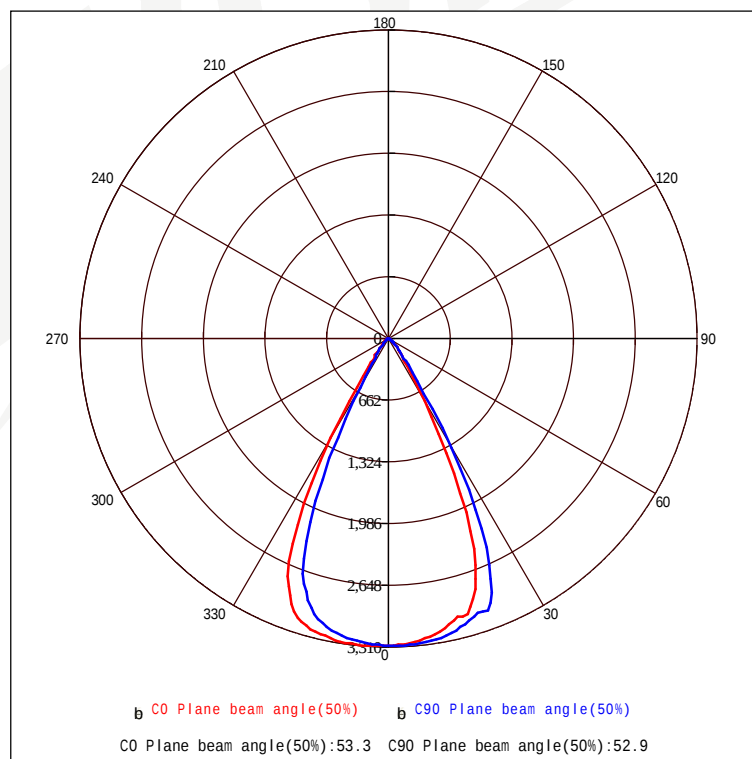


Goniophotometer Test Report

Measured Para U: 222.4V I: 213.6mA P: 28.60W PF: 0.602 Test LM: 2399.58lm						
Lamp Name: Led Track Light			Lamp Type:		Weight(kg):	
Lamp ID: LPTRL-30W			Lamp Spec: LPTRL-30W		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPTRL-30W		Peak Value(cd)	3307.2	Efficiency(lm/w)	83.9
Nominal P(w)		1.0	Position	135.0,5.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	2399.577	Down(C0-C180)	55.7
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)	44.3

Planar Intensity Distribution Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 25

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

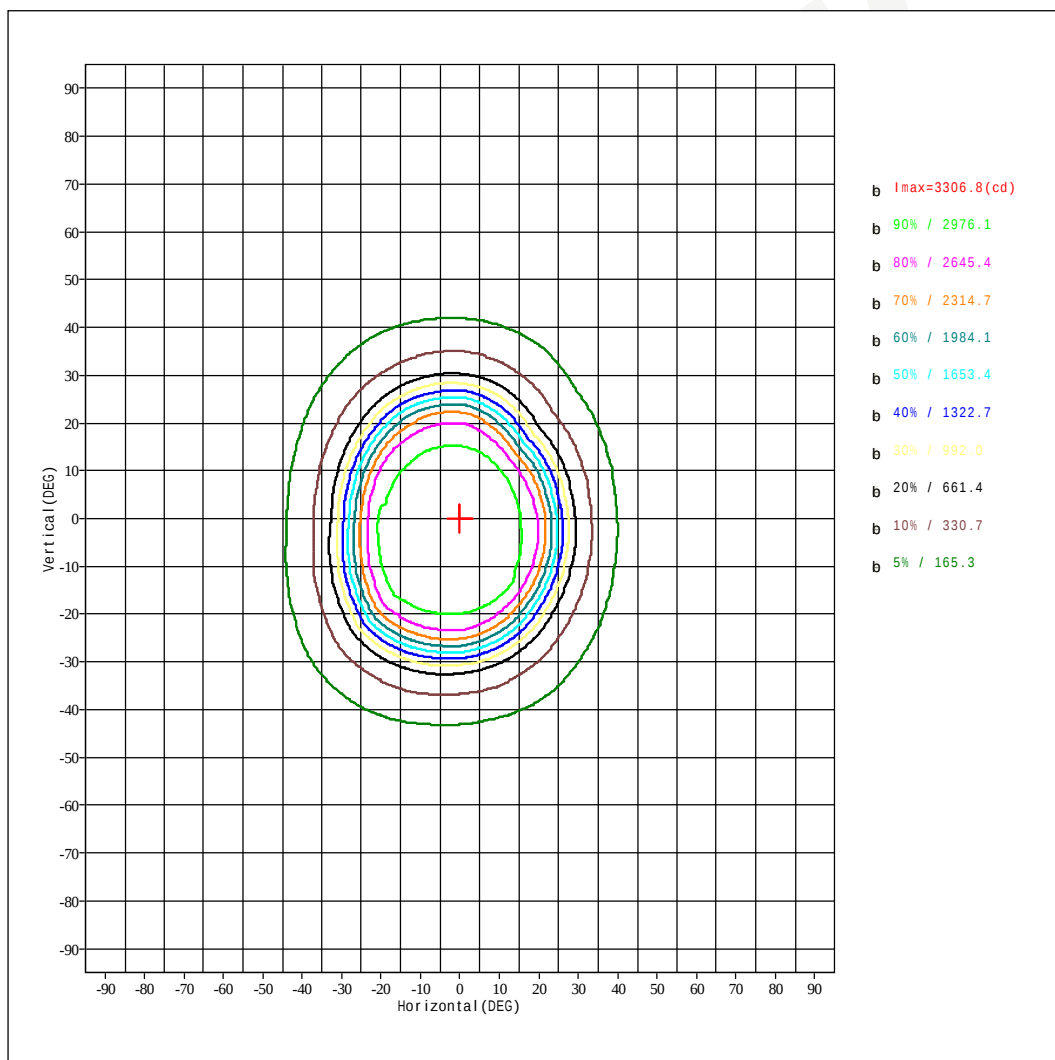
Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 222.4V I: 213.6mA P: 28.60W PF: 0.602 Test LM: 2399.58lm		
Lamp Name: Led Track Light	Lamp Type:	Weight(kg):
Lamp ID: LPTRL-30W	Lamp Spec: LPTRL-30W	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): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

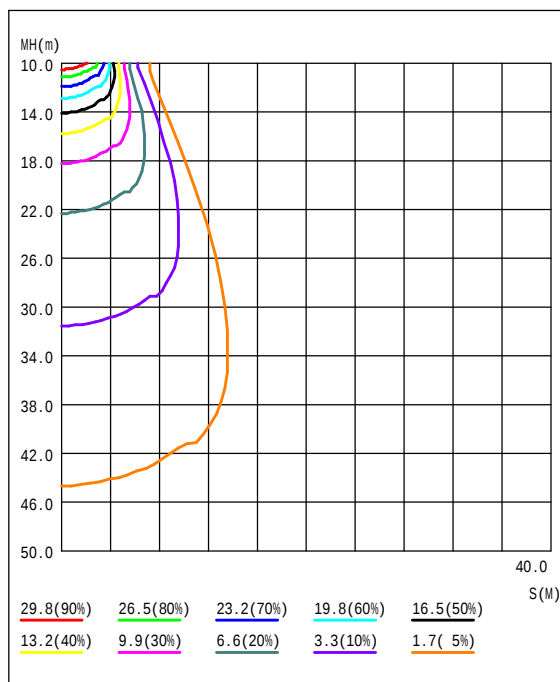
Humidity(%): 60

Date: 2025-2-19

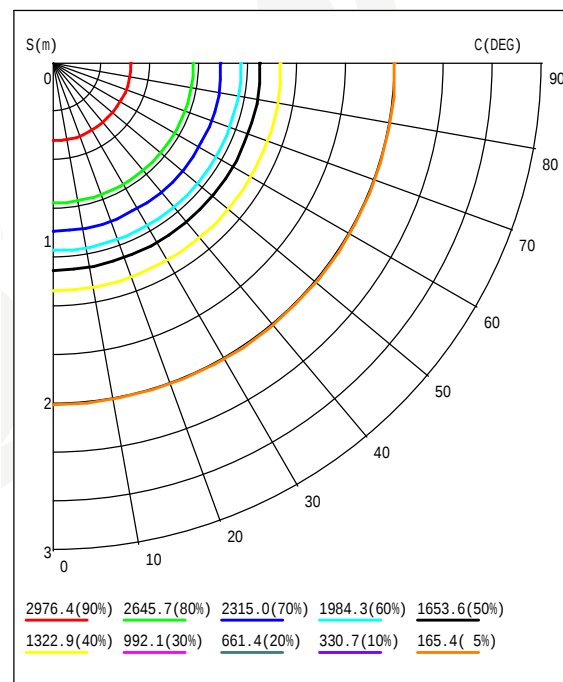
Remark:

Measured Para U: 222.4V I: 213.6mA P: 28.60W PF: 0.602 Test LM: 2399.58lm		
Lamp Name: Led Track Light	Lamp Type:	Weight(kg):
Lamp ID: LPTRL-30W	Lamp Spec: LPTRL-30W	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: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2025-2-19

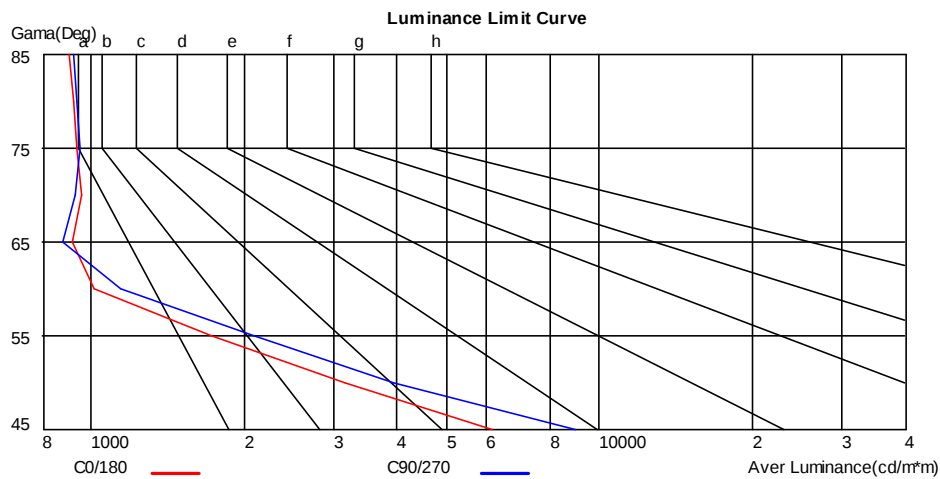
Remark:

Measured Para U: 222.4V I: 213.6mA P: 28.60W PF: 0.602 Test LM: 2399.58lm		
Lamp Name: Led Track Light	Lamp Type:	Weight(kg):
Lamp ID: LPTRL-30W	Lamp Spec: LPTRL-30W	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	6177.9	3152.2	1730.7	1013.8	918.8	955.0	933.9	920.7	903.1
C90	9000.3	3929.8	2088.4	1142.7	879.6	927.6	946.7	936.4	924.6

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: zxg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

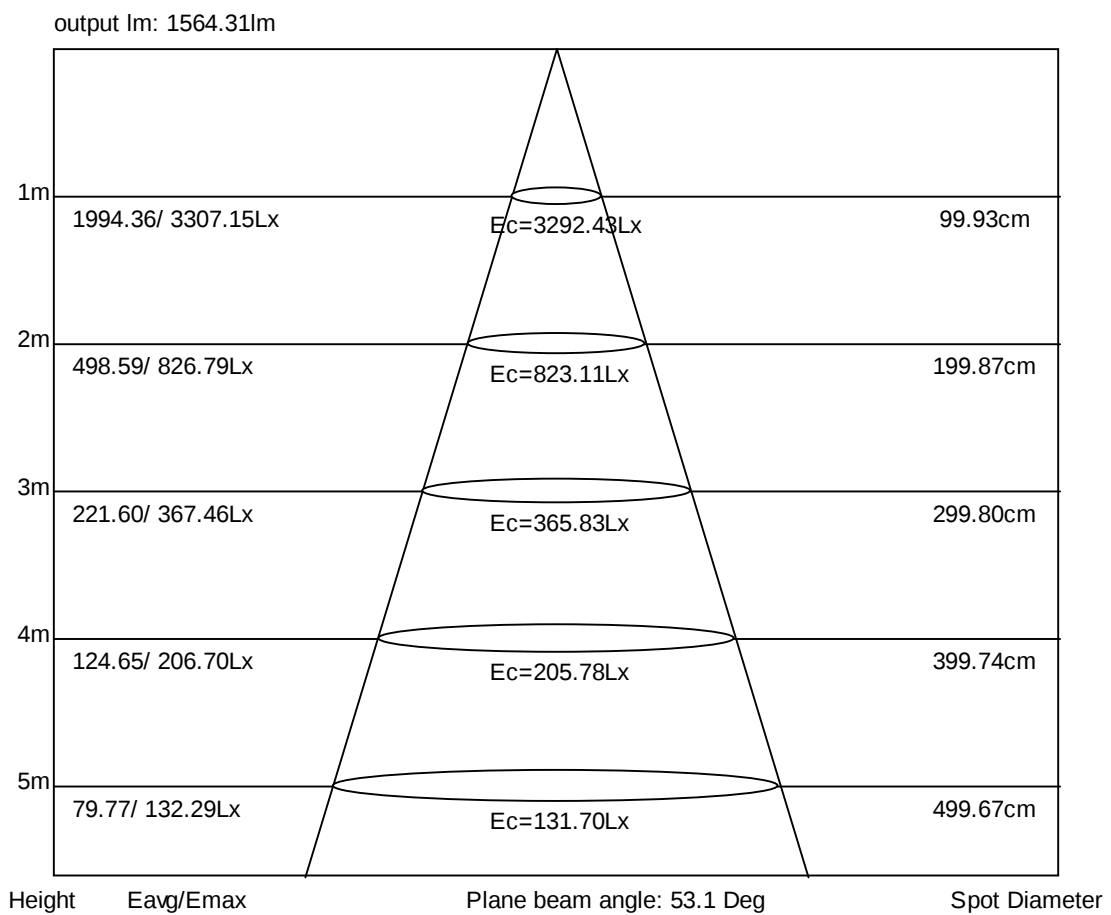
Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 222.4V I: 213.6mA P: 28.60W PF: 0.602 Test LM: 2399.58lm		
Lamp Name: Led Track Light	Lamp Type:	Weight(kg):
Lamp ID: LPTRL-30W	Lamp Spec: LPTRL-30W	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): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

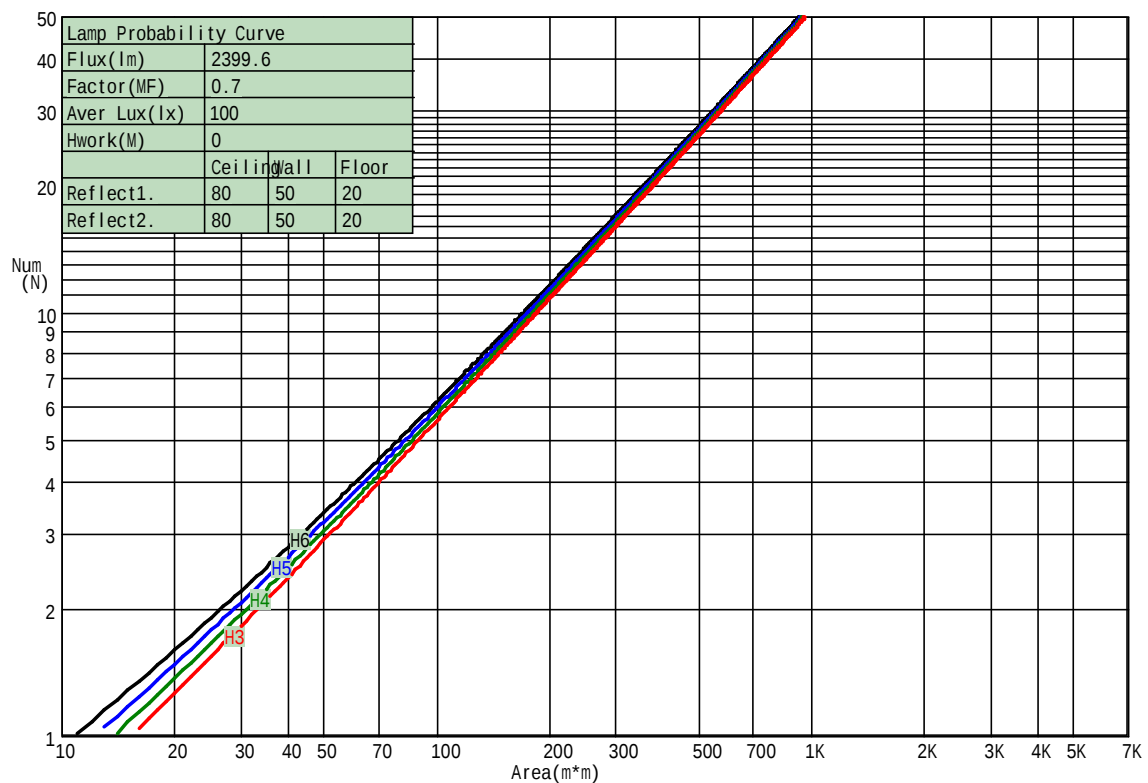
Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 222.4V I: 213.6mA P: 28.60W PF: 0.602 Test LM: 2399.58lm		
Lamp Name: Led Track Light	Lamp Type:	Weight(kg):
Lamp ID: LPTRL-30W	Lamp Spec: LPTRL-30W	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): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 222.4V I: 213.6mA P: 28.60W PF: 0.602 Test LM: 2399.58lm		
Lamp Name: Led Track Light	Lamp Type:	Weight(kg):
Lamp ID: LPTRL-30W	Lamp Spec: LPTRL-30W	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	42	25	14	40	24	14	37	23	14
0.80	47	28	16	45	27	16	40	25	15
1.00	51	31	17	48	30	17	43	27	16
1.25	54	34	19	51	32	18	45	29	17
1.50	57	36	20	53	34	19	47	30	17
2.00	61	39	22	57	37	21	49	33	19
2.50	63	41	23	59	39	22	51	34	20
3.00	65	43	25	60	40	23	52	35	20
4.00	67	45	26	62	42	25	53	37	21
5.00	69	47	27	64	44	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	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	1	0.99	0.98	0.97	0.96
2	1.04	1	0.97	1.03	0.99	0.96	0.99	0.97	0.94	0.96	0.94	0.92	0.94	0.92	0.9
3	0.98	0.93	0.9	0.97	0.92	0.89	0.94	0.91	0.88	0.92	0.89	0.86	0.89	0.87	0.85
4	0.92	0.87	0.83	0.91	0.87	0.83	0.89	0.85	0.82	0.87	0.84	0.81	0.85	0.83	0.8
5	0.87	0.82	0.78	0.86	0.81	0.78	0.85	0.8	0.77	0.83	0.79	0.76	0.82	0.78	0.76
6	0.83	0.77	0.73	0.82	0.77	0.73	0.8	0.76	0.73	0.79	0.75	0.72	0.78	0.74	0.72
7	0.78	0.73	0.69	0.78	0.73	0.69	0.77	0.72	0.69	0.75	0.71	0.68	0.74	0.71	0.68
8	0.75	0.69	0.65	0.74	0.69	0.65	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.64
9	0.71	0.66	0.62	0.7	0.65	0.62	0.7	0.65	0.62	0.69	0.64	0.61	0.68	0.64	0.61
10	0.68	0.62	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.66	0.61	0.58	0.65	0.61	0.58

Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 25

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 222.4V I: 213.6mA P: 28.60W PF: 0.602 Test LM: 2399.58lm		
Lamp Name: Led Track Light	Lamp Type:	Weight(kg):
Lamp ID: LPTRL-30W	Lamp Spec: LPTRL-30W	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	0.17	0.1	0.03	0.16	0.09	0.03	0.15	0.09	0.03	0.14	0.08	0.03	0.13	0.07	0.02
2	0.16	0.09	0.03	0.15	0.08	0.03	0.14	0.08	0.02	0.13	0.08	0.02	0.12	0.07	0.02
3	0.15	0.08	0.02	0.15	0.08	0.02	0.14	0.07	0.02	0.13	0.07	0.02	0.12	0.07	0.02
4	0.14	0.07	0.02	0.14	0.07	0.02	0.13	0.07	0.02	0.12	0.07	0.02	0.12	0.06	0.02
5	0.14	0.07	0.02	0.13	0.07	0.02	0.13	0.07	0.02	0.12	0.06	0.02	0.11	0.06	0.02
6	0.13	0.06	0.02	0.13	0.06	0.02	0.12	0.06	0.02	0.11	0.06	0.02	0.11	0.06	0.02
7	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
8	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
9	0.11	0.05	0.02	0.11	0.05	0.02	0.11	0.05	0.02	0.1	0.05	0.01	0.1	0.05	0.01
10	0.11	0.05	0.01	0.11	0.05	0.01	0.1	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	0.15	0.15	0.14	0.13	0.1	0.09	0.09	0.06	0.05	0.05	0.02	0.02	0.02
2	0.15	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	0.06	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	0.05	0.04	0.03	0.03	0.01	0.01	0.01
5	0.12	0.09	0.06	0.1	0.08	0.05	0.07	0.05	0.04	0.04	0.03	0.02	0.01	0.01	0.01
6	0.11	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	0.06	0.04	0.03	0.04	0.02	0.02	0.01	0.01	0.01
8	0.1	0.06	0.04	0.09	0.05	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	0.05	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): 25

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 222.4V I: 213.6mA P: 28.60W PF: 0.602 Test LM: 2399.58lm		
Lamp Name: Led Track Light	Lamp Type:	Weight(kg):
Lamp ID: LPTRL-30W	Lamp Spec: LPTRL-30W	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	3260	3276	3291	3307	3304	3291	3270	3230	0-5	78.6	78.6
10	3181	3216	3252	3293	3282	3243	3202	3120	5-10	233	311
15	3103	3084	3165	3250	3217	3129	3033	2940	10-15	376	688
20	2679	2804	3079	3156	3000	2842	2613	2200	15-20	491	1178
25	1727	2083	2388	2820	2327	1849	1552	1068	20-25	507	1685
30	696	969	1237	1868	1118	692	532	372	25-30	362	2047
35	299	338	390	712	348	260	236	193	30-35	172	2219
40	146	179	199	269	185	130	110	81.1	35-40	79.7	2299
45	61.8	77	90	145	79.1	51.2	45.5	36.4	40-45	41.8	2341
50	31.5	36.9	39.3	60	32.8	24.6	21.4	17.8	45-50	20.2	2361
55	17.3	19.4	20.9	28	15.1	10.3	10	7.23	50-55	10.2	2371
60	10.1	11.5	11.4	15.1	5.68	3.98	4.6	4.17	55-60	5.36	2377
65	9.19	9.27	8.8	8.81	3.89	3.94	4.62	4.71	60-65	3.45	2380
70	9.55	9.64	9.28	9.09	4.42	4.55	5.14	5.12	65-70	3.49	2384
75	9.34	9.62	9.47	9.49	4.76	4.89	5.27	5.35	70-75	3.77	2387
80	9.21	9.44	9.36	9.46	5.15	5.33	5.6	5.74	75-80	3.92	2391
85	9.03	9.27	9.25	9.4	5.64	5.77	5.99	6.09	80-85	4.07	2395
90	8.82	8.95	9.09	9.24	6.03	6.05	6.34	6.29	85-90	4.16	2400
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): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 222.4V I: 213.6mA P: 28.60W PF: 0.602 Test LM: 2399.58lm		
Lamp Name: Led Track Light	Lamp Type:	Weight(kg):
Lamp ID: LPTRL-30W	Lamp Spec: LPTRL-30W	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	3260	3267	3274	3281	3288	3295	3302	3307	3305	3304	3298	3292	3284	3275	3262	3243	3233	3247
10.0	3181	3196	3212	3228	3244	3261	3280	3292	3287	3282	3265	3248	3230	3211	3184	3147	3126	3154
15.0	3103	3095	3086	3111	3147	3183	3222	3247	3231	3217	3178	3139	3098	3054	3013	2970	2957	3031
20.0	2679	2734	2790	2894	3019	3096	3131	3139	3069	3000	2931	2859	2767	2663	2523	2335	2252	2469
25.0	1727	1882	2044	2183	2321	2482	2678	2766	2542	2327	2118	1901	1752	1617	1446	1227	1140	1439
30.0	696	816	940	1057	1179	1375	1661	1786	1446	1118	932	738	640	567	497	425	408	555
35.0	299	316	334	355	379	461	606	672	507	348	309	270	252	241	227	207	204	252
40.0	146	160	175	185	194	214	246	260	222	185	161	136	123	114	104	90.5	88.1	117
45.0	61.8	68.4	75.3	81.3	87.2	102	127	138	108	79.1	66.9	54.2	49.3	46.7	43.5	39.4	39.2	50.7
50.0	31.5	33.9	36.3	37.7	38.8	43.8	53.2	57	44.7	32.8	29.2	25.5	23.5	22.1	20.6	19	19.3	25.5
55.0	17.3	18.2	19.2	19.9	20.6	22.4	25.7	26.6	20.7	15.1	13	10.8	10.2	10.1	9.39	8.14	8.33	12.9
60.0	10.1	10.8	11.4	11.5	11.5	12.2	13.9	14.1	9.81	5.68	4.94	4.17	4.18	4.46	4.5	4.31	4.82	7.52
65.0	9.19	9.22	9.26	9.11	8.9	8.8	8.81	8.27	6.04	3.89	3.91	3.93	4.16	4.47	4.64	4.68	5.2	7.23
70.0	9.55	9.59	9.63	9.52	9.36	9.23	9.15	8.58	6.46	4.42	4.48	4.54	4.75	5.01	5.13	5.12	5.6	7.61
75.0	9.34	9.46	9.59	9.57	9.5	9.47	9.48	8.97	6.83	4.76	4.82	4.87	5.01	5.19	5.29	5.33	5.79	7.59
80.0	9.21	9.31	9.42	9.42	9.38	9.39	9.43	8.99	7.04	5.15	5.23	5.31	5.42	5.54	5.63	5.69	6.12	7.69
85.0	9.03	9.14	9.24	9.26	9.25	9.28	9.35	8.99	7.29	5.64	5.7	5.75	5.84	5.94	6.01	6.05	6.41	7.74
90.0	8.82	8.88	8.93	9	9.06	9.13	9.19	8.89	7.43	6.03	6.04	6.05	6.15	6.28	6.33	6.3	6.56	7.71
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): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2025-2-19

Remark: