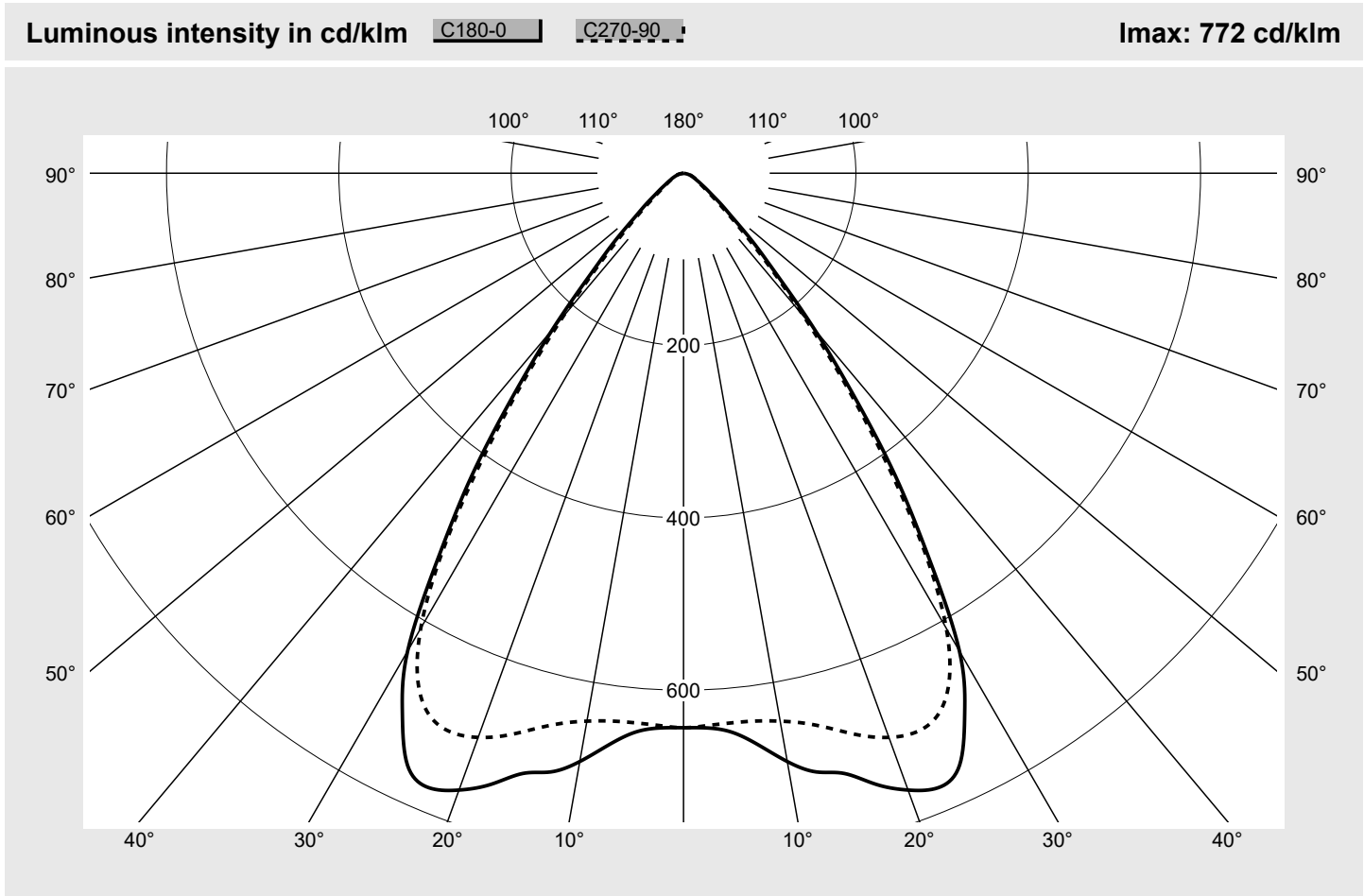


Photometric test report

Family Highbay 11	Order number: 51HN12DA4MLA01 EAN: 4069025374158	LP number 59710_86
	Version	primary light control with lens, PMMA, housing, white, for Licross® rail, wide distribution, with multisensor node BT
	Lamps	LED 4000 K CRI ≥ 80
	Controlgear	ECG-DALI
	Rated values	Net luminous flux = 28000 lm Power consumption = 147.1 W Luminous efficacy = 190.3 lm/W
		serial documentation 31.01.2025
		siteco



Classifications		Luminaire light output ratios	
DIN 5040	A 6 0	η_{LB}	100.0%
CIE	N1=88 N2=98 N3=100	ϕ_u	100.0%
	N4=100 N5=100	ϕ_o	0.0%

Measurement conditions
DIN EN 13032 and DIN 5032

Photometric test report

Family Highbay 11	Order number: 51HN12DA4MLA01 EAN: 4069025374158	LP number 59710_86
Table of values for luminous intensities		Maximum luminous intensity
		siteco

C- planes	0° 180°	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
γ	Luminous intensity in cd/klm							Luminous flux in lm/klm	
0,0°	643.6	643.6	643.6	643.6	643.6	643.6	643.6	1.0	1.0
2,5°	644.5	645.1	645.0	644.3	644.2	643.7	641.7	7.7	8.7
5,0°	651.5	652.3	650.7	647.5	645.3	643.2	640.4	15.5	24.1
7,5°	669.6	669.1	664.2	657.2	651.2	645.8	641.3	23.5	47.6
10,0°	693.4	691.0	681.5	670.0	659.9	651.2	645.8	31.9	79.6
12,5°	711.8	709.4	700.3	685.9	671.9	660.7	654.0	40.7	120.2
15,0°	721.3	721.7	717.1	704.9	689.4	675.9	667.7	49.7	169.9
17,5°	743.8	740.8	737.9	726.5	708.9	693.0	684.2	59.4	229.3
20,0°	761.9	761.9	759.6	745.2	724.0	705.6	696.8	69.2	298.5
22,5°	772.0	771.2	770.0	754.7	731.1	710.8	702.6	78.2	376.7
25,0°	758.1	756.6	756.3	743.6	722.7	703.3	695.6	85.1	461.8
27,5°	706.7	709.5	709.5	700.0	685.7	672.3	667.0	87.8	549.7
30,0°	640.4	635.6	633.7	626.6	621.7	614.1	609.9	85.8	635.5
32,5°	530.6	537.6	535.6	526.2	530.2	524.1	520.8	78.1	713.6
35,0°	428.2	426.4	425.9	411.9	420.8	414.2	411.4	66.0	779.6
37,5°	322.5	323.4	327.0	311.0	319.4	310.8	308.2	53.0	832.6
40,0°	236.1	234.0	241.6	230.8	230.9	219.8	218.4	40.7	873.3
42,5°	162.3	165.3	172.9	171.1	161.7	151.3	150.8	30.2	903.5
45,0°	117.3	114.9	119.4	122.5	109.3	102.6	102.3	21.9	925.4
47,5°	80.5	81.4	82.8	85.5	75.2	71.4	70.8	15.9	941.3
50,0°	59.4	58.0	58.0	59.0	52.9	50.5	49.6	11.7	953.0
52,5°	43.3	42.8	42.8	43.0	39.3	37.2	36.6	8.9	961.8
55,0°	33.3	32.4	32.9	33.7	30.5	28.7	28.3	7.1	968.9
57,5°	25.9	25.4	25.9	26.8	24.5	22.9	22.9	5.8	974.7
60,0°	20.9	20.2	21.2	21.8	20.4	18.9	19.2	4.9	979.5
62,5°	16.9	16.2	17.4	18.0	17.2	15.9	16.4	4.1	983.6
65,0°	14.9	13.6	14.4	15.1	14.8	13.6	14.4	3.6	987.2
67,5°	12.3	11.4	12.5	12.4	13.0	11.7	12.6	3.1	990.3
70,0°	10.4	9.5	10.5	10.1	11.1	10.1	11.0	2.7	993.0
72,5°	8.2	7.7	7.9	8.2	8.7	8.6	9.5	2.2	995.2
75,0°	6.5	6.0	6.0	6.4	6.6	7.1	7.9	1.7	996.9
77,5°	4.5	4.3	4.4	4.7	5.1	5.6	6.3	1.3	998.2
80,0°	2.9	2.7	2.9	3.1	3.5	4.1	4.7	0.9	999.1
82,5°	1.3	1.4	1.6	1.8	2.2	2.7	3.3	0.5	999.7
85,0°	0.6	0.6	0.6	0.7	1.0	1.4	1.8	0.3	999.9
87,5°	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.1	1000.0
90,0°	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: 51HN12DA4MLA01 EAN: 4069025374158						LP number 59710_86		
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	22.1	23.4	22.5	23.7	24.0	21.8	23.1	22.2	23.4	23.7
	3H	22.1	23.2	22.5	23.6	23.9	21.8	22.9	22.2	23.3	23.6
	4H	22.1	23.1	22.5	23.5	23.9	21.8	22.9	22.2	23.2	23.6
	6H	22.1	23.0	22.5	23.4	23.8	21.9	22.8	22.3	23.2	23.6
	8H	22.1	22.9	22.6	23.3	23.7	22.0	22.8	22.4	23.1	23.5
	12H	22.1	22.8	22.5	23.2	23.6	21.9	22.7	22.4	23.1	23.5
4H	2H	22.0	23.0	22.4	23.4	23.8	21.7	22.7	22.1	23.1	23.5
	3H	22.0	22.9	22.4	23.3	23.7	21.8	22.6	22.2	23.0	23.4
	4H	22.0	22.8	22.5	23.2	23.6	21.8	22.6	22.3	23.0	23.4
	6H	22.0	22.6	22.5	23.1	23.6	21.9	22.5	22.3	22.9	23.4
	8H	22.0	22.6	22.5	23.0	23.5	21.9	22.5	22.3	22.9	23.4
	12H	22.0	22.5	22.5	22.9	23.4	21.9	22.4	22.4	22.8	23.3
8H	4H	22.0	22.5	22.4	23.0	23.5	21.8	22.3	22.2	22.8	23.3
	6H	21.9	22.4	22.4	22.9	23.4	21.8	22.3	22.3	22.8	23.3
	8H	21.9	22.3	22.4	22.8	23.3	21.8	22.2	22.3	22.7	23.3
	12H	21.9	22.2	22.4	22.7	23.3	21.9	22.2	22.4	22.7	23.2
12H	4H	22.0	22.4	22.5	22.9	23.4	21.8	22.2	22.3	22.7	23.2
	6H	21.9	22.3	22.4	22.8	23.3	21.8	22.2	22.3	22.7	23.2
	8H	21.9	22.2	22.4	22.7	23.3	21.8	22.1	22.3	22.6	23.2

Luminance table		Max. for $\gamma \geq 65^\circ$		Photometric dimensions in mm:		L = 426 B = 264	
C-planes	0° 180°	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/m²						
45,0°	41309.5	40449.3	42046.4	43124.2	38472.7	36122.1	36015.8
50,0°	23016.1	22471.9	22448.3	22849.2	20503.5	19549.5	19214.1
55,0°	14464.3	14077.5	14278.5	14606.2	13249.8	12455.0	12305.3
60,0°	10403.4	10042.9	10552.3	10869.0	10176.3	9424.0	9544.0
65,0°	8778.3	7985.4	8511.5	8878.5	8694.1	8040.2	8494.4
70,0°	7545.1	6884.1	7614.9	7367.4	8082.3	7357.2	8035.0
75,0°	6218.0	5759.1	5743.7	6143.0	6382.5	6831.7	7615.7
80,0°	4198.0	3917.0	4145.0	4477.6	5054.0	5944.3	6775.9
85,0°	1676.8	1668.3	1722.5	2016.8	2982.3	3973.5	5147.6

Photometric test report

Family
Highbay 11

Order number: 51HN12DA4MLA01
EAN: 4069025374158

LP number
59710_86

Luminance values in cd/m²

γ 65°

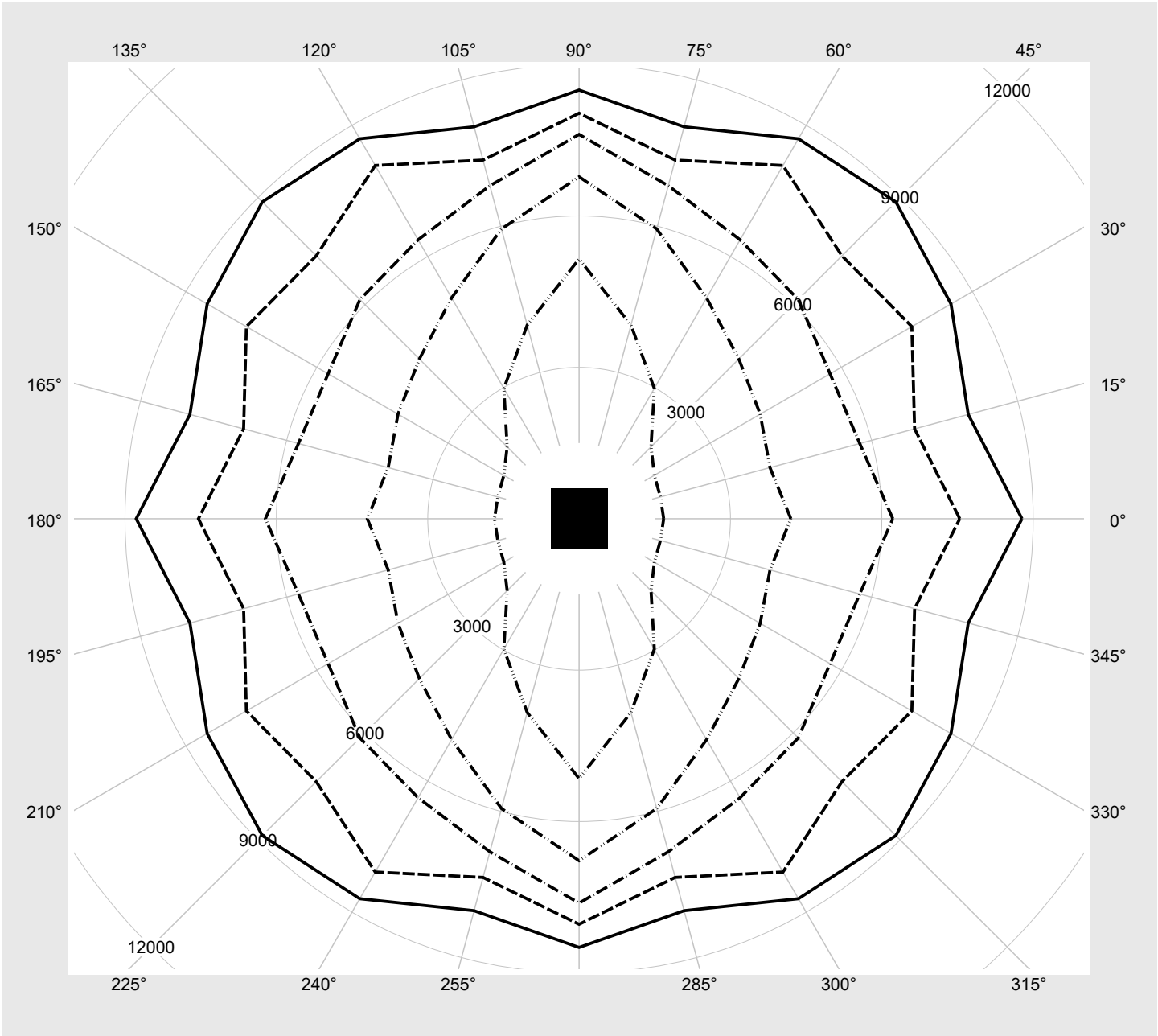
γ 70°

γ 75°

γ 80°

γ 85°

siteco



Photometric test report

Family Highbay 11	Order number: 51HN12DA4MLA01 EAN: 4069025374158	LP number 59710_86
Dimming levels table		environmental temperature: 25°C



Luminous flux %	Dimming level linear	Dimming level logarithmic	Luminous flux [lm]	Power consumption [W]
100	----	----	----	----
95	240	252	26584	138.7
90	227	250	25246	130.8
85	213	248	23796	122.4
80	200	245	22443	114.7
75	186	243	20975	106.4
70	173	240	19598	98.8
65	160	237	18213	91.2
60	147	234	16807	83.6
55	134	231	15399	76.2
50	121	227	13971	68.8
45	109	223	12641	62.0
40	96	218	11192	54.6
35	84	213	9836	47.8
30	71	207	8355	40.7
25	59	201	6969	34.0
20	47	192	5572	27.5
15	35	181	4154	21.1
10	24	168	2843	15.1
5	12	142	1395	8.3
2	5	110	539	4.4