H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-930-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-L400-930-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	31750
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	119
Total Luminaire Watts	266
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	14749	14782	14944
55	13617	14210	10712
65	12808	10259	10445
75	9817	6543	6045
85	5385	3485	3963

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	11548.020	11548.020	11548.020	11548.020	11548.020
5	11381.856	11378.676	11381.856	11385.831	11389.011
10	11371.520	11363.570	11371.520	11385.831	11385.831
15	11133.802	11148.113	11179.915	11183.890	11179.915
20	10701.298	10711.633	10729.920	10744.230	10744.230
25	10089.114	10117.735	10139.202	10099.449	10099.449
30	9505.551	9538.148	9512.707	9505.551	9501.576
35	8882.236	8925.169	8896.547	8914.833	8918.013
40	8486.304	8540.367	8496.640	8522.081	8547.523
45	8161.926	8204.858	8180.212	8241.430	8270.052
50	7214.233	7282.607	7347.801	7397.888	7351.776
55	6112.302	6216.452	6378.641	5017.525	4808.429
60	5121.676	5222.647	5226.622	4138.206	4156.492
65	4235.997	4290.060	3393.250	3494.220	3454.468
70	3104.648	3248.552	2654.653	2323.120	1861.994
75	1988.406	1642.562	1325.339	1350.780	1224.368
80	1105.907	990.625	569.252	395.932	349.025
85	367.311	237.718	237.718	266.340	270.315
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4229.83	N.A.	13.30
0-30	8899.44	N.A.	28.00
0-40	14520.29	N.A.	45.70
0-60	26049.56	N.A.	82.00
0-80	31422.83	N.A.	99.00
0-90	31749.76	N.A.	100.00
10-90	30661.5	N.A.	96.60
20-40	10290.45	N.A.	32.40
20-50	16527.85	N.A.	52.10
40-70	15239.7	N.A.	48.00
60-80	5373.27	N.A.	16.90
70-80	1662.85	N.A.	5.20
80-90	326.92	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	31749.76	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1088.25
10-20	3141.58
20-30	4669.61
30-40	5620.85
40-50	6237.4
50-60	5291.88
60-70	3710.42
70-80	1662.85
80-90	326.92
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	21.5	23.1	21.9	23.5	23.8	20.0	21.6	20.3	21.9	22.2
	3H	23.3	24.8	23.7	25.1	25.5	21.4	22.9	21.8	23.2	23.6
	4H	23.8	25.2	24.2	25.5	25.9	21.8	23.2	22.2	23.5	23.9
	6H	24.1	25.4	24.5	25.8	26.2	21.9	23.2	22.3	23.6	23.9
	8H	24.2	25.4	24.7	25.8	26.2	21.9	23.1	22.4	23.5	23.9
	12H	24.3	25.4	24.7	25.8	26.2	22.0	23.1	22.4	23.5	23.9
4H	2H	21.9	23.3	22.3	23.6	24.0	20.6	22.0	21.0	22.4	22.7
	3H	23.9	25.1	24.3	25.5	25.9	22.3	23.5	22.7	23.9	24.3
	4H	24.5	25.5	24.9	25.9	26.4	22.8	23.8	23.2	24.2	24.7
	6H	24.9	25.8	25.4	26.3	26.7	22.9	23.8	23.4	24.3	24.7
	8H	25.1	25.9	25.5	26.3	26.8	23.0	23.8	23.4	24.2	24.7
	12H	25.1	25.9	25.6	26.4	26.8	23.0	23.7	23.5	24.2	24.7
8H	4H	24.6	25.4	25.1	25.9	26.3	23.0	23.8	23.5	24.3	24.8
	6H	25.1	25.8	25.6	26.3	26.8	23.2	23.9	23.7	24.4	24.8
	8H	25.3	25.9	25.8	26.4	26.9	23.2	23.8	23.7	24.4	24.8
	12H	25.4	25.9	25.9	26.4	27.0	23.3	23.9	23.8	24.3	24.9
12H	4H	24.6	25.3	25.1	25.8	26.3	23.0	23.8	23.5	24.3	24.7
	6H	25.1	25.7	25.6	26.2	26.7	23.2	23.8	23.7	24.3	24.8
	8H	25.3	25.8	25.8	26.3	26.9	23.3	23.8	23.8	24.3	24.9

Maximum UGR = 27.0

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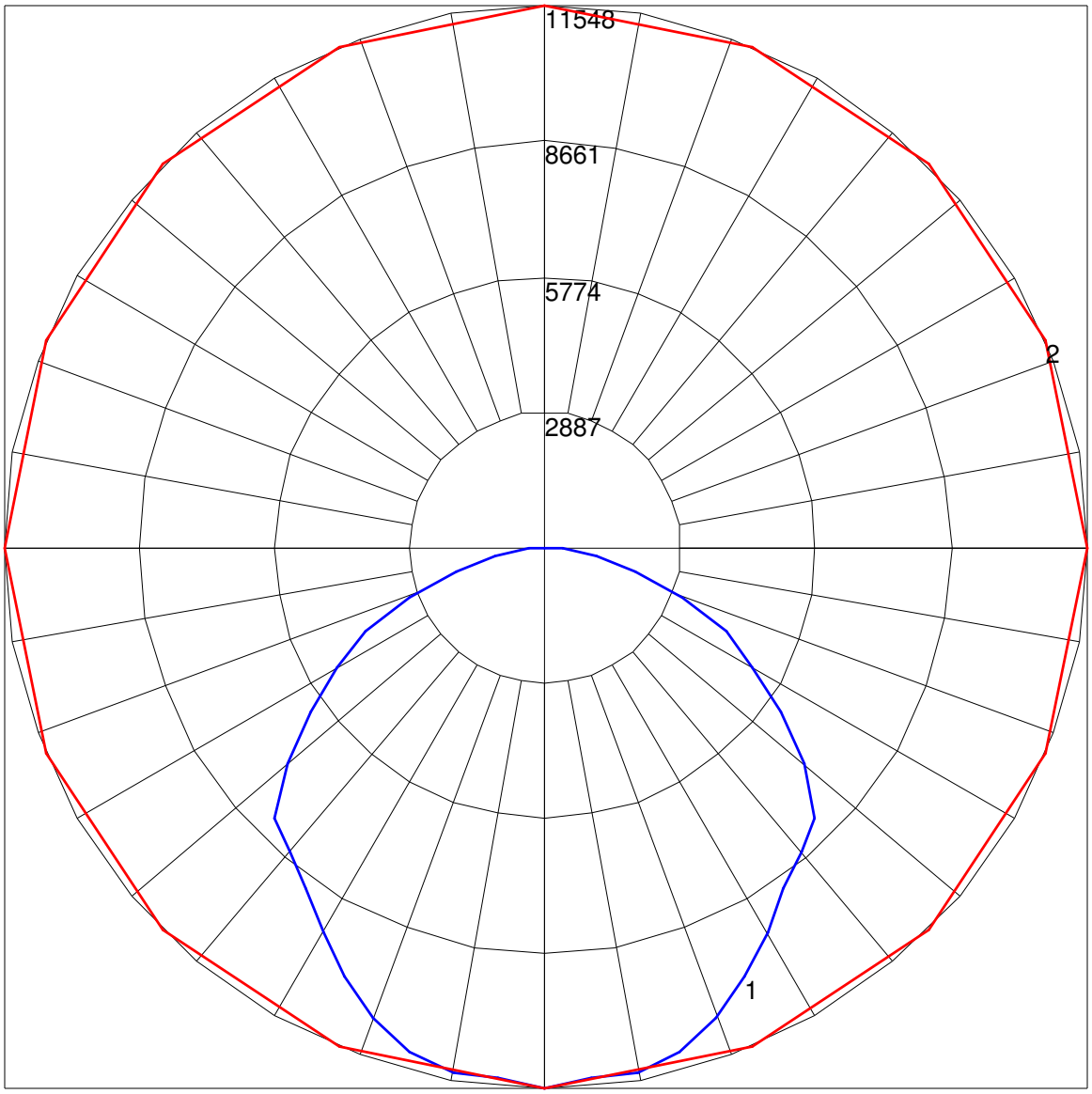
POLAR GRAPH



Maximum Candela = 11548.02 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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