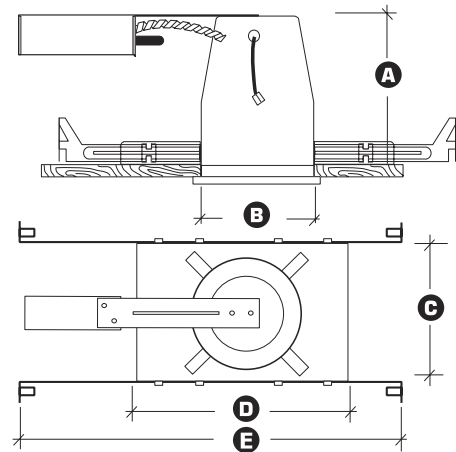


# B2-LED 2" NEW CONSTRUCTION NON-IC LED DOWNLIGHT



**450  
LUMENS**

INPUT VOLT.	INPUT FREQ.	INPUT CUR.	INPUT POWER	THD	POWER FACTOR	LUMENS
120	50/60Hz	83mA	10W(+/-5%)	<20%	>0.9	450



- A** Height = 4-1/4"
- B** Cut-out = 2-3/4"
- C** Width = 5"
- D** Length = 8"
- E** Bar Hanger = 12"-24"

**DESCRIPTION** - 2" LED dedicated New Construction NON-IC housing with Integral heat management system and driver (installed on junction box). Designed for new construction installations and suitable for use in non-insulation covered ceilings. The excellent color rendering index of 85+ and realistic color temperatures confirm that the Elite LED luminaires are ideally suited for use in hospitality, health care, commercial, retail and residential applications. Consuming 10 watts and producing over 450 usable lumens, the lighting is smooth and comfortable while using nearly 80% less energy than the equivalent 50W BR20/PAR20 or MR16. Plus, the eco-friendly Elite Lighting LED system features 70% lumen maintenance at 50,000 hours life, qualifying for Title 24 requirements.

**FEATURES** - Greater light output than a 50W BR20/PAR20 or MR16 while consuming 10 watts of power.



**DURABILITY** - Without proper heat management, any LED luminaire will fail. Our die-cast system pulls the heat from the LED chip, allowing continued cool operation for years. Life tests have shown the 10 watt Elite LED output will be maintained at 70% of initial lumens at 50,000 hours of operation.

**DRIVER** - Our LED driver is rated for 50 to 60 Hz at 120V input, produces less than 20% THD, has a power factor between 0.90 and 1.00 and is thermally protected for additional safety. Elites driver is installed on the junction box cover, it is easily accessible for serviced from below the ceiling.

**DIMMABLE** - The Elite LED system is fully dimmable down to 10% of initial light output with a Triac & Electronic Low Voltage dimmer when ordered with the following option (DIMTR-120). Applications requiring 277V are not dimmable. Consult Factory for details.

**BAR HANGERS** - Preinstalled bar hangers allow housing to be positioned and locked at any point within a 24" joist span. They can be positioned on either the long or short axis of the housing and can be shortened for 12" joists. They contain a double-headed real nail for secure attachment into the joist. Bar hanger nails are installed on a 20° downward angle for better contact, and the 90° pivoting mounting plate makes installation fast and accurate. Bar hangers can fit onto T-Bar spline with additional slots and holes for special mounting methods if necessary.

**JUNCTION BOX** - UL Listed for through-branch circuit wiring, provided with two 1/2" knockouts, Driver is installed on the junction box cover so it may be serviced from below the ceiling.

**HOUSING** - High-tempered 22-gauge deep drawn single piece aluminum housing with integrated thermal management system. Housing in NON-IC rated and insulation must be pulled at least 3 inches from all sides.

**REPEATABLE** - Repeatability means quality. From our chip selection process, to our driver, to the thermal management, the 10 watt Elite LED is engineered for quality. Our superior design allows for installation in construction that requires the Elite Air-Shut™ system. All Elite LED luminaires are rated at 85+ CRI and tested to LM-79 and LM-80 standards by a certified laboratory, and meets the California Title-24 compliance standards. Our stringent chip specifications require only those chips that produce no ultra violet and virtually no infrared.

**THERMAL PROTECTION** - Standard thermal protection device guards against improper installation and misuse of insulation material.

**OUR WORD** - The B2-LED eco-friendly Elite LED system is warranted for 3 years.

**LISTING**

c-UL-us / c-ETL-us - listed for Damp location.  
c-UL-us / c-ETL-us - listed for feed Through Wiring.  
LM79 / LM80  
Covered by U.S. Patent Number: 7717390B1

**DIMMING INFORMATION**

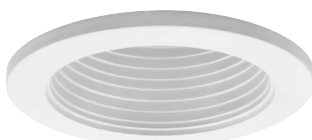
DIMELV (Electronic Low Voltage Dimming)

Please see page 313 for Trim Options

Example: **B2-LED-10W-DIMELV-120-AT/L1201-W-WH**

TYPE	450 LUMENS	COLOR
B2-LED	<input type="checkbox"/> 10W-DIMELV-120	<input type="checkbox"/> 27K <input type="checkbox"/> 35K <input type="checkbox"/> 50K <input type="checkbox"/> 30K <input type="checkbox"/> 40K
TRIM TYPE	FINISH	
L1201 (LENSED BAFFLE)	<input type="checkbox"/> W-WH <input type="checkbox"/> SN-SN <input type="checkbox"/> CP-CP <input type="checkbox"/> P-WH <input type="checkbox"/> P-BK <input type="checkbox"/> BZ-BZ	
L1202 (LENSED REFLECTOR)	<input type="checkbox"/> CL-WH <input type="checkbox"/> MB-BK <input type="checkbox"/> CP-CP <input type="checkbox"/> SN-SN <input type="checkbox"/> RG-WH <input type="checkbox"/> BZ-BZ <input type="checkbox"/> W-WH <input type="checkbox"/> MB-WH	

## BAFFLE



**L1201-W-WH**

*Photometric Multiplier 1.0*



**L1201-P-WH**

*Photometric Multiplier .75*



**L1201-P-BK**

*Photometric Multiplier .75*



**L1201-SN-SN**

*Photometric Multiplier .92*



**L1201-CP-CP**

*Photometric Multiplier .87*



**L1201-BZ-BZ**

*Photometric Multiplier .85*

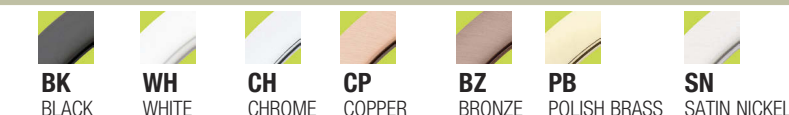
Example: **L1201-W-WH**

TYPE	FINISH	
L1201	<input type="checkbox"/> W-WH <input type="checkbox"/> P-WH <input type="checkbox"/> SN-SN	<input type="checkbox"/> CP-CP <input type="checkbox"/> BZ-BZ <input type="checkbox"/> P-BK

### BAFFLE FINISH:



### TRIM/RING FINISH:



## REFLECTOR



**L1202-CL-WH**

*Photometric Multiplier 1.0*



**L1202-BZ-BZ**

*Photometric Multiplier .87*



**L1202-SN-WH**

*Photometric Multiplier .87*



**L1202-CL-CH**

*Photometric Multiplier 1.0*



**L1202-CP-CP**

*Photometric Multiplier .90*



**L1202-SN-SN**

*Photometric Multiplier .87*



**L1202-MB-WH**

*Photometric Multiplier .77*



**L1202-MB-BK**

*Photometric Multiplier .77*



**L1202-W-WH**

*Photometric Multiplier .95*

Example: **L1202-W-WH**

TYPE	FINISH		
L1202	<input type="checkbox"/> CL-WH <input type="checkbox"/> SN-SN <input type="checkbox"/> W-WH	<input type="checkbox"/> MB-BK <input type="checkbox"/> RG-WH <input type="checkbox"/> MB-WH	<input type="checkbox"/> CP-CP <input type="checkbox"/> BZ-BZ

**B2/B2IC/B2R-LED-10W-DIMELV-120V-AT-L1201-W-WH**

TEST NO.: **ELT-00265**

INPUT WATTS: **10**

LUMENS: **367**

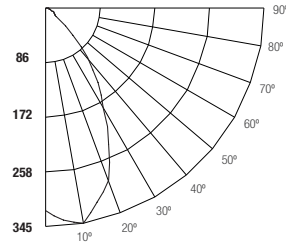
CRI: **+85**

EFFICACY: **33.4**

CCT: **4000K**

SPACING CRITERIA: **0.94**

**Candle Power Distribution (Candelas)**



**Zonal Lumens Summary**

Zone	Lumens	%Lamp	%Fixt
0-20	109.03	29.80	29.70
0-30	206.92	56.50	56.50
0-40	287.00	78.40	78.30
0-60	346.25	94.60	94.50
0-80	364.33	99.50	99.40
0-90	366.50	100.10	100.00

**Luminance (Average candela/M<sup>2</sup>)**

Angle in Degrees	Average		
	0°	45°	90°
45	4626	4595	4033
55	1903	2230	1566
65	1669	1485	1547
75	1486	1378	1318
85	1489	1351	245

**Lumens Per Zone**

Zone	Lumens
0-10	29.79
10-20	79.24
20-30	97.89
30-40	80.08
40-50	42.38
50-60	16.87
60-70	11.39
70-80	6.69
80-90	2.18

**Candela Tabulation**

0	319	306	272	209	132	59	20	13	7	2	0
0	319	306	272	209	132	59	20	13	7	2	0
5	306	272	209	132	59	20	13	7	2	0	
15	272	209	132	59	20	13	7	2	0		
25	209	132	59	20	13	7	2	0			
35	132	59	20	13	7	2	0				
45	59	20	13	7	2	0					
55	20	13	7	2	0						
65	13	7	2	0							
75	7	2	0								
85	2	0									
90	0										

**Coefficients of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	RC RW	80%				70%				50%				30%				10%				0%		
		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	0%	
0	119	119	119	119	116	116	116	116	111	111	111	107	107	107	102	102	102	100	100	100	100	100	100	100
1	112	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91	89	87	85	82	81	
2	105	100	95	91	103	98	93	90	95	91	88	91	88	86	89	86	84	82	80	78	75	72	70	
3	99	91	86	81	97	90	85	80	87	83	79	85	81	78	82	79	76	75	73	70	68	66	64	
4	93	84	78	73	91	83	77	72	81	76	71	79	74	71	77	73	70	68	66	64	62	60	58	
5	88	78	71	66	86	77	71	66	75	69	65	73	68	65	72	67	64	62	60	58	57	55	53	
6	83	72	65	61	81	71	65	60	70	64	60	68	63	59	67	62	59	57	55	53	51	49	47	
7	78	67	60	56	76	67	60	55	65	59	55	64	59	55	63	58	55	53	51	49	47	45	43	
8	74	63	56	51	72	62	56	51	61	55	51	60	55	51	59	54	51	49	47	45	43	41	39	
9	70	59	52	48	69	58	52	48	57	52	48	56	51	47	55	51	47	46	44	42	40	38	36	
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	48	44	43	41	39	37	35	33	

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

**Cone of Light**

Distance to Plane	Initial Footcandle at Nadir	Beam diameter
4.0	19.94	9.0'
8.0	4.99	18.1'
12.0	2.22	27.1'
16.0	1.25	36.1'
20.0	0.8	45.1'

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

**B2/B2IC/B2R-LED-10W-DIMELV-120V-AT-L1202-W-WH**

TEST NO.: **ELT-00266**

INPUT WATTS: **10**

LUMENS: **396**

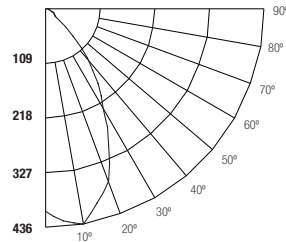
CRI: **+85**

EFFICIENCY: **39.6**

CCT: **4000K**

SPACING CRITERIA: **0.92**

**Candle Power Distribution (Candelas)**



**Zonal Lumens Summary**

Zone	Lumens	%Lamp	%Fixt
0-20	132.35	33.40	33.40
0-30	251.37	63.50	63.40
0-40	338.67	85.60	85.50
0-60	391.92	99.00	98.90
0-80	396.25	100.10	100.00
0-90	396.26	100.10	100.00

**Luminance (Average candela/M<sup>2</sup>)**

Angle in Degrees	Average		
	0°	45°	90°
45	9462	7247	4356
55	2614	2540	1135
65	1379	760	629
75	0	97	34
85	0	0	0

**Lumens Per Zone**

Zone	Lumens
0-10	35.70
10-20	96.65
20-30	119.02
30-40	87.30
40-50	41.80
50-60	11.45
60-70	3.94
70-80	0.38
80-90	0.01

**Candela Tabulation**

0	376	413	391	285	166	68	15	6	0	0	0
0	376	413	391	285	166	68	15	6	0	0	0
5	413	391	285	166	68	15	6	0	0	0	
15	391	285	166	68	15	6	0	0	0		
25	285	166	68	15	6	0	0	0	0		
35	166	68	15	6	0	0	0	0	0		
45	68	15	6	0	0	0	0	0	0		
55	15	6	0	0	0	0	0	0	0		
65	6	0	0	0	0	0	0	0	0		
75	0	0	0	0	0	0	0	0	0		
85	0	0	0	0	0	0	0	0	0		
90	0	0	0	0	0	0	0	0	0		

**Coefficients of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	RC RW	80%				70%				50%				30%				10%				0%	
		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	0%
0	119	119	119	119	116	116	116	116	111	111	111	107	107	107	102	102	102	100	100	100	100	100	100
1	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93	91	89	87	85	83
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85	83	81	79	77	75
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	86	83	80	79	77	74	72	70	68
4	96	88	82	77	94	86	81	77	84	79	76	82	78	75	80	77	74	72	70	68	66	64	62
5	90	81	75	71	89	80	75	70	79	74	70	77	72	69	75	71	68	67	65	63	61	59	57
6	85	76	70	65	84	75	69	65	74	68	64	72	67	64	71	67	63	62	60	58	56	54	52
7	81	71	65	60	79	70	64	60	69	64	60	68	63	59	67	62	59	57	55	53	51	49	47
8	77	67	60	56	75	66	60	56	65	59	55	64	59	55	63	58	55	53	51	49	47	45	43
9	73	62	56	52	72	62	56	52	61	56	52	60	55	51	59	55	51	50	48	46	44	42	40
10	69	59	53	49	68	58	52	49	58	52	48	57	52	48	56	51	48	47	45	43	41	39	37

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

**Cone of Light**

Distance to Plane	Initial Footcandle at Nadir	Beam diameter
4.0	19.94	9.0'
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BEAM DIA. MEASURED AT 50% OF NADIR F.C.