



## IES FLOOD REPORT

PHOTOMETRIC FILENAME : ZNF-85L-WF-50-GS.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] LED-13806  
[TESTLAB] LSI INDUSTRIES, INC.  
[ISSUE DATE] 12/22/22  
[TEST DATE] 12/12/22  
[MANUFACT] LSI INDUSTRIES, INC.  
[LUMCAT] ZNF-85L-WF-50-GS  
[TEST PROCEDURE] IESNA LM-79-19  
[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.  
[FACTORED] SCALED FROM ORIGINAL TEST DATA  
[SEARCH\_SOURCETYPE] LED  
[SEARCH\_APPLICATION] Outdoor  
[SEARCH\_COLORTEMP] 5000

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

### CHARACTERISTICS

NEMA Type	6 H x 6 V
Maximum Candela	87841
Maximum Candela Angle	0H 3V
Horizontal Beam Angle (50%)	44.4
Vertical Beam Angle (50%)	43.6
Horizontal Field Angle (10%)	105.5
Vertical Field Angle (10%)	101.6
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	30269
Beam Efficiency	N.A.
Field Lumens	69263
Field Efficiency	N.A.
Spill Lumens	7356
Luminaire Lumens	76619
Total Efficiency	N.A.
Total Luminaire Watts	573.6
Ballast Factor	1.00

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**AXIAL CANDELA**

DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	84	85	0
75	677	75	4
65	2053	65	1086
55	7138	55	4402
47.5	12752	47.5	9536
42.5	16778	42.5	13701
37.5	20726	37.5	18035
33	24932	33	22678
29	29522	29	27871
25.5	35374	25.5	34590
22.5	43290	22.5	43722
19.5	52915	19.5	54459
17	61231	17	62962
15	67186	15	69639
13	72320	13	74217
11	76784	11	78352
9	80572	9	81950
7	83673	7	84882
5	86067	5	86983
3	87345	3	87841
1	87627	1	87783
0	87601	0	87601
-1	87627	-1	87537
-3	87345	-3	87073
-5	86067	-5	85595
-7	83673	-7	82805
-9	80572	-9	79317
-11	76784	-11	75177
-13	72320	-13	70350
-15	67186	-15	64715
-17	61231	-17	58267
-19.5	52915	-19.5	49806
-22.5	43290	-22.5	39002
-25.5	35374	-25.5	32741
-29	29522	-29	28012
-33	24932	-33	24105
-37.5	20726	-37.5	20363
-42.5	16778	-42.5	16708
-47.5	12752	-47.5	12820
-55	7138	-55	7314
-65	2053	-65	2226
-75	677	-75	820
-85	84	-85	150
-90	0	-90	0

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**CANDELA TABULATION**

Maximum Candela = 87841

Beam Edge = 43920.5 Cd (50% of Max.)

Field Edge = 8784.1 Cd (10% of Max.)

\* Indicates Values Inside Field Edge

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<b>-90.0</b>	<b>-85.0</b>	<b>-75.0</b>	<b>-65.0</b>	<b>-55.0</b>	<b>-47.5</b>	<b>-42.5</b>	<b>-37.5</b>	<b>-33.0</b>	<b>-29.0</b>
<b>90.0</b>	0	0	0	0	0	0	0	0	0	0
<b>85.0</b>	0	4	9	14	16	17	16	14	11	7
<b>75.0</b>	0	11	42	95	143	168	182	182	175	170
<b>65.0</b>	0	18	104	230	384	504	587	664	741	806
<b>55.0</b>	0	30	192	447	792	1114	1353	1782	2274	2701
<b>47.5</b>	0	41	265	663	1263	2078	3061	4212	5156	6029
<b>42.5</b>	0	49	325	827	1660	3278	4688	6203	7600	8838 *
<b>37.5</b>	0	55	381	1002	2299	4729	6523	8551	10384 *	11945 *
<b>33.0</b>	0	61	430	1166	3086	6035	8303	10816 *	12974 *	14680 *
<b>29.0</b>	0	65	478	1310	3797	7226	9858 *	12757 *	15104 *	17320 *
<b>25.5</b>	0	69	516	1439	4437	8198	11208 *	14344 *	16993 *	19267 *
<b>22.5</b>	0	72	546	1545	4943	9050 *	12273 *	15680 *	18435 *	20977 *
<b>19.5</b>	0	74	573	1656	5395	9826 *	13231 *	16821 *	19722 *	22642 *
<b>17.0</b>	0	76	594	1740	5754	10424 *	13920 *	17633 *	20789 *	24001 *
<b>15.0</b>	0	78	609	1801	6018	10872 *	14452 *	18241 *	21599 *	25000 *
<b>13.0</b>	0	79	622	1858	6259	11282 *	14961 *	18804 *	22339 *	25976 *
<b>11.0</b>	0	82	635	1909	6476	11652 *	15411 *	19282 *	23018 *	26869 *
<b>9.0</b>	0	83	645	1949	6668	11980 *	15793 *	19664 *	23572 *	27667 *
<b>7.0</b>	0	83	655	1983	6832	12262 *	16107 *	19978 *	24005 *	28350 *
<b>5.0</b>	0	83	668	2010	6959	12488 *	16353 *	20222 *	24348 *	28901 *
<b>3.0</b>	0	84	671	2039	7088	12694 *	16638 *	20440 *	24608 *	29261 *
<b>1.0</b>	0	84	675	2048	7121	12733 *	16731 *	20658 *	24850 *	29479 *
<b>0.0</b>	0	84	677	2053	7138	12752 *	16778 *	20726 *	24932 *	29522 *
<b>-1.0</b>	0	84	679	2058	7153	12748 *	16783 *	20750 *	24946 *	29503 *
<b>-3.0</b>	0	85	682	2067	7182	12739 *	16792 *	20714 *	24901 *	29329 *
<b>-5.0</b>	0	85	685	2057	7116	12575 *	16595 *	20587 *	24645 *	28904 *
<b>-7.0</b>	0	85	679	2047	7054	12456 *	16445 *	20378 *	24281 *	28327 *
<b>-9.0</b>	0	86	676	2031	6950	12301 *	16237 *	20110 *	23829 *	27662 *
<b>-11.0</b>	0	86	672	2007	6816	12095 *	15975 *	19790 *	23315 *	26942 *
<b>-13.0</b>	0	83	666	1976	6651	11839 *	15664 *	19397 *	22755 *	26146 *
<b>-15.0</b>	0	83	658	1938	6457	11535 *	15273 *	18929 *	22148 *	25289 *
<b>-17.0</b>	0	82	649	1894	6235	11183 *	14783 *	18419 *	21473 *	24438 *
<b>-19.5</b>	0	81	636	1830	5917	10692 *	14167 *	17727 *	20564 *	23306 *
<b>-22.5</b>	0	79	615	1741	5500	10038 *	13387 *	16741 *	19452 *	21889 *
<b>-25.5</b>	0	77	592	1655	5035	9307 *	12504 *	15441 *	18266 *	20441 *
<b>-29.0</b>	0	74	560	1542	4421	8397	11261 *	13994 *	16709 *	18779 *
<b>-33.0</b>	0	70	518	1409	3710	7218	9776 *	12349 *	14449 *	16557 *
<b>-37.5</b>	0	64	474	1254	2914	5907	8057	10294 *	12291 *	13890 *
<b>-42.5</b>	0	58	418	1092	2223	4369	6195	8013	9656 *	11086 *
<b>-47.5</b>	0	50	355	929	1793	2973	4376	5901	7142	8274
<b>-55.0</b>	0	37	270	688	1273	1809	2249	2930	3726	4417
<b>-65.0</b>	0	23	163	395	719	979	1157	1332	1495	1636
<b>-75.0</b>	0	14	78	180	314	419	494	557	609	655
<b>-85.0</b>	0	5	21	41	68	88	101	113	122	129
<b>-90.0</b>	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	4	3	2	1	0	0	0	0	0	0
75.0	160	147	133	118	105	92	78	63	47	30
65.0	867	905	945	976	999	1020	1035	1046	1052	1055
55.0	3065	3310	3564	3805	3953	4065	4166	4255	4322	4366
47.5	6733	7349	7901	8293	8576	8822 *	9033 *	9232 *	9376 *	9465 *
42.5	9877 *	10709 *	11482 *	12055 *	12420 *	12729 *	12990 *	13204 *	13362 *	13458 *
37.5	13195 *	14102 *	15081 *	15804 *	16303 *	16710 *	17054 *	17335 *	17583 *	17773 *
33.0	16256 *	17485 *	18489 *	19351 *	19998 *	20602 *	21136 *	21580 *	21967 *	22284 *
29.0	18939 *	20397 *	21839 *	22947 *	23735 *	24568 *	25371 *	26061 *	26714 *	27304 *
25.5	21292 *	23142 *	25024 *	26602 *	27912 *	29156 *	30252 *	31693 *	32906 *	33796 *
22.5	23388 *	25662 *	28130 *	30362 *	32483 *	34547 *	36457 *	38785 *	40736 *	42241 *
19.5	25494 *	28287 *	31573 *	35147 *	38305 *	41732 *	44885 *	47992 *	50569 *	52551 *
17.0	27165 *	30599 *	35120 *	39978 *	44118 *	48493 *	52562 *	55859 *	58626 *	60824 *
15.0	28567 *	32685 *	38158 *	43969 *	49039 *	53836 *	58016 *	61657 *	64551 *	66749 *
13.0	29906 *	34934 *	41561 *	48034 *	53512 *	58577 *	62919 *	66613 *	69792 *	71841 *
11.0	31211 *	37114 *	44753 *	51853 *	57681 *	62867 *	67093 *	70745 *	73764 *	76080 *
9.0	32764 *	39346 *	47751 *	55181 *	61148 *	66305 *	70598 *	74191 *	77239 *	79651 *
7.0	34050 *	41123 *	50002 *	57653 *	63469 *	68900 *	73379 *	77090 *	80243 *	82428 *
5.0	34881 *	42344 *	51616 *	59466 *	65262 *	70558 *	75252 *	79176 *	82182 *	84413 *
3.0	35410 *	43048 *	52543 *	60511 *	66374 *	71606 *	76157 *	80154 *	83409 *	85622 *
1.0	35486 *	43370 *	52914 *	61012 *	67027 *	72234 *	76752 *	80540 *	83644 *	86181 *
0.0	35374 *	43290 *	52915 *	61231 *	67186 *	72320 *	76784 *	80572 *	83673 *	86067 *
-1.0	35348 *	43118 *	52592 *	60690 *	66728 *	71763 *	76213 *	80070 *	83270 *	85864 *
-3.0	35022 *	42300 *	51558 *	59507 *	65433 *	70630 *	75244 *	79239 *	82398 *	84643 *
-5.0	34285 *	41146 *	49967 *	57802 *	63720 *	69069 *	73797 *	77556 *	80488 *	82791 *
-7.0	33316 *	39580 *	47859 *	55549 *	61479 *	66716 *	71223 *	74896 *	77877 *	80279 *
-9.0	32110 *	37621 *	45159 *	52480 *	58196 *	63148 *	67698 *	71570 *	74646 *	77045 *
-11.0	30789 *	35376 *	42108 *	48881 *	54172 *	59138 *	63625 *	67534 *	70730 *	72973 *
-13.0	29645 *	33668 *	39330 *	45098 *	49847 *	54542 *	58823 *	62711 *	65858 *	67864 *
-15.0	28436 *	31822 *	36390 *	40998 *	45308 *	49477 *	53448 *	57097 *	60129 *	62082 *
-17.0	27210 *	30020 *	33691 *	37440 *	40529 *	44236 *	47783 *	51043 *	53829 *	55754 *
-19.5	25796 *	28161 *	30840 *	33403 *	35634 *	38062 *	40623 *	43447 *	45707 *	47447 *
-22.5	24125 *	26093 *	28095 *	29772 *	31212 *	32693 *	34043 *	35853 *	37300 *	38364 *
-25.5	22435 *	24103 *	25664 *	26897 *	27954 *	28958 *	29837 *	30850 *	31724 *	32376 *
-29.0	20438 *	21818 *	23096 *	24117 *	24876 *	25605 *	26276 *	26853 *	27373 *	27806 *
-33.0	18122 *	19302 *	20348 *	21182 *	21795 *	22364 *	22896 *	23356 *	23702 *	23938 *
-37.5	15307 *	16559 *	17497 *	18139 *	18597 *	19031 *	19405 *	19720 *	19996 *	20208 *
-42.5	12271 *	13194 *	13971 *	14520 *	14958 *	15363 *	15705 *	16011 *	16273 *	16472 *
-47.5	9187 *	9961 *	10675 *	11169 *	11507 *	11800 *	12051 *	12297 *	12496 *	12648 *
-55.0	5057	5568	6024	6349	6579	6779	6959	7112	7237	7332
-65.0	1753	1842	1933	2001	2050	2095	2135	2168	2194	2213
-75.0	691	718	741	758	770	781	791	799	805	815
-85.0	134	138	141	143	145	147	151	151	151	151
-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	0	0	0	0	0	0	0	0	0	0
75.0	17	8	4	8	17	30	47	63	78	92
65.0	1079	1086	1086	1086	1079	1055	1052	1046	1035	1020

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**CANDELA TABULATION - (Cont.)**

55.0	4397	4386	4402	4386	4397	4366	4322	4255	4166	4065
47.5	9569 *	9545 *	9536 *	9545 *	9569 *	9465 *	9376 *	9232 *	9033 *	8822 *
42.5	13584 *	13650 *	13701 *	13650 *	13584 *	13458 *	13362 *	13204 *	12990 *	12729 *
37.5	17897 *	17975 *	18035 *	17975 *	17897 *	17773 *	17583 *	17335 *	17054 *	16710 *
33.0	22503 *	22545 *	22678 *	22545 *	22503 *	22284 *	21967 *	21580 *	21136 *	20602 *
29.0	27691 *	27708 *	27871 *	27708 *	27691 *	27304 *	26714 *	26061 *	25371 *	24568 *
25.5	34369 *	34331 *	34590 *	34331 *	34369 *	33796 *	32906 *	31693 *	30252 *	29156 *
22.5	43271 *	43457 *	43722 *	43457 *	43271 *	42241 *	40736 *	38785 *	36457 *	34547 *
19.5	53880 *	54205 *	54459 *	54205 *	53880 *	52551 *	50569 *	47992 *	44885 *	41732 *
17.0	62230 *	62706 *	62962 *	62706 *	62230 *	60824 *	58626 *	55859 *	52562 *	48493 *
15.0	68224 *	69106 *	69639 *	69106 *	68224 *	66749 *	64551 *	61657 *	58016 *	53836 *
13.0	73142 *	73671 *	74217 *	73671 *	73142 *	71841 *	69792 *	66613 *	62919 *	58577 *
11.0	77426 *	77859 *	78352 *	77859 *	77426 *	76080 *	73764 *	70745 *	67093 *	62867 *
9.0	81041 *	81521 *	81950 *	81521 *	81041 *	79651 *	77239 *	74191 *	70598 *	66305 *
7.0	84001 *	84539 *	84882 *	84539 *	84001 *	82428 *	80243 *	77090 *	73379 *	68900 *
5.0	85888 *	86798 *	86983 *	86798 *	85888 *	84413 *	82182 *	79176 *	75252 *	70558 *
3.0	86965 *	87592 *	87841 *	87592 *	86965 *	85622 *	83409 *	80154 *	76157 *	71606 *
1.0	87387 *	87734 *	87783 *	87734 *	87387 *	86181 *	83644 *	80540 *	76752 *	72234 *
0.0	87345 *	87627 *	87601 *	87627 *	87345 *	86067 *	83673 *	80572 *	76784 *	72320 *
-1.0	87032 *	87533 *	87537 *	87533 *	87032 *	85864 *	83270 *	80070 *	76213 *	71763 *
-3.0	86242 *	86939 *	87073 *	86939 *	86242 *	84643 *	82398 *	79239 *	75244 *	70630 *
-5.0	84511 *	85552 *	85595 *	85552 *	84511 *	82791 *	80488 *	77556 *	73797 *	69069 *
-7.0	81981 *	82716 *	82805 *	82716 *	81981 *	80279 *	77877 *	74896 *	71223 *	66716 *
-9.0	78378 *	79235 *	79317 *	79235 *	78378 *	77045 *	74646 *	71570 *	67698 *	63148 *
-11.0	74099 *	74980 *	75177 *	74980 *	74099 *	72973 *	70730 *	67534 *	63625 *	59138 *
-13.0	69160 *	69991 *	70350 *	69991 *	69160 *	67864 *	65858 *	62711 *	58823 *	54542 *
-15.0	63478 *	64470 *	64715 *	64470 *	63478 *	62082 *	60129 *	57097 *	53448 *	49477 *
-17.0	57131 *	57962 *	58267 *	57962 *	57131 *	55754 *	53829 *	51043 *	47783 *	44236 *
-19.5	48758 *	49548 *	49806 *	49548 *	48758 *	47447 *	45707 *	43447 *	40623 *	38062 *
-22.5	39097 *	39269 *	39002 *	39269 *	39097 *	38364 *	37300 *	35853 *	34043 *	32693 *
-25.5	32808 *	32858 *	32741 *	32858 *	32808 *	32376 *	31724 *	30850 *	29837 *	28958 *
-29.0	28096 *	28096 *	28012 *	28096 *	28096 *	27806 *	27373 *	26853 *	26276 *	25605 *
-33.0	24080 *	24120 *	24105 *	24120 *	24080 *	23938 *	23702 *	23356 *	22896 *	22364 *
-37.5	20354 *	20385 *	20363 *	20385 *	20354 *	20208 *	19996 *	19720 *	19405 *	19031 *
-42.5	16684 *	16700 *	16708 *	16700 *	16684 *	16472 *	16273 *	16011 *	15705 *	15363 *
-47.5	12806 *	12815 *	12820 *	12815 *	12806 *	12648 *	12496 *	12297 *	12051 *	11800 *
-55.0	7398	7342	7314	7342	7398	7332	7237	7112	6959	6779
-65.0	2231	2228	2226	2228	2231	2213	2194	2168	2135	2095
-75.0	817	819	820	819	817	815	805	799	791	781
-85.0	151	150	150	150	151	151	151	151	151	147
-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	0	1	2	3	4	7	11	14	16	17
75.0	105	118	133	147	160	170	175	182	182	168
65.0	999	976	945	905	867	806	741	664	587	504
55.0	3953	3805	3564	3310	3065	2701	2274	1782	1353	1114
47.5	8576	8293	7901	7349	6733	6029	5156	4212	3061	2078
42.5	12420 *	12055 *	11482 *	10709 *	9877 *	8838 *	7600	6203	4688	3278
37.5	16303 *	15804 *	15081 *	14102 *	13195 *	11945 *	10384 *	8551	6523	4729
33.0	19998 *	19351 *	18489 *	17485 *	16256 *	14680 *	12974 *	10816 *	8303	6035
29.0	23735 *	22947 *	21839 *	20397 *	18939 *	17320 *	15104 *	12757 *	9858 *	7226
25.5	27912 *	26602 *	25024 *	23142 *	21292 *	19267 *	16993 *	14344 *	11208 *	8198

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**CANDELA TABULATION - (Cont.)**

22.5	32483 *	30362 *	28130 *	25662 *	23388 *	20977 *	18435 *	15680 *	12273 *	9050 *
19.5	38305 *	35147 *	31573 *	28287 *	25494 *	22642 *	19722 *	16821 *	13231 *	9826 *
17.0	44118 *	39978 *	35120 *	30599 *	27165 *	24001 *	20789 *	17633 *	13920 *	10424 *
15.0	49039 *	43969 *	38158 *	32685 *	28567 *	25000 *	21599 *	18241 *	14452 *	10872 *
13.0	53512 *	48034 *	41561 *	34934 *	29906 *	25976 *	22339 *	18804 *	14961 *	11282 *
11.0	57681 *	51853 *	44753 *	37114 *	31211 *	26869 *	23018 *	19282 *	15411 *	11652 *
9.0	61148 *	55181 *	47751 *	39346 *	32764 *	27667 *	23572 *	19664 *	15793 *	11980 *
7.0	63469 *	57653 *	50002 *	41123 *	34050 *	28350 *	24005 *	19978 *	16107 *	12262 *
5.0	65262 *	59466 *	51616 *	42344 *	34881 *	28901 *	24348 *	20222 *	16353 *	12488 *
3.0	66374 *	60511 *	52543 *	43048 *	35410 *	29261 *	24608 *	20440 *	16638 *	12694 *
1.0	67027 *	61012 *	52914 *	43370 *	35486 *	29479 *	24850 *	20658 *	16731 *	12733 *
0.0	67186 *	61231 *	52915 *	43290 *	35374 *	29522 *	24932 *	20726 *	16778 *	12752 *
-1.0	66728 *	60690 *	52592 *	43118 *	35348 *	29503 *	24946 *	20750 *	16783 *	12748 *
-3.0	65433 *	59507 *	51558 *	42300 *	35022 *	29329 *	24901 *	20714 *	16792 *	12739 *
-5.0	63720 *	57802 *	49967 *	41146 *	34285 *	28904 *	24645 *	20587 *	16595 *	12575 *
-7.0	61479 *	55549 *	47859 *	39580 *	33316 *	28327 *	24281 *	20378 *	16445 *	12456 *
-9.0	58196 *	52480 *	45159 *	37621 *	32110 *	27662 *	23829 *	20110 *	16237 *	12301 *
-11.0	54172 *	48881 *	42108 *	35376 *	30789 *	26942 *	23315 *	19790 *	15975 *	12095 *
-13.0	49847 *	45098 *	39330 *	33668 *	29645 *	26146 *	22755 *	19397 *	15664 *	11839 *
-15.0	45308 *	40998 *	36390 *	31822 *	28436 *	25289 *	22148 *	18929 *	15273 *	11535 *
-17.0	40529 *	37440 *	33691 *	30020 *	27210 *	24438 *	21473 *	18419 *	14783 *	11183 *
-19.5	35634 *	33403 *	30840 *	28161 *	25796 *	23306 *	20564 *	17727 *	14167 *	10692 *
-22.5	31212 *	29772 *	28095 *	26093 *	24125 *	21889 *	19452 *	16741 *	13387 *	10038 *
-25.5	27954 *	26897 *	25664 *	24103 *	22435 *	20441 *	18266 *	15441 *	12504 *	9307 *
-29.0	24876 *	24117 *	23096 *	21818 *	20438 *	18779 *	16709 *	13994 *	11261 *	8397
-33.0	21795 *	21182 *	20348 *	19302 *	18122 *	16557 *	14449 *	12349 *	9776 *	7218
-37.5	18597 *	18139 *	17497 *	16559 *	15307 *	13890 *	12291 *	10294 *	8057	5907
-42.5	14958 *	14520 *	13971 *	13194 *	12271 *	11086 *	9656 *	8013	6195	4369
-47.5	11507 *	11169 *	10675 *	9961 *	9187 *	8274	7142	5901	4376	2973
-55.0	6579	6349	6024	5568	5057	4417	3726	2930	2249	1809
-65.0	2050	2001	1933	1842	1753	1636	1495	1332	1157	979
-75.0	770	758	741	718	691	655	609	557	494	419
-85.0	145	143	141	138	134	129	122	113	101	88
-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	16	14	9	4	0
75.0	143	95	42	11	0
65.0	384	230	104	18	0
55.0	792	447	192	30	0
47.5	1263	663	265	41	0
42.5	1660	827	325	49	0
37.5	2299	1002	381	55	0
33.0	3086	1166	430	61	0
29.0	3797	1310	478	65	0
25.5	4437	1439	516	69	0
22.5	4943	1545	546	72	0
19.5	5395	1656	573	74	0
17.0	5754	1740	594	76	0
15.0	6018	1801	609	78	0
13.0	6259	1858	622	79	0
11.0	6476	1909	635	82	0
9.0	6668	1949	645	83	0

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : ZNF-85L-WF-50-GS.IES**

**CANDELA TABULATION - (Cont.)**

<b>7.0</b>	6832	1983	655	83	0
<b>5.0</b>	6959	2010	668	83	0
<b>3.0</b>	7088	2039	671	84	0
<b>1.0</b>	7121	2048	675	84	0
<b>0.0</b>	7138	2053	677	84	0
<b>-1.0</b>	7153	2058	679	84	0
<b>-3.0</b>	7182	2067	682	85	0
<b>-5.0</b>	7116	2057	685	85	0
<b>-7.0</b>	7054	2047	679	85	0
<b>-9.0</b>	6950	2031	676	86	0
<b>-11.0</b>	6816	2007	672	86	0
<b>-13.0</b>	6651	1976	666	83	0
<b>-15.0</b>	6457	1938	658	83	0
<b>-17.0</b>	6235	1894	649	82	0
<b>-19.5</b>	5917	1830	636	81	0
<b>-22.5</b>	5500	1741	615	79	0
<b>-25.5</b>	5035	1655	592	77	0
<b>-29.0</b>	4421	1542	560	74	0
<b>-33.0</b>	3710	1409	518	70	0
<b>-37.5</b>	2914	1254	474	64	0
<b>-42.5</b>	2223	1092	418	58	0
<b>-47.5</b>	1793	929	355	50	0
<b>-55.0</b>	1273	688	270	37	0
<b>-65.0</b>	719	395	163	23	0
<b>-75.0</b>	314	180	78	14	0
<b>-85.0</b>	68	41	21	5	0
<b>-90.0</b>	0	0	0	0	0

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : ZNF-85L-WF-50-GS.IES**

**LUMEN TABULATION**

Average Of Right And Left Sides

Total Luminaire Lumens (one side of beam only) = 38309.63

Total Field Lumens (one side of beam only) = 34631.41

\* 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	0.01	0.04	0.07	0.12	0.17	0.21	0.25	0.29	0.33	0.46
75	1.66	3.33	3.31	3.31	3.33	3.33	3.31	3.27	3.22	3.93
65	8.35	16.66	16.56	16.35	16.10	15.75	15.32	14.83	14.25	16.80
55	15.92	31.85	31.67	31.27	30.75	30.02	29.15	28.17	27.04	31.95
47.5	17.68 *	35.27 *	35.00 *	34.58 *	34.07 *	33.34 *	32.46 *	31.44 *	30.26 *	35.92 *
42.5	24.12 *	48.03 *	47.64 *	47.09 *	46.36 *	45.43 *	44.31 *	42.98 *	41.42 *	49.20 *
37.5	27.84 *	55.43 *	55.01 *	54.26 *	53.25 *	52.04 *	50.61 *	48.95 *	47.08 *	55.91 *
33	30.70 *	61.16 *	60.64 *	59.54 *	58.11 *	56.48 *	54.63 *	52.55 *	50.38 *	59.75 *
29	33.18 *	66.11 *	65.49 *	64.00 *	61.96 *	59.52 *	57.01 *	54.50 *	51.85 *	61.01 *
25.5	35.66 *	70.97 *	70.04 *	68.01 *	65.21 *	61.73 *	58.28 *	55.02 *	51.54 *	59.73 *
22.5	44.74 *	88.96 *	87.49 *	84.56 *	80.57 *	75.65 *	70.44 *	65.20 *	59.86 *	67.91 *
19.5	44.61 *	88.67 *	87.16 *	84.28 *	80.33 *	75.48 *	69.90 *	63.78 *	57.66 *	64.10 *
17	40.27 *	79.84 *	78.40 *	75.96 *	72.60 *	68.42 *	63.43 *	57.78 *	51.86 *	56.85 *
15	43.65 *	86.50 *	85.07 *	82.68 *	79.21 *	74.76 *	69.53 *	63.53 *	56.97 *	62.09 *
13	46.31 *	91.96 *	90.70 *	88.30 *	84.73 *	80.20 *	74.92 *	68.76 *	61.80 *	67.33 *
11	48.69 *	96.76 *	95.47 *	92.92 *	89.27 *	84.78 *	79.51 *	73.30 *	66.13 *	72.15 *
9	50.70 *	100.79 *	99.40 *	96.81 *	93.13 *	88.57 *	83.18 *	76.79 *	69.53 *	76.15 *
7	52.27 *	103.87 *	102.32 *	99.75 *	96.13 *	91.46 *	85.83 *	79.26 *	71.99 *	79.09 *
5	53.19 *	105.71 *	104.19 *	101.67 *	98.01 *	93.21 *	87.47 *	80.92 *	73.67 *	81.05 *
3	53.45 *	106.45 *	105.18 *	102.65 *	98.86 *	94.07 *	88.42 *	81.94 *	74.64 *	82.07 *
1	26.71 *	53.29 *	52.72 *	51.43 *	49.53 *	47.19 *	44.41 *	41.20 *	37.55 *	41.23 *
0	26.68 *	53.20 *	52.61 *	51.33 *	49.41 *	47.04 *	44.26 *	41.08 *	37.45 *	41.12 *
-1	53.17 *	105.86 *	104.46 *	101.84 *	98.03 *	93.22 *	87.55 *	81.15 *	73.89 *	81.12 *

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : ZNF-85L-WF-50-GS.IES**

**LUMENS TABULATION - (Cont.)**

<b>-3</b>	52.57 *	104.49 *	102.76 *	100.06 *	96.43 *	91.74 *	86.03 *	79.46 *	72.16 *	79.13 *
<b>-5</b>	51.27 *	101.91 *	100.14 *	97.37 *	93.75 *	89.23 *	83.66 *	77.13 *	69.85 *	76.36 *
<b>-7</b>	49.36 *	98.12 *	96.53 *	93.86 *	90.19 *	85.61 *	80.08 *	73.75 *	66.67 *	72.70 *
<b>-9</b>	47.02 *	93.36 *	91.92 *	89.48 *	85.81 *	81.12 *	75.56 *	69.35 *	62.58 *	68.21 *
<b>-11</b>	44.24 *	87.74 *	86.33 *	84.04 *	80.49 *	75.80 *	70.35 *	64.34 *	57.97 *	63.43 *
<b>-13</b>	41.05 *	81.31 *	79.79 *	77.53 *	74.14 *	69.62 *	64.44 *	58.87 *	53.07 *	58.51 *
<b>-15</b>	37.38 *	73.99 *	72.45 *	70.22 *	66.99 *	62.81 *	58.08 *	53.07 *	48.10 *	53.70 *
<b>-17</b>	41.04 *	81.20 *	79.42 *	76.77 *	73.16 *	68.58 *	63.58 *	58.54 *	53.80 *	61.19 *
<b>-19.5</b>	40.58 *	80.67 *	79.16 *	76.71 *	73.44 *	69.28 *	64.99 *	61.00 *	57.11 *	66.23 *
<b>-22.5</b>	32.87 *	65.77 *	65.02 *	63.51 *	61.41 *	58.76 *	56.10 *	53.56 *	50.88 *	59.89 *
<b>-25.5</b>	32.44 *	64.92 *	64.39 *	63.23 *	61.65 *	59.75 *	57.71 *	55.55 *	53.21 *	63.14 *
<b>-29</b>	31.78 *	63.56 *	63.15 *	62.29 *	61.10 *	59.62 *	57.89 *	55.94 *	53.86 *	64.18 *
<b>-33</b>	30.49 *	60.92 *	60.56 *	59.87 *	58.89 *	57.62 *	56.11 *	54.39 *	52.52 *	62.78 *
<b>-37.5</b>	28.24 *	56.41 *	56.00 *	55.25 *	54.29 *	53.13 *	51.77 *	50.21 *	48.47 *	57.97 *
<b>-42.5</b>	22.48 *	44.91 *	44.52 *	43.84 *	43.04 *	42.04 *	40.91 *	39.62 *	38.18 *	45.50 *
<b>-47.5</b>	23.01 *	46.07 *	45.79 *	45.11 *	44.28 *	43.22 *	42.00 *	40.64 *	39.09 *	46.40
<b>-55</b>	14.55	29.22	29.13	28.74	28.22	27.56	26.77	25.87	24.86	29.48
<b>-65</b>	4.64	9.28	9.23	9.13	9.00	8.84	8.64	8.42	8.17	9.82
<b>-75</b>	1.48	2.95	2.94	2.91	2.87	2.84	2.79	2.72	2.66	3.22
<b>-85</b>	0.11	0.23	0.23	0.23	0.23	0.23	0.22	0.22	0.21	0.26
<b>-90</b>										
<b>Total</b>	1406.15	2797.71	2760.06	2692.88	2598.5	2479.32	2341.87	2189.34	2023.79	2289.01

**Vert. Horizontal Angles**

<b>Angles</b>	<b>19.5</b>	<b>22.5</b>	<b>25.5</b>	<b>29</b>	<b>33</b>	<b>37.5</b>	<b>42.5</b>	<b>47.5</b>	<b>55</b>	<b>65</b>
<b>90</b>	0.01	0.01	0.01	0.02	0.03	0.04	0.04	0.06	0.06	0.03
<b>85</b>	0.61	0.66	0.81	0.95	1.07	1.15	1.03	1.23	1.02	0.42
<b>75</b>	4.54	4.34	4.75	4.94	4.93	4.71	3.88	4.28	3.24	1.23
<b>65</b>	18.61	17.00	17.62	17.03	15.28	12.79	9.58	9.98	7.05	2.53
<b>55</b>	35.39	32.02	32.92	31.64	28.17	22.76	15.35	14.06	9.03	3.06

**IES FLOOD REPORT**  
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**LUMENS TABULATION - (Cont.)**

<b>47.5</b>										
	39.92 *	36.17	37.29	36.06	32.41	26.48	17.64	14.79	8.39	2.71
<b>42.5</b>										
	54.78 *	49.96 *	51.95 *	50.60 *	45.80	37.86	25.86	21.37	11.01	3.30
<b>37.5</b>										
	62.53 *	57.32 *	59.79 *	58.72 *	53.79 *	44.87	31.00	25.96	12.93	3.49
<b>33</b>										
	66.72 *	61.00 *	63.68 *	62.73 *	57.81 *	48.68 *	33.83	28.79	14.24	3.52
<b>29</b>										
	67.48 *	61.19 *	63.70 *	62.76 *	57.97 *	49.16 *	34.38 *	29.58	14.62	3.41
<b>25.5</b>										
	65.23 *	58.53 *	60.36 *	59.26 *	54.94 *	46.81 *	32.89 *	28.54	14.11	3.16
<b>22.5</b>										
	72.71 *	64.38 *	65.75 *	64.04 *	59.31 *	50.74 *	35.84 *	31.31	15.45	3.37
<b>19.5</b>										
	66.95 *	58.20 *	58.82 *	56.88 *	52.44 *	44.91 *	31.90 *	28.04	13.83	2.97
<b>17</b>										
	58.25 *	49.67 *	49.63 *	47.72 *	43.79 *	37.47 *	26.74 *	23.63	11.65	2.47
<b>15</b>										
	62.84 *	52.63 *	51.86 *	49.56 *	45.32 *	38.76 *	27.76 *	24.60	12.12	2.54
<b>13</b>										
	67.55 *	55.58 *	54.00 *	51.27 *	46.69 *	39.92 *	28.70 *	25.49 *	12.55	2.61
<b>11</b>										
	72.07 *	58.61 *	56.16 *	52.80 *	47.86 *	40.91 *	29.52 *	26.28 *	12.93	2.67
<b>9</b>										
	76.02 *	61.47 *	58.20 *	54.09 *	48.81 *	41.72 *	30.22 *	26.97 *	13.26	2.72
<b>7</b>										
	78.94 *	63.61 *	59.79 *	55.14 *	49.55 *	42.37 *	30.80 *	27.54 *	13.53	2.77
<b>5</b>										
	80.85 *	64.98 *	60.87 *	55.93 *	50.15 *	42.95 *	31.32 *	28.03 *	13.76	2.80
<b>3</b>										
	81.84 *	65.66 *	61.43 *	56.49 *	50.67 *	43.43 *	31.65 *	28.32 *	13.92	2.83
<b>1</b>										
	41.05 *	32.87 *	30.77 *	28.40 *	25.51 *	21.84 *	15.88 *	14.20 *	6.98	1.42
<b>0</b>										
	40.93 *	32.79 *	30.74 *	28.43 *	25.56 *	21.88 *	15.90 *	14.22 *	7.00	1.42
<b>-1</b>										
	80.86 *	65.02 *	61.22 *	56.74 *	51.10 *	43.76 *	31.79 *	28.45 *	14.04	2.85
<b>-3</b>										
	78.90 *	63.76 *	60.43 *	56.27 *	50.84 *	43.56 *	31.60 *	28.30 *	14.01	2.86
<b>-5</b>										
	76.16 *	61.91 *	59.15 *	55.43 *	50.30 *	43.16 *	31.26 *	28.01 *	13.90	2.84
<b>-7</b>										
	72.60 *	59.53 *	57.53 *	54.35 *	49.58 *	42.67 *	30.92 *	27.69 *	13.75	2.83
<b>-9</b>										
	68.36 *	56.72 *	55.68 *	53.12 *	48.71 *	42.06 *	30.47 *	27.27 *	13.54	2.80
<b>-11</b>										
	64.18 *	54.04 *	53.79 *	51.77 *	47.71 *	41.31 *	29.92 *	26.72 *	13.27	2.77
<b>-13</b>										
	60.23 *	51.58 *	51.89 *	50.30 *	46.57 *	40.39 *	29.24 *	26.07 *	12.95	2.73
<b>-15</b>										
	56.27 *	49.04 *	49.93 *	48.74 *	45.31 *	39.31 *	28.41 *	25.30 *	12.57	2.67
<b>-17</b>										
	65.43 *	58.01 *	59.67 *	58.59 *	54.69 *	47.45 *	34.20 *	30.39	15.09	3.26
<b>-19.5</b>										
	72.42 *	65.22 *	67.61 *	66.73 *	62.52 *	54.26 *	38.99 *	34.45	17.10	3.76

**IES FLOOD REPORT**  
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**LUMENS TABULATION - (Cont.)**

<b>-22.5</b>	66.51 *	60.58 *	63.18 *	62.69 *	58.67 *	50.80 *	36.53 *	32.02	15.89	3.59
<b>-25.5</b>	70.67 *	64.86 *	68.07 *	67.79 *	63.07 *	54.30 *	39.07 *	33.96	16.84	3.96
<b>-29</b>	72.14 *	66.51 *	70.03 *	69.43 *	64.35 *	55.26 *	39.46 *	33.93	16.86	4.19
<b>-33</b>	70.73 *	65.07 *	68.10 *	67.18 *	62.18 *	53.11 *	37.50	31.75	15.89	4.28
<b>-37.5</b>	65.28 *	59.82 *	62.26 *	61.25 *	56.31 *	47.47	33.01	27.53	14.23	4.21
<b>-42.5</b>	50.97 *	46.55 *	48.35 *	47.20 *	42.96	35.70	24.11	20.29	11.48	3.63
<b>-47.5</b>	51.55	46.60	47.86	46.13	41.34	33.80	23.03	21.03	13.36	4.37
<b>-55</b>	32.77	29.68	30.48	29.43	26.53	22.36	16.67	17.08	11.69	3.94
<b>-65</b>	11.16	10.44	11.22	11.47	11.17	10.32	8.21	8.68	6.12	2.12
<b>-75</b>	3.71	3.51	3.81	3.95	3.92	3.69	2.97	3.18	2.29	0.83
<b>-85</b>	0.30	0.28	0.31	0.33	0.33	0.31	0.25	0.28	0.21	0.08
<b>-90</b>										
<b>Total</b>	2407.00	2077.35	2081.47	2004.35	1836.00	1567.26	1119.28	989.63	507.72	122.03

Vert. Angles	Horizontal Angles			
	<u>75</u>	<u>85</u>	<u>90</u>	<u>Total</u>
<b>90</b>				
	0.01	0.00	0.33	
<b>85</b>				
	0.09	0.00	10.97	
<b>75</b>				
	0.23	0.00	73.08	
<b>65</b>				
	0.45	0.01	278.89	
<b>55</b>				
	0.52	0.01	512.71	
<b>47.5</b>				
	0.45	0.01	572.33	
<b>42.5</b>				
	0.53	0.01	789.61	
<b>37.5</b>				
	0.55	0.01	911.32	
<b>33</b>				
	0.55	0.01	985.49	
<b>29</b>				
	0.52	0.01	1019.39	
<b>25.5</b>				
	0.48	0.01	1020.5	
<b>22.5</b>				
	0.50	0.01	1188.79	
<b>19.5</b>				
	0.43	0.01	1131.34	
<b>17</b>				
	0.36	0.01	996.78	

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : ZNF-85L-WF-50-GS.IES**

**LUMENS TABULATION - (Cont.)**

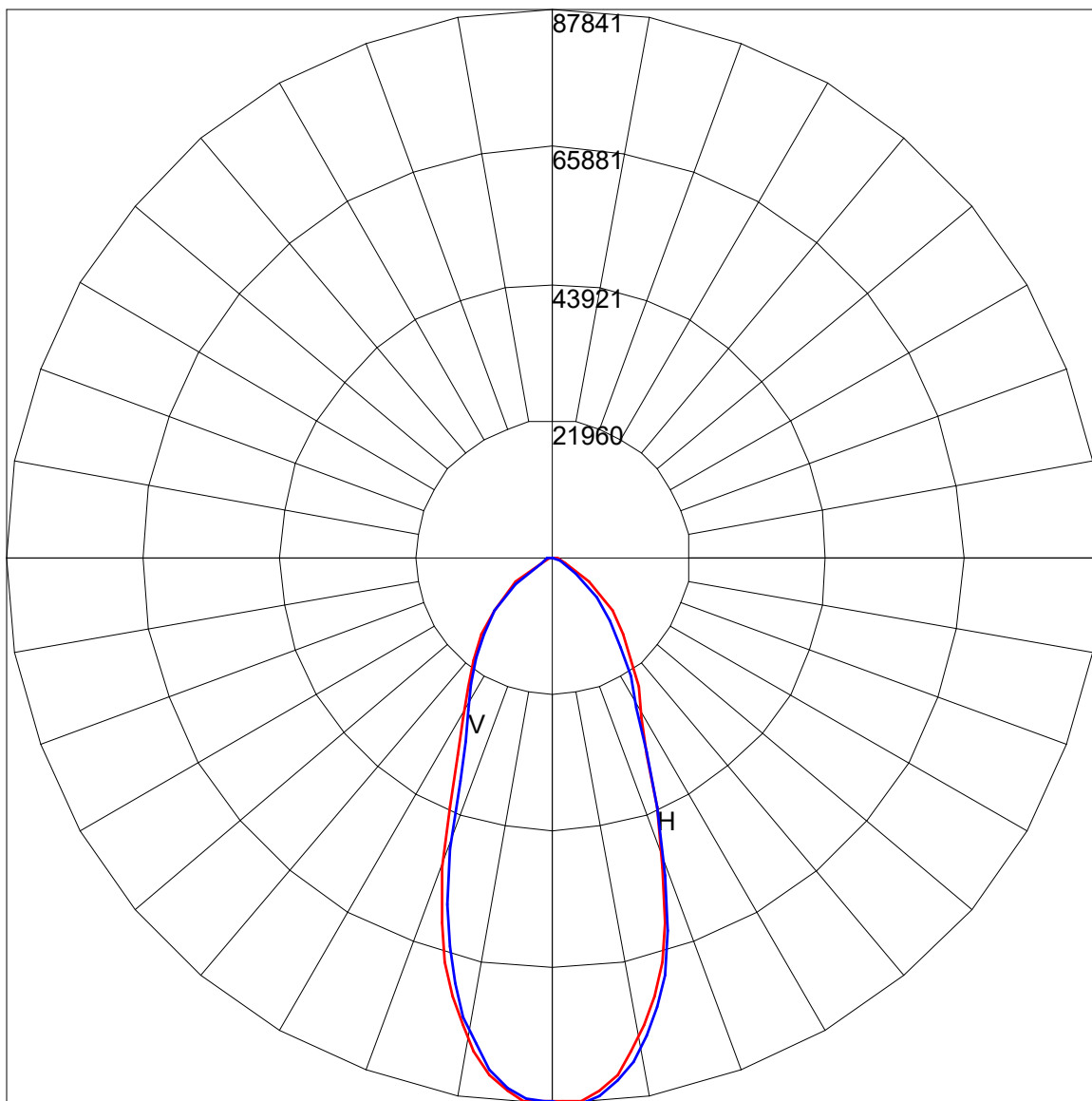
<b>15</b>			
	0.37	0.01	1072.35
<b>13</b>			
	0.37	0.01	1139.76
<b>11</b>			
	0.38	0.01	1199.18
<b>9</b>			
	0.39	0.01	1248.92
<b>7</b>			
	0.39	0.01	1286.41
<b>5</b>			
	0.40	0.01	1311.12
<b>3</b>			
	0.40	0.01	1324.37
<b>1</b>			
	0.20	0.00	664.37
<b>0</b>			
	0.20	0.00	663.24
<b>-1</b>			
	0.40	0.01	1316.53
<b>-3</b>			
	0.41	0.01	1295.77
<b>-5</b>			
	0.41	0.01	1263.22
<b>-7</b>			
	0.40	0.01	1218.73
<b>-9</b>			
	0.40	0.01	1163.54
<b>-11</b>			
	0.40	0.01	1100.62
<b>-13</b>			
	0.39	0.01	1030.67
<b>-15</b>			
	0.39	0.01	954.72
<b>-17</b>			
	0.48	0.01	1084.55
<b>-19.5</b>			
	0.56	0.01	1152.79
<b>-22.5</b>			
	0.54	0.01	1018.78
<b>-25.5</b>			
	0.60	0.01	1059.18
<b>-29</b>			
	0.65	0.01	1066.2
<b>-33</b>			
	0.67	0.01	1030.62
<b>-37.5</b>			
	0.67	0.01	943.78
<b>-42.5</b>			
	0.58	0.01	736.88
<b>-47.5</b>			
	0.71	0.01	745.38
<b>-55</b>			
	0.65	0.01	485.69
<b>-65</b>			
	0.37	0.01	176.46

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : ZNF-85L-WF-50-GS.IES**

**LUMENS TABULATION - (Cont.)**

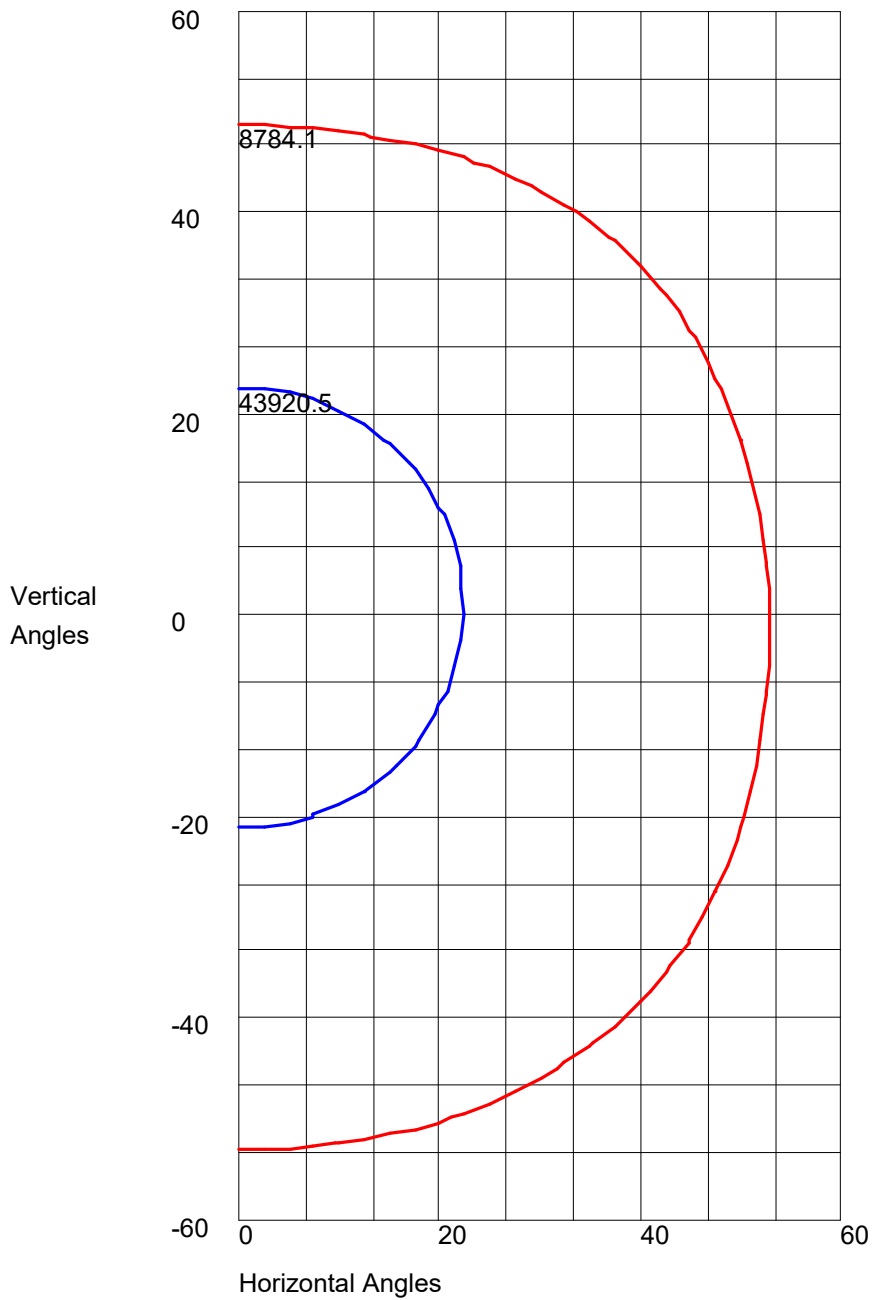
<b>-75</b>	0.16	0.00	59.40
<b>-85</b>	0.02	0.00	4.86
<b>-90</b>			
<b>Total</b>	18.62	0.28	38309.63

AXIAL CANDELA DISPLAY



Maximum Candela = 87841 Located At Horizontal Angle = 0, Vertical Angle = 3  
H - Horizontal Axial Candela  
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 87841 Located At Horizontal Angle = 0, Vertical Angle = 3  
50% Maximum Candela = 43920.5  
10% Maximum Candela = 8784.1