

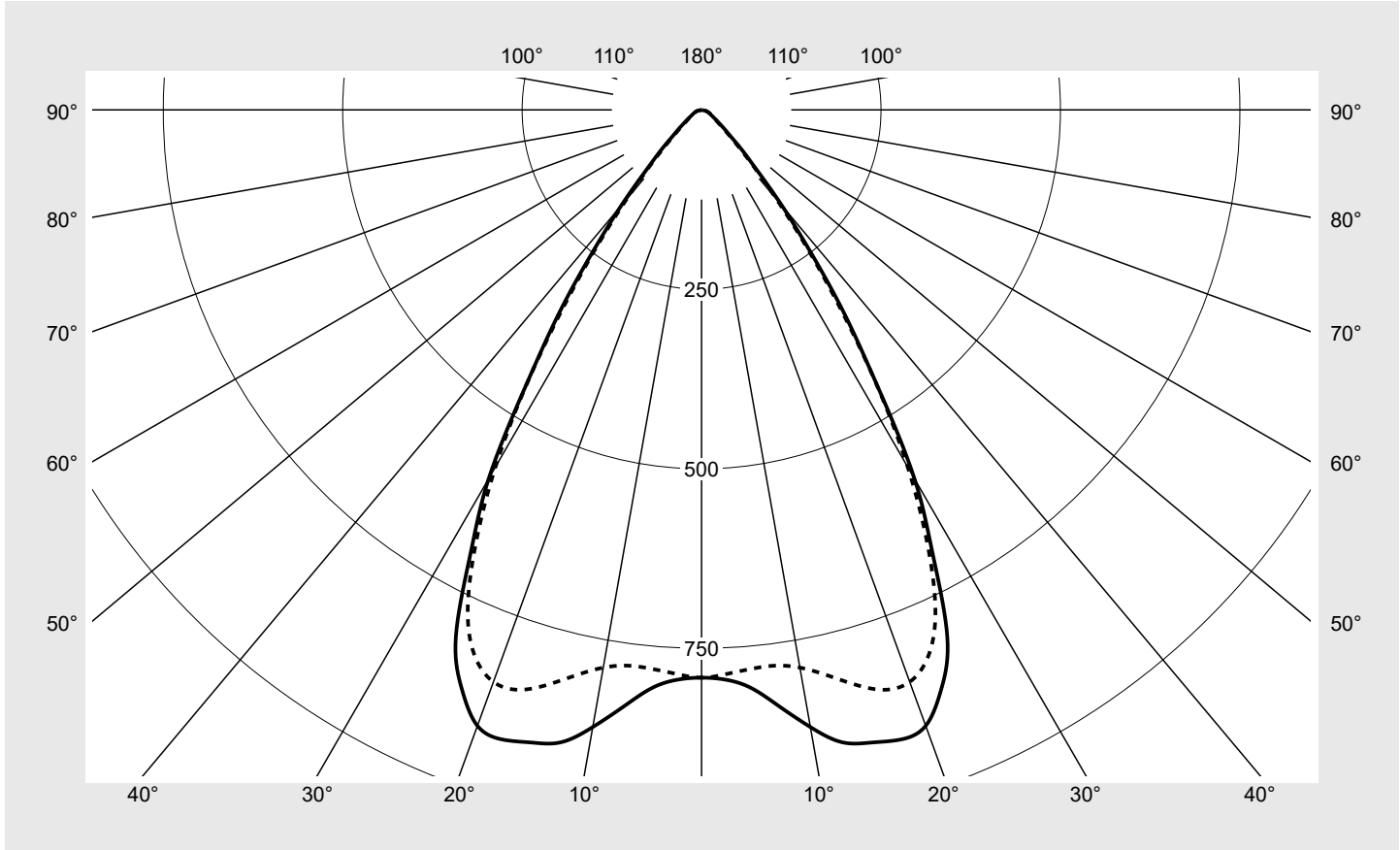


Photometric test report

Family Highbay 21	Order number: 52HN12DA4LBA EAN: 4069025441065	LP number 59723_144
	Version primary light control with lens, PMMA, housing, white, wide distribution	serial documentation 18.03.2025
	Lamps LED 4000 K CRI ≥ 80	
	Controlgear ECG-DALI	Setting DC mode (central or group accumulator) initial emergency light level
Rated values	Net luminous flux = 4160 lm Power consumption = 22.3 W Luminous efficacy = 186.6 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

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Table of values for luminous intensities	Maximum luminous intensity	siteco
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C-planes	0,0° 180,0°	7,5°	15,0°	22,5°	30,0°	37,5°	45,0°
		172,5° 187,5° 352,5°	165,0° 195,0° 345,0°	157,5° 202,5° 337,5°	150,0° 210,0° 330,0°	142,5° 217,5° 322,5°	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

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Table of values for luminous intensities		Maximum luminous intensity
		siteco

C-planes	52,5°	60,0°	67,5°	75,0°	82,5°	90,0°	Phi-zone	Total Phi-zone
	127,5°	120,0°	112,5°	105,0°	97,5°			
	232,5°	240,0°	247,5°	255,0°	262,5°			
	307,5°	300,0°	292,5°	285,0°	277,5°	270,0°		
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: 52HN12DA4LBA EAN: 4069025441065	LP number 59723_144
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UGR-Table	Standard room	siteco								
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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	13.9	15.1	14.3	15.4	15.8	13.7	15.0	14.1	15.3	15.6
	3H	13.9	15.0	14.3	15.4	15.7	13.8	14.9	14.2	15.2	15.6
	4H	13.9	14.9	14.3	15.3	15.7	13.9	14.8	14.2	15.2	15.6
	6H	13.9	14.8	14.3	15.2	15.6	13.9	14.8	14.3	15.2	15.6
	8H	14.0	14.8	14.4	15.1	15.5	14.0	14.8	14.5	15.1	15.5
	12H	14.0	14.7	14.4	15.1	15.5	14.0	14.7	14.5	15.1	15.5
4H	2H	13.8	14.8	14.2	15.2	15.5	13.6	14.6	14.0	15.0	15.4
	3H	13.9	14.7	14.3	15.1	15.5	13.8	14.6	14.2	15.0	15.4
	4H	13.9	14.6	14.4	15.1	15.5	13.9	14.6	14.3	15.0	15.5
	6H	13.9	14.5	14.4	15.0	15.4	14.0	14.6	14.4	15.0	15.5
	8H	13.9	14.4	14.4	14.9	15.4	14.0	14.5	14.5	15.0	15.5
	12H	13.9	14.3	14.4	14.8	15.3	14.0	14.5	14.5	14.9	15.4
8H	4H	13.9	14.4	14.3	14.9	15.4	13.8	14.4	14.3	14.8	15.3
	6H	13.9	14.3	14.4	14.8	15.3	13.9	14.4	14.4	14.8	15.4
	8H	13.8	14.2	14.3	14.7	15.2	13.9	14.3	14.5	14.8	15.4
	12H	13.8	14.1	14.4	14.6	15.2	14.0	14.3	14.5	14.8	15.3
12H	4H	13.9	14.3	14.4	14.8	15.3	13.8	14.3	14.3	14.7	15.2
	6H	13.9	14.2	14.4	14.7	15.2	13.9	14.3	14.4	14.8	15.3
	8H	13.8	14.1	14.4	14.6	15.2	14.0	14.3	14.5	14.8	15.3

Luminance table	Max. for $\gamma \geq 65^\circ$	Photometric dimensions in mm:	L = 426 B = 264
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C-planes	0,0° 180,0°	10,0° 170,0°	20,0° 160,0°	30,0° 150,0°	40,0° 140,0°	50,0° 130,0°	60,0° 120,0°	70,0° 110,0°	80,0° 100,0°	90,0° 270,0°
		190,0° 350,0°	200,0° 340,0°	210,0° 330,0°	220,0° 320,0°	230,0° 310,0°	240,0° 300,0°	250,0° 290,0°	260,0° 280,0°	
γ	Luminance in cd/m ²									
45,0°	4301.5	4168.4	4231.0	4254.5	4263.3	4168.5	4020.4	3910.4	3874.1	3863.4
50,0°	2440.2	2372.9	2417.4	2422.9	2422.6	2376.6	2291.3	2215.1	2166.8	2149.8
55,0°	1652.1	1603.8	1639.4	1681.3	1726.5	1693.4	1609.6	1542.4	1500.3	1505.4
60,0°	1271.0	1234.4	1255.2	1343.8	1386.0	1383.7	1333.0	1251.3	1236.8	1262.7
65,0°	1143.7	1077.2	1054.1	1140.9	1193.3	1227.4	1192.9	1112.8	1133.2	1183.9
70,0°	1020.8	964.1	932.8	1033.3	1010.7	1048.6	1122.0	1044.1	1085.5	1150.6
75,0°	839.5	810.4	814.1	805.9	830.7	878.0	904.9	985.5	1023.7	1086.2
80,0°	547.4	529.9	563.8	584.9	594.7	650.1	723.8	818.6	879.8	931.5
85,0°	213.9	208.5	212.0	213.1	233.0	293.6	413.8	515.3	631.8	688.8

Photometric test report

Family
Highbay 21

Order number: 52HN12DA4LBA
EAN: 4069025441065

LP number
59723_144

Luminance values in cd/m²

γ 65°
 γ 70°
 γ 75°
 γ 80°
 γ 85°

