

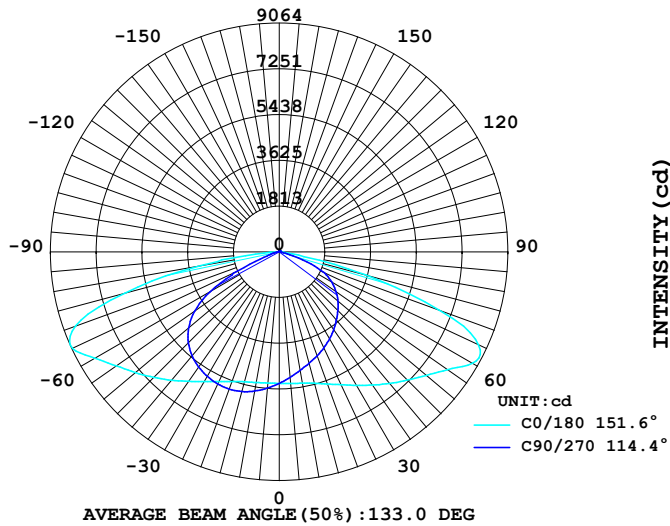
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

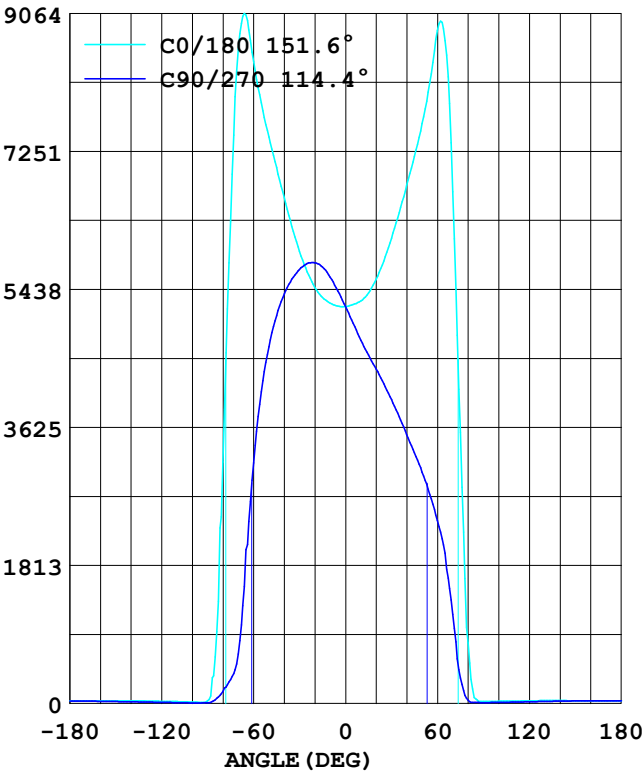
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D15040-TY2	WEIGHT:
SPECIFICATION: 5050LED 4000K Type II	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	9064	S/MH (C0/180)	1.92
MODEL		EFFICIENCY (%)	100.0	S/MH (C90/270)	1.60
NOMINAL POWER(W)	150	TOTAL FLUX(lm)	22315	Voltage(V)	230.6
RATED VOLTAGE (V)	230	EFFICIENCY (lm/W)	148.7	Current(A)	0.653
NOMINAL FLUX(lm)	22315.0	η up (%)	0.7	Power(W)	150.1
LAMPS QUANTITY	1	η down (%)	99.3	Power Factor (PF)	0.996
TEST VOLTAGE (V)	230.6	Effective Flux(lm)	22315.0	EEI	0.101

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



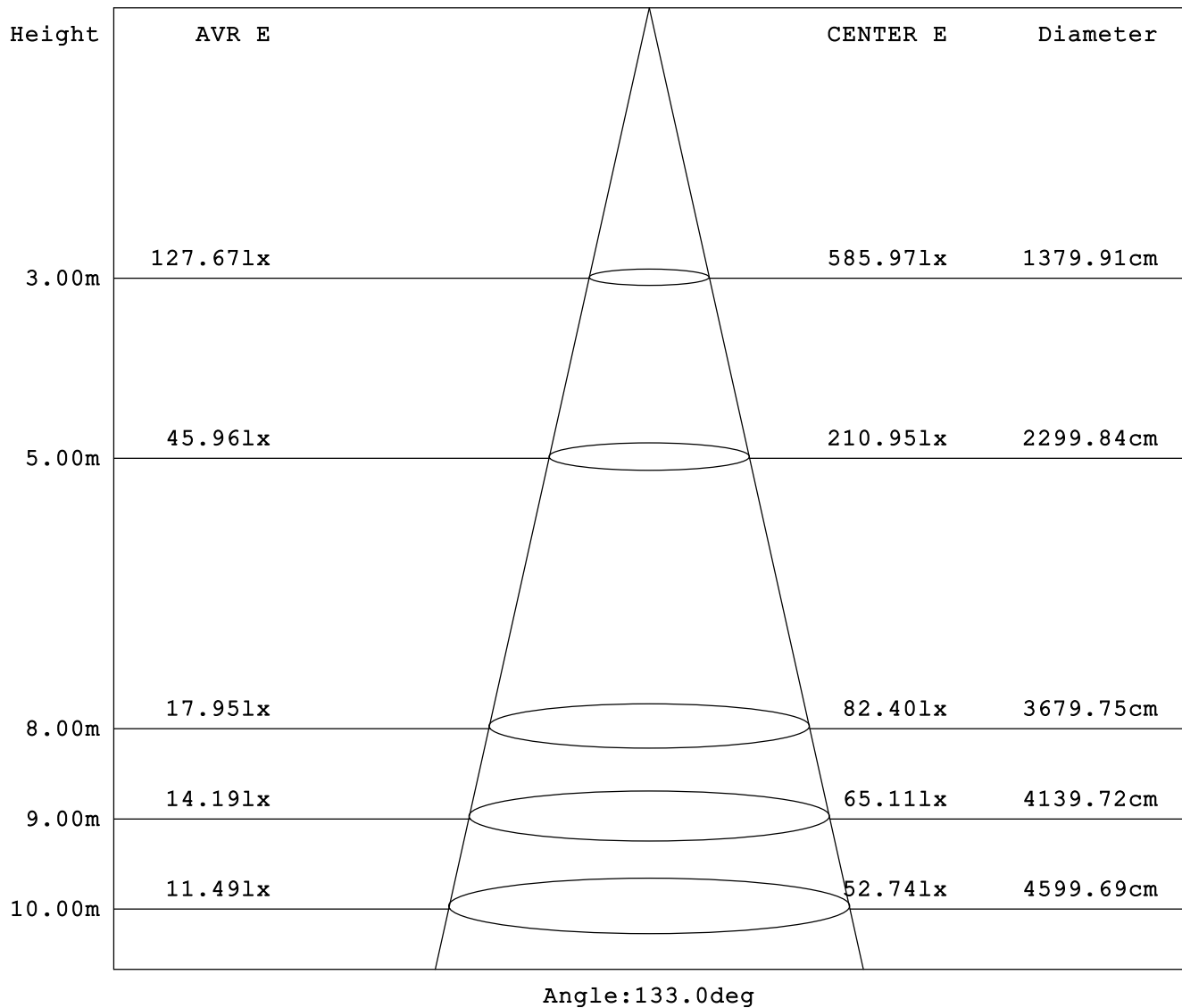
Test System:
 Temperature: 25.3 DEG
 Operators:
 Test Date: 2025.03.22

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-D15040-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-D15040-TY2	WEIGHT:
SPECIFICATION:5050LED 4000K Type II	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
5.0	5220	5369	5418	5359	5239	5072	4993	5081	0- 5	124.7	124.7
10.0	5257	5514	5599	5495	5287	4935	4770	4954	5- 10	373.7	498.4
15.0	5331	5651	5733	5609	5392	4802	4576	4822	10- 15	620.9	1119
20.0	5465	5789	5788	5706	5573	4680	4392	4697	15- 20	865.4	1985
25.0	5671	5917	5778	5775	5812	4564	4198	4576	20- 25	1107	3091
30.0	5937	6015	5700	5824	6109	4434	3991	4433	25- 30	1342	4433
35.0	6265	6089	5572	5838	6447	4300	3766	4289	30- 35	1567	6000
40.0	6640	6107	5377	5815	6810	4132	3528	4115	35- 40	1778	7779
45.0	7039	6047	5093	5735	7184	3917	3294	3900	40- 45	1966	9744
50.0	7439	5878	4687	5534	7617	3657	3039	3636	45- 50	2117	11861
55.0	7887	5523	4094	5113	8148	3341	2748	3288	50- 55	2216	14078
60.0	8433	4868	3160	4428	8837	2940	2403	2865	55- 60	2247	16325
65.0	9041	3674	2019	3195	8703	2386	1976	2287	60- 65	2166	18491
70.0	8586	1619	648.7	1364	6720	1536	1169	1454	65- 70	1815	20306
75.0	6326	469.9	315.1	435.4	3563	628.8	335.1	566.5	70- 75	1161	21467
80.0	3170	261.0	156.1	233.5	796.9	133.4	43.09	128.1	75- 80	517.4	21984
85.0	611.7	100.5	50.22	95.75	61.13	29.72	13.49	27.89	80- 85	151.2	22136
90.0	34.11	24.94	9.473	23.73	26.77	8.120	12.24	7.743	85- 90	27.28	22163
95.0	16.06	16.40	7.042	15.32	27.84	10.79	12.65	10.57	90- 95	8.531	22172
100.0	19.69	16.24	7.629	14.82	29.66	13.89	14.00	13.90	95-100	8.370	22180
105.0	22.90	17.41	9.390	15.73	31.39	16.82	15.84	17.15	100-105	9.232	22189
110.0	25.45	19.08	11.23	17.06	32.71	19.59	18.10	20.06	105-110	10.11	22199
115.0	27.35	20.84	12.99	18.56	33.78	22.01	20.37	22.81	110-115	10.79	22210
120.0	29.08	22.52	14.83	20.06	35.26	24.11	22.63	25.06	115-120	11.27	22221
125.0	31.06	24.27	16.68	21.56	37.40	26.03	24.81	27.14	120-125	11.58	22233
130.0	33.53	26.03	18.61	23.23	39.05	28.21	26.91	29.14	125-130	11.72	22245
135.0	35.67	27.62	20.62	24.81	39.54	30.30	29.09	30.89	130-135	11.65	22256
140.0	36.58	28.88	22.46	26.31	38.80	32.14	31.35	32.55	135-140	11.24	22268
145.0	36.25	29.88	24.14	27.47	37.73	33.23	33.11	33.47	140-145	10.48	22278
150.0	35.51	30.55	25.73	28.39	36.66	33.65	34.20	33.72	145-150	9.429	22287
155.0	34.77	31.14	27.16	29.30	35.92	33.90	34.96	33.80	150-155	8.198	22296
160.0	34.27	31.73	28.58	30.14	35.42	33.99	35.46	33.72	155-160	6.855	22302
165.0	34.11	32.31	30.01	30.89	35.18	33.99	35.71	33.63	160-165	5.432	22308
170.0	34.19	32.98	31.35	31.72	34.93	33.90	35.54	33.47	165-170	3.940	22312
175.0	34.19	33.40	32.44	32.38	34.68	33.57	34.87	32.97	170-175	2.388	22314
180.0	34.52	33.82	33.62	32.97	34.52	33.32	34.03	32.38	175-180	0.797	22315
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

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

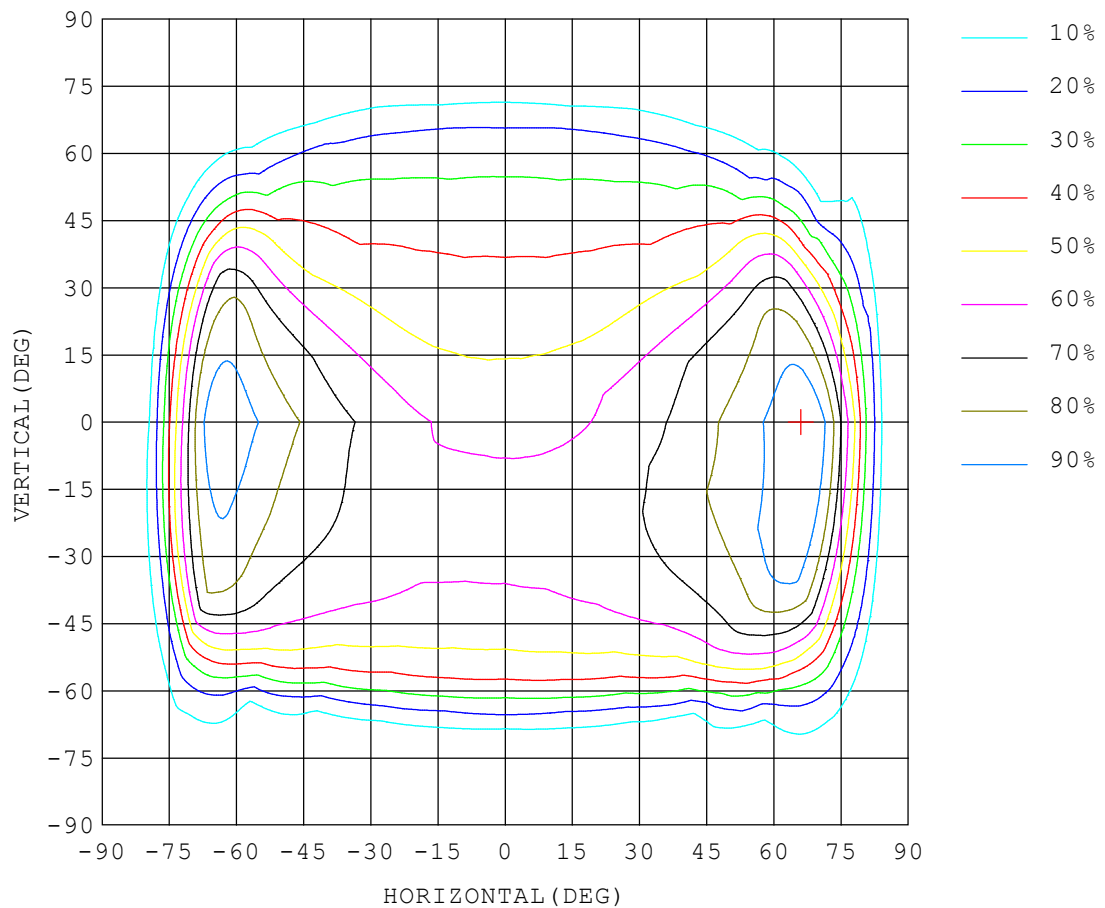
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:10.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE:IL-ST11-D15040-TY2	WEIGHT:
SPECIFICATION:5050LED 4000K Type II	DIMENSION:	SERIAL No.:

UNIT: cd



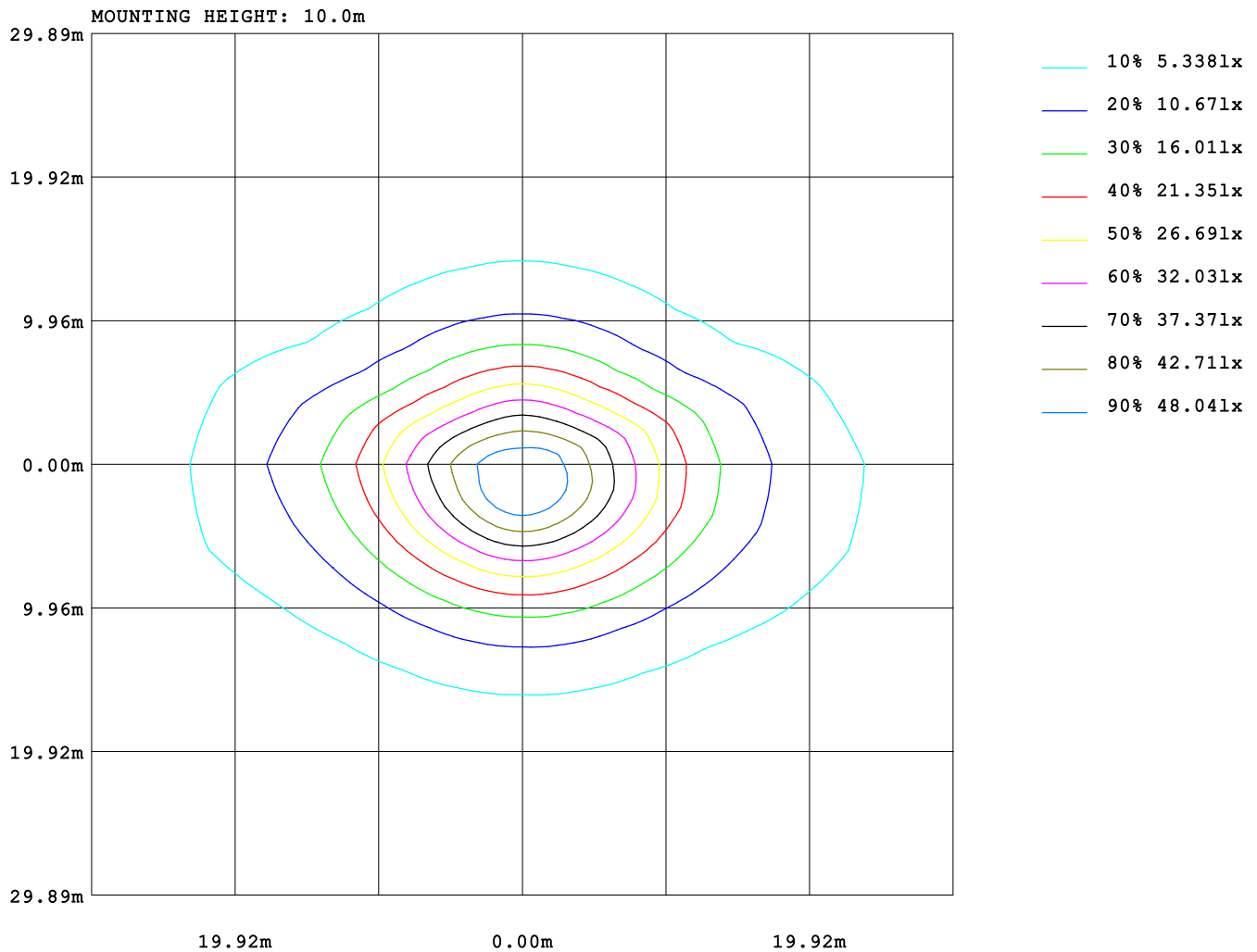
Test System:
Temperature:25.3DEG
Operators:
Test Date:2025.03.22

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

ISOLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D15040-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-D15040-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	5215	5215	5215	5215	5215	5215	5215	5215	5215	5215	5215	5215	5215	5215	5215
5.0	5220	5273	5322	5369	5397	5421	5418	5416	5389	5359	5313	5266	5239	5187	5124
10.0	5257	5357	5442	5514	5561	5599	5599	5594	5547	5495	5417	5335	5287	5181	5053
15.0	5331	5465	5573	5651	5698	5733	5733	5722	5671	5609	5521	5414	5392	5216	5004
20.0	5465	5641	5742	5789	5790	5799	5788	5779	5737	5706	5643	5552	5573	5311	4973
25.0	5671	5881	5947	5917	5841	5808	5778	5777	5755	5775	5790	5754	5812	5455	4960
30.0	5937	6159	6160	6015	5846	5756	5700	5711	5721	5824	5942	5987	6109	5650	4963
35.0	6265	6487	6366	6089	5798	5645	5572	5585	5637	5838	6084	6256	6447	5883	4959
40.0	6640	6828	6555	6107	5702	5485	5377	5406	5507	5815	6207	6525	6810	6133	4922
45.0	7039	7166	6695	6047	5524	5245	5093	5146	5316	5735	6268	6775	7184	6387	4834
50.0	7439	7486	6744	5878	5196	4860	4687	4756	4991	5534	6252	7004	7617	6630	4674
55.0	7887	7833	6722	5523	4653	4273	4094	4181	4459	5113	6137	7256	8148	6880	4431
60.0	8433	8248	6642	4868	3776	3371	3160	3294	3585	4428	5866	7552	8837	7221	4052
65.0	9041	8768	6402	3674	2440	1987	2019	1934	2280	3195	5274	7946	8703	7198	3381
70.0	8586	8252	4947	1619	866	715	649	706	813	1364	3588	7693	6720	5444	2077
75.0	6326	6009	2356	470	369	355	315	346	351	435	1003	5669	3563	2339	850
80.0	3170	2530	469	261	205	187	156	183	202	234	285	2025	797	327	185
85.0	612	464	139	101	64.6	67.5	50.2	67.6	64.7	95.7	108	400	61.1	40.1	52.7
90.0	34.1	46.3	21.2	24.9	11.1	18.8	9.47	18.1	10.2	23.7	18.5	41.1	26.7	16.1	21.1
95.0	16.0	24.6	12.4	16.4	8.38	14.2	7.04	13.5	8.01	15.3	11.1	23.4	27.8	18.9	21.3
100.0	19.6	25.2	14.5	16.2	8.55	12.7	7.62	12.6	8.09	14.8	12.8	23.7	29.6	22.3	23.3
105.0	22.9	26.8	17.3	17.4	10.3	13.6	9.39	13.5	9.93	15.7	15.1	25.1	31.3	24.8	25.2
110.0	25.4	28.5	19.9	19.0	12.4	14.8	11.2	14.6	11.7	17.0	17.4	26.7	32.7	26.9	26.9
115.0	27.3	29.9	22.4	20.8	14.3	16.1	12.9	15.9	13.5	18.5	19.6	27.8	33.7	28.6	28.4
120.0	29.0	31.2	24.6	22.5	16.3	17.5	14.8	17.2	15.3	20.0	21.4	28.7	35.2	30.5	29.9
125.0	31.0	32.7	26.6	24.2	18.3	19.0	16.6	18.7	17.1	21.5	23.1	30.0	37.4	32.8	31.7
130.0	33.5	34.4	28.5	26.0	20.4	20.6	18.6	20.3	19.2	23.2	25.0	31.6	39.0	34.9	33.6
135.0	35.6	35.9	30.1	27.6	22.5	22.4	20.6	22.1	21.2	24.8	26.7	33.1	39.5	36.3	35.2
140.0	36.5	36.7	31.2	28.8	24.3	24.1	22.4	23.8	23.0	26.3	28.0	34.0	38.8	36.3	36.0
145.0	36.2	36.5	31.6	29.8	25.8	25.6	24.1	25.3	24.5	27.4	28.9	34.1	37.7	35.7	36.1
150.0	35.5	35.9	31.8	30.5	27.2	27.0	25.7	26.8	26.0	28.3	29.4	33.8	36.6	35.0	35.8
155.0	34.7	35.4	32.1	31.1	28.4	28.4	27.1	28.2	27.3	29.3	29.8	33.5	35.9	34.4	35.5
160.0	34.2	35.1	32.3	31.7	29.5	29.6	28.5	29.5	28.5	30.1	30.2	33.1	35.4	34.1	35.2
165.0	34.1	34.9	32.5	32.3	30.5	30.8	30.0	30.6	29.8	30.8	30.7	33.0	35.1	33.9	34.9
170.0	34.1	34.6	32.8	32.9	31.6	32.0	31.3	31.8	30.8	31.7	31.3	33.0	34.9	33.9	34.7
175.0	34.1	34.4	33.2	33.4	32.4	32.8	32.4	32.7	31.7	32.3	31.8	33.1	34.6	33.6	34.3
180.0	34.5	34.4	33.6	33.8	33.2	33.5	33.6	33.3	32.7	32.9	32.3	33.0	34.5	33.7	34.0

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-D15040-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	5215	5215	5215	5215	5215	5215	5215	5215	5215
5.0	5072	5027	5004	4993	5008	5032	5081	5135	5192
10.0	4935	4836	4788	4770	4793	4851	4954	5078	5206
15.0	4802	4663	4592	4576	4595	4672	4822	5038	5260
20.0	4680	4491	4414	4392	4412	4499	4697	5017	5367
25.0	4564	4329	4231	4198	4223	4323	4576	5001	5521
30.0	4434	4159	4033	3991	4023	4150	4433	5001	5728
35.0	4300	3973	3817	3766	3807	3961	4289	4996	5969
40.0	4132	3785	3591	3528	3579	3768	4115	4949	6227
45.0	3917	3576	3356	3294	3344	3555	3900	4842	6465
50.0	3657	3311	3091	3039	3075	3280	3636	4648	6692
55.0	3341	2988	2781	2748	2763	2942	3288	4372	6903
60.0	2940	2610	2419	2403	2398	2549	2865	3948	7175
65.0	2386	2121	1974	1976	1939	2053	2287	3215	6891
70.0	1536	1340	1216	1169	1178	1319	1454	1908	4951
75.0	629	587	342	335	320	538	567	784	2277
80.0	133	105	44.7	43.0	35.5	101	128	181	304
85.0	29.7	31.1	5.54	13.4	4.78	24.4	27.8	52.8	38.6
90.0	8.12	13.6	5.54	12.2	5.45	13.1	7.74	20.9	17.0
95.0	10.7	13.9	7.39	12.6	7.29	13.6	10.5	20.9	18.4
100.0	13.8	15.4	9.74	14.0	9.64	15.1	13.9	23.1	21.9
105.0	16.8	17.4	12.4	15.8	12.3	17.3	17.1	25.4	24.6
110.0	19.5	19.6	15.2	18.1	15.1	19.7	20.0	27.5	26.8
115.0	22.0	21.7	17.9	20.3	17.9	21.9	22.8	29.4	28.9
120.0	24.1	23.8	20.5	22.6	20.5	24.2	25.0	31.4	30.9
125.0	26.0	25.7	22.8	24.8	23.0	26.2	27.1	33.0	33.0
130.0	28.2	27.8	25.2	26.9	25.4	28.3	29.1	34.5	34.9
135.0	30.3	29.9	27.6	29.0	27.6	30.3	30.8	35.7	35.8
140.0	32.1	31.9	30.0	31.3	30.0	32.2	32.5	36.2	35.8
145.0	33.2	33.4	32.1	33.1	31.8	33.6	33.4	36.2	35.2
150.0	33.6	34.2	33.3	34.2	33.0	34.3	33.7	35.7	34.5
155.0	33.9	34.7	34.1	34.9	33.7	34.7	33.8	35.2	33.9
160.0	33.9	35.0	34.5	35.4	34.1	34.8	33.7	34.8	33.4
165.0	33.9	35.0	34.6	35.7	34.2	34.8	33.6	34.4	33.0
170.0	33.9	34.8	34.3	35.5	34.2	34.7	33.4	34.1	32.8
175.0	33.5	34.2	33.7	34.8	33.5	34.0	32.9	33.5	32.4
180.0	33.3	33.6	33.1	34.0	32.9	33.1	32.3	32.9	32.3

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: