H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-14-L80-835-RA-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19323.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2023-06-23
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 1x4'RECESSED LED LUMINAIRE
[MORE] WHITE REFLECTOR w/WHITE RIBBED ACRYLIC LENS
[MORE] 0-10V LED DRIVER
[LUMCAT] PT-14-L80-835-RA-DIM-UNV
[LAMPCAT] 22" LED ARRAYS
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Architectural, Office, Direct
[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7978
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	129
Total Luminaire Watts	61.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.92 ft
Luminous Width (90-270)	0.94 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7467	7799	7912
55	6590	7241	7548
65	5735	6796	6973
75	4167	5837	6085
85	1899	3124	3675

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-14-L80-835-RA-DIM-UNV_.IES

CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	2907.392	2907.392	2907.392	2907.392	2907.392
5	2973.055	2951.167	2940.223	2912.864	2896.448
10	2921.984	2905.568	2900.096	2870.913	2856.321
15	2841.730	2827.138	2834.434	2799.779	2799.779
20	2726.820	2721.348	2734.116	2701.285	2712.228
25	2599.143	2586.375	2611.911	2588.199	2580.903
30	2449.578	2425.867	2462.346	2449.578	2445.930
35	2261.710	2243.471	2290.894	2281.774	2292.718
40	2042.835	2039.187	2090.258	2097.554	2088.434
45	1803.896	1809.368	1884.151	1900.566	1911.510
50	1550.366	1577.725	1656.156	1696.283	1696.283
55	1291.364	1342.435	1419.041	1497.471	1479.232
60	1057.897	1101.672	1192.870	1256.708	1247.589
65	828.078	866.381	981.290	1026.889	1006.826
70	590.963	662.097	756.943	778.831	769.711
75	368.440	463.286	516.181	538.068	538.068
80	187.868	275.418	295.482	311.897	299.129
85	56.543	107.614	93.022	102.142	109.438
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-14-L80-835-RA-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1073.63	N.A.	13.50
0-30	2268.77	N.A.	28.40
0-40	3688.96	N.A.	46.20
0-60	6386.3	N.A.	80.00
0-80	7848.92	N.A.	98.40
0-90	7978.04	N.A.	100.00
10-90	7699.78	N.A.	96.50
20-40	2615.33	N.A.	32.80
20-50	4051.62	N.A.	50.80
40-70	3635.92	N.A.	45.60
60-80	1462.62	N.A.	18.30
70-80	524.04	N.A.	6.60
80-90	129.12	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	7978.04	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	278.26
10-20	795.37
20-30	1195.14
30-40	1420.19
40-50	1436.29
50-60	1261.04
60-70	938.58
70-80	524.04
80-90	129.12
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-14-L80-835-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	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	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	78	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	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-14-L80-835-RA-DIM-UNV_.IES

UGR TABLE - CORRECTED

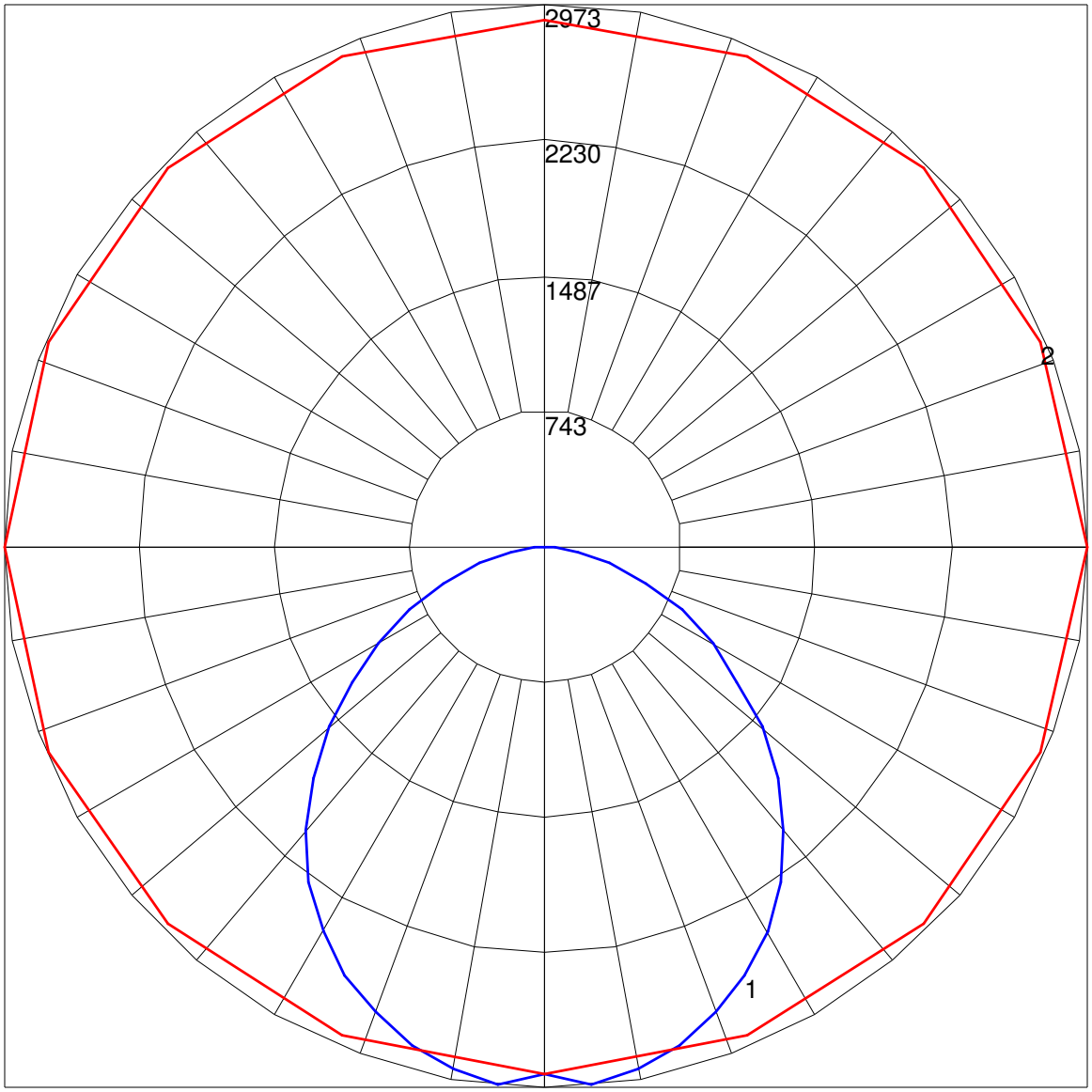
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.5	20.1	18.8	20.4	20.7	19.3	20.9	19.7	21.3	21.6
	3H	20.0	21.5	20.4	21.8	22.2	21.1	22.6	21.5	22.9	23.3
	4H	20.5	21.9	20.9	22.3	22.6	21.8	23.1	22.2	23.5	23.9
	6H	20.8	22.1	21.3	22.5	22.9	22.2	23.5	22.6	23.8	24.2
	8H	20.9	22.1	21.3	22.5	22.9	22.3	23.5	22.7	23.9	24.3
	12H	20.9	22.1	21.4	22.5	22.9	22.4	23.6	22.8	23.9	24.4
4H	2H	19.2	20.6	19.6	20.9	21.3	19.9	21.3	20.3	21.6	22.0
	3H	21.0	22.2	21.4	22.6	23.0	21.9	23.1	22.3	23.5	23.9
	4H	21.7	22.7	22.1	23.1	23.6	22.7	23.7	23.1	24.2	24.6
	6H	22.1	23.0	22.6	23.5	23.9	23.3	24.2	23.7	24.6	25.1
	8H	22.2	23.1	22.7	23.5	24.0	23.4	24.3	23.9	24.7	25.2
	12H	22.3	23.1	22.8	23.5	24.0	23.5	24.3	24.0	24.8	25.3
8H	4H	22.1	22.9	22.5	23.4	23.8	23.0	23.8	23.4	24.3	24.7
	6H	22.7	23.4	23.1	23.8	24.3	23.7	24.4	24.2	24.9	25.3
	8H	22.8	23.5	23.3	24.0	24.5	23.9	24.5	24.4	25.0	25.5
	12H	23.0	23.5	23.5	24.0	24.6	24.0	24.6	24.5	25.1	25.7
12H	4H	22.1	22.9	22.6	23.4	23.8	23.0	23.8	23.5	24.2	24.7
	6H	22.7	23.4	23.2	23.8	24.4	23.7	24.3	24.2	24.8	25.3
	8H	23.0	23.5	23.5	24.0	24.6	24.0	24.5	24.5	25.0	25.6

Maximum UGR = 25.7

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-14-L80-835-RA-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 2973.055 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.)

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.