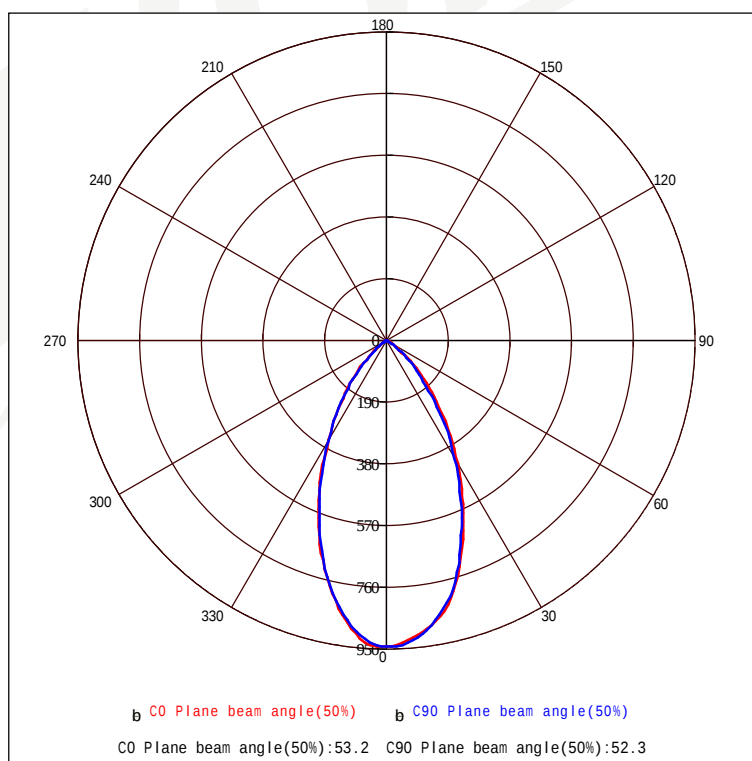


Goniophotometer Test Report

Measured Para U: 232.3V I: 72.0mA P: 9.56W PF: 0.571 Test LM: 813.78lm						
Lamp Name: LED DOWN LIGHT			Lamp Type:		Weight(kg):	
Lamp ID: LPDL-10GT01-Y			Lamp Spec: LPDL-10A-Y		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPDL-10A-Y		Peak Value(cd)	943.2	Efficiency(lm/w)	85.1
Nominal P(w)		1.0	Position	90.0,1.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	813.777	Down(C0-C180)	53.7
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)	46.3

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

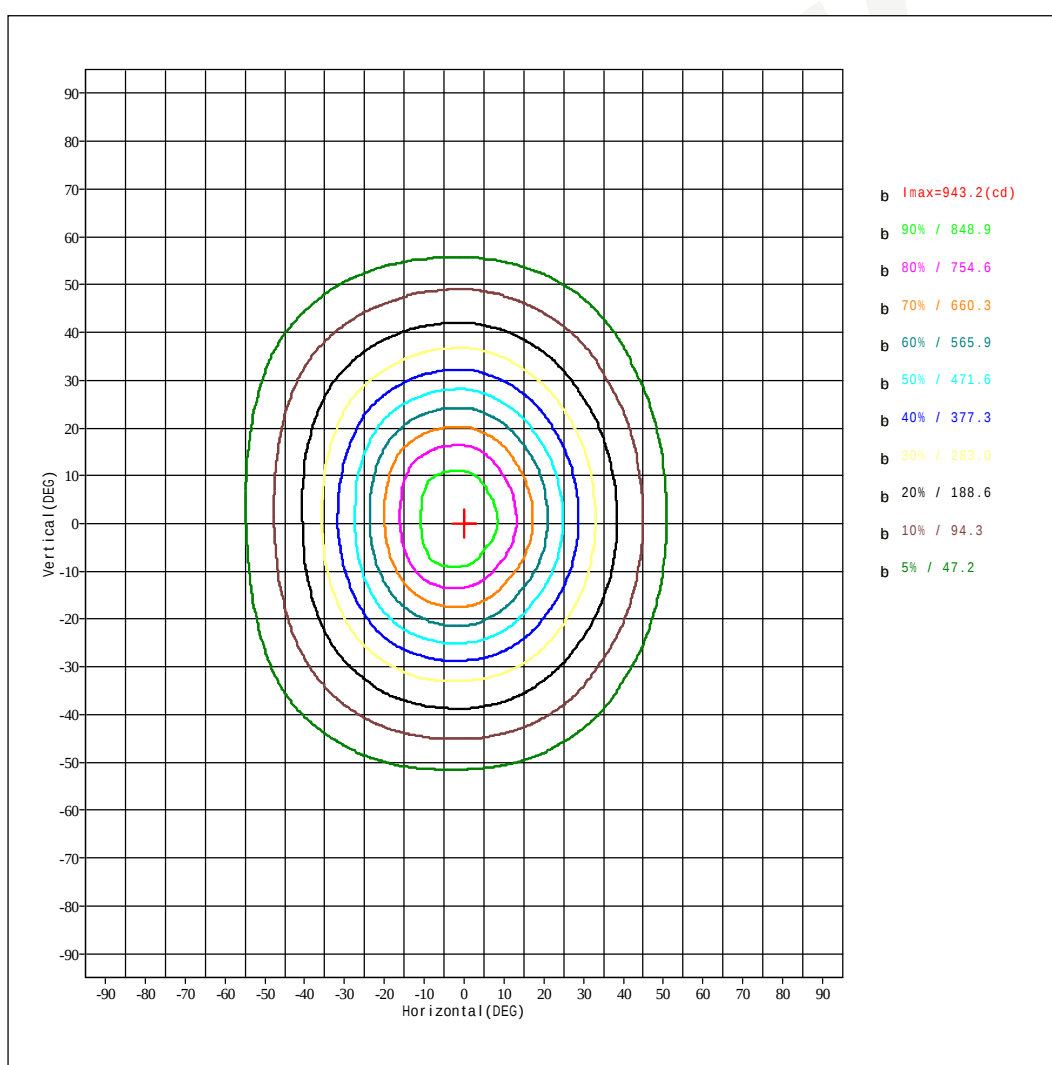
Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 232.3V I: 72.0mA P: 9.56W PF: 0.571 Test LM: 813.78lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10A-Y	Lamp Spec: LPDL-10A-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

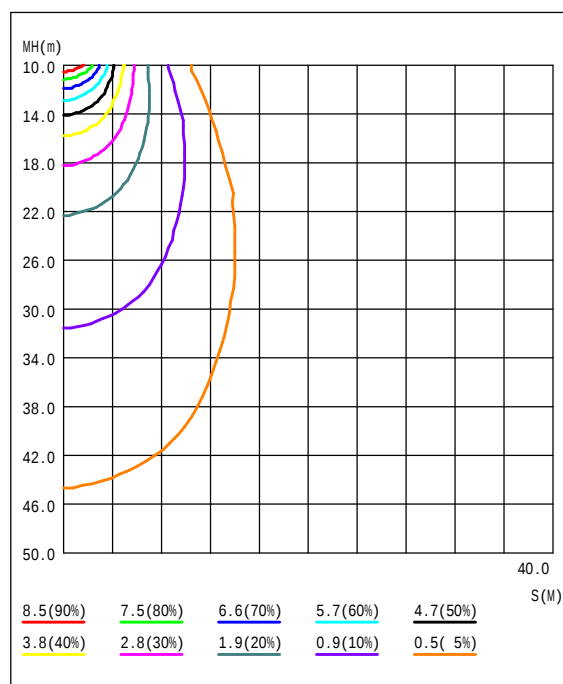
Humidity(%): 60

Date: 2025-2-19

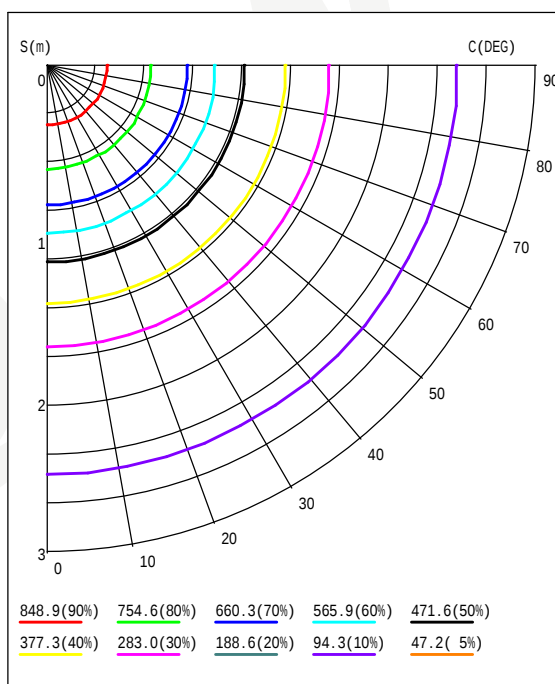
Remark:

Measured Para U: 232.3V I: 72.0mA P: 9.56W PF: 0.571 Test LM: 813.78lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10A-Y	Lamp Spec: LPDL-10A-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: 2025-2-19

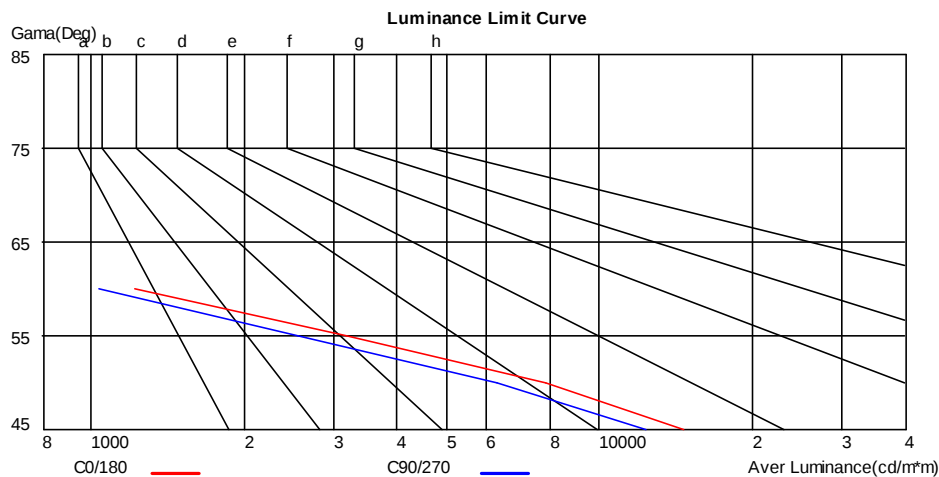
Remark:

Measured Para U: 232.3V I: 72.0mA P: 9.56W PF: 0.571 Test LM: 813.78lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10A-Y	Lamp Spec: LPDL-10A-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	14642.7	7835.1	3189.9	1215.2	587.0	261.2	233.7	230.8	230.8
C90	12368.6	6315.6	2548.5	1031.5	561.5	231.3	223.9	226.4	224.9

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): 25

Tester: zyg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

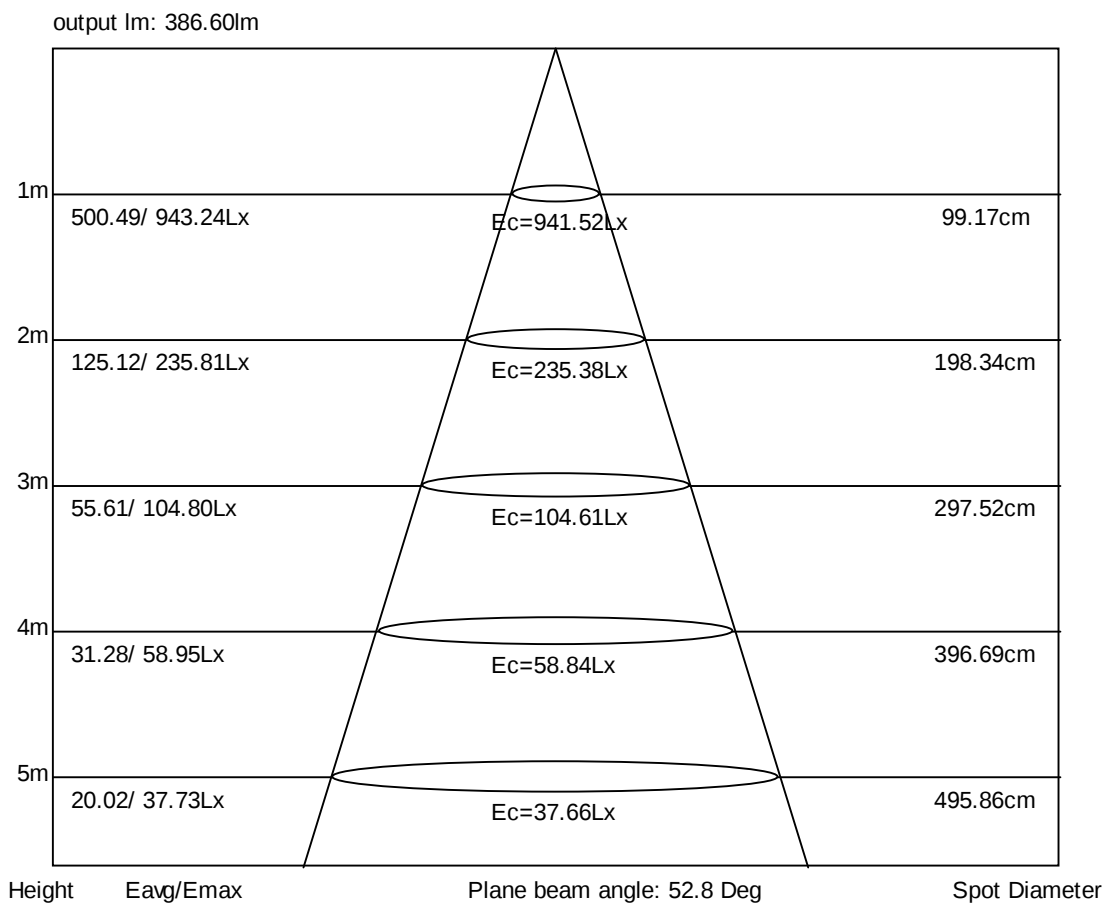
Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 232.3V I: 72.0mA P: 9.56W PF: 0.571 Test LM: 813.78lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10A-Y	Lamp Spec: LPDL-10A-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

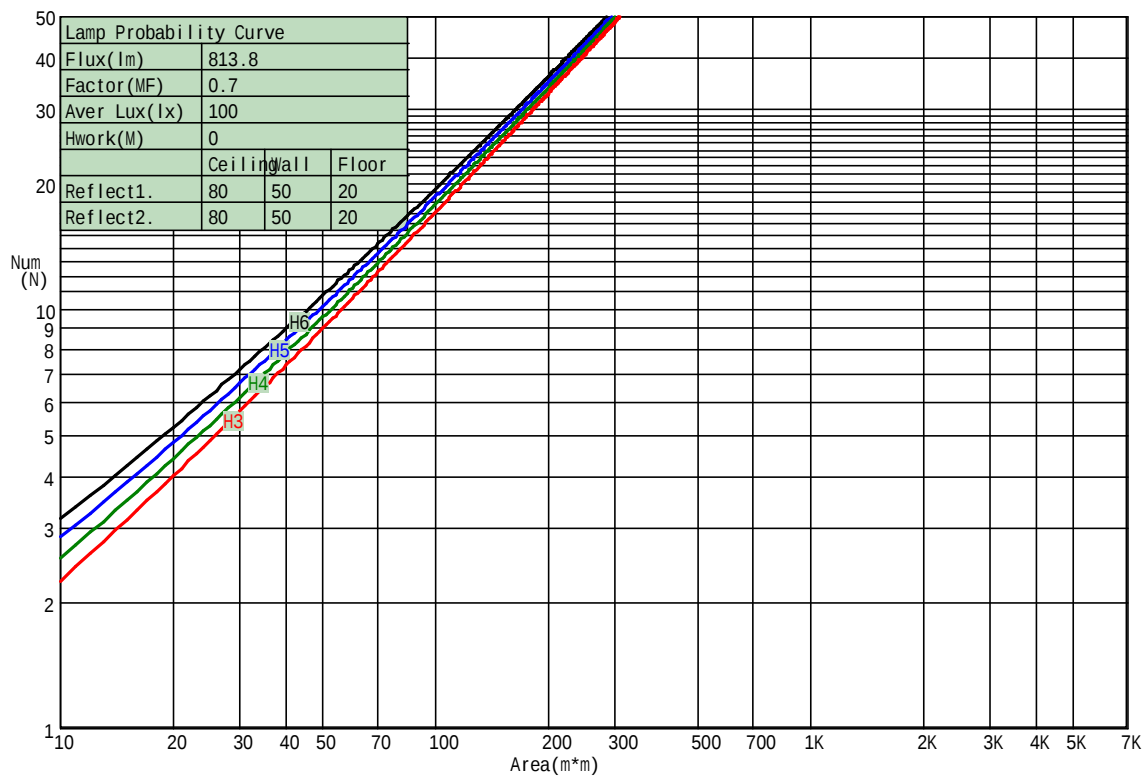
Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 232.3V I: 72.0mA P: 9.56W PF: 0.571 Test LM: 813.78lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10A-Y	Lamp Spec: LPDL-10A-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: 2025-2-19

Remark:

Measured Para U: 232.3V I: 72.0mA P: 9.56W PF: 0.571 Test LM: 813.78lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10A-Y	Lamp Spec: LPDL-10A-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	55	40	31	53	39	31	50	38	30
0.80	57	40	29	54	39	29	51	37	28
1.00	59	41	29	56	40	28	51	37	27
1.25	60	42	28	57	40	27	52	37	26
1.50	62	43	28	59	41	27	52	37	25
2.00	65	44	28	61	42	27	54	38	25
2.50	66	45	28	62	43	27	54	38	25
3.00	67	47	29	63	44	28	55	39	25
4.00	69	48	30	65	45	28	56	40	25
5.00	71	50	31	66	47	29	57	41	26

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	1.1	1.08	1.05	1.08	1.06	1.04	1.04	1.02	1	1	0.99	0.97	0.97	0.96	0.95
2	1.02	0.98	0.94	1	0.96	0.93	0.97	0.94	0.91	0.94	0.91	0.89	0.91	0.89	0.87
3	0.95	0.89	0.85	0.93	0.88	0.84	0.91	0.86	0.83	0.88	0.85	0.82	0.86	0.83	0.81
4	0.88	0.82	0.78	0.87	0.81	0.77	0.85	0.8	0.76	0.83	0.79	0.75	0.81	0.77	0.74
5	0.82	0.76	0.71	0.81	0.75	0.71	0.79	0.74	0.7	0.77	0.73	0.7	0.76	0.72	0.69
6	0.77	0.7	0.66	0.76	0.7	0.66	0.74	0.69	0.65	0.73	0.68	0.65	0.71	0.67	0.64
7	0.72	0.65	0.61	0.71	0.65	0.61	0.7	0.64	0.6	0.68	0.64	0.6	0.67	0.63	0.6
8	0.67	0.61	0.57	0.67	0.61	0.57	0.66	0.6	0.56	0.65	0.6	0.56	0.64	0.59	0.56
9	0.63	0.57	0.53	0.63	0.57	0.53	0.62	0.57	0.53	0.61	0.56	0.53	0.6	0.56	0.52
10	0.6	0.54	0.5	0.59	0.54	0.5	0.59	0.53	0.5	0.58	0.53	0.49	0.57	0.53	0.49

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: 2025-2-19

Remark:

Measured Para U: 232.3V I: 72.0mA P: 9.56W PF: 0.571 Test LM: 813.78lm															
Lamp Name: LED DOWN LIGHT								Lamp Type:				Weight(kg):			
Lamp ID: LPDL-10A-Y								Lamp Spec: LPDL-10A-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	0.19	0.11	0.03	0.18	0.1	0.03	0.17	0.1	0.03	0.16	0.09	0.03	0.15	0.09	0.03
2	0.18	0.1	0.03	0.18	0.1	0.03	0.16	0.09	0.03	0.15	0.09	0.03	0.15	0.08	0.03
3	0.17	0.09	0.03	0.17	0.09	0.03	0.16	0.09	0.03	0.15	0.08	0.03	0.14	0.08	0.02
4	0.16	0.09	0.03	0.16	0.08	0.02	0.15	0.08	0.02	0.14	0.08	0.02	0.14	0.07	0.02
5	0.16	0.08	0.02	0.15	0.08	0.02	0.15	0.08	0.02	0.14	0.07	0.02	0.13	0.07	0.02
6	0.15	0.07	0.02	0.15	0.07	0.02	0.14	0.07	0.02	0.13	0.07	0.02	0.13	0.07	0.02
7	0.14	0.07	0.02	0.14	0.07	0.02	0.13	0.07	0.02	0.13	0.07	0.02	0.12	0.06	0.02
8	0.14	0.07	0.02	0.13	0.07	0.02	0.13	0.06	0.02	0.12	0.06	0.02	0.12	0.06	0.02
9	0.13	0.06	0.02	0.13	0.06	0.02	0.12	0.06	0.02	0.12	0.06	0.02	0.12	0.06	0.02
10	0.12	0.06	0.02	0.12	0.06	0.02	0.12	0.06	0.02	0.11	0.06	0.02	0.11	0.06	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	0.17	0.16	0.14	0.15	0.13	0.12	0.1	0.09	0.09	0.06	0.05	0.05	0.02	0.02	0.02
2	0.16	0.13	0.11	0.13	0.11	0.1	0.09	0.08	0.07	0.05	0.05	0.04	0.02	0.01	0.01
3	0.15	0.11	0.09	0.12	0.1	0.08	0.09	0.07	0.05	0.05	0.04	0.03	0.02	0.01	0.01
4	0.14	0.1	0.07	0.12	0.09	0.06	0.08	0.06	0.04	0.05	0.03	0.03	0.01	0.01	0.01
5	0.13	0.09	0.06	0.11	0.08	0.05	0.08	0.05	0.04	0.04	0.03	0.02	0.01	0.01	0.01
6	0.12	0.08	0.05	0.1	0.07	0.04	0.07	0.05	0.03	0.04	0.03	0.02	0.01	0.01	0.01
7	0.11	0.07	0.04	0.1	0.06	0.04	0.07	0.04	0.03	0.04	0.03	0.02	0.01	0.01	0
8	0.11	0.06	0.04	0.09	0.06	0.03	0.06	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0
9	0.1	0.06	0.03	0.09	0.05	0.03	0.06	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0
10	0.1	0.06	0.03	0.09	0.05	0.02	0.06	0.03	0.02	0.03	0.02	0.01	0.01	0.01	0

Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 25

Tester: zxg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 232.3V I: 72.0mA P: 9.56W PF: 0.571 Test LM: 813.78lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10A-Y	Lamp Spec: LPDL-10A-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	918	928	922	929	916	892	907	904	0-5	22.2	22.2
10	871	885	867	871	828	796	826	831	5-10	62.9	85.1
15	790	814	779	766	718	681	714	730	10-15	94.6	180
20	670	710	656	642	597	559	592	613	15-20	113	293
25	545	577	529	520	470	435	467	484	20-25	118	412
30	429	456	407	399	342	325	346	360	25-30	112	523
35	320	335	297	292	248	223	245	254	30-35	96.6	620
40	219	237	193	196	167	145	165	169	35-40	76.2	696
45	146	159	124	125	93.9	72.6	90	97.2	40-45	55	751
50	78.4	91.4	63.2	61.5	35.5	26.6	33.6	39.1	45-50	33	784
55	31.9	37.8	25.5	21.4	13.2	9.78	11.7	13.1	50-55	15.1	799
60	12.2	14.7	10.3	10.6	6.84	3.86	6.14	6.42	55-60	6.28	805
65	5.87	7.76	5.62	5.19	2.09	1.39	1.82	1.81	60-65	3	808
70	2.61	3.33	2.31	2.87	1.45	1.17	1.15	1.21	65-70	1.36	810
75	2.34	2.66	2.24	2.56	1.39	1.17	1.34	1.14	70-75	1	811
80	2.31	2.51	2.26	2.44	1.44	1.23	1.34	1.18	75-80	0.98	812
85	2.31	2.44	2.25	2.37	1.53	1.39	1.44	1.32	80-85	1.01	813
90	2.31	2.38	2.23	2.32	1.67	1.52	1.53	1.4	85-90	1.04	814
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: 2025-2-19

Remark:

Measured Para U: 232.3V I: 72.0mA P: 9.56W PF: 0.571 Test LM: 813.78lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-10A-Y	Lamp Spec: LPDL-10A-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	918	922	927	926	924	924	927	928	922	916	905	895	897	903	906	905	906	912
10.0	871	877	884	879	871	868	870	866	847	828	814	799	806	820	827	829	835	854
15.0	790	801	812	803	787	776	770	761	739	718	702	685	692	707	718	725	736	764
20.0	670	688	706	692	668	653	647	637	617	597	581	564	570	585	596	606	620	645
25.0	545	559	574	561	540	527	523	514	492	470	455	439	446	460	471	479	491	519
30.0	429	441	453	440	418	405	402	393	367	342	335	327	332	341	349	355	368	399
35.0	320	327	333	322	305	296	294	287	267	248	237	226	230	240	247	251	261	291
40.0	219	227	235	222	202	194	195	193	179	167	157	148	152	161	166	167	174	197
45.0	146	152	157	147	131	124	125	122	108	93.9	84.6	74.9	78.3	86.2	91.6	94.9	103	125
50.0	78.4	84.1	90	82.1	69.3	62.8	62	58.7	46.8	35.5	31.6	27.6	28.9	32.1	34.8	37.3	43.4	61.2
55.0	31.9	34.5	37.1	33.7	28.2	24.6	22.7	20.5	16.8	13.2	11.7	10.1	10.4	11.3	12	12.6	15.1	23.7
60.0	12.2	13.3	14.4	13.3	11.3	10.4	10.5	10.2	8.49	6.84	5.53	4.19	4.61	5.64	6.2	6.33	7.05	9.65
65.0	5.87	6.7	7.55	7.06	6.08	5.52	5.33	4.85	3.45	2.09	1.78	1.46	1.53	1.72	1.82	1.81	2.26	4.1
70.0	2.61	2.93	3.25	3	2.54	2.43	2.69	2.72	2.07	1.45	1.33	1.2	1.16	1.15	1.16	1.19	1.36	2
75.0	2.34	2.48	2.63	2.52	2.33	2.31	2.45	2.43	1.9	1.39	1.29	1.19	1.23	1.31	1.3	1.21	1.27	1.81
80.0	2.31	2.4	2.49	2.43	2.32	2.3	2.38	2.33	1.87	1.44	1.35	1.25	1.27	1.32	1.31	1.23	1.3	1.81
85.0	2.31	2.37	2.43	2.38	2.29	2.27	2.33	2.28	1.9	1.53	1.47	1.41	1.41	1.43	1.41	1.36	1.43	1.87
90.0	2.31	2.34	2.37	2.33	2.26	2.25	2.29	2.25	1.95	1.67	1.6	1.54	1.53	1.53	1.5	1.44	1.5	1.91
95.0																		
100.0																		
105.0																		
110.0																		
115.0																		
120.0																		
125.0																		
130.0																		
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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: 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: 2025-2-19

Remark: