IES INDOOR REPORT
PHOTOMETRIC FILENAME : GP2-L200-840-W-DIM-UNV_.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] 06-NOV-2019
[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-DIM-UNV
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Industrial, Manufacturing, Warehouse, High Bay
[_SEARCH_MOUNTING] Cable, Pendant, Suspended
[_SEARCH_CERTIFICATION] DLC

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	19819
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	157
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	33127	33613	33554
55	31619	31383	32399
65	28206	28773	24166
75	21641	18222	13475
85	8003	8362	6092

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	7014.067	7014.067	7014.067	7014.067	7014.067
5	7016.204	7003.385	6994.839	6977.747	6994.839
10	6954.246	6947.836	6935.017	6911.516	6924.335
15	6789.737	6779.054	6817.511	6791.873	6798.283
20	6618.818	6576.089	6608.136	6610.272	6623.091
25	6349.622	6353.895	6360.304	6394.488	6409.443
30	6046.241	6039.832	6099.653	6127.428	6157.338
35	5650.992	5702.268	5734.315	5794.137	5813.365
40	5262.153	5270.699	5341.203	5392.478	5398.888
45	4807.082	4811.355	4877.586	4898.951	4869.040
50	4287.917	4290.054	4322.101	4373.377	4347.739
55	3721.750	3747.388	3693.976	3798.663	3813.619
60	3087.215	3134.218	3097.898	3189.766	3247.451
65	2446.271	2465.499	2495.410	2354.402	2095.888
70	1779.689	1796.781	1683.547	1442.125	1454.944
75	1149.427	1160.109	967.826	831.091	715.721
80	564.031	467.889	388.840	380.294	369.611
85	143.144	134.598	149.554	119.643	108.961
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2584.46	N.A.	13.00
0-30	5522.75	N.A.	27.90
0-40	9112.92	N.A.	46.00
0-60	16206.25	N.A.	81.80
0-80	19630.74	N.A.	99.10
0-90	19818.75	N.A.	100.00
10-90	19152.99	N.A.	96.60
20-40	6528.46	N.A.	32.90
20-50	10270.68	N.A.	51.80
40-70	9461.88	N.A.	47.70
60-80	3424.49	N.A.	17.30
70-80	1055.94	N.A.	5.30
80-90	188.01	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	19818.75	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	665.76
10-20	1918.7
20-30	2938.29
30-40	3590.17
40-50	3742.22
50-60	3351.11
60-70	2368.55
70-80	1055.94
80-90	188.01
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	254	254	254	254	248	248	248	248	237	237	237	227	227	227	218	218	218	214
1	234	224	215	207	228	219	211	204	210	204	198	202	196	192	194	190	186	181
2	213	196	182	170	207	192	179	168	184	173	164	177	168	160	171	163	157	152
3	194	172	155	142	189	169	153	140	162	149	138	157	145	135	151	141	133	128
4	178	153	134	120	173	150	132	119	144	129	117	139	126	116	135	124	114	110
5	163	136	117	103	159	134	116	103	129	114	102	125	111	100	121	109	99	95
6	151	123	104	90	147	121	103	90	117	101	89	113	99	88	110	97	87	83
7	140	111	92	79	136	109	92	79	106	90	79	103	89	78	100	87	77	73
8	130	101	83	71	127	100	83	71	97	81	70	94	80	70	92	79	69	65
9	121	93	75	64	118	92	75	63	89	74	63	87	73	63	85	72	62	58
10	114	86	69	58	111	85	68	57	82	67	57	80	67	57	78	66	57	53

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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	21.6	23.3	22.0	23.6	23.9	21.8	23.4	22.1	23.7	24.0
	3H	23.2	24.7	23.6	25.0	25.4	22.9	24.4	23.3	24.7	25.1
	4H	23.8	25.1	24.2	25.5	25.9	23.2	24.5	23.6	24.9	25.3
	6H	24.0	25.3	24.5	25.7	26.1	23.3	24.6	23.7	24.9	25.3
	8H	24.1	25.3	24.5	25.7	26.1	23.3	24.5	23.8	24.9	25.3
	12H	24.1	25.3	24.6	25.7	26.1	23.3	24.5	23.8	24.9	25.3
4H	2H	22.2	23.6	22.6	24.0	24.3	22.4	23.7	22.7	24.1	24.4
	3H	24.0	25.2	24.4	25.6	26.0	23.7	24.8	24.1	25.2	25.6
	4H	24.7	25.7	25.1	26.1	26.5	24.0	25.0	24.4	25.4	25.9
	6H	25.0	25.9	25.5	26.3	26.8	24.2	25.1	24.7	25.5	26.0
	8H	25.1	25.9	25.5	26.4	26.8	24.2	25.1	24.7	25.5	26.0
	12H	25.1	25.9	25.6	26.3	26.8	24.2	25.0	24.7	25.5	25.9
8H	4H	24.8	25.6	25.3	26.1	26.5	24.2	25.0	24.7	25.5	25.9
	6H	25.2	25.9	25.7	26.4	26.8	24.4	25.1	24.9	25.6	26.1
	8H	25.3	25.9	25.8	26.4	26.9	24.5	25.1	25.0	25.6	26.1
	12H	25.4	25.9	25.9	26.4	26.9	24.5	25.1	25.0	25.6	26.1
12H	4H	24.8	25.5	25.3	26.0	26.5	24.2	24.9	24.7	25.4	25.9
	6H	25.2	25.8	25.7	26.3	26.8	24.4	25.1	25.0	25.5	26.1
	8H	25.3	25.9	25.8	26.3	26.9	24.5	25.1	25.0	25.6	26.1

Maximum UGR = 26.9

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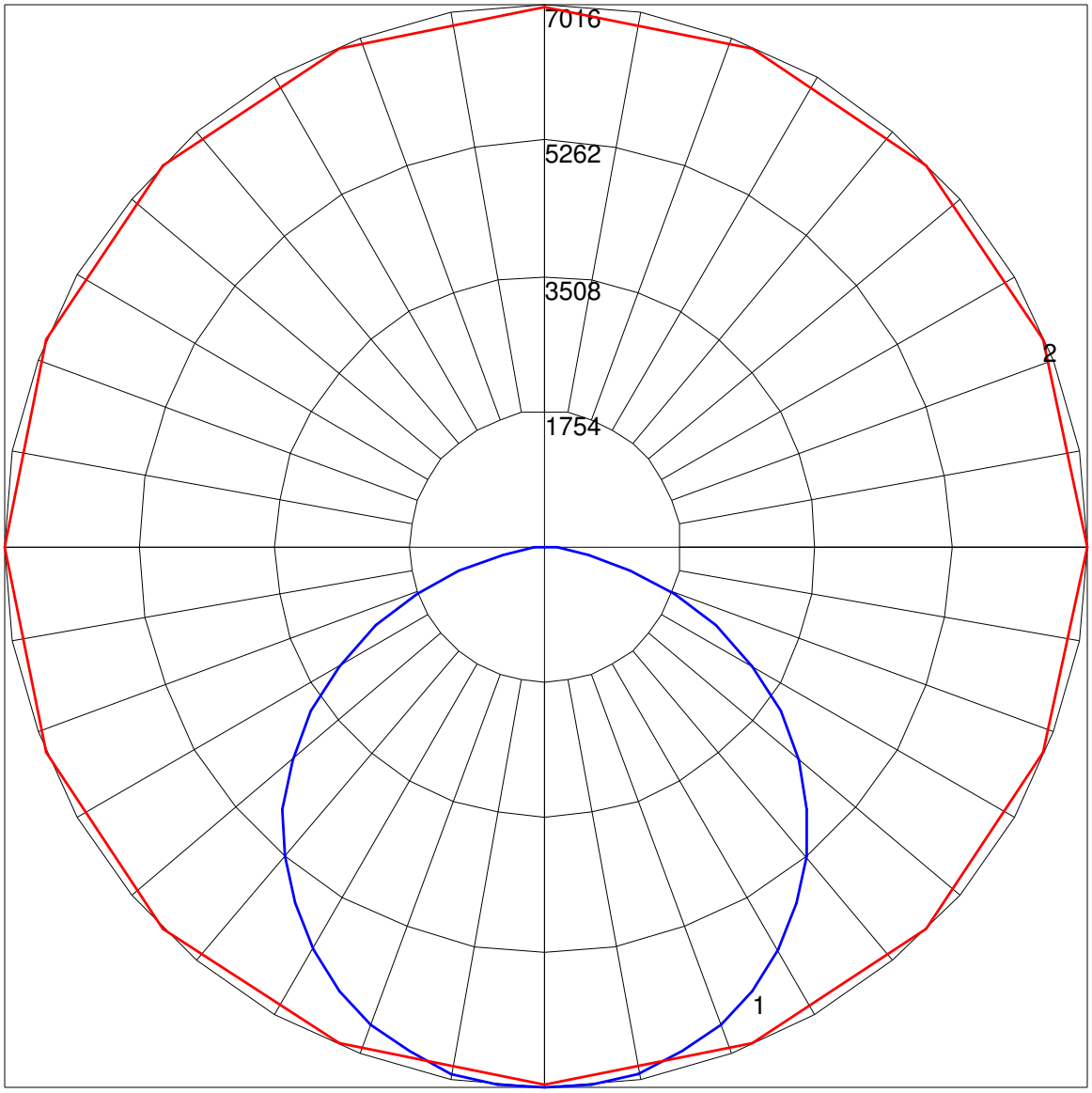
POLAR GRAPH



Maximum Candela = 7016.204 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.)