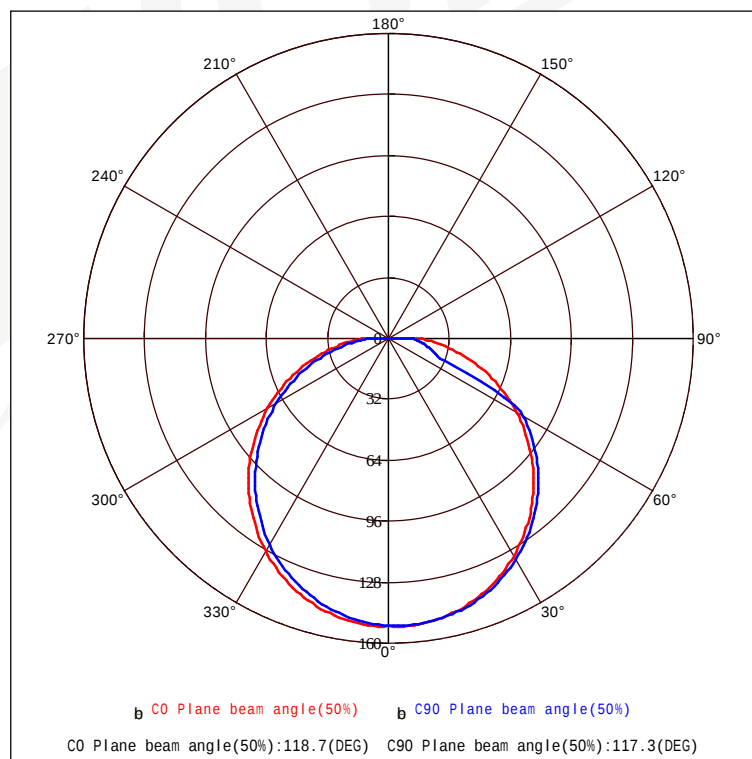


Goniophotometer Test Report

Measured Para U: 236.0V I: 40.0mA P: 5.60W PF: 0.593 Test LM: 472.26lm						
Lamp Name: LED DOWN LIGHT			Lamp Type:		Weight(kg):	
Lamp ID: LPDL-06EMS01-Y			Lamp Spec: LPDL-06EMS01-Y		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPDL-06EMS01-Y		Peak Value(cd)	151.6	Efficiency(lm/w)	84.3
Nominal P(w)		1.0	Position	0.0,1.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	472.261	Down(C0-C180)	52.3
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)	47.7

Planar Intensity Distribution Curve



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

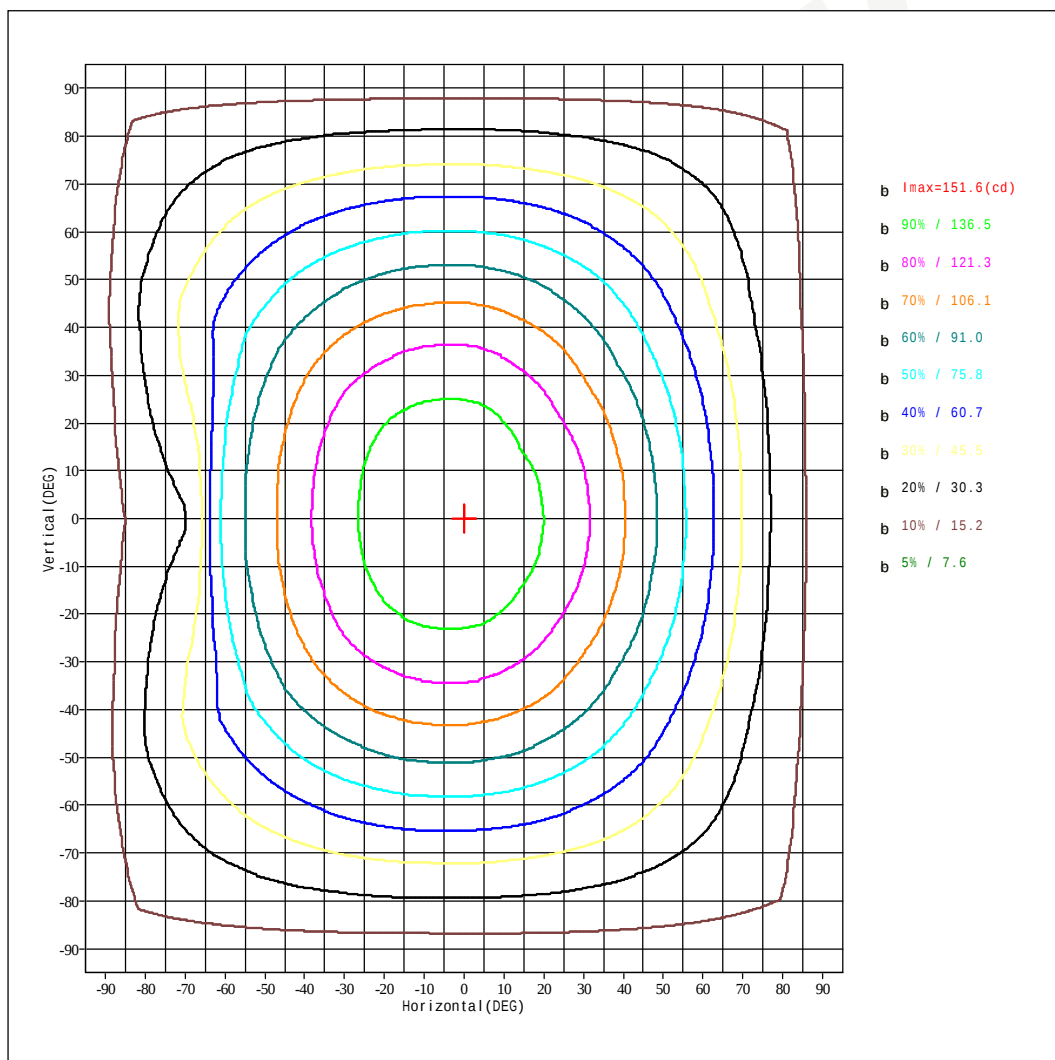
Humidity(%): 60

Date: 2026-2-3

Remark:

Measured Para U: 236.0V I: 40.0mA P: 5.60W PF: 0.593 Test LM: 472.26lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-06EMS01-Y	Lamp Spec: LPDL-06EMS01-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

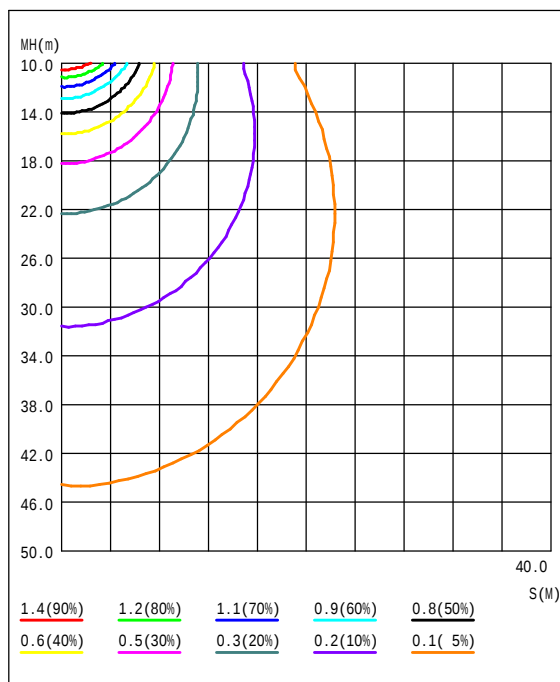
Humidity(%): 60

Date: 2026-2-3

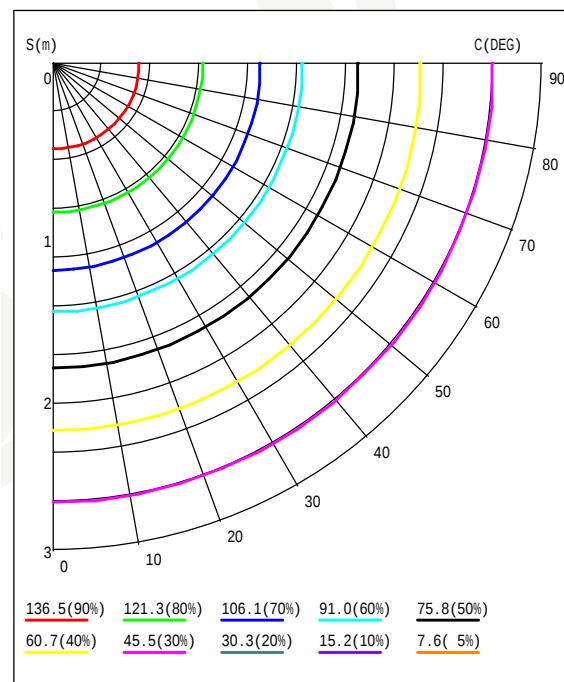
Remark:

Measured Para U: 236.0V I: 40.0mA P: 5.60W PF: 0.593 Test LM: 472.26lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-06EMS01-Y	Lamp Spec: LPDL-06EMS01-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: 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: 2026-2-3

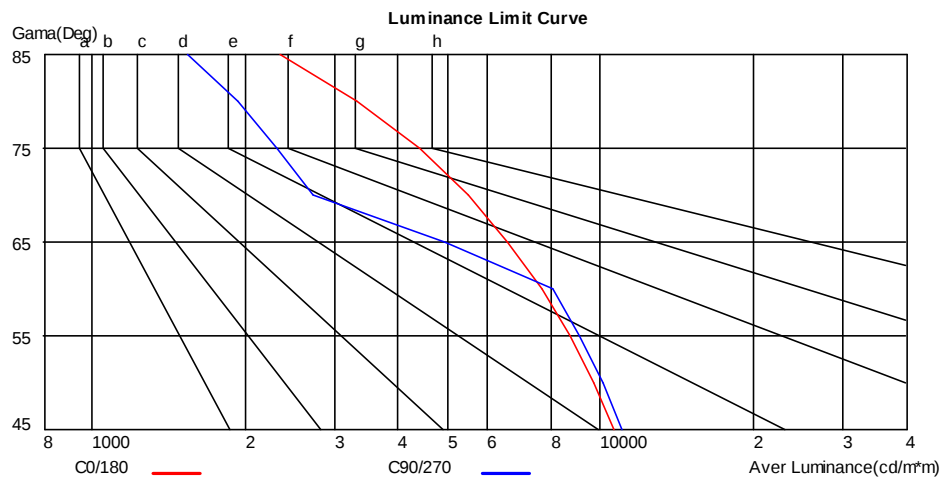
Remark:

Measured Para U: 236.0V I: 40.0mA P: 5.60W PF: 0.593 Test LM: 472.26lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-06EMS01-Y	Lamp Spec: LPDL-06EMS01-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	10689.8	9737.3	8725.4	7672.4	6590.5	5492.9	4401.2	3324.6	2337.8
C90	11040.2	10109.7	9129.7	8083.5	4949.5	2711.2	2312.8	1929.6	1544.5

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: zyg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

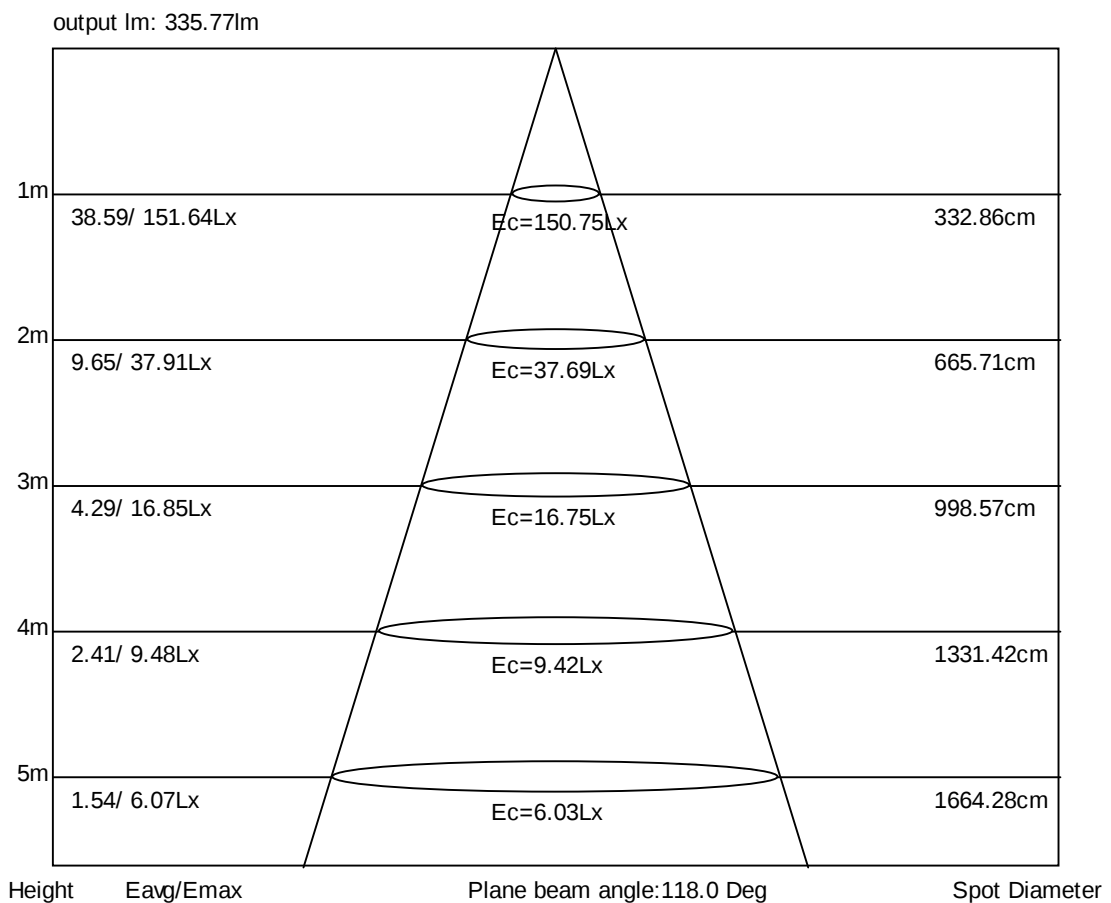
Humidity(%): 60

Date: 2026-2-3

Remark:

Measured Para U: 236.0V I: 40.0mA P: 5.60W PF: 0.593 Test LM: 472.26lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-06EMS01-Y	Lamp Spec: LPDL-06EMS01-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

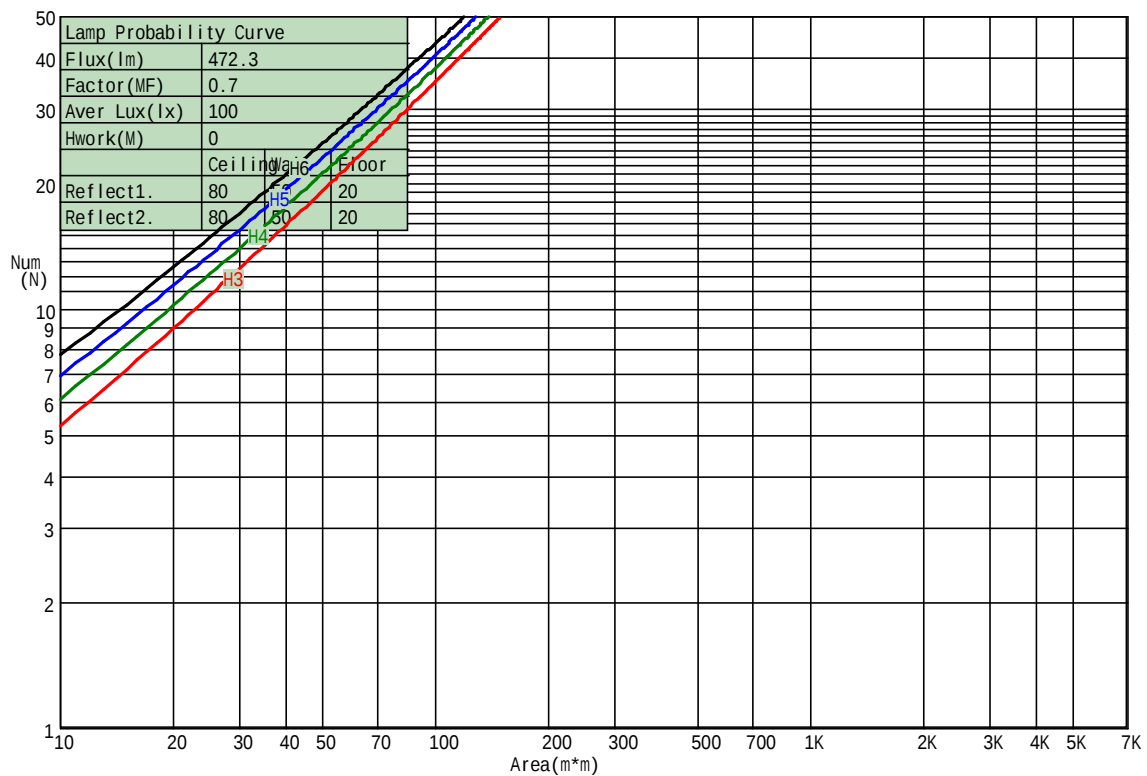
Humidity(%): 60

Date: 2026-2-3

Remark:

Measured Para U: 236.0V I: 40.0mA P: 5.60W PF: 0.593 Test LM: 472.26lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-06EMS01-Y	Lamp Spec: LPDL-06EMS01-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: 2026-2-3

Remark:

Measured Para U: 236.0V I: 40.0mA P: 5.60W PF: 0.593 Test LM: 472.26lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-06EMS01-Y	Lamp Spec: LPDL-06EMS01-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	55	39	29	51	37	28
1.00	60	43	31	58	42	30	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	58	43	31
2.50	70	50	35	66	48	33	58	43	31
3.00	71	51	35	67	49	33	59	44	31
4.00	72	53	35	68	50	34	59	44	31
5.00	73	54	36	69	50	34	60	45	31

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	1.02	0.97	0.93	1	0.95	0.91	0.95	0.92	0.88	0.91	0.88	0.85	0.88	0.85	0.83
2	0.88	0.81	0.74	0.86	0.79	0.73	0.82	0.77	0.72	0.79	0.74	0.7	0.76	0.72	0.68
3	0.77	0.68	0.61	0.75	0.67	0.61	0.72	0.65	0.6	0.69	0.63	0.58	0.67	0.62	0.57
4	0.68	0.59	0.52	0.66	0.58	0.51	0.64	0.56	0.5	0.62	0.55	0.5	0.59	0.54	0.49
5	0.6	0.51	0.44	0.59	0.5	0.44	0.57	0.49	0.43	0.55	0.48	0.43	0.53	0.47	0.42
6	0.54	0.45	0.38	0.53	0.45	0.38	0.52	0.44	0.38	0.5	0.43	0.37	0.48	0.42	0.37
7	0.49	0.4	0.34	0.48	0.4	0.34	0.47	0.39	0.33	0.45	0.38	0.33	0.44	0.38	0.33
8	0.45	0.36	0.3	0.44	0.36	0.3	0.43	0.35	0.3	0.41	0.35	0.3	0.4	0.34	0.29
9	0.41	0.33	0.27	0.4	0.32	0.27	0.39	0.32	0.27	0.38	0.31	0.27	0.37	0.31	0.26
10	0.38	0.3	0.24	0.37	0.3	0.24	0.36	0.29	0.24	0.35	0.29	0.24	0.34	0.28	0.24

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: 2026-2-3

Remark:

Measured Para U: 236.0V I: 40.0mA P: 5.60W PF: 0.593 Test LM: 472.26lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-06EMS01-Y	Lamp Spec: LPDL-06EMS01-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	0.35	0.2	0.06	0.34	0.19	0.06	0.33	0.19	0.06	0.32	0.18	0.06	0.3	0.18	0.06
2	0.32	0.17	0.05	0.31	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	0.15	0.05	0.28	0.15	0.05	0.27	0.15	0.04	0.26	0.14	0.04	0.25	0.14	0.04
4	0.26	0.14	0.04	0.26	0.13	0.04	0.25	0.13	0.04	0.24	0.13	0.04	0.23	0.12	0.04
5	0.24	0.12	0.04	0.23	0.12	0.04	0.23	0.12	0.03	0.22	0.12	0.03	0.21	0.11	0.03
6	0.22	0.11	0.03	0.22	0.11	0.03	0.21	0.11	0.03	0.2	0.11	0.03	0.2	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	0.18	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	0.16	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	0.16	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	0.1	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	0.03	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	0.05	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: 2026-2-3

Remark:

Measured Para U: 236.0V I: 40.0mA P: 5.60W PF: 0.593 Test LM: 472.26lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-06EMS01-Y	Lamp Spec: LPDL-06EMS01-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	151	151	151	150	151	149	149	149	0-5	3.6	3.6
10	150	150	150	149	148	146	146	146	5-10	10.7	14.3
15	147	148	147	147	145	142	142	142	10-15	17.4	31.7
20	143	145	144	143	141	137	137	137	15-20	23.6	55.2
25	137	140	139	138	135	131	131	131	20-25	29	84.2
30	131	134	133	133	128	124	124	124	25-30	33.4	118
35	124	128	127	126	120	115	116	116	30-35	36.9	154
40	116	120	119	118	112	106	107	107	35-40	39.2	194
45	107	112	110	109	103	96.9	97.8	98.1	40-45	40.3	234
50	97.4	102	101	100	93	86.8	87.8	88.1	45-50	40.2	274
55	87.3	92.7	91.3	90.4	82.6	76.2	77.3	77.7	50-55	38.9	313
60	76.7	82.4	80.8	80.1	72	65.4	66.6	67	55-60	36.6	350
65	65.9	71.8	69.5	69.5	61.2	54.5	55.7	56.2	60-65	32.8	382
70	54.9	61	58.8	58.8	50.2	43.6	44.8	45.3	65-70	27.3	410
75	44	50	47.9	47.9	39.4	32.8	34.1	34.7	70-75	22.6	432
80	33.2	39.2	37.2	37.2	28.8	23.1	23.9	24.4	75-80	17.9	450
85	23.4	28.6	26.7	26.7	19.4	14.8	15.3	16.1	80-85	13.2	463
90	17.1	18.9	17.5	17.5	12.3	10.7	9.97	11.5	85-90	9.04	472
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: 2026-2-3

Remark:

Measured Para U: 236.0V I: 40.0mA P: 5.60W PF: 0.593 Test LM: 472.26lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-06EMS01-Y	Lamp Spec: LPDL-06EMS01-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	151	151	151	151	151	151	150	150	150	151	150	149	149	149	149	149	149	150
10.0	150	150	150	150	150	149	149	149	149	148	148	147	146	146	146	146	146	148
15.0	147	147	148	148	147	147	147	146	146	145	144	143	142	142	142	142	143	145
20.0	143	143	144	144	144	144	143	143	142	141	139	137	137	137	137	137	138	140
25.0	137	139	140	140	139	139	139	138	136	135	133	131	131	131	131	131	132	135
30.0	131	133	134	134	134	133	133	132	130	128	126	124	124	124	124	124	125	128
35.0	124	126	127	127	127	126	126	125	123	120	118	116	116	116	116	116	117	121
40.0	116	118	120	120	119	119	118	117	115	112	110	107	107	107	107	107	108	112
45.0	107	109	111	111	111	110	110	109	106	103	100	97.5	97.2	97.6	97.9	98	99.1	103
50.0	97.4	99.6	102	102	101	101	100	99.4	96.1	93	90.3	87.4	87.1	87.5	87.8	88	89.2	93.3
55.0	87.3	89.7	92.1	92.3	91.6	91.1	90.7	89.6	86	82.6	79.8	76.9	76.6	77.1	77.4	77.6	78.8	83.1
60.0	76.7	79.2	81.8	81.9	81.2	80.7	80.4	79.3	75.6	72	69.2	66.2	65.8	66.3	66.7	66.9	68.1	72.5
65.0	65.9	68.5	71.2	71.2	70.4	69.9	69.4	68.6	64.8	61.2	58.2	55.2	54.9	55.4	55.8	56.1	57.3	61.7
70.0	54.9	57.6	60.3	60.3	59.4	58.9	58.4	57.8	53.9	50.2	47.3	44.3	44	44.5	44.9	45.2	46.4	50.7
75.0	44	46.6	49.3	49.3	48.4	47.9	47.4	46.8	42.9	39.2	36.3	33.3	33.3	33.9	34.3	34.5	35.7	39.9
80.0	33.2	35.8	38.5	38.5	37.6	37.1	36.6	36.2	32.4	28.8	26.3	23.7	23.3	23.7	24	24.2	25.3	29.4
85.0	23.4	25.6	28	28	27.1	26.6	26.1	25.9	22.6	19.4	17.4	15.3	15	15.2	15.5	15.8	16.9	20.2
90.0	17.1	17.9	18.7	18.7	18.1	17.6	17.1	16.9	14.6	12.3	11.6	10.9	10.5	10.1	10.3	11	12.1	14.7
95.0																		
100.0																		
105.0																		
110.0																		
115.0																		
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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: 2026-2-3

Remark: