



IES INDOOR REPORT

PHOTOMETRIC FILENAME : LT-22-L49-850-AF-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM BALLABS TEST NO. 20203.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 2023-07-21
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
 [LUMINAIRE] 2x2 RECESSED LED LUMINAIRE
 [MORE] WHITE REFLECTOR w/FROSTED ACRYLIC CENTER LENS
 [MORE] 0-10V DIMMING DRIVER
 [LUMCAT] LT-22-L49-850-AF-DIM-UNV
 [LAMPCAT] 22 INCH LED ARRAY
 [_SEARCH_SOURCETYPE] LED
 [_SEARCH_APPLICATION] Indoor, Classroom, Office, Direct
 [_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5161
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	135
Total Luminaire Watts	38.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.40
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.92 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	4463	4793	5161
55	4045	4717	5321
65	3564	4671	5767
75	2743	4951	6740
85	1192	4023	3924

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-22-L49-850-AF-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	1717.422	1717.422	1717.422	1717.422	1717.422
5	1715.943	1708.547	1707.067	1701.150	1705.588
10	1686.358	1678.961	1684.878	1678.961	1683.399
15	1641.980	1639.021	1647.897	1650.855	1655.293
20	1570.975	1581.330	1594.643	1609.436	1612.395
25	1489.616	1510.326	1529.556	1553.224	1559.141
30	1402.339	1426.008	1454.114	1489.616	1501.450
35	1306.187	1326.897	1360.920	1414.174	1426.008
40	1196.722	1217.432	1264.768	1320.980	1340.211
45	1078.381	1097.612	1158.261	1217.432	1247.017
50	939.331	964.478	1041.400	1102.049	1144.948
55	792.884	828.386	924.538	991.105	1042.879
60	653.833	693.773	804.718	889.036	939.331
65	514.783	557.681	674.543	788.446	832.824
70	378.691	424.548	554.723	678.981	724.838
75	242.599	298.811	437.861	560.640	596.142
80	119.820	187.866	301.769	412.714	400.880
85	35.502	72.484	119.820	202.659	116.862
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-22-L49-850-AF-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	626.70	N.A.	12.10
0-30	1332.04	N.A.	25.80
0-40	2187.28	N.A.	42.40
0-60	3900.74	N.A.	75.60
0-80	5017.68	N.A.	97.20
0-90	5160.92	N.A.	100.00
10-90	4998.76	N.A.	96.90
20-40	1560.58	N.A.	30.20
20-50	2453.78	N.A.	47.50
40-70	2381.19	N.A.	46.10
60-80	1116.94	N.A.	21.60
70-80	449.20	N.A.	8.70
80-90	143.24	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	5160.92	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	162.16
10-20	464.54
20-30	705.34
30-40	855.24
40-50	893.20
50-60	820.26
60-70	667.74
70-80	449.20
80-90	143.24
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 : LT-22-L49-850-AF-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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	62	56	51	60	55	50	48
5	75	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	45	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	38	34	32
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	39	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

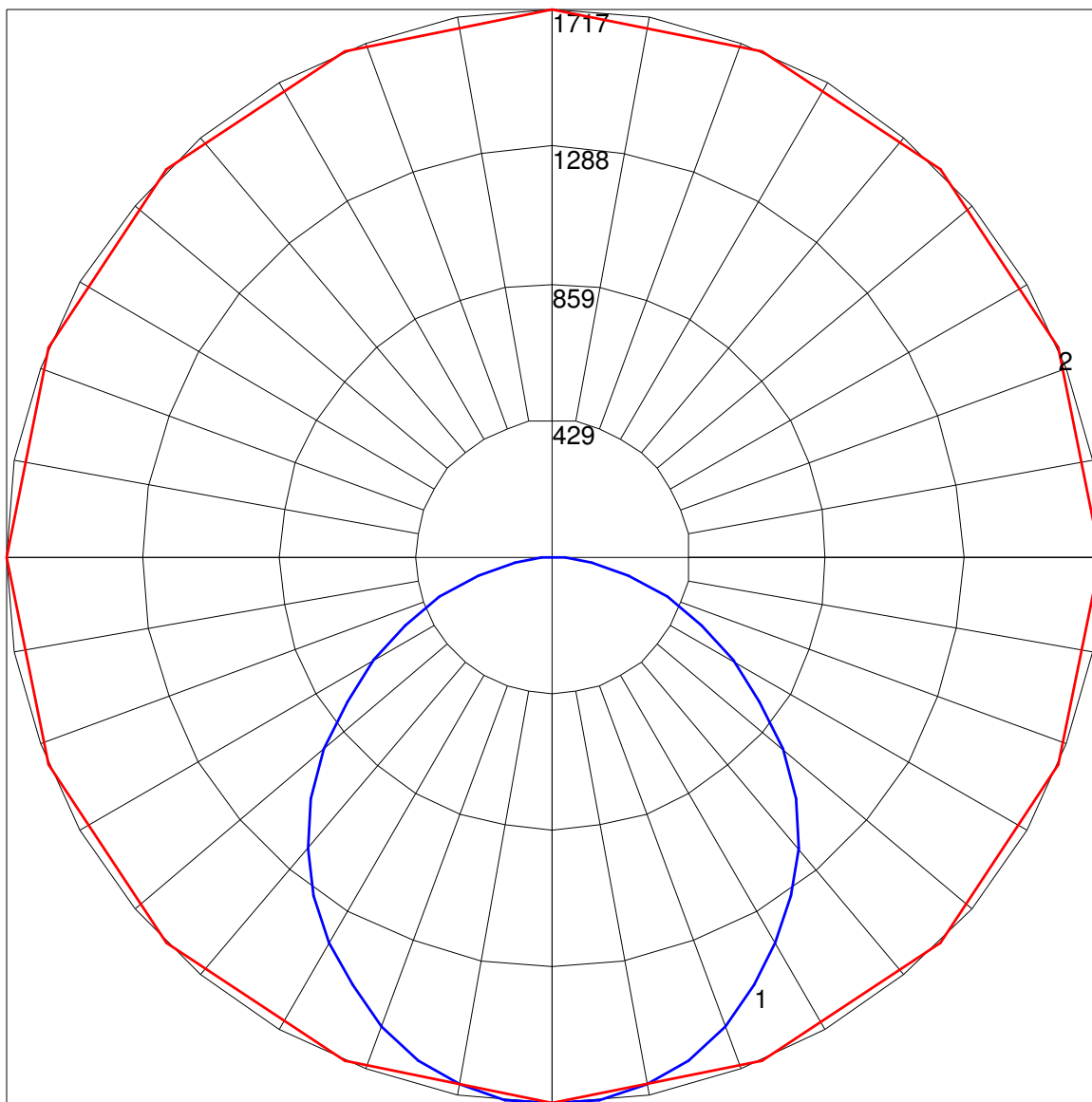
IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-22-L49-850-AF-DIM-UNV_.IES

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	16.6	18.3	17.0	18.6	18.9	18.2	19.9	18.6	20.2	20.5
	3H	18.2	19.8	18.6	20.1	20.4	20.8	22.3	21.1	22.6	23.0
	4H	18.8	20.2	19.2	20.6	21.0	21.9	23.4	22.3	23.7	24.1
	6H	19.1	20.5	19.5	20.8	21.2	22.9	24.2	23.3	24.6	25.0
	8H	19.2	20.5	19.6	20.9	21.3	23.2	24.5	23.6	24.9	25.3
	12H	19.2	20.5	19.7	20.8	21.3	23.3	24.6	23.8	25.0	25.4
4H	2H	17.5	19.0	17.9	19.3	19.7	18.8	20.2	19.2	20.6	20.9
	3H	19.4	20.6	19.8	21.0	21.4	21.6	22.8	22.0	23.2	23.6
	4H	20.1	21.2	20.5	21.6	22.1	22.9	24.1	23.4	24.5	24.9
	6H	20.6	21.5	21.0	22.0	22.4	24.1	25.1	24.6	25.6	26.0
	8H	20.7	21.6	21.1	22.0	22.5	24.5	25.4	25.0	25.9	26.3
	12H	20.7	21.6	21.2	22.0	22.5	24.7	25.6	25.2	26.0	26.5
8H	4H	20.8	21.7	21.3	22.2	22.7	23.2	24.2	23.7	24.6	25.1
	6H	21.5	22.2	22.0	22.7	23.2	24.6	25.4	25.1	25.9	26.4
	8H	21.7	22.4	22.2	22.9	23.3	25.2	25.9	25.7	26.4	26.8
	12H	21.8	22.4	22.3	22.9	23.4	25.5	26.1	26.0	26.6	27.2
12H	4H	21.0	21.8	21.5	22.3	22.8	23.3	24.1	23.7	24.6	25.0
	6H	21.7	22.4	22.3	22.9	23.4	24.7	25.4	25.2	25.8	26.4
	8H	22.0	22.6	22.5	23.1	23.7	25.3	25.9	25.8	26.4	26.9

Maximum UGR = 27.2

POLAR GRAPH



Maximum Candela = 1717.422 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.)