

Event categories		SM Higgs boson expected signal ( $m_H = 125$ GeV)						Background $m_{\gamma\gamma} = 125$ GeV (events/GeV)	
		Events	ggH	VBF	VH	ttH	$\sigma_{\text{eff}}$ (GeV)		FWHM/2.35 (GeV)
7 TeV, 5.1 fb <sup>-1</sup>	BDT 0	3.2	61%	17%	19%	3%	1.21	1.14	$3.3 \pm 0.4$
	BDT 1	16.3	88%	6%	6%	–	1.26	1.08	$37.5 \pm 1.3$
	BDT 2	21.5	92%	4%	4%	–	1.59	1.32	$74.8 \pm 1.9$
	BDT 3	32.8	92%	4%	4%	–	2.47	2.07	$193.6 \pm 3.0$
	Dijet tag	2.9	27%	72%	1%	–	1.73	1.37	$1.7 \pm 0.2$
8 TeV, 5.3 fb <sup>-1</sup>	BDT 0	6.1	68%	12%	16%	4%	1.38	1.23	$7.4 \pm 0.6$
	BDT 1	21.0	87%	6%	6%	1%	1.53	1.31	$54.7 \pm 1.5$
	BDT 2	30.2	92%	4%	4%	–	1.94	1.55	$115.2 \pm 2.3$
	BDT 3	40.0	92%	4%	4%	–	2.86	2.35	$256.5 \pm 3.4$
	Dijet tight	2.6	23%	77%	–	–	2.06	1.57	$1.3 \pm 0.2$
	Dijet loose	3.0	53%	45%	2%	–	1.95	1.48	$3.7 \pm 0.4$