

Initial technical specification of CFL

(specs are at 100h, unless specified differently)

Product Name		PAR38 220V 15W
Lamp No.		ES1502015
Lamp Shape		PAR38 STYLE / CLEAR
Inner Tube Available		3U or SPIRAL
Lamp Parameter	Main Voltage (V)	220V+10V/-15V; 50Hz
	Input current (mA)	130±5
	T.H.D.	<120%
	Input Power (W)	15W±1.3W
	PF.	>0.5
	Light Output (Lm)	>940Lm for 2700K
		>930Lm for 4500K
		>920Lm for 6400K
	Efficacy (Lm/w)	>62Lm/w
	Color temperature	Warm Light 2700K
Cool Light 4500K		
Day Light 6400K		
Burner Parameter	Burner voltage (V)	90±2
	Burner Current (mA)	100±10
	C.F.	<1.7
	Filament Current (mA)	70±10
	Cathode Current (mA)	100±10
	Burner Power (W)	13.0±1.3W
	Output Frequency (Hz)	25KHz -- 50KHz
Maintenance	0 to 100h Light Drop	<5%
	1000h	>90%
	2000h	>80%
	3000h	>75%
ON/OFF testing (on: 25s/off:35s)		10000 Swithes
Average Life Hour (After 40% loss of lumens)		10,000 hrs.
Thermo testing (Environment Temp.: 25°C Humidity: 65% Lamp Cap- Up Burning)	Power Transistor Surface Temp.	<53°C
	Elec. Capacitor Temp.	<45°C
	Coil Temp.	<55°C
	PCB Surface Temp.	<45°C
	Tube foot Temp.(Electro Portion)	<100°C
	Outer Housing (Near Base)	<40°C
Safety requirement	According to IEC 968	CE(EMC/LVD) approved
Mechanical Strength	Torsion test (Nm)	>3
Starting behavior	Starting time (S)	0.4s -- 0.8s
	Starting Voltage (V)	160V
Dimension	Neck diameter (inch)	4-3/4(3U), 4-3/4(SP) in Dia.
	Total Length (inch)	6-1/2(3U), 6-1/2(SP) M.O.L.
Lamp Cap		E26/E27/B22

Initial technical specification of CFL

(specs are at 100h, unless specified differently)

Product Name		PAR38 220V 20W
Lamp No.		ES1502020
Lamp Shape		PAR38 STYLE / CLEAR
Inner Tube Available		3U or SPIRAL
Lamp Parameter	Main Voltage (V)	220V+10V/-15V; 50Hz
	Input current (mA)	160±5
	T.H.D.	<120%
	Input Power (W)	20W±2W
	PF.	>0.5
	Light Output (Lm)	>1270Lm for 2700K
		>1260Lm for 4500K
		>1250Lm for 6400K
Efficacy (Lm/w)	>62Lm/w	
Color temperature	Warm Light 2700K	
	Cool Light 4500K	
	Day Light 6400K	
Burner Parameter	Burner voltage (V)	95±2
	Burner Current (mA)	280±10
	C.F.	<1.7
	Filament Current (mA)	130±10
	Cathode Current (mA)	300±10
	Burner Power (W)	18W±2W
	Output Frequency (Hz)	25KHz -- 50KHz
Maintenance	0 to 100h Light Drop	<5%
	1000h	>90%
	2000h	>80%
	3000h	>75%
ON/OFF testing (on: 25s/off:35s)		10000 Swithes
Average Life Hour (After 40% loss of lumens)		10,000 hrs.
Thermo testing (Environment Temp.: 25°C Humidity: 65% Lamp Cap- Up Burning)	Power Transistor Surface Temp.	<60°C
	Elec. Capacitor Temp.	<45°C
	Coil Temp.	<80°C
	PCB Surface Temp.	<40°C
	Tube foot Temp.(Electro Portion)	<90°C
	Outer Housing (Near Base)	<35°C
Safety requirement	According to IEC 968	CE(EMC/LVD) approved
Mechanical Strength	Torsion test (Nm)	>3
Starting behavior	Starting time (S)	0.4s -- 0.8s
	Starting Voltage (V)	160V
Dimension	Neck diameter (inch)	4-3/4(3U), 4-3/4(SP) in Dia.
	Total Length (inch)	6-1/2(3U), 6-1/2(SP) M.O.L.
Lamp Cap		E26/E27/B22

Initial technical specification of CFL

(specs are at 100h, unless specified differently)

Product Name		PAR38 220V 23W
Lamp No.		ES1502023
Lamp Shape		PAR38 STYLE / CLEAR
Inner Tube Available		3U or SPIRAL
Lamp Parameter	Main Voltage (V)	220V+10V/-15V; 50Hz
	Input current (mA)	210±5
	T.H.D.	<120%
	Input Power (W)	23W±2W
	PF.	>0.5
	Light Output (Lm)	>1450Lm for 2700K
		>1430Lm for 4500K
		>1410Lm for 6400K
	Efficacy (Lm/w)	>62Lm/w
	Color temperature	Warm Light 2700K
Cool Light 4500K		
Day Light 6400K		
Burner Parameter	Burner voltage (V)	105±2
	Burner Current (mA)	280±10
	C.F.	<1.7
	Filament Current (mA)	130±10
	Cathode Current (mA)	300±10
	Burner Power (W)	21W±2W
	Output Frequency (Hz)	25KHz -- 50KHz
Maintenance	0 to 100h Light Drop	<5%
	1000h	>90%
	2000h	>80%
	3000h	>75%
ON/OFF testing (on: 25s/off:35s)		10000 Swithes
Average Life Hour (After 40% loss of lumens)		10,000 hrs.
Thermo testing (Environment Temp.: 25°C Humidity: 65% Lamp Cap- Up Burning)	Power Transistor Surface Temp.	<60°C
	Elec. Capacitor Temp.	<45°C
	Coil Temp.	<80°C
	PCB Surface Temp.	<40°C
	Tube foot Temp.(Electro Portion)	<90°C
	Outer Housing (Near Base)	<35°C
Safety requirement	According to IEC 968	CE(EMC/LVD) approved
Mechanical Strength	Torsion test (Nm)	>3
Starting behavior	Starting time (S)	0.4s -- 0.8s
	Starting Voltage (V)	160V
Dimension	Neck diameter (inch)	4-3/4(3U), 4-3/4(SP) in Dia.
	Total Length (inch)	6-1/2(3U), 6-1/2(SP) M.O.L.
Lamp Cap		E26/E27/B22

Initial technical specification of CFL

(specs are at 100h, unless specified differently)

Product Name		PAR38 220V 20W
Lamp No.		ES1502020HF
Lamp Shape		PAR38 High P/F Style
Inner Tube Available		3U or SPIRAL
Lamp Parameter	Main Voltage (V)	220V+10V/-15V; 50Hz
	Input current (mA)	160±5
	T.H.D.	<120%
	Input Power (W)	20W±2W
	PF.	>0.9
	Light Output (Lm)	>1270Lm for 2700K
		>1260Lm for 4500K
		>1250Lm for 6400K
	Efficacy (Lm/w)	>62Lm/w
Color temperature	Warm Light 2700K	
	Cool Light 4500K	
	Day Light 6400K	
Burner Parameter	Burner voltage (V)	95±2
	Burner Current (mA)	280±10
	C.F.	<1.7
	Filament Current (mA)	130±10
	Cathode Current (mA)	300±10
	Burner Power (W)	18W±2W
	Output Frequency (Hz)	25KHz -- 50KHz
Maintenance	0 to 100h Light Drop	<5%
	1000h	>90%
	2000h	>80%
	3000h	>75%
ON/OFF testing (on: 25s/off:35s)		10000 Switches
Average Life Hour (After 40% loss of lumens)		10,000 hrs.
Thermo testing (Environment Temp.: 25°C Humidity: 65% Lamp Cap- Up Burning)	Power Transistor Surface Temp.	<60°C
	Elec. Capacitor Temp.	<45°C
	Coil Temp.	<80°C
	PCB Surface Temp.	<40°C
	Tube foot Temp.(Electro Portion)	<90°C
	Outer Housing (Near Base)	<35°C
Safety requirement	According to IEC 968	CE(EMC/LVD) approved
Mechanical Strength	Torsion test (Nm)	>3
Starting behavior	Starting time (S)	0.4s -- 0.8s
	Starting Voltage (V)	160V
Dimension	Neck diameter (inch)	4-3/4(3U), 4-3/4(SP) in Dia.
	Total Length (inch)	6-1/2(3U), 6-1/2(SP) M.O.L.
Lamp Cap		E26/E27/B22

Initial technical specification of CFL

(specs are at 100h, unless specified differently)

Product Name		PAR38 220V 23W
Lamp No.		ES1502023HF
Lamp Shape		PAR38 High P/F Style
Inner Tube Available		3U or SPIRAL
Lamp Parameter	Main Voltage (V)	220V+10V/-15V; 50Hz
	Input current (mA)	210±5
	T.H.D.	<120%
	Input Power (W)	23W±2W
	PF.	>0.9
	Light Output (Lm)	>1450Lm for 2700K
		>1430Lm for 4500K
		>1410Lm for 6400K
	Efficacy (Lm/w)	>62Lm/w
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	Cool Light 4500K	
	Day Light 6400K	
Burner Parameter	Burner voltage (V)	105±2
	Burner Current (mA)	280±10
	C.F.	<1.7
	Filament Current (mA)	130±10
	Cathode Current (mA)	300±10
	Burner Power (W)	21W±2W
	Output Frequency (Hz)	25KHz -- 50KHz
Maintenance	0 to 100h Light Drop	<5%
	1000h	>90%
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	3000h	>75%
ON/OFF testing (on: 25s/off:35s)		10000 Swithes
Average Life Hour (After 40% loss of lumens)		10,000 hrs.
Thermo testing (Environment Temp.: 25°C Humidity: 65% Lamp Cap- Up Burning)	Power Transistor Surface Temp.	<60°C
	Elec. Capacitor Temp.	<45°C
	Coil Temp.	<80°C
	PCB Surface Temp.	<40°C
	Tube foot Temp.(Electro Portion)	<90°C
	Outer Housing (Near Base)	<35°C
Safety requirement	According to IEC 968	CE(EMC/LVD) approved
Mechanical Strength	Torsion test (Nm)	>3
Starting behavior	Starting time (S)	0.4s -- 0.8s
	Starting Voltage (V)	160V
Dimension	Neck diameter (inch)	4-3/4(3U), 4-3/4(SP) in Dia.
	Total Length (inch)	6-1/2(3U), 6-1/2(SP) M.O.L.
Lamp Cap		E26/E27/B22