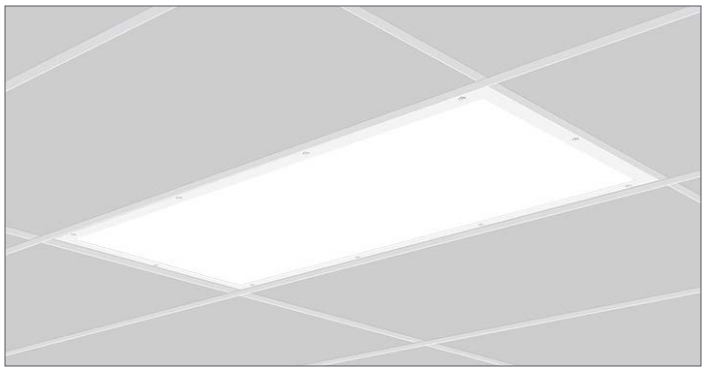
SPECIFICATION SHEET

CARLISLE TC6

LED . RECESSED . DIRECT

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



PERFORMANCE SUMMARY 4000K, L3		P12 OPTICS	
		2 x 2	2 x 4
Lumens	80 CRI	3970	6315
	90 CRI	3382	5380
Wattage		33	51
Efficacy (lm/W)	80 CRI	120	124
	90 CRI	102	106
L80 Estimate (h)		≥ 50,000 hrs	

[1] See page 2 for complete Light Level Performance chart and 90 CRI Lumen Adjustment Factor chart.

FEATURES

- Up to 125 lm/W
- CRI 80+ standard (CRI 90+ optional)
- Suitable for wet locations

ORDERING LOGIC

Example Part Number: TC6-2L35K-24-P04-W-L31-T-4-90

TC6 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11

1. SERIES

TC6

2. COLOR TEMP

2L30K 3000K
2L35K 3500K
2L40K 4000K
2L50K 5000K

90 CRI is available under OPTIONS

3. SIZE

22 2 x 2 ft
24 2 x 4 ft

4. OPTICS

P12 Frosted Pattern 12 Prismatic Acrylic (0.095" Thick) (Standard)
P04 Smooth Opal Acrylic
P13 Clear Prismatic Acrylic P12 (0.125" Thick)
P82 White Translucent *
P97 Frosted Pattern 19 Acrylic (0.156" Thick)

5. FINISH

W White
AM Antimicrobial White Paint

6. LIGHT LEVEL / DRIVER

L1
L2
L3
L4

Select Driver below.

See a complete Light Level Performance chart on page 2.

7. CIRCUITRY

1 1 Circuit
B Battery Pack

8. MOUNTING

D Recessed Drywall
T Recessed T-bar

9. VOLTAGE

3 347 V
4 UNV (120 - 277 V)

10. CONTROLS / SENSORS

Consult factory

11. OPTIONS

90 90 CRI, High R9
X5 NSF (National Sanitation Foundation)
_ None (leave space empty)

* For X5 - P82 must be used as an interior lens only and in conjunction with P13 or P12 Standard lens. For X5 option, smooth side must face down.

Select Driver:

- ☐ **D2** DALI
- ☐ **BD** Bi-Level Step Dimming (50/100) (not available for 347V)
- ☐ **LHE** Lutron H-Series Hi-lume 1% EcoSystem LED Driver
- ☐ **LA2** Lutron A-Series Hi-lume 1% 2-wire LED Driver
- ☐ **L5E** Lutron 5-Series EcoSystem LED Driver

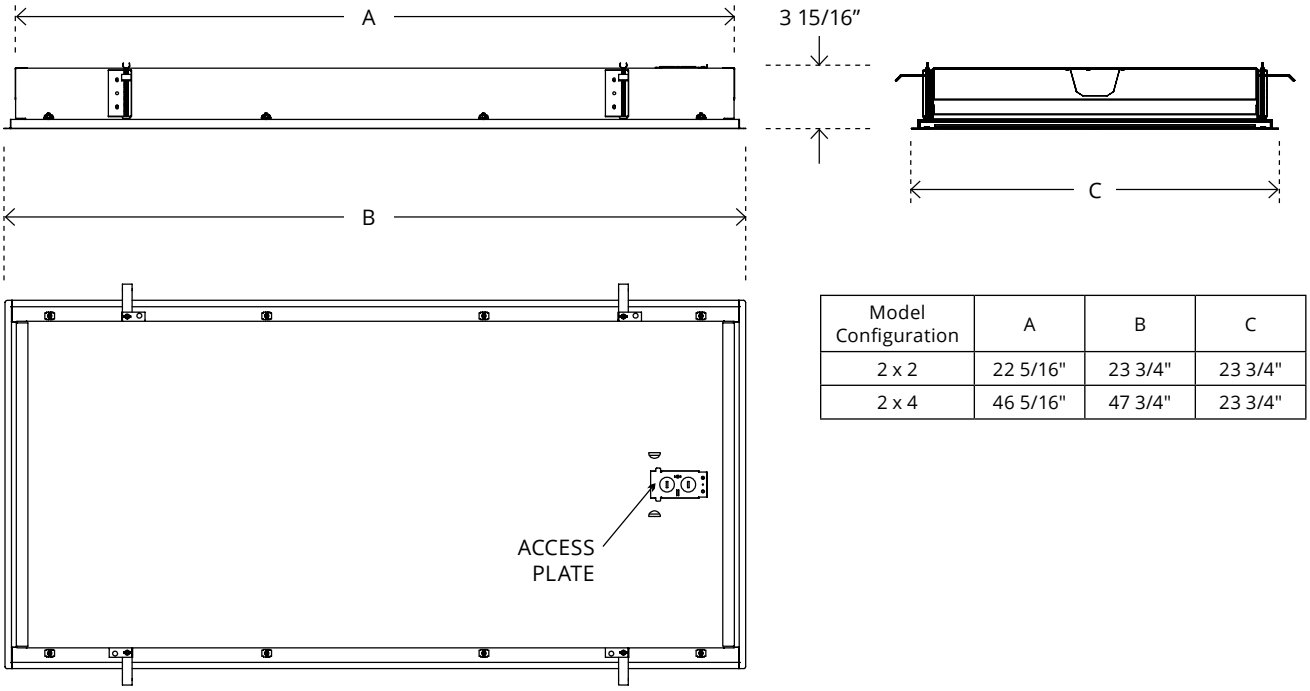
Light Level Performance at 4000K, P12 Optics

Size	Light Level	80 CRI			90 CRI		
		Lumens	Wattage	Efficacy (lm/W)	Lumens	Wattage	Efficacy (lm/W)
2 x2	**L1**	2687	22	122	2289	22	104
	L2	3599	30	120	3066	30	102
	L3	3970	33	120	3382	33	102
	L4	4596	41	112	3916	41	96
2 x 4	**L1**	4010	32	125	3417	32	107
	L2	4863	39	125	4143	39	106
	L3	6315	51	124	5380	51	105
	L4	7720	64	121	6577	64	103
	L5	9037	78	116	7700	78	99

Lumen Adjustment Factor

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

CROSS SECTIONS & DIMENSIONS



Model Configuration	A	B	C
2 x 2	22 5/16"	23 3/4"	23 3/4"
2 x 4	46 5/16"	47 3/4"	23 3/4"

SPECIFICATIONS

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

Housing: Die-formed and spot welded, steel housing assembly and 20 gauge steel door frame.Triple gasketed with sealed lens, gasketed door frame assembly and gasketed housing flange.
Optical System: One piece perimeter door frame with inverted frosted, prismatic pattern #12, sealed acrylic lens. Other lenses available (see options).
CRI: 80+ CRI. 90 CRI is an option.
Lumen Maintenance: At an ambient operating temperature of 35°C, the LED lifetime expectancy is ≥ 50 000hrs at L80.
Finish: White, polyester powder painted housing.
Mounting: Holes provided for chain-mounting support to building structure. Lay-in type luminaire for exposed grid type acoustical ceiling structure and swing style mounting brackets for drywall ceiling installation.
Electrical: Long life LEDs coupled with high efficiency drivers provide quality illumination.
Drivers: Standard low voltage dimming (0-10V).
Approvals: Tested in accordance to IESNA LM-79. cULus listing pending.
Environment: Suitable for wet locations.

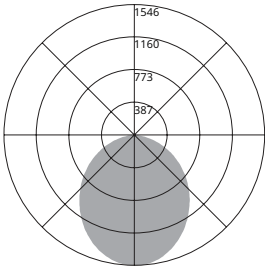
WARRANTY

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 - 4000K, 80 CRI

Optics: **P12 Frosted Pattern 12 Prismatic Acrylic**
IES File: **TC6-2L40K-22-P12-L3**
Lumens: **3970** Wattage: **33**
Efficacy: **120 lm/W**

PHOTOMETRIC CURVE
100% Down



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	555	14
0-30	1163	29.3
0-40	1874	47.2
0-60	3214	81
0-80	3908	98.4
0-90	3969	100
10-90	3824	96.3
20-40	1319	33.2
20-50	2034	51.2
40-70	1793	45.2
60-80	694	17.5
70-80	240	6.1
80-90	62	1.6
90-110	0	0
90-120	0	0
90-130	0	0
90-150	0	0
90-180	0	0
110-180	0	0
0-180	3969	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	119	119	119	119	116	116	116	116	111	111	111
1	109	105	100	97	106	102	98	95	98	95	92
2	100	91	85	79	97	90	83	78	86	81	76
3	91	81	73	66	88	79	72	66	76	70	64
4	83	72	63	56	81	70	62	56	68	61	55
5	77	64	55	49	75	63	55	48	61	54	48
6	71	58	49	43	69	57	49	42	55	48	42
7	66	53	44	38	64	52	43	38	50	43	37
8	61	48	40	34	60	47	39	34	46	39	33
9	57	44	36	30	56	43	36	30	42	35	30
10	54	41	33	28	53	40	33	28	39	32	27

LUMINANCE DATA (CD/M²)

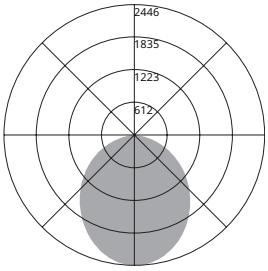
Vertical Angle	Horizontal Angle		
	0	45	90
45	3586	3604	3575
55	3343	3337	3249
65	3012	2954	2793
75	2457	2312	2169
85	1297	1523	1652

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	1546	1546	1546	1546	1546
10	1506	1497	1496	1501	1503
20	1390	1382	1385	1391	1395
30	1220	1216	1226	1229	1234
40	1021	1016	1030	1030	1028
50	805	802	812	804	797
60	576	572	572	562	548
70	342	332	332	319	304
80	126	115	120	110	102
90	2	3	3	2	2

Optics: **P12 Frosted Pattern 12 Prismatic Acrylic**
IES File: **TC6-2L40K-24-P12-L3**
Lumens: **6315** Wattage: **51.3**
Efficacy: **123 lm/W**

PHOTOMETRIC CURVE
100% Down



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	877	13.9
0-30	1837	29.1
0-40	2964	46.9
0-60	5087	80.6
0-80	6198	98.2
0-90	6315	100
10-90	6086	96.4
20-40	2087	33
20-50	3220	51
40-70	2845	45.1
60-80	1112	17.6
70-80	390	6.2
80-90	116	1.8
90-110	0	0
90-120	0	0
90-130	0	0
90-150	0	0
90-180	0	0
110-180	0	0
0-180	6315	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	119	119	119	119	116	116	116	116	111	111	111
1	109	104	100	96	106	102	98	95	98	95	92
2	99	91	85	79	97	89	83	78	86	81	76
3	91	80	72	66	88	79	71	65	76	69	64
4	83	71	63	56	81	70	62	56	68	61	55
5	77	64	55	48	74	63	54	48	61	53	48
6	71	58	49	42	69	57	48	42	55	47	42
7	66	52	44	38	64	52	43	37	50	43	37
8	61	48	39	34	60	47	39	34	46	39	33
9	57	44	36	30	56	43	36	30	42	35	30
10	54	41	33	28	52	40	33	27	39	32	27

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0	45	90
45	2840	2632	2499
55	2643	2345	2147
65	2382	1924	1657
75	1949	1232	1004
85	982	441	472

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	2441	2441	2441	2441	2441
10	2383	2351	2331	2325	2321
20	2210	2166	2133	2118	2110
30	1949	1901	1863	1835	1820
40	1632	1576	1535	1498	1475
50	1284	1226	1174	1124	1095
60	918	854	786	732	696
70	547	469	406	355	323
80	198	140	106	74	55
90	3	5	5	5	5