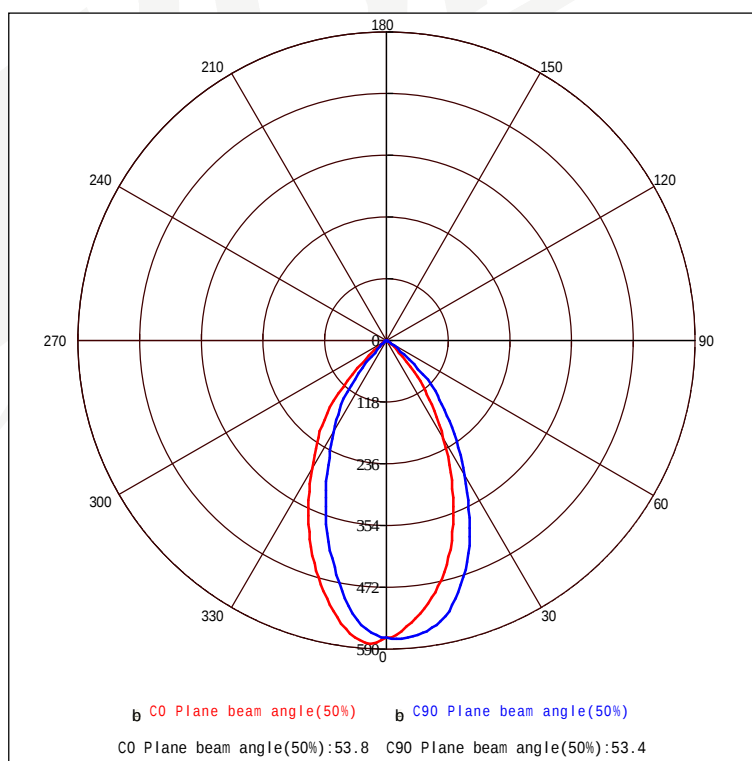


Goniophotometer Test Report

Measured Para U: 231.2V I: 50.6mA P: 6.74W PF: 0.585 Test LM: 499.65lm						
Lamp Name: LED DOWN LIGHT			Lamp Type:		Weight(kg):	
Lamp ID: LPDL-10GT01-Y			Lamp Spec: LPDL-7A-Y		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPDL-7A-Y		Peak Value(cd)	580.6	Efficiency(lm/w)	74.1
Nominal P(w)		1.0	Position	180.0,3.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	499.649	Down(C0-C180)	58.1
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)	41.9

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

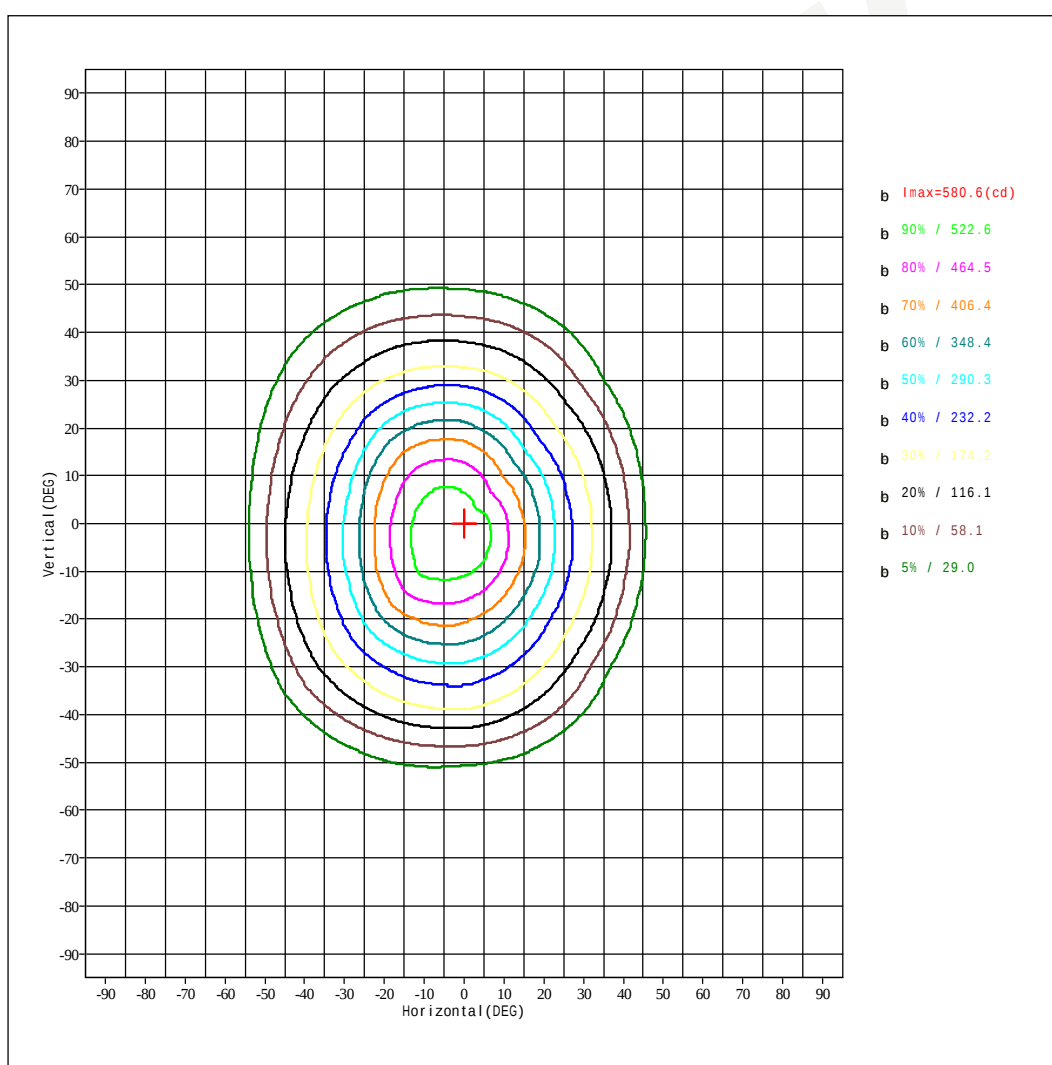
Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 231.2V I: 50.6mA P: 6.74W PF: 0.585 Test LM: 499.65lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-7A-Y	Lamp Spec: LPDL-7A-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: zyg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

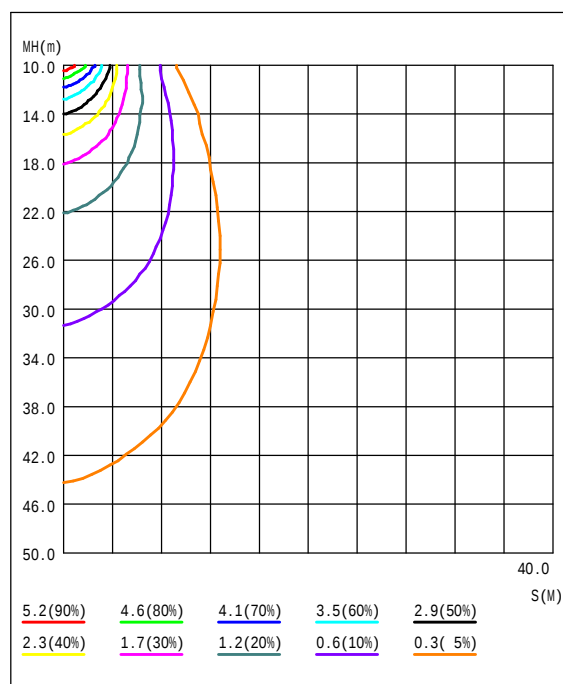
Humidity(%): 60

Date: 2025-2-19

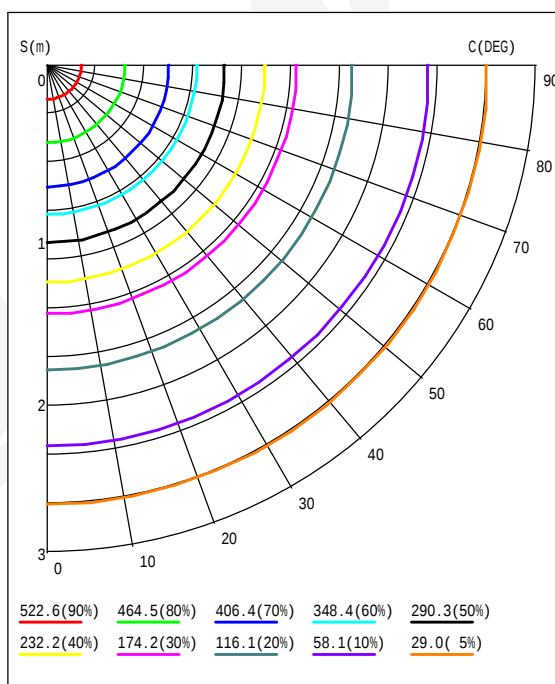
Remark:

Measured Para U: 231.2V I: 50.6mA P: 6.74W PF: 0.585 Test LM: 499.65lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-7A-Y	Lamp Spec: LPDL-7A-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

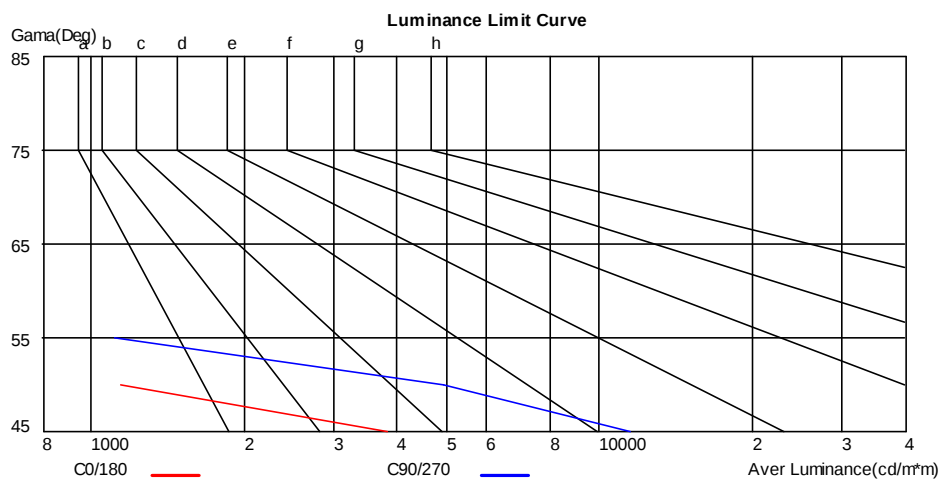
Remark:

Measured Para U: 231.2V I: 50.6mA P: 6.74W PF: 0.585 Test LM: 499.65lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-7A-Y	Lamp Spec: LPDL-7A-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	3816.1	1143.2	498.3	238.1	172.0	146.0	136.7	132.3	130.3
C90	11547.8	4947.5	1109.4	432.7	223.9	135.2	130.8	131.3	132.3

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

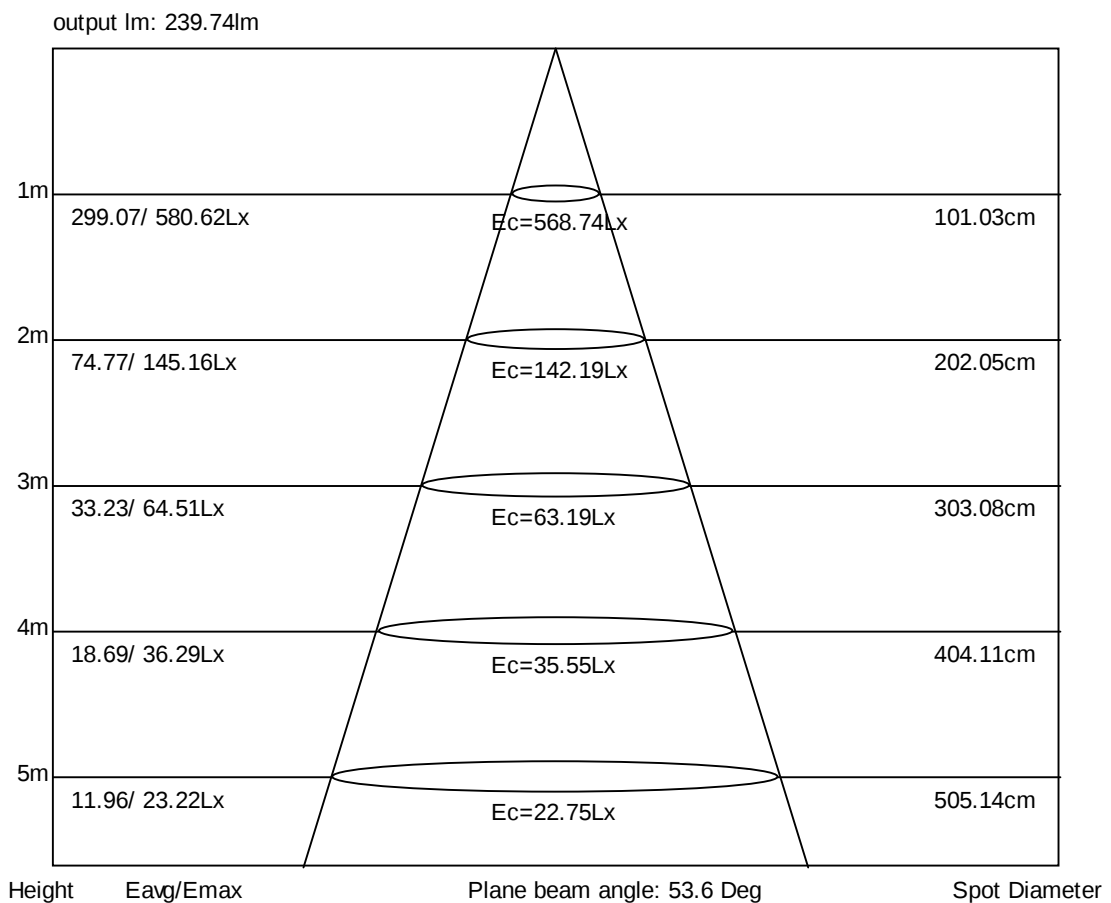
Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 231.2V I: 50.6mA P: 6.74W PF: 0.585 Test LM: 499.65lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-7A-Y	Lamp Spec: LPDL-7A-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

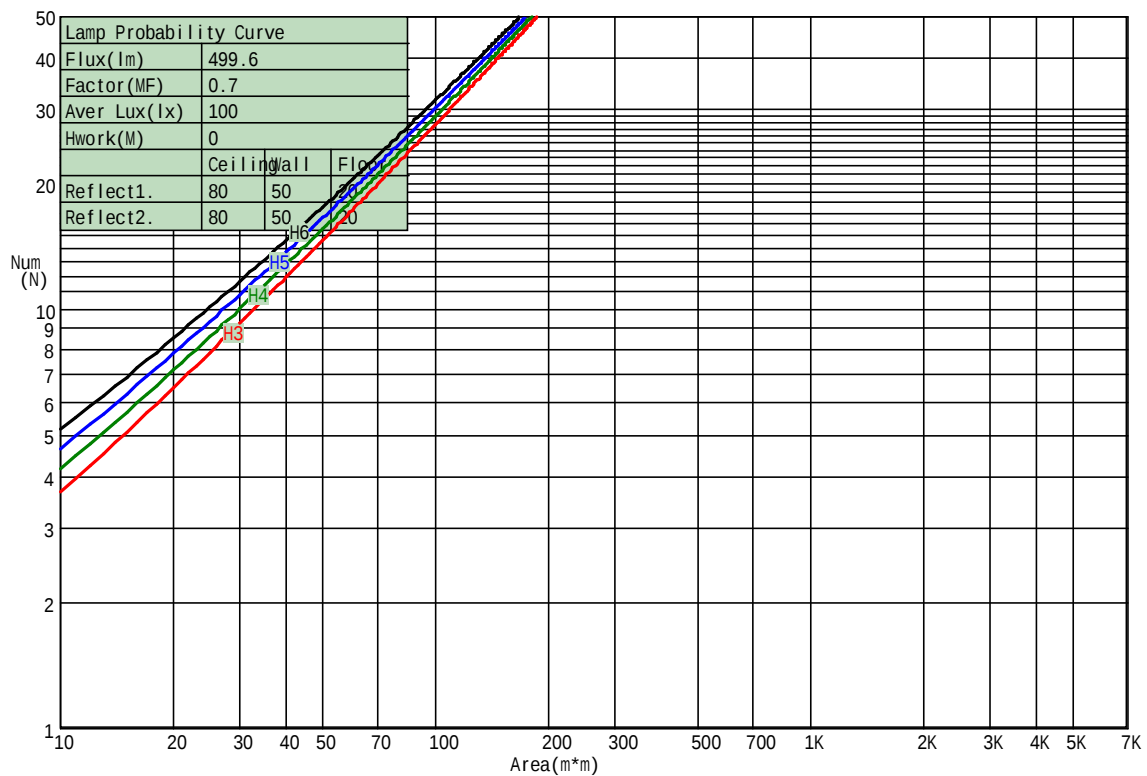
Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 231.2V I: 50.6mA P: 6.74W PF: 0.585 Test LM: 499.65lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-7A-Y	Lamp Spec: LPDL-7A-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: 231.2V I: 50.6mA P: 6.74W PF: 0.585 Test LM: 499.65lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-7A-Y	Lamp Spec: LPDL-7A-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	49	34	24	48	33	24	45	32	23
0.80	53	35	24	50	34	23	46	32	22
1.00	55	37	24	53	36	23	48	33	22
1.25	58	38	24	55	37	23	49	34	22
1.50	60	40	24	56	38	23	50	34	22
2.00	63	42	26	59	40	25	52	36	22
2.50	65	44	26	61	41	25	53	36	22
3.00	66	45	27	62	42	26	54	37	23
4.00	68	47	28	64	44	27	55	38	24
5.00	70	49	30	65	45	28	56	39	24

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	1.01	1	0.99	0.98	0.97	0.96	0.95
2	1.02	0.98	0.94	1.01	0.97	0.93	0.97	0.94	0.91	0.94	0.92	0.89	0.91	0.89	0.88
3	0.95	0.9	0.86	0.94	0.89	0.85	0.91	0.87	0.84	0.88	0.85	0.82	0.86	0.83	0.81
4	0.88	0.83	0.78	0.87	0.82	0.78	0.85	0.8	0.77	0.83	0.79	0.76	0.81	0.78	0.75
5	0.82	0.76	0.72	0.81	0.76	0.71	0.8	0.75	0.71	0.78	0.74	0.7	0.76	0.73	0.7
6	0.77	0.71	0.66	0.76	0.7	0.66	0.75	0.69	0.66	0.73	0.69	0.65	0.72	0.68	0.65
7	0.72	0.66	0.62	0.71	0.66	0.61	0.7	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.6
8	0.68	0.62	0.57	0.67	0.61	0.57	0.66	0.61	0.57	0.65	0.6	0.57	0.64	0.6	0.56
9	0.64	0.58	0.54	0.63	0.57	0.53	0.62	0.57	0.53	0.61	0.57	0.53	0.61	0.56	0.53
10	0.6	0.54	0.5	0.6	0.54	0.5	0.59	0.54	0.5	0.58	0.53	0.5	0.57	0.53	0.5

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: 231.2V I: 50.6mA P: 6.74W PF: 0.585 Test LM: 499.65lm															
Lamp Name: LED DOWN LIGHT								Lamp Type:				Weight(kg):			
Lamp ID: LPDL-7A-Y								Lamp Spec: LPDL-7A-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	0.14	0.08	0.03
2	0.18	0.1	0.03	0.17	0.1	0.03	0.16	0.09	0.03	0.15	0.09	0.03	0.14	0.08	0.03
3	0.17	0.09	0.03	0.17	0.09	0.03	0.16	0.08	0.03	0.15	0.08	0.02	0.14	0.08	0.02
4	0.16	0.08	0.02	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	0.15	0.08	0.02	0.15	0.08	0.02	0.14	0.08	0.02	0.14	0.07	0.02	0.13	0.07	0.02
6	0.15	0.07	0.02	0.14	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	0.13	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	0.11	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	0.08	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: 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: 231.2V I: 50.6mA P: 6.74W PF: 0.585 Test LM: 499.65lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-7A-Y	Lamp Spec: LPDL-7A-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	538	555	568	579	574	557	542	515	0-5	13.4	13.4
10	495	528	549	565	533	504	480	454	5-10	38.1	51.5
15	438	483	506	526	478	439	409	387	10-15	57.6	109
20	366	423	444	472	414	364	332	310	15-20	69.8	179
25	286	352	367	402	346	284	257	240	20-25	74	253
30	211	269	290	322	277	219	198	175	25-30	70.9	324
35	146	198	227	246	222	160	144	122	30-35	62.6	386
40	96.6	140	168	187	161	85.7	75.7	56.1	35-40	50.6	437
45	38.2	89.9	115	130	83.9	25.7	19	15.5	40-45	34	471
50	11.4	34.8	49.5	59.6	14.5	5.04	5.36	4.72	45-50	16.9	488
55	4.98	10.6	11.1	14.7	4.9	2.03	2.15	1.85	50-55	5.81	494
60	2.38	4.85	4.33	4.92	1.87	1.04	1.17	1.05	55-60	1.93	496
65	1.72	2.46	2.24	2.33	1.12	0.73	0.86	0.79	60-65	0.99	497
70	1.46	1.86	1.35	1.75	0.85	0.63	0.79	0.68	65-70	0.67	497
75	1.37	1.6	1.31	1.53	0.79	0.68	0.76	0.72	70-75	0.59	498
80	1.32	1.5	1.31	1.42	0.75	0.74	0.86	0.71	75-80	0.58	498
85	1.3	1.46	1.32	1.38	0.82	0.83	0.9	0.77	80-85	0.59	499
90	1.31	1.39	1.33	1.38	0.87	0.87	0.98	0.88	85-90	0.61	500
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: 231.2V I: 50.6mA P: 6.74W PF: 0.585 Test LM: 499.65lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-7A-Y	Lamp Spec: LPDL-7A-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	538	545	553	559	565	570	575	578	576	574	567	559	552	545	536	524	517	528
10.0	495	509	524	535	545	553	560	562	547	533	520	507	496	485	475	463	459	477
15.0	438	458	478	491	501	510	519	520	499	478	461	443	429	416	404	394	392	416
20.0	366	391	417	430	439	450	462	465	439	414	392	369	353	339	327	317	316	341
25.0	286	315	345	357	364	375	391	396	371	346	319	291	275	263	253	246	245	266
30.0	211	236	262	276	285	297	311	317	297	277	252	226	212	202	193	182	179	195
35.0	146	168	192	207	220	231	240	243	232	222	195	167	155	148	139	129	125	135
40.0	96.6	116	135	149	162	172	181	184	172	161	128	93.9	82.4	77.9	71.5	62.6	60.6	78.9
45.0	38.2	60.8	84.3	98.3	110	119	125	125	104	83.9	58.4	32.1	23.5	20.5	18.2	16.6	18	28.2
50.0	11.4	21.6	32.2	39.6	46.3	51.7	56.2	54.6	34.2	14.5	10.4	6.08	5.15	5.29	5.22	4.93	5.46	8.5
55.0	4.98	7.45	10	10.8	11	11.9	13.5	13.6	9.19	4.9	3.64	2.34	2.07	2.12	2.08	1.95	2.19	3.61
60.0	2.38	3.46	4.58	4.68	4.44	4.46	4.73	4.59	3.21	1.87	1.51	1.13	1.08	1.14	1.14	1.09	1.19	1.8
65.0	1.72	2.05	2.38	2.39	2.29	2.26	2.3	2.2	1.65	1.12	0.95	0.77	0.77	0.83	0.85	0.81	0.89	1.31
70.0	1.46	1.64	1.82	1.69	1.46	1.44	1.62	1.66	1.24	0.85	0.75	0.65	0.68	0.75	0.76	0.71	0.76	1.12
75.0	1.37	1.47	1.57	1.5	1.37	1.36	1.46	1.45	1.12	0.79	0.74	0.69	0.71	0.75	0.75	0.73	0.79	1.08
80.0	1.32	1.4	1.48	1.44	1.36	1.34	1.38	1.34	1.04	0.75	0.75	0.74	0.78	0.83	0.82	0.76	0.77	1.05
85.0	1.3	1.37	1.44	1.42	1.35	1.34	1.36	1.32	1.06	0.82	0.82	0.83	0.85	0.88	0.87	0.81	0.83	1.07
90.0	1.31	1.35	1.38	1.37	1.35	1.34	1.36	1.32	1.09	0.87	0.87	0.87	0.91	0.96	0.96	0.91	0.92	1.12
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: 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: