

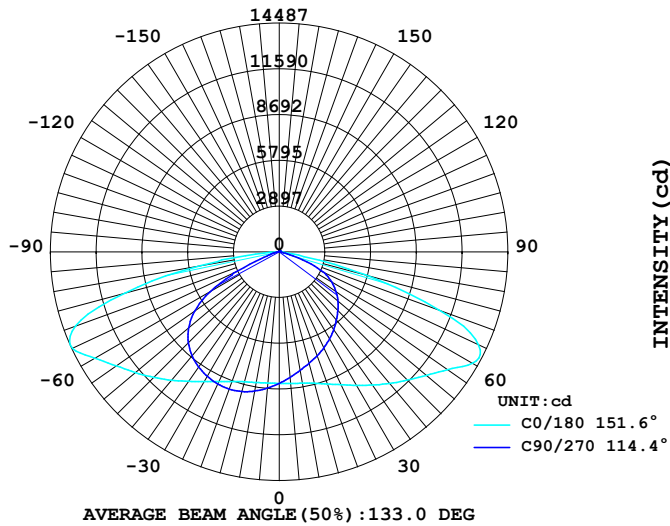
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

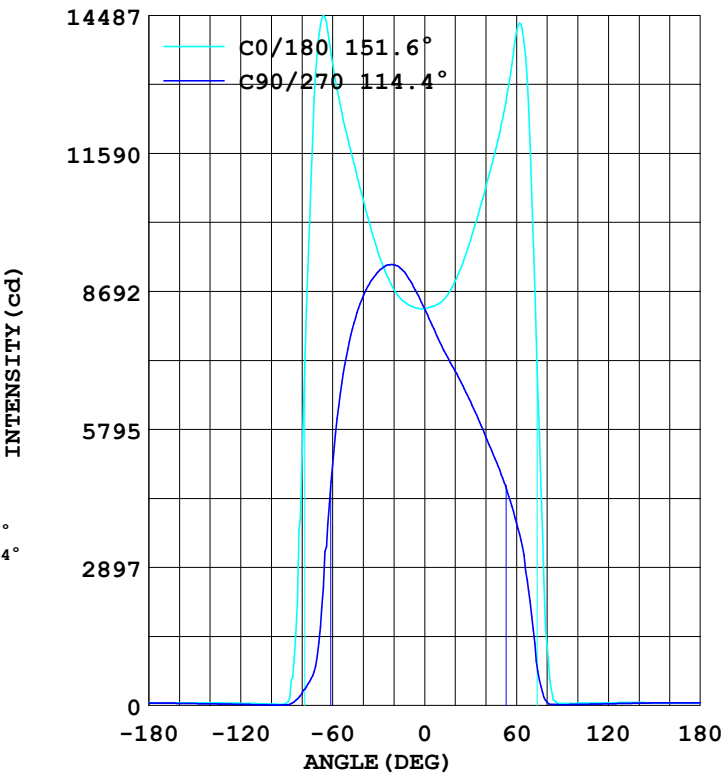
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D24040-TY2	WEIGHT:
SPECIFICATION: 5050LED 4000K Type II	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	14487	S/MH (C0/180)	1.92
MODEL		EFFICIENCY (%)	100.0	S/MH (C90/270)	1.60
NOMINAL POWER(W)	240	TOTAL FLUX(lm)	35668	Voltage(V)	230.8
RATED VOLTAGE (V)	230	EFFICIENCY (lm/W)	148.4	Current(A)	1.045
NOMINAL FLUX(lm)	35668.0	η up (%)	0.7	Power(W)	240.3
LAMPS QUANTITY	1	η down (%)	99.3	Power Factor (PF)	0.996
TEST VOLTAGE (V)	230.8	Effective Flux(lm)	35668.2	EEI	0.101

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



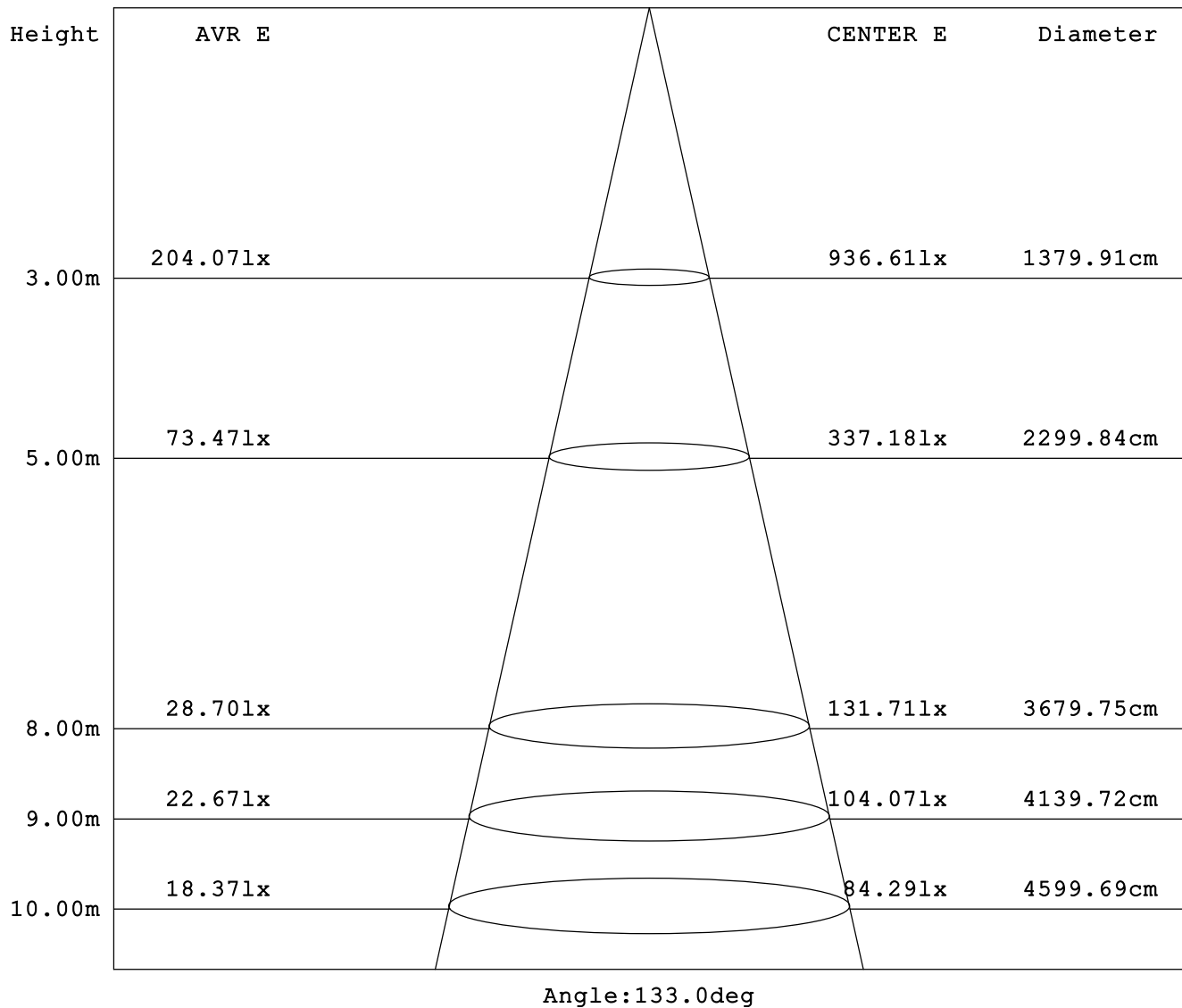
Test System:
 Temperature: 25.3 DEG
 Operators:
 Test Date: 2025.03.22

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-D24040-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-D24040-TY2	WEIGHT:
SPECIFICATION: 5050LED 4000K Type II	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
5.0	834.3	858.1	866.0	856.6	837.4	810.7	798.0	812.1	0- 5	199.3	199.3
10.0	840.3	881.4	894.9	878.2	845.0	788.8	762.3	791.7	5- 10	597.3	796.7
15.0	852.1	903.2	916.3	896.5	861.7	767.4	731.4	770.7	10- 15	992.5	1789
20.0	873.5	925.3	925.1	912.0	890.8	748.0	702.0	750.8	15- 20	1383	3173
25.0	906.4	945.8	923.4	923.1	929.0	729.4	670.9	731.5	20- 25	1769	4941
30.0	949.0	961.4	911.1	930.8	976.4	708.6	637.9	708.5	25- 30	2145	7086
35.0	1001	973.3	890.5	933.1	1031	687.2	601.9	685.5	30- 35	2505	9591
40.0	1061	976.1	859.5	929.4	1088	660.4	563.8	657.7	35- 40	2842	12433
45.0	1125	966.5	814.0	916.7	1148	626.1	526.4	623.4	40- 45	3142	15575
50.0	1189	939.5	749.1	884.4	1217	584.4	485.7	581.2	45- 50	3384	18959
55.0	1261	882.8	654.3	817.3	1302	534.0	439.2	525.6	50- 55	3542	22501
60.0	1348	778.1	505.0	707.8	1413	469.9	384.0	457.9	55- 60	3592	26093
65.0	1445	587.2	322.6	510.6	1391	381.3	315.7	365.5	60- 65	3463	29556
70.0	1372	258.7	103.6	217.9	1074	245.5	186.9	232.3	65- 70	2900	32456
75.0	1011	75.11	50.37	69.60	569.4	100.5	53.57	90.55	70- 75	1856	34313
80.0	506.7	41.72	24.95	37.33	127.3	21.33	6.888	20.48	75- 80	827.1	35140
85.0	97.78	16.07	8.027	15.30	9.771	4.750	2.157	4.458	80- 85	241.7	35381
90.0	5.452	3.987	1.514	3.792	4.280	1.298	1.956	1.237	85- 90	43.60	35425
95.0	2.568	2.622	1.125	2.448	4.451	1.726	2.023	1.690	90- 95	13.63	35439
100.0	3.147	2.596	1.219	2.368	4.741	2.221	2.237	2.222	95-100	13.37	35452
105.0	3.661	2.783	1.500	2.515	5.017	2.689	2.532	2.741	100-105	14.75	35467
110.0	4.069	3.051	1.795	2.728	5.228	3.131	2.894	3.207	105-110	16.15	35483
115.0	4.372	3.332	2.077	2.967	5.399	3.519	3.256	3.646	110-115	17.24	35500
120.0	4.648	3.599	2.371	3.207	5.636	3.853	3.618	4.005	115-120	18.02	35518
125.0	4.964	3.880	2.666	3.446	5.979	4.161	3.966	4.338	120-125	18.52	35537
130.0	5.360	4.161	2.975	3.713	6.242	4.509	4.301	4.658	125-130	18.74	35556
135.0	5.702	4.415	3.296	3.965	6.321	4.844	4.650	4.937	130-135	18.62	35574
140.0	5.847	4.616	3.591	4.205	6.202	5.138	5.011	5.203	135-140	17.97	35592
145.0	5.794	4.777	3.859	4.391	6.031	5.312	5.293	5.350	140-145	16.75	35609
150.0	5.676	4.884	4.114	4.538	5.860	5.379	5.467	5.390	145-150	15.07	35624
155.0	5.557	4.978	4.341	4.684	5.741	5.419	5.588	5.403	150-155	13.10	35637
160.0	5.478	5.071	4.569	4.817	5.662	5.433	5.668	5.390	155-160	10.95	35648
165.0	5.452	5.165	4.797	4.937	5.623	5.433	5.708	5.376	160-165	8.683	35657
170.0	5.465	5.272	5.011	5.070	5.583	5.419	5.681	5.350	165-170	6.298	35663
175.0	5.465	5.339	5.186	5.177	5.544	5.366	5.574	5.270	170-175	3.817	35667
180.0	5.518	5.406	5.373	5.270	5.518	5.325	5.440	5.177	175-180	1.274	35668
DEG	LUMINOUS INTENSITY: ×10cd									UNIT: lm	

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

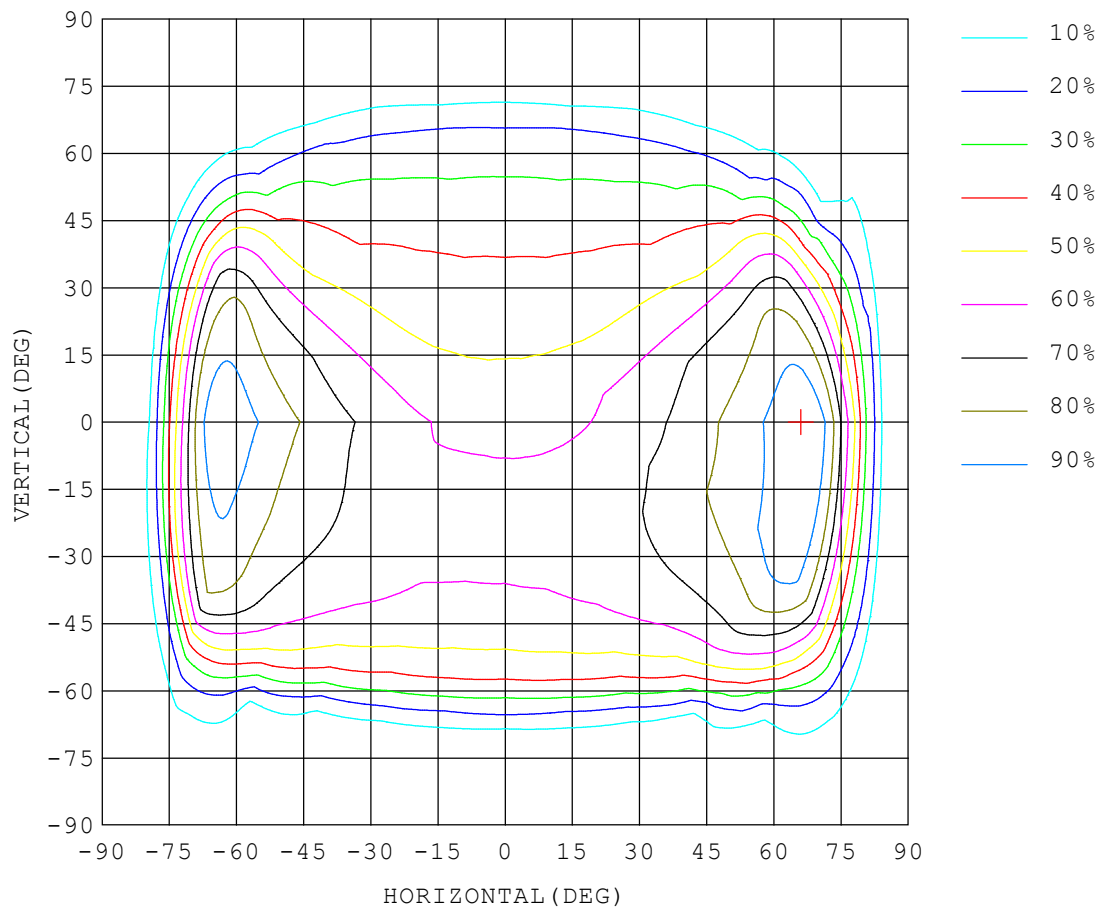
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 10.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D24040-TY2	WEIGHT:
SPECIFICATION: 5050LED 4000K Type II	DIMENSION:	SERIAL No.:

UNIT: cd



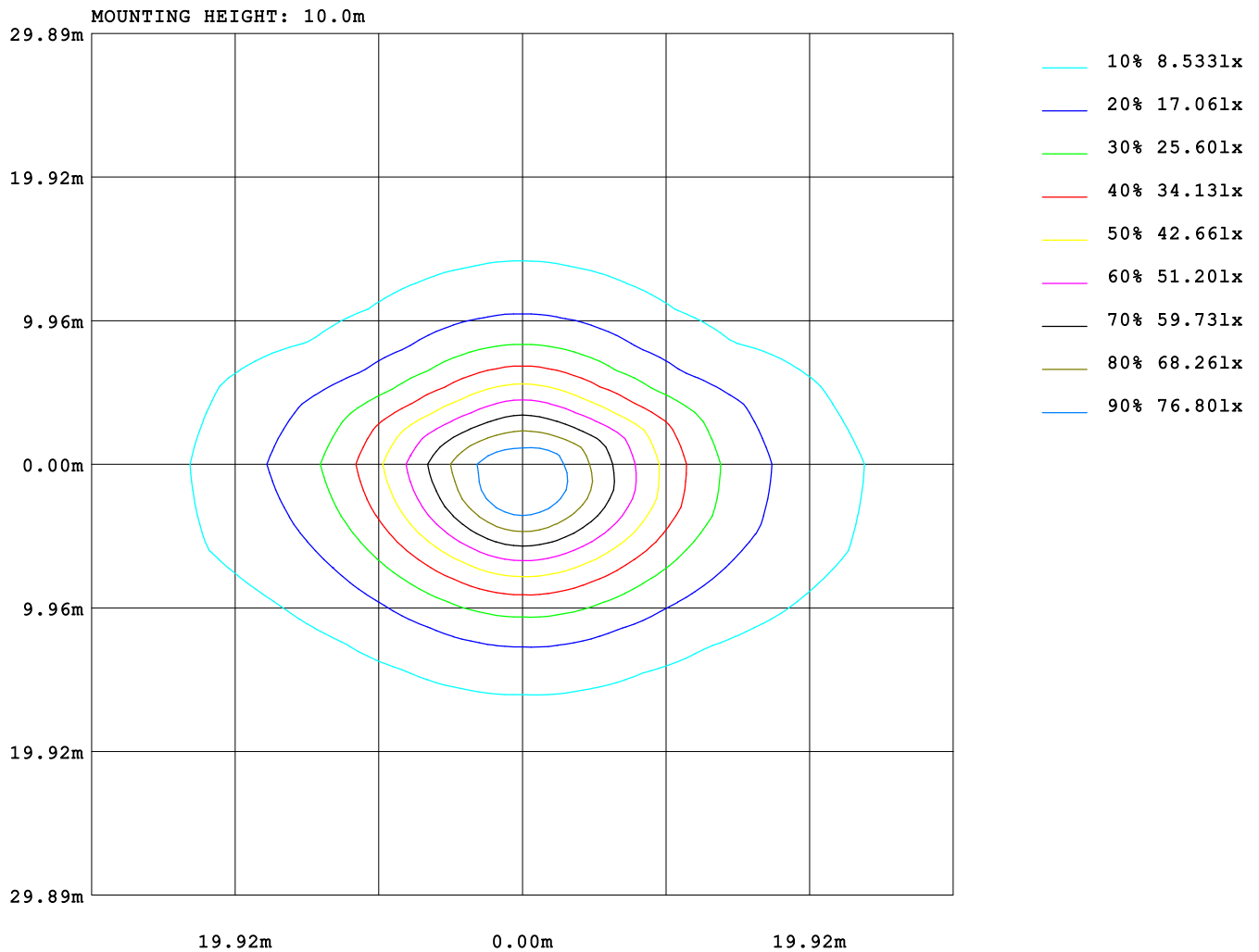
Test System:
Temperature: 25.3 DEG
Operators:
Test Date: 2025.03.22

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-D24040-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-D24040-TY2	WEIGHT:
SPECIFICATION:5050LED 4000K Type II	DIMENSION:	SERIAL No.:

UNIT: ×10cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210
0.0	833	833	833	833	833	833	833	833	833	833	833	833	833	833	833
5.0	834	843	851	858	863	866	866	866	861	857	849	842	837	829	819
10.0	840	856	870	881	889	895	895	894	887	878	866	853	845	828	808
15.0	852	874	891	903	911	916	916	915	906	897	882	865	862	834	800
20.0	874	902	918	925	925	927	925	924	917	912	902	887	891	849	795
25.0	906	940	951	946	934	928	923	923	920	923	925	920	929	872	793
30.0	949	984	985	961	934	920	911	913	914	931	950	957	976	903	793
35.0	1001	1037	1018	973	927	902	891	893	901	933	972	1000	1031	940	793
40.0	1061	1091	1048	976	911	877	860	864	880	929	992	1043	1088	980	787
45.0	1125	1145	1070	967	883	838	814	823	850	917	1002	1083	1148	1021	773
50.0	1189	1197	1078	940	830	777	749	760	798	884	999	1119	1217	1060	747
55.0	1261	1252	1074	883	744	683	654	668	713	817	981	1160	1302	1100	708
60.0	1348	1318	1062	778	604	539	505	526	573	708	938	1207	1413	1154	648
65.0	1445	1401	1023	587	390	318	323	309	365	511	843	1270	1391	1151	540
70.0	1372	1319	791	259	138	114	104	113	130	218	574	1230	1074	870	332
75.0	1011	961	377	75.1	58.9	56.7	50.3	55.2	56.0	69.6	160	906	569	374	136
80.0	507	404	74.9	41.7	32.8	29.9	24.9	29.2	32.3	37.3	45.5	324	127	52.2	29.5
85.0	97.7	74.1	22.2	16.0	10.3	10.8	8.02	10.8	10.3	15.3	17.3	63.9	9.77	6.41	8.42
90.0	5.45	7.40	3.39	3.98	1.78	3.00	1.51	2.89	1.64	3.79	2.96	6.58	4.28	2.58	3.38
95.0	2.56	3.93	1.99	2.62	1.33	2.27	1.12	2.17	1.28	2.44	1.78	3.74	4.45	3.03	3.40
100.0	3.14	4.02	2.32	2.59	1.36	2.04	1.21	2.02	1.29	2.36	2.05	3.79	4.74	3.56	3.72
105.0	3.66	4.29	2.76	2.78	1.66	2.17	1.50	2.15	1.58	2.51	2.42	4.02	5.01	3.97	4.03
110.0	4.06	4.55	3.19	3.05	1.98	2.37	1.79	2.34	1.88	2.72	2.79	4.27	5.22	4.30	4.31
115.0	4.37	4.78	3.59	3.33	2.29	2.57	2.07	2.54	2.16	2.96	3.13	4.45	5.39	4.58	4.55
120.0	4.64	4.99	3.94	3.59	2.61	2.80	2.37	2.76	2.45	3.20	3.42	4.60	5.63	4.89	4.79
125.0	4.96	5.23	4.25	3.88	2.93	3.04	2.66	2.98	2.74	3.44	3.70	4.80	5.97	5.24	5.07
130.0	5.36	5.51	4.56	4.16	3.26	3.30	2.97	3.25	3.06	3.71	3.99	5.05	6.24	5.59	5.37
135.0	5.70	5.75	4.81	4.41	3.60	3.58	3.29	3.53	3.38	3.96	4.27	5.30	6.32	5.80	5.63
140.0	5.84	5.87	4.99	4.61	3.88	3.85	3.59	3.80	3.68	4.20	4.48	5.44	6.20	5.80	5.76
145.0	5.79	5.84	5.05	4.77	4.12	4.09	3.85	4.04	3.92	4.39	4.62	5.46	6.03	5.71	5.77
150.0	5.67	5.75	5.09	4.88	4.35	4.32	4.11	4.28	4.16	4.53	4.70	5.40	5.86	5.60	5.73
155.0	5.55	5.67	5.13	4.97	4.54	4.54	4.34	4.51	4.36	4.68	4.76	5.35	5.74	5.51	5.68
160.0	5.47	5.61	5.16	5.07	4.71	4.74	4.56	4.71	4.56	4.81	4.83	5.30	5.66	5.45	5.63
165.0	5.45	5.57	5.20	5.16	4.89	4.92	4.79	4.90	4.76	4.93	4.91	5.27	5.62	5.42	5.59
170.0	5.46	5.53	5.25	5.27	5.05	5.11	5.01	5.09	4.93	5.07	5.00	5.28	5.58	5.42	5.55
175.0	5.46	5.51	5.31	5.33	5.18	5.25	5.18	5.22	5.07	5.17	5.09	5.30	5.54	5.38	5.49
180.0	5.51	5.49	5.37	5.40	5.31	5.35	5.37	5.33	5.23	5.27	5.17	5.28	5.51	5.39	5.44

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-D24040-TY2	WEIGHT:
SPECIFICATION:5050LED 4000K Type II	DIMENSION:	SERIAL No.:

UNIT: ×10cd

C (DEG) γ (DEG)	225	240	255	270	285	300	315	330	345
0.0	833	833	833	833	833	833	833	833	833
5.0	811	803	800	798	800	804	812	821	830
10.0	789	773	765	762	766	775	792	812	832
15.0	767	745	734	731	734	747	771	805	841
20.0	748	718	706	702	705	719	751	802	858
25.0	729	692	676	671	675	691	732	799	883
30.0	709	665	645	638	643	663	709	799	916
35.0	687	635	610	602	609	633	686	798	954
40.0	660	605	574	564	572	602	658	791	995
45.0	626	572	536	526	535	568	623	774	1033
50.0	584	529	494	486	492	524	581	743	1070
55.0	534	478	444	439	442	470	526	699	1103
60.0	470	417	387	384	383	407	458	631	1147
65.0	381	339	316	316	310	328	366	514	1101
70.0	246	214	194	187	188	211	232	305	791
75.0	101	93.8	54.7	53.5	51.1	86.0	90.5	125	364
80.0	21.3	16.7	7.14	6.88	5.68	16.1	20.4	28.9	48.5
85.0	4.75	4.98	0.89	2.15	0.76	3.90	4.45	8.44	6.18
90.0	1.29	2.18	0.89	1.95	0.87	2.10	1.23	3.35	2.73
95.0	1.72	2.23	1.18	2.02	1.16	2.17	1.69	3.35	2.95
100.0	2.22	2.46	1.55	2.23	1.54	2.42	2.22	3.70	3.50
105.0	2.68	2.78	1.98	2.53	1.97	2.77	2.74	4.06	3.94
110.0	3.13	3.13	2.43	2.89	2.42	3.14	3.20	4.39	4.28
115.0	3.51	3.47	2.86	3.25	2.86	3.50	3.64	4.70	4.62
120.0	3.85	3.80	3.27	3.61	3.28	3.86	4.00	5.01	4.94
125.0	4.16	4.11	3.65	3.96	3.68	4.20	4.33	5.28	5.27
130.0	4.50	4.44	4.04	4.30	4.06	4.52	4.65	5.52	5.57
135.0	4.84	4.78	4.41	4.65	4.42	4.84	4.93	5.72	5.73
140.0	5.13	5.10	4.80	5.01	4.79	5.15	5.20	5.80	5.72
145.0	5.31	5.34	5.13	5.29	5.09	5.37	5.35	5.78	5.63
150.0	5.37	5.48	5.33	5.46	5.28	5.49	5.39	5.72	5.52
155.0	5.41	5.56	5.45	5.58	5.38	5.55	5.40	5.64	5.42
160.0	5.43	5.60	5.52	5.66	5.45	5.57	5.39	5.57	5.34
165.0	5.43	5.60	5.53	5.70	5.48	5.57	5.37	5.50	5.28
170.0	5.41	5.57	5.49	5.68	5.46	5.55	5.35	5.45	5.24
175.0	5.36	5.48	5.38	5.57	5.36	5.44	5.27	5.36	5.18
180.0	5.32	5.37	5.30	5.44	5.26	5.29	5.17	5.27	5.17

Test System:
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