

Photometric test report

Family
Highbay 21

Order number: 52HN11DA4FDA01
EAN: 4069025421159

LP number
59724_137



Version primary light control with lens, PMMA, housing, white, narrow distribution, with multisensor node BT

Lamps LED 4000 K | CRI ≥ 80

Controlgear ECG-DALI

Rated values
Net luminous flux = 14000 lm
Power consumption = 72.6 W
Luminous efficacy = 192.9 lm/W

serial
documentation
20.03.2025

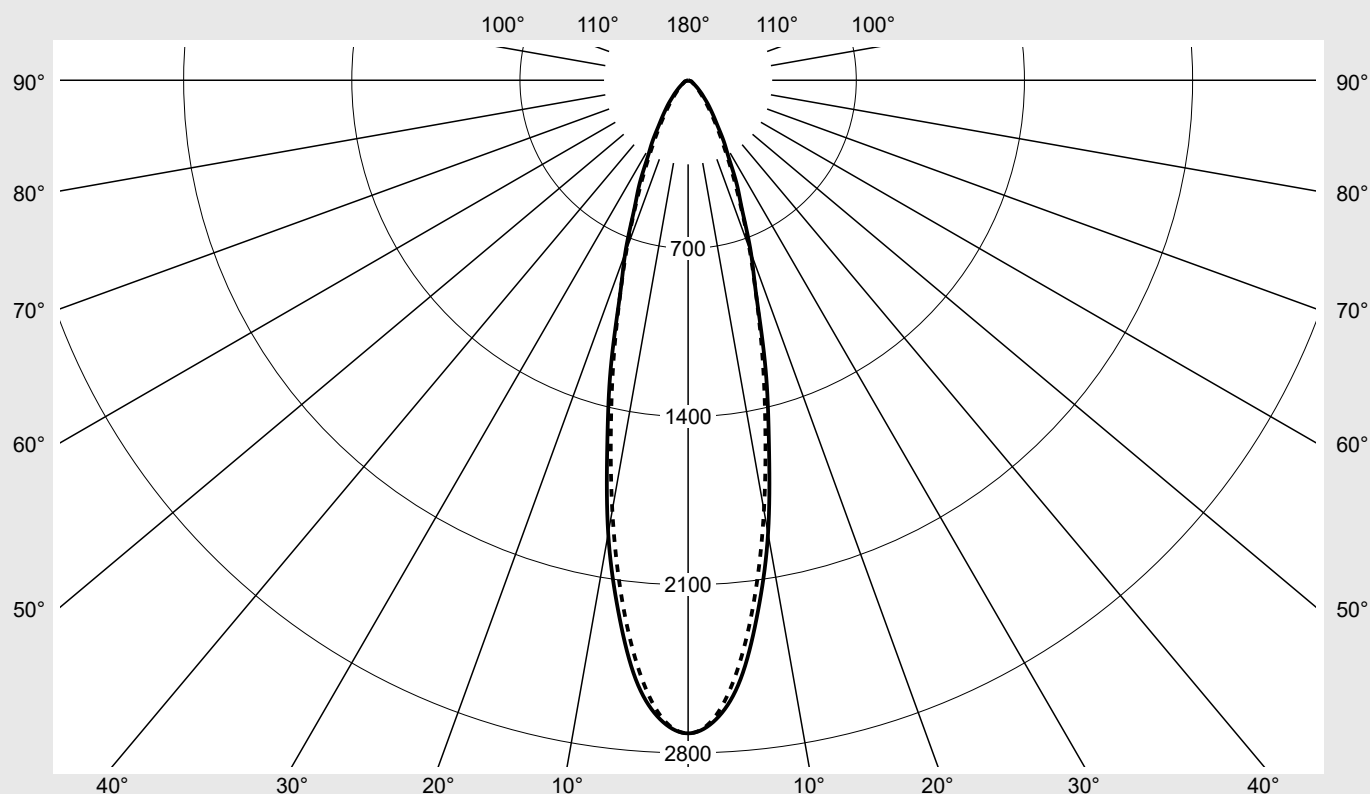
siteco

Luminous intensity in cd/klm

C180-0

C270-90

Imax: 2719 cd/klm



Classifications

DIN 5040 A 7 0
CIE N1=89 N2=97 N3=99
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

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°
		Luminous intensity in cd/klm					
γ							
0,0°	2718.5	2718.5	2718.5	2718.5	2718.5	2718.5	2718.5
2,5°	2662.8	2671.1	2671.1	2670.6	2667.6	2663.3	2662.4
5,0°	2502.8	2490.9	2498.0	2494.5	2487.6	2479.1	2473.3
7,5°	2228.4	2233.8	2227.9	2223.2	2214.7	2203.4	2194.2
10,0°	1915.8	1894.8	1902.8	1897.9	1890.8	1880.8	1870.9
12,5°	1554.6	1560.7	1554.3	1552.6	1548.0	1540.2	1531.7
15,0°	1246.2	1237.0	1237.4	1238.4	1237.7	1233.9	1229.0
17,5°	947.1	964.7	959.6	960.0	960.5	959.5	958.4
20,0°	765.0	752.2	754.6	751.6	749.0	747.8	747.5
22,5°	591.2	598.6	590.3	583.2	577.5	573.8	572.1
25,0°	481.4	472.8	470.4	460.9	451.8	445.8	443.1
27,5°	370.5	376.3	371.1	363.9	355.1	347.9	344.8
30,0°	301.2	297.9	295.0	290.6	284.7	279.0	275.2
32,5°	234.8	237.8	234.9	232.8	229.2	225.3	220.4
35,0°	189.2	188.5	187.7	186.9	184.4	180.6	175.3
37,5°	154.0	153.7	151.7	151.0	148.4	144.9	141.0
40,0°	125.7	123.3	123.0	121.9	119.1	115.8	113.2
42,5°	99.2	100.3	99.3	98.6	95.9	92.9	90.7
45,0°	81.4	79.6	79.7	79.0	77.2	74.6	72.7
47,5°	64.2	64.9	64.5	64.0	62.8	60.9	59.5
50,0°	52.5	51.6	51.8	51.7	51.0	49.9	49.1
52,5°	41.7	41.9	41.8	42.1	41.9	41.4	40.9
55,0°	33.9	33.5	34.1	34.8	35.0	35.0	34.7
57,5°	27.1	27.4	28.1	29.2	29.7	29.7	29.6
60,0°	22.3	22.3	23.0	24.6	25.8	25.8	25.5
62,5°	19.0	19.2	19.6	20.7	22.4	22.3	22.0
65,0°	17.0	16.8	17.2	18.3	19.8	19.1	19.1
67,5°	14.7	14.8	14.9	16.1	17.2	16.3	16.1
70,0°	12.8	12.5	12.6	13.8	14.3	13.8	13.9
72,5°	11.3	11.1	10.9	11.6	11.4	11.2	11.7
75,0°	9.7	9.3	8.9	9.6	9.3	9.1	9.3
77,5°	7.4	7.4	7.1	7.5	7.1	6.8	7.1
80,0°	4.9	4.7	4.8	4.8	4.5	4.5	4.8
82,5°	2.2	2.3	2.3	2.4	2.4	2.5	2.7
85,0°	0.8	0.8	0.8	0.8	0.8	0.9	1.0
87,5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4

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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°	2718.5	2718.5	2718.5	2718.5	2718.5	2718.5	4.1	4.1
2,5°	2661.4	2660.0	2657.7	2657.0	2651.0	2647.2	31.8	35.9
5,0°	2468.0	2461.9	2456.3	2452.9	2444.7	2440.4	59.1	95.0
7,5°	2185.5	2176.0	2168.0	2162.0	2152.6	2148.3	78.5	173.5
10,0°	1860.3	1847.8	1837.7	1831.0	1822.1	1817.6	88.9	262.4
12,5°	1522.0	1510.4	1500.7	1495.5	1488.9	1485.2	90.6	353.0
15,0°	1223.0	1215.3	1207.9	1204.2	1200.8	1197.6	86.8	439.8
17,5°	955.3	949.4	945.6	944.9	945.8	944.0	78.6	518.5
20,0°	745.4	741.8	741.4	743.7	748.0	747.7	70.2	588.6
22,5°	571.4	571.2	573.5	575.9	579.7	580.1	60.8	649.4
25,0°	443.2	444.5	446.3	448.3	449.2	448.8	52.5	701.9
27,5°	344.0	344.5	345.1	346.1	344.9	343.6	44.7	746.7
30,0°	273.7	273.8	273.9	272.4	270.2	268.2	38.5	785.2
32,5°	217.7	217.2	215.9	213.7	211.0	209.4	32.9	818.1
35,0°	172.5	170.5	168.2	166.4	165.0	164.5	27.8	845.9
37,5°	138.1	135.6	133.3	132.0	130.7	130.3	23.7	869.5
40,0°	110.2	108.1	106.1	104.8	103.7	103.1	20.0	889.6
42,5°	88.5	86.8	85.0	83.9	83.2	82.7	16.9	906.5
45,0°	71.2	69.8	68.4	67.3	66.9	66.6	14.2	920.7
47,5°	58.5	57.3	56.0	55.1	54.8	54.6	12.1	932.8
50,0°	48.3	47.1	46.0	45.5	45.1	44.8	10.3	943.0
52,5°	40.2	39.3	38.3	37.7	37.1	36.8	8.7	951.8
55,0°	34.1	33.4	32.5	31.7	31.0	30.7	7.5	959.3
57,5°	29.3	29.0	28.2	27.0	26.3	26.1	6.6	965.9
60,0°	25.7	25.8	24.8	23.5	22.8	22.6	5.8	971.6
62,5°	22.4	22.9	21.8	20.7	20.1	19.9	5.1	976.8
65,0°	19.6	20.2	19.7	18.4	17.9	17.8	4.6	981.4
67,5°	16.7	17.6	17.8	16.4	16.0	16.0	4.1	985.5
70,0°	14.1	15.0	15.6	14.4	14.4	14.6	3.6	989.1
72,5°	11.7	12.4	13.4	12.9	13.2	13.4	3.1	992.3
75,0°	9.5	10.4	12.0	11.4	11.8	11.9	2.7	995.0
77,5°	7.2	8.1	9.6	9.6	10.0	10.2	2.1	997.1
80,0°	5.1	5.7	7.0	7.5	7.6	8.0	1.5	998.6
82,5°	3.0	3.6	4.5	5.0	5.3	5.6	0.9	999.5
85,0°	1.2	1.7	2.3	2.7	3.1	3.3	0.4	999.9
87,5°	0.4	0.4	0.5	0.6	0.8	0.9	0.1	1000.1

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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	16.4	17.5	16.7	17.8	18.1	15.8	17.0	16.2	17.3	17.6
	3H	16.8	17.8	17.2	18.1	18.5	16.5	17.5	16.9	17.8	18.2
	4H	17.0	17.9	17.4	18.3	18.7	16.9	17.8	17.3	18.2	18.5
	6H	17.2	18.0	17.6	18.4	18.8	17.3	18.1	17.7	18.5	18.9
	8H	17.3	18.0	17.7	18.3	18.7	17.5	18.2	18.0	18.6	19.0
	12H	17.3	17.9	17.7	18.3	18.7	17.6	18.2	18.0	18.6	19.0
4H	2H	16.5	17.4	16.9	17.8	18.2	16.1	17.0	16.5	17.3	17.7
	3H	17.1	17.9	17.6	18.3	18.7	16.9	17.7	17.3	18.1	18.5
	4H	17.4	18.1	17.9	18.5	19.0	17.5	18.1	17.9	18.5	19.0
	6H	17.7	18.2	18.1	18.7	19.1	18.0	18.5	18.5	19.0	19.5
	8H	17.7	18.2	18.2	18.6	19.1	18.2	18.7	18.7	19.1	19.6
	12H	17.7	18.1	18.2	18.6	19.1	18.3	18.7	18.8	19.2	19.7
8H	4H	17.5	18.0	18.0	18.5	19.0	17.6	18.0	18.0	18.5	19.0
	6H	17.8	18.2	18.3	18.7	19.2	18.2	18.6	18.7	19.0	19.5
	8H	17.8	18.2	18.3	18.7	19.2	18.4	18.7	18.9	19.2	19.8
	12H	17.8	18.1	18.3	18.6	19.2	18.6	18.8	19.1	19.3	19.9
12H	4H	17.6	18.0	18.0	18.4	18.9	17.6	18.0	18.0	18.4	18.9
	6H	17.8	18.1	18.3	18.6	19.2	18.2	18.5	18.7	19.0	19.5
	8H	17.8	18.1	18.4	18.6	19.2	18.4	18.7	18.9	19.2	19.7

Luminance table		Max. for $\gamma \geq 65^\circ$		Photometric dimensions in mm:				L = 426 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°	14328.8	13988.2	13969.5	13592.8	13007.9	12620.0	12295.0	11968.6	11798.9	11720.9
50,0°	10157.6	9987.9	10031.9	9874.9	9609.1	9421.9	9122.7	8862.2	8753.7	8670.1
55,0°	7358.0	7287.9	7509.5	7606.5	7572.7	7439.7	7254.9	6996.9	6760.7	6672.0
60,0°	5559.2	5594.5	5996.2	6435.1	6394.9	6382.7	6426.9	6084.5	5724.8	5632.7
65,0°	5018.6	4976.9	5259.2	5818.9	5610.5	5709.7	5954.1	5701.8	5318.8	5255.7
70,0°	4654.4	4553.2	4917.1	5193.8	5009.0	5074.6	5462.8	5600.1	5232.0	5304.8
75,0°	4652.4	4402.9	4561.2	4477.8	4370.6	4520.5	4983.3	5812.5	5640.0	5728.4
80,0°	3512.0	3378.8	3474.1	3256.8	3286.2	3530.3	4111.3	5214.3	5388.7	5707.8
85,0°	1154.1	1124.5	1149.8	1166.9	1290.4	1565.4	2393.8	3451.1	4252.0	4737.7

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Order number: 52HN11DA4FDA01
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Luminance values in cd/m²

γ 65°

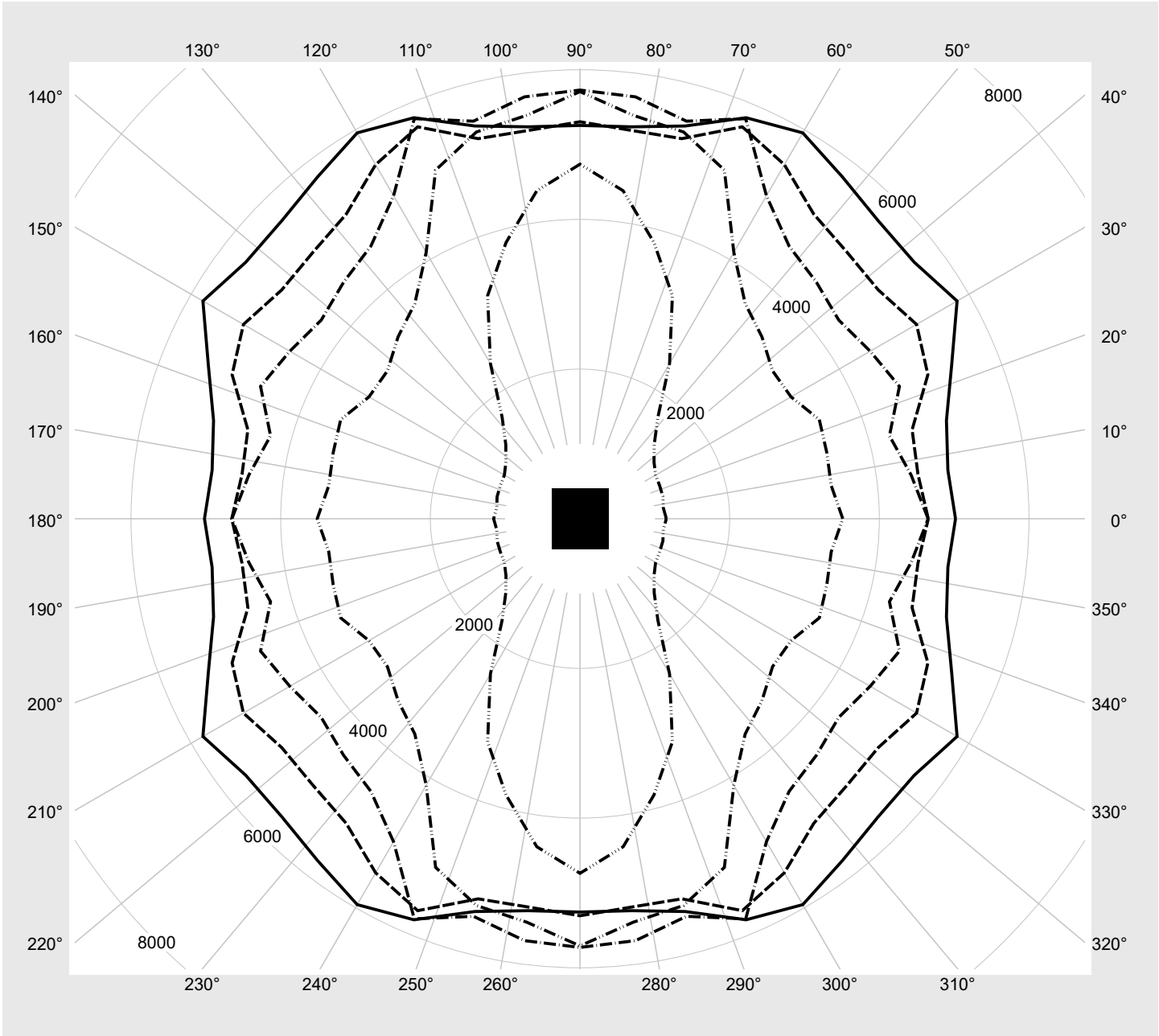
γ 70°

γ 75°

γ 80°

γ 85°

siteco



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Family Highbay 21	Order number: 52HN11DA4FDA01 EAN: 4069025421159	LP number 59724_137
Dimming levels table		environmental temperature: 25°C
		siteco

Luminous flux %	Dimming level linear	Dimming level logarithmic	Luminous flux [lm]	Power consumption [W]
100	254	254	14000	72.6
95	241	252	13303	68.8
90	228	250	12606	65.2
85	215	248	11901	61.5
80	202	246	11197	57.9
75	189	243	10494	54.0
70	176	241	9782	50.4
65	164	238	9126	47.1
60	151	235	8413	43.4
55	138	232	7695	39.8
50	125	228	6976	36.2
45	113	224	6313	32.9
40	100	220	5591	29.3
35	88	215	4919	26.0
30	75	209	4192	22.5
25	63	203	3520	19.2
20	50	194	2785	15.6
15	38	184	2109	12.4
10	25	169	1374	8.9
5	13	145	690	5.4
2	5	110	235	3.0