

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	2991.0 cd per klm.
(Luminaire orientation as tested.)	-180.0 degrees vertical
	-90.0 degrees horizontal

Beam Spread	At 10% of Imax	360.0V x 33.6H
	At 50% of Imax	359.9V x 11.6H
	At 90% of Imax	0.1V x 4.3H

Beam Flux	Total	951.2 lumens per klm.
	To 10% of Imax	870.4 lumens per klm.
	To 50% of Imax	435.5 lumens per klm.
	To 90% of Imax	269.5 lumens per klm.

Upward LOR	48.5 %
Downward LOR	46.6 %

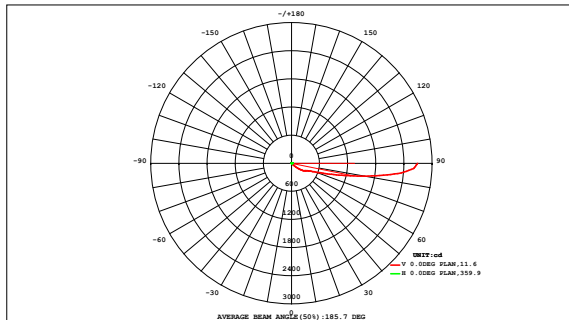
Luminaire Efficiency (Light Output Ratio)	95.2 %
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C Range: 0 - 180DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 25 January 2023

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: 96GRF328WW/1BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 160 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Circle	Shielding Angle:



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	96GRF328WW/1BL	Imax (cd)	2692
NOMINAL POWER (W)	10	AVAILABILITY (%)	80.0
RATED VOLTAGE (V)	230	Avai. FLUX (lm)	720.3
NOMINAL FLUX (lm)	900	LOR (%)	95.2
LAMPS INSIDE	1	TOTAL FLUX (lm)	856.4
TEST VOLTAGE (V)	230	θ @50% (H,V)	12,360DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	5.50	7.33	5.07	3.99	0.89	0.26	0.11	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.5	19.8
90	5.46	7.27	5.07	3.99	0.88	0.24	0.11	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.4	19.7
80	5.43	7.21	5.08	4.01	0.87	0.23	0.10	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.3	19.6
70	5.41	7.17	5.08	4.03	0.87	0.22	0.10	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.2	19.6
60	5.40	7.14	5.09	4.04	0.88	0.22	0.10	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.2	19.5
50	5.40	7.14	5.09	4.05	0.88	0.23	0.10	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.2	19.5
40	5.40	7.17	5.09	4.05	0.88	0.23	0.10	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.3	19.6
30	5.42	7.16	5.08	4.03	0.90	0.24	0.10	0.04	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.3	19.6
20	5.46	7.19	5.08	4.00	0.89	0.25	0.11	0.04	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.3	19.6
10	5.46	7.19	5.08	4.00	0.89	0.25	0.11	0.04	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.3	19.6
0	5.42	7.16	5.08	4.03	0.90	0.24	0.10	0.04	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.3	19.6
-10	5.40	7.17	5.09	4.05	0.88	0.23	0.10	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.3	19.6
-20	5.40	7.14	5.09	4.05	0.88	0.23	0.10	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.2	19.5
-30	5.40	7.14	5.09	4.04	0.88	0.22	0.10	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.2	19.5
-40	5.41	7.17	5.08	4.03	0.87	0.22	0.10	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.2	19.6
-50	5.43	7.21	5.08	4.01	0.87	0.23	0.10	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.3	19.6
-60	5.46	7.27	5.07	3.99	0.88	0.24	0.11	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.4	19.7
-70	5.50	7.33	5.07	3.99	0.89	0.26	0.11	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.5	19.8
-80	5.50	7.33	5.07	3.99	0.89	0.26	0.11	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.5	19.8
-90	5.50	7.33	5.07	3.99	0.89	0.26	0.11	0.05	0.01	0.00	0.00	0.01	0.02	0.05	0.07	0.07	0.05	0.02	23.5	19.8
HORIZONTAL (DEG)																				
Φ t	97.8	130	91.4	72.4	15.9	4.27	1.85	0.85	0.20	0.01	0.06	0.20	0.44	0.86	1.24	1.22	0.85	0.30	419	---
Φ a	97.8	130	91.4	34.3	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	---	353

one-half-peak spread: U:0.9,D:0.8 , L:11.5,R:11.7

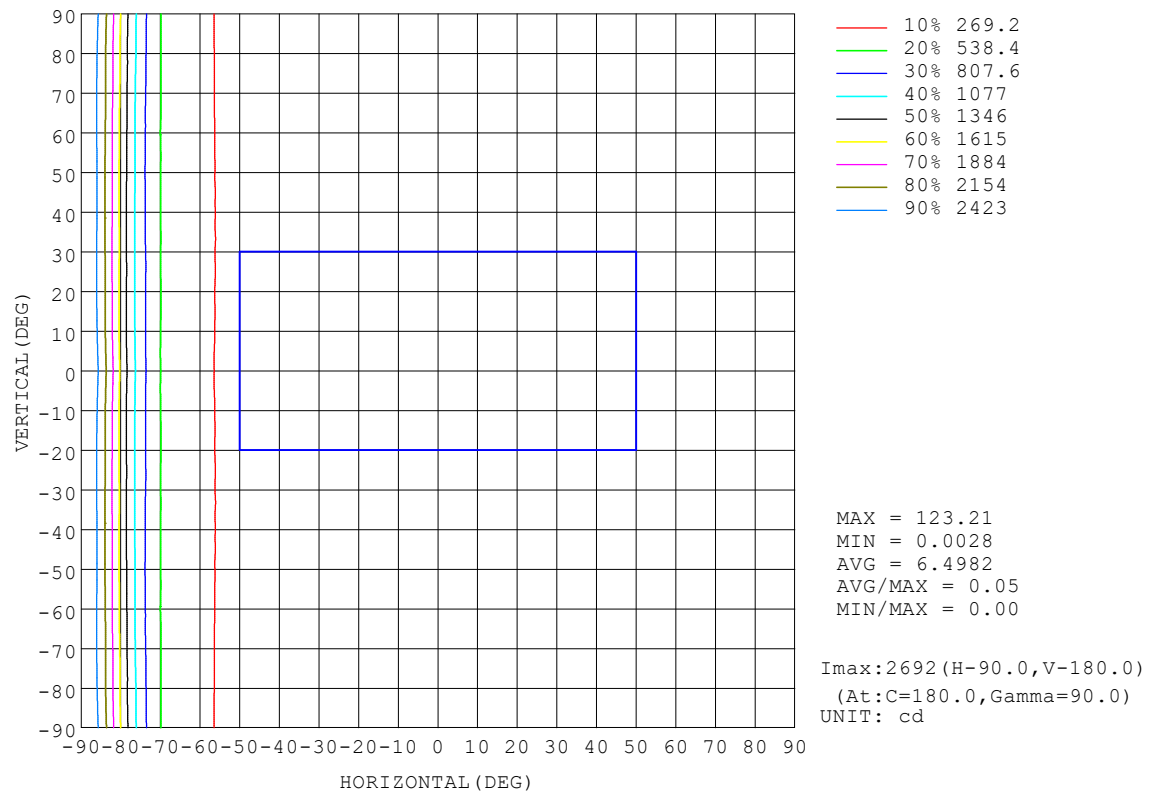
NEMA Beam Type: Type 3 x 7 (H x V)

C Range: 0 - 180DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:25 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: 96GRF328WW/1BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 160 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Circle	Shielding Angle:

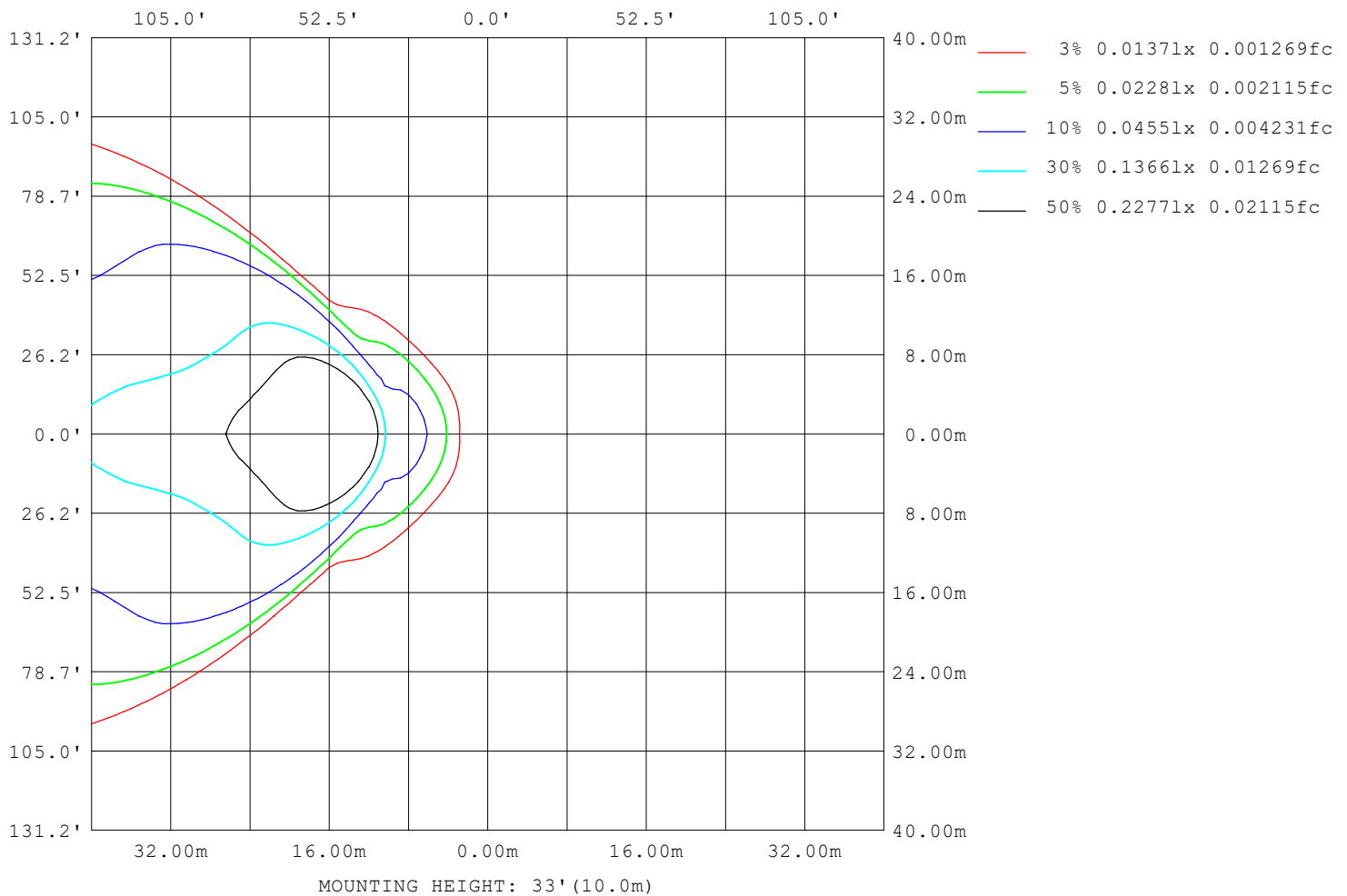


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C Interval: 2.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:25 January 2023

γ Range: 0 - 180DEG
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Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.340m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

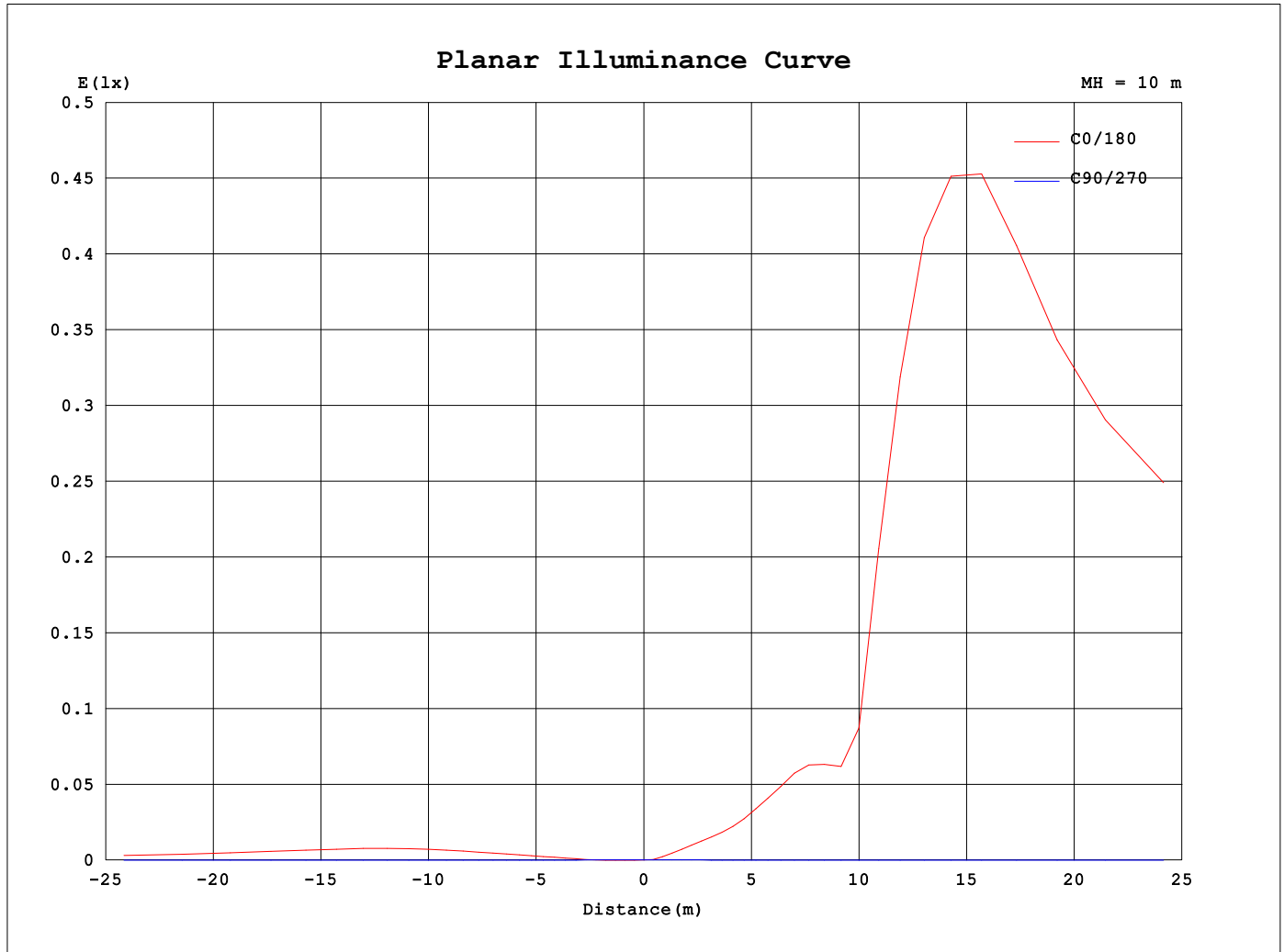
NAME: 96GRF328WW/1BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 160 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Circle	Shielding Angle:



C Range: 0 - 180DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 25 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

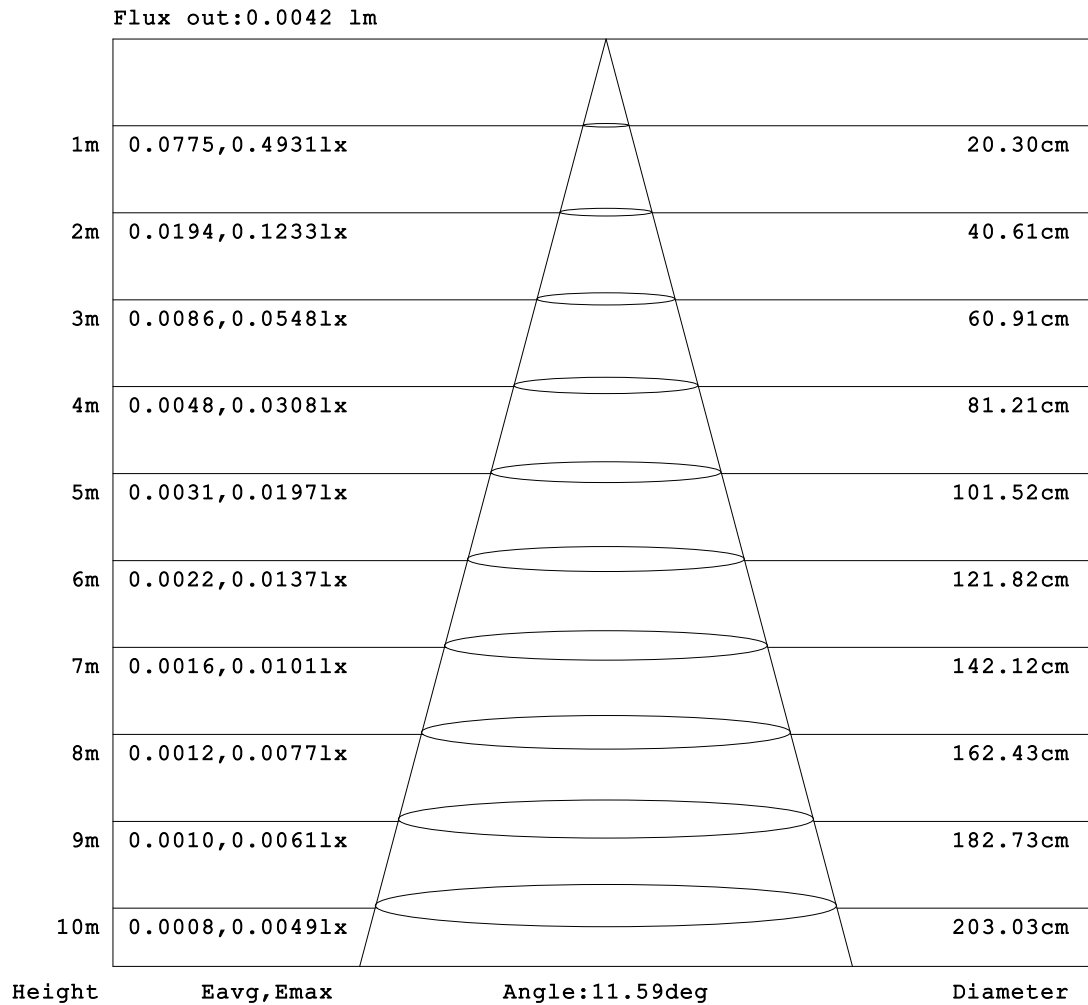


C Range: 0 - 180DEG
 C Interval: 2.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators:
 Test Date: 25 January 2023

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: 96GRF328WW/1BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 160 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 - 180DEG
 C Interval: 2.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:25 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: 96GRF328WW/1BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 160 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: 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
-180	2692	2456	1739	1033	587	392	322	256	131	25.6	12.8	8.94	5.39	3.06	1.86	1.14	0.53	0.10	0.01
-170	2692	2431	1729	1037	584	391	320	256	136	32.1	13.2	9.61	5.90	3.26	1.94	1.17	0.58	0.12	0.02
-160	2692	2418	1715	1023	583	390	318	254	139	34.9	13.6	10.2	6.27	3.46	2.02	1.21	0.60	0.16	0.02
-150	2692	2419	1700	1018	570	388	319	249	139	36.2	14.0	10.7	6.70	3.70	2.14	1.28	0.67	0.19	0.02
-140	2692	2389	1685	998	567	386	319	245	136	36.5	14.4	11.2	7.14	3.96	2.26	1.35	0.72	0.19	0.02
-130	2692	2377	1669	987	563	384	319	243	132	33.0	14.7	11.6	7.47	4.25	2.39	1.45	0.75	0.23	0.02
-120	2692	2381	1657	979	557	384	319	241	129	34.2	14.9	11.8	7.70	4.43	2.49	1.51	0.81	0.26	0.02
-110	2692	2357	1632	971	559	385	319	240	127	33.3	14.8	11.8	7.71	4.46	2.60	1.61	0.87	0.29	0.02
-100	2692	2347	1615	959	550	383	320	239	124	28.6	14.7	11.5	7.47	4.30	2.61	1.66	0.92	0.32	0.02
-90	2692	2353	1609	948	545	383	321	239	121	25.3	14.2	10.9	6.96	4.03	2.53	1.66	0.93	0.33	0.02
-80	2692	2321	1586	941	545	385	321	239	120	26.2	13.7	10.3	6.43	3.83	2.49	1.67	0.94	0.34	0.02
-70	2692	2306	1574	934	547	387	320	240	121	27.3	13.2	9.62	5.92	3.64	2.44	1.67	0.95	0.34	0.02
-60	2692	2306	1568	924	538	386	321	241	122	27.1	12.9	9.16	5.59	3.46	2.38	1.66	0.96	0.35	0.02
-50	2692	2287	1553	920	541	388	322	243	122	23.4	12.9	8.96	5.43	3.38	2.34	1.63	0.95	0.35	0.02
-40	2692	2285	1553	921	540	388	323	244	123	24.0	13.0	9.01	5.44	3.39	2.34	1.64	0.92	0.37	0.02
-30	2692	2300	1562	917	542	388	323	244	122	25.3	13.3	9.24	5.58	3.46	2.34	1.60	0.91	0.33	0.02
-20	2692	2301	1547	928	544	388	323	243	122	27.6	13.5	9.59	5.78	3.54	2.32	1.55	0.87	0.31	0.02
-10	2692	2319	1549	919	541	387	324	240	121	28.6	13.7	9.99	6.02	3.63	2.27	1.48	0.80	0.29	0.02
0	2692	2353	1576	932	543	385	325	239	120	24.8	14.1	10.5	6.32	3.70	2.23	1.41	0.76	0.25	0.00
10	2692	2319	1549	919	541	387	324	240	121	28.6	13.7	9.99	6.02	3.63	2.27	1.48	0.80	0.29	0.02
20	2692	2301	1547	928	544	388	323	243	122	27.6	13.5	9.59	5.78	3.54	2.32	1.55	0.87	0.31	0.02
30	2692	2300	1562	917	542	388	323	244	122	25.3	13.3	9.24	5.58	3.46	2.34	1.60	0.91	0.33	0.02
40	2692	2285	1553	921	540	388	323	244	123	24.0	13.0	9.01	5.44	3.39	2.34	1.64	0.92	0.37	0.02
50	2692	2287	1553	920	541	388	322	243	122	23.4	12.9	8.96	5.43	3.38	2.34	1.63	0.95	0.35	0.02
60	2692	2306	1568	924	538	386	321	241	122	27.1	12.9	9.16	5.59	3.46	2.38	1.66	0.96	0.35	0.02
70	2692	2306	1574	934	547	387	320	240	121	27.3	13.2	9.62	5.92	3.64	2.44	1.67	0.95	0.34	0.02
80	2692	2321	1586	941	545	385	321	239	120	26.2	13.7	10.3	6.43	3.83	2.49	1.67	0.94	0.34	0.02
90	2692	2353	1609	948	545	383	321	239	121	25.3	14.2	10.9	6.96	4.03	2.53	1.66	0.93	0.33	0.02
100	2692	2347	1615	959	550	383	320	239	124	28.6	14.7	11.5	7.47	4.30	2.61	1.66	0.92	0.32	0.02
110	2692	2357	1632	971	559	385	319	240	127	33.3	14.8	11.8	7.71	4.46	2.60	1.61	0.87	0.29	0.02
120	2692	2381	1657	979	557	384	319	241	129	34.2	14.9	11.8	7.70	4.43	2.49	1.51	0.81	0.26	0.02
130	2692	2377	1669	987	563	384	319	243	132	33.0	14.7	11.6	7.47	4.25	2.39	1.45	0.75	0.23	0.02
140	2692	2389	1685	998	567	386	319	245	136	36.5	14.4	11.2	7.14	3.96	2.26	1.35	0.72	0.19	0.02
150	2692	2419	1700	1018	570	388	319	249	139	36.2	14.0	10.7	6.70	3.70	2.14	1.28	0.67	0.19	0.02
160	2692	2418	1715	1023	583	390	318	254	139	34.9	13.6	10.2	6.27	3.46	2.02	1.21	0.60	0.16	0.02
170	2692	2431	1729	1037	584	391	320	256	136	32.1	13.2	9.61	5.90	3.26	1.94	1.17	0.58	0.12	0.02
180	2692	2456	1739	1033	587	392	322	256	131	25.6	12.8	8.94	5.39	3.06	1.86	1.14	0.53	0.10	0.03

C Range: 0 - 180DEG

C Interval: 2.5DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:25 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: 96GRF328WW/1BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 160 x 90	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	0.06	0.10	0.18	0.32	0.49	0.64	0.87	1.26	1.77	2.27	2.72	3.21	3.82	4.51	5.18	5.77	6.18	
-170	0.02	0.04	0.08	0.20	0.34	0.52	0.73	1.01	1.46	2.05	2.68	3.22	3.68	4.14	4.67	5.24	5.78	6.18	
-160	0.03	0.03	0.08	0.18	0.34	0.55	0.79	1.12	1.62	2.30	3.04	3.67	4.13	4.49	4.89	5.33	5.81	6.18	
-150	0.04	0.05	0.09	0.20	0.34	0.56	0.84	1.22	1.75	2.49	3.29	3.99	4.49	4.83	5.10	5.45	5.84	6.18	
-140	0.02	0.06	0.10	0.22	0.37	0.56	0.85	1.27	1.87	2.64	3.47	4.22	4.74	5.07	5.32	5.57	5.89	6.18	
-130	0.02	0.05	0.12	0.23	0.38	0.58	0.87	1.33	1.98	2.76	3.60	4.35	4.93	5.27	5.49	5.68	5.95	6.18	
-120	0.02	0.04	0.10	0.22	0.38	0.60	0.92	1.39	2.07	2.89	3.73	4.47	5.02	5.40	5.63	5.81	6.01	6.18	
-110	0.02	0.04	0.11	0.23	0.39	0.61	0.93	1.42	2.13	2.98	3.83	4.57	5.12	5.51	5.76	5.92	6.06	6.18	
-100	0.02	0.04	0.10	0.22	0.40	0.63	0.96	1.46	2.18	3.06	3.92	4.66	5.21	5.60	5.86	6.01	6.11	6.18	
-90	0.02	0.04	0.10	0.22	0.39	0.62	0.95	1.46	2.20	3.09	3.96	4.70	5.26	5.67	5.94	6.09	6.16	6.18	
-80	0.02	0.04	0.10	0.22	0.39	0.62	0.96	1.48	2.23	3.12	3.99	4.72	5.28	5.69	5.98	6.14	6.20	6.18	
-70	0.02	0.04	0.11	0.23	0.40	0.64	0.98	1.51	2.26	3.16	4.03	4.76	5.32	5.73	6.01	6.18	6.23	6.18	
-60	0.02	0.05	0.12	0.24	0.41	0.64	0.98	1.50	2.26	3.16	4.04	4.78	5.35	5.78	6.06	6.22	6.27	6.18	
-50	0.02	0.05	0.11	0.22	0.40	0.64	0.98	1.52	2.27	3.17	4.05	4.78	5.35	5.77	6.09	6.24	6.28	6.18	
-40	0.02	0.04	0.12	0.22	0.39	0.63	0.98	1.51	2.26	3.16	4.04	4.79	5.36	5.81	6.09	6.27	6.29	6.18	
-30	0.02	0.04	0.11	0.22	0.40	0.61	0.95	1.48	2.23	3.13	4.02	4.77	5.36	5.80	6.13	6.28	6.30	6.18	
-20	0.02	0.05	0.11	0.22	0.38	0.59	0.93	1.46	2.18	3.08	3.99	4.75	5.35	5.80	6.11	6.29	6.31	6.18	
-10	0.02	0.02	0.10	0.19	0.36	0.59	0.91	1.41	2.13	3.02	3.94	4.73	5.33	5.79	6.12	6.30	6.31	6.18	
0	0.00	0.01	0.06	0.18	0.34	0.55	0.87	1.36	2.07	2.97	3.90	4.70	5.32	5.77	6.09	6.27	6.31	6.18	
10	0.02	0.02	0.10	0.19	0.36	0.59	0.91	1.41	2.13	3.02	3.94	4.73	5.33	5.79	6.12	6.30	6.31	6.18	
20	0.02	0.05	0.11	0.22	0.38	0.59	0.93	1.46	2.18	3.08	3.99	4.75	5.35	5.80	6.11	6.29	6.31	6.18	
30	0.02	0.04	0.11	0.22	0.40	0.61	0.95	1.48	2.23	3.13	4.02	4.77	5.36	5.80	6.13	6.28	6.30	6.18	
40	0.02	0.04	0.12	0.22	0.39	0.63	0.98	1.51	2.26	3.16	4.04	4.79	5.36	5.81	6.09	6.27	6.29	6.18	
50	0.02	0.05	0.11	0.22	0.40	0.64	0.98	1.52	2.27	3.17	4.05	4.78	5.35	5.77	6.09	6.24	6.28	6.18	
60	0.02	0.05	0.12	0.24	0.41	0.64	0.98	1.50	2.26	3.16	4.04	4.78	5.35	5.78	6.06	6.22	6.27	6.18	
70	0.02	0.04	0.11	0.23	0.40	0.64	0.98	1.51	2.26	3.16	4.03	4.76	5.32	5.73	6.01	6.18	6.23	6.18	
80	0.02	0.04	0.10	0.22	0.39	0.62	0.96	1.48	2.23	3.12	3.99	4.72	5.28	5.69	5.98	6.14	6.20	6.18	
90	0.02	0.04	0.10	0.22	0.39	0.62	0.95	1.46	2.20	3.09	3.96	4.70	5.26	5.67	5.94	6.09	6.16	6.18	
100	0.02	0.04	0.10	0.22	0.40	0.63	0.96	1.46	2.18	3.06	3.92	4.66	5.21	5.60	5.86	6.01	6.11	6.18	
110	0.02	0.04	0.11	0.23	0.39	0.61	0.93	1.42	2.13	2.98	3.83	4.57	5.12	5.51	5.76	5.92	6.06	6.18	
120	0.02	0.04	0.10	0.22	0.38	0.60	0.92	1.39	2.07	2.89	3.73	4.47	5.02	5.40	5.63	5.81	6.01	6.18	
130	0.02	0.05	0.12	0.23	0.38	0.58	0.87	1.33	1.98	2.76	3.60	4.35	4.93	5.27	5.49	5.68	5.95	6.18	
140	0.02	0.06	0.10	0.22	0.37	0.56	0.85	1.27	1.87	2.64	3.47	4.22	4.74	5.07	5.32	5.57	5.89	6.18	
150	0.04	0.05	0.09	0.20	0.34	0.56	0.84	1.22	1.75	2.49	3.29	3.99	4.49	4.83	5.10	5.45	5.84	6.18	
160	0.03	0.03	0.08	0.18	0.34	0.55	0.79	1.12	1.62	2.30	3.04	3.67	4.13	4.49	4.89	5.33	5.81	6.18	
170	0.02	0.04	0.08	0.20	0.34	0.52	0.73	1.01	1.46	2.05	2.68	3.22	3.68	4.14	4.67	5.24	5.78	6.18	
180	0.04	0.06	0.10	0.18	0.32	0.49	0.64	0.87	1.26	1.77	2.27	2.72	3.21	3.82	4.51	5.18	5.77	6.18	

C Range: 0 - 180DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:25 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: