

LUMINAIRE PHOTOMETRIC TEST REPORT

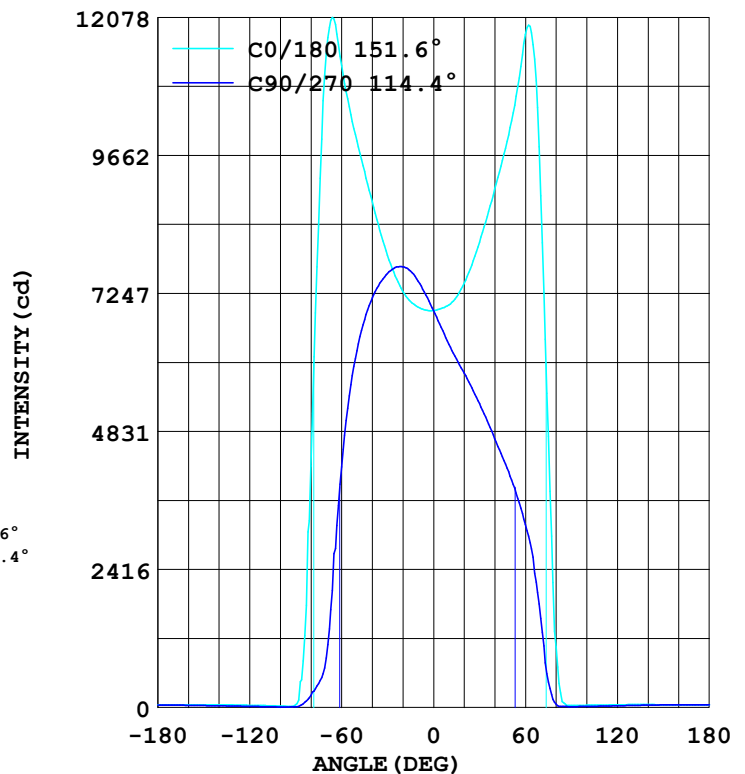
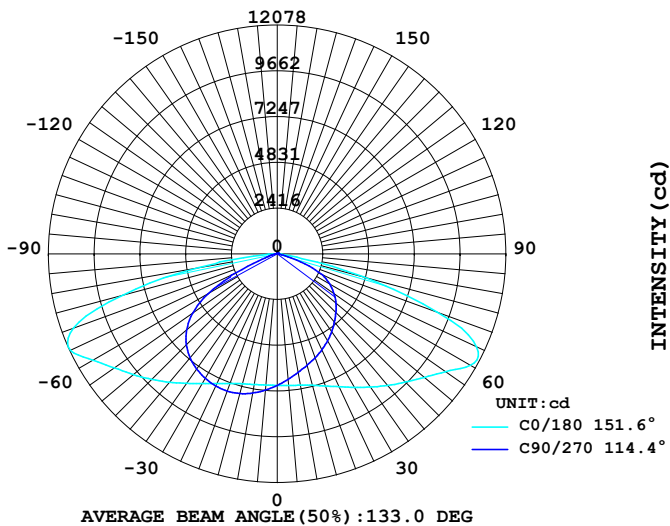
Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D20040-TY2	WEIGHT:
SPECIFICATION: 5050LED 4000K Type II	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax (cd)	12078	S/MH (C0/180)	1.92
MODEL		EFFICIENCY (%)	100.0	S/MH (C90/270)	1.60
NOMINAL POWER (W)	200	TOTAL FLUX (lm)	29735	Voltage (V)	230.8
RATED VOLTAGE (V)	230	EFFICIENCY (lm/W)	148.6	Current (A)	0.870
NOMINAL FLUX (lm)	29735.0	η up (%)	0.7	Power (W)	200.1
LAMPS QUANTITY	1	η down (%)	99.3	Power Factor (PF)	0.996
TEST VOLTAGE (V)	230.8	Effective Flux (lm)	29735.0	EEI	0.101

LUMINOUS INTENSITY DISTRIBUTION

LUMINOUS INTENSITY DISTRIBUTION



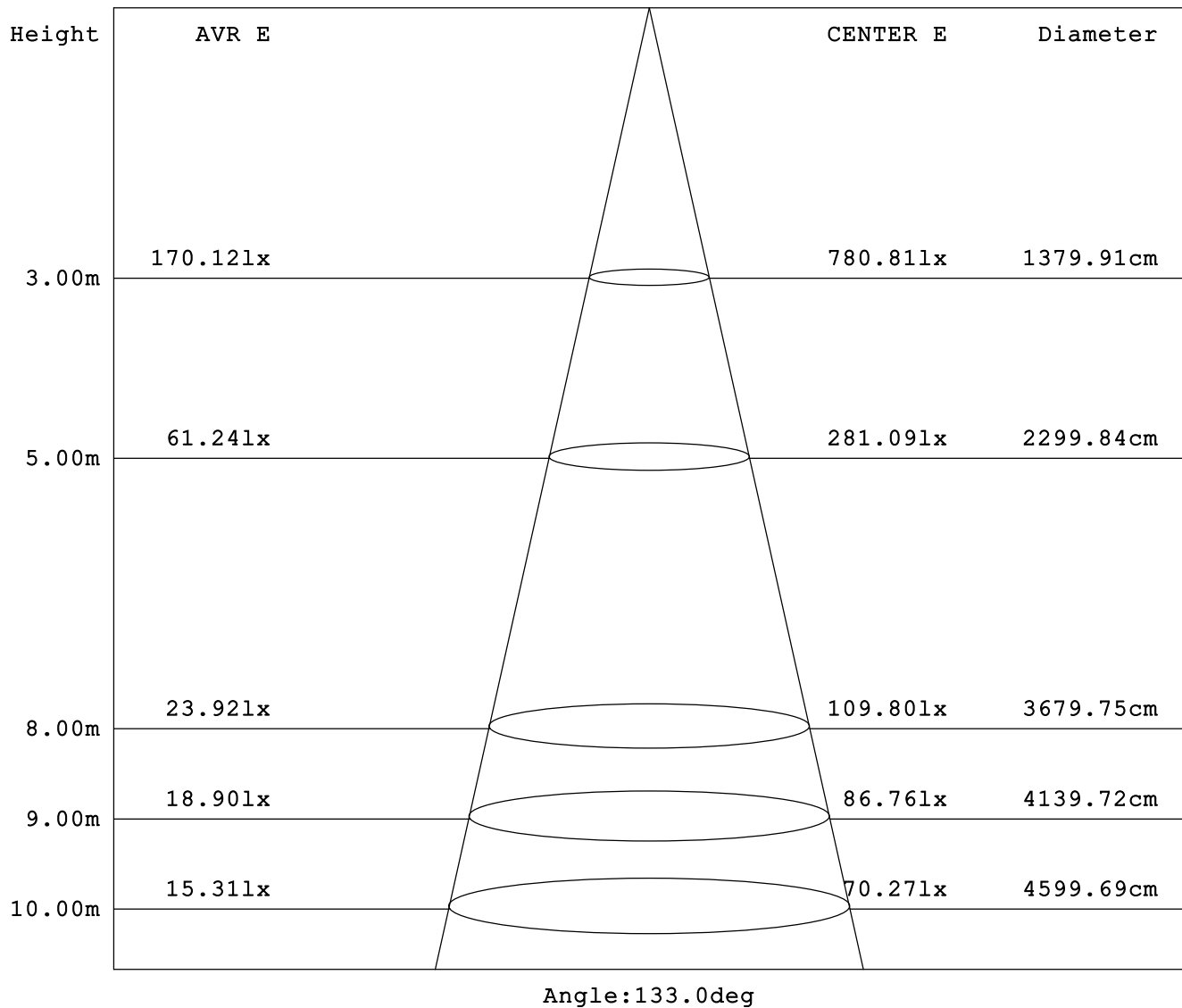
Test System:
 Temperature: 25.3 DEG
 Operators:
 Test Date: 2025.03.22

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-D20040-TY2	WEIGHT:
SPECIFICATION:5050LED 4000K Type II	DIMENSION:	SERIAL No.:



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Operators:
Test Date:2025.03.22

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Humidity:65.0%
Test Distance:10.000 m
Remarks:

ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE:IL-ST11-D20040-TY2	WEIGHT:
SPECIFICATION:5050LED 4000K Type II	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
5.0	695.5	715.4	721.9	714.1	698.1	675.8	665.2	677.0	0- 5	166.2	166.2
10.0	700.5	734.8	746.0	732.2	704.4	657.6	635.5	660.0	5- 10	498.0	664.2
15.0	710.3	753.0	763.9	747.4	718.4	639.8	609.7	642.5	10- 15	827.4	1492
20.0	728.2	771.4	771.2	760.3	742.6	623.6	585.2	625.9	15- 20	1153	2645
25.0	755.6	788.4	769.8	769.5	774.4	608.1	559.3	609.8	20- 25	1475	4119
30.0	791.1	801.5	759.5	776.0	814.0	590.7	531.8	590.7	25- 30	1788	5907
35.0	834.8	811.4	742.4	777.9	859.1	572.9	501.8	571.4	30- 35	2088	7996
40.0	884.7	813.7	716.5	774.8	907.4	550.5	470.0	548.3	35- 40	2370	10365
45.0	937.8	805.7	678.5	764.2	957.2	521.9	438.8	519.7	40- 45	2620	12985
50.0	991.3	783.2	624.5	737.3	1015	487.2	404.9	484.5	45- 50	2821	15806
55.0	1051	736.0	545.5	681.3	1086	445.1	366.1	438.1	50- 55	2953	18759
60.0	1124	648.7	421.0	590.0	1178	391.8	320.1	381.8	55- 60	2994	21753
65.0	1205	489.5	268.9	425.6	1160	317.9	263.2	304.7	60- 65	2887	24640
70.0	1144	215.7	86.44	181.7	895.3	204.6	155.8	193.7	65- 70	2418	27058
75.0	842.9	62.61	41.99	58.02	474.7	83.79	44.66	75.49	70- 75	1547	28605
80.0	422.4	34.78	20.80	31.12	106.1	17.78	5.742	17.07	75- 80	689.5	29295
85.0	81.51	13.39	6.691	12.75	8.146	3.960	1.798	3.716	80- 85	201.5	29496
90.0	4.545	3.324	1.262	3.162	3.568	1.082	1.631	1.031	85- 90	36.35	29532
95.0	2.140	2.186	0.938	2.041	3.710	1.439	1.686	1.409	90- 95	11.36	29544
100.0	2.623	2.164	1.016	1.974	3.952	1.851	1.865	1.852	95-100	11.15	29555
105.0	3.052	2.320	1.251	2.096	4.183	2.242	2.111	2.285	100-105	12.30	29567
110.0	3.392	2.543	1.497	2.274	4.358	2.610	2.413	2.673	105-110	13.47	29581
115.0	3.645	2.777	1.731	2.474	4.501	2.933	2.714	3.040	110-115	14.37	29595
120.0	3.875	3.000	1.977	2.673	4.699	3.212	3.016	3.339	115-120	15.02	29610
125.0	4.139	3.235	2.223	2.873	4.984	3.469	3.306	3.616	120-125	15.44	29626
130.0	4.468	3.469	2.480	3.095	5.204	3.759	3.586	3.883	125-130	15.62	29641
135.0	4.753	3.681	2.748	3.306	5.269	4.038	3.876	4.116	130-135	15.52	29657
140.0	4.874	3.848	2.994	3.506	5.171	4.283	4.178	4.338	135-140	14.98	29672
145.0	4.830	3.982	3.217	3.661	5.028	4.428	4.412	4.460	140-145	13.96	29686
150.0	4.731	4.071	3.429	3.783	4.885	4.484	4.558	4.493	145-150	12.56	29698
155.0	4.633	4.149	3.619	3.905	4.786	4.518	4.658	4.504	150-155	10.92	29709
160.0	4.567	4.228	3.809	4.016	4.721	4.529	4.725	4.493	155-160	9.135	29718
165.0	4.545	4.306	3.999	4.116	4.688	4.529	4.759	4.482	160-165	7.238	29726
170.0	4.556	4.395	4.178	4.227	4.655	4.518	4.736	4.460	165-170	5.250	29731
175.0	4.556	4.451	4.323	4.315	4.622	4.473	4.647	4.393	170-175	3.182	29734
180.0	4.600	4.506	4.479	4.393	4.600	4.440	4.535	4.315	175-180	1.062	29735
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm	

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

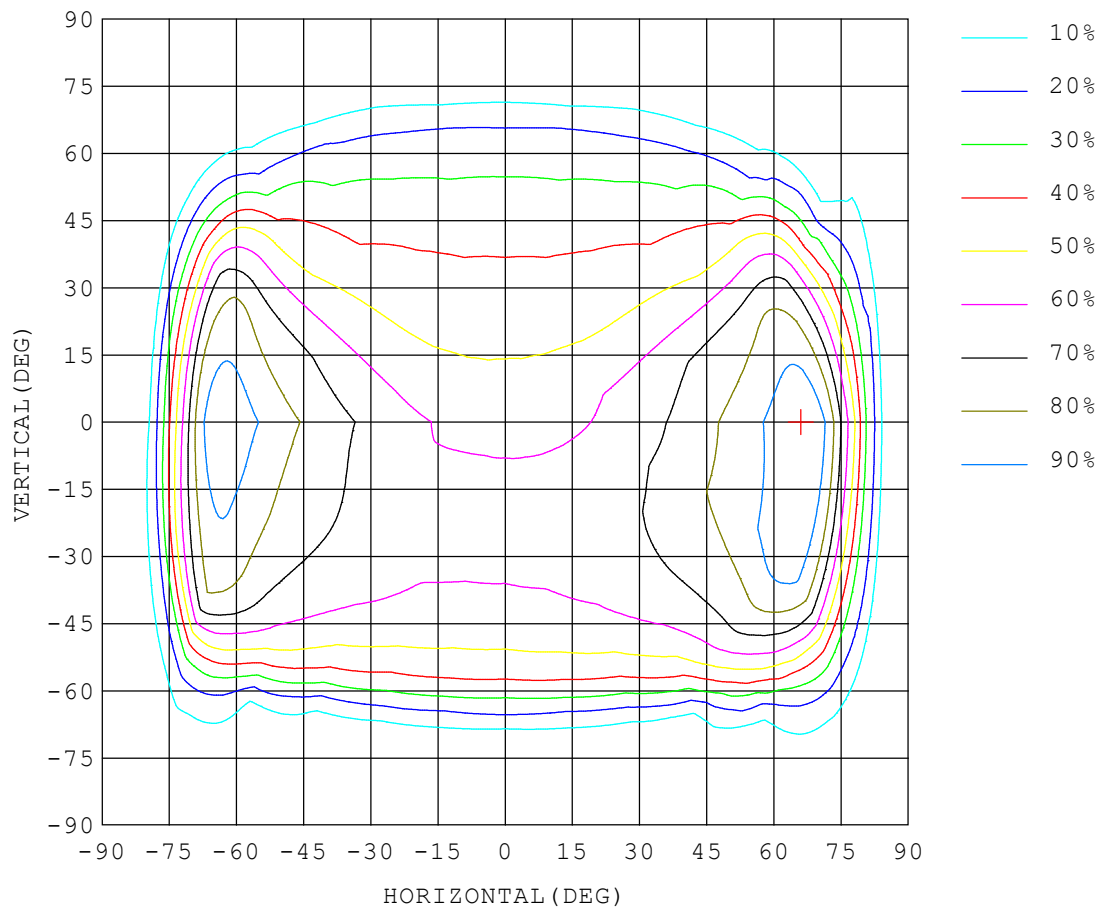
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:10.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE:IL-ST11-D20040-TY2	WEIGHT:
SPECIFICATION:5050LED 4000K Type II	DIMENSION:	SERIAL No.:

UNIT: cd



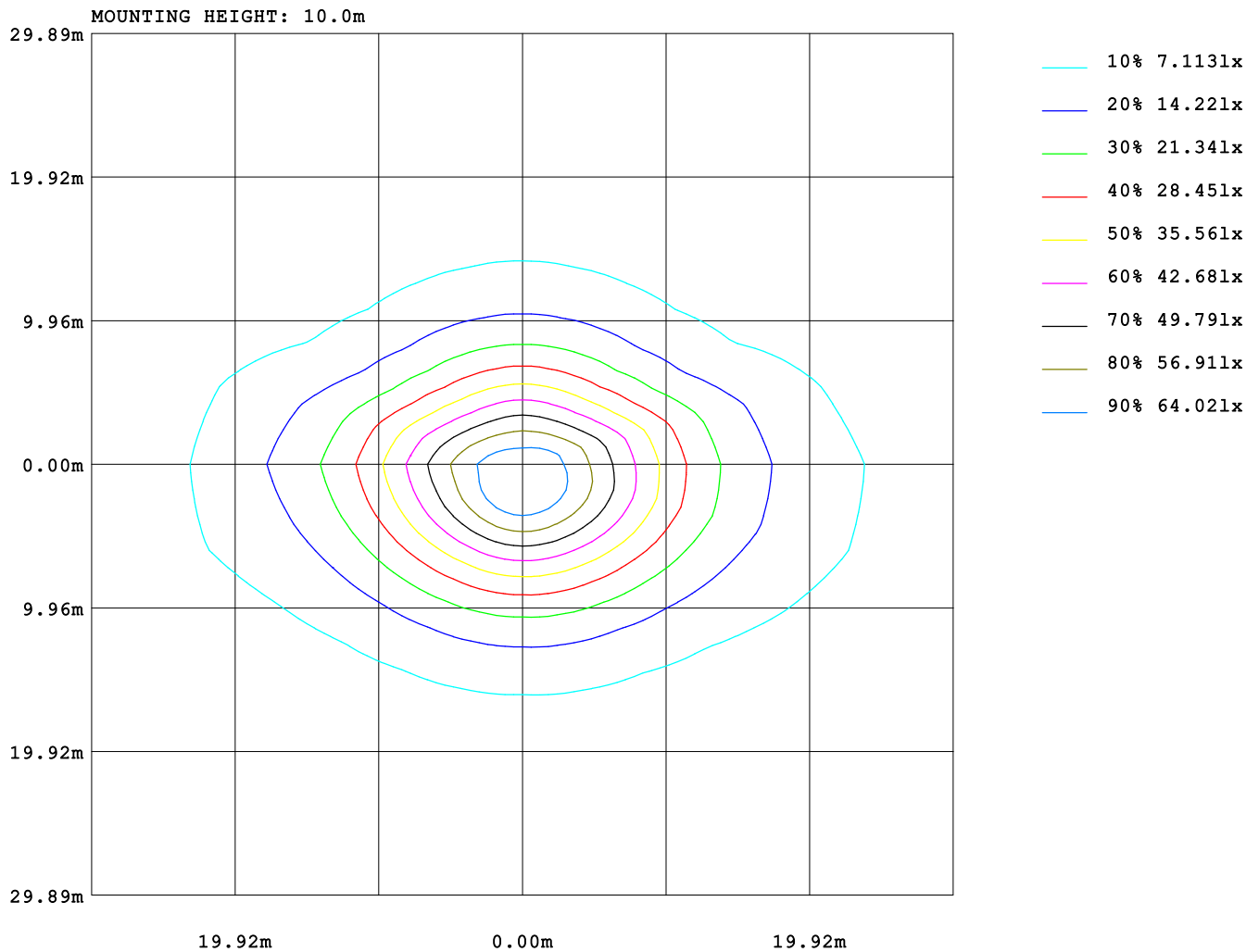
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Remarks:

ISOLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D20040-TY2	WEIGHT:
SPECIFICATION: 5050LED 4000K Type II	DIMENSION:	SERIAL No.:



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LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE:IL-ST11-D20040-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	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695
5.0	696	703	709	715	719	722	722	722	718	714	708	702	698	691	683
10.0	701	714	725	735	741	746	746	745	739	732	722	711	704	690	673
15.0	710	728	743	753	759	764	764	762	756	747	736	721	718	695	667
20.0	728	752	765	771	771	773	771	770	764	760	752	740	743	708	663
25.0	756	784	792	788	778	774	770	770	767	770	771	767	774	727	661
30.0	791	821	821	802	779	767	760	761	762	776	792	798	814	753	661
35.0	835	864	848	811	773	752	742	744	751	778	811	834	859	784	661
40.0	885	910	873	814	760	731	717	720	734	775	827	869	907	817	656
45.0	938	955	892	806	736	699	679	686	708	764	835	903	957	851	644
50.0	991	998	899	783	692	648	625	634	665	737	833	933	1015	883	623
55.0	1051	1044	896	736	620	569	546	557	594	681	818	967	1086	917	590
60.0	1124	1099	885	649	503	449	421	439	478	590	782	1006	1178	962	540
65.0	1205	1168	853	490	325	265	269	258	304	426	703	1059	1160	959	451
70.0	1144	1100	659	216	115	95.3	86.4	94.0	108	182	478	1025	895	725	277
75.0	843	801	314	62.6	49.1	47.2	41.9	46.0	46.7	58.0	134	755	475	312	113
80.0	422	337	62.4	34.7	27.3	24.9	20.8	24.3	26.9	31.1	37.9	270	106	43.5	24.6
85.0	81.5	61.8	18.5	13.3	8.61	9.00	6.69	9.01	8.62	12.7	14.4	53.2	8.14	5.34	7.02
90.0	4.54	6.17	2.82	3.32	1.48	2.50	1.26	2.41	1.36	3.16	2.47	5.48	3.56	2.15	2.81
95.0	2.14	3.28	1.66	2.18	1.11	1.89	0.94	1.81	1.06	2.04	1.49	3.12	3.71	2.52	2.84
100.0	2.62	3.35	1.94	2.16	1.13	1.70	1.01	1.68	1.07	1.97	1.71	3.16	3.95	2.97	3.10
105.0	3.05	3.57	2.30	2.32	1.38	1.81	1.25	1.79	1.32	2.09	2.02	3.35	4.18	3.31	3.36
110.0	3.39	3.80	2.66	2.54	1.65	1.98	1.49	1.95	1.56	2.27	2.32	3.56	4.35	3.59	3.59
115.0	3.64	3.98	2.99	2.77	1.91	2.15	1.73	2.12	1.80	2.47	2.61	3.71	4.50	3.82	3.79
120.0	3.87	4.16	3.28	3.00	2.17	2.34	1.97	2.30	2.04	2.67	2.85	3.83	4.69	4.07	3.99
125.0	4.13	4.36	3.55	3.23	2.44	2.54	2.22	2.49	2.29	2.87	3.09	4.00	4.98	4.37	4.22
130.0	4.46	4.59	3.80	3.46	2.72	2.75	2.48	2.71	2.55	3.09	3.33	4.21	5.20	4.66	4.48
135.0	4.75	4.79	4.01	3.68	3.00	2.99	2.74	2.95	2.82	3.30	3.56	4.42	5.26	4.83	4.69
140.0	4.87	4.89	4.16	3.84	3.23	3.21	2.99	3.17	3.07	3.50	3.74	4.54	5.17	4.83	4.80
145.0	4.83	4.87	4.21	3.98	3.44	3.41	3.21	3.37	3.27	3.66	3.85	4.55	5.02	4.76	4.81
150.0	4.73	4.79	4.25	4.07	3.63	3.60	3.42	3.57	3.47	3.78	3.91	4.50	4.88	4.67	4.78
155.0	4.63	4.72	4.28	4.14	3.78	3.78	3.61	3.76	3.63	3.90	3.97	4.46	4.78	4.59	4.73
160.0	4.56	4.68	4.30	4.22	3.93	3.95	3.80	3.93	3.80	4.01	4.02	4.42	4.72	4.55	4.69
165.0	4.54	4.65	4.33	4.30	4.07	4.10	3.99	4.08	3.97	4.11	4.09	4.39	4.68	4.51	4.66
170.0	4.55	4.61	4.38	4.39	4.21	4.26	4.17	4.24	4.11	4.22	4.17	4.40	4.65	4.51	4.62
175.0	4.55	4.59	4.42	4.45	4.32	4.37	4.32	4.35	4.22	4.31	4.25	4.42	4.62	4.48	4.58
180.0	4.60	4.58	4.48	4.50	4.43	4.46	4.47	4.44	4.36	4.39	4.31	4.40	4.60	4.49	4.53

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Operators:
Test Date:2025.03.22

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Test Distance:10.000 m
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

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NAME: Muller	TYPE:IL-ST11-D20040-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	695	695	695	695	695	695	695	695	695
5.0	676	670	667	665	667	670	677	684	692
10.0	658	644	638	636	639	646	660	677	694
15.0	640	621	612	610	612	623	643	671	701
20.0	624	598	588	585	588	599	626	668	715
25.0	608	577	564	559	563	576	610	666	736
30.0	591	554	537	532	536	553	591	666	763
35.0	573	529	509	502	507	528	571	666	795
40.0	551	504	479	470	477	502	548	659	830
45.0	522	477	447	439	446	474	520	645	861
50.0	487	441	412	405	410	437	485	619	892
55.0	445	398	371	366	368	392	438	583	920
60.0	392	348	322	320	320	340	382	526	956
65.0	318	283	263	263	258	274	305	428	918
70.0	205	179	162	156	157	176	194	254	660
75.0	83.7	78.2	45.6	44.6	42.6	71.7	75.4	105	303
80.0	17.7	13.9	5.95	5.74	4.73	13.4	17.0	24.1	40.4
85.0	3.96	4.15	0.74	1.79	0.64	3.25	3.71	7.04	5.15
90.0	1.08	1.82	0.74	1.63	0.73	1.75	1.03	2.79	2.27
95.0	1.43	1.86	0.99	1.68	0.97	1.81	1.40	2.79	2.46
100.0	1.85	2.05	1.29	1.86	1.28	2.02	1.85	3.09	2.92
105.0	2.24	2.32	1.65	2.11	1.64	2.31	2.28	3.38	3.28
110.0	2.61	2.61	2.02	2.41	2.02	2.62	2.67	3.66	3.57
115.0	2.93	2.89	2.38	2.71	2.39	2.92	3.04	3.91	3.85
120.0	3.21	3.17	2.73	3.01	2.73	3.22	3.33	4.18	4.12
125.0	3.46	3.42	3.04	3.30	3.07	3.50	3.61	4.40	4.39
130.0	3.75	3.70	3.37	3.58	3.38	3.77	3.88	4.60	4.65
135.0	4.03	3.98	3.68	3.87	3.68	4.03	4.11	4.76	4.78
140.0	4.28	4.25	4.00	4.17	4.00	4.29	4.33	4.83	4.77
145.0	4.42	4.45	4.27	4.41	4.24	4.48	4.46	4.82	4.69
150.0	4.48	4.56	4.44	4.55	4.40	4.58	4.49	4.76	4.60
155.0	4.51	4.63	4.54	4.65	4.49	4.62	4.50	4.70	4.51
160.0	4.52	4.66	4.60	4.72	4.54	4.65	4.49	4.64	4.45
165.0	4.52	4.66	4.61	4.75	4.57	4.65	4.48	4.59	4.40
170.0	4.51	4.64	4.58	4.73	4.55	4.62	4.46	4.54	4.37
175.0	4.47	4.56	4.49	4.64	4.46	4.53	4.39	4.47	4.32
180.0	4.44	4.47	4.42	4.53	4.39	4.41	4.31	4.39	4.31

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