H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-950-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19438.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2023-07-17
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 48 INCH, LOW PROFILE HIGHBAY LUMINAIRE
[MORE] WHITE REFLECTOR w/OPEN BOTTOM
[MORE] 0-10V DIMMING DRIVERS
[LUMCAT] GL-4-L300-950-DIM-UNV
[LAMPCAT] 22 INCH HLM LED ARRAYS
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Commercial, Industrial, Manufacturing, Warehouse, High Bay
[_SEARCH_MOUNTING] Pendant, Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	25919
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	130
Total Luminaire Watts	200
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	1.05 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	24081	24135	24400
55	22232	23201	17490
65	20911	16751	17053
75	16028	10683	9869
85	8792	5690	6471

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-950-DIM-UNV_.IES

CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	9427.353	9427.353	9427.353	9427.353	9427.353
5	9291.702	9289.106	9291.702	9294.948	9297.544
10	9283.265	9276.774	9283.265	9294.948	9294.948
15	9089.201	9100.884	9126.846	9130.091	9126.846
20	8736.122	8744.559	8759.487	8771.170	8771.170
25	8236.358	8259.724	8277.248	8244.796	8244.796
30	7759.961	7786.571	7765.802	7759.961	7756.715
35	7251.111	7286.159	7262.793	7277.721	7280.318
40	6927.887	6972.022	6936.325	6957.094	6977.863
45	6663.078	6698.126	6678.006	6727.982	6751.347
50	5889.418	5945.236	5998.457	6039.347	6001.702
55	4989.844	5074.869	5207.274	4096.112	3925.413
60	4181.136	4263.565	4266.810	3378.270	3393.198
65	3458.102	3502.237	2770.116	2852.545	2820.093
70	2534.514	2651.991	2167.155	1896.504	1520.059
75	1623.257	1340.923	1081.955	1102.724	999.527
80	902.819	808.708	464.715	323.224	284.930
85	299.858	194.064	194.064	217.429	220.675
90	0.000	0.000	0.000	0.000	0.000

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-950-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3453.07	N.A.	13.30
0-30	7265.16	N.A.	28.00
0-40	11853.8	N.A.	45.70
0-60	21265.84	N.A.	82.00
0-80	25652.37	N.A.	99.00
0-90	25919.26	N.A.	100.00
10-90	25030.85	N.A.	96.60
20-40	8400.72	N.A.	32.40
20-50	13492.69	N.A.	52.10
40-70	12441.09	N.A.	48.00
60-80	4386.53	N.A.	16.90
70-80	1357.49	N.A.	5.20
80-90	266.89	N.A.	1.00
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	25919.26	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	888.41
10-20	2564.67
20-30	3812.09
30-40	4588.64
40-50	5091.97
50-60	4320.08
60-70	3029.04
70-80	1357.49
80-90	266.89
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

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-950-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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-950-DIM-UNV_.IES

UGR TABLE - CORRECTED

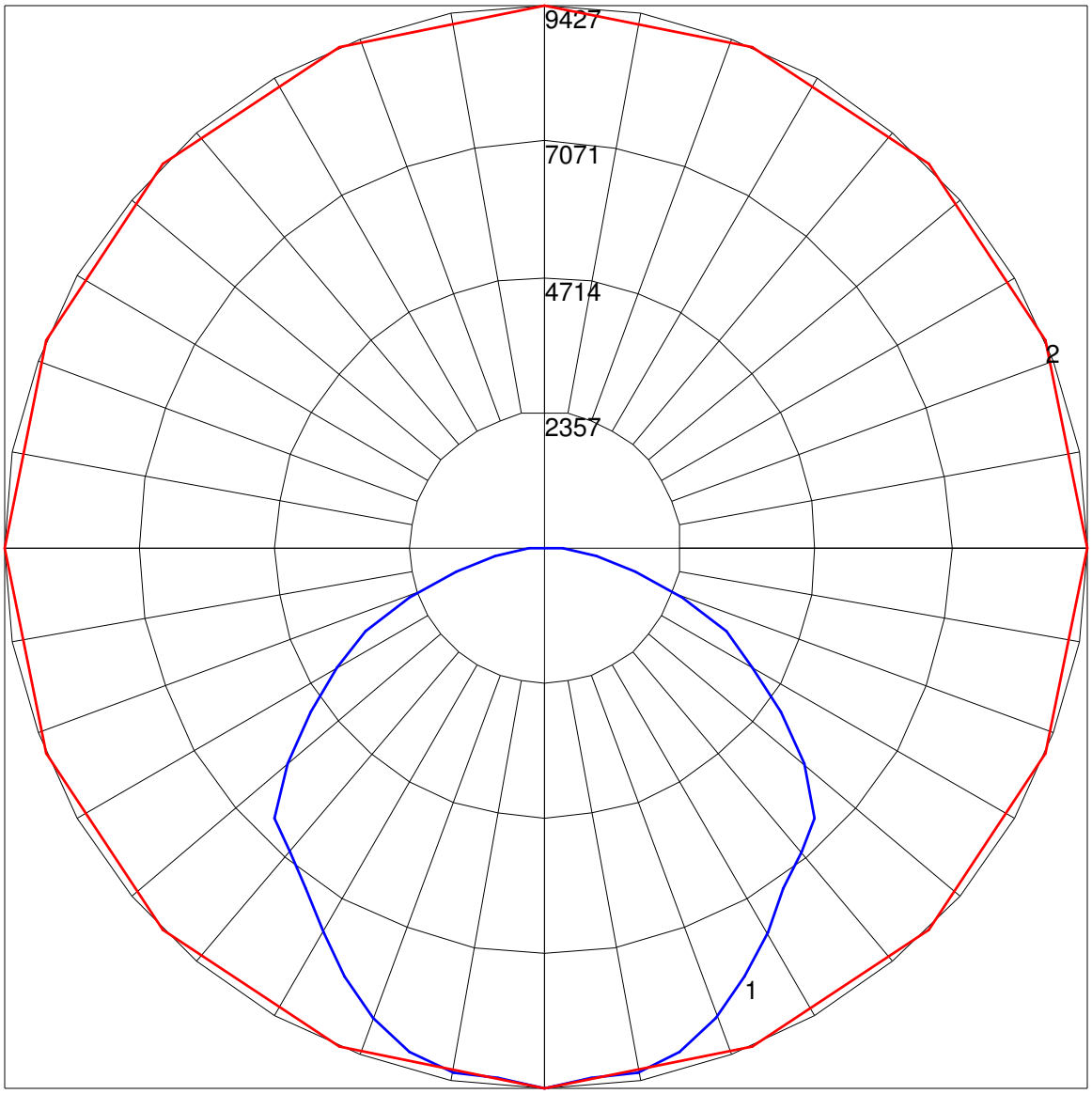
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	23.2	24.9	23.6	25.2	25.5	21.7	23.3	22.1	23.6	23.9
	3H	25.0	26.5	25.4	26.8	27.2	23.2	24.6	23.5	24.9	25.3
	4H	25.5	26.9	25.9	27.2	27.6	23.5	24.9	23.9	25.2	25.6
	6H	25.8	27.1	26.3	27.5	27.9	23.6	24.9	24.0	25.3	25.7
	8H	25.9	27.1	26.4	27.5	27.9	23.6	24.9	24.1	25.2	25.6
	12H	26.0	27.1	26.4	27.5	27.9	23.7	24.8	24.1	25.2	25.6
4H	2H	23.6	25.0	24.0	25.3	25.7	22.4	23.7	22.7	24.1	24.4
	3H	25.6	26.8	26.0	27.2	27.6	24.0	25.2	24.4	25.6	26.0
	4H	26.2	27.2	26.6	27.6	28.1	24.5	25.5	24.9	25.9	26.4
	6H	26.7	27.5	27.1	28.0	28.4	24.6	25.5	25.1	26.0	26.4
	8H	26.8	27.6	27.2	28.1	28.5	24.7	25.5	25.1	25.9	26.4
	12H	26.8	27.6	27.3	28.1	28.5	24.7	25.4	25.2	25.9	26.4
8H	4H	26.3	27.1	26.8	27.6	28.0	24.7	25.6	25.2	26.0	26.5
	6H	26.8	27.5	27.3	28.0	28.5	24.9	25.6	25.4	26.1	26.6
	8H	27.0	27.6	27.5	28.1	28.6	24.9	25.6	25.4	26.1	26.5
	12H	27.1	27.6	27.6	28.1	28.7	25.0	25.6	25.5	26.1	26.6
12H	4H	26.3	27.0	26.8	27.5	28.0	24.7	25.5	25.2	26.0	26.4
	6H	26.8	27.4	27.3	27.9	28.4	24.9	25.6	25.4	26.0	26.5
	8H	27.0	27.5	27.5	28.0	28.6	25.0	25.5	25.5	26.0	26.6

Maximum UGR = 28.7

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-950-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 9427.353 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.)

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.