



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 192_168_37_234-11_9_48-MERGED.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.04 & BALLABS #20687.0

[TESTLAB]

[ISSUE DATE] 3-MAR-2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 8CRDI-TL-P29-835U-P29-835D-xxx-PoE PR-OM-CSU-OW-CSD-WM

[LUMINAIRE] White formed aluminum housing, specular reflector, cover glass

[MORE]

[LAMP] Two white LEDs, one up/ one down

[SEARCH_SOURCETYPE] LED

[SEARCH_APPLICATION] INDOOR, DIRECT, INDIRECT

[SEARCH_MOUNTING] WALL

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5587
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	50
Ballast Factor	1.00
CIE Type	General Diffuse
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.50 ft (Diameter)
Luminous Width (90-270)	0.50 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	5010	5010	5010
55	1745	1745	1745
65	364	364	364
75	0	0	0
85	0	0	0

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 192_168_37_234-11_9_48-MERGED.IES

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>	<u>202.5</u>
0	2350.850	2350.850	2350.850	2350.850	2350.850	2350.850	2350.850	2350.850	2350.850	2350.850
5	2220.091	2220.091	2220.091	2220.091	2220.091	2220.091	2220.091	2220.091	2220.091	2220.091
10	2443.647	2443.647	2443.647	2443.647	2443.647	2443.647	2443.647	2443.647	2443.647	2443.647
15	2439.429	2439.429	2439.429	2439.429	2439.429	2439.429	2439.429	2439.429	2439.429	2439.429
20	2547.692	2547.692	2547.692	2547.692	2547.692	2547.692	2547.692	2547.692	2547.692	2547.692
25	2786.714	2786.714	2786.714	2786.714	2786.714	2786.714	2786.714	2786.714	2786.714	2786.714
30	2737.503	2737.503	2737.503	2737.503	2737.503	2737.503	2737.503	2737.503	2737.503	2737.503
35	849.231	849.231	849.231	849.231	849.231	849.231	849.231	849.231	849.231	849.231
40	116.699	116.699	116.699	116.699	116.699	116.699	116.699	116.699	116.699	116.699
45	64.677	64.677	64.677	64.677	64.677	64.677	64.677	64.677	64.677	64.677
50	37.962	37.962	37.962	37.962	37.962	37.962	37.962	37.962	37.962	37.962
55	18.278	18.278	18.278	18.278	18.278	18.278	18.278	18.278	18.278	18.278
60	9.842	9.842	9.842	9.842	9.842	9.842	9.842	9.842	9.842	9.842
65	2.812	2.812	2.812	2.812	2.812	2.812	2.812	2.812	2.812	2.812
70	0.000	0.000	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	0.000
80	0.000	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	0.000
90	0.131	0.131	0.131	0.131	0.131	0.131	0.131	0.131	0.131	0.131
95	0.392	0.392	0.392	0.392	0.392	0.392	0.392	0.392	0.392	0.392
100	0.785	0.785	0.785	0.785	0.785	0.785	0.785	0.785	0.785	0.785
105	1.438	1.438	1.438	1.438	1.438	1.438	1.438	1.438	1.438	1.438
110	2.876	2.876	2.876	2.876	2.876	2.876	2.876	2.876	2.876	2.876
115	5.230	5.230	5.230	5.230	5.230	5.230	5.230	5.230	5.230	5.230
120	9.544	9.544	9.544	9.544	9.544	9.544	9.544	9.544	9.544	9.544
125	18.043	18.043	18.043	18.043	18.043	18.043	18.043	18.043	18.043	18.043
130	35.040	35.040	35.040	35.040	35.040	35.040	35.040	35.040	35.040	35.040
135	60.404	60.404	60.404	60.404	60.404	60.404	60.404	60.404	60.404	60.404
140	151.404	151.404	151.404	151.404	151.404	151.404	151.404	151.404	151.404	151.404
145	517.100	517.100	517.100	517.100	517.100	517.100	517.100	517.100	517.100	517.100
150	1311.380	1311.380	1311.380	1311.380	1311.380	1311.380	1311.380	1311.380	1311.380	1311.380
155	1846.131	1846.131	1846.131	1846.131	1846.131	1846.131	1846.131	1846.131	1846.131	1846.131
160	2499.860	2499.860	2499.860	2499.860	2499.860	2499.860	2499.860	2499.860	2499.860	2499.860
165	3039.840	3039.840	3039.840	3039.840	3039.840	3039.840	3039.840	3039.840	3039.840	3039.840
170	3913.222	3913.222	3913.222	3913.222	3913.222	3913.222	3913.222	3913.222	3913.222	3913.222
175	5193.225	5193.225	5193.225	5193.225	5193.225	5193.225	5193.225	5193.225	5193.225	5193.225
180	5245.619	5245.619	5245.619	5245.619	5245.619	5245.619	5245.619	5245.619	5245.619	5245.619

Vert. Angles **Horizontal Angles**

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0	2350.850	2350.850	2350.850	2350.850	2350.850	2350.850	2350.850
5	2220.091	2220.091	2220.091	2220.091	2220.091	2220.091	2220.091
10	2443.647	2443.647	2443.647	2443.647	2443.647	2443.647	2443.647
15	2439.429	2439.429	2439.429	2439.429	2439.429	2439.429	2439.429
20	2547.692	2547.692	2547.692	2547.692	2547.692	2547.692	2547.692
25	2786.714	2786.714	2786.714	2786.714	2786.714	2786.714	2786.714
30	2737.503	2737.503	2737.503	2737.503	2737.503	2737.503	2737.503
35	849.231	849.231	849.231	849.231	849.231	849.231	849.231
40	116.699	116.699	116.699	116.699	116.699	116.699	116.699
45	64.677	64.677	64.677	64.677	64.677	64.677	64.677
50	37.962	37.962	37.962	37.962	37.962	37.962	37.962
55	18.278	18.278	18.278	18.278	18.278	18.278	18.278
60	9.842	9.842	9.842	9.842	9.842	9.842	9.842

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 192_168_37_234-11_9_48-MERGED.IES

CANDELA TABULATION - (Cont.)

65	2.812	2.812	2.812	2.812	2.812	2.812	2.812
70	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
80	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
90	0.131	0.131	0.131	0.131	0.131	0.131	0.131
95	0.392	0.392	0.392	0.392	0.392	0.392	0.392
100	0.785	0.785	0.785	0.785	0.785	0.785	0.785
105	1.438	1.438	1.438	1.438	1.438	1.438	1.438
110	2.876	2.876	2.876	2.876	2.876	2.876	2.876
115	5.230	5.230	5.230	5.230	5.230	5.230	5.230
120	9.544	9.544	9.544	9.544	9.544	9.544	9.544
125	18.043	18.043	18.043	18.043	18.043	18.043	18.043
130	35.040	35.040	35.040	35.040	35.040	35.040	35.040
135	60.404	60.404	60.404	60.404	60.404	60.404	60.404
140	151.404	151.404	151.404	151.404	151.404	151.404	151.404
145	517.100	517.100	517.100	517.100	517.100	517.100	517.100
150	1311.380	1311.380	1311.380	1311.380	1311.380	1311.380	1311.380
155	1846.131	1846.131	1846.131	1846.131	1846.131	1846.131	1846.131
160	2499.860	2499.860	2499.860	2499.860	2499.860	2499.860	2499.860
165	3039.840	3039.840	3039.840	3039.840	3039.840	3039.840	3039.840
170	3913.222	3913.222	3913.222	3913.222	3913.222	3913.222	3913.222
175	5193.225	5193.225	5193.225	5193.225	5193.225	5193.225	5193.225
180	5245.619	5245.619	5245.619	5245.619	5245.619	5245.619	5245.619

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 192_168_37_234-11_9_48-MERGED.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	922.15	N.A.	16.50
0-30	2180.73	N.A.	39.00
0-40	2870.06	N.A.	51.40
0-60	2943.11	N.A.	52.70
0-80	2946.89	N.A.	52.70
0-90	2946.93	N.A.	52.70
10-90	2725.45	N.A.	48.80
20-40	1947.9	N.A.	34.90
20-50	2002.23	N.A.	35.80
40-70	76.84	N.A.	1.40
60-80	3.79	N.A.	0.10
70-80	0.00	N.A.	0.00
80-90	0.04	N.A.	0.00
90-110	2.19	N.A.	0.00
90-120	7.83	N.A.	0.10
90-130	25.75	N.A.	0.50
90-150	465.04	N.A.	8.30
90-180	2640.00	N.A.	47.30
110-180	2637.82	N.A.	47.20
0-180	5586.93	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	221.48
10-20	700.67
20-30	1258.58
30-40	689.33
40-50	54.32
50-60	18.73
60-70	3.79
70-80	0.00
80-90	0.04
90-100	0.46
100-110	1.72
110-120	5.64
120-130	17.92
130-140	58.50
140-150	380.79
150-160	855.40
160-170	869.00
170-180	450.56

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : 192_168_37_234-11_9_48-MERGED.IES

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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53
1	101	97	94	92	93	91	88	86	78	76	75	66	65	64	56	55	54	49
2	94	88	84	80	87	83	79	75	72	69	66	62	60	58	52	51	50	46
3	88	81	75	70	82	76	71	67	66	63	60	57	55	53	49	48	46	43
4	82	74	67	62	77	69	64	60	61	57	54	53	51	48	46	44	43	40
5	77	67	61	56	72	64	58	54	57	52	49	50	47	44	44	41	40	37
6	72	62	55	51	67	59	53	49	52	48	45	47	43	41	41	39	37	34
7	68	57	51	46	63	54	49	44	49	44	41	44	40	38	39	36	34	32
8	64	53	47	42	60	51	45	41	46	41	38	41	37	35	36	34	32	30
9	60	49	43	39	56	47	41	37	43	38	35	38	35	32	34	32	30	28
10	56	46	40	36	53	44	38	35	40	35	32	36	33	30	32	30	28	26

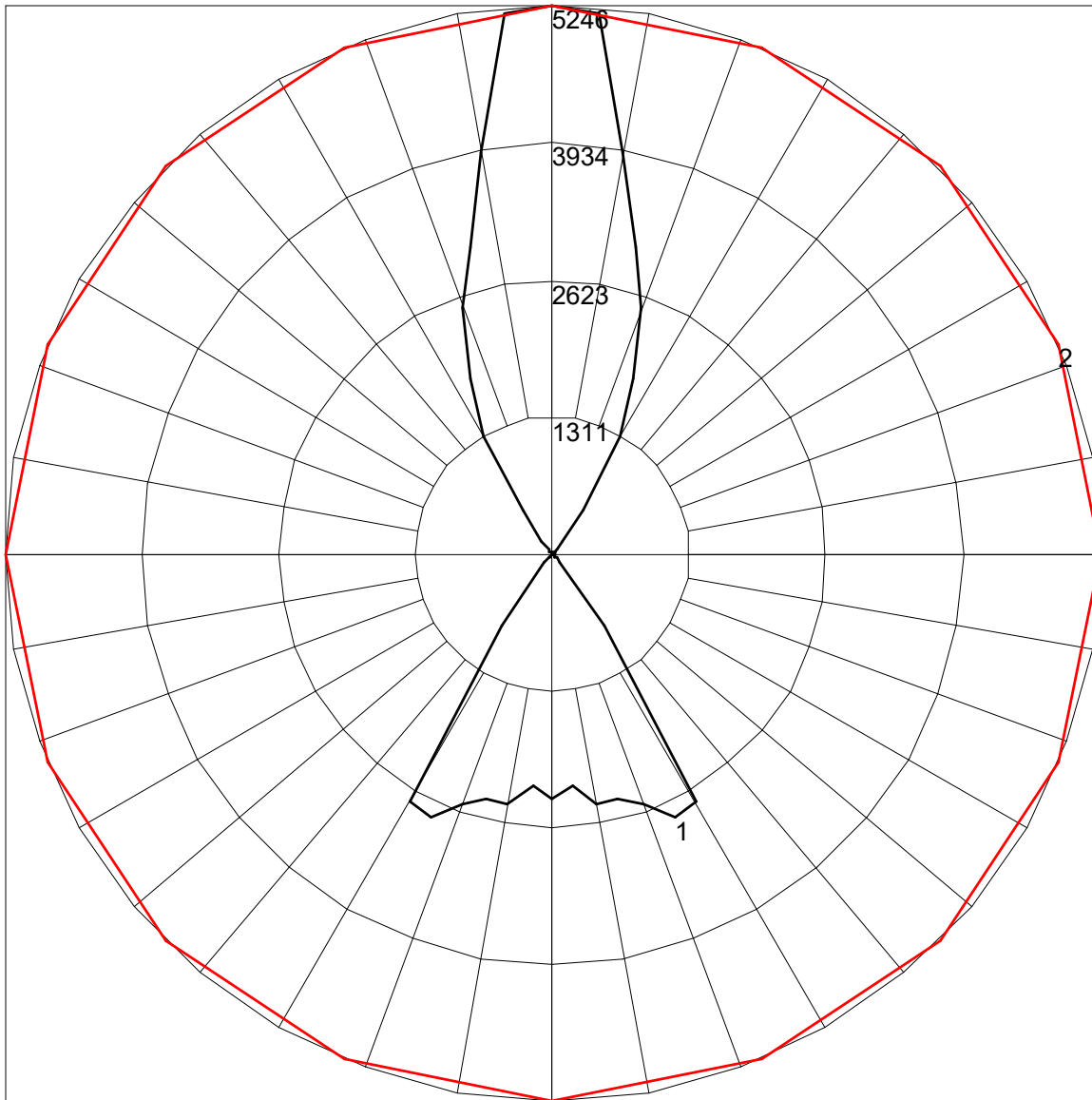
IES INDOOR REPORT
PHOTOMETRIC FILENAME : 192_168_37_234-11_9_48-MERGED.IES

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					UGR Viewed Endwise				
X=2H	Y=2H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	3H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	4H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	6H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	8H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	12H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
4H	2H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	3H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	4H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	6H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	8H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	12H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
8H	4H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	6H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	8H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	12H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
12H	4H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	6H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	8H	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0

Maximum UGR = 6.0

POLAR GRAPH



Maximum Candela = 5245.619 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (180) (Through Max. Cd.)