H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-22-L26-850-SA-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] BALLABS TEST NO. 20789.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2023-06-23
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 1-84 LED 22"ARRAY 2x2 LUMINAIRE
[MORE] WHITE REFLECTOR w/FROST SQUARED RIBBED LENS
[MORE] ADVANCE #C1042C092V045CNN1
[LUMCAT] PT-22-L26-850-SA-DIM-UNV
[LAMPCAT] HLM 80 CRI 3500K CCT

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3193
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	148
Total Luminaire Watts	21.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.14
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.92 ft
Luminous Width (90-270)	1.98 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2854	2812	2772
55	2565	2588	2660
65	2245	2448	2749
75	1750	2465	3187
85	910	2295	3091

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-22-L26-850-SA-DIM-UNV_.IES

CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	1265.308	1265.308	1265.308	1265.308	1265.308
5	1265.308	1257.144	1251.896	1252.480	1251.313
10	1238.485	1232.071	1226.824	1224.491	1222.742
15	1194.754	1190.089	1184.258	1179.593	1178.427
20	1145.191	1137.611	1123.616	1120.701	1117.785
25	1072.887	1069.972	1053.645	1045.482	1040.234
30	990.672	986.007	974.928	962.100	953.354
35	897.960	899.126	885.132	872.304	867.056
40	802.916	805.832	791.838	783.091	779.593
45	711.954	710.205	701.458	698.543	691.546
50	615.161	616.910	608.747	615.744	609.913
55	518.951	524.199	523.616	538.193	538.193
60	424.490	427.989	443.149	462.974	471.721
65	334.694	343.441	365.015	393.586	409.913
70	243.732	258.892	295.044	331.779	351.604
75	159.767	186.589	225.073	267.639	290.962
80	84.548	114.869	158.018	200.000	221.575
85	27.988	46.647	70.554	86.297	95.044
90	0.000	0.000	0.000	0.000	0.000

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-22-L26-850-SA-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	452.81	N.A.	14.20
0-30	938.87	N.A.	29.40
0-40	1492.48	N.A.	46.70
0-60	2509.00	N.A.	78.60
0-80	3114.00	N.A.	97.50
0-90	3192.66	N.A.	100.00
10-90	3073.69	N.A.	96.30
20-40	1039.67	N.A.	32.60
20-50	1582.68	N.A.	49.60
40-70	1382.69	N.A.	43.30
60-80	604.99	N.A.	18.90
70-80	238.83	N.A.	7.50
80-90	78.66	N.A.	2.50
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	3192.66	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	118.97
10-20	333.84
20-30	486.06
30-40	553.61
40-50	543.01
50-60	473.52
60-70	366.16
70-80	238.83
80-90	78.66
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

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-22-L26-850-SA-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	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	80	72	65	88	78	71	64	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-22-L26-850-SA-DIM-UNV_.IES

UGR TABLE - CORRECTED

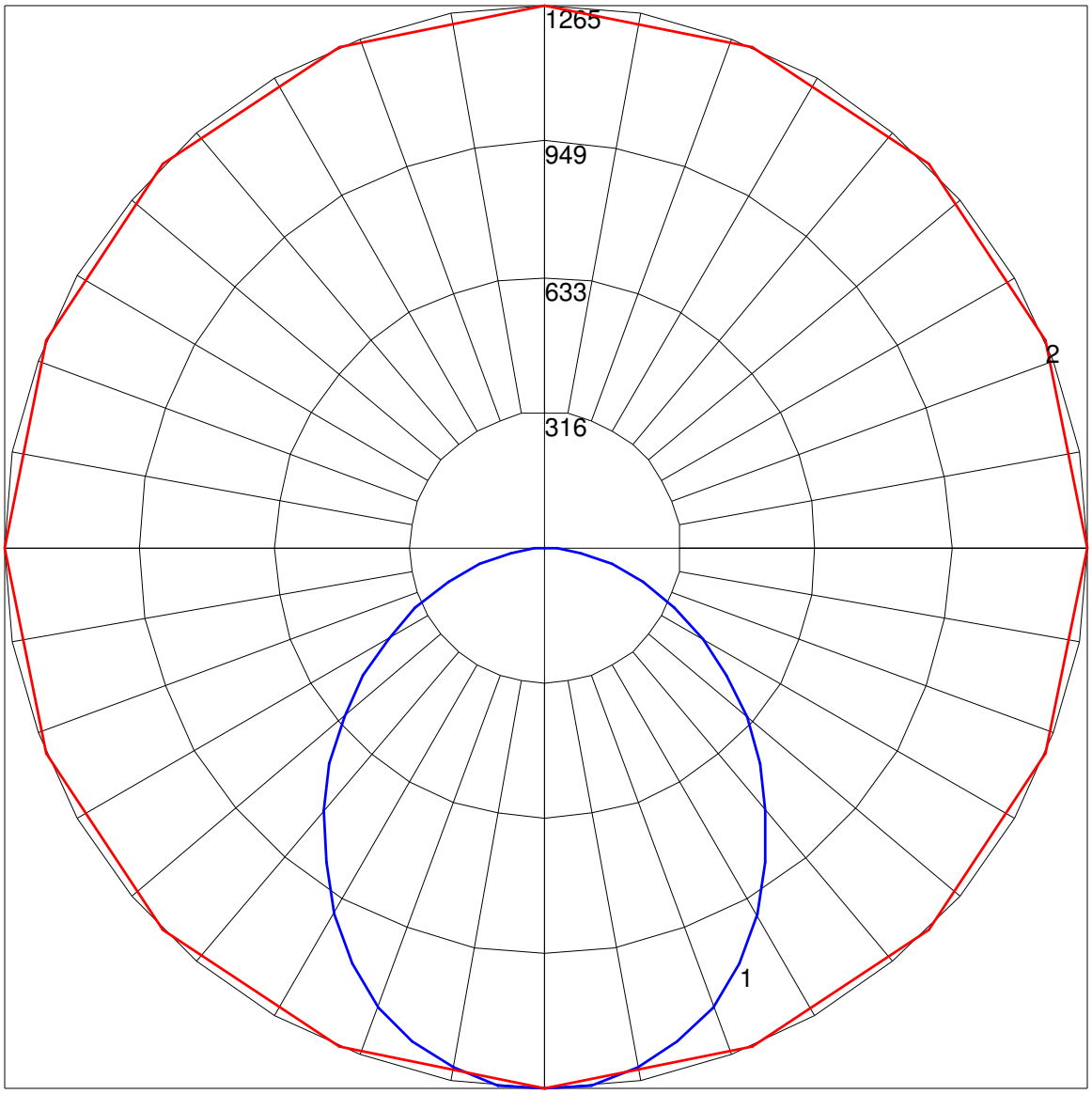
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	15.0	16.6	15.4	16.9	17.2	15.4	17.0	15.7	17.3	17.6
	3H	16.6	18.1	17.0	18.4	18.8	17.6	19.1	18.0	19.4	19.8
	4H	17.2	18.6	17.6	18.9	19.3	18.7	20.1	19.1	20.4	20.8
	6H	17.6	18.8	18.0	19.2	19.6	19.7	21.0	20.1	21.4	21.8
	8H	17.7	18.9	18.1	19.3	19.7	20.1	21.3	20.5	21.7	22.1
	12H	17.7	18.9	18.1	19.3	19.7	20.4	21.5	20.8	21.9	22.4
4H	2H	15.7	17.0	16.1	17.4	17.8	16.0	17.4	16.4	17.7	18.1
	3H	17.5	18.7	18.0	19.1	19.5	18.5	19.7	18.9	20.0	20.4
	4H	18.3	19.3	18.7	19.7	20.2	19.7	20.8	20.2	21.2	21.6
	6H	18.8	19.7	19.2	20.2	20.6	20.9	21.9	21.4	22.3	22.8
	8H	18.9	19.8	19.4	20.2	20.7	21.4	22.3	21.9	22.7	23.2
	12H	19.0	19.8	19.5	20.3	20.7	21.7	22.5	22.2	23.0	23.4
8H	4H	18.8	19.7	19.2	20.1	20.6	20.0	20.9	20.5	21.4	21.8
	6H	19.5	20.2	20.0	20.7	21.2	21.4	22.2	21.9	22.6	23.1
	8H	19.7	20.3	20.2	20.8	21.3	22.0	22.6	22.5	23.2	23.6
	12H	19.8	20.4	20.3	20.9	21.5	22.4	23.0	22.9	23.5	24.0
12H	4H	18.9	19.7	19.4	20.2	20.6	20.1	20.9	20.5	21.3	21.8
	6H	19.6	20.3	20.2	20.8	21.3	21.5	22.2	22.0	22.6	23.1
	8H	19.9	20.5	20.4	21.0	21.6	22.1	22.7	22.6	23.2	23.7

Maximum UGR = 24.0

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-22-L26-850-SA-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 1265.308 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.