

# Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	1182.2 cd per klm.
(Luminaire orientation as tested.)	10.0 degrees vertical
	2.0 degrees horizontal

Beam Spread	At 10% of Imax	90.5V x 70.8H
	At 50% of Imax	66.1V x 48.7H
	At 90% of Imax	42.8V x 14.1H

Beam Flux	Total	1010.0 lumens per klm.
	To 10% of Imax	960.4 lumens per klm.
	To 50% of Imax	685.7 lumens per klm.
	To 90% of Imax	152.8 lumens per klm.

Upward LOR	0.0 %
Downward LOR	101.0 %

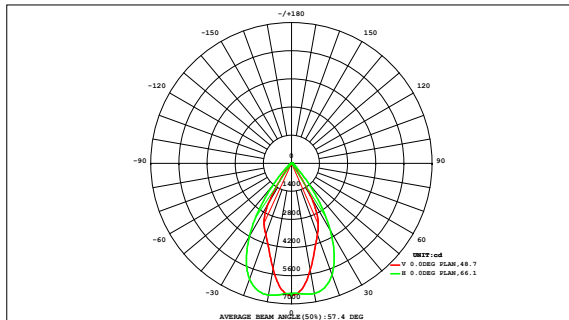
Luminaire Efficiency (Light Output Ratio)	100.9 %
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C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 30 August 2022

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: 93ZF6040/BL	TYPE: 93ZF6040/BL	WEIGHT: 1
SPEC.:	DIM.: 804 x 34 x 68	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: 24 square 20 x 20	Shielding Angle:



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	93ZF6040/BL	Imax (cd)	6739
NOMINAL POWER (W)	60	AVAILABILITY (%)	96.0
RATED VOLTAGE (V)	230	Avai. FLUX (lm)	5474
NOMINAL FLUX (lm)	5700	LOR (%)	100.9
LAMPS INSIDE	1	TOTAL FLUX (lm)	5751
TEST VOLTAGE (V)	230	θ @50% (H,V)	49,66DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM															UNIT:lm			Φ t	Φ a
	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.12	0.00
90	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.03	0.05	0.06	0.06	0.04	0.03	0.01	0.01	0.00	0.00	0.00	0.35	0.00
80	0.00	0.00	0.00	0.01	0.04	0.11	0.25	0.53	0.78	0.86	0.77	0.46	0.22	0.10	0.03	0.00	0.00	0.00	4.19	0.00
70	0.00	0.00	0.01	0.05	0.19	0.45	1.18	2.84	4.05	4.39	3.93	2.21	0.79	0.33	0.12	0.02	0.00	0.00	20.6	0.00
60	0.00	0.00	0.02	0.15	0.47	1.36	5.87	15.8	22.1	24.2	20.9	12.1	2.83	0.75	0.25	0.06	0.00	0.00	107	59.8
50	0.00	0.00	0.05	0.28	0.93	3.79	25.4	57.8	79.9	86.3	71.1	44.4	9.72	1.51	0.42	0.10	0.00	0.00	382	364
40	0.00	0.00	0.09	0.41	1.52	8.85	56.7	106	146	157	124	81.3	21.3	2.42	0.57	0.14	0.01	0.00	707	691
30	0.00	0.00	0.12	0.50	2.10	14.8	78.7	130	179	193	147	97.6	30.9	3.18	0.68	0.17	0.01	0.00	878	862
20	0.00	0.01	0.13	0.57	2.49	18.9	84.2	133	184	194	141	94.1	31.6	3.26	0.69	0.17	0.01	0.00	889	873
10	0.00	0.00	0.13	0.54	2.28	15.7	78.3	127	179	191	135	89.8	25.7	2.93	0.66	0.16	0.01	0.00	848	832
0	0.00	0.00	0.10	0.45	1.73	10.4	68.9	124	174	189	139	89.0	22.9	2.55	0.60	0.15	0.01	0.00	822	806
-10	0.00	0.00	0.07	0.35	1.25	6.40	47.5	99.2	138	149	116	70.9	14.9	1.90	0.49	0.12	0.01	0.00	645	629
-20	0.00	0.00	0.04	0.24	0.78	3.04	20.5	50.8	71.2	77.5	63.6	36.9	6.77	1.21	0.36	0.08	0.00	0.00	333	315
-30	0.00	0.00	0.01	0.12	0.40	1.15	4.93	13.3	19.0	21.0	18.5	9.77	2.18	0.63	0.21	0.04	0.00	0.00	91.3	42.5
-40	0.00	0.00	0.00	0.04	0.16	0.40	1.08	2.70	3.81	4.21	3.73	1.99	0.69	0.28	0.09	0.01	0.00	0.00	19.2	0.00
-50	0.00	0.00	0.00	0.01	0.03	0.10	0.23	0.49	0.71	0.80	0.71	0.42	0.20	0.08	0.02	0.00	0.00	0.00	3.81	0.00
-60	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.05	0.06	0.06	0.04	0.02	0.01	0.01	0.00	0.00	0.00	0.32	0.00
-70	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.11	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	0.01	0.05	0.79	3.74	14.4	85.5	474	865	1202	1292	985	631	171	21.2	5.22	1.25	0.08	0.01	5751	---
Φ a	0.00	0.00	0.00	0.00	0.00	39.9	449	841	1177	1269	961	608	128	0.00	0.00	0.00	0.00	0.00	---	5474

one-half-peak spread: U:22.6,D:23.7 , L:24.1,R:25.1

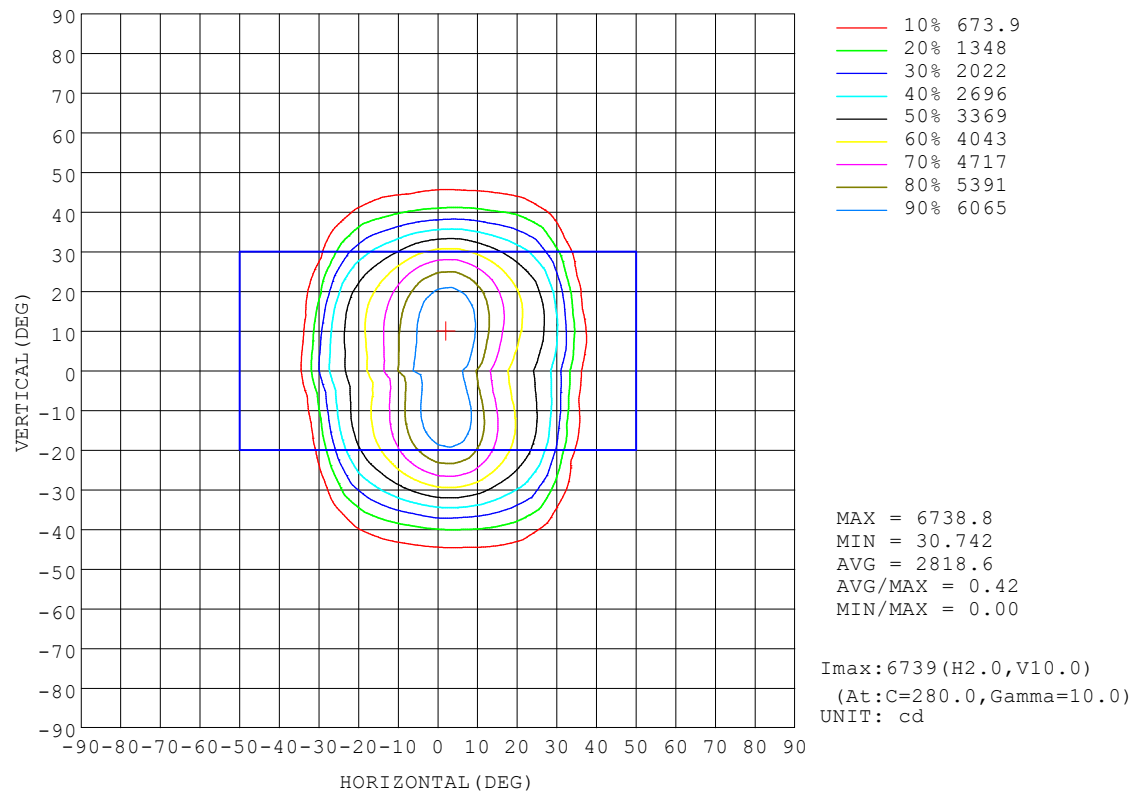
NEMA Beam Type: Type 5

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:30 August 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: 93ZFLD6040/BL	TYPE: 93ZFLD6040/BL	WEIGHT: 1
SPEC.:	DIM.: 804 x 34 x 68	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: 24 square 20 x 20	Shielding Angle:

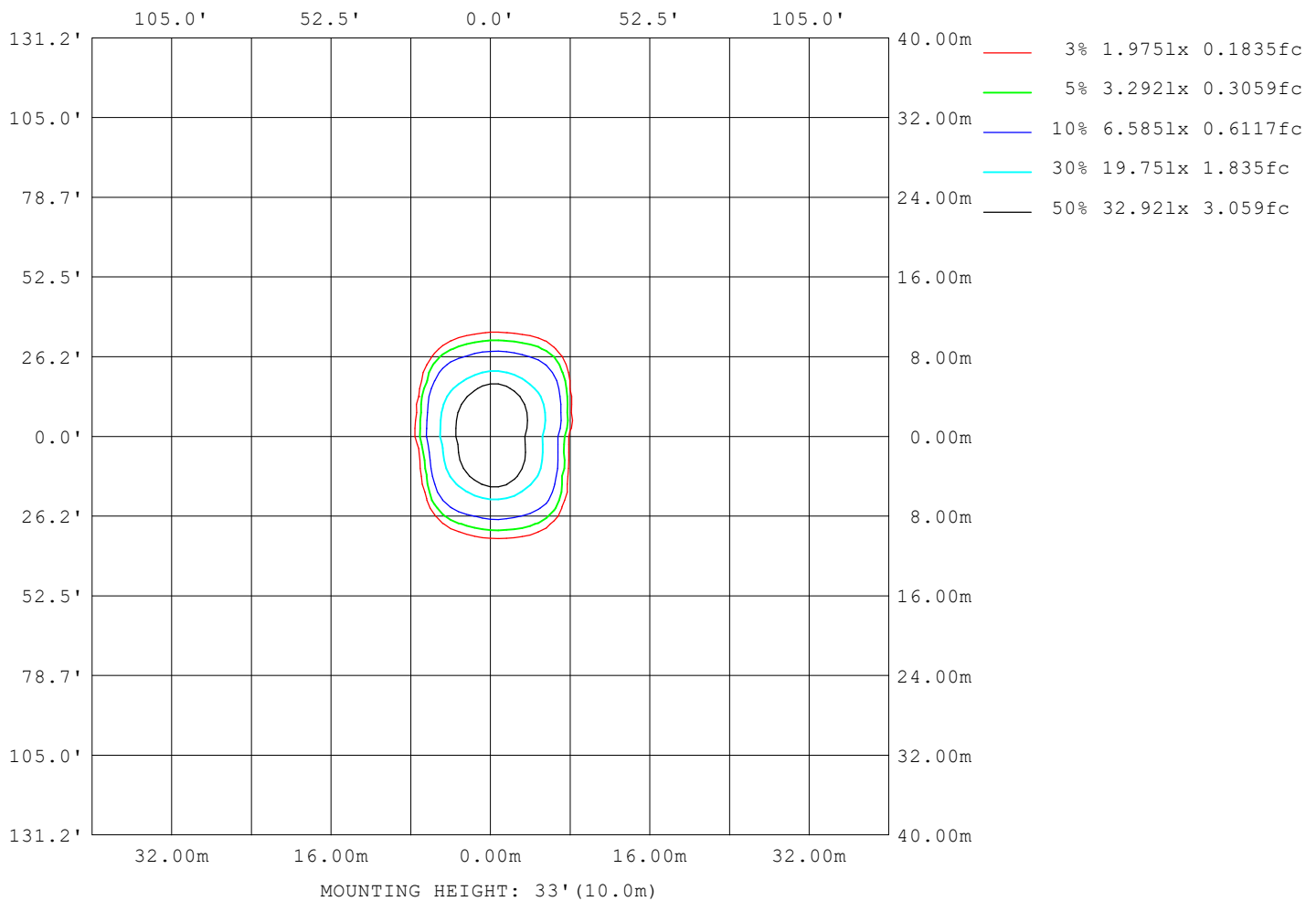


C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 30 August 2022

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**

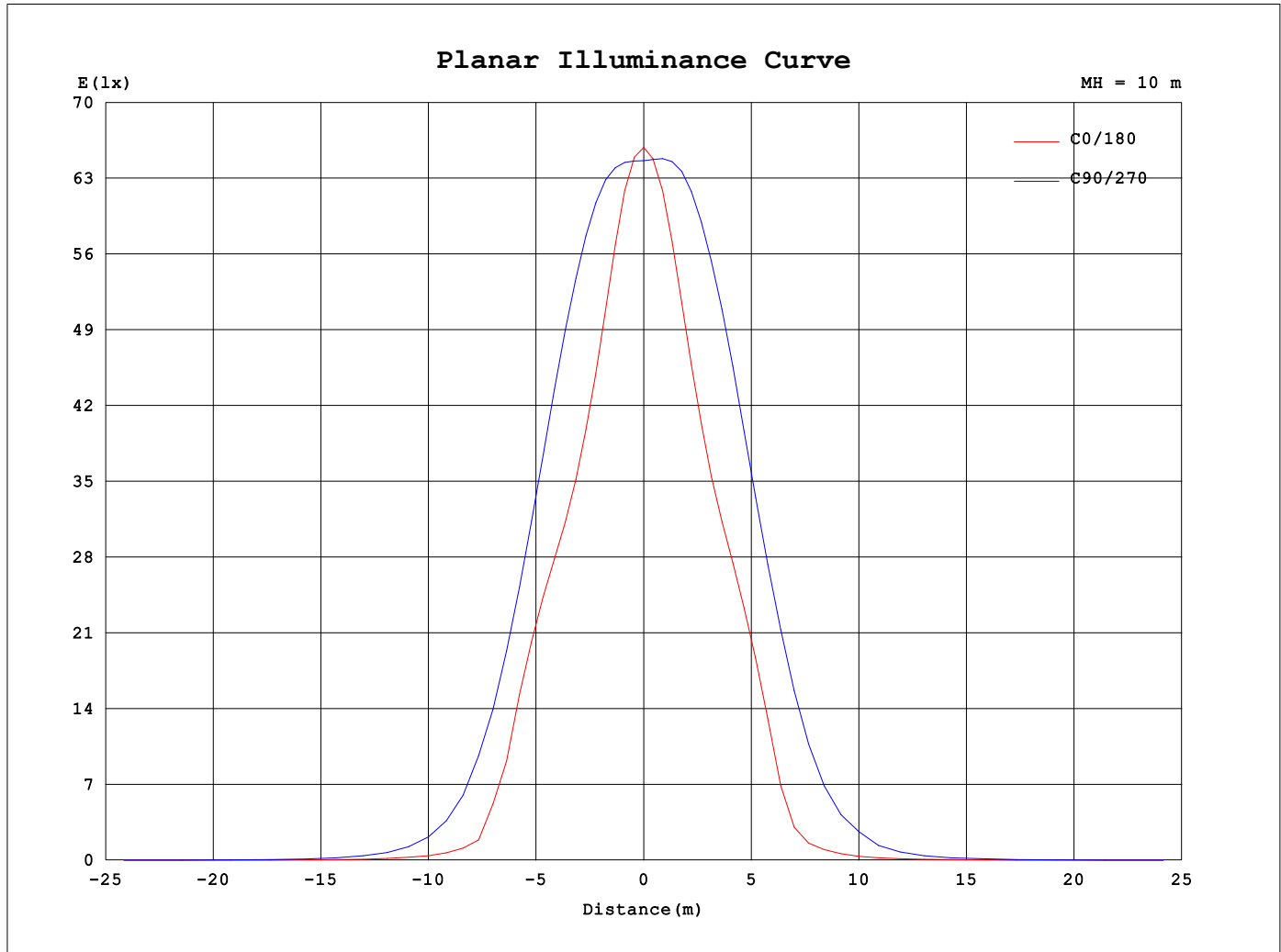
NAME: 93ZFLD6040/BL	TYPE: 93ZFLD6040/BL	WEIGHT: 1
SPEC.:	DIM.: 804 x 34 x 68	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: 24 square 20 x 20	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 30 August 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

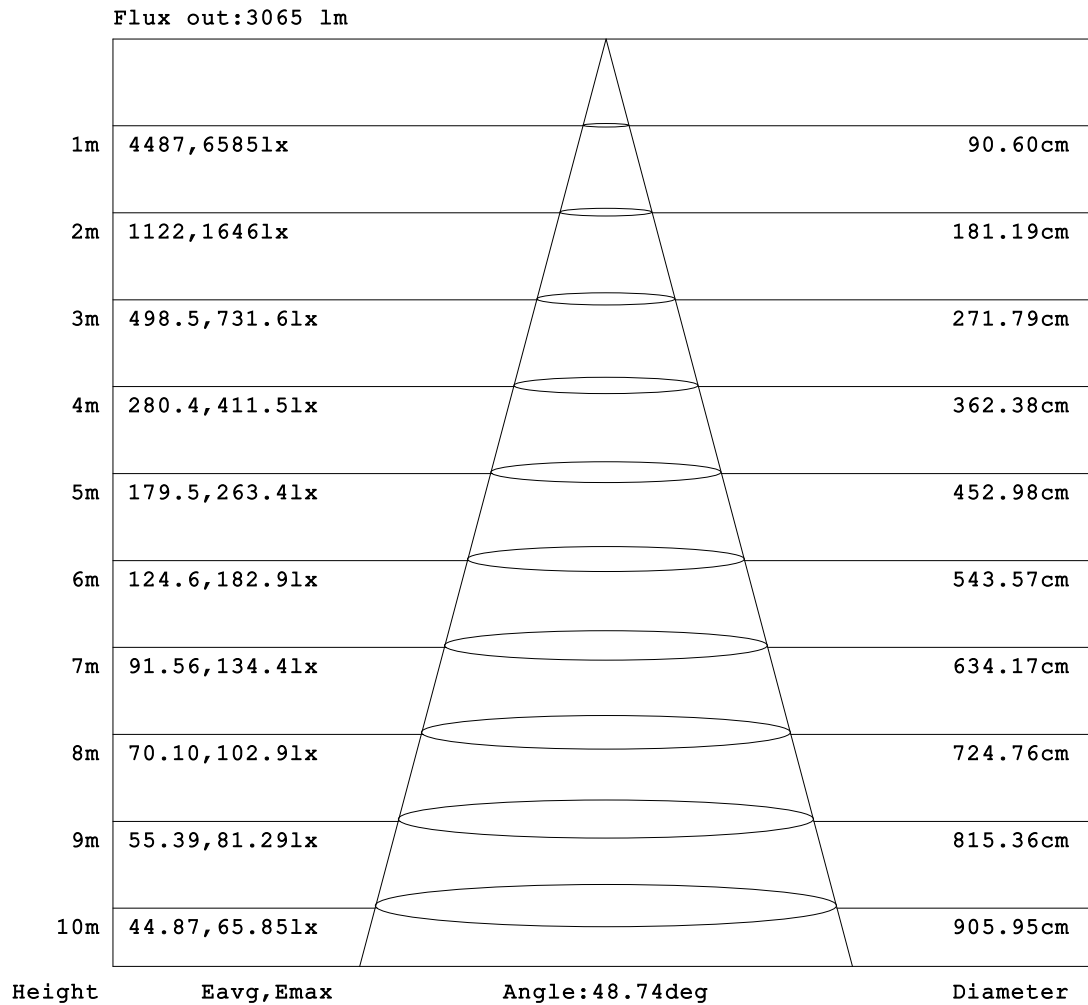


C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 30 August 2022

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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: 93ZFLD6040/BL	TYPE: 93ZFLD6040/BL	WEIGHT: 1
SPEC.:	DIM.: 804 x 34 x 68	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: 24 square 20 x 20	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:30 August 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: 93ZFLD6040/BL	TYPE: 93ZFLD6040/BL	WEIGHT: 1
SPEC.:	DIM.: 804 x 34 x 68	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: 24 square 20 x 20	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	0.30	0.25	0.20	0.20	0.20	0.22	0.23	0.24	0.24	0.28	0.31	0.32	0.33	0.35	0.36	0.36	0.36	0.35	0.35
-85	0.30	0.25	0.20	0.20	0.20	0.21	0.22	0.23	0.23	0.25	0.26	0.28	0.30	0.31	0.32	0.33	0.35	0.34	0.34
-80	0.30	0.25	0.20	0.20	0.20	0.21	0.21	0.23	0.25	0.26	0.26	0.31	0.35	0.37	0.38	0.41	0.44	0.46	0.47
-75	0.30	0.25	0.20	0.20	0.21	0.21	0.21	0.24	0.29	0.33	0.36	0.42	0.49	0.54	0.57	0.63	0.68	0.73	0.76
-70	0.30	0.25	0.21	0.20	0.21	0.23	0.24	0.29	0.37	0.45	0.59	0.96	1.20	1.80	2.72	3.88	5.09	6.11	6.86
-65	0.30	0.25	0.21	0.20	0.23	0.25	0.29	0.37	0.57	1.06	2.26	3.47	5.08	7.37	11.1	15.1	19.0	21.4	22.8
-60	0.30	0.26	0.21	0.21	0.24	0.28	0.36	0.53	1.67	3.46	5.47	8.10	11.7	17.2	26.4	36.5	44.7	49.8	52.6
-55	0.30	0.26	0.22	0.21	0.26	0.33	0.46	1.67	4.13	6.94	10.4	14.8	22.0	33.6	55.6	82.6	99.5	111	117
-50	0.30	0.26	0.22	0.21	0.28	0.39	1.11	3.92	7.41	11.5	17.1	25.3	40.1	67.6	126	199	228	252	267
-45	0.30	0.26	0.23	0.22	0.30	0.45	2.52	6.78	11.3	17.4	26.5	41.6	69.5	143	279	421	510	571	613
-40	0.30	0.26	0.23	0.23	0.33	0.95	4.89	9.87	15.9	24.9	39.9	67.4	149	332	663	901	1098	1233	1337
-35	0.30	0.27	0.24	0.25	0.37	1.68	7.21	13.0	21.0	33.8	57.1	99.9	244	683	1275	1732	2067	2334	2539
-30	0.30	0.27	0.25	0.27	0.40	3.39	9.38	16.1	26.3	43.6	76.9	150	392	1205	2051	2634	3122	3564	3883
-25	0.30	0.27	0.25	0.29	0.63	4.90	11.3	19.2	31.3	53.4	99.4	215	628	1741	2778	3404	4025	4612	5038
-20	0.30	0.28	0.26	0.30	0.99	6.31	13.0	21.7	36.1	63.3	123	260	839	2243	3286	3965	4664	5386	5904
-15	0.30	0.28	0.27	0.32	1.40	7.60	14.6	24.0	40.7	73.4	142	298	1124	2607	3582	4227	5002	5820	6402
-10	0.30	0.28	0.28	0.32	1.80	8.60	16.0	26.6	45.3	81.6	164	373	1329	2770	3662	4289	5093	5954	6582
-5	0.30	0.29	0.28	0.33	2.16	9.31	16.9	28.6	50.5	95.4	192	439	1573	2871	3631	4244	5065	5916	6522
0	0.30	0.29	0.29	0.33	2.44	9.73	17.5	30.0	54.1	106	218	554	2014	3138	3773	4473	5398	6258	6585
5	0.30	0.29	0.29	0.34	2.41	9.65	17.5	29.8	53.7	104	214	543	1932	3117	3796	4484	5361	6139	6557
10	0.30	0.29	0.29	0.34	2.25	9.29	17.0	28.8	51.1	97.0	200	516	1789	3107	3848	4507	5340	6103	6665
15	0.30	0.29	0.30	0.34	1.95	8.65	16.0	26.9	47.3	88.7	178	407	1557	2966	3804	4434	5206	5984	6544
20	0.30	0.29	0.30	0.34	1.51	7.73	14.7	24.5	42.2	76.9	153	356	1220	2640	3557	4166	4884	5620	6137
25	0.30	0.29	0.30	0.33	0.93	6.56	13.1	22.0	36.7	64.2	123	259	920	2128	3058	3652	4272	4914	5334
30	0.30	0.29	0.30	0.33	0.44	5.05	11.2	18.7	30.7	52.0	93.7	189	536	1475	2334	2897	3383	3899	4210
35	0.30	0.29	0.29	0.33	0.42	3.38	9.08	15.4	24.5	39.9	69.1	125	313	916	1530	1973	2322	2658	2847
40	0.30	0.29	0.29	0.32	0.36	1.99	6.77	11.9	18.6	29.4	47.8	81.8	160	404	824	1068	1287	1445	1532
45	0.30	0.29	0.29	0.31	0.33	0.58	4.32	8.51	13.4	20.5	31.4	49.1	81.7	172	337	499	605	673	749
50	0.30	0.29	0.29	0.30	0.32	0.41	2.09	5.41	9.05	13.7	20.0	28.9	45.5	76.5	133	209	251	276	287
55	0.30	0.30	0.29	0.30	0.31	0.32	0.67	2.70	5.41	8.41	12.1	16.6	24.4	36.8	59.4	87.7	107	117	121
60	0.30	0.30	0.29	0.30	0.30	0.30	0.34	0.85	2.49	4.44	6.43	9.06	12.9	18.6	28.1	38.8	48.3	53.1	55.0
65	0.30	0.30	0.29	0.30	0.30	0.31	0.32	0.35	0.73	1.60	2.81	4.03	5.76	8.16	12.1	16.6	21.1	23.4	24.6
70	0.30	0.30	0.29	0.30	0.30	0.30	0.32	0.32	0.32	0.41	0.63	1.12	1.46	2.13	3.15	4.64	6.26	7.29	7.97
75	0.30	0.30	0.29	0.30	0.30	0.30	0.31	0.31	0.31	0.32	0.33	0.34	0.36	0.38	0.39	0.40	0.40	0.45	0.49
80	0.30	0.30	0.30	0.30	0.31	0.30	0.30	0.31	0.32	0.32	0.32	0.33	0.34	0.34	0.35	0.35	0.35	0.37	0.38
85	0.30	0.30	0.30	0.30	0.31	0.31	0.30	0.32	0.33	0.33	0.33	0.35	0.36	0.35	0.35	0.36	0.37	0.37	0.37
90	0.30	0.30	0.30	0.31	0.31	0.32	0.32	0.34	0.35	0.36	0.38	0.40	0.41	0.42	0.43	0.43	0.44	0.43	0.42

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:30 August 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: 93ZFLD6040/BL	TYPE: 93ZFLD6040/BL	WEIGHT: 1
SPEC.:	DIM.: 804 x 34 x 68	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: 24 square 20 x 20	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	0.34	0.33	0.32	0.31	0.30	0.29	0.27	0.24	0.23	0.23	0.21	0.20	0.20	0.20	0.20	0.20	0.20	0.20	
-85	0.35	0.36	0.34	0.32	0.33	0.33	0.29	0.26	0.25	0.25	0.22	0.20	0.20	0.21	0.20	0.20	0.20	0.20	
-80	0.48	0.49	0.47	0.46	0.45	0.45	0.40	0.35	0.32	0.30	0.25	0.21	0.21	0.21	0.20	0.20	0.20	0.20	
-75	0.79	0.80	0.87	0.90	0.90	0.80	0.66	0.58	0.46	0.39	0.31	0.25	0.24	0.22	0.20	0.20	0.20	0.20	
-70	7.58	7.84	7.24	6.25	4.70	3.53	2.78	1.95	1.24	0.60	0.41	0.31	0.27	0.24	0.21	0.20	0.20	0.20	
-65	24.0	24.1	22.4	18.8	13.5	9.98	7.23	5.31	3.54	2.02	0.82	0.40	0.32	0.26	0.22	0.20	0.20	0.20	
-60	54.9	55.0	52.1	42.1	29.4	20.5	14.2	10.2	7.27	4.79	2.47	0.69	0.38	0.29	0.22	0.20	0.20	0.20	
-55	122	123	118	94.2	67.3	38.3	24.6	17.5	12.2	8.39	5.13	2.05	0.49	0.33	0.24	0.21	0.20	0.20	
-50	278	279	267	208	139	76.3	42.6	27.7	18.8	12.8	8.28	4.27	1.03	0.37	0.25	0.21	0.20	0.20	
-45	632	630	586	494	308	145	74.5	42.3	27.2	18.1	11.8	6.94	2.00	0.42	0.27	0.22	0.21	0.20	
-40	1363	1331	1215	1051	711	331	130	66.7	38.4	24.2	15.6	9.47	4.07	0.56	0.29	0.22	0.21	0.20	
-35	2563	2428	2163	1835	1392	627	190	95.1	51.5	31.0	19.3	12.0	6.03	1.03	0.31	0.24	0.21	0.20	
-30	3891	3620	3144	2676	2044	1099	319	125	65.7	38.0	23.0	14.3	7.71	1.38	0.34	0.25	0.21	0.20	
-25	5033	4627	3969	3361	2669	1495	436	162	79.5	44.4	26.7	16.3	9.18	2.29	0.37	0.26	0.21	0.20	
-20	5891	5341	4517	3802	3106	1921	577	196	93.1	50.6	29.5	18.0	10.4	3.28	0.40	0.26	0.22	0.20	
-15	6402	5697	4737	3983	3339	2169	790	221	107	56.2	32.0	19.4	11.3	4.02	0.41	0.27	0.22	0.20	
-10	6561	5714	4701	3959	3363	2297	816	244	116	60.0	33.9	20.4	11.9	4.52	0.43	0.28	0.22	0.20	
-5	6442	5502	4530	3849	3313	2362	838	252	122	62.2	34.8	20.8	12.1	4.77	0.43	0.28	0.22	0.20	
0	6259	5324	4413	3765	3275	2360	952	249	120	62.0	34.6	20.7	12.1	4.77	0.44	0.28	0.22	0.20	
5	6547	5789	4780	4009	3471	2638	1129	290	135	66.8	36.4	21.4	12.5	5.06	0.44	0.29	0.23	0.20	
10	6646	5956	4965	4168	3607	2733	1215	311	139	68.3	37.0	21.6	12.5	5.10	0.44	0.29	0.23	0.20	
15	6526	5902	4999	4215	3618	2652	1028	289	132	66.1	36.0	21.2	12.3	4.89	0.43	0.29	0.23	0.20	
20	6105	5571	4776	4072	3452	2437	899	264	118	60.4	33.6	20.0	11.7	4.41	0.42	0.29	0.23	0.20	
25	5322	4872	4254	3643	3059	1985	656	214	99.4	53.4	30.7	18.4	10.6	3.68	0.40	0.29	0.24	0.20	
30	4229	3897	3452	2981	2403	1468	482	164	84.5	45.4	26.7	16.3	9.30	2.81	0.38	0.29	0.24	0.20	
35	2883	2697	2423	2108	1668	865	279	129	63.2	36.6	22.5	14.0	7.71	1.95	0.36	0.29	0.24	0.20	
40	1580	1521	1383	1232	897	470	184	80.6	45.9	28.3	18.1	11.3	5.88	0.87	0.35	0.29	0.24	0.20	
45	739	714	655	575	385	191	92.4	51.2	32.2	21.0	13.8	8.66	3.96	0.58	0.34	0.29	0.24	0.20	
50	301	302	285	235	166	90.3	50.8	32.8	22.1	15.0	9.94	5.98	2.01	0.39	0.32	0.29	0.24	0.20	
55	127	128	122	96.9	71.3	44.2	28.3	20.3	14.4	10.0	6.52	3.40	0.81	0.33	0.31	0.29	0.24	0.20	
60	57.5	57.6	54.5	45.1	33.0	23.3	16.1	11.7	8.68	6.03	3.59	1.29	0.35	0.31	0.31	0.29	0.24	0.20	
65	25.9	26.0	24.1	20.5	15.2	11.4	8.22	6.19	4.45	2.88	1.34	0.37	0.32	0.30	0.30	0.29	0.24	0.20	
70	8.79	9.10	8.31	7.13	5.43	4.09	3.22	2.37	1.63	0.75	0.41	0.33	0.31	0.30	0.30	0.29	0.25	0.20	
75	0.58	0.66	0.78	0.84	0.83	0.67	0.58	0.57	0.41	0.32	0.32	0.32	0.30	0.29	0.30	0.29	0.25	0.20	
80	0.37	0.35	0.35	0.35	0.34	0.33	0.33	0.33	0.32	0.31	0.31	0.31	0.30	0.30	0.30	0.29	0.25	0.20	
85	0.37	0.37	0.36	0.35	0.34	0.33	0.33	0.32	0.32	0.31	0.31	0.30	0.30	0.30	0.29	0.29	0.25	0.20	
90	0.42	0.42	0.39	0.37	0.37	0.36	0.34	0.32	0.32	0.32	0.31	0.30	0.30	0.30	0.29	0.29	0.24	0.20	

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:30 August 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: