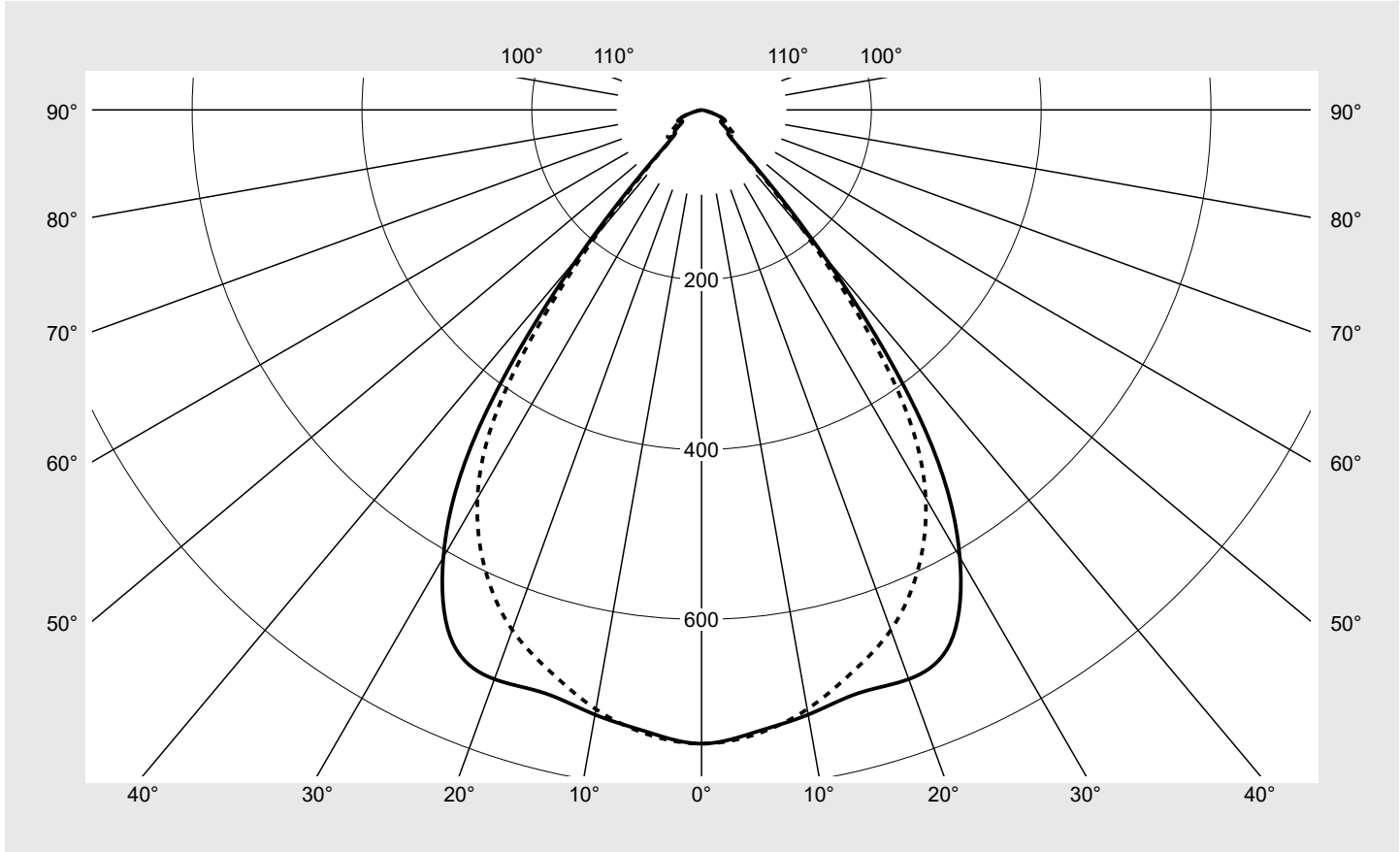


Photometric test report

Family Highbay 11	Order number: 51HLA2D24NLA + 59HL91002 EAN: 4058352361481 + 4058352341650	LP number 58924_23
Version	wide distribution, UGR≤22, cover panel, PC	serial documentation 31.03.2020
Lamps	LED 4000 K CRI ≥ 80	
Controlgear	ECG-DALI	
Rated values	Net luminous flux = 29910 lm Power consumption = 189.7 W Luminous efficacy = 157.7 lm/W	



Luminous intensity in cd/klm C180-0 C270-90 **Imax: 746 cd/klm**



Classifications	
DIN 5040	A 6 0
CIE	N1=88 N2=97 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 11	Order number: 51HLA2D24NLA + 59HL91002 EAN: 4058352361481 + 4058352341650	LP number 58924_23
Table of values for luminous intensities		Maximum luminous intensity
		siteco

C-planes γ	0° 180°	15°	30°	45°	60°	75°	90° 270°	Phi-zone	Total Phi-zone
		165° 195° 345°	150° 210° 330°	135° 225° 315°	120° 240° 300°	105° 255° 285°			
Luminous intensity in cd/klm							Luminous flux in lm/klm		
0°	746.3	746.3	746.3	746.3	746.3	746.3	746.3	4.5	4.5
5°	735.3	737.5	739.7	739.9	738.3	739.6	738.0	35.3	39.7
10°	723.2	726.6	729.4	728.5	722.4	719.9	716.7	69.0	108.7
15°	711.3	717.1	725.5	723.9	708.1	693.6	685.6	100.9	209.6
20°	713.4	718.0	728.3	720.4	690.5	663.2	651.9	131.3	340.9
25°	693.0	694.9	704.2	693.3	653.0	614.7	601.0	154.7	495.6
30°	608.4	605.8	624.6	634.7	585.4	537.6	527.9	162.4	658.1
35°	457.7	465.3	511.3	544.0	482.6	417.8	402.1	149.4	807.5
40°	223.2	249.0	306.2	349.8	284.7	219.8	194.6	95.0	902.5
45°	63.3	67.7	80.1	90.2	68.6	60.3	58.8	27.6	930.1
50°	41.6	37.0	34.8	39.2	39.3	44.2	50.6	16.8	947.0
55°	31.4	29.8	26.5	27.8	29.3	36.0	43.6	14.0	961.0
60°	26.5	29.7	26.3	21.9	21.3	25.9	33.0	12.2	973.2
65°	30.8	23.4	22.4	19.4	17.1	22.6	29.4	11.2	984.4
70°	22.6	17.1	16.5	15.8	14.1	17.3	23.9	8.9	993.3
75°	9.7	7.3	8.1	9.4	9.5	10.1	9.9	4.8	998.1
80°	2.5	2.3	2.6	3.2	3.7	3.7	3.7	1.7	999.8
85°	0.2	0.2	0.3	0.3	0.6	0.6	0.7	0.2	1000.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0

Photometric test report

Family Highbay 11	Order number: 51HLA2D24NLA + 59HL91002 EAN: 4058352361481 + 4058352341650	LP number 58924_23
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UGR-Table		Standard room									
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	20.9	22.2	21.3	22.5	22.9	20.5	21.8	20.8	22.1	22.4
	3H	21.2	22.4	21.6	22.7	23.1	20.8	22.0	21.2	22.3	22.7
	4H	21.3	22.4	21.7	22.7	23.1	21.0	22.0	21.3	22.4	22.7
	6H	21.3	22.2	21.7	22.6	23.0	21.0	21.9	21.4	22.3	22.7
	8H	21.3	22.1	21.8	22.5	22.9	21.0	21.8	21.4	22.2	22.6
	12H	21.3	22.1	21.7	22.4	22.9	21.0	21.7	21.4	22.1	22.6
4H	2H	20.9	21.9	21.3	22.3	22.6	20.4	21.5	20.8	21.8	22.2
	3H	21.3	22.1	21.7	22.5	22.9	20.9	21.7	21.3	22.1	22.5
	4H	21.3	22.1	21.8	22.5	23.0	21.0	21.8	21.5	22.2	22.6
	6H	21.3	22.0	21.8	22.4	22.9	21.0	21.7	21.5	22.1	22.6
	8H	21.3	21.9	21.7	22.3	22.8	21.0	21.6	21.5	22.1	22.5
	12H	21.3	21.7	21.8	22.2	22.7	21.0	21.5	21.5	22.0	22.5
8H	4H	21.3	21.9	21.8	22.3	22.8	21.0	21.6	21.5	22.0	22.5
	6H	21.2	21.7	21.7	22.2	22.7	21.0	21.5	21.5	22.0	22.5
	8H	21.2	21.6	21.7	22.1	22.6	21.0	21.4	21.5	21.9	22.4
	12H	21.2	21.5	21.7	22.0	22.6	21.0	21.3	21.5	21.8	22.4
12H	4H	21.3	21.8	21.8	22.2	22.7	21.0	21.5	21.5	21.9	22.4
	6H	21.3	21.6	21.8	22.1	22.7	21.0	21.4	21.5	21.9	22.4
	8H	21.2	21.5	21.7	22.0	22.6	21.0	21.3	21.5	21.8	22.4

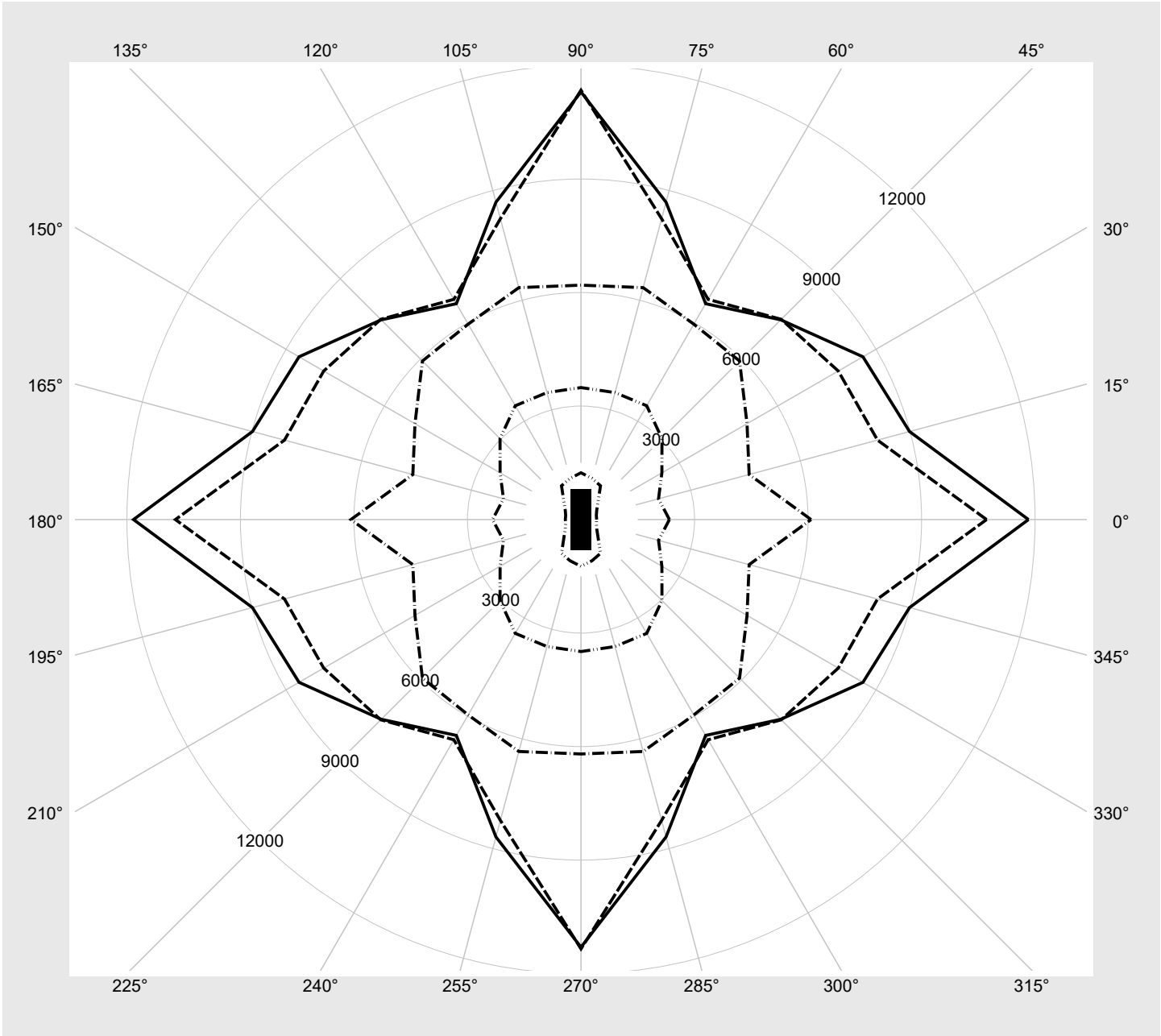
Luminance table		Max. for $\gamma \geq 65^\circ$		Photometric dimensions in mm:		L = 590		B = 312	
C-planes	0°	15° 165° 195° 345°	30° 150° 210° 330°	45° 135° 225° 315°	60° 120° 240° 300°	75° 105° 255° 285°	90° 270°		
γ	Luminance in cd/m ²								
45°	14550.3	15549.9	18415.8	20737.6	15760.6	13853.4	13503.2		
50°	10523.7	9357.7	8784.3	9912.0	9944.4	11183.0	12782.6		
55°	8890.8	8433.3	7504.4	7864.2	8295.3	10202.4	12349.4		
60°	8605.8	9641.1	8543.1	7132.7	6924.1	8404.0	10721.3		
65°	11825.5	8988.5	8603.7	7465.2	6587.5	8683.6	11302.2		
70°	10718.5	8112.3	7851.0	7483.8	6719.9	8231.1	11347.1		
75°	6080.1	4600.4	5066.3	5926.3	5962.7	6345.7	6195.0		
80°	2336.5	2121.2	2468.4	3026.1	3473.3	3474.3	3488.3		
85°	413.9	419.5	479.1	632.0	1031.0	1126.0	1236.0		

Photometric test report

Family Highbay 11	Order number: 51HLA2D24NLA + 59HL91002 EAN: 4058352361481 + 4058352341650	LP number 58924_23
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Luminance values in cd/m²

γ 65°
γ 70°
γ 75°
γ 80°
γ 85°



Photometric test report

Family Highbay 11	Order number: 51HLA2D24NLA + 59HL91002 EAN: 4058352361481 + 4058352341650	LP number 58924_23
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Dimming levels table	environmental temperature: 25°C	sITeco
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Luminous flux %	Dimming level linear	Dimming level logarithmic	Luminous flux [lm]	Power consumption [W]
100	254	254	29910	189.7
95	240	252	28376	179.0
90	227	250	26935	169.1
85	213	247	25371	158.4
80	200	245	23905	148.6
75	187	243	22424	139.0
70	174	240	20934	129.4
65	161	237	19428	119.8
60	148	234	17914	110.4
55	136	231	16494	101.5
50	123	228	14954	92.1
45	110	224	13400	82.8
40	98	220	11954	74.2
35	86	215	10497	65.6
30	74	210	9026	57.1
25	61	204	7425	48.1
20	49	197	5935	39.6
15	37	188	4434	31.2
10	26	177	3041	23.3
5	14	161	1519	14.9