



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4AR-L20-835-DIM-UNV-O-W-OF-CS_25 DEGREE TILT.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]GEN from BALLABS TEST NO. 20446.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 21-MAY-2018

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 4AR-L15-835-DIM-UNV-O-W-OF-CS_25 DEGREE TILT

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

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

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1032
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	60
Total Luminaire Watts	17.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.92
Spacing Criterion (90-270)	0.40
Spacing Criterion (Diagonal)	1.06
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	77416	4020	648
55	959	0	0
65	217	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>
0	600.021	600.021	600.021	600.021	600.021	600.021	600.021	600.021	600.021
5	1819.371	1638.176	1275.787	855.476	497.542	305.951	205.700	161.887	148.520
10	2735.740	2403.055	1675.306	869.585	340.111	154.461	100.251	77.230	69.062
15	3291.205	2537.466	1797.836	738.145	192.333	79.458	46.784	29.704	30.447
20	3000.106	2395.629	1767.389	525.018	112.133	31.189	19.308	19.308	19.308
25	2478.800	2328.795	1637.434	300.011	49.012	14.109	12.624	10.396	11.139
30	2193.642	2271.615	1336.681	175.254	16.337	10.396	8.911	10.396	10.396
35	2145.373	2140.917	754.482	66.091	8.911	4.456	5.941	6.683	8.169
40	1848.332	1352.275	251.742	16.337	5.941	4.456	3.713	4.456	4.456
45	443.332	242.088	23.021	8.169	3.713	2.228	2.970	2.228	2.228
50	25.991	13.367	7.426	4.456	4.456	2.228	2.228	2.970	2.970
55	4.456	0.743	0.000	0.000	0.000	0.000	0.000	2.228	2.228
60	1.485	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.743	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	2.228	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
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-L20-835-DIM-UNV-O-W-OF-CS_25 DEGREE TILT.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	317.19	N.A.	30.70
0-30	640.77	N.A.	62.10
0-40	944.62	N.A.	91.60
0-60	1031.62	N.A.	100.00
0-80	1031.74	N.A.	100.00
0-90	1031.74	N.A.	100.00
10-90	957.82	N.A.	92.80
20-40	627.43	N.A.	60.80
20-50	712.65	N.A.	69.10
40-70	87.09	N.A.	8.40
60-80	0.12	N.A.	0.00
70-80	0.04	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	1031.74	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

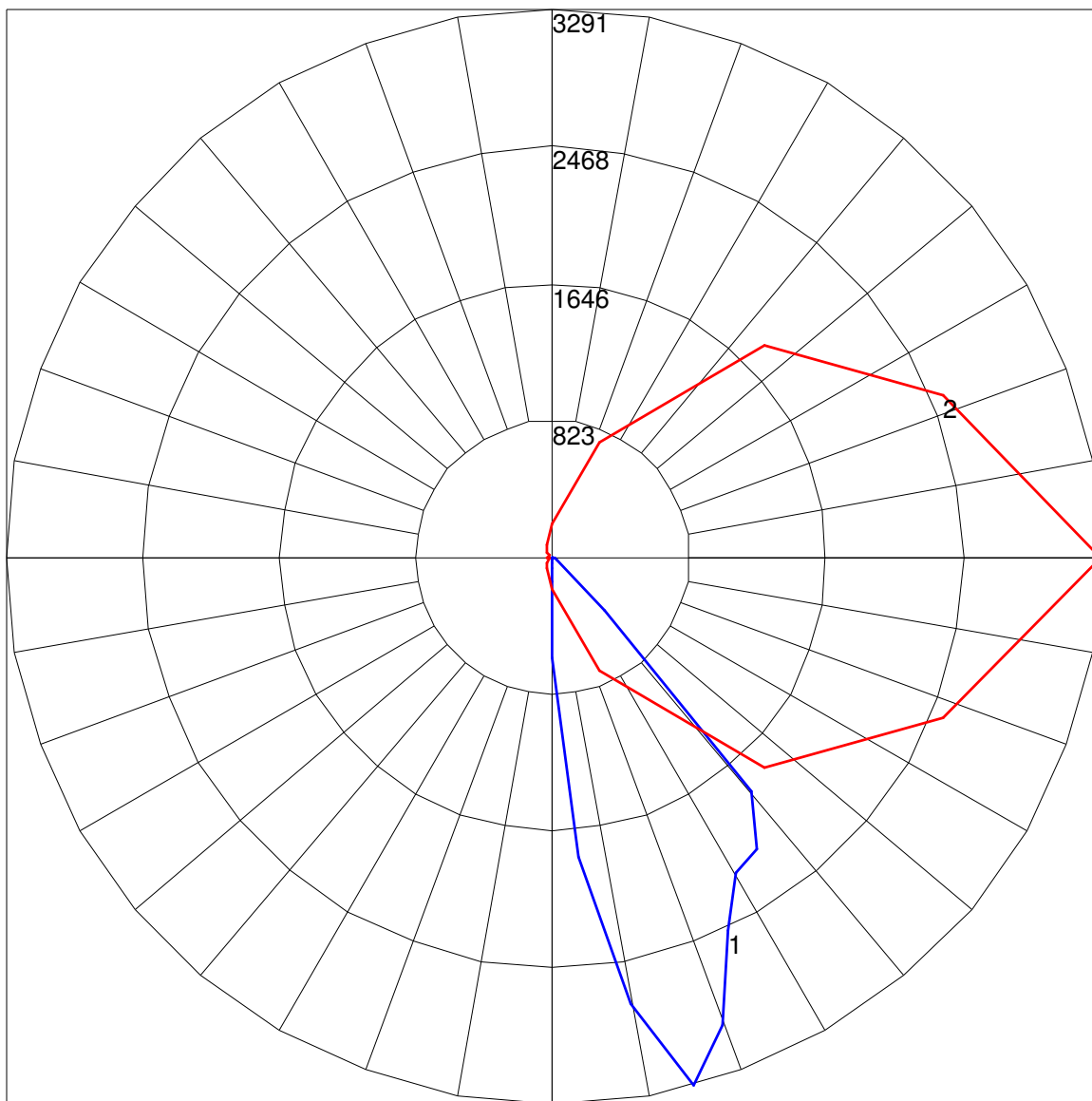
Zone	Lumens
0-10	73.92
10-20	243.27
20-30	323.58
30-40	303.85
40-50	85.23
50-60	1.78
60-70	0.08
70-80	0.04
80-90	0.00
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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Effective Floor Cavity Reflectance 0.20

RC RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	88	88	88	88	86	86	86	86	83	83	83	79	79	79	76	76	76	74
1	84	82	80	78	82	80	79	77	77	76	75	75	74	73	72	71	70	69
2	80	76	73	70	78	75	72	69	72	70	68	70	68	66	68	66	65	64
3	75	70	67	64	74	69	66	63	67	64	62	66	63	61	64	62	60	59
4	71	65	61	58	70	65	61	57	63	60	57	61	59	56	60	58	55	54
5	67	61	56	53	66	60	56	53	59	55	52	58	54	52	56	54	51	50
6	64	57	52	49	63	56	52	48	55	51	48	54	50	48	53	50	47	46
7	60	53	48	45	59	52	48	45	51	47	44	51	47	44	50	46	44	43
8	57	49	45	42	56	49	45	41	48	44	41	47	44	41	47	43	41	40
9	54	46	42	39	53	46	42	38	45	41	38	45	41	38	44	41	38	37
10	51	44	39	36	50	43	39	36	43	39	36	42	38	36	41	38	36	35

POLAR GRAPH



Maximum Candela = 3291.205 Located At Horizontal Angle = 0, Vertical Angle = 15

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

2 - Horizontal Cone Through Vertical Angle (15) (Through Max. Cd.)