



IES INDOOR REPORT

PHOTOMETRIC FILENAME : AT2-22-L35-8TW-D-DALI-UNV 4000K_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from BALLABS TEST NO. 18882.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 03-JAN-2020

[MANUFAC] WILLIAMS LINEAR

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

[LUMINAIRE] 2-56 LED 22" ARRAYS-SERIES 2x2' RECESSED LUMINAIRE w/WHITE

[MORE] REFL, FROST CONCAVE ACRYLIC LENS w/DEEP ACRYLIC CENTER

[MORE] DIFFUSER

[LUMCAT] AT2-22-L35-8TW-D-DALI-UNV 4000k

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Architectural, Classroom, Commercial, Office, Direct

[_SEARCH_MOUNTING] Ceiling, Recessed

[_SEARCH_CERTIFICATION] DLC

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3641
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	96
Total Luminaire Watts	37.99
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.16
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.76 ft
Luminous Width (90-270)	1.77 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3834	4111	4397
55	3358	3625	3924
65	2859	3207	3497
75	2275	2725	3081
85	1126	1689	1478

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : AT2-22-L35-8TW-D-DALI-UNV 4000K_.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	1489.017	1489.017	1489.017	1489.017	1489.017
5	1485.472	1478.381	1480.154	1478.381	1478.381
10	1450.019	1450.019	1453.564	1455.337	1457.109
15	1393.294	1398.612	1409.248	1416.339	1423.429
20	1325.934	1333.025	1350.751	1366.705	1379.113
25	1235.529	1249.711	1274.527	1294.026	1311.753
30	1130.944	1145.125	1185.896	1210.712	1224.894
35	1022.813	1031.676	1081.310	1111.445	1130.944
40	904.046	914.682	962.543	996.223	1015.722
45	783.506	797.688	840.231	877.456	898.728
50	666.512	682.466	721.464	751.599	776.416
55	556.609	569.017	600.925	625.742	650.559
60	450.250	467.977	494.566	521.156	537.110
65	349.210	372.254	391.753	409.480	427.206
70	255.260	285.395	296.031	311.984	329.711
75	170.173	186.127	203.853	226.898	230.443
80	92.177	108.131	120.539	131.175	127.630
85	28.362	37.225	42.543	46.089	37.225
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : AT2-22-L35-8TW-D-DALI-UNV 4000K_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	537.51	N.A.	14.80
0-30	1123.1	N.A.	30.80
0-40	1794.5	N.A.	49.30
0-60	2981.93	N.A.	81.90
0-80	3587.93	N.A.	98.50
0-90	3641.47	N.A.	100.00
10-90	3501.07	N.A.	96.10
20-40	1257.00	N.A.	34.50
20-50	1904.7	N.A.	52.30
40-70	1576.44	N.A.	43.30
60-80	606.00	N.A.	16.60
70-80	216.98	N.A.	6.00
80-90	53.55	N.A.	1.50
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	3641.47	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	140.41
10-20	397.10
20-30	585.60
30-40	671.40
40-50	647.71
50-60	539.72
60-70	389.02
70-80	216.98
80-90	53.55
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 : AT2-22-L35-8TW-D-DALI-UNV 4000K_.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	206	206	206	206	202	202	202	202	193	193	193	184	184	184	177	177	177	173
1	190	182	175	168	185	178	171	166	170	165	160	164	159	155	157	154	151	147
2	173	159	148	139	169	156	146	137	150	141	134	144	137	131	139	133	128	124
3	158	141	127	116	154	138	126	115	133	122	113	128	119	111	124	116	109	106
4	146	125	111	100	142	123	109	99	119	107	97	115	105	96	111	102	95	91
5	134	113	98	86	131	111	97	86	107	95	85	104	93	84	101	91	83	80
6	124	102	87	76	121	100	86	76	97	84	75	94	83	74	91	81	74	70
7	115	93	78	67	113	91	77	67	89	76	67	86	75	66	84	74	66	62
8	108	85	70	60	105	84	70	60	81	69	60	79	68	60	77	67	59	56
9	101	78	64	55	98	77	64	55	75	63	54	73	62	54	71	61	54	51
10	95	72	59	50	92	71	58	50	70	58	49	68	57	49	66	56	49	46

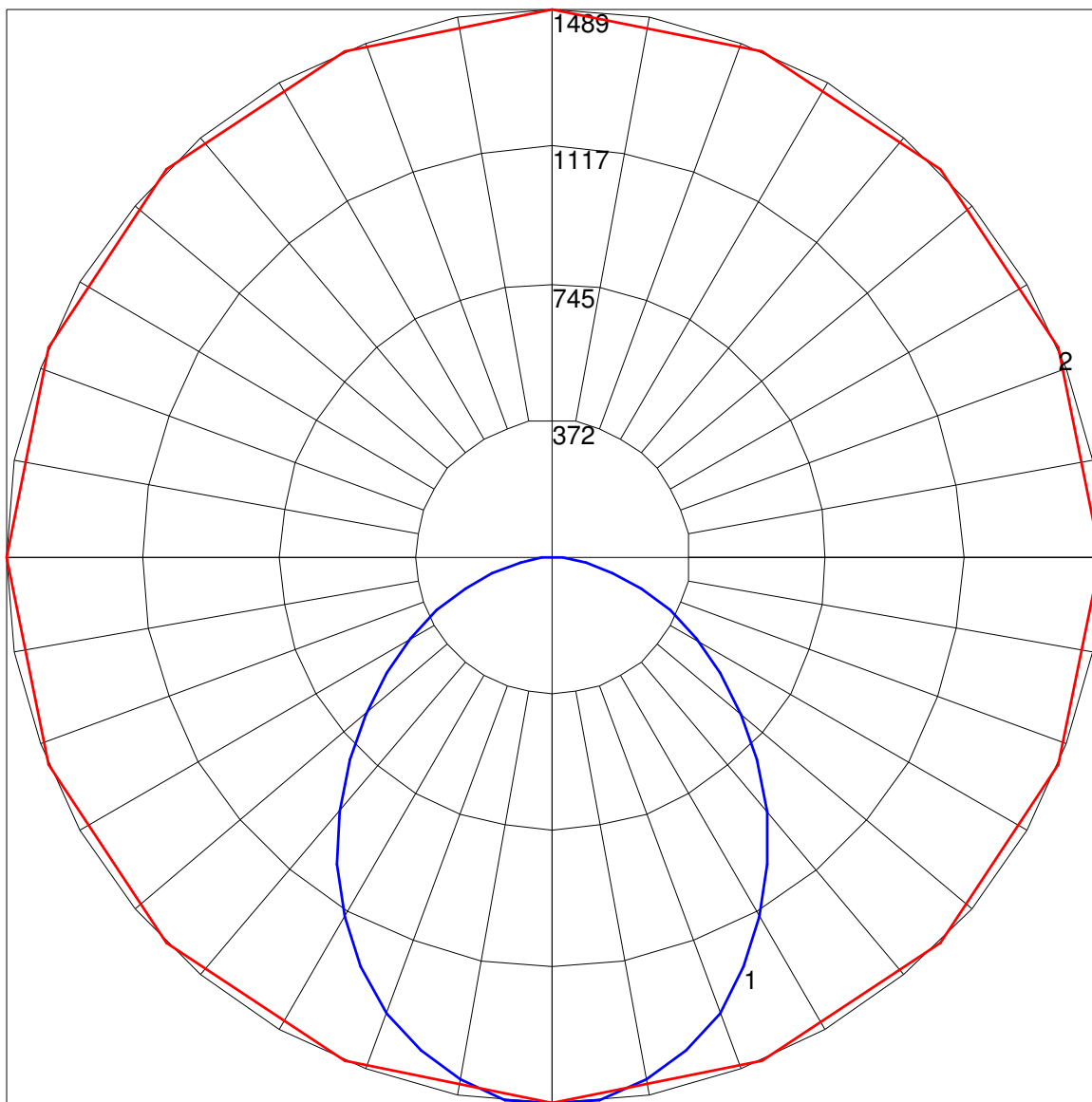
IES INDOOR REPORT
PHOTOMETRIC FILENAME : AT2-22-L35-8TW-D-DALI-UNV 4000K_.IES

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					UGR Viewed Endwise				
X=2H	Y=2H	14.0	15.6	14.3	15.9	16.2	14.8	16.4	15.1	16.7	17.0
	3H	15.6	17.0	16.0	17.3	17.7	16.5	17.9	16.9	18.3	18.6
	4H	16.1	17.5	16.5	17.8	18.2	17.2	18.5	17.6	18.9	19.2
	6H	16.5	17.7	16.9	18.1	18.5	17.6	18.9	18.1	19.2	19.6
	8H	16.5	17.7	17.0	18.1	18.5	17.8	18.9	18.2	19.3	19.7
	12H	16.6	17.7	17.0	18.1	18.5	17.8	18.9	18.2	19.3	19.8
4H	2H	14.7	16.0	15.1	16.3	16.7	15.3	16.6	15.7	17.0	17.3
	3H	16.5	17.6	16.9	18.0	18.4	17.2	18.4	17.7	18.8	19.2
	4H	17.1	18.1	17.6	18.6	19.0	18.1	19.1	18.5	19.5	19.9
	6H	17.6	18.5	18.0	18.9	19.4	18.7	19.5	19.1	20.0	20.4
	8H	17.7	18.5	18.2	19.0	19.5	18.8	19.6	19.3	20.1	20.6
	12H	17.8	18.5	18.3	19.0	19.5	18.9	19.6	19.4	20.1	20.6
8H	4H	17.5	18.3	17.9	18.7	19.2	18.3	19.1	18.8	19.6	20.0
	6H	18.1	18.7	18.6	19.2	19.7	19.0	19.7	19.5	20.2	20.7
	8H	18.2	18.9	18.7	19.4	19.8	19.2	19.9	19.8	20.4	20.9
	12H	18.4	18.9	18.9	19.4	19.9	19.4	19.9	19.9	20.4	21.0
12H	4H	17.5	18.3	18.0	18.7	19.2	18.3	19.1	18.8	19.5	20.0
	6H	18.1	18.7	18.6	19.2	19.7	19.1	19.7	19.6	20.1	20.7
	8H	18.4	18.9	18.9	19.4	20.0	19.3	19.9	19.8	20.4	20.9

Maximum UGR = 21.0

POLAR GRAPH



Maximum Candela = 1489.017 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.)