



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4AR-L15-930-DIM-UNV-OM-OF-WH\_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

[ISSUEDATE] 15 JULY 2020

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 4"SHORT HEATSINK 4"RND ADJ DOWNLIGHT @ 0 TILT

[MORE] ACRYLIC MED TIR OPTIC & 4"OPEN ASYM SEMI-SPEC TRIM

[MORE] ADVANCE #XI025C070V054DSM1

[LUMCAT] 4AR-L15-930-DIM-UNV-OM-OF-WH\_0 DEGREE TILT

[LAMPCAT] LAMP CODE : 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	1003
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	58
Total Luminaire Watts	17.2
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	278	278	278
55	114	114	114
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>	3702.937	3702.937	3702.937	3702.937	3702.937	3702.937	3702.937	3702.937	3702.937
<b>5</b>	3685.442	3648.864	3644.093	3641.442	3641.972	3654.165	3650.984	3648.864	3639.321
<b>10</b>	3262.401	3246.497	3263.461	3249.148	3233.774	3151.605	3156.906	3166.448	3085.339
<b>15</b>	1945.036	1960.409	2100.893	2032.507	1990.096	1805.082	1609.995	1616.887	1510.862
<b>20</b>	680.153	694.466	723.093	727.864	688.635	609.646	574.127	543.380	514.223
<b>25</b>	286.269	296.341	309.064	311.715	304.293	255.521	227.955	220.003	196.677
<b>30</b>	103.375	103.375	107.616	108.146	98.073	89.061	75.808	69.977	60.434
<b>35</b>	18.554	16.964	18.024	17.494	16.964	15.904	13.783	13.783	13.783
<b>40</b>	6.892	6.362	5.831	5.831	5.831	5.831	5.301	5.301	4.771
<b>45</b>	1.590	1.590	1.590	1.590	1.590	1.590	1.060	1.590	1.590
<b>50</b>	0.530	0.530	0.530	0.530	0.530	0.530	0.000	0.000	0.530
<b>55</b>	0.530	0.530	0.530	0.000	0.530	1.060	0.000	1.060	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-L15-930-DIM-UNV-OM-OF-WH\_0 DEGREE TILT\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	839.35	N.A.	83.70
0-30	981.26	N.A.	97.80
0-40	1000.8	N.A.	99.80
0-60	1002.84	N.A.	100.00
0-80	1002.84	N.A.	100.00
0-90	1002.84	N.A.	100.00
10-90	669.75	N.A.	66.80
20-40	161.45	N.A.	16.10
20-50	163.19	N.A.	16.30
40-70	2.05	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	1002.84	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	333.09
10-20	506.25
20-30	141.91
30-40	19.54
40-50	1.74
50-60	0.31
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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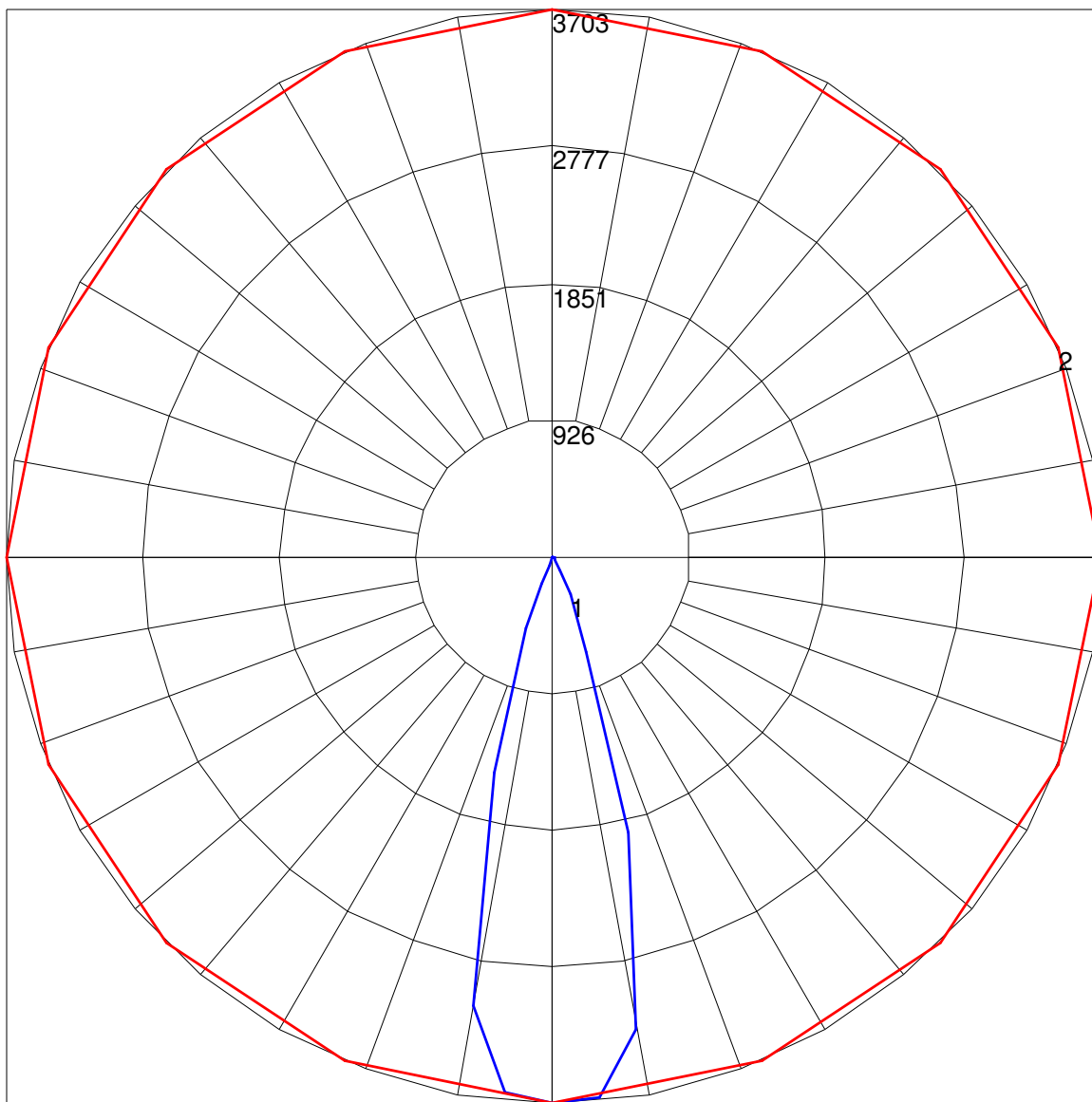
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	109	113	111	109	108	107	106	104	103	102	101	100	99	98	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	93	95	94	92	91
4	105	100	96	93	103	98	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	87	85	90	87	84	88	86	84	83
7	96	90	86	83	95	89	85	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	80	78	83	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 = 3702.937 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.)