



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : LPT-22-L27-835-SAF12095-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] GEN FROM BALLABS TEST NO. 18632.0  
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
 [ISSUEDATE] 27-MAR-2020  
 [MANUFAC] WILLIAMS INDOOR  
 [OTHER] H.E. WILLIAMS, INC CARTHAGE, MO  
 [LUMINAIRE] 2-56 LED 22" ARRAYS 2x2' WHITE REFL RECESSED LUMINAIRE  
 [MORE] ARRAYS ON INTERNAL WHITE REFLS w/PAT12 LENS (PRISMS DOWN)  
 [MORE] 0-10V LED DRIVER  
 [LUMCAT] LPT-22-L27-835-SAF12095-DIM-UNV  
 [LAMPCAT] HLM 80 CRI 3500K CCT  
 [SEARCH\_SOURCETYPE]LED  
 [SEARCH\_APPLICATION]INDOOR,DIRECT  
 [SEARCH\_MOUNTING]RECESSED

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2662
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	124
Total Luminaire Watts	21.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.28
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	3042	3097	3121
55	2429	2403	2351
65	1935	1804	1814
75	1592	1551	1756
85	1535	1681	1828

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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>	1158.543	1158.543	1158.543	1158.543	1158.543
<b>5</b>	1157.311	1157.927	1153.615	1149.920	1149.920
<b>10</b>	1135.754	1135.754	1137.602	1133.290	1135.754
<b>15</b>	1105.574	1103.726	1106.806	1106.190	1108.653
<b>20</b>	1058.764	1057.532	1058.764	1063.691	1070.466
<b>25</b>	999.636	997.788	1001.484	1006.411	1023.041
<b>30</b>	923.878	920.798	923.262	942.971	950.362
<b>35</b>	836.417	840.113	840.113	863.518	863.518
<b>40</b>	735.407	740.334	743.414	762.507	756.348
<b>45</b>	623.925	622.694	635.012	646.714	639.939
<b>50</b>	508.133	504.437	516.140	524.763	513.676
<b>55</b>	404.043	397.883	399.731	405.274	391.108
<b>60</b>	312.271	305.496	299.336	301.800	293.177
<b>65</b>	237.129	225.426	221.115	221.731	222.347
<b>70</b>	171.225	166.298	160.755	165.066	168.762
<b>75</b>	119.488	121.336	116.409	122.568	131.807
<b>80</b>	78.222	78.838	79.453	84.997	95.467
<b>85</b>	38.803	35.723	42.498	47.426	46.194
<b>90</b>	0.000	0.000	0.000	0.000	0.000

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	421.11	N.A.	15.80
0-30	882.64	N.A.	33.20
0-40	1411.04	N.A.	53.00
0-60	2260.1	N.A.	84.90
0-80	2616.54	N.A.	98.30
0-90	2661.9	N.A.	100.00
10-90	2552.36	N.A.	95.90
20-40	989.93	N.A.	37.20
20-50	1477.84	N.A.	55.50
40-70	1075.89	N.A.	40.40
60-80	356.45	N.A.	13.40
70-80	129.61	N.A.	4.90
80-90	45.36	N.A.	1.70
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	2661.9	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	109.54
10-20	311.57
20-30	461.54
30-40	528.40
40-50	487.91
50-60	361.14
60-70	226.83
70-80	129.61
80-90	45.36
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	120	120	120	120	117	117	117	117	112	112	112	107	107	107	103	103	103	101
1	111	106	102	99	108	104	101	97	100	97	94	96	94	91	92	90	89	87
2	102	94	88	82	99	92	86	81	89	84	80	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	67	60	84	74	66	60	71	64	59	69	63	58	67	62	57	55
5	80	67	59	53	78	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43
7	69	56	47	41	67	55	47	41	53	46	41	52	46	41	51	45	40	38
8	64	51	43	37	63	50	43	37	49	42	37	48	41	37	47	41	36	35
9	60	47	39	34	59	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	44	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

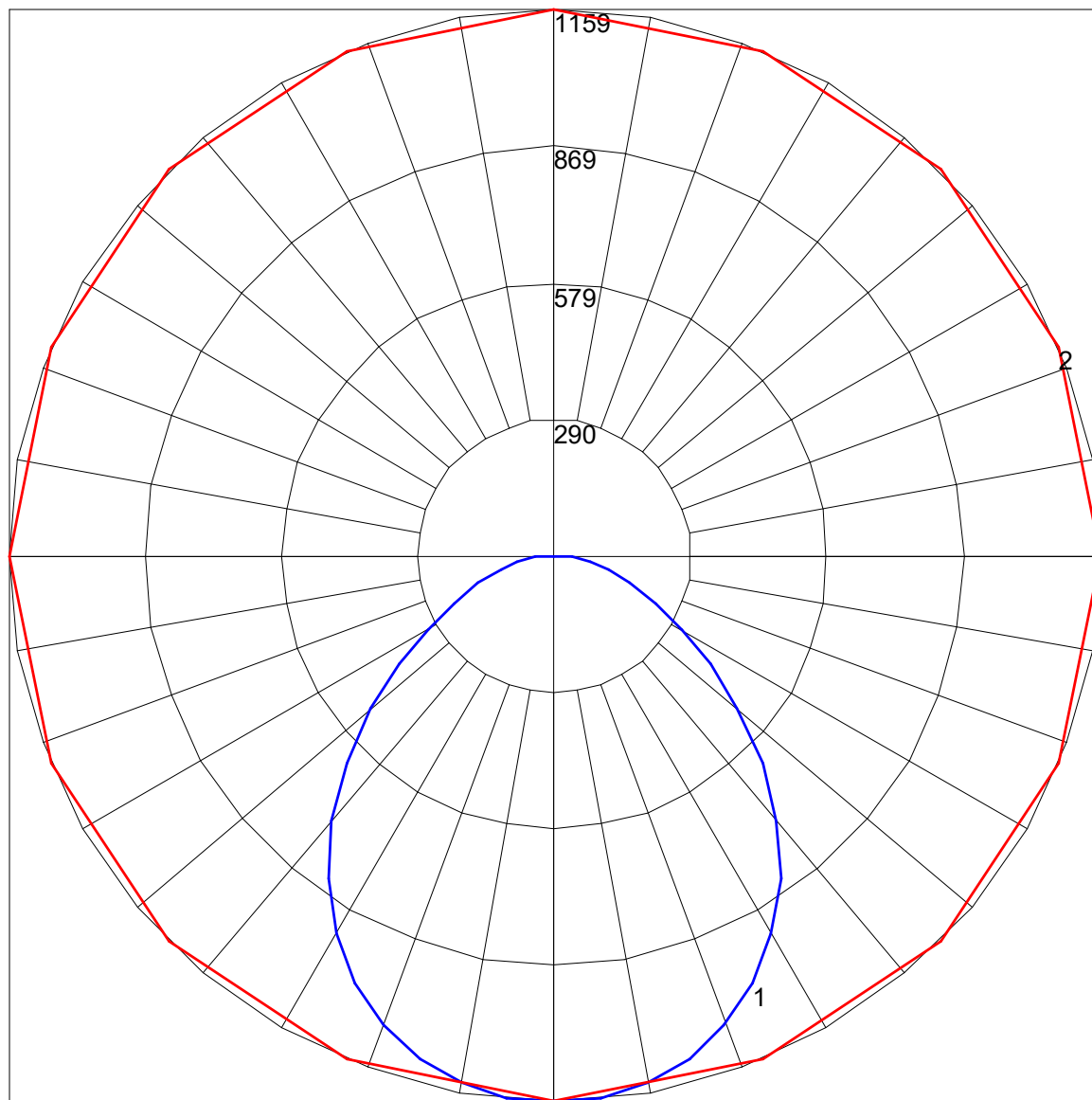
X=2H	Y=2H	14.4	15.9	14.7	16.2	16.5	14.3	15.9	14.7	16.2	16.5
	3H	15.7	17.1	16.1	17.4	17.8	15.7	17.0	16.0	17.4	17.7
	4H	16.3	17.6	16.7	17.9	18.3	16.3	17.6	16.7	17.9	18.3
	6H	16.8	17.9	17.2	18.3	18.7	16.9	18.1	17.3	18.5	18.9
	8H	16.9	18.1	17.4	18.5	18.9	17.2	18.3	17.6	18.7	19.1
	12H	17.1	18.1	17.5	18.5	19.0	17.3	18.4	17.8	18.8	19.2

UGR Viewed Endwise

4H	2H	14.8	16.1	15.2	16.4	16.8	14.7	16.0	15.1	16.4	16.8
	3H	16.4	17.5	16.8	17.9	18.3	16.3	17.4	16.7	17.8	18.2
	4H	17.1	18.1	17.5	18.5	18.9	17.1	18.1	17.5	18.5	18.9
	6H	17.7	18.6	18.2	19.0	19.5	17.9	18.7	18.3	19.2	19.6
	8H	17.9	18.7	18.4	19.2	19.6	18.2	19.0	18.7	19.4	19.9
	12H	18.1	18.8	18.6	19.3	19.8	18.5	19.2	18.9	19.6	20.1
8H	4H	17.3	18.1	17.8	18.6	19.1	17.4	18.1	17.8	18.6	19.1
	6H	18.1	18.8	18.6	19.3	19.7	18.3	18.9	18.8	19.4	19.9
	8H	18.4	19.0	18.9	19.5	20.0	18.7	19.3	19.2	19.8	20.3
	12H	18.7	19.2	19.2	19.7	20.3	19.1	19.6	19.6	20.1	20.7
12H	4H	17.4	18.1	17.9	18.6	19.0	17.4	18.1	17.9	18.6	19.0
	6H	18.2	18.8	18.7	19.2	19.8	18.3	18.9	18.9	19.4	19.9
	8H	18.6	19.1	19.1	19.6	20.1	18.8	19.3	19.3	19.8	20.4

Maximum UGR = 20.7

POLAR GRAPH



Maximum Candela = 1158.543 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.)