

Photometric test report

Family
Highbay 21

Order number: 52HN12DB4MLA
EAN: 4069025394804

LP number
59723_82

serial
documentation
27.02.2025



Version primary light control with lens, PMMA, housing, white, for Licross® rail, wide distribution

Lamps LED 4000 K | CRI ≥ 80

Controlgear ECG-DALI

Rated values Net luminous flux = 28000 lm
Power consumption = 144.0 W
Luminous efficacy = 194.5 lm/W

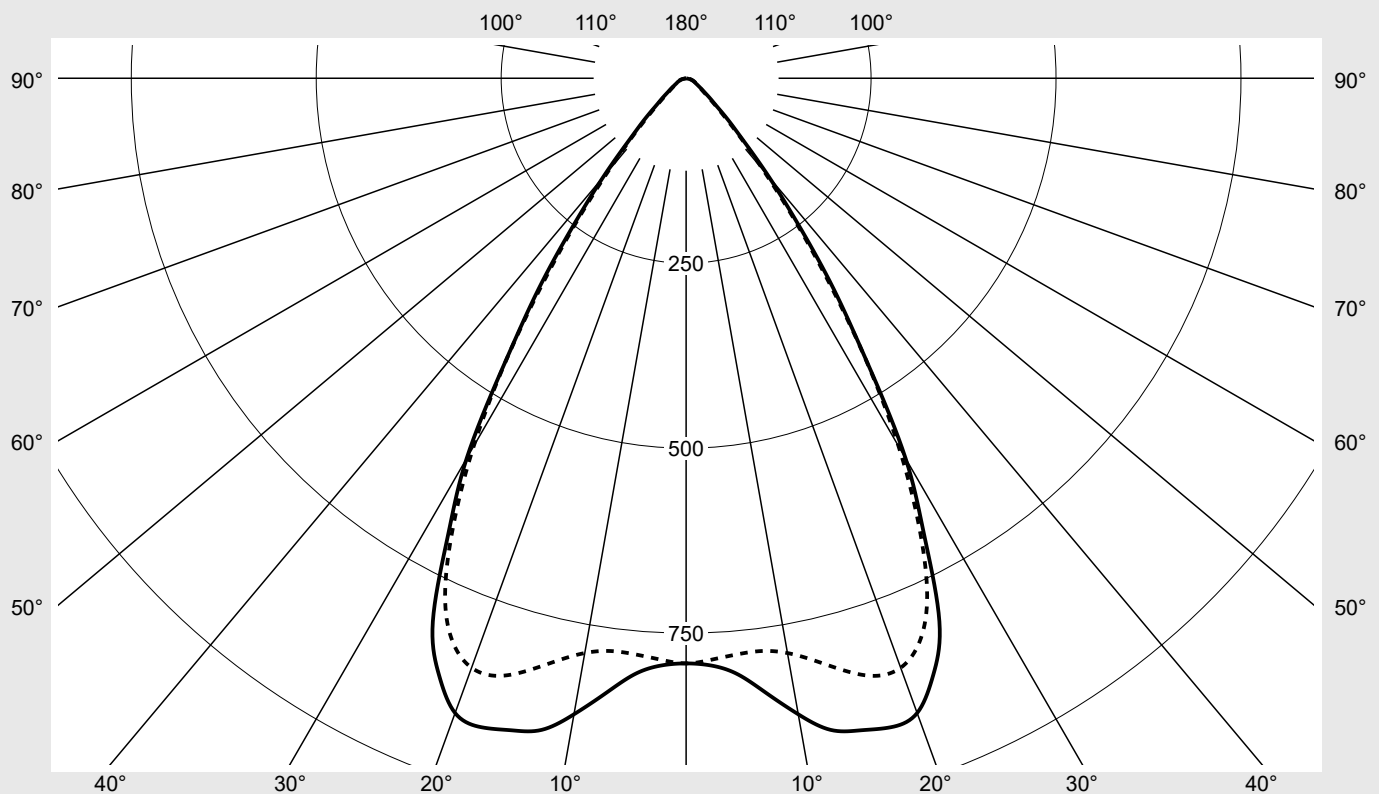
siteco

Luminous intensity in cd/klm

C180-0

C270-90

Imax: 920 cd/klm



Classifications

DIN 5040 A 7 0
CIE N1=90 N2=98 N3=100
N4=100 N5=100

Luminaire light output ratios

η_{LB} 100.0%
 ϕ_u 100.0%
 ϕ_o 0.0%

Measurement conditions

DIN EN 13032 and DIN 5032

Photometric test report

Family Highbay 21	Order number: 52HN12DB4MLA EAN: 4069025394804	LP number 59723_82
Table of values for luminous intensities		Maximum luminous intensity

siteco

C- planes	0,0° 180,0°	7,5° 172,5° 187,5° 352,5°	15,0° 165,0° 195,0° 345,0°	22,5° 157,5° 202,5° 337,5°	30,0° 150,0° 210,0° 330,0°	37,5° 142,5° 217,5° 322,5°	45,0° 135,0° 225,0° 315,0°
γ	Luminous intensity in cd/klm						
0,0°	791.0	791.0	791.0	791.0	791.0	791.0	791.0
2,5°	794.7	794.4	795.0	795.0	794.2	792.8	792.0
5,0°	809.1	811.4	809.6	807.9	804.8	800.8	797.1
7,5°	839.0	837.9	835.9	831.3	824.9	817.3	810.1
10,0°	873.0	873.9	866.7	857.6	846.5	834.6	825.0
12,5°	902.2	899.8	892.6	881.8	868.2	853.9	842.5
15,0°	912.4	911.0	905.2	895.6	883.1	869.5	858.7
17,5°	919.8	918.2	913.1	904.4	892.7	879.7	870.3
20,0°	913.1	910.4	906.8	900.7	891.6	880.0	870.9
22,5°	873.0	875.7	872.3	868.8	863.2	854.7	847.2
25,0°	810.1	803.4	805.6	804.0	800.6	794.9	789.9
27,5°	697.5	704.9	702.5	701.8	699.9	697.0	693.3
30,0°	593.2	587.4	585.8	584.9	582.5	580.2	578.9
32,5°	456.1	464.3	462.1	462.0	458.3	454.5	453.6
35,0°	347.7	343.4	342.9	343.5	340.5	335.4	333.2
37,5°	248.6	249.1	246.7	247.3	245.8	241.7	237.9
40,0°	174.7	169.8	171.0	172.0	172.0	169.5	166.1
42,5°	115.9	118.7	117.3	118.1	118.9	118.2	116.5
45,0°	82.2	79.8	80.4	81.1	81.3	81.6	80.9
47,5°	56.5	57.6	57.2	57.7	57.6	57.9	57.5
50,0°	42.4	41.3	41.7	42.1	42.1	42.1	42.0
52,5°	32.0	31.8	31.7	32.2	32.5	32.7	32.7
55,0°	25.6	24.9	25.0	25.6	26.1	26.6	26.9
57,5°	20.6	20.3	20.3	20.8	21.4	22.1	22.4
60,0°	17.2	16.8	16.6	17.2	18.2	18.6	18.9
62,5°	14.5	14.3	13.9	14.3	15.3	15.8	16.0
65,0°	13.1	12.5	12.0	12.2	13.0	13.5	13.7
67,5°	11.1	10.9	10.3	10.4	11.4	11.4	11.5
70,0°	9.4	9.0	8.7	8.7	9.6	9.3	9.5
72,5°	7.6	7.5	7.3	7.2	7.3	7.4	7.8
75,0°	5.9	5.7	5.6	5.7	5.6	5.7	6.1
77,5°	4.1	4.1	4.1	4.2	4.1	4.2	4.5
80,0°	2.6	2.5	2.5	2.7	2.7	2.8	2.9
82,5°	1.1	1.2	1.2	1.3	1.5	1.5	1.7
85,0°	0.5	0.5	0.5	0.5	0.5	0.5	0.6
87,5°	0.2	0.3	0.3	0.3	0.3	0.3	0.3

Photometric test report

Family Highbay 21	Order number: 52HN12DB4MLA EAN: 4069025394804	LP number 59723_82
Table of values for luminous intensities		Maximum luminous intensity



C- planes	52,5° 127,5° 232,5° 307,5°	60,0° 120,0° 240,0° 300,0°	67,5° 112,5° 247,5° 292,5°	75,0° 105,0° 255,0° 285,0°	82,5° 97,5° 262,5° 277,5°	90,0° 270,0°	Phi-zone	Total Phi-zone
γ	Luminous intensity in cd/klm						Luminous flux in lm/klm	
0,0°	791.0	791.0	791.0	791.0	791.0	791.0	1.2	1.2
2,5°	791.3	790.7	790.0	789.4	788.0	786.7	9.5	10.7
5,0°	794.2	790.9	788.1	786.0	783.2	781.9	19.1	29.7
7,5°	803.7	797.3	791.2	786.8	782.5	780.9	29.0	58.7
10,0°	816.7	808.7	801.4	796.1	791.2	788.9	39.5	98.2
12,5°	833.0	825.3	818.6	813.6	808.7	806.6	50.4	148.6
15,0°	850.7	844.9	836.9	832.9	831.6	829.0	61.4	210.0
17,5°	864.2	859.8	856.6	853.6	849.6	847.0	72.4	282.5
20,0°	864.8	860.1	856.9	853.9	850.4	848.0	82.3	364.7
22,5°	841.4	836.7	833.2	829.7	826.8	824.5	89.2	453.9
25,0°	786.0	782.5	779.1	775.6	772.9	771.0	91.6	545.4
27,5°	691.2	689.6	687.4	684.8	682.7	681.4	87.8	633.3
30,0°	578.6	579.1	578.3	576.4	575.3	574.3	79.6	712.9
32,5°	454.5	456.7	457.0	455.4	454.6	454.3	67.4	780.2
35,0°	335.0	337.7	338.0	336.6	336.0	336.2	53.3	833.5
37,5°	239.3	241.4	241.0	239.6	239.1	239.2	40.5	874.0
40,0°	166.2	166.4	164.7	163.3	162.9	163.0	29.6	903.6
42,5°	115.3	113.5	111.1	110.0	109.8	109.7	21.3	924.9
45,0°	79.0	76.9	75.1	74.3	74.0	73.9	15.2	940.1
47,5°	56.0	54.4	53.1	52.3	51.9	51.7	11.2	951.3
50,0°	40.9	39.8	38.8	38.0	37.5	37.4	8.5	959.8
52,5°	31.8	30.8	29.9	29.1	28.8	28.7	6.8	966.6
55,0°	25.9	25.0	24.2	23.4	23.2	23.3	5.6	972.3
57,5°	21.7	20.8	20.1	19.5	19.4	19.6	4.8	977.0
60,0°	18.6	18.0	17.1	16.6	16.8	17.1	4.2	981.2
62,5°	16.0	15.6	14.7	14.4	14.7	15.1	3.6	984.8
65,0°	14.0	13.6	12.8	12.7	13.1	13.5	3.2	988.1
67,5°	12.0	12.1	11.2	11.1	11.6	12.1	2.9	991.0
70,0°	9.8	10.4	9.7	9.7	10.2	10.6	2.5	993.4
72,5°	7.8	8.3	8.3	8.3	8.8	9.1	2.1	995.5
75,0°	6.2	6.3	6.8	6.9	7.3	7.6	1.6	997.1
77,5°	4.6	4.9	5.3	5.5	5.8	6.0	1.3	998.4
80,0°	3.1	3.4	3.7	4.0	4.2	4.4	0.9	999.2
82,5°	1.8	2.1	2.4	2.6	2.8	2.9	0.5	999.7
85,0°	0.7	1.0	1.2	1.3	1.6	1.6	0.2	1000.0
87,5°	0.3	0.3	0.3	0.3	0.4	0.4	0.1	1000.0

Photometric test report

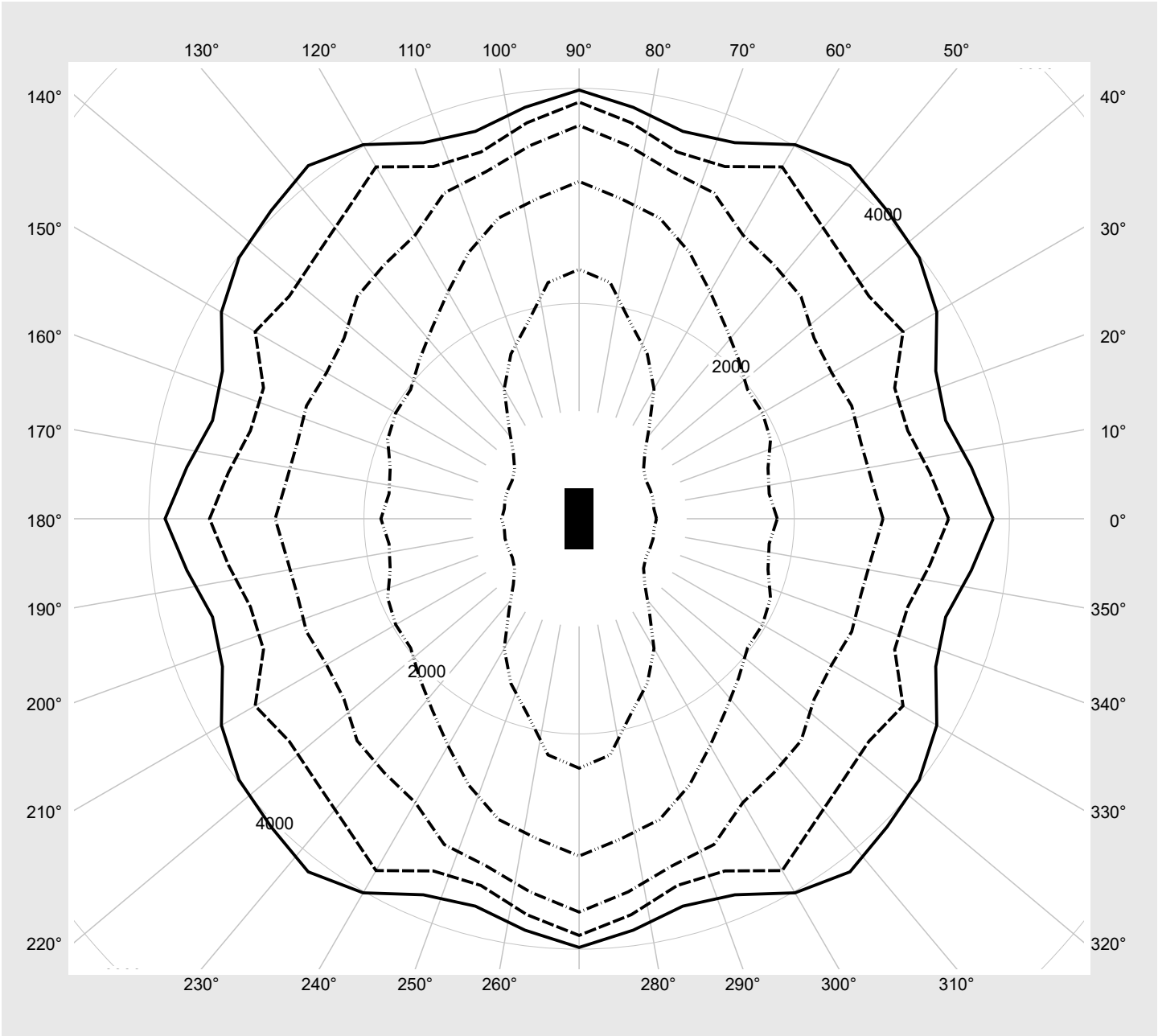
Family Highbay 21			Order number: 52HN12DB4MLA EAN: 4069025394804							LP number 59723_82	
UGR-Table			Standard room							siteco	
Reflection factor of ceiling	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
Reflection factor of walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
Reflection factor of floor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions		View crosswise (C0)					View endwise (C90)				
x	y										
2H	2H	18.1	19.4	18.5	19.7	20.0	17.9	19.2	18.3	19.5	19.8
	3H	18.2	19.2	18.5	19.6	19.9	18.0	19.1	18.4	19.4	19.8
	4H	18.2	19.2	18.6	19.5	19.9	18.1	19.1	18.5	19.4	19.8
	6H	18.1	19.0	18.6	19.4	19.8	18.1	19.0	18.5	19.4	19.8
	8H	18.2	19.0	18.7	19.4	19.8	18.2	19.0	18.7	19.4	19.8
	12H	18.2	18.9	18.6	19.3	19.7	18.2	18.9	18.7	19.3	19.7
4H	2H	18.0	19.0	18.4	19.4	19.7	17.9	18.8	18.2	19.2	19.6
	3H	18.1	18.9	18.5	19.3	19.7	18.0	18.8	18.4	19.2	19.6
	4H	18.1	18.9	18.6	19.3	19.7	18.1	18.8	18.5	19.2	19.7
	6H	18.1	18.7	18.6	19.2	19.7	18.2	18.8	18.6	19.2	19.7
	8H	18.1	18.7	18.6	19.1	19.6	18.2	18.7	18.7	19.2	19.7
	12H	18.1	18.6	18.6	19.0	19.5	18.3	18.7	18.8	19.1	19.6
8H	4H	18.1	18.6	18.6	19.1	19.6	18.0	18.6	18.5	19.0	19.5
	6H	18.1	18.5	18.6	19.0	19.5	18.1	18.6	18.6	19.1	19.6
	8H	18.0	18.4	18.6	18.9	19.5	18.2	18.6	18.7	19.1	19.6
	12H	18.0	18.3	18.6	18.8	19.4	18.2	18.5	18.7	19.0	19.6
12H	4H	18.1	18.5	18.6	19.0	19.5	18.1	18.5	18.6	19.0	19.5
	6H	18.1	18.4	18.6	18.9	19.5	18.2	18.5	18.7	19.0	19.5
	8H	18.1	18.3	18.6	18.9	19.4	18.2	18.5	18.7	19.0	19.5

Luminance table		Max. for $\gamma \geq 65^\circ$		Photometric dimensions in mm:				L = 852 B = 264		
C-planes	0,0° 180,0°	10,0° 170,0° 190,0° 350,0°	20,0° 160,0° 200,0° 340,0°	30,0° 150,0° 210,0° 330,0°	40,0° 140,0° 220,0° 320,0°	50,0° 130,0° 230,0° 310,0°	60,0° 120,0° 240,0° 300,0°	70,0° 110,0° 250,0° 290,0°	80,0° 100,0° 260,0° 280,0°	90,0° 270,0°
		Luminance in cd/m²								
γ										
45,0°	14476.2	14028.1	14239.0	14318.1	14347.6	14028.5	13530.1	13159.9	13037.9	13002.0
50,0°	8212.1	7985.8	8135.3	8154.0	8152.9	7998.3	7711.1	7454.8	7292.0	7234.9
55,0°	5559.9	5397.2	5517.3	5658.2	5810.2	5698.9	5416.9	5190.6	5049.2	5066.4
60,0°	4277.5	4154.2	4224.2	4522.3	4664.4	4656.7	4485.9	4211.2	4162.2	4249.4
65,0°	3848.9	3625.2	3547.5	3839.5	4016.1	4130.7	4014.5	3744.9	3813.7	3984.1
70,0°	3435.5	3244.6	3139.3	3477.3	3401.2	3528.9	3775.8	3513.7	3653.1	3872.3
75,0°	2825.2	2727.3	2739.9	2712.2	2795.6	2954.8	3045.5	3316.6	3445.0	3655.4
80,0°	1842.4	1783.4	1897.5	1968.5	2001.4	2187.7	2435.9	2754.9	2960.8	3134.9
85,0°	719.9	701.8	713.5	717.0	784.0	988.2	1392.6	1734.1	2126.4	2318.1

Photometric test report

Family Highbay 21	Order number: 52HN12DB4MLA EAN: 4069025394804	LP number 59723_82
Luminance values in cd/m² γ 65° γ 70° γ 75° γ 80° γ 85°		

siteco



Photometric test report

Family Highbay 21	Order number: 52HN12DB4MLA EAN: 4069025394804	LP number 59723_82
Dimming levels table environmental temperature: 25°C		sit eco

Luminous flux %	Dimming level linear	Dimming level logarithmic	Luminous flux [lm]	Power consumption [W]
100	----	----	----	----
95	241	252	26607	136.5
90	228	250	25210	129.1
85	215	248	23807	121.6
80	202	246	22396	114.0
75	189	243	20985	106.8
70	176	241	19564	99.4
65	164	238	18254	92.7
60	151	235	16828	85.2
55	138	232	15398	77.9
50	125	228	13963	70.7
45	113	224	12629	63.9
40	100	220	11186	56.7
35	88	215	9845	50.0
30	75	209	8391	42.8
25	63	203	7039	36.2
20	50	194	5577	29.2
15	38	184	4219	22.5
10	25	169	2748	15.5
5	13	145	1382	8.6
2	5	110	472	4.0