H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GP2-L200-840-W-EM10W-DIM-UNV_(EMERGENCY MODE).IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from BALLABS TEST NO. 19516.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 02-24-2021
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 2-192 LED 22"ARRAYS EACH ON ALUM HEATSINK 24X14"HIGHBAY
[MORE] LUMINAIRE W/ NO DIFFUSER/OPEN BOTTOM & CENTER DRIVER HOUSING
[LUMCAT] GP2-L200-840-W-EM10W-DIM-UNV(EMER MODE)
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Industrial, Manufacturing, Warehouse, High Bay
[_SEARCH_MOUNTING] Cable, Pendant, Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1410
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	141
Total Luminaire Watts	10
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.28
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.88 ft
Luminous Width (90-270)	1.18 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2357	2391	2387
55	2250	2233	2305
65	2007	2047	1719
75	1540	1296	959
85	569	595	433

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	499.033	499.033	499.033	499.033	499.033
5	499.185	498.273	497.665	496.449	497.665
10	494.777	494.321	493.409	491.737	492.649
15	483.073	482.312	485.049	483.225	483.681
20	470.912	467.872	470.152	470.304	471.216
25	451.759	452.063	452.519	454.952	456.016
30	430.175	429.719	433.975	435.951	438.079
35	402.054	405.702	407.982	412.238	413.606
40	374.389	374.997	380.013	383.661	384.117
45	342.012	342.316	347.028	348.548	346.420
50	305.074	305.226	307.507	311.155	309.331
55	264.793	266.617	262.817	270.265	271.329
60	219.648	222.992	220.408	226.944	231.048
65	174.046	175.414	177.542	167.510	149.117
70	126.620	127.836	119.780	102.604	103.516
75	81.779	82.539	68.858	59.130	50.922
80	40.129	33.289	27.665	27.057	26.297
85	10.184	9.576	10.640	8.512	7.752
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	183.88	N.A.	13.00
0-30	392.93	N.A.	27.90
0-40	648.36	N.A.	46.00
0-60	1153.03	N.A.	81.80
0-80	1396.68	N.A.	99.10
0-90	1410.05	N.A.	100.00
10-90	1362.69	N.A.	96.60
20-40	464.48	N.A.	32.90
20-50	730.73	N.A.	51.80
40-70	673.19	N.A.	47.70
60-80	243.64	N.A.	17.30
70-80	75.13	N.A.	5.30
80-90	13.38	N.A.	0.90
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	1410.05	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	47.37
10-20	136.51
20-30	209.05
30-40	255.43
40-50	266.25
50-60	238.42
60-70	168.52
70-80	75.13
80-90	13.38
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	65	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	31
9	57	43	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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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					UGR Viewed Endwise				
X=2H	Y=2H	15.1	16.8	15.5	17.1	17.4	15.3	16.9	15.6	17.2	17.5
	3H	16.7	18.2	17.1	18.5	18.9	16.4	17.9	16.8	18.2	18.6
	4H	17.3	18.6	17.7	19.0	19.4	16.7	18.0	17.1	18.4	18.8
	6H	17.5	18.8	18.0	19.2	19.6	16.8	18.1	17.2	18.4	18.8
	8H	17.6	18.8	18.0	19.2	19.6	16.8	18.0	17.2	18.4	18.8
	12H	17.6	18.8	18.1	19.2	19.6	16.8	18.0	17.3	18.4	18.8
4H	2H	15.7	17.1	16.1	17.5	17.8	15.8	17.2	16.2	17.6	17.9
	3H	17.5	18.7	17.9	19.1	19.5	17.2	18.3	17.6	18.7	19.1
	4H	18.2	19.2	18.6	19.6	20.0	17.5	18.5	17.9	18.9	19.4
	6H	18.5	19.4	19.0	19.8	20.3	17.7	18.6	18.2	19.0	19.5
	8H	18.6	19.4	19.0	19.9	20.3	17.7	18.6	18.2	19.0	19.5
	12H	18.6	19.4	19.1	19.8	20.3	17.7	18.5	18.2	19.0	19.4
8H	4H	18.3	19.1	18.8	19.6	20.0	17.7	18.5	18.2	19.0	19.4
	6H	18.7	19.4	19.2	19.9	20.3	17.9	18.6	18.4	19.1	19.6
	8H	18.8	19.4	19.3	19.9	20.4	18.0	18.6	18.5	19.1	19.6
	12H	18.9	19.4	19.4	19.9	20.4	18.0	18.6	18.5	19.1	19.6
12H	4H	18.3	19.0	18.8	19.5	20.0	17.7	18.4	18.2	18.9	19.4
	6H	18.7	19.3	19.2	19.8	20.3	17.9	18.6	18.5	19.0	19.6
	8H	18.8	19.4	19.3	19.8	20.4	18.0	18.6	18.5	19.1	19.6

Maximum UGR = 20.4

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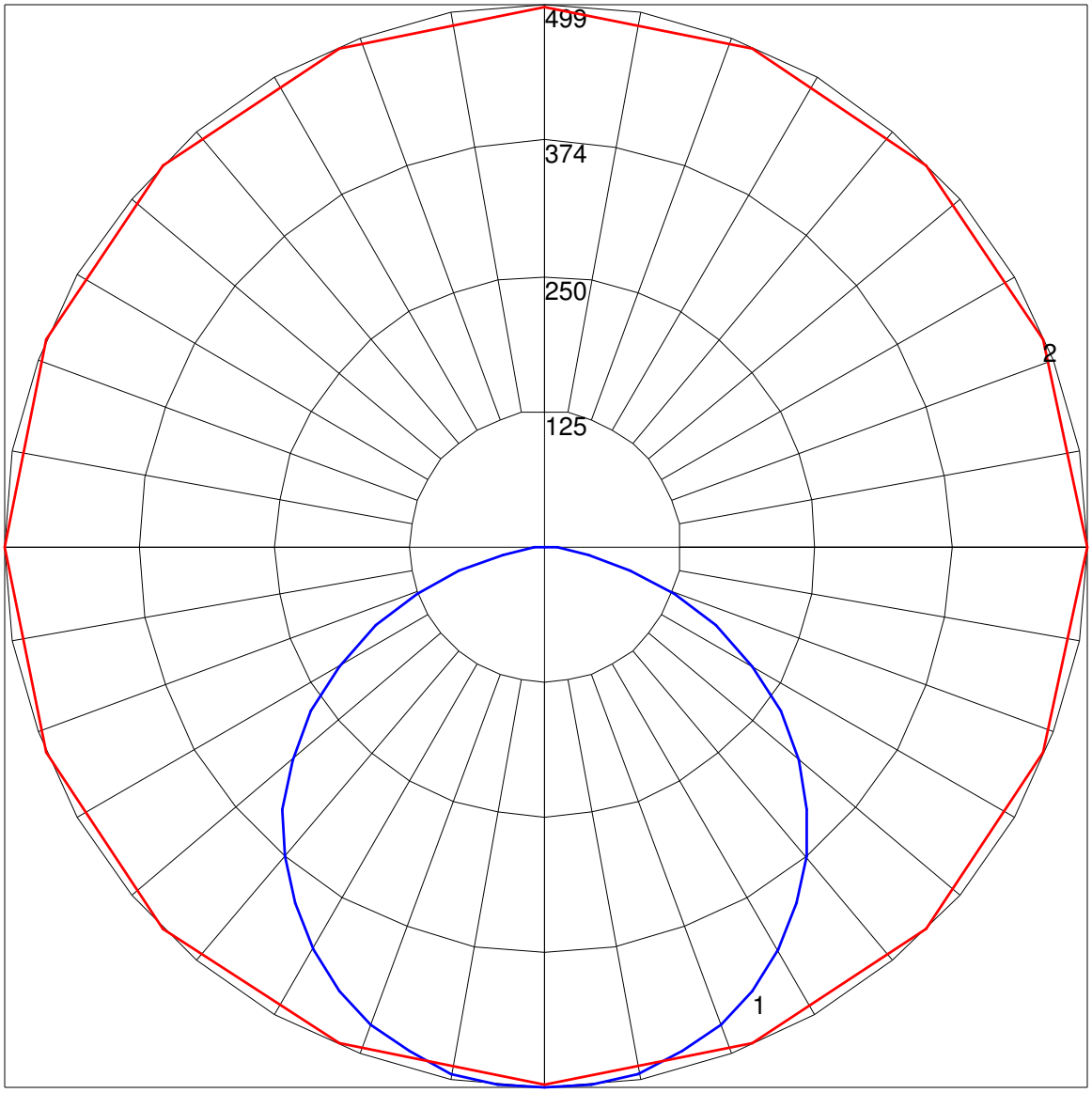
POLAR GRAPH



Maximum Candela = 499.185 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.)

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