



IES FLOOD REPORT

PHOTOMETRIC FILENAME : ZNF-70L-MWF-50.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-13021
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUE DATE] 06/30/22
[TEST DATE] 10/20/21
[MANUFACTURER] LSI INDUSTRIES, INC.
[LUMEN CATEGORY] ZNF-70L-MWF-50
[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	5 H x 5 V
Maximum Candela	116449
Maximum Candela Angle	-1H -1V
Horizontal Beam Angle (50%)	40.4
Vertical Beam Angle (50%)	40.4
Horizontal Field Angle (10%)	78.5
Vertical Field Angle (10%)	78.5
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	34533
Beam Efficiency	N.A.
Field Lumens	62043
Field Efficiency	N.A.
Spill Lumens	8603
Luminaire Lumens	70646
Total Efficiency	N.A.
Total Luminaire Watts	462.7
Ballast Factor	1.00

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AXIAL CANDELA

DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	61	85	62
75	340	75	337
65	868	65	869
55	1961	55	1954
47.5	3503	47.5	3603
42.5	7811	42.5	7914
37.5	13707	37.5	13655
33	20498	33	20419
29	28023	29	27999
25.5	36230	25.5	36540
22.5	46449	22.5	46577
19.5	62061	19.5	62108
17	76780	17	77090
15	87457	15	87715
13	95979	13	96136
11	102698	11	102907
9	108108	9	108364
7	112392	7	112601
5	115426	5	115477
3	116272	3	116349
1	116364	1	116397
0	116284	0	116284
-1	116364	-1	116397
-3	116272	-3	116349
-5	115426	-5	115477
-7	112392	-7	112601
-9	108108	-9	108364
-11	102698	-11	102907
-13	95979	-13	96136
-15	87457	-15	87715
-17	76780	-17	77090
-19.5	62061	-19.5	62108
-22.5	46449	-22.5	46577
-25.5	36230	-25.5	36540
-29	28023	-29	27999
-33	20498	-33	20419
-37.5	13707	-37.5	13655
-42.5	7811	-42.5	7914
-47.5	3503	-47.5	3603
-55	1961	-55	1954
-65	868	-65	869
-75	340	-75	337
-85	61	-85	62
-90	0	-90	0

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CANDELA TABULATION

Maximum Candela = 116449

Beam Edge = 58224.5 Cd (50% of Max.)

Field Edge = 11644.9 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	0	0	0	0	0	0	0	0	0	0
85.0	0	4	11	19	28	36	41	46	50	52
75.0	0	11	45	90	142	181	208	233	254	272
65.0	0	18	92	190	304	397	465	541	610	664
55.0	0	28	144	304	521	736	892	1062	1234	1387
47.5	0	36	183	397	728	1065	1351	1547	1868	2159
42.5	0	41	210	466	875	1351	1611	2091	2485	2770
37.5	0	45	235	540	1052	1533	2081	2583	3373	4777
33.0	0	49	256	606	1218	1843	2472	3362	5341	7640
29.0	0	52	273	661	1350	2140	2742	4729	7594	10663
25.5	0	54	287	709	1431	2372	3314	6199	9764	13200 *
22.5	0	56	297	741	1498	2483	3921	7511	11611	15583 *
19.5	0	57	306	774	1581	2579	4738	8881	13374 *	17992 *
17.0	0	58	313	798	1667	2711	5344	9962	14867 *	19983 *
15.0	0	59	319	815	1727	2888	5864	10741	15986 *	21471 *
13.0	0	59	323	829	1781	3043	6361	11492	16988 *	22996 *
11.0	0	61	327	842	1826	3173	6794	12133 *	17941 *	24310 *
9.0	0	61	331	852	1864	3280	7159	12649 *	18758 *	25406 *
7.0	0	61	334	859	1895	3364	7453	13057 *	19415 *	26369 *
5.0	0	61	338	864	1923	3426	7676	13356 *	19923 *	27156 *
3.0	0	61	339	870	1951	3501	7875	13562 *	20275 *	27687 *
1.0	0	61	340	869	1958	3502	7832	13700 *	20467 *	27976 *
0.0	0	61	340	868	1961	3503	7811	13707 *	20498 *	28023 *
-1.0	0	61	340	869	1958	3502	7832	13700 *	20467 *	27976 *
-3.0	0	61	339	870	1951	3501	7875	13562 *	20275 *	27687 *
-5.0	0	61	338	864	1923	3426	7676	13356 *	19923 *	27156 *
-7.0	0	61	334	859	1895	3364	7453	13057 *	19415 *	26369 *
-9.0	0	61	331	852	1864	3280	7159	12649 *	18758 *	25406 *
-11.0	0	61	327	842	1826	3173	6794	12133 *	17941 *	24310 *
-13.0	0	59	323	829	1781	3043	6361	11492	16988 *	22996 *
-15.0	0	59	319	815	1727	2888	5864	10741	15986 *	21471 *
-17.0	0	58	313	798	1667	2711	5344	9962	14867 *	19983 *
-19.5	0	57	306	774	1581	2579	4738	8881	13374 *	17992 *
-22.5	0	56	297	741	1498	2483	3921	7511	11611	15583 *
-25.5	0	54	287	709	1431	2372	3314	6199	9764	13200 *
-29.0	0	52	273	661	1350	2140	2742	4729	7594	10663
-33.0	0	49	256	606	1218	1843	2472	3362	5341	7640
-37.5	0	45	235	540	1052	1533	2081	2583	3373	4777
-42.5	0	41	210	466	875	1351	1611	2091	2485	2770
-47.5	0	36	183	397	728	1065	1351	1547	1868	2159
-55.0	0	28	144	304	521	736	892	1062	1234	1387
-65.0	0	18	92	190	304	397	465	541	610	664
-75.0	0	11	45	90	142	181	208	233	254	272
-85.0	0	4	11	19	28	36	41	46	50	52
-90.0	0	0	0	0	0	0	0	0	0	0

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CANDELA TABULATION - (Cont.)

Vert. Angles	Horizontal Angles									
	<u>-25.5</u>	<u>-22.5</u>	<u>-19.5</u>	<u>-17.0</u>	<u>-15.0</u>	<u>-13.0</u>	<u>-11.0</u>	<u>-9.0</u>	<u>-7.0</u>	<u>-5.0</u>
90.0	0	0	0	0	0	0	0	0	0	0
85.0	54	56	58	60	61	62	64	63	63	63
75.0	286	297	307	314	319	323	326	329	331	334
65.0	709	738	772	798	816	831	842	851	858	862
55.0	1453	1503	1570	1656	1718	1775	1825	1865	1897	1921
47.5	2401	2528	2640	2774	2949	3103	3237	3350	3437	3500
42.5	3363	3987	4800	5397	5921	6419	6856	7207	7477	7676
37.5	6257	7555	8884	9914	10667	11428	12086 *	12637 *	13081 *	13418 *
33.0	9784	11599	13337 *	14812 *	15862 *	16837 *	17856 *	18758 *	19435 *	19927 *
29.0	13224 *	15665 *	18065 *	19994 *	21431 *	22885 *	24220 *	25365 *	26356 *	27137 *
25.5	16575 *	19676 *	22751 *	25273 *	27268 *	29138 *	30799 *	32563 *	34064 *	35171 *
22.5	19569 *	23333 *	27157 *	30294 *	32922 *	35507 *	37902 *	40659 *	42894 *	44559 *
19.5	22630 *	27125 *	31767 *	36012 *	39698 *	43721 *	47637 *	52034 *	55697 *	58569 *
17.0	25272 *	30352 *	36053 *	41622 *	46362 *	52533 *	58238 *	63996 *	68993 *	72744 *
15.0	27351 *	33029 *	39736 *	46323 *	53334 *	60334 *	67749 *	74248 *	79345 *	83065 *
13.0	29271 *	35673 *	43649 *	52574 *	60475 *	69134 *	76857 *	83394 *	88639 *	91999 *
11.0	30920 *	38122 *	47535 *	58334 *	68002 *	76972 *	84825 *	91143 *	96026 *	99360 *
9.0	32593 *	40643 *	51918 *	64075 *	74532 *	83491 *	91144 *	97577 *	101786 *	104997 *
7.0	33980 *	42661 *	55331 *	68884 *	79519 *	88815 *	96128 *	101775 *	106327 *	109330 *
5.0	35073 *	44317 *	57968 *	72359 *	83037 *	92181 *	99644 *	105092 *	109259 *	112585 *
3.0	35808 *	45533 *	60306 *	74946 *	85597 *	94479 *	101510 *	107052 *	111505 *	114231 *
1.0	36181 *	46342 *	61716 *	76389 *	87206 *	95767 *	102656 *	108113 *	112406 *	115507 *
0.0	36230 *	46449 *	62061 *	76780 *	87457 *	95979 *	102698 *	108108 *	112392 *	115426 *
-1.0	36181 *	46342 *	61716 *	76389 *	87206 *	95767 *	102656 *	108113 *	112406 *	115507 *
-3.0	35808 *	45533 *	60306 *	74946 *	85597 *	94479 *	101510 *	107052 *	111505 *	114231 *
-5.0	35073 *	44317 *	57968 *	72359 *	83037 *	92181 *	99644 *	105092 *	109259 *	112585 *
-7.0	33980 *	42661 *	55331 *	68884 *	79519 *	88815 *	96128 *	101775 *	106327 *	109330 *
-9.0	32593 *	40643 *	51918 *	64075 *	74532 *	83491 *	91144 *	97577 *	101786 *	104997 *
-11.0	30920 *	38122 *	47535 *	58334 *	68002 *	76972 *	84825 *	91143 *	96026 *	99360 *
-13.0	29271 *	35673 *	43649 *	52574 *	60475 *	69134 *	76857 *	83394 *	88639 *	91999 *
-15.0	27351 *	33029 *	39736 *	46323 *	53334 *	60334 *	67749 *	74248 *	79345 *	83065 *
-17.0	25272 *	30352 *	36053 *	41622 *	46362 *	52533 *	58238 *	63996 *	68993 *	72744 *
-19.5	22630 *	27125 *	31767 *	36012 *	39698 *	43721 *	47637 *	52034 *	55697 *	58569 *
-22.5	19569 *	23333 *	27157 *	30294 *	32922 *	35507 *	37902 *	40659 *	42894 *	44559 *
-25.5	16575 *	19676 *	22751 *	25273 *	27268 *	29138 *	30799 *	32563 *	34064 *	35171 *
-29.0	13224 *	15665 *	18065 *	19994 *	21431 *	22885 *	24220 *	25365 *	26356 *	27137 *
-33.0	9784	11599	13337 *	14812 *	15862 *	16837 *	17856 *	18758 *	19435 *	19927 *
-37.5	6257	7555	8884	9914	10667	11428	12086 *	12637 *	13081 *	13418 *
-42.5	3363	3987	4800	5397	5921	6419	6856	7207	7477	7676
-47.5	2401	2528	2640	2774	2949	3103	3237	3350	3437	3500
-55.0	1453	1503	1570	1656	1718	1775	1825	1865	1897	1921
-65.0	709	738	772	798	816	831	842	851	858	862
-75.0	286	297	307	314	319	323	326	329	331	334
-85.0	54	56	58	60	61	62	64	63	63	63
-90.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	Horizontal Angles									
	<u>-3.0</u>	<u>-1.0</u>	<u>0.0</u>	<u>1.0</u>	<u>3.0</u>	<u>5.0</u>	<u>7.0</u>	<u>9.0</u>	<u>11.0</u>	<u>13.0</u>
90.0	0	0	0	0	0	0	0	0	0	0
85.0	63	62	62	62	63	63	63	63	64	62
75.0	335	336	337	336	335	334	331	329	326	323
65.0	868	869	869	869	868	862	858	851	842	831

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CANDELA TABULATION - (Cont.)

55.0	1947	1952	1954	1952	1947	1921	1897	1865	1825	1775
47.5	3575	3594	3603	3594	3575	3500	3437	3350	3237	3103
42.5	7891	7906	7914	7906	7891	7676	7477	7207	6856	6419
37.5	13645 *	13693 *	13655 *	13693 *	13645 *	13418 *	13081 *	12637 *	12086 *	11428
33.0	20257 *	20408 *	20419 *	20408 *	20257 *	19927 *	19435 *	18758 *	17856 *	16837 *
29.0	27658 *	27946 *	27999 *	27946 *	27658 *	27137 *	26356 *	25365 *	24220 *	22885 *
25.5	35900 *	36389 *	36540 *	36389 *	35900 *	35171 *	34064 *	32563 *	30799 *	29138 *
22.5	45652 *	46418 *	46577 *	46418 *	45652 *	44559 *	42894 *	40659 *	37902 *	35507 *
19.5	60515 *	61698 *	62108 *	61698 *	60515 *	58569 *	55697 *	52034 *	47637 *	43721 *
17.0	75113 *	76479 *	77090 *	76479 *	75113 *	72744 *	68993 *	63996 *	58238 *	52533 *
15.0	85688 *	87423 *	87715 *	87423 *	85688 *	83065 *	79345 *	74248 *	67749 *	60334 *
13.0	94397 *	95667 *	96136 *	95667 *	94397 *	91999 *	88639 *	83394 *	76857 *	69134 *
11.0	101516 *	102542 *	102907 *	102542 *	101516 *	99360 *	96026 *	91143 *	84825 *	76972 *
9.0	107081 *	108138 *	108364 *	108138 *	107081 *	104997 *	101786 *	97577 *	91144 *	83491 *
7.0	111357 *	112441 *	112601 *	112441 *	111357 *	109330 *	106327 *	101775 *	96128 *	88815 *
5.0	114171 *	115336 *	115477 *	115336 *	114171 *	112585 *	109259 *	105092 *	99644 *	92181 *
3.0	115872 *	116136 *	116349 *	116136 *	115872 *	114231 *	111505 *	107052 *	101510 *	94479 *
1.0	116248 *	116449 *	116397 *	116449 *	116248 *	115507 *	112406 *	108113 *	102656 *	95767 *
0.0	116272 *	116364 *	116284 *	116364 *	116272 *	115426 *	112392 *	108108 *	102698 *	95979 *
-1.0	116248 *	116449 *	116397 *	116449 *	116248 *	115507 *	112406 *	108113 *	102656 *	95767 *
-3.0	115872 *	116136 *	116349 *	116136 *	115872 *	114231 *	111505 *	107052 *	101510 *	94479 *
-5.0	114171 *	115336 *	115477 *	115336 *	114171 *	112585 *	109259 *	105092 *	99644 *	92181 *
-7.0	111357 *	112441 *	112601 *	112441 *	111357 *	109330 *	106327 *	101775 *	96128 *	88815 *
-9.0	107081 *	108138 *	108364 *	108138 *	107081 *	104997 *	101786 *	97577 *	91144 *	83491 *
-11.0	101516 *	102542 *	102907 *	102542 *	101516 *	99360 *	96026 *	91143 *	84825 *	76972 *
-13.0	94397 *	95667 *	96136 *	95667 *	94397 *	91999 *	88639 *	83394 *	76857 *	69134 *
-15.0	85688 *	87423 *	87715 *	87423 *	85688 *	83065 *	79345 *	74248 *	67749 *	60334 *
-17.0	75113 *	76479 *	77090 *	76479 *	75113 *	72744 *	68993 *	63996 *	58238 *	52533 *
-19.5	60515 *	61698 *	62108 *	61698 *	60515 *	58569 *	55697 *	52034 *	47637 *	43721 *
-22.5	45652 *	46418 *	46577 *	46418 *	45652 *	44559 *	42894 *	40659 *	37902 *	35507 *
-25.5	35900 *	36389 *	36540 *	36389 *	35900 *	35171 *	34064 *	32563 *	30799 *	29138 *
-29.0	27658 *	27946 *	27999 *	27946 *	27658 *	27137 *	26356 *	25365 *	24220 *	22885 *
-33.0	20257 *	20408 *	20419 *	20408 *	20257 *	19927 *	19435 *	18758 *	17856 *	16837 *
-37.5	13645 *	13693 *	13655 *	13693 *	13645 *	13418 *	13081 *	12637 *	12086 *	11428
-42.5	7891	7906	7914	7906	7891	7676	7477	7207	6856	6419
-47.5	3575	3594	3603	3594	3575	3500	3437	3350	3237	3103
-55.0	1947	1952	1954	1952	1947	1921	1897	1865	1825	1775
-65.0	868	869	869	869	868	862	858	851	842	831
-75.0	335	336	337	336	335	334	331	329	326	323
-85.0	63	62	62	62	63	63	63	63	64	62
-90.0	0	0	0	0	0	0	0	0	0	0

Vert. 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	0	0	0	0	0	0	0	0	0	0
85.0	61	60	58	56	54	52	50	46	41	36
75.0	319	314	307	297	286	272	254	233	208	181
65.0	816	798	772	738	709	664	610	541	465	397
55.0	1718	1656	1570	1503	1453	1387	1234	1062	892	736
47.5	2949	2774	2640	2528	2401	2159	1868	1547	1351	1065
42.5	5921	5397	4800	3987	3363	2770	2485	2091	1611	1351
37.5	10667	9914	8884	7555	6257	4777	3373	2583	2081	1533
33.0	15862 *	14812 *	13337 *	11599	9784	7640	5341	3362	2472	1843
29.0	21431 *	19994 *	18065 *	15665 *	13224 *	10663	7594	4729	2742	2140
25.5	27268 *	25273 *	22751 *	19676 *	16575 *	13200 *	9764	6199	3314	2372

IES FLOOD REPORT
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CANDELA TABULATION - (Cont.)

22.5	32922 *	30294 *	27157 *	23333 *	19569 *	15583 *	11611	7511	3921	2483
19.5	39698 *	36012 *	31767 *	27125 *	22630 *	17992 *	13374 *	8881	4738	2579
17.0	46362 *	41622 *	36053 *	30352 *	25272 *	19983 *	14867 *	9962	5344	2711
15.0	53334 *	46323 *	39736 *	33029 *	27351 *	21471 *	15986 *	10741	5864	2888
13.0	60475 *	52574 *	43649 *	35673 *	29271 *	22996 *	16988 *	11492	6361	3043
11.0	68002 *	58334 *	47535 *	38122 *	30920 *	24310 *	17941 *	12133 *	6794	3173
9.0	74532 *	64075 *	51918 *	40643 *	32593 *	25406 *	18758 *	12649 *	7159	3280
7.0	79519 *	68884 *	55331 *	42661 *	33980 *	26369 *	19415 *	13057 *	7453	3364
5.0	83037 *	72359 *	57968 *	44317 *	35073 *	27156 *	19923 *	13356 *	7676	3426
3.0	85597 *	74946 *	60306 *	45533 *	35808 *	27687 *	20275 *	13562 *	7875	3501
1.0	87206 *	76389 *	61716 *	46342 *	36181 *	27976 *	20467 *	13700 *	7832	3502
0.0	87457 *	76780 *	62061 *	46449 *	36230 *	28023 *	20498 *	13707 *	7811	3503
-1.0	87206 *	76389 *	61716 *	46342 *	36181 *	27976 *	20467 *	13700 *	7832	3502
-3.0	85597 *	74946 *	60306 *	45533 *	35808 *	27687 *	20275 *	13562 *	7875	3501
-5.0	83037 *	72359 *	57968 *	44317 *	35073 *	27156 *	19923 *	13356 *	7676	3426
-7.0	79519 *	68884 *	55331 *	42661 *	33980 *	26369 *	19415 *	13057 *	7453	3364
-9.0	74532 *	64075 *	51918 *	40643 *	32593 *	25406 *	18758 *	12649 *	7159	3280
-11.0	68002 *	58334 *	47535 *	38122 *	30920 *	24310 *	17941 *	12133 *	6794	3173
-13.0	60475 *	52574 *	43649 *	35673 *	29271 *	22996 *	16988 *	11492	6361	3043
-15.0	53334 *	46323 *	39736 *	33029 *	27351 *	21471 *	15986 *	10741	5864	2888
-17.0	46362 *	41622 *	36053 *	30352 *	25272 *	19983 *	14867 *	9962	5344	2711
-19.5	39698 *	36012 *	31767 *	27125 *	22630 *	17992 *	13374 *	8881	4738	2579
-22.5	32922 *	30294 *	27157 *	23333 *	19569 *	15583 *	11611	7511	3921	2483
-25.5	27268 *	25273 *	22751 *	19676 *	16575 *	13200 *	9764	6199	3314	2372
-29.0	21431 *	19994 *	18065 *	15665 *	13224 *	10663	7594	4729	2742	2140
-33.0	15862 *	14812 *	13337 *	11599	9784	7640	5341	3362	2472	1843
-37.5	10667	9914	8884	7555	6257	4777	3373	2583	2081	1533
-42.5	5921	5397	4800	3987	3363	2770	2485	2091	1611	1351
-47.5	2949	2774	2640	2528	2401	2159	1868	1547	1351	1065
-55.0	1718	1656	1570	1503	1453	1387	1234	1062	892	736
-65.0	816	798	772	738	709	664	610	541	465	397
-75.0	319	314	307	297	286	272	254	233	208	181
-85.0	61	60	58	56	54	52	50	46	41	36
-90.0	0	0	0	0	0	0	0	0	0	0

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	0	0	0	0	0
85.0	28	19	11	4	0
75.0	142	90	45	11	0
65.0	304	190	92	18	0
55.0	521	304	144	28	0
47.5	728	397	183	36	0
42.5	875	466	210	41	0
37.5	1052	540	235	45	0
33.0	1218	606	256	49	0
29.0	1350	661	273	52	0
25.5	1431	709	287	54	0
22.5	1498	741	297	56	0
19.5	1581	774	306	57	0
17.0	1667	798	313	58	0
15.0	1727	815	319	59	0
13.0	1781	829	323	59	0
11.0	1826	842	327	61	0
9.0	1864	852	331	61	0

IES FLOOD REPORT
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CANDELA TABULATION - (Cont.)

7.0	1895	859	334	61	0
5.0	1923	864	338	61	0
3.0	1951	870	339	61	0
1.0	1958	869	340	61	0
0.0	1961	868	340	61	0
-1.0	1958	869	340	61	0
-3.0	1951	870	339	61	0
-5.0	1923	864	338	61	0
-7.0	1895	859	334	61	0
-9.0	1864	852	331	61	0
-11.0	1826	842	327	61	0
-13.0	1781	829	323	59	0
-15.0	1727	815	319	59	0
-17.0	1667	798	313	58	0
-19.5	1581	774	306	57	0
-22.5	1498	741	297	56	0
-25.5	1431	709	287	54	0
-29.0	1350	661	273	52	0
-33.0	1218	606	256	49	0
-37.5	1052	540	235	45	0
-42.5	875	466	210	41	0
-47.5	728	397	183	36	0
-55.0	521	304	144	28	0
-65.0	304	190	92	18	0
-75.0	142	90	45	11	0
-85.0	28	19	11	4	0
-90.0	0	0	0	0	0

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

LUMEN TABULATION

Average Of Right And Left Sides

Total Luminaire Lumens (one side of beam only) = 35323.1

Total Field Lumens (one side of beam only) = 31021.5

* 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	0.05	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.11
75	0.61	1.21	1.21	1.20	1.19	1.17	1.15	1.13	1.10	1.34
65	1.84	3.67	3.64	3.61	3.57	3.52	3.46	3.38	3.29	3.96
55	4.30	8.58	8.51	8.39	8.25	8.07	7.86	7.60	7.30	8.67
47.5	6.34	12.63	12.47	12.22	11.93	11.56	11.11	10.58	9.99	11.72
42.5	8.76	17.48	17.20	16.73	16.19	15.49	14.61	13.59	12.47	14.11
37.5	16.44	32.83	32.38	31.54	30.47	29.09	27.40	25.44	23.35	26.21
33	23.36 *	46.58 *	45.98 *	44.89 *	43.38 *	41.40 *	39.02 *	36.44 *	33.77 *	38.20 *
29	29.48 *	58.61 *	57.72 *	56.26 *	54.24 *	51.71 *	48.74 *	45.52 *	42.22 *	47.88 *
25.5	34.35 *	68.13 *	66.93 *	65.06 *	62.47 *	59.29 *	55.81 *	52.10 *	48.15 *	54.47 *
22.5	37.91 *	75.05 *	73.51 *	71.20 *	67.95 *	63.86 *	59.59 *	55.34 *	50.84 *	57.21 *
19.5	49.53 *	97.85 *	95.39 *	91.66 *	86.55 *	80.20 *	73.64 *	67.32 *	61.02 *	67.92 *
17	52.81 *	104.19 *	101.39 *	96.94 *	90.76 *	83.21 *	75.28 *	67.35 *	59.91 *	65.74 *
15	50.06 *	98.84 *	96.21 *	92.14 *	86.44 *	79.26 *	71.17 *	62.82 *	54.94 *	59.20 *
13	55.89 *	110.56 *	107.92 *	103.92 *	98.22 *	90.67 *	81.66 *	71.90 *	62.28 *	65.91 *
11	60.50 *	119.98 *	117.68 *	113.91 *	108.35 *	100.86 *	91.70 *	81.15 *	70.09 *	73.07 *
9	64.26 *	127.63 *	125.48 *	121.83 *	116.59 *	109.40 *	100.24 *	89.55 *	77.58 *	80.22 *
7	67.25 *	133.64 *	131.50 *	127.97 *	122.91 *	115.98 *	107.13 *	96.46 *	84.04 *	86.86 *
5	69.43 *	137.99 *	135.96 *	132.53 *	127.43 *	120.78 *	112.26 *	101.54 *	88.95 *	92.04 *
3	70.56 *	140.49 *	138.82 *	135.59 *	130.58 *	123.98 *	115.55 *	105.01 *	92.51 *	96.03 *
1	70.87 *	141.46 *	140.34 *	137.43 *	132.44 *	125.79 *	117.51 *	107.30 *	94.91 *	98.84 *
0	35.45 *	70.83 *	70.41 *	69.03 *	66.51 *	63.23 *	59.16 *	54.15 *	47.99 *	50.07 *
-1	35.45 *	70.83 *	70.41 *	69.03 *	66.51 *	63.23 *	59.16 *	54.15 *	47.99 *	50.07 *
	70.87 *	141.46 *	140.34 *	137.43 *	132.44 *	125.79 *	117.51 *	107.30 *	94.91 *	98.84 *

IES FLOOD REPORT
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LUMENS TABULATION - (Cont.)

-3	70.56 *	140.49 *	138.82 *	135.59 *	130.58 *	123.98 *	115.55 *	105.01 *	92.51 *	96.03 *
-5	69.43 *	137.99 *	135.96 *	132.53 *	127.43 *	120.78 *	112.26 *	101.54 *	88.95 *	92.04 *
-7	67.25 *	133.64 *	131.50 *	127.97 *	122.91 *	115.98 *	107.13 *	96.46 *	84.04 *	86.86 *
-9	64.26 *	127.63 *	125.48 *	121.83 *	116.59 *	109.40 *	100.24 *	89.55 *	77.58 *	80.22 *
-11	60.50 *	119.98 *	117.68 *	113.91 *	108.35 *	100.86 *	91.70 *	81.15 *	70.09 *	73.07 *
-13	55.89 *	110.56 *	107.92 *	103.92 *	98.22 *	90.67 *	81.66 *	71.90 *	62.28 *	65.91 *
-15	50.06 *	98.84 *	96.21 *	92.14 *	86.44 *	79.26 *	71.17 *	62.82 *	54.94 *	59.20 *
-17	52.81 *	104.19 *	101.39 *	96.94 *	90.76 *	83.21 *	75.28 *	67.35 *	59.91 *	65.74 *
-19.5	49.53 *	97.85 *	95.39 *	91.66 *	86.55 *	80.20 *	73.64 *	67.32 *	61.02 *	67.92 *
-22.5	37.91 *	75.05 *	73.51 *	71.20 *	67.95 *	63.86 *	59.59 *	55.34 *	50.84 *	57.21 *
-25.5	34.35 *	68.13 *	66.93 *	65.06 *	62.47 *	59.29 *	55.81 *	52.10 *	48.15 *	54.47 *
-29	29.48 *	58.61 *	57.72 *	56.26 *	54.24 *	51.71 *	48.74 *	45.52 *	42.22 *	47.88 *
-33	23.36 *	46.58 *	45.98 *	44.89 *	43.38 *	41.40 *	39.02 *	36.44 *	33.77 *	38.20 *
-37.5	16.44	32.83	32.38	31.54	30.47	29.09	27.40	25.44	23.35	26.21
-42.5	8.76	17.48	17.20	16.73	16.19	15.49	14.61	13.59	12.47	14.11
-47.5	6.34	12.63	12.47	12.22	11.93	11.56	11.11	10.58	9.99	11.72
-55	4.30	8.58	8.51	8.39	8.25	8.07	7.86	7.60	7.30	8.67
-65	1.84	3.67	3.64	3.61	3.57	3.52	3.46	3.38	3.29	3.96
-75	0.61	1.21	1.21	1.20	1.19	1.17	1.15	1.13	1.10	1.34
-85	0.05	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.11
-90										
Total	1620.05	3216.67	3161.48	3068.28	2933.05	2757.22	2548.29	2311.53	2053.59	2199.58

Vert. Horizontal Angles

Angles	19.5	22.5	25.5	29	33	37.5	42.5	47.5	55	65
90	0.12	0.11	0.13	0.13	0.13	0.13	0.10	0.11	0.09	0.04
85	1.53	1.45	1.57	1.64	1.63	1.54	1.25	1.38	1.06	0.43
75	4.51	4.24	4.57	4.70	4.58	4.22	3.37	3.66	2.76	1.08
65	9.77	9.19	9.98	10.17	9.64	8.63	6.70	6.99	5.02	1.90
55	13.18	12.34	13.15	13.02	11.98	10.61	8.16	8.17	5.56	2.01

IES FLOOD REPORT
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LUMENS TABULATION - (Cont.)

47.5										
	14.88	12.81	12.67	12.12	11.18	9.62	7.24	7.18	4.69	1.63
42.5	26.90	22.08	20.34	17.50	14.73	12.20	8.85	8.59	5.58	1.89
37.5	39.71	33.05	30.34	24.82	18.46	13.78	9.60	9.08	5.85	1.92
33	50.05 *	41.96 *	39.15	32.62	23.53	15.52	9.90	9.36	5.83	1.87
29	56.85 *	47.58 *	44.50 *	37.66	27.70	17.33	9.96	9.12	5.53	1.76
25.5	59.45 *	49.55 *	46.15 *	39.28 *	29.45	18.32	9.76	8.34	5.00	1.59
22.5	69.98 *	58.01 *	53.86 *	45.86 *	34.73	21.91	11.08	8.73	5.24	1.65
19.5	66.80 *	54.98 *	50.87 *	43.22 *	32.93 *	21.09	10.34	7.63	4.58	1.42
17	59.36 *	48.42 *	44.58 *	37.75 *	28.85 *	18.61	9.05	6.43	3.81	1.17
15	64.87 *	52.31 *	47.90 *	40.43 *	30.89 *	20.10	9.77	6.74	3.92	1.19
13	70.37 *	55.92 *	50.94 *	42.94 *	32.77 *	21.45	10.43	7.02	4.01	1.21
11	76.02 *	59.38 *	53.65 *	45.12 *	34.40 *	22.59	10.98	7.25	4.09	1.22
9	81.28 *	62.55 *	56.08 *	46.96 *	35.74 *	23.51	11.44	7.43	4.16	1.24
7	85.42 *	65.12 *	58.08 *	48.48 *	36.79 *	24.23	11.80	7.58	4.21	1.25
5	88.77 *	67.09 *	59.57 *	49.62 *	37.56 *	24.77	12.10	7.72	4.27	1.25
3	91.23 *	68.39 *	60.49 *	50.33 *	38.05 *	25.06	12.23	7.80	4.30	1.26
1	46.19 *	34.48 *	30.42 *	25.31 *	19.13 *	12.55	6.10	3.90	2.15	0.63
0	46.19 *	34.48 *	30.42 *	25.31 *	19.13 *	12.55	6.10	3.90	2.15	0.63
-1	91.23 *	68.39 *	60.49 *	50.33 *	38.05 *	25.06	12.23	7.80	4.30	1.26
-3	88.77 *	67.09 *	59.57 *	49.62 *	37.56 *	24.77	12.10	7.72	4.27	1.25
-5	85.42 *	65.12 *	58.08 *	48.48 *	36.79 *	24.23	11.80	7.58	4.21	1.25
-7	81.28 *	62.55 *	56.08 *	46.96 *	35.74 *	23.51	11.44	7.43	4.16	1.24
-9	76.02 *	59.38 *	53.65 *	45.12 *	34.40 *	22.59	10.98	7.25	4.09	1.22
-11	70.37 *	55.92 *	50.94 *	42.94 *	32.77 *	21.45	10.43	7.02	4.01	1.21
-13	64.87 *	52.31 *	47.90 *	40.43 *	30.89 *	20.10	9.77	6.74	3.92	1.19
-15	59.36 *	48.42 *	44.58 *	37.75 *	28.85 *	18.61	9.05	6.43	3.81	1.17
-17	66.80 *	54.98 *	50.87 *	43.22 *	32.93 *	21.09	10.34	7.63	4.58	1.42
-19.5	69.98 *	58.01 *	53.86 *	45.86 *	34.73	21.91	11.08	8.73	5.24	1.65

IES FLOOD REPORT
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LUMENS TABULATION - (Cont.)

-22.5	59.45 *	49.55 *	46.15 *	39.28 *	29.45	18.32	9.76	8.34	5.00	1.59
-25.5	56.85 *	47.58 *	44.50 *	37.66	27.70	17.33	9.96	9.12	5.53	1.76
-29	50.05 *	41.96 *	39.15	32.62	23.53	15.52	9.90	9.36	5.83	1.87
-33	39.71	33.05	30.34	24.82	18.46	13.78	9.60	9.08	5.85	1.92
-37.5	26.90	22.08	20.34	17.50	14.73	12.20	8.85	8.59	5.58	1.89
-42.5	14.88	12.81	12.67	12.12	11.18	9.62	7.24	7.18	4.69	1.63
-47.5	13.18	12.34	13.15	13.02	11.98	10.61	8.16	8.17	5.56	2.01
-55	9.77	9.19	9.98	10.17	9.64	8.63	6.70	6.99	5.02	1.90
-65	4.51	4.24	4.57	4.70	4.58	4.22	3.37	3.66	2.76	1.08
-75	1.53	1.45	1.57	1.64	1.63	1.54	1.25	1.38	1.06	0.43
-85	0.12	0.11	0.13	0.13	0.13	0.13	0.10	0.11	0.09	0.04
-90										
Total	2154.46	1722.04	1577.96	1339.38	1029.75	695.53	380.45	300.41	183.40	59.20

Vert. Angles	Horizontal Angles			
	<u>75</u>	<u>85</u>	<u>90</u>	<u>Total</u>
90				
	0.01	0.00		2.02
85				
	0.09	0.00		24.89
75				
	0.22	0.00		71.86
65				
	0.37	0.01		155.90
55				
	0.39	0.01		209.13
47.5				
	0.31	0.01		240.97
42.5				
	0.35	0.01		414.16
37.5				
	0.35	0.01		579.95
33				
	0.33	0.01		722.53
29				
	0.31	0.01		825.05
25.5				
	0.27	0.01		879.63
22.5				
	0.28	0.01		1082.42
19.5				
	0.24	0.00		1091.69
17				
	0.20	0.00		1009.31

IES FLOOD REPORT
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LUMENS TABULATION - (Cont.)

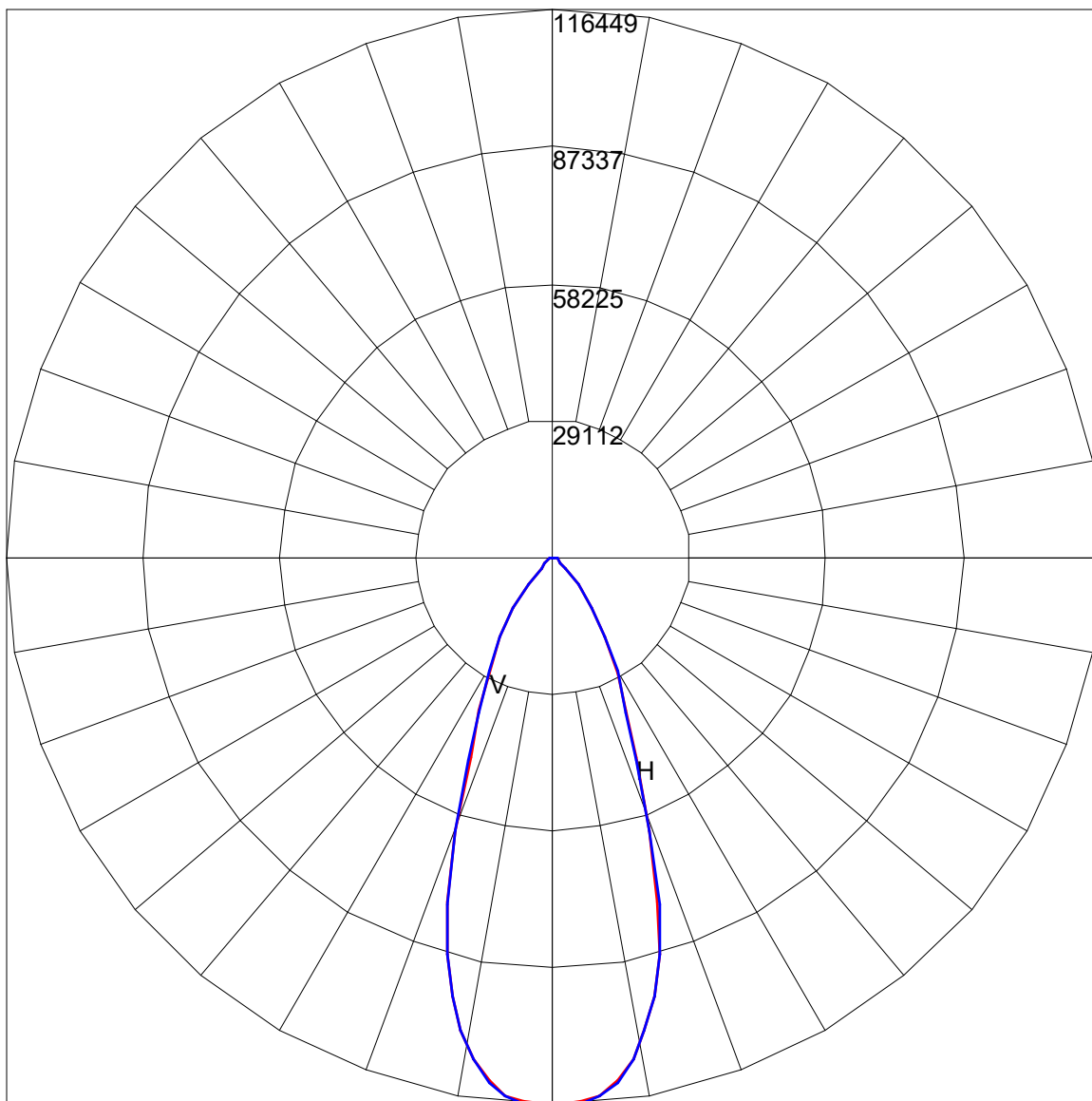
15	0.20	0.00	1127.25
13	0.20	0.00	1234.55
11	0.21	0.00	1327.71
9	0.21	0.00	1404.35
7	0.21	0.00	1462.1
5	0.21	0.00	1502.04
3	0.21	0.00	1526.25
1	0.11	0.00	767.80
0	0.11	0.00	767.80
-1	0.21	0.00	1526.25
-3	0.21	0.00	1502.04
-5	0.21	0.00	1462.1
-7	0.21	0.00	1404.35
-9	0.21	0.00	1327.71
-11	0.20	0.00	1234.55
-13	0.20	0.00	1127.25
-15	0.20	0.00	1009.31
-17	0.24	0.00	1091.69
-19.5	0.28	0.01	1082.42
-22.5	0.27	0.01	879.63
-25.5	0.31	0.01	825.05
-29	0.33	0.01	722.53
-33	0.35	0.01	579.95
-37.5	0.35	0.01	414.16
-42.5	0.31	0.01	240.97
-47.5	0.39	0.01	209.13
-55	0.37	0.01	155.90
-65	0.22	0.00	71.86

IES FLOOD REPORT
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LUMENS TABULATION - (Cont.)

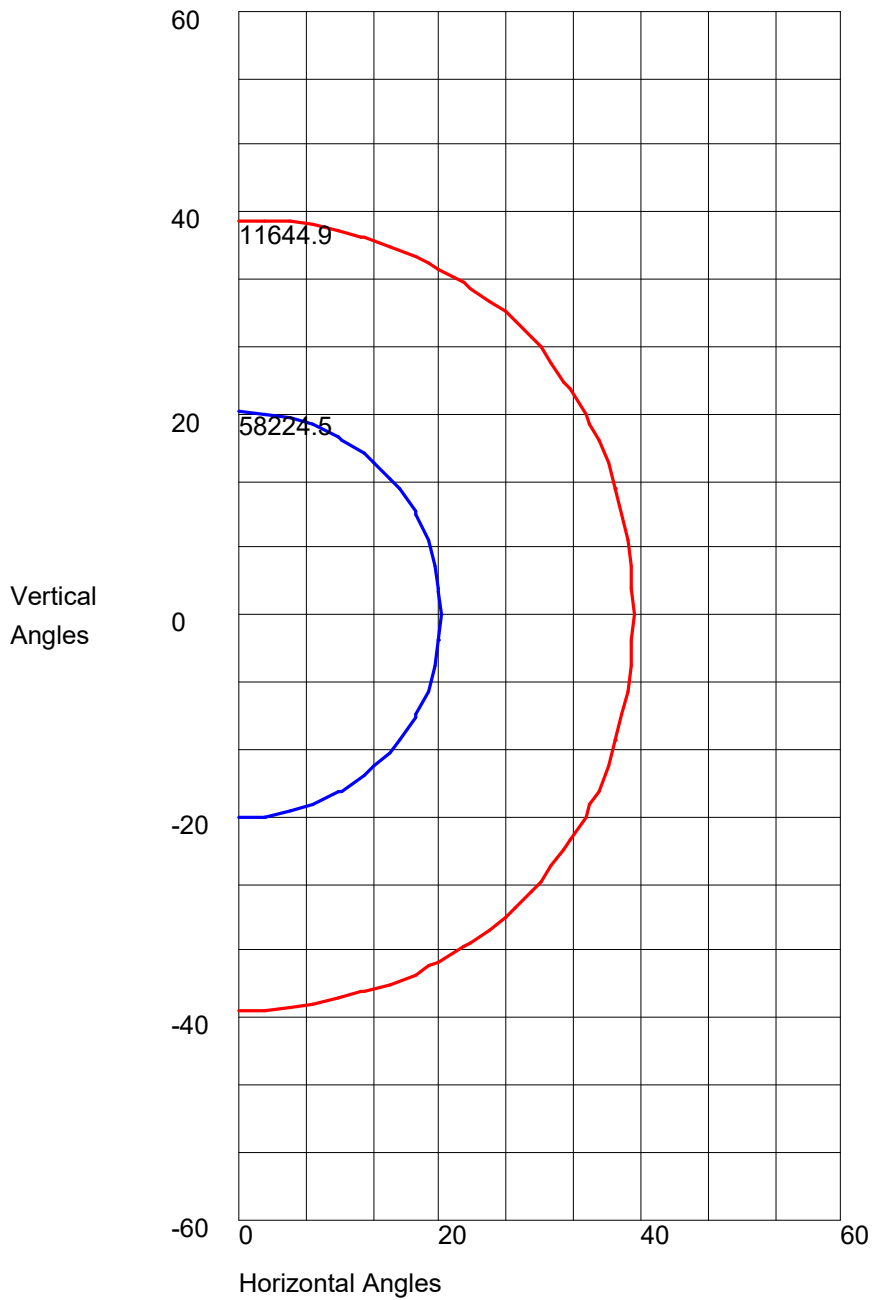
-75	0.09	0.00	24.89
-85	0.01	0.00	2.02
-90			
Total	10.57	0.21	35323.1

AXIAL CANDELA DISPLAY



Maximum Candela = 116449 Located At Horizontal Angle =-1, Vertical Angle =-1
H - Horizontal Axial Candela
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 116449 Located At Horizontal Angle =-1, Vertical Angle =-1
50% Maximum Candela = 58224.5
10% Maximum Candela = 11644.9