



Juniper R

RECESSED DOWNLIGHTS AND SPOTLIGHTS | TEC EM SERIES

Compact LED ceiling-recessed luminaire providing a symmetric, wide-beam light distribution. Provides high illuminance levels and better homogeneity on the working plane. Juniper R is suitable for general lighting purposes. Best for applications such as offices, showrooms, commercial areas, hospitals, hotels, airports. Housing available in signal white color, easy to complement any type of ceiling. Can be equipped with dimmer and emergency kit. Please see ECO and EM technical specifications.

Juniper R recessed luminaires come in several series, with various add-on and controls:

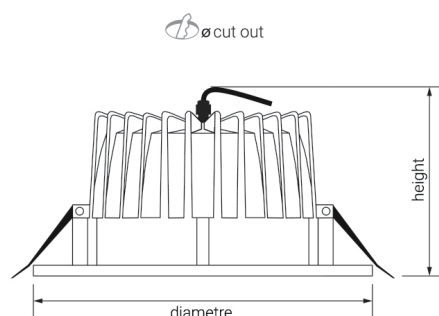
- Juniper R TEC – the standard for a large number of spaces – offices, showrooms, restaurants
- Juniper R TEC EM – with emergency lighting kit
- Juniper R ECO-DALI – with DALI controls for illumination adjustments
- Juniper R ECO-DALI EM - with both dimming and emergency kit

APPLICATION

Grocery & Supermarkets | Office | Healthcare | Hospitality | DIY

FEATURES & BENEFITS

- CRI \geq 80 standard
- IP40 when encased in closed ceilings
- Very long service life: 50,000 h at 90% luminous flux
- High efficiency of 125 lm/watt
- Lens angle of 75°
- Very low UGR starting with factor 17
- Comes in three diameters, suitable for any replacement of traditional lamps
- With emergency kits of 1 h and 3 h (for EM series only)
- Dimmable (for ECO-DALI EM series)



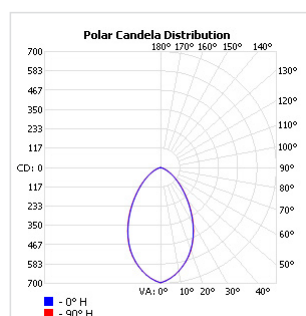
SPECIFICATIONS

Power consumption	9W, 17W	9W, 17W, 23W, 30W	9W, 17W, 23W, 30W, 40W
Dimensions	115x55xØ100±1mm	190x85xØ177±1mm	240x90xØ220±1mm
Weight	0.9 - 1.3Kg	1.5 - 1.8Kg	2.0 - 2.3Kg
Housing materials	Aluminium, Glass		
IK code	IK02		
THD (at 230V, 50Hz, Full load)	<20%		
Protection class	Safety class 1		
Operating temperature [°C]	+5C...+40C/+41F...+ 104F		
Operating humidity [%]	10 ÷ 85		
Power factor	≥0.95		
AC Input [Vac]	220 - 240 VAC		
Lens angle [°]	75°		
Lifespan [h]	50,000		
Housing color	○ RAL 9003 - signal white		
Lumen maintenance	L90/B10@50.000h at 25°C		
IP factor (front face)	IP40		
Control option	For more information please see JUNIPER R ECO-DALI EM datasheet		
Warranty [years]	5		
Storage temperature range [°C]	+5 ÷ +25C / +41F ... +77F		
Emergency option	EM1H, EM3H		

Light application	Standard
CRI	CRI 80
CCT [K]	3000K/4000K/5000K/6500K
MacAdam	4

CRI - Color rendering, CCT - Color temperature, MacAdam - Color consistency

LIGHT DISTRIBUTION



A75

RISK GROUP

RG1

The evaluation of photobiological safety is carried out according to the standard IEC 62471:2008 (“Photobiological safety of lamps and lamp systems”). Following the definition of the risk grouping system of the mentioned IEC standard, the LEDs mounted on this family fall into the class “Low Risk (RG1 – No photobiological hazard under normal behavioral limitations)”. Under real circumstances (regarding exposure time, pupils, observation distance), it is assumed that there is no endangerment to the eye from these devices. As a matter of principle, however, it should be mentioned that intense light sources have a high secondary exposure potential due to their blinding effect.

TOLERANCES

Luminous flux tolerances: -/+ 5%

Consumption tolerance: -/+ 5% for TEC | -/+ 10% for TEC & KIT EM | -/+ 10% for ECO-DALI | -/+ 15% for ECO-DALI & KIT EM

BATTERY WARRANTY

TEC EM & ECO EM: 12 months warranty

TEC & ECO: -

MAXIMUM NO. OF LUMINAIRES ON A CIRCUIT

Power	Driver type	Control type	Circuit Breaker Type						
			Amperage	B			C		
				20	16	10	20	16	10
< 50W		TEC		37	30	18	62	51	31
≥ 50W		TEC		37	30	18	62	51	31
< 80W		ECO		27	21	13	45	35	21

SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
CRI 80						
109044 JuniperR 100mm/3000/9W/80/A75/EM1H	D115xH55xØ100mm±1mm	3000	900	9W	100	75°
109045 JuniperR 100mm/4000/9W/80/A75/EM1H	D115xH55xØ100mm±1mm	4000	940	9W	105	75°
109046 JuniperR 100mm/5000/9W/80/A75/EM1H	D115xH55xØ100mm±1mm	5000	965	9W	108	75°
109047 JuniperR 100mm/6500/9W/80/A75/EM1H	D115xH55xØ100mm±1mm	6500	940	9W	105	75°
109048 JuniperR 177mm/3000/9W/80/A75/EM1H	D190xH85xØ177mm±1mm	3000	935	9W	104	75°
109049 JuniperR 177mm/4000/9W/80/A75/EM1H	D190xH85xØ177mm±1mm	4000	975	9W	109	75°
109050 JuniperR 177mm/5000/9W/80/A75/EM1H	D190xH85xØ177mm±1mm	5000	1000	9W	112	75°
109051 JuniperR 177mm/6500/9W/80/A75/EM1H	D190xH85xØ177mm±1mm	6500	975	9W	109	75°
109052 JuniperR 220mm/3000/9W/80/A75/EM1H	D240xH90xØ220mm±1mm	3000	940	9W	105	75°
109053 JuniperR 220mm/4000/9W/80/A75/EM1H	D240xH90xØ220mm±1mm	4000	980	9W	109	75°
109054 JuniperR 220mm/5000/9W/80/A75/EM1H	D240xH90xØ220mm±1mm	5000	1005	9W	112	75°
109055 JuniperR 220mm/6500/9W/80/A75/EM1H	D240xH90xØ220mm±1mm	6500	980	9W	109	75°
109056 JuniperR 100mm/3000/17W/80/A75/EM1H	D115xH55xØ100mm±1mm	3000	1800	17W	106	75°
109057 JuniperR 100mm/4000/17W/80/A75/EM1H	D115xH55xØ100mm±1mm	4000	1875	17W	111	75°
109058 JuniperR 100mm/5000/17W/80/A75/EM1H	D115xH55xØ100mm±1mm	5000	1925	17W	114	75°
109059 JuniperR 100mm/6500/17W/80/A75/EM1H	D115xH55xØ100mm±1mm	6500	1875	17W	111	75°
109060 JuniperR 177mm/3000/17W/80/A75/EM1H	D190xH85xØ177mm±1mm	3000	1950	17W	115	75°
109061 JuniperR 177mm/4000/17W/80/A75/EM1H	D190xH85xØ177mm±1mm	4000	2035	17W	120	75°
109062 JuniperR 177mm/5000/17W/80/A75/EM1H	D190xH85xØ177mm±1mm	5000	2090	17W	123	75°
109063 JuniperR 177mm/6500/17W/80/A75/EM1H	D190xH85xØ177mm±1mm	6500	2035	17W	120	75°
109064 JuniperR 220mm/3000/17W/80/A75/EM1H	D240xH90xØ220mm±1mm	3000	1955	17W	115	75°
109065 JuniperR 220mm/4000/17W/80/A75/EM1H	D240xH90xØ220mm±1mm	4000	2035	17W	120	75°
109066 JuniperR 220mm/5000/17W/80/A75/EM1H	D240xH90xØ220mm±1mm	5000	2090	17W	123	75°
109067 JuniperR 220mm/6500/17W/80/A75/EM1H	D240xH90xØ220mm±1mm	6500	2035	17W	120	75°
109068 JuniperR 177mm/3000/23W/80/A75/EM1H	D190xH85xØ177mm±1mm	3000	2665	23W	116	75°
109069 JuniperR 177mm/4000/23W/80/A75/EM1H	D190xH85xØ177mm±1mm	4000	2775	23W	121	75°
109070 JuniperR 177mm/5000/23W/80/A75/EM1H	D190xH85xØ177mm±1mm	5000	2850	23W	124	75°
109071 JuniperR 177mm/6500/23W/80/A75/EM1H	D190xH85xØ177mm±1mm	6500	2775	23W	121	75°
109072 JuniperR 220mm/3000/23W/80/A75/EM1H	D240xH90xØ220mm±1mm	3000	2595	23W	113	75°
109073 JuniperR 220mm/4000/23W/80/A75/EM1H	D240xH90xØ220mm±1mm	4000	2705	23W	118	75°
109074 JuniperR 220mm/5000/23W/80/A75/EM1H	D240xH90xØ220mm±1mm	5000	2775	23W	121	75°
109075 JuniperR 220mm/6500/23W/80/A75/EM1H	D240xH90xØ220mm±1mm	6500	2705	23W	118	75°
109076 JuniperR 177mm/3000/30W/80/A75/EM1H	D190xH85xØ177mm±1mm	3000	3575	30W	120	75°
109077 JuniperR 177mm/4000/30W/80/A75/EM1H	D190xH85xØ177mm±1mm	4000	3725	30W	125	75°
109078 JuniperR 177mm/5000/30W/80/A75/EM1H	D190xH85xØ177mm±1mm	5000	3825	30W	128	75°
109079 JuniperR 177mm/6500/30W/80/A75/EM1H	D190xH85xØ177mm±1mm	6500	3725	30W	125	75°
109080 JuniperR 220mm/3000/30W/80/A75/EM1H	D240xH90xØ220mm±1mm	3000	3590	30W	120	75°
109081 JuniperR 220mm/4000/30W/80/A75/EM1H	D240xH90xØ220mm±1mm	4000	3740	30W	125	75°
109082 JuniperR 220mm/5000/30W/80/A75/EM1H	D240xH90xØ220mm±1mm	5000	3840	30W	128	75°
109083 JuniperR 220mm/6500/30W/80/A75/EM1H	D240xH90xØ220mm±1mm	6500	3740	30W	125	75°
109084 JuniperR 220mm/3000/40W/80/A75/EM1H	D240xH90xØ220mm±1mm	3000	4785	40W	120	75°
109085 JuniperR 220mm/4000/40W/80/A75/EM1H	D240xH90xØ220mm±1mm	4000	4985	40W	125	75°
109086 JuniperR 220mm/5000/40W/80/A75/EM1H	D240xH90xØ220mm±1mm	5000	5120	40W	128	75°
109087 JuniperR 220mm/6500/40W/80/A75/EM1H	D240xH90xØ220mm±1mm	6500	4985	40W	125	75°
109088 JuniperR 100mm/3000/9W/80/A75/EM3H	D115xH55xØ100mm±1mm	3000	900	9W	100	75°
109089 JuniperR 100mm/4000/9W/80/A75/EM3H	D115xH55xØ100mm±1mm	4000	940	9W	105	75°
109090 JuniperR 100mm/5000/9W/80/A75/EM3H	D115xH55xØ100mm±1mm	5000	965	9W	108	75°
109091 JuniperR 100mm/6500/9W/80/A75/EM3H	D115xH55xØ100mm±1mm	6500	940	9W	105	75°
109092 JuniperR 177mm/3000/9W/80/A75/EM3H	D190xH85xØ177mm±1mm	3000	935	9W	104	75°
109093 JuniperR 177mm/4000/9W/80/A75/EM3H	D190xH85xØ177mm±1mm	4000	975	9W	109	75°

SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
CRI 80						
109094 JuniperR 177mm/5000/9W/80/A75/EM3H	D190xH85xØ177mm±1mm	5000	1000	9W	112	75°
109095 JuniperR 177mm/6500/9W/80/A75/EM3H	D190xH85xØ177mm±1mm	6500	975	9W	109	75°
109096 JuniperR 220mm/3000/9W/80/A75/EM3H	D240xH90xØ220mm±1mm	3000	940	9W	105	75°
109097 JuniperR 220mm/4000/9W/80/A75/EM3H	D240xH90xØ220mm±1mm	4000	980	9W	109	75°
109098 JuniperR 220mm/5000/9W/80/A75/EM3H	D240xH90xØ220mm±1mm	5000	1005	9W	112	75°
109099 JuniperR 220mm/6500/9W/80/A75/EM3H	D240xH90xØ220mm±1mm	6500	980	9W	109	75°
109100 JuniperR 100mm/3000/17W/80/A75/EM3H	D115xH55xØ100mm±1mm	3000	1800	17W	106	75°
109101 JuniperR 100mm/4000/17W/80/A75/EM3H	D115xH55xØ100mm±1mm	4000	1875	17W	111	75°
109102 JuniperR 100mm/5000/17W/80/A75/EM3H	D115xH55xØ100mm±1mm	5000	1925	17W	114	75°
109103 JuniperR 100mm/6500/17W/80/A75/EM3H	D115xH55xØ100mm±1mm	6500	1875	17W	111	75°
109104 JuniperR 177mm/3000/17W/80/A75/EM3H	D190xH85xØ177mm±1mm	3000	1950	17W	115	75°
109105 JuniperR 177mm/4000/17W/80/A75/EM3H	D190xH85xØ177mm±1mm	4000	2035	17W	120	75°
109106 JuniperR 177mm/5000/17W/80/A75/EM3H	D190xH85xØ177mm±1mm	5000	2090	17W	123	75°
109107 JuniperR 177mm/6500/17W/80/A75/EM3H	D190xH85xØ177mm±1mm	6500	2035	17W	120	75°
109108 JuniperR 220mm/3000/17W/80/A75/EM3H	D240xH90xØ220mm±1mm	3000	1955	17W	115	75°
109109 JuniperR 220mm/4000/17W/80/A75/EM3H	D240xH90xØ220mm±1mm	4000	2035	17W	120	75°
109110 JuniperR 220mm/5000/17W/80/A75/EM3H	D240xH90xØ220mm±1mm	5000	2090	17W	123	75°
109111 JuniperR 220mm/6500/17W/80/A75/EM3H	D240xH90xØ220mm±1mm	6500	2035	17W	120	75°
109112 JuniperR 177mm/3000/23W/80/A75/EM3H	D190xH85xØ177mm±1mm	3000	2665	23W	116	75°
109113 JuniperR 177mm/4000/23W/80/A75/EM3H	D190xH85xØ177mm±1mm	4000	2775	23W	121	75°
109114 JuniperR 177mm/5000/23W/80/A75/EM3H	D190xH85xØ177mm±1mm	5000	2850	23W	124	75°
109115 JuniperR 177mm/6500/23W/80/A75/EM3H	D190xH85xØ177mm±1mm	6500	2775	23W	121	75°
109116 JuniperR 220mm/3000/23W/80/A75/EM3H	D240xH90xØ220mm±1mm	3000	2595	23W	113	75°
109117 JuniperR 220mm/4000/23W/80/A75/EM3H	D240xH90xØ220mm±1mm	4000	2705	23W	118	75°
109118 JuniperR 220mm/5000/23W/80/A75/EM3H	D240xH90xØ220mm±1mm	5000	2775	23W	121	75°
109119 JuniperR 220mm/6500/23W/80/A75/EM3H	D240xH90xØ220mm±1mm	6500	2705	23W	118	75°
109120 JuniperR 177mm/3000/30W/80/A75/EM3H	D190xH85xØ177mm±1mm	3000	3575	30W	120	75°
109121 JuniperR 177mm/4000/30W/80/A75/EM3H	D190xH85xØ177mm±1mm	4000	3725	30W	125	75°
109122 JuniperR 177mm/5000/30W/80/A75/EM3H	D190xH85xØ177mm±1mm	5000	3825	30W	128	75°
109123 JuniperR 177mm/6500/30W/80/A75/EM3H	D190xH85xØ177mm±1mm	6500	3725	30W	125	75°
109124 JuniperR 220mm/3000/30W/80/A75/EM3H	D240xH90xØ220mm±1mm	3000	3590	30W	120	75°
109125 JuniperR 220mm/4000/30W/80/A75/EM3H	D240xH90xØ220mm±1mm	4000	3740	30W	125	75°
109126 JuniperR 220mm/5000/30W/80/A75/EM3H	D240xH90xØ220mm±1mm	5000	3840	30W	128	75°
109127 JuniperR 220mm/6500/30W/80/A75/EM3H	D240xH90xØ220mm±1mm	6500	3740	30W	125	75°
109128 JuniperR 220mm/3000/40W/80/A75/EM3H	D240xH90xØ220mm±1mm	3000	4785	40W	120	75°
109129 JuniperR 220mm/4000/40W/80/A75/EM3H	D240xH90xØ220mm±1mm	4000	4985	40W	125	75°
109130 JuniperR 220mm/5000/40W/80/A75/EM3H	D240xH90xØ220mm±1mm	5000	5120	40W	128	75°
109131 JuniperR 220mm/6500/40W/80/A75/EM3H	D240xH90xØ220mm±1mm	6500	4985	40W	125	75°

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