

EK100W

ATMOTERM Opole

EK100W

EWA JARZYŃSKA

DANE EMITORÓW

Obiekt: BROWAR BABIN

Identyfikator obiektu BROW

wybrane emitery: od: 1 do: 2

| lp. | Emitor Nr | współrzędne x [m], y [m] | wysokość h [m] | wymiar d[m], a[m] | Typ |
|-----|--------------|---------------------------------|-------------------|----------------------|-----------|
| 1 | 1 | E 1 (WENTYLACJA) 108,1 321,4 | 5,5 | 0,30 | ZADASZONY |
| 2 | 2 | E 2 (KOCIOŁ) 167,2 333,9 | 6,0 | 0,13 | OTWARTY |

ATMOTERM Opole

EK100W

EWA JARZYŃSKA

ANALIZA STĘŻEŃ UŚREDNIONYCH DLA 1 GODZINY
Komplet wyników dla wybranych substancji

Obiekt: BROWAR BABIN

Identyfikator obiektu: BROW

Zbiór wyników: T01BROW.DBF

* - przekroczenie

Punkty spoza terenu: ZMP.TER

| z[m] | współrzędne x[m] | y[m] | St. maksymalne [µg/m3] | Procenty [µg/m3] |
|---------------------------------------|---------------------|------|---------------------------|---------------------|
| współczynnik szorstkości z0 = 0,03500 | | | | |

| dwutl.węgla CAS 124-38-9 | (gaz) | D1= - | Obszar zwykły procenty 99,800 |
|-----------------------------|-------|----------------|----------------------------------|
| 0,0 | 60,0 | 1217,26282 (1) | 857,79059 |
| 0,0 | 100,0 | 1371,08826 (1) | 647,00891 |
| 0,0 | 200,0 | 1507,72925 (1) | 1095,93164 |
| 0,0 | 60,0 | 1223,36438 (1) | 862,09021 |
| 0,0 | 59,0 | 1335,89941 (1) | 953,71033 |
| 0,0 | 59,0 | 1469,03357 (1) | 1063,54187 |
| 0,0 | 59,0 | 1625,15759 (1) | 1193,15942 |
| 0,0 | 58,0 | 1815,94275 (1) | 1689,79089 |
| 0,0 | 58,0 | 2041,33630 (1) | 1903,32947 |
| 0,0 | 58,0 | 2308,51587 (1) | 2163,23462 |
| 0,0 | 58,0 | 2634,26636 (1) | 2475,90210 |
| 0,0 | 57,0 | 3008,99072 (1) | 2845,11865 |
| 0,0 | 57,0 | 3454,24805 (1) | 3275,93945 |
| 0,0 | 57,0 | 3929,86377 (1) | 3243,34351 |
| 0,0 | 57,0 | 4347,51660 (1) | 2157,72949 |
| 0,0 | 56,0 | 4565,85010 (1) | 4373,67969 |
| 0,0 | 56,0 | 4579,56836 (1) | 4395,60303 |
| 0,0 | 56,0 | 4364,94092 (1) | 3667,84692 |
| 0,0 | 56,0 | 3969,35962 (1) | 3285,78198 |
| 0,0 | 55,0 | 3485,47632 (1) | 3308,86328 |
| 0,0 | 55,0 | 3042,27246 (1) | 2876,58765 |

| EK100W | | | | |
|--------|-------|-------|----------------|------------|
| 0,0 | 55,0 | 425,0 | 2658,08203 (1) | 2503,28760 |
| 0,0 | 55,0 | 444,0 | 2331,71680 (1) | 2187,16187 |
| 0,0 | 74,0 | 445,0 | 2426,87573 (1) | 2278,69922 |
| 0,0 | 92,0 | 445,0 | 2495,78857 (1) | 1939,83850 |
| 0,0 | 111,0 | 445,0 | 2513,32056 (1) | 1957,37573 |
| 0,0 | 130,0 | 445,0 | 2478,37891 (1) | 1926,30713 |
| 0,0 | 149,0 | 445,0 | 2393,13623 (1) | 2242,53003 |
| 0,0 | 168,0 | 445,0 | 2269,60254 (1) | 2126,77075 |
| 0,0 | 187,0 | 445,0 | 2128,89868 (1) | 1988,94580 |
| 0,0 | 206,0 | 445,0 | 1977,04797 (1) | 1843,38708 |
| 0,0 | 207,0 | 425,0 | 2180,61011 (1) | 2037,25793 |
| 0,0 | 207,0 | 405,0 | 2405,13208 (1) | 1861,91370 |
| 0,0 | 207,0 | 385,0 | 2634,26660 (1) | 2063,91528 |
| 0,0 | 207,0 | 366,0 | 2833,76099 (1) | 2240,28882 |
| 0,0 | 207,0 | 346,0 | 2990,99097 (1) | 2383,58276 |
| 0,0 | 207,0 | 327,0 | 3066,70850 (1) | 2446,36865 |
| 0,0 | 207,0 | 307,0 | 3042,27246 (1) | 2429,30396 |
| 0,0 | 207,0 | 287,0 | 2922,98315 (1) | 1855,31885 |
| 0,0 | 208,0 | 268,0 | 2725,37158 (1) | 1692,24573 |
| 0,0 | 208,0 | 248,0 | 2508,29883 (1) | 1519,00635 |
| 0,0 | 208,0 | 229,0 | 2290,12134 (1) | 1762,27368 |
| 0,0 | 208,0 | 209,0 | 2074,26050 (1) | 1575,55054 |
| 0,0 | 208,0 | 189,0 | 1876,86865 (1) | 1404,39246 |
| 0,0 | 208,0 | 170,0 | 1706,77344 (1) | 1260,62134 |
| 0,0 | 207,0 | 150,0 | 1553,64661 (1) | 1132,70068 |
| 0,0 | 191,0 | 143,0 | 1562,99622 (1) | 1141,79846 |
| 0,0 | 174,0 | 135,0 | 1555,20081 (1) | 1134,96838 |
| 0,0 | 158,0 | 127,0 | 1530,51562 (1) | 1113,60754 |
| 0,0 | 141,0 | 119,0 | 1492,72717 (1) | 724,41187 |
| 0,0 | 125,0 | 112,0 | 1454,41650 (1) | 699,49591 |
| 0,0 | 109,0 | 104,0 | 1400,18542 (1) | 665,38110 |
| 0,0 | 92,0 | 96,0 | 1341,25378 (1) | 627,88690 |
| 0,0 | 76,0 | 89,0 | 1286,08765 (1) | 593,69159 |

Brak wartości odniesienia D1

| 70 | ditl. azotu (gaz) | D1=200,000 | obszar zwykły |
|-----|-------------------|---------------|------------------|
| CAS | 10102-44-0 | | percentyl 99,800 |
| 0,0 | 60,0 | 120,20989 (1) | 101,72725 |
| 0,0 | 100,0 | 130,09166 (1) | 99,71291 |
| 0,0 | 200,0 | 142,05855 (1) | 90,22398 |
| 0,0 | 60,0 | 120,57104 (1) | 101,72725 |
| 0,0 | 59,0 | 125,74288 (1) | 101,01765 |
| 0,0 | 59,0 | 130,87454 (1) | 99,51370 |
| 0,0 | 59,0 | 135,53625 (1) | 99,70734 |
| 0,0 | 58,0 | 139,94356 (1) | 103,88030 |
| 0,0 | 58,0 | 143,05644 (1) | 104,97580 |
| 0,0 | 58,0 | 144,92830 (1) | 111,13324 |
| 0,0 | 58,0 | 144,92830 (1) | 120,87172 |
| 0,0 | 57,0 | 142,91347 (1) | 119,07217 |
| 0,0 | 57,0 | 142,70865 (1) | 118,70277 |
| 0,0 | 57,0 | 150,01419 (1) | 122,07342 |
| 0,0 | 57,0 | 155,35765 (1) | 121,72079 |
| 0,0 | 56,0 | 157,86336 (1) | 138,07613 |
| 0,0 | 56,0 | 158,97227 (1) | 142,98358 |
| 0,0 | 56,0 | 158,49608 (1) | 142,55528 |
| 0,0 | 56,0 | 156,29259 (1) | 124,66407 |
| 0,0 | 55,0 | 151,52184 (1) | 122,56269 |
| 0,0 | 55,0 | 145,14450 (1) | 119,89576 |
| 0,0 | 55,0 | 142,70865 (1) | 115,77200 |
| 0,0 | 55,0 | 144,49419 (1) | 113,37828 |
| 0,0 | 74,0 | 142,70865 (1) | 129,90521 |
| 0,0 | 92,0 | 144,70972 (1) | 130,29552 |
| 0,0 | 111,0 | 151,37041 (1) | 135,73845 |
| 0,0 | 130,0 | 155,82442 (1) | 139,87230 |
| 0,0 | 149,0 | 158,33766 (1) | 142,41278 |

| EK100W | | | | |
|--------|-------|-------|---------------|-----------|
| 0,0 | 168,0 | 445,0 | 159,13133 (1) | 142,98358 |
| 0,0 | 187,0 | 445,0 | 158,17941 (1) | 142,27045 |
| 0,0 | 206,0 | 445,0 | 155,66867 (1) | 151,52185 |
| 0,0 | 207,0 | 425,0 | 162,50841 (1) | 158,17940 |
| 0,0 | 207,0 | 405,0 | 155,04723 (1) | 151,37039 |
| 0,0 | 207,0 | 385,0 | 155,14267 (1) | 152,07065 |
| 0,0 | 207,0 | 366,0 | 148,76161 (1) | 138,56580 |
| 0,0 | 207,0 | 346,0 | 133,39438 (1) | 125,97422 |
| 0,0 | 207,0 | 327,0 | 130,49173 (1) | 123,47976 |
| 0,0 | 207,0 | 307,0 | 142,78572 (1) | 134,83842 |
| 0,0 | 207,0 | 287,0 | 155,76448 (1) | 149,08150 |
| 0,0 | 208,0 | 268,0 | 155,32086 (1) | 148,18968 |
| 0,0 | 208,0 | 248,0 | 162,34601 (1) | 158,49608 |
| 0,0 | 208,0 | 229,0 | 158,33766 (1) | 154,27393 |
| 0,0 | 208,0 | 209,0 | 146,60324 (1) | 142,55530 |
| 0,0 | 208,0 | 189,0 | 143,34283 (1) | 128,73161 |
| 0,0 | 208,0 | 170,0 | 145,21846 (1) | 110,41425 |
| 0,0 | 207,0 | 150,0 | 143,62982 (1) | 94,13499 |
| 0,0 | 191,0 | 143,0 | 142,91347 (1) | 91,81079 |
| 0,0 | 174,0 | 135,0 | 141,63301 (1) | 90,85776 |
| 0,0 | 158,0 | 127,0 | 139,80368 (1) | 92,82629 |
| 0,0 | 141,0 | 119,0 | 137,58463 (1) | 87,94660 |
| 0,0 | 125,0 | 112,0 | 134,99521 (1) | 83,57378 |
| 0,0 | 109,0 | 104,0 | 131,79388 (1) | 99,01736 |
| 0,0 | 92,0 | 96,0 | 128,15485 (1) | 100,41336 |
| 0,0 | 76,0 | 89,0 | 124,61628 (1) | 101,21988 |

| 72 | ditl. siarki (gaz) | D1=350,000 | Obszar zwykły | |
|-----|--------------------|------------|------------------|-----------|
| CAS | 7446-09-5 | | percentyl 99,726 | |
| 0,0 | 60,0 | 80,0 | 87,90349 (1) | 74,38805 |
| 0,0 | 100,0 | 100,0 | 95,12952 (1) | 72,91507 |
| 0,0 | 200,0 | 140,0 | 103,88031 (1) | 65,41358 |
| 0,0 | 60,0 | 81,0 | 88,16758 (1) | 74,38805 |
| 0,0 | 59,0 | 100,0 | 91,94948 (1) | 73,86916 |
| 0,0 | 59,0 | 119,0 | 95,70201 (1) | 72,76939 |
| 0,0 | 59,0 | 138,0 | 99,11089 (1) | 70,90177 |
| 0,0 | 58,0 | 158,0 | 102,33372 (1) | 70,01643 |
| 0,0 | 58,0 | 177,0 | 104,61002 (1) | 74,34600 |
| 0,0 | 58,0 | 196,0 | 105,97882 (1) | 81,26617 |
| 0,0 | 58,0 | 215,0 | 105,97882 (1) | 88,38744 |
| 0,0 | 57,0 | 234,0 | 104,50546 (1) | 75,24352 |
| 0,0 | 57,0 | 253,0 | 104,35568 (1) | 78,98353 |
| 0,0 | 57,0 | 272,0 | 109,69787 (1) | 76,87684 |
| 0,0 | 57,0 | 291,0 | 113,60528 (1) | 81,98147 |
| 0,0 | 56,0 | 310,0 | 115,43758 (1) | 92,92616 |
| 0,0 | 56,0 | 330,0 | 116,24847 (1) | 92,27795 |
| 0,0 | 56,0 | 349,0 | 115,90025 (1) | 92,46268 |
| 0,0 | 56,0 | 368,0 | 114,28896 (1) | 89,72325 |
| 0,0 | 55,0 | 387,0 | 110,80034 (1) | 81,87955 |
| 0,0 | 55,0 | 406,0 | 106,13691 (1) | 78,11947 |
| 0,0 | 55,0 | 425,0 | 104,35569 (1) | 77,14832 |
| 0,0 | 55,0 | 444,0 | 105,66137 (1) | 81,33877 |
| 0,0 | 74,0 | 445,0 | 104,35569 (1) | 92,26112 |
| 0,0 | 92,0 | 445,0 | 105,81898 (1) | 94,51228 |
| 0,0 | 111,0 | 445,0 | 110,68961 (1) | 97,18562 |
| 0,0 | 130,0 | 445,0 | 113,94660 (1) | 98,45728 |
| 0,0 | 149,0 | 445,0 | 115,78441 (1) | 91,70920 |
| 0,0 | 168,0 | 445,0 | 116,36478 (1) | 91,98474 |
| 0,0 | 187,0 | 445,0 | 115,66869 (1) | 91,61754 |
| 0,0 | 206,0 | 445,0 | 113,83270 (1) | 102,17937 |
| 0,0 | 207,0 | 425,0 | 118,83427 (1) | 107,31086 |
| 0,0 | 207,0 | 405,0 | 113,37828 (1) | 110,44230 |
| 0,0 | 207,0 | 385,0 | 113,44807 (1) | 111,20165 |
| 0,0 | 207,0 | 366,0 | 108,78193 (1) | 101,32623 |
| 0,0 | 207,0 | 346,0 | 97,54463 (1) | 92,11864 |
| 0,0 | 207,0 | 327,0 | 95,42208 (1) | 87,55876 |

| EK100W | | | | |
|--------|-------|-------|---------------|-----------|
| 0,0 | 207,0 | 307,0 | 104,41206 (1) | 97,35316 |
| 0,0 | 207,0 | 287,0 | 113,90276 (1) | 105,67255 |
| 0,0 | 208,0 | 268,0 | 113,57838 (1) | 107,31087 |
| 0,0 | 208,0 | 248,0 | 118,71551 (1) | 107,31086 |
| 0,0 | 208,0 | 229,0 | 115,78441 (1) | 104,13934 |
| 0,0 | 208,0 | 209,0 | 107,20361 (1) | 95,94066 |
| 0,0 | 208,0 | 189,0 | 104,81944 (1) | 86,20515 |
| 0,0 | 208,0 | 170,0 | 106,19099 (1) | 77,30277 |
| 0,0 | 207,0 | 150,0 | 105,02930 (1) | 68,83620 |
| 0,0 | 191,0 | 143,0 | 104,50546 (1) | 64,73457 |
| 0,0 | 174,0 | 135,0 | 103,56913 (1) | 64,50416 |
| 0,0 | 158,0 | 127,0 | 102,23144 (1) | 61,41965 |
| 0,0 | 141,0 | 119,0 | 100,60875 (1) | 58,19096 |
| 0,0 | 125,0 | 112,0 | 98,71525 (1) | 55,18714 |
| 0,0 | 109,0 | 104,0 | 96,37428 (1) | 58,65214 |
| 0,0 | 92,0 | 96,0 | 93,71323 (1) | 73,42727 |
| 0,0 | 76,0 | 89,0 | 91,12565 (1) | 74,01704 |

| 137 | pył CAS | zaw. PM10(pył) | D1=280,000 | obszar zwykły percentyl 99,800 |
|-----|------------|----------------|--------------|-----------------------------------|
| 0,0 | 60,0 | 80,0 | 15,06645 (1) | 12,74993 |
| 0,0 | 100,0 | 100,0 | 16,30497 (1) | 12,49747 |
| 0,0 | 200,0 | 140,0 | 17,80484 (1) | 11,30818 |
| 0,0 | 60,0 | 81,0 | 15,11171 (1) | 12,74993 |
| 0,0 | 59,0 | 100,0 | 15,75992 (1) | 12,66100 |
| 0,0 | 59,0 | 119,0 | 16,40310 (1) | 12,47250 |
| 0,0 | 59,0 | 138,0 | 16,98737 (1) | 12,49677 |
| 0,0 | 58,0 | 158,0 | 17,53976 (1) | 13,01979 |
| 0,0 | 58,0 | 177,0 | 17,92991 (1) | 13,15709 |
| 0,0 | 58,0 | 196,0 | 18,16452 (1) | 13,92883 |
| 0,0 | 58,0 | 215,0 | 18,16452 (1) | 15,14940 |
| 0,0 | 57,0 | 234,0 | 17,91199 (1) | 14,92385 |
| 0,0 | 57,0 | 253,0 | 17,88631 (1) | 14,87755 |
| 0,0 | 57,0 | 272,0 | 18,80195 (1) | 15,30001 |
| 0,0 | 57,0 | 291,0 | 19,47167 (1) | 15,25581 |
| 0,0 | 56,0 | 310,0 | 19,78572 (1) | 17,30570 |
| 0,0 | 56,0 | 330,0 | 19,92471 (1) | 17,92077 |
| 0,0 | 56,0 | 349,0 | 19,86503 (1) | 17,86709 |
| 0,0 | 56,0 | 368,0 | 19,58885 (1) | 15,62471 |
| 0,0 | 55,0 | 387,0 | 18,99091 (1) | 15,36133 |
| 0,0 | 55,0 | 406,0 | 18,19161 (1) | 15,02707 |
| 0,0 | 55,0 | 425,0 | 17,88632 (1) | 14,51022 |
| 0,0 | 55,0 | 444,0 | 18,11011 (1) | 14,21021 |
| 0,0 | 74,0 | 445,0 | 17,88632 (1) | 16,28160 |
| 0,0 | 92,0 | 445,0 | 18,13712 (1) | 16,33052 |
| 0,0 | 111,0 | 445,0 | 18,97193 (1) | 17,01271 |
| 0,0 | 130,0 | 445,0 | 19,53018 (1) | 17,53082 |
| 0,0 | 149,0 | 445,0 | 19,84517 (1) | 17,84924 |
| 0,0 | 168,0 | 445,0 | 19,94464 (1) | 17,92077 |
| 0,0 | 187,0 | 445,0 | 19,82534 (1) | 17,83140 |
| 0,0 | 206,0 | 445,0 | 19,51065 (1) | 18,99092 |
| 0,0 | 207,0 | 425,0 | 20,36791 (1) | 19,82534 |
| 0,0 | 207,0 | 405,0 | 19,43277 (1) | 18,97193 |
| 0,0 | 207,0 | 385,0 | 19,44473 (1) | 19,05970 |
| 0,0 | 207,0 | 366,0 | 18,64496 (1) | 17,36707 |
| 0,0 | 207,0 | 346,0 | 16,71892 (1) | 15,78891 |
| 0,0 | 207,0 | 327,0 | 16,35512 (1) | 15,47627 |
| 0,0 | 207,0 | 307,0 | 17,89598 (1) | 16,89991 |
| 0,0 | 207,0 | 287,0 | 19,52266 (1) | 18,68505 |
| 0,0 | 208,0 | 268,0 | 19,46706 (1) | 18,57328 |
| 0,0 | 208,0 | 248,0 | 20,34756 (1) | 19,86503 |
| 0,0 | 208,0 | 229,0 | 19,84517 (1) | 19,33585 |
| 0,0 | 208,0 | 209,0 | 18,37444 (1) | 17,86710 |
| 0,0 | 208,0 | 189,0 | 17,96580 (1) | 16,13451 |
| 0,0 | 208,0 | 170,0 | 18,20088 (1) | 13,83871 |
| 0,0 | 207,0 | 150,0 | 18,00177 (1) | 11,79836 |

| EK100W | | | | |
|--------|-------|-------|--------------|----------|
| 0,0 | 191,0 | 143,0 | 17,91199 (1) | 11,50706 |
| 0,0 | 174,0 | 135,0 | 17,75150 (1) | 11,38761 |
| 0,0 | 158,0 | 127,0 | 17,52222 (1) | 11,63434 |
| 0,0 | 141,0 | 119,0 | 17,24410 (1) | 11,02274 |
| 0,0 | 125,0 | 112,0 | 16,91956 (1) | 10,47468 |
| 0,0 | 109,0 | 104,0 | 16,51832 (1) | 12,41029 |
| 0,0 | 92,0 | 96,0 | 16,06222 (1) | 12,58526 |
| 0,0 | 76,0 | 89,0 | 15,61872 (1) | 12,68634 |

w żadnym punkcie stężenie nie przekracza
10% wartości odniesienia

ATMOTERM Opole

EK100W

EWA JARZYŃSKA

ANALIZA STĘŻEŃ UŚREDNIONYCH DLA 1 GODZINY
Punkty z maksymalnymi wartościami

Obiekt: BROWAR BABIN

Identyfikator obiektu: BROW

Zbiór wyników: T01BROW.DBF

* - wartosc maksymalna

Punkty spoza terenu: ZMP.TER

| z[m] | współrzędne x[m] | y[m] | St. maksymalne [µg/m3] | Percentyl [µg/m3] |
|---------------------------------------|---------------------|------|---------------------------|----------------------|
| ----- | | | | |
| współczynnik szorstkości z0 = 0,03500 | | | | |
| ----- | | | | |

| | | | |
|-----|-------------------|-------|------------------|
| | dwutl.węgla (gaz) | D1= - | Obszar zwykły |
| | CAS 124-38-9 | | percentyl 99,800 |
| 0,0 | 56,0 | 330,0 | 4579,56836* |
| | | | 4395,60303* |

Brak wartości odniesienia D1

| | | | |
|-----|----------------------|------------|------------------|
| | 70 ditl. azotu (gaz) | D1=200,000 | Obszar zwykły |
| | CAS 10102-44-0 | | percentyl 99,800 |
| 0,0 | 207,0 | 425,0 | 162,50841* |
| 0,0 | 208,0 | 248,0 | 158,17940 |
| | | | 158,49608* |

wymagane obliczenia rozkładu stężeń uśrednionych dla roku, ponieważ
maksymalne stężenie 1-godz. przekracza 10% wartości odniesienia
i 10% dopuszczalnego poziomu substancji w powietrzu

| | | | |
|-----|-----------------------|------------|------------------|
| | 72 ditl. siarki (gaz) | D1=350,000 | Obszar zwykły |
| | CAS 7446-09-5 | | percentyl 99,726 |
| 0,0 | 207,0 | 425,0 | 118,83427* |
| 0,0 | 207,0 | 385,0 | 113,44807 |
| | | | 111,20165* |

wymagane obliczenia rozkładu stężeń uśrednionych dla roku, ponieważ
maksymalne stężenie 1-godz. przekracza 10% wartości odniesienia
i 10% dopuszczalnego poziomu substancji w powietrzu

| | | | | | |
|-----|--------------------|-------|------------|-----------|------------------|
| | | | | EK100W | |
| 137 | pył zaw. PM10(pył) | | D1=280,000 | | Obszar zwykły |
| | CAS | | | | percentyl 99,800 |
| 0,0 | 207,0 | 425,0 | | 20,36791* | 19,82534 |
| 0,0 | 208,0 | 248,0 | | 20,34756 | 19,86503* |

W żadnym punkcie stężenie nie przekracza
10% wartości odniesienia

ATMOTERM Opole

EK100W

EWA JARZYŃSKA

ANALIZA STĘŻEŃ UŚREDNIONYCH DLA 1 GODZINY
Punkty z przekroczeniami dopuszczalnych norm stężeń
dla wybranych substancji

Obiekt: BROWAR BABIN

Identyfikator obiektu: BROW

Zbiór wyników: T01BROW.DBF

Punkty spoza terenu: ZMP.TER

| | | | | |
|---------------------------------------|-------------|------|----------------|-----------|
| | współrzędne | | St. maksymalne | Percentyl |
| z[m] | x[m] | y[m] | [µg/m3] | [µg/m3] |
| ----- | | | | |
| współczynnik szorstkości z0 = 0,03500 | | | | |

dwutl.węgla (gaz)
CAS 124-38-9

D1= -

Obszar zwykły
percentyl 99,800

Brak wartości odniesienia D1

70 ditl. azotu (gaz)
CAS 10102-44-0

D1=200,000

Obszar zwykły
percentyl 99,800

Nie ma przekroczeń

72 ditl. siarki (gaz)
CAS 7446-09-5

D1=350,000

Obszar zwykły
percentyl 99,726

Nie ma przekroczeń

137 pył zaw. PM10(pył)
CAS

D1=280,000

Obszar zwykły
percentyl 99,800

Nie ma przekroczeń

W żadnym punkcie stężenie nie przekracza
10% wartości odniesienia

ATMOTERM Opole

EK100W

EWA JARZYŃSKA

ANALIZA STĘŻEŃ UŚREDNIONYCH DLA ROKU
Komplet wyników obliczeń
Strona 6

Obiekt: BROWAR BABIN
Identyfikator obiektu: BROW

Zbiór wyników: R01BROW.DBF

* - przekroczenie

Punkty spoza terenu: ZMP.TER

| współrzędne | | Stężenie średnioroczne |
|-------------|------|------------------------|
| X[m] | Y[m] | [µg/m ³] |

współczynnik szorstkości z0 = 0,03500

| dwutl.węglu (gaz) | Da-R= | obszar zwykły |
|-------------------|-------|---------------|
| CAS 124-38-9 | | |
| 60,0 | 80,0 | 8,35355 |
| 100,0 | 100,0 | 7,42810 |
| 200,0 | 140,0 | 15,17330 |
| 60,0 | 81,0 | 8,40855 |
| 59,0 | 100,0 | 9,55411 |
| 59,0 | 119,0 | 12,19463 |
| 59,0 | 138,0 | 14,12241 |
| 58,0 | 158,0 | 19,88094 |
| 58,0 | 177,0 | 25,06763 |
| 58,0 | 196,0 | 31,50571 |
| 58,0 | 215,0 | 40,51639 |
| 57,0 | 234,0 | 50,75404 |
| 57,0 | 253,0 | 61,31153 |
| 57,0 | 272,0 | 57,78938 |
| 57,0 | 291,0 | 48,45396 |
| 56,0 | 310,0 | 76,27150 |
| 56,0 | 330,0 | 85,69911 |
| 56,0 | 349,0 | 60,91433 |
| 56,0 | 368,0 | 57,29399 |
| 55,0 | 387,0 | 55,74829 |
| 55,0 | 406,0 | 46,71066 |
| 55,0 | 425,0 | 37,96191 |
| 55,0 | 444,0 | 30,86455 |
| 74,0 | 445,0 | 29,78982 |
| 92,0 | 445,0 | 27,48869 |
| 111,0 | 445,0 | 28,27093 |
| 130,0 | 445,0 | 32,39077 |
| 149,0 | 445,0 | 39,17624 |
| 168,0 | 445,0 | 41,34982 |
| 187,0 | 445,0 | 38,30611 |
| 206,0 | 445,0 | 33,32856 |
| 207,0 | 425,0 | 34,86076 |
| 207,0 | 405,0 | 35,65829 |
| 207,0 | 385,0 | 37,65948 |
| 207,0 | 366,0 | 41,11119 |
| 207,0 | 346,0 | 44,23770 |
| 207,0 | 327,0 | 45,34278 |
| 207,0 | 307,0 | 42,63708 |
| 207,0 | 287,0 | 34,40170 |
| 208,0 | 268,0 | 29,18402 |
| 208,0 | 248,0 | 26,21440 |
| 208,0 | 229,0 | 24,48043 |
| 208,0 | 209,0 | 23,19422 |
| 208,0 | 189,0 | 20,87401 |
| 208,0 | 170,0 | 18,53531 |
| 207,0 | 150,0 | 16,15630 |
| 191,0 | 143,0 | 15,67304 |
| 174,0 | 135,0 | 14,51346 |
| 158,0 | 127,0 | 11,70823 |
| 141,0 | 119,0 | 9,78842 |
| 125,0 | 112,0 | 8,24215 |
| 109,0 | 104,0 | 7,61545 |
| 92,0 | 96,0 | 7,33057 |

76,0 89,0 EK100w
7,55296

| 70 ditl. azotu (gaz) | Da-R= | 21,2000 | obszar zwykły |
|----------------------|-------|----------|---------------|
| CAS 10102-44-0 | | | |
| 60,0 | 80,0 | 1,86874 | |
| 100,0 | 100,0 | 1,77460 | |
| 200,0 | 140,0 | 1,70333 | |
| 60,0 | 81,0 | 1,87631 | |
| 59,0 | 100,0 | 2,08466 | |
| 59,0 | 119,0 | 2,30584 | |
| 59,0 | 138,0 | 2,53956 | |
| 58,0 | 158,0 | 2,77992 | |
| 58,0 | 177,0 | 3,01352 | |
| 58,0 | 196,0 | 3,13611 | |
| 58,0 | 215,0 | 3,09420 | |
| 57,0 | 234,0 | 2,64143 | |
| 57,0 | 253,0 | 2,35658 | |
| 57,0 | 272,0 | 2,33416 | |
| 57,0 | 291,0 | 2,62818 | |
| 56,0 | 310,0 | 3,49900 | |
| 56,0 | 330,0 | 4,07108 | |
| 56,0 | 349,0 | 3,98612 | |
| 56,0 | 368,0 | 3,37382 | |
| 55,0 | 387,0 | 2,90417 | |
| 55,0 | 406,0 | 2,66674 | |
| 55,0 | 425,0 | 2,63057 | |
| 55,0 | 444,0 | 2,61781 | |
| 74,0 | 445,0 | 3,25599 | |
| 92,0 | 445,0 | 3,71524 | |
| 111,0 | 445,0 | 4,02667 | |
| 130,0 | 445,0 | 4,06224 | |
| 149,0 | 445,0 | 3,88528 | |
| 168,0 | 445,0 | 3,98991 | |
| 187,0 | 445,0 | 4,92648 | |
| 206,0 | 445,0 | 6,45672 | |
| 207,0 | 425,0 | 8,22395 | |
| 207,0 | 405,0 | 10,29429 | |
| 207,0 | 385,0 | 11,77275 | |
| 207,0 | 366,0 | 11,05256 | |
| 207,0 | 346,0 | 8,78334 | |
| 207,0 | 327,0 | 7,17951 | |
| 207,0 | 307,0 | 7,25125 | |
| 207,0 | 287,0 | 8,03923 | |
| 208,0 | 268,0 | 7,37589 | |
| 208,0 | 248,0 | 6,09424 | |
| 208,0 | 229,0 | 4,90673 | |
| 208,0 | 209,0 | 3,78085 | |
| 208,0 | 189,0 | 3,02861 | |
| 208,0 | 170,0 | 2,43753 | |
| 207,0 | 150,0 | 1,95437 | |
| 191,0 | 143,0 | 1,64015 | |
| 174,0 | 135,0 | 1,40063 | |
| 158,0 | 127,0 | 1,32861 | |
| 141,0 | 119,0 | 1,32991 | |
| 125,0 | 112,0 | 1,43117 | |
| 109,0 | 104,0 | 1,64670 | |
| 92,0 | 96,0 | 1,88494 | |
| 76,0 | 89,0 | 1,90582 | |

| 72 ditl. siarki (gaz) | Da-R= | 18,0000 | obszar zwykły |
|-----------------------|-------|---------|---------------|
| CAS 7446-09-5 | | | |
| 60,0 | 80,0 | 1,36652 | |
| 100,0 | 100,0 | 1,29768 | |
| 200,0 | 140,0 | 1,24556 | |
| 60,0 | 81,0 | 1,37205 | |
| 59,0 | 100,0 | 1,52441 | |

| EK100w | | |
|--------|-------|---------|
| 59,0 | 119,0 | 1,68615 |
| 59,0 | 138,0 | 1,85705 |
| 58,0 | 158,0 | 2,03282 |
| 58,0 | 177,0 | 2,20363 |
| 58,0 | 196,0 | 2,29328 |
| 58,0 | 215,0 | 2,26264 |
| 57,0 | 234,0 | 1,93154 |
| 57,0 | 253,0 | 1,72325 |
| 57,0 | 272,0 | 1,70685 |
| 57,0 | 291,0 | 1,92186 |
| 56,0 | 310,0 | 2,55865 |
| 56,0 | 330,0 | 2,97698 |
| 56,0 | 349,0 | 2,91485 |
| 56,0 | 368,0 | 2,46711 |
| 55,0 | 387,0 | 2,12368 |
| 55,0 | 406,0 | 1,95006 |
| 55,0 | 425,0 | 1,92361 |
| 55,0 | 444,0 | 1,91427 |
| 74,0 | 445,0 | 2,38094 |
| 92,0 | 445,0 | 2,71677 |
| 111,0 | 445,0 | 2,94450 |
| 130,0 | 445,0 | 2,97051 |
| 149,0 | 445,0 | 2,84111 |
| 168,0 | 445,0 | 2,91762 |
| 187,0 | 445,0 | 3,60249 |
| 206,0 | 445,0 | 4,72148 |
| 207,0 | 425,0 | 6,01376 |
| 207,0 | 405,0 | 7,52770 |
| 207,0 | 385,0 | 8,60883 |
| 207,0 | 366,0 | 8,08218 |
| 207,0 | 346,0 | 6,42282 |
| 207,0 | 327,0 | 5,25001 |
| 207,0 | 307,0 | 5,30247 |
| 207,0 | 287,0 | 5,87868 |
| 208,0 | 268,0 | 5,39362 |
| 208,0 | 248,0 | 4,45641 |
| 208,0 | 229,0 | 3,58804 |
| 208,0 | 209,0 | 2,76475 |
| 208,0 | 189,0 | 2,21467 |
| 208,0 | 170,0 | 1,78244 |
| 207,0 | 150,0 | 1,42913 |
| 191,0 | 143,0 | 1,19936 |
| 174,0 | 135,0 | 1,02421 |
| 158,0 | 127,0 | 0,97154 |
| 141,0 | 119,0 | 0,97250 |
| 125,0 | 112,0 | 1,04654 |
| 109,0 | 104,0 | 1,20415 |
| 92,0 | 96,0 | 1,37836 |
| 76,0 | 89,0 | 1,39363 |

| 137 pył zaw. CAS | PM10(pył) | Da-R= | 12,6000 | obszar zwykły |
|------------------|-----------|---------|---------|---------------|
| 60,0 | 80,0 | 0,23422 | | |
| 100,0 | 100,0 | 0,22242 | | |
| 200,0 | 140,0 | 0,21349 | | |
| 60,0 | 81,0 | 0,23517 | | |
| 59,0 | 100,0 | 0,26128 | | |
| 59,0 | 119,0 | 0,28900 | | |
| 59,0 | 138,0 | 0,31829 | | |
| 58,0 | 158,0 | 0,34842 | | |
| 58,0 | 177,0 | 0,37770 | | |
| 58,0 | 196,0 | 0,39306 | | |
| 58,0 | 215,0 | 0,38781 | | |
| 57,0 | 234,0 | 0,33106 | | |
| 57,0 | 253,0 | 0,29536 | | |
| 57,0 | 272,0 | 0,29255 | | |
| 57,0 | 291,0 | 0,32940 | | |

| | | EK100w |
|-------|-------|---------|
| 56,0 | 310,0 | 0,43855 |
| 56,0 | 330,0 | 0,51025 |
| 56,0 | 349,0 | 0,49960 |
| 56,0 | 368,0 | 0,42286 |
| 55,0 | 387,0 | 0,36399 |
| 55,0 | 406,0 | 0,33423 |
| 55,0 | 425,0 | 0,32970 |
| 55,0 | 444,0 | 0,32810 |
| 74,0 | 445,0 | 0,40809 |
| 92,0 | 445,0 | 0,46565 |
| 111,0 | 445,0 | 0,50468 |
| 130,0 | 445,0 | 0,50914 |
| 149,0 | 445,0 | 0,48696 |
| 168,0 | 445,0 | 0,50007 |
| 187,0 | 445,0 | 0,61746 |
| 206,0 | 445,0 | 0,80925 |
| 207,0 | 425,0 | 1,03074 |
| 207,0 | 405,0 | 1,29023 |
| 207,0 | 385,0 | 1,47553 |
| 207,0 | 366,0 | 1,38527 |
| 207,0 | 346,0 | 1,10086 |
| 207,0 | 327,0 | 0,89984 |
| 207,0 | 307,0 | 0,90883 |
| 207,0 | 287,0 | 1,00759 |
| 208,0 | 268,0 | 0,92445 |
| 208,0 | 248,0 | 0,76382 |
| 208,0 | 229,0 | 0,61498 |
| 208,0 | 209,0 | 0,47387 |
| 208,0 | 189,0 | 0,37959 |
| 208,0 | 170,0 | 0,30551 |
| 207,0 | 150,0 | 0,24495 |
| 191,0 | 143,0 | 0,20557 |
| 174,0 | 135,0 | 0,17555 |
| 158,0 | 127,0 | 0,16652 |
| 141,0 | 119,0 | 0,16668 |
| 125,0 | 112,0 | 0,17937 |
| 109,0 | 104,0 | 0,20639 |
| 92,0 | 96,0 | 0,23625 |
| 76,0 | 89,0 | 0,23886 |

 ATMOTERM Opole

EK100w

 EWA JARZYŃSKA

 ANALIZA STĘŻEŃ UŚREDNIONYCH DLA ROKU
 Punkty z maksymalnymi wartościami.

Obiekt: BROWAR BABIN
 Identyfikator obiektu: BROW

Zbiór wyników: R01BROW.DBF

Punkty spoza terenu: ZMP.TER

| współrzędne | Stężenie średnioroczne |
|----------------|------------------------|
| x[m] y[m] | [µg/m3] |

współczynnik szorstkości z0 = 0,03500

| dwutl.węgla (gaz) | Da-R= | obszar zwykły |
|-------------------|----------|---------------|
| CAS 124-38-9 | | |
| 56,0 330,0 | 85,69911 | |

| | | | | |
|-------|-------------------|-------|-------------------|---------------|
| 70 | ditl. azotu (gaz) | Da-R= | EK100W 21,2000 | obszar zwykły |
| | CAS 10102-44-0 | | | |
| 207,0 | 385,0 | | 11,77275 | |

| | | | | |
|-------|--------------------|-------|---------|---------------|
| 72 | ditl. siarki (gaz) | Da-R= | 18,0000 | obszar zwykły |
| | CAS 7446-09-5 | | | |
| 207,0 | 385,0 | | 8,60883 | |

| | | | | |
|-------|--------------------|-------|---------|---------------|
| 137 | pył zaw. PM10(pył) | Da-R= | 12,6000 | obszar zwykły |
| | CAS | | | |
| 207,0 | 385,0 | | 1,47553 | |

ATMOTERM Opole

EK100W

EWA JARZYŃSKA

ANALIZA STĘŻEŃ UŚREDNIONYCH DLA ROKU

Punkty z wartościami stężenia średniego rocznego przekraczającymi normy

Obiekt: BROWAR BABIN

Identyfikator obiektu: BROW

Zbiór wyników: R01BROW.DBF

Punkty spoza terenu: ZMP.TER

| współrzędne | Stężenie średnioroczne |
|----------------|------------------------|
| x[m] y[m] | [µg/m3] |

współczynnik szorstkości z0 = 0,03500

| | | |
|--------------------|-------|---------------|
| dwutl. węgla (gaz) | Da-R= | obszar zwykły |
| CAS 124-38-9 | | |
| Nie ma przekroczeń | | |

| | | | | |
|--------------------|-------------------|-------|---------|---------------|
| 70 | ditl. azotu (gaz) | Da-R= | 21,2000 | obszar zwykły |
| | CAS 10102-44-0 | | | |
| Nie ma przekroczeń | | | | |

| | | | | |
|--------------------|--------------------|-------|---------|---------------|
| 72 | ditl. siarki (gaz) | Da-R= | 18,0000 | obszar zwykły |
| | CAS 7446-09-5 | | | |
| Nie ma przekroczeń | | | | |

| | | | | |
|--------------------|--------------------|-------|---------|---------------|
| 137 | pył zaw. PM10(pył) | Da-R= | 12,6000 | obszar zwykły |
| | CAS | | | |
| Nie ma przekroczeń | | | | |

ATMOTERM Opole

EK100W

EWA JARZYŃSKA

EK100W

EMISJA W WARIANTACH

Obiekt: BROWAR BABIN
Identyfikator obiektu: BROW
Wybrane emitery: od: 1 do: 2

| Emisor Nr | war. Nr | Czas trwania [h] | | | kod | Substancja nazwa | CAS | Emisja |
|--------------|------------|------------------|------|-----|--------|---|-----|--------|
| [kg/h] | | Zima | Lato | Rok | | | | |
| 2,1575300 | 1 | 1 | 0,0 | 0,0 | 8760,0 | Tsp[K]= 293,0 dwutl.węglu , 124-38-9 | | |
| 0,5680000 | 2 | 1 | 0,0 | 0,0 | 8760,0 | v _{wyl} [m/s]=23,8, Tsp[K]= 333,0 70 ditl. azotu , 10102-44-0 | | |
| 0,4153500 | | | | | | 72 ditl. siarki , 7446-09-5 | | |
| 0,1423800 | | | | | | 137 pył zaw. PM10, | | |

ATMOTERM Opole

EK100W

EWA JARZYŃSKA

EMITORY (Smm i Xmm)
Obliczenia dla wariantów emisji

Obiekt: BROWAR BABIN
Identyfikator obiektu: BROW

Wysokość anemometru: 14,0 Wektor szorstkości: 0,03500
Obszar: Obszar zwykły sezon: ROK

| Emisor | Smm[ug/m3] | Xmm[m] | St | Ua | Wariant | Hm[m] |
|----------------------------------|------------|--------|----|----|---------|-------|
| dwutl.węglu Nr CAS=124-38-9 | | | | | | |
| 1 | 4872,80176 | 38,71 | 6 | 1 | 1 | 5,50 |
| 70 ditl. azotu Nr CAS=10102-44-0 | | | | | | |
| 2 | 162,58620 | 97,36 | 4 | 1 | 1 | 12,05 |
| 72 ditl. siarki Nr CAS=7446-09-5 | | | | | | |
| 2 | 118,89115 | 97,36 | 4 | 1 | 1 | 12,05 |
| 137 pył zaw. PM10 | | | | | | |
| 2 | 20,37766 | 97,36 | 4 | 1 | 1 | 12,05 |

ATMOTERM Opole

EK100W

EK100W

EWA JARZYŃSKA

ZAKRES OBLICZEŃ
Obliczenia dla wariantów emisji

Obiekt: BROWAR BABIN
Identyfikator obiektu: BROW
Wysokość anemometru: 14,0 wektor szorstkości: 0,03500
Obszar: Obszar zwykły sezon: ROK

| Nr emitora: | 1 | h[m]: | 5,5 | d[m]: | 0,30 | typ: ZADASZONY |
|-------------|----------|------------|---------|-------|------|----------------|
| Substancja | Nr CAS | Smm[ug/m3] | Wariant | | | |
| dwutl.węgla | 124-38-9 | 4872,80176 | 1 | | | |

| Nr emitora: | 2 | h[m]: | 6,0 | d[m]: | 0,13 | typ: OTWARTY |
|-------------------|------------|------------|---------|-------|------|--------------|
| Substancja | Nr CAS | Smm[ug/m3] | Wariant | | | |
| 72 ditl. siarki | 7446-09-5 | 118,89115 | 1 | | | |
| 70 ditl. azotu | 10102-44-0 | 162,58620 | 1 | | | |
| 137 pył zaw. PM10 | | 20,37766 | 1 | | | |

ATMOTERM Opole

EK100W

EWA JARZYŃSKA

ZAKRES OBLICZEŃ
Obliczenia dla wariantów emisji

Obiekt: BROWAR BABIN
Identyfikator obiektu: BROW
Wysokość anemometru: 14,0 wektor szorstkości: 0,03500
Obszar: Obszar zwykły sezon: ROK

| Substancja | Nr CAS | Smm[ug/m3] | 0,1*D1 | Zakres |
|-------------------|------------|------------|----------|----------|
| dwutl.węgla | 124-38-9 | 4872,80176 | - | - |
| 70 ditl. azotu | 10102-44-0 | 162,58620 | 20,00000 | pełny |
| 72 ditl. siarki | 7446-09-5 | 118,89115 | 35,00000 | pełny |
| 137 pył zaw. PM10 | | 20,37766 | 28,00000 | skrótowy |

Zakres skrótowy oznacza, że substancja nie powoduje przekroczeń 10% dopuszczalnego poziomu w powietrzu lub 10% wartości odniesienia dla 1(jednej) godziny

- nie określono zakresu ze względu na brak D1