R3111/LEDW445DX1

suspended luminaire • linear

application : Office, Healthcare, Education, Horeca, Retail, Leisure

housing: lacquered sheet steel

light source : low power LED • 3000 K

optics : Shielded lens • Polycarbonate (PC) with aluminium thin film • medium wide-angle

UGR classification : <=16

luminous flux: 4200 lm

luminous efficacy : 145 lm/W

LLMF: 98% @ 50khrs (Tq=25°C)

Mechanical properties

dimensions : 1380 mm x 260 mm x 35 mm

ceiling modulation : non modular

colour: RAL9003 - white (textured)

type : individual luminaire

IP: IP20

Electrical properties

driver: DALI dimmable

power : 29 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 1 UNLIMITED

R3111/LEDW445DX1

Luminance

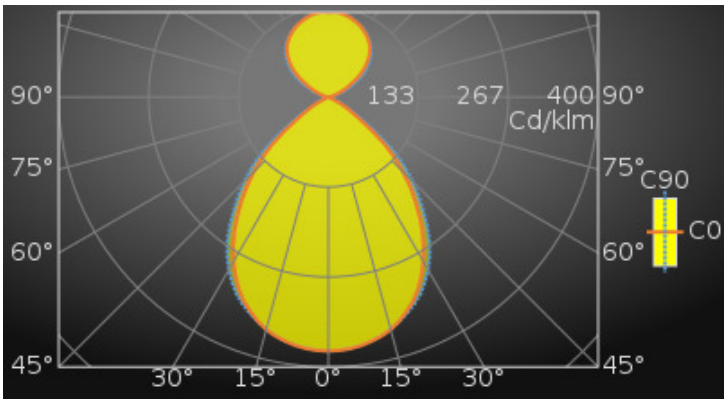
luminous flux : 4200 lm

luminous efficacy : 145 lm/W

luminance @ 65° : 3000 cd/m²

UGR classification: <=16

luminous area : 0.12 m²



Average Luminances (Cd/m²) for 4200lm

Gamma	C0	C30	C45	C60	C90
45°	7810	8902	9386	9068	8772
50°	6016	7505	8089	7832	7136
55°	3381	5384	6689	6308	4389
60°	2099	3272	4592	3457	2074
65°	619	1264	2032	1623	1431
70°	363	449	653	1003	920
75°	257	296	360	556	752
80°	58	137	195	283	576
85°	0	0	0	30	361

Classifications

CIE: 459 / 648 / 671 / 672 / 1000

CIE FLUXCODE : 0.68 / 0.96 / 1.00 / 0.67 / 1.00

BZ: BZ2

CAE: Symmetrical

DIN: B52 (Nach Arbeitsblatt 7 und 8)

DIN_U: Phi u = 0.67

DIN_SU: Phi su = 0.70

UTE: 0.67 C + 0.33 T

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Luminous intensities in cd

Lifetime Data (Tq=25.0°C)

Time(khrs)	LLMF(%)	Cx(%)
10	100	1
20	99	2
30	99	3
40	99	4
50	98	5
60	98	6

Intensity for 4200lm

Gamma	C0	C45	C90	Gamma	C0	C45	C90
0°	1580.2	1580.2	1580.2	90°	0.2	0.3	1.3
5°	1571.9	1567.8	1566.6	95°	3.4	4.7	8.2
10°	1543.8	1542.0	1542.3	100°	12.8	17.9	25.4
15°	1498.1	1495.7	1493.6	105°	30.2	39.7	53.5
20°	1420.9	1429.6	1430.9	110°	59.0	75.0	95.6
25°	1320.9	1347.4	1353.4	115°	104.5	127.0	149.9
30°	1180.1	1231.9	1239.9	120°	167.5	191.8	215.5
35°	1021.1	1104.2	1096.7	125°	237.5	259.3	280.9
40°	839.2	945.2	914.1	130°	304.1	315.5	333.3
45°	656.0	788.4	736.9	135°	358.2	360.8	376.4
50°	459.4	617.7	545.0	140°	402.4	399.0	410.5
55°	230.4	455.8	299.1	145°	433.9	433.6	439.3
60°	124.7	272.7	123.2	150°	459.4	457.4	463.2
65°	31.1	102.0	71.8	155°	481.9	480.6	482.8
70°	14.7	26.5	37.4	160°	498.5	498.1	498.4
75°	7.9	11.1	23.1	165°	513.2	517.3	516.3
80°	1.2	4.0	11.9	170°	525.3	521.9	524.7
85°	0.0	0.0	3.7	175°	530.7	531.6	531.2
90°	0.2	0.3	1.3	180°	524.8	524.8	524.8

UGR classification

Corrected Glare Ratings for a Total Lamp Flux of 4200lm (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	15.0	16.1	15.7	16.9	17.5	15.5	16.6	16.2	17.3	18.0
Y = 3H	14.8	15.8	15.5	16.5	17.2	15.3	16.3	16.1	17.0	17.7
Y = 4H	14.7	15.6	15.4	16.3	17.0	15.2	16.1	16.0	16.9	17.6
Y = 6H	14.5	15.4	15.3	16.1	16.9	15.1	15.9	15.9	16.7	17.4
Y = 8H	14.5	15.3	15.3	16.1	16.8	15.1	15.9	15.9	16.6	17.4
Y = 12H	14.4	15.2	15.2	16.0	16.7	15.0	15.8	15.8	16.6	17.3
X = 4H Y = 2H	15.1	15.9	15.8	16.7	17.4	15.4	16.3	16.2	17.1	17.8
Y = 3H	14.8	15.6	15.6	16.4	17.1	15.3	16.1	16.1	16.9	17.6
Y = 4H	14.7	15.3	15.5	16.2	16.9	15.2	15.9	16.0	16.7	17.4
Y = 6H	14.6	15.1	15.4	16.0	16.8	15.1	15.7	16.0	16.5	17.3
Y = 8H	14.5	15.0	15.4	15.9	16.7	15.1	15.6	15.9	16.4	17.2
Y = 12H	14.5	14.9	15.3	15.8	16.6	15.0	15.5	15.9	16.3	17.2
X = 8H Y = 4H	14.5	15.0	15.4	15.9	16.7	15.0	15.6	15.9	16.4	17.2
Y = 6H	14.4	14.8	15.3	15.7	16.5	15.0	15.4	15.8	16.2	17.1
Y = 8H	14.3	14.7	15.2	15.6	16.4	14.9	15.3	15.8	16.1	17.0
Y = 12H	14.3	14.6	15.2	15.5	16.4	14.8	15.1	15.7	16.0	16.9
X = 12H Y = 4H	14.5	14.9	15.3	15.8	16.6	15.0	15.4	15.8	16.3	17.1
Y = 6H	14.3	14.7	15.2	15.6	16.4	14.9	15.2	15.8	16.1	17.0
Y = 8H	14.3	14.6	15.2	15.5	16.4	14.8	15.1	15.7	16.0	16.9
	UGR Variations with Observer Position for Luminaire Spacings S									
S = 1.0H	+1.1		-2.3			+0.7		-1.5		
S = 1.5H	+2.3		-7.5			+2.1		-6.6		
S = 2.0H	+3.6		-14.7			+3.3		-8.3		

Colour properties

Correlated Colour Temperature : 3000

Ra: 80

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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	101	99	97	85	83	82	75	74	73	61
2	91	87	84	76	74	72	68	66	65	54
3	81	76	73	69	66	63	62	59	57	48
4	73	67	63	63	58	55	56	53	50	42
5	66	60	55	57	52	49	51	48	45	38
6	60	53	49	52	47	43	47	43	40	34
7	55	48	43	48	42	39	43	39	36	31
8	50	43	39	44	39	35	40	36	32	28
9	46	39	35	40	35	32	37	33	30	25
10	43	36	31	37	32	29	34	30	27	23

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	51	43	49	42	45	39	43	38	36	29
0.80	62	54	58	52	54	48	52	47	44	36
1.00	70	62	65	59	61	55	58	53	49	41
1.25	79	72	73	67	68	63	64	60	56	47
1.50	85	78	77	72	73	68	68	64	60	50
2.00	92	86	83	78	78	74	72	69	64	54
2.50	98	92	86	83	82	78	76	73	67	57
3.00	102	97	89	86	85	82	78	76	70	59
4.00	106	102	92	89	88	85	80	78	72	61
5.00	109	105	94	92	90	88	82	80	73	62

Dimensional drawing