H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L600-840-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-L600-840-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	60277
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	151
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	28001	28064	28372
55	25851	26978	20337
65	24315	19478	19829
75	18637	12422	11476
85	10224	6617	7524

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	21924.078	21924.078	21924.078	21924.078	21924.078
5	21608.613	21602.576	21608.613	21616.160	21622.198
10	21588.991	21573.897	21588.991	21616.160	21616.160
15	21137.679	21164.849	21225.225	21232.772	21225.225
20	20316.564	20336.186	20370.903	20398.072	20398.072
25	19154.324	19208.662	19249.416	19173.946	19173.946
30	18046.422	18108.308	18060.007	18046.422	18038.875
35	16863.050	16944.558	16890.219	16924.936	16930.973
40	16111.368	16214.007	16130.990	16179.291	16227.592
45	15495.531	15577.039	15530.247	15646.471	15700.810
50	13696.323	13826.131	13949.902	14044.995	13957.449
55	11604.290	11802.022	12109.940	9525.842	9128.869
60	9723.574	9915.268	9922.815	7856.443	7891.159
65	8042.099	8144.739	6442.132	6633.826	6558.356
70	5894.219	6167.421	5039.897	4410.476	3535.022
75	3775.017	3118.427	2516.175	2564.476	2324.481
80	2099.580	1880.716	1080.733	751.683	662.628
85	697.344	451.311	451.311	505.650	513.197
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	8030.4	N.A.	13.30
0-30	16895.72	N.A.	28.00
0-40	27566.97	N.A.	45.70
0-60	49455.46	N.A.	82.00
0-80	59656.69	N.A.	99.00
0-90	60277.36	N.A.	100.00
10-90	58211.3	N.A.	96.60
20-40	19536.57	N.A.	32.40
20-50	31378.35	N.A.	52.10
40-70	28932.78	N.A.	48.00
60-80	10201.23	N.A.	16.90
70-80	3156.94	N.A.	5.20
80-90	620.67	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	60277.36	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2066.06
10-20	5964.34
20-30	8865.32
30-40	10671.25
40-50	11841.79
50-60	10046.7
60-70	7044.29
70-80	3156.94
80-90	620.67
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	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

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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					UGR Viewed Endwise				
X=2H	Y=2H	23.7	25.3	24.1	25.7	26.0	22.2	23.8	22.5	24.1	24.4
	3H	25.5	27.0	25.9	27.3	27.7	23.6	25.1	24.0	25.4	25.8
	4H	26.0	27.4	26.4	27.7	28.1	24.0	25.4	24.4	25.7	26.1
	6H	26.3	27.6	26.7	28.0	28.4	24.1	25.4	24.5	25.8	26.1
	8H	26.4	27.6	26.9	28.0	28.4	24.1	25.3	24.6	25.7	26.1
	12H	26.5	27.6	26.9	28.0	28.4	24.2	25.3	24.6	25.7	26.1
4H	2H	24.1	25.5	24.5	25.8	26.2	22.8	24.2	23.2	24.6	24.9
	3H	26.1	27.3	26.5	27.7	28.1	24.5	25.7	24.9	26.1	26.5
	4H	26.7	27.7	27.1	28.1	28.6	25.0	26.0	25.4	26.4	26.9
	6H	27.1	28.0	27.6	28.5	28.9	25.1	26.0	25.6	26.5	26.9
	8H	27.3	28.1	27.7	28.5	29.0	25.2	26.0	25.6	26.4	26.9
	12H	27.3	28.1	27.8	28.6	29.0	25.2	25.9	25.7	26.4	26.9
8H	4H	26.8	27.6	27.3	28.1	28.5	25.2	26.0	25.7	26.5	27.0
	6H	27.3	28.0	27.8	28.5	29.0	25.4	26.1	25.9	26.6	27.0
	8H	27.5	28.1	28.0	28.6	29.1	25.4	26.0	25.9	26.6	27.0
	12H	27.6	28.1	28.1	28.6	29.2	25.5	26.1	26.0	26.5	27.1
12H	4H	26.8	27.5	27.3	28.0	28.5	25.2	26.0	25.7	26.5	26.9
	6H	27.3	27.9	27.8	28.4	28.9	25.4	26.0	25.9	26.5	27.0
	8H	27.5	28.0	28.0	28.5	29.1	25.5	26.0	26.0	26.5	27.1

Maximum UGR = 29.2

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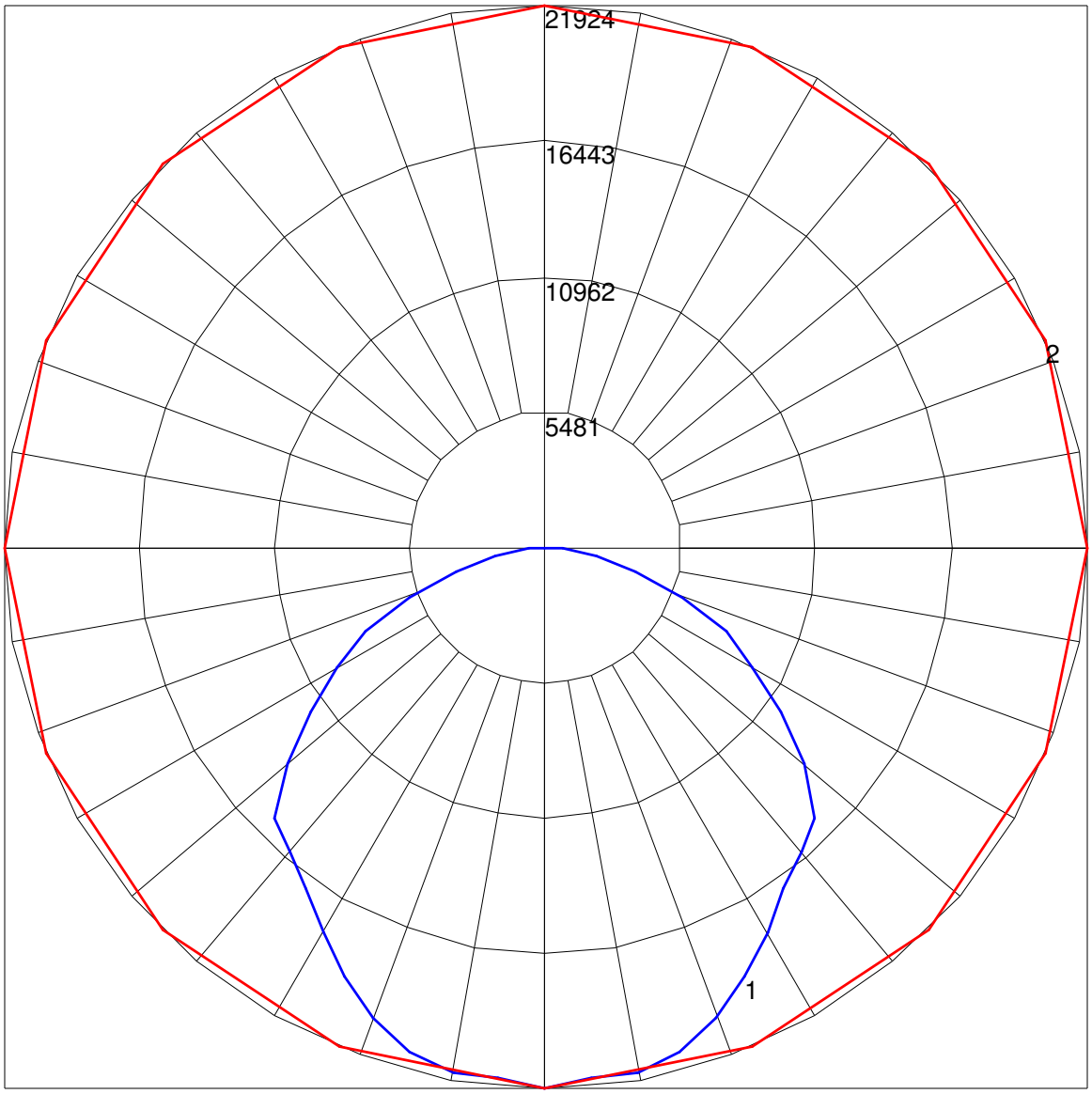
POLAR GRAPH



Maximum Candela = 21924.078 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.)

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