

Photometric test report

Family
Highbay 21

Order number: 52HN12DB4MDA02
EAN: 4069025421784

LP number
59723_159

serial
documentation
20.03.2025

siteco



Version primary light control with lens, PMMA, housing, white, wide distribution, with Node BT

Lamps LED 4000 K | CRI ≥ 80

Controlgear ECG-DALI

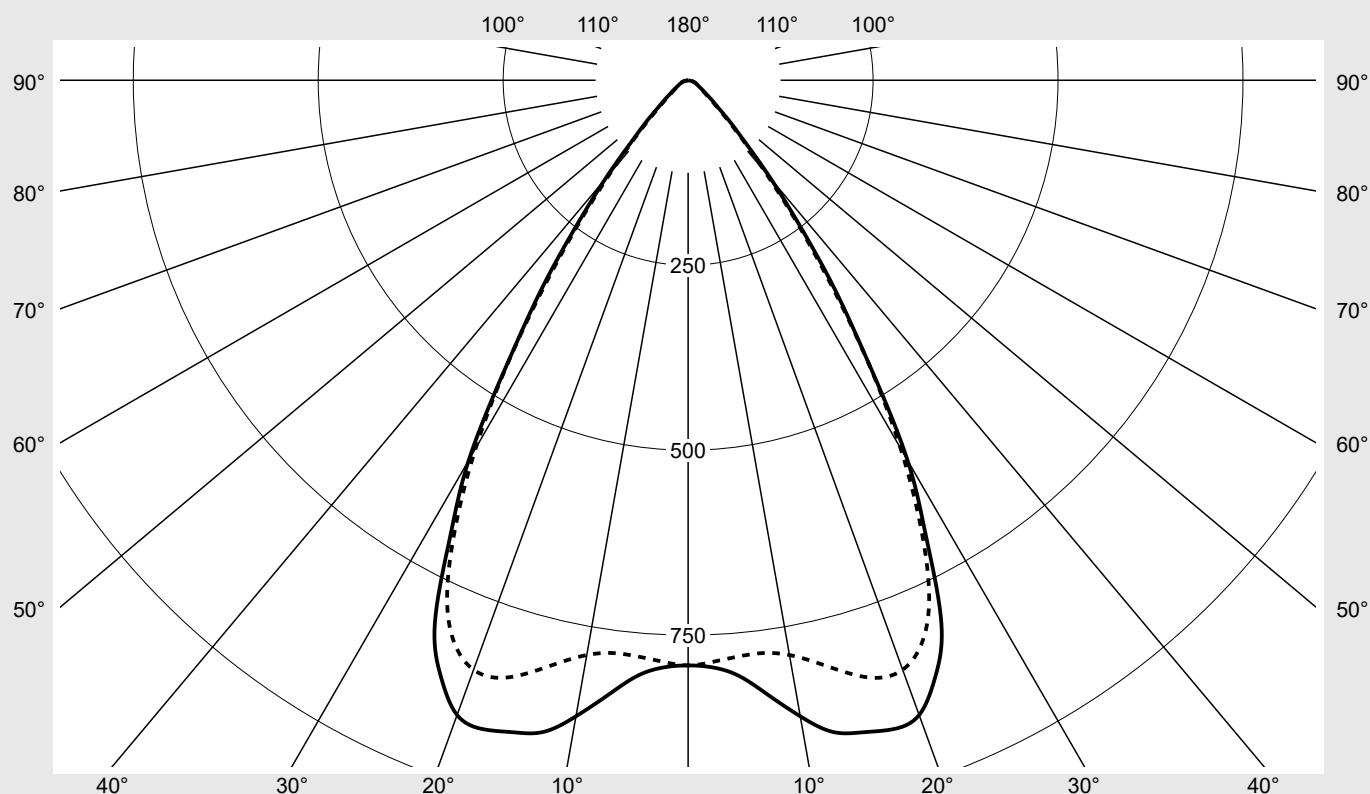
Rated values Net luminous flux = 28000 lm
Power consumption = 144.5 W
Luminous efficacy = 193.8 lm/W

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: 52HN12DB4MDA02 EAN: 4069025421784	LP number 59723_159
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: 52HN12DB4MDA02 EAN: 4069025421784	LP number 59723_159
Table of values for luminous intensities		Maximum luminous intensity
		siteco

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: 52HN12DB4MDA02 EAN: 4069025421784							LP number 59723_159	
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: 52HN12DB4MDA02
EAN: 4069025421784

LP number
59723_159

Luminance values in cd/m²

γ 65°

γ 70°

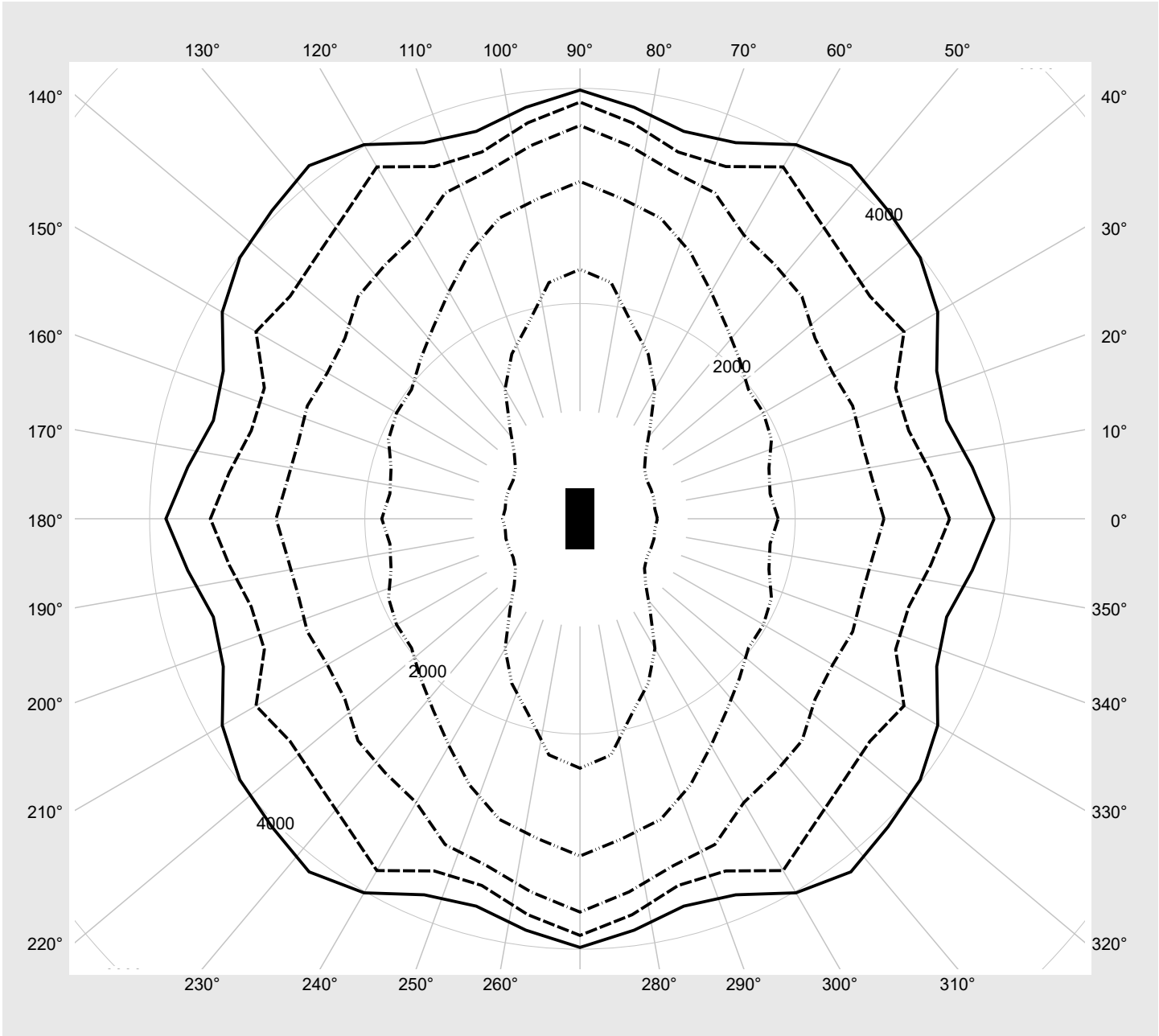
γ 75°

γ 80°

γ 85°

sit

eco



Photometric test report

Family Highbay 21	Order number: 52HN12DB4MDA02 EAN: 4069025421784	LP number 59723_159
Dimming levels table environmental temperature: 25°C		

Luminous flux %	Dimming level linear	Dimming level logarithmic	Luminous flux [lm]	Power consumption [W]
100	254	254	28000	144.5
95	241	252	26607	137.0
90	228	250	25210	129.6
85	215	248	23807	122.1
80	202	246	22396	114.5
75	189	243	20985	107.3
70	176	241	19564	99.9
65	164	238	18254	93.2
60	151	235	16828	85.7
55	138	232	15398	78.4
50	125	228	13963	71.2
45	113	224	12629	64.4
40	100	220	11186	57.2
35	88	215	9845	50.5
30	75	209	8391	43.3
25	63	203	7039	36.7
20	50	194	5577	29.7
15	38	184	4219	23.0
10	25	169	2748	16.0
5	13	145	1382	9.1
2	5	110	472	4.5