

R3111/LEDN455DX1



suspended luminaire • linear

Application : Workspaces, Classrooms

housing: lacquered sheet steel

light source : LED • 4000 K

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

UGR classification : <=16

luminous flux: 5300 lm

luminous efficacy : 147 lm/W

LLMF: 98% @ 50khrs (Tq=25°C)

Product information

Mechanical properties

dimensions : 1380 mm x 260 mm x 35 mm

colour: RAL9003 - white (textured)

type : individual luminaire

IP: IP20

Electrical properties

driver: DALI dimmable

power : 36 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 1
UNLIMITED

Luminance

luminous flux : 5300 lm

luminous efficacy : 147 lm/W

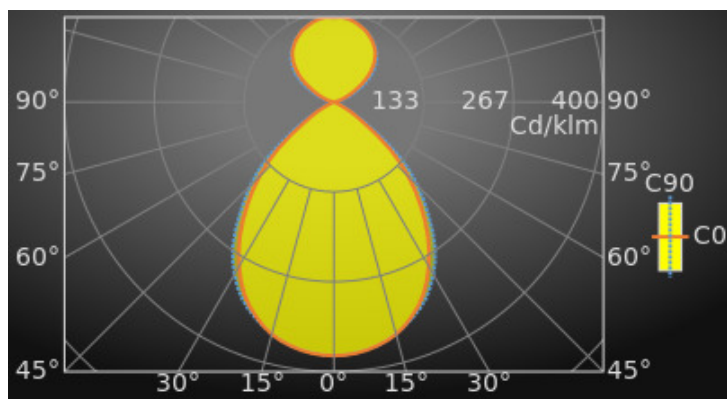
luminance @ 65° = : 3000 cd/m²

UGR classification =: <=16

luminous area : 0.12 m²

Average Luminances (Cd/m²) for 5300lm

Gamma	C0	C30	C45	C60	C90
45°	9855	11234	11844	11443	11070
50°	7592	9471	10207	9884	9006
55°	4267	6794	8441	7961	5539
60°	2649	4128	5794	4363	2617
65°	781	1595	2564	2048	1805
70°	458	566	824	1266	1161
75°	324	373	454	702	948
80°	73	173	247	357	727
85°	0	0	0	37	455



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

Lifetime Data (Tq=25.0°C)

Time(khrs)	LLMF(%)	Cx(%)
10	99	1
20	99	2
30	98	3
40	98	4
50	98	5
60	97	6

Luminous intensities in cd

Intensity for 5300lm

Gamma	C0	C45	C90	Gamma	C0	C45	C90
0°	1994.1	1994.1	1994.1	90°	0.3	0.4	1.7
5°	1983.6	1978.5	1976.8	95°	4.2	6.0	10.3
10°	1948.1	1945.8	1946.2	100°	16.2	22.6	32.0
15°	1890.4	1887.5	1884.7	105°	38.1	50.1	67.5
20°	1793.0	1804.1	1805.6	110°	74.5	94.7	120.7
25°	1666.9	1700.3	1707.9	115°	131.9	160.3	189.1
30°	1489.2	1554.5	1564.7	120°	211.3	242.1	271.9
35°	1288.5	1393.3	1384.0	125°	299.7	327.3	354.5
40°	1059.0	1192.8	1153.5	130°	383.7	398.1	420.6
45°	827.9	994.9	929.9	135°	452.0	455.3	475.0
50°	579.7	779.4	687.7	140°	507.9	503.5	518.0
55°	290.8	575.2	377.4	145°	547.5	547.2	554.3
60°	157.3	344.2	155.4	150°	579.7	577.2	584.5
65°	39.2	128.7	90.6	155°	608.1	606.5	609.2
70°	18.6	33.5	47.2	160°	629.1	628.5	628.9
75°	10.0	14.0	29.2	165°	647.6	652.7	651.5
80°	1.5	5.1	15.0	170°	662.9	658.6	662.1
85°	0.0	0.0	4.7	175°	669.8	670.8	670.3
90°	0.3	0.4	1.7	180°	662.3	662.3	662.3

UGR classification =

Corrected Glare Ratings for a Total Lamp Flux of 5300lm (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	15.8	16.9	16.5	17.7	18.3	16.3	17.4	17.0	18.1	18.8
Y = 3H	15.6	16.6	16.3	17.3	18.0	16.1	17.1	16.9	17.9	18.5
Y = 4H	15.5	16.4	16.2	17.1	17.9	16.0	16.9	16.8	17.7	18.4
Y = 6H	15.4	16.2	16.1	17.0	17.7	15.9	16.7	16.7	17.5	18.3
Y = 8H	15.3	16.1	16.1	16.9	17.6	15.9	16.7	16.7	17.5	18.2
Y = 12H	15.2	16.0	16.0	16.8	17.5	15.8	16.6	16.6	17.4	18.1
X = 4H Y = 2H	15.9	16.8	16.6	17.5	18.2	16.2	17.1	17.0	17.9	18.6
Y = 3H	15.6	16.4	16.4	17.2	17.9	16.1	16.9	16.9	17.7	18.4
Y = 4H	15.5	16.2	16.3	17.0	17.7	16.0	16.7	16.8	17.5	18.3
Y = 6H	15.4	15.9	16.2	16.8	17.6	15.9	16.5	16.8	17.3	18.1
Y = 8H	15.3	15.8	16.2	16.7	17.5	15.9	16.4	16.7	17.2	18.0
Y = 12H	15.3	15.7	16.1	16.6	17.4	15.8	16.3	16.7	17.1	18.0
X = 8H Y = 4H	15.3	15.8	16.2	16.7	17.5	15.9	16.4	16.7	17.2	18.0
Y = 6H	15.2	15.6	16.1	16.5	17.3	15.8	16.2	16.6	17.1	17.9
Y = 8H	15.1	15.5	16.0	16.4	17.2	15.7	16.1	16.6	16.9	17.8
Y = 12H	15.1	15.4	16.0	16.3	17.2	15.6	16.0	16.5	16.9	17.7
X = 12H Y = 4H	15.3	15.7	16.1	16.6	17.4	15.8	16.2	16.6	17.1	17.9
Y = 6H	15.1	15.5	16.0	16.4	17.2	15.7	16.1	16.6	16.9	17.8
Y = 8H	15.1	15.4	16.0	16.3	17.2	15.6	16.0	16.5	16.8	17.7
	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 : 4000

Ra: CRI (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	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

Available accessories

ACC-HI00-X00 Ceiling cap for suspended luminaires (R7/R3/Ley) - 5 poles terminal block - RAL9005 Jet black

ACC-HI00-X01 Ceiling cap for suspended luminaires (R7/R3/Ley) - 5 poles terminal block - RAL9003 Signal white

ACC-HI00-X02 Ceiling cap for suspended luminaires (R7/R3/Ley) - 5 poles terminal block - RAL9006 Aluminium white

ACC-HI01-3P-1500 Suspension cables set for R7/R3 - to combine with ceiling cap - 3 poles power cable - 2 steel cords - 1 cable holder - max. 1,5m

ACC-HI01-5P-1500 Suspension cables set for R7/R3 - to combine with ceiling cap - 5 poles power cable - 2 steel cords - 1 cable holder - max. 1,5m

ACC-HI02-3P-1500 Suspension cables set for R7/R3 - minimalist : no ceiling cap - 3 poles power cable - 2 steel cords - 2 cable holders - max. 1,5m

ACC-HI02-5P-1500 Suspension cables set for R7/R3 - minimalist : no ceiling cap - 5 poles power cable - 2 steel cords - 2 cable holders - max. 1,5m

Dimensional drawing

