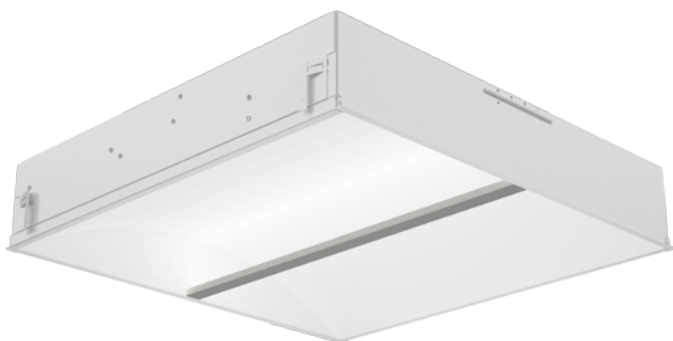


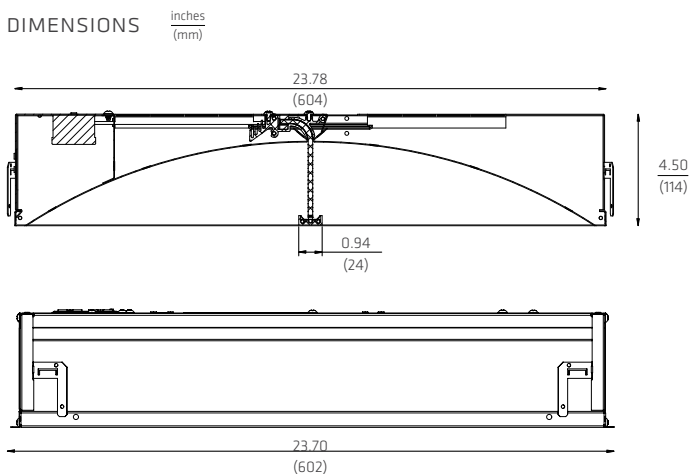
FLUXWERX



Luminaire	TRANSOM 2 x 2 RECESSED LED	Type
Project		
Product		
Notes		



DIMENSIONS

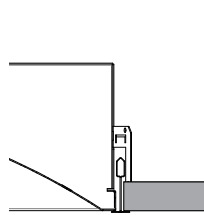


AIR RETURN

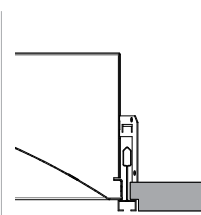


DAYLIGHT SENSOR

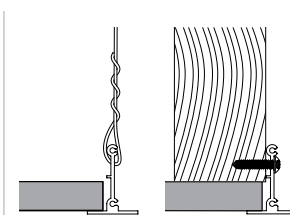
Performance Summary	A	B	C
Light (lm)	2400	3000	3700
Energy (W)	29	39	49
Efficacy (lm/W)	82	79	76
Color Accuracy (CRI)	83	83	83
Est. Lifetime (h ≥ L70)	200,000	200,000	100,000
Lumen Maintenance per TM21 (@ 60,000 h)	L90	L90	L80



FLAT GRID



SLOT GRID



DRYWALL FLANGE
 Required 24.50 x 24.50
 Aperture: (621 x 621)

SPECIFICATION

1	2	3	4	5	6	OPTIONS
1. FAMILY	2. SIZE	3. LIGHT + ENERGY	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 *	A 2400 lm + 29 W B 3000 lm + 39 W C 3700 lm + 49 W Nominal values per luminaire at 120 - 277 V AC ; 50 - 60 Hz For 347 V draw add 4 W to above	35 3500 K 40 4000 K	B 50% Bi Level ¹ D 0 - 10 V Dim L Lutron ² S Standard	M 120 - 277 V 3 347 V ²	A Air Return B Battery Pack ¹ C Chicago Plenum D Daylight Sensor (0 - 10 V) F Flex Whip K Drywall Flange Kit

* Comes with filler pans for 60" grids

¹ Available for 120 - 277 V

² Lutron + 347 V requires Ecobus controls

CONSTRUCTION

- Clear anodized extruded aluminum lower optical rail
- Die formed 22 ga. cold rolled steel housing with extruded and anodized aluminum heat sink
- Quick wire access plate and integral seismic restraint tabs/tie-offs
- Options for (K) drywall flange kit or (A) air return housing version
- High reflectance diffuse white finishes + textured powdercoat

OPTICAL

- Anidolic optical structures with linear light extraction elements
- Precision injection molded high transmittance clear acrylic lenses
- Long life mid-flux LED system designed for typical TM21 lumen maintenance \geq L90 @ 60,000 h
- Available in CCTs 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%
- BiLevel Switching: 50 / 100%
- 0 - 10 V Dim Range: 5 - 100% (CCR)
- Optional Battery: Bodine BSL722 rated for \sim 2000 lm @ 90 minutes
- Optional Daylight Harvesting: integral transparent adjustable 0 - 10 V ambient light sensor
- Optional Lutron: Hi-lume A-Series L3D LED drivers for 100 - 1% (PWM) dim range; factory prewired for EcoSystem or 3-wire controls
- Optional flex whip: 6' prewired
- DALI: Consult factory for details
- Surge Protection: Meets ANSI C82.11 spec and ANSI/IEEE C62.41
- Inrush Current: Meets NEMA 410

WEIGHT

- Maximum 25 lb. (11.3 kg)

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 - 95° F)

TESTING

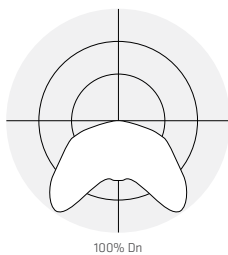
- IESNA LM79 (NVLAP Certified)
- IESNA LM80 (LED@10,000 h)

APPROVALS

- UL Listed (USA + Canada)
- IC Rated
- CCEA Chicago Plenum
- DLC Certified (JAN 2014)
- US DOE Lighting Facts (JAN 2014)

Product	Transom 2x2	Description	Performance Summary		Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy		
Version	TR1-22A40	2x2 LED 2425 lumens CCT 4000 K	CCT Color Temperature	4000 K	2425	29.4	82.5	(CRI)	(R9)	(SDCM)
Report	Fluxwerx	3500 K		2407	29.4	81.9	82	13.7	$<$ 2	

CANDLEPOWER DISTRIBUTION



Vertical Angle	Horizontal Angle					Zonal Lumens
	0°	22.5°	45°	67.5°	90°	
0°	472	472	472	472	472	472
5°	470	470	470	468	468	45
15°	456	455	511	536	548	143
25°	429	465	531	666	721	260
35°	387	434	628	792	884	393
45°	335	407	633	811	828	468
55°	272	385	551	644	657	455
65°	199	299	408	445	452	366
75°	120	215	261	254	254	237
85°	35	62	53	31	25	58
90°	0	0	0	0	0	0
95°						
105°						
115°						
125°						
135°						
145°						
155°						
165°						
175°						
180°						

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture	
0-30°	448	N.A.	19	
0-60°	1764	N.A.	73	
0-90°	2425	N.A.	100	
90-180°	0	N.A.	0	
Total Luminaire	0-180°	2425	N.A.	100

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45°	1396	2639	3452
55°	1398	2831	3375
65°	1389	2843	3152
75°	1362	2969	2898
85°	1192	1790	849

CO-EFFICIENTS OF UTILIZATION

Floor Ceiling Wall	80				70			20		30		10		0
	70	50	30	10	70	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	107	102	97	93	105	100	91	95	89	91	86	88	83	81
2	96	87	80	73	94	85	72	82	71	78	69	75	67	65
3	87	75	66	59	84	74	59	71	57	68	56	65	55	53
4	79	66	56	49	76	64	48	62	48	59	47	57	46	44
5	72	58	48	41	70	57	41	55	40	52	40	51	39	37
6	66	51	42	35	64	51	35	49	34	47	34	45	34	31
7	61	46	37	30	59	45	30	44	30	42	29	41	29	27
8	56	42	33	26	55	41	26	40	26	38	26	37	26	24
9	52	38	29	23	51	37	23	36	23	35	23	34	23	21
10	49	35	26	21	47	34	21	33	21	32	20	31	20	18

Preliminary performance results shown.

Final photometry conducted by an independent NVLAP accredited testing laboratory in accordance with IESNA LM-79-08 (Jan-2014).

Product	Transom 2x2	Description	Performance Summary		Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy			
Version	TR1-22B40	2x2 LED 3045 lumens CCT 4000 K	CCT Color Temperature		4000 K	3045	38.4	79.3	85	22.5	< 2
Report	Fluxwerx				3500 K	3025	38.4	78.8	82	13.7	< 2

100% Dn

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	90°
0°	592	592	592	592	592
5°	590	590	590	588	588
15°	572	572	642	673	689
25°	539	583	667	836	906
35°	486	544	788	994	1110
45°	421	510	795	1018	1040
55°	342	484	692	808	825
65°	250	376	512	559	567
75°	150	270	327	319	319
85°	44	78	66	38	32
90°	0	0	0	0	0

Zone	Lumens	% Lamp	% Fixture	
0-30°	562	N.A.	19	
0-60°	2215	N.A.	73	
0-90°	3045	N.A.	100	
90-180°	0	N.A.	0	
Total Luminaire	0-180°	3045	N.A.	100

Vertical Angle	0°	45°	90°
45°	1753	3314	4334
55°	1755	3554	4238
65°	1744	3569	3958
75°	1710	3728	3639
85°	1497	2247	1066

Floor Ceiling Wall	80			70			20			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	0	
0	119	119	119	119	116	116	116	111	111	111	106	106	102	102	100	
1	107	102	97	93	105	100	91	95	89	91	86	88	83	81	81	
2	96	87	80	73	94	85	72	82	71	78	69	75	67	65	65	
3	87	75	66	59	84	74	59	71	57	68	56	65	55	53	53	
4	79	66	56	49	76	64	48	62	48	59	47	57	46	44	44	
5	72	58	48	41	70	57	41	55	40	52	40	51	39	37	37	
6	66	51	42	35	64	51	35	49	34	47	34	45	34	31	31	
7	61	46	37	30	59	45	30	44	30	42	29	41	29	27	27	
8	56	42	33	26	55	41	26	40	26	38	26	37	26	24	24	
9	52	38	29	23	51	37	23	36	23	35	23	34	23	21	21	
10	49	35	26	21	47	34	21	33	21	32	20	31	20	18	18	

Preliminary performance results shown.
Final photometry conducted by an independent NVLAP accredited testing laboratory in accordance with IESNA LM-79-08 (Jan-2014).

Product	Transom 2x2	Description	Performance Summary		Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy			
Version	TR1-22C40	2x2 LED 3734 lumens CCT 4000 K	CCT Color Temperature		4000 K	3734	49.2	75.9	85	22.5	< 2
Report	Fluxwerx				3500 K	3705	49.2	75.3	82	13.7	< 2

100% Dn

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	90°
0°	726	726	726	726	726
5°	724	723	723	721	721
15°	702	701	787	826	845
25°	661	716	818	1025	1111
35°	596	668	966	1219	1361
45°	516	626	975	1249	1275
55°	419	593	848	991	1011
65°	307	460	627	685	696
75°	184	331	401	391	392
85°	54	95	81	47	39
90°	0	0	0	0	0

Zone	Lumens	% Lamp	% Fixture	
0-30°	689	N.A.	19	
0-60°	2716	N.A.	73	
0-90°	3734	N.A.	100	
90-180°	0	N.A.	0	
Total Luminaire	0-180°	3734	N.A.	100

Vertical Angle	0°	45°	90°
45°	2150	4064	5314
55°	2153	4359	5197
65°	2139	4377	4854
75°	2097	4571	4462
85°	1835	2756	1307

Floor Ceiling Wall	80			70			20			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	0	
0	119	119	119	119	116	116	116	111	111	111	106	106	102	102	100	
1	107	102	97	93	105	100	91	95	89	91	86	88	83	81	81	
2	96	87	80	73	94	85	72	82	71	78	69	75	67	65	65	
3	87	75	66	59	84	74	59	71	57	68	56	65	55	53	53	
4	79	66	56	49	76	64	48	62	48	59	47	57	46	44	44	
5	72	58	48	41	70	57	41	55	40	52	40	51	39	37	37	
6	66	51	42	35	64	51	35	49	34	47	34	45	34	31	31	
7	61	46	37	30	59	45	30	44	30	42	29	41	29	27	27	
8	56	42	33	26	55	41	26	40	26	38	26	37	26	24	24	
9	52	38	29	23	51	37	23	36	23	35	23	34	23	21	21	
10	49	35	26	21	47	34	21	33	21	32	20	31	20	18	18	