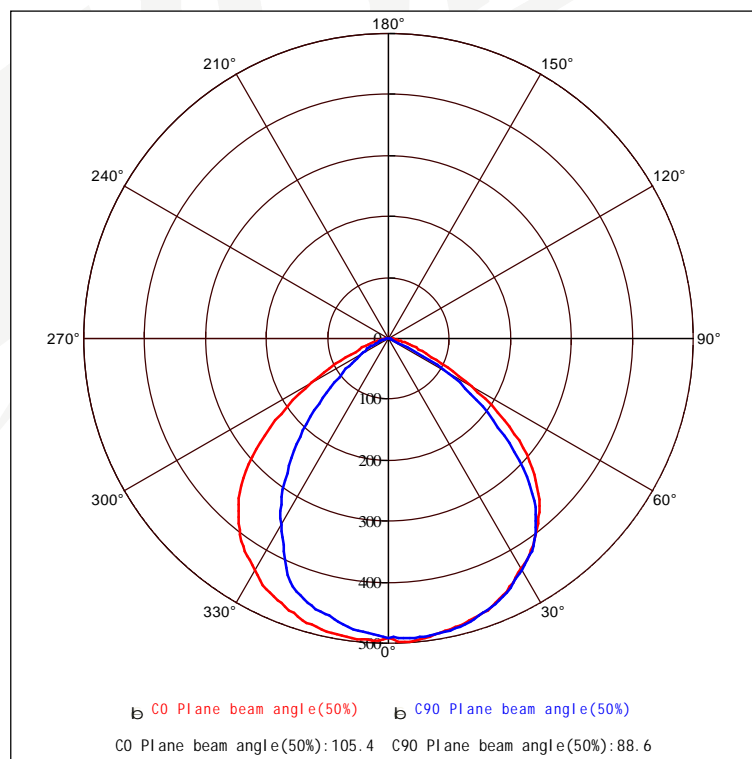


### Goniophotometer Test Report

Measured Para U: 231.6V I: 88.0mA P: 10.60W PF: 0.517 Test LM: 1090.56lm						
Lamp Name: LED FLOOD LIGHT		Lamp Type:		Weight(kg):		
Lamp ID: LPFL-10BW02		Lamp Spec: LPFL-10BW02		Shape Size:		
Manufactory: LIPER		Sur(m <sup>2</sup> ):		Protect Angle(Deg):		
Light Source Data			Photometric Data			
Model	LPFL-10BW02		Peak Value(cd)	499.6	Efficiency(lm/w)	102.9
Nominal P(w)	10.0		Position	0.0, 2.0	UP(C0-C180)	0.0
Rated Volt(v)	1.0		Total Flux(lm)	1090.557	Down(C0-C180)	56.0
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)	44.0

### 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

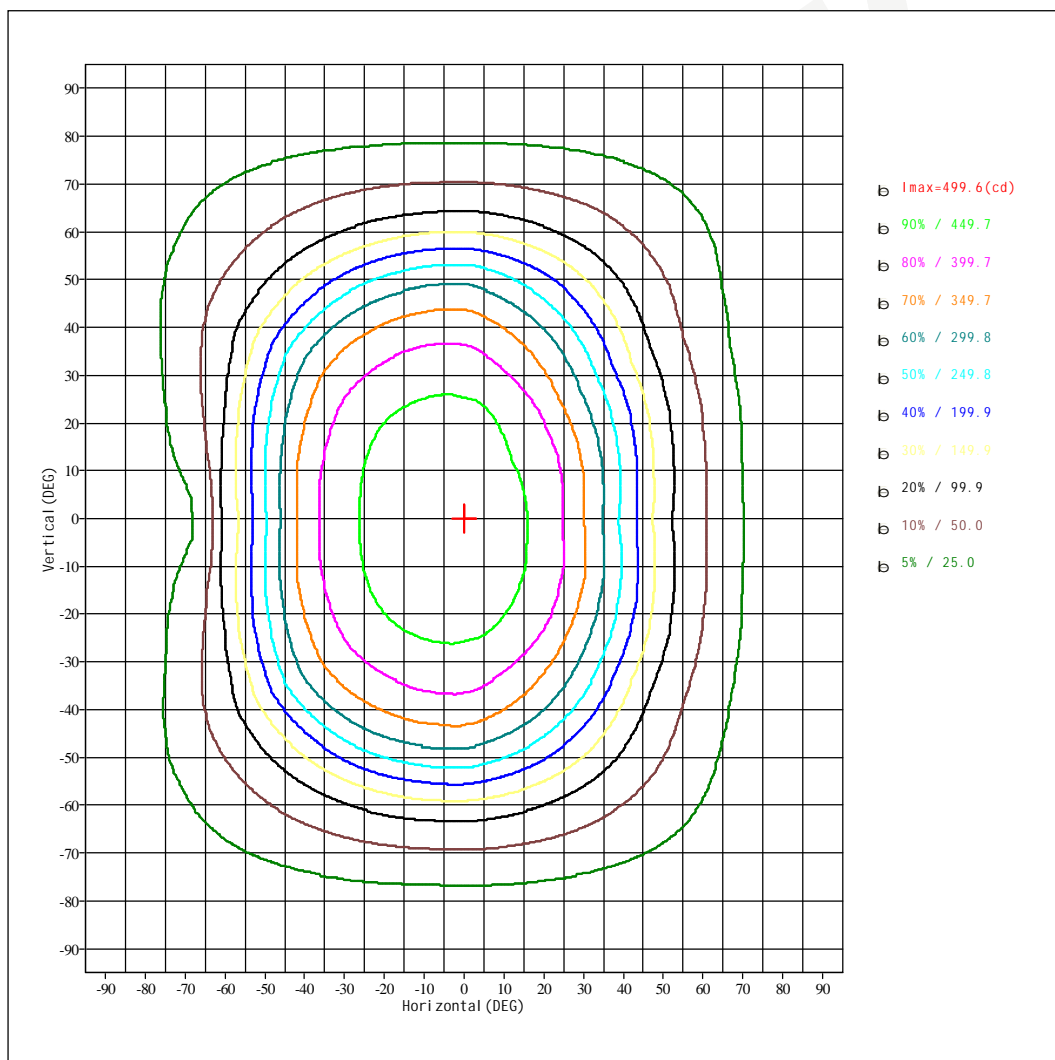
Humidity(%): 60

Date: 2026-4-3

Remark:

Measured Para U: 231.6V I: 88.0mA P: 10.60W PF: 0.517 Test LM: 1090.56lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPFL-10BW02	Lamp Spec: LPFL-10BW02	Shape Si ze:
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

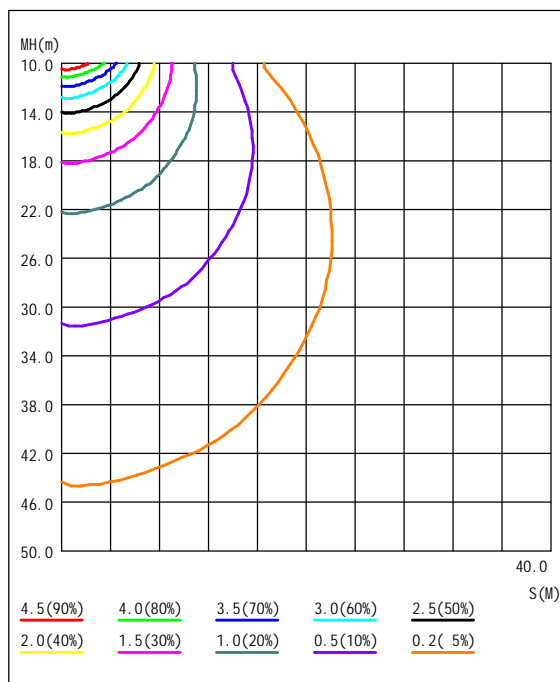
Humi di ty(%): 60

Date: 2026-4-3

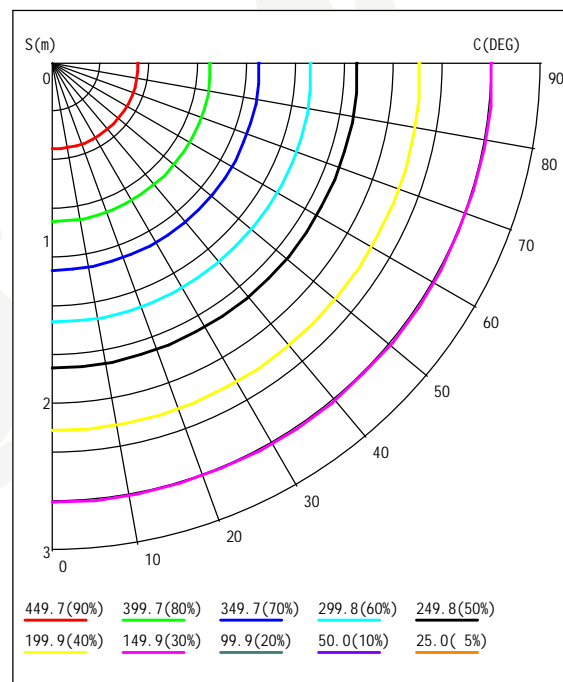
Remark:

Measured Para U: 231.6V I: 88.0mA P: 10.60W PF: 0.517 Test LM: 1090.56lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPFL-10BW02	Lamp Spec: LPFL-10BW02	Shape Si ze:
Manufactory: LIPER	Sur(m <sup>2</sup> ):	Protect Angle(Deg):

Spacial 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

Humi di ty(%): 60

Date: 2026-4-3

Remark:

Measured Para U: 231.6V I: 88.0mA P: 10.60W PF: 0.517 Test LM: 1090.56lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPFL-10BW02	Lamp Spec: LPFL-10BW02	Shape Si ze:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Lumina nce Li mi t Curve

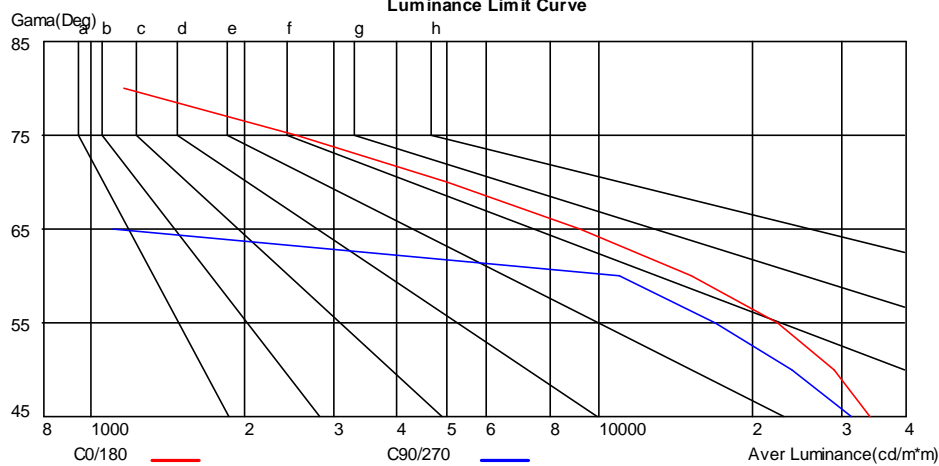
Aver Luminance(cd/m\*m)

Gm(Deg)	45	50	55	60	65	70	75	80	85
C0	34120.7	29058.0	22543.4	15157.2	9147.3	5015.6	2531.8	1159.3	569.9
C90	31306.6	23901.7	16925.6	10986.3	1098.6	628.2	444.9	346.4	291.6

Glare

Glare	Class	Illuminance(lx)							
		a	b	c	d	e	f	g	h
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

Lumina nce Li mi t Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval(Deg): 45

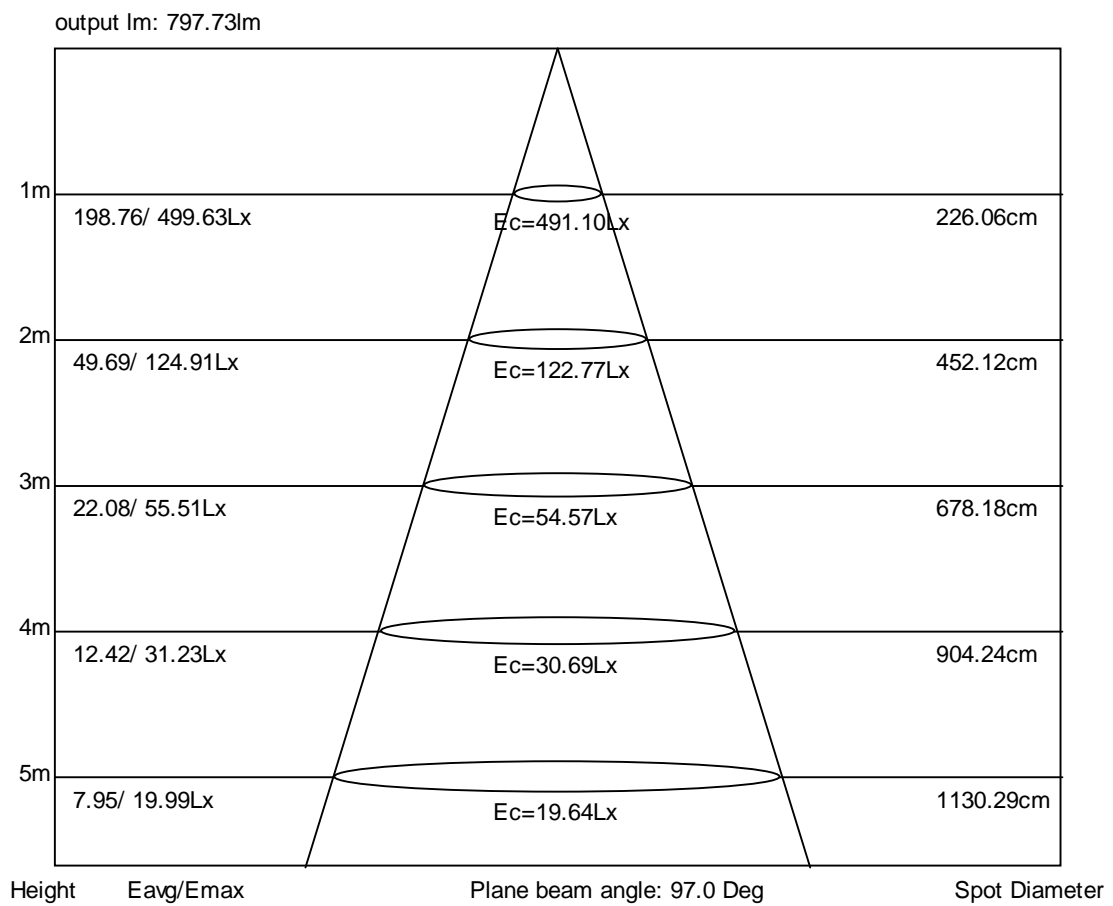
Humi di ty(%): 60

Date: 2026-4-3

Remark:

Measured Para U: 231.6V I: 88.0mA P: 10.60W PF: 0.517 Test LM: 1090.56lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPFL-10BW02	Lamp Spec: LPFL-10BW02	Shape Si ze:
Manufactory: LIPER	Sur(m <sup>2</sup> ):	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

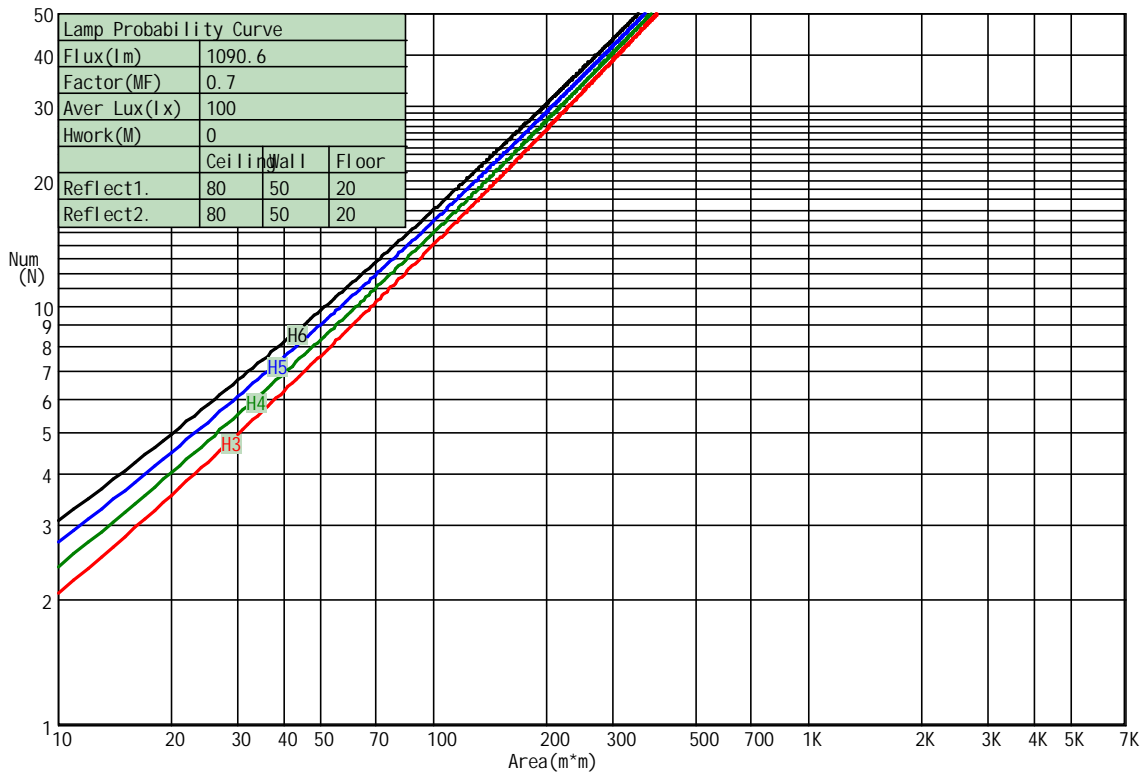
Humi di ty(%): 60

Date: 2026-4-3

Remark:

Measured Para U: 231.6V I: 88.0mA P: 10.60W PF: 0.517 Test LM: 1090.56lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPFL-10BW02	Lamp Spec: LPFL-10BW02	Shape Size:
Manufactory: LIPER	Sur(m <sup>2</sup> ):	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: 2026-4-3

Remark:

Measured Para U: 231.6V I: 88.0mA P: 10.60W PF: 0.517 Test LM: 1090.56lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPFL-10BW02	Lamp Spec: LPFL-10BW02	Shape Size:
Manufactory: LIPER	Sur(m <sup>2</sup> ):	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	58	45	36	57	44	36	54	43	36
0.80	61	46	36	59	45	35	55	43	35
1.00	64	47	36	61	46	35	57	44	34
1.25	65	48	35	62	46	35	57	44	33
1.50	67	49	35	63	47	34	57	43	32
2.00	68	50	35	65	48	34	58	43	32
2.50	69	50	34	65	47	33	58	43	30
3.00	70	50	33	66	48	32	58	43	29
4.00	71	51	33	67	48	32	58	42	28
5.00	72	52	33	67	48	31	58	42	28

CoEfficients Utilization

Ceiling(%)		0			0			0			0			0	
Wall (%)	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	1.07	1.04	1.01	1.05	1.02	0.99	1.01	0.98	0.96	0.97	0.95	0.93	0.93	0.92	0.9
2	0.96	0.9	0.85	0.94	0.89	0.84	0.9	0.86	0.82	0.87	0.84	0.8	0.84	0.81	0.79
3	0.86	0.79	0.73	0.84	0.78	0.72	0.81	0.76	0.71	0.79	0.74	0.7	0.76	0.72	0.69
4	0.77	0.69	0.63	0.76	0.68	0.63	0.73	0.67	0.62	0.71	0.66	0.61	0.69	0.64	0.6
5	0.69	0.61	0.55	0.68	0.61	0.55	0.66	0.6	0.55	0.64	0.59	0.54	0.63	0.58	0.53
6	0.63	0.55	0.49	0.62	0.54	0.49	0.6	0.54	0.48	0.59	0.53	0.48	0.57	0.52	0.48
7	0.57	0.49	0.44	0.57	0.49	0.44	0.55	0.48	0.43	0.54	0.48	0.43	0.53	0.47	0.43
8	0.53	0.45	0.39	0.52	0.44	0.39	0.51	0.44	0.39	0.5	0.43	0.39	0.48	0.43	0.39
9	0.48	0.41	0.36	0.48	0.41	0.36	0.47	0.4	0.35	0.46	0.4	0.35	0.45	0.39	0.35
10	0.45	0.37	0.32	0.44	0.37	0.32	0.43	0.37	0.32	0.42	0.36	0.32	0.42	0.36	0.32

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: 2026-4-3

Remark:

Measured Para U: 231.6V I: 88.0mA P: 10.60W PF: 0.517 Test LM: 1090.56lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPFL-10BW02	Lamp Spec: LPFL-10BW02	Shape Si ze:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Wall Exi tance 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	0.25	0.14	0.04	0.24	0.14	0.04	0.23	0.13	0.04	0.22	0.12	0.04	0.21	0.12	0.04
2	0.24	0.13	0.04	0.24	0.13	0.04	0.22	0.12	0.04	0.21	0.12	0.04	0.2	0.12	0.04
3	0.23	0.12	0.04	0.22	0.12	0.04	0.21	0.12	0.04	0.21	0.11	0.03	0.2	0.11	0.03
4	0.22	0.11	0.03	0.21	0.11	0.03	0.2	0.11	0.03	0.2	0.11	0.03	0.19	0.1	0.03
5	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	0.1	0.03
6	0.19	0.1	0.03	0.19	0.1	0.03	0.18	0.09	0.03	0.18	0.09	0.03	0.17	0.09	0.03
7	0.18	0.09	0.03	0.18	0.09	0.03	0.17	0.09	0.03	0.17	0.09	0.02	0.16	0.08	0.02
8	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
9	0.16	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	0.15	0.08	0.02	0.15	0.07	0.02
10	0.15	0.07	0.02	0.15	0.07	0.02	0.15	0.07	0.02	0.14	0.07	0.02	0.14	0.07	0.02

Ceiling Cavi ty Exi tance 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	0.14	0.15	0.13	0.12	0.1	0.09	0.08	0.06	0.05	0.05	0.02	0.02	0.02
2	0.17	0.13	0.1	0.14	0.11	0.09	0.1	0.08	0.06	0.06	0.05	0.04	0.02	0.01	0.01
3	0.16	0.11	0.08	0.13	0.1	0.07	0.09	0.07	0.05	0.05	0.04	0.03	0.02	0.01	0.01
4	0.15	0.1	0.06	0.13	0.09	0.05	0.09	0.06	0.04	0.05	0.04	0.02	0.02	0.01	0.01
5	0.14	0.09	0.05	0.12	0.08	0.04	0.08	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	0.04	0.08	0.05	0.03	0.05	0.03	0.02	0.02	0.01	0.01
7	0.13	0.07	0.04	0.11	0.06	0.03	0.08	0.04	0.02	0.04	0.03	0.01	0.01	0.01	0
8	0.12	0.07	0.03	0.11	0.06	0.03	0.07	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0
9	0.12	0.06	0.03	0.1	0.05	0.02	0.07	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0
10	0.11	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)

C Angle Range: 0 - 180(Deg)

Gama interval (Deg): 1

C interval (Deg): 45

Temperature(Deg): 30

Humi di ty(%): 60

Tester: zxcg

Date: 2026-4-3

Distance(m): 7.000

Remark:

Test System: ZWL Goni ophotometer System V3.0

Measured Para U: 231.6V I: 88.0mA P: 10.60W PF: 0.517 Test LM: 1090.56lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight (kg):
Lamp ID: LPFL-10BW02	Lamp Spec: LPFL-10BW02	Shape Si ze:
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	497	497	493	487	496	485	482	479	0-5	11.7	11.7
10	490	494	491	486	493	478	470	470	5-10	34.8	46.6
15	483	486	485	484	486	466	458	455	10-15	56.9	103
20	474	477	473	476	474	449	439	440	15-20	77.3	181
25	455	465	457	463	459	430	395	421	20-25	95.1	276
30	434	445	436	444	437	395	349	383	25-30	109	385
35	412	419	412	420	413	345	296	333	30-35	117	502
40	380	391	372	390	379	295	235	287	35-40	121	622
45	341	355	313	354	336	238	176	229	40-45	118	740
50	291	304	239	305	278	172	119	167	45-50	107	847
55	225	237	169	238	209	112	75.6	110	50-55	88.2	935
60	152	166	110	162	139	66.5	48.8	65.1	55-60	65.4	1000
65	91.5	103	11	101	80.8	37.1	30.1	36.5	60-65	42	1042
70	50.2	58.4	6.28	55.8	42.1	20.2	17.6	19.8	65-70	23.4	1066
75	25.3	31.1	4.45	29.1	20.6	9.65	9.12	9.62	70-75	12.9	1079
80	11.6	14.7	3.46	14	8.83	4.67	4.7	4.49	75-80	6.64	1085
85	5.7	7.08	2.92	6.48	4.23	2.71	2.77	2.57	80-85	3.29	1089
90	3.64	3.71	2.76	3.41	2.06	2.06	2.05	1.93	85-90	1.84	1091
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)

C Angle Range: 0 - 180(Deg)

Gama interval (Deg): 1

C interval (Deg): 45

Temperature(Deg): 30

Humi di ty(%): 60

Tester: zxcg

Date: 2026-4-3

Distance(m): 7.000

Remark:

Test System: ZWL Goniophotometer System V3.0

Measured Para U: 231.6V I: 88.0mA P: 10.60W PF: 0.517 Test LM: 1090.56lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight (kg):
Lamp ID: LPFL-10BW02	Lamp Spec: LPFL-10BW02	Shape Si ze:
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	497	497	497	496	494	492	489	488	492	496	491	486	484	483	482	480	481	489
10.0	490	492	494	493	491	490	487	487	490	493	486	480	475	472	470	470	472	481
15.0	483	484	485	485	485	485	484	484	485	486	477	468	463	460	458	456	458	471
20.0	474	475	477	476	474	474	475	476	475	474	463	452	446	441	440	440	444	459
25.0	455	460	464	463	459	459	461	462	461	459	446	433	419	403	401	413	425	440
30.0	434	439	444	442	438	438	441	443	440	437	419	400	380	359	357	372	389	412
35.0	412	415	419	417	414	414	417	419	416	413	383	352	329	307	304	321	342	378
40.0	380	385	390	385	376	376	384	389	384	379	342	304	276	249	247	270	297	339
45.0	341	347	353	341	322	322	341	352	344	336	293	249	218	190	188	212	241	292
50.0	291	297	303	283	253	253	283	302	290	278	231	183	154	131	130	151	180	236
55.0	225	231	236	215	184	184	215	235	221	209	166	122	100	83.5	83.1	98.8	123	175
60.0	152	158	164	147	122	121	145	160	149	139	107	74.3	60.7	52.7	52.4	59.8	74.6	114
65.0	91.5	96.5	102	72.8	31.1	30.7	71.5	98.8	89.6	80.8	61.7	41.9	34.8	31.7	31.5	34.4	42.5	67.4
70.0	50.2	53.8	57.5	41.3	17.7	17.1	39.5	54.3	48.1	42.1	32.5	22.6	19.3	18.1	18.1	19.1	23.2	36.9
75.0	25.3	27.8	30.4	22.3	10.3	9.85	21	28.2	24.3	20.6	15.8	10.8	9.47	9.23	9.23	9.46	11.3	18.5
80.0	11.6	13	14.4	11	5.93	5.76	10.5	13.4	11.1	8.83	7.01	5.12	4.68	4.7	4.66	4.56	5.27	8.49
85.0	5.7	6.3	6.93	5.71	3.83	3.7	5.31	6.24	5.21	4.23	3.57	2.88	2.73	2.76	2.73	2.64	2.91	4.33
90.0	3.64	3.67	3.71	3.4	2.97	2.9	3.19	3.26	2.65	2.06	2.06	2.06	2.05	2.05	2.02	1.97	2.11	2.89
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)

C Angle Range: 0 - 180(Deg)

Gama interval (Deg): 1

C interval (Deg): 45

Temperature(Deg): 30

Humi di ty(%): 60

Tester: zxcg

Date: 2026-4-3

Distance(m): 7.000

Remark:

Test System: ZWL Goniophotometer System V3.0