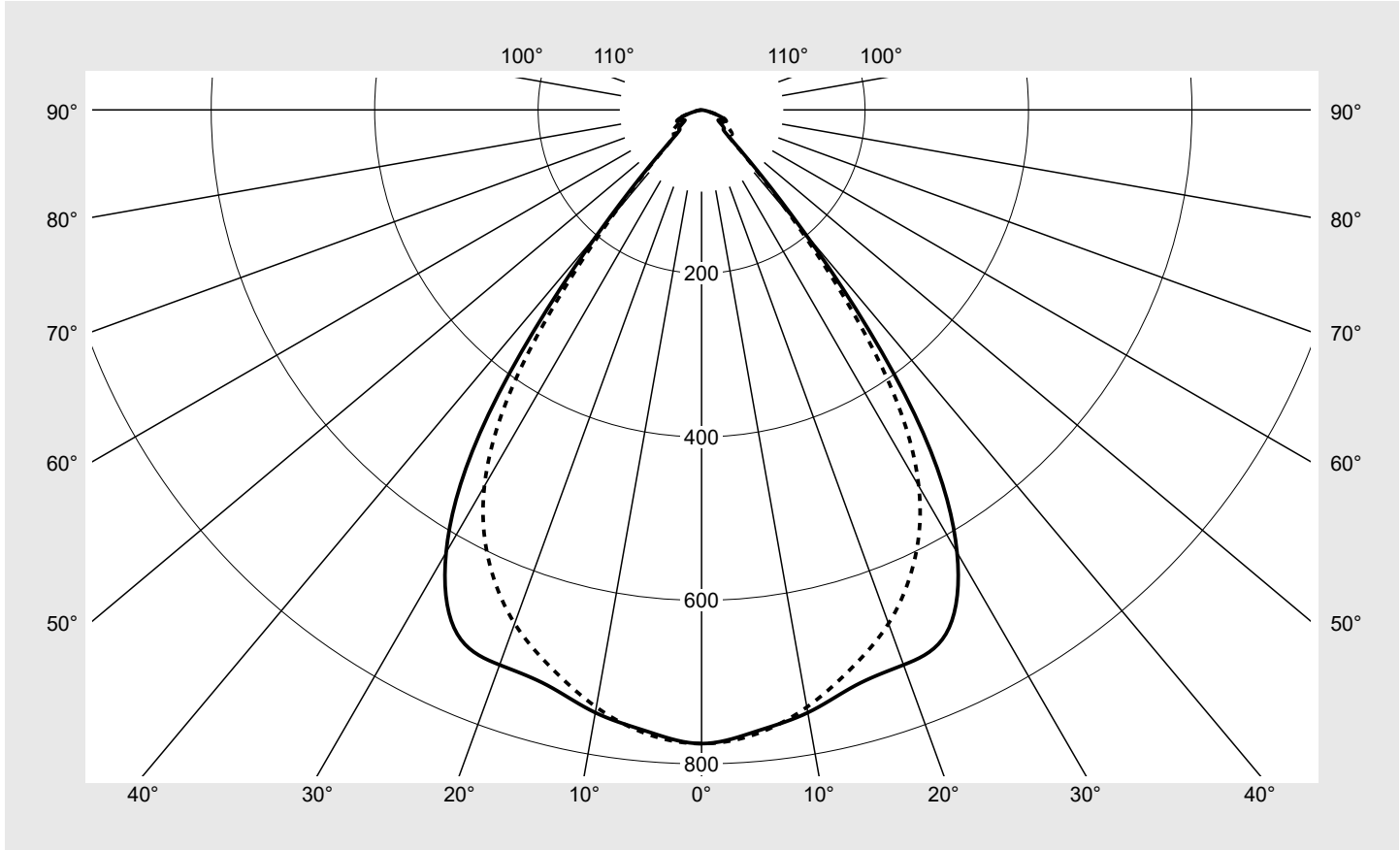


Photometric test report

Family Highbay 21	Order number: 51HLA2D24MLB EAN: 4058352417973	LP number 58922_23
	Version wide distribution, UGR≤22 Lamps LED 4000 K CRI ≥ 80 Controlgear ECG-DALI Rated values Net luminous flux = 27600 lm Power consumption = 171.1 W Luminous efficacy = 161.3 lm/W	serial documentation 01.07.2020
		

Luminous intensity in cd/klm C180-0 C270-90 **Imax: 775 cd/klm**



Classifications	
DIN 5040	A 6 0
CIE	N1=89 N2=96 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 21	Order number: 51HLA2D24MLB EAN: 4058352417973	LP number 58922_23
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Table of values for luminous intensities	Maximum luminous intensity
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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°	775.3	775.3	775.3	775.3	775.3	775.3	775.3	4.6	4.6
5°	763.3	765.5	767.8	768.1	766.5	768.2	766.4	36.6	41.3
10°	748.7	752.6	756.7	755.9	749.0	745.7	741.9	71.5	112.7
15°	728.8	736.6	748.6	748.7	732.9	716.3	707.4	104.1	216.8
20°	722.5	731.1	745.9	741.9	711.6	682.4	668.7	134.6	351.4
25°	707.4	710.1	723.4	713.1	669.4	627.0	613.5	158.4	509.9
30°	625.1	622.7	643.6	650.9	594.8	541.3	531.4	165.9	675.7
35°	454.3	465.0	515.3	546.7	478.1	404.7	385.8	148.3	824.0
40°	194.7	222.6	276.1	324.0	261.7	198.8	171.4	86.1	910.1
45°	52.4	51.4	56.0	64.9	54.8	51.5	51.3	21.3	931.5
50°	36.0	31.0	27.7	34.1	33.7	39.2	46.8	14.5	946.0
55°	27.7	25.7	21.5	23.0	24.8	33.2	42.0	12.2	958.2
60°	24.8	27.6	25.1	19.0	18.2	24.5	32.6	11.3	969.5
65°	33.0	23.0	22.5	18.8	16.0	23.0	31.5	11.2	980.7
70°	25.9	19.0	18.9	17.8	15.3	19.4	28.1	10.1	990.8
75°	12.6	8.9	10.2	12.8	12.0	13.0	13.0	6.1	996.9
80°	3.5	3.2	4.0	5.1	6.3	6.1	5.9	2.6	999.6
85°	0.3	0.3	0.4	0.5	1.1	1.3	1.4	0.4	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 21	Order number: 51HLA2D24MLB EAN: 4058352417973	LP number 58922_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	20.2	21.5	20.6	21.8	22.2	19.7	21.0	20.1	21.3	21.6
	3H	20.7	21.8	21.0	22.1	22.5	20.2	21.4	20.6	21.7	22.1
	4H	20.8	21.8	21.2	22.2	22.6	20.5	21.5	20.9	21.9	22.2
	6H	20.8	21.7	21.2	22.1	22.5	20.6	21.5	21.0	21.9	22.3
	8H	20.9	21.7	21.3	22.0	22.4	20.6	21.5	21.1	21.8	22.2
	12H	20.8	21.6	21.3	22.0	22.4	20.6	21.4	21.1	21.8	22.2
4H	2H	20.2	21.2	20.6	21.6	21.9	19.7	20.7	20.1	21.1	21.4
	3H	20.7	21.6	21.1	22.0	22.4	20.3	21.1	20.7	21.5	22.0
	4H	20.9	21.6	21.3	22.1	22.5	20.6	21.4	21.0	21.8	22.2
	6H	20.9	21.5	21.4	22.0	22.4	20.7	21.4	21.2	21.8	22.3
	8H	20.9	21.4	21.3	21.9	22.4	20.8	21.3	21.2	21.8	22.3
	12H	20.9	21.3	21.4	21.8	22.3	20.8	21.3	21.3	21.7	22.2
8H	4H	20.9	21.5	21.4	21.9	22.4	20.6	21.2	21.1	21.7	22.2
	6H	20.9	21.4	21.4	21.9	22.4	20.8	21.3	21.3	21.8	22.3
	8H	20.9	21.3	21.4	21.8	22.3	20.8	21.3	21.4	21.8	22.3
	12H	20.9	21.2	21.4	21.7	22.2	20.9	21.2	21.4	21.7	22.2
12H	4H	20.9	21.4	21.4	21.8	22.3	20.7	21.1	21.1	21.6	22.1
	6H	20.9	21.3	21.4	21.8	22.3	20.8	21.2	21.4	21.7	22.2
	8H	20.9	21.2	21.4	21.7	22.3	20.9	21.2	21.4	21.7	22.2

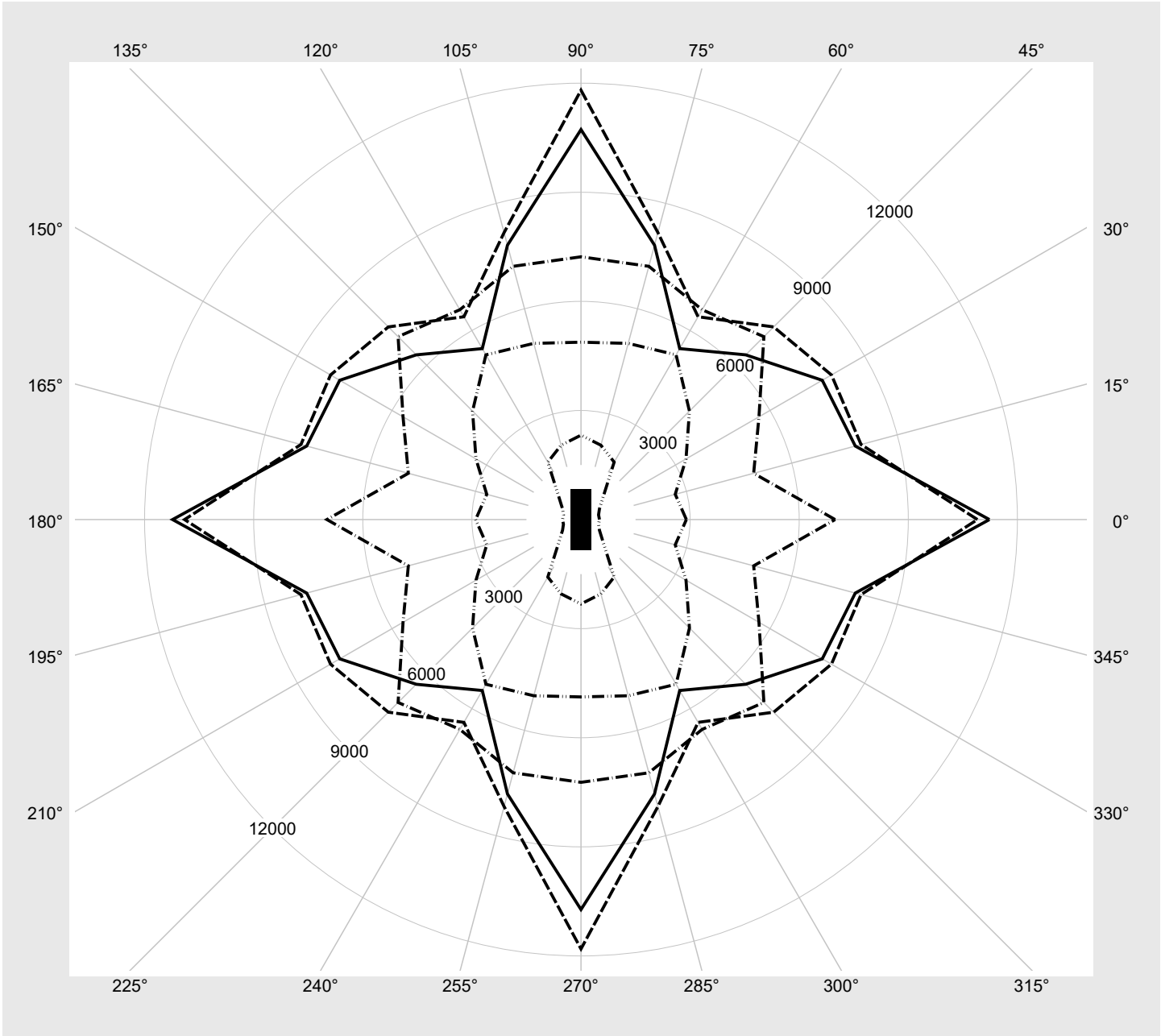
Luminance table		Max. for $\gamma \geq 65^\circ$		Photometric dimensions in mm:		L = 600		B = 320	
C-planes	0°	15° 165° 195° 345°	30° 150° 210° 330°	45° 135° 225° 315°	60° 120° 240° 300°	75° 105° 255° 285°	90° 270°		
γ	Luminance in cd/m ²								
45°	10647.3	10453.3	11385.4	13186.2	11145.3	10476.5	10421.6		
50°	8051.1	6939.9	6205.4	7633.1	7543.0	8762.0	10455.4		
55°	6937.7	6437.7	5385.1	5776.6	6205.9	8314.3	10525.8		
60°	7129.1	7948.5	7214.5	5473.1	5227.6	7048.9	9365.3		
65°	11230.5	7809.0	7660.7	6405.5	5428.3	7811.3	10724.7		
70°	10901.2	7972.6	7952.9	7491.8	6439.8	8170.6	11807.0		
75°	6987.0	4915.4	5650.7	7112.5	6662.7	7209.7	7225.8		
80°	2897.4	2683.0	3334.5	4216.9	5230.2	5015.8	4877.5		
85°	508.0	499.8	585.5	852.7	1824.2	2116.1	2320.6		

Photometric test report

Family Highbay 21	Order number: 51HLA2D24MLB EAN: 4058352417973	LP number 58922_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 21	Order number: 51HLA2D24MLB EAN: 4058352417973	LP number 58922_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	27600	171.1
95	240	252	26209	161.3
90	227	250	24884	152.0
85	213	248	23458	142.3
80	200	245	22116	133.3
75	186	243	20660	123.5
70	173	240	19286	114.7
65	160	237	17904	105.8
60	148	234	16606	97.5
55	135	231	15194	88.7
50	122	227	13767	79.9
45	110	223	12436	71.8
40	97	219	10988	63.2
35	85	214	9641	55.2
30	73	208	8280	47.2
25	61	202	6911	39.4
20	49	194	5528	31.5
15	37	183	4134	23.7
10	25	169	2729	16.0
5	14	148	1432	8.9
1	5	110	364	3.2