



IES INDOOR REPORT

PHOTOMETRIC FILENAME : AP-22-L30-835-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM LLI-20113-1
[TESTLAB] LightLab International (www.LightLabInt.com)
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] AP-22-L30-835-DIM-UNV
[LUMINAIRE] RECESSED 2 X 2 ARCHED CENTER LED LUMINAIRE
[MORE] White steel fabricated housing with frosted white concave lens.
[MORE] 180 LEDs with 90 mounted along each long side of clear plastic sheet.
[ISSUE DATE] 2023-10-24
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Indoor, Architectural, Direct-Indirect
[SEARCH_MOUNTING] Recessed
[CONVERT] Photometric web converted from original test data

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3030
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	119
Total Luminaire Watts	25.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.55 m
Luminous Width (90-270)	0.57 m
Luminous Height	0.00 m

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3087	3132	3227
55	2953	3016	3149
65	2757	2843	3012
75	2431	2519	2790
85	1487	1642	2010

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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	1059.460	1059.460	1059.460	1059.460	1059.460
5	1053.159	1054.258	1053.919	1054.531	1054.428
10	1035.630	1036.464	1037.851	1040.536	1041.584
15	1008.974	1010.509	1012.641	1016.728	1018.956
20	975.310	975.753	979.006	984.739	988.797
25	931.930	932.557	937.448	944.826	949.245
30	880.729	883.267	887.922	896.465	902.515
35	823.397	825.994	831.461	841.059	847.920
40	759.160	761.845	768.035	778.607	787.977
45	689.522	692.075	699.541	710.158	720.848
50	614.934	617.612	624.894	637.171	647.831
55	534.946	538.458	546.440	559.130	570.514
60	452.707	455.555	463.715	477.120	488.784
65	368.041	370.823	379.580	391.281	402.104
70	282.719	285.190	292.494	303.487	314.730
75	198.710	200.591	205.903	216.741	228.132
80	117.305	118.197	122.344	131.580	140.655
85	40.931	40.769	45.203	50.456	55.325
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	386.16	N.A.	12.70
0-30	818.87	N.A.	27.00
0-40	1340.27	N.A.	44.20
0-60	2372.27	N.A.	78.30
0-80	2971.13	N.A.	98.00
0-90	3030.34	N.A.	100.00
10-90	2930.21	N.A.	96.70
20-40	954.12	N.A.	31.50
20-50	1495.36	N.A.	49.30
40-70	1409.59	N.A.	46.50
60-80	598.86	N.A.	19.80
70-80	221.26	N.A.	7.30
80-90	59.21	N.A.	2.00
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	3030.34	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	100.12
10-20	286.03
20-30	432.71
30-40	521.40
40-50	541.25
50-60	490.75
60-70	377.60
70-80	221.26
80-90	59.21
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	109	104	99	95	106	101	98	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	78	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	46	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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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	15.9	17.6	16.3	17.9	18.2	16.2	17.9	16.6	18.2	18.5
	3H	17.7	19.2	18.1	19.5	19.9	18.2	19.6	18.5	20.0	20.3
	4H	18.4	19.8	18.8	20.2	20.5	18.9	20.3	19.3	20.7	21.0
	6H	18.9	20.2	19.3	20.6	21.0	19.5	20.8	19.9	21.1	21.5
	8H	19.0	20.3	19.5	20.7	21.1	19.7	20.9	20.1	21.3	21.7
	12H	19.1	20.3	19.6	20.7	21.1	19.8	21.0	20.2	21.3	21.8

UGR Viewed Endwise

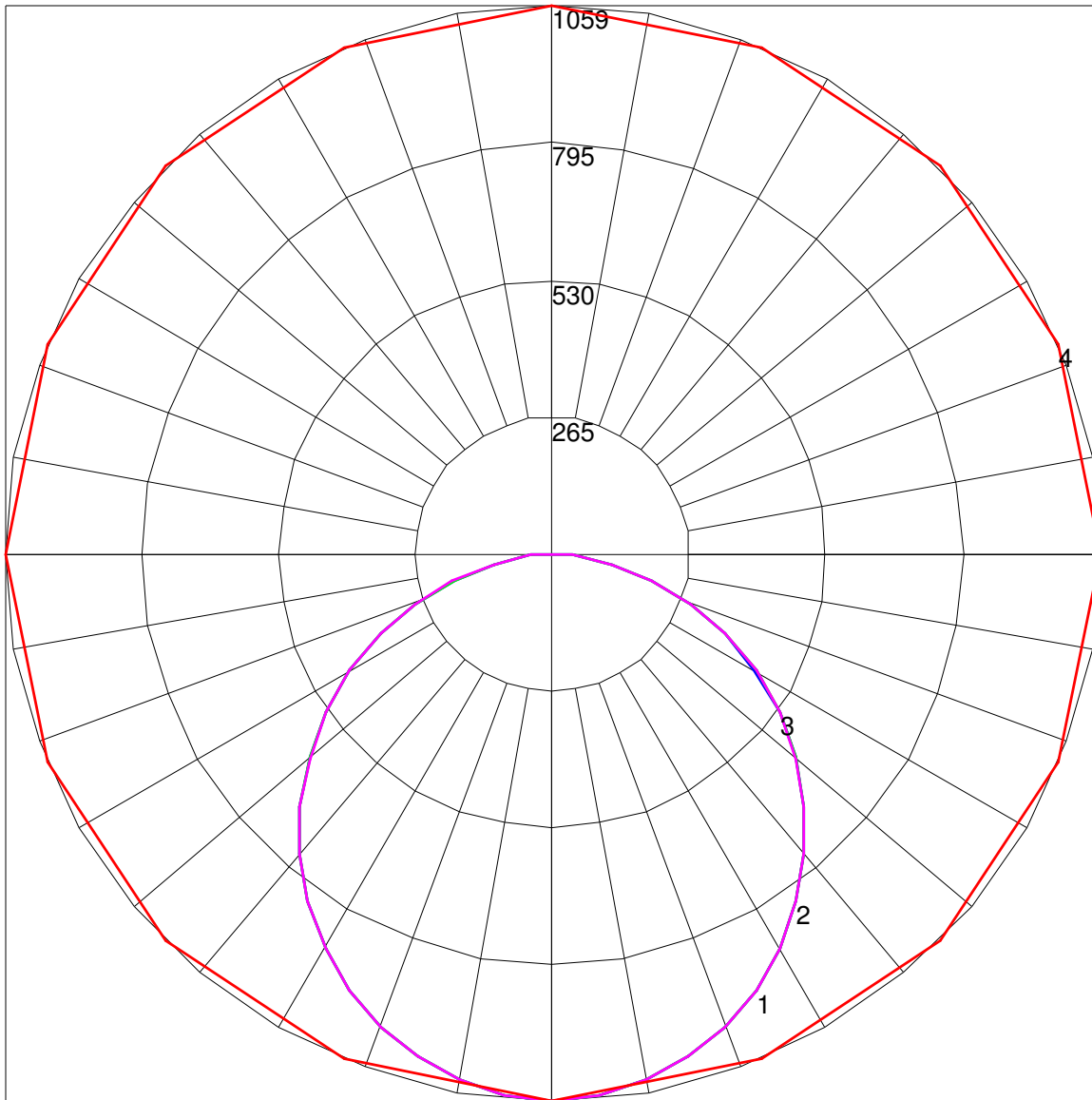
4H	2H	16.6	18.0	17.0	18.3	18.7	16.8	18.2	17.2	18.6	19.0
	3H	18.6	19.8	19.0	20.2	20.6	19.0	20.2	19.4	20.6	21.0
	4H	19.4	20.5	19.8	20.9	21.3	19.8	20.9	20.3	21.3	21.8
	6H	20.0	21.0	20.5	21.4	21.9	20.6	21.5	21.0	21.9	22.4
	8H	20.2	21.1	20.7	21.5	22.0	20.8	21.7	21.3	22.1	22.6
	12H	20.3	21.1	20.8	21.6	22.1	21.0	21.7	21.4	22.2	22.7

8H	4H	19.8	20.6	20.2	21.1	21.6	20.2	21.0	20.6	21.5	21.9
	6H	20.5	21.2	21.0	21.7	22.2	21.0	21.7	21.5	22.2	22.7
	8H	20.7	21.4	21.2	21.9	22.4	21.3	21.9	21.8	22.4	22.9
	12H	20.9	21.5	21.4	22.0	22.5	21.5	22.1	22.0	22.6	23.1

12H	4H	19.8	20.6	20.3	21.1	21.5	20.2	21.0	20.7	21.4	21.9
	6H	20.6	21.2	21.1	21.7	22.2	21.0	21.7	21.5	22.1	22.7
	8H	20.9	21.4	21.4	21.9	22.5	21.4	22.0	21.9	22.4	23.0

Maximum UGR = 23.1

POLAR GRAPH



Maximum Candela = 1059.46 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.)