



IES INDOOR REPORT

PHOTOMETRIC FILENAME : AMD4AERNG-L44-8TW-A-DALI-UNV 4000K 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] 25-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-L44-8TW-A-DALI-UNV 4000k AMBIENT ONLY
 [_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	4477
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	105
Total Luminaire Watts	42.6
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	1913	2154	2361
55	1541	1855	2037
65	1231	1585	1460
75	918	1053	855
85	740	673	521

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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	1855.693	1855.693	1855.693	1855.693	1855.693	1855.693	1855.693	1855.693	1855.693
5	1846.481	1842.386	1842.386	1843.410	1849.551	1852.622	1855.693	1856.716	1858.763
10	1784.044	1787.115	1795.303	1807.586	1818.845	1829.080	1837.269	1839.316	1839.316
15	1691.925	1700.113	1719.561	1746.173	1764.597	1777.903	1785.068	1788.138	1788.138
20	1629.488	1639.724	1672.477	1706.255	1734.914	1752.314	1758.455	1753.338	1748.220
25	1479.027	1495.404	1533.275	1573.193	1607.994	1626.418	1626.418	1614.135	1604.923
30	1351.083	1371.554	1423.755	1479.027	1518.945	1542.487	1540.440	1520.992	1503.592
35	1226.211	1254.870	1313.212	1374.625	1409.426	1436.038	1431.944	1403.284	1383.837
40	1073.702	1111.573	1176.057	1240.540	1276.364	1292.741	1282.506	1243.611	1214.951
45	944.735	986.700	1063.466	1123.856	1165.821	1178.104	1154.562	1108.502	1068.584
50	775.849	816.791	897.652	951.900	992.842	1003.077	977.488	923.240	881.275
55	617.199	661.212	743.096	791.203	815.768	838.286	820.886	757.426	715.460
60	476.973	520.986	594.681	619.247	618.223	650.977	668.377	602.870	558.857
65	363.360	409.419	467.761	453.432	430.914	476.973	528.151	473.903	430.914
70	257.934	297.852	324.465	278.405	268.170	296.829	361.312	344.936	302.970
75	165.815	194.474	190.380	160.697	154.556	169.909	207.780	226.204	189.356
80	99.284	114.637	103.378	87.002	81.884	90.072	109.520	122.826	105.425
85	45.036	49.130	40.942	34.801	31.730	31.730	37.871	40.942	38.895
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-L44-8TW-A-DALI-UNV 4000K AMBIENT ONLY_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	672.73	N.A.	15.00
0-30	1404.53	N.A.	31.40
0-40	2254.97	N.A.	50.40
0-60	3774.19	N.A.	84.30
0-80	4428.39	N.A.	98.90
0-90	4477.03	N.A.	100.00
10-90	4301.62	N.A.	96.10
20-40	1582.23	N.A.	35.30
20-50	2420.35	N.A.	54.10
40-70	1968.18	N.A.	44.00
60-80	654.19	N.A.	14.60
70-80	205.24	N.A.	4.60
80-90	48.65	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	4477.03	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	175.41
10-20	497.33
20-30	731.79
30-40	850.44
40-50	838.12
50-60	681.11
60-70	448.95
70-80	205.24
80-90	48.65
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	123	123	123	123	120	120	120	120	115	115	115	110	110	110	105	105	105	103
1	113	109	105	101	111	106	103	100	102	99	96	98	96	93	94	93	91	89
2	104	96	89	84	101	94	88	83	90	85	81	87	83	79	84	80	77	75
3	95	85	77	71	93	83	76	70	80	74	69	77	72	68	75	70	67	64
4	87	76	67	61	85	74	66	60	72	65	59	69	63	59	67	62	58	56
5	81	68	59	53	79	67	59	52	65	57	52	63	56	51	61	55	51	49
6	75	61	53	46	73	60	52	46	59	51	46	57	50	45	55	49	45	43
7	69	56	47	41	68	55	47	41	54	46	41	52	45	40	51	45	40	38
8	65	51	43	37	63	50	42	37	49	42	36	48	41	36	47	41	36	34
9	60	47	39	33	59	46	39	33	45	38	33	44	38	33	43	37	33	31
10	57	43	36	30	55	43	35	30	42	35	30	41	34	30	40	34	30	28

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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

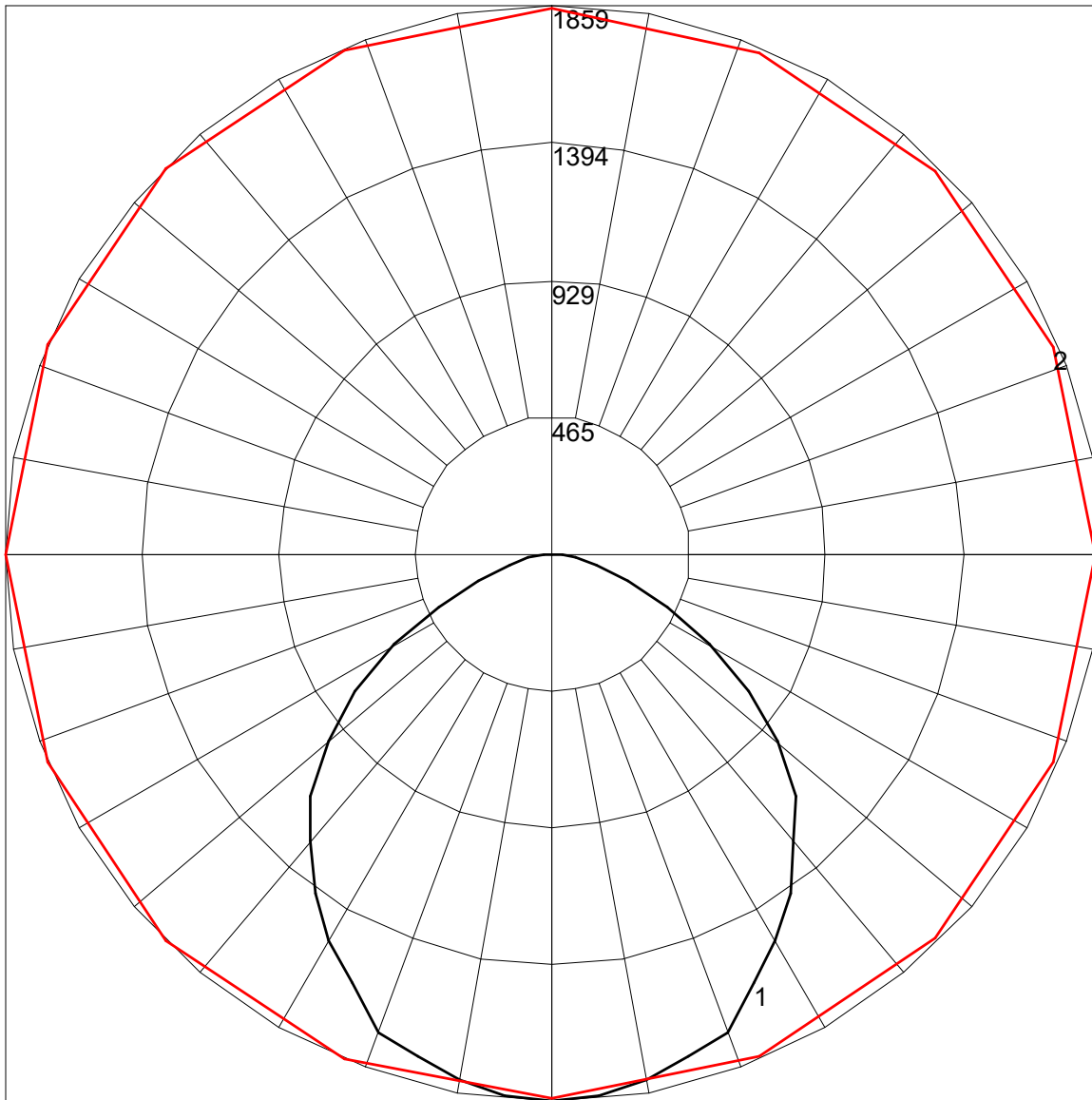
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	12.8	14.4	13.2	14.7	15.0	14.3	15.9	14.7	16.2	16.5
	3H	14.2	15.6	14.6	16.0	16.3	15.4	16.8	15.8	17.1	17.5
	4H	14.7	16.0	15.1	16.4	16.7	15.6	17.0	16.0	17.3	17.7
	6H	15.0	16.2	15.4	16.6	17.0	15.8	17.0	16.2	17.4	17.8
	8H	15.1	16.3	15.5	16.7	17.1	15.8	17.0	16.3	17.4	17.8
	12H	15.2	16.3	15.6	16.7	17.1	15.8	17.0	16.3	17.3	17.8
4H	2H	13.6	14.9	14.0	15.3	15.7	14.9	16.2	15.3	16.5	16.9
	3H	15.2	16.3	15.6	16.7	17.1	16.1	17.2	16.5	17.6	18.0
	4H	15.8	16.7	16.2	17.2	17.6	16.4	17.4	16.9	17.8	18.3
	6H	16.2	17.0	16.6	17.5	17.9	16.7	17.5	17.1	18.0	18.4
	8H	16.3	17.1	16.8	17.6	18.0	16.7	17.5	17.2	18.0	18.4
	12H	16.4	17.1	16.9	17.6	18.1	16.8	17.5	17.2	17.9	18.4
8H	4H	16.0	16.8	16.4	17.2	17.7	16.6	17.4	17.1	17.9	18.3
	6H	16.5	17.2	17.0	17.7	18.1	16.9	17.6	17.4	18.1	18.5
	8H	16.7	17.3	17.2	17.8	18.3	17.0	17.6	17.5	18.1	18.6
	12H	16.9	17.4	17.4	17.9	18.5	17.1	17.6	17.6	18.1	18.7
12H	4H	16.0	16.7	16.5	17.2	17.6	16.6	17.4	17.1	17.8	18.3
	6H	16.5	17.1	17.1	17.6	18.1	16.9	17.5	17.5	18.0	18.5
	8H	16.8	17.3	17.3	17.8	18.4	17.1	17.6	17.6	18.1	18.7

Maximum UGR = 18.7

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POLAR GRAPH



Maximum Candela = 1858.763 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.)