



IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-8-L230-850-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-L230-850-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	23716
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	162
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	12864	12552	12519
55	12396	12122	12072
65	11807	11545	6171
75	9493	5274	1010
85	4265	1866	1400

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : 80-8-L230-850-DIM-UNV_.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	8911.925	8911.925	8911.925	8911.925	8911.925
5	8806.056	8775.808	8749.340	8783.370	8821.180
10	8628.347	8598.098	8734.216	8756.902	8669.938
15	8427.951	8514.915	8420.389	8352.330	8352.330
20	8174.621	8363.674	8095.219	8053.628	8053.628
25	7845.670	7887.262	7754.925	7732.239	7732.239
30	7425.974	7361.696	7312.543	7286.075	7278.513
35	6979.811	6915.533	6858.817	6851.255	6836.131
40	6488.275	6382.406	6352.157	6340.814	6333.252
45	5921.118	5800.124	5777.438	5769.876	5762.314
50	5259.435	5172.471	5146.003	5138.441	5138.441
55	4628.000	4533.474	4525.912	4507.007	4507.007
60	3909.601	3837.762	3830.200	3815.075	3803.732
65	3247.918	3183.641	3176.079	2446.337	1697.690
70	2480.366	2423.650	1939.677	1315.804	1342.271
75	1599.382	1599.382	888.546	767.552	170.147
80	846.954	548.252	155.023	128.556	128.556
85	241.987	128.556	105.869	79.402	79.402
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-8-L230-850-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3216.99	N.A.	13.60
0-30	6802.91	N.A.	28.70
0-40	11107.15	N.A.	46.80
0-60	19618.06	N.A.	82.70
0-80	23562.05	N.A.	99.30
0-90	23716.41	N.A.	100.00
10-90	22880.12	N.A.	96.50
20-40	7890.15	N.A.	33.30
20-50	12358.19	N.A.	52.10
40-70	11323.13	N.A.	47.70
60-80	3943.99	N.A.	16.60
70-80	1131.78	N.A.	4.80
80-90	154.36	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	23716.41	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	836.29
10-20	2380.7
20-30	3585.92
30-40	4304.23
40-50	4468.04
50-60	4042.88
60-70	2812.21
70-80	1131.78
80-90	154.36
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-8-L230-850-DIM-UNV_.IES

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	40	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	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-8-L230-850-DIM-UNV_.IES

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	21.1	22.7	21.5	23.0	23.3	21.0	22.6	21.4	22.9	23.3
	3H	23.0	24.4	23.4	24.8	25.1	21.7	23.2	22.1	23.5	23.9
	4H	23.6	25.0	24.0	25.3	25.7	21.8	23.1	22.2	23.5	23.8
	6H	24.0	25.2	24.4	25.6	26.0	21.7	23.0	22.1	23.3	23.7
	8H	24.0	25.2	24.5	25.6	26.0	21.7	22.9	22.1	23.3	23.7
	12H	24.1	25.2	24.5	25.6	26.0	21.7	22.8	22.1	23.2	23.6

UGR Viewed Endwise

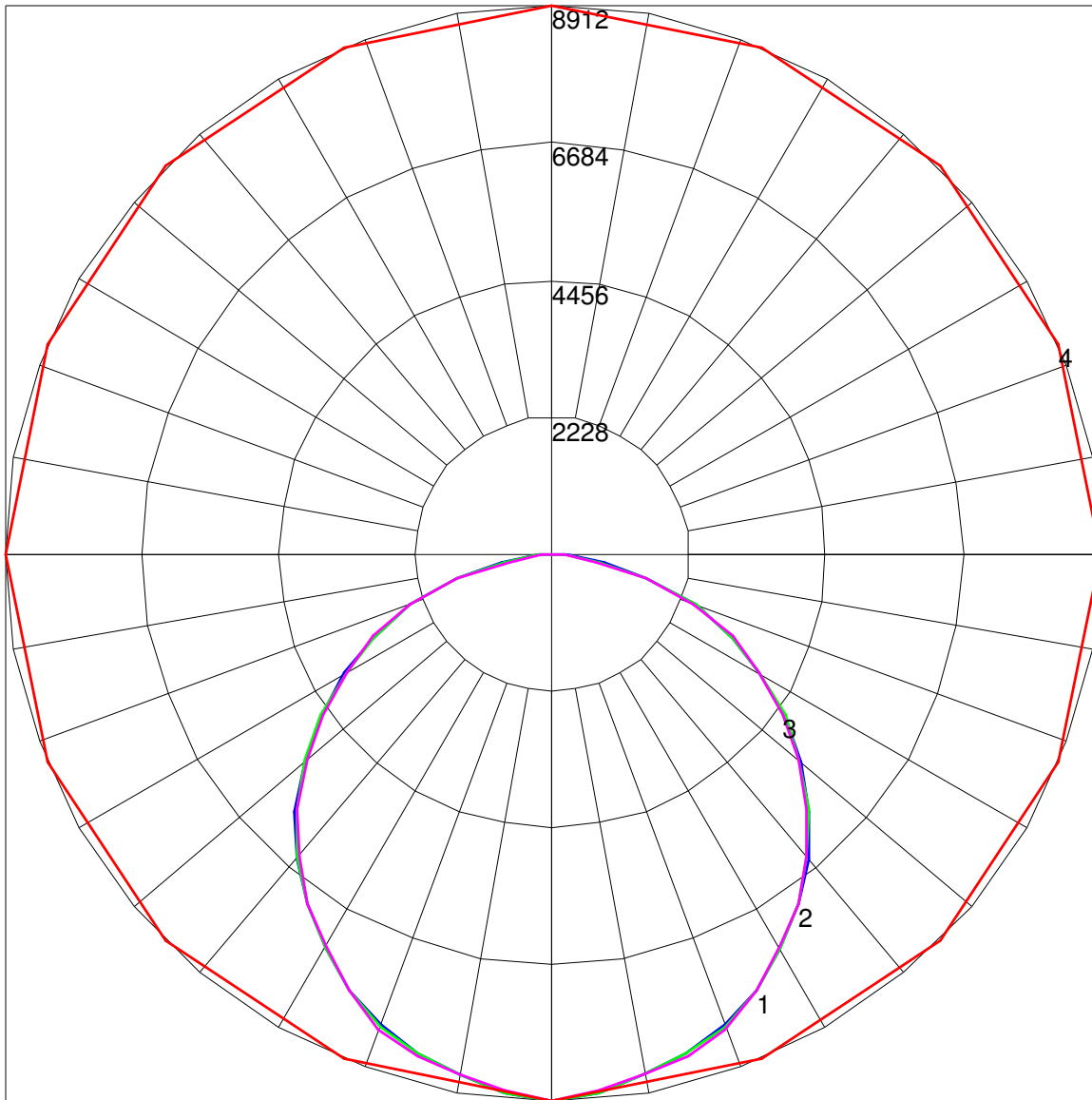
4H	2H	21.8	23.1	22.2	23.5	23.8	21.7	23.1	22.1	23.4	23.8
	3H	23.8	24.9	24.2	25.3	25.7	22.5	23.7	22.9	24.1	24.5
	4H	24.5	25.5	24.9	25.9	26.4	22.7	23.7	23.1	24.1	24.5
	6H	24.9	25.8	25.3	26.2	26.7	22.6	23.5	23.1	24.0	24.4
	8H	25.0	25.8	25.5	26.3	26.7	22.6	23.4	23.1	23.9	24.4
	12H	25.0	25.8	25.5	26.2	26.7	22.6	23.3	23.1	23.8	24.3

8H	4H	24.5	25.4	25.0	25.8	26.3	22.8	23.7	23.3	24.1	24.6
	6H	25.0	25.6	25.4	26.1	26.6	22.8	23.5	23.3	24.0	24.5
	8H	25.1	25.7	25.6	26.2	26.7	22.8	23.4	23.3	23.9	24.4
	12H	25.1	25.7	25.6	26.2	26.7	22.8	23.3	23.3	23.8	24.4

12H	4H	24.5	25.2	25.0	25.7	26.2	22.8	23.6	23.3	24.0	24.5
	6H	24.9	25.5	25.5	26.0	26.5	22.8	23.4	23.3	23.9	24.4
	8H	25.1	25.6	25.6	26.1	26.6	22.8	23.3	23.3	23.8	24.4

Maximum UGR = 26.7

POLAR GRAPH



Maximum Candela = 8911.925 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.)