

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	2003.5 cd per klm.
(Luminaire orientation as tested.)	-180.0 degrees vertical
	90.0 degrees horizontal

Beam Spread	At 10% of Imax	360.0V x 180.0H
	At 50% of Imax	215.0V x 180.0H
	At 90% of Imax	73.2V x 180.0H

Beam Flux	Total	1083.2 lumens per klm.
	To 10% of Imax	678.2 lumens per klm.
	To 50% of Imax	216.6 lumens per klm.
	To 90% of Imax	0.0 lumens per klm.

Upward LOR	54.9 %
Downward LOR	53.4 %

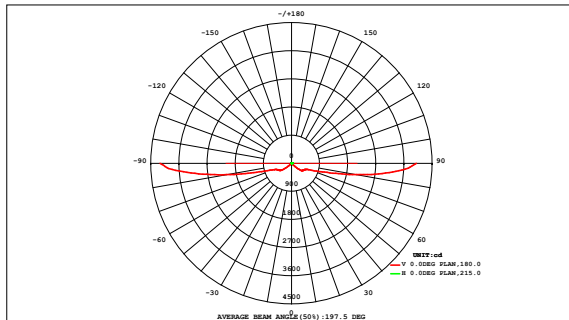
Luminaire Efficiency (Light Output Ratio)	108.4 %
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C Range: 0 - 360DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 26 January 2023

γ Range: 0 - 180DEG
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: 96GRF331WW/2BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 300 x 120 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Circle	Shielding Angle:



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	96GRF331WW/2BL	Imax (cd)	4207
NOMINAL POWER (W)	30	AVAILABILITY (%)	89.1
RATED VOLTAGE (V)	230	Avai. FLUX (lm)	1870
NOMINAL FLUX (lm)	2100	LOR (%)	108.4
LAMPS INSIDE	1	TOTAL FLUX (lm)	2276
TEST VOLTAGE (V)	230	θ @50% (H,V)	180,215DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	7.49	8.72	6.35	6.40	1.44	0.20	0.08	0.04	0.01	0.01	0.04	0.07	0.18	1.48	6.48	6.41	9.04	7.99	62.4	50.9
90	7.44	8.69	6.31	6.45	1.51	0.20	0.09	0.04	0.01	0.01	0.03	0.07	0.18	1.35	6.31	6.39	8.85	7.89	61.8	49.8
80	7.43	8.67	6.29	6.48	1.58	0.20	0.09	0.04	0.01	0.01	0.03	0.07	0.18	1.23	6.17	6.38	8.66	7.81	61.3	49.4
70	7.44	8.68	6.28	6.54	1.68	0.21	0.09	0.04	0.01	0.01	0.03	0.06	0.17	1.12	6.02	6.36	8.49	7.72	61.0	48.7
60	7.45	8.72	6.29	6.61	1.79	0.21	0.09	0.04	0.01	0.01	0.03	0.06	0.18	1.05	5.90	6.34	8.35	7.64	60.8	48.4
50	7.47	8.81	6.30	6.69	1.90	0.23	0.09	0.04	0.02	0.01	0.03	0.06	0.18	1.00	5.80	6.33	8.25	7.58	60.8	48.7
40	7.49	8.79	6.31	6.77	2.01	0.24	0.10	0.04	0.02	0.01	0.03	0.06	0.19	0.98	5.74	6.32	8.16	7.55	60.8	48.3
30	7.51	8.79	6.31	6.84	2.15	0.25	0.10	0.04	0.01	0.01	0.03	0.07	0.19	0.96	5.71	6.33	8.13	7.59	61.0	49.0
20	7.54	8.81	6.30	6.89	2.28	0.27	0.10	0.05	0.01	0.01	0.03	0.07	0.20	0.93	5.77	6.37	8.35	7.70	61.7	49.9
10	7.60	9.02	6.31	6.96	2.51	0.29	0.10	0.05	0.01	0.01	0.03	0.07	0.20	1.07	5.99	6.45	8.58	7.71	63.0	50.6
0	7.71	9.13	6.34	7.02	2.58	0.30	0.11	0.05	0.02	0.01	0.03	0.07	0.19	1.01	6.02	6.45	8.47	7.64	63.1	50.7
-10	7.78	9.09	6.36	7.06	2.63	0.30	0.11	0.05	0.02	0.01	0.03	0.06	0.18	1.02	6.07	6.46	8.49	7.61	63.3	51.4
-20	7.81	9.05	6.37	7.07	2.63	0.30	0.10	0.05	0.02	0.01	0.03	0.06	0.17	1.05	6.16	6.47	8.37	7.59	63.3	51.7
-30	7.80	9.06	6.39	7.05	2.58	0.28	0.10	0.05	0.02	0.01	0.03	0.06	0.17	1.11	6.27	6.48	8.35	7.57	63.4	52.0
-40	7.78	9.06	6.42	7.03	2.47	0.26	0.10	0.04	0.02	0.01	0.03	0.06	0.17	1.19	6.39	6.49	8.35	7.56	63.4	52.1
-50	7.74	9.05	6.46	7.02	2.34	0.24	0.09	0.04	0.01	0.01	0.03	0.06	0.17	1.29	6.52	6.51	8.38	7.56	63.6	52.3
-60	7.69	9.03	6.49	6.98	2.20	0.22	0.09	0.04	0.01	0.01	0.03	0.06	0.17	1.42	6.65	6.53	8.42	7.58	63.6	52.7
-70	7.64	8.95	6.49	6.93	2.04	0.21	0.09	0.04	0.01	0.01	0.03	0.07	0.18	1.55	6.77	6.54	8.46	7.63	63.6	53.0
-80	7.64	8.95	6.49	6.93	2.04	0.21	0.09	0.04	0.01	0.01	0.03	0.07	0.18	1.55	6.77	6.54	8.46	7.63	63.6	53.0
-90	7.64	8.95	6.49	6.93	2.04	0.21	0.09	0.04	0.01	0.01	0.03	0.07	0.18	1.55	6.77	6.54	8.46	7.63	63.6	53.0
HORIZONTAL (DEG)																				
Φ t	137	160	114	123	38.3	4.42	1.72	0.78	0.26	0.19	0.55	1.17	3.26	20.8	111	116	152	138	1122	---
Φ a	137	160	114	49.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.9	116	152	138	---	910

one-half-peak spread: U:8.3,D:8.3 , L:170.1,R:10.0

NEMA Beam Type: Type 7

C Range: 0 - 360DEG

C Interval: 2.5DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:26 January 2023

γ Range: 0 - 180DEG

γ Interval: 2.5DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456

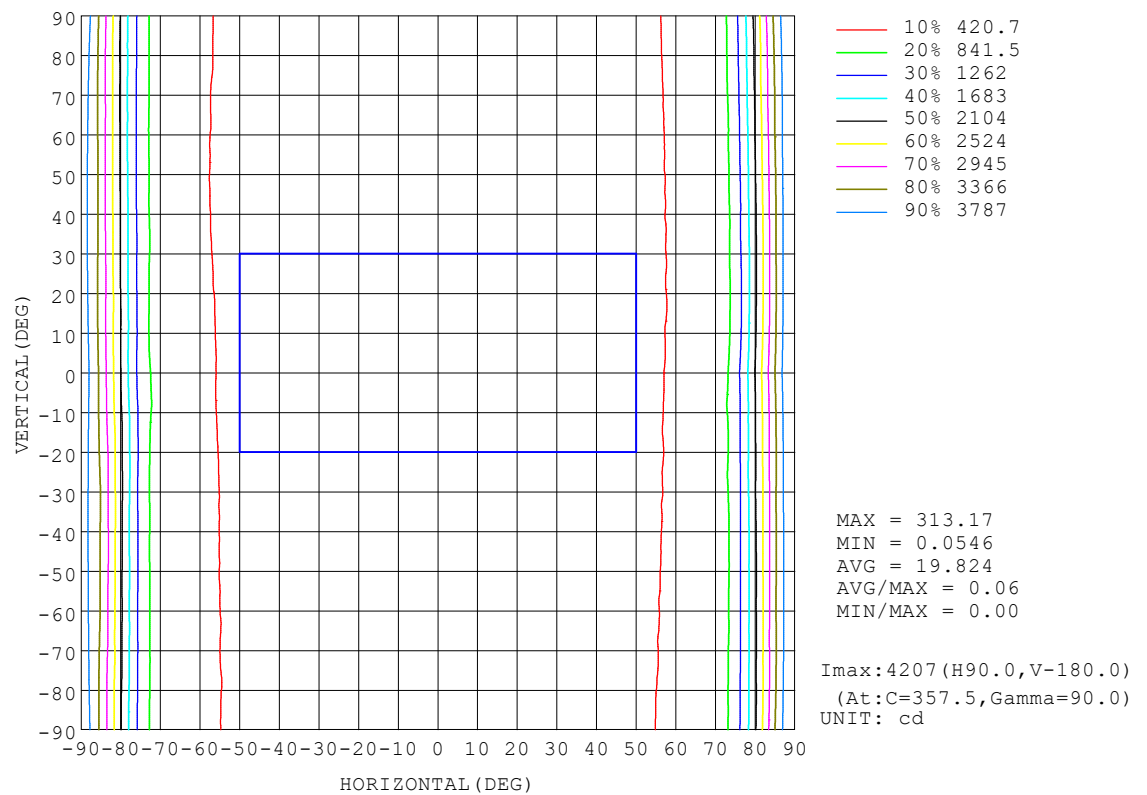
Humidity:65.0%

Test Distance:6.340m [K=1.0000]

Remarks:

ISOCANDELA DIAGRAM

NAME: 96GRF331WW/2BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 300 x 120 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Circle	Shielding Angle:

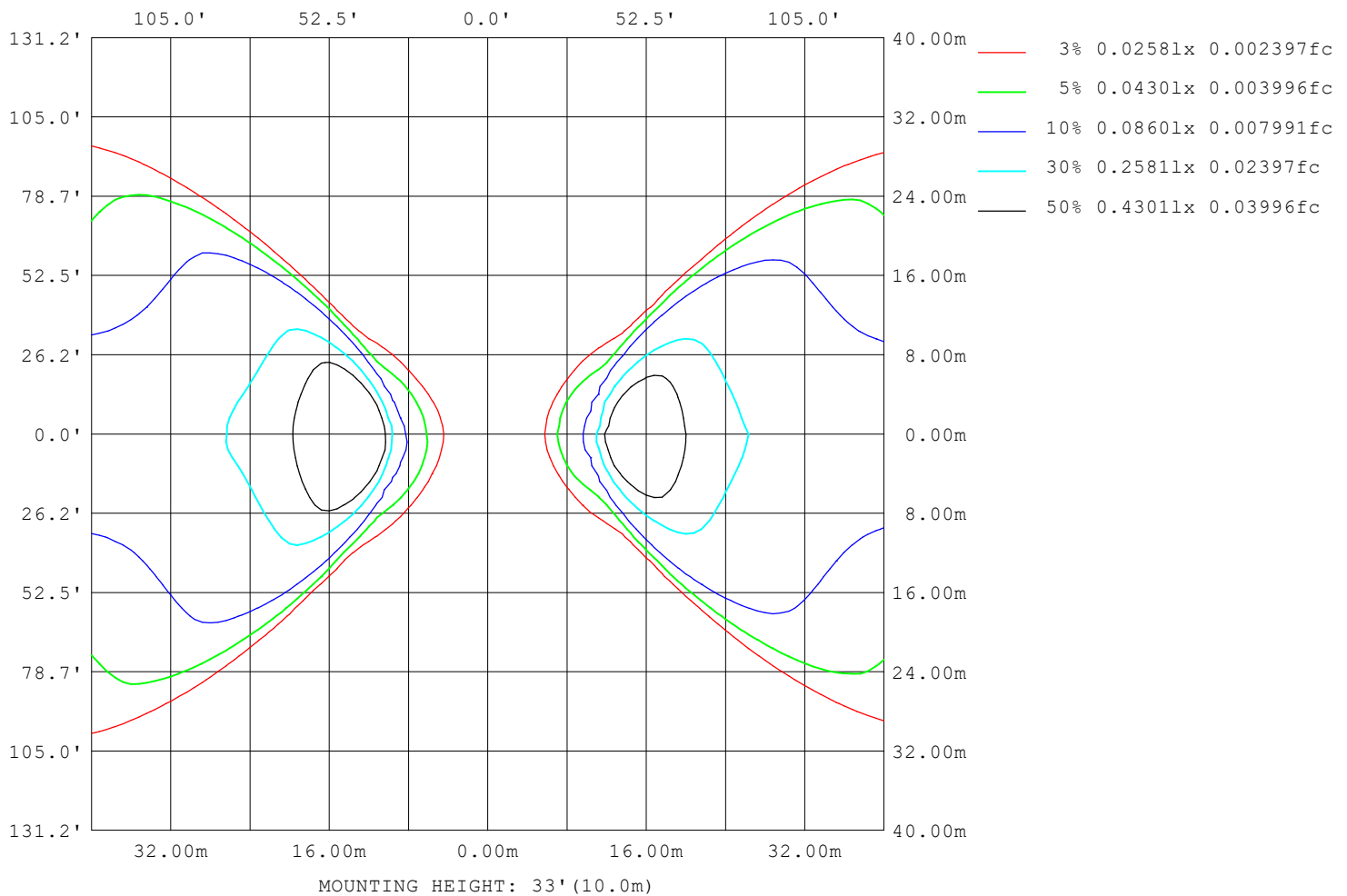


C Range: 0 - 360DEG
 C Interval: 2.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators:
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 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.456
 Humidity: 65.0%
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 Remarks:

ISOLUX DIAGRAM

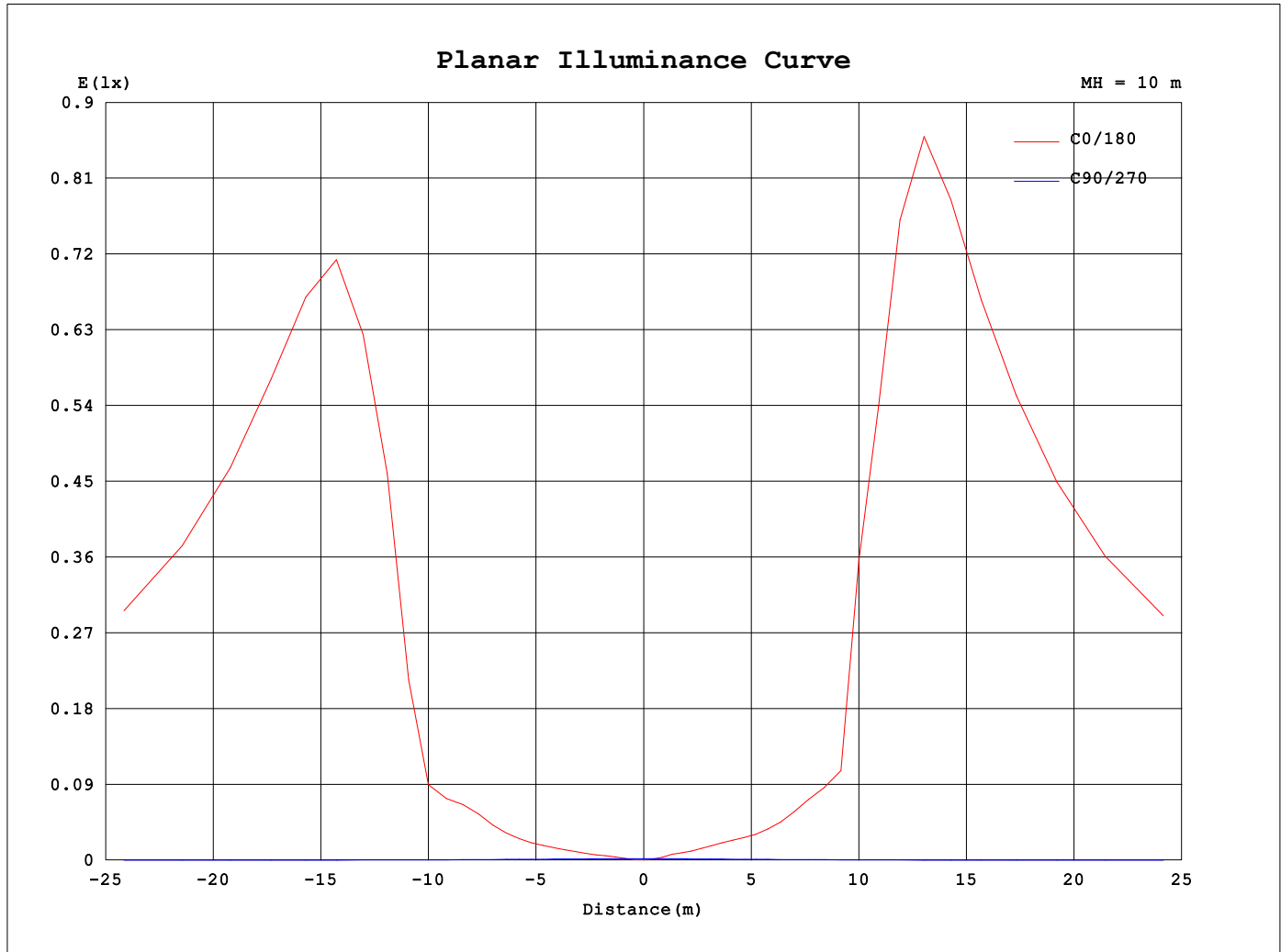
NAME: 96GRF331WW/2BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 300 x 120 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Circle	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
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γ Range: 0 - 180DEG
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

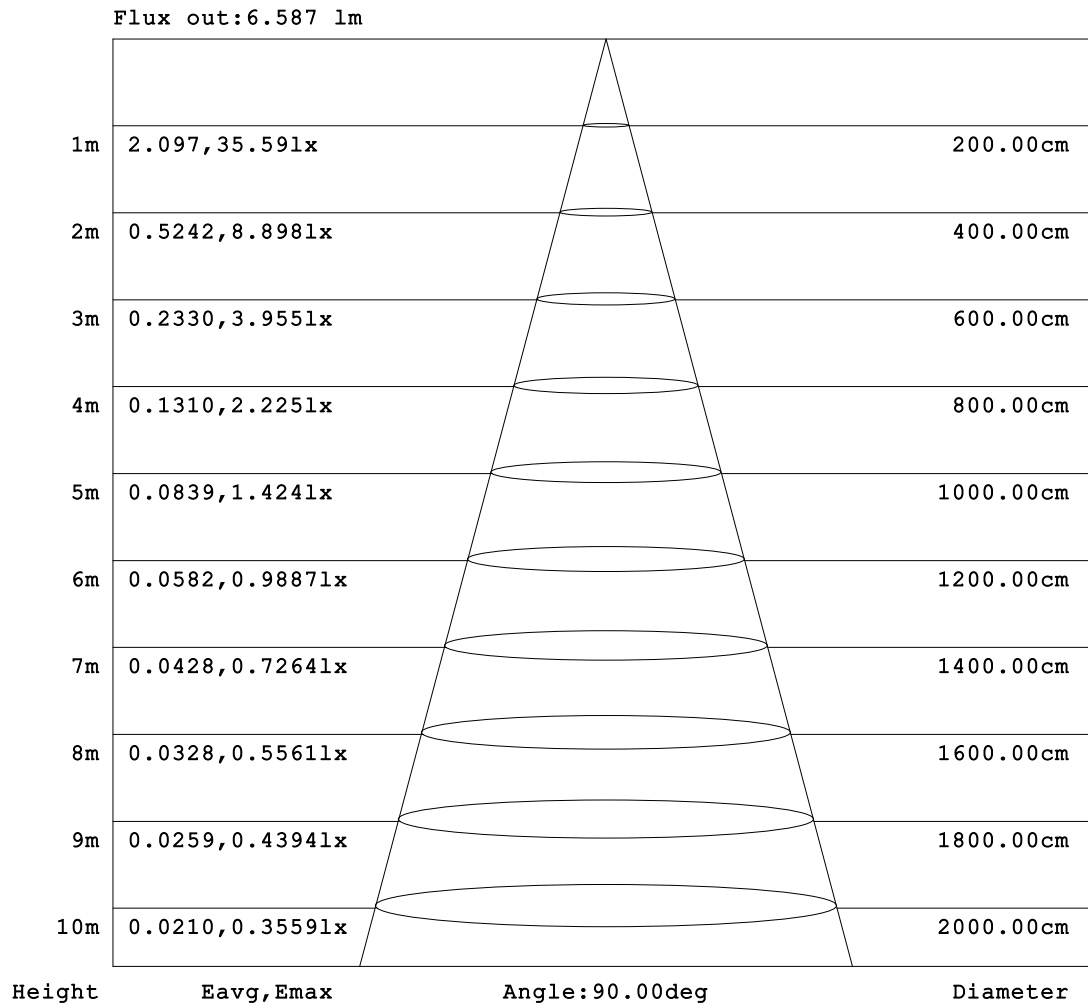


C Range: 0 - 360DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 26 January 2023

γ Range: 0 - 180DEG
 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:

AAI Figure

NAME: 96GRF331WW/2BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 300 x 120 x 120	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: 2.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators:
 Test Date: 26 January 2023

γ Range: 0 - 180DEG
 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: 96GRF331WW/2BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 300 x 120 x 120	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
-180	3993	3342	2175	1147	620	496	465	396	198	31.3	18.4	10.2	5.21	3.08	1.97	1.20	0.62	0.23	0.08
-170	3993	3272	2086	1080	606	491	461	380	182	36.1	18.1	10.1	5.17	3.01	1.91	1.13	0.58	0.19	0.08
-160	3993	3231	2048	1078	615	492	460	391	186	36.6	18.4	10.3	5.28	3.12	2.04	1.26	0.66	0.25	0.08
-150	3993	3221	2052	1084	609	491	459	396	196	32.6	17.6	9.96	5.09	3.05	2.05	1.30	0.73	0.28	0.08
-140	3993	3199	2045	1076	612	490	456	399	201	31.4	16.0	9.08	4.75	2.84	1.87	1.16	0.69	0.24	0.08
-130	3993	3200	2053	1082	613	489	455	406	212	32.6	14.8	8.24	4.49	2.81	1.87	1.19	0.73	0.27	0.08
-120	3993	3224	2070	1088	610	489	455	410	225	42.5	13.7	7.65	4.34	2.84	1.90	1.20	0.79	0.31	0.09
-110	3993	3212	2071	1099	622	491	455	415	241	50.6	13.3	7.32	4.28	2.91	1.99	1.26	0.88	0.34	0.09
-100	3993	3226	2091	1105	622	492	455	421	253	54.3	13.8	7.29	4.31	2.99	2.05	1.31	0.94	0.36	0.10
-90	3993	3270	2133	1114	626	492	454	425	267	62.3	14.2	7.54	4.42	3.06	2.08	1.33	0.95	0.39	0.11
-80	3993	3268	2146	1133	633	494	453	424	277	74.9	15.4	8.06	4.64	3.15	2.13	1.35	0.95	0.40	0.12
-70	3993	3292	2165	1147	638	494	452	421	288	86.4	16.4	8.82	4.96	3.27	2.20	1.39	0.96	0.42	0.13
-60	3993	3339	2189	1140	625	491	450	421	294	95.9	17.7	9.69	5.32	3.37	2.26	1.42	0.95	0.45	0.14
-50	3993	3324	2182	1144	627	487	448	419	302	99.5	19.1	10.5	5.65	3.47	2.30	1.46	0.99	0.51	0.16
-40	3993	3328	2193	1146	621	487	447	420	307	106	20.2	11.2	5.93	3.56	2.35	1.51	0.97	0.53	0.18
-30	3993	3352	2215	1137	620	485	447	420	309	106	21.1	11.7	6.14	3.62	2.39	1.50	0.94	0.53	0.18
-20	3993	3297	2190	1159	625	484	445	418	310	105	21.2	11.8	6.17	3.65	2.41	1.50	0.94	0.52	0.19
-10	3993	3260	2156	1143	627	482	442	416	304	103	21.0	11.5	6.07	3.66	2.45	1.52	0.89	0.45	0.19
0	3993	3247	2110	1085	603	479	442	416	286	101	19.2	10.5	5.73	3.63	2.49	1.55	0.93	0.38	0.09
10	3993	3210	2101	1107	615	480	441	413	283	75.7	18.4	10.1	5.56	3.54	2.39	1.45	0.86	0.39	0.19
20	3993	3201	2091	1109	626	481	439	411	277	71.3	17.1	9.37	5.28	3.43	2.30	1.41	0.86	0.49	0.18
30	3993	3217	2084	1113	624	481	437	406	270	63.0	15.9	8.78	5.07	3.33	2.25	1.39	0.94	0.49	0.17
40	3993	3189	2075	1098	622	480	435	402	260	56.7	14.9	8.34	4.91	3.27	2.22	1.41	0.97	0.45	0.16
50	3993	3184	2067	1099	621	478	435	399	251	48.6	14.1	7.96	4.77	3.22	2.19	1.42	0.95	0.44	0.14
60	3993	3202	2062	1098	618	478	436	398	240	50.1	13.6	7.74	4.69	3.18	2.16	1.38	0.90	0.41	0.13
70	3993	3191	2045	1101	626	480	438	395	233	46.9	13.2	7.55	4.59	3.11	2.10	1.32	0.84	0.36	0.12
80	3993	3206	2048	1098	622	481	440	399	223	39.2	13.1	7.49	4.52	3.01	2.02	1.27	0.79	0.32	0.11
90	3993	3250	2074	1100	620	484	444	401	216	32.8	13.3	7.51	4.45	2.92	1.97	1.25	0.78	0.31	0.11
100	3993	3237	2072	1112	626	490	449	393	208	36.1	13.7	7.76	4.50	2.93	1.97	1.25	0.75	0.29	0.10
110	3993	3252	2076	1129	635	493	452	387	200	36.4	14.1	7.95	4.54	2.86	1.87	1.16	0.70	0.28	0.09
120	3993	3291	2091	1135	626	494	454	383	196	36.3	14.4	8.02	4.48	2.81	1.82	1.14	0.66	0.24	0.08
130	3993	3275	2107	1144	632	493	455	381	189	30.5	14.6	7.97	4.40	2.75	1.78	1.10	0.63	0.23	0.08
140	3993	3281	2128	1144	624	491	455	380	187	28.4	15.1	8.16	4.36	2.68	1.74	1.08	0.59	0.23	0.08
150	3993	3309	2159	1129	619	490	456	380	185	32.2	15.6	8.44	4.42	2.67	1.75	1.09	0.59	0.20	0.08
160	3993	3295	2144	1146	620	491	458	384	187	40.2	16.2	8.80	4.57	2.75	1.79	1.09	0.59	0.20	0.08
170	3993	3305	2145	1132	622	493	461	383	188	39.9	17.2	9.53	4.91	2.93	1.87	1.13	0.58	0.21	0.08
180	3993	3342	2175	1147	620	496	465	396	198	31.3	18.4	10.2	5.21	3.08	1.97	1.20	0.62	0.23	0.09

C Range: 0 - 360DEG

C Interval: 2.5DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:26 January 2023

γ Range: 0 - 180DEG

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: 96GRF331WW/2BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 300 x 120 x 120	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	
-180	0.36	0.86	1.22	1.85	2.63	4.17	8.74	17.0	86.7	304	439	466	497	601	1103	2257	3508	4207	
-170	0.33	0.81	1.16	1.80	2.59	4.21	8.77	17.3	90.7	302	440	468	500	605	1112	2235	3467	4207	
-160	0.36	0.78	1.15	1.74	2.52	4.07	8.57	17.1	90.6	297	440	469	502	610	1098	2213	3452	4207	
-150	0.35	0.80	1.13	1.73	2.47	3.95	8.27	16.6	87.9	293	440	470	504	603	1092	2188	3460	4207	
-140	0.32	0.82	1.12	1.71	2.45	3.84	8.05	16.1	84.3	289	438	470	504	605	1071	2163	3409	4207	
-130	0.33	0.84	1.14	1.70	2.43	3.76	7.76	15.6	77.7	282	436	470	504	606	1070	2137	3385	4207	
-120	0.33	0.83	1.12	1.69	2.42	3.73	7.50	14.9	72.0	272	434	469	505	605	1069	2122	3389	4207	
-110	0.30	0.83	1.14	1.69	2.41	3.69	7.23	14.1	64.4	263	429	469	504	614	1074	2079	3350	4207	
-100	0.27	0.82	1.10	1.65	2.37	3.61	6.87	13.5	53.5	252	429	468	503	610	1064	2054	3341	4207	
-90	0.26	0.81	1.06	1.61	2.31	3.51	6.59	12.9	41.5	243	426	466	501	608	1057	2047	3362	4207	
-80	0.24	0.80	1.03	1.57	2.28	3.48	6.55	12.8	38.8	228	419	464	502	610	1057	2025	3310	4207	
-70	0.24	0.79	1.03	1.56	2.28	3.46	6.44	12.6	35.7	215	407	463	501	611	1060	2023	3290	4207	
-60	0.25	0.77	1.00	1.56	2.31	3.49	6.39	12.4	31.9	202	401	461	500	598	1047	2033	3301	4207	
-50	0.29	0.76	0.96	1.52	2.28	3.49	6.30	12.3	25.9	190	396	460	499	602	1044	2024	3275	4207	
-40	0.26	0.72	0.94	1.47	2.23	3.50	6.38	12.4	23.6	180	388	460	499	598	1046	2040	3273	4207	
-30	0.24	0.68	0.92	1.44	2.23	3.57	6.57	12.9	24.7	171	386	457	498	598	1048	2074	3296	4207	
-20	0.24	0.63	0.88	1.44	2.25	3.69	6.95	13.3	27.3	170	381	456	497	602	1062	2064	3287	4207	
-10	0.22	0.55	0.90	1.46	2.31	3.84	7.37	14.0	28.4	164	371	457	496	604	1047	2073	3307	4207	
0	0.24	0.55	0.92	1.51	2.34	3.95	7.58	14.7	25.4	173	378	457	495	598	1061	2116	3361	4207	
10	0.22	0.56	0.88	1.48	2.30	3.87	7.36	14.3	25.1	149	354	450	487	583	1003	2047	3304	4207	
20	0.32	0.60	0.88	1.43	2.23	3.72	7.12	14.1	26.3	150	356	448	487	588	1012	2015	3283	4207	
30	0.34	0.68	0.92	1.45	2.19	3.59	6.87	13.5	24.2	159	356	448	488	584	1028	2022	3297	4207	
40	0.33	0.75	0.97	1.50	2.21	3.51	6.72	13.1	24.3	165	360	449	488	588	1030	2039	3294	4207	
50	0.33	0.76	1.04	1.54	2.23	3.49	6.58	12.8	25.9	176	369	448	488	593	1051	2074	3319	4207	
60	0.35	0.78	1.05	1.57	2.30	3.54	6.62	12.7	30.7	186	376	449	489	597	1078	2114	3369	4207	
70	0.37	0.82	1.11	1.66	2.39	3.63	6.74	12.9	34.6	200	386	449	490	612	1106	2139	3379	4207	
80	0.37	0.85	1.16	1.73	2.47	3.73	6.84	12.9	37.4	214	398	450	490	613	1125	2173	3416	4207	
90	0.38	0.86	1.15	1.73	2.48	3.77	7.04	13.3	38.7	231	407	451	490	616	1152	2225	3483	4207	
100	0.39	0.87	1.16	1.74	2.51	3.88	7.34	13.8	48.9	244	412	453	490	625	1182	2239	3474	4207	
110	0.41	0.88	1.18	1.76	2.56	4.05	7.73	14.3	61.1	260	417	455	491	635	1205	2269	3495	4207	
120	0.42	0.88	1.17	1.77	2.59	4.22	8.11	14.8	68.4	274	423	457	492	623	1207	2309	3540	4207	
130	0.44	0.86	1.15	1.77	2.62	4.36	8.55	15.7	70.2	286	428	459	492	631	1209	2313	3525	4207	
140	0.45	0.83	1.18	1.78	2.64	4.47	8.92	16.3	80.6	297	431	460	492	628	1211	2328	3533	4207	
150	0.43	0.82	1.19	1.80	2.65	4.55	9.25	17.0	98.0	306	435	460	492	629	1196	2345	3563	4207	
160	0.42	0.84	1.19	1.82	2.64	4.49	9.45	17.6	103	315	436	462	494	632	1210	2326	3520	4207	
170	0.36	0.80	1.19	1.81	2.63	4.42	9.39	17.9	107	318	437	463	496	630	1181	2297	3500	4207	
180	0.36	0.86	1.22	1.85	2.63	4.17	8.74	17.0	86.7	304	439	466	497	601	1103	2257	3508	4207	

C Range: 0 - 360DEG

C Interval: 2.5DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:26 January 2023

γ Range: 0 - 180DEG

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: