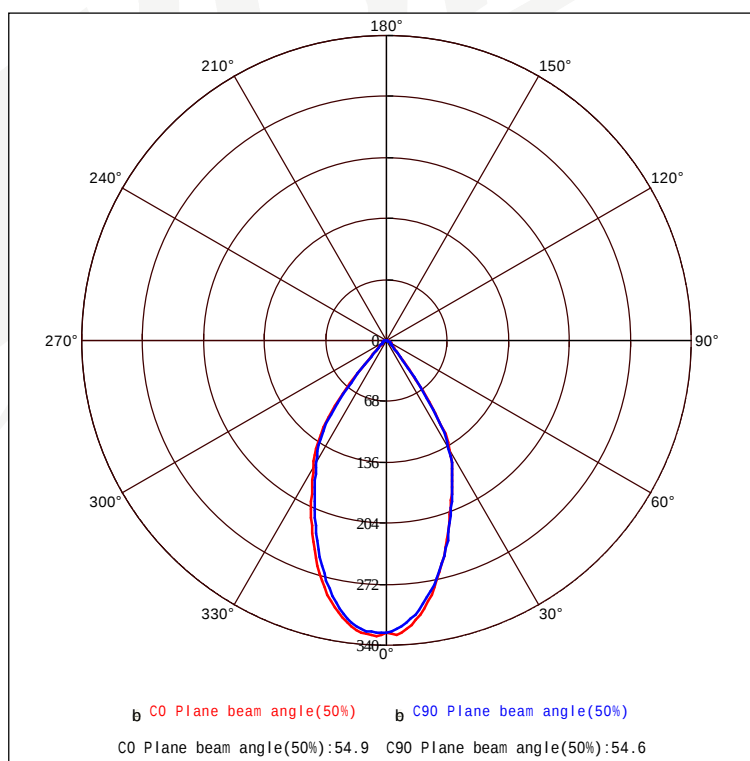


LED CEILING LIGHT

Measured Para U: 217.0V I: 42.0mA P: 4.50W PF: 0.485 Test LM: 265.31lm						
Lamp Name: LP-COB05F01-Y1			Lamp Type:		Weight(kg):	
Lamp ID: LP-COB05F01-Y1			Lamp Spec:		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model			Peak Value(cd)	330.7	Efficiency(lm/w)	59.0
Nominal P(w)		1.0	Position	0.0,0.0	UP(C0-C180)	0.0
Rated Volt(v)		220.0	Total Flux(lm)	265.306	Down(C0-C180)	52.2
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)	47.8

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

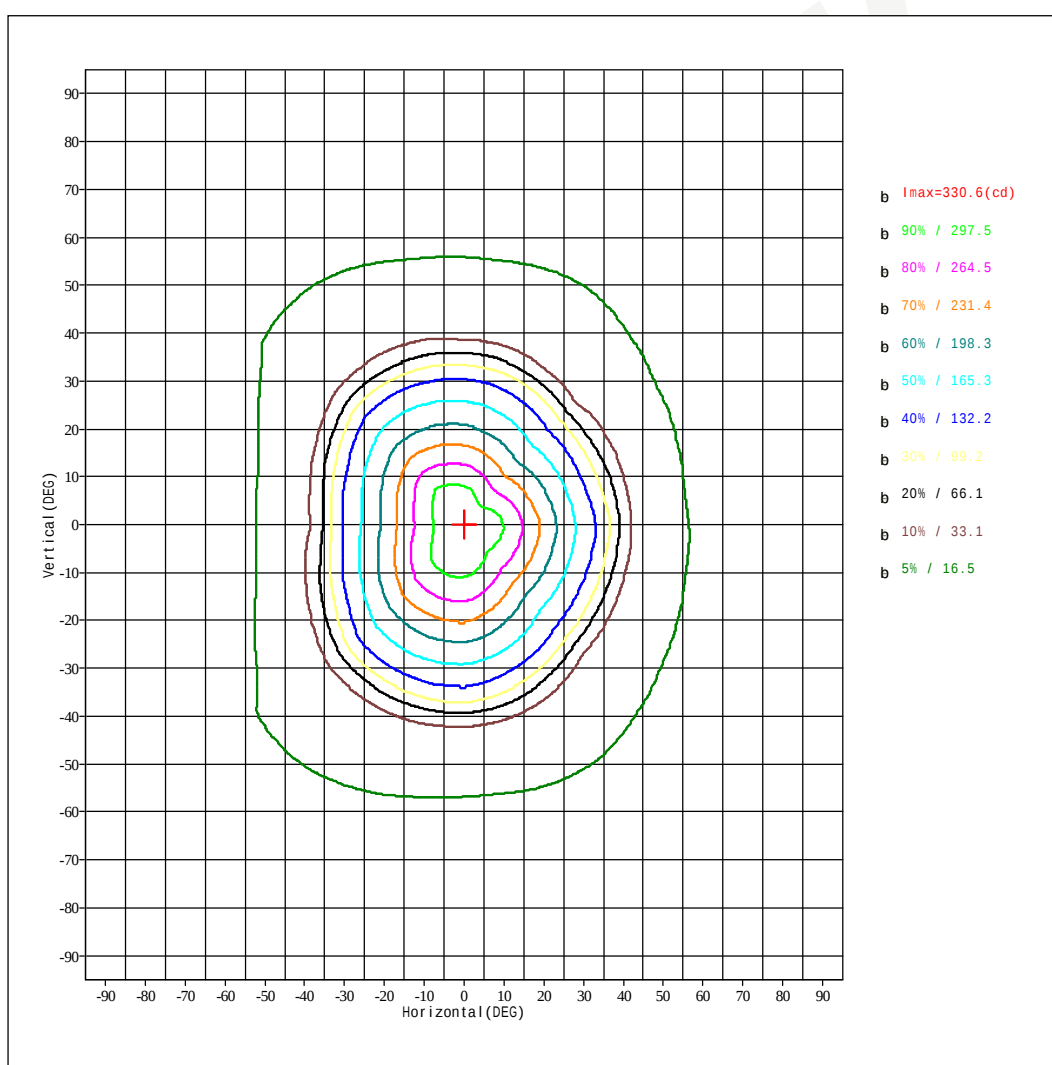
Humidity(%): 60

Date: 2018-8-13

Remark:

Measured Para U: 217.0V I: 42.0mA P: 4.50W PF: 0.485 Test LM: 265.31lm		
Lamp Name: LP-COB05F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB05F01-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

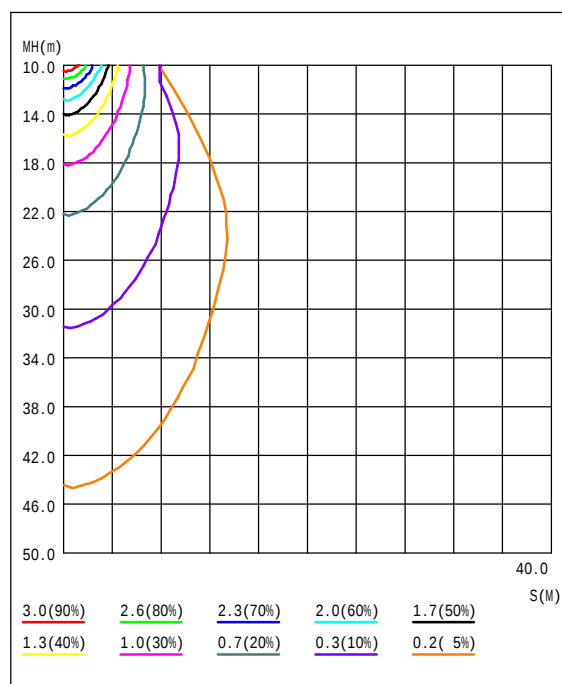
Humidity(%): 60

Date: 2018-8-13

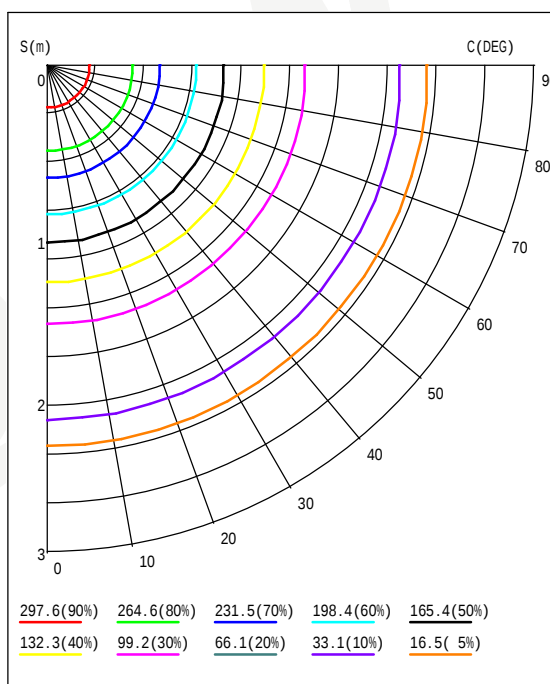
Remark:

Measured Para U: 217.0V I: 42.0mA P: 4.50W PF: 0.485 Test LM: 265.31lm		
Lamp Name: LP-COB05F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB05F01-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

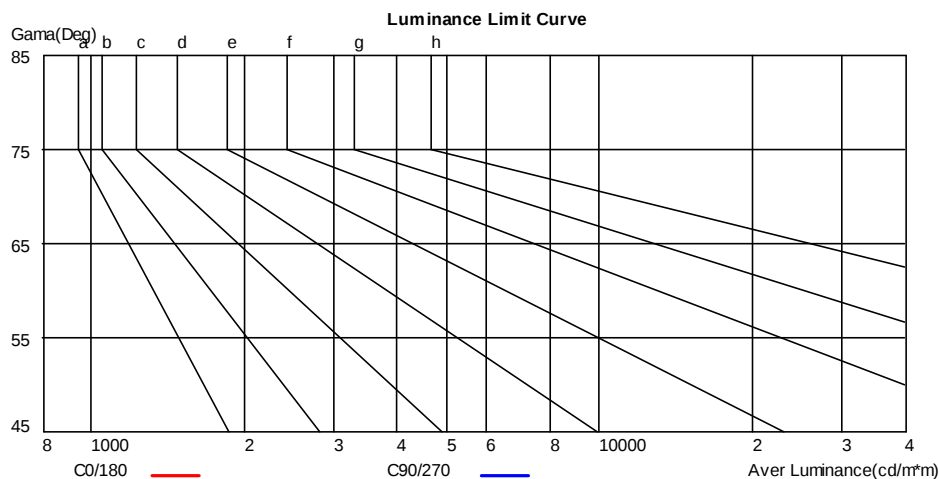
Remark:

Measured Para U: 217.0V I: 42.0mA P: 4.50W PF: 0.485 Test LM: 265.31lm		
Lamp Name: LP-COB05F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB05F01-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	913.2	665.3	597.8	551.3	497.8	422.4	306.4	143.0	78.5
C90	818.8	646.8	592.3	541.3	277.9	136.5	109.5	70.5	66.0

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

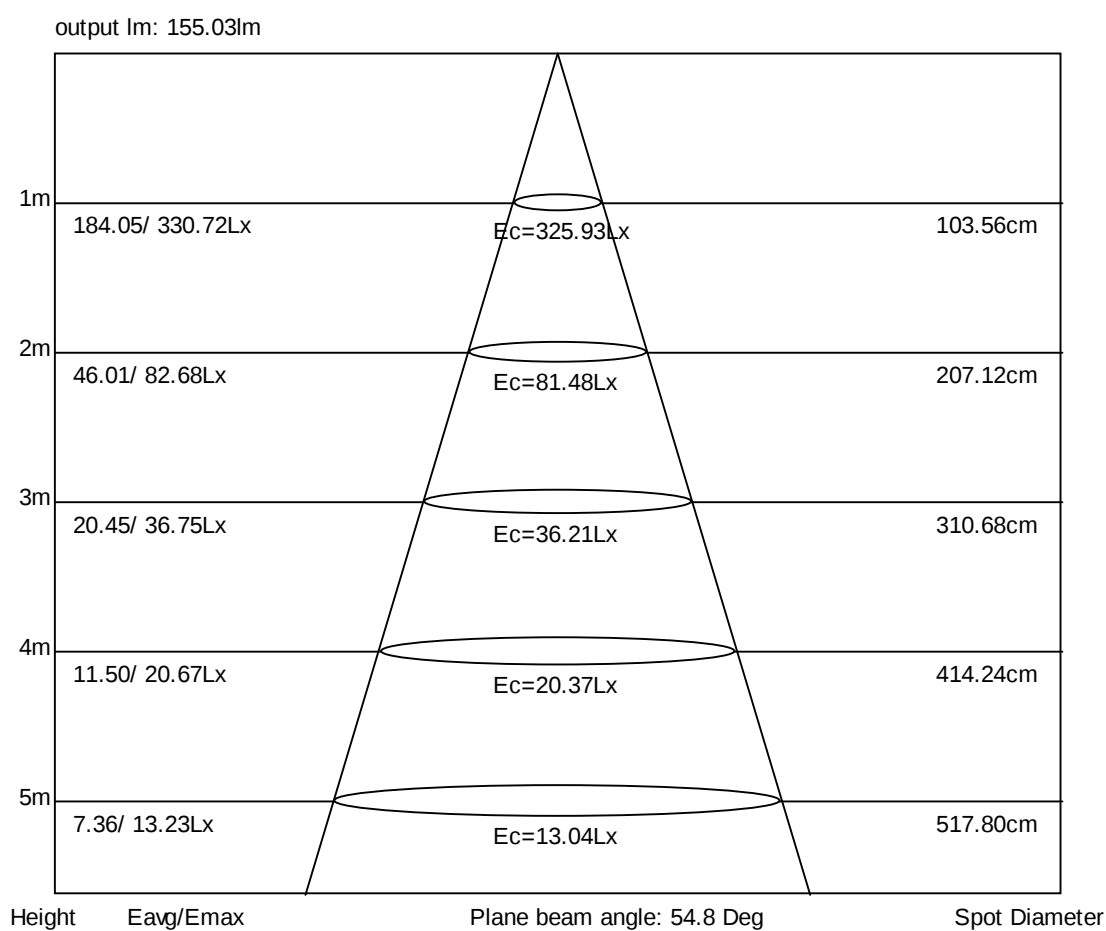
Humidity(%): 60

Date: 2018-8-13

Remark:

Measured Para U: 217.0V I: 42.0mA P: 4.50W PF: 0.485 Test LM: 265.31lm		
Lamp Name: LP-COB05F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB05F01-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

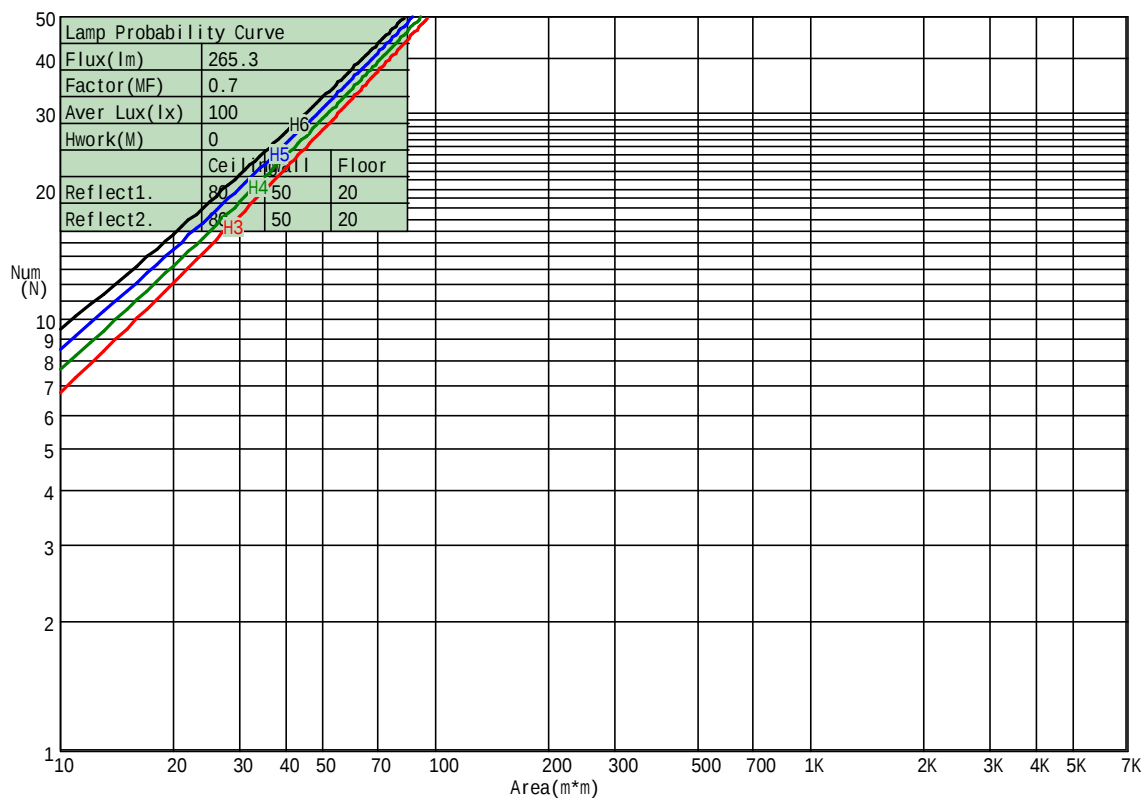
Humidity(%): 60

Date: 2018-8-13

Remark:

Measured Para U: 217.0V I: 42.0mA P: 4.50W PF: 0.485 Test LM: 265.3lm		
Lamp Name: LP-COB05F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB05F01-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: 217.0V I: 42.0mA P: 4.50W PF: 0.485 Test LM: 265.31lm		
Lamp Name: LP-COB05F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB05F01-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	43	26	16	41	25	15	38	24	15
0.80	48	30	17	46	28	17	41	26	16
1.00	52	32	19	49	31	18	44	28	17
1.25	55	35	20	52	33	19	46	30	18
1.50	58	37	21	54	35	20	48	31	19
2.00	61	40	23	57	38	22	50	34	20
2.50	64	42	24	59	40	23	51	35	21
3.00	65	44	25	61	41	24	52	36	21
4.00	68	46	27	63	43	25	54	37	22
5.00	69	47	28	64	44	26	55	38	23

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	1.03	1.04	1.02	1	1	0.99	0.97	0.97	0.96	0.94
2	1.02	0.98	0.94	1	0.96	0.93	0.97	0.94	0.91	0.94	0.91	0.89	0.91	0.89	0.87
3	0.95	0.9	0.86	0.94	0.89	0.85	0.91	0.87	0.84	0.88	0.85	0.82	0.86	0.83	0.81
4	0.89	0.83	0.78	0.87	0.82	0.78	0.85	0.81	0.77	0.83	0.79	0.76	0.81	0.78	0.75
5	0.83	0.77	0.72	0.82	0.76	0.72	0.8	0.75	0.71	0.78	0.74	0.71	0.77	0.73	0.7
6	0.78	0.72	0.67	0.77	0.71	0.67	0.75	0.7	0.66	0.74	0.69	0.66	0.73	0.69	0.66
7	0.73	0.67	0.63	0.72	0.67	0.62	0.71	0.66	0.62	0.7	0.65	0.62	0.69	0.65	0.61
8	0.69	0.63	0.59	0.68	0.62	0.58	0.67	0.62	0.58	0.66	0.61	0.58	0.65	0.61	0.58
9	0.65	0.59	0.55	0.64	0.59	0.55	0.64	0.58	0.55	0.63	0.58	0.54	0.62	0.57	0.54
10	0.61	0.56	0.52	0.61	0.55	0.52	0.6	0.55	0.51	0.59	0.55	0.51	0.59	0.54	0.51

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: 217.0V I: 42.0mA P: 4.50W PF: 0.485 Test LM: 265.31lm		
Lamp Name: LP-COB05F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB05F01-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	0.17	0.09	0.03	0.16	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	0.14	0.07	0.02	0.13	0.07	0.02
6	0.15	0.07	0.02	0.14	0.07	0.02	0.14	0.07	0.02	0.13	0.07	0.02	0.13	0.07	0.02
7	0.14	0.07	0.02	0.14	0.07	0.02	0.13	0.07	0.02	0.13	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	0.12	0.06	0.02
9	0.13	0.06	0.02	0.12	0.06	0.02	0.12	0.06	0.02	0.12	0.06	0.02	0.11	0.06	0.02
10	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	0.05	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	0.15	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	0.14	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	0.06	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: 217.0V I: 42.0mA P: 4.50W PF: 0.485 Test LM: 265.31lm		
Lamp Name: LP-COB05F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB05F01-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	316	324	310	320	326	315	322	301	0-5	7.68	7.68
10	284	300	281	305	306	286	300	266	5-10	21.7	29.4
15	244	265	244	277	274	248	265	224	10-15	32.3	61.7
20	203	225	204	239	235	206	225	186	15-20	38.7	100
25	169	187	170	201	193	170	186	156	20-25	41.2	142
30	137	156	135	166	160	139	154	121	25-30	41.1	183
35	76.6	112	71.9	132	125	86.9	120	55.7	30-35	36.3	219
40	19.7	41.7	20.8	69.6	55.5	25.5	55.5	15.7	35-40	21.8	241
45	9.13	14.9	8.19	21.4	15.2	7.09	15	6.17	40-45	8.05	249
50	6.65	7.59	6.47	8.14	6.53	5.31	6.3	4.88	45-50	3.43	252
55	5.98	6.5	5.92	6.63	5.32	4.68	5.17	4.37	50-55	2.59	255
60	5.51	5.97	5.41	6.07	4.8	4.22	4.59	3.95	55-60	2.46	257
65	4.98	5.42	2.78	5.51	4.25	3.74	4.12	3.56	60-65	2.32	260
70	4.22	4.74	1.36	4.8	3.64	3.17	3.71	2.91	65-70	1.97	262
75	3.06	3.76	1.09	3.99	2.94	2.29	3.05	1.83	70-75	1.67	263
80	1.43	2.33	0.7	2.75	1.76	0.98	1.98	0.57	75-80	1.17	264
85	0.78	0.87	0.66	1.11	0.4	0.23	0.52	0.22	80-85	0.55	265
90	0.67	0.69	0.68	0.76	0.26	0.24	0.27	0.23	85-90	0.28	265
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: 217.0V I: 42.0mA P: 4.50W PF: 0.485 Test LM: 265.31lm		
Lamp Name: LP-COB05F01-Y1	Lamp Type:	Weight(kg):
Lamp ID: LP-COB05F01-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	316	319	323	319	313	312	317	321	323	326	321	316	317	321	318	308	302	309
10.0	284	291	298	294	285	286	297	305	305	306	297	288	290	297	293	277	268	276
15.0	244	253	263	258	249	251	266	276	275	274	263	251	254	261	256	237	226	235
20.0	203	213	223	218	209	212	228	239	237	235	222	209	212	221	217	199	188	196
25.0	169	177	185	181	174	177	191	201	197	193	183	172	175	182	179	166	157	163
30.0	137	145	154	149	139	142	156	165	163	160	151	142	144	151	147	132	123	130
35.0	76.6	92.1	108	98.9	80.7	85	112	131	128	125	108	91	97.7	112	106	76.7	58	67.5
40.0	19.7	29.3	39.3	34.9	25.4	31.5	53.6	68	61.7	55.5	42.4	28.8	35.4	49	46.8	28.8	16.1	18
45.0	9.13	11.7	14.3	12.7	9.66	11.1	17	20.7	17.9	15.2	11.7	7.98	9.69	13.3	13.1	9.07	6.49	7.84
50.0	6.65	7.06	7.49	7.22	6.71	6.83	7.59	7.97	7.23	6.53	6	5.45	5.64	6.09	5.99	5.35	5.08	5.88
55.0	5.98	6.21	6.44	6.31	6.05	6.08	6.4	6.49	5.89	5.32	5.04	4.75	4.84	5.07	5	4.63	4.54	5.27
60.0	5.51	5.71	5.92	5.79	5.53	5.56	5.85	5.93	5.36	4.8	4.55	4.28	4.34	4.51	4.45	4.16	4.12	4.83
65.0	4.98	5.17	5.37	4.55	3.36	3.38	4.61	5.37	4.8	4.25	4.03	3.79	3.87	4.04	4	3.75	3.72	4.36
70.0	4.22	4.45	4.69	3.63	2.1	2.12	3.67	4.67	4.15	3.64	3.44	3.22	3.35	3.59	3.53	3.17	3.05	3.65
75.0	3.06	3.37	3.69	2.89	1.68	1.73	3.04	3.87	3.4	2.94	2.66	2.36	2.54	2.89	2.79	2.23	1.97	2.53
80.0	1.43	1.83	2.24	1.8	1.06	1.15	2.08	2.64	2.2	1.76	1.42	1.07	1.31	1.76	1.67	1.04	0.67	1.06
85.0	0.78	0.82	0.86	0.8	0.71	0.76	0.97	1.04	0.72	0.4	0.33	0.25	0.33	0.46	0.46	0.32	0.29	0.54
90.0	0.67	0.68	0.69	0.69	0.69	0.7	0.74	0.71	0.48	0.26	0.25	0.24	0.25	0.27	0.27	0.24	0.28	0.48
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: