



IES INDOOR REPORT

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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST]GEN FROM BALLABS TEST NO. 20461.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUE DATE] 18-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 NARROW TIR OPTIC & 4"WHITE ASYM FLUSH REFL w/SOLITE
 [MORE] LENS ADVANCE # XI025C070V054DSM1 @ 610mA
 [LUMCAT] 4AR-L11-8TW-DIM-UNV-LN-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	965
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	66
Total Luminaire Watts	14.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	2.48
Spacing Criterion (90-270)	0.58
Spacing Criterion (Diagonal)	1.30
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	134517	19777	2461
55	40559	6516	2135
65	9454	3507	1982
75	4482	1992	1494
85	0	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	163.356	163.356	163.356	163.356	163.356	163.356	163.356	163.356	163.356
5	465.538	419.611	354.373	240.076	158.659	108.556	81.417	69.935	68.891
10	1064.162	921.160	568.353	276.087	129.954	72.023	53.234	45.406	44.362
15	2021.333	1567.799	780.768	270.346	98.118	50.625	38.099	36.533	37.055
20	3122.551	2386.666	889.846	223.375	66.282	37.577	32.358	33.924	36.011
25	3634.538	2731.645	831.915	160.746	45.928	30.792	30.792	32.358	34.446
30	3464.398	2529.668	637.245	101.249	30.270	26.617	29.227	29.749	31.314
35	2643.443	1857.978	420.133	57.409	22.442	21.920	24.008	27.139	29.227
40	1625.730	1150.276	228.594	32.358	17.223	18.789	22.442	26.095	29.227
45	770.330	622.631	113.253	19.832	14.091	17.745	21.920	27.139	29.749
50	366.376	278.175	54.278	14.613	12.004	17.223	21.920	27.139	30.792
55	188.407	115.863	30.270	9.916	9.916	14.091	19.310	24.008	27.661
60	75.676	62.628	18.789	8.872	8.872	12.004	17.223	22.442	25.573
65	32.358	25.051	12.004	6.263	6.785	9.394	13.569	18.267	21.398
70	16.701	13.569	7.307	4.697	5.219	6.263	9.916	13.569	16.701
75	9.394	7.307	4.175	2.088	3.131	4.697	6.263	9.394	11.482
80	3.653	2.088	1.044	0.000	0.000	0.522	2.088	4.175	6.263
85	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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

Zone	Lumens	%Lamp	%Fixt
0-20	165.91	N.A.	17.20
0-30	480.77	N.A.	49.80
0-40	771.60	N.A.	80.00
0-60	942.35	N.A.	97.70
0-80	964.41	N.A.	99.90
0-90	964.91	N.A.	100.00
10-90	941.10	N.A.	97.50
20-40	605.69	N.A.	62.80
20-50	735.08	N.A.	76.20
40-70	186.65	N.A.	19.30
60-80	22.06	N.A.	2.30
70-80	6.16	N.A.	0.60
80-90	0.51	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	964.91	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	23.81
10-20	142.10
20-30	314.86
30-40	290.83
40-50	129.39
50-60	41.36
60-70	15.90
70-80	6.16
80-90	0.51
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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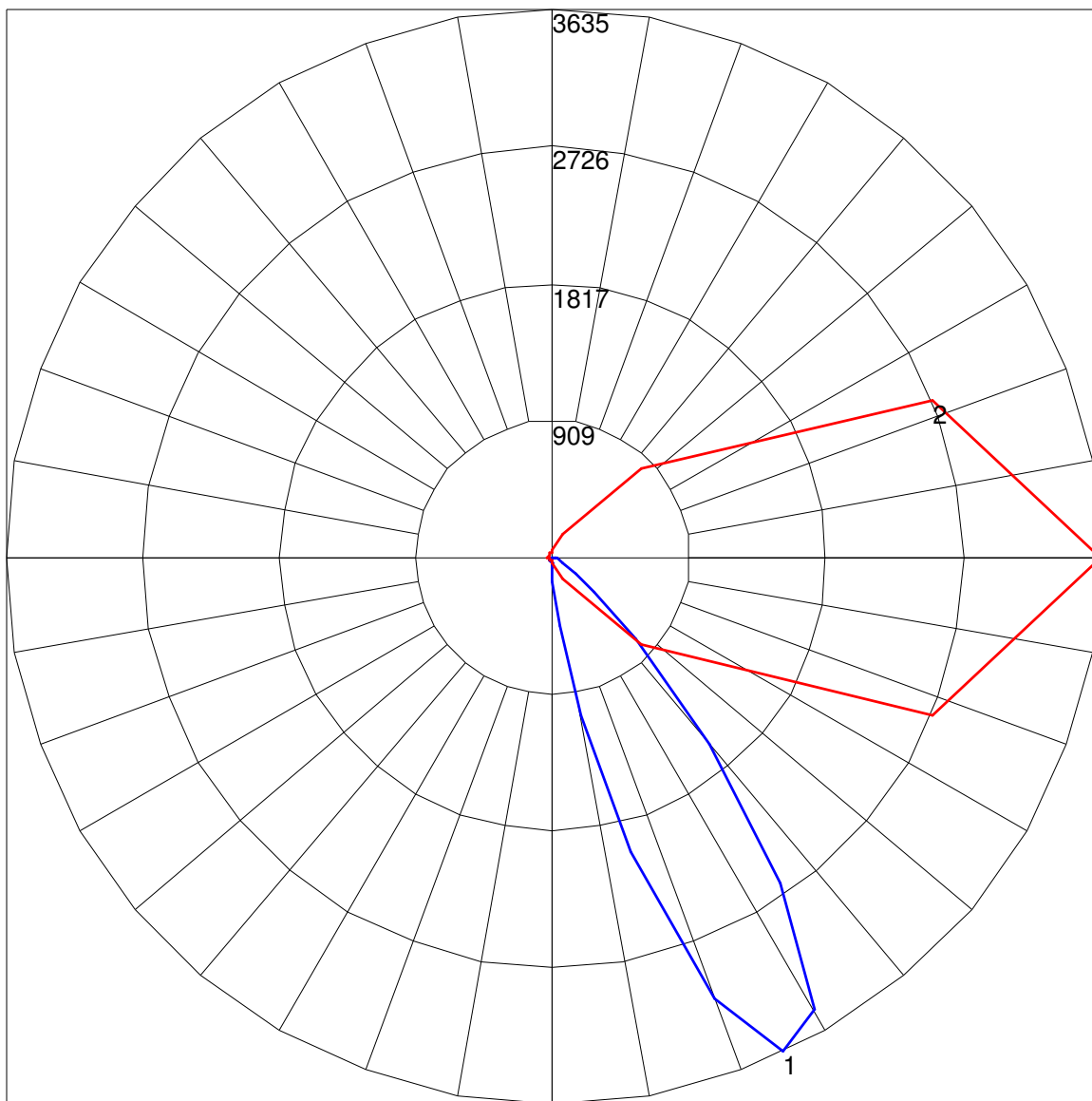
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	89	86	84	82
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	75	72	68	67
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	56	64	60	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	59	52	47	69	59	52	47	57	51	47	56	51	47	55	50	46	45
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	42	41
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

POLAR GRAPH



Maximum Candela = 3634.538 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.)