

# Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	364.8 cd per klm.
(Luminaire orientation as tested.)	14.5 degrees vertical
	-14.0 degrees horizontal

Beam Spread	At 10% of Imax	108.9V x 109.0H
	At 50% of Imax	93.0V x 93.1H
	At 90% of Imax	67.4V x 67.7H

Beam Flux	Total	645.3 lumens per klm.
	To 10% of Imax	620.1 lumens per klm.
	To 50% of Imax	540.8 lumens per klm.
	To 90% of Imax	242.8 lumens per klm.

Upward LOR	0.0 %
Downward LOR	64.5 %

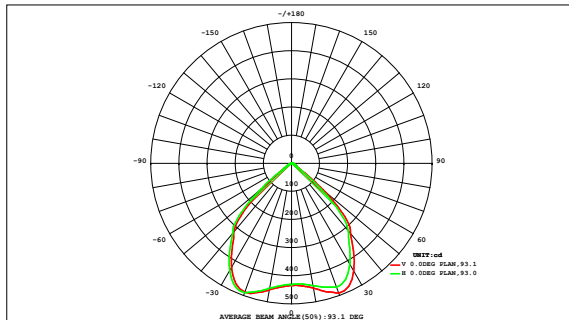
Luminaire Efficiency (Light Output Ratio)	64.5 %
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C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 06 October 2022

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: 96GRF53/1560220	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F96 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	Shielding Angle:



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	96GRF53/1560220	Imax (cd)	492.5
NOMINAL POWER (W)	15	AVAILABILITY (%)	62.0
RATED VOLTAGE (V)	230	Avai. FLUX (lm)	836.5
NOMINAL FLUX (lm)	1350	LOR (%)	64.5
LAMPS INSIDE	1	TOTAL FLUX (lm)	870.9
TEST VOLTAGE (V)	230	θ @50% (H,V)	93,93DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	0.00	0.00	0.01	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.39	0.00
90	0.00	0.01	0.02	0.04	0.07	0.09	0.11	0.13	0.14	0.13	0.12	0.10	0.08	0.05	0.03	0.02	0.01	0.00	1.15	0.00
80	0.00	0.02	0.04	0.07	0.13	0.21	0.29	0.36	0.38	0.37	0.33	0.26	0.18	0.11	0.06	0.03	0.01	0.00	2.86	0.00
70	0.00	0.02	0.06	0.13	0.26	0.45	0.77	1.28	1.71	1.65	1.19	0.67	0.41	0.24	0.11	0.04	0.01	0.00	9.01	3.83
60	0.00	0.02	0.08	0.22	0.49	1.58	4.09	6.43	7.58	7.46	6.08	3.62	1.32	0.44	0.20	0.07	0.02	0.00	39.7	37.2
50	0.00	0.03	0.11	0.32	1.37	5.06	8.43	10.5	11.6	11.4	10.2	8.04	4.41	1.08	0.30	0.10	0.02	0.00	72.9	71.3
40	0.00	0.03	0.14	0.50	3.23	7.63	10.8	13.3	14.3	14.2	12.9	10.3	7.16	2.63	0.42	0.13	0.03	0.00	97.8	96.5
30	0.01	0.04	0.17	0.82	4.79	8.89	12.5	14.3	14.4	14.3	14.1	12.0	8.43	4.12	0.61	0.15	0.03	0.00	110	109
20	0.01	0.04	0.18	1.05	5.47	9.51	13.1	14.0	13.5	13.4	13.9	12.6	9.06	4.88	0.79	0.16	0.03	0.00	112	111
10	0.01	0.04	0.18	1.02	5.39	9.35	12.9	13.7	13.2	13.4	13.9	12.7	9.11	4.90	0.78	0.16	0.03	0.00	111	110
0	0.00	0.04	0.17	0.76	4.57	8.57	12.0	13.8	13.9	14.0	13.9	11.8	8.43	4.05	0.60	0.15	0.03	0.00	107	106
-10	0.00	0.03	0.14	0.47	2.98	7.28	10.2	12.5	13.5	13.6	12.5	10.1	7.04	2.45	0.40	0.12	0.03	0.00	93.3	92.0
-20	0.00	0.03	0.11	0.31	1.21	4.53	7.90	9.82	10.8	10.8	9.79	7.72	4.01	0.96	0.28	0.09	0.02	0.00	68.4	66.7
-30	0.00	0.02	0.08	0.21	0.45	1.34	3.44	5.66	6.79	6.69	5.36	3.04	1.08	0.40	0.19	0.06	0.02	0.00	34.9	32.2
-40	0.00	0.02	0.05	0.13	0.25	0.43	0.68	1.06	1.34	1.29	0.95	0.59	0.38	0.23	0.11	0.04	0.01	0.00	7.56	2.24
-50	0.00	0.02	0.04	0.07	0.12	0.20	0.28	0.35	0.38	0.37	0.32	0.25	0.17	0.10	0.05	0.03	0.01	0.00	2.76	0.00
-60	0.00	0.01	0.02	0.04	0.06	0.08	0.10	0.12	0.13	0.12	0.11	0.09	0.07	0.05	0.03	0.01	0.00	0.00	1.05	0.00
-70	0.00	0.00	0.01	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.31	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	0.06	0.43	1.62	6.20	30.9	65.3	97.5	117	124	123	116	94.0	61.4	26.7	4.96	1.37	0.31	0.03	871	---
Φ a	0.00	0.00	0.00	2.56	28.2	62.9	95.2	115	122	121	114	91.8	59.1	24.0	1.36	0.00	0.00	0.00	---	836

one-half-peak spread: U:26.0,D:27.2 , L:27.3,R:26.0

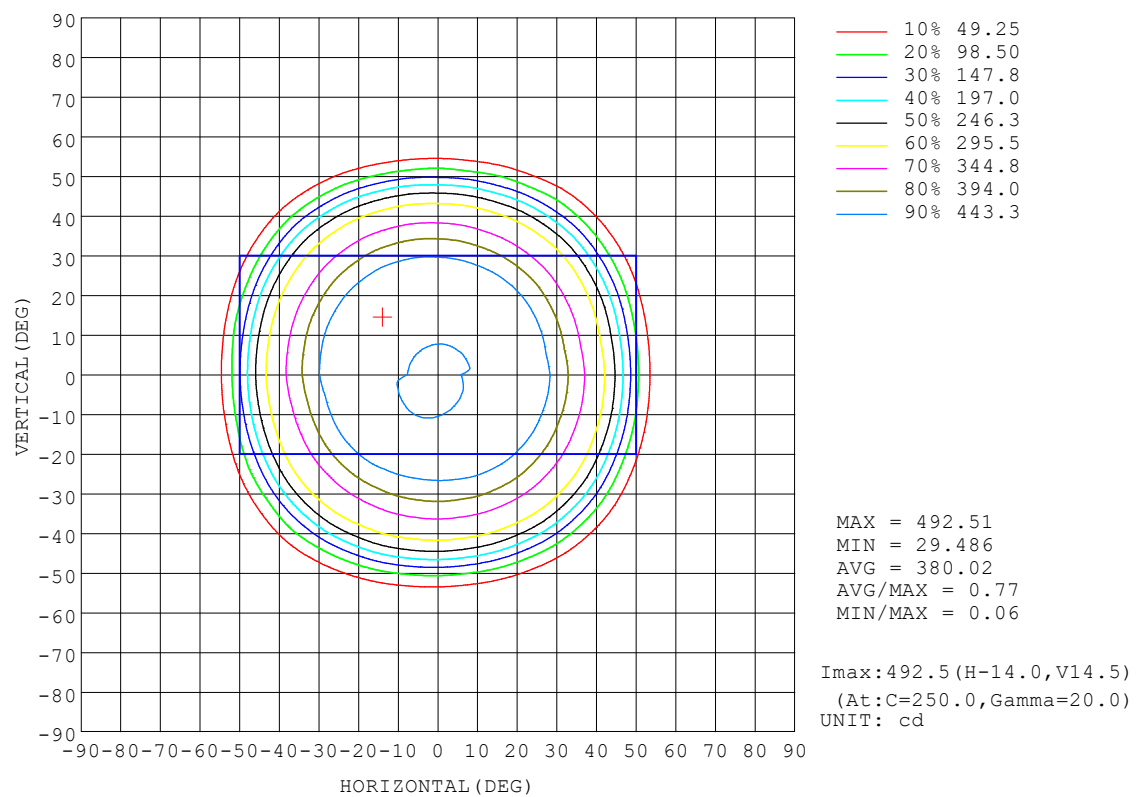
NEMA Beam Type: Type 6

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:06 October 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: 96GRF53/1560220	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F96 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	Shielding Angle:

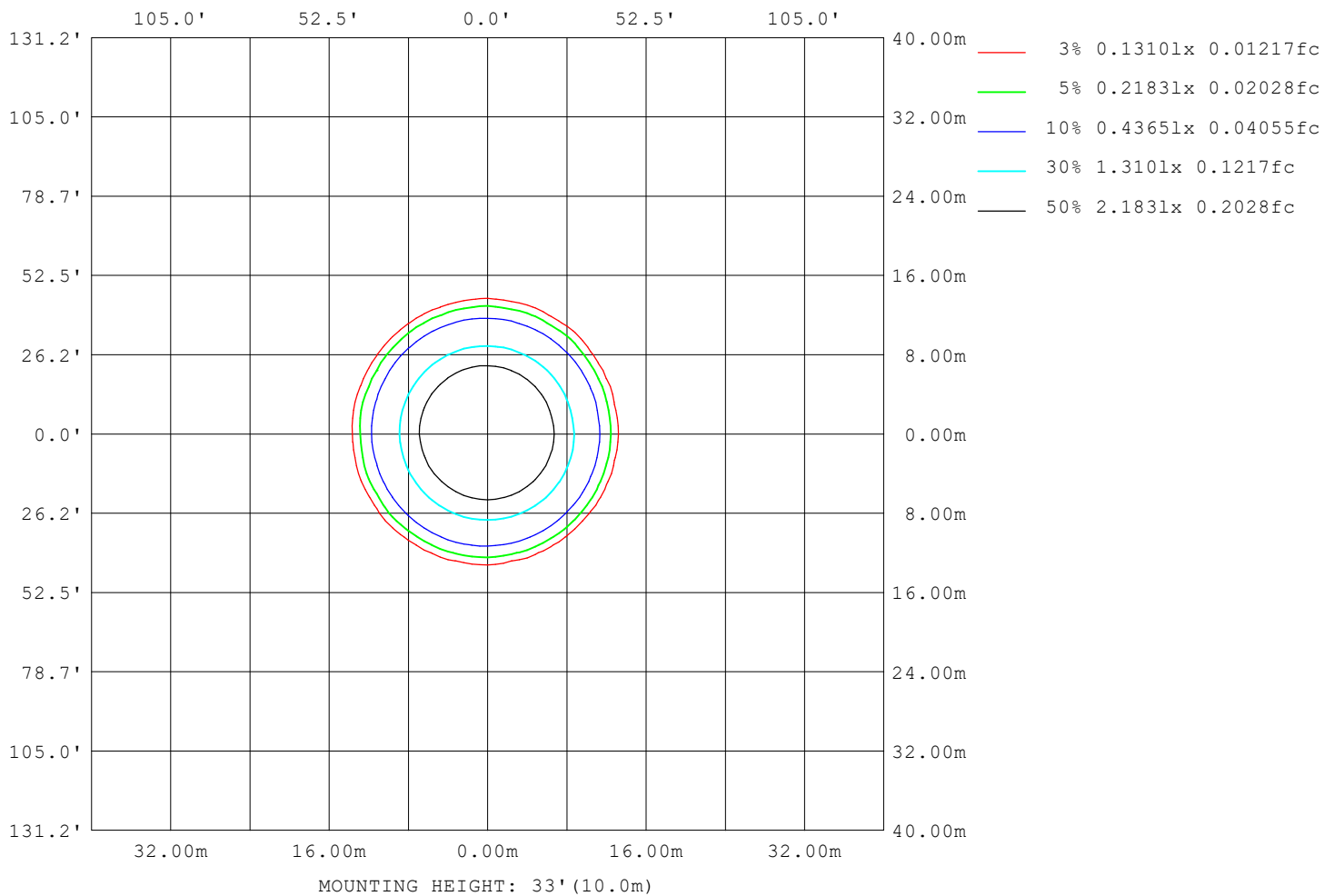


C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:  
 Test Date:06 October 2022

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

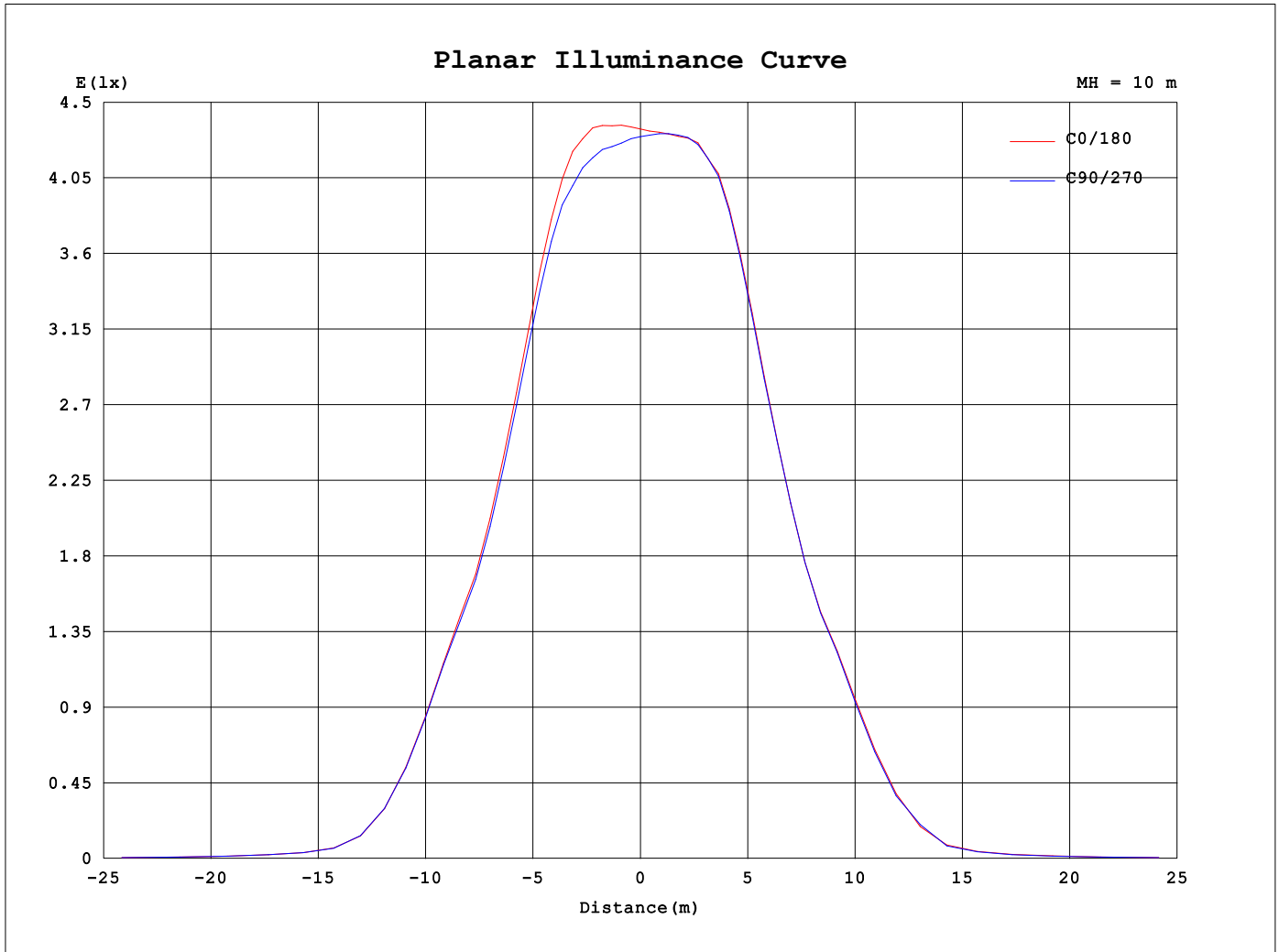
NAME: 96GRF53/1560220	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F96 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 06 October 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

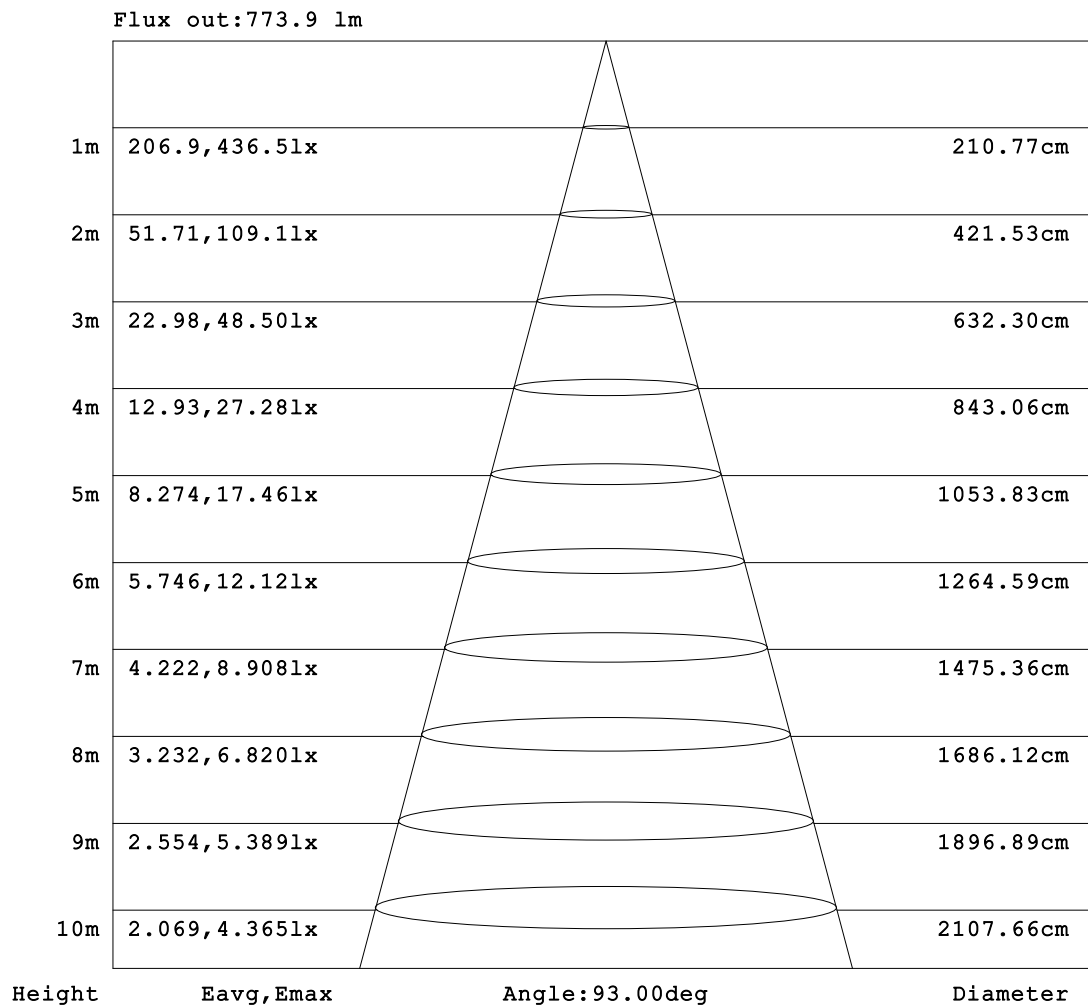


C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 06 October 2022

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: 96GRF53/1560220	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F96 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	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: 06 October 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: 96GRF53/1560220	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F96 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	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	0.10	0.09	0.09	0.09	0.09	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
-85	0.10	0.23	0.36	0.48	0.58	0.68	0.77	0.86	0.94	1.02	1.08	1.14	1.19	1.23	1.26	1.28	1.30	1.29	1.27
-80	0.10	0.36	0.62	0.86	1.08	1.30	1.52	1.67	1.80	1.91	2.01	2.11	2.20	2.27	2.32	2.34	2.34	2.32	2.29
-75	0.10	0.50	0.89	1.23	1.57	1.82	2.05	2.29	2.49	2.73	2.97	3.19	3.42	3.63	3.81	3.89	3.91	3.92	3.89
-70	0.10	0.63	1.12	1.59	1.94	2.29	2.63	3.02	3.39	3.87	4.37	4.93	5.43	6.00	6.52	6.85	7.01	7.08	7.04
-65	0.10	0.75	1.35	1.86	2.32	2.79	3.34	3.99	4.71	5.54	6.66	7.79	8.99	10.0	11.1	11.8	12.2	12.3	12.2
-60	0.10	0.87	1.58	2.13	2.71	3.38	4.23	5.30	6.63	8.17	9.98	12.0	13.9	15.6	17.0	17.9	18.5	18.7	18.6
-55	0.10	0.98	1.75	2.42	3.16	4.10	5.37	7.13	9.21	11.6	14.2	16.9	19.3	22.7	25.7	29.3	31.4	32.6	32.8
-50	0.10	1.08	1.91	2.69	3.63	4.93	6.84	9.37	12.3	15.4	18.6	23.9	31.2	43.8	62.8	84.9	101	110	112
-45	0.10	1.17	2.05	2.98	4.16	5.85	8.55	11.9	15.5	19.2	26.9	42.7	76.6	120	163	197	220	233	237
-40	0.10	1.25	2.19	3.28	4.68	7.04	10.4	14.5	18.6	27.4	53.1	106	166	222	264	293	304	312	315
-35	0.10	1.32	2.33	3.54	5.30	8.21	12.4	17.0	24.3	43.7	107	183	253	297	317	332	347	356	360
-30	0.10	1.39	2.45	3.80	5.85	9.47	14.2	19.2	32.8	85.0	172	256	304	329	356	381	400	411	415
-25	0.10	1.44	2.55	4.04	6.45	10.6	15.9	23.4	50.8	132	232	302	331	368	403	429	444	452	455
-20	0.10	1.49	2.64	4.24	7.00	11.6	17.3	27.7	78.5	178	275	322	364	408	443	464	468	467	469
-15	0.10	1.52	2.70	4.40	7.44	12.5	18.4	33.6	103	216	302	340	393	439	470	474	465	456	456
-10	0.10	1.55	2.75	4.51	7.75	13.1	19.3	38.1	124	242	313	360	415	458	481	470	453	442	442
-5	0.10	1.57	2.78	4.58	7.94	13.5	19.9	41.2	139	260	321	375	430	470	481	464	444	432	431
0	0.10	1.57	2.79	4.60	8.00	13.6	20.1	42.7	145	269	327	385	442	482	491	473	450	437	434
5	0.10	1.57	2.78	4.58	7.95	13.5	19.9	41.9	142	264	325	382	439	481	491	476	456	442	436
10	0.10	1.55	2.75	4.51	7.77	13.2	19.5	39.3	131	250	320	371	429	473	491	484	470	456	451
15	0.10	1.53	2.71	4.40	7.47	12.6	18.6	34.9	112	227	311	354	410	456	486	492	485	476	471
20	0.10	1.49	2.64	4.24	7.05	11.8	17.5	29.0	84.5	192	288	332	382	429	464	485	491	491	489
25	0.10	1.45	2.56	4.04	6.52	10.7	16.2	24.5	55.4	146	249	313	348	393	429	456	472	479	480
30	0.10	1.40	2.46	3.79	5.93	9.64	14.5	19.8	36.8	94.4	191	275	318	349	383	411	429	439	440
35	0.10	1.33	2.34	3.53	5.37	8.37	12.7	17.5	26.0	51.0	123	208	275	313	333	356	373	384	385
40	0.10	1.26	2.20	3.27	4.74	7.21	10.8	15.0	19.3	30.4	61.5	124	191	249	288	311	320	325	326
45	0.10	1.18	2.07	2.99	4.22	6.03	8.83	12.3	16.1	20.0	30.7	51.7	94.9	147	193	226	249	262	264
50	0.10	1.09	1.92	2.71	3.69	5.08	7.04	9.68	12.8	16.1	19.4	26.0	36.9	55.7	81.7	107	129	140	141
55	0.10	1.00	1.77	2.44	3.23	4.23	5.53	7.29	9.60	12.1	14.7	17.2	19.7	24.5	28.8	34.5	38.4	40.2	39.9
60	0.10	0.90	1.60	2.16	2.77	3.49	4.35	5.47	6.89	8.57	10.4	12.3	14.2	15.9	17.1	18.0	18.5	18.7	18.6
65	0.10	0.78	1.39	1.90	2.37	2.89	3.46	4.14	4.96	5.83	6.91	8.00	9.28	10.3	11.3	11.9	12.3	12.5	12.4
70	0.10	0.65	1.17	1.63	1.99	2.37	2.74	3.19	3.64	4.14	4.60	5.18	5.70	6.25	6.75	7.08	7.28	7.32	7.25
75	0.10	0.52	0.94	1.29	1.62	1.90	2.16	2.43	2.70	2.97	3.24	3.49	3.76	3.97	4.13	4.24	4.32	4.30	4.24
80	0.10	0.38	0.67	0.95	1.18	1.40	1.62	1.79	1.95	2.10	2.24	2.38	2.50	2.59	2.66	2.70	2.73	2.72	2.69
85	0.10	0.24	0.39	0.53	0.67	0.80	0.93	1.03	1.13	1.22	1.31	1.39	1.46	1.52	1.57	1.59	1.61	1.60	1.59
90	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.10	0.10	0.10	0.10	0.09	0.09	0.08	0.08	0.08	0.07	0.07	0.07

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:06 October 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: 96GRF53/1560220	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F96 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	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	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	
-85	1.24	1.18	1.11	1.02	0.93	0.83	0.71	0.59	0.48	0.38	0.26	0.13	0.13	0.13	0.11	0.09	0.09	0.07	
-80	2.24	2.17	2.08	1.98	1.87	1.76	1.62	1.48	1.34	1.20	1.05	0.90	0.67	0.43	0.17	0.12	0.10	0.07	
-75	3.77	3.62	3.47	3.28	3.04	2.78	2.54	2.31	2.05	1.80	1.57	1.33	1.13	0.92	0.55	0.16	0.11	0.07	
-70	6.81	6.48	6.14	5.69	5.15	4.58	4.08	3.52	3.04	2.57	2.20	1.82	1.50	1.20	0.92	0.42	0.13	0.07	
-65	11.9	11.3	10.7	9.84	8.80	7.78	6.65	5.62	4.58	3.75	3.04	2.41	1.92	1.50	1.13	0.67	0.14	0.07	
-60	18.1	17.3	16.4	15.2	13.7	12.2	10.6	8.76	7.02	5.50	4.22	3.19	2.41	1.82	1.32	0.91	0.16	0.07	
-55	31.7	29.6	26.4	22.0	19.5	17.3	15.2	12.8	10.4	7.98	5.86	4.22	3.03	2.20	1.55	1.04	0.27	0.07	
-50	106	93.7	75.3	52.9	37.3	26.6	20.3	17.2	14.1	11.0	8.03	5.53	3.76	2.58	1.77	1.16	0.38	0.07	
-45	230	212	186	148	103	61.1	35.3	22.7	17.9	14.3	10.5	7.12	4.61	3.06	2.01	1.27	0.48	0.07	
-40	311	303	288	254	207	146	82.7	40.6	23.0	17.5	13.1	8.92	5.70	3.54	2.26	1.38	0.57	0.07	
-35	355	346	332	318	291	237	160	83.8	36.0	20.8	15.6	10.9	6.81	4.11	2.48	1.50	0.66	0.07	
-30	410	400	381	355	329	300	238	148	61.9	27.4	18.0	12.8	8.09	4.62	2.72	1.60	0.73	0.07	
-25	453	445	428	402	364	330	293	209	104	38.4	20.5	14.6	9.22	5.20	2.95	1.69	0.80	0.07	
-20	471	471	462	439	403	358	322	257	150	54.0	22.9	16.1	10.3	5.73	3.15	1.77	0.85	0.07	
-15	461	471	477	465	432	385	336	291	188	76.6	27.4	17.3	11.1	6.15	3.30	1.83	0.89	0.07	
-10	450	463	477	479	452	407	352	308	217	96.1	30.6	18.2	11.8	6.45	3.41	1.87	0.93	0.07	
-5	441	457	475	484	465	421	364	318	234	108	32.7	18.8	12.2	6.63	3.48	1.90	0.95	0.07	
0	442	457	475	487	471	427	368	321	239	112	33.6	19.1	12.4	6.69	3.50	1.91	0.95	0.07	
5	441	455	471	480	461	418	361	315	233	108	32.9	18.9	12.2	6.62	3.48	1.91	0.95	0.07	
10	455	466	480	480	454	407	350	304	216	96.8	31.0	18.3	11.8	6.42	3.41	1.88	0.93	0.07	
15	473	480	484	473	437	389	335	292	192	79.4	27.9	17.5	11.2	6.12	3.30	1.84	0.90	0.07	
20	488	485	475	450	411	362	321	262	159	58.6	23.8	16.4	10.3	5.70	3.16	1.79	0.86	0.07	
25	474	463	444	414	376	334	297	218	115	41.8	21.5	15.0	9.29	5.18	2.97	1.72	0.81	0.07	
30	435	420	399	369	335	306	250	159	70.4	29.5	18.9	13.3	8.20	4.63	2.75	1.64	0.75	0.07	
35	379	365	344	325	301	253	179	96.6	39.6	22.6	16.6	11.4	6.95	4.15	2.51	1.54	0.68	0.07	
40	323	315	303	274	228	166	101	47.5	25.4	18.6	13.9	9.39	5.87	3.61	2.30	1.44	0.59	0.07	
45	258	240	212	175	127	85.0	41.8	25.7	19.2	15.2	11.1	7.50	4.77	3.16	2.08	1.33	0.50	0.07	
50	136	121	102	73.5	46.1	30.4	22.6	18.3	15.2	11.7	8.48	5.82	3.96	2.70	1.85	1.22	0.40	0.07	
55	38.6	35.5	30.8	25.3	21.6	18.2	16.0	13.6	11.1	8.48	6.18	4.45	3.23	2.32	1.65	1.10	0.29	0.07	
60	18.4	17.9	17.0	15.8	14.5	12.8	11.0	9.22	7.55	5.88	4.48	3.42	2.60	1.95	1.42	0.97	0.17	0.07	
65	12.2	11.8	11.1	10.2	9.20	8.18	7.00	5.98	4.92	4.09	3.31	2.64	2.10	1.64	1.22	0.72	0.16	0.07	
70	7.13	6.89	6.51	6.04	5.51	4.94	4.43	3.87	3.40	2.90	2.46	2.04	1.68	1.33	1.01	0.46	0.14	0.07	
75	4.18	4.07	3.90	3.69	3.46	3.20	2.91	2.64	2.37	2.09	1.83	1.55	1.30	1.04	0.62	0.20	0.12	0.07	
80	2.64	2.58	2.49	2.39	2.26	2.12	1.96	1.80	1.63	1.45	1.28	1.10	0.79	0.49	0.20	0.14	0.10	0.07	
85	1.55	1.50	1.43	1.35	1.24	1.12	0.99	0.85	0.69	0.53	0.38	0.23	0.18	0.14	0.12	0.10	0.08	0.07	
90	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:06 October 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: