H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-14-L61-840-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-L61-840-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	6366
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	140
Total Luminaire Watts	45.5
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	5958	6224	6314
55	5259	5778	6024
65	4576	5423	5564
75	3325	4658	4856
85	1515	2493	2933

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-L61-840-RA-DIM-UNV_.IES

CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	2320.094	2320.094	2320.094	2320.094	2320.094
5	2372.493	2355.027	2346.293	2324.461	2311.361
10	2331.738	2318.639	2314.272	2290.984	2279.340
15	2267.696	2256.051	2261.874	2234.219	2234.219
20	2175.998	2171.631	2181.820	2155.621	2164.354
25	2074.112	2063.923	2084.300	2065.379	2059.557
30	1954.759	1935.838	1964.948	1954.759	1951.848
35	1804.841	1790.286	1828.129	1820.852	1829.585
40	1630.179	1627.268	1668.023	1673.845	1666.567
45	1439.506	1443.873	1503.549	1516.649	1525.382
50	1237.189	1259.022	1321.609	1353.631	1353.631
55	1030.506	1071.261	1132.392	1194.980	1180.424
60	844.200	879.132	951.908	1002.851	995.574
65	660.805	691.371	783.068	819.456	803.445
70	471.588	528.353	604.040	621.506	614.228
75	294.014	369.701	411.911	429.378	429.378
80	149.918	219.783	235.794	248.893	238.705
85	45.121	85.876	74.231	81.509	87.331
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-L61-840-RA-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	856.76	N.A.	13.50
0-30	1810.47	N.A.	28.40
0-40	2943.79	N.A.	46.20
0-60	5096.25	N.A.	80.00
0-80	6263.42	N.A.	98.40
0-90	6366.46	N.A.	100.00
10-90	6144.41	N.A.	96.50
20-40	2087.03	N.A.	32.80
20-50	3233.19	N.A.	50.80
40-70	2901.46	N.A.	45.60
60-80	1167.17	N.A.	18.30
70-80	418.18	N.A.	6.60
80-90	103.04	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	6366.46	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	222.05
10-20	634.70
20-30	953.72
30-40	1133.31
40-50	1146.16
50-60	1006.31
60-70	748.99
70-80	418.18
80-90	103.04
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-L61-840-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	79	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-L61-840-RA-DIM-UNV_.IES

UGR TABLE - CORRECTED

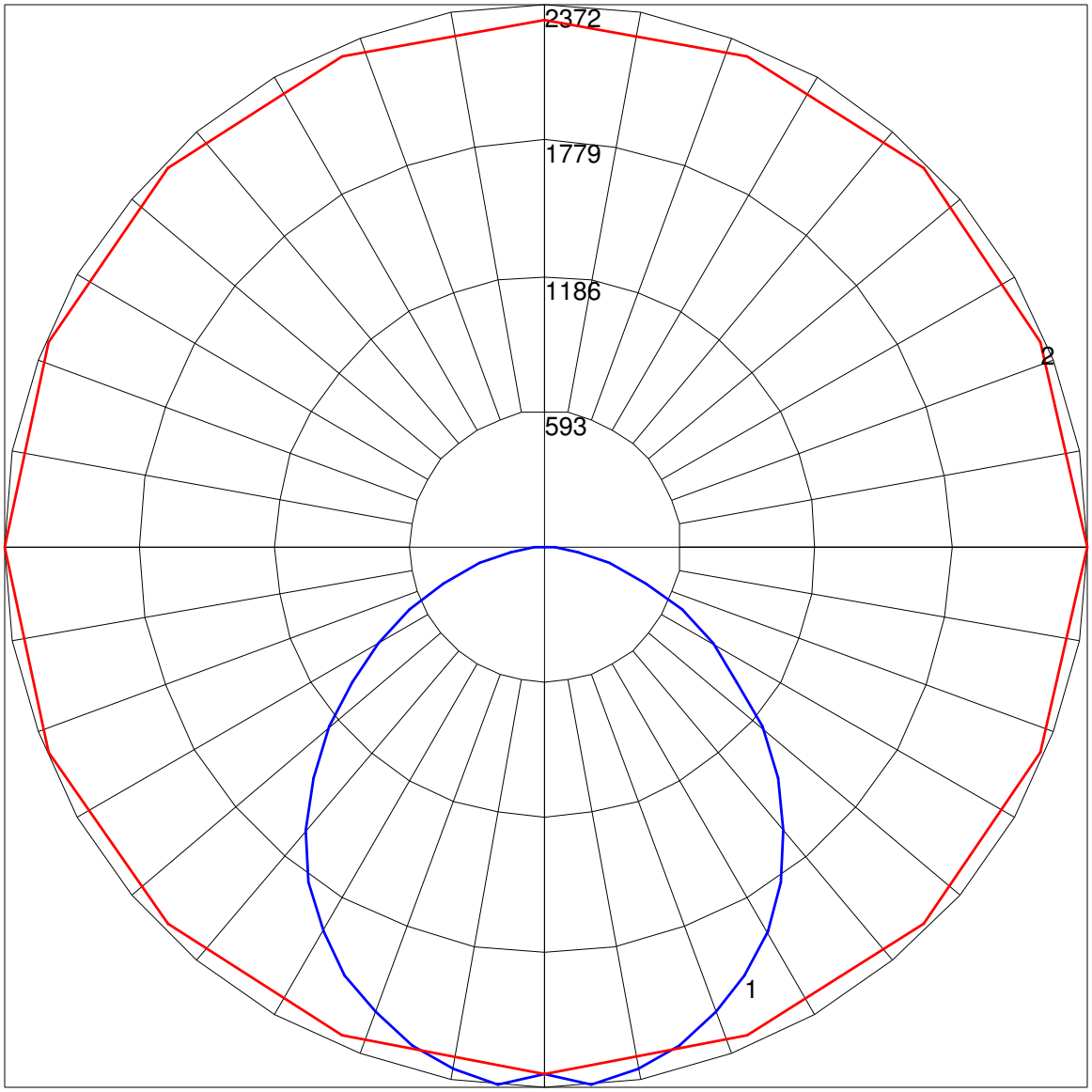
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	17.7	19.3	18.0	19.6	19.9	18.5	20.1	18.9	20.5	20.8
	3H	19.2	20.7	19.6	21.0	21.4	20.3	21.8	20.7	22.1	22.5
	4H	19.7	21.1	20.1	21.5	21.8	21.0	22.3	21.4	22.7	23.1
	6H	20.0	21.3	20.5	21.7	22.1	21.4	22.7	21.8	23.0	23.4
	8H	20.1	21.3	20.5	21.7	22.1	21.5	22.7	21.9	23.1	23.5
	12H	20.1	21.3	20.6	21.7	22.1	21.6	22.8	22.0	23.1	23.6
4H	2H	18.4	19.8	18.8	20.1	20.5	19.1	20.5	19.5	20.8	21.2
	3H	20.2	21.4	20.6	21.8	22.2	21.1	22.3	21.5	22.7	23.1
	4H	20.9	21.9	21.3	22.3	22.8	21.9	22.9	22.3	23.4	23.8
	6H	21.3	22.2	21.8	22.7	23.1	22.5	23.4	22.9	23.8	24.3
	8H	21.4	22.3	21.9	22.7	23.2	22.6	23.5	23.1	23.9	24.4
	12H	21.5	22.3	22.0	22.7	23.2	22.7	23.5	23.2	24.0	24.5
8H	4H	21.3	22.1	21.7	22.6	23.0	22.2	23.0	22.6	23.5	23.9
	6H	21.9	22.6	22.3	23.0	23.5	22.9	23.6	23.4	24.1	24.5
	8H	22.0	22.7	22.5	23.2	23.7	23.1	23.7	23.6	24.2	24.7
	12H	22.2	22.7	22.7	23.2	23.8	23.2	23.8	23.7	24.3	24.9
12H	4H	21.3	22.1	21.8	22.6	23.0	22.2	23.0	22.7	23.4	23.9
	6H	21.9	22.6	22.4	23.0	23.6	22.9	23.5	23.4	24.0	24.5
	8H	22.2	22.7	22.7	23.2	23.8	23.2	23.7	23.7	24.2	24.8

Maximum UGR = 24.9

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-L61-840-RA-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 2372.493 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.