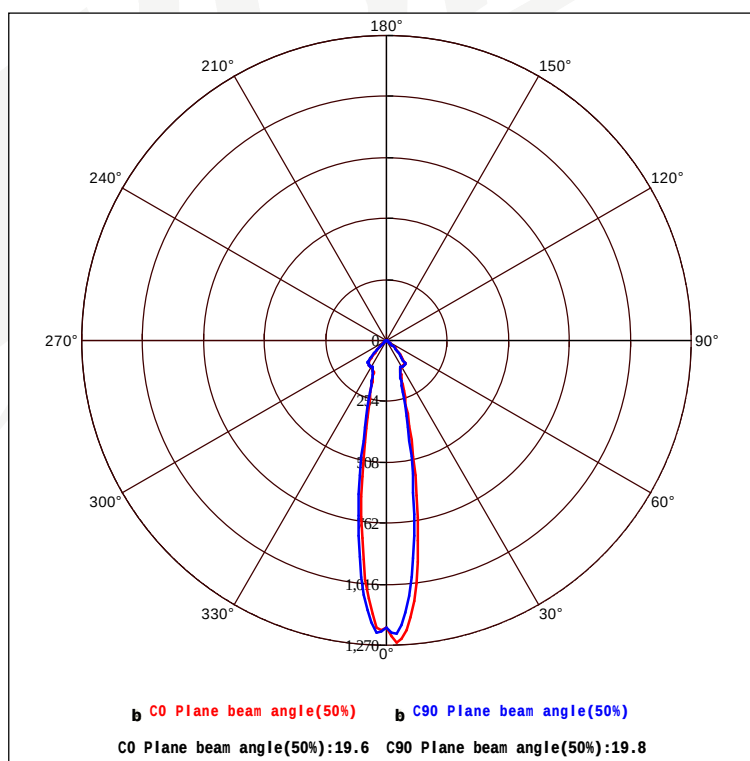


LED DOWN LIGHT

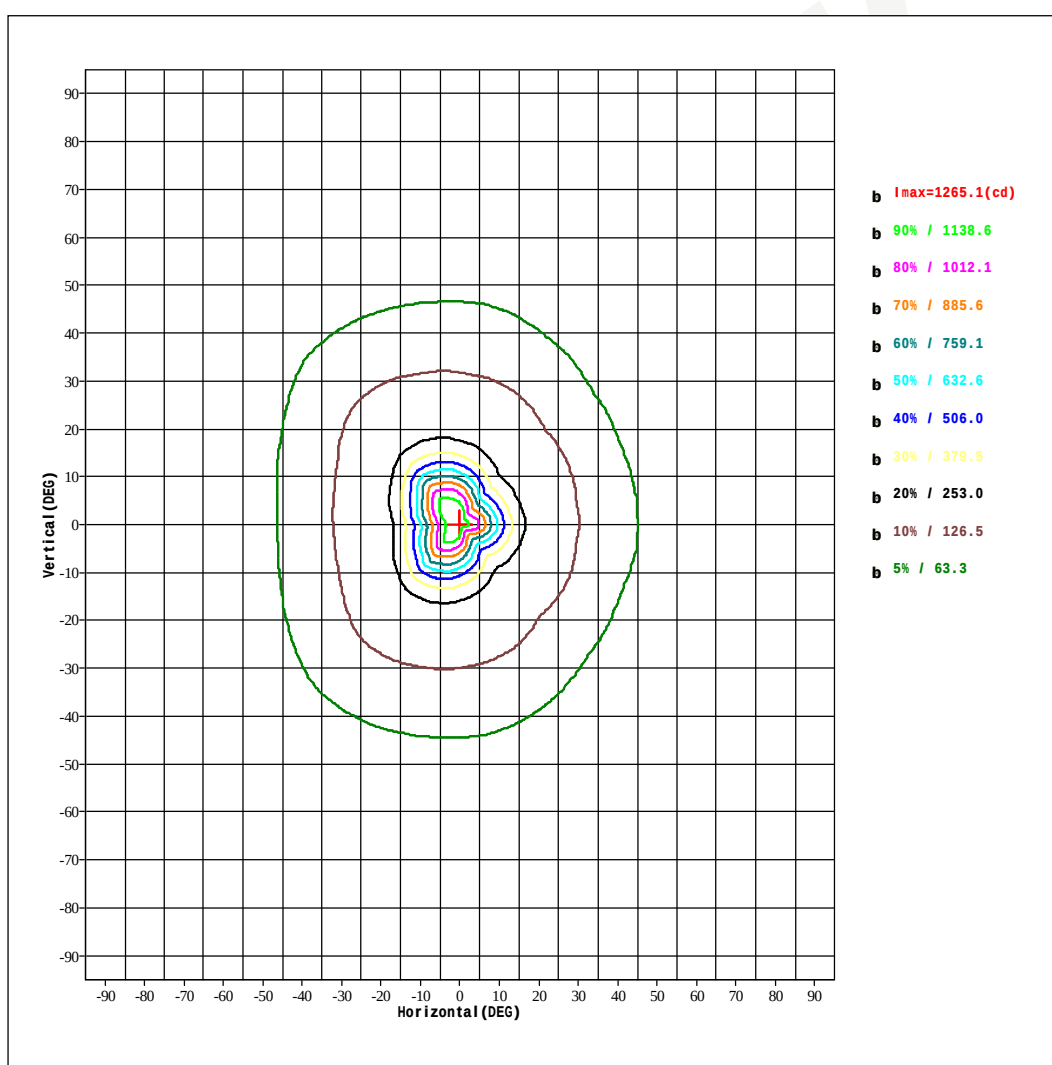
Measured Para U: 216.3V I: 66.0mA P: 6.40W PF: 0.450 Test LM: 372.52lm						
Lamp Name: LP-COB07BX			Lamp Type:		Weight(kg):	
Lamp ID: LP-COB07BX			Lamp Spec:		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model			Peak Value(cd)	1265.1	Efficiency(lm/w)	58.2
Nominal P(w)		1.0	Position	0.0,1.0	UP(C0-C180)	0.0
Rated Volt(v)		220.0	Total Flux(lm)	372.521	Down(C0-C180)	57.3
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)	42.7

Planar Intensity Distribution Curve



Measured Para U: 216.3V I: 66.0mA P: 6.40W PF: 0.450 Test LM: 372.52lm		
Lamp Name: LP-COB07BX	Lamp Type:	Weight(kg):
Lamp ID: LP-COB07BX	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

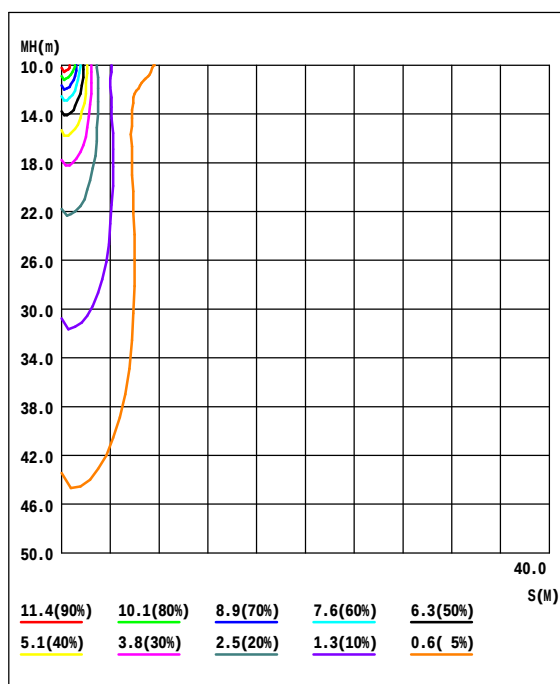
Humidity(%): 60

Date: 2018-8-13

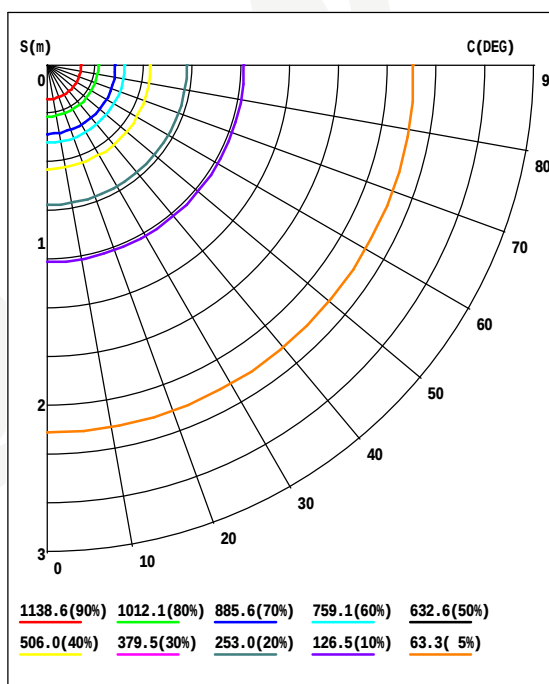
Remark:

Measured Para U: 216.3V I: 66.0mA P: 6.40W PF: 0.450 Test LM: 372.52lm		
Lamp Name: LP-COB07BX	Lamp Type:	Weight(kg):
Lamp ID: LP-COB07BX	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

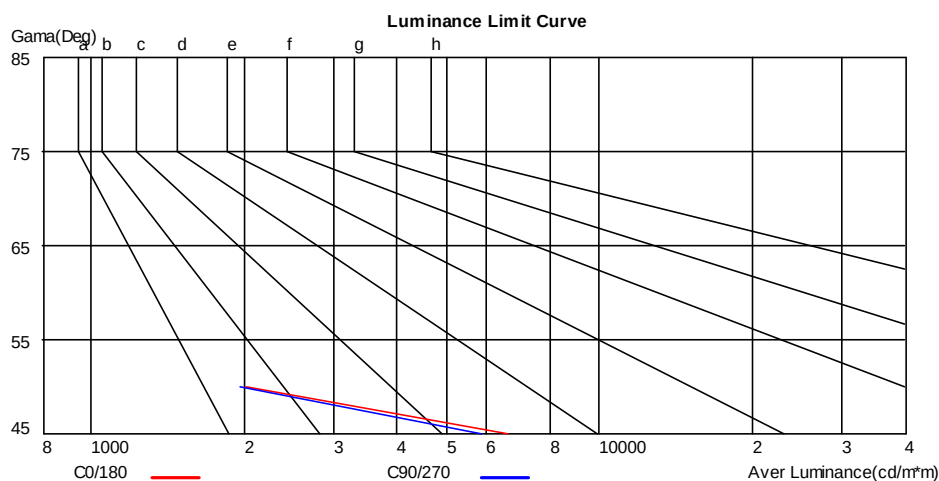
Remark:

Measured Para U: 216.3V I: 66.0mA P: 6.40W PF: 0.450 Test LM: 372.52lm		
Lamp Name: LP-COB07BX	Lamp Type:	Weight(kg):
Lamp ID: LP-COB07BX	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	6603.5	2018.9	610.3	186.9	141.5	121.0	99.5	116.0	121.0
C90	5861.7	1958.9	494.9	176.9	122.0	111.5	108.0	118.0	124.0

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: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

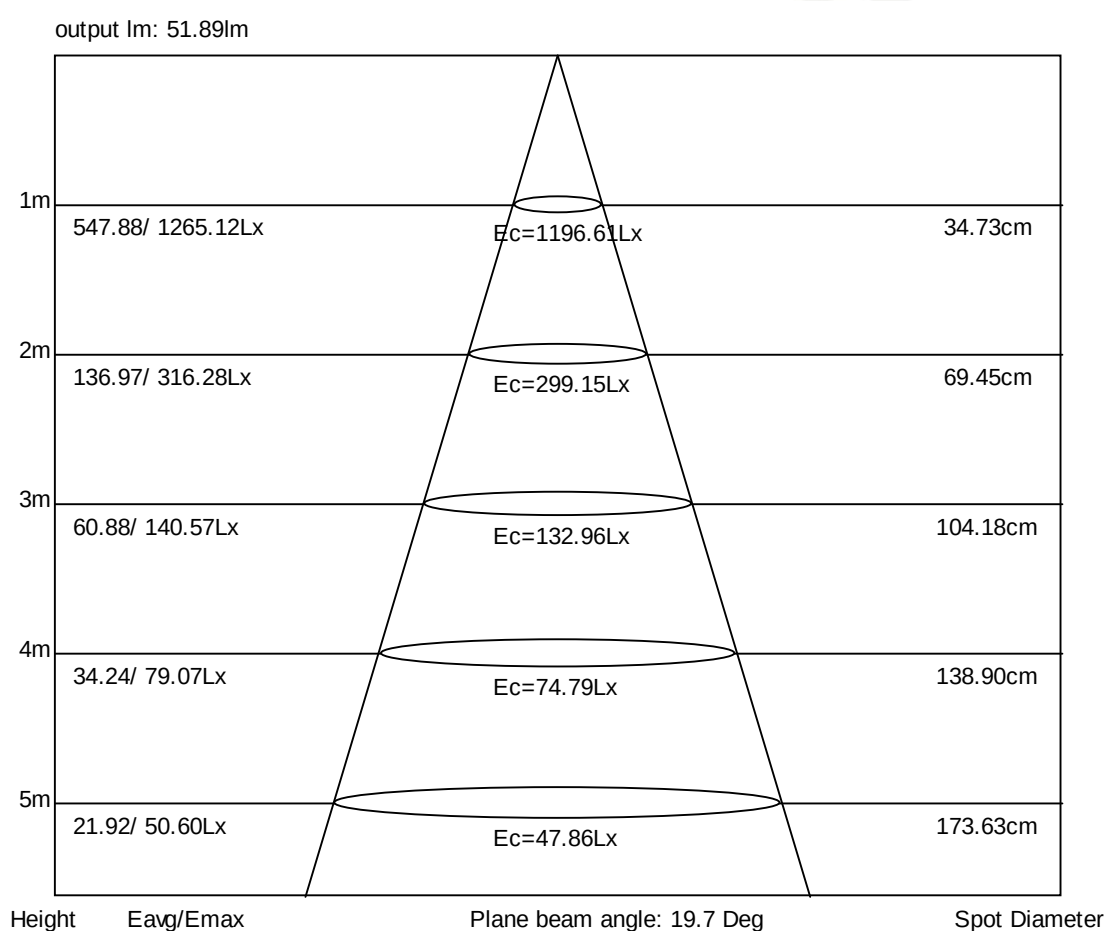
Humidity(%): 60

Date: 2018-8-13

Remark:

Measured Para U: 216.3V I: 66.0mA P: 6.40W PF: 0.450 Test LM: 372.52lm		
Lamp Name: LP-COB07BX	Lamp Type:	Weight(kg):
Lamp ID: LP-COB07BX	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

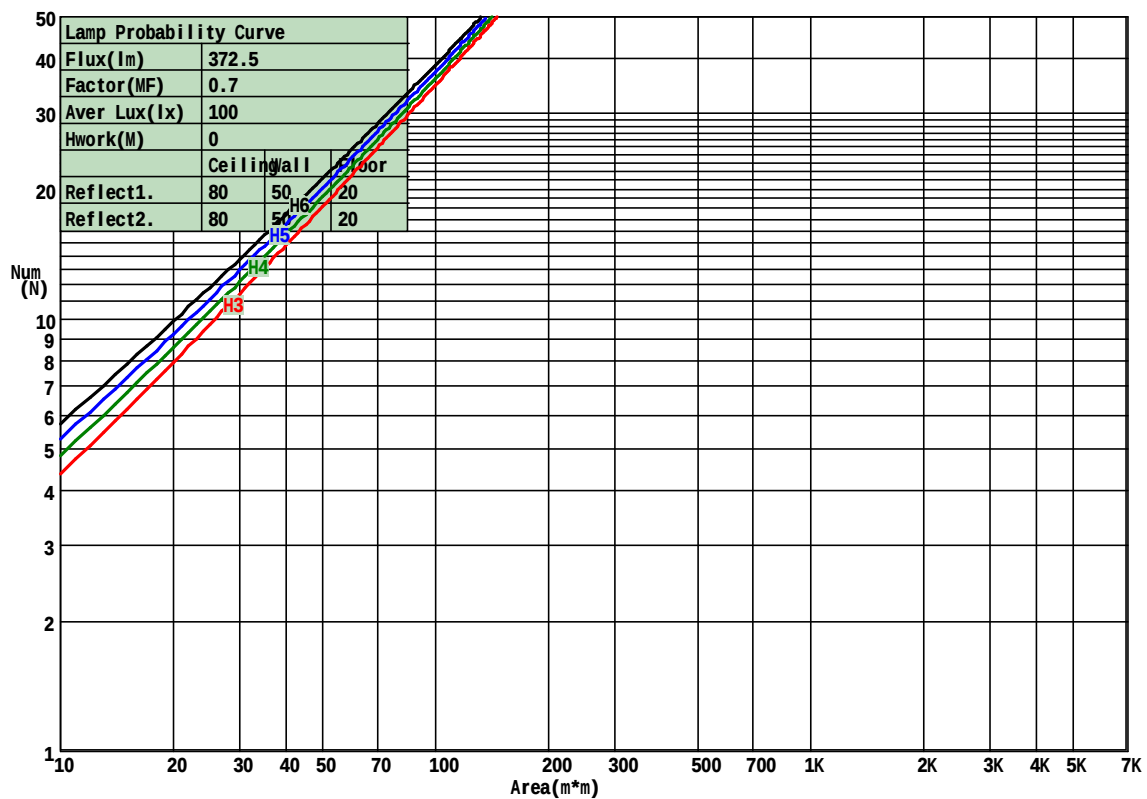
Humidity(%): 60

Date: 2018-8-13

Remark:

Measured Para U: 216.3V I: 66.0mA P: 6.40W PF: 0.450 Test LM: 372.52lm		
Lamp Name: LP-COB07BX	Lamp Type:	Weight(kg):
Lamp ID: LP-COB07BX	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: 66.0mA P: 6.40W PF: 0.450 Test LM: 372.52lm		
Lamp Name: LP-COB07BX	Lamp Type:	Weight(kg):
Lamp ID: LP-COB07BX	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	58	44	35	56	43	35	53	42	34
0.80	59	43	32	57	42	32	53	40	31
1.00	60	43	31	58	42	30	53	39	29
1.25	62	43	30	59	42	29	53	39	27
1.50	63	44	29	59	42	28	53	38	26
2.00	65	45	30	61	43	28	54	39	26
2.50	67	46	29	62	44	28	55	39	26
3.00	68	47	30	64	45	28	55	40	26
4.00	70	49	31	65	46	29	57	41	26
5.00	71	51	32	66	47	30	57	41	27

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	1.11	1.08	1.06	1.09	1.06	1.05	1.05	1.03	1.01	1.01	1	0.98	0.98	0.96	0.95
2	1.03	0.99	0.96	1.02	0.98	0.95	0.98	0.95	0.93	0.95	0.93	0.91	0.93	0.91	0.89
3	0.97	0.92	0.88	0.95	0.91	0.87	0.93	0.89	0.86	0.9	0.87	0.84	0.88	0.85	0.83
4	0.91	0.85	0.81	0.89	0.84	0.81	0.87	0.83	0.8	0.85	0.82	0.79	0.83	0.8	0.78
5	0.85	0.8	0.75	0.84	0.79	0.75	0.82	0.78	0.74	0.81	0.77	0.74	0.79	0.76	0.73
6	0.8	0.75	0.7	0.8	0.74	0.7	0.78	0.73	0.7	0.77	0.72	0.69	0.75	0.72	0.69
7	0.76	0.7	0.66	0.75	0.7	0.66	0.74	0.69	0.66	0.73	0.69	0.65	0.72	0.68	0.65
8	0.72	0.66	0.62	0.72	0.66	0.62	0.7	0.66	0.62	0.69	0.65	0.62	0.69	0.65	0.62
9	0.69	0.63	0.59	0.68	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.66	0.62	0.59
10	0.66	0.6	0.56	0.65	0.6	0.56	0.64	0.59	0.56	0.64	0.59	0.56	0.63	0.59	0.56

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: 66.0mA P: 6.40W PF: 0.450 Test LM: 372.52lm															
Lamp Name: LP-COB07BX								Lamp Type:				Weight(kg):			
Lamp ID: LP-COB07BX								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	0.18	0.1	0.03	0.17	0.1	0.03	0.16	0.09	0.03	0.15	0.08	0.03	0.13	0.08	0.03
2	0.17	0.09	0.03	0.16	0.09	0.03	0.15	0.08	0.03	0.14	0.08	0.02	0.13	0.08	0.02
3	0.16	0.08	0.03	0.15	0.08	0.02	0.15	0.08	0.02	0.14	0.08	0.02	0.13	0.07	0.02
4	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
5	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
6	0.14	0.07	0.02	0.13	0.07	0.02	0.13	0.07	0.02	0.12	0.06	0.02	0.12	0.06	0.02
7	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
8	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
9	0.12	0.06	0.02	0.12	0.06	0.02	0.11	0.06	0.02	0.11	0.05	0.02	0.1	0.05	0.02
10	0.11	0.05	0.02	0.11	0.05	0.01	0.11	0.05	0.01	0.1	0.05	0.01	0.1	0.05	0.01

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	0.14	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	0.08	0.07	0.05	0.05	0.04	0.03	0.02	0.01	0.01
4	0.13	0.1	0.07	0.11	0.09	0.06	0.08	0.06	0.04	0.05	0.03	0.03	0.01	0.01	0.01
5	0.12	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	0.09	0.06	0.04	0.07	0.04	0.03	0.04	0.03	0.02	0.01	0.01	0.01
8	0.1	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	0.08	0.05	0.03	0.06	0.04	0.02	0.03	0.02	0.01	0.01	0.01	0
10	0.09	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: 66.0mA P: 6.40W PF: 0.450 Test LM: 372.52lm		
Lamp Name: LP-COB07BX	Lamp Type:	Weight(kg):
Lamp ID: LP-COB07BX	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	1131	1256	1033	1175	960	679	1031	846	0-5	26.3	26.3
10	700	984	606	809	531	341	609	435	5-10	57.5	83.8
15	342	549	303	420	268	184	304	218	10-15	53.6	137
20	188	272	173	219	160	135	171	142	15-20	39.4	177
25	137	163	132	145	131	130	130	125	20-25	32.3	209
30	128	131	126	127	129	128	127	123	25-30	33	242
35	127	129	128	127	126	119	126	120	30-35	37.3	279
40	119	127	113	124	100	61.4	116	78.9	35-40	39.1	319
45	66	107	58.6	82.4	42.4	16.2	55.7	26.5	40-45	30.2	349
50	20.2	49	19.6	28.3	15.8	4.03	14.9	7.19	45-50	14.4	363
55	6.1	20.2	4.95	10.7	2.62	0.57	3.67	0.82	50-55	5.25	368
60	1.87	4.71	1.77	2.87	0.56	0.24	0.49	0.2	55-60	1.48	370
65	1.41	1.86	1.22	1.81	0.32	0.17	0.3	0.16	60-65	0.56	371
70	1.21	1.49	1.11	1.46	0.23	0.18	0.24	0.11	65-70	0.41	371
75	0.99	1.26	1.08	1.28	0.19	0.19	0.21	0.13	70-75	0.37	371
80	1.16	1.2	1.18	1.22	0.21	0.26	0.22	0.19	75-80	0.37	372
85	1.21	1.23	1.24	1.23	0.27	0.27	0.27	0.32	80-85	0.39	372
90	1.23	1.24	1.17	1.22	0.36	0.35	0.35	0.31	85-90	0.42	372
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:

Lamp Photometric Data

Page 10 Of 10

Measured Para U: 216.3V I: 66.0mA P: 6.40W PF: 0.450 Test LM: 372.52lm		
Lamp Name: LP-COB07BX	Lamp Type:	Weight(kg):
Lamp ID: LP-COB07BX	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	1131	1185	1242	1183	1082	1064	1129	1152	1054	960	837	710	794	954	991	907	877	1006
10.0	700	825	953	860	689	650	742	778	653	531	448	362	429	551	571	492	464	584
15.0	342	432	526	468	357	329	381	403	335	268	232	193	223	278	285	246	231	288
20.0	188	225	263	240	195	183	204	212	186	160	149	138	147	163	165	152	147	168
25.0	137	149	160	153	139	135	141	144	137	131	130	130	130	130	129	127	126	132
30.0	128	129	131	130	127	126	127	127	128	129	129	129	128	127	126	124	123	126
35.0	127	128	129	129	128	128	128	127	126	126	123	120	121	125	125	122	121	124
40.0	119	122	126	122	116	115	120	121	111	100	83.3	65.7	79.3	104	108	91	83.3	101
45.0	66	83.9	102	91	69.2	63.8	74.6	78	59.9	42.4	30.9	19.1	29.2	47.1	49.3	36.1	30.8	48.7
50.0	20.2	32.8	45.9	39.4	26	21.5	25.5	27	21.3	15.8	10.7	5.32	7.59	12.5	13.2	9.71	8.61	14.5
55.0	6.1	12.3	18.7	15.2	8.29	6.21	8.83	9.84	6.17	2.62	1.73	0.79	1.59	2.99	3.05	1.76	1.4	3.79
60.0	1.87	3.11	4.4	3.75	2.41	2.01	2.51	2.62	1.57	0.56	0.42	0.28	0.32	0.44	0.43	0.3	0.39	1.14
65.0	1.41	1.61	1.82	1.65	1.36	1.35	1.62	1.65	0.97	0.32	0.25	0.19	0.21	0.27	0.27	0.21	0.3	0.87
70.0	1.21	1.33	1.46	1.37	1.2	1.19	1.35	1.33	0.77	0.23	0.21	0.19	0.2	0.23	0.22	0.15	0.23	0.73
75.0	0.99	1.11	1.24	1.2	1.12	1.12	1.21	1.16	0.67	0.19	0.19	0.19	0.2	0.21	0.19	0.16	0.22	0.62
80.0	1.16	1.18	1.2	1.2	1.19	1.19	1.21	1.11	0.66	0.21	0.23	0.26	0.25	0.23	0.22	0.2	0.3	0.74
85.0	1.21	1.22	1.23	1.23	1.24	1.24	1.24	1.13	0.69	0.27	0.27	0.27	0.27	0.27	0.28	0.31	0.42	0.82
90.0	1.23	1.23	1.24	1.22	1.18	1.18	1.21	1.13	0.74	0.36	0.36	0.36	0.35	0.35	0.35	0.32	0.41	0.83
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: