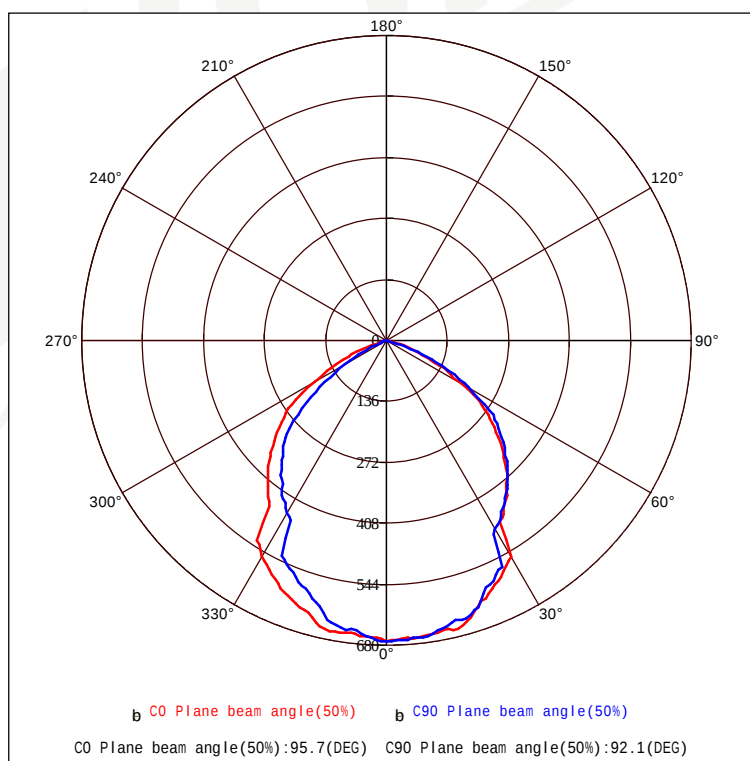


Goniophotometer Test Report

Measured Para U: 216.7V I: 103.7mA P: 20.15W PF: 0.897 Test LM: 1920.3lm						
Lamp Name: LED FLOOD LIGHT			Lamp Type:		Weight(kg):	
Lamp ID: LPFL-20X01			Lamp Spec:		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPFL-20X01		Peak Value(cd)	673.8	Efficiency(lm/w)	95.3
Nominal P(w)		1.0	Position	45.0,3.0	UP(C0-C180)	0.0
Rated Volt(v)		220.0	Total Flux(lm)	1920.3	Down(C0-C180)	55.2
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)	44.8

Planar Intensity Distribution Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

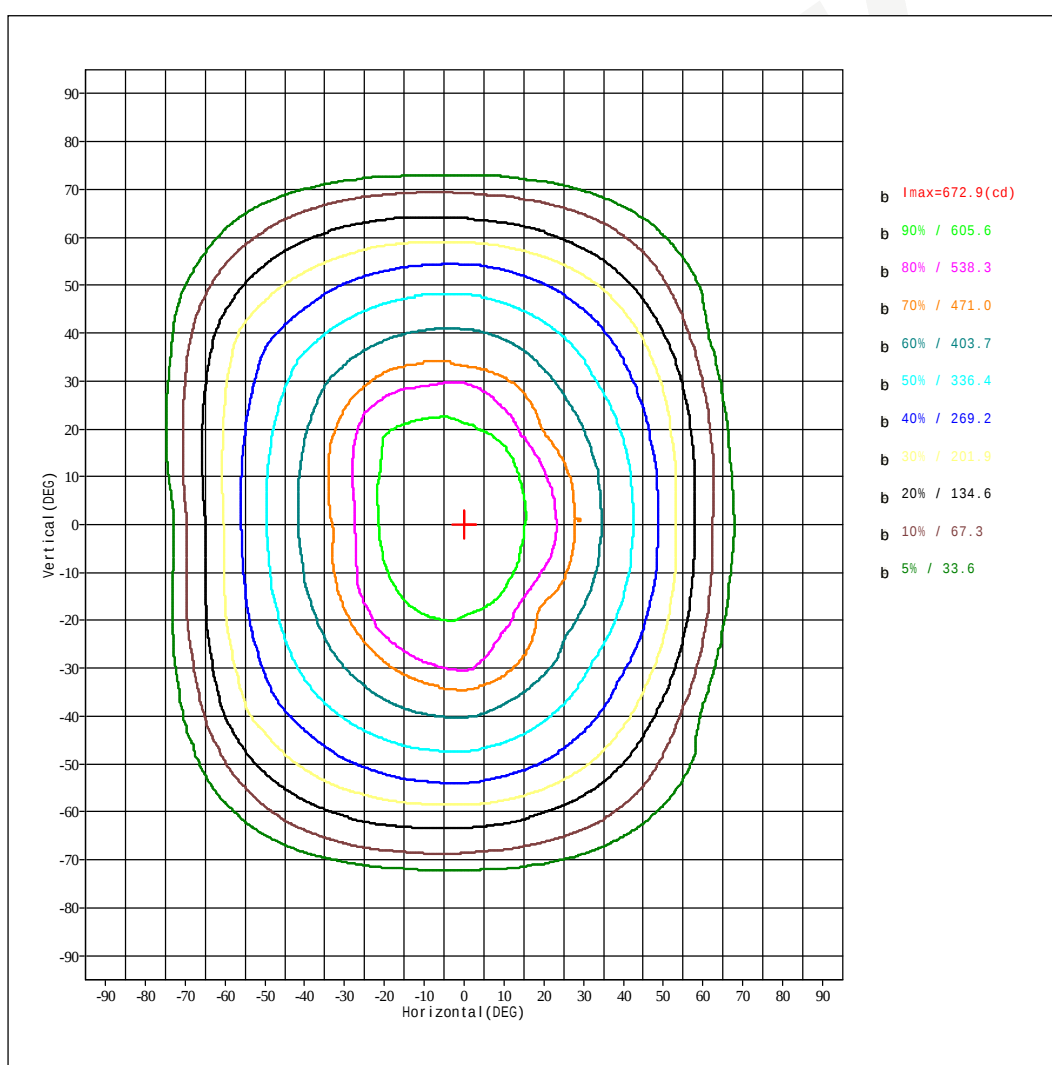
Humidity(%): 60

Date: 2023-5-12

Remark:

Measured Para U: 216.7V I: 103.7mA P: 20.15W PF: 0.897 Test LM: 1920.3lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID:LPFL-20X01	Lamp Spec:	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: zyg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

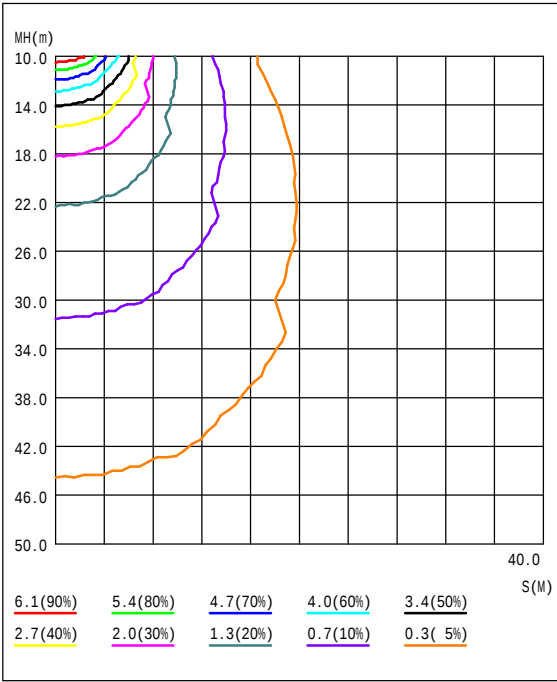
Humidity(%): 60

Date: 2023-5-12

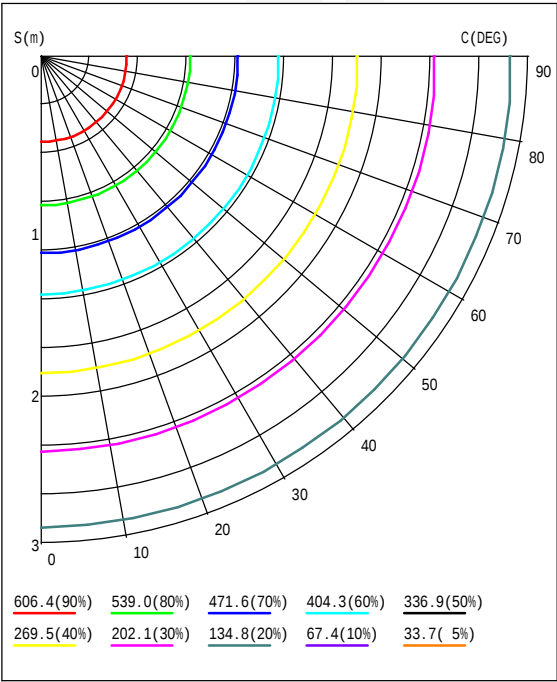
Remark:

Measured Para U: 216.7V I: 103.7mA P: 20.15W PF: 0.897 Test LM: 1920.3lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID:LPFL-20X01	Lamp Spec:	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): 30

Tester: zxg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2023-5-12

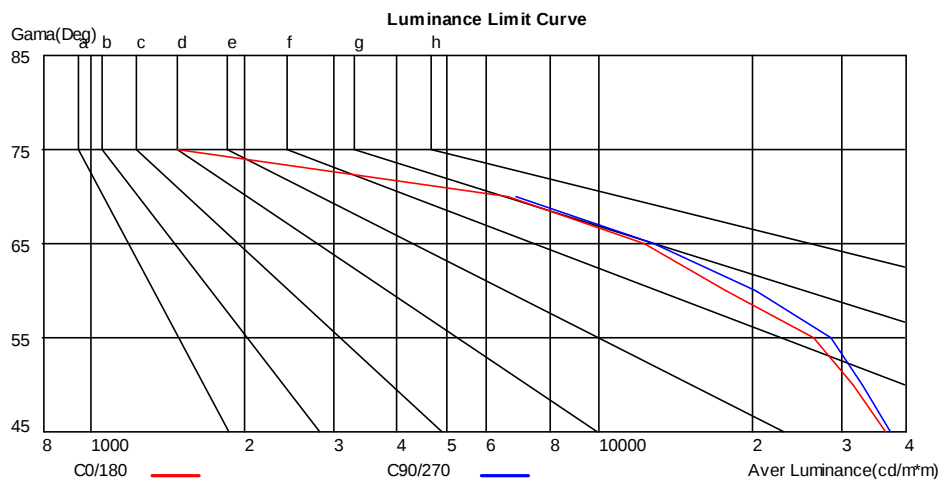
Remark:

Measured Para U: 216.7V I: 103.7mA P: 20.15W PF: 0.897 Test LM: 1920.3lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID:LPFL-20X01	Lamp Spec:	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	36846.3	31534.8	26400.0	17759.0	12319.0	6592.5	1473.5	263.5	201.5
C90	37471.0	32894.3	28694.3	20358.8	12819.7	6866.8	695.5	221.5	167.0

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: zxg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

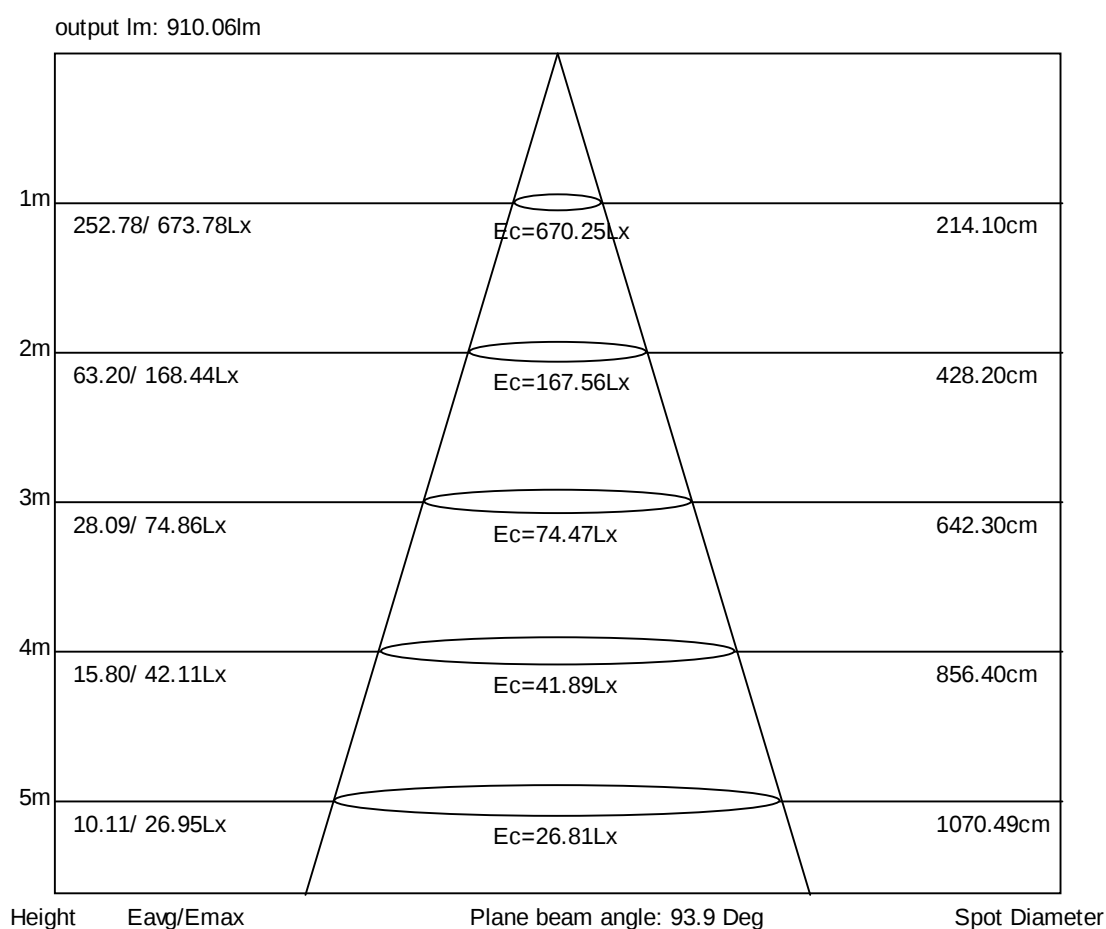
Humidity(%): 60

Date: 2023-5-12

Remark:

Measured Para U: 216.7V I: 103.7mA P: 20.15W PF: 0.897 Test LM: 1920.3lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID:LPFL-20X01	Lamp Spec:	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): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

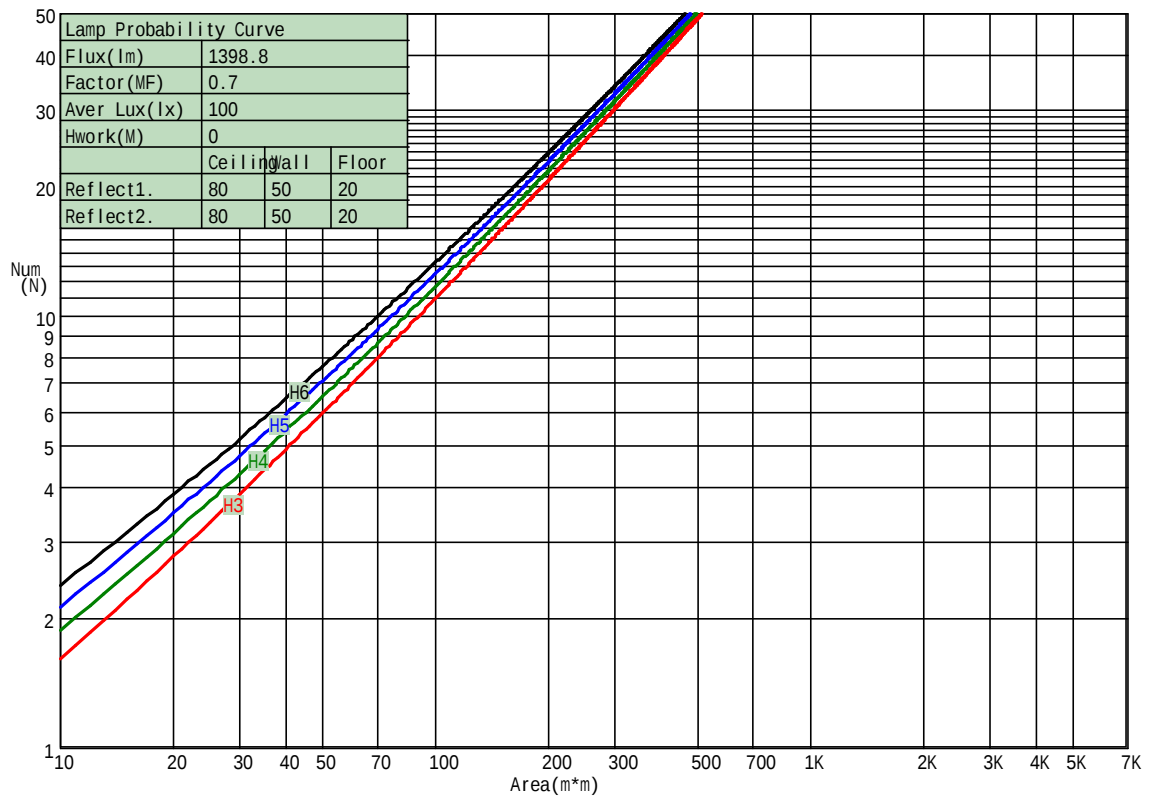
Humidity(%): 60

Date: 2023-5-12

Remark:

Measured Para U: 216.7V I: 103.7mA P: 20.15W PF: 0.897 Test LM: 1920.3lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID:LPFL-20X01	Lamp Spec:	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): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2023-5-12

Remark:

Measured Para U: 216.7V I: 103.7mA P: 20.15W PF: 0.897 Test LM: 1920.3lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID:LPFL-20X01	Lamp Spec:	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	41	32	54	40	32	51	39	31
0.80	59	43	32	57	42	32	53	40	31
1.00	61	44	33	59	43	32	54	41	31
1.25	63	46	33	61	44	32	55	41	30
1.50	65	46	32	62	45	31	56	41	30
2.00	67	48	32	63	46	31	56	41	29
2.50	68	48	32	64	46	30	56	41	28
3.00	69	49	31	65	46	30	56	41	27
4.00	70	49	31	65	46	30	57	41	26
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	1.07	1.04	1	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	0.95	0.9	0.85	0.94	0.88	0.84	0.9	0.86	0.82	0.87	0.83	0.8	0.84	0.81	0.78
3	0.85	0.78	0.72	0.84	0.77	0.72	0.81	0.75	0.71	0.78	0.73	0.69	0.76	0.72	0.68
4	0.76	0.69	0.63	0.75	0.68	0.62	0.73	0.66	0.61	0.7	0.65	0.61	0.68	0.64	0.6
5	0.69	0.61	0.55	0.68	0.6	0.55	0.66	0.59	0.54	0.64	0.58	0.53	0.62	0.57	0.53
6	0.62	0.54	0.48	0.62	0.54	0.48	0.6	0.53	0.48	0.58	0.52	0.47	0.57	0.51	0.47
7	0.57	0.49	0.43	0.56	0.49	0.43	0.55	0.48	0.43	0.53	0.47	0.42	0.52	0.46	0.42
8	0.52	0.44	0.39	0.52	0.44	0.39	0.5	0.43	0.39	0.49	0.43	0.38	0.48	0.42	0.38
9	0.48	0.4	0.35	0.48	0.4	0.35	0.46	0.4	0.35	0.45	0.39	0.35	0.44	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	0.41	0.36	0.32

Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date:2023-5-12

Remark:

Measured Para U: 216.7V I: 103.7mA P: 20.15W PF: 0.897 Test LM: 1920.3lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID:LPFL-20X01	Lamp Spec:	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	0.25	0.14	0.04	0.24	0.14	0.04	0.23	0.13	0.04	0.22	0.13	0.04	0.21	0.12	0.04
2	0.24	0.13	0.04	0.24	0.13	0.04	0.23	0.13	0.04	0.22	0.12	0.04	0.21	0.12	0.04
3	0.23	0.12	0.04	0.23	0.12	0.04	0.22	0.12	0.04	0.21	0.11	0.04	0.2	0.11	0.03
4	0.22	0.11	0.03	0.21	0.11	0.03	0.21	0.11	0.03	0.2	0.11	0.03	0.19	0.1	0.03
5	0.21	0.11	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 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	0.14	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	0.05	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)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2023-5-12

Remark:

Measured Para U: 216.7V I: 103.7mA P: 20.15W PF: 0.897 Test LM: 1920.3lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID:LPFL-20X01	Lamp Spec:	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	671	672	663	657	659	645	656	660	0-5	15.9	15.9
10	659	665	657	652	660	644	641	640	5-10	47	62.8
15	654	656	649	644	636	619	606	633	10-15	76.6	139
20	619	647	613	627	612	567	570	590	15-20	102	242
25	592	630	573	588	586	477	536	481	20-25	122	363
30	553	573	484	545	551	435	444	449	25-30	134	497
35	450	537	450	450	451	391	397	410	30-35	139	636
40	412	437	418	412	404	354	360	367	35-40	139	775
45	368	399	375	375	363	308	317	326	40-45	139	914
50	315	356	329	336	314	256	248	274	45-50	133	1047
55	264	309	287	288	260	197	173	223	50-55	120	1167
60	178	260	204	236	174	118	99.5	142	55-60	98.6	1266
65	123	209	128	172	115	40.3	32.1	67.2	60-65	69.9	1336
70	65.9	121	68.7	92.9	44.5	5.8	8.75	13.5	65-70	40.5	1376
75	14.7	56.8	6.96	28.4	6.54	3.5	4.68	3.99	70-75	15.6	1392
80	2.63	7.99	2.22	4.39	3.49	2.78	3	2.85	75-80	4.03	1396
85	2.02	3.13	1.67	2.52	2.95	3.05	2.53	2.7	80-85	1.59	1397
90	1.76	2.03	1.56	1.8	3.07	3.34	3.1	3.14	85-90	1.37	1399
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): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2023-5-12

Remark:

Measured Para U: 216.7V I: 103.7mA P: 20.15W PF: 0.897 Test LM: 1920.3lm		
Lamp Name: LED FLOOD LIGHT	Lamp Type:	Weight(kg):
Lamp ID:LPFL-20X01	Lamp Spec:	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	671	672	672	669	665	661	659	657	658	659	653	646	648	653	657	659	661	666
10.0	659	662	665	663	659	656	654	653	656	660	653	645	643	642	641	640	642	650
15.0	654	655	655	654	651	648	646	643	639	636	629	621	615	609	612	624	635	645
20.0	619	631	644	636	620	616	622	625	619	612	592	572	568	569	574	584	593	606
25.0	592	608	625	611	586	577	583	588	587	586	538	489	496	523	524	499	493	543
30.0	553	562	571	544	504	497	525	546	549	551	501	448	438	442	445	448	461	507
35.0	450	488	528	509	469	450	450	450	450	451	424	397	393	395	400	406	414	432
40.0	412	423	435	431	422	417	414	411	408	404	382	359	356	358	361	365	372	392
45.0	368	382	396	391	380	375	375	373	368	363	339	314	311	315	319	323	331	350
50.0	315	333	352	347	335	330	333	333	323	314	289	262	253	250	253	265	278	297
55.0	264	284	304	302	292	287	288	285	272	260	232	204	189	178	184	207	228	246
60.0	178	214	251	242	216	211	226	229	201	174	150	124	112	104	109	128	146	162
65.0	123	161	199	182	146	138	158	166	140	115	82.5	48.5	37.6	33.9	39.8	55.7	73.4	98.7
70.0	65.9	90.2	115	104	80.2	74	85	87.6	65.7	44.5	27.5	10	6.77	8.11	9.79	11.9	19.2	43
75.0	14.7	33.1	52.2	40.5	17.9	11.7	21.4	26	16.1	6.54	5.21	3.83	3.89	4.42	4.53	4.22	5.17	10
80.0	2.63	4.98	7.4	6.1	3.48	2.69	3.68	4.29	3.88	3.49	3.17	2.85	2.85	2.95	2.97	2.9	2.83	2.73
85.0	2.02	2.5	3.01	2.65	1.99	1.86	2.24	2.57	2.76	2.95	2.99	3.04	2.88	2.64	2.56	2.64	2.62	2.31
90.0	1.76	1.88	2	1.88	1.66	1.62	1.72	1.94	2.51	3.07	3.19	3.31	3.26	3.15	3.11	3.12	2.98	2.36
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: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2023-5-12

Remark: