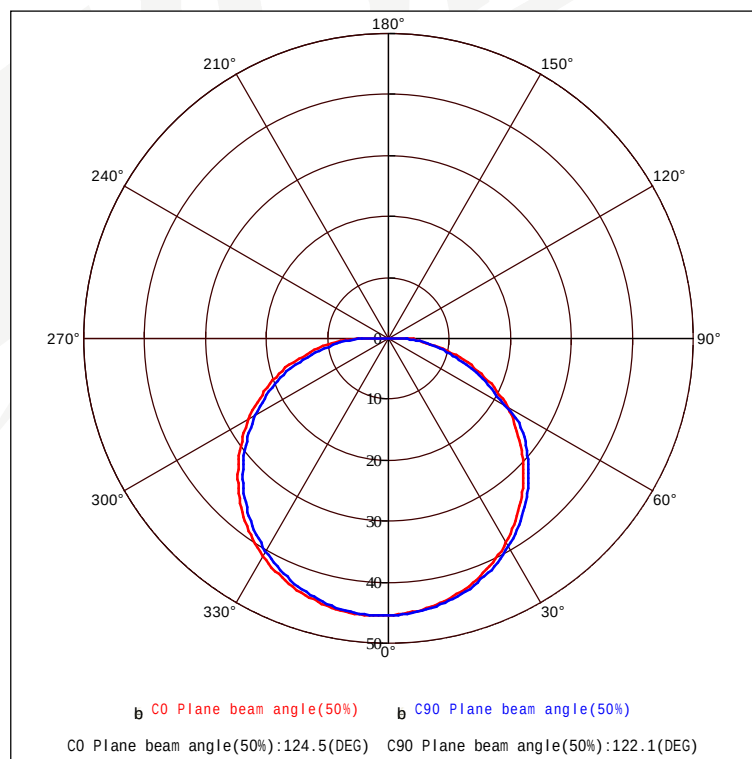


Goniophotometer Test Report

Measured Para U: 227.4V I: 139.0mA P: 17.40W PF: 0.549 Test LM: 150.89lm						
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)	45.6	Efficiency(lm/w)	8.7
Nominal P(w)		36.0	Position	225.0,3.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	150.895	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

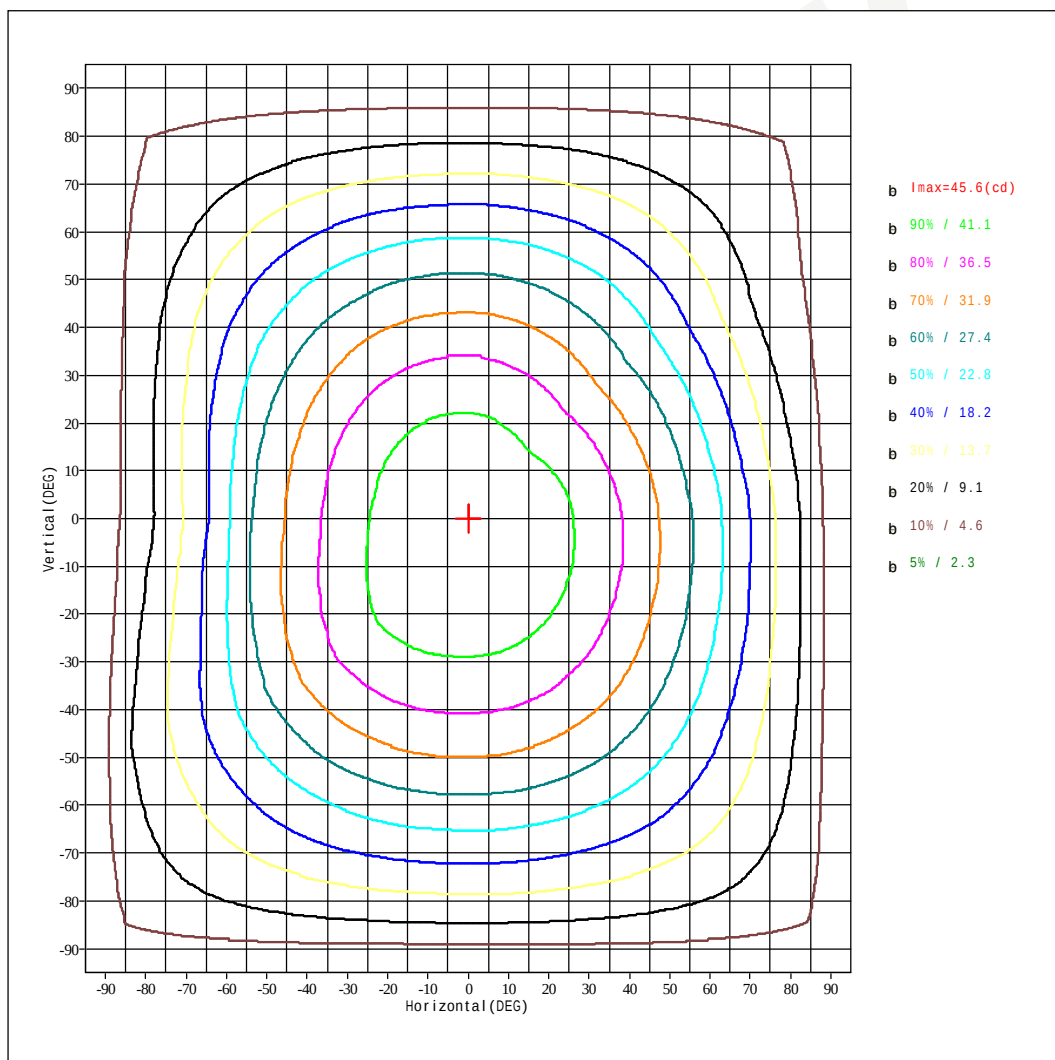
Humidity(%): 60

Date: 2026-4-27

Remark:

Measured Para U: 227.4V I: 139.0mA P: 17.40W PF: 0.549 Test LM: 150.89lm		
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

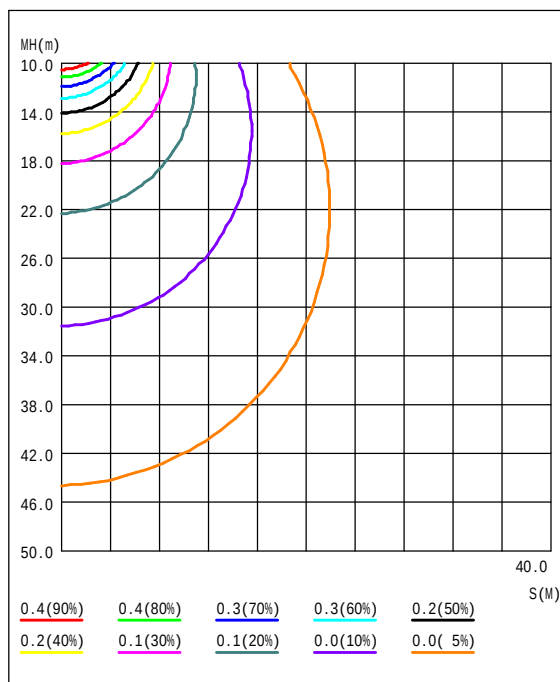
Humidity(%): 60

Date: 2026-4-27

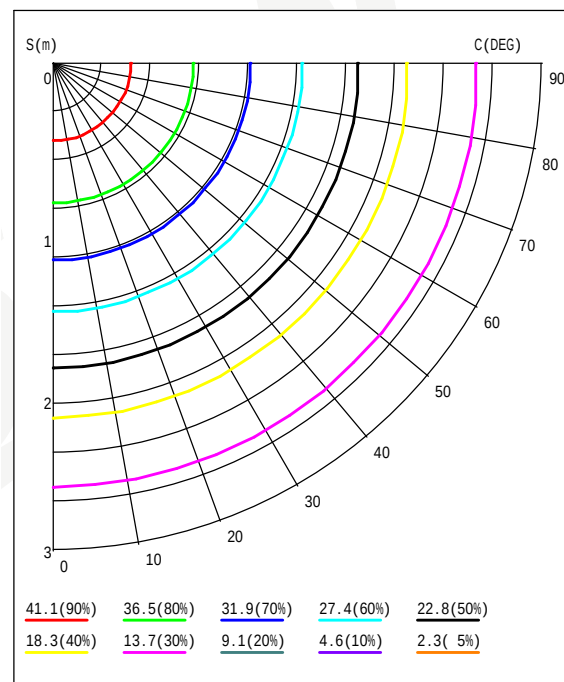
Remark:

Measured Para U: 227.4V I: 139.0mA P: 17.40W PF: 0.549 Test LM: 150.89lm		
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

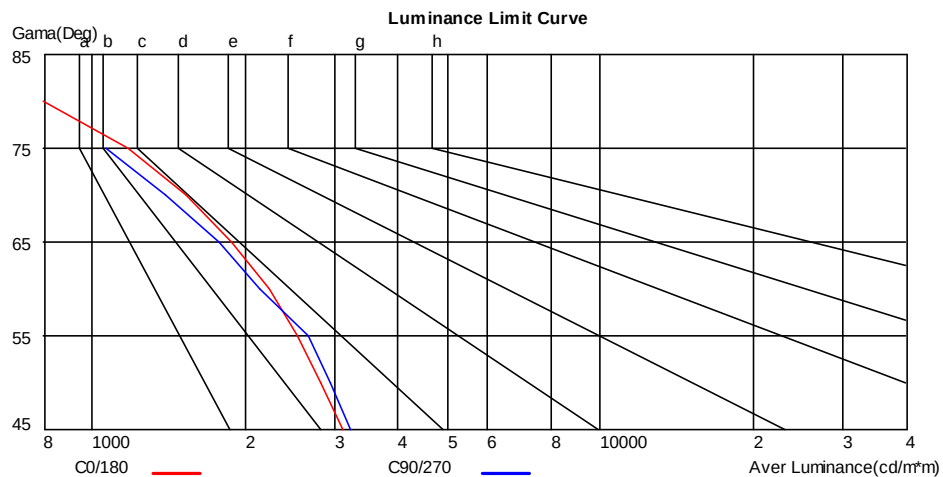
Remark:

Measured Para U: 227.4V I: 139.0mA P: 17.40W PF: 0.549 Test LM: 150.89lm		
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	3105.6	2823.4	2525.5	2222.6	1877.2	1529.3	1177.0	802.1	489.5
C90	3224.7	2948.8	2655.8	2138.9	1779.2	1389.6	1064.3	783.0	485.6

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): 30

Tester: zyg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

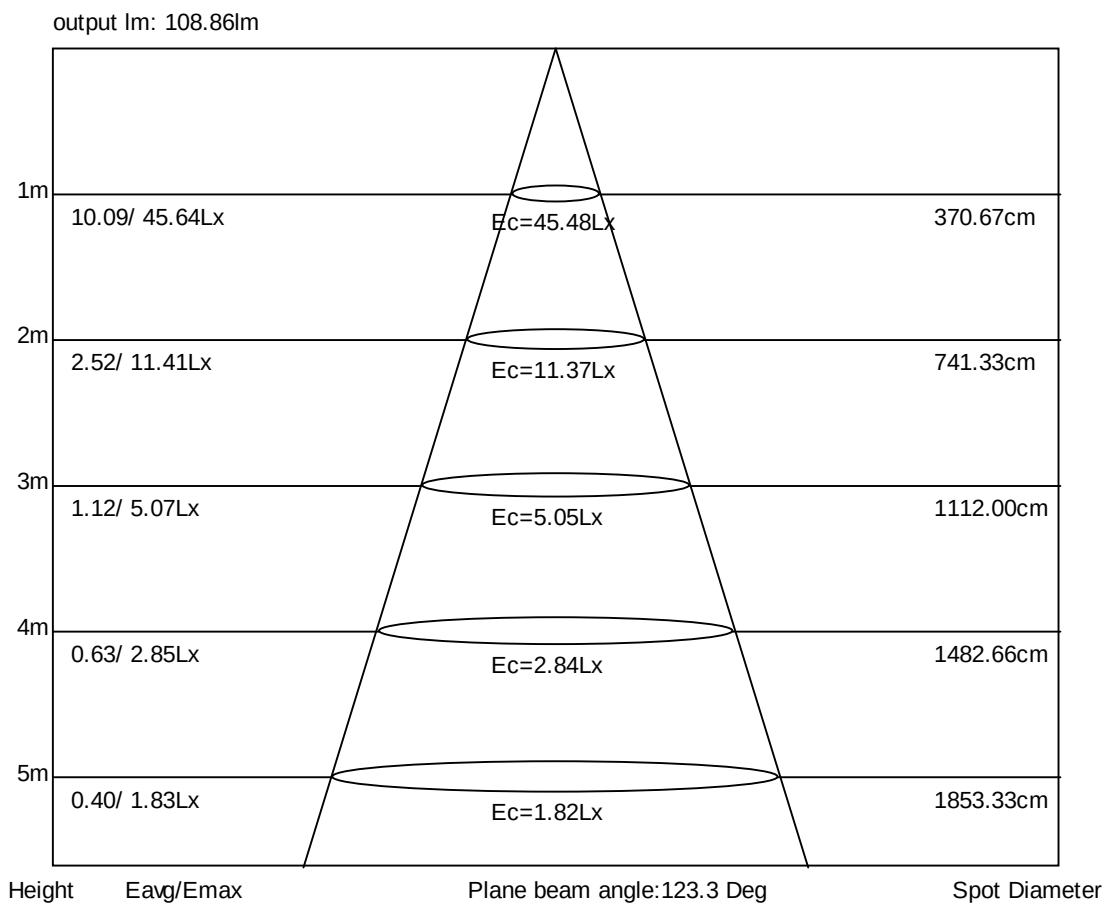
Humidity(%): 60

Date: 2026-4-27

Remark:

Measured Para U: 227.4V I: 139.0mA P: 17.40W PF: 0.549 Test LM: 150.89lm		
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

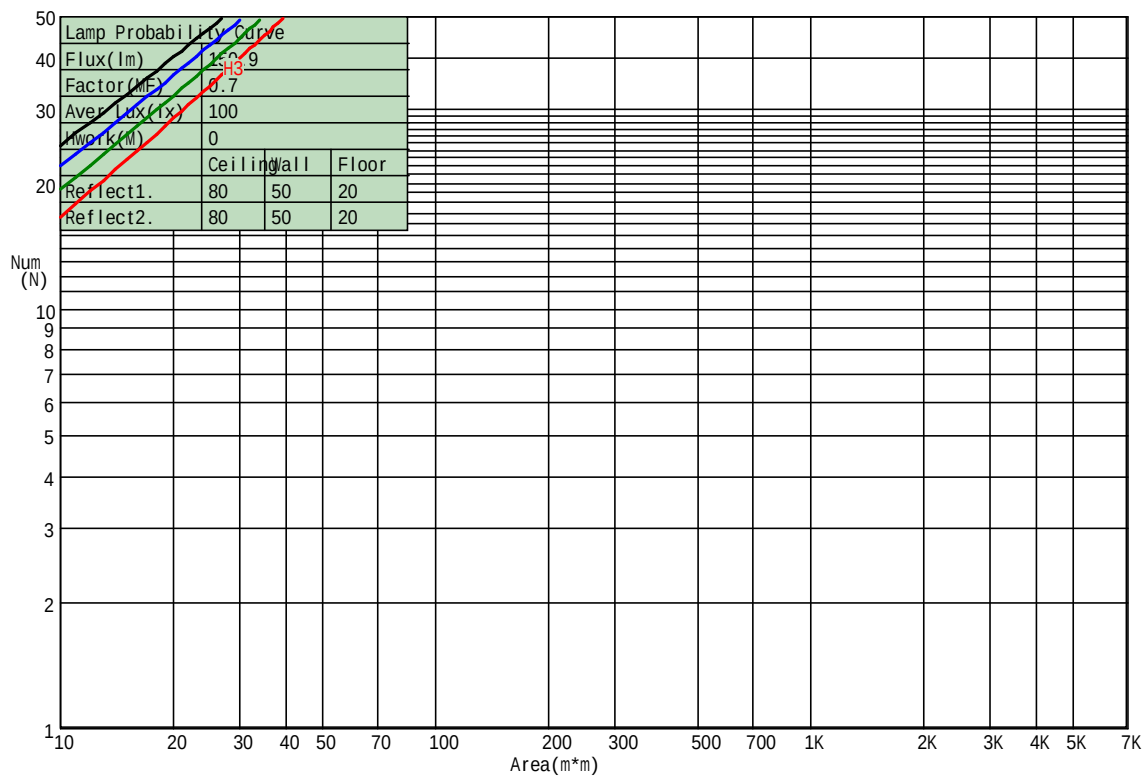
Humidity(%): 60

Date: 2026-4-27

Remark:

Measured Para U: 227.4V I: 139.0mA P: 17.40W PF: 0.549 Test LM: 150.89lm		
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: 227.4V I: 139.0mA P: 17.40W PF: 0.549 Test LM: 150.89lm		
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	51	36	26	49	35	26	46	34	25
0.80	56	39	28	53	38	27	49	36	27
1.00	59	42	29	57	40	29	52	38	28
1.25	62	44	31	59	42	30	54	39	28
1.50	64	46	31	61	44	31	55	40	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	34	66	48	32	58	43	29
4.00	72	52	34	67	49	32	59	43	29
5.00	73	53	34	68	49	33	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	1.01	0.96	0.92	0.99	0.95	0.9	0.95	0.91	0.87	0.91	0.88	0.85	0.87	0.85	0.82
2	0.87	0.8	0.73	0.85	0.78	0.72	0.82	0.76	0.71	0.78	0.73	0.69	0.75	0.71	0.67
3	0.76	0.67	0.6	0.74	0.66	0.59	0.71	0.64	0.58	0.68	0.62	0.57	0.66	0.61	0.56
4	0.67	0.57	0.5	0.66	0.57	0.5	0.63	0.55	0.49	0.61	0.54	0.48	0.58	0.53	0.48
5	0.6	0.5	0.43	0.58	0.49	0.43	0.56	0.48	0.42	0.54	0.47	0.42	0.52	0.46	0.41
6	0.53	0.44	0.37	0.52	0.44	0.37	0.51	0.43	0.37	0.49	0.42	0.36	0.47	0.41	0.36
7	0.48	0.39	0.33	0.47	0.39	0.33	0.46	0.38	0.32	0.44	0.37	0.32	0.43	0.37	0.32
8	0.44	0.35	0.29	0.43	0.35	0.29	0.42	0.34	0.29	0.41	0.34	0.29	0.39	0.33	0.28
9	0.4	0.32	0.26	0.4	0.32	0.26	0.39	0.31	0.26	0.37	0.31	0.26	0.36	0.3	0.25
10	0.37	0.29	0.24	0.37	0.29	0.23	0.36	0.28	0.23	0.35	0.28	0.23	0.34	0.28	0.23

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: 227.4V I: 139.0mA P: 17.40W PF: 0.549 Test LM: 150.89lm		
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	0.36	0.2	0.06	0.35	0.2	0.06	0.34	0.19	0.06	0.32	0.19	0.06	0.31	0.18	0.06
2	0.32	0.18	0.05	0.32	0.17	0.05	0.3	0.17	0.05	0.29	0.16	0.05	0.28	0.16	0.05
3	0.29	0.16	0.05	0.29	0.15	0.05	0.28	0.15	0.05	0.27	0.15	0.04	0.26	0.14	0.04
4	0.27	0.14	0.04	0.26	0.14	0.04	0.25	0.13	0.04	0.24	0.13	0.04	0.23	0.13	0.04
5	0.24	0.12	0.04	0.24	0.12	0.04	0.23	0.12	0.04	0.22	0.12	0.03	0.22	0.11	0.03
6	0.22	0.11	0.03	0.22	0.11	0.03	0.21	0.11	0.03	0.21	0.11	0.03	0.2	0.1	0.03
7	0.21	0.1	0.03	0.2	0.1	0.03	0.2	0.1	0.03	0.19	0.1	0.03	0.18	0.1	0.03
8	0.19	0.09	0.03	0.19	0.09	0.03	0.18	0.09	0.03	0.18	0.09	0.03	0.17	0.09	0.03
9	0.18	0.09	0.02	0.18	0.09	0.02	0.17	0.08	0.02	0.17	0.08	0.02	0.16	0.08	0.02
10	0.17	0.08	0.02	0.17	0.08	0.02	0.16	0.08	0.02	0.16	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	0.18	0.13	0.09	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	0.03	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	0.06	0.03	0.05	0.03	0.02	0.02	0.01	0.01
6	0.15	0.08	0.04	0.13	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	0.13	0.07	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: 227.4V I: 139.0mA P: 17.40W PF: 0.549 Test LM: 150.89lm		
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	45.1	45.2	45.2	45.5	45.6	45.5	45.4	44.8	0-5	1.08	1.08
10	44.3	44.5	44.6	45.3	45.3	45.3	45	43.9	5-10	3.22	4.3
15	43.3	43.6	43.7	44.7	44.7	44.5	44.2	42.8	10-15	5.26	9.56
20	42	42.2	42.5	44.1	43.8	43.6	43.2	41.3	15-20	7.15	16.7
25	40.4	40.7	41	42.9	42.6	42.3	41.8	39.6	20-25	8.83	25.5
30	38.4	38.7	39.2	41.5	41	40.7	40.2	37.5	25-30	10.3	35.8
35	36.2	36.7	37.1	39.8	39.2	38.8	38.2	35.2	30-35	11.4	47.2
40	33.7	34.2	34.8	37.7	37	36.6	36	32.6	35-40	12.2	59.4
45	31.1	31.6	32.2	35.5	34.6	34.1	33.4	29.9	40-45	12.6	72
50	28.2	28.9	29.5	32.8	31.9	31.4	30.8	27	45-50	12.7	84.7
55	25.3	25.9	26.6	30	29	28.6	27.9	24	50-55	12.4	97.1
60	22.2	22.9	21.4	26.6	26.2	25.6	24.9	20.8	55-60	11.8	109
65	18.8	19.7	17.8	23.2	23	22.4	21.7	17.3	60-65	10.8	120
70	15.3	15.9	13.9	19.9	19.9	18.9	18.5	13.7	65-70	9.52	129
75	11.8	12.7	10.6	16.5	16.6	15.4	14.8	10	70-75	7.99	137
80	8.02	9.07	7.83	13	12.7	11.8	11.1	6.32	75-80	6.26	143
85	4.9	5.61	4.86	9.57	8.93	7.96	7.39	4.08	80-85	4.49	148
90	4.17	4.31	2.94	5.88	5.09	5.22	4.28	3.87	85-90	2.96	151
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: 227.4V I: 139.0mA P: 17.40W PF: 0.549 Test LM: 150.89lm		
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	45.1	45.1	45.2	45.2	45.2	45.3	45.4	45.5	45.5	45.6	45.5	45.5	45.5	45.5	45.3	45	44.8	44.9
10.0	44.3	44.4	44.5	44.5	44.6	44.7	45.1	45.3	45.3	45.3	45.3	45.3	45.2	45.1	44.8	44.3	43.9	44.1
15.0	43.3	43.4	43.5	43.6	43.7	43.9	44.4	44.7	44.7	44.7	44.6	44.5	44.4	44.3	43.9	43.3	42.8	43.1
20.0	42	42.1	42.2	42.3	42.4	42.8	43.5	44	43.9	43.8	43.7	43.6	43.5	43.3	42.8	41.9	41.4	41.7
25.0	40.4	40.5	40.6	40.8	41	41.4	42.3	42.9	42.7	42.6	42.5	42.3	42.1	41.9	41.3	40.3	39.7	40
30.0	38.4	38.6	38.7	38.9	39.1	39.7	40.8	41.5	41.2	41	40.8	40.7	40.5	40.3	39.6	38.4	37.6	38
35.0	36.2	36.4	36.6	36.8	37	37.7	38.9	39.7	39.4	39.2	39	38.9	38.6	38.3	37.5	36.2	35.3	35.8
40.0	33.7	33.9	34.2	34.4	34.7	35.5	36.8	37.7	37.3	37	36.8	36.6	36.4	36.1	35.2	33.7	32.8	33.2
45.0	31.1	31.3	31.6	31.8	32.1	33	34.4	35.4	35	34.6	34.4	34.2	33.9	33.6	32.7	31.1	30	30.6
50.0	28.2	28.5	28.8	29.1	29.3	30.2	31.7	32.7	32.3	31.9	31.7	31.5	31.2	30.9	29.9	28.2	27.1	27.7
55.0	25.3	25.5	25.8	26.1	26.4	27.3	28.8	29.9	29.4	29	28.8	28.6	28.3	28	27	25.3	24.1	24.7
60.0	22.2	22.5	22.8	22.4	21.7	22.5	24.9	26.5	26.4	26.2	26	25.7	25.4	25	24	22.1	20.9	21.6
65.0	18.8	19.2	19.6	19.1	18.2	19	21.4	23.2	23.1	23	22.7	22.5	22.2	21.9	20.7	18.7	17.4	18.1
70.0	15.3	15.6	15.9	15.3	14.3	15.2	17.9	19.9	19.9	19.9	19.5	19	18.8	18.6	17.4	15.3	13.9	14.6
75.0	11.8	12.2	12.6	12	11.1	11.9	14.6	16.6	16.6	16.6	16.1	15.5	15.2	14.9	13.7	11.6	10.2	11
80.0	8.02	8.48	8.95	8.66	8.1	8.96	11.3	13	12.8	12.7	12.3	11.9	11.5	11.2	10	7.88	6.5	7.28
85.0	4.9	5.21	5.53	5.36	5.02	5.89	8.03	9.5	9.21	8.93	8.51	8.07	7.77	7.51	6.67	5.17	4.17	4.54
90.0	4.17	4.23	4.3	3.86	3.24	3.58	4.92	5.8	5.44	5.09	5.15	5.2	4.91	4.49	4.19	4	3.9	4.04
95.0																		
100.0																		
105.0																		
110.0																		
115.0																		
120.0																		
125.0																		
130.0																		
135.0																		
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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: