



IES INDOOR REPORT

PHOTOMETRIC FILENAME : PTS-22-L28-B35T-RA-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]GEN FROM BALLABS TEST NO. 19235.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUE DATE] 3-MAY-2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 2x2 SURFACE LED LUMINAIRE

[MORE] WHITE REFLECTOR w/RIBBED FROSTED ACRYLIC CENTER DIFFUSER

[LUMCAT] PTS-22-L28-B35T-RA-DIM-UNV

[LAMPCAT] BIOS LED MODULES

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Architectural, Office, Direct

[_SEARCH_MOUNTING] Surface

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2834
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	127
Total Luminaire Watts	22.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.14
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.92 ft
Luminous Width (90-270)	1.92 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2483	2620	2754
55	2226	2436	2632
65	1956	2318	2634
75	1514	2325	2879
85	914	3051	3496

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PTS-22-L28-B35T-RA-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	1084.227	1084.227	1084.227	1084.227	1084.227
5	1067.671	1066.199	1066.199	1062.520	1060.680
10	1064.360	1064.360	1066.199	1067.671	1067.671
15	1036.399	1037.870	1039.710	1042.285	1044.125
20	967.968	971.647	976.062	981.948	983.788
25	913.149	916.460	925.290	933.016	936.695
30	800.201	775.551	876.358	847.293	842.879
35	738.025	745.015	761.571	775.551	781.070
40	656.717	665.547	683.942	702.338	709.328
45	600.059	607.785	633.171	656.717	665.547
50	521.326	533.467	561.429	586.078	594.540
55	436.340	449.584	477.545	505.506	515.808
60	355.768	369.748	401.388	430.085	440.754
65	282.554	300.949	334.797	368.277	380.417
70	208.236	229.943	270.045	305.364	317.505
75	133.919	160.776	205.661	241.348	254.593
80	73.582	108.533	160.040	194.992	205.661
85	27.225	62.177	90.873	102.279	104.118
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PTS-22-L28-B35T-RA-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	393.03	N.A.	13.90
0-30	814.55	N.A.	28.70
0-40	1289.72	N.A.	45.50
0-60	2202.57	N.A.	77.70
0-80	2749.32	N.A.	97.00
0-90	2834.07	N.A.	100.00
10-90	2732.15	N.A.	96.40
20-40	896.69	N.A.	31.60
20-50	1381.35	N.A.	48.70
40-70	1243.38	N.A.	43.90
60-80	546.75	N.A.	19.30
70-80	216.21	N.A.	7.60
80-90	84.75	N.A.	3.00
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	2834.07	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	101.92
10-20	291.11
20-30	421.52
30-40	475.17
40-50	484.66
50-60	428.18
60-70	330.54
70-80	216.21
80-90	84.75
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 : PTS-22-L28-B35T-RA-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	138	138	138	138	134	134	134	134	128	128	128	123	123	123	118	118	118	116
1	125	119	114	110	122	117	112	108	112	108	104	107	104	101	103	101	98	96
2	114	104	96	89	111	102	94	88	98	91	86	94	89	84	90	86	82	80
3	104	92	82	74	101	90	81	74	86	79	72	83	76	71	80	75	70	67
4	95	81	71	63	93	80	70	63	77	68	62	74	67	61	72	65	60	58
5	88	73	62	55	85	71	62	54	69	60	54	67	59	53	65	58	52	50
6	81	66	55	48	79	65	55	48	62	54	47	60	53	47	59	52	46	44
7	75	60	49	42	73	59	49	42	57	48	42	55	47	42	54	47	41	39
8	70	55	45	38	68	54	44	38	52	44	38	51	43	37	49	42	37	35
9	66	50	41	34	64	49	40	34	48	40	34	47	39	34	46	39	34	31
10	62	46	37	31	60	46	37	31	45	37	31	44	36	31	42	36	31	29

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PTS-22-L28-B35T-RA-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	13.9	15.6	14.3	15.9	16.2	14.9	16.6	15.3	16.9	17.2
	3H	15.6	17.1	16.0	17.4	17.8	17.1	18.6	17.5	18.9	19.3
	4H	16.1	17.6	16.5	17.9	18.3	18.1	19.5	18.5	19.9	20.2
	6H	16.5	17.8	16.9	18.2	18.6	19.1	20.5	19.6	20.8	21.2
	8H	16.6	17.9	17.1	18.3	18.7	19.6	20.8	20.0	21.2	21.6
	12H	16.7	17.9	17.1	18.3	18.7	19.9	21.1	20.3	21.5	21.9

UGR Viewed Endwise

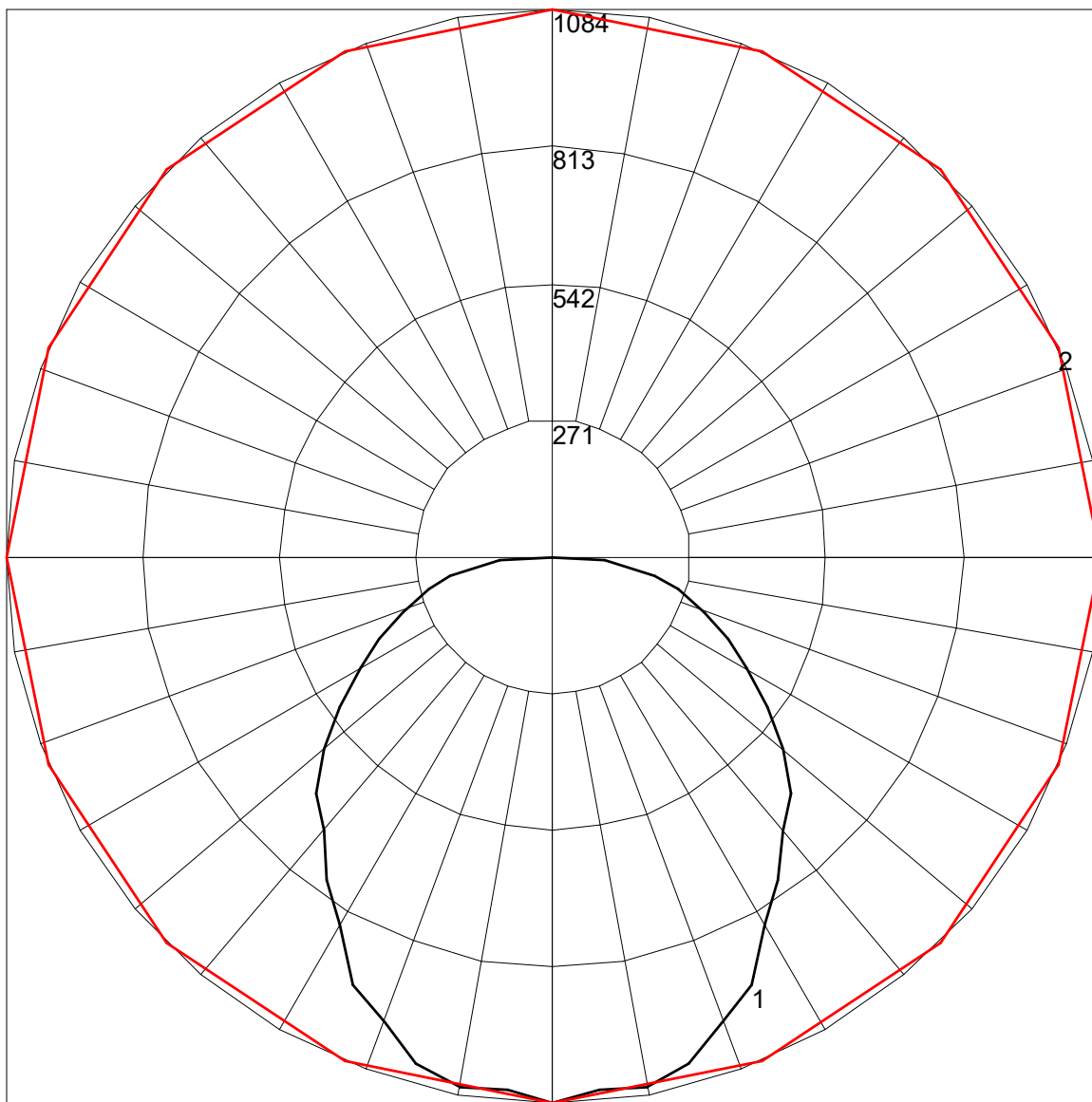
4H	2H	14.7	16.1	15.1	16.5	16.8	15.5	16.9	15.9	17.2	17.6
	3H	16.6	17.8	17.0	18.2	18.6	17.9	19.1	18.4	19.5	19.9
	4H	17.3	18.4	17.8	18.8	19.2	19.1	20.2	19.6	20.6	21.0
	6H	17.9	18.8	18.3	19.2	19.7	20.4	21.3	20.8	21.8	22.2
	8H	18.0	18.9	18.5	19.4	19.8	20.9	21.8	21.3	22.2	22.7
	12H	18.2	19.0	18.6	19.4	19.9	21.3	22.1	21.8	22.6	23.0

8H	4H	17.9	18.8	18.4	19.2	19.7	19.4	20.3	19.9	20.8	21.2
	6H	18.7	19.4	19.2	19.9	20.4	20.9	21.7	21.4	22.1	22.6
	8H	19.0	19.6	19.5	20.1	20.6	21.6	22.2	22.1	22.7	23.2
	12H	19.2	19.8	19.7	20.3	20.8	22.1	22.7	22.6	23.2	23.8

12H	4H	18.1	18.9	18.6	19.3	19.8	19.5	20.3	20.0	20.8	21.2
	6H	18.9	19.6	19.4	20.1	20.6	21.0	21.7	21.5	22.1	22.7
	8H	19.3	19.9	19.8	20.4	20.9	21.7	22.3	22.3	22.8	23.4

Maximum UGR = 23.8

POLAR GRAPH



Maximum Candela = 1084.227 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)