H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-950-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] 2023-07-18
[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-L400-950-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	34563
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	130
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	16056	16092	16269
55	14823	15469	11661
65	13942	11169	11370
75	10687	7123	6580
85	5862	3794	4314

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	12571.262	12571.262	12571.262	12571.262	12571.262
5	12390.375	12386.913	12390.375	12394.702	12398.164
10	12379.123	12370.468	12379.123	12394.702	12394.702
15	12120.341	12135.920	12170.540	12174.867	12170.540
20	11649.514	11660.766	11680.672	11696.251	11696.251
25	10983.086	11014.243	11037.612	10994.337	10994.337
30	10347.815	10383.300	10355.604	10347.815	10343.488
35	9669.270	9716.006	9684.849	9704.755	9708.217
40	9238.255	9297.109	9249.506	9277.202	9304.898
45	8885.135	8931.871	8905.041	8971.684	9002.841
50	7853.469	7927.901	7998.871	8053.397	8003.199
55	6653.898	6767.277	6943.837	5462.116	5234.492
60	5575.496	5685.413	5689.740	4504.883	4524.789
65	4611.338	4670.192	3693.917	3803.835	3760.560
70	3379.744	3536.398	2889.876	2528.966	2026.981
75	2164.594	1788.105	1442.774	1470.470	1332.857
80	1203.899	1078.402	619.692	431.015	379.951
85	399.857	258.782	258.782	289.940	294.267
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4604.63	N.A.	13.30
0-30	9688.00	N.A.	28.00
0-40	15806.89	N.A.	45.70
0-60	28357.75	N.A.	82.00
0-80	34207.13	N.A.	99.00
0-90	34563.03	N.A.	100.00
10-90	33378.35	N.A.	96.60
20-40	11202.26	N.A.	32.40
20-50	17992.34	N.A.	52.10
40-70	16590.05	N.A.	48.00
60-80	5849.38	N.A.	16.90
70-80	1810.19	N.A.	5.20
80-90	355.89	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	34563.03	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1184.68
10-20	3419.95
20-30	5083.37
30-40	6118.89
40-50	6790.08
50-60	5760.78
60-70	4039.19
70-80	1810.19
80-90	355.89
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

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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	21.8	23.4	22.2	23.8	24.1	20.3	21.9	20.6	22.2	22.5
	3H	23.6	25.1	24.0	25.4	25.8	21.7	23.2	22.1	23.5	23.9
	4H	24.1	25.5	24.5	25.8	26.2	22.1	23.5	22.5	23.8	24.2
	6H	24.4	25.7	24.8	26.1	26.5	22.2	23.5	22.6	23.9	24.2
	8H	24.5	25.7	25.0	26.1	26.5	22.2	23.4	22.7	23.8	24.2
	12H	24.6	25.7	25.0	26.1	26.5	22.3	23.4	22.7	23.8	24.2
4H	2H	22.2	23.6	22.6	23.9	24.3	20.9	22.3	21.3	22.7	23.0
	3H	24.2	25.4	24.6	25.8	26.2	22.6	23.8	23.0	24.2	24.6
	4H	24.8	25.8	25.2	26.2	26.7	23.1	24.1	23.5	24.5	25.0
	6H	25.2	26.1	25.7	26.6	27.0	23.2	24.1	23.7	24.6	25.0
	8H	25.4	26.2	25.8	26.6	27.1	23.3	24.1	23.7	24.5	25.0
	12H	25.4	26.2	25.9	26.7	27.1	23.3	24.0	23.8	24.5	25.0
8H	4H	24.9	25.7	25.4	26.2	26.6	23.3	24.1	23.8	24.6	25.1
	6H	25.4	26.1	25.9	26.6	27.1	23.5	24.2	24.0	24.7	25.1
	8H	25.6	26.2	26.1	26.7	27.2	23.5	24.1	24.0	24.7	25.1
	12H	25.7	26.2	26.2	26.7	27.3	23.6	24.2	24.1	24.6	25.2
12H	4H	24.9	25.6	25.4	26.1	26.6	23.3	24.1	23.8	24.6	25.0
	6H	25.4	26.0	25.9	26.5	27.0	23.5	24.1	24.0	24.6	25.1
	8H	25.6	26.1	26.1	26.6	27.2	23.6	24.1	24.1	24.6	25.2

Maximum UGR = 27.3

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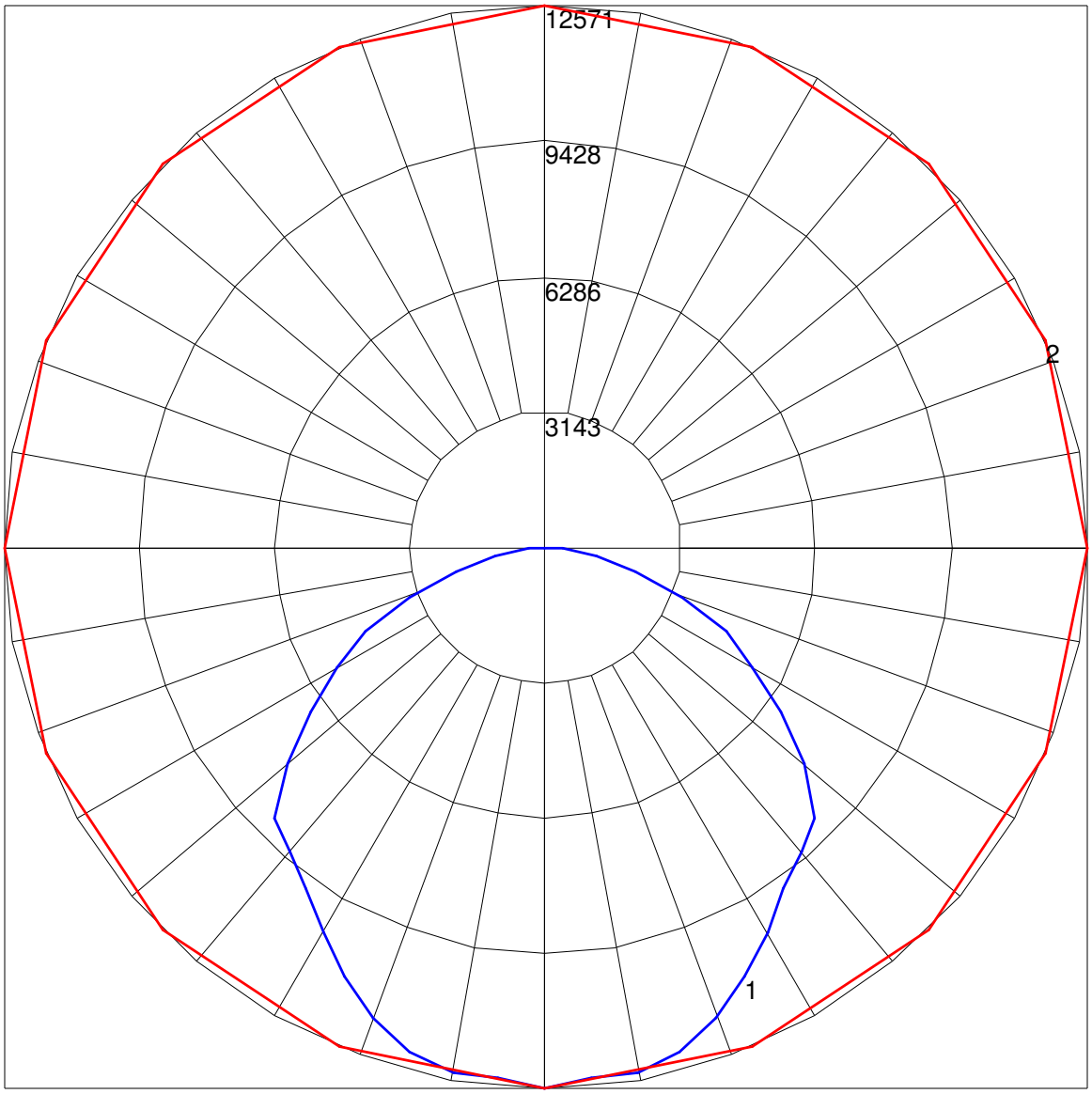
POLAR GRAPH



Maximum Candela = 12571.262 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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