H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-14-L80-930-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-L80-930-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	6622
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
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	6197	6473	6567
55	5469	6010	6265
65	4760	5641	5788
75	3458	4845	5050
85	1576	2593	3050

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-L80-930-RA-DIM-UNV_.IES

CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	2413.136	2413.136	2413.136	2413.136	2413.136
5	2467.636	2449.469	2440.386	2417.678	2404.053
10	2425.247	2411.622	2407.080	2382.858	2370.747
15	2358.636	2346.525	2352.580	2323.817	2323.817
20	2263.261	2258.719	2269.317	2242.067	2251.150
25	2157.289	2146.692	2167.886	2148.206	2142.150
30	2033.150	2013.470	2043.748	2033.150	2030.123
35	1877.220	1862.081	1901.442	1893.873	1902.956
40	1695.553	1692.526	1734.915	1740.970	1733.401
45	1497.234	1501.776	1563.845	1577.470	1586.554
50	1286.804	1309.512	1374.609	1407.915	1407.915
55	1071.832	1114.221	1177.804	1242.901	1227.762
60	878.054	914.388	990.082	1043.068	1035.499
65	687.305	719.096	814.471	852.318	835.666
70	490.499	549.541	628.263	646.430	638.860
75	305.805	384.527	428.430	446.597	446.597
80	155.930	228.597	245.250	258.875	248.277
85	46.930	89.319	77.208	84.778	90.833
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-L80-930-RA-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	891.11	N.A.	13.50
0-30	1883.08	N.A.	28.40
0-40	3061.84	N.A.	46.20
0-60	5300.63	N.A.	80.00
0-80	6514.6	N.A.	98.40
0-90	6621.77	N.A.	100.00
10-90	6390.82	N.A.	96.50
20-40	2170.72	N.A.	32.80
20-50	3362.85	N.A.	50.80
40-70	3017.81	N.A.	45.60
60-80	1213.98	N.A.	18.30
70-80	434.95	N.A.	6.60
80-90	107.17	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	6621.77	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	230.96
10-20	660.16
20-30	991.96
30-40	1178.76
40-50	1192.12
50-60	1046.66
60-70	779.03
70-80	434.95
80-90	107.17
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-L80-930-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	72	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	54	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-L80-930-RA-DIM-UNV_.IES

UGR TABLE - CORRECTED

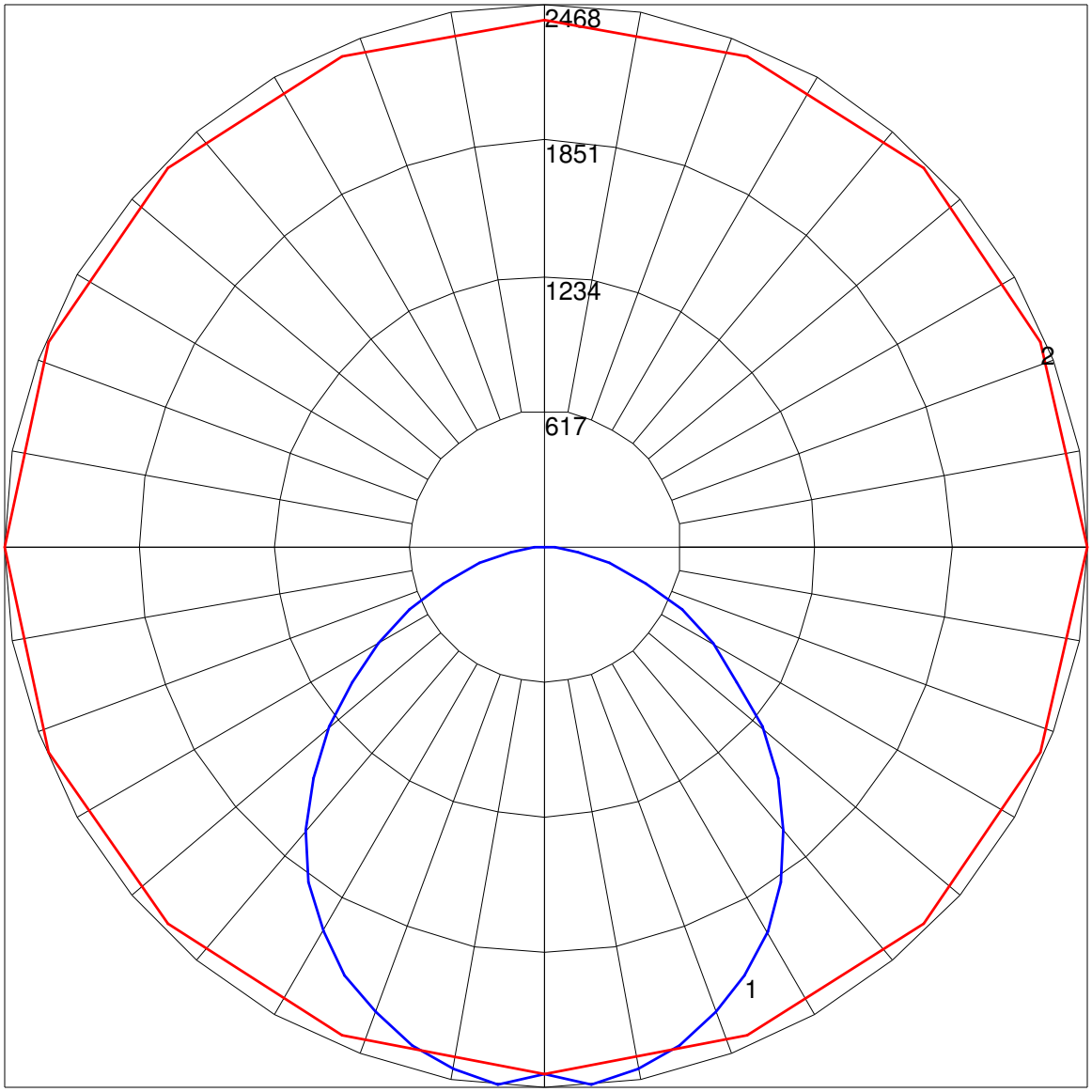
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	17.9	19.5	18.2	19.8	20.1	18.7	20.3	19.1	20.7	21.0
	3H	19.4	20.9	19.8	21.2	21.6	20.5	22.0	20.9	22.3	22.7
	4H	19.9	21.3	20.3	21.7	22.0	21.2	22.5	21.6	22.9	23.3
	6H	20.2	21.5	20.7	21.9	22.3	21.6	22.9	22.0	23.2	23.6
	8H	20.3	21.5	20.7	21.9	22.3	21.7	22.9	22.1	23.3	23.7
	12H	20.3	21.5	20.8	21.9	22.3	21.8	23.0	22.2	23.3	23.8
4H	2H	18.6	20.0	19.0	20.3	20.7	19.3	20.7	19.7	21.0	21.4
	3H	20.4	21.6	20.8	22.0	22.4	21.3	22.5	21.7	22.9	23.3
	4H	21.1	22.1	21.5	22.5	23.0	22.1	23.1	22.5	23.6	24.0
	6H	21.5	22.4	22.0	22.9	23.3	22.7	23.6	23.1	24.0	24.5
	8H	21.6	22.5	22.1	22.9	23.4	22.8	23.7	23.3	24.1	24.6
	12H	21.7	22.5	22.2	22.9	23.4	22.9	23.7	23.4	24.2	24.7
8H	4H	21.5	22.3	21.9	22.8	23.2	22.4	23.2	22.8	23.7	24.1
	6H	22.1	22.8	22.5	23.2	23.7	23.1	23.8	23.6	24.3	24.7
	8H	22.2	22.9	22.7	23.4	23.9	23.3	23.9	23.8	24.4	24.9
	12H	22.4	22.9	22.9	23.4	24.0	23.4	24.0	23.9	24.5	25.1
12H	4H	21.5	22.3	22.0	22.8	23.2	22.4	23.2	22.9	23.6	24.1
	6H	22.1	22.8	22.6	23.2	23.8	23.1	23.7	23.6	24.2	24.7
	8H	22.4	22.9	22.9	23.4	24.0	23.4	23.9	23.9	24.4	25.0

Maximum UGR = 25.1

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-L80-930-RA-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 2467.636 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.