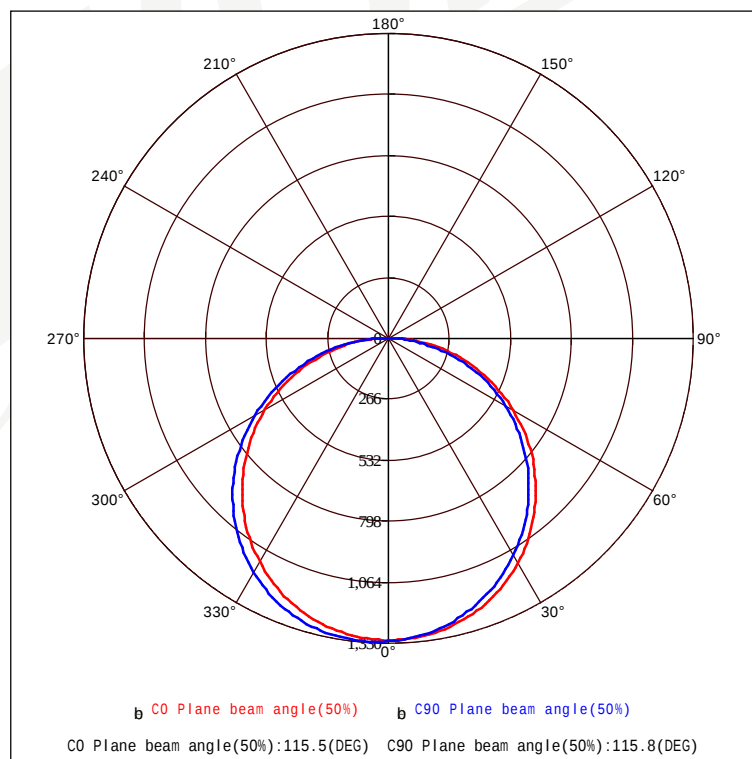


Goniophotometer Test Report

Measured Para U: 226.6V I: 382.0mA P: 54.90W PF: 0.633 Test LM: 3990.33lm						
Lamp Name: LED DOWN LIGHT			Lamp Type:		Weight(kg):	
Lamp ID: LPDL-60MW01-Y			Lamp Spec: LPDL-60MW01-Y		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPDL-60MW01-Y		Peak Value(cd)	1331.1	Efficiency(lm/w)	72.7
Nominal P(w)		60.0	Position	315.0,1.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	3990.325	Down(C0-C180)	49.2
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)	50.8

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

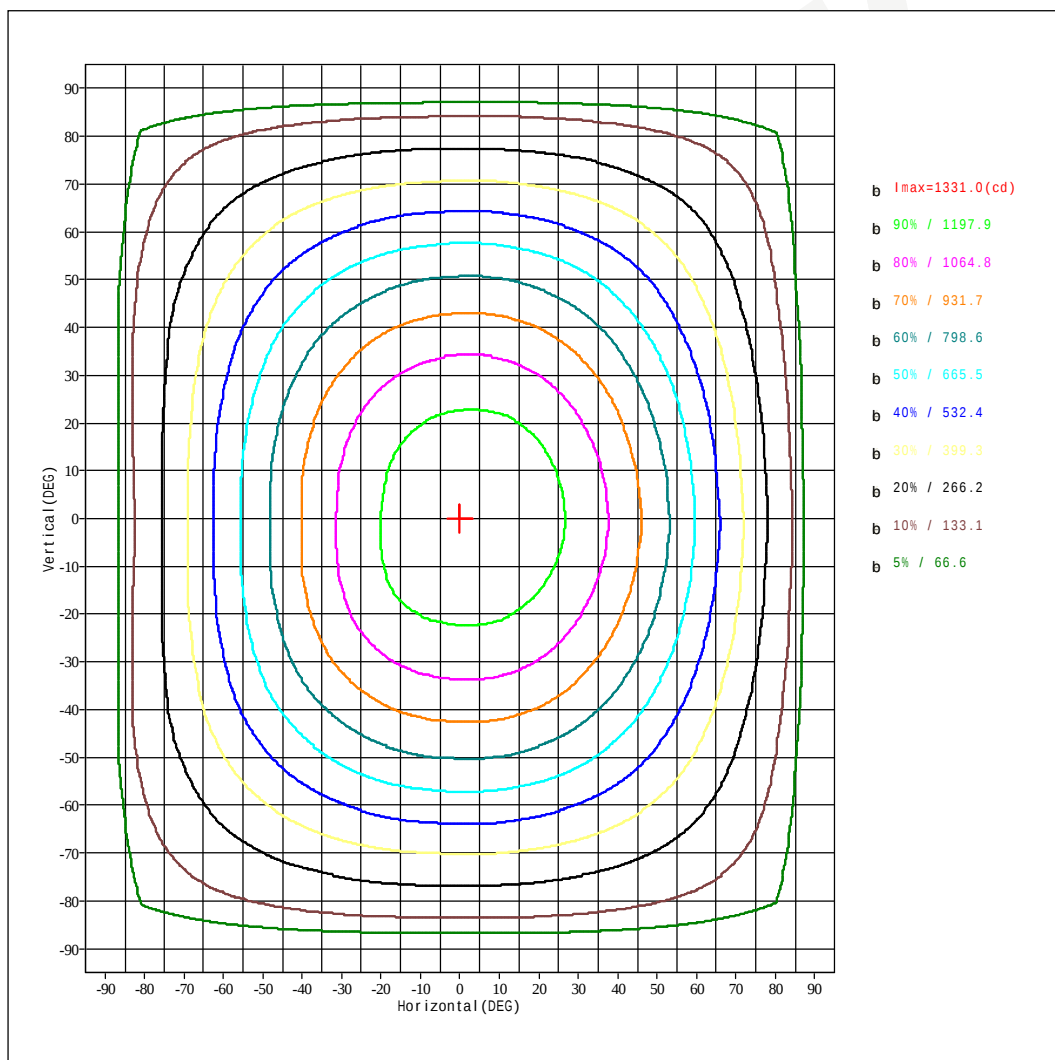
Humidity(%): 60

Date: 2026-2-6

Remark:

Measured Para U: 226.6V I: 382.0mA P: 54.90W PF: 0.633 Test LM: 3990.33lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-60MW01-Y	Lamp Spec: LPDL-60MW01-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

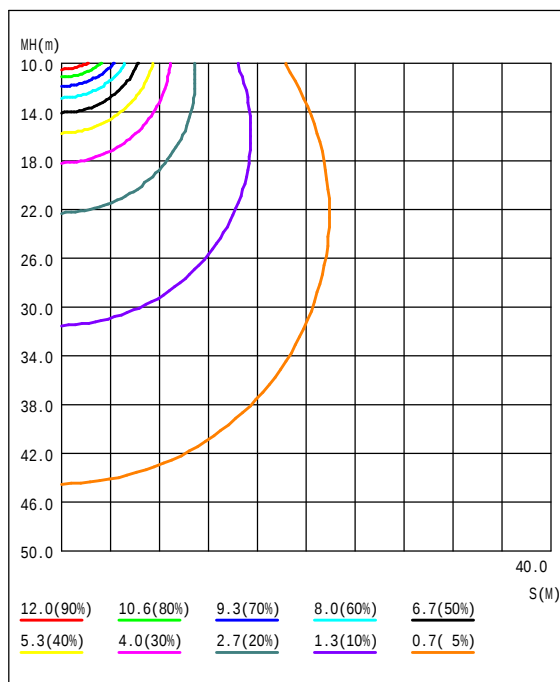
Humidity(%): 60

Date: 2026-2-6

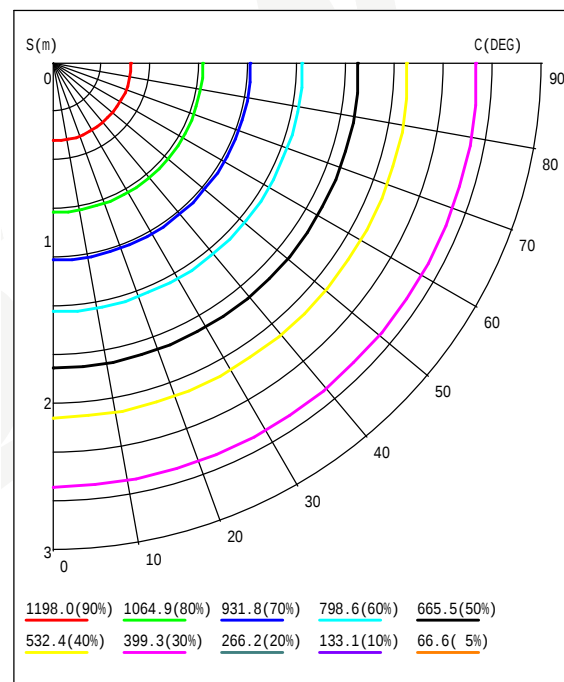
Remark:

Measured Para U: 226.6V I: 382.0mA P: 54.90W PF: 0.633 Test LM: 3990.33lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-60MW01-Y	Lamp Spec: LPDL-60MW01-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: 2026-2-6

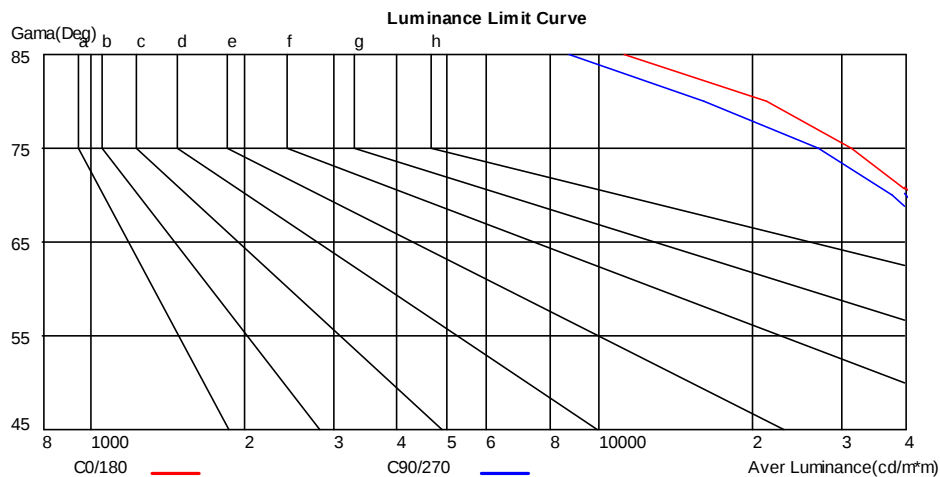
Remark:

Measured Para U: 226.6V I: 382.0mA P: 54.90W PF: 0.633 Test LM: 3990.33lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-60MW01-Y	Lamp Spec: LPDL-60MW01-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	90162.9	81305.2	71920.2	62061.0	51927.3	41619.6	31354.6	21430.2	11237.2
C90	85575.6	76805.5	67659.7	58088.5	48380.1	37771.7	26992.6	16120.0	8747.0

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

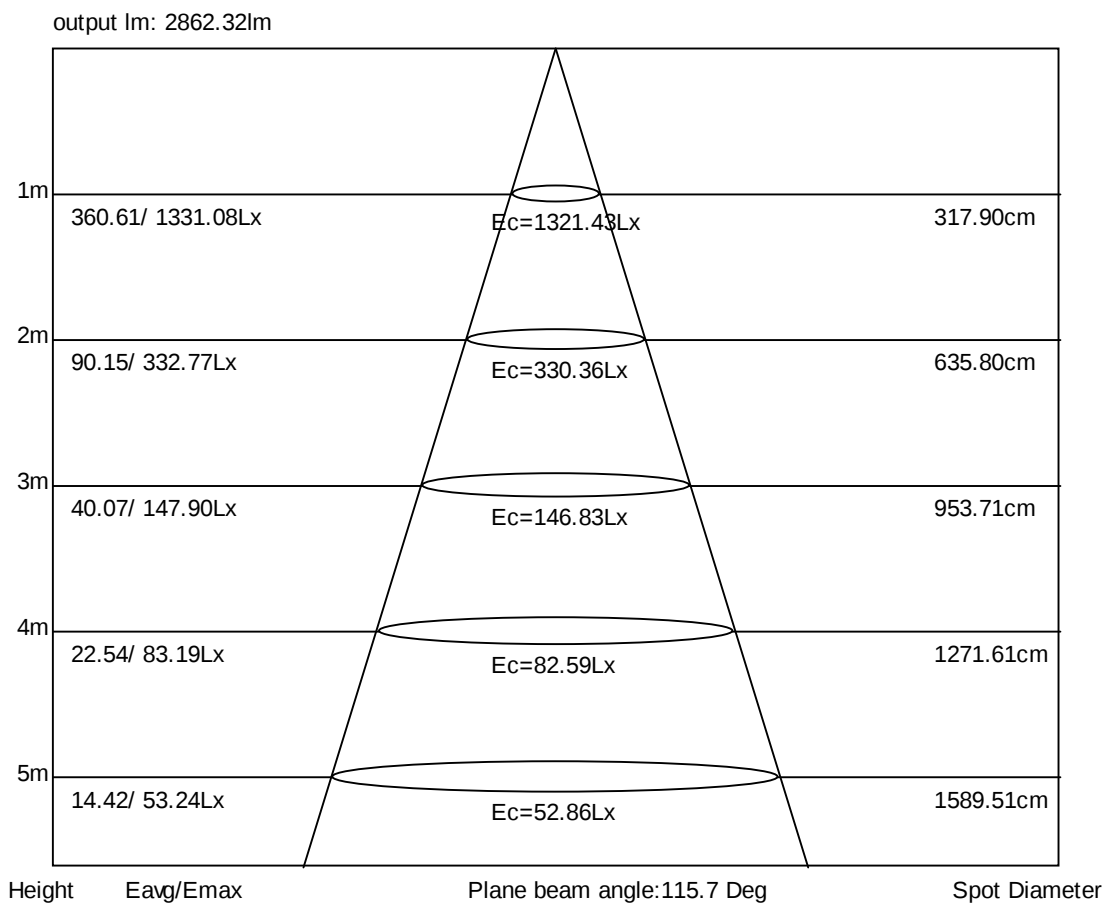
Humidity(%): 60

Date: 2026-2-6

Remark:

Measured Para U: 226.6V I: 382.0mA P: 54.90W PF: 0.633 Test LM: 3990.33lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-60MW01-Y	Lamp Spec: LPDL-60MW01-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

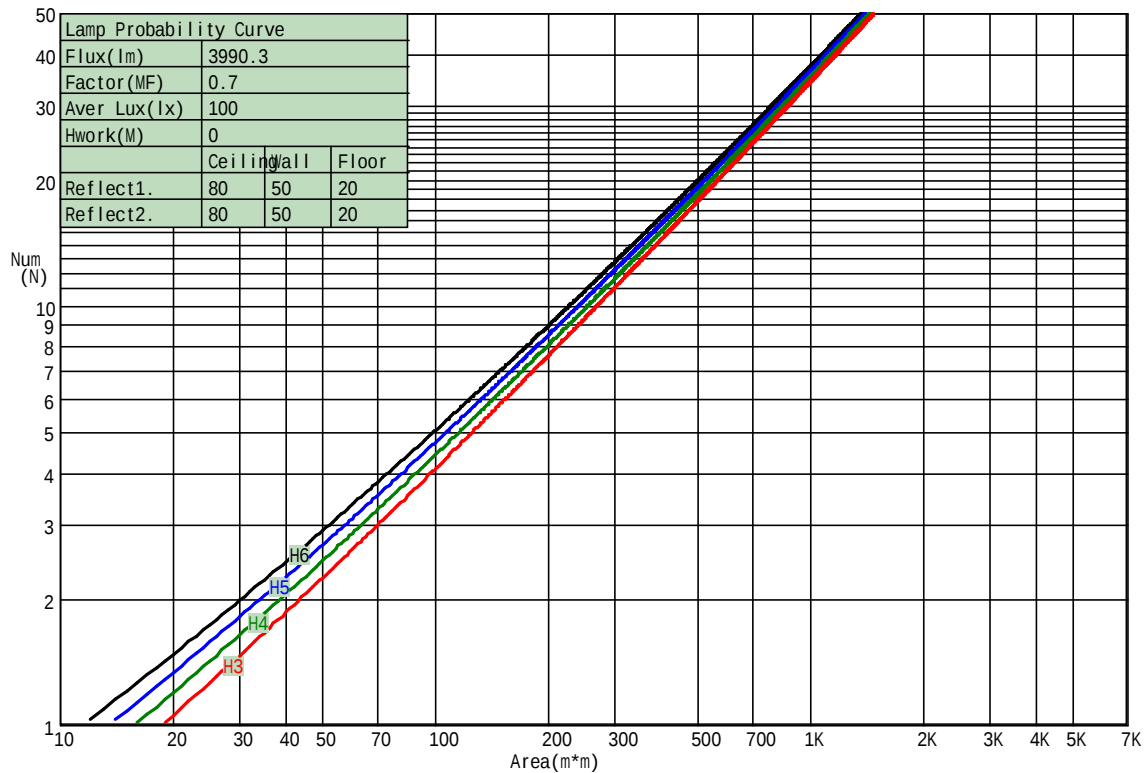
Humidity(%): 60

Date: 2026-2-6

Remark:

Measured Para U: 226.6V I: 382.0mA P: 54.90W PF: 0.633 Test LM: 3990.33lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-60MW01-Y	Lamp Spec: LPDL-60MW01-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: 2026-2-6

Remark:

Measured Para U: 226.6V I: 382.0mA P: 54.90W PF: 0.633 Test LM: 3990.33lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-60MW01-Y	Lamp Spec: LPDL-60MW01-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	28	47	35	27
0.80	57	40	29	55	39	29	51	37	28
1.00	60	43	31	57	41	30	53	39	29
1.25	63	45	32	60	43	31	54	40	30
1.50	65	47	32	62	45	32	56	41	30
2.00	68	49	34	64	47	33	57	43	30
2.50	69	50	34	65	47	33	58	43	30
3.00	70	51	34	66	48	33	58	43	30
4.00	72	52	34	67	49	33	59	43	30
5.00	73	53	35	68	50	33	59	44	30

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	0.89	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	0.69	0.63	0.76	0.68	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	0.52	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	0.5	0.45	0.56	0.49	0.44	0.54	0.48	0.44
6	0.55	0.46	0.39	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	0.3	0.25	0.38	0.3	0.25	0.37	0.3	0.25	0.36	0.29	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: 2026-2-6

Remark:

Measured Para U: 226.6V I: 382.0mA P: 54.90W PF: 0.633 Test LM: 3990.33lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-60MW01-Y	Lamp Spec: LPDL-60MW01-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	0.28	0.15	0.05	0.27	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	0.13	0.04	0.23	0.12	0.04
5	0.24	0.12	0.03	0.23	0.12	0.03	0.22	0.12	0.03	0.22	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: 2026-2-6

Remark:

Measured Para U: 226.6V I: 382.0mA P: 54.90W PF: 0.633 Test LM: 3990.33lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-60MW01-Y	Lamp Spec: LPDL-60MW01-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	1311	1309	1307	1322	1310	1316	1325	1328	0-5	31.5	31.5
10	1294	1288	1283	1302	1293	1303	1317	1315	5-10	93.6	125
15	1268	1257	1247	1272	1264	1279	1298	1290	10-15	153	278
20	1230	1216	1202	1231	1226	1244	1267	1253	15-20	206	484
25	1182	1165	1148	1180	1177	1198	1225	1206	20-25	254	738
30	1124	1106	1085	1120	1118	1141	1172	1148	25-30	293	1030
35	1058	1039	1015	1053	1051	1075	1109	1081	30-35	322	1352
40	983	964	938	977	976	1000	1036	1005	35-40	341	1694
45	902	883	856	896	893	916	953	920	40-45	349	2043
50	813	796	768	808	804	825	863	828	45-50	347	2390
55	719	705	677	716	710	728	765	729	50-55	333	2722
60	621	610	581	620	611	625	662	626	55-60	309	3032
65	519	512	484	521	509	518	554	518	60-65	276	3308
70	416	414	378	422	405	409	443	409	65-70	235	3543
75	314	316	270	322	303	302	333	301	70-75	188	3731
80	214	220	161	225	203	197	225	196	75-80	137	3868
85	112	121	87.5	125	101	94	114	92.5	80-85	84.1	3952
90	57.6	50.3	45.9	51.1	36.9	44.3	40.5	42.9	85-90	38.8	3990
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: 2026-2-6

Remark:

Measured Para U: 226.6V I: 382.0mA P: 54.90W PF: 0.633 Test LM: 3990.33lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-60MW01-Y	Lamp Spec: LPDL-60MW01-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	1311	1310	1309	1308	1308	1311	1317	1321	1315	1310	1313	1316	1319	1323	1326	1327	1326	1318
10.0	1294	1292	1289	1287	1284	1287	1296	1301	1297	1293	1297	1302	1308	1314	1317	1315	1312	1303
15.0	1268	1263	1258	1254	1249	1252	1264	1271	1268	1264	1271	1278	1285	1294	1296	1292	1287	1277
20.0	1230	1224	1218	1212	1205	1208	1221	1230	1228	1226	1234	1242	1252	1262	1264	1258	1251	1240
25.0	1182	1175	1167	1160	1152	1155	1169	1180	1178	1177	1186	1196	1207	1219	1221	1212	1203	1193
30.0	1124	1116	1108	1100	1090	1093	1109	1120	1119	1118	1128	1139	1151	1165	1167	1156	1146	1135
35.0	1058	1050	1041	1031	1020	1023	1040	1053	1052	1051	1062	1073	1086	1101	1103	1090	1079	1068
40.0	983	975	966	956	944	947	965	977	977	976	987	998	1012	1028	1029	1015	1003	993
45.0	902	893	885	874	862	864	882	895	894	893	903	914	928	945	946	931	918	910
50.0	813	805	798	787	774	777	795	808	806	804	814	823	838	855	856	840	827	820
55.0	719	713	706	696	683	685	703	715	712	710	717	726	740	757	758	741	728	724
60.0	621	616	611	600	587	589	607	619	615	611	617	623	637	654	654	638	625	623
65.0	519	516	513	503	490	492	509	520	514	509	513	517	530	546	546	530	519	519
70.0	416	415	414	402	386	387	407	420	412	405	407	409	421	436	436	420	410	413
75.0	314	314	315	301	280	281	305	320	311	303	302	302	312	326	326	311	302	308
80.0	214	217	220	201	174	175	204	223	213	203	201	198	206	219	219	206	198	206
85.0	112	116	120	110	94.8	95.6	112	122	111	101	98.1	94.8	101	110	110	99.7	94.7	104
90.0	57.6	54.4	51.1	48.8	46.8	47	49.4	49.6	43.1	36.9	40.2	43.5	43	41.3	41	42.1	44.5	51.1
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: 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: 2026-2-6

Remark: