

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	590.4 cd per klm.
(Luminaire orientation as tested.)	0.0 degrees vertical
	0.0 degrees horizontal

Beam Spread	At 10% of Imax	129.4V x 129.2H
	At 50% of Imax	60.4V x 61.0H
	At 90% of Imax	17.5V x 18.9H

Beam Flux	Total	869.6 lumens per klm.
	To 10% of Imax	852.7 lumens per klm.
	To 50% of Imax	329.7 lumens per klm.
	To 90% of Imax	52.8 lumens per klm.

Upward LOR	0.0 %
Downward LOR	87.0 %

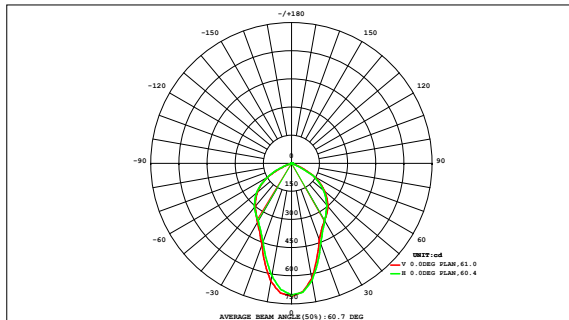
Luminaire Efficiency (Light Output Ratio)	86.8 %
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C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 20 January 2023

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity: 65.0%
Test Distance: 6.340m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 96RAY15/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F180 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	Shielding Angle:



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	96RAY15/WW	Imax (cd)	708.5
NOMINAL POWER (W)	15	AVAILABILITY (%)	84.9
RATED VOLTAGE (V)	230	Avai. FLUX (lm)	1019
NOMINAL FLUX (lm)	1200	LOR (%)	86.8
LAMPS INSIDE	1	TOTAL FLUX (lm)	1041
TEST VOLTAGE (V)	230	θ @50% (H,V)	61,60DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT: lm		Φ t	Φ a
	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.23	0.00
90	0.00	0.00	0.01	0.02	0.03	0.05	0.07	0.08	0.09	0.08	0.07	0.06	0.05	0.03	0.02	0.01	0.00	0.00	0.69	0.00
80	0.00	0.01	0.02	0.04	0.11	0.51	1.35	2.04	2.48	2.50	2.09	1.39	0.59	0.11	0.04	0.02	0.01	0.00	13.3	9.19
70	0.00	0.01	0.03	0.18	1.29	2.79	4.27	5.26	5.89	5.95	5.42	4.42	3.04	1.41	0.19	0.03	0.01	0.00	40.2	38.5
60	0.00	0.01	0.06	0.96	2.92	4.84	6.48	7.64	8.31	8.36	7.77	6.59	4.98	3.09	1.02	0.07	0.01	0.00	63.1	62.0
50	0.00	0.01	0.25	1.94	4.13	6.31	8.13	9.38	10.0	9.99	9.28	8.02	6.30	4.27	2.03	0.27	0.02	0.00	80.3	79.6
40	0.00	0.01	0.52	2.63	5.00	7.36	9.29	10.8	11.9	11.8	10.7	9.06	7.16	5.03	2.74	0.55	0.02	0.00	94.6	93.9
30	0.00	0.02	0.75	3.04	5.52	7.98	10.1	12.8	15.4	15.5	12.9	10.1	7.76	5.51	3.16	0.80	0.02	0.00	111	111
20	0.00	0.02	0.88	3.24	5.74	8.18	10.6	14.9	19.4	19.5	15.3	10.9	8.14	5.77	3.38	0.95	0.02	0.00	127	126
10	0.00	0.02	0.87	3.21	5.65	8.00	10.4	14.8	19.6	20.0	15.7	11.1	8.21	5.78	3.39	0.94	0.02	0.00	128	127
0	0.00	0.02	0.71	2.96	5.30	7.56	9.73	12.5	15.7	16.1	13.3	10.3	7.81	5.50	3.17	0.77	0.02	0.00	112	111
-10	0.00	0.01	0.45	2.50	4.75	6.89	8.80	10.5	11.8	12.0	10.9	9.06	7.07	4.97	2.70	0.50	0.02	0.00	92.9	92.2
-20	0.00	0.01	0.19	1.73	3.93	5.88	7.61	8.93	9.69	9.70	8.96	7.69	6.06	4.15	1.91	0.23	0.01	0.00	76.7	75.8
-30	0.00	0.01	0.04	0.74	2.66	4.50	6.02	7.15	7.75	7.72	7.11	6.10	4.70	2.87	0.86	0.05	0.01	0.00	58.3	57.0
-40	0.00	0.01	0.02	0.12	0.82	2.30	3.78	4.82	5.33	5.34	4.83	3.89	2.49	0.96	0.15	0.03	0.01	0.00	34.9	32.5
-50	0.00	0.01	0.01	0.03	0.07	0.28	0.67	1.18	1.52	1.55	1.24	0.75	0.32	0.08	0.03	0.02	0.01	0.00	7.76	3.20
-60	0.00	0.00	0.01	0.02	0.02	0.03	0.05	0.06	0.06	0.07	0.06	0.05	0.04	0.03	0.02	0.01	0.00	0.00	0.54	0.00
-70	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.21	0.00
-80	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.21	0.00
-90	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.21	0.00
HORIZONTAL (DEG)																				
Φ t	0.03	0.18	4.83	23.4	47.9	73.5	97.5	123	145	146	126	99.6	74.7	49.6	24.8	5.25	0.22	0.03	1041	---
Φ a	0.00	0.00	2.45	21.5	46.5	72.0	96.2	122	144	145	124	98.3	73.4	48.2	23.1	2.92	0.00	0.00	---	1019

one-half-peak spread: U:30.6,D:31.1 , L:30.3,R:31.9

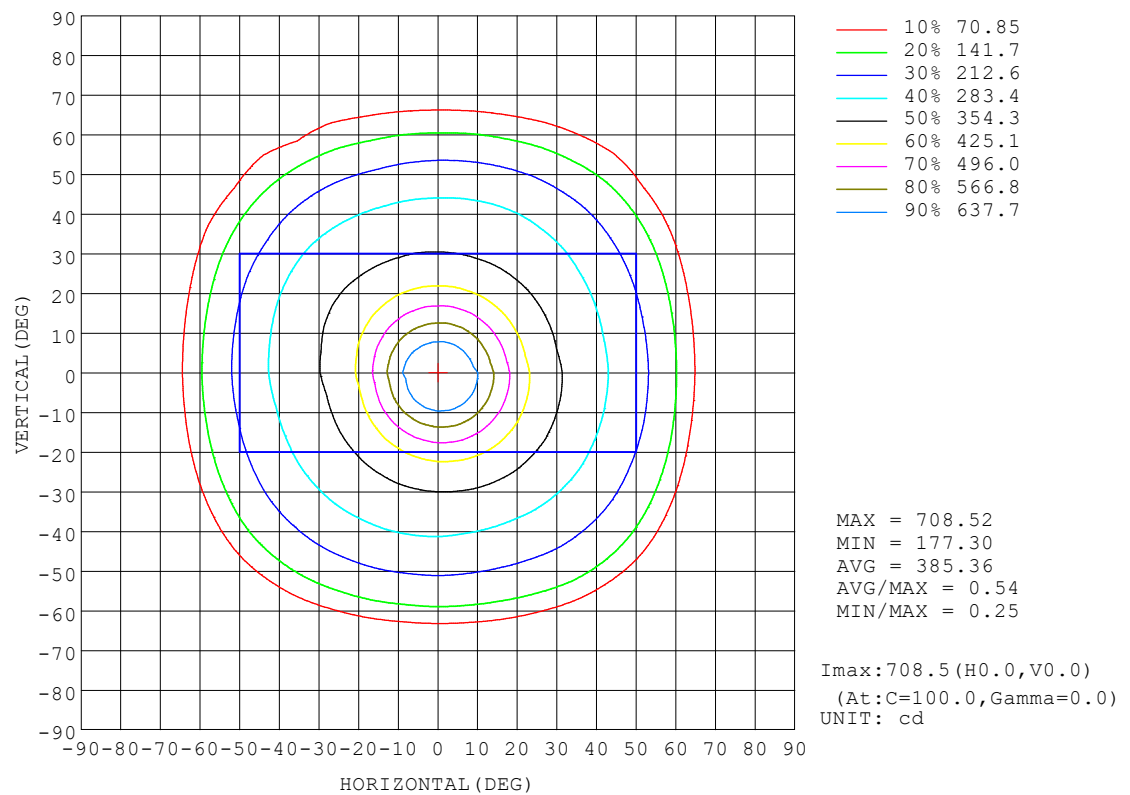
NEMA Beam Type: Type 6

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:20 January 2023

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.340m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: 96RAY15/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F180 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	Shielding Angle:

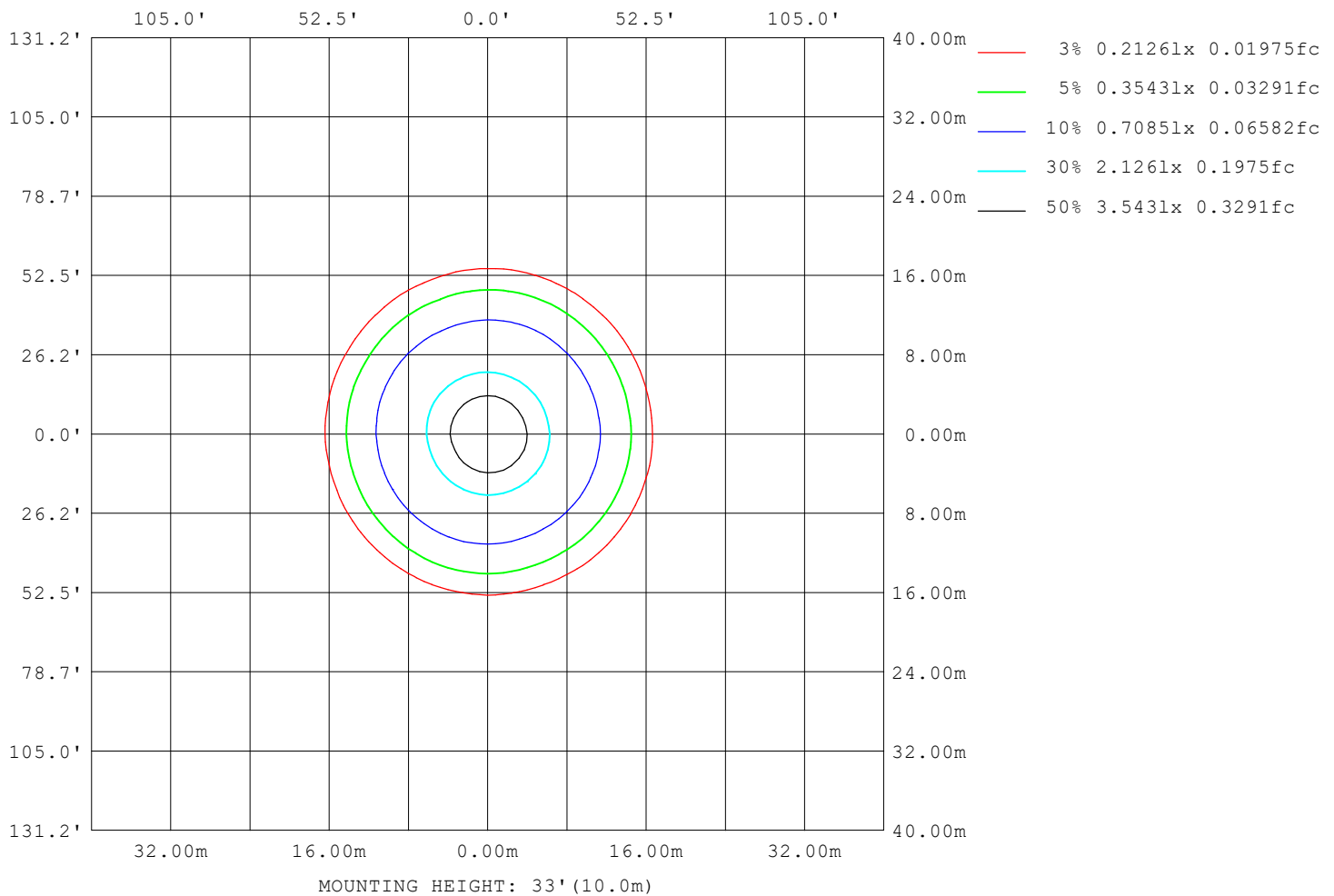


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Remarks:

ISOLUX DIAGRAM

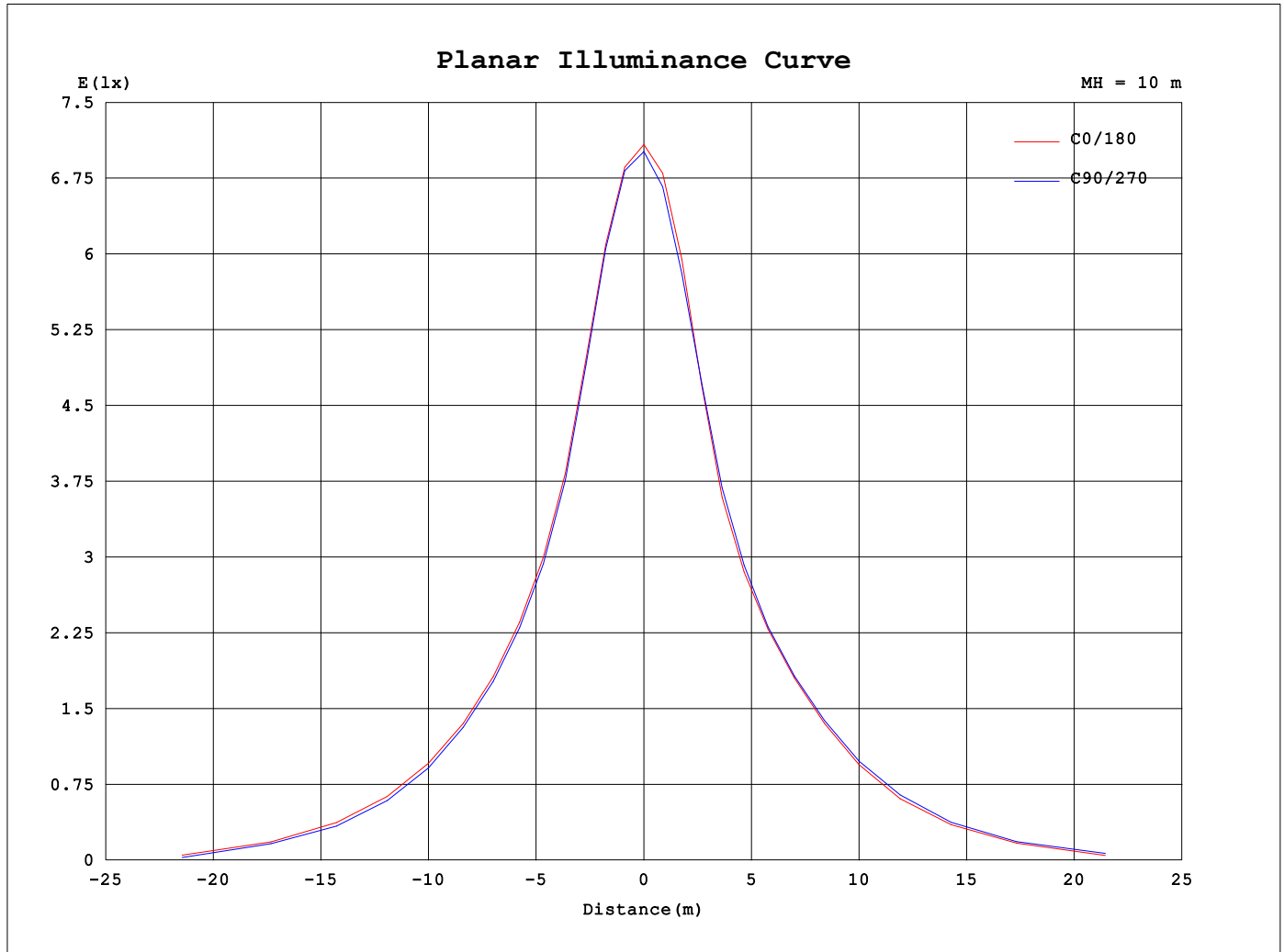
NAME: 96RAY15/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F180 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	Shielding Angle:



C Range: 0 - 360DEG
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Humidity: 65.0%
Test Distance: 6.340m [K=1.0000]
Remarks:

Planar Illuminance Curve

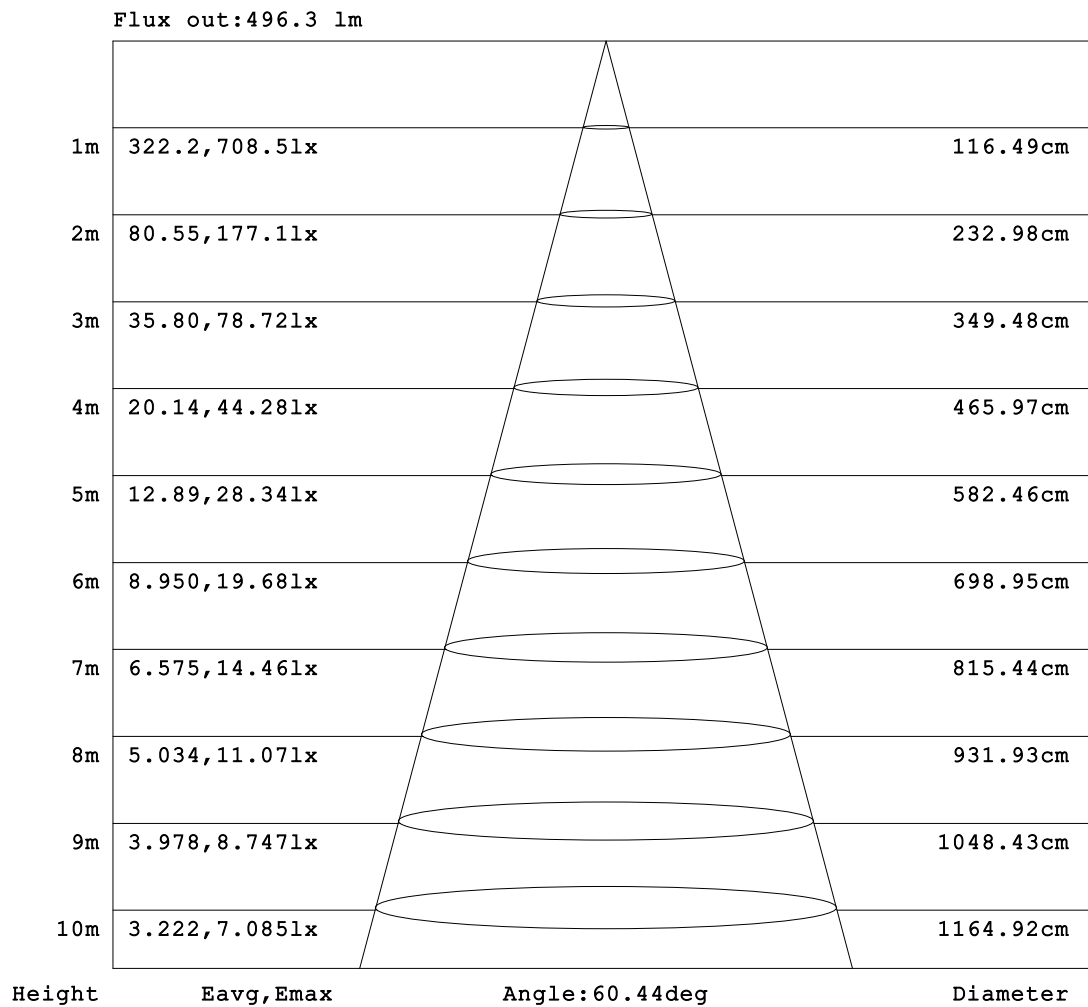


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators:
 Test Date: 20 January 2023

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.456
 Humidity: 65.0%
 Test Distance: 6.340m [K=1.0000]
 Remarks:

AAI Figure

NAME: 96RAY15/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F180 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	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:20 January 2023

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
 Humidity:65.0%
 Test Distance:6.340m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: 96RAY15/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F180 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	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	0.30	0.34	0.37	0.37	0.38	0.38	0.39	0.39	0.39	0.39	0.40	0.40	0.40	0.41	0.42	0.41	0.41	0.42	0.42
-85	0.30	0.36	0.41	0.43	0.45	0.46	0.47	0.48	0.50	0.50	0.51	0.52	0.54	0.54	0.53	0.55	0.57	0.57	0.56
-80	0.30	0.37	0.44	0.47	0.51	0.53	0.55	0.62	0.70	0.75	0.79	0.85	0.91	0.95	0.98	1.03	1.07	1.09	1.11
-75	0.30	0.39	0.47	0.52	0.58	0.69	0.78	0.89	0.99	1.11	1.23	1.36	1.47	1.58	1.67	1.76	1.84	1.90	1.95
-70	0.30	0.41	0.50	0.57	0.74	0.88	1.01	1.21	1.41	1.60	1.80	2.11	2.39	2.64	2.85	3.04	3.20	3.34	3.43
-65	0.30	0.42	0.53	0.69	0.90	1.09	1.33	1.58	1.92	2.36	2.79	4.94	13.2	20.2	26.6	31.1	33.6	36.2	37.7
-60	0.30	0.44	0.55	0.81	1.04	1.35	1.65	2.13	2.68	8.30	21.7	33.4	49.8	72.8	93.5	110	121	129	132
-55	0.30	0.45	0.63	0.92	1.24	1.61	2.14	2.76	16.2	32.7	59.2	94.1	125	142	156	166	173	177	180
-50	0.30	0.46	0.69	1.02	1.44	1.94	2.67	17.2	39.4	77.8	121	147	167	184	197	208	215	220	223
-45	0.30	0.47	0.76	1.14	1.62	2.35	9.37	37.5	80.3	130	157	182	202	220	233	244	252	257	259
-40	0.30	0.48	0.82	1.27	1.81	2.74	26.1	65.4	123	158	187	212	233	250	264	276	285	291	293
-35	0.30	0.49	0.87	1.38	2.09	5.56	42.4	98.4	149	183	212	237	258	277	293	305	314	320	322
-30	0.30	0.50	0.92	1.48	2.35	18.0	62.4	128	169	204	234	258	281	300	316	330	342	350	354
-25	0.30	0.51	0.96	1.57	2.57	29.5	84.3	145	186	222	251	277	300	319	338	356	374	387	395
-20	0.30	0.51	0.99	1.64	2.75	39.6	103	158	200	235	265	293	316	337	360	384	416	441	454
-15	0.30	0.52	1.01	1.70	2.91	48.2	117	169	211	246	277	304	328	352	380	423	477	523	544
-10	0.30	0.52	1.03	1.75	3.02	55.0	127	178	220	255	286	313	337	364	405	469	545	606	634
-5	0.30	0.52	1.04	1.78	3.09	59.8	134	184	226	263	295	321	345	373	421	503	596	660	690
0	0.30	0.52	1.04	1.79	3.12	62.4	137	187	230	268	302	328	352	383	433	523	623	688	709
5	0.30	0.52	1.05	1.79	3.13	61.5	135	186	229	267	301	329	352	382	429	509	594	650	674
10	0.30	0.52	1.04	1.78	3.09	58.2	130	181	225	263	298	327	350	377	416	474	539	589	608
15	0.30	0.52	1.03	1.75	3.01	52.4	120	174	218	256	291	321	345	366	393	432	477	512	525
20	0.30	0.52	1.00	1.70	2.88	44.3	108	164	208	247	281	312	335	353	372	394	421	439	445
25	0.30	0.51	0.97	1.63	2.72	34.2	93.9	151	195	233	266	296	321	338	351	365	380	390	392
30	0.30	0.50	0.93	1.55	2.51	21.8	77.0	135	177	214	248	278	302	319	332	342	350	355	356
35	0.30	0.49	0.89	1.45	2.29	6.75	58.5	111	156	192	225	254	278	296	311	320	327	331	332
40	0.30	0.48	0.84	1.33	2.00	3.25	37.3	82.8	131	167	199	227	250	268	282	293	302	307	308
45	0.30	0.47	0.78	1.20	1.81	2.83	13.1	53.3	95.0	138	168	196	218	237	250	261	270	276	277
50	0.30	0.45	0.71	1.08	1.61	2.33	3.54	24.3	60.8	101	133	158	181	200	213	224	234	240	244
55	0.30	0.44	0.64	0.97	1.39	1.93	2.83	4.03	26.2	62.3	87.9	112	139	156	169	180	190	197	200
60	0.30	0.42	0.56	0.85	1.16	1.62	2.13	3.00	3.88	14.8	38.6	59.0	89.3	110	121	131	140	145	147
65	0.30	0.40	0.52	0.72	0.98	1.28	1.71	2.13	2.67	3.36	4.02	8.12	28.2	47.5	61.7	73.8	83.8	89.7	92.0
70	0.30	0.38	0.48	0.58	0.79	1.02	1.27	1.59	1.90	2.20	2.51	3.06	3.68	4.24	4.69	5.04	5.30	5.27	5.13
75	0.30	0.36	0.44	0.51	0.59	0.77	0.96	1.13	1.30	1.50	1.71	1.91	2.11	2.27	2.42	2.45	2.44	2.40	2.34
80	0.30	0.34	0.39	0.44	0.49	0.56	0.64	0.75	0.86	0.97	1.08	1.17	1.26	1.35	1.42	1.42	1.42	1.40	1.38
85	0.30	0.32	0.34	0.36	0.39	0.42	0.46	0.49	0.52	0.56	0.60	0.63	0.65	0.68	0.71	0.70	0.69	0.70	0.70
90	0.30	0.30	0.30	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.30	0.30

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:20 January 2023

γ Range: 0 - 90DEG

γ Interval: 5.0DEG

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

Humidity:65.0%

Test Distance:6.340m [K=1.0000]

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: 96RAY15/WW	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F180 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circle	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	0.42	0.42	0.42	0.42	0.42	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.40	0.40	0.40	0.40	
-85	0.58	0.60	0.59	0.58	0.59	0.59	0.57	0.55	0.55	0.54	0.52	0.50	0.50	0.49	0.46	0.44	0.42	0.40	
-80	1.13	1.16	1.15	1.14	1.10	1.06	0.98	0.90	0.84	0.77	0.69	0.60	0.59	0.56	0.52	0.48	0.44	0.40	
-75	2.00	2.03	2.04	2.02	1.91	1.78	1.61	1.44	1.27	1.13	1.01	0.88	0.77	0.64	0.58	0.52	0.47	0.40	
-70	3.52	3.56	3.55	3.45	3.20	2.89	2.52	2.14	1.88	1.65	1.41	1.17	1.01	0.84	0.64	0.56	0.49	0.40	
-65	37.3	35.8	33.7	29.5	23.1	15.4	5.82	3.28	2.79	2.29	1.89	1.58	1.26	1.02	0.79	0.60	0.51	0.40	
-60	130	122	111	96.6	77.7	56.0	39.3	25.8	9.97	3.23	2.60	1.99	1.60	1.20	0.93	0.64	0.53	0.40	
-55	178	173	166	157	146	132	102	67.5	39.7	19.7	3.44	2.64	1.93	1.46	1.06	0.73	0.55	0.40	
-50	220	215	207	198	186	173	155	130	87.2	47.9	20.8	3.33	2.37	1.72	1.19	0.82	0.57	0.40	
-45	255	250	243	234	223	208	190	167	141	90.5	45.1	11.3	2.95	1.97	1.35	0.90	0.59	0.40	
-40	289	283	275	264	252	238	219	196	169	134	75.1	30.9	3.51	2.24	1.52	0.98	0.61	0.40	
-35	320	314	305	293	279	263	244	221	194	160	109	49.4	6.81	2.66	1.68	1.05	0.62	0.40	
-30	353	348	336	321	305	286	265	243	214	181	140	70.5	20.7	3.06	1.83	1.11	0.64	0.40	
-25	393	386	370	351	328	307	284	259	232	198	157	93.1	33.1	3.41	1.95	1.17	0.65	0.40	
-20	451	434	407	380	352	326	300	273	245	212	171	112	43.9	3.70	2.06	1.21	0.66	0.40	
-15	535	499	452	408	374	342	313	285	256	223	182	127	53.1	3.93	2.15	1.25	0.67	0.40	
-10	617	568	501	439	391	354	323	294	264	231	190	137	60.4	4.11	2.22	1.28	0.68	0.40	
-5	672	620	539	458	401	362	329	299	269	236	196	143	65.5	4.23	2.27	1.30	0.68	0.40	
0	694	638	551	462	403	363	330	301	272	238	197	145	68.2	4.28	2.29	1.31	0.69	0.40	
5	653	602	525	446	392	356	326	297	269	235	195	143	66.7	4.30	2.29	1.31	0.68	0.40	
10	594	548	484	425	381	348	319	292	264	230	190	137	62.7	4.25	2.27	1.30	0.68	0.40	
15	515	482	437	395	364	337	311	285	257	222	181	127	56.2	4.13	2.22	1.28	0.67	0.40	
20	440	422	394	371	347	324	301	276	247	213	171	114	47.4	3.94	2.15	1.25	0.67	0.40	
25	389	378	364	347	329	309	288	263	235	201	158	98.2	36.5	3.68	2.06	1.20	0.66	0.40	
30	354	348	338	325	310	293	274	247	218	184	142	79.3	23.3	3.35	1.94	1.15	0.64	0.40	
35	330	324	316	305	291	276	254	228	200	164	116	59.3	7.89	2.95	1.80	1.09	0.63	0.40	
40	307	302	294	284	270	251	230	205	175	139	86.3	37.9	4.14	2.48	1.64	1.02	0.61	0.40	
45	277	273	266	255	241	222	202	176	147	102	56.0	13.9	3.50	2.20	1.46	0.95	0.59	0.40	
50	243	239	230	219	206	187	165	141	108	65.9	25.9	4.06	2.79	1.93	1.29	0.86	0.57	0.40	
55	199	194	186	175	161	144	123	99.2	67.7	28.3	4.16	3.13	2.24	1.64	1.15	0.77	0.55	0.40	
60	146	142	135	125	113	97.4	73.8	45.9	16.1	3.99	3.07	2.28	1.84	1.35	1.00	0.67	0.53	0.40	
65	90.9	85.9	75.9	63.4	48.6	30.1	8.99	4.12	3.40	2.66	2.15	1.81	1.43	1.13	0.85	0.62	0.50	0.40	
70	5.12	5.00	4.68	4.32	3.98	3.52	2.95	2.40	2.11	1.86	1.61	1.34	1.13	0.91	0.68	0.57	0.47	0.40	
75	2.31	2.26	2.20	2.13	2.04	1.93	1.78	1.62	1.44	1.28	1.15	1.01	0.85	0.68	0.59	0.51	0.45	0.40	
80	1.35	1.32	1.30	1.27	1.22	1.17	1.10	1.03	0.94	0.85	0.77	0.69	0.62	0.56	0.51	0.45	0.42	0.40	
85	0.68	0.66	0.67	0.67	0.64	0.62	0.61	0.60	0.57	0.54	0.53	0.51	0.48	0.44	0.42	0.39	0.39	0.40	
90	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.37	0.40	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:20 January 2023

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.340m [K=1.0000]
Remarks: