WAVE 1x4 LED | Recessed T-Bar & Drywall

Project _____

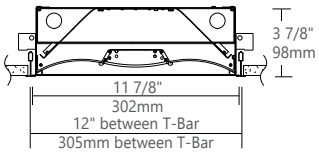
Type _____

Notes _____

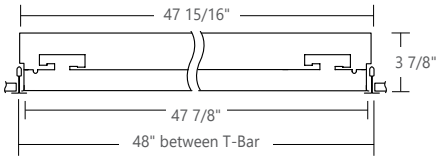
PERFORMANCE AT 4000K

NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY
4000 lm	41.16W	97 lm/W
5000 lm	53.46W	94 lm/W
6500 lm	70.65W	92 lm/W
7700 lm	85.33W	90 lm/W

Please consult factory for custom lumen output and wattage.



SECTION VIEW



SIDE VIEW

TechZone™ & Logix™ compatible | Axitune Tunable White | PoE | cULus Listed | cULus Listed Type I.C. | Control Sensors | bios | 5 YEAR

Ordering Guide

WALED

PRODUCT ID		SIZE		NOMINAL LUMENS		CRI		COLOR TEMP. (choose one)				SHIELDING		FINISH	
WALED	Wave LED	**14**	1'X4'	**1300**	1300 lm - Min	**80**	80 CRI	**27**	2700 K	**TW2750**	2700-5000 K - Tunable White	**VL**	VL optics	**W**	white
				6000	6000 lm - Max at 90 CRI	**90**	90 CRI*	**30**	3000 K	**TW2765**	2700-6500 K - Tunable White			**C**	custom
				6800	6800 lm - Max at 80 CRI			**35**	3500 K	**BTW3527**	3500-2700 K - Tunable BIOS				
								40	4000 K	**BTW4027**	4000-2700 K - Tunable BIOS				
								B30	3000 K - BIOS*						
								B35	3500 K - BIOS*						
								B40	4000 K - BIOS*						
				Outputs between listed min and max are available. Consult factory for outputs outside of the listed range. Consult factory for max output with BIOS		*Not available with BIOS.		Consult Axitune technical sheet for more information of color technology. *Consult BIOS guide for more information on BIOS technology							

VOLTAGE		DRIVER		CIRCUITS		MOUNTING		BATTERY (OPTIONAL)	
120	120 V	**DP**	dimming (0-10V) 1%	**1**	1 circuit	**TB9**	t-bar 9/16"	**B(#)**	battery pack
277	277 V	**LT(#)**	Lutron*	**+E(#)**	emergency circuit*	**TB15**	t-bar 15/16"		
347	347 V	**BI**	bi-level dimming	**+NL(#)**	night light circuit*	**ST**	screw slot t-bar		
UNV	universal	**O(#)**	other**	**+GTD(#)**	generator transfer device*	**TG9**	tegular 9/16"		
DC	low voltage*	**DPB(STC)**	dimming (0-10V) 1% with BIOS*			**TG15**	tegular 15/16"		
		DPB(DYN)	Bio-dimming™ 100%-81% with BIOS*			**DF**	drywall flange		
		TW(#)	tunable white drivers*						
		POE(#)	POE drivers*						
* Only available with POE drivers.		* See page 2 to specify system ** Please consult factory; see page 2		* Specify quantity				Not available with 347V Please consult factory	

OTHER (OPTIONAL)		IC CONTROLS (OPTIONAL)		CUSTOM (OPTIONAL)	
F	fuse*	**DS(#)**	daylight sensor	**C**	custom
FW(#)	flex whip (6' std)	**OS(#)**	occupancy sensor		
AR	air return	**DOS(#)**	daylight & occupancy sensor		
CP	Chicago plenum	**EN(#)**	Enlighted integral *		
		ENR(#)	Enlighted remote *		
		WC(#)	wireless control dimming		
* Requires 120V or 277V		* Please consult factory Specify quantity. Requires 1.5" blank. See integrated controls guide for more details. Consult factory for Tunable White. Not available with DPB (DYN) driver for BIOS with Dynamic Spectrum.		Please specify	

SPECIFY DRIVER NAME (if needed)

SPECIFY BATTERY NAME (if needed)

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ELECTRICAL

Lutron driver*	**LDE1** - Hi-lume 1% EcoSystem with Soft-on, Fade-to-Black **LTEA** - Hi-lume 1% 2-wire (120V forward phase only) *Consult factory
Other drivers**	**DALI** - Digital Addressable Lighting Interface **DMX** - Digital Multiplex **Xitanium SR** - For wireless sensor
BIOS DPB drivers*	**STC** - BIOS control 0-10V with static spectrum and BIOS SkyBlue enabled from 100% to 1%. **DYN** - BIOS control 0-10V with dynamic spectrum and BIOS SkyBlue® with Bio-Dimming™, which changes spectral qualities by removing the SkyBlue component when dimming from 100% to 81%, while light output remains relatively constant; bio-dimming reduces CCT to 2700K. Dimming from 80% to 1% will then reduce light output.
Tunable White TW drivers*	**DALIDT6** - DALI Type 6 (Two DALI Addresses) **DALIDT8** - DALI Type 8 (One DALI Address) **LTTW** - Lutron T-Series Tunable White
Power over Ethernet POE drivers* UL2108 certified for integral or remote driver	MOLEX IGOR SMARTENGINE **O** - Other (Consult factory)
Emergency	Integral emergency battery pack or emergency circuit optional.
Input Voltage	120V, 277V, 347V, UNV, DC.
Flex Whip	Shipped in a separate box for contractors to install

***Choose driver from available options.**

Incorporating these components may have limitations or affect the length of the luminaire. Please contact factory for more details.

LED SYSTEM

CRI	Minimum 80 or 90 color rendering index.
CRI BIOS	Minimum 80 color rendering index with R9>75 for all CCTs.
CCT Single Color	Choice of 2700K, 3000K, 3500K and 4000K color temperature with a great color consistency (within 3–step MacAdam ellipse). Both within fixture and fixture to fixture.
CCT BIOS	BIOS Static (STC) Choice of 3000K, 3500K and 4000K. BIOS SkyBlue® Dynamic (DYN) Choice of 3000K, 3500K, and 4000K with Bio-Dimming™ BIOS Tunable White (BTW) Choice of 4000-2700K and 3500-2700K; does not use a bio-dimmer, it uses TW drivers, which allow independent control of CCT and intensity; e.g., BTW4027 provides combined SkyBlue + white light at 4000K, SkyBlue is removed at 2700K. Light output can be adjusted for each CCT. Consult BIOS guide for more information on BIOS technology.
CCT Axitune Systems	Consult Axitune technical sheet for more information on color technology.
LED life	Minimum 50,000h with 85% of lumen maintenance in 25^{0}C ambient temperature, in compliance with IES LM-80 testing measurements.
Thermal Management	Aluminum housing acting as the heat sink to maximize life.
Environment	Dry and damp rated in operating ambient temperatures of 0-40^{0}C (32-104F).

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SPECIFICATIONS

CONSTTRUCTION

Housing	Die formed cold rolled sheet steel (20 gauge)
Central Lens Housing	Extruded aluminum (0.060" nominal)
Center Lens	PMMA Precision formed microconical structure 92 percent transmission, cuts off glare above 55^0.
Side lens	0.08" PMMA satin blend
Reflectors	Die formed cold rolled sheet steel (22 gauge)
Interior Brackets	Die formed cold rolled sheet steel (20 gauge)
Drywall Flange Kit	Extruded aluminum (0.060" nominal)

FINISH

Highly reflective, matte powder coat white paint for high efficiency. Matte texture to diffuse glare and lamp image on the surface within the optical chamber exterior. Custom finishes are also available.

WARRANTY

Axis Lighting will warrant defective LEDs, boards, and drivers for 5 years from date of purchase. Warranty is valid if luminaire is installed and used according to specifications.
If defective, Axis will send replacement boards or drivers at no cost along with detailed replacement instructions and instructions on how to return defective components to Axis.

APPROVALS

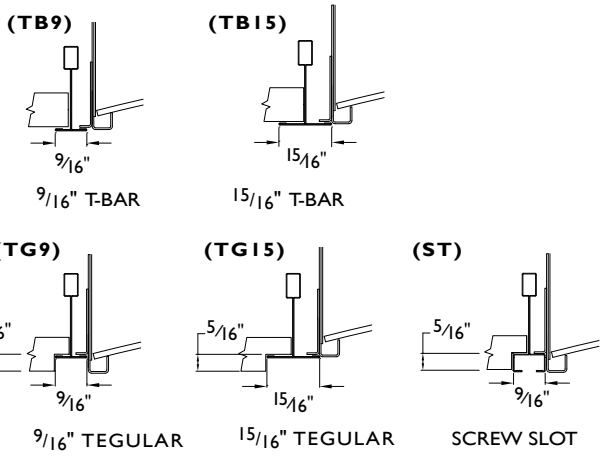
Certified to UL and CSA standards
Chicago Plenum Certified (CCEA)
Meets NYC requirements
Suitable for damp locations.

WEIGHT

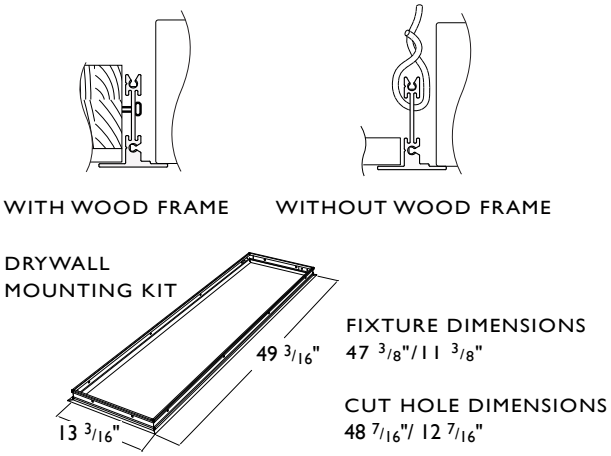
Standard	20 lbs / 9.0 kg
Drywall with Kit	22 lbs / 10.0 kg

CEILING SYSTEM

T-BAR STYLE MOUNTING



DRYWALL WITH FLANGE KIT (DF)

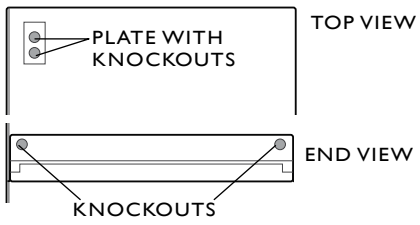


Installation sheets for all mountings options are available at: www.axislighting.com

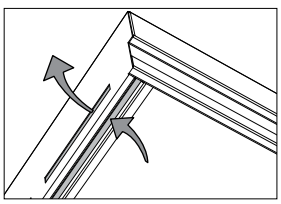
STANDARD AND END MOUNT POWER FEED

Knockouts for BX cable connection are provided both on the top and on the ends of the luminaire. This allows for an end mount power feed solution if it is required.

(BX CABLE BY OTHERS)



AIR RETURN



The air return (AR) option consists of discreet slots along the sides of the luminaire. These slots allow air to exhaust into the plenum and eliminate the need for unsightly air return grilles, and create a clean and well organized ceiling.

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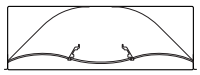
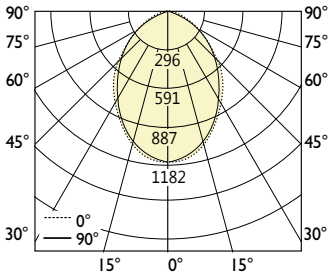
● *PHOTOMETRIC DATA*

LED



PHOTOMETRIC CURVE



Lumaire Lumens: 2400 lm
Input Watts: 22.765 W
Efficacy: 103 lm/W
IES FILE:WALED-14-2400-80-40-VL.ies

TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

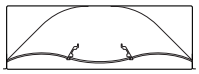
	Horizontal Angles					Zonal Lumens
Vertical Angle	0	20	40	70	90	
0	1176	1176	1176	1176	1176	
10	1130	1124	1116	1107	1104	53
20	993	979	967	952	938	92
30	803	805	804	791	794	111
40	636	639	651	657	649	116
50	407	415	423	415	419	90
60	250	265	266	258	259	64
70	154	165	158	128	126	40
80	72	74	58	55	53	17
90	0	0	0	0	0	

COEFFICIENTS OF UTILIZATION (%)

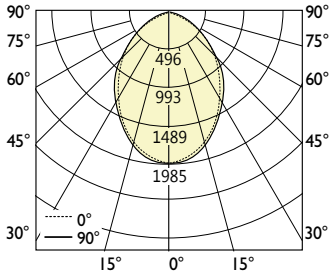
Ceiling	80				70				50		
Wall	70	50	30	10	70	50	30	10	50	30	10
0	118	118	118	118	116	116	116	116	110	110	110
1	109	105	101	96	107	103	99	95	99	96	92
2	100	93	87	79	98	91	86	79	88	83	77
3	92	83	75	67	90	81	74	67	78	73	66
4	85	74	66	58	83	73	66	57	71	64	57
5	79	67	59	50	77	66	58	50	64	57	50
6	73	61	53	44	72	60	52	44	58	51	44
7	68	56	48	40	67	55	47	40	54	47	40
8	64	51	43	36	63	51	43	36	49	43	36
9	60	47	40	33	59	47	39	32	46	39	32
10	56	44	37	30	55	44	36	30	43	36	30

Based on floor reflectance of 20

LED



PHOTOMETRIC CURVE



Lumaire Lumens: 4000 lm
Input Watts: 41.16 W
Efficacy: 97 lm/W
IES FILE:WALED-14-4000-80-40-VL.ies

TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

	Horizontal Angles					Zonal Lumens
Vertical Angle	0	22.5	45	67.5	90	
0	1983	1983	1983	1983	1983	
10	1909	1911	1905	1906	1907	91
20	1693	1691	1677	1669	1665	157
30	1388	1398	1401	1398	1399	192
40	1110	1124	1145	1140	1127	199
50	693	719	719	705	713	149
60	444	463	455	444	447	107
70	268	278	269	237	230	67
80	126	120	95	86	85	27
90	0	0	0	0	0	

LUMINANCE DATA (cd/m²)

	Horizontal Angles		
Vertical Angle	0	45	90
45	3501	3587	3559
55	2569	2692	2616
65	2220	2281	2162
75	2011	1813	1529
85	1682	1121	1065

COEFFICIENTS OF UTILIZATION (%)

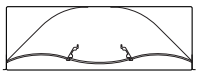
Ceiling	80				70				50		
Wall	70	50	30	10	70	50	30	10	50	30	10
0	120	120	120	120	117	117	117	117	112	112	112
1	111	106	102	97	108	104	101	96	100	97	93
2	102	94	88	81	99	92	87	80	89	84	78
3	94	84	77	68	91	82	76	68	80	74	67
4	86	75	67	59	84	74	67	58	72	65	58
5	80	68	60	51	78	67	59	51	65	58	51
6	74	62	53	45	72	61	53	45	59	52	45
7	69	57	48	40	68	56	48	40	54	47	40
8	65	52	44	36	63	51	44	36	50	43	36
9	61	48	40	33	59	47	40	33	46	39	33
10	57	44	37	30	56	44	37	30	43	36	30

Based on floor reflectance of 20

ℹ All IES files are available for download at: www.axislighting.com

● *PHOTOMETRIC DATA*

LED



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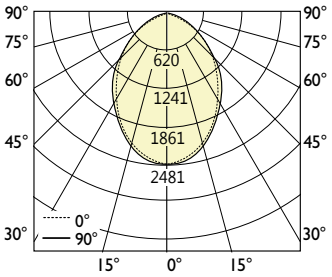


Lumaire Lumens: 5000 lm
Input Watts: 53.46W
Efficacy: 94 lm/W
IES FILE:WALED-14-5000-80-40-VL.ies

TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

	Horizontal Angles					Zonal Lumens
Vertical Angle	0	22.5	45	67.5	90	
0	2479	2479	2479	2479	2479	
10	2386	2389	2381	2382	2384	114
20	2117	2113	2096	2086	2081	197
30	1735	1747	1751	1747	1748	239
40	1387	1405	1431	1425	1409	249
50	867	899	899	882	891	187
60	556	578	569	556	559	134
70	335	348	336	297	287	83
80	158	150	118	108	106	34
90	0	0	0	0	0	

LUMINANCE DATA (cd/m²)

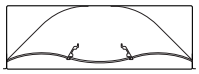
	Horizontal Angles		
Vertical Angle	0	45	90
45	4376	4484	4449
55	3211	3365	3270
65	2775	2840	2703
75	2514	2266	1912
85	2103	1402	1332

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50		
Wall	70	50	30	10	70	50	30	10	50	30	10
0	120	120	120	120	117	117	117	117	112	112	112
1	111	106	102	97	108	104	101	96	100	97	93
2	102	94	88	81	99	92	87	80	89	84	78
3	94	84	77	68	91	82	76	68	80	74	67
4	86	75	67	59	84	74	67	58	72	65	58
5	80	68	60	51	78	67	59	51	65	58	51
6	74	62	53	45	72	61	53	45	59	52	45
7	69	57	48	40	68	56	48	40	54	47	40
8	65	52	44	36	63	51	44	36	50	43	36
9	61	48	40	33	59	47	40	33	46	39	33
10	57	44	37	30	56	44	37	30	43	36	30

Based on floor reflectance of 20

LED



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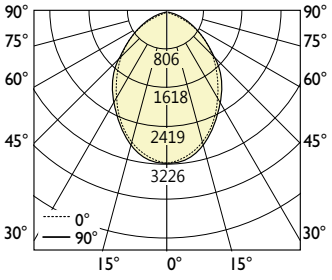

Lumaire Lumens: 6500 lm
Input Watts: 70.65W
Efficacy: 92 lm/W
IES FILE:WALED-14-6500-80-40-VL.ies

TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

	Horizontal Angles					Zonal Lumens
Vertical Angle	0	22.5	45	67.5	90	
0	3223	3223	3223	3223	3223	
10	3102	3106	3096	3097	3099	148
20	2752	2747	2725	2712	2706	256
30	2255	2272	2276	2272	2273	311
40	1803	1827	1861	1852	1831	324
50	1127	1168	1168	1146	1158	243
60	722	752	740	722	727	174
70	436	452	437	385	374	108
80	205	195	154	140	137	45
90	0	0	0	0	0	

LUMINANCE DATA (cd/m²)

	Horizontal Angles		
Vertical Angle	0	45	90
45	5688	5829	5764
55	4174	4375	4251
65	3608	3692	3514
75	3268	2946	2485
85	2734	1822	1731

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50		
Wall	70	50	30	10	70	50	30	10	50	30	10
0	120	120	120	120	117	117	117	117	112	112	112
1	111	106	102	97	108	104	101	96	100	97	93
2	102	94	88	81	99	92	87	80	89	84	78
3	94	84	77	68	91	82	76	68	80	74	67
4	86	75	67	59	84	74	67	58	72	65	58
5	80	68	60	51	78	67	59	51	65	58	51
6	74	62	53	45	72	61	53	45	59	52	45
7	69	57	48	40	68	56	48	40	54	47	40
8	65	52	44	36	63	51	44	36	50	43	36
9	61	48	40	33	59	47	40	33	46	39	33
10	57	44	37	30	56	44	37	30	43	36	30

Based on floor reflectance of 20

ℹ All IES files are available for download at: www.axislighting.com

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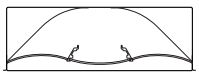
● *PHOTOMETRIC DATA*

LED



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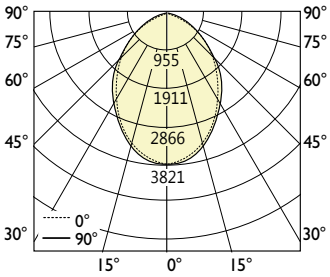

Lumaire Lumens: 7700 lm
Input Watts: 85.33 W
Efficacy: 90 lm/W
IES FILE:WALED-14-7700-80-40-VL.ies

TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

	Horizontal Angles					Zonal Lumens
Vertical Angle	0	22.5	45	67.5	90	
0	3818	3818	3818	3818	3818	
10	3674	3679	3667	3669	3671	175
20	3260	3254	3228	3212	3205	303
30	2672	2691	2696	2691	2693	369
40	2136	2164	2205	2194	2170	384
50	1335	1384	1384	1358	1372	288
60	856	891	877	856	861	207
70	516	535	518	457	443	128
80	243	231	182	166	163	53
90	0	0	0	0	0	

LUMINANCE DATA (cd/m²)

	Horizontal Angles		
Vertical Angle	0	45	90
45	6739	6905	6852
55	4945	5183	5035
65	4274	4374	4163
75	3871	3489	2944
85	3238	2159	2051

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50		
Wall	70	50	30	10	70	50	30	10	50	30	10
0	120	120	120	120	117	117	117	117	112	112	112
1	111	106	102	97	108	104	101	96	100	97	93
2	102	94	88	81	99	92	87	80	89	84	78
3	94	84	77	68	91	82	76	68	80	74	67
4	86	75	67	59	84	74	67	58	72	65	58
5	80	68	60	51	78	67	59	51	65	58	51
6	74	62	53	45	72	61	53	45	59	52	45
7	69	57	48	40	68	56	48	40	54	47	40
8	65	52	44	36	63	51	44	36	50	43	36
9	61	48	40	33	59	47	40	33	46	39	33
10	57	44	37	30	56	44	37	30	43	36	30

Based on floor reflectance of 20

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