H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-940-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-L400-940-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	33357
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	125
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	15496	15531	15701
55	14306	14930	11254
65	13456	10779	10973
75	10314	6874	6351
85	5658	3662	4164

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	12132.729	12132.729	12132.729	12132.729	12132.729
5	11958.152	11954.811	11958.152	11962.328	11965.669
10	11947.293	11938.940	11947.293	11962.328	11962.328
15	11697.538	11712.574	11745.986	11750.162	11745.986
20	11243.135	11253.994	11273.206	11288.241	11288.241
25	10599.954	10630.025	10652.578	10610.813	10610.813
30	9986.844	10021.092	9994.362	9986.844	9982.668
35	9331.969	9377.075	9347.005	9366.217	9369.558
40	8915.990	8972.790	8926.849	8953.578	8980.308
45	8575.188	8620.294	8594.400	8658.718	8688.788
50	7579.510	7651.346	7719.841	7772.465	7724.017
55	6421.785	6531.209	6701.610	5271.577	5051.893
60	5381.001	5487.084	5491.261	4347.735	4366.947
65	4450.477	4507.278	3565.060	3671.143	3629.378
70	3261.846	3413.035	2789.066	2440.746	1956.272
75	2089.085	1725.729	1392.445	1419.174	1286.362
80	1161.902	1040.784	598.075	415.979	366.697
85	385.909	249.755	249.755	279.825	284.002
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4444.00	N.A.	13.30
0-30	9350.05	N.A.	28.00
0-40	15255.49	N.A.	45.70
0-60	27368.53	N.A.	82.00
0-80	33013.86	N.A.	99.00
0-90	33357.34	N.A.	100.00
10-90	32213.98	N.A.	96.60
20-40	10811.49	N.A.	32.40
20-50	17364.7	N.A.	52.10
40-70	16011.33	N.A.	48.00
60-80	5645.34	N.A.	16.90
70-80	1747.05	N.A.	5.20
80-90	343.48	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	33357.34	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1143.35
10-20	3300.65
20-30	4906.04
30-40	5905.44
40-50	6553.21
50-60	5559.82
60-70	3898.29
70-80	1747.05
80-90	343.48
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	21.7	23.3	22.1	23.7	24.0	20.2	21.8	20.5	22.1	22.4
	3H	23.5	25.0	23.9	25.3	25.7	21.6	23.1	22.0	23.4	23.8
	4H	24.0	25.4	24.4	25.7	26.1	22.0	23.4	22.4	23.7	24.1
	6H	24.3	25.6	24.7	26.0	26.4	22.1	23.4	22.5	23.8	24.1
	8H	24.4	25.6	24.9	26.0	26.4	22.1	23.3	22.6	23.7	24.1
	12H	24.5	25.6	24.9	26.0	26.4	22.2	23.3	22.6	23.7	24.1
4H	2H	22.1	23.5	22.5	23.8	24.2	20.8	22.2	21.2	22.6	22.9
	3H	24.1	25.3	24.5	25.7	26.1	22.5	23.7	22.9	24.1	24.5
	4H	24.7	25.7	25.1	26.1	26.6	23.0	24.0	23.4	24.4	24.9
	6H	25.1	26.0	25.6	26.5	26.9	23.1	24.0	23.6	24.5	24.9
	8H	25.3	26.1	25.7	26.5	27.0	23.2	24.0	23.6	24.4	24.9
	12H	25.3	26.1	25.8	26.6	27.0	23.2	23.9	23.7	24.4	24.9
8H	4H	24.8	25.6	25.3	26.1	26.5	23.2	24.0	23.7	24.5	25.0
	6H	25.3	26.0	25.8	26.5	27.0	23.4	24.1	23.9	24.6	25.0
	8H	25.5	26.1	26.0	26.6	27.1	23.4	24.0	23.9	24.6	25.0
	12H	25.6	26.1	26.1	26.6	27.2	23.5	24.1	24.0	24.5	25.1
12H	4H	24.8	25.5	25.3	26.0	26.5	23.2	24.0	23.7	24.5	24.9
	6H	25.3	25.9	25.8	26.4	26.9	23.4	24.0	23.9	24.5	25.0
	8H	25.5	26.0	26.0	26.5	27.1	23.5	24.0	24.0	24.5	25.1

Maximum UGR = 27.2

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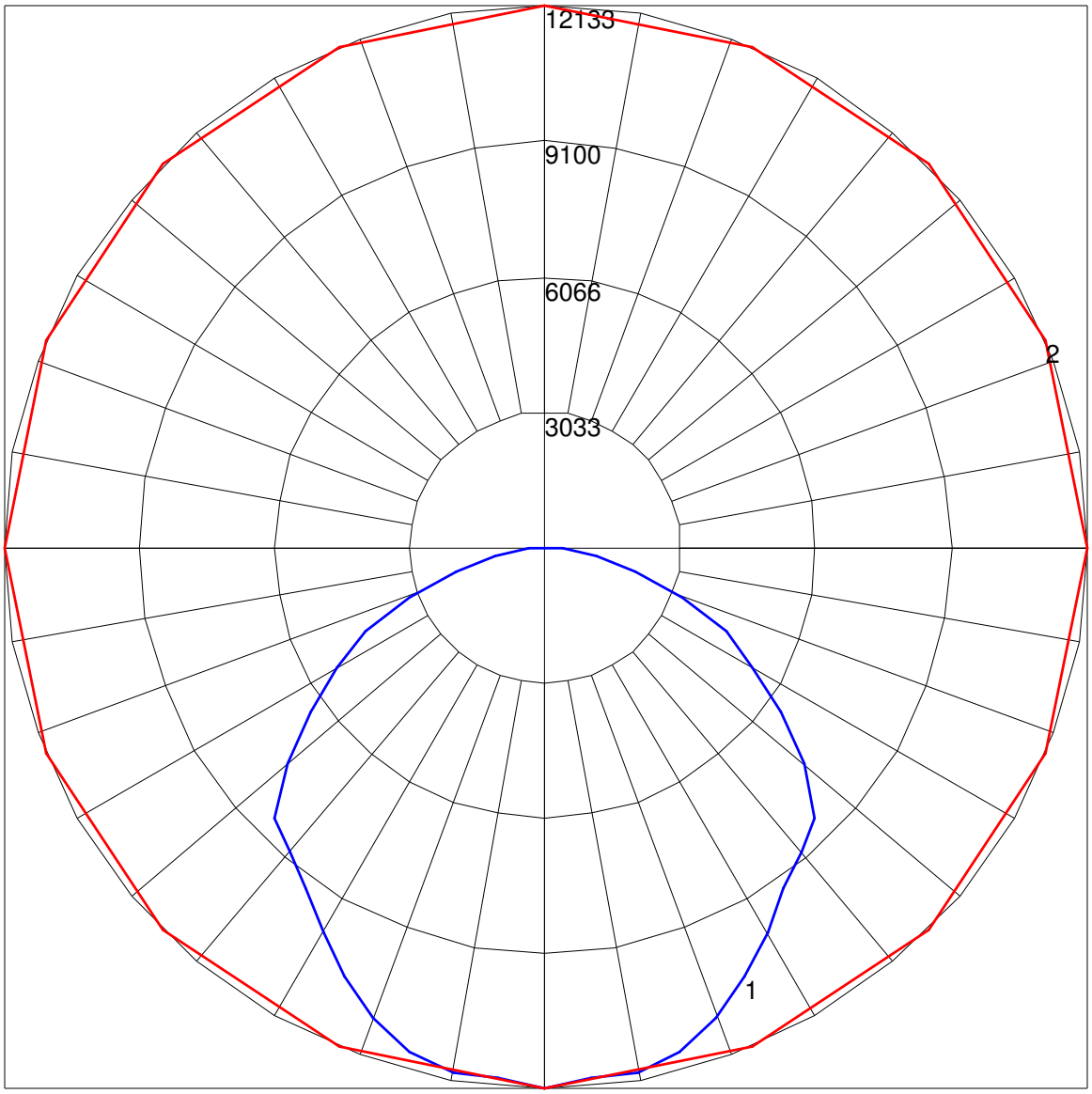
POLAR GRAPH



Maximum Candela = 12132.729 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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