



IES INDOOR REPORT

PHOTOMETRIC FILENAME : VF2-L88-750-WF_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST]ATAL009603-R2
 [TESTLAB]ATAL-LABS
 [ISSUE DATE]29 NOV 2022
 [MANUFACTURER]WILLIAMS OUTDOOR
 [OTHER]H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMEN CATEGORY]VF2-L88-750-WF-MTG-CLR-OPT-DIM-UNV
 [LUMINAIRE]VOLTAIRE MEDIUM ARCHITECTURAL FLOOD LIGHT WITH WIDE
 [MORE]FLOOD MOLDED REFRACTIVE CLEAR ACRYLIC LENS AND A CLEAR GLASS
 [MORE]LENS.
 [LAMP CATEGORY]LUXEON TX 5000K LEDS
 [BALLAST](1) PHILIPS ELECTRONIC DRIVER
 [OTHER]INPUT WATTS: 75, AMPS: 0.4428, VAC: 120.03, TEMP: 25.2 C
 [SEARCH_SOURCE TYPE] LED
 [SEARCH_APPLICATION] Outdoor, Architectural, Facade, Landscape, Parking, Site, Flood, Wet Location
 [SEARCH_MOUNTING] Arm, Ground, Pole, Post Top, Wall
 [SEARCH_CERTIFICATION] DLC
 [SEARCH_CLASSIFICATION] IP66

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

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	8816
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	118
Total Luminaire Watts	75
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	2.06
Spacing Criterion (90-270)	2.02
Spacing Criterion (Diagonal)	1.76
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.00 ft
Luminous Width (90-270)	0.69 ft (Diameter)
Luminous Height	0.00 ft

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF2-L88-750-WF_.IES

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	134391	131717	129829
55	63338	64802	65857
65	25886	26504	24055
75	19141	15408	15153
85	0	5859	2368

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF2-L88-750-WF_.IES

CANDELA TABULATION

	<u>0.0</u>	<u>2.5</u>	<u>5.0</u>	<u>7.5</u>	<u>10.0</u>	<u>12.5</u>	<u>15.0</u>	<u>17.5</u>	<u>20.0</u>	<u>22.5</u>
0.0	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992
2.5	2207.118	2207.109	2207.084	2207.041	2206.982	2206.907	2206.814	2206.706	2206.581	2206.440
5.0	2237.401	2236.946	2236.363	2235.658	2234.837	2234.043	2235.893	2236.857	2237.633	2238.213
7.5	2323.797	2321.984	2319.470	2316.283	2317.072	2317.457	2317.048	2315.829	2311.064	2312.296
10.0	2472.542	2468.019	2462.218	2461.435	2462.186	2461.721	2460.070	2457.262	2457.096	2455.167
12.5	2685.416	2677.829	2669.082	2670.700	2669.187	2665.442	2663.627	2665.470	2664.599	2660.942
15.0	2958.856	2949.248	2943.606	2943.354	2939.993	2937.884	2941.358	2941.691	2936.342	2941.342
17.5	3238.887	3231.651	3229.154	3227.834	3224.052	3230.531	3233.804	3231.423	3229.696	3226.469
20.0	3404.199	3411.126	3414.007	3415.932	3419.354	3424.869	3421.752	3415.856	3410.533	3405.574
22.5	3439.826	3436.231	3435.614	3434.998	3432.143	3429.847	3428.943	3429.827	3430.915	3432.689
25.0	3390.838	3387.685	3389.710	3392.200	3393.914	3395.664	3396.849	3397.612	3396.798	3395.473
27.5	3369.843	3368.556	3369.889	3371.228	3372.404	3372.891	3372.774	3370.606	3367.366	3362.065
30.0	3379.704	3379.822	3379.112	3378.042	3376.339	3373.545	3370.257	3369.661	3369.907	3368.369
32.5	3425.352	3426.223	3424.010	3423.263	3421.996	3419.095	3416.153	3412.743	3408.609	3403.247
35.0	3502.569	3502.584	3497.095	3491.287	3483.831	3475.264	3468.298	3462.790	3458.471	3454.445
37.5	3587.679	3586.714	3578.870	3566.794	3552.289	3538.087	3526.187	3515.739	3507.724	3500.504
40.0	3553.833	3550.372	3543.249	3533.609	3524.458	3516.884	3512.582	3512.190	3516.051	3527.068
42.5	3519.987	3512.537	3502.017	3488.639	3476.779	3462.956	3452.788	3441.012	3429.733	3430.345
45.0	3280.393	3273.031	3267.786	3257.279	3250.620	3239.032	3244.566	3248.012	3263.670	3294.815
47.5	3040.799	3031.510	3023.722	3002.954	2976.666	2944.806	2933.142	2914.761	2909.178	2903.499
50.0	2445.228	2441.224	2443.458	2440.913	2438.818	2439.150	2450.749	2460.096	2473.200	2472.044
52.5	1849.656	1847.068	1848.171	1846.503	1848.940	1855.852	1864.696	1872.849	1885.443	1891.819
55.0	1254.085	1252.879	1253.120	1252.949	1262.311	1273.074	1279.905	1286.314	1310.663	1331.401
57.5	1034.976	1031.491	1023.457	1009.728	998.422	978.687	946.964	904.823	883.756	848.273
60.0	815.868	814.064	810.257	803.480	799.282	786.870	766.519	740.730	728.495	702.888
62.5	596.759	596.725	597.827	598.524	601.721	598.623	590.563	581.551	577.526	565.659
65.0	377.650	379.465	386.083	394.718	405.593	411.885	419.802	426.929	432.516	434.356
67.5	325.991	326.679	328.764	330.168	333.070	330.457	331.218	331.708	331.292	329.899
70.0	274.331	275.292	276.684	276.805	279.593	276.321	276.212	276.634	275.627	272.936
72.5	222.672	223.918	224.525	223.646	225.937	222.380	220.770	221.944	219.893	215.781
75.0	171.012	172.552	172.303	170.495	172.146	168.597	164.980	167.564	164.112	158.482
77.5	128.259	129.863	130.389	129.477	129.974	127.590	123.405	125.584	120.932	114.058
80.0	85.506	87.207	88.765	88.991	89.214	88.530	85.748	87.463	84.605	80.221
82.5	42.753	44.538	47.183	48.431	48.694	49.421	48.453	49.815	48.733	46.879
85.0	0.000	1.862	5.625	7.817	8.343	10.268	11.413	12.352	13.163	13.886
87.5	0.000	0.891	2.678	3.593	3.617	4.328	4.610	4.669	4.739	4.820
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Vert.
Angles**

Horizontal Angles

	<u>25.0</u>	<u>27.5</u>	<u>30.0</u>	<u>32.5</u>	<u>35.0</u>	<u>37.5</u>	<u>40.0</u>	<u>42.5</u>	<u>45.0</u>	<u>47.5</u>
0.0	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992
2.5	2206.284	2206.912	2207.204	2207.454	2207.660	2207.822	2207.939	2208.009	2208.033	2208.010
5.0	2238.590	2238.758	2238.710	2238.444	2237.954	2236.928	2237.805	2237.806	2237.536	2236.994
7.5	2312.800	2313.850	2314.217	2313.886	2312.846	2311.087	2308.605	2304.395	2304.935	2299.921
10.0	2445.640	2447.741	2444.482	2445.865	2445.794	2443.912	2440.195	2434.629	2425.491	2427.875
12.5	2658.154	2656.123	2654.123	2652.267	2649.562	2648.653	2644.626	2637.453	2628.982	2626.921
15.0	2940.325	2936.846	2927.681	2931.745	2926.677	2915.330	2916.647	2911.236	2905.813	2898.552
17.5	3223.161	3221.189	3219.791	3218.154	3213.076	3208.672	3203.847	3190.734	3187.329	3176.324
20.0	3403.456	3404.186	3408.482	3417.113	3409.580	3399.233	3397.200	3397.959	3386.556	3384.211
22.5	3434.998	3436.031	3439.221	3432.140	3427.425	3424.784	3423.761	3427.564	3416.086	3411.510
25.0	3392.018	3387.529	3384.775	3382.181	3376.949	3369.240	3360.234	3355.062	3351.468	3345.713
27.5	3359.615	3359.240	3355.950	3349.898	3342.251	3333.950	3328.119	3321.205	3311.378	3301.650
30.0	3366.551	3362.407	3355.008	3346.274	3337.249	3332.491	3325.503	3315.869	3307.314	3298.646

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF2-L88-750-WF_IES

CANDELA TABULATION - (Cont.)

32.5	3396.321	3385.902	3376.097	3371.192	3365.479	3357.128	3347.574	3337.888	3328.221	3321.699
35.0	3448.449	3440.209	3430.687	3421.563	3411.403	3401.852	3396.769	3387.463	3379.699	3370.573
37.5	3493.393	3486.523	3482.490	3481.720	3472.210	3462.883	3453.594	3448.598	3444.515	3435.070
40.0	3529.680	3517.149	3505.784	3493.920	3487.425	3490.807	3495.039	3481.857	3469.944	3475.874
42.5	3432.852	3433.937	3445.757	3459.370	3446.502	3421.973	3416.256	3416.672	3446.369	3420.575
45.0	3298.977	3266.665	3238.179	3226.804	3221.617	3241.146	3252.552	3231.618	3215.138	3229.309
47.5	2895.420	2897.249	2909.611	2934.022	2912.552	2875.976	2863.721	2865.729	2882.141	2883.654
50.0	2432.460	2405.827	2402.081	2394.762	2403.379	2404.547	2405.741	2366.627	2365.006	2369.597
52.5	1890.980	1884.650	1871.882	1840.683	1819.652	1817.779	1817.960	1814.855	1806.393	1801.876
55.0	1348.662	1370.273	1376.453	1371.304	1349.896	1314.350	1268.358	1271.150	1283.069	1275.182
57.5	830.051	875.206	911.026	940.703	955.234	958.601	938.074	905.855	848.895	858.647
60.0	681.680	657.920	631.022	610.494	606.642	649.626	670.009	669.066	645.420	640.764
62.5	555.150	541.405	526.846	513.670	502.841	492.213	481.892	478.853	492.148	497.228
65.0	435.032	432.328	428.799	423.864	418.985	412.164	403.181	394.515	386.659	377.999
67.5	329.030	329.932	336.287	339.356	339.338	334.587	326.947	320.559	314.722	309.762
70.0	270.927	270.329	270.728	270.219	269.009	261.008	253.002	249.808	246.350	246.159
72.5	212.679	211.243	211.404	210.693	209.678	203.730	196.986	191.254	185.393	184.060
75.0	154.324	152.296	152.199	151.750	151.190	148.955	145.424	140.964	137.665	138.034
77.5	108.051	103.487	99.962	96.212	94.553	96.286	95.080	92.030	91.588	93.734
80.0	76.471	73.796	71.661	69.360	67.661	66.438	62.314	56.697	54.213	53.332
82.5	45.375	44.478	43.793	42.997	42.598	42.386	39.821	36.482	35.768	35.611
85.0	14.619	15.421	16.228	16.977	17.800	18.632	18.043	17.094	17.629	18.243
87.5	4.913	5.020	5.141	5.279	5.435	5.611	5.240	4.841	5.035	5.269
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Vert.
Angles**

Horizontal Angles

	<u>50.0</u>	<u>52.5</u>	<u>55.0</u>	<u>57.5</u>	<u>60.0</u>	<u>62.5</u>	<u>65.0</u>	<u>67.5</u>	<u>70.0</u>	<u>72.5</u>
0.0	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992
2.5	2207.940	2207.824	2207.662	2207.456	2207.206	2206.915	2206.282	2206.313	2206.149	2205.958
5.0	2236.182	2234.260	2235.006	2235.181	2235.154	2234.929	2234.510	2233.903	2233.115	2232.155
7.5	2302.575	2302.865	2302.439	2301.306	2299.479	2296.977	2293.820	2291.267	2289.145	2290.633
10.0	2428.103	2426.554	2423.244	2418.201	2409.758	2408.888	2403.403	2405.416	2402.650	2397.335
12.5	2625.423	2620.817	2613.126	2606.305	2601.331	2589.222	2587.600	2581.069	2579.133	2575.113
15.0	2889.218	2877.660	2867.402	2858.018	2845.771	2832.314	2831.834	2825.185	2815.258	2808.996
17.5	3166.576	3159.416	3151.493	3143.728	3127.232	3122.175	3110.359	3099.472	3091.773	3082.473
20.0	3385.329	3368.557	3356.972	3353.107	3340.228	3322.685	3310.715	3299.826	3290.914	3289.285
22.5	3413.186	3397.422	3389.321	3381.334	3378.687	3372.813	3359.462	3350.671	3338.770	3331.980
25.0	3337.323	3331.009	3323.825	3319.654	3313.148	3305.199	3299.689	3298.020	3295.739	3289.416
27.5	3296.576	3287.961	3277.296	3271.485	3268.051	3263.733	3256.949	3247.430	3241.686	3239.740
30.0	3286.656	3280.500	3276.320	3269.511	3262.511	3258.425	3254.492	3248.703	3241.810	3235.339
32.5	3313.653	3305.819	3300.222	3296.785	3292.390	3284.621	3274.699	3272.705	3268.739	3263.562
35.0	3364.989	3359.731	3353.931	3345.900	3337.223	3332.399	3327.049	3321.805	3314.591	3306.008
37.5	3429.389	3425.528	3410.744	3401.414	3392.799	3384.993	3373.277	3363.282	3357.712	3353.545
40.0	3469.967	3448.089	3443.344	3438.486	3415.918	3394.960	3386.823	3384.678	3387.683	3379.398
42.5	3407.355	3421.314	3395.910	3369.844	3358.483	3359.279	3351.031	3322.877	3308.154	3305.647
45.0	3274.299	3228.616	3214.421	3217.394	3211.627	3172.164	3151.670	3148.544	3168.199	3198.917
47.5	2872.790	2903.578	2921.799	2887.692	2865.253	2849.354	2870.116	2879.052	2856.502	2856.422
50.0	2386.928	2405.968	2410.150	2413.754	2401.471	2425.711	2406.027	2403.183	2419.266	2458.233
52.5	1815.571	1826.527	1822.977	1835.685	1876.718	1865.293	1868.778	1879.808	1915.527	1935.629
55.0	1278.740	1293.506	1287.186	1289.937	1323.828	1328.176	1344.051	1391.054	1417.377	1418.145
57.5	895.288	880.364	841.932	851.349	858.039	908.631	953.654	977.725	975.146	947.044
60.0	626.653	620.557	577.405	473.735	531.829	621.918	658.319	644.648	608.822	616.556
62.5	492.078	472.794	432.963	397.275	393.099	425.962	457.746	426.141	442.648	486.115
65.0	384.111	379.425	359.546	357.317	356.767	357.412	364.368	361.867	366.909	380.348
67.5	311.778	314.169	311.864	307.864	307.167	310.605	308.226	307.341	305.821	309.342

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF2-L88-750-WF_IES

CANDELA TABULATION - (Cont.)

70.0	248.695	251.192	253.027	254.594	254.193	252.859	251.884	251.171	250.894	250.596
72.5	187.252	190.314	193.019	195.308	197.028	197.396	196.053	195.070	194.910	196.050
75.0	137.823	136.793	135.404	138.737	142.068	143.905	143.624	140.793	140.234	144.499
77.5	95.026	95.313	95.070	94.499	94.440	94.856	96.610	95.552	96.449	98.614
80.0	53.552	55.365	56.680	58.512	60.547	61.224	60.167	57.811	61.169	62.954
82.5	34.580	33.017	31.026	30.214	29.858	32.244	34.116	35.051	35.619	35.055
85.0	18.402	18.285	17.863	18.090	18.322	18.393	18.248	17.811	16.973	17.145
87.5	5.537	5.846	6.203	6.620	7.125	7.899	8.578	9.098	9.396	9.374
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Horizontal Angles
Angles

	<u>75.0</u>	<u>77.5</u>	<u>80.0</u>	<u>82.5</u>	<u>85.0</u>	<u>87.5</u>	<u>90.0</u>	<u>92.5</u>	<u>95.0</u>	<u>97.5</u>
0.0	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992
2.5	2205.741	2205.501	2205.238	2204.955	2204.652	2204.334	2204.000	2203.654	2203.297	2202.931
5.0	2231.029	2229.005	2228.555	2227.380	2226.078	2224.664	2223.150	2222.328	2221.424	2220.437
7.5	2289.866	2288.492	2286.530	2284.066	2282.365	2280.169	2277.482	2275.336	2272.721	2269.565
10.0	2397.822	2396.410	2393.724	2389.822	2385.664	2382.845	2379.020	2375.392	2370.794	2367.069
12.5	2569.031	2564.155	2560.949	2555.795	2548.735	2543.200	2536.671	2531.862	2526.076	2521.626
15.0	2803.397	2794.305	2786.305	2779.437	2769.603	2760.445	2752.217	2744.947	2737.815	2730.780
17.5	3075.220	3062.659	3057.912	3056.724	3055.445	3051.474	3044.717	3027.021	3010.249	2992.064
20.0	3286.237	3284.482	3271.444	3262.552	3261.326	3258.594	3250.110	3235.043	3219.127	3200.211
22.5	3326.808	3324.564	3321.905	3319.459	3317.066	3312.865	3308.004	3299.912	3286.852	3271.920
25.0	3283.194	3276.809	3270.597	3263.057	3257.326	3253.380	3247.141	3240.459	3230.672	3220.443
27.5	3236.237	3232.375	3228.551	3222.156	3215.998	3211.079	3206.466	3199.033	3189.386	3178.335
30.0	3227.038	3219.991	3214.580	3208.417	3201.865	3196.175	3191.770	3183.875	3174.039	3162.014
32.5	3257.693	3249.138	3239.691	3230.531	3222.310	3215.741	3208.470	3202.047	3194.405	3183.571
35.0	3298.651	3292.100	3284.990	3279.971	3275.396	3271.651	3265.647	3257.805	3246.760	3232.604
37.5	3349.142	3346.553	3343.118	3340.965	3338.860	3337.053	3332.943	3323.369	3309.911	3293.823
40.0	3363.382	3352.199	3345.582	3340.945	3338.388	3337.812	3335.615	3326.625	3314.698	3300.301
42.5	3309.511	3314.583	3321.537	3327.127	3331.143	3336.647	3338.287	3328.920	3314.485	3295.469
45.0	3181.865	3166.256	3158.352	3157.454	3158.754	3164.217	3169.057	3161.862	3153.815	3145.503
47.5	2870.481	2892.924	2916.644	2943.240	2966.383	2986.875	2999.827	2991.088	2976.692	2957.446
50.0	2497.943	2487.708	2467.511	2449.450	2432.873	2428.688	2434.539	2437.865	2452.149	2477.515
52.5	1936.978	1922.780	1899.880	1877.794	1863.619	1860.210	1869.251	1875.020	1891.413	1915.726
55.0	1399.403	1370.579	1335.261	1307.604	1295.793	1291.394	1303.963	1312.578	1330.861	1355.716
57.5	896.659	897.705	950.575	990.702	1023.821	1046.987	1065.704	1064.835	1055.359	1033.497
60.0	670.079	716.985	756.303	782.387	802.045	814.798	827.447	828.068	825.189	812.711
62.5	526.176	558.684	577.416	585.596	586.291	584.814	589.188	592.360	599.483	602.412
65.0	407.520	422.135	420.416	404.515	379.894	357.605	350.930	357.973	380.873	408.186
67.5	316.291	314.939	304.886	302.292	298.804	296.045	297.044	296.467	298.080	301.421
70.0	251.587	252.320	252.068	249.271	245.730	242.835	243.157	243.699	246.488	249.379
72.5	198.612	199.805	198.789	196.553	192.199	189.467	189.271	190.772	195.277	197.244
75.0	147.452	148.668	147.571	144.377	140.189	135.888	135.384	137.844	144.300	148.220
77.5	99.845	99.813	98.701	97.495	101.993	102.306	103.319	105.065	105.003	102.597
80.0	62.003	58.582	59.503	67.488	70.954	71.482	71.255	73.795	74.250	70.445
82.5	34.522	33.163	35.512	38.942	42.325	40.986	39.190	42.262	44.386	41.930
85.0	16.990	17.519	18.928	19.851	18.794	13.193	7.125	13.508	19.898	21.909
87.5	8.871	8.748	8.773	9.425	8.238	5.037	3.563	5.037	8.464	10.123
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Horizontal Angles
Angles

	<u>100.0</u>	<u>102.5</u>	<u>105.0</u>	<u>107.5</u>	<u>110.0</u>	<u>112.5</u>	<u>115.0</u>	<u>117.5</u>	<u>120.0</u>	<u>122.5</u>
0.0	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992
2.5	2202.559	2202.182	2201.803	2201.423	2201.045	2200.543	2200.262	2199.827	2199.393	2198.960

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF2-L88-750-WF_IES

CANDELA TABULATION - (Cont.)

5.0	2219.371	2218.298	2217.249	2216.114	2214.891	2213.582	2212.186	2210.704	2209.138	2207.488
7.5	2267.364	2264.674	2261.529	2257.934	2252.403	2250.481	2248.090	2245.780	2243.140	2240.167
10.0	2363.045	2358.030	2352.024	2345.282	2340.178	2333.815	2323.181	2320.023	2314.680	2313.188
12.5	2515.429	2507.481	2500.565	2494.315	2486.252	2476.382	2469.521	2457.508	2456.834	2450.413
15.0	2721.237	2712.826	2705.568	2695.640	2686.165	2679.454	2670.526	2660.106	2654.688	2650.231
17.5	2973.638	2958.171	2951.898	2939.458	2927.804	2913.819	2903.139	2892.236	2873.350	2873.774
20.0	3188.815	3181.070	3162.103	3143.212	3125.081	3111.155	3100.060	3092.280	3089.463	3082.445
22.5	3254.715	3237.490	3219.764	3204.138	3191.916	3183.252	3175.240	3172.157	3163.029	3148.139
25.0	3209.224	3198.127	3187.504	3179.302	3171.007	3158.474	3144.640	3130.061	3119.610	3109.193
27.5	3166.571	3154.663	3143.595	3133.156	3120.788	3110.953	3104.026	3092.858	3078.493	3063.758
30.0	3150.211	3138.798	3129.321	3122.683	3114.594	3106.410	3095.460	3080.964	3068.228	3055.678
32.5	3173.188	3163.825	3154.484	3143.921	3132.812	3119.742	3103.760	3092.594	3080.765	3066.071
35.0	3216.812	3204.346	3190.765	3177.246	3166.789	3156.137	3142.085	3127.002	3109.715	3092.690
37.5	3276.295	3259.986	3242.897	3225.885	3212.053	3197.296	3184.640	3172.843	3158.185	3140.683
40.0	3287.120	3275.099	3265.271	3261.820	3253.377	3234.675	3218.214	3204.502	3197.060	3194.868
42.5	3277.174	3255.007	3234.774	3219.311	3209.875	3210.913	3222.947	3214.864	3198.871	3190.983
45.0	3139.203	3135.933	3142.759	3155.041	3124.986	3100.594	3093.265	3104.153	3136.925	3132.575
47.5	2931.949	2904.567	2884.514	2876.251	2881.650	2905.904	2895.226	2870.253	2882.618	2909.094
50.0	2503.601	2534.502	2568.594	2548.840	2516.848	2494.896	2497.456	2530.252	2511.455	2528.099
52.5	1944.288	1977.303	2013.801	2042.463	2046.869	2016.564	1995.651	1996.331	2023.908	1995.412
55.0	1386.182	1425.982	1470.330	1507.175	1515.149	1489.030	1457.289	1444.204	1444.671	1428.061
57.5	995.851	945.380	947.088	1004.155	1003.350	1024.893	1019.971	975.933	923.981	923.662
60.0	788.120	751.254	702.061	604.732	585.933	659.829	684.944	648.742	546.539	483.193
62.5	596.960	577.694	532.954	457.061	430.462	414.520	458.050	424.754	388.934	394.764
65.0	427.217	429.924	387.303	371.290	359.467	354.163	355.630	350.558	351.885	355.170
67.5	301.676	311.753	310.691	305.901	302.404	303.037	302.935	304.487	305.281	308.613
70.0	250.919	251.644	251.798	251.445	251.162	250.943	251.814	254.150	257.623	259.981
72.5	200.474	201.128	201.439	200.469	200.016	200.189	202.084	204.829	205.949	206.167
75.0	150.640	151.951	152.365	151.549	149.389	150.501	153.503	155.036	155.349	154.732
77.5	102.296	105.029	106.384	106.948	106.251	106.286	108.347	108.706	109.396	109.732
80.0	64.369	64.249	68.839	70.607	70.021	67.975	70.390	71.631	71.234	69.556
82.5	39.508	37.638	39.607	40.933	41.642	40.927	39.913	38.346	36.420	37.429
85.0	21.317	20.079	19.723	19.918	19.635	20.643	21.388	22.088	22.396	22.408
87.5	9.635	9.631	9.722	10.431	10.719	10.727	10.526	9.809	8.890	8.276
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Horizontal Angles

	<u>125.0</u>	<u>127.5</u>	<u>130.0</u>	<u>132.5</u>	<u>135.0</u>	<u>137.5</u>	<u>140.0</u>	<u>142.5</u>	<u>145.0</u>	<u>147.5</u>
0.0	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992
2.5	2198.529	2198.100	2197.676	2197.256	2196.840	2196.432	2196.029	2195.635	2195.248	2194.871
5.0	2205.758	2204.034	2202.420	2200.679	2198.815	2196.829	2194.727	2192.055	2191.340	2190.482
7.5	2236.862	2233.227	2229.265	2225.831	2223.589	2219.573	2219.154	2217.588	2215.662	2213.384
10.0	2310.375	2306.218	2300.704	2293.830	2285.273	2288.064	2288.394	2287.558	2285.574	2282.464
12.5	2446.386	2443.629	2438.527	2431.079	2427.812	2423.244	2420.889	2416.287	2409.472	2406.225
15.0	2643.887	2638.191	2633.136	2626.277	2620.855	2614.309	2607.757	2595.526	2594.278	2587.522
17.5	2866.448	2857.571	2850.711	2845.437	2838.455	2828.681	2818.739	2811.826	2804.442	2795.438
20.0	3066.855	3057.468	3052.552	3041.893	3032.981	3028.595	3015.571	3001.556	2991.500	2981.602
22.5	3138.509	3132.063	3135.211	3115.947	3106.743	3110.004	3088.455	3075.918	3066.914	3060.268
25.0	3097.750	3084.814	3071.968	3064.254	3054.772	3044.135	3038.130	3033.063	3023.103	3011.564
27.5	3050.783	3041.292	3030.251	3015.708	3007.872	3001.748	2992.919	2981.412	2975.735	2969.658
30.0	3043.076	3029.770	3017.364	3007.147	2996.018	2985.064	2976.631	2968.882	2961.126	2954.802
32.5	3049.740	3034.323	3021.635	3008.180	2993.005	2981.401	2972.008	2964.049	2956.953	2948.700
35.0	3078.229	3061.991	3043.034	3023.474	3012.060	2996.487	2984.437	2973.239	2972.216	2972.173
37.5	3124.659	3108.305	3092.080	3075.164	3055.856	3042.044	3031.573	3025.949	3020.850	3015.062
40.0	3177.533	3161.032	3149.568	3134.450	3118.395	3108.483	3098.592	3086.915	3083.163	3082.750

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF2-L88-750-WF_IES

CANDELA TABULATION - (Cont.)

42.5	3196.395	3197.300	3171.397	3164.426	3166.247	3137.958	3132.843	3131.740	3139.876	3137.994
45.0	3117.052	3119.570	3147.970	3098.788	3083.703	3098.144	3109.765	3094.949	3073.902	3076.275
47.5	2947.770	2916.880	2881.611	2899.544	2896.655	2877.957	2879.043	2893.521	2933.775	2951.425
50.0	2521.516	2525.565	2500.650	2484.243	2491.339	2499.686	2558.039	2543.197	2532.117	2520.362
52.5	1976.058	1979.857	1974.310	1965.663	1992.453	1997.375	1995.414	2004.103	2011.646	2041.109
55.0	1428.436	1430.086	1421.891	1421.656	1430.403	1430.941	1434.780	1485.277	1512.192	1521.375
57.5	924.870	970.798	984.064	946.485	943.552	1010.729	1045.587	1063.662	1058.575	1035.710
60.0	607.800	655.398	663.205	686.850	695.006	720.370	715.864	689.724	645.107	657.119
62.5	436.565	484.605	507.918	516.850	509.924	488.936	490.928	504.742	528.169	548.292
65.0	359.298	383.429	389.268	382.390	393.963	404.785	415.080	425.110	438.515	449.310
67.5	313.825	317.408	317.587	317.112	324.744	333.732	342.166	350.347	356.625	357.866
70.0	260.264	260.449	259.618	257.676	259.060	265.861	271.957	279.554	286.818	286.939
72.5	205.977	205.554	204.324	200.329	199.907	207.912	215.401	222.138	228.182	227.904
75.0	153.330	154.976	156.072	154.599	152.941	157.049	162.579	166.821	169.959	169.535
77.5	110.237	110.693	110.957	109.539	107.176	107.982	111.352	113.281	113.306	114.191
80.0	68.198	67.680	66.959	67.441	68.298	70.520	75.443	79.413	81.738	83.200
82.5	38.848	41.540	43.661	45.023	45.057	45.566	48.374	50.683	51.856	52.488
85.0	22.343	22.962	23.174	23.011	22.170	21.394	21.984	22.331	22.309	21.967
87.5	7.754	7.308	6.922	6.587	6.294	6.049	6.403	6.744	7.135	7.391
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Angles **Horizontal Angles**

	<u>150.0</u>	<u>152.5</u>	<u>155.0</u>	<u>157.5</u>	<u>160.0</u>	<u>162.5</u>	<u>165.0</u>	<u>167.5</u>	<u>170.0</u>	<u>172.5</u>
0.0	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992	2199.992
2.5	2194.503	2194.146	2193.700	2193.466	2193.144	2192.836	2192.541	2192.260	2191.993	2191.742
5.0	2189.595	2188.684	2187.752	2186.805	2185.849	2184.889	2183.931	2182.703	2181.941	2181.558
7.5	2210.767	2207.825	2204.574	2202.702	2202.022	2202.431	2202.397	2201.942	2201.089	2200.038
10.0	2278.456	2277.237	2276.352	2276.029	2274.713	2272.492	2272.997	2272.761	2271.785	2270.072
12.5	2403.429	2400.748	2398.332	2396.977	2396.408	2393.861	2389.440	2387.813	2387.942	2386.856
15.0	2579.140	2573.115	2572.304	2569.376	2561.687	2560.414	2554.752	2546.936	2544.542	2543.995
17.5	2785.847	2776.549	2766.100	2759.240	2754.222	2747.097	2745.491	2733.785	2724.363	2724.587
20.0	2964.578	2949.039	2941.146	2931.140	2923.389	2918.007	2909.643	2903.288	2890.303	2882.883
22.5	3052.779	3030.046	3012.008	2995.040	2981.104	2972.543	2968.720	2967.124	2965.806	2965.468
25.0	2996.702	2983.569	2978.139	2971.037	2961.863	2952.380	2945.345	2939.921	2935.230	2931.646
27.5	2962.682	2954.976	2946.736	2936.928	2928.335	2923.068	2918.203	2915.727	2913.312	2911.136
30.0	2948.411	2941.319	2935.664	2931.026	2923.726	2917.488	2914.637	2912.911	2910.752	2909.054
32.5	2941.845	2941.117	2940.330	2940.679	2939.049	2934.760	2932.023	2929.432	2926.355	2925.698
35.0	2970.547	2970.347	2968.282	2965.135	2965.487	2964.361	2963.105	2964.196	2965.342	2968.459
37.5	3014.846	3017.293	3019.788	3019.608	3018.386	3015.699	3010.564	3013.098	3016.254	3021.277
40.0	3083.587	3082.628	3081.822	3075.657	3068.152	3062.864	3057.318	3056.446	3059.105	3063.818
42.5	3123.162	3114.410	3111.183	3106.366	3104.436	3102.429	3099.604	3098.010	3099.981	3106.080
45.0	3086.721	3109.754	3125.512	3110.796	3078.912	3057.960	3043.427	3034.853	3033.265	3038.342
47.5	2915.971	2899.582	2892.609	2897.663	2899.944	2905.838	2914.916	2926.189	2939.578	2956.214
50.0	2533.314	2546.732	2586.687	2624.340	2595.257	2562.735	2532.541	2509.872	2490.367	2482.419
52.5	2056.386	2054.338	2047.589	2037.396	2023.828	2005.613	1987.634	1976.199	1965.737	1964.237
55.0	1517.517	1506.307	1480.935	1463.156	1451.017	1443.502	1439.573	1438.747	1440.345	1444.148
57.5	1002.395	969.530	931.038	958.312	1003.170	1049.911	1090.740	1118.960	1143.950	1158.202
60.0	685.791	722.725	754.424	781.316	809.528	841.232	864.918	879.421	894.344	898.580
62.5	566.047	585.250	602.710	614.424	624.950	635.161	643.039	644.893	646.364	641.233
65.0	455.100	458.196	460.004	455.565	448.059	438.602	426.827	412.801	399.859	385.916
67.5	352.085	339.196	337.627	335.647	333.263	330.711	329.297	326.515	325.002	322.127
70.0	286.255	285.393	285.289	285.002	283.775	281.250	280.901	278.400	276.551	273.822
72.5	227.832	230.035	232.433	234.117	234.265	231.823	232.058	230.622	228.014	225.496
75.0	168.480	173.918	179.155	183.039	184.731	182.422	182.853	183.111	179.408	177.164
77.5	115.378	124.395	132.454	137.953	140.709	139.229	139.420	140.749	137.402	135.600

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF2-L88-750-WF_.IES

CANDELA TABULATION - (Cont.)

80.0	83.629	88.866	94.274	97.889	99.379	98.205	97.770	98.882	96.112	94.360
82.5	52.133	54.179	56.641	58.086	58.297	57.225	56.411	56.764	54.890	53.096
85.0	20.810	20.085	19.391	18.464	17.376	16.246	15.256	14.468	12.470	11.108
87.5	7.198	7.028	6.879	6.748	6.635	6.537	6.455	6.386	6.331	5.612
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Vert.
Angles**

Horizontal Angles

	<u>175.0</u>	<u>177.5</u>	<u>180.0</u>
0.0	2199.992	2199.992	2199.992
2.5	2191.507	2191.288	2191.085
5.0	2181.172	2180.785	2180.397
7.5	2200.896	2201.479	2201.773
10.0	2269.279	2271.507	2273.028
12.5	2383.765	2388.403	2392.380
15.0	2545.142	2544.532	2549.141
17.5	2722.771	2721.690	2724.071
20.0	2879.714	2875.055	2866.818
22.5	2969.386	2967.762	2967.762
25.0	2930.044	2929.489	2930.650
27.5	2910.222	2910.315	2912.031
30.0	2908.405	2909.190	2910.313
32.5	2926.326	2927.897	2927.014
35.0	2973.287	2976.299	2974.690
37.5	3029.513	3033.209	3030.110
40.0	3069.765	3072.783	3071.082
42.5	3109.953	3113.221	3112.053
45.0	3047.469	3051.688	3052.378
47.5	2978.180	2988.668	2992.702
50.0	2483.493	2481.911	2483.230
52.5	1969.923	1969.434	1973.758
55.0	1456.749	1451.562	1464.286
57.5	1177.812	1182.212	1189.509
60.0	909.432	910.254	914.734
62.5	641.551	638.454	639.957
65.0	365.181	364.527	365.181
67.5	317.544	315.683	317.529
70.0	268.318	266.350	269.878
72.5	219.140	216.952	222.226
75.0	168.926	167.231	174.574
77.5	129.679	126.770	131.376
80.0	89.533	86.136	88.178
82.5	49.365	45.539	44.979
85.0	8.873	4.890	1.781
87.5	4.466	2.451	0.891
90.0	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF2-L88-750-WF_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1013.52	N.A.	11.50
0-30	2493.32	N.A.	28.30
0-40	4523.09	N.A.	51.30
0-60	8189.72	N.A.	92.90
0-80	8787.81	N.A.	99.70
0-90	8816.03	N.A.	100.00
10-90	8599.72	N.A.	97.50
20-40	3509.57	N.A.	39.80
20-50	5873.88	N.A.	66.60
40-70	4095.13	N.A.	46.50
60-80	598.09	N.A.	6.80
70-80	169.59	N.A.	1.90
80-90	28.22	N.A.	0.30
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	8816.03	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	216.31
10-20	797.21
20-30	1479.8
30-40	2029.77
40-50	2364.32
50-60	1302.31
60-70	428.51
70-80	169.59
80-90	28.22
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF2-L88-750-WF_.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	150	150	150	150	146	146	146	146	140	140	140	134	134	134	128	128	128	126
1	139	134	130	126	136	132	127	124	126	123	120	121	119	116	117	115	113	110
2	128	119	112	106	125	117	110	105	113	107	102	109	104	100	105	101	98	95
3	118	106	97	90	115	104	96	89	101	93	88	97	91	86	94	89	85	82
4	108	95	85	77	106	93	84	76	90	82	75	87	80	74	85	79	74	71
5	100	85	74	67	97	83	74	66	81	72	66	78	71	65	76	70	64	62
6	92	76	66	58	90	75	65	58	73	64	57	71	63	57	69	62	56	54
7	85	69	58	51	83	68	58	51	66	57	51	64	56	50	63	55	50	47
8	79	63	52	45	77	62	52	45	60	51	45	59	51	45	57	50	44	42
9	74	57	47	40	72	56	47	40	55	46	40	54	46	40	52	45	40	37
10	69	52	43	36	67	52	42	36	51	42	36	49	41	36	48	41	36	34

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF2-L88-750-WF_.IES

UGR TABLE - CORRECTED

Reflectances

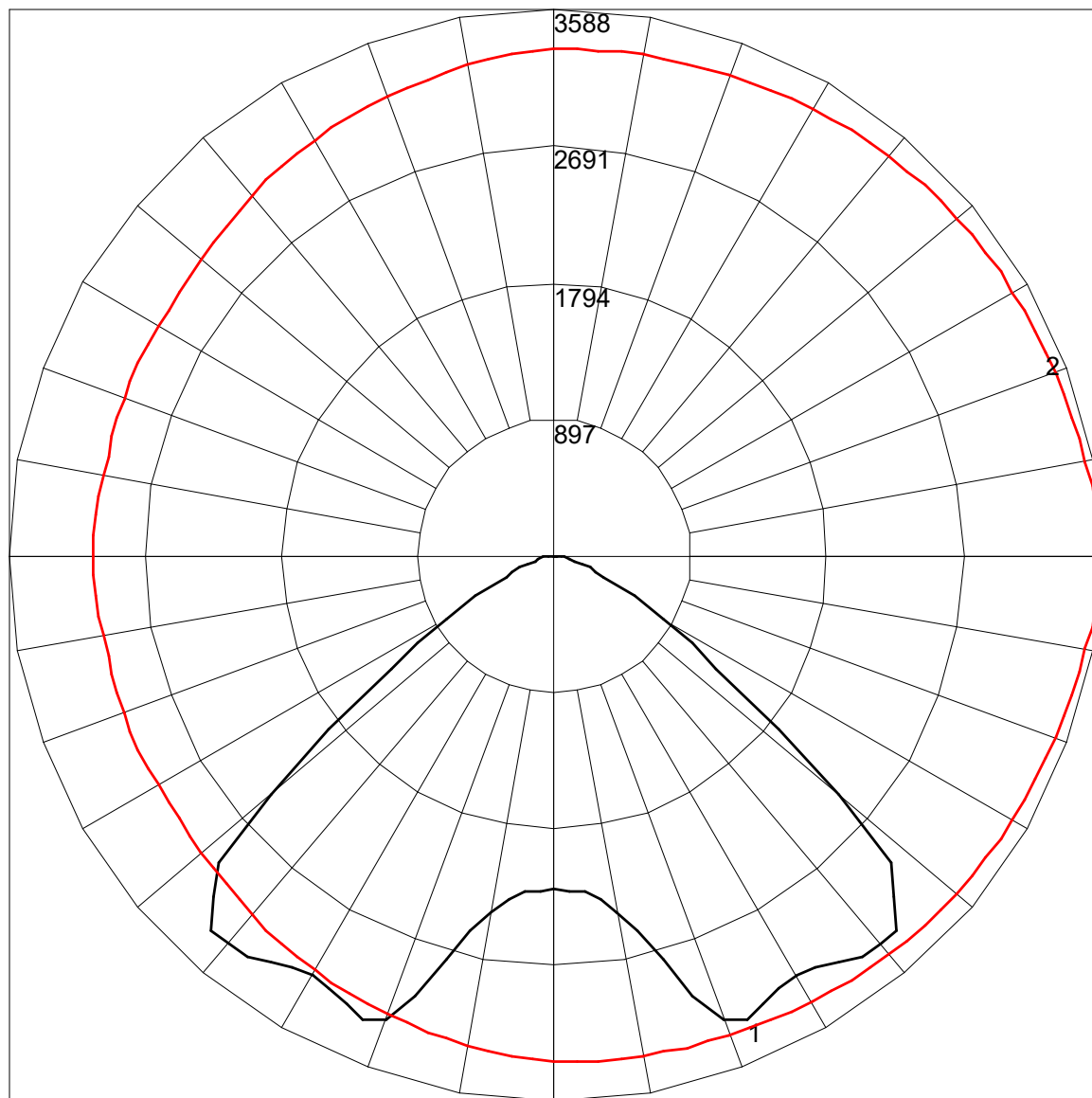
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size UGR Viewed Crosswise

X=2H	Y=2H	21.3	22.8	21.6	23.1	23.4	6.8	6.8	6.8	6.8	6.8
	3H	22.1	23.4	22.5	23.7	24.1	6.8	6.8	6.8	6.8	6.8
	4H	22.4	23.6	22.8	24.0	24.3	6.8	6.8	6.8	6.8	6.8
	6H	22.6	23.7	23.0	24.1	24.5	6.8	6.8	6.8	6.8	6.8
	8H	22.6	23.7	23.0	24.0	24.4	6.8	6.8	6.8	6.8	6.8
	12H	22.5	23.6	23.0	24.0	24.4	6.8	6.8	6.8	6.8	6.8
4H	2H	21.2	22.4	21.6	22.8	23.1	9.5	10.8	9.9	11.1	11.5
	3H	22.2	23.2	22.6	23.6	24.0	10.1	11.1	10.5	11.5	11.9
	4H	22.5	23.4	23.0	23.8	24.3	10.1	11.0	10.6	11.4	11.9
	6H	22.8	23.6	23.2	24.0	24.5	10.1	10.9	10.6	11.4	11.8
	8H	22.8	23.6	23.3	24.0	24.5	10.1	10.9	10.6	11.3	11.8
	12H	22.8	23.5	23.3	23.9	24.4	10.1	10.8	10.6	11.3	11.7
8H	4H	22.4	23.2	22.9	23.6	24.1	11.6	12.4	12.1	12.8	13.3
	6H	22.7	23.3	23.2	23.8	24.3	11.7	12.3	12.2	12.8	13.3
	8H	22.8	23.3	23.3	23.8	24.3	11.7	12.3	12.2	12.8	13.3
	12H	22.8	23.3	23.3	23.8	24.3	11.8	12.2	12.3	12.7	13.3
12H	4H	22.4	23.1	22.9	23.5	24.0	11.9	12.5	12.3	13.0	13.5
	6H	22.7	23.2	23.2	23.7	24.2	12.0	12.6	12.5	13.0	13.6
	8H	22.7	23.2	23.3	23.7	24.3	12.1	12.6	12.6	13.0	13.6

Maximum UGR = 24.5

POLAR GRAPH



Maximum Candela = 3587.679 Located At Horizontal Angle = 0, Vertical Angle = 37.5
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (37.5) (Through Max. Cd.)