H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-14-L80-950-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-L80-950-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	7180
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	116
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	6720	7019	7121
55	5931	6517	6794
65	5161	6116	6276
75	3750	5254	5476
85	1709	2812	3308

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-L80-950-RA-DIM-UNV_.IES

CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	2616.653	2616.653	2616.653	2616.653	2616.653
5	2675.749	2656.051	2646.201	2621.578	2606.804
10	2629.786	2615.011	2610.087	2583.822	2570.689
15	2557.557	2544.424	2550.990	2519.801	2519.801
20	2454.138	2449.214	2460.704	2431.156	2441.006
25	2339.229	2327.738	2350.720	2329.379	2322.813
30	2204.620	2183.280	2216.111	2204.620	2201.337
35	2035.539	2019.124	2061.804	2053.597	2063.446
40	1838.552	1835.269	1881.232	1887.799	1879.591
45	1623.507	1628.431	1695.736	1710.510	1720.359
50	1395.329	1419.953	1490.540	1526.655	1526.655
55	1162.227	1208.191	1277.137	1347.724	1331.308
60	952.107	991.505	1073.583	1131.038	1122.830
65	745.270	779.743	883.161	924.201	906.143
70	531.867	595.888	681.249	700.948	692.740
75	331.596	416.957	464.563	484.261	484.261
80	169.081	247.876	265.933	280.707	269.216
85	50.888	96.852	83.720	91.928	98.494
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-L80-950-RA-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	966.27	N.A.	13.50
0-30	2041.89	N.A.	28.40
0-40	3320.07	N.A.	46.20
0-60	5747.67	N.A.	80.00
0-80	7064.03	N.A.	98.40
0-90	7180.24	N.A.	100.00
10-90	6929.8	N.A.	96.50
20-40	2353.8	N.A.	32.80
20-50	3646.46	N.A.	50.80
40-70	3272.33	N.A.	45.60
60-80	1316.36	N.A.	18.30
70-80	471.63	N.A.	6.60
80-90	116.21	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	7180.24	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	250.44
10-20	715.83
20-30	1075.62
30-40	1278.17
40-50	1292.67
50-60	1134.94
60-70	844.73
70-80	471.63
80-90	116.21
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-L80-950-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	55	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-L80-950-RA-DIM-UNV_.IES

UGR TABLE - CORRECTED

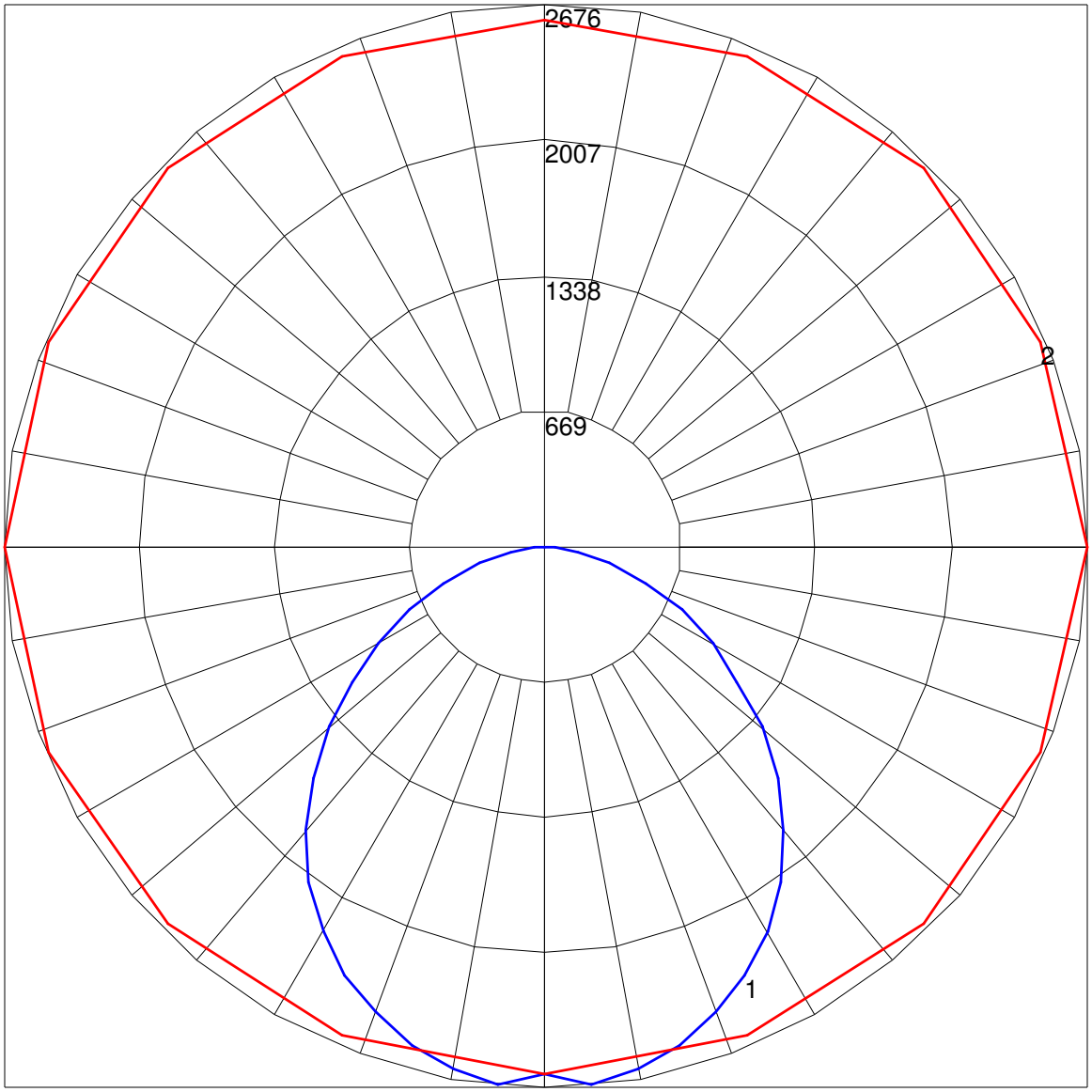
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.1	19.7	18.4	20.0	20.3	18.9	20.5	19.3	20.9	21.2
	3H	19.6	21.1	20.0	21.4	21.8	20.7	22.2	21.1	22.5	22.9
	4H	20.1	21.5	20.5	21.9	22.2	21.4	22.7	21.8	23.1	23.5
	6H	20.4	21.7	20.9	22.1	22.5	21.8	23.1	22.2	23.4	23.8
	8H	20.5	21.7	20.9	22.1	22.5	21.9	23.1	22.3	23.5	23.9
	12H	20.5	21.7	21.0	22.1	22.5	22.0	23.2	22.4	23.5	24.0
4H	2H	18.8	20.2	19.2	20.5	20.9	19.5	20.9	19.9	21.2	21.6
	3H	20.6	21.8	21.0	22.2	22.6	21.5	22.7	21.9	23.1	23.5
	4H	21.3	22.3	21.7	22.7	23.2	22.3	23.3	22.7	23.8	24.2
	6H	21.7	22.6	22.2	23.1	23.5	22.9	23.8	23.3	24.2	24.7
	8H	21.8	22.7	22.3	23.1	23.6	23.0	23.9	23.5	24.3	24.8
	12H	21.9	22.7	22.4	23.1	23.6	23.1	23.9	23.6	24.4	24.9
8H	4H	21.7	22.5	22.1	23.0	23.4	22.6	23.4	23.0	23.9	24.3
	6H	22.3	23.0	22.7	23.4	23.9	23.3	24.0	23.8	24.5	24.9
	8H	22.4	23.1	22.9	23.6	24.1	23.5	24.1	24.0	24.6	25.1
	12H	22.6	23.1	23.1	23.6	24.2	23.6	24.2	24.1	24.7	25.3
12H	4H	21.7	22.5	22.2	23.0	23.4	22.6	23.4	23.1	23.8	24.3
	6H	22.3	23.0	22.8	23.4	24.0	23.3	23.9	23.8	24.4	24.9
	8H	22.6	23.1	23.1	23.6	24.2	23.6	24.1	24.1	24.6	25.2

Maximum UGR = 25.3

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-L80-950-RA-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 2675.749 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.