

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	2263.0 cd per klm.
(Luminaire orientation as tested.)	0.0 degrees vertical
	0.0 degrees horizontal

Beam Spread	At 10% of Imax	102.7V x 101.9H
	At 50% of Imax	22.7V x 22.7H
	At 90% of Imax	7.9V x 8.1H

Beam Flux	Total	1152.9 lumens per klm.
	To 10% of Imax	1045.2 lumens per klm.
	To 50% of Imax	216.6 lumens per klm.
	To 90% of Imax	43.2 lumens per klm.

Upward LOR	0.0 %
Downward LOR	115.3 %

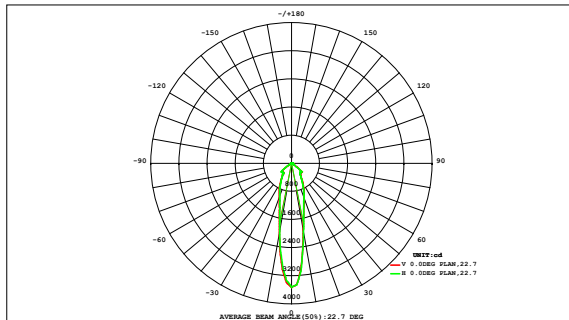
Luminaire Efficiency (Light Output Ratio)	115.1 %
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C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 17 August 2022

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: 96RAY24/20	TYPE: 96RAY24/20	WEIGHT: 1
SPEC.:	DIM.: F 250	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	96RAY24/20	Imax (cd)	3530
NOMINAL POWER (W)	20	AVAILABILITY (%)	104.4
RATED VOLTAGE (V)	24	Avai. FLUX (lm)	1629
NOMINAL FLUX (lm)	1560	LOR (%)	115.1
LAMPS INSIDE	1	TOTAL FLUX (lm)	1795
TEST VOLTAGE (V)	24	θ @50% (H,V)	23,23DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	0.00	0.00	0.01	0.02	0.03	0.04	0.06	0.06	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.01	0.00	0.00	0.57	0.00
90	0.00	0.01	0.03	0.08	0.14	0.20	0.25	0.29	0.31	0.32	0.30	0.25	0.20	0.14	0.08	0.03	0.01	0.00	2.65	0.00
80	0.00	0.02	0.07	0.16	0.27	0.38	0.49	0.61	0.71	0.73	0.63	0.49	0.37	0.27	0.17	0.08	0.02	0.00	5.47	0.00
70	0.00	0.04	0.12	0.24	0.42	0.85	2.27	4.50	6.02	6.01	4.48	2.28	0.85	0.42	0.25	0.12	0.04	0.00	28.9	5.20
60	0.01	0.05	0.16	0.33	1.14	5.21	9.59	11.1	11.5	11.4	10.9	9.48	5.21	1.15	0.34	0.16	0.05	0.01	77.7	60.4
50	0.01	0.06	0.19	0.60	4.50	9.27	10.7	12.7	14.5	14.2	12.3	10.4	9.18	4.46	0.61	0.20	0.06	0.01	104	93.8
40	0.01	0.07	0.23	1.45	7.51	9.69	13.6	19.8	23.9	23.4	19.1	13.3	9.51	7.42	1.43	0.23	0.07	0.01	151	143
30	0.01	0.08	0.27	2.60	8.04	10.9	18.8	29.2	39.2	38.3	27.9	18.3	10.7	7.92	2.53	0.27	0.08	0.01	215	208
20	0.01	0.08	0.30	3.38	8.08	12.2	22.7	38.6	74.1	73.9	37.8	22.0	12.0	8.00	3.24	0.30	0.09	0.01	317	311
10	0.01	0.08	0.30	3.40	8.02	12.1	22.3	38.3	73.9	75.6	38.8	22.4	12.1	7.98	3.32	0.30	0.09	0.01	319	313
0	0.01	0.08	0.27	2.61	7.86	10.8	18.3	28.7	39.5	40.1	29.3	18.7	10.8	7.86	2.67	0.27	0.08	0.01	218	211
-10	0.01	0.07	0.22	1.29	7.11	9.41	13.3	19.3	23.9	24.2	19.7	13.4	9.43	7.19	1.32	0.23	0.07	0.01	150	142
-20	0.01	0.06	0.19	0.58	4.20	8.83	10.2	12.4	14.2	14.3	12.5	10.3	8.97	4.32	0.58	0.19	0.06	0.01	102	90.6
-30	0.01	0.05	0.15	0.32	1.03	4.40	8.66	10.4	11.0	11.0	10.4	8.91	4.80	1.05	0.33	0.16	0.05	0.01	72.8	51.7
-40	0.00	0.04	0.11	0.23	0.39	0.78	1.76	3.57	4.85	4.86	3.63	1.85	0.79	0.40	0.24	0.12	0.04	0.00	23.6	0.00
-50	0.00	0.03	0.07	0.15	0.24	0.33	0.43	0.54	0.62	0.62	0.55	0.45	0.35	0.25	0.16	0.08	0.02	0.00	4.88	0.00
-60	0.00	0.01	0.04	0.07	0.12	0.17	0.22	0.26	0.28	0.29	0.27	0.23	0.18	0.13	0.08	0.04	0.01	0.00	2.41	0.00
-70	0.00	0.01	0.01	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.00	0.00	0.51	0.00
-80	0.00	0.01	0.01	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.00	0.00	0.51	0.00
-90	0.00	0.01	0.01	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.00	0.00	0.51	0.00
HORIZONTAL (DEG)																				
Φ t	0.10	0.82	2.72	17.5	59.1	95.7	154	230	339	339	229	153	95.5	59.0	17.4	2.78	0.86	0.09	1795	---
Φ a	0.00	0.00	0.00	1.12	42.4	82.9	142	219	328	329	218	141	82.5	42.5	1.05	0.00	0.00	0.00	---	1629

one-half-peak spread: U:11.6,D:11.4 , L:11.3,R:11.6

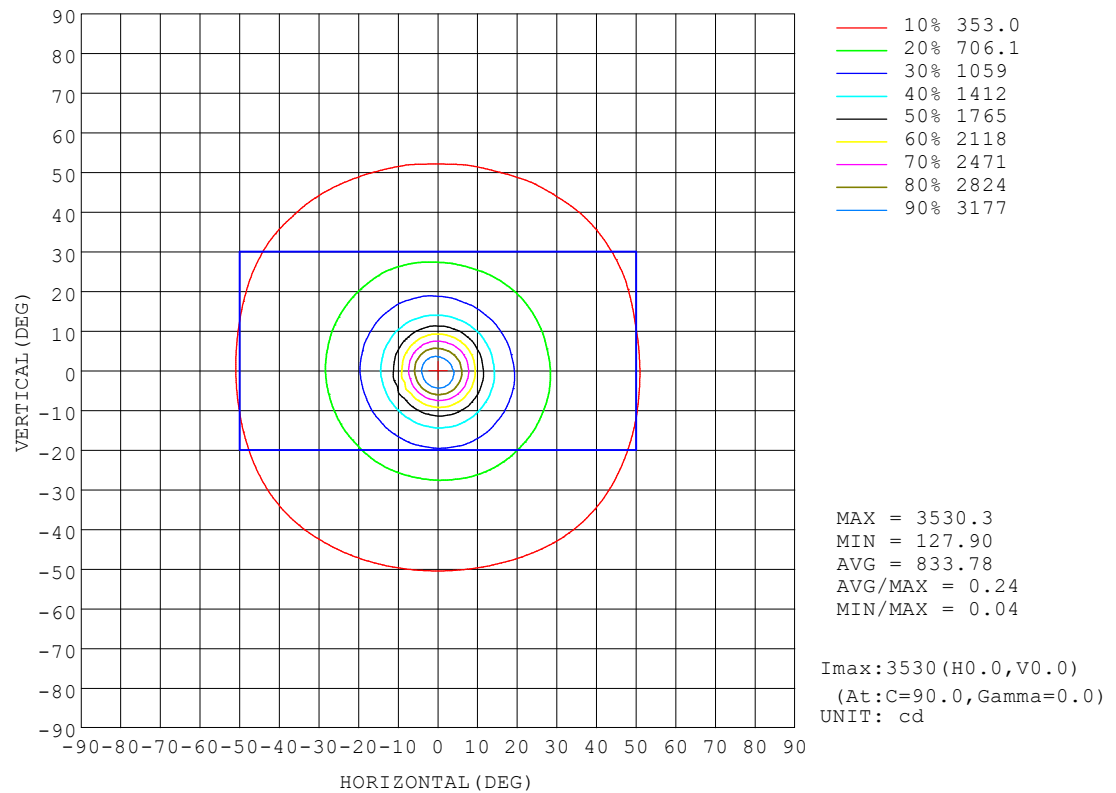
NEMA Beam Type: Type 6

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:17 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: 96RAY24/20	TYPE: 96RAY24/20	WEIGHT: 1
SPEC.:	DIM.: F 250	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

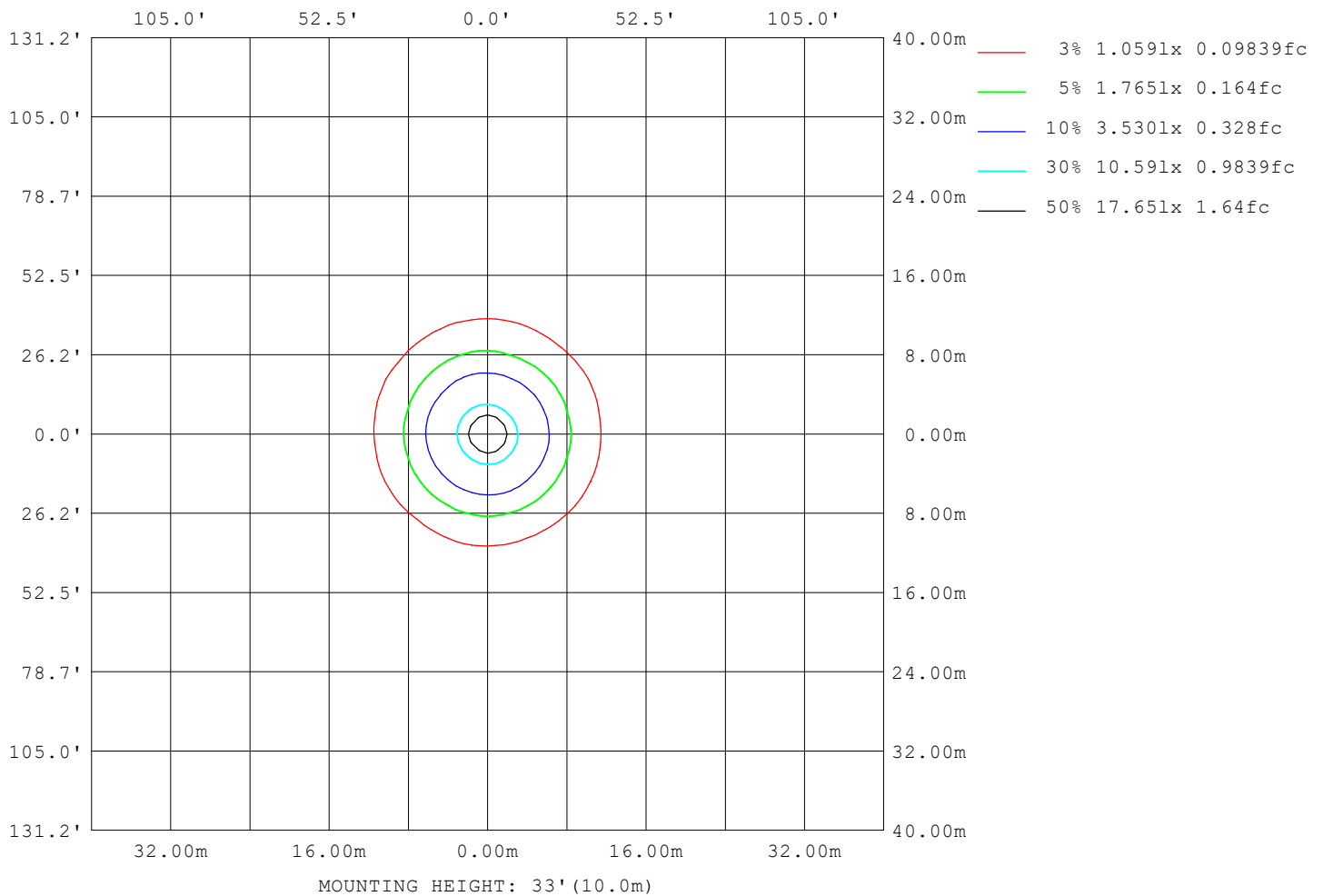


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 γ Interval: 2.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.456
 Humidity: 65.0%
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 Remarks:

ISOLUX DIAGRAM

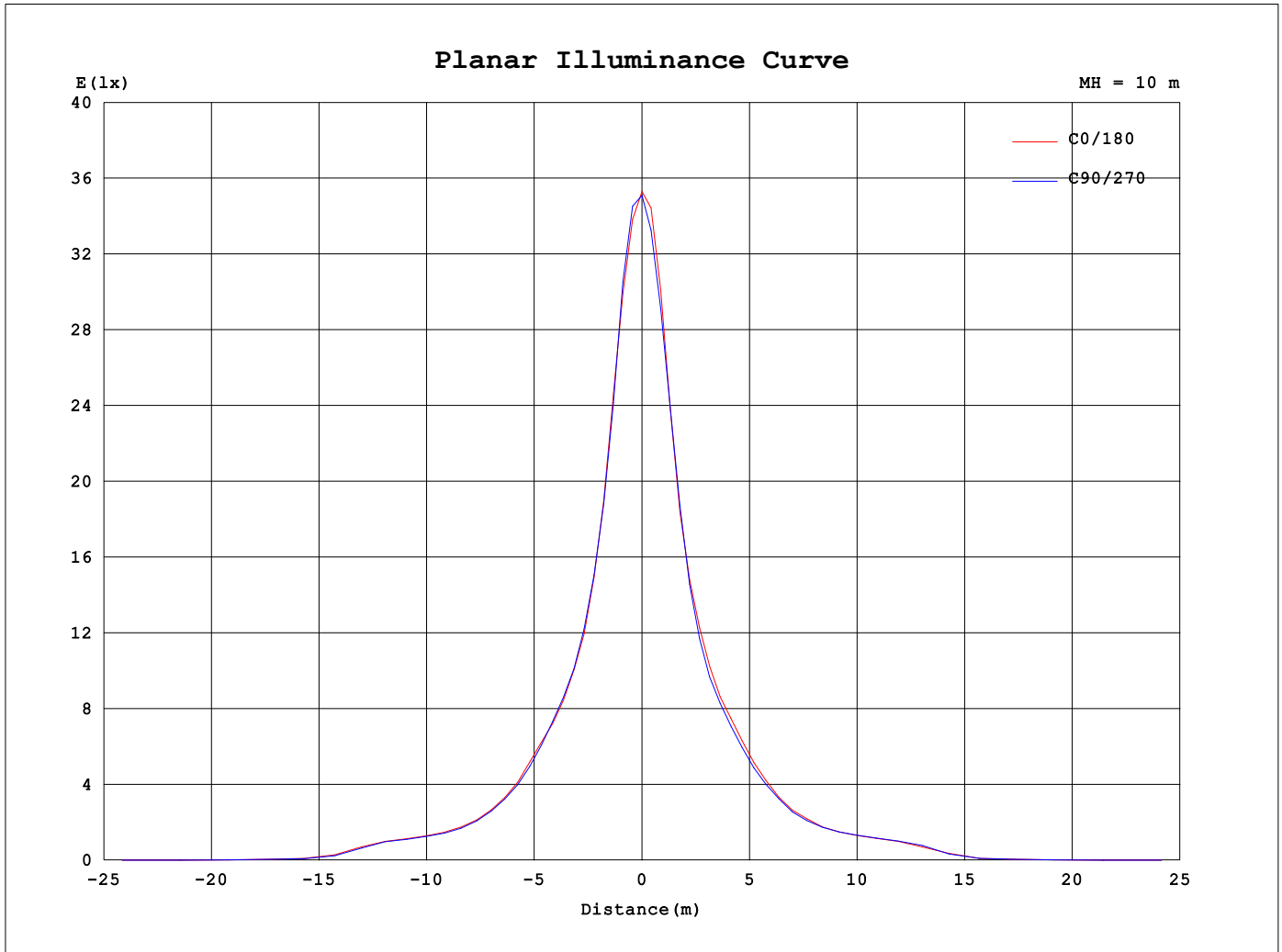
NAME: 96RAY24/20	TYPE: 96RAY24/20	WEIGHT: 1
SPEC.:	DIM.: F 250	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 17 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

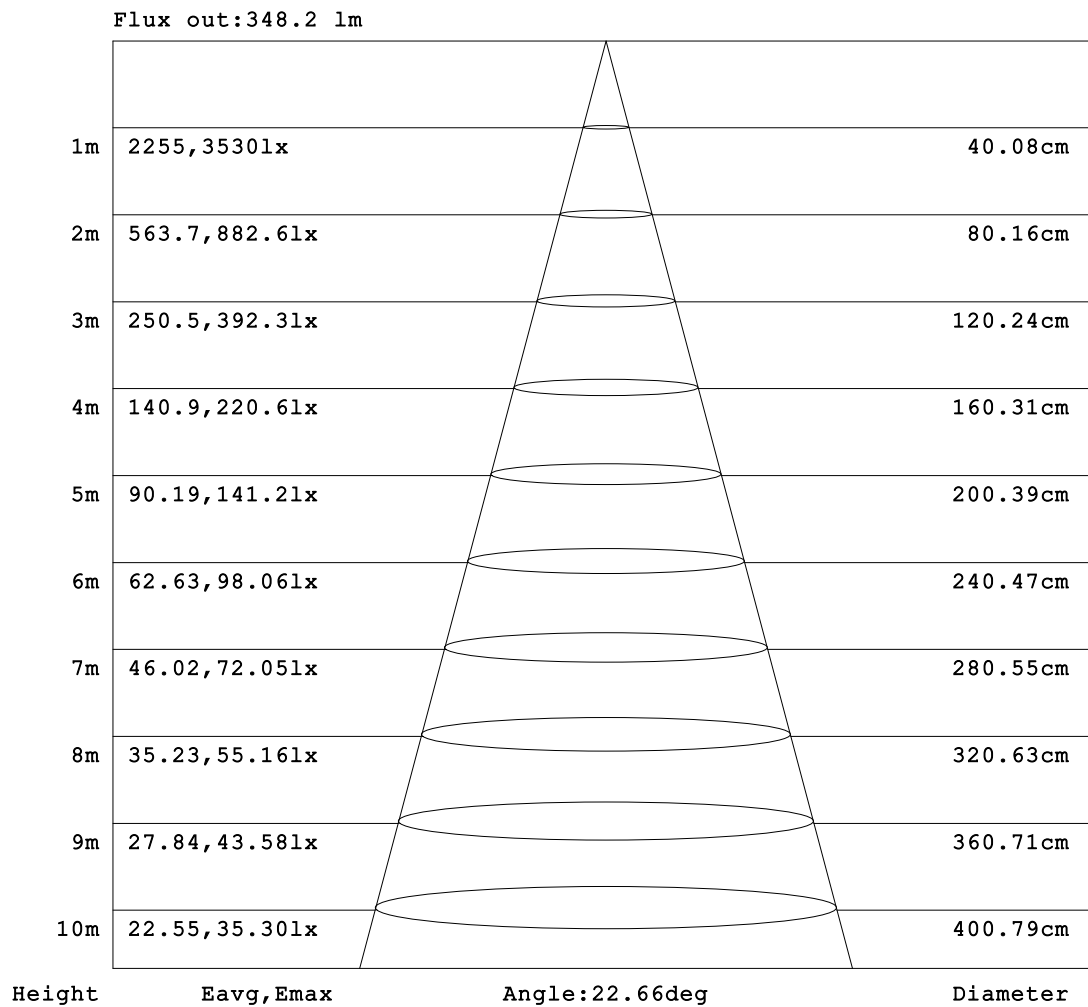


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators:
 Test Date: 17 August 2022

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:

AAI Figure

NAME: 96RAY24/20	TYPE: 96RAY24/20	WEIGHT: 1
SPEC.:	DIM.: F 250	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	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: 17 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: 96RAY24/20	TYPE: 96RAY24/20	WEIGHT: 1
SPEC.:	DIM.: F 250	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	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	0.44	0.44	0.44	0.41	0.39	0.35	0.31	0.28	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.26
-85	0.44	0.52	0.60	0.64	0.67	0.67	0.65	0.80	0.92	1.04	1.15	1.22	1.26	1.33	1.39	1.44	1.47	1.51	1.52
-80	0.44	0.60	0.77	0.90	1.31	1.72	2.15	2.49	2.81	3.17	3.53	3.82	4.07	4.35	4.58	4.78	4.92	5.04	5.10
-75	0.44	0.68	0.96	1.64	2.27	2.96	3.63	4.23	4.88	5.60	6.30	6.88	7.41	7.94	8.39	8.82	9.17	9.41	9.55
-70	0.44	0.76	1.45	2.38	3.27	4.15	5.03	6.07	7.13	8.29	9.33	10.2	10.9	11.6	12.1	12.5	12.8	13.1	13.3
-65	0.44	0.84	1.93	3.10	4.19	5.27	6.63	8.24	9.83	11.3	12.4	13.4	14.3	15.0	15.8	16.4	16.9	17.2	17.3
-60	0.44	0.91	2.37	3.80	5.03	6.55	8.56	10.7	12.5	14.0	15.4	16.7	19.2	22.7	27.5	32.7	36.3	38.7	39.7
-55	0.44	1.11	2.80	4.42	6.03	8.07	10.7	13.1	14.9	16.7	20.7	28.0	38.3	49.6	61.4	88.2	105	118	125
-50	0.44	1.30	3.21	5.02	7.05	9.72	12.7	15.1	17.2	23.8	37.0	53.6	95.4	164	261	314	344	364	369
-45	0.44	1.47	3.59	5.66	8.25	11.5	14.5	17.0	24.1	40.4	67.3	155	295	358	360	359	358	358	357
-40	0.44	1.63	3.94	6.31	9.42	13.1	16.1	21.3	37.8	72.5	199	332	359	355	357	360	369	375	377
-35	0.44	1.77	4.25	6.89	10.6	14.5	17.6	29.0	54.7	200	337	363	356	361	381	410	443	463	472
-30	0.44	1.89	4.54	7.50	11.8	15.6	20.5	39.9	109	310	367	360	370	404	456	516	568	601	616
-25	0.44	1.99	4.79	8.09	12.6	16.7	24.7	52.0	184	369	365	369	408	475	564	653	734	789	818
-20	0.44	2.07	5.01	8.57	13.3	17.6	29.8	67.0	286	371	367	391	462	566	686	816	924	1004	1037
-15	0.44	2.13	5.18	8.96	13.9	18.2	35.2	118	331	368	371	426	522	663	817	969	1138	1281	1355
-10	0.44	2.18	5.32	9.24	14.3	18.7	39.1	157	356	366	380	455	580	748	924	1137	1412	1763	1973
-5	0.44	2.20	5.40	9.41	14.6	19.0	41.5	181	371	368	388	474	625	815	1001	1282	1776	2535	3088
0	0.44	2.20	5.44	9.48	14.7	19.2	42.4	190	377	370	393	482	648	848	1041	1363	1926	3042	3530
5	0.44	2.18	5.41	9.43	14.6	19.1	41.6	171	374	371	390	476	633	825	1018	1298	1783	2564	2942
10	0.44	2.14	5.34	9.27	14.3	18.7	39.3	141	362	373	385	459	593	766	953	1139	1436	1790	1962
15	0.44	2.09	5.21	9.01	13.9	18.2	35.5	106	343	376	378	434	532	678	843	991	1136	1266	1299
20	0.44	2.01	5.03	8.65	13.4	17.5	30.2	68.9	307	380	376	398	463	579	708	833	934	991	1000
25	0.44	1.92	4.81	8.20	12.7	16.7	25.2	53.9	230	381	377	379	419	476	578	676	749	793	799
30	0.44	1.81	4.54	7.65	11.9	15.7	21.0	41.1	130	339	382	376	385	418	461	532	588	616	618
35	0.44	1.69	4.22	7.07	10.9	14.7	18.0	30.2	57.2	192	360	377	375	378	398	426	449	464	463
40	0.44	1.55	3.87	6.48	9.74	13.5	16.5	22.1	38.7	76.3	243	358	380	375	373	375	385	390	387
45	0.44	1.40	3.47	5.82	8.67	12.2	15.0	17.6	25.2	42.2	79.7	206	341	381	380	379	377	376	375
50	0.44	1.23	3.03	5.12	7.54	10.5	13.3	15.5	18.1	26.0	39.7	57.5	124	233	320	359	375	383	385
55	0.44	1.06	2.55	4.38	6.44	8.80	11.3	13.5	15.8	18.3	22.9	30.7	41.7	54.7	70.4	118	167	188	179
60	0.44	0.87	2.05	3.56	5.27	7.21	9.19	11.3	13.5	15.4	17.0	18.5	21.6	26.2	31.3	36.8	41.1	43.7	44.6
65	0.44	0.80	1.67	2.68	4.00	5.66	7.26	8.95	10.9	12.6	14.0	15.1	16.2	17.1	17.8	18.5	19.2	19.7	20.1
70	0.44	0.72	1.27	1.75	2.68	4.08	5.41	6.73	8.10	9.45	10.7	11.7	12.6	13.2	13.6	14.1	14.6	14.8	15.0
75	0.44	0.65	0.87	1.24	1.33	2.51	3.64	4.56	5.56	6.45	7.26	7.95	8.59	8.98	9.24	9.68	10.0	10.3	10.5
80	0.44	0.57	0.70	0.77	0.86	1.27	1.92	2.52	3.04	3.56	4.09	4.50	4.86	5.10	5.26	5.50	5.70	5.86	5.95
85	0.44	0.49	0.54	0.55	0.54	0.59	0.64	0.83	1.03	1.22	1.40	1.52	1.62	1.70	1.74	1.81	1.86	1.87	1.85
90	0.44	0.41	0.39	0.35	0.32	0.29	0.26	0.23	0.21	0.20	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:17 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: 96RAY24/20	TYPE: 96RAY24/20	WEIGHT: 1
SPEC.:	DIM.: F 250	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	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	0.25	0.25	0.25	0.26	0.25	0.25	0.25	0.26	0.25	0.25	0.27	0.28	0.30	0.31	0.33	0.34	0.36	0.38	
-85	1.53	1.51	1.50	1.46	1.40	1.31	1.23	1.12	1.00	0.87	0.72	0.56	0.56	0.55	0.52	0.48	0.43	0.38	
-80	5.10	5.03	5.01	4.91	4.64	4.33	4.01	3.66	3.24	2.82	2.40	1.95	1.56	1.16	0.75	0.63	0.51	0.38	
-75	9.53	9.43	9.29	9.03	8.52	7.95	7.35	6.64	5.87	5.12	4.40	3.59	2.86	2.08	1.45	0.80	0.58	0.38	
-70	13.4	13.4	13.2	12.8	12.2	11.5	10.6	9.69	8.64	7.49	6.53	5.50	4.32	3.21	2.15	1.26	0.65	0.38	
-65	17.4	17.3	17.0	16.4	15.6	14.8	13.9	12.9	11.8	10.3	8.83	7.26	5.81	4.35	2.95	1.70	0.72	0.38	
-60	38.9	36.6	33.2	28.0	23.2	19.6	17.1	15.9	14.6	13.2	11.4	9.35	7.27	5.49	3.72	2.12	0.79	0.38	
-55	118	107	90.9	63.4	50.4	38.8	28.3	21.1	17.3	15.6	13.7	11.6	8.99	6.64	4.55	2.59	0.98	0.38	
-50	363	344	315	269	177	117	54.2	37.3	24.2	17.9	15.7	13.5	10.8	7.78	5.35	3.03	1.15	0.38	
-45	356	356	357	361	364	310	185	69.3	40.6	24.4	17.7	15.2	12.6	9.08	6.11	3.45	1.32	0.38	
-40	375	370	362	357	359	367	343	210	73.7	38.0	21.8	16.6	13.8	10.3	6.84	3.85	1.46	0.38	
-35	467	449	414	386	368	361	368	345	205	55.2	29.3	18.0	15.0	11.5	7.51	4.27	1.60	0.38	
-30	606	578	525	465	407	374	363	370	319	112	40.2	20.8	15.9	12.5	8.20	4.65	1.71	0.38	
-25	799	753	671	571	481	408	370	365	372	190	52.7	24.8	16.7	13.3	8.85	4.98	1.81	0.38	
-20	1016	944	836	709	571	464	390	365	371	295	68.2	30.0	17.5	13.9	9.39	5.27	1.88	0.38	
-15	1306	1158	990	835	678	527	417	371	367	339	122	35.4	18.1	14.3	9.82	5.50	1.94	0.38	
-10	1825	1452	1152	936	768	585	453	382	364	360	152	39.3	18.6	14.6	10.1	5.67	1.98	0.38	
-5	2622	1832	1285	1006	828	625	476	390	363	372	161	41.7	19.0	14.8	10.4	5.78	2.00	0.38	
0	3027	1991	1326	1019	838	635	483	392	365	376	154	42.5	19.1	14.9	10.5	5.82	2.01	0.38	
5	2569	1795	1258	978	805	614	470	387	366	370	147	41.5	19.1	14.8	10.4	5.77	1.99	0.38	
10	1784	1397	1090	913	750	577	449	380	368	356	131	39.1	18.8	14.6	10.2	5.66	1.96	0.38	
15	1229	1080	947	812	663	521	423	371	372	336	104	35.2	18.4	14.3	9.92	5.49	1.90	0.38	
20	967	896	801	691	570	459	391	368	376	302	67.1	30.1	17.8	13.8	9.52	5.25	1.83	0.38	
25	772	719	651	564	474	410	372	372	378	227	53.0	25.3	17.0	13.2	9.03	4.95	1.75	0.38	
30	600	561	510	452	407	376	369	379	335	128	41.6	21.3	16.1	12.5	8.44	4.59	1.65	0.38	
35	455	435	409	384	368	367	375	358	189	56.6	30.8	18.5	15.0	11.6	7.77	4.17	1.53	0.38	
40	382	373	365	365	367	373	358	244	75.5	39.8	22.7	17.0	13.8	10.6	7.02	3.71	1.40	0.38	
45	372	372	373	374	373	340	207	79.3	43.0	25.9	18.2	15.4	12.5	9.47	6.18	3.27	1.26	0.38	
50	381	372	355	322	235	125	57.4	40.0	26.3	18.6	16.2	13.6	11.1	8.26	5.27	2.83	1.10	0.38	
55	188	167	117	69.8	54.7	42.0	30.9	22.9	18.4	16.2	14.0	11.9	9.57	6.88	4.31	2.35	0.93	0.38	
60	44.2	42.1	37.7	32.0	26.5	21.6	18.3	16.9	15.4	13.7	12.0	10.1	7.86	5.38	3.28	1.85	0.76	0.38	
65	20.2	20.0	19.1	18.1	17.1	15.9	14.6	13.5	12.5	11.3	9.84	8.04	5.90	3.78	2.44	1.48	0.69	0.38	
70	15.1	15.0	14.5	13.8	12.9	12.0	11.3	10.6	9.81	8.78	7.31	5.68	3.95	2.36	1.58	1.11	0.62	0.38	
75	10.6	10.6	10.2	9.73	9.16	8.58	8.01	7.33	6.63	5.76	4.66	3.56	2.30	1.19	1.09	0.72	0.55	0.38	
80	5.99	5.95	5.71	5.41	5.07	4.68	4.25	3.78	3.35	2.90	2.35	1.73	1.13	0.74	0.63	0.56	0.48	0.38	
85	1.84	1.80	1.70	1.57	1.51	1.42	1.31	1.19	1.06	0.90	0.73	0.56	0.50	0.44	0.44	0.43	0.41	0.38	
90	0.19	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.20	0.23	0.23	0.24	0.27	0.29	0.33	0.38	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:17 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: