



IES INDOOR REPORT

PHOTOMETRIC FILENAME : MDBAERNX-DI-L44-840-AD-SAPL15-FA-DIM-UNV ALL ON_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from BALLABS TEST NO. 19078.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 6-MAY-2020

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 2-56 LED w/HALF ROUND FROST ACRYLIC LIGHT SHIELDS

[MORE] 2x4' 3 APERATURE MEDICAL LUMINAIRE AMBIENT SECTION w/WHITE

[MORE] REFL & FROSTED ACRYLIC RIBBED LENS w/CLEAR ACRYLIC LENS & EXAM SECTION WITH 1.5" DEEP LOUVER,

[LUMCAT] MBDAERNx-DI-L44/840-AD/SAPL15-FA-DIM-UNV all on

[_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	13507
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	125.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.14
Spacing Criterion (90-270)	1.14
Spacing Criterion (Diagonal)	1.24
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.75 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	17627	17527	17157
55	15223	15034	14292
65	8965	12077	11077
75	4952	5919	6164
85	2315	2229	2615

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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	6244.004	6244.004	6244.004	6244.004	6244.004	6244.004	6244.004	6244.004	6244.004
5	6177.929	6176.897	6184.124	6187.221	6191.351	6213.031	6217.161	6221.291	6217.161
10	6039.587	6044.749	6032.360	6032.360	6046.814	6074.689	6106.693	6140.763	6141.795
15	5799.036	5799.036	5781.485	5785.614	5812.457	5845.494	5895.050	5943.573	5955.962
20	5545.063	5526.480	5492.411	5494.475	5527.512	5559.517	5614.235	5661.725	5671.017
25	5060.864	5038.151	5008.211	5008.211	5042.281	5074.285	5102.160	5112.484	5113.517
30	4649.966	4621.058	4599.378	4603.507	4642.739	4663.387	4662.355	4612.799	4589.054
35	4338.178	4309.271	4271.072	4261.780	4296.882	4314.433	4267.975	4130.664	4073.882
40	3855.011	3834.363	3791.002	3752.803	3777.581	3774.484	3655.757	3456.502	3387.331
45	3444.113	3435.854	3424.497	3362.553	3352.229	3322.289	3140.585	2928.941	2883.516
50	2915.520	2891.775	2894.872	2825.701	2796.793	2749.303	2551.080	2402.413	2397.251
55	2412.737	2400.349	2382.798	2330.145	2265.103	2214.515	2036.941	1969.834	1981.191
60	1660.112	1810.844	1875.885	1824.265	1740.640	1695.214	1567.195	1551.709	1565.131
65	1046.862	1119.130	1410.269	1391.686	1293.607	1266.765	1182.107	1182.107	1185.204
70	647.320	691.713	813.538	915.746	806.311	813.538	801.149	777.403	745.399
75	354.116	383.023	423.287	500.718	440.838	451.162	455.292	440.838	426.385
80	171.380	184.801	186.866	206.482	205.449	205.449	211.644	207.514	198.222
85	55.750	53.685	53.685	59.880	62.977	60.912	61.944	60.912	58.847
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : MDBAERNX-DI-L44-840-AD-SAPL15-FA-DIM-UNV ALL ON_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	2234.16	N.A.	16.50
0-30	4573.89	N.A.	33.90
0-40	7211.26	N.A.	53.40
0-60	11697.21	N.A.	86.60
0-80	13420.86	N.A.	99.40
0-90	13507.11	N.A.	100.00
10-90	12919.43	N.A.	95.60
20-40	4977.1	N.A.	36.80
20-50	7478.29	N.A.	55.40
40-70	5719.51	N.A.	42.30
60-80	1723.65	N.A.	12.80
70-80	490.09	N.A.	3.60
80-90	86.25	N.A.	0.60
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	13507.11	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	587.67
10-20	1646.48
20-30	2339.73
30-40	2637.37
40-50	2501.19
50-60	1984.76
60-70	1233.56
70-80	490.09
80-90	86.25
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	131	131	131	131	128	128	128	128	123	123	123	117	117	117	113	113	113	110
1	122	117	113	109	119	115	111	108	110	107	104	106	103	101	102	100	98	96
2	112	104	97	91	109	102	96	90	98	93	88	94	90	86	91	88	84	82
3	103	92	84	78	100	91	83	77	87	81	76	84	79	74	82	77	73	71
4	95	83	74	67	92	81	73	66	78	71	66	76	70	65	74	68	64	62
5	88	74	65	58	85	73	65	58	71	63	57	69	62	57	67	61	56	54
6	81	67	58	52	79	66	58	51	64	57	51	63	56	50	61	55	50	48
7	76	61	52	46	74	61	52	46	59	51	45	57	50	45	56	50	45	43
8	70	56	47	41	69	56	47	41	54	46	41	53	46	41	52	45	40	38
9	66	52	43	37	65	51	43	37	50	42	37	49	42	37	48	41	37	35
10	62	48	40	34	61	48	39	34	46	39	34	45	39	34	44	38	34	32

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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	19.5	21.0	19.9	21.3	21.7	20.5	22.0	20.8	22.3	22.6
	3H	20.8	22.1	21.2	22.5	22.8	21.7	23.1	22.1	23.4	23.8
	4H	21.2	22.4	21.6	22.8	23.2	22.0	23.3	22.4	23.7	24.0
	6H	21.4	22.5	21.8	22.9	23.3	22.2	23.4	22.6	23.7	24.1
	8H	21.4	22.5	21.8	22.9	23.3	22.2	23.3	22.6	23.7	24.1
	12H	21.4	22.5	21.8	22.9	23.3	22.2	23.3	22.6	23.7	24.1

UGR Viewed Endwise

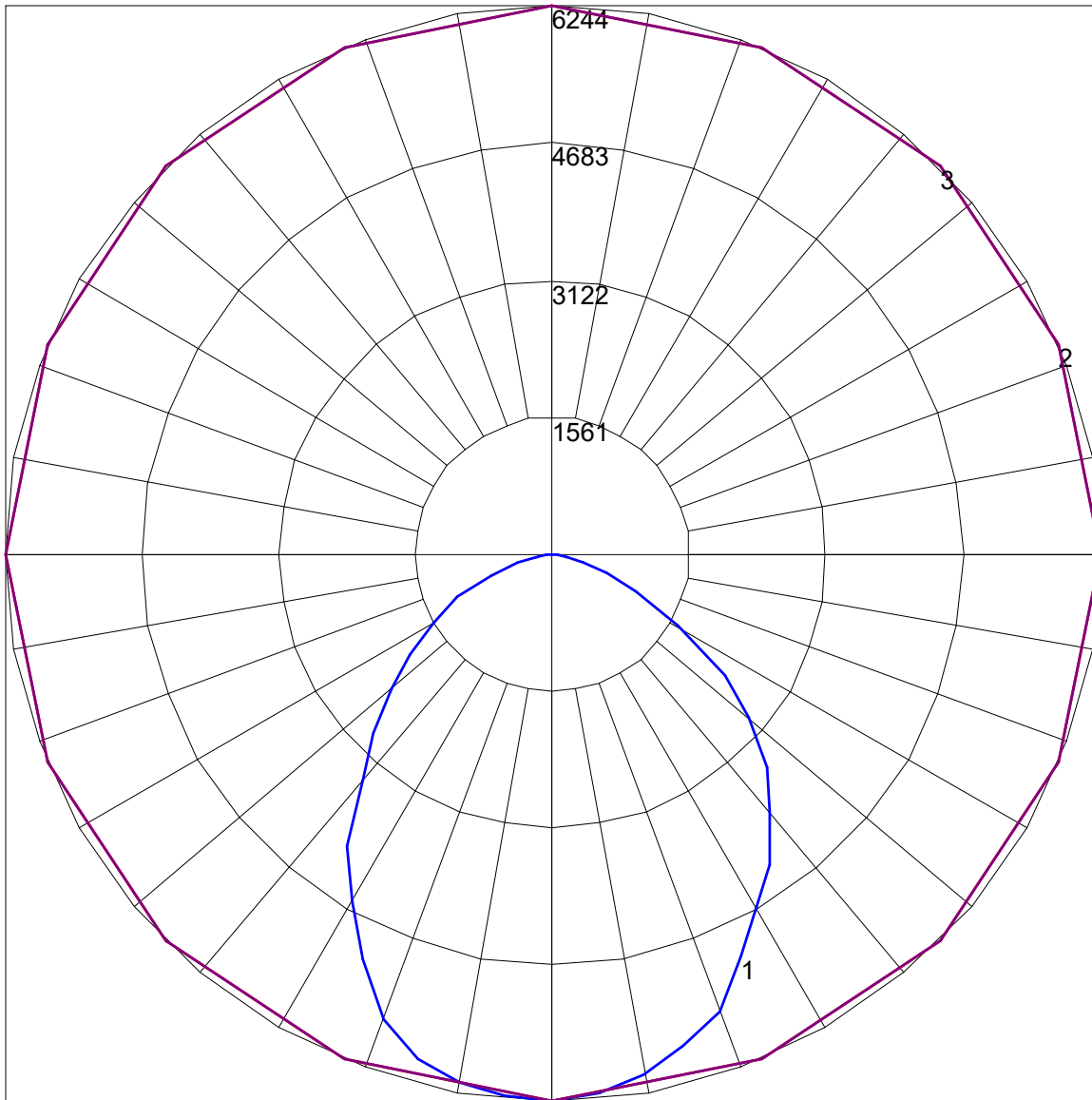
4H	2H	20.0	21.3	20.4	21.7	22.0	20.9	22.1	21.3	22.5	22.9
	3H	21.5	22.6	21.9	23.0	23.4	22.3	23.4	22.7	23.8	24.2
	4H	22.0	22.9	22.4	23.3	23.8	22.7	23.6	23.1	24.1	24.5
	6H	22.2	23.1	22.7	23.5	24.0	22.9	23.7	23.4	24.2	24.6
	8H	22.3	23.1	22.8	23.5	24.0	23.0	23.7	23.4	24.2	24.6
	12H	22.3	23.0	22.8	23.5	24.0	23.0	23.7	23.5	24.1	24.6
8H	4H	22.1	22.9	22.6	23.3	23.8	22.8	23.6	23.3	24.0	24.5
	6H	22.5	23.1	23.0	23.6	24.1	23.1	23.7	23.6	24.2	24.7
	8H	22.6	23.1	23.1	23.6	24.1	23.2	23.7	23.7	24.2	24.7
	12H	22.6	23.1	23.1	23.6	24.2	23.2	23.7	23.7	24.2	24.8
12H	4H	22.1	22.8	22.6	23.3	23.7	22.8	23.5	23.3	24.0	24.4
	6H	22.5	23.0	23.0	23.5	24.0	23.1	23.7	23.6	24.1	24.7
	8H	22.6	23.1	23.1	23.6	24.2	23.2	23.7	23.7	24.2	24.8

Maximum UGR = 24.8

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POLAR GRAPH



Maximum Candela = 6244.004 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)