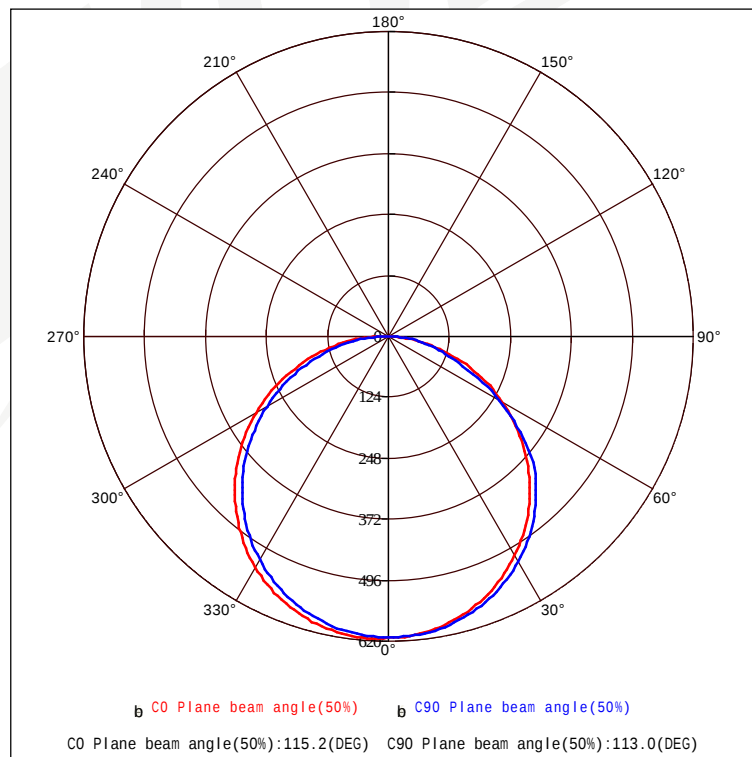


Goniophotometer Test Report

Measured Para U: 230.3V I: 151.0mA P: 22.10W PF: 0.634 Test LM: 1814.49lm						
Lamp Name: LED DOWN LIGHT			Lamp Type:		Weight(kg):	
Lamp ID: LPDL-24LS01-Y			Lamp Spec: LPDL-24LS01-Y		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPDL-24LS01-Y		Peak Value(cd)	615.7	Efficiency(lm/w)	82.1
Nominal P(w)		1.0	Position	180.0,2.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	1814.486	Down(C0-C180)	50.6
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)	49.4

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

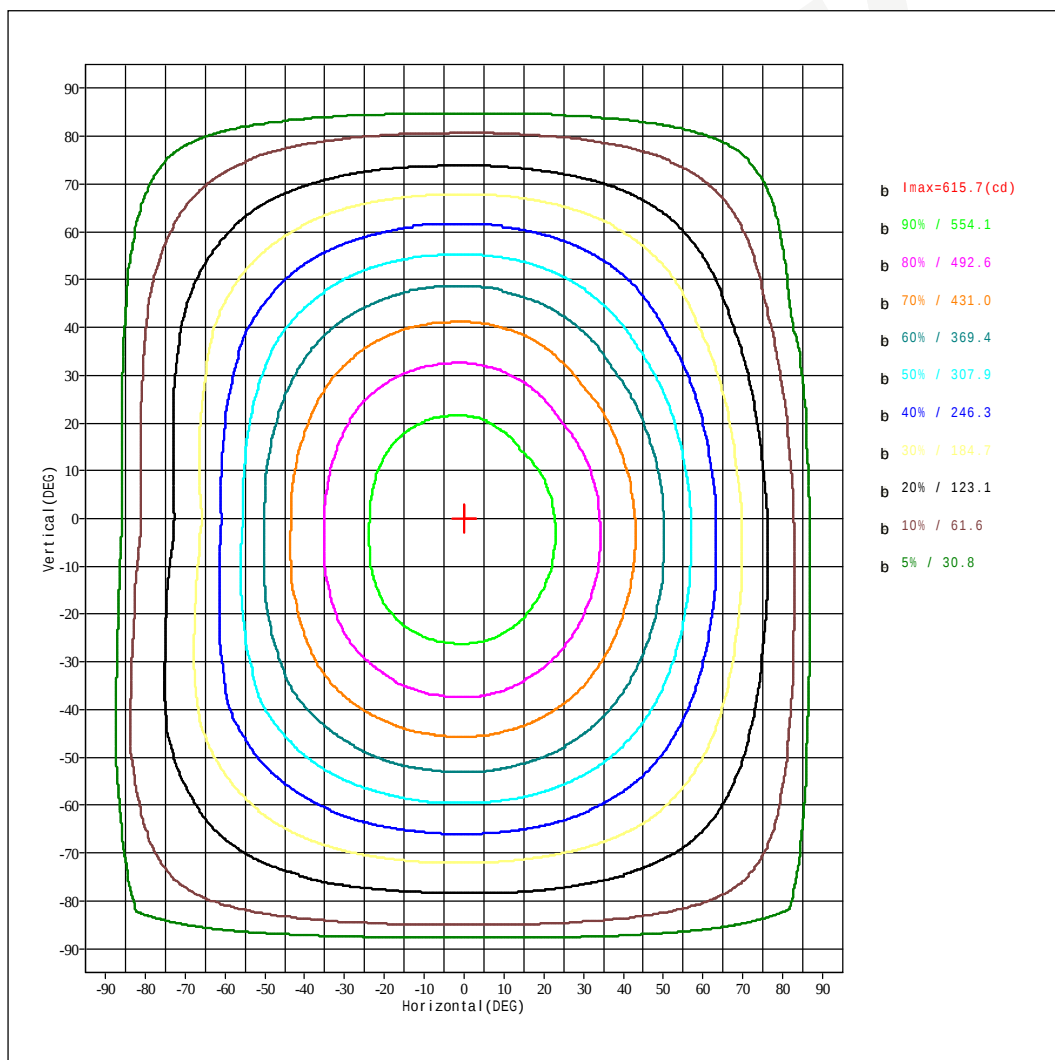
Humidity(%): 60

Date: 2026-6-6

Remark:

Measured Para U: 230.3V I: 151.0mA P: 22.10W PF: 0.634 Test LM: 1814.49lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-24LS01-Y	Lamp Spec: LPDL-24LS01-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

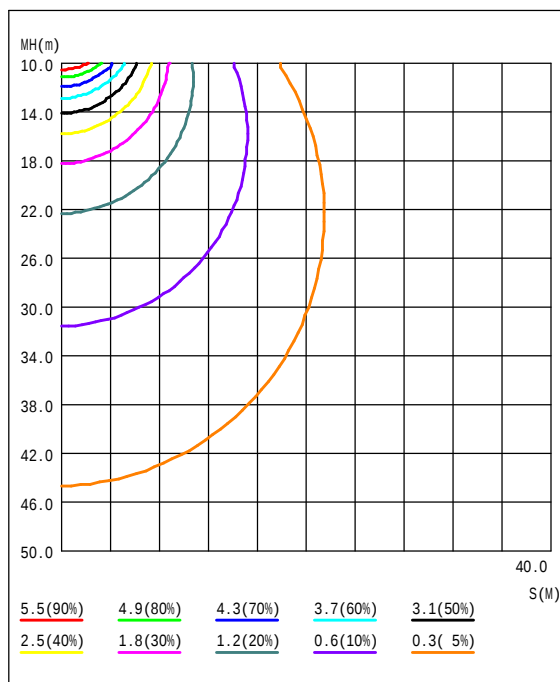
Humidity(%): 60

Date: 2026-6-6

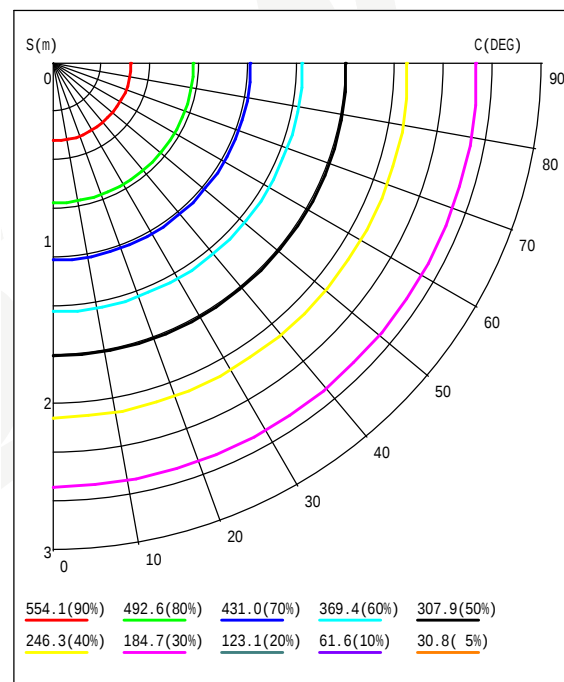
Remark:

Measured Para U: 230.3V I: 151.0mA P: 22.10W PF: 0.634 Test LM: 1814.49lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-24LS01-Y	Lamp Spec: LPDL-24LS01-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: 2026-6-6

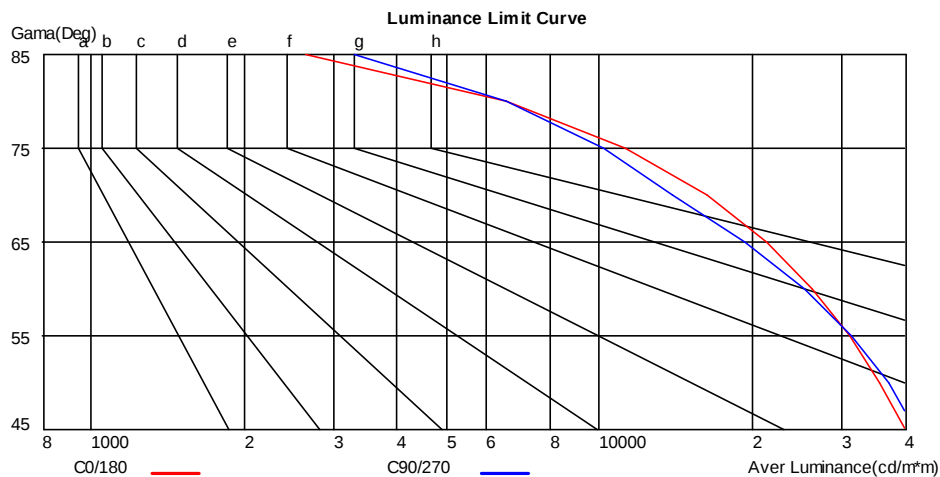
Remark:

Measured Para U: 230.3V I: 151.0mA P: 22.10W PF: 0.634 Test LM: 1814.49lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-24LS01-Y	Lamp Spec: LPDL-24LS01-Y	Shape Size:
Manufactory: LIPER	Sur(m ²):	Protect Angle(Deg):

Luminance Limit Curve

Aver Luminance(cd/m ² m)									
Gm(Deg)	45	50	55	60	65	70	75	80	85
C0	40117.8	35761.7	31107.2	26229.2	21393.4	16269.0	11263.1	6581.2	2638.7
C90	42080.2	37202.8	31419.8	25428.6	19340.3	13981.2	10209.2	6579.2	3292.8

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: zyg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

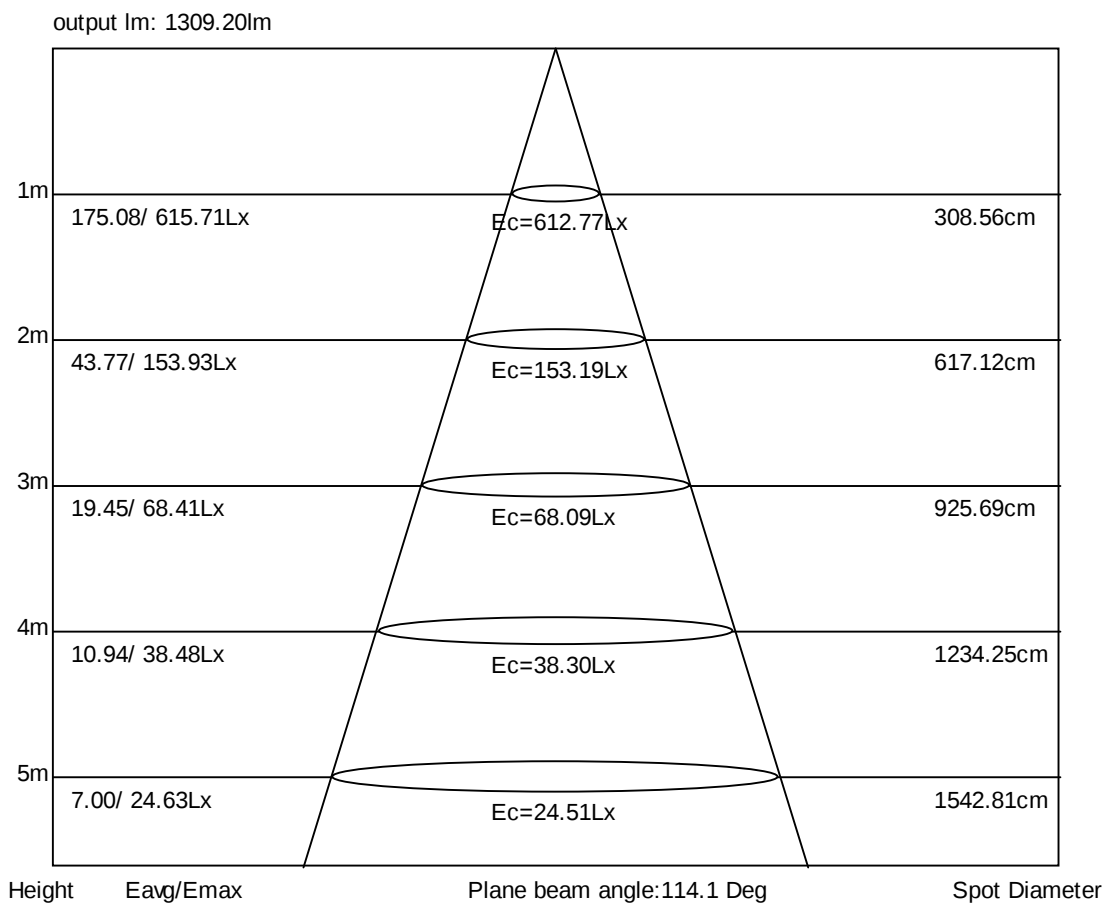
Humidity(%): 60

Date: 2026-6-6

Remark:

Measured Para U: 230.3V I: 151.0mA P: 22.10W PF: 0.634 Test LM: 1814.49lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-24LS01-Y	Lamp Spec: LPDL-24LS01-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

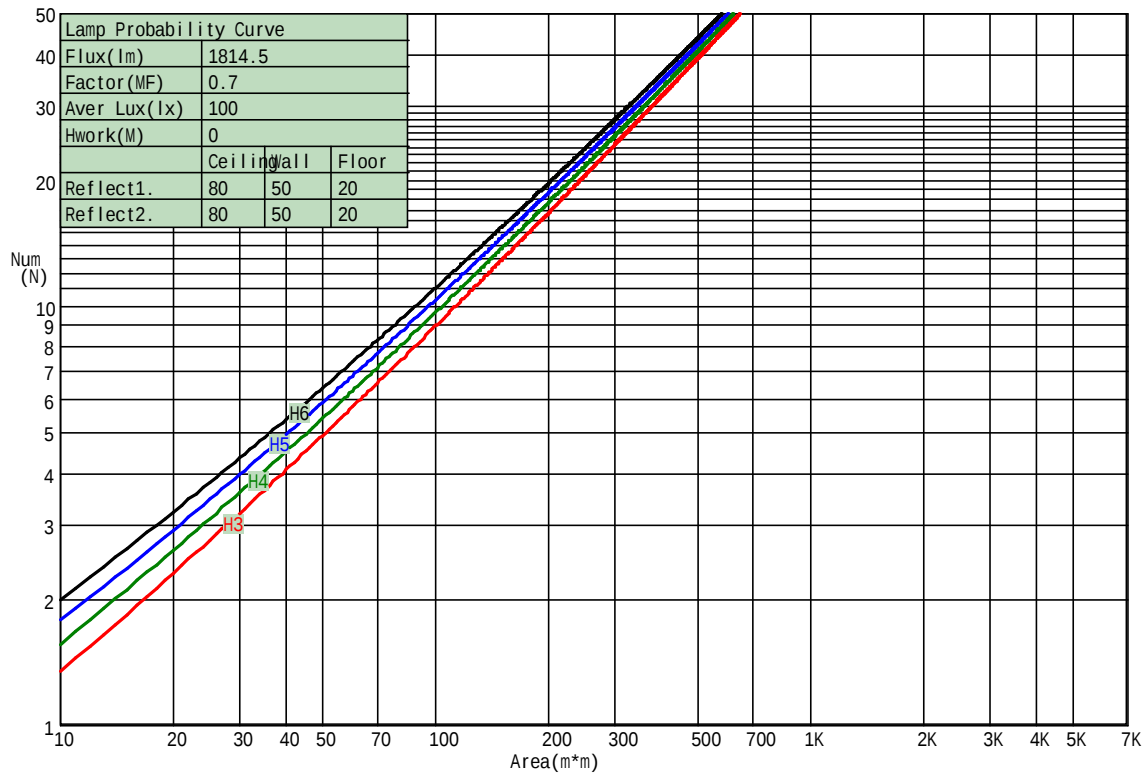
Humidity(%): 60

Date: 2026-6-6

Remark:

Measured Para U: 230.3V I: 151.0mA P: 22.10W PF: 0.634 Test LM: 1814.49lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-24LS01-Y	Lamp Spec: LPDL-24LS01-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: 2026-6-6

Remark:

Measured Para U: 230.3V I: 151.0mA P: 22.10W PF: 0.634 Test LM: 1814.49lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-24LS01-Y	Lamp Spec: LPDL-24LS01-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	52	37	28	50	36	27	47	35	27
0.80	57	40	29	54	39	29	50	37	28
1.00	60	42	30	57	41	30	52	39	29
1.25	63	44	31	60	43	30	54	40	29
1.50	65	46	32	61	44	31	55	41	29
2.00	67	48	33	64	46	32	57	42	30
2.50	69	49	33	65	47	32	57	42	29
3.00	70	50	33	66	47	32	58	42	29
4.00	71	51	33	67	48	32	58	43	29
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	1.03	0.99	0.95	1.01	0.97	0.93	0.97	0.93	0.9	0.93	0.9	0.87	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	0.72	0.78	0.74	0.71
3	0.79	0.7	0.63	0.77	0.69	0.63	0.74	0.67	0.62	0.71	0.65	0.61	0.69	0.64	0.6
4	0.69	0.6	0.54	0.68	0.6	0.53	0.66	0.58	0.52	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	0.44	0.39	0.5	0.44	0.39
7	0.5	0.42	0.35	0.5	0.41	0.35	0.48	0.4	0.35	0.47	0.4	0.35	0.45	0.39	0.34
8	0.46	0.37	0.31	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	0.4	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	0.36	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: 2026-6-6

Remark:

Measured Para U: 230.3V I: 151.0mA P: 22.10W PF: 0.634 Test LM: 1814.49lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-24LS01-Y	Lamp Spec: LPDL-24LS01-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	0.06	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	0.28	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: 2026-6-6

Remark:

Measured Para U: 230.3V I: 151.0mA P: 22.10W PF: 0.634 Test LM: 1814.49lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-24LS01-Y	Lamp Spec: LPDL-24LS01-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	609	611	610	611	615	612	609	604	0-5	14.6	14.6
10	599	603	603	607	610	605	601	593	5-10	43.4	58
15	584	590	591	598	600	593	589	577	10-15	70.8	129
20	564	572	574	583	584	577	571	557	15-20	95.8	225
25	540	549	552	564	564	555	549	531	20-25	118	342
30	511	522	526	540	539	529	521	501	25-30	136	478
35	478	491	495	512	510	498	490	467	30-35	150	628
40	441	455	460	478	476	464	455	430	35-40	158	786
45	401	416	421	442	439	426	416	389	40-45	162	949
50	358	373	372	401	397	383	374	345	45-50	160	1109
55	311	327	314	357	353	338	328	298	50-55	153	1262
60	262	279	254	310	306	291	280	250	55-60	140	1403
65	214	230	193	262	257	241	231	201	60-65	124	1526
70	163	181	140	212	206	192	182	151	65-70	103	1629
75	113	130	102	162	157	142	133	103	70-75	80.6	1710
80	65.8	81.8	65.8	112	108	93.9	86.4	57.8	75-80	57.1	1767
85	26.4	37.8	32.9	66.2	62.8	50.4	44.1	20.3	80-85	34.1	1801
90	5.26	5.36	11.6	24.9	20.5	20.1	5.4	5.02	85-90	13.8	1814
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: 2026-6-6

Remark:

Measured Para U: 230.3V I: 151.0mA P: 22.10W PF: 0.634 Test LM: 1814.49lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-24LS01-Y	Lamp Spec: LPDL-24LS01-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	609	610	611	611	610	610	611	611	613	615	614	613	611	610	608	606	605	607
10.0	599	601	602	603	603	604	606	607	608	610	608	606	604	602	600	596	594	596
15.0	584	587	589	590	591	592	595	598	599	600	597	594	592	590	586	581	578	581
20.0	564	568	571	573	573	576	580	583	584	584	581	578	575	572	568	561	557	561
25.0	540	544	548	550	552	555	560	564	564	564	560	556	553	550	545	537	532	536
30.0	511	516	521	523	525	529	535	540	540	539	535	530	527	523	517	508	502	507
35.0	478	483	489	492	494	498	506	511	511	510	505	500	496	492	485	475	469	473
40.0	441	447	453	456	459	464	472	478	477	476	471	465	461	457	450	438	431	436
45.0	401	407	414	417	420	425	435	441	440	439	433	427	422	418	410	398	390	396
50.0	358	364	371	373	372	378	391	400	399	397	391	385	380	376	367	354	346	352
55.0	311	318	325	323	317	324	343	357	355	353	347	340	335	331	322	308	300	306
60.0	262	270	278	271	260	267	292	310	308	306	299	292	287	282	274	260	251	257
65.0	214	221	228	218	201	208	239	261	259	257	250	243	238	234	225	211	203	208
70.0	163	171	179	167	149	156	188	211	209	206	200	194	189	184	175	161	152	158
75.0	113	120	128	121	108	115	142	162	159	157	150	144	139	135	127	113	104	108
80.0	65.8	72.8	80.1	76.6	69.3	75.9	97	112	110	108	102	95.4	91.4	88	80.1	67.2	58.7	62.3
85.0	26.4	31.4	36.5	36.2	34	40.2	55.3	65.8	64.3	62.8	57.4	51.8	48.3	45.4	38.9	28.1	21	23.7
90.0	5.26	5.3	5.35	7.4	10.2	14.5	20.5	24.4	22.4	20.5	20.4	20.2	15.3	8.62	5.32	5.14	5.04	5.15
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: 2026-6-6

Remark: