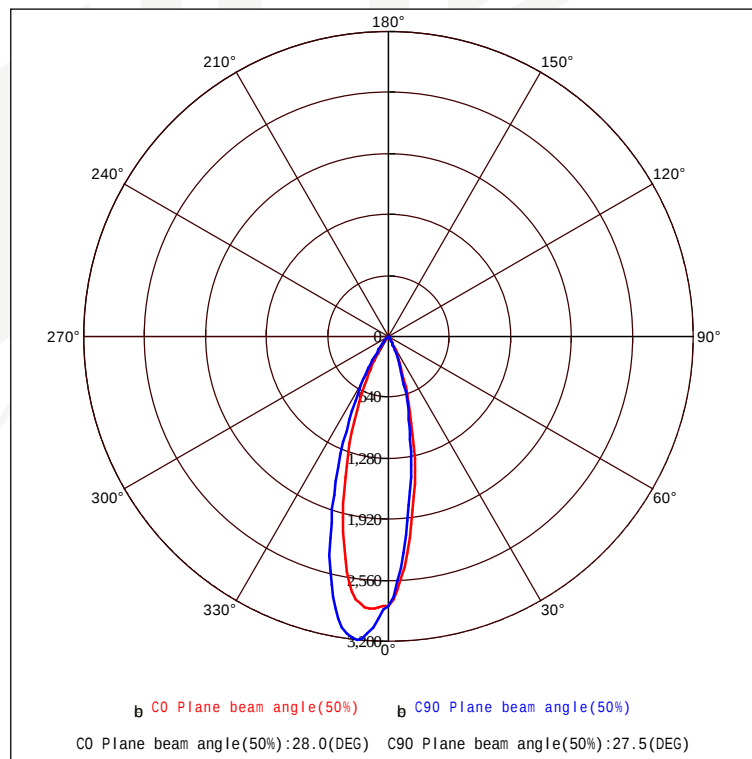


Goniophotometer Test Report

Measured Para U: 225.5V I: 109.0mA P: 14.00W PF: 0.567 Test LM: 900.31lm						
Lamp Name: LED DOWN LIGHT			Lamp Type:		Weight(kg):	
Lamp ID: LPCL-15H01-YB			Lamp Spec: LPCL-15H01-YB		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPCL-15H01-YB		Peak Value(cd)	3312.1	Efficiency(lm/w)	64.3
Nominal P(w)		15.0	Position	225.0,6.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	900.310	Down(C0-C180)	36.1
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)	63.9

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

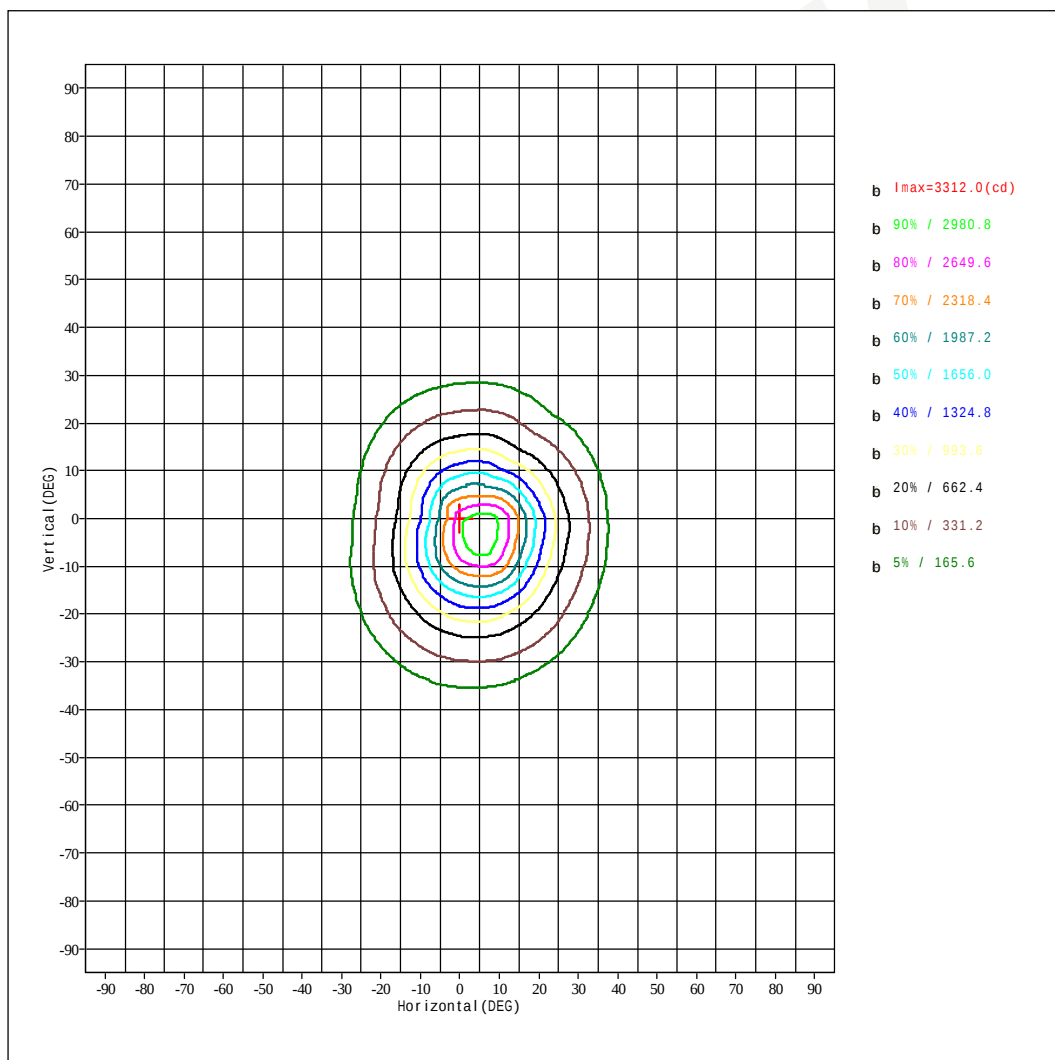
Humidity(%): 60

Date: 2026-4-7

Remark:

Measured Para U: 225.5V I: 109.0mA P: 14.00W PF: 0.567 Test LM: 900.31lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPCL-15H01-YB	Lamp Spec: LPCL-15H01-YB	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

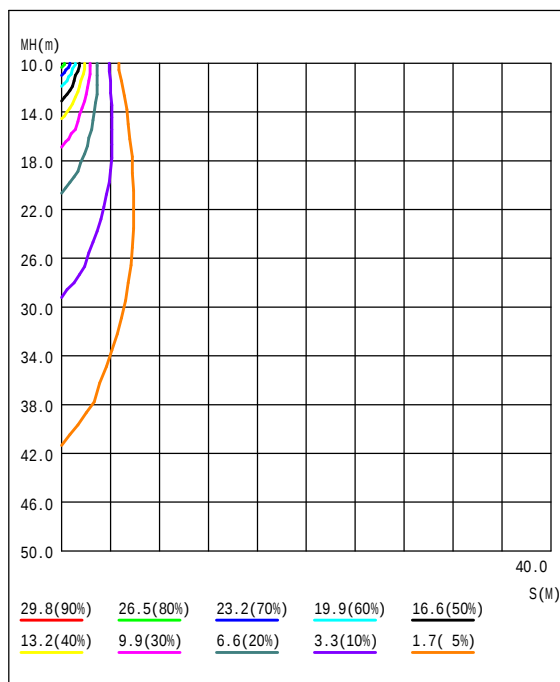
Humidity(%): 60

Date: 2026-4-7

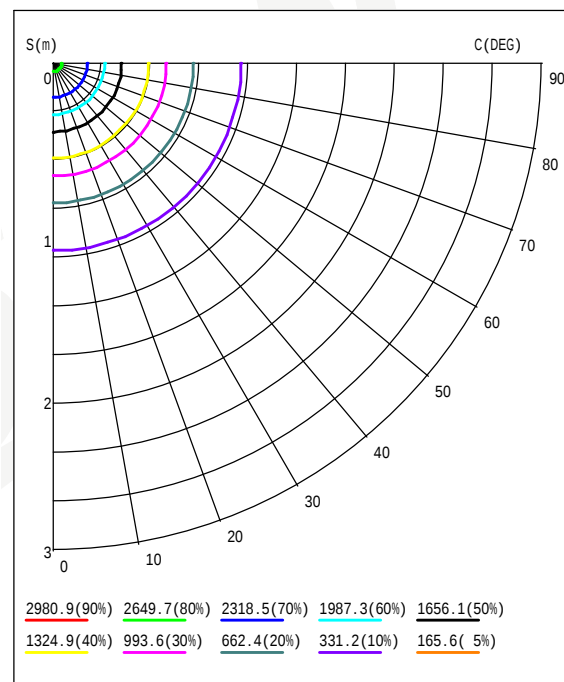
Remark:

Measured Para U: 225.5V I: 109.0mA P: 14.00W PF: 0.567 Test LM: 900.31lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPCL-15H01-YB	Lamp Spec: LPCL-15H01-YB	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: 2026-4-7

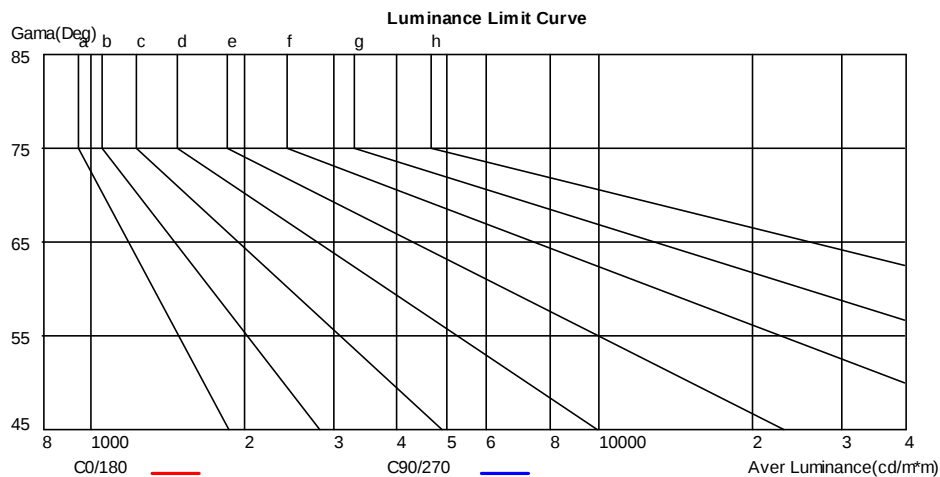
Remark:

Measured Para U: 225.5V I: 109.0mA P: 14.00W PF: 0.567 Test LM: 900.31lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPCL-15H01-YB	Lamp Spec: LPCL-15H01-YB	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	163.2	180.3	220.5	251.4	277.3	290.1	290.6	277.8	259.7
C90	183.8	222.0	259.2	287.1	305.3	307.2	297.4	280.8	260.7

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

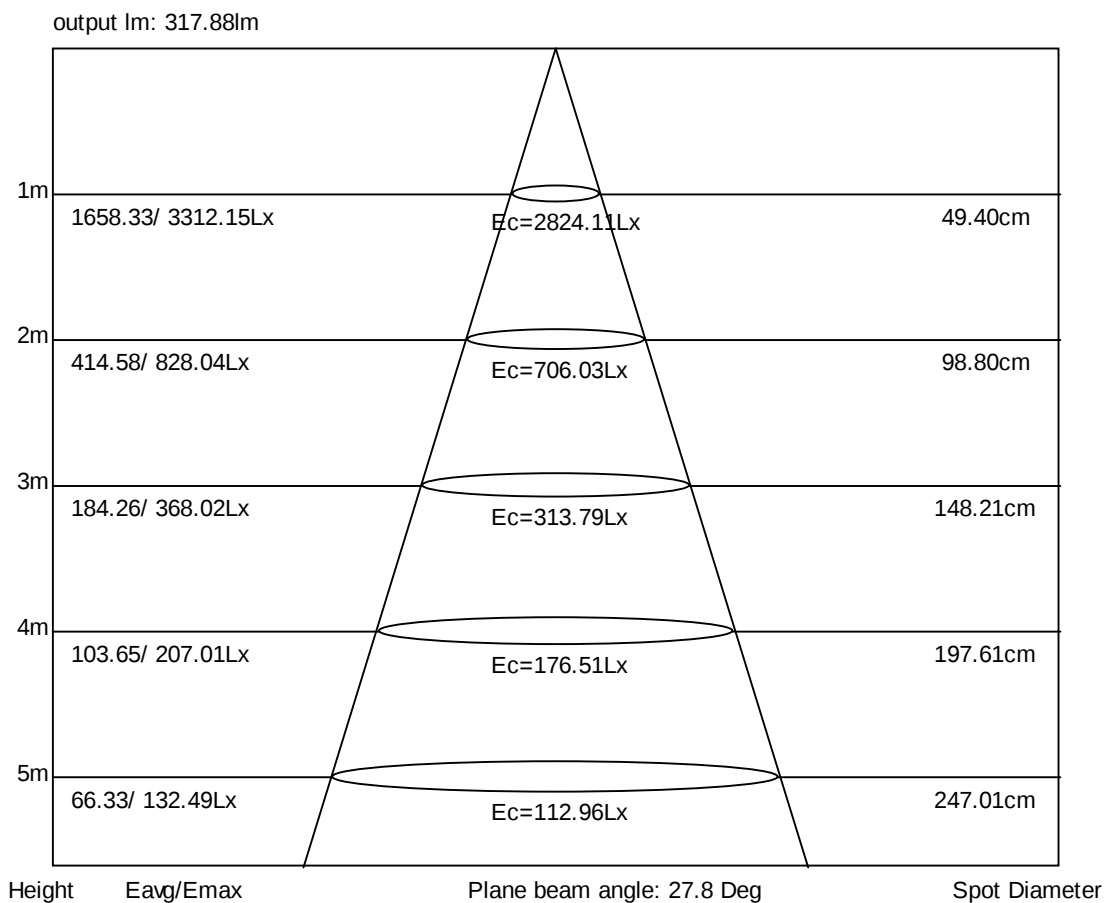
Humidity(%): 60

Date: 2026-4-7

Remark:

Measured Para U: 225.5V I: 109.0mA P: 14.00W PF: 0.567 Test LM: 900.31lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPCL-15H01-YB	Lamp Spec: LPCL-15H01-YB	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

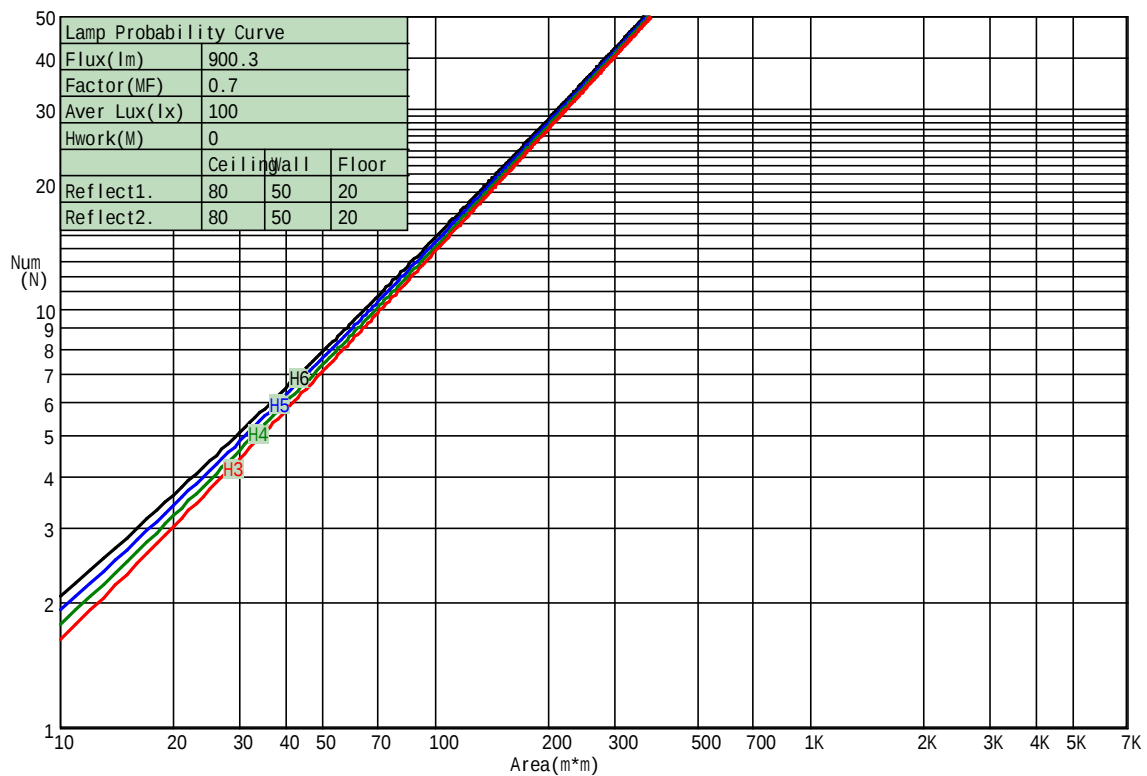
Humidity(%): 60

Date: 2026-4-7

Remark:

Measured Para U: 225.5V I: 109.0mA P: 14.00W PF: 0.567 Test LM: 900.3lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPCL-15H01-YB	Lamp Spec: LPCL-15H01-YB	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: 2026-4-7

Remark:

Measured Para U: 225.5V I: 109.0mA P: 14.00W PF: 0.567 Test LM: 900.31lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPCL-15H01-YB	Lamp Spec: LPCL-15H01-YB	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	39	22	11	37	21	10	34	19	10
0.80	45	26	13	43	25	12	38	23	12
1.00	49	29	15	46	28	14	41	25	13
1.25	53	32	17	50	30	16	44	27	15
1.50	56	35	18	52	33	17	46	29	16
2.00	60	38	21	56	36	20	48	31	17
2.50	62	40	22	58	38	21	50	33	18
3.00	64	42	23	60	39	22	51	34	19
4.00	67	45	25	62	42	24	53	36	20
5.00	68	46	26	63	43	25	54	37	21

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	1.12	1.1	1.08	1.1	1.08	1.06	1.06	1.05	1.03	1.02	1.01	1	0.99	0.98	0.97
2	1.06	1.03	1	1.05	1.02	0.99	1.01	0.99	0.97	0.99	0.97	0.95	0.96	0.94	0.93
3	1.01	0.97	0.94	1	0.96	0.93	0.97	0.94	0.92	0.95	0.92	0.9	0.93	0.91	0.89
4	0.96	0.92	0.89	0.95	0.91	0.88	0.93	0.9	0.87	0.91	0.89	0.86	0.9	0.87	0.85
5	0.92	0.88	0.84	0.91	0.87	0.84	0.9	0.86	0.83	0.88	0.85	0.83	0.87	0.84	0.82
6	0.89	0.84	0.81	0.88	0.83	0.8	0.86	0.83	0.8	0.85	0.82	0.79	0.84	0.81	0.79
7	0.85	0.8	0.77	0.84	0.8	0.77	0.83	0.79	0.77	0.82	0.79	0.76	0.81	0.78	0.76
8	0.82	0.77	0.74	0.81	0.77	0.74	0.8	0.76	0.74	0.79	0.76	0.73	0.79	0.75	0.73
9	0.79	0.74	0.71	0.78	0.74	0.71	0.78	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.7
10	0.76	0.72	0.69	0.76	0.71	0.69	0.75	0.71	0.68	0.74	0.71	0.68	0.74	0.7	0.68

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: 2026-4-7

Remark:

Measured Para U: 225.5V I: 109.0mA P: 14.00W PF: 0.567 Test LM: 900.31lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPCL-15H01-YB	Lamp Spec: LPCL-15H01-YB	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	0.15	0.09	0.03	0.14	0.08	0.03	0.13	0.08	0.02	0.12	0.07	0.02	0.11	0.06	0.02
2	0.14	0.08	0.02	0.13	0.07	0.02	0.12	0.07	0.02	0.11	0.06	0.02	0.11	0.06	0.02
3	0.13	0.07	0.02	0.13	0.07	0.02	0.12	0.06	0.02	0.11	0.06	0.02	0.1	0.06	0.02
4	0.12	0.06	0.02	0.12	0.06	0.02	0.11	0.06	0.02	0.1	0.06	0.02	0.1	0.05	0.02
5	0.12	0.06	0.02	0.11	0.06	0.02	0.11	0.06	0.02	0.1	0.05	0.02	0.1	0.05	0.02
6	0.11	0.06	0.02	0.11	0.05	0.02	0.1	0.05	0.02	0.1	0.05	0.01	0.09	0.05	0.01
7	0.11	0.05	0.01	0.1	0.05	0.01	0.1	0.05	0.01	0.09	0.05	0.01	0.09	0.05	0.01
8	0.1	0.05	0.01	0.1	0.05	0.01	0.09	0.05	0.01	0.09	0.05	0.01	0.09	0.04	0.01
9	0.1	0.05	0.01	0.09	0.05	0.01	0.09	0.04	0.01	0.09	0.04	0.01	0.08	0.04	0.01
10	0.09	0.04	0.01	0.09	0.04	0.01	0.09	0.04	0.01	0.08	0.04	0.01	0.08	0.04	0.01

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	0.15	0.14	0.14	0.13	0.1	0.09	0.09	0.06	0.05	0.05	0.02	0.02	0.02
2	0.15	0.13	0.12	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	0.08	0.07	0.06	0.05	0.04	0.03	0.02	0.01	0.01
4	0.13	0.1	0.08	0.11	0.08	0.07	0.07	0.06	0.05	0.04	0.03	0.03	0.01	0.01	0.01
5	0.12	0.09	0.06	0.1	0.07	0.06	0.07	0.05	0.04	0.04	0.03	0.02	0.01	0.01	0.01
6	0.11	0.08	0.05	0.09	0.07	0.05	0.06	0.05	0.03	0.04	0.03	0.02	0.01	0.01	0.01
7	0.1	0.07	0.05	0.09	0.06	0.04	0.06	0.04	0.03	0.03	0.02	0.02	0.01	0.01	0.01
8	0.09	0.06	0.04	0.08	0.05	0.03	0.06	0.04	0.02	0.03	0.02	0.01	0.01	0.01	0
9	0.09	0.06	0.03	0.08	0.05	0.03	0.05	0.03	0.02	0.03	0.02	0.01	0.01	0.01	0
10	0.08	0.05	0.03	0.07	0.04	0.03	0.05	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: 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: 2026-4-7

Remark:

Measured Para U: 225.5V I: 109.0mA P: 14.00W PF: 0.567 Test LM: 900.31lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPCL-15H01-YB	Lamp Spec: LPCL-15H01-YB	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	2194	2102	2017	2442	2843	3312	3198	2471	0-5	64.5	64.5
10	1501	1388	1294	1841	2454	3043	2969	1907	5-10	165	229
15	883	809	743	1235	1759	2382	2312	1248	10-15	203	432
20	450	407	359	711	1131	1527	1540	693	15-20	183	615
25	186	176	136	366	618	860	915	331	20-25	132	747
30	69.6	66.3	48.9	158	311	437	488	141	25-30	80.2	828
35	26.8	20.3	15	55.8	123	197	231	51.6	30-35	42.7	870
40	3.3	3.12	2.44	12.4	40.6	60.8	69.6	7.73	35-40	17.5	888
45	1.63	2.12	1.84	2.35	3.7	5.39	8.32	0.99	40-45	4.3	892
50	1.8	2.4	2.22	1.81	0.72	0.8	1.29	0.37	45-50	0.81	893
55	2.21	2.75	2.59	2.13	0.38	0.26	0.44	0.36	50-55	0.59	894
60	2.51	3.01	2.87	2.52	0.39	0.35	0.48	0.4	55-60	0.68	894
65	2.77	3.17	3.05	2.77	0.48	0.33	0.45	0.5	60-65	0.79	895
70	2.9	3.18	3.07	2.96	0.58	0.44	0.56	0.82	65-70	0.89	896
75	2.91	3.07	2.97	3.03	0.77	0.72	0.88	1.23	70-75	0.98	897
80	2.78	2.91	2.81	2.98	1.11	1.06	1.19	1.68	75-80	1.07	898
85	2.6	2.69	2.61	2.83	1.38	1.43	1.64	2.17	80-85	1.15	899
90	2.48	2.5	2.44	2.63	1.66	1.67	2.07	2.41	85-90	1.21	900
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: 2026-4-7

Remark:

Measured Para U: 225.5V I: 109.0mA P: 14.00W PF: 0.567 Test LM: 900.31lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPCL-15H01-YB	Lamp Spec: LPCL-15H01-YB	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	2194	2154	2112	2074	2035	2110	2302	2486	2667	2843	3048	3260	3274	3223	3039	2709	2441	2315
10.0	1501	1451	1400	1357	1315	1414	1662	1908	2186	2454	2712	2978	3018	2985	2737	2255	1863	1678
15.0	883	850	817	787	757	851	1073	1292	1529	1759	2031	2314	2359	2328	2080	1597	1208	1043
20.0	450	431	412	391	369	436	596	757	947	1131	1304	1484	1532	1537	1355	971	666	556
25.0	186	182	177	163	145	186	290	393	508	618	724	833	878	903	787	523	316	250
30.0	69.6	68.1	66.6	60.6	52.7	72.7	122	174	244	311	366	423	454	477	412	255	133	101
35.0	26.8	24	21	18.6	16.2	24	42.5	63.2	93.5	123	155	189	208	224	192	110	48.9	37.7
40.0	3.3	3.22	3.14	2.89	2.59	4.61	9.11	15.5	28.3	40.6	49.4	58.6	63.7	67.7	56.1	28	7.24	5.24
45.0	1.63	1.85	2.07	2.03	1.9	1.95	2.18	2.5	3.11	3.7	4.44	5.21	6.35	7.68	6.72	3.4	1.06	1.35
50.0	1.8	2.06	2.34	2.34	2.26	2.13	1.94	1.69	1.2	0.72	0.75	0.79	0.96	1.18	1.09	0.67	0.52	1.18
55.0	2.21	2.45	2.69	2.7	2.63	2.49	2.28	1.94	1.14	0.38	0.33	0.28	0.32	0.4	0.42	0.39	0.56	1.4
60.0	2.51	2.73	2.95	2.96	2.9	2.79	2.63	2.29	1.32	0.39	0.37	0.35	0.39	0.45	0.46	0.42	0.63	1.59
65.0	2.77	2.95	3.13	3.13	3.08	2.99	2.86	2.52	1.48	0.48	0.41	0.34	0.37	0.42	0.46	0.48	0.75	1.78
70.0	2.9	3.02	3.15	3.14	3.1	3.05	3	2.7	1.62	0.58	0.52	0.46	0.48	0.54	0.62	0.74	1.05	1.99
75.0	2.91	2.98	3.05	3.04	3	2.99	3.01	2.78	1.76	0.77	0.75	0.73	0.77	0.84	0.96	1.12	1.42	2.17
80.0	2.78	2.84	2.9	2.88	2.83	2.85	2.92	2.77	1.93	1.11	1.09	1.07	1.1	1.16	1.29	1.52	1.8	2.3
85.0	2.6	2.64	2.68	2.66	2.62	2.66	2.75	2.67	2.01	1.38	1.4	1.42	1.5	1.59	1.76	2	2.22	2.41
90.0	2.48	2.49	2.5	2.48	2.45	2.48	2.57	2.52	2.08	1.66	1.66	1.66	1.8	1.98	2.15	2.3	2.41	2.45
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: 2026-4-7

Remark: