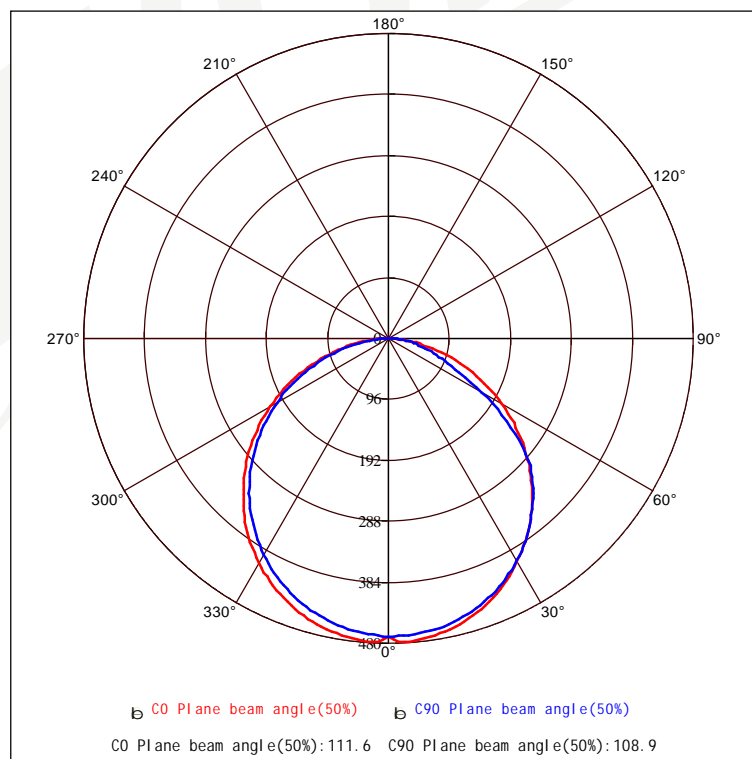


LED DOWN LIGHT

Measured Para U: 216.6V I: 119.0mA P: 16.40W PF: 0.635 Test LM: 1324.49lm						
Lamp Name: LPDL-18A-Y		Lamp Type:		Weight(kg):		
Lamp ID:		Lamp Spec: LPDL-18A-Y		Shape Size:		
Manufactory: LIPER		Sur(m <sup>2</sup> ):		Protect Angle(Deg):		
Light Source Data			Photometric Data			
Model	LPDL-18A-Y		Peak Value(cd)	479.4	Efficiency(lm/w)	80.8
Nominal P(w)	1.0		Position	0.0, 1.0	UP(C0-C180)	0.0
Rated Volt(v)	220.0		Total Flux(lm)	1324.489	Down(C0-C180)	52.1
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)	47.9

Planar Intensity Distribution Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 25

Tester: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval(Deg): 45

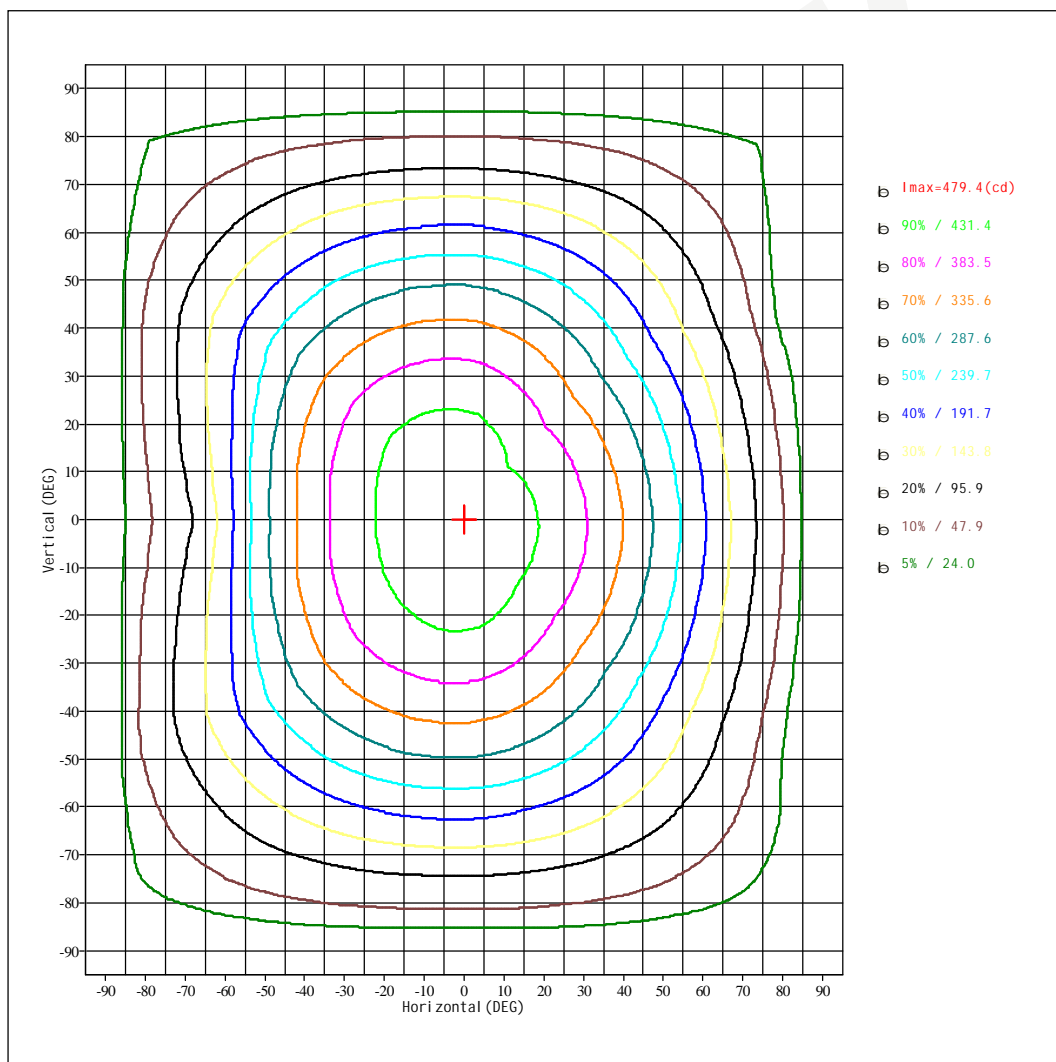
Humidity(%): 60

Date: 2020-6-15

Remark:

Measured Para U: 216.6V I: 119.0mA P: 16.40W PF: 0.635 Test LM: 1324.49lm		
Lamp Name: LPDL-18A-Y	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-18A-Y	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): 25

Tester: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

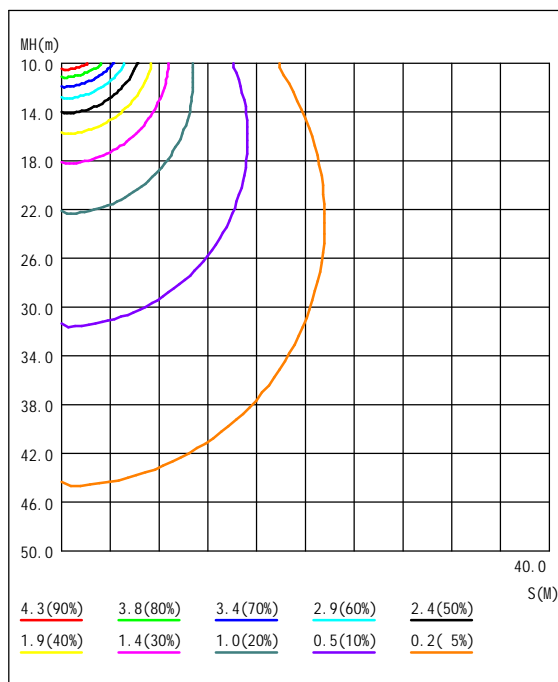
Humi di ty(%): 60

Date: 2020-6-15

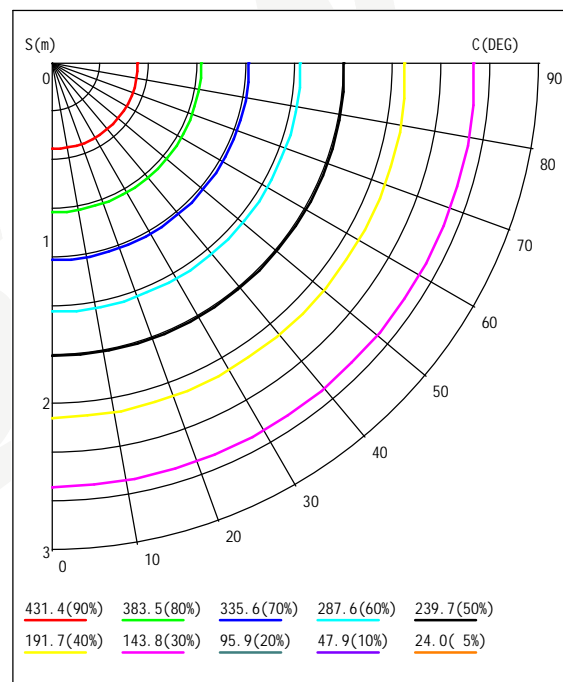
Remark:

Measured Para U: 216.6V I: 119.0mA P: 16.40W PF: 0.635 Test LM: 1324.49lm		
Lamp Name: LPDL-18A-Y	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-18A-Y	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): 25

Tester: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humi di ty(%): 60

Date: 2020-6-15

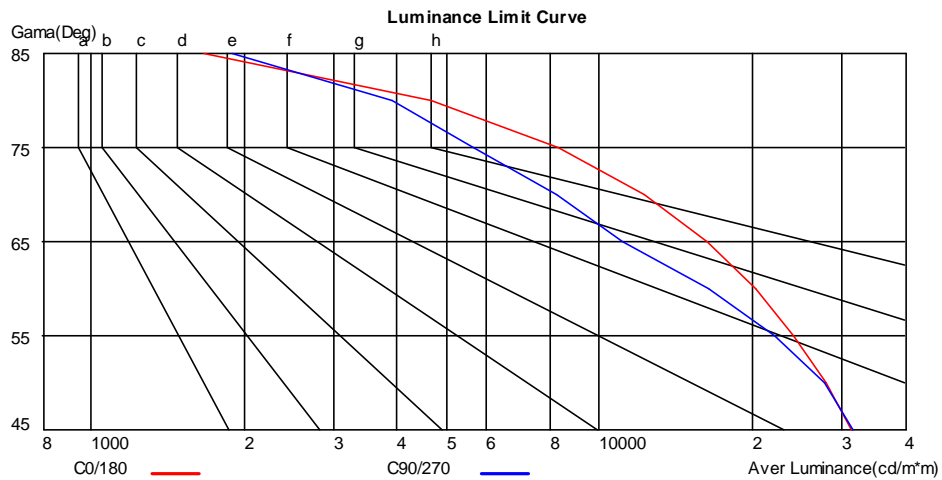
Remark:

Measured Para U: 216.6V I: 119.0mA P: 16.40W PF: 0.635 Test LM: 1324.49lm		
Lamp Name: LPDL-18A-Y	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-18A-Y	Shape Si ze:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Luminance Limit Curve

Gm(Deg)	45	50	55	60	65	70	75	80	85
C0	31482.3	27938.3	24186.8	20330.0	16268.5	12268.8	8324.0	4680.3	1665.3
C90	31730.5	27831.0	22118.8	16471.3	11099.8	8271.5	5675.8	3909.0	1898.0

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



Gama Angle Range: -90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 25

Tester: zxg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval(Deg): 45

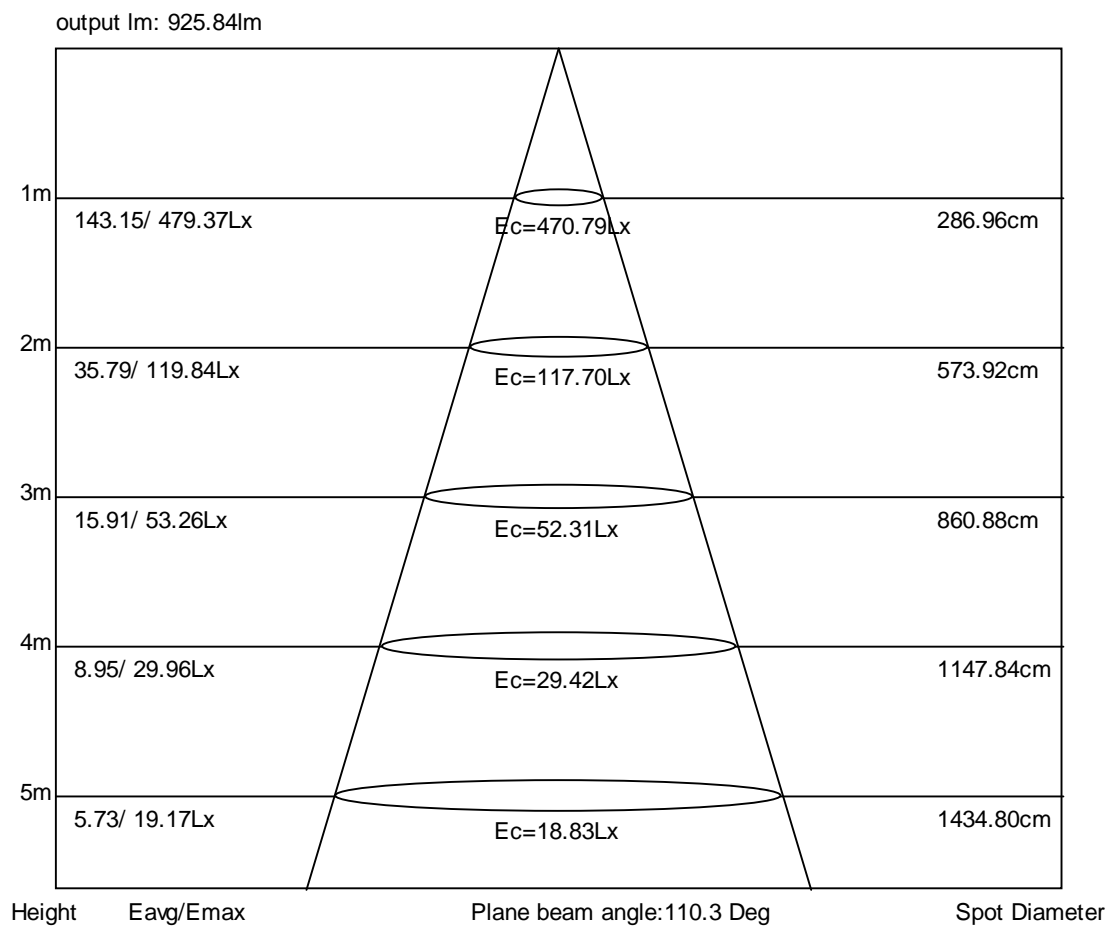
Humi di ty(%): 60

Date: 2020-6-15

Remark:

Measured Para U: 216.6V I: 119.0mA P: 16.40W PF: 0.635 Test LM: 1324.49lm		
Lamp Name: LPDL-18A-Y	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-18A-Y	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): 25

Tester: zxg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

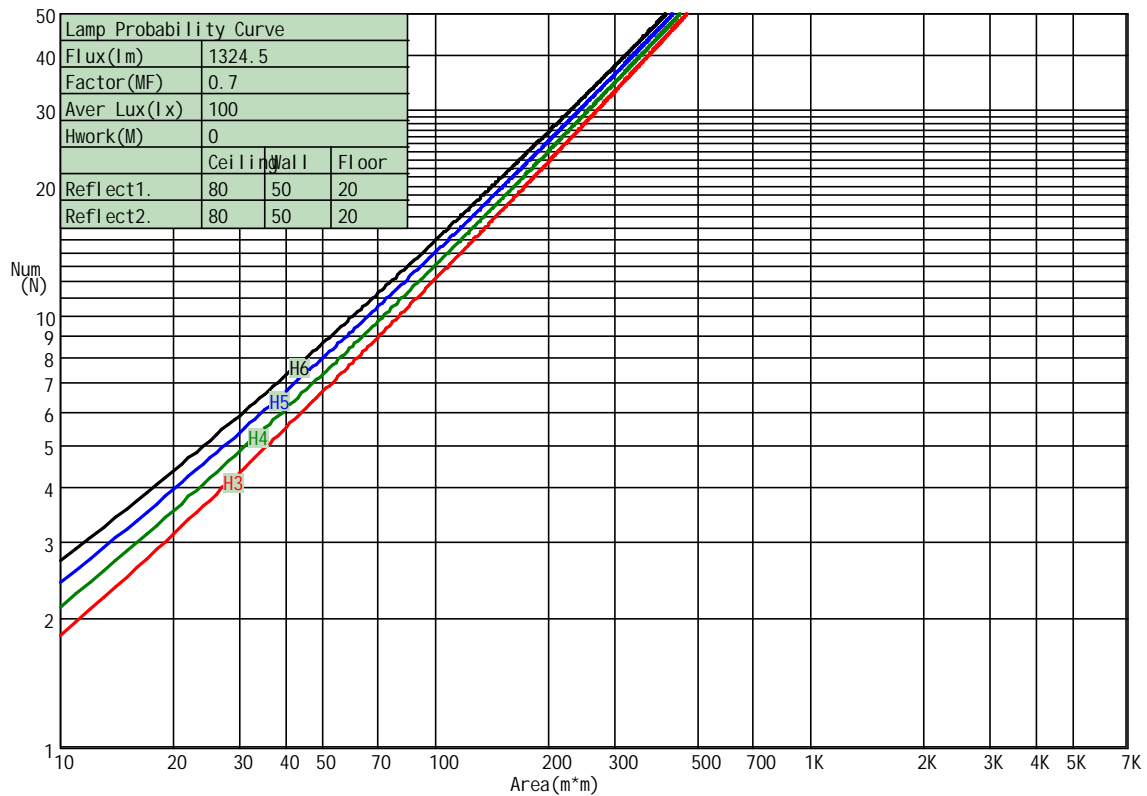
Humi di ty(%): 60

Date: 2020-6-15

Remark:

Measured Para U: 216.6V I: 119.0mA P: 16.40W PF: 0.635 Test LM: 1324.49lm		
Lamp Name: LPDL-18A-Y	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-18A-Y	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): 25

Tester: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humi di ty(%): 60

Date: 2020-6-15

Remark:

Measured Para U: 216.6V I: 119.0mA P: 16.40W PF: 0.635 Test LM: 1324.49lm		
Lamp Name: LPDL-18A-Y	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-18A-Y	Shape Si ze:
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	53	38	29	51	38	29	48	36	28
0.80	57	41	30	55	40	30	51	38	29
1.00	61	43	32	58	42	31	53	40	30
1.25	63	45	32	60	44	31	55	41	30
1.50	65	47	33	62	45	32	56	41	30
2.00	68	49	34	64	47	33	57	42	30
2.50	69	50	34	65	47	32	58	43	30
3.00	70	50	34	66	48	32	58	43	29
4.00	71	51	34	67	48	32	58	43	29
5.00	72	52	34	67	49	32	59	43	29

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	1.04	1	0.96	1.02	0.98	0.94	0.97	0.94	0.91	0.94	0.91	0.89	0.9	0.88	0.86
2	0.91	0.84	0.78	0.89	0.83	0.77	0.85	0.8	0.75	0.82	0.78	0.74	0.79	0.75	0.72
3	0.8	0.71	0.65	0.78	0.7	0.64	0.75	0.69	0.63	0.72	0.67	0.62	0.7	0.65	0.61
4	0.71	0.62	0.55	0.69	0.61	0.55	0.67	0.6	0.54	0.64	0.58	0.53	0.62	0.57	0.52
5	0.63	0.54	0.47	0.62	0.53	0.47	0.6	0.52	0.47	0.58	0.51	0.46	0.56	0.5	0.46
6	0.57	0.48	0.41	0.56	0.47	0.41	0.54	0.46	0.41	0.52	0.46	0.4	0.51	0.45	0.4
7	0.51	0.43	0.37	0.51	0.42	0.36	0.49	0.42	0.36	0.48	0.41	0.36	0.46	0.4	0.36
8	0.47	0.38	0.33	0.46	0.38	0.32	0.45	0.38	0.32	0.44	0.37	0.32	0.43	0.36	0.32
9	0.43	0.35	0.29	0.43	0.35	0.29	0.41	0.34	0.29	0.4	0.34	0.29	0.39	0.33	0.29
10	0.4	0.32	0.27	0.39	0.32	0.27	0.38	0.31	0.26	0.37	0.31	0.26	0.36	0.3	0.26

Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 25

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: 2020-6-15

Remark:

Measured Para U: 216.6V I: 119.0mA P: 16.40W PF: 0.635 Test LM: 1324.49lm		
Lamp Name: LPDL-18A-Y	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-18A-Y	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	0.31	0.17	0.06	0.3	0.17	0.05	0.29	0.16	0.05	0.28	0.16	0.05	0.26	0.15	0.05
2	0.29	0.16	0.05	0.28	0.16	0.05	0.27	0.15	0.05	0.26	0.15	0.05	0.25	0.14	0.04
3	0.27	0.14	0.04	0.26	0.14	0.04	0.25	0.14	0.04	0.24	0.13	0.04	0.23	0.13	0.04
4	0.25	0.13	0.04	0.24	0.13	0.04	0.23	0.12	0.04	0.23	0.12	0.04	0.22	0.12	0.04
5	0.23	0.12	0.03	0.22	0.12	0.03	0.22	0.11	0.03	0.21	0.11	0.03	0.2	0.11	0.03
6	0.21	0.11	0.03	0.21	0.11	0.03	0.2	0.1	0.03	0.19	0.1	0.03	0.19	0.1	0.03
7	0.2	0.1	0.03	0.19	0.1	0.03	0.19	0.1	0.03	0.18	0.09	0.03	0.18	0.09	0.03
8	0.19	0.09	0.03	0.18	0.09	0.03	0.18	0.09	0.03	0.17	0.09	0.02	0.17	0.09	0.02
9	0.17	0.08	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	0.16	0.08	0.02	0.16	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	0.15	0.07	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	0.13	0.15	0.13	0.12	0.11	0.09	0.08	0.06	0.05	0.05	0.02	0.02	0.02
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	0.16	0.11	0.07	0.14	0.1	0.06	0.1	0.07	0.05	0.06	0.04	0.03	0.02	0.01	0.01
4	0.16	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	0.15	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	0.08	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	0.03	0.08	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0
9	0.12	0.06	0.03	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)

C Angle Range: 0 - 180(Deg)

Gama interval (Deg): 1

C interval (Deg): 45

Temperature(Deg): 25

Humi di ty(%): 60

Tester: zxcg

Date: 2020-6-15

Distance(m): 5.000

Remark:

Test System: ZWL Goni ophotometer System V3.0



Measured Para U: 216.6V I: 119.0mA P: 16.40W PF: 0.635 Test LM: 1324.49lm		
Lamp Name: LPDL-18A-Y	Lamp Type:	Weight (kg):
Lamp ID:	Lamp Spec: LPDL-18A-Y	Shape Size:
Manufactory: LIPER	Sur(m <sup>2</sup> ):	Protect Angle(Deg):

Ring-shaped Flux Data Table

Gm\C(Deg)	0	45	90	135	180	225	270	315	Range	Ring	T(lm)
5	477	473	468	464	477	467	465	458	0-5	11.2	11.2
10	471	469	463	461	471	458	458	449	5-10	33.3	44.5
15	460	461	453	455	460	445	446	435	10-15	54.2	98.8
20	445	450	440	444	446	429	431	418	15-20	73.3	172
25	427	434	423	429	428	408	413	398	20-25	90	262
30	404	415	402	410	406	385	391	373	25-30	104	366
35	377	391	377	388	381	357	365	346	30-35	114	479
40	348	364	349	362	352	327	337	316	35-40	120	599
45	315	333	317	333	320	295	305	282	40-45	122	720
50	279	300	278	301	286	260	272	247	45-50	119	840
55	242	264	221	267	249	223	236	210	50-55	112	952
60	203	226	165	230	211	185	199	172	55-60	101	1053
65	163	188	111	192	171	146	160	133	60-65	86.6	1140
70	123	147	82.7	153	131	107	122	95	65-70	70.3	1210
75	83.2	107	56.8	113	92.8	69.9	84.9	58.4	70-75	53	1263
80	46.8	69.3	39.1	75.5	56.2	36.8	50.3	27.2	75-80	35.5	1299
85	16.7	35.3	19	40.8	25.3	10.6	21.1	3.49	80-85	19.2	1318
90	5.6	6.63	6.21	11	3.27	3.17	3.06	3.2	85-90	6.6	1324
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): 25

Humi di ty(%): 60

Tester: zxg

Date: 2020-6-15

Distance(m): 5.000

Remark:

Test System: ZWL Goniophotometer System V3.0

Measured Para U: 216.6V I: 119.0mA P: 16.40W PF: 0.635 Test LM: 1324.49lm		
Lamp Name: LPDL-18A-Y	Lamp Type:	Weight (kg):
Lamp ID:	Lamp Spec: LPDL-18A-Y	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	477	475	473	471	469	467	465	466	472	477	473	468	466	466	464	460	460	469
10.0	471	470	469	467	464	462	462	462	467	471	465	460	458	458	456	452	451	461
15.0	460	461	461	459	455	454	454	455	458	460	454	447	446	446	444	439	438	449
20.0	445	447	450	447	442	441	443	444	445	446	438	431	430	431	428	423	421	434
25.0	427	430	434	431	426	424	427	429	428	428	419	410	410	412	409	403	401	414
30.0	404	409	414	411	405	404	408	410	408	406	397	387	387	389	387	379	377	391
35.0	377	383	390	386	380	380	384	387	384	381	370	360	360	363	361	352	350	364
40.0	348	355	362	359	352	352	358	361	356	352	341	330	330	335	332	322	319	334
45.0	315	323	331	328	321	321	328	332	326	320	309	297	298	303	300	290	286	301
50.0	279	288	298	293	283	283	294	300	293	286	274	263	264	269	266	255	251	265
55.0	242	251	261	250	231	231	252	265	257	249	238	226	227	233	230	219	214	228
60.0	203	213	223	206	178	179	209	228	219	211	199	188	189	196	193	181	175	189
65.0	163	174	185	163	128	129	166	190	180	171	160	148	150	157	154	142	136	150
70.0	123	133	145	126	96.8	98	130	150	141	131	121	110	112	119	116	104	98	111
75.0	83.2	93.9	105	90.8	67.9	69.2	94.8	111	102	92.8	82.8	72.4	74.8	81.6	79.1	67.1	61.2	72.4
80.0	46.8	56.7	66.9	59.4	45.7	47.1	63.6	73.4	64.6	56.2	47.7	38.9	41.2	47.3	45.2	34.7	29.3	38.2
85.0	16.7	24.8	33.2	29.9	22.5	23.8	33.7	39.1	32.1	25.3	18.9	12.2	14.1	18.8	17.3	9.28	4.93	10.9
90.0	5.6	6.05	6.52	6.49	6.3	7.27	9.45	10.2	6.66	3.27	3.22	3.18	3.13	3.09	3.09	3.15	3.46	4.55
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): 25

Humi di ty(%): 60

Tester: zyg

Date: 2020-6-15

Distance(m): 5.000

Remark:

Test System: ZWL Goniophotometer System V3.0