

### Flex Lighting Solutions: Grow Solution Alternatives

Solution Scenario	Luminaire				PAR Max		PAR Average		Total Units Installed	Total Power		Notes
	Lumens	Power	lm/W	Dimming	Value	Delta to Gavita	Value	Delta to Gavita		kW	Delta to Gavita	
0) Baseline Luminaire Gavita 4'x4' spacing, 36" above		1080			1146	n/a	938	n/a	71	76.7	n/a	Existing solution for comparison purposes
1) HiOptiX, 3'x3' spacing, 36" Above	68277	572	119	100%	882	-23%	714	-24%	118	67.5	-12%	<b>Suboptimal Solution</b> -Lower PAR and equivalent energy
2) HiOptiX, 2'x2' spacing, 36" Above	68277	572	119	100%	1823	59%	1525	63%	248	141.9	85%	<b>Suboptimal Solution</b> -Insane PAR but higher energy and no payback
3) 6-Mod, Brickwalled, 36" Above Grow at 100%	80000	640	125	100%	1278	12%	1069	14%	134	85.8	12%	<b>Marginal Solution</b> -Equivalent PAR and equivalent energy
4) 6-Mod, Brickwalled, 24" Above Grow at 100%	80000	640	125	100%	2283	99%	1910	104%	134	85.8	12%	<b>Workable Solution</b> -Insane PAR and equivalent energy -Equivalent PAR and insane energy savings
Grow at 50%	80000	640	125	50%	1142	0%	955	2%	134	42.9	-44%	
5) 6-Mod, Brickwalled, 24" Above Performance at 100%	39669	260	153	100%	1132	-1%	947	1%	134	34.8	-55%	<b>Workable Solution</b> -Equivalent PAR and insane energy savings -Equivalent PAR and insane energy savings
Value at 100%	39748	298	133	100%	1134	-1%	949	1%	134	39.9	-48%	
6) 6-Mod, Brickwalled, 12" Above Performance at 100%	39669	260	153	100%	2447	113%	2047	118%	134	34.8	-55%	<b>Great Solution</b> -Insane PAR and insane energy savings -Equivalent PAR and ludicrous energy savings
Performance at 50%	39669	260	153	50%	1223	7%	1023	9%	134	17.4	-77%	
7) 6-Mod, Brickwalled, 12" Above Grow at 100%	80000	640	125	100%	4934	331%	4127	340%	134	85.8	12%	<b>Excellent Solution</b> -Ludicrous PAR and equivalent energy -Insane PAR and insane energy savings -Equivalent PAR and ludicrous energy savings <b>"Any ludicrous operating mode the grower desires"</b>
Grow at 50%	80000	640	125	50%	2467	115%	2064	120%	134	42.9	-44%	
Grow at 25%	80000	640	125	25%	1234	8%	1032	10%	134	21.4	-72%	
8) 6-Mod, Brickwalled, 12" Above Value at 100%	39748	298	133	100%	2452	114%	2051	119%	134	39.9	-48%	<b>Excellent Solution</b> -Insane PAR and insane energy savings -Equivalent PAR and ludicrous energy savings <b>"Lowest upfront cost and best payback"</b>
Value at 50%	39748	298	133	50%	1226	7%	1025	9%	134	20.0	-74%	