

600W HPS Budget Lamp Testing

Lamp Description	Test	Average* PPFD (μmol/m ² /s)	Average* Lux	Declared Manufacturer Lumen output	Declared Lifetime (hrs)	Declared CCT (K)	•Tested CCT (K)	•PPFD 380-780nm (μmol/m ² /s)	•PFD-B (μmol/m ² /s)	•PFD-G (μmol/m ² /s)	•PFD-R (μmol/m ² /s)	•PFD-UV (μmol/m ² /s)	•PFD-FR (μmol/m ² /s)			
LUMii Black 600W HPS (sample 1)	0 hours	243.7	15323.6	88,000	20,000	2,000	2067	410.1	17.1	229.5	139.1	1.00	30.0			
	100 hrs	236.7	15223.7				2068	388.4	16.4	223.4	126.5	0.85	27.4			
LUMii Black 600W HPS (sample 2)	0 hours	244.9	15904.1				2061	414.7	17.1	230.6	141.7	1.04	30.9			
	100 hrs	245.0	15790.9				2073	419.3	17.7	240.3	137.6	0.99	29.4			
		242.6	15560.6						2067.25	408.1	17.1	231.0	136.2	0.97	29.4	
LUMii SunBlaster 600W HPS (sample 1)	0 hours	244.5	15617.8				88,000	32,000	2,000	2075	406.6	17.9	235.6	128.3	1.09	30.1
	100 hrs	238.7	15889.4							2080	402.6	17.9	237.7	123.3	1.05	28.9
LUMii SunBlaster 600W HPS (sample 2)	0 hours	240.6	15996.6							2069	396.3	17.3	230.1	124.6	1.08	29.5
	100 hrs	244.2	15857.1	2075	406.6	17.8				237.5	127.0	1.04	29.7			
		242.0	15840.2			2074.75				403.0	17.7	235.2	125.8	1.06	29.6	
Omega 600W HPS (sample 1)	0 hours	226.2	14789.3	90,000	24,000	2,000				2084	368.1	18.1	214.9	117.8	1.18	22.1
	100 hrs	227.7	14930.9							2076	365.4	17.2	210.8	119.5	1.08	22.7
Omega 600W HPS (sample 2)	0 hours	245.9	15578.9							2086	395.9	19.3	227.5	130.5	1.28	23.8
	100 hrs	242.4	15057.4				2074	390.6	18.8	222.8	130.3	1.19	23.9			
		235.6	15089.1						2080	380.0	18.3	219.0	124.5	1.18	23.1	
Ultra Vivid 600W HPS (sample 1)	0 hours	234.4	15484.8				90,000	24,000	2,000	2073	362.5	14.2	212.6	117.5	1.01	23.0
	100 hrs	245.7	15642.2							2069	389.9	15.0	220.5	133.7	1.04	25.8
Ultra Vivid 600W HPS (sample 2)	0 hours	236.5	15197.7							2083	399.3	18.1	232.6	124.7	1.14	29.0
	100 hrs	237.9	15849.1	2084	401.9	18.2				234.6	125.6	1.08	28.7			
		238.6	15543.5			2077.25				388.4	16.4	225.1	125.4	1.06	26.6	
Parbright 600W HPS (sample 1)	0 hours	230.0	14748.7	No Info Available	No Info Available	No Info Available				2074	368.2	17.3	217.1	117.8	1.07	21.0
	100 hrs	234.4	15488.5							2071	372.0	17.3	217.7	120.5	0.97	21.8
Parbright 600W HPS (sample 2)	0 hours	232.9	14671.2							2068	370.6	17.1	213.1	123.3	1.05	22.1
	100 hrs	232.7	14862.9				2063	385.1	17.4	219.7	129.6	0.96	23.8			
		232.5	14942.8						2069.0	374.0	17.3	216.9	122.80	1.01	22.2	

Trial Info
Average of 25 measurements on 1m ² grid at 1m height to centred lamp in a dark room
All lamps tested using the same LUMii Black Electronic Ballast and LUMii Black reflector
All PPFD measurements, 400-700nm, taken using Licor LI 250a meter
All Lux measurements taken using Testo 545 Lux meter
Spectrum test report produced by UPPrtek MK3505 at 0.85m
Lamps aged to 100 hours using LUMii Black Electronic ballasts, 8 hours per ignition

