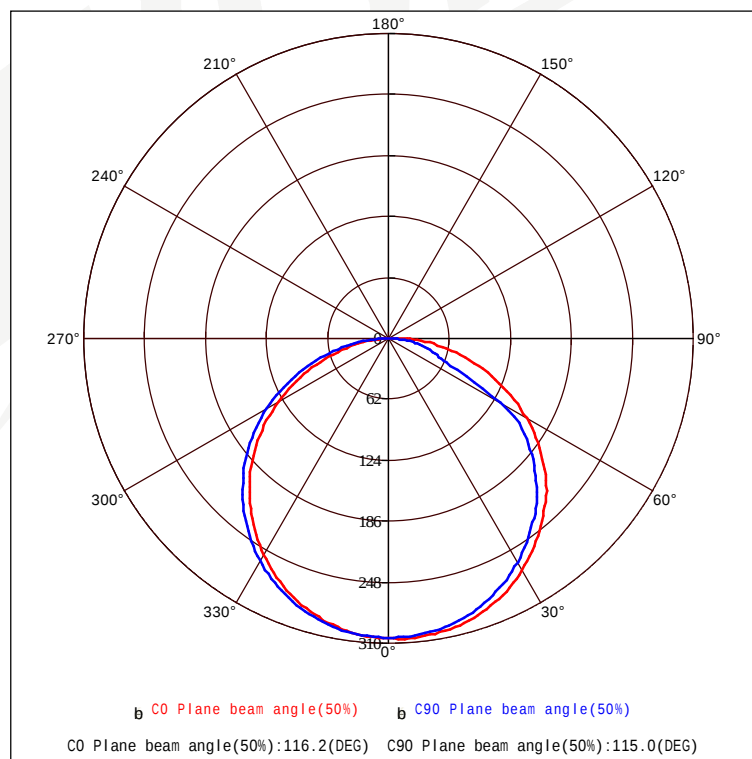


Goniophotometer Test Report

Measured Para U: 224.2V I: 80.0mA P: 11.10W PF: 0.614 Test LM: 902.29lm						
Lamp Name: LED DOWN LIGHT			Lamp Type:		Weight(kg):	
Lamp ID: LPDL-12LS01-Y			Lamp Spec: LPDL-12LS01-Y		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPDL-12LS01-Y		Peak Value(cd)	306.1	Efficiency(lm/w)	81.3
Nominal P(w)		1.0	Position	0.0,1.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	902.294	Down(C0-C180)	50.4
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)	49.6

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

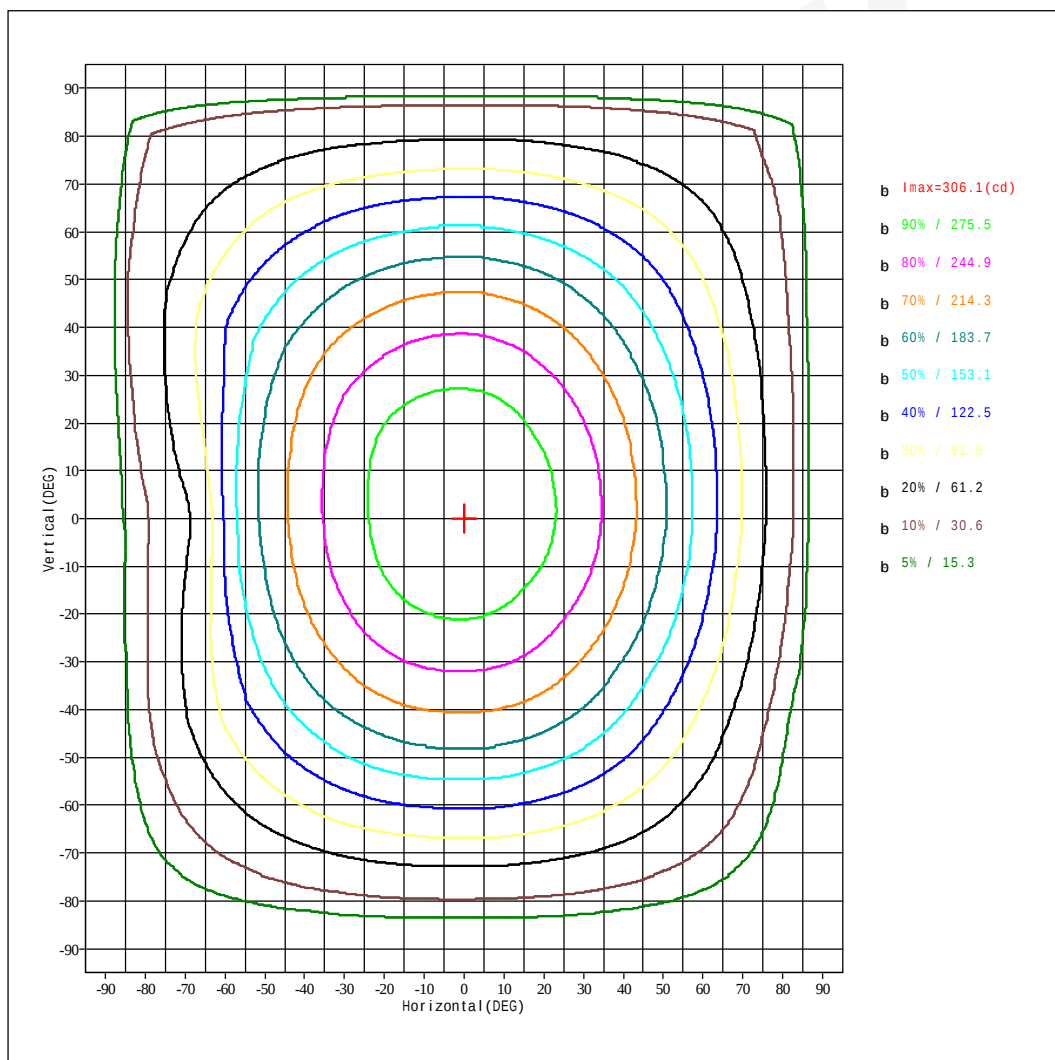
Humidity(%): 60

Date: 2026-6-2

Remark:

Measured Para U: 224.2V I: 80.0mA P: 11.10W PF: 0.614 Test LM: 902.29lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-12LS01-Y	Lamp Spec: LPDL-12LS01-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

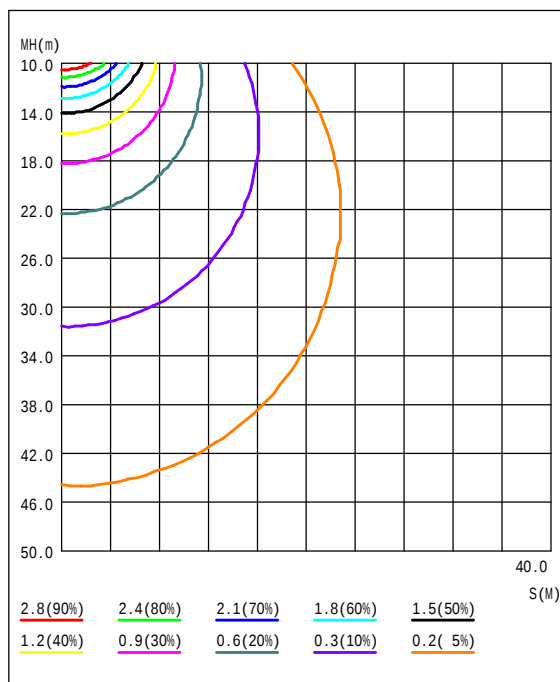
Humidity(%): 60

Date: 2026-6-2

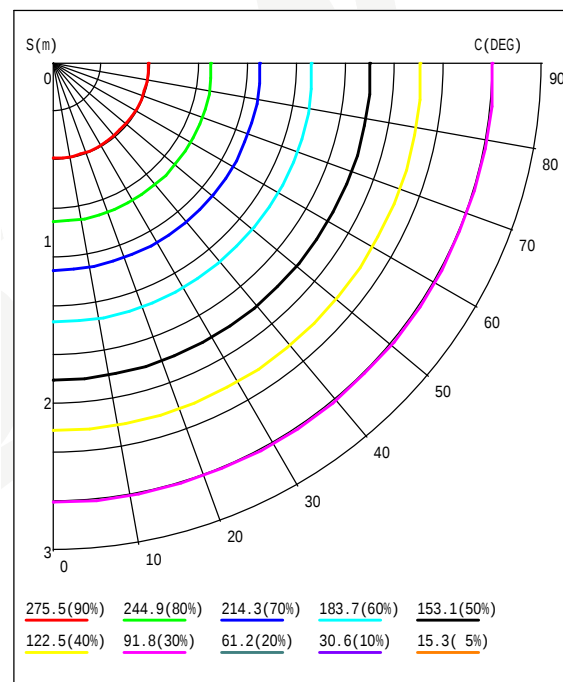
Remark:

Measured Para U: 224.2V I: 80.0mA P: 11.10W PF: 0.614 Test LM: 902.29lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-12LS01-Y	Lamp Spec: LPDL-12LS01-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: 2026-6-2

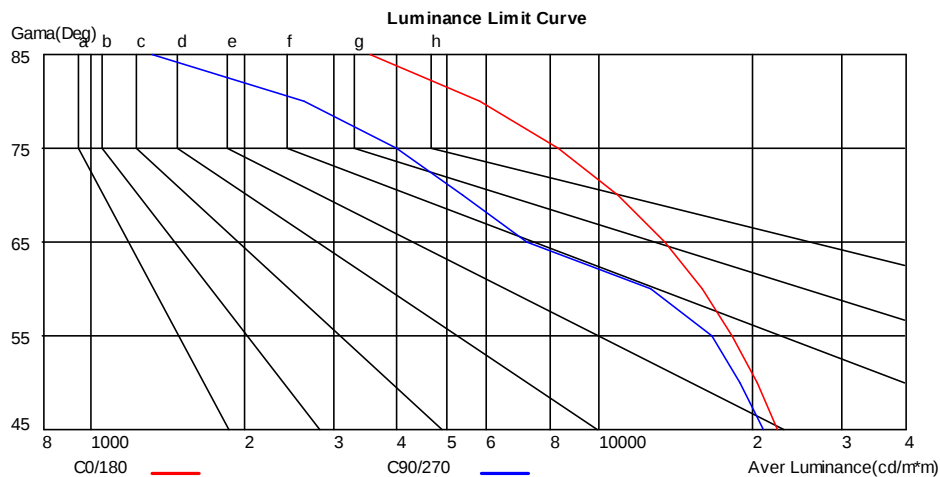
Remark:

Measured Para U: 224.2V I: 80.0mA P: 11.10W PF: 0.614 Test LM: 902.29lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-12LS01-Y	Lamp Spec: LPDL-12LS01-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	22534.1	20544.2	18336.3	15969.6	13478.9	10896.1	8299.6	5805.5	3543.2
C90	21119.0	18970.4	16662.9	12624.9	7200.1	5363.5	3996.9	2632.8	1312.2

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

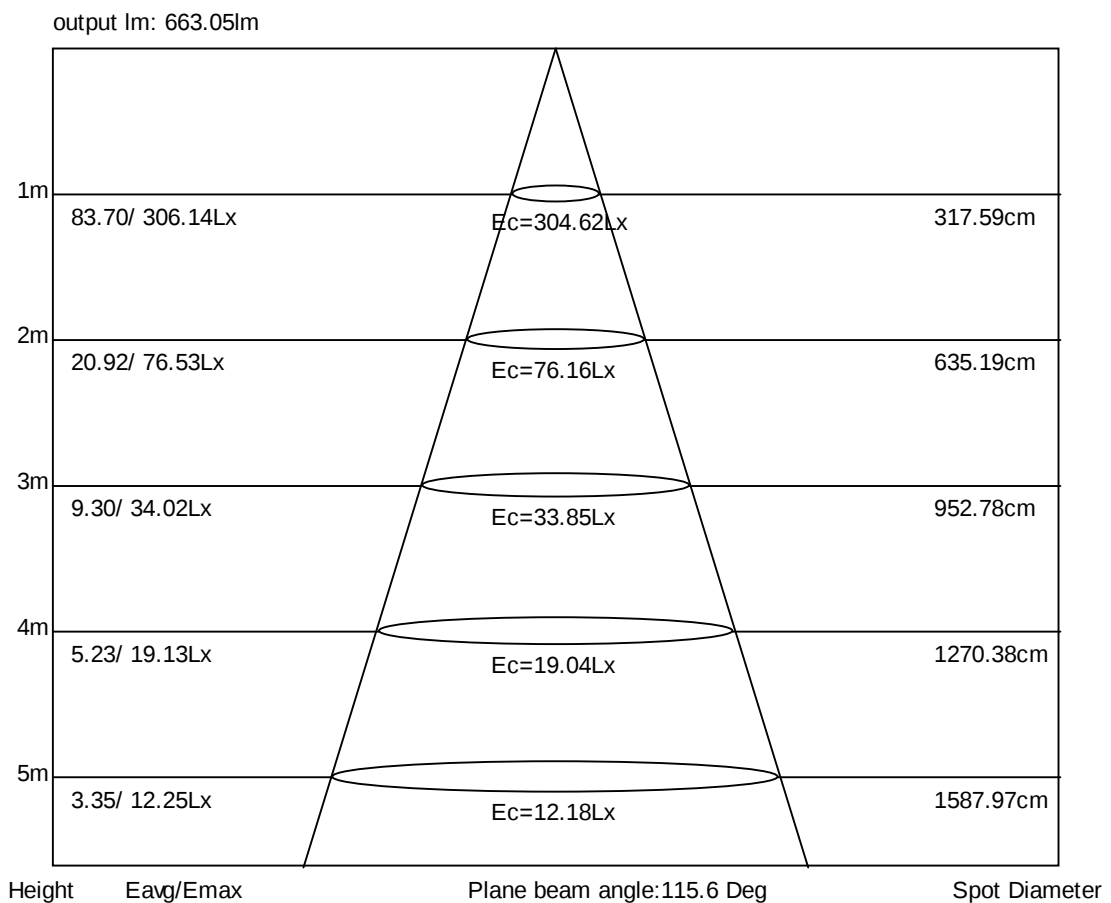
Humidity(%): 60

Date: 2026-6-2

Remark:

Measured Para U: 224.2V I: 80.0mA P: 11.10W PF: 0.614 Test LM: 902.29lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-12LS01-Y	Lamp Spec: LPDL-12LS01-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

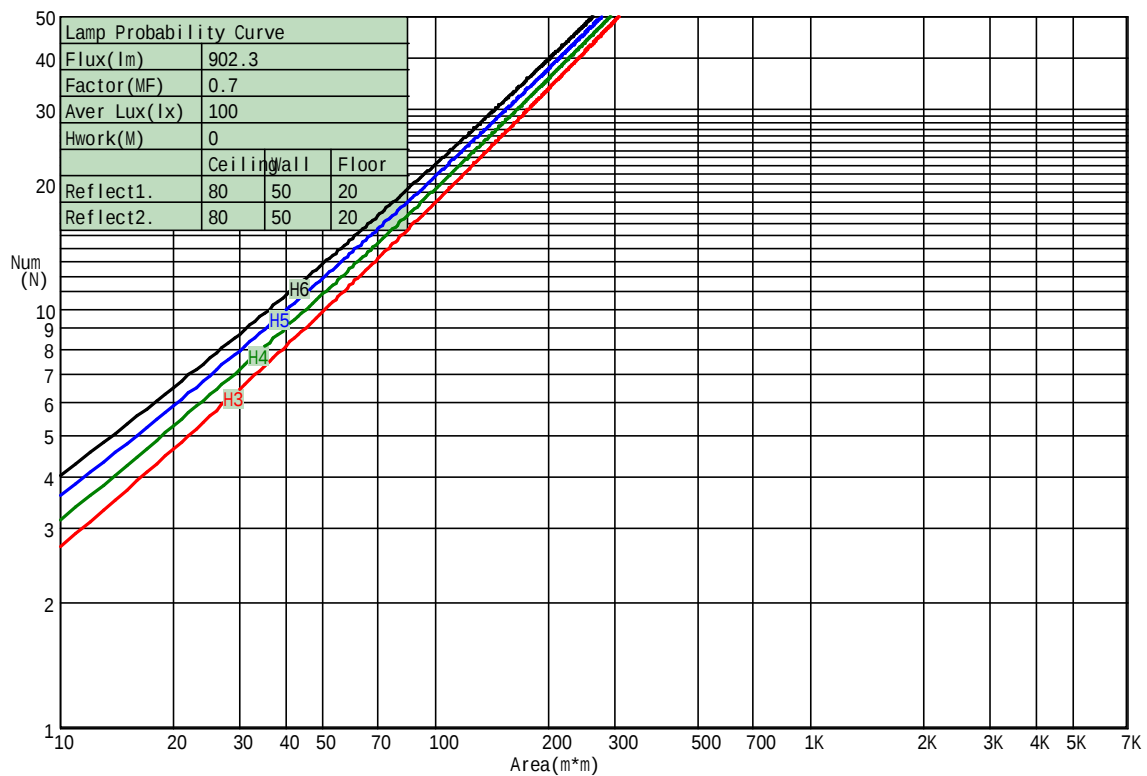
Humidity(%): 60

Date: 2026-6-2

Remark:

Measured Para U: 224.2V I: 80.0mA P: 11.10W PF: 0.614 Test LM: 902.29lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-12LS01-Y	Lamp Spec: LPDL-12LS01-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: 2026-6-2

Remark:

Measured Para U: 224.2V I: 80.0mA P: 11.10W PF: 0.614 Test LM: 902.29lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-12LS01-Y	Lamp Spec: LPDL-12LS01-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	53	38	29	52	38	29	49	36	28
0.80	58	42	31	56	41	30	52	39	30
1.00	61	44	32	59	43	32	54	40	31
1.25	64	46	33	61	45	33	56	42	31
1.50	66	48	34	63	46	33	57	43	31
2.00	69	50	35	65	48	34	58	44	32
2.50	70	51	35	66	49	34	59	44	31
3.00	71	52	35	67	49	34	59	44	31
4.00	73	53	36	68	50	34	60	45	31
5.00	73	54	36	69	51	34	60	45	31

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	1.03	0.99	0.95	1.01	0.97	0.93	0.97	0.93	0.9	0.93	0.9	0.88	0.89	0.87	0.85
2	0.9	0.83	0.77	0.88	0.81	0.76	0.84	0.79	0.74	0.81	0.76	0.73	0.78	0.74	0.71
3	0.79	0.7	0.64	0.77	0.69	0.63	0.74	0.67	0.62	0.71	0.66	0.61	0.69	0.64	0.6
4	0.7	0.61	0.54	0.68	0.6	0.53	0.66	0.58	0.53	0.63	0.57	0.52	0.61	0.56	0.51
5	0.62	0.53	0.46	0.61	0.52	0.46	0.59	0.51	0.45	0.57	0.5	0.45	0.55	0.49	0.44
6	0.56	0.47	0.4	0.55	0.46	0.4	0.53	0.45	0.4	0.51	0.45	0.39	0.5	0.44	0.39
7	0.51	0.42	0.35	0.5	0.41	0.35	0.48	0.41	0.35	0.47	0.4	0.35	0.45	0.39	0.35
8	0.46	0.37	0.32	0.45	0.37	0.31	0.44	0.37	0.31	0.43	0.36	0.31	0.42	0.35	0.31
9	0.42	0.34	0.28	0.42	0.34	0.28	0.41	0.33	0.28	0.39	0.33	0.28	0.38	0.32	0.28
10	0.39	0.31	0.26	0.38	0.31	0.26	0.37	0.3	0.25	0.37	0.3	0.25	0.36	0.3	0.25

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: 2026-6-2

Remark:

Measured Para U: 224.2V I: 80.0mA P: 11.10W PF: 0.614 Test LM: 902.29lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-12LS01-Y	Lamp Spec: LPDL-12LS01-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	0.32	0.18	0.06	0.31	0.18	0.06	0.3	0.17	0.05	0.29	0.17	0.05	0.28	0.16	0.05
2	0.3	0.16	0.05	0.29	0.16	0.05	0.28	0.16	0.05	0.27	0.15	0.05	0.26	0.15	0.05
3	0.27	0.15	0.04	0.27	0.14	0.04	0.26	0.14	0.04	0.25	0.14	0.04	0.24	0.13	0.04
4	0.25	0.13	0.04	0.25	0.13	0.04	0.24	0.13	0.04	0.23	0.12	0.04	0.22	0.12	0.04
5	0.23	0.12	0.03	0.23	0.12	0.03	0.22	0.11	0.03	0.21	0.11	0.03	0.21	0.11	0.03
6	0.22	0.11	0.03	0.21	0.11	0.03	0.2	0.1	0.03	0.2	0.1	0.03	0.19	0.1	0.03
7	0.2	0.1	0.03	0.2	0.1	0.03	0.19	0.1	0.03	0.18	0.09	0.03	0.18	0.09	0.03
8	0.19	0.09	0.03	0.18	0.09	0.03	0.18	0.09	0.03	0.17	0.09	0.03	0.17	0.09	0.03
9	0.18	0.08	0.02	0.17	0.08	0.02	0.17	0.08	0.02	0.16	0.08	0.02	0.16	0.08	0.02
10	0.16	0.08	0.02	0.16	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	0.15	0.07	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	0.18	0.16	0.13	0.15	0.13	0.11	0.11	0.09	0.08	0.06	0.05	0.05	0.02	0.02	0.01
2	0.17	0.13	0.1	0.15	0.11	0.08	0.1	0.08	0.06	0.06	0.05	0.03	0.02	0.01	0.01
3	0.17	0.11	0.07	0.14	0.1	0.06	0.1	0.07	0.04	0.06	0.04	0.03	0.02	0.01	0.01
4	0.16	0.1	0.06	0.14	0.09	0.05	0.09	0.06	0.04	0.05	0.04	0.02	0.02	0.01	0.01
5	0.15	0.09	0.05	0.13	0.08	0.04	0.09	0.05	0.03	0.05	0.03	0.02	0.02	0.01	0.01
6	0.14	0.08	0.04	0.12	0.07	0.03	0.08	0.05	0.02	0.05	0.03	0.01	0.02	0.01	0
7	0.14	0.08	0.03	0.12	0.07	0.03	0.08	0.05	0.02	0.05	0.03	0.01	0.02	0.01	0
8	0.13	0.07	0.03	0.11	0.06	0.02	0.08	0.04	0.02	0.04	0.03	0.01	0.01	0.01	0
9	0.12	0.06	0.03	0.11	0.06	0.02	0.07	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0
10	0.12	0.06	0.02	0.1	0.05	0.02	0.07	0.04	0.01	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: 2026-6-2

Remark:

Measured Para U: 224.2V I: 80.0mA P: 11.10W PF: 0.614 Test LM: 902.29lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-12LS01-Y	Lamp Spec: LPDL-12LS01-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	306	305	303	302	303	302	303	303	0-5	7.27	7.27
10	303	303	300	298	298	296	299	300	5-10	21.6	28.8
15	299	299	294	292	290	288	293	294	10-15	35.2	64
20	292	292	286	283	280	278	284	286	15-20	47.7	112
25	283	283	275	271	267	266	273	275	20-25	58.6	170
30	271	272	262	258	253	251	260	263	25-30	67.7	238
35	257	258	246	242	236	235	244	248	30-35	74.6	313
40	241	242	231	224	217	217	227	233	35-40	79.2	392
45	225	224	211	204	198	196	207	213	40-45	81.2	473
50	205	204	190	184	176	174	188	192	45-50	80.6	554
55	183	183	167	161	152	150	165	169	50-55	77.3	631
60	160	160	126	136	127	125	141	145	55-60	70.9	702
65	135	135	72	111	101	99.5	115	120	60-65	61	763
70	109	110	53.6	85.6	75.7	74	89.7	94.9	65-70	49.9	813
75	83	83.9	40	60.2	51.2	49.6	64.6	69.6	70-75	39	852
80	58.1	58.9	26.3	37.3	28.7	27	41.1	45.4	75-80	27.5	879
85	35.4	35.4	13.1	17.1	8.82	7.47	20.4	25.2	80-85	16.3	896
90	19.7	13.6	4.7	2.24	2.23	2.04	2.4	9.7	85-90	6.78	902
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: 2026-6-2

Remark:

Measured Para U: 224.2V I: 80.0mA P: 11.10W PF: 0.614 Test LM: 902.29lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-12LS01-Y	Lamp Spec: LPDL-12LS01-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	306	305	305	305	304	303	303	302	303	303	302	302	302	303	303	303	304	305
10.0	303	303	303	302	301	300	299	298	298	298	297	296	297	298	299	300	300	302
15.0	299	299	299	297	295	293	292	292	291	290	289	289	290	292	293	294	295	297
20.0	292	292	292	290	287	285	284	282	281	280	279	278	280	283	284	285	287	289
25.0	283	283	283	280	276	274	272	271	269	267	267	266	268	271	273	275	276	280
30.0	271	271	272	268	264	261	259	257	255	253	252	251	254	258	260	262	264	267
35.0	257	257	258	254	249	245	243	241	238	236	235	235	238	242	245	247	249	253
40.0	241	241	242	238	233	229	226	223	220	217	217	217	220	225	228	231	234	237
45.0	225	225	224	220	214	210	207	204	201	198	197	196	200	205	209	211	215	220
50.0	205	205	204	199	193	188	186	183	179	176	175	174	178	185	189	191	194	200
55.0	183	183	183	178	170	165	163	160	156	152	151	150	155	161	166	168	171	177
60.0	160	160	160	149	134	128	133	135	131	127	126	125	130	137	142	144	147	153
65.0	135	135	135	114	85.8	80.6	98.3	110	106	101	101	99.7	105	112	116	118	121	128
70.0	109	109	110	91.3	65.9	60.6	75.1	84.5	80.1	75.7	75	74.2	79.2	86.3	90.8	93.2	96.4	103
75.0	83	83.4	83.8	69.5	49.6	44.4	53.6	59.2	55.1	51.2	50.5	49.7	54.5	61.3	65.7	68	71	77.1
80.0	58.1	58.4	58.8	48.2	33.4	28.7	33.7	36.4	32.5	28.7	28	27.2	31.7	38	42.1	44	46.8	52.5
85.0	35.4	35.4	35.4	28.1	18	14	15.8	16.2	12.5	8.82	8.23	7.62	11.7	17.6	21.4	23.6	26.4	31
90.0	19.7	17	14.3	10.7	6.65	4.16	3.05	2.24	2.24	2.23	2.15	2.06	2.16	2.32	4	7.31	10.8	15.3
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: 2026-6-2

Remark: