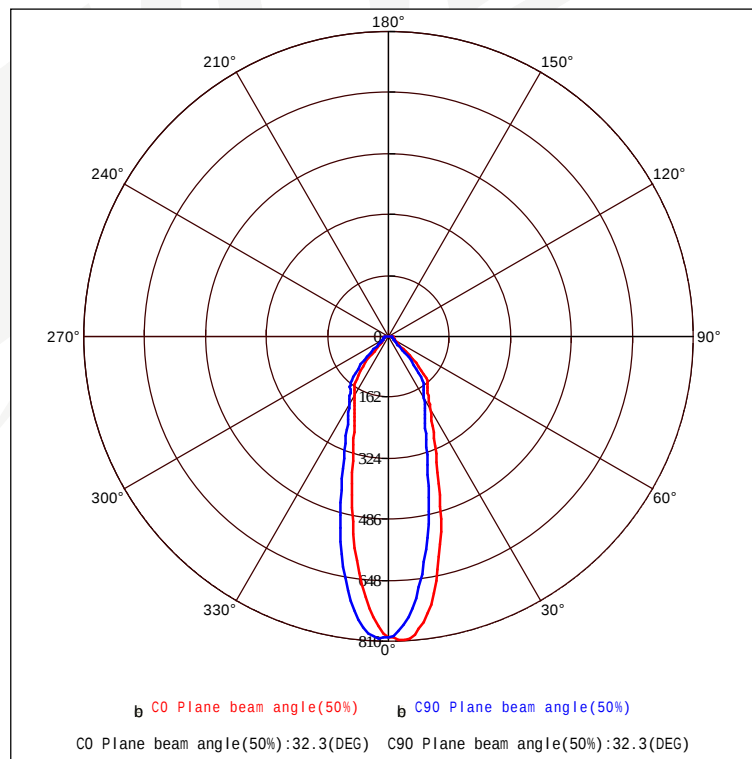


Goniophotometer Test Report

Measured Para U: 232.1V I: 45.0mA P: 6.60W PF: 0.620 Test LM: 514.99lm						
Lamp Name: LED DOWN LIGHT			Lamp Type:		Weight(kg):	
Lamp ID: LPDL-07GF01-Y			Lamp Spec: LPDL-07GF01-Y		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPDL-07GF01-Y		Peak Value(cd)	813.6	Efficiency(lm/w)	78.0
Nominal P(w)		1.0	Position	315.0,1.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	514.994	Down(C0-C180)	49.8
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)	50.2

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

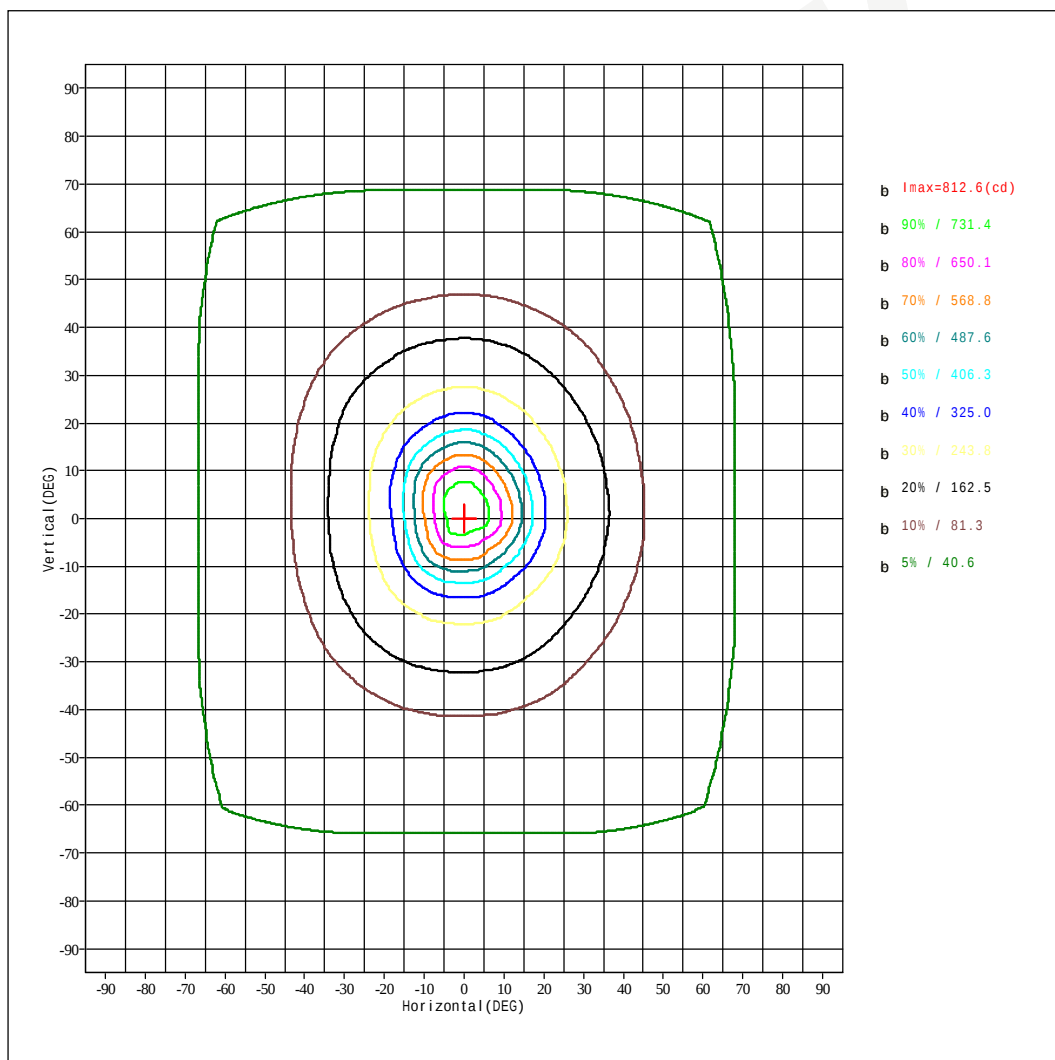
Humidity(%): 60

Date: 2026-1-22

Remark:

Measured Para U: 232.1V I: 45.0mA P: 6.60W PF: 0.620 Test LM: 514.99lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-07GF01-Y	Lamp Spec: LPDL-07GF01-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

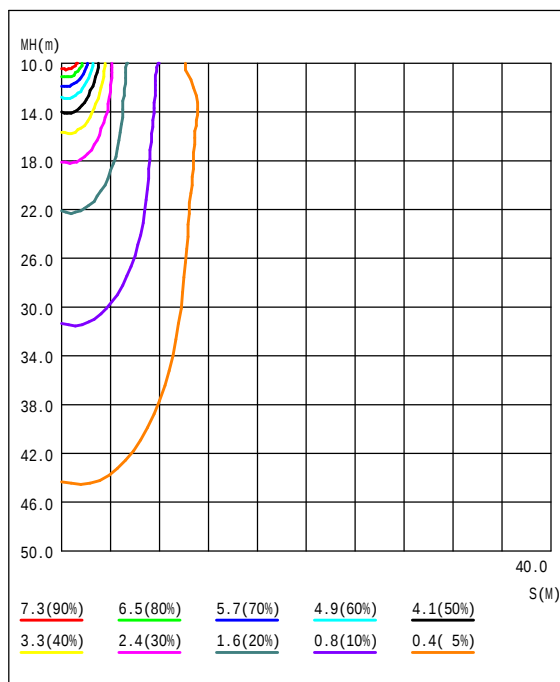
Humidity(%): 60

Date: 2026-1-22

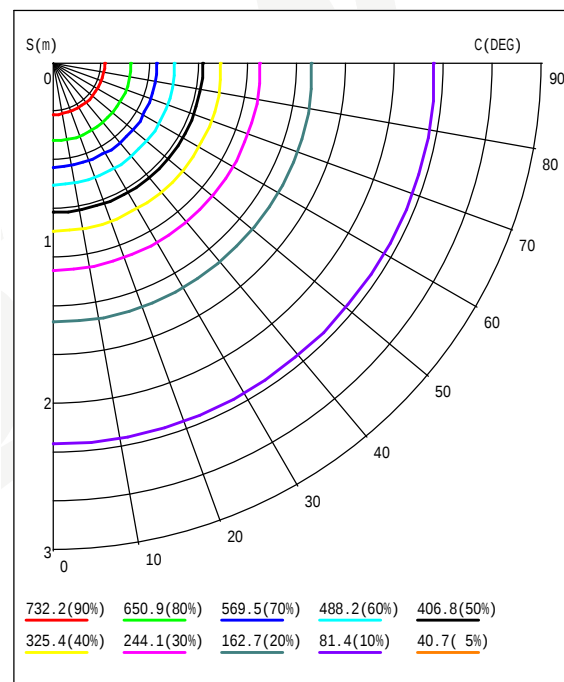
Remark:

Measured Para U: 232.1V I: 45.0mA P: 6.60W PF: 0.620 Test LM: 514.99lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-07GF01-Y	Lamp Spec: LPDL-07GF01-Y	Shape Size:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Spatial ISOLUX Curve



Planar ISOLUX 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: 2026-1-22

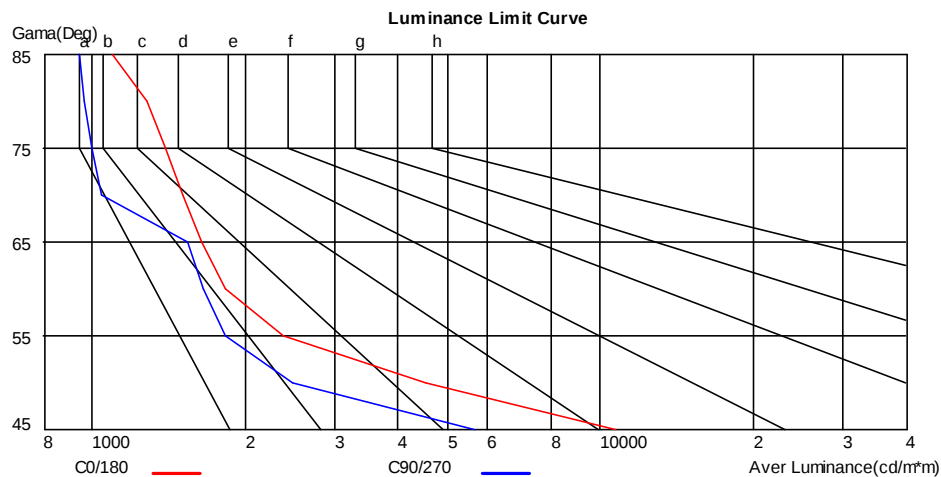
Remark:

Measured Para U: 232.1V I: 45.0mA P: 6.60W PF: 0.620 Test LM: 514.99lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-07GF01-Y	Lamp Spec: LPDL-07GF01-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	10753.5	4539.4	2383.4	1828.2	1639.5	1509.7	1397.0	1277.9	1093.7
C90	5665.9	2481.9	1826.7	1651.3	1535.7	1044.2	998.6	962.4	940.3

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: zyg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

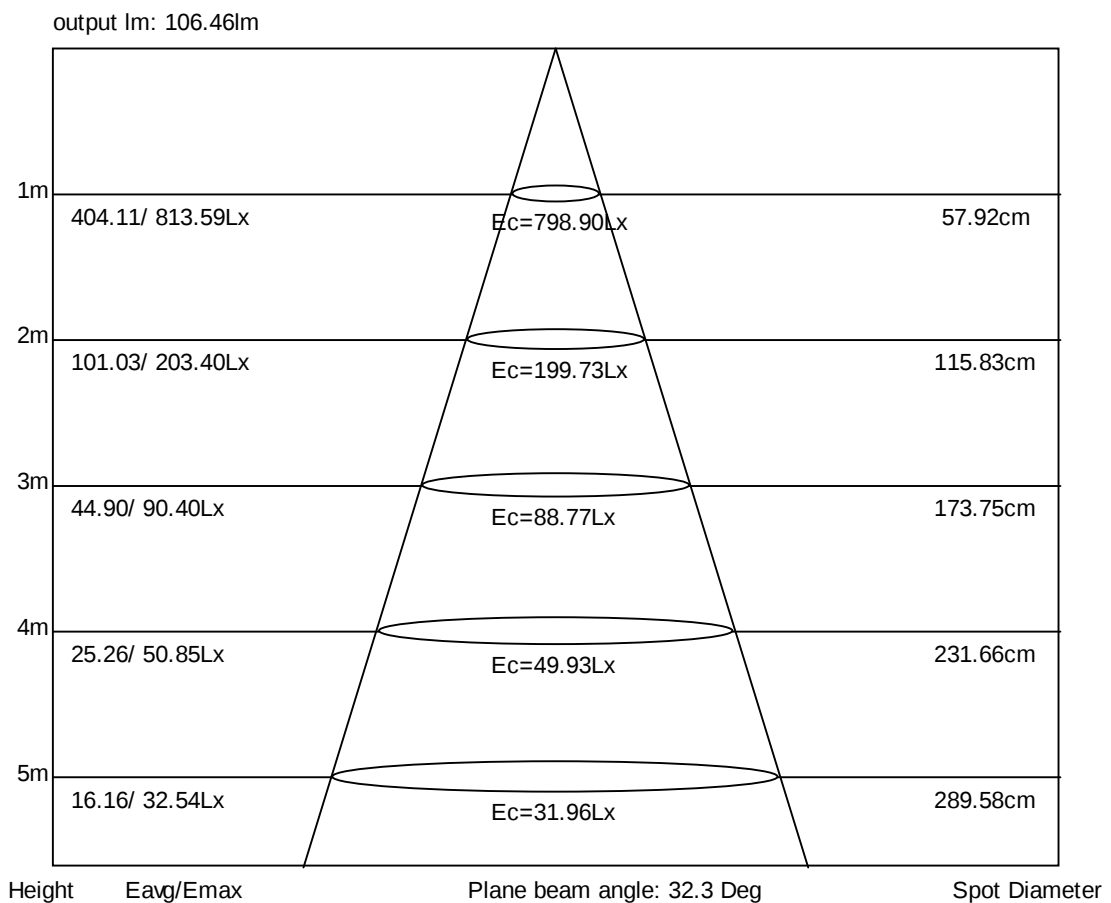
Humidity(%): 60

Date: 2026-1-22

Remark:

Measured Para U: 232.1V I: 45.0mA P: 6.60W PF: 0.620 Test LM: 514.99lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-07GF01-Y	Lamp Spec: LPDL-07GF01-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: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

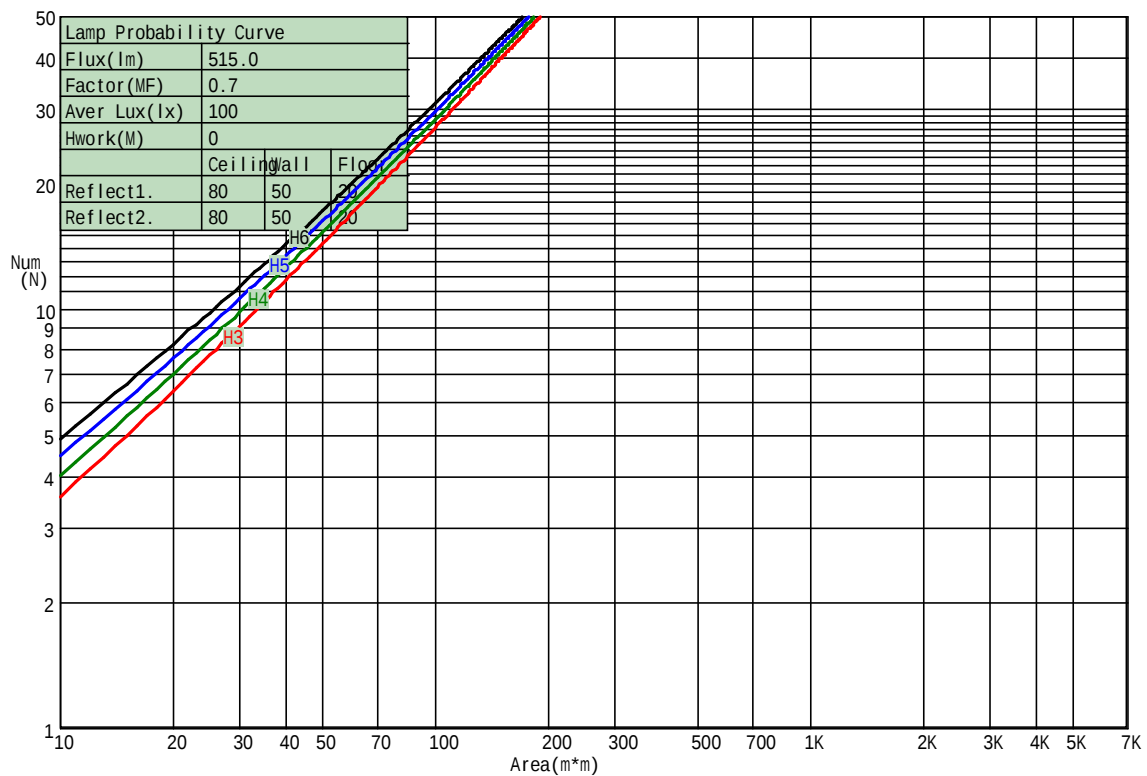
Humidity(%): 60

Date: 2026-1-22

Remark:

Measured Para U: 232.1V I: 45.0mA P: 6.60W PF: 0.620 Test LM: 514.99lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-07GF01-Y	Lamp Spec: LPDL-07GF01-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: 2026-1-22

Remark:

Measured Para U: 232.1V I: 45.0mA P: 6.60W PF: 0.620 Test LM: 514.99lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-07GF01-Y	Lamp Spec: LPDL-07GF01-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	57	43	35	56	43	35	53	41	34
0.80	59	43	33	57	42	32	53	40	31
1.00	61	44	32	58	42	31	53	40	30
1.25	62	44	31	59	42	30	54	39	29
1.50	64	45	30	60	43	30	54	39	28
2.00	66	47	31	62	44	30	55	40	28
2.50	68	48	31	63	45	30	56	40	27
3.00	69	49	31	65	46	30	56	41	27
4.00	71	50	33	66	48	31	58	42	28
5.00	72	52	34	67	49	32	58	43	28

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	1.08	1.05	1.02	1.06	1.03	1.01	1.02	1	0.97	0.98	0.96	0.95	0.95	0.93	0.92
2	0.99	0.94	0.9	0.97	0.93	0.89	0.94	0.9	0.87	0.91	0.88	0.85	0.88	0.86	0.83
3	0.91	0.86	0.81	0.9	0.85	0.8	0.87	0.83	0.79	0.85	0.81	0.78	0.82	0.79	0.76
4	0.85	0.78	0.73	0.84	0.78	0.73	0.81	0.76	0.72	0.79	0.75	0.71	0.77	0.73	0.7
5	0.79	0.72	0.67	0.78	0.72	0.67	0.76	0.71	0.66	0.74	0.69	0.66	0.73	0.68	0.65
6	0.74	0.67	0.62	0.73	0.66	0.62	0.71	0.66	0.61	0.7	0.65	0.61	0.68	0.64	0.61
7	0.69	0.62	0.58	0.68	0.62	0.58	0.67	0.61	0.57	0.66	0.61	0.57	0.65	0.6	0.57
8	0.65	0.58	0.54	0.64	0.58	0.54	0.63	0.57	0.53	0.62	0.57	0.53	0.61	0.56	0.53
9	0.61	0.55	0.5	0.61	0.55	0.5	0.6	0.54	0.5	0.59	0.54	0.5	0.58	0.53	0.5
10	0.58	0.52	0.47	0.57	0.51	0.47	0.57	0.51	0.47	0.56	0.51	0.47	0.55	0.5	0.47

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: 2026-1-22

Remark:

Measured Para U: 232.1V I: 45.0mA P: 6.60W PF: 0.620 Test LM: 514.99lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-07GF01-Y	Lamp Spec: LPDL-07GF01-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	0.23	0.13	0.04	0.22	0.13	0.04	0.21	0.12	0.04	0.19	0.11	0.04	0.18	0.11	0.03
2	0.21	0.11	0.03	0.2	0.11	0.03	0.19	0.11	0.03	0.18	0.1	0.03	0.17	0.1	0.03
3	0.19	0.1	0.03	0.19	0.1	0.03	0.18	0.1	0.03	0.17	0.09	0.03	0.16	0.09	0.03
4	0.18	0.09	0.03	0.18	0.09	0.03	0.17	0.09	0.03	0.16	0.09	0.03	0.15	0.08	0.03
5	0.17	0.09	0.02	0.16	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	0.14	0.08	0.02
6	0.16	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	0.14	0.07	0.02	0.14	0.07	0.02
7	0.15	0.07	0.02	0.15	0.07	0.02	0.14	0.07	0.02	0.14	0.07	0.02	0.13	0.07	0.02
8	0.14	0.07	0.02	0.14	0.07	0.02	0.13	0.07	0.02	0.13	0.07	0.02	0.13	0.06	0.02
9	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
10	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

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	0.08	0.06	0.05	0.05	0.02	0.02	0.02
2	0.16	0.13	0.11	0.14	0.11	0.09	0.09	0.08	0.07	0.05	0.05	0.04	0.02	0.01	0.01
3	0.15	0.11	0.09	0.13	0.1	0.07	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	0.04	0.02	0.02	0.01	0.01
5	0.13	0.09	0.06	0.11	0.08	0.05	0.08	0.05	0.03	0.04	0.03	0.02	0.01	0.01	0.01
6	0.12	0.08	0.05	0.11	0.07	0.04	0.07	0.05	0.03	0.04	0.03	0.02	0.01	0.01	0.01
7	0.12	0.07	0.04	0.1	0.06	0.03	0.07	0.04	0.02	0.04	0.03	0.01	0.01	0.01	0
8	0.11	0.07	0.03	0.1	0.06	0.03	0.07	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0
9	0.11	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	0.09	0.05	0.02	0.06	0.03	0.02	0.04	0.02	0.01	0.01	0.01	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: 2026-1-22

Remark:

Measured Para U: 232.1V I: 45.0mA P: 6.60W PF: 0.620 Test LM: 514.99lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-07GF01-Y	Lamp Spec: LPDL-07GF01-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	790	772	712	721	679	693	769	774	0-5	18.4	18.4
10	679	651	560	564	517	538	639	644	5-10	47.6	65.9
15	523	494	397	397	358	377	476	483	10-15	60.8	127
20	372	346	284	283	261	272	335	339	15-20	60.6	187
25	274	258	224	222	210	216	251	251	20-25	56.7	244
30	217	209	187	187	177	178	205	202	25-30	54.4	298
35	180	177	163	164	154	156	176	168	30-35	53	351
40	159	155	121	118	97.2	104	149	145	35-40	50.4	402
45	108	98.5	56.7	52.7	38	42	84.2	86.1	40-45	37.4	439
50	45.4	38.4	24.8	24.1	21	21.6	29.4	32	45-50	18.9	458
55	23.8	22.2	18.3	18.6	17.4	17.3	18.7	19.6	50-55	9.99	468
60	18.3	17.8	16.5	16.7	15.4	15.3	16.4	16.3	55-60	8.2	476
65	16.4	16.4	15.4	15.7	14.1	14	14.8	14.6	60-65	7.68	484
70	15.1	15.1	10.4	14.4	12.9	12.8	13.6	13.3	65-70	7.22	491
75	14	14	9.99	13.1	11.6	11.6	12.6	12.4	70-75	6.76	498
80	12.8	12.6	9.62	11	9.79	9.73	11.1	11.1	75-80	6.26	504
85	10.9	10.6	9.4	9.86	8.91	8.82	9.48	9.53	80-85	5.58	510
90	10.1	9.57	9.31	9.37	8.84	8.73	8.78	8.9	85-90	5.14	515
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: 2026-1-22

Remark:

Measured Para U: 232.1V I: 45.0mA P: 6.60W PF: 0.620 Test LM: 514.99lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-07GF01-Y	Lamp Spec: LPDL-07GF01-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	790	782	774	753	725	714	718	717	698	679	685	691	718	752	770	773	776	783
10.0	679	667	654	621	580	561	563	559	538	517	526	536	571	617	640	642	647	664
15.0	523	510	497	462	418	397	397	393	375	358	366	374	409	454	478	481	488	506
20.0	372	361	349	326	298	284	284	281	271	261	266	271	292	321	336	337	342	358
25.0	274	267	260	247	232	224	223	221	215	210	213	216	227	243	251	251	254	264
30.0	217	214	210	202	192	187	187	186	181	177	177	178	187	199	204	203	204	211
35.0	180	179	177	172	166	163	163	163	158	154	155	156	162	171	174	171	170	175
40.0	159	158	156	144	129	121	119	116	106	97.2	100	104	119	140	148	146	147	153
45.0	108	104	99.5	84.8	65.8	55.8	54	51.1	44.4	38	39.8	41.6	55.9	75	84.6	85.5	88.4	98.1
50.0	45.4	42.3	39.2	33.9	27.8	24.7	24.4	23.8	22.4	21	21.3	21.5	24.2	27.7	29.9	31.1	33.4	39.5
55.0	23.8	23.1	22.4	20.9	19.1	18.3	18.5	18.4	17.9	17.4	17.3	17.3	17.7	18.4	18.9	19.3	20.1	22
60.0	18.3	18.1	17.8	17.4	16.8	16.6	16.7	16.6	16	15.4	15.3	15.3	15.6	16.2	16.4	16.4	16.6	17.4
65.0	16.4	16.4	16.4	16.1	15.6	15.4	15.6	15.5	14.8	14.1	14	14	14.3	14.6	14.8	14.7	14.8	15.6
70.0	15.1	15.1	15.1	13.6	11.5	11.3	13.1	14.2	13.6	12.9	12.9	12.8	13.1	13.4	13.6	13.4	13.5	14.3
75.0	14	14	14	12.7	10.9	10.7	12.1	12.9	12.3	11.6	11.6	11.6	11.9	12.3	12.5	12.4	12.6	13.3
80.0	12.8	12.7	12.6	11.6	10.3	9.92	10.5	10.9	10.3	9.79	9.76	9.74	10.2	10.8	11.1	11.1	11.3	12
85.0	10.9	10.8	10.6	10.2	9.66	9.5	9.71	9.76	9.33	8.91	8.87	8.83	9.03	9.34	9.49	9.51	9.68	10.3
90.0	10.1	9.89	9.64	9.49	9.37	9.33	9.35	9.31	9.07	8.84	8.8	8.74	8.75	8.77	8.81	8.86	9.03	9.6
95.0																		
100.0																		
105.0																		
110.0																		
115.0																		
120.0																		
125.0																		
130.0																		
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140.0																		
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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: 2026-1-22

Remark: