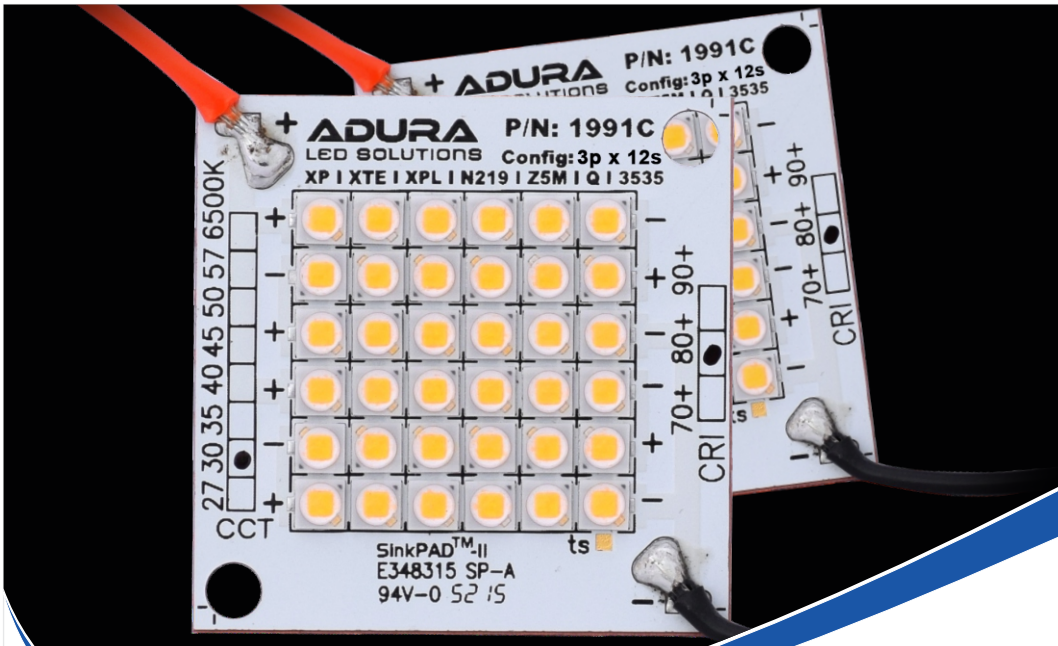

SinkPAD™ Cooling Matters

RoHS compliant

ADURA LED SOLUTIONS

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	**1991C-A**
Ordering Code	LOB-450036D-0363535-xxx-3x12(3P12S)
PCB Technology	SinkPAD™, **Thermal Conductivity 210 - 380 W/mK**
Number / Type of LEDs	36 LED (3x12 LEDs in Series) / LED Type - 3535
CCT	2700K-6500K
CRI	70+, 80+, 90+
Drive Current Range (mA)	2100 - 3600 mA
Typical Voltage (V)	36V
Wattage (W)	75 - 130 W
Lumen (@ 1000mA)	13633 lm
Shape / Size	Square / 38mm (1.496 Inch)
LES	33mm
Compatible With LEDIL Optics	ANGELA, ANGELINA, STELLA HB, STELLA FRESNEL

ADURA LED SOLUTIONS
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PRODUCT FEATURES

- Built on SinkPAD™-II PCB Technology. >200.0W/m.k Thermal Conductivity
- High efficacy over 150 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 LEDIL Optics
  ANGELA, ANGELINA, STELLA HB, STELLA FRESNEL.
- UL Recognized Board and Components
- 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-450036D-0363535-277-3x12	36	1050	4500	34	2700K	70	5549	155	1.496 Inch x 1.496 Inch [38mm x 38mm]
	52	1500	4500	35	2700K		7689	147	
	75	2100	4500	36	2700K		10332	138	
	111	3000	4500	37	2700K		13927	126	
	136	3600	4500	38	2700K		16149	119	
LOB-450036D-0363535-307-3x12	36	1050	4500	34	3000K	70	5761	161	
	52	1500	4500	35	3000K		7983	153	
	75	2100	4500	36	3000K		10728	143	
	111	3000	4500	37	3000K		14461	130	
	136	3600	4500	38	3000K		16768	124	
LOB-450036D-0363535-357-3x12	36	1050	4500	34	3500K	70	5916	165	
	52	1500	4500	35	3500K		8198	157	
	75	2100	4500	36	3500K		11016	147	
	111	3000	4500	37	3500K		14849	134	
	136	3600	4500	38	3500K		17218	127	
LOB-450036D-0363535-407-3x12	36	1050	4500	34	4000K	70	6187	173	
	52	1500	4500	35	4000K		8573	164	
	75	2100	4500	36	4000K		11520	153	
	111	3000	4500	37	4000K		15528	140	
	136	3600	4500	38	4000K		18006	133	

All Above data are at 25° C

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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-450036D-0363535-457-3x12	36	1050	4500	34	4500K	70	6206	174	1.496 Inch x 1.496 Inch [38mm x 38mm]
	52	1500	4500	35	4500K		8599	164	
	75	2100	4500	36	4500K		11556	154	
	111	3000	4500	37	4500K		15577	141	
	136	3600	4500	38	4500K		18062	133	
LOB-450036D-0363535-507-3x12	36	1050	4500	34	5000K	70	6210	174	
	52	1500	4500	35	5000K		8609	165	
	75	2100	4500	36	5000K		11592	154	
	111	3000	4500	37	5000K		15678	141	
	136	3600	4500	38	5000K		18204	134	
LOB-450036D-0363535-577-3x12	36	1050	4500	34	5700K	70	5997	168	
	52	1500	4500	35	5700K		8315	159	
	75	2100	4500	36	5700K		11196	149	
	111	3000	4500	37	5700K		15143	137	
	136	3600	4500	38	5700K		17582	130	
LOB-450036D-0363535-657-3x12	36	1050	4500	34	6500K	70	5940	166	
	52	1500	4500	35	6500K		8235	157	
	75	2100	4500	36	6500K		11088	148	
	111	3000	4500	37	6500K		14996	135	
	136	3600	4500	38	6500K		17412	128	
Color Rendering Index (CRI) 80									
LOB-450036D-0363535-278-3x12	36	1050	4500	34	2700K	80	4911	137	1.496 Inch x 1.496 Inch [38mm x 38mm]
	52	1500	4500	35	2700K		6805	130	
	75	2100	4500	36	2700K		9144	122	
	111	3000	4500	37	2700K		12326	111	
	136	3600	4500	38	2700K		14292	105	
LOB-450036D-0363535-308-3x12	36	1050	4500	34	3000K	80	5181	145	
	52	1500	4500	35	3000K		7180	137	
	75	2100	4500	36	3000K		9648	128	
	111	3000	4500	37	3000K		13005	117	
	136	3600	4500	38	3000K		15080	111	
LOB-450036D-0363535-358-3x12	36	1050	4500	34	3500K	80	5413	151	
	52	1500	4500	35	3500K		7501	143	
	75	2100	4500	36	3500K		10080	134	
	111	3000	4500	37	3500K		13587	123	
	136	3600	4500	38	3500K		15755	116	
LOB-450036D-0363535-408-3x12	36	1050	4500	34	4000K	80	5452	152	
	52	1500	4500	35	4000K		7555	144	
	75	2100	4500	36	4000K		10152	135	
	111	3000	4500	37	4000K		13684	123	
	136	3600	4500	38	4000K		15868	117	

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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-450036D-0363535-458-3x12	36	1050	4500	34	4500K	80	5510	154	1.496 Inch x 1.496 Inch [38mm x 38mm]
	52	1500	4500	35	4500K		7635	146	
	75	2100	4500	36	4500K		10260	137	
	111	3000	4500	37	4500K		13830	125	
	136	3600	4500	38	4500K		16036	118	
LOB-450036D-0363535-508-3x12	36	1050	4500	34	5000K	80	5400	151	
	52	1500	4500	35	5000K		7486	143	
	75	2100	4500	36	5000K		10080	134	
	111	3000	4500	37	5000K		13633	123	
	136	3600	4500	38	5000K		15829	117	
Color Rendering Index (CRI) 90									
LOB-450036D-0363535-279-3x12	36	1050	4500	34	2700K	90	3449	97	1.496 Inch x 1.496 Inch [38mm x 38mm]
	52	1500	4500	35	2700K		4790	92	
	75	2100	4500	36	2700K		6432	86	
	110	3000	4500	37	2700K		8655	79	
	134	3600	4500	38	2700K		10052	75	
LOB-450036D-0363535-309-3x12	36	1050	4500	34	3000K	90	3738	105	
	52	1500	4500	35	3000K		5191	99	
	75	2100	4500	36	3000K		6971	93	
	110	3000	4500	37	3000K		9381	85	
	134	3600	4500	38	3000K		10895	81	
LOB-450036D-0363535-359-3x12	36	1050	4500	34	3500K	90	3950	111	
	52	1500	4500	35	3500K		5485	105	
	75	2100	4500	36	3500K		7366	98	
	110	3000	4500	37	3500K		9913	90	
	134	3600	4500	38	3500K		11512	86	
LOB-450036D-0363535-409-3x12	36	1050	4500	34	4000K	90	4123	116	
	52	1500	4500	35	4000K		5726	110	
	75	2100	4500	36	4000K		7689	103	
	110	3000	4500	37	4000K		10348	94	
	134	3600	4500	38	4000K		12018	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.

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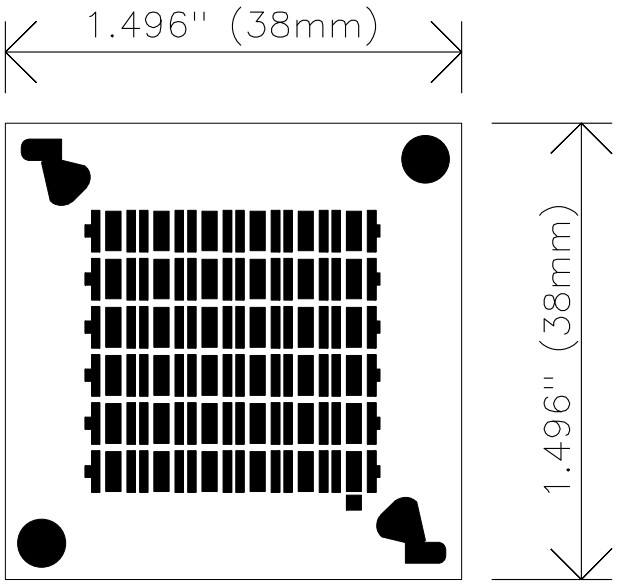
Mechanical Drawing for 1991C-A



LOB-450036D-0363535-277-3x12

Board Type	Driving Current(mA)	Voltage(vdc)	Series Type	No. of LED	Type of LED	CCT	CRI	Series /Parallel Configuration
LOB	4500	36	D	036	3535	27	7	3x12

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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