



IES FLOOD REPORT

PHOTOMETRIC FILENAME : ZNF-70L-MF-50-GS.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-13168
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUE DATE] 06/30/22
[TEST DATE] 01/05/22
[MANUFACTURER] LSI INDUSTRIES, INC.
[LUMEN CATEGORY] ZNF-70L-MF-50-GS
[OTHER] TEST PROCEDURE: IESNA LM-79-08
[OTHER] SCALED FROM ORIGINAL TEST DATA
[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED
[SEARCH_SOURCE TYPE] LED
[SEARCH_APPLICATION] Outdoor
[SEARCH_COLOR TEMP] 5000

Note: Candela values converted from Type-C to Type-B

CHARACTERISTICS

NEMA Type	4 H x 4 V
Maximum Candela	172695
Maximum Candela Angle	-1H -1V
Horizontal Beam Angle (50%)	32.2
Vertical Beam Angle (50%)	31.9
Horizontal Field Angle (10%)	59.9
Vertical Field Angle (10%)	58.7
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	32362
Beam Efficiency	N.A.
Field Lumens	54824
Field Efficiency	N.A.
Spill Lumens	12763
Luminaire Lumens	67587
Total Efficiency	N.A.
Total Luminaire Watts	462.3
Ballast Factor	1.00

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AXIAL CANDELA

DEG.	HOR.	DEG.	VERT.
90	2	90	0
85	43	85	0
75	291	75	0
65	767	65	130
55	1939	55	993
47.5	3277	47.5	1794
42.5	4880	42.5	3145
37.5	8195	37.5	5707
33	12654	33	9627
29	18544	29	14548
25.5	28202	25.5	22315
22.5	40074	22.5	33071
19.5	57410	19.5	48871
17	77475	17	69613
15	98249	15	90544
13	118695	13	112876
11	135853	11	131975
9	149481	9	147066
7	159952	7	158359
5	168256	5	167049
3	171442	3	170912
1	172208	1	172064
0	172188	0	172188
-1	172208	-1	172547
-3	171442	-3	172650
-5	168256	-5	170912
-7	159952	-7	162994
-9	149481	-9	152889
-11	135853	-11	140005
-13	118695	-13	123888
-15	98249	-15	104223
-17	77475	-17	83141
-19.5	57410	-19.5	61753
-22.5	40074	-22.5	43914
-25.5	28202	-25.5	31333
-29	18544	-29	20340
-33	12654	-33	13908
-37.5	8195	-37.5	9105
-42.5	4880	-42.5	5667
-47.5	3277	-47.5	3871
-55	1939	-55	2419
-65	767	-65	1069
-75	291	-75	483
-85	43	-85	127
-90	2	-90	28

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CANDELA TABULATION

Maximum Candela = 172695

Beam Edge = 86347.5 Cd (50% of Max.)

Field Edge = 17269.5 Cd (10% of Max.)

* Indicates Values Inside Field Edge

Vert. Angles	Horizontal Angles									
	<u>-90.0</u>	<u>-85.0</u>	<u>-75.0</u>	<u>-65.0</u>	<u>-55.0</u>	<u>-47.5</u>	<u>-42.5</u>	<u>-37.5</u>	<u>-33.0</u>	<u>-29.0</u>
90.0	2	2	2	2	2	2	2	1	1	1
85.0	2	4	6	5	5	5	4	3	2	2
75.0	2	8	23	33	37	35	32	27	19	16
65.0	2	11	51	96	139	158	167	171	174	177
55.0	2	17	88	182	281	372	446	521	594	667
47.5	2	23	119	249	418	581	727	935	1019	1173
42.5	2	26	141	301	534	807	1063	1275	1577	1812
37.5	2	29	163	361	693	1142	1408	1873	2266	2643
33.0	2	32	182	422	859	1345	1886	2454	2998	3707
29.0	2	34	200	476	1012	1650	2325	3012	3916	5128
25.5	2	36	214	525	1166	1948	2698	3587	4944	6609
22.5	2	37	226	564	1289	2189	3000	4153	5975	8160
19.5	2	38	237	604	1400	2396	3320	4851	7065	9860
17.0	2	39	246	635	1489	2553	3579	5430	8101	11361
15.0	2	40	253	658	1559	2686	3823	5853	8901	12504
13.0	2	41	259	679	1628	2807	4055	6343	9626	13589
11.0	2	42	266	698	1694	2914	4257	6782	10356	14616
9.0	2	42	271	715	1758	3009	4436	7150	11037	15571
7.0	2	43	277	730	1816	3090	4589	7458	11622	16533
5.0	2	43	283	743	1860	3158	4716	7705	12097	17443 *
3.0	2	43	286	756	1905	3230	4838	7922	12449	18129 *
1.0	2	43	289	763	1928	3261	4866	8129	12615	18474 *
0.0	2	43	291	767	1939	3277	4880	8195	12654	18544 *
-1.0	2	43	292	772	1947	3285	4925	8229	12700	18690 *
-3.0	2	43	295	782	1962	3302	5013	8221	12705	18747 *
-5.0	2	44	297	786	1953	3280	4995	8153	12610	18348 *
-7.0	2	44	296	790	1945	3277	4939	8013	12393	17691 *
-9.0	2	44	296	790	1923	3265	4852	7800	12046	16965
-11.0	2	45	296	788	1894	3237	4733	7516	11534	16204
-13.0	2	43	295	781	1859	3193	4583	7157	10903	15304
-15.0	2	43	293	772	1819	3132	4400	6737	10257	14275
-17.0	2	43	291	760	1775	3054	4213	6394	9532	13249
-19.5	2	42	287	743	1712	2957	4033	5904	8595	11913
-22.5	2	42	282	717	1632	2827	3783	5275	7557	10337
-25.5	2	41	275	691	1540	2670	3545	4724	6529	8719
-29.0	2	39	265	656	1417	2403	3258	4171	5417	7059
-33.0	2	38	252	614	1280	2073	2899	3654	4448	5488
-37.5	2	35	234	560	1114	1807	2376	3112	3672	4270
-42.5	2	32	212	498	949	1502	1916	2429	2988	3381
-47.5	2	29	187	440	803	1193	1532	1905	2200	2575
-55.0	2	23	150	354	603	851	1037	1243	1440	1635
-65.0	2	17	98	230	387	505	592	685	768	830
-75.0	2	12	51	118	198	263	305	344	377	403
-85.0	2	6	18	35	56	74	85	94	101	107
-90.0	2	3	6	11	15	19	21	23	25	25

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CANDELA TABULATION - (Cont.)

Vert. Angles	Horizontal Angles									
	-25.5	-22.5	-19.5	-17.0	-15.0	-13.0	-11.0	-9.0	-7.0	-5.0
90.0	1	1	1	1	1	1	1	0	0	0
85.0	1	1	1	1	1	1	1	0	0	0
75.0	10	7	5	3	1	1	1	0	0	0
65.0	173	170	171	168	164	159	155	150	143	136
55.0	735	792	835	853	869	884	903	926	950	972
47.5	1312	1431	1523	1588	1635	1669	1693	1722	1740	1747
42.5	2015	2194	2373	2493	2621	2746	2849	2948	3036	3102
37.5	3048	3458	3904	4244	4485	4786	5044	5260	5460	5606
33.0	4552	5343	6112	6821	7373	7879	8366	8781	9130	9395
29.0	6423	7670	8944	10041	10848	11690	12415	13005	13574	14091
25.5	8453	10205	11994	13451	14895	16285	17428 *	19014 *	20357 *	21384 *
22.5	10523	12706	15193	17715 *	20150 *	22719 *	25001 *	27647 *	29811 *	31457 *
19.5	12750	15694	19601 *	24004 *	27736 *	31649 *	35422 *	39659 *	43140 *	45694 *
17.0	14612	18789 *	24767 *	30522 *	35288 *	40946 *	46100 *	52770 *	58563 *	62710 *
15.0	16416	21809 *	29358 *	36263 *	42775 *	49548 *	57629 *	65217 *	74925 *	81966 *
13.0	18274 *	25036 *	34064 *	43062 *	50795 *	60978 *	71532 *	83188 *	93870 *	102367 *
11.0	20078 *	28023 *	38484 *	49304 *	60440 *	73042 *	87692 *	101282 *	113727 *	121965 *
9.0	22320 *	31380 *	43441 *	56750 *	69252 *	86221 *	102478 *	117787 *	129632 *	138472 *
7.0	24317 *	34287 *	47662 *	63253 *	79718 *	97969 *	115557 *	130035 *	142146 *	149972 *
5.0	25946 *	36884 *	51075 *	68236 *	87957 *	107377 *	125170 *	139749 *	150111 *	158271 *
3.0	27199 *	39060 *	54775 *	73445 *	94083 *	114119 *	131568 *	145841 *	156434 *	163878 *
1.0	27987 *	40164 *	57048 *	76884 *	97829 *	117865 *	135075 *	148798 *	159458 *	168333 *
0.0	28202 *	40074 *	57410 *	77475 *	98249 *	118695 *	135853 *	149481 *	159952 *	168256 *
-1.0	28380 *	40280 *	56983 *	76847 *	98533 *	119380 *	136749 *	150173 *	160582 *	169057 *
-3.0	28283 *	39831 *	55644 *	75188 *	96241 *	116491 *	133651 *	147892 *	158467 *	166144 *
-5.0	27491 *	38679 *	53346 *	72248 *	91842 *	111376 *	129353 *	143752 *	154080 *	162219 *
-7.0	26250 *	36968 *	51039 *	67860 *	84989 *	103730 *	121176 *	135647 *	147396 *	154294 *
-9.0	24677 *	34835 *	47835 *	61983 *	75722 *	93382 *	109750 *	125378 *	136187 *	144631 *
-11.0	22752 *	32081 *	43248 *	54971 *	67418 *	80817 *	95965 *	110546 *	122733 *	131373 *
-13.0	21075 *	28953 *	38693 *	48810 *	57856 *	68945 *	81389 *	94895 *	105911 *	114099 *
-15.0	19064 *	25584 *	34027 *	42185 *	49974 *	58172 *	68400 *	77579 *	87538 *	94644 *
-17.0	17139	22421 *	29664 *	36709 *	42644 *	49661 *	56202 *	63785 *	70363 *	75059 *
-19.5	15279	19105 *	24397 *	29980 *	34715 *	39850 *	44646 *	49585 *	53424 *	56315 *
-22.5	13056	15833	19335 *	22914 *	26243 *	29649 *	32791 *	36280 *	39065 *	41134 *
-25.5	10973	13079	15460	17552 *	19656 *	21830 *	23775 *	26051 *	28047 *	29512 *
-29.0	8784	10399	12117	13509	14576	15785	16883	17876 *	18900 *	19745 *
-33.0	6606	7678	8789	9849	10673	11409	12070	12646	13116	13468
-37.5	4882	5475	6155	6698	7100	7600	8046	8431	8726	8956
-42.5	3729	4016	4324	4555	4788	5019	5222	5377	5489	5568
-47.5	2913	3117	3304	3424	3507	3581	3644	3714	3772	3817
-55.0	1757	1846	1939	2035	2105	2169	2229	2282	2326	2361
-65.0	883	920	959	989	1011	1030	1044	1056	1065	1072
-75.0	426	440	450	456	460	465	469	473	476	481
-85.0	112	117	121	124	127	127	130	129	129	128
-90.0	26	26	27	27	27	28	28	28	29	29

Vert. Angles	Horizontal Angles									
	-3.0	-1.0	0.0	1.0	3.0	5.0	7.0	9.0	11.0	13.0
90.0	0	0	0	0	0	0	0	0	1	1
85.0	0	0	0	0	0	0	0	0	1	1
75.0	0	0	0	0	0	0	0	0	1	1
65.0	134	131	130	131	134	136	143	150	155	159

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CANDELA TABULATION - (Cont.)

55.0	996	997	993	997	996	972	950	926	903	884
47.5	1771	1790	1794	1790	1771	1747	1740	1722	1693	1669
42.5	3166	3139	3145	3139	3166	3102	3036	2948	2849	2746
37.5	5696	5691	5707	5691	5696	5606	5460	5260	5044	4786
33.0	9558	9576	9627	9576	9558	9395	9130	8781	8366	7879
29.0	14411	14510	14548	14510	14411	14091	13574	13005	12415	11690
25.5	22046 *	22353 *	22315 *	22353 *	22046 *	21384 *	20357 *	19014 *	17428 *	16285
22.5	32559 *	33271 *	33071 *	33271 *	32559 *	31457 *	29811 *	27647 *	25001 *	22719 *
19.5	47519 *	49141 *	48871 *	49141 *	47519 *	45694 *	43140 *	39659 *	35422 *	31649 *
17.0	65789 *	68134 *	69613 *	68134 *	65789 *	62710 *	58563 *	52770 *	46100 *	40946 *
15.0	86641 *	89398 *	90544 *	89398 *	86641 *	81966 *	74925 *	65217 *	57629 *	49548 *
13.0	108276 *	111205 *	112876 *	111205 *	108276 *	102367 *	93870 *	83188 *	71532 *	60978 *
11.0	127610 *	130935 *	131975 *	130935 *	127610 *	121965 *	113727 *	101282 *	87692 *	73042 *
9.0	143420 *	146427 *	147066 *	146427 *	143420 *	138472 *	129632 *	117787 *	102478 *	86221 *
7.0	154859 *	157550 *	158359 *	157550 *	154859 *	149972 *	142146 *	130035 *	115557 *	97969 *
5.0	163369 *	166535 *	167049 *	166535 *	163369 *	158271 *	150111 *	139749 *	125170 *	107377 *
3.0	168514 *	170195 *	170912 *	170195 *	168514 *	163878 *	156434 *	145841 *	131568 *	114119 *
1.0	171179 *	172013 *	172064 *	172013 *	171179 *	168333 *	159458 *	148798 *	135075 *	117865 *
0.0	171442 *	172208 *	172188 *	172208 *	171442 *	168256 *	159952 *	149481 *	135853 *	118695 *
-1.0	171716 *	172695 *	172547 *	172695 *	171716 *	169057 *	160582 *	150173 *	136749 *	119380 *
-3.0	171149 *	172528 *	172650 *	172528 *	171149 *	166144 *	158467 *	147892 *	133651 *	116491 *
-5.0	166786 *	170835 *	170912 *	170835 *	166786 *	162219 *	154080 *	143752 *	129353 *	111376 *
-7.0	159755 *	162908 *	162994 *	162908 *	159755 *	154294 *	147396 *	135647 *	121176 *	103730 *
-9.0	150321 *	152555 *	152889 *	152555 *	150321 *	144631 *	136187 *	125378 *	109750 *	93382 *
-11.0	137101 *	139350 *	140005 *	139350 *	137101 *	131373 *	122733 *	110546 *	95965 *	80817 *
-13.0	119954 *	123206 *	123888 *	123206 *	119954 *	114099 *	105911 *	94895 *	81389 *	68945 *
-15.0	100031 *	103956 *	104223 *	103956 *	100031 *	94644 *	87538 *	77579 *	68400 *	58172 *
-17.0	79635 *	82689 *	83141 *	82689 *	79635 *	75059 *	70363 *	63785 *	56202 *	49661 *
-19.5	59588 *	61518 *	61753 *	61518 *	59588 *	56315 *	53424 *	49585 *	44646 *	39850 *
-22.5	42555 *	43628 *	43914 *	43628 *	42555 *	41134 *	39065 *	36280 *	32791 *	29649 *
-25.5	30480 *	31127 *	31333 *	31127 *	30480 *	29512 *	28047 *	26051 *	23775 *	21830 *
-29.0	20311 *	20428 *	20340 *	20428 *	20311 *	19745 *	18900 *	17876 *	16883	15785
-33.0	13699	13864	13908	13864	13699	13468	13116	12646	12070	11409
-37.5	9116	9136	9105	9136	9116	8956	8726	8431	8046	7600
-42.5	5656	5663	5667	5663	5656	5568	5489	5377	5222	5019
-47.5	3865	3869	3871	3869	3865	3817	3772	3714	3644	3581
-55.0	2399	2412	2419	2412	2399	2361	2326	2282	2229	2169
-65.0	1076	1071	1069	1071	1076	1072	1065	1056	1044	1030
-75.0	482	483	483	483	482	481	476	473	469	465
-85.0	128	127	127	127	128	128	129	129	130	127
-90.0	29	28	28	28	29	29	29	28	28	28

Vert. Angles **Horizontal Angles**

	<u>15.0</u>	<u>17.0</u>	<u>19.5</u>	<u>22.5</u>	<u>25.5</u>	<u>29.0</u>	<u>33.0</u>	<u>37.5</u>	<u>42.5</u>	<u>47.5</u>
90.0	1	1	1	1	1	1	1	1	2	2
85.0	1	1	1	1	1	2	2	3	4	5
75.0	1	3	5	7	10	16	19	27	32	35
65.0	164	168	171	170	173	177	174	171	167	158
55.0	869	853	835	792	735	667	594	521	446	372
47.5	1635	1588	1523	1431	1312	1173	1019	935	727	581
42.5	2621	2493	2373	2194	2015	1812	1577	1275	1063	807
37.5	4485	4244	3904	3458	3048	2643	2266	1873	1408	1142
33.0	7373	6821	6112	5343	4552	3707	2998	2454	1886	1345
29.0	10848	10041	8944	7670	6423	5128	3916	3012	2325	1650
25.5	14895	13451	11994	10205	8453	6609	4944	3587	2698	1948

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CANDELA TABULATION - (Cont.)

22.5	20150 *	17715 *	15193	12706	10523	8160	5975	4153	3000	2189
19.5	27736 *	24004 *	19601 *	15694	12750	9860	7065	4851	3320	2396
17.0	35288 *	30522 *	24767 *	18789 *	14612	11361	8101	5430	3579	2553
15.0	42775 *	36263 *	29358 *	21809 *	16416	12504	8901	5853	3823	2686
13.0	50795 *	43062 *	34064 *	25036 *	18274 *	13589	9626	6343	4055	2807
11.0	60440 *	49304 *	38484 *	28023 *	20078 *	14616	10356	6782	4257	2914
9.0	69252 *	56750 *	43441 *	31380 *	22320 *	15571	11037	7150	4436	3009
7.0	79718 *	63253 *	47662 *	34287 *	24317 *	16533	11622	7458	4589	3090
5.0	87957 *	68236 *	51075 *	36884 *	25946 *	17443 *	12097	7705	4716	3158
3.0	94083 *	73445 *	54775 *	39060 *	27199 *	18129 *	12449	7922	4838	3230
1.0	97829 *	76884 *	57048 *	40164 *	27987 *	18474 *	12615	8129	4866	3261
0.0	98249 *	77475 *	57410 *	40074 *	28202 *	18544 *	12654	8195	4880	3277
-1.0	98533 *	76847 *	56983 *	40280 *	28380 *	18690 *	12700	8229	4925	3285
-3.0	96241 *	75188 *	55644 *	39831 *	28283 *	18747 *	12705	8221	5013	3302
-5.0	91842 *	72248 *	53346 *	38679 *	27491 *	18348 *	12610	8153	4995	3280
-7.0	84989 *	67860 *	51039 *	36968 *	26250 *	17691 *	12393	8013	4939	3277
-9.0	75722 *	61983 *	47835 *	34835 *	24677 *	16965	12046	7800	4852	3265
-11.0	67418 *	54971 *	43248 *	32081 *	22752 *	16204	11534	7516	4733	3237
-13.0	57856 *	48810 *	38693 *	28953 *	21075 *	15304	10903	7157	4583	3193
-15.0	49974 *	42185 *	34027 *	25584 *	19064 *	14275	10257	6737	4400	3132
-17.0	42644 *	36709 *	29664 *	22421 *	17139	13249	9532	6394	4213	3054
-19.5	34715 *	29980 *	24397 *	19105 *	15279	11913	8595	5904	4033	2957
-22.5	26243 *	22914 *	19335 *	15833	13056	10337	7557	5275	3783	2827
-25.5	19656 *	17552 *	15460	13079	10973	8719	6529	4724	3545	2670
-29.0	14576	13509	12117	10399	8784	7059	5417	4171	3258	2403
-33.0	10673	9849	8789	7678	6606	5488	4448	3654	2899	2073
-37.5	7100	6698	6155	5475	4882	4270	3672	3112	2376	1807
-42.5	4788	4555	4324	4016	3729	3381	2988	2429	1916	1502
-47.5	3507	3424	3304	3117	2913	2575	2200	1905	1532	1193
-55.0	2105	2035	1939	1846	1757	1635	1440	1243	1037	851
-65.0	1011	989	959	920	883	830	768	685	592	505
-75.0	460	456	450	440	426	403	377	344	305	263
-85.0	127	124	121	117	112	107	101	94	85	74
-90.0	27	27	27	26	26	25	25	23	21	19

Vert. Angles	Horizontal Angles				
	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>	<u>85.0</u>	<u>90.0</u>
90.0	2	2	2	2	2
85.0	5	5	6	4	2
75.0	37	33	23	8	2
65.0	139	96	51	11	2
55.0	281	182	88	17	2
47.5	418	249	119	23	2
42.5	534	301	141	26	2
37.5	693	361	163	29	2
33.0	859	422	182	32	2
29.0	1012	476	200	34	2
25.5	1166	525	214	36	2
22.5	1289	564	226	37	2
19.5	1400	604	237	38	2
17.0	1489	635	246	39	2
15.0	1559	658	253	40	2
13.0	1628	679	259	41	2
11.0	1694	698	266	42	2
9.0	1758	715	271	42	2

IES FLOOD REPORT
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CANDELA TABULATION - (Cont.)

7.0	1816	730	277	43	2
5.0	1860	743	283	43	2
3.0	1905	756	286	43	2
1.0	1928	763	289	43	2
0.0	1939	767	291	43	2
-1.0	1947	772	292	43	2
-3.0	1962	782	295	43	2
-5.0	1953	786	297	44	2
-7.0	1945	790	296	44	2
-9.0	1923	790	296	44	2
-11.0	1894	788	296	45	2
-13.0	1859	781	295	43	2
-15.0	1819	772	293	43	2
-17.0	1775	760	291	43	2
-19.5	1712	743	287	42	2
-22.5	1632	717	282	42	2
-25.5	1540	691	275	41	2
-29.0	1417	656	265	39	2
-33.0	1280	614	252	38	2
-37.5	1114	560	234	35	2
-42.5	949	498	212	32	2
-47.5	803	440	187	29	2
-55.0	603	354	150	23	2
-65.0	387	230	98	17	2
-75.0	198	118	51	12	2
-85.0	56	35	18	6	2
-90.0	15	11	6	3	2

IES FLOOD REPORT
PHOTOMETRIC FILENAME : ZNF-70L-MF-50-GS.IES

LUMEN TABULATION

Average Of Right And Left Sides

Total Luminaire Lumens (one side of beam only) = 33793.44

Total Field Lumens (one side of beam only) = 27411.95

* Indicates Values Inside Field Edge

Vert. Angles	Horizontal Angles									
	<u>0</u>	<u>1</u>	<u>3</u>	<u>5</u>	<u>7</u>	<u>9</u>	<u>11</u>	<u>13</u>	<u>15</u>	<u>17</u>
90										
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02
65	0.20	0.40	0.41	0.42	0.44	0.46	0.47	0.48	0.49	0.63
55	1.71	3.44	3.40	3.33	3.27	3.20	3.13	3.07	3.01	3.66
47.5	3.18	6.34	6.25	6.14	6.04	5.90	5.75	5.60	5.43	6.51
42.5	3.76	7.51	7.43	7.29	7.12	6.91	6.67	6.41	6.10	7.21
37.5	6.73	13.46	13.35	13.03	12.60	12.07	11.49	10.82	10.13	11.76
33	10.49	20.90	20.68	20.17	19.43	18.53	17.48	16.31	15.10	17.15
29	14.70	29.26	28.84	27.98	26.84	25.54	24.04	22.34	20.54	23.08
25.5	19.65 *	39.06 *	38.25 *	36.79 *	34.81	32.47	30.15	27.78	25.23	28.11
22.5	25.36 *	50.33 *	48.97 *	46.81 *	43.81 *	40.09 *	36.39 *	32.83 *	29.08	31.65
19.5	37.55 *	74.20 *	71.66 *	68.21 *	63.46 *	57.47 *	51.30 *	45.33 *	39.35 *	41.50 *
17	44.88 *	87.74 *	84.21 *	79.56 *	73.20 *	65.23 *	57.40 *	50.10 *	43.02 *	44.70 *
15	48.38 *	94.36 *	90.28 *	84.27 *	75.85 *	66.51 *	57.87 *	49.82 *	42.41 *	43.72 *
13	61.53 *	120.40 *	115.24 *	106.97 *	95.68 *	83.26 *	71.41 *	60.32 *	50.62 *	51.62 *
11	74.17 *	145.52 *	139.84 *	130.85 *	118.26 *	103.10 *	87.37 *	72.49 *	59.61 *	59.63 *
9	84.74 *	166.94 *	161.49 *	152.62 *	139.49 *	122.76 *	104.11 *	85.40 *	69.03 *	67.97 *
7	92.81 *	183.34 *	178.28 *	169.71 *	156.73 *	139.75 *	119.84 *	98.47 *	78.76 *	76.33 *
5	98.92 *	195.53 *	190.36 *	181.91 *	169.53 *	153.14 *	132.91 *	110.25 *	87.60 *	83.25 *
3	102.76 *	203.54 *	198.73 *	190.45 *	178.61 *	162.68 *	142.49 *	119.27 *	94.79 *	89.50 *
1	104.35 *	207.58 *	204.16 *	196.33 *	184.16 *	168.37 *	148.56 *	125.28 *	100.21 *	94.79 *
0	52.43 *	104.54 *	103.19 *	99.36 *	93.16 *	85.37 *	75.60 *	63.93 *	51.30 *	48.60 *
-1	52.52 *	104.73 *	103.38 *	99.64 *	93.54 *	85.83 *	76.08 *	64.26 *	51.40 *	48.58 *
	105.15 *	209.47 *	206.04 *	198.19 *	186.14 *	170.52 *	150.84 *	127.28 *	101.55 *	95.70 *

IES FLOOD REPORT
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LUMENS TABULATION - (Cont.)

-3	104.62 *	207.40 *	202.46 *	194.15 *	182.25 *	166.38 *	146.25 *	122.94 *	98.24 *	92.72 *
-5	101.68 *	201.00 *	195.40 *	187.21 *	175.21 *	158.96 *	138.73 *	115.84 *	92.80 *	88.41 *
-7	96.15 *	190.42 *	185.05 *	176.46 *	164.27 *	147.57 *	127.53 *	105.76 *	85.07 *	82.70 *
-9	89.07 *	176.36 *	171.20 *	162.05 *	149.26 *	132.48 *	113.19 *	93.79 *	76.16 *	75.22 *
-11	80.18 *	158.18 *	152.70 *	143.63 *	130.94 *	114.83 *	97.46 *	81.29 *	67.07 *	67.16 *
-13	69.34 *	136.12 *	130.27 *	121.84 *	110.38 *	96.67 *	82.50 *	69.44 *	58.22 *	59.20 *
-15	56.96 *	111.51 *	106.16 *	99.24 *	90.27 *	79.78 *	69.25 *	59.24 *	50.22 *	51.56 *
-17	55.04 *	107.85 *	102.78 *	96.62 *	89.42 *	80.32 *	70.90 *	61.65 *	52.72 *	54.58 *
-19.5	48.16 *	94.65 *	90.97 *	86.31 *	80.70 *	73.48 *	65.67 *	57.84 *	50.00 *	52.41 *
-22.5	34.27 *	67.48 *	65.49 *	62.60 *	58.57 *	53.50 *	48.29 *	43.17 *	37.93 *	40.82 *
-25.5	27.51 *	54.52 *	53.20 *	51.00 *	47.97 *	44.40 *	40.81 *	37.16 *	33.46	37.11
-29	20.88	41.58	40.85	39.52	37.73	35.68	33.46	31.00	28.46	32.01
-33	15.77	31.38	30.93	30.17	29.13	27.80	26.23	24.46	22.61	25.62
-37.5	11.26	22.50	22.25	21.77	21.13	20.31	19.28	18.11	16.94	19.65
-42.5	7.26	14.50	14.36	14.12	13.84	13.47	13.01	12.48	11.91	14.11
-47.5	7.18	14.32	14.18	13.95	13.68	13.35	12.99	12.59	12.16	14.51
-55	5.31	10.59	10.50	10.34	10.15	9.92	9.64	9.33	8.99	10.71
-65	2.37	4.74	4.73	4.69	4.63	4.56	4.48	4.38	4.27	5.16
-75	0.93	1.86	1.85	1.84	1.82	1.80	1.77	1.74	1.71	2.08
-85	0.12	0.24	0.24	0.24	0.24	0.24	0.23	0.23	0.22	0.27
-90										
Total	1880.02	3715.8	3610.04	3437.77	3193.75	2884.69	2533.06	2160.28	1793.95	1801.68

Vert. Horizontal Angles

Angles	19.5	22.5	25.5	29	33	37.5	42.5	47.5	55	65
90	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.02
85	0.03	0.04	0.07	0.10	0.14	0.19	0.20	0.29	0.30	0.17
75	0.75	0.75	0.89	1.01	1.09	1.16	1.06	1.32	1.16	0.53
65	4.20	3.90	4.15	4.21	4.08	3.81	3.08	3.39	2.65	1.08
55	7.33	6.68	6.91	6.76	6.44	5.75	4.29	4.43	3.22	1.24

IES FLOOD REPORT
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LUMENS TABULATION - (Cont.)

47.5										
	8.02	7.25	7.48	7.28	6.72	5.83	4.28	4.18	2.86	1.05
42.5	12.72	11.18	11.28	10.83	9.78	8.19	5.95	5.67	3.59	1.26
37.5	18.06	15.40	14.87	13.64	12.08	10.00	7.00	6.49	4.00	1.32
33	23.94	20.02	18.77	16.45	13.86	11.29	7.76	6.95	4.21	1.33
29	28.97	23.92	22.07	18.82	15.14	11.86	8.12	7.22	4.23	1.29
25.5	32.05	26.22	23.98	20.12	15.66	11.76	7.94	7.06	4.04	1.19
22.5	40.43	32.35	29.35	24.33	18.50	13.41	8.81	7.80	4.40	1.27
19.5	42.04 *	32.27	28.78	23.75	17.80	12.52	7.97	7.00	3.92	1.12
17	40.40 *	29.89 *	26.01	21.34	15.83	10.90	6.80	5.92	3.30	0.93
15	47.03 *	34.03 *	28.80	23.30	17.19	11.71	7.20	6.20	3.44	0.96
13	53.57 *	38.15 *	31.54	25.16	18.53	12.50	7.55	6.46	3.57	0.99
11	60.28 *	42.49 *	34.39 *	26.93	19.77	13.19	7.87	6.70	3.70	1.01
9	66.87 *	46.87 *	37.31 *	28.59	20.85	13.78	8.14	6.91	3.82	1.04
7	72.47 *	50.68 *	39.92 *	30.12	21.76	14.27	8.37	7.09	3.92	1.06
5	77.54 *	53.88 *	42.04 *	31.39	22.48	14.69	8.58	7.25	4.00	1.08
3	81.49 *	56.10 *	43.49 *	32.20	23.01	15.02	8.72	7.38	4.07	1.09
1	41.52 *	28.47 *	22.08 *	16.26	11.64	7.60	4.38	3.72	2.05	0.55
0	41.53 *	28.58 *	22.23 *	16.34	11.69	7.65	4.41	3.73	2.06	0.55
-1	82.21 *	57.09 *	44.59 *	32.81	23.42	15.39	8.90	7.50	4.16	1.11
-3	79.97 *	56.05 *	44.01 *	32.58	23.33	15.39	8.93	7.50	4.17	1.12
-5	76.79 *	54.00 *	42.54 *	31.87	23.04	15.22	8.88	7.47	4.16	1.13
-7	72.80 *	51.22 *	40.55 *	30.85	22.52	14.93	8.79	7.44	4.14	1.13
-9	67.39 *	47.72 *	38.19 *	29.63	21.77	14.52	8.66	7.37	4.10	1.13
-11	60.98 *	43.77 *	35.70 *	28.17	20.77	13.99	8.48	7.28	4.05	1.12
-13	54.28 *	39.52 *	33.04 *	26.49	19.62	13.34	8.24	7.15	3.98	1.11
-15	47.64 *	35.15 *	30.20	24.70	18.42	12.68	7.97	6.99	3.90	1.10
-17	50.96 *	38.58 *	34.10	28.25	21.28	14.98	9.59	8.48	4.74	1.35
-19.5	50.33 *	39.61	35.95	30.08	22.94	16.62	10.98	9.78	5.48	1.58

IES FLOOD REPORT
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LUMENS TABULATION - (Cont.)

-22.5	40.76	33.14	30.62	25.96	20.22	15.16	10.36	9.29	5.23	1.53
-25.5	38.11	31.58	29.47	25.33	20.41	16.02	11.19	10.04	5.73	1.72
-29	33.25	27.94	26.48	23.40	19.80	16.31	11.45	10.25	6.03	1.86
-33	26.96	23.14	22.65	21.00	18.74	15.80	11.09	10.09	6.11	1.94
-37.5	21.29	18.89	19.26	18.68	17.07	14.34	10.23	9.60	5.93	1.96
-42.5	15.74	14.37	14.92	14.55	13.32	11.35	8.27	7.94	5.11	1.74
-47.5	16.32	15.08	15.78	15.37	14.24	12.50	9.31	9.24	6.27	2.21
-55	12.08	11.28	12.09	12.20	11.57	10.37	8.03	8.38	5.99	2.16
-65	5.91	5.57	6.02	6.21	6.08	5.62	4.48	4.83	3.55	1.29
-75	2.41	2.29	2.48	2.58	2.56	2.41	1.96	2.11	1.55	0.58
-85	0.31	0.29	0.32	0.34	0.34	0.33	0.27	0.29	0.22	0.09
-90										
Total	1657.76	1235.43	1055.39	859.97	665.50	484.34	314.55	282.23	167.17	51.13

Vert. Angles	Horizontal Angles			
	<u>75</u>	<u>85</u>	<u>90</u>	<u>Total</u>
90				
	0.01	0.00	0.16	
85				
	0.05	0.00	1.65	
75				
	0.12	0.00	14.25	
65				
	0.22	0.01	66.01	
55				
	0.24	0.01	110.45	
47.5				
	0.20	0.00	121.58	
42.5				
	0.24	0.00	196.14	
37.5				
	0.24	0.00	279.36	
33				
	0.24	0.00	368.00	
29				
	0.22	0.00	454.19	
25.5				
	0.20	0.00	535.57	
22.5				
	0.21	0.00	730.89	
19.5				
	0.18	0.00	807.40	
17				
	0.15	0.00	814.95	

IES FLOOD REPORT
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LUMENS TABULATION - (Cont.)

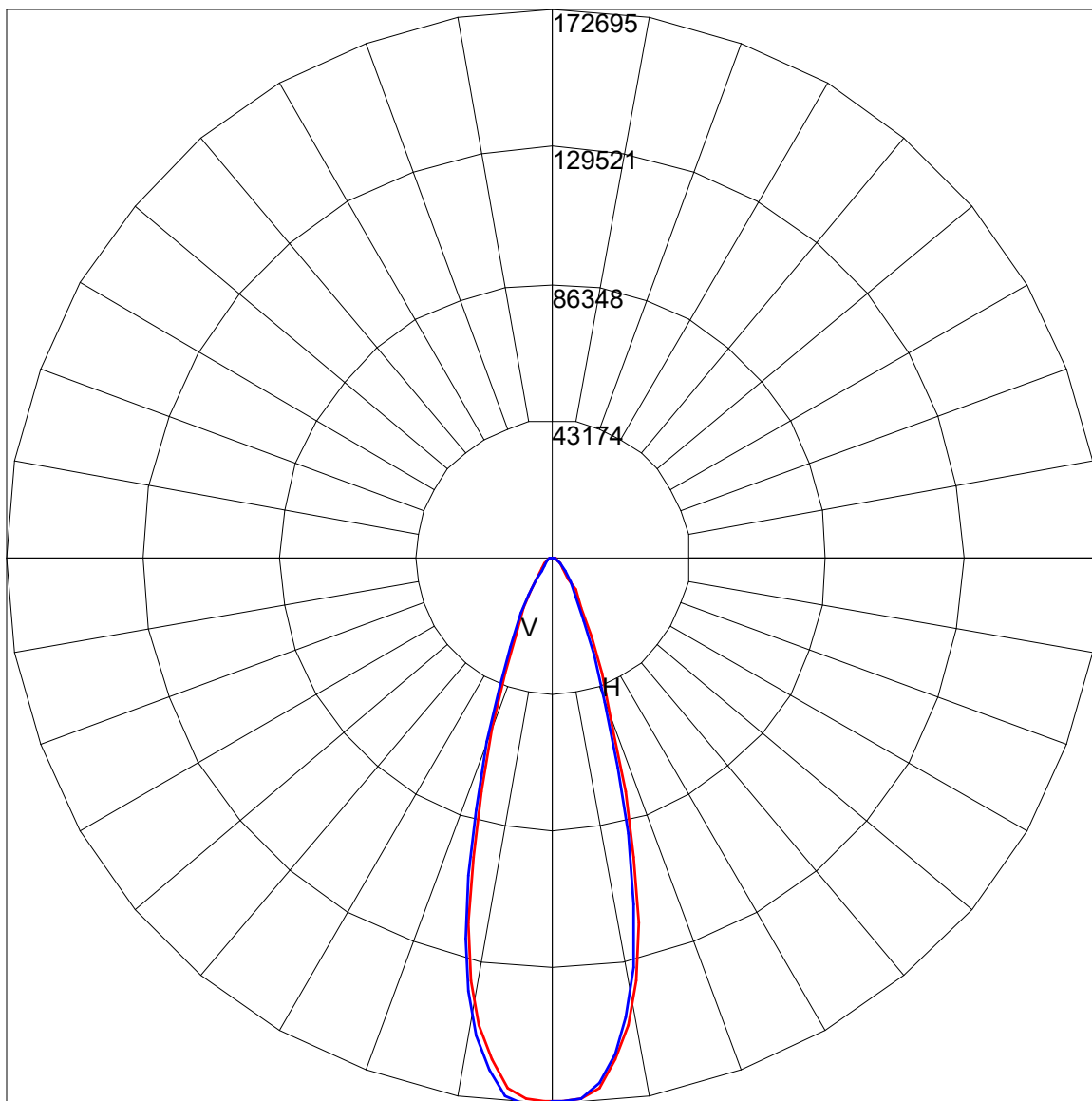
15	0.16	0.00	997.09
13	0.16	0.00	1189.03
11	0.16	0.00	1371.05
9	0.17	0.00	1528.37
7	0.17	0.00	1653.22
5	0.17	0.00	1745.92
3	0.17	0.00	1806.55
1	0.09	0.00	915.86
0	0.09	0.00	918.82
-1	0.18	0.00	1828.23
-3	0.18	0.00	1790.64
-5	0.18	0.00	1720.54
-7	0.18	0.00	1615.58
-9	0.18	0.00	1479.45
-11	0.18	0.00	1317.89
-13	0.18	0.00	1140.91
-15	0.18	0.00	963.12
-17	0.22	0.00	984.43
-19.5	0.26	0.00	923.81
-22.5	0.25	0.00	704.63
-25.5	0.29	0.00	617.03
-29	0.31	0.01	518.26
-33	0.33	0.01	421.96
-37.5	0.34	0.01	330.79
-42.5	0.30	0.01	236.69
-47.5	0.39	0.01	245.63
-55	0.38	0.01	190.02
-65	0.24	0.01	93.80

IES FLOOD REPORT
PHOTOMETRIC FILENAME : ZNF-70L-MF-50-GS.IES

LUMENS TABULATION - (Cont.)

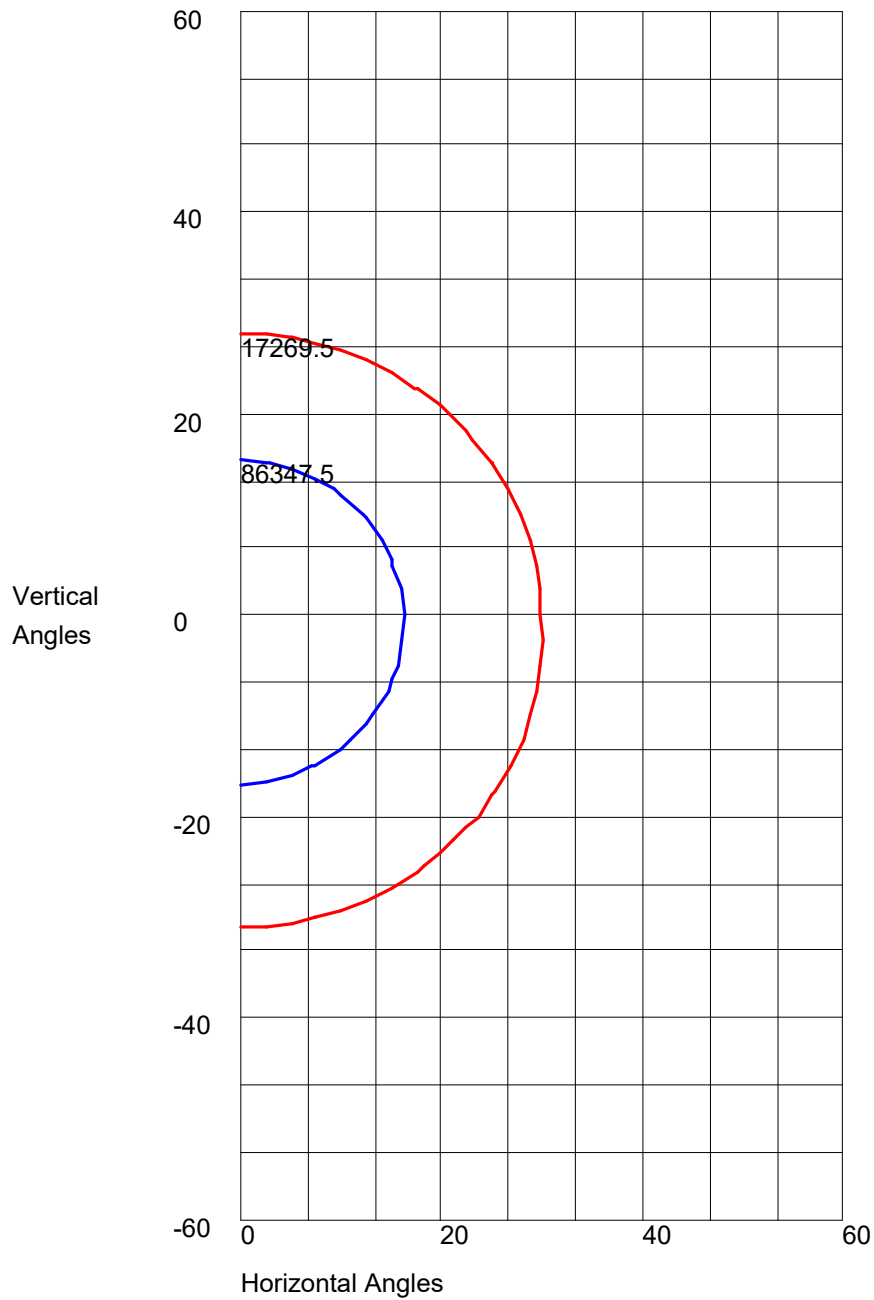
-75	0.11	0.00	38.45
-85	0.02	0.00	5.08
-90			
Total	8.77	0.17	33793.44

AXIAL CANDELA DISPLAY



Maximum Candela = 172695 Located At Horizontal Angle =-1, Vertical Angle =-1
H - Horizontal Axial Candela
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 172695 Located At Horizontal Angle =-1, Vertical Angle =-1
50% Maximum Candela = 86347.5
10% Maximum Candela = 17269.5