H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L600-930-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-L600-930-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	47619
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	119
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	22121	22171	22414
55	20423	21313	16066
65	19209	15387	15665
75	14723	9814	9066
85	8077	5227	5944

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	17320.017	17320.017	17320.017	17320.017	17320.017
5	17070.799	17066.029	17070.799	17076.761	17081.531
10	17055.298	17043.373	17055.298	17076.761	17076.761
15	16698.762	16720.225	16767.922	16773.885	16767.922
20	16050.081	16065.582	16093.008	16114.472	16114.472
25	15131.911	15174.839	15207.034	15147.413	15147.413
30	14256.669	14305.559	14267.401	14256.669	14250.707
35	13321.806	13386.197	13343.269	13370.695	13375.465
40	12727.976	12809.061	12743.478	12781.636	12819.793
45	12241.466	12305.857	12268.892	12360.709	12403.636
50	10820.092	10922.640	11020.420	11095.542	11026.382
55	9167.386	9323.594	9566.850	7525.413	7211.805
60	7681.621	7833.059	7839.022	6206.588	6234.014
65	6353.256	6434.341	5089.283	5240.721	5181.100
70	4656.431	4872.261	3981.517	3484.275	2792.666
75	2982.262	2463.556	1987.777	2025.935	1836.339
80	1658.667	1485.765	853.778	593.829	523.476
85	550.902	356.536	356.536	399.463	405.426
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	6344.01	N.A.	13.30
0-30	13347.61	N.A.	28.00
0-40	21777.9	N.A.	45.70
0-60	39069.8	N.A.	82.00
0-80	47128.77	N.A.	99.00
0-90	47619.1	N.A.	100.00
10-90	45986.91	N.A.	96.60
20-40	15433.88	N.A.	32.40
20-50	24788.89	N.A.	52.10
40-70	22856.88	N.A.	48.00
60-80	8058.97	N.A.	16.90
70-80	2493.99	N.A.	5.20
80-90	490.33	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	47619.1	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1632.19
10-20	4711.83
20-30	7003.6
30-40	8430.29
40-50	9355.01
50-60	7936.89
60-70	5564.99
70-80	2493.99
80-90	490.33
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	22.9	24.5	23.3	24.9	25.2	21.4	23.0	21.7	23.3	23.6
	3H	24.7	26.2	25.1	26.5	26.9	22.8	24.3	23.2	24.6	25.0
	4H	25.2	26.6	25.6	26.9	27.3	23.2	24.6	23.6	24.9	25.3
	6H	25.5	26.8	25.9	27.2	27.6	23.3	24.6	23.7	25.0	25.3
	8H	25.6	26.8	26.1	27.2	27.6	23.3	24.5	23.8	24.9	25.3
	12H	25.7	26.8	26.1	27.2	27.6	23.4	24.5	23.8	24.9	25.3
4H	2H	23.3	24.7	23.7	25.0	25.4	22.0	23.4	22.4	23.8	24.1
	3H	25.3	26.5	25.7	26.9	27.3	23.7	24.9	24.1	25.3	25.7
	4H	25.9	26.9	26.3	27.3	27.8	24.2	25.2	24.6	25.6	26.1
	6H	26.3	27.2	26.8	27.7	28.1	24.3	25.2	24.8	25.7	26.1
	8H	26.5	27.3	26.9	27.7	28.2	24.4	25.2	24.8	25.6	26.1
	12H	26.5	27.3	27.0	27.8	28.2	24.4	25.1	24.9	25.6	26.1
8H	4H	26.0	26.8	26.5	27.3	27.7	24.4	25.2	24.9	25.7	26.2
	6H	26.5	27.2	27.0	27.7	28.2	24.6	25.3	25.1	25.8	26.2
	8H	26.7	27.3	27.2	27.8	28.3	24.6	25.2	25.1	25.8	26.2
	12H	26.8	27.3	27.3	27.8	28.4	24.7	25.3	25.2	25.7	26.3
12H	4H	26.0	26.7	26.5	27.2	27.7	24.4	25.2	24.9	25.7	26.1
	6H	26.5	27.1	27.0	27.6	28.1	24.6	25.2	25.1	25.7	26.2
	8H	26.7	27.2	27.2	27.7	28.3	24.7	25.2	25.2	25.7	26.3

Maximum UGR = 28.4

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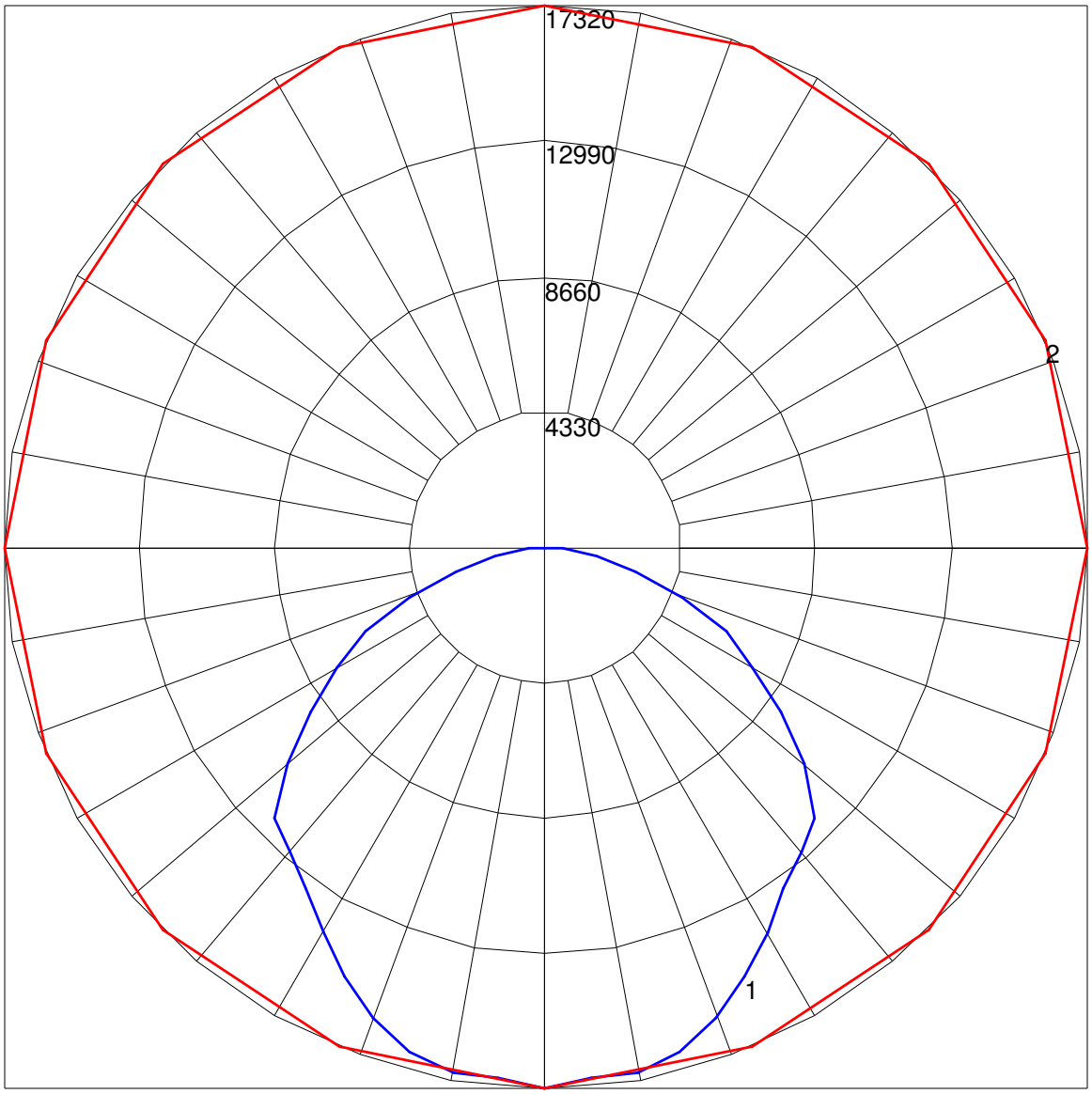
POLAR GRAPH



Maximum Candela = 17320.017 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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