



IES INDOOR REPORT

PHOTOMETRIC FILENAME : AMD4AERNG-P31-840-A-POE 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] 24-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-P31-840-A-PoE AMBIENT ONLY
 [LAMPCAT] HLM 80 CRI, 4000K 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	3127
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	124
Total Luminaire Watts	25.3
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	1336	1504	1649
55	1076	1296	1423
65	860	1107	1020
75	641	736	597
85	517	470	364

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : AMD4AERNG-P31-840-A-POE 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	1296.125	1296.125	1296.125	1296.125	1296.125	1296.125	1296.125	1296.125	1296.125
5	1289.691	1286.831	1286.831	1287.546	1291.836	1293.980	1296.125	1296.840	1298.270
10	1246.082	1248.226	1253.946	1262.524	1270.388	1277.537	1283.257	1284.686	1284.686
15	1181.740	1187.459	1201.042	1219.630	1232.498	1241.792	1246.796	1248.941	1248.941
20	1138.131	1145.280	1168.157	1191.749	1211.766	1223.919	1228.209	1224.634	1221.060
25	1033.039	1044.478	1070.930	1098.811	1123.118	1135.986	1135.986	1127.407	1120.973
30	943.676	957.974	994.435	1033.039	1060.921	1077.364	1075.934	1062.351	1050.197
35	856.458	876.475	917.225	960.119	984.426	1003.013	1000.154	980.136	966.553
40	749.937	776.388	821.427	866.466	891.488	902.927	895.777	868.611	848.594
45	659.858	689.170	742.788	784.967	814.278	822.857	806.414	774.243	746.362
50	541.899	570.495	626.973	664.863	693.459	700.608	682.735	644.845	615.534
55	431.088	461.829	519.022	552.623	569.780	585.508	573.355	529.031	499.719
60	333.146	363.887	415.361	432.518	431.803	454.680	466.834	421.080	390.339
65	253.792	285.962	326.712	316.703	300.976	333.146	368.892	331.002	300.976
70	180.156	208.038	226.625	194.454	187.305	207.323	252.362	240.923	211.612
75	115.815	135.832	132.973	112.240	107.951	118.674	145.126	157.994	132.258
80	69.346	80.069	72.206	60.767	57.192	62.912	76.495	85.789	73.635
85	31.456	34.315	28.596	24.307	22.162	22.162	26.452	28.596	27.166
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-P31-840-A-POE AMBIENT ONLY_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	469.88	N.A.	15.00
0-30	981.01	N.A.	31.40
0-40	1575.00	N.A.	50.40
0-60	2636.12	N.A.	84.30
0-80	3093.05	N.A.	98.90
0-90	3127.02	N.A.	100.00
10-90	3004.51	N.A.	96.10
20-40	1105.13	N.A.	35.30
20-50	1690.52	N.A.	54.10
40-70	1374.69	N.A.	44.00
60-80	456.93	N.A.	14.60
70-80	143.35	N.A.	4.60
80-90	33.98	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	3127.02	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	122.52
10-20	347.36
20-30	511.13
30-40	594.00
40-50	585.39
50-60	475.73
60-70	313.58
70-80	143.35
80-90	33.98
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-P31-840-A-POE 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	134	134	134	134	131	131	131	131	125	125	125	120	120	120	115	115	115	113
1	124	119	114	110	121	116	112	109	111	108	105	107	104	102	103	101	99	97
2	113	105	98	92	110	103	96	90	99	93	88	95	90	86	92	88	84	82
3	104	93	84	77	101	91	83	76	88	81	75	85	79	74	82	77	73	70
4	95	83	73	66	93	81	72	66	78	71	65	76	69	64	73	68	63	61
5	88	74	65	57	86	73	64	57	71	63	56	68	61	56	66	60	55	53
6	81	67	57	50	79	66	57	50	64	56	50	62	55	49	60	54	49	47
7	76	61	51	45	74	60	51	45	58	50	44	57	49	44	55	49	44	42
8	71	56	47	40	69	55	46	40	54	46	40	52	45	40	51	44	39	37
9	66	51	42	36	64	51	42	36	49	42	36	48	41	36	47	40	36	34
10	62	47	39	33	61	47	39	33	46	38	33	45	38	33	44	37	33	31

IES INDOOR REPORT
PHOTOMETRIC FILENAME : AMD4AERNG-P31-840-A-POE 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	11.2	12.8	11.6	13.1	13.4	12.7	14.3	13.1	14.6	14.9
	3H	12.6	14.0	13.0	14.4	14.7	13.8	15.2	14.2	15.5	15.9
	4H	13.1	14.4	13.5	14.8	15.1	14.0	15.4	14.4	15.7	16.1
	6H	13.4	14.6	13.8	15.0	15.4	14.2	15.4	14.6	15.8	16.2
	8H	13.5	14.7	13.9	15.1	15.5	14.2	15.4	14.7	15.8	16.2
	12H	13.6	14.7	14.0	15.1	15.5	14.2	15.4	14.7	15.7	16.2

UGR Viewed Endwise

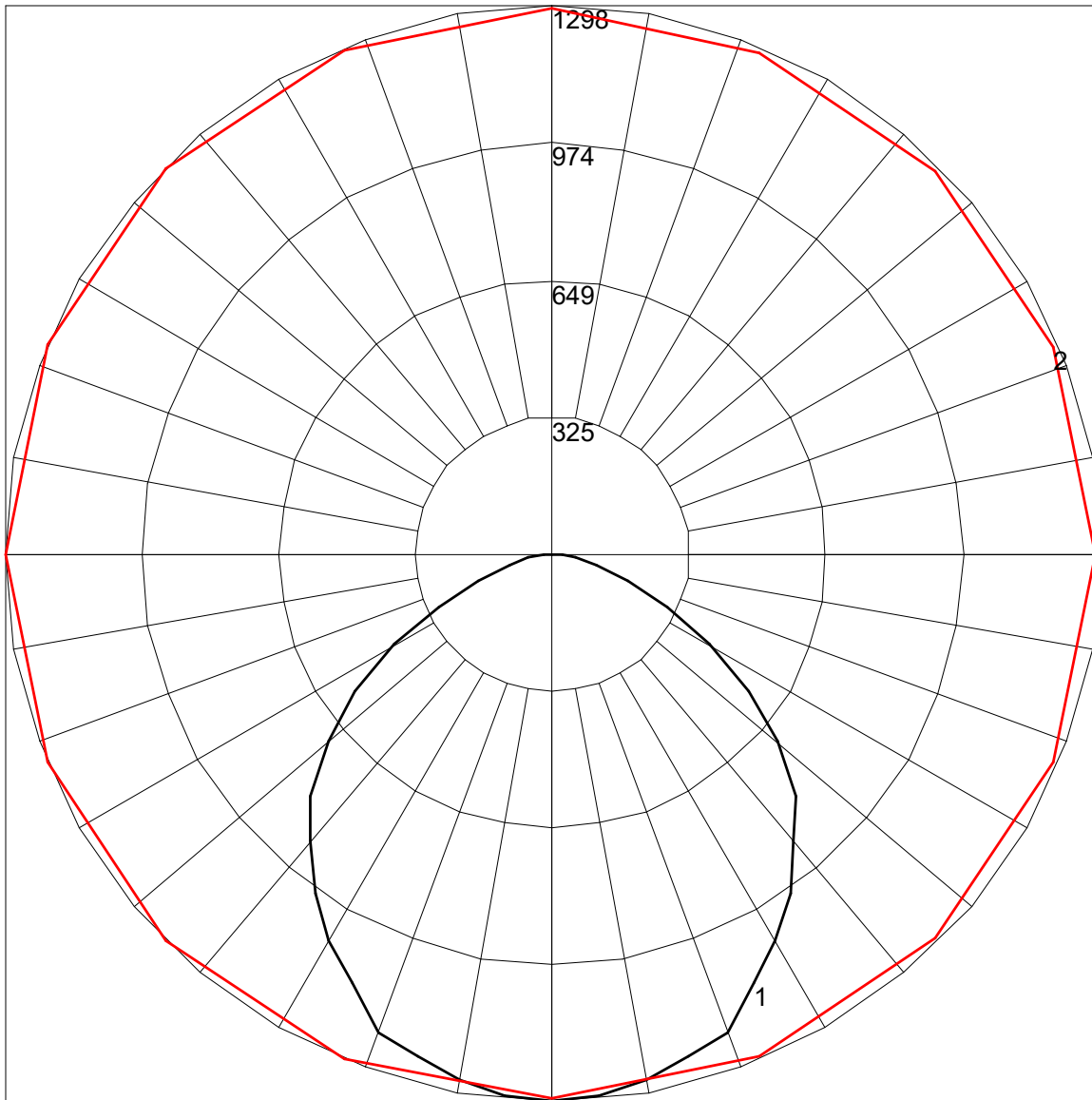
4H	2H	12.0	13.3	12.4	13.7	14.1	13.3	14.6	13.7	14.9	15.3
	3H	13.6	14.7	14.0	15.1	15.5	14.5	15.6	14.9	16.0	16.4
	4H	14.2	15.1	14.6	15.6	16.0	14.8	15.8	15.3	16.2	16.7
	6H	14.6	15.4	15.0	15.9	16.3	15.1	15.9	15.5	16.4	16.8
	8H	14.7	15.5	15.2	16.0	16.4	15.1	15.9	15.6	16.4	16.8
	12H	14.8	15.5	15.3	16.0	16.5	15.2	15.9	15.6	16.3	16.8

8H	4H	14.4	15.2	14.8	15.6	16.1	15.0	15.8	15.5	16.3	16.7
	6H	14.9	15.6	15.4	16.1	16.5	15.3	16.0	15.8	16.5	16.9
	8H	15.1	15.7	15.6	16.2	16.7	15.4	16.0	15.9	16.5	17.0
	12H	15.3	15.8	15.8	16.3	16.9	15.5	16.0	16.0	16.5	17.1

12H	4H	14.4	15.1	14.9	15.6	16.0	15.0	15.8	15.5	16.2	16.7
	6H	14.9	15.5	15.5	16.0	16.5	15.3	15.9	15.9	16.4	16.9
	8H	15.2	15.7	15.7	16.2	16.8	15.5	16.0	16.0	16.5	17.1

Maximum UGR = 17.1

POLAR GRAPH



Maximum Candela = 1298.27 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.)