

**IES INDOOR REPORT**
**PHOTOMETRIC FILENAME : SP-00674 ~ HD24GV-27L35K-EX-MWI.IES**
**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] SP-00674\_M-27L  
 [TESTLAB] Spectrum Photometric Lab VLS-245-981  
 [MANUFAC] Spectrum Lighting  
 [ISSUEDATE] 4/20/2018  
 [UPDATE] 5/3/2018  
 [LUMCAT] HD24GV-27L-35K-EX-MWI-xx  
 [LUMINAIRE] Nom. 24" diam x 11.9" H, Half Dome luminaire  
 [OTHER] Regressed, 6" diam low profile frosted glass diffuser  
 [OTHER] Reflector: Matte White interior finish  
 [OTHER] Nom. 99 Degree Beam Angle  
 [LAMP] N/A, Gen3  
 [LAMPCAT] N/A  
 [OTHER] Total Luminaire Watts is approximate  
 [OTHER] CCT Multipliers: 27K x 0.971, 30K x 0.985, 40K x 1.03  
 [OTHER] This report generated by Spectrum Lighting, scaled from 55L  
 [\_CRI]85+

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1879
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	18
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.16
Spacing Criterion (90-270)	1.16
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Circular
Luminous Length (0-180)	2.00 ft (Diameter)
Luminous Width (90-270)	2.00 ft (Diameter)
Luminous Height	0.00 ft

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**LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2701	2714	2725
55	1420	1514	1594
65	705	725	733
75	695	721	738
85	437	499	567

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**CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
<b>0.0</b>	896.476	896.476	896.476	896.476	896.476	896.476	896.476	896.476	896.476	896.476
<b>2.5</b>	892.646	893.380	889.584	888.215	887.128	887.342	890.656	892.399	894.727	895.647
<b>5.0</b>	885.751	884.346	879.915	878.994	876.504	875.328	880.180	883.434	889.864	889.429
<b>7.5</b>	872.919	870.781	865.692	864.453	862.418	860.294	865.353	868.601	875.612	878.021
<b>10.0</b>	859.223	855.111	849.627	848.947	846.597	842.575	848.371	851.978	860.748	863.571
<b>12.5</b>	842.317	837.538	831.406	830.508	829.718	823.471	828.506	832.093	841.416	845.662
<b>15.0</b>	824.240	819.282	812.215	811.739	810.121	802.635	807.527	811.270	821.925	825.982
<b>17.5</b>	802.850	798.996	792.091	791.215	789.185	781.076	786.014	789.037	799.605	804.650
<b>20.0</b>	781.374	778.155	771.175	770.587	768.300	760.005	764.341	766.921	777.274	783.293
<b>22.5</b>	759.705	756.902	749.633	749.943	747.434	739.090	742.152	744.948	754.827	761.915
<b>25.0</b>	737.595	735.568	728.430	729.273	727.299	717.683	719.851	723.295	732.487	739.434
<b>27.5</b>	714.710	712.977	707.442	708.093	707.380	696.161	698.837	701.957	710.791	716.273
<b>30.0</b>	692.325	690.226	686.894	687.147	686.349	676.565	678.012	680.849	689.174	693.809
<b>32.5</b>	670.664	669.638	666.572	668.400	665.074	657.292	659.191	659.928	667.893	671.692
<b>35.0</b>	649.867	649.208	647.260	649.570	646.437	637.928	640.541	640.629	646.921	650.848
<b>37.5</b>	630.079	630.060	628.360	630.260	628.182	618.555	620.902	622.395	626.924	630.506
<b>40.0</b>	609.042	610.792	608.107	610.519	608.535	597.888	601.153	601.228	606.081	607.788
<b>42.5</b>	586.824	587.952	587.432	589.069	588.767	577.119	577.981	578.526	583.205	584.362
<b>45.0</b>	557.983	563.738	560.704	564.653	562.848	549.589	553.628	551.070	557.196	555.626
<b>47.5</b>	523.933	524.398	532.574	531.180	535.449	518.152	513.343	521.596	525.080	525.690
<b>50.0</b>	441.078	473.682	445.088	473.201	456.517	425.731	463.164	438.366	461.053	434.298
<b>52.5</b>	327.342	350.657	348.036	357.881	375.511	332.850	341.603	337.654	347.489	333.585
<b>55.0</b>	237.978	238.992	253.613	256.604	267.069	236.219	230.737	246.753	250.425	241.454
<b>57.5</b>	160.883	176.184	159.438	181.169	167.616	150.239	170.491	158.192	173.981	150.059
<b>60.0</b>	122.013	123.549	127.857	126.968	132.277	120.811	119.509	122.868	124.010	121.050
<b>62.5</b>	98.698	104.175	99.162	104.926	101.259	95.535	101.364	96.726	101.583	94.556
<b>65.0</b>	87.019	88.085	89.465	89.072	90.512	85.767	85.899	86.288	87.154	85.841
<b>67.5</b>	78.897	79.759	80.045	80.557	80.630	76.669	77.207	77.494	79.313	77.201
<b>70.0</b>	70.416	71.681	72.595	72.288	73.081	69.084	68.762	69.928	71.212	69.064
<b>72.5</b>	61.771	63.902	64.276	64.183	64.782	61.009	60.626	61.885	62.993	60.564
<b>75.0</b>	52.555	54.136	54.553	55.266	55.791	52.532	51.807	52.683	53.671	51.487
<b>77.5</b>	42.940	44.065	44.431	45.499	45.540	42.302	42.530	42.720	44.073	41.637
<b>80.0</b>	32.774	34.567	34.051	34.713	35.445	31.690	32.626	32.668	34.131	31.635
<b>82.5</b>	21.842	22.869	23.452	24.511	25.340	20.744	22.066	22.564	23.854	21.436
<b>85.0</b>	11.139	11.896	12.715	13.943	14.442	10.144	10.967	11.429	11.991	10.783
<b>87.5</b>	2.469	2.477	3.079	3.987	4.572	2.223	2.464	2.483	3.284	2.234
<b>90.0</b>	0.356	0.274	0.616	0.152	0.427	0.293	0.313	0.478	0.264	0.375
<b>92.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>95.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>97.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>100.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>102.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>105.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>107.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>110.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>112.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>115.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>117.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>120.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>122.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>125.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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**CANDELA TABULATION - (Cont.)**

127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	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>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	896.476	896.476	896.476	896.476	896.476	896.476	896.476
2.5	895.708	893.990	894.071	897.347	897.154	896.317	892.646
5.0	891.420	890.678	889.548	894.172	893.133	890.784	885.751
7.5	881.472	881.427	880.760	887.150	883.763	879.743	872.919
10.0	868.981	870.067	868.194	876.141	871.758	867.295	859.223
12.5	852.576	853.887	853.328	861.816	856.923	851.079	842.317
15.0	834.814	836.620	836.793	844.708	840.131	834.194	824.240
17.5	814.691	817.366	818.654	826.420	821.591	814.310	802.850
20.0	793.932	796.823	799.581	807.323	801.317	794.086	781.374
22.5	772.153	774.371	778.341	786.664	779.792	772.515	759.705
25.0	750.180	751.856	756.071	765.133	757.451	750.870	737.595
27.5	727.094	729.265	732.878	742.309	734.638	728.279	714.710
30.0	703.877	706.299	709.342	718.916	712.132	705.721	692.325
32.5	681.522	682.965	686.670	695.964	689.772	683.817	670.664
35.0	659.223	659.914	664.236	673.164	666.672	661.952	649.867
37.5	636.625	637.089	640.550	649.922	643.300	640.433	630.079
40.0	613.849	611.909	616.603	626.566	619.977	618.326	609.042
42.5	587.296	585.201	588.531	599.405	596.668	592.925	586.824
45.0	559.142	552.612	559.902	571.550	565.255	564.867	557.983
47.5	514.869	516.887	503.774	526.817	532.181	525.975	523.933
50.0	459.170	425.751	445.702	480.102	444.698	466.836	441.078
52.5	335.020	311.413	323.525	360.309	349.972	346.841	327.342
55.0	223.701	226.249	202.490	236.186	253.979	242.703	237.978
57.5	165.097	150.422	155.666	178.241	157.897	175.156	160.883
60.0	116.471	117.247	111.650	122.216	127.494	123.954	122.013
62.5	99.207	94.527	97.863	104.767	99.038	103.385	98.698
65.0	84.788	84.398	84.979	88.332	89.478	87.938	87.019

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**CANDELA TABULATION - (Cont.)**

67.5	76.871	76.364	77.425	80.086	80.196	79.902	78.897
70.0	68.931	68.718	69.194	71.739	72.588	71.560	70.416
72.5	60.963	60.640	59.490	63.137	64.098	62.977	61.771
75.0	51.503	51.238	50.201	54.090	54.283	53.240	52.555
77.5	41.718	41.427	40.875	44.577	43.363	43.158	42.940
80.0	32.099	31.198	30.475	34.021	33.128	32.828	32.774
82.5	21.266	20.372	19.969	22.902	23.022	23.140	21.842
85.0	10.317	9.230	8.648	12.441	11.376	11.645	11.139
87.5	1.922	1.521	1.483	2.956	2.445	2.783	2.469
90.0	0.204	0.416	0.461	0.320	0.501	0.268	0.356
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	315.66	N.A.	16.80
0-30	656.40	N.A.	34.90
0-40	1065.46	N.A.	56.70
0-60	1719.16	N.A.	91.50
0-80	1864.25	N.A.	99.20
0-90	1878.72	N.A.	100.00
10-90	1795.03	N.A.	95.50
20-40	749.80	N.A.	39.90
20-50	1174.39	N.A.	62.50
40-70	743.29	N.A.	39.60
60-80	145.09	N.A.	7.70
70-80	55.50	N.A.	3.00
80-90	14.47	N.A.	0.80
90-110	0.05	N.A.	0.00
90-120	0.05	N.A.	0.00
90-130	0.05	N.A.	0.00
90-150	0.05	N.A.	0.00
90-180	0.05	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1878.77	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	83.69
10-20	231.97
20-30	340.74
30-40	409.06
40-50	424.59
50-60	229.11
60-70	89.59
70-80	55.50
80-90	14.47
90-100	0.05
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

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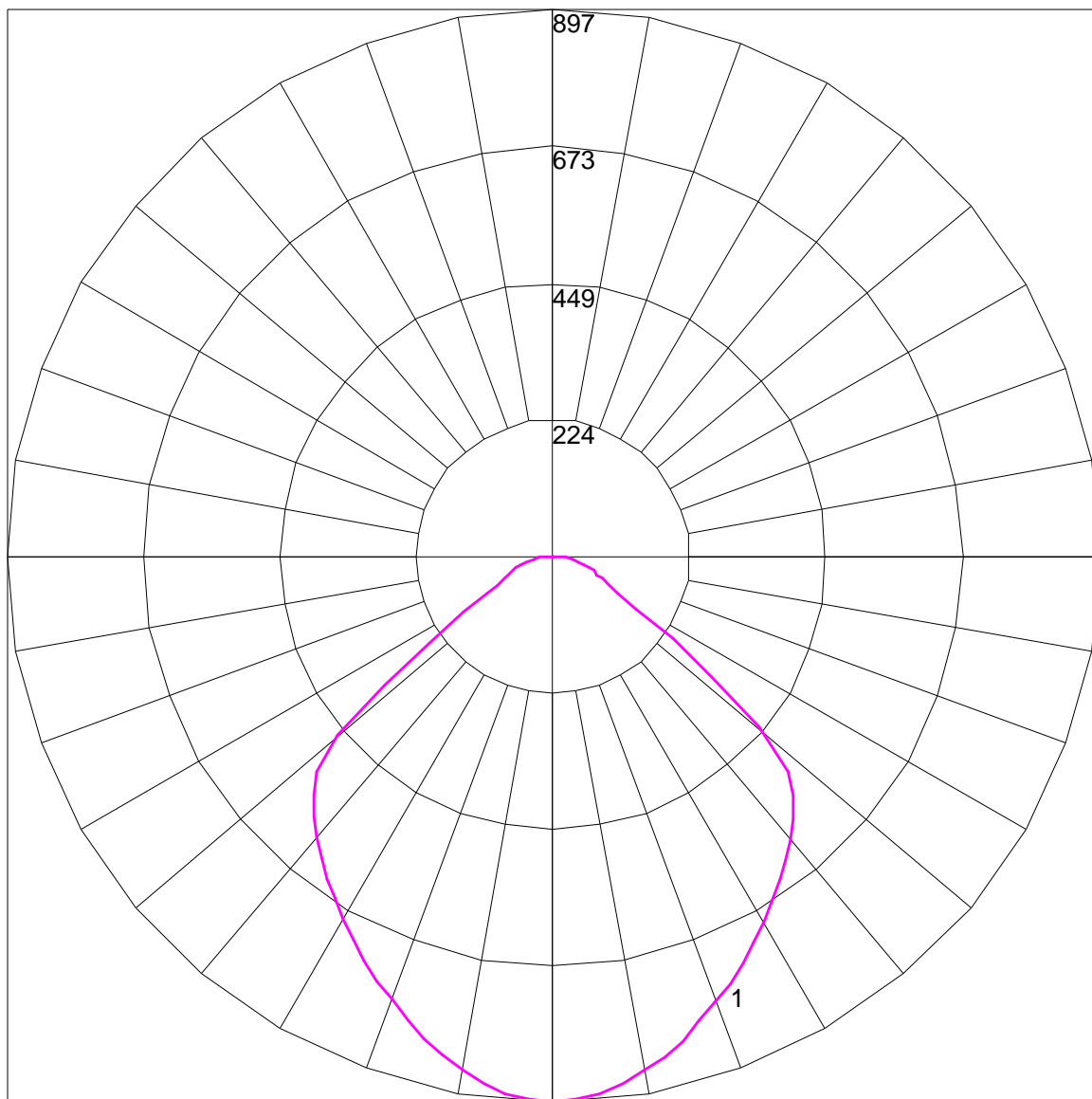
**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	105	101	99	100	98	95	97	94	93	93	91	90	88
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78	76
3	95	85	78	73	92	84	77	72	81	76	71	78	74	70	76	72	69	67
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58
5	81	69	61	56	79	68	61	55	66	60	55	64	59	54	63	58	54	52
6	75	63	55	49	73	62	55	49	60	54	49	59	53	48	57	52	48	46
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41
8	65	53	45	40	64	52	45	39	51	44	39	50	43	39	49	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	33
10	57	45	38	33	56	44	37	33	44	37	32	43	37	32	42	36	32	30

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : SP-00674 ~ HD24GV-27L35K-EX-MWI.IES

POLAR GRAPH



Maximum Candela = 897.347 Located At Horizontal Angle = 292.5, Vertical Angle = 2.5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)