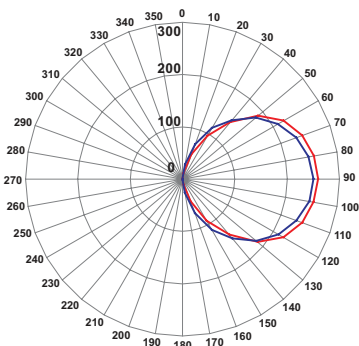


Description	S Brand 6" 15W	EFFE Brand 6" 6W	Remarks
Optical			
Lamp lumen output (Lumen)	672.1	724.02	> 100 lm/Watt - good saving in power consumption > 75 lm/Watt - moderate saving in power consumption < 60 lm/Watt - poor saving in power consumption < 50 lm/Watt - No point in using the lamp
Efficacy (Lumen/Watt) (Lm/w)	43.25	103.43	
LED make	-	Nichia	TOP Branded LED Manufacturers - Osram, Nichia, LUMI LED's, CREE Branded - Assured Quality and Life
No of LED's (Nos)	30	42	
LED Operated at (mA)	149	46.7	< 50% - less stress on LED, High Life
LED max rated current (mA)	180	180	< 75% - more stress on LED, moderate Life
% of Max rated used (%)	82.78	25.93	< 100% - Higher stress, Low life
Color Temperature (Kelvin)	5888	6257	~2700K - Warm White ~4000K - Neutral White ~5000K - Cool white ~6000K - Day Light
Thermal			
Solder point temperature raise @ 25°C ambient (°C)	34.9	11.6	
Estimated Junction temperature raise @ 25°C ambient (°C)	68.45	38.88	LED Junction Temperature < 60° - Excellent Life
Estimated Junction temperature raise @ 35°C ambient (°C)	78.45	48.88	LED Junction Temperature < 85°C - Good Life
Estimated Junction temperature raise @ 45°C ambient (°C)	88.45	58.88	LED Junction Temperature > 100°C - Poor life not recommended
Electrical			
Lamp power (Watts)	13.8	5.7	
Electrical I/P power (Watts)	15.54	7	55% of Power Saved compared to S brand 15W
Power Factor	0.97	0.93	> 0.9
VA	15.94	7.56	
I _{thd} (%)	20.83	26.22	I _{thd} < 30%
V _{thd} (%)	3.85	4.29	V _{thd} < 10%
Efficiency (%)	88.79	82	Minimum Efficiency > 80%
Power supply PCB	Single side-FR4	Double side - FR4	Life of normal capacitor - 1000 hours at 85°C
Capacitors	Single	Dual with Redundancy	High Life capacitor - 10000 hours at 105°C This factor causes lot of difference in life time of the power driver
Line filter circuit	No	Yes	Line filter protects the power supply from Power lineDisturbances
Driver short circuit protection	Yes	Yes	
Driver open circuit protection	Yes	Yes	
Driver I/P surge protection	?	Yes IEC 61000-4-5	Sudden Surges due to Lightening or electrical disturbances will damage the driver so driver should be immune towards these surges
Driver transient protection	?	Yes IEC 61000-4-4	Electrical transients damage the electronic components hence the design should ensure proper immunity
Driver voltage dips and interruption protection	?	Yes IEC 61000-4-11	Electrical Line fluctuations will cause the driver to malfunction so the driver should work well even in fluctuating power conditions
Temperature raise in power supply compartment (°C)	41	20	< 25°C - Good, More the temperature raise more it degrades the life
Mechanical			
Luminaire Cover	Plastic	UV Stabilised Polycarbonate sheet	UV Stabilised - retains whitishness hence better light output. Un Stabilised - turns yellowish/dirty white over period of time, reducing light o/p
Housing type	Sheet Metal	ABS Plastic	Sheet Metal - Possibility of rusting and denting ABS Plastic - No rust and dents more elegant
Ingress Protection	?	IP30	IP Protected - no insect and dust entry more clean and more light Non IP-Possibility of dust and insect entry making it dirty and degrades light output
Performance			
Case temperature raise above ambient (heat sink) (°C)	20.58	10.51	< 15°C-works well in Indian climatic conditions without degradation in light output. < 30°C-moderate performance in Indian climatic conditions with degradation in light output > 40°C - poor performance with higher degradation in light output
24 X 7	?	Yes	
Operation Operating Ambient temperature range (°C)	?	0 to 60	
Warranty (years)	2	5	
Life (years)	?	10	



Illumination Pattern

- S Brand 6" - 15W
- EFFE Brand 6" - 6W

* The specifications are subjected to change