H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GP4-L300-840-M-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] 02-11-2022
[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-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	27564
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	236
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	42505	44567	23183
55	41389	16924	2382
65	38892	2522	290
75	31476	348	143
85	14058	239	133

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	11726.928	11726.928	11726.928	11726.928	11726.928
5	11719.910	11745.432	11767.764	11770.955	11802.220
10	11599.316	11705.234	11869.216	11977.686	12025.541
15	11405.345	11615.268	11963.649	12225.892	12310.116
20	11111.199	11467.875	12022.989	12403.911	12488.135
25	10746.866	11236.259	11996.190	12394.340	12503.449
30	10298.947	10957.426	11790.734	12118.698	12095.090
35	9738.729	10548.429	11432.782	10943.389	10615.426
40	9043.881	10032.876	10447.615	8659.768	8126.987
45	8295.435	9391.624	8698.051	5482.861	4524.493
50	7499.772	8664.872	6109.437	1951.191	849.898
55	6552.251	7572.511	2679.219	429.415	377.094
60	5524.973	5932.694	468.337	339.449	270.538
65	4536.616	3483.815	294.146	110.385	33.817
70	3457.654	696.763	82.948	18.504	14.037
75	2248.528	220.131	24.884	14.037	10.209
80	1235.287	61.892	17.866	8.295	6.381
85	338.172	31.265	5.743	1.914	3.190
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4499.05	N.A.	16.30
0-30	9940.88	N.A.	36.10
0-40	16594.81	N.A.	60.20
0-60	25578.85	N.A.	92.80
0-80	27487.63	N.A.	99.70
0-90	27564.38	N.A.	100.00
10-90	26439.25	N.A.	95.90
20-40	12095.75	N.A.	43.90
20-50	17800.34	N.A.	64.60
40-70	10496.22	N.A.	38.10
60-80	1908.79	N.A.	6.90
70-80	396.61	N.A.	1.40
80-90	76.74	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	27564.38	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1125.13
10-20	3373.92
20-30	5441.83
30-40	6653.92
40-50	5704.59
50-60	3279.45
60-70	1512.18
70-80	396.61
80-90	76.74
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	26.9	28.3	27.3	28.7	29.0	11.5	11.5	11.5	11.5	11.5
	3H	27.7	29.0	28.1	29.3	29.7	11.5	11.5	11.5	11.5	11.5
	4H	28.0	29.2	28.4	29.5	29.9	11.5	11.5	11.5	11.5	11.5
	6H	28.3	29.3	28.7	29.7	30.1	11.5	11.5	11.5	11.5	11.5
	8H	28.3	29.4	28.8	29.8	30.2	11.5	11.5	11.5	11.5	11.5
	12H	28.4	29.3	28.8	29.7	30.2	11.5	11.5	11.5	11.5	11.5
4H	2H	26.7	27.9	27.1	28.2	28.6	11.5	11.5	11.5	11.5	11.5
	3H	27.5	28.5	28.0	28.9	29.3	11.5	11.5	11.5	11.5	11.5
	4H	27.8	28.7	28.3	29.1	29.5	11.5	11.5	11.5	11.5	11.5
	6H	28.1	28.8	28.6	29.3	29.7	11.5	11.5	11.5	11.5	11.5
	8H	28.2	28.9	28.7	29.3	29.8	11.5	11.5	11.5	11.5	11.5
	12H	28.3	28.8	28.7	29.3	29.8	11.5	11.5	11.5	11.5	11.5
8H	4H	27.7	28.4	28.2	28.8	29.3	11.5	11.5	11.5	11.5	11.5
	6H	28.0	28.5	28.5	29.0	29.5	11.5	11.5	11.5	11.5	11.5
	8H	28.0	28.5	28.6	29.1	29.6	11.5	11.5	11.5	11.5	11.5
	12H	28.1	28.5	28.6	29.0	29.6	11.5	11.5	11.5	11.5	11.5
12H	4H	27.7	28.3	28.2	28.7	29.2	11.5	11.5	11.5	11.5	11.5
	6H	27.9	28.4	28.4	28.9	29.4	11.5	11.5	11.5	11.5	11.5
	8H	28.0	28.5	28.5	28.9	29.5	11.5	11.5	11.5	11.5	11.5

Maximum UGR = 30.2

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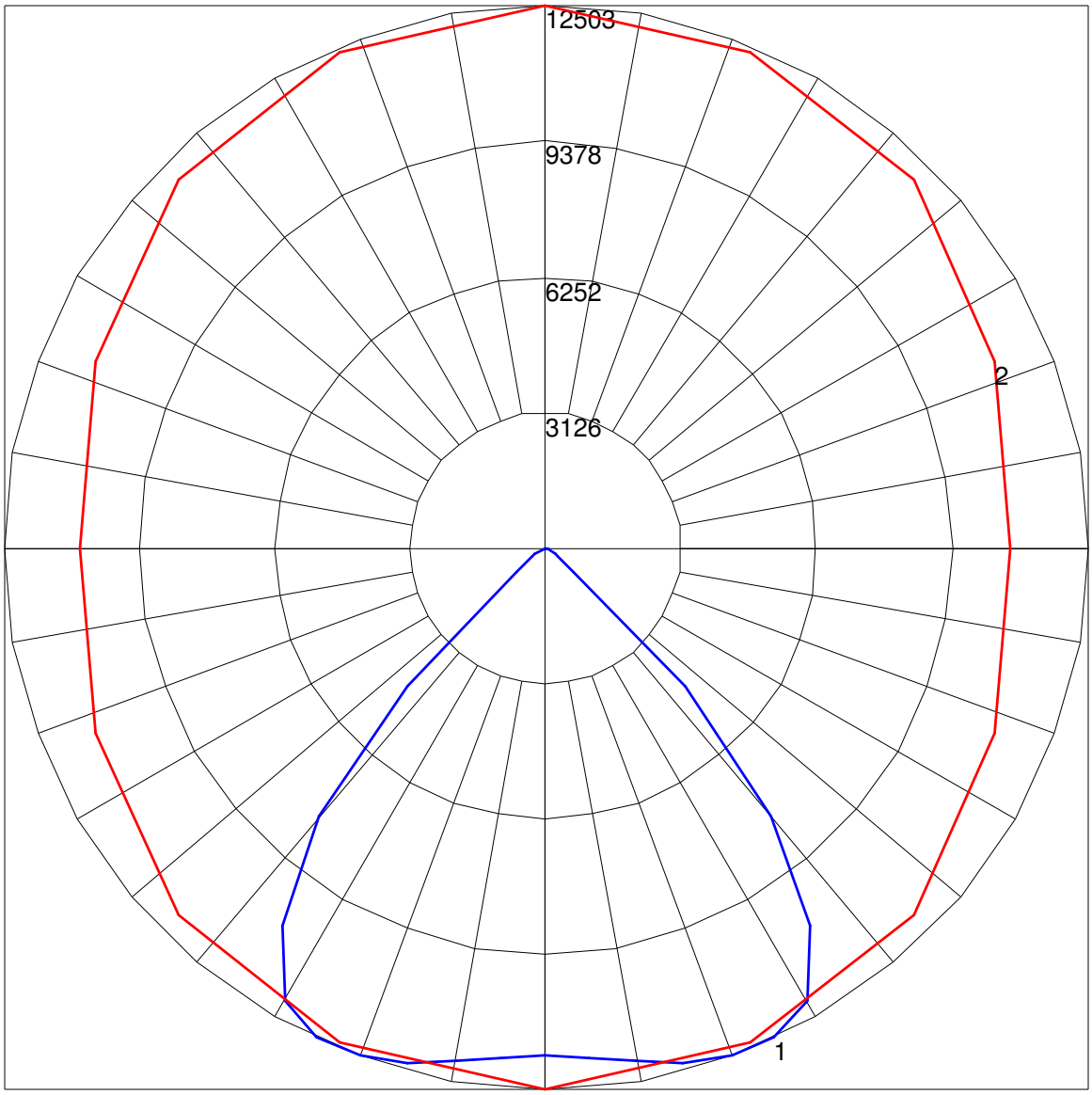
POLAR GRAPH



Maximum Candela = 12503.449 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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