

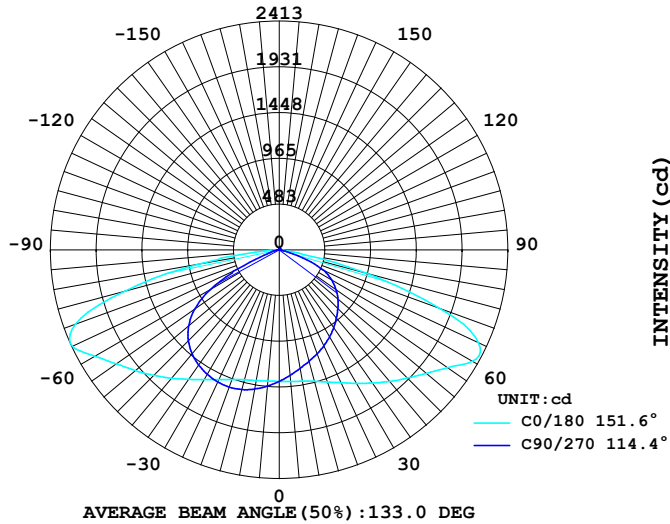
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

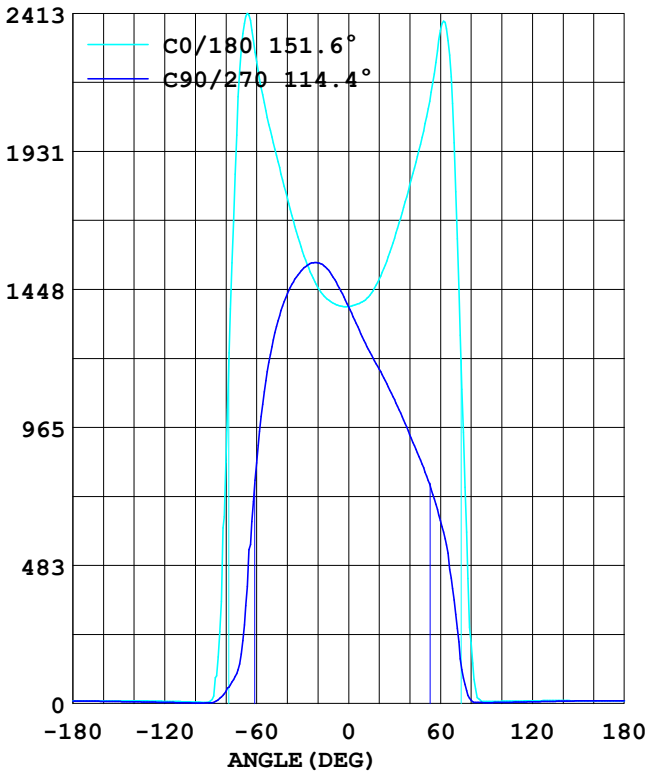
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D04040-TY2	WEIGHT:
SPECIFICATION: 5050LED 4000K Type II	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	2413	S/MH (C0/180)	1.92
MODEL		EFFICIENCY (%)	100.0	S/MH (C90/270)	1.60
NOMINAL POWER(W)	40	TOTAL FLUX(lm)	5942.0	Voltage(V)	230.5
RATED VOLTAGE (V)	230	EFFICIENCY (lm/W)	147.8	Current(A)	0.175
NOMINAL FLUX(lm)	5942.0	$\eta$ up (%)	0.7	Power(W)	40.20
LAMPS QUANTITY	1	$\eta$ down (%)	99.3	Power Factor (PF)	0.996
TEST VOLTAGE (V)	230.5	Effective Flux(lm)	5942.0	EEI	0.101

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



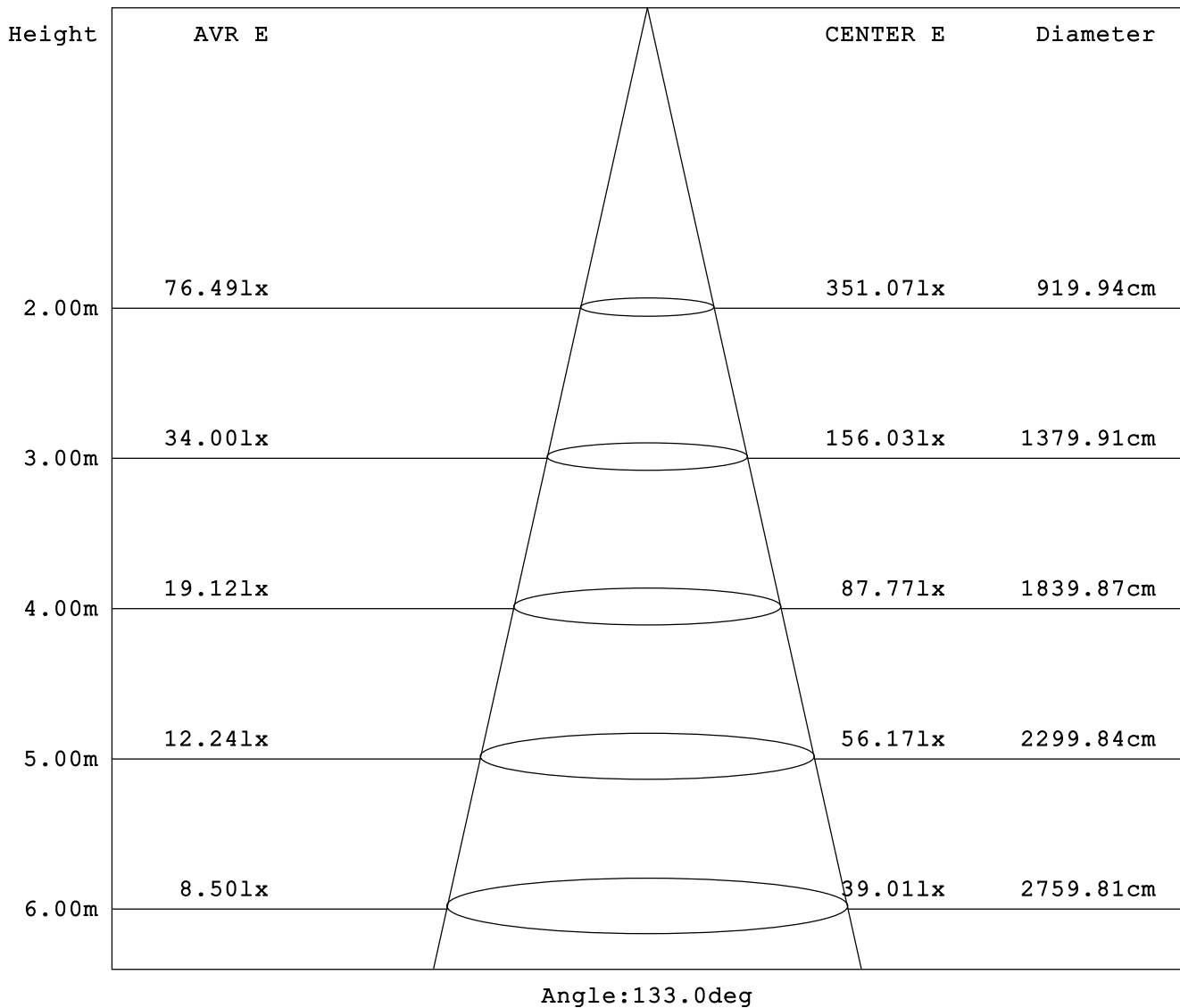
Test System:  
 Temperature: 25.3 DEG  
 Operators:  
 Test Date: 2025.03.22

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-D04040-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-D04040-TY2	WEIGHT:
SPECIFICATION:5050LED 4000K Type II	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
5.0	1390	1430	1443	1427	1395	1351	1329	1353	0- 5	33.21	33.21
10.0	1400	1468	1491	1463	1408	1314	1270	1319	5- 10	99.51	132.7
15.0	1420	1505	1527	1494	1436	1279	1219	1284	10- 15	165.3	298.0
20.0	1455	1542	1541	1519	1484	1246	1169	1251	15- 20	230.4	528.5
25.0	1510	1576	1538	1538	1548	1215	1118	1219	20- 25	294.6	823.1
30.0	1581	1602	1518	1551	1627	1181	1063	1180	25- 30	357.2	1180
35.0	1668	1621	1484	1555	1717	1145	1003	1142	30- 35	417.3	1598
40.0	1768	1626	1432	1548	1813	1100	939.3	1096	35- 40	473.5	2071
45.0	1874	1610	1356	1527	1913	1043	877.0	1039	40- 45	523.4	2595
50.0	1981	1565	1248	1473	2028	973.6	809.2	968.3	45- 50	563.7	3158
55.0	2100	1471	1090	1362	2170	889.6	731.7	875.6	50- 55	590.0	3749
60.0	2246	1296	841.4	1179	2353	782.9	639.8	762.9	55- 60	598.3	4347
65.0	2407	978.3	537.5	850.6	2318	635.3	526.0	608.9	60- 65	576.8	4924
70.0	2286	431.0	172.7	363.1	1789	409.0	311.3	387.1	65- 70	483.1	5407
75.0	1684	125.1	83.91	115.9	948.6	167.4	89.25	150.8	70- 75	309.2	5716
80.0	844.1	69.50	41.56	62.19	212.2	35.53	11.47	34.12	75- 80	137.7	5854
85.0	162.9	26.77	13.37	25.49	16.27	7.914	3.594	7.427	80- 85	40.26	5894
90.0	9.083	6.643	2.522	6.318	7.130	2.162	3.259	2.061	85- 90	7.264	5902
95.0	4.278	4.369	1.875	4.079	7.415	2.875	3.371	2.815	90- 95	2.271	5904
100.0	5.243	4.324	2.031	3.946	7.898	3.700	3.728	3.702	95-100	2.228	5906
105.0	6.099	4.636	2.500	4.190	8.359	4.480	4.219	4.567	100-105	2.458	5908
110.0	6.779	5.082	2.991	4.545	8.710	5.216	4.822	5.343	105-110	2.692	5911
115.0	7.283	5.550	3.460	4.944	8.995	5.863	5.424	6.074	110-115	2.873	5914
120.0	7.744	5.996	3.951	5.343	9.390	6.420	6.027	6.673	115-120	3.002	5917
125.0	8.271	6.464	4.442	5.742	9.960	6.933	6.608	7.227	120-125	3.085	5920
130.0	8.929	6.933	4.956	6.185	10.39	7.512	7.166	7.759	125-130	3.122	5923
135.0	9.499	7.356	5.491	6.607	10.53	8.070	7.746	8.225	130-135	3.102	5926
140.0	9.741	7.691	5.983	7.006	10.33	8.560	8.349	8.668	135-140	2.994	5929
145.0	9.653	7.958	6.429	7.316	10.04	8.850	8.818	8.912	140-145	2.790	5932
150.0	9.456	8.136	6.853	7.560	9.763	8.961	9.108	8.979	145-150	2.510	5935
155.0	9.258	8.292	7.233	7.804	9.565	9.028	9.309	9.001	150-155	2.183	5937
160.0	9.126	8.449	7.612	8.025	9.434	9.050	9.443	8.979	155-160	1.825	5939
165.0	9.083	8.605	7.992	8.225	9.368	9.050	9.510	8.957	160-165	1.446	5940
170.0	9.104	8.783	8.349	8.447	9.302	9.028	9.465	8.912	165-170	1.049	5941
175.0	9.104	8.894	8.639	8.624	9.236	8.939	9.287	8.779	170-175	0.636	5942
180.0	9.192	9.006	8.952	8.779	9.192	8.872	9.063	8.624	175-180	0.212	5942
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

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

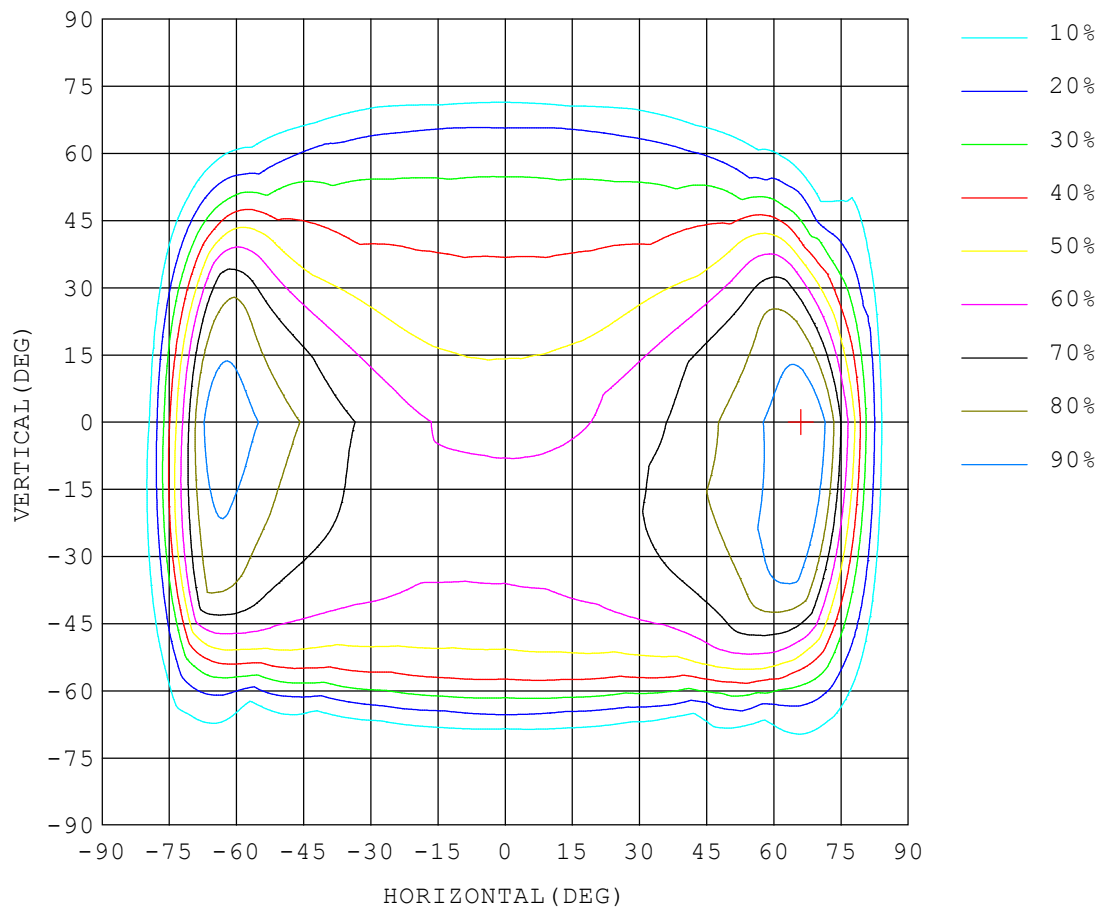
Test Set: 5.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:10.000 m  
Remarks:

## ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Muller	TYPE: IL-ST11-D04040-TY2	WEIGHT:
SPECIFICATION: 5050LED 4000K Type II	DIMENSION:	SERIAL No.:

UNIT: cd



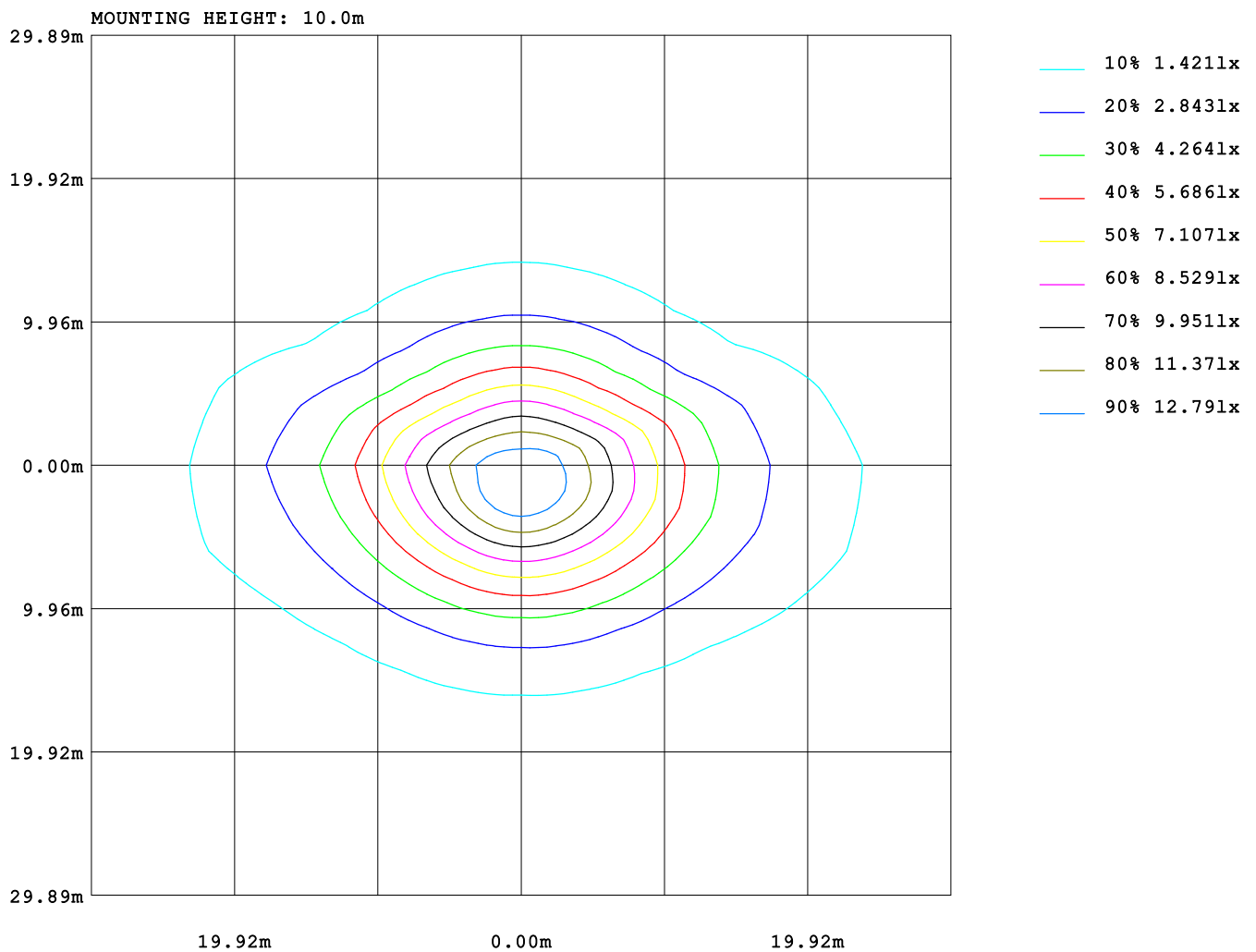
Test System:  
Temperature: 25.3 DEG  
Operators:  
Test Date: 2025.03.22

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-D04040-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:

<b>MANUFACTURER: ILUMEN GMBH</b>	<b>Address:</b>	
<b>NAME: Muller</b>	<b>TYPE:IL-ST11-D04040-TY2</b>	<b>WEIGHT:</b>
<b>SPECIFICATION:5050LED 4000K Type II</b>	<b>DIMENSION:</b>	<b>SERIAL No.:</b>

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210
0.0	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389
5.0	1390	1404	1417	1430	1437	1443	1443	1442	1435	1427	1415	1402	1395	1381	1364
10.0	1400	1426	1449	1468	1481	1491	1491	1489	1477	1463	1442	1421	1408	1380	1346
15.0	1420	1455	1484	1505	1517	1526	1527	1524	1510	1494	1470	1442	1436	1389	1333
20.0	1455	1502	1529	1542	1542	1544	1541	1539	1528	1519	1503	1478	1484	1414	1324
25.0	1510	1566	1583	1576	1555	1546	1538	1538	1533	1538	1542	1532	1548	1452	1321
30.0	1581	1640	1640	1602	1557	1533	1518	1521	1523	1551	1582	1594	1627	1505	1321
35.0	1668	1727	1695	1621	1544	1503	1484	1487	1501	1555	1620	1666	1717	1566	1320
40.0	1768	1818	1745	1626	1518	1461	1432	1439	1467	1548	1653	1737	1813	1633	1311
45.0	1874	1908	1783	1610	1471	1397	1356	1370	1416	1527	1669	1804	1913	1701	1287
50.0	1981	1993	1796	1565	1384	1294	1248	1266	1329	1473	1665	1865	2028	1765	1245
55.0	2100	2086	1790	1471	1239	1138	1090	1113	1187	1362	1634	1932	2170	1832	1180
60.0	2246	2196	1769	1296	1006	898	841	877	955	1179	1562	2011	2353	1923	1079
65.0	2407	2335	1705	978	650	529	538	515	607	851	1404	2116	2318	1917	900
70.0	2286	2197	1317	431	231	191	173	188	217	363	955	2048	1789	1450	553
75.0	1684	1600	627	125	98.1	94.4	83.9	92.0	93.4	116	267	1509	949	623	226
80.0	844	674	125	69.5	54.6	49.8	41.5	48.6	53.8	62.1	75.8	539	212	87.1	49.1
85.0	163	124	37.0	26.7	17.2	17.9	13.3	18.0	17.2	25.4	28.8	106	16.2	10.6	14.0
90.0	9.08	12.3	5.65	6.64	2.96	5.01	2.52	4.82	2.73	6.31	4.94	10.9	7.13	4.30	5.63
95.0	4.27	6.55	3.32	4.36	2.23	3.78	1.87	3.61	2.13	4.07	2.97	6.24	7.41	5.05	5.67
100.0	5.24	6.71	3.88	4.32	2.27	3.40	2.03	3.37	2.15	3.94	3.41	6.32	7.89	5.93	6.20
105.0	6.09	7.15	4.61	4.63	2.76	3.62	2.50	3.59	2.64	4.19	4.03	6.70	8.35	6.62	6.71
110.0	6.77	7.59	5.32	5.08	3.30	3.96	2.99	3.90	3.13	4.54	4.65	7.11	8.71	7.17	7.18
115.0	7.28	7.96	5.98	5.55	3.81	4.29	3.46	4.24	3.60	4.94	5.22	7.42	8.99	7.63	7.58
120.0	7.74	8.32	6.56	5.99	4.35	4.67	3.95	4.60	4.09	5.34	5.71	7.66	9.39	8.14	7.98
125.0	8.27	8.72	7.09	6.46	4.88	5.07	4.44	4.97	4.57	5.74	6.17	7.99	9.96	8.74	8.44
130.0	8.92	9.18	7.60	6.93	5.44	5.50	4.95	5.42	5.11	6.18	6.66	8.41	10.3	9.31	8.95
135.0	9.49	9.58	8.02	7.35	6.00	5.97	5.49	5.89	5.64	6.60	7.12	8.83	10.5	9.66	9.38
140.0	9.74	9.78	8.31	7.69	6.47	6.42	5.98	6.34	6.13	7.00	7.47	9.07	10.3	9.66	9.60
145.0	9.65	9.73	8.42	7.95	6.87	6.82	6.42	6.74	6.53	7.31	7.69	9.09	10.0	9.51	9.62
150.0	9.45	9.58	8.49	8.13	7.25	7.20	6.85	7.14	6.93	7.56	7.83	9.00	9.76	9.33	9.55
155.0	9.25	9.44	8.56	8.29	7.56	7.56	7.23	7.52	7.26	7.80	7.94	8.92	9.56	9.18	9.46
160.0	9.12	9.36	8.60	8.44	7.85	7.89	7.61	7.86	7.60	8.02	8.05	8.83	9.43	9.09	9.38
165.0	9.08	9.29	8.67	8.60	8.14	8.21	7.99	8.17	7.93	8.22	8.18	8.78	9.36	9.02	9.31
170.0	9.10	9.22	8.75	8.78	8.41	8.52	8.34	8.48	8.22	8.44	8.33	8.81	9.30	9.02	9.24
175.0	9.10	9.18	8.84	8.89	8.63	8.74	8.63	8.70	8.44	8.62	8.49	8.83	9.23	8.96	9.15
180.0	9.19	9.16	8.95	9.00	8.86	8.92	8.95	8.88	8.71	8.77	8.62	8.81	9.19	8.98	9.07

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:

<b>MANUFACTURER: ILUMEN GMBH</b>	<b>Address:</b>	
<b>NAME: Muller</b>	<b>TYPE:IL-ST11-D04040-TY2</b>	<b>WEIGHT:</b>
<b>SPECIFICATION:5050LED 4000K Type II</b>	<b>DIMENSION:</b>	<b>SERIAL No.:</b>

UNIT: cd

C (DEG) γ (DEG)	225	240	255	270	285	300	315	330	345
0.0	1389	1389	1389	1389	1389	1389	1389	1389	1389
5.0	1351	1338	1333	1329	1333	1340	1353	1367	1383
10.0	1314	1288	1275	1270	1276	1292	1319	1352	1386
15.0	1279	1242	1223	1219	1224	1244	1284	1342	1401
20.0	1246	1196	1175	1169	1175	1198	1251	1336	1429
25.0	1215	1153	1127	1118	1125	1151	1219	1332	1470
30.0	1181	1108	1074	1063	1071	1105	1180	1332	1525
35.0	1145	1058	1016	1003	1014	1055	1142	1330	1589
40.0	1100	1008	956	939	953	1003	1096	1318	1658
45.0	1043	952	894	877	890	947	1039	1289	1722
50.0	974	882	823	809	819	873	968	1238	1782
55.0	890	796	740	732	736	783	876	1164	1838
60.0	783	695	644	640	638	679	763	1051	1911
65.0	635	565	526	526	516	547	609	856	1835
70.0	409	357	324	311	314	351	387	508	1318
75.0	167	156	91.1	89.2	85.2	143	151	209	606
80.0	35.5	27.8	11.9	11.4	9.46	26.9	34.1	48.2	80.8
85.0	7.91	8.30	1.47	3.59	1.27	6.51	7.42	14.0	10.3
90.0	2.16	3.63	1.47	3.25	1.45	3.51	2.06	5.58	4.54
95.0	2.87	3.72	1.96	3.37	1.94	3.62	2.81	5.58	4.92
100.0	3.70	4.10	2.59	3.72	2.56	4.04	3.70	6.17	5.84
105.0	4.48	4.64	3.31	4.21	3.28	4.62	4.56	6.77	6.56
110.0	5.21	5.22	4.05	4.82	4.04	5.24	5.34	7.32	7.14
115.0	5.86	5.78	4.76	5.42	4.77	5.84	6.07	7.83	7.71
120.0	6.42	6.33	5.46	6.02	5.47	6.44	6.67	8.36	8.23
125.0	6.93	6.85	6.08	6.60	6.14	7.00	7.22	8.80	8.78
130.0	7.51	7.41	6.73	7.16	6.76	7.53	7.75	9.19	9.29
135.0	8.07	7.96	7.36	7.74	7.36	8.06	8.22	9.53	9.55
140.0	8.56	8.50	8.01	8.34	7.99	8.58	8.66	9.66	9.53
145.0	8.85	8.90	8.54	8.81	8.48	8.95	8.91	9.64	9.38
150.0	8.96	9.12	8.88	9.10	8.79	9.15	8.97	9.53	9.20
155.0	9.02	9.26	9.08	9.30	8.97	9.24	9.00	9.39	9.03
160.0	9.05	9.33	9.19	9.44	9.08	9.29	8.97	9.28	8.89
165.0	9.05	9.33	9.21	9.51	9.13	9.29	8.95	9.17	8.81
170.0	9.02	9.28	9.15	9.46	9.11	9.24	8.91	9.08	8.74
175.0	8.93	9.12	8.97	9.28	8.93	9.07	8.77	8.93	8.63
180.0	8.87	8.95	8.83	9.06	8.77	8.82	8.62	8.78	8.61

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: