

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	1860.7 cd per klm.
(Luminaire orientation as tested.)	0.0 degrees vertical
	0.0 degrees horizontal

Beam Spread	At 10% of Imax	81.0V x 81.4H
	At 50% of Imax	32.7V x 32.6H
	At 90% of Imax	11.6V x 11.5H

Beam Flux	Total	963.4 lumens per klm.
	To 10% of Imax	858.4 lumens per klm.
	To 50% of Imax	332.0 lumens per klm.
	To 90% of Imax	57.9 lumens per klm.

Upward LOR	0.0 %
Downward LOR	96.3 %

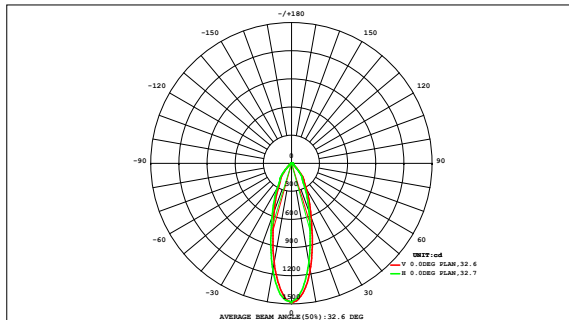
Luminaire Efficiency (Light Output Ratio)	96.2 %
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C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 17 August 2022

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: 96RAY24/10	TYPE: 96RAY24/10	WEIGHT: 1
SPEC.:	DIM.: F 150	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



DATA OF LAMP				PHOTOMETRIC DATA	
MODEL	99LED642			Imax (cd)	1489
NOMINAL POWER (W)	10			AVAILABILITY (%)	85.3
RATED VOLTAGE (V)	24			Avai. FLUX (lm)	682.7
NOMINAL FLUX (lm)	800			LOR (%)	96.2
LAMPS INSIDE	1			TOTAL FLUX (lm)	769.4
TEST VOLTAGE (V)	24			θ @50% (H,V)	33,33DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.21	0.00
90	0.00	0.00	0.02	0.04	0.06	0.08	0.09	0.11	0.11	0.11	0.10	0.09	0.07	0.05	0.03	0.01	0.00	0.00	0.96	0.00
80	0.00	0.01	0.03	0.06	0.10	0.13	0.16	0.18	0.19	0.19	0.18	0.16	0.12	0.09	0.06	0.03	0.01	0.00	1.70	0.00
70	0.00	0.01	0.05	0.09	0.14	0.20	0.30	0.45	0.55	0.54	0.42	0.27	0.18	0.13	0.08	0.04	0.01	0.00	3.46	0.00
60	0.00	0.02	0.06	0.11	0.20	0.52	1.22	2.12	2.78	2.73	2.04	1.13	0.44	0.17	0.10	0.05	0.02	0.00	13.7	0.71
50	0.00	0.03	0.07	0.14	0.46	1.61	3.83	5.69	6.74	6.66	5.44	3.41	1.41	0.36	0.12	0.06	0.02	0.00	36.1	26.8
40	0.00	0.03	0.08	0.20	0.99	3.59	6.63	10.3	13.2	12.7	9.36	5.99	3.03	0.81	0.16	0.07	0.02	0.00	67.3	61.4
30	0.00	0.03	0.08	0.30	1.67	5.16	9.84	17.4	25.0	24.0	15.8	8.47	4.44	1.35	0.22	0.08	0.03	0.00	114	109
20	0.00	0.03	0.09	0.37	2.15	5.94	12.2	24.2	38.6	37.2	21.8	10.5	5.06	1.71	0.27	0.08	0.03	0.00	160	156
10	0.00	0.03	0.09	0.36	2.11	5.85	11.9	23.2	36.9	36.1	21.3	10.4	5.02	1.69	0.27	0.08	0.03	0.00	155	151
0	0.00	0.03	0.08	0.28	1.60	4.98	9.24	16.0	22.6	22.1	14.9	8.05	4.26	1.28	0.21	0.08	0.03	0.00	106	101
-10	0.00	0.03	0.08	0.19	0.93	3.35	6.28	9.26	11.7	11.5	8.53	5.55	2.78	0.73	0.16	0.07	0.02	0.00	61.2	55.0
-20	0.00	0.02	0.07	0.14	0.43	1.46	3.46	5.29	6.17	5.97	4.86	3.01	1.19	0.32	0.12	0.06	0.02	0.00	32.6	22.0
-30	0.00	0.02	0.06	0.11	0.19	0.47	1.08	1.82	2.29	2.22	1.62	0.89	0.36	0.17	0.10	0.05	0.02	0.00	11.5	0.00
-40	0.00	0.02	0.05	0.09	0.13	0.19	0.27	0.38	0.45	0.43	0.34	0.24	0.17	0.12	0.08	0.04	0.01	0.00	3.01	0.00
-50	0.00	0.01	0.03	0.06	0.09	0.12	0.15	0.18	0.19	0.18	0.17	0.15	0.12	0.08	0.05	0.03	0.01	0.00	1.63	0.00
-60	0.00	0.01	0.02	0.03	0.05	0.07	0.09	0.10	0.10	0.10	0.09	0.08	0.06	0.05	0.03	0.01	0.00	0.00	0.90	0.00
-70	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.17	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	0.04	0.34	0.95	2.59	11.3	33.7	66.8	117	168	163	107	58.4	28.7	9.13	2.07	0.84	0.28	0.03	769	---
Φ a	0.00	0.00	0.00	0.00	1.15	25.2	59.7	110	161	156	100	50.8	18.4	0.00	0.00	0.00	0.00	0.00	---	683

one-half-peak spread: U:15.7,D:17.2 , L:17.2,R:15.6

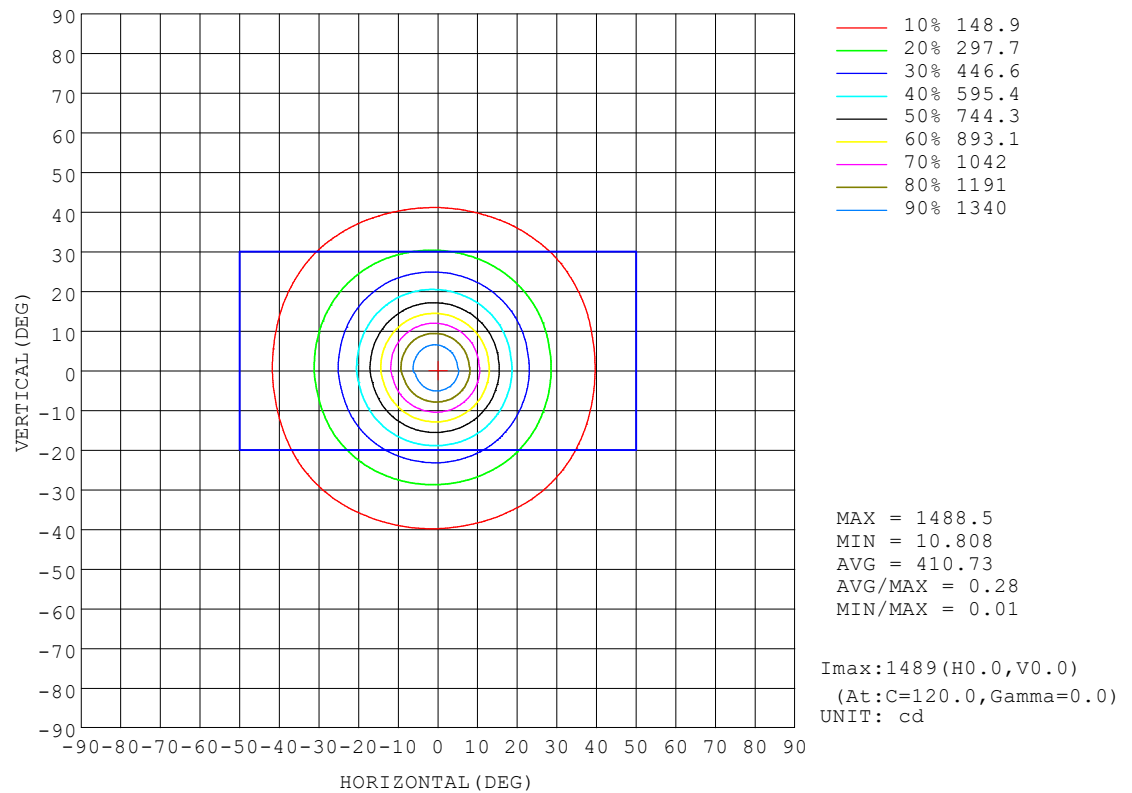
NEMA Beam Type: Type 5

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
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: 96RAY24/10	TYPE: 96RAY24/10	WEIGHT: 1
SPEC.:	DIM.: F 150	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

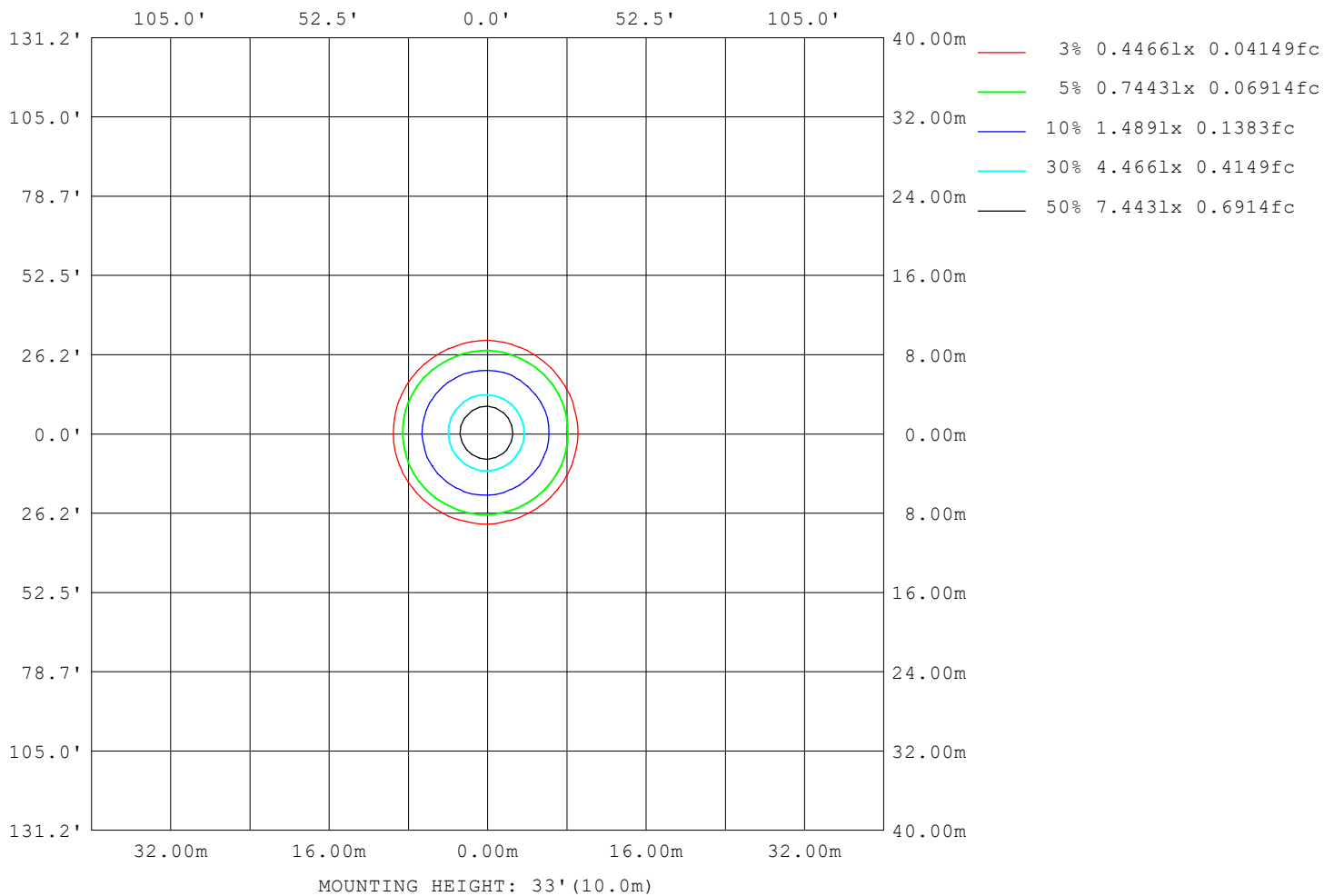


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Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:17 August 2022

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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

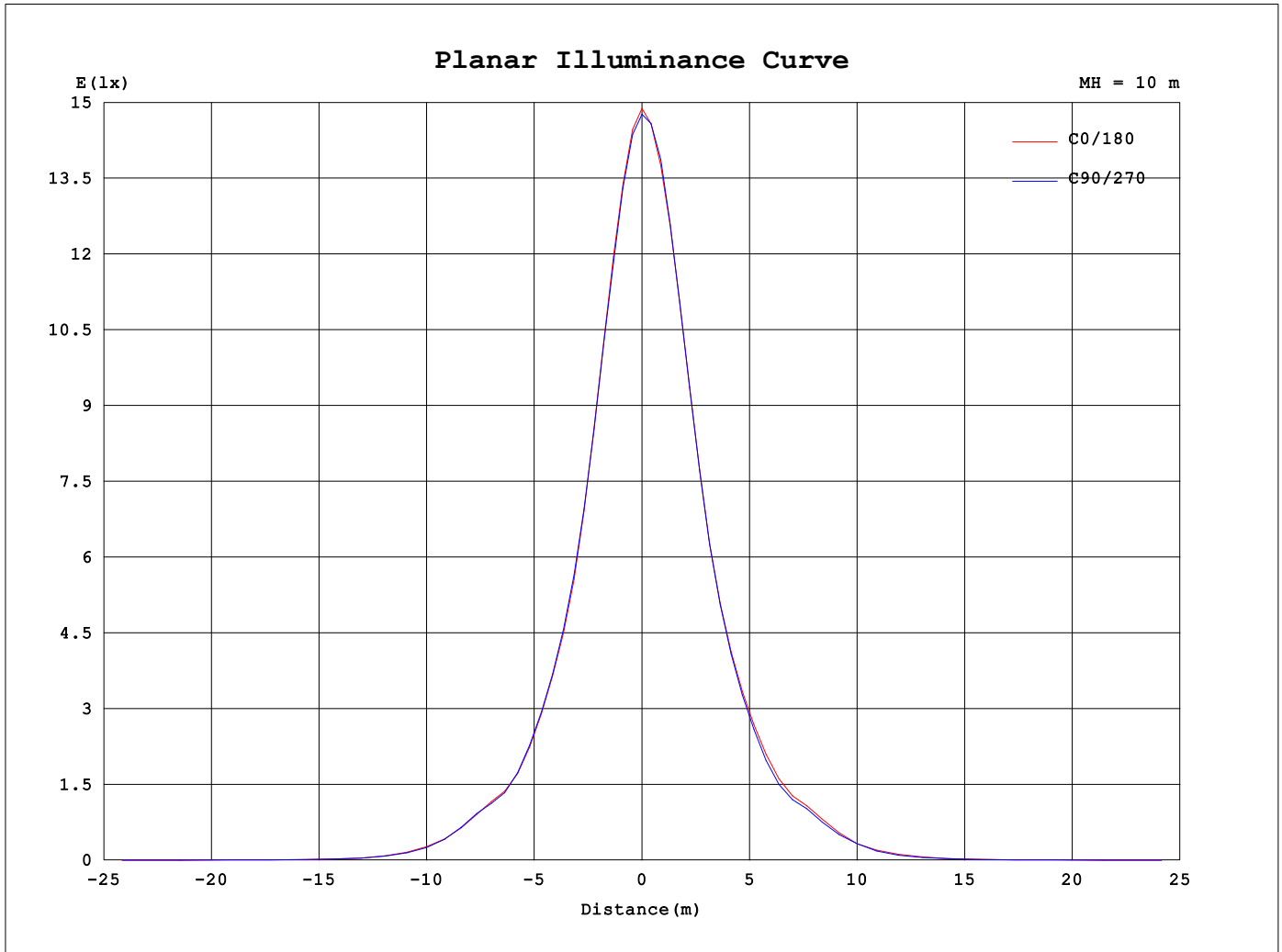
NAME: 96RAY24/10	TYPE: 96RAY24/10	WEIGHT: 1
SPEC.:	DIM.: F 150	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
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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

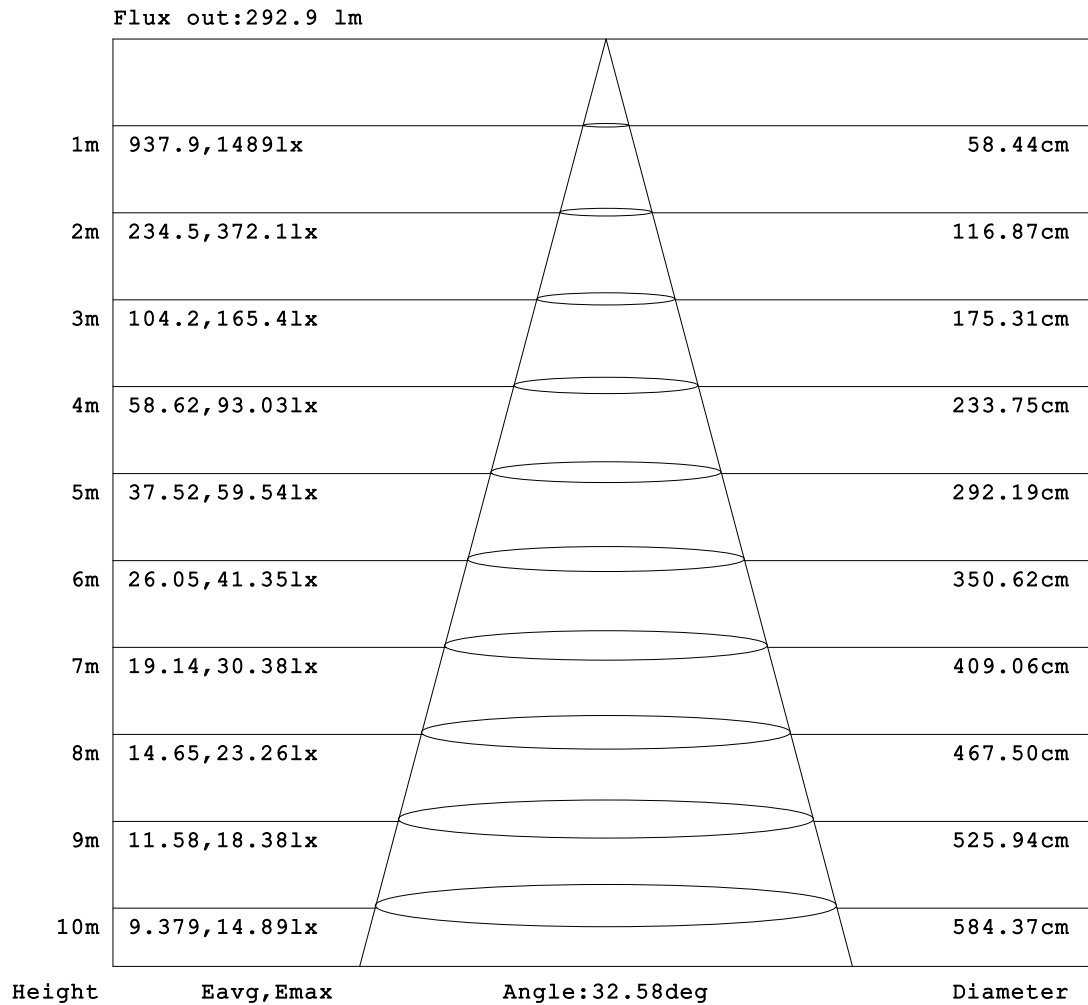


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 17 August 2022

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: 96RAY24/10	TYPE: 96RAY24/10	WEIGHT: 1
SPEC.:	DIM.: F 150	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: MEDIUM
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: 96RAY24/10	TYPE: 96RAY24/10	WEIGHT: 1
SPEC.:	DIM.: F 150	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	0.20	0.16	0.11	0.08	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
-85	0.20	0.21	0.21	0.22	0.21	0.19	0.15	0.22	0.28	0.32	0.33	0.37	0.39	0.39	0.39	0.41	0.42	0.41	0.40
-80	0.20	0.25	0.31	0.36	0.52	0.68	0.84	1.01	1.17	1.30	1.43	1.55	1.66	1.77	1.86	1.95	2.01	2.04	2.05
-75	0.20	0.30	0.41	0.68	0.97	1.28	1.59	1.88	2.17	2.42	2.64	2.84	3.02	3.15	3.26	3.36	3.44	3.45	3.44
-70	0.20	0.35	0.61	1.00	1.45	1.88	2.30	2.67	3.03	3.36	3.64	3.92	4.16	4.35	4.50	4.62	4.70	4.72	4.70
-65	0.20	0.39	0.81	1.34	1.91	2.45	2.94	3.43	3.88	4.30	4.66	4.98	5.30	5.55	5.77	5.94	6.05	6.09	6.07
-60	0.20	0.44	0.99	1.67	2.34	2.97	3.60	4.19	4.71	5.20	5.67	6.12	6.55	6.92	7.23	7.46	7.61	7.67	7.64
-55	0.20	0.51	1.19	1.98	2.75	3.51	4.24	4.87	5.52	6.18	6.81	7.38	7.91	8.62	9.31	11.0	12.0	12.5	12.5
-50	0.20	0.59	1.38	2.27	3.14	4.03	4.80	5.57	6.39	7.20	7.97	9.26	12.3	16.7	21.8	26.7	29.9	31.5	31.5
-45	0.20	0.66	1.55	2.54	3.52	4.48	5.35	6.30	7.26	8.22	10.7	16.7	25.7	36.2	48.0	58.2	66.0	70.4	71.3
-40	0.20	0.72	1.71	2.80	3.87	4.87	5.92	7.00	8.13	11.1	19.3	32.2	49.8	70.5	92.7	114	133	144	146
-35	0.20	0.77	1.86	3.03	4.17	5.24	6.43	7.67	9.94	17.8	32.7	55.0	85.2	123	161	190	201	206	205
-30	0.20	0.82	2.00	3.25	4.43	5.61	6.90	8.30	13.8	27.5	51.3	87.9	138	190	212	229	251	265	268
-25	0.20	0.86	2.12	3.43	4.66	5.94	7.32	9.67	19.2	38.9	76.0	132	196	223	261	311	357	386	395
-20	0.20	0.89	2.22	3.59	4.84	6.21	7.69	11.2	25.6	53.7	105	178	222	269	344	420	489	538	552
-15	0.20	0.92	2.31	3.71	4.99	6.42	8.00	13.8	32.5	68.3	133	210	249	333	432	541	652	746	773
-10	0.20	0.94	2.37	3.80	5.10	6.58	8.22	15.9	38.3	81.3	157	221	282	388	514	669	858	1015	1072
-5	0.20	0.95	2.41	3.86	5.17	6.67	8.36	17.3	42.3	89.7	173	228	308	428	578	786	1048	1260	1346
0	0.20	0.95	2.42	3.89	5.20	6.71	8.42	17.9	44.1	93.3	181	232	324	451	614	858	1152	1391	1489
5	0.20	0.93	2.41	3.88	5.19	6.69	8.37	17.5	43.1	90.9	177	230	318	440	598	826	1101	1322	1403
10	0.20	0.90	2.36	3.83	5.13	6.60	8.24	16.3	39.8	83.8	164	224	295	407	542	718	932	1106	1154
15	0.20	0.87	2.28	3.76	5.04	6.46	8.02	14.3	34.2	71.5	142	215	260	355	465	589	720	829	858
20	0.20	0.83	2.17	3.65	4.90	6.26	7.72	11.6	27.1	57.1	111	188	227	291	378	464	545	600	611
25	0.20	0.79	2.03	3.50	4.73	6.01	7.36	9.94	20.5	42.0	80.3	145	203	230	287	351	404	436	441
30	0.20	0.75	1.85	3.33	4.52	5.70	6.96	8.35	14.7	29.5	54.6	95.9	156	198	218	249	281	302	305
35	0.20	0.70	1.64	3.12	4.27	5.35	6.52	7.73	10.4	19.1	35.3	59.8	95.1	140	178	200	209	215	219
40	0.20	0.64	1.39	2.85	4.00	4.98	6.04	7.08	8.21	11.9	21.1	35.1	54.2	79.1	108	133	153	164	167
45	0.20	0.59	1.20	2.55	3.66	4.58	5.49	6.42	7.35	8.35	11.8	18.7	28.6	40.5	54.9	67.5	79.1	87.5	93.1
50	0.20	0.53	1.02	2.18	3.27	4.16	4.94	5.74	6.52	7.31	8.14	10.2	14.1	19.5	25.4	31.1	36.0	38.7	39.3
55	0.20	0.47	0.83	1.72	2.83	3.68	4.39	5.04	5.72	6.35	6.98	7.61	8.21	9.59	10.9	13.2	14.7	15.5	15.7
60	0.20	0.41	0.64	1.27	2.34	3.13	3.82	4.39	4.91	5.42	5.94	6.39	6.80	7.17	7.49	7.74	7.91	8.01	8.03
65	0.20	0.37	0.54	1.00	1.77	2.52	3.13	3.68	4.15	4.53	4.90	5.23	5.55	5.83	6.04	6.21	6.33	6.41	6.45
70	0.20	0.33	0.45	0.70	1.26	1.88	2.42	2.87	3.30	3.66	3.97	4.21	4.40	4.59	4.75	4.85	4.91	4.96	4.97
75	0.20	0.29	0.35	0.51	0.80	1.26	1.72	2.04	2.34	2.63	2.88	3.10	3.27	3.42	3.55	3.64	3.70	3.73	3.72
80	0.20	0.25	0.28	0.32	0.47	0.70	0.98	1.18	1.36	1.53	1.70	1.83	1.93	2.05	2.15	2.22	2.27	2.31	2.32
85	0.20	0.21	0.21	0.21	0.21	0.24	0.27	0.33	0.39	0.45	0.50	0.54	0.56	0.59	0.62	0.63	0.63	0.64	0.65
90	0.20	0.17	0.14	0.10	0.06	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
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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: 96RAY24/10	TYPE: 96RAY24/10	WEIGHT: 1
SPEC.:	DIM.: F 150	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

Table--2

UNIT: cd

H(DEC) V(DEC)	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	
-90	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.05	0.08	0.12	0.15	0.18	
-85	0.40	0.40	0.38	0.36	0.35	0.33	0.30	0.27	0.24	0.21	0.15	0.10	0.13	0.15	0.16	0.17	0.17	0.18	
-80	2.04	2.00	1.91	1.80	1.67	1.53	1.37	1.20	1.07	0.93	0.76	0.59	0.47	0.36	0.25	0.22	0.20	0.18	
-75	3.42	3.38	3.27	3.13	2.97	2.78	2.57	2.35	2.12	1.84	1.53	1.21	0.94	0.67	0.46	0.28	0.22	0.18	
-70	4.66	4.57	4.45	4.29	4.10	3.88	3.65	3.39	3.07	2.71	2.31	1.89	1.47	1.06	0.68	0.41	0.25	0.18	
-65	6.04	5.94	5.77	5.55	5.28	4.98	4.64	4.31	3.95	3.54	3.06	2.54	2.02	1.47	0.96	0.54	0.27	0.18	
-60	7.57	7.42	7.17	6.87	6.51	6.14	5.72	5.29	4.80	4.28	3.74	3.18	2.54	1.89	1.23	0.66	0.29	0.18	
-55	11.9	11.0	9.89	8.43	7.89	7.42	6.87	6.31	5.73	5.07	4.39	3.74	3.06	2.29	1.53	0.83	0.35	0.18	
-50	30.1	27.1	22.9	17.9	13.4	10.0	8.13	7.44	6.65	5.86	5.06	4.26	3.52	2.67	1.81	0.98	0.40	0.18	
-45	68.0	61.3	51.1	40.5	29.4	19.8	12.7	8.86	7.66	6.67	5.72	4.79	3.91	3.04	2.08	1.12	0.45	0.18	
-40	139	125	104	81.8	59.5	39.8	24.7	14.3	8.91	7.50	6.37	5.31	4.30	3.36	2.32	1.26	0.49	0.18	
-35	200	189	174	143	107	71.9	43.7	24.9	13.0	8.28	6.99	5.80	4.66	3.62	2.54	1.40	0.53	0.18	
-30	257	235	211	193	165	118	73.0	40.5	20.3	10.3	7.57	6.23	5.01	3.86	2.75	1.54	0.56	0.18	
-25	378	339	285	232	203	166	109	61.7	30.2	13.9	8.10	6.62	5.32	4.08	2.92	1.66	0.59	0.18	
-20	527	467	392	305	233	198	146	84.7	42.7	18.7	8.66	6.95	5.57	4.27	3.07	1.75	0.61	0.18	
-15	727	623	503	390	285	218	177	106	55.3	24.4	10.2	7.23	5.78	4.42	3.19	1.83	0.63	0.18	
-10	987	811	618	463	336	239	195	126	66.6	29.2	11.3	7.44	5.93	4.53	3.27	1.89	0.64	0.18	
-5	1233	992	721	520	374	257	207	139	73.7	32.4	12.1	7.57	6.03	4.61	3.32	1.92	0.65	0.18	
0	1353	1076	768	543	390	265	211	143	76.8	33.7	12.4	7.62	6.07	4.64	3.35	1.94	0.65	0.18	
5	1268	1017	739	527	379	261	207	140	74.7	32.8	12.2	7.55	6.03	4.61	3.33	1.91	0.64	0.18	
10	1057	860	645	480	349	246	199	130	68.5	30.1	11.4	7.40	5.94	4.55	3.28	1.86	0.62	0.18	
15	794	667	533	412	301	227	186	112	58.7	25.5	10.2	7.19	5.80	4.44	3.20	1.78	0.60	0.18	
20	577	507	421	329	250	209	155	92.3	46.9	20.0	8.52	6.93	5.60	4.28	3.09	1.68	0.58	0.18	
25	420	375	314	253	217	180	118	69.8	33.9	14.9	7.98	6.64	5.37	4.09	2.96	1.54	0.55	0.18	
30	291	265	234	210	181	130	84.1	47.3	23.0	10.8	7.52	6.28	5.08	3.87	2.79	1.37	0.52	0.18	
35	217	209	193	161	121	84.9	53.6	29.6	14.6	8.21	7.03	5.87	4.74	3.65	2.58	1.16	0.49	0.18	
40	160	145	122	98.5	73.3	50.0	30.7	17.0	9.13	7.52	6.47	5.42	4.37	3.39	2.30	0.93	0.45	0.18	
45	86.0	77.8	66.1	52.3	37.7	25.2	15.4	9.31	7.73	6.81	5.86	4.92	3.96	3.08	2.00	0.79	0.41	0.18	
50	38.2	35.2	30.0	23.3	17.1	11.8	8.62	7.64	6.85	6.03	5.23	4.38	3.55	2.75	1.65	0.68	0.37	0.18	
55	15.1	13.9	12.1	9.72	8.69	7.85	7.26	6.59	5.91	5.25	4.55	3.82	3.11	2.32	1.24	0.58	0.32	0.18	
60	7.96	7.81	7.61	7.33	6.97	6.54	6.05	5.54	4.99	4.43	3.85	3.26	2.63	1.86	0.83	0.48	0.28	0.18	
65	6.39	6.28	6.12	5.89	5.62	5.29	4.92	4.51	4.06	3.61	3.16	2.67	2.08	1.34	0.69	0.40	0.26	0.18	
70	4.92	4.84	4.73	4.58	4.38	4.13	3.82	3.50	3.16	2.81	2.45	2.03	1.49	0.92	0.52	0.33	0.24	0.18	
75	3.66	3.57	3.47	3.34	3.16	2.96	2.75	2.52	2.27	2.00	1.71	1.40	0.96	0.60	0.37	0.25	0.22	0.18	
80	2.28	2.21	2.13	2.02	1.89	1.75	1.60	1.44	1.28	1.10	0.92	0.72	0.51	0.33	0.22	0.21	0.20	0.18	
85	0.62	0.59	0.58	0.55	0.52	0.47	0.45	0.41	0.35	0.29	0.25	0.21	0.17	0.14	0.15	0.17	0.18	0.18	
90	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.09	0.14	0.16	0.18	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
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: