

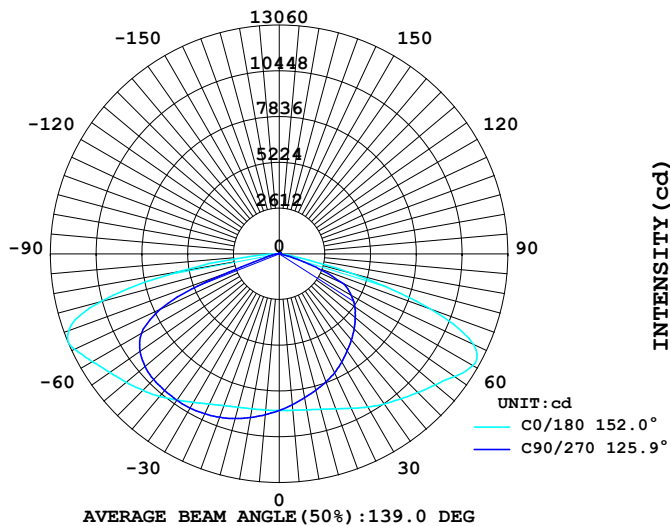
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

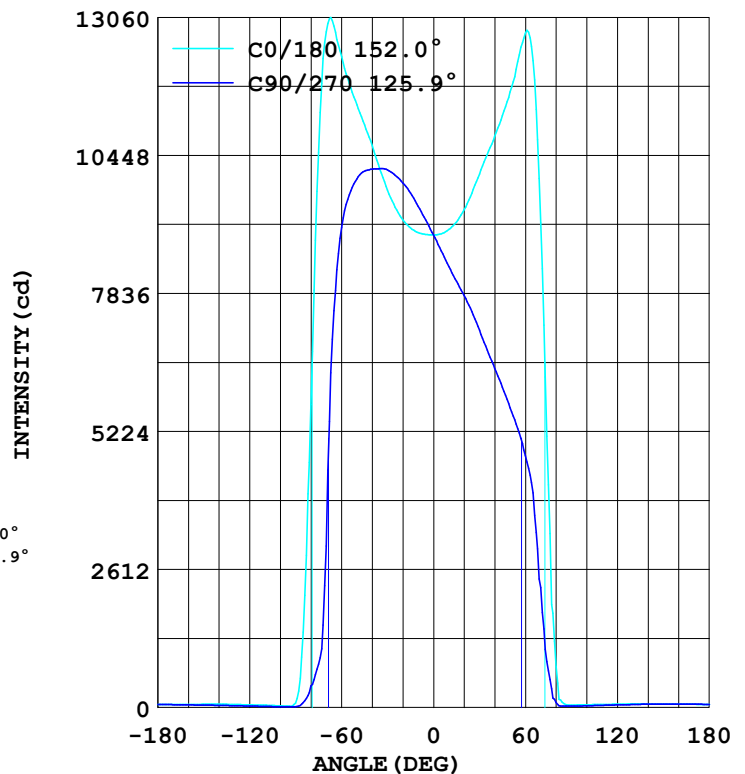
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D28040-TY3	WEIGHT:
SPECIFICATION: 5050LED 4000K Type III	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	14720	S/MH (C0/180)	1.79
MODEL		EFFICIENCY (%)	100.0	S/MH (C90/270)	1.71
NOMINAL POWER(W)	280	TOTAL FLUX(lm)	41993	Voltage(V)	230.6
RATED VOLTAGE (V)	230	EFFICIENCY (lm/W)	149.8	Current(A)	1.220
NOMINAL FLUX(lm)	41993.0	η up (%)	0.7	Power(W)	280.2
LAMPS QUANTITY	1	η down (%)	99.3	Power Factor (PF)	0.996
TEST VOLTAGE (V)	230.6	Effective Flux(lm)	41993.1	EEI	0.100

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



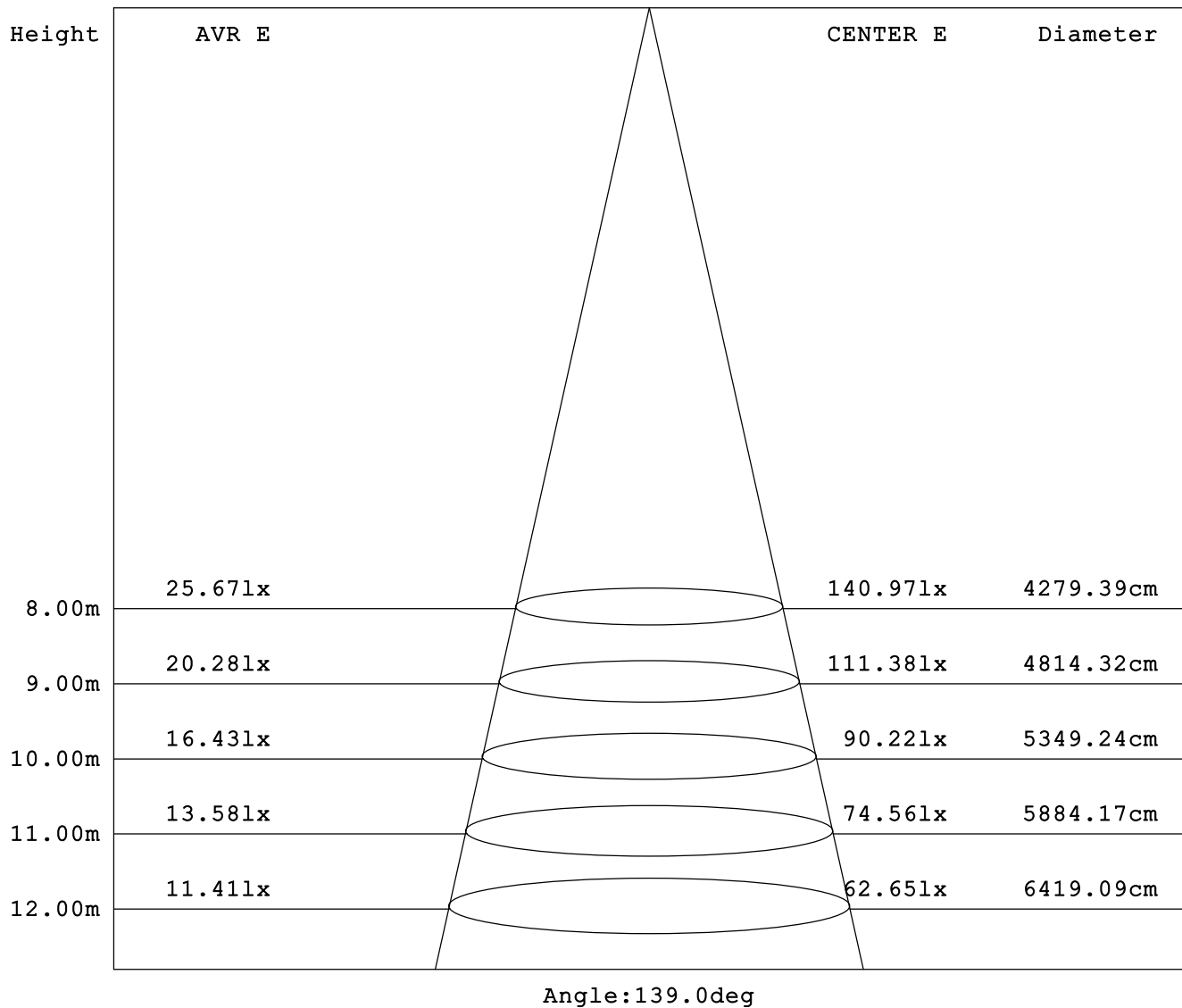
Test System:
 Temperature: 25.3 DEG
 Operators:
 Test Date: 2025.03.23

Test Set: 5.0deg/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-D28040-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-D28040-TY3	WEIGHT:
SPECIFICATION:5050LED 4000K Type III	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
5.0	894.9	914.8	922.0	914.2	896.3	873.5	864.0	874.1	0- 5	213.8	213.8
10.0	898.6	936.0	948.0	934.1	904.5	853.2	834.4	853.6	5- 10	640.1	853.9
15.0	907.4	959.2	973.6	956.6	918.8	833.7	806.4	833.7	10- 15	1064	1918
20.0	922.7	986.8	992.7	981.7	942.2	813.0	779.0	812.9	15- 20	1485	3403
25.0	946.4	1017	1007	1009	973.4	792.1	749.1	791.2	20- 25	1902	5306
30.0	979.0	1052	1017	1039	1009	771.8	714.0	771.3	25- 30	2315	7621
35.0	1019	1089	1020	1070	1047	748.2	676.6	748.8	30- 35	2717	10337
40.0	1063	1121	1019	1095	1081	721.8	641.6	724.9	35- 40	3099	13436
45.0	1102	1146	1015	1114	1120	691.5	606.0	696.9	40- 45	3454	16890
50.0	1140	1165	1000	1128	1165	653.5	567.1	661.8	45- 50	3772	20662
55.0	1181	1180	970.1	1133	1222	605.4	527.7	616.4	50- 55	4042	24704
60.0	1232	1183	908.2	1121	1276	551.0	476.4	564.2	55- 60	4246	28950
65.0	1289	1164	750.5	1061	1224	472.8	405.9	494.3	60- 65	4328	33278
70.0	1279	1077	305.6	806.2	916.6	307.9	226.8	364.1	65- 70	3993	37271
75.0	1051	610.6	82.05	183.1	421.5	117.6	69.53	166.7	70- 75	2729	40000
80.0	573.6	110.3	41.02	52.40	77.23	22.08	9.355	49.48	75- 80	1276	41275
85.0	142.6	30.32	9.166	17.35	7.706	4.356	2.756	7.305	80- 85	368.1	41643
90.0	8.451	6.385	1.795	4.201	4.691	2.327	2.661	2.100	85- 90	63.57	41707
95.0	2.610	3.350	1.338	3.088	4.909	2.925	2.897	2.711	90- 95	17.78	41725
100.0	3.247	3.161	1.480	2.994	5.235	3.507	3.260	3.370	95-100	16.95	41742
105.0	3.837	3.255	1.811	3.103	5.530	3.979	3.716	3.919	100-105	18.43	41760
110.0	4.319	3.460	2.141	3.291	5.763	4.403	4.142	4.389	105-110	19.82	41780
115.0	4.691	3.680	2.456	3.495	5.981	4.765	4.551	4.828	110-115	20.85	41801
120.0	5.033	3.932	2.756	3.699	6.261	5.111	4.913	5.204	115-120	21.51	41822
125.0	5.391	4.199	3.071	3.966	6.571	5.489	5.244	5.549	120-125	21.90	41844
130.0	5.779	4.498	3.417	4.232	6.742	5.898	5.591	5.894	125-130	22.02	41866
135.0	6.090	4.781	3.764	4.499	6.711	6.181	5.984	6.207	130-135	21.70	41888
140.0	6.230	5.001	4.079	4.718	6.571	6.244	6.284	6.317	135-140	20.67	41909
145.0	6.183	5.158	4.331	4.875	6.400	6.196	6.410	6.270	140-145	18.96	41928
150.0	6.074	5.284	4.567	5.016	6.261	6.133	6.410	6.176	145-150	16.83	41944
155.0	5.981	5.394	4.772	5.157	6.152	6.055	6.394	6.097	150-155	14.51	41959
160.0	5.934	5.504	4.992	5.282	6.105	6.008	6.378	6.019	155-160	12.05	41971
165.0	5.919	5.614	5.213	5.408	6.074	5.960	6.315	5.956	160-165	9.515	41981
170.0	5.950	5.725	5.417	5.564	6.059	5.913	6.236	5.878	165-170	6.879	41987
175.0	5.950	5.819	5.622	5.674	6.043	5.835	6.079	5.768	170-175	4.160	41992
180.0	6.012	5.882	5.843	5.784	6.012	5.787	5.906	5.674	175-180	1.388	41993
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm	

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

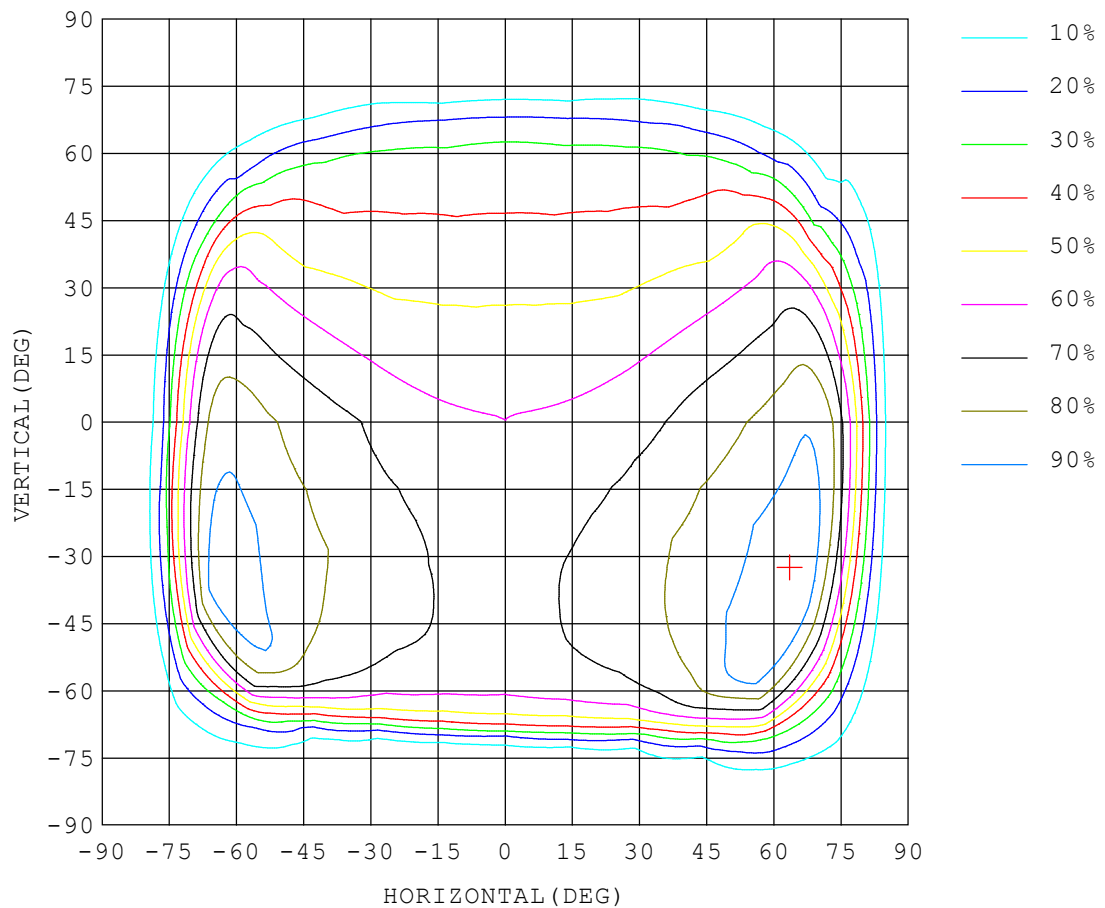
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:10.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D28040-TY3	WEIGHT:
SPECIFICATION: 5050LED 4000K Type III	DIMENSION:	SERIAL No.:

UNIT: cd



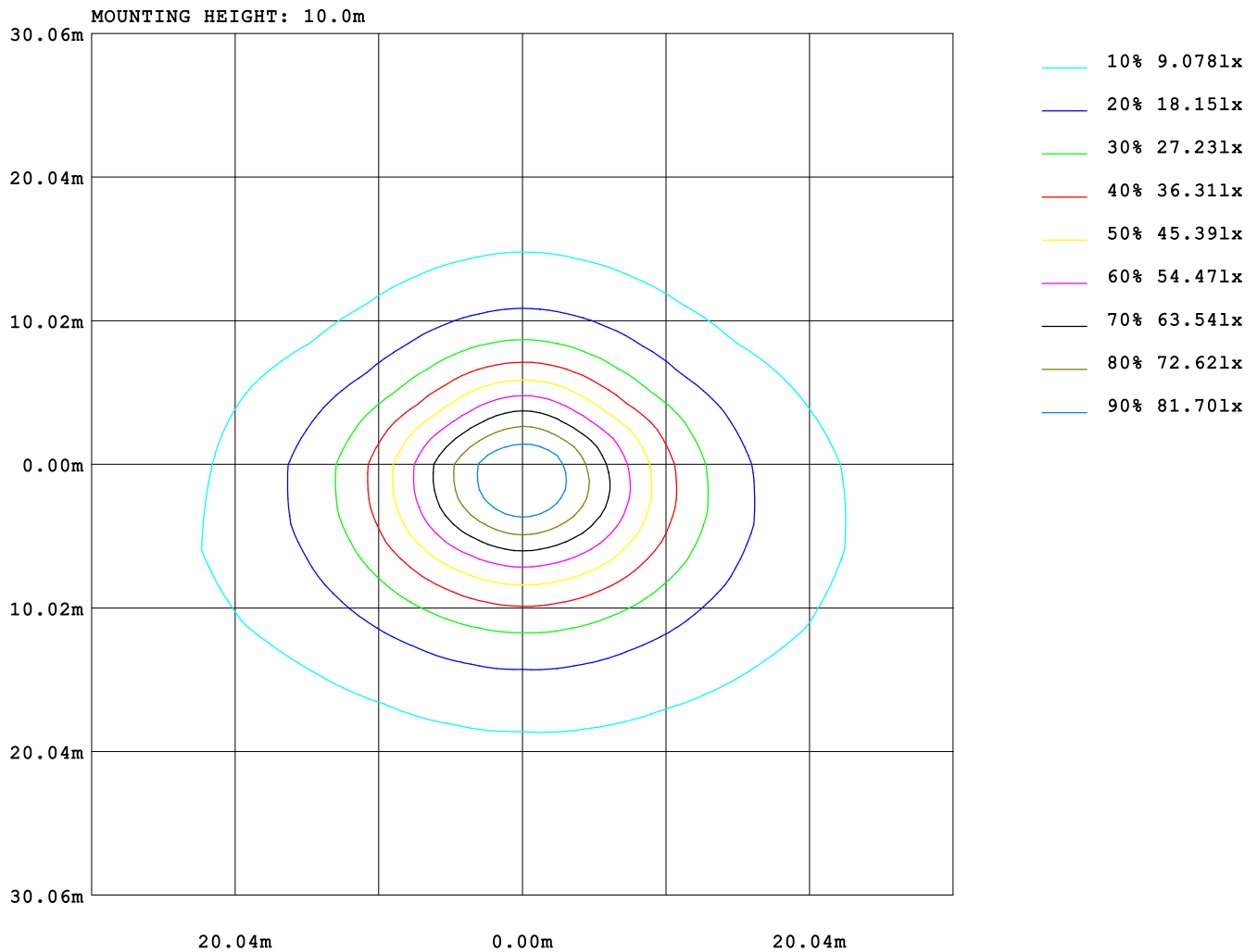
Test System:
Temperature: 25.3 DEG
Operators:
Test Date: 2025.03.23

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-D28040-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-D28040-TY3	WEIGHT:
SPECIFICATION: 5050LED 4000K Type III	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	894	894	894	894	894	894	894	894	894	894	894	894	894	894	894
5.0	895	902	909	915	919	922	922	922	918	914	908	902	896	888	880
10.0	899	913	925	936	943	948	948	947	941	934	924	912	905	888	869
15.0	907	928	946	959	968	973	974	972	965	957	944	929	919	891	859
20.0	923	952	973	987	991	994	993	991	986	982	971	954	942	898	850
25.0	946	987	1011	1017	1012	1010	1007	1006	1005	1009	1007	990	973	910	842
30.0	979	1029	1056	1052	1033	1021	1017	1017	1021	1039	1049	1032	1009	927	832
35.0	1019	1078	1101	1089	1052	1028	1020	1020	1035	1070	1089	1076	1047	947	821
40.0	1063	1127	1145	1121	1069	1031	1019	1022	1045	1095	1127	1119	1081	962	808
45.0	1102	1172	1187	1146	1079	1033	1015	1021	1053	1114	1162	1161	1120	973	791
50.0	1140	1223	1230	1165	1085	1030	1000	1014	1055	1128	1194	1212	1165	983	764
55.0	1181	1280	1266	1180	1073	1005	970	985	1036	1133	1224	1269	1222	992	731
60.0	1232	1346	1314	1183	1035	955	908	928	987	1121	1262	1347	1276	990	691
65.0	1289	1436	1376	1164	941	808	751	759	850	1061	1318	1437	1224	974	622
70.0	1279	1453	1437	1077	672	453	306	346	472	806	1262	1379	917	713	425
75.0	1051	1209	1184	611	146	93.0	82.0	83.6	84.7	183	800	992	422	298	176
80.0	574	631	449	110	52.7	45.2	41.0	39.2	40.0	52.4	185	352	77.2	60.1	29.4
85.0	143	146	84.7	30.3	16.5	14.3	9.16	11.9	10.5	17.3	26.0	45.1	7.70	5.24	8.20
90.0	8.45	11.5	6.18	6.38	2.45	3.78	1.79	3.65	2.21	4.20	2.73	5.54	4.69	3.08	4.44
95.0	2.61	4.38	2.11	3.35	1.63	2.79	1.33	2.69	1.55	3.08	2.07	4.11	4.90	3.72	4.61
100.0	3.24	4.26	2.39	3.16	1.62	2.52	1.48	2.48	1.63	2.99	2.32	4.12	5.23	4.30	4.96
105.0	3.83	4.44	2.77	3.25	1.96	2.66	1.81	2.64	1.94	3.10	2.68	4.29	5.53	4.74	5.22
110.0	4.31	4.71	3.19	3.46	2.29	2.87	2.14	2.83	2.27	3.29	3.02	4.51	5.76	5.10	5.46
115.0	4.69	4.94	3.57	3.68	2.62	3.07	2.45	3.05	2.59	3.49	3.35	4.70	5.98	5.43	5.71
120.0	5.03	5.18	3.94	3.93	2.95	3.29	2.75	3.26	2.88	3.69	3.66	4.90	6.26	5.78	6.01
125.0	5.39	5.44	4.29	4.19	3.27	3.55	3.07	3.51	3.20	3.96	3.98	5.14	6.57	6.19	6.38
130.0	5.77	5.74	4.65	4.49	3.63	3.83	3.41	3.79	3.56	4.23	4.30	5.42	6.74	6.46	6.73
135.0	6.09	6.00	4.96	4.78	3.99	4.11	3.76	4.07	3.89	4.49	4.60	5.63	6.71	6.47	6.82
140.0	6.23	6.14	5.18	5.00	4.29	4.40	4.07	4.36	4.17	4.71	4.80	5.73	6.57	6.35	6.71
145.0	6.18	6.14	5.30	5.15	4.53	4.63	4.33	4.59	4.41	4.87	4.91	5.73	6.40	6.19	6.57
150.0	6.07	6.10	5.38	5.28	4.73	4.82	4.56	4.80	4.61	5.01	5.02	5.71	6.26	6.07	6.41
155.0	5.98	6.07	5.46	5.39	4.94	5.01	4.77	5.02	4.82	5.15	5.12	5.70	6.15	5.96	6.29
160.0	5.93	6.03	5.52	5.50	5.11	5.19	4.99	5.21	5.01	5.28	5.23	5.68	6.10	5.89	6.20
165.0	5.91	6.02	5.59	5.61	5.30	5.36	5.21	5.38	5.21	5.40	5.32	5.71	6.07	5.86	6.12
170.0	5.95	6.02	5.68	5.72	5.46	5.55	5.41	5.56	5.38	5.56	5.44	5.74	6.05	5.86	6.07
175.0	5.95	6.00	5.74	5.81	5.60	5.69	5.62	5.68	5.52	5.67	5.54	5.77	6.04	5.85	5.99
180.0	6.01	5.99	5.84	5.88	5.77	5.83	5.84	5.82	5.71	5.78	5.66	5.77	6.01	5.86	5.91

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-D28040-TY3	WEIGHT:
SPECIFICATION:5050LED 4000K Type III	DIMENSION:	SERIAL No.:

UNIT: ×10cd

C (DEG) γ (DEG)	225	240	255	270	285	300	315	330	345
0.0	894	894	894	894	894	894	894	894	894
5.0	874	868	865	864	866	868	874	881	889
10.0	853	842	836	834	837	843	854	869	887
15.0	834	817	807	806	809	818	834	858	889
20.0	813	791	781	779	783	792	813	848	895
25.0	792	766	753	749	754	766	791	840	905
30.0	772	740	720	714	721	740	771	830	921
35.0	748	708	682	677	684	708	749	819	943
40.0	722	675	646	642	648	675	725	809	963
45.0	692	639	610	606	612	640	697	796	975
50.0	654	598	570	567	572	601	662	774	981
55.0	605	552	528	528	530	556	616	739	985
60.0	551	501	474	476	480	508	564	698	981
65.0	473	426	400	406	408	440	494	656	975
70.0	308	237	218	227	233	299	364	489	840
75.0	118	101	62.7	69.5	70.5	132	167	230	440
80.0	22.0	18.5	7.87	9.35	9.38	19.3	49.4	59.0	119
85.0	4.35	5.39	1.32	2.75	1.22	5.57	7.30	12.6	9.71
90.0	2.32	3.17	1.49	2.66	1.46	3.15	2.10	4.46	3.09
95.0	2.92	3.43	2.00	2.89	1.96	3.36	2.71	4.43	3.38
100.0	3.50	3.80	2.57	3.26	2.55	3.76	3.37	4.80	4.00
105.0	3.97	4.20	3.12	3.71	3.13	4.22	3.91	5.12	4.47
110.0	4.40	4.58	3.64	4.14	3.66	4.63	4.38	5.38	4.82
115.0	4.76	4.88	4.11	4.55	4.17	4.97	4.82	5.66	5.15
120.0	5.11	5.16	4.49	4.91	4.58	5.32	5.20	5.96	5.45
125.0	5.48	5.50	4.87	5.24	4.96	5.62	5.54	6.27	5.82
130.0	5.89	5.87	5.30	5.59	5.33	5.93	5.89	6.63	6.19
135.0	6.18	6.20	5.71	5.98	5.71	6.26	6.20	6.82	6.33
140.0	6.24	6.39	6.04	6.28	6.03	6.47	6.31	6.76	6.29
145.0	6.19	6.42	6.18	6.41	6.15	6.50	6.27	6.60	6.16
150.0	6.13	6.39	6.21	6.41	6.17	6.45	6.17	6.44	6.04
155.0	6.05	6.32	6.20	6.39	6.14	6.39	6.09	6.30	5.95
160.0	6.00	6.26	6.15	6.37	6.11	6.31	6.01	6.19	5.85
165.0	5.96	6.20	6.09	6.31	6.04	6.21	5.95	6.10	5.80
170.0	5.91	6.10	5.99	6.23	5.96	6.12	5.87	6.01	5.76
175.0	5.83	5.98	5.85	6.07	5.82	5.96	5.76	5.88	5.68
180.0	5.78	5.85	5.74	5.90	5.73	5.81	5.67	5.77	5.65

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: