



IES INDOOR REPORT

PHOTOMETRIC FILENAME : PTDC-22-L52-830-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
 [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-L52-830-RA-DIM-UNV
 [LAMPCAT] HLM 80 CRI 3000K 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	5155
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	149
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	4843	5023	5187
55	4095	4512	4814
65	3130	3915	4353
75	2176	3472	4292
85	1239	2832	3540

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : PTDC-22-L52-830-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	1970.028	1970.028	1970.028	1970.028	1970.028
5	1976.652	1964.729	1962.079	1955.455	1955.455
10	1950.156	1938.232	1936.907	1930.283	1928.958
15	1903.786	1890.538	1889.213	1886.564	1885.239
20	1837.545	1825.621	1824.296	1825.621	1825.621
25	1744.806	1732.883	1740.832	1746.131	1740.832
30	1630.871	1625.571	1633.520	1642.794	1636.170
35	1499.712	1498.387	1515.610	1522.234	1528.858
40	1348.681	1348.681	1377.827	1389.751	1400.350
45	1176.453	1176.453	1220.172	1247.994	1259.917
50	994.950	996.275	1054.568	1091.663	1108.886
55	806.824	821.397	888.964	928.709	948.581
60	622.672	651.818	719.385	763.104	784.302
65	454.418	492.838	568.354	616.048	631.946
70	306.037	353.731	429.246	478.265	496.813
75	193.426	239.795	308.686	357.705	381.552
80	104.662	144.407	205.349	239.795	263.642
85	37.095	64.917	84.789	84.789	105.987
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PTDC-22-L52-830-RA-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	719.78	N.A.	14.00
0-30	1520.98	N.A.	29.50
0-40	2465.72	N.A.	47.80
0-60	4188.9	N.A.	81.30
0-80	5060.37	N.A.	98.20
0-90	5154.67	N.A.	100.00
10-90	4968.21	N.A.	96.40
20-40	1745.94	N.A.	33.90
20-50	2682.74	N.A.	52.00
40-70	2276.4	N.A.	44.20
60-80	871.48	N.A.	16.90
70-80	318.25	N.A.	6.20
80-90	94.30	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	5154.67	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	186.46
10-20	533.31
20-30	801.21
30-40	944.74
40-50	936.80
50-60	786.38
60-70	553.22
70-80	318.25
80-90	94.30
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-L52-830-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-L52-830-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

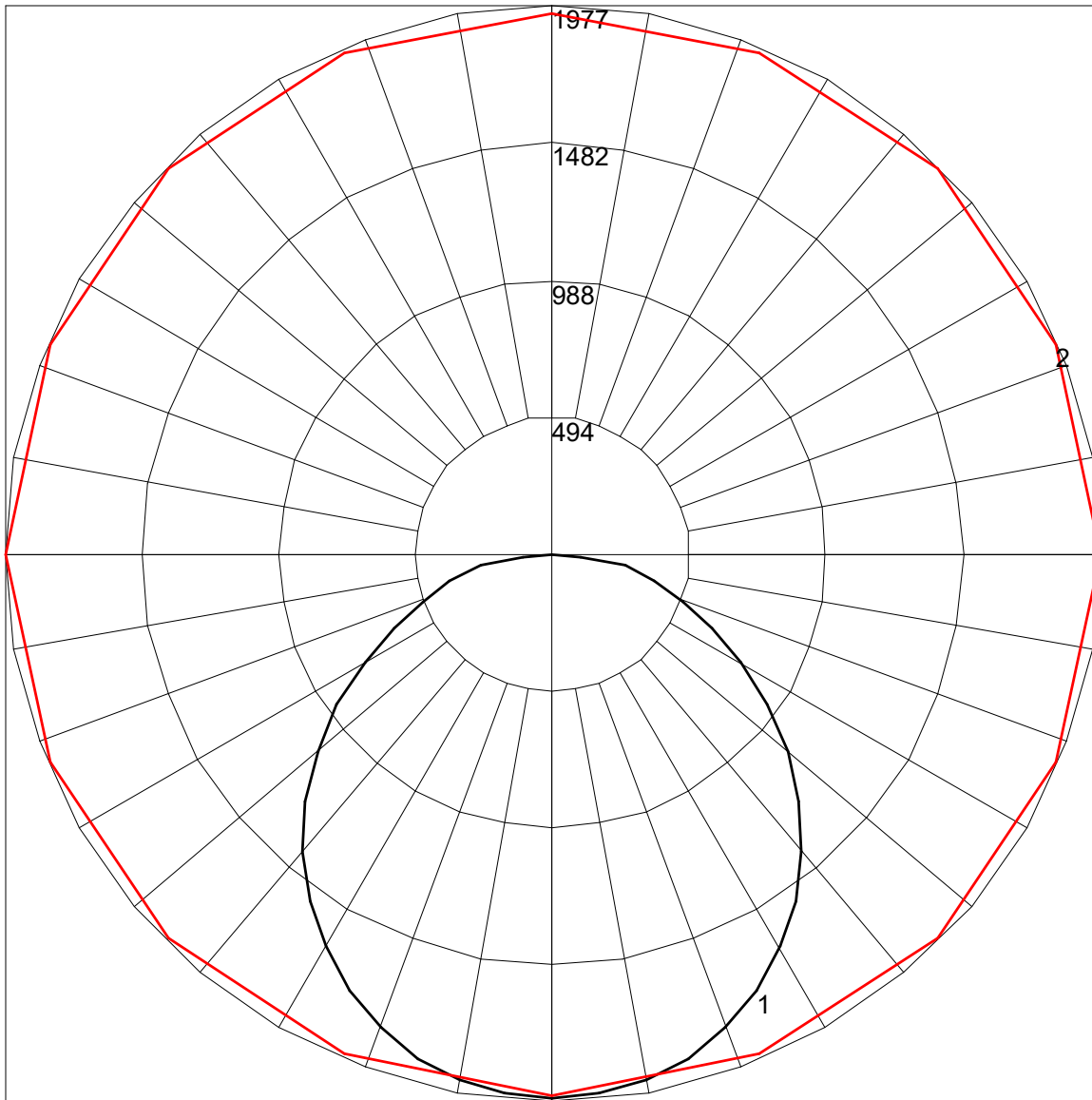
X=2H	Y=2H	16.5	18.1	16.8	18.4	18.7	17.5	19.1	17.9	19.4	19.7
	3H	17.8	19.2	18.1	19.5	19.9	19.3	20.8	19.7	21.1	21.5
	4H	18.2	19.5	18.6	19.9	20.3	20.1	21.5	20.5	21.8	22.2
	6H	18.4	19.7	18.9	20.1	20.5	20.8	22.1	21.2	22.4	22.8
	8H	18.5	19.7	18.9	20.1	20.5	21.0	22.2	21.5	22.6	23.0
	12H	18.5	19.7	19.0	20.1	20.5	21.2	22.3	21.6	22.7	23.2

UGR Viewed Endwise

4H	2H	17.2	18.5	17.6	18.9	19.3	18.0	19.4	18.4	19.7	20.1
	3H	18.7	19.8	19.1	20.2	20.6	20.1	21.2	20.5	21.6	22.0
	4H	19.3	20.3	19.7	20.7	21.1	21.0	22.0	21.4	22.4	22.9
	6H	19.6	20.5	20.1	21.0	21.4	21.9	22.8	22.3	23.2	23.7
	8H	19.7	20.6	20.2	21.0	21.5	22.2	23.0	22.6	23.4	23.9
	12H	19.8	20.6	20.3	21.0	21.5	22.4	23.1	22.8	23.6	24.1
8H	4H	19.7	20.5	20.2	21.0	21.4	21.3	22.1	21.7	22.5	23.0
	6H	20.2	20.9	20.7	21.4	21.9	22.2	22.9	22.7	23.4	23.9
	8H	20.4	21.0	20.9	21.6	22.0	22.6	23.3	23.2	23.8	24.3
	12H	20.5	21.1	21.0	21.6	22.1	22.9	23.5	23.4	23.9	24.5
12H	4H	19.8	20.5	20.3	21.0	21.5	21.3	22.0	21.7	22.5	23.0
	6H	20.4	21.0	20.9	21.5	22.0	22.3	22.9	22.8	23.4	23.9
	8H	20.6	21.2	21.1	21.7	22.2	22.7	23.3	23.2	23.8	24.3

Maximum UGR = 24.5

POLAR GRAPH



Maximum Candela = 1976.652 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.)