



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : BAR-22-L20-927-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-L20-927-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	1662
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
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	1511	1644	1746
55	1469	1675	1782
65	1395	1668	1632
75	1169	1221	674
85	830	712	398

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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	540.055	540.055	540.055	540.055	540.055
0.5	539.622	540.920	540.055	539.622	539.622
1.0	539.189	540.920	540.055	539.622	539.622
1.5	539.189	540.488	540.055	539.189	539.622
2.0	539.189	540.488	539.622	539.189	539.189
2.5	539.189	540.488	539.189	538.757	538.757
3.0	538.757	540.055	538.757	538.324	538.757
3.5	538.324	539.622	538.324	538.324	538.324
4.0	537.891	539.189	538.324	537.891	537.891
4.5	537.458	538.757	537.458	537.458	537.458
5.0	537.026	537.891	537.026	537.026	537.458
5.5	536.593	537.458	536.593	536.593	537.026
6.0	535.728	537.026	536.160	536.160	536.593
6.5	535.295	536.160	535.728	536.160	536.160
7.0	534.862	535.728	535.295	535.728	536.160
7.5	533.997	534.862	534.429	535.295	535.728
8.0	533.564	534.429	533.997	534.862	535.295
8.5	532.698	533.564	533.564	534.429	534.862
9.0	531.833	532.698	532.698	533.997	534.862
9.5	530.967	531.833	532.266	533.564	534.429
10.0	530.535	531.400	531.833	533.131	533.997
10.5	529.669	530.535	530.967	532.698	533.997
11.0	528.804	529.669	530.535	532.266	533.564
11.5	527.938	528.804	529.669	531.833	533.131
12.0	527.073	527.938	529.237	531.400	532.698
12.5	526.207	527.073	528.371	530.967	532.698
13.0	524.909	526.207	527.938	530.535	532.266
13.5	524.044	525.342	527.073	530.102	531.833
14.0	522.745	524.044	526.207	529.669	531.400
14.5	521.880	523.178	525.342	528.804	530.967
15.0	520.582	521.880	524.476	528.371	530.535
15.5	519.284	520.582	523.611	527.506	529.669
16.0	517.985	519.284	522.745	526.640	529.237
16.5	516.687	517.985	521.447	526.207	528.371
17.0	514.956	516.687	520.582	524.909	527.938
17.5	513.658	515.389	519.284	524.044	526.640
18.0	511.927	513.658	517.985	523.178	525.775
18.5	510.196	511.927	516.687	521.880	524.909
19.0	508.465	510.629	515.389	521.015	524.044
19.5	507.167	508.898	514.091	519.716	522.745
20.0	505.003	507.167	512.793	518.851	521.880
20.5	503.272	505.436	511.062	517.553	521.015
21.0	501.541	503.705	509.763	516.254	519.716
21.5	499.810	501.974	508.032	514.956	518.418
22.0	497.647	500.243	506.301	513.658	517.120
22.5	495.483	498.079	505.003	512.360	515.822
23.0	493.752	496.349	503.272	511.062	514.956
23.5	491.588	494.618	501.974	509.763	513.658
24.0	489.857	492.887	500.243	508.465	512.360
24.5	487.261	490.723	498.945	507.167	511.494
25.0	485.530	488.559	497.214	505.869	510.196
25.5	483.366	486.828	495.916	504.571	509.331
26.0	481.203	484.665	494.185	503.272	508.032
26.5	479.039	482.934	492.454	501.974	507.167

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**CANDELA TABULATION - (Cont.)**

27.0	476.443	480.770	490.723	500.676	505.869
27.5	474.279	478.606	489.425	499.378	504.571
28.0	472.115	476.443	487.694	497.647	502.840
28.5	469.519	474.279	485.530	495.916	501.541
29.0	466.922	471.683	483.799	494.185	499.810
29.5	464.759	469.519	481.636	492.454	498.079
30.0	462.162	467.355	479.472	490.723	496.349
30.5	459.566	464.759	477.308	488.559	494.618
31.0	456.970	462.595	475.144	486.828	492.454
31.5	453.940	459.999	472.981	484.665	490.723
32.0	451.344	457.402	470.384	482.501	488.559
32.5	448.748	454.806	468.221	480.337	486.396
33.0	445.718	451.777	465.624	478.174	484.232
33.5	442.689	449.180	463.461	476.010	482.068
34.0	439.660	446.151	460.864	473.414	479.905
34.5	436.631	443.555	458.268	471.250	477.741
35.0	433.602	440.526	455.671	469.086	475.577
35.5	430.616	437.929	453.075	466.922	473.414
36.0	427.587	434.900	450.478	464.326	471.250
36.5	424.384	432.001	448.315	462.162	469.086
37.0	421.269	429.058	445.286	459.566	466.922
37.5	417.980	426.072	442.689	457.402	464.326
38.0	414.605	423.086	440.093	454.806	461.730
38.5	411.273	419.927	437.064	452.209	459.566
39.0	407.897	416.855	434.467	449.613	456.970
39.5	404.522	413.739	431.568	447.017	453.940
40.0	401.147	410.450	428.582	443.987	451.344
40.5	397.685	407.248	425.553	440.958	448.748
41.0	394.006	403.959	422.697	438.362	445.718
41.5	390.588	400.627	419.624	435.333	443.122
42.0	386.996	397.252	416.509	432.260	440.093
42.5	383.491	393.877	413.306	429.274	437.064
43.0	379.856	390.545	410.191	426.289	434.035
43.5	376.221	386.996	407.075	423.259	431.222
44.0	372.673	383.448	403.830	420.144	428.106
44.5	369.038	379.986	400.584	417.071	424.990
45.0	365.229	376.481	397.295	413.912	421.788
45.5	361.594	372.889	394.006	410.710	418.543
46.0	357.830	369.384	390.631	407.508	415.297
46.5	354.108	365.749	387.256	404.219	412.181
47.0	350.213	362.114	383.837	400.887	408.936
47.5	346.189	358.479	380.462	397.425	405.474
48.0	342.294	354.844	376.957	393.963	402.142
48.5	339.611	351.122	373.451	390.545	398.507
49.0	338.227	347.574	369.816	387.039	395.175
49.5	334.246	344.588	366.268	383.621	391.583
50.0	330.178	341.429	362.633	379.986	387.948
50.5	326.153	338.616	358.998	376.264	384.356
51.0	321.956	335.024	355.363	372.543	380.678
51.5	317.845	331.216	351.685	368.778	376.740
52.0	313.647	328.144	348.396	365.013	372.889
52.5	309.493	324.336	345.367	361.205	368.951
53.0	305.209	320.398	341.732	357.137	365.013
53.5	300.838	316.374	338.789	353.156	360.772
54.0	296.468	312.349	335.544	349.045	356.488
54.5	292.097	308.325	331.563	345.843	352.291

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**CANDELA TABULATION - (Cont.)**

55.0	287.856	304.257	328.274	342.468	349.261
55.5	283.529	300.232	324.422	338.227	345.497
56.0	279.201	296.078	320.311	334.072	340.823
56.5	274.831	291.924	316.071	331.043	336.063
57.0	270.417	287.640	311.787	326.629	331.216
57.5	266.003	283.442	307.502	321.999	328.144
58.0	261.676	279.288	303.262	317.369	323.081
58.5	257.392	275.177	298.978	312.695	318.018
59.0	252.978	271.066	294.650	307.805	312.782
59.5	248.607	266.782	290.236	302.872	307.502
60.0	244.150	262.628	285.866	297.809	301.963
60.5	239.779	258.430	281.495	292.876	296.295
61.0	235.538	254.319	277.124	287.770	290.582
61.5	231.211	250.338	272.884	282.663	284.784
62.0	227.013	246.400	268.513	277.471	278.899
62.5	222.729	242.332	264.099	271.975	272.624
63.0	218.532	238.265	259.685	266.392	266.046
63.5	214.291	234.283	255.141	260.551	258.949
64.0	210.007	230.259	250.554	254.406	251.550
64.5	205.809	226.105	245.794	247.958	243.847
65.0	201.395	221.950	240.904	241.121	235.668
65.5	196.852	217.623	235.885	233.937	227.013
66.0	192.265	213.123	230.475	226.278	217.796
66.5	187.634	208.536	224.807	218.186	207.930
67.0	182.701	203.776	219.051	209.791	198.193
67.5	177.811	198.929	213.123	201.266	187.981
68.0	172.835	193.996	207.064	192.265	177.725
68.5	167.902	188.976	200.746	183.134	167.209
69.0	162.579	183.870	194.212	173.744	156.867
69.5	157.343	178.763	187.634	164.223	146.395
70.0	152.237	173.614	181.057	154.703	136.442
70.5	147.087	168.421	174.133	145.616	126.662
71.0	142.111	163.315	167.166	136.355	117.228
71.5	137.177	158.208	159.983	127.441	108.184
72.0	132.244	153.102	152.842	118.873	99.702
72.5	127.268	147.909	145.443	110.651	91.610
73.0	122.421	142.760	137.740	102.732	84.297
73.5	117.618	137.610	130.124	95.332	77.330
74.0	112.901	132.504	122.681	88.235	70.925
74.5	108.098	127.181	115.281	81.701	65.040
75.0	103.381	121.945	107.968	75.729	59.631
75.5	98.837	116.579	100.871	70.103	54.784
76.0	94.293	111.300	94.120	64.737	50.111
76.5	89.793	106.020	87.716	59.934	46.086
77.0	85.422	100.784	81.657	55.563	42.451
77.5	81.052	95.635	75.945	51.582	39.119
78.0	76.724	90.442	70.709	47.904	36.133
78.5	72.656	85.509	65.819	44.485	33.364
79.0	68.762	80.705	61.232	41.283	30.854
79.5	64.997	76.075	56.991	38.427	28.604
80.0	61.362	71.748	53.010	35.744	26.570
80.5	57.597	67.637	49.289	33.191	24.753
81.0	53.832	63.569	45.784	30.854	23.022
81.5	50.241	59.501	42.408	28.604	21.507
82.0	46.562	55.563	39.163	26.527	19.906
82.5	42.884	51.539	36.047	24.406	18.305

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CANDELA TABULATION - (Cont.)

83.0	39.119	47.428	33.018	22.243	16.833
83.5	35.528	43.403	30.032	20.209	15.492
84.0	31.893	39.379	27.133	18.261	14.194
84.5	28.301	35.181	24.190	16.314	12.982
85.0	24.709	30.984	21.204	14.497	11.857
85.5	21.334	26.743	18.305	12.809	10.992
86.0	18.002	22.546	15.492	11.338	10.256
86.5	14.800	18.391	12.722	9.953	9.390
87.0	11.900	14.453	10.126	8.482	8.222
87.5	9.261	10.818	7.876	6.794	6.534
88.0	6.967	7.659	5.755	5.452	5.669
88.5	4.847	5.150	4.198	4.371	4.674
89.0	2.986	3.332	2.943	2.899	2.986
89.5	2.467	2.553	2.510	2.899	2.856
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-L20-927-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-L20-927-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	199.41	N.A.	12.00
0-30	429.01	N.A.	25.80
0-40	713.87	N.A.	42.90
0-60	1307.25	N.A.	78.60
0-80	1637.76	N.A.	98.50
0-90	1662.35	N.A.	100.00
10-90	1611.23	N.A.	96.90
20-40	514.46	N.A.	30.90
20-50	819.49	N.A.	49.30
40-70	818.14	N.A.	49.20
60-80	330.52	N.A.	19.90
70-80	105.75	N.A.	6.40
80-90	24.59	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	1662.35	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	51.12
10-20	148.29
20-30	229.60
30-40	284.86
40-50	305.03
50-60	288.35
60-70	224.76
70-80	105.75
80-90	24.59
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 : BAR-22-L20-927-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	89	82	77	85	80	75	82	77	73	79	75	72	69
3	90	79	71	64	87	78	70	64	75	68	63	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	46	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-L20-927-DIM-UNV\_.IES**

**UGR TABLE - CORRECTED**

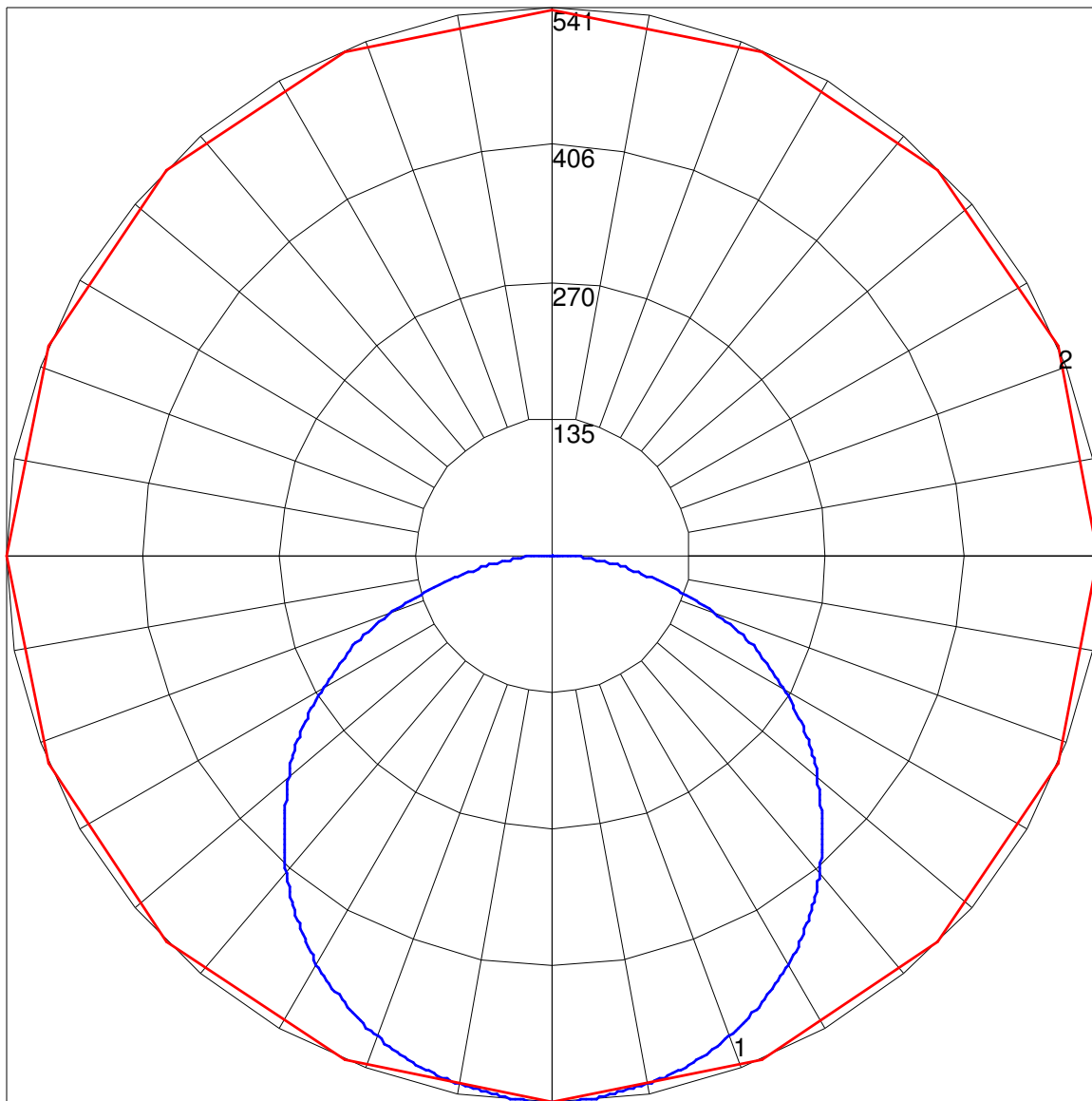
Reflectances

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	13.7	15.4	14.1	15.7	16.0	14.7	16.4	15.1	16.7	17.0
	3H	15.6	17.1	16.0	17.4	17.8	16.1	17.7	16.5	18.0	18.3
	4H	16.3	17.7	16.7	18.0	18.4	16.4	17.8	16.8	18.1	18.5
	6H	16.7	18.0	17.1	18.4	18.8	16.4	17.7	16.8	18.1	18.5
	8H	16.8	18.1	17.3	18.5	18.9	16.4	17.7	16.8	18.1	18.5
	12H	16.9	18.1	17.3	18.5	18.9	16.4	17.6	16.8	18.0	18.4
4H	2H	14.6	16.0	15.0	16.4	16.7	15.4	16.8	15.8	17.1	17.5
	3H	16.7	17.9	17.1	18.3	18.7	17.0	18.2	17.4	18.6	19.0
	4H	17.5	18.5	17.9	18.9	19.4	17.2	18.3	17.7	18.7	19.2
	6H	18.0	19.0	18.5	19.4	19.9	17.4	18.3	17.8	18.7	19.2
	8H	18.2	19.1	18.7	19.5	20.0	17.4	18.3	17.8	18.7	19.2
	12H	18.3	19.1	18.8	19.6	20.1	17.4	18.2	17.9	18.7	19.1
8H	4H	17.7	18.6	18.2	19.0	19.5	17.5	18.4	18.0	18.8	19.3
	6H	18.4	19.1	18.9	19.6	20.1	17.7	18.4	18.2	18.9	19.4
	8H	18.7	19.3	19.2	19.8	20.3	17.7	18.4	18.3	18.9	19.4
	12H	18.9	19.5	19.4	19.9	20.5	17.8	18.3	18.3	18.8	19.4
12H	4H	17.7	18.5	18.2	19.0	19.4	17.5	18.3	18.0	18.8	19.3
	6H	18.4	19.1	19.0	19.5	20.1	17.8	18.4	18.3	18.9	19.4
	8H	18.7	19.3	19.2	19.8	20.4	17.8	18.4	18.3	18.9	19.4

Maximum UGR = 20.5

POLAR GRAPH



Maximum Candela = 540.92 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.)