

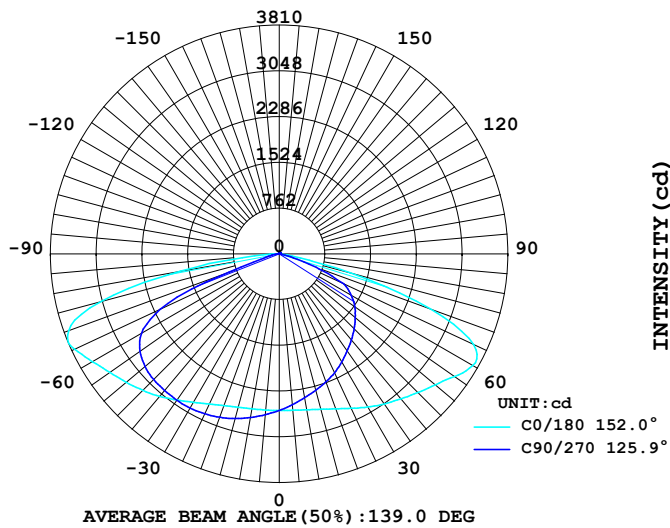
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

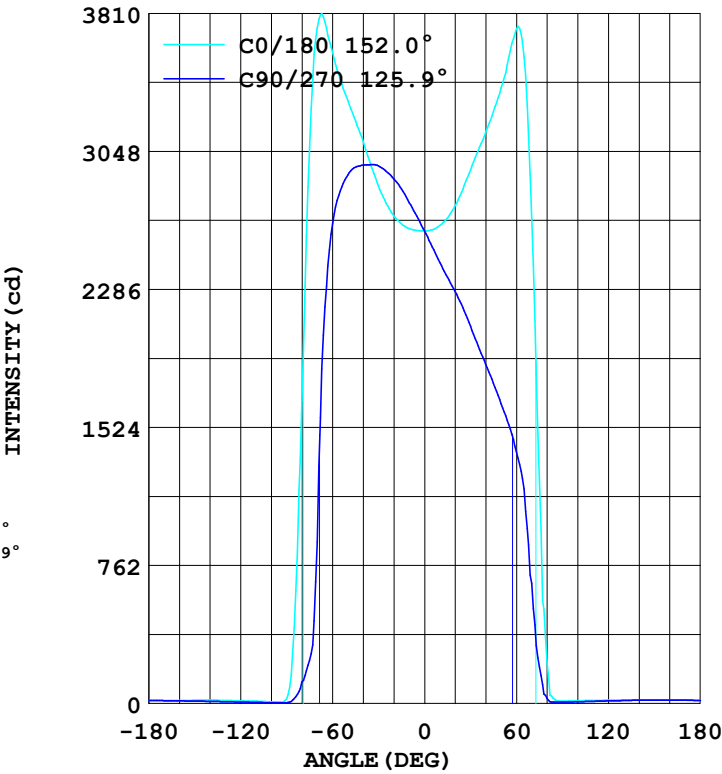
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE:IL-ST11-D08040-TY3	WEIGHT:
SPECIFICATION:5050LED 4000K Type III	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	4295	S/MH (C0/180)	1.79
MODEL		EFFICIENCY (%)	100.0	S/MH (C90/270)	1.71
NOMINAL POWER(W)	80	TOTAL FLUX(lm)	12251	Voltage(V)	230.8
RATED VOLTAGE (V)	230	EFFICIENCY (lm/W)	148.9	Current(A)	0.358
NOMINAL FLUX(lm)	12251.4	$\eta$ up (%)	0.7	Power(W)	82.30
LAMPS QUANTITY	1	$\eta$ down (%)	99.3	Power Factor (PF)	0.996
TEST VOLTAGE (V)	230.8	Effective Flux(lm)	12251.4	EEL	0.101

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



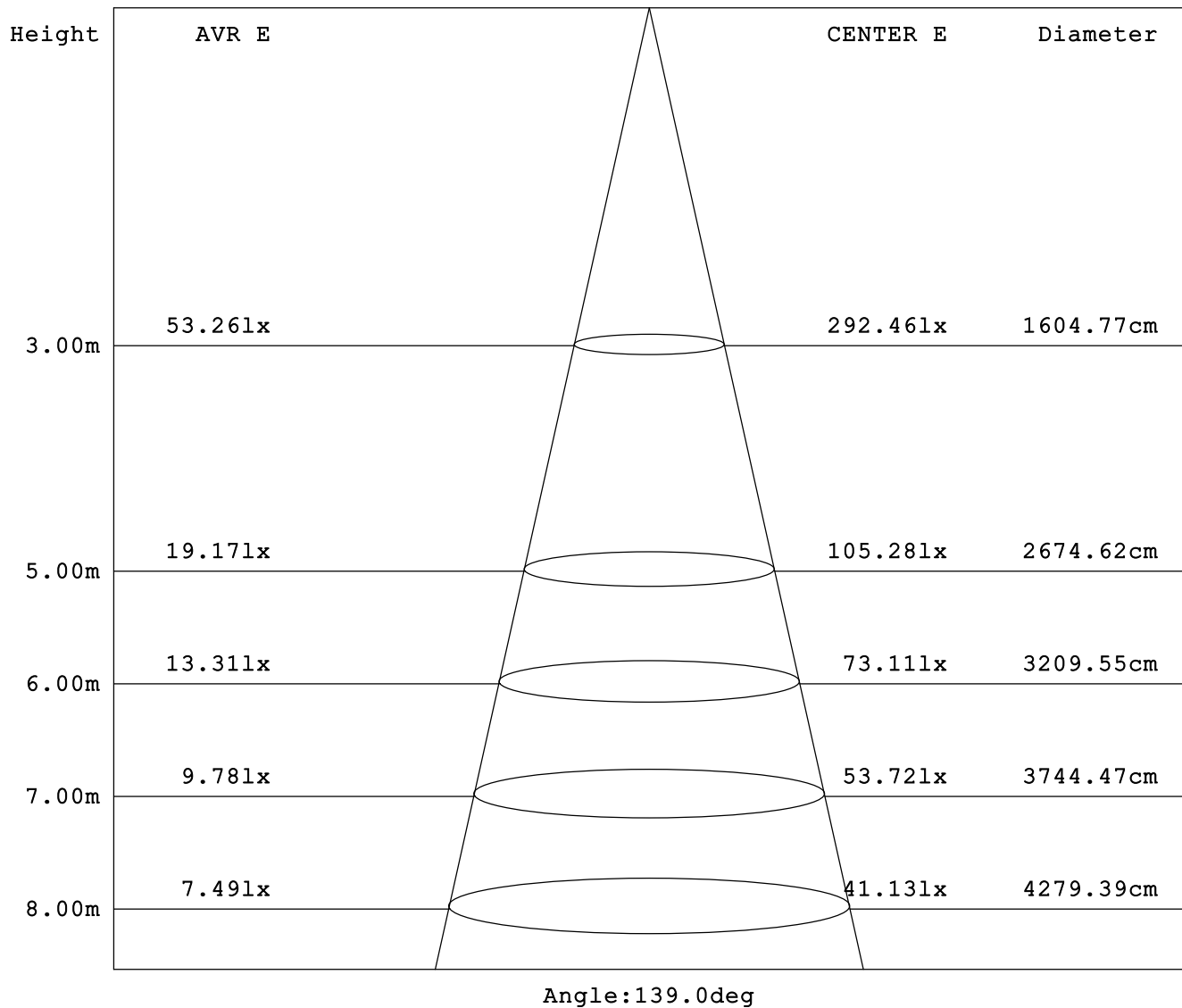
Test System:  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2025.03.23

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:10.000 m  
 Remarks:

## AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE:IL-ST11-D08040-TY3	WEIGHT:
SPECIFICATION:5050LED 4000K Type III	DIMENSION:	SERIAL No.:



Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2025.03.23

Test Set: 5.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:10.000 m  
Remarks:

## ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D08040-TY3	WEIGHT:
SPECIFICATION: 5050LED 4000K Type III	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
5.0	2611	2669	2690	2667	2615	2549	2521	2550	0- 5	62.37	62.37
10.0	2622	2731	2766	2725	2639	2489	2435	2491	5- 10	186.7	249.1
15.0	2648	2799	2841	2791	2681	2433	2353	2432	10- 15	310.4	559.5
20.0	2692	2879	2896	2864	2749	2372	2273	2372	15- 20	433.2	992.8
25.0	2761	2968	2938	2945	2840	2311	2186	2308	20- 25	555.0	1548
30.0	2856	3070	2968	3033	2945	2252	2083	2250	25- 30	675.4	2223
35.0	2972	3177	2975	3121	3053	2183	1974	2185	30- 35	792.5	3016
40.0	3101	3270	2972	3194	3154	2106	1872	2115	35- 40	904.0	3920
45.0	3216	3343	2960	3249	3266	2018	1768	2033	40- 45	1008	4928
50.0	3327	3399	2919	3291	3398	1907	1655	1931	45- 50	1101	6028
55.0	3446	3442	2830	3306	3566	1766	1540	1799	50- 55	1179	7207
60.0	3594	3451	2650	3271	3723	1608	1390	1646	55- 60	1239	8446
65.0	3761	3396	2190	3094	3571	1379	1184	1442	60- 65	1263	9709
70.0	3730	3144	891.7	2352	2674	898.4	661.8	1062	65- 70	1165	10874
75.0	3066	1782	239.3	534.2	1230	343.2	202.8	486.4	70- 75	796.1	11670
80.0	1674	322.0	119.6	152.8	225.3	64.42	27.29	144.3	75- 80	372.1	12042
85.0	416.2	88.46	26.74	50.62	22.48	12.71	8.041	21.31	80- 85	107.4	12149
90.0	24.65	18.62	5.238	12.25	13.68	6.791	7.765	6.128	85- 90	18.54	12168
95.0	7.614	9.773	3.905	9.009	14.32	8.534	8.454	7.912	90- 95	5.189	12173
100.0	9.473	9.223	4.319	8.735	15.27	10.23	9.511	9.832	95-100	4.945	12178
105.0	11.19	9.498	5.284	9.055	16.13	11.60	10.84	11.43	100-105	5.377	12183
110.0	12.60	10.09	6.249	9.604	16.81	12.84	12.08	12.80	105-110	5.784	12189
115.0	13.68	10.73	7.168	10.19	17.45	13.90	13.27	14.08	110-115	6.083	12195
120.0	14.68	11.47	8.041	10.79	18.26	14.91	14.33	15.18	115-120	6.276	12202
125.0	15.72	12.25	8.960	11.57	19.17	16.01	15.30	16.19	120-125	6.389	12208
130.0	16.86	13.12	9.971	12.34	19.67	17.20	16.31	17.19	125-130	6.426	12214
135.0	17.76	13.94	10.98	13.12	19.58	18.03	17.46	18.11	130-135	6.331	12221
140.0	18.17	14.59	11.90	13.76	19.17	18.21	18.33	18.43	135-140	6.032	12227
145.0	18.04	15.05	12.63	14.22	18.67	18.07	18.70	18.29	140-145	5.531	12232
150.0	17.72	15.41	13.32	14.63	18.26	17.89	18.70	18.01	145-150	4.912	12237
155.0	17.45	15.73	13.92	15.04	17.94	17.66	18.65	17.79	150-155	4.233	12241
160.0	17.31	16.06	14.56	15.41	17.81	17.52	18.60	17.56	155-160	3.518	12245
165.0	17.26	16.38	15.20	15.77	17.72	17.39	18.42	17.37	160-165	2.776	12248
170.0	17.36	16.70	15.80	16.23	17.67	17.25	18.19	17.15	165-170	2.006	12250
175.0	17.36	16.97	16.40	16.55	17.63	17.02	17.73	16.83	170-175	1.213	12251
180.0	17.54	17.16	17.04	16.87	17.54	16.88	17.23	16.55	175-180	0.405	12251
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2025.03.23

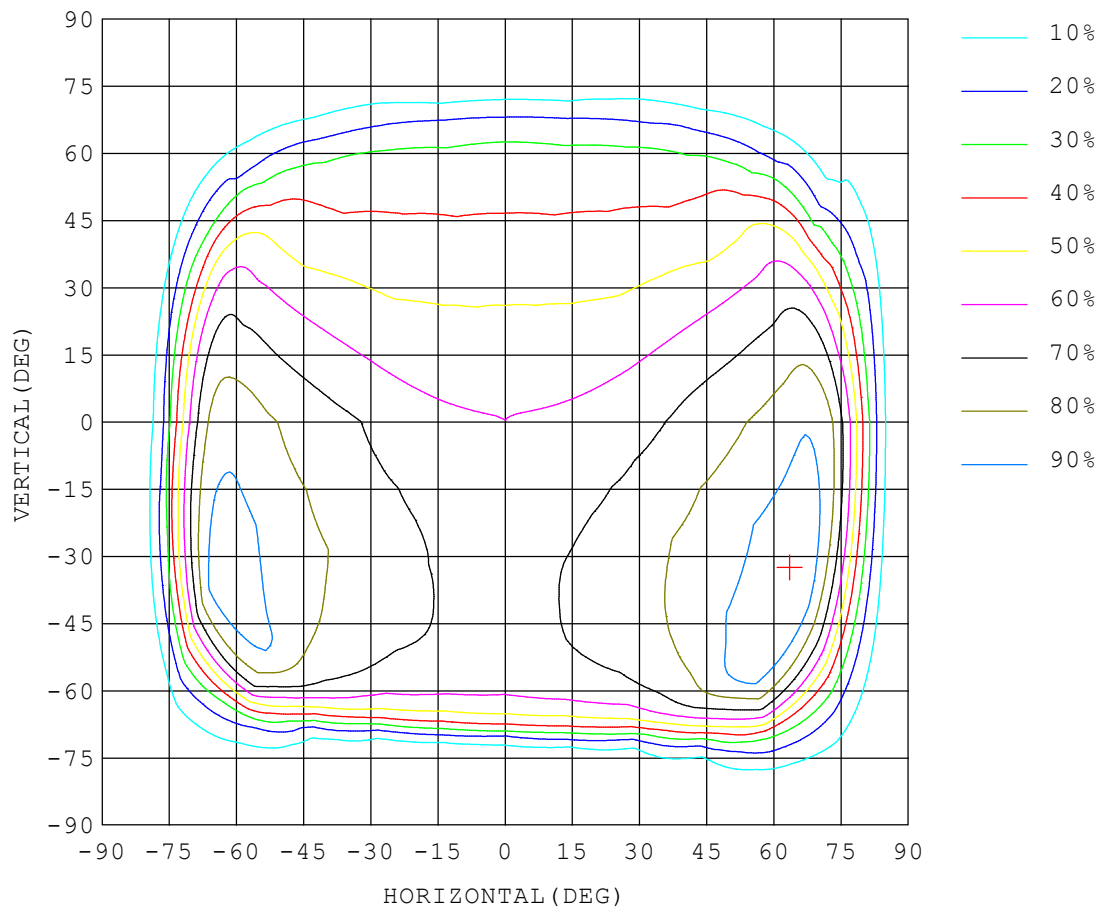
Test Set: 5.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:10.000 m  
Remarks:

## ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D08040-TY3	WEIGHT:
SPECIFICATION: 5050LED 4000K Type III	DIMENSION:	SERIAL No.:

UNIT: cd



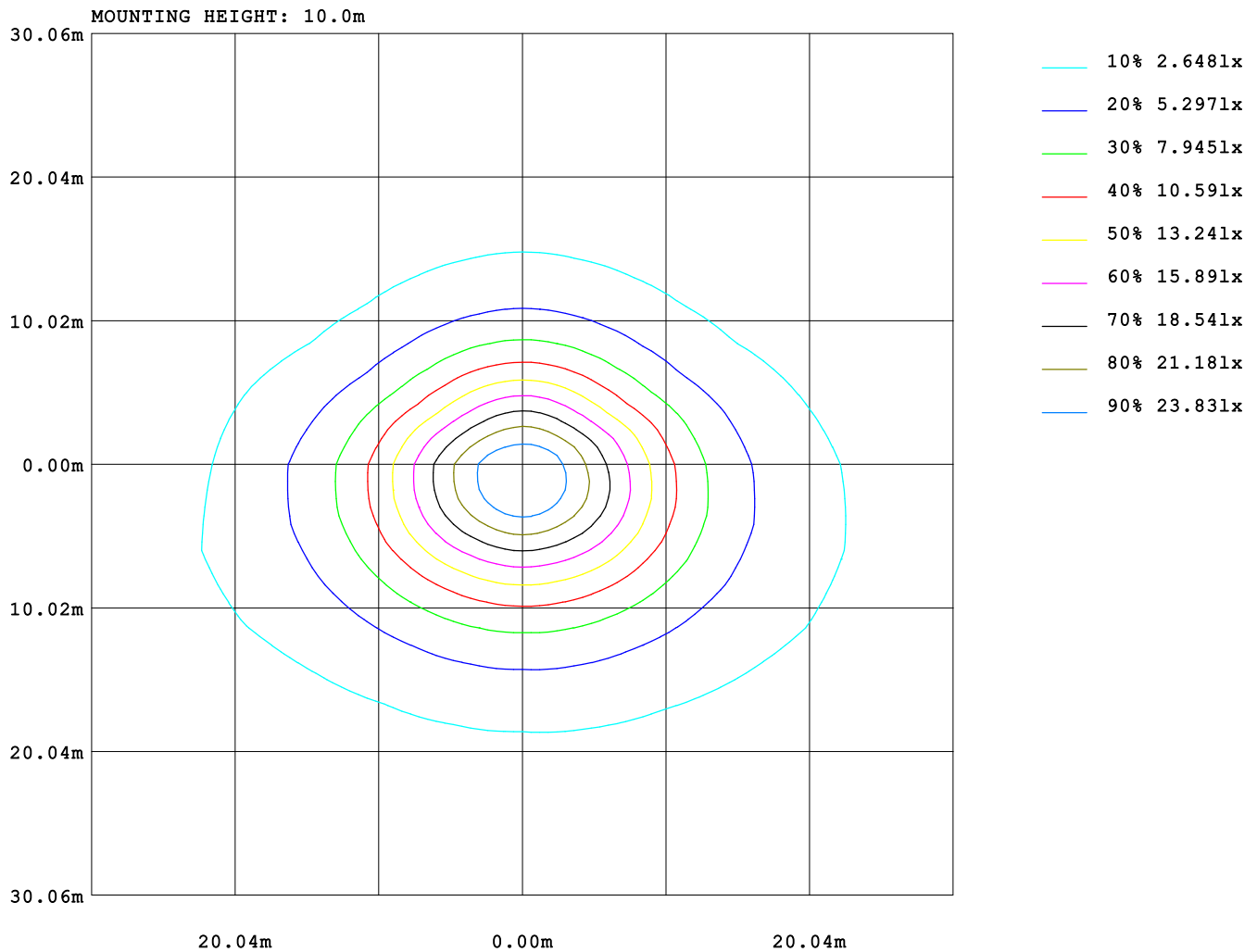
Test System:  
Temperature: 25.3 DEG  
Operators:  
Test Date: 2025.03.23

Test Set: 5.0 deg/s C-Gamma (TYPE C)  
Humidity: 65.0%  
Test Distance: 10.000 m  
Remarks:

## ISOLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D08040-TY3	WEIGHT:
SPECIFICATION: 5050LED 4000K Type III	DIMENSION:	SERIAL No.:



Test System:  
Temperature: 25.3DEG  
Operators:  
Test Date: 2025.03.23

Test Set: 5.0deg/s C-Gamma (TYPE C)  
Humidity: 65.0%  
Test Distance: 10.000 m  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

<b>MANUFACTURER: ILUMEN GMBH</b>	<b>Address:</b>	
<b>NAME: Muller</b>	<b>TYPE:IL-ST11-D08040-TY3</b>	<b>WEIGHT:</b>
<b>SPECIFICATION:5050LED 4000K Type III</b>	<b>DIMENSION:</b>	<b>SERIAL No.:</b>

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210
0.0	2609	2609	2609	2609	2609	2609	2609	2609	2609	2609	2609	2609	2609	2609	2609
5.0	2611	2631	2651	2669	2680	2691	2690	2690	2679	2667	2649	2631	2615	2592	2568
10.0	2622	2662	2699	2731	2750	2765	2766	2763	2746	2725	2695	2661	2639	2590	2535
15.0	2648	2708	2761	2799	2823	2839	2841	2835	2816	2791	2755	2709	2681	2598	2505
20.0	2692	2778	2839	2879	2892	2900	2896	2893	2877	2864	2834	2784	2749	2620	2480
25.0	2761	2879	2948	2968	2953	2946	2938	2935	2931	2945	2939	2887	2840	2654	2457
30.0	2856	3003	3080	3070	3015	2980	2968	2966	2979	3033	3059	3010	2945	2703	2429
35.0	2972	3146	3212	3177	3071	3000	2975	2977	3018	3121	3178	3139	3053	2762	2394
40.0	3101	3287	3342	3270	3118	3008	2972	2982	3048	3194	3287	3265	3154	2806	2357
45.0	3216	3420	3463	3343	3147	3015	2960	2979	3072	3249	3391	3388	3266	2839	2307
50.0	3327	3569	3589	3399	3164	3006	2919	2958	3079	3291	3484	3537	3398	2867	2230
55.0	3446	3736	3693	3442	3129	2933	2830	2874	3022	3306	3572	3701	3566	2893	2132
60.0	3594	3928	3833	3451	3019	2785	2650	2708	2879	3271	3683	3930	3723	2888	2015
65.0	3761	4188	4014	3396	2745	2358	2190	2216	2479	3094	3845	4191	3571	2841	1816
70.0	3730	4238	4193	3144	1961	1322	892	1009	1378	2352	3681	4023	2674	2079	1238
75.0	3066	3527	3455	1782	425	272	239	244	247	534	2335	2894	1230	870	513
80.0	1674	1842	1309	322	154	132	120	114	117	153	541	1028	225	175	85.8
85.0	416	425	247	88.4	48.4	41.7	26.7	34.7	30.7	50.6	76.0	132	22.4	15.2	23.9
90.0	24.6	33.5	18.0	18.6	7.16	11.0	5.23	10.6	6.46	12.2	7.97	16.1	13.6	9.01	12.9
95.0	7.61	12.7	6.16	9.77	4.77	8.14	3.90	7.85	4.53	9.00	6.05	11.9	14.3	10.8	13.4
100.0	9.47	12.4	6.98	9.22	4.73	7.36	4.31	7.26	4.76	8.73	6.78	12.0	15.2	12.5	14.4
105.0	11.1	12.9	8.08	9.49	5.74	7.77	5.28	7.72	5.68	9.05	7.83	12.5	16.1	13.8	15.2
110.0	12.6	13.7	9.31	10.0	6.70	8.37	6.24	8.27	6.64	9.60	8.83	13.1	16.8	14.8	15.9
115.0	13.6	14.4	10.4	10.7	7.67	8.97	7.16	8.91	7.56	10.1	9.79	13.7	17.4	15.8	16.6
120.0	14.6	15.1	11.5	11.4	8.63	9.62	8.04	9.51	8.43	10.7	10.7	14.3	18.2	16.8	17.5
125.0	15.7	15.8	12.5	12.2	9.55	10.3	8.96	10.2	9.34	11.5	11.6	14.9	19.1	18.0	18.6
130.0	16.8	16.7	13.5	13.1	10.6	11.1	9.97	11.0	10.4	12.3	12.5	15.8	19.6	18.8	19.6
135.0	17.7	17.5	14.4	13.9	11.6	12.0	10.9	11.9	11.3	13.1	13.4	16.4	19.5	18.8	19.9
140.0	18.1	17.9	15.1	14.5	12.5	12.8	11.9	12.7	12.1	13.7	14.0	16.7	19.1	18.5	19.5
145.0	18.0	17.9	15.4	15.0	13.2	13.5	12.6	13.4	12.8	14.2	14.3	16.7	18.6	18.0	19.1
150.0	17.7	17.8	15.7	15.4	13.8	14.0	13.3	14.0	13.4	14.6	14.6	16.6	18.2	17.7	18.7
155.0	17.4	17.7	15.9	15.7	14.4	14.6	13.9	14.6	14.0	15.0	14.9	16.6	17.9	17.3	18.3
160.0	17.3	17.6	16.1	16.0	14.9	15.1	14.5	15.2	14.6	15.4	15.2	16.5	17.8	17.2	18.0
165.0	17.2	17.5	16.3	16.3	15.4	15.6	15.2	15.7	15.2	15.7	15.5	16.6	17.7	17.1	17.8
170.0	17.3	17.5	16.5	16.7	15.9	16.2	15.8	16.2	15.7	16.2	15.9	16.7	17.6	17.1	17.7
175.0	17.3	17.5	16.7	16.9	16.3	16.6	16.4	16.5	16.1	16.5	16.1	16.8	17.6	17.0	17.4
180.0	17.5	17.4	17.0	17.1	16.8	17.0	17.0	17.0	16.6	16.8	16.5	16.8	17.5	17.1	17.2

Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2025.03.23

Test Set: 5.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:10.000 m  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

<b>MANUFACTURER:</b> ILUMEN GMBH	<b>Address:</b>	
<b>NAME:</b> Muller	<b>TYPE:</b> IL-ST11-D08040-TY3	<b>WEIGHT:</b>
<b>SPECIFICATION:</b> 5050LED 4000K Type III	<b>DIMENSION:</b>	<b>SERIAL No.:</b>

UNIT: cd

C (DEG) γ (DEG)	225	240	255	270	285	300	315	330	345
0.0	2609	2609	2609	2609	2609	2609	2609	2609	2609
5.0	2549	2532	2525	2521	2526	2534	2550	2570	2593
10.0	2489	2455	2439	2435	2442	2459	2491	2535	2588
15.0	2433	2383	2355	2353	2361	2388	2432	2504	2594
20.0	2372	2306	2278	2273	2283	2310	2372	2475	2611
25.0	2311	2233	2195	2186	2200	2236	2308	2451	2641
30.0	2252	2158	2100	2083	2104	2158	2250	2422	2686
35.0	2183	2067	1991	1974	1996	2065	2185	2390	2751
40.0	2106	1968	1885	1872	1892	1968	2115	2361	2810
45.0	2018	1863	1780	1768	1786	1868	2033	2322	2845
50.0	1907	1744	1664	1655	1669	1754	1931	2259	2862
55.0	1766	1611	1541	1540	1548	1623	1799	2157	2873
60.0	1608	1463	1384	1390	1400	1482	1646	2036	2861
65.0	1379	1244	1166	1184	1190	1283	1442	1913	2844
70.0	898	693	637	662	680	872	1062	1428	2451
75.0	343	294	183	203	206	385	486	670	1284
80.0	64.4	54.0	22.9	27.2	27.3	56.5	144	172	347
85.0	12.7	15.7	3.86	8.04	3.58	16.2	21.3	36.9	28.3
90.0	6.79	9.27	4.37	7.76	4.27	9.20	6.12	13.0	9.04
95.0	8.53	10.0	5.84	8.45	5.74	9.80	7.91	12.9	9.86
100.0	10.2	11.1	7.50	9.51	7.44	10.9	9.83	14.0	11.6
105.0	11.6	12.2	9.11	10.8	9.14	12.3	11.4	14.9	13.0
110.0	12.8	13.3	10.6	12.0	10.7	13.5	12.8	15.7	14.0
115.0	13.9	14.2	12.0	13.2	12.1	14.5	14.0	16.5	15.0
120.0	14.9	15.0	13.1	14.3	13.3	15.5	15.1	17.4	15.9
125.0	16.0	16.0	14.2	15.3	14.4	16.4	16.1	18.3	16.9
130.0	17.2	17.1	15.4	16.3	15.5	17.3	17.1	19.3	18.0
135.0	18.0	18.0	16.6	17.4	16.6	18.2	18.1	19.9	18.4
140.0	18.2	18.6	17.6	18.3	17.5	18.8	18.4	19.7	18.3
145.0	18.0	18.7	18.0	18.7	17.9	18.9	18.2	19.2	17.9
150.0	17.8	18.6	18.1	18.7	18.0	18.8	18.0	18.8	17.6
155.0	17.6	18.4	18.0	18.6	17.9	18.6	17.7	18.4	17.3
160.0	17.5	18.2	17.9	18.6	17.8	18.4	17.5	18.0	17.0
165.0	17.3	18.0	17.7	18.4	17.6	18.1	17.3	17.8	16.9
170.0	17.2	17.8	17.4	18.1	17.4	17.8	17.1	17.5	16.8
175.0	17.0	17.4	17.0	17.7	17.0	17.4	16.8	17.1	16.5
180.0	16.8	17.0	16.7	17.2	16.7	16.9	16.5	16.8	16.4

Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2025.03.23

Test Set: 5.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:10.000 m  
Remarks: