



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50G-S24-L59-840-SAF12125-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 18125.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 05-19-2020

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 2x4' LED TROFFER

[MORE] FROSTED ACRYLIC LENS

[LUMCAT] 50G-S24-L59-840-SAF12125-DIM-UNV

[LAMPCAT] HLM 80 CRI, 4000K 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	6418
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	134
Total Luminaire Watts	48
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.14
Spacing Criterion (90-270)	1.16
Spacing Criterion (Diagonal)	1.24
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	3481	3432	3385
55	2872	2777	2692
65	2310	2171	2143
75	1871	1793	1892
85	1870	1870	2206

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : 50G-S24-L59-840-SAF12125-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	2890.012	2890.012	2890.012	2890.012	2890.012
5	2861.564	2859.699	2857.367	2855.968	2855.968
10	2809.799	2806.534	2808.866	2809.799	2809.799
15	2695.075	2695.075	2695.075	2698.339	2699.738
20	2594.808	2594.808	2598.073	2602.736	2598.073
25	2376.087	2373.755	2380.750	2384.948	2384.015
30	2189.078	2186.746	2191.410	2191.410	2196.073
35	1969.424	1968.491	1964.760	1963.828	1972.688
40	1742.775	1738.577	1729.250	1721.789	1728.318
45	1528.717	1523.121	1507.265	1493.740	1486.279
50	1257.297	1246.105	1233.513	1212.527	1199.936
55	1023.186	1005.931	989.142	963.493	958.829
60	791.874	778.349	756.897	736.843	734.512
65	606.264	595.071	569.888	562.426	562.426
70	441.640	435.111	413.658	421.586	422.519
75	300.800	296.136	288.208	298.468	304.065
80	202.865	199.601	199.601	208.461	214.990
85	101.199	97.935	101.199	114.724	119.387
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 50G-S24-L59-840-SAF12125-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1034.34	N.A.	16.10
0-30	2134.82	N.A.	33.30
0-40	3364.08	N.A.	52.40
0-60	5402.93	N.A.	84.20
0-80	6304.61	N.A.	98.20
0-90	6417.93	N.A.	100.00
10-90	6146.49	N.A.	95.80
20-40	2329.75	N.A.	36.30
20-50	3482.78	N.A.	54.30
40-70	2617.92	N.A.	40.80
60-80	901.68	N.A.	14.00
70-80	322.61	N.A.	5.00
80-90	113.32	N.A.	1.80
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	6417.93	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	271.43
10-20	762.91
20-30	1100.48
30-40	1229.27
40-50	1153.04
50-60	885.81
60-70	579.07
70-80	322.61
80-90	113.32
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-S24-L59-840-SAF12125-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	92	90	91	89	88	86
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	54
5	79	66	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	55	43	35	30	42	35	30	41	34	30	40	34	30	28

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 50G-S24-L59-840-SAF12125-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	15.2	16.7	15.5	17.0	17.3	UGR Viewed Endwise			
	3H	16.6	18.0	17.0	18.3	18.7	14.8	16.3	15.2	16.6
	4H	17.1	18.4	17.5	18.8	19.2	16.2	17.6	16.6	18.0
	6H	17.6	18.8	18.0	19.2	19.6	16.8	18.1	17.2	18.5
	8H	17.8	18.9	18.2	19.3	19.7	17.4	18.6	17.8	18.9
	12H	17.9	19.0	18.3	19.4	19.8	17.6	18.8	18.0	19.1
							17.8	18.9	18.2	19.3

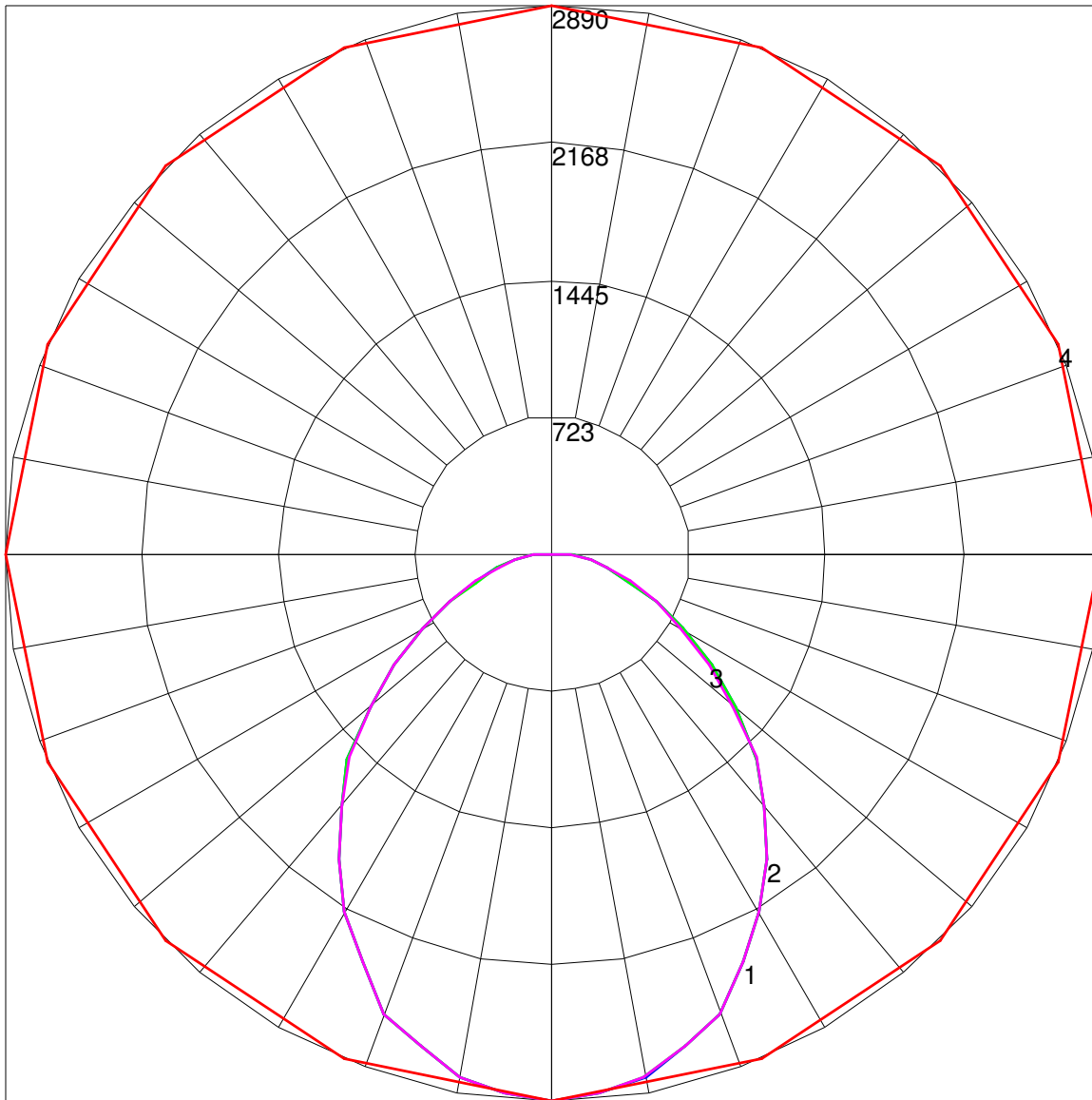
4H	2H	15.6	16.9	16.0	17.2	17.6	14.8	16.3	15.2	16.6
	3H	17.2	18.3	17.7	18.7	19.1	16.2	17.6	16.6	18.0
	4H	17.9	18.9	18.3	19.3	19.7	16.8	18.1	17.2	18.5
	6H	18.5	19.4	19.0	19.8	20.3	17.4	18.6	17.8	18.9
	8H	18.8	19.6	19.2	20.0	20.5	17.6	18.8	18.0	19.1
	12H	19.0	19.7	19.5	20.2	20.6	17.8	18.9	18.2	19.3

8H	4H	18.2	19.0	18.6	19.4	19.9	17.4	18.6	17.8	18.9
	6H	18.9	19.6	19.4	20.1	20.5	17.6	18.8	18.0	19.1
	8H	19.2	19.8	19.8	20.4	20.8	17.8	18.9	18.2	19.3
	12H	19.5	20.1	20.0	20.6	21.1	17.9	19.0	18.3	19.4

12H	4H	18.2	18.9	18.7	19.4	19.9	17.4	18.6	17.8	18.9
	6H	19.0	19.6	19.5	20.1	20.6	17.6	18.8	18.0	19.1
	8H	19.4	19.9	19.9	20.4	21.0	17.8	18.9	18.2	19.3

Maximum UGR = 21.2

POLAR GRAPH



Maximum Candela = 2890.012 Located At Horizontal Angle = 0, Vertical Angle = 0

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

2 - Vertical Plane Through Horizontal Angles (5 - 185)

3 - Vertical Plane Through Horizontal Angles (10 - 190)

4 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)