H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L600-940-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] 2023-07-18
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 96 INCH LONG, LOW PROFILE LED HIGHBAY LUMINAIRE
[MORE] WHITE REFLECTOR w/OPEN BOTTOM
[MORE] 0-10V DIMMING DRIVERS
[LUMCAT] GL-8-L600-940-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	50030
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	125
Total Luminaire Watts	400
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)	8.00 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	23241	23293	23549
55	21457	22392	16880
65	20182	16167	16458
75	15469	10311	9525
85	8486	5492	6245

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-8-L600-940-DIM-UNV_.IES

CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	18196.979	18196.979	18196.979	18196.979	18196.979
5	17935.143	17930.131	17935.143	17941.407	17946.418
10	17918.856	17906.328	17918.856	17941.407	17941.407
15	17544.268	17566.818	17616.930	17623.194	17616.930
20	16862.742	16879.029	16907.843	16930.394	16930.394
25	15898.083	15943.184	15977.010	15914.370	15914.370
30	14978.525	15029.890	14989.800	14978.525	14972.261
35	13996.327	14063.978	14018.877	14047.692	14052.703
40	13372.430	13457.621	13388.717	13428.807	13468.896
45	12861.286	12928.938	12890.101	12986.567	13031.668
50	11367.944	11475.685	11578.415	11657.342	11584.679
55	9631.557	9795.675	10051.247	7906.446	7576.959
60	8070.564	8229.670	8235.934	6520.845	6549.660
65	6674.940	6760.131	5346.968	5506.074	5443.434
70	4892.200	5118.957	4183.113	3660.693	2934.067
75	3133.263	2588.293	2088.424	2128.514	1929.318
80	1742.650	1560.994	897.008	623.896	549.981
85	578.795	374.588	374.588	419.689	425.953
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-8-L600-940-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	6665.23	N.A.	13.30
0-30	14023.44	N.A.	28.00
0-40	22880.58	N.A.	45.70
0-60	41048.01	N.A.	82.00
0-80	49515.04	N.A.	99.00
0-90	50030.19	N.A.	100.00
10-90	48315.36	N.A.	96.60
20-40	16215.35	N.A.	32.40
20-50	26044.02	N.A.	52.10
40-70	24014.2	N.A.	48.00
60-80	8467.02	N.A.	16.90
70-80	2620.26	N.A.	5.20
80-90	515.16	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	50030.19	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1714.83
10-20	4950.4
20-30	7358.21
30-40	8857.14
40-50	9828.68
50-60	8338.76
60-70	5846.76
70-80	2620.26
80-90	515.16
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-8-L600-940-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-8-L600-940-DIM-UNV_.IES

UGR TABLE - CORRECTED

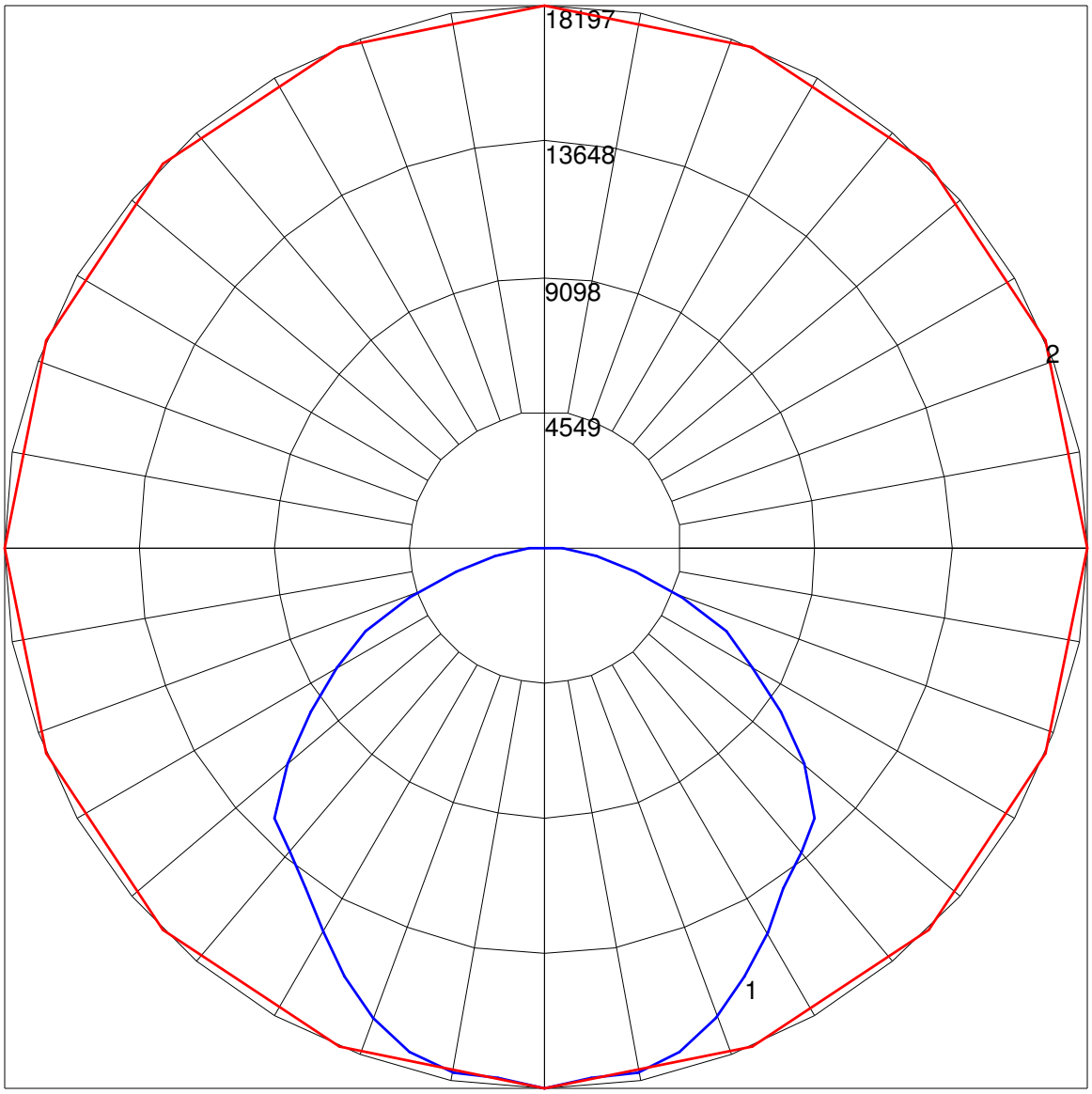
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	23.1	24.7	23.5	25.1	25.4	21.6	23.2	21.9	23.5	23.8
	3H	24.9	26.4	25.3	26.7	27.1	23.0	24.5	23.4	24.8	25.2
	4H	25.4	26.8	25.8	27.1	27.5	23.4	24.8	23.8	25.1	25.5
	6H	25.7	27.0	26.1	27.4	27.8	23.5	24.8	23.9	25.2	25.5
	8H	25.8	27.0	26.3	27.4	27.8	23.5	24.7	24.0	25.1	25.5
	12H	25.9	27.0	26.3	27.4	27.8	23.6	24.7	24.0	25.1	25.5
4H	2H	23.5	24.9	23.9	25.2	25.6	22.2	23.6	22.6	24.0	24.3
	3H	25.5	26.7	25.9	27.1	27.5	23.9	25.1	24.3	25.5	25.9
	4H	26.1	27.1	26.5	27.5	28.0	24.4	25.4	24.8	25.8	26.3
	6H	26.5	27.4	27.0	27.9	28.3	24.5	25.4	25.0	25.9	26.3
	8H	26.7	27.5	27.1	27.9	28.4	24.6	25.4	25.0	25.8	26.3
	12H	26.7	27.5	27.2	28.0	28.4	24.6	25.3	25.1	25.8	26.3
8H	4H	26.2	27.0	26.7	27.5	27.9	24.6	25.4	25.1	25.9	26.4
	6H	26.7	27.4	27.2	27.9	28.4	24.8	25.5	25.3	26.0	26.4
	8H	26.9	27.5	27.4	28.0	28.5	24.8	25.4	25.3	26.0	26.4
	12H	27.0	27.5	27.5	28.0	28.6	24.9	25.5	25.4	25.9	26.5
12H	4H	26.2	26.9	26.7	27.4	27.9	24.6	25.4	25.1	25.9	26.3
	6H	26.7	27.3	27.2	27.8	28.3	24.8	25.4	25.3	25.9	26.4
	8H	26.9	27.4	27.4	27.9	28.5	24.9	25.4	25.4	25.9	26.5

Maximum UGR = 28.6

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-8-L600-940-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 18196.979 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.