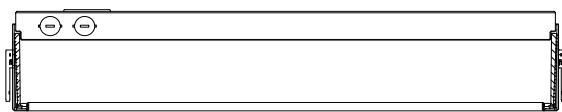




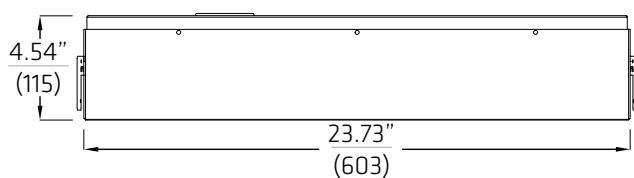
Specification Data



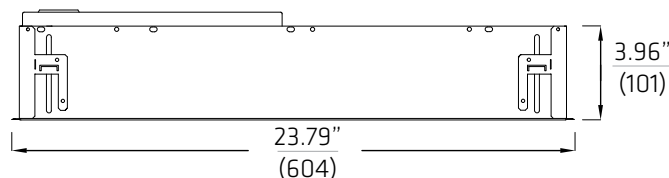
CROSS SECTION



DIMENSIONS inches (mm)



FRONT VIEW



SIDE VIEW

SPECIFICATION

NB1		22						OPTIONS	
1	2	3	4	5	6				
1. FAMILY	2. SIZE	3. ENERGY ¹	4. CCT	5. DRIVER	6. VOLTAGE	OPTIONS			
NB2 Inbox	12 1 x 2 (2-sided optics) 14 1 x 4 (2-sided optics) 22 2 x 2 (2-sided optics) 24 2 x 4 (2-sided optics)	A 23 W B 29 W C 38 W D 47 W ²	30 3000 K 35 3500 K 40 4000 K	E1 eldoLED ECO 0-10V Dim 1% E2 eldoLED SOLO 0-10V Dim 0.1% E3 eldoLED ECO DALI 1% E4 eldoLED SOLO DALI Dim 0.1% F1 Factory Non- Dim F2 Factory 0-10V Dim 3% L1 Lutron Hi-Lume 1%-H EcoSystem	M 120 - 277 V 3 347 V ³	B Battery Pack ⁴ C Chicago Plenum F 6' Flex Whip K Drywall Flange Kit			
NB1 Inbox	22 2 x 2 (4-sided optics)	¹ Add 4W to above for 347V with E1-4/L1 ² 1 x 4 2 x 4 2 x 2 (4 sided) only		³ 347 V Driver for F1/F2 347 V Transformer & Driver E1-4/L1		⁴ Available for 120-277V			

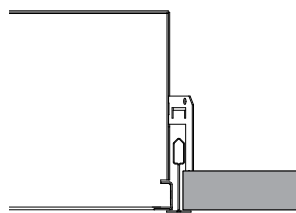
Luminaire	INBOX 2 X 2 4-Sided Optics (NB1-22)	Type
Project		
Product		
Notes		



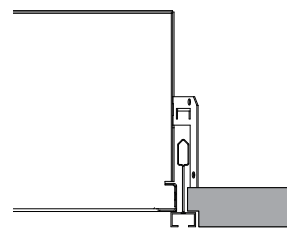
Performance Summary	Inbox 2 x 2 4 - Sided			
	A	B	C	D
Light (lm)	2300	2800	3600	4300
Energy (W)	23	29	38	47
Efficacy (lm/W)	99	97	95	92
Color Rendering (CRI)	80+	80+	80+	80+
Color Accuracy (SDCM)	< 2	< 2	< 2	< 2
L70 Estimate (h)	200,000	200,000	200,000	200,000
Lumen Maintenance per TM21 (@ 60,000 h)	L90	L90	L90	L90

DLC qualified for 47 W (D) in 3000K, 3500K & 4000K.
 Note: Values are nominal and based on 4000K CCT.

CEILING INTEGRATION GRID

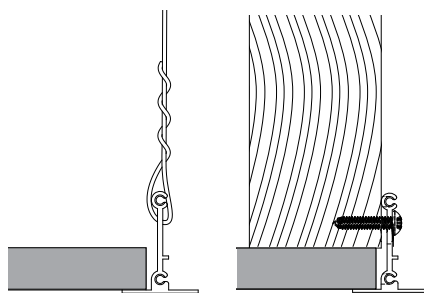


FLAT GRID

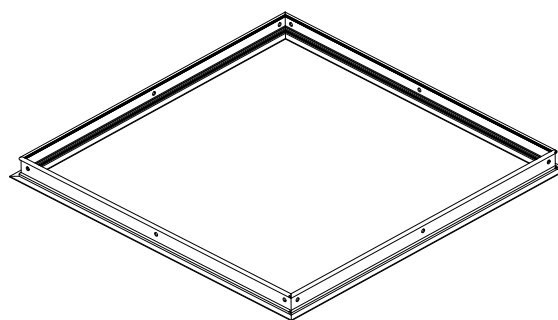


SLOT GRID

CEILING INTEGRATION DRYWALL



DRYWALL FLANGE KIT



Required Aperture: 24.63" x 24.63" (625 x 625)

CONSTRUCTION

- Die formed 22 ga. steel housing
- Quick wire access plate and integral seismic restraint tabs/tie-offs
- Option for (K) drywall flange kit
- High reflectance diffuse white textured powdercoat

OPTICAL

- Anidolic optical structures with linear light extraction elements
- Precision extruded high transmittance clear acrylic lenses
- Long life LED system designed for typical TM21 lumen maintenance \geq L90 @ 60,000 h
- Available in CCTs 3000 K, 3500 K or 4000 K with CRI \geq 80 and R9 \geq 0, all with color accurate binning \leq 2 SDCM

ELECTRICAL

- Integral high efficiency drivers 120 - 277 V or 347 V; 50 - 60 Hz
- Power Factor $>$ 0.90
- Total Harmonic Distortion $<$ 20%
- F2:0 - 10 V Dim Range: 3 - 100%
- Optional Battery Pack
- Optional Lutron: Hi-lume H-Series EcoSystem LED drivers for 100 - 1% (PWM) dim range
- Optional flex whip: 6' prewired
- Surge Protection: Meets ANSI C82.11 spec and ANSI/IEEE C62.41
- Inrush Current: Meets NEMA 410

WEIGHT

- Maximum 17 lb (7.6 kg)
- Maximum 21 lb (9.5 kg) with battery pack

WARRANTY

- 5 year limited warranty on all components and workmanship

ENVIRONMENTAL

- Designed for use in damp or dry indoor environments with room side operating temperatures of 0 - 30° C (32 - 86° F)

INDEPENDENT TESTING

- IESNA LM79
- IESNA LM80 (LED@ 10,000 h)

APPROVALS

- UL Listed (USA + Canada)
- CCEA Chicago Plenum
- DesignLights Consortium[®]
- Lighting Facts[®]
- IC Rated

Product	Inbox 2x2 4-sided	Description	Performance Summary		Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy		
Version	NB1-22A40	2x2 - 4 sided LED A Lumens CCT 4000 K	CCT Color Temperature	4000 K	2277	23.1	98.6	83	11.6	<2
Report	1190403			3500 K	2322	23	99	84	11.5	<2
				3000K	2160	23	94	83	6.8	<2

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	
0°	473	473	473	473	473
5°	475	472	471	476	479
15°	555	554	569	554	554
25°	577	614	650	612	576
35°	545	611	651	608	541
45°	459	545	596	544	458
55°	350	444	486	445	350
65°	251	332	365	331	251
75°	167	225	212	226	168
85°	53	77	74	82	57
90°					
95°					
105°					
115°					
125°					
135°					
145°					
155°					
165°					
175°					
180°					

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0-30°	488	N.A.	21
0-60°	1663	N.A.	73
0-90°	2277	N.A.	100
90-180°	0	N.A.	0
Total Luminaire	0-180°	2277	N.A.

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0°	45°	90°
45°	2032	2637	2026
55°	1907	2653	1909
65°	1854	2705	1858
75°	2013	2566	2026
85°	1917	2653	2050

CO-EFFICIENTS OF UTILIZATION

Floor Ceiling	80				70				20				30				10				0			
	70	50	30	10	70	50	30	10	50	50	10	50	10	50	10	50	10	50	10	50	10	50	10	
0	119	119	119	119	116	116	116	111	111	111	111	106	106	102	102	100	100	100	100	100	100	100		
1	107	102	97	93	104	100	91	95	88	91	86	91	86	88	83	81	81	81	81	81	81	81		
2	97	88	80	74	94	86	73	82	71	79	69	75	68	65	65	65	65	65	65	65	65	65		
3	87	76	67	60	85	74	59	71	58	68	57	66	56	54	54	54	54	54	54	54	54	54		
4	80	67	57	50	77	65	50	63	49	60	48	58	47	45	45	45	45	45	45	45	45	45		
5	73	59	49	42	71	58	42	56	42	54	41	52	41	38	38	38	38	38	38	38	38	38		
6	67	53	43	36	65	52	36	50	36	48	35	46	35	33	33	33	33	33	33	33	33	33		
7	62	47	38	32	60	47	32	45	31	44	31	42	31	29	29	29	29	29	29	29	29	29		
8	57	43	34	28	56	42	28	41	28	40	27	38	27	25	25	25	25	25	25	25	25	25		
9	53	39	31	25	52	39	25	37	25	36	24	35	24	22	22	22	22	22	22	22	22	22		
10	50	36	28	22	49	36	22	34	22	34	22	33	22	20	20	20	20	20	20	20	20	20		

Integrating Sphere and Photometric results at 4000K by an independent accredited testing laboratory per IES LM-79-2008 and ANSI C78.377-2011. Results for 3000K, 3500K scaled based on integrating sphere results at 47W (D). Candlepower Distribution scaled per total lumens of Integrating Sphere results.

Product	Inbox 2x2 4-sided	Description	Performance Summary		Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy		
Version	NB1-22B40	2x2 - 4 sided LED B Lumens CCT 4000 K	CCT Color Temperature	4000 K	2784	28.7	96.9	83	11.6	<2
Report	1190402			3500 K	2839	29	97	84	11.5	<2
				3000K	2640	29	92	83	6.8	<2

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	
0°	579	579	579	579	579
5°	581	577	576	582	585
15°	679	677	695	678	677
25°	706	751	795	748	704
35°	666	747	796	743	662
45°	562	666	729	665	560
55°	427	543	595	543	428
65°	306	406	447	405	307
75°	204	276	260	276	205
85°	65	94	90	100	70
90°					
95°					
105°					
115°					
125°					
135°					
145°					
155°					
165°					
175°					
180°					

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0-30°	597	N.A.	21
0-60°	2033	N.A.	73
0-90°	2784	N.A.	100
90-180°	0	N.A.	0
Total Luminaire	0-180°	2784	N.A.

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0°	45°	90°
45°	2484	3224	2476
55°	2331	3243	2333
65°	2267	3307	2272
75°	2460	3138	2477
85°	2344	3241	2509

CO-EFFICIENTS OF UTILIZATION

Floor Ceiling	80				70				20				30				10				0			
	70	50	30	10	70	50	30	10	50	50	10	50	10	50	10	50	10	50	10	50	10			
0	119	119	119	119	116	116	116	111	111	111	111	106	106	102	102	100	100	100	100	100	100	100		
1	107	102	97	93	104	100	91	95	88	91	86	91	86	88	83	81	81	81	81	81	81	81		
2	97	88	80	74	94	86	73	82	71	79	69	75	68	65	65	65	65	65	65	65	65	65		
3	87	76	67	60	85	74	59	71	58	68	57	66	56	54	54	54	54	54	54	54	54	54		
4	80	67	57	50	77	65	50	63	49	60	48	58	47	45	45	45	45	45	45	45	45	45		
5	73	59	49	42	71	58	42	56	42	54	41	52	41	38	38	38	38	38	38	38	38	38		
6	67	53	43	36	65	52	36	50	36	48	35	46	35	33	33	33	33	33	33	33	33	33		
7	62	47	38	32	60	47	32	45	31	44	31	42	31	29	29	29	29	29	29	29	29	29		
8	57	43	34	28	56	42	28	41	28	40	27	38	27	25	25	25	25	25	25	25	25	25		
9	53	39	31	25	52	39	25	37	25	36	24	35	24	22	22	22	22	22	22	22	22	22		
10	50	36	28	22	49	36	22	34	22	34	22	33	22	20	20	20	20	20	20	20	20	20		

Product	Inbox 2x2 4-sided	Description	Performance Summary		Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy		
Version	NB2-22C40	2x2 - 4 sided LED C Lumens CCT 4000 K	CCT Color Temperature	4000 K	3550	37.2	95.4	83	11.6	<2
Report	1190401			3500 K	3620	37	95	84	11.5	<2
				3000K	3367	37	90	83	6.8	<2

100% Dn

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	90°
0°	738	738	738	738	738
5°	741	736	735	742	746
15°	865	863	886	864	863
25°	900	957	1013	954	898
35°	849	953	1015	948	844
45°	716	850	929	848	714
55°	545	692	758	693	546
65°	391	517	570	516	391
75°	260	351	331	352	261
85°	83	120	115	128	89
90°					
95°					
105°					
115°					
125°					
135°					
145°					
155°					
165°					
175°					
180°					

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0-30°	761	N.A.	21
0-60°	2593	N.A.	73
0-90°	3550	N.A.	100
90-180°	0	N.A.	0
Total Luminaire	3550	N.A.	100

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45°	3168	4111	3158
55°	2973	4136	2975
65°	2891	4217	2897
75°	3137	4001	3159
85°	2990	4135	3198

CO-EFFICIENTS OF UTILIZATION

Floor Ceiling Wall	80				70				20				50				30				10				0			
	70	50	30	10	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10
0	119	119	119	119	116	116	116	111	111	106	106	102	102	100														
1	107	102	97	93	104	100	91	95	88	91	86	88	83	81														
2	97	88	80	74	94	86	73	82	71	79	69	75	68	65														
3	87	76	67	60	85	74	59	71	58	68	57	66	56	54														
4	80	67	57	50	77	65	50	63	49	60	48	58	47	45														
5	73	59	49	42	71	58	42	56	42	54	41	52	41	38														
6	67	53	43	36	65	52	36	50	36	48	35	46	35	33														
7	62	47	38	32	60	47	32	45	31	44	31	42	31	29														
8	57	43	34	28	56	42	28	41	28	40	27	38	27	25														
9	53	39	31	25	52	39	25	37	25	36	24	35	24	22														
10	50	36	28	22	49	36	22	34	22	34	22	33	22	20														

Integrating Sphere and Photometric results at 4000K by an independent accredited testing laboratory per IES LM-79-2008 and ANSI C78.377-2011. Results for 3000K, 3500K scaled based on integrating sphere results at 47W (D). Candlepower Distribution scaled per total lumens of Integrating Sphere results.

Product	Inbox 2x2 4-sided	Description	Performance Summary		Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy		
Version	NB1-22D40	2x2 - 4 sided LED D Lumens CCT 4000 K	CCT Color Temperature	4000 K	4305	46.8	92.1	83	11.6	<2
Report	1190400			3500 K	4390	47	92	84	11.5	<2
				3000K	4083	47	87	83	6.8	<2

100% Dn

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	90°
0°	895	895	895	895	895
5°	898	893	891	900	905
15°	1049	1047	1075	1048	1047
25°	1092	1161	1229	1157	1088
35°	1030	1156	1231	1149	1024
45°	868	1031	1127	1028	866
55°	661	839	919	840	662
65°	474	627	691	626	475
75°	315	426	401	427	317
85°	101	145	140	155	108
90°					
95°					
105°					
115°					
125°					
135°					
145°					
155°					
165°					
175°					
180°					

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0-30°	923	N.A.	21
0-60°	3144	N.A.	73
0-90°	4305	N.A.	100
90-180°	0	N.A.	0
Total Luminaire	4305	N.A.	100

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45°	3841	4985	3829
55°	3605	5015	3608
65°	3506	5114	3513
75°	3804	4852	3831
85°	3626	5011	3877

CO-EFFICIENTS OF UTILIZATION

Floor Ceiling Wall	80				70				20				50				30				10				0			
	70	50	30	10	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10
0	119	119	119	119	116	116	116	111	111	106	106	102	102	100														
1	107	102	97	93	104	100	91	95	88	91	86	88	83	81														
2	97	88	80	74	94	86	73	82	71	79	69	75	68	65														
3	87	76	67	60	85	74	59	71	58	68	57	66	56	54														
4	80	67	57	50	77	65	50	63	49	60	48	58	47	45														
5	73	59	49	42	71	58	42	56	42	54	41	52	41	38														
6	67	53	43	36	65	52	36	50	36	48	35	46	35	33														
7	62	47	38	32	60	47	32	45	31	44	31	42	31	29														
8	57	43	34	28	56	42	28	41	28	40	27	38	27	25														
9	53	39	31	25	52	39	25	37	25	36	24	35	24	22														
10	50	36	28	22	49	36	22	34	22	34	22	33	22	20														