



IES INDOOR REPORT

PHOTOMETRIC FILENAME : MDSG-24-L220-940-SYM-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM 12186363.03
 [TESTLAB] UL Verification Services Inc.
 [ISSUEDATE] 09-06-2022
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] MDSG-24-L220-940-SYM-DIM-UNV
 [LUMINAIRE] Recessed 2' x 4' LED medical troffer
 [MORE] with pattern 12, 0.125 thick acrylic lens
 [LAMP] LED
 [LAMPCAT] HLM 90 CRI, 4000K CCT
 [_SEARCH_SOURCETYPE] LED
 [_SEARCH_APPLICATION] Indoor, Healthcare, Direct
 [_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	18360
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
Total Luminaire Watts	171
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.26
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.67 ft
Luminous Width (90-270)	3.67 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	10706	10473	10373
55	9004	8715	8585
65	7452	7150	7206
75	6537	6440	6961
85	6806	7045	8238

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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>
0.0	7868.572	7868.572	7868.572	7868.572	7868.572
0.5	7941.968	7904.848	7844.950	7836.514	7833.983
1.0	7940.280	7904.004	7843.263	7834.826	7832.295
1.5	7938.593	7901.473	7840.732	7832.295	7830.608
2.0	7935.219	7898.099	7838.201	7828.921	7827.234
2.5	7931.001	7893.881	7833.983	7824.703	7823.015
3.0	7925.095	7887.975	7828.077	7819.641	7817.954
3.5	7919.190	7882.070	7822.172	7813.735	7812.048
4.0	7910.753	7874.477	7814.579	7806.986	7804.455
4.5	7903.161	7866.041	7806.986	7798.550	7797.706
5.0	7893.881	7856.761	7798.550	7790.957	7789.270
5.5	7883.757	7846.637	7789.270	7780.834	7779.990
6.0	7873.633	7836.514	7778.303	7770.710	7769.866
6.5	7861.823	7823.859	7766.492	7758.899	7758.899
7.0	7848.324	7811.205	7754.681	7747.088	7747.088
7.5	7833.983	7796.863	7740.339	7734.434	7732.747
8.0	7818.797	7781.677	7726.841	7719.248	7719.248
8.5	7801.925	7766.492	7710.812	7704.907	7702.376
9.0	7784.208	7749.619	7695.627	7688.034	7687.190
9.5	7766.492	7731.903	7678.754	7671.161	7669.474
10.0	7747.088	7712.499	7660.194	7653.445	7652.601
10.5	7726.841	7693.096	7640.791	7634.885	7633.198
11.0	7705.750	7672.005	7620.543	7614.638	7612.951
11.5	7682.972	7650.070	7599.452	7593.547	7591.860
12.0	7660.194	7627.292	7576.674	7571.613	7569.925
12.5	7635.729	7603.671	7553.896	7547.991	7547.147
13.0	7611.263	7578.362	7528.587	7524.369	7523.525
13.5	7584.267	7552.209	7503.278	7499.904	7500.747
14.0	7557.271	7525.213	7477.126	7474.595	7473.751
14.5	7529.431	7497.373	7449.286	7446.755	7447.598
15.0	7499.904	7468.689	7420.602	7419.758	7420.602
15.5	7470.377	7438.318	7390.231	7389.388	7391.075
16.0	7439.162	7407.948	7359.017	7359.860	7361.548
16.5	7407.948	7375.890	7328.646	7328.646	7331.177
17.0	7375.890	7342.988	7295.744	7296.588	7299.119
17.5	7343.831	7308.399	7261.999	7263.686	7266.217
18.0	7309.242	7273.810	7227.410	7229.941	7233.315
18.5	7273.810	7239.221	7192.821	7195.352	7197.883
19.0	7238.377	7202.101	7156.545	7159.076	7163.294
19.5	7202.101	7166.668	7120.269	7121.112	7125.330
20.0	7164.137	7128.705	7082.305	7083.149	7088.210
20.5	7124.487	7089.898	7042.654	7043.498	7049.403
21.0	7083.992	7050.247	7003.003	7003.847	7008.065
21.5	7043.498	7009.753	6961.665	6961.665	6966.727
22.0	7002.160	6969.258	6921.171	6920.327	6924.546
22.5	6959.978	6927.076	6878.146	6877.302	6882.364
23.0	6916.109	6883.207	6834.277	6833.433	6837.651
23.5	6871.397	6839.338	6790.408	6787.877	6793.782
24.0	6825.840	6794.626	6745.695	6742.321	6747.382
24.5	6779.441	6749.070	6700.139	6696.764	6702.670
25.0	6732.197	6703.513	6656.270	6652.052	6654.583
25.5	6686.641	6657.957	6609.026	6604.808	6608.183
26.0	6640.241	6610.714	6560.096	6555.878	6559.252
26.5	6592.997	6561.783	6511.165	6506.103	6510.321

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CANDELA TABULATION - (Cont.)

27.0	6543.223	6512.009	6461.391	6456.329	6460.547
27.5	6493.449	6460.547	6409.929	6404.867	6409.085
28.0	6441.987	6409.085	6358.467	6352.562	6356.780
28.5	6389.682	6356.780	6306.162	6299.413	6303.631
29.0	6336.533	6303.631	6252.169	6246.264	6248.795
29.5	6282.540	6250.482	6198.177	6191.428	6194.802
30.0	6228.548	6195.646	6143.341	6135.748	6139.966
30.5	6173.711	6140.810	6087.661	6080.068	6084.286
31.0	6118.032	6085.130	6031.137	6023.545	6027.763
31.5	6060.665	6028.607	5974.614	5966.178	5971.239
32.0	6004.141	5972.083	5917.247	5907.967	5912.185
32.5	5945.930	5913.872	5859.036	5848.069	5853.131
33.0	5887.720	5855.662	5799.982	5789.015	5792.389
33.5	5827.822	5796.607	5740.927	5728.273	5731.647
34.0	5768.767	5736.709	5680.186	5667.531	5671.749
34.5	5708.026	5675.968	5619.444	5605.102	5608.477
35.0	5647.284	5614.382	5557.859	5541.830	5546.048
35.5	5586.542	5551.953	5495.430	5479.401	5483.619
36.0	5524.114	5488.681	5433.001	5416.128	5418.659
36.5	5460.841	5425.408	5369.729	5351.169	5354.543
37.0	5395.881	5361.292	5304.769	5286.209	5287.896
37.5	5330.921	5296.332	5239.809	5220.405	5220.405
38.0	5265.118	5231.373	5174.006	5153.758	5153.758
38.5	5199.315	5164.726	5107.358	5087.111	5086.268
39.0	5132.667	5098.079	5040.711	5020.464	5017.933
39.5	5066.020	5030.588	4973.221	4952.130	4949.599
40.0	4998.530	4962.253	4905.730	4883.796	4881.265
40.5	4929.352	4893.919	4837.396	4814.618	4811.243
41.0	4861.017	4826.428	4769.061	4744.596	4740.378
41.5	4789.309	4757.250	4699.883	4674.574	4669.513
42.0	4720.131	4688.916	4629.862	4603.709	4598.647
42.5	4650.953	4619.738	4559.840	4532.844	4526.938
43.0	4580.931	4549.717	4489.819	4461.135	4456.073
43.5	4511.753	4479.695	4419.797	4388.583	4385.208
44.0	4442.575	4409.673	4348.932	4316.874	4312.656
44.5	4372.554	4338.808	4278.910	4244.321	4240.947
45.0	4303.376	4269.630	4209.732	4172.612	4169.238
45.5	4233.354	4199.609	4138.867	4100.903	4096.685
46.0	4165.020	4129.587	4068.845	4029.195	4024.976
46.5	4094.154	4059.565	3997.980	3957.486	3952.424
47.0	4024.976	3988.700	3926.271	3885.777	3879.871
47.5	3954.955	3918.679	3855.406	3814.068	3809.850
48.0	3885.777	3847.813	3785.384	3743.203	3738.985
48.5	3815.755	3776.948	3714.519	3673.181	3668.963
49.0	3746.577	3707.770	3645.341	3604.003	3598.941
49.5	3675.712	3638.592	3576.163	3535.669	3528.920
50.0	3605.690	3569.414	3506.985	3467.335	3459.742
50.5	3535.669	3501.080	3437.807	3399.000	3390.564
51.0	3466.491	3432.746	3369.473	3330.666	3322.230
51.5	3398.157	3363.568	3300.295	3263.175	3253.895
52.0	3330.666	3295.233	3232.804	3196.528	3187.248
52.5	3262.332	3226.899	3166.157	3129.881	3121.445
53.0	3195.684	3161.096	3101.198	3064.078	3055.641
53.5	3129.881	3096.136	3034.550	2999.118	2990.682
54.0	3063.234	3031.176	2970.434	2934.158	2925.722
54.5	2999.961	2966.216	2905.475	2870.042	2861.606

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CANDELA TABULATION - (Cont.)

55.0	2935.845	2901.256	2841.358	2805.082	2799.177
55.5	2872.573	2837.140	2778.086	2742.653	2736.748
56.0	2810.144	2773.868	2714.813	2679.381	2674.319
56.5	2747.715	2710.595	2653.228	2618.639	2613.577
57.0	2686.130	2648.166	2591.643	2557.897	2554.523
57.5	2626.232	2587.425	2531.745	2498.843	2496.312
58.0	2566.334	2527.527	2472.690	2440.632	2438.945
58.5	2506.436	2467.629	2412.792	2383.265	2382.422
59.0	2447.381	2408.574	2353.738	2326.742	2326.742
59.5	2387.483	2349.520	2295.527	2271.062	2271.062
60.0	2329.273	2291.309	2237.317	2216.226	2217.913
60.5	2271.906	2233.942	2181.637	2163.077	2164.764
61.0	2215.382	2177.419	2125.957	2110.772	2112.459
61.5	2159.702	2121.739	2071.964	2059.310	2061.841
62.0	2104.022	2067.746	2018.815	2009.536	2012.910
62.5	2049.186	2014.597	1966.510	1960.605	1963.979
63.0	1995.194	1962.292	1915.049	1912.518	1915.049
63.5	1942.888	1909.143	1863.587	1864.431	1867.805
64.0	1890.583	1857.681	1812.969	1817.187	1821.405
64.5	1840.809	1807.063	1764.038	1771.631	1775.849
65.0	1790.191	1757.289	1717.638	1726.075	1731.136
65.5	1741.260	1709.202	1671.238	1682.206	1688.955
66.0	1694.016	1661.958	1626.526	1640.024	1646.773
66.5	1646.773	1616.402	1582.657	1597.842	1607.122
67.0	1601.217	1570.846	1538.788	1556.504	1567.471
67.5	1555.661	1526.133	1494.919	1515.166	1526.977
68.0	1511.792	1482.264	1453.581	1475.515	1488.170
68.5	1467.923	1439.239	1411.399	1436.708	1451.050
69.0	1424.897	1397.057	1370.905	1397.901	1414.774
69.5	1383.559	1355.719	1332.098	1360.781	1380.185
70.0	1341.378	1315.225	1294.134	1324.505	1345.596
70.5	1300.883	1275.574	1256.171	1289.916	1311.007
71.0	1261.232	1237.611	1219.894	1254.483	1277.261
71.5	1220.738	1199.647	1182.774	1219.894	1245.203
72.0	1181.087	1161.684	1146.498	1186.149	1212.302
72.5	1143.124	1124.564	1111.909	1152.404	1179.400
73.0	1105.160	1087.444	1077.320	1119.502	1147.342
73.5	1068.040	1051.168	1043.575	1086.600	1115.284
74.0	1032.608	1015.735	1010.673	1055.386	1084.913
74.5	996.331	981.146	978.615	1024.171	1055.386
75.0	961.742	947.401	947.401	993.801	1024.171
75.5	927.153	914.499	916.186	964.273	993.801
76.0	894.252	881.597	884.972	933.903	963.430
76.5	861.350	848.696	853.757	903.532	933.903
77.0	829.882	816.384	823.387	873.161	904.375
77.5	797.993	784.664	793.353	843.634	874.005
78.0	766.104	753.196	763.995	814.697	844.477
78.5	734.805	722.235	735.142	786.267	815.625
79.0	704.519	691.780	706.206	757.499	787.026
79.5	674.907	661.831	676.426	729.068	757.583
80.0	645.380	632.303	647.405	700.807	727.634
80.5	614.840	602.692	617.962	672.714	698.613
81.0	584.469	572.996	588.435	644.283	668.748
81.5	553.761	542.710	558.907	615.178	638.209
82.0	523.559	512.507	529.296	586.157	607.332
82.5	493.610	482.474	499.769	557.726	576.033

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CANDELA TABULATION - (Cont.)

83.0	463.745	452.778	470.326	529.296	544.312
83.5	432.953	422.998	440.630	500.190	511.748
84.0	401.570	393.302	410.428	469.988	478.509
84.5	369.680	362.931	379.720	438.605	444.004
85.0	337.200	332.054	349.011	406.041	408.150
85.5	304.720	300.671	317.797	373.308	371.283
86.0	271.144	269.035	286.920	338.550	333.320
86.5	235.796	236.639	255.452	302.105	295.272
87.0	200.194	203.822	222.382	264.985	257.730
87.5	164.424	170.161	188.636	227.106	219.851
88.0	128.739	137.006	155.397	189.143	182.647
88.5	93.812	104.357	122.327	151.770	146.539
89.0	60.489	73.312	91.112	116.168	111.528
89.5	30.455	44.881	62.935	83.435	80.061
90.0	9.364	22.609	39.398	54.667	52.305
90.5	0.000	0.000	0.000	0.000	0.000
91.0	0.000	0.000	0.000	0.000	0.000
91.5	0.000	0.000	0.000	0.000	0.000
92.0	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000
93.0	0.000	0.000	0.000	0.000	0.000
93.5	0.000	0.000	0.000	0.000	0.000
94.0	0.000	0.000	0.000	0.000	0.000
94.5	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000
95.5	0.000	0.000	0.000	0.000	0.000
96.0	0.000	0.000	0.000	0.000	0.000
96.5	0.000	0.000	0.000	0.000	0.000
97.0	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000
98.0	0.000	0.000	0.000	0.000	0.000
98.5	0.000	0.000	0.000	0.000	0.000
99.0	0.000	0.000	0.000	0.000	0.000
99.5	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000
100.5	0.000	0.000	0.000	0.000	0.000
101.0	0.000	0.000	0.000	0.000	0.000
101.5	0.000	0.000	0.000	0.000	0.000
102.0	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000
103.0	0.000	0.000	0.000	0.000	0.000
103.5	0.000	0.000	0.000	0.000	0.000
104.0	0.000	0.000	0.000	0.000	0.000
104.5	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000
105.5	0.000	0.000	0.000	0.000	0.000
106.0	0.000	0.000	0.000	0.000	0.000
106.5	0.000	0.000	0.000	0.000	0.000
107.0	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000
108.0	0.000	0.000	0.000	0.000	0.000
108.5	0.000	0.000	0.000	0.000	0.000
109.0	0.000	0.000	0.000	0.000	0.000
109.5	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000
110.5	0.000	0.000	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

111.0	0.000	0.000	0.000	0.000	0.000
111.5	0.000	0.000	0.000	0.000	0.000
112.0	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000
113.0	0.000	0.000	0.000	0.000	0.000
113.5	0.000	0.000	0.000	0.000	0.000
114.0	0.000	0.000	0.000	0.000	0.000
114.5	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000
115.5	0.000	0.000	0.000	0.000	0.000
116.0	0.000	0.000	0.000	0.000	0.000
116.5	0.000	0.000	0.000	0.000	0.000
117.0	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000
118.0	0.000	0.000	0.000	0.000	0.000
118.5	0.000	0.000	0.000	0.000	0.000
119.0	0.000	0.000	0.000	0.000	0.000
119.5	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000
120.5	0.000	0.000	0.000	0.000	0.000
121.0	0.000	0.000	0.000	0.000	0.000
121.5	0.000	0.000	0.000	0.000	0.000
122.0	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000
123.0	0.000	0.000	0.000	0.000	0.000
123.5	0.000	0.000	0.000	0.000	0.000
124.0	0.000	0.000	0.000	0.000	0.000
124.5	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000
125.5	0.000	0.000	0.000	0.000	0.000
126.0	0.000	0.000	0.000	0.000	0.000
126.5	0.000	0.000	0.000	0.000	0.000
127.0	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000
128.0	0.000	0.000	0.000	0.000	0.000
128.5	0.000	0.000	0.000	0.000	0.000
129.0	0.000	0.000	0.000	0.000	0.000
129.5	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000
130.5	0.000	0.000	0.000	0.000	0.000
131.0	0.000	0.000	0.000	0.000	0.000
131.5	0.000	0.000	0.000	0.000	0.000
132.0	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000
133.0	0.000	0.000	0.000	0.000	0.000
133.5	0.000	0.000	0.000	0.000	0.000
134.0	0.000	0.000	0.000	0.000	0.000
134.5	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000
135.5	0.000	0.000	0.000	0.000	0.000
136.0	0.000	0.000	0.000	0.000	0.000
136.5	0.000	0.000	0.000	0.000	0.000
137.0	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000
138.0	0.000	0.000	0.000	0.000	0.000
138.5	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MDSG-24-L220-940-SYM-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

139.0	0.000	0.000	0.000	0.000	0.000
139.5	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000
140.5	0.000	0.000	0.000	0.000	0.000
141.0	0.000	0.000	0.000	0.000	0.000
141.5	0.000	0.000	0.000	0.000	0.000
142.0	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000
143.0	0.000	0.000	0.000	0.000	0.000
143.5	0.000	0.000	0.000	0.000	0.000
144.0	0.000	0.000	0.000	0.000	0.000
144.5	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000
145.5	0.000	0.000	0.000	0.000	0.000
146.0	0.000	0.000	0.000	0.000	0.000
146.5	0.000	0.000	0.000	0.000	0.000
147.0	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000
148.0	0.000	0.000	0.000	0.000	0.000
148.5	0.000	0.000	0.000	0.000	0.000
149.0	0.000	0.000	0.000	0.000	0.000
149.5	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000
150.5	0.000	0.000	0.000	0.000	0.000
151.0	0.000	0.000	0.000	0.000	0.000
151.5	0.000	0.000	0.000	0.000	0.000
152.0	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000
153.0	0.000	0.000	0.000	0.000	0.000
153.5	0.000	0.000	0.000	0.000	0.000
154.0	0.000	0.000	0.000	0.000	0.000
154.5	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000
155.5	0.000	0.000	0.000	0.000	0.000
156.0	0.000	0.000	0.000	0.000	0.000
156.5	0.000	0.000	0.000	0.000	0.000
157.0	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000
158.0	0.000	0.000	0.000	0.000	0.000
158.5	0.000	0.000	0.000	0.000	0.000
159.0	0.000	0.000	0.000	0.000	0.000
159.5	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000
160.5	0.000	0.000	0.000	0.000	0.000
161.0	0.000	0.000	0.000	0.000	0.000
161.5	0.000	0.000	0.000	0.000	0.000
162.0	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000
163.0	0.000	0.000	0.000	0.000	0.000
163.5	0.000	0.000	0.000	0.000	0.000
164.0	0.000	0.000	0.000	0.000	0.000
164.5	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000
165.5	0.000	0.000	0.000	0.000	0.000
166.0	0.000	0.000	0.000	0.000	0.000
166.5	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MDSG-24-L220-940-SYM-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

167.0	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000
168.0	0.000	0.000	0.000	0.000	0.000
168.5	0.000	0.000	0.000	0.000	0.000
169.0	0.000	0.000	0.000	0.000	0.000
169.5	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000
170.5	0.000	0.000	0.000	0.000	0.000
171.0	0.000	0.000	0.000	0.000	0.000
171.5	0.000	0.000	0.000	0.000	0.000
172.0	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000
173.0	0.000	0.000	0.000	0.000	0.000
173.5	0.000	0.000	0.000	0.000	0.000
174.0	0.000	0.000	0.000	0.000	0.000
174.5	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000
175.5	0.000	0.000	0.000	0.000	0.000
176.0	0.000	0.000	0.000	0.000	0.000
176.5	0.000	0.000	0.000	0.000	0.000
177.0	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000
178.0	0.000	0.000	0.000	0.000	0.000
178.5	0.000	0.000	0.000	0.000	0.000
179.0	0.000	0.000	0.000	0.000	0.000
179.5	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MDSG-24-L220-940-SYM-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2838.23	N.A.	15.50
0-30	5908.53	N.A.	32.20
0-40	9389.15	N.A.	51.10
0-60	15201.35	N.A.	82.80
0-80	17970.75	N.A.	97.90
0-90	18359.35	N.A.	100.00
10-90	17617.14	N.A.	96.00
20-40	6550.92	N.A.	35.70
20-50	9804.38	N.A.	53.40
40-70	7549.64	N.A.	41.10
60-80	2769.4	N.A.	15.10
70-80	1031.96	N.A.	5.60
80-90	388.60	N.A.	2.10
90-110	1.01	N.A.	0.00
90-120	1.01	N.A.	0.00
90-130	1.01	N.A.	0.00
90-150	1.01	N.A.	0.00
90-180	1.01	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	18360.36	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	742.20
10-20	2096.03
20-30	3070.3
30-40	3480.62
40-50	3253.46
50-60	2558.74
60-70	1737.44
70-80	1031.96
80-90	388.60
90-100	1.01
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 : MDSG-24-L220-940-SYM-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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	53
5	78	66	57	51	76	65	57	50	63	55	50	61	54	49	59	53	49	47
6	72	60	51	45	70	59	50	45	57	50	44	55	49	44	54	48	43	41
7	67	54	46	40	66	53	45	40	52	45	39	51	44	39	49	43	39	37
8	63	50	41	36	61	49	41	36	48	41	36	46	40	35	45	39	35	33
9	59	46	38	32	57	45	38	32	44	37	32	43	37	32	42	36	32	30
10	55	42	35	30	54	42	34	30	41	34	29	40	34	29	39	33	29	27

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MDSG-24-L220-940-SYM-DIM-UNV_.IES

UGR TABLE - CORRECTED

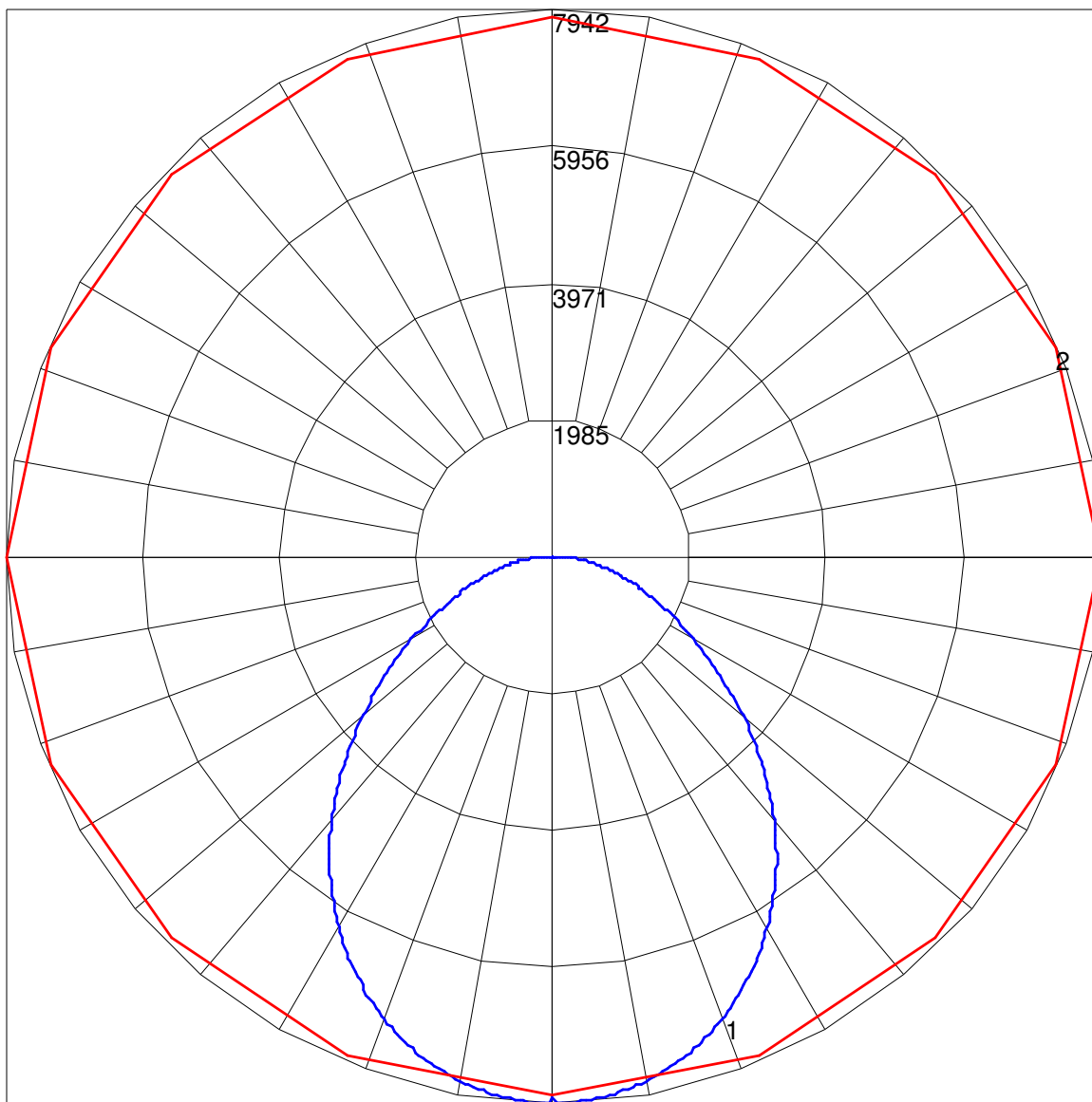
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	19.1	20.7	19.5	21.0	21.3	18.9	20.4	19.2	20.7	21.0
	3H	20.7	22.1	21.0	22.4	22.7	20.5	21.9	20.9	22.2	22.6
	4H	21.3	22.6	21.7	22.9	23.3	21.2	22.5	21.6	22.9	23.2
	6H	21.8	23.0	22.2	23.4	23.8	21.9	23.1	22.3	23.4	23.8
	8H	22.0	23.2	22.4	23.6	24.0	22.1	23.3	22.6	23.7	24.1
	12H	22.2	23.3	22.6	23.7	24.1	22.4	23.5	22.8	23.9	24.3
4H	2H	19.6	20.9	20.0	21.3	21.6	19.4	20.7	19.8	21.1	21.4
	3H	21.4	22.5	21.8	22.9	23.3	21.2	22.3	21.6	22.7	23.1
	4H	22.1	23.1	22.6	23.5	24.0	22.1	23.1	22.5	23.5	24.0
	6H	22.8	23.7	23.3	24.1	24.6	22.9	23.8	23.4	24.2	24.7
	8H	23.1	23.9	23.6	24.4	24.8	23.3	24.1	23.8	24.6	25.0
	12H	23.3	24.1	23.8	24.5	25.0	23.6	24.4	24.1	24.8	25.3
8H	4H	22.4	23.2	22.9	23.7	24.2	22.4	23.2	22.9	23.7	24.1
	6H	23.3	23.9	23.8	24.4	24.9	23.4	24.1	23.9	24.6	25.0
	8H	23.6	24.2	24.1	24.8	25.2	23.9	24.5	24.4	25.0	25.5
	12H	24.0	24.5	24.5	25.0	25.6	24.4	24.9	24.9	25.4	25.9
12H	4H	22.5	23.2	23.0	23.7	24.2	22.5	23.2	22.9	23.7	24.1
	6H	23.4	24.0	23.9	24.4	25.0	23.5	24.1	24.0	24.6	25.1
	8H	23.8	24.3	24.3	24.8	25.4	24.0	24.6	24.5	25.1	25.6

Maximum UGR = 25.9

POLAR GRAPH



Maximum Candela = 7941.968 Located At Horizontal Angle = 0, Vertical Angle = .5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)