

# Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	2337.0 cd per klm.
(Luminaire orientation as tested.)	0.0 degrees vertical
	0.0 degrees horizontal

Beam Spread	At 10% of Imax	44.9V x 45.4H
	At 50% of Imax	25.1V x 25.2H
	At 90% of Imax	10.7V x 11.2H

Beam Flux	Total	658.3 lumens per klm.
	To 10% of Imax	436.2 lumens per klm.
	To 50% of Imax	258.8 lumens per klm.
	To 90% of Imax	53.2 lumens per klm.

Upward LOR	0.0 %
Downward LOR	65.8 %

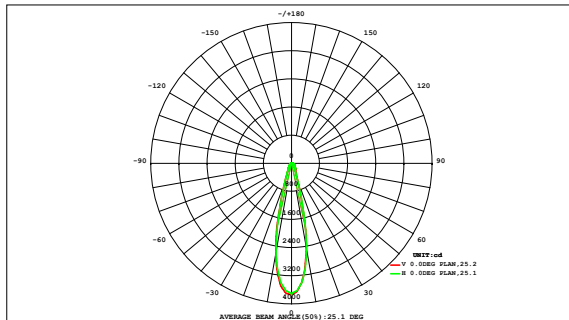
Luminaire Efficiency (Light Output Ratio)	65.6 %
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C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 01 September 2022

γ Range: 0 - 90DEG  
γ Interval: 2.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity: 65.0%  
Test Distance: 6.265m [K=1.0000]  
Remarks:

## LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 96GRF1/183024	TYPE: 96GRF1/183024	WEIGHT: 1
SPEC.:	DIM.: F 200 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: 18 Circle	Shielding Angle:



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	96GRF1/183024	Imax (cd)	3739
NOMINAL POWER (W)	18	AVAILABILITY (%)	43.5
RATED VOLTAGE (V)	230	Avai. FLUX (lm)	695.7
NOMINAL FLUX (lm)	1600	LOR (%)	65.6
LAMPS INSIDE	1	TOTAL FLUX (lm)	1050
TEST VOLTAGE (V)	230	θ @50% (H,V)	25,25DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT: lm		Φ t	Φ a
	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.03	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.29	0.00
90	0.00	0.00	0.02	0.05	0.10	0.17	0.24	0.31	0.35	0.34	0.29	0.23	0.17	0.10	0.05	0.02	0.00	0.00	2.45	0.00
80	0.00	0.01	0.06	0.16	0.31	0.50	0.71	0.89	1.00	0.98	0.87	0.70	0.50	0.32	0.16	0.06	0.01	0.00	7.26	0.00
70	0.00	0.02	0.12	0.32	0.62	0.97	1.34	1.65	1.82	1.81	1.64	1.33	0.98	0.62	0.32	0.12	0.02	0.00	13.7	0.00
60	0.00	0.04	0.20	0.52	0.97	1.49	2.03	2.49	2.76	2.76	2.47	2.01	1.47	0.96	0.50	0.19	0.04	0.00	20.9	0.00
50	0.00	0.06	0.27	0.72	1.30	2.01	2.88	3.94	4.69	4.71	3.92	2.84	1.96	1.25	0.67	0.26	0.05	0.00	31.5	0.00
40	0.00	0.07	0.34	0.87	1.60	2.59	4.39	6.55	8.96	9.09	6.56	4.32	2.52	1.52	0.82	0.32	0.07	0.00	50.6	5.48
30	0.00	0.08	0.38	0.98	1.82	3.34	6.20	14.8	35.1	36.5	15.7	6.17	3.23	1.72	0.92	0.36	0.08	0.00	127	96.2
20	0.00	0.09	0.40	1.04	1.96	3.86	8.19	32.9	87.4	89.9	36.3	8.33	3.74	1.86	0.98	0.39	0.08	0.00	277	251
10	0.00	0.09	0.40	1.03	1.97	3.85	8.10	32.0	85.5	89.5	36.1	8.29	3.76	1.88	0.98	0.39	0.08	0.00	274	248
0	0.00	0.08	0.37	0.96	1.82	3.28	6.04	14.3	33.6	34.8	15.1	6.04	3.23	1.74	0.93	0.36	0.08	0.00	123	91.1
-10	0.00	0.07	0.32	0.83	1.59	2.57	4.26	6.33	8.56	8.52	6.24	4.22	2.51	1.52	0.82	0.32	0.07	0.00	48.7	3.87
-20	0.00	0.05	0.25	0.67	1.29	2.00	2.81	3.78	4.49	4.44	3.74	2.78	1.94	1.24	0.67	0.26	0.05	0.00	30.5	0.00
-30	0.00	0.04	0.18	0.49	0.96	1.47	1.98	2.42	2.65	2.64	2.37	1.94	1.43	0.93	0.48	0.18	0.04	0.00	20.2	0.00
-40	0.00	0.02	0.11	0.31	0.61	0.95	1.28	1.55	1.71	1.71	1.54	1.27	0.93	0.59	0.30	0.11	0.02	0.00	13.0	0.00
-50	0.00	0.01	0.05	0.15	0.30	0.48	0.65	0.80	0.89	0.90	0.81	0.65	0.47	0.29	0.15	0.05	0.01	0.00	6.67	0.00
-60	0.00	0.00	0.02	0.04	0.09	0.15	0.21	0.26	0.30	0.30	0.27	0.21	0.15	0.09	0.04	0.02	0.00	0.00	2.16	0.00
-70	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.24	0.00
-80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HORIZONTAL (DEG)																				
Φ t	0.04	0.72	3.48	9.16	17.3	29.7	51.4	125	280	289	134	51.4	29.0	16.7	8.81	3.40	0.72	0.04	1050	---
Φ a	0.00	0.00	0.00	0.00	0.00	0.00	4.00	87.3	246	256	97.1	5.59	0.00	0.00	0.00	0.00	0.00	0.00	---	696

one-half-peak spread: U:12.4,D:12.8 , L:12.3,R:13.0

NEMA Beam Type: Type 3

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:01 September 2022

γ Range: 0 - 90DEG

γ Interval: 2.5DEG

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

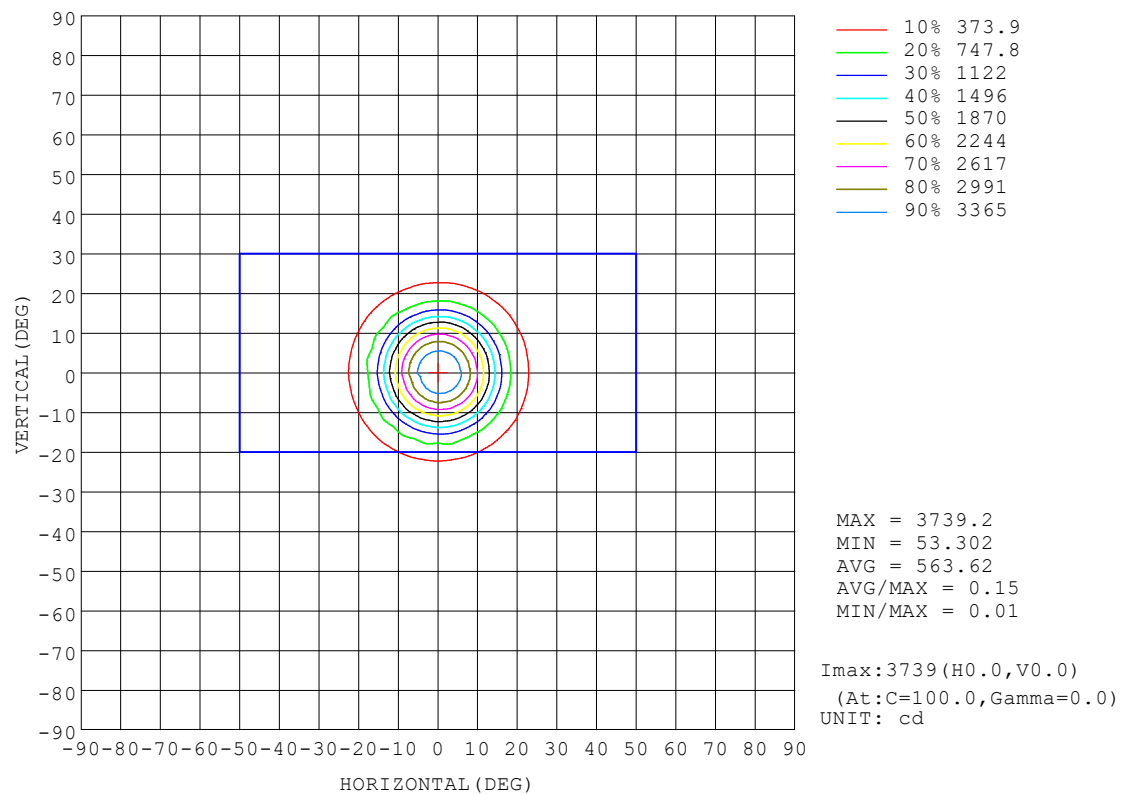
Humidity:65.0%

Test Distance:6.265m [K=1.0000]

Remarks:

# ISOCANDELA DIAGRAM

NAME: 96GRF1/183024	TYPE: 96GRF1/183024	WEIGHT: 1
SPEC.:	DIM.: F 200 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: 18 Circle	Shielding Angle:

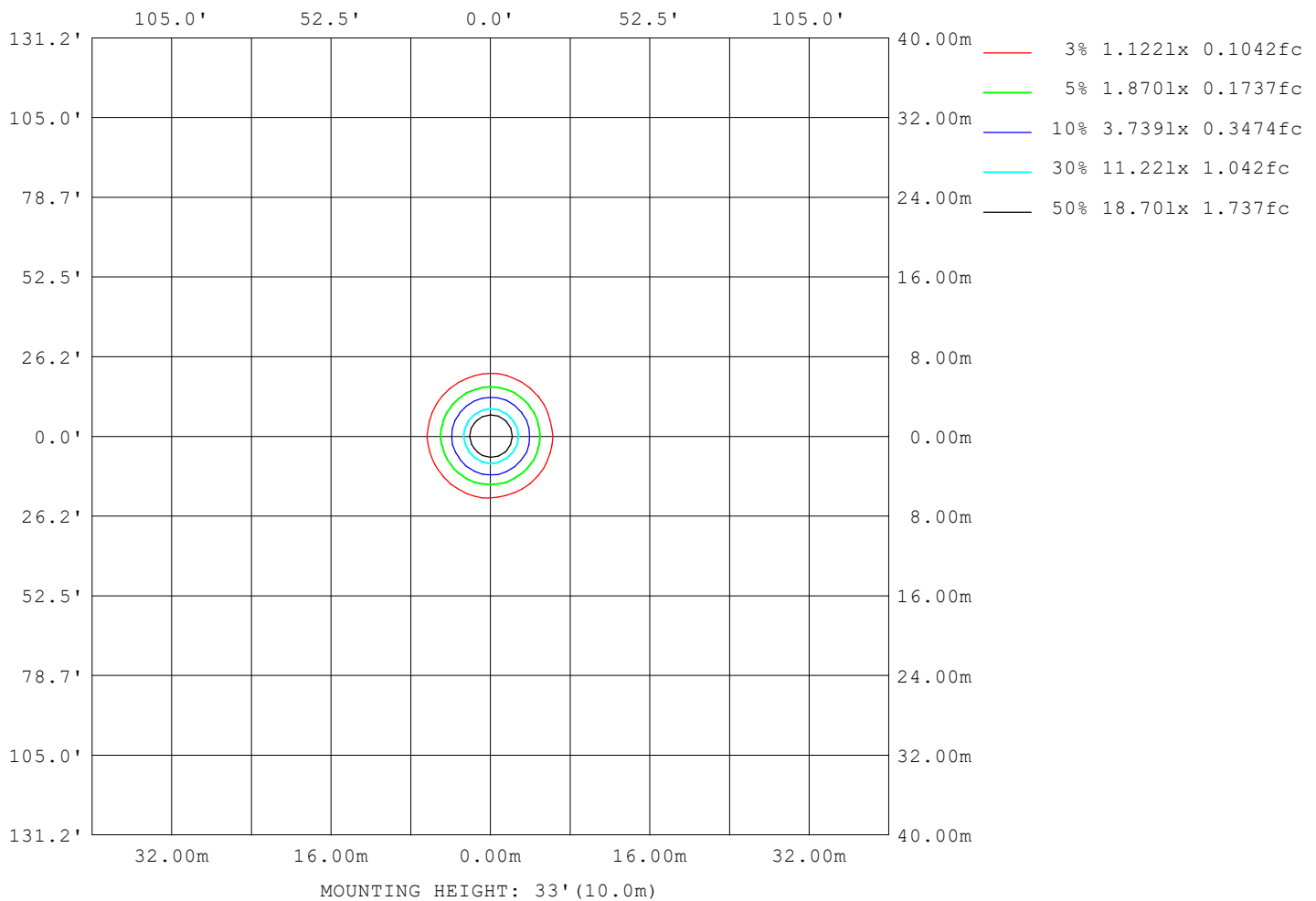


C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 01 September 2022

γ Range: 0 - 90DEG  
γ Interval: 2.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity: 65.0%  
Test Distance: 6.265m [K=1.0000]  
Remarks:

## ISOLUX DIAGRAM

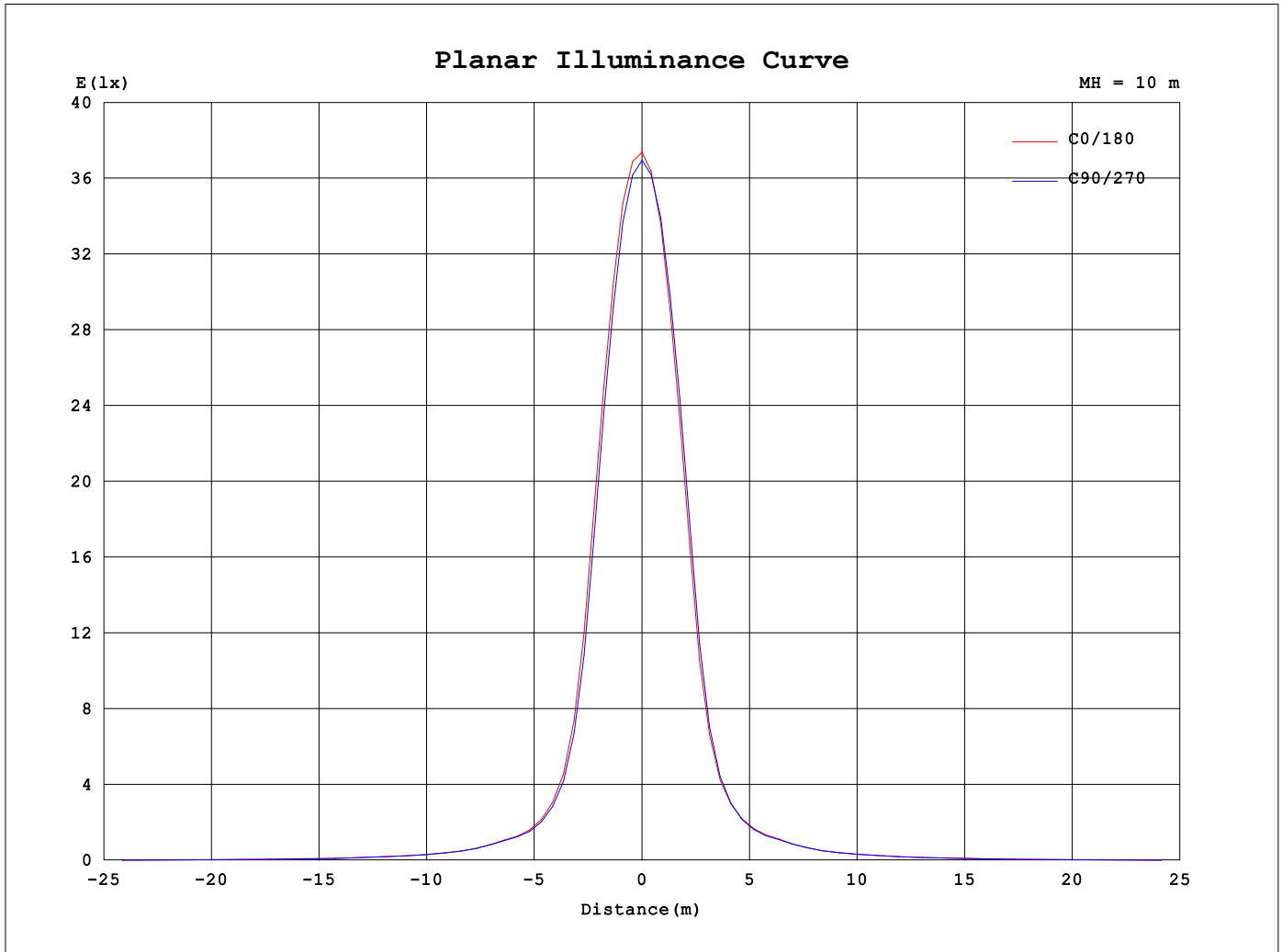
NAME: 96GRF1/183024	TYPE: 96GRF1/183024	WEIGHT: 1
SPEC.:	DIM.: F 200 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: 18 Circle	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 01 September 2022

γ Range: 0 - 90DEG  
γ Interval: 2.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity: 65.0%  
Test Distance: 6.265m [K=1.0000]  
Remarks:

# Planar Illuminance Curve

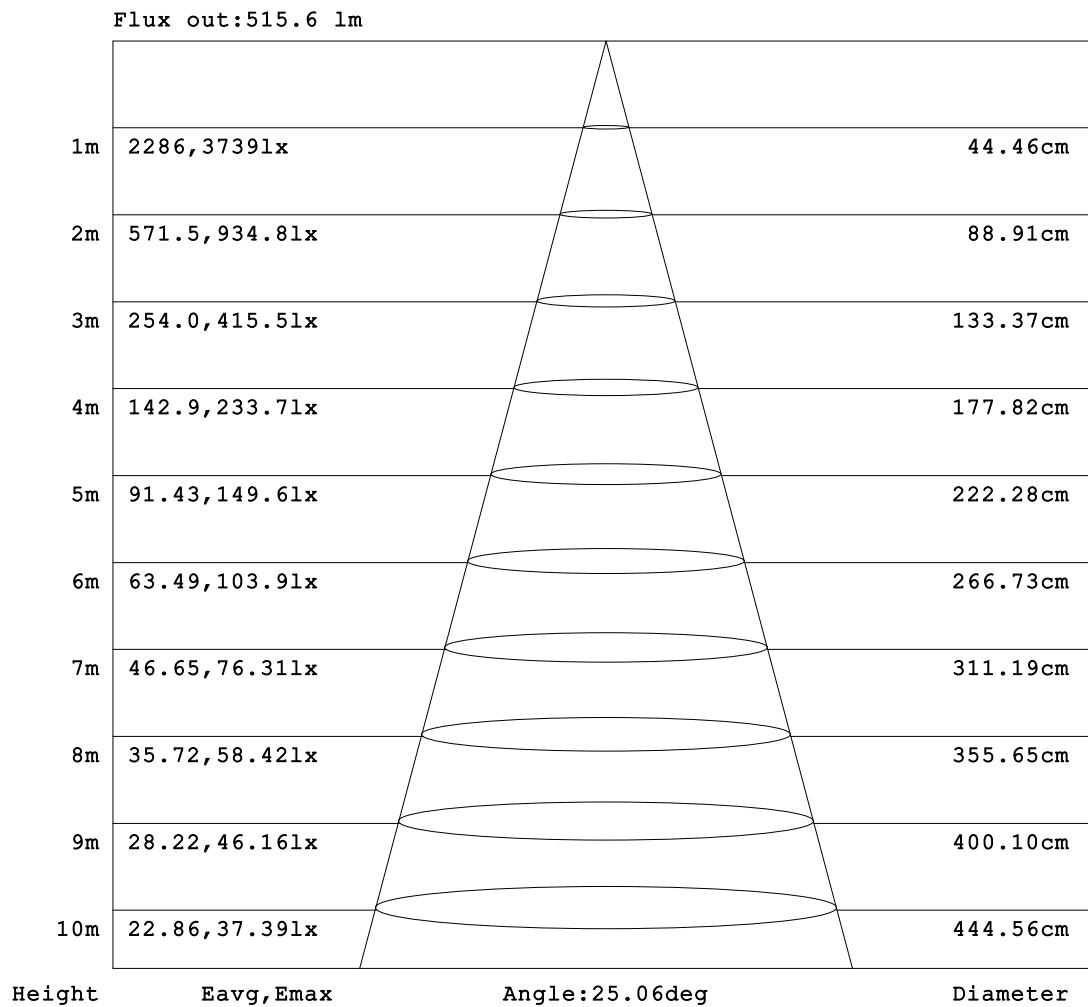


C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 01 September 2022

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
 Humidity: 65.0%  
 Test Distance: 6.265m [K=1.0000]  
 Remarks:

**AAI Figure**

NAME: 96GRF1/183024	TYPE: 96GRF1/183024	WEIGHT: 1
SPEC.:	DIM.: F 200 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: 18 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: HIGH

Temperature: 25.3°C

Operators:

Test Date: 01 September 2022

γ Range: 0 - 90DEG

γ Interval: 2.5DEG

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

Humidity: 65.0%

Test Distance: 6.265m [K=1.0000]

Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: 96GRF1/183024	TYPE: 96GRF1/183024	WEIGHT: 1
SPEC.:	DIM.: F 200 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: 18 Circle	Shielding Angle:

Table--1

UNIT: cd

H(DEC) V(DEC)	-90	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
-90	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.16	0.16	0.16	0.17	0.17	0.18	0.19	0.19	0.19	0.20
-85	0.16	0.18	0.20	0.23	0.27	0.28	0.29	0.34	0.39	0.41	0.42	0.42	0.42	0.43	0.43	0.46	0.48	0.51	0.54
-80	0.16	0.21	0.25	0.31	0.41	0.49	0.57	0.85	1.12	1.36	1.65	1.96	2.24	2.51	2.74	2.92	3.04	3.21	3.33
-75	0.16	0.23	0.30	0.45	0.61	1.06	1.52	2.32	3.08	3.99	4.98	5.72	6.37	7.12	7.78	8.40	8.87	9.24	9.46
-70	0.16	0.25	0.39	0.61	1.21	2.11	3.29	4.89	6.52	8.35	10.0	11.5	12.8	14.1	15.3	16.4	17.1	17.9	18.4
-65	0.16	0.27	0.48	1.06	2.09	3.66	5.86	8.41	11.2	14.0	16.5	18.9	21.1	23.1	25.3	26.9	28.0	29.0	29.6
-60	0.16	0.30	0.57	1.49	3.20	5.78	8.95	12.7	16.5	20.3	24.1	27.9	31.3	34.4	37.3	39.5	41.0	42.7	43.9
-55	0.16	0.34	0.85	2.28	4.76	8.18	12.4	17.2	22.3	27.9	33.4	38.3	42.7	46.6	50.0	52.9	55.1	56.3	56.5
-50	0.16	0.38	1.11	3.05	6.31	10.7	16.0	22.2	29.2	36.6	43.0	48.7	53.9	58.5	63.0	67.0	69.6	70.9	71.2
-45	0.16	0.41	1.36	3.94	8.02	13.3	19.8	27.7	36.6	44.6	51.9	58.8	65.6	72.0	77.7	82.5	85.3	87.0	87.7
-40	0.16	0.44	1.64	4.88	9.63	16.0	23.8	33.2	43.0	51.9	60.7	69.8	78.0	85.5	92.2	98.9	104	107	108
-35	0.16	0.47	2.04	5.74	11.4	18.6	27.9	38.2	49.0	59.4	70.2	80.2	89.9	100	111	126	139	147	150
-30	0.16	0.50	2.40	6.63	12.9	21.3	31.6	42.7	54.8	66.9	79.0	90.3	103	122	146	169	187	196	193
-25	0.16	0.52	2.72	7.47	14.5	23.7	34.9	47.2	60.2	73.8	86.8	101	122	154	186	207	235	263	274
-20	0.16	0.54	2.98	8.18	15.9	25.9	37.8	50.8	65.1	79.5	93.9	114	147	186	218	283	372	466	504
-15	0.16	0.56	3.19	8.75	17.0	27.8	40.3	53.9	69.1	84.1	101	128	172	212	284	438	737	1046	1203
-10	0.16	0.57	3.35	9.18	17.8	29.2	42.2	56.7	72.0	87.8	107	143	191	244	375	720	1363	2109	2472
-5	0.16	0.57	3.44	9.46	18.4	30.1	43.5	58.5	74.2	90.3	111	153	203	275	466	1025	2082	3002	3407
0	0.16	0.58	3.48	9.58	18.7	30.5	44.1	59.3	75.3	91.4	113	157	208	292	510	1170	2434	3397	3739
5	0.16	0.58	3.46	9.57	18.6	30.4	44.0	58.9	74.7	90.0	111	153	202	279	475	1047	2142	3070	3431
10	0.16	0.57	3.37	9.39	18.3	29.8	43.3	57.7	72.8	87.4	107	144	192	250	384	762	1426	2216	2548
15	0.16	0.56	3.22	9.05	17.6	28.7	41.8	55.7	69.9	84.1	101	131	176	216	295	453	762	1095	1269
20	0.16	0.55	3.02	8.53	16.6	27.1	39.6	52.9	66.2	79.6	94.1	115	151	191	228	293	388	489	532
25	0.16	0.53	2.76	7.85	15.4	25.0	37.0	49.5	61.9	73.9	86.2	102	127	159	191	214	246	279	290
30	0.16	0.51	2.46	7.01	13.9	22.8	34.0	45.7	56.5	67.5	78.2	90.2	106	127	151	175	190	199	200
35	0.16	0.48	2.10	6.09	12.4	20.2	30.3	40.9	50.5	60.5	70.4	80.0	90.2	102	117	132	146	154	158
40	0.16	0.45	1.69	5.17	10.6	17.6	25.9	35.4	44.2	52.7	61.4	70.2	78.2	86.5	95.1	102	108	113	114
45	0.16	0.42	1.41	4.16	8.81	14.8	21.5	29.5	37.5	44.9	52.2	59.5	66.7	73.6	79.6	84.3	87.8	90.0	90.3
50	0.16	0.39	1.16	3.22	6.86	12.0	17.4	23.5	30.3	36.7	43.0	48.9	54.9	60.8	66.0	70.3	73.3	74.8	74.9
55	0.16	0.35	0.88	2.44	5.21	9.11	13.5	18.1	23.3	28.6	33.9	39.0	43.7	48.2	52.4	56.0	58.6	60.0	60.3
60	0.16	0.31	0.59	1.62	3.60	6.30	9.75	13.4	17.0	21.0	25.0	29.2	33.1	36.7	40.1	43.1	45.6	46.6	46.7
65	0.16	0.29	0.51	1.14	2.37	4.13	6.25	8.97	11.7	14.2	17.0	19.9	22.9	25.5	27.9	30.2	32.1	33.0	33.0
70	0.16	0.26	0.42	0.63	1.37	2.40	3.69	5.27	6.94	8.77	10.4	12.3	14.2	16.0	17.6	19.0	20.1	20.5	20.5
75	0.16	0.24	0.33	0.47	0.64	1.19	1.70	2.60	3.43	4.36	5.30	6.31	7.43	8.48	9.44	10.3	11.1	11.2	11.1
80	0.16	0.21	0.28	0.32	0.42	0.53	0.63	0.96	1.30	1.56	1.84	2.34	2.80	3.14	3.44	3.77	4.05	4.11	4.08
85	0.16	0.19	0.22	0.24	0.26	0.30	0.34	0.38	0.42	0.46	0.50	0.52	0.53	0.55	0.56	0.59	0.62	0.65	0.67
90	0.16	0.16	0.17	0.16	0.16	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.17	0.18	0.18	0.18	0.18	0.18	0.18

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:01 September 2022

γ Range: 0 - 90DEG

γ Interval: 2.5DEG

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

Humidity:65.0%

Test Distance:6.265m [K=1.0000]

Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: 96GRF1/183024	TYPE: 96GRF1/183024	WEIGHT: 1
SPEC.:	DIM.: F 200 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: 18 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	0.20	0.20	0.19	0.19	0.19	0.19	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	
-85	0.56	0.58	0.56	0.54	0.53	0.51	0.48	0.45	0.43	0.41	0.36	0.32	0.30	0.29	0.26	0.22	0.20	0.18	
-80	3.29	3.20	3.09	2.91	2.63	2.30	1.99	1.64	1.37	1.13	0.87	0.58	0.51	0.43	0.34	0.27	0.23	0.18	
-75	9.40	9.19	8.82	8.26	7.34	6.36	5.52	4.76	3.89	3.00	2.32	1.57	1.10	0.63	0.47	0.32	0.26	0.18	
-70	18.4	18.0	17.1	15.9	14.4	12.7	11.2	9.57	8.02	6.40	4.89	3.32	2.19	1.28	0.62	0.41	0.28	0.18	
-65	29.3	28.5	27.2	25.5	23.2	21.0	18.6	16.0	13.3	10.8	8.29	5.98	3.79	2.21	1.11	0.50	0.31	0.18	
-60	43.4	42.1	39.9	37.2	34.0	30.7	27.3	23.5	19.6	16.0	12.5	8.94	6.00	3.37	1.59	0.59	0.33	0.18	
-55	56.1	54.8	52.4	49.4	46.0	42.0	37.3	32.2	27.0	21.9	17.2	12.6	8.36	5.00	2.41	0.88	0.37	0.18	
-50	70.3	68.5	65.9	62.0	57.7	53.1	47.6	41.4	35.1	28.3	22.1	16.4	11.0	6.63	3.21	1.17	0.41	0.18	
-45	86.7	84.3	80.6	75.8	69.9	64.0	57.5	50.2	43.1	35.5	27.2	20.2	13.9	8.34	4.16	1.43	0.44	0.18	
-40	106	103	97.5	91.0	84.0	75.9	67.4	58.9	50.6	42.3	32.7	24.0	16.6	10.00	5.18	1.72	0.47	0.18	
-35	146	137	125	111	99.1	88.3	77.5	67.3	57.4	48.3	38.3	27.8	19.1	11.8	6.07	2.13	0.50	0.18	
-30	189	183	168	145	122	102	88.0	75.7	63.8	53.5	43.2	31.4	21.6	13.5	6.93	2.49	0.52	0.18	
-25	261	234	203	183	152	122	98.6	83.6	69.8	58.0	47.0	34.9	23.7	14.9	7.70	2.79	0.54	0.18	
-20	473	378	282	215	184	147	112	90.8	75.6	62.1	50.2	37.7	25.7	16.1	8.33	3.05	0.56	0.18	
-15	1095	748	463	290	209	171	127	97.4	80.5	65.7	52.7	39.9	27.3	17.1	8.82	3.25	0.58	0.18	
-10	2224	1515	783	400	243	187	140	104	84.2	68.3	54.6	41.5	28.5	17.7	9.16	3.39	0.59	0.18	
-5	3146	2307	1170	514	279	195	150	108	86.4	69.9	55.6	42.4	29.2	18.1	9.34	3.47	0.59	0.18	
0	3510	2616	1334	551	291	197	153	109	87.1	70.3	55.8	42.6	29.4	18.2	9.38	3.50	0.59	0.18	
5	3161	2308	1191	517	279	192	149	106	85.6	69.4	55.3	42.3	29.2	18.1	9.30	3.47	0.59	0.18	
10	2298	1559	795	408	249	186	140	102	82.7	67.4	54.0	41.3	28.5	17.7	9.08	3.38	0.59	0.18	
15	1148	789	485	302	214	172	127	96.4	79.5	64.9	52.1	39.7	27.3	16.9	8.69	3.23	0.58	0.18	
20	507	404	298	225	187	148	111	90.2	75.5	61.8	49.7	37.5	25.7	15.9	8.15	3.03	0.57	0.18	
25	282	250	213	187	157	124	98.3	83.5	70.2	57.9	46.5	34.9	23.7	14.6	7.46	2.77	0.55	0.18	
30	200	191	175	150	126	104	88.3	75.9	64.2	53.3	42.7	31.8	21.6	13.1	6.61	2.46	0.53	0.18	
35	157	146	132	116	101	89.0	78.5	67.9	57.8	48.2	38.4	28.3	19.1	11.6	5.72	2.10	0.51	0.18	
40	113	108	101	94.0	85.6	77.2	68.5	59.8	51.3	42.7	33.5	24.3	16.5	9.88	4.91	1.69	0.48	0.18	
45	90.0	87.7	83.8	78.9	72.8	65.7	58.6	52.1	44.7	36.5	28.1	20.4	13.9	8.25	4.04	1.41	0.45	0.18	
50	74.6	72.9	69.8	65.4	60.4	54.9	49.4	43.7	37.0	29.6	22.8	16.7	11.2	6.52	3.19	1.16	0.42	0.18	
55	59.8	58.3	55.6	52.4	48.3	44.0	39.3	34.1	28.6	23.1	17.9	13.0	8.62	5.01	2.41	0.89	0.38	0.18	
60	46.0	44.7	42.4	39.6	36.2	32.7	28.8	24.9	21.3	17.3	13.3	9.42	6.18	3.47	1.60	0.62	0.35	0.18	
65	32.3	31.2	29.4	27.3	24.9	22.4	19.8	17.4	14.8	11.9	8.95	6.30	3.98	2.31	1.14	0.53	0.32	0.18	
70	20.0	19.2	18.2	16.8	15.4	13.9	12.4	10.7	9.03	7.10	5.34	3.59	2.36	1.37	0.65	0.45	0.29	0.18	
75	10.8	10.4	9.65	8.80	8.09	7.24	6.38	5.50	4.51	3.55	2.62	1.71	1.19	0.65	0.49	0.36	0.27	0.18	
80	3.99	3.83	3.61	3.33	3.06	2.75	2.36	1.94	1.62	1.31	0.97	0.64	0.54	0.43	0.35	0.30	0.24	0.18	
85	0.68	0.68	0.66	0.64	0.61	0.58	0.55	0.52	0.47	0.41	0.38	0.35	0.31	0.28	0.26	0.24	0.21	0.18	
90	0.18	0.18	0.18	0.19	0.18	0.18	0.18	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:01 September 2022

γ Range: 0 - 90DEG

γ Interval: 2.5DEG

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

Humidity:65.0%

Test Distance:6.265m [K=1.0000]

Remarks: