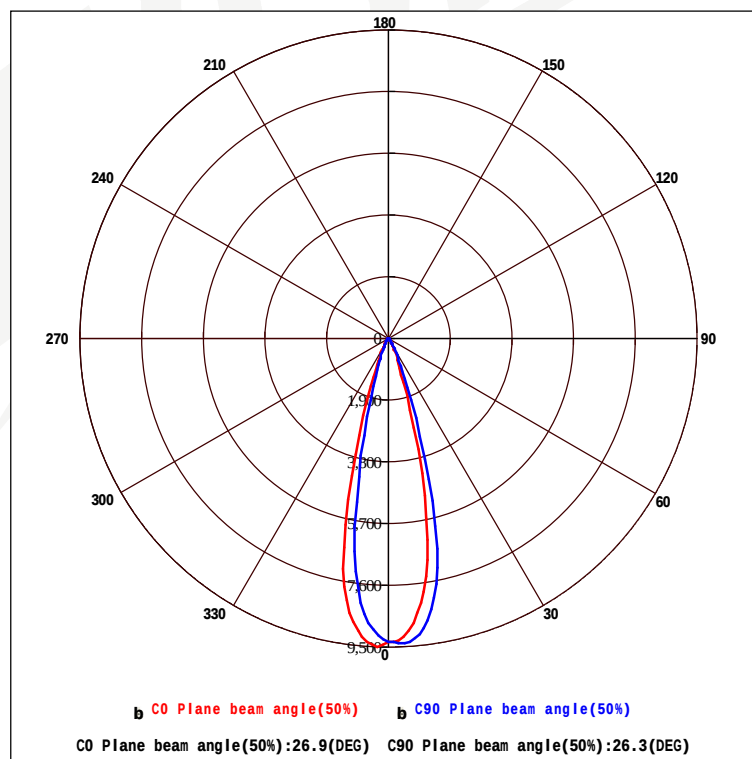


Goniophotometer Test Report

Measured Para U: 224.2V I: 213.1mA P: 28.57W PF: 0.598 Test LM: 2254.35lm						
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)	9627.7	Efficiency(lm/w)	78.9
Nominal P(w)		1.0	Position	135.0,4.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	2254.352	Down(C0-C180)	60.1
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)	39.9

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

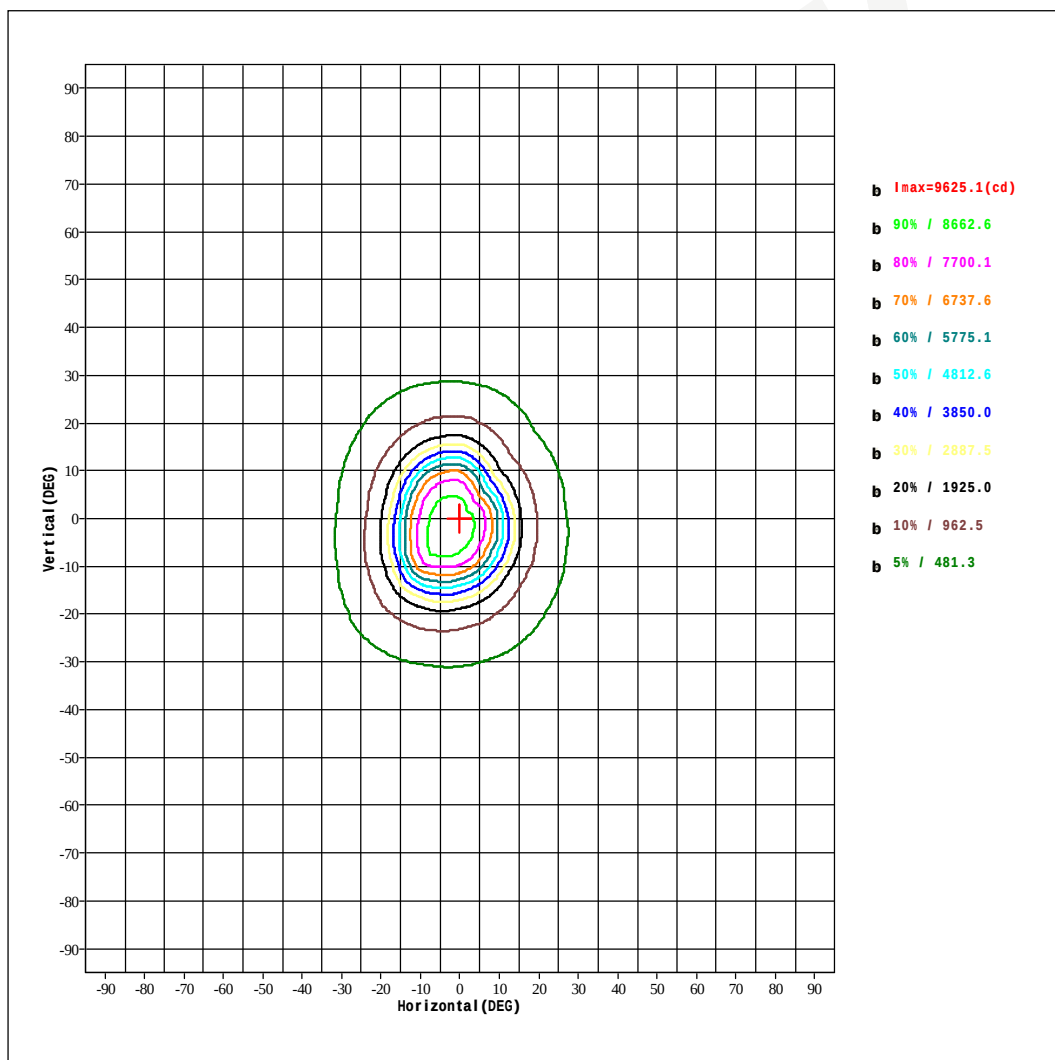
Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 224.2V I: 213.1mA P: 28.57W PF: 0.598 Test LM: 2254.35lm		
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: zxc

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

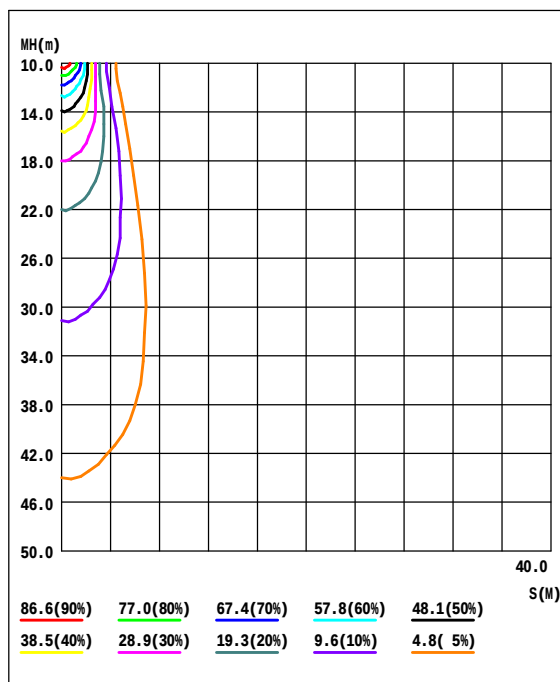
Humidity(%): 60

Date: 2025-2-19

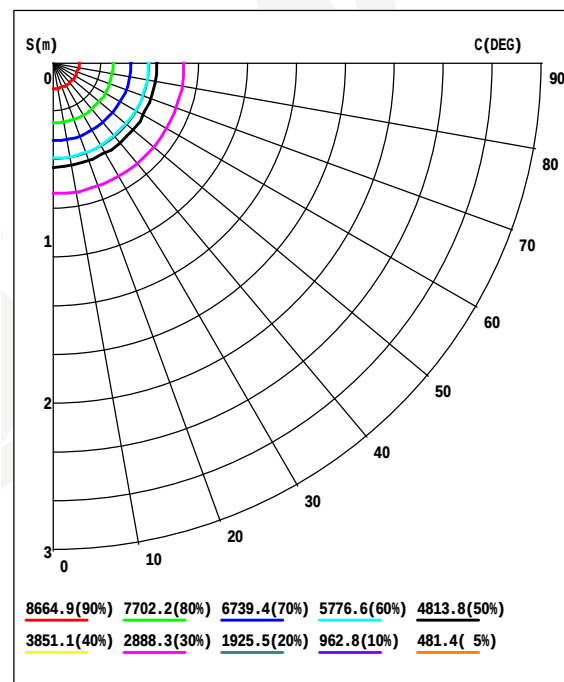
Remark:

Measured Para U: 224.2V I: 213.1mA P: 28.57W PF: 0.598 Test LM: 2254.35lm		
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

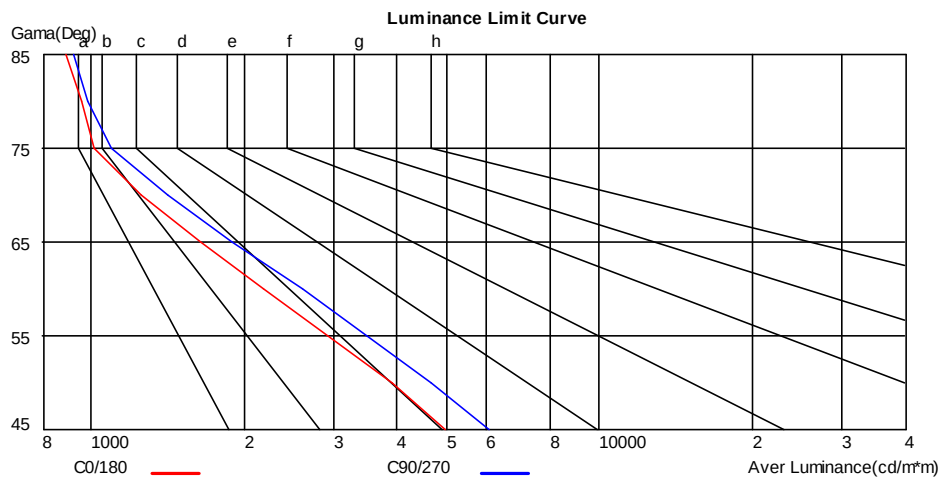
Remark:

Measured Para U: 224.2V I: 213.1mA P: 28.57W PF: 0.598 Test LM: 2254.35lm		
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	4985.8	3896.5	2909.1	2188.3	1643.5	1253.4	1010.9	954.5	887.9
C90	6087.3	4670.7	3486.8	2597.0	1894.3	1410.7	1091.7	985.9	921.2

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

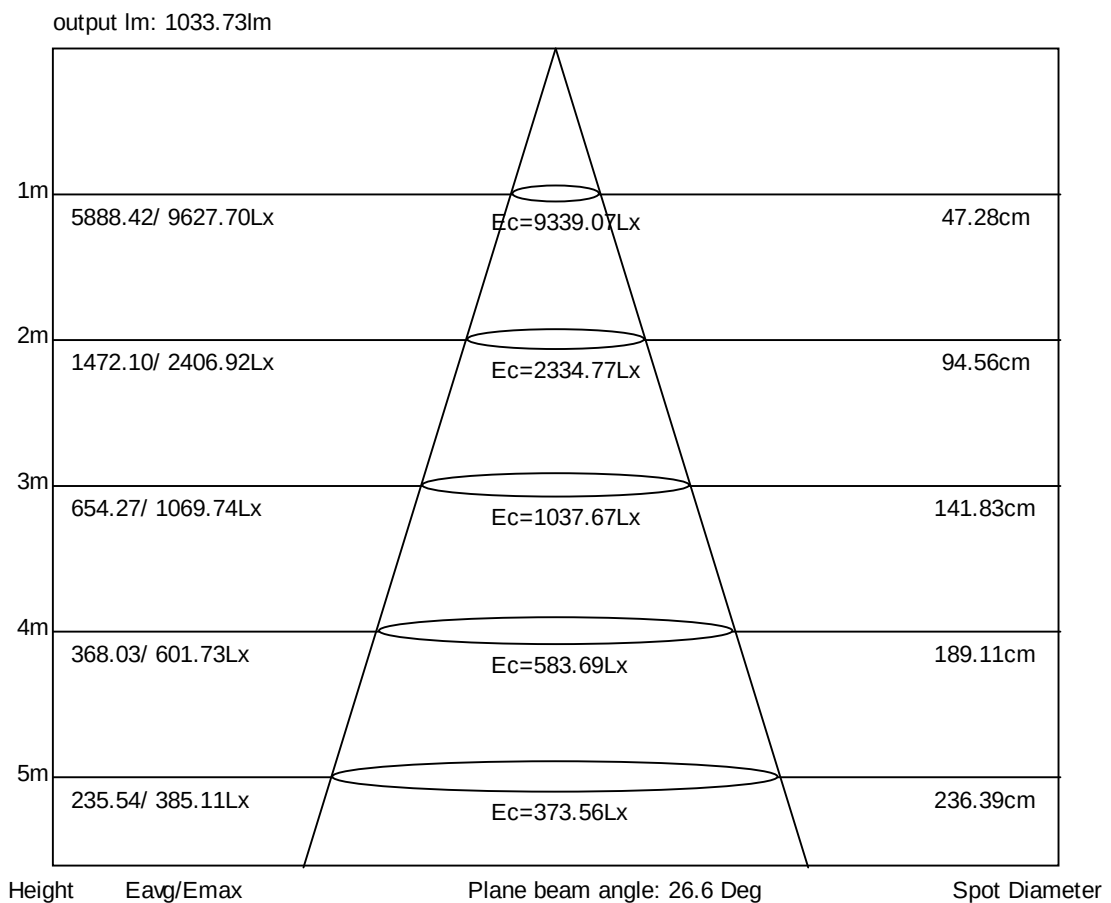
Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 224.2V I: 213.1mA P: 28.57W PF: 0.598 Test LM: 2254.35lm		
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: zyg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

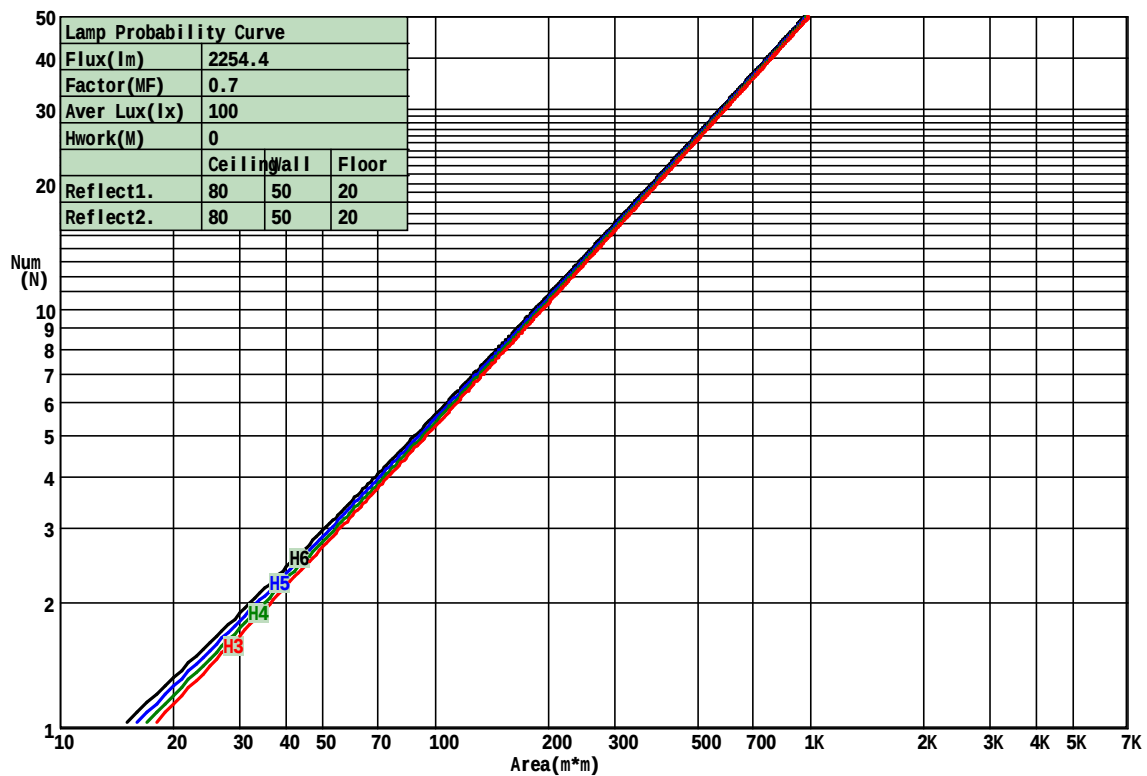
Humidity(%): 60

Date: 2025-2-19

Remark:

Measured Para U: 224.2V I: 213.1mA P: 28.57W PF: 0.598 Test LM: 2254.35lm		
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: 224.2V I: 213.1mA P: 28.57W PF: 0.598 Test LM: 2254.35lm		
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	41	24	13	39	23	13	36	21	12
0.80	46	27	15	44	26	14	40	24	13
1.00	50	30	17	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	60	39	22	56	37	21	49	32	18
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	1.12	1.1	1.08	1.1	1.08	1.07	1.06	1.05	1.03	1.03	1.01	1	0.99	0.98	0.98
2	1.07	1.04	1.01	1.05	1.02	1	1.02	1	0.98	0.99	0.97	0.96	0.96	0.95	0.94
3	1.02	0.98	0.95	1.01	0.97	0.94	0.98	0.95	0.93	0.96	0.93	0.91	0.94	0.92	0.9
4	0.98	0.94	0.9	0.97	0.93	0.9	0.95	0.91	0.89	0.93	0.9	0.88	0.91	0.89	0.87
5	0.94	0.9	0.86	0.93	0.89	0.86	0.92	0.88	0.85	0.9	0.87	0.85	0.89	0.86	0.84
6	0.91	0.86	0.83	0.9	0.86	0.83	0.89	0.85	0.82	0.87	0.84	0.82	0.86	0.83	0.81
7	0.88	0.83	0.8	0.87	0.83	0.8	0.86	0.82	0.8	0.85	0.82	0.79	0.84	0.81	0.79
8	0.85	0.81	0.78	0.84	0.8	0.77	0.83	0.8	0.77	0.83	0.79	0.77	0.82	0.79	0.77
9	0.82	0.78	0.75	0.82	0.78	0.75	0.81	0.78	0.75	0.8	0.77	0.75	0.8	0.77	0.75
10	0.8	0.76	0.73	0.8	0.76	0.73	0.79	0.75	0.73	0.78	0.75	0.73	0.78	0.75	0.73

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: 224.2V I: 213.1mA P: 28.57W PF: 0.598 Test LM: 2254.35lm		
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	0.15	0.08	0.03	0.14	0.08	0.03	0.13	0.07	0.02	0.12	0.07	0.02	0.11	0.06	0.02
2	0.14	0.07	0.02	0.13	0.07	0.02	0.12	0.07	0.02	0.11	0.06	0.02	0.1	0.06	0.02
3	0.13	0.07	0.02	0.12	0.06	0.02	0.11	0.06	0.02	0.1	0.06	0.02	0.1	0.05	0.02
4	0.12	0.06	0.02	0.11	0.06	0.02	0.11	0.06	0.02	0.1	0.05	0.02	0.09	0.05	0.02
5	0.11	0.06	0.02	0.11	0.05	0.02	0.1	0.05	0.02	0.09	0.05	0.01	0.09	0.05	0.01
6	0.1	0.05	0.01	0.1	0.05	0.01	0.1	0.05	0.01	0.09	0.05	0.01	0.09	0.05	0.01
7	0.1	0.05	0.01	0.1	0.05	0.01	0.09	0.05	0.01	0.09	0.04	0.01	0.08	0.04	0.01
8	0.09	0.05	0.01	0.09	0.04	0.01	0.09	0.04	0.01	0.08	0.04	0.01	0.08	0.04	0.01
9	0.09	0.04	0.01	0.09	0.04	0.01	0.08	0.04	0.01	0.08	0.04	0.01	0.08	0.04	0.01
10	0.08	0.04	0.01	0.08	0.04	0.01	0.08	0.04	0.01	0.08	0.04	0.01	0.07	0.04	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	0.14	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	0.12	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	0.01	0.01	0.01
4	0.12	0.1	0.08	0.11	0.08	0.07	0.07	0.06	0.05	0.04	0.03	0.03	0.01	0.01	0.01
5	0.11	0.09	0.07	0.1	0.07	0.06	0.07	0.05	0.04	0.04	0.03	0.02	0.01	0.01	0.01
6	0.1	0.08	0.05	0.09	0.07	0.05	0.06	0.05	0.03	0.04	0.03	0.02	0.01	0.01	0.01
7	0.1	0.07	0.05	0.08	0.06	0.04	0.06	0.04	0.03	0.03	0.02	0.02	0.01	0.01	0.01
8	0.09	0.06	0.04	0.08	0.05	0.04	0.05	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0
9	0.09	0.06	0.04	0.07	0.05	0.03	0.05	0.03	0.02	0.03	0.02	0.01	0.01	0.01	0
10	0.08	0.05	0.03	0.07	0.04	0.03	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: 224.2V I: 213.1mA P: 28.57W PF: 0.598 Test LM: 2254.35lm		
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	8645	8967	9219	9617	9134	8594	8371	7741	0-5	217	217
10	6636	7442	7919	8924	7528	6243	5545	4536	5-10	561	777
15	3178	4037	4776	6693	4014	2771	2197	1503	10-15	614	1391
20	1072	1430	1810	2985	1412	926	812	646	15-20	386	1777
25	473	615	722	1073	623	439	364	271	20-25	187	1964
30	211	271	320	484	272	197	177	140	25-30	99.1	2063
35	118	141	157	218	144	115	106	84.4	30-35	54.9	2118
40	75.3	86.6	93.4	119	88.4	77.8	72.5	55.9	35-40	35.4	2154
45	49.9	57.4	60.9	73.1	57.7	48.9	46.3	41.2	40-45	25.1	2179
50	39	40.3	46.7	48.9	34.9	35.7	30.7	27.9	45-50	18.3	2197
55	29.1	29.7	34.9	35	26.4	23.9	23.3	18.2	50-55	14.1	2211
60	21.9	25.1	26	29.6	16.9	14.7	14.6	11.1	55-60	10.9	2222
65	16.4	18.5	18.9	21.9	9.87	8.39	8.52	6.67	60-65	8.06	2230
70	12.5	13.9	14.1	16.2	5.87	4.98	5.31	4.67	65-70	5.83	2236
75	10.1	10.9	10.9	12.3	4.39	4.48	5.01	5.62	70-75	4.52	2240
80	9.55	10	9.86	10.3	5.86	6.49	7	7.5	75-80	4.32	2245
85	8.88	9.31	9.21	9.66	7.63	8.28	8.79	8.98	80-85	4.68	2249
90	8.33	8.5	8.73	8.86	8.96	9.28	9.75	9.42	85-90	4.9	2254
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: 224.2V I: 213.1mA P: 28.57W PF: 0.598 Test LM: 2254.35lm		
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	8645	8786	8931	9049	9164	9306	9487	9565	9346	9134	8898	8653	8521	8420	8233	7948	7840	8249
10.0	6636	6989	7354	7599	7815	8139	8594	8772	8139	7528	6966	6383	6014	5698	5324	4867	4766	5717
15.0	3178	3554	3943	4279	4614	5195	6064	6400	5186	4014	3470	2907	2582	2322	2045	1730	1686	2445
20.0	1072	1229	1391	1555	1727	2067	2599	2813	2100	1412	1199	979	888	837	776	700	692	885
25.0	473	536	600	650	698	799	958	1024	820	623	542	459	414	380	344	301	293	385
30.0	211	237	264	287	309	356	430	461	365	272	239	205	190	182	169	152	148	180
35.0	118	128	139	146	153	170	198	210	177	144	132	118	112	108	101	91.4	88.1	104
40.0	75.3	80.3	85.3	88.8	91.9	98.9	110	115	102	88.4	83.7	79	76.1	73.6	68.8	61.3	58	66.8
45.0	49.9	53.1	56.5	58.5	60.1	63.5	69.1	71.4	64.5	57.7	53.9	49.8	48	46.9	45.2	42.9	42.2	46.1
50.0	39	39.6	40.2	42.4	45.3	47.2	48.2	47.3	41	34.9	35.2	35.6	34.1	31.8	30.1	28.8	29.1	34.1
55.0	29.1	29.3	29.6	31.4	33.7	34.9	35	34.1	30.2	26.4	25.3	24.2	23.7	23.4	22.2	19.8	19.4	24.3
60.0	21.9	23.3	24.7	25.4	25.8	26.8	28.4	28.2	22.5	16.9	16	15	14.7	14.6	13.8	12.2	12.3	17.2
65.0	16.4	17.3	18.3	18.7	18.8	19.6	20.9	20.6	15.1	9.87	9.22	8.55	8.43	8.49	8.12	7.28	7.74	12.2
70.0	12.5	13.1	13.8	14	14.1	14.6	15.5	15.1	10.4	5.87	5.48	5.08	5.09	5.23	5.17	4.88	5.53	9.1
75.0	10.1	10.5	10.8	10.9	10.9	11.2	11.9	11.4	7.85	4.39	4.43	4.47	4.66	4.89	5.14	5.42	6.11	8.14
80.0	9.55	9.76	9.97	9.97	9.9	9.95	10.2	9.81	7.8	5.86	6.13	6.42	6.66	6.89	7.11	7.33	7.72	8.65
85.0	8.88	9.07	9.26	9.28	9.23	9.31	9.51	9.44	8.52	7.63	7.91	8.21	8.45	8.68	8.83	8.92	8.97	8.92
90.0	8.33	8.4	8.48	8.57	8.68	8.76	8.82	8.87	8.92	8.96	9.1	9.24	9.43	9.64	9.67	9.53	9.3	8.81
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: