

T O V O

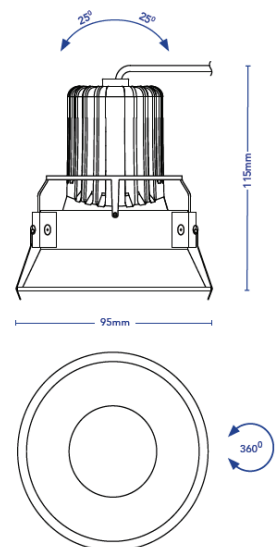
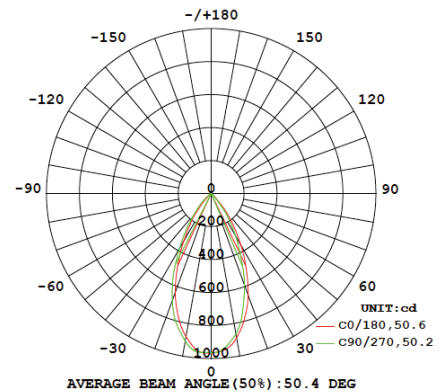
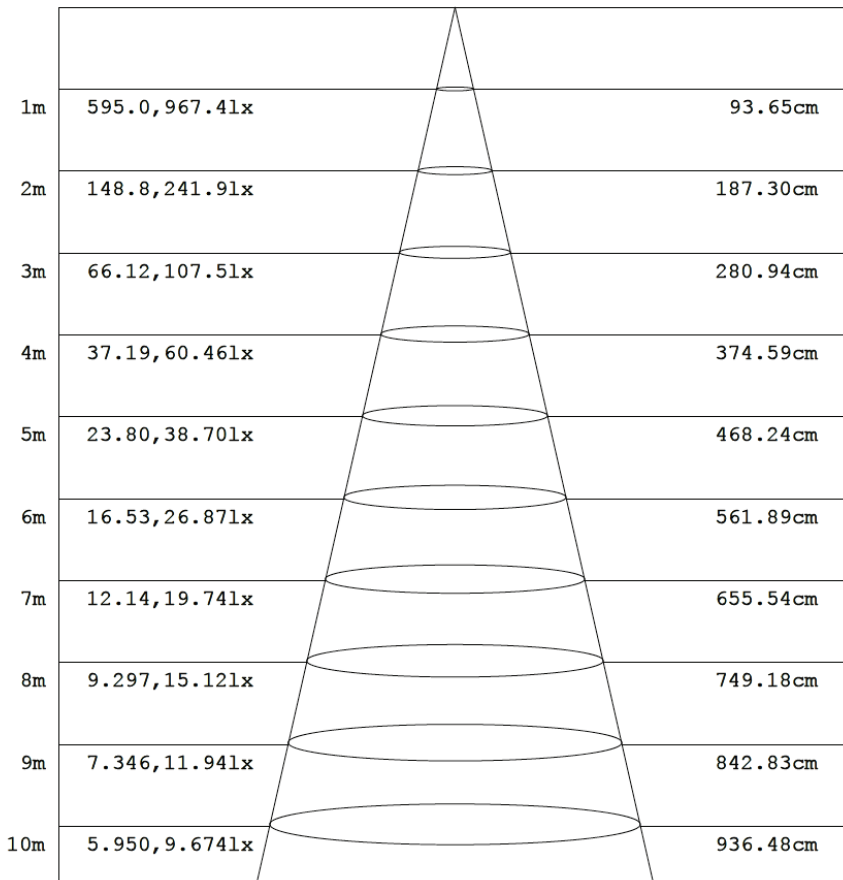
PHOTOMETRY

Downlight - Semi Trimless - 2700K

FITTING - Downlight - Semi Trimless		CODE - 4176_2700K_60°	
BODY - Powdercoated Diecast Aluminium Body With Minimal Trim For Unobtrusive Appearance. A Wide Conical Reflector Maximises The Throw Of Our Custom Dedicated TOVO LED Lamp With Incorporated Driver			
LAMP - TOVO 10W 2700K LED Lamp With Dimmable 25-42VDC 250mA LED Driver.			
INSTALLATION - Recessed Downlight. 89mm Cut		POWER SUPPLY - 240V LED Driver c/w Flex & Plug	
NOMINAL POWER	10W	RATED INPUT VOLTAGE	200-250V
NOMINAL FLUX	737.2 Lm	LAMPS INSIDE	1
IMAX	967.6 CD	LIGHT OUTPUT RATIO	100%
CIE CLASS	Direct	UP	.1%
EFFICIENCY	77.03 Lm/W	DOWN	99.9%

LUMINANCE cd/ (m2)		
G (DEG)	C0/180	C90/270
85	9147	0
80	8696	1382
75	7978	3692
70	7443	4662
65	9202	5088
60	13178	8618
55	20254	17209
50	29475	22830
45	67538	33688

Flux out: 444.7 lm



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.



Downlight - Semi Trimless - 2700K

Coefficients of Utilisation

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.11	1.08	1.06	1.09	1.06	1.04	1.04	1.03	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.96	1.01	.98	.94	.98	.95	.92	.95	.93	.90	.92	.90	.88	.87
3.0	.96	.91	.87	.95	.90	.86	.92	.88	.85	.90	.86	.84	.87	.85	.82	.81
4.0	.90	.84	.80	.89	.84	.80	.86	.82	.79	.84	.81	.78	.83	.79	.77	.75
5.0	.84	.78	.74	.83	.78	.74	.81	.77	.73	.80	.76	.72	.78	.75	.72	.70
6.0	.79	.73	.69	.78	.73	.69	.77	.72	.68	.75	.71	.68	.74	.70	.67	.66
7.0	.74	.68	.64	.74	.68	.64	.72	.67	.64	.71	.67	.63	.70	.66	.63	.62
8.0	.70	.64	.60	.70	.64	.60	.69	.64	.60	.68	.63	.60	.67	.62	.59	.58
9.0	.66	.61	.57	.66	.60	.57	.65	.60	.56	.64	.60	.56	.63	.59	.56	.55
10.0	.63	.57	.53	.63	.57	.53	.62	.57	.53	.61	.56	.53	.60	.56	.53	.52

Candela Distribution

UNIT: cd

C (DEG) \ γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	967	967	966	965	965	964	963	963	967	967	966	965	965	964	963	963			
5	951	951	944	941	939	939	943	949	955	954	954	958	964	959	951	947			
10	887	879	861	862	864	865	861	867	881	884	899	900	909	905	912	903			
15	783	769	758	748	741	739	753	756	773	783	793	806	817	822	809	799			
20	656	630	616	597	592	587	595	617	641	656	666	681	691	695	690	669			
25	504	483	462	449	429	434	436	459	481	501	521	526	545	544	535	523			
30	362	341	329	306	294	288	300	318	335	355	379	382	385	393	393	380			
35	234	218	207	194	180	181	186	198	216	234	245	257	262	261	258	249			
40	129	117	89.8	77.3	79.0	83.7	101	110	111	140	150	156	157	160	156	136			
45	47.8	43.9	30.3	24.0	23.8	28.5	38.5	48.0	45.8	71.1	77.2	84.5	90.3	93.4	90.4	63.8			
50	18.9	15.9	13.9	13.6	14.7	16.0	17.2	17.7	22.7	36.2	42.1	47.8	48.9	48.4	41.6	28.9			
55	11.6	9.96	8.60	8.59	9.87	11.1	12.2	12.0	12.8	14.9	18.2	21.9	23.7	22.1	18.7	14.3			
60	6.59	6.06	4.93	4.38	4.31	4.72	5.75	7.28	7.69	9.92	11.6	13.2	14.9	14.8	13.0	8.73			
65	3.89	2.55	2.23	2.07	2.15	2.31	2.63	3.51	4.04	6.11	7.39	8.74	9.67	9.13	6.60	4.38			
70	2.55	1.99	1.67	1.59	1.59	1.83	2.07	2.63	2.70	2.70	3.64	4.52	4.61	3.82	2.55	2.62			
75	2.06	1.35	1.11	0.96	0.96	1.11	1.51	1.91	2.69	2.07	2.46	2.86	2.78	2.47	1.83	1.51			
80	1.51	0.64	0.40	0.32	0.24	0.48	0.72	1.11	1.59	1.27	1.67	1.98	1.91	1.59	1.27	0.55			
85	0.80	0.00	0.00	0.00	0.00	0.00	0.08	0.40	1.03	0.23	0.48	1.18	0.95	0.63	0.08	0.00			
90	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.24	0.08	0.16	0.08	0.00	0.16	0.16			
150	0.00	0.00	0.00	0.00	0.08	0.08	0.08	0.00	0.48	0.32	0.40	0.40	0.32	0.24	0.24	0.40			
155	0.00	0.08	0.08	0.00	0.08	0.08	0.08	0.08	0.63	0.79	0.72	0.72	0.64	0.63	0.48	0.64			
160	0.24	0.32	0.24	0.32	0.32	0.24	0.24	0.32	0.79	1.03	0.87	0.80	0.88	0.88	0.88	0.88			
165	0.48	0.40	0.48	0.56	0.56	0.40	0.48	0.48	0.95	1.03	1.11	1.03	1.03	1.03	1.04	1.04			
170	0.63	0.64	0.79	0.80	0.87	0.72	0.95	0.64	1.11	1.03	1.11	1.28	1.35	1.19	1.35	1.27			
175	0.87	1.11	1.43	1.35	1.20	1.27	1.43	1.19	1.19	1.03	1.11	1.51	1.35	1.19	1.35	1.43			
180	1.03	1.11	1.51	1.35	1.19	1.35	1.36	1.51	1.51	1.03	1.11	1.51	1.35	1.19	1.35	1.43			