

ADURA LOB is our Leading LED array product using SinkPAD™ PCB technology that gives customers a competitive advantage. ADURA LOB creates the most impactful lighting and delivers exceptional Lumen performance in easy to use platform with high reliability.

ADURA LOB simplifies luminaire design and manufacturing by uniform emitting surface enables both directional and non-directional applications. ADURA LOB arrays are available in several LES configurations, engineered to enable new degree of flexibility and reliability over a broad range of electrical currents. Our SinkPAD™ Technology platform delivers high lumen density with improved THERMAL than a conventional COB, for clean and uniform illumination.

SinkPAD™ Technology: A PCB with SinkPAD™ technology offers the highest thermal conductivity in the industry; in excess of 200 W/m.k. it has 200 to 385 W/m.k thermal conductivity. As a result, the LEDs run substantially cooler, increase lumen per watt, increase life and increase reliability.

SPECIFICATIONS	Part Number	1981C-A
	Ordering Code	LOB-150046D-0163535-xxx-1x16 (1P16S)
	PCB Technology	SinkPAD™, Thermal Conductivity 210 - 380 W/mK
	Number / Type of LEDs	16 LED (1x16 LEDs in Series) / LED Type - 3535
	CCT	2700K-6500K
	CRI	70+, 80+, 90+
	Drive Current Range (mA)	350 - 1200 mA
	Typical Voltage (V)	48V
	Wattage (W)	16 - 60 W
	Lumen (@ 1000mA)	6004lm at 5000K, 1000mA, Ra 80.
	Lm / W	150lm/W typical (5000K, Ra 70)
	Shape / Size	Square / 28 mm (1.102 Inch)
	LES	21mm
	Compatible With LEDIL Optics	ANGELA, MIRELLA, LENA, LENINA, ANGELLETE, STELLA HB, STELLA FRESNEL
IDEAL Holder	50 - 2204 CT	



PRODUCT FEATURES

- ✓ Built on SinkPAD™-II PCB Technology. >200.0W/m.k Thermal Conductivity
 - ✓ High efficacy over 160 lm/W typical (5000K, Ra 70)
 - ✓ Broad range of CCT options from 2700K to 6500K
 - ✓ CRI options include minimum 70+, 80+, and 90+
 - ✓ Options for 3 and 5 SDCM color control for 2700K-6500K CCT
 - ✓ Reliable operation at up to 2X nominal drive current
 - ✓ Compatible with IDEAL Solderless Connector
 - ✓ Compatible with LEDIL Optics
- ANGELA, MIRELLA, LENA, LENINA, ANGELLETE, STELLA HB, STELLA FRESNEL.
- ✓ UL Recognized Board and Components (E348315)
 - ✓ Broad rang of application coverage for interior and exterior lighting
 - ✓ Flexibility for application driven lighting design requirements
 - ✓ High quality true color reproduction
 - ✓ Uniform consistent white light
- Flexibility in design optimization

APPLICATIONS

- Downlight
- Lamps
- Spot Light
- High Bay
- Street Lighting
- Area Lighting
- Retrofit Etc...

- ✓ Option for wire soldering
- ✓ Top side part number, CCT & CRI markings
- ✓ Thermocouple point
- ✓ RoHS Compliant
- ✓ Enhanced ease of use and manufacturability
- ✓ Short lead time

ADURA ORDERING CODE	Typical Wattage (W)	OPERATING CURRENT		Input Voltage (Vdc)	CCT (Kelvin)	CRI	Typical Lumen (lm)	Typical Lumens Per Watt (LPW)	Dimensions Inch(mm)
		Nominal Current (mA)	Max Current (mA)						
LOB-150046D-0163535-277-1x16	16	350	1500	45.4	2700K	70	2466	155	1.102 Inch x 1.102 Inch [28mm x 28mm]
	23	500	1500	46.5	2700K		3417	147	
	33	700	1500	47.7	2700K		4592	138	
	49	1000	1500	49.3	2700K		6190	126	
	60	1200	1500	50.3	2700K		7177	119	
LOB-150046D-0163535-307-1x16	16	350	1500	45.4	3000K	70	2561	161	
	23	500	1500	46.5	3000K		3548	153	
	33	700	1500	47.7	3000K		4768	143	
	49	1000	1500	49.3	3000K		6427	130	
	60	1200	1500	50.3	3000K		7452	124	
LOB-150046D-0163535-357-1x16	16	350	1500	45.4	3500K	70	2629	165	
	23	500	1500	46.5	3500K		3643	157	
	33	700	1500	47.7	3500K		4896	147	
	49	1000	1500	49.3	3500K		6599	134	
	60	1200	1500	50.3	3500K		7652	127	
LOB-150046D-0163535-407-1x16	16	350	1500	45.4	4000K	70	2750	173	
	23	500	1500	46.5	4000K		3810	164	
	33	700	1500	47.7	4000K		5120	153	
	49	1000	1500	49.3	4000K		6901	140	
	60	1200	1500	50.3	4000K		8003	133	

All Above data are at 25° C



ADURA ORDERING CODE	Typical Wattage (W)	OPERATING CURRENT		Input Voltage (Vdc)	CCT (Kelvin)	CRI	Typical Lumen (lm)	Typical Lumens Per Watt (LPW)	Dimensions Inch(mm)
		Nominal Current (mA)	Max Current (mA)						
LOB-150046D-0163535-457-1x16	16	350	1500	45.4	4500K	70	2758	174	1.102 Inch x 1.102 Inch [28mm x 28mm]
	23	500	1500	46.5	4500K		3822	164	
	33	700	1500	47.7	4500K		5136	154	
	49	1000	1500	49.3	4500K		6923	141	
	60	1200	1500	50.3	4500K		8028	133	
LOB-150046D-0163535-507-1x16	16	350	1500	45.4	5000K	70	2760	174	
	23	500	1500	46.5	5000K		3826	165	
	33	700	1500	47.7	5000K		5152	154	
	49	1000	1500	49.3	5000K		6968	141	
	60	1200	1500	50.3	5000K		8091	134	
LOB-150046D-0163535-577-1x16	16	350	1500	45.4	5700K	70	2666	168	
	23	500	1500	46.5	5700K		3696	159	
	33	700	1500	47.7	5700K		4976	149	
	49	1000	1500	49.3	5700K		6730	137	
	60	1200	1500	50.3	5700K		7814	130	
LOB-150046D-0163535-657-1x16	16	350	1500	45.4	6500K	70	2640	166	
	23	500	1500	46.5	6500K		3660	157	
	33	700	1500	47.7	6500K		4928	148	
	49	1000	1500	49.3	6500K		6665	135	
	60	1200	1500	50.3	6500K		7739	128	
Color Rendering Index (CRI) 80									
LOB-150046D-0163535-278-1x16	16	350	1500	45.4	2700K	80	2182	137	1.102 Inch x 1.102 Inch [28mm x 28mm]
	23	500	1500	46.5	2700K		3024	130	
	33	700	1500	47.7	2700K		4064	122	
	49	1000	1500	49.3	2700K		5478	111	
	60	1200	1500	50.3	2700K		6352	105	
LOB-150046D-0163535-308-1x16	16	350	1500	45.4	3000K	80	2303	145	
	23	500	1500	46.5	3000K		3191	137	
	33	700	1500	47.7	3000K		4288	128	
	49	1000	1500	49.3	3000K		5780	117	
	60	1200	1500	50.3	3000K		6702	111	
LOB-150046D-0163535-358-1x16	16	350	1500	45.4	3500K	80	2406	151	
	23	500	1500	46.5	3500K		3334	143	
	33	700	1500	47.7	3500K		4480	134	
	49	1000	1500	49.3	3500K		6039	123	
	60	1200	1500	50.3	3500K		7002	116	
LOB-150046D-0163535-408-1x16	16	350	1500	45.4	4000K	80	2423	152	
	23	500	1500	46.5	4000K		3358	144	
	33	700	1500	47.7	4000K		4512	135	
	49	1000	1500	49.3	4000K		6082	123	
	60	1200	1500	50.3	4000K		7052	117	

All Above data are at 25° C

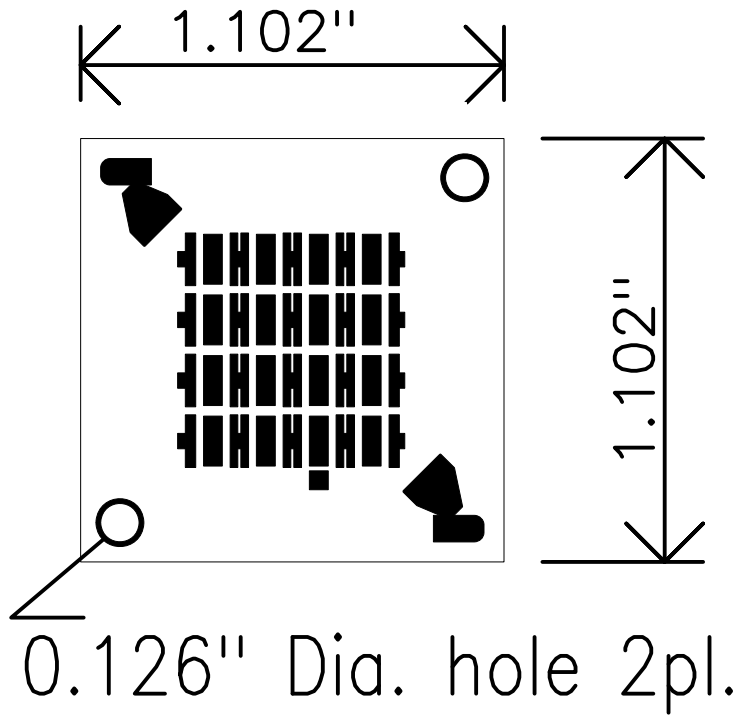


ADURA ORDERING CODE	Typical Wattage (W)	OPERATING CURRENT		Input Voltage (Vdc)	CCT (Kelvin)	CRI	Typical Lumen (lm)	Typical Lumens Per Watt (LPW)	Dimensions Inch(mm)
		Nominal Current (mA)	Max Current (mA)						
LOB-150046D-0163535-458-1x16	16	350	1500	45.4	4500K	80	2449	154	1.102 Inch x 1.102 Inch [28mm x 28mm]
	23	500	1500	46.5	4500K		3393	146	
	33	700	1500	47.7	4500K		4560	137	
	49	1000	1500	49.3	4500K		6147	125	
	60	1200	1500	50.3	4500K		7127	118	
LOB-150046D-0163535-508-1x16	16	350	1500	45.4	5000K	80	2400	151	
	23	500	1500	46.5	5000K		3327	143	
	33	700	1500	47.7	5000K		4480	134	
	49	1000	1500	49.3	5000K		6059	123	
	60	1200	1500	50.3	5000K		7035	117	
Color Rendering Index (CRI) 90									
LOB-150046D-0163535-279-1x16	16	350	1500	45.4	2700K	90	1533	97	
	23	500	1500	46.5	2700K		2129	92	
	33	700	1500	47.7	2700K		2859	86	
	49	1000	1500	49.3	2700K		3847	79	
	60	1200	1500	50.3	2700K		4468	75	
LOB-150046D-0163535-309-1x16	16	350	1500	45.4	3000K	90	1661	105	
	23	500	1500	46.5	3000K		2307	99	
	33	700	1500	47.7	3000K		3098	93	
	49	1000	1500	49.3	3000K		4169	85	
	60	1200	1500	50.3	3000K		4842	81	
LOB-150046D-0163535-359-1x16	16	350	1500	45.4	3500K	90	1756	111	
	23	500	1500	46.5	3500K		2438	105	
	33	700	1500	47.7	3500K		3274	98	
	49	1000	1500	49.3	3500K		4406	90	
	60	1200	1500	50.3	3500K		5117	86	
LOB-150046D-0163535-409-1x16	16	350	1500	45.4	4000K	90	1833	116	
	23	500	1500	46.5	4000K		2545	110	
	33	700	1500	47.7	4000K		3418	103	
	49	1000	1500	49.3	4000K		4599	94	
	60	1200	1500	50.3	4000K		5341	90	

All Above data are at 25° C

Disclaimer: Adura LED Solutions (ALS) provides this engineering data for design guidance only. Users of ALS technology are reminded that they bear the responsibility for testing for their applications. Any information furnished by ALS, its licensees and representative is believed to be accurate, but users of the technology must bear all responsibility for the use and testing of the product since ALS, its licensees and representatives cannot be aware of all potential uses. ALS makes no warranties as to the applicability, fitness or suitability of ALS technology for any specific or general uses. ALS shall not be liable for incidental or consequential damages of any kind.

Mechanical Drawing for 1981C-A



LOB-150046D-0163535-277-1x16

Board Type	Driving Current(mA)	Voltage(vdc)	Series Type	No. of LED	Type of LED	CCT	CRI	Series /Parallel Configuration
LOB	1500	46	D	016	3535	27	7	1x16

Board Types: LINEAR(LIN), SQUARE(SQR), CIRCULAR(CIR), STRIP(STRIP), STAR(STAR), CUSTOM LED on Board (LOB)

Series Types: R = Ruby, E = Emerald, D = Diamond

Number LED: 004=4, 012 = 12, 033 = 33, 100 =100

CCT: 27=2700K, 30=3000K, 35=3500K, 40=4000K, 45=4500K, 50=5000K, 57=5700K, 65=6500K

CRI: N=N/A, 6=60, 7=70, 8=80, 9=90

Configuration: 1x4 = 4 LED in Series / 2x6= 2 Rows of six LEDs in Parallel

Notes:

- Boards Tested at Ts = 25 °C
- Forward voltage Tolerances:± 0.2V
- Luminus Flux Tolerances:± 0.5%
- Color Rendering Index Tolerance (Ra): ± 2
- Color Rendering Index Tolerance (R9): ± 4
- Incorrect wiring may damage the LED module.
- All data is related to the entire module. Data reflects standard mean values.
- Actual data may differ depending on Variance in the LED and manufacturing process.
- Performance values were taken at steady state.
- Instant-ON measurement may be higher
- Exceeding maximum rating may damage the LED Light engine and cause potential safety hazard
- Elevated operating temperatures can damage the board, LEDs and life in terms of lumen output.

Ver1
01-04-16

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