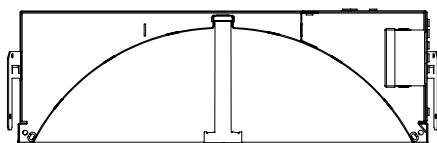




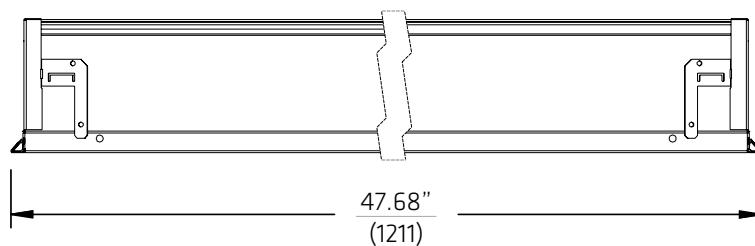
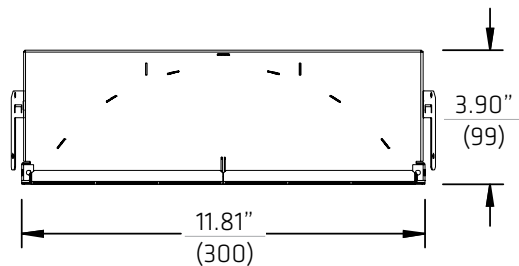
Specification Data



CROSS SECTION



DIMENSIONS inches (mm)



Luminaire	TRANSOM - 1 X 4 (TR1-14)	Type
Project		
Product		
Notes		



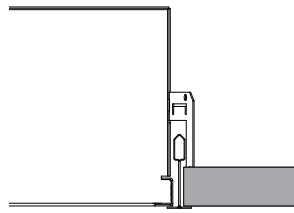
Performance Summary	Transom 1 x 4			
	A	B	C	D
Light (lm)	2300	2800	3600	4300
Energy (W)	23	29	38	47
Efficacy (lm/W)	99	98	93	92
Color Rendering (CRI)	80+	80+	80+	80+
Color Accuracy (SDCM)	< 2	< 2	< 2	< 2
L70 Estimate (h)	200,000	200,000	200,000	200,000
Lumen Maintenance per TM21 (@ 60,000 h)	L90	L90	L90	L90

DLC qualified for each lumen output (A,B,C,D) in 3000K, 3500K & 4000K.
 Note: Values are nominal and based on 4000K CCT

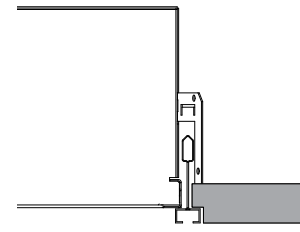
SPECIFICATION

TR1	14						OPTIONS
1	2	3	4	5	6		
1. FAMILY	2. SIZE	3. ENERGY ²	4. CCT	5. DRIVER	6. VOLTAGE		OPTIONS
TR1 Transom	14 1 x 4 22 2 x 2 24 2 x 4 52 20 x 24 54 20 x 48 ¹	A 23 W B 29 W C 38 W D 47 W ³	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 ⁴		B Battery Pack ⁵ C Chicago Plenum F 6' Flex Whip K Drywall Flange Kit
	¹ Optional filler panels available for 20 x 60	² Add 4W to above for 347 V with E1-4/L1 ³ 1 x 4 2 x 4 20 x 48 only			⁴ 347 V Driver for F1/F2 347 V Transformer & Driver E1-4/L1		⁵ Available for 120-277V

CEILING INTEGRATION GRID

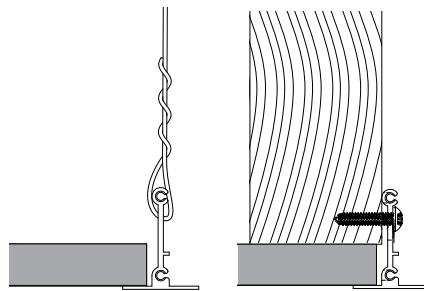


FLAT GRID

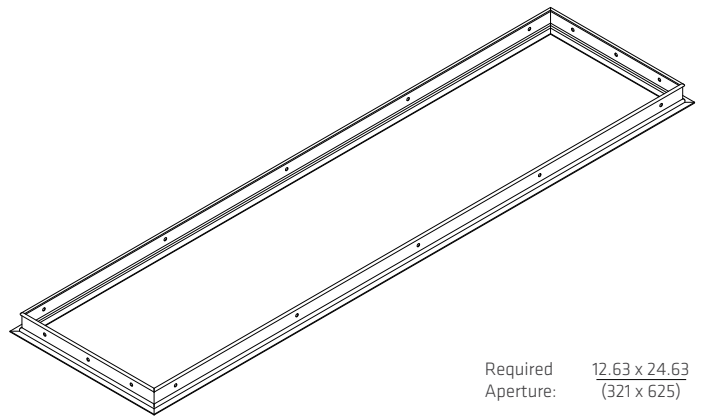


SLOT GRID

CEILING INTEGRATION DRYWALL



DRYWALL FLANGE KIT



Required Aperture: 12.63 x 24.63 (321 x 625)

CONSTRUCTION

- Clear anodized aluminum lower rail
- 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 20.5 lb. (9.3 kg)
- Maximum 24.5 lb. (11.1 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
- Lighting Facts®
- DesignLights Consortium®
- IC Rated

Product	Transom 1x4	Description 1x4 LED A Lumens CCT 4000 K	Performance Summary		Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy (CRI) (R9) (SDCM)		
Version	TR1-14A40		CCT Color Temperature	4000 K	2294	23.27	99	84.1	13.9	< 2
Report	11361637.29			3500 K	2322	23.0	101	83.2	9.6	< 2
		3000K		2245	23.1	97	82.6	7.4	< 2	

100% Dn

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	
0°	644	644	644	644	644
5°	647	642	638	641	646
15°	628	631	683	724	740
25°	591	633	714	752	763
35°	534	611	684	717	720
45°	462	551	616	596	591
55°	378	468	475	445	422
65°	279	356	321	228	214
75°	166	216	125	96	90
85°	42	43	22	19	18
90°	0	1	1	1	1
95°					
105°					
115°					
125°					
135°					
145°					
155°					
165°					
175°					
180°					

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0-30°	575	N.A.	25
0-60°	1826	N.A.	80
0-90°	2294	N.A.	100
90-180°	0	N.A.	0
Total Luminaire	2294	N.A.	100

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0°	45°	90°
45°	1955	2606	2503
55°	1971	2479	2204
65°	1973	2277	1517
75°	1918	1449	1038
85°	1446	769	625

CO-EFFICIENTS OF UTILIZATION

Floor Ceiling Wall	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	50	10	50	10	50
0	119	119	119	119	116	116	116	111	111	111	111	111	106	106	102	102	102	102	102	100	100	100	100	100	100	100	100	100
1	109	104	100	96	106	102	94	97	91	94	89	90	86	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84
2	99	90	84	78	96	89	77	85	75	82	73	79	72	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
3	90	79	71	64	87	78	64	75	63	72	61	69	60	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
4	82	70	61	54	80	69	54	66	53	64	52	61	52	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49
5	75	62	53	46	73	61	46	59	45	57	45	55	44	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
6	69	56	47	40	67	55	40	53	40	51	39	50	39	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
7	64	50	41	35	62	50	35	48	35	46	34	45	34	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
8	60	46	37	31	58	45	31	44	31	42	31	41	30	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
9	55	42	33	28	54	41	28	40	28	39	27	38	27	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
10	52	38	30	25	51	38	25	37	25	36	25	35	25	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23

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	Transom 1x4	Description 1x4 LED B Lumens CCT 4000 K	Performance Summary		Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy (CRI) (R9) (SDCM)		
Version	TR1-14B40		CCT Color Temperature	4000 K	2805	28.75	97.6	84	13.8	< 2
Report	11361637.30			3500 K	2839	28.4	100	83.2	9.6	< 2
		3000K		2650	28.0	94	82.5	7.3	< 2	

100% Dn

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	
0°	788	788	788	788	788
5°	791	785	781	784	789
15°	768	772	835	886	905
25°	722	774	874	919	933
35°	653	747	836	877	880
45°	565	674	753	728	723
55°	462	572	581	544	516
65°	341	436	393	278	262
75°	203	265	153	117	110
85°	52	53	27	23	22
90°	1	1	1	1	1
95°					
105°					
115°					
125°					
135°					
145°					
155°					
165°					
175°					
180°					

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0-30°	703	N.A.	25
0-60°	2232	N.A.	80
0-90°	2805	N.A.	100
90-180°	0	N.A.	0
Total Luminaire	2805	N.A.	100


LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0°	45°	90°
45°	2390	3187	3060
55°	2410	3031	2695
65°	2412	2784	1855
75°	2345	1772	1269
85°	1769	941	766

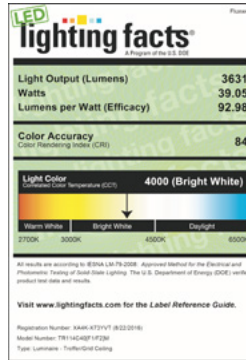
CO-EFFICIENTS OF UTILIZATION

Floor Ceiling Wall	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	50	10	50	10	50
0	119	119	119	119	116	116	116	111	111	111	111	111	106	106	102	102	102	102	102	100	100	100	100	100	100	100	100	100
1	109	104	100	96	106	102	94	97	91	94	89	90	86	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84
2	99	90	84	78	96	89	77	85	75	82	73	79	72	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
3	90	79	71	64	87	78	64	75	63	72	61	69	60	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
4	82	70	61	54	80	69	54	66	53	64	52	61	52	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49
5	75	62	53	46	73	61	46	59	45	57	45	55	44	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
6	69	56	47	40	67	55	40	53	40	51	39	50	39	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
7	64	50	41	35	62	50	35	48	35	46	34	45	34	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
8	60	46	37	31	58	45	31	44	31	42	31	41	30	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
9	55	42	33	28	54	41	28	40	28	39	27	38	27	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
10	52	38	30	25	51	38	25	37	25	36	25	35	25	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23

Product	Transom 1x4	Description	Performance Summary		Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy		
Version	TR1-14C40	1x4 LED C Lumens CCT 4000 K	CCT Color Temperature	4000 K	3631	39.05	93	84	13.6	< 2
Report	11361637.31			3500 K	3675	38.6	95	83.2	9.6	< 2
				3000K	3430	38.1	90	82.5	7.3	< 2



100% Dn



CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	90°
0°	1020	1020	1020	1020	1020
5°	1024	1017	1010	1015	1022
15°	995	999	1081	1147	1171
25°	935	1002	1131	1190	1207
35°	846	967	1082	1135	1140
45°	731	873	974	943	936
55°	598	740	752	705	668
65°	441	564	509	360	339
75°	262	343	198	151	142
85°	67	68	35	29	29
90°	1	1	1	1	1
95°					
105°					
115°					
125°					
135°					
145°					
155°					
165°					
175°					
180°					

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0-30°	910	N.A.	25
0-60°	2890	N.A.	80
0-90°	3631	N.A.	100
90-180°	0	N.A.	0
Total Luminaire	0-180°	3631	N.A.

LUMINANCE DATA (CD/M²)


Vertical Angle	0°	45°	90°
45°	3094	4125	3961
55°	3120	3924	3488
65°	3123	3604	2401
75°	3035	2295	1643
85°	2291	1216	989

CO-EFFICIENTS OF UTILIZATION

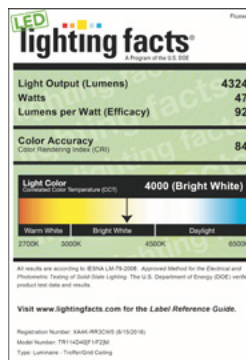
Floor Ceiling Wall	80				70				20				50				30				10				0			
	70	50	30	10	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10				
0	119	119	119	119	116	116	116	111	111	106	106	102	102	100														
1	109	104	100	96	106	102	94	97	91	94	89	90	86	84														
2	99	90	84	78	96	89	77	85	75	82	73	79	72	70														
3	90	79	71	64	87	78	64	75	63	72	61	69	60	58														
4	82	70	61	54	80	69	54	66	53	64	52	61	52	49														
5	75	62	53	46	73	61	46	59	45	57	45	55	44	42														
6	69	56	47	40	67	55	40	53	40	51	39	50	39	37														
7	64	50	41	35	62	50	35	48	35	46	34	45	34	32														
8	60	46	37	31	58	45	31	44	31	42	31	41	30	29														
9	55	42	33	28	54	41	28	40	28	39	27	38	27	25														
10	52	38	30	25	51	38	25	37	25	36	25	35	25	23														

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	Transom 1x4	Description	Performance Summary		Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy		
Version	TR1-14D40	1x4 LED D Lumens CCT 4000 K	CCT Color Temperature	4000 K	4324	47	92	84	13.4	< 2
Report	1248343			3500 K	4376	46.5	94	83.2	9.6	< 2
				3000K	4085	45.9	89	82.5	7.3	< 2



100% Dn



CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	90°
0°	1215	1215	1215	1215	1215
5°	1219	1211	1203	1208	1217
15°	1184	1190	1287	1365	1395
25°	1113	1193	1347	1417	1438
35°	1007	1152	1289	1352	1357
45°	870	1039	1160	1123	1114
55°	712	882	895	839	796
65°	525	672	606	429	404
75°	313	408	236	180	169
85°	79	81	42	35	34
90°	1	2	2	2	2
95°					
105°					
115°					
125°					
135°					
145°					
155°					
165°					
175°					
180°					

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0-30°	1084	N.A.	25
0-60°	3441	N.A.	80
0-90°	4324	N.A.	100
90-180°	0	N.A.	0
Total Luminaire	0-180°	4324	N.A.

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45°	3684	4913	4718
55°	3715	4672	4154
65°	3719	4292	2859
75°	3615	2732	1956
85°	2728	1450	1178

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				
0	119	119	119	119	116	116	116	111	111	106	106	102	102	100														
1	109	104	100	96	106	102	94	97	91	94	89	90	86	84														
2	99	90	84	78	96	89	77	85	75	82	73	79	72	70														
3	90	79	71	64	87	78	64	75	63	72	61	69	60	58														
4	82	70	61	54	80	69	54	66	53	64	52	61	52	49														
5	75	62	53	46	73	61	46	59	45	57	45	55	44	42														
6	69	56	47	40	67	55	40	53	40	51	39	50	39	37														
7	64	50	41	35	62	50	35	48	35	46	34	45	34	32														
8	60	46	37	31	58	45	31	44	31	42	31	41	30	29														
9	55	42	33	28	54	41	28	40	28	39	27	38	27	25														
10	52	38	30	25	51	38	25	37	25	36	25	35	25	23														