



IES INDOOR REPORT

PHOTOMETRIC FILENAME : PTDC-22-L52-950-RA-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] BALLABS TEST NO. 19562.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUE DATE] 2022-05-03
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
 [LUMINAIRE] 1-72 LED 22"ARRAY 2x2'RECESSED LUMINAIRE
 [MORE] WHITE REFLECTOR w/CENTER FROSTED RIBBED ACRYLIC LENS
 [MORE] ELECTRONIC 0-10V LED DRIVER
 [LUMCAT] PTDC-22-L52-950-RA-DIM-UNV
 [LAMPCAT] HLM 90 CRI 5000K CCT
 [SEARCH_SOURCETYPE] LED
 [SEARCH_APPLICATION] INDOOR
 [SEARCH_MOUNTING] RECESSED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4686
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	135
Total Luminaire Watts	34.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.92 ft
Luminous Width (90-270)	1.93 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4403	4567	4715
55	3723	4102	4377
65	2846	3559	3957
75	1978	3156	3901
85	1126	2575	3218

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PTDC-22-L52-950-RA-DIM-UNV_.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	1790.935	1790.935	1790.935	1790.935	1790.935
5	1796.957	1786.118	1783.709	1777.687	1777.687
10	1772.870	1762.030	1760.826	1754.804	1753.599
15	1730.716	1718.672	1717.467	1715.059	1713.854
20	1670.496	1659.656	1658.452	1659.656	1659.656
25	1586.188	1575.349	1582.575	1587.393	1582.575
30	1482.610	1477.793	1485.019	1493.450	1487.428
35	1363.375	1362.171	1377.828	1383.850	1389.872
40	1226.074	1226.074	1252.571	1263.410	1273.046
45	1069.503	1069.503	1109.248	1134.540	1145.380
50	904.501	905.705	958.698	992.422	1008.079
55	733.477	746.725	808.149	844.281	862.347
60	566.066	592.562	653.987	693.732	713.002
65	413.108	448.035	516.685	560.044	574.496
70	278.215	321.573	390.224	434.787	451.648
75	175.842	217.996	280.624	325.187	346.866
80	95.147	131.279	186.681	217.996	239.675
85	33.723	59.015	77.081	77.081	96.352
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PTDC-22-L52-950-RA-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	654.34	N.A.	14.00
0-30	1382.71	N.A.	29.50
0-40	2241.56	N.A.	47.80
0-60	3808.09	N.A.	81.30
0-80	4600.34	N.A.	98.20
0-90	4686.06	N.A.	100.00
10-90	4516.55	N.A.	96.40
20-40	1587.22	N.A.	33.90
20-50	2438.86	N.A.	52.00
40-70	2069.45	N.A.	44.20
60-80	792.25	N.A.	16.90
70-80	289.32	N.A.	6.20
80-90	85.72	N.A.	1.80
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	4686.06	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	169.51
10-20	484.83
20-30	728.37
30-40	858.85
40-50	851.64
50-60	714.89
60-70	502.93
70-80	289.32
80-90	85.72
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 : PTDC-22-L52-950-RA-DIM-UNV_.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	109	104	100	97	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	100	91	85	79	97	90	83	78	86	81	76	83	79	75	80	76	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	63	71	66	62	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	62	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	28	38	32	27	26

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PTDC-22-L52-950-RA-DIM-UNV_.IES

UGR TABLE - CORRECTED

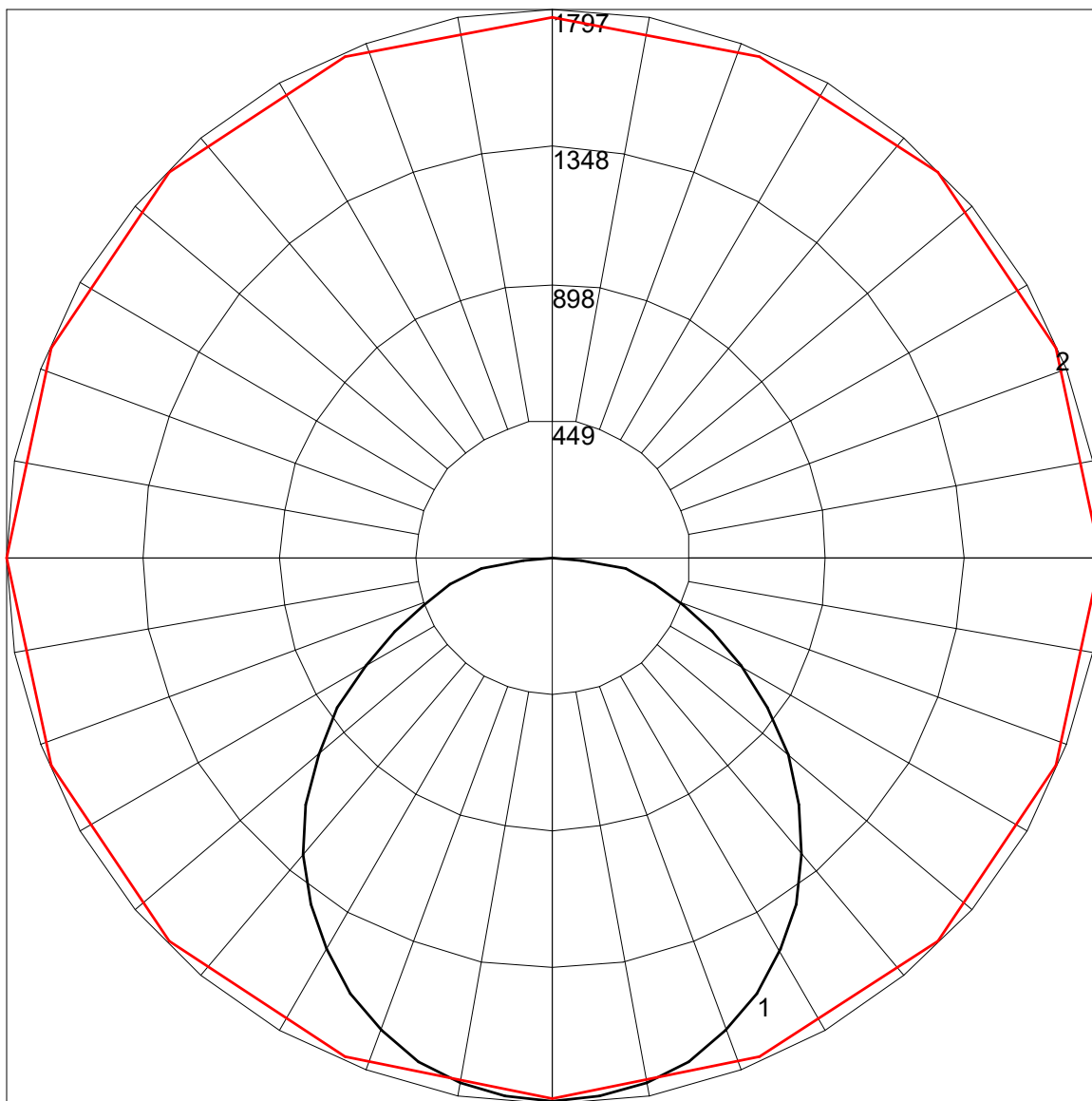
Reflectances

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	16.2	17.8	16.5	18.1	18.4	17.2	18.8	17.6	19.1	19.4
	3H	17.5	18.9	17.8	19.2	19.6	19.0	20.5	19.4	20.8	21.2
	4H	17.9	19.2	18.3	19.6	20.0	19.8	21.2	20.2	21.5	21.9
	6H	18.1	19.4	18.6	19.8	20.2	20.5	21.8	20.9	22.1	22.5
	8H	18.2	19.4	18.6	19.8	20.2	20.7	21.9	21.2	22.3	22.7
	12H	18.2	19.4	18.7	19.8	20.2	20.9	22.0	21.3	22.4	22.9
4H	2H	16.9	18.2	17.3	18.6	19.0	17.7	19.1	18.1	19.4	19.8
	3H	18.4	19.5	18.8	19.9	20.3	19.8	20.9	20.2	21.3	21.7
	4H	19.0	20.0	19.4	20.4	20.8	20.7	21.7	21.1	22.1	22.6
	6H	19.3	20.2	19.8	20.7	21.1	21.6	22.5	22.0	22.9	23.4
	8H	19.4	20.3	19.9	20.7	21.2	21.9	22.7	22.3	23.1	23.6
	12H	19.5	20.3	20.0	20.7	21.2	22.1	22.8	22.5	23.3	23.8
8H	4H	19.4	20.2	19.9	20.7	21.2	21.0	21.8	21.4	22.2	22.7
	6H	19.9	20.6	20.4	21.1	21.6	21.9	22.6	22.4	23.1	23.6
	8H	20.1	20.7	20.6	21.3	21.7	22.3	23.0	22.9	23.5	24.0
	12H	20.2	20.8	20.7	21.3	21.8	22.6	23.2	23.1	23.6	24.2
12H	4H	19.5	20.2	20.0	20.7	21.2	21.0	21.7	21.4	22.2	22.7
	6H	20.1	20.7	20.6	21.2	21.7	22.0	22.6	22.5	23.1	23.6
	8H	20.3	20.9	20.8	21.4	21.9	22.4	23.0	22.9	23.5	24.0

Maximum UGR = 24.2

POLAR GRAPH



Maximum Candela = 1796.957 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)