



IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-8-L230-830-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 18635.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2024-01-09
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 8' SUSPENDED INDUSTRIAL LED LUMINAIRE
[MORE] WHITE REFLECTOR w/OPEN BOTTOM
[MORE] 0-10V DIMMING DRIVER
[LUMCAT] 80-8-L230-830-DIM-UNV
[LAMPCAT] HLM 22 INCH LED ARRAYS
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] INDOOR
[_SEARCH_MOUNTING] SUSPENDED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	22105
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	151
Total Luminaire Watts	146.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	8.00 ft
Luminous Width (90-270)	0.88 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	11990	11699	11668
55	11553	11298	11251
65	11004	10761	5752
75	8848	4916	941
85	3976	1739	1304

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	8306.261	8306.261	8306.261	8306.261	8306.261
5	8207.587	8179.394	8154.726	8186.442	8221.683
10	8041.955	8013.762	8140.629	8161.774	8080.720
15	7855.179	7936.233	7848.130	7784.697	7784.697
20	7619.065	7795.269	7545.059	7506.295	7506.295
25	7312.470	7351.235	7227.892	7206.748	7206.748
30	6921.297	6861.388	6815.574	6790.906	6783.858
35	6505.455	6445.546	6392.685	6385.636	6371.540
40	6047.325	5948.650	5920.458	5909.885	5902.837
45	5518.712	5405.942	5384.797	5377.749	5370.701
50	4901.998	4820.944	4796.276	4789.227	4789.227
55	4313.476	4225.374	4218.326	4200.706	4200.706
60	3643.901	3576.943	3569.895	3555.799	3545.226
65	3027.186	2967.277	2960.229	2280.081	1582.313
70	2311.798	2258.937	1807.854	1226.381	1251.049
75	1490.687	1490.687	828.159	715.389	158.584
80	789.394	510.992	144.487	119.819	119.819
85	225.541	119.819	98.674	74.006	74.006
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2998.36	N.A.	13.60
0-30	6340.58	N.A.	28.70
0-40	10352.29	N.A.	46.80
0-60	18284.8	N.A.	82.70
0-80	21960.75	N.A.	99.30
0-90	22104.62	N.A.	100.00
10-90	21325.16	N.A.	96.50
20-40	7353.93	N.A.	33.30
20-50	11518.31	N.A.	52.10
40-70	10553.6	N.A.	47.70
60-80	3675.95	N.A.	16.60
70-80	1054.86	N.A.	4.80
80-90	143.87	N.A.	0.70
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	22104.62	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	779.46
10-20	2218.91
20-30	3342.22
30-40	4011.71
40-50	4164.39
50-60	3768.12
60-70	2621.09
70-80	1054.86
80-90	143.87
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	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88	85
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	59	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	41	39
7	66	53	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	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

X=2H	Y=2H	20.9	22.5	21.3	22.8	23.1	UGR Viewed Endwise			
	3H	22.8	24.2	23.2	24.6	24.9	20.8	22.4	21.2	22.7
	4H	23.4	24.8	23.8	25.1	25.5	21.5	23.0	21.9	23.3
	6H	23.8	25.0	24.2	25.4	25.8	21.6	22.9	22.0	23.3
	8H	23.8	25.0	24.3	25.4	25.8	21.5	22.8	21.9	23.1
	12H	23.9	25.0	24.3	25.4	25.8	21.5	22.7	21.9	23.1

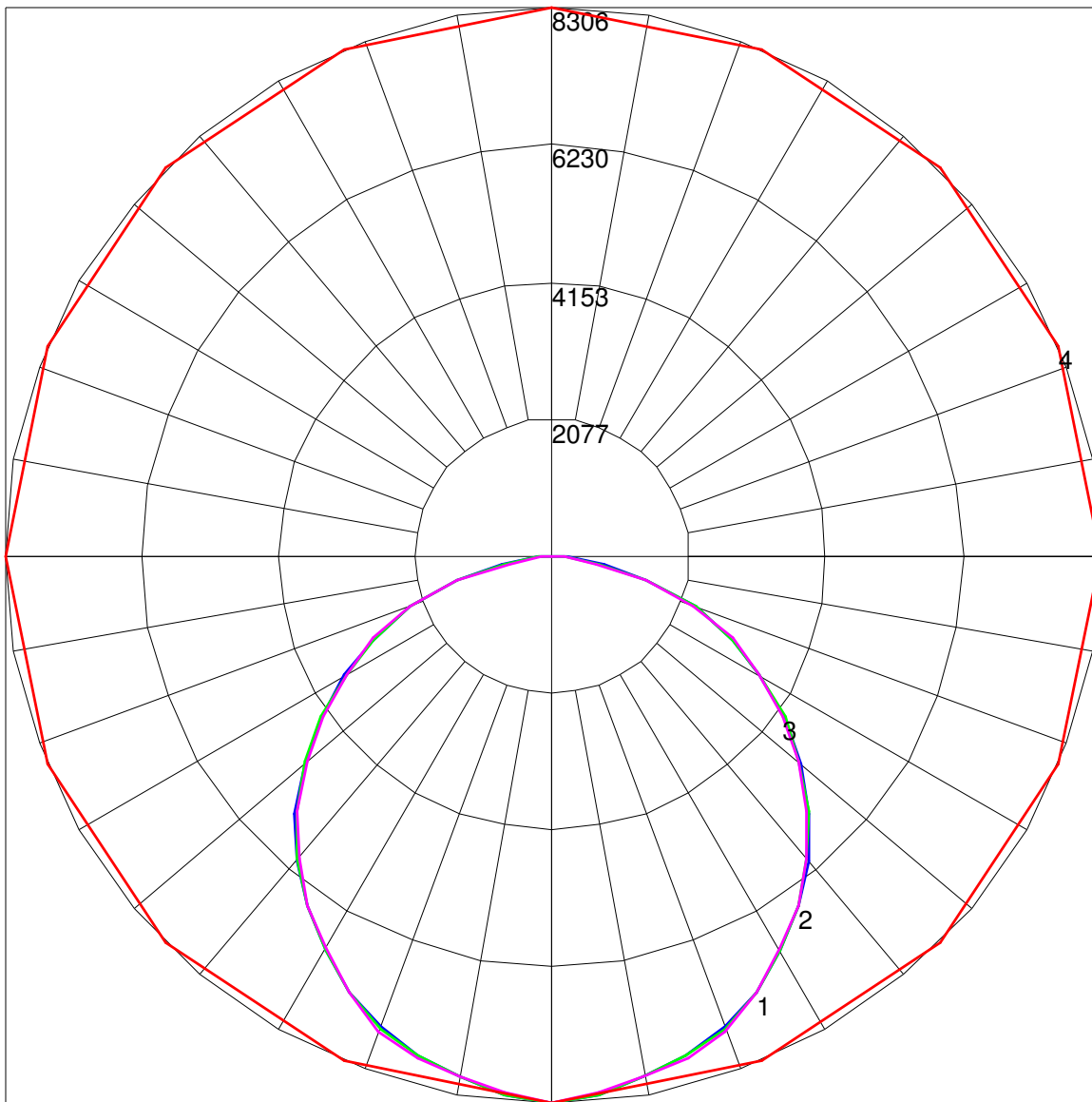
4H	2H	21.6	22.9	22.0	23.3	23.6	21.5	22.9	21.9	23.2
	3H	23.6	24.7	24.0	25.1	25.5	22.3	23.5	22.7	23.9
	4H	24.3	25.3	24.7	25.7	26.2	22.5	23.5	22.9	23.9
	6H	24.7	25.6	25.1	26.0	26.5	22.4	23.3	22.9	23.8
	8H	24.8	25.6	25.3	26.1	26.5	22.4	23.2	22.9	23.7
	12H	24.8	25.6	25.3	26.0	26.5	22.4	23.1	22.9	23.6

8H	4H	24.3	25.2	24.8	25.6	26.1	22.6	23.5	23.1	23.9
	6H	24.8	25.4	25.2	25.9	26.4	22.6	23.3	23.1	23.8
	8H	24.9	25.5	25.4	26.0	26.5	22.6	23.2	23.1	23.7
	12H	24.9	25.5	25.4	26.0	26.5	22.6	23.1	23.1	23.6

12H	4H	24.3	25.0	24.8	25.5	26.0	22.6	23.4	23.1	23.8
	6H	24.7	25.3	25.3	25.8	26.3	22.6	23.2	23.1	23.7
	8H	24.9	25.4	25.4	25.9	26.4	22.6	23.1	23.1	23.6

Maximum UGR = 26.5

POLAR GRAPH



Maximum Candela = 8306.261 Located At Horizontal Angle = 0, Vertical Angle = 0

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

2 - Vertical Plane Through Horizontal Angles (5 - 185)

3 - Vertical Plane Through Horizontal Angles (10 - 190)

4 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)