



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : V50G-S24-L56-835-FPC12187-CA040-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from BALLABS TEST NO. 21039.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUE DATE] 23-APR-2020

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

[LUMINAIRE] 4-56 LED 22" ARRAYS 2X4' RECESSED LUMINAIRE

[MORE] WHITE REFL w/.187" PRISMATIC PAT12 POLYCARB LENS & CA040 OVERLAY

[LUMCAT] V50G-S24-L56/835-FPC12187/CA040-DIM-UNV

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4638
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	97
Total Luminaire Watts	48
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.26
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.76 ft
Luminous Width (90-270)	1.77 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2514	2451	2428
55	2096	2043	2007
65	1715	1617	1641
75	1435	1391	1525
85	1141	1234	1383

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : V50G-S24-L56-835-FPC12187-CA040-DIM-UNV\_.IES****CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
<b>0</b>	1991.779	1991.779	1991.779	1991.779	1991.779
<b>5</b>	2000.147	1988.431	1974.706	1969.015	1970.354
<b>10</b>	1965.333	1955.291	1939.892	1936.210	1936.879
<b>15</b>	1910.099	1900.056	1885.997	1879.302	1880.641
<b>20</b>	1829.758	1821.055	1806.995	1798.626	1800.300
<b>25</b>	1726.989	1715.942	1702.218	1694.183	1696.192
<b>30</b>	1596.770	1587.063	1572.333	1568.316	1566.308
<b>35</b>	1446.801	1441.110	1425.377	1419.017	1417.678
<b>40</b>	1279.425	1274.069	1257.331	1243.606	1248.628
<b>45</b>	1100.667	1082.256	1073.217	1057.149	1063.175
<b>50</b>	919.900	910.193	894.459	882.408	879.395
<b>55</b>	744.490	739.803	725.744	708.002	712.689
<b>60</b>	587.491	578.118	562.050	561.380	555.689
<b>65</b>	448.903	435.179	423.127	429.822	429.488
<b>70</b>	329.062	324.041	315.002	326.049	329.062
<b>75</b>	229.975	226.628	222.945	239.348	244.369
<b>80</b>	144.948	143.609	144.613	158.673	163.694
<b>85</b>	61.594	60.255	66.616	79.671	74.650
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : V50G-S24-L56-835-FPC12187-CA040-DIM-UNV\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	720.40	N.A.	15.50
0-30	1504.71	N.A.	32.40
0-40	2396.15	N.A.	51.70
0-60	3878.11	N.A.	83.60
0-80	4559.76	N.A.	98.30
0-90	4638.06	N.A.	100.00
10-90	4450.17	N.A.	95.90
20-40	1675.75	N.A.	36.10
20-50	2505.92	N.A.	54.00
40-70	1916.36	N.A.	41.30
60-80	681.64	N.A.	14.70
70-80	247.25	N.A.	5.30
80-90	78.30	N.A.	1.70
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	4638.06	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	187.88
10-20	532.52
20-30	784.31
30-40	891.44
40-50	830.18
50-60	651.79
60-70	434.39
70-80	247.25
80-90	78.30
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

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : V50G-S24-L56-835-FPC12187-CA040-DIM-UNV\_.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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44	42
7	67	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29	28

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : V50G-S24-L56-835-FPC12187-CA040-DIM-UNV\_.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

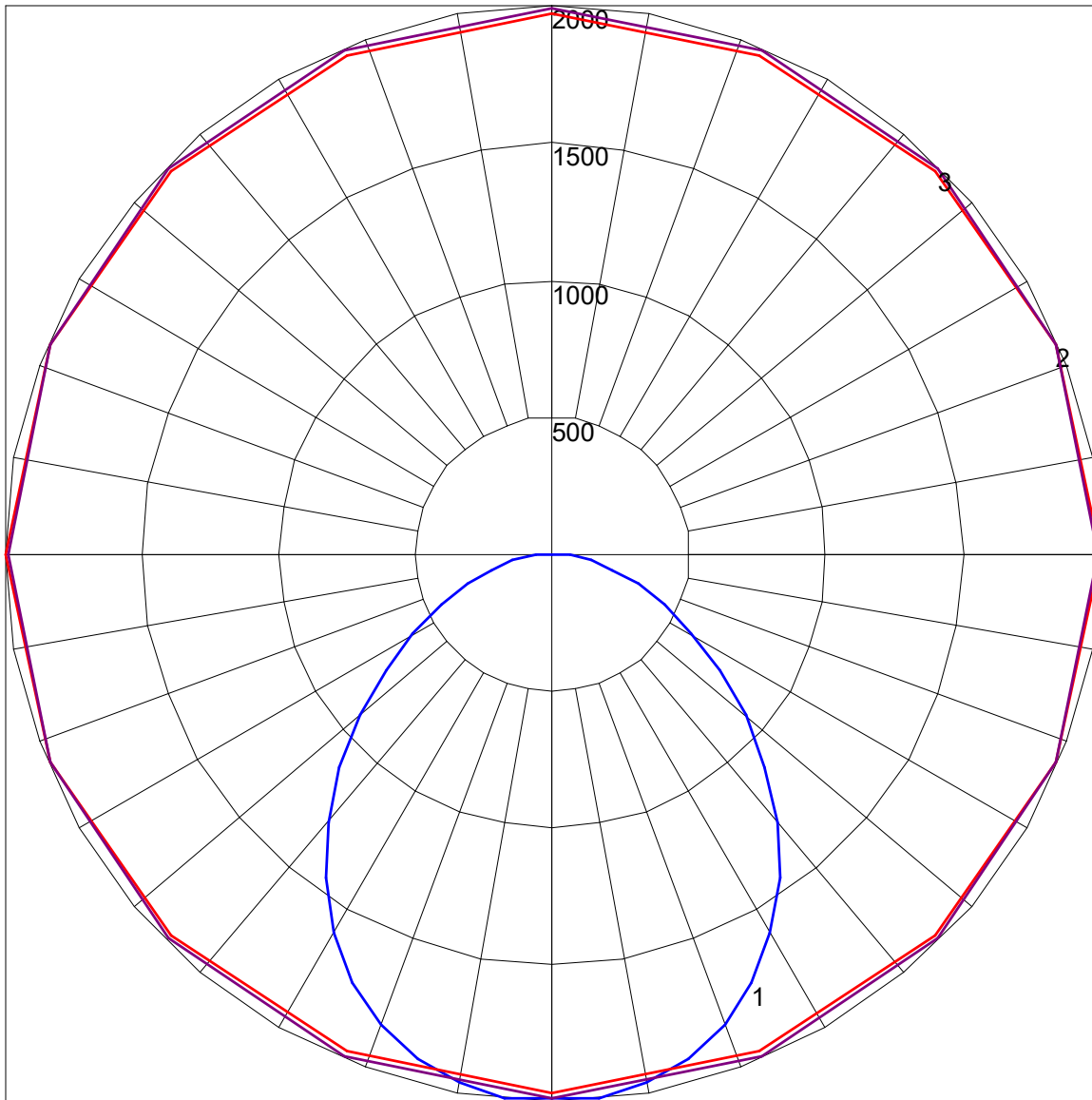
X=2H	Y=2H	14.1	15.6	14.5	16.0	16.3	13.8	15.4	14.2	15.7	16.0
	3H	15.5	16.9	15.9	17.3	17.6	15.4	16.8	15.7	17.1	17.4
	4H	16.1	17.4	16.5	17.8	18.2	16.0	17.3	16.4	17.7	18.1
	6H	16.6	17.8	17.0	18.1	18.5	16.6	17.8	17.0	18.2	18.6
	8H	16.7	17.9	17.2	18.3	18.7	16.8	17.9	17.2	18.3	18.7
	12H	16.8	17.9	17.2	18.3	18.7	16.9	18.0	17.4	18.4	18.9

### UGR Viewed Endwise

4H	2H	14.5	15.9	14.9	16.2	16.6	14.3	15.6	14.7	16.0	16.4
	3H	16.2	17.3	16.6	17.7	18.1	16.1	17.2	16.5	17.6	18.0
	4H	16.9	17.9	17.4	18.3	18.8	16.9	17.9	17.3	18.3	18.7
	6H	17.5	18.4	18.0	18.8	19.3	17.6	18.5	18.1	18.9	19.4
	8H	17.7	18.5	18.2	19.0	19.4	17.9	18.7	18.3	19.1	19.6
	12H	17.9	18.6	18.4	19.1	19.5	18.1	18.8	18.6	19.3	19.8
8H	4H	17.2	18.0	17.6	18.4	18.9	17.2	18.0	17.6	18.4	18.9
	6H	17.9	18.6	18.4	19.1	19.6	18.0	18.7	18.5	19.2	19.7
	8H	18.2	18.8	18.7	19.3	19.8	18.4	19.0	18.9	19.5	20.0
	12H	18.4	18.9	18.9	19.4	20.0	18.7	19.2	19.2	19.7	20.3
12H	4H	17.2	18.0	17.7	18.4	18.9	17.2	17.9	17.7	18.4	18.9
	6H	18.0	18.6	18.5	19.1	19.6	18.1	18.7	18.6	19.2	19.7
	8H	18.3	18.8	18.8	19.3	19.9	18.5	19.0	19.0	19.5	20.1

Maximum UGR = 20.3

POLAR GRAPH



Maximum Candela = 2000.147 Located At Horizontal Angle = 0, Vertical Angle = 5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)  
# 3 - Horizontal Cone Through Vertical Angle (0)