



IES INDOOR REPORT

PHOTOMETRIC FILENAME : MDBAERX-XX-L44-840-XX-A12125 EXAM ONLY_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from BALLABS TEST NO. 19079.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 4-MAY-2020

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.

[LUMINAIRE] 4-72 LED 2x4' 3 APERATURE MEDICAL BED LUMINAIRE

[MORE] EXAM SECTION-WHITE REFL w/PAT12 LENS & CLEAR ACRYLIC LENS

[LUMCAT] MDBAERx-xx-L44-840-AF12125-FCHA118-EXAM ONLY

[_SEARCH_APPLICATION] Indoor, Healthcare, Direct

[_SEARCH_MOUNTING] Recessed

[_SEARCH_SOURCETYPE] LED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7837
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	122
Total Luminaire Watts	64.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.04
Spacing Criterion (90-270)	1.12
Spacing Criterion (Diagonal)	1.20
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.34 ft
Luminous Width (90-270)	1.70 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	10748	11101	12410
55	8342	8645	9875
65	6295	6373	7418
75	4467	4141	4667
85	2373	1995	2373

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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>
0	3878.103	3878.103	3878.103	3878.103	3878.103	3878.103	3878.103	3878.103	3878.103
5	3758.408	3755.416	3758.408	3766.388	3786.337	3804.291	3819.253	3834.215	3839.202
10	3624.749	3624.749	3646.693	3674.622	3714.520	3764.393	3799.304	3828.230	3837.207
15	3416.281	3423.264	3456.180	3506.052	3562.907	3628.739	3681.604	3727.487	3742.449
20	3182.877	3195.844	3234.745	3302.572	3379.376	3460.169	3534.978	3584.851	3600.810
25	2884.638	2897.605	2952.465	3025.279	3112.058	3192.852	3265.666	3302.572	3315.538
30	2543.509	2558.471	2628.292	2723.051	2836.760	2937.503	3016.302	3053.208	3068.170
35	2243.275	2256.242	2329.056	2422.817	2545.504	2646.247	2703.101	2736.017	2748.984
40	1935.062	1941.046	2013.860	2114.603	2228.313	2322.074	2356.985	2385.911	2402.868
45	1612.884	1612.884	1665.749	1766.492	1862.247	1933.067	1962.990	1986.929	2006.878
50	1304.670	1304.670	1345.566	1435.337	1517.128	1573.983	1606.899	1621.861	1645.800
55	1015.409	1015.409	1052.314	1125.129	1201.933	1247.815	1273.749	1291.703	1315.642
60	764.050	764.050	787.989	835.867	912.671	952.569	962.544	987.480	1011.419
65	564.559	562.564	571.541	606.452	665.302	694.228	705.200	733.129	757.068
70	400.977	385.017	381.028	402.972	437.882	463.816	476.783	514.686	531.643
75	245.374	234.402	227.420	236.397	256.346	273.303	284.275	315.196	335.145
80	124.682	120.692	115.705	120.692	126.677	133.659	150.616	166.575	175.552
85	43.888	43.888	36.906	36.906	43.888	45.883	45.883	54.860	54.860
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Zone	Lumens	%Lamp	%Fixt
0-20	1366.4	N.A.	17.40
0-30	2797.19	N.A.	35.70
0-40	4368.63	N.A.	55.70
0-60	6834.56	N.A.	87.20
0-80	7775.85	N.A.	99.20
0-90	7837.08	N.A.	100.00
10-90	7476.63	N.A.	95.40
20-40	3002.23	N.A.	38.30
20-50	4414.77	N.A.	56.30
40-70	3115.64	N.A.	39.80
60-80	941.29	N.A.	12.00
70-80	291.58	N.A.	3.70
80-90	61.23	N.A.	0.80
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	7837.08	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	360.45
10-20	1005.95
20-30	1430.79
30-40	1571.44
40-50	1412.54
50-60	1053.39
60-70	649.71
70-80	291.58
80-90	61.23
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

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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	110	106	102	99	107	104	100	97	100	97	94	96	94	92	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	48	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	38	50	43	38	49	43	38	48	42	38	36
9	60	48	40	35	59	47	40	35	46	39	35	45	39	35	44	39	34	33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30

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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

X=2H	Y=2H	18.2	19.7	18.6	20.0	20.3	19.3	20.8	19.7	21.1	21.4
	3H	19.5	20.8	19.8	21.1	21.5	20.5	21.8	20.9	22.1	22.5
	4H	19.8	21.1	20.2	21.4	21.8	20.8	22.0	21.2	22.4	22.8
	6H	20.0	21.2	20.5	21.6	22.0	21.0	22.1	21.4	22.5	22.9
	8H	20.1	21.2	20.5	21.6	22.0	21.0	22.1	21.4	22.5	22.9
	12H	20.1	21.2	20.5	21.5	22.0	21.0	22.1	21.4	22.4	22.9

UGR Viewed Endwise

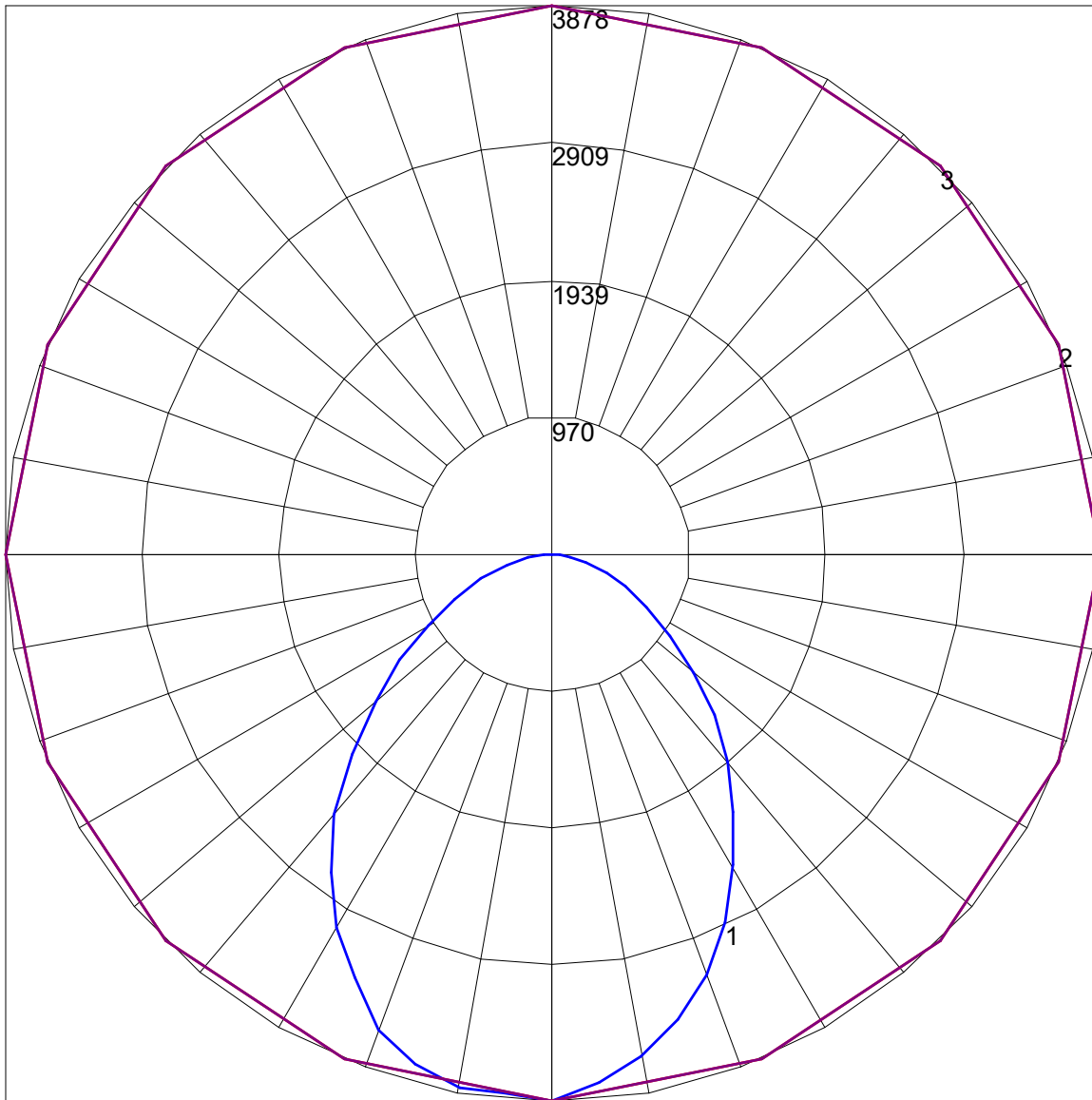
4H	2H	18.7	19.9	19.1	20.3	20.6	19.7	21.0	20.1	21.3	21.7
	3H	20.1	21.1	20.5	21.5	21.9	21.1	22.1	21.5	22.5	22.9
	4H	20.5	21.5	21.0	21.9	22.3	21.4	22.4	21.9	22.8	23.2
	6H	20.8	21.6	21.3	22.1	22.5	21.7	22.5	22.2	23.0	23.4
	8H	20.9	21.7	21.4	22.1	22.6	21.8	22.5	22.2	23.0	23.4
	12H	21.0	21.6	21.4	22.1	22.6	21.8	22.5	22.3	22.9	23.4

8H	4H	20.7	21.4	21.1	21.9	22.3	21.6	22.3	22.1	22.8	23.3
	6H	21.0	21.7	21.5	22.1	22.6	21.9	22.5	22.4	23.0	23.5
	8H	21.2	21.7	21.7	22.2	22.7	22.0	22.5	22.5	23.0	23.5
	12H	21.2	21.7	21.7	22.2	22.8	22.0	22.5	22.5	23.0	23.6

12H	4H	20.7	21.3	21.2	21.8	22.3	21.6	22.3	22.1	22.7	23.2
	6H	21.0	21.6	21.6	22.1	22.6	21.9	22.5	22.4	22.9	23.5
	8H	21.2	21.7	21.7	22.2	22.7	22.0	22.5	22.5	23.0	23.6

Maximum UGR = 23.6

POLAR GRAPH



Maximum Candela = 3878.103 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)
3 - Horizontal Cone Through Vertical Angle (0)