



IES INDOOR REPORT

PHOTOMETRIC FILENAME : VF1-L20-750-VF-XX-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST]GEN FROM ATAL009594-R3
 [TESTLAB]ATAL-LABS
 [ISSUEDATE]23 NOV, 2022
 [MANUFAC]WILLIAMS OUTDOOR
 [OTHER]H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT]VF1-L20-750-VF-xx-DIM-UNV
 [LUMINAIRE]VOLTAIRE SMALL ARCHITECTURAL FLOOD LIGHT WITH
 [MORE]VERTICAL FLOOD MOLDED REFRACTIVE CLEAR ACRYLIC LENS AND A
 [MORE]CLEAR GLASS LENS.
 [LAMPCAT]X16-LUXEON TX 3000K LEDS
 [LAMP](16) LUXEON TX 3000K LEDS
 [BALLASTCAT]X1-EUC-018S035DSP
 [BALLAST](1) INVENTRONICS ELECTRONIC DRIVER
 [OTHER]INPUT WATTS: 19, AMPS: 0.1506, VAC: 120.04, TEMP: 25.6 C
 [_SEARCH_SOURCE] 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	1953
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	103
Total Luminaire Watts	19
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.60
Spacing Criterion (90-270)	1.52
Spacing Criterion (Diagonal)	1.48
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.00 ft
Luminous Width (90-270)	0.48 ft (Diameter)
Luminous Height	0.00 ft

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF1-L20-750-VF-XX-DIM-UNV_.IES

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	41200	90018	44259
55	10796	25666	13267
65	9709	11049	12533
75	5765	6772	8359
85	0	2357	856

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF1-L20-750-VF-XX-DIM-UNV_.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	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401
2.5	691.490	691.614	691.984	692.599	693.460	694.563	695.907	697.490	699.309	701.359
5.0	571.707	571.929	572.595	573.704	575.253	577.240	580.362	583.695	587.426	591.546
7.5	508.844	509.310	509.889	510.581	512.579	514.747	516.979	519.262	521.961	525.206
10.0	501.026	502.065	502.991	504.924	507.242	509.437	511.504	513.438	516.354	519.053
12.5	525.107	525.475	525.527	529.291	532.141	534.629	537.593	541.374	544.633	547.333
15.0	562.950	562.737	564.293	568.058	571.373	575.704	582.294	588.015	591.712	599.518
17.5	604.984	604.725	608.141	613.045	617.313	627.786	637.434	646.896	657.721	667.120
20.0	648.435	648.070	653.491	659.549	668.894	680.922	693.085	708.623	721.670	734.295
22.5	700.560	700.158	706.392	712.227	723.178	734.698	747.664	761.086	775.228	789.601
25.0	737.048	735.709	740.495	745.549	755.341	766.454	781.241	796.949	814.749	832.010
27.5	744.345	745.073	749.288	755.684	765.446	779.358	795.723	816.795	836.752	861.360
30.0	770.303	772.524	773.998	777.766	782.664	792.121	803.615	823.200	848.558	873.599
32.5	835.199	839.582	839.653	844.069	850.027	857.946	873.705	891.424	909.729	929.546
35.0	867.082	868.498	867.825	872.079	878.967	889.532	913.068	941.281	975.184	1015.125
37.5	890.712	887.036	883.783	882.581	884.065	891.363	906.294	932.303	969.629	1018.107
40.0	791.258	788.818	790.500	791.615	799.144	814.904	839.598	874.655	930.291	1012.380
42.5	691.803	689.559	691.703	689.289	695.305	709.091	730.575	766.422	823.051	904.856
45.0	488.516	486.842	492.426	497.489	508.648	522.496	553.300	604.255	680.216	774.241
47.5	285.228	282.968	289.021	295.216	300.419	302.814	331.184	378.788	449.051	513.169
50.0	224.763	222.442	223.751	223.262	217.658	209.267	216.776	234.193	258.779	247.846
52.5	164.298	163.457	164.918	166.181	164.281	163.171	170.839	185.986	198.241	196.368
55.0	103.833	104.438	106.237	109.739	113.260	116.981	123.180	133.824	142.635	148.135
57.5	95.076	95.472	95.723	96.781	97.537	98.107	99.104	101.156	104.797	107.876
60.0	86.319	87.024	87.264	88.152	88.429	88.620	89.575	91.080	93.840	96.182
62.5	77.562	78.576	78.803	79.462	79.246	79.064	79.963	80.849	82.435	84.353
65.0	68.805	70.127	70.339	70.716	70.030	69.545	70.141	70.181	70.766	72.223
67.5	57.859	58.777	59.391	59.314	58.837	58.754	59.292	59.114	59.271	60.201
70.0	46.913	47.414	48.378	47.647	47.435	47.614	48.114	47.931	48.234	48.902
72.5	35.966	36.061	37.384	35.972	36.076	36.458	36.997	36.737	37.249	37.407
75.0	25.020	24.716	26.404	24.339	24.754	25.289	25.930	25.537	26.306	25.748
77.5	18.765	18.531	20.057	18.375	18.560	18.801	19.100	18.448	18.849	17.587
80.0	12.510	12.365	13.807	12.700	12.850	13.045	13.287	12.894	13.133	12.319
82.5	6.255	6.191	7.550	7.025	7.138	7.286	7.469	7.332	7.499	7.140
85.0	0.000	0.012	1.287	1.348	1.424	1.523	1.646	1.764	1.918	2.023
87.5	0.000	0.000	0.626	0.631	0.635	0.641	0.648	0.656	0.666	0.677
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	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401
2.5	703.637	706.370	709.239	712.321	715.612	719.105	722.794	726.672	730.732	734.966
5.0	596.043	600.906	606.126	611.689	617.583	623.720	630.735	637.907	645.377	653.131
7.5	530.287	535.738	541.368	547.158	553.087	559.140	565.298	571.286	578.148	586.504
10.0	520.991	524.951	529.154	534.034	538.706	543.101	547.202	550.994	553.992	562.043
12.5	550.529	554.153	557.972	561.935	565.457	569.126	572.198	574.661	577.377	582.045
15.0	604.760	608.780	611.426	617.513	621.209	622.396	624.776	624.686	625.499	626.587
17.5	675.748	683.902	690.595	695.571	698.634	699.920	698.413	690.472	688.148	682.439
20.0	746.641	756.580	765.167	770.672	773.416	771.494	768.869	763.534	754.683	745.500
22.5	802.368	812.060	820.122	822.925	824.377	821.982	816.583	810.273	798.087	786.472
25.0	847.833	861.106	866.544	869.805	866.876	862.283	851.200	838.844	823.939	806.031
27.5	880.492	893.146	902.581	906.794	906.806	900.066	887.708	871.442	852.065	829.880
30.0	898.162	918.281	932.334	940.847	941.796	938.717	930.286	915.727	895.658	871.620

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF1-L20-750-VF-XX-DIM-UNV_IES

CANDELA TABULATION - (Cont.)

32.5	947.431	959.254	969.067	985.989	1002.853	1008.231	999.987	984.026	964.482	929.430
35.0	1042.060	1065.915	1087.379	1108.949	1123.156	1118.524	1120.051	1098.029	1047.897	996.709
37.5	1075.668	1140.623	1208.618	1277.815	1287.386	1284.348	1257.035	1204.077	1152.415	1072.232
40.0	1098.283	1172.201	1242.537	1296.722	1339.994	1373.412	1359.099	1292.356	1203.816	1125.054
42.5	998.865	1092.378	1190.060	1260.028	1294.802	1288.447	1283.693	1254.535	1228.443	1123.776
45.0	861.059	930.750	989.098	1050.635	1095.602	1140.949	1150.477	1116.534	1067.372	1018.982
47.5	584.870	665.112	740.157	812.874	862.263	886.879	902.663	899.162	876.545	825.536
50.0	275.909	350.040	432.635	508.040	579.803	630.466	655.111	642.965	625.310	558.966
52.5	197.708	211.654	223.290	231.361	303.482	380.896	412.962	419.734	397.937	348.291
55.0	156.117	169.330	179.272	191.302	210.832	222.107	221.207	248.094	246.855	214.794
57.5	113.575	125.587	136.370	149.916	167.009	172.517	174.721	167.212	154.862	150.262
60.0	100.357	104.493	108.408	112.636	118.565	128.612	132.912	129.529	122.322	117.368
62.5	87.887	91.240	94.569	98.090	100.617	103.174	101.535	99.477	97.468	93.831
65.0	74.942	77.723	80.205	82.817	84.334	85.554	83.836	81.708	78.299	73.903
67.5	61.866	63.962	65.363	66.742	67.757	68.019	67.122	65.842	63.753	61.159
70.0	49.907	51.216	51.993	52.522	52.669	51.852	51.305	51.508	50.947	50.342
72.5	37.713	38.333	39.084	40.025	40.802	40.393	39.894	39.755	39.741	40.400
75.0	25.320	25.468	26.188	27.865	29.130	29.342	29.331	29.203	29.389	30.250
77.5	16.299	15.523	15.365	16.657	17.757	18.631	18.866	18.753	19.239	20.293
80.0	11.478	11.059	11.123	12.100	12.599	12.695	12.144	11.268	11.018	11.113
82.5	6.759	6.635	6.803	7.450	7.778	7.936	7.639	7.193	7.217	7.363
85.0	2.112	2.238	2.426	2.733	2.978	3.198	3.262	3.267	3.445	3.646
87.5	0.690	0.705	0.722	0.741	0.763	0.788	0.816	0.848	0.884	0.925
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>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	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401
2.5	739.365	743.922	748.628	753.474	758.450	763.546	771.740	773.784	778.525	783.337
5.0	661.155	671.655	678.825	688.812	699.041	709.492	720.146	730.981	741.978	753.114
7.5	594.738	606.935	619.353	631.975	644.783	657.760	670.892	684.821	699.874	715.524
10.0	571.042	579.712	588.047	596.046	604.321	619.473	635.827	652.580	668.945	686.548
12.5	585.862	588.942	591.292	596.223	604.482	611.512	618.484	628.231	646.251	664.173
15.0	624.709	622.044	620.704	620.674	619.803	617.364	622.672	627.439	631.386	643.959
17.5	674.969	667.400	662.291	655.852	647.632	643.834	639.017	635.122	637.694	639.901
20.0	735.226	722.033	708.392	692.985	682.371	669.219	657.848	650.365	641.884	642.110
22.5	775.167	756.765	739.776	722.769	706.372	688.754	671.868	656.253	647.917	639.835
25.0	787.732	770.831	749.847	729.412	708.650	689.140	671.235	658.715	647.268	643.482
27.5	807.916	783.696	758.707	736.269	715.498	695.924	678.056	662.152	653.459	649.485
30.0	842.915	811.875	785.271	757.262	732.445	709.960	692.309	678.554	669.283	666.836
32.5	891.751	857.391	817.996	782.226	751.656	725.749	703.916	690.872	682.310	679.274
35.0	947.705	893.448	845.632	804.915	765.357	735.340	711.742	695.869	688.331	686.720
37.5	995.747	928.539	867.222	811.449	770.254	734.362	707.804	687.116	675.617	671.585
40.0	1041.291	951.800	874.781	815.165	755.176	712.201	680.847	662.332	653.042	646.416
42.5	1026.900	948.434	857.740	773.647	711.081	666.611	635.025	604.514	584.309	574.450
45.0	969.432	857.582	767.297	692.848	628.935	577.950	538.545	512.244	497.862	493.640
47.5	739.634	683.143	614.075	546.306	483.117	441.580	421.142	401.825	386.131	372.937
50.0	450.602	381.719	406.604	385.289	316.164	266.013	288.576	283.653	264.859	252.514
52.5	254.295	236.666	239.675	228.465	208.775	199.657	188.098	176.178	172.957	183.506
55.0	202.849	190.016	175.253	164.849	159.106	148.252	138.596	138.900	139.308	142.468
57.5	150.610	146.126	141.078	132.520	121.648	117.883	118.049	117.103	115.039	111.767
60.0	111.038	109.429	109.252	104.881	102.167	101.838	101.106	99.022	95.431	93.537
62.5	89.342	87.249	83.925	84.491	87.479	88.667	87.473	85.128	84.629	85.009
65.0	72.363	71.198	69.539	70.662	72.580	74.974	76.164	75.889	75.980	76.387
67.5	59.910	58.119	57.766	58.658	60.081	62.183	63.788	65.859	66.307	67.142

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF1-L20-750-VF-XX-DIM-UNV_IES

CANDELA TABULATION - (Cont.)

70.0	49.757	48.714	47.841	47.205	47.670	49.207	51.006	53.059	55.473	56.878
72.5	40.607	39.679	38.654	37.847	37.370	37.108	38.208	40.162	42.482	45.168
75.0	30.986	30.420	29.599	28.612	28.356	28.166	27.860	27.419	29.571	32.143
77.5	20.963	20.879	20.551	20.067	19.965	19.742	19.550	19.182	19.372	20.479
80.0	11.356	11.826	12.075	12.299	12.568	12.602	12.337	11.924	12.553	12.890
82.5	7.200	6.886	6.485	6.163	5.828	6.114	6.364	6.638	7.010	7.222
85.0	3.696	3.682	3.605	3.564	3.477	3.311	3.043	2.832	2.559	2.699
87.5	0.972	1.026	1.089	1.162	1.251	1.391	1.480	1.539	1.544	1.469
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>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	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401
2.5	788.210	793.134	798.099	803.093	808.108	813.132	818.154	822.380	826.585	830.763
5.0	764.369	780.178	786.338	796.466	806.618	816.772	826.911	834.554	842.158	849.720
7.5	731.206	747.032	762.970	778.923	793.572	808.217	822.845	834.977	847.076	859.709
10.0	705.264	725.741	746.288	766.901	786.792	804.638	822.533	837.725	852.963	866.530
12.5	682.009	702.528	726.121	749.707	773.309	794.296	814.714	831.403	847.989	863.696
15.0	661.761	679.262	700.867	726.659	752.605	777.680	801.891	824.567	845.148	863.685
17.5	648.547	665.072	680.607	706.031	733.685	761.384	788.881	815.218	839.826	863.710
20.0	641.942	649.824	663.817	682.431	711.497	740.770	772.076	804.142	831.639	862.098
22.5	640.013	640.635	651.657	664.958	688.724	715.770	748.098	784.587	822.488	860.672
25.0	640.894	643.637	649.834	662.787	683.515	709.782	744.971	787.909	835.916	885.418
27.5	651.386	655.753	662.866	677.317	696.565	724.421	760.787	809.133	864.495	922.835
30.0	668.143	673.316	683.417	697.196	715.096	743.696	780.624	833.552	894.947	959.800
32.5	682.560	689.893	700.888	715.704	734.914	762.281	799.389	855.212	919.876	984.535
35.0	688.390	694.446	704.113	718.668	737.939	765.442	803.142	858.754	918.553	974.649
37.5	676.125	684.977	697.658	713.901	734.500	763.966	803.142	855.480	902.767	938.873
40.0	641.607	644.133	651.257	662.502	678.557	701.531	733.086	772.343	806.818	832.029
42.5	572.415	578.269	589.754	602.225	619.254	639.256	663.030	684.537	699.017	706.903
45.0	485.566	478.196	473.466	469.794	484.001	509.489	524.795	539.277	550.644	556.555
47.5	360.629	349.113	337.408	325.319	338.518	379.559	386.559	391.357	396.983	403.196
50.0	245.821	249.318	249.956	247.939	257.829	293.742	300.240	304.140	306.655	307.880
52.5	192.256	193.824	192.337	188.726	189.020	207.990	213.921	218.491	224.440	230.012
55.0	145.122	142.470	136.585	130.445	126.244	125.634	127.602	133.465	143.931	156.327
57.5	107.424	103.341	105.069	107.525	110.400	113.779	117.907	121.308	125.167	128.810
60.0	94.389	95.235	96.461	98.582	101.123	104.191	108.212	111.307	115.178	118.590
62.5	85.682	87.583	87.991	89.879	92.008	94.683	98.516	101.082	105.069	107.960
65.0	77.049	78.432	79.801	81.469	83.093	85.274	88.821	90.784	94.592	97.090
67.5	68.337	69.414	71.395	70.913	71.463	72.732	75.686	77.813	81.874	84.971
70.0	58.508	58.545	58.781	58.790	59.363	60.204	62.550	64.569	68.288	71.221
72.5	46.394	46.957	46.738	47.513	46.957	47.919	49.415	51.134	54.174	56.756
75.0	34.283	35.247	35.302	35.556	34.866	35.835	36.279	37.417	40.275	42.295
77.5	22.439	23.715	24.153	24.248	25.925	26.438	27.522	28.375	29.095	29.025
80.0	12.767	13.509	14.651	16.628	17.875	18.208	18.765	19.832	20.367	19.640
82.5	7.295	7.095	7.945	9.398	10.159	9.968	10.008	11.228	12.107	11.182
85.0	2.975	3.473	3.969	4.082	4.241	2.829	1.251	3.071	4.893	4.525
87.5	1.274	1.251	1.251	1.632	1.508	0.884	0.626	0.884	1.519	1.632
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>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	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401
2.5	834.905	839.003	843.049	847.035	850.955	856.459	858.131	861.057	863.894	866.636

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF1-L20-750-VF-XX-DIM-UNV_IES

CANDELA TABULATION - (Cont.)

5.0	857.237	864.422	871.098	877.678	884.147	890.494	896.707	902.774	908.682	914.422
7.5	869.406	879.551	889.655	899.713	909.781	919.636	928.126	935.709	943.166	950.486
10.0	879.471	892.406	905.315	917.964	928.275	938.669	949.476	959.222	968.921	977.487
12.5	879.499	895.392	909.422	921.759	934.085	946.377	958.016	969.644	980.474	991.884
15.0	882.193	899.453	915.149	930.340	944.853	958.480	971.203	982.985	994.832	1008.658
17.5	887.193	909.337	930.349	950.737	970.228	988.685	1006.134	1022.199	1037.079	1049.149
20.0	892.846	923.068	952.625	981.418	1007.906	1030.557	1051.853	1070.158	1086.528	1101.140
22.5	902.077	942.464	982.502	1020.172	1051.558	1080.598	1102.444	1122.996	1137.731	1149.764
25.0	936.745	985.273	1031.604	1069.243	1104.537	1129.840	1153.798	1169.238	1182.803	1187.901
27.5	981.305	1034.889	1080.606	1120.613	1148.971	1173.226	1187.894	1199.018	1206.342	1209.443
30.0	1021.183	1078.283	1118.476	1146.116	1167.875	1181.507	1191.759	1200.841	1204.316	1201.372
32.5	1038.820	1080.940	1111.979	1132.785	1145.992	1157.344	1167.861	1167.695	1162.428	1155.067
35.0	1022.249	1050.620	1071.963	1087.434	1092.055	1092.436	1090.862	1088.889	1088.972	1078.810
37.5	962.245	974.662	981.058	984.463	985.289	986.422	986.931	985.156	968.823	953.877
40.0	847.240	855.328	860.011	861.980	858.519	852.128	847.958	839.167	831.348	808.165
42.5	709.094	709.001	708.733	708.105	707.252	704.913	697.982	688.170	670.566	645.450
45.0	558.806	559.061	557.580	555.270	555.204	553.188	548.964	538.705	519.143	489.917
47.5	408.428	414.054	416.542	418.918	420.045	415.703	411.098	402.867	384.420	363.330
50.0	305.082	300.225	288.051	296.019	306.309	310.039	306.057	291.954	285.214	267.909
52.5	233.876	233.761	231.675	229.714	225.453	225.571	229.715	227.953	219.218	213.499
55.0	167.618	175.810	182.642	185.744	186.201	185.076	182.265	181.492	180.391	174.845
57.5	131.288	134.491	141.139	150.494	155.269	157.215	156.322	153.776	150.651	149.217
60.0	120.925	123.670	125.625	127.587	131.657	135.934	136.578	134.068	129.704	125.590
62.5	110.648	112.578	114.901	116.448	118.641	120.484	120.051	116.810	111.213	105.048
65.0	100.026	102.105	103.659	105.416	106.569	106.276	105.099	98.751	92.131	89.943
67.5	88.437	91.005	92.285	92.980	92.361	90.665	85.261	81.150	79.801	79.048
70.0	74.351	77.289	79.460	78.745	76.423	71.288	68.488	68.220	68.586	67.624
72.5	59.944	62.208	63.231	62.430	58.154	55.344	54.315	54.671	55.194	54.626
75.0	45.087	46.447	46.343	44.074	41.440	39.479	40.439	41.064	41.412	41.441
77.5	29.556	30.692	29.742	28.008	27.115	27.241	28.000	28.362	28.752	28.870
80.0	17.599	16.494	16.440	17.131	17.095	16.624	17.616	18.104	17.969	17.346
82.5	9.150	7.849	8.534	9.084	9.543	9.666	9.591	9.040	8.267	8.357
85.0	4.103	3.473	3.247	3.592	3.866	4.413	4.718	4.745	4.709	4.627
87.5	1.251	1.251	1.297	1.687	1.837	1.827	1.704	1.491	1.249	1.162
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>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	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401
2.5	869.277	871.812	874.234	876.540	878.724	880.782	882.711	884.508	886.168	887.689
5.0	919.981	925.046	929.151	933.083	936.837	940.404	943.778	946.876	949.633	952.013
7.5	957.658	964.668	971.505	977.861	983.448	988.941	993.250	997.144	1000.740	1004.031
10.0	985.992	994.425	1002.774	1011.028	1018.938	1024.584	1029.919	1034.842	1039.351	1043.446
12.5	1003.083	1013.630	1023.577	1032.896	1043.066	1049.384	1056.483	1062.914	1068.681	1072.184
15.0	1021.858	1033.869	1044.495	1054.156	1064.133	1072.798	1079.627	1085.881	1090.212	1093.839
17.5	1060.246	1069.959	1075.873	1081.816	1089.768	1096.001	1097.755	1100.119	1102.386	1104.206
20.0	1109.602	1116.610	1120.465	1118.700	1116.497	1113.301	1104.592	1099.214	1094.239	1090.296
22.5	1156.648	1157.947	1158.426	1146.230	1131.211	1114.474	1093.767	1073.883	1058.384	1049.554
25.0	1192.861	1186.139	1176.520	1155.148	1127.128	1097.849	1067.345	1036.736	1017.218	1001.384
27.5	1207.465	1191.550	1168.418	1143.996	1107.153	1067.868	1030.349	995.287	967.635	949.988
30.0	1187.183	1172.589	1144.022	1104.384	1065.366	1023.231	981.183	944.188	913.760	888.322
32.5	1142.143	1117.997	1084.968	1041.522	997.637	951.000	906.325	866.129	834.286	810.892
35.0	1054.969	1023.536	984.990	943.616	890.670	843.748	798.794	759.982	723.708	696.997
37.5	927.976	897.798	848.044	798.299	754.126	704.617	659.857	619.104	584.983	555.313
40.0	775.316	731.085	686.757	634.288	583.021	543.245	500.945	471.928	446.014	417.800

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF1-L20-750-VF-XX-DIM-UNV_IES

CANDELA TABULATION - (Cont.)

42.5	609.967	567.127	512.443	451.725	388.818	386.193	372.462	346.433	319.409	290.719
45.0	455.681	411.380	354.910	324.455	302.017	281.722	257.296	244.318	232.618	220.238
47.5	332.104	297.096	274.416	249.405	226.968	214.618	199.706	181.007	161.649	150.559
50.0	252.654	234.334	208.765	196.871	182.094	167.060	149.443	141.522	135.284	134.012
52.5	200.913	188.171	177.606	163.088	146.952	140.974	136.206	131.095	125.801	122.530
55.0	171.724	162.556	150.760	144.399	137.158	130.848	125.519	123.625	122.365	121.720
57.5	147.208	142.152	134.485	130.320	127.100	124.355	123.529	121.951	120.768	120.553
60.0	122.654	118.748	115.812	116.610	118.264	117.931	119.292	119.787	118.974	117.437
62.5	101.025	102.026	102.614	103.902	106.167	108.841	110.438	111.431	109.363	108.506
65.0	89.435	89.878	90.095	90.585	92.434	93.873	95.461	97.554	97.952	98.887
67.5	78.755	78.467	77.950	77.539	78.379	79.127	80.412	82.908	85.348	88.185
70.0	66.706	66.320	65.930	65.457	65.307	65.254	65.311	68.104	70.668	72.705
72.5	54.089	54.062	54.183	53.567	52.533	51.669	51.025	52.687	54.482	55.028
75.0	41.230	41.420	41.382	40.160	38.817	37.933	37.366	37.886	38.810	38.116
77.5	28.739	28.475	28.093	26.935	25.332	24.243	23.761	23.608	23.597	22.776
80.0	16.610	15.942	15.161	14.727	14.396	14.470	15.297	16.109	16.873	16.758
82.5	8.560	9.065	9.457	9.625	9.299	9.170	9.804	10.385	10.715	10.639
85.0	4.543	4.624	4.625	4.538	4.216	3.972	4.401	4.785	4.665	4.445
87.5	1.089	1.026	0.972	0.925	0.884	0.856	1.232	1.576	1.527	1.483
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	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401	814.401
2.5	889.070	890.308	891.193	892.582	893.942	895.178	896.289	897.268	898.114	898.823
5.0	954.179	956.126	957.850	959.347	960.611	961.641	962.431	962.674	966.104	966.643
7.5	1007.015	1009.686	1012.044	1015.298	1014.869	1015.113	1015.138	1014.950	1014.551	1014.093
10.0	1047.044	1048.645	1049.362	1049.127	1048.580	1047.743	1046.891	1045.871	1044.685	1043.335
12.5	1074.330	1075.305	1075.252	1073.924	1071.283	1068.183	1064.677	1061.652	1058.963	1056.107
15.0	1096.264	1095.509	1092.048	1088.112	1083.200	1077.468	1070.757	1063.901	1058.504	1053.875
17.5	1102.055	1098.327	1094.992	1090.062	1083.907	1078.009	1071.164	1064.139	1057.183	1052.705
20.0	1084.642	1080.870	1075.997	1072.486	1068.702	1063.082	1058.070	1052.932	1047.866	1043.638
22.5	1043.478	1042.473	1043.808	1044.614	1045.416	1044.959	1042.202	1039.440	1035.186	1031.412
25.0	997.566	998.109	1003.479	1011.030	1015.976	1020.054	1019.851	1018.009	1015.619	1013.587
27.5	941.022	943.489	953.669	965.509	979.820	983.459	988.013	985.646	983.769	981.798
30.0	874.219	873.971	885.617	904.802	920.860	935.984	941.851	941.001	938.287	935.165
32.5	793.883	787.174	795.122	814.201	836.089	856.426	864.784	868.223	867.000	866.635
35.0	677.628	667.030	678.929	704.114	729.927	748.240	758.604	755.847	749.766	746.194
37.5	544.629	536.661	534.998	553.429	575.824	597.763	615.320	610.870	606.664	604.148
40.0	399.347	396.726	395.924	407.868	430.765	449.707	456.411	451.832	444.220	440.662
42.5	273.779	277.981	281.856	286.072	307.287	311.160	303.424	290.222	277.159	276.276
45.0	201.533	186.826	177.514	182.207	205.896	220.190	217.373	213.337	208.795	211.241
47.5	149.740	146.003	146.161	149.948	159.739	170.616	169.961	167.330	163.109	159.224
50.0	132.976	129.263	126.504	126.224	132.668	141.177	147.819	151.451	152.020	151.184
52.5	122.278	122.381	122.725	124.281	129.088	136.661	143.370	147.273	148.255	147.734
55.0	121.416	121.243	121.329	122.408	125.830	132.646	139.318	143.256	144.485	144.196
57.5	120.543	120.325	120.140	119.817	121.480	127.179	133.751	137.746	139.209	139.024
60.0	116.404	114.912	113.740	113.159	114.988	120.272	127.172	131.698	133.566	133.686
62.5	108.347	107.710	106.832	106.624	108.748	113.221	120.299	125.751	127.851	128.345
65.0	99.754	100.322	99.674	100.017	102.322	106.619	113.448	119.258	122.107	123.000
67.5	90.684	92.677	90.702	89.741	90.471	92.964	97.430	101.616	103.053	103.107
70.0	73.693	73.763	72.531	72.030	72.649	74.571	77.755	81.171	82.147	82.020
72.5	55.010	54.567	54.108	54.200	54.985	56.444	58.409	60.917	61.329	60.898
75.0	36.585	35.604	35.473	36.272	37.457	38.544	39.342	40.824	40.585	39.815
77.5	21.299	21.294	22.339	24.350	26.311	27.792	28.644	30.192	30.388	30.090

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF1-L20-750-VF-XX-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

80.0	15.631	15.434	15.963	17.288	18.565	19.501	20.044	21.076	21.190	20.948
82.5	9.877	9.608	9.743	10.362	10.943	11.346	11.529	11.991	11.987	11.804
85.0	4.062	3.806	3.633	3.531	3.403	3.246	3.074	2.929	2.502	2.502
87.5	1.444	1.410	1.380	1.354	1.331	1.312	1.295	1.281	1.270	1.262
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	814.401	814.401	814.401
2.5	899.391	899.816	900.095
5.0	967.185	967.729	968.274
7.5	1015.272	1016.259	1017.063
10.0	1042.491	1042.990	1043.334
12.5	1052.659	1051.847	1050.840
15.0	1049.100	1045.762	1043.334
17.5	1048.434	1045.011	1043.084
20.0	1040.140	1037.063	1035.203
22.5	1028.100	1025.820	1025.820
25.0	1011.806	1010.313	1011.225
27.5	979.636	977.517	978.997
30.0	932.386	929.137	931.057
32.5	866.374	863.457	866.161
35.0	745.099	739.925	742.538
37.5	606.343	599.555	604.233
40.0	437.507	432.350	432.221
42.5	268.554	261.459	260.208
45.0	209.403	207.634	206.415
47.5	155.400	152.622	152.622
50.0	150.181	149.734	149.703
52.5	147.117	146.815	146.784
55.0	143.994	143.865	143.865
57.5	138.759	138.601	138.548
60.0	133.433	133.282	133.232
62.5	128.105	127.962	127.915
65.0	122.598	122.598	122.598
67.5	102.234	101.495	101.331
70.0	81.186	80.213	80.064
72.5	60.153	58.930	58.797
75.0	38.674	37.530	37.530
77.5	29.516	28.415	28.148
80.0	20.132	19.256	18.765
82.5	10.733	10.102	9.383
85.0	1.251	0.932	0.000
87.5	0.628	0.469	0.000
90.0	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF1-L20-750-VF-XX-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	310.72	N.A.	15.90
0-30	725.68	N.A.	37.20
0-40	1268.32	N.A.	64.90
0-60	1822.31	N.A.	93.30
0-80	1947.61	N.A.	99.70
0-90	1953.2	N.A.	100.00
10-90	1877.56	N.A.	96.10
20-40	957.60	N.A.	49.00
20-50	1360.86	N.A.	69.70
40-70	641.19	N.A.	32.80
60-80	125.29	N.A.	6.40
70-80	38.09	N.A.	2.00
80-90	5.59	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	1953.2	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	75.65
10-20	235.08
20-30	414.96
30-40	542.64
40-50	403.26
50-60	150.73
60-70	87.20
70-80	38.09
80-90	5.59
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

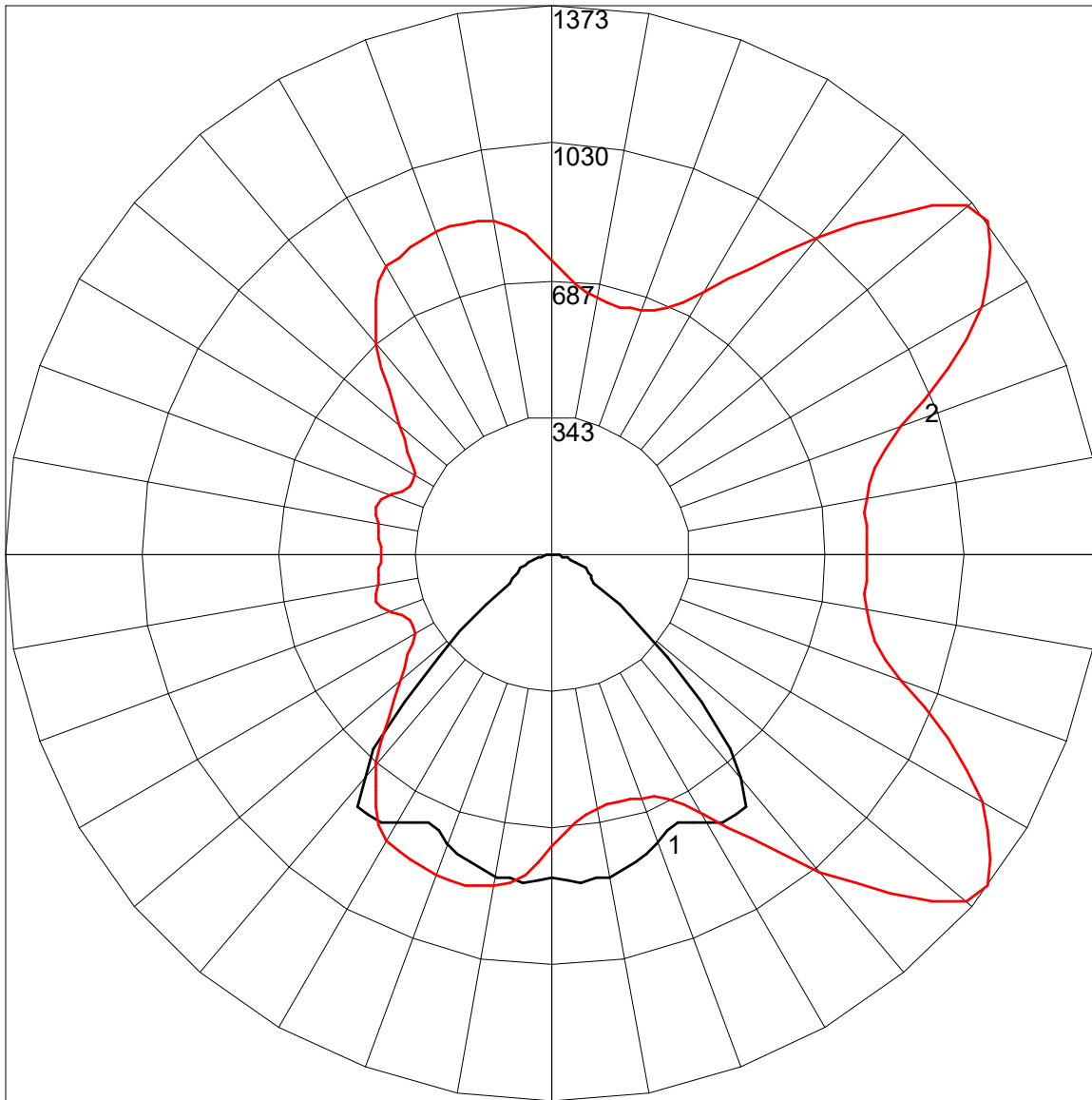
IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF1-L20-750-VF-XX-DIM-UNV_.IES

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	120	120	120	120	117	117	117	117	112	112	112	107	107	107	103	103	103	101
1	112	108	105	102	110	106	103	101	102	100	97	98	96	94	95	93	92	90
2	104	98	92	88	102	96	91	86	92	88	85	89	86	83	86	83	81	79
3	97	88	81	76	94	86	80	75	84	78	74	81	76	73	79	75	71	70
4	90	79	72	66	88	78	71	66	76	70	65	74	68	64	72	67	63	62
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	77	66	58	52	76	65	57	52	63	56	51	61	56	51	60	55	51	49
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40
9	63	51	43	38	62	50	43	38	49	42	38	48	42	38	47	42	37	36
10	59	47	40	35	58	46	39	35	45	39	34	44	39	34	44	38	34	33

POLAR GRAPH



Maximum Candela = 1373.412 Located At Horizontal Angle = 37.5, Vertical Angle = 40
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (40) (Through Max. Cd.)