LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

FEATURES & SPECIFICATIONS

INTENDED USE — The Avante 2x4 is a general lighting luminaire for large spaces including open offices, circulation areas, classrooms, libraries, cafeterias, airport ticketing and wait areas, and numerous other commercial applications. Static or air function available. **Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate.** **Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.** A typically configured AVL features a Unified Glare Rating (UGR) starting at 18, UGR data available on page 3.

CONSTRUCTION — Housing is gloss white enamel on **cold-rolled steel**. All edges hemmed or rounded.

All **shieldings pivot on light traps and swing down for easy access**.

Molded light traps prevent light leaks between shielding and end-plates.

All air and screw slot units supplied with screw-on tee bar clips. **Driver access is from below.**

OPTICS — Matte white polyester powder paint finished reflectors provide uniform light distribution.

All diffusers control direct light distribution and glare by shielding LEDs from direct view.

Metal diffuser staggered round holes (MDR) **52% open perforated metal** with .075" diameter holes backed with white acrylic diffuser.

Straight blade louver (SBL) sides of perforated metal with staggered round holes and solid blade louvered center. Sides and louver backed with white acrylic diffuser.

Acrylic diffuser prismatic lens (ADP) extruded acrylic lens backed with white acrylic diffuser.

ELECTRICAL— Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. 90% LED lumen maintenance at 60,000 hours **(L90/60,000)**.

eldoLED driver options deliver choice of dimming range and choice of control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI.

Optional integrated nLight® controls make each luminaire addressable, allowing them to digitally communicate with other nLight enabled controls such as dimmers, switches, nLight AIR RIO. Simply connect all the nLight enabled control devices and the AVLED luminaires using standard Cat-5 cabling, or the nLight AIR wireless network. Unique plug-and-play convenience allows devices and luminaires to automatically discover each other and self-commission.

Lumen Management: Unique lumen management system (option N80) provides onboard intelligence that actively manages the LED light source so that constant lumen output is maintained over the system life, preventing the energy waste created by the traditional practice of over-lighting.

Driver disconnect provided where required to comply with US and Canadian codes.

INSTALLATION — Trims available for standard 1" and 9/16" tee bar or screw slot grids.

Fixtures **can be row mounted end-to-end**. **Suitable for damp locations.**

Drywall ceiling adapters available.

LISTINGS — CSA certified to meet US and Canadian standards. **IC rated.**

Avante is covered by one or more of the following patents: 5,988,829; 399,586; 411,641; 413,402; 2,212,513; 87,513.

BUY AMERICAN ACT — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/buy-american for additional information.

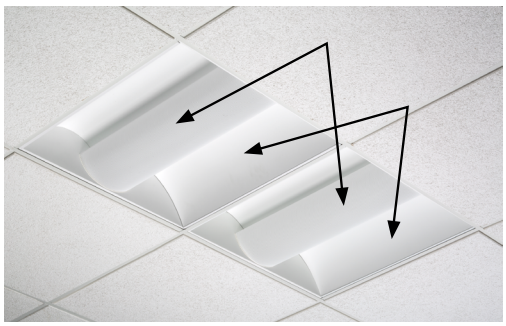
WARRANTY — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

Avante SE offers tremendous value while providing a similar aesthetic to the first generation LED Avante - now sold as HE version Avante.

SE (standard efficiency) version pictured left

(HE) high efficiency Avante is pictured on the right. Notice both the reflector and diffuser are fully illuminated. If looking to match existing first generation Avante fixtures select this version.



Avante® Direct/Indirect Lighting

2AVL4

2' X 4' LED

Specifications

Length:	47.75 (121.3)
Width:	23.75 (60.3)
Diffuser width:	8 (20.3)
Depth:	5.5 (14.0)
	5.875 (14.9) for air fixture
Weight:	35 lbs

All dimensions are inches (centimeters) unless otherwise indicated.

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details

2AVL 2x4 Direct/Indirect Lighting

A+ Capable options indicated by this color background.

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative

Example: 2AVL4 40LSE MDR EZ1 LP835

2AVL4					
Series	**Trim type**	**Air function**	**Lumens**[1]	**Diffuser**	**Voltage**
2AVL4 AV LED	**(blank)** Grid trim ST Screw slot	**(blank)** Static (no air function) A Air return/Supply	**Standard Efficiency** 30LSE 3000 lumens 40LSE 4000 lumens 50LSE 5000 lumens **High Efficiency** 30LHE 3000 lumens 40LHE 4000 lumens 50LHE 5000 lumens	MDR Metal diffuser, round holes SBL Straight louver, round holes ADP Acrylic diffuser, linear prismatic lens	**(blank)** MVOLT (120 - 277V) **347** 347V [2]

Driver	Color temperature	Controls	Options
EZ1 eldoLED dims to 1% (0-10 volt dimming) GZ1 Dims to 1% (0-10V dimming)[3] GZ10 Dims to 10% (0-10V dimming)[3]	LP830 3000 K LP835 3500 K LP840 4000 K LP850 5000 K	**(blank)** No controls N80 nLight® with 80% lumen management N80EMG nLight® with 80% lumen management. For use with generator supply EM power N100 nLight® without lumen management N100EMG nLight® without lumen management. For use with generator supply EM power NLTAIR2 RIO nLight AIR radio module without sensors[4] NLTAIR2 RIOEM nLight AIR radio module less sensor, with UL924 Emergency Operation, via power interrupt detection[5]	BDP Disconnect Plug JP10 Palletized job pack, qty. 10 EL7L 700 lumen battery pack (non-CEC compliant)[1] EL14L 1400 lumen battery pack (non-CEC compliant)[1] E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, CEC compliant PWS1836 6' pre-wire 3/8" diameter, 18 gauge, 1 circuit PWS1846 6' pre-wire 3/8" diameter, 18 gauge, 2 circuit PWS1846 PWSLV Two cables: one 6' prewire, 3/8" diameter, 18 gauge, 2 circuits; one 6' pre-wire, 3/8" diameter, 18 gauge PWS1856LV 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit w/ low voltage wires CP Chicago plenum BAA Buy America(n) Act Compliant

Accessories: *Order as separate catalog number.*	
DGA24	Drywall ceiling adapter, unit installation. Use G trim plus DGA accessory for fixture trim flange and fixture support in plaster or plasterboard ceilings.
RK8BDP 2P U	Disconnect Plug (BDP), 2 Pole, Package of 1
RK8BDP 3P U	Disconnect Plug (BDP), 3 Pole, Package of 1
RK8BDP 2P J10	Disconnect Plug (BDP), 2 Pole, Package of 10
RK8BDP 2P J40	Disconnect Plug (BDP), 2 Pole, Package of 40

Notes

1 Approximate lumen output.

2 Not available with, EL7L, EL14L, or E10WLCP options.

3 GZ1, GZ10 not available with any Controls options.

4 NLTAIR2 RIO available with MDR diffuser only. See UL 924 Sequence of Operation chart on page 3. When combined with the EZ1 option, can be used as a normal power sensing device for nLight AIR devices and luminaires with EM emergency options.

5 See UL924 Sequence of Operation chart on page 3.

6 Not available with N80, N80EMG, N100, N100EMG, PWS1836, PWS1846, PWS1846 PWSLV or PWS1856LV.

Performance Data			
Lumen Package	**Lumens**	**Input Watts**	**LPW**
2AVL4 30LSE MDR LP830	2802	36	78
2AVL4 30LSE MDR LP835	2906	36	81
2AVL4 30LSE MDR LP840	3009	36	84
2AVL4 30LSE MDR LP850	3009	36	84
2AVL4 30LHE MDR LP830	2984	30	98
2AVL4 30LHE MDR LP835	3094	30	102
2AVL4 30LHE MDR LP840	3205	30	105
2AVL4 30LHE MDR LP850	3205	30	105
2AVL4 40LSE MDR LP830	3870	47	81
2AVL4 40LSE MDR LP835	4014	47	85
2AVL4 40LSE MDR LP840	4157	47	88
2AVL4 40LSE MDR LP850	4157	47	88
2AVL4 40LHE MDR LP830	3935	41	96
2AVL4 40LHE MDR LP835	4080	41	100
2AVL4 40LHE MDR LP840	4226	41	103
2AVL4 40LHE MDR LP850	4226	41	103
2AVL4 50LSE MDR LP830	4771	62	78
2AVL4 50LSE MDR LP835	4948	62	80
2AVL4 50LSE MDR LP840	5125	62	83
2AVL4 50LSE MDR LP850	5125	62	83
2AVL4 50LHE MDR LP830	4870	50	97
2AVL4 50LHE MDR LP835	5051	50	100
2AVL4 50LHE MDR LP840	5231	50	104
2AVL4 50LHE MDR LP850	5231	50	104

How to Estimate Delivered Lumens in Emergency Mode

Use the formula below to estimate the delivered lumens in emergency mode

Delivered Lumens = 1.25 x P x LPW

P = Ouput power of emergency driver. P = 10W for E10WLCP option.

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

LPW = Lumen per watt rating of the luminaire. LPW information available in Performance Data section.

UL924 Sequence of Operation

The below information applies to all nLight AIR devices with an EM option.

- EM devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CL**AIR**ITY+ mobile app, EM devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.
- Only non-emergency rPP20, rLSXR, rSBOR, rSDGR, and nLight AIR luminaires with version 3.4 or later firmware can provide normal power sensing for EM devices. See specification sheets for control devices and luminaires for more information on options that support normal power sensing.

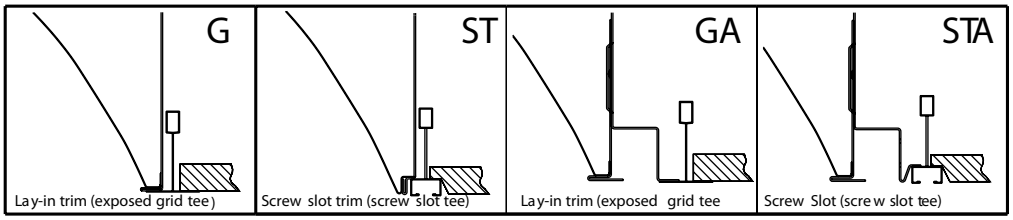
Lumen Package	UGR Values of AVL 2x4 @ 80CRI and 3500K (70% 50% 20% reflectance using a 4H x 8H room size)					
	ADP		**MDR**		**SBL**	
	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise
3000LSE	18	19.9	16	17.4	15.7	17.2
3000LHE	19.1	21.2	16.4	19.1	16.4	18.9
4000LSE	19.1	21.1	17.1	18.5	16.8	18.3
4000LHE	20.1	22.2	17.4	20.1	17.3	19.8
5000LSE	19.9	21.8	17.8	19.2	17.6	19.1
5000LHE	20.8	22.9	18.1	20.8	18.1	20.6

UGR varies based on luminaire options and is affected by application dependent parameters. Numbers depicted here are considered "Luminaire-UGR and/or "Point-UGR" values. To determine a more precise maximum UGR value ("Application-UGR"), a full lighting design layout should be completed with the selected luminaire configuration for each application

2AVL 2x4 Direct/Indirect Lighting

MOUNTING DATA

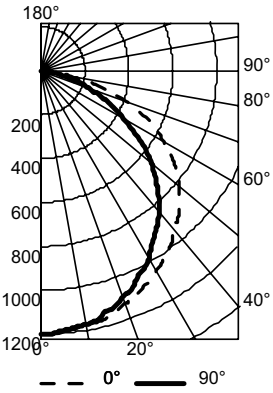
Ceiling Type	Appropriate Trim Type
Exposed grid tee (1' and 9/16")	G
Concealed grid tee	G
Screw slot	ST
Plaster or plasterboard	G*



*DGA accessory available to provide ceiling trim flange and fixture support for plaster or plasterboard ceiling. Recommended rough-in dimensions for DGA installation is 24-3/4" x 48-3/4" (Tolerance is +1/8", -0").

PHOTOMETRICS

2AVL4 30LHE MDR LP835, 3094 delivered lumens



CP Summary

	0°	90
0°	1198	1198
5°	1190	1186
15°	1166	1137
25°	1090	1038
35°	1001	905
45°	889	748
55°	743	549
65°	553	327
75°	271	141
85°	49	45
90	1	1

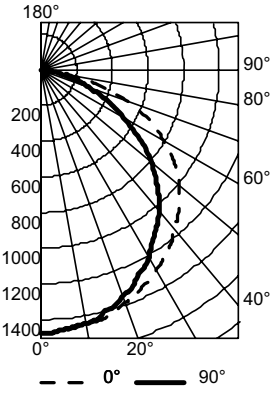
Coefficients of Utilization

	pf			20%								
	pc	80%			70%			50%				
RCR	pw	70%	50%	30%	50%	30%	10%	50%	30%	10%		
	0	119	119	119	116	116	116	111	111	111		
	1	109	104	100	102	98	94	97	94	91		
	2	99	90	83	88	82	77	85	80	75		
	3	90	79	71	78	70	64	75	68	63		
	4	82	70	61	69	60	54	66	59	53		
	5	75	62	53	61	53	46	59	52	46		
	6	70	56	47	55	47	40	53	46	40		
	7	65	51	42	50	42	36	48	41	35		
	8	60	46	38	46	37	32	44	37	32		
	9	56	43	34	42	34	29	41	33	28		
	10	53	39	31	39	31	26	38	31	26		

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	925	26.8	26.8
0° - 40°	1517	43.9	43.9
0° - 60°	2709	78.4	78.4
0° - 90°	3456	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	3456	100.0	100.0

2AVL4 40LHE MDR LP835, 4006 delivered lumens



CP Summary

	0°	90
0°	1475	1475
5°	1465	1460
15°	1436	1399
25°	1341	1278
35°	1232	1114
45°	1094	921
55°	914	676
65°	681	402
75°	333	174
85°	60	55
90	1	1

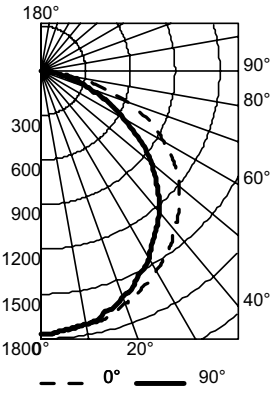
Coefficients of Utilization

	pf			20%								
	pc	80%			70%			50%				
RCR	pw	70%	50%	30%	50%	30%	10%	50%	30%	10%		
	0	119	119	119	116	116	116	111	111	111		
	1	109	104	100	102	98	94	97	94	91		
	2	99	90	83	88	82	77	85	80	75		
	3	90	79	71	78	70	64	75	68	63		
	4	82	70	61	69	60	54	66	59	53		
	5	75	62	53	61	53	46	59	52	46		
	6	70	56	47	55	47	40	53	46	40		
	7	65	51	42	50	42	36	48	41	35		
	8	60	46	38	46	37	32	44	37	32		
	9	56	43	34	42	34	29	41	33	28		
	10	53	39	31	39	31	26	38	31	26		

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1139	26.8	26.8
0° - 40°	1868	43.9	43.9
0° - 60°	3335	78.4	78.4
0° - 90°	4255	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	4255	100.0	100.0

2AVL4 50LHE MDR LP835, 5050 delivered lumens



CP Summary

	0°	90
0°	1766	1766
5°	1755	1749
15°	1720	1676
25°	1606	1531
35°	1476	1334
45°	1310	1103
55°	1095	809
65°	815	482
75°	399	208
85°	72	66
90	1	1

Coefficients of Utilization

	pf			20%								
	pc	80%			70%			50%				
RCR	pw	70%	50%	30%	50%	30%	10%	50%	30%	10%		
	0	119	119	119	116	116	116	111	111	111		
	1	109	104	100	102	98	94	97	94	91		
	2	99	90	83	88	82	77	85	80	75		
	3	90	79	71	78	70	64	75	68	63		
	4	82	70	61	69	60	54	66	59	53		
	5	75	62	53	61	53	46	59	52	46		
	6	70	56	47	55	47	40	53	46	40		
	7	65	51	42	50	42	36	48	41	35		
	8	60	46	38	46	37	32	44	37	32		
	9	56	43	34	42	34	29	41	33	28		
	10	53	39	31	39	31	26	38	31	26		

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1364	26.8	26.8
0° - 40°	2237	43.9	43.9
0° - 60°	3993	78.4	78.4
0° - 90°	5096	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	5096	100.0	100.0