

Analysis categories	SM 125 GeV Higgs boson expected signal									
	Total	Target STXS bin(s)	Fraction of total events						σ_{eff} (GeV)	
			ggH	qqH	VH lep	t̄tH	tHq	tHW		
tHq lep	1.8	23.9%	3.5%	3.7%	34.0%	28.8%	23.9%	6.0%	1.62	0.42
t̄tH lep $p_T^{\gamma\gamma} < 60$ Tag0	0.8	93.8%	—	—	0.7%	98.2%	0.7%	0.5%	1.71	0.72
t̄tH lep $p_T^{\gamma\gamma} < 60$ Tag1	1.0	94.4%	—	—	0.5%	97.9%	1.5%	0.7%	1.69	0.53
t̄tH lep $p_T^{\gamma\gamma} < 60$ Tag2	1.8	87.7%	—	0.5%	5.1%	90.7%	3.2%	1.1%	1.94	0.19
t̄tH lep $60 < p_T^{\gamma\gamma} < 120$ Tag0	1.4	95.0%	—	—	1.0%	97.3%	1.0%	0.8%	1.60	0.64
t̄tH lep $60 < p_T^{\gamma\gamma} < 120$ Tag1	0.6	90.8%	—	0.7%	1.0%	95.6%	1.6%	1.1%	1.61	0.55
t̄tH lep $60 < p_T^{\gamma\gamma} < 120$ Tag2	2.1	90.9%	—	0.1%	2.8%	93.7%	2.5%	1.3%	1.92	0.38
t̄tH lep $120 < p_T^{\gamma\gamma} < 200$ Tag0	3.6	90.1%	0.3%	0.2%	2.7%	92.8%	2.0%	2.0%	1.63	0.71
t̄tH lep $120 < p_T^{\gamma\gamma} < 200$ Tag1	0.8	77.9%	2.0%	0.5%	11.3%	80.6%	3.2%	2.5%	1.72	0.43
t̄tH lep $200 < p_T^{\gamma\gamma} < 300$ Tag0	2.5	85.9%	0.1%	—	4.1%	88.1%	3.0%	4.8%	1.54	0.68
t̄tH lep $p_T^{\gamma\gamma} > 300$ Tag0	2.1	61.7%	1.0%	—	18.0%	69.3%	3.0%	8.7%	1.57	0.69
t̄tH had $p_T^{\gamma\gamma} < 60$ Tag0	1.2	94.2%	1.7%	0.2%	—	96.6%	0.9%	0.4%	1.68	0.49
t̄tH had $p_T^{\gamma\gamma} < 60$ Tag1	0.4	93.5%	0.1%	0.9%	—	96.7%	1.7%	0.6%	1.66	0.38
t̄tH had $p_T^{\gamma\gamma} < 60$ Tag2	3.1	89.8%	1.6%	1.5%	0.3%	92.9%	3.0%	0.7%	1.88	0.15
t̄tH had $60 < p_T^{\gamma\gamma} < 120$ Tag0	1.8	92.6%	0.6%	—	0.1%	97.6%	1.1%	0.6%	1.55	0.77
t̄tH had $60 < p_T^{\gamma\gamma} < 120$ Tag1	0.4	90.8%	4.6%	0.8%	—	91.9%	1.9%	0.8%	1.35	0.39
t̄tH had $60 < p_T^{\gamma\gamma} < 120$ Tag2	5.2	88.7%	1.0%	2.2%	0.5%	91.8%	3.5%	1.0%	1.90	0.23
t̄tH had $120 < p_T^{\gamma\gamma} < 200$ Tag0	3.6	91.4%	1.5%	0.4%	0.1%	94.7%	2.2%	1.3%	1.53	0.66
t̄tH had $120 < p_T^{\gamma\gamma} < 200$ Tag1	2.1	83.3%	4.6%	2.9%	0.5%	86.2%	4.2%	1.7%	1.76	0.40
t̄tH had $120 < p_T^{\gamma\gamma} < 200$ Tag2	1.7	74.3%	10.0%	4.6%	0.6%	76.5%	6.3%	2.0%	1.65	0.29
t̄tH had $120 < p_T^{\gamma\gamma} < 200$ Tag3	2.6	62.2%	15.4%	8.4%	1.2%	64.7%	8.5%	1.9%	1.73	0.14
t̄tH had $200 < p_T^{\gamma\gamma} < 300$ Tag0	2.0	90.1%	0.5%	0.4%	0.1%	92.3%	3.8%	2.9%	1.44	0.72
t̄tH had $200 < p_T^{\gamma\gamma} < 300$ Tag1	1.5	74.6%	8.8%	3.1%	0.7%	77.0%	6.8%	3.5%	1.47	0.54
t̄tH had $200 < p_T^{\gamma\gamma} < 300$ Tag2	1.7	56.5%	18.8%	8.4%	0.4%	58.0%	10.5%	3.8%	1.59	0.30
t̄tH had $p_T^{\gamma\gamma} > 300$ Tag0	2.5	73.8%	8.3%	1.6%	0.8%	74.9%	7.7%	6.8%	1.44	0.77
t̄tH had $p_T^{\gamma\gamma} > 300$ Tag1	1.9	45.6%	27.1%	7.3%	1.4%	46.0%	11.4%	6.7%	1.56	0.57