



IES INDOOR REPORT

PHOTOMETRIC FILENAME : BAR-22-L20-840-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GENERATED FROM 15729805.02
 [TESTLAB] UL Verification Services Inc.
 [ISSUEDATE] 2025-05-02
 [TESTDATE] 3/21/2025
 [MANUFAC] WILLIAMS INDOOR
 [MORE] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] BAR-22-L20-840-DIM-UNV_
 [LUMINAIRE] Recessed 2 x 2 Indirect LED luminaire
 [MORE] with centered LED rail & white painted housing
 [LAMP] 56 White LEDs
 [BALLAST] 0-10v LED DRIVER
 [_SEARCH_SOURCETYPE] LED
 [_SEARCH_APPLICATION] INDOOR
 [_SEARCH_MOUNTING] RECESSED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2088
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	135
Total Luminaire Watts	15.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.28
Spacing Criterion (90-270)	1.38
Spacing Criterion (Diagonal)	1.46
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.92 ft
Luminous Width (90-270)	1.92 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1899	2065	2193
55	1845	2104	2238
65	1752	2095	2050
75	1468	1533	847
85	1042	894	500

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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	678.362	678.362	678.362	678.362	678.362
0.5	677.818	679.449	678.362	677.818	677.818
1.0	677.275	679.449	678.362	677.818	677.818
1.5	677.275	678.905	678.362	677.275	677.818
2.0	677.275	678.905	677.818	677.275	677.275
2.5	677.275	678.905	677.275	676.731	676.731
3.0	676.731	678.362	676.731	676.187	676.731
3.5	676.187	677.818	676.187	676.187	676.187
4.0	675.644	677.275	676.187	675.644	675.644
4.5	675.100	676.731	675.100	675.100	675.100
5.0	674.557	675.644	674.557	674.557	675.100
5.5	674.013	675.100	674.013	674.013	674.557
6.0	672.926	674.557	673.470	673.470	674.013
6.5	672.383	673.470	672.926	673.470	673.470
7.0	671.839	672.926	672.383	672.926	673.470
7.5	670.752	671.839	671.295	672.383	672.926
8.0	670.208	671.295	670.752	671.839	672.383
8.5	669.121	670.208	670.208	671.295	671.839
9.0	668.034	669.121	669.121	670.752	671.839
9.5	666.947	668.034	668.578	670.208	671.295
10.0	666.403	667.490	668.034	669.665	670.752
10.5	665.316	666.403	666.947	669.121	670.752
11.0	664.229	665.316	666.403	668.578	670.208
11.5	663.142	664.229	665.316	668.034	669.665
12.0	662.055	663.142	664.773	667.490	669.121
12.5	660.968	662.055	663.686	666.947	669.121
13.0	659.337	660.968	663.142	666.403	668.578
13.5	658.250	659.881	662.055	665.860	668.034
14.0	656.619	658.250	660.968	665.316	667.490
14.5	655.532	657.163	659.881	664.229	666.947
15.0	653.901	655.532	658.794	663.686	666.403
15.5	652.271	653.901	657.706	662.598	665.316
16.0	650.640	652.271	656.619	661.511	664.773
16.5	649.009	650.640	654.989	660.968	663.686
17.0	646.835	649.009	653.901	659.337	663.142
17.5	645.205	647.379	652.271	658.250	661.511
18.0	643.030	645.205	650.640	657.163	660.424
18.5	640.856	643.030	649.009	655.532	659.337
19.0	638.682	641.400	647.379	654.445	658.250
19.5	637.051	639.225	645.748	652.814	656.619
20.0	634.333	637.051	644.117	651.727	655.532
20.5	632.159	634.877	641.943	650.097	654.445
21.0	629.985	632.703	640.313	648.466	652.814
21.5	627.811	630.528	638.138	646.835	651.184
22.0	625.093	628.354	635.964	645.205	649.553
22.5	622.375	625.636	634.333	643.574	647.922
23.0	620.201	623.462	632.159	641.943	646.835
23.5	617.483	621.288	630.528	640.313	645.205
24.0	615.309	619.114	628.354	638.682	643.574
24.5	612.047	616.396	626.724	637.051	642.487
25.0	609.873	613.678	624.549	635.420	640.856
25.5	607.155	611.504	622.919	633.790	639.769
26.0	604.438	608.786	620.744	632.159	638.138
26.5	601.720	606.612	618.570	630.528	637.051

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CANDELA TABULATION - (Cont.)

27.0	598.458	603.894	616.396	628.898	635.420
27.5	595.741	601.176	614.765	627.267	633.790
28.0	593.023	598.458	612.591	625.093	631.616
28.5	589.762	595.741	609.873	622.919	629.985
29.0	586.500	592.479	607.699	620.744	627.811
29.5	583.782	589.762	604.981	618.570	625.636
30.0	580.521	587.044	602.263	616.396	623.462
30.5	577.260	583.782	599.546	613.678	621.288
31.0	573.998	581.065	596.828	611.504	618.570
31.5	570.193	577.803	594.110	608.786	616.396
32.0	566.932	574.542	590.849	606.068	613.678
32.5	563.671	571.281	588.131	603.351	610.960
33.0	559.866	567.476	584.869	600.633	608.243
33.5	556.061	564.214	582.152	597.915	605.525
34.0	552.256	560.409	578.890	594.654	602.807
34.5	548.451	557.148	575.629	591.936	600.089
35.0	544.646	553.343	572.368	589.218	597.371
35.5	540.896	550.082	569.106	586.500	594.654
36.0	537.091	546.277	565.845	583.239	591.936
36.5	533.068	542.635	563.127	580.521	589.218
37.0	529.155	538.939	559.322	577.260	586.500
37.5	525.024	535.188	556.061	574.542	583.239
38.0	520.784	531.438	552.800	571.281	579.977
38.5	516.598	527.470	548.995	568.019	577.260
39.0	512.359	523.610	545.733	564.758	573.998
39.5	508.119	519.697	542.091	561.496	570.193
40.0	503.879	515.566	538.341	557.692	566.932
40.5	499.531	511.543	534.536	553.887	563.671
41.0	494.910	507.412	530.948	550.625	559.866
41.5	490.616	503.227	527.089	546.820	556.604
42.0	486.105	498.987	523.176	542.961	552.800
42.5	481.702	494.747	519.153	539.211	548.995
43.0	477.136	490.562	515.240	535.460	545.190
43.5	472.570	486.105	511.326	531.655	541.657
44.0	468.113	481.648	507.249	527.741	537.743
44.5	463.547	477.299	503.173	523.882	533.829
45.0	458.764	472.896	499.042	519.914	529.807
45.5	454.198	468.385	494.910	515.892	525.730
46.0	449.469	463.982	490.671	511.870	521.654
46.5	444.794	459.416	486.431	507.738	517.740
47.0	439.902	454.850	482.137	503.553	513.663
47.5	434.847	450.284	477.897	499.205	509.315
48.0	429.955	445.718	473.494	494.856	505.129
48.5	426.585	441.044	469.091	490.562	500.563
49.0	424.846	436.587	464.526	486.159	496.378
49.5	419.845	432.836	460.068	481.865	491.867
50.0	414.736	428.868	455.502	477.299	487.301
50.5	409.680	425.335	450.937	472.625	482.789
51.0	404.408	420.823	446.371	467.950	478.169
51.5	399.244	416.040	441.750	463.221	473.222
52.0	393.972	412.181	437.619	458.492	468.385
52.5	388.753	407.397	433.814	453.709	463.438
53.0	383.372	402.451	429.249	448.599	458.492
53.5	377.882	397.396	425.552	443.599	453.165
54.0	372.392	392.341	421.476	438.435	447.784
54.5	366.902	387.286	416.475	434.412	442.511

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CANDELA TABULATION - (Cont.)

55.0	361.575	382.176	412.344	430.173	438.706
55.5	356.140	377.121	407.506	424.846	433.978
56.0	350.704	371.903	402.342	419.628	428.107
56.5	345.214	366.685	397.016	415.823	422.128
57.0	339.670	361.304	391.634	410.278	416.040
57.5	334.126	356.031	386.253	404.462	412.181
58.0	328.690	350.813	380.926	398.646	405.821
58.5	323.309	345.649	375.545	392.776	399.462
59.0	317.765	340.485	370.109	386.634	392.884
59.5	312.275	335.104	364.565	380.437	386.253
60.0	306.676	329.886	359.075	374.077	379.295
60.5	301.186	324.613	353.585	367.881	372.175
61.0	295.859	319.450	348.095	361.467	365.000
61.5	290.424	314.449	342.768	355.053	357.716
62.0	285.151	309.503	337.278	348.530	350.324
62.5	279.770	304.393	331.734	341.627	342.442
63.0	274.497	299.284	326.190	334.615	334.180
63.5	269.170	294.283	320.482	327.277	325.266
64.0	263.789	289.228	314.721	319.558	315.971
64.5	258.517	284.010	308.742	311.459	306.296
65.0	252.972	278.791	302.599	302.871	296.022
65.5	247.265	273.356	296.294	293.848	285.151
66.0	241.503	267.703	289.500	284.227	273.573
66.5	235.687	261.941	282.379	274.062	261.180
67.0	229.491	255.962	275.150	263.517	248.950
67.5	223.348	249.874	267.703	252.809	236.122
68.0	217.097	243.678	260.093	241.503	223.240
68.5	210.901	237.372	252.157	230.034	210.031
69.0	204.215	230.958	243.949	218.239	197.040
69.5	197.638	224.544	235.687	206.281	183.886
70.0	191.224	218.076	227.425	194.322	171.384
70.5	184.756	211.553	218.728	182.908	159.100
71.0	178.505	205.139	209.977	171.275	147.250
71.5	172.308	198.725	200.954	160.078	135.890
72.0	166.112	192.311	191.985	149.316	125.236
72.5	159.861	185.788	182.690	138.988	115.071
73.0	153.773	179.320	173.015	129.041	105.885
73.5	147.739	172.852	163.448	119.746	97.134
74.0	141.815	166.438	154.099	110.832	89.089
74.5	135.781	159.752	144.804	102.624	81.697
75.0	129.856	153.175	135.618	95.123	74.902
75.5	124.149	146.435	126.704	88.057	68.815
76.0	118.442	139.803	118.224	81.316	62.944
76.5	112.788	133.172	110.179	75.283	57.889
77.0	107.299	126.595	102.570	69.793	53.323
77.5	101.809	120.127	95.395	64.792	49.138
78.0	96.373	113.604	88.818	60.172	45.387
78.5	91.264	107.407	82.675	55.878	41.908
79.0	86.372	101.374	76.914	51.856	38.756
79.5	81.643	95.558	71.587	48.268	35.929
80.0	77.077	90.122	66.586	44.898	33.375
80.5	72.348	84.958	61.911	41.691	31.092
81.0	67.619	79.849	57.509	38.756	28.917
81.5	63.107	74.739	53.269	35.929	27.015
82.0	58.487	69.793	49.192	33.320	25.004
82.5	53.867	64.738	45.278	30.657	22.993

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CANDELA TABULATION - (Cont.)

83.0	49.138	59.574	41.474	27.939	21.144
83.5	44.626	54.519	37.723	25.384	19.459
84.0	40.060	49.464	34.081	22.938	17.829
84.5	35.549	44.191	30.385	20.492	16.307
85.0	31.037	38.919	26.634	18.209	14.894
85.5	26.797	33.592	22.993	16.089	13.806
86.0	22.612	28.319	19.459	14.241	12.882
86.5	18.590	23.101	15.981	12.502	11.795
87.0	14.948	18.155	12.719	10.654	10.328
87.5	11.632	13.589	9.893	8.534	8.208
88.0	8.751	9.621	7.229	6.849	7.121
88.5	6.088	6.468	5.273	5.490	5.870
89.0	3.751	4.185	3.696	3.642	3.751
89.5	3.098	3.207	3.153	3.642	3.587
90.0	0.000	0.000	0.000	0.000	0.000
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

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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 : BAR-22-L20-840-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 : BAR-22-L20-840-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	250.48	N.A.	12.00
0-30	538.88	N.A.	25.80
0-40	896.69	N.A.	42.90
0-60	1642.03	N.A.	78.60
0-80	2057.19	N.A.	98.50
0-90	2088.08	N.A.	100.00
10-90	2023.86	N.A.	96.90
20-40	646.21	N.A.	30.90
20-50	1029.36	N.A.	49.30
40-70	1027.66	N.A.	49.20
60-80	415.16	N.A.	19.90
70-80	132.83	N.A.	6.40
80-90	30.88	N.A.	1.50
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	2088.08	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	64.22
10-20	186.27
20-30	288.40
30-40	357.81
40-50	383.14
50-60	362.19
60-70	282.33
70-80	132.83
80-90	30.88
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 : BAR-22-L20-840-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	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	88	82	77	85	80	75	82	77	73	79	75	72	69
3	90	79	71	64	87	78	70	64	75	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	41	33	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

IES INDOOR REPORT
PHOTOMETRIC FILENAME : BAR-22-L20-840-DIM-UNV_.IES

UGR TABLE - CORRECTED

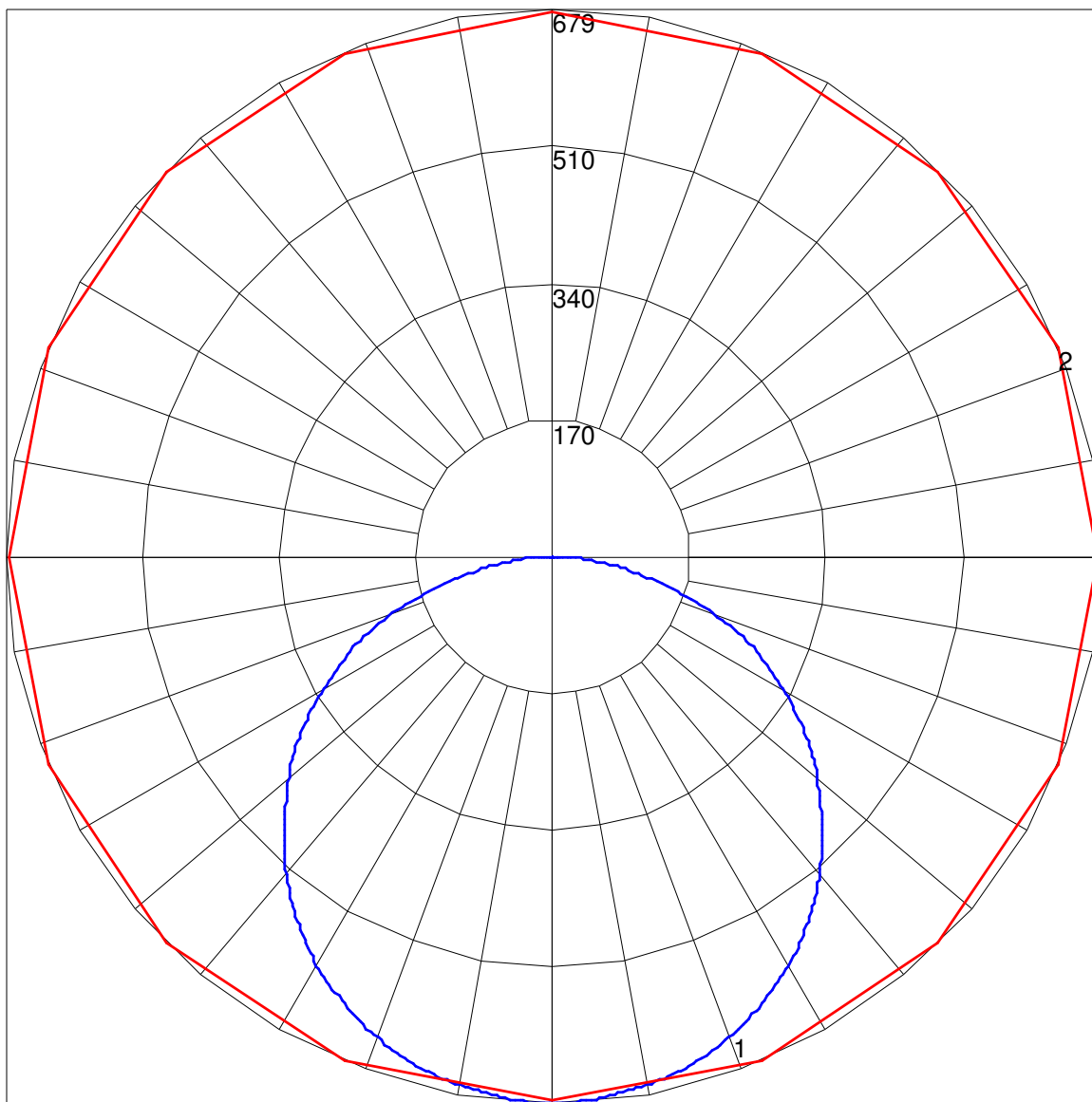
Reflectances

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	14.5	16.2	14.9	16.5	16.8	15.5	17.2	15.9	17.5	17.8
	3H	16.4	17.9	16.8	18.2	18.6	16.9	18.5	17.3	18.8	19.1
	4H	17.1	18.5	17.5	18.8	19.2	17.2	18.6	17.6	18.9	19.3
	6H	17.5	18.8	17.9	19.2	19.6	17.2	18.5	17.6	18.9	19.3
	8H	17.6	18.9	18.1	19.3	19.7	17.2	18.5	17.6	18.9	19.3
	12H	17.7	18.9	18.1	19.3	19.7	17.2	18.4	17.6	18.8	19.2
4H	2H	15.4	16.8	15.8	17.2	17.5	16.2	17.6	16.6	17.9	18.3
	3H	17.5	18.7	17.9	19.1	19.5	17.8	19.0	18.2	19.4	19.8
	4H	18.3	19.3	18.7	19.7	20.2	18.0	19.1	18.5	19.5	20.0
	6H	18.8	19.8	19.3	20.2	20.7	18.2	19.1	18.6	19.5	20.0
	8H	19.0	19.9	19.5	20.3	20.8	18.2	19.1	18.6	19.5	20.0
	12H	19.1	19.9	19.6	20.4	20.9	18.2	19.0	18.7	19.5	19.9
8H	4H	18.5	19.4	19.0	19.8	20.3	18.3	19.2	18.8	19.6	20.1
	6H	19.2	19.9	19.7	20.4	20.9	18.5	19.2	19.0	19.7	20.2
	8H	19.5	20.1	20.0	20.6	21.1	18.5	19.2	19.1	19.7	20.2
	12H	19.7	20.3	20.2	20.7	21.3	18.6	19.2	19.1	19.6	20.2
12H	4H	18.5	19.3	19.0	19.8	20.2	18.3	19.1	18.8	19.6	20.1
	6H	19.2	19.9	19.8	20.3	20.9	18.6	19.2	19.1	19.7	20.2
	8H	19.5	20.1	20.0	20.6	21.2	18.6	19.2	19.1	19.7	20.2

Maximum UGR = 21.3

POLAR GRAPH



Maximum Candela = 679.449 Located At Horizontal Angle = 22.5, Vertical Angle = .5
1 - Vertical Plane Through Horizontal Angles (22.5 - 202.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)