



IES INDOOR REPORT

PHOTOMETRIC FILENAME : AMD2ARNG-P31-840-A-POE NURSE ONLY_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN from BALLABS TEST NO. 18940.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 19-AUG-2020
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO 64836
 [LUMINAIRE] 2x2' MULTI COMPARTMENT LED TROFFER
 [MORE] CLEAR ACRYLIC LENS
 [LUMCAT] AMD2ARNG-P31-840-A-PoE NURSE ONLY
 [LAMPCAT] HLM 80 CRI, 4000K CCT
 [SEARCH_SOURCETYPE]LED
 [SEARCH_APPLICATION]INDOOR,DIRECT, MEDICAL
 [SEARCH_MOUNTING]RECESSED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	101
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	10
Total Luminaire Watts	9.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.02
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	0.02
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.92 ft
Luminous Width (90-270)	1.92 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	0	86	209
55	0	197	399
65	0	391	308
75	0	112	11
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
15	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
20	0.00	0.00	0.00	0.99	0.99	0.99	0.00	0.00	0.00
25	0.00	0.00	0.99	3.96	8.91	3.96	0.99	0.00	0.00
30	0.99	0.99	6.93	15.84	17.82	15.84	6.93	0.99	0.99
35	0.99	0.99	9.90	23.76	27.72	23.76	9.90	0.99	0.99
40	0.00	0.99	11.88	30.69	35.64	30.69	11.88	0.00	0.00
45	0.00	2.97	20.79	41.58	50.49	41.58	15.84	2.97	0.00
50	0.00	6.93	30.69	57.42	68.31	57.42	30.69	6.93	0.00
55	0.00	6.93	38.61	71.28	78.21	68.31	35.64	6.93	0.00
60	0.00	11.88	51.48	75.24	75.24	71.28	44.55	8.91	0.00
65	0.00	14.85	56.43	51.48	44.55	48.51	44.55	8.91	0.00
70	0.00	15.84	35.64	20.79	14.85	15.84	29.70	9.90	0.00
75	0.00	15.84	9.90	0.99	0.99	0.99	6.93	9.90	0.00
80	0.00	3.96	0.99	0.99	0.99	0.99	0.99	0.99	0.00
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Zone	Lumens	%Lamp	%Fixt
0-20	0.27	N.A.	0.30
0-30	1.90	N.A.	1.90
0-40	9.51	N.A.	9.40
0-60	61.34	N.A.	60.60
0-80	100.85	N.A.	99.70
0-90	101.18	N.A.	100.00
10-90	101.15	N.A.	100.00
20-40	9.24	N.A.	9.10
20-50	27.12	N.A.	26.80
40-70	83.34	N.A.	82.40
60-80	39.51	N.A.	39.00
70-80	8.00	N.A.	7.90
80-90	0.34	N.A.	0.30
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	101.18	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	0.04
10-20	0.23
20-30	1.63
30-40	7.61
40-50	17.87
50-60	33.96
60-70	31.51
70-80	8.00
80-90	0.34
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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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	112	112	112	112	109	109	109	109	104	104	104	100	100	100	96	96	96	94
1	100	94	89	85	97	92	87	83	88	84	81	84	81	78	81	78	76	74
2	87	77	69	62	84	75	68	62	72	66	60	69	63	59	66	61	57	55
3	76	64	54	46	74	62	53	46	59	51	45	56	49	44	54	48	43	40
4	67	53	42	34	65	52	42	34	49	40	34	47	39	33	44	38	32	30
5	60	45	34	26	58	43	33	26	41	32	26	39	31	25	37	30	25	22
6	54	38	28	20	52	37	27	20	35	26	20	33	26	20	32	25	19	17
7	49	33	23	16	47	32	23	16	31	22	16	29	21	15	28	21	15	13
8	44	29	19	13	43	28	19	13	27	18	12	26	18	12	24	17	12	10
9	41	26	17	10	39	25	16	10	24	16	10	23	15	10	22	15	10	8
10	38	23	14	9	36	23	14	8	22	14	8	21	13	8	20	13	8	6

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UGR TABLE - CORRECTED

Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size UGR Viewed Crosswise

X=2H	Y=2H	0.0	0.4	0.0	0.7	1.1	13.8	15.9	14.2	16.2	16.5
	3H	2.0	3.9	2.4	4.2	4.5	14.5	16.3	14.8	16.7	17.0
	4H	3.2	4.9	3.6	5.3	5.6	14.5	16.2	14.8	16.6	16.9
	6H	3.4	5.1	3.8	5.4	5.8	14.4	16.1	14.8	16.4	16.8
	8H	3.4	5.0	3.8	5.4	5.8	14.4	16.0	14.8	16.4	16.8
	12H	3.4	4.9	3.8	5.3	5.7	14.4	15.9	14.8	16.3	16.7

UGR Viewed Endwise

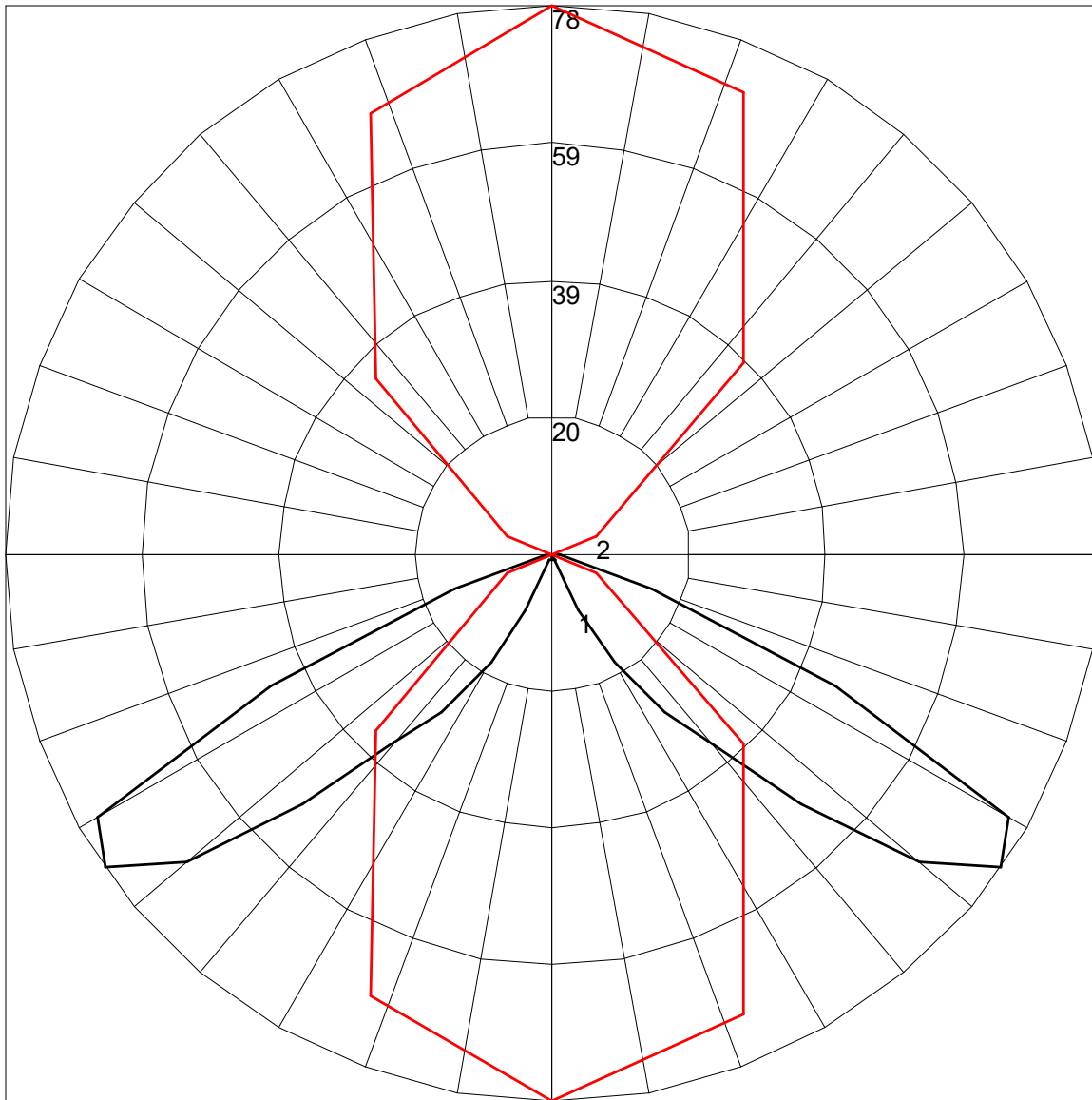
4H	2H	9.5	11.2	9.9	11.6	11.9	14.4	16.2	14.8	16.5	16.9
	3H	10.6	12.1	11.0	12.5	12.9	15.2	16.7	15.6	17.1	17.5
	4H	11.2	12.6	11.7	13.0	13.4	15.2	16.5	15.6	16.9	17.4
	6H	11.4	12.6	11.8	13.0	13.4	15.1	16.3	15.6	16.8	17.2
	8H	11.4	12.5	11.8	12.9	13.4	15.2	16.3	15.6	16.7	17.2
	12H	11.4	12.4	11.9	12.9	13.3	15.2	16.2	15.6	16.6	17.1

8H	4H	11.6	12.7	12.0	13.1	13.6	15.2	16.3	15.7	16.8	17.2
	6H	11.8	12.7	12.3	13.2	13.6	15.2	16.1	15.7	16.6	17.1
	8H	11.8	12.6	12.3	13.1	13.6	15.2	16.0	15.7	16.5	17.0
	12H	11.8	12.5	12.3	13.0	13.6	15.3	15.9	15.8	16.4	17.0

12H	4H	11.6	12.6	12.1	13.1	13.5	15.2	16.2	15.7	16.7	17.2
	6H	11.8	12.6	12.3	13.1	13.6	15.2	16.1	15.8	16.5	17.0
	8H	11.8	12.5	12.3	13.0	13.6	15.3	15.9	15.8	16.4	17.0

Maximum UGR = 17.5

POLAR GRAPH



Maximum Candela = 78.21 Located At Horizontal Angle = 90, Vertical Angle = 55
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (55) (Through Max. Cd.)