

# Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	415.3 cd per klm.
(Luminaire orientation as tested.)	-0.5 degrees vertical
	5.0 degrees horizontal

Beam Spread	At 10% of Imax	146.0V x 146.4H
	At 50% of Imax	109.1V x 109.0H
	At 90% of Imax	65.7V x 64.7H

Beam Flux	Total	1097.9 lumens per klm.
	To 10% of Imax	1080.8 lumens per klm.
	To 50% of Imax	870.8 lumens per klm.
	To 90% of Imax	393.7 lumens per klm.

Upward LOR	0.0 %
Downward LOR	109.8 %

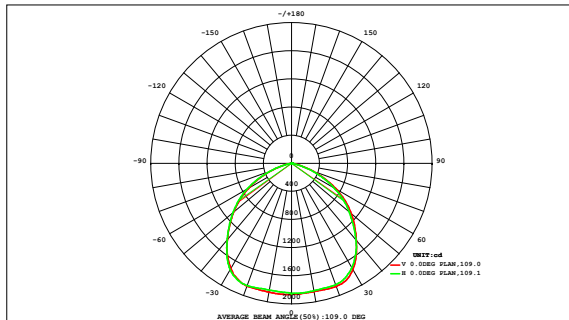
Luminaire Efficiency (Light Output Ratio)	109.8 %
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C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 23 January 2023

γ Range: 0 - 90DEG  
γ Interval: 2.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity: 65.0%  
Test Distance: 6.340m [K=1.0000]  
Remarks:

## LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 96RAY50/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F300 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	Shielding Angle:



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	96RAY50/WW	Imax (cd)	1869
NOMINAL POWER(W)	50	AVAILABILITY (%)	108.3
RATED VOLTAGE (V)	230	Avai. FLUX(lm)	4875
NOMINAL FLUX(lm)	4500	LOR (%)	109.8
LAMPS INSIDE	1	TOTAL FLUX(lm)	4940
TEST VOLTAGE (V)	230	θ @50% (H,V)	109,109DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.08	0.07	0.06	0.04	0.04	0.03	0.02	0.01	0.00	0.70	0.00
90	0.00	0.01	0.03	0.15	0.77	1.73	2.88	3.80	4.23	4.20	3.70	2.72	1.58	0.63	0.10	0.02	0.01	0.00	26.6	10.9
80	0.00	0.02	0.30	1.84	4.87	8.38	11.9	14.5	15.8	15.7	14.2	11.5	8.06	4.58	1.58	0.20	0.02	0.00	113	107
70	0.00	0.09	1.48	5.14	10.5	16.4	21.7	25.6	27.6	27.5	25.2	21.2	15.8	10.0	4.82	1.28	0.06	0.00	214	211
60	0.01	0.31	2.95	8.50	15.8	23.4	30.2	35.2	37.9	37.7	34.7	29.5	22.7	15.2	8.09	2.71	0.24	0.00	305	303
50	0.01	0.61	4.37	11.5	20.3	29.3	37.6	44.3	48.1	48.0	44.0	37.0	28.5	19.5	11.0	4.10	0.51	0.01	389	387
40	0.01	0.90	5.56	13.8	23.7	34.0	44.3	51.8	55.0	54.7	51.1	43.7	33.3	22.9	13.2	5.24	0.79	0.01	454	453
30	0.01	1.12	6.41	15.3	26.0	37.6	48.5	54.4	55.9	55.6	53.5	47.5	37.0	25.1	14.6	6.04	1.00	0.01	486	485
20	0.01	1.25	6.87	16.1	27.2	39.6	50.1	54.5	55.9	55.5	53.8	49.2	39.0	26.5	15.5	6.47	1.12	0.01	499	498
10	0.01	1.24	6.84	16.1	27.0	39.2	49.4	53.9	55.6	56.2	54.4	49.5	39.2	26.7	15.5	6.47	1.12	0.01	499	498
0	0.01	1.10	6.32	15.1	25.6	37.0	47.6	53.5	55.6	55.8	53.9	47.7	37.2	25.4	14.7	6.04	1.00	0.01	484	483
-10	0.01	0.87	5.43	13.5	23.3	33.5	43.6	50.8	54.1	54.1	50.7	43.5	33.5	22.9	13.1	5.21	0.79	0.01	449	448
-20	0.01	0.58	4.22	11.2	19.9	28.7	37.0	43.8	47.5	47.6	44.0	37.1	28.4	19.4	10.8	4.03	0.51	0.01	385	383
-30	0.01	0.29	2.78	8.26	15.4	22.9	29.5	34.5	37.3	37.4	34.5	29.3	22.5	14.9	7.90	2.62	0.24	0.01	300	298
-40	0.01	0.08	1.34	4.88	10.0	15.7	20.8	24.7	26.7	26.7	24.6	20.5	15.3	9.66	4.61	1.23	0.06	0.01	207	204
-50	0.01	0.02	0.30	1.77	4.46	7.78	11.0	13.5	14.8	14.8	13.3	10.7	7.53	4.18	1.61	0.25	0.02	0.01	106	98.9
-60	0.00	0.02	0.03	0.14	0.60	1.41	2.35	3.16	3.64	3.63	3.15	2.33	1.39	0.58	0.12	0.03	0.02	0.01	22.6	7.14
-70	0.00	0.02	0.03	0.03	0.04	0.05	0.06	0.07	0.07	0.07	0.07	0.06	0.05	0.04	0.03	0.03	0.02	0.01	0.74	0.00
-80	0.00	0.02	0.03	0.03	0.04	0.05	0.06	0.07	0.07	0.07	0.07	0.06	0.05	0.04	0.03	0.03	0.02	0.01	0.74	0.00
-90	0.00	0.02	0.03	0.03	0.04	0.05	0.06	0.07	0.07	0.07	0.07	0.06	0.05	0.04	0.03	0.03	0.02	0.01	0.74	0.00
HORIZONTAL (DEG)																				
Φ t	0.11	8.54	55.3	143	256	377	489	562	596	595	559	483	371	248	137	52.0	7.55	0.10	4940	---
Φ a	0.00	3.44	50.8	140	252	373	485	558	592	591	555	479	367	244	133	47.5	2.82	0.00	---	4875

one-half-peak spread: U:37.0,D:35.1 , L:35.2,R:34.2

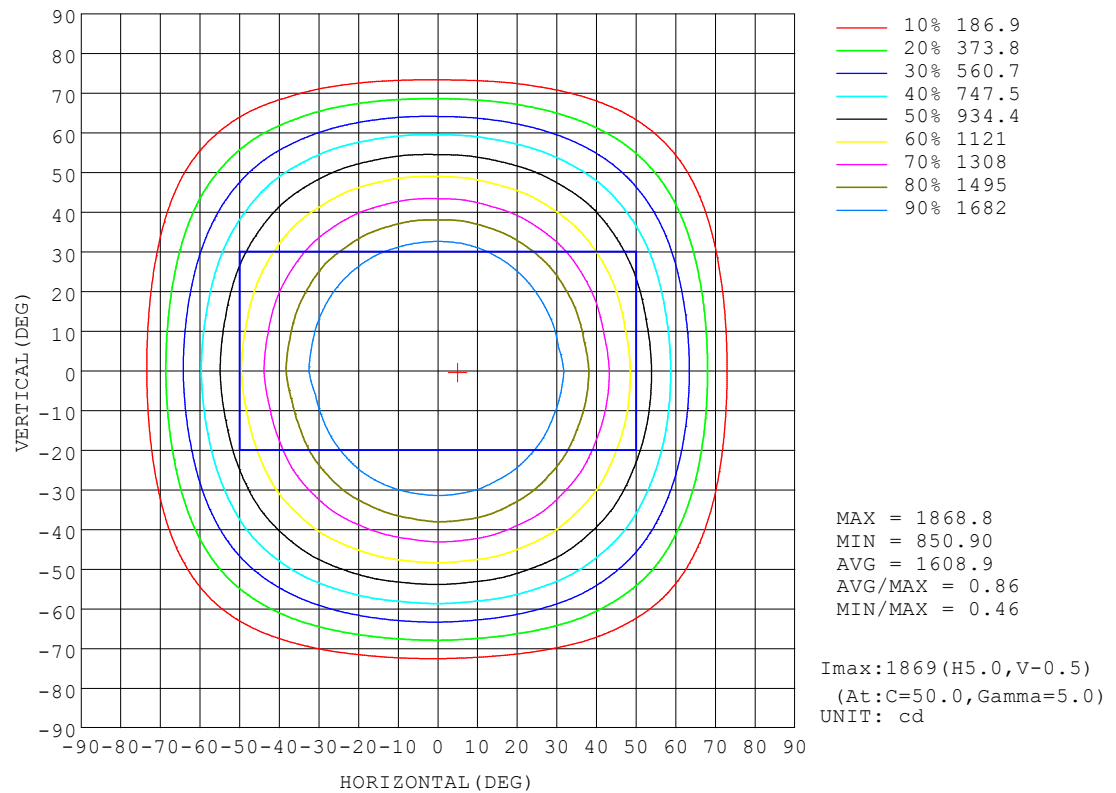
NEMA Beam Type: Type 7

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:23 January 2023

γ Range: 0 - 90DEG  
γ Interval: 2.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity:65.0%  
Test Distance:6.340m [K=1.0000]  
Remarks:

ISOCANDELA DIAGRAM

NAME: 96RAY50/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F300 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	Shielding Angle:

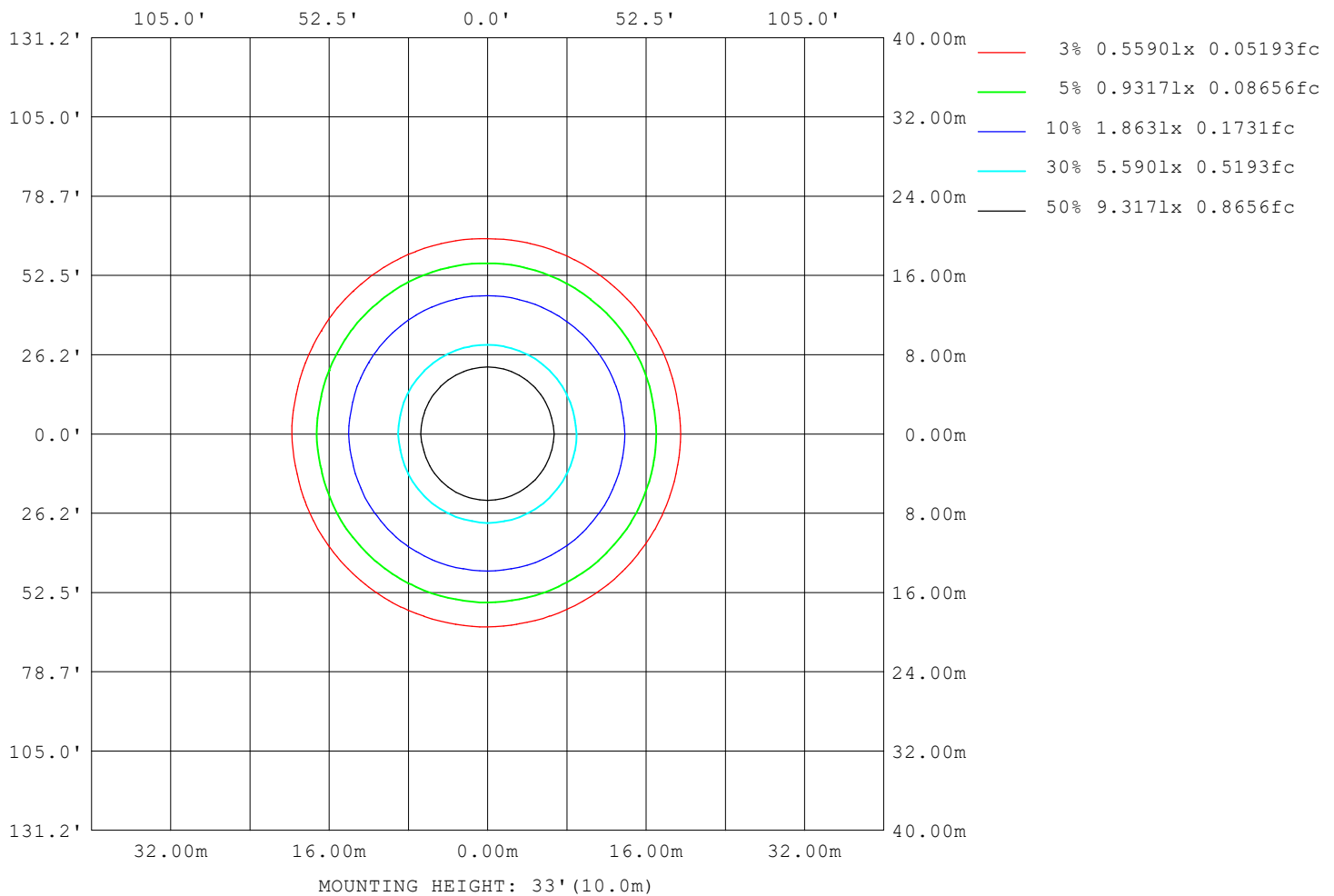


C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3°C  
 Operators:  
 Test Date:23 January 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
 Humidity:65.0%  
 Test Distance:6.340m [K=1.0000]  
 Remarks:

## ISOLUX DIAGRAM

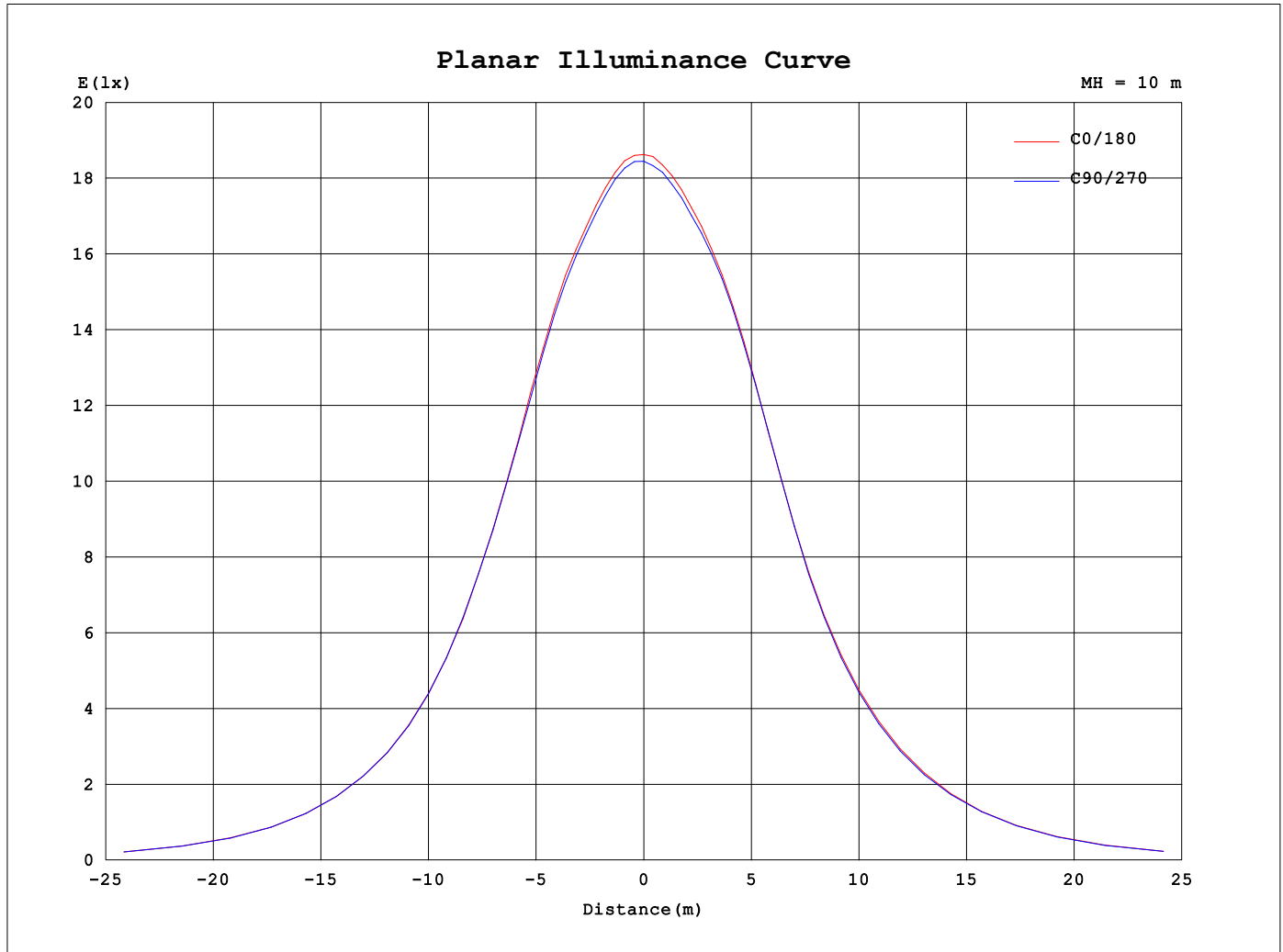
NAME: 96RAY50/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F300 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 23 January 2023

γ Range: 0 - 90DEG  
γ Interval: 2.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity: 65.0%  
Test Distance: 6.340m [K=1.0000]  
Remarks:

## Planar Illuminance Curve

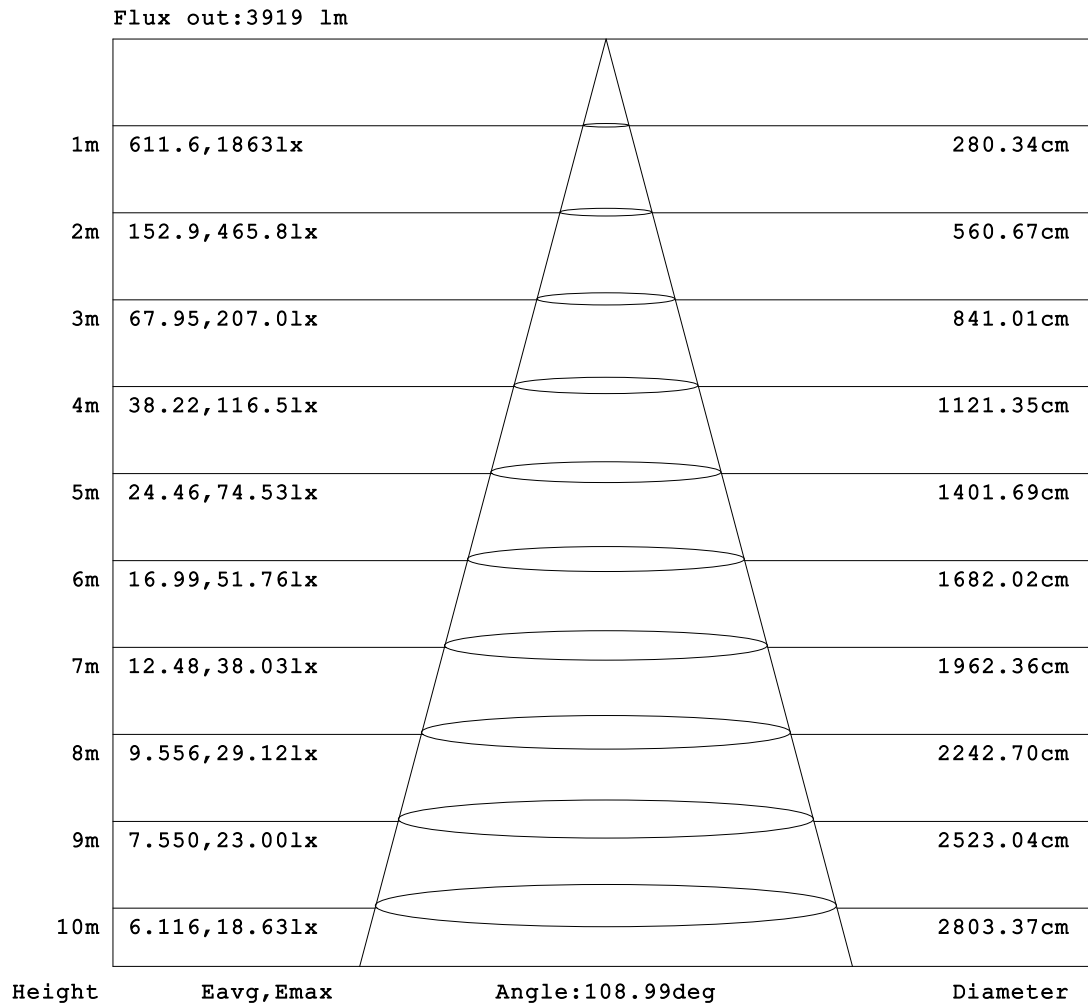


C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 23 January 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity: 65.0%  
Test Distance: 6.340m [K=1.0000]  
Remarks:

**AAI Figure**

NAME: 96RAY50/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F300 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	Shielding Angle:



**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3°C  
 Operators:  
 Test Date:23 January 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
 Humidity:65.0%  
 Test Distance:6.340m [K=1.0000]  
 Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: 96RAY50/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F300 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	Shielding Angle:

Table--1

UNIT: cd

H (DEG) V (DEG)	-90	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
-90	1.69	1.82	1.96	1.96	1.96	1.95	1.95	1.94	1.94	1.95	1.96	1.96	1.97	1.98	1.99	1.99	2.00	2.01	2.01
-85	1.69	1.83	1.96	1.96	1.95	1.94	1.93	1.93	1.93	1.93	1.94	1.95	1.96	1.98	2.00	2.01	2.02	2.04	2.05
-80	1.69	1.83	1.96	1.96	2.00	2.04	2.08	2.13	2.18	2.24	2.49	3.17	3.61	3.86	3.94	4.00	3.97	4.05	4.08
-75	1.69	1.83	1.96	2.03	2.10	2.22	2.32	4.18	5.79	15.7	30.4	42.5	57.8	74.0	87.0	97.2	104	110	112
-70	1.69	1.83	2.00	2.11	2.27	4.05	6.91	31.2	56.7	91.5	124	160	191	219	243	262	276	286	290
-65	1.69	1.82	2.04	2.23	4.20	13.0	48.7	95.8	148	202	258	310	358	400	433	460	480	491	495
-60	1.69	1.82	2.08	2.35	7.76	48.2	109	180	256	333	406	472	531	583	624	655	676	690	696
-55	1.69	1.84	2.14	4.95	32.9	96.1	180	275	372	466	553	632	699	756	807	846	871	888	895
-50	1.69	1.86	2.20	7.60	61.3	149	257	374	488	597	694	784	862	927	981	1021	1045	1062	1071
-45	1.69	1.87	2.26	19.6	97.6	205	335	469	600	719	824	923	1008	1072	1129	1178	1209	1230	1242
-40	1.69	1.88	2.69	37.5	132	263	410	559	702	829	943	1044	1134	1211	1275	1333	1378	1409	1428
-35	1.69	1.89	4.14	53.8	169	317	479	641	789	928	1047	1153	1253	1344	1423	1495	1548	1577	1588
-30	1.69	1.90	5.45	71.8	202	367	542	711	867	1012	1141	1254	1364	1474	1567	1637	1682	1706	1717
-25	1.69	1.90	6.60	89.2	234	410	596	771	935	1081	1218	1346	1471	1588	1679	1738	1775	1795	1801
-20	1.69	1.90	7.59	104	262	448	641	823	990	1140	1282	1422	1563	1675	1754	1803	1828	1836	1838
-15	1.69	1.90	8.38	116	284	480	679	864	1033	1188	1336	1483	1630	1737	1801	1827	1834	1832	1834
-10	1.69	1.90	8.99	125	301	504	708	897	1067	1224	1378	1535	1678	1774	1825	1833	1827	1830	1838
-5	1.69	1.90	9.38	131	312	521	727	920	1093	1255	1413	1575	1712	1799	1832	1829	1826	1835	1849
0	1.69	1.89	9.56	133	316	528	736	932	1108	1272	1437	1604	1746	1838	1863	1857	1852	1857	1863
5	1.69	1.89	9.51	132	313	524	729	924	1098	1262	1425	1590	1736	1829	1861	1855	1845	1843	1836
10	1.69	1.88	9.23	127	304	510	712	903	1076	1239	1397	1558	1707	1809	1855	1858	1845	1836	1831
15	1.69	1.88	8.71	118	289	488	685	872	1046	1206	1359	1513	1658	1770	1839	1857	1855	1844	1838
20	1.69	1.87	7.96	107	268	458	650	834	1007	1160	1305	1447	1583	1708	1794	1839	1856	1853	1851
25	1.69	1.85	6.97	92.6	241	421	607	784	953	1101	1235	1364	1495	1615	1709	1775	1812	1828	1827
30	1.69	1.84	5.75	75.2	210	378	554	725	885	1028	1156	1275	1390	1492	1586	1664	1712	1744	1750
35	1.69	1.82	4.31	57.1	178	329	493	653	804	942	1067	1178	1274	1363	1446	1512	1561	1592	1605
40	1.69	1.81	2.65	40.4	141	276	424	573	711	845	964	1067	1152	1232	1301	1354	1396	1421	1426
45	1.69	1.79	2.14	21.8	106	219	349	483	614	735	848	943	1024	1097	1157	1199	1232	1251	1253
50	1.69	1.76	2.06	9.01	69.4	162	272	387	505	618	719	806	885	952	1003	1041	1071	1086	1087
55	1.69	1.74	1.98	5.62	38.7	107	194	289	390	488	578	660	730	793	840	875	903	916	917
60	1.69	1.71	1.89	2.18	10.3	52.9	116	194	274	354	428	497	562	618	659	691	714	726	727
65	1.69	1.71	1.84	2.04	4.98	14.5	37.9	99.0	164	222	279	334	386	430	466	494	514	524	524
70	1.69	1.71	1.78	1.89	2.07	4.13	5.28	27.2	67.3	108	141	181	219	250	276	294	307	313	313
75	1.69	1.70	1.72	1.80	1.87	1.84	1.73	4.04	8.98	22.8	41.5	58.6	77.4	95.1	109	119	126	128	127
80	1.69	1.70	1.71	1.71	1.76	1.68	1.52	1.66	1.85	1.93	2.48	4.26	5.80	6.99	7.86	8.58	9.06	8.89	8.46
85	1.69	1.69	1.70	1.69	1.69	1.64	1.57	1.59	1.64	1.65	1.66	1.66	1.65	1.65	1.65	1.67	1.68	1.70	1.71
90	1.69	1.69	1.68	1.68	1.68	1.66	1.64	1.62	1.60	1.60	1.60	1.60	1.59	1.59	1.59	1.59	1.59	1.60	1.60

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: MEDIUM

Temperature:25.3°C

Operators:

Test Date:23 January 2023

γ Range: 0 - 90DEG

γ Interval: 2.5DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456

Humidity:65.0%

Test Distance:6.340m [K=1.0000]

Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: 96RAY50/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F300 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	Shielding Angle:

Table--2

UNIT: cd

H (DEG) V (DEG)	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	
-90	2.02	2.02	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.04	2.03	2.03	2.03	2.02	2.02	2.02	2.02	2.01	
-85	2.05	2.04	2.03	2.02	1.99	1.97	1.94	1.92	1.93	1.94	1.94	1.95	1.96	1.97	1.99	2.00	2.01	2.01	
-80	4.01	3.88	3.59	3.30	3.07	2.83	2.63	2.33	2.21	2.16	2.10	2.04	2.01	1.98	1.96	1.98	2.00	2.01	
-75	107	101	95.0	86.8	76.8	64.8	48.3	31.4	14.2	3.62	3.06	2.26	2.14	2.03	1.99	1.96	1.99	2.01	
-70	286	275	260	239	212	183	152	117	85.9	54.9	27.2	4.27	2.93	2.17	2.03	1.98	1.98	2.01	
-65	488	474	453	425	390	348	299	246	189	135	86.3	41.8	9.33	2.89	2.12	2.00	1.97	2.01	
-60	688	672	649	615	571	519	461	393	315	240	167	97.9	42.5	4.14	2.20	2.02	1.96	2.01	
-55	885	866	841	800	745	685	618	536	448	356	260	168	86.5	27.7	3.03	2.07	1.97	2.01	
-50	1061	1042	1016	971	913	847	766	672	574	469	357	243	137	54.3	3.85	2.12	1.98	2.01	
-45	1233	1212	1178	1124	1064	994	904	801	693	575	450	319	194	87.3	14.3	2.17	1.98	2.01	
-40	1417	1390	1343	1279	1207	1122	1027	921	806	674	536	391	251	120	30.8	2.31	1.99	2.01	
-35	1582	1556	1509	1437	1350	1249	1136	1028	906	765	614	459	303	158	45.6	2.74	2.00	2.01	
-30	1707	1681	1630	1567	1481	1365	1248	1122	990	844	684	520	352	191	61.8	3.13	2.00	2.01	
-25	1795	1774	1734	1670	1583	1478	1345	1207	1062	911	747	572	394	222	77.6	3.46	2.01	2.01	
-20	1838	1833	1810	1756	1669	1566	1429	1277	1123	969	799	617	430	248	90.9	3.75	2.01	2.01	
-15	1841	1845	1842	1812	1738	1627	1495	1335	1176	1016	841	652	459	269	102	3.97	2.01	2.01	
-10	1844	1846	1852	1840	1779	1675	1546	1384	1217	1049	871	677	479	284	109	4.14	2.01	2.01	
-5	1858	1851	1852	1851	1806	1710	1579	1412	1240	1066	889	692	492	294	114	4.25	2.02	2.01	
0	1868	1859	1854	1860	1817	1726	1593	1420	1247	1071	896	697	497	297	116	4.29	2.02	2.01	
5	1831	1825	1824	1827	1787	1698	1573	1399	1230	1059	886	691	492	294	115	4.36	2.00	2.01	
10	1825	1824	1828	1822	1770	1672	1540	1366	1199	1035	866	675	480	285	110	4.34	1.98	2.01	
15	1833	1833	1829	1800	1731	1630	1492	1327	1167	1005	835	650	459	270	102	4.24	1.96	2.01	
20	1843	1832	1804	1754	1674	1564	1418	1272	1121	966	799	617	431	249	90.7	4.04	1.95	2.01	
25	1817	1787	1747	1683	1596	1473	1335	1201	1062	917	751	576	396	223	76.8	3.73	1.93	2.01	
30	1737	1703	1649	1573	1475	1364	1244	1119	990	851	693	526	356	193	60.1	3.31	1.91	2.01	
35	1597	1560	1504	1430	1341	1245	1143	1030	909	773	624	467	309	160	43.3	2.77	1.89	2.01	
40	1419	1387	1339	1283	1207	1122	1033	933	815	684	547	400	257	123	29.7	2.12	1.87	2.01	
45	1247	1221	1180	1133	1071	997	916	821	708	588	460	329	200	89.4	14.6	1.89	1.86	2.01	
50	1081	1061	1025	984	931	861	781	691	591	482	367	253	145	53.4	4.81	1.82	1.84	2.01	
55	912	895	863	823	772	707	634	555	465	369	271	177	91.0	27.7	3.31	1.76	1.83	2.01	
60	722	707	678	642	597	543	480	409	335	257	179	101	37.0	5.28	1.80	1.69	1.81	2.01	
65	519	506	484	453	415	371	321	267	209	151	84.2	20.5	8.48	3.00	1.72	1.67	1.81	2.01	
70	312	304	289	269	241	210	174	134	96.6	51.6	16.0	2.66	2.54	1.74	1.64	1.65	1.81	2.01	
75	127	123	116	106	88.6	68.6	49.7	33.8	16.5	5.21	2.56	1.51	1.60	1.63	1.63	1.63	1.82	2.01	
80	8.30	7.94	7.23	6.37	5.35	4.29	3.22	2.15	1.82	1.73	1.55	1.40	1.53	1.62	1.61	1.64	1.82	2.01	
85	1.70	1.69	1.67	1.66	1.65	1.64	1.64	1.64	1.62	1.61	1.56	1.53	1.58	1.63	1.64	1.65	1.83	2.01	
90	1.60	1.60	1.60	1.60	1.61	1.62	1.63	1.63	1.64	1.65	1.65	1.65	1.66	1.66	1.66	1.66	1.84	2.01	

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: MEDIUM

Temperature:25.3°C

Operators:

Test Date:23 January 2023

γ Range: 0 - 90DEG

γ Interval: 2.5DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456

Humidity:65.0%

Test Distance:6.340m [K=1.0000]

Remarks: