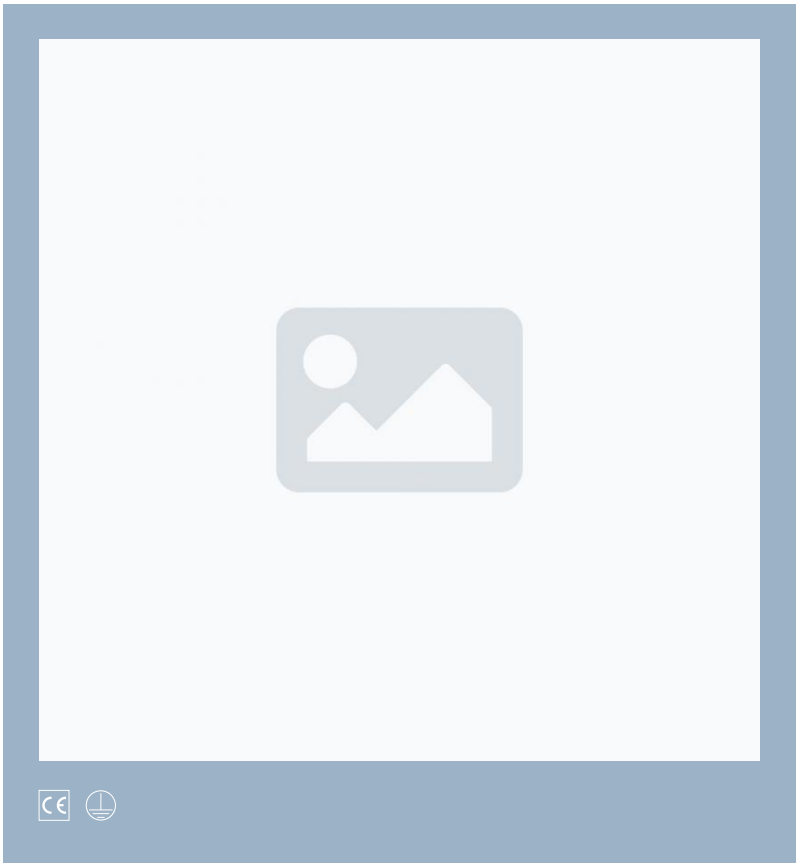
V2M110/LEDN2525DX1



module • linear

application : Office, Retail, Horeca, Education, Leisure

light source : high power LED • 4000 K

optics : LED+LENS™ • acrylic (PMMA) HaloOptics® • wide-angle

UGR classification : <=16

luminous flux: 2550 lm

luminous efficacy : 134 lm/W

LLMF: 98% @ 50khrs (Tq=25°C)

Product information

Mechanical properties

colour: RAL9003 - white (textured)

type : individual luminaire

Electrical properties

driver: DALI dimmable

power : 19 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 1 UNLIMITED

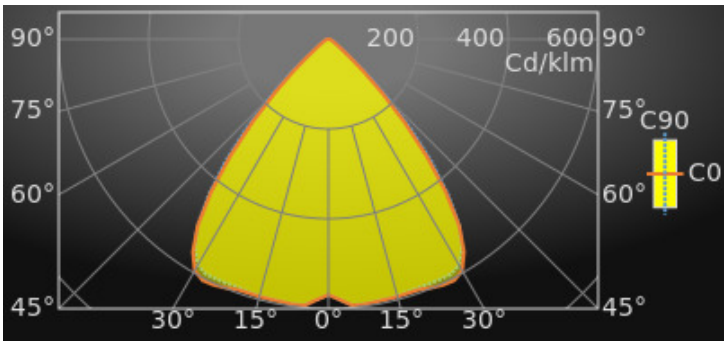
Luminance

luminous flux : 2550 lm

luminous efficacy : 134 lm/W

UGR classification <=16

luminous area : 0.07 m²



Average Luminances (Cd/m²) for 2550lm

Gamma	C0	C30	C45	C60	C90
45°	8854	9659	9981	9956	9873
50°	3524	3408	4063	3800	3732
55°	1803	1635	1969	1835	1943
60°	1130	1146	1209	1168	1192
65°	896	889	933	913	921
70°	796	761	799	772	820
75°	657	655	715	664	686
80°	566	549	592	550	584
85°	388	335	429	335	403

Classifications

CIE: 834 / 983 / 997 / 1000 / 1000

CIE FLUXCODE : 0.83 / 0.98 / 1.00 / 1.00 / 1.00

BZ: BZ1

CAE: Symmetrical

DIN: A60 (Nach Arbeitsblatt 7)

DIN_U: Phi u = 1.00

DIN_SU: Phi su = 0.76

UTE: 1.00 B + 0.00 T

Luminous intensities in cd

Lifetime Data (Tq=25.0°C)

Time(khrs)	LLMF(%)	Cx(%)
10	100	2
20	99	4
30	99	6
40	99	8
50	99	10
60	98	12

Intensity for 2550lm

Gamma	C0	C45	C90
0°	1451.9	1451.9	1451.9
5°	1516.0	1514.7	1513.6
10°	1515.2	1516.7	1512.0
15°	1513.0	1516.9	1509.2
20°	1512.6	1508.1	1500.3
25°	1540.0	1507.9	1504.1
30°	1517.5	1492.9	1481.5
35°	1293.1	1341.4	1292.8
40°	864.5	949.3	908.7
45°	430.4	485.2	479.9
50°	155.7	179.6	164.9
55°	71.1	77.7	76.6
60°	38.9	41.6	41.0
65°	26.0	27.1	26.8
70°	18.7	18.8	19.3
75°	11.7	12.7	12.2
80°	6.8	7.1	7.0
85°	2.3	2.6	2.4
90°	0.6	0.7	0.3

UGR classification

Corrected Glare Ratings for a Total Lamp Flux of 2550lm (S = 0.25H)

	Room Reflection Factors (%)									
Ceiling	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor	20	20	20	20	20	20	20	20	20	20
Room Dimensions	Viewed Crosswise					Viewed Endwise				
X = 2H Y = 2H	16.6	18.1	16.9	18.3	18.6	16.8	18.3	17.1	18.6	18.8
Y = 3H	16.4	17.8	16.8	18.1	18.3	16.7	18.0	17.0	18.3	18.6
Y = 4H	16.4	17.6	16.7	17.9	18.2	16.6	17.9	17.0	18.1	18.4
Y = 6H	16.3	17.5	16.7	17.8	18.1	16.6	17.7	16.9	18.0	18.3
Y = 8H	16.3	17.4	16.7	17.7	18.0	16.5	17.6	16.9	17.9	18.3
Y = 12H	16.3	17.3	16.7	17.6	18.0	16.5	17.5	16.9	17.9	18.2
X = 4H Y = 2H	16.4	17.6	16.7	17.9	18.2	16.6	17.8	16.9	18.1	18.4
Y = 3H	16.3	17.3	16.7	17.6	18.0	16.5	17.5	16.9	17.9	18.2
Y = 4H	16.2	17.1	16.6	17.5	17.9	16.5	17.4	16.9	17.7	18.1
Y = 6H	16.2	17.0	16.6	17.4	17.8	16.4	17.2	16.9	17.6	18.0
Y = 8H	16.2	16.9	16.6	17.3	17.7	16.4	17.1	16.8	17.5	18.0
Y = 12H	16.1	16.8	16.6	17.2	17.7	16.4	17.0	16.8	17.5	17.9
X = 8H Y = 4H	16.2	16.9	16.6	17.3	17.7	16.4	17.1	16.8	17.5	17.9
Y = 6H	16.1	16.7	16.6	17.2	17.6	16.4	17.0	16.8	17.4	17.9
Y = 8H	16.1	16.6	16.6	17.1	17.6	16.3	16.9	16.8	17.3	17.8
Y = 12H	16.1	16.6	16.6	17.0	17.6	16.3	16.8	16.8	17.3	17.8
X = 12H Y = 4H	16.1	16.8	16.6	17.2	17.7	16.4	17.0	16.8	17.4	17.9
Y = 6H	16.1	16.6	16.6	17.1	17.6	16.3	16.9	16.8	17.3	17.8
Y = 8H	16.1	16.6	16.6	17.0	17.6	16.3	16.8	16.8	17.3	17.8

	UGR Variations with Observer Position for Luminaire Spacings S			
S = 1.0H	+3.0	-7.4	+2.9	-7.3
S = 1.5H	+5.2	-8.7	+5.0	-8.7
S = 2.0H	+7.2	-9.2	+7.0	-9.3

Colour properties

Correlated Colour Temperature : 4000

Ra: 80

Efficiency

Utilisation Factors according to IES (%)

	Room Reflection Factors (%)									
Ceiling	80	80	80	50	50	50	30	30	30	0
Walls	50	30	10	50	30	10	50	30	10	0
Floor	20	20	20	20	20	20	20	20	20	0
RCR = 1	109	107	106	103	101	100	99	98	97	92
2	100	96	94	95	92	90	91	89	88	83
3	91	87	83	87	83	81	84	81	79	75
4	84	78	74	80	76	73	78	74	71	68
5	77	71	67	74	69	66	72	68	65	62
6	71	65	60	69	63	59	67	62	59	56
7	66	59	55	64	58	54	62	57	54	51
8	61	54	50	59	53	49	58	53	49	47
9	57	50	46	55	49	45	54	49	45	43
10	53	46	42	51	46	42	50	45	42	40

Utilisation Factors according to LiTG (%)

	Room Reflection Factors (%)									
Ceiling	80	80	80	50	50	50	50	50	30	0
Walls	50	30	50	30	50	30	50	30	30	0
Floor	30	30	10	10	30	30	10	10	10	0
k = 0.60	65	57	62	56	63	56	60	55	55	50
0.80	77	70	72	67	74	68	71	66	65	61
1.00	84	77	78	73	81	75	77	72	71	67
1.25	94	87	86	82	89	84	84	81	80	76
1.50	99	93	90	86	94	89	88	85	84	80
2.00	106	100	95	91	99	95	92	90	88	85
2.50	111	106	98	95	103	99	95	93	92	88
3.00	115	110	100	98	106	103	98	96	95	91
4.00	118	114	102	100	108	106	99	97	96	92
5.00	121	117	103	102	110	108	100	99	98	94