IES INDOOR REPORT
PHOTOMETRIC FILENAME : GP6-L650-840-W-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from BALLABS TEST NO. 19520.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 06-NOV-2019
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 6-192 LED 22"ARRAYS EACH ON ALUM HEATSINK 24x27"HIGHBAY
[MORE] LUMINAIRE W/ NO DIFFUSER/OPEN BOTTOM & CENTER DRIVER HOUSING
[LUMCAT] GP6-L650-840-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	68200
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	131
Total Luminaire Watts	520
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.30
Spacing Criterion (90-270)	1.34
Spacing Criterion (Diagonal)	1.44
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.88 ft
Luminous Width (90-270)	2.26 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	57248	59065	59682
55	56004	58223	59477
65	52579	54927	52767
75	41542	39756	41443
85	13853	15166	15675

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	22423.215	22423.215	22423.215	22423.215	22423.215
5	22312.787	22405.730	22434.257	22391.927	22372.602
10	22107.576	22208.801	22265.856	22240.089	22207.881
15	21737.644	21860.955	21939.174	21946.536	21893.163
20	21168.023	21313.419	21479.980	21470.778	21423.846
25	20484.293	20602.082	20826.618	20852.384	20787.968
30	19622.958	19784.919	19977.247	20141.968	20032.460
35	18594.143	18811.317	18968.676	19204.254	19099.348
40	17363.797	17674.834	17795.384	18010.718	17970.228
45	15951.246	16324.859	16457.371	16545.713	16629.454
50	14381.335	14781.635	14873.658	14996.048	15125.800
55	12657.747	13030.440	13159.272	13289.944	13442.702
60	10802.566	11052.868	11331.697	11399.794	11578.319
65	8755.977	8852.601	9147.074	8875.607	8787.265
70	6539.146	6507.858	6443.442	6507.858	6688.223
75	4236.733	4163.115	4054.528	4149.312	4226.611
80	2046.589	1978.492	1921.438	2083.398	2060.392
85	475.758	619.314	520.849	621.154	538.334
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	8315.09	N.A.	12.20
0-30	17878.48	N.A.	26.20
0-40	29735.99	N.A.	43.60
0-60	54101.6	N.A.	79.30
0-80	67344.73	N.A.	98.70
0-90	68200.04	N.A.	100.00
10-90	66068.37	N.A.	96.90
20-40	21420.89	N.A.	31.40
20-50	34067.43	N.A.	50.00
40-70	33172.39	N.A.	48.60
60-80	13243.13	N.A.	19.40
70-80	4436.35	N.A.	6.50
80-90	855.32	N.A.	1.30
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	68200.04	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2131.68
10-20	6183.42
20-30	9563.38
30-40	11857.51
40-50	12646.54
50-60	11719.07
60-70	8806.78
70-80	4436.35
80-90	855.32
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	110	110	110	110	107	107	107	107	102	102	102	98	98	98	94	94	94	92
1	100	96	92	88	98	94	90	87	90	87	84	86	84	82	83	81	79	77
2	91	83	77	72	89	82	76	71	78	74	69	75	71	68	73	69	66	64
3	83	73	66	59	81	72	65	59	69	63	58	66	61	57	64	60	56	54
4	76	65	56	50	74	63	56	50	61	54	49	59	53	48	57	52	48	46
5	69	58	49	43	68	56	49	43	55	48	42	53	47	42	51	46	41	39
6	64	52	43	37	62	51	43	37	49	42	37	48	41	37	46	41	36	34
7	59	47	39	33	58	46	38	33	45	38	32	43	37	32	42	36	32	30
8	55	43	35	29	54	42	34	29	41	34	29	40	33	29	38	33	29	27
9	51	39	31	26	50	38	31	26	37	31	26	36	30	26	35	30	26	24
10	48	36	29	24	47	35	28	24	35	28	24	34	28	23	33	27	23	22

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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	26.7	28.4	27.1	28.7	29.0	27.0	28.6	27.3	28.9	29.2
	3H	28.4	29.9	28.8	30.3	30.6	28.6	30.1	29.0	30.4	30.8
	4H	29.0	30.4	29.4	30.7	31.1	29.1	30.5	29.5	30.9	31.3
	6H	29.3	30.6	29.7	31.0	31.4	29.4	30.7	29.8	31.1	31.5
	8H	29.4	30.6	29.8	31.0	31.4	29.5	30.7	29.9	31.1	31.5
	12H	29.4	30.6	29.8	31.0	31.4	29.5	30.7	30.0	31.1	31.5
4H	2H	27.4	28.8	27.8	29.2	29.5	27.6	29.0	28.0	29.3	29.7
	3H	29.3	30.5	29.7	30.9	31.3	29.4	30.6	29.8	31.0	31.4
	4H	29.9	31.0	30.4	31.4	31.9	30.0	31.1	30.5	31.5	31.9
	6H	30.3	31.3	30.8	31.7	32.2	30.4	31.4	30.9	31.8	32.3
	8H	30.4	31.3	30.9	31.7	32.2	30.5	31.4	31.0	31.8	32.3
	12H	30.5	31.2	31.0	31.7	32.2	30.6	31.3	31.1	31.8	32.3
8H	4H	30.2	31.0	30.6	31.5	31.9	30.3	31.1	30.7	31.6	32.0
	6H	30.6	31.4	31.1	31.8	32.3	30.7	31.4	31.2	31.9	32.4
	8H	30.8	31.4	31.3	31.9	32.4	30.9	31.5	31.4	32.0	32.5
	12H	30.8	31.4	31.3	31.9	32.4	30.9	31.5	31.4	32.0	32.6
12H	4H	30.2	31.0	30.7	31.4	31.9	30.3	31.0	30.8	31.5	32.0
	6H	30.7	31.3	31.2	31.8	32.3	30.8	31.4	31.3	31.9	32.4
	8H	30.8	31.4	31.3	31.9	32.4	30.9	31.5	31.4	32.0	32.5

Maximum UGR = 32.6

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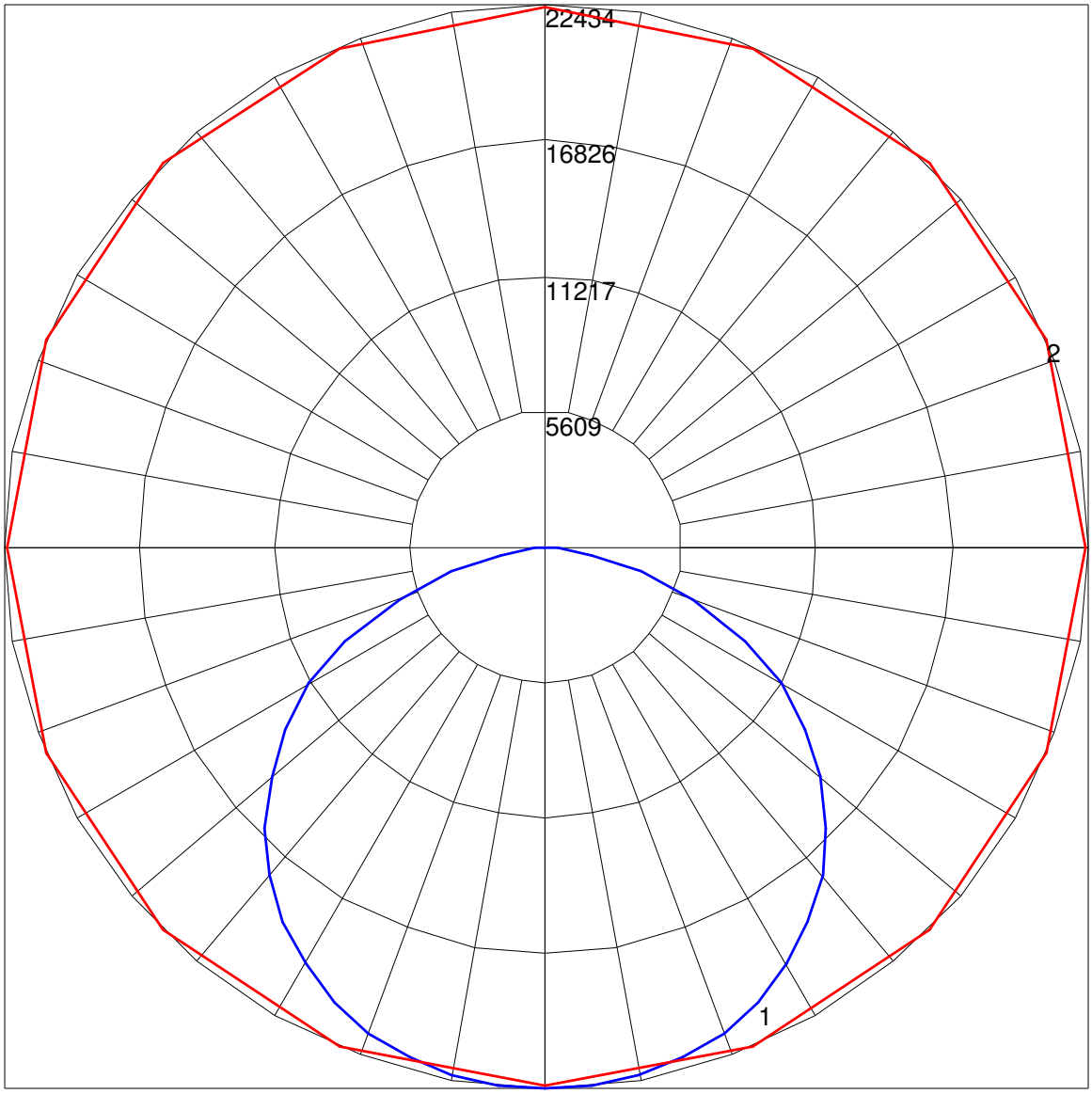
POLAR GRAPH



Maximum Candela = 22434.257 Located At Horizontal Angle = 45, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)