

R3110/LEDN440DX1



Anbauleuchte • linear

Anwendung : Arbeitsbereiche, Klassenräume

Gehäuse: Lackiertes Stahlblech

Lichtquelle : LED • 4000 K

Optik : Shielded lens • Polycarbonat (PC)
Aluminium-bedampft • mittelbreit strahlend

UGR-Klassifizierung : ≤ 19

Lichtstrom: 4150 lm

Spezifischer Lichtstrom : 143 lm/W

LLMF: 98% @ 50khrs (T_q=25°C)

Product information

Mechanische Merkmale

Abmessungen : 1380 mm x 260 mm x 35 mm

Farbe: RAL9003 - signalweiß (Strukturlack)

Typ : Einzelleuchte

IP: IP20

Elektrische Ausrüstung

Betriebsgerät: DALI dimmbar

Anschlussleistung : 29 W

Spannung : 220-240V

Frequenz : 50-60Hz AC

Fotobiologische Sicherheit : EN 62471: RISK GROUP 1
UNLIMITED

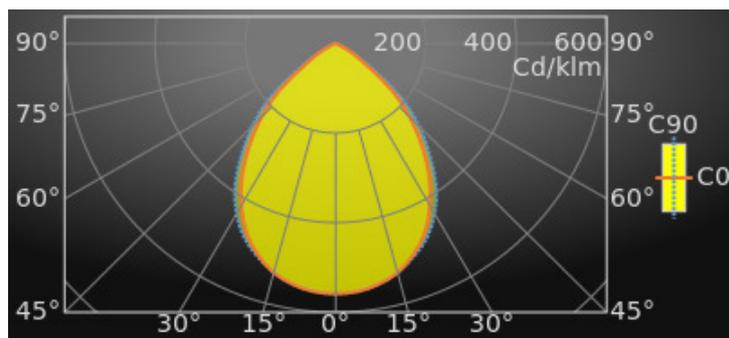
Leuchtdichte

Lichtstrom : 4150 lm

Spezifischer Lichtstrom : 143 lm/W

UGR-Klassifizierung <=: <=19

leuchtende Fläche : 0.12 m²



Average Luminances (Cd/m²) for 4150lm

Gamma	C0	C30	C45	C60	C90
45°	11464	13066	13775	13313	12876
50°	8845	11027	11880	11508	10489
55°	4993	7935	9845	9300	6480
60°	3118	4859	6805	5149	3086
65°	949	1921	3075	2445	2131
70°	548	696	1022	1517	1385
75°	397	456	560	866	1140
80°	109	232	324	469	908
85°	1	0	16	93	642

Klassifikationen

CIE: 681 / 963 / 997 / 1000 / 1000

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

BZ: BZ2

CAE: Symmetrical

DIN: A50 (Nach Arbeitsblatt 7)

DIN_U: Phi u = 1.00

DIN_SU: Phi su = 0.70

UTE: 1.00 C + 0.00 T

Lifetime Data (Tq=25.0°C)

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

UGR-Klassifizierung <=

Corrected Glare Ratings for a Total Lamp Flux of 4150lm (S = 0.25H)

Room Dimensions	Room Reflection Factors (%)														
	Ceiling	Walls	Floor	70	70	50	50	30	70	70	50	50	30		
	70	70	50	50	30	70	70	50	50	30	70	70	50	50	30
	50	30	50	30	30	50	30	50	30	50	30	50	30	30	30
	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Room Dimensions	Viewed Crosswise					Viewed Endwise									
X = 2H Y = 2H	18.4	20.0	18.7	20.3	20.5	18.8	20.5	19.2	20.7	21.0					
Y = 3H	18.2	19.7	18.6	20.0	20.2	18.8	20.2	19.1	20.5	20.8					
Y = 4H	18.2	19.5	18.5	19.8	20.1	18.7	20.1	19.1	20.4	20.7					
Y = 6H	18.1	19.3	18.4	19.6	20.0	18.7	19.9	19.0	20.2	20.5					
Y = 8H	18.0	19.2	18.4	19.6	19.9	18.6	19.8	19.0	20.2	20.5					
Y = 12H	18.0	19.1	18.4	19.5	19.8	18.6	19.7	19.0	20.1	20.4					
X = 4H Y = 2H	18.5	19.9	18.9	20.2	20.5	18.9	20.3	19.3	20.6	20.9					
Y = 3H	18.4	19.5	18.8	19.9	20.2	18.9	20.0	19.3	20.4	20.7					
Y = 4H	18.4	19.3	18.8	19.7	20.1	18.9	19.9	19.3	20.2	20.6					
Y = 6H	18.3	19.2	18.7	19.5	19.9	18.9	19.7	19.3	20.1	20.5					
Y = 8H	18.3	19.1	18.7	19.5	19.9	18.8	19.6	19.3	20.0	20.5					
Y = 12H	18.2	18.9	18.7	19.4	19.8	18.8	19.5	19.3	19.9	20.4					
X = 8H Y = 4H	18.3	19.1	18.7	19.5	19.9	18.8	19.6	19.2	20.0	20.4					
Y = 6H	18.2	18.9	18.7	19.3	19.8	18.8	19.4	19.2	19.9	20.3					
Y = 8H	18.2	18.8	18.7	19.2	19.7	18.8	19.3	19.2	19.8	20.3					
Y = 12H	18.2	18.6	18.6	19.1	19.6	18.7	19.2	19.2	19.7	20.2					
X = 12H Y = 4H	18.2	19.0	18.7	19.4	19.8	18.8	19.5	19.2	19.9	20.3					
Y = 6H	18.2	18.8	18.7	19.2	19.7	18.7	19.3	19.2	19.8	20.3					
Y = 8H	18.2	18.6	18.7	19.1	19.6	18.7	19.2	19.2	19.7	20.2					
UGR Variations with Observer Position for Luminaire Spacings S															
S = 1.0H	+1.0		-2.3		+0.7		-1.4								
S = 1.5H	+2.2		-7.4		+2.1		-6.4								
S = 2.0H	+3.6		-14.2		+3.3		-8.1								

Lichtstärken in cd

Intensity for 4150lm

Gamma	C0	C45	C90
0°	2318.1	2318.1	2318.1
5°	2305.9	2299.9	2298.0
10°	2264.6	2262.0	2262.4
15°	2197.6	2194.1	2191.0
20°	2084.3	2097.2	2099.0
25°	1937.8	1976.6	1985.5
30°	1731.2	1807.1	1819.1
35°	1498.0	1619.8	1609.1
40°	1231.4	1386.8	1341.3
45°	963.0	1157.1	1081.7
50°	675.4	907.2	801.0
55°	340.2	670.9	441.6
60°	185.2	404.2	183.3
65°	47.6	154.4	107.0
70°	22.3	41.5	56.3
75°	12.2	17.2	35.1
80°	2.3	6.7	18.7
85°	0.0	0.2	6.6
90°	0.0	0.0	0.0

Colour properties

Correlated Colour Temperature : 4000

Farbwiedergabeindex Ra: 80



Leuchten-Betriebwirkungsgrad

Utilisation Factors according to IES (%)

	Room Reflection Factors (%)									
	80	80	80	50	50	50	30	30	30	0
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	108	106	104	102	100	99	98	97	96	90
2	97	93	90	92	89	87	89	86	84	80
3	88	83	79	83	79	76	81	77	75	71
4	80	74	69	76	71	67	74	70	66	63
5	72	66	61	69	64	60	67	63	59	56
6	66	59	54	64	58	54	62	57	53	50
7	61	54	49	59	53	48	57	52	48	46
8	56	49	44	54	48	44	53	47	43	41
9	52	45	40	50	44	40	49	44	40	38
10	48	41	37	47	41	37	46	40	36	35

Utilisation Factors according to LiTG (%)

	Room Reflection Factors (%)									
	80	80	80	50	50	50	50	50	30	0
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	59	51	56	50	57	50	55	49	49	43
0.80	71	63	67	60	68	61	65	60	59	54
1.00	80	72	74	68	76	69	72	67	66	61
1.25	90	82	82	77	85	79	80	76	75	70
1.50	95	88	87	82	90	84	84	80	79	75
2.00	103	96	92	88	96	91	89	86	85	80
2.50	108	102	96	92	100	96	93	90	89	85
3.00	112	108	98	96	104	101	96	94	92	88
4.00	116	112	100	98	107	104	97	96	94	90
5.00	119	115	102	100	109	106	99	98	96	93

Vermaßte Skizze

