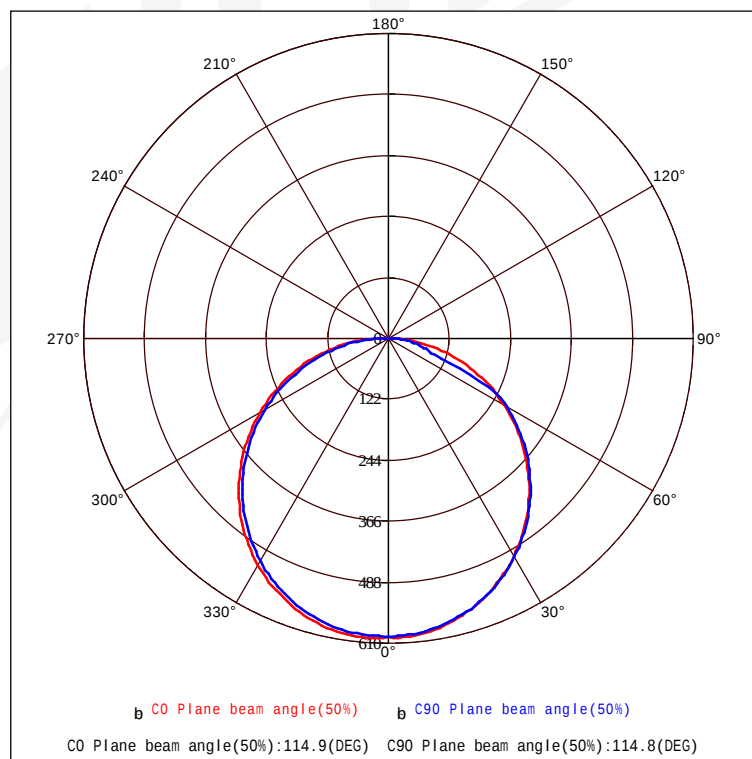


Goniophotometer Test Report

Measured Para U: 229.8V I: 140.0mA P: 18.00W PF: 0.559 Test LM: 1774.34lm						
Lamp Name: LED DOWN LIGHT			Lamp Type:		Weight(kg):	
Lamp ID: LPDL-18+18WET01-Y			Lamp Spec: LPDL-18+18WET01-Y		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPDL-18+18WET01-Y		Peak Value(cd)	601.6	Efficiency(lm/w)	98.6
Nominal P(w)		36.0	Position	180.0,1.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	1774.344	Down(C0-C180)	50.2
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)	49.8

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

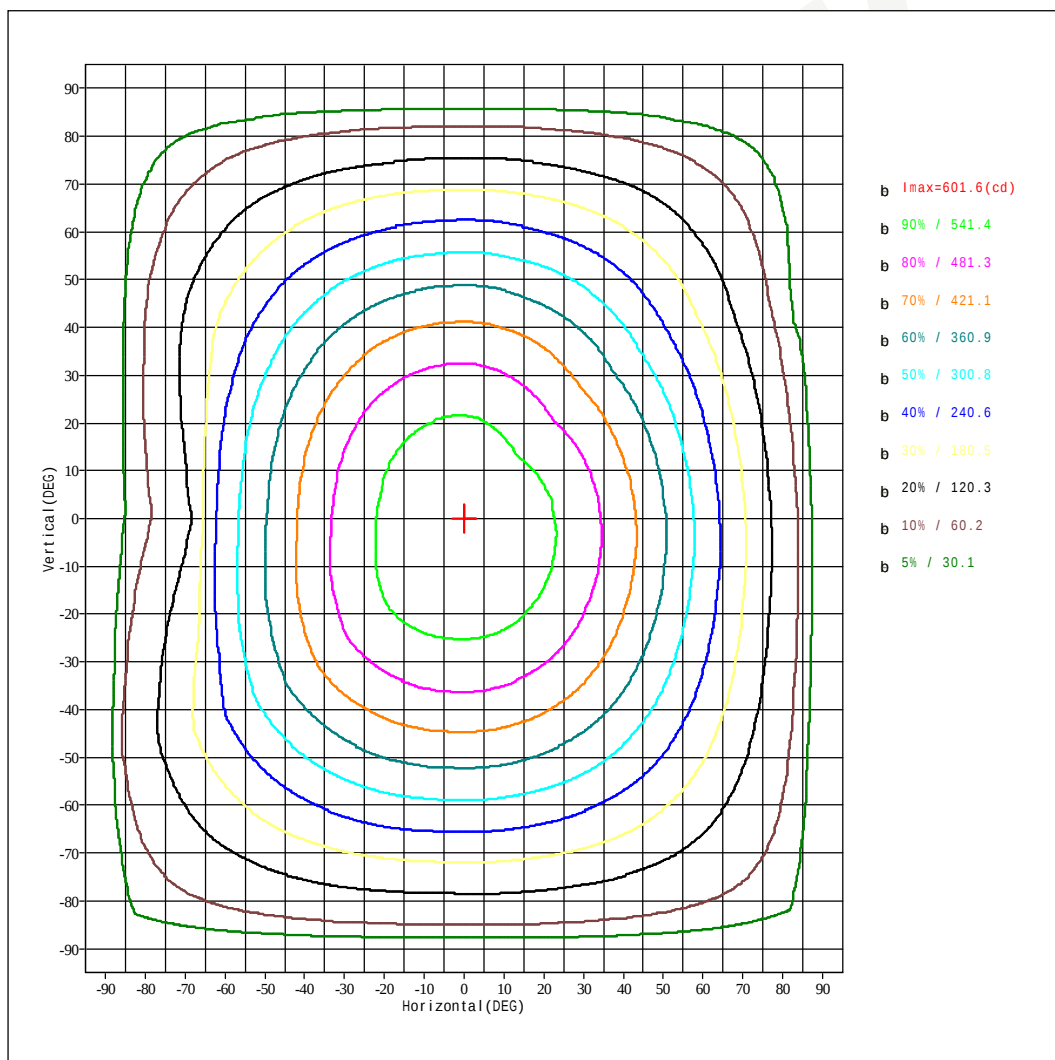
Humidity(%): 60

Date: 2026-4-27

Remark:

Measured Para U: 229.8V I: 140.0mA P: 18.00W PF: 0.559 Test LM: 1774.34lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18+18WET01-Y	Lamp Spec: LPDL-18+18WET01-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

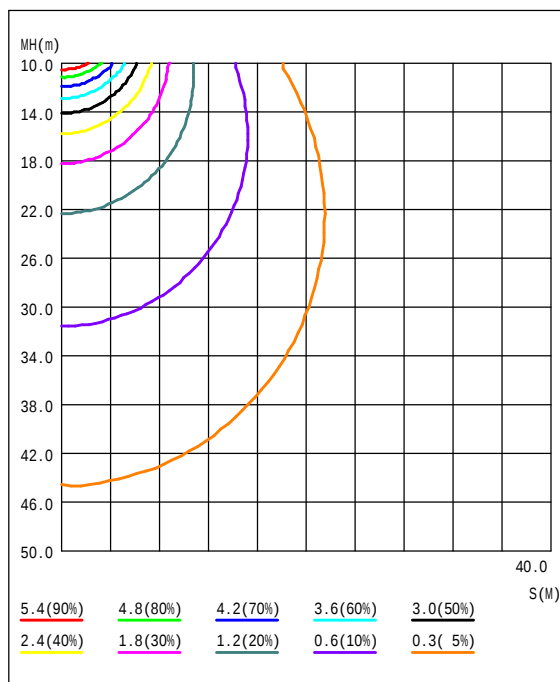
Humidity(%): 60

Date: 2026-4-27

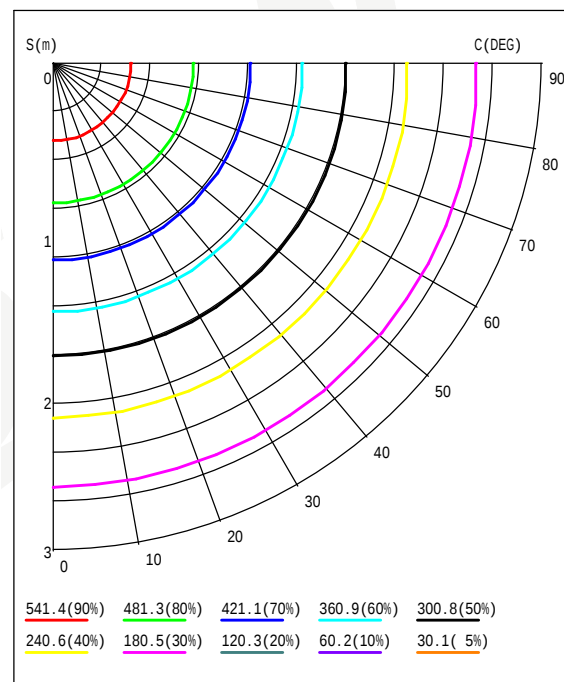
Remark:

Measured Para U: 229.8V I: 140.0mA P: 18.00W PF: 0.559 Test LM: 1774.34lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18+18WET01-Y	Lamp Spec: LPDL-18+18WET01-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: 2026-4-27

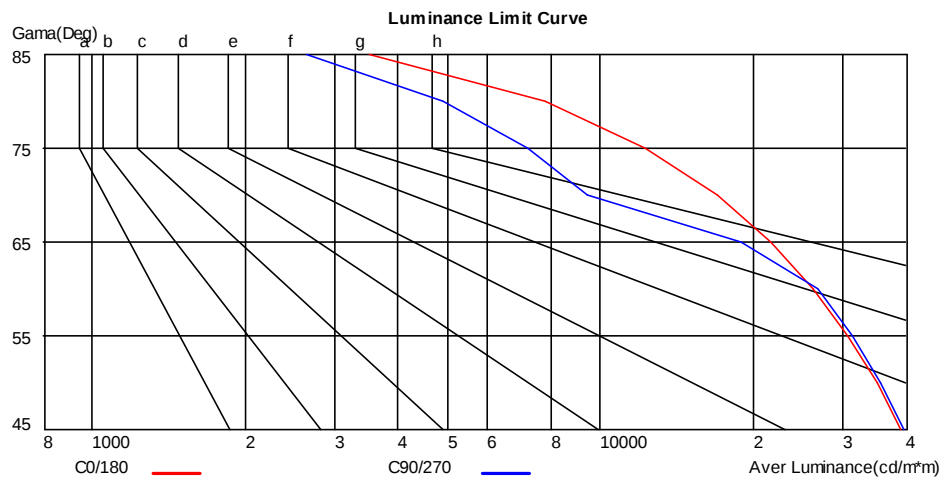
Remark:

Measured Para U: 229.8V I: 140.0mA P: 18.00W PF: 0.559 Test LM: 1774.34lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18+18WET01-Y	Lamp Spec: LPDL-18+18WET01-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	39267.1	35116.3	30754.9	26225.3	21721.7	16990.8	12314.7	7779.7	3503.5
C90	39720.9	35677.4	31348.7	26888.8	18989.5	9470.7	7190.3	4916.2	2644.5

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: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

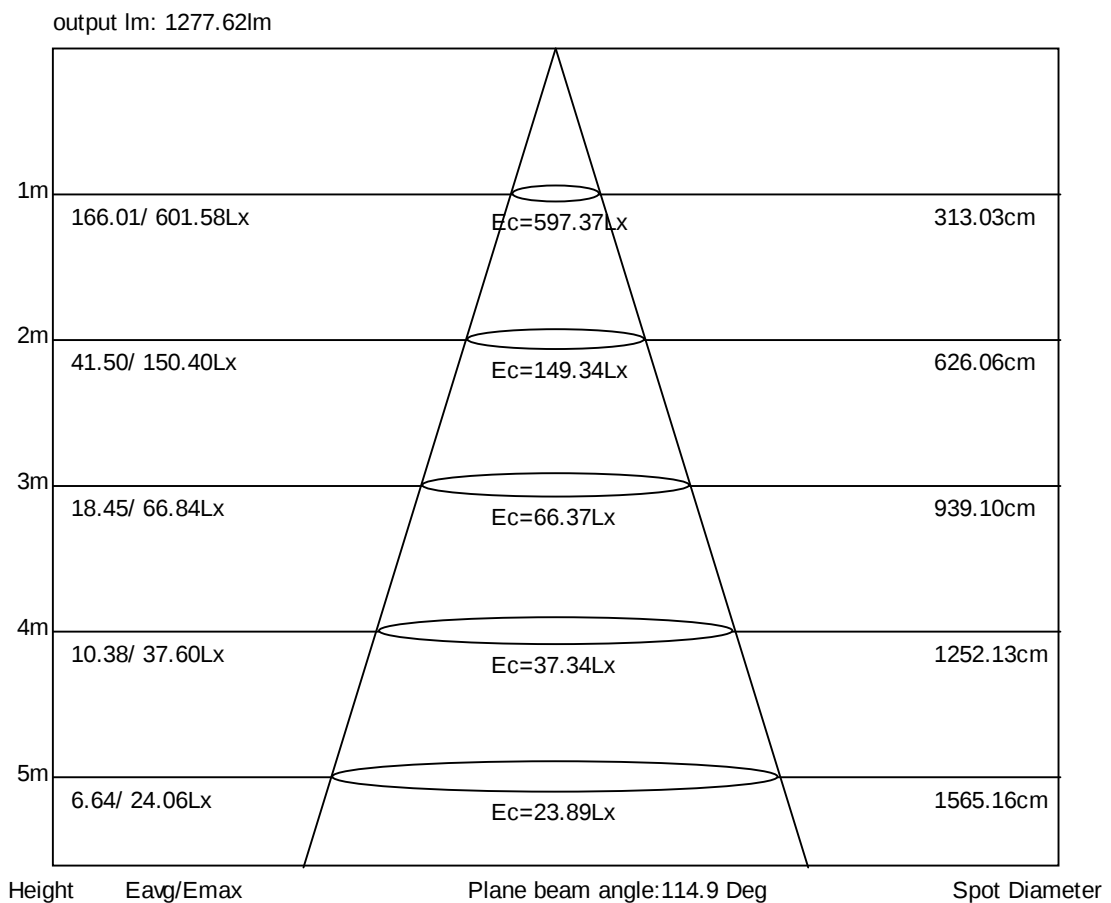
Humidity(%): 60

Date: 2026-4-27

Remark:

Measured Para U: 229.8V I: 140.0mA P: 18.00W PF: 0.559 Test LM: 1774.34lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18+18WET01-Y	Lamp Spec: LPDL-18+18WET01-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

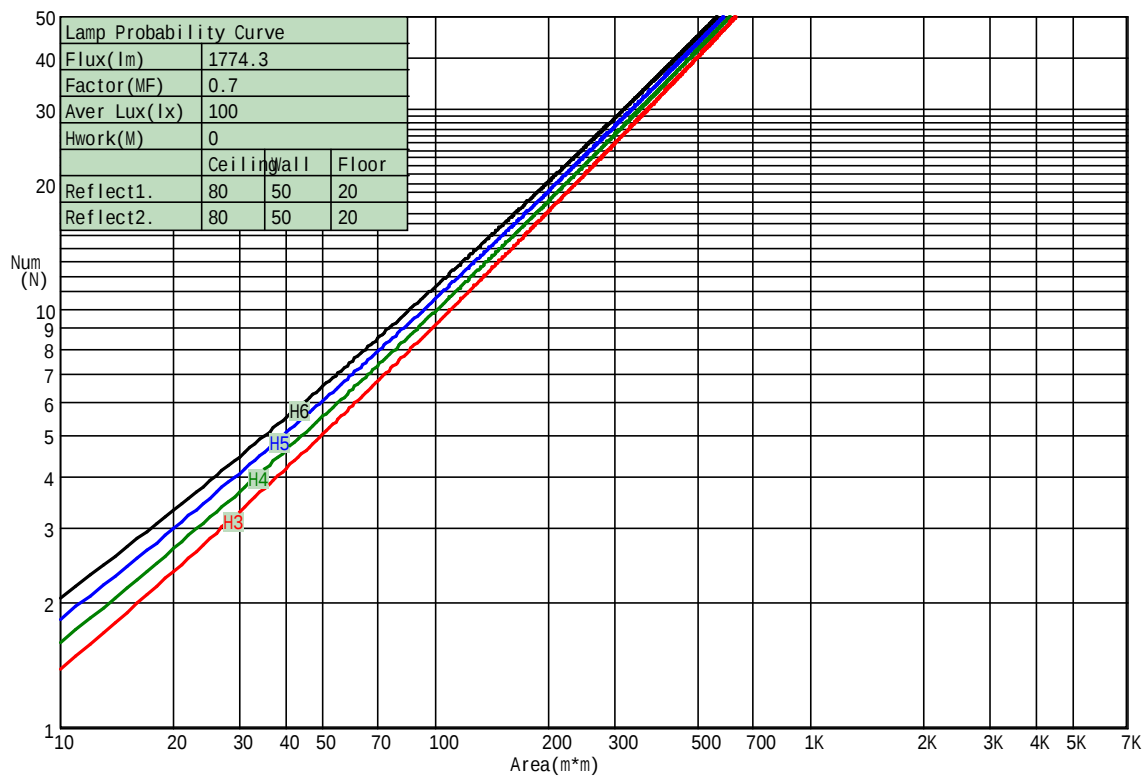
Humidity(%): 60

Date: 2026-4-27

Remark:

Measured Para U: 229.8V I: 140.0mA P: 18.00W PF: 0.559 Test LM: 1774.34lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18+18WET01-Y	Lamp Spec: LPDL-18+18WET01-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: 2026-4-27

Remark:

Measured Para U: 229.8V I: 140.0mA P: 18.00W PF: 0.559 Test LM: 1774.34lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18+18WET01-Y	Lamp Spec: LPDL-18+18WET01-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	31	57	41	30	52	39	29
1.25	63	45	31	60	43	31	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	48	32	58	43	29
4.00	71	51	34	67	48	32	58	43	29
5.00	72	52	34	68	49	32	59	43	29

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	0.94	1.01	0.97	0.93	0.96	0.93	0.9	0.93	0.9	0.87	0.89	0.87	0.85
2	0.89	0.82	0.76	0.88	0.81	0.75	0.84	0.78	0.74	0.81	0.76	0.72	0.78	0.74	0.7
3	0.78	0.7	0.63	0.77	0.69	0.63	0.74	0.67	0.61	0.71	0.65	0.6	0.68	0.63	0.59
4	0.69	0.6	0.53	0.68	0.59	0.53	0.65	0.58	0.52	0.63	0.57	0.51	0.61	0.55	0.51
5	0.62	0.53	0.46	0.61	0.52	0.45	0.58	0.51	0.45	0.56	0.5	0.44	0.55	0.49	0.44
6	0.56	0.46	0.4	0.55	0.46	0.4	0.53	0.45	0.39	0.51	0.44	0.39	0.49	0.43	0.39
7	0.5	0.41	0.35	0.49	0.41	0.35	0.48	0.4	0.35	0.46	0.4	0.34	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	0.41	0.35	0.31
9	0.42	0.34	0.28	0.41	0.33	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	0.25	0.38	0.31	0.25	0.37	0.3	0.25	0.36	0.3	0.25	0.35	0.29	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: 2026-4-27

Remark:

Measured Para U: 229.8V I: 140.0mA P: 18.00W PF: 0.559 Test LM: 1774.34lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18+18WET01-Y	Lamp Spec: LPDL-18+18WET01-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	0.33	0.18	0.06	0.32	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	0.17	0.05	0.3	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	0.15	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	0.12	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	0.21	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	0.19	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	0.09	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	0.17	0.08	0.02	0.16	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	0.15	0.08	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	0.16	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	0.02	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: 2026-4-27

Remark:

Measured Para U: 229.8V I: 140.0mA P: 18.00W PF: 0.559 Test LM: 1774.34lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18+18WET01-Y	Lamp Spec: LPDL-18+18WET01-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	596	595	593	594	600	598	595	586	0-5	14.2	14.2
10	587	586	584	591	595	592	588	575	5-10	42.3	56.5
15	572	571	571	582	583	580	576	558	10-15	68.9	125
20	552	552	552	568	567	564	559	537	15-20	93.2	219
25	528	528	529	550	546	542	537	510	20-25	114	333
30	499	500	501	526	521	516	511	481	25-30	132	465
35	467	468	470	498	491	486	480	452	30-35	145	609
40	431	433	435	467	457	452	446	416	35-40	153	763
45	393	394	397	432	420	415	409	376	40-45	157	919
50	351	353	357	394	380	374	369	335	45-50	155	1075
55	308	310	313	353	337	331	326	291	50-55	149	1224
60	262	265	269	310	292	286	281	246	55-60	138	1362
65	217	220	190	265	246	239	235	201	60-65	123	1484
70	170	174	94.7	219	199	192	188	154	65-70	101	1585
75	123	129	71.9	174	153	144	141	108	70-75	79.5	1665
80	77.8	84.1	49.2	128	106	96.9	94.2	62.9	75-80	58.2	1723
85	35	41.5	26.4	81.3	61.3	52.5	49.9	21.3	80-85	36.3	1759
90	5.54	5.41	9.35	32.3	16.4	20.4	6.09	4.53	85-90	14.9	1774
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: 2026-4-27

Remark:

Measured Para U: 229.8V I: 140.0mA P: 18.00W PF: 0.559 Test LM: 1774.34lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18+18WET01-Y	Lamp Spec: LPDL-18+18WET01-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	596	596	595	594	594	593	594	595	598	600	599	598	597	596	593	589	587	592
10.0	587	586	586	585	585	586	589	591	593	595	593	592	590	589	585	579	576	581
15.0	572	571	571	571	571	573	578	582	583	583	582	580	579	577	572	564	559	566
20.0	552	552	552	552	552	556	563	568	568	567	566	564	562	560	554	544	538	545
25.0	528	528	528	528	529	534	543	549	548	546	544	543	540	538	531	519	512	520
30.0	499	500	500	501	501	507	518	526	523	521	519	517	515	512	504	491	483	491
35.0	467	467	468	469	470	476	489	498	494	491	489	487	484	482	474	461	454	461
40.0	431	432	432	433	435	442	457	466	462	457	455	453	450	448	440	426	418	425
45.0	393	393	394	395	397	405	421	431	425	420	418	415	413	410	402	387	378	386
50.0	351	352	353	354	356	365	382	392	386	380	378	375	372	370	361	346	336	344
55.0	308	309	310	311	313	322	340	351	344	337	335	332	329	327	318	302	293	300
60.0	262	264	265	266	268	278	296	308	300	292	289	286	284	282	273	257	247	255
65.0	217	218	220	210	196	206	240	263	255	246	243	240	238	236	227	212	202	210
70.0	170	172	174	148	112	122	179	217	208	199	196	193	191	189	181	165	156	163
75.0	123	126	128	110	84.3	94.3	141	172	162	153	149	145	143	141	133	118	109	116
80.0	77.8	80.5	83.4	72.6	56.8	66.4	102	126	116	106	102	97.9	96	94.8	87.3	73.2	64.6	71.3
85.0	35	37.9	40.8	36.6	29.7	38.5	63.3	79.1	70.1	61.3	57.4	53.5	51.7	50.5	43.7	30.7	22.8	29
90.0	5.54	5.48	5.42	6.7	8.49	14.4	24.8	30.6	23.4	16.4	18.1	19.9	15.7	9.21	5.75	5.04	4.64	5.1
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: 2026-4-27

Remark: