IES INDOOR REPORT
PHOTOMETRIC FILENAME : PTDC-22-L43-850-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-L43-850-RA-DIM-UNV
[LAMPCAT] HLM 80 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	4603
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	133
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	4325	4486	4632
55	3657	4029	4299
65	2795	3496	3887
75	1943	3101	3833
85	1107	2529	3161

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	1759.322	1759.322	1759.322	1759.322	1759.322
5	1765.237	1754.589	1752.223	1746.307	1746.307
10	1741.575	1730.927	1729.743	1723.828	1722.645
15	1700.165	1688.334	1687.151	1684.784	1683.601
20	1641.008	1630.360	1629.177	1630.360	1630.360
25	1558.189	1547.541	1554.639	1559.372	1554.639
30	1456.439	1451.707	1458.805	1467.087	1461.172
35	1339.309	1338.126	1353.506	1359.422	1365.338
40	1204.431	1204.431	1230.460	1241.109	1250.574
45	1050.624	1050.624	1089.667	1114.513	1125.161
50	888.534	889.718	941.775	974.903	990.284
55	720.529	733.544	793.884	829.378	847.125
60	556.073	582.102	642.442	681.486	700.416
65	405.815	440.126	507.565	550.158	564.355
70	273.304	315.897	383.336	427.112	443.676
75	172.738	214.147	275.670	319.446	340.743
80	93.468	128.962	183.386	214.147	235.444
85	33.128	57.974	75.721	75.721	94.651
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	642.79	N.A.	14.00
0-30	1358.31	N.A.	29.50
0-40	2202.00	N.A.	47.80
0-60	3740.87	N.A.	81.30
0-80	4519.13	N.A.	98.20
0-90	4603.35	N.A.	100.00
10-90	4436.83	N.A.	96.40
20-40	1559.2	N.A.	33.90
20-50	2395.81	N.A.	52.00
40-70	2032.92	N.A.	44.20
60-80	778.27	N.A.	16.90
70-80	284.22	N.A.	6.20
80-90	84.21	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	4603.35	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	166.52
10-20	476.27
20-30	715.51
30-40	843.69
40-50	836.60
50-60	702.27
60-70	494.05
70-80	284.22
80-90	84.21
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	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	34	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

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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					UGR Viewed Endwise				
X=2H	Y=2H	16.1	17.7	16.4	18.0	18.3	17.1	18.7	17.5	19.0	19.3
	3H	17.4	18.8	17.7	19.1	19.5	18.9	20.4	19.3	20.7	21.1
	4H	17.8	19.1	18.2	19.5	19.9	19.7	21.1	20.1	21.4	21.8
	6H	18.0	19.3	18.5	19.7	20.1	20.4	21.7	20.8	22.0	22.4
	8H	18.1	19.3	18.5	19.7	20.1	20.6	21.8	21.1	22.2	22.6
	12H	18.1	19.3	18.6	19.7	20.1	20.8	21.9	21.2	22.3	22.8
4H	2H	16.8	18.1	17.2	18.5	18.9	17.6	19.0	18.0	19.3	19.7
	3H	18.3	19.4	18.7	19.8	20.2	19.7	20.8	20.1	21.2	21.6
	4H	18.9	19.9	19.3	20.3	20.7	20.6	21.6	21.0	22.0	22.5
	6H	19.2	20.1	19.7	20.6	21.0	21.5	22.4	21.9	22.8	23.3
	8H	19.3	20.2	19.8	20.6	21.1	21.8	22.6	22.2	23.0	23.5
	12H	19.4	20.2	19.9	20.6	21.1	22.0	22.7	22.5	23.2	23.7
8H	4H	19.3	20.1	19.8	20.6	21.1	20.9	21.7	21.3	22.1	22.6
	6H	19.8	20.5	20.3	21.0	21.5	21.8	22.5	22.3	23.0	23.5
	8H	20.0	20.6	20.5	21.2	21.6	22.2	22.9	22.8	23.4	23.9
	12H	20.1	20.7	20.6	21.2	21.7	22.5	23.1	23.0	23.5	24.1
12H	4H	19.4	20.1	19.9	20.6	21.1	20.9	21.6	21.3	22.1	22.6
	6H	20.0	20.6	20.5	21.1	21.6	21.9	22.5	22.4	23.0	23.5
	8H	20.2	20.8	20.7	21.3	21.8	22.3	22.9	22.8	23.4	23.9

Maximum UGR = 24.1

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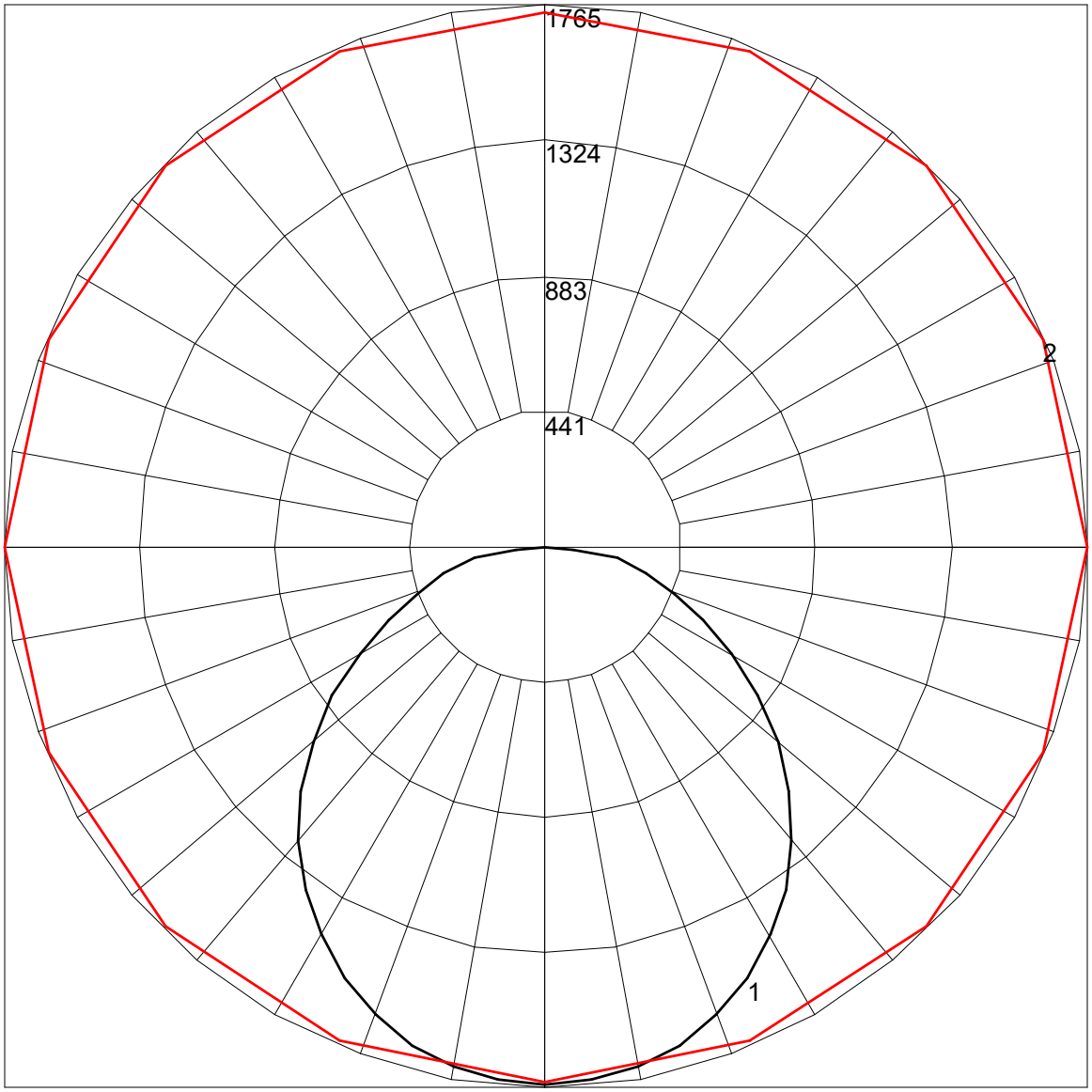
POLAR GRAPH



Maximum Candela = 1765.237 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.)

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