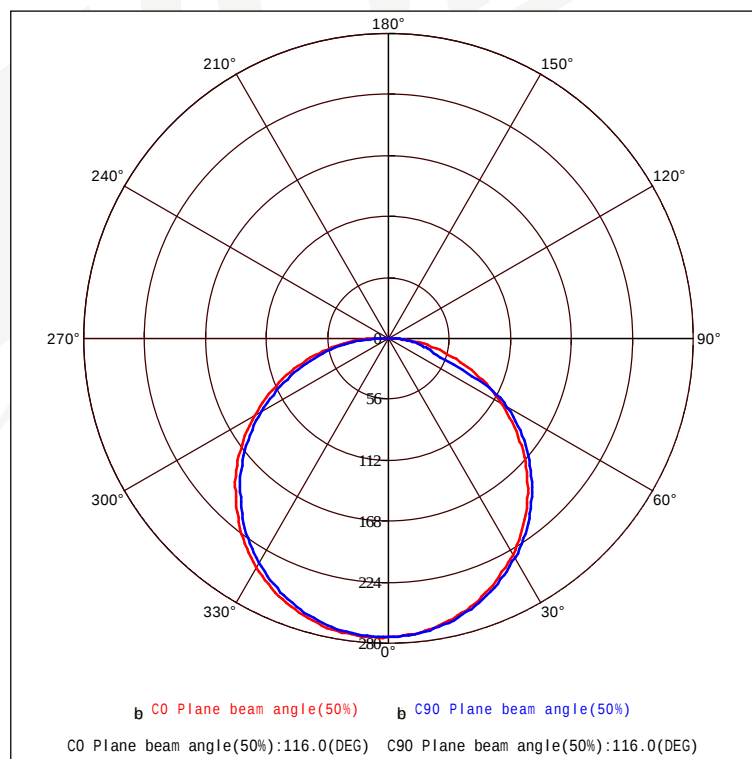


Goniophotometer Test Report

Measured Para U: 229.7V I: 136.0mA P: 16.90W PF: 0.540 Test LM: 827.21lm						
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)	275.5	Efficiency(lm/w)	48.9
Nominal P(w)		36.0	Position	135.0,5.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	827.207	Down(C0-C180)	50.1
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)	49.9

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

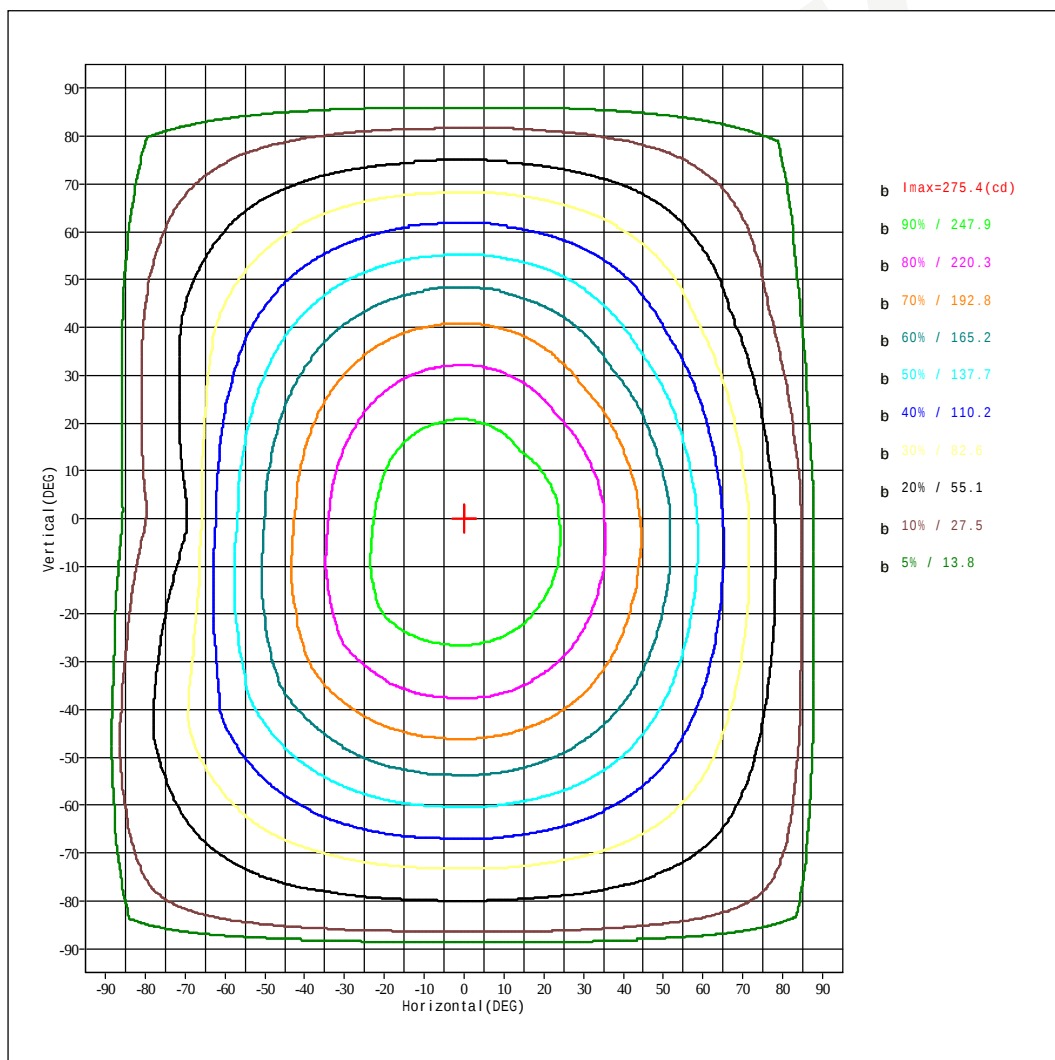
Humidity(%): 60

Date: 2026-4-27

Remark:

Measured Para U: 229.7V I: 136.0mA P: 16.90W PF: 0.540 Test LM: 827.21lm		
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

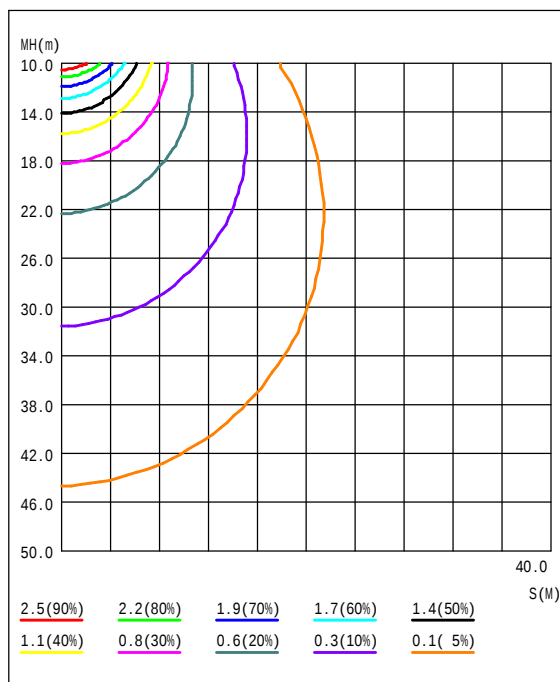
Humidity(%): 60

Date: 2026-4-27

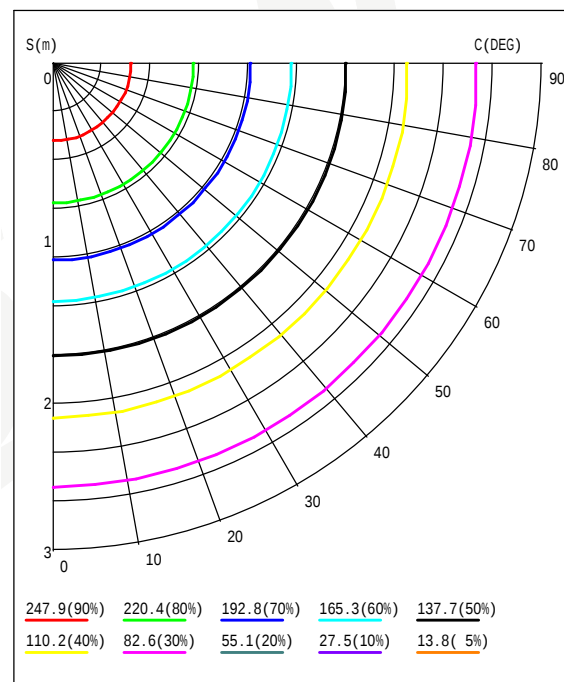
Remark:

Measured Para U: 229.7V I: 136.0mA P: 16.90W PF: 0.540 Test LM: 827.2lm		
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

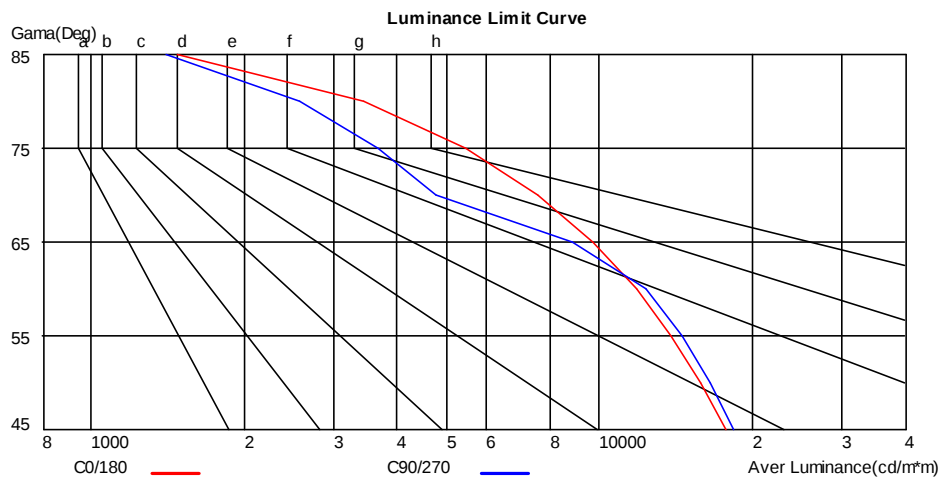
Remark:

Measured Para U: 229.7V I: 136.0mA P: 16.90W PF: 0.540 Test LM: 827.21lm		
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/m²m)									
Gm(Deg)	45	50	55	60	65	70	75	80	85
C0	17826.7	15907.8	13897.9	11812.9	9689.8	7564.6	5468.9	3432.5	1470.0
C90	18414.7	16576.2	14602.5	12393.6	8884.2	4779.0	3673.5	2575.9	1403.9

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

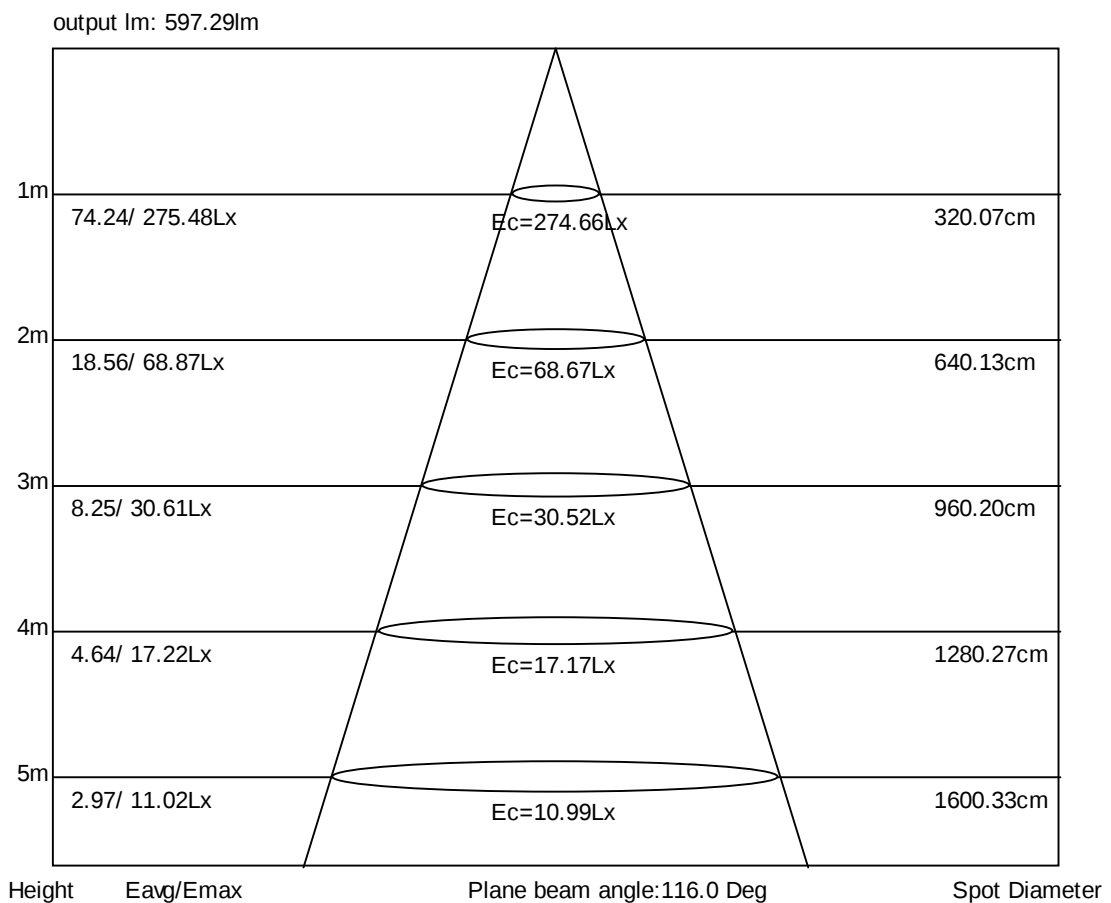
Humidity(%): 60

Date: 2026-4-27

Remark:

Measured Para U: 229.7V I: 136.0mA P: 16.90W PF: 0.540 Test LM: 827.21lm		
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

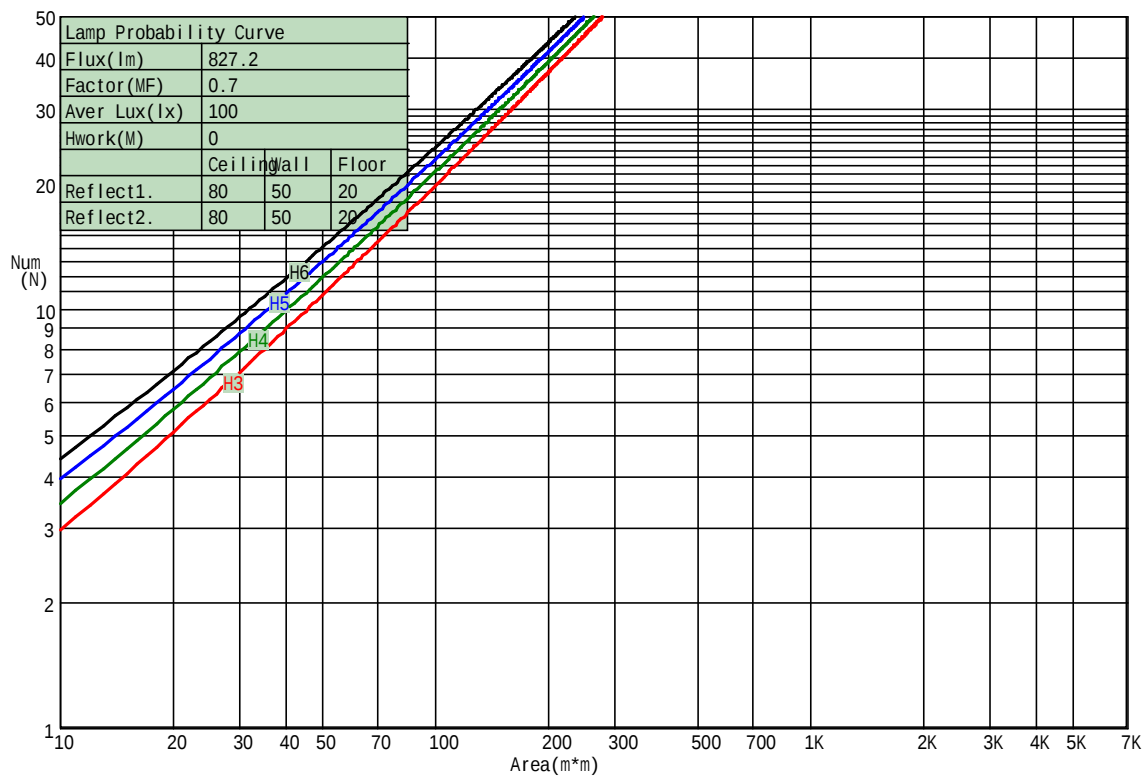
Humidity(%): 60

Date: 2026-4-27

Remark:

Measured Para U: 229.7V I: 136.0mA P: 16.90W PF: 0.540 Test LM: 827.21lm		
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: 229.7V I: 136.0mA P: 16.90W PF: 0.540 Test LM: 827.21lm		
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	27	50	36	27	47	35	26
0.80	56	40	29	54	39	28	50	37	27
1.00	60	42	30	57	41	29	52	38	28
1.25	62	44	31	59	43	30	54	40	29
1.50	64	46	32	61	44	31	55	40	29
2.00	67	48	33	63	46	32	57	42	29
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	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	0.98	0.94	1.01	0.96	0.93	0.96	0.93	0.9	0.92	0.9	0.87	0.89	0.86	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	0.73	0.7
3	0.78	0.7	0.63	0.76	0.69	0.62	0.73	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	0.6	0.55	0.5
5	0.61	0.52	0.45	0.6	0.52	0.45	0.58	0.51	0.45	0.56	0.49	0.44	0.54	0.48	0.44
6	0.55	0.46	0.4	0.54	0.46	0.39	0.52	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	0.35	0.3	0.41	0.35	0.3
9	0.42	0.33	0.28	0.41	0.33	0.28	0.4	0.33	0.28	0.39	0.32	0.27	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): 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: 229.7V I: 136.0mA P: 16.90W PF: 0.540 Test LM: 827.21lm		
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	0.19	0.06	0.32	0.18	0.06	0.31	0.18	0.06	0.3	0.17	0.05	0.29	0.17	0.05
2	0.3	0.17	0.05	0.3	0.16	0.05	0.29	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	0.14	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	0.24	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): 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: 229.7V I: 136.0mA P: 16.90W PF: 0.540 Test LM: 827.21lm		
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	272	273	273	275	275	275	274	271	0-5	6.55	6.55
10	267	268	268	274	273	272	271	266	5-10	19.4	26
15	260	262	262	270	268	267	265	258	10-15	31.7	57.7
20	251	253	254	264	261	260	258	249	15-20	42.9	101
25	240	242	243	255	253	251	248	237	20-25	52.7	153
30	228	229	232	245	241	240	237	225	25-30	60.8	214
35	213	214	218	233	228	228	223	209	30-35	67	281
40	196	198	202	218	214	212	208	192	35-40	71	352
45	178	181	184	202	197	195	192	173	40-45	72.7	425
50	159	162	166	186	180	177	173	154	45-50	72.2	497
55	139	143	146	167	160	157	153	133	50-55	69.4	566
60	118	122	124	147	140	136	133	112	55-60	64.4	631
65	96.9	101	88.8	126	119	115	111	90.2	60-65	57.2	688
70	75.6	79.8	47.8	104	97.5	93.1	89.7	68.7	65-70	47.4	735
75	54.7	59.1	36.7	83	76.1	71.3	68.3	47.8	70-75	37.6	773
80	34.3	38.9	25.8	61.8	54.8	49.7	47.6	27.4	75-80	28	801
85	14.7	19.6	14	38.9	34.2	29.5	27	8.57	80-85	17.9	819
90	5.03	5.25	5.67	17.3	12.8	14.1	6.8	5.16	85-90	8.27	827
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: 229.7V I: 136.0mA P: 16.90W PF: 0.540 Test LM: 827.21lm		
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	272	273	273	273	273	273	275	275	275	275	275	275	274	274	273	272	272	272
10.0	267	268	268	268	268	270	272	274	273	273	273	272	272	271	270	268	266	267
15.0	260	261	262	262	262	264	267	270	269	268	268	267	267	266	264	261	259	259
20.0	251	252	253	253	254	256	260	263	262	261	261	260	259	258	256	252	249	250
25.0	240	241	242	242	243	246	251	255	254	253	252	251	250	249	246	240	237	238
30.0	228	228	229	230	231	235	241	245	243	241	241	240	239	237	234	229	225	227
35.0	213	214	214	215	217	221	228	232	230	228	228	228	226	224	220	213	209	211
40.0	196	197	198	199	201	205	213	218	216	214	213	212	211	209	204	197	192	194
45.0	178	180	181	182	184	188	196	202	199	197	196	195	194	192	188	179	174	176
50.0	159	160	162	163	165	170	179	185	182	180	178	177	175	174	169	160	154	157
55.0	139	141	142	144	145	151	160	166	163	160	159	157	156	154	149	140	134	136
60.0	118	120	121	123	123	129	139	146	143	140	138	137	135	134	128	119	112	115
65.0	96.9	98.7	100	97	91.5	96.9	114	125	122	119	117	115	114	112	107	97.2	91	94
70.0	75.6	77.5	79.4	69.3	54.8	60.2	85.8	104	101	97.5	95.6	93.6	92	90.5	85.1	75.6	69.5	72.6
75.0	54.7	56.6	58.6	51.8	41.6	46.9	67.8	82.3	79.1	76.1	74	71.9	70.4	69	63.8	54.5	48.5	51.7
80.0	34.3	36.3	38.4	34.6	28.6	33.6	50	61.1	57.9	54.8	52.6	50.3	49	48	43.1	34	28.1	31.3
85.0	14.7	16.8	19	17.8	15.2	19.5	30.7	38.4	36.2	34.2	32.1	30	28.7	27.5	23	14.6	9.24	12
90.0	5.03	5.13	5.22	5.39	5.58	8.21	13.5	16.8	14.8	12.8	13.4	13.9	11.7	8.39	6.44	5.7	5.15	5.09
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: