



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4AR-L11-8TW-DIM-UNV-LM-OF-WH_25 DEGREE TILT.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]GEN from BALLABS TEST NO. 20458.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 21-MAY-2018

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO

[LUMINAIRE] GEN7 V13 LED 4"SHORT HEATSINK 4"RND ADJ DOWNLIGHT @ 25 TILT

[MORE] ACRYLIC MED TIR OPTIC & 4"WHITE ASYM FLUSH REFL w/SOLITE

[MORE] ADVANCE # XI025C070V054DSM1 @ 610mA

[LUMCAT] 4AR-L11-8TW-DIM-UNV-LM-OF-WH_25 DEGREE TILT

[LAMPCAT] BXRE-35E2000

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Classroom, Commercial, Industrial, Direct, Downlight

[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	929
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	64
Total Luminaire Watts	14.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	2.14
Spacing Criterion (90-270)	0.56
Spacing Criterion (Diagonal)	1.16
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.33 ft (Diameter)
Luminous Width (90-270)	0.33 ft (Diameter)
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	95637	18286	5085
55	21097	6751	4822
65	7035	3763	3927
75	4275	2404	2672
85	1587	0	0

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0	283.92	283.92	283.92	283.92	283.92	283.92	283.92	283.92	283.92
5	702.80	668.08	539.28	388.08	266.56	185.92	145.60	123.20	118.16
10	1340.08	1215.20	774.48	422.24	216.72	129.36	91.84	76.16	73.92
15	2285.92	1887.20	989.52	399.84	164.08	87.36	64.96	57.68	56.00
20	2846.48	2412.48	1079.12	319.20	109.76	61.60	49.84	47.60	48.72
25	2983.12	2455.04	958.16	231.84	76.72	49.28	45.36	46.48	48.72
30	2661.12	2131.92	692.72	141.12	52.08	40.88	43.68	48.72	51.52
35	1957.20	1485.12	422.80	81.76	39.76	38.64	44.80	50.40	54.88
40	1142.40	830.48	222.88	49.28	34.16	38.64	47.60	54.88	58.80
45	547.68	390.32	104.72	34.72	29.12	36.96	46.48	54.88	59.36
50	235.76	184.24	50.96	23.52	25.76	33.60	42.56	50.40	56.56
55	98.00	85.68	31.36	19.60	22.40	29.68	38.08	45.92	48.72
60	49.28	40.88	19.60	14.56	17.36	25.20	31.92	38.64	41.44
65	24.08	19.60	12.88	11.20	13.44	19.04	25.20	30.80	33.04
70	13.44	11.20	8.40	7.84	9.52	14.00	19.60	22.40	25.20
75	8.96	6.16	5.04	3.92	5.60	8.96	11.20	13.44	15.68
80	3.36	2.80	1.68	1.12	1.12	3.36	5.60	6.16	7.84
85	1.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4AR-L11-8TW-DIM-UNV-LM-OF-WH_25 DEGREE TILT.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	205.21	N.A.	22.10
0-30	504.58	N.A.	54.30
0-40	751.16	N.A.	80.90
0-60	898.45	N.A.	96.70
0-80	928.06	N.A.	99.90
0-90	929.05	N.A.	100.00
10-90	893.14	N.A.	96.10
20-40	545.95	N.A.	58.80
20-50	651.94	N.A.	70.20
40-70	167.91	N.A.	18.10
60-80	29.61	N.A.	3.20
70-80	8.99	N.A.	1.00
80-90	0.99	N.A.	0.10
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	929.05	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	35.91
10-20	169.30
20-30	299.37
30-40	246.58
40-50	105.99
50-60	41.30
60-70	20.62
70-80	8.99
80-90	0.99
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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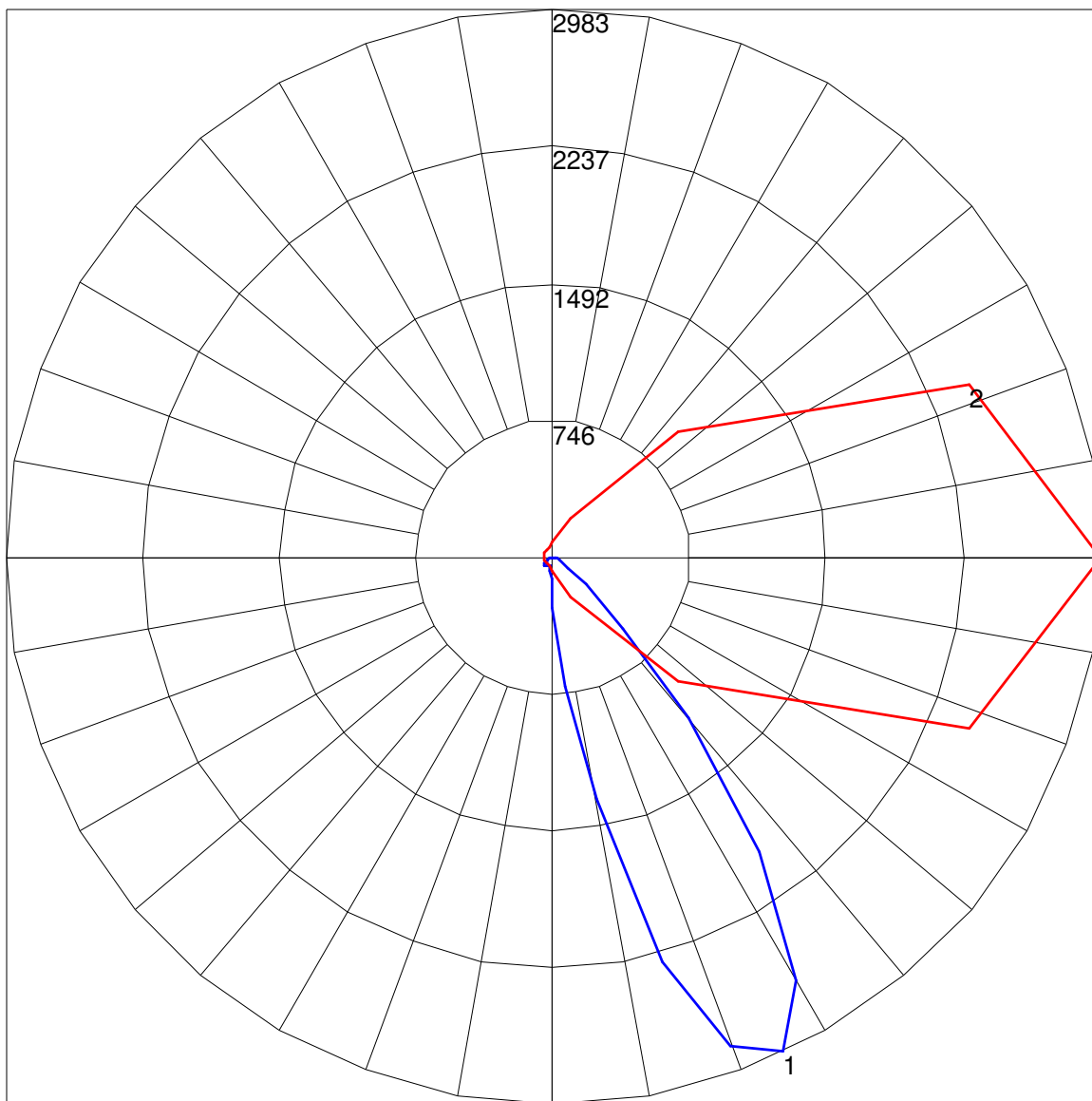
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	67	67	67	67	65	65	65	65	62	62	62	60	60	60	57	57	57	56
1	63	61	59	58	62	60	58	57	58	56	55	55	55	54	54	53	52	51
2	59	56	53	51	58	55	52	50	53	51	49	51	50	48	50	48	47	46
3	55	51	48	45	54	50	47	45	49	46	44	47	45	43	46	44	43	42
4	52	47	43	40	51	46	43	40	45	42	40	44	41	39	43	41	39	38
5	49	43	39	36	48	43	39	36	42	38	36	41	38	36	40	37	35	34
6	46	40	36	33	45	39	36	33	38	35	33	38	35	32	37	34	32	31
7	43	37	33	30	42	36	33	30	36	32	30	35	32	30	34	32	30	29
8	40	34	30	28	40	34	30	28	33	30	27	33	29	27	32	29	27	26
9	38	32	28	25	37	31	28	25	31	28	25	30	27	25	30	27	25	24
10	36	30	26	23	35	29	26	23	29	26	23	28	25	23	28	25	23	22

POLAR GRAPH



Maximum Candela = 2983.12 Located At Horizontal Angle = 0, Vertical Angle = 25
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.)