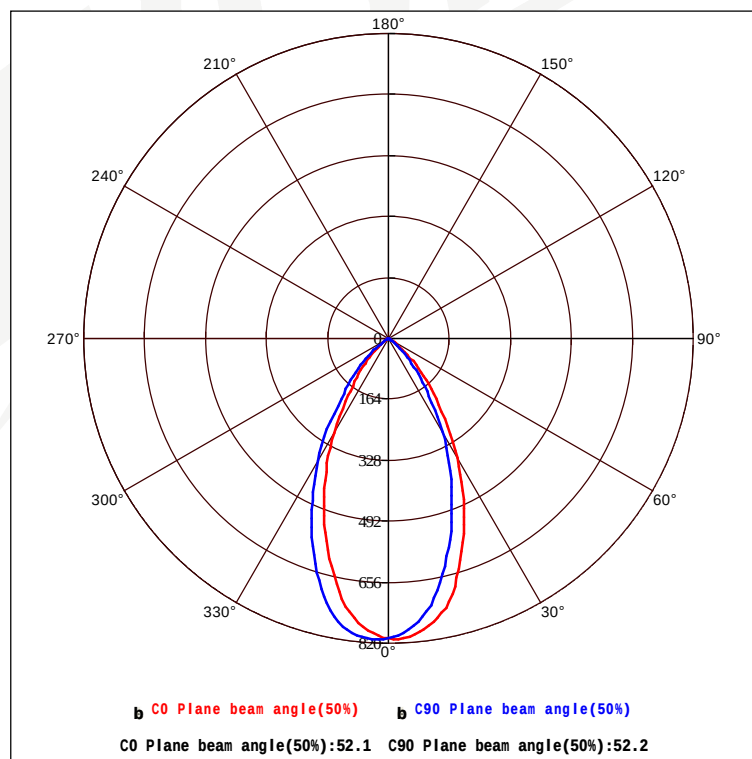


Goniophotometer Test Report

Measured Para U: 223.3V I: 74.0mA P: 8.70W PF: 0.526 Test LM: 668.52lm						
Lamp Name: LED DOWN LIGHT			Lamp Type:		Weight(kg):	
Lamp ID: LPDL-10GT01-Y			Lamp Spec: LPDL-10GT01-Y		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPDL-10GT01-Y		Peak Value(cd)	811.6	Efficiency(lm/w)	76.8
Nominal P(w)		10.0	Position	270.0,2.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	668.522	Down(C0-C180)	48.6
Rated Flux(lm)		1.0	Up Flux Rate(%)	0.0	UP(C180-C360)	0.0
Illuminant QTY		1	Dw Flux Rate(%)	100.0	Down(C180-C360)	51.4

Planar Intensity Distribution Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

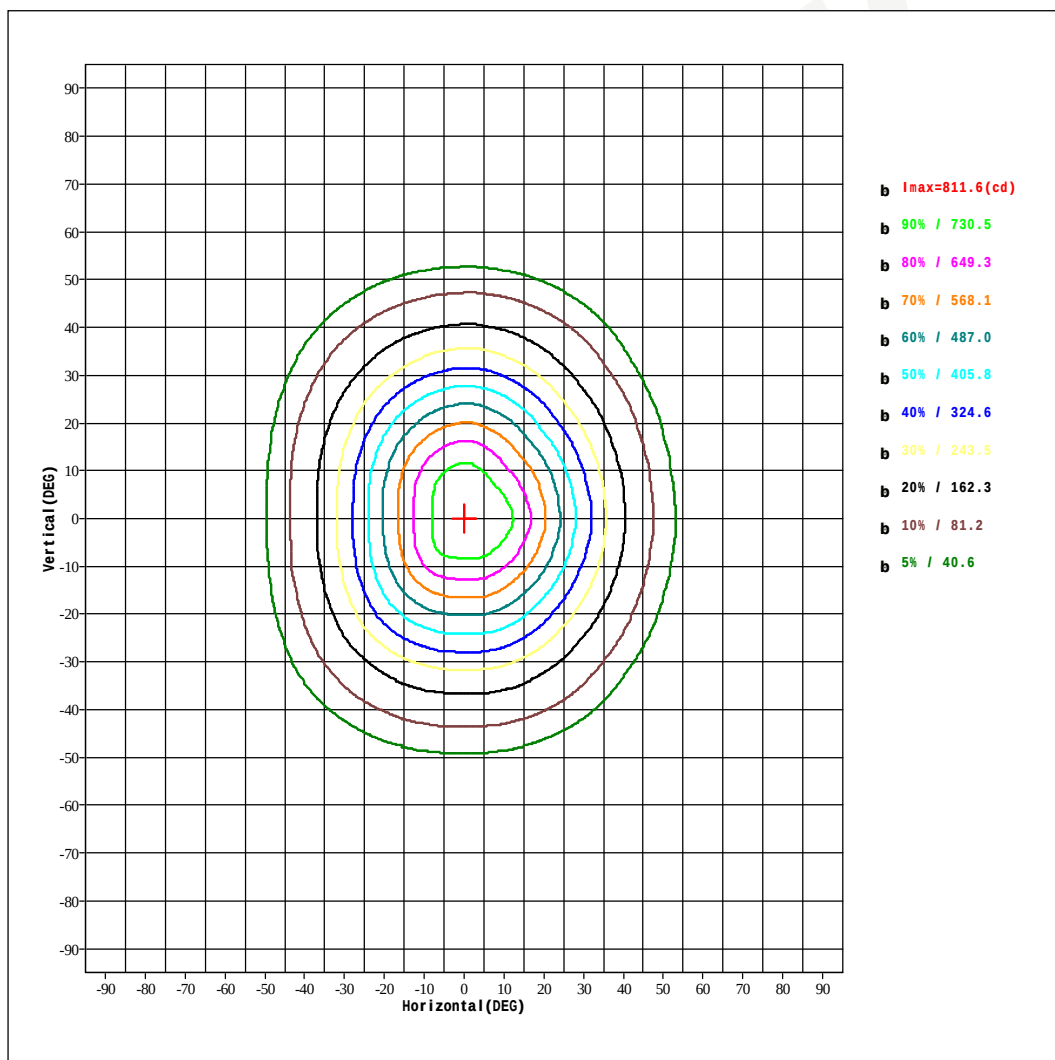
Humidity(%): 60

Date: 2026-4-15

Remark:

Measured Para U: 223.3V I: 74.0mA P: 8.70W PF: 0.526 Test LM: 668.52lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10GT01-Y	Lamp Spec: LPDL-10GT01-Y	Shape Size:
Manufactory: LIPER	Sur(m ²):	Protect Angle(Deg):

Planar IsoCandela Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

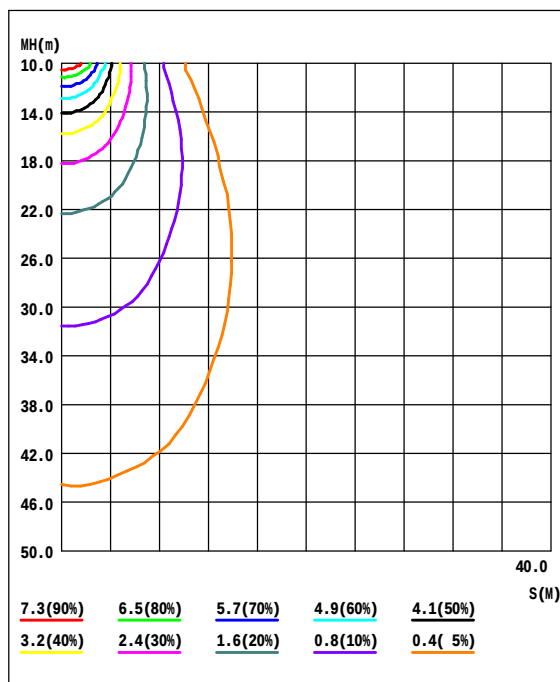
Humidity(%): 60

Date: 2026-4-15

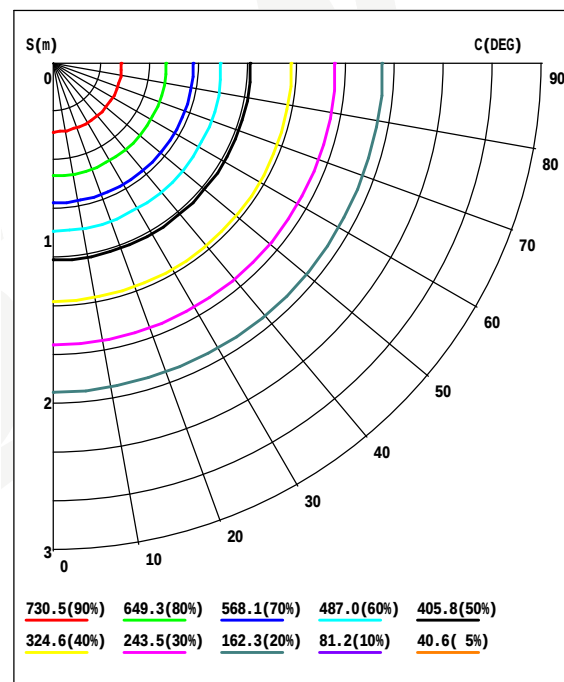
Remark:

Measured Para U: 223.3V I: 74.0mA P: 8.70W PF: 0.526 Test LM: 668.52lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10GT01-Y	Lamp Spec: LPDL-10GT01-Y	Shape Size:
Manufactory: LIPER	Sur(m ²):	Protect Angle(Deg):

Spacial ISOLUX Curve



Planar ISOLUX Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zyg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2026-4-15

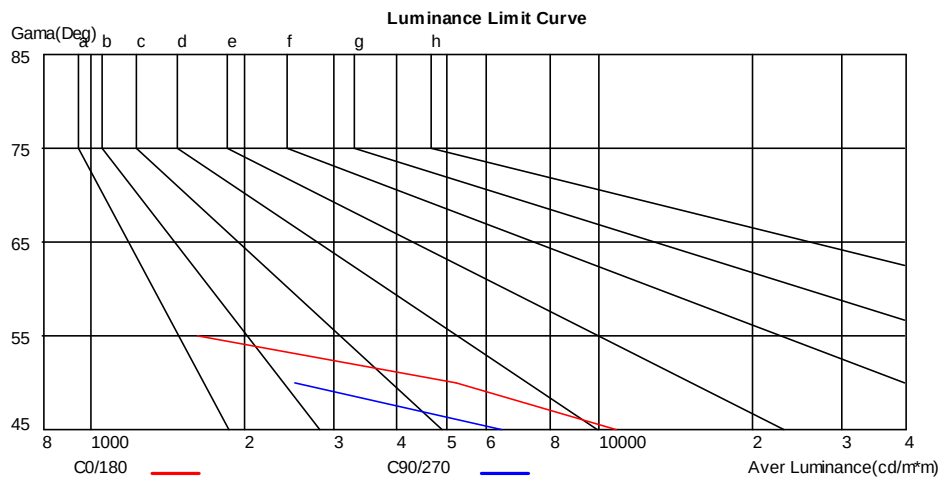
Remark:

Measured Para U: 223.3V I: 74.0mA P: 8.70W PF: 0.526 Test LM: 668.52lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10GT01-Y	Lamp Spec: LPDL-10GT01-Y	Shape Size:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Luminance Limit Curve

Aver Luminance(cd/m²m)									
Gm(Deg)	45	50	55	60	65	70	75	80	85
C0	10827.5	5213.6	1612.1	528.7	284.7	191.6	194.0	199.4	201.4
C90	6406.7	2510.8	720.3	352.8	196.0	197.5	202.9	204.8	206.8

Glare									
Glare	Class	Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

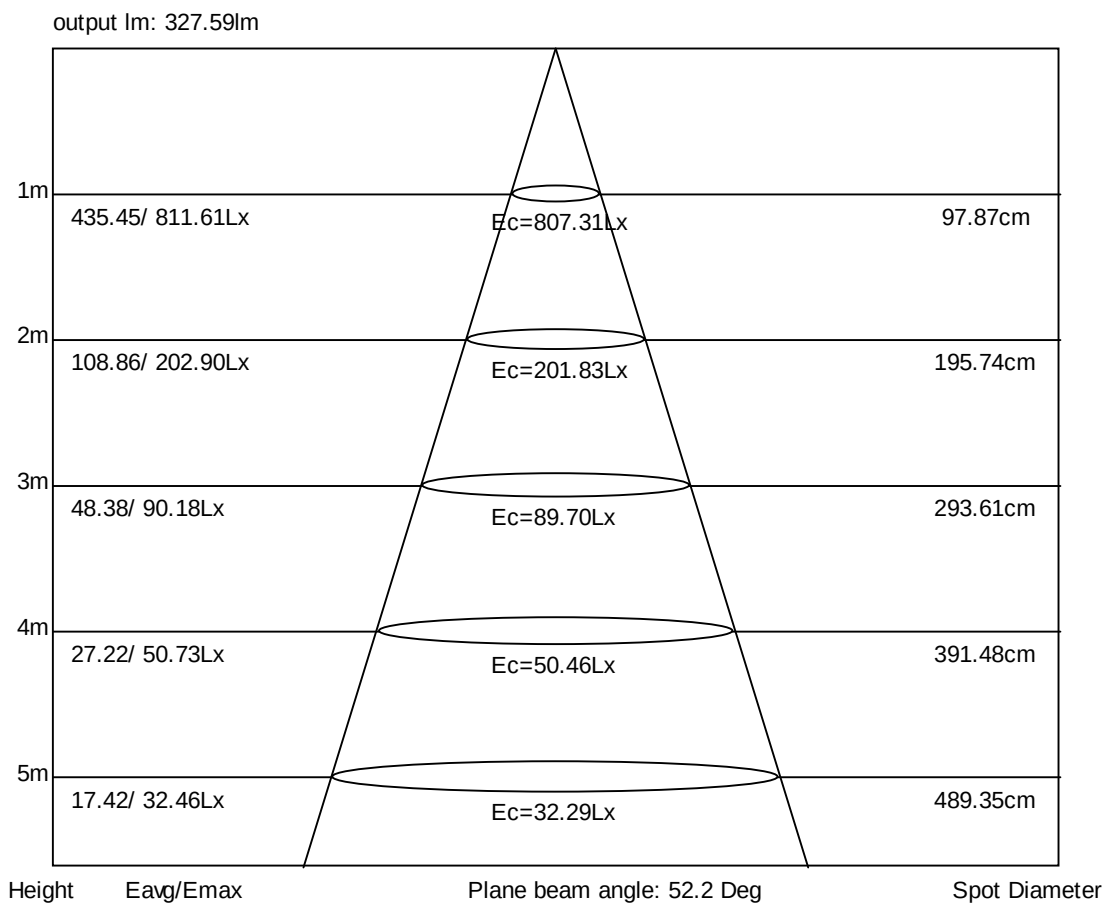
Humidity(%): 60

Date: 2026-4-15

Remark:

Measured Para U: 223.3V I: 74.0mA P: 8.70W PF: 0.526 Test LM: 668.52lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10GT01-Y	Lamp Spec: LPDL-10GT01-Y	Shape Size:
Manufactory: LIPER	Sur(m ²):	Protect Angle(Deg):

Average Illumination



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zyg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

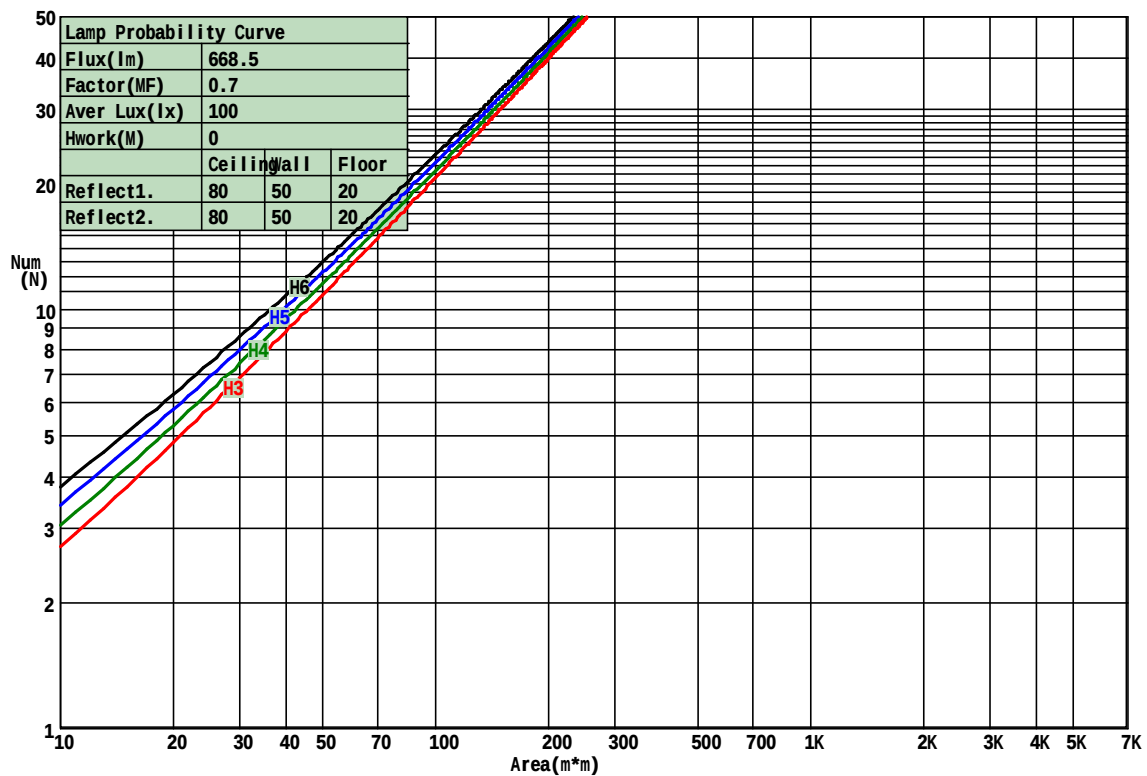
Humidity(%): 60

Date: 2026-4-15

Remark:

Measured Para U: 223.3V I: 74.0mA P: 8.70W PF: 0.526 Test LM: 668.52lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10GT01-Y	Lamp Spec: LPDL-10GT01-Y	Shape Size:
Manufactory: LIPER	Sur(m ²):	Protect Angle(Deg):

Lamp Probability Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2026-4-15

Remark:

Measured Para U: 223.3V I: 74.0mA P: 8.70W PF: 0.526 Test LM: 668.52lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10GT01-Y	Lamp Spec: LPDL-10GT01-Y	Shape Size:
Manufactory: LIPER	Sur(m ²):	Protect Angle(Deg):

UF Table

Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5
Wall	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3
Floor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0.60	54	39	30	52	38	30	49	37	29
0.80	56	39	28	54	38	28	50	36	27
1.00	58	40	28	55	39	27	51	36	26
1.25	60	41	27	57	39	26	51	36	25
1.50	61	42	27	58	40	26	52	36	24
2.00	64	44	28	60	42	27	53	37	24
2.50	66	45	28	62	43	27	54	38	24
3.00	67	46	29	63	44	27	55	38	24
4.00	69	48	30	64	45	28	56	40	25
5.00	71	50	31	66	46	29	57	40	26

CoEfficients Utilization

Ceiling(%)		0			0			0			0			0	
Wall(%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Floor (%)		0			0			0			0			0	
0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02
1	1.1	1.08	1.05	1.08	1.06	1.04	1.04	1.02	1.01	1	0.99	0.98	0.97	0.96	0.95
2	1.02	0.98	0.95	1.01	0.97	0.94	0.97	0.94	0.92	0.94	0.92	0.9	0.92	0.9	0.88
3	0.95	0.9	0.86	0.94	0.89	0.85	0.91	0.87	0.84	0.89	0.85	0.83	0.86	0.84	0.81
4	0.89	0.83	0.79	0.87	0.82	0.78	0.85	0.81	0.77	0.83	0.79	0.76	0.81	0.78	0.75
5	0.83	0.77	0.72	0.82	0.76	0.72	0.8	0.75	0.71	0.78	0.74	0.71	0.77	0.73	0.7
6	0.77	0.71	0.67	0.77	0.71	0.67	0.75	0.7	0.66	0.74	0.69	0.66	0.72	0.68	0.65
7	0.73	0.67	0.62	0.72	0.66	0.62	0.71	0.66	0.62	0.7	0.65	0.61	0.68	0.64	0.61
8	0.68	0.62	0.58	0.68	0.62	0.58	0.67	0.61	0.58	0.66	0.61	0.57	0.65	0.6	0.57
9	0.64	0.58	0.54	0.64	0.58	0.54	0.63	0.58	0.54	0.62	0.57	0.54	0.61	0.57	0.54
10	0.61	0.55	0.51	0.6	0.55	0.51	0.6	0.54	0.51	0.59	0.54	0.51	0.58	0.54	0.51

Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2026-4-15

Remark:

Measured Para U: 223.3V I: 74.0mA P: 8.70W PF: 0.526 Test LM: 668.52lm															
Lamp Name: LED DOWN LIGHT								Lamp Type:				Weight(kg):			
Lamp ID: LPDL-10GT01-Y								Lamp Spec: LPDL-10GT01-Y				Shape Size:			
Manufactory: LIPER								Sur(m ²):				Protect Angle(Deg):			

Wall Exitance CoEfficients

Ceiling(%)		0			0			0			0			0	
Wall(%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Floor (%)		0			0			0			0			0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0.19	0.11	0.03	0.18	0.1	0.03	0.17	0.1	0.03	0.15	0.09	0.03	0.14	0.08	0.03
2	0.18	0.1	0.03	0.17	0.09	0.03	0.16	0.09	0.03	0.15	0.08	0.03	0.14	0.08	0.03
3	0.17	0.09	0.03	0.16	0.09	0.03	0.15	0.08	0.03	0.15	0.08	0.02	0.14	0.08	0.02
4	0.16	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	0.14	0.08	0.02	0.13	0.07	0.02
5	0.15	0.08	0.02	0.15	0.08	0.02	0.14	0.07	0.02	0.14	0.07	0.02	0.13	0.07	0.02
6	0.15	0.07	0.02	0.14	0.07	0.02	0.14	0.07	0.02	0.13	0.07	0.02	0.13	0.07	0.02
7	0.14	0.07	0.02	0.14	0.07	0.02	0.13	0.07	0.02	0.13	0.06	0.02	0.12	0.06	0.02
8	0.13	0.07	0.02	0.13	0.06	0.02	0.13	0.06	0.02	0.12	0.06	0.02	0.12	0.06	0.02
9	0.13	0.06	0.02	0.13	0.06	0.02	0.12	0.06	0.02	0.12	0.06	0.02	0.11	0.06	0.02
10	0.12	0.06	0.02	0.12	0.06	0.02	0.12	0.06	0.02	0.11	0.06	0.02	0.11	0.05	0.02

Ceiling Cavity Exitance CoEfficients

Ceiling(%)		0			0			0			0			0	
Wall(%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Floor (%)		0			0			0			0			0	
0	0.19	0.19	0.19	0.16	0.16	0.16	0.11	0.11	0.11	0.06	0.06	0.06	0.02	0.02	0.02
1	0.17	0.16	0.14	0.15	0.13	0.12	0.1	0.09	0.09	0.06	0.05	0.05	0.02	0.02	0.02
2	0.16	0.13	0.11	0.13	0.11	0.1	0.09	0.08	0.07	0.05	0.05	0.04	0.02	0.01	0.01
3	0.14	0.11	0.09	0.12	0.1	0.08	0.09	0.07	0.05	0.05	0.04	0.03	0.02	0.01	0.01
4	0.14	0.1	0.07	0.12	0.09	0.06	0.08	0.06	0.04	0.05	0.03	0.03	0.01	0.01	0.01
5	0.13	0.09	0.06	0.11	0.08	0.05	0.07	0.05	0.04	0.04	0.03	0.02	0.01	0.01	0.01
6	0.12	0.08	0.05	0.1	0.07	0.04	0.07	0.05	0.03	0.04	0.03	0.02	0.01	0.01	0.01
7	0.11	0.07	0.04	0.1	0.06	0.04	0.07	0.04	0.03	0.04	0.03	0.02	0.01	0.01	0.01
8	0.11	0.06	0.04	0.09	0.06	0.03	0.06	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0
9	0.1	0.06	0.03	0.09	0.05	0.03	0.06	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0
10	0.1	0.06	0.03	0.08	0.05	0.02	0.06	0.03	0.02	0.03	0.02	0.01	0.01	0.01	0

Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2026-4-15

Remark:

Measured Para U: 223.3V I: 74.0mA P: 8.70W PF: 0.526 Test LM: 668.52lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10GT01-Y	Lamp Spec: LPDL-10GT01-Y	Shape Size:
Manufactory: LIPER	Sur(m ²):	Protect Angle(Deg):

Ring-shaped Flux Data Table

Gm\C(Deg)	0	45	90	135	180	225	270	315	Range	Ring	T(lm)
5	798	789	772	784	774	788	806	787	0-5	19	19
10	759	736	700	729	705	729	769	736	5-10	54.4	73.4
15	680	647	597	628	603	631	689	648	10-15	81.4	155
20	574	543	488	519	496	519	585	550	15-20	96.5	251
25	467	434	383	414	385	414	472	439	20-25	100	352
30	361	327	278	313	282	307	370	335	25-30	94.3	446
35	252	222	184	206	182	200	262	227	30-35	78.6	525
40	169	151	120	136	119	131	171	151	35-40	59.2	584
45	108	92.1	64.1	80.1	65.7	74.6	110	93.1	40-45	42.2	626
50	52.1	40.2	25.1	33	23.7	28.5	55.9	41.4	45-50	24.3	650
55	16.1	11.6	7.2	9.86	5.89	6.9	18.7	10.6	50-55	9.53	660
60	5.29	5.21	3.53	4.9	2.71	3.28	5.51	3.57	55-60	3.04	663
65	2.85	2.35	1.96	2.21	1.09	0.96	2.28	1.25	60-65	1.46	664
70	1.92	2.12	1.97	2.16	1.06	0.96	1.16	0.97	65-70	0.81	665
75	1.94	2.13	2.03	2.15	1.13	0.99	1.17	1.05	70-75	0.81	666
80	1.99	2.14	2.05	2.16	1.21	1.08	1.24	1.22	75-80	0.86	667
85	2.01	2.12	2.07	2.14	1.28	1.2	1.33	1.28	80-85	0.9	668
90	2.05	2.1	2.05	2.13	1.38	1.23	1.43	1.41	85-90	0.93	669
95									90-95		
100									95-100		
105									100-105		
110									105-110		
115									110-115		
120									115-120		
125									120-125		
130									125-130		
135									130-135		
140									135-140		
145									140-145		
150									145-150		
155									150-155		
160									155-160		
165									160-165		
170									165-170		
175									170-175		
180									175-180		

Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2026-4-15

Remark:

Measured Para U: 223.3V I: 74.0mA P: 8.70W PF: 0.526 Test LM: 668.52lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10GT01-Y	Lamp Spec: LPDL-10GT01-Y	Shape Size:
Manufactory: LIPER	Sur(m ²):	Protect Angle(Deg):

CD Table

Gm\C(Deg)	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340
5.0	798	794	790	784	776	775	780	783	778	774	780	787	794	802	802	793	788	793
10.0	759	749	738	724	707	706	719	726	715	705	716	727	742	760	762	747	739	749
15.0	680	665	651	630	608	604	618	625	614	603	615	628	650	676	680	662	652	666
20.0	574	560	546	525	500	495	509	516	506	496	506	517	541	570	577	561	552	563
25.0	467	453	437	417	394	390	404	411	398	385	398	411	433	459	465	450	442	455
30.0	361	347	331	311	289	285	301	309	295	282	293	304	328	356	363	347	338	350
35.0	252	239	225	209	192	189	199	204	192	182	190	198	221	248	254	238	230	241
40.0	169	161	153	141	127	123	131	134	127	119	124	130	144	163	167	158	153	161
45.0	108	101	93.8	82.9	70.2	67.6	74.8	78.5	72	65.7	69.6	73.6	86.3	103	107	98.8	94.8	102
50.0	52.1	46.9	41.5	35.3	28.4	26.8	30.4	32	27.8	23.7	25.8	28	37.5	49.9	52.8	46.2	42.6	47.4
55.0	16.1	14.2	12.1	10.2	8.17	7.79	8.99	9.43	7.63	5.89	6.33	6.79	10.8	16.1	16.9	13.2	11.2	13.7
60.0	5.29	5.25	5.22	4.66	3.9	3.83	4.45	4.67	3.67	2.71	2.96	3.22	4.01	5.02	5.09	4.21	3.76	4.54
65.0	2.85	2.63	2.4	2.22	2.04	2.02	2.13	2.09	1.58	1.09	1.03	0.97	1.39	1.99	2.05	1.59	1.43	2.15
70.0	1.92	2.01	2.1	2.07	2.01	2.01	2.1	2.04	1.54	1.06	1.01	0.97	1.02	1.12	1.12	1.03	1.07	1.5
75.0	1.94	2.02	2.11	2.09	2.05	2.05	2.11	2.03	1.57	1.13	1.07	1	1.05	1.13	1.14	1.09	1.15	1.55
80.0	1.99	2.06	2.12	2.11	2.07	2.07	2.12	2.05	1.62	1.21	1.15	1.09	1.13	1.21	1.24	1.22	1.3	1.65
85.0	2.01	2.06	2.11	2.1	2.08	2.08	2.11	2.04	1.65	1.28	1.24	1.2	1.24	1.3	1.32	1.3	1.36	1.69
90.0	2.05	2.07	2.1	2.09	2.06	2.07	2.11	2.05	1.71	1.38	1.31	1.25	1.29	1.38	1.42	1.42	1.48	1.77
95.0																		
100.0																		
105.0																		
110.0																		
115.0																		
120.0																		
125.0																		
130.0																		
135.0																		
140.0																		
145.0																		
150.0																		
155.0																		
160.0																		
165.0																		
170.0																		
175.0																		
180.0																		

Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2026-4-15

Remark: