



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50G-S22-L43-935-SA12125-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

[ISSUEDATE] 02-17-2022

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 2x2' LED TROFFER

[MORE] WITH ACRYLIC LENS

[LUMCAT] 50G-S22-L43-935-SA12125-DIM-UNV

[LAMPCAT] HLM 90 CRI, 3500K CCT

[_SEARCH_SOURCETYPE]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	3585
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	106
Total Luminaire Watts	33.7
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	3977	4059	4227
55	3276	3304	3402
65	2607	2552	2663
75	2283	2200	2193
85	2252	2074	2118

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 50G-S22-L43-935-SA12125-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	1564.397	1564.397	1564.397	1564.397	1564.397
5	1562.130	1560.996	1557.596	1554.195	1553.061
10	1530.389	1531.522	1531.522	1528.688	1533.790
15	1502.615	1504.882	1512.818	1511.684	1519.619
20	1386.419	1400.022	1405.123	1411.358	1424.395
25	1320.669	1337.673	1345.608	1355.244	1373.382
30	1217.509	1228.845	1246.417	1255.485	1280.992
35	1089.977	1097.345	1119.451	1139.856	1163.662
40	956.776	960.744	980.582	1000.988	1026.494
45	820.175	819.608	837.179	846.815	871.755
50	681.873	682.440	695.477	692.643	718.716
55	548.106	549.239	552.640	550.373	569.078
60	423.408	422.274	422.274	416.606	434.177
65	321.382	316.280	314.580	312.879	328.183
70	239.761	234.660	231.259	231.826	236.360
75	172.310	168.910	166.076	164.375	165.509
80	112.795	112.229	110.528	106.560	107.127
85	57.248	59.515	52.713	52.713	53.847
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 50G-S22-L43-935-SA12125-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	568.49	N.A.	15.90
0-30	1185.05	N.A.	33.10
0-40	1884.54	N.A.	52.60
0-60	3027.08	N.A.	84.40
0-80	3525.33	N.A.	98.30
0-90	3585.24	N.A.	100.00
10-90	3437.43	N.A.	95.90
20-40	1316.05	N.A.	36.70
20-50	1962.38	N.A.	54.70
40-70	1461.88	N.A.	40.80
60-80	498.25	N.A.	13.90
70-80	178.91	N.A.	5.00
80-90	59.91	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	3585.24	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	147.81
10-20	420.68
20-30	616.56
30-40	699.49
40-50	646.33
50-60	496.21
60-70	319.34
70-80	178.91
80-90	59.91
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-L43-935-SA12125-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-L43-935-SA12125-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	15.5	17.0	15.9	17.3	17.6	15.5	17.0	15.9	17.3	17.7
	3H	16.9	18.3	17.3	18.6	19.0	16.9	18.3	17.3	18.6	19.0
	4H	17.5	18.8	17.9	19.1	19.5	17.4	18.7	17.8	19.1	19.5
	6H	18.0	19.2	18.4	19.5	19.9	17.9	19.1	18.3	19.5	19.9
	8H	18.2	19.3	18.6	19.7	20.1	18.1	19.2	18.5	19.6	20.0
	12H	18.3	19.4	18.7	19.8	20.2	18.2	19.3	18.6	19.7	20.1

UGR Viewed Endwise

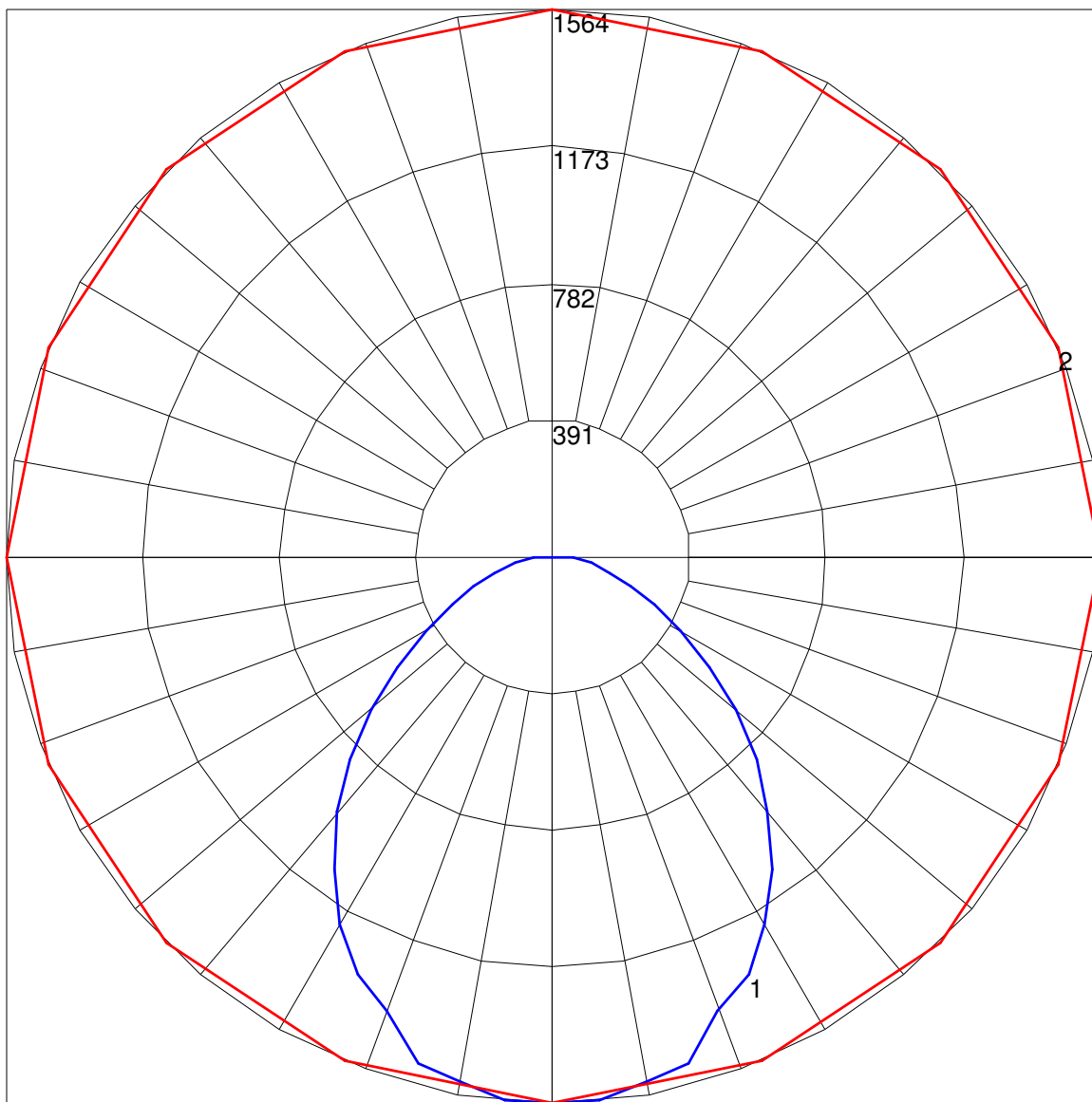
4H	2H	15.9	17.2	16.3	17.6	18.0	15.9	17.2	16.3	17.6	18.0
	3H	17.6	18.7	18.0	19.1	19.5	17.6	18.7	18.0	19.1	19.5
	4H	18.3	19.3	18.7	19.7	20.1	18.3	19.2	18.7	19.6	20.1
	6H	19.0	19.8	19.4	20.2	20.7	18.9	19.7	19.3	20.1	20.6
	8H	19.2	20.0	19.7	20.5	20.9	19.1	19.9	19.6	20.3	20.8
	12H	19.4	20.1	19.9	20.6	21.1	19.3	20.0	19.8	20.5	20.9

8H	4H	18.6	19.4	19.0	19.8	20.3	18.5	19.3	19.0	19.8	20.2
	6H	19.4	20.0	19.9	20.5	21.0	19.3	19.9	19.8	20.4	20.9
	8H	19.7	20.3	20.2	20.8	21.3	19.6	20.2	20.1	20.7	21.2
	12H	20.0	20.6	20.6	21.1	21.6	19.9	20.4	20.4	20.9	21.4

12H	4H	18.6	19.3	19.1	19.8	20.3	18.6	19.3	19.0	19.7	20.2
	6H	19.4	20.0	20.0	20.5	21.0	19.3	19.9	19.9	20.4	20.9
	8H	19.9	20.4	20.4	20.9	21.4	19.7	20.2	20.2	20.7	21.3

Maximum UGR = 21.6

POLAR GRAPH



Maximum Candela = 1564.397 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.)