

T
TOVO
LIGHTING

THE ROPE LIGHT IS UNIQUE.
IT THROWS A BEAUTIFUL WARM WHITE LIGHT.
AVAILABLE IN UP TO 3 METERS IN LENGTH.

LED ROPE LIGHT- FRONT EMITTING

DESCRIPTION : FLEXIBLE AND FULLY SUBMERSIBLE LED ROPE

CODE :

FRONT EMITTING HIGH OUTPUT : 4481

FRONT EMITTING RGB : 4453

COLOURS : WARM WHITE

RGB : COLOUR CHANGING

COLOUR TEMPERATURE : 2700K, 3000K

CRI : ≥ 80

LUMENS : 60lm per metre

VOLTAGE : 24V_DC

WATTAGE : 8W

BEAM ANGLE : N.A

DIMMABLE : YES
0-10V, DALI

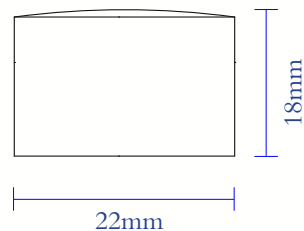
DRIVER : REMOTE

IP RATING : IP68

CUT OUT : N.A



Front Emitting



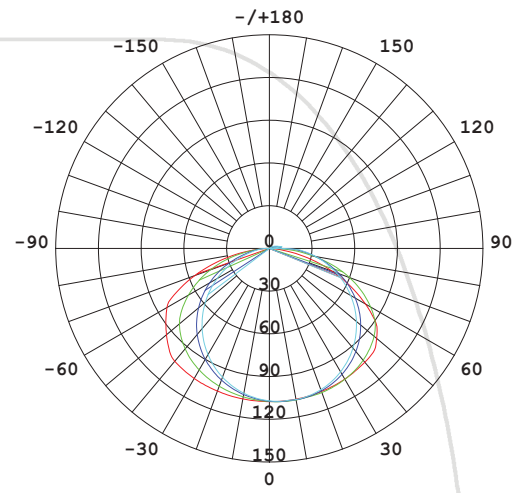
PHOTOMETRY

MODEL LED ROPE LIGHT HIGH OUTPUT FRONT EMITTING

NOMINAL POWER	11 W/M	LIGHT OUTPUT RATIO	100%
RATED VOLTAGE	24V DC	CIE CLASS	DIRECT
NOMINAL FLUX	392.8LM	UP	1.2%
LAMPS INSIDE	1	DOWN	98.8%
IMAX	108.1 CD	EFFICIENCY	35.39 lm/W

CANDELA DISTRIBUTION

VERTICAL ANGLE	HORIZONTAL ANGLE								ZONAL LUMENS
	0°	45°	90°	135°	180°	225°	270°	315°	
10	107.4	105.1	103.3	104.1	107.5	107.8	107.8	107.0	10.17
20	106.6	100.7	96.25	99.50	107.0	107.3	105.6	106.6	39.90
30	105.5	94.13	86.22	92.64	106.0	104.1	100.0	103.7	86.76
40	103.4	84.95	73.52	83.02	104.3	98.25	91.35	98.27	146.8
50	94.39	72.54	58.75	70.03	98.39	88.82	79.83	89.61	214.3
60	83.05	56.41	42.47	53.27	77.91	75.04	65.89	76.96	281.1
70	55.67	36.79	25.39	33.02	47.07	56.37	50.08	59.54	337.2
80	23.07	16.10	11.45	13.12	15.83	33.70	33.03	37.72	373.5
90	0.4482	0.1525	0.0018	0	0	3.398	9.613	13.07	388.2
100	0.0077	0	0.0213	0	0.0059	5.334	7.653	5.732	389.7
110	0.0071	0	0.0068	0	0.0107	2.730	4.813	3.021	391.5
120	0.0000	0	0	0	0.0083	1.073	2.714	1.225	392.4
130	0	0	0	0	0.0030	0.0644	1.134	0.1162	392.7
140	0	0	0	0	0	0	0.0759	0	392.8
150	0	0	0	0	0	0	0	0	392.8
160	0	0	0	0	0	0	0	0	392.8
170	0	0	0	0	0	0	0	0	392.8
180	0	0	0	0	0	0	0	0	392.8



AVERAGE BEAM ANGLE (50%): 130.8°

UNIT: CD

- Co 180°, 138.5°
- C30 210°, 137.9°
- C60 240°, 125.9°
- C90 270°, 120.7°

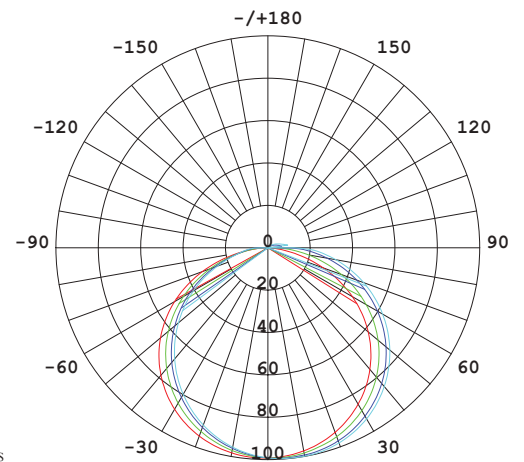
VERTICAL ANGLE	HORIZONTAL ANGLE	
	0	90
85	5221	3890
80	6644	3298
75	7587	3403
70	8139	3711
65	8442	4015
60	8305	4247
55	7740	4423
50	7342	4570
45	7055	4693

MODEL LED ROPE LIGHT LOW OUTPUT FRONT EMITTING

NOMINAL POWER	6W/M	LIGHT OUTPUT RATIO	100%
RATED VOLTAGE	24V DC	CIE CLASS	DIRECT
NOMINAL FLUX	322.46 LM	UP	1.5%
LAMPS INSIDE	1	DOWN	98.5%
IMAX	99.95 CD	EFFICIENCY	46.07 lm/W

CANDELA DISTRIBUTION

VERTICAL ANGLE	HORIZONTAL ANGLE								ZONAL LUMENS
	0°	45°	90°	135°	180°	225°	270°	315°	
10	98.32	96.66	95.58	95.84	97.35	98.76	99.90	99.41	9.395
20	94.62	91.28	89.05	89.76	92.71	96.03	98.07	97.39	36.51
30	88.03	83.15	79.93	80.97	85.24	90.32	93.19	92.31	78.22
40	78.56	72.43	68.47	69.69	74.92	81.78	85.45	84.32	129.6
50	66.17	59.38	55.09	56.17	61.84	70.53	75.10	73.56	184.5
60	50.87	44.30	40.53	40.83	46.02	56.83	62.52	60.23	236.1
70	32.94	28.05	25.23	24.67	27.87	41.11	48.12	44.69	278.0
80	13.77	12.74	13.19	10.56	9.538	24.18	32.57	27.66	305.4
90	0.3824	0.4713	0.0183	0	0.0032	0.1731	12.09	9.845	317.8
100	0.0222	0.0136	0.0574	0.0145	0.0256	3.745	8.575	4.180	319.0
110	0.0244	0.0124	0.0438	0.0120	0.0247	2.374	5.448	2.694	320.7
120	0.0296	0.0142	0.0420	0.0157	0.0367	1.265	3.356	1.432	321.7
130	0.0429	0.0198	0.0423	0.0225	0.0463	0.3819	1.778	0.4156	322.2
140	0.0534	0.0238	0.0487	0.0235	0.0580	0.0528	0.5199	0.0461	322.4
150	0.0583	0.0367	0.0404	0.0330	0.0663	0.0540	0.0592	0.0472	322.4
160	0.0623	0.0373	0.0419	0.0324	0.0759	0.0586	0.0469	0.0525	322.4
170	0.0669	0.0487	0.0386	0.0438	0.0799	0.0691	0.0518	0.0592	322.5
180	0.0734	0.0611	0.0583	0.0540	0.0799	0.0614	0.0565	0.0561	322.5



AVERAGE BEAM ANGLE (50%): 120.8°

UNIT: CD

- Co 180°, 118.6°
- C30 210°, 120.3°
- C60 240°, 121.9°
- C90 270°, 122.4°

VERTICAL ANGLE	HORIZONTAL ANGLE	
	0	90
85	633	1068
80	793	760
75	900	712
70	963	738
65	999	780
60	1017	811
55	1026	837
50	1029	857
45	1028	877

COEFFICIENTS OF UTILISATION (%)

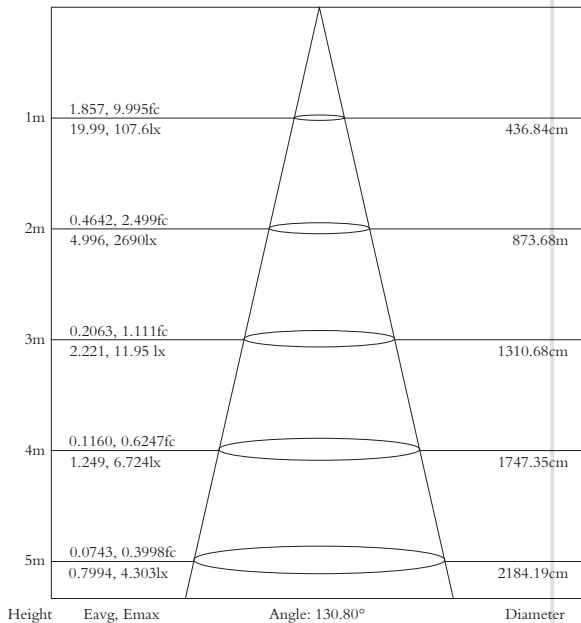
HIGH OUTPUT

Ceiling Wall Floor	80%			70%			50%			30%			10%			
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
R:CR 0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.06	1.06	1.06	1.01	1.01	1.01	.99
1	1.02	.97	.92	.99	.95	.91	.95	.91	.88	.90	.87	.85	.87	.84	.82	.80
2	.87	.80	.73	.85	.78	.72	.81	.76	.70	.78	.73	.69	.75	.71	.67	.65
3	.76	.67	.60	.74	.66	.59	.71	.64	.58	.68	.62	.57	.65	.60	.56	.53
4	.66	.57	.50	.65	.56	.49	.62	.55	.49	.60	.53	.48	.57	.52	.47	.45
5	.59	.49	.42	.58	.49	.42	.55	.47	.41	.53	.46	.41	.51	.45	.40	.38
6	.53	.43	.37	.52	.43	.36	.50	.42	.36	.48	.41	.35	.46	.40	.35	.33
7	.48	.38	.32	.47	.38	.32	.45	.37	.31	.43	.36	.31	.42	.36	.31	.29
8	.43	.34	.28	.42	.34	.28	.41	.33	.28	.40	.33	.28	.38	.32	.27	.25
9	.40	.31	.25	.39	.31	.25	.38	.30	.25	.36	.30	.25	.35	.29	.24	.23
10	.36	.28	.23	.36	.28	.23	.35	.27	.22	.34	.27	.22	.33	.27	.22	.20

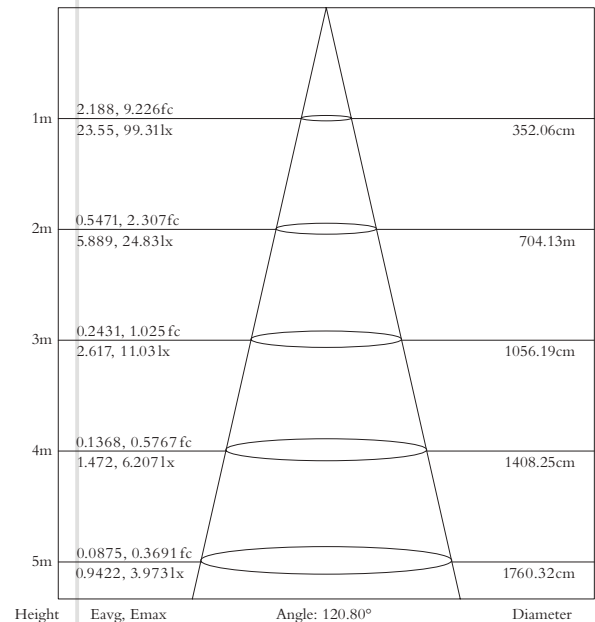
LOW OUTPUT

Ceiling Wall Floor	80%			70%			50%			30%			10%			
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
R:CR 0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	.99
1	1.02	.97	.93	.99	.95	.91	.95	.91	.88	.91	.88	.85	.87	.84	.82	.80
2	.88	.81	.75	.86	.79	.74	.82	.76	.72	.79	.74	.70	.75	.71	.68	.66
3	.77	.68	.61	.75	.67	.61	.72	.65	.59	.69	.63	.58	.66	.61	.57	.55
4	.68	.59	.51	.66	.58	.51	.64	.56	.50	.61	.55	.49	.59	.53	.48	.46
5	.60	.51	.44	.59	.50	.44	.57	.49	.43	.55	.48	.42	.53	.47	.42	.40
6	.54	.45	.38	.53	.44	.38	.51	.43	.37	.49	.42	.37	.47	.41	.37	.34
7	.49	.40	.34	.48	.39	.33	.46	.39	.33	.45	.38	.33	.43	.37	.32	.30
8	.45	.36	.30	.44	.35	.30	.42	.35	.29	.41	.34	.29	.40	.33	.29	.27
9	.41	.32	.27	.40	.32	.27	.39	.32	.26	.38	.31	.26	.37	.30	.26	.24
10	.38	.30	.24	.37	.29	.24	.36	.29	.24	.35	.28	.24	.34	.28	.24	.22

Flux out: 316.7lm



Flux out: 240.81m



BODY

POLYURETHANE TUBING CONTAINING THE LED PCB BOARD, ENCASED IN A POLYURETHANE GLUE. BEING A FULLY SUBMERSIBLE UNIT, THE LED ROPE LIGHT MUST BE MADE TO MEASURE AND CANNOT BE CUT ON SITE.

LIGHTING SYSTEM

LED PCB BOARD. AVAILABLE IN WARM WHITE OR RGB COLOUR CHANGING. THE HIGH OUTPUT ROPE IS 11 WATTS PER METRE AND THE LOW OUTPUT IS 6 WATTS PER METRE.

END CAPS

POLYURETHANE END CAPS SEALED WITH POLYURETHANE GLUE.

MOUNTING

THE PRODUCT CAN BE SILICONED OR GLUED INTO PLACE. IT CAN ALSO BE RECESSED INTO FLEXIBLE ALUMINIUM MOUNTING CHANNEL.

POWER SUPPLY

24V LED DRIVER, REMOTE. SPECIALISED DRIVER REQUIRED FOR RGB COLOUR CONTROL.

WEIGHT

400G/M

ORDERING & LEAD TIMES

LED ROPE LIGHT COMES IN A RANGE OF LENGTHS FROM 317.5MM TO 3005MM. PLEASE SPEAK TO THE TEAM FOR THE FULL LIST OF LENGTHS. 8-9 WEEK LEAD TIME.