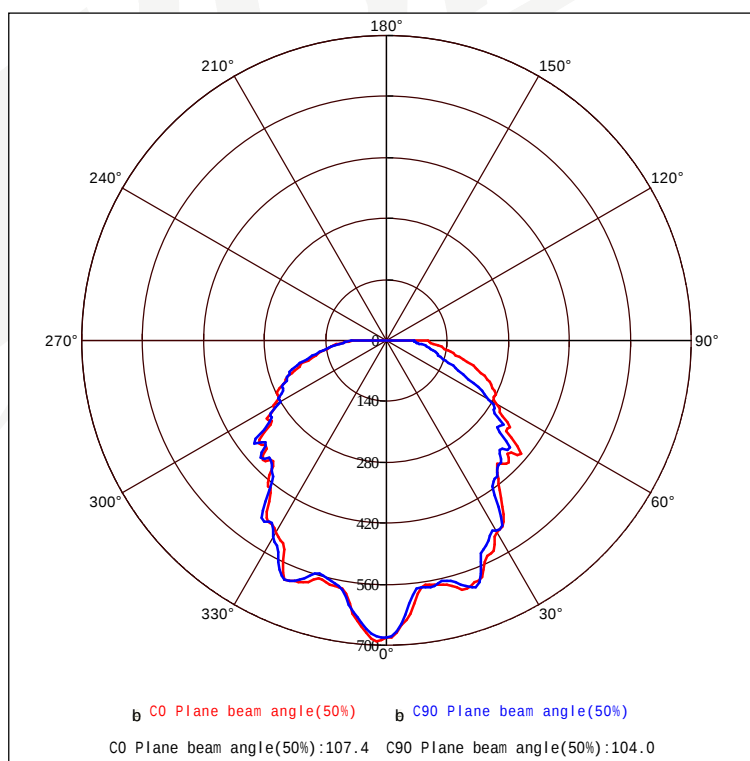


LED DOWN LIGHT

Measured Para U: 216.3V I: 135.0mA P: 19.20W PF: 0.654 Test LM: 1923.54lm						
Lamp Name: LPDL-20A-Y			Lamp Type: CLASS II		Weight(kg):	
Lamp ID:			Lamp Spec: LPDL-20A-Y		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPDL-20A-Y		Peak Value(cd)	692.5	Efficiency(lm/w)	100.2
Nominal P(w)		1.0	Position	180.0,1.0	UP(C0-C180)	0.0
Rated Volt(v)		220.0	Total Flux(lm)	1923.535	Down(C0-C180)	50.1
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)	49.9

Planar Intensity Distribution Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 25

Tester: zxcg

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

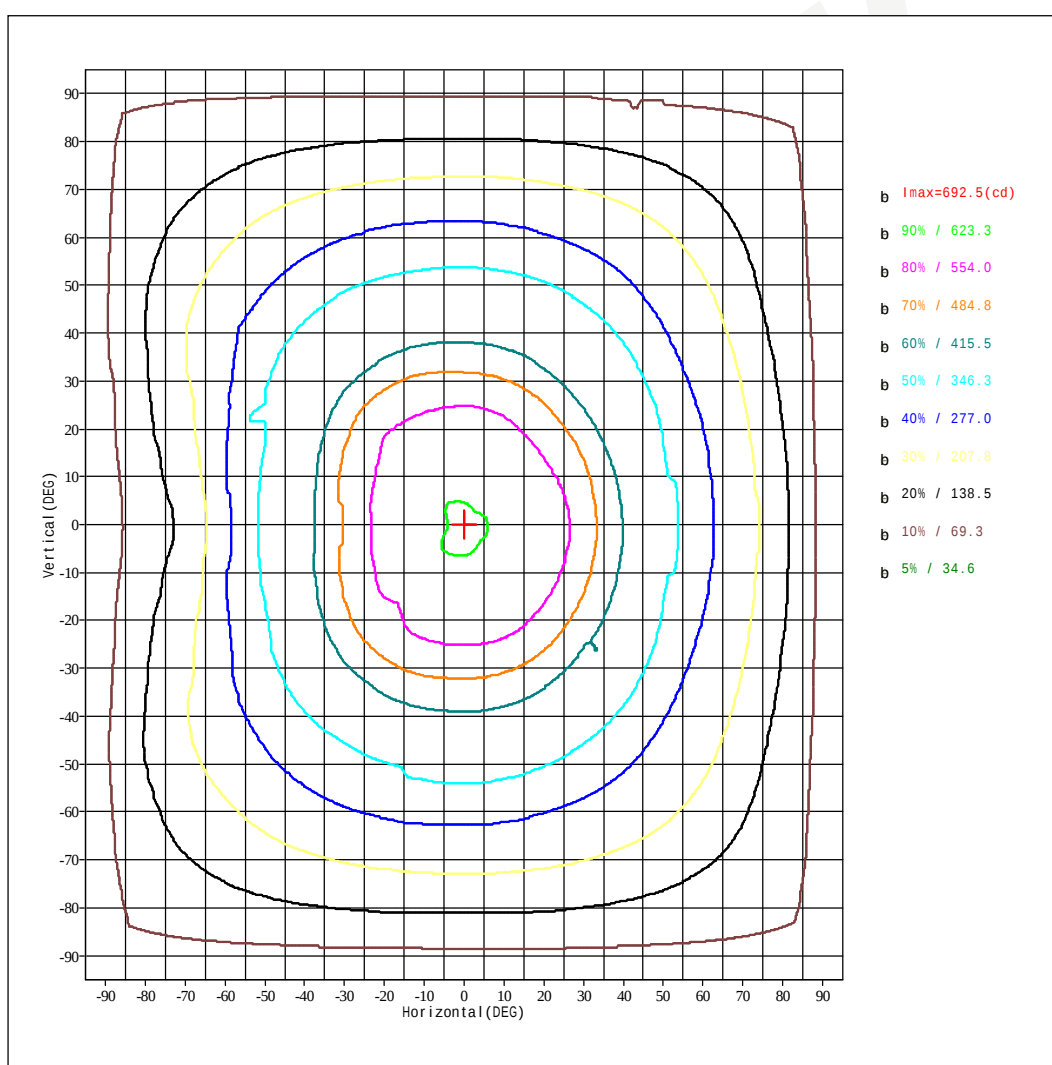
Humidity(%): 60

Date: 2019-11-2

Remark:

Measured Para U: 216.3V I: 135.0mA P: 19.20W PF: 0.654 Test LM: 1923.54lm		
Lamp Name: LPDL-20A-Y	Lamp Type: CLASS II	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-20A-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: zxcg

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

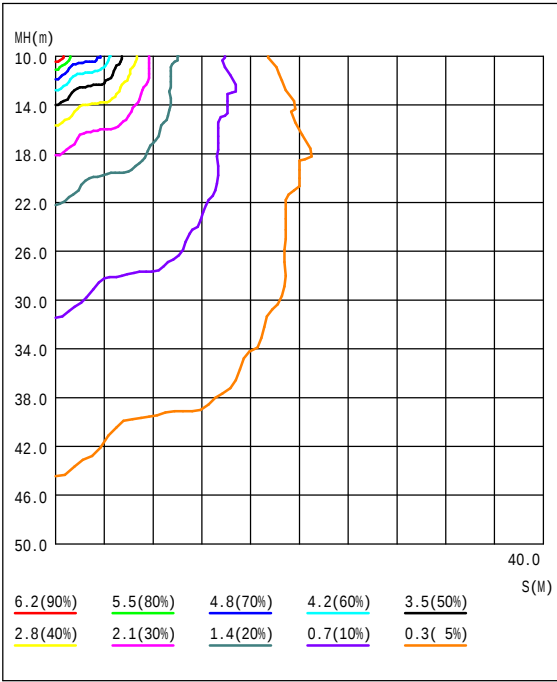
Humidity(%): 60

Date: 2019-11-2

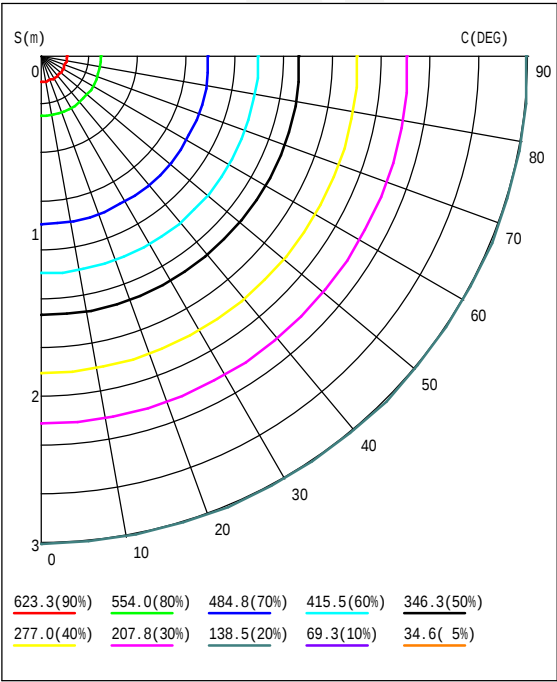
Remark:

Measured Para U: 216.3V I: 135.0mA P: 19.20W PF: 0.654 Test LM: 1923.54lm		
Lamp Name: LPDL-20A-Y	Lamp Type: CLASS II	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-20A-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: zxg

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2019-11-2

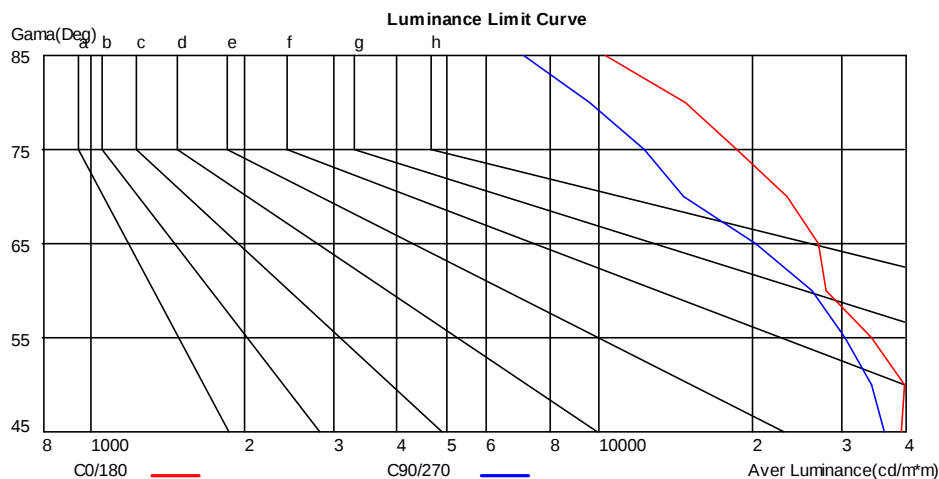
Remark:

Measured Para U: 216.3V I: 135.0mA P: 19.20W PF: 0.654 Test LM: 1923.54lm		
Lamp Name: LPDL-20A-Y	Lamp Type: CLASS II	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-20A-Y	Shape Size:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Luminance Limit Curve

Aver Luminance(cd/m²)									
Gm(Deg)	45	50	55	60	65	70	75	80	85
C0	39308.1	39937.4	34501.1	28116.0	26990.8	23425.9	18749.8	14757.0	10254.9
C90	36556.5	34482.1	30581.3	26280.1	20292.9	14660.6	12304.8	9563.6	7091.4

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: zxcg

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

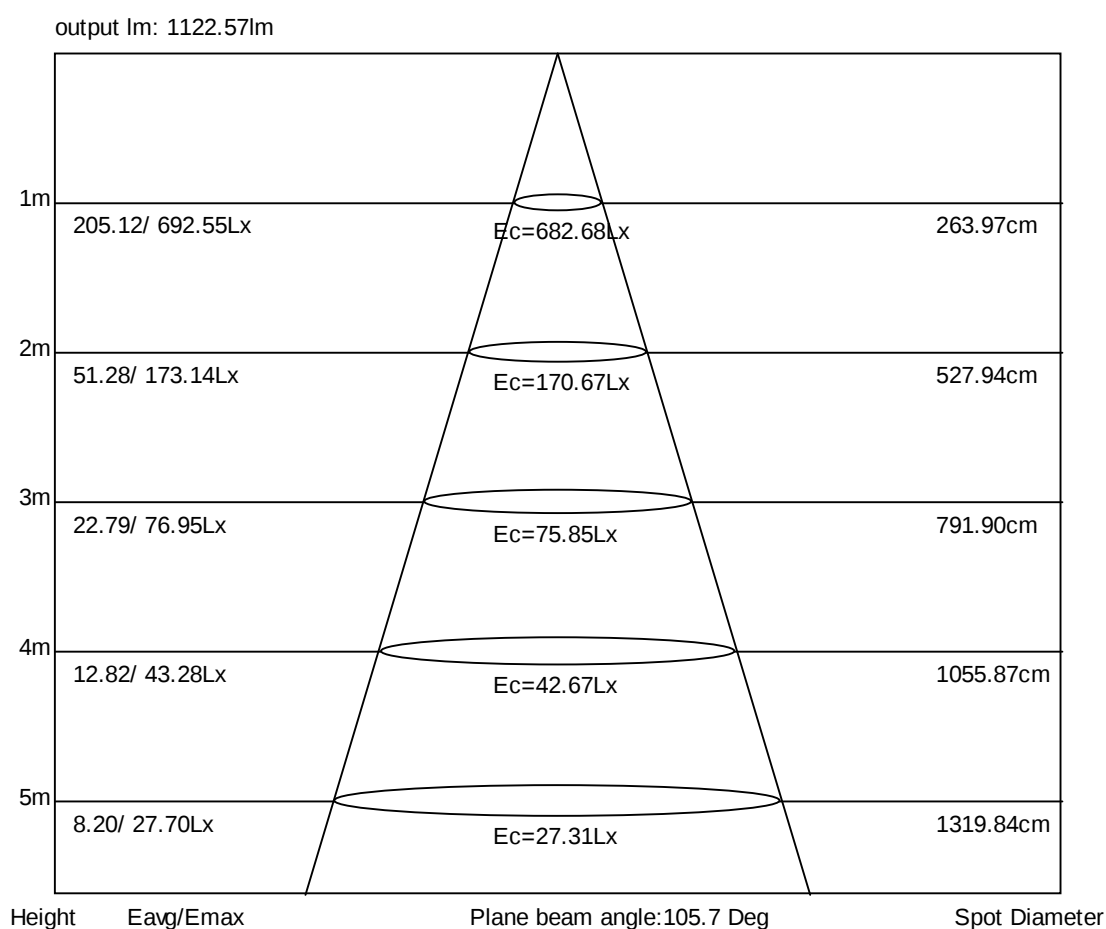
Humidity(%): 60

Date: 2019-11-2

Remark:

Measured Para U: 216.3V I: 135.0mA P: 19.20W PF: 0.654 Test LM: 1923.54lm		
Lamp Name: LPDL-20A-Y	Lamp Type: CLASS II	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-20A-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): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval(Deg): 45

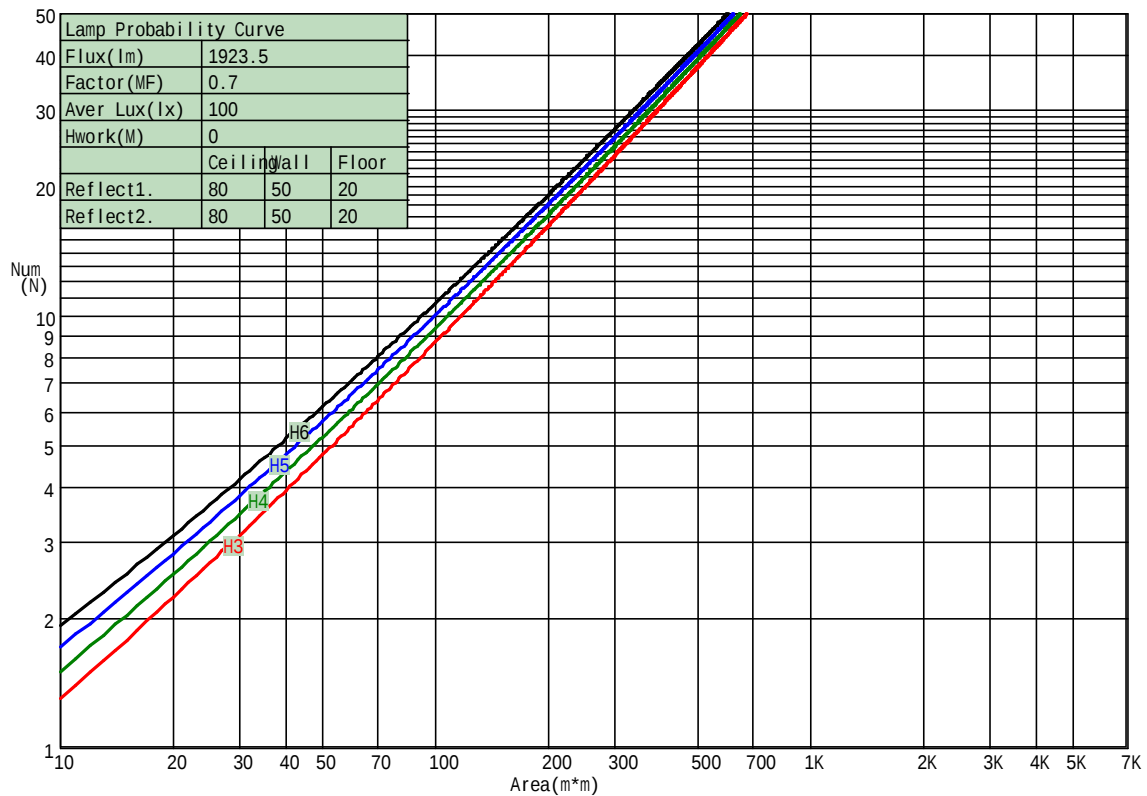
Humidity(%): 60

Date: 2019-11-2

Remark:

Measured Para U: 216.3V I: 135.0mA P: 19.20W PF: 0.654 Test LM: 1923.54lm		
Lamp Name: LPDL-20A-Y	Lamp Type: CLASS II	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-20A-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): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2019-11-2

Remark:

Measured Para U: 216.3V I: 135.0mA P: 19.20W PF: 0.654 Test LM: 1923.54lm		
Lamp Name: LPDL-20A-Y	Lamp Type: CLASS II	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-20A-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	50	34	25	48	34	24	45	32	24
0.80	55	38	27	53	37	26	48	35	25
1.00	58	41	28	56	39	28	51	37	27
1.25	62	43	30	59	42	29	53	39	28
1.50	64	45	31	61	43	30	55	40	28
2.00	67	48	33	63	46	32	57	42	29
2.50	69	49	33	65	47	32	57	42	30
3.00	70	51	34	66	48	33	58	43	30
4.00	72	52	35	68	49	33	59	44	30
5.00	73	53	36	68	50	34	60	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	1.01	0.95	0.91	0.98	0.94	0.89	0.94	0.9	0.86	0.9	0.87	0.84	0.86	0.84	0.81
2	0.87	0.79	0.72	0.85	0.77	0.71	0.81	0.75	0.7	0.78	0.72	0.68	0.74	0.7	0.66
3	0.75	0.66	0.59	0.74	0.65	0.59	0.71	0.64	0.58	0.68	0.62	0.57	0.65	0.6	0.56
4	0.67	0.57	0.5	0.65	0.56	0.49	0.63	0.55	0.49	0.6	0.53	0.48	0.58	0.52	0.47
5	0.59	0.5	0.43	0.58	0.49	0.42	0.56	0.48	0.42	0.54	0.47	0.41	0.52	0.46	0.41
6	0.53	0.44	0.37	0.52	0.43	0.37	0.5	0.43	0.37	0.49	0.42	0.36	0.47	0.41	0.36
7	0.48	0.39	0.33	0.47	0.39	0.33	0.46	0.38	0.32	0.44	0.37	0.32	0.43	0.37	0.32
8	0.44	0.35	0.29	0.43	0.35	0.29	0.42	0.34	0.29	0.41	0.34	0.29	0.4	0.33	0.28
9	0.4	0.32	0.26	0.4	0.32	0.26	0.39	0.31	0.26	0.38	0.31	0.26	0.37	0.3	0.26
10	0.37	0.29	0.24	0.37	0.29	0.24	0.36	0.29	0.24	0.35	0.28	0.23	0.34	0.28	0.23

Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 25

Tester: zxcg

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2019-11-2

Remark:

Measured Para U: 216.3V I: 135.0mA P: 19.20W PF: 0.654 Test LM: 1923.54lm		
Lamp Name: LPDL-20A-Y	Lamp Type: CLASS II	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-20A-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	0.37	0.21	0.07	0.36	0.21	0.07	0.35	0.2	0.06	0.34	0.2	0.06	0.33	0.19	0.06
2	0.33	0.18	0.06	0.32	0.18	0.05	0.31	0.17	0.05	0.3	0.17	0.05	0.29	0.16	0.05
3	0.3	0.16	0.05	0.29	0.16	0.05	0.28	0.15	0.05	0.27	0.15	0.05	0.26	0.14	0.04
4	0.27	0.14	0.04	0.26	0.14	0.04	0.25	0.13	0.04	0.24	0.13	0.04	0.24	0.13	0.04
5	0.24	0.12	0.04	0.24	0.12	0.04	0.23	0.12	0.04	0.22	0.12	0.04	0.22	0.12	0.03
6	0.22	0.11	0.03	0.22	0.11	0.03	0.21	0.11	0.03	0.21	0.11	0.03	0.2	0.1	0.03
7	0.21	0.1	0.03	0.2	0.1	0.03	0.2	0.1	0.03	0.19	0.1	0.03	0.18	0.1	0.03
8	0.19	0.09	0.03	0.19	0.09	0.03	0.18	0.09	0.03	0.18	0.09	0.03	0.17	0.09	0.03
9	0.18	0.09	0.02	0.18	0.09	0.02	0.17	0.08	0.02	0.17	0.08	0.02	0.16	0.08	0.02
10	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

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	0.04	0.02	0.02	0.01
2	0.18	0.13	0.09	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	0.15	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	0.1	0.06	0.03	0.06	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	0.06	0.03	0.05	0.03	0.02	0.02	0.01	0.01
6	0.15	0.08	0.04	0.13	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	0.13	0.07	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): 25

Tester: zxcg

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2019-11-2

Remark:

Measured Para U: 216.3V I: 135.0mA P: 19.20W PF: 0.654 Test LM: 1923.54lm		
Lamp Name: LPDL-20A-Y	Lamp Type: CLASS II	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-20A-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	621	649	595	663	653	635	645	606	0-5	15.6	15.6
10	571	564	575	581	576	567	577	563	5-10	42.4	58.1
15	587	574	574	550	566	584	557	591	10-15	67.7	126
20	591	583	602	577	591	601	590	582	15-20	96.4	222
25	544	564	527	562	543	549	575	543	20-25	120	343
30	507	529	507	529	505	512	514	508	25-30	134	477
35	455	494	421	490	470	452	492	447	30-35	145	622
40	391	416	393	419	418	392	402	383	35-40	144	765
45	393	390	366	376	397	382	384	374	40-45	143	909
50	399	383	345	363	376	375	362	375	45-50	153	1062
55	345	334	306	330	323	323	319	325	50-55	153	1215
60	281	299	263	297	297	278	278	270	55-60	141	1356
65	270	283	203	268	278	258	263	257	60-65	132	1488
70	234	253	147	243	237	232	236	223	65-70	123	1610
75	187	210	123	209	195	182	204	171	70-75	108	1718
80	148	162	95.6	164	150	138	153	136	75-80	86.6	1804
85	103	125	70.9	130	111	102	113	100	80-85	68.1	1873
90	96.8	91.9	63.9	90	78.9	82.7	82.2	79	85-90	51	1924
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): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2019-11-2

Remark:

Measured Para U: 216.3V I: 135.0mA P: 19.20W PF: 0.654 Test LM: 1923.54lm		
Lamp Name: LPDL-20A-Y	Lamp Type: CLASS II	Weight(kg):
Lamp ID:	Lamp Spec: LPDL-20A-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	621	633	645	631	606	609	640	661	657	653	645	637	638	642	636	619	608	614
10.0	571	568	565	568	573	577	579	580	578	576	572	568	571	575	574	568	564	568
15.0	587	581	575	574	574	569	558	552	559	566	574	582	575	563	564	580	591	589
20.0	591	588	584	590	598	597	586	579	585	591	595	600	597	592	588	584	583	587
25.0	544	552	561	551	535	534	550	560	551	543	546	549	558	569	568	553	543	544
30.0	507	516	526	521	511	511	521	526	515	505	508	512	513	513	512	510	507	507
35.0	455	472	490	470	437	436	467	488	479	470	462	454	465	483	482	462	448	451
40.0	391	402	413	409	398	399	410	419	419	418	407	395	395	400	398	389	384	387
45.0	393	392	390	382	371	368	373	378	388	397	390	383	382	383	382	377	376	385
50.0	399	392	385	370	353	349	357	365	371	376	376	375	371	365	365	371	377	389
55.0	345	340	335	324	312	311	322	329	326	323	323	323	322	320	321	323	327	336
60.0	281	289	297	287	271	270	285	297	297	297	289	280	278	278	276	272	271	276
65.0	270	276	282	257	221	217	247	269	274	278	269	260	259	262	262	259	258	264
70.0	234	243	251	218	170	168	212	243	240	237	235	232	233	235	233	227	224	229
75.0	187	197	208	182	142	142	181	208	201	195	190	184	189	199	196	182	173	180
80.0	148	154	160	140	110	111	142	163	156	150	145	139	143	150	149	142	137	143
85.0	103	113	123	108	82.9	83.7	110	128	119	111	107	103	105	110	110	104	100	102
90.0	96.8	94.6	92.4	82.7	70.1	69.6	81.4	88.8	83.8	78.9	80.6	82.3	82.5	82.3	81.5	80.1	80.9	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)

Gama interval(Deg): 1

Temperature(Deg): 25

Tester: zxcg

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2019-11-2

Remark: