

V3RB10M/N3M0D0X0



surface-mounted luminaire • linear

Application : Workspaces, Auditoria, General education area's, General healthcare area's

housing: lacquered aluminium

light source : LED • 4000 K

optics : Shielded lens • black polycarbonate (PC) • medium wide-angle

UGR classification : <=19

luminous flux: 2800 lm

luminous efficacy : 120 lm/W

LLMF: 96% @ 50khrs (Tq=25°C)

Product information

Mechanical properties

dimensions : 1371 mm x 60 mm x 90 mm

colour: RAL9005 - jetblack (textured)

type : individual luminaire

IP: IP20

IK: IK07

Electrical properties

driver: DALI dimmable

power : 23.3 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 1 UNLIMITED

Luminance

luminous flux : 2800 lm

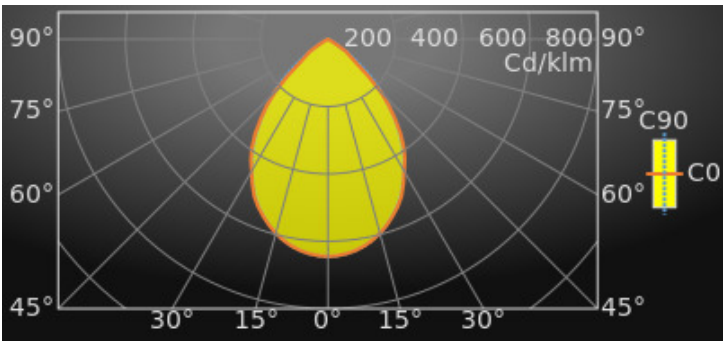
luminous efficacy : 120 lm/W

luminance @ 65° = : 3000 cd/m²

UGR classification =: <=19

luminous area : 0.08 m²

Gamma	Average Luminances (Cd/m²) for 2800lm				
	C0	C30	C45	C60	C90
45°	11517	13511	14197	13343	11746
50°	6062	10244	11495	10764	8586
55°	4224	5699	8380	7635	4259
60°	1070	3677	4487	3420	1547
65°	0	693	1793	1161	805
70°	0	1	104	323	178
75°	0	0	0	0	47
80°	0	0	0	0	84
85°	0	0	0	0	34



Classifications

CIE: 739 / 985 / 1000 / 1000 / 1000

CIE FLUXCODE : 0.74 / 0.99 / 1.00 / 1.00 / 1.00

BZ: BZ2/0.8/BZ1

CAE: Symmetrical

DIN: A60 (Nach Arbeitsblatt 7)

DIN_U: Phi u = 1.00

DIN_SU: Phi su = 0.73

UTE: 1.00 B + 0.00 T



Lifetime Data (Tq=25.0°C)

Time(khrs)	LLMF(%)	Cx(%)
10	99	2
20	98	4
30	98	6
40	97	8
50	96	10
60	95	12

Luminous intensities in cd

Intensity for 2800lm

Gamma	C0	C45	C90
0°	1805.5	1805.5	1805.5
5°	1789.4	1787.2	1788.1
10°	1746.1	1740.2	1742.3
15°	1670.4	1671.8	1667.7
20°	1567.8	1575.3	1557.1
25°	1444.5	1454.1	1424.4
30°	1266.7	1307.1	1255.6
35°	1102.6	1148.5	1059.0
40°	867.8	969.9	845.9
45°	623.9	769.1	636.3
50°	298.5	566.0	422.8
55°	185.6	368.2	187.1
60°	41.0	171.9	59.3
65°	0.0	58.0	26.1
70°	0.0	2.7	4.7
75°	0.0	0.0	0.9
80°	0.0	0.0	1.1
85°	0.0	0.0	0.2
90°	0.0	0.0	0.0

UGR classification =

Corrected Glare Ratings for a Total Lamp Flux of 2800lm (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	17.8	19.3	18.1	19.6	19.8	18.1	19.6	18.4	19.9	20.1
Y = 3H	17.6	19.0	17.9	19.3	19.5	17.9	19.3	18.2	19.6	19.9
Y = 4H	17.5	18.8	17.9	19.1	19.4	17.8	19.1	18.2	19.4	19.7
Y = 6H	17.4	18.6	17.8	18.9	19.2	17.7	18.9	18.1	19.2	19.6
Y = 8H	17.4	18.5	17.8	18.8	19.2	17.7	18.8	18.1	19.2	19.5
Y = 12H	17.4	18.4	17.7	18.8	19.1	17.7	18.8	18.1	19.1	19.4
X = 4H Y = 2H	17.8	19.0	18.1	19.3	19.6	18.0	19.3	18.4	19.6	19.9
Y = 3H	17.6	18.7	18.0	19.0	19.4	17.9	19.0	18.3	19.3	19.6
Y = 4H	17.5	18.5	17.9	18.8	19.2	17.8	18.7	18.2	19.1	19.5
Y = 6H	17.5	18.3	17.9	18.7	19.1	17.8	18.6	18.2	18.9	19.3
Y = 8H	17.4	18.2	17.9	18.6	19.0	17.7	18.5	18.1	18.9	19.3
Y = 12H	17.4	18.1	17.9	18.5	19.0	17.7	18.4	18.1	18.8	19.2
X = 8H Y = 4H	17.4	18.2	17.9	18.6	19.0	17.7	18.5	18.1	18.9	19.3
Y = 6H	17.4	18.0	17.8	18.4	18.9	17.7	18.3	18.1	18.7	19.2
Y = 8H	17.3	17.9	17.8	18.3	18.8	17.6	18.2	18.1	18.6	19.1
Y = 12H	17.3	17.8	17.8	18.3	18.8	17.6	18.1	18.1	18.5	19.1
X = 12H Y = 4H	17.4	18.1	17.9	18.5	19.0	17.7	18.4	18.1	18.8	19.2
Y = 6H	17.3	17.9	17.8	18.3	18.8	17.6	18.2	18.1	18.6	19.1
Y = 8H	17.3	17.8	17.8	18.3	18.8	17.6	18.1	18.1	18.5	19.1
	UGR Variations with Observer Position for Luminaire Spacings S									
S = 1.0H	+1.7		-3.5			+1.3		-3.3		
S = 1.5H	+3.1		-16.5			+2.5		-12.2		
S = 2.0H	+4.6		-76.4			+4.1		-17.1		

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	109	107	105	102	101	100	99	97	97	91
2	99	95	92	94	91	89	91	88	86	82
3	90	85	81	86	82	79	83	80	77	73
4	82	76	72	78	74	70	76	72	69	66
5	75	69	64	72	67	63	70	66	62	59
6	69	62	58	66	61	57	65	60	56	54
7	64	57	52	61	56	52	60	55	51	49
8	59	52	47	57	51	47	56	50	47	45
9	55	48	43	53	47	43	52	47	43	41
10	51	44	40	49	44	40	49	43	39	38

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	62	55	59	53	60	54	58	53	52	47
0.80	74	67	70	64	71	65	68	63	63	57
1.00	83	75	77	71	79	73	75	70	70	65
1.25	92	85	85	80	87	82	82	79	78	73
1.50	98	91	89	85	92	87	86	83	82	78
2.00	105	99	94	90	98	93	91	88	87	83
2.50	110	104	97	94	102	98	94	92	91	87
3.00	114	109	100	97	105	102	97	95	94	90
4.00	117	113	101	99	108	105	98	97	95	92
5.00	120	117	103	101	110	107	100	99	97	94

Available accessories

V3H2500 *Ceiling mounting brackets*

V3H9900 *Installation file*

V3H9960 *Installation tool*



Dimensional drawing

