



IES INDOOR REPORT

PHOTOMETRIC FILENAME : PTDC-22-L43-950-RA-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM BALLABS TEST NO. 19562.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 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-L43-950-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	3909
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
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	3672	3809	3933
55	3105	3421	3650
65	2373	2969	3301
75	1650	2633	3254
85	939	2147	2684

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PTDC-22-L43-950-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	1493.764	1493.764	1493.764	1493.764	1493.764
5	1498.787	1489.746	1487.737	1482.714	1482.714
10	1478.696	1469.655	1468.651	1463.628	1462.623
15	1443.537	1433.491	1432.487	1430.478	1429.473
20	1393.309	1384.269	1383.264	1384.269	1384.269
25	1322.991	1313.950	1319.977	1323.996	1319.977
30	1236.600	1232.582	1238.609	1245.641	1240.618
35	1137.149	1136.145	1149.204	1154.227	1159.250
40	1022.631	1022.631	1044.731	1053.772	1061.808
45	892.040	892.040	925.190	946.285	955.326
50	754.416	755.421	799.621	827.748	840.808
55	611.770	622.820	674.052	704.189	719.257
60	472.138	494.238	545.470	578.620	594.693
65	344.560	373.692	430.952	467.115	479.170
70	232.051	268.215	325.474	362.642	376.706
75	146.664	181.823	234.060	271.228	289.310
80	79.359	109.496	155.705	181.823	199.905
85	28.127	49.223	64.291	64.291	80.364
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PTDC-22-L43-950-RA-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	545.77	N.A.	14.00
0-30	1153.28	N.A.	29.50
0-40	1869.62	N.A.	47.80
0-60	3176.21	N.A.	81.30
0-80	3837.00	N.A.	98.20
0-90	3908.5	N.A.	100.00
10-90	3767.12	N.A.	96.40
20-40	1323.85	N.A.	33.90
20-50	2034.18	N.A.	52.00
40-70	1726.07	N.A.	44.20
60-80	660.79	N.A.	16.90
70-80	241.31	N.A.	6.20
80-90	71.50	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	3908.5	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	141.38
10-20	404.38
20-30	607.51
30-40	716.34
40-50	710.32
50-60	596.27
60-70	419.48
70-80	241.31
80-90	71.50
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-L43-950-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	99	91	85	79	97	90	83	78	86	81	76	83	78	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-L43-950-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

X=2H	Y=2H	15.5	17.1	15.8	17.4	17.7	UGR Viewed Endwise			
	3H	16.8	18.2	17.1	18.5	18.9	16.5	18.1	16.9	18.4
	4H	17.2	18.5	17.6	18.9	19.3	18.3	19.8	18.7	20.1
	6H	17.4	18.7	17.9	19.1	19.5	19.1	20.5	19.5	20.8
	8H	17.5	18.7	17.9	19.1	19.5	19.8	21.1	20.2	21.4
	12H	17.5	18.7	18.0	19.1	19.5	20.2	21.2	20.5	21.6
							20.0	21.2	20.5	21.6
							20.2	21.3	20.6	21.7

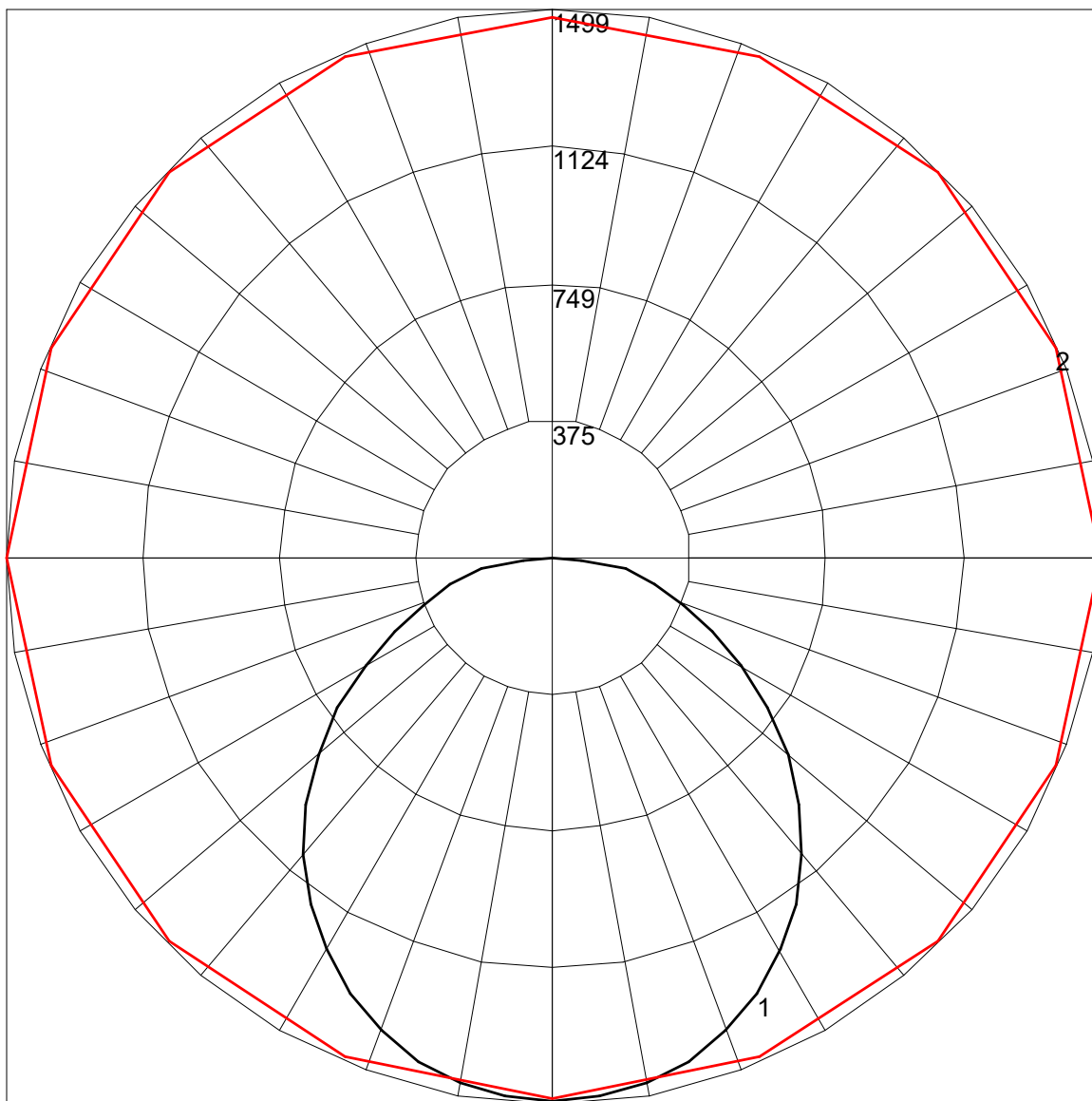
4H	2H	16.2	17.5	16.6	17.9	18.3	17.0	18.4	17.4	18.7
	3H	17.7	18.8	18.1	19.2	19.6	19.1	20.2	19.5	20.6
	4H	18.3	19.3	18.7	19.7	20.1	20.0	21.0	20.4	21.4
	6H	18.6	19.5	19.1	20.0	20.4	20.9	21.8	21.3	22.2
	8H	18.7	19.6	19.2	20.0	20.5	21.2	22.0	21.6	22.4
	12H	18.8	19.6	19.3	20.0	20.5	21.4	22.1	21.9	22.6

8H	4H	18.7	19.5	19.2	20.0	20.5	20.3	21.1	20.7	21.5
	6H	19.2	19.9	19.7	20.4	20.9	21.2	21.9	21.7	22.4
	8H	19.4	20.0	19.9	20.6	21.0	21.6	22.3	22.2	22.8
	12H	19.5	20.1	20.0	20.6	21.1	21.9	22.5	22.4	22.9

12H	4H	18.8	19.5	19.3	20.0	20.5	20.3	21.0	20.7	21.5
	6H	19.4	20.0	19.9	20.5	21.0	21.3	21.9	21.8	22.4
	8H	19.6	20.2	20.1	20.7	21.2	21.7	22.3	22.2	22.8

Maximum UGR = 23.5

POLAR GRAPH



Maximum Candela = 1498.787 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.)