H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-14-L27-950-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-L27-950-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	2363
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	18.8
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	2212	2310	2344
55	1952	2145	2236
65	1699	2013	2066
75	1234	1729	1803
85	563	925	1089

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-L27-950-RA-DIM-UNV_.IES

CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	861.285	861.285	861.285	861.285	861.285
5	880.737	874.253	871.011	862.906	858.043
10	865.607	860.744	859.123	850.478	846.156
15	841.833	837.510	839.672	829.405	829.405
20	807.792	806.171	809.953	800.228	803.470
25	769.969	766.187	773.751	766.727	764.566
30	725.662	718.638	729.444	725.662	724.581
35	670.008	664.605	678.653	675.952	679.194
40	605.169	604.088	619.217	621.379	618.677
45	534.386	536.007	558.160	563.023	566.265
50	459.280	467.385	490.619	502.506	502.506
55	382.553	397.682	420.376	443.610	438.207
60	313.391	326.359	353.375	372.287	369.585
65	245.309	256.656	290.697	304.205	298.262
70	175.067	196.140	224.237	230.721	228.019
75	109.147	137.244	152.913	159.397	159.397
80	55.654	81.590	87.533	92.396	88.614
85	16.750	31.879	27.557	30.258	32.420
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-L27-950-RA-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	318.05	N.A.	13.50
0-30	672.10	N.A.	28.40
0-40	1092.82	N.A.	46.20
0-60	1891.87	N.A.	80.00
0-80	2325.16	N.A.	98.40
0-90	2363.41	N.A.	100.00
10-90	2280.98	N.A.	96.50
20-40	774.76	N.A.	32.80
20-50	1200.25	N.A.	50.80
40-70	1077.1	N.A.	45.60
60-80	433.29	N.A.	18.30
70-80	155.24	N.A.	6.60
80-90	38.25	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	2363.41	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	82.43
10-20	235.62
20-30	354.05
30-40	420.72
40-50	425.49
50-60	373.57
60-70	278.05
70-80	155.24
80-90	38.25
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-L27-950-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	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-L27-950-RA-DIM-UNV_.IES

UGR TABLE - CORRECTED

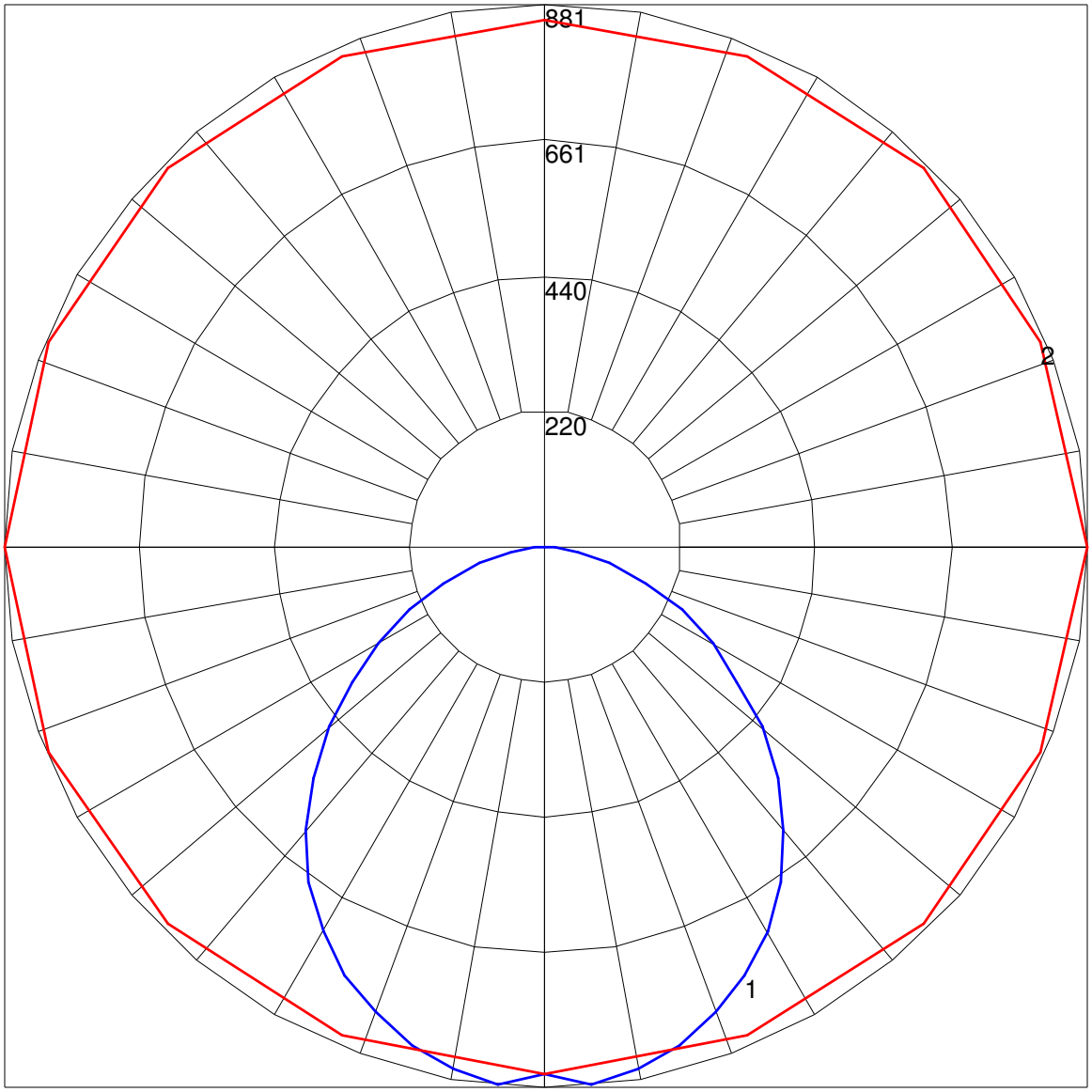
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	14.3	15.9	14.6	16.2	16.5	15.1	16.7	15.5	17.1	17.4
	3H	15.8	17.3	16.2	17.6	18.0	16.9	18.4	17.3	18.7	19.1
	4H	16.3	17.7	16.7	18.1	18.4	17.6	18.9	18.0	19.3	19.7
	6H	16.6	17.9	17.1	18.3	18.7	18.0	19.3	18.4	19.6	20.0
	8H	16.7	17.9	17.1	18.3	18.7	18.1	19.3	18.5	19.7	20.1
	12H	16.7	17.9	17.2	18.3	18.7	18.2	19.4	18.6	19.7	20.2
4H	2H	15.0	16.4	15.4	16.7	17.1	15.7	17.1	16.1	17.4	17.8
	3H	16.8	18.0	17.2	18.4	18.8	17.7	18.9	18.1	19.3	19.7
	4H	17.5	18.5	17.9	18.9	19.4	18.5	19.5	18.9	20.0	20.4
	6H	17.9	18.8	18.4	19.3	19.7	19.1	20.0	19.5	20.4	20.9
	8H	18.0	18.9	18.5	19.3	19.8	19.2	20.1	19.7	20.5	21.0
	12H	18.1	18.9	18.6	19.3	19.8	19.3	20.1	19.8	20.6	21.1
8H	4H	17.9	18.7	18.3	19.2	19.6	18.8	19.6	19.2	20.1	20.5
	6H	18.5	19.2	18.9	19.6	20.1	19.5	20.2	20.0	20.7	21.1
	8H	18.6	19.3	19.1	19.8	20.3	19.7	20.3	20.2	20.8	21.3
	12H	18.8	19.3	19.3	19.8	20.4	19.8	20.4	20.3	20.9	21.5
12H	4H	17.9	18.7	18.4	19.2	19.6	18.8	19.6	19.3	20.0	20.5
	6H	18.5	19.2	19.0	19.6	20.2	19.5	20.1	20.0	20.6	21.1
	8H	18.8	19.3	19.3	19.8	20.4	19.8	20.3	20.3	20.8	21.4

Maximum UGR = 21.5

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-L27-950-RA-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 880.737 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.)