

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	1839.7 cd per klm.
(Luminaire orientation as tested.)	-32.0 degrees vertical
	-5.5 degrees horizontal

Beam Spread	At 10% of Imax	136.6V x 69.2H
	At 50% of Imax	113.5V x 33.3H
	At 90% of Imax	104.6V x 13.2H

Beam Flux	Total	1628.2 lumens per klm.
	To 10% of Imax	1464.4 lumens per klm.
	To 50% of Imax	796.9 lumens per klm.
	To 90% of Imax	0.0 lumens per klm.

Upward LOR	0.0 %
Downward LOR	162.8 %

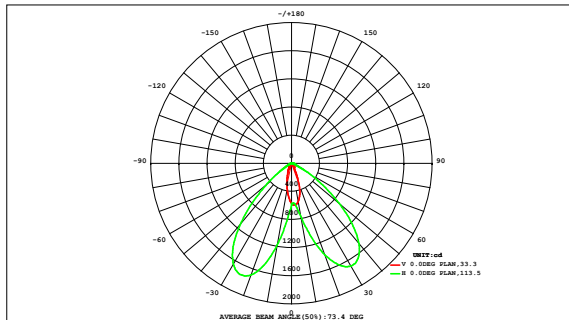
Luminaire Efficiency (Light Output Ratio)	162.8 %
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C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 11 November 2022

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: 93M20TL2040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F42 x 225	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cilinder	Shielding Angle:



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	93M20TL1640/BL	Imax (cd)	1766
NOMINAL POWER (W)	16	AVAILABILITY (%)	148.1
RATED VOLTAGE (V)	48	Avai. FLUX (lm)	1422
NOMINAL FLUX (lm)	960	LOR (%)	162.8
LAMPS INSIDE	1	TOTAL FLUX (lm)	1563
TEST VOLTAGE (V)	48	θ @50% (H,V)	33,113DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	0.00	0.00	0.00	0.01	0.06	0.15	0.23	0.29	0.31	0.28	0.21	0.13	0.05	0.01	0.00	0.00	0.00	0.00	1.75	0.00
90	0.00	0.00	0.01	0.06	0.20	0.37	0.55	0.70	0.76	0.69	0.55	0.39	0.21	0.07	0.01	0.00	0.00	0.00	4.57	0.00
80	0.00	0.00	0.02	0.14	0.36	0.69	1.15	1.63	1.89	1.64	1.20	0.78	0.43	0.19	0.03	0.00	0.00	0.00	10.2	0.00
70	0.00	0.00	0.05	0.22	0.56	1.24	2.88	5.72	7.62	6.03	3.27	1.55	0.73	0.32	0.06	0.00	0.00	0.00	30.2	15.6
60	0.00	0.00	0.07	0.29	0.78	2.29	7.89	17.7	23.9	19.7	10.3	3.46	1.15	0.42	0.10	0.01	0.00	0.00	88.1	79.7
50	0.00	0.00	0.08	0.34	0.98	3.77	14.7	32.6	43.2	37.7	21.5	6.89	1.65	0.49	0.15	0.01	0.00	0.00	164	157
40	0.00	0.00	0.09	0.36	1.07	4.34	17.2	38.5	51.5	47.0	28.4	9.37	1.82	0.55	0.17	0.02	0.00	0.00	200	194
30	0.00	0.00	0.09	0.33	0.93	3.38	13.0	30.3	43.2	41.6	25.9	8.04	1.81	0.60	0.18	0.02	0.00	0.00	169	162
20	0.00	0.00	0.09	0.28	0.72	1.98	6.70	16.7	24.1	28.6	17.4	5.48	1.71	0.65	0.19	0.01	0.00	0.00	105	96.1
10	0.00	0.00	0.09	0.25	0.64	1.72	5.92	15.5	21.1	16.0	8.43	3.54	1.56	0.66	0.18	0.01	0.00	0.00	75.6	65.7
0	0.00	0.00	0.08	0.24	0.54	1.30	6.25	20.7	31.3	28.4	15.2	5.01	1.65	0.62	0.16	0.01	0.00	0.00	111	103
-10	0.00	0.00	0.07	0.23	0.43	2.31	14.9	35.9	47.9	41.3	22.6	7.05	1.75	0.56	0.15	0.01	0.00	0.00	175	169
-20	0.00	0.00	0.07	0.27	0.78	4.85	19.1	40.0	50.6	42.3	22.8	6.94	1.59	0.50	0.15	0.01	0.00	0.00	190	184
-30	0.00	0.00	0.07	0.30	1.00	4.16	14.3	30.0	38.2	30.5	15.4	4.52	1.24	0.43	0.13	0.01	0.00	0.00	140	133
-40	0.00	0.00	0.06	0.27	0.80	2.29	6.68	14.2	18.1	13.6	6.41	2.21	0.84	0.33	0.09	0.01	0.00	0.00	65.8	56.5
-50	0.00	0.00	0.04	0.20	0.52	1.16	2.29	4.05	4.85	3.63	2.06	1.06	0.51	0.21	0.04	0.00	0.00	0.00	20.6	5.30
-60	0.00	0.00	0.02	0.13	0.32	0.59	0.93	1.28	1.37	1.15	0.83	0.52	0.27	0.10	0.01	0.00	0.00	0.00	7.52	0.00
-70	0.00	0.00	0.01	0.05	0.16	0.29	0.42	0.52	0.53	0.46	0.35	0.21	0.09	0.02	0.00	0.00	0.00	0.00	3.13	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	0.00	0.03	0.99	3.95	10.8	36.9	135	306	410	361	203	67.1	19.1	6.72	1.82	0.15	0.02	0.01	1563	---
Φ a	0.00	0.00	0.00	0.00	0.00	12.5	121	298	402	352	193	43.6	0.00	0.00	0.00	0.00	0.00	0.00	---	1422

one-half-peak spread: U:30.1,D:28.6 , L:15.5,R:18.0

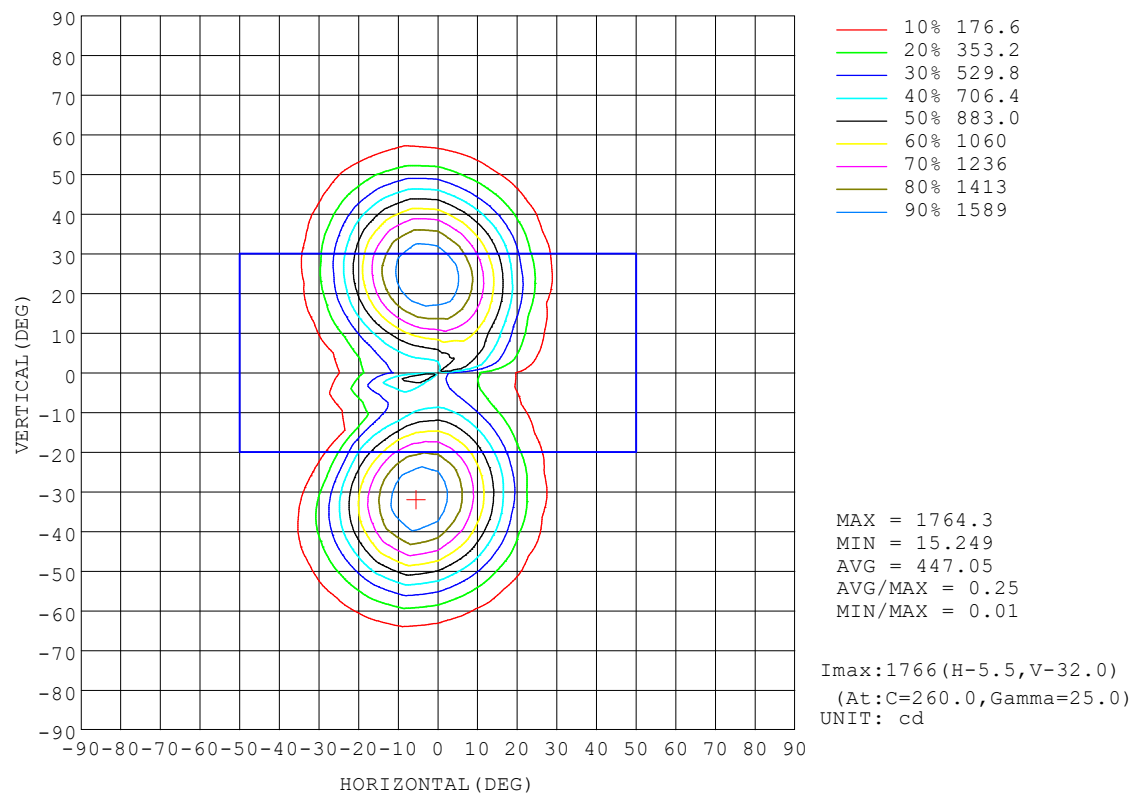
NEMA Beam Type: Type 4 x 7 (H x V)

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: 93M20TL2040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F42 x 225	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cilinder	Shielding Angle:

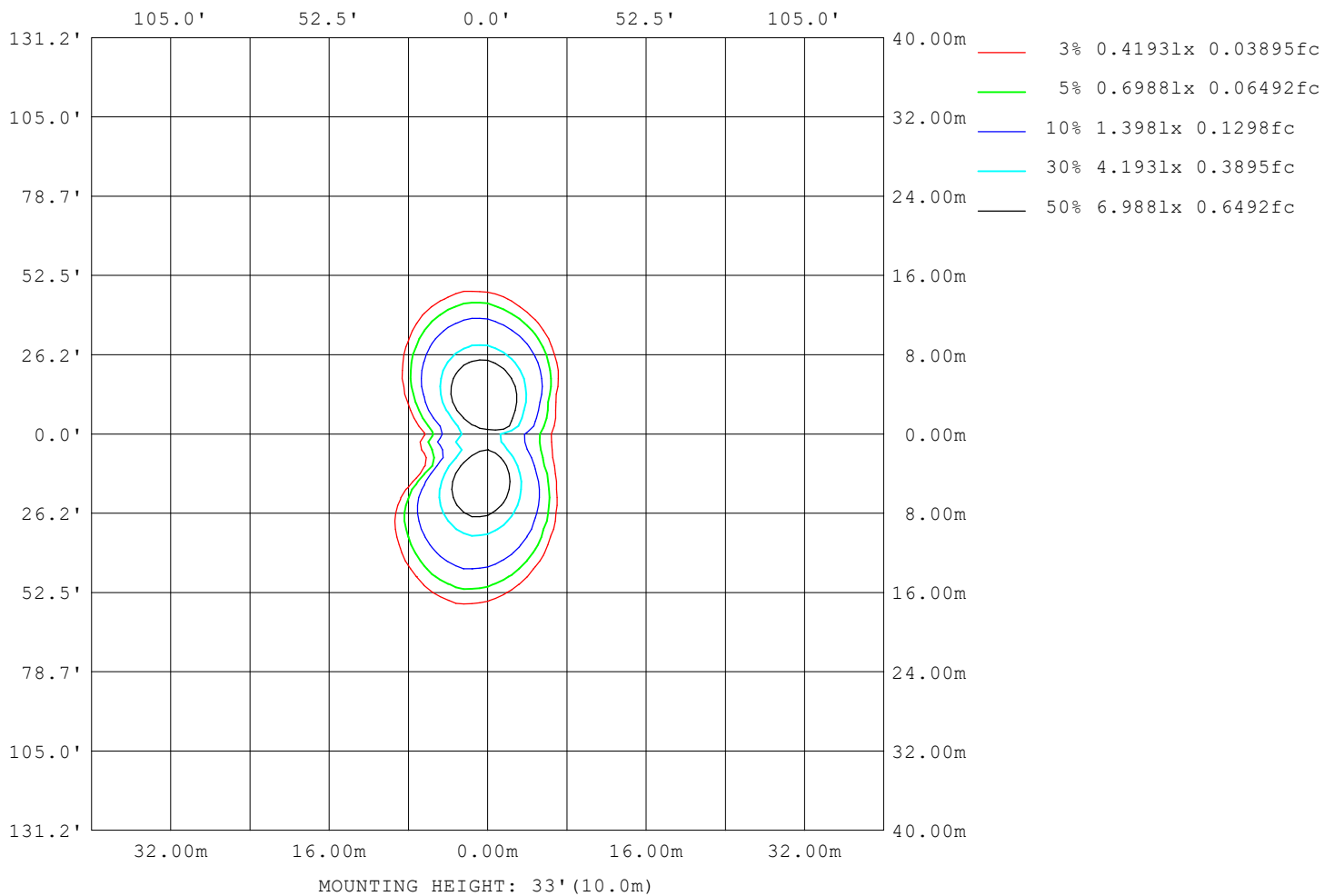


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Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.456
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ISOLUX DIAGRAM

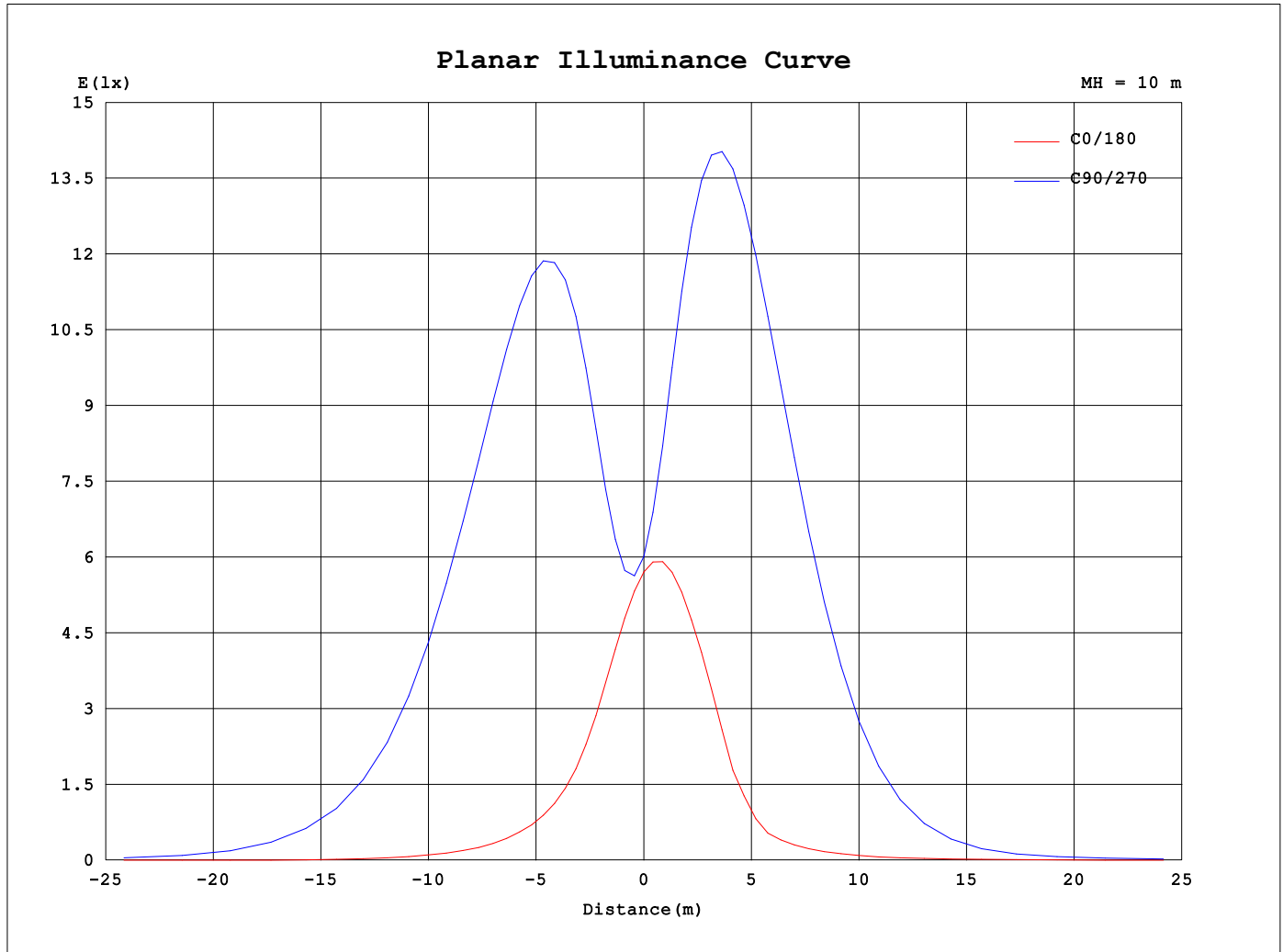
NAME: 93M20TL2040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F42 x 225	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cilinder	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
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Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity: 65.0%
Test Distance: 6.265m [K=1.0000]
Remarks:

Planar Illuminance Curve

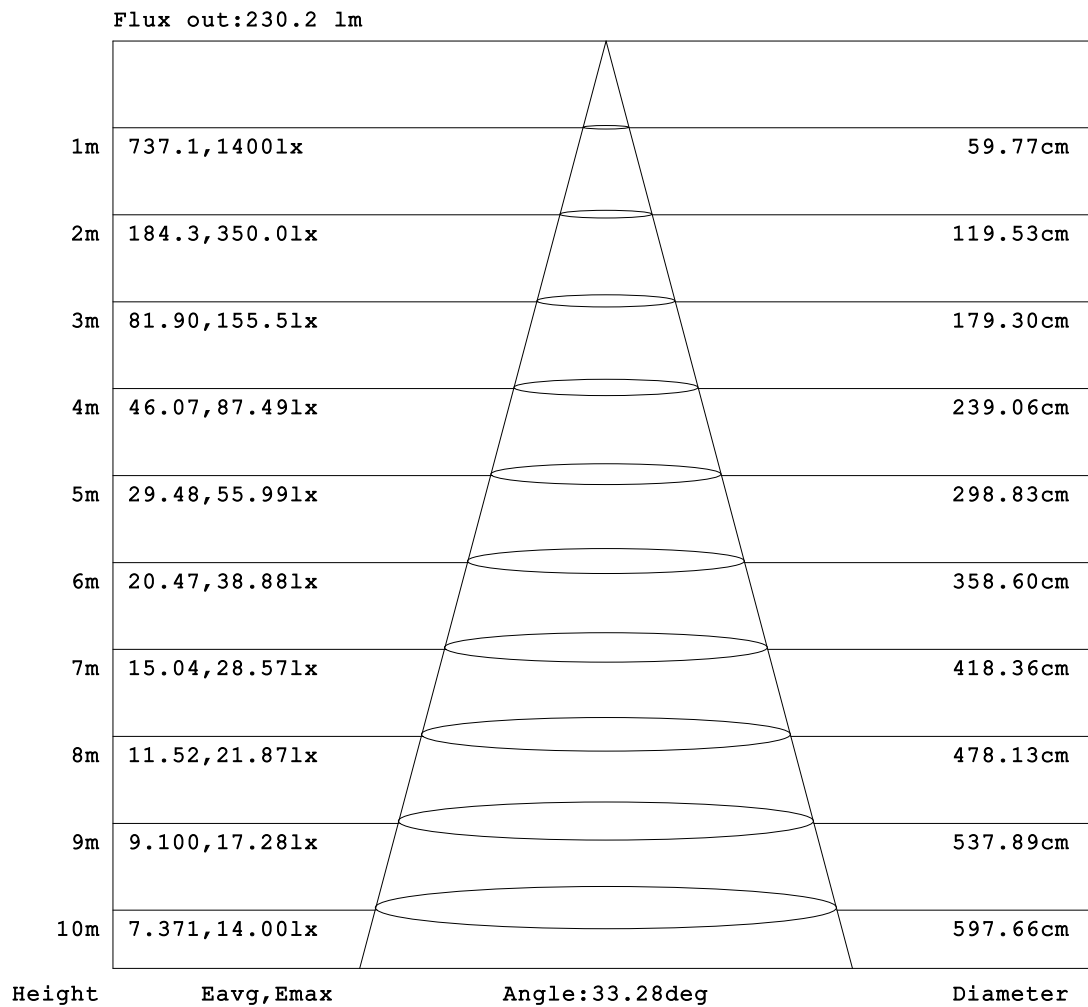


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 11 November 2022

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: 93M20TL2040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F42 x 225	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cilinder	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: 93M20TL2040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F42 x 225	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cilinder	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	0.05	0.04	0.04	0.06	0.09	0.24	0.40	1.48	2.56	4.27	5.97	7.13	8.28	9.25	10.2	10.7	11.2	10.6	9.91
-85	0.05	0.04	0.04	0.06	0.08	0.45	0.91	2.94	5.13	7.45	9.80	11.6	13.3	14.9	16.4	17.2	18.0	17.2	16.4
-80	0.05	0.04	0.04	0.06	0.08	0.88	2.09	4.87	7.88	10.9	14.1	16.7	19.3	21.8	24.2	25.8	27.2	26.1	24.8
-75	0.05	0.05	0.04	0.06	0.10	1.39	3.59	7.00	10.7	14.7	19.0	22.9	27.2	32.5	38.2	42.0	45.1	43.5	41.0
-70	0.05	0.05	0.04	0.07	0.14	1.93	5.10	9.16	13.7	18.8	24.6	32.0	40.5	49.9	60.2	68.2	75.2	72.6	67.6
-65	0.05	0.05	0.04	0.08	0.32	2.47	6.46	11.2	16.8	23.5	33.2	45.2	59.4	76.8	102	126	147	143	130
-60	0.05	0.05	0.04	0.08	0.57	3.08	7.72	13.1	19.8	28.8	43.1	62.0	89.2	130	193	259	313	314	285
-55	0.05	0.05	0.04	0.14	0.97	3.69	8.80	14.7	23.0	35.3	55.6	84.7	140	228	351	478	575	589	545
-50	0.05	0.05	0.04	0.15	1.25	4.22	9.60	16.0	25.3	41.2	68.1	118	215	365	555	760	902	941	880
-45	0.05	0.05	0.04	0.13	1.43	4.71	10.0	16.7	24.9	43.8	77.1	157	294	511	772	1052	1228	1292	1222
-40	0.05	0.05	0.04	0.06	1.37	4.92	9.99	16.5	23.6	41.8	83.8	185	369	636	960	1271	1482	1568	1494
-35	0.05	0.05	0.05	0.07	1.16	4.87	10.3	15.2	21.9	28.6	75.8	179	390	693	1056	1388	1628	1730	1653
-30	0.05	0.05	0.05	0.08	0.71	4.94	10.5	13.4	18.1	22.3	36.7	143	332	661	1038	1390	1650	1757	1690
-25	0.05	0.05	0.05	0.09	0.78	4.89	10.5	13.0	14.2	19.3	23.7	59.3	239	523	907	1253	1511	1627	1595
-20	0.05	0.05	0.05	0.10	0.97	5.42	10.3	12.9	15.5	19.5	26.5	40.1	103	357	709	995	1258	1380	1385
-15	0.05	0.05	0.05	0.10	1.08	6.23	10.3	13.3	18.1	24.3	33.1	45.8	83.7	151	442	706	908	1056	1081
-10	0.05	0.05	0.05	0.10	1.10	6.79	10.6	13.6	19.9	29.7	42.9	61.3	91.2	154	292	476	608	732	769
-5	0.05	0.05	0.05	0.10	1.05	7.07	10.7	13.5	19.7	28.7	43.5	67.7	122	238	397	548	674	591	580
0	0.05	0.05	0.05	0.09	0.95	7.06	10.7	13.2	18.9	26.4	38.7	55.1	82.8	172	312	457	556	598	571
5	0.05	0.05	0.05	0.11	1.35	7.19	11.4	15.2	21.9	32.3	48.0	74.4	120	212	382	546	688	777	830
10	0.05	0.05	0.05	0.12	1.66	7.08	12.0	16.7	24.1	36.7	57.4	99.4	182	326	540	769	980	1126	1179
15	0.05	0.05	0.06	0.13	1.83	6.78	12.3	17.6	26.9	41.7	66.6	118	252	456	742	1047	1307	1469	1493
20	0.05	0.05	0.06	0.13	1.81	6.37	12.6	19.0	29.5	44.2	75.2	147	300	569	906	1260	1540	1679	1691
25	0.05	0.05	0.06	0.12	1.58	6.19	12.7	19.5	30.4	46.7	79.7	155	338	617	983	1347	1616	1749	1743
30	0.05	0.05	0.06	0.10	1.31	6.18	12.2	19.0	30.0	46.3	77.3	159	325	605	952	1299	1559	1679	1658
35	0.05	0.05	0.06	0.08	1.45	5.92	11.6	18.5	28.4	42.7	72.7	133	286	521	831	1127	1354	1470	1451
40	0.05	0.05	0.06	0.08	1.36	5.49	10.8	17.4	25.8	39.7	62.2	112	219	404	644	881	1062	1157	1138
45	0.05	0.05	0.06	0.11	1.25	4.84	9.93	16.0	23.3	35.0	51.6	84.5	149	272	434	605	734	797	779
50	0.05	0.05	0.06	0.09	0.89	4.03	8.77	14.3	20.9	30.2	43.3	63.0	101	172	255	358	436	468	452
55	0.05	0.05	0.06	0.08	0.56	3.03	7.37	12.2	18.1	25.0	35.1	47.7	65.9	95.0	133	183	224	234	223
60	0.05	0.05	0.05	0.06	0.17	1.99	5.83	10.1	15.1	20.7	27.5	36.4	46.9	59.2	73.9	89.9	104	106	101
65	0.05	0.05	0.05	0.06	0.10	1.23	4.21	7.94	12.1	16.6	21.4	27.0	34.0	40.5	47.2	52.7	57.2	57.7	56.4
70	0.05	0.05	0.05	0.05	0.05	0.71	2.58	5.68	9.07	12.7	16.5	20.3	24.1	28.0	32.0	34.8	37.0	37.1	36.5
75	0.05	0.05	0.05	0.05	0.05	0.31	0.99	3.46	6.26	9.06	12.0	14.8	17.5	19.7	21.7	23.0	24.1	24.0	23.6
80	0.05	0.05	0.05	0.05	0.05	0.10	0.18	1.63	3.54	5.71	7.86	9.95	12.0	13.5	14.9	15.7	16.4	16.3	16.0
85	0.05	0.05	0.05	0.05	0.05	0.08	0.11	0.49	1.10	2.67	4.32	5.79	7.24	8.25	9.23	9.79	10.3	10.1	9.95
90	0.05	0.05	0.05	0.05	0.05	0.08	0.10	0.13	0.15	0.60	1.05	2.09	3.13	3.90	4.67	5.01	5.34	5.20	5.05

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: 93M20TL2040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F42 x 225	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cilinder	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	8.89	7.86	6.42	4.97	3.41	1.84	1.10	0.37	0.31	0.26	0.22	0.19	0.17	0.15	0.14	0.12	0.12	0.12	
-85	15.1	13.6	11.7	9.79	7.63	5.47	3.44	1.51	0.81	0.27	0.22	0.18	0.17	0.15	0.14	0.12	0.12	0.12	
-80	22.8	20.7	18.2	15.5	12.6	9.66	6.86	4.15	2.08	0.51	0.29	0.18	0.17	0.15	0.14	0.12	0.12	0.12	
-75	36.6	31.8	27.0	22.5	18.4	14.4	10.8	7.35	4.21	1.59	0.61	0.18	0.17	0.15	0.13	0.12	0.12	0.12	
-70	59.4	50.7	42.0	33.4	26.0	19.9	15.2	10.7	6.84	3.41	1.22	0.20	0.17	0.15	0.13	0.12	0.12	0.12	
-65	107	84.2	65.7	49.7	36.8	27.1	20.0	14.4	9.52	5.42	2.09	0.38	0.18	0.15	0.13	0.12	0.12	0.12	
-60	224	162	112	75.3	52.0	36.8	25.3	18.1	12.2	7.42	3.24	0.92	0.22	0.15	0.13	0.12	0.12	0.12	
-55	438	320	203	122	72.0	48.6	31.8	22.1	14.8	9.38	4.58	1.53	0.27	0.15	0.13	0.12	0.12	0.12	
-50	720	538	347	201	104	63.4	39.9	26.0	17.3	11.1	5.89	2.04	0.23	0.15	0.13	0.12	0.12	0.12	
-45	1023	780	519	298	151	77.1	47.7	28.7	19.4	12.4	6.90	2.39	0.27	0.15	0.12	0.12	0.12	0.12	
-40	1274	987	677	387	203	95.2	54.6	33.4	21.3	13.6	7.68	2.62	0.51	0.16	0.12	0.12	0.12	0.12	
-35	1432	1127	784	465	230	113	57.3	36.0	22.0	14.4	8.11	3.19	0.66	0.16	0.12	0.12	0.12	0.12	
-30	1478	1170	814	494	255	115	64.0	37.6	23.3	14.7	8.19	3.40	0.73	0.15	0.13	0.12	0.12	0.12	
-25	1398	1106	773	463	240	119	65.3	40.8	25.0	14.8	8.33	3.24	0.52	0.16	0.13	0.12	0.12	0.12	
-20	1208	953	657	398	211	107	66.0	41.7	26.4	16.2	8.31	2.79	0.41	0.17	0.14	0.12	0.12	0.12	
-15	949	743	510	308	164	99.7	62.7	42.4	28.2	17.5	8.47	2.74	0.46	0.18	0.14	0.12	0.12	0.12	
-10	687	532	365	227	133	89.9	61.8	42.5	29.1	18.4	9.36	2.97	0.45	0.19	0.15	0.12	0.12	0.12	
-5	511	387	264	178	120	85.9	60.7	42.8	30.1	19.2	9.84	3.01	0.40	0.20	0.15	0.12	0.12	0.12	
0	485	368	255	172	120	86.3	60.6	42.9	30.0	19.2	9.85	2.87	0.32	0.20	0.15	0.12	0.12	0.12	
5	933	912	615	363	187	103	65.3	44.0	29.1	18.5	10.1	3.63	0.56	0.20	0.15	0.12	0.12	0.12	
10	1154	1017	761	455	230	118	68.4	43.6	27.2	17.3	10.0	4.15	0.73	0.20	0.15	0.12	0.12	0.12	
15	1406	1199	892	548	257	124	66.8	42.1	26.5	16.8	9.78	4.39	0.78	0.19	0.15	0.12	0.12	0.12	
20	1564	1312	980	619	318	123	64.7	40.2	25.1	16.6	9.90	4.41	0.67	0.18	0.15	0.12	0.12	0.12	
25	1595	1327	982	609	328	146	63.2	37.9	24.3	16.1	9.67	4.28	0.56	0.17	0.14	0.12	0.12	0.12	
30	1498	1225	895	556	292	135	66.7	35.8	22.8	15.2	9.02	3.92	0.69	0.17	0.14	0.13	0.12	0.12	
35	1274	1023	734	453	227	114	61.3	36.2	20.7	13.9	8.12	3.36	0.51	0.16	0.14	0.13	0.12	0.12	
40	971	760	532	323	172	87.0	53.8	34.1	20.5	12.2	6.99	2.44	0.35	0.15	0.13	0.13	0.12	0.12	
45	645	493	338	205	115	65.9	44.5	29.7	18.9	10.6	5.61	1.70	0.17	0.14	0.13	0.13	0.12	0.12	
50	368	276	188	120	76.2	51.6	35.9	25.3	17.0	9.58	4.10	1.07	0.15	0.14	0.13	0.13	0.12	0.12	
55	187	145	104	75.2	53.4	39.3	28.0	20.8	14.7	8.13	2.46	0.52	0.14	0.14	0.13	0.13	0.12	0.12	
60	87.1	72.4	59.8	48.3	38.6	29.7	22.1	16.6	11.8	6.35	1.60	0.20	0.14	0.13	0.13	0.12	0.12	0.12	
65	51.1	45.3	39.6	33.7	27.4	22.0	17.0	12.6	8.70	4.63	1.27	0.16	0.14	0.14	0.13	0.12	0.12	0.12	
70	33.5	30.1	26.7	23.3	19.8	16.3	12.4	8.87	5.77	2.83	0.86	0.16	0.15	0.14	0.13	0.12	0.12	0.12	
75	22.0	20.3	18.4	16.4	13.9	11.2	8.25	5.44	2.95	0.94	0.36	0.16	0.15	0.14	0.13	0.12	0.12	0.12	
80	14.8	13.6	12.2	10.7	8.79	6.85	4.50	2.22	1.00	0.24	0.19	0.16	0.15	0.14	0.14	0.13	0.12	0.12	
85	9.02	8.05	6.98	5.87	4.42	2.96	1.62	0.48	0.33	0.23	0.20	0.16	0.16	0.15	0.14	0.13	0.12	0.12	
90	4.48	3.91	2.83	1.74	1.14	0.54	0.44	0.34	0.30	0.26	0.22	0.17	0.16	0.15	0.14	0.13	0.12	0.12	

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: