Tovo Lighting

Downlight - Modulated Click Spot Series - Semi Trimless - B Spot

Description : Modulated Downlight System With Tunnel Baffle

Codes : 4640

Colours : White, Black

Colour Temperature : 2700K

CRI : 92

Lumens : 580lm

Input Voltage : 240V

Wattage : 9.5W

Beam Angle : 60°, 38°, 24°, 15°, 7°

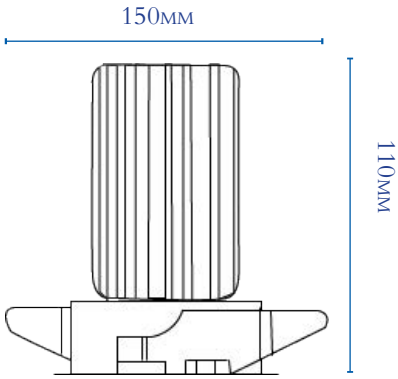
Dimmable : YES

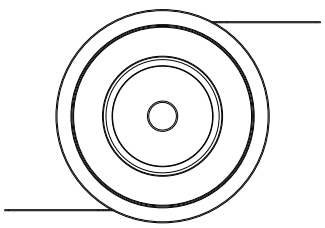
PHASE, AUTOMATION, DALI

Driver : INCORPORATED

IP Rating : IP20

Cut Out : 76mm



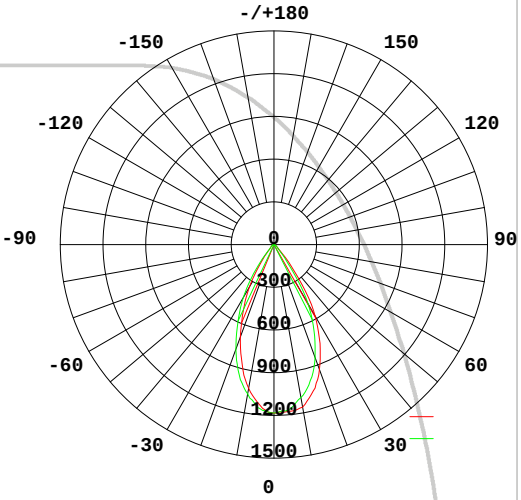


TOVO LIGHTING

PHOTOMETRY

MODEL DOWNLIGHT MODULATED SERIES - CLICK SPOT A - SEMI TRIMLESS

NOMINAL POWER	10W	LIGHT OUTPUT RATIO	100%
RATED VOLTAGE	24V DC	CIE CLASS	DIRECT
NOMINAL FLUX	915.303 LM	UP	0.2%
LAMPS INSIDE	1	DOWN	99.8%
IMAX	1190 CD	EFFICIENCY	81.59 LM/W



CANDELA DISTRIBUTION

VERTICAL ANGLE	HORIZONTAL ANGLE 0°	45°	90°	135°	180°	225°	270°	315°	ZONAL LUMENS
10	1158	1123	1091	1058	1025	1027	1066	1129	108
20	933.7	911.6	845.6	739.3	691.7	696.7	783.4	883.6	376.5
30	579.1	572.7	480.4	386.8	350	369.5	435	524.1	665.3
40	162.8	139.6	104.4	82.99	81.34	93.97	109.6	160.1	829.1
50	33.99	34.28	32.50	31	30.05	30.15	31.30	33.05	871.9
60	17.37	17.19	17.45	17.27	16.76	17.02	17.33	17.57	893.3
70	9.354	9.597	10.01	10.06	9.324	9.571	9.580	9.055	905.9
80	3.972	3.816	3.605	3.381	2.441	2.447	2.785	3.049	912.4
90	0.0026	0.0020	0	0	0	0	0	0	913.6
100	0	0	0	0	0	0	0	0	913.6
110	0	0	0	0	0	0	0	0	913.6
120	0	0	0	0	0	0	0	0	913.6
130	0	0	0	0	0.0003	0.1598	0	0.3370	913.6
140	0.0789	0.0792	0	0.1598	0.6323	0.6605	0.2919	0.4625	913.7
150	0.6327	0.0792	0.9575	0.9552	1.109	0.9615	0.9592	0.7241	914.1
160	1.710	1.735	1.354	1.525	1.350	1.393	1.490	1.276	914.6
170	3.049	2.867	1.519	1.844	1.395	1.839	1.735	1.806	915.1
180	1.980	1.900	1.759	1.846	1.426	1.900	1.918	1.927	915.3

AVERAGE BEAM ANGLE (50%): 52.2°

UNIT: CD
C0 180°, 52.2°
C90 270°, 52.3°

VERTICAL ANGLE	HORIZONTAL ANGLE 0	90
85	751	577
80	899	816
75	1001	986
70	1075	1151
65	1076	1153
60	1366	1373
55	1640	1636
50	2079	1988
45	3136	2603

COEFFICIENTS OF UTILISATION (%)

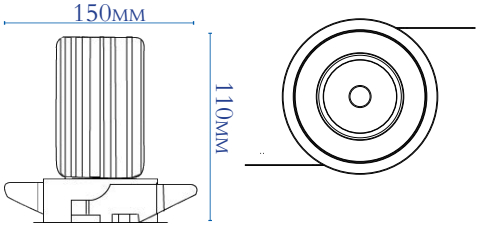
CELING	80%			70%			50%			30%			10%			0
WALL	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
FLOOR	20%			20%			20%			20%			20%			0
RCR 0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1	1.11	1.08	1.06	1.08	1.06	1.04	1.04	1.03	1.01	1.01	.99	.98	.97	.96	.95	.93
2	1.03	.99	.95	1.01	.97	.94	.98	.95	.92	.95	.92	.90	.92	.90	.88	.87
3	.96	.91	.87	.94	.90	.86	.92	.88	.85	.89	.86	.83	.87	.84	.82	.81
4	.90	.84	.80	.88	.83	.79	.86	.82	.78	.84	.80	.77	.82	.79	.76	.75
5	.84	.78	.74	.83	.77	.73	.81	.76	.73	.79	.75	.72	.78	.74	.71	.70
6	.79	.73	.68	.78	.72	.68	.76	.71	.68	.75	.71	.67	.74	.70	.67	.65
7	.74	.68	.64	.73	.68	.64	.72	.67	.63	.71	.66	.63	.70	.66	.63	.61
8	.70	.64	.60	.69	.64	.60	.68	.63	.59	.67	.63	.59	.66	.62	.59	.58
9	.66	.60	.56	.66	.60	.56	.65	.59	.56	.64	.59	.56	.63	.59	.55	.54
10	.63	.57	.53	.62	.57	.53	.61	.56	.53	.60	.56	.53	.60	.55	.52	.51

Flux out:584.9 lm

Height	Eavg,Emax	Angle:52.21deg	Diameter
1m	717.1,1190lx		98.00cm
2m	179.3,297.4lx		195.99cm
3m	79.68,132.2lx		293.99cm
4m	44.82,74.35lx		391.99cm
5m	28.68,47.58lx		489.98cm
6m	19.92,33.04lx		587.98cm
7m	14.63,24.28lx		685.98cm
8m	11.20,18.59lx		783.97cm
9m	8.853,14.69lx		881.97cm
10m	7.171,11.90lx		979.97cm

BODY
MODULATED DOWNLIGHT SYSTEM WITH SMALL TRIM ALLOWING INTERCHANGABLE BODY AND HOUSINGS.

LAMP
BRIGHTTEK LED LAMP WITH DIMMABLE A 36V 250n LED DRIVER. THE BT LAMP IS AVAILABLE IN A WARM WHITE 2700K AND 3000K. 4000K IS AVAILABLE ON CUSTOM REQUEST.

INSTALLATION
RECESSED DOWNLIGHT. 76MM CUT

POWER SUPPLY
24V LED FLEX & PLUG DRIVE