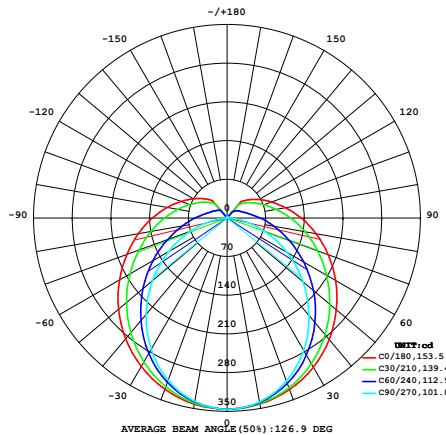


LAMP PHOTOMETRIC REPORT

MODEL: 93M20DL1230/BL		
POWER: 12W	VOLTAGE: 48V	WORKING VOLTAGE: 48V
MANUFACTURER: Elmark Industries JSC		

TOTAL FLUX: 1430.5 lm



γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%
10	341.8	340.3	337.9	339.7	341.9	339.2	337.1	339.6	0- 10	32.72	32.72	2.29
20	330.5	322.9	313.8	321.6	329.6	320.6	312.5	321.8	10- 20	93.72	126.4	8.84
30	312.0	296.1	276.9	293.6	310.2	292.1	274.8	294.5	20- 30	142.4	268.8	18.8
40	287.3	262.2	230.5	258.7	285.7	257.2	228.0	260.3	30- 40	173.4	442.2	30.9
50	258.2	224.5	179.1	220.5	256.6	219.0	176.3	222.6	40- 50	185.0	627.2	43.8
60	226.8	186.1	126.0	181.8	224.9	180.4	122.9	184.1	50- 60	178.7	805.9	56.3
70	194.8	149.9	73.56	145.7	193.0	144.5	71.03	148.1	60- 70	158.5	964.4	67.4
80	163.6	117.7	26.60	114.6	163.2	113.6	24.62	116.2	70- 80	130.5	1095	76.5
90	134.2	90.56	0.7865	89.38	135.4	88.83	0.7323	89.51	80- 90	101.6	1196	83.6
100	107.7	69.07	1.015	69.36	110.4	68.97	0.9442	68.22	90-100	77.71	1274	89.1
110	85.66	53.36	1.331	54.10	88.45	53.87	1.268	38.39	100-110	58.63	1333	93.2
120	67.20	41.66	1.693	42.81	69.90	42.77	1.624	40.87	110-120	43.50	1376	96.2
130	51.71	32.25	2.060	33.96	54.60	34.03	1.992	32.01	120-130	31.27	1408	98.4
140	38.81	22.74	2.408	26.81	41.42	26.92	2.348	22.44	130-140	20.97	1428	99.9
150	0	0	0	0	0	0	0	0	140-150	2.025	1431	100
160	0	0	0	0	0	0	0	0	150-160	0	1431	100
170	0	0	0	0	0	0	0	0	160-170	0	1431	100
180	0	0	0	0	0	0	0	0	170-180	0	1431	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:10 November 2022

γ Range: 0 - 140DEG
 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: 93M20DL1230/BL		
POWER: 12W	VOLTAGE: 48V	WORKING VOLTAGE: 48V
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	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346
5	345	345	345	345	345	345	344	344	344	344	344	344	344	344	344	345	345	345	345
10	342	342	342	341	341	340	339	339	338	338	338	338	339	339	340	341	341	342	342
15	337	337	337	335	334	332	330	329	328	328	328	329	330	331	333	335	335	336	337
20	331	330	329	327	324	321	319	316	314	314	314	315	317	320	323	326	328	329	330
25	322	322	320	317	313	308	304	300	298	297	297	299	303	306	311	315	318	320	321
30	312	311	309	305	299	293	287	282	278	277	277	280	285	291	296	302	306	309	310
35	300	300	296	291	284	276	268	261	256	255	256	260	266	273	280	288	293	297	299
40	287	286	282	276	267	257	247	239	233	231	232	237	245	254	263	272	279	284	286
45	273	272	267	260	249	238	226	216	208	205	207	214	223	234	245	256	264	269	272
50	258	257	252	243	231	218	204	192	183	179	182	189	201	214	227	239	248	254	257
55	243	241	235	225	213	198	182	168	157	153	155	165	178	194	208	222	232	238	241
60	227	225	218	208	194	178	161	144	131	126	130	141	157	174	190	204	215	222	225
65	211	209	202	191	176	159	140	121	106	99.5	104	118	136	155	172	187	199	206	209
70	195	193	186	174	159	141	120	99.6	81.6	73.6	80.0	96.8	116	137	155	171	182	190	193
75	179	177	170	159	143	124	102	79.6	58.9	48.9	57.3	76.9	98.4	120	139	155	167	175	178
80	164	162	155	143	127	108	86.0	62.1	38.9	26.6	37.6	59.8	83.1	105	124	141	152	160	163
85	149	147	140	129	113	94.1	71.9	47.6	23.4	9.03	22.6	46.2	69.9	91.9	111	127	138	146	149
90	134	133	126	115	99.7	81.4	59.8	36.4	13.7	0.79	13.6	35.9	58.9	80.3	98.5	114	125	133	135
95	121	119	112	102	87.9	70.3	49.9	28.5	9.31	0.88	9.48	28.6	49.8	70.0	87.7	102	113	120	123
100	108	106	100	90.7	77.3	60.9	42.4	23.5	7.83	1.02	8.07	23.8	42.5	61.1	77.6	91.5	101	108	110
105	96.0	94.7	89.0	80.3	68.0	53.1	36.6	20.2	7.44	1.16	7.63	20.7	37.0	53.6	68.7	81.5	90.4	96.8	99.0
110	85.7	84.3	79.3	71.1	60.0	46.7	32.1	18.1	7.45	1.33	7.54	18.6	32.7	47.4	60.8	72.4	80.9	86.4	88.4
115	76.0	74.7	70.3	62.9	53.0	41.2	28.5	16.6	7.62	1.50	7.58	17.1	29.3	42.1	54.1	64.3	72.0	77.0	78.7
120	67.2	66.0	62.1	55.5	46.8	36.5	25.6	15.6	7.83	1.69	7.62	16.0	26.4	37.6	48.0	57.2	64.0	68.3	69.9
125	59.1	58.1	54.6	48.9	41.3	32.5	23.3	14.8	7.45	1.88	6.73	15.1	24.0	33.6	42.7	50.7	56.7	60.5	61.9
130	51.7	50.8	47.8	42.8	36.2	28.3	20.4	13.2	6.68	2.06	5.64	14.3	22.0	30.1	37.8	44.7	49.9	53.3	54.6
135	44.9	44.2	41.5	37.1	31.2	24.0	17.4	11.8	6.51	2.24	4.96	13.5	20.1	26.9	33.5	39.3	43.7	46.6	47.7
140	38.8	38.2	35.8	31.6	25.6	19.9	14.9	10.6	6.23	2.41	4.24	12.4	18.3	24.0	29.6	34.4	38.1	40.5	41.4
145	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
150	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
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:10 November 2022

γ Range: 0 - 140DEG

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: 93M20DL1230/BL		
POWER: 12W	VOLTAGE: 48V	WORKING VOLTAGE: 48V
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	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346		
5	345	344	344	344	344	344	344	344	344	344	344	344	344	344	345	345	345		
10	342	341	340	340	339	338	337	337	337	337	338	338	339	340	341	341	342		
15	336	335	334	332	330	329	327	327	327	327	328	329	331	333	335	336	337		
20	329	327	325	322	319	316	314	313	313	313	315	317	320	323	326	329	330		
25	320	317	314	310	305	301	298	296	295	296	298	302	307	312	316	319	322		
30	309	306	301	295	289	283	279	276	275	276	279	285	291	298	304	308	311		
35	297	293	286	279	271	264	257	254	252	254	259	266	274	282	290	296	299		
40	283	279	271	262	252	243	235	230	228	230	236	245	255	265	275	282	286		
45	269	263	255	244	232	221	211	205	203	206	213	224	236	248	258	267	272		
50	254	248	238	226	212	199	187	179	176	180	189	202	216	229	241	251	256		
55	238	231	220	207	192	177	163	154	150	154	165	180	196	211	224	234	240		
60	222	215	203	189	172	155	139	128	123	129	141	159	176	192	207	218	224		
65	206	198	186	171	153	135	116	102	96.5	104	119	138	157	174	190	201	208		
70	190	182	170	154	135	115	94.4	78.0	71.0	79.4	97.0	118	138	158	173	185	192		
75	174	167	154	138	118	97.4	75.2	55.6	46.6	56.8	77.5	100	122	141	157	169	177		
80	160	152	139	124	104	82.0	58.4	36.2	24.6	37.2	60.3	84.4	106	126	142	154	161		
85	146	139	126	110	90.7	69.0	45.1	21.7	7.69	22.2	46.1	70.5	92.3	112	128	140	146		
90	132	125	113	98.2	79.4	58.1	35.2	13.1	0.73	13.0	35.3	58.6	80.1	98.9	114	126	132		
95	120	113	102	87.2	69.3	49.3	28.1	9.33	0.81	8.93	27.7	49.0	69.2	87.0	101	112	119		
100	108	102	90.7	77.3	60.7	42.2	23.5	8.03	0.94	6.85	20.9	32.6	60.0	76.5	89.6	100	106		
105	96.4	90.8	81.1	68.4	53.2	36.8	20.6	7.65	1.10	6.71	18.6	33.5	33.0	67.3	79.8	89.0	94.2		
110	86.3	80.9	72.1	60.6	47.1	32.6	18.6	7.64	1.27	7.02	17.0	30.1	43.4	33.4	70.6	79.1	84.1		
115	76.8	72.0	64.1	53.9	42.0	29.2	17.2	7.73	1.44	7.49	16.1	27.4	39.2	49.5	41.1	70.1	74.6		
120	68.3	64.0	57.0	48.0	37.5	26.5	16.1	7.81	1.62	7.75	15.5	25.4	36.1	45.6	46.5	59.4	65.9		
125	60.5	56.7	50.6	42.7	33.6	24.1	15.2	7.32	1.81	7.30	14.7	23.1	32.2	40.9	47.8	36.8	58.0		
130	53.3	50.0	44.7	37.9	30.1	22.0	14.4	6.62	1.99	6.48	13.0	20.2	28.1	35.9	42.3	38.7	46.7		
135	46.7	43.8	39.3	33.6	27.0	20.2	13.7	6.19	2.17	6.06	11.6	17.1	23.7	30.7	37.0	41.1	32.0		
140	40.6	38.2	34.4	29.7	24.2	18.4	12.7	5.71	2.35	5.57	10.3	14.6	19.6	25.3	31.8	35.6	33.9		
145	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		
150	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		
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:10 November 2022

γ Range: 0 - 140DEG

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: