

# Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	5743.6 cd per klm.
(Luminaire orientation as tested.)	0.0 degrees vertical
	0.0 degrees horizontal

Beam Spread	At 10% of Imax	43.3V x 43.4H
	At 50% of Imax	24.5V x 24.6H
	At 90% of Imax	9.8V x 10.5H

Beam Flux	Total	1326.1 lumens per klm.
	To 10% of Imax	1027.6 lumens per klm.
	To 50% of Imax	599.4 lumens per klm.
	To 90% of Imax	130.5 lumens per klm.

Upward LOR	0.0 %
Downward LOR	132.6 %

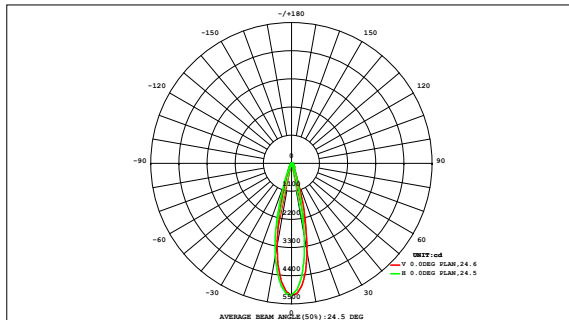
Luminaire Efficiency (Light Output Ratio)	132.1 %
---	---------

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 11 November 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: 93M21PLB1040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: sphere	Shielding Angle:



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	93M21PLB1040/BL	Imax (cd)	5169
NOMINAL POWER (W)	12	AVAILABILITY (%)	102.4
RATED VOLTAGE (V)	48	Avai. FLUX (lm)	921.8
NOMINAL FLUX (lm)	900	LOR (%)	132.1
LAMPS INSIDE	1	TOTAL FLUX (lm)	1189
TEST VOLTAGE (V)	48	θ @50% (H,V)	25,24DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	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	0.01	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	0.01	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	0.01	0.00
70	0.00	0.00	0.00	0.00	0.01	0.05	0.11	0.18	0.21	0.20	0.15	0.08	0.03	0.00	0.00	0.00	0.00	0.00	1.01	0.00
60	0.00	0.00	0.00	0.02	0.13	0.32	0.54	0.75	0.86	0.84	0.70	0.48	0.25	0.09	0.01	0.00	0.00	0.00	4.98	0.00
50	0.00	0.00	0.00	0.10	0.36	0.76	1.21	1.61	1.85	1.82	1.55	1.14	0.69	0.29	0.07	0.00	0.00	0.00	11.4	0.00
40	0.00	0.00	0.02	0.21	0.65	1.25	2.00	2.92	3.63	3.59	2.85	1.96	1.21	0.59	0.18	0.01	0.00	0.00	21.1	0.00
30	0.00	0.00	0.05	0.34	0.93	1.81	3.48	6.91	11.4	11.1	6.44	3.32	1.78	0.88	0.29	0.03	0.00	0.00	48.8	7.74
20	0.00	0.00	0.08	0.44	1.18	2.51	6.38	23.0	58.0	56.3	21.2	5.87	2.38	1.11	0.39	0.06	0.00	0.00	179	150
10	0.00	0.00	0.09	0.50	1.34	3.12	9.94	51.8	127	123	46.5	8.76	2.80	1.24	0.44	0.07	0.00	0.00	377	352
0	0.00	0.00	0.09	0.50	1.36	3.14	9.54	45.3	115	111	40.2	8.41	2.76	1.22	0.44	0.07	0.00	0.00	340	315
-10	0.00	0.00	0.08	0.44	1.22	2.57	6.06	17.4	39.0	37.0	15.6	5.36	2.23	1.06	0.38	0.06	0.00	0.00	128	95.8
-20	0.00	0.00	0.05	0.33	0.95	1.88	3.34	6.01	9.03	8.80	5.69	3.04	1.63	0.82	0.28	0.03	0.00	0.00	41.9	0.96
-30	0.00	0.00	0.02	0.20	0.63	1.25	1.96	2.75	3.37	3.36	2.67	1.82	1.11	0.54	0.17	0.01	0.00	0.00	19.9	0.00
-40	0.00	0.00	0.00	0.09	0.33	0.71	1.12	1.48	1.71	1.70	1.43	1.03	0.61	0.27	0.06	0.00	0.00	0.00	10.5	0.00
-50	0.00	0.00	0.00	0.01	0.11	0.27	0.47	0.64	0.73	0.71	0.58	0.39	0.21	0.07	0.01	0.00	0.00	0.00	4.20	0.00
-60	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.13	0.15	0.14	0.10	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.71	0.00
-70	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	0.01	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	0.01	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	0.01	0.00
HORIZONTAL (DEG)																				
Φ t	0.00	0.01	0.49	3.18	9.19	19.7	46.2	161	372	360	146	41.7	17.7	8.18	2.70	0.35	0.00	0.00	1189	---
Φ a	0.00	0.00	0.00	0.00	0.00	0.00	4.81	128	344	331	112	1.93	0.00	0.00	0.00	0.00	0.00	0.00	---	922

one-half-peak spread: U:10.9,D:13.7 , L:12.8,R:12.0

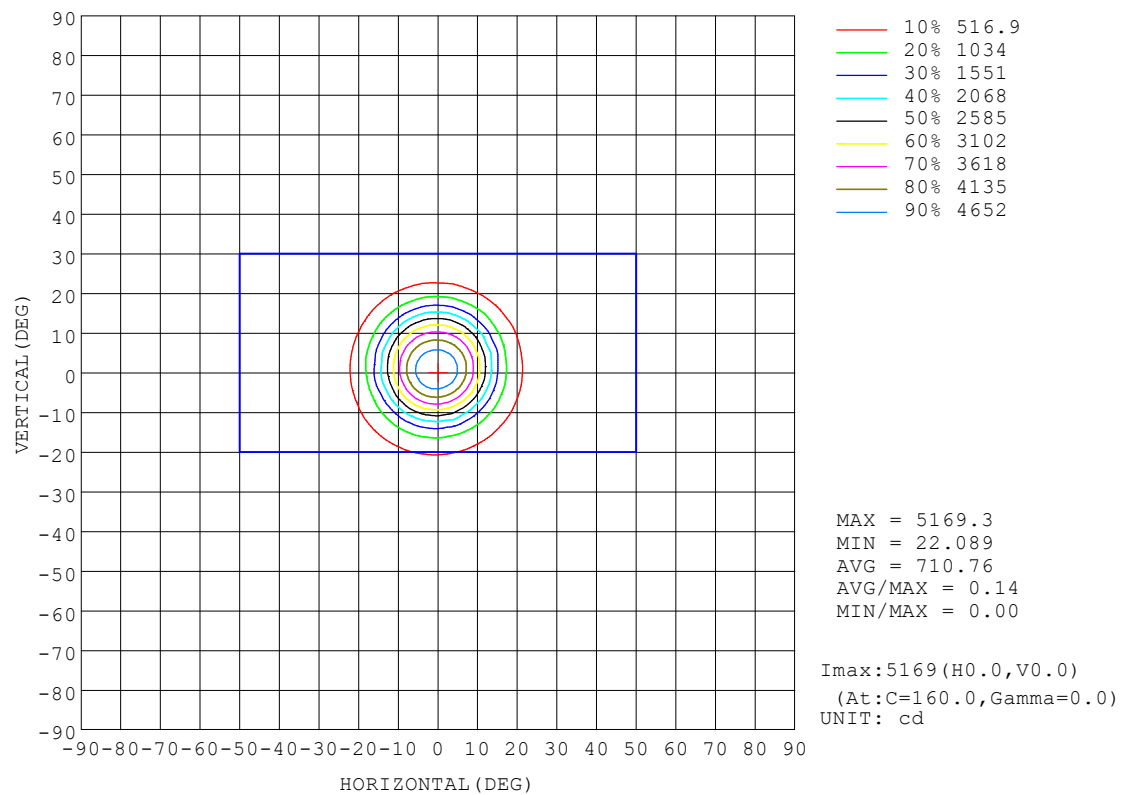
NEMA Beam Type: Type 3

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:11 November 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: 93M21PLB1040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: sphere	Shielding Angle:

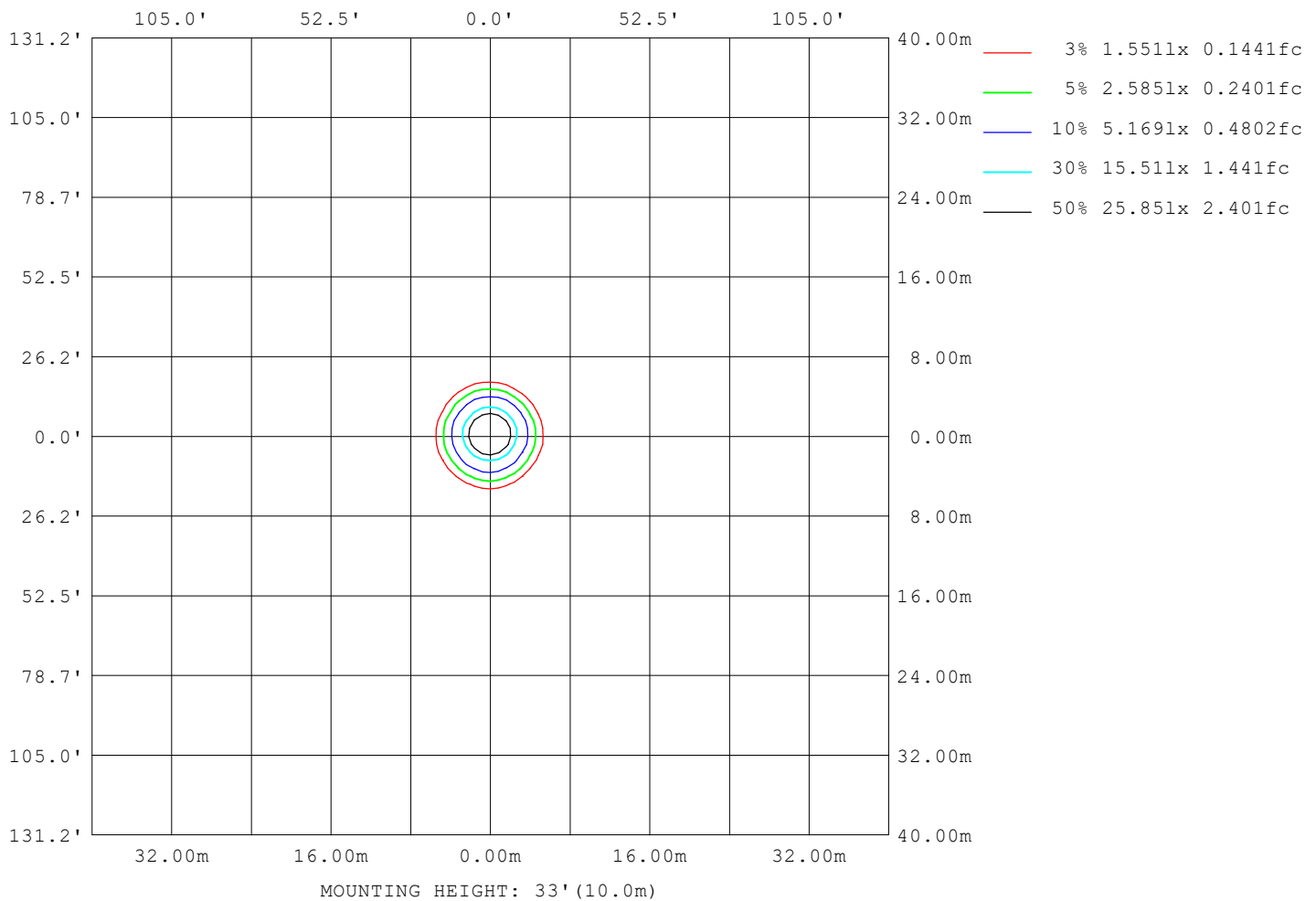


C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:  
 Test Date:11 November 2022

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**

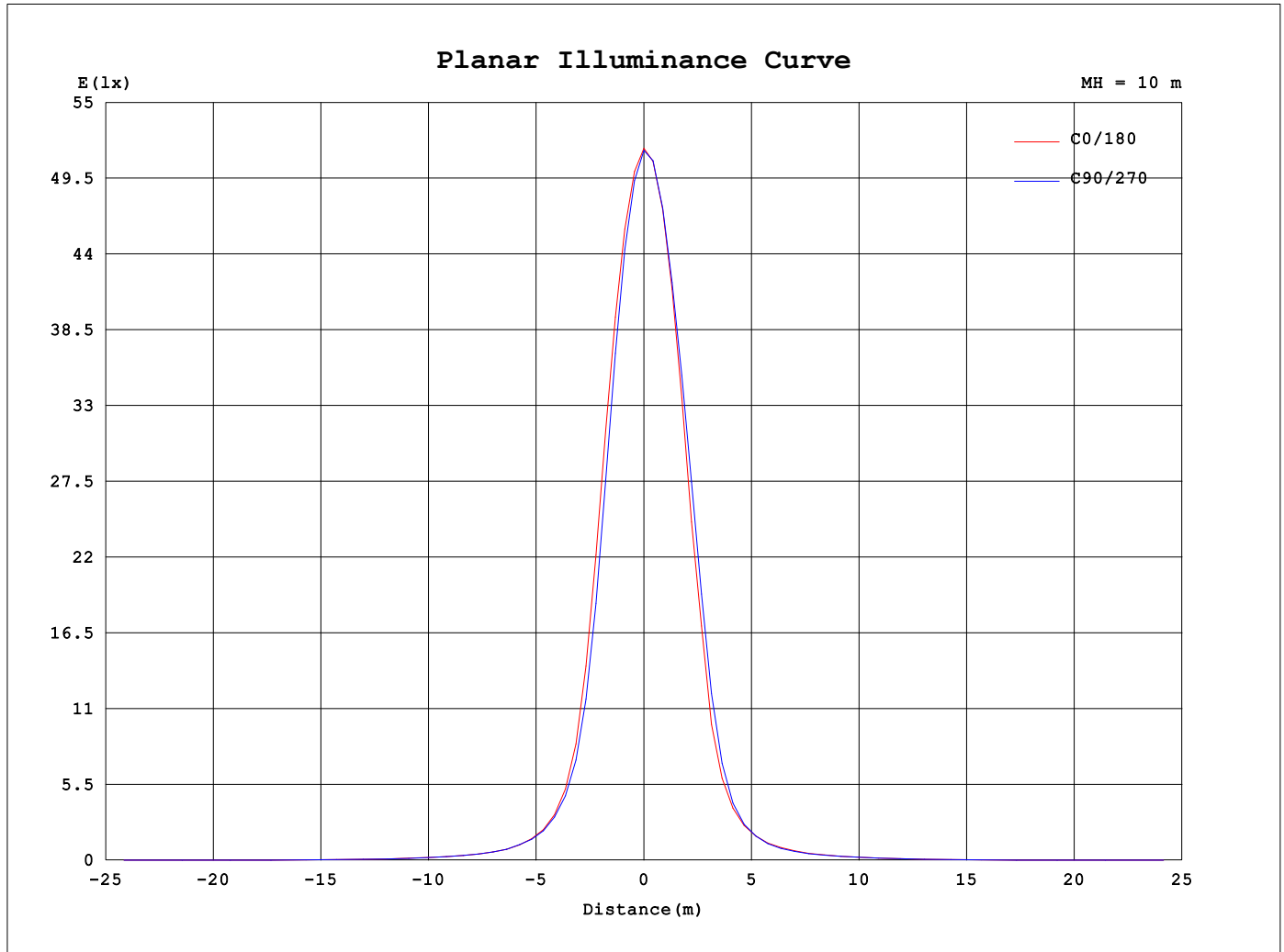
NAME: 93M21PLB1040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: sphere	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 11 November 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

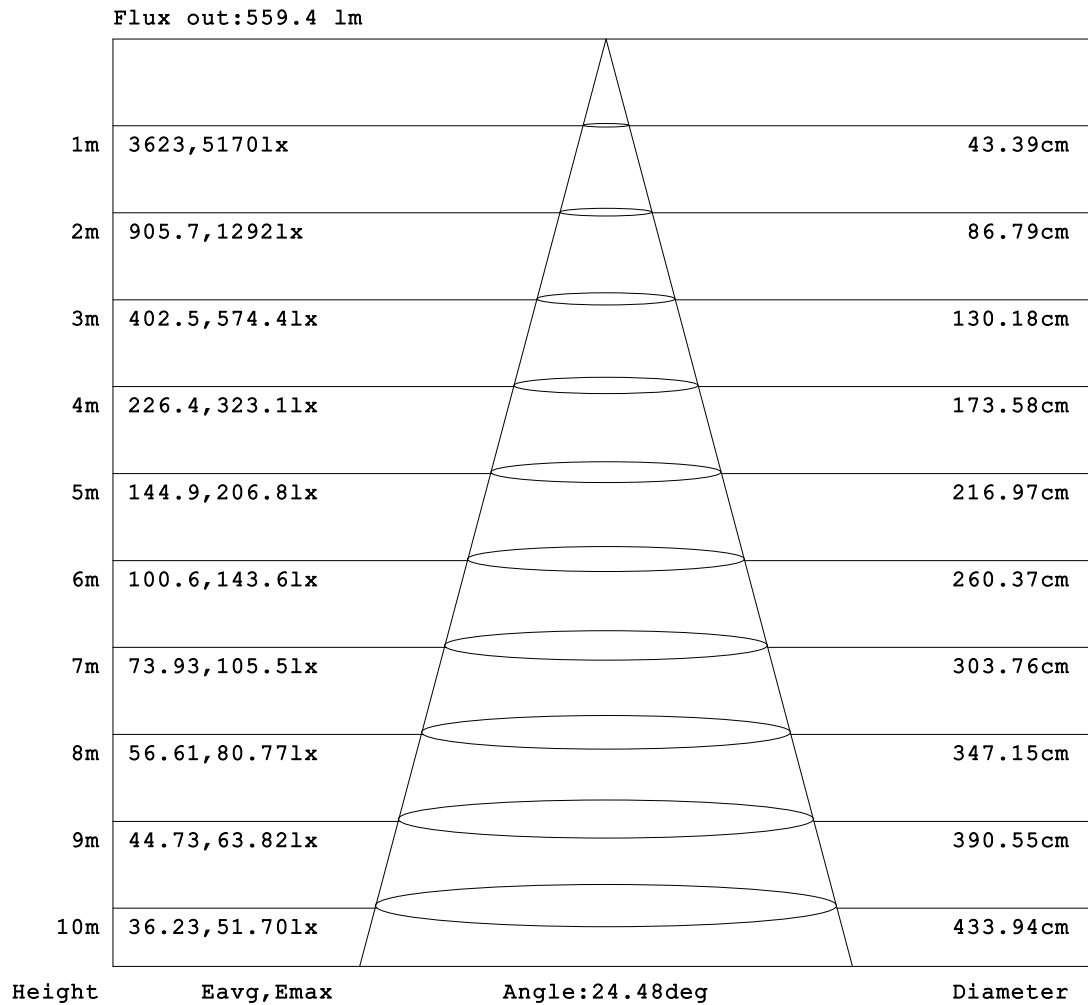


C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 11 November 2022

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: 93M21PLB1040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: sphere	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:11 November 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: 93M21PLB1040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: sphere	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	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
-85	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
-80	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
-75	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
-70	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.04	0.04	0.03	0.04	0.05	0.04	0.02
-65	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.10	0.36	1.37	2.13	3.10	3.78	4.16	4.34	4.29
-60	0.03	0.03	0.02	0.02	0.02	0.03	0.02	0.02	0.14	0.89	2.63	4.76	6.68	8.49	10.0	11.1	11.8	12.2	12.1
-55	0.03	0.03	0.02	0.02	0.02	0.03	0.03	0.24	1.92	4.63	7.75	10.9	13.5	16.1	18.4	21.1	22.8	23.8	23.9
-50	0.03	0.03	0.02	0.02	0.02	0.04	0.20	1.99	5.40	9.47	13.5	18.0	23.2	27.9	31.8	35.0	37.3	38.6	38.9
-45	0.03	0.03	0.02	0.02	0.03	0.04	1.07	4.80	9.56	14.5	20.8	28.4	34.6	40.1	45.4	50.0	53.6	56.0	57.0
-40	0.03	0.03	0.02	0.02	0.03	0.24	2.89	7.97	13.7	21.3	30.3	38.5	46.4	54.3	61.5	68.0	73.4	76.8	78.3
-35	0.03	0.03	0.02	0.02	0.02	0.67	5.14	11.2	18.8	29.2	39.5	49.4	60.0	70.2	80.6	90.9	101	107	109
-30	0.03	0.03	0.02	0.02	0.02	1.86	7.33	14.1	24.6	36.2	49.3	62.0	74.8	89.8	108	129	153	163	176
-25	0.03	0.03	0.02	0.02	0.12	2.89	9.39	17.8	30.0	43.5	59.1	74.7	91.7	117	153	194	242	278	289
-20	0.03	0.03	0.02	0.02	0.24	4.12	11.1	21.2	34.4	50.3	68.1	86.9	114	156	220	313	429	539	565
-15	0.03	0.03	0.03	0.02	0.35	5.11	12.6	24.4	38.4	55.8	75.4	99.2	140	209	326	542	858	1209	1298
-10	0.03	0.03	0.03	0.02	0.43	5.83	13.6	26.6	41.5	60.1	81.6	113	167	268	471	929	1761	2595	2888
-5	0.03	0.03	0.03	0.02	0.48	6.27	14.3	28.0	43.3	62.3	84.9	121	187	320	630	1462	2883	4084	4483
0	0.03	0.03	0.03	0.02	0.51	6.43	14.5	28.4	43.8	62.8	85.7	124	194	340	719	1888	3516	4779	5169
5	0.03	0.03	0.03	0.02	0.50	6.31	14.3	28.0	43.1	61.3	84.3	120	186	325	733	1753	3267	4432	4789
10	0.03	0.03	0.03	0.02	0.46	5.89	13.7	26.7	41.3	58.3	79.6	110	167	278	531	1219	2409	3384	3685
15	0.03	0.03	0.03	0.02	0.39	5.20	12.7	24.5	38.5	53.9	71.9	97.2	140	216	364	700	1298	1920	2146
20	0.03	0.03	0.03	0.03	0.28	4.24	11.3	21.6	34.9	48.6	64.1	83.5	114	163	243	371	567	788	849
25	0.03	0.03	0.03	0.03	0.15	3.04	9.63	18.4	30.8	42.7	56.0	71.0	91.6	121	164	222	285	339	351
30	0.03	0.03	0.03	0.03	0.03	2.04	7.74	14.7	25.6	36.7	47.9	60.0	74.0	91.3	114	140	165	183	187
35	0.03	0.03	0.03	0.02	0.03	0.85	5.62	11.7	19.8	30.2	40.0	49.9	60.2	71.4	83.5	95.8	108	116	117
40	0.03	0.03	0.03	0.02	0.03	0.35	3.28	8.59	14.5	22.7	32.0	40.2	48.2	56.7	65.1	71.7	77.6	81.1	81.7
45	0.03	0.03	0.03	0.02	0.03	0.03	1.39	5.39	10.3	15.6	23.0	30.6	37.1	43.5	49.5	54.6	58.5	60.8	61.4
50	0.03	0.03	0.03	0.03	0.02	0.02	0.34	2.42	6.21	10.6	14.9	20.2	26.0	31.4	35.6	39.1	41.8	43.5	44.0
55	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.46	2.51	5.72	9.11	12.4	15.4	19.0	22.1	25.2	27.6	28.8	28.9
60	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.37	1.54	3.60	6.12	8.47	10.5	12.2	13.6	14.6	15.0	14.9
65	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.40	0.96	2.35	3.47	4.66	5.62	6.29	6.54	6.46
70	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.02	0.02	0.03	0.03	0.03	0.02	0.16	0.31	0.42	0.49	0.49	0.44
75	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.03
80	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02
85	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.03	0.02	0.02
90	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.02

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:11 November 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: 93M21PLB1040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: sphere	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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
-85	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
-80	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
-75	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
-70	0.04	0.05	0.03	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
-65	4.01	3.52	2.90	2.08	1.03	0.61	0.13	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
-60	11.6	10.8	9.70	8.26	6.57	4.75	2.94	1.14	0.36	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
-55	23.1	21.4	19.1	15.9	13.4	11.0	8.37	5.51	2.79	0.86	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	
-50	37.7	35.7	32.9	29.1	24.5	19.5	14.7	10.9	7.12	3.55	0.93	0.04	0.03	0.02	0.02	0.02	0.02	0.02	
-45	55.7	52.9	48.6	43.2	37.2	31.1	24.3	17.0	12.0	7.42	3.09	0.43	0.03	0.02	0.02	0.02	0.02	0.02	
-40	76.7	72.9	66.7	59.0	50.7	42.4	34.3	26.1	17.4	11.4	6.03	1.41	0.04	0.02	0.02	0.02	0.02	0.02	
-35	107	100	88.3	77.1	65.5	54.2	43.9	34.6	25.1	15.5	9.15	3.45	0.18	0.02	0.02	0.02	0.02	0.02	
-30	162	150	124	102	83.3	67.0	54.0	42.5	31.8	20.7	12.1	5.51	0.85	0.02	0.02	0.02	0.02	0.02	
-25	271	232	185	143	106	82.7	64.4	50.3	37.6	26.0	14.9	7.58	1.47	0.02	0.02	0.02	0.02	0.02	
-20	515	400	288	199	140	101	75.2	57.8	43.2	30.5	17.4	9.38	2.56	0.03	0.02	0.02	0.02	0.02	
-15	1129	776	483	288	188	122	88.1	64.9	48.4	34.2	20.5	10.8	3.41	0.03	0.02	0.02	0.02	0.02	
-10	2464	1580	819	415	233	146	98.0	71.2	52.8	37.0	22.9	11.9	4.02	0.04	0.02	0.02	0.02	0.02	
-5	3935	2653	1276	557	283	170	106	75.6	55.9	38.8	24.4	12.5	4.38	0.05	0.03	0.02	0.02	0.02	
0	4635	3269	1565	624	300	171	109	77.9	57.6	39.6	24.9	12.8	4.49	0.06	0.03	0.02	0.02	0.02	
5	4325	3065	1566	602	292	167	107	77.3	57.0	39.1	24.6	12.6	4.39	0.05	0.03	0.02	0.02	0.02	
10	3294	2258	1079	475	254	154	102	74.5	54.8	37.7	23.3	12.0	4.04	0.05	0.03	0.02	0.02	0.02	
15	1861	1204	647	329	200	132	92.1	69.6	51.1	35.3	21.0	11.0	3.44	0.04	0.03	0.02	0.02	0.02	
20	760	526	336	223	154	108	81.4	62.9	46.2	32.0	18.0	9.63	2.59	0.04	0.02	0.02	0.02	0.02	
25	328	267	206	155	116	89.1	70.6	54.9	40.2	27.7	15.5	7.88	1.53	0.03	0.02	0.02	0.02	0.02	
30	180	160	135	110	89.2	73.5	59.4	46.3	34.1	22.1	12.7	5.82	0.92	0.03	0.02	0.02	0.02	0.02	
35	115	106	93.9	82.1	70.3	59.2	48.4	37.7	27.1	16.4	9.76	3.76	0.19	0.03	0.02	0.02	0.02	0.02	
40	80.3	76.2	70.0	63.0	54.9	46.4	38.0	29.0	18.8	12.1	6.53	1.72	0.03	0.02	0.02	0.02	0.02	0.02	
45	59.8	56.7	52.2	47.2	41.2	34.8	27.7	19.1	13.0	8.05	3.49	0.50	0.03	0.02	0.02	0.02	0.02	0.02	
50	42.9	40.8	37.5	33.7	29.0	22.9	16.7	12.2	8.12	4.11	1.17	0.03	0.02	0.02	0.03	0.02	0.02	0.02	
55	28.1	26.2	23.2	19.5	16.3	12.9	9.80	6.66	3.64	1.21	0.04	0.03	0.02	0.03	0.03	0.02	0.02	0.02	
60	14.4	13.4	12.1	10.4	8.48	6.33	4.07	1.94	0.56	0.03	0.03	0.02	0.02	0.03	0.03	0.02	0.02	0.02	
65	6.13	5.51	4.58	3.46	2.19	1.26	0.27	0.04	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.02	0.02	
70	0.39	0.31	0.21	0.12	0.06	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.02	0.02	
75	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.02	0.02	
80	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.03	0.04	0.03	0.03	0.02	0.02	
85	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.03	0.04	0.03	0.03	0.03	0.02	
90	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.02	

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:11 November 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: