

TOWER LUMINAIRES TABLE

TAG	STATION AND OFFSET	48" DIA FOUNDATION DEPTH	TOWER HEIGHT	NUMBER OF LUMINAIRES	EACH LAMP WATTAGE
36 25	STA. 11+31 OFFSET 71' RT	12.00 FT	100 FT	6	400W HPS
36 26	STA. 155+89 OFFSET 63' RT	12.00 FT	100 FT	6	400W HPS
36 27	STA. 16+78 OFFSET 61' RT	13.50 FT	100 FT	4	400W HPS (SHIELDED)
36 28	STA. 150+48 OFFSET. 62' RT	12.00 FT	100 FT	4	400W HPS
36 29	STA. 22+07 OFFSET 44' RT	13.50 FT	100 FT	4	400W HPS (SHIELDED)
36 30	STA. 318+04 OFFSET. 100' RT	12.00 FT	100 FT	6	400W HPS
36 31	STA. 28+13 OFFSET. 127' LT	12.00 FT	100 FT	4	400W HPS
36 32	STA. 143+56 OFFSET. 88' LT	12.00 FT	100 FT	4	400W HPS
36 33	STA. 313+48 OFFSET. 121' LT	12.00 FT	100 FT	6	400W HPS
36 34	STA. 309+38 OFFSET. 159' RT	12.00 FT	100 FT	6	400W HPS
36 35	STA. 306+77 OFFSET. 135' LT	12.00 FT	100 FT	4	400W HPS
36 36	STA. 121+77 OFFSET. 89' LT	12.00 FT	100 FT	4	400W HPS
36 37	STA. 54+53 OFFSET. 47' RT	12.00 FT	100 FT	4	400W HPS
36 38	STA. 115+92 OFFSET. 85' LT	13.50 FT	100 FT	6	400W HPS
36 39	STA. 60+30 OFFSET. 54' RT	13.50 FT	100 FT	6	400W HPS
36 40	STA. 303+03 OFFSET. 95' RT	13.50 FT	100 FT	6	400W HPS
36 41	STA. 67+77 OFFSET. 36' RT	13.40 FT	100 FT	6	400W HPS
36 42	STA. 104+7 OFFSET. 67' RT	12.00 FT	100 FT	6	400W HPS

LOAD TABLE "A"

LIGHTING CONTROLLER "A" 100A, 480V, SINGLE PHASE, 3W						
CIRCUIT NO.	BREAKER SIZE	INPUT WATTAGE	LOWERING DEVICE MOTOR	150W HPS INPUT	TOTAL LOAD	LOAD AT 480V
A1	30A/2P	10x490	2x768	---	6436	13.40 A
A2	30A/2P	17x490	2x768	---	9866	20.55 A
A3	30A/2P	18x490	3x768	---	11124	23.17 A
A4	30A/2P	12x490	2x768	---	7416	15.45 A
TOTAL						72.57 A

LOAD TABLE "B"

LIGHTING CONTROLLER "B" 100A, 480V, SINGLE PHASE, 3W						
CIRCUIT NO.	BREAKER SIZE	INPUT WATTAGE	LOWERING DEVICE MOTOR	150W HPS INPUT	TOTAL LOAD	LOAD AT 480V
B1	30A/2P	14x490	3x768	---	9164	19.10 A
B2	30A/2P	15x490	2x768	12x180	11046	23.01 A
B3	30A/2P	13x490	2x768	---	7906	16.47 A
B4	30A/2P	12x490	2x768	---	7416	15.45 A
TOTAL						74.03 A

CABLE SCHEDULE

TAG	DESCRIPTION
(A)	UNIT DUCT 600V, 2-1/C NO. 4 1/C NO. 4 GROUND (XLP-TYPE USE) 1" DIA POLYETHYLENE
(B)	UNIT DUCT 600V, 2-1/C NO. 6 1/C NO. 6 GROUND (XLP-TYPE USE) 1" DIA POLYETHYLENE
(C)	ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2*10 & 1*10 GRD

VOLTAGE DROP TABLE "A"

CIRCUIT NO.	LOAD	CONDUCTOR SIZE	RESISTANCE PER 1000 FT	LENGTH OF CIRCUIT	% VOLTAGE DROP
A1	13.40 A	#6	0.51	1520 FT	3.68
A2	22.60 A	#6	0.51	2495 FT	3.42
A3	23.17 A	#6	0.51	1725 FT	4.76
A4	15.45 A	#4	0.321	2392 FT	4.09

VOLTAGE DROP TABLE "B"

CIRCUIT NO.	LOAD	CONDUCTOR SIZE	RESISTANCE PER 1000 FT	LENGTH OF CIRCUIT	% VOLTAGE DROP
B1	21.13 A	#4	0.321	1875 FT	3.56
B2	24.03 A	#4	0.321	2310 FT	3.23
B3	20.11 A	#6	0.51	2310 FT	3.80
B4	15.45 A	#4	0.321	2040 FT	3.45