H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-14-L80-850-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-L80-850-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	8457
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	137
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	7915	8267	8387
55	6985	7676	8001
65	6079	7204	7391
75	4417	6188	6450
85	2013	3311	3896

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3081.835	3081.835	3081.835	3081.835	3081.835
5	3151.437	3128.236	3116.636	3087.635	3070.235
10	3097.302	3079.902	3074.101	3043.167	3027.700
15	3012.233	2996.765	3004.499	2967.764	2967.764
20	2890.429	2884.628	2898.162	2863.361	2874.961
25	2755.091	2741.557	2768.625	2743.490	2735.757
30	2596.552	2571.418	2610.086	2596.552	2592.685
35	2397.412	2378.078	2428.347	2418.680	2430.280
40	2165.405	2161.538	2215.673	2223.407	2213.740
45	1912.130	1917.930	1997.199	2014.600	2026.200
50	1643.387	1672.388	1755.525	1798.059	1798.059
55	1368.845	1422.980	1504.183	1587.319	1567.985
60	1121.370	1167.772	1264.442	1332.111	1322.444
65	877.762	918.364	1040.168	1088.503	1067.235
70	626.421	701.823	802.360	825.561	815.894
75	390.546	491.083	547.151	570.352	570.352
80	199.140	291.943	313.210	330.611	317.077
85	59.935	114.070	98.603	108.270	116.004
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1138.05	N.A.	13.50
0-30	2404.89	N.A.	28.40
0-40	3910.3	N.A.	46.20
0-60	6769.47	N.A.	80.00
0-80	8319.85	N.A.	98.40
0-90	8456.72	N.A.	100.00
10-90	8161.76	N.A.	96.50
20-40	2772.25	N.A.	32.80
20-50	4294.72	N.A.	50.80
40-70	3854.07	N.A.	45.60
60-80	1550.38	N.A.	18.30
70-80	555.48	N.A.	6.60
80-90	136.87	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	8456.72	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	294.96
10-20	843.09
20-30	1266.85
30-40	1505.4
40-50	1522.47
50-60	1336.7
60-70	994.90
70-80	555.48
80-90	136.87
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

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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

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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	18.7	20.3	19.0	20.6	20.9	19.5	21.1	19.9	21.5	21.8
	3H	20.2	21.7	20.6	22.0	22.4	21.3	22.8	21.7	23.1	23.5
	4H	20.7	22.1	21.1	22.5	22.8	22.0	23.3	22.4	23.7	24.1
	6H	21.0	22.3	21.5	22.7	23.1	22.4	23.7	22.8	24.0	24.4
	8H	21.1	22.3	21.5	22.7	23.1	22.5	23.7	22.9	24.1	24.5
	12H	21.1	22.3	21.6	22.7	23.1	22.6	23.8	23.0	24.1	24.6
4H	2H	19.4	20.8	19.8	21.1	21.5	20.1	21.5	20.5	21.8	22.2
	3H	21.2	22.4	21.6	22.8	23.2	22.1	23.3	22.5	23.7	24.1
	4H	21.9	22.9	22.3	23.3	23.8	22.9	23.9	23.3	24.4	24.8
	6H	22.3	23.2	22.8	23.7	24.1	23.5	24.4	23.9	24.8	25.3
	8H	22.4	23.3	22.9	23.7	24.2	23.6	24.5	24.1	24.9	25.4
	12H	22.5	23.3	23.0	23.7	24.2	23.7	24.5	24.2	25.0	25.5
8H	4H	22.3	23.1	22.7	23.6	24.0	23.2	24.0	23.6	24.5	24.9
	6H	22.9	23.6	23.3	24.0	24.5	23.9	24.6	24.4	25.1	25.5
	8H	23.0	23.7	23.5	24.2	24.7	24.1	24.7	24.6	25.2	25.7
	12H	23.2	23.7	23.7	24.2	24.8	24.2	24.8	24.7	25.3	25.9
12H	4H	22.3	23.1	22.8	23.6	24.0	23.2	24.0	23.7	24.4	24.9
	6H	22.9	23.6	23.4	24.0	24.6	23.9	24.5	24.4	25.0	25.5
	8H	23.2	23.7	23.7	24.2	24.8	24.2	24.7	24.7	25.2	25.8

Maximum UGR = 25.9

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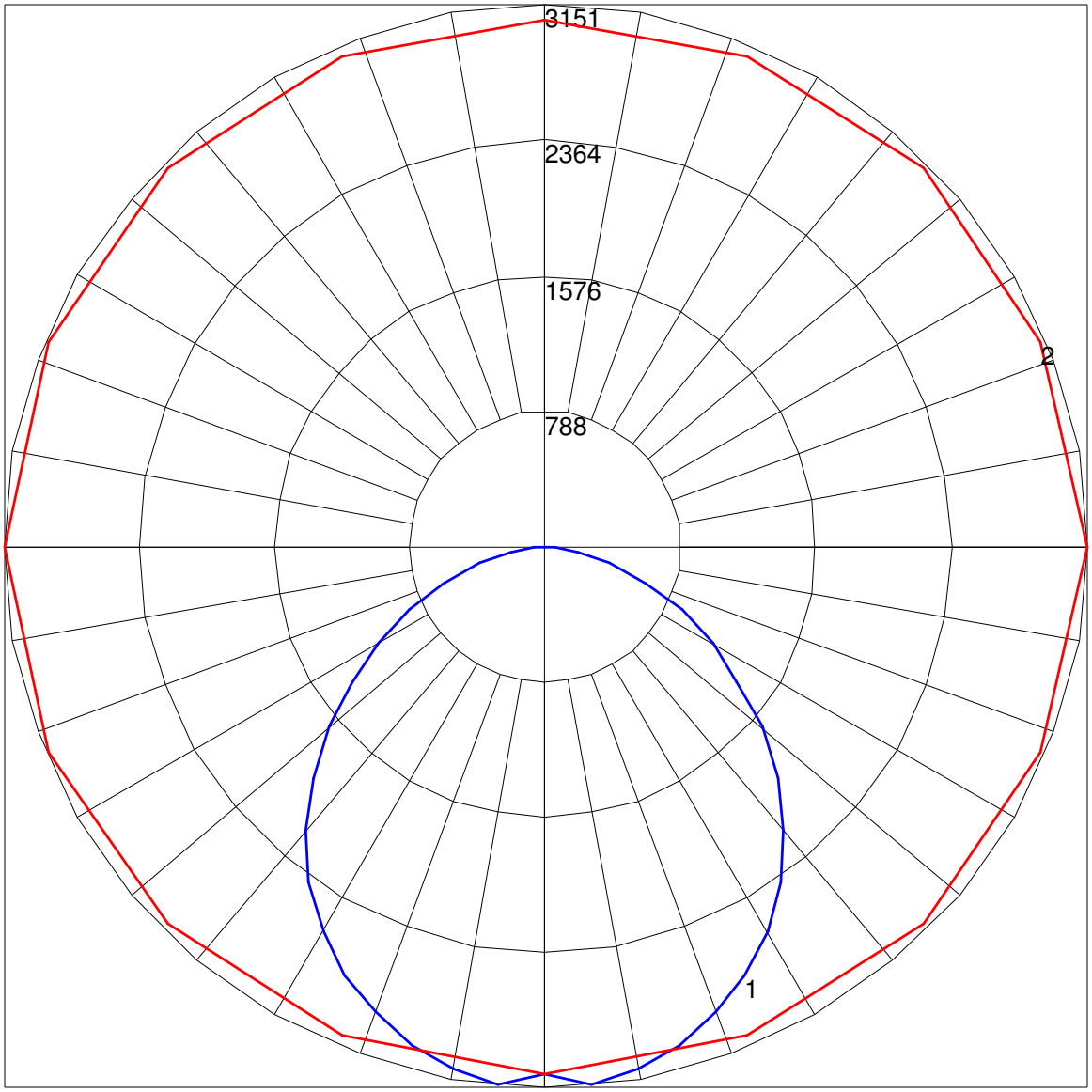
POLAR GRAPH



Maximum Candela = 3151.437 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.)

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