

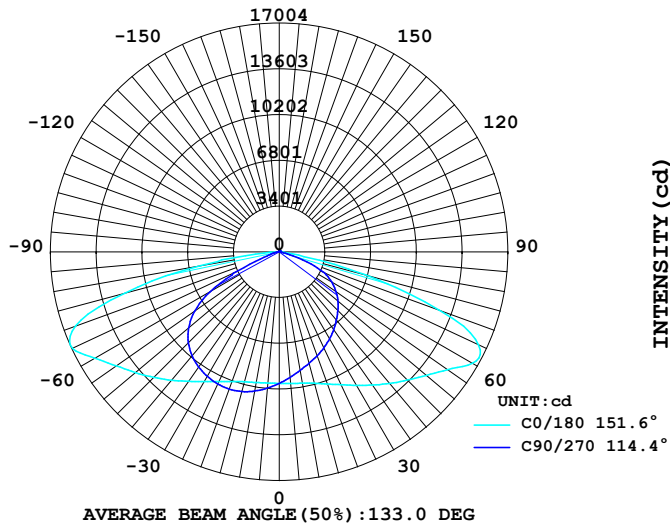
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

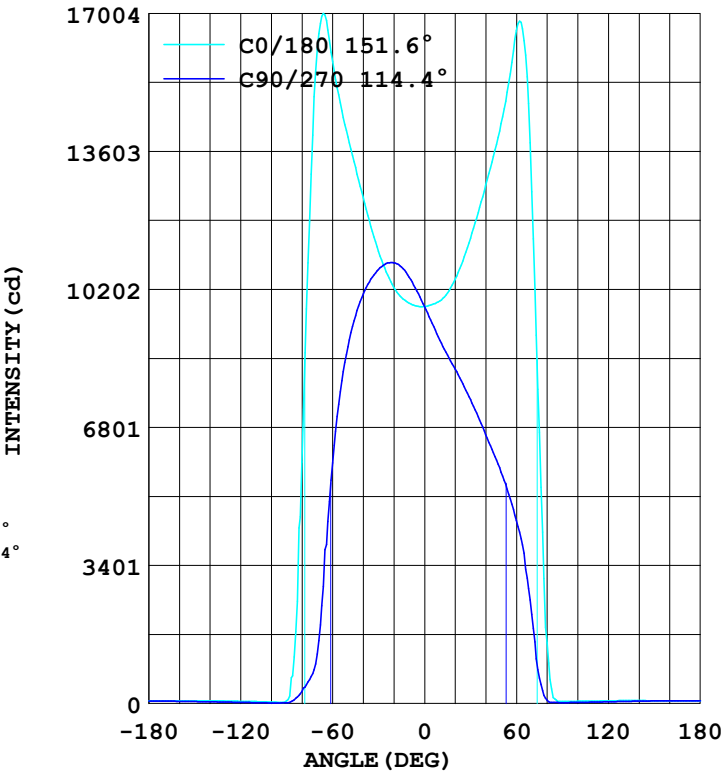
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D28040-TY2	WEIGHT:
SPECIFICATION: 5050LED 4000K Type II	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	17004	S/MH (C0/180)	1.92
MODEL		EFFICIENCY (%)	100.0	S/MH (C90/270)	1.60
NOMINAL POWER(W)	280	TOTAL FLUX(lm)	41863	Voltage(V)	230.8
RATED VOLTAGE (V)	230	EFFICIENCY (lm/W)	149.4	Current(A)	1.218
NOMINAL FLUX(lm)	41863.0	η up (%)	0.7	Power(W)	280.2
LAMPS QUANTITY	1	η down (%)	99.3	Power Factor (PF)	0.996
TEST VOLTAGE (V)	230.9	Effective Flux(lm)	41863.1	EEI	0.100

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



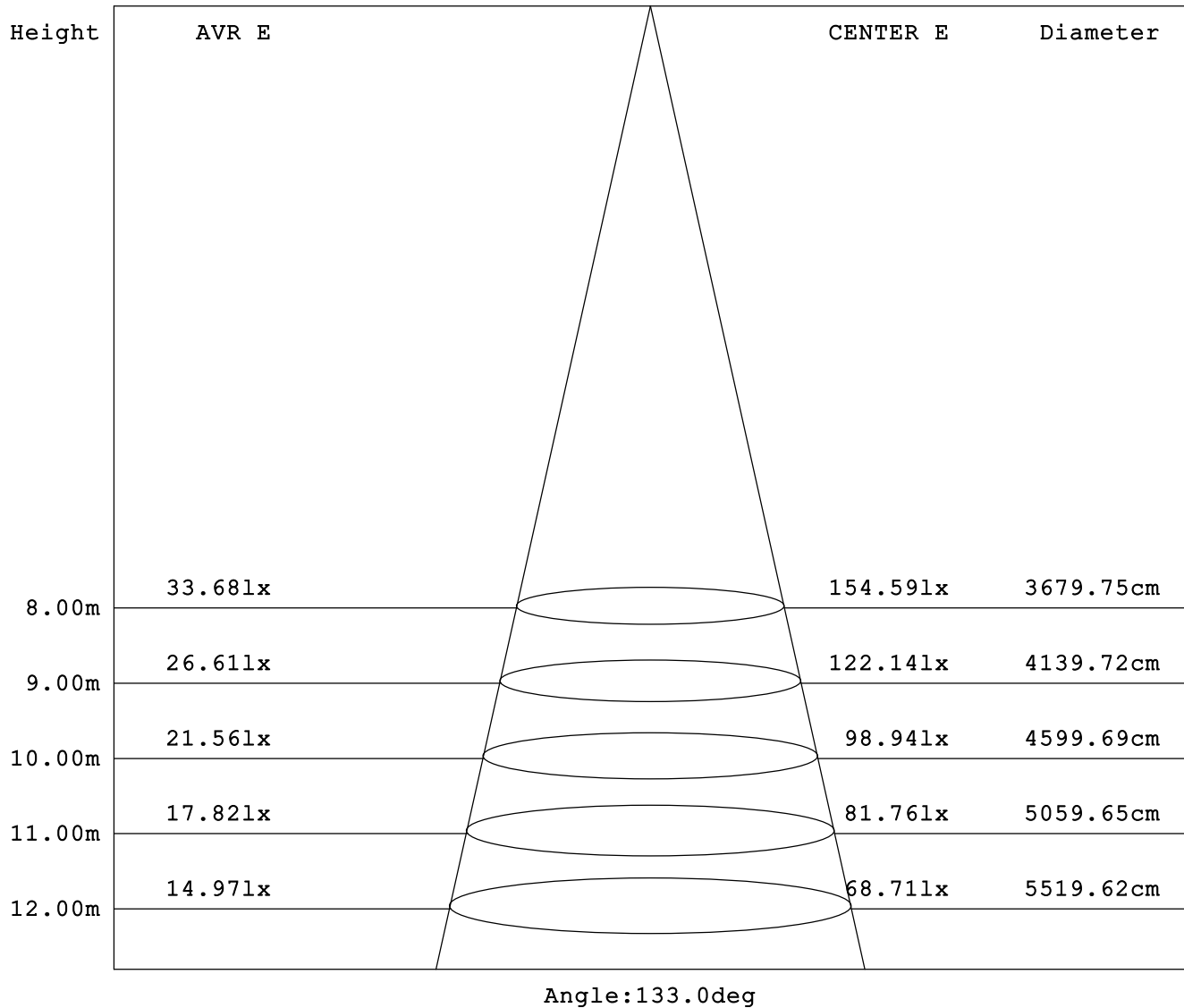
Test System:
 Temperature: 25.3 DEG
 Operators:
 Test Date: 2025.03.22

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-D28040-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-D28040-TY2	WEIGHT:
SPECIFICATION: 5050LED 4000K Type II	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
5.0	979.2	1007	1016	1005	982.9	951.5	936.6	953.1	0- 5	233.9	233.9
10.0	986.2	1035	1050	1031	991.8	925.8	894.7	929.3	5- 10	701.1	935.1
15.0	1000	1060	1076	1052	1011	900.7	858.4	904.6	10- 15	1165	2100
20.0	1025	1086	1086	1070	1046	877.9	823.9	881.2	15- 20	1624	3724
25.0	1064	1110	1084	1083	1090	856.1	787.4	858.5	20- 25	2076	5800
30.0	1114	1128	1069	1093	1146	831.7	748.7	831.6	25- 30	2517	8317
35.0	1175	1142	1045	1095	1210	806.6	706.5	804.5	30- 35	2940	11257
40.0	1246	1146	1009	1091	1278	775.1	661.7	771.9	35- 40	3336	14593
45.0	1320	1134	955.3	1076	1348	734.8	617.8	731.7	40- 45	3688	18281
50.0	1396	1103	879.2	1038	1429	685.9	570.1	682.1	45- 50	3972	22252
55.0	1480	1036	768.0	959.2	1528	626.7	515.5	616.8	50- 55	4157	26410
60.0	1582	913.2	592.8	830.7	1658	551.6	450.7	537.5	55- 60	4216	30625
65.0	1696	689.2	378.7	599.3	1633	447.6	370.6	429.0	60- 65	4064	34689
70.0	1611	303.6	121.7	255.8	1261	288.1	219.3	272.7	65- 70	3404	38094
75.0	1187	88.15	59.12	81.69	668.3	117.9	62.88	106.2	70- 75	2179	40272
80.0	594.7	48.97	29.28	43.81	149.5	25.03	8.084	24.03	75- 80	970.7	41243
85.0	114.7	18.86	9.421	17.96	11.46	5.575	2.532	5.232	80- 85	283.6	41527
90.0	6.399	4.680	1.777	4.451	5.023	1.523	2.296	1.452	85- 90	51.17	41578
95.0	3.014	3.078	1.321	2.874	5.224	2.026	2.375	1.983	90- 95	16.00	41594
100.0	3.694	3.046	1.431	2.780	5.564	2.607	2.626	2.608	95-100	15.70	41610
105.0	4.297	3.266	1.761	2.952	5.889	3.156	2.972	3.217	100-105	17.31	41627
110.0	4.776	3.580	2.107	3.202	6.136	3.675	3.397	3.764	105-110	18.96	41646
115.0	5.131	3.910	2.437	3.483	6.337	4.130	3.822	4.279	110-115	20.24	41666
120.0	5.456	4.224	2.783	3.764	6.615	4.523	4.246	4.701	115-120	21.15	41687
125.0	5.827	4.554	3.129	4.045	7.017	4.884	4.655	5.092	120-125	21.74	41709
130.0	6.291	4.884	3.491	4.358	7.326	5.292	5.048	5.467	125-130	22.00	41731
135.0	6.692	5.182	3.869	4.654	7.419	5.685	5.457	5.795	130-135	21.85	41753
140.0	6.862	5.418	4.215	4.935	7.280	6.031	5.882	6.107	135-140	21.10	41774
145.0	6.801	5.607	4.529	5.154	7.079	6.235	6.212	6.279	140-145	19.66	41794
150.0	6.662	5.732	4.828	5.326	6.878	6.313	6.417	6.326	145-150	17.68	41811
155.0	6.522	5.842	5.096	5.498	6.739	6.360	6.558	6.341	150-155	15.38	41827
160.0	6.430	5.952	5.363	5.654	6.646	6.376	6.653	6.326	155-160	12.86	41839
165.0	6.399	6.062	5.630	5.795	6.600	6.376	6.700	6.310	160-165	10.19	41850
170.0	6.414	6.188	5.882	5.951	6.553	6.360	6.668	6.279	165-170	7.391	41857
175.0	6.414	6.266	6.086	6.076	6.507	6.298	6.543	6.185	170-175	4.480	41862
180.0	6.476	6.345	6.307	6.185	6.476	6.250	6.385	6.076	175-180	1.495	41863
DEG	LUMINOUS INTENSITY: ×10cd									UNIT: lm	

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

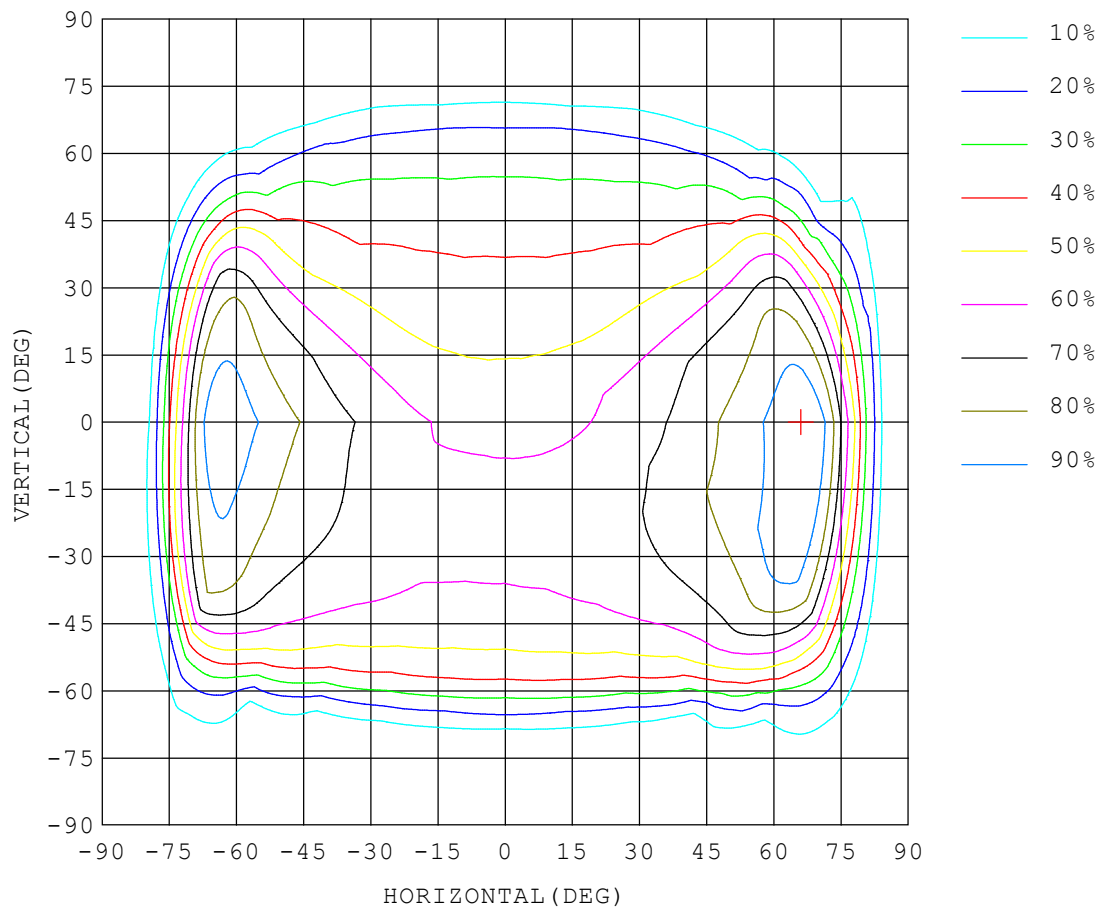
Test Set: 5.0 deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 10.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE:IL-ST11-D28040-TY2	WEIGHT:
SPECIFICATION:5050LED 4000K Type II	DIMENSION:	SERIAL No.:

UNIT: cd



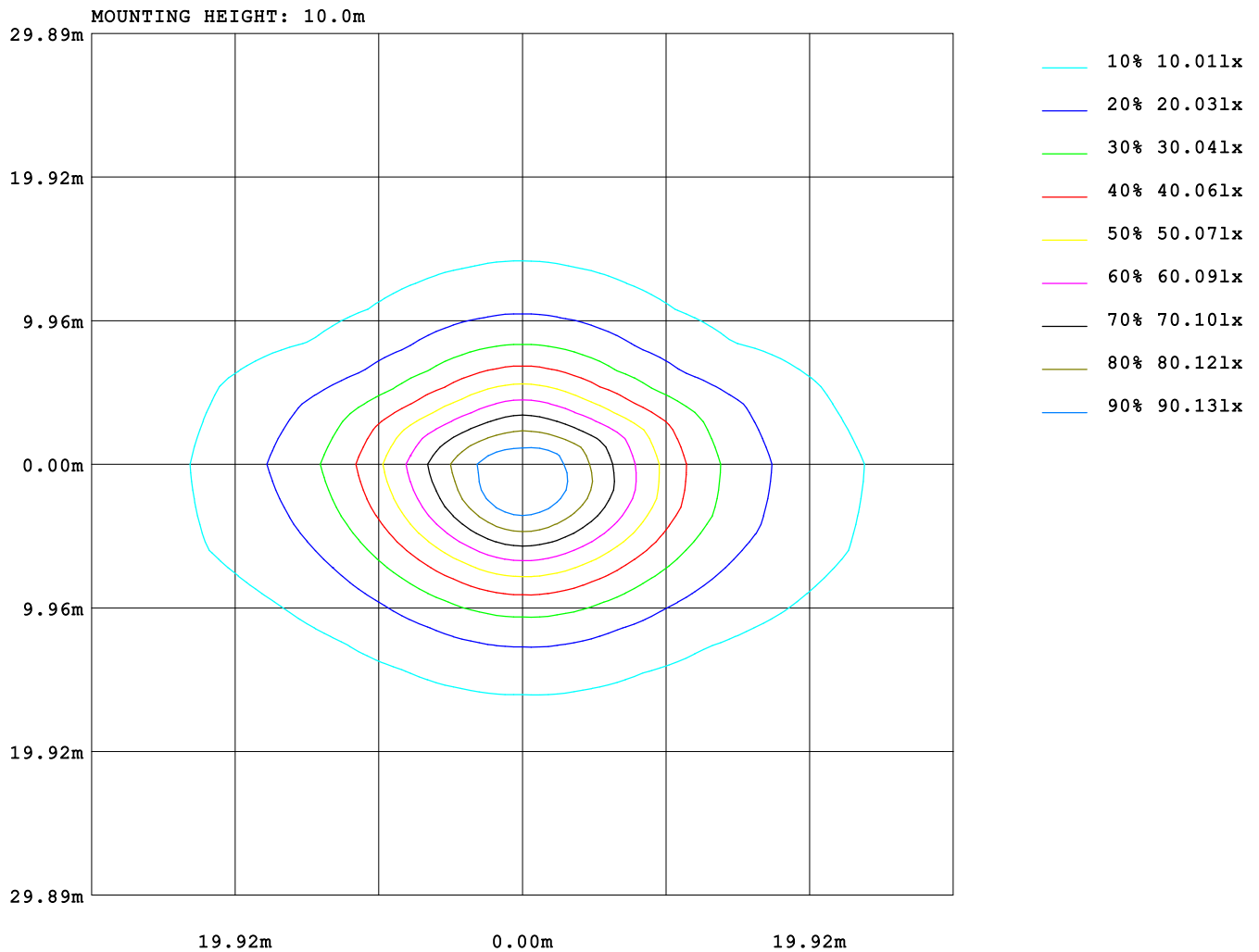
Test System:
Temperature:25.3DEG
Operators:
Test Date:2025.03.22

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-D28040-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%
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Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE:IL-ST11-D28040-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	978	978	978	978	978	978	978	978	978	978	978	978	978	978	978
5.0	979	989	998	1007	1012	1017	1016	1016	1011	1005	997	988	983	973	961
10.0	986	1005	1021	1035	1043	1050	1050	1049	1041	1031	1016	1001	992	972	948
15.0	1000	1025	1045	1060	1069	1075	1076	1073	1064	1052	1036	1016	1011	979	939
20.0	1025	1058	1077	1086	1086	1088	1086	1084	1076	1070	1059	1041	1046	996	933
25.0	1064	1103	1116	1110	1096	1090	1084	1084	1080	1083	1086	1079	1090	1023	930
30.0	1114	1155	1156	1128	1097	1080	1069	1071	1073	1093	1115	1123	1146	1060	931
35.0	1175	1217	1194	1142	1088	1059	1045	1048	1058	1095	1141	1174	1210	1104	930
40.0	1246	1281	1230	1146	1070	1029	1009	1014	1033	1091	1164	1224	1278	1151	923
45.0	1320	1344	1256	1134	1036	984	955	965	997	1076	1176	1271	1348	1198	907
50.0	1396	1404	1265	1103	975	912	879	892	936	1038	1173	1314	1429	1244	877
55.0	1480	1470	1261	1036	873	802	768	784	837	959	1151	1361	1528	1291	831
60.0	1582	1547	1246	913	708	632	593	618	673	831	1100	1417	1658	1355	760
65.0	1696	1645	1201	689	458	373	379	363	428	599	989	1491	1633	1350	634
70.0	1611	1548	928	304	162	134	122	132	153	256	673	1443	1261	1021	390
75.0	1187	1127	442	88.1	69.1	66.5	59.1	64.8	65.8	81.6	188	1063	668	439	159
80.0	595	475	87.9	48.9	38.5	35.1	29.2	34.2	37.9	43.8	53.4	380	150	61.3	34.6
85.0	115	87.0	26.0	18.8	12.1	12.6	9.42	12.6	12.1	17.9	20.3	74.9	11.4	7.52	9.88
90.0	6.39	8.69	3.98	4.68	2.09	3.53	1.77	3.39	1.92	4.45	3.48	7.72	5.02	3.03	3.96
95.0	3.01	4.61	2.34	3.07	1.57	2.66	1.32	2.54	1.50	2.87	2.09	4.39	5.22	3.56	3.99
100.0	3.69	4.72	2.73	3.04	1.60	2.39	1.43	2.37	1.51	2.78	2.40	4.45	5.56	4.18	4.37
105.0	4.29	5.03	3.24	3.26	1.94	2.55	1.76	2.53	1.86	2.95	2.84	4.72	5.88	4.66	4.73
110.0	4.77	5.35	3.74	3.58	2.32	2.79	2.10	2.75	2.20	3.20	3.27	5.01	6.13	5.05	5.06
115.0	5.13	5.61	4.21	3.91	2.68	3.02	2.43	2.98	2.53	3.48	3.68	5.23	6.33	5.38	5.34
120.0	5.45	5.86	4.62	4.22	3.06	3.29	2.78	3.24	2.88	3.76	4.02	5.40	6.61	5.73	5.62
125.0	5.82	6.14	4.99	4.55	3.44	3.57	3.12	3.50	3.22	4.04	4.35	5.63	7.01	6.15	5.95
130.0	6.29	6.47	5.35	4.88	3.83	3.87	3.49	3.82	3.60	4.35	4.69	5.92	7.32	6.56	6.31
135.0	6.69	6.75	5.65	5.18	4.23	4.20	3.86	4.15	3.97	4.65	5.02	6.22	7.41	6.81	6.60
140.0	6.86	6.89	5.85	5.41	4.56	4.52	4.21	4.46	4.32	4.93	5.26	6.39	7.28	6.81	6.76
145.0	6.80	6.85	5.93	5.60	4.84	4.80	4.52	4.75	4.60	5.15	5.42	6.40	7.07	6.70	6.78
150.0	6.66	6.75	5.98	5.73	5.11	5.07	4.82	5.03	4.88	5.32	5.51	6.34	6.87	6.57	6.73
155.0	6.52	6.65	6.03	5.84	5.33	5.32	5.09	5.30	5.12	5.49	5.59	6.28	6.73	6.47	6.67
160.0	6.43	6.59	6.06	5.95	5.53	5.56	5.36	5.53	5.35	5.65	5.67	6.22	6.64	6.40	6.60
165.0	6.39	6.54	6.10	6.06	5.73	5.78	5.63	5.75	5.59	5.79	5.76	6.19	6.60	6.36	6.56
170.0	6.41	6.50	6.17	6.18	5.92	6.00	5.88	5.97	5.79	5.95	5.87	6.20	6.55	6.36	6.51
175.0	6.41	6.47	6.23	6.26	6.08	6.16	6.08	6.13	5.95	6.07	5.98	6.22	6.50	6.31	6.45
180.0	6.47	6.45	6.31	6.34	6.24	6.29	6.30	6.26	6.13	6.18	6.07	6.20	6.47	6.33	6.39

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-D28040-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	978	978	978	978	978	978	978	978	978
5.0	952	943	939	937	939	944	953	963	974
10.0	926	907	898	895	899	910	929	953	977
15.0	901	875	861	858	862	877	905	945	987
20.0	878	843	828	824	828	844	881	941	1007
25.0	856	812	794	787	792	811	859	938	1036
30.0	832	780	757	749	755	778	832	938	1075
35.0	807	745	716	707	714	743	805	937	1120
40.0	775	710	674	662	671	707	772	928	1168
45.0	735	671	630	618	627	667	732	908	1213
50.0	686	621	580	570	577	615	682	872	1255
55.0	627	561	522	516	518	552	617	820	1295
60.0	552	490	454	451	450	478	538	741	1346
65.0	448	398	370	371	364	385	429	603	1293
70.0	288	251	228	219	221	247	273	358	929
75.0	118	110	64.2	62.8	60.0	101	106	147	427
80.0	25.0	19.6	8.38	8.08	6.67	18.9	24.0	33.9	56.9
85.0	5.57	5.84	1.04	2.53	0.90	4.58	5.23	9.91	7.26
90.0	1.52	2.56	1.04	2.29	1.02	2.47	1.45	3.93	3.20
95.0	2.02	2.62	1.38	2.37	1.36	2.55	1.98	3.93	3.46
100.0	2.60	2.89	1.82	2.62	1.80	2.85	2.60	4.35	4.11
105.0	3.15	3.27	2.33	2.97	2.31	3.25	3.21	4.77	4.62
110.0	3.67	3.67	2.85	3.39	2.84	3.69	3.76	5.16	5.03
115.0	4.13	4.07	3.35	3.82	3.36	4.11	4.27	5.51	5.43
120.0	4.52	4.46	3.84	4.24	3.85	4.54	4.70	5.89	5.80
125.0	4.88	4.82	4.28	4.65	4.32	4.93	5.09	6.20	6.19
130.0	5.29	5.22	4.74	5.04	4.76	5.30	5.46	6.48	6.54
135.0	5.68	5.61	5.18	5.45	5.19	5.68	5.79	6.71	6.73
140.0	6.03	5.99	5.64	5.88	5.63	6.04	6.10	6.80	6.71
145.0	6.23	6.27	6.02	6.21	5.97	6.31	6.27	6.79	6.60
150.0	6.31	6.43	6.25	6.41	6.19	6.45	6.32	6.71	6.48
155.0	6.36	6.52	6.40	6.55	6.32	6.51	6.34	6.62	6.36
160.0	6.37	6.57	6.47	6.65	6.40	6.54	6.32	6.54	6.26
165.0	6.37	6.57	6.49	6.70	6.43	6.54	6.31	6.46	6.20
170.0	6.36	6.54	6.44	6.66	6.41	6.51	6.27	6.40	6.16
175.0	6.29	6.43	6.32	6.54	6.29	6.39	6.18	6.29	6.08
180.0	6.25	6.30	6.22	6.38	6.18	6.21	6.07	6.18	6.06

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