H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L150-930-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-L150-930-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	10997
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	115
Total Luminaire Watts	96
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	11795	11554	8819
55	11191	8204	8312
65	9383	7276	7115
75	6092	4099	3027
85	1214	1239	1037

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	4121.100	4121.100	4121.100	4121.100	4121.100
5	4167.047	4119.529	4089.683	4074.367	4078.294
10	4130.525	4083.007	4057.873	4040.987	4046.485
15	4059.444	4025.278	3999.752	3971.870	3982.080
20	3969.906	3920.818	3900.397	3875.656	3890.972
25	3850.130	3787.296	3782.191	3770.802	3773.159
30	3687.548	3629.819	3632.961	3615.682	3625.892
35	3479.411	3411.080	3445.246	3436.999	3439.355
40	3246.534	3169.956	3186.057	3227.684	3221.401
45	2972.815	2901.342	2911.945	2691.242	2222.739
50	2645.295	2603.668	2609.166	1922.316	1940.773
55	2287.929	2265.545	1677.265	1700.435	1699.257
60	1890.506	1871.264	1401.975	1429.072	1429.072
65	1413.364	1436.141	1096.054	1133.754	1071.706
70	963.711	763.428	781.886	719.445	568.644
75	561.968	441.406	378.180	346.763	279.217
80	223.452	194.391	142.161	116.242	107.995
85	37.700	33.773	38.486	38.878	32.202
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1521.36	N.A.	13.80
0-30	3267.64	N.A.	29.70
0-40	5417.3	N.A.	49.30
0-60	9298.25	N.A.	84.60
0-80	10935.09	N.A.	99.40
0-90	10997.03	N.A.	100.00
10-90	10606.49	N.A.	96.40
20-40	3895.94	N.A.	35.40
20-50	6040.31	N.A.	54.90
40-70	5068.5	N.A.	46.10
60-80	1636.84	N.A.	14.90
70-80	449.29	N.A.	4.10
80-90	61.94	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	10997.03	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	390.54
10-20	1130.82
20-30	1746.28
30-40	2149.66
40-50	2144.37
50-60	1736.58
60-70	1187.55
70-80	449.29
80-90	61.94
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	21.0	22.5	21.3	22.8	23.2	19.0	20.6	19.4	20.9	21.2
	3H	22.2	23.6	22.5	23.9	24.3	20.2	21.6	20.6	22.0	22.3
	4H	22.5	23.8	22.9	24.2	24.6	20.4	21.8	20.8	22.1	22.5
	6H	22.7	23.9	23.1	24.2	24.6	20.5	21.7	20.9	22.1	22.5
	8H	22.7	23.8	23.1	24.2	24.6	20.5	21.6	20.9	22.0	22.4
	12H	22.7	23.8	23.1	24.1	24.6	20.5	21.6	20.9	22.0	22.4
4H	2H	21.2	22.5	21.6	22.9	23.3	19.6	20.9	20.0	21.2	21.6
	3H	22.6	23.7	23.0	24.1	24.5	21.0	22.1	21.4	22.5	22.9
	4H	23.0	24.0	23.4	24.4	24.8	21.3	22.2	21.7	22.7	23.1
	6H	23.2	24.0	23.7	24.5	25.0	21.4	22.2	21.8	22.6	23.1
	8H	23.2	24.0	23.7	24.5	24.9	21.3	22.1	21.8	22.6	23.0
	12H	23.2	23.9	23.7	24.4	24.9	21.3	22.0	21.8	22.5	23.0
8H	4H	23.0	23.8	23.5	24.3	24.7	21.4	22.2	21.9	22.6	23.1
	6H	23.3	23.9	23.8	24.4	24.9	21.5	22.2	22.0	22.6	23.1
	8H	23.3	23.9	23.8	24.4	24.9	21.5	22.1	22.0	22.6	23.1
	12H	23.3	23.8	23.8	24.3	24.9	21.5	22.0	22.0	22.5	23.1
12H	4H	23.0	23.7	23.5	24.2	24.7	21.4	22.1	21.9	22.6	23.0
	6H	23.2	23.8	23.8	24.3	24.8	21.5	22.1	22.0	22.5	23.1
	8H	23.3	23.8	23.8	24.3	24.9	21.5	22.0	22.0	22.5	23.1

Maximum UGR = 25.0

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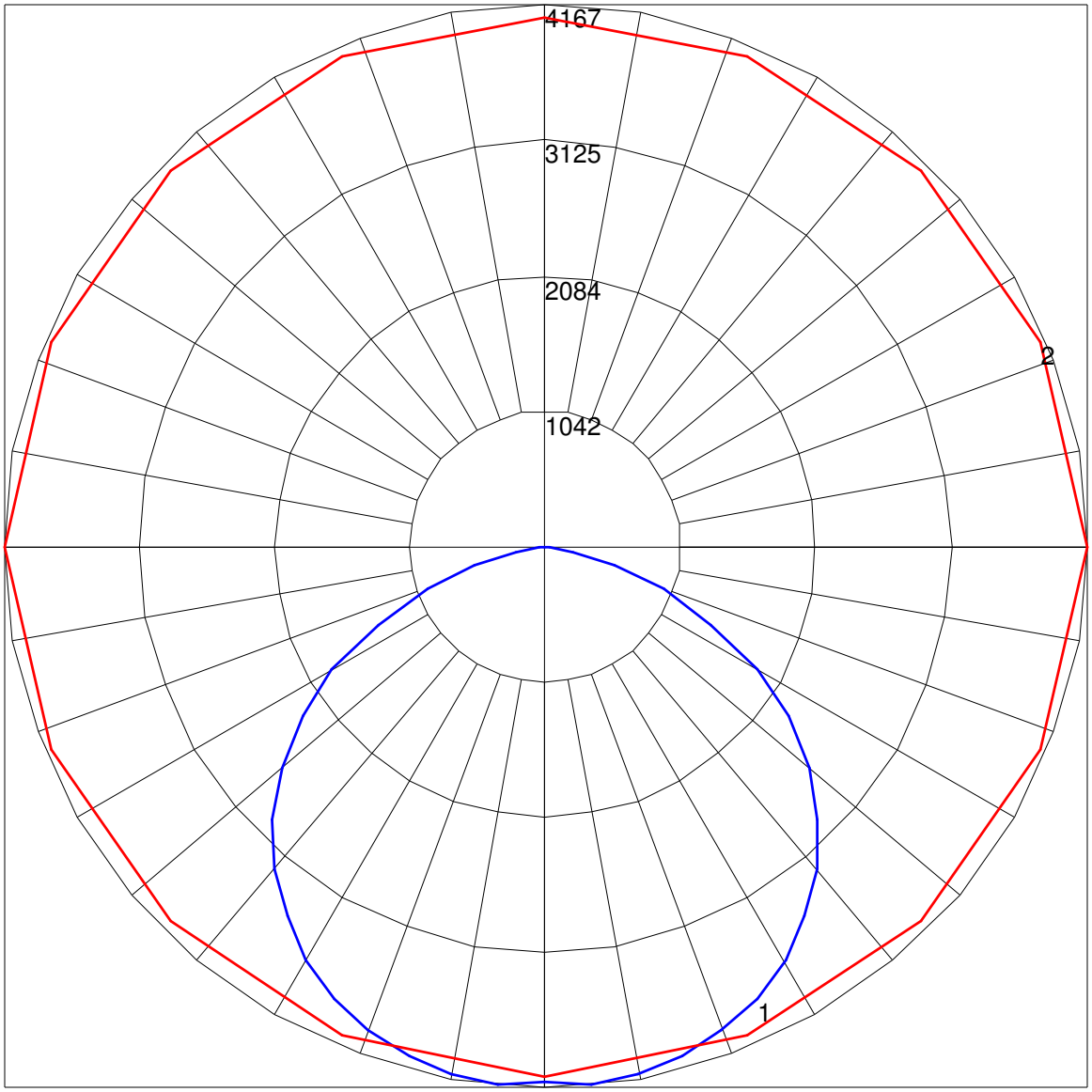
POLAR GRAPH



Maximum Candela = 4167.047 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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