

RefLED ES50 *RefLED ES50 V5 610lm 830 36° SL* 0027462



Product features

- • Compact, energy efficient and exceptional value for money product.
 - Same shape and size as halogen GU10 lamp
 - Compact Cluster SMD technology enabling high efficiency with halogen look
- • Reduced visible heat sink from the front
- Available in 36 degree
- High lumen efficacy
- • 15,000 hours average rated life
- 3 years warranty



PRODUCT OVERVIEW

Product name	RefLED ES50 V5 610lm 830 36° SL
Technology	LED
Watt (Rated) (W)	7
Cap/Base	GU10
Fixture rating	Open
General application	Office, Hospitality, Retail, Education, Residential & Consumer, Museums & Galleries
ETIM Class	EC001959
Warranty	3 years
Colour temperature (K)	3000
Light colour	Warm White
CRI (Ra)	80
Colour Variation Initial (SDCM)	SDCM6
Colour Consistency (SDCM)	6
Beam Angle (°)	36
Wattage (W)	7
Product Voltage (V)	230
Average life (Nominal) (h)	15000
Product EAN number	5410288274621

DATA TABLE

General data	
Product name	RefLED ES50 V5 610Im 830 36° SL
Technology	LED
Watt (Rated) (W)	7
Cap/Base	GU10
Fixture rating	Open
General application	Office, Hospitality, Retail, Education, Residential & Consumer, Museums & Galleries
Performance ambient temperature Tq (°C)	25
ETIM Class	EC001959
Warranty	3 years



RefLED ES50 *RefLED ES50 V5 610lm 830 36° SL* 0027462

Wattage (W)7Equivalent watt (W)85Starting time (max) (s)0.5Warm-up time to 60% of full light (max) (s)1.0Product Voltage (V)230Lamp power factor0.5No. Of switching cycles before premature failures>50000Inrush Current (A)6Nominal Frequency (Hz)50/60HzMax. Luminaires per 10A C Breaker100Max. Luminaires per 16A C Breaker160Max. Luminaires per 20A C Breaker200Lifetime data15000Average life (Nominal) (h)15000	Optical data	
Light colourWarm WhiteCR (Ra)80Colour Variation Initial (SDCM)SDCM6Colour Consistency (SDCM)6Luminous Intensity (cd)1350Beam Angle (°)36Lumen maintenance at end of nominal Iffe (%)7Electrical data70Wattage (W)7Equivalent watt (W)85Starting time (max) (s)0.5Warmup time to 60% of full light (max) (s)1.0Product Voltage (V)230Lamp power factor0.5No. Of switching cycles before premature afultures50000Finaler50000Max. Luminaires per 10A C Breaker100Max. Luminaires per 10A C Breaker100Max. Luminaires per 10A C Breaker160Max. Luminaires per 10A C Breaker15000Physical data15000Physical data50Physical data50Physical data50Verage life (Nominal) (h)50Verage life (Rated) (h)50Verage life (Rated) (h)50Veight (kg)0.047Packaging single ength / height (m)5.2Packaging single length / height (m)5.2Packaging single ength / height (m)5.2Packaging single ength / height (m)5.2DuN14 (Inner)5.2DuN14 (Inner)5.2DuN14 (Inner)5.2DuN14 (Inner)5.2DuN14 (Inner)5.2DuN14 (Inner)5.2DuN14 (Inner)5.2	Colour temperature (K)	3000
CR (Ra)80Colour Variation Initial (SDCM)SDCM6Colour Variation Initial (SDCM)6Luminous Intensity (cd)1350Beam Angle (*)36Lumen meintenance at end of nominal life (%)7Electrical data7Wattage (W)7Equivalent watt (W)85Starting time (max) (s)0.5Warm-up time to 60% of full light (max) (s)1.0Product Voltage (V)230Lamp power factor0.5No. of switching cycles before premature fultures50000Inrush Current (A)6Nominal Frequency (Hz)50%Max. Luminaires per 10A C Breaker100Max. Luminaires per 10A C Breaker100Morinal Product Diameter (mm)50Verage life (Rated) (h)1000Packaging single degth (em)	,	Warm White
Colour Variation Initial (SDCM)SDCM6Colour Consistency (SDCM)6Luminous Intensity (cd)1350Beam Angle (*)36Lumen maintenance at end of nominal life (%)7Electrical data	-	80
Colour Consistency (SDCM)6Luminous Intensity (cd)1350Beam Angle (°)36Lumen maintenance at end of nominal life (%)70Electrical data70Wattage (W)7Equivalent watt (W)85Starting time (max) (s)0.5Warm-up time to 60% of full light (max) (s)1.0Product Voltage (V)230Lamp power factor0.5No. of switching cycles before premature railures50000Inrush Current (A)6Nominal Frequency (Hz)50/60HzMax. Luminaires per 10A C Breaker100Max. Luminaires per 10A C Breaker100 <td< th=""><th></th><th>SDCM6</th></td<>		SDCM6
Luminous Intensity (cd)1350Beam Angle (*)36Lumen maintenance at end of nominal life (%)7Electrical dataWattage (W)7Equivalent watt (W)85Starting time (max) (s)0.5Warm-up time to 60% of full light (max) (s)1.0Product Voltage (V)230Lamp power factor0.5No. Of switching cycles before premature fallures>50000Inrush Current (A)6Nominal Frequency (Hz)50/60HzMax. Luminaires per 10A C Breaker100Max. Luminaires per 20A C Breaker200Lifetime data200Average life (Nominal) (h)15000Average life (Rated) (h)15000Physical data50Nominal Product Length (mm)54Nominal Product Diameter (mm)50Veight (kg)0.047Packaging single length / height (cm)5.2Packaging single length / (cm)5.2Packaging single length (cm)5.2Packaging single length / height (cm)5.2Packaging single length (cm) <th></th> <th>6</th>		6
Beam Angle (*) 36 Lumen maintenance at end of nominal life (%) 70 Electrical data 70 Wattage (W) 7 Equivalent watt (W) 85 Starting time (max) (s) 0.5 Warm-up time to 60% of full light (max) (s) 1.0 (s) Product Voltage (V) 230 Lamp power factor 0.5 No. Of switching cycles before premeture failures >50000 Failures - Inrush Current (A) 6 Nominal Frequency (Hz) 50/60Hz Max. Luminaires per 10A C Breaker 100 Max. Luminaires per 20A C Breaker 100 Maxet per 10A C Breaker 100 Max. Luminaires per 20A C Breaker 100 Max. Luminaires per 10A C Breaker 100 Morinal Product Length (mn) 54 Nominal Product Diameter (mm) 50		1350
Lumen maintenance at end of nominal life (%) 7 Electrical data 7 Equivalent watt (W) 85 Starting time (max) (s) 0.5 Warm-up time to 60% of full light (max) (s) 1.0 (s) 7 Product Voltage (V) 230 Lamp power factor 0.5 No. Of switching cycles before premature failures >50000 Inrush Current (A) 6 Nominal Frequency (Hz) 50/60Hz Max. Luminaires per 10A C Breaker 100 Max. Luminaires per 10A C Breaker 100 Max. Luminaires per 20A C Breaker 100 Average life (Nominal) (h) 15000 Polycical data 1000 Nominal Product Longth (mm) 5 Nominal Product Diameter (mm) 5		36
Wattage (W)7Equivalent watt (W)85Starting time (max) (s)0.5Warm-up time to 60% of full light (max) (s)1.0Product Voltage (V)230Lamp power factor0.5No. Of switching cycles before premature fallures>50000Inrush Current (A)6Nominal Frequency (Hz)50/60HzMax. Luminaires per 16A C Breaker100Max. Luminaires per 16A C Breaker100Max. Luminaires per 16A C Breaker200Lifetime data	Lumen maintenance at end of nominal	70
Equivalent watt (W)85Starting time (max) (s)0.5Warm-up time to 60% of full light (max)1.0(s)230Product Voltage (V)230Lamp power factor0.5No. Of switching cycles before premature failures>50000Inrush Current (A)6Nominal Frequency (Hz)50/60HzMax. Luminaires per 10A C Breaker100Max. Luminaires per 10A C Breaker100Max. Luminaires per 20A C Breaker200Lifetime data200Average life (Nominal) (h)15000Average life (Rated) (h)15000Physical data50Nominal Product Length (mm)54Nominal Product Length (mm)50Weight (kg)0.047PackagingSingle packaging typeSingle packaging typeCartonPackaging single length / height (cm)6.5Packaging single length / height (cm)5.2DUN14 (inner)52410288274625Units per inner package6	Electrical data	
Equivalent watt (W)85Starting time (max) (s)0.5Warm-up time to 60% of full light (max) (s)1.0Product Voltage (V)230Lamp power factor0.5No. Of switching cycles before premature rallures>50000Inrush Current (A)6Nominal Frequency (Hz)50/60HzMax. Luminaires per 10A C Breaker100Max. Luminaires per 10A C Breaker100Max. Luminaires per 20A C Breaker200Lifetime data200Average life (Nominal) (h)15000Average life (Rated) (h)15000Physical data50Nominal Product Length (mm)54Nominal Product Length (mm)50Weight (kg)0.047PackagingStil0288274621Packaging single length / height (cm)5.2Packaging single length / height (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)52410288274625Units per inner package6	Wattage (W)	7
Starting time (max) (s)0.5Warm-up time to 60% of full light (max) (s)1.0Product Voltage (V)230Lamp power factor0.5No. Of switching cycles before premature failures>50000Inrush Current (A)6Nominal Frequency (Hz)50/60HzMax. Luminaires per 10A C Breaker100Max. Luminaires per 10A C Breaker100Max. Luminaires per 10A C Breaker100Max. Luminaires per 20A C Breaker100Max. Luminaires per 20A C Breaker100Max. Luminaires per 10A C Breaker15000Max. Luminaires per 10A C Breaker100Max. Luminaires per 20A C Breaker100Max. Luminaires per 10A C Breaker100Max. Luminaires per 10A C Breaker100Max. Luminaires per 10A C Breaker100Max. Luminaires per 20A C Breaker1000Polysical data1000Polysical data1000Nominal Product Length (mm)54Nominal Product Length (mm)50Weight (kg)0.047PackagingSingle packaging typeCartonProduct EAN number510288274621Packaging single length / height (cm)5.2Packaging single depth (cm)5.2Packaging single depth (cm)5.2		85
Warm-up time to 60% of full light (max) (s)1.0Product Voltage (V)230Lamp power factor0.5No. Of switching cycles before premature failures>50000Inrush Current (A)6Nominal Frequency (Hz)50/60HzMax. Luminaires per 10A C Breaker100Max. Luminaires per 16A C Breaker160Max. Luminaires per 20A C Breaker200Lifetime data200Average life (Nominal) (h)15000Average life (Rated) (h)15000Physical data0.047Nominal Product Length (mm)54Nominal Product Length (mm)50Veight (kg)0.047Packaging5410288274621Packaging single length / height (cm)5.2Packaging single length / height (cm)5.2Packaging single depth (cm)5.2DuN14 (inner)25410288274625Units per inner package6		0.5
Product Voltage (V)230Lamp power factor0.5No. Of switching cycles before premature failures50000Inrush Current (A)6Nominal Frequency (Hz)50/60HzMax. Luminaires per 10A C Breaker100Max. Luminaires per 16A C Breaker200Lifetime data200Average life (Nominal) (h)15000Average life (Rated) (h)15000Physical data54Nominal Product Length (mm)54Nominal Product Diameter (mm)50Veight (kg)0.047Packaging5410288274621Packaging single length / height (cm)5.2Packaging single width (cm)5.2DuN14 (inner)5.2DuN14 (inner)5.2UNTA (inner)5.2DuN14 (inner)5.2DuN14 (inner)5.2DuN14 (inner)5.2Dunta (inner)5.4Dunta (inner)	Warm-up time to 60% of full light (max)	1.0
Lamp power factor0.5No. Of switching cycles before premature failures>50000Inrush Current (A)6Nominal Frequency (Hz)50/60HzMax. Luminaires per 10A C Breaker100Max. Luminaires per 10A C Breaker160Max. Luminaires per 20A C Breaker200Lifetime data15000Average life (Nominal) (h)15000Average life (Rated) (h)15000Physical data50Nominal Product Length (mm)54Nominal Product Length (mm)50Weight (kg)0.047Packaging510288274621Packaging single length / height (cm)5.2Packaging single length (mm)5.2Packaging single depth (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6		230
No. Of switching cycles before premature failures>50000Inrush Current (A)6Nominal Frequency (Hz)50/60HzMax. Luminaires per 10A C Breaker100Max. Luminaires per 16A C Breaker160Max. Luminaires per 20A C Breaker200Lifetime data200Average life (Nominal) (h)15000Average life (Rated) (h)15000Physical data54Nominal Product Length (mm)54Nominal Product Diameter (mm)50Weight (kg)0.047Packaging5410288274621Product EAN number5410288274621Packaging single length / height (cm)6.5Packaging single depth (cm)5.2DUN14 (inner)52410288274625Units per inner package6		
failuresInrush Current (A)6Nominal Frequency (Hz)50/60HzMax. Luminaires per 10A C Breaker100Max. Luminaires per 16A C Breaker160Max. Luminaires per 20A C Breaker200Lifetime data200Average life (Nominal) (h)15000Average life (Rated) (h)15000Physical data54Nominal Product Length (mm)54Nominal Product Diameter (mm)50Weight (kg)0.047Packaging5110288274621Product EAN number6.5Packaging single length / height (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6		
Nominal Frequency (Hz)50/60HzMax. Luminaires per 10A C Breaker100Max. Luminaires per 16A C Breaker160Max. Luminaires per 20A C Breaker200Lifetime data200Average life (Nominal) (h)15000Average life (Rated) (h)15000Physical data54Nominal Product Length (mm)54Nominal Product Diameter (mm)50Weight (kg)0.047PackagingSational Sational Satisma Sa		
Max. Luminaires per 10A C Breaker100Max. Luminaires per 16A C Breaker160Max. Luminaires per 20A C Breaker200Lifetime data200Average life (Nominal) (h)15000Average life (Rated) (h)15000Physical data200Nominal Product Length (mm)54Nominal Product Diameter (mm)50Veight (kg)0.047Packaging2410288274621Product EAN number5410288274621Packaging single length / height (cm)6.5Packaging single length / height (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6	Inrush Current (A)	6
Max. Luminaires per 16A C Breaker160Max. Luminaires per 20A C Breaker200Lifetime data200Average life (Nominal) (h)15000Average life (Rated) (h)15000Physical data50Nominal Product Length (mm)54Nominal Product Diameter (mm)50Weight (kg)0.047Packaging51Single packaging typeCartonProduct EAN number5410288274621Packaging single length / height (cm)6.5Packaging single length / height (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)5.2Units per inner package6	Nominal Frequency (Hz)	50/60Hz
Max. Luminaires per 20A C Breaker200Lifetime data	Max. Luminaires per 10A C Breaker	100
Lifetime dataAverage life (Nominal) (h)15000Average life (Rated) (h)15000Physical data15000Nominal Product Length (mm)54Nominal Product Diameter (mm)50Weight (kg)0.047Packaging5410288274621Packaging single length / height (cm)6.5Packaging single length / height (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6	Max. Luminaires per 16A C Breaker	160
Average life (Nominal) (h)15000Average life (Rated) (h)15000Physical data54Nominal Product Length (mm)54Nominal Product Diameter (mm)50Weight (kg)0.047PackagingCartonSingle packaging typeCartonProduct EAN number5410288274621Packaging single length / height (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6	Max. Luminaires per 20A C Breaker	200
Average life (Rated) (h)15000Physical data54Nominal Product Length (mm)50Nominal Product Diameter (mm)0.047Packaging0.047PackagingCartonProduct EAN number5410288274621Packaging single length / height (cm)6.5Packaging single width (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6	Lifetime data	
Average life (Rated) (h)15000Physical data54Nominal Product Length (mm)50Nominal Product Diameter (mm)50Weight (kg)0.047PackagingCartonProduct EAN number5410288274621Packaging single length / height (cm)6.5Packaging single width (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6	Average life (Nominal) (h)	15000
Nominal Product Length (mm)54Nominal Product Diameter (mm)50Weight (kg)0.047PackagingCartonProduct EAN number5410288274621Packaging single length / height (cm)6.5Packaging single depth (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6		15000
Nominal Product Diameter (mm)50Weight (kg)0.047PackagingCartonProduct EAN number5410288274621Packaging single length / height (cm)6.5Packaging single depth (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6	Physical data	
Nominal Product Diameter (mm)50Weight (kg)0.047PackagingCartonProduct EAN number5410288274621Packaging single length / height (cm)6.5Packaging single depth (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6	Nominal Product Length (mm)	54
Weight (kg)0.047PackagingCartonSingle packaging typeCartonProduct EAN number5410288274621Packaging single length / height (cm)6.5Packaging single depth (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6	Nominal Product Diameter (mm)	50
Packaging Single packaging type Carton Product EAN number 5410288274621 Packaging single length / height (cm) 6.5 Packaging single width (cm) 5.2 Packaging single depth (cm) 5.2 DUN14 (inner) 25410288274625 Units per inner package 6		0.047
Single packaging typeCartonProduct EAN number5410288274621Packaging single length / height (cm)6.5Packaging single width (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6		
Product EAN number5410288274621Packaging single length / height (cm)6.5Packaging single width (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6		Carton
Packaging single length / height (cm) 6.5 Packaging single width (cm) 5.2 Packaging single depth (cm) 5.2 DUN14 (inner) 25410288274625 Units per inner package 6		
Packaging single width (cm)5.2Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6		
Packaging single depth (cm)5.2DUN14 (inner)25410288274625Units per inner package6		
DUN14 (inner) 25410288274625 Units per inner package 6		
Units per inner package 6		
	. ,	
Packaging inner width (cm) 11.3		
Packaging inner depth (cm) 7.5		
DUN14 (outer) 15410288274628		
Units per outer package 60		



RefLED ES50 *RefLED ES50 V5 610lm 830 36° SL* 0027462

Packaging outer length / height (cm)	59.0
Packaging outer width (cm)	18.2
Packaging outer depth (cm)	17.5
Safety data	
Breakage cleaning instructions	Not applicable
Special purpose lamp	No
Dry applications use only	Yes
Suitable for household illumination	Yes
Safety message	Not Suitable for totally enclosed fixtures

PHOTOMETRY

TECHNICAL DRAWINGS

