

Table 2: The measured $F(\lambda)$ and de-reddened $I(\lambda)$ line fluxes of IC 4663, relative to $H\beta = 100$.

$\lambda_{Lab.}(\text{\AA})$	$\lambda_{Obs.}(\text{\AA})$	Ion	$F(\lambda)$	$I(\lambda)$
3405.71	3403.90	O III	0.25 ± 0.266	$1.02^{+0.403}_{-0.407}$
3411.69	3409.87	O IV	0.60 ± 0.211	$0.74^{+0.322}_{-0.319}$
3415.26	3413.44	O III	0.47 ± 0.243	$0.57^{+0.368}_{-0.370}$
3423.91	3422.09	Ne I	1.83 ± 1.357	$2.33^{+2.040}_{-2.070}$
3444.07	3442.23	O III	21.63 ± 1.616	$33.10^{+2.500}_{-2.700}$
3453.32	3451.48	He I	0.76 ± 0.263	$0.58^{+0.396}_{-0.394}$
3465.94	3464.09	He I	0.45 ± 0.186	$0.62^{+0.276}_{-0.275}$
3471.81	3469.96	He I	0.09 ± 0.231	$0.51^{+0.346}_{-0.345}$
3478.97	3477.12	He I	0.42 ± 0.294	$0.72^{+0.430}_{-0.438}$
3498.64	3496.78	He I	0.00 ± 0.166	$0.28^{+0.245}_{-0.245}$
3554.42	3552.53	He I	0.40 ± 0.115	$0.22^{+0.167}_{-0.168}$
3568.50	3566.60	Ne II	0.69 ± 0.158	$1.06^{+0.228}_{-0.227}$
3682.81	3681.28	H I	0.94 ± 0.148	$0.98^{+0.207}_{-0.205}$
3691.56	3690.03	H I	0.04 ± 0.093	$0.40^{+0.128}_{-0.130}$
3697.15	3695.61	H I	1.28 ± 0.123	$1.92^{+0.168}_{-0.184}$
3703.86	3702.32	H I	1.82 ± 0.153	$2.24^{+0.208}_{-0.229}$
3711.97	3710.43	H I	1.83 ± 0.115	$2.69^{+0.167}_{-0.167}$
3713.08	3711.54	Ne II	0.64 ± 0.118	$0.74^{+0.162}_{-0.164}$
3721.63	3720.08	[S III]	2.25 ± 0.785	$4.26^{+1.080}_{-1.080}$
3726.03	3724.48	[O II]	13.69 ± 0.825	$18.50^{+1.200}_{-1.200}$
3728.82	3727.27	[O II]	9.03 ± 0.677	$11.85^{+0.925}_{-1.003}$
3734.37	3732.82	H I	2.16 ± 0.133	$3.09^{+0.191}_{-0.191}$
3750.15	3748.59	H I	2.36 ± 0.161	$3.41^{+0.229}_{-0.229}$
3754.69	3753.13	O III	2.41 ± 0.261	$3.52^{+0.346}_{-0.383}$
3759.87	3758.31	O III	5.85 ± 0.251	$7.08^{+0.364}_{-0.364}$

Table 2: The measured $F(\lambda)$ and de-reddened $I(\lambda)$ line fluxes of IC 4663, relative to $H\beta = 100$.

$\lambda_{Lab.}(\text{\AA})$	$\lambda_{Obs.}(\text{\AA})$	Ion	$F(\lambda)$	$I(\lambda)$
3770.63	3769.06	H I	3.33 ± 0.246	$4.35^{+0.332}_{-0.359}$
3777.14	3775.57	Ne II	0.07 ± 0.103	$0.22^{+0.141}_{-0.140}$
3791.27	3789.70	O III	0.25 ± 0.226	$0.58^{+0.308}_{-0.306}$
3797.90	3796.32	H I	4.39 ± 0.309	$5.58^{+0.415}_{-0.448}$
3813.50	3812.02	He II	0.45 ± 0.065	$0.51^{+0.088}_{-0.089}$
3819.62	3818.14	He I	0.71 ± 0.063	$0.93^{+0.083}_{-0.091}$
3835.39	3833.90	H I	6.03 ± 0.193	$7.65^{+0.289}_{-0.289}$
3868.75	3867.25	[Ne III]	68.40 ± 3.442	$92.90^{+4.800}_{-4.800}$
3888.65	3887.14	He I	14.10 ± 0.632	$17.32^{+0.883}_{-0.883}$
3918.98	3917.46	C II	0.13 ± 0.038	$0.11^{+0.050}_{-0.049}$
3920.69	3919.17	C II	0.03 ± 0.040	$0.08^{+0.053}_{-0.053}$
3923.48	3921.96	He II	0.23 ± 0.038	$0.36^{+0.050}_{-0.050}$
3967.46	3965.92	[Ne III]	23.72 ± 1.204	$29.60^{+1.600}_{-1.600}$
3970.07	3968.53	H I	11.16 ± 0.981	$13.60^{+1.200}_{-1.400}$
4026.08	4024.66	N II	2.02 ± 0.118	$2.49^{+0.154}_{-0.154}$
4041.31	4039.89	N II	0.13 ± 0.053	$0.25^{+0.067}_{-0.068}$
4048.22	4046.79	O II	0.11 ± 0.033	$0.06^{+0.041}_{-0.041}$
4067.94	4066.51	C III	0.20 ± 0.088	$0.34^{+0.111}_{-0.111}$
4068.60	4067.17	[S II]	0.86 ± 0.090	$1.15^{+0.110}_{-0.122}$
4069.62	4068.19	O II	2.20 ± 0.093	$2.91^{+0.124}_{-0.124}$
4072.15	4070.73	O II	0.84 ± 0.093	$1.09^{+0.113}_{-0.126}$
4075.86	4074.43	O II	1.30 ± 0.058	$1.61^{+0.076}_{-0.076}$
4078.84	4077.41	O II	0.11 ± 0.065	$0.10^{+0.082}_{-0.082}$
4083.90	4082.46	O II	0.16 ± 0.075	$0.11^{+0.094}_{-0.095}$
4089.29	4087.85	O II	0.45 ± 0.070	$0.54^{+0.089}_{-0.089}$

Table 2: The measured $F(\lambda)$ and de-reddened $I(\lambda)$ line fluxes of IC 4663, relative to $H\beta = 100$.

$\lambda_{Lab.}(\text{\AA})$	$\lambda_{Obs.}(\text{\AA})$	Ion	$F(\lambda)$	$I(\lambda)$
4097.26	4095.81	O II	2.41 ± 0.753	$5.09^{+0.947}_{-0.942}$
4100.04	4098.60	He II	0.87 ± 0.825	$2.36^{+1.030}_{-1.030}$
4101.74	4100.30	H I	21.29 ± 0.823	$27.30^{+1.000}_{-1.000}$
4110.79	4109.33	O II	0.05 ± 0.033	$0.09^{+0.041}_{-0.041}$
4119.22	4117.77	O II	0.58 ± 0.080	$0.56^{+0.101}_{-0.101}$
4153.30	4151.84	O II	0.19 ± 0.038	$0.32^{+0.047}_{-0.047}$
4156.53	4155.07	O II	0.10 ± 0.048	$0.09^{+0.058}_{-0.058}$
4168.97	4167.50	He I	0.12 ± 0.030	$0.13^{+0.037}_{-0.037}$
4186.90	4185.43	C III	0.09 ± 0.025	$0.12^{+0.031}_{-0.031}$
4189.79	4188.32	O II	0.04 ± 0.038	$0.10^{+0.046}_{-0.046}$
4199.83	4198.35	He II	1.33 ± 0.043	$1.59^{+0.055}_{-0.055}$
4227.20	4225.60	[Fe V]	0.29 ± 0.028	$0.35^{+0.032}_{-0.036}$
4236.91	4235.31	N II	0.10 ± 0.050	$0.13^{+0.060}_{-0.061}$
4242.49	4240.89	N II	0.25 ± 0.043	$0.25^{+0.051}_{-0.051}$
4267.15	4265.54	C II	2.48 ± 0.048	$2.99^{+0.065}_{-0.065}$
4275.55	4273.93	O II	0.75 ± 0.068	$0.96^{+0.081}_{-0.081}$
4283.72	4282.11	O II	0.17 ± 0.048	$0.17^{+0.057}_{-0.057}$
4294.78	4293.16	O II	0.36 ± 0.038	$0.33^{+0.045}_{-0.045}$
4303.61	4301.98	O II	0.62 ± 0.030	$0.70^{+0.036}_{-0.036}$
4317.70	4316.07	O II	0.18 ± 0.043	$0.24^{+0.050}_{-0.050}$
4338.67	4337.03	He II	1.69 ± 0.324	$2.35^{+0.380}_{-0.378}$
4340.47	4338.83	H I	39.38 ± 0.324	$46.35^{+0.538}_{-0.538}$
4342.00	4340.36	O II	0.80 ± 0.288	$0.74^{+0.335}_{-0.338}$
4345.55	4343.91	O II	0.19 ± 0.058	$0.09^{+0.067}_{-0.067}$
4349.43	4347.79	O II	0.33 ± 0.033	$0.35^{+0.036}_{-0.041}$

Table 2: The measured $F(\lambda)$ and de-reddened $I(\lambda)$ line fluxes of IC 4663, relative to $H\beta = 100$.

$\lambda_{Lab.}(\text{\AA})$	$\lambda_{Obs.}(\text{\AA})$	Ion	$F(\lambda)$	$I(\lambda)$
4363.21	4361.56	[O III]	8.57 ± 0.088	$9.88^{+0.132}_{-0.132}$
4366.89	4365.24	N III	1.10 ± 0.095	$1.32^{+0.107}_{-0.117}$
4379.11	4377.45	N III	1.23 ± 0.080	$1.57^{+0.094}_{-0.094}$
4387.93	4386.27	He I	0.36 ± 0.038	$0.38^{+0.041}_{-0.047}$
4391.99	4390.33	Ne II	0.19 ± 0.040	$0.09^{+0.046}_{-0.046}$
4409.30	4407.65	Ne II	0.43 ± 0.045	$0.54^{+0.050}_{-0.055}$
4414.90	4413.24	O II	0.52 ± 0.028	$0.57^{+0.032}_{-0.032}$
4416.97	4415.31	O II	0.12 ± 0.025	$0.12^{+0.028}_{-0.029}$
4432.74	4431.08	N II	0.90 ± 0.043	$1.03^{+0.049}_{-0.049}$
4442.02	4440.35	N II	0.06 ± 0.015	$0.07^{+0.017}_{-0.017}$
4448.19	4446.52	O II	0.08 ± 0.065	$0.11^{+0.074}_{-0.074}$
4452.38	4450.70	O II	0.18 ± 0.088	$0.25^{+0.099}_{-0.100}$
4459.94	4458.27	N II	0.32 ± 0.030	$0.32^{+0.033}_{-0.036}$
4471.50	4469.82	He I	2.87 ± 0.055	$3.31^{+0.066}_{-0.066}$
4481.21	4479.53	Mg II	0.04 ± 0.038	$0.06^{+0.042}_{-0.042}$
4491.07	4489.38	C II	0.26 ± 0.030	$0.24^{+0.034}_{-0.034}$
4510.91	4509.22	N III	0.25 ± 0.030	$0.28^{+0.034}_{-0.034}$
4514.86	4513.17	N III	0.00 ± 0.030	$0.03^{+0.034}_{-0.033}$
4523.58	4521.88	N III	0.04 ± 0.020	$0.08^{+0.022}_{-0.022}$
4530.41	4528.71	N II	0.14 ± 0.023	$0.13^{+0.025}_{-0.025}$
4534.58	4532.88	N III	0.04 ± 0.025	$0.13^{+0.028}_{-0.028}$
4541.59	4539.89	He II	2.29 ± 0.045	$2.50^{+0.052}_{-0.052}$
4552.53	4550.82	N II	0.09 ± 0.025	$0.06^{+0.027}_{-0.028}$
4562.60	4560.89	Mg I]	0.05 ± 0.023	$0.06^{+0.025}_{-0.024}$
4571.10	4569.39	Mg I]	0.08 ± 0.033	$0.09^{+0.035}_{-0.036}$

Table 2: The measured $F(\lambda)$ and de-reddened $I(\lambda)$ line fluxes of IC 4663, relative to $H\beta = 100$.

$\lambda_{Lab.}(\text{\AA})$	$\lambda_{Obs.}(\text{\AA})$	Ion	$F(\lambda)$	$I(\lambda)$
4595.96	4594.24	O II	0.03 ± 0.020	$0.05^{+0.022}_{-0.022}$
4601.48	4599.75	N II	0.13 ± 0.030	$0.14^{+0.033}_{-0.033}$
4609.44	4607.76	O II	0.42 ± 0.043	$0.42^{+0.044}_{-0.049}$
4621.25	4619.57	O II	0.07 ± 0.020	$0.11^{+0.022}_{-0.022}$
4634.14	4632.46	N III	2.85 ± 0.178	$3.03^{+0.191}_{-0.191}$
4640.64	4638.95	N III	8.22 ± 0.095	$8.72^{+0.107}_{-0.107}$
4641.81	4640.12	O II	7.86 ± 0.100	$8.46^{+0.112}_{-0.112}$
4649.13	4647.44	O II	2.64 ± 0.073	$2.85^{+0.078}_{-0.078}$
4650.25	4648.56	C III	0.46 ± 0.073	$0.46^{+0.077}_{-0.077}$
4651.47	4649.78	C III	0.22 ± 0.073	$0.27^{+0.078}_{-0.078}$
4661.63	4659.94	O II	0.71 ± 0.040	$0.72^{+0.043}_{-0.043}$
4676.23	4674.54	O II	0.45 ± 0.053	$0.45^{+0.056}_{-0.055}$
4685.68	4683.98	He II	75.58 ± 0.304	$80.20^{+0.402}_{-0.402}$
4711.37	4709.66	[Ar IV]	7.24 ± 0.108	$7.60^{+0.115}_{-0.115}$
4724.15	4722.43	[Ne IV]	1.00 ± 0.020	$1.03^{+0.021}_{-0.021}$
4725.62	4723.90	[Ne IV]	0.36 ± 0.020	$0.40^{+0.021}_{-0.021}$
4740.17	4738.45	[Ar IV]	5.73 ± 0.078	$6.11^{+0.082}_{-0.082}$
4859.32	4857.53	He II	4.17 ± 0.840	$4.62^{+0.847}_{-0.836}$
4861.33	4859.54	H I	100.00 ± 0.840	$100.00^{+0.845}_{-0.845}$
4921.93	4920.12	He I	0.83 ± 0.065	$0.92^{+0.064}_{-0.064}$
4958.91	4957.08	[O III]	367.36 ± 3.354	$354.00^{+3.000}_{-3.000}$
5006.84	5005.02	[O III]	1087.69 ± 6.979	$1030.00^{+10.000}_{-10.000}$
5015.68	5013.85	He I	1.36 ± 0.058	$1.24^{+0.055}_{-0.055}$
5047.74	5045.90	He I	0.08 ± 0.015	$0.08^{+0.014}_{-0.014}$
5191.82	5189.93	[Ar III]	0.24 ± 0.018	$0.21^{+0.015}_{-0.017}$

Table 2: The measured $F(\lambda)$ and de-reddened $I(\lambda)$ line fluxes of IC 4663, relative to $H\beta = 100$.

$\lambda_{Lab.}(\text{\AA})$	$\lambda_{Obs.}(\text{\AA})$	Ion	$F(\lambda)$	$I(\lambda)$
5200.26	5198.37	[N I]	0.13 ± 0.013	$0.13^{+0.011}_{-0.012}$
5342.38	5339.53	C II	0.05 ± 0.060	$0.08^{+0.052}_{-0.052}$
5411.52	5409.73	He II	6.73 ± 0.183	$5.91^{+0.165}_{-0.165}$
5517.66	5515.84	[Cl III]	1.33 ± 0.050	$1.09^{+0.043}_{-0.043}$
5537.60	5535.77	[Cl III]	1.10 ± 0.060	$0.89^{+0.050}_{-0.050}$
5577.34	5575.50	[O I]	0.17 ± 0.088	$0.21^{+0.071}_{-0.071}$
5666.63	5665.12	N II	0.26 ± 0.020	$0.21^{+0.016}_{-0.017}$
5676.02	5674.51	N II	0.00 ± 0.038	$0.09^{+0.030}_{-0.030}$
5679.56	5678.05	N II	0.54 ± 0.040	$0.38^{+0.031}_{-0.034}$
5686.21	5684.69	N II	0.02 ± 0.030	$0.05^{+0.024}_{-0.024}$
5710.77	5709.25	N II	0.09 ± 0.023	$0.07^{+0.018}_{-0.018}$
5754.60	5753.07	[N II]	0.76 ± 0.035	$0.61^{+0.029}_{-0.029}$
5801.51	5799.96	C IV	0.07 ± 0.013	$0.06^{+0.010}_{-0.010}$
5812.14	5810.80	C IV	0.06 ± 0.010	$0.04^{+0.008}_{-0.008}$
5875.66	5874.31	He I	11.97 ± 0.740	$9.96^{+0.585}_{-0.585}$
5931.78	5930.42	N II	0.21 ± 0.018	$0.15^{+0.013}_{-0.014}$
5941.65	5940.28	N II	0.10 ± 0.010	$0.08^{+0.007}_{-0.008}$
5978.97	5977.60	S III	0.07 ± 0.028	$0.06^{+0.021}_{-0.021}$
6036.70	6035.39	He II	0.16 ± 0.018	$0.12^{+0.013}_{-0.014}$
6074.10	6072.78	He II	0.18 ± 0.013	$0.13^{+0.009}_{-0.010}$
6101.83	6100.51	[K IV]	0.38 ± 0.023	$0.26^{+0.017}_{-0.017}$
6118.20	6116.87	He II	0.21 ± 0.018	$0.14^{+0.012}_{-0.014}$
6151.43	6150.10	C II	0.07 ± 0.010	$0.06^{+0.007}_{-0.007}$
6170.69	6169.35	He II	0.21 ± 0.018	$0.16^{+0.013}_{-0.014}$
6233.80	6232.80	He II	0.23 ± 0.025	$0.16^{+0.017}_{-0.019}$

Table 2: The measured $F(\lambda)$ and de-reddened $I(\lambda)$ line fluxes of IC 4663, relative to $H\beta = 100$.

$\lambda_{Lab.}(\text{\AA})$	$\lambda_{Obs.}(\text{\AA})$	Ion	$F(\lambda)$	$I(\lambda)$
6310.80	6309.78	He II	1.55 ± 0.045	$1.10^{+0.038}_{-0.038}$
6312.10	6311.08	[S III]	3.99 ± 0.043	$2.80^{+0.064}_{-0.064}$
6347.10	6346.08	Si II	0.08 ± 0.020	$0.06^{+0.014}_{-0.014}$
6371.38	6370.35	S III	0.15 ± 0.023	$0.09^{+0.016}_{-0.016}$
6393.60	6392.57	[Mn V]	0.06 ± 0.005	$0.05^{+0.003}_{-0.004}$
6406.30	6405.13	He II	0.48 ± 0.023	$0.32^{+0.017}_{-0.017}$
6461.95	6460.77	C II	0.33 ± 0.025	$0.23^{+0.017}_{-0.019}$
6527.11	6525.91	He II	0.55 ± 0.035	$0.36^{+0.024}_{-0.026}$
6548.10	6546.90	[N II]	13.78 ± 0.717	$7.90^{+0.499}_{-0.533}$
6560.10	6558.90	He II	53.86 ± 10.900	$41.10^{+7.300}_{-7.400}$
6562.77	6561.57	H I	420.31 ± 10.245	$283.00^{+2.000}_{-2.000}$
6583.50	6582.29	[N II]	34.46 ± 2.188	$25.10^{+1.500}_{-1.600}$
6678.16	6676.63	He I	4.27 ± 0.163	$2.78^{+0.126}_{-0.126}$
6683.20	6681.67	He II	0.68 ± 0.093	$0.47^{+0.062}_{-0.062}$
6716.44	6714.90	[S II]	7.17 ± 0.253	$4.83^{+0.203}_{-0.203}$
6730.82	6729.28	[S II]	8.72 ± 0.319	$5.96^{+0.254}_{-0.254}$
6795.00	6793.44	[K IV]	0.11 ± 0.008	$0.07^{+0.005}_{-0.005}$
7005.67	7004.00	[Ar V]	1.40 ± 0.035	$0.86^{+0.032}_{-0.032}$
7065.25	7063.56	He I	2.44 ± 0.055	$1.50^{+0.053}_{-0.053}$
7135.80	7134.09	[Ar III]	39.35 ± 0.715	$23.39^{+0.794}_{-0.794}$
7160.56	7158.85	He I	0.08 ± 0.015	$0.04^{+0.009}_{-0.009}$
7177.50	7175.79	He II	1.45 ± 0.038	$0.87^{+0.034}_{-0.034}$
7231.32	7229.66	C II	0.48 ± 0.060	$0.25^{+0.037}_{-0.037}$
7236.19	7234.53	C II	1.06 ± 0.040	$0.67^{+0.031}_{-0.031}$
7262.76	7261.10	[Ar IV]	0.26 ± 0.015	$0.15^{+0.010}_{-0.010}$

Table 2: The measured $F(\lambda)$ and de-reddened $I(\lambda)$ line fluxes of IC 4663, relative to $H\beta = 100$.

$\lambda_{Lab.}(\text{\AA})$	$\lambda_{Obs.}(\text{\AA})$	Ion	$F(\lambda)$	$I(\lambda)$
7281.35	7279.68	He I	0.53 ± 0.018	$0.32^{+0.014}_{-0.014}$
7298.04	7296.37	He I	0.01 ± 0.013	$0.02^{+0.007}_{-0.008}$
7318.92	7317.24	[O II]	0.88 ± 0.055	$0.44^{+0.034}_{-0.037}$
7319.99	7318.31	[O II]	3.05 ± 0.048	$1.86^{+0.062}_{-0.062}$
7329.67	7327.99	[O II]	0.20 ± 0.023	$0.12^{+0.013}_{-0.015}$
7330.73	7329.05	[O II]	0.25 ± 0.023	$0.16^{+0.014}_{-0.015}$
7449.07	7447.27	O III	0.03 ± 0.010	$0.01^{+0.006}_{-0.006}$
7455.36	7453.56	O III	0.05 ± 0.010	$0.03^{+0.006}_{-0.006}$
7530.83	7529.01	[Cl IV]	0.88 ± 0.070	$0.49^{+0.042}_{-0.046}$
7592.74	7590.91	He II	2.08 ± 0.050	$1.14^{+0.046}_{-0.046}$
7751.06	7748.93	[Ar III]	9.66 ± 0.033	$5.41^{+0.179}_{-0.179}$
7816.16	7813.56	He I	0.07 ± 0.008	$0.04^{+0.004}_{-0.005}$
8014.00	8012.09	N III	0.03 ± 0.018	$0.01^{+0.009}_{-0.010}$
8018.08	8016.17	Fe II	0.11 ± 0.018	$0.05^{+0.010}_{-0.010}$
8033.54	8031.63	[Ni II]	0.01 ± 0.015	$0.01^{+0.008}_{-0.008}$
8045.63	8043.71	[Cl IV]	2.11 ± 0.025	$1.12^{+0.041}_{-0.041}$
8068.40	8066.48	C III	0.04 ± 0.018	$0.03^{+0.010}_{-0.009}$
8076.62	8074.70	[V II]	0.02 ± 0.008	$0.02^{+0.004}_{-0.004}$
8083.88	8081.96	Fe II	0.02 ± 0.013	$0.03^{+0.007}_{-0.007}$
8101.31	8099.38	Fe III	0.04 ± 0.008	$0.03^{+0.004}_{-0.004}$
8133.90	8131.96	Si I	0.03 ± 0.013	$0.01^{+0.007}_{-0.007}$
8141.18	8139.24	Fe III	0.03 ± 0.013	$0.02^{+0.007}_{-0.007}$
8159.95	8158.01	Fe II]	0.45 ± 0.030	$0.24^{+0.018}_{-0.019}$
8168.91	8166.97	He I	0.07 ± 0.023	$0.03^{+0.012}_{-0.012}$
8174.86	8172.91	Na I	0.03 ± 0.015	$0.04^{+0.008}_{-0.008}$

Table 2: The measured $F(\lambda)$ and de-reddened $I(\lambda)$ line fluxes of IC 4663, relative to $H\beta = 100$.

$\lambda_{Lab.}(\text{\AA})$	$\lambda_{Obs.}(\text{\AA})$	Ion	$F(\lambda)$	$I(\lambda)$
8185.51	8183.56	Ne I	0.06 ± 0.013	$0.04^{+0.007}_{-0.007}$
8196.61	8194.66	Fe I	0.36 ± 0.023	$0.22^{+0.014}_{-0.015}$
8204.42	8202.35	Fe II	0.04 ± 0.010	$0.02^{+0.005}_{-0.005}$
8215.90	8213.83	N II	0.02 ± 0.018	$0.02^{+0.009}_{-0.009}$
8225.10	8223.02	N II	0.11 ± 0.083	$0.06^{+0.043}_{-0.043}$
8236.77	8234.69	He II	3.85 ± 0.073	$2.00^{+0.081}_{-0.084}$
8243.69	8241.61	H I	0.40 ± 0.100	$0.17^{+0.053}_{-0.053}$
8249.97	8247.89	H I	0.19 ± 0.053	$0.08^{+0.028}_{-0.028}$
8264.28	8262.19	H I	0.15 ± 0.043	$0.08^{+0.022}_{-0.023}$
8267.94	8265.85	H I	0.19 ± 0.043	$0.13^{+0.022}_{-0.023}$
8281.12	8279.03	H I	0.07 ± 0.023	$0.04^{+0.012}_{-0.012}$
8286.43	8284.34	H I	0.18 ± 0.025	$0.10^{+0.013}_{-0.014}$
8292.31	8290.22	H I	0.15 ± 0.043	$0.08^{+0.022}_{-0.023}$
8298.83	8296.73	H I	0.25 ± 0.030	$0.13^{+0.016}_{-0.018}$
8306.11	8304.01	H I	0.24 ± 0.020	$0.13^{+0.011}_{-0.012}$
8314.26	8312.16	H I	0.26 ± 0.040	$0.11^{+0.021}_{-0.021}$
8323.42	8321.32	H I	0.33 ± 0.040	$0.17^{+0.021}_{-0.024}$
8333.78	8331.68	H I	0.33 ± 0.010	$0.16^{+0.008}_{-0.008}$
8345.47	8343.36	H I	0.26 ± 0.035	$0.15^{+0.018}_{-0.021}$
8359.00	8356.89	H I	0.33 ± 0.035	$0.18^{+0.019}_{-0.021}$
8374.48	8372.37	H I	0.37 ± 0.020	$0.18^{+0.012}_{-0.013}$
8392.40	8390.28	H I	0.42 ± 0.020	$0.22^{+0.013}_{-0.014}$
8413.32	8411.20	H I	0.48 ± 0.023	$0.24^{+0.014}_{-0.015}$
8421.99	8419.87	He I	0.09 ± 0.015	$0.04^{+0.008}_{-0.008}$
8437.95	8435.82	H I	0.56 ± 0.018	$0.29^{+0.014}_{-0.015}$

Table 2: The measured $F(\lambda)$ and de-reddened $I(\lambda)$ line fluxes of IC 4663, relative to $H\beta = 100$.

$\lambda_{Lab.}(\text{\AA})$	$\lambda_{Obs.}(\text{\AA})$	Ion	$F(\lambda)$	$I(\lambda)$
8444.69	8442.56	He I	0.02 ± 0.028	$0.03^{+0.014}_{-0.014}$
8451.20	8449.07	He I	0.03 ± 0.018	$0.01^{+0.009}_{-0.009}$
8467.25	8465.12	H I	0.62 ± 0.013	$0.31^{+0.013}_{-0.014}$
8480.85	8478.71	[Cl III]	0.06 ± 0.013	$0.03^{+0.006}_{-0.007}$
8486.31	8484.17	He I	0.04 ± 0.013	$0.02^{+0.006}_{-0.006}$
8502.48	8500.34	H I	0.73 ± 0.028	$0.37^{+0.019}_{-0.020}$
8519.35	8517.20	He II	0.05 ± 0.008	$0.03^{+0.004}_{-0.004}$
8528.99	8526.84	He I	0.02 ± 0.010	$0.02^{+0.005}_{-0.005}$
8545.38	8543.23	H I	0.94 ± 0.013	$0.48^{+0.019}_{-0.020}$
8566.92	8564.76	He II	0.19 ± 0.015	$0.09^{+0.008}_{-0.009}$
8578.69	8576.53	[Cl II]	0.32 ± 0.013	$0.15^{+0.008}_{-0.009}$
8598.39	8596.22	H I	1.23 ± 0.013	$0.62^{+0.024}_{-0.025}$
8608.31	8606.13	He I	0.01 ± 0.010	$0.01^{+0.005}_{-0.005}$
8616.95	8614.77	[Fe II]	0.04 ± 0.008	$0.02^{+0.004}_{-0.004}$
8626.19	8624.00	He II	0.15 ± 0.018	$0.06^{+0.009}_{-0.009}$
8648.25	8646.06	He I	0.05 ± 0.020	$0.02^{+0.010}_{-0.010}$
8665.02	8662.82	H I	1.83 ± 0.058	$0.88^{+0.044}_{-0.046}$
8680.28	8678.08	N I	0.07 ± 0.010	$0.03^{+0.005}_{-0.005}$
8686.15	8683.95	N I	0.03 ± 0.008	$0.01^{+0.004}_{-0.004}$
8701.83	8699.62	N II	0.07 ± 0.018	$0.04^{+0.009}_{-0.009}$
8703.87	8701.66	[Ni II]	0.15 ± 0.018	$0.07^{+0.009}_{-0.009}$
8710.54	8708.33	N II	0.04 ± 0.013	$0.02^{+0.006}_{-0.006}$
8728.90	8726.69	[Fe III]	0.03 ± 0.010	$0.01^{+0.005}_{-0.005}$
8733.43	8731.22	He I	0.03 ± 0.008	$0.01^{+0.004}_{-0.004}$
8750.47	8748.25	H I	1.87 ± 0.033	$0.95^{+0.040}_{-0.042}$

Table 2: The measured $F(\lambda)$ and de-reddened $I(\lambda)$ line fluxes of IC 4663, relative to $H\beta = 100$.

$\lambda_{Lab.}(\text{\AA})$	$\lambda_{Obs.}(\text{\AA})$	Ion	$F(\lambda)$	$I(\lambda)$
8776.97	8774.74	He I	0.11 ± 0.030	$0.05^{+0.015}_{-0.015}$
8793.80	8791.57	C II	0.08 ± 0.018	$0.04^{+0.009}_{-0.009}$
8795.17	8792.94	[Cr II]	0.20 ± 0.015	$0.10^{+0.008}_{-0.009}$
8799.00	8796.77	He II	0.06 ± 0.015	$0.04^{+0.007}_{-0.008}$
8809.83	8807.63	Fe II	0.06 ± 0.013	$0.03^{+0.006}_{-0.006}$
8816.64	8814.44	He I	0.02 ± 0.013	$0.01^{+0.006}_{-0.006}$
8822.18	8819.98	O II	0.07 ± 0.013	$0.03^{+0.006}_{-0.006}$
8845.37	8843.16	He I	0.12 ± 0.015	$0.05^{+0.008}_{-0.008}$
8862.78	8860.57	H I	2.40 ± 0.025	$1.17^{+0.047}_{-0.050}$
8899.31	8897.09	C I	0.04 ± 0.028	$0.03^{+0.014}_{-0.014}$
8914.77	8912.55	He I	0.06 ± 0.018	$0.03^{+0.009}_{-0.009}$
8929.11	8926.88	He II	0.16 ± 0.013	$0.08^{+0.007}_{-0.007}$