



KINO FLO® LIGHTING SYSTEMS

IES INDOOR REPORT

PHOTOMETRIC FILENAME : L061702303 FREESTYLE 21 60.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L061702303

[TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)

[ISSUE DATE] 6/13/2017

[MANUFAC] Kino Flo Lighting Systems

[LUMCAT] CFX-F21 or CFX-F21T

[LUMINAIRE] FreeStyle 21, w 60 Louver

[BALLASTCAT] KINO FLO LED-150X or LED-151X

[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND

[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.

[TEST CONDITION] BRIGHTNESS IS SET TO 100%. COLOR TEMPERATURE IS SET TO 6500K.

[MORE] TEST IS PERFORMED WITH 60 DEGREE LOUVER.

[INPUT] 120VAC, 1.09A, 130.17W, 0.99PF, 7% ATHD

[TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	967
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	7
Total Luminaire Watts	130.17
Ballast Factor	1.00
CIE Type	Direct
Spacing Criteria (0-180)	0.56
Spacing Criteria (90-270)	0.52
Spacing Criteria (Diagonal)	0.56
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.85 ft
Luminous Width (90-270)	1.85 ft
Luminous Height	0.00 ft



LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	135	266	232
55	95	119	107
65	113	113	113
75	159	159	159
85	471	471	471

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CANDELA TABULATION

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
0.0	2651	2651	2651	2651	2651	2651	2651	2651	2651	2651
1.0	2623	2623	2624	2626	2627	2628	2629	2629	2629	2629
3.0	2532	2531	2530	2530	2532	2533	2534	2535	2536	2535
5.0	2398	2399	2399	2400	2401	2402	2403	2404	2405	2404
7.0	2247	2246	2247	2248	2248	2248	2248	2249	2250	2249
9.0	2081	2080	2081	2080	2080	2080	2080	2080	2080	2078
11.0	1900	1900	1900	1900	1899	1899	1898	1897	1896	1893
13.0	1711	1711	1711	1712	1712	1712	1710	1707	1704	1698
15.0	1512	1512	1515	1517	1518	1518	1515	1510	1503	1494
17.0	1311	1311	1315	1319	1322	1322	1318	1310	1300	1286
19.5	1063	1064	1068	1073	1077	1077	1071	1060	1043	1023
22.5	785	784	785	786	787	786	777	760	737	713
25.5	540	538	533	526	519	512	499	481	461	446
29.0	308	303	291	272	252	235	223	219	218	221
33.0	123	113	104	95	94	98	104	112	119	125
37.5	39	40	44	48	53	57	62	66	70	73
42.5	17	19	20	25	29	30	33	34	35	36
47.5	11	12	12	13	15	16	17	18	19	19
55.0	8	8	8	9	9	9	10	10	10	10
65.0	7	7	7	7	7	7	7	7	7	7
75.0	6	6	6	6	6	6	6	6	6	6
85.0	6	6	6	6	6	6	6	6	6	6
90.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles **Horizontal Angles**

	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>
0.0	2651	2651	2651	2651	2651	2651	2651	2651	2651
1.0	2629	2630	2630	2632	2632	2633	2633	2634	2634
3.0	2534	2532	2529	2526	2525	2522	2520	2519	2519
5.0	2401	2395	2391	2383	2377	2372	2369	2366	2365
7.0	2243	2238	2228	2218	2210	2202	2198	2194	2194
9.0	2072	2063	2050	2038	2027	2019	2013	2010	2009
11.0	1885	1872	1857	1843	1832	1824	1818	1815	1814
13.0	1688	1674	1657	1643	1632	1624	1619	1616	1616
15.0	1482	1465	1449	1436	1426	1420	1417	1415	1415
17.0	1271	1254	1239	1228	1221	1218	1216	1217	1217
19.5	1003	986	974	968	967	968	971	974	975
22.5	694	680	672	669	672	679	687	694	696
25.5	436	430	425	422	422	425	431	437	440
29.0	225	229	231	229	224	218	214	213	213
33.0	129	132	133	132	130	126	123	120	119
37.5	76	77	78	77	75	72	68	64	63
42.5	37	38	37	37	35	33	32	32	32
47.5	19	19	18	17	16	16	16	16	16
55.0	10	10	10	10	9	9	9	9	9
65.0	7	7	7	7	7	7	7	7	7
75.0	6	6	6	6	6	6	6	6	6
85.0	6	6	6	6	6	6	6	6	6
90.0	0	0	0	0	0	0	0	0	0

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	844.66	N.A.	87.30
0-40	910.53	N.A.	94.10
0-60	944.75	N.A.	97.70
0-90	967.29	N.A.	100.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
0-180	967.29	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	178.40
10-20	421.07
20-30	245.19
30-40	65.87
40-50	26.05
50-60	8.17
60-70	7.73
70-80	6.69
80-90	8.11
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

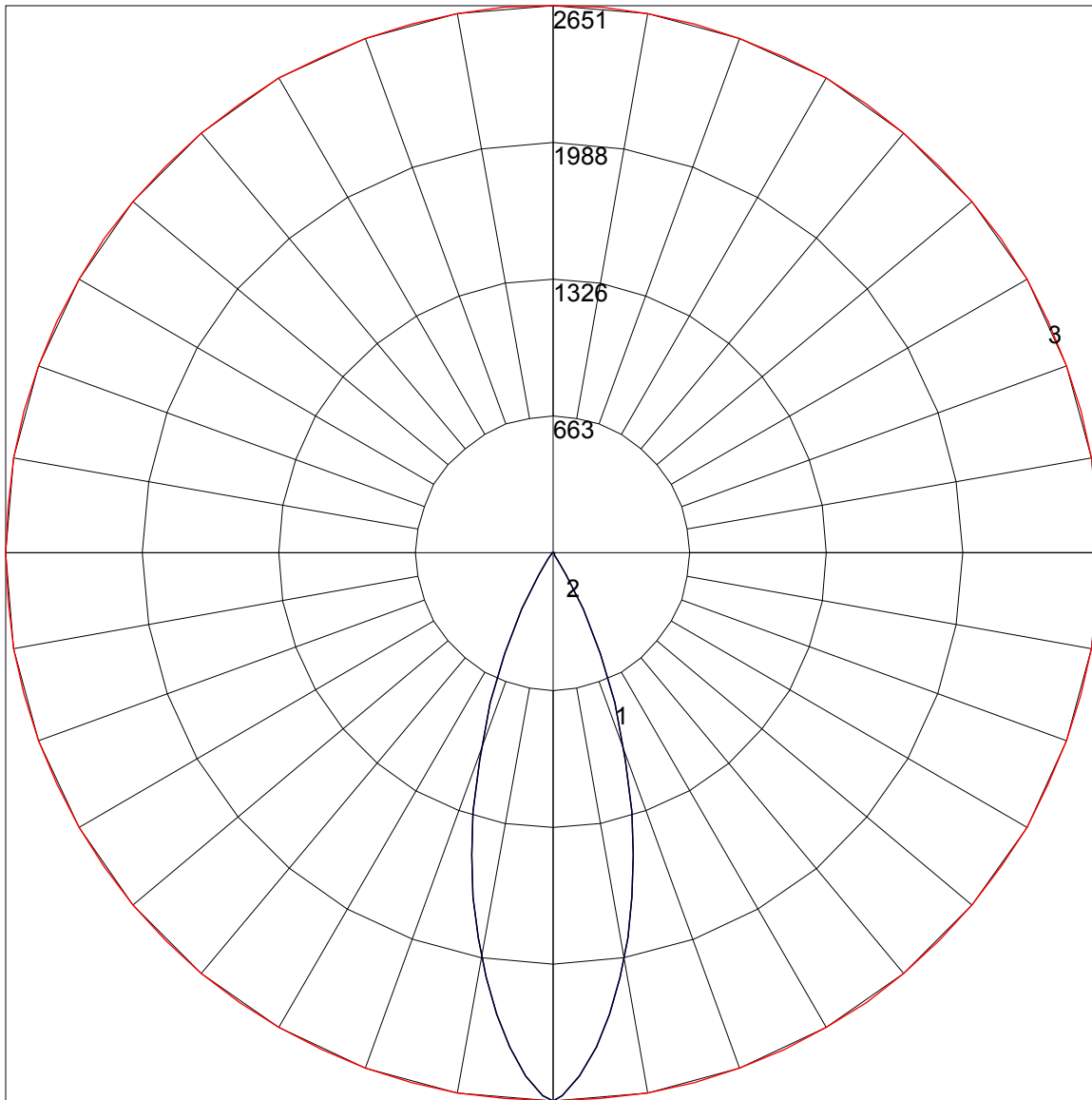
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89
3	105	99	94	91	103	97	93	90	95	92	89	93	90	87	90	88	86	85
4	100	94	89	85	99	93	88	85	91	87	84	89	85	83	87	84	82	80
5	96	89	84	80	95	88	83	80	87	82	79	85	81	79	83	80	78	77
6	93	85	80	76	91	84	79	76	83	79	75	81	78	75	80	77	74	73
7	89	81	76	72	88	81	76	72	79	75	72	78	74	72	77	74	71	70
8	86	78	73	69	85	77	72	69	76	72	69	75	71	68	74	71	68	67
9	83	75	69	66	82	74	69	66	73	69	66	72	68	66	72	68	65	64
10	80	72	67	63	79	71	66	63	70	66	63	70	66	63	69	65	63	62

POLAR GRAPH



Maximum Candela = 2651 Located At Horizontal Angle = 0, Vertical Angle = 0

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

2 - Vertical Plane Through Horizontal Angles (0 - 180)

3 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)