



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : LPT-24-L75-840-SAF12125-(L46)-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] GEN FROM BALLABS TEST NO. 18561.0  
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
 [ISSUEDATE] 10-31-2019  
 [MANUFAC] WILLIAMS INDOOR  
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.  
 [LUMINAIRE] 4-56 LED 22"ARRAYS 2x4'RECESSED GRID LUMINAIRE  
 [MORE] WHITE INTERNAL REFLECTORS w/.095"PAT12 ACRYLIC LENS  
 [MORE] 0-10V DIMMING DRIVER  
 [LUMCAT] LPT-24-L75-840-SAF12125-(L46)-DIM-UNV  
 [LAMPCAT] HLM 80 CRI 4000K CCT  
 [\_SEARCH\_SOURCETYPE] LED  
 [\_SEARCH\_APPLICATION] INDOOR, OFFICE, DIRECT, CLASSROOM  
 [\_SEARCH\_MOUNTING] RECESSED

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4705
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	147
Total Luminaire Watts	32
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.16
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.26
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.77 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	2630	2598	2558
55	2032	1933	1854
65	1592	1453	1458
75	1315	1246	1410
85	1506	1557	1850

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**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>	2111.747	2111.747	2111.747	2111.747	2111.747
<b>5</b>	2093.175	2092.487	2091.799	2090.423	2090.423
<b>10</b>	2068.412	2066.348	2065.660	2065.660	2065.660
<b>15</b>	2001.689	2001.001	2001.001	2001.689	2002.376
<b>20</b>	1923.960	1921.208	1921.208	1922.584	1925.336
<b>25</b>	1772.629	1771.942	1771.942	1777.444	1778.820
<b>30</b>	1630.929	1628.178	1630.241	1635.056	1637.808
<b>35</b>	1500.923	1498.171	1498.171	1500.923	1505.050
<b>40</b>	1313.823	1311.072	1309.008	1304.193	1308.320
<b>45</b>	1150.111	1144.608	1136.354	1120.533	1118.469
<b>50</b>	922.428	919.676	899.040	874.277	868.086
<b>55</b>	720.883	711.253	685.802	661.039	657.599
<b>60</b>	544.789	531.720	506.957	491.824	491.136
<b>65</b>	416.159	400.338	379.702	377.638	381.077
<b>70</b>	300.597	290.279	273.770	290.279	294.406
<b>75</b>	210.487	207.048	199.481	218.053	225.620
<b>80</b>	149.267	145.140	149.267	162.336	171.966
<b>85</b>	81.168	79.105	83.920	99.053	99.740
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : LPT-24-L75-840-SAF12125-(L46)-DIM-UNV\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	763.66	N.A.	16.20
0-30	1582.43	N.A.	33.60
0-40	2512.28	N.A.	53.40
0-60	3996.51	N.A.	84.90
0-80	4615.01	N.A.	98.10
0-90	4705.03	N.A.	100.00
10-90	4506.04	N.A.	95.80
20-40	1748.63	N.A.	37.20
20-50	2611.33	N.A.	55.50
40-70	1874.73	N.A.	39.80
60-80	618.50	N.A.	13.10
70-80	227.99	N.A.	4.80
80-90	90.02	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	4705.03	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	198.99
10-20	564.67
20-30	818.77
30-40	929.86
40-50	862.70
50-60	621.53
60-70	390.51
70-80	227.99
80-90	90.02
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	99	96	99	96	93	95	93	90	91	89	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	69	90	81	74	69	78	72	67	76	71	66	73	69	65	63
4	85	74	66	60	83	73	65	59	70	64	59	68	62	58	66	61	57	55
5	79	67	59	52	77	66	58	52	64	57	51	62	56	51	60	55	50	48
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	35
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	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

X=2H	Y=2H	13.7	15.3	14.1	15.6	15.9	13.2	14.7	13.5	15.0	15.3
	3H	15.1	16.5	15.5	16.8	17.2	14.7	16.0	15.0	16.4	16.7
	4H	15.6	16.9	16.0	17.3	17.7	15.3	16.6	15.7	17.0	17.4
	6H	16.1	17.3	16.5	17.7	18.1	16.0	17.2	16.4	17.6	18.0
	8H	16.4	17.5	16.8	17.9	18.3	16.3	17.5	16.8	17.9	18.3
	12H	16.5	17.6	17.0	18.0	18.4	16.6	17.7	17.0	18.1	18.5

### UGR Viewed Endwise

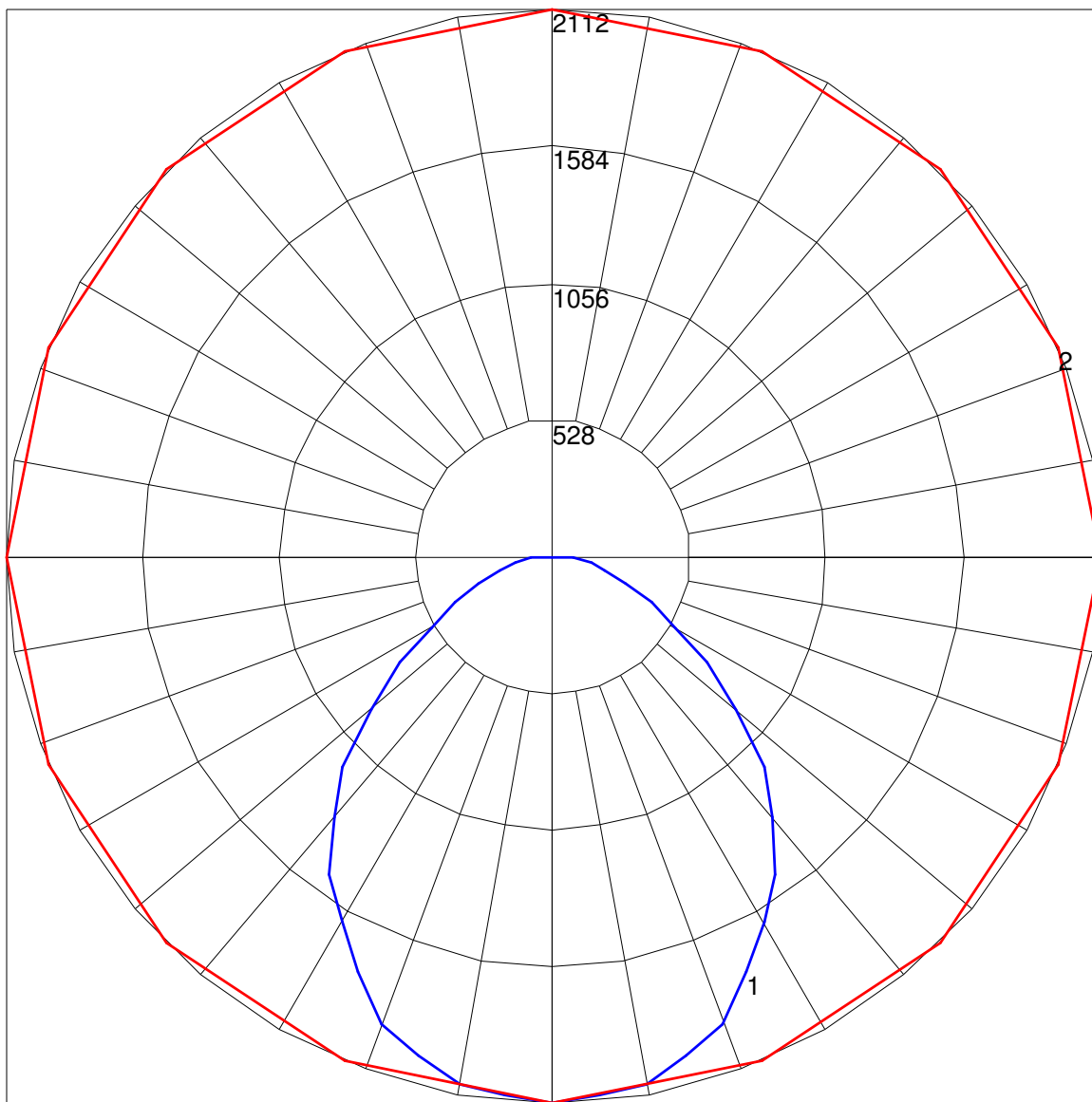
4H	2H	14.1	15.4	14.5	15.7	16.1	13.7	14.9	14.1	15.3	15.7
	3H	15.7	16.8	16.1	17.2	17.6	15.4	16.4	15.8	16.8	17.2
	4H	16.4	17.4	16.8	17.8	18.2	16.2	17.2	16.6	17.6	18.0
	6H	17.1	17.9	17.5	18.3	18.8	17.1	17.9	17.5	18.4	18.8
	8H	17.3	18.1	17.8	18.6	19.0	17.5	18.3	17.9	18.7	19.2
	12H	17.6	18.3	18.1	18.8	19.3	17.8	18.5	18.3	19.0	19.5

8H	4H	16.6	17.4	17.1	17.9	18.3	16.5	17.3	16.9	17.7	18.2
	6H	17.5	18.1	18.0	18.6	19.1	17.5	18.2	18.0	18.7	19.2
	8H	17.9	18.5	18.4	19.0	19.5	18.0	18.6	18.6	19.1	19.6
	12H	18.2	18.8	18.8	19.3	19.8	18.6	19.1	19.1	19.6	20.1

12H	4H	16.7	17.4	17.2	17.9	18.4	16.5	17.2	17.0	17.7	18.2
	6H	17.6	18.2	18.1	18.6	19.2	17.6	18.2	18.1	18.7	19.2
	8H	18.0	18.6	18.5	19.0	19.6	18.2	18.7	18.7	19.2	19.8

Maximum UGR = 20.1

POLAR GRAPH



Maximum Candela = 2111.747 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.)