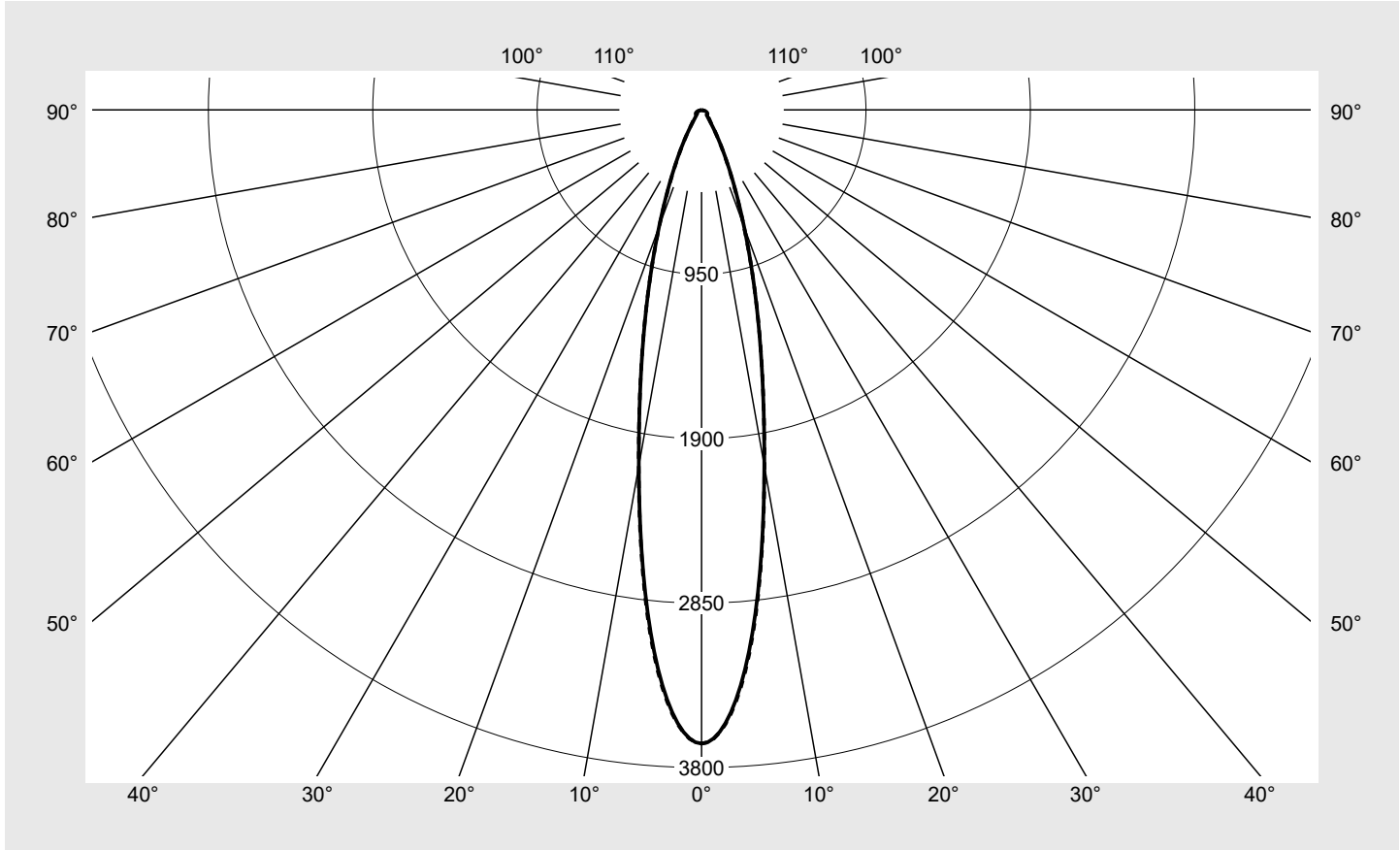


Photometric test report

Family Highbay 11	Order number: 51HL61D24HCA EAN: 4058352348895	LP number 58918_7
	Version narrow distribution, UGR≤22 Lamps LED 4000 K CRI ≥ 80 Controlgear ECG-DALI	serial documentation 21.05.2019
	Rated values Net luminous flux = 19570 lm Power consumption = 111.2 W Luminous efficacy = 176 lm/W	

Luminous intensity in cd/klm C180-0 C270-90 **Imax: 3662 cd/klm**



Classifications	
DIN 5040	A 7 0
CIE	N1=88 N2=95 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

Photometric test report

Family Highbay 11	Order number: 51HL61D24HCA EAN: 4058352348895	LP number 58918_7
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Table of values for luminous intensities	Maximum luminous intensity
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C-planes γ	0°	15° 165° 195° 345°	30° 150° 210° 330°	45° 135° 225° 315°	60° 120° 240° 300°	75° 105° 255° 285°	90° 270°	Phi-zone	Total Phi-zone
	Luminous intensity in cd/klm							Luminous flux in lm/klm	
0°	3661.5	3661.5	3661.5	3661.5	3661.5	3661.5	3661.5	21.9	21.9
5°	3142.6	3138.8	3148.7	3152.8	3150.8	3162.1	3157.3	150.5	172.4
10°	2088.2	2082.4	2095.8	2102.6	2097.1	2098.1	2092.4	199.3	371.8
15°	1265.5	1263.0	1272.3	1276.0	1271.9	1272.7	1269.2	180.2	552.0
20°	717.4	718.4	730.4	738.2	732.8	722.5	712.3	136.1	688.1
25°	380.2	383.6	397.1	405.5	395.8	382.2	373.9	90.4	778.5
30°	189.9	192.8	203.8	209.2	205.7	196.2	189.8	54.7	833.2
35°	93.4	93.2	98.1	106.1	108.6	103.6	99.4	31.8	865.0
40°	56.8	57.1	60.0	67.1	71.1	71.1	70.3	22.9	887.9
45°	41.2	40.8	44.9	50.9	50.2	47.6	46.5	18.0	905.9
50°	41.3	41.9	46.2	48.9	40.8	33.1	32.5	17.3	923.2
55°	41.3	42.1	45.2	43.2	36.0	29.8	29.9	17.4	940.6
60°	39.0	39.2	40.5	39.6	33.4	27.4	27.5	16.9	957.4
65°	33.8	33.6	34.5	34.8	29.3	24.3	24.5	15.4	972.8
70°	26.5	26.3	27.0	27.6	23.9	20.0	20.0	12.7	985.5
75°	15.9	16.7	18.0	19.3	17.3	15.5	15.6	9.0	994.6
80°	6.4	6.9	7.9	9.2	9.9	9.6	10.9	4.7	999.3
85°	0.5	0.5	0.6	1.0	1.8	2.4	3.4	0.7	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: 51HL61D24HCA EAN: 4058352348895	LP number 58918_7
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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	15.5	16.6	15.8	16.9	17.2	14.2	15.4	14.6	15.7	16.0
	3H	17.4	18.3	17.8	18.7	19.0	15.8	16.8	16.2	17.1	17.5
	4H	17.9	18.8	18.3	19.2	19.6	16.5	17.4	16.9	17.8	18.2
	6H	18.2	19.0	18.6	19.3	19.7	17.2	18.0	17.6	18.4	18.8
	8H	18.3	18.9	18.7	19.3	19.7	17.5	18.2	17.9	18.6	19.0
	12H	18.2	18.8	18.6	19.2	19.7	17.6	18.2	18.0	18.6	19.0
4H	2H	16.3	17.2	16.7	17.5	17.9	15.4	16.3	15.8	16.6	17.0
	3H	18.3	19.0	18.7	19.4	19.8	17.1	17.8	17.5	18.2	18.7
	4H	18.9	19.6	19.4	20.0	20.5	17.9	18.6	18.3	19.0	19.4
	6H	19.2	19.8	19.7	20.2	20.7	18.5	19.1	19.0	19.6	20.0
	8H	19.3	19.8	19.7	20.2	20.7	18.8	19.3	19.3	19.8	20.2
	12H	19.2	19.6	19.7	20.1	20.6	18.9	19.3	19.4	19.8	20.3
8H	4H	19.2	19.7	19.7	20.2	20.7	18.4	18.9	18.8	19.3	19.8
	6H	19.6	20.0	20.1	20.5	21.0	19.1	19.5	19.7	20.0	20.5
	8H	19.6	20.0	20.1	20.4	21.0	19.3	19.7	19.9	20.2	20.7
	12H	19.5	19.8	20.1	20.4	20.9	19.4	19.7	19.9	20.2	20.8
12H	4H	19.2	19.7	19.7	20.1	20.6	18.3	18.8	18.8	19.2	19.7
	6H	19.6	19.9	20.1	20.4	21.0	19.1	19.5	19.6	20.0	20.5
	8H	19.6	19.9	20.1	20.4	21.0	19.4	19.7	19.9	20.2	20.7

Luminance table	Max. for $\gamma \geq 65^\circ$	Photometric dimensions in mm:	L = 600 B = 320
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C-planes	γ	0° 180°	15°	30°	45°	60°	75°	90°
			165° 195° 345°	150° 210° 330°	135° 225° 315°	120° 240° 300°	105° 255° 285°	270°
Luminance in cd/m²								
45°	5933.9	5876.3	6476.9	7336.3	7238.5	6863.3	6702.1	
50°	6555.6	6650.0	7319.9	7756.3	6465.1	5253.3	5152.4	
55°	7345.1	7480.3	8037.7	7669.4	6391.1	5292.4	5321.0	
60°	7953.0	7990.5	8247.9	8076.7	6813.8	5586.0	5610.7	
65°	8145.9	8095.7	8309.6	8393.8	7077.7	5867.2	5916.6	
70°	7888.8	7827.1	8035.4	8236.2	7119.0	5970.4	5972.5	
75°	6255.4	6563.7	7072.9	7606.2	6817.7	6107.7	6142.7	
80°	3778.9	4032.5	4630.1	5404.9	5816.9	5644.3	6391.6	
85°	539.1	542.6	741.5	1191.7	2117.9	2768.2	4011.3	

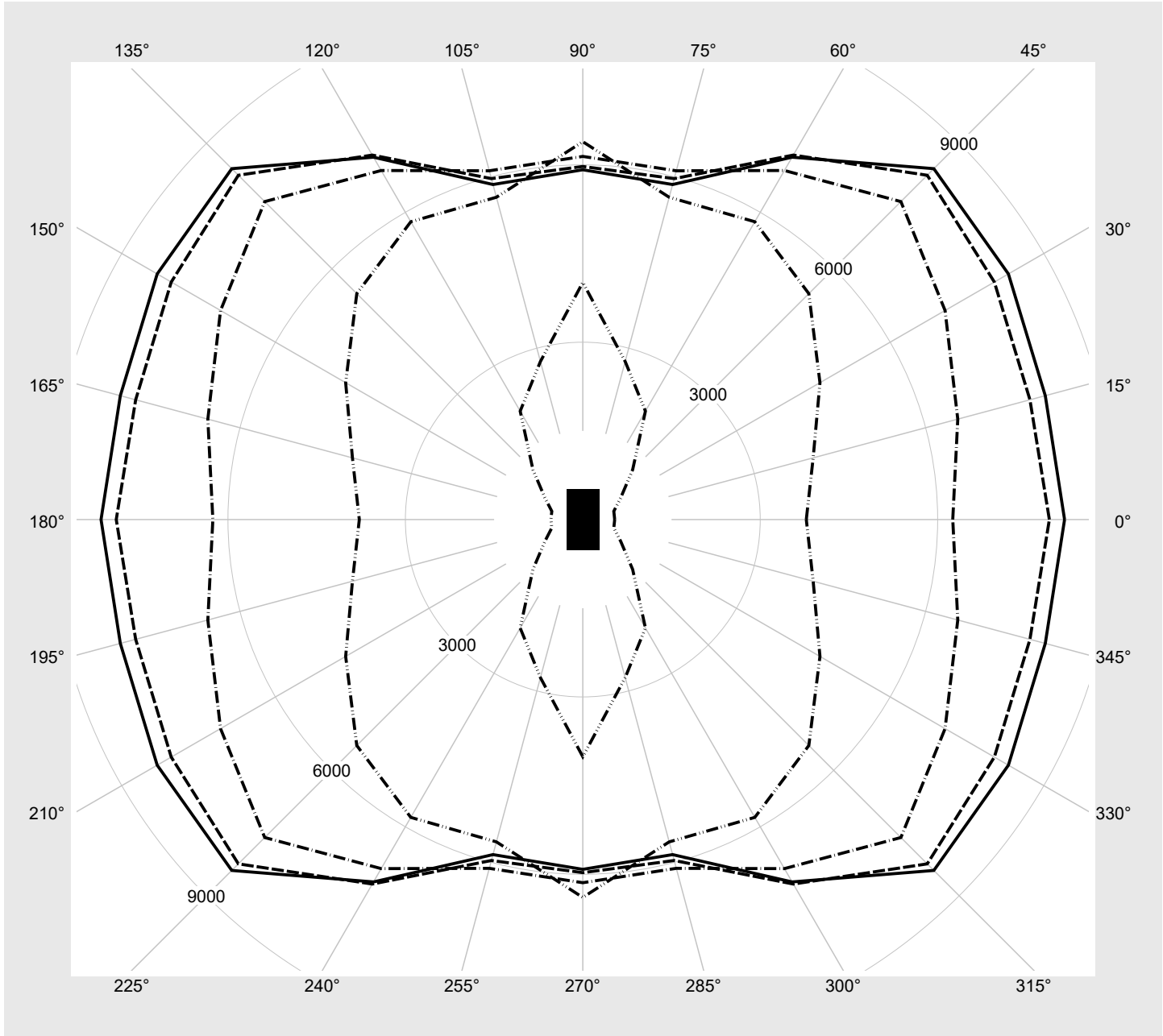
Photometric test report

Family Highbay 11	Order number: 51HL61D24HCA EAN: 4058352348895	LP number 58918_7
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Luminance values in cd/m²

γ 65°	γ 70°	γ 75°	γ 80°	γ 85°
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Photometric test report

Family Highbay 11	Order number: 51HL61D24HCA EAN: 4058352348895	LP number 58918_7
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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	19570	111.2
95	241	252	18592	105.5
90	228	250	17613	100.0
85	215	248	16635	94.3
80	202	246	15656	89.0
75	189	243	14678	83.5
70	176	241	13699	78.2
65	163	238	12721	73.0
60	151	235	11742	67.5
55	138	232	10764	62.3
50	125	228	9785	57.1
45	113	225	8807	51.9
40	100	220	7828	47.0
35	88	215	6850	41.5
30	76	210	5871	36.5
25	63	204	4893	31.6
20	51	196	3914	26.6
15	39	186	2936	21.5
10	27	172	1956	16.4