

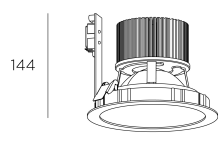


## Cardex C

## 90-4048-14-37

Downlight Cardex C 53.2W 3000K CRI 90 24.3° White IP23 3073lm

## TECHNICAL FEATURES



Ø175



165



0-25



Power (W) : 53.2W

Total power consumption of light (W) : 53.2W

Raw lumens : 3073

Raw lm/W : 58

Colour temperature : LED warm-white 3000K

Lens / reflector angle : MEDIUM 24°

Structure material : Aluminium

Structure finish : White

Diffuser material : Glass

Diffuser finish : Transparent

Useful life : 50.000h L80B20

Equipment necessary but not included :

Voltage / frequency : max. 1400mA

Warranty : 5 Years

Max. temperature : 25°C

Energy efficiency : LED A++

## LUMINOTECHNIC FEATURES

Light source: LED CREE

CRI: 90

MacAdam steps: 2

Photobiological risk: RG1

## LOGISTICS



1 Un



ACT-9180-60-00

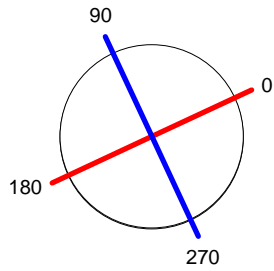
Honeycomb panel

Structure material: Steel  
Dimensions: NA x NA x NA  
Net weight (kg): 0.01

<b>Luminaire</b>		<b>Measur.</b>		<b>Lamp</b>	
Code	90-4048	Code	90-3295-14-37	Code	L4048 53.2W 90 3000K
Name	CARDEX C LED 53.2W 930 24°	Name	Downlight led 21.8W 24° 4000K	Number	1
Line	- LEDS C4 LEDS	Date	29-04-2014	Position	Universal
Efficiency	100.00%	Coordinate system	CG	Total Flux	2964.30 lm
Maximum value	8469.44 cd	Position	C=0.00 G=0.00	Double Symmetrical	
Round Recessed Luminaire	Diam.	175 mm	Height	2 mm	
Round Luminous Area	Diam.	110 mm	Height	0 mm	
Horizontal Luminous Area	0.009503 m2	Emitting area on Plane 180°	0.000000 m2		
Emitting area on Plane 0°	0.000000 m2	Emitting area on Plane 270°	0.000000 m2		
Emitting area on Plane 90°	0.000000 m2	Glare area at 76°	0.002299 m2		
Symmetry Type	Double Symmetrical	Maximum Gamma Angle	90		
Measurement Distance	6.44	Measurement Flux	1810.10 lm		
Operator	Asselum T2	Source voltage	36.30 V		
Temperature	20.00 °C	Source current	0.60 A		
Humidity	53.00 %	Photocell	Prc		
Notes					

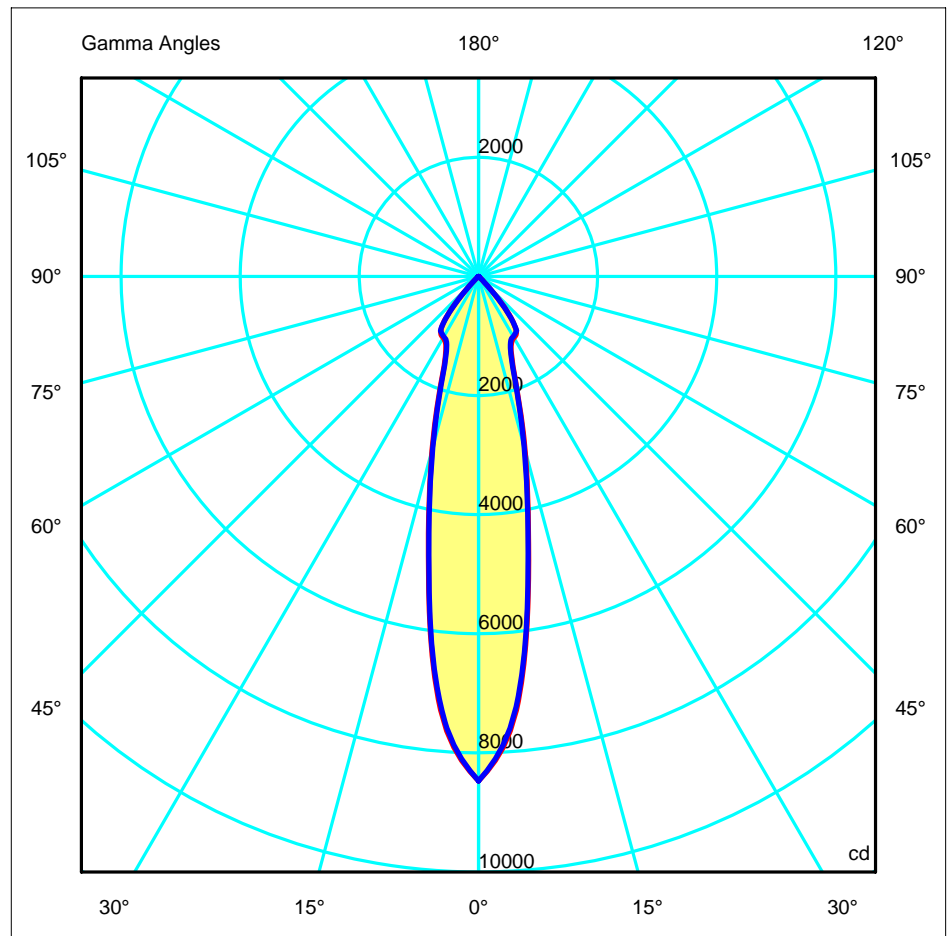
Luminaire Lamps						
Line	Code	Name	Flux [lm]	Pow. [W]	Q.ty	
- LEDS C4 LEDS	L4048 53.2W 90 3000K	Lámpara leds 53.2W 3000K	2964.30	53.00	1	
C.I.E.	94 100 100 100 100	D DIN 5040				
F UTE	1.00 A	B NBN				
		A60				
		BZ 1				

Diam=175mm Incasso



C Halfplanes  
 180.0 — 0.0  
 270.0 — 90.0

ULOR 0.00 %  
 DLOR 100.00 %  
 RN 0.00 %



<b>Luminaire</b>		<b>Measur.</b>		<b>Lamp</b>	
Code	90-4048	Code	90-3295-14-37	Code	L4048 53.2W 90 3000K
Name	CARDEX C LED 53.2W 930 24°	Name	Downlight led 21.8W 24° 4000K	Number	1
Line	- LEDS C4 LEDS	Date	29-04-2014	Position	Universal
Efficiency	100.00%	Coordinate system	CG	Total Flux	2964.30 lm
Maximum value	8469.44 cd	Position	C=0.00 G=0.00	Double Symmetrical	

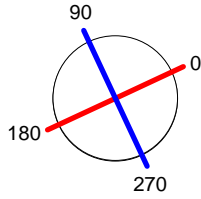
**Luminous Intensity Table cd      Table 1/1**

	C 0.00	C 15.00	C 30.00	C 45.00	C 60.00	C 75.00	C 90.00
G 0.0	8469.44	8469.44	8469.44	8469.44	8469.44	8469.44	8469.44
G 5.0	7303.36	7278.32	7515.18	7308.58	7257.13	7317.11	7252.64
G 10.0	4843.86	4790.77	4998.58	4873.63	4842.22	4874.34	4804.02
G 15.0	3012.02	2906.33	3108.57	2930.02	2926.71	3002.84	2960.98
G 20.0	1768.64	1732.38	1778.65	1757.20	1726.59	1758.62	1737.15
G 25.0	1294.97	1272.85	1292.85	1294.67	1268.53	1296.86	1264.58
G 30.0	1187.13	1175.32	1183.27	1185.49	1169.18	1182.90	1167.58
G 35.0	1100.17	1104.90	1117.95	1089.06	1105.14	1112.55	1114.02
G 40.0	689.99	645.50	769.52	661.85	691.93	688.65	663.69
G 45.0	147.20	114.82	155.52	135.83	125.17	139.22	124.75
G 50.0	43.68	39.19	45.54	42.75	41.35	43.93	42.74
G 55.0	17.95	17.65	19.83	19.47	18.51	20.13	18.88
G 60.0	8.17	8.00	8.92	8.59	8.25	8.84	8.12
G 65.0	5.08	4.89	5.32	5.06	4.77	4.76	4.39
G 70.0	4.10	4.05	4.12	3.97	3.78	3.65	3.48
G 75.0	4.34	4.47	4.34	4.27	4.33	4.02	4.19
G 80.0	2.19	1.66	2.22	2.16	1.77	2.16	1.80
G 85.0	0.56	0.51	0.56	0.56	0.49	0.56	0.52
G 90.0	0.42	0.41	0.42	0.41	0.42	0.42	0.41

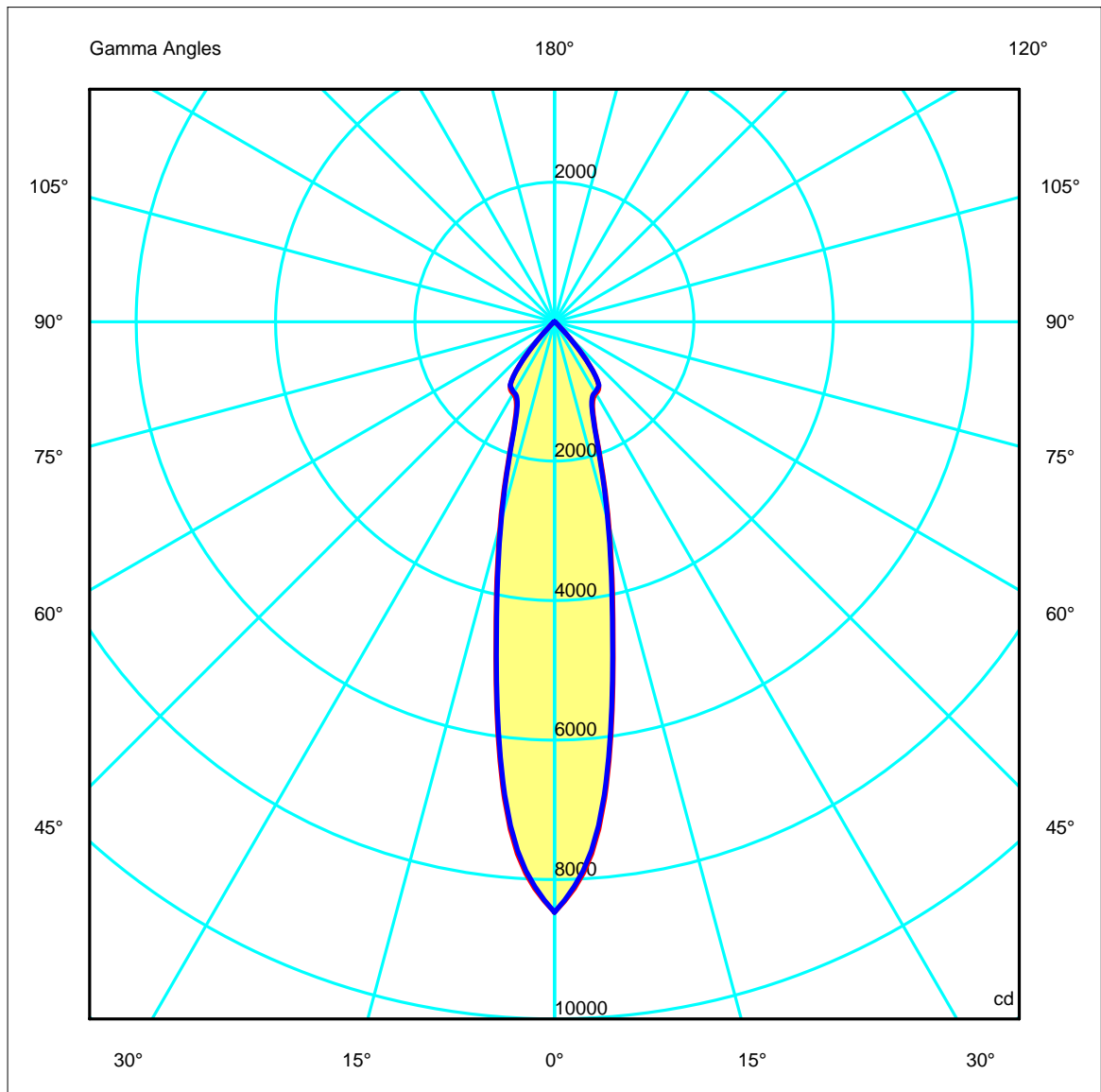
<b>Luminaire</b>		<b>Measur.</b>		<b>Lamp</b>	
Code	90-4048	Code	90-3295-14-37	Code	L4048 53.2W 90 3000K
Name	CARDEX C LED 53.2W 930 24°	Name	Downlight led 21.8W 24° 4000K	Number	1
Line	- LEDS C4 LEDS	Date	29-04-2014	Position	Universal
Efficiency	100.00%	Coordinate system	CG	Total Flux	2964.30 lm
Maximum value	8469.44 cd	Position	C=0.00 G=0.00	Double Symmetrical	

Diam=175mm Incasso

C Halfplanes

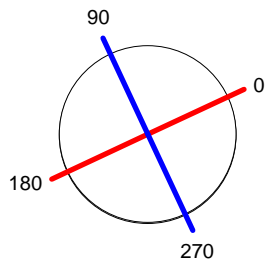


180.0 ————— 0.0  
 270.0 ————— 90.0



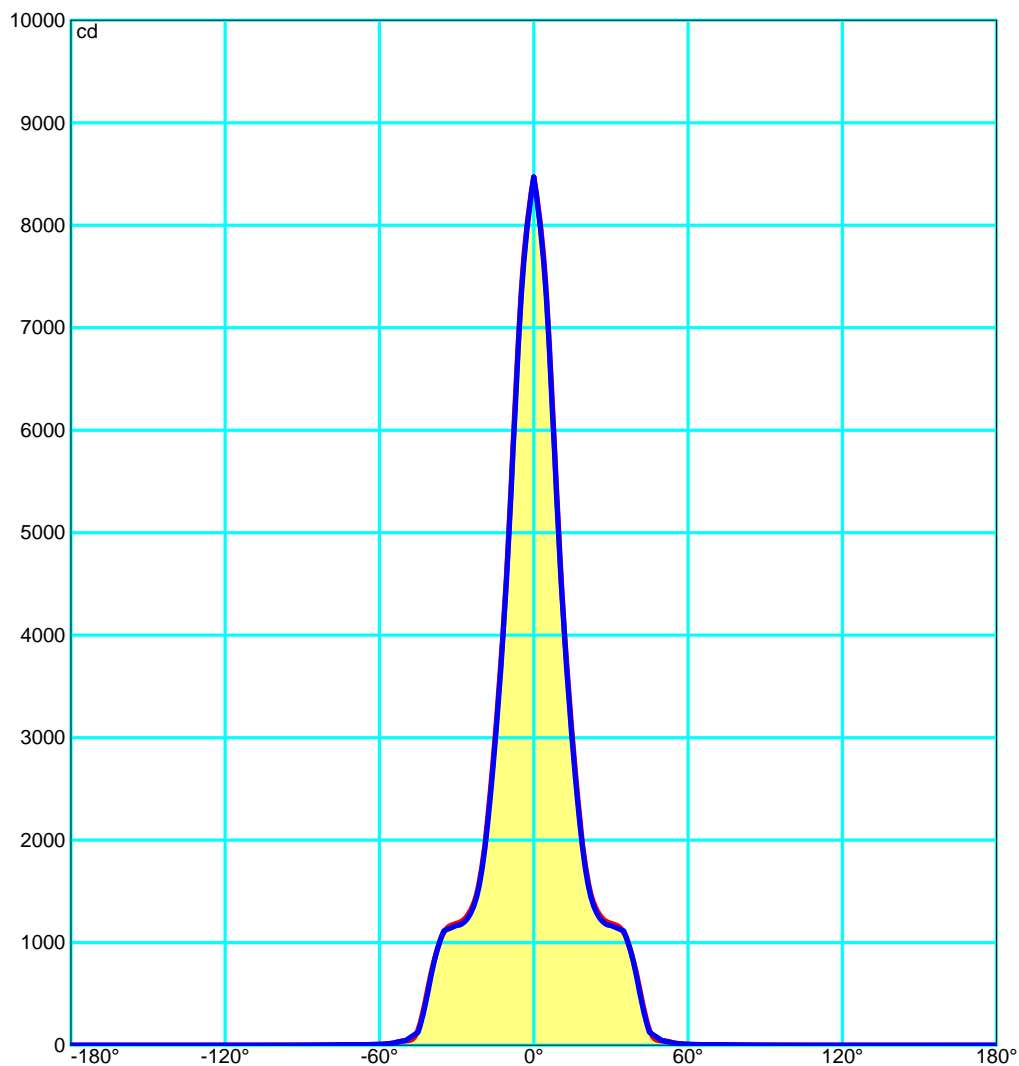
Luminaire		Measur.		Lamp	
Code	90-4048	Code	90-3295-14-37	Code	L4048 53.2W 90 3000K
Name	CARDEX C LED 53.2W 930 24°	Name	Downlight led 21.8W 24° 4000K	Number	1
Line	- LEDS C4 LEDS	Date	29-04-2014	Position	Universal
Efficiency	100.00%	Coordinate system	CG	Total Flux	2964.30 lm
Maximum value	8469.44 cd	Position	C=0.00 G=0.00	Double Symmetrical	

Diam=175mm Incasso



C Halfplanes

180.0 ———— 0.0  
270.0 ———— 90.0



<b>Luminaire</b>		<b>Measur.</b>		<b>Lamp</b>	
Code	90-4048	Code	90-3295-14-37	Code	L4048 53.2W 90 3000K
Name	CARDEX C LED 53.2W 930 24°	Name	Downlight led 21.8W 24° 4000K	Number	1
Line	- LEDS C4 LEDS	Date	29-04-2014	Position	Universal
Efficiency	100.00%	Coordinate system	CG	Total Flux	2964.30 lm
Maximum value	8469.44 cd	Position	C=0.00 G=0.00	Double Symmetrical	

**UGR**  
S = 0.250

Reflectancies										
Ceiling/Cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
WorkingPlane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
RoomDimensions	ViewedCrosswise					ViewedEndwise				
x=2H y=2H	20.4	21.1	20.7	21.3	21.5	20.4	21.1	20.7	21.3	21.5
x=2H y=3H	20.3	21.0	20.6	21.2	21.4	20.3	20.9	20.6	21.2	21.4
x=2H y=4H	20.2	20.8	20.5	21.1	21.3	20.2	20.8	20.5	21.1	21.3
x=2H y=6H	20.2	20.7	20.5	21.0	21.3	20.2	20.7	20.5	21.0	21.3
x=2H y=8H	20.1	20.7	20.5	21.0	21.2	20.1	20.7	20.5	20.9	21.2
x=2H y=12H	20.1	20.6	20.5	20.9	21.2	20.1	20.6	20.5	20.9	21.2
x=4H y=2H	20.2	20.8	20.5	21.1	21.3	20.2	20.8	20.5	21.1	21.3
x=4H y=3H	20.1	20.6	20.5	20.9	21.2	20.1	20.6	20.5	20.9	21.2
x=4H y=4H	20.0	20.5	20.4	20.8	21.1	20.0	20.5	20.4	20.8	21.1
x=4H y=6H	20.0	20.3	20.4	20.7	21.1	20.0	20.3	20.4	20.7	21.1
x=4H y=8H	19.9	20.2	20.3	20.6	21.0	19.9	20.2	20.3	20.6	21.0
x=4H y=12H	19.9	20.2	20.3	20.6	21.0	19.9	20.2	20.3	20.6	21.0
x=8H y=4H	19.9	20.2	20.3	20.6	21.0	19.9	20.2	20.3	20.6	21.0
x=8H y=6H	19.9	20.1	20.3	20.5	21.0	19.9	20.1	20.3	20.5	21.0
x=8H y=8H	19.8	20.0	20.3	20.4	20.9	19.8	20.0	20.3	20.4	20.9
x=8H y=12H	19.8	19.9	20.2	20.4	20.9	19.8	19.9	20.2	20.4	20.9
x=12H y=4H	19.9	20.2	20.3	20.6	21.0	19.9	20.2	20.3	20.6	21.0
x=12H y=6H	19.8	20.0	20.3	20.4	20.9	19.8	20.0	20.3	20.4	20.9
x=12H y=8H	19.8	19.9	20.2	20.4	20.9	19.8	19.9	20.2	20.4	20.9

<b>Luminaire</b>		<b>Measur.</b>		<b>Lamp</b>	
Code	90-4048	Code	90-3295-14-37	Code	L4048 53.2W 90 3000K
Name	CARDEX C LED 53.2W 930 24°	Name	Downlight led 21.8W 24° 4000K	Number	1
Line	- LEDS C4 LEDS	Date	29-04-2014	Position	Universal
Efficiency	100.00%	Coordinate system	CG	Total Flux	2964.30 lm
Maximum value	8469.44 cd	Position	C=0.00 G=0.00	Double Symmetrical	

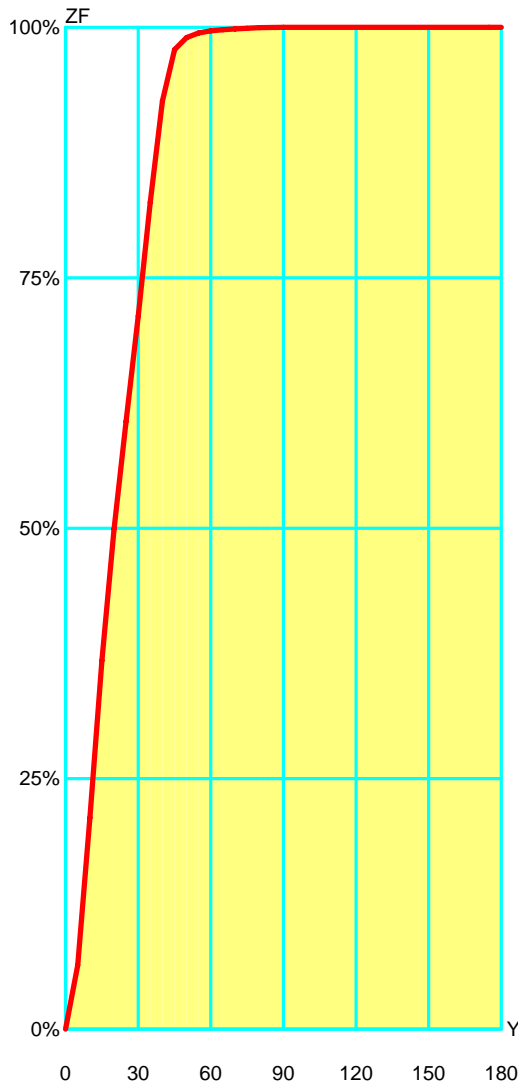
Total Flux=2964.30 Luminaire Flux=2964.28

RI	0.60	0.80	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	10.00	20.00
DRR	0.69	0.74	0.79	0.83	0.86	0.91	0.94	0.96	0.98	0.99	1.01	1.02
RC	-	-	-	-	-	-	-	-	-	-	-	-

Zonal Flux per 1000 Lumen																		
Y°	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
ZF(Y)	211	499	712	926	990	997	998	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

CIE Flux Codes  
94 100 100 100 100

C.I.E.	-/-/-/-/-/-/-/-/-/-	LOR	99.99922 %
D DIN 5040	A60	ULOR	0.00000 %
F UTE	1.00 A	DLOR	99.99922 %
B NBN	BZ 1	UFF	0.00000 %
RN	0.00000 %	DFF	100.00000 %
BLF	1.0	FFR	0.00000 %



Gamma °	Zonal Flux			
	Flux	Sum lm	Flux [%]	Sum [%]
0°	0.00	0.00	0.00%	0.00%
5°	63.70	63.70	6.37%	6.37%
10°	147.14	210.84	14.71%	21.08%
15°	156.97	367.81	15.70%	36.78%
20°	131.45	499.26	13.14%	49.93%
25°	107.39	606.65	10.74%	60.67%
30°	105.16	711.81	10.52%	71.18%
35°	113.51	825.32	11.35%	82.53%
40°	101.04	926.36	10.10%	92.64%
45°	51.44	977.80	5.14%	97.78%
50°	12.07	989.87	1.21%	98.99%
55°	4.52	994.39	0.45%	99.44%
60°	2.14	996.54	0.21%	99.65%
65°	1.10	997.63	0.11%	99.76%
70°	0.75	998.39	0.08%	99.84%
75°	0.72	999.11	0.07%	99.91%
80°	0.57	999.67	0.06%	99.97%
85°	0.23	999.90	0.02%	99.99%
90°	0.09	999.99	0.01%	100.00%
95°	0.00	999.99	0.00%	100.00%
100°	0.00	999.99	0.00%	100.00%
105°	0.00	999.99	0.00%	100.00%
110°	0.00	999.99	0.00%	100.00%
115°	0.00	999.99	0.00%	100.00%
120°	0.00	999.99	0.00%	100.00%
125°	0.00	999.99	0.00%	100.00%
130°	0.00	999.99	0.00%	100.00%
135°	0.00	999.99	0.00%	100.00%
140°	0.00	999.99	0.00%	100.00%
145°	0.00	999.99	0.00%	100.00%
150°	0.00	999.99	0.00%	100.00%
155°	0.00	999.99	0.00%	100.00%
160°	0.00	999.99	0.00%	100.00%
165°	0.00	999.99	0.00%	100.00%
170°	0.00	999.99	0.00%	100.00%
175°	0.00	999.99	0.00%	100.00%
180°	0.00	999.99	0.00%	100.00%

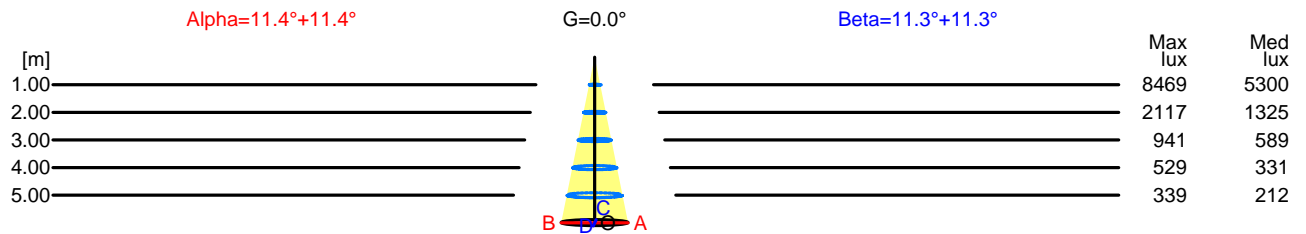


<b>Luminaire</b>		<b>Measur.</b>		<b>Lamp</b>	
Code	90-4048	Code	90-3295-14-37	Code	L4048 53.2W 90 3000K
Name	CARDEX C LED 53.2W 930 24°	Name	Downlight led 21.8W 24° 4000K	Number	1
Line	- LEDS C4 LEDS	Date	29-04-2014	Position	Universal
Efficiency	100.00%	Coordinate system	CG	Total Flux	2964.30 lm
Maximum value	8469.44 cd	Position	C=0.00 G=0.00	Double Symmetrical	


Width at 50.00 % of Max Intensity

H[m]	1.00	2.00	3.00	4.00	5.00	H[m]	1.00	2.00	3.00	4.00	5.00
OA	0.20	0.40	0.61	0.81	1.01	OC	0.20	0.40	0.60	0.80	1.00
OB	0.20	0.40	0.61	0.81	1.01	OD	0.20	0.40	0.60	0.80	1.00

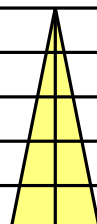
	Luminous Intensities [ cd]									
	0	5	15	25	35	45	55	65	75	85
OA	8469.44	7303.36	3012.02	1294.97	1100.17	147.20	17.95	5.08	4.34	0.56
OB	8469.44	7303.36	3012.02	1294.97	1100.17	147.20	17.95	5.08	4.34	0.56
OC	8469.44	7252.64	2960.98	1264.58	1114.02	124.75	18.88	4.39	4.19	0.52
OD	8469.44	7252.64	2960.98	1264.58	1114.02	124.75	18.88	4.39	4.19	0.52



H[m]	D[m]	Max lux	Med lux	Alpha=11.4°+11.4°	G=0.0
1.00	0.40	8469	5300		
2.00	0.81	2117	1325		
3.00	1.21	941	589		
4.00	1.62	529	331		
5.00	2.02	339	212		



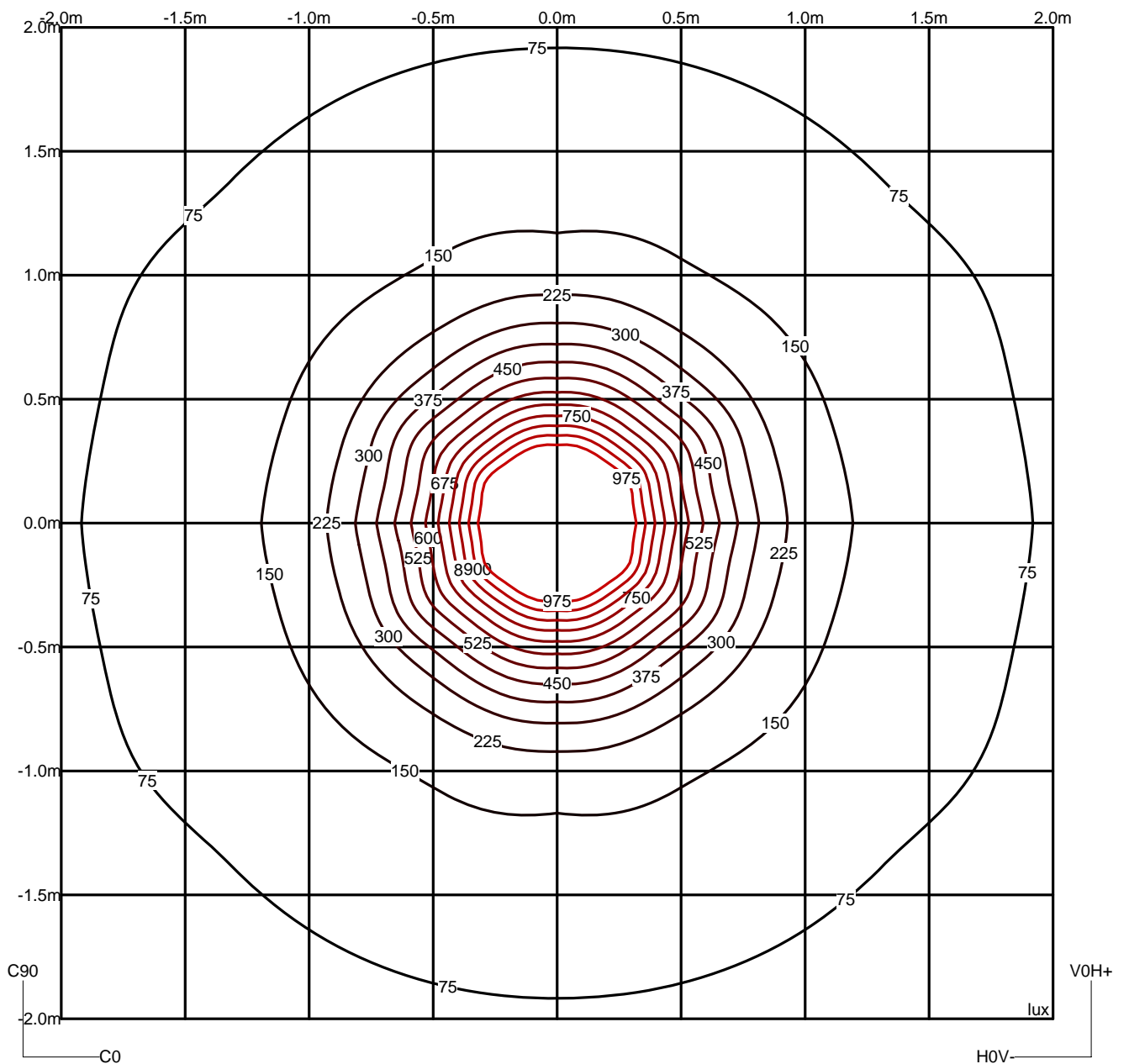
H[m]	D[m]	Max lux	Med lux	Beta=11.3°+11.3°	G=0.0
1.00	0.40	8469	5300		
2.00	0.80	2117	1325		
3.00	1.20	941	589		
4.00	1.60	529	331		
5.00	2.00	339	212		



Luminaire		Measuram.		Lamp	
Code	90-4048	Code	90-3295-14-37	Code	L4048 53.2W 90 3000K
Name	CARDEX C LED 53.2W 930 24°	Name	Downlight led 21.8W 24° 4000K	Number	1
Line	- LEDS C4 LEDS	Date	29-04-2014	Position	Universal
Efficiency	100.00%	Coordinate system	CG	Total Flux	2964.30 lm
Maximum value	8469.44 cd	Position	C=0.00 G=0.00	Double Symmetrical	

Isolux (Floor)

Luminaire position X=0.00m Y=0.00m Z=2.50m



<b>Luminaire</b>		<b>Measur.</b>		<b>Lamp</b>	
Code	90-4048	Code	90-3295-14-37	Code	L4048 53.2W 90 3000K
Name	CARDEX C LED 53.2W 930 24°	Name	Downlight led 21.8W 24° 4000K	Number	1
Line	- LEDS C4 LEDS	Date	29-04-2014	Position	Universal
Efficiency	100.00%	Coordinate system	CG	Total Flux	2964.30 lm
Maximum value	8469.44 cd	Position	C=0.00 G=0.00	Double Symmetrical	

Utilizations CIE

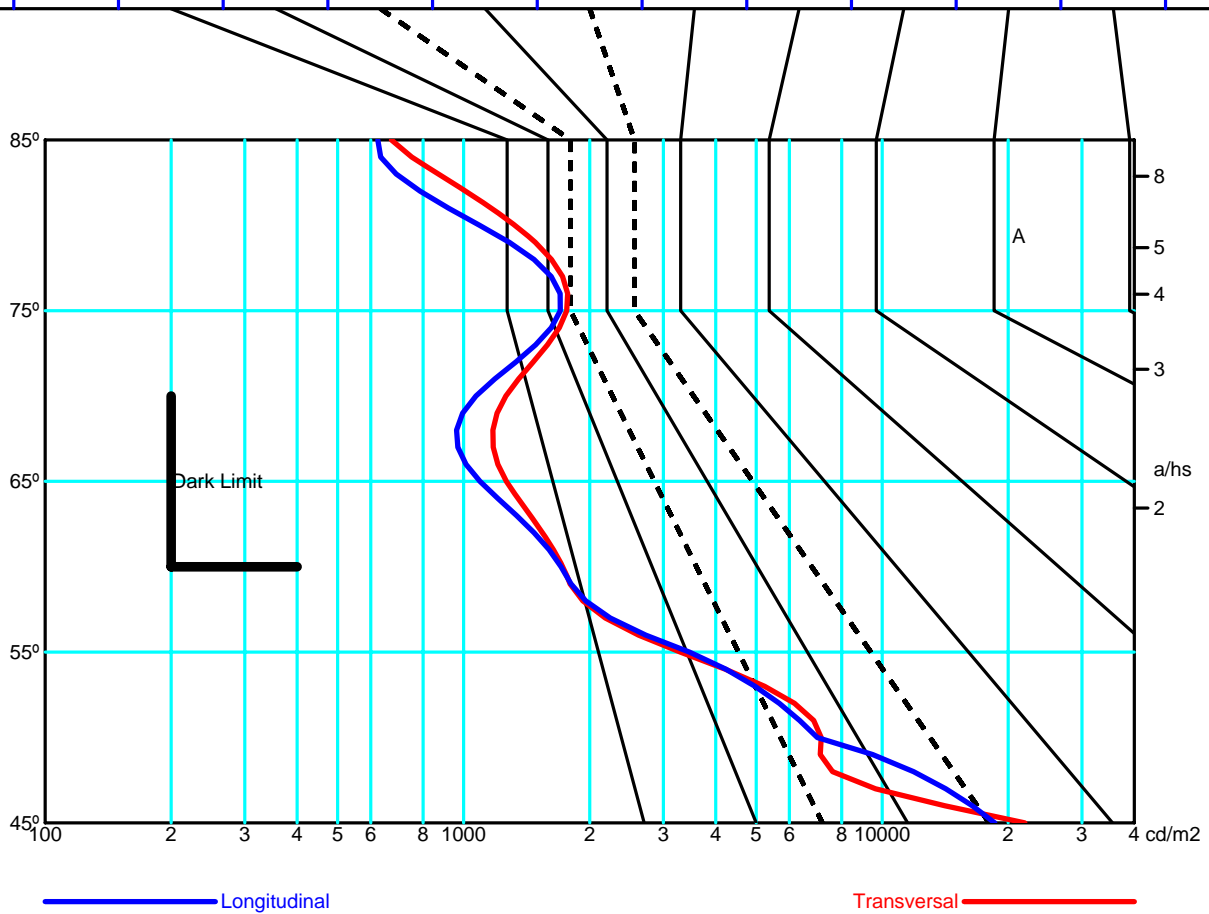
Mounting	Direct	Normalization										Suspension Ratio			Standard CIE Settings									
		8873	8773	8871	8771	7773	7771	7753	7553	7751	7551	7731	7331	7711	7111	5551	5531	5331	5511	5111	3331	3311	1111	0000
Ceiling																								
K		8873	8773	8871	8771	7773	7771	7753	7553	7751	7551	7731	7331	7711	7111	5551	5531	5331	5511	5111	3331	3311	1111	0000
0.60	166	149	98	88	142	84	95	81	53	46	33	25	18	12	43	26	23	14	12	22	12	11	0	0
0.80	199	182	105	97	173	93	124	109	63	55	41	33	25	18	52	34	31	21	18	30	18	16	0	0
1.00	222	206	106	99	196	95	148	132	68	61	48	39	32	25	57	41	37	28	24	35	24	22	0	0
1.25	244	230	107	101	219	97	173	158	73	67	55	46	40	32	63	47	44	35	30	42	31	28	0	0
1.50	261	248	107	102	237	98	194	178	77	71	60	52	46	38	67	53	50	41	36	47	37	34	0	0
2.00	284	273	103	100	261	97	225	210	81	76	67	61	56	48	72	61	58	51	46	55	47	43	0	0
2.50	300	290	101	98	277	95	247	233	83	79	73	67	64	56	75	66	64	59	54	61	54	51	0	0
3.00	311	303	99	97	289	94	263	251	85	81	77	71	69	63	78	71	68	65	60	66	60	57	0	0
4.00	328	321	99	97	307	95	287	276	88	86	83	78	77	71	82	77	75	73	69	73	69	65	0	0
5.00	339	333	99	98	319	95	302	293	91	89	86	83	83	77	85	82	80	78	75	77	74	71	0	0
10.00	363	360	100	99	345	97	337	332	96	95	95	93	95	91	92	92	91	91	89	88	88	85	0	0
20.00	376	374	101	100	360	99	357	354	100	99	100	99	101	99	97	97	97	98	97	95	95	93	0	0
Wall																								
K		8873	8773	8871	8771	7773	7771	7753	7553	7751	7551	7731	7331	7711	7111	5551	5531	5331	5511	5111	3331	3311	1111	0000
0.60	296	287	209	204	282	202	222	215	163	160	137	133	118	116	158	134	133	116	115	132	115	115	93	0
0.80	328	318	221	217	311	213	253	245	178	174	153	149	134	131	171	149	147	132	130	146	130	129	103	0
1.00	343	333	218	214	323	210	270	260	179	176	157	152	139	135	172	152	150	136	134	149	134	133	103	0
1.25	358	348	216	213	337	208	287	277	182	178	162	157	145	141	174	156	154	142	140	152	139	137	104	0
1.50	369	359	214	210	345	206	300	290	183	179	164	160	149	145	174	158	156	145	143	153	141	139	103	0
2.00	369	360	193	191	344	186	306	296	169	166	155	150	143	138	160	148	146	137	135	142	133	129	90	0
2.50	362	355	173	171	336	166	305	295	153	151	142	138	133	128	144	134	133	126	124	128	121	116	75	0
3.00	352	345	153	151	325	146	298	289	136	134	127	123	120	115	126	119	117	113	110	112	106	101	58	0
4.00	346	341	134	133	318	128	297	289	121	119	115	111	109	104	111	106	104	101	98	97	94	87	41	0
5.00	339	334	119	118	310	112	293	286	107	106	103	100	99	94	97	93	92	90	87	84	82	74	27	0
10.00	288	285	49	49	257	43	249	245	42	41	41	39	40	37	31	30	29	30	28	20	20	11	0	0
20.00	185	183	0	0	153	0	151	148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Working Pl.																								
K		8873	8773	8871	8771	7773	7771	7753	7553	7751	7551	7731	7331	7711	7111	5551	5531	5331	5511	5111	3331	3311	1111	0000
0.60	880	870	821	815	864	812	791	785	762	758	728	725	704	702	756	725	724	702	701	723	701	700	692	0
0.80	949	938	874	868	928	864	856	847	817	812	783	779	758	755	808	779	777	756	754	775	754	752	743	0
1.00	1000	996	919	913	983	908	916	905	866	862	836	830	812	807	856	829	827	808	806	825	805	803	794	0
1.25	1000	1000	953	948	1000	942	967	954	905	900	877	871	855	849	894	869	867	850	847	863	845	842	834	0
1.50	1000	1000	977	972	1000	965	1000	991	933	928	907	901	886	880	920	898	896	880	877	891	875	870	862	0
2.00	1000	1000	1000	1000	1000	1000	1000	1000	977	972	957	950	940	933	962	946	943	931	927	936	924	918	910	0
2.50	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	989	982	975	968	989	976	973	964	960	965	955	947	940	0
3.00	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	993	1000	997	995	988	984	985	978	968	961
4.00	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	998	986	979
5.00	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	996	989
10.00	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
20.00	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

LM53 SHR C0-C180: 0.380 SHR C90-C270: 0.380 SHR Square: 0.433

<b>Luminaire</b>		<b>Measur.</b>		<b>Lamp</b>	
Code	90-4048	Code	90-3295-14-37	Code	L4048 53.2W 90 3000K
Name	CARDEX C LED 53.2W 930 24°	Name	Downlight led 21.8W 24° 4000K	Number	1
Line	- LEDS C4 LEDS	Date	29-04-2014	Position	Universal
Efficiency	100.00%	Coordinate system	CG	Total Flux	2964.30 lm
Maximum value	8469.44 cd	Position	C=0.00 G=0.00	Double Symmetrical	

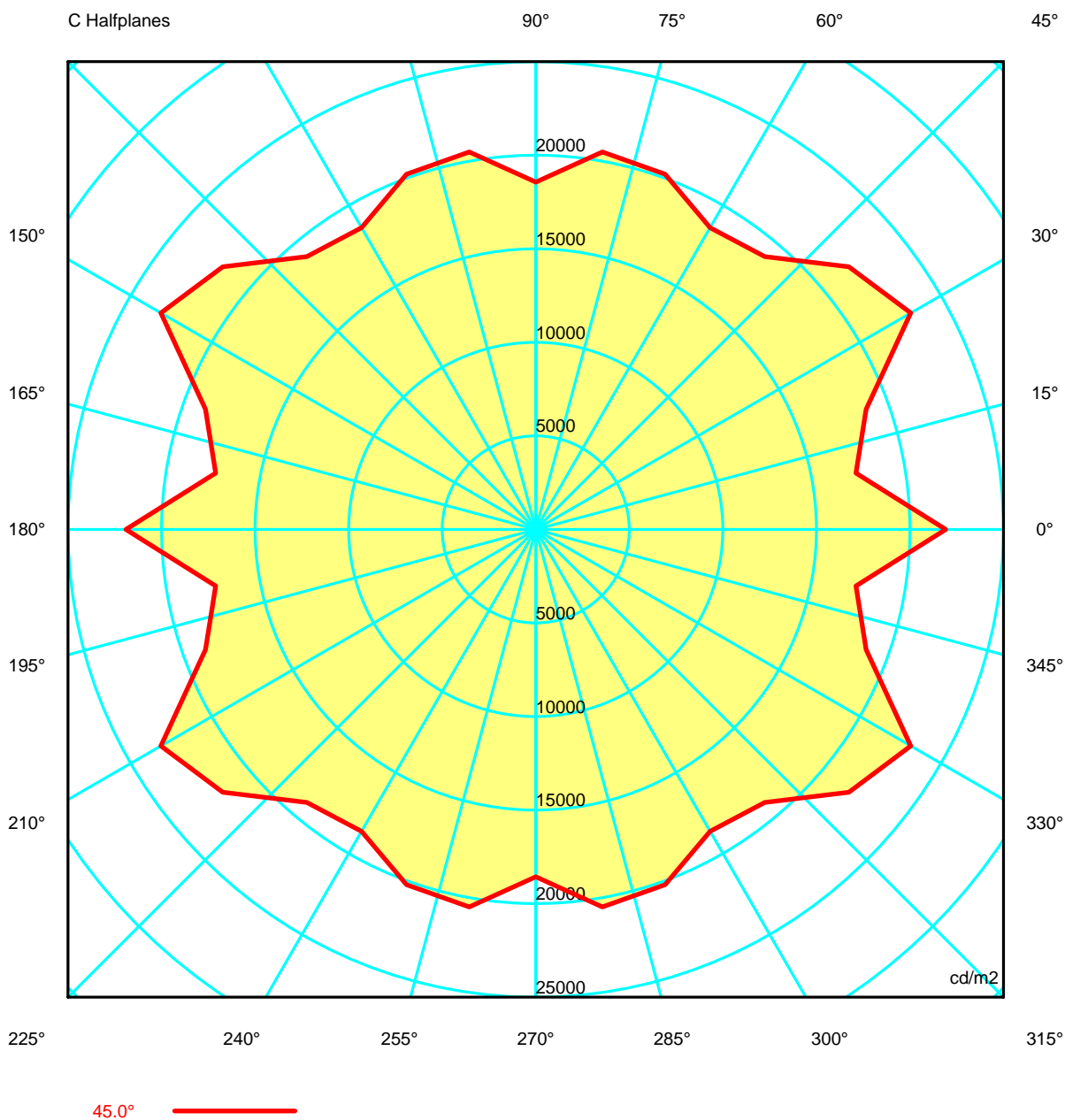
Average Luminance [cd/m <sup>2</sup> ]										
0.0°	45°	50°	55°	60°	65°	70°	75°	80°	85°	---
90.0°	21906	7151	3294	1720	1265	1262	1763	1324	672	---
	18564	6997	3464	1709	1094	1069	1702	1090	624	---

Flush mounted or longitudinal view												
		Illumination(lx)										
A	A	2000	1000	750	500		<300					1.15
B	1		2000	1500	1000	750	500	<300				1.5
C					2000		1000	500	<300			1.85
D	2						2000	1000	500	<300		2.2
E	3							2000	1000	500	<300	2.55



<b>Luminaire</b>		<b>Measur.</b>		<b>Lamp</b>	
Code	90-4048	Code	90-3295-14-37	Code	L4048 53.2W 90 3000K
Name	CARDEX C LED 53.2W 930 24°	Name	Downlight led 21.8W 24° 4000K	Number	1
Line	- LEDS C4 LEDS	Date	29-04-2014	Position	Universal
Efficiency	100.00%	Coordinate system	CG	Total Flux	2964.30 lm
Maximum value	8469.44 cd	Position	C=0.00 G=0.00	Double Symmetrical	

Luminance



<b>Luminaire</b>		<b>Measur.</b>		<b>Lamp</b>	
Code	90-4048	Code	90-3295-14-37	Code	L4048 53.2W 90 3000K
Name	CARDEX C LED 53.2W 930 24°	Name	Downlight led 21.8W 24° 4000K	Number	1
Line	- LEDS C4 LEDS	Date	29-04-2014	Position	Universal

Efficiency	100.00%	Coordinate system	CG	Total Flux	2964.30 lm
Maximum value	8469.44 cd	Position	C=0.00 G=0.00	Double Symmetrical	

**Luminance cd/m2 Table 1/3**

	C 0.00	C 10.00	C 20.00	C 30.00	C 40.00	C 50.00	C 60.00	C 70.00	C 80.00	C 90.00	C 100.00	C 110.00	C 120.00
G 0.0	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71
G 5.0	771467.33	765625.55	777940.25	793842.51	781296.62	766773.35	766584.39	771625.67	772048.36	766109.73	772048.36	771625.67	766584.39
G 10.0	517582.29	510034.92	519334.34	534114.94	526994.52	517312.60	517407.37	520486.13	519449.78	513325.72	519449.78	520486.13	517407.37
G 15.0	328135.62	315913.79	324026.47	338653.96	327170.03	315688.06	318842.12	325374.34	326890.00	322574.76	326890.00	325374.34	318842.12
G 20.0	198057.69	194256.00	195396.66	199179.37	198414.79	195017.16	193349.46	195822.83	196904.68	194532.32	196904.68	195822.83	193349.46
G 25.0	150357.35	148141.51	148220.08	150111.14	150894.57	149051.13	147287.36	149622.00	150210.37	146827.83	150210.37	149622.00	147287.36
G 30.0	144247.21	143058.52	142933.66	143778.29	144322.32	143290.99	142065.92	143209.58	143573.90	141871.60	143573.90	143209.58	142065.92
G 35.0	141330.63	141734.91	142822.15	143614.15	140954.36	140031.90	141968.74	142842.33	142977.90	143108.90	142977.90	142842.33	141968.74
G 40.0	94782.54	87422.84	94719.33	105707.05	96300.04	92294.56	95048.64	95702.50	93423.03	91169.10	93423.03	95702.50	95048.64
G 45.0	21905.89	17375.17	18785.52	23143.86	21846.77	19042.16	18627.50	20206.89	20487.36	18564.48	20487.36	20206.89	18627.50
G 50.0	7151.35	6445.13	6712.14	7456.10	7260.19	6814.15	6769.22	7072.51	7200.13	6997.12	7200.13	7072.51	6769.22
G 55.0	3293.55	3201.47	3358.95	3637.36	3649.78	3476.28	3396.69	3608.20	3680.97	3463.84	3680.97	3608.20	3396.69
G 60.0	1720.43	1666.46	1744.11	1876.67	1854.76	1761.90	1736.37	1830.09	1841.47	1708.94	1841.47	1830.09	1736.37
G 65.0	1264.82	1212.67	1249.99	1324.49	1295.18	1225.47	1187.59	1186.45	1165.70	1094.12	1165.70	1186.45	1187.59
G 70.0	1261.78	1244.89	1252.44	1266.31	1242.42	1200.67	1163.59	1135.76	1105.86	1069.50	1105.86	1135.76	1163.59
G 75.0	1762.76	1808.50	1806.66	1763.33	1733.52	1743.92	1759.81	1671.89	1635.25	1702.16	1635.25	1671.89	1759.81
G 80.0	1324.20	1040.61	1086.38	1346.73	1379.96	1199.84	1073.43	1238.41	1294.82	1090.40	1294.82	1238.41	1073.43
G 85.0	672.16	620.09	623.38	672.20	696.10	644.84	588.45	645.50	677.26	623.51	677.26	645.50	588.45
G 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

<b>Luminaire</b>		<b>Measur.</b>		<b>Lamp</b>	
Code	90-4048	Code	90-3295-14-37	Code	L4048 53.2W 90 3000K
Name	CARDEX C LED 53.2W 930 24°	Name	Downlight led 21.8W 24° 4000K	Number	1
Line	- LEDS C4 LEDS	Date	29-04-2014	Position	Universal

Efficiency	100.00%	Coordinate system	CG	Total Flux	2964.30 lm
Maximum value	8469.44 cd	Position	C=0.00 G=0.00	Double Symmetrical	

**Luminance cd/m2 Table 2/3**

	C 130.00	C 140.00	C 150.00	C 160.00	C 170.00	C 180.00	C 190.00	C 200.00	C 210.00	C 220.00	C 230.00	C 240.00	C 250.00
G 0.0	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71
G 5.0	766773.35	781296.62	793842.51	777940.25	765625.55	771467.33	765625.55	777940.25	793842.51	781296.62	766773.35	766584.39	771625.67
G 10.0	517312.60	526994.52	534114.94	519334.34	510034.92	517582.29	510034.92	519334.34	534114.94	526994.52	517312.60	517407.37	520486.13
G 15.0	315688.06	327170.03	338653.96	324026.47	315913.79	328135.62	315913.79	324026.47	338653.96	327170.03	315688.06	318842.12	325374.34
G 20.0	195017.16	198414.79	199179.37	195396.66	194256.00	198057.69	194256.00	195396.66	199179.37	198414.79	195017.16	193349.46	195822.83
G 25.0	149051.13	150894.57	150111.14	148220.08	148141.51	150357.35	148141.51	148220.08	150111.14	150894.57	149051.13	147287.36	149622.00
G 30.0	143290.99	144322.32	143778.29	142933.66	143058.52	144247.21	143058.52	142933.66	143778.29	144322.32	143290.99	142065.92	143209.58
G 35.0	140031.90	140954.36	143614.15	142822.15	141734.91	141330.63	141734.91	142822.15	143614.15	140954.36	140031.90	141968.74	142842.33
G 40.0	92294.56	96300.04	105707.05	94719.33	87422.84	94782.54	87422.84	94719.33	105707.05	96300.04	92294.56	95048.64	95702.50
G 45.0	19042.16	21846.77	23143.86	18785.52	17375.17	21905.89	17375.17	18785.52	23143.86	21846.77	19042.16	18627.50	20206.89
G 50.0	6814.15	7260.19	7456.10	6712.14	6445.13	7151.35	6445.13	6712.14	7456.10	7260.19	6814.15	6769.22	7072.51
G 55.0	3476.28	3649.78	3637.36	3358.95	3201.47	3293.55	3201.47	3358.95	3637.36	3649.78	3476.28	3396.69	3608.20
G 60.0	1761.90	1854.76	1876.67	1744.11	1666.46	1720.43	1666.46	1744.11	1876.67	1854.76	1761.90	1736.37	1830.09
G 65.0	1225.47	1295.18	1324.49	1249.99	1212.67	1264.82	1212.67	1249.99	1324.49	1295.18	1225.47	1187.59	1186.45
G 70.0	1200.67	1242.42	1266.31	1252.44	1244.89	1261.78	1244.89	1252.44	1266.31	1242.42	1200.67	1163.59	1135.76
G 75.0	1743.92	1733.52	1763.33	1806.66	1808.50	1762.76	1808.50	1806.66	1763.33	1733.52	1743.92	1759.81	1671.89
G 80.0	1199.84	1379.96	1346.73	1086.38	1040.61	1324.20	1040.61	1086.38	1346.73	1379.96	1199.84	1073.43	1238.41
G 85.0	644.84	696.10	672.20	623.38	620.09	672.16	620.09	623.38	672.20	696.10	644.84	588.45	645.50
G 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

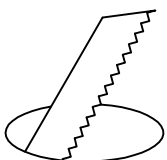
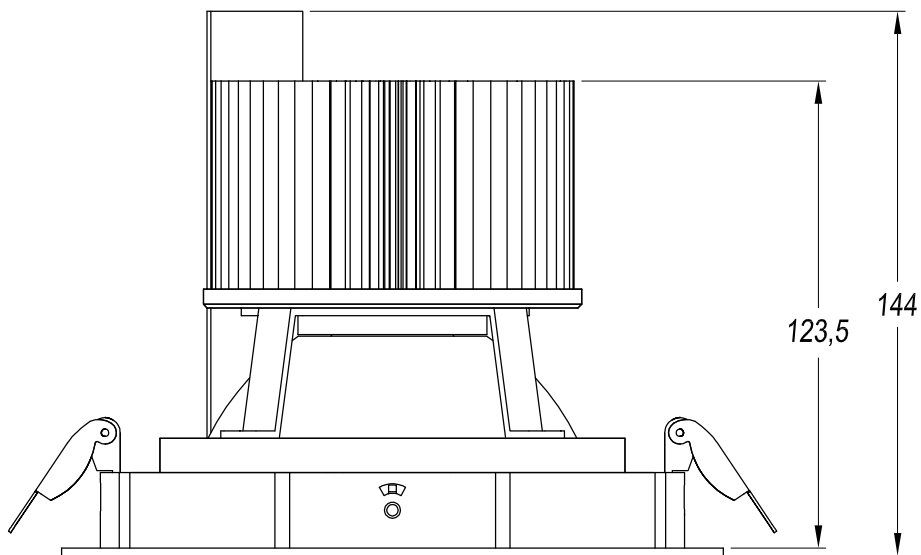
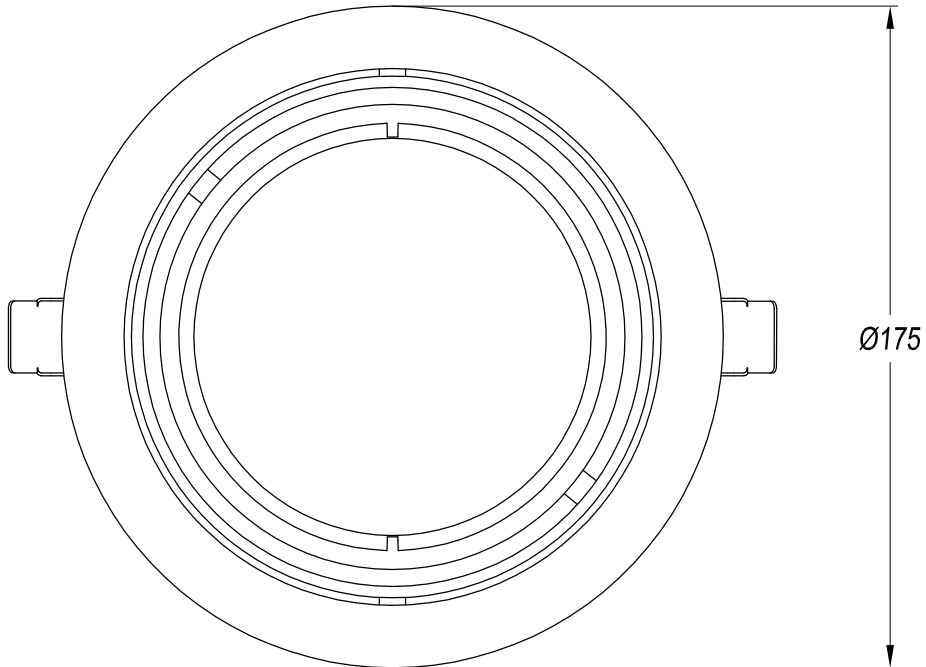
<b>Luminaire</b>		<b>Measur.</b>		<b>Lamp</b>	
Code	90-4048	Code	90-3295-14-37	Code	L4048 53.2W 90 3000K
Name	CARDEX C LED 53.2W 930 24°	Name	Downlight led 21.8W 24° 4000K	Number	1
Line	- LEDS C4 LEDS	Date	29-04-2014	Position	Universal

Efficiency	100.00%	Coordinate system	CG	Total Flux	2964.30 lm
Maximum value	8469.44 cd	Position	C=0.00 G=0.00	Double Symmetrical	

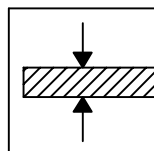
**Luminance cd/m2 Table 3/3**

	C 260.00	C 270.00	C 280.00	C 290.00	C 300.00	C 310.00	C 320.00	C 330.00	C 340.00	C 350.00
G 0.0	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71	891238.71
G 5.0	772048.36	766109.73	772048.36	771625.67	766584.39	766773.35	781296.62	793842.51	777940.25	765625.55
G 10.0	519449.78	513325.72	519449.78	520486.13	517407.37	517312.60	526994.52	534114.94	519334.34	510034.92
G 15.0	326890.00	322574.76	326890.00	325374.34	318842.12	315688.06	327170.03	338653.96	324026.47	315913.79
G 20.0	196904.68	194532.32	196904.68	195822.83	193349.46	195017.16	198414.79	199179.37	195396.66	194256.00
G 25.0	150210.37	146827.83	150210.37	149622.00	147287.36	149051.13	150894.57	150111.14	148220.08	148141.51
G 30.0	143573.90	141871.60	143573.90	143209.58	142065.92	143290.99	144322.32	143778.29	142933.66	143058.52
G 35.0	142977.90	143108.90	142977.90	142842.33	141968.74	140031.90	140954.36	143614.15	142822.15	141734.91
G 40.0	93423.03	91169.10	93423.03	95702.50	95048.64	92294.56	96300.04	105707.05	94719.33	87422.84
G 45.0	20487.36	18564.48	20487.36	20206.89	18627.50	19042.16	21846.77	23143.86	18785.52	17375.17
G 50.0	7200.13	6997.12	7200.13	7072.51	6769.22	6814.15	7260.19	7456.10	6712.14	6445.13
G 55.0	3680.97	3463.84	3680.97	3608.20	3396.69	3476.28	3649.78	3637.36	3358.95	3201.47
G 60.0	1841.47	1708.94	1841.47	1830.09	1736.37	1761.90	1854.76	1876.67	1744.11	1666.46
G 65.0	1165.70	1094.12	1165.70	1186.45	1187.59	1225.47	1295.18	1324.49	1249.99	1212.67
G 70.0	1105.86	1069.50	1105.86	1135.76	1163.59	1200.67	1242.42	1266.31	1252.44	1244.89
G 75.0	1635.25	1702.16	1635.25	1671.89	1759.81	1743.92	1733.52	1763.33	1806.66	1808.50
G 80.0	1294.82	1090.40	1294.82	1238.41	1073.43	1199.84	1379.96	1346.73	1086.38	1040.61
G 85.0	677.26	623.51	677.26	645.50	588.45	644.84	696.10	672.20	623.38	620.09
G 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00





Ø165mm

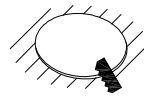
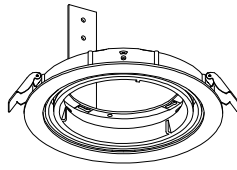


0-25mm

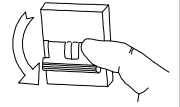
Scale 1:2 20/12/13

1

CARDEX  
STRUCTURE

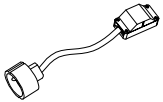


Ø165MM

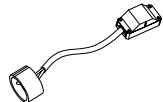


OFF

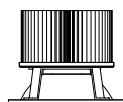
KIT GU10



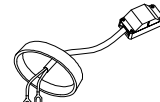
KIT GX8.5



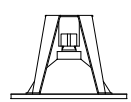
KIT LED / LED AC



KIT G53

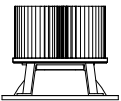


KIT G8.5

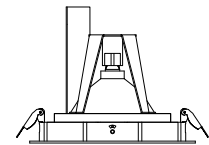
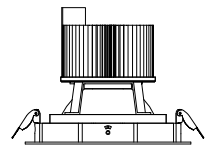
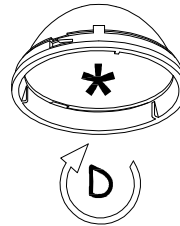
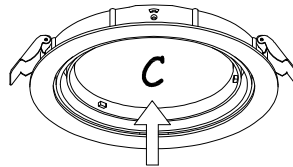
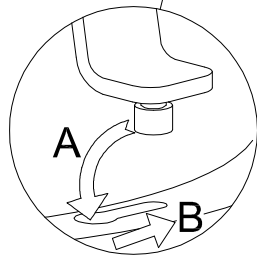
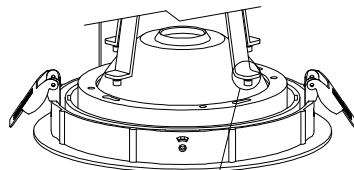
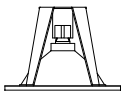


2

LED / LED AC

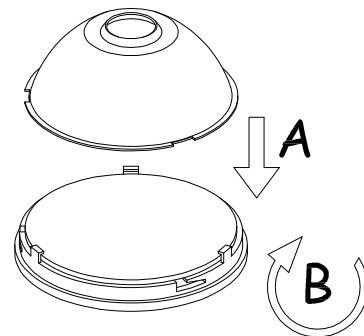
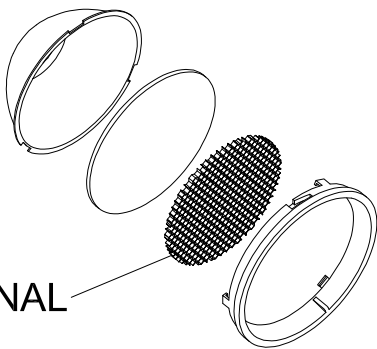


G8.5

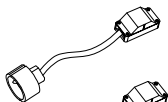


\*

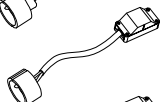
OPTIONAL



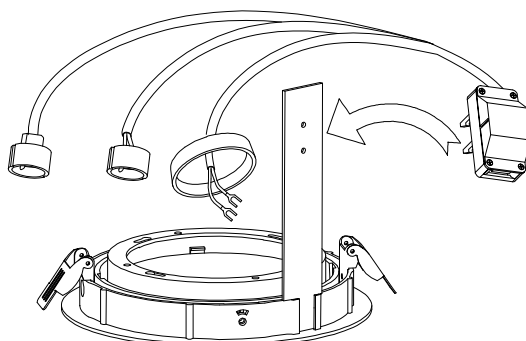
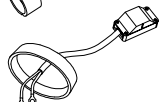
GU10

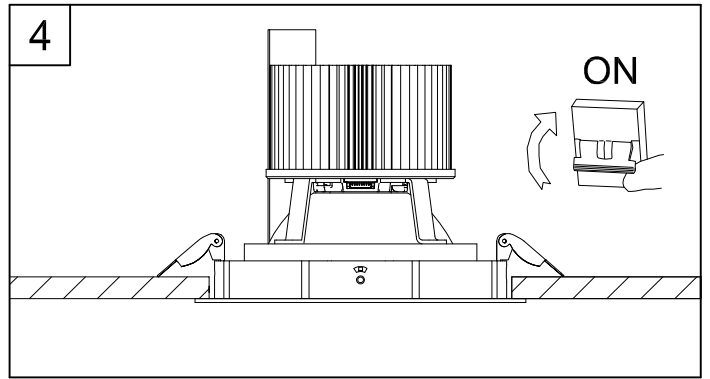
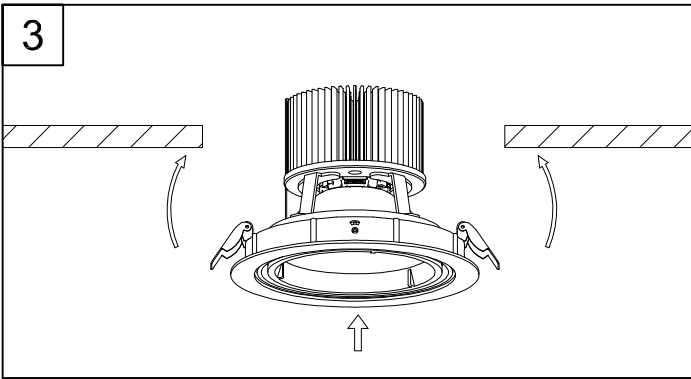


GX8.5



G53





LED AC	GU10

GX8.5	G8.5

G53

LED