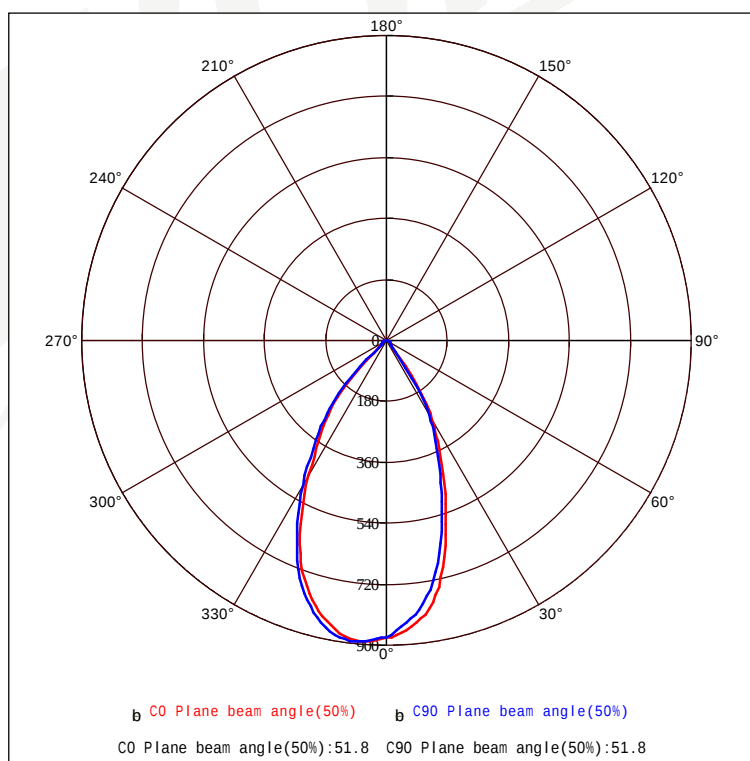


LED CEILING LIGHT

Measured Para U: 216.3V I: 89.0mA P: 11.00W PF: 0.571 Test LM: 702.04lm						
Lamp Name: LP-COB12F01-Y1			Lamp Type:		Weight(kg):	
Lamp ID: LP-COB12F01-Y1			Lamp Spec:		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model			Peak Value(cd)	911.1	Efficiency(lm/w)	63.8
Nominal P(w)		1.0	Position	225.0,3.0	UP(C0-C180)	0.0
Rated Volt(v)		220.0	Total Flux(lm)	702.035	Down(C0-C180)	45.8
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)	54.2

Planar Intensity Distribution Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

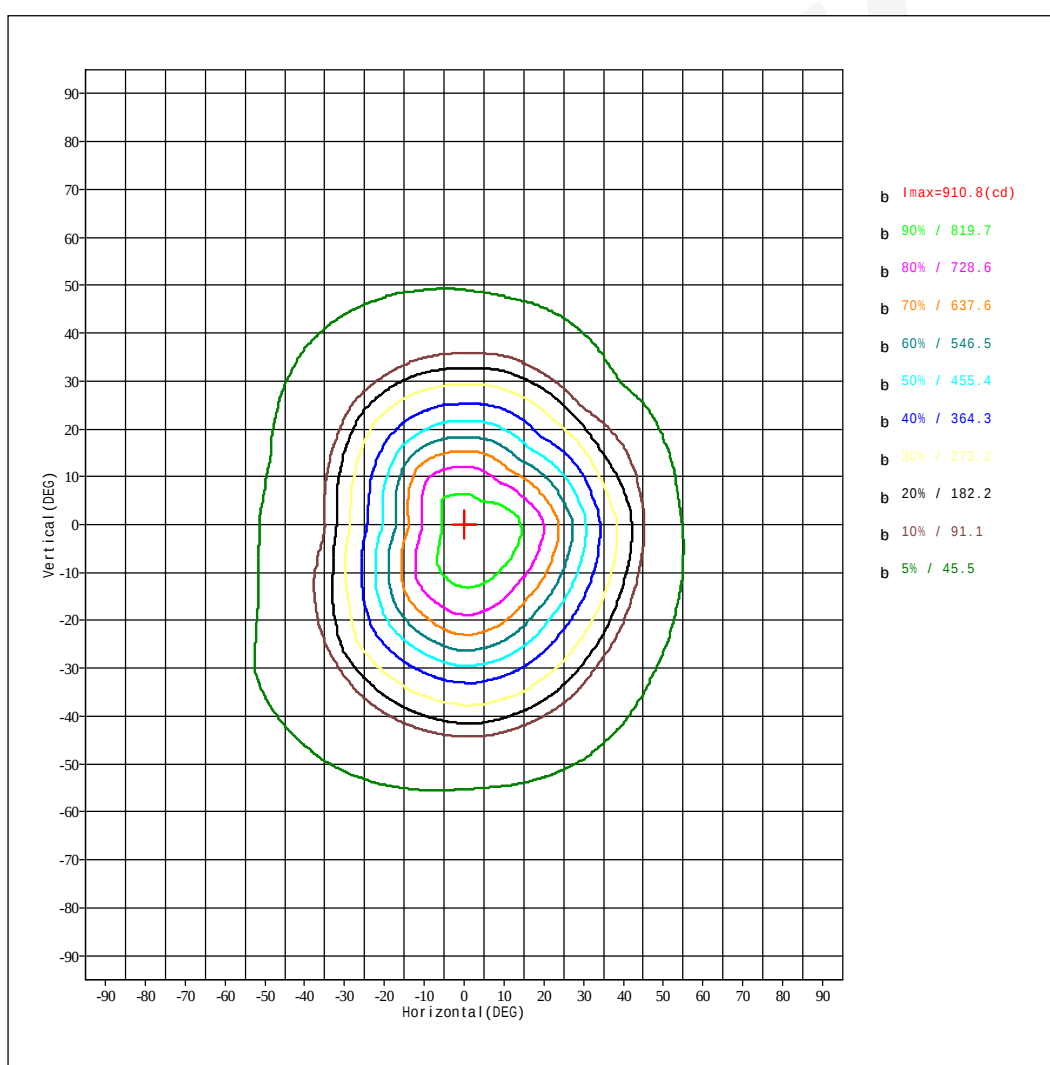
Humidity(%): 60

Date: 2018-8-13

Remark:

Measured Para U: 216.3V I: 89.0mA P: 11.00W PF: 0.571 Test LM: 702.04lm		
Lamp Name: LP-COB12F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB12F01-Y1	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: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

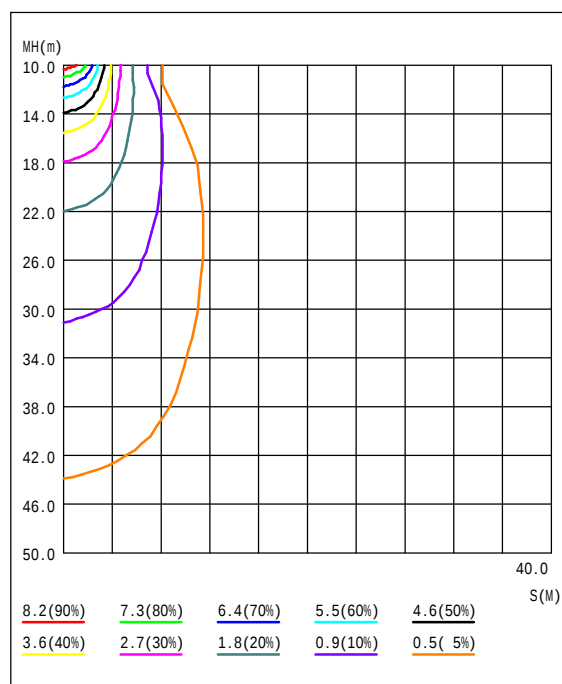
Humidity(%): 60

Date: 2018-8-13

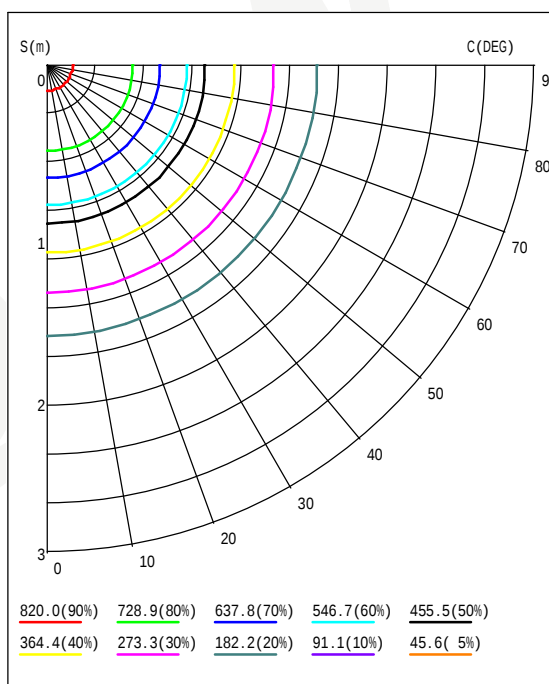
Remark:

Measured Para U: 216.3V I: 89.0mA P: 11.00W PF: 0.571 Test LM: 702.04lm		
Lamp Name: LP-COB12F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB12F01-Y1	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: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2018-8-13

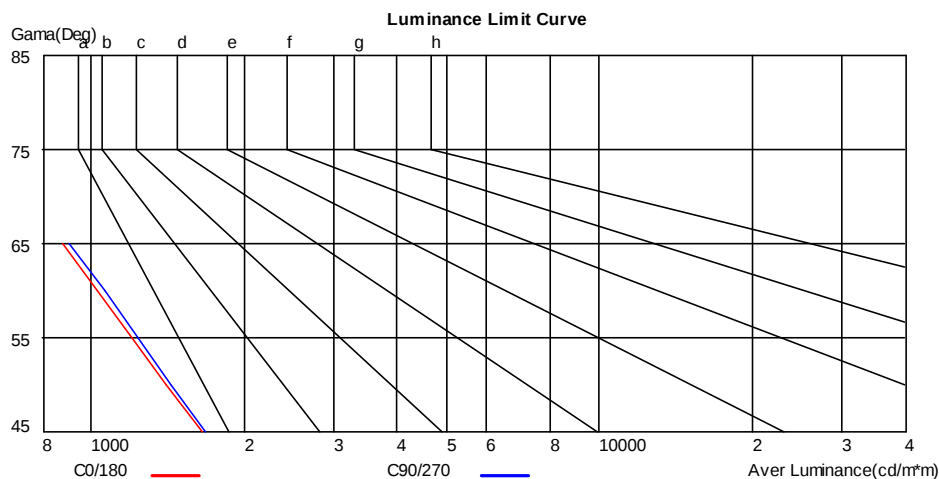
Remark:

Measured Para U: 216.3V I: 89.0mA P: 11.00W PF: 0.571 Test LM: 702.04lm		
Lamp Name: LP-COB12F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB12F01-Y1	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	1652.0	1401.1	1198.6	1023.7	876.2	744.8	600.3	446.4	304.4
C90	1677.5	1437.1	1237.6	1061.7	903.7	576.8	395.9	329.9	273.4

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): 30

Tester: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

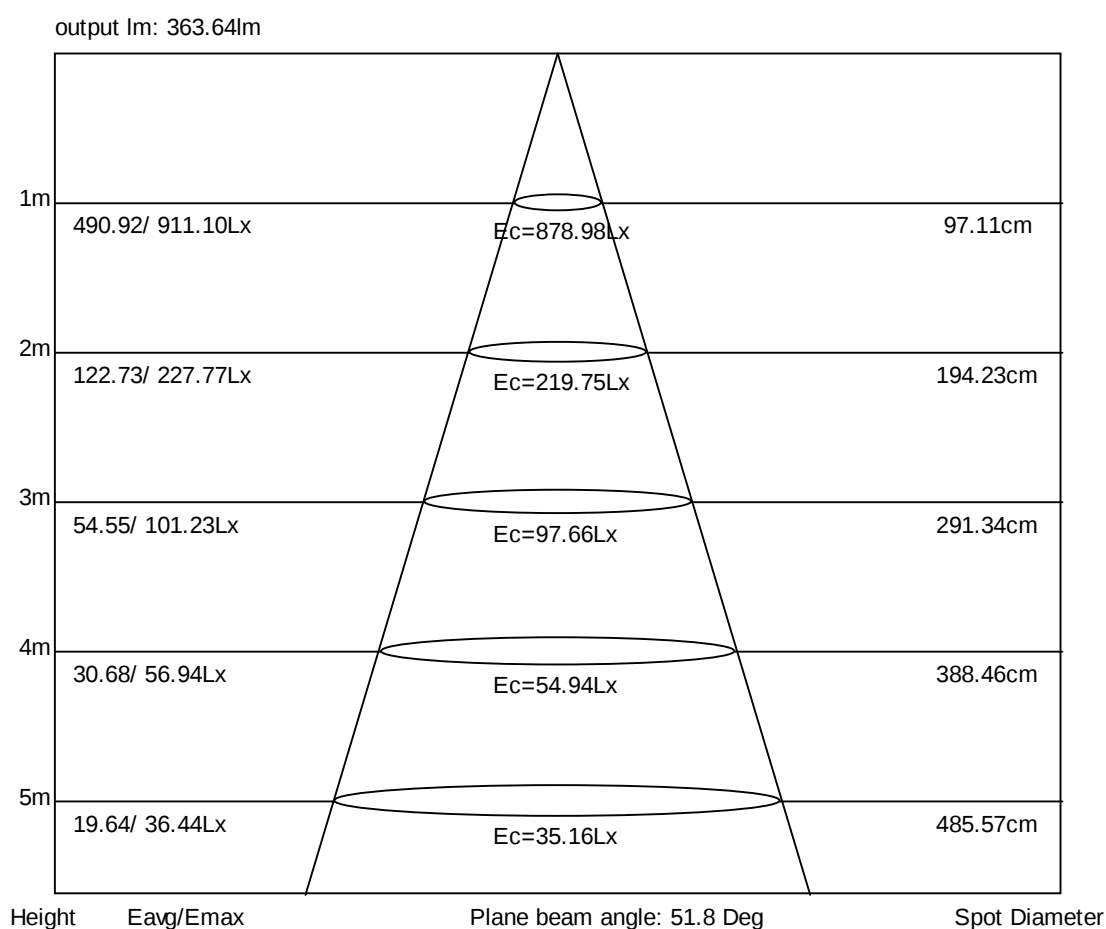
Humidity(%): 60

Date: 2018-8-13

Remark:

Measured Para U: 216.3V I: 89.0mA P: 11.00W PF: 0.571 Test LM: 702.04lm		
Lamp Name: LP-COB12F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB12F01-Y1	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: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

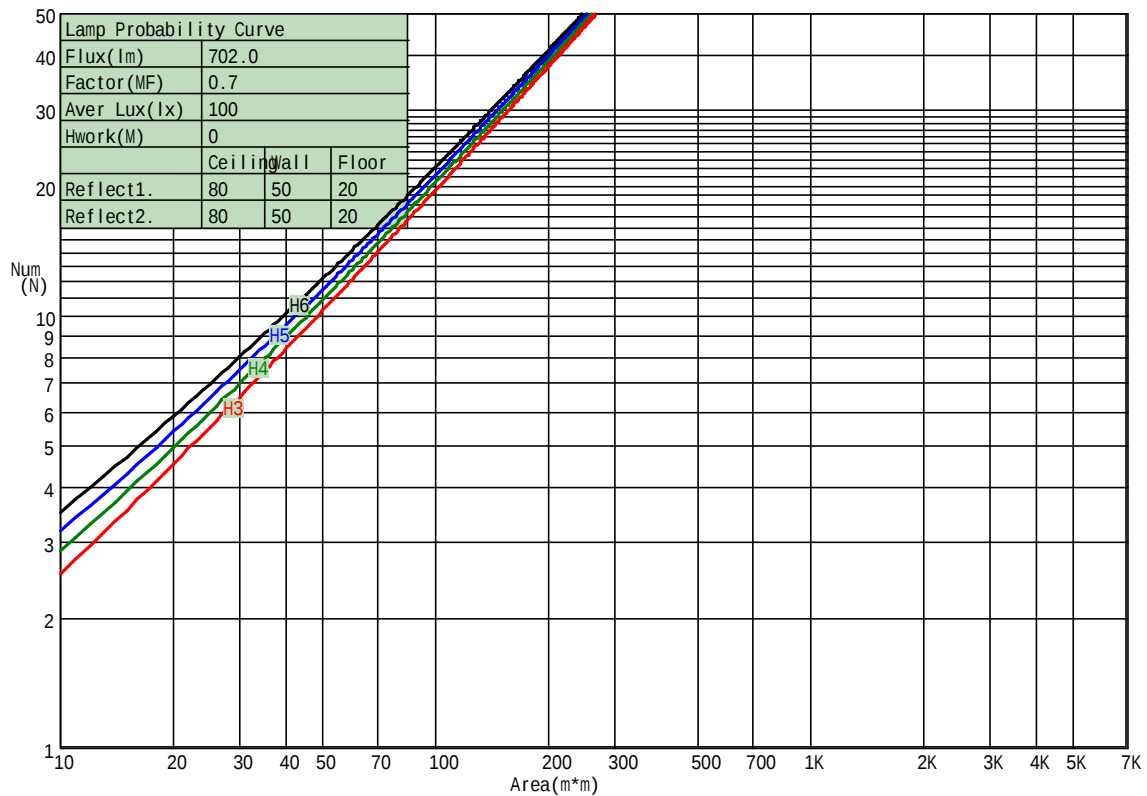
Humidity(%): 60

Date: 2018-8-13

Remark:

Measured Para U: 216.3V I: 89.0mA P: 11.00W PF: 0.571 Test LM: 702.04lm		
Lamp Name: LP-COB12F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB12F01-Y1	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: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2018-8-13

Remark:

Measured Para U: 216.3V I: 89.0mA P: 11.00W PF: 0.571 Test LM: 702.04lm		
Lamp Name: LP-COB12F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB12F01-Y1	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	41	23	13	39	23	12	35	21	12
0.80	46	27	15	44	26	14	39	24	13
1.00	50	30	16	47	29	16	42	26	15
1.25	54	33	18	51	32	17	45	28	16
1.50	57	36	20	53	34	19	47	30	17
2.00	61	39	22	57	37	21	49	32	19
2.50	63	41	23	59	39	22	51	34	19
3.00	65	43	24	60	40	23	52	35	20
4.00	67	45	26	62	42	24	53	36	21
5.00	68	47	27	63	43	25	54	37	22

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	1.1	1.08	1.05	1.08	1.06	1.04	1.04	1.02	1	1	0.99	0.97	0.97	0.96	0.94
2	1.02	0.98	0.95	1.01	0.97	0.93	0.97	0.94	0.91	0.94	0.92	0.89	0.91	0.89	0.88
3	0.95	0.9	0.86	0.94	0.89	0.85	0.91	0.87	0.84	0.89	0.85	0.83	0.86	0.84	0.81
4	0.89	0.83	0.79	0.88	0.83	0.79	0.86	0.81	0.78	0.84	0.8	0.77	0.82	0.78	0.76
5	0.83	0.77	0.73	0.82	0.77	0.73	0.81	0.76	0.72	0.79	0.75	0.71	0.77	0.74	0.71
6	0.78	0.72	0.68	0.77	0.72	0.68	0.76	0.71	0.67	0.75	0.7	0.67	0.73	0.69	0.66
7	0.74	0.68	0.63	0.73	0.67	0.63	0.72	0.67	0.63	0.71	0.66	0.63	0.69	0.65	0.62
8	0.7	0.64	0.59	0.69	0.63	0.59	0.68	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.58
9	0.66	0.6	0.56	0.65	0.6	0.56	0.64	0.59	0.56	0.63	0.59	0.55	0.63	0.58	0.55
10	0.62	0.56	0.53	0.62	0.56	0.53	0.61	0.56	0.52	0.6	0.56	0.52	0.6	0.55	0.52

Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2018-8-13

Remark:

Measured Para U: 216.3V I: 89.0mA P: 11.00W PF: 0.571 Test LM: 702.04lm		
Lamp Name: LP-COB12F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB12F01-Y1	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	0.19	0.11	0.03	0.18	0.1	0.03	0.17	0.1	0.03	0.16	0.09	0.03	0.15	0.09	0.03
2	0.18	0.1	0.03	0.17	0.1	0.03	0.16	0.09	0.03	0.15	0.09	0.03	0.14	0.08	0.03
3	0.17	0.09	0.03	0.16	0.09	0.03	0.15	0.08	0.03	0.15	0.08	0.02	0.14	0.08	0.02
4	0.16	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	0.14	0.08	0.02	0.13	0.07	0.02
5	0.15	0.08	0.02	0.15	0.08	0.02	0.14	0.07	0.02	0.13	0.07	0.02	0.13	0.07	0.02
6	0.14	0.07	0.02	0.14	0.07	0.02	0.13	0.07	0.02	0.13	0.07	0.02	0.12	0.06	0.02
7	0.14	0.07	0.02	0.13	0.07	0.02	0.13	0.06	0.02	0.12	0.06	0.02	0.12	0.06	0.02
8	0.13	0.06	0.02	0.13	0.06	0.02	0.12	0.06	0.02	0.12	0.06	0.02	0.11	0.06	0.02
9	0.12	0.06	0.02	0.12	0.06	0.02	0.12	0.06	0.02	0.11	0.06	0.02	0.11	0.06	0.02
10	0.12	0.06	0.02	0.12	0.06	0.02	0.11	0.06	0.02	0.11	0.05	0.02	0.11	0.05	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	0.09	0.06	0.05	0.05	0.02	0.02	0.02
2	0.16	0.13	0.11	0.13	0.11	0.1	0.09	0.08	0.07	0.05	0.05	0.04	0.02	0.01	0.01
3	0.14	0.11	0.09	0.12	0.1	0.08	0.09	0.07	0.05	0.05	0.04	0.03	0.02	0.01	0.01
4	0.13	0.1	0.07	0.12	0.09	0.06	0.08	0.06	0.04	0.05	0.03	0.03	0.01	0.01	0.01
5	0.13	0.09	0.06	0.11	0.08	0.05	0.07	0.05	0.04	0.04	0.03	0.02	0.01	0.01	0.01
6	0.12	0.08	0.05	0.1	0.07	0.04	0.07	0.05	0.03	0.04	0.03	0.02	0.01	0.01	0.01
7	0.11	0.07	0.04	0.1	0.06	0.04	0.07	0.04	0.03	0.04	0.03	0.02	0.01	0.01	0.01
8	0.11	0.06	0.04	0.09	0.06	0.03	0.06	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0
9	0.1	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	0.05	0.03	0.08	0.05	0.02	0.06	0.03	0.02	0.03	0.02	0.01	0.01	0.01	0

Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2018-8-13

Remark:

Measured Para U: 216.3V I: 89.0mA P: 11.00W PF: 0.571 Test LM: 702.04lm		
Lamp Name: LP-COB12F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB12F01-Y1	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	844	856	820	860	892	909	895	842	0-5	20.8	20.8
10	778	794	736	827	862	865	879	778	5-10	60.1	81
15	648	683	604	760	804	787	823	663	10-15	91.2	172
20	500	528	464	648	714	685	737	523	15-20	109	281
25	369	385	343	515	584	556	612	395	20-25	112	392
30	261	283	245	385	442	422	480	287	25-30	103	496
35	110	153	82.9	281	325	308	349	172	30-35	84.6	580
40	20.2	25.6	19.9	158	232	199	251	27.8	35-40	54.4	635
45	16.5	18.8	16.8	26.1	67.5	39.6	96.4	14.3	40-45	27.4	662
50	14	15.1	14.4	19.9	16.6	15.4	18.6	11.6	45-50	8.72	671
55	12	12.9	12.4	16.2	13.7	12.7	14	9.52	50-55	6.17	677
60	10.2	11.1	10.6	14.1	11.4	10.6	11.5	7.97	55-60	5.49	682
65	8.76	9.43	9.04	12.2	9.56	8.97	9.59	6.65	60-65	4.89	687
70	7.45	7.96	5.77	10.5	8.03	7.58	8.13	5.64	65-70	4.3	692
75	6	6.51	3.96	8.88	6.7	6.31	6.9	4.67	70-75	3.61	695
80	4.46	4.91	3.3	7.17	5.37	4.99	5.81	3.29	75-80	2.99	698
85	3.04	3.45	2.73	4.85	3.74	3.14	4.44	1.95	80-85	2.27	700
90	2.53	2.76	2.78	3.38	1.97	2.48	2.46	1.63	85-90	1.56	702
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: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2018-8-13

Remark:

Measured Para U: 216.3V I: 89.0mA P: 11.00W PF: 0.571 Test LM: 702.04lm		
Lamp Name: LP-COB12F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB12F01-Y1	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	844	849	854	844	828	828	847	863	878	892	899	907	904	898	883	859	842	843
10.0	778	785	793	775	749	756	797	831	847	862	864	865	870	876	857	811	778	778
15.0	648	663	679	657	621	638	709	765	784	804	796	789	799	815	788	716	662	655
20.0	500	512	525	507	478	504	588	655	685	714	701	688	702	726	690	594	521	510
25.0	369	376	383	371	352	381	459	523	554	584	572	559	574	600	564	466	392	381
30.0	261	271	281	271	253	276	339	391	417	442	434	424	441	467	438	350	284	272
35.0	110	129	149	130	98.3	126	216	286	306	325	318	310	322	340	310	230	165	137
40.0	20.2	22.6	25	23.7	21.1	50.2	113	166	200	232	218	203	216	240	202	101	26.9	23.5
45.0	16.5	17.5	18.6	18.2	17.2	18.8	23.1	30.7	49.4	67.5	55.3	42.7	58.2	84	78.5	41.3	14.6	15.6
50.0	14	14.5	15	14.8	14.5	15.6	18.1	19.6	18	16.6	16.1	15.5	16.4	17.9	17.1	13.9	11.9	13
55.0	12	12.4	12.8	12.7	12.5	13.2	15	16	14.8	13.7	13.2	12.8	13.1	13.7	13	11	9.79	10.9
60.0	10.2	10.6	11	10.9	10.7	11.4	12.9	13.8	12.5	11.4	11	10.7	10.9	11.3	10.7	9.12	8.22	9.25
65.0	8.76	9.05	9.35	9.3	9.12	9.72	11.1	11.9	10.7	9.56	9.3	9.04	9.18	9.46	8.95	7.61	6.88	7.84
70.0	7.45	7.67	7.9	7.24	6.25	6.81	8.96	10.2	9.12	8.03	7.83	7.63	7.76	8.01	7.59	6.46	5.84	6.66
75.0	6	6.23	6.46	5.67	4.52	5.04	7.27	8.64	7.65	6.7	6.53	6.35	6.5	6.77	6.41	5.4	4.82	5.42
80.0	4.46	4.66	4.86	4.38	3.65	4.15	5.9	6.97	6.16	5.37	5.2	5.03	5.26	5.63	5.26	4.12	3.42	3.95
85.0	3.04	3.22	3.4	3.21	2.89	3.2	4.15	4.73	4.23	3.74	3.48	3.21	3.57	4.15	3.9	2.77	2.07	2.57
90.0	2.53	2.63	2.74	2.77	2.78	2.91	3.19	3.23	2.59	1.97	2.19	2.42	2.47	2.46	2.28	1.9	1.73	2.14
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: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2018-8-13

Remark: