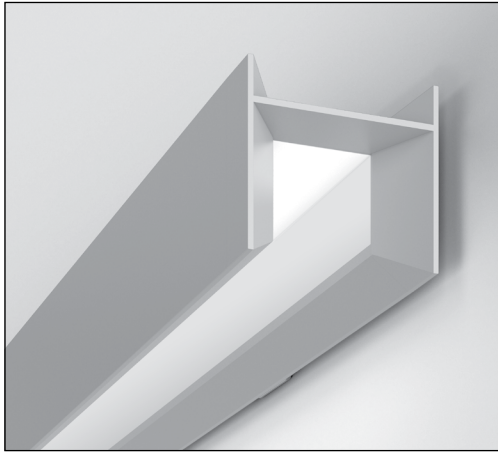
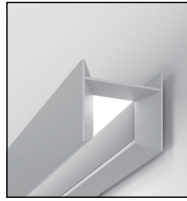
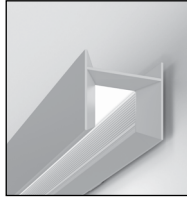




SO - spotless lens



MSO - microgroove spotless lens



MAL - microgroove aluminum

Project _____

Type _____

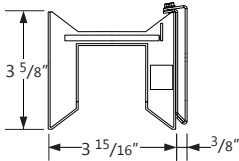
Notes _____

PERFORMANCE PER LINEAR FOOT AT 3500K

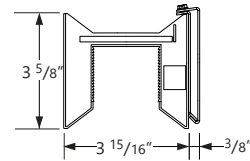
DISTRIBUTION	NOMINAL LUMEN OUTPUT		INPUT WATTS	EFFICACY	SHIELDING
	UP	DOWN			
75up/25down at 1200 lm/ft	917 lm/ft	282 lm/ft	9.6 w/ft	125 lm/w	SO
50up/50down at 1000 lm/ft	555 lm/ft	443 lm/ft	8.9 w/ft	112 lm/w	MSO
25up/75down at 800 lm/ft	186 lm/ft	610 lm/ft	9.8 w/ft	81 lm/w	MAL

* Based on a 4 foot luminaire using one driver
Please consult factory for custom lumen output and wattage

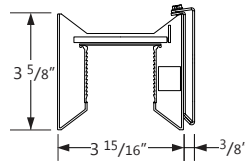
SO - spotless lens



MSO - microgroove spotless lens



MAL - microgroove aluminum



Ordering Guide

ZESQWDI											
PRODUCT ID		LIGHT ENGINE		NOMINAL LUMENS/FT		CRI		COLOR TEMP.		SHIELDING	
ZESQWDI	Zen Square Wall Direct/Indirect	SL 75/25	surroundlite 75%up/25%down	400	400 lm/ft - Minimum	80	80 CRI	27	2700 K	SO	spotless lens
		SL 50/50	surroundlite 50%up/50%down	800	800 lm/ft - Maximum for 25/75	90	90 CRI	30	3000 K	M	microgroove spotless lens
		SL 25/75	surroundlite 25%up/75%down	1000	1000 lm/ft - Maximum for 50/50			35	3500 K	MA	microgroove aluminum *
				1200	1200 lm/ft - Maximum for 75/25			40	4000 K		
				Output limits displayed apply to 90 CRI option. Applies to both UP & DOWN. Higher output possible for 80 CRI. Please consult factory.		Applies to both UP & DOWN.		Applies to both UP & DOWN.		* Standard white	

SHIELDING FINISH (OPTIONAL)	FIXTURE LENGTH	FINISH	VOLTAGE	DRIVER	CIRCUITS
W white - standard C custom	2 2' 3 3' 4 4' 5 5' 6 6' 7 7' 8 8' 12 12' S(L) system run	AP aluminum paint W white BLK black C custom	UNV universal DC low voltage*	DP integral driver 0-10V dimming 1% POE(##) POE drivers*	1 1 circuit +E(##) emergency section
Shielding finish option is for MAL option only.	All lengths in 1' increments		Consult factory for 347 V * Only available with POE drivers	* Specify system, see page 3 Only integral 0-10V driver available	

BATTERY (OPTIONAL)	END CAP (OPTIONAL)	IC CONTROLS (OPTIONAL)	CUSTOM
BR(##) remote battery pack	FE flat end cap RE rounded end cap	EN(##) enlightened integral DOS(##) daylight & occupancy sensor WC(##) wireless control dimming	C custom
Please consult factory	A standard end cap will be supplied (open end, or sensor end cap), if no selection is made. See page 2 for more details.	Applies to both UP & DOWN. Remote or integrated. See IC controls guide for more information Sensor end cap will be supplied as standard with the selection. See page 2 for end cap details.	Please specify



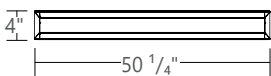
● LIGHT GUIDE

High precision light guide made of PMMA material, allows distribution of controlled light in all 3-dimensions to put light on both vertical and horizontal planes within the space. Patented lightguide design featuring molecular optics and precision-coupled optic components yield a high efficiency luminaire. In-plane mixing maximizes color uniformity while light emitting area is uniform and diffuse without 'head lighting' from the LED's.

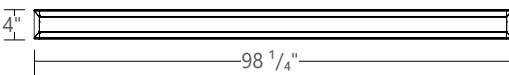
● LENGTHS

2' to 12' in 1 foot increments

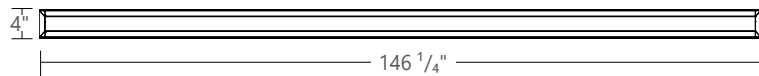
4ft



8ft



12ft



● SYSTEMS (S#)

Runs of Zen Square that are greater than 12ft in length are designated as systems S(L). This means that the run is comprised of a combination 4ft and/or 8ft sections to be assembled on site using our joining system.

● WEIGHT

4 ft 9 lbs / 4.1 kg
8 ft 18 lbs / 8.2 kg
12 ft 27 lbs / 12.3 kg

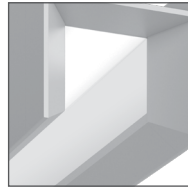
● FINISH

White, black, aluminum paint, powder coated and custom finishes are also available.

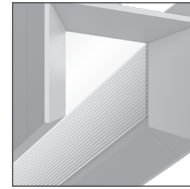
● APPROVALS

Certified to UL and CUL standards 
 Suitable for damp locations.

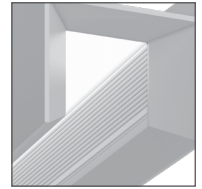
● OPTICS



SO spotless lens



MSO microgroove
spotless lens

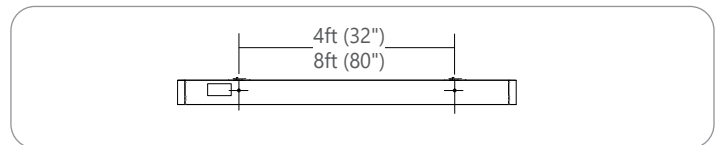
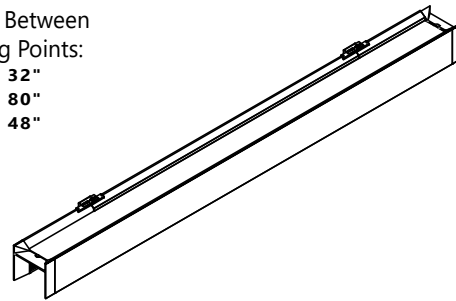


MAL microgroove
aluminum

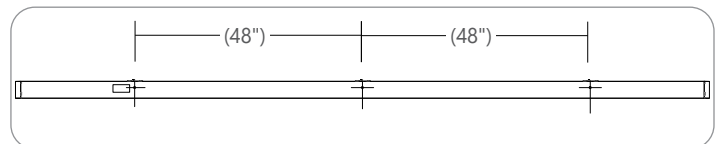
● MOUNTING SPACING

Distance Between
Mounting Points:

4ft 32"
8ft 80"
12ft 48"

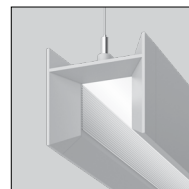


For 4' to 8' luminaires.

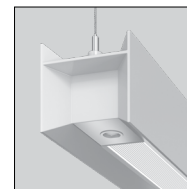


For 9' to 12' luminaires.

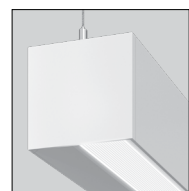
● END CAP OPTIONS



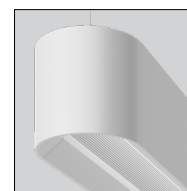
Default end cap that
will be supplied unless
specified otherwise.
Standard



Sensor end cap that will
be supplied, if sensor
selection is made.
Standard



Flat end cap
Optional

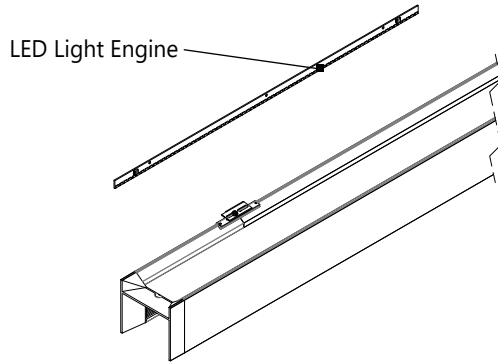


Rounded end cap
Optional



● LED UPGRADE / REPLACEMENT

All LED light engines used are field replaceable and upgradable to ensure the lighting system will last for years. Future-proof design comes with easy access to LED light engines from above using quick connectors (included in luminaire) and a screwdriver.



● CONSTRUCTION

Housing	Extruded aluminum (0.06" nominal)
End Cap	Die cast aluminum (0.10" nominal)
Joiners	Die cast aluminum (0.10" nominal)
Interior Bracket	Die formed zintec (20 gauge)
Lens	Uniform frosted acrylic lens
Microgroove Lens	Uniform frosted acrylic lens
Microgroove Aluminum	White painted aluminum material
Mounting Brackets	Cold rolled sheet painted (16 gauge)

● ELECTRICAL

Power over Ethernet	MOLEX
POE drivers*	IGOR
UL2108 certified for integral or remote driver	SMARTENGINE
	O - Other (Consult factory)
Emergency	Remote emergency battery pack or emergency circuit optional.
Input Voltage	UNV (120-277 V)

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

● WARRANTY

Limited 5-year warranty is available. Warranty is valid provided luminaires are installed and used according to specifications. For full terms and conditions, please consult warranty section at axislighting.com.

● LED SYSTEM

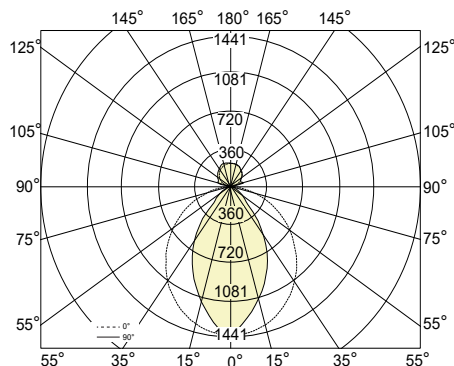
CRI	Minimum 80 or 90 color rendering index
CCT	Choice of 3000K, 3500K and 4000K color temperature with a great color consistency (within 3-step MacAdam ellipse). Both within fixture and fixture to fixture.
LED life	Minimum 50,000h with 85% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.
Thermal Management	Aluminum housing acting as the heat sink to maximize life.
Environment	Dry and damp rated for indoor use only in operating ambient temperatures of 0-40°C (32-104°F)



● PHOTOMETRIC DATA

MAL Microgroove Aluminium
25% up / 75% down at 800 lm/ft

PHOTOMETRIC CURVE



Lumens up: 743 lm
Lumens down: 2438 lm
Total lumens: 3181 lm (for 4ft)
Input Watts: 39.2 W
Efficacy: 81 lm/W

IES FILE: ZESQWDI-SL25-75-800-80-35-MAL-W-4.IES

CRI:80 shown
TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles				
	0	22.5	45	67.5	90
0	1427	1427	1427	1427	1427
5	1419	1380	1350	1326	1324
15	1369	1254	1172	1118	1104
25	1264	1092	972	888	866
35	1118	901	745	625	583
45	935	692	489	304	240
55	728	474	202	149	139
65	503	246	105	72	67
75	270	85	41	17	13
85	77	20	9	1	1
90	2	8	4	0	0
95	9	10	4	2	2
105	49	48	61	105	129
115	94	84	90	101	112
125	133	125	125	128	130
135	164	164	154	160	162
145	188	188	188	180	182
155	206	205	208	210	210
165	217	217	218	219	220
175	223	222	222	222	222
180	224	224	224	224	224

ZONAL LUMENS

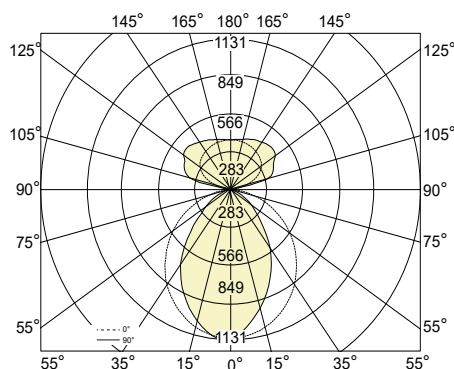
Zone	Lumens
0	
0-10	129
10-20	341
20-30	469
30-40	498
40-50	420
50-60	297
60-70	184
70-80	82
80-90	21
90	
90-100	12
100-110	76
110-120	102
120-130	121
130-140	129
140-150	120
150-160	98
160-170	63
170-180	21
180	

LUMINANCE DATA (cd/m²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	10838	5674	2785
55	10407	2893	1993
65	9758	2045	1291
75	8559	1297	420
85	7242	841	63

MSO Microgroove Spotless Lens
50% up / 50% down at 1000 lm/ft

PHOTOMETRIC CURVE



Lumens up: 2218 lm
Lumens down: 1770 lm
Total lumens: 3989 lm (for 4ft)
Input Watts: 35.7 W
Efficacy: 112 lm/W

IES FILE: ZESQWDI-SL 50-50-1000-80-35-MSO-W-4.IES

CRI:80 shown
TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles				
	0	22.5	45	67.5	90
0	1113	1113	1113	1113	1113
5	1107	1088	1078	1066	1062
15	1066	1012	952	912	900
25	987	889	800	737	719
35	875	740	626	545	517
45	732	577	439	337	305
55	570	410	254	201	182
65	394	238	138	93	80
75	210	107	43	11	8
85	51	22	10	2	1
90	3	9	5	1	1
95	20	26	10	7	6
105	120	118	181	291	335
115	229	241	268	373	438
125	296	321	371	429	456
135	329	356	401	452	474
145	348	366	402	432	445
155	361	370	393	413	422
165	369	372	380	390	394
175	373	373	374	376	376
180	374	374	374	374	374

ZONAL LUMENS

Zone	Lumens
0	
0-10	104
10-20	282
20-30	398
30-40	437
40-50	394
50-60	303
60-70	194
70-80	86
80-90	20
90	
90-100	25
100-110	207
110-120	311
120-130	339
130-140	313
140-150	251
150-160	181
160-170	108
170-180	36
180	

LUMINANCE DATA (cd/m²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	8485	5082	3532
55	8149	3623	2603
65	7631	2672	1553
75	6658	1376	243
85	4780	963	123

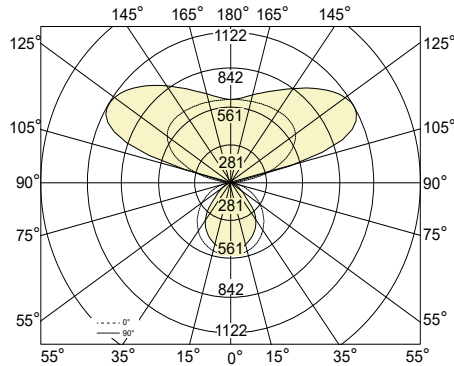
i All IES files are available for download at: www.axislighting.com



● PHOTOMETRIC DATA

SO Spotless lens
75% up / 25% down at 1200 lm/ft

PHOTOMETRIC CURVE



Lumens up: 3667 lm
Lumens down: 1129 lm
Total lumens: 4796 lm (for 4ft)
Input Watts: 38.5 W
Efficacy: 125 lm/W

IES FILE: ZESQWDI-SL75-25-1200-80-35-SO-W-4.IES

CRI:80 shown
TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles				
	0	22.5	45	67.5	90
0	542	542	542	542	542
5	540	534	527	521	520
15	525	502	486	475	473
25	494	457	437	426	422
35	440	395	371	354	345
45	365	317	285	234	199
55	280	230	154	116	105
65	184	136	72	50	44
75	88	45	18	6	4
85	8	0	1	0	0
90	2	2	2	1	1
95	71	69	23	20	20
105	306	380	504	504	485
115	509	572	744	973	1087
125	622	681	818	1006	1103
135	654	706	809	930	989
145	650	687	758	827	857
155	638	659	703	739	752
165	627	635	656	672	677
175	622	622	625	627	628
180	621	621	621	621	621

ZONAL LUMENS

Zone	Lumens
0	
0-10	50
10-20	138
20-30	205
30-40	236
40-50	215
50-60	156
60-70	93
70-80	33
80-90	3
90	
90-100	54
100-110	426
110-120	747
120-130	752
130-140	636
140-150	479
150-160	326
160-170	186
170-180	60
180	

LUMINANCE DATA (cd/m²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	4233	3300	2310
55	4005	2203	1501
65	3578	1406	855
75	2783	557	139
85	794	56	0

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