

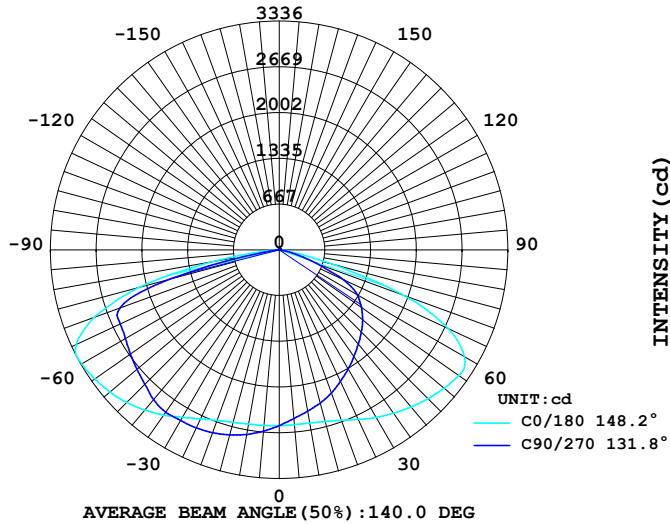
# LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

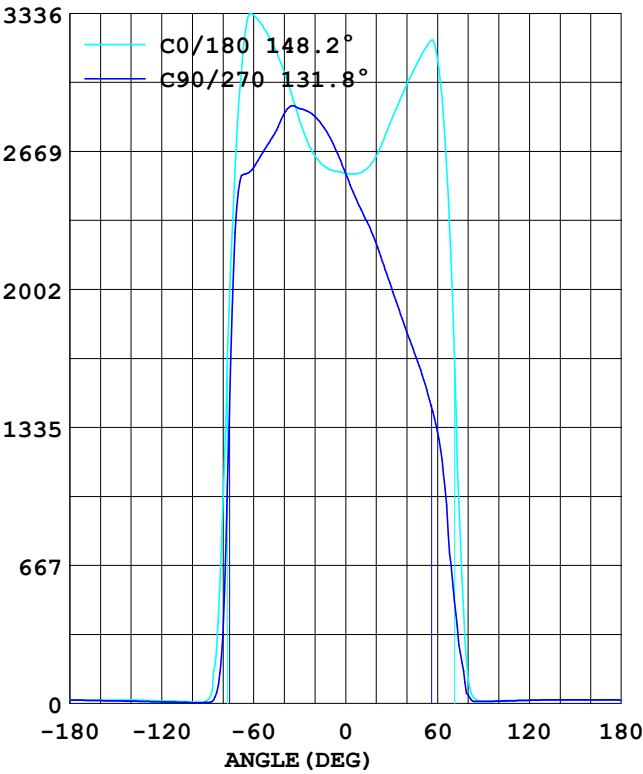
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D08040-TY4	WEIGHT:
SPECIFICATION: 5050LED 4000K Type IV	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	3564	S/MH (C0/180)	1.79
MODEL		EFFICIENCY (%)	100.0	S/MH (C90/270)	1.68
NOMINAL POWER(W)	80	TOTAL FLUX(lm)	12092	Voltage(V)	230.3
RATED VOLTAGE (V)	230	EFFICIENCY (lm/W)	150.6	Current(A)	0.350
NOMINAL FLUX(lm)	12092.3	$\eta$ up (%)	0.7	Power(W)	80.30
LAMPS QUANTITY	1	$\eta$ down (%)	99.3	Power Factor (PF)	0.996
TEST VOLTAGE (V)	230.4	Effective Flux(lm)	12092.3	EEI	0.100

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



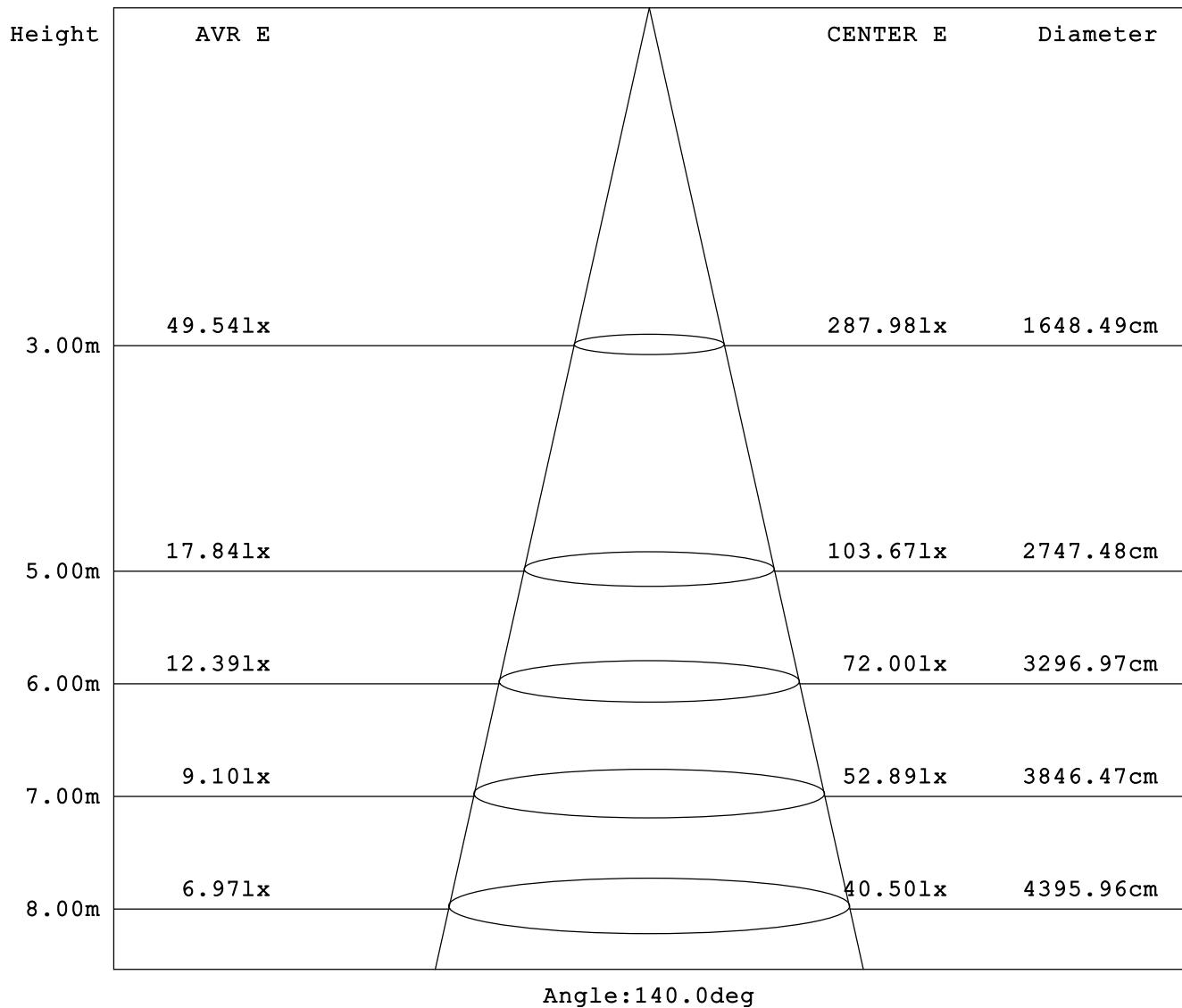
Test System:  
 Temperature: 25.3 DEG  
 Operators:  
 Test Date: 2025.03.24

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-TY4	WEIGHT:
SPECIFICATION:5050LED 4000K Type IV	DIMENSION:	SERIAL No.:



Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2025.03.24

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-TY4	WEIGHT:
SPECIFICATION:5050LED 4000K Type IV	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
5.0	2571	2634	2656	2624	2560	2490	2471	2498	0- 5	61.28	61.28
10.0	2581	2698	2735	2675	2567	2427	2391	2440	5- 10	183.3	244.6
15.0	2604	2762	2794	2724	2593	2371	2314	2391	10- 15	304.4	549.0
20.0	2649	2834	2839	2776	2645	2307	2225	2331	15- 20	423.8	972.9
25.0	2719	2913	2864	2835	2728	2255	2118	2282	20- 25	541.3	1514
30.0	2820	2998	2876	2896	2822	2199	2009	2229	25- 30	657.2	2172
35.0	2941	3087	2889	2954	2908	2144	1902	2175	30- 35	770.7	2942
40.0	3051	3172	2852	3006	2992	2087	1797	2122	35- 40	878.5	3821
45.0	3147	3250	2773	3053	3070	2023	1695	2065	40- 45	977.0	4798
50.0	3225	3314	2710	3088	3140	1955	1590	2000	45- 50	1064	5862
55.0	3285	3351	2653	3099	3198	1880	1464	1923	50- 55	1139	7002
60.0	3327	3359	2592	3095	3117	1780	1315	1825	55- 60	1197	8199
65.0	3268	3323	2560	3052	2728	1627	1041	1684	60- 65	1220	9418
70.0	2872	3173	2472	2918	1925	1245	579.5	1337	65- 70	1156	10574
75.0	2108	2383	1639	2092	788.5	540.8	241.6	626.2	70- 75	904.5	11479
80.0	960.2	779.4	328.2	477.1	126.1	94.31	42.34	149.5	75- 80	437.8	11917
85.0	188.7	92.38	33.06	52.43	19.79	15.81	9.865	22.39	80- 85	81.27	11998
90.0	17.31	15.09	5.405	13.12	11.64	7.009	9.684	6.627	85- 90	12.18	12010
95.0	6.422	10.24	3.648	9.806	12.31	8.807	10.40	8.284	90- 95	5.140	12015
100.0	7.972	9.750	4.234	9.403	13.33	10.46	11.48	9.941	95-100	4.983	12020
105.0	9.611	10.02	5.180	9.717	14.35	11.77	12.56	11.28	100-105	5.388	12026
110.0	11.07	10.51	6.126	10.16	15.14	12.94	13.60	12.44	105-110	5.758	12031
115.0	12.18	11.05	7.027	10.65	15.90	13.92	14.54	13.47	110-115	6.022	12037
120.0	13.15	11.72	7.883	11.23	16.65	14.96	15.49	14.55	115-120	6.181	12044
125.0	14.17	12.44	8.783	11.91	17.49	16.13	16.53	15.76	120-125	6.285	12050
130.0	15.19	13.25	9.729	12.71	18.11	17.20	17.56	16.88	125-130	6.330	12056
135.0	16.12	14.01	10.72	13.43	18.42	17.70	18.10	17.46	130-135	6.213	12063
140.0	16.69	14.55	11.57	13.97	18.33	17.74	18.19	17.55	135-140	5.873	12068
145.0	16.87	14.91	12.29	14.32	18.11	17.61	18.19	17.41	140-145	5.371	12074
150.0	16.83	15.18	12.97	14.64	17.80	17.43	18.10	17.24	145-150	4.772	12079
155.0	16.69	15.45	13.60	14.91	17.58	17.25	18.06	17.06	150-155	4.116	12083
160.0	16.65	15.68	14.14	15.22	17.40	17.12	18.01	16.92	155-160	3.424	12086
165.0	16.65	15.99	14.77	15.53	17.36	16.98	17.92	16.79	160-165	2.703	12089
170.0	16.78	16.26	15.40	15.89	17.27	16.85	17.74	16.65	165-170	1.955	12091
175.0	16.83	16.53	15.94	16.16	17.14	16.62	17.25	16.34	170-175	1.183	12092
180.0	17.05	16.76	16.57	16.43	17.05	16.44	16.75	16.12	175-180	0.395	12092
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2025.03.24

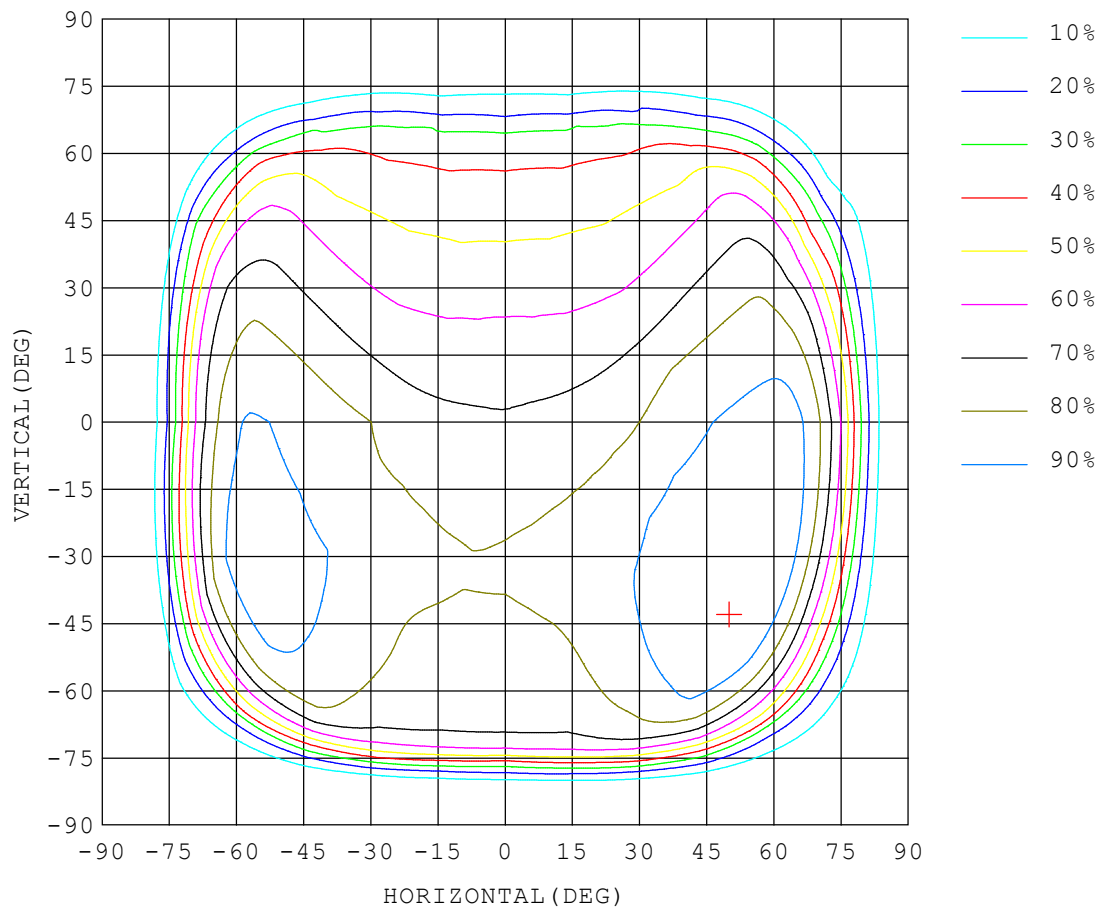
Test Set: 5.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:10.000 m  
Remarks:

## ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D08040-TY4	WEIGHT:
SPECIFICATION: 5050LED 4000K Type IV	DIMENSION:	SERIAL No.:

UNIT: cd



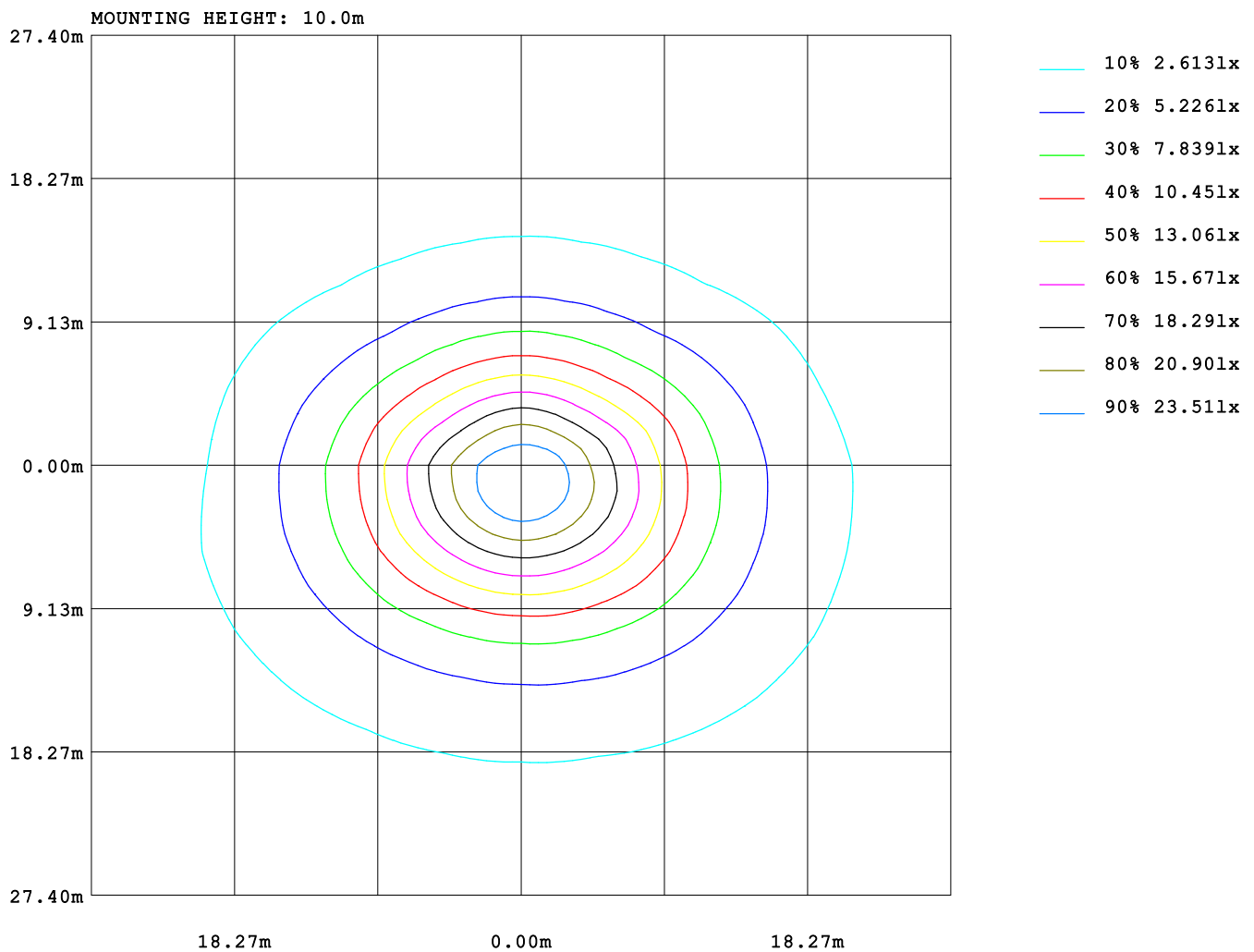
Test System:  
Temperature: 25.3 DEG  
Operators:  
Test Date: 2025.03.24

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-TY4	WEIGHT:
SPECIFICATION: 5050LED 4000K Type IV	DIMENSION:	SERIAL No.:



Test System:  
Temperature: 25.3DEG  
Operators:  
Test Date: 2025.03.24

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-TY4	<b>WEIGHT:</b>
<b>SPECIFICATION:</b> 5050LED 4000K Type IV	<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	2563	2563	2563	2563	2563	2563	2563	2563	2563	2563	2563	2563	2563	2563	2563
5.0	2571	2594	2616	2634	2648	2654	2656	2650	2639	2624	2603	2580	2560	2535	2512
10.0	2581	2626	2669	2698	2721	2732	2735	2722	2704	2675	2642	2601	2567	2517	2467
15.0	2604	2673	2727	2762	2782	2794	2794	2779	2754	2724	2682	2629	2593	2511	2429
20.0	2649	2741	2802	2834	2843	2844	2839	2822	2800	2776	2737	2679	2645	2523	2404
25.0	2719	2834	2898	2913	2898	2877	2864	2849	2841	2835	2811	2754	2728	2561	2383
30.0	2820	2957	3012	2998	2950	2903	2876	2867	2877	2896	2899	2853	2822	2622	2374
35.0	2941	3092	3137	3087	2995	2932	2889	2886	2902	2954	2995	2960	2908	2680	2372
40.0	3051	3208	3252	3172	3028	2921	2852	2853	2913	3006	3080	3046	2992	2735	2375
45.0	3147	3314	3356	3250	3032	2882	2773	2798	2882	3053	3160	3132	3070	2784	2376
50.0	3225	3403	3448	3314	3028	2822	2710	2728	2855	3088	3230	3219	3140	2819	2368
55.0	3285	3476	3517	3351	3030	2764	2653	2669	2839	3099	3281	3302	3198	2836	2346
60.0	3327	3527	3560	3359	3009	2700	2592	2616	2799	3095	3318	3362	3117	2799	2308
65.0	3268	3466	3541	3323	2942	2622	2560	2576	2712	3052	3288	3275	2728	2549	2188
70.0	2872	3021	3172	3173	2785	2508	2472	2481	2556	2918	2943	2800	1925	2013	1753
75.0	2108	2060	2258	2383	2188	1875	1639	1744	1939	2092	1987	1750	789	1097	841
80.0	960	789	696	779	593	407	328	342	408	477	441	484	126	183	134
85.0	189	126	144	92.3	49.5	46.8	33.0	44.1	36.8	52.4	59.5	53.6	19.7	15.3	25.6
90.0	17.3	22.5	12.4	15.0	6.39	11.8	5.40	11.6	6.42	13.1	7.85	14.3	11.6	8.60	13.4
95.0	6.42	11.3	6.40	10.2	4.77	8.38	3.64	8.10	4.48	9.80	6.42	11.1	12.3	9.09	12.6
100.0	7.97	11.1	7.11	9.75	5.08	7.79	4.23	7.65	4.89	9.40	7.13	11.2	13.3	10.8	13.7
105.0	9.61	11.8	8.14	10.0	6.12	8.15	5.18	7.96	5.88	9.71	8.16	11.9	14.3	12.3	14.6
110.0	11.0	12.5	9.22	10.5	7.06	8.60	6.12	8.46	6.82	10.1	9.14	12.5	15.1	13.5	15.4
115.0	12.1	13.1	10.1	11.0	7.96	9.19	7.02	9.00	7.63	10.6	9.99	13.2	15.9	14.5	16.1
120.0	13.1	13.9	11.1	11.7	8.86	9.77	7.88	9.54	8.48	11.2	10.8	13.8	16.6	15.5	16.9
125.0	14.1	14.6	12.1	12.4	9.85	10.4	8.78	10.1	9.38	11.9	11.7	14.5	17.4	16.4	17.8
130.0	15.1	15.5	13.2	13.2	10.8	11.2	9.72	10.9	10.3	12.7	12.7	15.3	18.1	17.2	18.6
135.0	16.1	16.3	14.1	14.0	11.7	11.9	10.7	11.7	11.3	13.4	13.5	16.0	18.4	17.6	18.9
140.0	16.6	16.8	14.7	14.5	12.5	12.7	11.5	12.5	12.0	13.9	14.0	16.3	18.3	17.7	18.8
145.0	16.8	17.0	15.0	14.9	13.0	13.2	12.2	13.1	12.7	14.3	14.4	16.4	18.1	17.5	18.6
150.0	16.8	17.0	15.3	15.1	13.5	13.8	12.9	13.7	13.2	14.6	14.6	16.4	17.8	17.2	18.2
155.0	16.6	16.9	15.4	15.4	14.0	14.3	13.6	14.3	13.7	14.9	14.8	16.4	17.5	17.0	17.9
160.0	16.6	16.9	15.6	15.6	14.5	14.8	14.1	14.8	14.3	15.2	15.0	16.3	17.4	16.8	17.7
165.0	16.6	16.9	15.8	15.9	15.0	15.3	14.7	15.3	14.8	15.5	15.2	16.3	17.3	16.7	17.5
170.0	16.7	16.9	16.1	16.2	15.5	15.8	15.4	15.7	15.3	15.8	15.6	16.4	17.2	16.7	17.3
175.0	16.8	16.9	16.2	16.5	15.9	16.2	15.9	16.2	15.7	16.1	15.8	16.4	17.1	16.6	17.1
180.0	17.0	16.9	16.6	16.7	16.4	16.5	16.5	16.5	16.2	16.4	16.1	16.4	17.0	16.6	16.8

Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2025.03.24

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-TY4</b>	<b>WEIGHT:</b>
<b>SPECIFICATION:5050LED 4000K Type IV</b>	<b>DIMENSION:</b>	<b>SERIAL No.:</b>

UNIT: cd

C (DEG) γ (DEG)	225	240	255	270	285	300	315	330	345
0.0	2563	2563	2563	2563	2563	2563	2563	2563	2563
5.0	2490	2479	2470	2471	2471	2483	2498	2523	2547
10.0	2427	2404	2391	2391	2395	2412	2440	2487	2541
15.0	2371	2331	2313	2314	2319	2343	2391	2459	2549
20.0	2307	2257	2225	2225	2232	2270	2331	2443	2573
25.0	2255	2172	2125	2118	2132	2187	2282	2433	2624
30.0	2199	2083	2020	2009	2027	2098	2229	2433	2702
35.0	2144	1996	1915	1902	1923	2011	2175	2440	2782
40.0	2087	1908	1814	1797	1826	1928	2122	2454	2848
45.0	2023	1821	1713	1695	1728	1842	2065	2465	2900
50.0	1955	1730	1606	1590	1619	1752	2000	2464	2931
55.0	1880	1620	1488	1464	1503	1647	1923	2444	2945
60.0	1780	1491	1342	1315	1360	1520	1825	2402	2927
65.0	1627	1325	1111	1041	1130	1357	1684	2328	2661
70.0	1245	936	638	580	656	975	1337	1872	2193
75.0	541	410	235	242	245	446	626	1044	1232
80.0	94.3	87.7	38.8	42.3	44.2	103	150	228	295
85.0	15.8	21.2	6.30	9.86	5.98	20.7	22.3	34.1	23.0
90.0	7.00	11.3	6.21	9.68	6.03	11.1	6.62	13.1	8.58
95.0	8.80	11.5	7.79	10.4	7.60	11.2	8.28	12.2	8.44
100.0	10.4	12.5	9.32	11.4	9.18	12.2	9.94	13.2	10.1
105.0	11.7	13.3	10.7	12.5	10.5	13.1	11.2	14.0	11.6
110.0	12.9	14.2	12.0	13.6	11.8	14.0	12.4	14.8	12.7
115.0	13.9	15.0	13.1	14.5	13.0	14.9	13.4	15.4	13.6
120.0	14.9	15.9	14.1	15.4	14.1	15.8	14.5	16.1	14.4
125.0	16.1	17.0	15.4	16.5	15.3	16.8	15.7	17.1	15.4
130.0	17.2	18.0	16.5	17.5	16.4	17.9	16.8	18.1	16.3
135.0	17.7	18.4	17.1	18.1	17.0	18.3	17.4	18.5	16.9
140.0	17.7	18.4	17.3	18.1	17.2	18.3	17.5	18.5	17.1
145.0	17.6	18.3	17.5	18.1	17.2	18.2	17.4	18.2	17.0
150.0	17.4	18.2	17.5	18.1	17.2	18.0	17.2	17.9	16.8
155.0	17.2	18.0	17.4	18.0	17.1	17.8	17.0	17.7	16.6
160.0	17.1	17.9	17.4	18.0	17.1	17.7	16.9	17.4	16.5
165.0	16.9	17.7	17.3	17.9	17.0	17.5	16.7	17.2	16.4
170.0	16.8	17.4	17.0	17.7	16.9	17.3	16.6	17.0	16.2
175.0	16.6	17.0	16.6	17.2	16.5	16.9	16.3	16.7	16.1
180.0	16.4	16.6	16.3	16.7	16.2	16.4	16.1	16.4	16.1

Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2025.03.24

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