



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : LPT-22-L45-840-SAF12125-(L33)-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 18557.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 04-26-2024

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO.64836

[LUMINAIRE] 2x2' LED TROFFER

[MORE] WITH FROSTED ACRYLIC LENS

[LUMCAT] LPT-22-L45-840-SAF12125-(L33)-DIM-UNV

[LAMPCAT] HLM 80 CRI 4000K CCT

[\_SEARCH\_SOURCETYPE]LED

[\_SEARCH\_APPLICATION] INDOOR,OFFICE,CLASSROOM,COMMERCIAL,DIRECT

[\_SEARCH\_MOUNTING] RECESSED

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3468
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	131
Total Luminaire Watts	26.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.26
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.77 ft
Luminous Width (90-270)	1.77 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4086	4037	3988
55	3154	2982	2850
65	2467	2247	2261
75	2042	1919	2177
85	2299	2399	2832

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : LPT-22-L45-840-SAF12125-(L33)-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>
<b>0</b>	1566.411	1566.411	1566.411	1566.411	1566.411
<b>5</b>	1567.253	1566.411	1566.411	1566.411	1566.411
<b>10</b>	1534.409	1532.725	1531.883	1532.725	1531.040
<b>15</b>	1485.564	1483.880	1485.564	1485.564	1487.248
<b>20</b>	1430.824	1430.824	1432.508	1434.192	1436.719
<b>25</b>	1326.396	1324.712	1326.396	1329.765	1333.134
<b>30</b>	1220.285	1220.285	1220.285	1221.969	1224.495
<b>35</b>	1118.384	1117.542	1117.542	1117.542	1120.910
<b>40</b>	969.322	965.111	965.111	962.585	965.111
<b>45</b>	837.946	833.735	827.840	817.734	817.734
<b>50</b>	673.725	667.830	653.513	634.986	632.459
<b>55</b>	524.663	514.558	496.030	478.345	474.134
<b>60</b>	400.866	387.392	372.233	360.443	358.759
<b>65</b>	302.334	288.860	275.385	275.385	277.069
<b>70</b>	218.119	209.697	197.065	209.697	214.750
<b>75</b>	153.272	151.588	144.009	157.483	163.378
<b>80</b>	107.796	106.112	106.954	115.375	123.797
<b>85</b>	58.109	57.267	60.635	70.741	71.583
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : LPT-22-L45-840-SAF12125-(L33)-DIM-UNV\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	567.83	N.A.	16.40
0-30	1179.92	N.A.	34.00
0-40	1871.94	N.A.	54.00
0-60	2954.09	N.A.	85.20
0-80	3403.09	N.A.	98.10
0-90	3467.84	N.A.	100.00
10-90	3319.52	N.A.	95.70
20-40	1304.11	N.A.	37.60
20-50	1934.76	N.A.	55.80
40-70	1366.15	N.A.	39.40
60-80	449.00	N.A.	12.90
70-80	164.99	N.A.	4.80
80-90	64.75	N.A.	1.90
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	3467.84	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	148.32
10-20	419.52
20-30	612.09
30-40	692.02
40-50	630.65
50-60	451.50
60-70	284.00
70-80	164.99
80-90	64.75
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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	76	70	90	81	75	69	79	73	68	76	71	67	73	69	65	63
4	86	74	66	60	83	73	66	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

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## UGR TABLE - CORRECTED

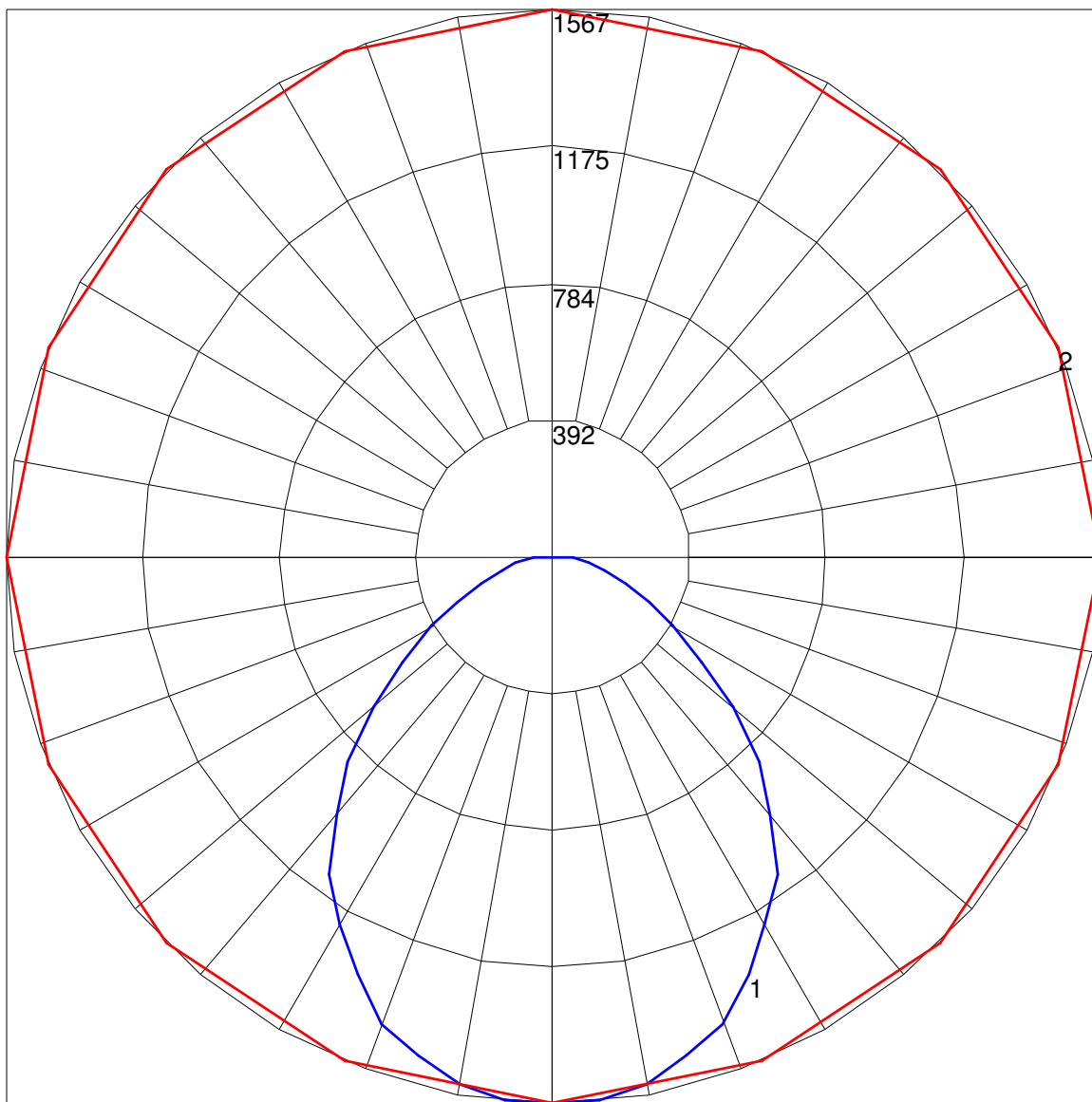
### Reflectances

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	15.2	16.7	15.5	17.0	17.3	14.6	16.1	15.0	16.5	16.8
	3H	16.5	17.9	16.9	18.2	18.6	16.1	17.5	16.5	17.8	18.2
	4H	17.1	18.4	17.5	18.7	19.1	16.8	18.1	17.2	18.4	18.8
	6H	17.6	18.8	18.0	19.1	19.5	17.5	18.6	17.9	19.0	19.4
	8H	17.8	18.9	18.2	19.3	19.7	17.7	18.9	18.2	19.3	19.7
	12H	18.0	19.0	18.4	19.4	19.9	18.0	19.1	18.5	19.5	19.9
4H	2H	15.6	16.8	16.0	17.2	17.6	15.1	16.4	15.5	16.7	17.1
	3H	17.1	18.2	17.5	18.6	19.0	16.8	17.9	17.2	18.3	18.7
	4H	17.8	18.8	18.3	19.2	19.6	17.6	18.6	18.1	19.0	19.4
	6H	18.5	19.3	18.9	19.8	20.2	18.5	19.3	18.9	19.8	20.2
	8H	18.8	19.6	19.2	20.0	20.5	18.9	19.7	19.3	20.1	20.6
	12H	19.0	19.7	19.5	20.2	20.7	19.2	19.9	19.7	20.4	20.9
8H	4H	18.1	18.9	18.5	19.3	19.8	17.9	18.7	18.4	19.1	19.6
	6H	18.9	19.6	19.4	20.1	20.5	18.9	19.6	19.4	20.1	20.5
	8H	19.3	19.9	19.8	20.4	20.9	19.4	20.0	19.9	20.5	21.0
	12H	19.7	20.2	20.2	20.7	21.2	20.0	20.5	20.5	21.0	21.5
12H	4H	18.1	18.8	18.6	19.3	19.8	17.9	18.6	18.4	19.1	19.6
	6H	19.0	19.6	19.5	20.1	20.6	19.0	19.6	19.5	20.1	20.6
	8H	19.5	20.0	20.0	20.5	21.0	19.6	20.1	20.1	20.6	21.2

Maximum UGR = 21.5

POLAR GRAPH



Maximum Candela = 1567.253 Located At Horizontal Angle = 0, Vertical Angle = 5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)