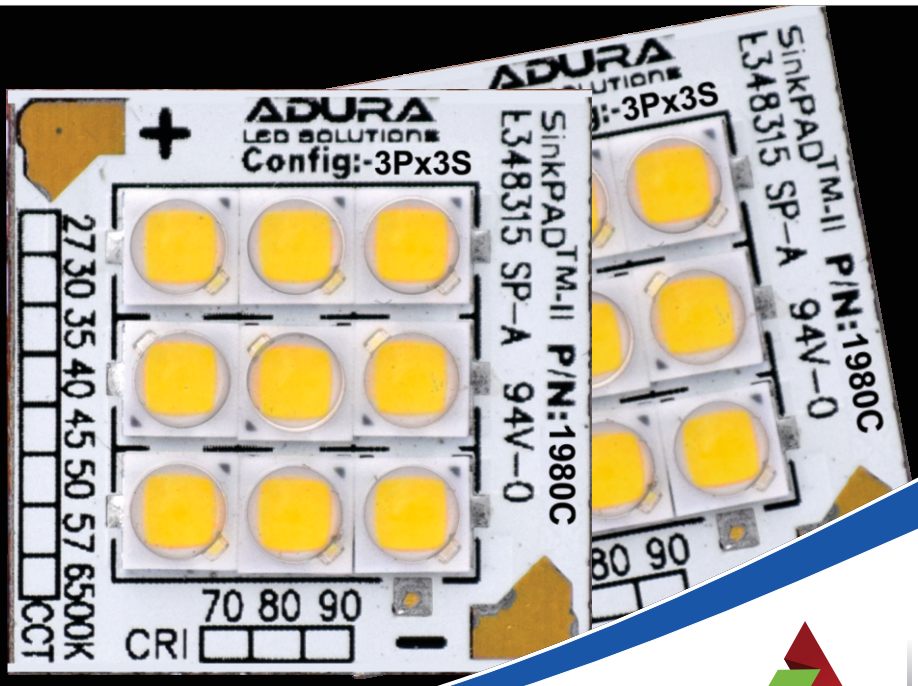

SinkPAD™ Cooling Matters

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	**1980C-A**
Ordering Code	LOB-45009D-0093535-XXX-3x3C (3P3S)
PCB Technology	SinkPAD™, **Thermal Conductivity 210 - 380 W/mK**
Number / Type of LED	9 LED (3x3) / LED Type - 3535
CCT	2700K-6500K
CRI	70+, 80+, 90+
Drive Current Range (mA)	2100 - 3600 mA
Typical Voltage (V)	9V
Wattage (W)	9 - 34 W
Lumen (@ 1000mA)	3400 lm at 5000K, 100mA, Ra 80.
Lm / W	150lm/W Typical (5000K, Ra 70)
Shape / Size	Square / 17.86 mm (0.703 Inch)
LES	16mm
Compatible With LEDIL Optics	ANGELA, MIRELLA, LENA, LENINA, SAGA, WINNIE
IDEAL Holder	50 - 2103 CT

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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)
- Lumen output performance ranges from 1,000 to 18,000 lumens (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
  (STELLA HB & FRESNEL, SAGA and variety of Reflectors).
- 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-45009D-0093535-277-3x3C	9	1050	4500	9.0	2700K	70	1387	155	0.703 Inch x 0.703 Inch [17.86mm x 17.86mm]
	13	1500	4500	9.0	2700K		1922	147	
	19	2100	4500	9.0	2700K		2583	138	
	28	3000	4500	9.0	2700K		3482	126	
	34	3600	4500	9.0	2700K		4037	119	
LOB-45009D-0093535-307-3x3C	9	1050	4500	9.0	3000K	70	1440	161	
	13	1500	4500	9.0	3000K		1996	153	
	19	2100	4500	9.0	3000K		2682	143	
	28	3000	4500	9.0	3000K		3615	130	
	34	3600	4500	9.0	3000K		4192	124	
LOB-45009D-0093535-357-3x3C	9	1050	4500	9.0	3500K	70	1479	165	
	13	1500	4500	9.0	3500K		2049	157	
	19	2100	4500	9.0	3500K		2754	147	
	28	3000	4500	9.0	3500K		3712	134	
	34	3600	4500	9.0	3500K		4305	127	
LOB-45009D-0093535-407-3x3C	9	1050	4500	9.0	4000K	70	1547	173	
	13	1500	4500	9.0	4000K		2143	164	
	19	2100	4500	9.0	4000K		2880	153	
	28	3000	4500	9.0	4000K		3882	140	
	34	3600	4500	9.0	4000K		4501	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-45009D-0093535-457-3x3C	9	1050	4500	9.0	4500K	70	1551	174	0.703 Inch x 0.703 Inch [17.86mm x 17.86mm]
	13	1500	4500	9.0	4500K		2150	164	
	19	2100	4500	9.0	4500K		2889	154	
	28	3000	4500	9.0	4500K		3894	141	
	34	3600	4500	9.0	4500K		4516	133	
LOB-45009D-0093535-507-3x3C	9	1050	4500	9.0	5000K	70	1552	174	
	13	1500	4500	9.0	5000K		2152	165	
	19	2100	4500	9.0	5000K		2898	154	
	28	3000	4500	9.0	5000K		3920	141	
	34	3600	4500	9.0	5000K		4551	134	
LOB-45009D-0093535-577-3x3C	9	1050	4500	9.0	5700K	70	1499	168	
	13	1500	4500	9.0	5700K		2079	159	
	19	2100	4500	9.0	5700K		2799	149	
	28	3000	4500	9.0	5700K		3786	137	
	34	3600	4500	9.0	5700K		4395	130	
LOB-45009D-0093535-657-3x3C	9	1050	4500	9.0	6500K	70	1485	166	
	13	1500	4500	9.0	6500K		2059	157	
	19	2100	4500	9.0	6500K		2772	148	
	28	3000	4500	9.0	6500K		3749	135	
	34	3600	4500	9.0	6500K		4353	128	
Color Rendering Index (CRI) 80									
LOB-45009D-0093535-278-3x3C	9	1050	4500	9.0	2700K	80	1228	137	0.703 Inch x 0.703 Inch [17.86mm x 17.86mm]
	13	1500	4500	9.0	2700K		1701	130	
	19	2100	4500	9.0	2700K		2286	122	
	28	3000	4500	9.0	2700K		3081	111	
	34	3600	4500	9.0	2700K		3573	105	
LOB-45009D-0093535-308-3x3C	9	1050	4500	9.0	3000K	80	1295	145	
	13	1500	4500	9.0	3000K		1795	137	
	19	2100	4500	9.0	3000K		2412	128	
	28	3000	4500	9.0	3000K		3251	117	
	34	3600	4500	9.0	3000K		3770	111	
LOB-45009D-0093535-358-3x3C	9	1050	4500	9.0	3500K	80	1353	151	
	13	1500	4500	9.0	3500K		1875	143	
	19	2100	4500	9.0	3500K		2520	134	
	28	3000	4500	9.0	3500K		3397	123	
	34	3600	4500	9.0	3500K		3939	116	
LOB-45009D-0093535-408-3x3C	9	1050	4500	9.0	4000K	80	1363	152	
	13	1500	4500	9.0	4000K		1889	144	
	19	2100	4500	9.0	4000K		2538	135	
	28	3000	4500	9.0	4000K		3421	123	
	34	3600	4500	9.0	4000K		3967	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-45009D-0093535-458-3x3C	9	1050	4500	9.0	4500K	80	1377	154	0.703 Inch x 0.703 Inch [17.86mm x 17.86mm]
	13	1500	4500	9.0	4500K		1909	146	
	19	2100	4500	9.0	4500K		2565	137	
	28	3000	4500	9.0	4500K		3457	125	
	34	3600	4500	9.0	4500K		4009	118	
LOB-45009D-0093535-508-3x3C	9	1050	4500	9.0	5000K	80	1350	151	
	13	1500	4500	9.0	5000K		1872	143	
	19	2100	4500	9.0	5000K		2520	134	
	28	3000	4500	9.0	5000K		3408	123	
	34	3600	4500	9.0	5000K		3957	117	
Color Rendering Index (CRI) 90									
LOB-45009D-0093535-279-3x3C	9	1050	4500	9.0	2700K	90	862	97	0.703 Inch x 0.703 Inch [17.86mm x 17.86mm]
	13	1500	4500	9.0	2700K		1197	92	
	19	2100	4500	9.0	2700K		1608	86	
	28	3000	4500	9.0	2700K		2164	79	
	34	3600	4500	9.0	2700K		2513	75	
LOB-45009D-0093535-309-3x3C	9	1050	4500	9.0	3000K	90	934	105	
	13	1500	4500	9.0	3000K		1298	99	
	19	2100	4500	9.0	3000K		1743	93	
	28	3000	4500	9.0	3000K		2345	85	
	34	3600	4500	9.0	3000K		2724	81	
LOB-45009D-0093535-359-3x3C	9	1050	4500	9.0	3500K	90	987	111	
	13	1500	4500	9.0	3500K		1371	105	
	19	2100	4500	9.0	3500K		1842	98	
	28	3000	4500	9.0	3500K		2478	90	
	34	3600	4500	9.0	3500K		2878	86	
LOB-45009D-0093535-409-3x3C	9	1050	4500	9.0	4000K	90	1031	116	
	13	1500	4500	9.0	4000K		1432	110	
	19	2100	4500	9.0	4000K		1922	103	
	28	3000	4500	9.0	4000K		2587	94	
	34	3600	4500	9.0	4000K		3004	90	

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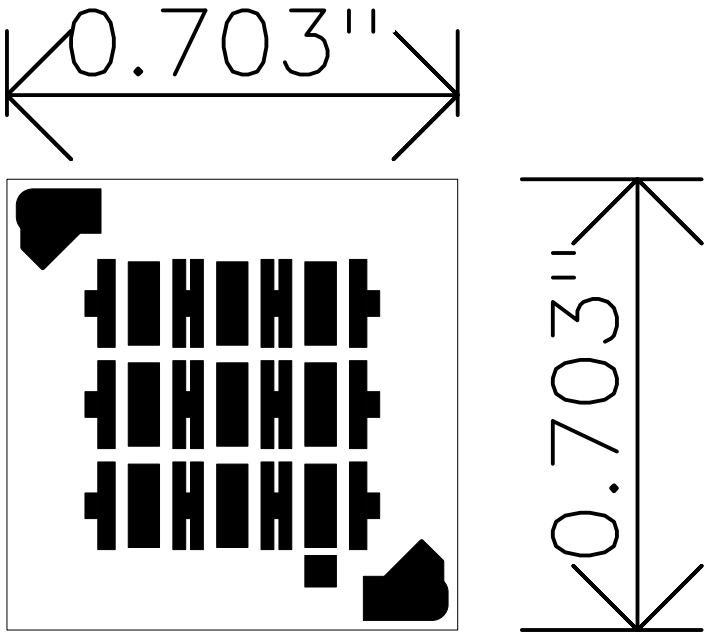
Mechanical Drawing for 1980C-A



LOB-45009D-0093535-277-3x3C

Board Type	Driving Current(mA)	Voltage(vdc)	Series Type	No. of LED	Type of LED	CCT	CRI	Series /Parallel Configuration
LOB	4500	9	D	09	3535	27	7	3 x 3

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
12-10-15

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