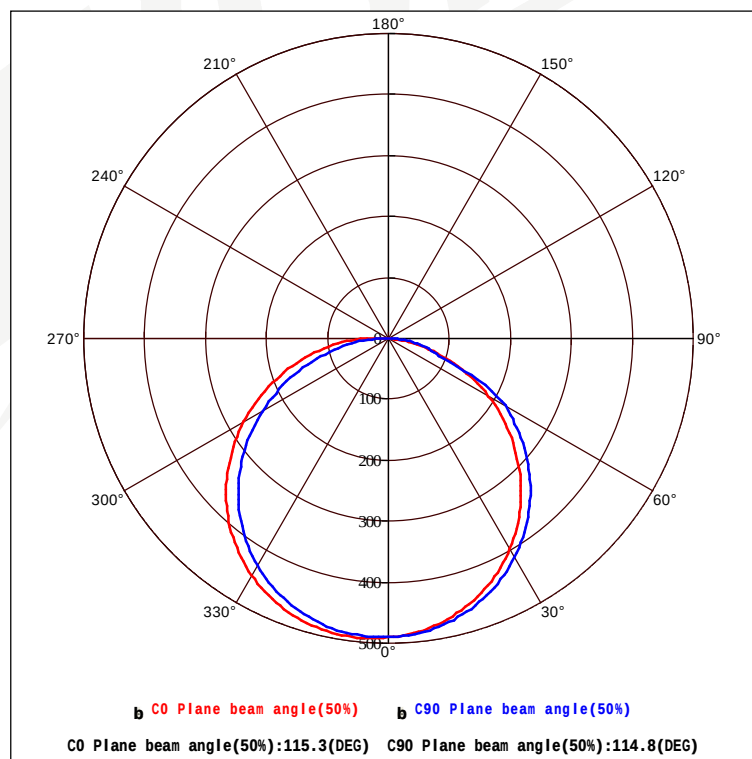


Goniophotometer Test Report

Measured Para U: 222.8V I: 120.0mA P: 17.00W PF: 0.635 Test LM: 1456.73lm						
Lamp Name: LED DOWN LIGHT			Lamp Type:		Weight(kg):	
Lamp ID: LPDL-18LS01-Y			Lamp Spec: LPDL-18LS01-Y		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPDL-18LS01-Y		Peak Value(cd)	493.5	Efficiency(lm/w)	85.7
Nominal P(w)		18.0	Position	180.0,6.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	1456.728	Down(C0-C180)	49.5
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)	50.5

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

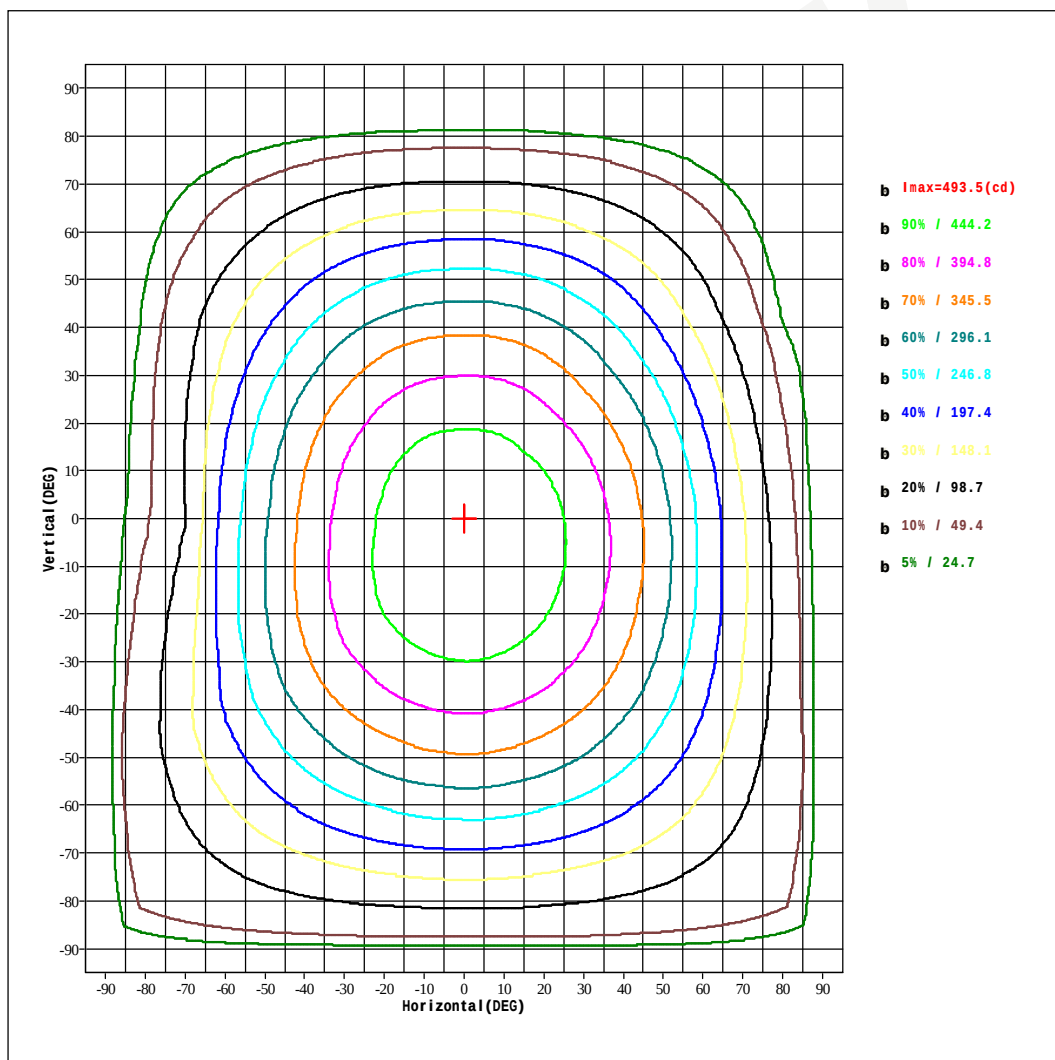
Humidity(%): 60

Date: 2026-5-22

Remark:

Measured Para U: 222.8V I: 120.0mA P: 17.00W PF: 0.635 Test LM: 1456.73lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18LS01-Y	Lamp Spec: LPDL-18LS01-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

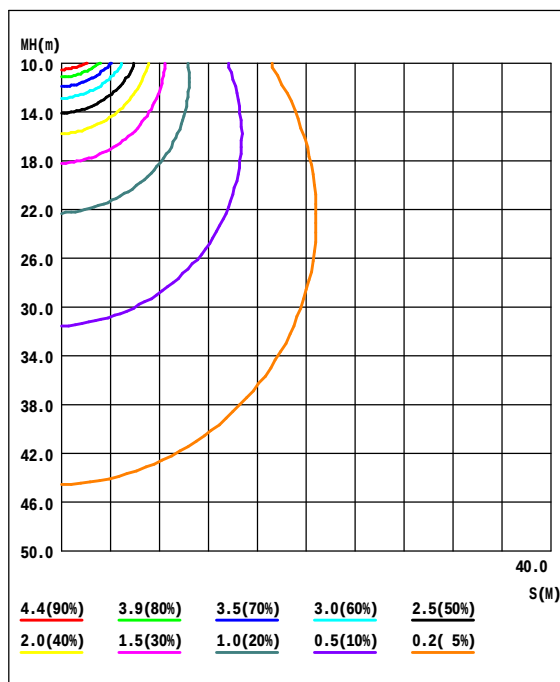
Humidity(%): 60

Date: 2026-5-22

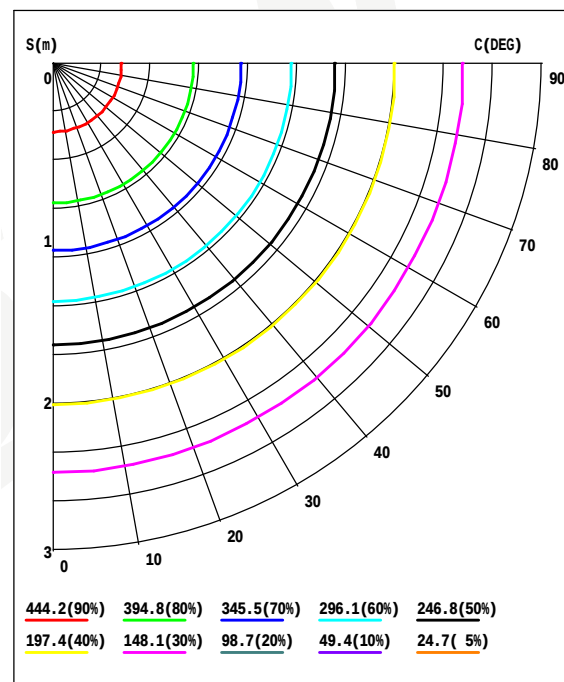
Remark:

Measured Para U: 222.8V I: 120.0mA P: 17.00W PF: 0.635 Test LM: 1456.73lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18LS01-Y	Lamp Spec: LPDL-18LS01-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: 2026-5-22

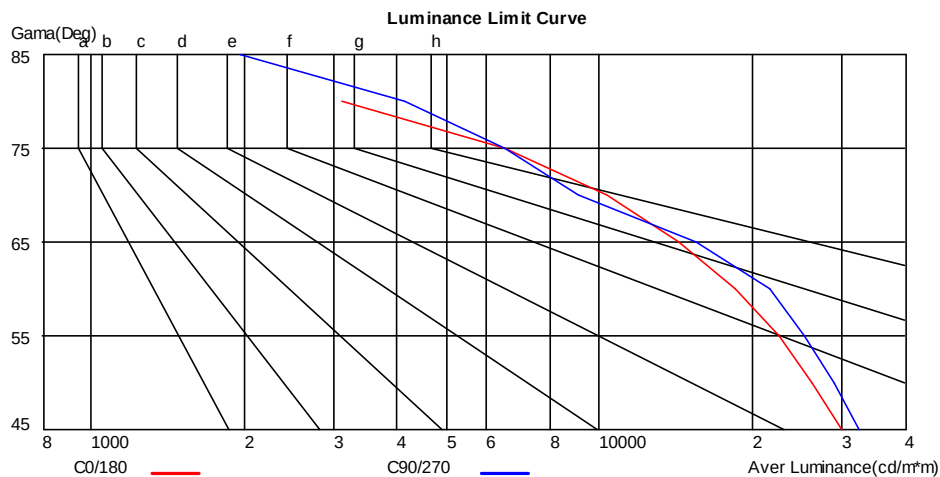
Remark:

Measured Para U: 222.8V I: 120.0mA P: 17.00W PF: 0.635 Test LM: 1456.73lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18LS01-Y	Lamp Spec: LPDL-18LS01-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	30016.9	26329.2	22601.3	18496.5	14377.1	10337.0	6527.8	3118.9	303.8
C90	32490.9	29031.0	25376.1	21687.4	15532.0	9141.4	6535.6	4136.6	1960.0

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

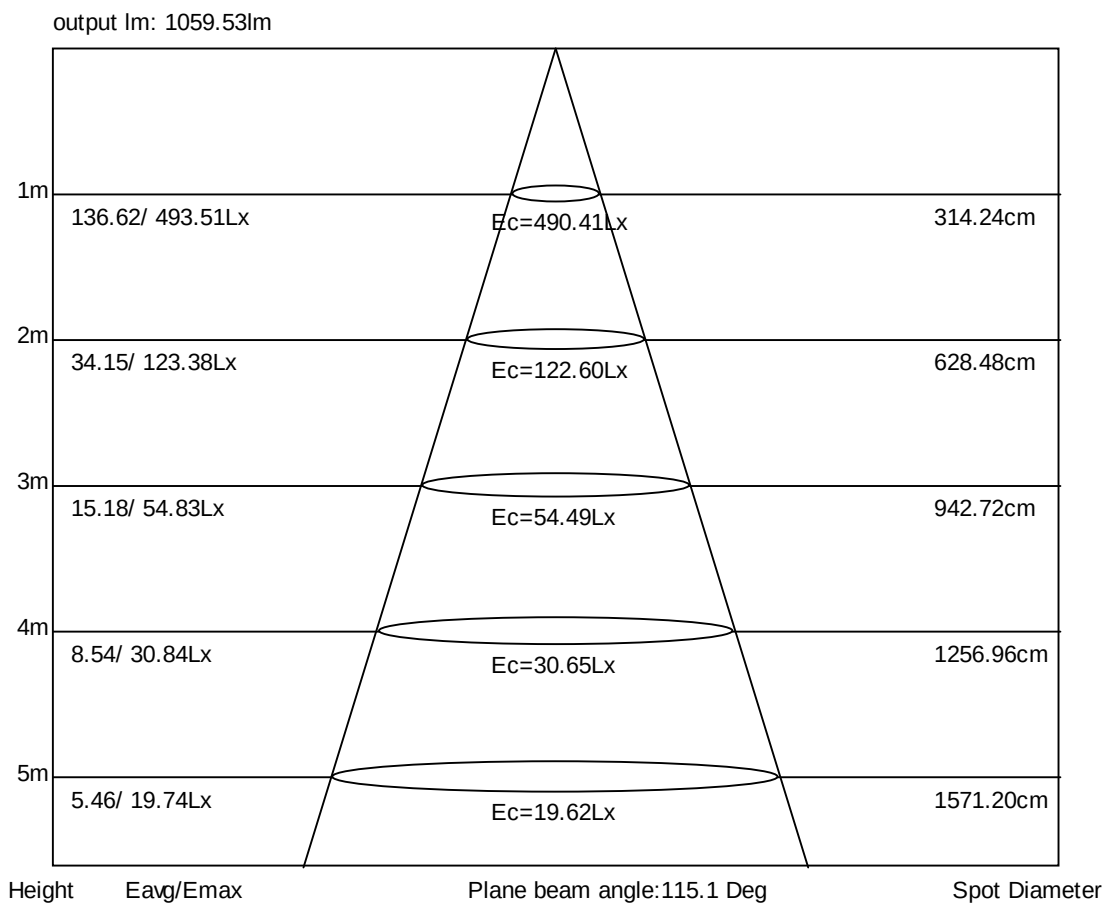
Humidity(%): 60

Date: 2026-5-22

Remark:

Measured Para U: 222.8V I: 120.0mA P: 17.00W PF: 0.635 Test LM: 1456.73lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18LS01-Y	Lamp Spec: LPDL-18LS01-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

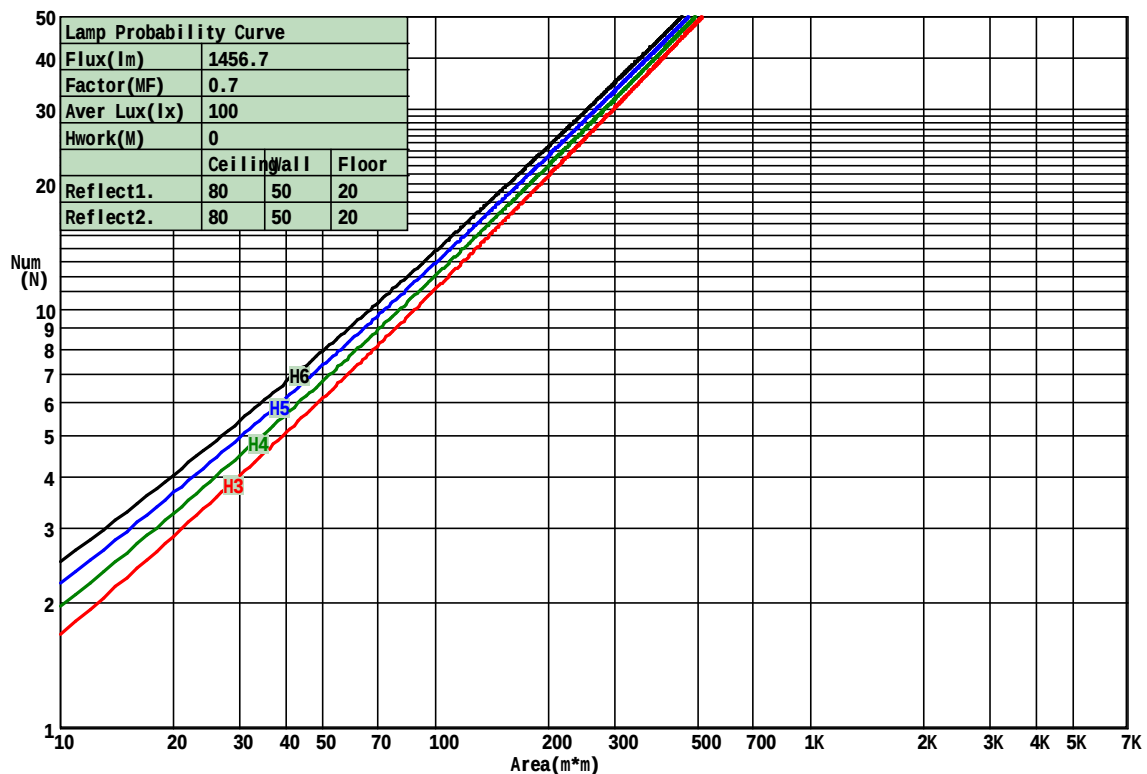
Humidity(%): 60

Date: 2026-5-22

Remark:

Measured Para U: 222.8V I: 120.0mA P: 17.00W PF: 0.635 Test LM: 1456.73lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18LS01-Y	Lamp Spec: LPDL-18LS01-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: 2026-5-22

Remark:

Measured Para U: 222.8V I: 120.0mA P: 17.00W PF: 0.635 Test LM: 1456.73lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18LS01-Y	Lamp Spec: LPDL-18LS01-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	51	36	27	50	35	26	47	34	26
0.80	56	39	28	54	38	28	50	36	27
1.00	59	41	29	56	40	29	52	38	27
1.25	62	43	30	59	42	29	53	39	28
1.50	64	45	31	60	43	30	54	40	28
2.00	66	47	32	63	45	30	56	41	28
2.50	68	48	32	64	45	30	56	41	28
3.00	69	49	32	65	46	30	57	41	27
4.00	70	50	32	66	47	30	57	41	27
5.00	71	51	32	67	48	31	58	42	27

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	0.36	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: 2026-5-22

Remark:

Measured Para U: 222.8V I: 120.0mA P: 17.00W PF: 0.635 Test LM: 1456.73lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18LS01-Y	Lamp Spec: LPDL-18LS01-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	0.11	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: 2026-5-22

Remark:

Measured Para U: 222.8V I: 120.0mA P: 17.00W PF: 0.635 Test LM: 1456.73lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18LS01-Y	Lamp Spec: LPDL-18LS01-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	485	485	486	491	493	492	489	485	0-5	11.7	11.7
10	474	476	479	489	492	490	485	477	5-10	34.7	46.4
15	460	463	468	482	486	483	477	464	10-15	56.7	103
20	442	446	453	471	477	473	464	447	15-20	76.8	180
25	421	425	434	456	464	459	448	426	20-25	94.5	274
30	395	401	412	438	447	441	428	402	25-30	109	384
35	367	374	386	416	426	419	404	374	30-35	120	504
40	335	343	357	391	401	393	376	342	35-40	127	631
45	300	310	325	362	373	363	345	308	40-45	130	761
50	263	274	290	330	342	331	311	271	45-50	129	890
55	226	236	254	295	307	295	274	233	50-55	123	1013
60	185	198	217	258	271	257	234	192	55-60	114	1127
65	144	158	155	220	232	219	195	150	60-65	99.8	1226
70	103	118	91.4	181	193	177	153	109	65-70	82	1308
75	65.3	79.6	65.4	141	152	135	111	70.2	70-75	63.4	1372
80	31.2	44.5	41.4	101	112	94.4	72.5	35.3	75-80	45	1417
85	3.04	12.7	19.6	64	73	57	37.4	5.36	80-85	27.2	1444
90	3.1	2.91	5.61	29.4	36	31.6	5.08	2.83	85-90	12.6	1457
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: 2026-5-22

Remark:

Measured Para U: 222.8V I: 120.0mA P: 17.00W PF: 0.635 Test LM: 1456.73lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18LS01-Y	Lamp Spec: LPDL-18LS01-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	485	485	485	485	486	488	490	492	493	493	493	492	491	490	489	487	485	485
10.0	474	475	476	477	478	481	485	489	491	492	491	490	488	486	483	480	476	475
15.0	460	461	462	464	467	471	477	482	484	486	485	484	481	478	474	468	463	462
20.0	442	444	446	448	451	457	465	472	475	477	475	473	470	466	461	453	447	444
25.0	421	423	425	428	432	439	449	457	461	464	462	459	455	451	444	434	426	423
30.0	395	398	401	405	409	418	430	439	443	447	444	441	437	431	423	411	401	398
35.0	367	370	373	378	383	392	406	417	422	426	423	419	414	407	398	384	373	370
40.0	335	338	342	348	354	364	380	392	397	401	398	394	387	380	369	354	342	338
45.0	300	304	309	315	322	333	350	363	368	373	369	364	357	349	337	320	307	303
50.0	263	268	273	279	287	299	317	331	336	342	337	332	324	315	302	284	270	267
55.0	226	230	235	242	250	263	282	297	302	307	302	296	288	278	265	247	232	229
60.0	185	191	197	204	213	226	245	260	265	271	265	258	249	239	225	206	191	188
65.0	144	150	156	157	156	169	199	221	227	232	226	220	211	200	185	165	149	147
70.0	103	110	116	109	97.2	111	152	183	188	193	186	179	169	158	143	123	108	106
75.0	65.3	71.5	78	74.9	68.5	81.9	116	142	147	152	145	137	127	117	102	83.8	69.7	67.4
80.0	31.2	37	43	43.5	42.1	54.5	81.7	102	107	112	104	96.3	87.2	77.3	64.3	47.5	34.8	33
85.0	3.04	7.25	11.6	14.9	18.1	29.3	49.4	65	69	73	66	58.8	50.6	41.7	30.4	15.9	5.1	4.05
90.0	3.1	3.02	2.93	3.79	5.02	10.8	21.6	30.1	33.1	36	34.1	32.1	22.9	10.9	4.59	3.57	2.86	2.98
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: 2026-5-22

Remark: