

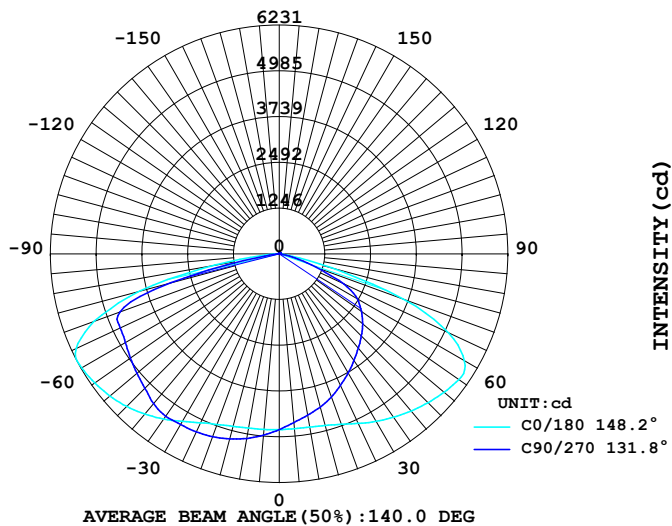
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

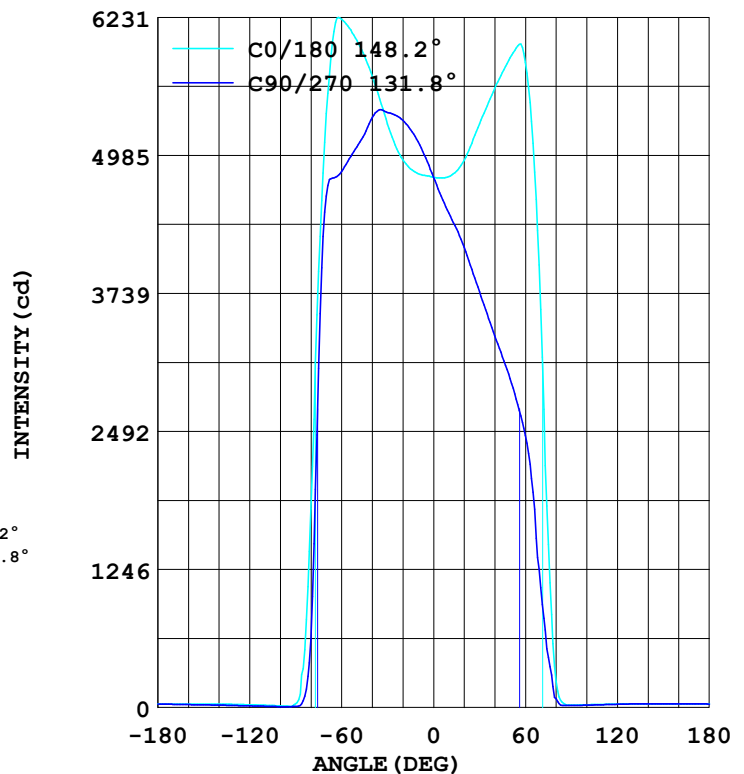
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D15040-TY4	WEIGHT:
SPECIFICATION: 5050LED 4000K Type IV	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax (cd)	6655	S/MH (C0/180)	1.79
MODEL		EFFICIENCY (%)	100.0	S/MH (C90/270)	1.68
NOMINAL POWER (W)	150	TOTAL FLUX (lm)	22583	Voltage (V)	230.3
RATED VOLTAGE (V)	230	EFFICIENCY (lm/W)	150.3	Current (A)	0.655
NOMINAL FLUX (lm)	22583.3	η up (%)	0.7	Power (W)	150.3
LAMPS QUANTITY	1	η down (%)	99.3	Power Factor (PF)	0.996
TEST VOLTAGE (V)	230.3	Effective Flux (lm)	22583.3	EEI	0.100

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



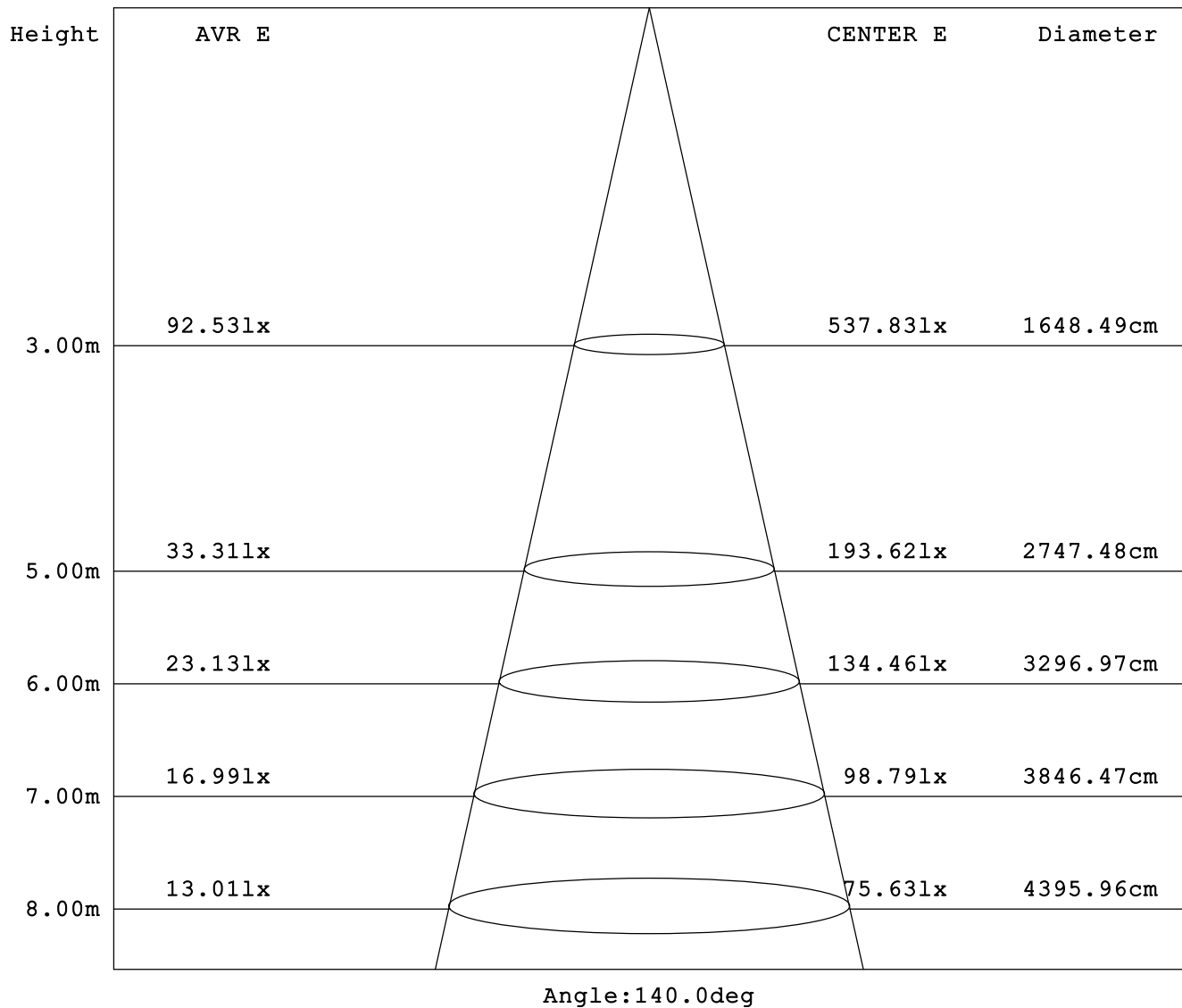
Test System:
Temperature: 25.3 DEG
Operators:
Test Date: 2025.03.24

Test Set: 5.0 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-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-D15040-TY4	WEIGHT:
SPECIFICATION:5050LED 4000K Type IV	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
5.0	4802	4919	4960	4900	4782	4651	4615	4665	0- 5	114.4	114.4
10.0	4820	5039	5108	4996	4793	4532	4465	4557	5- 10	342.4	456.9
15.0	4864	5159	5219	5087	4843	4428	4322	4465	10- 15	568.5	1025
20.0	4947	5293	5302	5185	4940	4308	4155	4354	15- 20	791.5	1817
25.0	5079	5440	5349	5294	5094	4211	3956	4262	20- 25	1011	2828
30.0	5267	5599	5371	5409	5270	4108	3752	4162	25- 30	1227	4056
35.0	5493	5765	5396	5516	5431	4003	3553	4062	30- 35	1440	5495
40.0	5698	5924	5327	5614	5588	3898	3357	3963	35- 40	1641	7136
45.0	5878	6070	5179	5702	5734	3778	3165	3857	40- 45	1825	8961
50.0	6023	6188	5061	5768	5864	3652	2970	3735	45- 50	1988	10948
55.0	6135	6259	4955	5788	5973	3511	2735	3592	50- 55	2128	13076
60.0	6213	6273	4840	5780	5822	3325	2456	3408	55- 60	2236	15312
65.0	6103	6206	4782	5699	5094	3039	1943	3145	60- 65	2278	17589
70.0	5363	5925	4617	5450	3595	2325	1082	2498	65- 70	2159	19748
75.0	3937	4451	3061	3908	1473	1010	451.2	1170	70- 75	1689	21438
80.0	1793	1456	613.1	891.1	235.5	176.1	79.07	279.3	75- 80	817.7	22255
85.0	352.4	172.5	61.74	97.93	36.97	29.53	18.42	41.81	80- 85	151.7	22407
90.0	32.34	28.19	10.09	24.50	21.75	13.09	18.08	12.37	85- 90	22.76	22430
95.0	11.99	19.13	6.814	18.31	22.99	16.44	19.43	15.47	90- 95	9.600	22440
100.0	14.88	18.21	7.907	17.56	24.89	19.55	21.45	18.56	95-100	9.307	22449
105.0	17.95	18.71	9.674	18.14	26.80	21.98	23.47	21.07	100-105	10.06	22459
110.0	20.68	19.63	11.44	18.98	28.29	24.16	25.40	23.24	105-110	10.75	22470
115.0	22.74	20.64	13.12	19.90	29.69	26.01	27.17	25.17	110-115	11.24	22481
120.0	24.56	21.90	14.72	20.99	31.10	27.94	28.93	27.17	115-120	11.54	22492
125.0	26.47	23.24	16.40	22.24	32.67	30.12	30.87	29.43	120-125	11.73	22504
130.0	28.37	24.75	18.17	23.75	33.83	32.14	32.80	31.52	125-130	11.82	22516
135.0	30.11	26.18	20.02	25.08	34.41	33.06	33.81	32.61	130-135	11.60	22528
140.0	31.18	27.18	21.62	26.09	34.24	33.14	33.98	32.78	135-140	10.96	22539
145.0	31.51	27.86	22.96	26.76	33.83	32.89	33.98	32.53	140-145	10.03	22549
150.0	31.43	28.36	24.22	27.34	33.25	32.56	33.81	32.19	145-150	8.912	22558
155.0	31.18	28.86	25.40	27.84	32.84	32.22	33.73	31.86	150-155	7.688	22565
160.0	31.10	29.28	26.41	28.43	32.50	31.97	33.65	31.61	155-160	6.394	22572
165.0	31.10	29.87	27.59	29.01	32.42	31.72	33.48	31.36	160-165	5.049	22577
170.0	31.35	30.37	28.77	29.68	32.26	31.46	33.14	31.11	165-170	3.652	22580
175.0	31.43	30.88	29.78	30.19	32.01	31.05	32.22	30.52	170-175	2.209	22583
180.0	31.84	31.30	30.95	30.69	31.84	30.71	31.29	30.10	175-180	0.737	22583
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

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

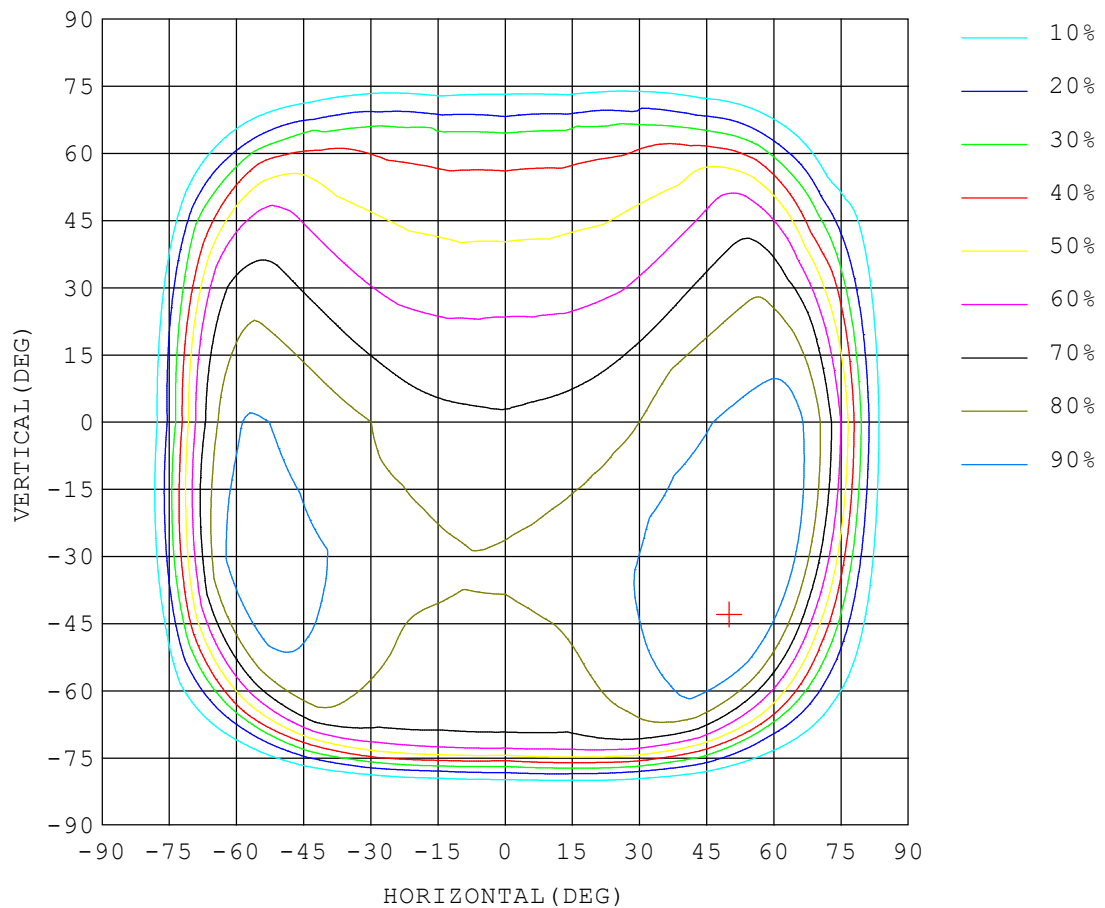
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:10.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D15040-TY4	WEIGHT:
SPECIFICATION: 5050LED 4000K Type IV	DIMENSION:	SERIAL No.:

UNIT: cd



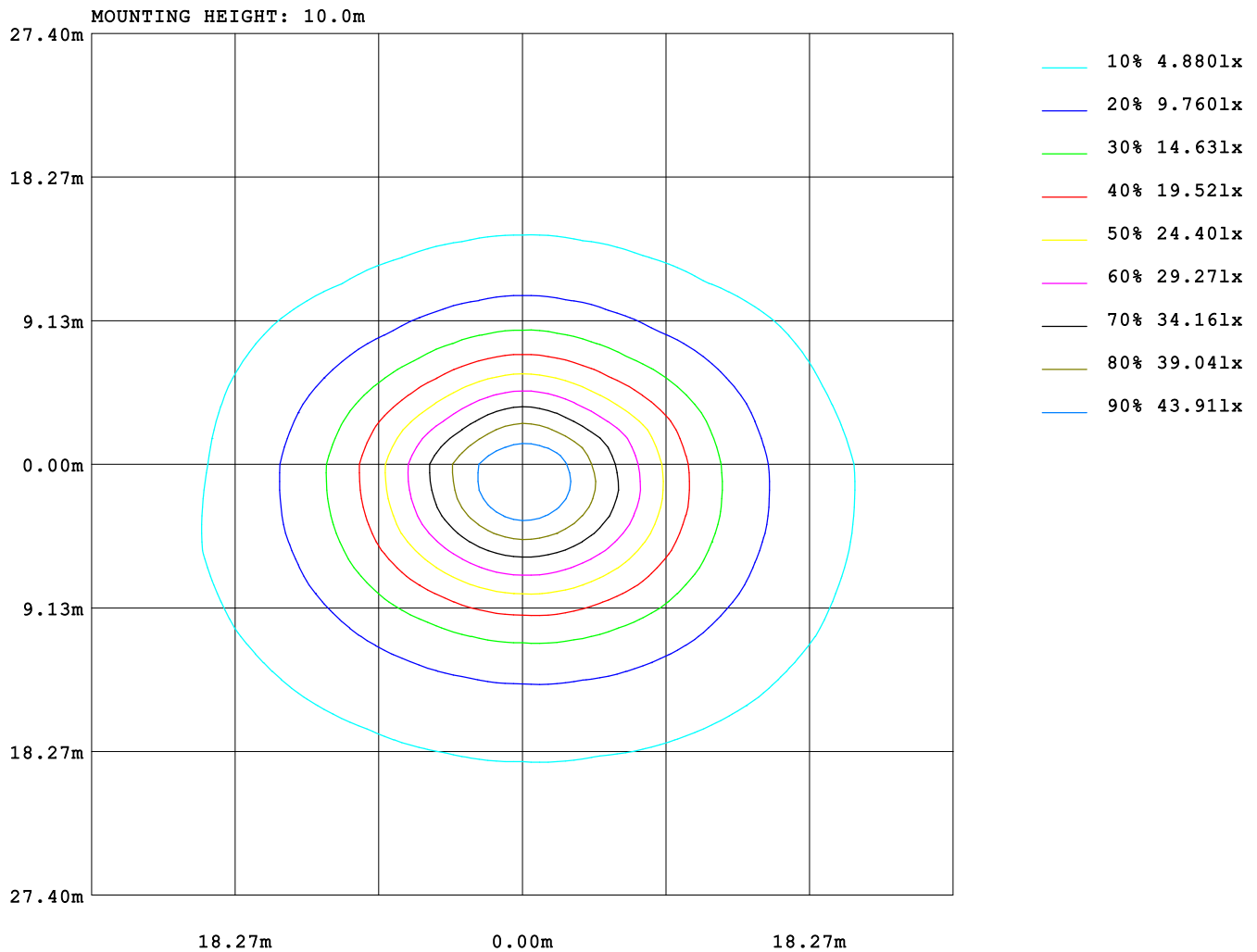
Test System:
Temperature: 25.3 DEG
Operators:
Test Date: 2025.03.24

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-D15040-TY4	WEIGHT:
SPECIFICATION: 5050LED 4000K Type IV	DIMENSION:	SERIAL No.:



Test System:
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Operators:
Test Date: 2025.03.24

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

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D15040-TY4	WEIGHT:
SPECIFICATION: 5050LED 4000K Type IV	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	4787	4787	4787	4787	4787	4787	4787	4787	4787	4787	4787	4787	4787	4787	4787
5.0	4802	4845	4886	4919	4945	4957	4960	4949	4929	4900	4862	4818	4782	4734	4692
10.0	4820	4905	4984	5039	5082	5103	5108	5084	5049	4996	4934	4858	4793	4700	4607
15.0	4864	4992	5092	5159	5196	5218	5219	5191	5144	5087	5010	4909	4843	4689	4536
20.0	4947	5120	5234	5293	5309	5311	5302	5271	5229	5185	5111	5004	4940	4712	4490
25.0	5079	5293	5413	5440	5413	5373	5349	5320	5306	5294	5250	5143	5094	4783	4451
30.0	5267	5522	5626	5599	5510	5421	5371	5355	5374	5409	5413	5328	5270	4896	4433
35.0	5493	5774	5859	5765	5594	5476	5396	5390	5419	5516	5594	5528	5431	5006	4430
40.0	5698	5991	6073	5924	5655	5455	5327	5329	5440	5614	5752	5690	5588	5108	4435
45.0	5878	6189	6267	6070	5663	5382	5179	5225	5382	5702	5902	5849	5734	5200	4438
50.0	6023	6355	6440	6188	5655	5271	5061	5095	5332	5768	6032	6013	5864	5264	4422
55.0	6135	6492	6569	6259	5658	5162	4955	4985	5302	5788	6127	6166	5973	5297	4381
60.0	6213	6587	6648	6273	5620	5042	4840	4885	5227	5780	6196	6279	5822	5227	4311
65.0	6103	6472	6613	6206	5495	4896	4782	4810	5064	5699	6140	6117	5094	4761	4086
70.0	5363	5643	5923	5925	5201	4685	4617	4634	4773	5450	5497	5229	3595	3759	3274
75.0	3937	3847	4218	4451	4086	3501	3061	3256	3622	3908	3711	3267	1473	2048	1571
80.0	1793	1474	1299	1456	1108	761	613	638	762	891	823	903	236	342	250
85.0	352	236	268	173	92.4	87.4	61.7	82.3	68.8	97.9	111	100	36.9	28.7	47.9
90.0	32.3	42.1	23.1	28.1	11.9	22.2	10.0	21.7	11.9	24.5	14.6	26.7	21.7	16.0	25.1
95.0	11.9	21.2	11.9	19.1	8.90	15.6	6.81	15.1	8.38	18.3	11.9	20.7	22.9	16.9	23.6
100.0	14.8	20.8	13.2	18.2	9.49	14.5	7.90	14.2	9.13	17.5	13.3	21.0	24.8	20.3	25.6
105.0	17.9	22.0	15.2	18.7	11.4	15.2	9.67	14.8	10.9	18.1	15.2	22.2	26.8	23.1	27.4
110.0	20.6	23.3	17.2	19.6	13.1	16.0	11.4	15.8	12.7	18.9	17.0	23.4	28.2	25.3	28.8
115.0	22.7	24.6	18.9	20.6	14.8	17.1	13.1	16.8	14.2	19.9	18.6	24.6	29.6	27.2	30.1
120.0	24.5	25.9	20.7	21.9	16.5	18.2	14.7	17.8	15.8	20.9	20.2	25.8	31.1	28.9	31.6
125.0	26.4	27.3	22.6	23.2	18.4	19.5	16.4	18.9	17.5	22.2	21.9	27.1	32.6	30.7	33.2
130.0	28.3	29.0	24.6	24.7	20.1	20.9	18.1	20.5	19.3	23.7	23.7	28.6	33.8	32.2	34.8
135.0	30.1	30.6	26.4	26.1	21.8	22.3	20.0	21.9	21.1	25.0	25.3	29.8	34.4	33.0	35.4
140.0	31.1	31.4	27.5	27.1	23.3	23.7	21.6	23.3	22.5	26.0	26.3	30.5	34.2	33.1	35.2
145.0	31.5	31.7	28.0	27.8	24.3	24.8	22.9	24.5	23.7	26.7	26.9	30.7	33.8	32.7	34.7
150.0	31.4	31.7	28.5	28.3	25.3	25.8	24.2	25.7	24.7	27.3	27.4	30.7	33.2	32.2	34.1
155.0	31.1	31.7	28.9	28.8	26.3	26.8	25.4	26.7	25.7	27.8	27.7	30.6	32.8	31.7	33.6
160.0	31.1	31.7	29.2	29.2	27.2	27.6	26.4	27.7	26.7	28.4	28.1	30.5	32.5	31.4	33.1
165.0	31.1	31.7	29.5	29.8	28.1	28.6	27.5	28.6	27.7	29.0	28.5	30.5	32.4	31.2	32.6
170.0	31.3	31.7	30.1	30.3	28.9	29.5	28.7	29.5	28.6	29.6	29.1	30.6	32.2	31.2	32.3
175.0	31.4	31.7	30.4	30.8	29.8	30.2	29.7	30.2	29.3	30.1	29.5	30.7	32.0	31.0	31.9
180.0	31.8	31.6	31.0	31.3	30.6	30.9	30.9	30.8	30.3	30.6	30.2	30.7	31.8	31.0	31.5

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:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D15040-TY4	WEIGHT:
SPECIFICATION: 5050LED 4000K Type IV	DIMENSION:	SERIAL No.:

UNIT: cd

C (DEG) γ (DEG)	225	240	255	270	285	300	315	330	345
0.0	4787	4787	4787	4787	4787	4787	4787	4787	4787
5.0	4651	4630	4613	4615	4615	4638	4665	4712	4757
10.0	4532	4489	4466	4465	4473	4505	4557	4644	4746
15.0	4428	4353	4320	4322	4332	4376	4465	4592	4760
20.0	4308	4214	4155	4155	4169	4240	4354	4562	4806
25.0	4211	4056	3968	3956	3982	4085	4262	4543	4900
30.0	4108	3889	3773	3752	3785	3918	4162	4543	5047
35.0	4003	3727	3577	3553	3592	3756	4062	4558	5195
40.0	3898	3563	3387	3357	3410	3600	3963	4583	5319
45.0	3778	3400	3200	3165	3227	3440	3857	4604	5415
50.0	3652	3232	2999	2970	3024	3272	3735	4602	5474
55.0	3511	3026	2779	2735	2807	3076	3592	4564	5501
60.0	3325	2784	2507	2456	2540	2838	3408	4486	5466
65.0	3039	2475	2074	1943	2110	2535	3145	4348	4970
70.0	2325	1748	1192	1082	1226	1820	2498	3497	4096
75.0	1010	765	440	451	457	834	1170	1950	2301
80.0	176	164	72.6	79.0	82.6	193	279	426	552
85.0	29.5	39.7	11.7	18.4	11.1	38.7	41.8	63.8	43.0
90.0	13.0	21.1	11.6	18.0	11.2	20.7	12.3	24.5	16.0
95.0	16.4	21.6	14.5	19.4	14.2	21.0	15.4	22.9	15.7
100.0	19.5	23.3	17.4	21.4	17.1	22.8	18.5	24.6	18.9
105.0	21.9	24.9	20.1	23.4	19.7	24.4	21.0	26.3	21.6
110.0	24.1	26.5	22.4	25.4	22.1	26.1	23.2	27.6	23.8
115.0	26.0	28.0	24.4	27.1	24.3	27.8	25.1	28.9	25.5
120.0	27.9	29.7	26.5	28.9	26.4	29.5	27.1	30.2	27.0
125.0	30.1	31.7	28.7	30.8	28.7	31.4	29.4	31.9	28.8
130.0	32.1	33.7	30.8	32.8	30.7	33.4	31.5	33.8	30.5
135.0	33.0	34.4	32.0	33.8	31.8	34.2	32.6	34.6	31.6
140.0	33.1	34.4	32.4	33.9	32.1	34.2	32.7	34.6	31.9
145.0	32.8	34.2	32.7	33.9	32.2	34.0	32.5	34.1	31.8
150.0	32.5	34.0	32.7	33.8	32.1	33.7	32.1	33.5	31.5
155.0	32.2	33.7	32.6	33.7	32.1	33.3	31.8	33.0	31.1
160.0	31.9	33.4	32.5	33.6	32.0	33.1	31.6	32.6	30.8
165.0	31.7	33.1	32.3	33.4	31.8	32.7	31.3	32.2	30.6
170.0	31.4	32.6	31.8	33.1	31.6	32.3	31.1	31.8	30.3
175.0	31.0	31.8	31.0	32.2	30.8	31.6	30.5	31.2	30.1
180.0	30.7	31.1	30.4	31.2	30.3	30.7	30.1	30.7	30.1

Test System:
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