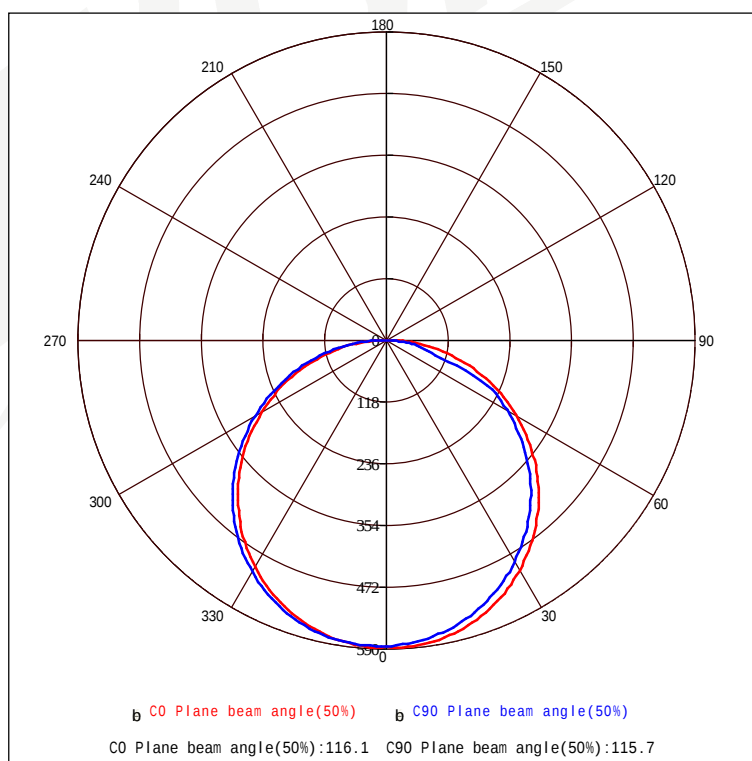


Goniophotometer Test Report

Measured Para U: 232.0V I: 127.0mA P: 17.10W PF: 0.583 Test LM: 1759.17lm						
Lamp Name: LED DOWN LIGHT			Lamp Type:		Weight(kg):	
Lamp ID: LPDL-18K01-Y			Lamp Spec: LPDL-18A-Y		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPDL-18A-Y		Peak Value(cd)	588.6	Efficiency(lm/w)	102.9
Nominal P(w)		1.0	Position	0.0,1.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	1759.173	Down(C0-C180)	49.6
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)	50.4

Planar Intensity Distribution Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 25

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

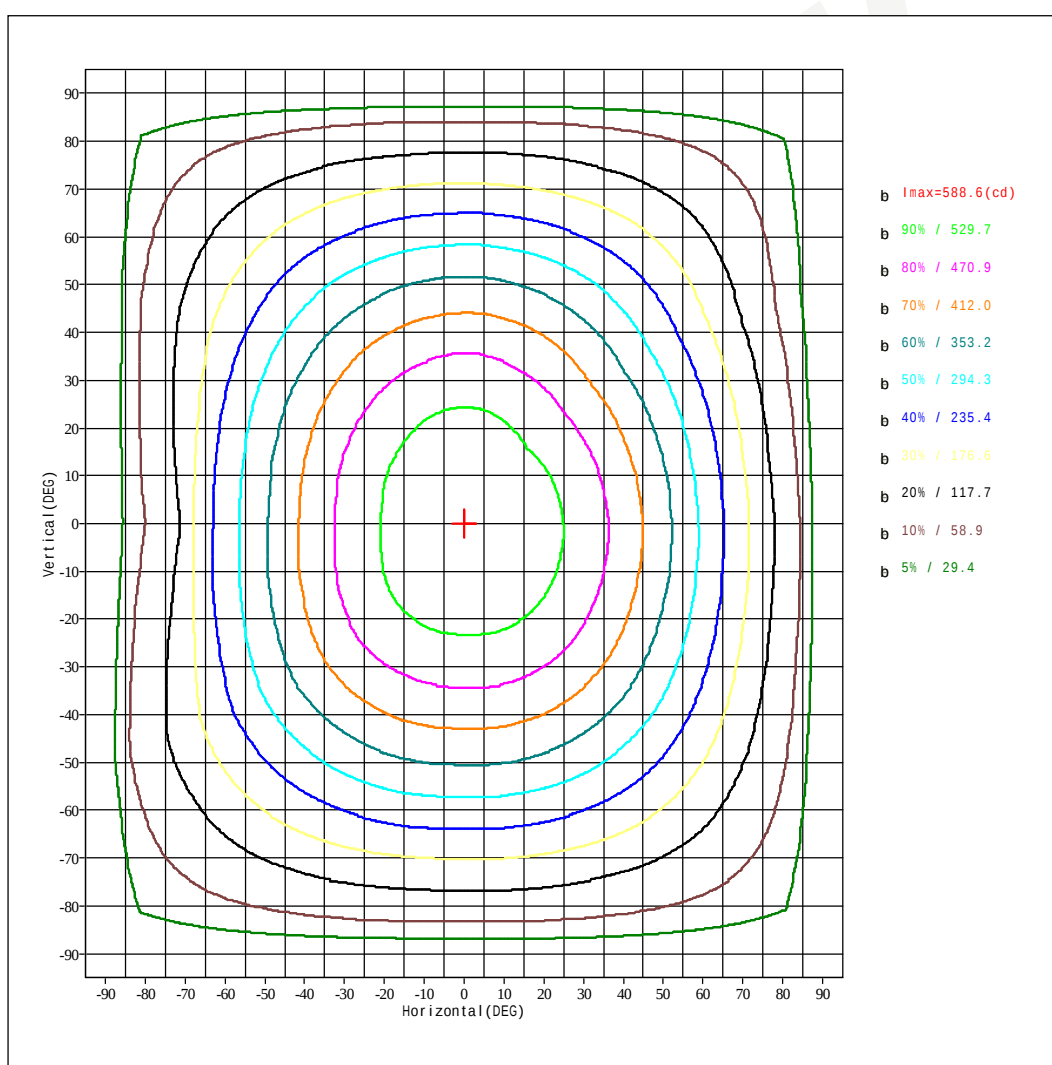
Humidity(%): 60

Date: 2025-2-20

Remark:

Measured Para U: 232.0V I: 127.0mA P: 17.10W PF: 0.583 Test LM: 1759.17lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18A-Y	Lamp Spec: LPDL-18A-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): 25

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

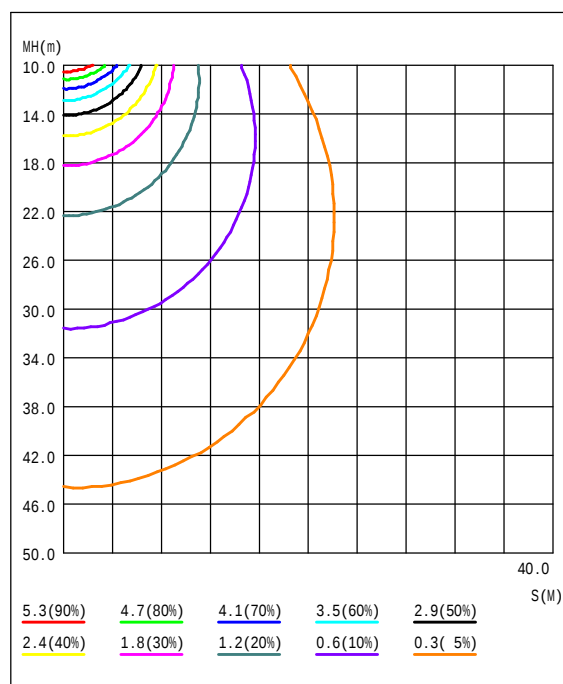
Humidity(%): 60

Date: 2025-2-20

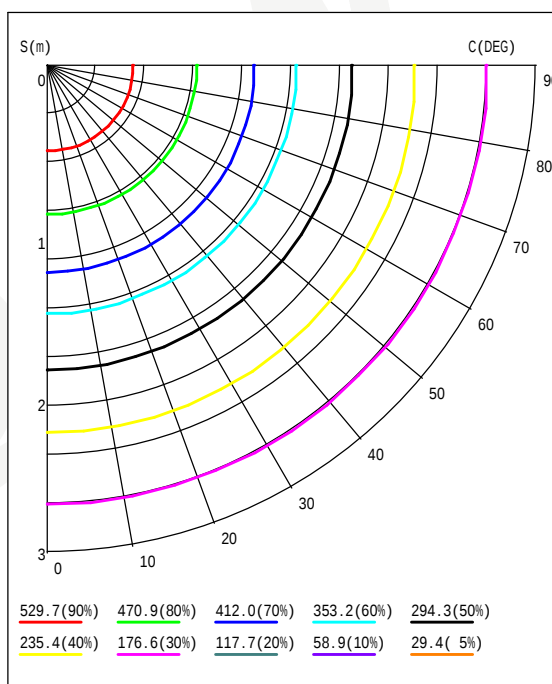
Remark:

Measured Para U: 232.0V I: 127.0mA P: 17.10W PF: 0.583 Test LM: 1759.17lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18A-Y	Lamp Spec: LPDL-18A-Y	Shape Size:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Spacial ISOLUX Curve



Planar ISOLUX Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 25

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: 2025-2-20

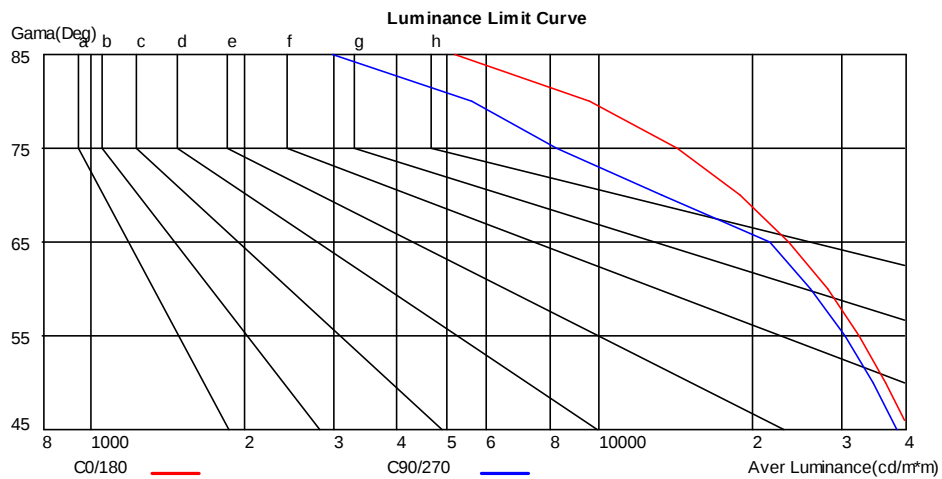
Remark:

Measured Para U: 232.0V I: 127.0mA P: 17.10W PF: 0.583 Test LM: 1759.17lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18A-Y	Lamp Spec: LPDL-18A-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	40800.8	36855.4	32638.9	28188.7	23597.9	18948.3	14229.6	9558.9	5192.0
C90	38608.1	34601.8	30451.0	26155.2	21758.9	13309.4	8241.3	5625.2	2985.6

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): 25

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

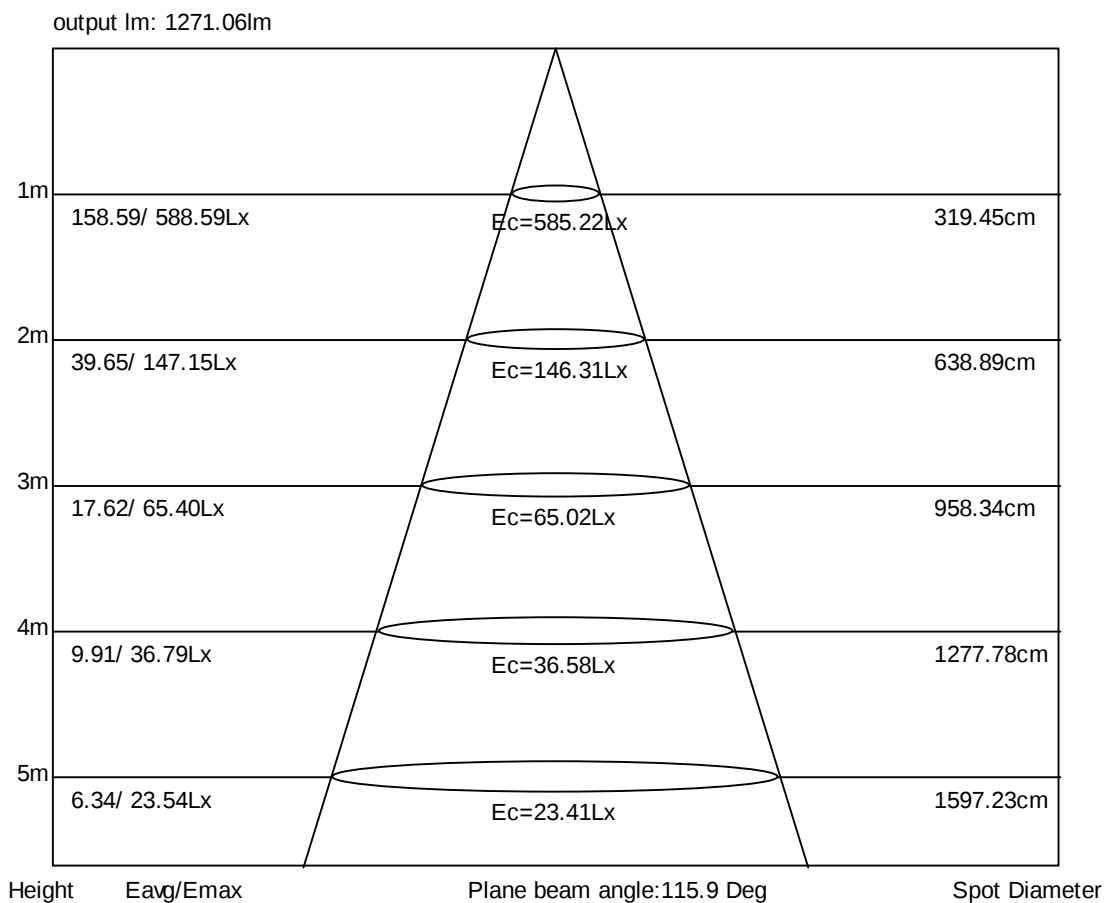
Humidity(%): 60

Date: 2025-2-20

Remark:

Measured Para U: 232.0V I: 127.0mA P: 17.10W PF: 0.583 Test LM: 1759.17lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18A-Y	Lamp Spec: LPDL-18A-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): 25

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval(Deg): 45

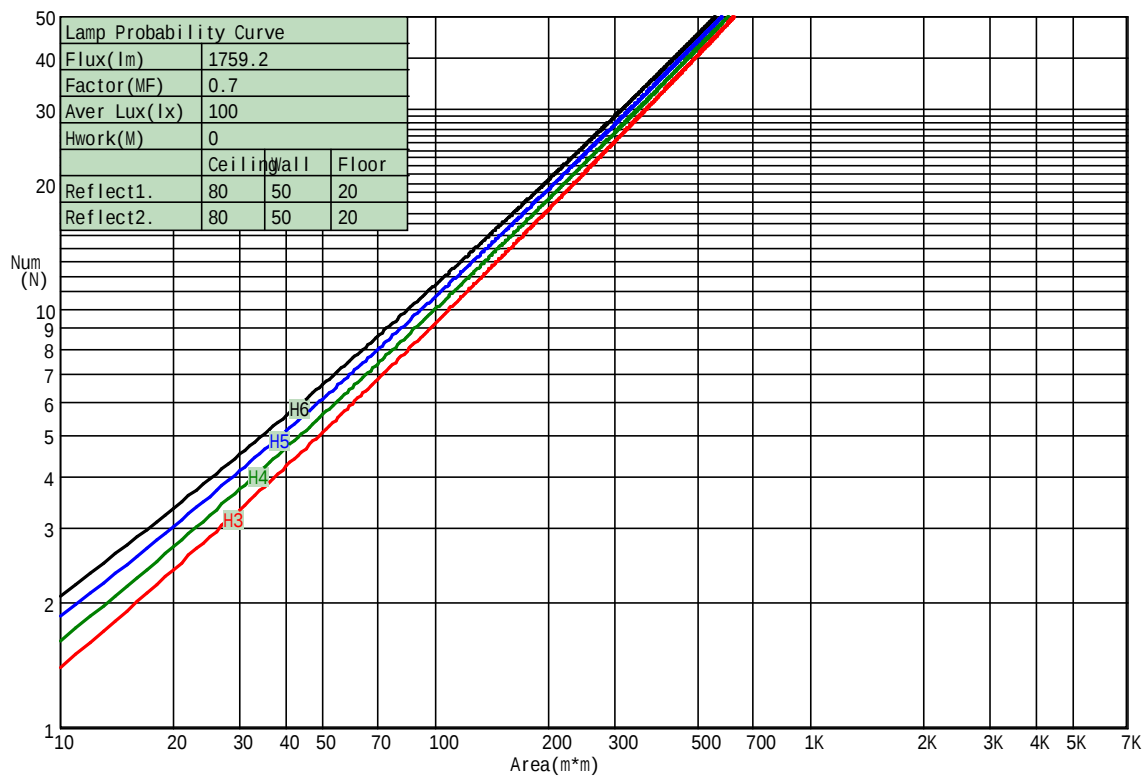
Humidity(%): 60

Date: 2025-2-20

Remark:

Measured Para U: 232.0V I: 127.0mA P: 17.10W PF: 0.583 Test LM: 1759.17lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18A-Y	Lamp Spec: LPDL-18A-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): 25

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: 2025-2-20

Remark:

Measured Para U: 232.0V I: 127.0mA P: 17.10W PF: 0.583 Test LM: 1759.17lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18A-Y	Lamp Spec: LPDL-18A-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	38	28	51	37	28	48	36	27
0.80	57	41	30	55	40	29	51	38	29
1.00	60	43	31	58	42	31	53	39	29
1.25	63	45	32	60	44	31	55	41	30
1.50	65	47	33	62	45	32	56	42	30
2.00	68	49	34	64	47	33	57	43	31
2.50	70	50	34	65	48	33	58	43	30
3.00	71	51	34	66	48	33	58	43	30
4.00	72	52	35	67	49	33	59	44	30
5.00	73	53	35	68	50	33	59	44	30

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	0.98	0.94	1.01	0.97	0.93	0.96	0.93	0.9	0.92	0.9	0.87	0.89	0.87	0.84
2	0.89	0.82	0.76	0.87	0.81	0.75	0.84	0.78	0.73	0.8	0.76	0.72	0.77	0.74	0.7
3	0.78	0.7	0.63	0.77	0.69	0.62	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	0.56	0.51	0.61	0.55	0.5
5	0.62	0.52	0.46	0.6	0.52	0.45	0.58	0.51	0.45	0.56	0.5	0.44	0.54	0.48	0.44
6	0.55	0.46	0.4	0.54	0.46	0.39	0.53	0.45	0.39	0.51	0.44	0.39	0.49	0.43	0.38
7	0.5	0.41	0.35	0.49	0.41	0.35	0.48	0.4	0.34	0.46	0.39	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	0.42	0.36	0.31	0.41	0.35	0.3
9	0.42	0.34	0.28	0.41	0.33	0.28	0.4	0.33	0.28	0.39	0.32	0.28	0.38	0.32	0.27
10	0.39	0.31	0.25	0.38	0.3	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): 25

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: 2025-2-20

Remark:

Measured Para U: 232.0V I: 127.0mA P: 17.10W PF: 0.583 Test LM: 1759.17lm															
Lamp Name: LED DOWN LIGHT								Lamp Type:				Weight(kg):			
Lamp ID: LPDL-18A-Y								Lamp Spec: LPDL-18A-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	0.19	0.06	0.32	0.18	0.06	0.31	0.18	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	0.26	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	0.1	0.03	0.18	0.09	0.03
8	0.19	0.09	0.03	0.19	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	0.09	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	0.05	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): 25

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: 2025-2-20

Remark:

Measured Para U: 232.0V I: 127.0mA P: 17.10W PF: 0.583 Test LM: 1759.17lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18A-Y	Lamp Spec: LPDL-18A-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	587	582	579	580	585	585	584	579	0-5	14	14
10	580	573	570	574	577	578	579	571	5-10	41.4	55.4
15	568	560	555	562	564	568	568	559	10-15	67.5	123
20	552	542	537	546	547	552	554	541	15-20	91.4	214
25	531	520	514	526	525	531	534	519	20-25	112	327
30	506	493	487	501	498	506	510	493	25-30	130	456
35	477	463	456	473	468	477	481	462	30-35	143	599
40	444	430	422	441	435	444	448	428	35-40	151	750
45	408	393	386	406	397	408	412	390	40-45	155	905
50	369	354	346	368	358	368	373	349	45-50	154	1059
55	326	312	305	328	315	325	330	306	50-55	148	1206
60	282	269	262	285	271	281	285	260	55-60	137	1343
65	236	224	218	242	225	236	239	214	60-65	122	1466
70	189	179	133	195	179	187	192	166	65-70	103	1569
75	142	134	82.4	153	133	140	144	118	70-75	80.2	1649
80	95.6	90	56.3	109	87.9	92.8	96.8	71.6	75-80	58.3	1708
85	51.9	47.9	29.9	66	45.1	48.3	51.7	29.6	80-85	36.2	1744
90	21.9	9.26	11.1	24.6	9.48	17.9	9.78	7.74	85-90	15.4	1759
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): 25

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: 2025-2-20

Remark:

Measured Para U: 232.0V I: 127.0mA P: 17.10W PF: 0.583 Test LM: 1759.17lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-18A-Y	Lamp Spec: LPDL-18A-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	587	585	583	581	580	580	580	581	583	585	585	585	584	584	583	581	580	583
10.0	580	577	574	572	570	570	572	574	576	577	578	578	579	579	577	574	572	576
15.0	568	565	561	558	556	557	560	562	563	564	566	567	568	568	566	562	560	564
20.0	552	548	543	540	538	539	543	546	547	547	549	551	553	554	551	545	542	547
25.0	531	526	521	518	515	516	522	526	525	525	528	531	532	533	531	524	520	526
30.0	506	501	495	491	488	490	496	501	500	498	502	505	508	509	506	498	494	500
35.0	477	471	465	461	458	460	467	472	470	468	472	476	478	480	477	468	464	470
40.0	444	438	431	427	424	426	435	440	437	435	439	443	446	448	444	434	429	437
45.0	408	401	394	391	388	390	399	405	401	397	402	407	409	411	407	397	392	400
50.0	369	362	355	351	348	351	361	367	362	358	362	367	370	372	368	357	351	360
55.0	326	320	314	310	306	310	320	326	321	315	320	324	327	329	325	314	308	317
60.0	282	276	270	266	263	267	277	284	277	271	275	280	282	284	280	268	263	272
65.0	236	231	225	222	219	223	234	240	232	225	230	235	237	238	234	222	216	226
70.0	189	185	181	164	143	147	174	193	186	179	183	186	189	191	186	174	168	179
75.0	142	139	135	117	93.8	97.8	130	151	142	133	136	139	141	143	138	127	121	132
80.0	95.6	93.1	90.6	78.9	63.6	67.7	91.4	106	97	87.9	90	92.2	94.1	95.9	91.3	79.9	74.2	85.1
85.0	51.9	50.2	48.3	42	33.8	37.8	54.1	63.7	54.2	45.1	46.5	48	49.4	51	46.9	36.9	32.1	42.2
90.0	21.9	16.4	10.6	9.85	10.7	14	20.1	22.9	16.1	9.48	13.1	16.9	15.2	11.5	9.33	8.41	9.28	15.7
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): 25

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: 2025-2-20

Remark: