



IES INDOOR REPORT

PHOTOMETRIC FILENAME : LT-14-L28-850-AF-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 20224.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2023-07-21
[MANUFAC] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 1x4'RECESSED LED LUMINAIRE
[MORE] WHITE REFLECTOR w/FROSTED ACRYLIC CENTER LENS
[MORE] 0-10V DIMMING DRIVER
[LUMCAT] LT-14-L28-850-AF-DIM-UNV_
[LAMPCAT] 22 INCH LED ARRAYS
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] INDOOR
[_SEARCH_MOUNTING] RECESSED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2983
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	139
Total Luminaire Watts	21.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.92 ft
Luminous Width (90-270)	0.92 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2832	2921	3085
55	2603	2853	3086
65	2268	2788	2953
75	1713	2487	2612
85	739	1211	1026

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-14-L28-850-AF-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	1037.483	1037.483	1037.483	1037.483	1037.483
5	1053.610	1033.900	1028.524	1025.538	1023.149
10	1035.692	1017.773	1014.787	1012.995	1010.008
15	1011.203	996.271	993.284	996.271	992.090
20	971.185	958.642	958.642	964.017	964.017
25	925.194	915.637	920.416	929.375	929.972
30	873.230	863.674	873.827	888.162	888.162
35	814.696	807.529	818.280	839.782	841.574
40	746.009	744.814	756.760	783.040	789.013
45	668.959	670.153	689.864	721.520	728.687
50	585.936	592.506	619.981	651.638	662.986
55	498.733	515.457	546.515	576.380	591.312
60	412.126	437.810	473.049	497.538	511.276
65	320.145	349.412	393.611	410.335	416.905
70	236.525	271.765	308.796	317.755	326.715
75	148.127	193.520	215.022	213.231	225.774
80	77.050	111.095	122.443	114.081	122.443
85	21.502	38.226	35.240	29.864	29.864
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-14-L28-850-AF-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	378.95	N.A.	12.70
0-30	804.47	N.A.	27.00
0-40	1319.5	N.A.	44.20
0-60	2343.85	N.A.	78.60
0-80	2935.00	N.A.	98.40
0-90	2982.99	N.A.	100.00
10-90	2884.96	N.A.	96.70
20-40	940.55	N.A.	31.50
20-50	1476.7	N.A.	49.50
40-70	1401.53	N.A.	47.00
60-80	591.15	N.A.	19.80
70-80	213.97	N.A.	7.20
80-90	47.99	N.A.	1.60
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	2982.99	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	98.02
10-20	280.92
20-30	425.52
30-40	515.03
40-50	536.15
50-60	488.20
60-70	377.18
70-80	213.97
80-90	47.99
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 : LT-14-L28-850-AF-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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	46	55	50	45	43
6	70	56	47	41	68	55	47	41	54	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	47	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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-14-L28-850-AF-DIM-UNV_.IES

UGR TABLE - CORRECTED

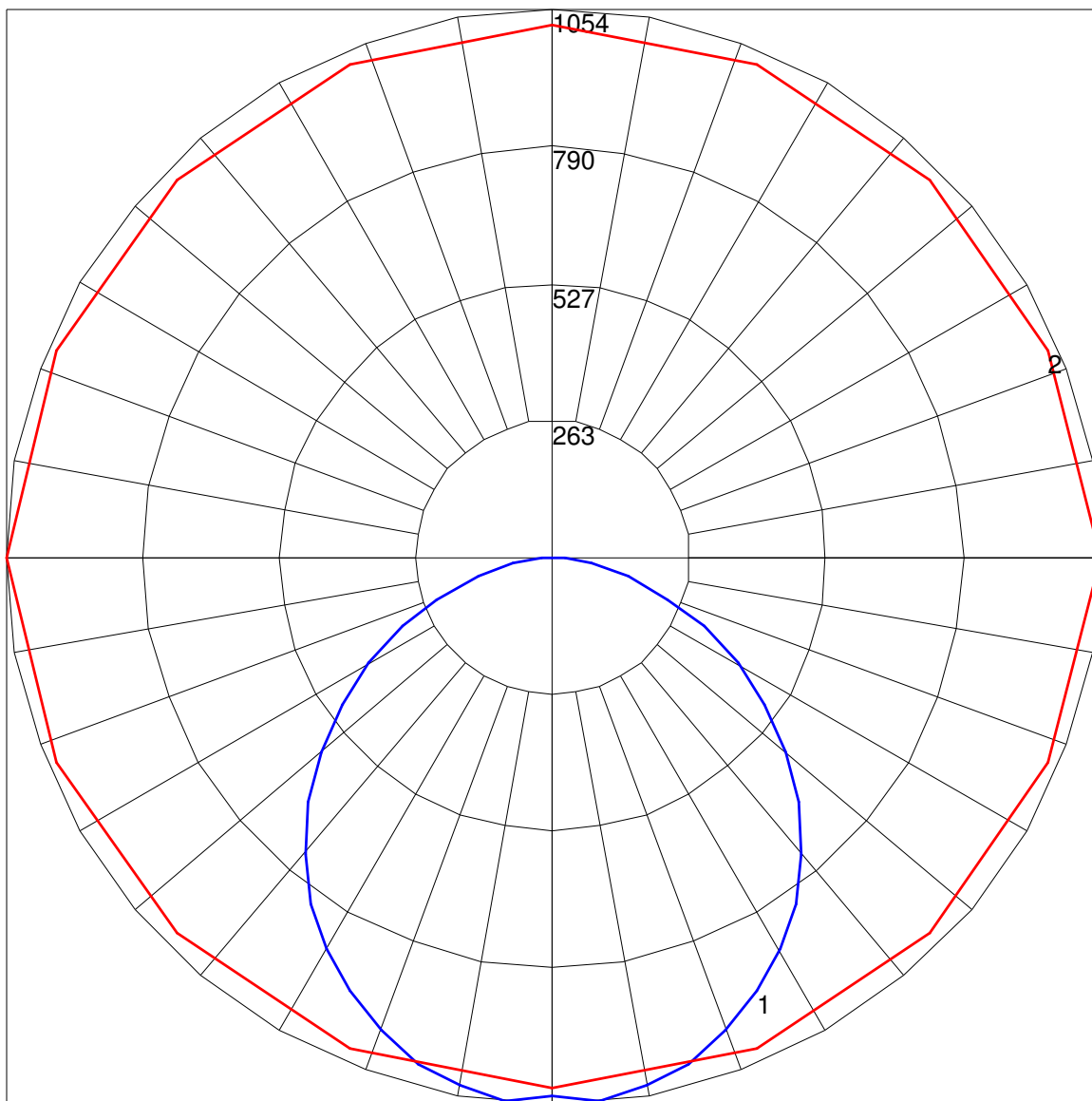
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	15.4	17.0	15.7	17.3	17.7	16.3	18.0	16.7	18.3	18.6
	3H	17.0	18.5	17.4	18.9	19.2	18.2	19.7	18.6	20.1	20.4
	4H	17.6	19.0	18.0	19.3	19.7	18.9	20.3	19.3	20.7	21.1
	6H	17.9	19.2	18.3	19.6	20.0	19.4	20.7	19.8	21.1	21.4
	8H	18.0	19.2	18.4	19.6	20.0	19.5	20.7	19.9	21.1	21.5
	12H	18.0	19.2	18.5	19.6	20.0	19.5	20.7	20.0	21.1	21.5
4H	2H	16.2	17.6	16.6	18.0	18.3	16.9	18.3	17.3	18.7	19.0
	3H	18.1	19.3	18.5	19.7	20.1	19.1	20.2	19.5	20.6	21.0
	4H	18.8	19.9	19.3	20.3	20.7	19.9	20.9	20.3	21.4	21.8
	6H	19.3	20.2	19.7	20.6	21.1	20.4	21.4	20.9	21.8	22.3
	8H	19.4	20.3	19.8	20.7	21.2	20.6	21.4	21.0	21.9	22.4
	12H	19.4	20.2	19.9	20.7	21.2	20.6	21.4	21.1	21.9	22.4
8H	4H	19.2	20.1	19.7	20.5	21.0	20.2	21.0	20.6	21.5	21.9
	6H	19.8	20.6	20.3	21.0	21.5	20.8	21.5	21.3	22.0	22.5
	8H	20.0	20.7	20.5	21.2	21.7	21.0	21.7	21.5	22.2	22.6
	12H	20.1	20.7	20.6	21.2	21.7	21.1	21.7	21.6	22.2	22.7
12H	4H	19.3	20.1	19.7	20.5	21.0	20.2	21.0	20.7	21.4	21.9
	6H	19.9	20.6	20.4	21.0	21.6	20.9	21.5	21.4	22.0	22.5
	8H	20.1	20.7	20.6	21.2	21.8	21.1	21.7	21.6	22.1	22.7

Maximum UGR = 22.7

POLAR GRAPH



Maximum Candela = 1053.61 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.)