H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L200-950-SCHA118-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19725.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2023-07-17
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 48 INCH LOW PROFILE LED HIGHBAY LUMINAIRE
[MORE] WHITE REFLECTOR w/.118"THK CLEAR ACRYLIC LENS
[MORE] 0-10V UNIVERSAL VOLTAGE 122-277V DRIVERS
[LUMCAT] GL-4-L200-950-SCHA118-DIM-UNV_
[LAMPCAT] 22 INCH HLM LINEAR LED ARRAYS
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Commercial, Industrial, Manufacturing, High Bay
[_SEARCH_MOUNTING] Cable, Pendant, Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	15986
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	133
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.34
Spacing Criterion (90-270)	1.32
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.83 ft
Luminous Width (90-270)	1.00 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	17146	16795	12820
55	16268	11926	12082
65	13639	10577	10342
75	8855	5959	4400
85	1764	1801	1507

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	5990.524	5990.524	5990.524	5990.524	5990.524
5	6057.314	5988.240	5944.856	5922.592	5928.301
10	6004.224	5935.151	5898.617	5874.070	5882.062
15	5900.900	5851.236	5814.130	5773.600	5788.442
20	5770.746	5699.389	5669.705	5633.741	5656.004
25	5596.636	5505.299	5497.878	5481.324	5484.749
30	5360.303	5276.388	5280.954	5255.837	5270.679
35	5057.751	4958.423	5008.087	4996.099	4999.524
40	4719.236	4607.920	4631.325	4691.835	4682.701
45	4321.352	4217.457	4232.870	3912.051	3231.024
50	3845.261	3784.751	3792.743	2794.322	2821.152
55	3325.785	3293.247	2438.110	2471.790	2470.078
60	2748.083	2720.111	2037.943	2077.331	2077.331
65	2054.497	2087.607	1593.249	1648.051	1557.856
70	1400.871	1109.737	1136.567	1045.801	826.594
75	816.890	641.638	549.731	504.063	405.876
80	324.815	282.572	206.649	168.972	156.984
85	54.802	49.093	55.944	56.514	46.810
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2211.48	N.A.	13.80
0-30	4749.91	N.A.	29.70
0-40	7874.71	N.A.	49.30
0-60	13516.14	N.A.	84.60
0-80	15895.49	N.A.	99.40
0-90	15985.53	N.A.	100.00
10-90	15417.84	N.A.	96.40
20-40	5663.23	N.A.	35.40
20-50	8780.33	N.A.	54.90
40-70	7367.68	N.A.	46.10
60-80	2379.35	N.A.	14.90
70-80	653.10	N.A.	4.10
80-90	90.04	N.A.	0.60
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	15985.53	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	567.69
10-20	1643.79
20-30	2538.43
30-40	3124.8
40-50	3117.1
50-60	2524.33
60-70	1726.25
70-80	653.10
80-90	90.04
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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	53
5	78	65	57	50	76	64	56	50	62	55	50	60	54	49	58	53	49	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	48	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	44	39	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

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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	22.3	23.8	22.6	24.1	24.5	20.3	21.9	20.7	22.2	22.5
	3H	23.5	24.9	23.8	25.2	25.6	21.5	22.9	21.9	23.3	23.6
	4H	23.8	25.1	24.2	25.5	25.9	21.7	23.1	22.1	23.4	23.8
	6H	24.0	25.2	24.4	25.5	25.9	21.8	23.0	22.2	23.4	23.8
	8H	24.0	25.1	24.4	25.5	25.9	21.8	22.9	22.2	23.3	23.7
	12H	24.0	25.1	24.4	25.4	25.9	21.8	22.9	22.2	23.3	23.7
4H	2H	22.5	23.8	22.9	24.2	24.6	20.9	22.2	21.3	22.5	22.9
	3H	23.9	25.0	24.3	25.4	25.8	22.3	23.4	22.7	23.8	24.2
	4H	24.3	25.3	24.7	25.7	26.1	22.6	23.5	23.0	24.0	24.4
	6H	24.5	25.3	25.0	25.8	26.3	22.7	23.5	23.1	23.9	24.4
	8H	24.5	25.3	25.0	25.8	26.2	22.6	23.4	23.1	23.9	24.3
	12H	24.5	25.2	25.0	25.7	26.2	22.6	23.3	23.1	23.8	24.3
8H	4H	24.3	25.1	24.8	25.6	26.0	22.7	23.5	23.2	23.9	24.4
	6H	24.6	25.2	25.1	25.7	26.2	22.8	23.5	23.3	23.9	24.4
	8H	24.6	25.2	25.1	25.7	26.2	22.8	23.4	23.3	23.9	24.4
	12H	24.6	25.1	25.1	25.6	26.2	22.8	23.3	23.3	23.8	24.4
12H	4H	24.3	25.0	24.8	25.5	26.0	22.7	23.4	23.2	23.9	24.3
	6H	24.5	25.1	25.1	25.6	26.1	22.8	23.4	23.3	23.8	24.4
	8H	24.6	25.1	25.1	25.6	26.2	22.8	23.3	23.3	23.8	24.4

Maximum UGR = 26.3

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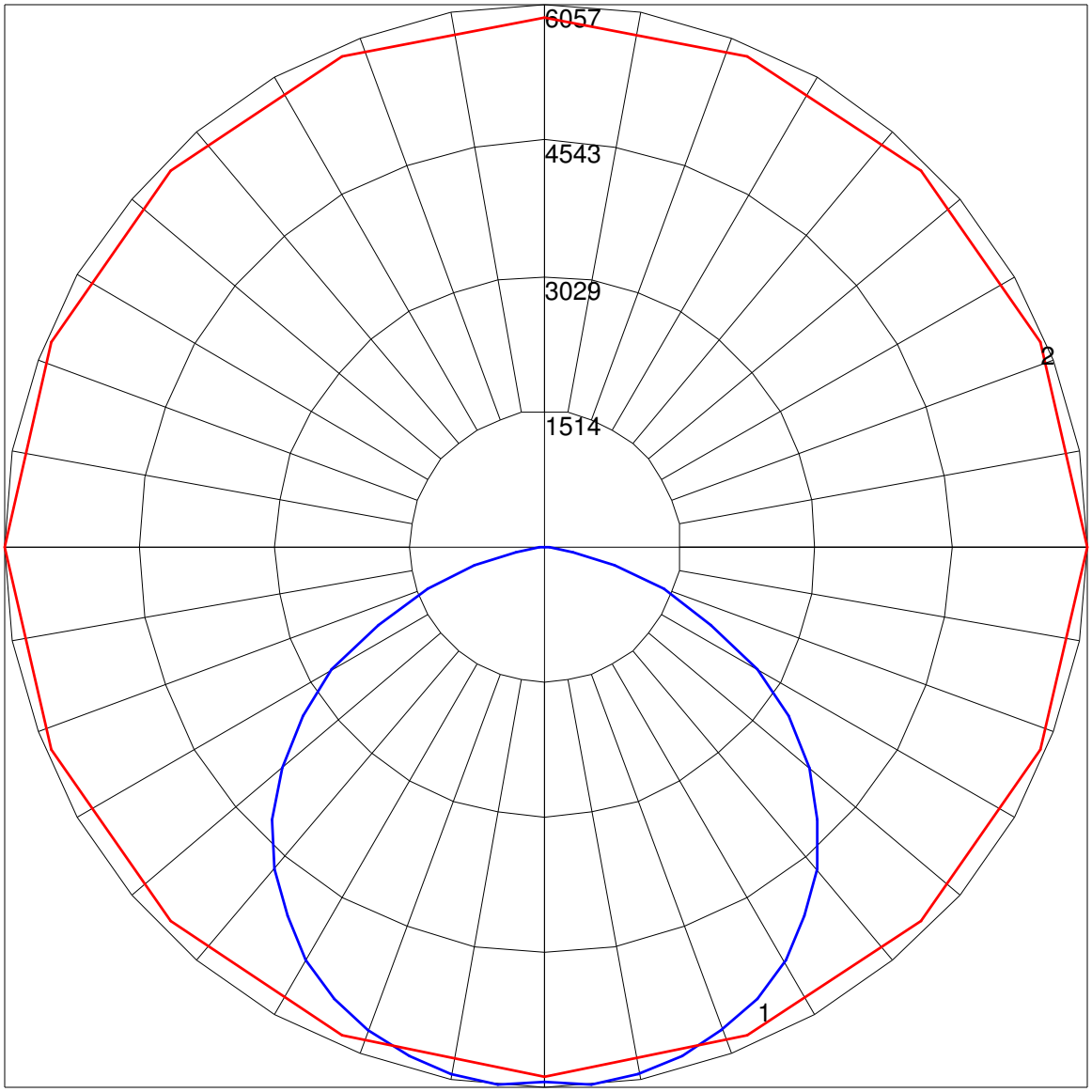
POLAR GRAPH



Maximum Candela = 6057.314 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

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