

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50G-S24-L59-840-FAF12125-(L43)-DIM1-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
[ISSUE DATE] 6-12-2023
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMINAIRE] 288 LEDS (4 BOARDS) 2x4'RECESSED LUMINAIRE
[MORE] WHITE REFLECTOR w/PAT 12 LENS PRISMS DOWN
[MORE] 4 ULT EVERLINE DRIVERS #D15CCUNVT-C
[LUMCAT] 50G-S24-L59-840-FAF12125-(L43)-DIM1-UNV
[LAMPCAT] HLM 80 CRI 4000K CCT
[_SEARCH_SOURCE TYPE] LED
[_SEARCH_APPLICATION] INDOOR, DIRECT
[_SEARCH_MOUNTING] RECESSED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4477
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	39.66
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	2428	2394	2361
55	2004	1937	1878
65	1611	1515	1495
75	1305	1251	1320
85	1304	1304	1539

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	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	2015.984	2015.984	2015.984	2015.984	2015.984
5	1996.140	1994.838	1993.212	1992.236	1992.236
10	1960.030	1957.752	1959.379	1960.030	1960.030
15	1880.002	1880.002	1880.002	1882.279	1883.255
20	1810.059	1810.059	1812.336	1815.589	1812.336
25	1657.486	1655.859	1660.739	1663.667	1663.016
30	1527.034	1525.407	1528.660	1528.660	1531.914
35	1373.810	1373.159	1370.557	1369.906	1376.087
40	1215.706	1212.778	1206.272	1201.067	1205.621
45	1066.386	1062.482	1051.422	1041.987	1036.782
50	877.052	869.245	860.461	845.822	837.038
55	713.744	701.707	689.995	672.103	668.850
60	552.387	542.953	527.988	513.999	512.373
65	422.911	415.103	397.536	392.331	392.331
70	308.074	303.520	288.555	294.086	294.736
75	209.829	206.576	201.045	208.202	212.106
80	141.513	139.235	139.235	145.416	149.971
85	70.594	68.316	70.594	80.028	83.281
90	0.000	0.000	0.000	0.000	0.000

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Zone	Lumens	%Lamp	%Fixt
0-20	721.52	N.A.	16.10
0-30	1489.18	N.A.	33.30
0-40	2346.68	N.A.	52.40
0-60	3768.92	N.A.	84.20
0-80	4397.9	N.A.	98.20
0-90	4476.95	N.A.	100.00
10-90	4287.61	N.A.	95.80
20-40	1625.16	N.A.	36.30
20-50	2429.48	N.A.	54.30
40-70	1826.18	N.A.	40.80
60-80	628.98	N.A.	14.00
70-80	225.04	N.A.	5.00
80-90	79.05	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	4476.95	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	189.34
10-20	532.18
20-30	767.66
30-40	857.50
40-50	804.32
50-60	617.91
60-70	403.94
70-80	225.04
80-90	79.05
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	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

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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	13.9	15.4	14.2	15.7	16.0	13.5	15.0	13.9	15.3	15.7
	3H	15.3	16.7	15.7	17.0	17.4	14.9	16.3	15.3	16.7	17.0
	4H	15.8	17.1	16.2	17.5	17.9	15.5	16.8	15.9	17.2	17.6
	6H	16.3	17.5	16.7	17.9	18.3	16.1	17.3	16.5	17.6	18.0
	8H	16.5	17.6	16.9	18.0	18.4	16.3	17.5	16.7	17.8	18.2
	12H	16.6	17.7	17.0	18.1	18.5	16.5	17.6	16.9	18.0	18.4

UGR Viewed Endwise

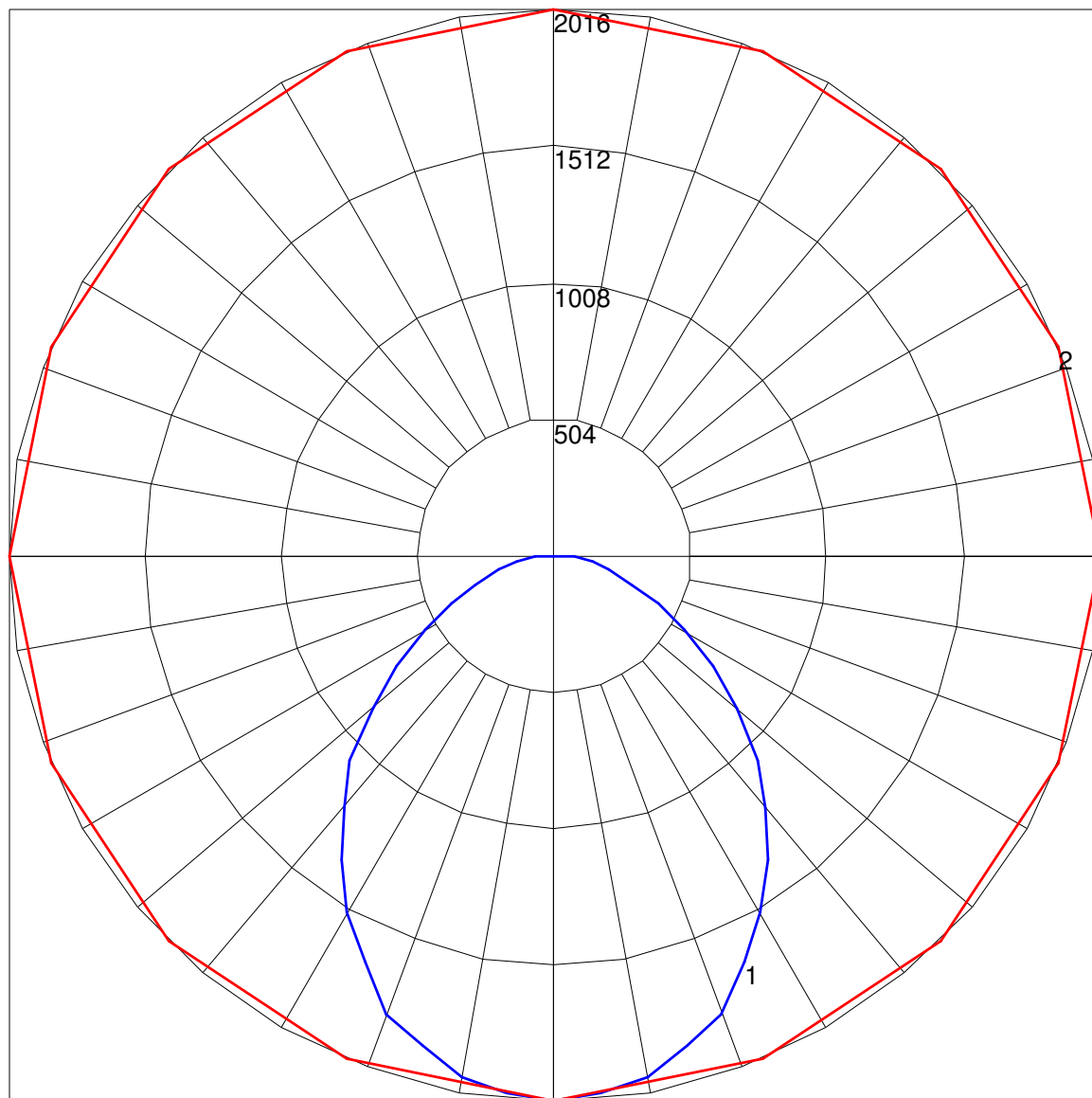
4H	2H	14.3	15.6	14.7	15.9	16.3	14.0	15.3	14.4	15.6	16.0
	3H	15.9	17.0	16.4	17.4	17.8	15.7	16.8	16.1	17.2	17.6
	4H	16.6	17.6	17.0	18.0	18.4	16.4	17.4	16.8	17.8	18.2
	6H	17.2	18.1	17.7	18.5	19.0	17.1	17.9	17.6	18.4	18.8
	8H	17.5	18.3	17.9	18.7	19.2	17.4	18.2	17.9	18.6	19.1
	12H	17.7	18.4	18.2	18.9	19.3	17.7	18.4	18.2	18.9	19.3

8H	4H	16.9	17.7	17.3	18.1	18.6	16.7	17.5	17.1	17.9	18.4
	6H	17.6	18.3	18.1	18.8	19.2	17.5	18.2	18.0	18.7	19.1
	8H	17.9	18.5	18.5	19.1	19.5	17.9	18.5	18.4	19.0	19.5
	12H	18.2	18.8	18.7	19.3	19.8	18.3	18.8	18.8	19.3	19.9

12H	4H	16.9	17.6	17.4	18.1	18.6	16.7	17.4	17.2	17.9	18.4
	6H	17.7	18.3	18.2	18.8	19.3	17.6	18.2	18.1	18.7	19.2
	8H	18.1	18.6	18.6	19.1	19.7	18.0	18.6	18.6	19.1	19.6

Maximum UGR = 19.9

POLAR GRAPH



Maximum Candela = 2015.984 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.)