

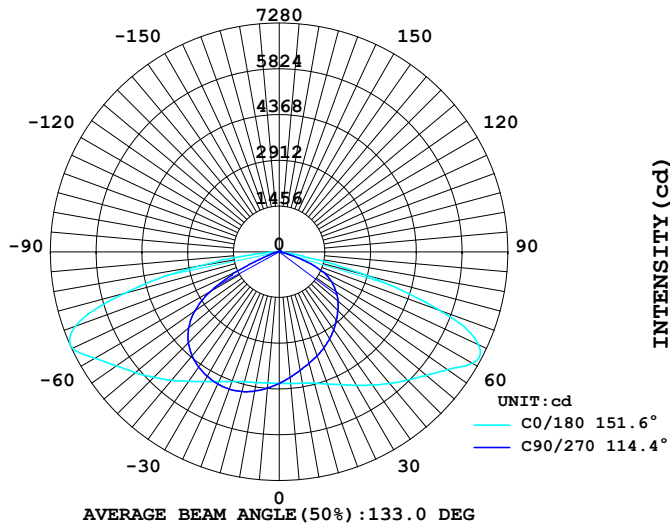
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

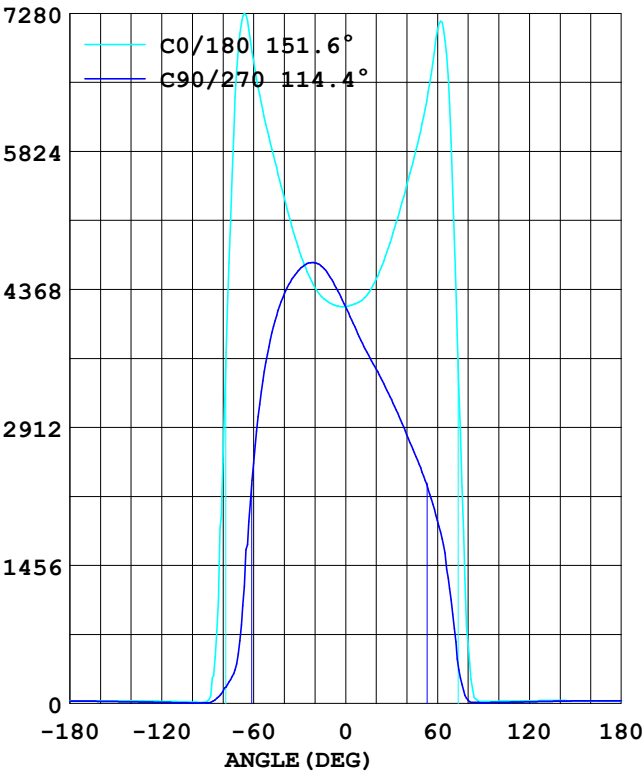
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D12040-TY2	WEIGHT:
SPECIFICATION: 5050LED 4000K Type II	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	7280	S/MH (C0/180)	1.92
MODEL		EFFICIENCY (%)	100.0	S/MH (C90/270)	1.60
NOMINAL POWER(W)	120	TOTAL FLUX(lm)	17923	Voltage(V)	230.6
RATED VOLTAGE (V)	230	EFFICIENCY (lm/W)	148.5	Current(A)	0.525
NOMINAL FLUX(lm)	17923.0	η up (%)	0.7	Power(W)	120.6
LAMPS QUANTITY	1	η down (%)	99.3	Power Factor (PF)	0.996
TEST VOLTAGE (V)	230.6	Effective Flux(lm)	0.0	EEI	0.000

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



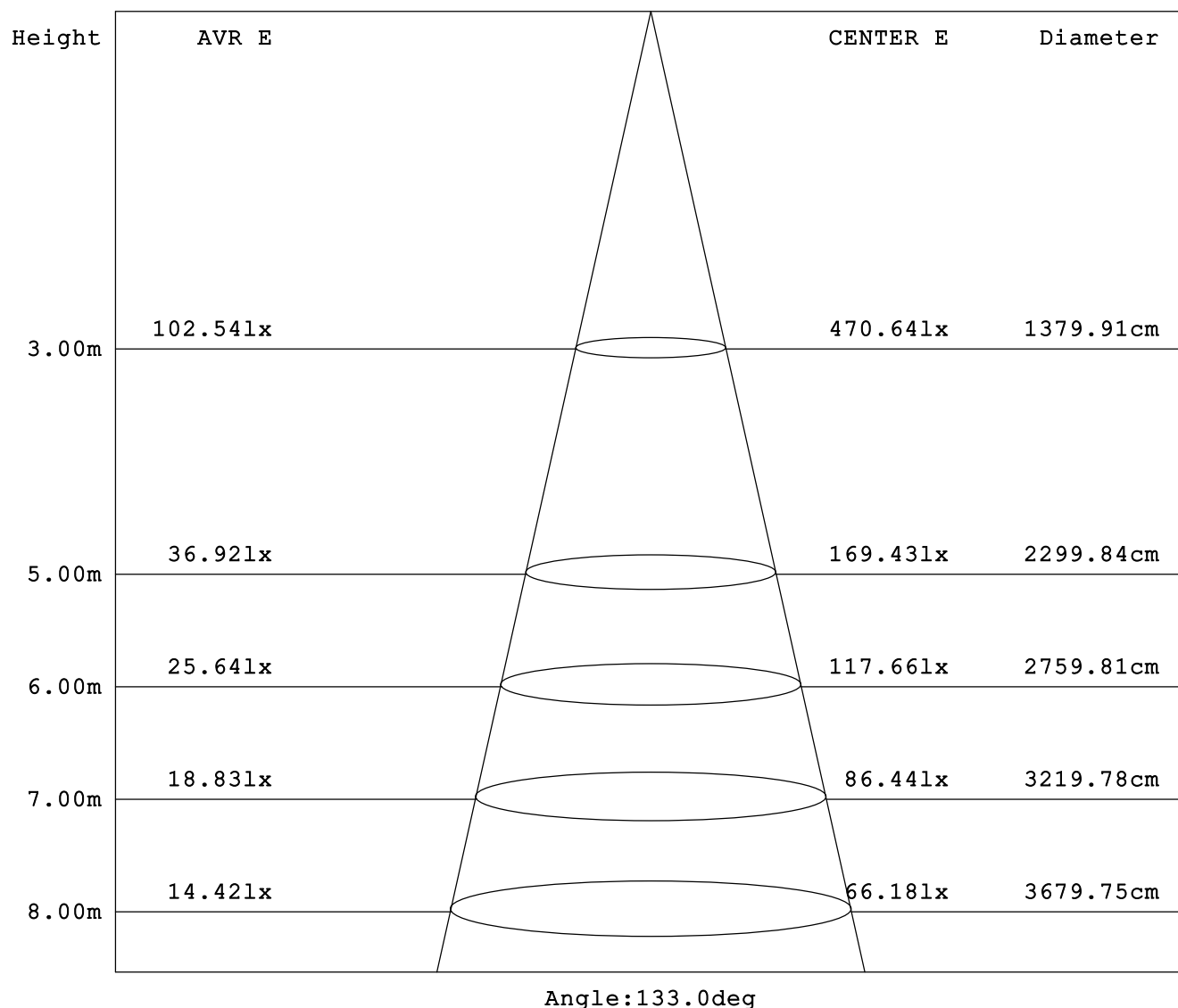
Test System:
 Temperature: 25.3 DEG
 Operators:
 Test Date: 2025.03.22

Test Set: 5.0 deg/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-D12040-TY2	WEIGHT:
SPECIFICATION:5050LED 4000K Type II	DIMENSION:	SERIAL No.:



Test System:
Temperature:25.3DEG
Operators:
Test Date:2025.03.22

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-D12040-TY2	WEIGHT:
SPECIFICATION: 5050LED 4000K Type II	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
5.0	4193	4312	4352	4305	4208	4074	4010	4081	0- 5	100.1	100.1
10.0	4223	4429	4497	4413	4246	3964	3831	3979	5- 10	300.1	400.3
15.0	4282	4539	4605	4505	4330	3857	3675	3873	10- 15	498.7	899.0
20.0	4389	4650	4649	4583	4476	3759	3528	3773	15- 20	695.1	1594
25.0	4555	4753	4640	4639	4668	3665	3371	3676	20- 25	888.8	2483
30.0	4769	4831	4578	4678	4907	3561	3205	3561	25- 30	1078	3561
35.0	5032	4891	4475	4689	5178	3454	3025	3445	30- 35	1259	4819
40.0	5333	4905	4319	4670	5470	3319	2833	3305	35- 40	1428	6248
45.0	5653	4857	4090	4606	5770	3146	2645	3133	40- 45	1579	7827
50.0	5975	4721	3764	4444	6118	2937	2441	2921	45- 50	1700	9527
55.0	6335	4436	3288	4107	6544	2683	2207	2641	50- 55	1780	11307
60.0	6773	3910	2538	3557	7098	2362	1930	2301	55- 60	1805	13112
65.0	7262	2951	1621	2566	6990	1916	1587	1837	60- 65	1740	14852
70.0	6896	1300	521.0	1095	5397	1234	939.2	1168	65- 70	1457	16309
75.0	5081	377.4	253.1	349.7	2861	505.0	269.2	455.0	70- 75	932.6	17242
80.0	2546	209.6	125.3	187.5	640.0	107.1	34.61	102.9	75- 80	415.6	17658
85.0	491.3	80.75	40.33	76.90	49.10	23.87	10.84	22.40	80- 85	121.4	17779
90.0	27.39	20.03	7.609	19.05	21.50	6.522	9.831	6.219	85- 90	21.91	17801
95.0	12.90	13.17	5.656	12.30	22.36	8.674	10.16	8.493	90- 95	6.852	17808
100.0	15.81	13.04	6.127	11.90	23.82	11.16	11.24	11.16	95-100	6.722	17814
105.0	18.39	13.98	7.541	12.63	25.21	13.51	12.72	13.77	100-105	7.415	17822
110.0	20.44	15.33	9.023	13.70	26.27	15.73	14.54	16.11	105-110	8.120	17830
115.0	21.97	16.74	10.43	14.91	27.13	17.68	16.36	18.32	110-115	8.666	17839
120.0	23.36	18.08	11.91	16.11	28.32	19.36	18.18	20.12	115-120	9.057	17848
125.0	24.94	19.50	13.40	17.32	30.04	20.91	19.93	21.80	120-125	9.308	17857
130.0	26.93	20.91	14.94	18.65	31.36	22.66	21.61	23.40	125-130	9.419	17866
135.0	28.65	22.19	16.56	19.92	31.76	24.34	23.36	24.81	130-135	9.357	17876
140.0	29.38	23.19	18.04	21.13	31.16	25.82	25.18	26.14	135-140	9.033	17885
145.0	29.11	24.00	19.39	22.06	30.30	26.69	26.59	26.88	140-145	8.417	17893
150.0	28.52	24.54	20.67	22.80	29.44	27.03	27.47	27.08	145-150	7.573	17901
155.0	27.92	25.01	21.81	23.54	28.85	27.23	28.08	27.15	150-155	6.584	17907
160.0	27.52	25.48	22.96	24.20	28.45	27.30	28.48	27.08	155-160	5.506	17913
165.0	27.39	25.95	24.10	24.81	28.25	27.30	28.68	27.01	160-165	4.363	17917
170.0	27.46	26.49	25.18	25.47	28.05	27.23	28.55	26.88	165-170	3.164	17920
175.0	27.46	26.82	26.06	26.01	27.86	26.96	28.01	26.48	170-175	1.918	17922
180.0	27.72	27.16	27.00	26.48	27.72	26.76	27.33	26.01	175-180	0.640	17923
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:
 Temperature:25.3DEG
 Operators:
 Test Date:2025.03.22

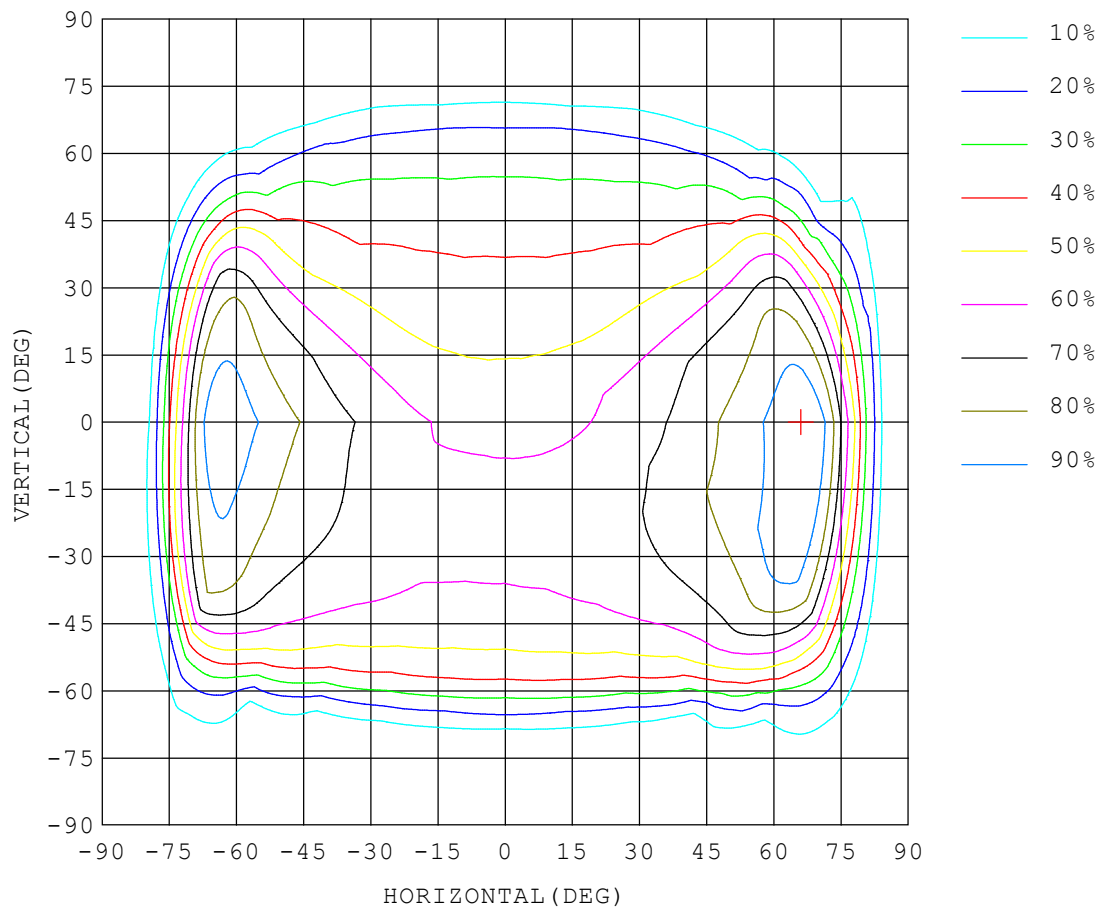
Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:10.000 m
 Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D12040-TY2	WEIGHT:
SPECIFICATION: 5050LED 4000K Type II	DIMENSION:	SERIAL No.:

UNIT: cd



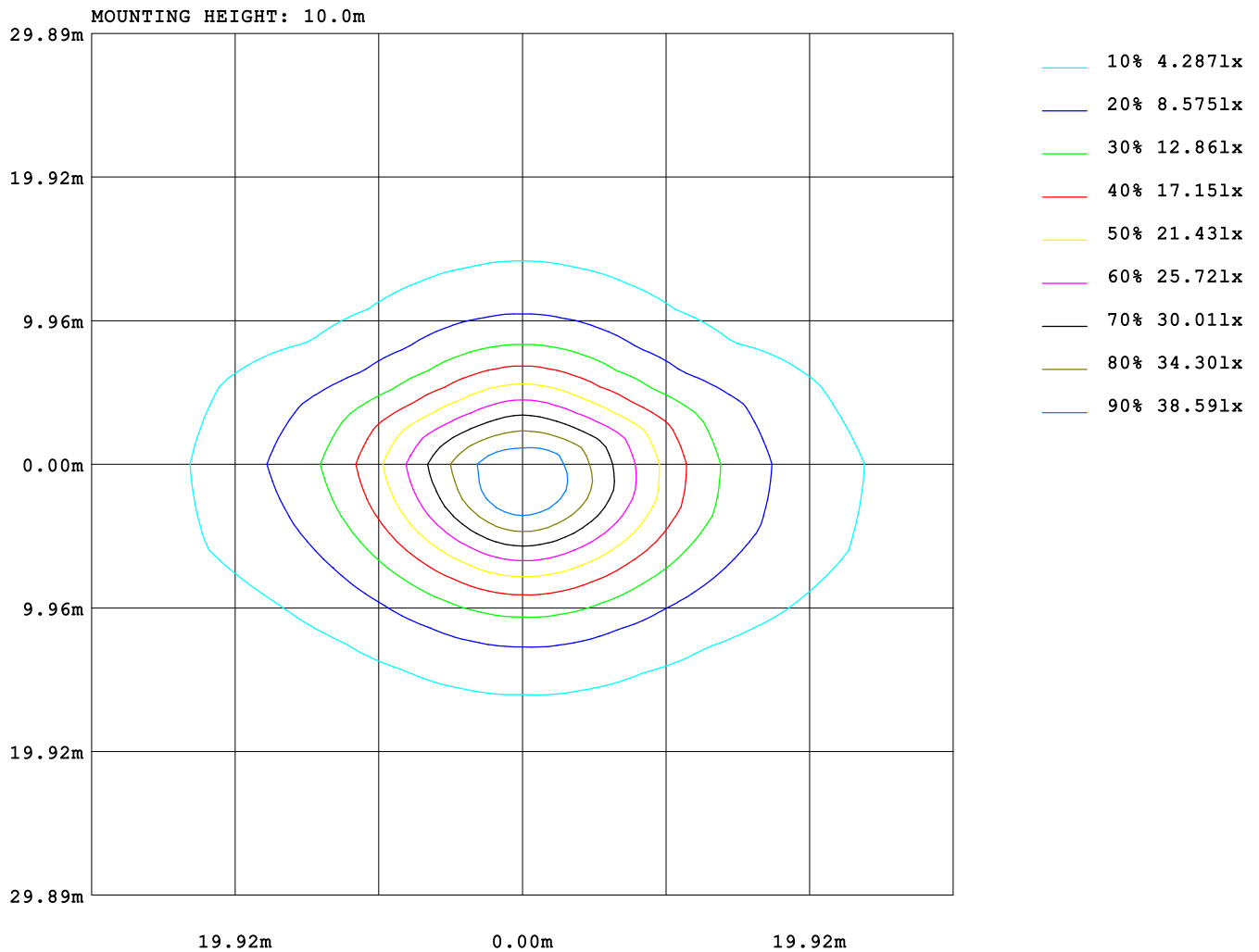
Test System:
Temperature: 25.3 DEG
Operators:
Test Date: 2025.03.22

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-D12040-TY2	WEIGHT:
SPECIFICATION: 5050LED 4000K Type II	DIMENSION:	SERIAL No.:



Test System:
Temperature: 25.3DEG
Operators:
Test Date: 2025.03.22

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

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE:IL-ST11-D12040-TY2	WEIGHT:
SPECIFICATION:5050LED 4000K Type II	DIMENSION:	SERIAL No.:

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210
0.0	4188	4188	4188	4188	4188	4188	4188	4188	4188	4188	4188	4188	4188	4188	4188
5.0	4193	4235	4275	4312	4335	4354	4352	4350	4328	4305	4267	4230	4208	4166	4116
10.0	4223	4303	4371	4429	4467	4497	4497	4493	4456	4413	4351	4285	4246	4162	4059
15.0	4282	4390	4476	4539	4576	4604	4605	4596	4555	4505	4434	4348	4330	4189	4019
20.0	4389	4531	4612	4650	4650	4657	4649	4641	4608	4583	4533	4459	4476	4266	3995
25.0	4555	4723	4776	4753	4691	4665	4640	4640	4623	4639	4650	4621	4668	4381	3984
30.0	4769	4947	4947	4831	4695	4623	4578	4587	4595	4678	4773	4808	4907	4538	3986
35.0	5032	5211	5113	4891	4657	4534	4475	4486	4528	4689	4886	5025	5178	4725	3983
40.0	5333	5484	5265	4905	4580	4405	4319	4342	4424	4670	4985	5240	5470	4926	3954
45.0	5653	5756	5378	4857	4436	4213	4090	4133	4270	4606	5034	5442	5770	5130	3882
50.0	5975	6013	5416	4721	4173	3904	3764	3820	4009	4444	5022	5625	6118	5325	3754
55.0	6335	6292	5399	4436	3738	3432	3288	3358	3581	4107	4929	5828	6544	5526	3559
60.0	6773	6624	5335	3910	3033	2708	2538	2646	2879	3557	4711	6066	7098	5800	3254
65.0	7262	7042	5142	2951	1960	1596	1621	1553	1832	2566	4236	6382	6990	5781	2716
70.0	6896	6628	3973	1300	696	575	521	567	653	1095	2882	6179	5397	4372	1668
75.0	5081	4827	1892	377	296	285	253	278	282	350	806	4553	2861	1878	683
80.0	2546	2032	376	210	165	150	125	147	162	188	229	1627	640	263	148
85.0	491	373	112	80.7	51.9	54.2	40.3	54.3	51.9	76.9	87.0	321	49.1	32.2	42.3
90.0	27.3	37.2	17.0	20.0	8.95	15.1	7.60	14.5	8.24	19.0	14.9	33.0	21.5	12.9	16.9
95.0	12.9	19.7	10.0	13.1	6.73	11.4	5.65	10.9	6.43	12.3	8.98	18.8	22.3	15.2	17.1
100.0	15.8	20.2	11.7	13.0	6.86	10.2	6.12	10.1	6.50	11.9	10.3	19.0	23.8	17.9	18.7
105.0	18.3	21.5	13.9	13.9	8.34	10.9	7.54	10.8	7.97	12.6	12.1	20.2	25.2	19.9	20.2
110.0	20.4	22.9	16.0	15.3	9.96	11.9	9.02	11.7	9.45	13.7	14.0	21.4	26.2	21.6	21.6
115.0	21.9	24.0	18.0	16.7	11.5	12.9	10.4	12.7	10.8	14.9	15.7	22.4	27.1	23.0	22.8
120.0	23.3	25.1	19.7	18.0	13.1	14.1	11.9	13.8	12.3	16.1	17.2	23.1	28.3	24.5	24.0
125.0	24.9	26.3	21.4	19.5	14.7	15.3	13.4	15.0	13.8	17.3	18.6	24.1	30.0	26.3	25.4
130.0	26.9	27.7	22.9	20.9	16.4	16.6	14.9	16.3	15.4	18.6	20.0	25.3	31.3	28.1	27.0
135.0	28.6	28.9	24.2	22.1	18.1	18.0	16.5	17.7	17.0	19.9	21.4	26.6	31.7	29.1	28.2
140.0	29.3	29.5	25.0	23.1	19.5	19.3	18.0	19.1	18.5	21.1	22.5	27.3	31.1	29.1	28.9
145.0	29.1	29.3	25.4	24.0	20.7	20.5	19.3	20.3	19.7	22.0	23.2	27.4	30.3	28.7	29.0
150.0	28.5	28.9	25.6	24.5	21.8	21.7	20.6	21.5	20.9	22.8	23.6	27.1	29.4	28.1	28.8
155.0	27.9	28.5	25.8	25.0	22.8	22.8	21.8	22.6	21.9	23.5	23.9	26.9	28.8	27.7	28.5
160.0	27.5	28.2	25.9	25.4	23.6	23.8	22.9	23.7	22.9	24.2	24.2	26.6	28.4	27.4	28.2
165.0	27.3	28.0	26.1	25.9	24.5	24.7	24.1	24.6	23.9	24.8	24.6	26.5	28.2	27.2	28.0
170.0	27.4	27.8	26.4	26.4	25.3	25.7	25.1	25.5	24.8	25.4	25.1	26.5	28.0	27.2	27.8
175.0	27.4	27.7	26.6	26.8	26.0	26.3	26.0	26.2	25.4	26.0	25.6	26.6	27.8	27.0	27.6
180.0	27.7	27.6	27.0	27.1	26.7	26.9	27.0	26.8	26.2	26.4	26.0	26.5	27.7	27.1	27.3

Test System:
Temperature:25.3DEG
Operators:
Test Date:2025.03.22

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

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE:IL-ST11-D12040-TY2	WEIGHT:
SPECIFICATION:5050LED 4000K Type II	DIMENSION:	SERIAL No.:

UNIT: cd

C (DEG) γ (DEG)	225	240	255	270	285	300	315	330	345
0.0	4188	4188	4188	4188	4188	4188	4188	4188	4188
5.0	4074	4037	4019	4010	4022	4041	4081	4124	4170
10.0	3964	3884	3846	3831	3850	3896	3979	4079	4182
15.0	3857	3746	3688	3675	3691	3753	3873	4047	4225
20.0	3759	3607	3545	3528	3544	3613	3773	4029	4310
25.0	3665	3477	3399	3371	3392	3472	3676	4016	4435
30.0	3561	3341	3239	3205	3231	3333	3561	4017	4601
35.0	3454	3191	3066	3025	3058	3182	3445	4012	4794
40.0	3319	3040	2885	2833	2875	3026	3305	3975	5001
45.0	3146	2872	2695	2645	2686	2855	3133	3889	5193
50.0	2937	2659	2483	2441	2470	2634	2921	3733	5375
55.0	2683	2400	2233	2207	2219	2363	2641	3511	5544
60.0	2362	2096	1943	1930	1926	2047	2301	3171	5763
65.0	1916	1703	1586	1587	1558	1649	1837	2583	5534
70.0	1234	1076	977	939	946	1060	1168	1533	3977
75.0	505	472	275	269	257	432	455	630	1829
80.0	107	84.0	35.9	34.6	28.5	81.3	103	146	244
85.0	23.8	25.0	4.45	10.8	3.83	19.6	22.4	42.4	31.0
90.0	6.52	10.9	4.45	9.83	4.37	10.5	6.21	16.8	13.7
95.0	8.67	11.2	5.94	10.1	5.85	10.9	8.49	16.8	14.8
100.0	11.1	12.3	7.83	11.2	7.74	12.2	11.1	18.6	17.6
105.0	13.5	14.0	9.99	12.7	9.90	13.9	13.7	20.4	19.8
110.0	15.7	15.7	12.2	14.5	12.1	15.8	16.1	22.0	21.5
115.0	17.6	17.4	14.3	16.3	14.4	17.6	18.3	23.6	23.2
120.0	19.3	19.1	16.4	18.1	16.5	19.4	20.1	25.2	24.8
125.0	20.9	20.6	18.3	19.9	18.5	21.1	21.8	26.5	26.5
130.0	22.6	22.3	20.3	21.6	20.4	22.7	23.4	27.7	28.0
135.0	24.3	24.0	22.2	23.3	22.2	24.3	24.8	28.7	28.8
140.0	25.8	25.6	24.1	25.1	24.1	25.8	26.1	29.1	28.7
145.0	26.6	26.8	25.7	26.5	25.5	27.0	26.8	29.0	28.2
150.0	27.0	27.5	26.7	27.4	26.5	27.6	27.0	28.7	27.7
155.0	27.2	27.9	27.4	28.0	27.0	27.8	27.1	28.3	27.2
160.0	27.3	28.1	27.7	28.4	27.4	28.0	27.0	28.0	26.8
165.0	27.3	28.1	27.8	28.6	27.5	28.0	27.0	27.6	26.5
170.0	27.2	28.0	27.6	28.5	27.4	27.8	26.8	27.4	26.3
175.0	26.9	27.5	27.0	28.0	26.9	27.3	26.4	26.9	26.0
180.0	26.7	26.9	26.6	27.3	26.4	26.6	26.0	26.4	25.9

Test System:
Temperature:25.3DEG
Operators:
Test Date:2025.03.22

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