

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	2527.5 cd per klm.
(Luminaire orientation as tested.)	-180.0 degrees vertical
	-90.0 degrees horizontal

Beam Spread	At 10% of Imax	360.0V x 36.7H
	At 50% of Imax	359.9V x 11.6H
	At 90% of Imax	359.6V x 4.6H

Beam Flux	Total	811.2 lumens per klm.
	To 10% of Imax	762.2 lumens per klm.
	To 50% of Imax	339.4 lumens per klm.
	To 90% of Imax	229.5 lumens per klm.

Upward LOR	41.4 %
Downward LOR	39.8 %

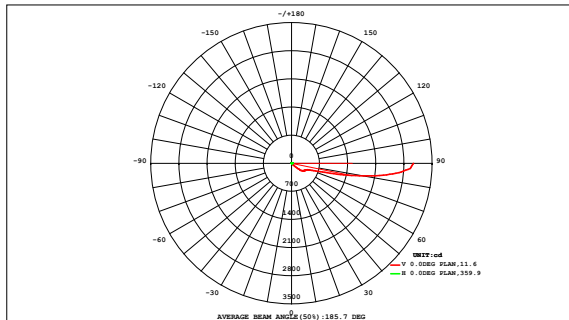
Luminaire Efficiency (Light Output Ratio)	81.1 %
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C Range: 0 - 180DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 26 January 2023

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/1BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 200 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)	3033
NOMINAL POWER (W)	15	AVAILABILITY (%)	71.0
RATED VOLTAGE (V)	230	Avai. FLUX (lm)	851.6
NOMINAL FLUX (lm)	1200	LOR (%)	81.1
LAMPS INSIDE	1	TOTAL FLUX (lm)	973.8
TEST VOLTAGE (V)	230	θ @50% (H,V)	12,360DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	6.28	7.54	5.38	5.66	1.44	0.18	0.06	0.03	0.01	0.00	0.00	0.01	0.03	0.05	0.08	0.07	0.05	0.02	26.9	23.4
90	6.28	7.54	5.38	5.66	1.44	0.18	0.06	0.03	0.01	0.00	0.00	0.01	0.03	0.05	0.08	0.07	0.05	0.02	26.9	23.4
80	6.26	7.49	5.35	5.63	1.41	0.18	0.06	0.03	0.01	0.00	0.01	0.02	0.03	0.05	0.08	0.07	0.05	0.02	26.8	23.2
70	6.26	7.44	5.34	5.59	1.39	0.18	0.06	0.03	0.01	0.00	0.01	0.02	0.03	0.05	0.08	0.07	0.05	0.02	26.6	23.2
60	6.26	7.41	5.33	5.56	1.36	0.18	0.06	0.03	0.01	0.00	0.01	0.02	0.03	0.05	0.08	0.07	0.05	0.02	26.5	23.1
50	6.26	7.38	5.32	5.54	1.35	0.17	0.06	0.03	0.01	0.00	0.01	0.02	0.03	0.05	0.08	0.08	0.05	0.02	26.5	23.0
40	6.28	7.34	5.31	5.53	1.34	0.17	0.06	0.03	0.01	0.00	0.01	0.02	0.03	0.05	0.08	0.08	0.05	0.02	26.4	23.0
30	6.27	7.34	5.29	5.53	1.34	0.17	0.06	0.03	0.01	0.00	0.01	0.01	0.03	0.05	0.08	0.08	0.05	0.02	26.4	23.0
20	6.27	7.32	5.26	5.52	1.35	0.17	0.06	0.03	0.01	0.00	0.00	0.01	0.03	0.05	0.08	0.08	0.05	0.02	26.3	22.9
10	6.30	7.32	5.23	5.46	1.34	0.17	0.06	0.03	0.01	0.00	0.00	0.01	0.03	0.05	0.08	0.07	0.05	0.02	26.3	22.9
0	6.30	7.32	5.23	5.46	1.34	0.17	0.06	0.03	0.01	0.00	0.00	0.01	0.03	0.05	0.08	0.07	0.05	0.02	26.3	22.9
-10	6.27	7.32	5.26	5.52	1.35	0.17	0.06	0.03	0.01	0.00	0.00	0.01	0.03	0.05	0.08	0.08	0.05	0.02	26.3	22.9
-20	6.27	7.34	5.29	5.53	1.34	0.17	0.06	0.03	0.01	0.00	0.01	0.01	0.03	0.05	0.08	0.08	0.05	0.02	26.4	23.0
-30	6.28	7.34	5.31	5.53	1.34	0.17	0.06	0.03	0.01	0.00	0.01	0.02	0.03	0.05	0.08	0.08	0.05	0.02	26.4	23.0
-40	6.26	7.38	5.32	5.54	1.35	0.17	0.06	0.03	0.01	0.00	0.01	0.02	0.03	0.05	0.08	0.08	0.05	0.02	26.5	23.0
-50	6.26	7.41	5.33	5.56	1.36	0.18	0.06	0.03	0.01	0.00	0.01	0.02	0.03	0.05	0.08	0.07	0.05	0.02	26.5	23.1
-60	6.26	7.44	5.34	5.59	1.39	0.18	0.06	0.03	0.01	0.00	0.01	0.02	0.03	0.05	0.08	0.07	0.05	0.02	26.6	23.2
-70	6.26	7.49	5.35	5.63	1.41	0.18	0.06	0.03	0.01	0.00	0.01	0.02	0.03	0.05	0.08	0.07	0.05	0.02	26.8	23.2
-80	6.28	7.54	5.38	5.66	1.44	0.18	0.06	0.03	0.01	0.00	0.00	0.01	0.03	0.05	0.08	0.07	0.05	0.02	26.9	23.4
-90	6.28	7.54	5.38	5.66	1.44	0.18	0.06	0.03	0.01	0.00	0.00	0.01	0.03	0.05	0.08	0.07	0.05	0.02	26.9	23.4
HORIZONTAL (DEG)																				
Φ t	113	133	95.6	100	24.7	3.14	1.11	0.57	0.18	0.02	0.09	0.27	0.52	0.97	1.38	1.34	0.93	0.32	477	---
Φ a	113	133	95.6	73.6	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	---	415

one-half-peak spread: U:1.0,D:1.0 , L:11.5,R:11.6

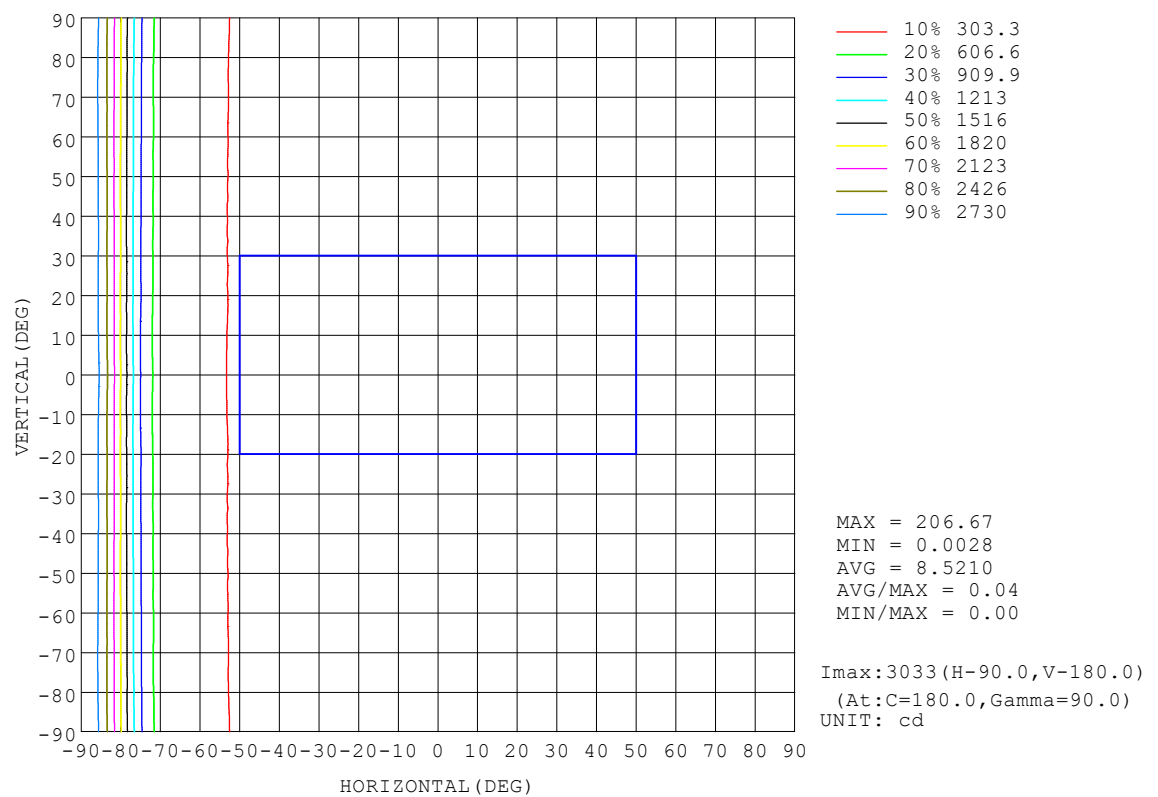
NEMA Beam Type: Type 3 x 7 (H x V)

C Range: 0 - 180DEG
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/1BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 200 x 120 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Circle	Shielding Angle:

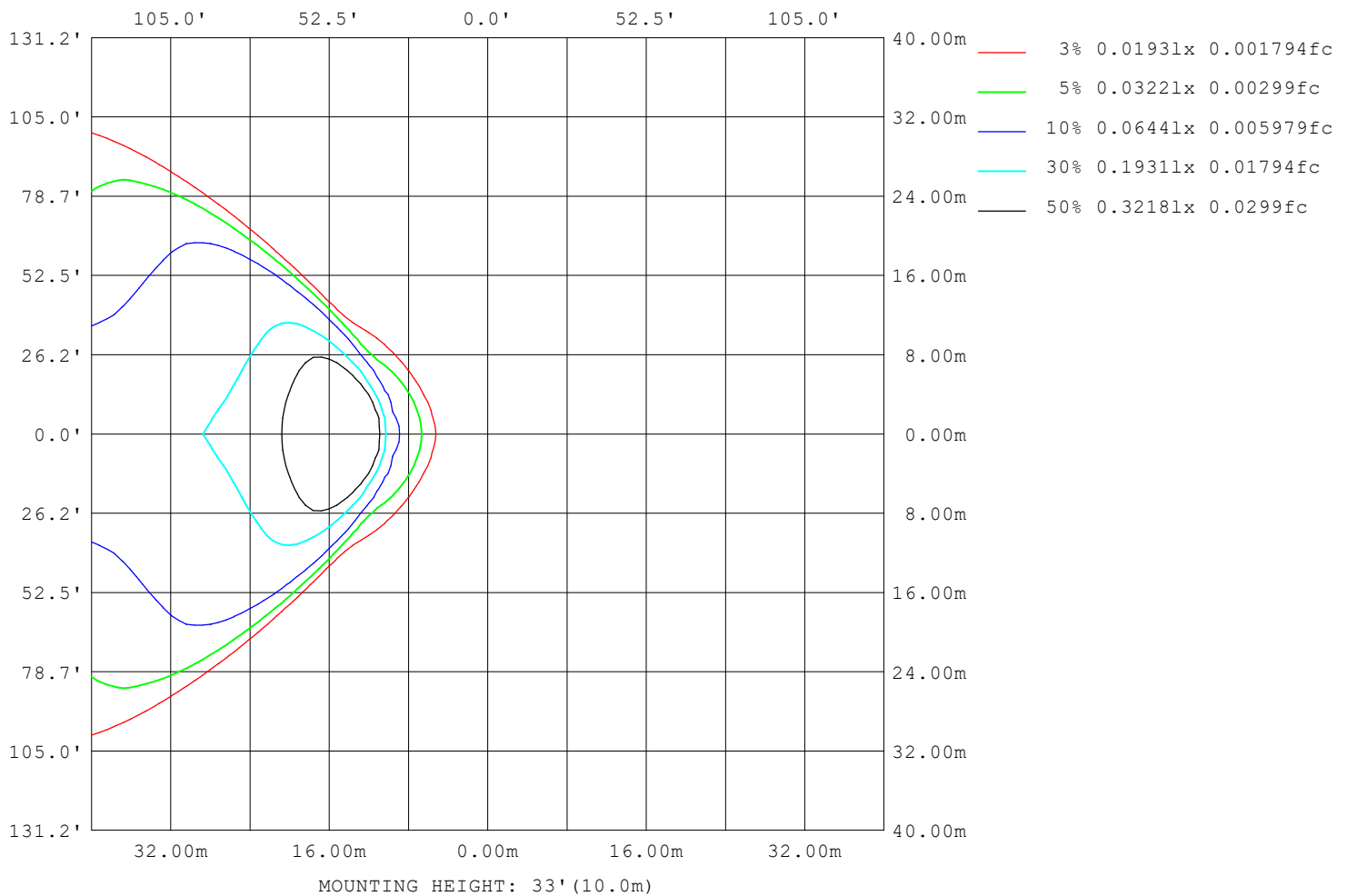


C Range: 0 - 180DEG
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Test Speed: HIGH
Temperature: 25.3°C
Operators:
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γ Interval: 2.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity: 65.0%
Test Distance: 6.340m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

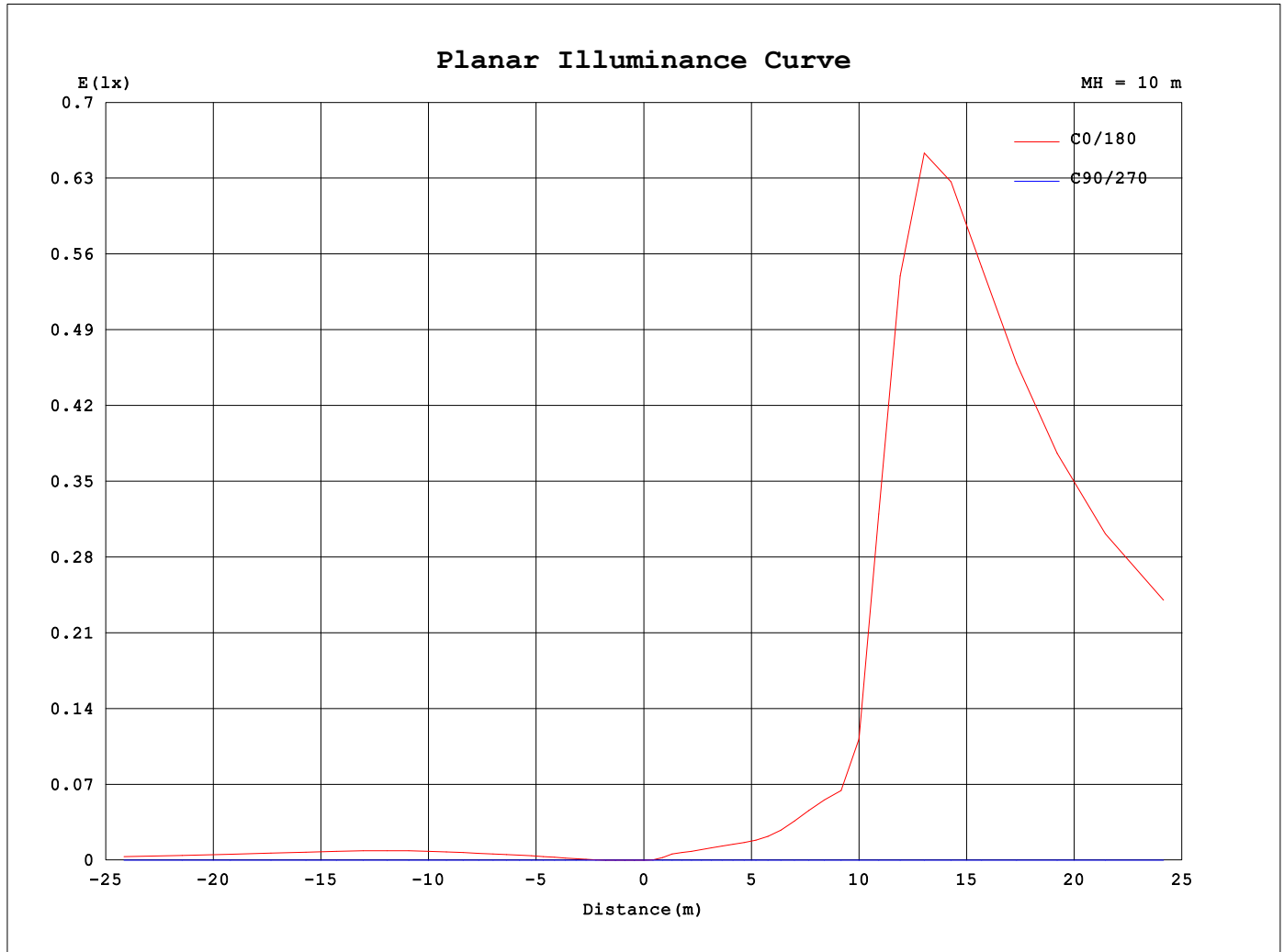
NAME: 96GRF331WW/1BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 200 x 120 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Circle	Shielding Angle:



C Range: 0 - 180DEG
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:

Planar Illuminance Curve

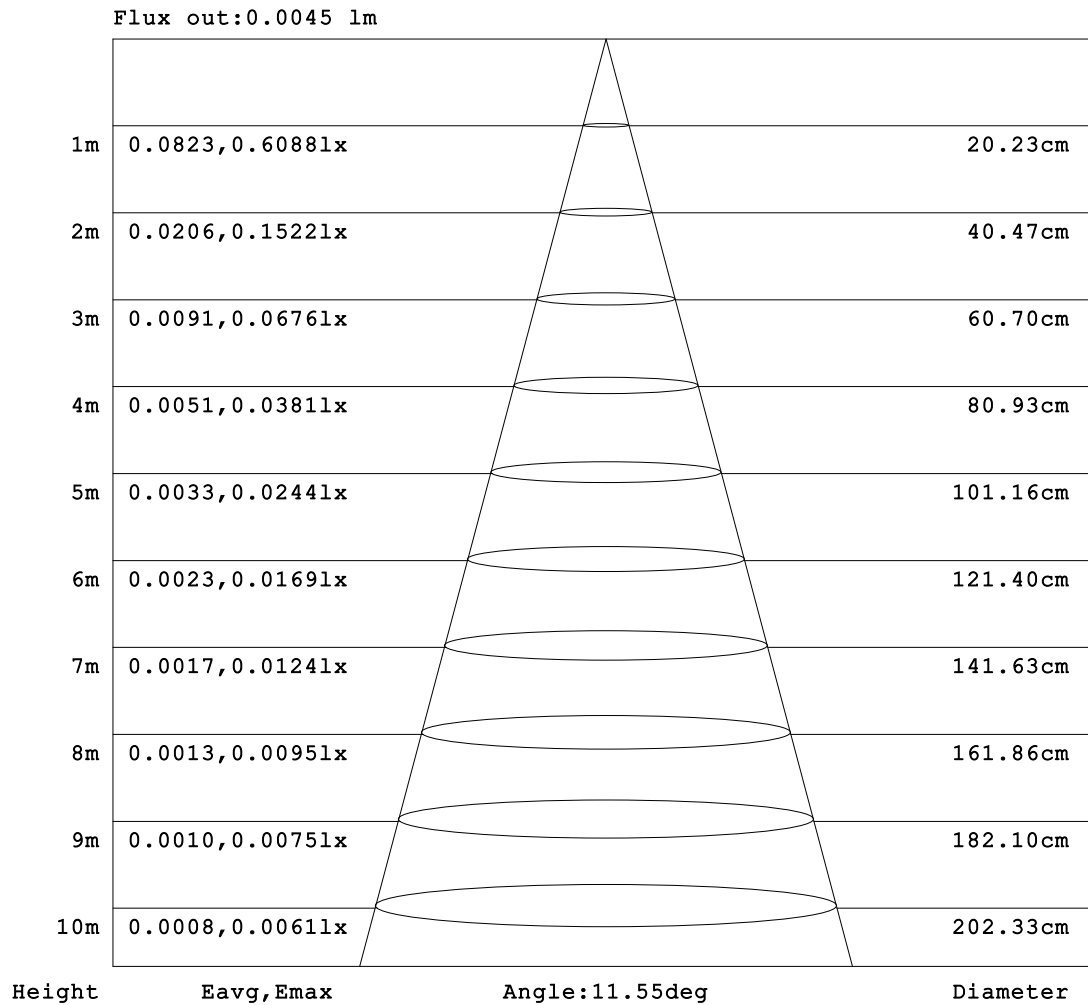


C Range: 0 - 180DEG
 C Interval: 2.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators:
 Test Date: 26 January 2023

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/1BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 200 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 - 180DEG
 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/1BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 200 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	3033	2701	1929	1030	533	408	378	349	230	45.2	13.6	7.51	3.79	2.34	1.70	1.15	0.75	0.35	0.00
-170	3033	2683	1907	1042	542	412	379	348	228	50.9	13.6	7.60	3.88	2.32	1.64	1.08	0.73	0.35	0.03
-160	3033	2679	1899	1034	548	415	380	349	226	53.3	13.7	7.52	3.81	2.27	1.58	1.06	0.73	0.35	0.03
-150	3033	2688	1900	1034	540	416	381	349	226	52.1	13.6	7.45	3.73	2.23	1.57	1.06	0.76	0.35	0.03
-140	3033	2664	1893	1017	540	416	381	348	224	46.9	13.7	7.38	3.66	2.22	1.58	1.06	0.78	0.32	0.03
-130	3033	2658	1885	1009	535	416	382	347	223	43.7	13.6	7.26	3.57	2.18	1.56	1.07	0.77	0.33	0.03
-120	3033	2671	1875	999	527	416	382	347	218	46.4	13.4	7.13	3.51	2.16	1.53	1.05	0.77	0.32	0.03
-110	3033	2657	1852	987	530	416	382	346	218	46.0	13.3	7.03	3.47	2.15	1.54	1.07	0.79	0.30	0.03
-100	3033	2658	1842	967	519	414	382	347	215	41.9	13.2	6.92	3.41	2.13	1.53	1.07	0.79	0.28	0.03
-90	3033	2674	1843	953	511	412	381	346	216	37.1	13.0	6.76	3.32	2.09	1.50	1.05	0.77	0.26	0.03
-80	3033	2650	1822	948	511	411	379	344	212	40.0	12.9	6.72	3.36	2.12	1.51	1.06	0.76	0.26	0.03
-70	3033	2643	1812	946	514	410	377	340	211	41.5	12.8	6.69	3.38	2.14	1.53	1.07	0.76	0.26	0.03
-60	3033	2653	1815	935	504	409	376	338	207	40.7	12.8	6.67	3.38	2.14	1.52	1.06	0.78	0.27	0.03
-50	3033	2638	1802	929	509	408	375	337	205	34.2	12.7	6.57	3.36	2.13	1.49	1.04	0.79	0.27	0.03
-40	3033	2639	1807	927	505	408	374	336	202	34.3	12.5	6.52	3.37	2.13	1.49	1.05	0.76	0.28	0.03
-30	3033	2658	1818	915	504	406	373	338	201	35.2	12.3	6.51	3.39	2.17	1.52	1.04	0.76	0.26	0.03
-20	3033	2651	1799	926	505	404	372	337	204	40.7	12.2	6.51	3.40	2.18	1.54	1.06	0.78	0.27	0.03
-10	3033	2659	1800	906	500	402	370	335	201	39.1	12.2	6.58	3.43	2.20	1.57	1.09	0.76	0.29	0.03
0	3033	2683	1820	915	497	400	367	332	203	31.8	12.4	6.59	3.42	2.20	1.58	1.08	0.75	0.26	0.00
10	3033	2659	1800	906	500	402	370	335	201	39.1	12.2	6.58	3.43	2.20	1.57	1.09	0.76	0.29	0.03
20	3033	2651	1799	926	505	404	372	337	204	40.7	12.2	6.51	3.40	2.18	1.54	1.06	0.78	0.27	0.03
30	3033	2658	1818	915	504	406	373	338	201	35.2	12.3	6.51	3.39	2.17	1.52	1.04	0.76	0.26	0.03
40	3033	2639	1807	927	505	408	374	336	202	34.3	12.5	6.52	3.37	2.13	1.49	1.05	0.76	0.28	0.03
50	3033	2638	1802	929	509	408	375	337	205	34.2	12.7	6.57	3.36	2.13	1.49	1.04	0.79	0.27	0.03
60	3033	2653	1815	935	504	409	376	338	207	40.7	12.8	6.67	3.38	2.14	1.52	1.06	0.78	0.27	0.03
70	3033	2643	1812	946	514	410	377	340	211	41.5	12.8	6.69	3.38	2.14	1.53	1.07	0.76	0.26	0.03
80	3033	2650	1822	948	511	411	379	344	212	40.0	12.9	6.72	3.36	2.12	1.51	1.06	0.76	0.26	0.03
90	3033	2674	1843	953	511	412	381	346	216	37.1	13.0	6.76	3.32	2.09	1.50	1.05	0.77	0.26	0.03
100	3033	2658	1842	967	519	414	382	347	215	41.9	13.2	6.92	3.41	2.13	1.53	1.07	0.79	0.28	0.03
110	3033	2657	1852	987	530	416	382	346	218	46.0	13.3	7.03	3.47	2.15	1.54	1.07	0.79	0.30	0.03
120	3033	2671	1875	999	527	416	382	347	218	46.4	13.4	7.13	3.51	2.16	1.53	1.05	0.77	0.32	0.03
130	3033	2658	1885	1009	535	416	382	347	223	43.7	13.6	7.26	3.57	2.18	1.56	1.07	0.77	0.33	0.03
140	3033	2664	1893	1017	540	416	381	348	224	46.9	13.7	7.38	3.66	2.22	1.58	1.06	0.78	0.32	0.03
150	3033	2688	1900	1034	540	416	381	349	226	52.1	13.6	7.45	3.73	2.23	1.57	1.06	0.76	0.35	0.03
160	3033	2679	1899	1034	548	415	380	349	226	53.3	13.7	7.52	3.81	2.27	1.58	1.06	0.73	0.35	0.03
170	3033	2683	1907	1042	542	412	379	348	228	50.9	13.6	7.60	3.88	2.32	1.64	1.08	0.73	0.35	0.03
180	3033	2701	1929	1030	533	408	378	349	230	45.2	13.6	7.51	3.79	2.34	1.70	1.15	0.75	0.35	0.03

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C Interval: 2.5DEG
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LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: 96GRF331WW/1BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 200 x 120 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Circle	Shielding Angle:

Table--2

UNIT: cd

H(DEC) V(DEC)	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	
-180	0.04	0.05	0.11	0.24	0.42	0.60	0.72	0.94	1.41	2.01	2.55	3.04	3.57	4.24	5.00	5.69	6.29	6.74	
-170	0.02	0.04	0.10	0.25	0.44	0.64	0.84	1.09	1.60	2.30	3.03	3.63	4.12	4.60	5.16	5.74	6.30	6.74	
-160	0.03	0.03	0.11	0.25	0.44	0.68	0.91	1.22	1.76	2.54	3.41	4.13	4.63	4.99	5.38	5.83	6.32	6.74	
-150	0.03	0.06	0.13	0.28	0.45	0.70	0.98	1.35	1.91	2.73	3.65	4.46	5.01	5.35	5.60	5.94	6.36	6.74	
-140	0.03	0.07	0.13	0.30	0.49	0.71	1.01	1.43	2.05	2.88	3.81	4.66	5.24	5.60	5.84	6.06	6.41	6.74	
-130	0.03	0.06	0.16	0.31	0.50	0.74	1.04	1.51	2.18	3.02	3.95	4.78	5.40	5.80	6.01	6.18	6.47	6.74	
-120	0.03	0.06	0.15	0.30	0.51	0.76	1.09	1.58	2.31	3.17	4.08	4.90	5.50	5.91	6.15	6.31	6.53	6.74	
-110	0.03	0.07	0.17	0.32	0.52	0.77	1.10	1.62	2.38	3.28	4.20	5.01	5.60	6.02	6.29	6.43	6.59	6.74	
-100	0.03	0.07	0.16	0.33	0.54	0.80	1.14	1.67	2.45	3.38	4.32	5.12	5.69	6.11	6.40	6.53	6.65	6.74	
-90	0.03	0.06	0.16	0.32	0.53	0.79	1.13	1.67	2.47	3.43	4.39	5.18	5.76	6.19	6.48	6.62	6.70	6.74	
-80	0.03	0.06	0.16	0.32	0.54	0.80	1.15	1.70	2.50	3.47	4.42	5.21	5.79	6.22	6.53	6.68	6.75	6.74	
-70	0.03	0.07	0.17	0.34	0.55	0.82	1.17	1.72	2.53	3.51	4.46	5.26	5.84	6.27	6.56	6.72	6.79	6.74	
-60	0.03	0.08	0.18	0.35	0.56	0.81	1.17	1.72	2.53	3.52	4.48	5.28	5.88	6.33	6.61	6.76	6.82	6.74	
-50	0.03	0.08	0.17	0.34	0.55	0.82	1.17	1.73	2.55	3.53	4.50	5.30	5.88	6.33	6.64	6.79	6.83	6.74	
-40	0.04	0.06	0.19	0.33	0.54	0.81	1.17	1.72	2.54	3.52	4.49	5.30	5.90	6.36	6.65	6.81	6.84	6.74	
-30	0.03	0.06	0.18	0.33	0.54	0.78	1.14	1.70	2.51	3.49	4.48	5.29	5.90	6.35	6.68	6.82	6.85	6.74	
-20	0.03	0.07	0.17	0.32	0.52	0.77	1.12	1.68	2.46	3.44	4.44	5.28	5.90	6.36	6.66	6.84	6.85	6.74	
-10	0.03	0.04	0.15	0.29	0.49	0.76	1.10	1.63	2.41	3.38	4.40	5.26	5.89	6.35	6.68	6.83	6.85	6.74	
0	0.00	0.01	0.11	0.26	0.47	0.74	1.06	1.57	2.35	3.34	4.37	5.24	5.88	6.33	6.64	6.80	6.84	6.74	
10	0.03	0.04	0.15	0.29	0.49	0.76	1.10	1.63	2.41	3.38	4.40	5.26	5.89	6.35	6.68	6.83	6.85	6.74	
20	0.03	0.07	0.17	0.32	0.52	0.77	1.12	1.68	2.46	3.44	4.44	5.28	5.90	6.36	6.66	6.84	6.85	6.74	
30	0.03	0.06	0.18	0.33	0.54	0.78	1.14	1.70	2.51	3.49	4.48	5.29	5.90	6.35	6.68	6.82	6.85	6.74	
40	0.04	0.06	0.19	0.33	0.54	0.81	1.17	1.72	2.54	3.52	4.49	5.30	5.90	6.36	6.65	6.81	6.84	6.74	
50	0.03	0.08	0.17	0.34	0.55	0.82	1.17	1.73	2.55	3.53	4.50	5.30	5.88	6.33	6.64	6.79	6.83	6.74	
60	0.03	0.08	0.18	0.35	0.56	0.81	1.17	1.72	2.53	3.52	4.48	5.28	5.88	6.33	6.61	6.76	6.82	6.74	
70	0.03	0.07	0.17	0.34	0.55	0.82	1.17	1.72	2.53	3.51	4.46	5.26	5.84	6.27	6.56	6.72	6.79	6.74	
80	0.03	0.06	0.16	0.32	0.54	0.80	1.15	1.70	2.50	3.47	4.42	5.21	5.79	6.22	6.53	6.68	6.75	6.74	
90	0.03	0.06	0.16	0.32	0.53	0.79	1.13	1.67	2.47	3.43	4.39	5.18	5.76	6.19	6.48	6.62	6.70	6.74	
100	0.03	0.07	0.16	0.33	0.54	0.80	1.14	1.67	2.45	3.38	4.32	5.12	5.69	6.11	6.40	6.53	6.65	6.74	
110	0.03	0.07	0.17	0.32	0.52	0.77	1.10	1.62	2.38	3.28	4.20	5.01	5.60	6.02	6.29	6.43	6.59	6.74	
120	0.03	0.06	0.15	0.30	0.51	0.76	1.09	1.58	2.31	3.17	4.08	4.90	5.50	5.91	6.15	6.31	6.53	6.74	
130	0.03	0.06	0.16	0.31	0.50	0.74	1.04	1.51	2.18	3.02	3.95	4.78	5.40	5.80	6.01	6.18	6.47	6.74	
140	0.03	0.07	0.13	0.30	0.49	0.71	1.01	1.43	2.05	2.88	3.81	4.66	5.24	5.60	5.84	6.06	6.41	6.74	
150	0.03	0.06	0.13	0.28	0.45	0.70	0.98	1.35	1.91	2.73	3.65	4.46	5.01	5.35	5.60	5.94	6.36	6.74	
160	0.03	0.03	0.11	0.25	0.44	0.68	0.91	1.22	1.76	2.54	3.41	4.13	4.63	4.99	5.38	5.83	6.32	6.74	
170	0.02	0.04	0.10	0.25	0.44	0.64	0.84	1.09	1.60	2.30	3.03	3.63	4.12	4.60	5.16	5.74	6.30	6.74	
180	0.04	0.05	0.11	0.24	0.42	0.60	0.72	0.94	1.41	2.01	2.55	3.04	3.57	4.24	5.00	5.69	6.29	6.74	

C Range: 0 - 180DEG
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: