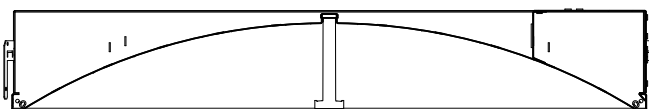




Specification Data



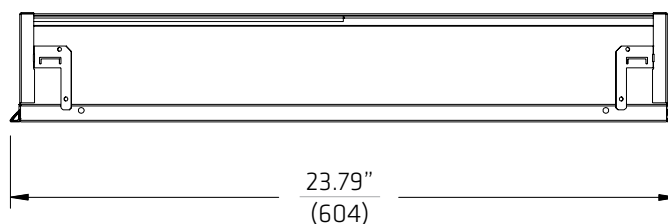
CROSS SECTION



DIMENSIONS inches
(mm)



FRONT VIEW



SIDE VIEW

SPECIFICATION

TR1	22								
1	2	3	4	5	6	OPTIONS			
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 <small>⁵ Available for 120-277V</small>			
	<small>¹ Optional filler panels available for 20 x 60</small>	<small>² Add 4W to above for 347 V with E1-4/L1</small>	<small>³ 1 x 4 2 x 4 20 x 48 only</small>		<small>⁴ 347 V Driver for F1/F2 347 V Transformer & Driver E1-4/L1</small>				

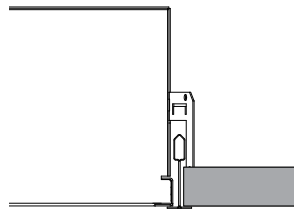
Luminaire	TRANSOM - 2 X 2 (TR1-22)	Type
Project		
Product		
Notes		



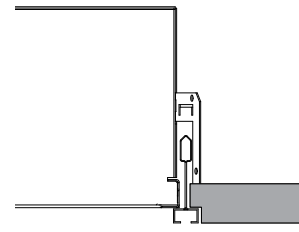
Performance Summary	Transom 2 x 2		
	A	B	C
Light (lm)	2400	2900	3700
Energy (W)	23	29	38
Efficacy (lm/W)	102	100	94
Color Rendering (CRI)	80+	80+	80+
Color Accuracy (SDCM)	< 2	< 2	< 2
L70 Estimate (h)	200,000	200,000	200,000
Lumen Maintenance per TM21 (@ 60,000 h)	L90	L90	L90

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

CEILING INTEGRATION GRID

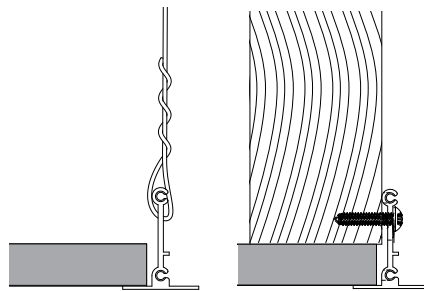


FLAT GRID

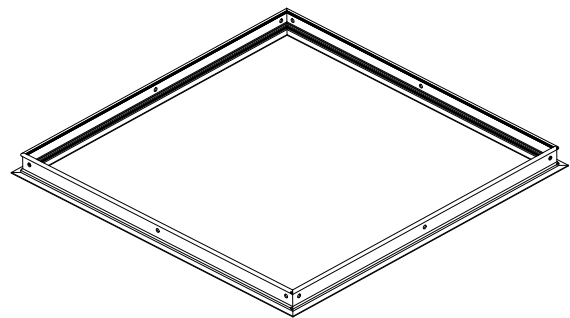


SLOT GRID

CEILING INTEGRATION DRYWALL



DRYWALL FLANGE KIT



Required Aperture: 24.63 x 24.63 (625 x 625)

CONSTRUCTION

- 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 16 lb. (7.3 kg)
- Maximum 20 lb. (9.1 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 2x2	Description 2x2 LED A Lumens CCT 4000 K	Performance Summary		Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy (CRI) (R9) (SDCM)		
Version	TR1-22A40		CCT Color Temperature	4000 K	2422	23.66	102.4	84.1	14.1	< 2
Report	11361637.22			3500 K	2335	23.6	99	83	9.5	< 2
		3000K		2299	23.5	98	82.3	6.7	< 2	

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle					Zonal Lumens
	0°	22.5°	45°	67.5°	90°	
0°	617	617	617	617	617	617
5°	616	615	614	615	618	59
15°	595	602	664	713	731	188
25°	556	608	713	770	789	319
35°	500	591	703	745	752	416
45°	425	540	635	636	640	452
55°	338	467	509	510	498	424
65°	240	355	375	334	334	334
75°	135	225	196	157	137	189
85°	38	59	33	21	16	42
90°	1	2	2	1	1	
95°						
105°						
115°						
125°						
135°						
145°						
155°						
165°						
175°						
180°						

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture	
0-30°	566	N.A.	23	
0-60°	1858	N.A.	77	
0-90°	2422	N.A.	100	
90-180°	0	N.A.	0	
Total Luminaire	0-180°	2422	N.A.	100

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0°	45°	90°
45°	1760	2627	2650
55°	1722	2594	2541
65°	1660	2593	2313
75°	1521	2221	1551
85°	1286	1095	530

CO-EFFICIENTS OF UTILIZATION

Floor Ceiling	80				70				20				30				10				0			
	70	50	30	10	70	50	30	10	50	50	10	10	50	10	10	10	50	10	10	10	50	10	10	10
0	119	119	119	119	116	116	116	111	111	111	111	106	106	102	102	100	100	100	100	100	100	100	100	
1	108	103	99	95	106	101	93	97	90	93	88	89	85	83	83	83	83	83	83	83	83	83	83	
2	98	89	82	76	95	87	75	84	74	81	72	77	70	68	68	68	68	68	68	68	68	68	68	
3	89	78	69	63	86	76	62	73	61	70	60	68	59	56	56	56	56	56	56	56	56	56	56	
4	81	68	59	52	79	67	52	65	51	62	50	60	50	47	47	47	47	47	47	47	47	47	47	
5	74	61	51	44	72	60	44	57	44	55	43	54	43	41	41	41	41	41	41	41	41	41	41	
6	68	54	45	38	66	53	38	52	38	50	37	48	37	35	35	35	35	35	35	35	35	35	35	
7	63	49	40	34	61	48	33	47	33	45	33	44	33	31	31	31	31	31	31	31	31	31	31	
8	58	44	36	30	57	44	30	42	29	41	29	40	29	27	27	27	27	27	27	27	27	27	27	
9	54	41	32	26	53	40	26	39	26	38	26	37	26	24	24	24	24	24	24	24	24	24	24	
10	51	37	29	24	50	37	24	36	24	35	23	34	23	22	22	22	22	22	22	22	22	22	22	

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 38W (C). Candlepower Distribution scaled per total lumens of Integrating Sphere results.

Product	Transom 2x2	Description 2x2 LED B Lumens CCT 4000 K	Performance Summary		Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy (CRI) (R9) (SDCM)		
Version	TR1-22B40		CCT Color Temperature	4000 K	2937	29.42	99.8	84.1	13.6	< 2
Report	11361637.23			3500 K	2785	29.2	95	83.1	9.9	< 2
		3000K		2789	29.4	95	81.9	5.3	< 2	

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle					Zonal Lumens
	0°	22.5°	45°	67.5°	90°	
0°	748	748	748	748	748	748
5°	748	746	744	746	750	72
15°	722	730	805	864	886	228
25°	674	737	864	934	957	386
35°	606	717	852	903	912	505
45°	516	655	770	772	777	548
55°	409	566	617	618	604	514
65°	291	431	454	405	405	405
75°	163	273	238	191	166	229
85°	47	71	40	25	19	51
90°	1	2	2	2	2	
95°						
105°						
115°						
125°						
135°						
145°						
155°						
165°						
175°						
180°						

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture	
0-30°	686	N.A.	23	
0-60°	2253	N.A.	77	
0-90°	2937	N.A.	100	
90-180°	0	N.A.	0	
Total Luminaire	0-180°	2937	N.A.	100


LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0°	45°	90°
45°	2134	3186	3213
55°	2088	3146	3081
65°	2014	3144	2804
75°	1844	2693	1881
85°	1561	1326	641

CO-EFFICIENTS OF UTILIZATION

Floor Ceiling	80				70				20				30				10				0			
	70	50	30	10	70	50	30	10	50	50	10	10	50	10	10	10	50	10	10	10	50	10	10	10
0	119	119	119	119	116	116	116	111	111	111	111	106	106	102	102	100	100	100	100	100	100	100	100	
1	108	103	99	95	106	101	93	97	90	93	88	89	85	83	83	83	83	83	83	83	83	83	83	
2	98	89	82	76	95	87	75	84	74	81	72	77	70	68	68	68	68	68	68	68	68	68	68	
3	89	78	69	63	86	76	62	73	61	70	60	68	59	56	56	56	56	56	56	56	56	56	56	
4	81	68	59	52	79	67	52	65	51	62	50	60	50	47	47	47	47	47	47	47	47	47	47	
5	74	61	51	44	72	60	44	57	44	55	43	54	43	41	41	41	41	41	41	41	41	41	41	
6	68	54	45	38	66	53	38	52	38	50	37	48	37	35	35	35	35	35	35	35	35	35	35	
7	63	49	40	34	61	48	33	47	33	45	33	44	33	31	31	31	31	31	31	31	31	31	31	
8	58	44	36	30	57	44	30	42	29	41	29	40	29	27	27	27	27	27	27	27	27	27	27	
9	54	41	32	26	53	40	26	39	26	38	26	37	26	24	24	24	24	24	24	24	24	24	24	
10	51	37	29	24	50	37	24	36	24	35	23	34	23	22	22	22	22	22	22	22	22	22	22	

Product	Transom 2x2	Description	Performance Summary					Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy		
Version	TR1-22C40	2x2 LED C Lumens CCT 4000 K	CCT Color Temperature	4000 K	3722	39.47	94.3	84.1	13.6	< 2			
Report	11361637.24			3500 K	3529	39.2	90	83.1	9.9	< 2			
				3000K	3534	39.4	90	81.9	5.3	< 2			



100% Dn

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle					Zonal Lumens
	0°	22.5°	45°	67.5°	90°	
0°	948	948	948	948	948	948
5°	947	945	943	945	950	91
15°	915	925	1020	1095	1123	288
25°	854	935	1095	1183	1212	490
35°	768	908	1080	1145	1155	639
45°	654	830	976	978	984	695
55°	519	717	781	784	765	652
65°	369	546	576	514	513	513
75°	207	346	302	242	211	290
85°	59	90	50	32	24	64
90°	1	3	2	2	2	
95°						
105°						
115°						
125°						
135°						
145°						
155°						
165°						
175°						
180°						

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture	
0-30°	869	N.A.	23	
0-60°	2855	N.A.	77	
0-90°	3722	N.A.	100	
90-180°	0	N.A.	0	
Total Luminaire	0-180°	3722	N.A.	100

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0°	45°	90°
45°	2705	4038	4073
55°	2646	3987	3904
65°	2552	3985	3554
75°	2337	3413	2383
85°	1978	1682	816

CO-EFFICIENTS OF UTILIZATION

Floor Ceiling Wall	80			70			20		50		30		10		0	
	70	50	30	10	70	50	10	50	10	50	10	50	10	50	10	0
0	119	119	119	119	116	116	116	111	111	106	106	102	102	100		
1	108	103	99	95	106	101	93	97	90	93	88	89	85	83		
2	98	89	82	76	95	87	75	84	74	81	72	77	70	68		
3	89	78	69	63	86	76	62	73	61	70	60	68	59	56		
4	81	68	59	52	79	67	52	65	51	62	50	60	50	47		
5	74	61	51	44	72	60	44	57	44	55	43	54	43	41		
6	68	54	45	38	66	53	38	52	38	50	37	48	37	35		
7	63	49	40	34	61	48	33	47	33	45	33	44	33	31		
8	58	44	36	30	57	44	30	42	29	41	29	40	29	27		
9	54	41	32	26	53	40	26	39	26	38	26	37	26	24		
10	51	37	29	24	50	37	24	36	24	35	23	34	23	22		

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 38W (C). Candlepower Distribution scaled per total lumens of Integrating Sphere results.