



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4AR-L10-930-DIM-UNV-OM-OF-CS\_0 DEGREE TILT\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] GEN FROM BALLABS TEST NO. 20448.0  
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
 [ISSUE DATE] 07/11/2023  
 [MANUFAC] WILLIAMS INDOOR  
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO  
 [LUMINAIRE] 4"RND ADJ LED DOWNLIGHT @ 0 TILT  
 [MORE] ACRYLIC MED TIR OPTIC & 4"OPEN ASYM SEMI-SPEC TRIM  
 [MORE] 0-10V DIMMING DRIVER  
 [LUMCAT] 4AR-L10-930-DIM-UNV-OM-OF-CS\_0 DEGREE TILT  
 [LAMPCAT] BRIDGELUX V13 COB  
 [\_SEARCH\_SOURCETYPE] LED  
 [\_SEARCH\_APPLICATION] Indoor, Classroom, Commercial, Downlight  
 [\_SEARCH\_MOUNTING] Recessed

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	747
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	62
Total Luminaire Watts	12.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.54
Spacing Criterion (90-270)	0.54
Spacing Criterion (Diagonal)	0.48
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	207	207	207
55	85	85	85
65	0	0	0
75	0	0	0
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>
<b>0</b>	2758.921	2758.921	2758.921	2758.921	2758.921	2758.921	2758.921	2758.921	2758.921
<b>5</b>	2745.887	2718.633	2715.079	2713.104	2713.499	2722.583	2720.213	2718.633	2711.524
<b>10</b>	2430.695	2418.845	2431.484	2420.820	2409.366	2348.144	2352.094	2359.204	2298.772
<b>15</b>	1449.174	1460.629	1565.298	1514.346	1482.747	1344.900	1199.548	1204.683	1125.687
<b>20</b>	506.757	517.421	538.750	542.305	513.076	454.225	427.761	404.852	383.129
<b>25</b>	213.288	220.793	230.272	232.247	226.717	190.379	169.841	163.916	146.537
<b>30</b>	77.021	77.021	80.181	80.576	73.071	66.356	56.482	52.137	45.027
<b>35</b>	13.824	12.639	13.429	13.034	12.639	11.849	10.269	10.269	10.269
<b>40</b>	5.135	4.740	4.345	4.345	4.345	4.345	3.950	3.950	3.555
<b>45</b>	1.185	1.185	1.185	1.185	1.185	1.185	0.790	1.185	1.185
<b>50</b>	0.395	0.395	0.395	0.395	0.395	0.395	0.000	0.000	0.395
<b>55</b>	0.395	0.395	0.395	0.000	0.395	0.790	0.000	0.790	0.000
<b>60</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>65</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>70</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>75</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>80</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>85</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>90</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : 4AR-L10-930-DIM-UNV-OM-OF-CS\_0 DEGREE TILT\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	625.37	N.A.	83.70
0-30	731.10	N.A.	97.80
0-40	745.66	N.A.	99.80
0-60	747.18	N.A.	100.00
0-80	747.18	N.A.	100.00
0-90	747.18	N.A.	100.00
10-90	499.01	N.A.	66.80
20-40	120.29	N.A.	16.10
20-50	121.58	N.A.	16.30
40-70	1.53	N.A.	0.20
60-80	0.00	N.A.	0.00
70-80	0.00	N.A.	0.00
80-90	0.00	N.A.	0.00
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	747.18	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	248.17
10-20	377.19
20-30	105.73
30-40	14.56
40-50	1.29
50-60	0.23
60-70	0.00
70-80	0.00
80-90	0.00
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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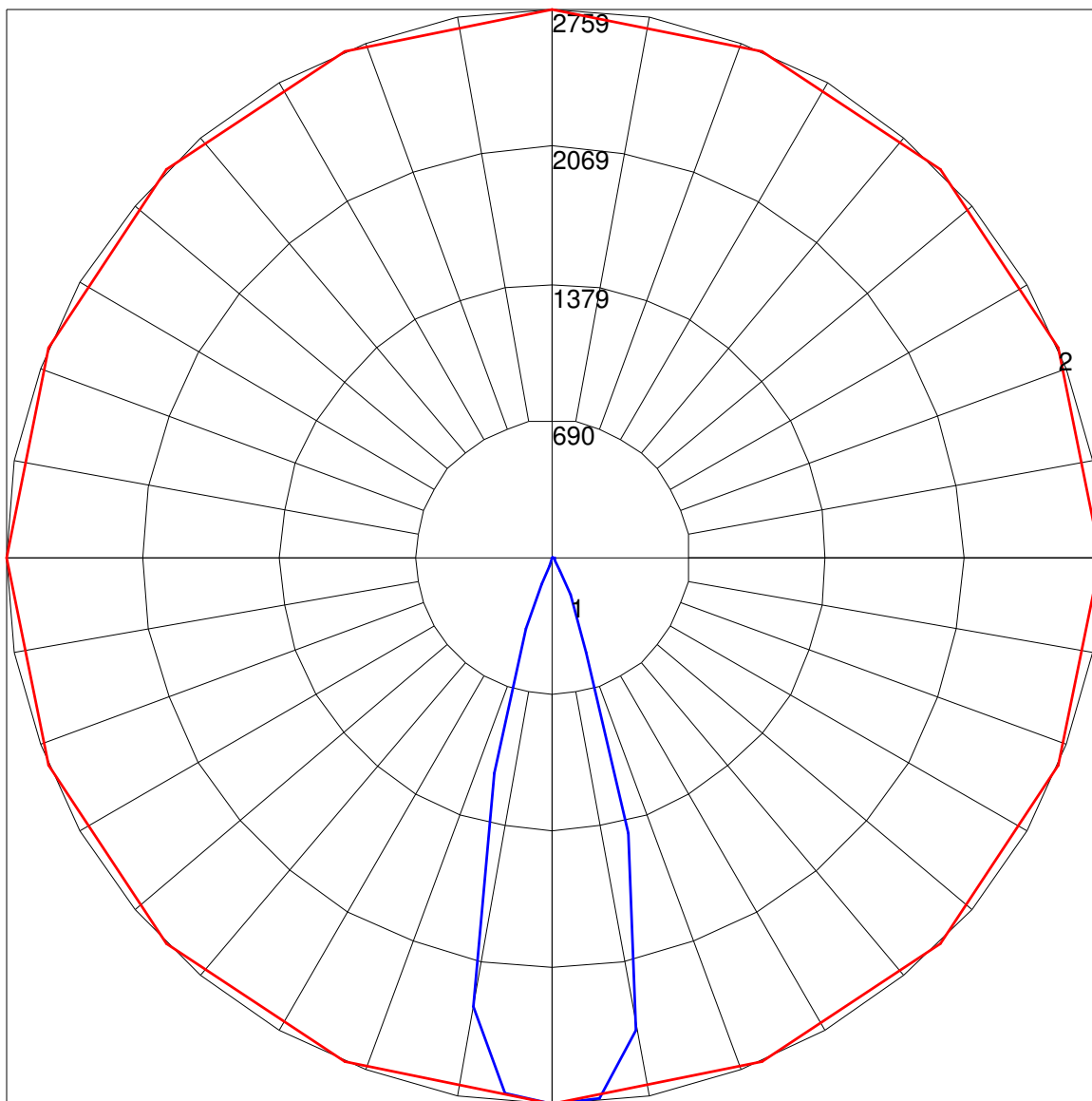
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	115	113	111	110	113	111	109	108	107	106	104	103	102	101	100	99	99	97
2	111	108	105	103	109	106	104	101	103	101	99	100	99	97	98	96	95	94
3	108	103	100	97	106	102	99	96	100	97	95	97	95	94	95	94	92	91
4	105	100	96	93	103	99	95	92	97	94	91	95	92	90	93	91	89	88
5	102	96	92	89	100	95	91	89	94	90	88	92	89	87	91	88	87	85
6	99	93	89	86	98	92	88	86	91	88	85	90	87	85	88	86	84	83
7	96	90	86	83	95	89	86	83	88	85	82	87	84	82	86	84	82	81
8	94	87	83	80	93	87	83	80	86	82	80	85	82	80	84	81	79	78
9	91	85	81	78	90	84	81	78	84	80	78	83	80	77	82	79	77	76
10	89	82	78	76	88	82	78	76	81	78	76	81	78	75	80	77	75	74

POLAR GRAPH



Maximum Candela = 2758.921 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)