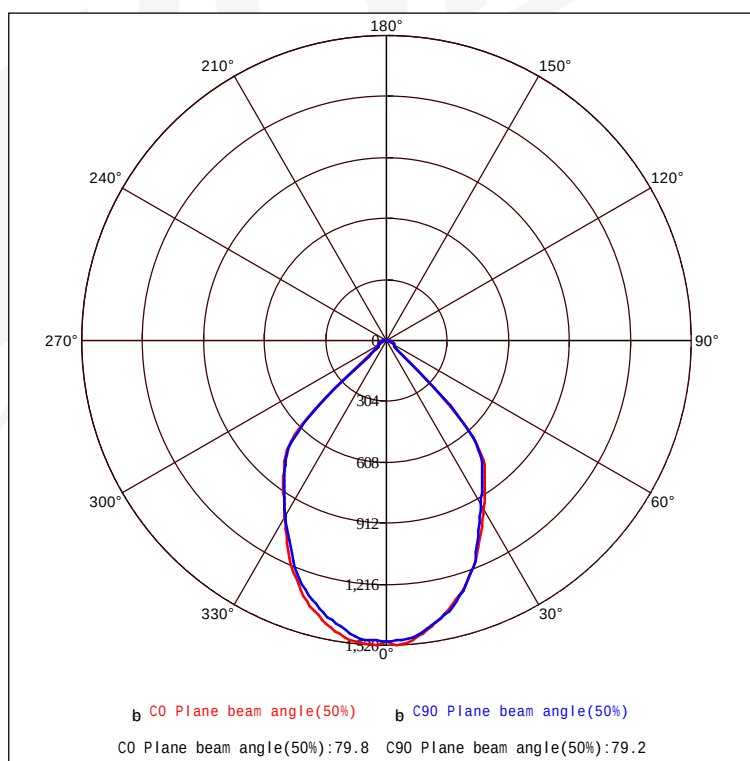


LED DOWN LIGHT

Measured Para U: 216.8V I: 137.0mA P: 19.70W PF: 0.665 Test LM: 1948.56lm						
Lamp Name: LPDL-20A-Y			Lamp Type:		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)	1520.0	Efficiency(lm/w)	98.9
Nominal P(w)		1.0	Position	0.0,1.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	1948.562	Down(C0-C180)	50.4
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)	49.6

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

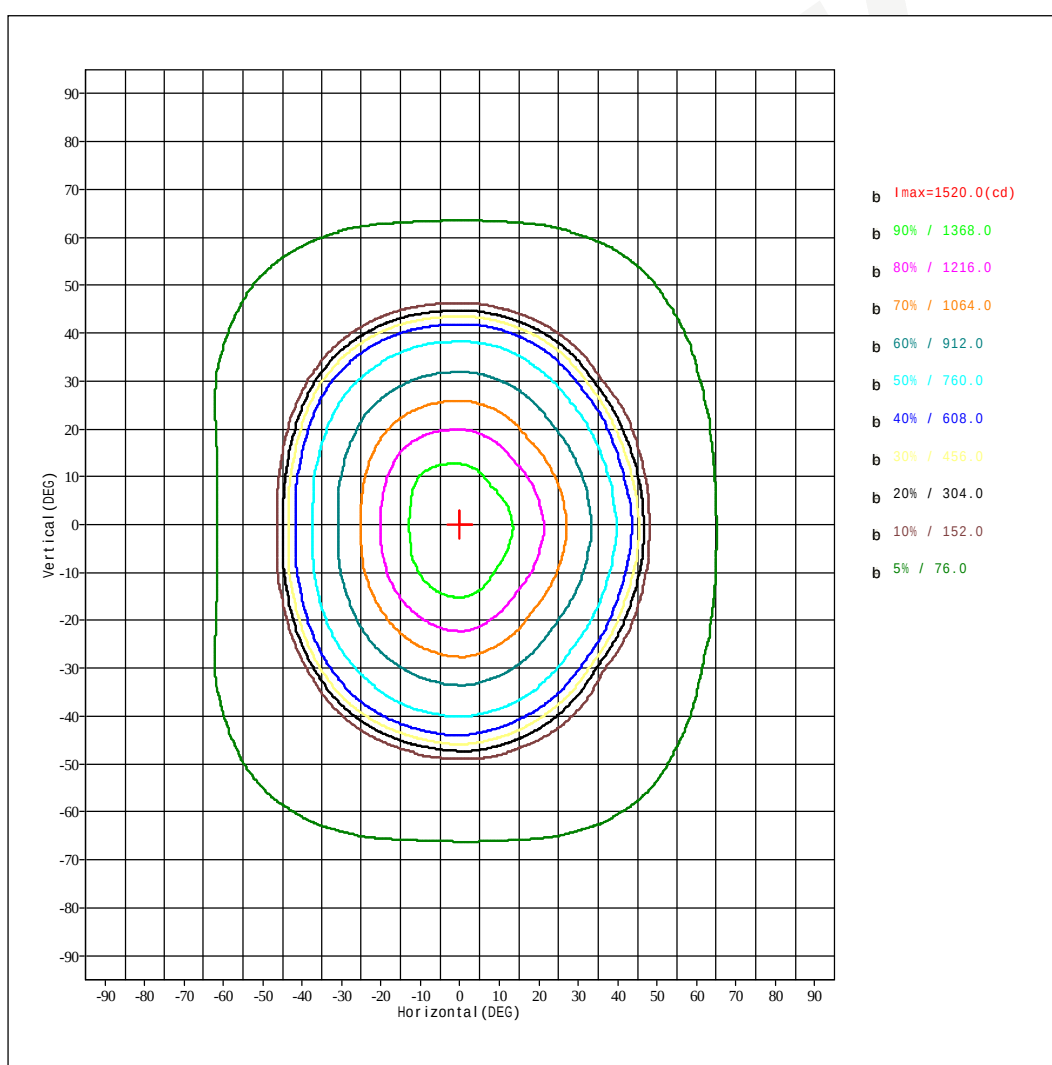
Humidity(%): 60

Date: 2022-5-18

Remark:

Measured Para U: 216.8V I: 137.0mA P: 19.70W PF: 0.665 Test LM: 1948.56lm		
Lamp Name: LPDL-20A-Y	Lamp Type:	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): 30

Tester: zyg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

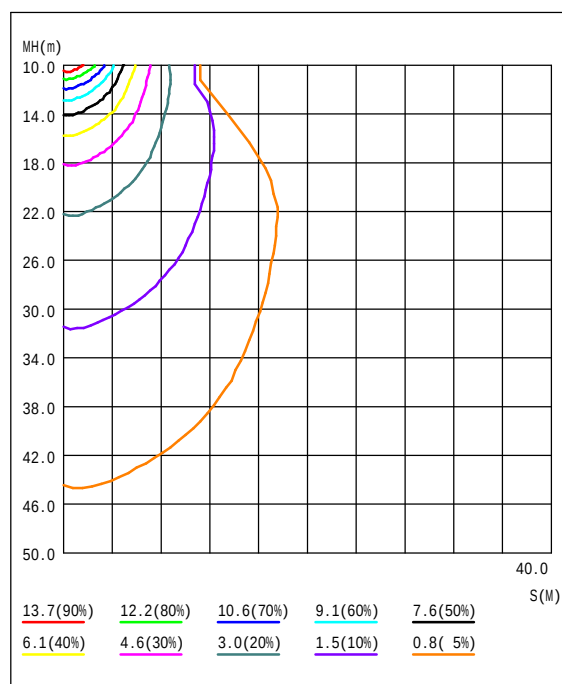
Humidity(%): 60

Date: 2022-5-18

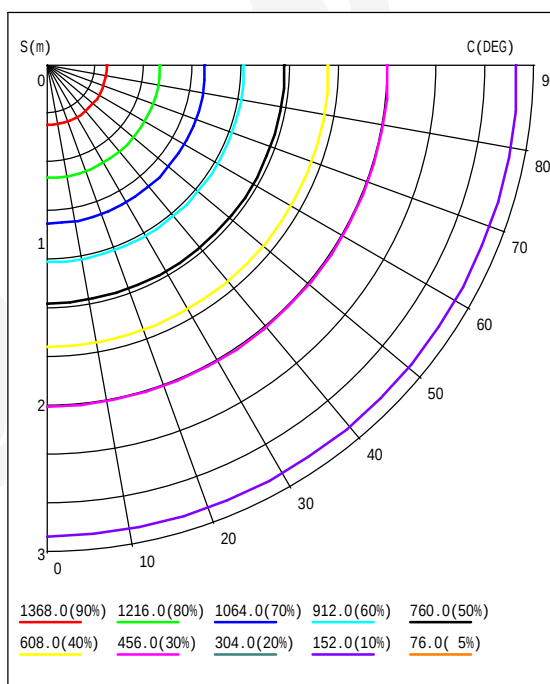
Remark:

Measured Para U: 216.8V I: 137.0mA P: 19.70W PF: 0.665 Test LM: 1948.56lm		
Lamp Name: LPDL-20A-Y	Lamp Type:	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): 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: 2022-5-18

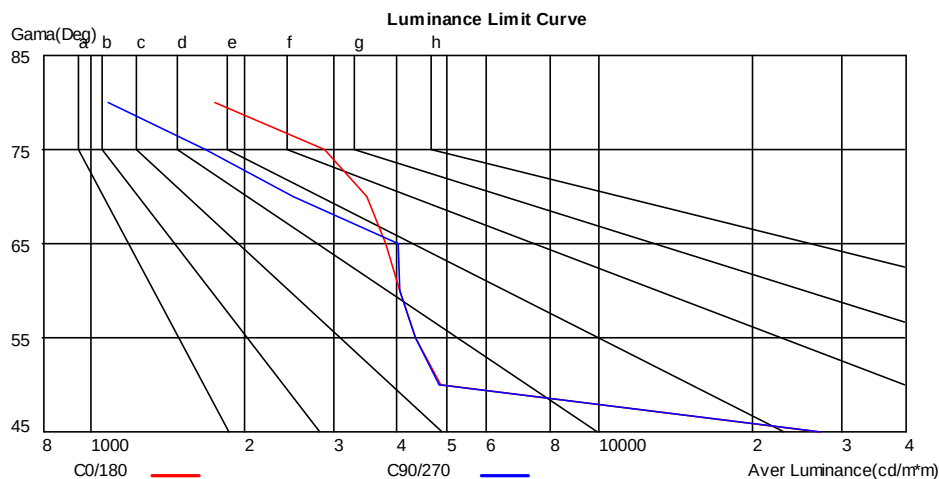
Remark:

Measured Para U: 216.8V I: 137.0mA P: 19.70W PF: 0.665 Test LM: 1948.56lm		
Lamp Name: LPDL-20A-Y	Lamp Type:	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/m²m)									
Gm(Deg)	45	50	55	60	65	70	75	80	85
C0	27103.5	4873.0	4359.8	4047.8	3807.5	3495.5	2882.0	1748.8	752.0
C90	27158.2	4852.0	4357.3	4053.3	4014.0	2489.5	1678.0	1077.8	499.0

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: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

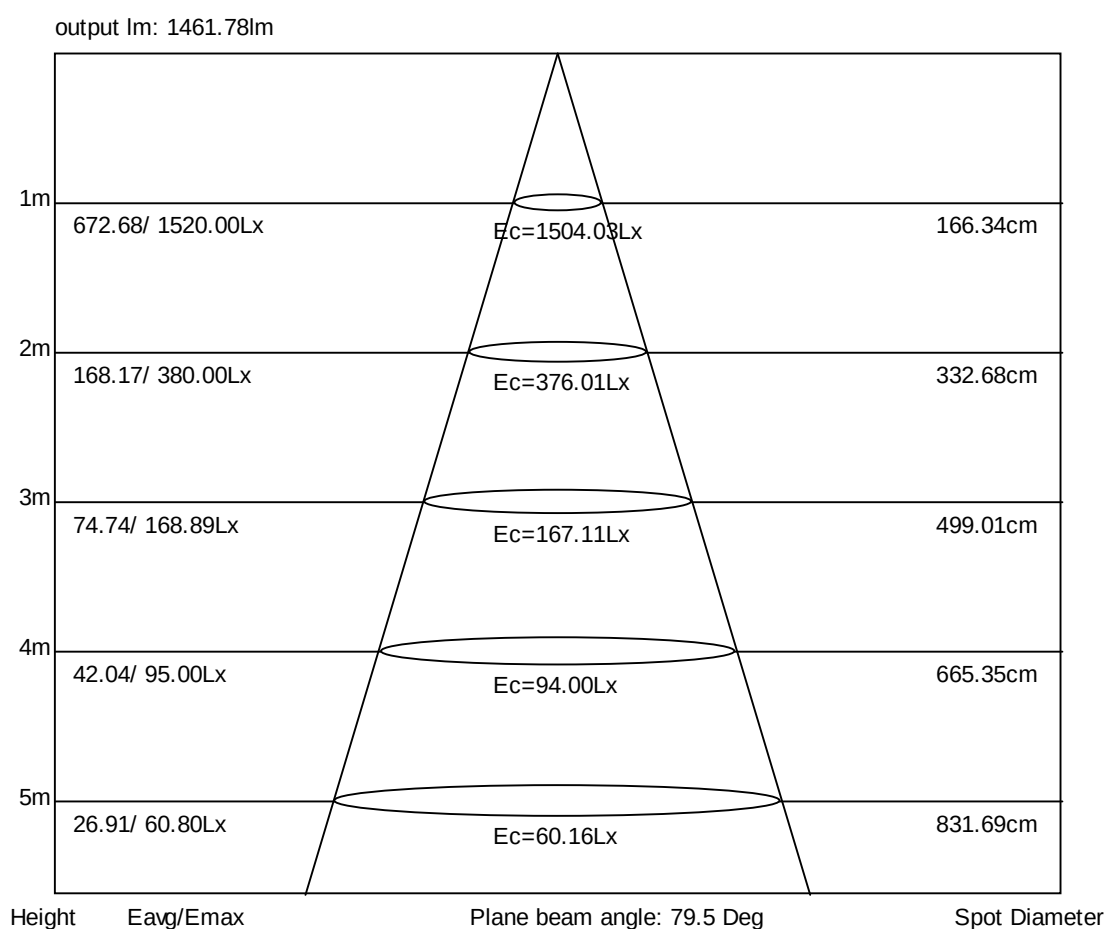
Humidity(%): 60

Date: 2022-5-18

Remark:

Measured Para U: 216.8V I: 137.0mA P: 19.70W PF: 0.665 Test LM: 1948.56lm		
Lamp Name: LPDL-20A-Y	Lamp Type:	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): 30

Tester: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

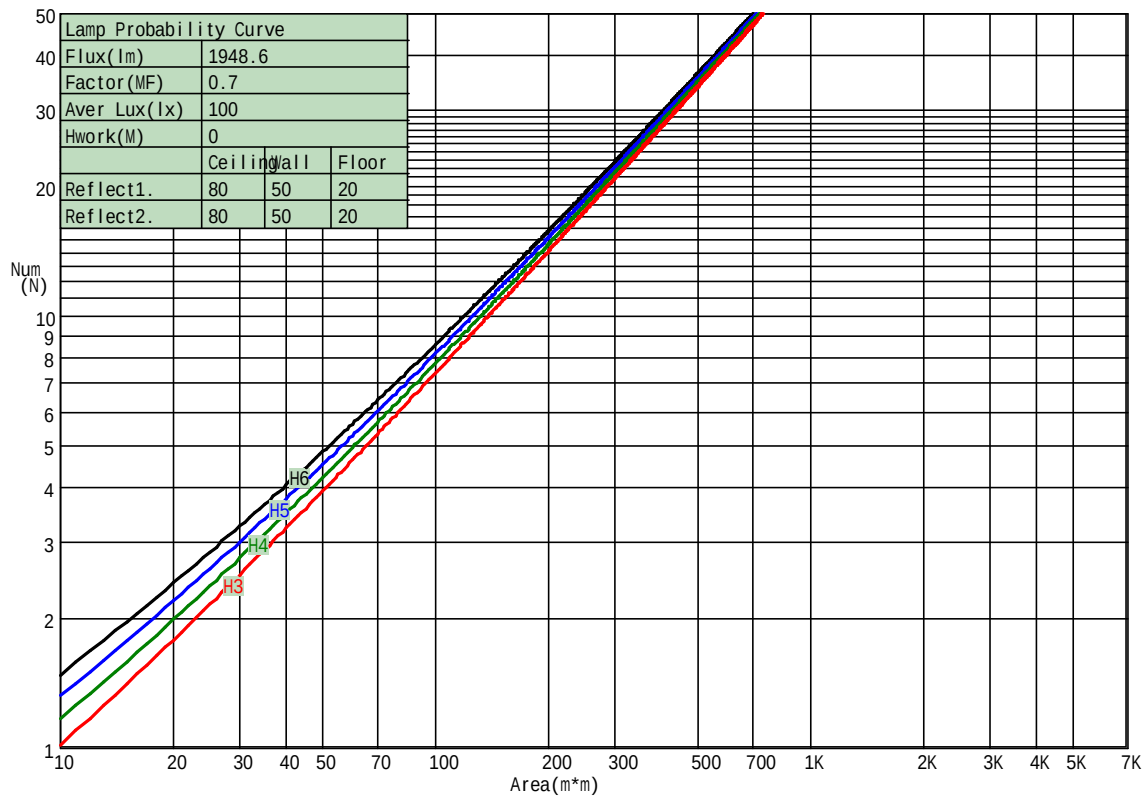
Humidity(%): 60

Date: 2022-5-18

Remark:

Measured Para U: 216.8V I: 137.0mA P: 19.70W PF: 0.665 Test LM: 1948.56lm		
Lamp Name: LPDL-20A-Y	Lamp Type:	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): 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: 2022-5-18

Remark:

Measured Para U: 216.8V I: 137.0mA P: 19.70W PF: 0.665 Test LM: 1948.56lm		
Lamp Name: LPDL-20A-Y	Lamp Type:	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	61	47	39	59	47	39	56	45	38
0.80	61	46	36	59	45	35	55	43	34
1.00	62	46	34	60	45	34	55	42	32
1.25	63	46	32	60	44	32	55	41	30
1.50	64	46	32	61	44	31	55	40	29
2.00	67	47	32	63	45	31	56	41	28
2.50	68	48	31	64	45	30	56	41	28
3.00	69	49	32	65	46	30	57	41	28
4.00	71	51	33	66	48	31	58	42	28
5.00	72	52	34	67	49	32	58	43	28

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	1.09	1.06	1.03	1.07	1.04	1.02	1.03	1.01	0.99	0.99	0.97	0.96	0.95	0.94	0.93
2	1	0.95	0.91	0.98	0.94	0.9	0.95	0.91	0.88	0.92	0.89	0.86	0.89	0.86	0.84
3	0.92	0.86	0.81	0.9	0.85	0.8	0.87	0.83	0.79	0.85	0.81	0.78	0.83	0.79	0.77
4	0.84	0.78	0.73	0.83	0.77	0.72	0.81	0.76	0.72	0.79	0.74	0.71	0.77	0.73	0.7
5	0.78	0.71	0.66	0.77	0.7	0.66	0.75	0.69	0.65	0.73	0.68	0.65	0.72	0.67	0.64
6	0.72	0.65	0.6	0.71	0.65	0.6	0.7	0.64	0.6	0.68	0.63	0.59	0.67	0.62	0.59
7	0.67	0.6	0.55	0.66	0.6	0.55	0.65	0.59	0.55	0.63	0.58	0.54	0.62	0.58	0.54
8	0.62	0.55	0.51	0.62	0.55	0.51	0.6	0.55	0.5	0.59	0.54	0.5	0.58	0.53	0.5
9	0.58	0.51	0.47	0.58	0.51	0.47	0.56	0.51	0.47	0.56	0.5	0.46	0.55	0.5	0.46
10	0.54	0.48	0.43	0.54	0.48	0.43	0.53	0.47	0.43	0.52	0.47	0.43	0.51	0.46	0.43

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: 2022-5-18

Remark:

Measured Para U: 216.8V I: 137.0mA P: 19.70W PF: 0.665 Test LM: 1948.56lm		
Lamp Name: LPDL-20A-Y	Lamp Type:	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	0.21	0.12	0.04	0.2	0.12	0.04	0.19	0.11	0.04	0.18	0.1	0.03	0.17	0.1	0.03
2	0.2	0.11	0.03	0.2	0.11	0.03	0.19	0.1	0.03	0.18	0.1	0.03	0.17	0.09	0.03
3	0.19	0.1	0.03	0.19	0.1	0.03	0.18	0.1	0.03	0.17	0.09	0.03	0.16	0.09	0.03
4	0.18	0.09	0.03	0.18	0.09	0.03	0.17	0.09	0.03	0.16	0.09	0.03	0.15	0.08	0.03
5	0.17	0.09	0.03	0.17	0.09	0.03	0.16	0.08	0.02	0.15	0.08	0.02	0.15	0.08	0.02
6	0.16	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	0.15	0.08	0.02	0.14	0.07	0.02
7	0.16	0.08	0.02	0.15	0.08	0.02	0.15	0.07	0.02	0.14	0.07	0.02	0.14	0.07	0.02
8	0.15	0.07	0.02	0.15	0.07	0.02	0.14	0.07	0.02	0.14	0.07	0.02	0.13	0.07	0.02
9	0.14	0.07	0.02	0.14	0.07	0.02	0.13	0.07	0.02	0.13	0.07	0.02	0.13	0.06	0.02
10	0.13	0.06	0.02	0.13	0.06	0.02	0.13	0.06	0.02	0.12	0.06	0.02	0.12	0.06	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	0.17	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	0.16	0.13	0.11	0.14	0.11	0.09	0.09	0.08	0.07	0.05	0.05	0.04	0.02	0.01	0.01
3	0.15	0.11	0.09	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	0.14	0.1	0.07	0.12	0.09	0.06	0.08	0.06	0.04	0.05	0.04	0.02	0.02	0.01	0.01
5	0.13	0.09	0.06	0.11	0.08	0.05	0.08	0.05	0.03	0.05	0.03	0.02	0.01	0.01	0.01
6	0.13	0.08	0.05	0.11	0.07	0.04	0.07	0.05	0.03	0.04	0.03	0.02	0.01	0.01	0.01
7	0.12	0.07	0.04	0.1	0.06	0.03	0.07	0.04	0.02	0.04	0.03	0.01	0.01	0.01	0
8	0.11	0.07	0.03	0.1	0.06	0.03	0.07	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0
9	0.11	0.06	0.03	0.09	0.05	0.03	0.06	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0
10	0.1	0.06	0.03	0.09	0.05	0.02	0.06	0.03	0.02	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: 2022-5-18

Remark:

Measured Para U: 216.8V I: 137.0mA P: 19.70W PF: 0.665 Test LM: 1948.56lm		
Lamp Name: LPDL-20A-Y	Lamp Type:	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	1493	1496	1482	1487	1512	1482	1489	1455	0-5	35.8	35.8
10	1420	1442	1420	1439	1468	1416	1430	1387	5-10	104	140
15	1333	1362	1338	1365	1388	1331	1353	1299	10-15	164	304
20	1220	1253	1220	1255	1279	1216	1256	1188	15-20	213	517
25	1084	1112	1067	1109	1141	1073	1122	1054	20-25	245	762
30	959	975	929	967	1002	939	998	932	25-30	260	1021
35	846	855	823	852	883	825	876	820	30-35	266	1287
40	714	747	693	750	779	687	770	670	35-40	264	1551
45	271	434	272	463	551	223	531	184	40-45	217	1768
50	48.7	55.2	48.5	56.7	74.6	46.2	62.7	46.2	45-50	64.4	1832
55	43.6	45	43.6	44.3	45.5	41.4	43.6	41.4	50-55	20.4	1853
60	40.5	41.3	40.5	40.7	41.4	38.9	39.7	38.8	55-60	19.3	1872
65	38.1	38.9	40.1	38.3	39.2	36.7	37.6	36.7	60-65	19	1891
70	35	36.1	24.9	35.5	36.9	33.8	35.5	33.6	65-70	18.4	1909
75	28.8	31.1	16.8	30.9	33	27.3	32	26.8	70-75	16.4	1926
80	17.5	20.1	10.8	20.4	23.8	16.4	23.7	15.7	75-80	12.6	1938
85	7.52	9.89	4.99	10.3	13.1	6.85	12.9	6.21	80-85	7.39	1946
90	2.85	2.87	2.73	2.8	3.46	3.56	3.85	3.09	85-90	3	1949
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: 2022-5-18

Remark:

Measured Para U: 216.8V I: 137.0mA P: 19.70W PF: 0.665 Test LM: 1948.56lm		
Lamp Name: LPDL-20A-Y	Lamp Type:	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	1493	1494	1496	1492	1485	1483	1485	1490	1501	1512	1499	1485	1484	1487	1482	1466	1459	1476
10.0	1420	1430	1440	1435	1424	1424	1433	1442	1455	1468	1445	1421	1420	1427	1420	1401	1391	1406
15.0	1333	1346	1359	1354	1343	1344	1356	1367	1378	1388	1363	1338	1338	1348	1341	1317	1303	1318
20.0	1220	1234	1249	1242	1227	1227	1243	1257	1269	1279	1252	1223	1229	1247	1241	1210	1192	1206
25.0	1084	1096	1109	1098	1077	1077	1096	1113	1127	1141	1111	1080	1089	1111	1107	1076	1057	1071
30.0	959	966	973	960	939	938	955	971	987	1002	975	946	959	985	983	954	935	947
35.0	846	850	854	845	830	829	843	856	870	883	858	831	842	865	864	838	822	834
40.0	714	728	743	729	705	705	731	753	766	779	739	697	714	752	748	703	675	695
45.0	271	343	417	381	307	314	400	473	512	551	407	259	324	464	455	298	194	233
50.0	48.7	51.5	54.5	53	50	50.3	54	58.6	66.7	74.6	62.1	49.3	51.6	59.1	59.1	51.6	46.5	47.6
55.0	43.6	44.2	44.8	44.5	43.9	43.7	44	44.4	44.9	45.5	43.7	41.9	42.1	43.1	43.1	42.1	41.6	42.6
60.0	40.5	40.9	41.2	41.1	40.7	40.6	40.6	40.8	41.1	41.4	40.3	39.2	39.2	39.6	39.5	39.1	39	39.8
65.0	38.1	38.4	38.8	39.3	39.9	39.7	38.9	38.4	38.8	39.2	38.1	37	37	37.4	37.4	37	36.8	37.5
70.0	35	35.5	36	32.4	27.3	27.2	32	35.7	36.3	36.9	35.5	34.1	34.3	35.1	35.1	34.2	33.7	34.3
75.0	28.8	29.8	30.9	26.4	19.9	19.9	26.2	31.1	32.1	33	30.5	27.9	28.9	31	30.9	28.5	27	27.9
80.0	17.5	18.6	19.8	17.1	12.8	12.9	17.2	20.7	22.3	23.8	20.6	17.2	18.8	22.1	21.9	18.3	15.9	16.7
85.0	7.52	8.55	9.63	8.28	6.06	6.14	8.53	10.6	11.8	13.1	10.3	7.53	8.83	11.6	11.4	8.4	6.35	6.95
90.0	2.85	2.86	2.87	2.82	2.76	2.75	2.78	2.87	3.17	3.46	3.5	3.54	3.65	3.78	3.68	3.33	3.06	2.95
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: 2022-5-18

Remark: