

LUMINAIRE PHOTOMETRIC TEST REPORT

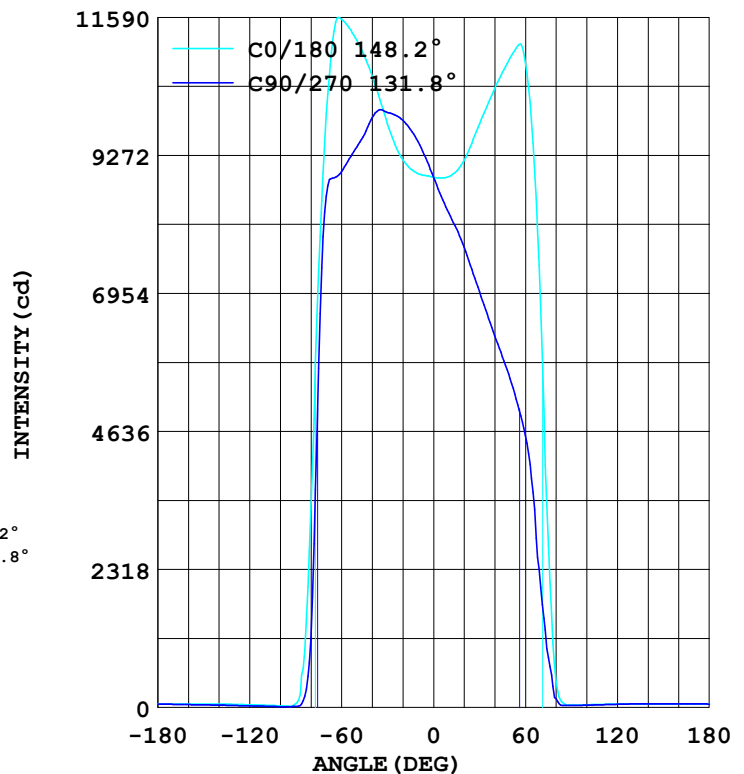
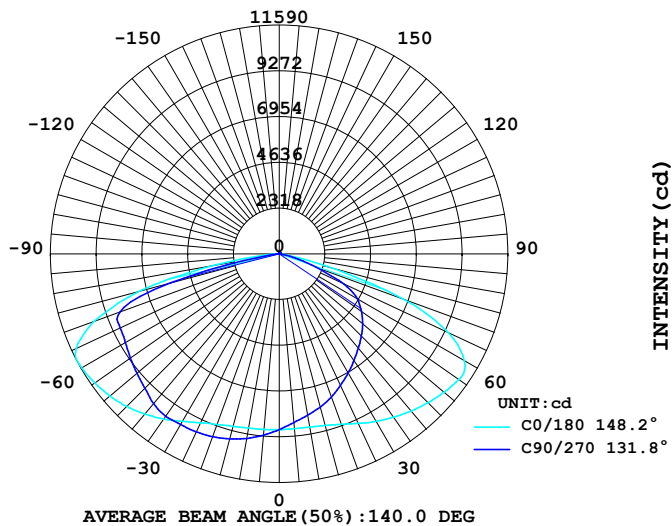
Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D28040-TY4	WEIGHT:
SPECIFICATION: 5050LED 4000K Type IV	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	12380	S/MH (C0/180)	1.79
MODEL		EFFICIENCY (%)	100.0	S/MH (C90/270)	1.68
NOMINAL POWER(W)	280	TOTAL FLUX(lm)	42007	Voltage(V)	230.8
RATED VOLTAGE (V)	230	EFFICIENCY (lm/W)	149.9	Current(A)	1.218
NOMINAL FLUX(lm)	42007.0	η up (%)	0.7	Power(W)	280.2
LAMPS QUANTITY	1	η down (%)	99.3	Power Factor (PF)	0.996
TEST VOLTAGE (V)	230.8	Effective Flux(lm)	42007.1	EEI	0.100

LUMINOUS INTENSITY DISTRIBUTION

LUMINOUS INTENSITY DISTRIBUTION



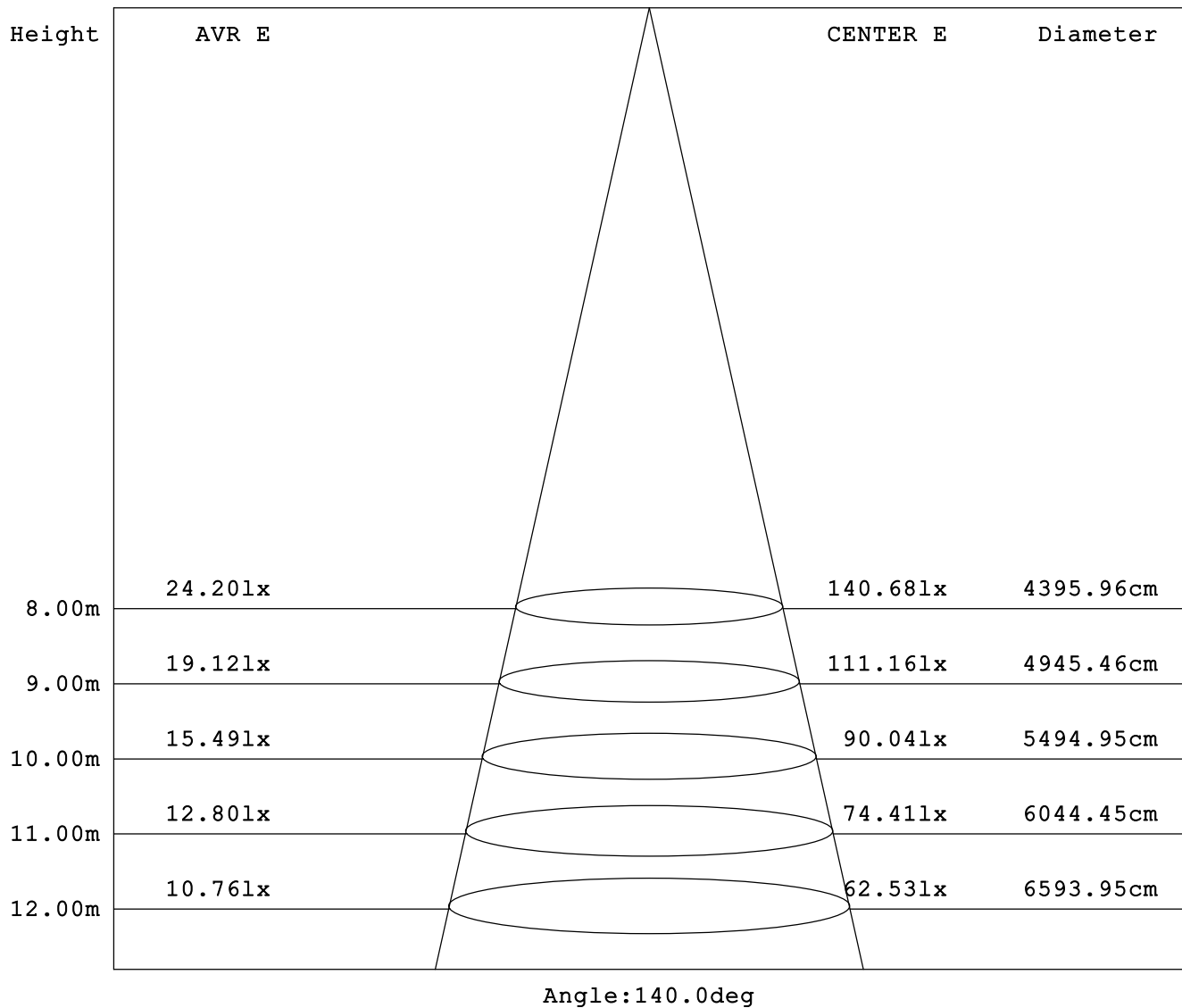
Test System:
 Temperature: 25.3 DEG
 Operators:
 Test Date: 2025.03.24

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:	
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SPECIFICATION:5050LED 4000K Type IV	DIMENSION:	SERIAL No.:



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Operators:
Test Date:2025.03.24

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Humidity:65.0%
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ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE:IL-ST11-D28040-TY4	WEIGHT:
SPECIFICATION:5050LED 4000K Type IV	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
5.0	893.2	915.0	922.5	911.3	889.4	865.1	858.5	867.7	0- 5	212.8	212.8
10.0	896.5	937.3	950.0	929.2	891.5	843.0	830.5	847.7	5- 10	637.0	849.9
15.0	904.6	959.6	970.6	946.2	900.7	823.6	803.8	830.5	10- 15	1058	1907
20.0	920.1	984.4	986.1	964.3	918.9	801.4	772.8	809.8	15- 20	1472	3380
25.0	944.6	1012	994.9	984.6	947.5	783.3	735.8	792.7	20- 25	1881	5261
30.0	979.7	1041	999.1	1006	980.3	764.0	697.9	774.1	25- 30	2283	7544
35.0	1022	1072	1004	1026	1010	744.6	660.8	755.6	30- 35	2678	10221
40.0	1060	1102	990.8	1044	1040	725.0	624.4	737.1	35- 40	3052	13273
45.0	1093	1129	963.2	1061	1066	702.7	588.8	717.4	40- 45	3394	16667
50.0	1120	1151	941.4	1073	1091	679.3	552.5	694.8	45- 50	3698	20365
55.0	1141	1164	921.6	1077	1111	653.0	508.6	668.1	50- 55	3958	24323
60.0	1156	1167	900.3	1075	1083	618.4	456.7	633.9	55- 60	4158	28481
65.0	1135	1154	889.4	1060	947.5	565.3	361.4	584.9	60- 65	4237	32718
70.0	997.5	1102	858.8	1014	668.6	432.5	201.3	464.5	65- 70	4016	36734
75.0	732.2	827.9	569.4	726.8	273.9	187.8	83.93	217.5	70- 75	3142	39876
80.0	333.5	270.7	114.0	165.7	43.82	32.76	14.70	51.95	75- 80	1521	41397
85.0	65.56	32.09	11.48	18.21	6.877	5.494	3.426	7.777	80- 85	282.3	41679
90.0	6.016	5.244	1.877	4.557	4.046	2.435	3.364	2.302	85- 90	42.34	41722
95.0	2.231	3.559	1.267	3.406	4.277	3.059	3.614	2.877	90- 95	17.85	41740
100.0	2.769	3.387	1.470	3.266	4.631	3.637	3.990	3.453	95-100	17.31	41757
105.0	3.338	3.480	1.799	3.375	4.985	4.089	4.365	3.920	100-105	18.71	41776
110.0	3.846	3.652	2.128	3.531	5.262	4.495	4.725	4.324	105-110	20.00	41796
115.0	4.231	3.839	2.441	3.702	5.523	4.839	5.054	4.682	110-115	20.92	41817
120.0	4.569	4.074	2.738	3.904	5.785	5.198	5.383	5.055	115-120	21.47	41838
125.0	4.923	4.323	3.051	4.137	6.077	5.603	5.742	5.475	120-125	21.83	41860
130.0	5.277	4.604	3.380	4.417	6.293	5.978	6.102	5.864	125-130	21.99	41882
135.0	5.600	4.870	3.724	4.666	6.400	6.150	6.290	6.066	130-135	21.58	41903
140.0	5.800	5.057	4.021	4.853	6.370	6.165	6.321	6.097	135-140	20.40	41924
145.0	5.862	5.182	4.272	4.977	6.293	6.119	6.321	6.051	140-145	18.66	41943
150.0	5.847	5.276	4.506	5.086	6.185	6.056	6.290	5.989	145-150	16.57	41959
155.0	5.800	5.369	4.725	5.180	6.108	5.994	6.274	5.926	150-155	14.30	41973
160.0	5.785	5.447	4.913	5.289	6.047	5.947	6.259	5.880	155-160	11.89	41985
165.0	5.785	5.557	5.132	5.397	6.031	5.900	6.228	5.833	160-165	9.393	41995
170.0	5.831	5.650	5.351	5.522	6.000	5.853	6.165	5.786	165-170	6.793	42002
175.0	5.847	5.744	5.539	5.615	5.954	5.775	5.993	5.677	170-175	4.109	42006
180.0	5.923	5.822	5.758	5.709	5.923	5.713	5.821	5.600	175-180	1.371	42007
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm	

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

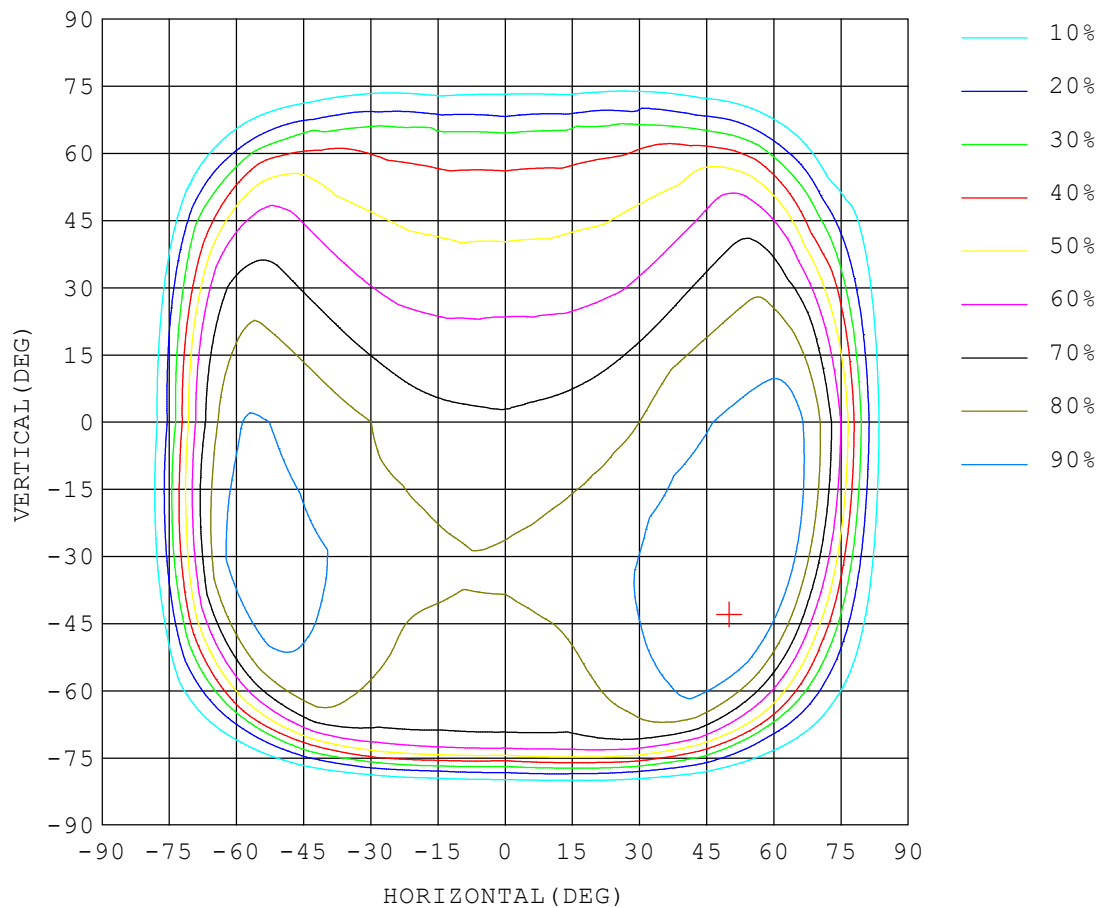
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:10.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D28040-TY4	WEIGHT:
SPECIFICATION: 5050LED 4000K Type IV	DIMENSION:	SERIAL No.:

UNIT: cd



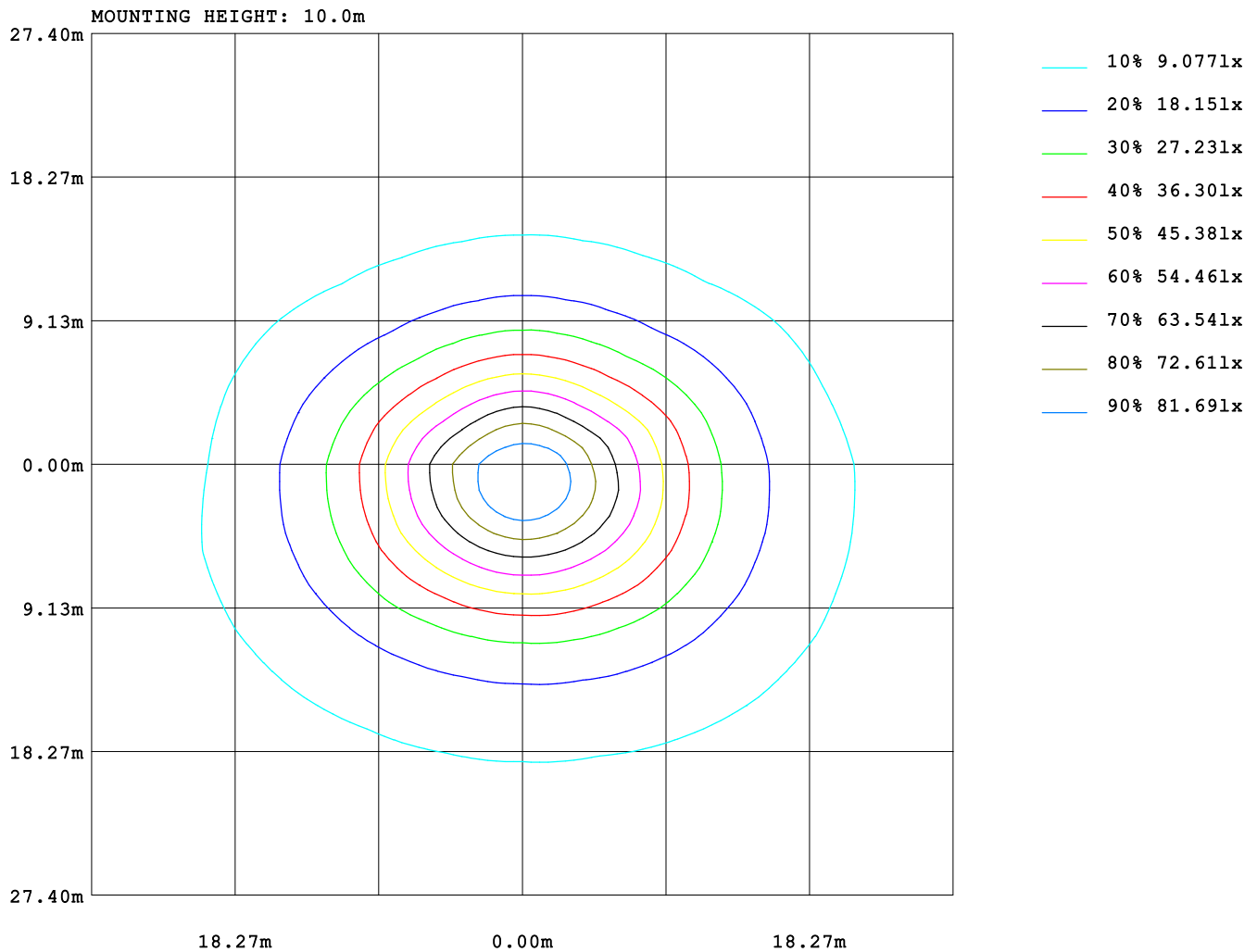
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ISOLUX DIAGRAM

Report number:

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NAME: Muller	TYPE: IL-ST11-D28040-TY4	WEIGHT:
SPECIFICATION: 5050LED 4000K Type IV	DIMENSION:	SERIAL No.:



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LUMINOUS DISTRIBUTION INTENSITY DATA

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MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D28040-TY4	WEIGHT:
SPECIFICATION: 5050LED 4000K Type IV	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	891	891	891	891	891	891	891	891	891	891	891	891	891	891	891
5.0	893	901	909	915	920	922	923	921	917	911	904	896	889	881	873
10.0	897	912	927	937	945	949	950	946	939	929	918	904	892	874	857
15.0	905	928	947	960	966	971	971	966	957	946	932	913	901	872	844
20.0	920	952	973	984	988	988	986	980	973	964	951	931	919	877	835
25.0	945	985	1007	1012	1007	999	995	990	987	985	977	957	948	890	828
30.0	980	1027	1046	1041	1025	1008	999	996	1000	1006	1007	991	980	911	825
35.0	1022	1074	1090	1072	1041	1019	1004	1003	1008	1026	1040	1028	1010	931	824
40.0	1060	1114	1130	1102	1052	1015	991	991	1012	1044	1070	1058	1040	950	825
45.0	1093	1151	1166	1129	1053	1001	963	972	1001	1061	1098	1088	1066	967	825
50.0	1120	1182	1198	1151	1052	980	941	948	992	1073	1122	1118	1091	979	822
55.0	1141	1208	1222	1164	1052	960	922	927	986	1077	1140	1147	1111	985	815
60.0	1156	1225	1237	1167	1045	938	900	909	972	1075	1152	1168	1083	972	802
65.0	1135	1204	1230	1154	1022	911	889	895	942	1060	1142	1138	948	886	760
70.0	998	1050	1102	1102	967	871	859	862	888	1014	1022	973	669	699	609
75.0	732	716	784	828	760	651	569	606	674	727	690	608	274	381	292
80.0	334	274	242	271	206	142	114	119	142	166	153	168	43.8	63.5	46.4
85.0	65.5	43.8	49.9	32.0	17.1	16.2	11.4	15.3	12.8	18.2	20.6	18.6	6.87	5.34	8.91
90.0	6.01	7.83	4.30	5.24	2.22	4.13	1.87	4.04	2.23	4.55	2.72	4.97	4.04	2.98	4.68
95.0	2.23	3.94	2.22	3.55	1.65	2.91	1.26	2.81	1.55	3.40	2.23	3.86	4.27	3.15	4.40
100.0	2.76	3.88	2.47	3.38	1.76	2.70	1.47	2.65	1.69	3.26	2.47	3.92	4.63	3.77	4.77
105.0	3.33	4.10	2.83	3.48	2.12	2.83	1.79	2.76	2.04	3.37	2.83	4.13	4.98	4.30	5.10
110.0	3.84	4.35	3.20	3.65	2.45	2.99	2.12	2.93	2.37	3.53	3.17	4.37	5.26	4.72	5.36
115.0	4.23	4.58	3.53	3.83	2.76	3.19	2.44	3.12	2.65	3.70	3.47	4.58	5.52	5.06	5.61
120.0	4.56	4.82	3.85	4.07	3.08	3.39	2.73	3.31	2.94	3.90	3.76	4.80	5.78	5.38	5.87
125.0	4.92	5.09	4.21	4.32	3.42	3.63	3.05	3.53	3.25	4.13	4.09	5.05	6.07	5.72	6.18
130.0	5.27	5.40	4.58	4.60	3.75	3.89	3.38	3.81	3.60	4.41	4.41	5.32	6.29	6.00	6.48
135.0	5.60	5.69	4.91	4.87	4.06	4.16	3.72	4.08	3.93	4.66	4.71	5.55	6.40	6.14	6.59
140.0	5.80	5.85	5.11	5.05	4.34	4.41	4.02	4.34	4.19	4.85	4.89	5.68	6.37	6.16	6.56
145.0	5.86	5.91	5.22	5.18	4.53	4.61	4.27	4.56	4.41	4.97	5.00	5.71	6.29	6.08	6.46
150.0	5.84	5.91	5.31	5.27	4.72	4.80	4.50	4.78	4.60	5.08	5.09	5.71	6.18	6.00	6.34
155.0	5.80	5.89	5.38	5.36	4.89	4.99	4.72	4.97	4.78	5.18	5.16	5.69	6.10	5.91	6.25
160.0	5.78	5.89	5.44	5.44	5.06	5.15	4.91	5.15	4.97	5.28	5.23	5.68	6.04	5.85	6.15
165.0	5.78	5.89	5.50	5.55	5.23	5.32	5.13	5.33	5.16	5.39	5.31	5.68	6.03	5.82	6.08
170.0	5.83	5.89	5.59	5.65	5.39	5.49	5.35	5.48	5.33	5.52	5.42	5.69	6.00	5.80	6.01
175.0	5.84	5.89	5.66	5.74	5.55	5.63	5.53	5.62	5.45	5.61	5.50	5.71	5.95	5.77	5.94
180.0	5.92	5.88	5.77	5.82	5.70	5.76	5.75	5.73	5.64	5.70	5.62	5.71	5.92	5.77	5.86

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:

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NAME: Muller	TYPE:IL-ST11-D28040-TY4	WEIGHT:
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UNIT: ×10cd

C (DEG) γ (DEG)	225	240	255	270	285	300	315	330	345
0.0	891	891	891	891	891	891	891	891	891
5.0	865	861	858	859	858	863	868	876	885
10.0	843	835	831	831	832	838	848	864	883
15.0	824	810	804	804	806	814	831	854	885
20.0	801	784	773	773	775	789	810	849	894
25.0	783	754	738	736	741	760	793	845	911
30.0	764	723	702	698	704	729	774	845	939
35.0	745	693	665	661	668	699	756	848	966
40.0	725	663	630	624	634	670	737	853	989
45.0	703	633	595	589	600	640	717	856	1007
50.0	679	601	558	553	562	609	695	856	1018
55.0	653	563	517	509	522	572	668	849	1023
60.0	618	518	466	457	473	528	634	834	1017
65.0	565	460	386	361	392	472	585	809	924
70.0	433	325	222	201	228	339	465	650	762
75.0	188	142	81.7	83.9	84.9	155	218	363	428
80.0	32.7	30.4	13.5	14.7	15.3	35.9	51.9	79.1	103
85.0	5.49	7.39	2.19	3.42	2.07	7.20	7.77	11.8	8.01
90.0	2.43	3.93	2.16	3.36	2.09	3.86	2.30	4.57	2.98
95.0	3.05	4.01	2.70	3.61	2.64	3.91	2.87	4.26	2.93
100.0	3.63	4.34	3.24	3.99	3.18	4.24	3.45	4.58	3.52
105.0	4.08	4.64	3.74	4.36	3.67	4.55	3.92	4.89	4.03
110.0	4.49	4.94	4.18	4.72	4.12	4.86	4.32	5.14	4.43
115.0	4.83	5.22	4.55	5.05	4.53	5.17	4.68	5.37	4.75
120.0	5.19	5.53	4.93	5.38	4.92	5.48	5.05	5.62	5.03
125.0	5.60	5.90	5.35	5.74	5.34	5.84	5.47	5.95	5.35
130.0	5.97	6.28	5.74	6.10	5.72	6.22	5.86	6.29	5.68
135.0	6.15	6.41	5.96	6.29	5.92	6.37	6.06	6.44	5.88
140.0	6.16	6.41	6.04	6.32	5.98	6.36	6.09	6.44	5.94
145.0	6.11	6.37	6.08	6.32	6.00	6.33	6.05	6.35	5.93
150.0	6.05	6.33	6.08	6.29	5.98	6.26	5.98	6.24	5.86
155.0	5.99	6.26	6.07	6.27	5.97	6.20	5.92	6.15	5.79
160.0	5.94	6.22	6.05	6.25	5.95	6.16	5.88	6.07	5.74
165.0	5.90	6.16	6.01	6.22	5.92	6.09	5.83	5.99	5.69
170.0	5.85	6.06	5.91	6.16	5.87	6.02	5.78	5.91	5.65
175.0	5.77	5.92	5.77	5.99	5.73	5.87	5.67	5.81	5.60
180.0	5.71	5.78	5.66	5.82	5.64	5.72	5.60	5.71	5.60

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