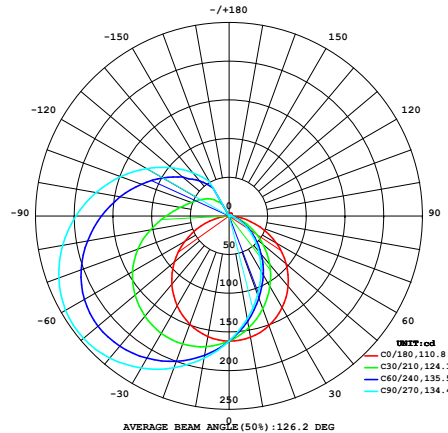


### LAMP PHOTOMETRIC REPORT

MODEL: 99LPL12/BL		
POWER: 12W	VOLTAGE: 230V	WORKING VOLTAGE: 230V
MANUFACTURER: Elmark Industries JSC		

TOTAL FLUX: 878.20 lm



$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%
10	159.2	141.9	135.1	141.5	158.2	177.6	186.6	178.6	0- 10	15.35	15.35	1.75
20	150.9	119.3	108.4	118.5	148.9	188.9	208.8	190.9	10- 20	44.53	59.87	6.82
30	137.2	95.36	83.09	94.37	134.3	195.3	226.9	198.2	20- 30	69.41	129.3	14.7
40	118.7	71.57	59.96	70.68	115.3	196.6	239.8	200.5	30- 40	87.89	217.2	24.7
50	96.37	48.93	39.89	48.32	92.46	192.8	245.7	197.6	40- 50	98.57	315.7	36
60	70.83	29.06	23.43	28.82	66.80	183.5	243.8	188.8	50- 60	100.9	416.7	47.4
70	43.32	13.52	10.93	13.59	39.54	168.6	234.1	174.2	60- 70	95.52	512.2	58.3
80	16.59	3.455	2.811	3.649	13.85	148.7	218.3	154.6	70- 80	84.16	596.4	67.9
90	0.8332	1.349	1.972	1.459	0.4453	127.4	198.1	133.3	80- 90	71.06	667.4	76
100	1.384	1.500	2.122	1.619	0.6058	107.0	174.6	112.6	90-100	60.21	727.6	82.9
110	2.535	1.629	2.217	1.753	1.293	88.55	149.2	93.42	100-110	49.70	777.3	88.5
120	3.562	1.711	2.217	1.845	2.265	72.44	122.9	76.26	110-120	39.15	816.5	93
130	4.054	1.744	2.179	1.877	2.973	57.43	97.09	60.73	120-130	29.02	845.5	96.3
140	4.371	1.747	2.086	1.879	3.535	44.63	73.30	46.75	130-140	19.75	865.2	98.5
150	4.526	1.742	1.983	1.866	3.837	30.39	51.60	31.32	140-150	11.93	877.2	99.9
160	0	0	0	0	0	0	0	0	150-160	1.033	878.2	100
170	0	0	0	0	0	0	0	0	160-170	0	878.2	100
180	0	0	0	0	0	0	0	0	170-180	0	878.2	100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:13 December 2022

$\gamma$  Range: 0 - 150DEG  
 $\gamma$  Interval: 2.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity:65.0%  
Test Distance:6.265m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

MODEL: 99LPL12/BL		
POWER: 12W	VOLTAGE: 230V	WORKING VOLTAGE: 230V
MANUFACTURER: Elmark Industries JSC		

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162
5	161	159	157	155	153	152	150	149	149	148	149	149	150	151	153	155	156	159	161
10	159	155	151	147	143	141	138	137	135	135	135	136	138	140	143	146	150	154	158
15	156	149	143	138	133	129	126	124	122	122	122	123	125	128	132	137	142	148	154
20	151	142	134	128	122	117	113	111	109	108	109	110	113	116	121	127	133	141	149
25	145	134	125	117	110	105	101	97.9	96.0	95.5	95.7	97.5	100.0	104	109	116	123	132	142
30	137	125	114	105	98.1	92.6	88.6	85.5	83.8	83.1	83.7	85.1	87.9	91.8	96.9	104	112	123	134
35	128	115	103	93.7	86.4	80.6	76.5	73.5	71.9	71.2	71.7	73.1	75.9	79.8	85.2	92.2	101	112	125
40	119	104	91.2	81.7	74.4	68.8	64.9	62.1	60.6	60.0	60.5	61.8	64.4	68.1	73.3	80.3	89.1	101	115
45	108	92.0	79.3	69.6	62.6	57.4	53.9	51.4	50.1	49.5	49.9	51.1	53.4	56.8	61.7	68.3	77.3	89.3	104
50	96.4	79.6	66.9	57.7	51.2	46.6	43.5	41.5	40.3	39.9	40.2	41.3	43.2	46.2	50.5	56.5	65.0	76.9	92.5
55	84.0	66.7	54.5	46.1	40.5	36.6	34.1	32.4	31.6	31.2	31.5	32.3	33.9	36.3	39.9	45.2	52.8	64.1	79.9
60	70.8	53.6	42.3	35.1	30.6	27.6	25.6	24.4	23.7	23.4	23.7	24.3	25.6	27.4	30.2	34.5	41.0	51.3	66.8
65	57.2	40.6	30.8	25.2	21.8	19.6	18.2	17.3	16.8	16.7	16.8	17.4	18.2	19.6	21.6	24.8	29.9	38.6	53.2
70	43.3	28.0	20.4	16.4	14.2	12.8	11.9	11.3	11.0	10.9	11.0	11.4	12.0	12.9	14.2	16.3	19.9	26.6	39.5
75	29.5	16.6	11.6	9.39	8.11	7.33	6.79	6.45	6.28	6.24	6.31	6.55	6.92	7.49	8.26	9.49	11.5	15.8	26.1
80	16.6	7.48	5.16	4.22	3.64	3.28	3.03	2.89	2.82	2.81	2.86	2.98	3.17	3.46	3.84	4.41	5.29	7.26	13.8
85	6.03	1.92	1.44	1.22	1.24	1.40	1.59	1.74	1.83	1.88	1.85	1.80	1.67	1.50	1.39	1.38	1.61	2.06	4.29
90	0.83	0.59	0.76	1.01	1.22	1.48	1.66	1.83	1.91	1.97	1.93	1.88	1.74	1.58	1.33	1.11	0.86	0.68	0.45
95	0.93	0.65	0.83	1.08	1.30	1.55	1.74	1.92	2.00	2.06	2.02	1.97	1.82	1.67	1.42	1.19	0.93	0.75	0.50
100	1.38	0.72	0.90	1.16	1.37	1.62	1.81	1.98	2.06	2.12	2.09	2.05	1.90	1.74	1.50	1.28	1.01	0.82	0.61
105	1.93	0.80	0.98	1.23	1.45	1.69	1.87	2.04	2.12	2.18	2.14	2.10	1.96	1.81	1.57	1.36	1.10	0.91	0.89
110	2.54	0.88	1.05	1.30	1.51	1.75	1.92	2.08	2.16	2.22	2.18	2.14	2.01	1.86	1.64	1.44	1.18	0.99	1.29
115	3.17	0.96	1.12	1.36	1.56	1.79	1.95	2.09	2.18	2.22	2.21	2.16	2.04	1.91	1.70	1.51	1.26	1.08	1.79
120	3.56	1.04	1.20	1.41	1.60	1.82	1.96	2.09	2.19	2.22	2.21	2.16	2.06	1.95	1.74	1.57	1.34	1.17	2.26
125	3.83	1.12	1.26	1.47	1.64	1.82	1.97	2.08	2.19	2.20	2.21	2.15	2.07	1.95	1.78	1.62	1.41	1.26	2.64
130	4.05	1.19	1.32	1.51	1.66	1.82	1.97	2.06	2.17	2.18	2.20	2.14	2.07	1.95	1.80	1.67	1.48	1.34	2.97
135	4.23	1.35	1.37	1.54	1.68	1.82	1.97	2.03	2.13	2.14	2.17	2.10	2.07	1.94	1.82	1.70	1.54	1.41	3.27
140	4.37	1.70	1.41	1.58	1.69	1.81	1.94	1.99	2.09	2.09	2.13	2.07	2.04	1.93	1.83	1.73	1.58	1.48	3.54
145	4.48	2.09	1.46	1.60	1.70	1.80	1.92	1.95	2.04	2.03	2.07	2.02	2.00	1.91	1.83	1.75	1.62	1.71	3.76
150	4.53	2.48	1.50	1.60	1.70	1.78	1.88	1.91	1.98	1.98	2.01	1.99	1.96	1.90	1.83	1.76	1.65	2.03	3.84
155	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
160	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
165	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
170	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
175	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
180	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

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: MEDIUM

Temperature:25.3°C

Operators:

Test Date:13 December 2022

γ Range: 0 - 150DEG

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

MODEL: 99LPL12/BL		
POWER: 12W	VOLTAGE: 230V	WORKING VOLTAGE: 230V
MANUFACTURER: Elmark Industries JSC		

Table--2

UNIT: cd

C (DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162		
5	163	165	167	169	171	173	173	174	174	174	173	173	171	170	168	166	163		
10	162	167	171	176	179	183	185	186	187	187	185	183	180	177	173	168	164		
15	161	168	174	181	187	192	195	198	198	198	196	193	188	183	176	170	163		
20	157	167	176	185	193	200	204	208	209	209	205	201	195	187	178	169	160		
25	153	165	176	188	198	207	213	217	218	218	214	208	200	190	179	168	156		
30	147	162	175	189	201	212	220	226	227	226	221	214	204	192	179	165	150		
35	140	157	173	189	204	217	226	232	234	233	227	219	207	193	177	161	144		
40	132	151	169	188	205	220	230	238	240	239	232	223	209	192	174	155	136		
45	122	144	165	186	205	221	233	241	244	243	235	224	209	191	170	149	127		
50	112	136	159	183	203	221	234	243	246	244	236	225	208	187	165	141	117		
55	101	126	152	178	200	220	233	243	246	244	236	223	205	183	158	132	106		
60	88.6	116	144	172	195	216	230	241	244	242	233	219	200	177	151	123	94.5		
65	76.1	106	135	164	189	211	226	237	240	238	229	214	194	170	142	113	82.5		
70	62.8	94.2	125	156	181	204	219	231	234	232	222	207	187	162	133	101	69.6		
75	49.4	82.2	115	146	172	195	212	223	227	225	214	199	177	152	122	89.7	56.4		
80	36.2	69.9	103	135	162	186	203	215	218	216	206	190	168	142	111	77.6	43.4		
85	24.3	58.0	91.8	124	152	176	193	205	209	206	196	180	157	131	99.2	65.9	31.6		
90	15.5	47.7	81.5	114	141	165	182	194	198	196	185	169	147	120	88.6	55.5	22.5		
95	11.4	40.0	72.3	103	130	154	171	183	187	184	174	158	136	110	79.5	47.4	17.4		
100	10.1	34.6	64.3	94.0	120	143	159	171	175	172	162	147	125	100.0	71.1	41.3	15.0		
105	9.80	30.9	57.6	85.2	110	132	148	159	162	160	150	136	115	90.8	63.8	36.8	14.0		
110	9.88	28.3	51.9	77.2	99.9	121	135	146	149	148	138	124	105	82.3	57.5	33.4	13.5		
115	10.1	26.2	47.1	69.8	90.6	110	123	133	136	135	126	113	94.6	74.3	52.0	30.6	13.2		
120	10.4	24.6	42.9	63.0	81.9	99.0	111	120	123	121	113	102	85.5	67.0	47.1	28.3	13.1		
125	10.2	22.9	38.7	56.2	73.3	88.5	99.5	108	110	109	101	91.0	76.5	60.1	42.6	26.3	12.7		
130	8.40	20.9	35.2	50.3	64.6	78.4	88.3	95.3	97.1	96.1	89.5	80.5	67.9	53.6	38.4	24.4	11.8		
135	7.89	18.8	30.6	44.7	57.0	67.8	77.4	83.3	85.1	83.9	78.5	70.5	59.7	47.4	34.3	21.1	9.09		
140	7.42	15.3	25.1	39.5	49.8	59.1	65.5	71.8	73.3	72.3	67.7	61.0	51.9	41.6	28.3	17.4	8.37		
145	6.98	13.6	22.2	33.2	42.9	50.6	55.8	60.9	62.1	61.2	57.5	52.0	44.5	34.0	23.1	14.6	7.72		
150	6.52	9.72	17.5	25.8	34.9	41.5	46.9	48.9	51.6	50.9	48.0	42.8	35.6	27.0	18.7	10.4	7.02		
155	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		
160	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		
165	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		
170	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		
175	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		
180	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		

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: MEDIUM

Temperature:25.3°C

Operators:

Test Date:13 December 2022

γ Range: 0 - 150DEG

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: