

# FLEXI BLD

LED . WALL



PART #:	
PREP BY:	DATE:
PROJECT:	
NOTES:	
APPROVAL SIGNATURE:	DATE (DD/MM/YYYY):

PERFORMANCE SUMMARY @ 3500K	CLOSED			OPEN
	Ambient	Reading	Read. & Amb.	Exam
Lumens	2735	2381	5115	5084
Wattage	23.9	23.9	47.8	47.8
Efficacy (lm/W)	114	100	107	106
L70 Estimate (h)	≥ 60,000 hrs			

See page 2 for the complete Light Level Performance chart.

## FEATURES

- Standard modes of operation: ambient, reading, reading & ambient, and exam
- Optional switches are available: pull chain, safety, remote
- Optional chart light is available
- Antimicrobial finish is a standard option

## ORDERING LOGIC

Example Part Number: BLD-2L35K-4-MM-AM-L31-W-1

<b>BLD</b>	<b>4</b>	<b>MM</b>	<b>1</b>	<b>W</b>						
1	2	3	4	5	6	7	8	9	10	11
1. SERIES <b>BLD</b>	2. COLOR TEMP <b>2L30K</b> 3000K <b>2L35K</b> 3500K <b>2L40K</b> 4000K  90 CRI is available under OPTIONS	3. LENGTH <b>4</b> 4 ft	4. OPTICS <b>MM</b> Up: Meta Ice Down: Meta Ice  <b>Meta Ice:</b> High output semi-diffuse lens	5. FINISH <b>WM</b> White Matte  <b>AM</b> Antimicrobial White Paint  <b>C</b> Custom Finish Specify RAL:	6. LIGHT LEVEL / DRIVER <b>L1</b> <b>L2</b> <b>L3</b> <b>L4</b> Select Driver below. See Light Level Performance chart on p2.	7. CIRCUITRY <b>1</b> 1 Circuit	8. MOUNTING <b>W</b> Wall Mount	9. VOLTAGE <b>1</b> 120 V <b>2</b> 277 V <b>3</b> 347 V <b>4</b> UNV (120 - 277V)	10. CONTROLS / SENSORS _ None (leave space empty) <b>PSLV</b> Pillow switch with low voltage controller*  * Integrated solid state electronic controller for sequential control of two circuit loads. Wired into fixture and activated by low voltage controller (pillow switch) for patient activation and control. No interference with hospital equipment. In the event of a power interruption, the unit will reset to the off position.	11. OPTIONS _ None (leave space empty) <b>90</b> 90 CRI, High R9 <b>LR</b> LED Chart Light - Right Hand Side <b>LL</b> LED Chart Light - Left Hand Side <b>LRL</b> LED Chart Light - Right and Left Hand Side <b>F</b> Fuse <b>SS</b> Safety Switch** <b>PCL</b> Pull Chain Switch Left <b>PCR</b> Pull Chain Switch Right <b>RXS</b> Remote Exam Switch  ** Integral Safety switch cuts off power to bed should it come into contact with fixture.

### Select Driver:

- Factory option 0-10V, 1% Dimming
- LHE** Lutron H-Series Hi-lume 1% EcoSystem LED Driver
- LA2** Lutron A-Series Hi-lume 1% 2-wire LED Driver
- LSE** Lutron 5-Series EcoSystem LED Driver

## Light Level Performance

3500K, 80 CRI, 0-10V Dimming (Standard)

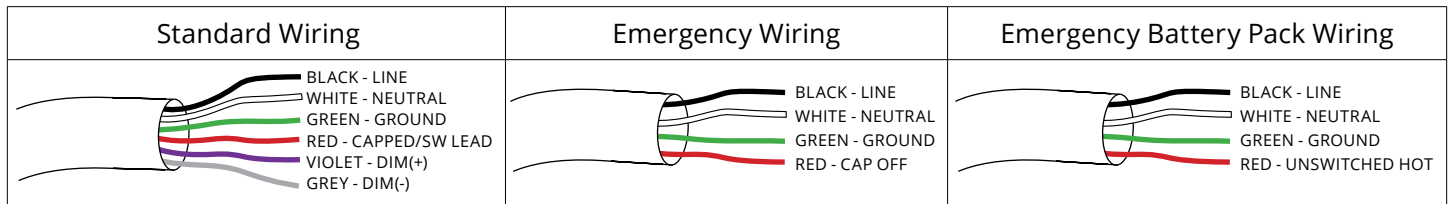
Light Level	CLOSED									OPEN		
	Ambient			Reading			Reading & Ambient			Exam		
	Lumens	Wattage	Efficacy (lm/W)	Lumens	Wattage	Efficacy (lm/W)	Lumens	Wattage	Efficacy (lm/W)	Lumens	Wattage	Efficacy (lm/W)
L1	1496	14.8	101	1302	14.8	88	2798	29.4	94	2780	29.7	94
L2	1904	18.2	105	1657	18.2	90	3563	36.2	98	3540	36.3	98
L3	2735	23.9	114	2381	23.9	100	5115	47.8	107	5084	47.8	106
L4	5233	45.0	116	4556	45.0	101	9790	90.1	109	9725	90.1	108

### Standard Lumen Adjustment Factor

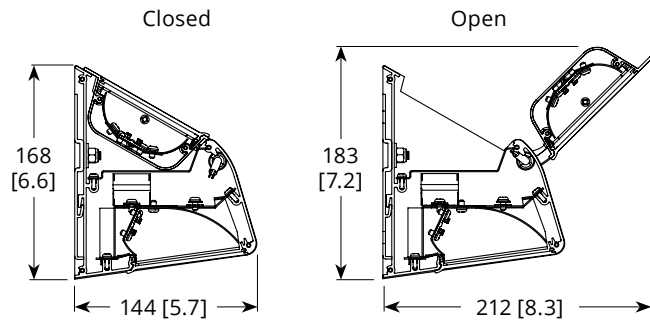
Color Temp	80 CRI	90 CRI
3000K	0.984	0.880
3500K	1.000	0.875
4000K	1.032	0.879

Metalumen's light level performance metrics are subject to manufacturers component tolerances.

## WIRING



## CROSS SECTIONS



## BODY LENGTH



## SPECIFICATIONS

Due to the Continuous Improvement Policy at Metalumen, we reserve the right to change our specifications without notice.

**Housing:** Rigid extruded aluminum body and backplate, 2.0mm (0.08") nominal wall thickness. Aluminum end caps.

**Optical System:** Metalumen luminaires are designed to utilize leading edge LED technology combined with luminaire optimized reflectors and our custom diffusers, resulting in industry leading optical performance.

**CRI:** 83+ for 3500K, 80 minimum for all CCTs in standard configurations.

**Lumen Maintenance:** Minimum 50,000h with TM-21 lumen maintenance of 85% @ 25°C ambient temperature (calculated based on IESNA LM-80-08 LED test data). L70: ≥60,000hrs.

**Finish:** White polyester powder coated paint finish and antimicrobial white finish are available. Consult factory for

custom finish.

**Weight:** 4.16 kg/300 mm [9.5 lb/ft]

**Mounting:** Wall mounting plate provided.

**Electrical:** Factory prewired with easy wire quick connect sections.

**Drivers:** Metalumen offers 0-10V dimming\* as a standard on our entire LED product offering. Dimming range is 1%-100%. Power factor is > 90%. Class 2 rating.

**Approvals:** All components are UL/CSA/QPS recognized or listed. RoHS compliant. cULus listed.

**Environment:** Suitable for dry locations.

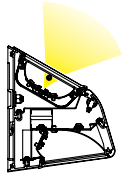
\*Standard drivers compatible with passive/sinking dimmers. Please contact Metalumen if active/sourcing dimmer support is required.

## WARRANTY

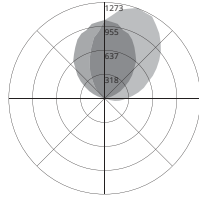
Metalumen will warrant defective luminaires for 5 years from date of purchase. Warranty is valid if luminaire is installed and used according to specification. If defective, Metalumen will send replacement boards or drivers at no cost along with detailed replacement instructions and instructions on how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

PHOTOMETRIC DATA - 3500K, 80 CRI

Mode: **Ambient (Closed)**  
 IES File: **BLD-2L35K-4-MM-L3-AMB-CLOSED**  
 Lumens: **2735** Wattage: **23.9**  
 Efficacy: **114**



PHOTOMETRIC CURVE  
 100% Up



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	0	0
0-30	0	0
0-40	0	0
0-60	0	0
0-80	32	1.2
0-90	99	3.6
10-90	99	3.6
20-40	0	0
20-50	0	0
40-70	3	0.1
60-80	32	1.2
70-80	29	1
80-90	67	2.5
90-110	312	11.4
90-120	597	21.8
90-130	972	35.6
90-150	1872	68.4
90-180	2635	96.4
110-180	2323	85
0-180	2735	100

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

RC	80				70				50			
	RW	70	50	30	10	70	50	30	10	50	30	10
RCR	0	81	81	81	81	70	70	70	70	49	49	49
1	73	69	66	63	62	59	57	54	41	39	38	
2	66	60	55	51	56	52	47	44	36	33	31	
3	60	53	47	42	51	45	40	36	31	28	26	
4	55	46	40	35	47	40	35	31	28	24	22	
5	50	41	35	30	43	35	30	26	24	21	18	
6	46	36	30	25	39	31	26	22	22	18	16	
7	42	33	26	22	36	28	23	19	20	16	14	
8	39	29	23	19	33	25	20	17	18	14	12	
9	36	27	21	17	31	23	18	15	16	13	10	
10	34	24	19	15	29	21	16	13	15	11	9	

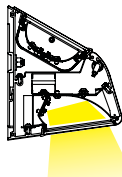
CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle			
	0	22.5	45	67.5 90
0	0	0	0	0
5	0	0	0	0
10	0	0	0	0
15	0	0	0	0
20	0	0	0	0
25	0	0	0	0
30	1	1	0	0
35	68	42	5	0
40	192	168	84	9
45	298	258	164	62
50	451	411	287	152
55	604	573	457	306
60	792	751	640	490
65	972	931	831	678
70	1123	1093	1013	841
75	1252	1210	1115	973
80	1273	1231	1162	1048
85	1192	1153	1134	1061
90	1038	1038	1038	1038

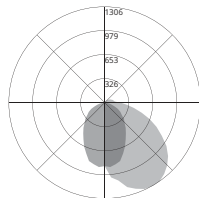
LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0	45	90
45	0	0	0
55	0	0	0
65	4	0	0
75	45	15	0
85	76	54	0

Mode: **Reading (Closed)**  
 IES File: **BLD-2L35K-4-MM-L3-READ-CLOSED**  
 Lumens: **2381** Wattage: **23.9**  
 Efficacy: **100 lm/W**



PHOTOMETRIC CURVE  
 100% Down



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	231	9.7
0-30	498	20.9
0-40	843	35.4
0-60	1587	66.7
0-80	2093	87.9
0-90	2209	92.8
10-90	2144	90.1
20-40	612	25.7
20-50	992	41.7
40-70	1043	43.8
60-80	506	21.3
70-80	207	8.7
80-90	116	4.9
90-110	100	4.2
90-120	131	5.5
90-130	151	6.4
90-150	169	7.1
90-180	172	7.2
110-180	72	3
0-180	2381	100

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

RC	80				70				50			
	RW	70	50	30	10	70	50	30	10	50	30	10
RCR	0	86	86	86	86	84	84	84	84	79	79	79
1	77	73	70	66	75	71	68	65	67	64	62	
2	70	63	58	53	67	61	56	52	58	53	50	
3	63	55	48	43	61	53	47	43	50	45	41	
4	58	48	41	36	55	47	41	36	44	39	35	
5	53	43	36	31	51	42	35	30	40	34	30	
6	49	38	32	27	47	37	31	26	36	30	26	
7	45	35	28	23	43	34	28	23	32	27	22	
8	42	32	25	21	40	31	25	20	29	24	20	
9	39	29	23	18	38	28	22	18	27	22	18	
10	36	27	21	17	35	26	20	16	25	20	16	

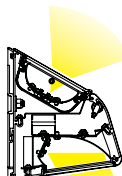
CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle			
	0	22.5	45	67.5 90
0	861	861	861	861
5	1071	1070	1018	929
10	1244	1207	1106	954
15	1306	1257	1126	936
20	1261	1207	1069	853
25	1127	1073	937	727
30	897	858	742	549
35	650	615	517	370
40	405	383	317	209
45	222	200	152	83
50	127	122	95	54
55	113	105	79	39
60	92	83	60	25
65	67	59	40	17
70	43	39	26	9
75	24	20	13	5
80	10	9	6	2
85	2	2	2	1
90	0	0	0	0

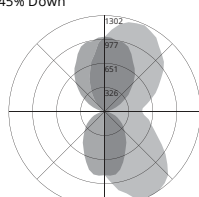
LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0	45	90
45	484	524	984
55	368	394	790
65	259	276	617
75	168	177	379
85	96	97	158

Mode: **Reading & Ambient (Closed)**  
 IES File: **BLD-2L35K-4-MM-L3-READ-L3-AMB-CLOSED**  
 Lumens: **5115** Wattage: **47.8**  
 Efficacy: **107 lm/W**



PHOTOMETRIC CURVE  
 55% Up  
 45% Down



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	232	4.5
0-30	499	9.8
0-40	845	16.5
0-60	1588	31.1
0-80	2125	41.5
0-90	2308	45.1
10-90	2243	43.9
20-40	613	12
20-50	994	19.4
40-70	1046	20.4
60-80	537	10.5
70-80	235	4.6
80-90	183	3.6
90-110	411	8
90-120	727	14.2
90-130	1124	22
90-150	2040	39.9
90-180	2807	54.9
110-180	2396	46.8
0-180	5115	100

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

RC	80				70				50			
	RW	70	50	30	10	70	50	30	10	50	30	10
RCR	0	84	84	84	84	77	77	77	77	64	64	64
1	75	71	68	65	69	65	62	59	54	52	50	
2	68	62	56	52	62	56	52	48	47	43	40	
3	62	54	48	43	56	49	44	39	41	37	33	
4	56	47	41	36	51	43	38	33	36	32	28	
5	51	42	35	30	47	38	33	28	32	27	24	
6	47	37	31	26	43	34	29	24	29	24	21	
7	44	34	27	23	40	31	25	21	26	21	18	
8	40	30	24	20	37	28	22	19	24	19	16	
9	38	28	22	18	34	26	20	16	22	17	14	
10	35	25	20	16	32	23	18	15	20	16	13	

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle			
	0	22.5	45	67.5 90
0	863	863	863	863
5	1080	1068	1013	960
10	1261	1194	1118	971
15	1302	1257	1125	930
20	1267	1198	1079	866
25	1111	1086	931	719
30	897	858	745	553
35	714	651	526	371
40	608	549	404	211
45	509	460	321	144
50	581	527	387	207
55	737	673	533	341
60	881	830	704	517
65	1049	1000	872	694
70	1149	1135	1043	848
75	1254	1226	1145	979
80	1271	1255	1146	1042
85	1206	1195	1134	1061
90	1015	1015	1015	1015

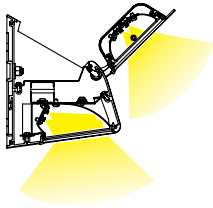
LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0	45	90
45	491	524	993
55	362	395	808
65	264	275	599
75	208	190	376
85	170	149	166

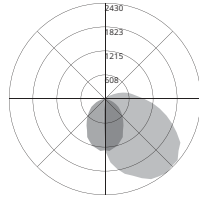
Photometric performance is measured and scaled in accordance with IESNA LM-79.

PHOTOMETRIC DATA - 3500K, 80 CRI

Mode: **Exam (Open)**  
 IES File: **BLD-2L35K-4-MM-L3-EXAM-OPEN**  
 Lumens: **5084** Wattage: **47.8**  
 Efficacy: **106 lm/W**



**PHOTOMETRIC CURVE**  
100% Down



**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixt
0-20	376	7.4
0-30	823	16.2
0-40	1425	28
0-60	2872	56.5
0-80	4105	80.7
0-90	4501	88.5
10-90	4397	86.5
20-40	1050	20.6
20-50	1759	34.6
40-70	2126	41.8
60-80	1233	24.2
70-80	553	10.9
80-90	396	7.8
90-110	426	8.4
90-120	514	10.1
90-130	554	10.9
90-150	580	11.4
90-180	583	11.5
110-180	158	3.1
0-180	5084	100

**COEFFICIENTS OF UTILIZATION**

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

RC	80				70				50			
	RW	70	50	30	10	70	50	30	10	50	30	10
RCR												
0	91	91	91	91	88	88	88	88	82	82	82	
1	80	76	71	67	77	73	69	65	68	65	62	
2	72	64	58	52	69	62	56	51	58	53	48	
3	65	55	48	42	62	53	47	41	50	44	39	
4	59	48	41	35	56	47	40	34	43	37	33	
5	54	43	35	29	51	41	34	29	39	32	28	
6	49	38	31	25	47	37	30	25	34	28	24	
7	46	34	27	22	44	33	26	21	31	25	21	
8	42	31	24	19	41	30	23	19	28	22	18	
9	39	28	22	17	38	28	21	17	26	20	16	
10	37	26	20	15	35	25	19	15	24	18	15	

**LUMINANCE DATA (CD/M<sup>2</sup>)**

Vertical Angle	Horizontal Angle		
	0	45	90
45	908	896	1060
55	779	744	846
65	643	592	635
75	502	444	404
85	378	309	193

**CANDELA DISTRIBUTION**

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	1290	1290	1290	1290	1290
5	1792	1735	1645	1500	1258
10	2057	1996	1816	1536	1132
15	2332	2211	1913	1531	912
20	2430	2299	1915	1432	716
25	2401	2225	1811	1249	539
30	2202	1988	1586	1023	393
35	1810	1661	1293	759	234
40	1414	1279	927	503	110
45	1006	906	621	268	29
50	704	629	409	143	11
55	484	418	237	66	6
60	249	208	107	36	4
65	118	105	63	18	2
70	74	58	30	10	2
75	29	21	13	4	2
80	11	8	5	2	1
85	3	3	2	2	1
90	1	1	1	1	1

Photometric performance is measured and scaled in accordance with IESNA LM-79.