

# Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	1840.5 cd per klm.
(Luminaire orientation as tested.)	0.0 degrees vertical
	0.0 degrees horizontal

Beam Spread	At 10% of Imax	104.5V x 104.9H
	At 50% of Imax	22.8V x 23.5H
	At 90% of Imax	7.5V x 7.5H

Beam Flux	Total	1033.6 lumens per klm.
	To 10% of Imax	958.3 lumens per klm.
	To 50% of Imax	180.4 lumens per klm.
	To 90% of Imax	29.8 lumens per klm.

Upward LOR	0.0 %
Downward LOR	103.4 %

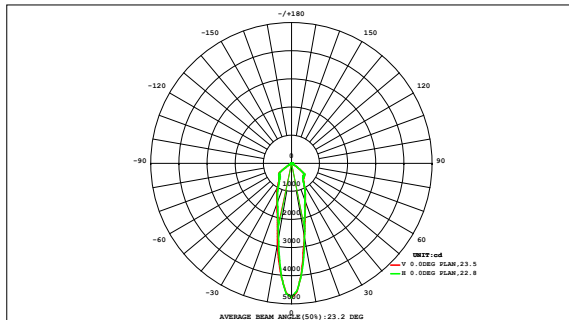
Luminaire Efficiency (Light Output Ratio)	103.2 %
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C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 17 August 2022

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: 96RAY24/30	TYPE: 96RAY24/30	WEIGHT: 1
SPEC.:	DIM.: F 200	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	96RAY24/30	Imax (cd)	4785
NOMINAL POWER (W)	30	AVAILABILITY (%)	95.4
RATED VOLTAGE (V)	24	Avai. FLUX (lm)	2480
NOMINAL FLUX (lm)	2600	LOR (%)	103.2
LAMPS INSIDE	1	TOTAL FLUX (lm)	2683
TEST VOLTAGE (V)	24	θ @50% (H,V)	24,23DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	0.00	0.01	0.01	0.03	0.05	0.07	0.08	0.09	0.10	0.11	0.10	0.09	0.07	0.05	0.03	0.01	0.01	0.00	0.89	0.00
90	0.00	0.01	0.05	0.11	0.19	0.27	0.36	0.42	0.45	0.47	0.44	0.38	0.30	0.21	0.13	0.05	0.02	0.00	3.87	0.00
80	0.00	0.03	0.10	0.22	0.38	0.55	0.72	0.93	1.09	1.12	0.99	0.79	0.61	0.43	0.26	0.12	0.04	0.00	8.40	0.00
70	0.01	0.05	0.16	0.35	0.62	1.27	3.06	6.22	8.63	8.79	6.80	3.56	1.48	0.73	0.40	0.19	0.06	0.01	42.4	11.4
60	0.01	0.06	0.22	0.50	1.60	7.09	14.4	17.7	19.0	18.9	17.7	15.0	8.25	1.98	0.59	0.26	0.08	0.01	123	104
50	0.01	0.08	0.28	0.89	6.09	14.7	18.1	21.1	23.3	23.5	21.4	18.5	15.1	7.31	1.08	0.32	0.10	0.01	172	160
40	0.01	0.09	0.33	2.01	11.2	16.2	21.3	28.8	35.2	35.5	29.8	22.1	16.9	12.1	2.46	0.39	0.12	0.01	234	225
30	0.01	0.10	0.39	3.50	12.8	17.4	26.8	41.1	55.5	56.3	41.7	28.4	18.6	13.5	4.50	0.46	0.13	0.01	321	314
20	0.01	0.11	0.44	4.76	13.2	18.6	31.4	53.6	98.9	103	55.0	33.3	20.0	13.9	5.67	0.52	0.13	0.01	452	445
10	0.01	0.11	0.44	4.86	13.1	18.5	31.1	52.8	98.4	103	55.5	33.6	19.8	13.7	5.66	0.52	0.13	0.01	451	444
0	0.01	0.11	0.40	3.70	12.6	17.1	26.4	39.7	53.3	53.9	41.2	28.4	17.7	13.2	4.43	0.46	0.13	0.01	313	305
-10	0.01	0.10	0.34	1.86	10.8	15.7	20.5	28.0	33.8	34.2	29.0	21.0	16.1	11.8	2.34	0.38	0.12	0.01	226	217
-20	0.01	0.09	0.29	0.89	6.06	14.2	17.3	20.0	22.2	22.2	20.1	17.6	14.7	6.98	1.03	0.31	0.10	0.01	164	151
-30	0.01	0.07	0.24	0.52	1.58	6.81	13.7	17.1	18.3	18.4	17.4	14.4	7.66	1.86	0.56	0.26	0.08	0.01	119	97.3
-40	0.01	0.05	0.18	0.37	0.62	1.26	2.87	5.87	7.83	8.01	6.01	3.15	1.40	0.68	0.39	0.19	0.06	0.01	39.0	5.88
-50	0.00	0.04	0.11	0.23	0.38	0.54	0.72	0.90	1.03	1.05	0.94	0.77	0.59	0.42	0.26	0.12	0.04	0.00	8.14	0.00
-60	0.00	0.02	0.06	0.11	0.17	0.24	0.32	0.39	0.43	0.44	0.42	0.37	0.30	0.21	0.12	0.06	0.02	0.00	3.68	0.00
-70	0.00	0.01	0.01	0.03	0.04	0.05	0.06	0.07	0.08	0.08	0.08	0.07	0.05	0.04	0.03	0.01	0.01	0.00	0.73	0.00
-80	0.00	0.01	0.01	0.03	0.04	0.05	0.06	0.07	0.08	0.08	0.08	0.07	0.05	0.04	0.03	0.01	0.01	0.00	0.73	0.00
-90	0.00	0.01	0.01	0.03	0.04	0.05	0.06	0.07	0.08	0.08	0.08	0.07	0.05	0.04	0.03	0.01	0.01	0.00	0.73	0.00
HORIZONTAL (DEG)																				
Φ t	0.13	1.13	4.05	25.0	91.4	150	229	335	477	488	345	241	160	99.1	29.9	4.64	1.37	0.15	2683	---
Φ a	0.00	0.00	0.00	3.77	71.5	135	215	321	464	475	331	228	145	82.0	9.19	0.00	0.00	0.00	---	2480

one-half-peak spread: U:11.4,D:11.6 , L:11.5,R:12.3

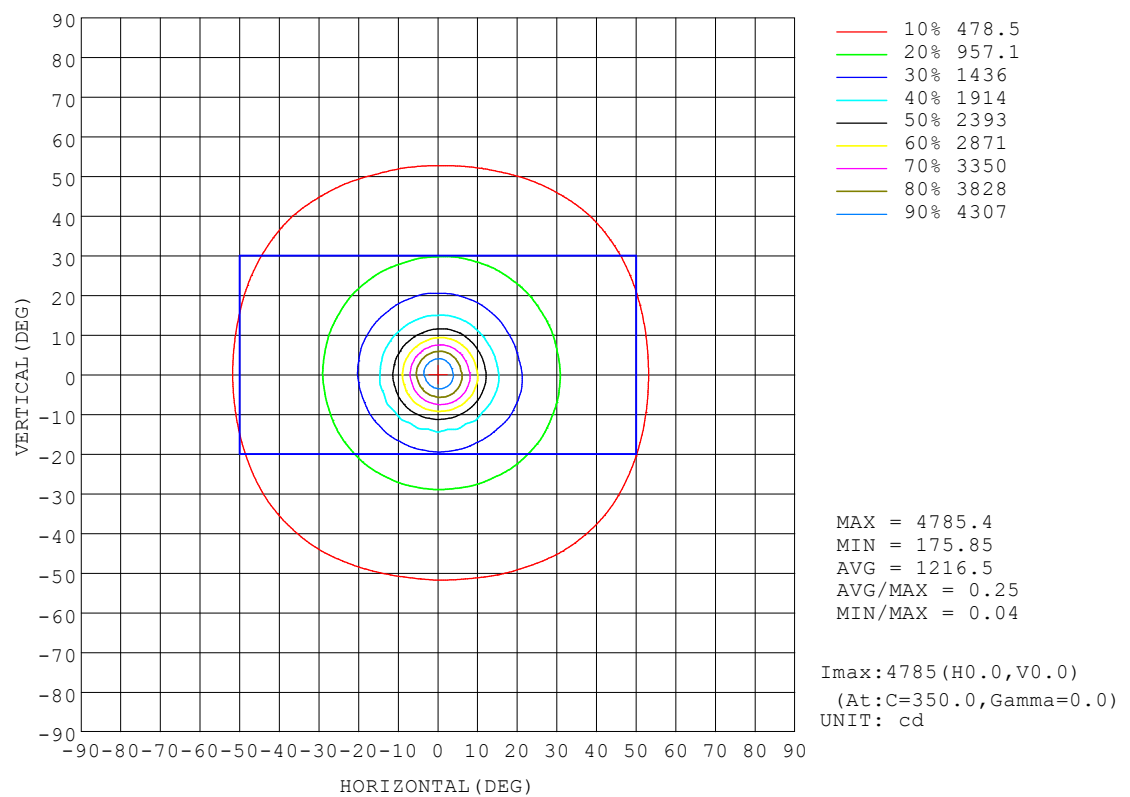
NEMA Beam Type: Type 6

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: 96RAY24/30	TYPE: 96RAY24/30	WEIGHT: 1
SPEC.:	DIM.: F 200	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

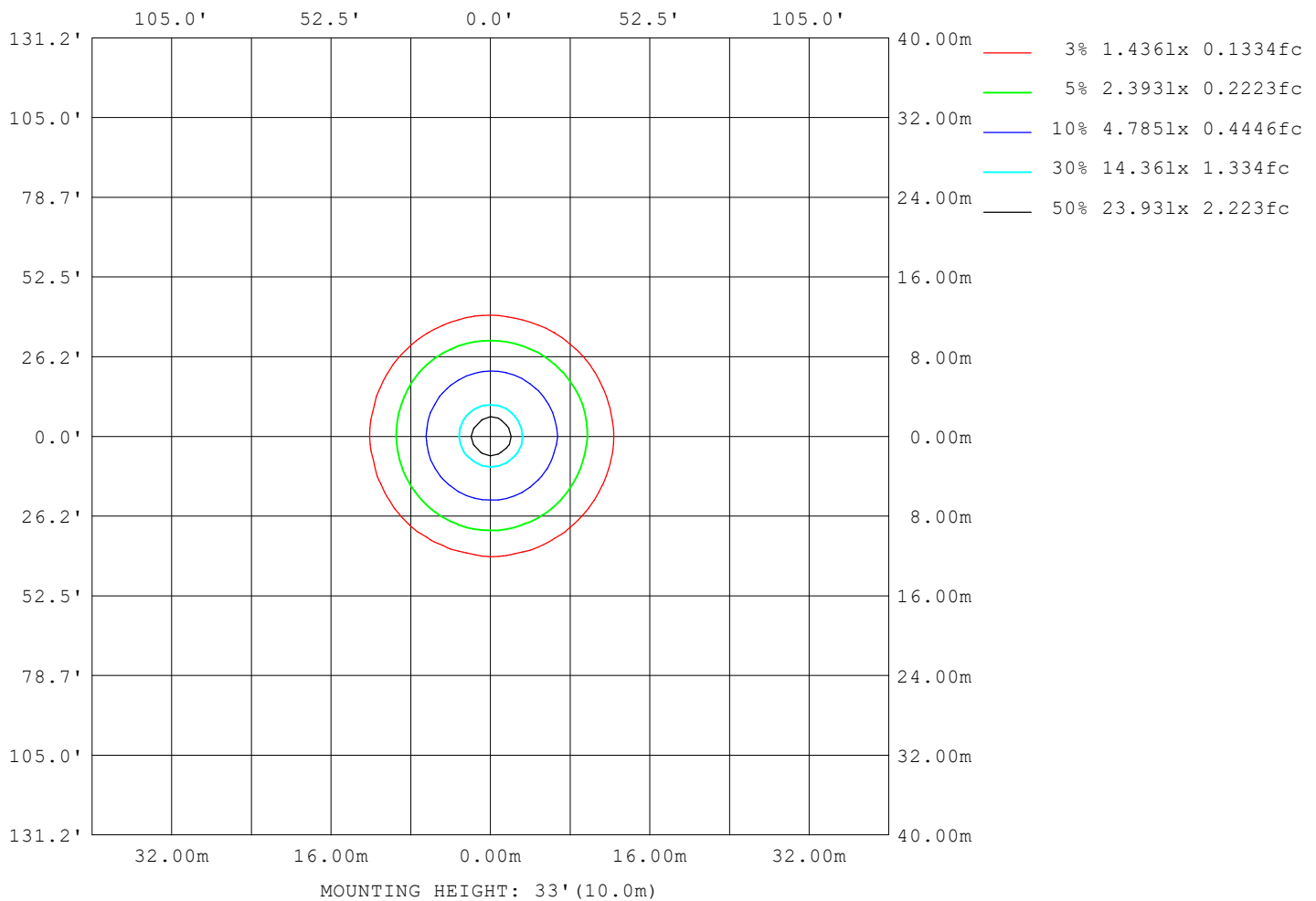


C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 17 August 2022

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:

## ISOLUX DIAGRAM

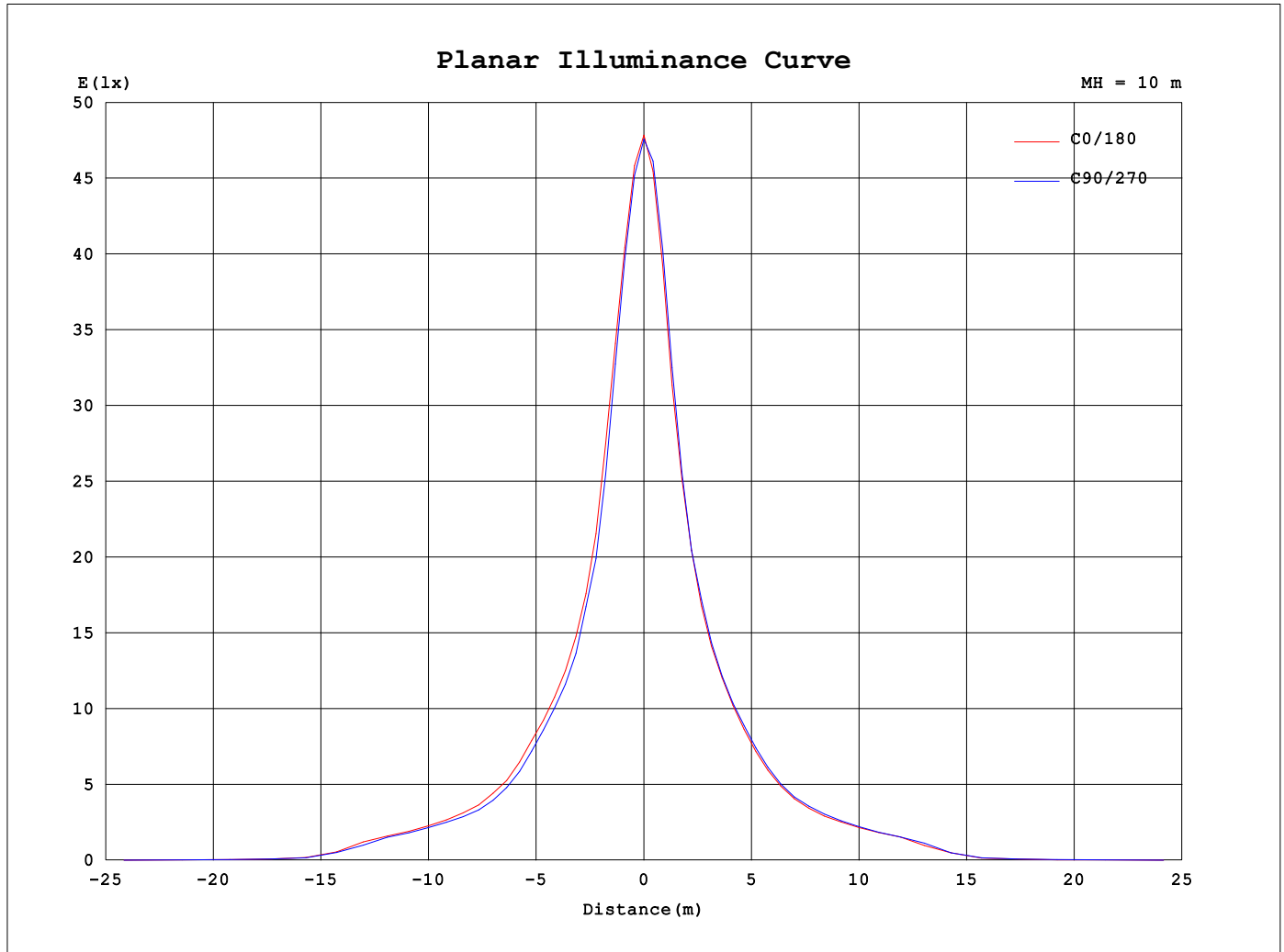
NAME: 96RAY24/30	TYPE: 96RAY24/30	WEIGHT: 1
SPEC.:	DIM.: F 200	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



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

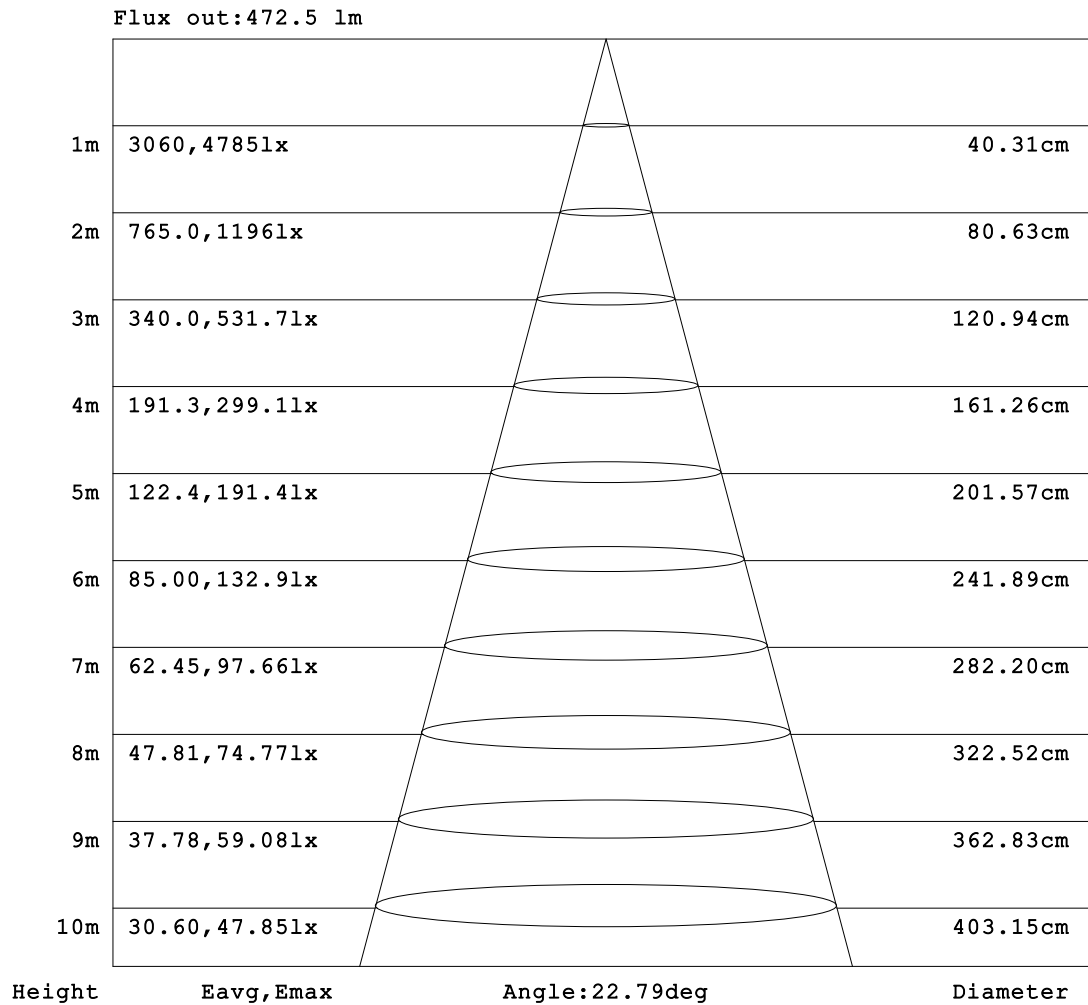


C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 17 August 2022

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
 Humidity: 65.0%  
 Test Distance: 6.265m [K=1.0000]  
 Remarks:

**AAI Figure**

NAME: 96RAY24/30	TYPE: 96RAY24/30	WEIGHT: 1
SPEC.:	DIM.: F 200	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: 96RAY24/30	TYPE: 96RAY24/30	WEIGHT: 1
SPEC.:	DIM.: F 200	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

Table--1

UNIT: cd

H(DEC) V(DEC)	-90	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
-90	0.48	0.49	0.51	0.50	0.50	0.47	0.45	0.44	0.43	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.41	0.41	0.41
-85	0.48	0.61	0.73	0.81	0.86	0.87	0.86	1.07	1.24	1.41	1.54	1.64	1.72	1.83	1.93	1.98	2.00	2.05	2.08
-80	0.48	0.72	0.96	1.16	1.75	2.33	2.89	3.43	3.88	4.33	4.72	5.13	5.54	6.01	6.46	6.80	7.07	7.34	7.52
-75	0.48	0.83	1.22	2.14	3.11	4.22	5.28	6.25	7.00	7.76	8.47	9.34	10.3	11.4	12.3	13.0	13.6	14.1	14.5
-70	0.48	0.94	1.85	3.12	4.68	6.31	7.96	9.48	10.7	12.1	13.4	15.1	16.8	18.2	19.4	20.3	20.9	21.4	21.7
-65	0.48	1.05	2.45	4.21	6.29	8.54	10.9	13.2	15.3	17.5	19.6	21.9	23.9	25.6	26.7	27.6	28.1	28.6	28.8
-60	0.48	1.15	3.02	5.25	7.90	10.9	14.1	17.4	20.1	22.6	25.2	27.5	31.7	37.8	45.8	54.1	59.9	64.2	66.3
-55	0.48	1.42	3.64	6.33	9.58	13.6	17.7	21.5	24.4	27.1	33.2	44.9	62.2	80.8	103	167	184	220	271
-50	0.48	1.66	4.23	7.33	11.2	16.2	20.9	24.8	28.1	37.3	58.4	86.0	170	252	391	471	521	555	570
-45	0.48	1.89	4.77	8.29	12.8	18.7	23.8	27.8	37.6	63.1	105	253	435	560	578	590	602	610	614
-40	0.48	2.10	5.27	9.19	14.4	20.8	26.2	33.6	58.3	112	280	498	581	599	615	627	636	640	638
-35	0.48	2.29	5.75	9.97	15.9	22.6	28.3	44.4	85.8	282	499	584	609	625	643	668	697	716	722
-30	0.48	2.45	6.16	10.7	17.3	24.2	31.9	60.4	155	434	581	608	629	660	711	781	840	886	904
-25	0.48	2.59	6.50	11.4	18.4	25.6	37.3	79.7	249	562	599	626	663	731	834	948	1054	1120	1156
-20	0.48	2.70	6.77	12.0	19.4	26.6	44.5	102	394	580	614	647	715	839	991	1150	1279	1366	1400
-15	0.48	2.79	6.97	12.3	20.1	27.4	52.3	170	477	590	626	678	784	950	1151	1347	1521	1749	1857
-10	0.48	2.85	7.10	12.6	20.7	28.0	57.9	222	532	600	636	705	848	1050	1290	1547	1953	2415	2668
-5	0.48	2.88	7.16	12.6	20.9	28.3	61.2	254	567	608	644	726	892	1126	1394	1766	2420	3354	4011
0	0.48	2.89	7.15	12.6	20.9	28.3	62.2	265	581	612	648	739	915	1161	1452	1862	2642	3970	4785
5	0.48	2.87	7.11	12.5	20.8	28.2	60.9	230	572	612	647	730	896	1135	1420	1805	2402	3363	4079
10	0.48	2.84	7.00	12.3	20.4	27.8	57.3	184	541	608	642	713	853	1071	1312	1630	1984	2405	2687
15	0.48	2.77	6.82	12.0	19.7	27.1	51.6	138	487	601	635	688	791	963	1175	1386	1628	1822	1908
20	0.48	2.68	6.59	11.5	18.8	26.1	44.0	98.3	409	592	624	665	735	850	1018	1185	1323	1432	1467
25	0.48	2.56	6.30	10.9	17.6	24.9	37.0	78.5	307	578	610	646	693	760	852	978	1087	1171	1194
30	0.48	2.42	5.95	10.1	16.3	23.3	31.5	60.4	176	455	596	624	661	702	749	804	864	926	944
35	0.48	2.26	5.56	9.34	14.8	21.5	27.4	44.6	84.5	241	524	600	628	657	684	714	736	753	759
40	0.48	2.07	5.12	8.52	13.2	19.4	25.0	33.4	58.1	108	302	526	596	617	638	653	668	678	680
45	0.48	1.86	4.63	7.60	11.7	17.0	22.3	27.0	37.8	63.1	111	256	466	579	598	610	620	625	626
50	0.48	1.64	4.09	6.66	10.1	14.6	19.3	23.6	27.7	38.1	59.0	87.3	164	288	433	508	554	575	577
55	0.48	1.39	3.51	5.74	8.55	12.2	16.2	20.1	23.6	26.9	33.8	45.8	62.6	83.2	105	163	215	249	261
60	0.48	1.13	2.90	4.71	6.86	9.82	13.0	16.4	19.6	22.4	25.0	27.6	32.1	39.0	47.5	56.5	63.7	68.0	69.6
65	0.48	1.03	2.34	3.60	5.20	7.55	10.1	12.7	15.2	17.7	20.0	21.9	23.7	25.3	26.9	28.2	29.2	30.0	30.4
70	0.48	0.92	1.77	2.43	3.47	5.45	7.39	9.29	11.1	12.9	14.6	16.3	17.9	19.2	20.3	21.0	21.6	22.1	22.5
75	0.48	0.81	1.17	1.70	1.72	3.45	5.14	6.35	7.53	8.63	9.66	10.8	11.9	12.8	13.5	14.1	14.4	14.8	15.1
80	0.48	0.70	0.92	1.03	1.13	1.81	2.97	3.75	4.42	5.05	5.69	6.26	6.81	7.17	7.45	7.70	7.89	8.17	8.37
85	0.48	0.59	0.70	0.73	0.72	0.80	0.90	1.22	1.55	1.83	2.08	2.32	2.53	2.67	2.77	2.88	2.95	3.06	3.14
90	0.48	0.48	0.47	0.45	0.42	0.40	0.37	0.36	0.35	0.33	0.32	0.32	0.32	0.32	0.31	0.31	0.32	0.31	0.31

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: 96RAY24/30	TYPE: 96RAY24/30	WEIGHT: 1
SPEC.:	DIM.: F 200	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	0.40	0.40	0.40	0.40	0.40	0.39	0.39	0.39	0.39	0.39	0.40	0.41	0.41	0.41	0.41	0.41	0.41	0.42	
-85	2.07	2.03	2.01	1.96	1.91	1.82	1.72	1.58	1.45	1.27	1.08	0.85	0.85	0.82	0.78	0.69	0.56	0.42	
-80	7.50	7.39	7.32	7.15	6.83	6.41	5.98	5.44	4.87	4.30	3.72	3.09	2.46	1.82	1.19	0.97	0.71	0.42	
-75	14.6	14.6	14.5	14.2	13.6	12.8	11.9	10.8	9.47	8.18	6.97	5.67	4.50	3.31	2.30	1.29	0.85	0.42	
-70	21.8	21.8	21.6	21.2	20.3	19.2	17.8	16.3	14.5	12.7	10.8	8.82	6.84	5.02	3.41	2.01	0.99	0.42	
-65	28.9	28.7	28.7	28.2	27.3	25.7	23.8	21.7	19.5	17.2	14.7	12.1	9.44	6.90	4.68	2.71	1.13	0.42	
-60	65.2	61.9	56.8	48.8	40.9	34.3	29.7	27.3	24.5	21.6	18.6	15.4	12.1	8.89	5.90	3.38	1.27	0.42	
-55	227	187	157	109	87.4	68.0	50.5	36.9	29.4	25.9	22.3	18.7	14.8	10.9	7.31	4.15	1.58	0.42	
-50	564	539	501	430	291	178	97.5	66.1	42.8	30.3	25.9	21.7	17.4	12.9	8.65	4.87	1.87	0.42	
-45	612	607	601	590	574	491	289	127	72.2	43.6	29.6	24.5	19.8	14.9	9.97	5.54	2.14	0.42	
-40	639	634	627	621	610	594	541	348	130	67.7	37.9	27.3	21.9	16.6	11.2	6.19	2.39	0.42	
-35	716	695	668	651	636	622	601	550	310	101	52.4	30.2	23.8	18.2	12.4	6.88	2.61	0.42	
-30	891	849	792	718	675	645	623	600	522	198	71.1	35.9	25.8	19.6	13.4	7.50	2.80	0.42	
-25	1139	1090	984	859	739	681	640	618	592	337	94.2	44.3	27.5	20.7	14.4	8.03	2.97	0.42	
-20	1374	1297	1210	1067	877	728	665	633	608	492	121	53.7	29.2	21.6	15.1	8.48	3.11	0.42	
-15	1774	1567	1387	1237	1037	819	697	647	618	557	195	62.9	30.6	22.4	15.7	8.83	3.21	0.42	
-10	2462	2000	1616	1362	1155	911	735	665	627	583	250	69.6	31.7	23.0	16.1	9.09	3.29	0.42	
-5	3588	2589	1855	1476	1228	979	770	683	636	598	285	73.8	32.4	23.3	16.3	9.25	3.33	0.42	
0	4089	2882	1953	1508	1241	999	806	697	642	603	298	75.4	32.7	23.5	16.4	9.31	3.35	0.42	
5	3538	2546	1835	1443	1206	969	786	699	642	597	287	74.1	32.5	23.4	16.3	9.26	3.32	0.42	
10	2527	2023	1611	1345	1149	917	764	692	638	582	254	70.1	32.0	23.0	16.0	9.11	3.27	0.42	
15	1843	1629	1408	1225	1026	846	737	677	629	559	200	63.6	31.0	22.4	15.6	8.86	3.18	0.42	
20	1435	1341	1221	1070	899	776	713	658	614	503	124	54.9	29.7	21.5	15.0	8.52	3.07	0.42	
25	1180	1113	1013	888	789	723	677	634	592	360	97.0	46.0	28.0	20.4	14.3	8.08	2.93	0.42	
30	938	890	831	766	718	681	643	609	538	213	74.0	37.6	26.2	19.1	13.4	7.56	2.75	0.42	
35	763	745	720	700	669	639	612	565	330	103	55.5	31.6	24.2	17.8	12.5	6.96	2.56	0.42	
40	678	672	659	644	623	602	562	383	135	70.0	40.3	28.3	21.9	16.3	11.3	6.29	2.33	0.42	
45	624	617	606	596	579	526	325	134	75.1	46.3	31.0	25.1	19.4	14.7	10.1	5.60	2.09	0.42	
50	566	552	531	483	344	201	99.6	69.9	46.9	32.0	26.6	21.7	17.1	13.0	8.70	4.86	1.82	0.42	
55	260	234	184	116	92.5	71.3	54.2	40.3	31.4	26.8	22.4	18.3	14.6	10.9	7.27	4.04	1.53	0.42	
60	69.3	66.4	60.5	52.6	44.6	36.9	31.5	28.4	25.3	21.9	18.3	15.2	12.1	8.75	5.72	3.17	1.23	0.42	
65	30.9	30.8	30.0	28.9	27.5	26.1	24.3	22.3	19.9	17.3	14.6	12.1	9.39	6.36	4.25	2.54	1.09	0.42	
70	22.8	22.7	22.2	21.4	20.6	19.5	18.1	16.5	14.7	12.9	11.0	9.00	6.53	4.11	2.75	1.88	0.95	0.42	
75	15.3	15.4	15.0	14.5	13.7	12.8	11.8	10.8	9.81	8.66	7.36	5.94	3.95	2.10	1.88	1.20	0.81	0.42	
80	8.58	8.68	8.39	8.01	7.62	7.15	6.63	6.02	5.38	4.70	3.94	3.00	1.97	1.29	1.07	0.88	0.66	0.42	
85	3.17	3.17	3.02	2.84	2.71	2.56	2.36	2.13	1.87	1.58	1.26	0.93	0.82	0.72	0.68	0.60	0.52	0.42	
90	0.31	0.31	0.30	0.30	0.30	0.30	0.29	0.29	0.29	0.29	0.30	0.31	0.31	0.31	0.31	0.32	0.37	0.42	

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: