

Phase space region	Observable	Bin boundaries							
<i>Baseline</i> $p_T^{\gamma\gamma} / m_{\gamma\gamma} > 1/3$ $p_T^{\gamma\gamma} / m_{\gamma\gamma} > 1/4$ $ \eta^{\gamma\gamma} < 2.5$ $\mathcal{I}_{\text{gen}}^{\gamma} < 10 \text{ GeV}$	$p_T^{\gamma\gamma}$	0	5	10	15	20	25	30	35
		45	60	80	100	120	140	170	200
		250	350	450	∞				
	n_{jets}	0	1	2	3	≥ 4			
	$ \mathbf{y}^{\gamma\gamma} $	0.0	0.1	0.2	0.3	0.45	0.6	0.75	0.90
		2.5							
	$ \cos(\theta^*) $	0.0	0.07	0.15	0.22	0.35	0.45	0.55	0.75
		1.0							
	$ \phi_\eta^* $	0.0	0.05	0.1	0.2	0.3	0.4	0.5	0.7
		1.0	1.5	2.5	4.0	∞			
	$p_T^{\gamma\gamma}, n_{\text{jets}} = 0$	0	5	10	15	20	25	30	35
		45	60	∞					
	$p_T^{\gamma\gamma}, n_{\text{jets}} = 1$	0	30	60	100	170	∞		
	$p_T^{\gamma\gamma}, n_{\text{jets}} > 1$	0	100	170	250	350	∞		
	n_{bjets}	0	1	≥ 2					
n_{leptons}	0	1	≥ 2						
$p_{\text{T}}^{\text{miss}}$	0	30	50	100	200	∞			
<i>1-jet</i> Baseline + ≥ 1 jet p_{T}^{j} > 30 GeV $ \eta^{\text{j}} < 2.5$	p_{T}^{j}	30	40	55	75	95	120	150	200
		∞							
	$ \mathbf{y}^{\text{j1}} $	0.0	0.3	0.6	0.9	1.2	1.6	2.0	2.5
	$ \Delta\phi_{\gamma\gamma, \text{j1}} $	0.0	2.0	2.6	2.85	3.0	3.07	π	
	$ \Delta\mathbf{y}_{\gamma\gamma, \text{j1}} $	0.0	0.3	0.6	1.0	1.4	1.9	2.5	∞
	$\tau_{\text{C}}^{\text{j}}$	< 15	15	20	30	50	80	∞	
	$p_T^{\gamma\gamma}, \tau_{\text{C}}^{\text{j}} < 15 \text{ GeV}$	0	45	120	∞				
	$p_T^{\gamma\gamma}, 15 \text{ GeV} \leq \tau_{\text{C}}^{\text{j}} < 25 \text{ GeV}$	0	45	120	∞				
	$p_T^{\gamma\gamma}, 25 \text{ GeV} \leq \tau_{\text{C}}^{\text{j}} < 40 \text{ GeV}$	0	120	∞					
	$p_T^{\gamma\gamma}, 40 \text{ GeV} \leq \tau_{\text{C}}^{\text{j}}$	0	200	350	∞				
<i>2-jets</i> Baseline + ≥ 2 jets p_{T}^{j} > 30 GeV $ \eta^{\text{j}} < 4.7$	p_{T}^{j2}	30	40	65	90	150	∞		
	$ \mathbf{y}^{\text{j2}} $	0.0	0.6	1.2	1.8	2.5	3.5	5.0	
	$ \Delta\phi_{\text{j1, j2}} $	0.0	0.5	0.9	1.3	1.7	2.5	π	
	$ \Delta\phi_{\gamma\gamma, \text{j1, j2}} $	0.0	2.0	2.7	2.95	3.07	π		
	$ \bar{\eta}_{\text{j1, j2}} - \eta_{\gamma\gamma} $	0.0	0.2	0.5	0.85	1.2	1.7	∞	
	m^{jj}	0	75	120	180	300	500	1000	∞
	$ \Delta\eta_{\text{j1, j2}} $	0.0	0.7	1.6	3.0	5.0	∞		
<i>VBF-enriched</i> 2-jets + $\Delta\eta^{\text{jj}} > 3.5$ $m^{\text{jj}} > 200 \text{ GeV}$	$p_{\text{T}}^{\gamma\gamma}$	0	30	60	120	200	∞		
	p_{T}^{j2}	30	40	65	90	150	∞		
	$ \Delta\phi_{\text{j1, j2}} $	0.0	0.5	0.9	1.3	1.7	2.5	π	
	$ \Delta\phi_{\gamma\gamma, \text{j1, j2}} $	0.0	2.0	2.7	2.95	3.07	π		