

# Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	738.3 cd per klm.
(Luminaire orientation as tested.)	0.0 degrees vertical
	0.0 degrees horizontal

Beam Spread	At 10% of Imax	128.2V x 128.4H
	At 50% of Imax	63.5V x 63.0H
	At 90% of Imax	12.6V x 13.4H

Beam Flux	Total	1067.5 lumens per klm.
	To 10% of Imax	1051.0 lumens per klm.
	To 50% of Imax	433.0 lumens per klm.
	To 90% of Imax	28.8 lumens per klm.

Upward LOR	0.0 %
Downward LOR	106.7 %

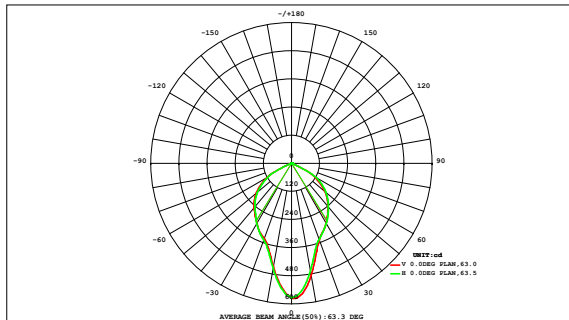
Luminaire Efficiency (Light Output Ratio)	106.7 %
---	---------

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 20 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: 96RAY10/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F150 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	Shielding Angle:



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	96RAY10/WW	Imax (cd)	575.9
NOMINAL POWER (W)	10	AVAILABILITY (%)	104.7
RATED VOLTAGE (V)	230	Avai. FLUX (lm)	816.9
NOMINAL FLUX (lm)	780	LOR (%)	106.7
LAMPS INSIDE	1	TOTAL FLUX (lm)	832.2
TEST VOLTAGE (V)	230	θ @50% (H,V)	63,64DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.16	0.00
90	0.00	0.00	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.01	0.00	0.00	0.48	0.00
80	0.00	0.00	0.01	0.03	0.07	0.22	0.67	1.20	1.54	1.56	1.27	0.72	0.24	0.07	0.02	0.01	0.00	0.00	7.65	4.59
70	0.00	0.01	0.02	0.09	0.72	2.07	3.32	4.11	4.56	4.60	4.21	3.47	2.30	0.83	0.10	0.02	0.01	0.00	30.4	29.0
60	0.00	0.01	0.04	0.57	2.26	3.71	5.02	6.04	6.56	6.57	6.10	5.19	3.93	2.50	0.68	0.04	0.01	0.00	49.2	48.4
50	0.00	0.01	0.12	1.46	3.20	4.89	6.36	7.48	8.10	8.09	7.49	6.47	5.08	3.43	1.65	0.13	0.01	0.00	64.0	63.4
40	0.00	0.01	0.31	2.06	3.90	5.73	7.41	8.89	9.73	9.70	8.81	7.43	5.87	4.12	2.25	0.37	0.01	0.00	76.6	76.2
30	0.00	0.01	0.52	2.39	4.37	6.31	8.31	10.1	11.6	11.5	10.0	8.24	6.39	4.55	2.59	0.60	0.01	0.00	87.5	87.1
20	0.00	0.02	0.64	2.57	4.61	6.64	8.76	11.5	15.3	14.7	11.0	8.72	6.70	4.78	2.77	0.72	0.02	0.00	99.4	99.0
10	0.00	0.02	0.64	2.58	4.60	6.61	8.67	11.5	15.4	14.9	11.0	8.80	6.75	4.80	2.78	0.71	0.02	0.00	99.8	99.4
0	0.00	0.01	0.52	2.42	4.37	6.29	8.16	9.93	11.7	11.5	10.0	8.38	6.46	4.58	2.62	0.58	0.01	0.00	87.6	87.2
-10	0.00	0.01	0.30	2.09	3.94	5.76	7.38	8.72	9.57	9.67	8.95	7.56	5.92	4.16	2.27	0.35	0.01	0.00	76.7	76.2
-20	0.00	0.01	0.12	1.48	3.31	4.96	6.40	7.49	8.13	8.18	7.61	6.53	5.13	3.51	1.62	0.12	0.01	0.00	64.6	64.0
-30	0.00	0.01	0.04	0.56	2.36	3.87	5.13	6.07	6.58	6.60	6.14	5.27	4.06	2.49	0.63	0.04	0.01	0.00	49.8	49.0
-40	0.00	0.01	0.02	0.10	0.66	2.08	3.40	4.29	4.73	4.75	4.37	3.52	2.24	0.73	0.09	0.02	0.01	0.00	31.0	29.5
-50	0.00	0.00	0.01	0.02	0.07	0.20	0.56	1.05	1.39	1.38	1.09	0.61	0.21	0.06	0.02	0.01	0.00	0.00	6.69	3.68
-60	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.00	0.00	0.38	0.00
-70	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.14	0.00
-80	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.14	0.00
-90	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.14	0.00
HORIZONTAL (DEG)																				
Φ t	0.02	0.15	3.34	18.5	38.5	59.4	79.6	98.5	115	114	98.2	81.0	61.4	40.7	20.1	3.73	0.14	0.02	832	---
Φ a	0.00	0.00	1.82	17.2	37.4	58.4	78.7	97.6	114	113	97.3	80.1	60.4	39.7	19.0	2.26	0.00	0.00	---	817

one-half-peak spread: U:32.5,D:32.1 , L:31.9,R:32.2

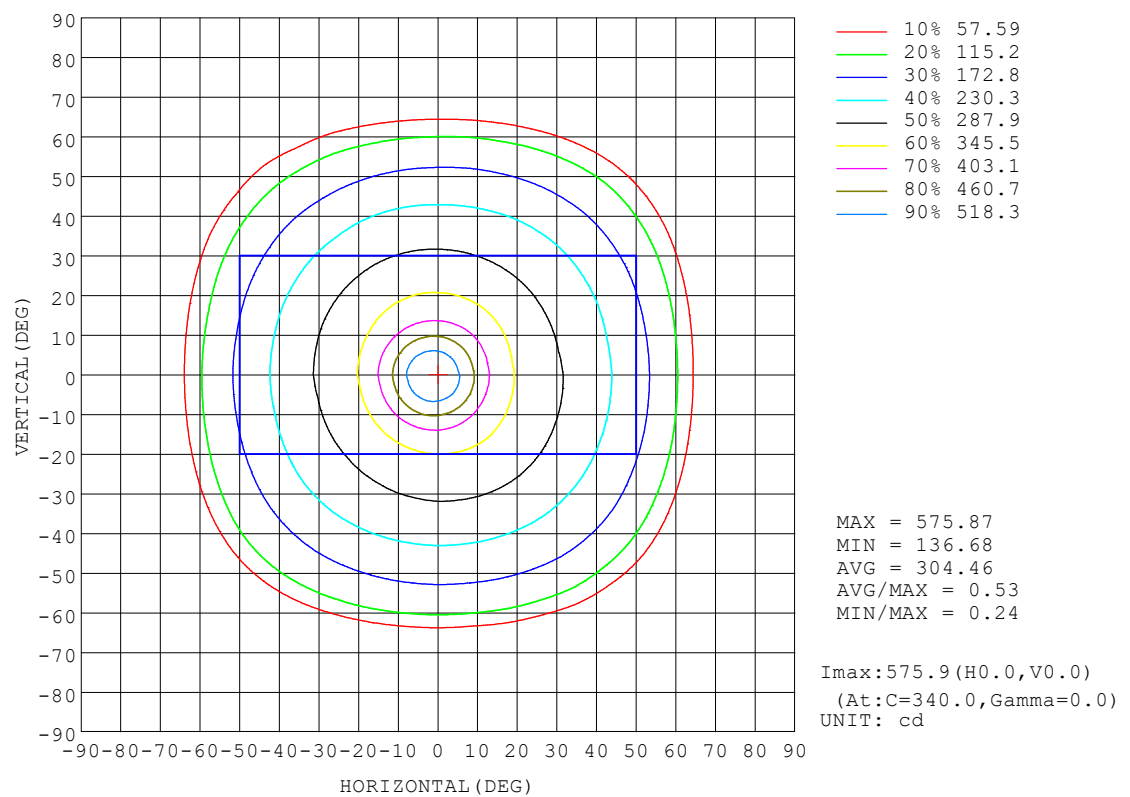
NEMA Beam Type: Type 6

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:20 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: 96RAY10/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F150 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	Shielding Angle:

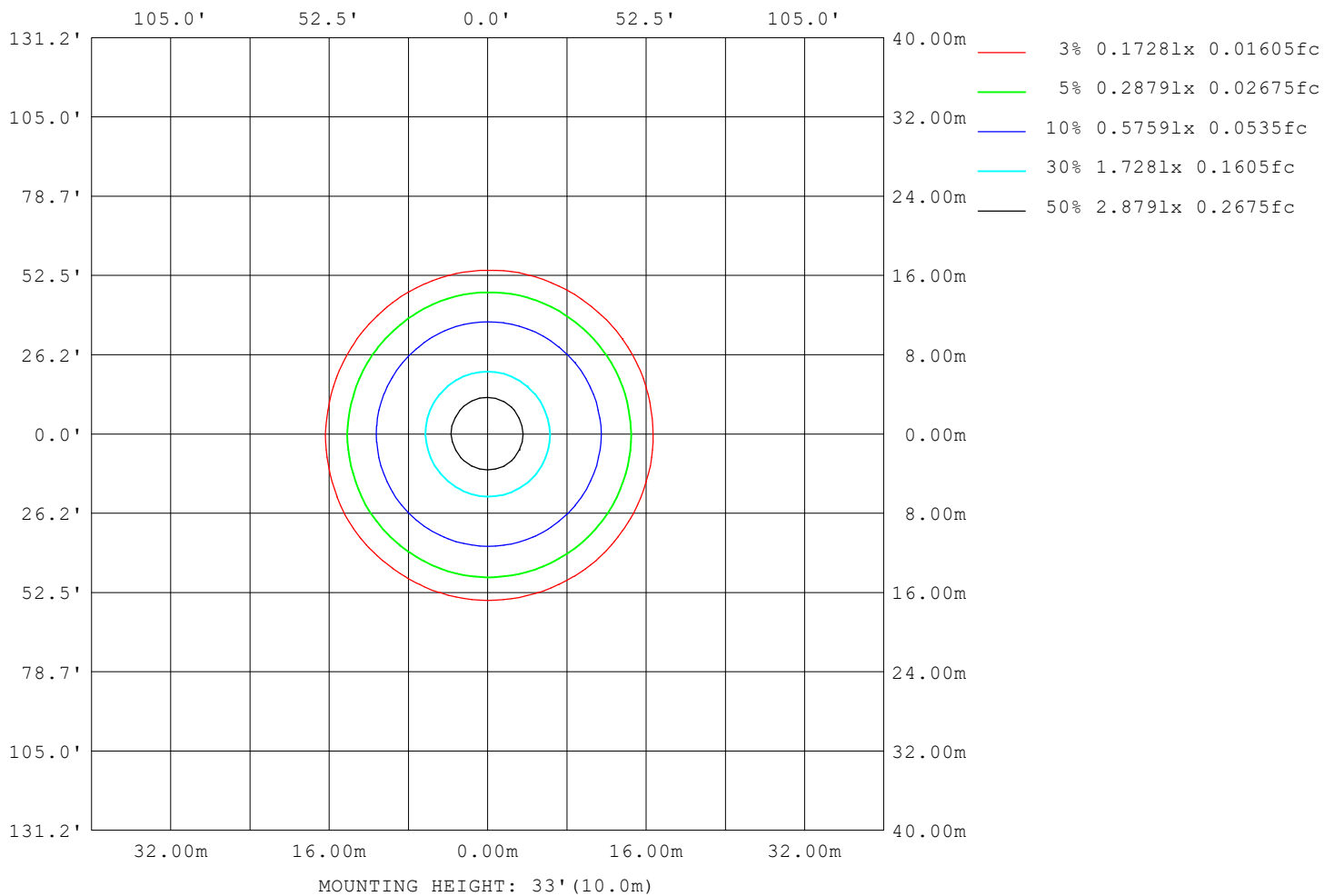


C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 20 January 2023

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

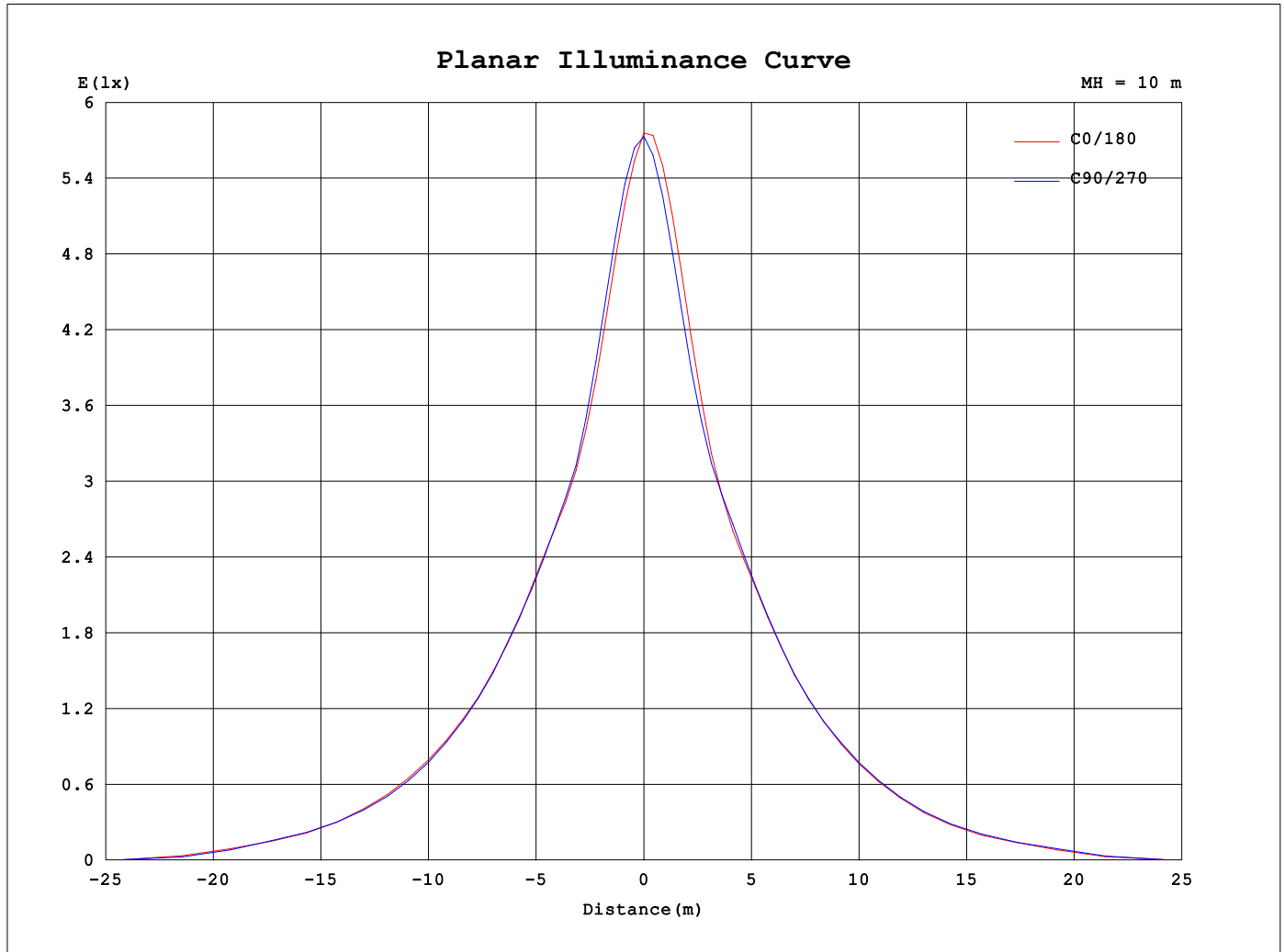
NAME: 96RAY10/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F150 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 20 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

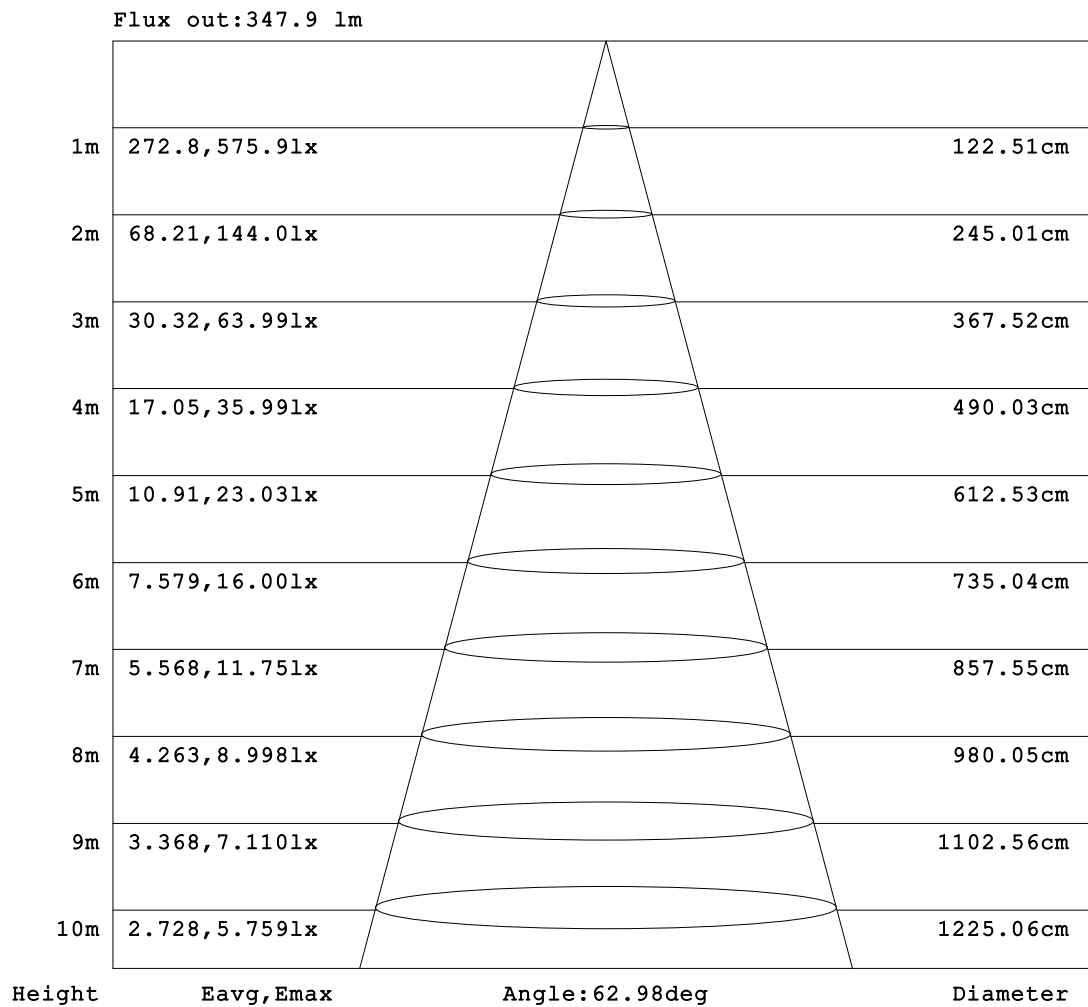


C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 20 January 2023

$\gamma$  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: 96RAY10/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F150 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: 20 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: 96RAY10/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F150 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	0.22	0.25	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.27	0.27
-85	0.22	0.26	0.29	0.31	0.33	0.33	0.32	0.35	0.37	0.37	0.37	0.39	0.41	0.41	0.40	0.42	0.43	0.42	0.40
-80	0.22	0.27	0.31	0.34	0.39	0.42	0.44	0.49	0.54	0.56	0.58	0.63	0.67	0.69	0.69	0.72	0.74	0.74	0.72
-75	0.22	0.28	0.33	0.41	0.48	0.55	0.60	0.69	0.77	0.83	0.89	0.96	1.03	1.08	1.11	1.15	1.18	1.18	1.17
-70	0.22	0.29	0.37	0.47	0.60	0.70	0.80	0.92	1.05	1.16	1.25	1.38	1.50	2.57	3.79	4.80	5.57	5.97	6.07
-65	0.22	0.29	0.41	0.56	0.72	0.87	1.02	1.19	1.38	1.55	4.32	6.71	8.00	9.36	17.6	24.3	29.2	32.7	34.3
-60	0.22	0.30	0.45	0.64	0.85	1.06	1.27	1.50	4.10	7.62	9.74	24.8	44.5	69.3	89.2	104	114	121	124
-55	0.22	0.32	0.51	0.74	0.99	1.26	1.54	4.84	8.77	23.1	53.3	88.4	116	128	138	147	153	157	159
-50	0.22	0.34	0.56	0.82	1.13	1.47	4.01	8.75	28.2	72.4	111	130	145	159	170	179	185	189	191
-45	0.22	0.36	0.61	0.92	1.27	1.68	7.39	24.1	72.5	118	136	155	173	187	198	207	214	218	220
-40	0.22	0.37	0.65	1.00	1.41	4.30	10.1	54.4	110	136	158	179	197	212	223	233	240	244	246
-35	0.22	0.39	0.70	1.08	1.55	6.73	27.2	87.6	127	154	178	200	218	233	245	255	263	268	270
-30	0.22	0.40	0.74	1.16	1.68	8.39	47.8	111	141	170	196	217	236	251	265	277	287	294	297
-25	0.22	0.41	0.77	1.24	2.75	10.0	71.1	122	153	184	210	232	250	269	284	297	308	315	320
-20	0.22	0.42	0.80	1.30	4.03	19.7	87.9	130	164	195	221	243	264	283	301	315	331	342	346
-15	0.22	0.43	0.83	1.35	5.03	27.6	98.8	137	173	204	230	252	275	297	314	336	360	382	388
-10	0.22	0.43	0.84	1.38	5.74	33.5	106	143	179	210	236	260	284	308	328	362	410	454	465
-5	0.22	0.43	0.86	1.41	6.16	37.4	111	147	184	214	240	265	291	314	340	389	462	523	542
0	0.22	0.43	0.86	1.42	6.30	38.9	112	148	186	216	243	269	296	319	348	404	486	556	576
5	0.22	0.43	0.86	1.42	6.11	37.7	110	146	184	214	241	266	294	317	344	391	459	517	532
10	0.22	0.43	0.86	1.42	5.65	34.1	106	142	179	210	237	261	288	312	335	364	407	445	455
15	0.22	0.43	0.85	1.40	4.93	28.1	98.4	135	172	204	230	252	278	303	322	343	362	381	386
20	0.22	0.42	0.83	1.37	3.98	19.9	89.2	127	162	194	221	243	264	287	309	323	338	347	348
25	0.22	0.42	0.80	1.32	2.81	9.55	73.8	119	150	182	208	231	250	268	288	304	315	322	324
30	0.22	0.41	0.77	1.25	1.86	7.90	51.1	108	137	166	193	216	234	250	265	279	290	296	298
35	0.22	0.39	0.73	1.18	1.73	6.23	29.6	88.1	122	148	174	197	216	231	244	255	262	266	267
40	0.22	0.38	0.69	1.10	1.58	4.11	9.43	57.2	103	129	153	174	193	210	223	233	239	242	243
45	0.22	0.36	0.64	1.00	1.43	1.94	6.70	26.9	69.2	110	130	149	167	183	197	207	214	218	219
50	0.22	0.34	0.59	0.90	1.27	1.70	3.87	8.02	33.2	75.7	105	123	138	152	165	175	183	187	189
55	0.22	0.32	0.54	0.80	1.11	1.47	1.92	4.57	8.04	27.6	58.9	84.2	110	122	132	140	147	151	153
60	0.22	0.30	0.48	0.69	0.94	1.24	1.59	1.99	3.94	6.77	9.54	31.3	54.3	81.2	96.3	104	110	114	115
65	0.22	0.29	0.43	0.59	0.78	1.02	1.29	1.57	1.86	2.16	4.25	6.31	7.93	9.43	21.3	31.3	39.2	44.2	46.2
70	0.22	0.28	0.38	0.49	0.63	0.81	1.02	1.21	1.40	1.61	1.81	1.98	2.11	2.99	3.94	4.70	5.28	5.72	5.94
75	0.22	0.26	0.32	0.40	0.48	0.62	0.76	0.89	1.01	1.14	1.28	1.37	1.45	1.52	1.58	1.60	1.60	1.62	1.62
80	0.22	0.25	0.29	0.32	0.37	0.45	0.53	0.60	0.66	0.74	0.83	0.87	0.91	0.96	0.99	0.99	0.98	1.00	1.01
85	0.22	0.23	0.25	0.27	0.28	0.31	0.34	0.36	0.37	0.42	0.46	0.46	0.47	0.49	0.52	0.51	0.50	0.51	0.53
90	0.22	0.22	0.21	0.21	0.21	0.22	0.23	0.22	0.22	0.22	0.23	0.23	0.23	0.23	0.23	0.23	0.22	0.22	0.22

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: MEDIUM

Temperature:25.3°C

Operators:

Test Date:20 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: 96RAY10/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F150 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	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.26	0.27	0.27	0.26	0.26	0.26	0.26	
-85	0.42	0.43	0.41	0.39	0.41	0.41	0.39	0.37	0.37	0.37	0.35	0.32	0.32	0.32	0.30	0.28	0.27	0.26	
-80	0.73	0.73	0.71	0.68	0.68	0.67	0.63	0.59	0.57	0.54	0.49	0.44	0.42	0.39	0.34	0.31	0.29	0.26	
-75	1.17	1.16	1.13	1.09	1.07	1.03	0.95	0.88	0.82	0.76	0.67	0.59	0.54	0.48	0.40	0.33	0.30	0.26	
-70	5.68	5.09	4.45	3.57	2.45	1.49	1.36	1.23	1.13	1.02	0.89	0.77	0.68	0.58	0.47	0.38	0.32	0.26	
-65	33.4	30.6	25.9	19.0	9.70	8.08	6.31	3.90	1.50	1.32	1.13	0.96	0.82	0.69	0.55	0.42	0.33	0.26	
-60	121	115	106	92.9	72.1	50.7	29.9	9.86	6.64	3.49	1.41	1.18	0.99	0.80	0.62	0.46	0.35	0.26	
-55	158	155	150	142	133	121	96.2	59.6	27.7	8.06	4.21	1.44	1.17	0.92	0.70	0.51	0.37	0.26	
-50	190	187	182	175	165	152	137	115	76.0	34.8	8.05	3.56	1.36	1.05	0.78	0.56	0.39	0.26	
-45	218	215	209	202	192	180	164	144	122	80.5	28.9	6.71	1.56	1.18	0.86	0.61	0.40	0.26	
-40	245	242	236	226	215	202	187	168	143	115	63.6	9.80	3.86	1.30	0.94	0.65	0.42	0.26	
-35	270	266	259	250	237	223	206	187	164	135	96.9	32.7	6.08	1.44	1.02	0.69	0.44	0.26	
-30	296	291	283	271	257	241	223	204	181	151	118	56.7	7.92	1.57	1.09	0.73	0.45	0.26	
-25	320	316	306	291	275	256	238	217	194	165	131	81.6	9.76	2.53	1.16	0.77	0.47	0.26	
-20	343	337	326	311	291	270	250	228	205	177	141	98.6	22.2	3.68	1.22	0.80	0.48	0.26	
-15	377	356	341	326	305	281	259	237	214	185	150	108	32.3	4.60	1.27	0.82	0.49	0.26	
-10	439	392	354	335	315	290	266	244	220	191	156	115	39.8	5.26	1.30	0.84	0.49	0.26	
-5	502	431	370	340	321	294	271	248	224	195	159	119	44.5	5.67	1.33	0.86	0.50	0.26	
0	525	447	379	341	323	295	272	249	225	196	160	120	46.4	5.83	1.34	0.86	0.50	0.26	
5	493	428	371	337	318	291	269	247	223	194	158	119	45.4	5.72	1.34	0.86	0.50	0.26	
10	433	393	355	332	311	285	263	242	218	190	154	115	41.2	5.35	1.32	0.85	0.49	0.26	
15	377	358	340	322	299	277	256	236	212	183	147	108	34.0	4.71	1.29	0.83	0.49	0.26	
20	345	337	324	304	285	266	248	227	204	175	139	99.5	23.6	3.79	1.24	0.81	0.48	0.26	
25	321	313	300	285	269	253	236	216	192	163	130	84.3	10.1	2.62	1.19	0.79	0.47	0.26	
30	295	287	277	265	253	239	222	202	178	149	118	61.0	8.28	1.62	1.13	0.75	0.46	0.26	
35	266	262	255	246	236	222	205	184	160	133	100	36.2	6.39	1.50	1.06	0.71	0.44	0.26	
40	242	239	234	226	215	201	183	163	140	114	68.6	10.5	4.07	1.37	0.98	0.67	0.42	0.26	
45	218	215	209	201	190	175	158	139	119	86.8	32.0	7.18	1.66	1.24	0.90	0.62	0.41	0.26	
50	188	185	179	170	159	146	131	115	88.1	39.1	8.82	3.87	1.46	1.11	0.82	0.58	0.39	0.26	
55	152	150	144	136	127	116	101	69.1	32.2	8.91	4.72	1.64	1.27	0.98	0.74	0.53	0.37	0.26	
60	115	112	107	100	85.5	60.6	35.3	10.3	7.51	4.07	1.70	1.37	1.09	0.85	0.65	0.47	0.34	0.26	
65	45.6	41.7	34.1	23.5	10.2	8.30	6.50	4.32	1.87	1.61	1.37	1.13	0.91	0.72	0.56	0.43	0.32	0.26	
70	5.94	5.64	4.97	4.04	2.86	1.87	1.75	1.59	1.41	1.23	1.07	0.91	0.74	0.59	0.47	0.38	0.31	0.26	
75	1.59	1.54	1.50	1.45	1.38	1.29	1.22	1.14	1.02	0.91	0.80	0.69	0.58	0.46	0.39	0.33	0.29	0.26	
80	0.98	0.95	0.94	0.92	0.88	0.83	0.80	0.76	0.69	0.61	0.56	0.50	0.43	0.36	0.32	0.28	0.27	0.26	
85	0.51	0.49	0.50	0.50	0.47	0.44	0.44	0.44	0.40	0.36	0.35	0.33	0.30	0.27	0.26	0.24	0.25	0.26	
90	0.22	0.22	0.22	0.23	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.21	0.21	0.20	0.20	0.23	0.26	

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: MEDIUM

Temperature:25.3°C

Operators:

Test Date:20 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: