



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : PTR-24-L49-835-RA-(L42)-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] GEN FROM BALLABS TEST NO. 19272.2  
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
 [ISSUEDATE] 09-30-2021  
 [MANUFAC] WILLIAMS INDOOR  
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO  
 [LUMINAIRE] 2-72LED 22"ARRAYS 2x4'RECESSED LUMINAIRE  
 [MORE] WHITE REFLECTOR w/WHITE ACRYLIC RIBBED CENTER DIFFUSER  
 [LUMCAT] PTR-24-L49-835-RA-(L42)-DIM-UNV  
 [LAMPCAT] M700C835D72N2A  
 [\_SEARCH\_SOURCETYPE] LED  
 [\_SEARCH\_APPLICATION] Indoor, Classroom, Commercial, Industrial, Office, Retrofit  
 [\_SEARCH\_MOUNTING] Recessed

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4040
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	33.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.16
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	1767	1868	1973
55	1563	1709	1855
65	1407	1660	1902
75	1076	1665	2097
85	696	1832	1868

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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>
0	1503.645	1503.645	1503.645	1503.645	1503.645
5	1495.842	1494.728	1495.842	1495.842	1496.400
10	1467.419	1468.534	1470.206	1472.435	1473.550
15	1402.213	1403.885	1407.786	1414.474	1417.260
20	1363.758	1367.659	1376.576	1386.608	1391.066
25	1258.425	1263.441	1282.389	1289.077	1294.650
30	1153.092	1187.645	1224.428	1282.947	1223.314
35	1037.727	1047.201	1070.608	1094.016	1104.047
40	942.425	953.572	981.995	1010.975	1024.908
45	872.203	885.579	922.362	958.030	974.192
50	749.593	765.198	804.768	843.223	859.385
55	625.868	642.588	684.387	726.186	742.905
60	508.274	528.338	572.923	614.722	633.114
65	415.202	439.167	489.883	538.927	561.219
70	304.296	334.948	394.581	449.756	471.491
75	194.504	232.402	300.952	356.684	378.976
80	109.234	159.393	230.730	270.299	280.888
85	42.356	86.942	111.464	112.578	113.693
90	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : PTR-24-L49-835-RA-(L42)-DIM-UNV\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	542.37	N.A.	13.40
0-30	1137.03	N.A.	28.10
0-40	1817.04	N.A.	45.00
0-60	3132.69	N.A.	77.50
0-80	3928.84	N.A.	97.20
0-90	4040.01	N.A.	100.00
10-90	3898.05	N.A.	96.50
20-40	1274.66	N.A.	31.60
20-50	1976.27	N.A.	48.90
40-70	1796.55	N.A.	44.50
60-80	796.15	N.A.	19.70
70-80	315.25	N.A.	7.80
80-90	111.17	N.A.	2.80
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	4040.01	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	141.96
10-20	400.41
20-30	594.66
30-40	680.00
40-50	701.60
50-60	614.05
60-70	480.90
70-80	315.25
80-90	111.17
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30
9	57	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

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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	13.3	14.9	13.6	15.2	15.5	14.3	15.9	14.6	16.2	16.6
	3H	15.0	16.5	15.4	16.8	17.2	16.6	18.1	17.0	18.4	18.8
	4H	15.6	17.0	15.9	17.3	17.7	17.6	19.0	18.0	19.4	19.7
	6H	15.9	17.3	16.4	17.6	18.0	18.6	19.9	19.0	20.2	20.6
	8H	16.1	17.3	16.5	17.7	18.1	18.9	20.2	19.4	20.6	21.0
	12H	16.2	17.3	16.6	17.7	18.2	19.1	20.3	19.6	20.7	21.1

### UGR Viewed Endwise

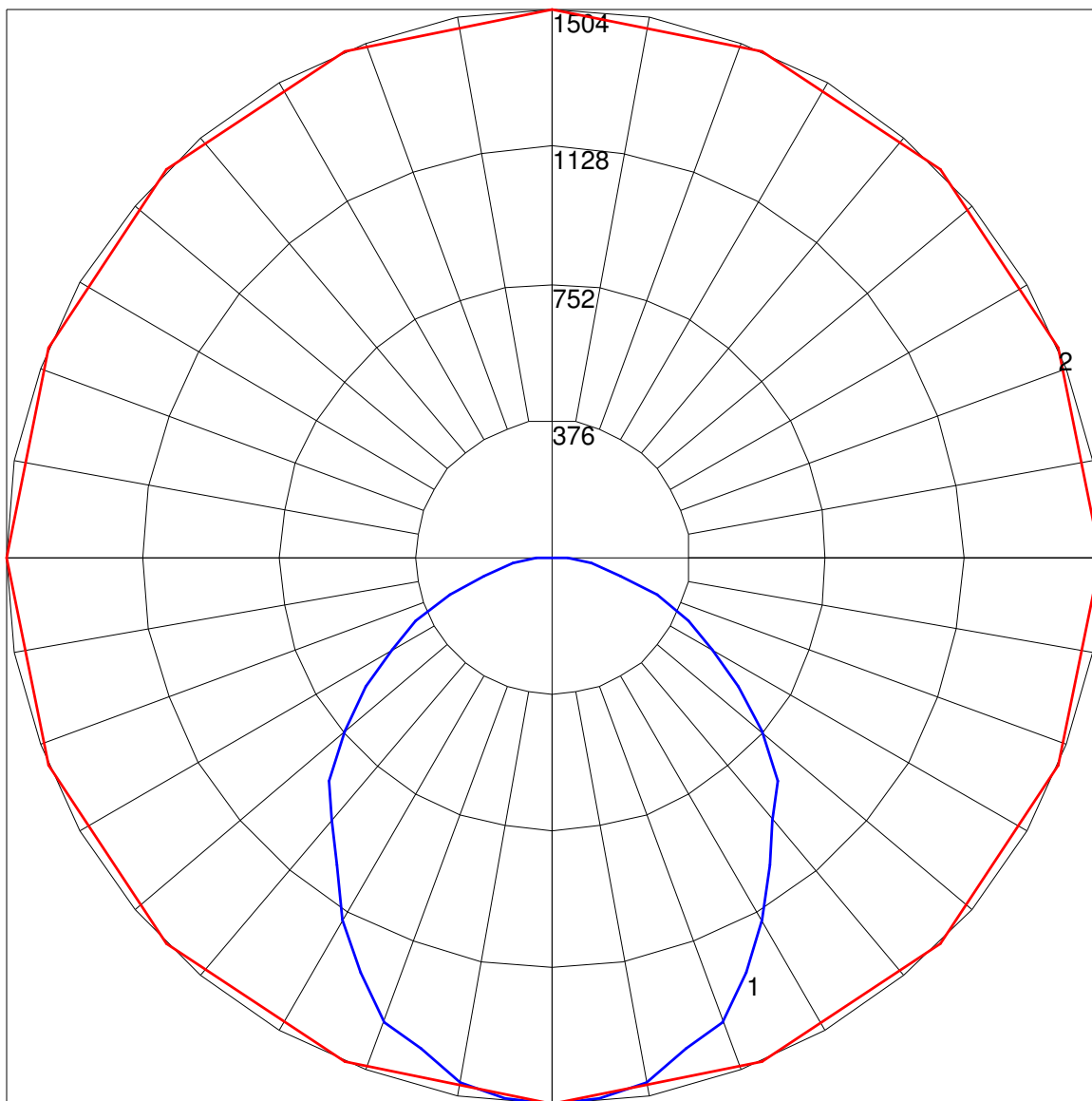
4H	2H	14.1	15.5	14.5	15.8	16.2	14.9	16.3	15.3	16.6	17.0
	3H	16.1	17.2	16.5	17.6	18.0	17.4	18.6	17.8	19.0	19.4
	4H	16.8	17.8	17.2	18.2	18.7	18.6	19.7	19.1	20.1	20.6
	6H	17.3	18.2	17.8	18.7	19.1	19.8	20.7	20.2	21.2	21.6
	8H	17.5	18.4	17.9	18.8	19.3	20.2	21.1	20.7	21.5	22.0
	12H	17.6	18.4	18.1	18.9	19.3	20.5	21.3	21.0	21.8	22.2

8H	4H	17.3	18.2	17.8	18.7	19.1	18.9	19.8	19.4	20.3	20.7
	6H	18.1	18.9	18.6	19.3	19.8	20.3	21.1	20.8	21.5	22.0
	8H	18.4	19.1	18.9	19.6	20.1	20.9	21.5	21.4	22.0	22.5
	12H	18.6	19.2	19.1	19.7	20.3	21.2	21.8	21.8	22.3	22.9

12H	4H	17.5	18.3	18.0	18.8	19.2	19.0	19.8	19.5	20.3	20.7
	6H	18.4	19.0	18.9	19.5	20.0	20.4	21.1	20.9	21.5	22.1
	8H	18.7	19.3	19.2	19.8	20.4	21.0	21.6	21.5	22.1	22.6

Maximum UGR = 22.9

POLAR GRAPH



Maximum Candela = 1503.645 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.)