

Analysis categories	SM 125 GeV Higgs boson expected signal								S/S+B
	Total	Target	Production Mode Fractions				$\sigma_{\text{eff}}$		
	Yield	Fraction	ggH	bbH	qqH	VH lep	Top		
0J low $p_T^{\gamma\gamma}$ Tag0	294.2	86.5%	98.6%	1.1%	0.3%	-	-	1.93	0.06
0J low $p_T^{\gamma\gamma}$ Tag1	340.0	89.6%	98.9%	1.0%	0.1%	-	-	2.29	0.03
0J low $p_T^{\gamma\gamma}$ Tag2	292.7	89.7%	98.9%	1.0%	0.1%	-	-	2.51	0.01
0J high $p_T^{\gamma\gamma}$ Tag0	892.5	83.0%	97.0%	1.3%	1.6%	-	-	1.82	0.07
0J high $p_T^{\gamma\gamma}$ Tag1	1156.7	79.8%	96.8%	1.4%	1.8%	0.1%	-	2.38	0.03
0J high $p_T^{\gamma\gamma}$ Tag2	743.7	80.1%	96.9%	1.4%	1.6%	0.1%	-	2.62	0.01
1J low $p_T^{\gamma\gamma}$ Tag0	192.0	66.2%	89.9%	0.9%	8.7%	0.6%	-	1.62	0.09
1J low $p_T^{\gamma\gamma}$ Tag1	283.5	66.3%	89.7%	0.8%	8.9%	0.6%	-	1.96	0.05
1J low $p_T^{\gamma\gamma}$ Tag2	240.8	65.9%	89.8%	0.8%	8.8%	0.7%	-	2.35	0.02
1J med $p_T^{\gamma\gamma}$ Tag0	74.4	65.9%	81.5%	0.3%	17.6%	0.6%	-	1.62	0.18
1J med $p_T^{\gamma\gamma}$ Tag1	215.1	68.8%	85.1%	0.5%	13.4%	1.0%	-	1.82	0.10
1J med $p_T^{\gamma\gamma}$ Tag2	373.3	67.9%	85.0%	0.5%	13.4%	1.2%	-	2.04	0.05
1J high $p_T^{\gamma\gamma}$ Tag0	18.2	61.2%	77.6%	0.1%	22.2%	0.1%	-	1.46	0.35
1J high $p_T^{\gamma\gamma}$ Tag1	60.4	63.2%	77.6%	0.1%	22.1%	0.1%	-	1.78	0.16
1J high $p_T^{\gamma\gamma}$ Tag2	66.3	63.2%	78.1%	0.1%	21.2%	0.6%	-	2.02	0.06
$\geq 2$ J low $p_T^{\gamma\gamma}$ Tag0	18.4	53.1%	77.5%	0.6%	18.9%	0.8%	2.2%	1.47	0.06
$\geq 2$ J low $p_T^{\gamma\gamma}$ Tag1	67.1	53.2%	76.3%	0.7%	19.6%	0.7%	2.7%	1.91	0.03
$\geq 2$ J low $p_T^{\gamma\gamma}$ Tag2	39.0	49.0%	72.2%	0.6%	21.3%	0.8%	5.0%	2.31	0.01
$\geq 2$ J med $p_T^{\gamma\gamma}$ Tag0	25.4	63.5%	81.0%	0.1%	17.4%	0.1%	1.4%	1.49	0.16
$\geq 2$ J med $p_T^{\gamma\gamma}$ Tag1	76.3	60.9%	79.3%	0.1%	18.5%	0.2%	1.9%	1.78	0.07
$\geq 2$ J med $p_T^{\gamma\gamma}$ Tag2	122.3	59.5%	77.9%	0.1%	18.8%	0.5%	2.7%	2.09	0.03
$\geq 2$ J high $p_T^{\gamma\gamma}$ Tag0	37.6	67.3%	79.8%	-	18.5%	0.2%	1.6%	1.58	0.20
$\geq 2$ J high $p_T^{\gamma\gamma}$ Tag1	25.9	67.0%	78.3%	-	19.6%	0.3%	1.8%	1.76	0.12
$\geq 2$ J high $p_T^{\gamma\gamma}$ Tag2	70.1	61.3%	76.0%	-	20.6%	0.7%	2.8%	1.93	0.05
BSM low $p_T^{\gamma\gamma}$ Tag0	30.2	77.3%	79.1%	-	19.4%	-	1.5%	1.48	0.36
BSM low $p_T^{\gamma\gamma}$ Tag1	36.5	72.6%	76.1%	-	21.2%	-	2.7%	1.89	0.11
BSM med-low $p_T^{\gamma\gamma}$ Tag0	14.8	77.3%	78.8%	-	18.9%	0.3%	2.0%	1.44	0.38
BSM med-low $p_T^{\gamma\gamma}$ Tag1	4.5	66.7%	69.2%	-	22.5%	1.2%	7.1%	1.58	0.08
BSM med-high $p_T^{\gamma\gamma}$	3.0	58.3%	62.0%	-	31.4%	1.1%	5.6%	1.41	0.24
BSM high $p_T^{\gamma\gamma}$	0.8	73.0%	73.3%	-	21.2%	1.7%	3.7%	1.22	0.37