



IES INDOOR REPORT

PHOTOMETRIC FILENAME : AMD4AERNG-L27-835-A-AMBIENT ONLY_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from BALLABS TEST NO. 18937.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 3-AUG-2020
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO 64836
[LUMINAIRE] 2x4' MULTI COMPARTMENT LED TROFFER
[MORE] FROSTED ACRYLIC DIFFUSER
[LUMCAT] AMD4AERNG-L27-835-A-AMBIENT ONLY
[LAMPCAT] HLM 80 CRI, 3500K CCT
[SEARCH_SOURCETYPE]LED
[SEARCH_APPLICATION]INDOOR,DIRECT,MEDICAL
[SEARCH_MOUNTING]RECESSED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2775
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	122
Total Luminaire Watts	22.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.12
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.92 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	1186	1335	1464
55	955	1150	1263
65	763	983	905
75	569	653	530
85	459	417	323

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : AMD4AERNG-L27-835-A-AMBIENT ONLY_.IES

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	1150.223	1150.223	1150.223	1150.223	1150.223	1150.223	1150.223	1150.223	1150.223
5	1144.513	1141.975	1141.975	1142.610	1146.416	1148.320	1150.223	1150.857	1152.126
10	1105.813	1107.716	1112.791	1120.405	1127.383	1133.728	1138.803	1140.072	1140.072
15	1048.714	1053.789	1065.844	1082.339	1093.759	1102.006	1106.447	1108.350	1108.350
20	1010.014	1016.358	1036.660	1057.596	1075.360	1086.145	1089.952	1086.780	1083.608
25	916.752	926.903	950.377	975.120	996.691	1008.110	1008.110	1000.497	994.787
30	837.449	850.137	882.493	916.752	941.495	956.087	954.818	942.764	931.979
35	760.048	777.812	813.975	852.040	873.611	890.106	887.569	869.804	857.750
40	665.518	688.992	728.961	768.930	791.135	801.286	794.942	770.833	753.069
45	585.580	611.591	659.174	696.605	722.617	730.230	715.638	687.088	662.346
50	480.898	506.276	556.396	590.021	615.398	621.742	605.881	572.256	546.245
55	382.562	409.842	460.597	490.415	505.641	519.599	508.813	469.479	443.467
60	295.645	322.925	368.604	383.831	383.196	403.498	414.283	373.680	346.399
65	225.223	253.772	289.935	281.053	267.095	295.645	327.366	293.741	267.095
70	159.877	184.619	201.115	172.565	166.221	183.985	223.954	213.803	187.791
75	102.778	120.542	118.004	99.606	95.799	105.315	128.789	140.209	117.370
80	61.540	71.056	64.078	53.927	50.754	55.830	67.884	76.132	65.346
85	27.915	30.453	25.377	21.571	19.667	19.667	23.474	25.377	24.108
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : AMD4AERNG-L27-835-A-AMBIENT ONLY_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	416.98	N.A.	15.00
0-30	870.58	N.A.	31.40
0-40	1397.71	N.A.	50.40
0-60	2339.38	N.A.	84.30
0-80	2744.87	N.A.	98.90
0-90	2775.02	N.A.	100.00
10-90	2666.3	N.A.	96.10
20-40	980.72	N.A.	35.30
20-50	1500.22	N.A.	54.10
40-70	1219.95	N.A.	44.00
60-80	405.49	N.A.	14.60
70-80	127.21	N.A.	4.60
80-90	30.15	N.A.	1.10
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	2775.02	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	108.72
10-20	308.26
20-30	453.59
30-40	527.13
40-50	519.49
50-60	422.17
60-70	278.28
70-80	127.21
80-90	30.15
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 : AMD4AERNG-L27-835-A-AMBIENT ONLY_.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	110	105	101	98	107	103	100	96	99	96	93	95	93	91	91	90	88	86
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	54	50	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	65	53	45	40	52	45	39	50	44	39	49	43	39	37
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

IES INDOOR REPORT
PHOTOMETRIC FILENAME : AMD4AERNG-L27-835-A-AMBIENT ONLY_.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

X=2H	Y=2H	11.7	13.2	12.0	13.5	13.9	13.2	14.7	13.5	15.0	15.4
	3H	13.1	14.5	13.4	14.8	15.2	14.2	15.6	14.6	15.9	16.3
	4H	13.5	14.8	13.9	15.2	15.6	14.5	15.8	14.9	16.1	16.5
	6H	13.8	15.0	14.2	15.4	15.8	14.6	15.8	15.0	16.2	16.6
	8H	13.9	15.1	14.4	15.5	15.9	14.7	15.8	15.1	16.2	16.6
	12H	14.0	15.1	14.4	15.5	15.9	14.7	15.8	15.1	16.2	16.6

UGR Viewed Endwise

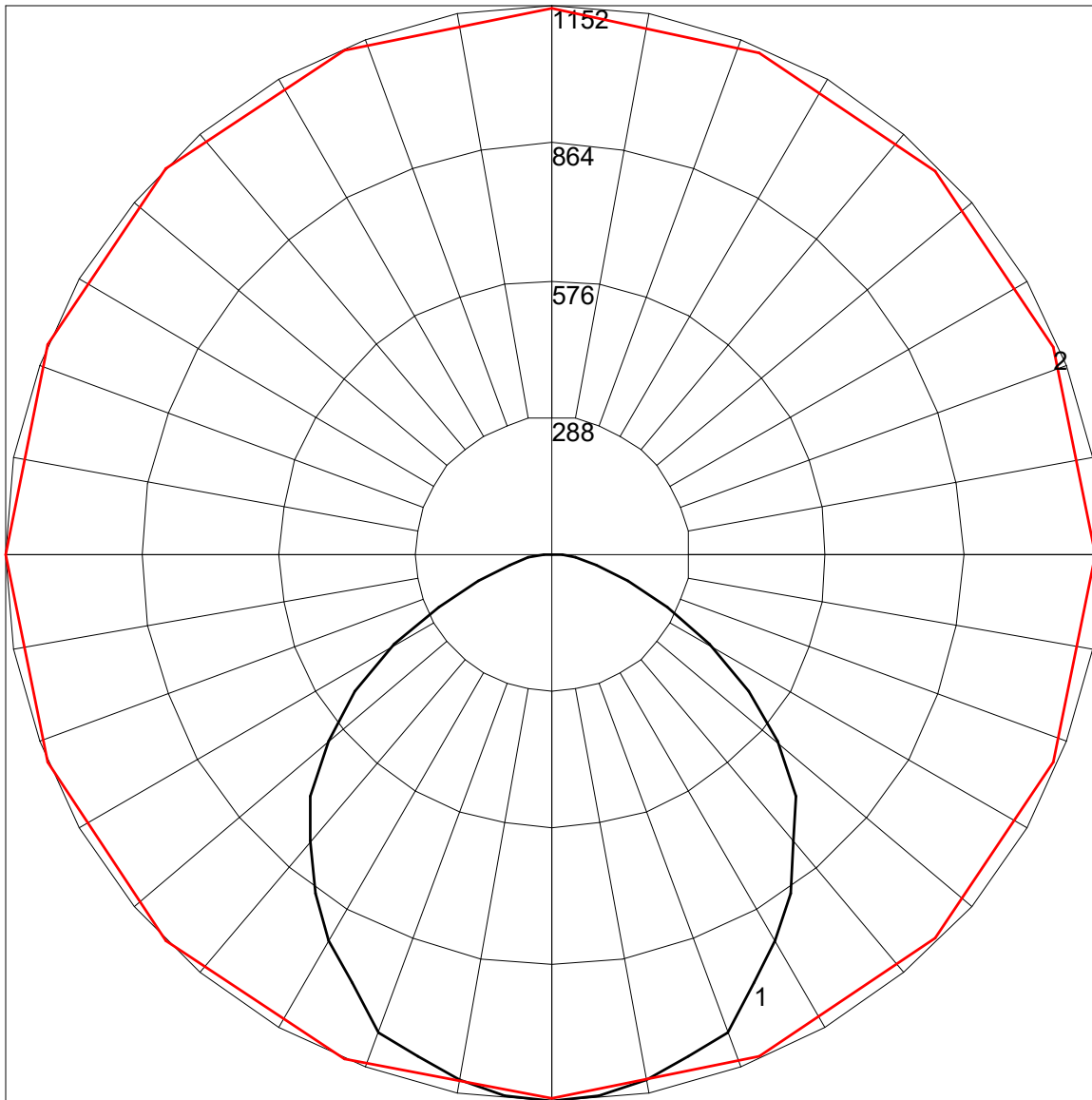
4H	2H	12.4	13.7	12.8	14.1	14.5	13.7	15.0	14.1	15.4	15.7
	3H	14.0	15.1	14.4	15.5	15.9	14.9	16.0	15.3	16.4	16.8
	4H	14.6	15.6	15.0	16.0	16.4	15.3	16.2	15.7	16.7	17.1
	6H	15.0	15.9	15.5	16.3	16.8	15.5	16.3	15.9	16.8	17.2
	8H	15.1	15.9	15.6	16.4	16.8	15.5	16.3	16.0	16.8	17.2
	12H	15.2	16.0	15.7	16.4	16.9	15.6	16.3	16.1	16.8	17.2

8H	4H	14.8	15.6	15.3	16.0	16.5	15.5	16.2	15.9	16.7	17.2
	6H	15.3	16.0	15.8	16.5	17.0	15.7	16.4	16.2	16.9	17.4
	8H	15.5	16.1	16.0	16.6	17.1	15.8	16.4	16.3	16.9	17.4
	12H	15.7	16.2	16.2	16.7	17.3	15.9	16.4	16.4	16.9	17.5

12H	4H	14.8	15.5	15.3	16.0	16.5	15.5	16.2	15.9	16.7	17.1
	6H	15.4	16.0	15.9	16.4	17.0	15.8	16.4	16.3	16.8	17.4
	8H	15.6	16.1	16.1	16.6	17.2	15.9	16.4	16.4	16.9	17.5

Maximum UGR = 17.5

POLAR GRAPH



Maximum Candela = 1152.126 Located At Horizontal Angle = 180, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)