



## IES FLOOD REPORT

PHOTOMETRIC FILENAME : ZNF-85L-MF-40.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] LED-13129  
[TESTLAB] LSI INDUSTRIES, INC.  
[ISSUE DATE] 06/30/22  
[TEST DATE] 12/15/21  
[MANUFACT] LSI INDUSTRIES, INC.  
[LUMCAT] ZNF-85L-MF-40  
[OTHER] TEST PROCEDURE: IESNA LM-79-08  
[OTHER] SCALED FROM ORIGINAL TEST DATA  
[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED  
[SEARCH\_SOURCETYPE] LED  
[SEARCH\_APPLICATION] Outdoor  
[SEARCH\_COLORTEMP] 4000

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

### CHARACTERISTICS

NEMA Type	4 H x 4 V
Maximum Candela	198108
Maximum Candela Angle	-1H -1V
Horizontal Beam Angle (50%)	32.2
Vertical Beam Angle (50%)	32.2
Horizontal Field Angle (10%)	60.6
Vertical Field Angle (10%)	60.7
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	37263
Beam Efficiency	N.A.
Field Lumens	64245
Field Efficiency	N.A.
Spill Lumens	16238
Luminaire Lumens	80483
Total Efficiency	N.A.
Total Luminaire Watts	573.5
Ballast Factor	1.00

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**AXIAL CANDELA**

DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	83	85	84
75	461	75	461
65	1073	65	1075
55	2528	55	2542
47.5	4099	47.5	4111
42.5	6053	42.5	6054
37.5	9762	37.5	9796
33	15012	33	15217
29	22218	29	22348
25.5	33276	25.5	33578
22.5	46674	22.5	47030
19.5	65799	19.5	66187
17	88563	17	89084
15	112061	15	112761
13	135568	13	136180
11	155158	11	155675
9	170854	9	171275
7	183095	7	183492
5	192737	5	193322
3	196950	3	197254
1	197919	1	198013
0	197863	0	197863
-1	197919	-1	198013
-3	196950	-3	197254
-5	192737	-5	193322
-7	183095	-7	183492
-9	170854	-9	171275
-11	155158	-11	155675
-13	135568	-13	136180
-15	112061	-15	112761
-17	88563	-17	89084
-19.5	65799	-19.5	66187
-22.5	46674	-22.5	47030
-25.5	33276	-25.5	33578
-29	22218	-29	22348
-33	15012	-33	15217
-37.5	9762	-37.5	9796
-42.5	6053	-42.5	6054
-47.5	4099	-47.5	4111
-55	2528	-55	2542
-65	1073	-65	1075
-75	461	-75	461
-85	83	-85	84
-90	0	-90	0

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**CANDELA TABULATION**

Maximum Candela = 198108

Beam Edge = 99054 Cd (50% of Max.)

Field Edge = 19810.8 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	5	14	23	35	48	55	61	66	70
75.0	0	14	60	125	198	252	289	323	351	378
65.0	0	24	127	265	420	526	600	685	766	829
55.0	0	36	200	422	670	906	1091	1290	1484	1671
47.5	0	48	253	536	904	1282	1625	2077	2334	2732
42.5	0	55	291	613	1083	1640	2109	2622	3228	3656
37.5	0	61	325	696	1280	2037	2622	3409	3995	4634
33.0	0	67	353	770	1491	2333	3227	4016	4862	5987
29.0	0	71	376	832	1667	2723	3666	4619	5972	7753
25.5	0	74	394	886	1822	3067	4015	5276	7214	9610
22.5	0	76	408	924	1942	3285	4314	5921	8401	11461
19.5	0	78	421	963	2062	3468	4642	6671	9639	13331
17.0	0	79	430	991	2158	3602	4890	7287	10764	14898
15.0	0	80	437	1010	2228	3719	5138	7732	11622	16083
13.0	0	81	442	1027	2294	3819	5379	8262	12376	17333
11.0	0	84	448	1041	2353	3902	5581	8720	13127	18444
9.0	0	84	452	1053	2406	3969	5748	9101	13805	19404
7.0	0	83	455	1062	2451	4019	5880	9410	14337	20347 *
5.0	0	83	460	1068	2484	4055	5975	9643	14722	21216 *
3.0	0	83	461	1075	2518	4100	6073	9772	14958	21802 *
1.0	0	83	461	1074	2525	4099	6060	9795	15028	22153 *
0.0	0	83	461	1073	2528	4099	6053	9762	15012	22218 *
-1.0	0	83	461	1074	2525	4099	6060	9795	15028	22153 *
-3.0	0	83	461	1075	2518	4100	6073	9772	14958	21802 *
-5.0	0	83	460	1068	2484	4055	5975	9643	14722	21216 *
-7.0	0	83	455	1062	2451	4019	5880	9410	14337	20347 *
-9.0	0	84	452	1053	2406	3969	5748	9101	13805	19404
-11.0	0	84	448	1041	2353	3902	5581	8720	13127	18444
-13.0	0	81	442	1027	2294	3819	5379	8262	12376	17333
-15.0	0	80	437	1010	2228	3719	5138	7732	11622	16083
-17.0	0	79	430	991	2158	3602	4890	7287	10764	14898
-19.5	0	78	421	963	2062	3468	4642	6671	9639	13331
-22.5	0	76	408	924	1942	3285	4314	5921	8401	11461
-25.5	0	74	394	886	1822	3067	4015	5276	7214	9610
-29.0	0	71	376	832	1667	2723	3666	4619	5972	7753
-33.0	0	67	353	770	1491	2333	3227	4016	4862	5987
-37.5	0	61	325	696	1280	2037	2622	3409	3995	4634
-42.5	0	55	291	613	1083	1640	2109	2622	3228	3656
-47.5	0	48	253	536	904	1282	1625	2077	2334	2732
-55.0	0	36	200	422	670	906	1091	1290	1484	1671
-65.0	0	24	127	265	420	526	600	685	766	829
-75.0	0	14	60	125	198	252	289	323	351	378
-85.0	0	5	14	23	35	48	55	61	66	70
-90.0	0	0	0	0	0	0	0	0	0	0

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

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<b>-25.5</b>	<b>-22.5</b>	<b>-19.5</b>	<b>-17.0</b>	<b>-15.0</b>	<b>-13.0</b>	<b>-11.0</b>	<b>-9.0</b>	<b>-7.0</b>	<b>-5.0</b>
<b>90.0</b>	0	0	0	0	0	0	0	0	0	0
<b>85.0</b>	73	76	79	81	83	84	87	86	86	86
<b>75.0</b>	401	416	426	432	435	439	444	448	451	456
<b>65.0</b>	881	916	957	987	1009	1028	1043	1056	1067	1075
<b>55.0</b>	1840	1962	2065	2146	2206	2261	2318	2373	2423	2465
<b>47.5</b>	3100	3327	3532	3669	3762	3845	3915	3981	4032	4069
<b>42.5</b>	4015	4319	4645	4881	5118	5353	5559	5731	5870	5978
<b>37.5</b>	5299	5941	6669	7240	7663	8203	8681	9090	9397	9628
<b>33.0</b>	7229	8426	9644	10751	11632	12425	13139	13784	14327	14738
<b>29.0</b>	9659	11423	13277	14867	16022	17270	18391	19322	20266 *	21146 *
<b>25.5</b>	12124	14496	17066	19218	21384 *	23613 *	25573 *	27833 *	29769 *	31285 *
<b>22.5</b>	14543	17524	21103 *	24798 *	28277 *	31919 *	35293 *	38930 *	41826 *	44008 *
<b>19.5</b>	17084	21100 *	26546 *	32490 *	37505 *	42859 *	47999 *	53351 *	57535 *	60674 *
<b>17.0</b>	19201	24797 *	32591 *	40098 *	46362 *	53676 *	60500 *	68676 *	75718 *	81211 *
<b>15.0</b>	21340 *	28324 *	37772 *	46597 *	54626 *	63226 *	74049 *	83711 *	94507 *	103117 *
<b>13.0</b>	23529 *	32017 *	43099 *	54134 *	63563 *	75527 *	89093 *	103527 *	115622 *	125339 *
<b>11.0</b>	25488 *	35372 *	48010 *	60937 *	74429 *	89216 *	106902 *	122706 *	136227 *	145707 *
<b>9.0</b>	27825 *	38840 *	53204 *	68849 *	83825 *	103613 *	122578 *	140591 *	152764 *	162189 *
<b>7.0</b>	29825 *	41657 *	57453 *	75810 *	94576 *	115604 *	135861 *	152557 *	166258 *	174380 *
<b>5.0</b>	31377 *	43968 *	60717 *	81350 *	103151 *	125341 *	145725 *	162197 *	174477 *	183822 *
<b>3.0</b>	32438 *	45679 *	63841 *	86017 *	109127 *	132397 *	152606 *	168524 *	180721 *	189346 *
<b>1.0</b>	33109 *	46664 *	65583 *	88555 *	112467 *	135563 *	155472 *	171297 *	183388 *	193140 *
<b>0.0</b>	33276 *	46674 *	65799 *	88563 *	112061 *	135568 *	155158 *	170854 *	183095 *	192737 *
<b>-1.0</b>	33109 *	46664 *	65583 *	88555 *	112467 *	135563 *	155472 *	171297 *	183388 *	193140 *
<b>-3.0</b>	32438 *	45679 *	63841 *	86017 *	109127 *	132397 *	152606 *	168524 *	180721 *	189346 *
<b>-5.0</b>	31377 *	43968 *	60717 *	81350 *	103151 *	125341 *	145725 *	162197 *	174477 *	183822 *
<b>-7.0</b>	29825 *	41657 *	57453 *	75810 *	94576 *	115604 *	135861 *	152557 *	166258 *	174380 *
<b>-9.0</b>	27825 *	38840 *	53204 *	68849 *	83825 *	103613 *	122578 *	140591 *	152764 *	162189 *
<b>-11.0</b>	25488 *	35372 *	48010 *	60937 *	74429 *	89216 *	106902 *	122706 *	136227 *	145707 *
<b>-13.0</b>	23529 *	32017 *	43099 *	54134 *	63563 *	75527 *	89093 *	103527 *	115622 *	125339 *
<b>-15.0</b>	21340 *	28324 *	37772 *	46597 *	54626 *	63226 *	74049 *	83711 *	94507 *	103117 *
<b>-17.0</b>	19201	24797 *	32591 *	40098 *	46362 *	53676 *	60500 *	68676 *	75718 *	81211 *
<b>-19.5</b>	17084	21100 *	26546 *	32490 *	37505 *	42859 *	47999 *	53351 *	57535 *	60674 *
<b>-22.5</b>	14543	17524	21103 *	24798 *	28277 *	31919 *	35293 *	38930 *	41826 *	44008 *
<b>-25.5</b>	12124	14496	17066	19218	21384 *	23613 *	25573 *	27833 *	29769 *	31285 *
<b>-29.0</b>	9659	11423	13277	14867	16022	17270	18391	19322	20266 *	21146 *
<b>-33.0</b>	7229	8426	9644	10751	11632	12425	13139	13784	14327	14738
<b>-37.5</b>	5299	5941	6669	7240	7663	8203	8681	9090	9397	9628
<b>-42.5</b>	4015	4319	4645	4881	5118	5353	5559	5731	5870	5978
<b>-47.5</b>	3100	3327	3532	3669	3762	3845	3915	3981	4032	4069
<b>-55.0</b>	1840	1962	2065	2146	2206	2261	2318	2373	2423	2465
<b>-65.0</b>	881	916	957	987	1009	1028	1043	1056	1067	1075
<b>-75.0</b>	401	416	426	432	435	439	444	448	451	456
<b>-85.0</b>	73	76	79	81	83	84	87	86	86	86
<b>-90.0</b>	0	0	0	0	0	0	0	0	0	0

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<b>-3.0</b>	<b>-1.0</b>	<b>0.0</b>	<b>1.0</b>	<b>3.0</b>	<b>5.0</b>	<b>7.0</b>	<b>9.0</b>	<b>11.0</b>	<b>13.0</b>
<b>90.0</b>	0	0	0	0	0	0	0	0	0	0
<b>85.0</b>	85	84	84	84	85	86	86	86	87	84
<b>75.0</b>	458	460	461	460	458	456	451	448	444	439
<b>65.0</b>	1080	1077	1075	1077	1080	1075	1067	1056	1043	1028

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**CANDELA TABULATION - (Cont.)**

55.0	2512	2532	2542	2532	2512	2465	2423	2373	2318	2261
47.5	4110	4111	4111	4111	4110	4069	4032	3981	3915	3845
42.5	6089	6066	6054	6066	6089	5978	5870	5731	5559	5353
37.5	9780	9821	9796	9821	9780	9628	9397	9090	8681	8203
33.0	15009	15180	15217	15180	15009	14738	14327	13784	13139	12425
29.0	21739 *	22198 *	22348 *	22198 *	21739 *	21146 *	20266 *	19322	18391	17270
25.5	32321 *	33201 *	33578 *	33201 *	32321 *	31285 *	29769 *	27833 *	25573 *	23613 *
22.5	45407 *	46589 *	47030 *	46589 *	45407 *	44008 *	41826 *	38930 *	35293 *	31919 *
19.5	63677 *	65569 *	66187 *	65569 *	63677 *	60674 *	57535 *	53351 *	47999 *	42859 *
17.0	85566 *	88255 *	89084 *	88255 *	85566 *	81211 *	75718 *	68676 *	60500 *	53676 *
15.0	109099 *	112661 *	112761 *	112661 *	109099 *	103117 *	94507 *	83711 *	74049 *	63226 *
13.0	132428 *	135681 *	136180 *	135681 *	132428 *	125339 *	115622 *	103527 *	89093 *	75527 *
11.0	152438 *	155390 *	155675 *	155390 *	152438 *	145707 *	136227 *	122706 *	106902 *	89216 *
9.0	168281 *	171223 *	171275 *	171223 *	168281 *	162189 *	152764 *	140591 *	122578 *	103613 *
7.0	180454 *	183551 *	183492 *	183551 *	180454 *	174380 *	166258 *	152557 *	135861 *	115604 *
5.0	189447 *	193695 *	193322 *	193695 *	189447 *	183822 *	174477 *	162197 *	145725 *	125341 *
3.0	194953 *	197032 *	197254 *	197032 *	194953 *	189346 *	180721 *	168524 *	152606 *	132397 *
1.0	196813 *	198108 *	198013 *	198108 *	196813 *	193140 *	183388 *	171297 *	155472 *	135563 *
0.0	196950 *	197919 *	197863 *	197919 *	196950 *	192737 *	183095 *	170854 *	155158 *	135568 *
-1.0	196813 *	198108 *	198013 *	198108 *	196813 *	193140 *	183388 *	171297 *	155472 *	135563 *
-3.0	194953 *	197032 *	197254 *	197032 *	194953 *	189346 *	180721 *	168524 *	152606 *	132397 *
-5.0	189447 *	193695 *	193322 *	193695 *	189447 *	183822 *	174477 *	162197 *	145725 *	125341 *
-7.0	180454 *	183551 *	183492 *	183551 *	180454 *	174380 *	166258 *	152557 *	135861 *	115604 *
-9.0	168281 *	171223 *	171275 *	171223 *	168281 *	162189 *	152764 *	140591 *	122578 *	103613 *
-11.0	152438 *	155390 *	155675 *	155390 *	152438 *	145707 *	136227 *	122706 *	106902 *	89216 *
-13.0	132428 *	135681 *	136180 *	135681 *	132428 *	125339 *	115622 *	103527 *	89093 *	75527 *
-15.0	109099 *	112661 *	112761 *	112661 *	109099 *	103117 *	94507 *	83711 *	74049 *	63226 *
-17.0	85566 *	88255 *	89084 *	88255 *	85566 *	81211 *	75718 *	68676 *	60500 *	53676 *
-19.5	63677 *	65569 *	66187 *	65569 *	63677 *	60674 *	57535 *	53351 *	47999 *	42859 *
-22.5	45407 *	46589 *	47030 *	46589 *	45407 *	44008 *	41826 *	38930 *	35293 *	31919 *
-25.5	32321 *	33201 *	33578 *	33201 *	32321 *	31285 *	29769 *	27833 *	25573 *	23613 *
-29.0	21739 *	22198 *	22348 *	22198 *	21739 *	21146 *	20266 *	19322	18391	17270
-33.0	15009	15180	15217	15180	15009	14738	14327	13784	13139	12425
-37.5	9780	9821	9796	9821	9780	9628	9397	9090	8681	8203
-42.5	6089	6066	6054	6066	6089	5978	5870	5731	5559	5353
-47.5	4110	4111	4111	4111	4110	4069	4032	3981	3915	3845
-55.0	2512	2532	2542	2532	2512	2465	2423	2373	2318	2261
-65.0	1080	1077	1075	1077	1080	1075	1067	1056	1043	1028
-75.0	458	460	461	460	458	456	451	448	444	439
-85.0	85	84	84	84	85	86	86	86	87	84
-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	83	81	79	76	73	70	66	61	55	48
75.0	435	432	426	416	401	378	351	323	289	252
65.0	1009	987	957	916	881	829	766	685	600	526
55.0	2206	2146	2065	1962	1840	1671	1484	1290	1091	906
47.5	3762	3669	3532	3327	3100	2732	2334	2077	1625	1282
42.5	5118	4881	4645	4319	4015	3656	3228	2622	2109	1640
37.5	7663	7240	6669	5941	5299	4634	3995	3409	2622	2037
33.0	11632	10751	9644	8426	7229	5987	4862	4016	3227	2333
29.0	16022	14867	13277	11423	9659	7753	5972	4619	3666	2723
25.5	21384 *	19218	17066	14496	12124	9610	7214	5276	4015	3067

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

22.5	28277 *	24798 *	21103 *	17524	14543	11461	8401	5921	4314	3285
19.5	37505 *	32490 *	26546 *	21100 *	17084	13331	9639	6671	4642	3468
17.0	46362 *	40098 *	32591 *	24797 *	19201	14898	10764	7287	4890	3602
15.0	54626 *	46597 *	37772 *	28324 *	21340 *	16083	11622	7732	5138	3719
13.0	63563 *	54134 *	43099 *	32017 *	23529 *	17333	12376	8262	5379	3819
11.0	74429 *	60937 *	48010 *	35372 *	25488 *	18444	13127	8720	5581	3902
9.0	83825 *	68849 *	53204 *	38840 *	27825 *	19404	13805	9101	5748	3969
7.0	94576 *	75810 *	57453 *	41657 *	29825 *	20347 *	14337	9410	5880	4019
5.0	103151 *	81350 *	60717 *	43968 *	31377 *	21216 *	14722	9643	5975	4055
3.0	109127 *	86017 *	63841 *	45679 *	32438 *	21802 *	14958	9772	6073	4100
1.0	112467 *	88555 *	65583 *	46664 *	33109 *	22153 *	15028	9795	6060	4099
0.0	112061 *	88563 *	65799 *	46674 *	33276 *	22218 *	15012	9762	6053	4099
-1.0	112467 *	88555 *	65583 *	46664 *	33109 *	22153 *	15028	9795	6060	4099
-3.0	109127 *	86017 *	63841 *	45679 *	32438 *	21802 *	14958	9772	6073	4100
-5.0	103151 *	81350 *	60717 *	43968 *	31377 *	21216 *	14722	9643	5975	4055
-7.0	94576 *	75810 *	57453 *	41657 *	29825 *	20347 *	14337	9410	5880	4019
-9.0	83825 *	68849 *	53204 *	38840 *	27825 *	19404	13805	9101	5748	3969
-11.0	74429 *	60937 *	48010 *	35372 *	25488 *	18444	13127	8720	5581	3902
-13.0	63563 *	54134 *	43099 *	32017 *	23529 *	17333	12376	8262	5379	3819
-15.0	54626 *	46597 *	37772 *	28324 *	21340 *	16083	11622	7732	5138	3719
-17.0	46362 *	40098 *	32591 *	24797 *	19201	14898	10764	7287	4890	3602
-19.5	37505 *	32490 *	26546 *	21100 *	17084	13331	9639	6671	4642	3468
-22.5	28277 *	24798 *	21103 *	17524	14543	11461	8401	5921	4314	3285
-25.5	21384 *	19218	17066	14496	12124	9610	7214	5276	4015	3067
-29.0	16022	14867	13277	11423	9659	7753	5972	4619	3666	2723
-33.0	11632	10751	9644	8426	7229	5987	4862	4016	3227	2333
-37.5	7663	7240	6669	5941	5299	4634	3995	3409	2622	2037
-42.5	5118	4881	4645	4319	4015	3656	3228	2622	2109	1640
-47.5	3762	3669	3532	3327	3100	2732	2334	2077	1625	1282
-55.0	2206	2146	2065	1962	1840	1671	1484	1290	1091	906
-65.0	1009	987	957	916	881	829	766	685	600	526
-75.0	435	432	426	416	401	378	351	323	289	252
-85.0	83	81	79	76	73	70	66	61	55	48
-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	35	23	14	5	0
75.0	198	125	60	14	0
65.0	420	265	127	24	0
55.0	670	422	200	36	0
47.5	904	536	253	48	0
42.5	1083	613	291	55	0
37.5	1280	696	325	61	0
33.0	1491	770	353	67	0
29.0	1667	832	376	71	0
25.5	1822	886	394	74	0
22.5	1942	924	408	76	0
19.5	2062	963	421	78	0
17.0	2158	991	430	79	0
15.0	2228	1010	437	80	0
13.0	2294	1027	442	81	0
11.0	2353	1041	448	84	0
9.0	2406	1053	452	84	0

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : ZNF-85L-MF-40.IES**

**CANDELA TABULATION - (Cont.)**

<b>7.0</b>	2451	1062	455	83	0
<b>5.0</b>	2484	1068	460	83	0
<b>3.0</b>	2518	1075	461	83	0
<b>1.0</b>	2525	1074	461	83	0
<b>0.0</b>	2528	1073	461	83	0
<b>-1.0</b>	2525	1074	461	83	0
<b>-3.0</b>	2518	1075	461	83	0
<b>-5.0</b>	2484	1068	460	83	0
<b>-7.0</b>	2451	1062	455	83	0
<b>-9.0</b>	2406	1053	452	84	0
<b>-11.0</b>	2353	1041	448	84	0
<b>-13.0</b>	2294	1027	442	81	0
<b>-15.0</b>	2228	1010	437	80	0
<b>-17.0</b>	2158	991	430	79	0
<b>-19.5</b>	2062	963	421	78	0
<b>-22.5</b>	1942	924	408	76	0
<b>-25.5</b>	1822	886	394	74	0
<b>-29.0</b>	1667	832	376	71	0
<b>-33.0</b>	1491	770	353	67	0
<b>-37.5</b>	1280	696	325	61	0
<b>-42.5</b>	1083	613	291	55	0
<b>-47.5</b>	904	536	253	48	0
<b>-55.0</b>	670	422	200	36	0
<b>-65.0</b>	420	265	127	24	0
<b>-75.0</b>	198	125	60	14	0
<b>-85.0</b>	35	23	14	5	0
<b>-90.0</b>	0	0	0	0	0

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : ZNF-85L-MF-40.IES**

**LUMEN TABULATION**

Average Of Right And Left Sides

Total Luminaire Lumens (one side of beam only) = 40241.27

Total Field Lumens (one side of beam only) = 32122.29

\* 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	0.06	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.12
75	0.83	1.65	1.65	1.63	1.62	1.60	1.57	1.54	1.51	1.84
65	2.34	4.68	4.66	4.62	4.56	4.49	4.40	4.30	4.19	5.07
55	5.50	10.96	10.84	10.65	10.44	10.18	9.91	9.61	9.29	11.13
47.5	7.59	15.14	14.99	14.76	14.49	14.16	13.79	13.38	12.94	15.47
42.5	7.75	15.51	15.38	15.11	14.79	14.39	13.91	13.36	12.76	15.12
37.5	12.08	24.17	23.91	23.38	22.69	21.79	20.70	19.46	18.23	21.18
33	17.14	34.10	33.61	32.78	31.63	30.17	28.46	26.55	24.56	27.91
29	22.83	45.13	44.14	42.70	40.84	38.78	36.48	33.90	31.20	35.10
25.5	29.67 *	58.31 *	56.63 *	54.32 *	51.30 *	47.83 *	44.24 *	40.49	36.63	40.77
22.5	36.64 *	71.93 *	69.75 *	66.75 *	62.60 *	57.43 *	52.02 *	46.64 *	41.14 *	44.58 *
19.5	51.49 *	101.02 *	97.43 *	92.72 *	86.71 *	79.00 *	70.64 *	62.31 *	54.05 *	56.92 *
17	58.84 *	115.32 *	110.58 *	104.19 *	96.25 *	86.44 *	76.36 *	66.65 *	57.26 *	59.54 *
15	61.34 *	120.42 *	115.16 *	107.41 *	97.31 *	86.07 *	74.92 *	64.40 *	54.95 *	56.79 *
13	75.74 *	149.12 *	142.81 *	132.86 *	119.86 *	105.11 *	89.95 *	75.94 *	64.10 *	65.67 *
11	88.78 *	175.32 *	168.92 *	158.40 *	144.21 *	126.66 *	107.48 *	89.47 *	74.10 *	74.55 *
9	99.54 *	197.06 *	191.01 *	180.82 *	166.59 *	147.82 *	125.83 *	103.76 *	84.34 *	83.53 *
7	108.06 *	214.16 *	208.24 *	198.60 *	184.65 *	165.46 *	142.32 *	117.52 *	94.59 *	92.32 *
5	114.84 *	227.44 *	221.24 *	211.73 *	197.72 *	178.89 *	155.69 *	129.65 *	103.91 *	99.56 *
3	118.99 *	235.96 *	230.19 *	220.65 *	206.90 *	188.70 *	165.68 *	138.92 *	111.16 *	105.56 *
1	120.38 *	239.55 *	235.26 *	226.17 *	212.33 *	194.35 *	171.63 *	144.69 *	116.00 *	109.92 *
0	60.30 *	120.21 *	118.45 *	113.96 *	106.88 *	97.91 *	86.67 *	73.25 *	58.80 *	55.78 *
-1	60.30 *	120.21 *	118.45 *	113.96 *	106.88 *	97.91 *	86.67 *	73.25 *	58.80 *	55.78 *
	120.38 *	239.55 *	235.26 *	226.17 *	212.33 *	194.35 *	171.63 *	144.69 *	116.00 *	109.92 *

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : ZNF-85L-MF-40.IES**

**LUMENS TABULATION - (Cont.)**

<b>-3</b>	118.99 *	235.96 *	230.19 *	220.65 *	206.90 *	188.70 *	165.68 *	138.92 *	111.16 *	105.56 *
<b>-5</b>	114.84 *	227.44 *	221.24 *	211.73 *	197.72 *	178.89 *	155.69 *	129.65 *	103.91 *	99.56 *
<b>-7</b>	108.06 *	214.16 *	208.24 *	198.60 *	184.65 *	165.46 *	142.32 *	117.52 *	94.59 *	92.32 *
<b>-9</b>	99.54 *	197.06 *	191.01 *	180.82 *	166.59 *	147.82 *	125.83 *	103.76 *	84.34 *	83.53 *
<b>-11</b>	88.78 *	175.32 *	168.92 *	158.40 *	144.21 *	126.66 *	107.48 *	89.47 *	74.10 *	74.55 *
<b>-13</b>	75.74 *	149.12 *	142.81 *	132.86 *	119.86 *	105.11 *	89.95 *	75.94 *	64.10 *	65.67 *
<b>-15</b>	61.34 *	120.42 *	115.16 *	107.41 *	97.31 *	86.07 *	74.92 *	64.40 *	54.95 *	56.79 *
<b>-17</b>	58.84 *	115.32 *	110.58 *	104.19 *	96.25 *	86.44 *	76.36 *	66.65 *	57.26 *	59.54 *
<b>-19.5</b>	51.49 *	101.02 *	97.43 *	92.72 *	86.71 *	79.00 *	70.64 *	62.31 *	54.05 *	56.92 *
<b>-22.5</b>	36.64 *	71.93 *	69.75 *	66.75 *	62.60 *	57.43 *	52.02 *	46.64 *	41.14 *	44.58 *
<b>-25.5</b>	29.67 *	58.31 *	56.63 *	54.32 *	51.30 *	47.83 *	44.24 *	40.49	36.63	40.77
<b>-29</b>	22.83	45.13	44.14	42.70	40.84	38.78	36.48	33.90	31.20	35.10
<b>-33</b>	17.14	34.10	33.61	32.78	31.63	30.17	28.46	26.55	24.56	27.91
<b>-37.5</b>	12.08	24.17	23.91	23.38	22.69	21.79	20.70	19.46	18.23	21.18
<b>-42.5</b>	7.75	15.51	15.38	15.11	14.79	14.39	13.91	13.36	12.76	15.12
<b>-47.5</b>	7.59	15.14	14.99	14.76	14.49	14.16	13.79	13.38	12.94	15.47
<b>-55</b>	5.50	10.96	10.84	10.65	10.44	10.18	9.91	9.61	9.29	11.13
<b>-65</b>	2.34	4.68	4.66	4.62	4.56	4.49	4.40	4.30	4.19	5.07
<b>-75</b>	0.83	1.65	1.65	1.63	1.62	1.60	1.57	1.54	1.51	1.84
<b>-85</b>	0.06	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.12	0.14
<b>-90</b>										
<b>Total</b>	2201.5	4354.63	4229.95	4028.63	3748.98	3394.7	2985.51	2551.82	2131.69	2156.87

**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>										
	0.17	0.16	0.17	0.18	0.18	0.17	0.14	0.15	0.11	0.05
<b>85</b>	2.13	2.02	2.18	2.26	2.24	2.12	1.73	1.90	1.45	0.58
<b>75</b>	5.79	5.46	5.90	6.07	5.95	5.53	4.49	4.99	3.83	1.50
<b>65</b>	12.58	11.68	12.37	12.40	11.82	10.69	8.41	9.01	6.76	2.64
<b>55</b>	17.41	16.01	16.60	16.10	15.08	13.30	9.90	10.08	7.22	2.75

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : ZNF-85L-MF-40.IES**

**LUMENS TABULATION - (Cont.)**

<b>47.5</b>										
	16.87	15.40	16.00	15.60	14.35	12.30	8.96	8.77	5.96	2.20
<b>42.5</b>	23.00	20.42	20.85	20.25	18.54	15.69	11.32	10.79	6.98	2.50
<b>37.5</b>	29.44	25.26	24.68	22.88	20.50	17.42	12.38	11.48	7.25	2.51
<b>33</b>	36.49	30.67	29.03	25.66	21.79	18.11	12.86	11.74	7.24	2.43
<b>29</b>	42.00	34.84	32.46	27.91	22.60	17.94	12.69	11.60	6.93	2.27
<b>25.5</b>	44.91	36.74	33.93	28.73	22.50	17.08	11.85	10.84	6.36	2.04
<b>22.5</b>	55.20 *	43.98	40.10	33.54	25.71	18.85	12.68	11.53	6.72	2.12
<b>19.5</b>	56.00 *	42.88 *	38.21	31.74	24.03	17.12	11.17	10.08	5.87	1.82
<b>17</b>	52.67 *	39.09 *	33.89	27.86	20.93	14.61	9.34	8.36	4.86	1.49
<b>15</b>	60.23 *	43.91 *	37.09	29.98	22.38	15.46	9.72	8.62	4.99	1.52
<b>13</b>	67.60 *	48.58 *	40.18 *	31.99	23.77	16.30	10.06	8.84	5.11	1.54
<b>11</b>	74.82 *	53.23 *	43.20 *	33.82	25.04	17.00	10.34	9.02	5.21	1.56
<b>9</b>	81.53 *	57.66 *	46.15 *	35.45	26.11	17.58	10.56	9.18	5.30	1.57
<b>7</b>	86.92 *	61.28 *	48.69 *	36.87	26.92	18.03	10.73	9.29	5.37	1.58
<b>5</b>	91.36 *	64.05 *	50.62 *	37.96	27.47	18.35	10.88	9.40	5.43	1.59
<b>3</b>	94.59 *	65.90 *	51.89 *	38.61	27.73	18.49	10.95	9.46	5.47	1.60
<b>1</b>	47.92 *	33.33 *	26.24 *	19.43	13.88	9.23	5.47	4.73	2.74	0.80
<b>0</b>	47.92 *	33.33 *	26.24 *	19.43	13.88	9.23	5.47	4.73	2.74	0.80
<b>-1</b>	94.59 *	65.90 *	51.89 *	38.61	27.73	18.49	10.95	9.46	5.47	1.60
<b>-3</b>	91.36 *	64.05 *	50.62 *	37.96	27.47	18.35	10.88	9.40	5.43	1.59
<b>-5</b>	86.92 *	61.28 *	48.69 *	36.87	26.92	18.03	10.73	9.29	5.37	1.58
<b>-7</b>	81.53 *	57.66 *	46.15 *	35.45	26.11	17.58	10.56	9.18	5.30	1.57
<b>-9</b>	74.82 *	53.23 *	43.20 *	33.82	25.04	17.00	10.34	9.02	5.21	1.56
<b>-11</b>	67.60 *	48.58 *	40.18 *	31.99	23.77	16.30	10.06	8.84	5.11	1.54
<b>-13</b>	60.23 *	43.91 *	37.09	29.98	22.38	15.46	9.72	8.62	4.99	1.52
<b>-15</b>	52.67 *	39.09 *	33.89	27.86	20.93	14.61	9.34	8.36	4.86	1.49
<b>-17</b>	56.00 *	42.88 *	38.21	31.74	24.03	17.12	11.17	10.08	5.87	1.82
<b>-19.5</b>	55.20 *	43.98	40.10	33.54	25.71	18.85	12.68	11.53	6.72	2.12

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : ZNF-85L-MF-40.IES**

**LUMENS TABULATION - (Cont.)**

<b>-22.5</b>	44.91	36.74	33.93	28.73	22.50	17.08	11.85	10.84	6.36	2.04
<b>-25.5</b>	42.00	34.84	32.46	27.91	22.60	17.94	12.69	11.60	6.93	2.27
<b>-29</b>	36.49	30.67	29.03	25.66	21.79	18.11	12.86	11.74	7.24	2.43
<b>-33</b>	29.44	25.26	24.68	22.88	20.50	17.42	12.38	11.48	7.25	2.51
<b>-37.5</b>	23.00	20.42	20.85	20.25	18.54	15.69	11.32	10.79	6.98	2.50
<b>-42.5</b>	16.87	15.40	16.00	15.60	14.35	12.30	8.96	8.77	5.96	2.20
<b>-47.5</b>	17.41	16.01	16.60	16.10	15.08	13.30	9.90	10.08	7.22	2.75
<b>-55</b>	12.58	11.68	12.37	12.40	11.82	10.69	8.41	9.01	6.76	2.64
<b>-65</b>	5.79	5.46	5.90	6.07	5.95	5.53	4.49	4.99	3.83	1.50
<b>-75</b>	2.13	2.02	2.18	2.26	2.24	2.12	1.73	1.90	1.45	0.58
<b>-85</b>	0.17	0.16	0.17	0.18	0.18	0.17	0.14	0.15	0.11	0.05
<b>-90</b>										
<b>Total</b>	1999.29	1505.1	1300.88	1070.56	839.06	622.72	413.22	379.74	234.35	77.32

<b>Vert. Angles</b>	<b>Horizontal Angles</b>		
	<b><u>75</u></b>	<b><u>85</u></b>	<b><u>90</u></b>
<b>90</b>			
	0.01	0.00	2.70
<b>85</b>			
	0.12	0.00	34.18
<b>75</b>			
	0.30	0.01	93.10
<b>65</b>			
	0.51	0.01	197.39
<b>55</b>			
	0.53	0.01	261.71
<b>47.5</b>			
	0.43	0.01	254.91
<b>42.5</b>			
	0.48	0.01	358.45
<b>37.5</b>			
	0.48	0.01	461.18
<b>33</b>			
	0.46	0.01	567.57
<b>29</b>			
	0.42	0.01	671.87
<b>25.5</b>			
	0.38	0.01	764.84
<b>22.5</b>			
	0.39	0.01	1003.14
<b>19.5</b>			
	0.33	0.01	1070.71
<b>17</b>			
	0.27	0.01	1052.16

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : ZNF-85L-MF-40.IES**

**LUMENS TABULATION - (Cont.)**

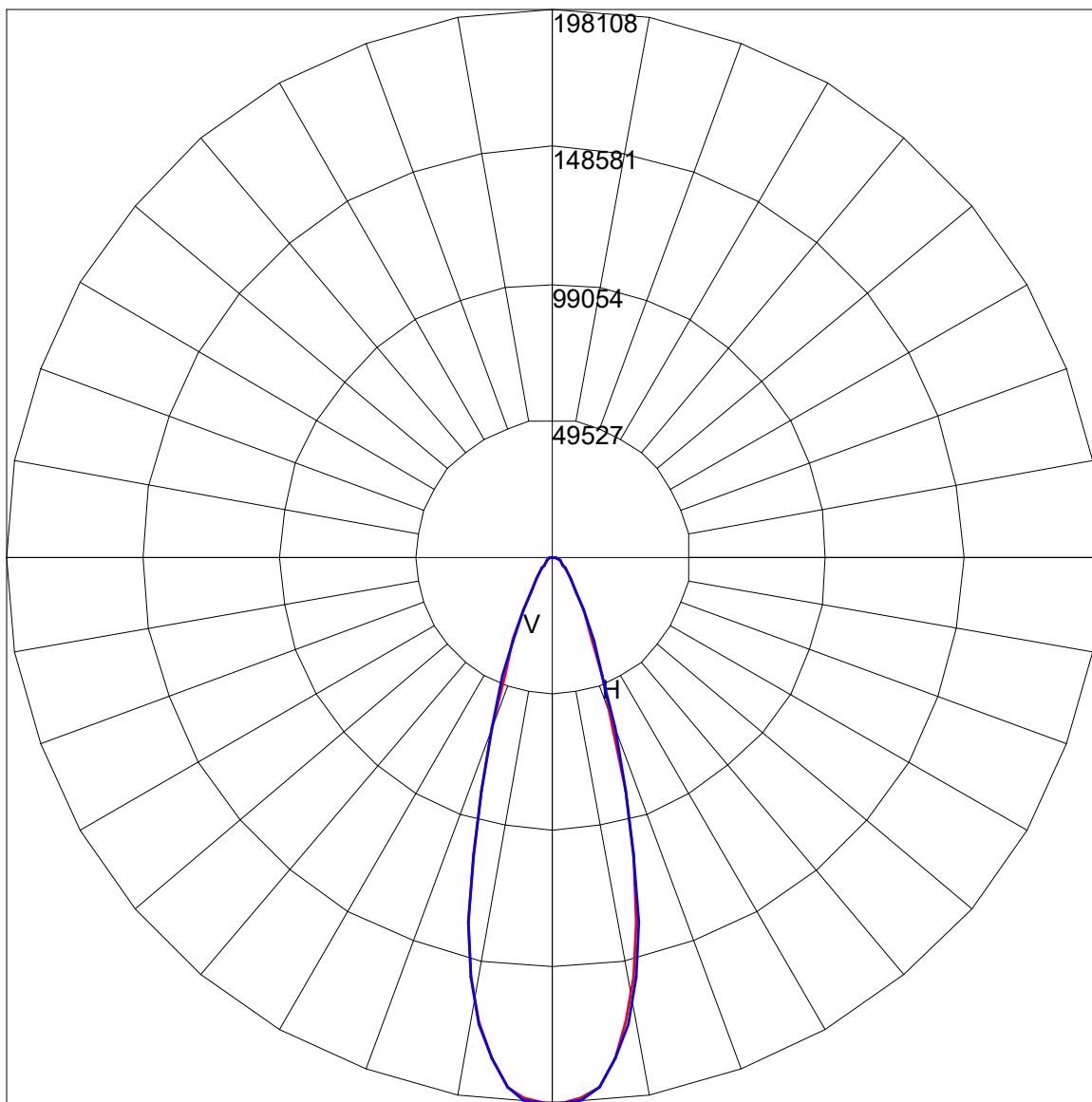
<b>15</b>	0.27	0.01	1255.33
<b>13</b>	0.28	0.01	1462.15
<b>11</b>	0.28	0.01	1653.82
<b>9</b>	0.28	0.01	1817.3
<b>7</b>	0.29	0.01	1946.67
<b>5</b>	0.29	0.01	2040.12
<b>3</b>	0.29	0.01	2095.25
<b>1</b>	0.14	0.00	1056.12
<b>0</b>	0.14	0.00	1056.12
<b>-1</b>	0.29	0.01	2095.25
<b>-3</b>	0.29	0.01	2040.12
<b>-5</b>	0.29	0.01	1946.67
<b>-7</b>	0.28	0.01	1817.3
<b>-9</b>	0.28	0.01	1653.82
<b>-11</b>	0.28	0.01	1462.15
<b>-13</b>	0.27	0.01	1255.33
<b>-15</b>	0.27	0.01	1052.16
<b>-17</b>	0.33	0.01	1070.71
<b>-19.5</b>	0.39	0.01	1003.14
<b>-22.5</b>	0.38	0.01	764.84
<b>-25.5</b>	0.42	0.01	671.87
<b>-29</b>	0.46	0.01	567.57
<b>-33</b>	0.48	0.01	461.18
<b>-37.5</b>	0.48	0.01	358.45
<b>-42.5</b>	0.43	0.01	254.91
<b>-47.5</b>	0.53	0.01	261.71
<b>-55</b>	0.51	0.01	197.39
<b>-65</b>	0.30	0.01	93.10

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : ZNF-85L-MF-40.IES**

**LUMENS TABULATION - (Cont.)**

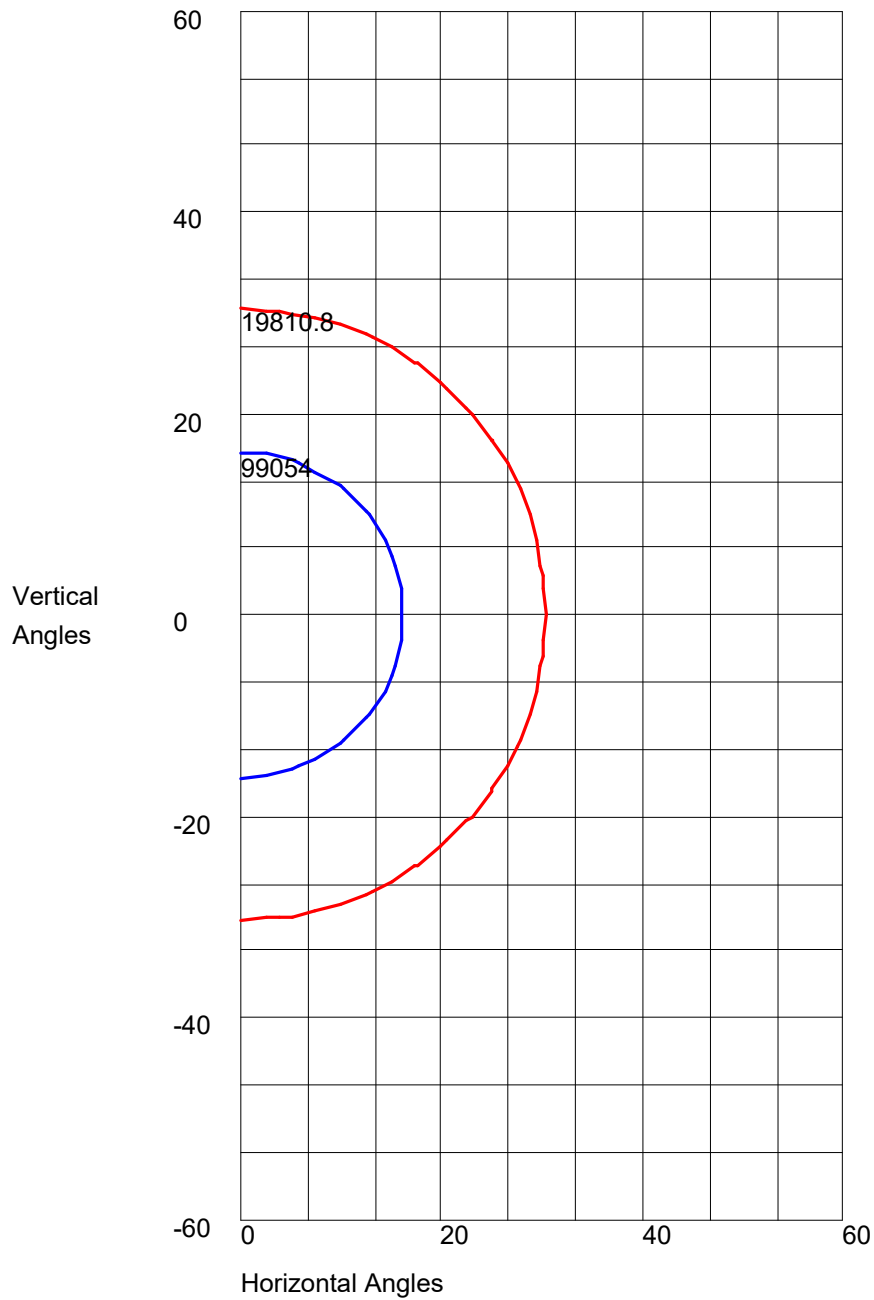
<b>-75</b>	0.12	0.00	34.18
<b>-85</b>	0.01	0.00	2.70
<b>-90</b>			
<b>Total</b>	14.48	0.29	40241.29

AXIAL CANDELA DISPLAY



Maximum Candela = 198108 Located At Horizontal Angle =-1, Vertical Angle =-1  
H - Horizontal Axial Candela  
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 198108 Located At Horizontal Angle =-1, Vertical Angle =-1  
50% Maximum Candela = 99054  
10% Maximum Candela = 19810.8