



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 75R-4-L50-935-(L45)-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 19750.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 06-JAN-2020

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO

[LUMINAIRE] 2-56 LED 22"ARRAYS 4'SURFACE MOUNT STRIP LUMINAIRE

[MORE] WHITE REFLECTOR w/FROSTED ACRYLIC ROUND LENS

[LUMCAT] 75R-4-L50-935-(L45)-DIM-UNV

[LAMPCAT] HLM 90 CRI 3500K CCT

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Commercial, Industrial, Manufacturing, Utility, Warehouse, Linear

[_SEARCH_MOUNTING] Surface, Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3687
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	119
Total Luminaire Watts	31
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	3.72 ft
Luminous Width (90-270)	0.21 ft
Luminous Height	0.10 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	12894	10902	10883
55	10641	9330	9580
65	8764	7836	8071
75	5922	6439	6613
85	3475	5531	5423

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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	1180.900	1180.900	1180.900	1180.900	1180.900
5	1193.864	1176.390	1176.954	1174.136	1162.298
10	1174.136	1159.480	1162.298	1160.607	1149.898
15	1139.751	1129.042	1136.933	1140.315	1129.042
20	1087.893	1085.075	1098.603	1104.240	1097.476
25	1027.016	1030.962	1050.127	1063.092	1058.019
30	957.121	962.757	995.451	1015.179	1014.052
35	872.006	882.152	929.501	957.121	961.066
40	781.254	788.582	848.331	890.043	899.626
45	674.156	692.757	761.525	816.765	830.294
50	563.112	592.986	676.974	737.287	754.198
55	456.577	495.471	590.168	653.300	677.538
60	367.516	403.592	506.744	569.876	595.241
65	282.401	321.859	428.957	486.452	508.435
70	197.850	250.836	355.115	405.283	426.702
75	121.754	189.395	286.911	334.259	352.861
80	67.641	130.773	228.852	272.819	284.656
85	28.747	90.188	182.631	220.397	228.288
90	3.946	62.004	141.482	174.739	185.449
95	0.564	42.276	113.299	138.664	149.938
100	0.000	27.620	87.933	113.299	122.318
105	0.000	19.729	68.205	92.443	99.771
110	0.000	13.528	52.422	75.532	81.733
115	0.000	11.274	42.839	63.132	67.641
120	0.000	8.455	32.693	51.858	56.368
125	0.000	5.073	24.238	41.148	46.221
130	0.000	3.382	17.474	32.129	36.639
135	0.000	1.691	12.965	25.365	28.747
140	0.000	1.691	9.019	19.729	22.547
145	0.000	0.000	5.637	12.401	15.783
150	0.000	0.000	3.946	9.019	11.274
155	0.000	0.000	2.818	4.509	7.328
160	0.000	0.000	1.127	3.382	3.946
165	0.000	0.000	0.000	1.127	1.691
170	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	431.82	N.A.	11.70
0-30	914.17	N.A.	24.80
0-40	1489.76	N.A.	40.40
0-60	2589.85	N.A.	70.20
0-80	3274.57	N.A.	88.80
0-90	3446.67	N.A.	93.50
10-90	3334.87	N.A.	90.50
20-40	1057.94	N.A.	28.70
20-50	1641.16	N.A.	44.50
40-70	1505.67	N.A.	40.80
60-80	684.72	N.A.	18.60
70-80	279.14	N.A.	7.60
80-90	172.09	N.A.	4.70
90-110	164.23	N.A.	4.50
90-120	201.88	N.A.	5.50
90-130	223.26	N.A.	6.10
90-150	238.51	N.A.	6.50
90-180	240.11	N.A.	6.50
110-180	75.88	N.A.	2.10
0-180	3686.78	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	111.80
10-20	320.02
20-30	482.35
30-40	575.59
40-50	583.22
50-60	516.87
60-70	405.58
70-80	279.14
80-90	172.09
90-100	102.47
100-110	61.77
110-120	37.65
120-130	21.37
130-140	10.80
140-150	4.46
150-160	1.39
160-170	0.20
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	117	117	117	117	114	114	114	114	107	107	107	102	102	102	96	96	96	93
1	106	101	96	92	103	98	94	90	92	89	86	87	84	82	83	80	78	76
2	96	87	80	74	93	85	78	73	80	75	70	76	72	68	72	68	65	62
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	52
4	80	68	59	52	77	66	58	51	63	56	50	60	53	48	57	51	47	45
5	74	61	51	45	71	59	51	44	56	49	43	54	47	42	51	45	41	39
6	68	55	46	39	66	53	45	39	51	43	38	48	42	37	46	41	36	34
7	63	49	41	34	61	48	40	34	46	39	33	44	38	33	42	36	32	30
8	59	45	37	31	57	44	36	30	42	35	30	41	34	29	39	33	29	27
9	55	41	33	28	53	41	33	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	24	22

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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	18.3	19.8	18.8	20.3	20.8	UGR Viewed Endwise			
	3H	19.8	21.2	20.3	21.6	22.2	20.7	22.2	21.1	22.6
	4H	20.3	21.6	20.8	22.1	22.6	22.9	24.2	23.3	24.7
	6H	20.6	21.8	21.1	22.3	22.9	23.9	25.2	24.4	25.7
	8H	20.7	21.8	21.2	22.4	22.9	24.9	26.1	25.5	26.6
	12H	20.8	21.9	21.3	22.4	23.0	25.5	26.6	26.0	27.1
							26.0	27.1	26.6	27.6

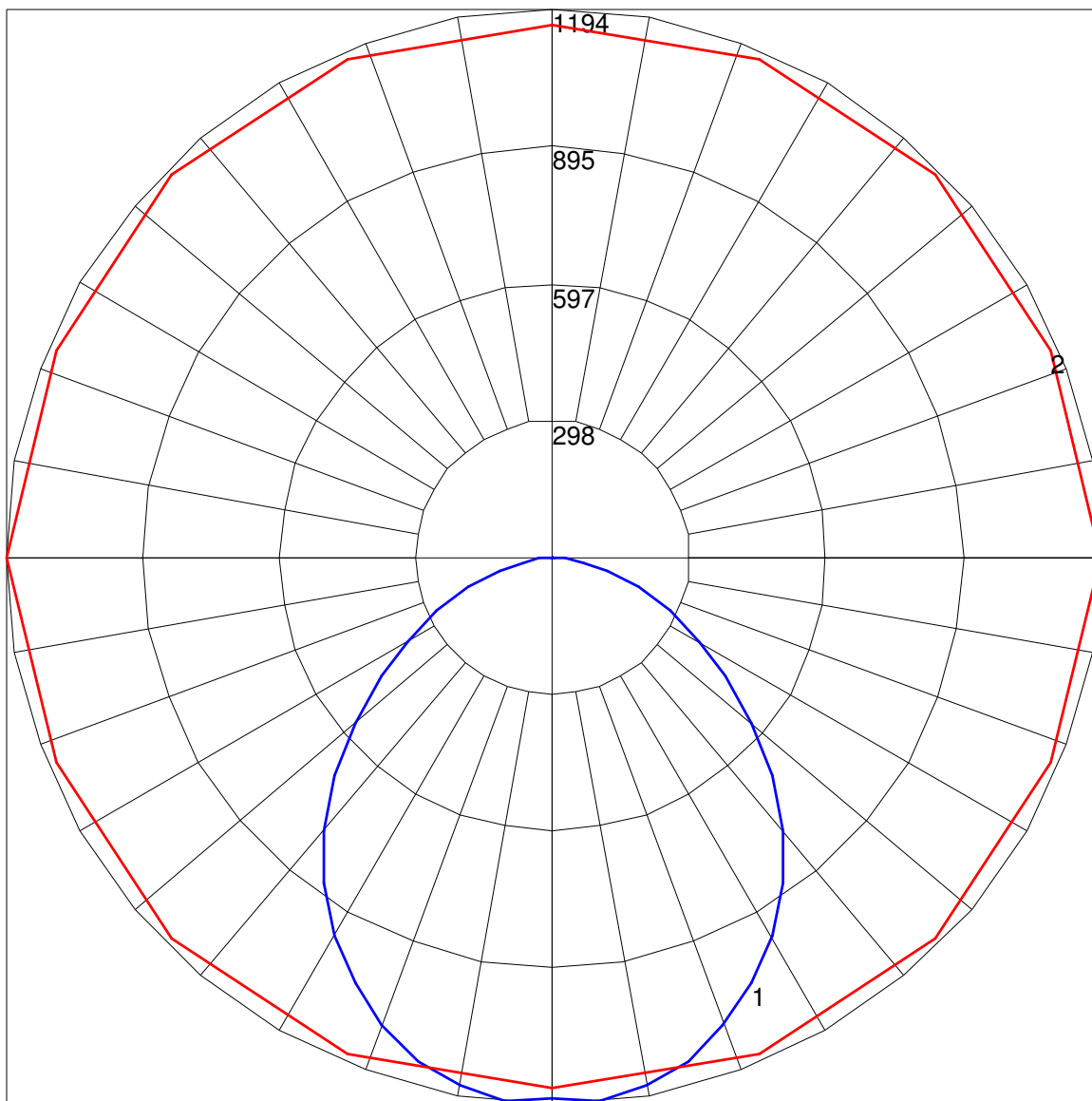
4H	2H	19.1	20.4	19.6	20.9	21.4	21.0	22.3	21.5	22.8
	3H	20.8	21.9	21.3	22.4	23.0	23.4	24.5	23.9	25.0
	4H	21.4	22.4	22.0	23.0	23.5	24.6	25.6	25.1	26.1
	6H	21.9	22.7	22.4	23.3	23.9	25.8	26.7	26.4	27.3
	8H	22.0	22.8	22.6	23.4	24.0	26.4	27.3	27.0	27.8
	12H	22.1	22.8	22.7	23.4	24.1	26.4	27.3	27.0	27.8
							27.1	27.9	27.7	28.5

8H	4H	21.9	22.8	22.5	23.3	23.9	24.8	25.6	25.3	26.1
	6H	22.5	23.2	23.1	23.9	24.5	26.1	26.8	26.7	27.4
	8H	22.8	23.4	23.4	24.0	24.7	26.9	27.5	27.5	28.1
	12H	23.0	23.5	23.6	24.1	24.8	26.9	27.5	27.5	28.1
							27.7	28.3	28.3	28.9

12H	4H	22.0	22.8	22.6	23.4	24.0	24.7	25.5	25.3	26.1
	6H	22.8	23.4	23.4	24.0	24.6	26.2	26.8	26.8	27.4
	8H	23.1	23.6	23.7	24.2	24.9	26.9	27.5	27.6	28.1
							26.9	27.5	27.6	28.1

Maximum UGR = 29.6

POLAR GRAPH



Maximum Candela = 1193.864 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)