± 0.05	5.50	5.60*	
Y_{00}	24662.0113 ± 0.7020	24660.93	24727.4*	24630
Y_{10}	44.3790 ± 0.1500	44.7	42.5*	
Y_{20}	-0.0950 ± 0.0073			
Y_{01}	0.0382 ± 0.0007	.0384	0.0371*	
Y_{11}	$(-2.61 \pm 1.30) \times 10^{-4}$			
Y_{21}	$(1.4 \pm 0.6) \times 10^{-5}$			
Y_{02}	-8.145×10^{-8}			

* Refs. 52 and 53 list the energy minimum of the shallower inner well as the $3^3\Pi$ $T_e = Y_{00}$ value. The values reported here represent the energy minimum of the deeper outer well taken from a spline interpolation of the results reported in the supplementary tables to Ref. 53 (and shifted in energy so that the dissociation asymptotes agree with experimental values).

Table 5. IPA potential for the NaK $3^3\Pi_0$ State

R(Å)	Energy (cm^{-1})
3.0428	28186.9418
3.1751	27168.3152
3.3074	26446.7446
3.4397	25936.2255
3.5719	25578.6472
3.7042	25360.4032
3.8365	25251.3781
3.9688	25214.2880
4.1011	25238.2194
4.2334	25312.3006
4.3657	25349.8398
4.4980	25250.0524
4.6303	25111.6982
4.7626	24982.1589
4.8949	24879.2473
5.0272	24792.6347
5.1595	24729.6555
5.2918	24686.8834
5.4241	24664.3334
5.5564	24662.6172
5.6887	24674.6471
5.8209	24695.7958
5.9532	24727.0431
6.0855	24768.7785
6.2178	24819.9224
6.3501	24879.9824
6.8793	25196.2678
7.4085	25593.8262
7.9377	25966.6080
8.4668	26253.6153
8.9960	26461.4540
9.5252	26586.2689
10.0544	26661.5884
10.5835	26709.0500
11.6419	26758.5751
12.7003	26781.2741
13.7586	26792.6236
14.8170	26798.8143
15.8753	26801.9096