H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GP4-L300-840-M-(L230)-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]GEN FROM BALLABS TEST NO. 19518.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 01-18-2024
[MANUFAC] WILLIAMS INDOOR
[MANUFAC] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 4-192 LED 22"ARRAYS EACH ON ALUM HEATSINK 24x19"HIGHBAY
[MORE] LUMINAIRE w/SPEC MEDIUM DOWNLIGHT REFL & CENTER DRIVER
[MORE] HOUSING 4 ADVANCE #XI095C275V054DNF1 - 18K RESISTORS
[LUMCAT] GP4-L300-840-M-(L230)-DIM-UNV
[LAMPCAT] D5638D192C2560A8N50JRB
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Industrial, Manufacturing, Warehouse, High Bay
[_SEARCH_MOUNTING] Cable, Pendant, Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	21356
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	138
Total Luminaire Watts	155
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.32
Spacing Criterion (90-270)	1.40
Spacing Criterion (Diagonal)	1.44
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.88 ft
Luminous Width (90-270)	1.58 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	32931	34530	17961
55	32067	13112	1845
65	30133	1954	225
75	24387	270	111
85	10892	185	103

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	9085.693	9085.693	9085.693	9085.693	9085.693
5	9080.256	9100.030	9117.332	9119.804	9144.027
10	8986.823	9068.885	9195.934	9279.974	9317.050
15	8836.540	8999.182	9269.098	9472.277	9537.531
20	8608.644	8884.987	9315.073	9610.201	9675.455
25	8326.369	8705.537	9294.310	9602.786	9687.320
30	7979.334	8489.505	9135.129	9389.226	9370.934
35	7545.293	8172.626	8857.797	8478.629	8224.532
40	7006.944	7773.189	8094.518	6709.344	6296.560
45	6427.069	7276.366	6739.005	4247.966	3505.449
50	5810.612	6713.299	4733.419	1511.728	658.477
55	5076.500	5866.968	2075.784	332.699	292.162
60	4280.593	4596.484	362.854	262.995	209.605
65	3514.842	2699.161	227.896	85.523	26.201
70	2678.893	539.832	64.266	14.336	10.876
75	1742.096	170.551	19.280	10.876	7.910
80	957.065	47.952	13.842	6.427	4.944
85	262.007	24.223	4.449	1.483	2.472
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3485.74	N.A.	16.30
0-30	7701.92	N.A.	36.10
0-40	12857.19	N.A.	60.20
0-60	19817.77	N.A.	92.80
0-80	21296.64	N.A.	99.70
0-90	21356.1	N.A.	100.00
10-90	20484.38	N.A.	95.90
20-40	9371.45	N.A.	43.90
20-50	13791.2	N.A.	64.60
40-70	8132.17	N.A.	38.10
60-80	1478.88	N.A.	6.90
70-80	307.29	N.A.	1.40
80-90	59.46	N.A.	0.30
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	21356.1	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	871.72
10-20	2614.02
20-30	4216.18
30-40	5155.27
40-50	4419.75
50-60	2540.83
60-70	1171.59
70-80	307.29
80-90	59.46
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	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	80	78
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68
4	88	78	70	64	86	77	70	64	74	68	63	72	67	62	70	65	62	60
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53
6	76	64	56	50	74	63	55	50	61	55	50	60	54	49	58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	53	46	40	64	53	45	40	52	45	40	50	44	40	49	44	40	38
9	62	49	42	37	60	49	41	36	48	41	36	47	40	36	46	40	36	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31

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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	26.0	27.4	26.4	27.8	28.1	10.6	10.6	10.6	10.6	10.6
	3H	26.8	28.1	27.2	28.4	28.8	10.6	10.6	10.6	10.6	10.6
	4H	27.1	28.3	27.5	28.6	29.0	10.6	10.6	10.6	10.6	10.6
	6H	27.4	28.4	27.8	28.8	29.2	10.6	10.6	10.6	10.6	10.6
	8H	27.4	28.5	27.9	28.9	29.3	10.6	10.6	10.6	10.6	10.6
	12H	27.5	28.4	27.9	28.8	29.3	10.6	10.6	10.6	10.6	10.6
4H	2H	25.8	27.0	26.2	27.3	27.7	10.6	10.6	10.6	10.6	10.6
	3H	26.6	27.6	27.1	28.0	28.4	10.6	10.6	10.6	10.6	10.6
	4H	26.9	27.8	27.4	28.2	28.6	10.6	10.6	10.6	10.6	10.6
	6H	27.2	27.9	27.7	28.4	28.8	10.6	10.6	10.6	10.6	10.6
	8H	27.3	28.0	27.8	28.4	28.9	10.6	10.6	10.6	10.6	10.6
	12H	27.4	27.9	27.8	28.4	28.9	10.6	10.6	10.6	10.6	10.6
8H	4H	26.8	27.5	27.3	27.9	28.4	10.6	10.6	10.6	10.6	10.6
	6H	27.1	27.6	27.6	28.1	28.6	10.6	10.6	10.6	10.6	10.6
	8H	27.1	27.6	27.7	28.2	28.7	10.6	10.6	10.6	10.6	10.6
	12H	27.2	27.6	27.7	28.1	28.7	10.6	10.6	10.6	10.6	10.6
12H	4H	26.8	27.4	27.3	27.8	28.3	10.6	10.6	10.6	10.6	10.6
	6H	27.0	27.5	27.5	28.0	28.5	10.6	10.6	10.6	10.6	10.6
	8H	27.1	27.6	27.6	28.0	28.6	10.6	10.6	10.6	10.6	10.6

Maximum UGR = 29.3

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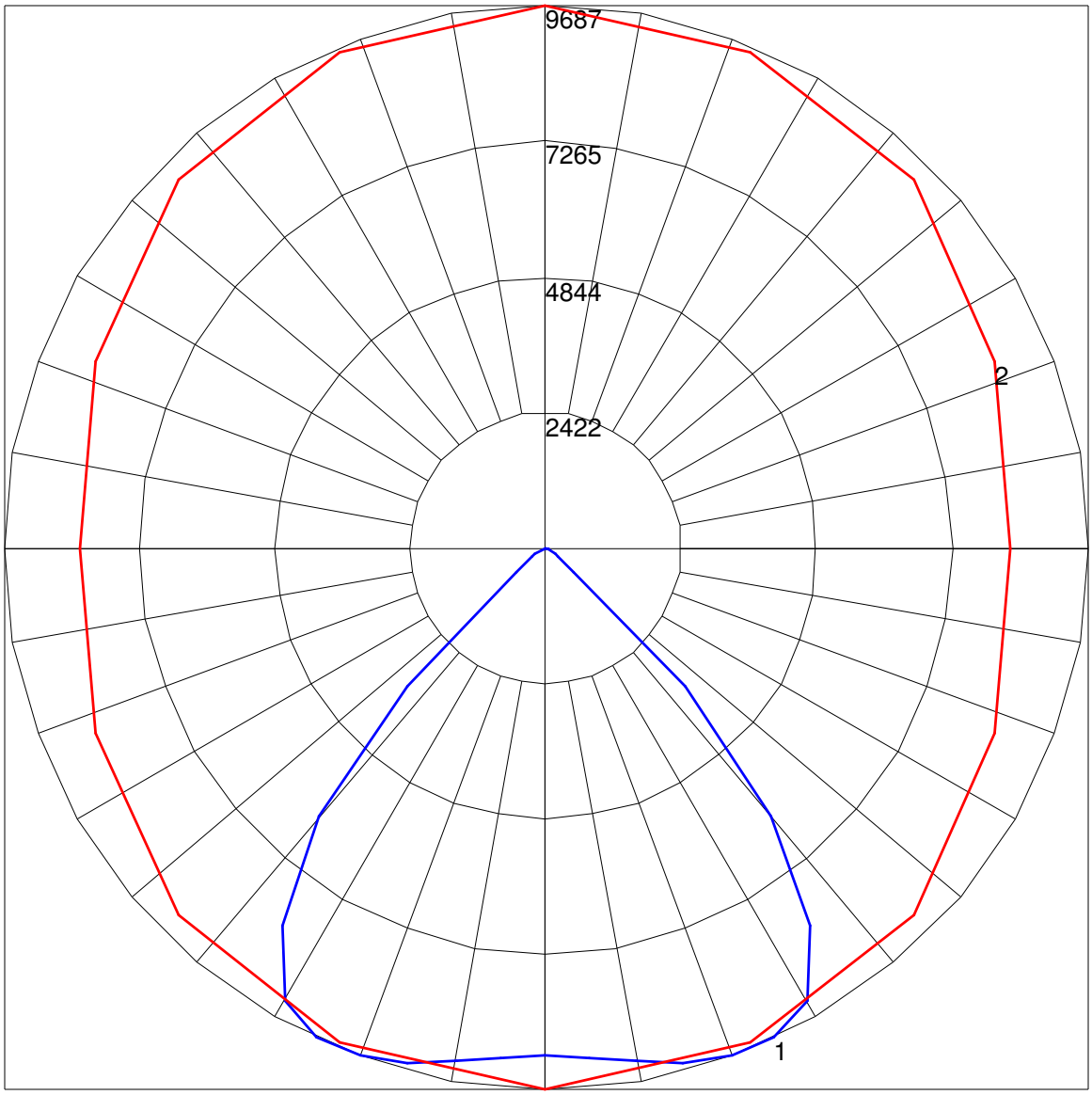
POLAR GRAPH



Maximum Candela = 9687.32 Located At Horizontal Angle = 90, Vertical Angle = 25
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.)

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