

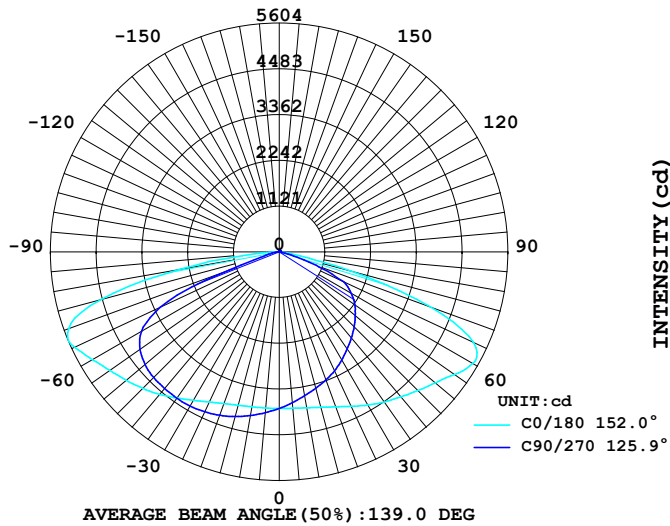
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

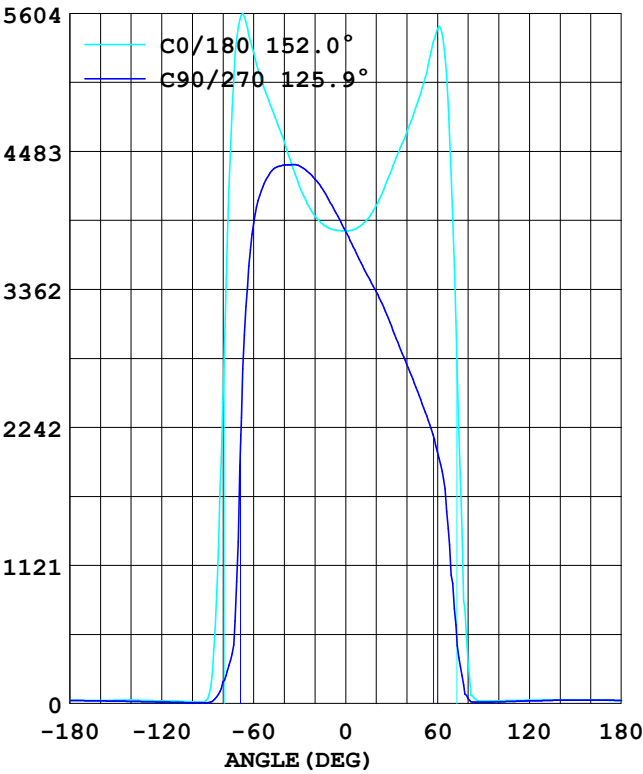
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D12040-TY3	WEIGHT:
SPECIFICATION: 5050LED 4000K Type III	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax (cd)	6316	S/MH (C0/180)	1.79
MODEL		EFFICIENCY (%)	100.0	S/MH (C90/270)	1.71
NOMINAL POWER (W)	120	TOTAL FLUX (lm)	18019	Voltage (V)	230.6
RATED VOLTAGE (V)	230	EFFICIENCY (lm/W)	149.8	Current (A)	0.523
NOMINAL FLUX (lm)	18019.0	η up (%)	0.7	Power (W)	120.3
LAMPS QUANTITY	1	η down (%)	99.3	Power Factor (PF)	0.996
TEST VOLTAGE (V)	230.6	Effective Flux (lm)	18019.0	EEL	0.100

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



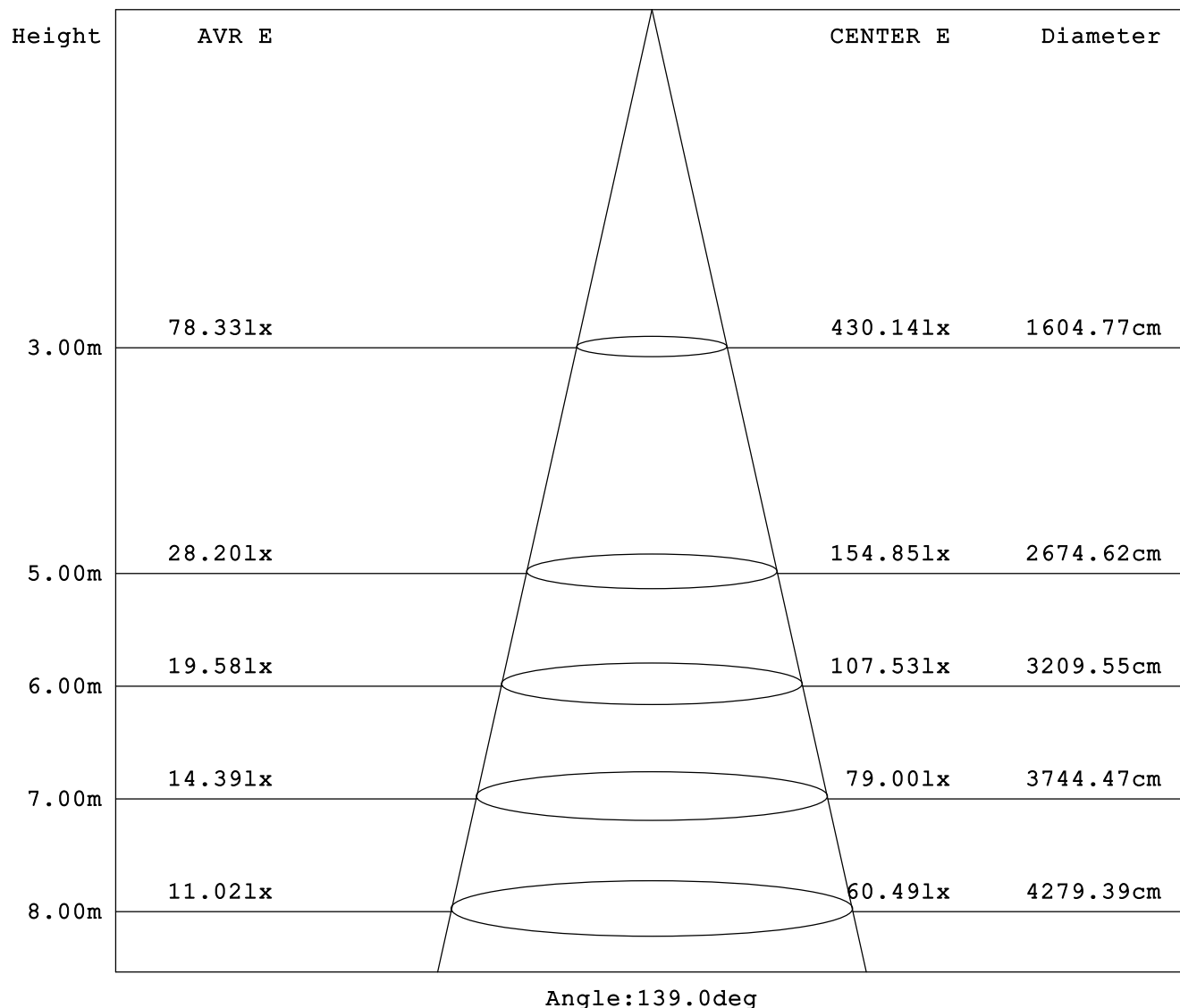
Test System:
 Temperature: 25.3 DEG
 Operators:
 Test Date: 2025.03.23

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

AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE:IL-ST11-D12040-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-D12040-TY3	WEIGHT:
SPECIFICATION:5050LED 4000K Type III	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
5.0	3840	3926	3956	3923	3846	3749	3708	3751	0- 5	91.74	91.74
10.0	3856	4017	4068	4008	3881	3661	3581	3663	5- 10	274.6	366.4
15.0	3894	4116	4178	4105	3943	3578	3460	3578	10- 15	456.5	822.9
20.0	3959	4234	4260	4213	4043	3489	3343	3488	15- 20	637.2	1460
25.0	4061	4366	4322	4331	4177	3399	3215	3395	20- 25	816.3	2277
30.0	4201	4515	4365	4460	4331	3312	3064	3310	25- 30	993.4	3270
35.0	4372	4673	4375	4590	4491	3211	2903	3213	30- 35	1166	4436
40.0	4561	4810	4371	4698	4639	3097	2753	3111	35- 40	1330	5765
45.0	4730	4917	4354	4779	4804	2967	2601	2990	40- 45	1482	7247
50.0	4893	5000	4293	4840	4998	2804	2433	2840	45- 50	1619	8866
55.0	5068	5062	4163	4863	5244	2598	2265	2645	50- 55	1734	10600
60.0	5286	5075	3897	4812	5475	2365	2045	2421	55- 60	1822	12422
65.0	5532	4994	3221	4551	5252	2029	1742	2121	60- 65	1857	14279
70.0	5487	4623	1312	3460	3933	1321	973.4	1562	65- 70	1713	15993
75.0	4510	2620	352.0	785.7	1809	504.8	298.3	715.4	70- 75	1171	17164
80.0	2461	473.6	176.0	224.8	331.3	94.75	40.14	212.3	75- 80	547.3	17711
85.0	612.1	130.1	39.33	74.46	33.06	18.69	11.82	31.34	80- 85	157.9	17869
90.0	36.26	27.40	7.704	18.02	20.13	9.988	11.42	9.013	85- 90	27.28	17896
95.0	11.19	14.37	5.744	13.25	21.06	12.55	12.43	11.63	90- 95	7.632	17904
100.0	13.93	13.56	6.352	12.84	22.46	15.05	13.98	14.46	95-100	7.273	17911
105.0	16.46	13.97	7.771	13.31	23.73	17.07	15.94	16.81	100-105	7.909	17919
110.0	18.53	14.84	9.191	14.12	24.73	18.89	17.77	18.83	105-110	8.507	17928
115.0	20.13	15.79	10.54	15.00	25.66	20.44	19.53	20.71	110-115	8.947	17937
120.0	21.59	16.87	11.82	15.87	26.86	21.93	21.08	22.33	115-120	9.231	17946
125.0	23.13	18.01	13.17	17.01	28.19	23.55	22.50	23.81	120-125	9.397	17955
130.0	24.79	19.30	14.66	18.16	28.93	25.30	23.99	25.29	125-130	9.452	17965
135.0	26.13	20.51	16.15	19.30	28.79	26.52	25.68	26.63	130-135	9.312	17974
140.0	26.73	21.46	17.50	20.24	28.19	26.79	26.96	27.10	135-140	8.872	17983
145.0	26.53	22.13	18.58	20.91	27.46	26.59	27.50	26.90	140-145	8.136	17991
150.0	26.06	22.67	19.59	21.52	26.86	26.32	27.50	26.50	145-150	7.225	17998
155.0	25.66	23.14	20.47	22.13	26.39	25.98	27.43	26.16	150-155	6.226	18004
160.0	25.46	23.62	21.42	22.66	26.19	25.78	27.37	25.82	155-160	5.174	18010
165.0	25.39	24.09	22.36	23.20	26.06	25.57	27.10	25.56	160-165	4.082	18014
170.0	25.53	24.56	23.24	23.87	25.99	25.37	26.76	25.22	165-170	2.951	18017
175.0	25.53	24.97	24.12	24.34	25.93	25.03	26.08	24.75	170-175	1.785	18018
180.0	25.79	25.24	25.07	24.82	25.79	24.83	25.34	24.34	175-180	0.596	18019
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

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

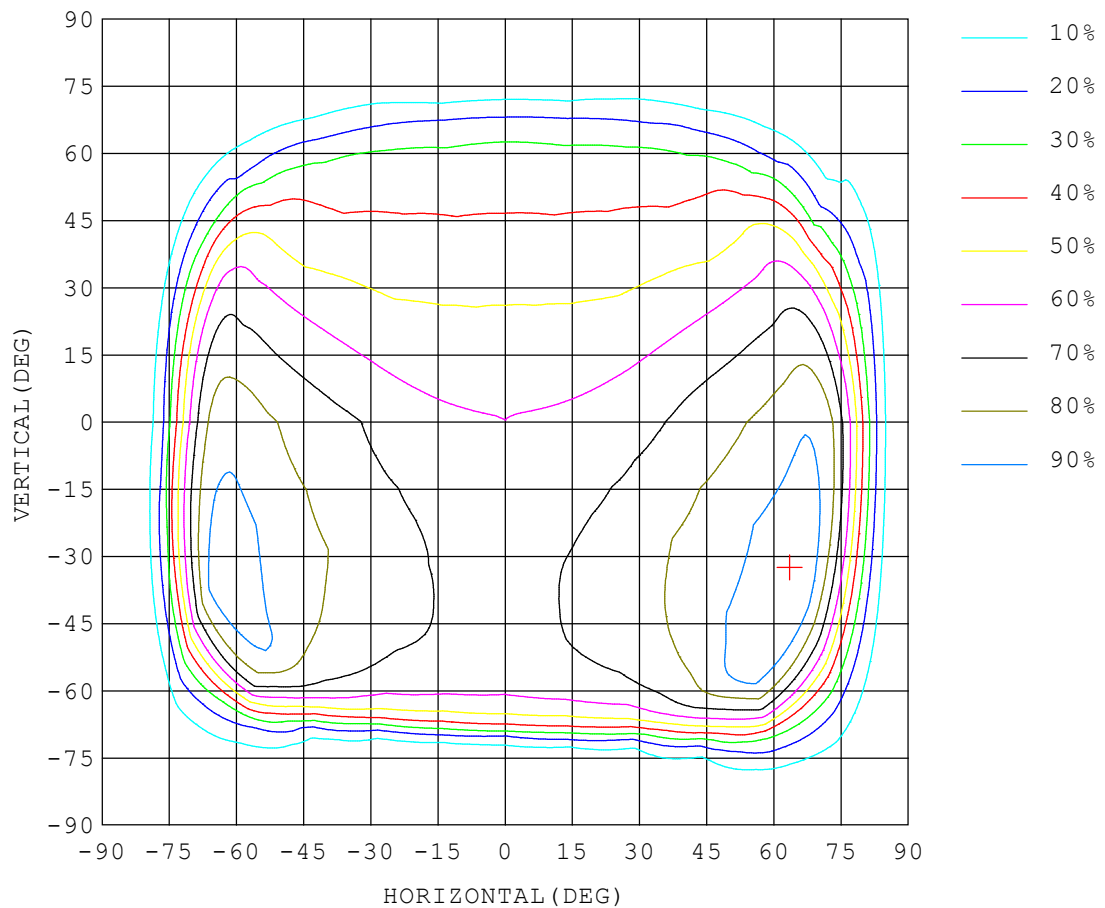
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:10.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D12040-TY3	WEIGHT:
SPECIFICATION: 5050LED 4000K Type III	DIMENSION:	SERIAL No.:

UNIT: cd



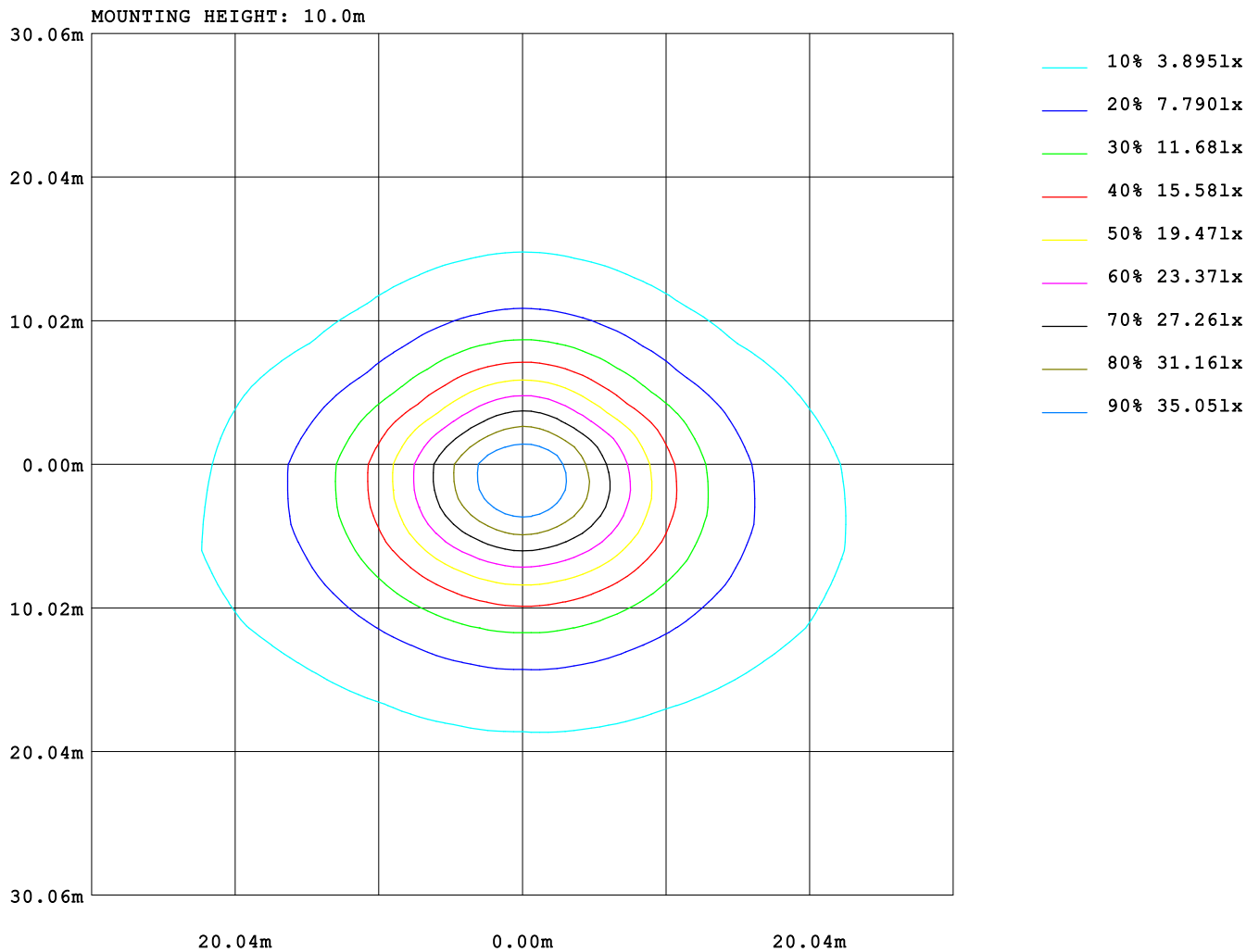
Test System:
Temperature: 25.3 DEG
Operators:
Test Date: 2025.03.23

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-D12040-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:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D12040-TY3	WEIGHT:
SPECIFICATION: 5050LED 4000K Type III	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	3837	3837	3837	3837	3837	3837	3837	3837	3837	3837	3837	3837	3837	3837	3837
5.0	3840	3870	3899	3926	3942	3957	3956	3956	3941	3923	3897	3869	3846	3812	3778
10.0	3856	3916	3970	4017	4045	4066	4068	4063	4039	4008	3964	3914	3881	3809	3728
15.0	3894	3983	4060	4116	4152	4176	4178	4170	4142	4105	4053	3984	3943	3821	3684
20.0	3959	4085	4176	4234	4253	4266	4260	4254	4232	4213	4168	4094	4043	3854	3648
25.0	4061	4234	4336	4366	4343	4333	4322	4317	4311	4331	4323	4246	4177	3904	3614
30.0	4201	4417	4529	4515	4434	4383	4365	4362	4382	4460	4499	4427	4331	3976	3572
35.0	4372	4626	4725	4673	4516	4412	4375	4379	4439	4590	4674	4617	4491	4062	3521
40.0	4561	4834	4915	4810	4586	4425	4371	4385	4482	4698	4835	4803	4639	4127	3467
45.0	4730	5031	5093	4917	4629	4435	4354	4382	4518	4779	4987	4983	4804	4176	3393
50.0	4893	5249	5278	5000	4654	4421	4293	4351	4528	4840	5124	5203	4998	4216	3280
55.0	5068	5494	5432	5062	4603	4314	4163	4227	4445	4863	5254	5444	5244	4255	3135
60.0	5286	5777	5638	5075	4440	4096	3897	3983	4235	4812	5417	5781	5475	4248	2963
65.0	5532	6160	5904	4994	4037	3469	3221	3259	3646	4551	5655	6165	5252	4178	2671
70.0	5487	6233	6166	4623	2885	1944	1312	1485	2027	3460	5414	5917	3933	3058	1822
75.0	4510	5187	5081	2620	624	399	352	359	364	786	3434	4256	1809	1279	754
80.0	2461	2709	1925	474	226	194	176	168	172	225	796	1512	331	258	126
85.0	612	625	364	130	71.1	61.4	39.3	51.0	45.2	74.4	112	194	33.0	22.4	35.2
90.0	36.2	49.3	26.5	27.4	10.5	16.2	7.70	15.6	9.50	18.0	11.7	23.7	20.1	13.2	19.0
95.0	11.1	18.8	9.07	14.3	7.02	11.9	5.74	11.5	6.67	13.2	8.91	17.6	21.0	16.0	19.8
100.0	13.9	18.2	10.2	13.5	6.95	10.8	6.35	10.6	7.00	12.8	9.98	17.7	22.4	18.4	21.2
105.0	16.4	19.0	11.8	13.9	8.44	11.4	7.77	11.3	8.35	13.3	11.5	18.4	23.7	20.3	22.4
110.0	18.5	20.2	13.7	14.8	9.86	12.3	9.19	12.1	9.77	14.1	12.9	19.3	24.7	21.8	23.4
115.0	20.1	21.2	15.3	15.7	11.2	13.2	10.5	13.1	11.1	15.0	14.4	20.1	25.6	23.3	24.5
120.0	21.5	22.2	16.9	16.8	12.6	14.1	11.8	13.9	12.4	15.8	15.7	21.0	26.8	24.8	25.8
125.0	23.1	23.3	18.4	18.0	14.0	15.2	13.1	15.0	13.7	17.0	17.0	22.0	28.1	26.5	27.4
130.0	24.7	24.6	19.9	19.3	15.6	16.4	14.6	16.2	15.2	18.1	18.4	23.2	28.9	27.7	28.8
135.0	26.1	25.7	21.2	20.5	17.1	17.6	16.1	17.5	16.7	19.3	19.7	24.1	28.7	27.7	29.2
140.0	26.7	26.3	22.2	21.4	18.4	18.8	17.5	18.7	17.9	20.2	20.6	24.5	28.1	27.2	28.8
145.0	26.5	26.3	22.7	22.1	19.4	19.9	18.5	19.7	18.9	20.9	21.1	24.5	27.4	26.5	28.2
150.0	26.0	26.1	23.1	22.6	20.3	20.7	19.5	20.6	19.8	21.5	21.5	24.5	26.8	26.0	27.5
155.0	25.6	26.0	23.4	23.1	21.2	21.5	20.4	21.5	20.6	22.1	21.9	24.4	26.3	25.5	27.0
160.0	25.4	25.9	23.7	23.6	21.9	22.2	21.4	22.3	21.4	22.6	22.4	24.3	26.1	25.3	26.6
165.0	25.3	25.8	23.9	24.0	22.7	23.0	22.3	23.1	22.3	23.2	22.8	24.5	26.0	25.1	26.2
170.0	25.5	25.8	24.3	24.5	23.4	23.8	23.2	23.8	23.1	23.8	23.3	24.6	25.9	25.1	26.0
175.0	25.5	25.7	24.6	24.9	24.0	24.4	24.1	24.3	23.7	24.3	23.7	24.7	25.9	25.1	25.7
180.0	25.7	25.7	25.0	25.2	24.7	25.0	25.0	25.0	24.5	24.8	24.3	24.7	25.7	25.1	25.3

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:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE:IL-ST11-D12040-TY3	WEIGHT:
SPECIFICATION:5050LED 4000K Type III	DIMENSION:	SERIAL No.:

UNIT: cd

C (DEG) γ (DEG)	225	240	255	270	285	300	315	330	345
0.0	3837	3837	3837	3837	3837	3837	3837	3837	3837
5.0	3749	3723	3713	3708	3715	3727	3751	3780	3814
10.0	3661	3611	3587	3581	3592	3617	3663	3728	3807
15.0	3578	3504	3464	3460	3473	3512	3578	3682	3815
20.0	3489	3392	3350	3343	3358	3398	3488	3640	3841
25.0	3399	3285	3229	3215	3236	3288	3395	3604	3885
30.0	3312	3173	3089	3064	3094	3174	3310	3562	3951
35.0	3211	3040	2928	2903	2935	3038	3213	3515	4047
40.0	3097	2895	2773	2753	2782	2895	3111	3473	4132
45.0	2967	2740	2618	2601	2627	2747	2990	3416	4184
50.0	2804	2566	2447	2433	2455	2579	2840	3322	4210
55.0	2598	2370	2266	2265	2276	2388	2645	3172	4226
60.0	2365	2151	2036	2045	2059	2180	2421	2995	4208
65.0	2029	1830	1715	1742	1751	1886	2121	2813	4182
70.0	1321	1019	937	973	999	1283	1562	2100	3606
75.0	505	433	269	298	303	566	715	986	1888
80.0	94.7	79.4	33.7	40.1	40.2	83.2	212	253	511
85.0	18.6	23.1	5.68	11.8	5.27	23.9	31.3	54.2	41.7
90.0	9.98	13.6	6.43	11.4	6.28	13.5	9.01	19.1	13.3
95.0	12.5	14.7	8.59	12.4	8.44	14.4	11.6	19.0	14.5
100.0	15.0	16.3	11.0	13.9	10.9	16.1	14.4	20.6	17.1
105.0	17.0	18.0	13.4	15.9	13.4	18.1	16.8	21.9	19.1
110.0	18.8	19.6	15.6	17.7	15.7	19.8	18.8	23.1	20.7
115.0	20.4	20.9	17.6	19.5	17.9	21.3	20.7	24.3	22.1
120.0	21.9	22.1	19.2	21.0	19.6	22.8	22.3	25.5	23.3
125.0	23.5	23.6	20.9	22.5	21.2	24.1	23.8	26.9	24.9
130.0	25.3	25.1	22.7	23.9	22.9	25.4	25.2	28.4	26.6
135.0	26.5	26.6	24.5	25.6	24.5	26.8	26.6	29.2	27.2
140.0	26.7	27.4	25.9	26.9	25.8	27.7	27.1	29.0	27.0
145.0	26.5	27.5	26.5	27.5	26.4	27.9	26.9	28.3	26.4
150.0	26.3	27.4	26.6	27.5	26.4	27.6	26.5	27.6	25.9
155.0	25.9	27.1	26.6	27.4	26.3	27.4	26.1	27.0	25.5
160.0	25.7	26.8	26.4	27.3	26.2	27.0	25.8	26.6	25.1
165.0	25.5	26.6	26.1	27.1	25.9	26.6	25.5	26.1	24.9
170.0	25.3	26.2	25.7	26.7	25.6	26.2	25.2	25.7	24.7
175.0	25.0	25.6	25.1	26.0	25.0	25.6	24.7	25.2	24.3
180.0	24.8	25.1	24.6	25.3	24.6	24.9	24.3	24.7	24.2

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: