



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50G-S22-L43-835-SAF12125-(L40)-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] GEN FROM BALLABS TEST NO. 18124.0  
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
 [ISSUE DATE] 06-8-2020  
 [MANUFAC] WILLIAMS INDOOR  
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO. 64836  
 [LUMINAIRE] 2x2' RECESSED TROFFER  
 [MORE] WITH FROSTED ACRYLIC LENS  
 [LUMCAT] 50G-S22-L43-835-SAF12125-(L40)-DIM-UNV  
 [LAMPCAT] HLM 80 CRI, 3500K CCT  
 [ \_SEARCH\_SOURCE TYPE] LED  
 [ \_SEARCH\_APPLICATION] INDOOR, CLASSROOM, COMMERCIAL, EDUCATIONAL, OFFICE, DIRECT  
 [ \_SEARCH\_MOUNTING] RECESSED

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3974
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	33
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.22
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	4408	4500	4686
55	3632	3662	3771
65	2890	2829	2951
75	2530	2439	2430
85	2496	2299	2348

IES INDOOR REPORT  
 PHOTOMETRIC FILENAME : 50G-S22-L43-835-SAF12125-(L40)-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>	1734.109	1734.109	1734.109	1734.109	1734.109
<b>5</b>	1731.596	1730.339	1726.570	1722.800	1721.543
<b>10</b>	1696.411	1697.668	1697.668	1694.526	1700.181
<b>15</b>	1665.624	1668.138	1676.934	1675.677	1684.473
<b>20</b>	1536.823	1551.902	1557.557	1564.468	1578.919
<b>25</b>	1463.940	1482.789	1491.585	1502.266	1522.372
<b>30</b>	1349.589	1362.155	1381.633	1391.685	1419.959
<b>35</b>	1208.222	1216.390	1240.893	1263.512	1289.901
<b>40</b>	1060.571	1064.969	1086.960	1109.579	1137.852
<b>45</b>	909.151	908.522	928.000	938.681	966.326
<b>50</b>	755.845	756.474	770.925	767.783	796.685
<b>55</b>	607.567	608.823	612.593	610.080	630.814
<b>60</b>	469.340	468.084	468.084	461.801	481.278
<b>65</b>	356.246	350.592	348.707	346.822	363.786
<b>70</b>	265.771	260.116	256.347	256.975	262.001
<b>75</b>	191.003	187.234	184.092	182.207	183.464
<b>80</b>	125.032	124.403	122.519	118.120	118.749
<b>85</b>	63.458	65.972	58.432	58.432	59.689
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : 50G-S22-L43-835-SAF12125-(L40)-DIM-UNV\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	630.16	N.A.	15.90
0-30	1313.61	N.A.	33.10
0-40	2088.98	N.A.	52.60
0-60	3355.47	N.A.	84.40
0-80	3907.77	N.A.	98.30
0-90	3974.18	N.A.	100.00
10-90	3810.34	N.A.	95.90
20-40	1458.82	N.A.	36.70
20-50	2175.27	N.A.	54.70
40-70	1620.47	N.A.	40.80
60-80	552.30	N.A.	13.90
70-80	198.32	N.A.	5.00
80-90	66.41	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	3974.18	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	163.84
10-20	466.32
20-30	683.45
30-40	775.37
40-50	716.45
50-60	550.04
60-70	353.98
70-80	198.32
80-90	66.41
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 : 50G-S22-L43-835-SAF12125-(L40)-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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55
5	79	67	58	52	77	65	57	51	63	56	51	61	55	50	60	54	50	48
6	73	60	52	46	71	59	51	46	58	50	45	56	50	45	54	49	44	42
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34
9	59	46	39	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	56	43	35	30	54	42	35	30	41	35	30	41	34	30	40	34	30	28

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50G-S22-L43-835-SAF12125-(L40)-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

X=2H	Y=2H	15.9	17.4	16.3	17.7	18.0	15.9	17.4	16.3	17.7	18.1
	3H	17.3	18.7	17.7	19.0	19.4	17.3	18.7	17.7	19.0	19.4
	4H	17.9	19.2	18.3	19.5	19.9	17.8	19.1	18.2	19.5	19.9
	6H	18.4	19.6	18.8	19.9	20.3	18.3	19.5	18.7	19.9	20.2
	8H	18.6	19.7	19.0	20.1	20.5	18.5	19.6	18.9	20.0	20.4
	12H	18.7	19.8	19.1	20.2	20.6	18.6	19.7	19.0	20.1	20.5

### UGR Viewed Endwise

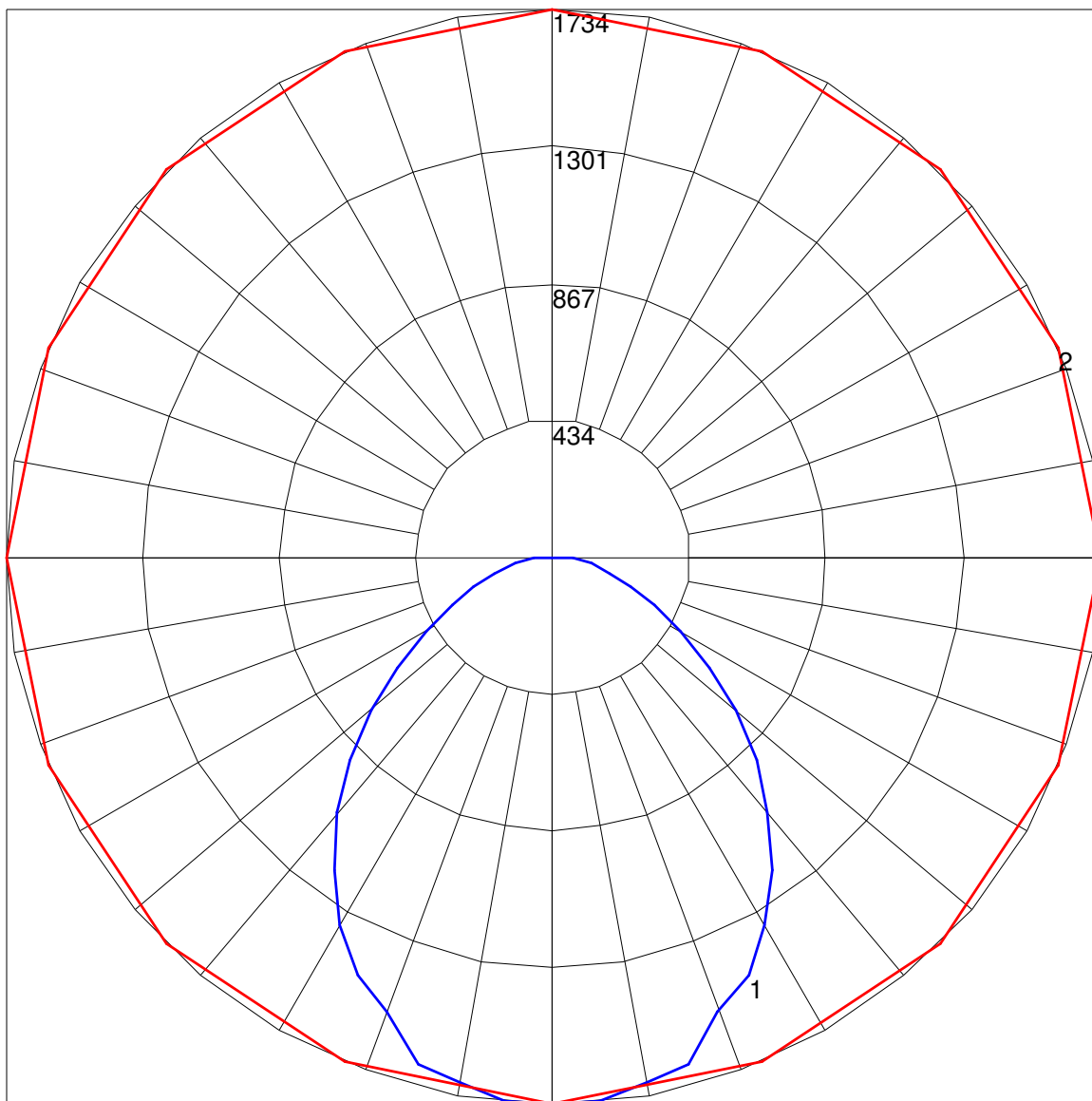
4H	2H	16.3	17.6	16.7	18.0	18.4	16.3	17.6	16.7	18.0	18.4
	3H	18.0	19.1	18.4	19.5	19.9	18.0	19.1	18.4	19.5	19.9
	4H	18.7	19.7	19.1	20.1	20.5	18.7	19.6	19.1	20.0	20.5
	6H	19.4	20.2	19.8	20.6	21.1	19.3	20.1	19.7	20.5	21.0
	8H	19.6	20.4	20.1	20.8	21.3	19.5	20.3	20.0	20.7	21.2
	12H	19.8	20.5	20.3	21.0	21.5	19.7	20.4	20.2	20.9	21.3

8H	4H	19.0	19.8	19.4	20.2	20.7	18.9	19.7	19.4	20.2	20.6
	6H	19.8	20.4	20.3	20.9	21.4	19.7	20.3	20.2	20.8	21.3
	8H	20.1	20.7	20.6	21.2	21.7	20.0	20.6	20.5	21.1	21.6
	12H	20.4	21.0	20.9	21.4	22.0	20.2	20.8	20.8	21.3	21.8

12H	4H	19.0	19.7	19.5	20.2	20.7	19.0	19.7	19.4	20.1	20.6
	6H	19.8	20.4	20.4	20.9	21.4	19.7	20.3	20.3	20.8	21.3
	8H	20.2	20.8	20.7	21.3	21.8	20.1	20.6	20.6	21.1	21.7

Maximum UGR = 22.0

POLAR GRAPH



Maximum Candela = 1734.109 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.)