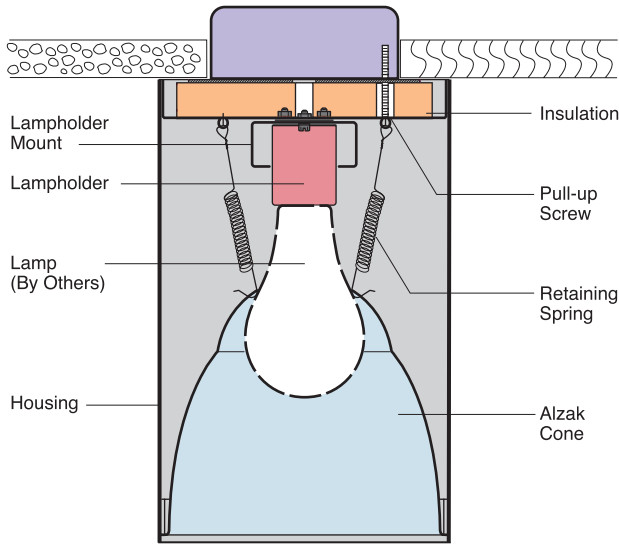


L321

**A Lamps to 200W
Conoid Trims**



Optics and Applications

For general downlighting where a concealed and shielded light source is required. Use when job conditions preclude recessing, or if the architectural appearance of a surface unit is preferred.

Design Features

The multiple curve specular Alzak conoid reflector collects and redistributes the output of general service or Halogena lamps. Performance is smooth and efficient and normally lost spill light is captured. Shielding is excellent and aperture brightness from most viewing angles is very low.

Finish

Specular clear Alzak cones are standard. Optional colors and Softglow® finishes are available. Cylinder exterior is satin white baked enamel, inside is optical matte black to suppress stray light leaks. Cylinders are satin brushed and emulsion cleaned before paint spraying, then baked for superior adhesion and durability.

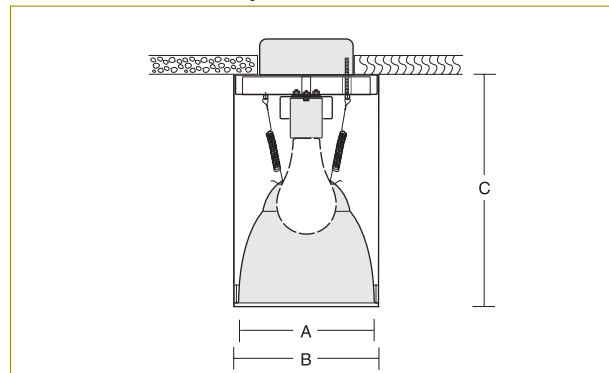
General

Cylinders are rigid heavy wall aluminum. Fixtures are UL and C-UL listed for thermal and electrical safety. Union made IBEW. Luminaire Efficiency Rating (LER) data is in the photometric directory located in Section Z.

Accessories

- B Black cone.
- G Gold cone.
- H Mocha cone.
- P Graphite cone.
- S Softglow® finishes: add S before color letters. e.g. SW for Softglow® wheat cone, SC for Softglow® clear cone.
- T Titanium cone.
- W Wheat cone.
- Y Pewter cone.
- Z Bronze cone.
- M Wall or column mount.
- YK Yoke mounting.
- EX Exterior application.
- P5 Pendant adaptor, 21" length.
- ES Extra stem length, specify length.
- CC Custom color.
- BA Brushed aluminum finish.
- WRL Wattage restriction label, specify wattage.

Dimensions and Lamps



Number	A Aperture	B Diameter	C Depth	Lamps*
L321	5 7/8" 149mm	6 1/4" 159mm	10" 254mm	60-150W A-19 75-200W A-21 60-150W BT-15 Halogena

*Factory sets focal position for A-21. Add ABT to catalog number for preset A-19 and BT-15 position. May be converted on the job as required.

Matching Units

- Recessed downlights [Pages C6, C7, C8, C9](#)
- Recessed directionals [Pages C22, C23, C24](#)

* Click for link to pages in blue.

L5 L321

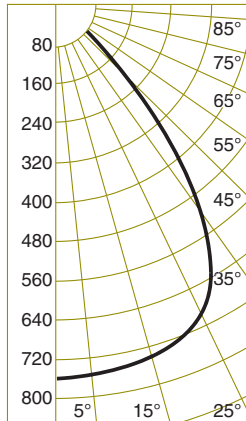
Performance Datachart

Single Unit Initial Footcandles, 30" Work Plane						Ceiling to Floor	Multiple Units Initial Footcandles, 30" Work Plane			
L321 100W A-19 IF Read Top Data							Ceiling 80%	Walls 50%	Floor 20%	
L321 200W A-21 IF Read Bottom Data							Spacing is Maximum Over Work Plane			
Nadir	15°		25°		35°		Spacing	RCR 1	RCR 3	RCR 8
FC	FC	Diam	FC	Diam	FC	Diam				
25	22	3'	17	5'	10	8'	7'	28	24	16
57	51	3'	41	5'	22	8'	7'	60	51	35
18	16	3'	12	6'	7	9'	8'	20	17	12
40	37	3'	29	6'	15	9'	8'	43	37	25
13	12	4'	9	7'	5	11'	9'	15	13	9
30	28	4'	22	7'	12	11'	9'	32	28	19
8	7	5'	6	9'	3	13'	11'	9	8	5
19	17	5'	14	9'	7	13'	12'	20	17	12
6	5	6'	4	11'	2	16'	14'	6	5	4
13	12	6'	9	11'	5	16'	14'	14	12	8

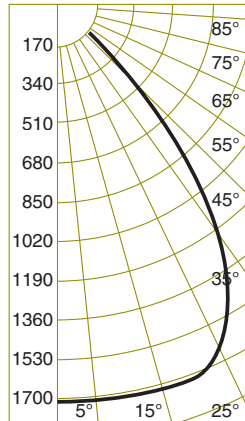
Single Unit Initial Footcandles, 30" Work Plane						Ceiling to Floor	Multiple Units Initial Footcandles, 30" Work Plane			
L321 60W BT-15/HAL/W Read Top Data							Ceiling 80%	Walls 50%	Floor 20%	
L321 150W BT-15/HAL/W Read Bottom Data							Spacing is Maximum Over Work Plane			
Nadir	15°		25°		35°		Spacing	RCR 1	RCR 3	RCR 8
FC	FC	Diam	FC	Diam	FC	Diam				
13	10	3'	7	5'	4	8'	6'	16	14	9
41	33	3'	23	5'	12	8'	6'	51	44	31
9	7	3'	5	6'	3	9'	7'	11	10	7
30	24	3'	17	6'	8	9'	7'	37	31	22
7	6	4'	4	7'	2	11'	8'	9	7	5
22	18	4'	13	7'	6	11'	8'	28	24	16
4	4	5'	2	9'	1	13'	10'	5	5	3
14	11	5'	8	9'	4	13'	10'	17	15	10
3	2	6'	2	11'	1	16'	12'	4	3	2
9	8	6'	5	11'	3	16'	12'	12	10	7

Colored cone multipliers: Gold x .98, Wheat x .72, Pewter x .62, Mocha x .61, Graphite x .50, Titanium x .50, Bronze x .44

Candlepower Distribution



L321 100W A-19 IF
Eff. 62% S/M 1.20



L321 200W A-21 IF
Eff. 63% S/M 1.23

Candelas

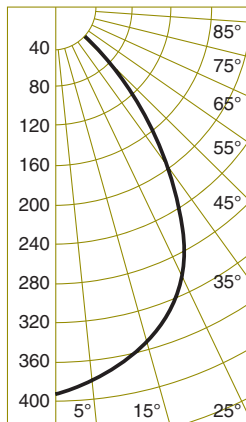
Vertical Angles	100W	200W
	1750*	3910*
0	755	1710
5	752	1716
10	747	1720
15	735	1721
20	728	1725
25	701	1648
30	630	1476
35	524	1190
40	385	812
45	205	410
50	28	57
55	7	12
60	0	4
65	0	0
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

° Vertical Angles
* Initial Lamp Lumens

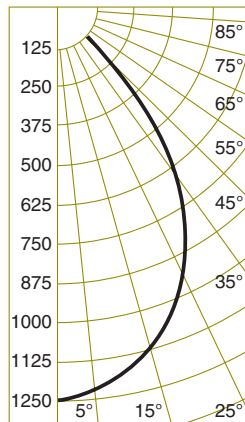
Coefficients of Utilization

Ceiling	80%				70%		50%		30%		0
	70	50	30	10	50	10	50	10	50	10	0
Wall %	Zonal Cavity Method - Floor Reflectance 20%										
RCR	Zonal Cavity Method - Floor Reflectance 20%										
1	.72	.70	.68	.67	.69	.66	.66	.64	.64	.62	.59
2	.68	.65	.62	.60	.64	.59	.62	.58	.60	.56	.54
3	.64	.60	.56	.54	.59	.53	.57	.52	.56	.51	.50
4	.60	.55	.51	.48	.54	.48	.53	.48	.52	.47	.45
5	.57	.51	.47	.44	.50	.44	.49	.43	.48	.43	.42
6	.54	.47	.43	.40	.47	.40	.46	.40	.45	.39	.38
7	.51	.44	.40	.37	.44	.37	.43	.37	.42	.36	.35
8	.48	.41	.37	.34	.41	.34	.40	.34	.39	.34	.32
9	.45	.38	.34	.31	.38	.31	.37	.31	.37	.31	.30
10	.43	.36	.32	.29	.35	.29	.35	.29	.34	.29	.28

L321 100W A-19 IF
L321 200W A-21 IF



L321 60W BT-15 Halogena
Eff. 55% S/M 1.03



L321 150W BT-15 Halogena
Eff. 56% S/M 1.03

Vertical Angles	60W	150W
	840*	2650*
0	395	1251
5	390	1235
10	375	1192
15	351	1111
20	325	1034
25	300	950
30	260	824
35	203	642
40	137	433
45	76	240
50	20	63
55	5	15
60	0	11
65	0	9
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

° Vertical Angles
* Initial Lamp Lumens

Ceiling	80%				70%		50%		30%		0
	70	50	30	10	50	10	50	10	50	10	0
Wall %	Zonal Cavity Method - Floor Reflectance 20%										
RCR	Zonal Cavity Method - Floor Reflectance 20%										
1	.63	.61	.60	.58	.60	.58	.58	.56	.56	.54	.52
2	.59	.57	.54	.52	.56	.52	.54	.50	.52	.49	.47
3	.56	.52	.49	.47	.52	.47	.50	.46	.49	.45	.44
4	.53	.48	.45	.43	.48	.42	.47	.42	.45	.41	.40
5	.50	.45	.41	.39	.44	.39	.43	.38	.42	.38	.37
6	.47	.42	.38	.36	.41	.35	.40	.35	.40	.35	.34
7	.44	.39	.35	.33	.39	.33	.38	.32	.37	.32	.31
8	.42	.36	.33	.30	.36	.30	.35	.30	.35	.30	.29
9	.40	.34	.30	.28	.34	.28	.33	.28	.33	.28	.27
10	.38	.32	.28	.26	.32	.26	.31	.26	.31	.26	.25

L321 60W BT-15 Halogena
L321 150W BT-15 Halogena