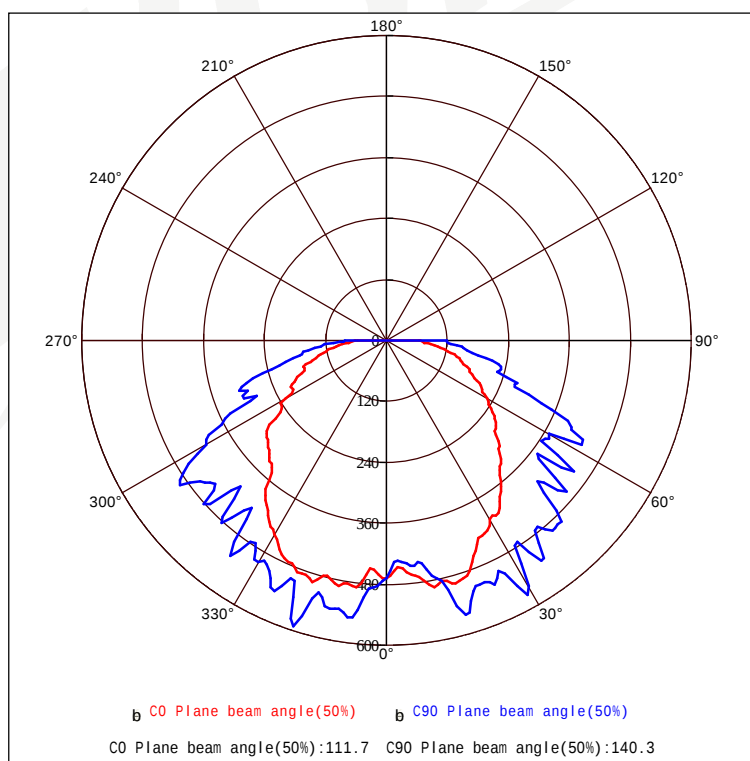


LED DOWN LIGHT

Measured Para U: 216.5V I: 135.0mA P: 19.20W PF: 0.656 Test LM: 1931.59lm						
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)	594.6	Efficiency(lm/w)	100.6
Nominal P(w)		1.0	Position	270.0,18.0	UP(C0-C180)	0.0
Rated Volt(v)		220.0	Total Flux(lm)	1931.590	Down(C0-C180)	51.4
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)	48.6

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

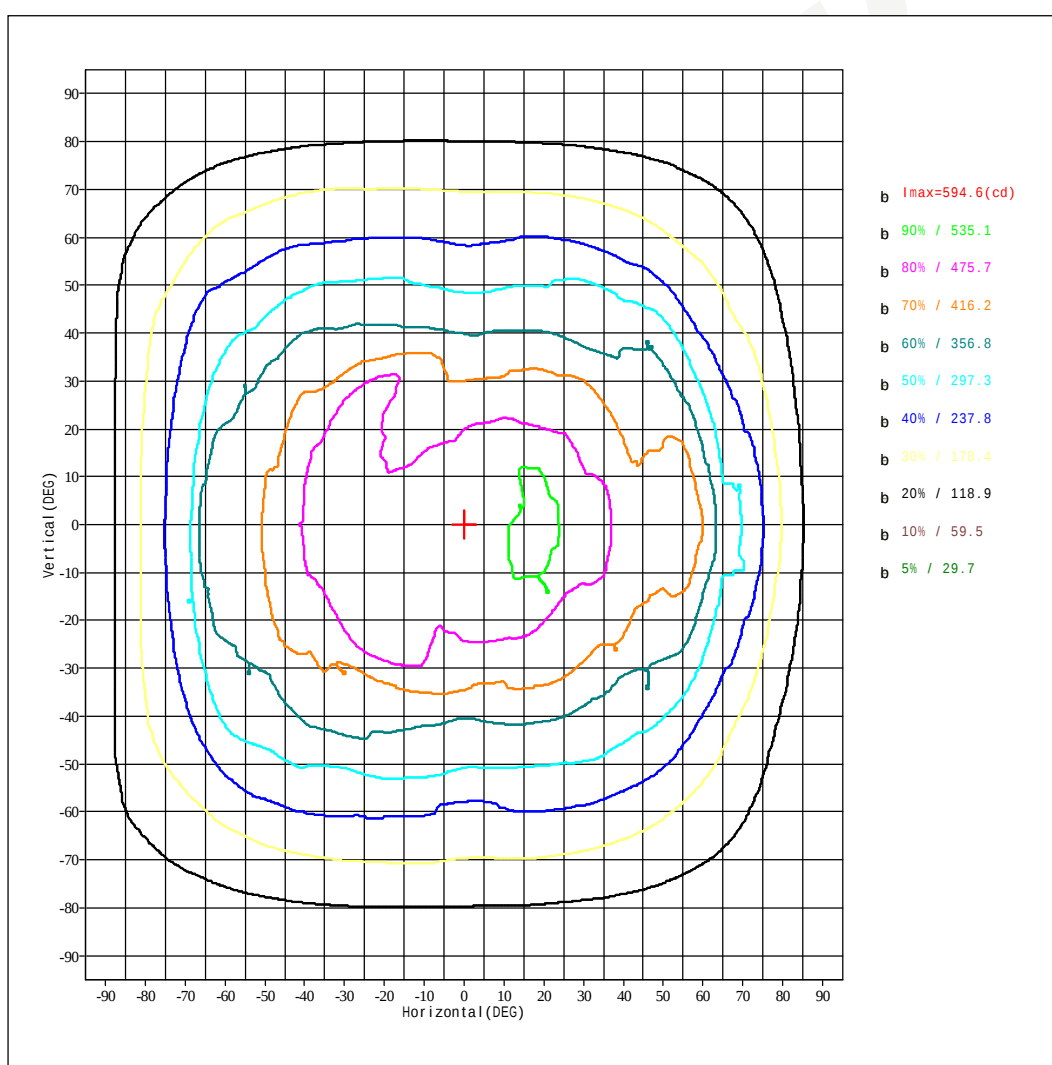
Humidity(%): 60

Date: 2019-11-2

Remark:

Measured Para U: 216.5V I: 135.0mA P: 19.20W PF: 0.656 Test LM: 1931.59lm		
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

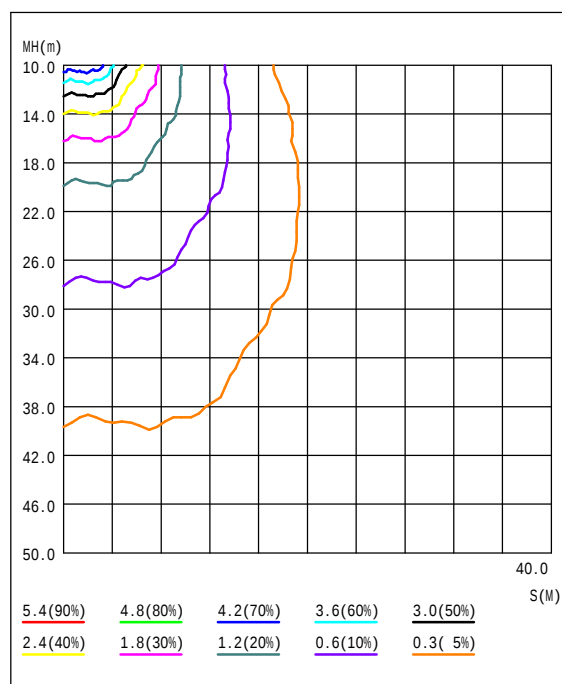
Humidity(%): 60

Date: 2019-11-2

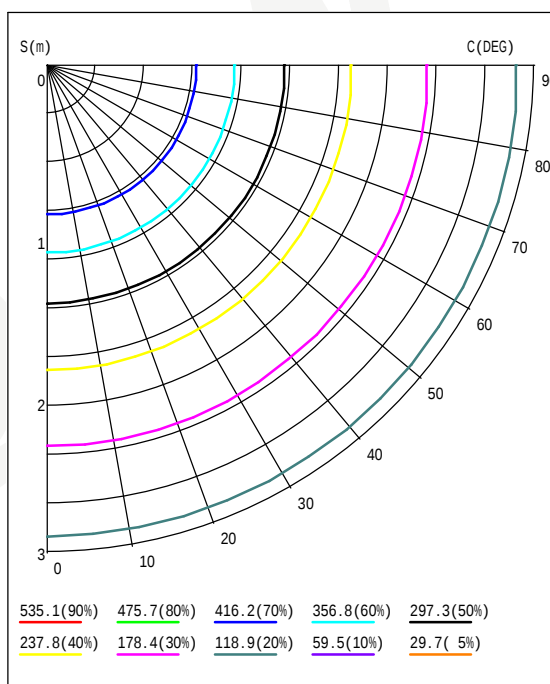
Remark:

Measured Para U: 216.5V I: 135.0mA P: 19.20W PF: 0.656 Test LM: 1931.59lm		
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: zyg

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

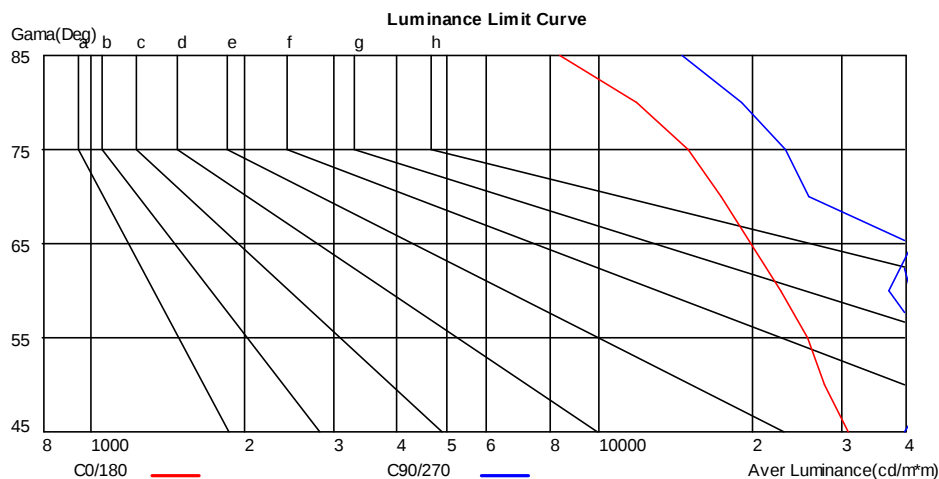
Remark:

Measured Para U: 216.5V I: 135.0mA P: 19.20W PF: 0.656 Test LM: 1931.59lm		
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	31063.1	27763.1	25650.8	22731.6	19870.0	17424.2	14978.5	11846.4	8390.5
C90	45306.8	45936.1	43437.4	37329.2	41587.4	25870.2	23309.5	19055.7	14575.1

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

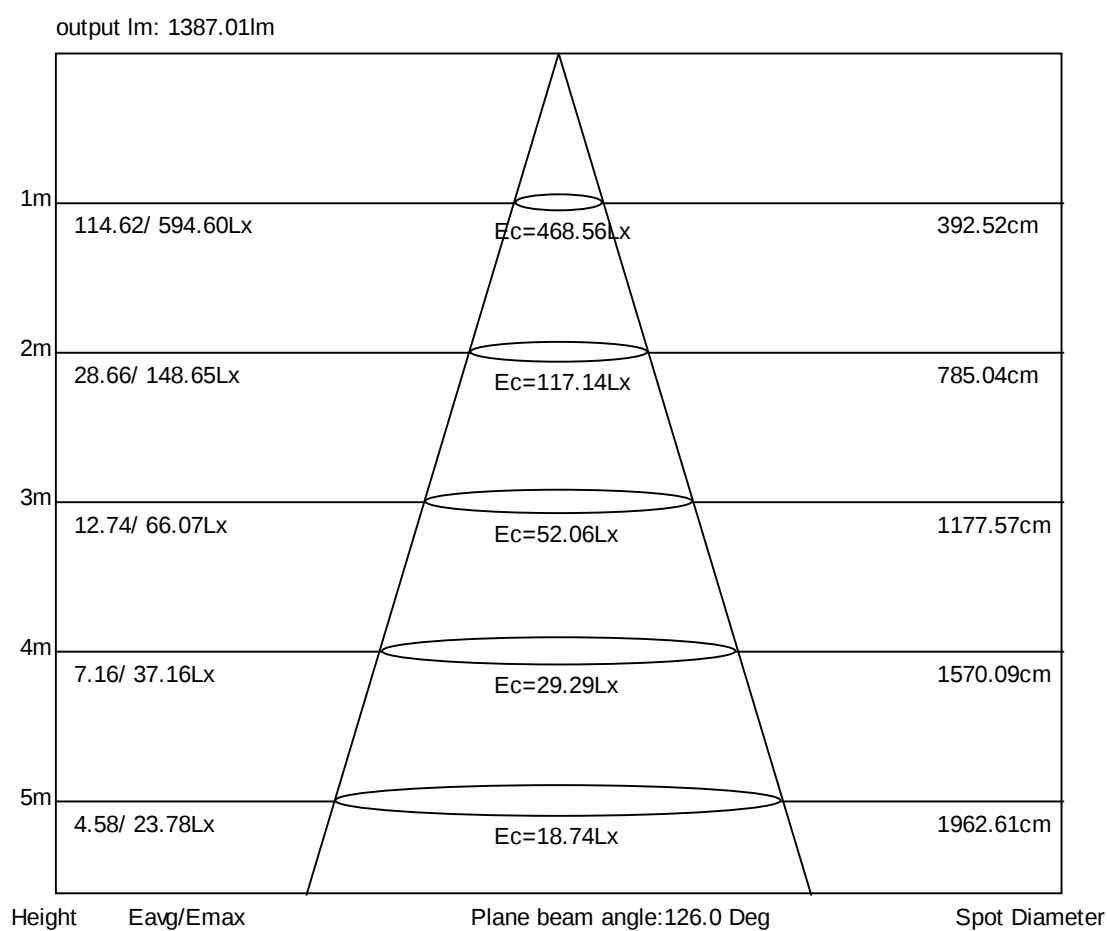
Humidity(%): 60

Date: 2019-11-2

Remark:

Measured Para U: 216.5V I: 135.0mA P: 19.20W PF: 0.656 Test LM: 1931.59lm		
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

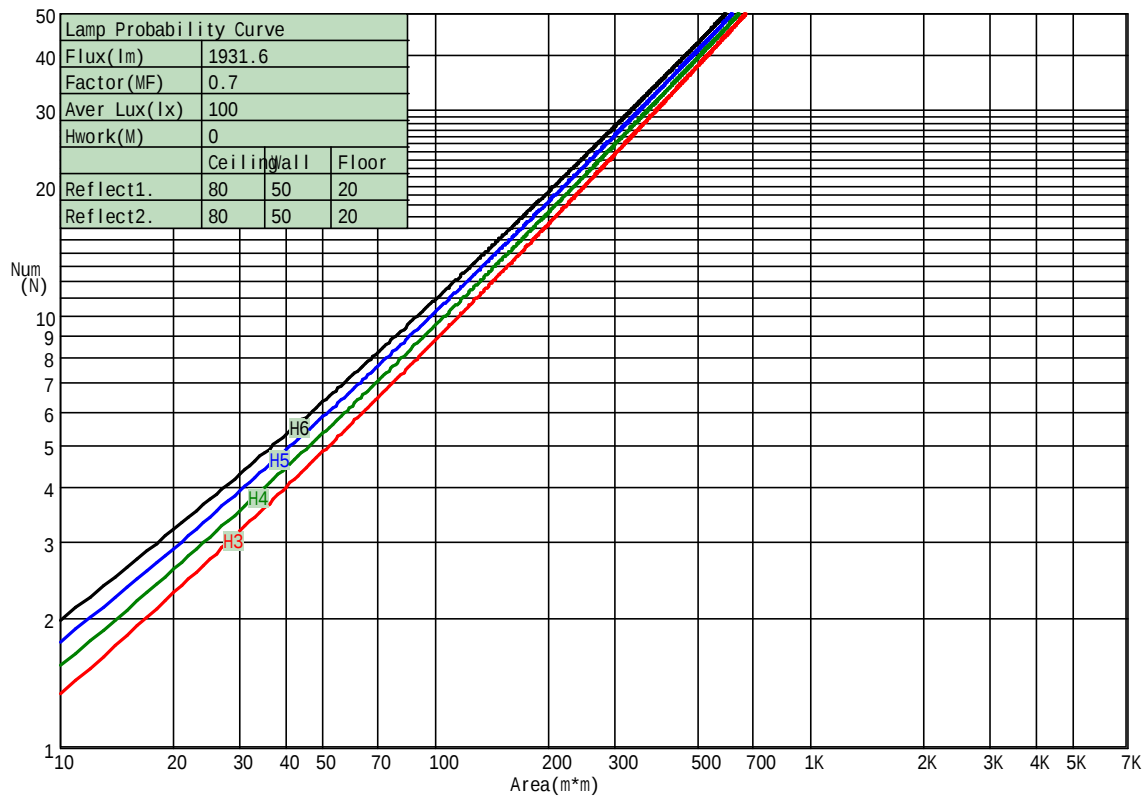
Humidity(%): 60

Date: 2019-11-2

Remark:

Measured Para U: 216.5V I: 135.0mA P: 19.20W PF: 0.656 Test LM: 1931.59lm		
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: 216.5V I: 135.0mA P: 19.20W PF: 0.656 Test LM: 1931.59lm		
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	49	33	23	47	32	23	44	31	22
0.80	54	36	25	51	35	24	47	33	24
1.00	57	39	27	54	38	26	50	35	25
1.25	60	42	28	57	40	27	52	37	26
1.50	63	44	29	59	42	28	53	38	26
2.00	66	46	31	62	44	30	55	40	27
2.50	68	48	32	64	45	30	56	41	28
3.00	69	49	32	65	47	31	57	41	28
4.00	71	51	33	67	48	32	58	42	28
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	0.95	0.9	0.98	0.93	0.88	0.93	0.89	0.85	0.89	0.86	0.83	0.86	0.83	0.8
2	0.85	0.77	0.71	0.83	0.76	0.7	0.8	0.74	0.68	0.76	0.71	0.67	0.73	0.69	0.65
3	0.74	0.65	0.57	0.72	0.64	0.57	0.69	0.62	0.56	0.66	0.6	0.55	0.64	0.58	0.54
4	0.65	0.55	0.48	0.64	0.54	0.47	0.61	0.53	0.47	0.58	0.52	0.46	0.56	0.5	0.45
5	0.58	0.48	0.4	0.56	0.47	0.4	0.54	0.46	0.4	0.52	0.45	0.39	0.5	0.44	0.39
6	0.52	0.42	0.35	0.51	0.41	0.35	0.49	0.41	0.34	0.47	0.4	0.34	0.45	0.39	0.34
7	0.47	0.37	0.31	0.46	0.37	0.3	0.44	0.36	0.3	0.43	0.35	0.3	0.41	0.35	0.3
8	0.42	0.33	0.27	0.42	0.33	0.27	0.4	0.32	0.27	0.39	0.32	0.27	0.38	0.31	0.26
9	0.39	0.3	0.24	0.38	0.3	0.24	0.37	0.29	0.24	0.36	0.29	0.24	0.35	0.28	0.24
10	0.36	0.27	0.22	0.35	0.27	0.22	0.34	0.27	0.22	0.33	0.26	0.21	0.32	0.26	0.21

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: 216.5V I: 135.0mA P: 19.20W PF: 0.656 Test LM: 1931.59lm		
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	0.38	0.22	0.07	0.38	0.22	0.07	0.36	0.21	0.07	0.35	0.2	0.07	0.34	0.2	0.06
2	0.34	0.19	0.06	0.33	0.18	0.06	0.32	0.18	0.06	0.31	0.17	0.05	0.3	0.17	0.05
3	0.3	0.16	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
4	0.27	0.14	0.04	0.27	0.14	0.04	0.26	0.14	0.04	0.25	0.13	0.04	0.24	0.13	0.04
5	0.25	0.13	0.04	0.25	0.13	0.04	0.24	0.12	0.04	0.23	0.12	0.04	0.22	0.12	0.04
6	0.23	0.12	0.03	0.23	0.11	0.03	0.22	0.11	0.03	0.21	0.11	0.03	0.2	0.11	0.03
7	0.21	0.1	0.03	0.21	0.1	0.03	0.2	0.1	0.03	0.2	0.1	0.03	0.19	0.1	0.03
8	0.2	0.1	0.03	0.19	0.1	0.03	0.19	0.09	0.03	0.18	0.09	0.03	0.18	0.09	0.03
9	0.18	0.09	0.02	0.18	0.09	0.02	0.17	0.09	0.02	0.17	0.09	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	0.19	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	0.02	0.02	0.01	0.01
4	0.16	0.1	0.05	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	0.16	0.09	0.04	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	0.08	0.04	0.01	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: 216.5V I: 135.0mA P: 19.20W PF: 0.656 Test LM: 1931.59lm		
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	462	418	444	423	472	514	520	497	0-5	11	11
10	494	441	470	462	490	524	537	540	5-10	34.4	45.5
15	499	503	560	487	485	521	512	504	10-15	59.7	105
20	475	452	514	472	489	542	516	551	15-20	84.5	190
25	428	492	508	465	470	504	530	510	20-25	104	293
30	402	470	538	553	436	436	511	454	25-30	122	415
35	383	562	540	486	405	476	524	458	30-35	139	555
40	342	448	492	412	349	432	450	454	35-40	148	703
45	311	414	453	416	326	387	402	371	40-45	151	854
50	278	400	459	429	303	333	444	350	45-50	154	1008
55	257	376	434	366	257	323	496	362	50-55	158	1166
60	227	317	373	320	219	309	404	332	55-60	155	1321
65	199	294	416	327	203	258	319	260	60-65	147	1468
70	174	272	259	291	169	208	302	205	65-70	130	1598
75	150	239	233	225	149	166	241	175	70-75	113	1711
80	118	181	191	185	118	123	168	141	75-80	93.7	1805
85	83.9	149	146	157	83	89.5	128	95.7	80-85	73	1878
90	63.8	111	120	120	56.9	69.8	82	71.5	85-90	54	1932
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: 216.5V I: 135.0mA P: 19.20W PF: 0.656 Test LM: 1931.59lm		
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	462	443	423	427	439	440	430	429	451	472	490	509	516	519	515	505	493	477
10.0	494	471	447	451	463	468	465	465	478	490	505	521	528	534	537	539	535	514
15.0	499	501	503	522	547	544	511	487	486	485	501	517	518	514	510	507	503	501
20.0	475	465	454	472	500	505	486	474	482	489	513	537	534	522	524	540	543	508
25.0	428	456	485	497	504	499	479	466	468	470	485	500	513	524	525	517	501	464
30.0	402	432	462	492	523	541	548	540	487	436	436	436	460	495	499	473	448	425
35.0	383	461	543	555	545	528	504	477	440	405	436	468	492	513	509	479	449	415
40.0	342	388	436	463	483	475	438	405	377	349	385	423	438	446	451	453	441	391
45.0	311	356	403	427	444	445	428	406	365	326	353	381	392	399	396	381	365	337
50.0	278	331	386	419	446	453	439	415	358	303	316	329	369	419	423	381	342	309
55.0	257	309	363	395	422	419	388	354	305	257	286	316	380	458	467	406	351	303
60.0	227	267	308	336	361	362	338	309	263	219	259	300	340	383	388	356	321	273
65.0	199	240	283	334	389	396	356	313	257	203	227	252	278	306	306	279	253	225
70.0	174	217	261	268	262	266	280	277	222	169	186	203	239	281	281	237	201	188
75.0	150	189	229	237	234	231	228	217	182	149	157	165	191	225	227	196	172	161
80.0	118	146	174	184	188	189	187	178	147	118	121	123	138	158	162	150	139	129
85.0	83.9	112	142	148	146	148	153	149	115	83	85.8	88.8	102	119	121	106	94.4	89.1
90.0	63.8	84.7	106	114	118	120	120	113	84.4	56.9	62.6	68.4	73.8	79.3	79.7	74.9	70.7	67.2
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: